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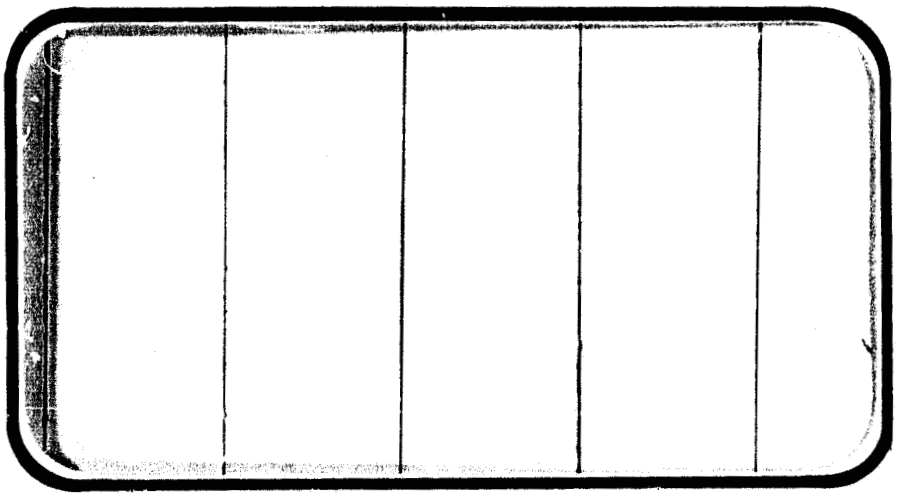

(NASA-CR-147635) INVESTIGATIONS OF THE 0.020-SCALE 88-OTS INTEGRATED SPACE SHUTTLE VEHICLE JETPLUME MODEL IN THE NASA/AMES RESEARCH CENTER 11 BY 11-FOOT UNITARY PLAN WIND TUNNEL (IA80), VOLUME 4 (Chrysler

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SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANagement services

SPACE DIVISION CHRYSLER CORPORATION

September, 1976

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VOLUME 4 OF 4

INVESTIGATIONS OF THE 0.020-SCALE 88-OTS INTEGRATED SPACE SHUTTLE VEHICLE JET-PLUME MODEL IN THE NASA/AMES RESEARCH CENTER 11 x 11-FOOT UNITARY PLAN WIND TUNNEL (IA80)

by

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Prepared under NASA Contract Number NAS9-13247

by

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for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number.	ARC 11-023
NASA Series Number:	IA80
Model Number:	88-OTS
Test Dates:	4 through 8 November 1974
Occupancy Hours:	132

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INVESTIGATIONS OF THE 0.020-SCALE 88-OTS INTEGRATED SPACE SHUTTLE VEHICLE JET-PLUME MODEL IN THE NASA/AMES RESEARCH CENTER 11 x 11-FOOT UNITARY PLAN WIND TUNNEL (IA80)

By

M. E. Nichols, Rockwell International Space Division

ABSTRACT

This report documents the results of jet-plume effects wind tunnel test IA80 of the 0.020-scale 88-OTS launch-configuration Space Shuttle Vehicle model in 11 x 11-foot leg of the NASA/Ames Research Center Unitary Plan Wind Tunnel. This test involved cold-gas Main Propulsion System and Solid Rocket - Motor plume simulations at Mach numbers from 0.6 to 1.4. IA80 was a continuation of a series of planned tests of plume effects, including IA19 and IA72. The test period was 4 through 8 November 1974, for 377 recorded runs.

The test-program objective was to determine integrated vehicle surface-pressure distributions, elevon and rudder hinge moments, and wing and vertical-tail root bending and torsional moments due to MPS and SRB plume interactions. Nozzle power conditions were controlled per pretest nozzle calibrations carried out by Rockwell International.

Model angle-of-attack was varied from -4° to +4°; model angle-of-sideslip was varied from -4° to +4°. Reynolds number was varied for certain test conditions and configurations,with the nominal freestream total pressure being 14.69 psia.

ABSTRACT (Concluded)

This report consists of 4 volumes of force and pressure data. They are arranged in the following manner:

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1	IA80	Plotted Force and Pressure Data	
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4	IA80	Tabulated Pressure Data	
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PLOTTED COEFFICIENTS SCHEDULE:

(A) CBMW, CTMW, CNW versus ALPHA

(B) CHEI, CHEO versus ALPHA

(C) CBMV, CTMV, CYV versus BETA

(D) CHR versus BETA

(E) CBMW, CTMW, CNW versus BETA

(F) CHEI, CHEO versus BETA

(G) CBMW, CTMW, CNW versus MACH NUMBER

(H) DCBMW, DCTMW, DCNW versus MACH NUMBER

(I) DCBMWE, DCTMWE, DCNWE versus MACH NUMBER

(J) CHEI, CHEO versus MACH NUMBER

(K) DCHEI, DCHEO versus MACH NUMBER

(L) DCHEIE, DCHEOE versus MACH NUMBER

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NOMENCLATURE

Symbol	Plot Symbol	Definition
b	BREF	span of wing, in
b_V		span of vertical tail, in
BM_V		vertical tail-root bending moment (about vertical tail reference center), in-lb
BM_{V_O}		vertical tail-root bending moment at outboard gauge, in-lb
BM_{V_I}		vertical tail-root bending moment at inboard gauge, in-lb
BM_W		wing-root bending moment (about wing reference center), in-lb
BM_{W_I}		wing-root bending moment at inboard gauge, in-lb
BM_{W_O}		wing-root bending moment at outboard gauge, in-lb
$\bar{c}$	LREF	MAC of wing, in
C_{B_V}	CBMV	vertical tail-root bending-moment coefficient
C_{B_W}	CBMW	wing-root bending-moment coefficient
$\bar{c}_E$		MAC of total elevon panel, in
$C_{H_{E_I}}$	CHEI	hinge-moment coefficient for inboard elevon
$C_{H_{E_O}}$	CHEO	hinge-moment coefficient for outboard elevon
$C_{H_{E_T}}$	CHET	total elevon hinge-moment coefficient

NOMENCLATURE (Continued)

Symbol	Plot Symbol	Definition
C_{H_R}	CHR	hinge-moment coefficient for rudder
C_{N_W}	CNW	wing normal-force coefficient
C_{P_i}	CPi	pressure coefficient for model surface tap i
CPR_j		chamber-pressure ratio for nozzle j
$\bar{c}_R$		MAC of rudder panel, in
C_{T_V}	CTMV	vertical tail-root twisting-moment coefficient
C_{T_W}	CTMW	wing-root torsion-moment coefficient
$\bar{c}_V$		MAC of vertical tail, in
C_{Y_V}	CYV	vertical-tail side-force coefficient
EPR_j		exit-pressure ratio for nozzle j
ET		External Tank
HM_{E_I}		hinge moment of inboard elevon, in-lb
HM_{E_O}		hinge moment of outboard elevon, in-lb
HM_R		hinge moment of rudder, in-lb
M	MACH	freestream Mach number
MPS		Main Propulsion System
N		nominal

NOMENCLATURE (Continued)

Symbol	Plot Symbol	Definition
OTS		Orbiter + Tank + SRB
P_{c_j}		chamber pressure (absolute) of nozzle j
P_{cSRM}		SRM supply total pressure, psia (as set)
P_{cMPS}		MPS supply total pressure, psia (as set)
P_{e_j}		exit pressure (absolute) of nozzle j
P_i		pressure (absolute) at model surface tap i
P_T		freestream total pressure, psia
P_∞		freestream static pressure, psia
q	Q(PSF)	freestream dynamic pressure, psf
Re/ft	RN/L	freestream unit Reynolds number, ft^{-1}
S	SREF	reference wing area, ft^2
SRB		Solid Rocket Booster
SRM		Solid Rocket Motor
SSME		Space Shuttle Main Engine
S_E		reference elevon area, ft^2
S_R		reference rudder area, ft^2
S_V		reference vertical tail area, ft^2
TM_V		vertical tail-root torsional moment (about vertical tail reference center), in-lb
TM_{V_G}		vertical tail-root torsional moment at gauge, in-lb

NOMENCLATURE (Continued)

Symbol	Plot Symbol	Definition
TM_W		wing-root torsional moment (about wing reference center), in-lb
TM_{W_G}		wing-root torsional moment at gauge, in-lb
$T_{T_{MPS}}$		MPS supply total temperature, °R
$T_{T_{SRM}}$		SRM supply total temperature, °R
T_T		freestream total temperature, °R
T_∞		freestream static temperature, °R
X_{CP_V}	XVCP	vertical tail center-of-pressure, longitudinal location, in
X_{CP_W}	XWCP	wing center-of-pressure, longitudinal location, in
X_N		Orbiter nose station, in
$X_{TM_{V_G}}$		longitudinal location of vertical tail-root torsional gauge, in
$X_{TM_{W_G}}$		longitudinal location of wing-root torsional gauge, in
X_{VRC}		longitudinal (station) location of vertical tail reference center, in
X_{WRC}		longitudinal (station) location of wing reference center, in
$Y_{BM_{W_I}}$		lateral location of inboard wing-root bending gauge, in
$Y_{BM_{W_O}}$		lateral location of outboard wing-root bending gauge, in

NOMENCLATURE (Continued)

Symbol	Plot Symbol	Definition
Y_{CP_W}	YWCP	wing center-of-pressure, lateral location, in
Y_{WRC}		lateral (buttplane) location of wing reference center, in
$Z_{BM_{V_I}}$		vertical location of inboard vertical tail-root bending gauge, in
$Z_{BM_{V_O}}$		vertical location of outboard vertical tail-root bending gauge, in
Z_{CP_V}	ZVCP	vertical tail center-of-pressure, vertical location, in
Z_{VRC}		vertical (waterplane) location of vertical tail reference center, in
α	ALPHA	model angle-of-attack, deg
α_{Nj}		pitch angle of nozzle-j measured in a plane parallel to the Orbiter plane of symmetry, degrees
β	BETA	model angle-of-sideslip, deg
γ_{N_j}		pitch angle of nozzle-j measured in a plane which yaws with the nozzle, degrees
δ_{BF}	BDFLAP	bodyflap deflection, deg
$\delta_{E_{l_I}}$	ELV-LI	left inboard elevon deflection, deg
$\delta_{E_{l_O}}$	ELV-LO	left outboard elevon deflection, deg
$\delta_{E_{r_I}}$	ELV-RI	right inboard elevon deflection, deg
$\delta_{E_{r_O}}$	ELV-RO	right outboard elevon deflection, deg

NOMENCLATURE (Continued)

Symbol	Plot Symbol	Definition
δ_{E_I}	ELV-IB	inboard elevon deflection, deg
δ_{E_O}	ELV-OB	outboard elevon deflection, deg
δ_R	RUDDER	rudder deflection, deg
δ_{SB}	SPDBRK	speedbrake deflection, deg
ΔC_{p_i}	DCPi	incremental pressure coefficient, i = tap#
$\Delta C_{p_{av_\#}}$	DCP#A	average value of incremental pressure coefficients for model surface taps
ψ_{N_j}		yaw angle of nozzle-j measured in an Orbiter waterplane, deg
ϕ	PHI	radial location, deg
$C_{p_{av_\#}}$	CP#AV	average value of pressure coefficients for model surface taps
$\Delta(i)$	D(i)	incremental coefficient (i) due to thrust (i) ≡ previously defined coefficient
$\Delta(i)_{\delta_E}$	D(i)E	incremental coefficient (i) due to elevon deflection, (i) ≡ previously defined coefficient
ℓ_B		body length, in
R/R_{od}	R/ROD	radius of tap location divided by outer radius
X_B/ℓ_B	XB/LB	SRB base longitudinal distance divided by body length

NOMENCLATURE (Concluded)

SUBSCRIPTS

B	base, body
c	chamber
e	exit
E	elevon
G	gauge
i	surface-pressure tap number
I	inboard
j	nozzle number
l	left
N	nozzle, Orbiter nose
O	outboard, Orbiter
r	right
R	rudder
S	Solid Rocket Booster
T	External Tank, total
V	vertical tail
W	wing
∞	static

CONFIGURATIONS INVESTIGATED

The model employed in Test IA80, 88-OTS, was a 0.020-scale representation of the Vehicle 5 Space Shuttle launch configuration with mated Orbiter, External Tank, and Solid Rocket Boosters. Main Propulsion System and Solid Rocket Motor cold-gas plume-simulation was made possible by dual high-pressure air-supply systems.

Various elevon control settings were incorporated in the run schedule, while no gimbal-angle changes were made on the nozzles. Several different nozzle operation pressures were set for each Mach number, and two nozzle contours were tested.

Component dimensions are presented in Table III. Control-setting parameters were as indicated in Table II. Model surface-pressure tap locations are shown in Table IV.

The Orbiter, designated as O, was comprised of components identified as follows:

Component Symbol	Description
B_{62}	fuselage
C_{12}	canopy
E_{52}	elevons
F_{10}	bodyflap
M_{16}	OMS/RCS pods
N_{87}	MPS nozzles, conical
N_{89}	OMS nozzles

CONFIGURATIONS INVESTIGATED (Continued)

N_{104}	MPS nozzles, contoured
R_5	rudder/speedbrake
V_8	vertical tail
W_{116}	wing

The External Tank, designated as T_{28}, was comprised of components identified as follows:

AT_{28}	attach structure
AT_{31}	attach structure
AT_{32}	attach structure
FR_{10}	aft attach crossbeam
FL_{10}	feedline
FL_{11}	feedline
PT_{12}	ET protuberances
PT_{22}	ET protuberances
PT_{23}	ET protuberances
PT_{24}	ET protuberances
PT_{25}	ET protuberances
PT_{26}	ET protuberances
PT_{27}	ET protuberances

CONFIGURATIONS INVESTIGATED (Concluded)

The solid rocket booster, designated as S_{22}, was composed of components identified as follows:

N_{88}	SRB nozzles
PS_{11}	SRB protuberances
PS_{12}	SRB protuberances
PS_{13}	SRB protuberances
PS_{14}	SRB protuberances
PS_{17}	SRB protuberances
PS_{18}	SRB protuberances
PS_{19}	SRB protuberances

The launch configuration was designated as OTS on the Data Set/Run Number Collation Summary sheets.

TEST FACILITY DESCRIPTION

The NASA/Ames Research Center Unitary Plan Wind Tunnel 11 x 11 transonic leg is one of three circuits operating from a common power system and two compressor systems. The 11 x 11 leg is capable of attaining Mach numbers from 0.60 to 1.40, at Reynolds numbers from 1.7×10^6 per foot to 9.4×10^6 per foot.

The tunnel is a closed-return, air-medium, variable-density facility, operating at ambient temperatures and having a bled test section for transonic conditions.

Models are supported by means of conventional stings or sting/strut assemblies for force, moment, pressure, and component-loads testing. The tunnel sector-strut system can attain angles-of-attack to $\pm$ 15 degrees and angles-of-sideslip to $\pm$ 15 degrees about its body-of-revolution.

Schlieren and shadowgraph photographic systems are available, and high-pressure air-supply systems exist for use in power-plume simulations and thrust tests.

DATA REDUCTION

Standard tunnel operation parameters were computed by the facility along with model plume-simulation pressure data, model surface-pressure values and coefficients, rudder and elevon hinge-moments, and air-supply temperatures. Model angle-of-attack was determined by the onboard dangleometer. Furthermore, wing and vertical-tail bending and torsional moments were recorded and reduced to present centers-of-pressure and forces.

The following equations and methods were used:

Wing Normal-Force Coefficient:

$$C_{N_W} = \frac{BM_{W_I} - BM_{W_O}}{(Y_{BM_{W_O}} - Y_{BM_{W_I}})\, S\, q}$$

Wing-Root Bending-Moment Coefficient:

$$C_{B_W} = \left[\frac{BM_{W_O}}{S\, q\, b}\right] + \left[\frac{C_{N_W}\,(Y_{BM_{W_O}} - Y_{WRC})}{b}\right]$$

or:

$$= \left[\frac{BM_{W_I}}{S\, q\, b}\right] + \left[\frac{C_{N_W}\,(Y_{BM_{W_I}} - Y_{WRC})}{b}\right]$$

Wing-Root Torsional-Moment Coefficient

$$C_{T_W} = \left[\frac{TM_{W_G}}{S\, q\, \bar{c}}\right] - \left[\frac{C_{N_W}\,(X_{TM_{W_G}} - X_{WRC})}{\bar{c}}\right]$$

DATA REDUCTION (Continued)

Wing-Center-of-Pressure:

$$X_{CP_W} = X_{TM_{W_G}} - \left[\frac{TM_{W_G}}{S\ C_{N_W}\ q}\right]$$

$$Y_{CP_W} = Y_{BM_{W_I}} + \left[\frac{BM_{W_I}}{S\ C_{N_W}\ q}\right]$$

or:

$$= Y_{BM_{W_O}} + \left[\frac{BM_{W_O}}{C_{N_W}\ S\ q}\right]$$

Vertical Tail Side-Force Coefficient:

$$C_{Y_V} = \frac{BM_{V_I} - BM_{V_O}}{(Z_{BM_{V_O}} - Z_{BM_{V_I}})\ S_V\ q}$$

Vertical Tail-Root Bending-Moment Coefficient:

$$C_{B_V} = \left[\frac{BM_{V_O}}{S_V\ q\ b_V}\right] + \left[\frac{C_{Y_V}\ (Z_{BM_{V_O}} - Z_{VRC}}{b_V}\right]$$

or:

$$= \left[\frac{BM_{V_I}}{S_V\ q\ b_V}\right] + \left[\frac{C_{Y_V}(Z_{BM_{V_I}} - Z_{VRC}}{b_V}\right]$$

Vertical Tail-Root Torsional-Moment Coefficient:

$$C_{T_V} = \left[\frac{TM_{V_G}}{S_V\ q\ \bar{c}_V}\right] = \left[\frac{C_{Y_V}\ (X_{TM_{V_G}} - X_{VRC})}{\bar{c}_V}\right]$$

DATA REDUCTION (Continued)

Vertical Tail Center-of-Pressure:

$$X_{CP_V} = X_{TM_{V_G}} - \left[\frac{TM_{V_G}}{C_{Y_V} S_V q} \right]$$

$$Z_{CP_V} = Z_{BM_{V_I}} + \left[\frac{BM_{V_I}}{C_{Y_V} S_V q} \right]$$

or:

$$= Z_{BM_{V_O}} + \left[\frac{BM_{V_O}}{C_{Y_V} S_V q} \right]$$

Nozzle-Pressure Ratios:

$$CPR_j = \frac{Pc_j}{P_\infty}$$

$$EPR_j = \frac{Pe_j}{P_\infty}$$

where: j = 1, Top MPS nozzle
2, L.H. MPS nozzle
3, R.H. MPS nozzle
4, L.H. SRB nozzle
5, R.H. SRB nozzle

Hinge-Moments:

$$C_{H_{E_I}} = \frac{HM_{E_I}}{S_E q \bar{c}_E}$$

$$C_{H_{E_O}} = \frac{HM_{E_O}}{S_E q \bar{c}_E}$$

$$C_{H_{E_T}} = C_{H_{E_I}} + C_{H_{E_O}}$$

$$C_{H_R} = \frac{HM_R}{S_R q \bar{c}_R}$$

DATA REDUCTION (Continued)

Surface-Pressure Coefficients:

$$C_{p_i} = \frac{P_i - P_\infty}{q}$$

Coefficient averages:

For i = 2, 21, 22, 39, 40, 60, 67, 68, 75, 76

$$C_{p_{av_i}} = \left(C_{p_i} + C_{p_{i+2}} + C_{p_{i+4}} + C_{p_{i+6}}\right)/4$$

For i = 12, 29, 30, 47, 48:

$$C_{p_{av_i}} = \left(C_{p_i} + C_{p_{i+2}} + C_{p_{i+6}} + C_{p_{i+8}}\right)/4$$

And:

$$C_{p_{av_{13}}} = \left(C_{p_{13}} + C_{p_{17}} + C_{p_{19}}\right)/3$$

$$C_{p_{av_{59}}} = \left(C_{p_{59}} + C_{p_{61}} + C_{p_{63}} + C_{p_{67}}\right)/4$$

To reflect plume effects on surface pressures, incremental data were computed from results of tests with plume simulation and tests without plume simulation:

$$\Delta C_{p_i} = C_{p_i}\left(\begin{matrix}\text{with}\\ \text{plume}\end{matrix}\right) - C_{p_i}\left(\begin{matrix}\text{without}\\ \text{plume}\end{matrix}\right)$$

$$\Delta C_{p_{av_i}} = C_{p_{av_i}}\left(\begin{matrix}\text{with}\\ \text{plume}\end{matrix}\right) - C_{p_{av_i}}\left(\begin{matrix}\text{without}\\ \text{plume}\end{matrix}\right)$$

DATA REDUCTION (Continued)

Symbol	Full-Scale	Model-Scale
b	936.68 in	18.734 in
b_V	315.72 in	6.3144
$\bar{c}$	474.8 in	9.496 in
$\bar{c}_E$	90.70 in	1.814 in
$\bar{c}_R$	73.20 in	1.464 in
$\bar{c}_V$	199.81 in	3.996 in
ℓ_B	1290.3 in	25.806 in
S_E	210.00 ft^2	0.08400 ft^2
S_R	100.15 ft^2	0.04006 ft^2
S	2690.0 ft^2	1.0760 ft^2
S_V	413.25 ft^2	0.16530 ft^2
X_N	235.0	4.700 in
$X_{TM_{V_G}}$	——	28.5500 in
$X_{TM_{W_G}}$	——	24.6400 in
X_{VRC}	1414.3 in	28.286 in
X_{WRC}	1307.0 in	26.140 in
$Y_{BM_{W_I}}$	——	2.4962 in
$Y_{BM_{W_O}}$	——	3.9037 in

DATA REDUCTION (Concluded)

Symbol	Full-Scale	Model-Scale
Y_{WRC}	106.0 in	2.120 in
Z_{BMV_I}	——	10.4681 in
Z_{BMV_O}	——	11.3935 in
Z_{VRC}	503.0 in	10.060 in

Resulting data are presented in the data figures and in the appendix.

RESULTS AND DISCUSSION

Generally high data confidence can be ascribed to the results of this test program, as instrumentation anomalies were few and correctable. Most data error was attributable to model failure, and the following outlines those incidents.

Hinge-moment data was consistently good with only minor zero-return changes due to gradual wear of hinge bearings in the elevons.

Post test data-correction factors had to be applied to Main Propulsion System nozzle chamber pressure readings, as the total-pressure probes progressively failed during testing. However, these corrections were small, on the order of 1%, and are already incorporated in data presented herein.

Scanivalve-measured Orbiter, External Tank, and Solid Rocket Booster surface pressures were also extremely reliable, with only one orifice apparently plugged, Tap #30 shown in Table 4.

Due to the loss of the right-hand contoured MPS nozzle during Run 311, all contoured-nozzle configuration testing after Run 313 employed the conical nozzle in the top-center location. The top-center contoured nozzle was used in the right-hand location, consequently.

TABLE I

TEST : IA80 DATE : 8 NOV., 1974

TEST CONDITIONS

MACH NUMBER	REYNOLDS NUMBER (per foot)	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)
0.60	1.75×10^6	1.46	77
0.60	2.56×10^6	2.13	81
0.60	3.39×10^6	2.93	91
0.90	2.17×10^6	2.44	85
0.90	3.13×10^6	3.62	90
0.90	4.26×10^6	4.48	92
1.10	2.25×10^6	2.93	90
1.10	3.27×10^6	4.26	94
1.10	4.30×10^6	5.79	109
1.25	2.27×10^6	3.11	90
1.25	3.29×10^6	4.52	94
1.25	4.36×10^6	6.16	105
1.40	2.23×10^6	3.18	90
1.40	3.22×10^6	4.62	96
1.40	4.25×10^6	6.32	111

BALANCE UTILIZED: None

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF			
SF			
AF			
PM			
RM			
YM			

COMMENTS:

TEST: IA80

TABLE II.

DATA SET RUN NUMBER COLLATION SUMMARY

DATE: 8 NOV 74

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES SRB	SSIM	δE1	δE2	RN	M	NO. OF RUNS	ANGLE-OF-ATTACK −4	0	4
RE4001	ΦTS		B	N+	N	0	0	3.4	0.6		240	241	242
02								4.25	0.9		222	223	224
03									1.1		74	75	76
04									1.25		48	49	50
05									1.4		1	2	3
06				N+	N			3.4	0.6		243	244	245
07								4.25	0.9		225	226	227
08									1.1		77	78	79
09									1.25		51	52	53
10									1.4		4	5	6
11				N	N+			3.4	0.6		249	250	251
12								4.25	0.9		231	232	233
13									1.1		80	81	82
14									1.25		54	55	56
15									1.4		7	8	9
16				N	N-				0.9		234	235	236
17									1.1		83	84	85
18									1.25		57	58	59

TEST RUN NUMBERS

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

SEE ATTACHED SHEET FOR COMPLETE COEFFICIENT SCHEDULES

α OR β SCHEDULES

COEFFICIENTS

IDVAR (1) IDVAR (2) NCV

TABLE II. - Continued.

TEST: IA80 — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE:

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES SRB	SSME	δ_{EI}	δ_{EO}	RN	M	NO. OF RUNS	ANGLE-OF-ATTACK -4	0	4
RE4019	ΦTS		B	N	N-	0	0	4.25	1.4		10	11	12
20				N	N			3.4	0.6		246	247	248
21								4.25	0.9		228	229	230
22									1.1		86	87	88
23									1.25		60	61	62
24				↓	↓				1.4		13	14	15
25				N-	N				1.1		89	90	91
26									1.25		63	64	65
27				↓	↓			↓	1.4		16	17	18
28				OFF	OFF			3.4	0.6		237	238	239
29								4.25	0.9		219	220	221
30									1.1		69	70	71
31									1.25		66	67	68
32								↓	1.4		19	20	21
33								1.75	0.6		270	271	272
34								2.25	0.9		267	268	269
35									1.1		22	23	24
↓ 36			↓	↓	↓	↓	↓	↓	1.25		30	31	32

TEST RUN NUMBERS

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

COEFFICIENTS — IDVAR (1) — IDVAR (2) — NDV

α OR β SCHEDULES

TABLE II. - Continued.

TEST: IA80 — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE:

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	SRB	SSME	δ_{EI}	δ_{EO}	RN	M	NO. OF RUNS	MACH NO.	ANGLE-OF-ATTACK -4	ANGLE-OF-ATTACK 0	ANGLE-OF-ATTACK 4
RE4037	ΦTS		B	OFF	OFF	0	0	2.25	1.4			33	34	35
38				N	N			1.75	0.6			273	274	275
39								2.25	0.9			264	265	266
40				↓	↓			2.25	1.1			27	28	29
41				OFF	OFF			2.5	0.6			252	253	254
42								3.25	0.9			258	259	260
43									1.1			36	37	38
44									1.25			42	43	44
45				↓	↓			↓	1.4			45	46	47
46				N	N			2.5	0.6			255	256	257
47								3.25	0.9			261	262	263
48			↓	↓	↓	↓	↓	3.25	1.1			39	40	41
49			0	OFF	OFF	8	4	4.25	V		92			
50			0	N	N				V		93			
51			B	OFF	OFF				0.98			112	113	114
52				N	N			↓	0.98			115	116	117
53				OFF	OFF			3.4	0.6			288	289	290
54	↓		↓	↓	↓	↓	↓	4.25	0.9			296	297	298

TEST RUN NUMBERS

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

COEFFICIENTS — IDVAR (1) — IDVAR (2) — NDV

α OR β SCHEDULES

TABLE II. - Continued.

TEST: IA 80 — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE:

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	SRB	SSME	SEI	SEO	RN	M	NO. OF RUNS	ANGLE-OF-ATTACK -4	ANGLE-OF-ATTACK 0	ANGLE-OF-ATTACK 4	TEST RUN NUMBERS
REI055	ΦTS		B	OFF	OFF	8	4	4.25	1.1		106	107	108	
56									1.25		94	95	96	
57									1.4		100	101	102	
58				N	N			3.4	0.6		291	292	293	
59								4.25	0.9		299	300	301	
60									1.1		109	110	111	
61									1.25		97	98	99	
62									1.4		103	104	105	
63				NT	N				0.98		118	119	120	
64				OFF	OFF	8	-4	3.4	0.6		314	315	316	
65								4.25	0.9		302	303	304	
66									1.1		133	134	135	
67									1.25		129	128	129	
68									1.4		121	122	123	
69				N	N			3.4	0.6		317	318	319	
70								4.25	0.9		305	306	307	
71									1.1		136	137	138	
72									1.25		130	131	132	

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

α OR β SCHEDULES

COEFFICIENTS IDVAR (1) IDVAR (2) NDV

TABLE II. - Continued.

TEST: IA80 | DATA SET/RUN NUMBER COLLATION SUMMARY | DATE:

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	SRB	SSME	SEI	SEO	RN	M	NO. OF RUNS	ANGLE-OF-ATTACK -4	ANGLE-OF-ATTACK 0	ANGLE-OF-ATTACK 4
RE4073	OTS		B	N	N	8	-4	4.25	1.4		124	125	126
74				OFF	OFF	8	0	3.4	0.6		276	277	278
75								4.25	0.9		282	283	284
76									1.1		153	154	155
77									1.25		147	148	149
78				↓	↓			↓	1.4		141	142	143
79				N	N			3.4	0.6		279	280	281
80								4.25	0.9		285	286	287
81									1.1		156	157	158
82									1.25		150	151	152
83				↓	↓	↓	↓	↓	1.4		144	145	146
84				OFF	OFF	9	2	3.4	0.6		326	327	328
85								4.25	0.9		320	321	322
86				↓	↓			↓	1.1		159	160	161
87				N	N			3.4	0.6		329	330	331
88								4.25	0.9		323	324	325
89				↓	↓	↓	↓	4.25	1.1		162	163	164
↓ 90	↓		↓	OFF	OFF	4	4	3.4	0.6		332	333	334

TEST RUN NUMBERS

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

α OR β SCHEDULES — COEFFICIENTS — IDVAR (1) — IDVAR (2) — NCV

TABLE II. - Continued.

TEST: IA80 | DATA SET/RUN NUMBER COLLATION SUMMARY | DATE:

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	SRB	SME	SEI	SEO	RN	M	NO. OF RUNS	ANGLE-OF-ATTACK -4	ANGLE-OF-ATTACK 0	ANGLE-OF-ATTACK 4
RE4091	ΦTS		B	OFF	OFF	4	4	4.25	0.9		338	339	340
92									1.1		177	178	179
93									1.25		171	172	173
94									1.4		165	166	167
95				N	N			3.4	0.6		335	336	337
96								4.25	0.9		341	342	343
97									1.1		180	181	182
98									1.25		174	175	176
99									1.4		168	169	170
A0				OFF	OFF	0	4	3.4	0.6		344	345	346
A1								4.25	0.9		350	351	352
A2									1.1		195	196	197
A3									1.25		189	190	191
A4									1.4		183	184	185
A5				N	N			3.4	0.6		347	348	349
A6								4.25	0.9		353	354	355
A7									1.1		198	199	200
A8									1.25		192	193	194

TEST RUN NUMBERS

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

α OR β SCHEDULES

COEFFICIENTS IDVAR (1) IDVAR (2) NDV

TABLE II. - Continued.

TEST: IA8C

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE:

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES SRB	SME	SEI	SEO	RN	M	NO. OF RUNS	ANGLE-OF-ATTACK -4	0	4
RE4OA9	ΦTS		B	N	N	0	4	4.25	1.4		186	187	188
B0				N	#2 OUT	0	0	3.4	0.6		362	363	364
B1								4.25	0.9		365	366	367
B2									1.1		207	208	209
B3									1.25		204	205	206
B4									1.4		201	202	203
B5				N	#1 OUT			3.4	0.6		356	357	358
B6								4.25	0.9		359	360	361
B7									1.1		216	217	218
B8									1.25		213	214	215
B9									1.4		210	211	212
C0	ΦTS W/ET BASE SPOILER			OFF	OFF				0.9		377	375	376
C1									1.1		368	369	370
C2				N	N				0.9		378	379	380
C3									1.1		371	372	373

TEST RUN NUMBERS

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

COEFFICIENTS IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES

TABLE II. - Concluded.

DATASETS	IDVAR(1)	IDVAR(2)	COEFFICIENTS
RE40XX	ALPHA	BETA	CBMW, CTMW, CNW, CHEI, CHEO, CBMV, CTMV, CYV, CHR, MACH
EE4XXX	ALPHA	BETA	XWCP, YWCP, XVCP, ZVCP
AE4XXX	ALPHA	BETA	CP379, CP717, CP380, CP718, CP381, CP716, CP720, CP719, CP374, CP376
BE4XXX	ALPHA	BETA	CP2, CP4, CP6, CP8, CP12, CP14, CP18, CP20
CE4XXX	ALPHA	BETA	CP29, CP31, CP35, CP37, CP30, CP32, CP36, CP38
DE4XXX	ALPHA	BETA	CP76, CP78, CP80, CP82, CP75, CP77, CP79, CP81
FE4XXX	ALPHA	BETA	CP378, CP715, CP375, CP377, CP721, CP372, CP714, CP722, CP373, CP713
GE4XXX	ALPHA	BETA	CP723, CP371, CP370, CP724
HE4XXX	ALPHA	BETA	CP22, CP24, CP26, CP28, CP21, CP23, CP25, CP27
IE4XXX	ALPHA	BETA	CP13, CP17, CP19
JE4XXX	ALPHA	BETA	CP39, CP41, CP43, CP45, CP40, CP42, CP44, CP46
KE4XXX	ALPHA	BETA	CP47, CP49, CP53, CP55, CP48, CP50, CP54, CP56
LE4XXX	ALPHA	BETA	CP60, CP62, CP64, CP66, CP59, CP61, CP63, CP65
ME4XXX	ALPHA	BETA	CP68, CP70, CP72, CP74, CP67, CP69, CP71, CP73
RE4CXX	ALPHA	BETA	CP for pressure tap* 9, 10, 15, 16, 33, 34, 51, 54, 57, 58
RE4DXX	ALPHA	BETA	CP for pressure taps* 700, 702, 704, 706, 382, 384, 708, 710, 383, 385
RE4EXX	ALPHA	BETA	CP for pressure taps* 701, 703, 705, 707, 386, 388, 709, 711, 387, 389
RE4GXX	ALPHA	BETA	CP for pressure taps* 518, 805, 800, 521, 806, 801, 804, 807, 802, 515, 808, 803
RE4HXX	ALPHA	BETA	CP for pressure taps* 541, 810, 814, 821, 826, 815, 811, 816, 822, 827, 817, 823, 828, 832, 812, 818, 824, 829, 830, 833, 809, 813, 819, 820, 825, 831, 834
RE4IXX	ALPHA	BETA	CP for pressure taps* 841, 842, 843, 844

* See TABLE IV for tap locations.

Table III Model Dimensional Data

MODEL COMPONENT: ATTACH STRUCTURE - AT 28

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

MODEL SCALE: 0.020 MODEL DRAWING NO.: _____

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

DIMENSIONS:	MEMBER		FULL SCALE	MODEL SCALE
	#1	X_o	1317.00	26.34
		Y_o	- 96.50 (LH)	- 1.930
			96.50 (RH)	1.930
		Z_o	267.50	5.350
		X_T	2058.00	41.16
		Y_T	-125.68 (LH)	-2.514
			125.68 (RH)	2.514
		Z_T	515.5	10.310
	#2	X_o	1317.00	26.34
		Y_o	- 96.50 (LH)	- 1.930
			96.50 (RH)	1.930
		Z_o	267.50	5.350
		X_T	1872.00	37.44
		Y_T	-125.68 (LH)	- 2.514
			125.68 (RH)	2.514
		Z_T	504.5	10.090
Diameter, In.	#1		11.5	0.230
	#2		15.5	0.310

Table III (Cont'd)

MODEL COMPONENT: ATTACH STRUCTURE - AT_{31}

GENERAL DESCRIPTION: REAR ET to SRB attach structure (LH and RH). (3 members)

MODEL SCALE: 0.020 MODEL DRAWING: _____

DRAWING NO.: VL78-000063, -000062B, -000066

DIMENSIONS:	MEMBER	FULL SCALE	MODEL SCALE	
X_T	#1	2058.00	41.16	
Y_T		-171.50	- 3.430	(LH)
		171.50	3.430	(RH)
Z_T		457.00	9.140	
X_s		1511.00	41.16	
Y_s		53.24	1.064	
Z_s		57.00	1.14	
X_T	#2	2058.00	41.16	
Y_T		-163.85	- 3.277	
Z_T		449.81	8.996	
X_s		1511.00	30.22	
Y_s		76.56	1.531	
Z_s		15.73	0.315	
X_T	#3	2058	41.16	
Y_T		-161.72	-3.234	
Z_T		343.00	6.860	
X_s		1511.00	30.22	
Y_s		53.24	1.597	
Z_s		- 57.00	-1.140	
Diameter of members, In.:	#1	_____	_____	
	#2	_____	_____	
	#3	_____	_____	

Table III (Cont'd)

MODEL COMPONENT: ATTACH STRUCTURE - AT32

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

MODEL SCALE: 0.020

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

DIMENSIONS:	MEMBER		FULL SCALE	MODEL SCALE
Member	#1	X_o	388.15	7.763
		Y_o	0	0
(Attach point on Orbiter Z_T 614)		Z_o	LWR ML	LWR ML
		X_T	1129.9	22.598
		Y_T	46.50	9.300
(Attach point on Tank)		Z_T	562.58	11.251
	#2	X_o	388.15	7.763
		Y_o	0	0
		Z_o	LWR ML	LWR ML
		X_T	1129.9	22.598
		Y_T	-46.50	-0.930
		Z_T	562.58	11.252
Diameter, In.	#1		6.00	0.120
	#2		6.00	0.120

Table III (Cont'd)

MODEL COMPONENT : BODY B_{62}

GENERAL DESCRIPTION : Configuration 140C orbiter fuselage, MCR 200-R4. Similar to 140A/B fuselage except aft body revised and improved midbody-wing-boot fairing, X_o = 940 to X_o = 1040.

MODEL SCALE: 0.020

DRAWING NUMBER : VL70-000140C, -000202C, -000205A -000200B, -000203

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (IML: Fwd Sta X_o=238), In.	1290.3	25.806
Length(OML: Fwd Sta X_o=235), In.	1293.3	25.866
Max Width (At X_o = 1528.3), In.	264.0	5.280
Max Depth (At X_o = 1464), In.	250.0	5.00
Fineness Ratio	4.899	4.899
Area - Ft^2		
Max. Cross-Sectional	340.885	0.136
Planform		
Wetted		
Base		

Table III (Cont'd)

MODEL COMPONENT : CANOPY - C_{12}

GENERAL DESCRIPTION : Configuration 140C orbiter canopy. Vehicle Cabin No. 31 updated to MCR 200-R4. Used with Fuselage B_{62}.

MODEL SCALE: 0.020

DRAWING NUMBER : VL70-000140C, -000202B, -000204

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (X_o = 434.643 to 578), In.	143.357	2.867
Max Width (At X_o = 513.127), In.	152.412	3.048
Max Depth (At Z_o = 501 to 449.39), In.	51.61	1.032
Fineness Ratio		
Area		
Max. Cross-Sectional		
Planform		
Wetted		
Base		

Table III (Cont'd)

MODEL COMPONENT: ELEVON - E_{52}

GENERAL DESCRIPTION: Elevon for configuration 140C. Hingeline at X_o = 1387, elevon split line X_w = 312.5. 6.0" gaps, beveled edges, and centerbodies.

MODEL SCALE: 0.020

DRAWING NUMBER: VL70-000140C, -006089, -006092, SS-A01260

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Area - Ft^2	210.0	0.084
Span (equivalent) , In.	349.2	6.984
Inb'd equivalent chord , In.	118.0	2.360
Outb'd equivalent chord , In.	55.19	1.104
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.2096	0.2096
At Outb'd equiv. chord	0.4004	0.4004
Sweep Back Angles, degrees		
Leading Edge	0.0	0.0
Tailing Edge	-10.056	-10.056
Hingeline	0.0	0.0
Area Moment (Product of area & $\bar{c}$) , Ft^3	1587.25	0.0127
Mean Aerodynamic Chord, In.	90.7	1.814
Hingeline dihedral (origin at Z_o = 261.3509), deg.)	5.229	5.229

Table III (Cont'd)

MODEL COMPONENT : BODY FLAP - F_{10}

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

MODEL SCALE: 0.020

DRAWING NUMBER : VL70-000140C, -355114

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (X_o = 1525.5 to 1613), In.	87.50	1.750
Max Width (At L.E., X_o = 1525.5) In.	256.00	5.12
Max Depth (X_o = 1532.0), In.	19.798	0.594
Fineness Ratio		
Area - Ft^2		
Max. Cross-Sectional (At H.L.)	35.196	0.0317
Planform	135.00	0 1215
Wetted		
Base (X_o = 1613)	4.89	0.0044

Table III (Cont'd)

MODEL COMPONENT: FEEDLINE - FL_{10}

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

MODEL SCALE: 0.020

DRAWING NO.: VL78-000063, -000062B

DIMENSIONS:		FULL SCALE	NNMODEL SCALE
Leading edge at:	X_T	2071.5	41.430
	Y_T	- 70.00	-1.400
	Z_T	573.934	11.479
Trailing edge at:	X_T	2081.8	41.636
	Y_T	- 70.00	-1.400
	Z_T	584.059	11.681
Diameter of line (17.0 I.D.)		18.160	0.363

Table III (Cont'd)

MODEL COMPONENT: FEEDLINE - FL_{11}

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

MODEL SCALE: 0.020

DRAWING NUMBER: VL78-000063, -000062B

DIMENSIONS:		FULL SCALE	MODEL SCALE
Leading edge at:	X_T	1000.667	20.013
	Y_T	70.00	1.400
	Z_T	150.519	3.010
Trailing edge at:	X_T	2071.5	41.430
	Y_T	70.00	1.400
	Z_T	573.934	11.479
Diameter of line (17.0 I.D.)		18.16 O.D.	0.363

Table III (Cont'd)

MODEL COMPONENT: FAIRING - FR_{10}

GENERAL DESCRIPTION: Umbilical door fairing between aft ET/Orbiter attach structure.

MODEL SCALE: 0.020

DRAWING NO.: VL78-000063, -000062B, Martin Marietta 82600207000

DIMENSIONS:		FULL SCALE	MODEL SCALE
Leading edge at:	X_T	2052.0	41.04
Length		193.0	3.86
Width		15.00	0.300

Table III (Cont'd)

MODEL COMPONENT : OMS POD - M_{16}

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

MODEL SCALE: 0.020

DRAWING NUMBER : VL70-008401, -008410

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (OMS Fwd Sta X_o = 1310.5), In.	258.50	5.170
Max Width (At X_o = 1511), In.	136.8	2.736
Max Depth (At X = 1511), In.	74.70	1.474
Fineness Ratio	2.484	2.484
Area - Ft^2		
Max. Cross-Sectional	58.864	0.024
Planform		
Wetted		
Base		

Table III (Cont'd)

MODEL COMPONENT: MPS NOZZLES - N_{87}

GENERAL DESCRIPTION: Flow-through MPS nozzles.

MODEL SCALE: 0.020

DRAWING NUMBER: SS-A01279

DIMENSIONS:	FULL SCALE	MODEL SCALE
MACH NO. 1.55, 2.0, 2.2, 2.6, 3.0, 3.5		
Length - In.		
Gimbal Point to Exit Plane	157.0	3.140
Throat to Exit Plane	181.55	3.361
Diameter - In.		
Exit	90.435	1.809
Throat	23.350	0.467
Inlet		
Area - ft^2		
Exit	44.607	0.178
Throat	2.974	0.00198
Gimbal Point (Station) - In.		
Upper Nozzle		
X_o	1445.00	28.90
Y_o	0.0	0.0
Z_o	443.00	8.86
Lower Nozzles		
X_o	1468.17	29.363
Y_o	±53.0	±1.06
Z_o	342.64	6.853
Null Position - Deg.		
Upper Nozzle		
Pitch	16	16
Yaw	0	0
Lower Nozzle		
Pitch	10	10
Yaw	0	0

Table III (Cont'd)

MODEL COMPONENT: SRB NOZZLE - N_{88}

GENERAL DESCRIPTION: Flow-through SRB nozzle simulator = 7.0 prototype.

MODEL SCALE: 0.020

DRAWING NUMBER: SS-A01281

DIMENSIONS:	FULL SCALE	MODEL SCALE
MACH NO. 1.55, 2.0, 2.2, 2.6, 3.0, 3.5		
Length - In.		
Gimbal Point to Exit Plane	86.8	1.736
Throat to Exit Plane	112.135	2.243
Diameter - In.		
Exit	114.290	2.886
Throat	64.53	1.291
Inlet		
Area - ft^2		
Exit	356.738	0.143
Throat	22.712	0.009
Gimbal Point (Station) - In.		
X_B	1902.6	38.052
Y_B	250.2	5.010
Z		
Lower Nozzles		
X		
Y		
Z		
Null Position - Deg.		
Pitch	0	0
Yaw	0	0
Lower Nozzle		
Pitch		
Yaw		

Table III (Cont'd)

MODEL COMPONENT: OMS NOZZLES - N_{89}

GENERAL DESCRIPTION: OMS nozzle in stowed position which is outboard 8 deg. and down 7 deg. from null position. Use with M_{16}.

MODEL SCALE: 0.020

DRAWING NUMBER: SS-A01279

DIMENSIONS:	FULL SCALE	MODEL SCALE
MACH NO.		
Length - In.		
Gimbal Point to Exit Plane	56.0	1.12
Throat to Exit Plane		
Diameter - In.		
Exit (.O.D.)	50.0	1.00
Throat		
Inlet		
Area - ft^2		
Exit		
Throat		
Gimbal Point (Station) - In.		
X_o	1518.00	30.360
Y_o	88.00	1.76
Z_o	492.0	9.84
Lower Nozzles		
X		
Y		
Z		
Null Position - Deg.		
Pitch	15°49'	15°49'
Yaw	6°30'	6°30'
Lower Nozzle		
Pitch		
Yaw		

Table III (Cont'd)

MODEL COMPONENT: NOZZLES - N_{104}

GENERAL DESCRIPTION: Flow-through MPS nozzles with gimbal capability. Same as N_{87}, except that these nozzles have contoured interior, the exterior same as N_{87} when shroud is attached.

MODEL SCALE: 0.020

DRAWING NUMBER: SS-A01261

DIMENSIONS:	FULL SCALE	MODEL SCALE
MACH NO.		
Length - In.		
Gimbal Point to Exit Plane	157.00	3.14
Throat to Exit Plane	119.69	2.394
Diameter - In.		
Exit	90.435	1.809
Throat	30.140	0.603
Inlet		
Area - ft^2		
Exit	44.607	0.0178
Throat	4.955	0.00198
Gimbal Point (Station) - In.		
Upper Nozzle		
X_o	1445.00	28.90
Y_o	0.0	0.0
Z_o		
Lower Nozzles		
X_o	1468.17	29.3634
Y_o	53.0	1.06
Z_o	342.64	6.853
Null Position - Deg.		
Upper Nozzle		
Pitch	16	16
Yaw	0	0
Lower Nozzle		
Pitch	10	10
Yaw	OUTB'D 3°30'	OUTB'D 3°30'

Table III (Cont'd)

MODEL COMPONENT : ELECTRICAL TUNNEL - PS_{11}

GENERAL DESCRIPTION : Tunnel running longitudinally on the SRB for electrical wires.

MODEL SCALE: 0.020

DRAWING NUMBER : VC77-000002

DIMENSIONS :	FULL SCALE	MODEL SCALE
Width, In.	5.70	0.114
Radius, In.	5.70	0.114
Height, In	4.70	0.094
L.E. at Sta.	494.70	9.894
L.E. sweepback angle, Deg.	30.0	30.0
Max. Cross-Sectional		
Planform		
Wetted		
Base		

Table III (Cont'd)

MODEL COMPONENT: ELECTRICAL TUNNEL - PS_{12}

GENERAL DESCRIPTION: Four ring stiffeners located at the aft end of the solid rocket boosters. The stiffener is a curved I-beam.

MODEL SCALE: 0.020

DRAWING NO.: VC77-000002

DIMENSIONS:		FULL SCALE	MODEL SCALE
Height, In.		2.5	0.050
Length, In.		2.0	0.04
Locations:	X_B =	1602.00	32.04
		1644.00	32.88
		1729.00	34.58
		1771.00	35.42

Table III (Cont'd)

MODEL COMPONENT: CIRCUMFERENTIAL STIFFENER - PS_{13}

GENERAL DESCRIPTION: Ring stiffener located at the point where the skirt flares. The stiffener is I-beam.

MODEL SCALE: 0.020

DRAWING NO.: VC77-000002

DIMENSIONS:		FULL SCALE	MODEL SCALE
Height, In.		6.50	0.130
Length, In.		4.00	0.080
Location centerline	X_B	1833.70	36.674

Table III (Cont'd)

MODEL COMPONENT: SOLID ROCKET BOOSTER - EXTERNAL TANK ATTACH - PS_{14}

GENERAL DESCRIPTION: Two-ring stiffeners located at aft end of solid rocket boosters. The stiffener is curved I-beam.

MODEL SCALE: 0.020

DRAWING NO.: VC77-000002

DIMENSIONS:		FULL SCALE	MODEL SCALE
Height, In.		8.00	0.160
Length, In.		3.00	0.060
Location centerline	X_B	1511.00	30.22

Table III (Cont'd)

MODEL COMPONENT: SRB PROTUBERANCES - PS_{17}

GENERAL DESCRIPTION: Electrical connecting box mounted on top of PS_{14}.

MODEL SCALE: 0.020

DRAWING NO.: None

DIMENSIONS:	FULL SCALE	MODEL SCALE
Width, In.	60.00	1.200
Depth, In.	17.5	0.350

Centerline of box located 15 deg inboard from vertical plane of symmetry.

Table III (Cont'd)

MODEL COMPONENT: SRB PROTUBERANCE - PS_{18}

GENERAL DESCRIPTION: Tie-down fixtures mounted on the aft skirt. Total of four founted 30 deg. on both sides of vertical plane of symmetry.

MODEL SCALE: 0.020

DRAWING NO.: None

DIMENSIONS:	FULL SCALE	MODEL SCALE
Sta. of leading edge (X_B)	1861.2	37.224
Sta. of Trailing Edge (X_B)	1925.2	38.504
Max. width, In.	14.2	0.284
Height, In.	8.3	0.166

Table III (Cont'd)

MODEL COMPONENT: SRB PROTUBERANCES - PS_{19}

GENERAL DESCRIPTION: Aft separation motor pod mounted on aft skirt at 20 deg. inboard from top vertical plane of symmetry.

MODEL SCALE: 0.020

DRAWING NO.: None

DIMENSIONS:	FULL SCALE	MODEL SCALE
Width, In.	14.0	0.280
Height, In. (at Trailing edge)	19.0	0.380
Sweepback of leading edge, deg.	15.0	15.0

Table III (Cont'd)

MODEL COMPONENT: ET PROTUBERANCE - PT_{12}

GENERAL DESCRIPTION: Lightning rod attached to ET nose.

MODEL SCALE: 0.020

DRAWING NO.: VL78-000068A

DIMENSIONS:	FULL SCALE	MODEL SCALE
Length	30.90	0.618
Diameter, In.	3.20	0.096

Table III (Cont'd)

MODEL COMPONENT: ELECTRICAL LINE - PT_{22}

GENERAL DESCRIPTION: Left-hand electrical conduit line on T_{28}.

MODEL SCALE: 0.020

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

DIMENSIONS:		FULL SCALE	MODEL SCALE
Leading edge at:	X_T	1084.333	21.687
	Y_T	- 99.591	- 1.992
	Z_T	-139.620	- 2.794
Trailing edge at:	X_T	2058.00	41.16
	Y_T	- 99.491	-1.992
	Z_T	-139.620	-2.794
Conduit size:		2.0 x 6.0	0.04 x 0.12

Centerline of line located radially at Φ = 35.5 deg.

Table III (Cont'd)

MODEL COMPONENT: LO_2 RECIRCULATION LINE - PT_{23}

GENERAL DESCRIPTION: LO_2 recirculation line on right-hand upper side of T_{28}.

MODEL SCALE: 0.020

DRAWING NO.: VL78-000063, -000062B , Martin Marietta 82600207000

DIMENSIONS:		FULL SCALE	MODEL SCALE
Leading edge at:	X_T	1040.667	20.813
	Y_T	94.169	1.883
	Z_T	540.934	11 11.817
Trailing edge at:	X_T	2062.920	41.258
	Y_T	70.00	1.40
	Z_T	573.934	11.479
Diameter of line		4.00	0.080

Centerl ıe of lines located radially at $\phi = 33^{\circ} 45'$

(Right of TDC looking forward).

Table III (Cont'd)

MODEL COMPONENT: LH_2 RECIRCULATION LINE - PT_{24}

GENERAL DESCRIPTION: LH_2 recirculation line on T_{28}.

MODEL SCALE: 0.020

DRAWING NO.: VL78-000063, -000062B, Martin Marietta 82600207000

DIMENSIONS:		FULL SCALE	MODEL SCALE
Leading edge at:	X_T	1040.667	20.813
	Y_T	- 94.169	-1.883
	Z_T	540.934	11.819
Trailing edge at:	X_T	2062.920	41.258
	Y_T	- 70.00	-1.400
	Z_T	573.934	11.479
Diameter of line		4.0	0.080

Centerline of line located radially at $\phi = 33^{o}45'$

(Left of TDL looking forward).

Table III (Cont'd)

MODEL COMPONENT: ELECTRICAL LINE - PT_{25}

GENERAL DESCRIPTION: Right-hand aft electrical conduit line on T_{28} with LH_2 pressure sensor line and LOX vent valve actuat[illegible] line.

MODEL SCALE: 0.020

DRAWING NO.: VL78-000063, -000062B, Martin Marietta 82600207000

DIMENSIONS:		FULL SCALE	MODEL SCALE
Leading edge at:	X_T	1084.333	21.687
	Y_T	99.591	1.992
	Z_T	139.620	2.792
Trailing edge at:	X_T	2058.000	41.16
	Y_T	99.591	1.992
	Z_T	139.620	2.792
Conduit size		2.0 x 6.0	0.04 x 0.12

Centerline of line located radially at ϕ = 35.5 deg.

Table III (Cont'd)

MODEL COMPONENT: LOX PRESSURE LINE - PT_{26}

GENERAL DESCRIPTION: LOX pressure line on the T_{28}.

MODEL SCALE: 0.020

DRAWING NO.: VL78-000063, -000062B, Martin Marietta 82600207000

DIMENSIONS:		FULL SCALE	MODEL SCALE
Leading edge at:	X_T	360.733	7.215
	Y_T	15.145	0.303
	Z_T	407.718	8.154
Trailing edge at:	X_T	2083.5	41.670
	Y_T	63.25	1.265
	Z_T	609.00	12.180
Line diameter		2.0	0.040

Centerline of line located radially at ϕ = 27 deg.

Table III (Cont'd)

MODEL COMPONENT: ELECTRICAL LINE - PT_{27}

GENERAL DESCRIPTION: Electrical conduit on the right-hand forward section of T_{28}.

MODEL SCALE: 0.020

DRAWING NO.: VL78-000062B

DIMENSIONS:		FULL SCALE	MODEL SCALE
Leading edge at:	X_T	360.733	7.215
	Y_T	11.549	0.231
	Z_T	412.474	8.250
Trailing edge at:	X_T	876.273	17.525
	Y_T	226.114	4.522
	Z_T	646.774	12.935

Centerline of conduit located radially at ϕ = 47.5 deg.

Table III (Cont'd)

MODEL COMPONENT: RUDDER - R_5

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

MODEL SCALE: 0.020

DRAWING NUMBER: VL70-000146B, -000095

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Area - Ft^2	100.15	0.004
Span (equivalent) - In.	201.00	4.020
Inb'd equivalent chord - In.	91.585	1.832
Outb'd equivalent chord - In.	50.833	1.017
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.400	0.400
At Outb'd equiv. chord	0.400	0.400
Sweep Back Angles, degrees		
Leading Edge		
Tailing Edge	26.25	26.25
Hingeline	34.83	34.83
Area Moment (Product of area & $\bar{c}$), Ft^3	610.92	0.0049
Mean Aerodynamic Chord, In.	73.2	1.464

Table III (Cont'd)

MODEL COMPONENT : BOOSTER SOLID ROCKET MOTOR - S_{22}

GENERAL DESCRIPTION : The BSRM is an external propulsion system which is jettisoned and recoverable after burnout. The BSRM's can be refurbished and reused after recovery.

MODEL SCALE: 0.020

DRAWING NUMBER : VC77-000002C, VC70-000002A, VC72-000002C

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length - In.	1789.60	35.792
Max Width (Tank Dia.), In.	146.00	2.92
Max Depth (Aft Shroud Dia.), In.	208.20	4.164
Fineness Ratio	8.596	8.596
Area - Ft^2		
Max. Cross-Sectional	236.423	0.095
Planform		
Wetted		
Base		
WP of BSRM Centerline (X_T)	400.00	8.00
FS of BSRM nose (X_T)	743.0	14.86
BP of BSRM centerline (X_T)	250.5	5.010

Table III (Cont'd)

MODEL COMPONENT : EXTERNAL TANK - T_{28}

GENERAL DESCRIPTION :

NOTE: Dimensions are to tank structural OML, TPS not included).

MODEL SCALE: 0.020

DRAWING NUMBER : VL72-000143D, VL78-000063

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length - In.	1844.275	36.886
Max ~~Width~~ Dia. - In.	331.00	6.62
Max Depth		
Fineness Ratio	5.687	5.687
Area - Ft^2		
Max. Cross-Sectional	594.678	0.239
Planform		
Wetted		
Base		

Table III (Cont'd)

MODEL COMPONENT: VERTICAL - V_8

GENERAL DESCRIPTION: Configuration 140C orbiter vertical tail (identical to configuration 140A/B vertical tail).

MODEL SCALE: 0.020

DRAWING NUMBER: VL70-000140C, -000146B

DIMENSIONS:	FULL SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo) - Ft^2		
Planform	413.253	0.165
Span (Theo) - In.	315.72	6.314
Aspect Ratio	1.675	1.675
Rate of Taper	0.507	0.507
Taper Ratio	0.404	0.404
Sweep-Back Angles, Degrees.		
Leading Edge	45.00	45.00
Trailing Edge	26.25	26.25
0.25 Element Line	41.13	41.13
Chords:		
Root (Theo) WP	268.50	5.370
Tip (Theo) WP	108.47	2.169
MAC	199.81	3.996
Fus. Sta. of .25 MAC	1463.35	29.267
W.P. of .25 MAC	635.52	12.710
B.L. of .25 MAC	0.0	0.0
Airfoil Section		
Leading Wedge Angle - Deg.	10.00	10.0
Trailing Wedge Angle - Deg.	14.92	14.92
Leading Edge Radius	2.00	0.04
Void Area	13.17	0.0053
Blanketed Area	0.0	0.0

Table III (Con'l'd)

MODEL COMPONENT: WING-W_{116}

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

MODEL SCALE: 0.020

TEST NO.

DWG. NO. VL70-000140A, -000200

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo.) Ft^2		
Planform	2690.00	1.076
Span (Theo In.	936.68	18.734
Aspect Ratio	2.265	2.265
Rate of Taper	1.177	1.177
Taper Ratio	0.200	0.200
Dihedral Angle, degrees	3.500	3.500
Incidence Angle, degrees	0.500	0.500
Aerodynamic Twist, degrees		
Sweep Back Angles, degrees		
Leading Edge	45.000	45.000
Trailing Edge	- 10.056	- 10.056
0.25 Element Line	35.209	35.209
Chords:		
Root (Theo) B.P.0.0.	689.24	13.785
Tip, (Theo) B.P.	137.85	2.757
MAC	474.81	9.496
Fus. Sta. of .25 MAC	1136.85	22.737
W.P. of .25 MAC	290.58	5.812
B.L. of .25 MAC	182.13	3.643
EXPOSED DATA		
Area (Theo) Ft^2	1751.50	0.701
Span, (Theo) In. BP108	720.68	14.4136
Aspect Ratio	2.059	2.059
Taper Ratio	0.245	0.245
Chords		
Root BP108	562.09	11.242
Tip 1.00 $\frac{b}{2}$	137.85	2.757
MAC	392.83	7.856
Fus. Sta. of .25 MAC	1185.98	23.720
W.P. of .25 MAC	294.30	5.886
B.L. of .25 MAC	251.77	5.035
Airfoil Section (Rockwell Mod NA.., XXXX-64		
Root $\frac{b}{2}$ =	0.113	0.113
Tip $\frac{b}{2}$ =	0.120	0.120
Data for (1) of (2) Sides		
Leading Edge Cuff Planform Area Ft^2	113.18	0.045
Leading Edge Intersects Fus M. L. @ Sta	500.00	10.00
Leading Edge Intersects Wing @ Sta	1024.00	20.480

TABLE IV. - PRESSURE TAP NUMBER ASSIGNMENTS

ORBITER FUSELAGE

X_o STA	Z_o W.L	Tap LH	No. RH
7.60	7.08	—	2
8.24	7.08	—	6
7.60	7.26	—	4
8.24	7.26	—	8
15.08	7.54	—	12
15.48	7.54	17	18
15.08	7.76	13	14
15.48	7.76	19	20
18.48	7.02	29	30
18.90	7.02	35	36
18.48	7.24	31	32
18.90	7.24	37	38

X_o STA	Z_o WL	Tap LH	No RH
17.90	7.54	21	22
18.30	7.54	25	26
17.90	7.76	23	24
18.30	7.76	27	28
19.70	7.54	39	40
20.10	7.54	43	44
19.70	7.76	41	42
20.10	7.76	45	46
22.36	7.54	47	48
22.76	7.54	53	54
22.36	7.76	49	50
22.76	7.76	55	56

X_o STA	Z_o WL	Tap LH	No RH
27.62	6.72	75	76
28.02	6.72	79	80
27.62	6.98	77	78
28.02	6.98	81	82
26.84	6.72	59	60
27.08	6.72	63	64
26.84	6.86	61	62
27.08	6.86	65	66
27.40	6.18	67	68
27.54	6.18	71	72
27.40	6.28	69	70
27.54	6.28	73	74

ORB. FUS. RADIAL LOCATIONS

ϕ \ X_o	11.40	15.20	18.84	22.50	26.14
120	10	16	34	52	58
240	9	15	33	51	57

ORB. BODY FLAP - UPPER SURFACE

X_o	Y_o (B.L)				
STA	-1.89	-0.82	0.0	0.82	1.89
31.10	700	704	382	708	383
31.80	702	706	384	710	385

ORB. BODY FLAP - LWR SURFACE

X_o	Y_o (B.L.)				
STA	-1.89	-0.82	0.0	0.82	1.89
31.10	701	705	386	709	387
31.80	703	707	388	711	389

TABLE IV. - Concluded.

ORBITER BASE

Y_o BL	Z_o WL	Tap No.
-2.30	6.59	379
-.438	6.10	717
0.00	6.59	380
.438	6.10	718
2.30	6.59	381
-2.30	7.15	716
0.00	7.15	720
2.30	7.15	719
-2.30	8.00	374

Y_o BL	Z_o WL	Tap No.
0.00	7.72	376
2.30	8.00	378
-2.09	8.38	715
-.87	8.21	375
.87	8.21	377
2.09	8.38	721
-2.45	8.88	372
-1.73	8.70	714
1.73	8.70	722

Y_o BL	Z_o WL	Tap No.
2.45	8.88	373
-1.77	9.18	713
1.77	9.18	723
-1.00	10.0	371
1.00	10.0	370
1.9	9.92	724

EXTERNAL TANK

X_T STA	φ DEG.							
	0	45	90	135	180	225	270	315
19.0		800		801		802		803
38.0	518		521		804		515	
41.16	805		806		807		808	

ET BASE

R/ROD	φ							
	0	45	90	135	180	225	270	315
0	541							
0.45							809	
.635	810		811		812		813	
.840	814	815	816	817	818		819	820
.895	821		822	823	824			825
.946	826		827	828	829	830		831
1.00				832		833		834

SRB (Inside Skirt)

X_B STA	φ			
	0	90	180	270
380	841	842	843	844

Notes:

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

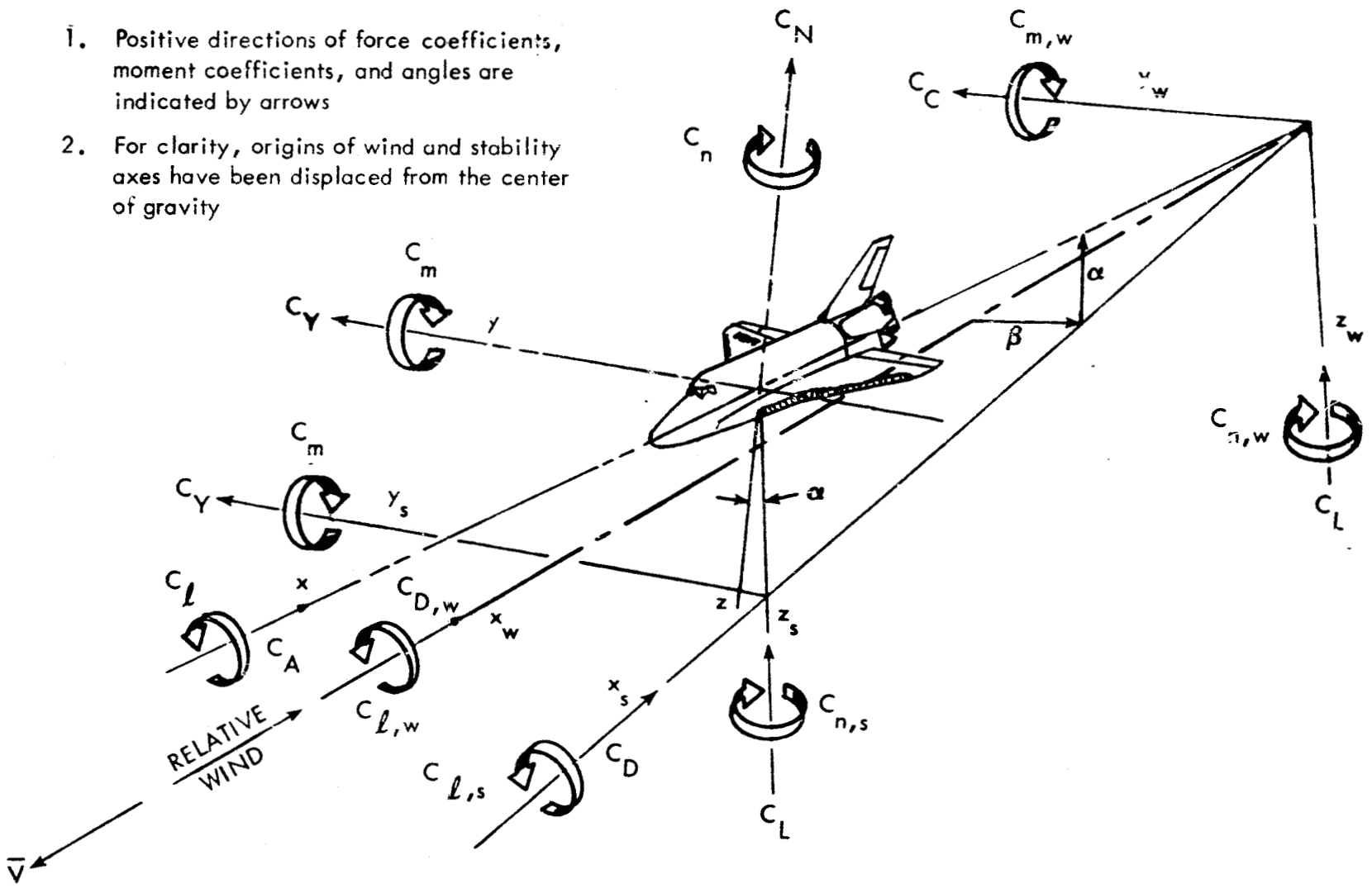


Figure 1. - Axis systems.

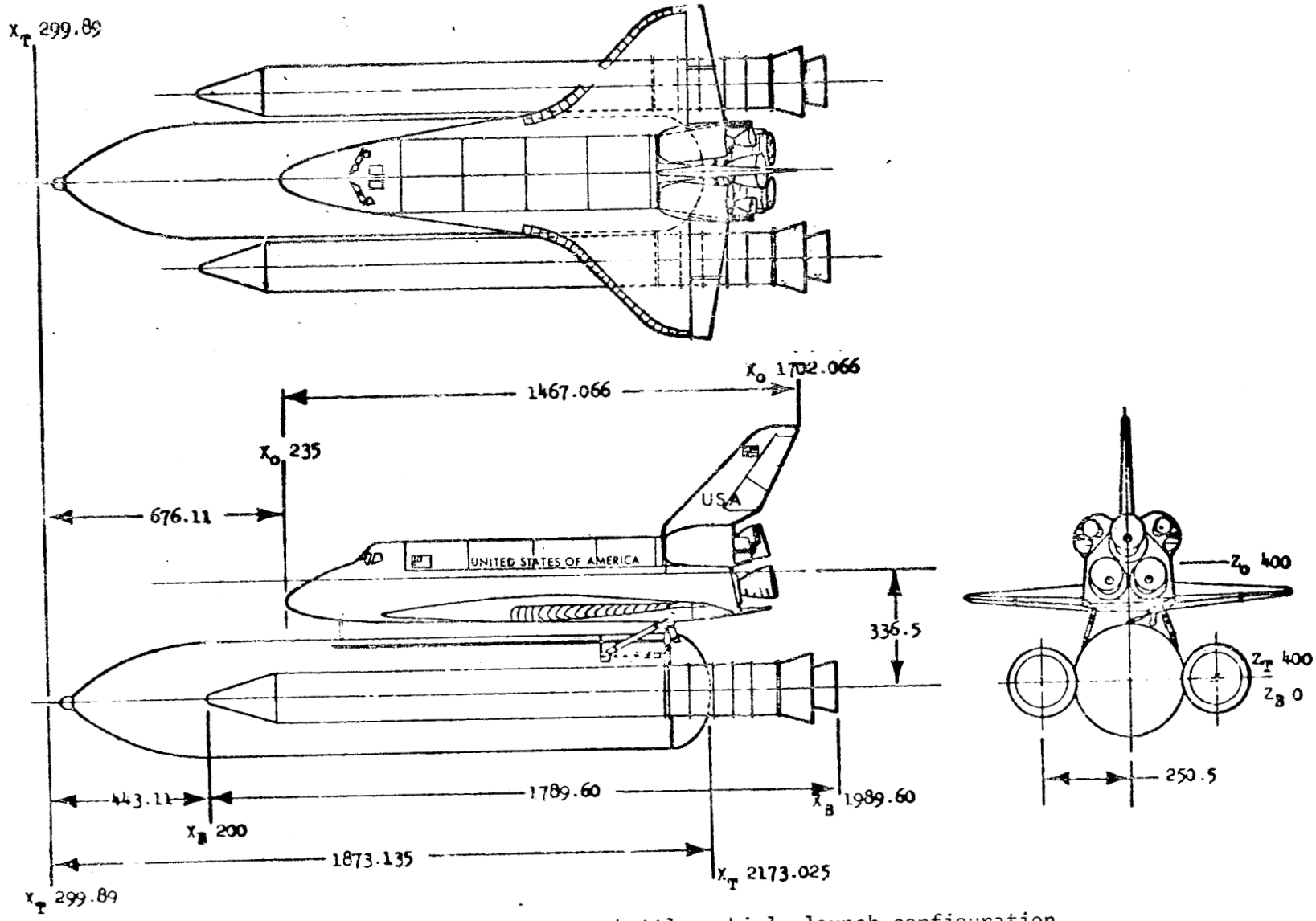
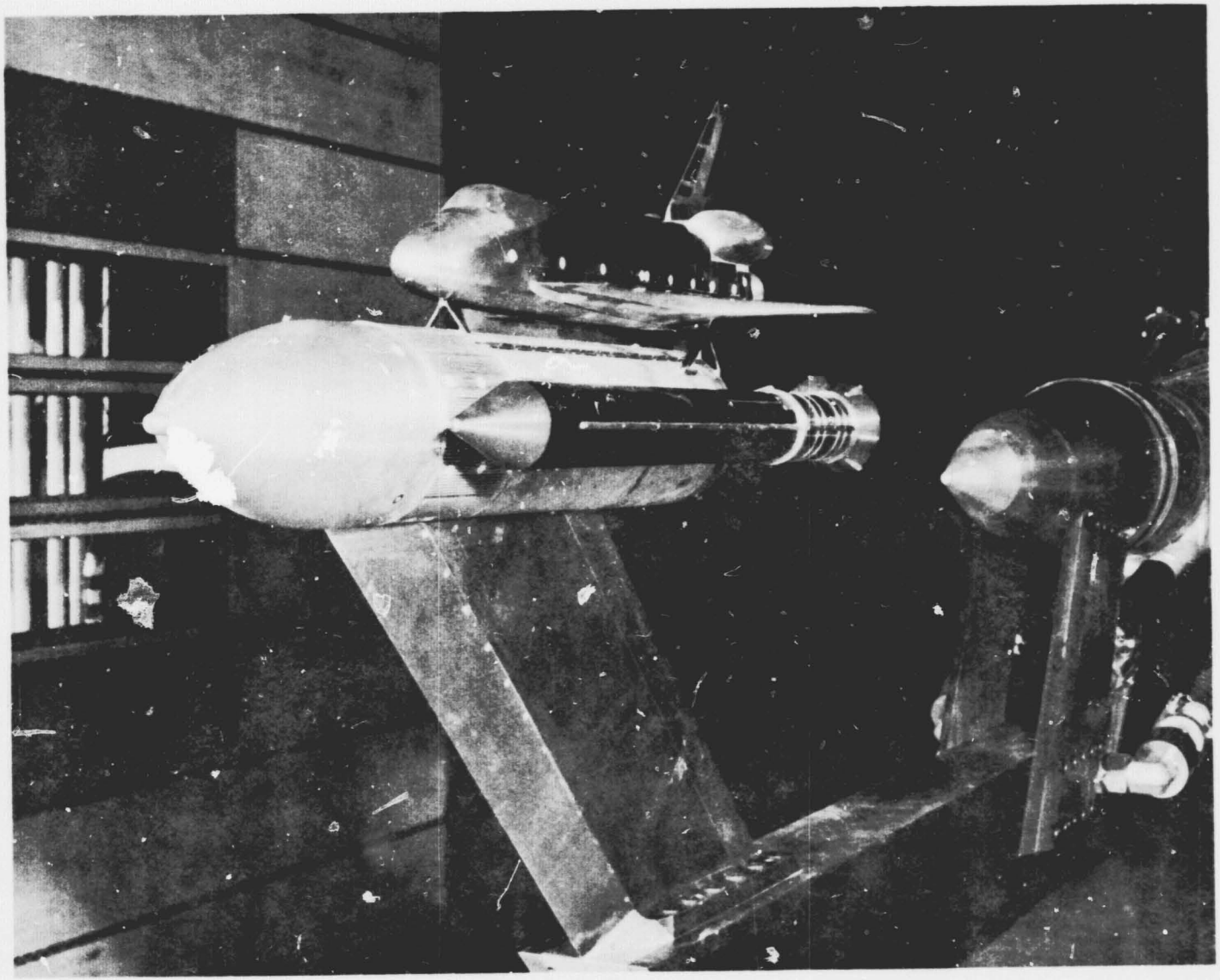
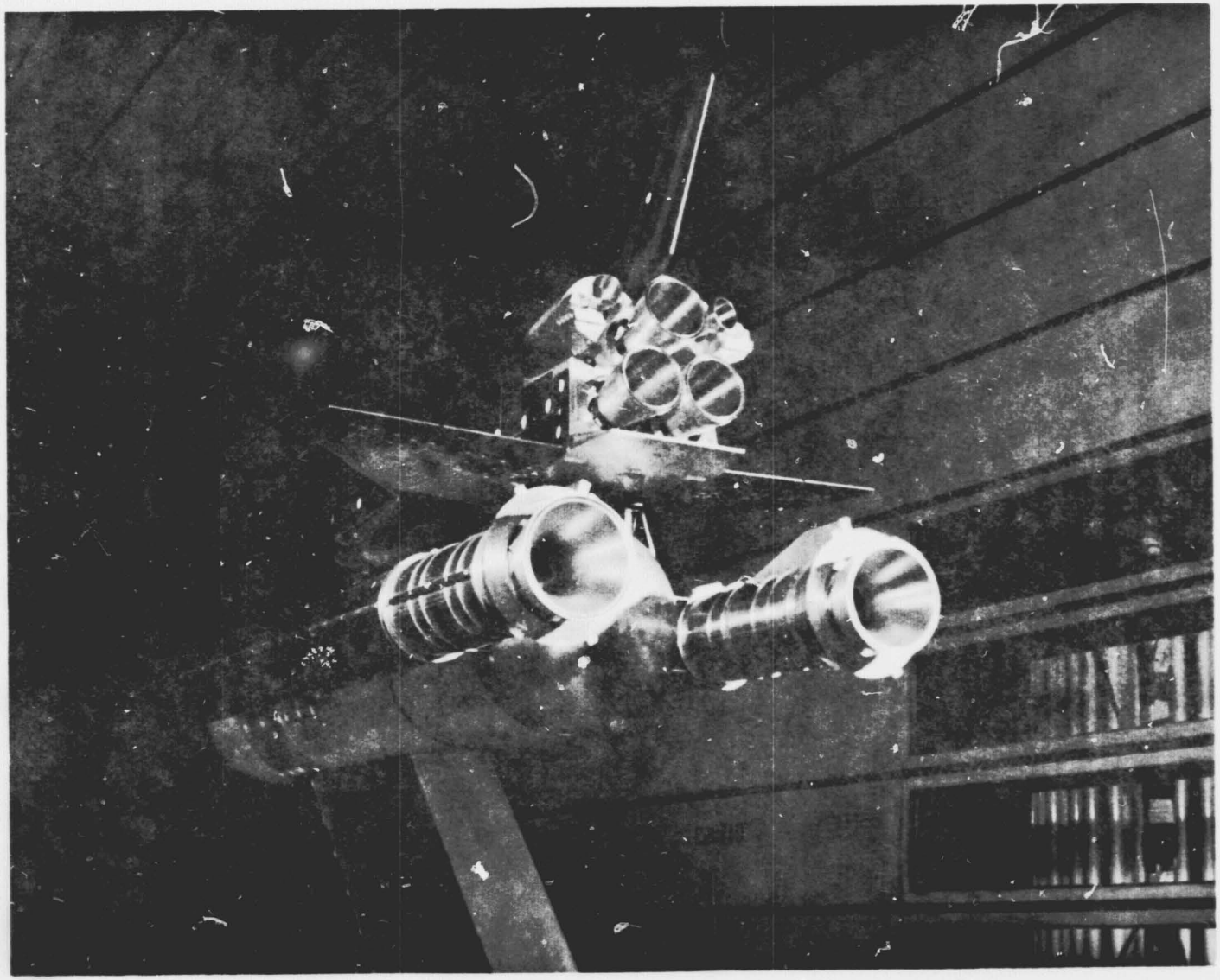


Figure 2. - Integrated space shuttle vehicle launch configuration.



a. Model 88-OTS Installation, Front View

Figure 3. - Model photographs.



b. Model 88-OTS Installation, Rear View

Figure 3. - Concluded.

APPENDIX

TABULATED SOURCE DATA

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

ARC11-023IA80 OTS(SRB=N++ ORB=N) ET (RE4G01) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -4.013 BETA (1) = -.019 MACH = .59860 RN/L = 3.3812 PO = 2110.5 P = 1656.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		-.0516
45.000	-.1430	
90.000		-.1208
135.000	.0334	
180.000		.0000
225.000	.0358	
270.000		-.1215
315.000	-.1526	

ALPHA (2) = -.314 BETA (1) = -4.034 MACH = .59953 RN/L = 3.3878 PO = 2110.3 P = 1655.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		-.0495
45.000	-.0052	
90.000		-.1003
135.000	.0003	
180.000		.0000
225.000	-.0526	
270.000		-.1213
315.000	-.2240	

ALPHA (2) = -.340 BETA (2) = -.019 MACH = .59953 RN/L = 3.3878 PO = 2110.3 P = 1655.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		-.0453
45.000	-.1074	
90.000		-.1027
135.000	-.0193	
180.000		.0000
225.000	-.0133	

ARC11-023[A80 OTS(SRB=N++ ORB=N) ET (RE4G01)

ALPHA (2) = -.340 BETA (2) = -.019

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.1061
315.000	-.1128	

ALPHA (2) = -.459 BETA (3) = 3.597 MACH = .59953 RN/L = 3.3878 PO = 2110.3 P = 1655.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE C^{P}

XT/LT	.3362	.8506
PHI		
.000		-.0466
45.000	-.2108	
90.000		-.1211
135.000	-.0439	
180.000		.0000
225.000	.0112	
270.000		-.0973
315.000	-.0069	

ALPHA (3) = 4.039 BETA (1) = -.019 MACH = .59860 RN/L = 3.3874 PO = 2109.8 P = 1655.9

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0294
45.000	-.0509	
90.000		-.0795
135.000	-.0676	
180.000		.0000
225.000	-.0642	
270.000		-.0973
315.000	-.0533	

ARC11-023IA80 OTS(SRB=N++ ORB=N) ET (RE4G02) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.901 BETA (1) = -.012 MACH = .90550 RN/L = 4.2328 PO = 2108.4 P = 1239.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0371
45.000	-.1305
90.000	.0047
135.000	.0875
180.000	.0000
225.000	.0965
270.000	-.0037
315.000	-.1435

ALPHA (2) = -.387 BETA (1) = -4.025 MACH = .90060 RN/L = 4.2176 PO = 2106.2 P = 1244.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0241
45.000	-.0234
90.000	-.0043
135.000	-.0083
180.000	.0000
225.000	.0217
270.000	-.0452
315.000	-.1276

ALPHA (2) = -.380 BETA (2) = -.009 MACH = .90060 RN/L = 4.2176 PO = 2106.2 P = 1244.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0445
45.000	-.0747
90.000	-.0047
135.000	.0078
180.000	.0000
225.000	.0222

ARC11-023IA80 OTS(SRB=N++ ORB=N) ET (RE4G02)

ALPHA (2) = -.380 BETA (2) = -.009

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0243
315.000	-.0857	

ALPHA (2) = -.456 BETA (3) = 4.003 MACH = .90060 RN/L = 4.2176 PO = 2106.2 P = 1244.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0189
45.000	-.1133	
90.000		-.0495
135.000	.0167	
180.000		.0000
225.000	-.0052	
270.000		-.0275
315.000	-.0366	

ALPHA (3) = 3.977 BETA (1) = -.009 MACH = .89810 RN/L = 4.2116 PO = 2105.5 P = 1247.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0268
45.000	-.0165	
90.000		-.1023
135.000	-.0644	
180.000		.0000
225.000	-.0614	
270.000		-.1160
315.000	-.0256	

ARC11-023IA80 CTS(SRB=N++ ORB=N) ET (RE4G03) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.920 BETA (1) = -.003 MACH = 1.0986 RN/L = 4.3008 PO = 2109.8 P = 989.84

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.2399
45.000	.1191	
90.000		.2053
135.000	.3026	
180.000		.0000
225.000	.2975	
270.000		.2026
315.000	.1008	

ALPHA (2) = -.621 BETA (1) = -4.006 MACH = 1.1024 RN/L = 4.3086 PO = 2109.6 P = 985.11

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.2295
45.000	.1814	
90.000		.2420
135.000	.1256	
180.000		.0000
225.000	.2454	
270.000		.1445
315.000	.1890	

ALPHA (2) = -.641 BETA (2) = .000 MACH = 1.1024 RN/L = 4.3086 PO = 2109.6 P = 985.11

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.2258
45.000	.2045	
90.000		.2265
135.000	.2206	
180.000		.0000
225.000	.2142	

ARC11-023IA80 OTS(SRB=N++ ORB=N) ET (RE4G03)

ALPHA (2) = -.641 BETA (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.2196
315.000	.1871	

ALPHA (2) = -.492 BETA (3) = 4.009 MACH = 1.1024 RN/L = 4.3086 PO = 2109.6 P = 985.11

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2245
45.000	.1940	
90.000		.1278
135.000	.2791	
180.000		.0000
225.000	.1163	
270.000		.2199
315.000	.1666	

ALPHA (3) = 3.944 BETA (1) = -.003 MACH = 1.1088 RN/L = 4.3102 PO = 2108.4 P = 976.70

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1924
45.000	.2538	
90.000		.1458
135.000	.0689	
180.000		.0000
225.000	.0662	
270.000		.1322
315.000	.2432	

ARC11-0231A80 OTS(SRB=N++ ORB=N) ET (RE4G04) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -4.165 BETA (1) = .000 MACH = 1.2595 RN/L = 4.4972 PO = 2140.2 P = 815.83

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0113
45.000	.2505
90.000	.0017
135.000	.3452
180.000	.0000
225.000	.3248
270.000	-.0112
315.000	.2311

ALPHA (2) = -.495 BETA (1) = -4.006 MACH = 1.2534 RN/L = 4.4312 PO = 2113.5 P = 812.32

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.1909
45.000	.2926
90.000	.1244
135.000	.1636
180.000	.0000
225.000	.2045
270.000	-.0255
315.000	.2446

ALPHA (2) = -.528 BETA (2) = .000 MACH = 1.2534 RN/L = 4.4312 PO = 2113.5 P = 812.32

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.1424
45.000	.3330
90.000	-.0010
135.000	.3087
180.000	.0000
225.000	.2956

ARC11-023IA80 OTS(SRB=N++ ORB=N) ET (RE4G04)

ALPHA (2) = -.528 BETA (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0179
315.000	.3257	

ALPHA (2) = -.555 BETA (3) = 4.006 MACH = 1.2534 RN/L = 4.4312 PO = 2113.5 P = 812.32

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1806
45.000	.2305	
90.000		-.0453
135.000	.2657	
180.000		.0000
225.000	.1703	
270.000		.0620
315.000	.2809	

ALPHA (3) = 3.881 BETA (1) = .006 MACH = 1.2464 RN/L = 4.4257 PO = 2113.3 P = 819.82

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2623
45.000	.3372	
90.000		.0781
135.000	.1575	
180.000		.0000
225.000	.1426	
270.000		.0376
315.000	.3282	

ARC11-0231A80 OTS(SRB=N++ ORB=N) ET (RE4G05) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.950 BETA (1) = -.003 MACH = 1.4026 RN/L = 4.3103 PO = 2124.6 P = 665.23

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0095
45.000	.2839	
90.000		-.0306
135.000	.3013	
180.000		.0000
225.000	.2565	
270.000		-.0634
315.000	.2776	

ALPHA (2) = -.436 BETA (1) = -4.009 MACH = 1.4051 RN/L = 4.3040 PO = 2123.0 P = 662.38

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0117
45.000	.3857	
90.000		.0247
135.000	.2435	
180.000		.0000
225.000	.1448	
270.000		-.1149
315.000	.1121	

ALPHA (2) = -.482 BETA (2) = -.003 MACH = 1.4051 RN/L = 4.3040 PO = 2123.0 P = 662.38

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0153
45.000	.3245	
90.000		-.0512
135.000	.3209	
180.000		.0000
225.000	.2963	

ARC11-023IA80 OTS(SRB=N++ ORB=N) ET (RE4G05)

ALPHA (2) = -.482 BETA (2) = -.003

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0909
315.000	.3237	

ALPHA (2) = -.505 BETA (3) = 4.009 MACH = 1.4051 RN/L = 4.3040 PO = 2123.0 P = 662.38

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0177
45.000	.1351	
90.000		-.0926
135.000	.1699	
180.000		.0000
225.000	.2416	
270.000		-.0477
315.000	.3818	

ALPHA (3) = 3.881 BETA (1) = -.006 MACH = 1.4020 RN/L = 4.3020 PO = 2122.5 P = 665.10

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0355
45.000	.2990	
90.000		-.1009
135.000	.2503	
180.000		.0000
225.000	.2128	
270.000		-.1508
315.000	.2936	

ARC11-0231A80 OTS(SRB=N+ ORB=N) ET (REV006) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.848 BETA (1) = -.019 MACH = .59810 RN/L = 3.3852 PO = 2109.1 P = 1656.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	-.0554
45.000	-.1409
90.000	-.1251
135.000	.0368
180.000	.0000
225.000	.0392
270.000	-.1283
315.000	-.1480

ALPHA (2) = -.350 BETA (1) = -4.038 MACH = .59800 RN/L = 3.3843 PO = 2108.4 P = 1655.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	-.0471
45.000	-.0066
90.000	-.0955
135.000	-.0014
180.000	.0000
225.000	-.0492
270.000	-.1213
315.000	-.2178

ALPHA (2) = -.314 BETA (2) = -.022 MACH = .59800 RN/L = 3.3843 PO = 2108.4 P = 1655.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	-.0454
45.000	-.1045
90.000	-.0991
135.000	-.0153
180.000	.0000
225.000	-.0150

ARC11-023/A80 OTS(SRB=N+ ORB=N) ET (RE4G06)

ALPHA (2) = -.314 BETA (2) = -.022

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.1069
315.000	-.1055	

ALPHA (2) = -.396 BETA (3) = 3.997 MACH = .59800 RN/L = 3.3843 PO = 2108.4 P = 1655.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0591
45.000	-.2168	
90.000		-.1316
135.000	-.0478	
180.000		.0000
225.000	-.0003	
270.000		-.1044
315.000	-.0137	

ALPHA (3) = 3.970 BETA (1) = -.022 MACH = .59820 RN/L = 3.3879 PO = 2107.7 P = 1654.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CF

XT/LT	.3362	.8506
PHI		
.000		-.0294
45.000	-.0492	
90.000		-.0813
135.000	-.0704	
180.000		.0000
225.000	-.0687	
270.000		-.1024
315.000	-.0554	

ARC11-023IA80 OTS(SRB=N+ ORB=N) ET (RE4G07) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.930 BETA (1) = -.009 MACH = .89330 RN/L = 4.2036 PO = 2101.3 P = 1243.3

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0281
45.000	-.1423	
90.000		-.0036
135.000	.0834	
180.000		.0000
225.000	.0935	
270.000		-.0179
315.000	-.1544	

ALPHA (2) = -.376 BETA (1) = -4.028 MACH = .90183 RN/L = 4.2093 PO = 2101.3 P = 1239.9

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0300
45.000	-.0261	
90.000		.0019
135.000	-.0084	
180.000		.0000
225.000	.0246	
270.000		-.0394
315.000	-.1202	

ALPHA (2) = -.330 BETA (2) = -.012 MACH = .90183 RN/L = 4.2093 PO = 2101.3 P = 1239.9

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8505
PHI		
.000		.0406
45.000	-.0781	
90.000		-.0079
135.000	.0031	
180.000		.0000
225.000	.0153	

ARC11-0231A80 OTS(SRB=N+ ORB=N) ET (RE4G07)

ALPHA (2) = -.330 BETA (2) = -.012

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0307
315.000	-.0897	

ALPHA (2) = -.330 BETA (3) = 4.003 MACH = .90183 RN/L = 4.2093 PO = 2101.3 P = 1239.9

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0236
45.000	-.1045	
90.000		-.0431
135.000	.0238	
180.000		.0000
225.000	.0027	
270.000		-.0200
315.000	-.0278	

ALPHA (3) = 3.927 BETA (1) = -.016 MACH = .90100 RN/L = 4.2085 PO = 2101.3 P = 1241.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0282
45.000	-.0124	
90.000		-.0983
135.000	-.0674	
180.000		.0000
225.000	-.0566	
270.000		-.1146
315.000	-.0222	

ARC11-023IA80 OTS(SRB=N+ ORB=N) ET (RE4G08) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.907 BETA (1) = .000 MACH = 1.0989 RN/L = 4.3130 PO = 2107.0 P = 988.16

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2400
45.000	.1177	
90.000		.2040
135.000	.3048	
180.000		.0000
225.000	.2992	
270.000		.2024
315.000	.1016	

ALPHA (2) = -.515 BETA (1) = -4.003 MACH = 1.1012 RN/L = 4.3135 PO = 2106.7 P = 985.16

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2285
45.000	.1807	
90.000		.2422
135.000	.1228	
180.000		.0000
225.000	.2461	
270.000		.1441
315.000	.1861	

ALPHA (2) = -.525 BETA (2) = .003 MACH = 1.1012 RN/L = 4.3135 PO = 2106.7 P = 985.16

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2246
45.000	.2047	
90.000		.2260
135.000	.2187	
180.000		.0000
225.000	.2108	

ARC11-023IA80 OTS(SRB=N+ ORB=N) ET (RE4G08)

ALPHA (2) = -.525 BETA (2) = .003

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.2190
315.000	.1858	

ALPHA (2) = -.426 BETA (3) = 4.012 MACH = 1.1012 RN/L = 4.3135 PO = 2106.7 P = 985.16

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2228
45.000	.1943	
90.000		.1294
135.000	.2782	
180.000		.0000
225.000	.1144	
270.000		.2194
315.000	.1681	

ALPHA (3) = 3.881 BETA (1) = .006 MACH = 1.1017 RN/L = 4.3151 PO = 2105.5 P = 984.01

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1936
45.000	.2460	
90.000		.1519
135.000	.0744	
180.000		.0000
225.000	.0654	
270.000		.1397
315.000	.2363	

ARC11-0231A80 OTS(SRB=N+ ORB=N) ET (RE4G09) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.897 BETA (1) = .006 MACH = 1.2489 RN/L = 4.4001 PO = 2111.9 P = 816.48

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0355
45.000	.2404	
90.000		.0055
135.000	.3343	
180.000		.0000
225.000	.3195	
270.000		-.0116
315.000	.2248	

ALPHA (2) = -.482 BETA (1) = -4.006 MACH = 1.2477 RN/L = 4.3993 PO = 2111.9 P = 817.80

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1857
45.000	.2903	
90.000		.1191
135.000	.1601	
180.000		.0000
225.000	.2046	
270.000		-.0303
315.000	.2426	

ALPHA (2) = -.519 BETA (2) = .003 MACH = 1.2477 RN/L = 4.3993 PO = 2111.9 P = 817.80

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1467
45.000	.3286	
90.000		.0010
135.000	.3053	
180.000		.0000
225.000	.2935	

ARC11-023IA80 OTS(SRB=N+ ORB=N) ET (RE4G09)

ALPHA (2) = -.519 BETA (2) = .003

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0190
315.000	.3209	

ALPHA (2) = -.462 BETA (3) = 4.009 MACH = 1.2477 RN/L = 4.3993 PO = 2111.9 P = 817.80

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1948
45.000	.2358	
90.000		-.0245
135.000	.2703	
180.000		.0000
225.000	.1593	
270.000		.0922
315.000	.2711	

ALPHA (3) = 3.854 BETA (1) = .006 MACH = 1.2493 RN/L = 4.3962 PO = 2111.9 P = 816.04

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2672
45.000	.3403	
90.000		.0776
135.000	.1572	
180.000		.0000
225.000	.1445	
270.000		.0376
315.000	.3296	

ARC11-023IA80 OTS(SRB=N+ ORB=N) ET (RE4G10) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.904 BETA (1) = -.006 MACH = 1.4001 RN/L = 4.2924 PO = 2119.7 P = 665.99

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0074
45.000	.2835	
90.000		-.0327
135.000	.2991	
180.000		.0000
225.000	.2516	
270.000		-.0669
315.000	.2759	

ALPHA (2) = -.406 BETA (1) = -4.009 MACH = 1.4020 RN/L = 4.2945 PO = 2120.9 P = 664.59

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	3362	.8506
PHI		
.000		.0108
45.000	.3857	
90.000		.0203
135.000	.2409	
180.000		.0000
225.000	.1414	
270.000		-.1207
315.000	.1071	

ALPHA (2) = -.370 BETA (2) = .000 MACH = 1.4020 RN/L = 4.2945 PO = 2120.9 P = 664.59

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0149
45.000	.3263	
90.000		-.0566
135.000	.3183	
180.000		.0000
225.000	.2986	

ARC11-023IA80 OTS(SRB=N+ ORB=N) ET (RE4G10)

ALPHA (2) = -.370 BETA (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0940
315.000	.3192	

ALPHA (2) = -.453 BETA (3) = 4.012 MACH = 1.4020 RN/L = 4.2945 PO = 2120.9 P = 664.59

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0164
45.000	.1319	
90.000		-.0971
135.000	.1711	
180.000		.0000
225.000	.2381	
270.000		-.0497
315.000	.3829	

ALPHA (3) = 3.944 BETA (1) = -.006 MACH = 1.3972 RN/L = 4.2925 PO = 2121.1 P = 669.17

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0325
45.000	.2979	
90.000		-.1090
135.000	.2418	
180.000		.0000
225.000	.2051	
270.000		-.1579
315.000	.2899	

ARC11-023IA80 OTS(SRB=N ORB=N+) ET (RE4G11) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.957 BETA (1) = -.016 MACH = .59560 RN/L = 3.3845 PO = 2105.5 P = 1656.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0625
45.000	-.1486	
90.000		-.1269
135.000	.0304	
180.000		.0000
225.000	.0318	
270.000		-.1275
315.000	-.1576	

ALPHA (2) = -.337 BETA (1) = -4.041 MACH = .59810 RN/L = 3.3979 PO = 2105.7 P = 1653.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0490
45.000	-.0075	
90.000		-.1049
135.000	-.0020	
180.000		.0000
225.000	-.0465	
270.000		-.1239
315.000	-.2227	

ALPHA (2) = -.383 BETA (2) = -.022 MACH = .59810 RN/L = 3.3979 PO = 2105.7 P = 1653.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0432
45.000	-.1054	
90.000		-.1041
135.000	-.0159	
180.000		.0000
225.000	-.0098	

ARC11-023IA80 OTS,SRB=N ORB=N+) ET (RE4G11)

ALPHA (2) = -.383 BETA (2) = -.022

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.1068
315.000	-.1061	

ALPHA (2) = -.400 BETA (3) = 3.997 MACH = .59810 RN/L = 3.3979 PO = 2105.7 P = 1653.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0454
45.000	-.2159	
90.000		-.1206
135.000	-.0369	
180.000		.0000
225.000	.0130	
270.000		-.0912
315.000	-.0013	

ALPHA (3) = 4.125 BETA (1) = -.025 MACH = .59330 RN/L = 3.4056 PO = 2106.2 P = 1652.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0246
45.000	-.0437	
90.000		-.0744
135.000	-.0618	
180.000		.0000
225.000	-.0618	
270.000		-.0976
315.000	-.0509	

ARC11-023IA80 OTS(SRB=N ORB=N+) ET (RE4G12) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .900 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -4.062 BETA (1) = -.012 MACH = .89970 RN/L = 4.2040 PO = 2099.9 P = 1242.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0274
45.000	-.1441	
90.000		-.0066
135.000	.0869	
180.000		.0000
225.000	.0923	
270.000		-.0171
315.000	-.1576	

ALPHA (2) = -.383 BETA (1) = -4.028 MACH = .90127 RN/L = 4.2082 PO = 2100.1 P = 1240.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0236
45.000	-.0270	
90.000		-.0068
135.000	-.0114	
180.000		.0000
225.000	.0171	
270.000		-.0471
315.000	-.1308	

ALPHA (2) = -.383 BETA (2) = -.016 MACH = .90127 RN/L = 4.2082 PO = 2100.1 P = 1240.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0427
45.000	-.0758	
90.000		-.0034
135.000	.0078	
180.000		.0000
225.000	.0176	

ARC11-0231A80 OTS(SRB=N ORB=N+) ET (RE4G12)

ALPHA (2) = -.383 BETA (2) = -.016

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0254
315.000	-.0863	

ALPHA (2) = -.453 BETA (3) = 4.000 MACH = .90127 RN/L = 4.2082 PO = 2100.1 P = 1240.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0197
45.000	-.1052	
90.000		-.0427
135.000	.0233	
180.000		.0000
225.000	.0013	
270.000		-.0188
315.000	-.0342	

ALPHA (3) = 3.947 BETA (1) = -.012 MACH = .90020 RN/L = 4.1982 PO = 2099.2 P = 1240.9

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0278
45.000	-.0120	
90.000		-.1017
135.000	-.0645	
180.000		.0000
225.000	-.0565	
270.000		-.1156
315.000	-.0227	

ARC11-023IA80 OTS(SRB=N ORB=N+.) ET (RE4G13) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.950 BETA (1) = .006 MACH = 1.0974 RN/L = 4.3157 PO = 2105.5 P = 989.31

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2388
45.000	.1158	
90.000		.2005
135.000	.3029	
180.000		.0000
225.000	.2978	
270.000		.2015
315.000	.0984	

ALPHA (2) = -.509 BETA (1) = -4.066 MACH = 1.1004 RN/L = 4.3182 PO = 2105.5 P = 985.62

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2281
45.000	.1795	
90.000		.2424
135.000	.1251	
180.000		.0000
225.000	.2460	
270.000		.1479
315.000	.1866	

ALPHA (2) = -.552 BETA (2) = -.056 MACH = 1.1004 RN/L = 4.3182 PO = 2105.5 P = 985.62

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2252
45.000	.2024	
90.000		.2255
135.000	.2176	
180.000		.0000
225.000	.2109	

ARC11-023IA80 OTS(SRB=N ORB=N+) ET (RE4G13)

ALPHA (2) = -.552 BETA (2) = -.056

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.2173
315.000	.1852	

ALPHA (2) = -.486 BETA (3) = 3.950 MACH = 1.1004 RN/L = 4.3182 PO = 2105.5 P = 985.62

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2226
45.000	.1922	
90.000		.1332
135.000	.2786	
180.000		.0000
225.000	.1161	
270.000		.2184
315.000	.1676	

ALPHA (3) = 4.029 BETA (1) = -.069 MACH = 1 030 RN/L = 4.3205 PO = 2104.8 P = 982.12

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1918
45.000	.2461	
90.000		.1495
135.000	.0752	
180.000		.0000
225.000	.0689	
270.000		.1340
315.000	.2378	

ARC11-0231A80 OTS(SRB=N ORB=N+) ET (RE4G14) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.963 BETA (1) = .006 MACH = 1.2512 RN/L = 4.3841 PO = 2109.1 P = 812.89

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0324
45.000	.2416	
90.000		.0039
135.000	.3344	
180.000		.0000
225.000	.3210	
270.000		-.0148
315.000	.2251	

ALPHA (2) = -.492 BETA (1) = -4.006 MACH = 1.2479 RN/L = 4.3874 PO = 2110.0 P = 816.96

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.1908
45.000	.2916	
90.000		.1171
135.000	.1626	
180.000		.0000
225.000	.2054	
270.000		-.0283
315.000	.2418	

ALPHA (2) = -.466 BETA (2) = .003 MACH = 1.2479 RN/L = 4.3874 PO = 2110.0 P = 816.96

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.1531
45.000	.3292	
90.000		-.0059
135.000	.3064	
180.000		.0000
225.000	.2912	

ARC11-023IA80 OTS(SRB=N ORB=N+) ET (RE4314)

ALPHA (2) = -.466 BETA (2) = .003

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0266
315.000	.3213	

ALPHA (2) = -.522 BETA (3) = 4.009 MACH = 1.2479 RN/L = 4.3874 PO = 2110.0 P = 816.96

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1882
45.000	.2297	
90.000		-.0073
135.000	.2669	
180.000		.0000
225.000	.1580	
270.000		.0711
315.000	.2723	

ALPHA (3) = 3.996 BETA (1) = .000 MACH = 1.2453 RN/L = 4.3815 PO = 2109.8 P = 819.58

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2601
45.000	.3361	
90.000		.0761
135.000	.1490	
180.000		.0000
225.000	.1394	
270.000		.0283
315.000	.3249	

ARC11-023IA80 OTS(SRB=N ORB=N+) ET (RE4G15) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.910 BETA (1) = -.006 MACH = 1.4040 RN/L = 4.2694 PO = 2117.6 P = 661.67

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0110
45.000	.2847	
90.000		-.0342
135.000	.3022	
180.000		.0000
225.000	.2555	
270.000		-.0681
315.000	.2786	

ALPHA (2) = -.409 BETA (1) = -4.009 MACH = 1.4005 RN/L = 4.2782 PO = 2119.0 P = 665.37

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0096
45.000	.3852	
90.000		.0230
135.000	.2417	
180.000		.0000
225.000	.1430	
270.000		-.1205
315.000	.1074	

ALPHA (2) = -.446 BETA (2) = .000 MACH = 1.4005 RN/L = 4.2782 PO = 2119.0 P = 665.37

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0133
45.000	.3246	
90.000		-.0623
135.000	.3202	
180.000		.0000
225.000	.2953	

ARC11-023IA80 OTS(SRB=N ORB=N+) ET (RE4G15)

ALPHA (2) = -.446 BETA (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0992
315.000	.3221	

ALPHA (2) = -.509 BETA (3) = 4.009 MACH = 1.4005 RN/L = 4.2782 PO = 2119.0 P = 665.37

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0170
45.000	.1329	
90.000		-.0919
135.000	.1748	
180.000		.0000
225.000	.2334	
270.000		-.0612
315.000	.3788	

ALPHA (3) = 3.848 BETA (1) = -.006 MACH = 1.4000 RN/L = 4.2776 PO = 2121.1 P = 666.55

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0343
45.000	.3034	
90.000		-.1139
135.000	.2494	
180.000		.0000
225.000	.2117	
270.000		-.1645
315.000	.2914	

ARC11-023IA80 OTS(SRB=N ORB=N-) ET (RE4G16) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.986 BETA (1) = -.012 MACH = .90160 RN/L = 4.2050 PO = 2099.2 P = 1239.1

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0302
45.000	-.1408	
90.000		-.0009
135.000	.0881	
180.000		.0000
225.000	.0943	
270.000		-.0134
315.000	-.1535	

ALPHA (2) = -.350 BETA (1) = -4.031 MACH = .90357 RN/L = 4.2104 PO = 2098.7 P = 1236.1

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0274
45.000	-.0225	
90.000		-.0033
135.000	-.0055	
180.000		.0000
225.000	.0225	
270.000		-.0399
315.000	-.1249	

ALPHA (2) = -.301 BETA (2) = -.016 MACH = .90357 RN/L = 4.2104 PO = 2098.7 P = 1236.1

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0470
45.000	-.0702	
90.000		.0029
135.000	.0083	
180.000		.0000
225.000	.0211	

ARC11-023/1A80 OTS(SRB=N ORB=N-) ET (RE4G16)

ALPHA (2) = -.301 BETA (2) = -.016

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0180
315.000	-.0798	

ALPHA (2) = -.317 BETA (3) = 4.000 MACH = .90357 RN/L = 4.2104 PO = 2098.7 P = 1236.1

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0234
45.000	-.1026	
90.000		-.0410
135.000	.0268	
180.000		.0000
225.000	.0035	
270.000		-.0182
315.000	-.0296	

ALPHA (3) = 3.947 BETA (1) = -.019 MACH = .90070 RN/L = 4.2030 PO = 2098.5 P = 1239.8

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0266
45.000	-.0124	
90.000		-.0985
135.000	-.0653	
180.000		.0000
225.000	-.0588	
270.000		-.1130
315.000	-.0237	

ARC11-0231A80 OTS(SRB=N ORB=N-) ET (RE4G17) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -4.020 BETA (1) = -.069 MACH = 1.0966 RN/L = 4.3161 PO = 2104.8 P = 990.02

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2383
45.000	.1141	
90.000		.2052
135.000	.3021	
180.000		.0000
225.000	.2977	
270.000		.2039
315.000	.0964	

ALPHA (2) = -.479 BETA (1) = -4.069 MACH = 1.1010 RN/L = 4.3147 PO = 2104.3 P = 984.44

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2282
45.000	.1819	
90.000		.2387
135.000	.1221	
180.000		.0000
225.000	.2468	
270.000		.1439
315.000	.1856	

ALPHA (2) = -.489 BETA (2) = -.056 MACH = 1.1010 RN/L = 4.3147 PO = 2104.3 P = 984.44

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2253
45.000	.2032	
90.000		.2263
135.000	.2160	
180.000		.0000
225.000	.2093	

ARC11-0231A80 OTS(SRB=N ORB=N-) ET (RE4G17)

ALPHA (2) = -.489 BETA (2) = -.056

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.2210
315.000	.1846	

ALPHA (2) = -.486 BETA (3) = 3.947 MACH = 1.1010 RN/L = 4.3147 PO = 2104.3 P = 984.44

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2225
45.000	.1948	
90.000		.1264
135.000	.2801	
180.000		.0000
225.000	.1134	
270.000		.2167
315.000	.1679	

ALPHA (3) = 3.983 BETA (1) = -.063 MACH = 1.1056 RN/L = 4.3164 PO = 2104.1 P = 978.63

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1953
45.000	.2490	
90.000		.1565
135.000	.0796	
180.000		.0000
225.000	.0705	
270.000		.1406
315.000	.2402	

ARC11-023IA80 OTS(SRB=N ORB=N-) ET (RE4G18) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.953 BETA (1) = .000 MACH = 1.2490 RN/L = 4.3771 PO = 2108.4 P = 815.07

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0394
45.000	.2377	
90.000		.0143
135.000	.3333	
180.000		.0000
225.000	.3228	
270.000		-.0037
315.000	.2244	

ALPHA (2) = -.429 BETA (1) = -4.006 MACH = 1.2479 RN/L = 4.3753 PO = 2108.4 P = 816.19

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1904
45.000	.2938	
90.000		.1207
135.000	.1620	
180.000		.0000
225.000	.2061	
270.000		-.0235
315.000	.2387	

ALPHA (2) = -.423 BETA (2) = .003 MACH = 1.2479 RN/L = 4.3753 PO = 2108.4 P = 816.19

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1580
45.000	.3280	
90.000		.0128
135.000	.3037	
180.000		.0000
225.000	.2915	

ARC11-0231A80 OTS(SRB=N ORB=N-) ET (RE4G18)

ALPHA (2) = -.423 BETA (2) = .003

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0057
315.000	.3232	

ALPHA (2) = -.416 BETA (3) = 4.009 MACH = 1.2479 RN/L = 4.3753 PO = 2108.4 P = 816.19

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1894
45.000	.2332	
90.000		-.0263
135.000	.2630	
180.000		.0000
225.000	.1541	
270.000		.0919
315.000	.2714	

ALPHA (3) = 3.993 BETA (1) = .003 MACH = 1.2456 RN/L = 4.3674 PO = 2108.4 P = 818.72

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2627
45.000	.3382	
90.000		.0776
135.000	.1517	
180.000		.0000
225.000	.1412	
270.000		.0410
315.000	.3266	

ARC11-023IA80 OTS(SRB=N ORB=N-) ET (RE4G19) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.848 BETA (1) = -.006 MACH = 1.4069 RN/L = 4.2698 PO = 2120.4 P = 659.90

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0094
45.000	.2872	
90.000		-.0251
135.000	.3046	
180.000		.0000
225.000	.2523	
270.000		-.0647
315.000	.2793	

ALPHA (2) = -.357 BETA (1) = -4.009 MACH = 1.4043 RN/L = 4.2657 PO = 2120.4 P = 662.32

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0123
45.000	.3886	
90.000		.0228
135.000	.2379	
180.000		.0000
225.000	.1455	
270.000		-.1168
315.000	.1040	

ALPHA (2) = -.353 BETA (2) = .000 MACH = 1.4043 RN/L = 4.2657 PO = 2120.4 P = 662.32

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0161
45.000	.3237	
90.000		-.0468
135.000	.3191	
180.000		.0000
225.000	.2939	

ARC11-023IA80 OTS(SRB=N ORB=N-) ET (RE4G19)

ALPHA (2) = -.363 BETA (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0874
315.000	.3191	

ALPHA (2) = -.462 BETA (3) = 4.012 MACH = 1.4043 RN/L = 4.2657 PO = 2120.4 P = 662.32

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0169
45.000	.1256	
90.000		-.1000
135.000	.1684	
180.000		.0000
225.000	.2376	
270.000		-.0430
315.000	.3846	

ALPHA (3) = 3.986 BETA (1) = -.003 MACH = 1.4018 RN/L = 4.2745 PO = 2122.5 P = 665.25

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0330
45.000	.3029	
90.000		-.0932
135.000	.2459	
180.000		.0000
225.000	.2090	
270.000		-.1436
315.000	.2891	

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4G20) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.868 BETA (1) = -.016 MACH = .59200 RN/L = 3.3619 PO = 2105.5 P = 1661.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0638
45.000	-.1492	
90.000		-.1280
135.000	.0307	
180.000		.0000
225.000	.0290	
270.000		-.1349
315.000	-.1583	

ALPHA (2) = -.327 BETA (1) = -4.038 MACH = .59820 RN/L = 3.3862 PO = 2105.3 P = 1652.9

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0454
45.000	-.0068	
90.000		-.0936
135.000	.0004	
180.000		.0000
225.000	-.0448	
270.000		-.1148
315.000	-.2194	

ALPHA (2) = -.291 BETA (2) = -.022 MACH = .59820 RN/L = 3.3862 PO = 2105.3 P = 1652.9

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0493
45.000	-.1040	
90.000		-.1044
135.000	-.0141	
180.000		.0000
225.000	-.0124	

ARC11-023(1A80 OTS(SRB=N ORB=N) ET (RE4G20)

ALPHA (2) = -.291 BETA (2) = -.022

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.1153
315.000	-.1102	

ALPHA (2) = -.386 BETA (3) = 3.994 MACH = .59820 RN/L = 3.3862 PO = 2105.3 P = 1652.9

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0472
45.000	-.2148	
90.000		-.1183
135.000	-.0383	
180.000		.0000
225.000	.0181	
270.000		-.0920
315.000	-.0018	

ALPHA (3) = 4.016 BETA (1) = -.022 MACH = .60330 RN/L = 3.4092 PO = 2105.5 P = 1646.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0255
45.000	-.0454	
90.000		-.0727
135.000	-.0690	
180.000		.0000
225.000	-.0609	
270.000		-.1021
315.000	-.0470	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G21) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.977 BETA (1) = -.016 MACH = .90170 RN/L = 4.2042 PO = 2099.2 P = 1238.9

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0300
45.000	-.1396	
90.000		-.0023
135.000	.0879	
180.000		.0000
225.000	.0928	
270.000		-.0138
315.000	-.1539	

ALPHA (2) = -.327 BETA (1) = -4.028 MACH = .90323 RN/L = 4.2094 PO = 2099.4 P = 1237.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0266
45.000	-.0234	
90.000		-.0058
135.000	-.0050	
180.000		.0000
225.000	.0225	
270.000		-.0416
315.000	-.1253	

ALPHA (2) = -.317 BETA (2) = -.012 MACH = .90323 RN/L = 4.2094 PO = 2099.4 P = 1237.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0478
45.000	-.0677	
90.000		.0035
135.000	.0084	
180.000		.0000
225.000	.0194	

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4G21)

ALPHA (2) = -.317 BETA (2) = -.012

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0176
315.000	-.0776	

ALPHA (2) = -.350 BETA (3) = 4.000 MACH = .90323 RN/L = 4.2094 PO = 2099.4 P = 1237.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0192
45.000	-.1062	
90.000		-.0443
135.000	.0216	
180.000		.0000
225.000	.0029	
270.000		-.0216
315.000	-.0329	

ALPHA (3) = 3.977 BETA (1) = -.012 MACH = .90240 RN/L = 4.2041 PO = 2098.5 P = 1237.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0278
45.000	-.0118	
90.000		-.0985
135.000	-.0668	
180.000		.0000
225.000	-.0571	
270.000		-.1127
315.000	-.0210	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G22) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.937 BETA (1) = -.063 MACH = 1.0978 RN/L = 4.3175 PO = 2104.8 P = 988.46

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2392
45.000	.1170	
90.000		.2046
135.000	.3024	
180.000		.0000
225.000	.2973	
270.000		.2032
315.000	.1002	

ALPHA (2) = -.525 BETA (1) = -4.069 MACH = 1.1008 RN/L = 4.3153 PO = 2104.6 P = 984.73

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2282
45.000	.1812	
90.000		.2394
135.000	.1245	
180.000		.0000
225.000	.2462	
270.000		.1456
315.000	.1867	

ALPHA (2) = -.439 BETA (2) = -.056 MACH = 1.1008 RN/L = 4.3153 PO = 2104.6 P = 984.73

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2246
45.000	.2025	
90.000		.2258
135.000	.2160	
180.000		.0000
225.000	.2103	

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4G22)

ALPHA (2) = -.439 BETA (2) = -.056

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
270.000		.2189
315.000	.1846	

ALPHA (2) = -.482 BETA (3) = 3.950 MACH = 1.1008 RN/L = 4.3153 PO = 2104.6 P = 984.73

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.2231
45.000	.1934	
90.000		.1276
135.000	.2776	
180.000		.0000
225.000	.1142	
270.000		.2210
315.000	.1696	

ALPHA (3) = 3.963 BETA (1) = -.063 MACH = 1.1046 RN/L = 4.3189 PO = 2104.1 P = 979.83

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.1937
45.000	.2492	
90.000		.1540
135.000	.0756	
180.000		.0000
225.000	.0675	
270.000		.1400
315.000	.2389	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G23) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.917 BETA (1) = .003 MACH = 1.2460 RN/L = 4.3726 PO = 2108.4 P = 818.30

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0400
45.000	.2357	
90.000		.0080
135.000	.3322	
180.000		.0000
225.000	.3202	
270.000		-.0.J1
315.000	.2215	

ALPHA (2) = -.446 BETA (1) = -4.006 MACH = 1.2483 RN/L = 4.3668 PO = 2108.9 P = 816.03

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1864
45.000	.2930	
90.000		.1179
135.000	.1592	
180.000		.0000
225.000	.2084	
270.000		-.0267
315.000	.2417	

ALPHA (2) = -.456 BETA (2) = .003 MACH = 1.2483 RN/L = 4.3668 PO = 2108.9 P = 815.03

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1577
45.000	.3318	
90.000		.0020
135.000	.3053	
180.000		.0000
225.000	.2948	

ARC11-023(A80 OTS(SRB=N ORB=N) ET (RE4G23)

ALPHA (2) = -.456 BETA (2) = .003

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000	-.0236	
315.000	.3237	

ALPHA (2) = -.439 BETA (3) = 4.012 MACH = 1.2483 RN/L = 4.3668 PO = 2108.9 P = 816.03

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000	.1884	
45.000	.2315	
90.000	-.0259	
135.000	.2653	
180.000	.0000	
225.000	.1553	
270.000	.0729	
315.000	.2721	

ALPHA (3) = 3.986 BETA (1) = .000 MACH = 1.2455 RN/L = 4.3668 PO = 2109.1 P = 819.16

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000	.2631	
45.000	.3370	
90.000	.0667	
135.000	.1490	
180.000	.0000	
225.000	.1383	
270.000	.0308	
315.000	.3276	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G24) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.884 BETA (1) = -.003 MACH = 1.4001 RN/L = 4.2484 PO = 2114.0 P = 664.19

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0083
45.000	.2840	
90.000		-.0340
135.000	.2980	
180.000		.0000
225.000	.2525	
270.000		-.0645
315.000	.2776	

ALPHA (2) = -.370 BETA (1) = -4.009 MACH = 1.3999 RN/L = 4.2511 PO = 2113.8 P = 664.35

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .6506

PHI		
.000		.0109
45.000	.3879	
90.000		.0240
135.000	.2400	
180.000		.0000
225.000	.1479	
270.000		-.1191
315.000	.1115	

ALPHA (2) = -.370 BETA (2) = .000 MACH = 1.3999 RN/L = 4.2511 PO = 2113.8 P = 664.35

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0139
45.000	.3236	
90.000		-.0569
135.000	.3197	
180.000		.0000
225.000	.2941	

ARC11-023(A80 OTS(SRB=N ORB=N) ET (RE4G24)

ALPHA (2) = -.370 BETA (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0956
315.000	.3164	

ALPHA (2) = -.429 BETA (3) = 4.012 MACH = 1.3999 RN/L = 4.2511 PO = 2113.8 P = 664.35

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0162
45.000	.1307	
90.000		-.1008
135.000	.1678	
180.000		.0000
225.000	.2337	
270.000		-.0508
315.000	.3839	

ALPHA (3) = 3.894 BETA (1) = .000 MACH = 1.3947 RN/L = 4.2558 PO = 2114.0 P = 669.27

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0323
45.000	.3037	
90.000		-.1073
135.000	.2436	
180.000		.0000
225.000	.2053	
270.000		-.1550
315.000	.2944	

ARC11-023IA80 OTS(SRB=N- ORB=N) ET (RE4G25) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -4.020 BETA (1) = -.063 MACH = 1.0964 RN/L = 4.3166 PO = 2104.1 P = 989.88

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.2372
45.000	.1137	
90.000		.2041
135.000	.3023	
180.000		.0000
225.000	.2977	
270.000		.2024
315.000	.0960	

ALPHA (2) = -.482 BETA (1) = -4.069 MACH = 1.1000 RN/L = 4.3184 PO = 2103.9 P = 985.34

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.2270
45.000	.1810	
90.000		.2399
135.000	.1218	
180.000		.0000
225.000	.2461	
270.000		.1442
315.000	.1849	

ALPHA (2) = -.489 BETA (2) = -.059 MACH = 1.1000 RN/L = 4.3184 PO = 2103.9 P = 985.34

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.2252
45.000	.2033	
90.000		.2243
135.000	.2176	
180.000		.0000
225.000	.2089	

ARC11-023IA80 OTS(SRB=N- ORB=N) ET (RE4G25)

ALPHA (2) = -.489 BETA (2) = -.059

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
270.000	.2193
315.000	.1840

ALPHA (2) = -.453 BETA (3) = 3.950 MACH = 1.1000 RN/L = 4.3184 PO = 2103.9 P = 985.34

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.2212
45.000	.1934
90.000	.1271
135.000	.2789
180.000	.0000
225.000	.1138
270.000	.2159
315.000	.1671

ALPHA (3) = 4.029 BETA (1) = -.059 MACH = 1.1031 RN/L = 4.3201 PO = 2102.0 P = 980.74

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.1918
45.000	.2468
90.000	.1505
135.000	.0756
180.000	.0000
225.000	.0648
270.000	.1359
315.000	.2371

ARC11-023!A80 OTS(SRB=N- ORB=N) ET (RE4G26) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.983 BETA (1) = .000 MACH = 1.2472 RN/L = 4.3616 PO = 2107.7 P = 816.70

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0398
45.000	.2362	
90.000		.0067
135.000	.3338	
180.000		.0000
225.000	.3197	
270.000		-.0074
315.000	.2208	

ALPHA (2) = -.443 BETA (1) = -4.006 MACH = 1.2481 RN/L = 4.3581 PO = 2107.7 P = 815.72

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1884
45.000	.2924	
90.000		.1168
135.000	.1586	
180.000		.0000
225.000	.2071	
270.000		-.0219
315.000	.2396	

ALPHA (2) = -.426 BETA (2) = .003 MACH = 1.2481 RN/L = 4.3581 PO = 2107.7 P = 815.72

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1553
45.000	.3295	
90.000		-.0013
135.000	.3039	
180.000		.0000
225.000	.2916	

ARC11-0231A80 OTS(SRB=N- ORB=N) ET (RE4G26)

ALPHA (2) = -.426 BETA (2) = .003

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
270.000	-.0161
315.000	.3219

ALPHA (2) = -.456 BETA (3) = 4.016 MACH = 1.2481 RN/L = 4.3581 PO = 2107.7 P = 815.72

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.1965
45.000	.2318
90.000	-.0234
135.000	.2689
180.000	.0000
225.000	.1600
270.000	.0835
315.000	.2747

ALPHA (3) = 4.020 BETA (1) = -.003 MACH = 1.2443 RN/L = 4.3536 PO = 2107.0 P = 819.62

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.2637
45.000	.3367
90.000	.0737
135.000	.1548
180.000	.0000
225.000	.1397
270.000	.0390
315.000	.3280

ARC11-023IA80 OTS(SRB=N- ORB=N) ET (RE4G27) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.805 BETA (1) = .000 MACH = 1.4005 RN/L = 4.2336 PO = 2109.8 P = 662.52

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0050
45.000	.2829	
90.000		-.0311
135.000	.2977	
180.000		.0000
225.000	.2492	
270.000		-.0682
315.000	.2749	

ALPHA (2) = -.353 BETA (1) = -4.006 MACH = 1.3984 RN/L = 4.2397 PO = 2110.7 P = 664.83

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0098
45.000	.3842	
90.000		.0207
135.000	.2371	
180.000		.0000
225.000	.1423	
270.000		-.1216
315.000	.1064	

ALPHA (2) = -.367 BETA (2) = .000 MACH = 1.3984 RN/L = 4.2397 PO = 2110.7 P = 664.83

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0154
45.000	.3221	
90.000		-.0617
135.000	.3165	
180.000		.0000
225.000	.2924	

ARC11-023IA80 OTS(SRB=N- ORB=N) ET (RE4G27)

ALPHA (2) = -.367 BETA (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0944
315.000	.3185	

ALPHA (2) = -.400 BETA (3) = 4.012 MACH = 1.3984 RN/L = 4.2397 PO = 2110.7 P = 664.83

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0156
45.000	.1295	
90.000		-.1010
135.000	.1695	
180.000		.0000
225.000	.2318	
270.000		-.0503
315.000	.3834	

ALPHA (3) = 3.983 BETA (1) = .000 MACH = 1.3983 RN/L = 4.2365 PO = 2109.8 P = 664.56

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0341
45.000	.3006	
90.000		-.1083
135.000	.2441	
180.000		.0000
225.000	.2085	
270.000		-.1562
315.000	.2972	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G28) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -4.000 BETA (1) = -.016 MACH = .59820 RN/L = 3.3864 PO = 2123.2 P = 1666.9

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0514
45.000	-.1379	
90.000		-.1200
135.000	.0379	
180.000		.0000
225.000	.0379	
270.000		-.1189
315.000	-.1498	

ALPHA (2) = -.264 BETA (1) = -4.034 MACH = .59700 RN/L = 3.3816 PO = 2123.7 P = 1668.9

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0351
45.000	.0016	
90.000		-.0950
135.000	.0033	
180.000		.0000
225.000	-.0433	
270.000		-.1089
315.000	-.2130	

ALPHA (2) = -.261 BETA (2) = -.019 MACH = .59700 RN/L = 3.3816 PO = 2123.7 P = 1668.9

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0365
45.000	-.1020	
90.000		-.0973
135.000	-.0113	
180.000		.0000
225.000	-.0086	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G28)

ALPHA (2) = -.261 BETA (2) = -.019

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0986
315.000	-.1034	

ALPHA (2) = -.274 BETA (3) = 3.991 MACH = .59700 RN/L = 3.3816 PO = 2123.7 P = 1668.9

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0417
45.000	-.2099	
90.000		-.1171
135.000	-.0393	
180.000		.0000
225.000	.0081	
270.000		-.0939
315.000	-.0045	

ALPHA (3) = 4.013 BETA (1) = -.019 MACH = .59700 RN/L = 3.3862 PO = 2124.6 P = 1669.6

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0188
45.000	-.0433	
90.000		-.0664
135.000	-.0647	
180.000		.0000
225.000	-.0589	
270.000		-.0923
315.000	-.0484	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G29) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.980 BETA (1) = -.006 MACH = .90100 RN/L = 4.2493 PO = 2121.1 P = 1252.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0308
45.000	-.1411	
90.000		-.0009
135.000	.0875	
180.000		.0000
225.000	.0941	
270.000		-.0104
315.000	-.1528	

ALPHA (2) = -.320 BETA (1) = -4.022 MACH = .90373 RN/L = 4.2509 PO = 2123.0 P = 1250.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0290
45.000	-.0200	
90.000		.0002
135.000	-.0082	
180.000		.0000
225.000	.0214	
270.000		-.0392
315.000	-.1246	

ALPHA (2) = -.310 BETA (2) = -.009 MACH = .90373 RN/L = 4.2509 PO = 2123.0 P = 1250.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0475
45.000	-.0715	
90.000		.0033
135.000	.0086	
180.000		.0000
225.000	.0189	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G29)

ALPHA (2) = -.310 BETA (2) = -.009

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0179
315.000	-.0818	

ALPHA (2) = -.297 BETA (3) = 4.006 MACH = .90373 RN/L = 4.2509 PO = 2123.0 P = 1250.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0268
45.000	-.0987	
90.000		-.0374
135.000	.0268	
180.000		.0000
225.000	.0051	
270.000		-.0093
315.000	-.0261	

ALPHA (3) = 3.986 BETA (1) = -.009 MACH = .89810 RN/L = 4.2418 PO = 2119.7 P = 1255.9

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0287
45.000	-.0161	
90.000		-.0993
135.000	-.0650	
180.000		.0000
225.000	-.0589	
270.000		-.1077
315.000	-.0243	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G30) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -4.016 BETA (1) = -.003 MACH = 1.0992 RN/L = 4.3334 PO = 2116.2 P = 992.05

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2393
45.000	.1150	
90.000		.2122
135.000	.3050	
180.000		.0000
225.000	.2984	
270.000		.2012
315.000	.0980	

ALPHA (2) = -.370 BETA (1) = -4.006 MACH = 1.1030 RN/L = 4.2966 PO = 2115.2 P = 987.00

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2293
45.000	.1841	
90.000		.2323
135.000	.1185	
180.000		.0000
225.000	.2451	
270.000		.1489
315.000	.1895	

ALPHA (2) = -.343 BETA (2) = .003 MACH = 1.1030 RN/L = 4.2966 PO = 2115.2 P = 987.00

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2244
45.000	.2069	
90.000		.2286
135.000	.2162	
180.000		.0000
225.000	.2073	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G30)

ALPHA (2) = -.343 BETA (2) = .003

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.2210
315.000	.1885	

ALPHA (2) = -.370 BETA (3) = 4.009 MACH = 1.1030 RN/L = 4.2966 PO = 2115.2 P = 987.00

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2224
45.000	.1971	
90.000		.1109
135.000	.2789	
180.000		.0000
225.000	.1102	
270.000		.2118
315.000	.1721	

ALPHA (3) = 3.894 BETA (1) = -.003 MACH = 1.1097 RN/L = 4.2923 PO = 2114.0 P = 978.29

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1946
45.000	.2539	
90.000		.1528
135.000	.0804	
180.000		.0000
225.000	.0718	
270.000		.1404
315.000	.2442	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G31) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.970 BETA (1) = -.003 MACH = 1.2502 RN/L = 4.3628 PO = 2115.4 P = 816.45

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0233
45.000	.2364	
90.000		.0132
135.000	.3351	
180.000		.0000
225.000	.3174	
270.000		-.0052
315.000	.2243	

ALPHA (2) = -.330 BETA (1) = -4.006 MACH = 1.2515 RN/L = 4.3608 PO = 2116.1 P = 815.32

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.1880
45.000	.2980	
90.000		.1110
135.000	.1564	
180.000		.0000
225.000	.2021	
270.000		-.0188
315.000	.2401	

ALPHA (2) = -.317 BETA (2) = .003 MACH = 1.2515 RN/L = 4.3608 PO = 2116.1 P = 815.32

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.1499
45.000	.3363	
90.000		.0275
135.000	.3032	
180.000		.0000
225.000	.2903	

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET (RE4G31)

ALPHA (2) = -.317 BETA (2) = .003

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0054
315.000	.3287	

ALPHA (2) = -.570 BETA (3) = 4.012 MACH = 1.2515 RN/L = 4.3608 PO = 2116.1 P = 815.32

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1929
45.000	.2291	
90.000		-.0421
135.000	.2604	
180.000		.0000
225.000	.1578	
270.000		.0745
315.000	.2833	

ALPHA (3) = 3.950 BETA (1) = -.003 MACH = 1.2493 RN/L = 4.3586 PO = 2116.9 P = 818.02

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2624
45.000	.3388	
90.000		.0808
135.000	.1518	
180.000		.0000
225.000	.1404	
270.000		.0499
315.000	.3289	

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET (RE4G32) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -4.043 BETA (1) = .000 MACH = 1.4047 RN/L = 4.2434 PO = 2120.4 P = 661.94

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0066
45.000	.2776	
90.000		-.0285
135.000	.2969	
180.000		.0000
225.000	.2529	
270.000		-.0548
315.000	.2690	

ALPHA (2) = -.195 BETA (1) = -4.012 MACH = 1.4028 RN/L = 4.2458 PO = 2120.4 P = 663.72

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0109
45.000	.3924	
90.000		.0152
135.000	.2367	
180.000		.0000
225.000	.1419	
270.000		-.1086
315.000	.1044	

ALPHA (2) = -.211 BETA (2) = .000 MACH = 1.4028 RN/L = 4.2458 PO = 2120.4 P = 663.72

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0139
45.000	.3168	
90.000		-.0416
135.000	.3176	
180.000		.0000
225.000	.2979	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G32)

ALPHA (2) = -.211 BETA (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0800
315.000	.3229	

ALPHA (2) = .083 BETA (3) = 4.006 MACH = 1.4028 RN/L = 4.2458 PO = 2120.4 P = 563.72

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0151
45.000	.1194	
90.000		-.0959
135.000	.1803	
180.000		.0000
225.000	.2173	
270.000		-.0519
315.000	.3958	

ALPHA (3) = 4.082 BETA (1) = .000 MACH = 1.3983 RN/L = 4.2463 PO = 2120.4 P = 667.87

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0321
45.000	.2994	
90.000		-.0862
135.000	.2408	
180.000		.0000
225.000	.2044	
270.000		-.1339
315.000	.2923	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G33) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 1.750 MACH = .60?

ALPHA (1) = -3.953 BETA (1) = -.003 MACH = .59560 RN/L = 1.7428 PO = 1060.9 P = 834.63

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	-.0515
45.000	-.1350
90.000	-.1117
135.000	.0450
180.000	.0000
225.000	.0443
270.000	-.1138
315.000	-.1377

ALPHA (2) = -.271 BETA (1) = -4.044 MACH = .59443 RN/L = 1.7407 PO = 1060.2 P = 834.82

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	-.0500
45.000	.0012
90.000	-.1017
135.000	.0088
180.000	.0000
225.000	-.0396
270.000	-.1169
315.000	-.2082

ALPHA (2) = -.284 BETA (2) = -.0[illegible] MACH = .59443 RN/L = 1.7407 PO = 1060.2 P = 834.82

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	-.0341
45.000	-.0930
90.000	-.0842
135.000	-.0023
180.000	.0000
225.000	.0045

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G33)

ALPHA (2) = -.284 BETA (2) = -.031

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0876
315.000	-.0944	

ALPHA (2) = -.543 BETA (3) = 3.984 MACH = .59443 RN/L = 1.7407 PO = 1060.2 P = 834.82

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0534
45.000	-.2072	
90.000		-.1093
135.000	-.0354	
180.000		.0000
225.000	.0101	
270.000		-.1017
315.000	-.0051	

ALPHA (3) = 3.963 BETA (1) = -.003 MACH = .59300 RN/L = 1.7403 PO = 1060.2 P = 835.76

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0319
45.000	-.0464	
90.000		-.0850
135.000	-.0629	
180.000		.0000
225.000	-.0636	
270.000		-.1070
315.000	-.0526	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G34) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 2.250 MACH = .900

ALPHA (1) = -3.947 BETA (1) = .000 MACH = .90000 RN/L = 2.1578 PO = 1061.6 P = 627.70

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0225
45.000	-.1414
90.000	-.0034
135.000	.0907
180.000	.0000
225.000	.0971
270.000	-.0142
315.000	-.1515

ALPHA (2) = -.264 BETA (1) = -4.044 MACH = .90150 RN/L = 2.1576 PO = 1060.4 P = 625.98

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0178
45.000	-.0214
90.000	-.0102
135.000	.0042
180.000	.0000
225.000	.0226
270.000	-.0366
315.000	-.1226

ALPHA (2) = -.271 BETA (2) = -.031 MACH = .90150 RN/L = 2.1576 PO = 1060.4 P = 625.98

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0323
45.000	-.0740
90.000	-.0064
135.000	.0034
180.000	.0000
225.000	.0213

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G34)

ALPHA (2) = -.271 BETA (2) = -.031

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0250
315.000	-.0835	

ALPHA (2) = -.304 BETA (3) = 3.984 MACH = .90150 RN/L = 2.1576 PO = 1060.4 P = 625.98

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0090
45.000	-.1184	
90.000		-.0479
135.000	.0150	
180.000		.0000
225.000	.0166	
270.000		-.0294
315.000	-.0210	

ALPHA (3) = 3.990 BETA (1) = -.003 MACH = .90350 RN/L = 2.1629 PO = 1061.6 P = 625.33

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0239
45.000	-.0123	
90.000		-.0892
135.000	-.0596	
180.000		.0000
225.000	-.0524	
270.000		-.1061
315.000	-.0163	

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET (RE4G35) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 2.250 MACH = 1.100

ALPHA (1) = -3.957 BETA (1) = .000 MACH = 1.0935 RN/L = 2.2424 PO = 1058.8 P = 499.91

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.2223
45.000	.1040	
90.000		.1901
135.000	.2979	
180.000		.0000
225.000	.2969	
270.000		.1840
315.000	.0918	

ALPHA (2) = -.225 BETA (1) = -4.009 MACH = 1.0961 RN/L = 2.2501 PO = 1061.4 P = 499.48

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.2079
45.000	.1741	
90.000		.2160
135.000	.1181	
180.000		.0000
225.000	.2376	
270.000		.1393
315.000	.1781	

ALPHA (2) = -.225 BETA (2) = .000 MACH = 1.0961 RN/L = 2.2501 PO = 1061.4 P = 499.48

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.2096
45.000	.1941	
90.000		.2207
135.000	.2059	
180.000		.0000
225.000	.1998	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G35)

ALPHA (2) = -.225 BETA (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.2079
315.000	.1796	

ALPHA (2) = -.231 BETA (3) = 4.012 MACH = 1.0961 RN/L = 2.2501 PO = 1061.4 P = 499.48

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1998
45.000	.1804	
90.000		.1049
135.000	.2483	
180.000		.0000
225.000	.1178	
270.000		.1961
315.000	.1634	

ALPHA (3) = 4.016 BETA (1) = -.003 MACH = 1.1017 RN/L = 2.2510 PO = 1060.9 P = 495.81

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1796
45.000	.2378	
90.000		.1379
135.000	.0706	
180.000		.0000
225.000	.0632	
270.000		.1204
315.000	2267	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G36) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 2.250 MACH = 1.250

ALPHA (1) = -3.993 BETA (1) = .003 MACH = 1.2488 RN/L = 2.2675 PO = 1060.9 P = 410.21

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0155
45.000	.2141	
90.000		.0117
135.000	.3246	
180.000		.0000
225.000	.3100	
270.000		-.0060
315.000	.2046	

ALPHA (2) = -.145 BETA (1) = -4.003 MACH = 1.2488 RN/L = 2.2680 PO = 1060.9 P = 410.21

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1693
45.000	.2918	
90.000		.1060
135.000	.1624	
180.000		.0000
225.000	.2038	
270.000		-.0152
315.000	.2140	

ALPHA (2) = -.129 BETA (2) = .003 MACH = 1.2488 RN/L = 2.2680 PO = 1060.9 P = 410.21

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1559
45.000	.3022	
90.000		.0381
135.000	.2788	
180.000		.0000
225.000	.2709	

ARC11-023/1A80 OTS(SRB=OFF ORB=OFF) ET (RE4G36)

ALPHA (2) = -.129 BETA (2) = .003

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.0020
315.000	.3003	

ALPHA (2) = -.175 BETA (3) = 4.009 MACH = 1.2488 RN/L = 2.2680 PO = 1060.9 P = 410.21

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1716
45.000	.2039	
90.000		-.0220
135.000	.2473	
180.000		.0000
225.000	.1583	
270.000		.0708
315.000	.2796	

ALPHA (3) = 4.072 BETA (1) = .003 MACH = 1.2496 RN/L = 2.2672 PO = 1060.9 P = 409.77

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2520
45.000	.3251	
90.000		.0779
135.000	.1466	
180.000		.0000
225.000	.1311	
270.000		.0501
315.000	.3147	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G37) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 2.250 MACH = 1.400

ALPHA (1) = -4.013 BETA (1) = .003 MACH = 1.3998 RN/L = 2.2349 PO = 1061.6 P = 333.70

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		-.0055
45.000	.2378	
90.000		-.0321
135.000	.2735	
180.000		.0000
225.000	.2393	
270.000		-.0576
315.000	.2352	

ALPHA (2) = -.241 BETA (1) = -4.006 MACH = 1.3997 RN/L = 2.2285 PO = 1060.0 P = 333.23

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		-.0028
45.000	.3618	
90.000		.0080
135.000	.2236	
180.000		.0000
225.000	.1310	
270.000		-.1131
315.000	.0922	

ALPHA (2) = -.264 BETA (2) = .000 MACH = 1.3997 RN/L = 2.2285 PO = 1060.0 P = 333.23

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0007
45.000	.2820	
90.000		-.0425
135.000	.2801	
180.000		.0000
225.000	.2543	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G37)

ALPHA (2) = -.264 BETA (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
270.000	-.0794
315.000	.2804

ALPHA (2) = -.267 BETA (3) = 4.009 MACH = 1.3997 RN/L = 2.2285 PO = 1060.0 P = 333.23

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0021
45.000	.1095
90.000	-.0965
135.000	.1533
180.000	.0000
225.000	.2273
270.000	-.0492
315.000	.3645

ALPHA (3) = 4.010 BETA (1) = .003 MACH = 1.3956 RN/L = 2.2367 PO = 1060.2 P = 335.22

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0218
45.000	.2782
90.000	-.0985
135.000	.2036
180.000	.0000
225.000	.1734
270.000	-.1410
315.000	.2698

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G38) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 1.750 MACH = .600

ALPHA (1) = -3.980 BETA (1) = -.003 MACH = .59910 RN/L = 1.7583 PO = 1060.9 P = 832.35

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.3506
PHI		
.000		-.0645
45.000	-.1433	
90.000		-.1215
135.000	.0366	
180.000		.0000
225.000	.0386	
270.000		-.1255
315.000	-.1479	

ALPHA (2) = -.314 BETA (1) = -4.044 MACH = .59907 RN/L = 1.7686 PO = 1066.1 P = 836.42

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0494
45.000	.0005	
90.000		-.0967
135.000	.0093	
180.000		.0000
225.000	-.0359	
270.000		-.1135
315.000	-.2053	

ALPHA (2) = -.317 BETA (2) = -.009 MACH = .59907 RN/L = 1.7685 PO = 1066.1 P = 836.42

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0476
45.000	-.0997	
90.000		-.1017
135.000	-.0082	
180.000		.0000
225.000	-.0022	

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4G38)

ALPHA (2) = -.317 BETA (2) = -.009

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.1051
315.000	-.1031	

ALPHA (2) = -.327 BETA (3) = 3.981 MACH = .59907 RN/L = 1.7686 PO = 1066.1 P = 836.42

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0514
45.000	-.2082	
90.000		-.1142
135.000	-.0357	
180.000		.0000
225.000	.0141	
270.000		-.0958
315.000	.0032	

ALPHA (3) = 3.950 BETA (1) = -.003 MACH = .60350 RN/L = 1.7801 PO = 1066.6 P = 833.90

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0328
45.000	-.0481	
90.000		-.0761
135.000	-.0574	
180.000		.0000
225.000	-.0514	
270.000		-.1014
315.000	-.0454	

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4G39) (14 JAN 75)

REFERENCE DATA

SPEF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 2.250 MACH = .900

ALPHA (1) = -3.986 BETA (1) = .003 MACH = .89730 RN/L = 2.1589 PO = 1063.0 P = 630.39

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8505

PHI	
.000	.0162
45.000	-.1469
90.000	-.0134
135.000	.0906
180.000	.0000
225.000	.0989
270.000	-.0198
315.000	-.1561

ALPHA (2) = -.294 BETA (1) = -4.044 MACH = .90407 RN/L = 2.1638 PO = 1061.8 P = 625.06

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0182
45.000	-.0198
90.000	-.0174
135.000	.0070
180.000	.0000
225.000	.0226
270.000	-.0422
315.000	-.1253

ALPHA (2) = -.310 BETA (2) = -.028 MACH = .90407 RN/L = 2.1638 PO = 1061.8 P = 625.06

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0394
45.000	-.0662
90.000	.0033
135.000	.0131
180.000	.0000
225.000	.0253

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G39)

ALPHA (2) = -.310 BETA (2) = -.028

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0171
315.000	-.0756	

ALPHA (2) = -.320 BETA (3) = 3.981 MACH = .90407 RN/L = 2.1638 PO = 1061.8 P = 625.06

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0096
45.000	-.1102	
90.000		-.0467
135.000	.0216	
180.000		.0000
225.000	.0081	
270.000		-.0241
315.000	-.0285	

ALPHA (3) = 3.970 BETA (1) = .000 MACH = .90120 RN/L = 2.1536 PO = 1060.2 P = 626.02

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0196
45.000	-.0114	
90.000		-.0947
135.000	-.0588	
180.000		.0000
225.000	-.0509	
270.000		-.1079
315.000	-.0166	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G40) (14 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 2.250 MACH = 1.100

ALPHA (1) = -3.801 BETA (1) = -.006 MACH = 1.0940 RN/L = 2.2469 PO = 1059.5 P = 499.92

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2261
45.000	.1103	
90.000		.1902
135.000	.2982	
180.000		.0000
225.000	.2951	
270.000		.1885
315.000	.0958	

ALPHA (2) = -.304 BETA (1) = -4.003 MACH = 1.0971 RN/L = 2.2528 PO = 1061.4 P = 498.93

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3352	.8506
PHI		
.000		.2113
45.000	.1738	
90.000		.2207
135.000	.1216	
180.000		.0000
225.000	.2382	
270.000		.1415
315.000	.1792	

ALPHA (2) = -.267 BETA (2) = .003 MACH = 1.0971 RN/L = 2.2528 PO = 1061.4 P = 498.93

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2114
45.000	.1949	
90.000		.2178
135.000	.2090	
180.000		.0000
225.000	.2033	

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4G40)

ALPHA (2) = -.267 BETA (2) = .003

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.2067
315.000	.1808	

ALPHA (2) = -.390 BETA (3) = 4.016 MACH = 1.0971 RN/L = 2.2528 PO = 1061.4 P = 498.93

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2056
45.000	.1816	
90.000		.1235
135.000	.2501	
180.000		.0000
225.000	.1218	
270.000		.2035
315.000	.1640	

ALPHA (3) = 3.983 BETA (1) = .003 MACH = 1.1029 RN/L = 2.2596 PO = 1063.7 P = 496.39

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1819
45.000	.2385	
90.000		.1393
135.000	.0757	
180.000		.0000
225.000	.0653	
270.000		.1169
315.000	.2288	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G41) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 2.500 MACH = .600

ALPHA (1) = -4.000 BETA (1) = -.022 MACH = .60170 RN/L = 2.5509 PO = 1557.4 P = 1219.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		-.0467
45.000	-.1367	
90.000		-.1183
135.000	.0479	
180.000		.0000
225.000	.0433	
270.000		-.1114
315.000	-.1413	

ALPHA (2) = -.261 BETA (1) = -4.041 MACH = .60297 RN/L = 2.5529 PO = 1556.0 P = 1217.1

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		-.0378
45.000	.0062	
90.000		-.0925
135.000	.0085	
180.000		.0000
225.000	-.0378	
270.000		-.1037
315.000	-.2056	

ALPHA (2) = -.271 BETA (2) = -.025 MACH = .60297 RN/L = 2.5529 PO = 1556.0 P = 1217.1

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		-.0926
45.000	-.0950	
90.000		-.0858
135.000	-.0084	
180.000		.0000
225.000	.0007	

ARC11-023(A80 OTS(SRB=OFF ORB=OFF) ET (RE4G41)

ALPHA (2) = -.271 BETA (2) = -.025

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0941
315.000	-.0982	

ALPHA (2) = -.343 BETA (3) = 3.991 MACH = .60297 RN/L = 2.5529 PO = 1556.0 P = 1217.1

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0421
45.000	-.2078	
90.000		-.1104
135.000	-.0334	
180.000		.0000
225.000	.0171	
270.000		-.0881
315.000	.0053	

ALPHA (3) = 3.944 BETA (1) = -.022 MACH = .60230 RN/L = 2.5548 PO = 1556.7 P = 1218.3

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0168
45.000	-.0425	
90.000		-.0659
135.000	-.0572	
180.000		.0000
225.000	-.0553	
270.000		-.0929
315.000	-.0448	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G42) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.250 MACH = .900

ALPHA (1) = -3.930 BETA (1) = .003 MACH = .90330 RN/L = 3.1425 PO = 1558.1 P = 918.01

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0298
45.000	-.1366	
90.000		-.0035
135.000	.0887	
180.000		.0000
225.000	.0960	
270.000		-.0108
315.000	-.1505	

ALPHA (2) = -.284 BETA (1) = -4.041 MACH = .90200 RN/L = 3.1294 PO = 1556.9 P = 918.58

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0305
45.000	-.0194	
90.000		.0049
135.000	-.0013	
180.000		.0000
225.000	.0285	
270.000		-.0302
315.000	-.1131	

ALPHA (2) = -.281 BETA (2) = -.028 MACH = .90200 RN/L = 3.1294 PO = 1556.9 P = 918.58

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0366
45.000	-.0788	
90.000		-.0097
135.000	.0030	
180.000		.0000
225.000	.0157	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G42)

ALPHA (2) = -.281 BETA (2) = -.028

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0298
315.000	-.0896	

ALPHA (2) = -.248 BETA (3) = 3.994 MACH = .90200 RN/L = 3.1294 PO = 1556.9 P = 918.58

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0185
45.000	-.1097	
90.000		-.0418
135.000	.0210	
180.000		.0000
225.000	.0128	
270.000		-.0181
315.000	-.0230	

ALPHA (3) = 3.960 BETA (1) = .000 MACH = .89670 RN/L = 3.1185 PO = 1557.4 P = 924.11

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
000		.0264
45.000	-.0163	
90.000		-.0912
135.000	-.0640	
180.000		.0000
225.000	-.0574	
270.000		-.1084
315.000	-.0223	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G43) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.250 MACH = 1.100

ALPHA (1) = -4.016 BETA (1) = .003 MACH = 1.0981 RN/L = 3.2788 PO = 1555.3 P = 730.16

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2348
45.000	.1150	
90.000		.2056
135.000	.3048	
180.000		.0000
225.000	.2993	
270.000		.1946
315.000	.0995	

ALPHA (2) = -.287 BETA (1) = -4.006 MACH = 1.0996 RN/L = 3.2682 PO = 1553.2 P = 727.81

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2194
45.000	.1791	
90.000		.2272
135.000	.1161	
180.000		.0000
225.000	.2406	
270.000		.1444
315.000	.1830	

ALPHA (2) = -.291 BETA (2) = .000 MACH = 1.0996 RN/L = 3.2682 PO = 1553.2 P = 727.81

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2192
45.000	.2025	
90.000		.2250
135.000	.2110	
180.000		.0000
225.000	.2041	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G43)

ALPHA (2) = -.291 BETA (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.2158
315.000	.1864	

ALPHA (2) = -.310 BETA (3) = 4.006 MACH = 1.0996 RN/L = 3.2682 PO = 1553.2 P = 727.81

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2136
45.000	.1907	
90.000		.1156
135.000	.2707	
180.000		.0000
225.000	.1086	
270.000		.2044
315.000	.1689	

ALPHA (3) = 4.016 BETA (1) = .003 MACH = 1.1070 RN/L = 3.2713 PO = 1554.6 P = 721.83

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1889
45.000	.0479	
90.000		.1456
135.000	.0749	
180.000		.0000
225.000	.0689	
270.000		.1295
315.000	.2392	

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET (RE4G44) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.250 MACH = 1.250

ALPHA (1) = -3.953 BETA (1) = .000 MACH = 1.3532 RN/L = 3.2918 PO = 1554.6 P = 597.59

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0225
45.000	.2376	
90.000		.0137
135.000	.3320	
180.000		.0000
225.000	.3175	
270.000		-.0031
315.000	.2270	

ALPHA (2) = -.287 BETA (1) = -4.003 MACH = 1.2509 RN/L = 3.2855 PO = 1552.7 P = 598.69

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1817
45.000	.2903	
90.000		.1178
135.000	.1549	
180.000		.0000
225.000	.2100	
270.000		-.0207
315.000	.2257	

ALPHA (2) = -.277 BETA (2) = .003 MACH = 1.250[illegible] RN/L = 3.2855 PO = 1552.7 P = 598.69

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1449
45.000	.3282	
90.000		.0257
135.000	.2965	
180.000		.0000
225.000	.2836	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G44)

ALPHA (2) = -.277 BETA (2) = .003

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
270.000	-.0051
315.000	.3215

ALPHA (2) = -.376 BETA (3) = 4.012 MACH = 1.2509 RN/L = 3.2855 PO = 1552.7 P = 598.69

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.1797
45.000	.2251
90.000	-.0370
135.000	.25[illegible]
180.000	.0000
225.000	.1667
270.000	.0625
315.000	.2887

ALPHA (3) = 3.947 BETA (1) = -.003 MACH = 1.2488 RN/L = 3.2905 PO = 1553.9 P = 600.81

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.2580
45.000	.3329
90.000	.0813
135.000	.1513
180.000	.0000
225.000	.1420
270.000	.0427
315.000	.3239

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G45) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.250 MACH = 1.400

ALPHA (1) = -3.990 BETA (1) = -.003 MACH = 1.4024 RN/L = 3.2259 PO = 1554.6 P = 486.87

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	-.0006
45.000	.2644
90.000	-.0299
135.000	.2877
180.000	.0000
225.000	.2445
270.000	-.0589
315.000	.2583

ALPHA (2) = -.284 BETA (1) = -4.000 MACH = 1.4054 RN/L = 3.2190 PO = 1553.7 P = 484.53

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0059
45.000	.3817
90.000	.0103
135.000	.2377
180.000	.0000
225.000	.1404
270.000	-.1084
315.000	.1020

ALPHA (2) = -.297 BETA (2) = .000 MACH = 1.4054 RN/L = 3.2190 PO = 1553.7 P = 484.53

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0106
45.000	.3045
90.000	-.0385
135.000	.3040
180.000	.0000
225.000	.2774

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G45)

ALPHA (2) = -.297 BETA (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
270.000	-.0768
315.000	.3013

ALPHA (2) = -.294 BETA (3) = 4.009 MACH = 1.4054 RN/L = 3.2190 PO = 1553.7 P = 484.53

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0063
45.000	.1184
90.000	-.0909
135.000	.1625
180.000	.0000
225.000	.2347
270.000	-.0439
315.000	.3792

ALPHA (3) = 3.980 BETA CH = 1.4028 RN/L = 3.2136 PO = 1 ~3.2 P = 486.18

SECTION (1)EXTERNAL TANK VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0284
45.000	.2854
90.000	-.0841
135.000	.2325
180.000	.0000
225.000	.1992
270.000	-.1326
315.000	.2824

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4046) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 2.500 MACH = .600

ALPHA (1) = -3.894 BETA (1) = -.022 MACH = .60060 RN/L = 2.5569 PO = 1558.8 P = 1221.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0595
45.000	-.1441	
90.000		-.1188
135.000	.0347	
180.000		.0000
225.000	.0388	
270.000		-.1233
315.000	-.1504	

ALPHA (2) = -.350 BETA (1) = -4.041 MACH = .59890 RN/L = 2.5548 PO = 1557.9 P = 1222.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0443
45.000	.0011	
90.000		-.0907
135.000	.0094	
180.000		.0000
225.000	-.0384	
270.000		-.1127
315.000	-.2072	

ALPHA (2) = -.329 BETA (2) = -.025 MACH = .59890 RN/L = 2.5548 PO = 1557.9 P = 1222.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0427
45.000	-.1027	
90.000		-.0990
135.000	-.0127	
180.000		.0000
225.000	-.0035	

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4G46)

ALPHA (2) = -.320 BETA (2) = -.025

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.1068
315.000	-.1059	

ALPHA (2) = -.337 BETA (3) = 3.994 MACH = .59890 RN/L = 2.5548 PO = 1557.9 P = 1222.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0583
45.000	-.2088	
90.000		-.1238
135.000	-.0388	
180.000		.0000
225.000	.0095	
270.000		-.1122
315.000	-.0077	

ALPHA (3) = 4.076 BETA (1) = -.028 MACH = .60170 RN/L = 2.5615 PO = 1555.3 P = 1217.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0164
45.000	-.0407	
90.000		-.0651
135.000	-.0572	
180.000		.0000
225.000	-.0504	
270.000		-.0899
315.000	-.0380	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G47) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.250 MACH = .900

ALPHA (1) = -4.033 BETA (1) = .000 MACH = .90410 RN/L = 3.1247 PO = 1556.7 P = 916.32

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0332
45.000	-.1381	
90.000		.0019
135.000	.0329	
180.000		.0000
225.000	.1018	
270.000		-.0094
315.000	-.1446	

ALPHA (2) = -.343 BETA (1) = -4.044 MACH = .90470 RN/L = 3.1302 PO = 1559.3 P = 917.26

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0271
45.000	-.0197	
90.000		-.0007
135.000	-.0013	
180.000		.0000
225.000	.0277	
270.000		-.0353
315.000	-.1178	

ALPHA (2) = -.340 BETA (2) = -.028 MACH = .90470 RN/L = 3.1302 PO = 1559.3 P = 917.26

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0441
45.000	-.0689	
90.000		.0023
135.000	.0123	
180.000		.0000
225.000	.0213	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G47)

ALPHA (2) = -.340 BETA (2) = -.028

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0178
315.000	-.0783	

ALPHA (2) = -.340 BETA (3) = 3.991 MACH = .90470 RN/L = 3.1302 PO = 1559.3 P = 917.26

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0225
45.000	-.1059	
90.000		-.0373
135.000	.0244	
180.000		.0000
225.000	.0111	
270.000		-.0173
315.000	-.0221	

ALPHA (3) = 3.927 BETA (1) = -.028 MACH = .90080 RN/L = 3.1258 PO = 1559.5 P = 921.25

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0250
45.000	-.0121	
90.000		-.0949
135.000	-.0592	
180.000		.0003
225.000	-.0513	
270.000		-.1149
315.000	-.0191	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G48) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.250 MACH = 1.100

ALPHA (1) = -3.934 BETA (1) = .003 MACH = 1.0985 RN/L = 3.2696 PO = 1558.8 P = 731.42

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2345
45.000	.1180	
90.000		.1986
135.000	.3012	
180.000		.0000
225.000	.2964	
270.000		.1695
315.000	.1018	

ALPHA (2) = -.413 BETA (1) = -4.006 MACH = 1.1014 RN/L = 3.2674 PO = 1557.4 P = 728.17

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2237
45.000	.1811	
90.000		.2361
135.000	.1218	
180.000		.0000
225.000	.2421	
270.000		.1436
315.000	.1862	

ALPHA (2) = -.443 BETA (2) = .000 MACH = 1.1014 RN/L = 3.2674 PO = 1557.4 P = 728.17

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2200
45.000	.2029	
90.000		.2212
135.000	.2159	
180.000		.0000
225.000	.2086	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4C48)

ALPHA (2) = -.443 BETA (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.2150
315.000	.1867	

ALPHA (2) = -.420 BETA (3) = 4.016 MACH = 1.1014 RN/L = 3.2674 PO = 1557.4 P = 728.17

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2181
45.000	.1927	
90.000		.1281
135.000	.2728	
180.000		.0000
225.000	.1143	
270.000		.2119
315.000	.1675	

ALPHA (3) = 3.884 BETA (1) = .000 MACH = 1.1080 RN/L = 3.2705 PO = 1558.1 P = 722.58

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1917
45.000	.2492	
90.000		.1491
135.000	.0809	
180.000		.0000
225.000	.0725	
270.000		.1308
315.000	.2398	

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET (RE4G49) (21 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 ALPHA = .000

BETA (1) = -.063 MACH (1) = .908 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0473
45.000	-.0667	
90.000		-.0044
135.000	-.0006	
180.000		.0000
225.000	.0088	
270.000		-.0191
315.000	-.0763	

BETA (1) = -.063 MACH (2) = .947 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0814
45.000	-.0074	
90.000		.0527
135.000	.0316	
180.000		.0000
225.000	.0401	
270.000		.0430
315.000	-.0174	

BETA (1) = -.063 MACH (3) = .998 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1341
45.000	.0632	
90.000		.1274
135.000	.0896	
180.000		.0000
225.000	.0936	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G49)

BETA (1) = -.063 MACH (3) = .998

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.1234
315.000	.0523	

BETA (1) = -.063 MACH (4) = 1.050 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1758
45.000	.1360	
90.000		.1789
135.000	.1519	
180.000		.0000
225.000	.1539	
270.000		.1749
315.000	.1233	

BETA (1) = -.063 MACH (5) = 1.102 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2212
45.000	.2067	
90.000		.2305
135.000	.1991	
180.000		.0000
225.000	.1888	
270.000		.2203
315.000	.1898	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G49)

BETA (1) = -.063 MACH (6) = 1.146 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2176
45.000	.2567	
90.000		.2097
135.000	.2333	
180.000		.0000
225.000	.2181	
270.000		.1960
315.000	.2420	

BETA (1) = -.063 MACH (7) = 1.196 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2217
45.000	.2992	
90.000		.1456
135.000	.2604	
180.000		.0000
225.000	.2445	
270.000		.1264
315.000	.2869	

BETA (1) = -.063 MACH (8) = 1.253 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1815
45.000	.3338	
90.000		.0351
135.000	.2853	
180.000		.0000
225.000	.2725	
270.000		.0058
315.000	.3296	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G50) (21 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 ALPHA = .000

BETA (1) = -.063 MACH (1) = .893 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0271
45.000	-.0869	
90.000		-.0314
135.000	-.0135	
180.000		.0000
225.000	-.0030	
270.000		-.0480
315.000	-.0993	

BETA (1) = -.063 MACH (2) = .948 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0804
45.000	-.0095	
90.000		.0503
135.000	.0330	
180.000		.0000
225.000	.0430	
270.000		.0379
315.000	-.0202	

BETA (1) = -.063 MACH (3) = .995 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1315
45.000	.0569	
90.000		.1213
135.000	.0879	
180.000		.0000
225.000	.0947	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G50)

BETA (1) = -.063 MACH (3) = .995

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.1200
315.000	.0460	

BETA (1) = -.063 MACH (4) = 1.052 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CF

XT/LT	.3362	.8506
PHI		
.000		.1789
45.000	.1366	
90.000		.1782
135.000	.1572	
180.000		.0000
225.000	.1597	
270.000		.1750
315.000	.1237	

BETA (1) = -.063 MACH (5) = 1.098 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2202
45.000	.2008	
90.000		.2239
135.000	.1992	
180.000		.0000
225.000	.1940	
270.000		.2140
315.000	.1825	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G50)

BETA (1) = -.063 MACH (6) = 1.149 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2186
45.000	.2584	
90.000		.1975
135.000	.2407	
180.000		.0000
225.000	.2272	
270.000		.1923
315.000	.2430	

BETA (1) = -.063 MACH (7) = 1.197 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2222
45.000	.2987	
90.000		.1319
135.000	.2647	
180.000		.0000
225.000	.2454	
270.000		.1187
315.000	.2860	

BETA (1) = -.063 MACH (8) = 1.250 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1792
45.000	.3322	
90.000		.0098
135.000	.2972	
180.000		.0000
225.000	.2753	
270.000		-.0134
315.000	.3238	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G51) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = .980

ALPHA (1) = -3.950 BETA (1) = -.063 MACH = .98240 RN/L = 4.3057 PO = 2116.2 P = 1141.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.1337
45.000	-.0246
90.000	.1079
135.000	.1546
180.000	.0000
225.000	.1636
270.000	.1028
315.000	-.0358

ALPHA (2) = -.416 BETA (1) = -4.075 MACH = .98283 RN/L = 4.3109 PO = 2116.4 P = 1140.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.1071
45.000	.0509
90.000	.1347
135.000	.0393
180.000	.0000
225.000	.1156
270.000	.0575
315.000	.0056

ALPHA (2) = -.386 BETA (2) = -.063 MACH = .98283 RN/L = 4.3109 PO = 2116.4 P = 1140.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.1277
45.000	.0437
90.000	.1184
135.000	.0882
180.000	.0000
225.000	.0358

ARC11-023:A80 OTS(SRB=OFF ORB=OFF) ET (RE4G51)

ALPHA (2) = -.386 BETA (2) = -.063

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.1160
315.000	.0326	

ALPHA (2) = -.370 BETA (3) = 3.950 MACH = .98283 RN/L = 4.3109 PO = 2116.4 P = 1140.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0995
45.000	.1182	
90.000		.0298
135.000	.1175	
180.000		.0000
225.000	.0502	
270.000		.1241
315.000	.0449	

ALPHA (3) = 4.076 BETA (1) = -.063 MACH = .98530 RN/L = 4.3166 PO = 2116.2 P = 1137.1

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0890
45.000	.1024	
90.000		.0167
135.000	-.0022	
180.000		.0000
225.000	.0043	
270.000		.0060
315.000	.0925	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G52) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = .980

ALPHA (1) = -3.930 BETA (1) = -.063 MACH = .97970 RN/L = 4.2999 PO = 2109.1 P = 1140.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1305
45.000	-.0279	
90.000		.1019
135.000	.1517	
180.000		.0000
225.000	.1617	
270.000		.0979
315.000	-.0401	

ALPHA (2) = -.519 BETA (1) = -4.078 MACH = .98183 RN/L = 4.3033 PO = 2108.9 P = 1137.8

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1038
45.000	.0448	
90.000		.1313
135.000	.0392	
180.000		.0000
225.000	.1154	
270.000		.0501
315.000	-.0099	

ALPHA (2) = -.476 BETA (2) = -.063 MACH = .98183 RN/L = 4.3033 PO = 2108.9 P = 1137.8

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1292
45.000	.0426	
90.000		.1186
135.000	.0923	
180.000		.0000
225.000	.0383	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G52)

ALPHA (2) = -.476 BETA (2) = -.063

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.1150
315.000	.0320	

ALPHA (2) = -.499 BETA (3) = 3.953 MACH = .98183 RN/L = 4.3033 PO = 2108.9 P = 1137.8

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0982
45.000	.0035	
90.000		.0309
135.000	.1162	
180.000		.0000
225.000	.0530	
270.000		.1209
315.000	.0392	

ALPHA (3) = 3.993 BETA (1) = -.063 MACH = .98140 RN/L = 4.3065 PO = 2109.8 P = 1138.9

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0830
45.000	.0971	
90.000		.0092
135.000	-.0026	
180.000		.0000
225.000	.0005	
270.000		-.0033
315.000	.0852	

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET (RE4G53) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.944 BETA (1) = .000 MACH = .60320 RN/L = 3.4712 PO = 2123.2 P = 1660.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0443
45.000	-.1435	
90.000		-.1190
135.000	.0368	
180.000		.0000
225.000	.0378	
270.000		-.1130
315.000	-.1485	

ALPHA (2) = -.320 BETA (1) = -4.050 MACH = .60547 RN/L = 3.4696 PO = 2122.3 P = 1656.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0292
45.000	.0035	
90.000		-.0850
135.000	.0059	
180.000		.0000
225.000	-.0392	
270.000		-.1000
315.000	-.2145	

ALPHA (2) = -.297 BETA (2) = .000 MACH = .60547 RN/L = 3.4696 PO = 2122.3 P = 1656.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0305
45.000	-.1067	
90.000		-.0930
135.000	-.0131	
180.000		.0000
225.000	-.0085	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G53)

ALPHA (2) = -.297 BETA (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0873
315.000	-.1043	

ALPHA (2) = -.314 BETA (3) = 3.978 MACH = .60547 RN/L = 3.4696 PO = 2122.3 P = 1656.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0327
45.000	-.2104	
90.000		-.1040
135.000	-.0370	
180.000		.0000
225.000	.0071	
270.000		-.0788
315.000	-.0075	

ALPHA (3) = 4.053 BETA (1) = .000 MACH = .60520 RN/L = 3.4659 PO = 2121.8 P = 1656.8

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0115
45.000	-.0428	
90.000		-.0598
135.000	-.0628	
180.000		.0000
225.000	-.0572	
270.000		-.0779
315.000	-.0438	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G54) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.940 BETA (1) = -.044 MACH = .89610 RN/L = 4.1894 PO = 2105.5 P = 1250.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0279
45.000	-.1437	
90.000		-.0070
135.000	.0863	
180.000		.0000
225.000	.0946	
270.000		-.0175
315.000	-.1538	

ALPHA (2) = -.284 BETA (1) = -4.059 MACH = .89087 RN/L = 4.1758 PO = 2102.0 P = 1255.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0228
45.000	-.0253	
90.000		-.0118
135.000	-.0078	
180.000		.0000
225.000	.0133	
270.000		-.0461
315.000	-.1373	

ALPHA (2) = -.320 BETA (2) = -.041 MACH = .89087 RN/L = 4.1758 PO = 2102.0 P = 1255.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0360
45.000	-.0864	
90.000		-.0136
135.000	.0001	
180.000		.0000
225.000	.0126	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G54)

ALPHA (2) = -.320 BETA (2) = -.041

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0328
315.000	-.0961	

ALPHA (2) = -.314 BETA (3) = 3.975 MACH = .89087 RN/L = 4.1758 PO = 2102.0 P = 1255.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0144
45.000	-.1326	
90.000		-.0580
135.000	.0070	
180.000		.0000
225.000	.0062	
270.000		-.0310
315.000	-.0290	

ALPHA (3) = 3.980 BETA (1) = -.038 MACH = .89310 RN/L = 4.1769 PO = 2101.3 P = 1251.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0329
45.000	-.0188	
90.000		-.0925
135.000	-.0641	
180.000		.0000
225.000	-.0535	
270.000		-.0975
315.000	-.0251	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G55) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.772 BETA (1) = -.066 MACH = 1.1026 RN/L = 4.3661 PO = 2116.2 P = 987.87

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2375
45.000	.1241	
90.000		.2145
135.000	.3000	
180.000		.0000
225.000	.2971	
270.000		.2039
315.000	.1066	

ALPHA (2) = -.380 BETA (1) = -4.075 MACH = 1.1029 RN/L = 4.3716 PO = 2116.7 P = 987.69

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2283
45.000	.1861	
90.000		.2449
135.000	.1207	
180.000		.0000
225.000	.2454	
270.000		.1484
315.000	.1908	

ALPHA (2) = -.357 BETA (2) = -.059 MACH = 1.1029 RN/L = 4.3716 PO = 2116.7 P = 987.69

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2222
45.000	.2094	
90.000		.2258
135.000	.2148	
180.000		.0000
225.000	.2079	

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET (RE4G55)

ALPHA (2) = -.357 BETA (2) = -.059

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.2130
315.000	.1905	

ALPHA (2) = -.367 BETA (3) = 3.956 MACH = 1.1029 RN/L = 4.3716 PO = 2116.7 P = 987.69

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2186
45.000	.1972	
90.000		.1096
135.000	.2772	
180.000		.0000
225.000	.1081	
270.000		.2166
315.000	.1711	

ALPHA (3) = 4.092 BETA (1) = -.059 MACH = 1.0997 RN/L = 4.3718 PO = 2114.7 P = 990.85

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1897
45.000	.2457	
90.000		.1471
135.000	.0687	
180.000		.0000
225.000	.0616	
270.000		.1381
315.000	.2373	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G56) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.950 BETA (1) = -.063 MACH = 1.2534 RN/L = 4.3988 PO = 2111.9 P = 811.60

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0140
45.000	.2432	
90.000		.0088
135.000	.3353	
180.000		.0000
225.000	.3194	
270.000		-.0068
315.000	.2253	

ALPHA (2) = -.324 BETA (1) = -4.075 MACH = 1.2533 RN/L = 4.3973 PO = 2112.4 P = 811.89

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1831
45.000	.2996	
90.000		.1068
135.000	.1585	
180.000		.0000
225.000	.2014	
270.000		-.0233
315.000	.2374	

ALPHA (2) = -.314 BETA (2) = -.063 MACH = 1.2533 RN/L = 4.3973 PO = 2112.4 P = 811.89

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1492
45.000	.3357	
90.000		.0237
135.000	.3044	
180.000		.0000
225.000	.2875	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4056)

ALPHA (2) = -.314 BETA (2) = -.063

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0055
315.000	.3316	

ALPHA (2) = -.343 BETA (3) = 3.953 MACH = 1.2533 RN/L = 4.3973 PO = 2112.4 P = 811.89

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1886
45.000	.2327	
90.000		-.0403
135.000	.2652	
180.000		.0000
225.000	.1566	
270.000		.0847
315.000	.2820	

ALPHA (3) = 3.967 BETA (1) = -.066 MACH = 1.2519 RN/L = 4.3949 PO = 2112.6 P = 813.49

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2662
45.000	.3432	
90.000		.0801
135.000	.1578	
180.000		.0000
225.000	.1438	
270.000		.0425
315.000	.3331	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF, ET (RE4G57) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.953 BETA (1) = -.063 MACH = 1.4049 RN/L = 4.3087 PO = 2128.2 P = 664.20

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0066
45.000	.2838	
90.000		-.0269
135.000	.2997	
180.000		.0000
225.000	.2521	
270.000		-.0567
315.000	.2767	

ALPHA (2) = -.317 BETA (1) = -4.075 MACH = 1.4057 RN/L = 4.3127 PO = 2132.4 P = 664.76

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0103
45.000	.3895	
90.000		.0101
135.000	.2380	
180.000		.0000
225.000	.1447	
270.000		-.1052
315.000	.1046	

ALPHA (2) = -.320 BETA (2) = -.059 MACH = 1.4057 RN/L = 4.3127 PO = 2132.4 P = 664.76

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0169
45.000	.3236	
90.000		-.0361
135.000	.3230	
180.000		.0000
225.000	.2981	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G57)

ALPHA (2) = -.320 BETA (2) = -.059

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0738
315.000	.3237	

ALPHA (2) = -.522 BETA (3) = 3.956 MACH = 1.4057 RN/L = 4.3127 PO = 2132.4 P = 664.76

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0146
45.000	.1292	
90.000		-.0893
135.000	.1723	
180.000		.0000
225.000	.2302	
270.000		-.0442
315.000	.3859	

ALPHA (3) = 4.208 BETA (1) = -.069 MACH = 1.4030 RN/L = 4.2923 PO = 2121.8 P = 663.96

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0355
45.000	.2970	
90.000		-.0832
135.000	.2415	
180.000		.0000
225.000	.2014	
270.000		-.1324
315.000	.2972	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G58) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.953 BETA (1) = .000 MACH = .59380 RN/L = 3.3921 PO = 2104.8 P = 1658.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0601
45.000	-.1477	
90.000		-.1287
135.000	.0289	
180.000		.0000
225.000	.0285	
270.000		-.1318
315.000	-.1578	

ALPHA (2) = -.343 BETA (1) = -4.050 MACH = .59587 RN/L = 3.4000 PO = 2105.0 P = 1655.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0429
45.000	-.0055	
90.000		-.0959
135.000	.0007	
180.000		.0000
225.000	-.0495	
270.000		-.1196
315.000	-.2241	

ALPHA (2) = -.380 BETA (2) = .000 MACH = .59587 RN/L = 3.4000 PO = 2105.0 P = 1655.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0469
45.000	-.1088	
90.000		-.1037
135.000	-.0202	
180.000		.0000
225.000	-.0167	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G58)

ALPHA (2) = -.380 BETA (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.1053
315.000	-.1122	

ALPHA (2) = -.386 BETA (3) = 3.978 MACH = .59587 RN/L = 3.4000 PO = 2105.0 P = 1655.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0554
45.000	-.2229	
90.000		-.1306
135.000	-.0512	
180.000		.0000
225.000	-.0033	
270.000		-.1043
315.000	-.0151	

ALPHA (3) = 3.993 BETA (1) = -.003 MACH = .59700 RN/L = 3.4043 PO = 2104.8 P = 1654.1

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0284
45.000	-.0484	
90.000		-.0734
135.000	-.0696	
180.000		.0000
225.000	-.0686	
270.000		-.0930
315.000	-.0549	

ARC11-023IA80 OTS(SRB= 4 ORB=N) ET (RE4359) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.983 BETA (1) = -.038 MACH = .89250 RN/L = 4.1747 PO = 2100.6 P = 1252.1

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0207
45.000	-.1497	
90.000		-.0152
135.000	.0825	
180.000		.0000
225.000	.0918	
270.000		-.0280
315.000	-.1596	

ALPHA (2) = -.370 BETA (1) = -4.059 MACH = .89213 RN/L = 4.1756 PO = 2100.4 P = 1252.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0176
45.000	-.0309	
90.000		-.0177
135.000	-.0112	
180.000		.0000
225.000	.0133	
270.000		-.0524
315.000	-.1372	

ALPHA (2) = -.403 BETA (2) = -.044 MACH = .89213 RN/L = 4.1756 PO = 2100.4 P = 1252.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0385
45.000	-.0825	
90.000		-.0132
135.000	.0043	
180.000		.0000
225.000	.0176	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G59)

ALPHA (2) = -.403 BETA (2) = - 044

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0297
315.000	-.0918	

ALPHA (2) = -.409 BETA (3) = 3.972 MACH = .89213 RN/L = 4.1756 PO = 2100.4 P = 1252.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0110
45.000	-.1349	
90.000		-.0609
135.000	.0090	
180.000		.0000
225.000	.0061	
270.000		-.0392
315.000	-.0392	

ALPHA (3) = 4.076 BETA (1) = -.041 MACH = .89250 RN/L = 4.1726 PO = 2099.9 P = 1251.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0238
45.000	-.0205	
90.000		-.1103
135.000	-.0687	
180.000		.0000
225.000	-.0607	
270.000		-.1182
315.000	-.0246	

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4G60) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.937 BETA (1) = -.059 MACH = 1.1000 RN/L = 4.3718 PO = 2109.8 P = 988.18

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2357
45.000	.1179	
90.000		.2023
135.000	.3054	
180.000		.0000
225.000	.2977	
270.000		.1983
315.000	.1006	

ALPHA (2) = -.528 BETA (1) = -4.075 MACH = 1.0987 RN/L = 4.3759 PO = 2110.0 P = 989.81

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2247
45.000	.1790	
90.000		.2387
135.000	.1246	
180.000		.0000
225.000	.2478	
270.000		.1403
315.000	.1827	

ALPHA (2) = -.492 BETA (2) = -.063 MACH = 1.0987 RN/L = 4.3759 PO = 2110.0 P = 989.81

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2207
45.000	.2077	
90.000		.2160
135.000	.2212	
180.000		.0000
225.000	.2139	

ARC11-023IA80 OTS(SR3=N ORB=N) ET (RE4G60)

ALPHA (2) = -.492 BETA (2) = -.063

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
270.000		.2133
315.000	.1891	

ALPHA (2) = -.532 BETA (3) = 3.956 MACH = 1.0987 RN/L = 4.3759 PO = 2110.0 P = 989.81

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.2140
45.000	.1898	
90.000		.1199
135.000	.2754	
180.000		.0000
225.000	.1133	
270.000		.2113
315.000	.1611	

ALPHA (3) = 4.013 BETA (1) = -.063 MACH = 1.1000 RN/L = 4.3823 PO = 2110.5 P = 988.47

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.1912
45.000	.2448	
90.000		.1498
135.000	.0737	
180.000		.0000
225.000	.0654	
270.000		.1404
315.000	.2361	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G61) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.960 BETA (1) = -.066 MACH = 1.2528 RN/L = 4.3924 PO = 2109.8 P = 811.49

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0224
45.000	.2447
90.000	.0020
135.000	.3354
180.000	.0000
225.000	.3191
270.000	-.0131
315.000	.2281

ALPHA (2) = -.505 BETA (1) = -4.075 MACH = 1.2524 RN/L = 4.3922 PO = 2110.3 P = 812.12

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.1872
45.000	.2942
90.000	.1160
135.000	.1633
180.000	.0000
225.000	.2037
270.000	-.0279
315.000	.2360

ALPHA (2) = -.459 BETA (2) = -.059 MACH = 1.2524 RN/L = 4.3922 PO = 2110.3 P = 812.12

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.1485
45.000	.3325
90.000	-.0017
135.000	.3061
180.000	.0000
225.000	.2896

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G61)

ALPHA (2) = -.459 BETA (2) = -.059

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0173
315.000	.3254	

ALPHA (2) = -.462 BETA (3) = 3.953 MACH = 1.2524 RN/L = 4.3922 PO = 2110.3 P = 812.12

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1823
45.000	.2316	
90.000		-.0387
135.000	.2686	
180.000		.0000
225.000	.1656	
270.000		.0725
315.000	.2799	

ALPHA (3) = 4.006 BETA (1) = -.063 MACH = 1.2481 RN/L = 4.3345 PO = 2110.5 P = 816.88

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2602
45.000	.3398	
90.000		.0663
135.000	.1483	
180.000		.0000
225.000	.1416	
270.000		.0291
315.000	.3289	

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4G62) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.937 BETA (1) = -.069 MACH = 1.3993 RN/L = 4.2798 PO = 2114.0 P = 664.93

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0069
45.000	.2835	
90.000		-.0312
135.000	.2949	
180.000		.0000
225.000	.2505	
270.000		-.0663
315.000	.2748	

ALPHA (2) = -.486 BETA (1) = -4.078 MACH = 1.3989 RN/L = 4.2779 PO = 2113.8 P = 665.32

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0090
45.000	.3858	
90.000		.0225
135.000	.2396	
180.000		.0000
225.000	.1430	
270.000		-.1193
315.000	.1108	

ALPHA (2) = -.486 BETA (2) = -.063 MACH = 1.3989 RN/L = 4.2779 PO = 2113.8 P = 665.32

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0145
45.000	.3257	
90.000		-.0577
135.000	.3209	
180.000		.0000
225.000	.2933	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G62)

ALPHA (2) = -.486 BETA (2) = -.063

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
270.000	-.0906
315.000	.3228

ALPHA (2) = -.499 BETA (3) = 3.953 MACH = 1.3989 RN/L = 4.2779 PO = 2113.8 P = 665.32

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0155
45.000	.1311
90.000	-.1018
135.000	.1701
180.000	.0000
225.000	.2313
270.000	-.0502
315.000	.3802

ALPHA (3) = 4.020 BETA (1) = -.066 MACH = 1.3960 RN/L = 4.2780 PO = 2114.0 P = 668.11

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0343
45.000	.3035
90.000	-.1092
135.000	.2409
180.000	.0000
225.000	.2030
270.000	-.1557
315.000	.2968

ARC11-023IA80 OTS(SRB=N+ ORB=N) ET (RE4G63) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = .980

ALPHA (1) = -3.868 BETA (1) = -.063 MACH = .98020 RN/L = 4.3081 PO = 2109.8 P = 1140.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.1315
45.000	-.0258
90.000	.1061
135.000	.1514
180.000	.0000
225.000	.1584
270.000	.0996
315.000	-.0385

ALPHA (2) = -.486 BETA (1) = -4.075 MACH = .97937 RN/L = 4.3059 PO = 2108.4 P = 1140.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.1035
45.000	.0449
90.000	.1270
135.000	.0397
180.000	.0000
225.000	.1124
270.000	.0473
315.000	-.0116

ALPHA (2) = -.456 BETA (2) = -.063 MACH = .97937 RN/L = 4.3059 PO = 2108.4 P = 1140.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.1254
45.000	.0376
90.000	.1154
135.000	.0879
180.000	.0000
225.000	.0956

ARC11-023IA80 OTS(SRB=N+ ORB=N) ET (RE4G63)

ALPHA (2) = -.456 BETA (2) = -.063

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.1097
315.000	.0264	

ALPHA (2) = -.439 BETA (3) = 3.953 MACH = .97937 RN/L = 4.3059 PO = 2108.4 P = 1140.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0934
45.000	-.0003	
90.000		.0294
135.000	.1095	
180.000		.0000
225.000	.0455	
270.000		.1132
315.000	.0361	

ALPHA (3) = 4.013 BETA (1) = -.069 MACH = .98150 RN/L = 4.3090 PO = 2108.4 P = 1137.9

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0830
45.000	.0943	
90.000		.0050
135.000	-.0046	
180.000		.0000
225.000	.0013	
270.000		-.0007
315.000	.0829	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (PE4G64) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.973 BETA (1) = -.047 MACH = .58500 RN/L = 3.4024 PO = 2096.3 P = 1662.8

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0404
45.000	-.1406	
90.000		-.1120
135.000	.0377	
180.000		.0000
225.000	.0438	
270.000		-.1038
315.000	-.1399	

ALPHA (2) = -.277 BETA (1) = -4.066 MACH = .58960 RN/L = 3.4202 PO = 2098.0 P = 1658.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0361
45.000	.0011	
90.000		-.0941
135.000	.0036	
180.000		.0000
225.000	-.0417	
270.000		-.1036
315.000	-.2139	

ALPHA (2) = -.291 BETA (2) = -.047 MACH = .58960 RN/L = 3.4202 PO = 2098.0 P = 1658.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0365
45.000	-.1058	
90.000		-.0946
135.000	-.0151	
180.000		.0000
225.000	-.0092	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G64)

ALPHA (2) = -.291 BETA (2) = -.047

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0942
315.000	-.1048	

ALPHA (2) = -.307 BETA (3) = 3.972 MACH = .58960 RN/L = 3.4202 PO = 2098.0 P = 1658.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0365
45.000	-.2138	
90.000		-.1107
135.000	-.0393	
180.000		.0000
225.000	.0105	
270.000		-.0874
315.000	-.0033	

ALPHA (3) = 3.957 BETA (1) = -.044 MACH = .59060 RN/L = 3.4224 PO = 2098.5 P = 1657.3

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0165
45.000	-.0459	
90.000		-.0548
135.000	-.0624	
180.000		.0000
225.000	-.0578	
270.000		-.0869
315.000	-.0494	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G65) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.977 BETA (1) = -.044 MACH = .89350 RN/L = 4.2056 PO = 2100.6 P = 1250.8

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0251
45.000	-.1481	
90.000		-.0113
135.000	.0844	
180.000		.0000
225.000	.0923	
270.000		-.0224
315.000	-.1601	

ALPHA (2) = -.304 BETA (1) = -4.063 MACH = .89107 RN/L = 4.1787 PO = 2099.2 P = 1253.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0199
45.000	-.0257	
90.000		-.0161
135.000	-.0087	
180.000		.000
225.000	.0107	
270.000		-.0507
315.000	-.1407	

ALPHA (2) = -.314 BETA (2) = -.044 MACH = .89107 RN/L = 4.1787 PO = 2099.2 P = 1253.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0377
45.000	-.0831	
90.000		-.0121
135.000	.0024	
180.000		.0000
225.000	.0141	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G65)

ALPHA (2) = -.314 BETA (2) = -.044

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0285
315.000	-.0934	

ALPHA (2) = -.317 BETA (3) = 3.972 MACH = .89107 RN/L = 4.1787 PO = 2099.2 P = 1253.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0142
45.000	-.1298	
90.000		-.0574
135.000	.0097	
180.000		.0000
225.000	.0083	
270.000		-.0320
315.000	-.0287	

ALPHA (3) = 3.930 BETA (1) = -.041 MACH = .89120 RN/L = 4.1708 PO = 2098.5 P = 1252.6

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0311
45.000	-.0225	
90.000		-.0965
135.000	-.0674	
180.000		.0000
225.000	-.0563	
270.000		-.1118
315.000	-.0298	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G66) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.963 BETA (1) = -.063 MACH = 1.0996 RN/L = 4.4015 PO = 2123.2 P = 994.87

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2447
45.000	.1189	
90.000		.2132
135.000	.3031	
180.000		.0000
225.000	.2975	
270.000		.2023
315.000	.1016	

ALPHA (2) = -.337 BETA (1) = -4.072 MACH = 1.0995 RN/L = 4.4038 PO = 2123.7 P = 995.30

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2328
45.000	.1858	
90.000		.2304
135.000	.1195	
180.000		.0000
225.000	.2480	
270.000		.1555
315.000	.1907	

ALPHA (2) = -.334 BETA (2) = -.059 MACH = 1.0995 RN/L = 4.4038 PO = 2123.7 P = 995.30

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2272
45.000	.1986	
90.000		.2338
135.000	.2058	
180.000		.0000
225.000	.1997	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G66)

ALPHA (2) = -.334 BETA (2) = -.059

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.2244
315.000	.1809	

ALPHA (2) = -.576 BETA (3) = 3.950 MACH = 1.0995 RN/L = 4.4038 PO = 2123.7 P = 995.30

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2237
45.000	.2006	
90.000		.1144
135.000	.2749	
180.000		.0000
225.000	.1088	
270.000		.2072
315.000	.1706	

ALPHA (3) = 3.953 BETA (1) = -.066 MACH = 1.1032 RN/L = 4.3993 PO = 2119.0 P = 988.53

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2008
45.000	.2554	
90.000		.1378
135.000	.0773	
180.000		.0000
225.000	.0670	
270.000		.1359
315.000	.2479	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G67) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -.327 BETA (1) = -4.072 MACH = 1.2493 RN/L = 4.4272 PO = 2123.0 P = 820.40

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1934
45.000	.2952	
90.000		.1100
135.000	.1538	
180.000		.0000
225.000	.2050	
270.000		-.0181
315.000	.2432	

ALPHA (1) = -.317 BETA (2) = -.059 MACH = 1.2493 RN/L = 4.4272 PO = 2123.0 P = 820.40

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1692
45.000	.3330	
90.000		.0345
135.000	.2993	
180.000		.0000
225.000	.2888	
270.000		.0124
315.000	.3281	

ALPHA (1) = -.340 BETA (3) = 3.950 MACH = 1.2493 RN/L = 4.4272 PO = 2123.0 P = 820.40

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1911
45.000	.2374	
90.000		-.0347
135.000	.2645	
180.000		.0000
225.000	.1535	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4067)

ALPHA (1) = -.340 BETA (3) = 3.950

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
270.000	.0764
315.000	.2804

ALPHA (2) = .000 BETA (1) = -.063 MACH = 1.2510 RN/L = 4.4292 PO = 2123.9 P = 818.86

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.1858
45.000	.3344
90.000	.0332
135.000	.2875
180.000	.0000
225.000	.2773
270.000	.0096
315.000	.3300

ALPHA (3) = 3.960 BETA (1) = -.066 MACH = 1.2490 RN/L = 4.4220 PO = 2123.2 P = 820.75

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.2648
45.000	.3418
90.000	.0764
135.000	.1509
180.000	.0000
225.000	.1407
270.000	.0442
315.000	.3329

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G68) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.944 BETA (1) = -.059 MACH = 1.4046 RN/L = 4.3918 PO = 2123.2 P = 662.88

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0094
45.000	.2864	
90.000		-.0227
135.000	.3026	
180.000		.0000
225.000	.2587	
270.000		-.0483
315.000	.2784	

ALPHA (2) = -.320 BETA (1) = -4.072 MACH = 1.4079 RN/L = 4.3701 PO = 2122.5 P = 659.58

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0118
45.000	.3942	
90.000		.0070
135.000	.2399	
180.000		.0000
225.000	.1470	
270.000		-.1025
315.000	.1138	

ALPHA (2) = -.320 BETA (2) = -.059 MACH = 1.4079 RN/L = 4.3701 PO = 2122.5 P = 659.58

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0193
45.000	.3243	
90.000		-.0294
135.000	.3224	
180.000		.0000
225.000	.3033	

ARC11-023IA80 DTS(SRB=OFF ORB=OFF) ET (RE4G68)

ALPHA (2) = -.320 BETA (2) = -.059

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0723
315.000	.3238	

ALPHA (2) = -.347 BETA (3) = 3.953 MACH = 1.4079 RN/L = 4.3701 PO = 2122.5 P = 659.58

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0181
45.000	.1329	
90.000		-.0818
135.000	.1703	
180.000		.0000
225.000	.2327	
270.000		-.0447
315.000	.3871	

ALPHA (3) = 3.960 BETA (1) = -.063 MACH = 1.4068 RN/L = 4.3541 PO = 2121.8 P = 660.41

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0335
45.000	.2971	
90.000		-.0708
135.000	.2495	
180.000		.0000
225.000	.2141	
270.000		-.1245
315.000	.2990	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G69) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.920 BETA (1) = -.044 MACH = .59500 RN/L = 3.4551 PO = 2109.8 P = 1660.6

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0545
45.000	-.1460	
90.000		-.1237
135.000	.0302	
180.000		.0000
225.000	.0316	
270.000		-.1206
315.000	-.1515	

ALPHA (2) = -.376 BETA (1) = -4.066 MACH = .59743 RN/L = 3.4632 PO = 2109.3 P = 1657.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0454
45.000	-.0069	
90.000		-.1004
135.000	.0034	
180.000		.0000
225.000	-.0485	
270.000		-.1165
315.000	-.2201	

ALPHA (2) = -.373 BETA (2) = -.050 MACH = .59743 RN/L = 3.4632 PO = 2109.3 P = 1657.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0387
45.000	-.1025	
90.000		-.1076
135.000	-.0108	
180.000		.0000
225.000	-.0112	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G69)

ALPHA (2) = -.373 BETA (2) = -.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.1026
315.000	-.1073	

ALPHA (2) = -.426 BETA (3) = 3.969 MACH = .59743 RN/L = 3.4632 PO = 2109.3 P = 1657.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0457
45.000	-.2143	
90.000		-.1191
135.000	-.0375	
180.000		.0000
225.000	.0112	
270.000		-.1020
315.000	.0006	

ALPHA (3) = 3.947 BETA (1) = -.044 MACH = .59880 RN/L = 3.4697 PO = 2109.8 P = 1655.6

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE C~

XT/LT	.3362	.8506
PHI		
.000		-.0237
45.000	-.0506	
90.000		-.0775
135.000	-.0680	
180.000		.0000
225.000	-.0619	
270.000		-.0980
315.000	-.0533	

ARC11-023IA80 OTS:SRB=N ORB=N) ET (RE4G70) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.897 BETA (1) = -.041 MACH = .89150 RN/L = 4.1731 PO = 2102.0 P = 1254.3

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0185
45.000	-.1518	
90.000		-.0187
135.000	.0783	
180.000		.0000
225.000	.0852	
270.000		-.0283
315.000	-.1645	

ALPHA (2) = -.383 BETA (1) = -4.063 MACH = .89050 RN/L = 4.1731 PO = 2101.3 P = 1255.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0193
45.000	-.0274	
90.000		-.0192
135.000	-.0095	
180.000		.0000
225.000	.0118	
270.000		-.0517
315.000	-.1394	

ALPHA (2) = -.357 BETA (2) = -.047 MACH = .89050 RN/L = 4.1731 PO = 2101.3 P = 1255.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0339
45.000	-.0876	
90.000		-.0164
135.000	.0046	
180.000		.0000
225.000	.0147	

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4G70)

ALPHA (2) = -.357 BETA (2) = -.047

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0339
315.000	-.0981	

ALPHA (2) = -.370 BETA (3) = 3.972 MACH = .89050 RN/L = 4.1731 PO = 2101.3 P = 1255.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0043
45.000	-.1327	
90.000		-.0671
135.000	.0057	
180.000		.0000
225.000	-.0043	
270.000		-.0427
315.000	-.0440	

ALPHA (3) = 4.020 BETA (1) = -.041 MACH = .89260 RN/L = 4.1823 PO = 2101.3 P = 1252.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0258
45.000	-.0184	
90.000		-.1025
135.000	-.0671	
180.000		.0000
225.000	-.0576	
270.000		-.1169
315.000	-.0274	

ARC11-023IA80 OTS(SRB=N ORB=N) ET

(RE4G71) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.963 BETA (1) = -.066 MACH = 1.0977 RN/L = 4.3743 PO = 2107.0 P = 989.57

SECTION (1)EXTERNAL TANK

DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2706
45.000	.1284	
90.000		.2251
135.000	.3357	
180.000		.0000
225.000	.3299	
270.000		.2267
315.000	.1119	

ALPHA (2) = -.545 BETA (1) = -4.072 MACH = 1.1017 RN/L = 4.3738 PO = 2107.7 P = 985.11

SECTION (1)EXTERNAL TANK

DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2862
45.000	.2244	
90.000		.2978
135.000	.1524	
180.000		.0000
225.000	.3022	
270.000		.1806
315.000	.2333	

ALPHA (2) = -.667 BETA (2) = -.059 MACH = 1.1017 RN/L = 4.3738 PO = 2107.7 P = 985.11

SECTION (1)EXTERNAL TANK

DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2747
45.000	.2415	
90.000		.2748
135.000	.2600	
180.000		.0000
225.000	.2531	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G71)

ALPHA (2) = -.667 SETA (2) = -.059

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.2678
315.000	.2215	

ALPHA (2) = -.519 BETA (3) = 3.953 MACH = 1.1017 RN/L = 4.3738 PO = 2107.7 P = 985.11

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2614
45.000	.2267	
90.000		.1487
135.000	.3192	
180.000		.0000
225.000	.1287	
270.000		.2424
315.000	.1916	

ALPHA (3) = 3.990 BETA (1) = -.066 MACH = 1.1080 RN/L = 4.3708 PO = 2107.0 P = 977.00

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2442
45.000	.3170	
90.000		.1680
135.000	.0904	
180.000		.0000
225.000	.0800	
270.000		.1529
315.000	.3062	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (R:4G72) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -4.003 BETA (1) = -.066 MACH = 1.2534 RN/L = 4.4018 PO = 2110.5 P = 811.05

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0222
45.000	.2458	
90.000		.0099
135.000	.3350	
180.000		.0000
225.000	.3175	
270.000		.0016
315.000	.2283	

ALPHA (2) = -.502 BETA (1) = -4.072 MACH = 1.2515 RN/L = 4.3996 PO = 2110.5 P = 813.16

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1904
45.000	.2961	
90.000		.1024
135.000	.1616	
180.000		.0000
225.000	.2039	
270.000		-.0301
315.000	.2448	

ALPHA (2) = -.528 BETA (2) = -.059 MACH = 1.2515 RN/L = 4.3995 PO = 2110.5 P = 813.16

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1583
45.000	.3363	
90.000		.0056
135.000	.3084	
180.000		.0000
225.000	.2926	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G72)

ALPHA (2) = -.528 BETA (2) = -.059

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0101
315.000	.3306	

ALPHA (2) = -.538 BETA (3) = 3.953 MACH = 1.2515 RN/L = 4.3996 PO = 2110.5 P = 813.16

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1952
45.000	.2311	
90.000		-.0198
135.000	.2641	
180.000		.0000
225.000	.1619	
270.000		.0698
315.000	.2727	

ALPHA (3) = 3.953 BETA (1) = -.063 MACH = 1.2505 RN/L = 4.4051 PO = 2110.5 P = 814.22

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2640
45.000	.3422	
90.000		.0614
135.000	.1585	
180.000		.0000
225.000	.1405	
270.000		.0351
315.000	.3308	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G73) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -.522 BETA (1) = -4.072 MACH = 1.4084 RN/L = 4.3191 PO = 2112.8 P = 656.17

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0115
45.000	.3899	
90.000		.0137
135.000	.2459	
180.000		.0000
225.000	.1443	
270.000		-.1122
315.000	.1105	

ALPHA (1) = -.502 BETA (2) = -.059 MACH = 1.4084 RN/L = 4.3191 PO = 2112.8 P = 656.17

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0196
45.000	.3255	
90.000		-.0415
135.000	.3222	
180.000		.0000
225.000	.3020	
270.000		-.0876
315.000	.3224	

ALPHA (1) = -.535 BETA (3) = 3.953 MACH = 1.4084 RN/L = 4.3191 PO = 2112.8 P = 656.17

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0168
45.000	.1338	
90.000		-.0871
135.000	.1666	
180.000		.0000
225.000	.2394	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G73)

ALPHA (1) = -.535 BETA (3) = 3.953

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0484
315.000	.3848	

ALPHA (2) = .000 BETA (1) = -.063 MACH = 1.4118 RN/L = 4.3069 PO = 2111.9 P = 652.69

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0219
45.000	.3269	
90.000		-.0484
135.000	.3221	
180.000		.0000
225.000	.2986	
270.000		-.0940
315.000	.3202	

ALPHA (3) = .020 BETA (1) = -.063 MACH = 1.4046 RN/L = 4.3270 PO = 2113.3 P = 659.80

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0183
45.000	.3245	
90.000		-.0581
135.000	.3155	
180.000		.0000
225.000	.2963	
270.000		-.0980
315.000	.3187	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G74) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETR.C DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.950 BETA (1) = -.009 MACH = .60200 RN/L = 3.5046 PO = 2121.1 P = 1660.3

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0398
45.000	-.1390	
90.000		-.1101
135.000	.0399	
180.000		.0000
225.000	.0439	
270.000		-.1031
315.000	-.1451	

ALPHA (2) = -.301 BETA (1) = -4.044 MACH = .60423 RN/L = 3.5076 PO = 2121.3 P = 1657.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0331
45.000	.0002	
90.000		-.0883
135.000	.0012	
180.000		.0000
225.000	-.0442	
270.000		-.1048
315.000	-.2155	

ALPHA (2) = -.287 BETA (2) = -.006 MACH = .60423 RN/L = 3.5076 PO = 2121.3 P = 1657.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0288
45.000	-.1033	
90.000		-.0909
135.000	-.0121	
180.000		.0000
225.000	-.0071	

LPHA (2) = -.287 BETA (2) = -.006

SECTION ( )EXTERNAL TANK DEPENDENT VARIABLE CP

T/LT .3362 .8506

PHI	
270.000	-.0903
315.000	-.1049

LPHA (2) = -.317 BETA (3) = 3.988 MACH = .60423 RN/L = 3.5076 PO = 2121.3 P = 1657.7

SECTION ( )EXTERNAL TANK DEPENDENT VARIABLE CP

T/LT .3362 .8506

PHI	
.000	-.0390
45.000	-.2076
90.000	-.1059
135.000	-.0390
180.000	.0000
225.000	.0089
270.000	-.0905
315.000	-.0012

LPHA (3) = 3.947 BETA (1) = -.009 MACH = .60510 RN/L = 3.5081 PO = 2121.8 P = 1656.9

SECTION ( )EXTERNAL TANK DEPENDENT VARIABLE CP

T/LT .3362 .8506

PHI	
.000	-.0165
45.000	-.0449
90.000	-.0696
135.000	-.0619
180.000	.0000
225.000	-.0589
270.000	-.0859
315.000	-.0505

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G75) (13 JAN 75)

REFERENCE DATA

PARAMETRIC DATA

REF = 2690.0000 SQ.FT. XMRP = .0000 IN. ELV-IB = 8.000 ELV-OB = .000
REF = 1290.3000 IN. YMRP = .0000 IN. RN/L = 4.250 MACH = .900
REF = 1290.3000 IN. ZMRP = .0000 IN.
CALE = .0200

LPHA (1) = -3.980 BETA (1) = -.012 MACH = .90260 RN/L = 4.2512 PO = 2122.5 P = 1251.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

T/LT .3362 .8506

PHI		
.000		.0310
45.000	-.1413	
90.000		-.0018
135.000	.0865	
180.000		.0000
225.000	.0955	
270.000		-.0092
315.000	-.1515	

LPHA (2) = -.324 BETA (1) = -4.047 MACH = .90460 RN/L = 4.2477 PO = 2121.6 P = 1248.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

T/LT .3362 .8506

PHI		
.000		.0300
45.000	-.0209	
90.000		-.0023
135.000	-.0073	
180.000		.0000
225.000	.0216	
270.000		-.0359
315.000	-.1232	

LPHA (2) = -.317 BETA (2) = -.006 MACH = .90460 RN/L = 4.2477 PO = 2121.6 P = 1248.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

T/LT .3362 .8506

PHI		
.000		.0494
45.000	-.0691	
90.000		.0025
135.000	.0096	
180.000		.0000
225.000	.0206	

LPHA (2) = -.317 BETA (2) = -.006

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
270.000		-.0143
315.000	-.0799	

LPHA (2) = -.396 BETA (3) = 3.984 MACH = .90460 RN/L = 4.2477 PO = 2121.6 P = 1248.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0263
45.000	-.1017	
90.000		-.0399
135.000	.0245	
180.000		.0000
225.000	.0055	
270.000		-.0106
315.000	-.0276	

LPHA (3) = 4.076 BETA (1) = -.012 MACH = .90480 RN/L = 4.2388 PO = 2121.1 P = 1247.6

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0367
45.000	-.0066	
90.000		-.0925
135.000	-.0648	
180.000		.0000
225.000	-.0551	
270.000		-.0988
315.000	-.0138	

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET (RE4G76) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.934 BETA (1) = .009 MACH = 1.1011 RN/L = 4.4175 PO = 2123.9 P = 993.44

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.2313
45.000	.1138
90.000	.1992
135.000	.3095
180.000	.0000
225.000	.2992
270.000	.1875
315.000	.0951

ALPHA (2) = -.238 BETA (1) = -3.994 MACH = 1.1063 RN/L = 4.4170 PO = 2123.4 P = 986.84

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.2234
45.000	.1832
90.000	.2556
135.000	.1190
180.000	.0000
225.000	.2470
270.000	.1469
315.000	.1894

ALPHA (2) = -.307 BETA (2) = .009 MACH = 1.1063 RN/L = 4.4170 PO = 2123.4 P = 986.84

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.2143
45.000	.2124
90.000	.2205
135.000	.2183
180.000	.0000
225.000	.2083

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET (RE4G76)

ALPHA (2) = -.307 BETA (2) = .009

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
270.000	.2049
315.000	.1954

ALPHA (2) = -.271 BETA (3) = 4.034 MACH = 1.1063 RN/L = 4.4170 PO = 2123.4 P = 986.84

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.2189
45.000	.2041
90.000	.1000
135.000	.2783
180.000	.0000
225.000	.1089
270.000	.2387
315.000	.1756

ALPHA (3) = 4.026 BETA (1) = .012 MACH = 1.1056 RN/L = 4.4135 PO = 2121.8 P = 986.83

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.1922
45.000	.2500
90.000	.1563
135.000	.0763
180.000	.0000
225.000	.0672
270.000	.1488
315.000	.2406

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G77) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
BREF = 1290.3000 IN. YMRP = .0000 IN.
CREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.881 BETA (1) = .012 MACH = 1.2507 RN/L = 4.4817 PO = 2123.2 P = 818.92

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0226
45.000	.2367	
90.000		.0096
135.000	.3358	
180.000		.0000
225.000	.3201	
270.000		-.0056
315.000	.2199	

ALPHA (2) = -.239 BETA (1) = -3.994 MACH = 1.2534 RN/L = 4.4652 PO = 2123.9 P = 816.27

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.1799
45.000	.2971	
90.000		.1179
135.000	.1600	
180.000		.0000
225.000	.2115	
270.000		-.0245
315.000	.2444	

ALPHA (2) = -.259 BETA (2) = .003 MACH = 1.2534 RN/L = 4.4652 PO = 2123.9 P = 816.27

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT LT .3362 .8506

PHI		
.000		.1413
45.000	.3344	
90.000		.0242
135.000	.3014	
180.000		.0000
225.000	.2907	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G77)

ALPHA (2) = -.258 BETA (2) = .009

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
270.000	-.0062
315.000	.3277

ALPHA (2) = -.281 BETA (3) = 4.031 MACH = 1.2534 RN/L = 4.4652 PO = 2123.9 P = 816.27

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.1806
45.000	.2365
90.000	-.0440
135.000	.2607
180.000	.0000
225.000	.1604
270.000	.0799
315.000	.2833

ALPHA (3) = 3.953 BETA (1) = .016 MACH = 1.2486 RN/L = 4.4578 PO = 2122.5 P = 820.98

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.2600
45.000	.3382
90.000	.0822
135.000	.1577
180.000	.0000
225.000	.1425
270.000	.0513
315.000	.3303

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G78) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.980 BETA (1) = -.066 MACH = 1.4100 RN/L = 4.3522 PO = 2122.5 P = 657.63

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0089
45.000	.2851	
90.000		-.0259
135.000	.2998	
180.000		.0000
225.000	.2587	
270.000		-.0559
315.000	.2761	

ALPHA (2) = -.239 BETA (1) = -4.072 MACH = 1.4075 RN/L = 4.3434 PO = 2123.2 P = 660.25

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0127
45.000	.3906	
90.000		.0186
135.000	.2400	
180.000		.0000
225.000	.1483	
270.000		-.1034
315.000	.1139	

ALPHA (2) = -.228 BETA (2) = -.063 MACH = 1.4075 RN/L = 4.3434 PO = 2123.2 P = 660.25

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0157
45.000	.3313	
90.000		-.0385
135.000	.3224	
180.000		.0000
225.000	.3032	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G78)

ALPHA (2) = -.228 BETA (2) = -.063

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0744
315.000	.3288	

ALPHA (2) = -.261 BETA (3) = 3.953 MACH = 1.4075 RN/L = 4.3434 PO = 2123.2 P = 660.25

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0148
45.000	.1339	
90.000		-.0867
135.000	.1707	
180.000		.0000
225.000	.2320	
270.000		-.0379
315.000	.3897	

ALPHA (3) = 3.920 BETA (1) = -.066 MACH = 1.4043 RN/L = 4.3377 PO = 2123.2 P = 663.16

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0308
45.000	.3059	
90.000		-.0757
135.000	.2535	
180.000		.0000
225.000	.2170	
270.000		-.1267
315.000	.3018	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G79) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/_ = 3.400 MACH = .600

ALPHA (1) = -4.105 BETA (1) = -.006 MACH = .59090 RN/L = 3.4170 PO = 2104.1 P = 1661.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		-.0483
45.000	-.1419	
90.000		-.1227
135.000	.0379	
180.000		.0000
225.000	.0389	
270.000		-.1171
315.000	-.1471	

ALPHA (2) = -.383 BETA (1) = -4.047 MACH = .59743 RN/L = 3.4453 PO = 2104.1 P = 1653.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		-.0444
45.000	-.0017	
90.000		-.0951
135.000	.0032	
180.000		.0000
225.000	-.0482	
270.000		-.1165
315.000	-.2202	

ALPHA (2) = -.383 BETA (2) = -.009 MACH = .59743 RN/L = 3.4453 PO = 2104.1 P = 1653.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		-.0458
45.000	-.1136	
90.000		-.1061
135.000	-.0181	
180.000		.0000
225.000	-.0130	

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4G79)

ALPHA (2) = -.380 BETA (2) = -.009

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.1027
315.000	-.1136	

ALPHA (2) = -.499 BETA (3) = 3.981 MACH = .59743 RN/L = 3.4453 PO = 2104.1 P = 1653.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8505
PHI		
.000		-.0462
45.000	-.2100	
90.000		-.1207
135.000	-.0397	
180.000		.0000
225.000	.0116	
270.000		-.0920
315.000	-.0024	

ALPHA (3) = 3.960 BETA (1) = -.012 MACH = .59700 RN/L = 3.4428 PO = 2104.1 P = 1653.6

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0292
45.000	-.0470	
90.000		-.0742
135.000	-.0603	
180.000		.0000
225.000	-.0656	
270.000		-.0992
315.000	-.0560	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4S80) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.897 BETA (1) = -.009 MACH = .89640 RN/L = 4.1815 PO = 2097.1 P = 1244.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0249
45.000	-.1440	
90.000		-.0115
135.000	.0804	
180.000		.0000
225.000	.0879	
270.000		-.0208
315.000	-.1569	

ALPHA (2) = -.353 BETA (1) = -4.050 MACH = .90047 RN/L = 4.1929 PO = 2097.3 P = 1239.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0254
45.000	-.0267	
90.000		-.0105
135.000	-.0103	
180.000		.0000
225.000	.0199	
270.000		-.0438
315.000	-.1271	

ALPHA (2) = -.363 BETA (2) = -.009 MACH = .90047 RN/L = 4.1929 PO = 2097.3 P = 1239.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0390
45.000	-.0801	
90.000		-.0112
135.000	.0049	
180.000		.0000
225.000	.0179	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G80)

ALPHA (2) = -.363 BETA (2) = -.009

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
270.000	-.0277
315.000	-.0906

ALPHA (2) = -.519 BETA (3) = 3.981 MACH = .90047 RN/L = 4.1929 PO = 2097.3 P = 1239.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0228
45.000	-.1082
90.000	-.0449
135.000	.0216
180.000	.0000
225.000	.0017
270.000	-.0176
315.000	-.0343

ALPHA (3) = 3.980 BETA (1) = -.012 MACH = .89790 RN/L = 4.1840 PO = 2097.8 P = 1243.1

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0272
45.000	-.0160
90.000	-.1014
135.000	-.0647
180.000	.0000
225.000	-.0568
270.000	-.1113
315.000	-.0226

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4G81) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.937 BETA (1) = .012 MACH = 1.0996 RN/L = 4.3760 PO = 2105.5 P = 986.57

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2344
45.000	.1131	
90.000		.2021
135.000	.3053	
180.000		.0000
225.000	.2997	
270.000		.1983
315.000	.0961	

ALPHA (2) = -.396 BETA (1) = -3.994 MACH = 1.1021 RN/L = 4.3810 PO = 2106.0 P = 983.89

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2245
45.000	.1795	
90.000		.2605
135.000	.1253	
180.000		.0000
225.000	.2464	
270.000		.1399
315.000	.1869	

ALPHA (2) = -.380 BETA (2) = .009 MACH = 1.1021 RN/L = 4.3810 PO = 2106.0 P = 983.89

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2175
45.000	.2107	
90.000		.2170
135.000	.2226	
180.000		.0000
225.000	.2159	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G81)

ALPHA (2) = -.380 BETA (2) = .009

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.2050
315.000	.1917	

ALPHA (2) = -.393 BETA (3) = 4.031 MACH = 1.1021 RN/L = 4.3810 PO = 2106.0 P = 983.89

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2153
45.000	.1920	
90.000		.1163
135.000	.2787	
180.000		.0000
225.000	.1139	
270.000		.2279
315.000	.1641	

ALPHA (3) = 3.894 BETA (1) = .012 MACH = 1.1031 RN/L = 4.3843 PO = 2106.2 P = 982.65

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1920
45.000	.2478	
90.000		.1537
135.000	.0816	
180.000		.0000
225.000	.0711	
270.000		.1506
315.000	.2365	

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4G82) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.967 BETA (1) = .015 MACH = 1.2439 RN/L = 4.4220 PO = 2109.1 P = 820.87

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0375
45.000	.2278	
90.000		.0030
135.000	.3319	
180.000		.0000
225.000	.3201	
270.000		-.0120
315.000	.2173	

ALPHA (2) = -.396 BETA (1) = -3.994 MACH = 1.2511 RN/L = 4.4175 PO = 2109.6 P = 813.25

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1813
45.000	.2935	
90.000		.1145
135.000	.1645	
180.000		.0000
225.000	.2044	
270.000		-.0355
315.000	.2394	

ALPHA (2) = -.396 BETA (2) = .009 MACH = 1.2511 RN/L = 4.4175 PO = 2109.6 P = 813.25

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1440
45.000	.3311	
90.000		.0013
135.000	.3074	
180.000		.0000
225.000	.2931	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G82)

ALPHA (2) = -.395 BETA (2) = .009

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0209
315.000	.3239	

ALPHA (2) = -.380 BETA (3) = 4.031 MACH = 1.2511 RN/L = 4.4175 PO = 2109.6 P = 813.25

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1817
45.000	.2297	
90.000		-.0375
135.000	.2684	
180.000		.0000
225.000	.1621	
270.000		.0729
315.000	.2764	

ALPHA (3) = 3.877 BETA (1) = .009 MACH = 1.2502 RN/L = 4.4099 PO = 2109.1 P = 813.99

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2604
45.000	.3406	
90.000		.0625
135.000	.1603	
180.000		.0000
225.000	.1478	
270.000		.0278
315.000	.3298	

DATE 23 JUL 76

TABULATED SOURCE DATA - IA80

ARC1:-023IA80 OTS(SRB=N ORB=N) ET (RE4G83) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.983 BETA (1) = -.066 MACH = 1.4086 RN/L = 4.3187 PO = 2118.3 P = 657.67

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0103
45.000	.2834	
90.000		-.0281
135.000	.2971	
180.000		.0000
225.000	.2550	
270.000		-.0659
315.000	.2758	

ALPHA (2) = -.380 BETA (1) = -4.059 MACH = 1.4054 RN/L = 4.3138 PO = 2117.4 P = 660.32

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0120
45.000	.3878	
90.000		.0270
135.000	.2434	
180.000		.0000
225.000	.1465	
270.000		-.1164
315.000	.1113	

ALPHA (2) = -.380 BETA (2) = -.059 MACH = 1.4054 RN/L = 4.3138 PO = 2117.4 P = 660.32

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0150
45.000	.3233	
90.000		-.0544
135.000	.3214	
180.000		.0000
225.000	.2937	

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4G83)

ALPHA (2) = -.380 BETA (2) = -.059

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
270.000	-.0869
315.000	.3246

ALPHA (2) = -.409 BETA (3) = 3.953 MACH = 1.4054 RN/L = 4.3138 PO = 2117.4 P = 660.32

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0181
45.000	.1328
90.000	-.0958
135.000	.1688
180.000	.0000
225.000	.2363
270.000	-.0458
315.000	.3821

ALPHA (3) = 3.828 BETA (1) = .000 MACH = 1.4102 RN/L = 4.2670 PO = 2116.9 P = 655.67

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0319
45.000	.3044
90.000	-.0949
135.000	.2600
180.000	.0000
225.000	.2255
270.000	-.1453
315.000	.2980

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G84) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 2.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.953 BETA (1) = -.044 MACH = .59570 RN/L = 3.4174 PO = 2114.7 P = 1663.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	-.0571
45.000	-.1466
90.000	-.1301
135.000	.0293
180.000	.0000
225.000	.0266
270.000	-.1304
315.000	-.1582

ALPHA (2) = -.284 BETA (1) = -4.063 MACH = .59877 RN/L = 3.4302 PO = 2114.0 P = 1659.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	-.0330
45.000	.0032
90.000	-.0904
135.000	.0049
180.000	.0000
225.000	-.0392
270.000	-.1047
315.000	-.2123

ALPHA (2) = -.291 BETA (2) = -.047 MACH = .59877 RN/L = 3.4302 PO = 2114.0 P = 1659.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	-.0290
45.000	-.0999
90.000	-.0897
135.000	-.0104
180.000	.0000
225.000	-.0033

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET (RE4G84)

ALPHA (2) = -.291 BETA (2) = -.047

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
270.000	-.0836
315.000	-.0982

ALPHA (2) = -.320 BETA (3) = 3.969 MACH = .59877 RN/L = 3.4302 PO = 2114.0 P = 1659.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	-.0412
45.000	-.2120
90.000	-.1146
135.000	-.0391
180.000	.0000
225.000	.0063
270.000	-.0914
315.000	-.0084

ALPHA (3) = 3.973 BETA (1) = -.044 MACH = .59840 RN/L = 3.4294 PO = 2112.6 P = 1658.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .9506

PHI	
.000	-.0132
45.000	-.0425
90.000	-.0640
135.000	-.0595
180.000	.0000
225.000	-.0569
270.000	-.0855
315.000	-.0466

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4085) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 2.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.937 BETA (1) = -.050 MACH = .90250 RN/L = 4.2680 PO = 2118.3 P = 1249.1

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0340
45.000	-.1381	
90.000		.0007
135.000	.0885	
180.000		.0000
225.000	.0961	
270.000		-.0085
315.000	-.1501	

ALPHA (2) = -.301 BETA (1) = -4.066 MACH = .89937 RN/L = 4.2393 PO = 2116.4 P = 1252.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0292
45.000	-.0228	
90.000		-.0015
135.000	-.0069	
180.000		.0000
225.000	.0218	
270.000		-.0360
315.000	-.1242	

ALPHA (2) = -.304 BETA (2) = -.047 MACH = .89937 RN/L = 4.2393 PO = 2116.4 P = 1252.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0451
45.000	-.0736	
90.000		-.0024
135.000	.0070	
180.000		.0000
225.000	.0189	

DATE 23 JUL 76

TABULATED SOURCE DATA - IA80

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G85)

ALPHA (2) = -.304 BETA (2) = -.047

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000	-.0204	
315.000	-.0845	

ALPHA (2) = -.320 BETA (3) = 3.969 MACH = .89937 RN/L = 4.2393 PO = 2116.4 P = 1252.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0148
45.000	-.1182	
90.000		-.0515
135.000	.0150	
180.000		.0000
225.000	.0042	
270.000		-.0230
315.000	-.0340	

ALPHA (3) = 3.977 BETA (1) = -.044 MACH = .89910 RN/L = 4.2250 PO = 2114.7 P = 1251.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0314
45.000	-.0135	
90.000		-.0938
135.000	-.0625	
180.000		.0000
225.000	-.0533	
270.000		-.1040
315.000	-.0210	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4086) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 2.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -4.013 BETA (1) = .016 MACH = 1.1058 RN/L = 4.4715 PO = 2118.3 P = 985.01

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2347
45.000	.1176	
90.000		.2017
135.000	.3142	
180.000		.0000
225.000	.3031	
270.000		.1903
315.000	.1008	

ALPHA (2) = -.304 BETA (1) = -3.991 MACH = 1.1047 RN/L = 4.4560 PO = 2115.9 P = 985.23

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2230
45.000	.1838	
90.000		.2559
135.000	.1194	
180.000		.0000
225.000	.2446	
270.000		.1366
315.000	.1879	

ALPHA (2) = -.267 BETA (2) = .009 MACH = 1.1047 RN/L = 4.4560 PO = 2115.9 P = 985.23

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2263
45.000	.2055	
90.000		.2339
135.000	.2134	
180.000		.0000
225.000	.2043	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4086)

ALPHA (2) = -.267 BETA (2) = .009

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.2158
315.000	.1880	

ALPHA (2) = -.527 BETA (3) = 4.034 MACH = 1.1047 RN/L = 4.4560 PO = 2115.9 P = 985.23

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2205
45.000	.2075	
90.000		.1037
135.000	.2766	
180.000		.0000
225.000	.1095	
270.000		.2408
315.000	.1745	

ALPHA (3) = 3.986 BETA (1) = .016 MACH = 1.1038 RN/L = 4.4466 PO = 2116.2 P = 986.43

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1914
45.000	.2474	
90.000		.1528
135.000	.0734	
180.000		.0000
225.000	.0651	
270.000		.1479
315.000	.2374	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4086)

ALPHA (2) = -.267 BETA (2) = .009

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.2158
315.000	.1880	

ALPHA (2) = -.527 BETA (3) = 4.034 MACH = 1.1047 RN/L = 4.4560 PO = 2115.9 P = 985.23

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2205
45.000	.2075	
90.000		.1037
135.000	.2766	
180.000		.0000
225.000	.1095	
270.000		.2408
315.000	.1745	

ALPHA (3) = 3.986 BETA (1) = .016 MACH = 1.1038 RN/L = 4.4466 PO = 2116.2 P = 986.43

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1914
45.000	.2474	
90.000		.1528
135.000	.0734	
180.000		.0000
225.000	.0651	
270.000		.1479
315.000	.2374	

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4087) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 2.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.871 BETA (1) = -.044 MACH = .59840 RN/L = 3.4324 PO = 2111.9 P = 1657.8

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	-.0486
45.000	-.1407
90.000	-.1185
135.000	.0374
180.000	.0000
225.000	.0363
270.000	-.1200
315.000	-.1462

ALPHA (2) = -.350 BETA (1) = -4.066 MACH = .59830 RN/L = 3.4341 PO = 2111.9 P = 1657.9

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	-.0376
45.000	.0029
90.000	-.0893
135.000	.0029
180.000	.0000
225.000	-.0444
270.000	-.1113
315.000	-.2154

ALPHA (2) = -.380 BETA (2) = -.050 MACH = .59830 RN/L = 3.4341 PO = 2111.9 P = 1657.9

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	-.0428
45.000	-.1075
90.000	-.1056
135.000	-.0190
180.000	.0000
225.000	-.0163

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4G87)

ALPHA (2) = -.380 BETA (2) = -.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.1062
315.000	-.1127	

ALPHA (2) = -.423 BETA (3) = 3.963 MACH = .59830 RN/L = 3.4341 PO = 2111.9 P = 1657.9

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0407
45.000	-.2143	
90.000		-.1132
135.000	-.0380	
180.000		.0000
225.000	.0143	
270.000		-.0828
315.000	-.0042	

ALPHA (3) = 3.986 BETA (1) = -.047 MACH = .59740 RN/L = 3.4327 PO = 2111.2 P = 1658.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0255
45.000	-.0508	
90.000		-.0741
135.000	-.0697	
180.000		.0000
225.000	-.0632	
270.000		-.0970
315.000	-.0529	

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4G88) (13 JAN 75)

REFERENCE DATA

SREF = 2699.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1293.3000 IN. YMRP = .0000 IN.
BREF = 1293.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 2.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.963 BETA (1) = -.044 MACH = .89500 RN/L = 4.1900 PO = 2107.0 P = 1252.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0226
45.000	-.1495
90.000	-.0105
135.000	.0824
180.000	.0000
225.000	.0891
270.000	-.0231
315.000	-.1602

ALPHA (2) = -.383 BETA (1) = -4.066 MACH = .89813 RN/L = 4.1944 PO = 2106.2 P = 1247.9

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0243
45.000	-.0259
90.000	-.0136
135.000	-.0099
180.000	.0000
225.000	.0152
270.000	-.0516
315.000	-.1329

ALPHA (2) = -.376 BETA (2) = -.047 MACH = .89813 RN/L = 4.1944 PO = 2106.2 P = 1247.9

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0422
45.000	-.0788
90.000	-.0069
135.000	.0063
180.000	.0000
225.000	.0129

DATE 23 JUL 76

TABULATED SOURCE DATA - 1A80

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4088)

ALPHA (2) = -.376 BETA (2) = -.047

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000	-.0247	
315.000	-.0872	

ALPHA (2) = -.409 BETA (3) = 3.969 MACH = .89813 RN/L = 4.1944 PO = 2106.2 P = 1247.9

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0214
45.000	-.1155	
90.000		-.0479
135.000	.0204	
180.000		.0000
225.000	.0115	
270.000		-.0215
315.000	-.0318	

ALPHA (3) = 3.940 BETA (1) = -.044 MACH = .89700 RN/L = 4.1933 PO = 2107.0 P = 1249.8

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0292
45.000	-.0148	
90.000		-.0989
135.000	-.0635	
180.000		.0000
225.000	-.0573	
270.000		-.1139
315.000	-.0229	

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4G89) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 2.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.970 BETA (1) = .016 MACH = 1.1009 RN/L = 4.4134 PO = 2105.5 P = 985.03

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.2352
45.000	.1146	
90.000		.2010
135.000	.3077	
180.000		.0000
225.000	.3011	
270.000		.1956
315.000	.0969	

ALPHA (2) = -.436 BETA (1) = -3.994 MACH = 1.1059 RN/L = 4.4313 PO = 2113.1 P = 982.43

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.2282
45.000	.1813	
90.000		.2618
135.000	.1266	
180.000		.0000
225.000	.2469	
270.000		.1401
315.000	.1931	

ALPHA (2) = -.429 BETA (2) = .009 MACH = 1.1059 RN/L = 4.4313 PO = 2113.1 P = 982.43

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.2195
45.000	.2103	
90.000		.2145
135.000	.2245	
180.000		.0000
225.000	.2170	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G89)

ALPHA (2) = -.429 BETA (2) = .009

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.2099
315.000	.1941	

ALPHA (2) = -.466 BETA (3) = 4.031 MACH = 1.1059 RN/L = 4.4313 PO = 2113.1 P = 982.43

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2209
45.000	.2005	
90.000		.1213
135.000	.2788	
180.000		.0000
225.000	.1105	
270.000		.2392
315.000	.1684	

ALPHA (3) = 3.851 BETA (1) = .012 MACH = 1.1043 RN/L = 4.4260 PO = 2112.6 P = 984.21

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1933
45.000	.2459	
90.000		.1552
135.000	.0813	
180.000		.0000
225.000	.0693	
270.000		.1464
315.000	.2367	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G90) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.960 BETA (1) = -.003 MACH = .59840 RN/L = 3.4955 PO = 2121.1 P = 1665.1

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		-.0473
45.000	-.1415	
90.000		-.1156
135.000	.0339	
180.000		.0000
225.000	.0396	
270.000		-.1105
315.000	-.[illegible]	

ALPHA (2) = -.267 BETA (1) = -4.003 MACH = .59907 RN/L = 3.4936 PO = 2121.1 P = 1664.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		-.0361
45.000	-.0001	
90.000		-.0928
135.000	.0054	
180.000		.0000
225.000	-.0391	
270.000		-.1053
315.000	-.2133	

ALPHA (2) = -.291 BETA (2) = .012 MACH = .59907 RN/L = 3.4936 PO = 2121.1 P = 1664.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		-.0312
45.000	-.0991	
90.000		-.0916
135.000	-.0123	
180.000		.0000
225.000	-.0082	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4090)

ALPHA (2) = -.291 BETA (2) = .012

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0937
315.000	-.1068	

ALPHA (2) = -.294 BETA (3) = 4.028 MACH = .59907 RN/L = 3.4936 PO = 2121.1 P = 1664.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0422
45.000	-.2138	
90.000		-.1137
135.000	-.0411	
180.000		.0000
225.000	.0074	
270.000		-.0920
315.000	-.0032	

ALPHA (3) = 3.973 BETA (1) = .006 MACH = .59860 RN/L = 3.4896 PO = 2121.1 P = 1664.8

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0164
45.000	-.0456	
90.000		-.0642
135.000	-.0622	
180.000		.0000
225.000	-.0615	
270.000		-.0897
315.000	-.0510	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G91) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.980 BETA (1) = -.003 MACH = .90430 RN/L = 4.2125 PO = 2104.8 P = 1238.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0348
45.000	-.1366	
90.000		.0047
135.000	.0907	
180.000		.0000
225.000	.0974	
270.000		-.0079
315.000	-.1504	

ALPHA (2) = -.267 BETA (1) = -4.003 MACH = .90037 RN/L = 4.1975 PO = 2104.1 P = 1243.6

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0342
45.000	-.0175	
90.000		.0051
135.000	-.0055	
180.000		.0000
225.000	.0264	
270.000		-.0323
315.000	-.1141	

ALPHA (2) = -.291 BETA (2) = .012 MACH = .90037 RN/L = 4.1975 PO = 2104.1 P = 1243.6

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0373
45.000	-.0826	
90.000		-.0089
135.000	-.0005	
180.000		.0000
225.000	.0104	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G91)

ALPHA (2) = -.291 BETA (2) = .012

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0306
315.000	-.0937	

ALPHA (2) = -.284 BETA (3) = 4.028 MACH = .90037 RN/L = 4.1975 PO = 2104.1 P = 1243.6

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0240
45.000	-.1098	
90.000		-.0421
135.000	.0200	
180.000		.0000
225.000	.0051	
270.000		-.0194
315.000	-.0244	

ALPHA (3) = 3.970 BETA (1) = -.003 MACH = .90050 RN/L = 4.1955 PO = 2102.7 P = 1242.6

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0334
45.000	-.0117	
90.000		-.0928
135.000	-.0639	
180.000		.0000
225.000	-.0547	
270.000		-.1014
315.000	-.0189	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4G92) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.957 BETA (1) = .003 MACH = 1.0978 RN/L = 4.3356 PO = 2110.5 P = 991.11

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2326
45.000	.1112	
90.000		.2029
135.000	.3043	
180.000		.0000
225.000	.2980	
270.000		.1952
315.000	.0942	

ALPHA (2) = -.284 BETA (1) = -3.994 MACH = 1.0997 RN/L = 4.3377 PO = 2110.5 P = 988.87

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2184
45.000	.1802	
90.000		.2468
135.000	.1184	
180.000		.0000
225.000	.2456	
270.000		.1417
315.000	.1839	

ALPHA (2) = -.281 BETA (2) = .000 MACH = 1.0997 RN/L = 4.3377 PO = 2110.5 P = 988.87

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2179
45.000	.2080	
90.000		.2281
135.000	.2139	
180.000		.0000
225.000	.2021	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4092)

ALPHA (2) = -.281 BETA (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
270.000	.2097
315.000	.1899

ALPHA (2) = -.320 BETA (3) = 4.028 MACH = 1.0997 RN/L = 4.3377 PO = 2110.5 P = 988.87

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.2149
45.000	.1960
90.000	.1030
135.000	.2765
180.000	.0000
225.000	.1054
270.000	.2246
315.000	.1709

ALPHA (3) = 3.977 BETA (1) = .003 MACH = 1.0998 RN/L = 4.3390 PO = 2109.8 P = 988.41

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.1900
45.000	.2437
90.000	.1580
135.000	.0780
180.000	.0000
225.000	.0868
270.000	.1466
315.000	.2349

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4093) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.953 BETA (1) = .006 MACH = 1.2528 RN/L = 4.3463 PO = 2110.5 P = 811.76

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0150
45.000	.2408	
90.000		.0031
135.000	.3375	
180.000		.0000
225.000	.3202	
270.000		-.0082
315.000	.2227	

ALPHA (2) = -.238 BETA (1) = -3.997 MACH = 1.2535 RN/L = 4.3462 PO = 2111.4 P = 811.30

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1804
45.000	.2977	
90.000		.1035
135.000	.1596	
180.000		.0000
225.000	.2062	
270.000		-.0293
315.000	.2395	

ALPHA (2) = -.231 BETA (2) = .000 MACH = 1.2535 RN/L = 4.3462 PO = 2111.4 P = 811.30

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1404
45.000	.3357	
90.000		.0228
135.000	.3025	
180.000		.0000
225.000	.2933	

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET (RE4G93)

ALPHA (2) = -.231 BETA (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
270.000	-.0091
315.000	.3279

ALPHA (2) = -.284 BETA (3) = 4.034 MACH = 1.2535 RN/L = 4.3462 PO = 2111.4 P = 811.30

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.1785
45.000	.2307
90.000	-.0432
135.000	.2551
180.000	.0000
225.000	.1575
270.000	.0789
315.000	.2831

ALPHA (3) = 3.977 BETA (1) = .000 MACH = 1.2524 RN/L = 4.3409 PO = 2110.5 P = 812.19

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.2592
45.000	.3420
90.000	.0811
135.000	.1640
180.000	.0000
225.000	.1480
270.000	.0427
315.000	.3314

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET (RE4G94) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.887 BETA (1) = .016 MACH = 1.4070 RN/L = 4.3762 PO = 2135.2 P = 664.38

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0117
45.000	.2878
90.000	-.0254
135.000	.3054
180.000	.0000
225.000	.2624
270.000	-.0535
315.000	.2782

ALPHA (2) = -.271 BETA (1) = -3.991 MACH = 1.4086 RN/L = 4.3552 PO = 2132.6 P = 662.12

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0148
45.000	.3941
90.000	.0235
135.000	.2391
180.000	.0000
225.000	.1547
270.000	-.0990
315.000	.1175

ALPHA (2) = -.251 BETA (2) = .009 MACH = 1.4086 RN/L = 4.3552 PO = 2132.6 P = 662.12

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0198
45.000	.3350
90.000	-.0399
135.000	.3259
180.000	.0000
225.000	.3057

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET (RE4G94)

ALPHA (2) = -.251 BETA (2) = .009

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0674
315.000	.3331	

ALPHA (2) = -.284 BETA (3) = 4.031 MACH = 1.4086 RN/L = 4.3552 PO = 2132.6 P = 662.12

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0231
45.000	.1434	
90.000		-.0851
135.000	.1799	
180.000		.0000
225.000	.2332	
270.000		-.0325
315.000	.3908	

ALPHA (3) = 3.973 BETA (1) = .006 MACH = 1.3982 RN/L = 4.3323 PO = 2123.9 P = 665..2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0332
45.000	.3065	
90.000		-.0792
135.000	.2465	
180.000		.0000
225.000	.2101	
270.000		-.1290
315.000	.3004	

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4095) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.960 BETA (1) = .006 MACH = .58310 RN/L = 3.4103 PO = 2111.9 P = 1677.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0637
45.000	-.1471	
90.000		-.1318
135.000	.0291	
180.000		.0000
225.000	.0288	
270.000		-.1272
315.000	-.1556	

ALPHA (2) = -.297 BETA (1) = -4.003 MACH = .59743 RN/L = 3.4671 PO = 2111.9 P = 1659.1

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0395
45.000	-.0014	
90.000		-.0946
135.000	.0034	
180.000		.0000
225.000	-.0447	
270.000		-.1151
315.000	-.2121	

ALPHA (2) = -.307 BETA (2) = .012 MACH = .59743 RN/L = 3.4671 PO = 2111.9 P = 1659.1

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0382
45.000	-.1083	
90.000		-.0964
135.000	-.0174	
180.000		.0000
225.000	-.0085	

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4095)

ALPHA (2) = -.307 BETA (2) = .012

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0916
315.000	-.1039	

ALPHA (2) = -.376 BETA (3) = 4.022 MACH = .59743 RN/L = 3.4671 PO = 2111.9 P = 1659.1

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0464
45.000	-.2160	
90.000		-.1217
135.000	-.0416	
180.000		.0000
225.000	.0083	
270.000		-.0970
315.000	-.0038	

ALPHA (3) = 4.020 BETA (1) = -.003 MACH = .60100 RN/L = 3.4818 PO = 2111.9 P = 1654.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0190
45.000	-.0478	
90.000		-.0687
135.000	-.0644	
180.000		.0000
225.000	-.0630	
270.000		-.0928
315.000	-.0501	

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4G96) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.891 BETA (1) = -.003 MACH = .90360 RN/L = 4.2068 PO = 2106.2 P = 1240.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0359
45.000	-.1347
90.000	.0045
135.000	.0892
180.000	.0000
225.000	.0956
270.000	-.0100
315.000	-.1479

ALPHA (2) = -.[illegible]00 BETA (1) = -4.003 MACH = .89957 RN/L = 4.1991 PO = 2105.5 P = 1245.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0267
45.000	-.0226
90.000	-.0041
135.000	-.0083
180.000	.0000
225.000	.0205
270.000	-.0438
315.000	-.1263

ALPHA (2) = -.[illegible]80 BETA (2) = .012 MACH = .89957 RN/L = 4.1991 PO = 2105.5 P = 1245.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0396
45.000	-.0827
90.000	-.0083
135.000	.0021
180.000	.0000
225.000	.0133

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4096)

ALPHA (2) = -.360 BETA (2) = .012

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
270.000	-.0323
315.000	-.0914

ALPHA (2) = -.406 BETA (3) = 4.031 MACH = .89957 RN/L = 4.1991 PO = 2105.5 P = 1245.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0235
45.000	-.1072
90.000	-.0400
135.000	.0232
180.000	.0000
225.000	.0079
270.000	-.0189
315.000	-.0285

ALPHA (3) = 3.986 BETA (1) = -.003 MACH = .90050 RN/L = 4.1971 PO = 2105.5 P = 1244.3

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0350
45.000	-.0117
90.000	-.0946
135.000	-.0609
180.000	.0000
225.000	-.0491
270.000	-.1096
315.000	-.0793

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G97) (13 JAN 75)

REFERENCE DATA

SREF = 2190.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.963 BETA (1) = .003 MACH = 1.0995 RN/L = 4.3360 PO = 2105.5 P = 986.72

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2353
45.000	.1139	
90.000		.2040
135.000	.3056	
180.000		.0000
225.000	.3314	
270.000		.2008
315.000	.0984	

ALPHA (2) = -.409 BETA (1) = -3.997 MACH = 1.0997 RN/L = 4.3375 PO = 2105.5 P = 986.54

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2201
45.000	.1782	
90.000		.2500
135.000	.1276	
180.000		.0000
225.000	.2471	
270.000		.1385
315.000	.1850	

ALPHA (2) = -.385 BETA (2) = -.003 MACH = 1.0997 RN/L = 4.3375 PO = 2105.5 P = 986.54

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2199
45.000	.2075	
90.000		.2234
135.000	.2222	
180.000		.0000
225.000	.2144	

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4097)

ALPHA (2) = -.385 BETA (2) = -.003

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.2098
315.000	.1899	

ALPHA (2) = -.429 BETA (3) = 4.028 MACH = 1.0997 RN/L = 4.3375 PO = 2105.5 P = 986.54

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2169
45.000	.1927	
90.000		.1221
135.000	.2795	
180.000		.0000
225.000	.1154	
270.000		.2208
315.000	.1677	

ALPHA (3) = 4.033 BETA (1) = -.003 MACH = 1.0997 RN/L = 4.3440 PO = 2106.2 P = 986.87

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1905
45.000	.2436	
90.000		.1515
135.000	.0756	
180.000		.0000
225.000	.0698	
270.000		.1480
315.000	.0339	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4098) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.973 BETA (1) = .003 MACH = 1.2526 RN/L = 4.3420 PO = 2108.4 P = 811.19

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0276
45.000	.2391	
90.000		.0042
135.000	.3397	
180.000		.0000
225.000	.3225	
270.000		-.0116
315.000	.2239	

ALPHA (2) = -.482 BETA (1) = -3.994 MACH = 1.2535 RN/L = 4.3392 PO = 2107.9 P = 809.98

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.1817
45.000	.2941	
90.000		.1107
135.000	.1842	
180.000		.0000
225.000	.2051	
270.000		-.0373
315.000	.2440	

ALPHA (2) = -.439 BETA (2) = -.003 MACH = 1.2535 RN/L = 4.3392 PO = 2107.9 P = 809.98

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.1483
45.000	.3317	
90.000		.0007
135.000	.2072	
180.000		.0000
225.000	.2931	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G98)

ALPHA (2) = -.439 BETA (2) = -.003

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0224
315.000	.3252	

ALPHA (2) = -.416 BETA (3) = 4.028 MACH = 1.2535 PN/L = 4.3392 PO = 2107.9 P = 809.98

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1883
45.000	.2285	
90.000		-.0439
135.000	.2605	
180.000		.0000
225.000	.1624	
270.000		.0668
315.000	.2787	

ALPHA (3) = 4.020 BETA (1) = .003 MACH = 1.2508 PN/L = 4.3353 PO = 2107.7 P = 812.82

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2550
45.000	.3384	
90.000		.0641
135.000	.1625	
180.000		.0000
225.000	.1430	
270.000		.0311
315.000	.3274	

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4093) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.944 BETA (1) = .009 MACH = 1.4093 RN/L = 4.2699 PO = 2108.4 P = 653.90

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0115
45.000	.2874
90.000	-.0270
135.000	.3025
180.000	.0000
225.000	.2572
270.000	-.0630
315.000	.2809

ALPHA (2) = -.403 BETA (1) = -3.991 MACH = 1.4102 RN/L = 4.2615 PO = 2109.3 P = 653.36

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0145
45.000	.3883
90.000	.0308
135.000	.2474
180.000	.0000
225.000	.1505
270.000	-.1126
315.000	.1152

ALPHA (2) = -.388 BETA (2) = .012 MACH = 1.4102 RN/L = 4.2615 PO = 2109.3 P = 653.36

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0181
45.000	.3269
90.000	-.0484
135.000	.3253
180.000	.0000
225.000	.3000

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4G99)

ALPHA (2) = -.386 BETA (2) = .012

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
270.000	-.0881
315.000	.3276

ALPHA (2) = -.443 BETA (3) = 4.034 MACH = 1.4102 RN/L = 4.2 15 PO = 2109.3 P = 653.36

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0214
45.000	.1366
90.000	-.0915
135.000	.1700
180.000	.0000
225.000	.2439
270.000	-.0411
315.000	.3862

ALPHA (3) = 3.864 BETA (1) = .012 MACH = 1.4084 RN/L = 4.2570 PO = 2109.1 P = 654.92

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8505

PHI	
.000	.0326
45.000	.3058
90.000	-.0936
135.000	.2575
180.000	.0000
225.000	.2039
270.000	-.1185
315.000	.3004

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4GA01 (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.894 BETA (1) = .000 MACH = .60180 RN/L = 3.5043 PO = 2121.1 P = 1660.6

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	-.0405
45.000	-.1371
90.000	-.1102
135.000	.0403
180.000	.0000
225.000	.0403
270.000	-.1058
315.000	-.1428

ALPHA (2) = -.281 BETA (1) = -4.003 MACH = .59723 RN/L = 3.4829 PO = 2122.3 P = 1667.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	-.0327
45.000	.0000
90.000	-.0941
135.000	.0075
180.000	.0000
225.000	-.0412
270.000	-.1056
315.000	-.2140

ALPHA (2) = -.287 BETA (2) = .012 MACH = .59723 RN/L = 3.4829 PO = 2122.3 P = 1667.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	-.0403
45.000	-.0935
90.000	-.0944
135.000	-.0102
180.000	.0000
225.000	-.0062

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET (RE4GA0)

ALPHA (2) = -.287 BETA (2) = .012

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
270.000	-.0907
315.000	-.1050

ALPHA (2) = -.301 BETA (3) = 4.028 MACH = .59723 RN/L = 3.4829 PO = 2122.3 P = 1667.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	-.0432
45.000	-.2170
90.000	-.1192
135.000	-.0473
180.000	.0000
225.000	.0021
270.000	-.0946
315.000	-.0971

ALPHA (3) = 3.986 BETA (1) = .012 MACH = .59790 RN/L = 3.4847 PO = 2122.5 P = 1666.8

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	-.0177
45.000	-.0452
90.000	-.0714
135.000	-.0522
180.000	.0000
225.000	-.0602
270.000	-.0931
315.000	-.0503

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4GAI) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.996 BETA (1) = .009 MACH = .89940 RN/L = 4.2300 PO = 2121.8 P = 1255.3

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0295
45.000	-.1428
90.000	-.0030
135.000	.0886
180.000	.0000
225.000	.0928
270.000	-.0138
315.000	-.1550

ALPHA (2) = -.281 BETA (1) = -4.006 MACH = .90087 RN/L = 4.2382 PO = 2122.0 P = 1253.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0302
45.000	-.0189
90.000	.0031
135.000	-.0091
180.000	.0000
225.000	.0204
270.000	-.0348
315.000	-.1208

ALPHA (2) = -.284 BETA (2) = .009 MACH = .90087 RN/L = 4.2382 PO = 2122.0 P = 1253.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0424
45.000	-.0733
90.000	-.0030
135.000	.0044
180.000	.0000
225.000	.0158

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4GA1)

ALPHA (2) = -.284 BETA (2) = .009

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0222
315.000	-.0854	

ALPHA (2) = -.281 BETA (3) = 4.028 MACH = .90087 RN/L = 4.2382 PO = 2122.0 P = 1253.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0188
45.000	-.1145	
90.000		-.0495
135.000	.0172	
180.000		.0000
225.000	.0022	
270.000		-.0178
315.000	-.0305	

ALPHA (3) = 4.023 BETA (1) = .016 MACH = .90100 RN/L = 4.2328 PO = 2121.8 P = 1253.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0326
45.000	-.0094	
90.000		-.0963
135.000	-.0605	
180.000		.0000
225.000	-.0531	
270.000		-.1060
315.000	-.0205	

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET (RE4GA2) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.967 BETA (1) = .006 MACH = 1.0986 RN/L = 4.3563 PO = 2114.0 P = 991.79

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.2340
45.000	.1120	
90.000		.2069
135.000	.3051	
180.000		.0000
225.000	.3005	
270.000		.2004
315.000	.0955	

ALPHA (2) = -.284 BETA (1) = -4.003 MACH = 1.1004 RN/L = 4.3594 PO = 2113.8 P = 989.54

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.2178
45.000	.1790	
90.000		.2494
135.000	.1173	
180.000		.0000
225.000	.2457	
270.000		.1417
315.000	.1848	

ALPHA (2) = -.258 BETA (2) = -.012 MACH = 1.1004 RN/L = 4.3594 PO = 2113.8 P = 999.54

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.2142
45.000	.2116	
90.000		.2242
135.000	.2182	
180.000		.0000
225.000	.2096	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4GA2)

ALPHA (2) = -.258 BETA (2) = -.012

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.2076
315.000	.1937	

ALPHA (2) = -.301 BETA (3) = 4.016 MACH = 1.1004 RN/L = 4.3594 PO = 2113.8 P = 989.54

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2119
45.000	.1936	
90.000		.1044
135.000	.2743	
180.000		.0000
225.000	.1057	
270.000		.2226
315.000	.1685	

ALPHA (3) = 3.947 BETA (1) = .000 MACH = 1.1030 RN/L = 4.3633 PO = 2114.0 P = 985.41

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1899
45.000	.2465	
90.000		.1565
135.000	.0791	
180.000		.0000
225.000	.0680	
270.000		.1452
315.000	.2366	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4GA3) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.947 BETA (1) = -.006 MACH = 1.2545 RN/L = 4.3671 PO = 2114.0 P = 811.27

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0115
45.000	.2441	
90.000		.0095
135.000	.3399	
180.000		.0000
225.000	.3219	
270.000		-.0086
315.000	.2260	

ALPHA (2) = -.248 BETA (1) = -4.000 MACH = 1.2545 RN/L = 4.3581 PO = 2114.0 P = 811.32

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.1799
45.000	.3006	
90.000		.1100
135.000	.1627	
180.000		.0000
225.000	.2075	
270.000		-.0323
315.000	.2457	

ALPHA (2) = -.244 BETA (2) = -.006 MACH = 1.2545 RN/L = 4.3581 PO = 2114.0 P = 811.32

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.1407
45.000	.3369	
90.000		.0203
135.000	.3038	
180.000		.0000
225.000	.2869	

ALPHA (2) = -.244 BETA (2) = -.006

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
270.000	-.0123
315.000	.3282

ALPHA (2) = -.271 BETA (3) = 4.022 MACH = 1.2545 RN/L = 4.3581 PO = 2114.0 P = 811.32

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.1774
45.000	.2342
90.000	-.0513
135.000	.2631
180.000	.0000
225.000	.1568
270.000	.0692
315.000	.2824

ALPHA (3) = 3.986 BETA (1) = .003 MACH = 1.2546 RN/L = 4.3551 PO = 2114.0 P = 811.12

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.2617
45.000	.3436
90.000	.0688
135.000	.1634
180.000	.0000
225.000	.1459
270.000	0378
315.000	.3331

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.947 BETA (1) = .006 MACH = 1.4033 RN/L = 4.3439 PO = 2107.0 P = 659.02

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0091
45.000	.2839	
90.000		-.0290
135.000	.2988	
180.000		.0000
225.000	.2599	
270.000		-.0570
315.000	.2730	

ALPHA (2) = -.267 BETA (1) = -3.994 MACH = 1.4040 RN/L = 4.3128 PO = 2099.2 P = 655.94

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0097
45.000	.3895	
90.000		.0188
135.000	.2377	
180.000		.0000
225.000	.1467	
270.000		-.1052
315.000	.1104	

ALPHA (2) = -.277 BETA (2) = -.003 MACH = 1.4040 RN/L = 4.3128 PO = 2099.2 P = 655.94

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0137
45.000	.3282	
90.000		-.0450
135.000	.3201	
180.000		.0000
225.000	.2993	

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET (RE4GA4)

ALPHA (2) = -.277 BETA (2) = -.003

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
270.000	-.0763
315.000	.3254

ALPHA (2) = -.284 BETA (3) = 4.019 MACH = 1.4040 RN/L = 4.3128 PO = 2099.2 P = 655.94

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0162
45.000	.1346
90.000	-.0907
135.000	.1748
180.000	.0000
225.000	.2303
270.000	-.0389
315.000	.3869

ALPHA (3) = 3.986 BETA (1) = .006 MACH = 1.3970 RN/L = 4.2777 PO = 2085.7 P = 658.16

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0315
45.000	.3039
90.000	-.0809
135.000	.2439
180.000	.0000
225.000	.2089
270.000	-.1355
315.000	.2977

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4GA5) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.983 BETA (1) = .012 MACH = .59900 RN/L = 3.4730 PO = 2113.3 P = 1658.1

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0582
45.000	-.1470	
90.000		-.1287
135.000	.0344	
180.000		.0000
225.000	.0357	
270.000		-.1317
315.000	-.1559	

ALPHA (2) = -.337 BETA (1) = -4.006 MACH = .60037 RN/L = 3.4773 PO = 2112.8 P = 1656.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0423
45.000	-.0014	
90.000		-.0928
135.000	.0007	
180.000		.0000
225.000	-.0454	
270.000		-.1136
315.000	-.2088	

ALPHA (2) = -.370 BETA (2) = .009 MACH = .60037 RN/L = 3.4773 PO = 2112.8 P = 1656.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0490
45.000	-.1067	
90.000		-.1077
135.000	-.0195	
180.000		.0000
225.000	-.0114	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4GA5)

ALPHA (2) = -.370 BETA (2) = .009

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
270.000	-.1084
315.000	-.1107

ALPHA (2) = -.453 BETA (3) = 4.025 MACH = .60037 RN/L = 3.4773 PO = 2112.8 P = 1656.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	-.0482
45.000	-.2142
90.000	-.1236
135.000	-.0404
180.000	.0000
225.000	.0098
270.000	-.1008
315.000	-.0055

ALPHA (3) = 3.910 BETA (1) = .009 MACH = .60100 RN/L = 3.4798 PO = 2112.6 P = 1655.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	-.0278
45.000	-.0507
90.000	-.0778
135.000	-.0687
180.000	.0000
225.000	-.0599
270.000	-.0981
315.000	-.0501

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4GA6) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.937 BETA (1) = .016 MACH = .90250 RN/L = 4.2121 PO = 2111.9 P = 1245.3

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0321
45.000	-.1372
90.000	-.0001
135.000	.0842
180.000	.0000
225.000	.0941
270.000	-.0102
315.000	-.1488

ALPHA (2) = -.376 BETA (1) = -4.006 MACH = .90930 RN/L = 4.2268 PO = 2111.9 P = 1236.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0343
45.000	-.0212
90.000	.0057
135.000	-.0100
180.000	.0000
225.000	.0279
270.000	-.0322
315.000	-.1136

ALPHA (2) = -.353 BETA (2) = .009 MACH = .90930 RN/L = 4.2268 PO = 2111.9 P = 1236.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0488
45.000	-.0587
90.000	.0031
135.000	.0098
180.000	.0000
225.000	.0227

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4GA6)

ALPHA (2) = -.353 BETA (2) = .009

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0157
315.000	-.0774	

ALPHA (2) = -.420 BETA (3) = 4.022 MACH = .90930 RN/L = 4.2268 PO = 2111.9 P = 1236.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0304
45.000	-.0932	
90.000		-.0351
135.000	.0316	
180.000		.0000
225.000	.0019	
270.000		-.0007
315.000	-.0278	

ALPHA (3) = 3.910 BETA (1) = .006 MACH = .91060 RN/L = 4.2296 PO = 2111.9 P = 1234.3

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0369
45.000	-.0012	
90.000		-.0913
135.000	-.0593	
180.000		.0000
225.000	-.0490	
270.000		-.1001
315.000	-.0091	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4GA7) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.130

ALPHA (1) = -3.996 BETA (1) = .006 MACH = 1.0997 RN/L = 4.3565 PO = 2107.7 P = 987.56

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2326
45.000	.1141	
90.000		.2000
135.000	.3070	
180.000		.0000
225.000	.2988	
270.000		.2002
315.000	.0977	

ALPHA (2) = -.416 BETA (1) = -4.003 MACH = 1.0993 RN/L = 4.3567 PO = 2107.7 P = 988.07

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2200
45.000	.1773	
90.000		.2569
135.000	.1218	
180.000		.0000
225.000	.2460	
270.000		.1388
315.000	.1846	

ALPHA (2) = -.403 BETA (2) = -.012 MACH = 1.0993 RN/L = 4.3567 PO = 2107.7 P = 988.07

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2193
45.000	.2066	
90.000		.2213
135.000	.2208	
180.000		.0000
225.000	.2114	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4GA7)

ALPHA (2) = -.403 BETA (2) = -.012

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
270.000	.2068
315.000	.1882

ALPHA (2) = -.426 BETA (3) = 4.019 MACH = 1.0993 RN/L = 4.3567 PO = 2107.7 P = 988.07

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.2140
45.000	.1881
90.000	.1189
135.000	.2795
180.000	.0000
225.000	.1142
270.000	.2194
315.000	.1641

ALPHA (3) = 3.798 BETA (1) = .009 MACH = 1.0994 RN/L = 4.3619 PO = 2107.7 P = 987.85

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.1918
45.000	.2414
90.000	.1565
135.000	.0810
180.000	.0000
225.000	.0721
270.000	.1458
315.000	.2322

ARC11-023IA80 015(SRB=N ORB=N) ET (RE4GA8) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.986 BETA (1) = .009 MACH = 1.2550 RN/L = 4.3537 PO = 2109.1 P = 808.83

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0210
45.000	.2423	
90.000		-.0013
135.000	.3395	
180.000		.0000
225.000	.3189	
270.000		-.0139
315.000	.2271	

ALPHA (2) = -.400 BETA (1) = -4.003 MACH = 1.2517 RN/L = 4.3574 PO = 2109.1 P = 812.36

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.1833
45.000	.2951	
90.000		.1086
135.000	.1667	
180.000		.0000
225.000	.2064	
270.000		-.0409
315.000	.2440	

ALPHA (2) = -.393 BETA (2) = -.012 MACH = 1.2517 RN/L = 4.3574 PO = 2109.1 P = 812.36

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.1479
45.000	.3323	
90.000		.0002
135.000	.3069	
180.000		.0000
225.000	.2934	

ALPHA (2) = -.393 BETA (2) = -.012

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0241
315.000	.3254	

ALPHA (2) = -.413 BETA (3) = 4.022 MACH = 1.2517 RN/L = 4.3574 PO = 2109.1 P = 812.36

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1865
45.000	.2324	
90.000		-.0324
135.000	.2629	
180.000		.0000
225.000	.1611	
270.000		.0739
315.000	.2737	

ALPHA (3) = 3.947 BETA (1) = .003 MACH = 1.2539 RN/L = 4.3574 PO = 2109.1 P = 810.01

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2626
45.000	.3436	
90.000		.0579
135.000	1648	
180.000		.0000
225.000	.1475	
270.000		.0302
315.000	.3327	

ARC11-0231A80 OTS(SRB=N ORB=N) ET (RE4GA9) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.940 BETA (1) = .009 MACH = 1.4085 RN/L = 4.2899 PO = 2110.5 P = 655.32

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0107
45.000	.2845	
90.000		-.0301
135.000	.2998	
180.000		.0000
225.000	.2557	
270.000		-.0637
315.000	.2776	

ALPHA (2) = -.449 BETA (1) = -3.997 MACH = 1.4066 RN/L = 4.2802 PO = 2110.5 P = 657.03

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0119
45.000	.3884	
90.000		.0272
135.000	.2449	
180.000		.0000
225.000	.1487	
270.000		-.1138
315.000	.1147	

ALPHA (2) = -.380 BETA (2) = -.006 MACH = 1.4066 RN/L = 4.2802 PO = 2110.5 P = 657.03

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0149
45.000	.3257	
90.000		-.0532
135.000	.3222	
180.000		.0000
225.000	.2978	

ARC11-023IA80 OTS(SRB=N ORB=N) ET (RE4GA9)

ALPHA (2) = -.380 BETA (2) = -.006

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0899
315.000	.3252	

ALPHA (2) = -.443 BETA (3) = 4.025 MACH = 1.4066 RN/L = 4.2802 PO = 2110.5 P = 657.03

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0202
45.000	.1349	
90.000		-.0931
135.000	.1684	
180.000		.0000
225.000	.2404	
270.000		-.0466
315.000	.3847	

ALPHA (3) = 3.821 BETA (1) = .006 MACH = 1.4060 RN/L = 4.2706 PO = 2109.8 P = 657.37

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0303
45.000	.3039	
90.000		-.1019
135.000	.2555	
180.000		.0000
225.000	.2205	
270.000		-.1500
315.000	.2987	

ARC11-023IA80 OTS(SRB=N ORB NO.2 OUT)ET (RE4GB0) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -4.013 BETA (1) = .006 MACH = .60070 RN/L = 3.5069 PO = 2116.2 P = 1658.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0517
45.000	-.1401	
90.000		-.1208
135.000	.0404	
180.000		.0000
225.000	.0411	
270.000		-.1226
315.000	-.1405	

ALPHA (2) = -.271 BETA (1) = -4.006 MACH = .59863 RN/L = 3.4917 PO = 2115.4 P = 1660.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0539
45.000	-.0075	
90.000		-.1102
135.000	-.0024	
180.000		.0000
225.000	-.0512	
270.000		-.1320
315.000	-.2224	

ALPHA (2) = -.310 BETA (2) = .003 MACH = .59863 RN/L = 3.4917 PO = 2115.4 P = 1660.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0438
45.000	-.1059	
90.000		-.1033
135.000	-.0102	
180.000		.0000
225.000	-.0092	

ARC11-023IA80 OTS(SRB=N ORB NO.2 OUT)ET (RE4G80)

ALPHA (2) = -.310 BETA (2) = .003

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.1019
315.000	-.1053	

ALPHA (2) = -.310 BETA (3) = 4.025 MACH = .59863 RN/L = 3.4917 PO = 2115.4 P = 1660.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0547
45.000	-.2150	
90.000		-.1337
135.000	-.0414	
180.000		.0000
225.000	.0055	
270.000		-.1053
315.000	-.0065	

ALPHA (3) = 3.930 BETA (1) = .009 MACH = .59910 RN/L = 3.4923 PO = 2115.4 P = 1659.7

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0302
45.000	-.0502	
90.000		-.0828
135.000	-.0621	
180.000		.0000
225.000	-.0611	
270.000		-.1032
315.000	-.0533	

ARC11-023IA80 OTS(SRB=N ORB NO.2 OUT)ET (RE4GB1) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -4.069 BETA (1) = .009 MACH = .90080 RN/L = 4.2148 PO = 2109.8 P = 1246.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0272
45.000	-.1440	
90.000		-.0055
135.000	.0845	
180.000		.0000
225.000	.0911	
270.000		-.0169
315.000	-.1566	

ALPHA (2) = -.304 BETA (1) = -4.006 MACH = .90390 RN/L = 4.2180 PO = 2109.6 P = 1242.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0275
45.000	-.0267	
90.000		.0010
135.000	-.0100	
180.000		.0000
225.000	.0203	
270.000		-.0441
315.000	-.1233	

ALPHA (2) = -.317 BETA (2) = .003 MACH = .90390 RN/L = 4.2183 PO = 2109.6 P = 1242.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0482
45.000	-.0691	
90.000		.0042
135.000	.0111	
180.000		.0000
225.000	.0218	

ARC11-0231A80 OTS(SRB=N ORB NO.2 OUT)ET (RE4GB1)

ALPHA (2) = -.317 BETA (2) = .003

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0174
315.000	-.0772	

ALPHA (2) = -.357 BETA (3) = 4.025 MACH = .90390 RN/L = 4.2180 PO = 2109.6 P = 1242.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0217
45.000	-.1071	
90.000		-.0442
135.000	.0229	
180.000		.0000
225.000	.0028	
270.000		-.0218
315.000	-.0304	

ALPHA (3) = 3.986 BETA (1) = .019 MACH = .90670 RN/L = 4.2222 PO = 2109.8 P = 1238.4

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0333
45.000	-.0078	
90.000		-.0909
135.000	-.0633	
180.000		.0000
225.000	-.0538	
270.000		-.1072
315.000	-.0145	

ARC11-023(A80 OTS(SRB=N ORB NO.2 OUT)ET (RE4GB2) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.973 BETA (1) = -.009 MACH = 1.0946 RN/L = 4.3814 PO = 2106.2 P = 993.13

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2302
45.000	.1098	
90.000		.2011
135.000	.3017	
180.000		.0000
225.000	.2979	
270.000		.2006
315.000	.0921	

ALPHA (2) = -.393 BETA (1) = -4.006 MACH = 1.0958 RN/L = 4.3823 PO = 2105.7 P = 991.34

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2209
45.000	.1779	
90.000		.2573
135.000	.1220	
180.000		.0000
225.000	.2457	
270.000		.1394
315.000	.1856	

ALPHA (2) = -.340 BETA (2) = -.016 MACH = 1.0958 RN/L = 4.3828 PO = 2105.7 P = 991.34

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2181
45.000	.1980	
90.000		.2211
135.000	.2130	
180.000		.0000
225.000	.2050	

ARC11-0231A80 OTS(SRB=N ORB NO.2 OUT)ET (RE4GB2)

ALPHA (2) = -.340 BETA (2) = -.016

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.2159
315.000	.1797	

ALPHA (2) = -.357 BETA (3) = 4.016 MACH = 1.0958 RN/L = 4.3828 PO = 2105.7 P = 991.34

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2080
45.000	.1860	
90.000		.1134
135.000	.2788	
180.000		.0000
225.000	.1111	
270.000		.2116
315.000	.1613	

ALPHA (3) = 4.026 BETA (1) = -.016 MACH = 1.1011 RN/L = 4.3891 PO = 2106.2 P = 985.19

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1923
45.000	.2445	
90.000		.1550
135.000	.0785	
180.000		.0000
225.000	.0716	
270.000		.1426
315.000	.2359	

ARC11-0231A80 OTS(SRB=N ORB NO.2 OUT)ET (RE4GB3) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.947 BETA (1) = -.003 MACH = 1.2463 RN/L = 4.4021 PO = 2107.0 P = 817.37

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0421
45.000	.2328	
90.000		.0047
135.000	.3366	
180.000		.0000
225.000	.3210	
270.000		-.0080
315.000	.2186	

ALPHA (2) = -.400 BETA (1) = -4.000 MACH = 1.2440 RN/L = 4.3992 PO = 2107.0 P = 819.92

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1934
45.000	.2877	
90.000		.1364
135.000	.1627	
180.000		.0000
225.000	.2114	
270.000		-.0098
315.000	.2475	

ALPHA (2) = -.370 BETA (2) = -.009 MACH = 1.2440 RN/L = 4.3992 PO = 2107.0 P = 819.92

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1562
45.000	.3276	
90.000		.0050
135.000	.3032	
180.000		.0000
225.000	.2914	

ARC11-0231A80 OTS(SRB=N ORB NO.2 OUT)ET (RE4GB3)

ALPHA (2) = -.370 BETA (2) = -.009

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0220
315.000	.3211	

ALPHA (2) = -.420 BETA (3) = 4.019 MACH = 1.2440 RN/L = 4.395E PO = 2107.0 P = 819.92

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1917
45.000	.2394	
90.000		-.0260
135.000	.2617	
180.000		.0000
225.000	.1574	
270.000		.0903
315.000	.2595	

ALPHA (3) = 3.986 BETA (1) = -.012 MACH = 1.2457 RN/L = 4.4005 PO = 2107.7 P = 818.39

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2633
45.000	.3370	
90.000		.0705
135.000	.1585	
180.000		.0000
225.000	.1407	
270.000		.0[illegible]
315.000	.3278	

.ATED SOURCE DATA - IA80

A80 OTS(SRB=N ORB NO.2 OUTJET (RE4GB4) (13 JAN 75)

PARAMETRIC DATA

ELV-IB =	.000	ELV-OB =	.000
RN/L =	4.250	MACH =	1.400

MACH = 1.4002 RN/L = 4.3550 PO = 2109.8 P = 662.79

DENT VARIABLE CP

MACH = 1.3986 RN/L = 4.3480 PO = 2109.6 P = 664.22

ENDENT VARIABLE CP

MACH = 1.3986 RN/L = 4.3480 PO = 2109.6 P = 664.22

PENDENT VARIABLE CP

ARC11-023IA80 OTS(SRB=N ORB NO.2 OUT)ET (RE4GB4)

ALPHA (2) = -.406 BETA (2) = -.006

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
270.000		-.0953
315.000	.3232	

ALPHA (2) = -.446 BETA (3) = 4.019 MACH = 1.3986 RN/L = 4.3460 PO = 2109.6 P = 664.22

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0180
45.000	.1373	
90.000		-.0984
135.000	.1700	
180.000		.0000
225.000	.2328	
270.000		-.0468
315.000	.3803	

ALPHA (3) = 3.953 BETA (1) = -.009 MACH = 1.3971 RN/L = 4.3340 PO = 2109.8 P = 665.69

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0343
45.000	.3059	
90.000		-.1129
135.000	.2442	
180.000		.0000
225.000	.2066	
270.000		-.1593
315.000	.2961	

ARC11-023IA80 OTS(SRB=N ORB NO.1 OUT)ET (RE4GB5) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -4.072 BETA (1) = .012 MACH = .58560 RN/L = 3.4206 PO = 2115.4 P = 1677.1

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		-.0655
45.000	-.1471	
90.000		-.1380
135.000	.0317	
180.000		.0000
225.000	.0338	
270.000		-.1485
315.000	-.1580	

ALPHA (2) = -.284 BETA (1) = -4.003 MACH = .60257 RN/L = 3.4870 PO = 2114.9 P = 1654.8

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		-.0438
45.000	.0003	
90.000		-.1010
135.000	.0060	
180.000		.0000
225.000	-.0401	
270.000		-.1182
315.000	-.2124	

ALPHA (2) = -.337 BETA (2) = .003 MACH = .60257 RN/L = 3.4870 PO = 2114.9 P = 1654.8

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		-.0461
45.000	-.1079	
90.000		-.1062
135.000	-.0145	
180.000		.0000
225.000	-.0085	

ARC11-0231A80 OTS(SRB=N ORB NO.1 OUT)ET (RE4GB5)

ALPHA (2) = -.337 BETA (2) = .003

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.1092
315.000	-.1085	

ALPHA (2) = -.367 BETA (3) = 4.025 MACH = .60257 RN/L = 3.4870 PO = 2114.9 P = 1654.8

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0499
45.000	-.2141	
90.000		-.1202
135.000	-.0421	
180.000		.0000
225.000	.0104	
270.000		-.1027
315.000	-.0011	

ALPHA (3) = 3.868 BETA (1) = .006 MACH = .59730 RN/L = 3.4653 PO = 2114.7 P = 1661.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		-.0321
45.000	-.0559	
90.000		-.0839
135.000	-.0709	
180.000		.0000
225.000	-.0600	
270.000		-.1019
315.000	-.0563	

ARC11-023IA80 OTS(SRB=N ORB NO.1 OUTJET (RE4GB6) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -4.013 BETA (1) = .009 MACH = .89890 RN/L = 4.2040 PO = 2109.8 P = 1249.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0253
45.000	-.1446	
90.000		-.0099
135.000	.0844	
180.000		.0000
225.000	.0879	
270.000		-.0189
315.000	-.1596	

ALPHA (2) = -.317 BETA (1) = -4.003 MACH = .90107 RN/L = 4.2091 PO = 2108.6 P = 1245.3

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0302
45.000	-.0219	
90.000		-.0013
135.000	-.0065	
180.000		.0000
225.000	.0243	
270.000		-.0391
315.000	-.1203	

ALPHA (2) = -.310 BETA (2) = .003 MACH = .90107 RN/L = 4.2091 PO = 2108.6 P = 1245.3

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0347
45.000	-.0827	
90.000		-.0159
135.000	.0009	
180.000		.0000
225.000	.0111	

ARC11-023IA80 OTS(SRB=N ORB NO.1 OUTJET (RE4GB6)

ALPHA (2) = -.310 BETA (2) = .003

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0341
315.000	-.0961	

ALPHA (2) = -.340 BETA (3) = 4.025 MACH = .90107 RN/L = 4.2091 PO = 2108.6 P = 1245.3

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0233
45.000	-.1054	
90.000		-.0428
135.000	.0231	
180.000		.0000
225.000	.0000	
270.000		-.0168
315.000	-.0322	

ALPHA (3) = 3.854 BETA (1) = .009 MACH = .90130 RN/L = 4.2056 PO = 2109.1 P = 1245.3

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0291
45.000	-.0166	
90.000		-.0987
135.000	-.0634	
180.000		.0000
225.000	-.0585	
270.000		-.1065
315.000	-.0266	

ARC11-023!A80 OTS(SRB=N ORB NO.1 OUT)ET (RE4GB7) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -4.003 BETA (1) = -.012 MACH = 1.0992 RN/L = 4.3803 PO = 2102.7 P = 985.74

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2292
45.000	.1117	
90.000		.1914
135.000	.3057	
180.000		.0000
225.000	.2997	
270.000		.1979
315.000	.0942	

ALPHA (2) = -.393 BETA (1) = -4.006 MACH = 1.1052 RN/L = 4.3824 PO = 2102.7 P = 978.47

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2234
45.000	.1810	
90.000		.2637
135.000	.1257	
180.000		.0000
225.000	.2452	
270.000		.1420
315.000	.1888	

ALPHA (2) = -.347 BETA (2) = -.019 MACH = 1.1052 RN/L = 4.3824 PO = 2102.7 P = 978.47

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2213
45.000	.2094	
90.000		.2287
135.000	.2215	
180.000		.0000
225.000	.2103	

ARC11-023IA80 OTS(SRB=N ORB NO.1 OUT)ET (RE4G87)

ALPHA (2) = -.347 BETA (2) = -.019

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.2139
315.000	.1924	

ALPHA (2) = -.383 BETA (3) = 4.012 MACH = 1.1052 RN/L = 4.3824 PO = 2102.7 P = 978.47

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2192
45.000	.2023	
90.000		.1144
135.000	.2777	
180.000		.0000
225.000	.1110	
270.000		.2418
315.000	.1712	

ALPHA (3) = 4.049 BETA (1) = -.012 MACH = 1.1075 RN/L = 4.3846 PO = 2102.7 P = 975.68

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1902
45.000	.2512	
90.000		.1590
135.000	.0815	
180.000		.0000
225.000	.0660	
270.000		.1436
315.000	.2422	

ARC11-0231A80 OTS(SRB=N ORB NO.1 OUT)ET (RE4GB8) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.914 BETA (1) = -.009 MACH = 1.2513 RN/L = 4.3952 PO = 2104.1 P = 810.95

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.0337
45.000	.2360	
90.000		.0086
135.000	.3388	
180.000		.0000
225.000	.3230	
270.000		-.0138
315.000	.2192	

ALPHA (2) = -.353 BETA (1) = -4.006 MACH = 1.2491 RN/L = 4.3920 PO = 2104.8 P = 813.54

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8505

PHI		
.000		.1850
45.000	.2927	
90.000		.1239
135.000	.1620	
180.000		.0000
225.000	.2036	
270.000		-.0341
315.000	.2436	

ALPHA (2) = -.367 BETA (2) = -.016 MACH = 1.2491 RN/L = 4.3920 PO = 2104.8 P = 813.54

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI		
.000		.1549
45.000	.3298	
90.000		.0146
135.000	.3055	
180.000		.0000
225.000	.2906	

ARC11-023IA80 OTS(SRB=N ORB NO.1 OUT)ET (RE4GB8)

ALPHA (2) = -.367 BETA (2) = -.016

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0228
315.000	.3206	

ALPHA (2) = -.393 BETA (3) = 4.016 MACH = 1.2491 RN/L = 4.3920 PO = 2104.8 P = 813.54

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1910
45.000	.2362	
90.000		-.0294
135.000	.2586	
180.000		.0000
225.000	.1568	
270.000		.0773
315.000	.2773	

ALPHA (3) = 4.053 BETA (1) = -.012 MACH = 1.2485 RN/L = 4.3917 PO = 2104.1 P = 813.89

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2640
45.000	.3396	
90.000		.0674
135.000	.1572	
180.000		.0000
225.000	.1362	
270.000		.0301
315.000	.3322	

ARC11-023IA80 OTS(SRB=N ORB NO.1 OUTJET (RE4GB9) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.934 BETA (1) = -.009 MACH = 1.4069 RN/L = 4.3421 PO = 2107.0 P = 655.71

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0035
45.000	.2688
90.000	-.0363
135.000	.2951
180.000	.0000
225.000	.2589
270.000	.0706
315.000	.2641

ALPHA (2) = -.426 BETA (1) = -4.006 MACH = 1.4068 RN/L = 4.3356 PO = 2107.7 P = 655.95

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0055
45.000	.3833
90.000	.0277
135.000	.2474
180.000	.0000
225.000	.1460
270.000	-.1183
315.000	.1099

ALPHA (2) = -.383 BETA (2) = -.016 MACH = 1.4068 RN/L = 4.3356 PO = 2107.7 P = 655.95

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0095
45.000	.3230
90.000	-.0549
135.000	.3230
180.000	.0000
225.000	.2996

ARC11-023IA80 OTS(SRB=N ORB NO.1 OUT)ET (RE4089)

ALPHA (2) = -.383 BETA (2) = -.016

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		-.0883
315.000	.3241	

ALPHA (2) = -.435 BETA (3) = 4.016 MACH = 1.4068 RN/L = 4.3356 PO = 2107.7 P = 655.95

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0141
45.000	.1308	
90.000		-.0934
135.000	.1661	
180.000		.0000
225.000	.2410	
270.000		-.0465
315.000	.3811	

ALPHA (3) = 4.046 BETA (1) = -.012 MACH = 1.4068 RN/L = 4.3293 PO = 2108.4 P = 656.24

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.0288
45.000	.2921	
90.000		-.1029
135.000	.2515	
180.000		.0000
225.000	.2119	
270.000		-.1502
315.000	.2944	

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -4.029 BETA (1) = .016 MACH = .89710 RN/L = 4.2461 PO = 2124.6 P = 1260.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1075
45.000	-.1452	
90.000		.0349
135.000	.0852	
180.000		.0000
225.000	.0918	
270.000		.0299
315.000	-.1583	

ALPHA (2) = -.241 BETA (1) = -4.009 MACH = .90283 RN/L = 4.2515 PO = 2122.7 P = 1251.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1134
45.000	-.0189	
90.000		.0549
135.000	-.0058	
180.000		.0000
225.000	.0266	
270.000		.0166
315.000	-.1161	

ALPHA (2) = -.264 BETA (2) = -.003 MACH = .90283 RN/L = 4.2516 PO = 2122.7 P = 1251.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1186
45.000	-.0788	
90.000		0462
135.000	.0032	
180.000		.0000
225.000	.0143	

ARC11-023IA80 OTS(ET SPOIL(SRB=ORB=OFF)ET (RE4GC0)

ALPHA (2) = -.264 BETA (2) = -.003

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.0288
315.000	-.0889	

ALPHA (2) = -.291 BETA (3) = 4.022 MACH = .90283 RN/L = 4.2516 PO = 2122.7 P = 1251.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1070
45.000	-.1035	
90.000		.0055
135.000	.0238	
180.000		.0000
225.000	.0081	
270.000		.0436
315.000	-.0238	

ALPHA (3) = 3.980 BETA (1) = .016 MACH = .90820 RN/L = 4.2637 PO = 2123.2 P = 1244.2

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1210
45.000	-.0039	
90.000		-.0183
135.000	-.0607	
180.000		.0000
225.000	-.0509	
270.000		-.0217
315.000	-.0150	

ARC11-023IA80 OTS(ET SPOIL(SRB=ORB=OFF)ET (RE4GC1) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -4.000 BETA (1) = .012 MACH = 1.1039 RN/L = 4.4630 PO = 2123.2 P = 989.56

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2924
45.000	.1172	
90.000		.2220
135.000	.3089	
180.000		.0000
225.000	.3013	
270.000		.2181
315.000	.0991	

ALPHA (2) = -.264 BETA (1) = -4.009 MACH = 1.1017 RN/L = 4.4844 PO = 2124.6 P = 992.96

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2809
45.000	.1828	
90.000		.2868
135.000	.1178	
180.000		.0000
225.000	.2443	
270.000		.1624
315.000	.1903	

ALPHA (2) = -.284 BETA (2) = .000 MACH = 1.1017 RN/L = 4.4844 PO = 2124.6 P = 992.96

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2823
45.000	.2038	
90.000		.2512
135.000	.2128	
180.000		.0000
225.000	.2024	

ARC11-023IA80 OTS(ET SPOIL(SRB=ORB=OFF)ET (RE4GC1)

ALPHA (2) = -.284 BETA (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.2334
315.000	.1845	

ALPHA (2) = -.297 BETA (3) = 4.022 MACH = 1.1017 RN/L = 4.4844 PO = 2124.6 P = 992.96

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2741
45.000	.1990	
90.000		.1258
135.000	.2796	
180.000		.0000
225.000	.1112	
270.000		.2587
315.000	.1718	

ALPHA (3) = 3.910 BETA (1) = .016 MACH = 1.1025 RN/L = 4.4864 PO = 2123.9 P = 991.59

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2533
45.000	.2447	
90.000		.1947
135.000	.0784	
180.000		.0000
225.000	.0666	
270.000		.1940
315.000	.2351	

ARC11-023IA80 OTS(ET SPOIL(SRB=ORB=NOM)ET (RE4GC2) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.996 BETA (1) = .016 MACH = .90230 RN/L = 4.2244 PO = 2111.2 P = 1245.1

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1139
45.000	-.1384	
90.000		.0408
135.000	.0857	
180.000		.0000
225.000	.0939	
270.000		.0355
315.000	-.1506	

ALPHA (2) = -.284 BETA (1) = -4.012 MACH = .90030 RN/L = 4.2241 PO = 2110.5 P = 1247.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1041
45.000	-.0253	
90.000		.0459
135.000	-.0080	
180.000		.0000
225.000	.0177	
270.000		.0078
315.000	-.1312	

ALPHA (2) = -.360 BETA (2) = -.003 MACH = .90030 RN/L = 4.2241 PO = 2110.5 P = 1247.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.1206
45.000	-.0694	
90.000		.0512
135.000	.0075	
180.000		.0000
225.000	.0214	

ARC11-023IA80 OTS(ET SPOIL(SRB=ORB=NOM)E; (RE4GC2)

ALPHA (2) = -.360 BETA (2) = -.003

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
270.000	.0342
315.000	-.0813

ALPHA (2) = -.330 BETA (3) = 4.019 MACH = .90030 RN/L = 4.2241 PO = 2110.5 P = 1247.5

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.0963
45.000	-.1149
90.000	-.0044
135.000	.0175
180.000	.0000
225.000	.0002
270.000	.0309
315.000	-.0327

ALPHA (3) = 3.927 BETA (1) = .012 MACH = .89920 RN/L = 4.2176 PO = 2110.5 P = 1249.0

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT .3362 .8506

PHI	
.000	.1187
45.000	-.0163
90.000	-.0201
135.000	-.0624
180.000	.0000
225.000	-.0504
270.000	-.0243
315.000	-.0247

ARC11-023IA80 OTS(ET SPOIL(SRB=ORB=NOM)ET (RE4GC3) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -4.033 BETA (1) = .016 MACH = 1.1036 RN/L = 4.4660 PO = 2114.0 P = 985.75

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2931
45.000	.1163	
90.000		.2132
135.000	.3113	
180.000		.0000
225.000	.3039	
270.000		.2156
315.000	.0989	

ALPHA (2) = -.433 BETA (1) = -4.009 MACH = 1.1009 RN/L = 4.4637 PO = 2114.0 P = 989.05

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2798
45.000	.1789	
90.000		.2835
135.000	.1234	
180.000		.0000
225.000	.2459	
270.000		.1599
315.000	.1846	

ALPHA (2) = -.446 BETA (2) = -.003 MACH = 1.1009 RN/L = 4.4637 PO = 2114.0 P = 989.05

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2762
45.000	.2090	
90.000		.2839
135.000	.2247	
180.000		.0000
225.000	.2158	

ARC11-023IA80 OTS(ET SPOIL(SRB=ORB=NOM)ET (RE4GC3)

ALPHA (2) = -.446 BETA (2) = -.003

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
270.000		.2300
315.000	.1910	

ALPHA (2) = -.456 BETA (3) = 4.022 MACH = 1.1009 RN/L = 4.4637 PO = 2114.0 P = 989.05

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XT/LT	.3362	.8506
PHI		
.000		.2684
45.000	.1884	
90.000		.1360
135.000	.2776	
180.000		.0000
225.000	.1141	
270.000		.2520
315.000	.1606	

ALPHA (3) = 3.844 BETA (1) = .003 MACH = 1.1023 RN/L = 4.4653 PO = 2114.7 P = 987.65

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X LT	.3362	.8506
PHI		
.000		.2576
45.000	.2445	
90.000		.1994
135.000	.0862	
180.000		.0000
225.000	.0747	
270.000		.1906
315.000	.2347	

ARC11-0231A80 OTS(SRB=N++ ORB=N) ET BASE (RE4H01) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -4.013 BETA (1) = -.019 MACH = .59860 RN/L = 3.3812 PO = 2110.5 P = 1656.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3483		-.2869	-.2977	-.3586	-.7059	-.8446	
45.000				-.3567				
90.000			-.3597	-.4124	-.4391	-.6032	-.7907	
135.000				-.3596	-.4055	-.6193		.2162
180.000			-.3409	-.3548	-.3785	-.4433	-.6730	
225.000						-.7333		.1423
270.000		-.3411	-.3313	-.3490			-.6761	
315.000				-.3408	-.3596	-.4958		-.5670

ALPHA (2) = -.314 BETA (1) = -4.034 MACH = .59953 RN/L = 3.3878 PO = 2110.3 P = 1655.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3528		-.2806	-.3077	-.3293	-.6745	-.8941	
45.000				-.3724				
90.000			-.3517	-.4442	-.4873	-.5750	-.7903	
135.000				-.3793	-.3935	-.6738		.3195
180.000			-.3519	-.3752	-.3980	-.4481	-.7131	
225.000						-.6869		.0699
270.000		-.3325	-.3317	-.3338			-.6354	
315.000				-.3341	-.3476	-.4876		-.6031

ALPHA (2) = -.340 BETA (2) = -.019 MACH = .59953 RN/L = 3.3378 PO = 2110.3 P = 1655.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3296		-.2786	-.2937	-.3254	-.6826	-.8699	
45.000				-.3555				
90.000			-.3510	-.4067	-.4295	-.5674	-.7470	
135.000				-.3639	-.4051	-.6338		.2437
180.000			-.3419	-.3517	-.3592	-.4468	-.6743	
225.000						-.7311		.1803

ARC11-023IA80 OTS(SRB=N++ ORB=N) ET BASE (RE4H01)

ALPHA (2) = -.340 BETA (2) = -.019

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3221	-.3256	-.3527			-.6753	
315.000				-.3320	-.3423	-.4401		-.5790

ALPHA (2) = -.459 BETA (3) = 3.997 MACH = .59953 RN/L = 3.3878 PO = 2110.3 P = 1655.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3379		-.2876	-.2955	-.3201	-.6462	-.8783	
45.000				-.3344				
90.000			-.3406	-.3768	-.3932	-.5510	-.7481	
135.000				-.3379	-.3696	-.5148		.0599
180.000			-.3228	-.3522	-.3505	-.4472	-.6825	
225.000						-.7390		.2298
270.000		-.3291	-.3177	-.3467			-.7091	
315.000				-.3450	-.3450	-.4407		-.5755

ALPHA (3) = 4.039 BETA (1) = -.019 MACH = .59860 RN/L = 3.3974 PO = 2109.8 P = 1655.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3364		-.2695	-.2827	-.3187	-.6925	-.8743	
45.000				-.3485				
90.000			-.3406	-.4023	-.4505	-.5271	-.7003	
135.000				-.3636	-.4160	-.6394		.2844
180.000			-.3303	-.3475	-.3636	-.4388	-.6730	
225.000						-.7480		.2419
270.000		-.3265	-.3159	-.3207			-.6350	
315.000				-.3269	-.3338	-.4432		-.5394

ARC11-023IA80 OTS(SRB=N++ ORB=N) ET BASE (RE4H02) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.901 BETA (1) = -.012 MACH = .90550 RN/L = 4.2328 PO = 2108.4 P = 1239.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3554		-.3614	-.3733	-.3869	-.4233	-.6952	
45.000				-.4162				
90.000			-.3620	-.4023	-.4298	-.5500	-.7877	
135.000				-.3711	-.4342	-.5822		.2625
180.000			-.3397	-.3604	-.3659	-.4329	-.6051	
225.000						-.6858		.2680
270.000		-.3566	-.3504	-.3694			-.6069	
315.000				-.4069	-.4494	-.5866		-.4250

ALPHA (2) = -.347 BETA (1) = -4.025 MACH = .90060 RN/L = 4.2176 PO = 2106.2 P = 1244.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3750		-.3780	-.3877	-.4021	-.4162	-.6987	
45.000				-.4102				
90.000			-.3616	-.4234	-.4997	-.5258	-.8470	
135.000				-.3734	-.4116	-.6551		.4726
180.000			-.3535	-.3744	-.3983	-.4991	-.8420	
225.000						-.6743		.1408
270.000		-.3764	-.3531	-.3807			-.6049	
315.000				-.4294	-.5049	-.6096		-.4172

ALPHA (2) = -.380 BETA (2) = -.009 MACH = .90060 RN/L = 4.2176 PO = 2106.2 P = 1244.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3312		-.3256	-.3600	-.3605	-.4286	-.6754	
45.000				-.3945				
90.000			-.3503	-.4055	-.4359	-.5194	-.7227	
135.000				-.3706	-.4476	-.6014		.3678
180.000			-.3284	-.3485	-.3442	-.4343	-.5844	
225.000						-.6663		.3373

ARC11-023IA80 OTS(SRB=N++ ORB=N) ET BASE (RE4H02)

ALPHA (2) = -.380 BETA (2) = -.009

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3308	-.3372	-.3389			-.5549	
315.000				-.3493	-.3793	-.5630		-.4034

ALPHA (2) = -.456 BETA (3) = 4.003 MACH = .90060 RN/L = 4.2176 PO = 2106.2 P = 1244.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3529		-.3626	-.3749	-.3875	-.4095	-.6940	
45.000				-.4098				
90.000			-.3346	-.3709	-.3740	-.5125	-.8033	
135.000				-.3715	-.3926	-.5323		.0717
180.000			-.3587	-.3632	-.3851	-.4812	-.6948	
225.000						-.7249		.3341
270.000		-.3535	-.3585	-.3543			-.4954	
315.000				-.3711	-.3985	-.5194		-.4231

ALPHA (3) = 3.977 BETA (1) = -.009 MACH = .89810 RN/L = 4.2116 PO = 2105.5 P = 1247.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3445		-.3356	-.3620	-.3748	-.4138	-.6894	
45.000				-.3709				
90.000			-.3414	-.3867	-.4178	-.5180	-.7794	
135.000				-.3936	-.4839	-.6325		.4186
180.000			-.3183	-.3524	-.3464	-.4415	-.5984	
225.000						-.6490		.3695
270.000		-.3405	-.3452	-.3497			-.4524	
315.000				-.3543	-.3750	-.4768		-.4174

ARC11-0231A80 OTS(SRB=N++ ORB=N) ET BASE (RE4H03) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.920 BETA (1) = -.003 MACH = 1.0986 RN/L = 4.3008 PO = 2109.8 P = 989.84

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3031		-.3077	-.3403	-.3875	-.5471	-.3028	
45.000				-.3611				
90.000			-.3235	-.3371	-.3356	-.3559	-.4392	
135.000				-.3323	-.3657	-.4751		.3112
180.000			-.3069	-.3490	-.4045	-.4175	-.5788	
225.000						-.5187		.3051
270.000		-.3163	-.3218	-.3436			-.4289	
315.000				-.3638	-.4159	-.5445		-.0682

ALPHA (2) = -.621 BETA (1) = -4.006 MACH = 1.1024 RN/L = 4.3086 PO = 2109.6 P = 985.11

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3071		-.3190	-.3213	-.3311	-.4009	-.3275	
45.000				-.3590				
90.000			-.3236	-.3466	-.3644	-.4528	-.6599	
135.000				-.3717	-.3919	-.5537		.6094
180.000			-.3272	-.3206	-.3348	-.4095	-.5662	
225.000						-.4776		.2322
270.000		-.3239	-.3299	-.3513			-.4317	
315.000				-.3668	-.3860	-.5011		-.0635

ALPHA (2) = -.641 BETA (2) = .000 MACH = 1.1024 RN/L = 4.3086 PO = 2109.6 P = 985.11

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2733		-.2955	-.3068	-.3363	-.4694	-.3149	
45.000				-.3226				
90.000			-.2919	-.3190	-.3213	-.4382	-.5459	
135.000				-.3090	-.3427	-.4770		.3939
180.000			-.3024	-.3397	-.3907	-.4128	-.5937	
225.000						-.5253		.3829

ARC11-023IA80 OTS(SRB=N++ ORB=N) ET BASE (RE4H03)

ALPHA (2) = -.641 BETA (2) = .000

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2849	-.2889	-.3236			-.4752	
315.000				-.3120	-.3498	-.4292		-.0728

ALPHA (2) = -.492 BETA (3) = 4.009 MACH = 1.1024 RN/L = 4.3086 PO = 2109.6 P = 985.11

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3003		-.3116	-.3221	-.3287	-.3912	-.3244	
45.000				-.3304				
90.000			-.3266	-.3399	-.3472	-.3779	-.4343	
135.000				-.3426	-.3737	-.4481		.2159
180.000			-.3276	-.3499	-.4150	-.5045	-.7355	
225.000						-.4776		.4678
270.000		-.3135	-.3125	-.3285			-.4918	
315.000				-.3702	-.4220	-.5408		-.1117

ALPHA (3) = 3.944 BETA (1) = -.003 MACH = 1.1088 RN/L = 4.3102 PO = 2108.4 P = 976.70

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3316		-.3319	-.3538	-.3730	-.4820	-.3178	
45.000				-.3735				
90.000			-.3313	-.3589	-.3810	-.4803	-.6696	
135.000				-.3643	-.3964	-.4998		.4615
180.000			-.3418	-.3460	-.4245	-.4669	-.6793	
225.000						-.5145		.3464
270.000		-.3333	-.3308	-.3525			-.4697	
315.000				-.3827	-.4557	-.6185		-.1298

ARC11-023IA80 OTS(SRB=N++ ORB=N) ET BASE (RE4H04) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -4.165 BETA (1) = .000 MACH = 1.2595 RN/L = 4.4972 PO = 2140.2 P = 815.83

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2181		-.2165	-.2574	-.3104	-.4367	-.1437	
45.000				-.2537				
90.000			-.2100	-.2574	-.2597	-.2594	-.4835	
135.000				-.2260	-.2614	-.3683		.4041
180.000			-.2203	-.2719	-.2939	-.3165	-.4336	
225.000						-.4148		.3210
270.000		-.2161	-.2091	-.2347			-.4320	
315.000				-.2731	-.3506	-.4838		-.0246

ALPHA (2) = -.495 BETA (1) = -4.006 MACH = 1.2534 RN/L = 4.4312 PO = 2113.5 P = 812.32

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2221		-.2153	-.2558	-.2887	-.4184	-.1840	
45.000				-.2260				
90.000			-.2305	-.2329	-.3167	-.3630	-.4831	
135.000				-.2781	-.2528	-.3603		.6305
180.000			-.2305	-.2381	-.2611	-.3808	-.4414	
225.000						-.3855		.2459
270.000		-.2161	-.2038	-.2270			-.4675	
315.000				-.3440	-.3823	-.4702		-.0103

ALPHA (2) = -.528 BETA (2) = .000 MACH = 1.2534 RN/L = 4.4312 PO = 2113.5 P = 812.32

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.1997		-.1915	-.2400	-.2847	-.4129	-.1440	
45.000				-.2237				
90.000			-.2035	-.2272	-.2228	-.2454	-.4868	
135.000				-.2056	-.2674	-.3969		.4742
180.000			-.2266	-.2809	-.3065	-.3196	-.4156	
225.000						-.4129		.3769

ARC11-023IA80 OTS(SRB=N++ ORB=N) ET BASE (RE4H04)

ALPHA (2) = -.528 BETA (2) = .000

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2010	-.1962	-.2229			-.4564	
315.000				-.2409	-.3700	-.5001		-.0055

ALPHA (2) = -.555 BETA (3) = 4.006 MACH = 1.2534 RN/L = 4.4312 PO = 2113.5 P = 812.32

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.1981		-.2179	-.2496	-.2723	-.3963	-.1785	
45.000				-.2992				
90.000			-.2079	-.2312	-.2476	-.3337	-.4883	
135.000				-.2248	-.2575	-.3480		.1832
180.000			-.2165	-.2680	-.2957	-.3480	-.5241	
225.000						-.3499		.4613
270.000		-.2106	-.2095	-.2436			-.3982	
315.000				-.2101	-.2952	-.4893		-.0059

ALPHA (3) = 3.881 BETA (1) = .006 MACH = 1.2464 RN/L = 4.4257 PO = 2113.3 P = 819.82

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2169		-.2004	-.2514	-.2705	-.3800	-.1807	
45.000				-.2418				
90.000			-.2150	-.2283	-.2547	-.2545	-.4750	
135.000				-.2340	-.2643	-.3704		.4758
180.000			-.2517	-.2883	-.3098	-.3282	-.4854	
225.000						-.3849		.3821
270.000		-.2148	-.2149	-.2428			-.3837	
315.000				-.2228	-.3436	-.5120		-.0113

ARC11-0031A8C OTS(SRB=N++ ORB=N) ET BASE (RE4H05) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.950 BETA (1) = -.003 MACH = 1.4026 RN/L = 4.3103 PO = 2124.6 P = 665.23

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.1515		-.1405	-.1462	-.1592	-.2097	-.1855	
45.000				-.1550				
90.000			-.1325	-.2328	-.2230	-.1868	-.3925	
135.000				-.1703	-.2140	-.3065		.4262
180.000			-.1720	-.2199	-.2346	-.2436	-.3128	
225.000						-.3312		.3161
270.000		-.1584	-.1563	-.1762			-.3721	
315.000				-.1813	-.2156	-.3607		-.0667

ALPHA (2) = -.436 BETA (1) = -4.009 MACH = 1.4051 RN/L = 4.3040 PO = 2123.0 P = 662.38

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.1607		-.1378	-.1525	-.1712	-.2281	-.1618	
45.000				-.1695				
90.000			-.1891	-.1897	-.1972	-.1949	-.3537	
135.000				-.2263	-.2653	-.2477		.5633
180.000			-.1739	-.1768	-.1842	-.2234	-.1980	
225.000						-.2993		.2329
270.000		-.1522	-.1550	-.1813			-.3176	
315.000				-.1573	-.1957	-.3381		-.0413

ALPHA (2) = -.482 BETA (2) = -.003 MACH = 1.4051 RN/L = 4.3040 PO = 2123.0 P = 662.38

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.1557		-.1270	-.1457	-.1639	-.2418	-.1749	
45.000				-.1581				
90.000			-.1574	-.2139	-.2034	-.1804	-.3948	
135.000				-.2008	-.2388	-.3204		.5232
180.000			-.1702	-.2092	-.2318	-.2357	-.3202	
225.000						-.3139		.3554

ARC11-023IA80 OTS(SRB=N++ ORB=N) ET BASE (RE4H05)

ALPHA (2) = -.482 BETA (2) = -.003

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.1545	-.1557	-.1830			-.3764	
315.000				-.1597	-.1644	-.3151		-.0432

ALPHA (2) = -.505 BETA (3) = 4.009 MACH = 1.4051 RN/L = 4.3040 PO = 2123.0 P = 662.38

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.1551		-.1641	-.1783	-.1884	-.2488	-.1637	
45.000				-.1771				
90.000			-.1566	-.1639	-.1634	-.1652	-.3461	
135.000				-.1705	-.1900	-.2551		.1977
180.000			-.1609	-.2060	-.2302	-.2652	-.4364	
225.000						-.2314		.4395
270.000		-.1743	-.1685	-.2061			-.3468	
315.000				-.1580	-.1598	-.2583		-.0429

ALPHA (3) = 3.881 BETA (1) = -.005 MACH = 1.4020 RN/L = 4.3020 PO = 2122.5 P = 665.10

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.1574		-.1310	-.2001	-.2152	-.3264	-.0676	
45.000				-.1570				
90.000			-.1579	-.2160	-.2283	-.2579	-.3950	
135.000				-.2031	-.2524	-.3025		.5143
180.000			-.1568	-.1867	-.2116	-.2146	-.3218	
225.000						-.2884		.3950
270.000		-.1468	-.1444	-.1731			-.3485	
315.000				-.1399	-.1965	-.2666		.0503

ARC11-023IA80 OTS(SRB=N+ ORB=N) ET BASE (RE4H06) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.848 BETA (1) = -.019 MACH = .59810 RN/L = 3.3852 PO = 2109.1 P = 1656.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3617		-.2882	-.2976	-.3716	-.7090	-.8635	
45.000				-.3663				
90.000			-.3594	-.4075	-.4441	-.6024	-.7872	
135.000				-.3697	-.4238	-.6250		.2159
180.000			-.3395	-.3623	-.3736	-.4412	-.6850	
225.000						-.7275		.1435
270.000		-.3477	-.3357	-.3606			-.6652	
315.000				-.3575	-.3599	-.4935		-.5775

ALPHA (2) = -.350 BETA (1) = -4.038 MACH = .59800 RN/L = 3.3843 PO = 2108.4 P = 1655.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3583		-.2800	-.3052	-.3371	-.6774	-.8970	
45.000				-.3687				
90.000			-.3647	-.4412	-.4900	-.5685	-.7789	
135.000				-.3732	-.3975	-.6671		.3235
180.000			-.3532	-.3784	-.3971	-.4420	-.7194	
225.000						-.6750		.0715
270.000		-.3343	-.3325	-.3401			-.5249	
315.000				-.3345	-.3381	-.4970		-.6019

ALPHA (2) = -.314 BETA (2) = -.022 MACH = .59800 RN/L = 3.3843 PO = 2108.4 P = 1655.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3395		-.2759	-.2930	-.3382	-.6812	-.8607	
45.000				-.3525				
90.000			-.3488	-.4072	-.4290	-.5784	-.7552	
135.000				-.3692	-.4178	-.6381		.2465
180.000			-.3382	-.3603	-.3709	-.4500	-.6795	
225.000						-.7359		.1824

ARC11-023IA80 OTS(SRB=N+ ORB=N) ET BASE (RE4H06)

ALPHA (2) = -.314 BETA (2) = -.022

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3341	-.3297	-.3488			-.6623	
315.000				-.3433	-.3352	-.4310		-.3743

ALPHA (2) = -.396 BETA (3) = 3.997 MACH = .59800 RN/L = 3.3843 PO = 2108.4 P = 1655.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3546		-.3041	-.3077	-.3299	-.6551	-.9094	
45.000				-.3515				
90.000			-.3485	-.3829	-.4024	-.5688	-.7730	
135.000				-.3543	-.3779	-.5276		.0503
180.000			-.3347	-.3581	-.3634	-.4559	-.7045	
225.000						-.7676		.2223
270.000		-.3454	-.3343	-.3684			-.7227	
315.000				-.3515	-.3606	-.4602		-.5949

ALPHA (3) = 3.970 BETA (1) = -.022 MACH = .59820 RN/L = 3.3879 PO = 2107.7 P = 1654.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3437		-.2779	-.3019	-.3368	-.6908	-.9809	
45.000				-.3585				
90.000			-.3437	-.4081	-.4557	-.5342	-.7156	
135.000				-.3707	-.4242	-.6490		.2837
180.000			-.3331	-.3546	-.3659	-.4438	-.6880	
225.000						-.7473		.2419
270.000		-.3243	-.3245	-.3228			-.6383	
315.000				-.3399	-.3453	-.4543		-.5421

ARC11-023IA80 OTS(SRB=N+ ORB=N) ET BASE (RE4H07) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.930 BETA (1) = -.009 MACH = .89930 RN/L = 4.2036 PO = 2101.3 P = 1243.3

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3692		-.3789	-.4035	-.4045	-.4437	-.7120	
45.000				-.4377				
90.000			-.3784	-.4156	-.4652	-.5761	-.8089	
135.000				-.3901	-.4477	-.6001		.2651
180.000			-.3614	-.3774	-.3888	-.4661	-.6198	
225.000						-.7117		.2652
270.000		-.3714	-.3723	-.3835			-.6262	
315.000				-.4146	-.4629	-.6194		-.4388

ALPHA (2) = -.376 BETA (1) = -4.028 MACH = .90183 RN/L = 4.2093 PO = 2101.3 P = 1239.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3855		-.3886	-.4093	-.4141	-.4553	-.6895	
45.000				-.4267				
90.000			-.3921	-.4380	-.5095	-.5641	-.8635	
135.000				-.3818	-.4185	-.6714		.4745
180.000			-.3822	-.3909	-.4141	-.5351	-.8546	
225.000						-.6924		.1454
270.000		-.3896	-.3838	-.4004			-.6320	
315.000				-.4548	-.5429	-.6619		-.4119

ALPHA (2) = -.330 BETA (2) = -.012 MACH = .90183 RN/L = 4.2093 PO = 2101.3 P = 1239.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3704		-.3678	-.3977	-.4018	-.4650	-.6840	
45.000				-.4189				
90.000			-.3760	-.4213	-.4681	-.5658	-.8098	
135.000				-.4094	-.4892	-.6332		.3576
180.000			-.3525	-.3840	-.3789	-.4677	-.6269	
225.000						-.6833		.3293

ARC11-023IA80 OTS(SRB=N+ ORB=N) ET BASE (RE4H07)

ALPHA (2) = -.330 BETA (2) = -.012

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3758	-.3744	-.3947			-.5982	
315.000				-.4095	-.4413	-.5467		-.4149

ALPHA (2) = -.330 BETA (3) = 4.003 MACH = .90183 RN/L = 4.2093 PO = 2101.3 P = 1239.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3779		-.3861	-.3959	-.4180	-.4346	-.6853	
45.000				-.4463				
90.000			-.3547	-.3929	-.3962	-.5349	-.8160	
135.000				-.3956	-.4036	-.5482		.0745
180.000			-.3975	-.3995	-.4252	-.4993	-.7249	
225.000						-.7359		.3328
270.000		-.3785	-.3713	-.3756			-.5214	
315.000				-.3956	-.4258	-.5543		-.4176

ALPHA (3) = 3.927 BETA (1) = -.016 MACH = .90100 RN/L = 4.2086 PO = 2101.3 P = 1241.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3666		-.3601	-.3936	-.4009	-.4525	-.6806	
45.000				-.3966				
90.000			-.3672	-.3886	-.4358	-.5623	-.8138	
135.000				-.4126	-.5041	-.6503		.4236
180.000			-.3504	-.3750	-.3662	-.4623	-.6284	
225.000						-.6646		.3699
270.000		-.3708	-.3664	-.3706			-.4713	
315.000				-.3791	-.3991	-.5501		-.4157

ARC11-0231A80 OTS(SRB=N+ ORB=N) ET BASE (RE4H08) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.907 BETA (1) = .000 MACH = 1.0989 RN/L = 4.3130 PO = 2107.0 P = 988.16

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3390		-.3450	-.3849	-.4324	-.5790	-.3027	
45.000				-.4011				
90.000			-.3673	-.3762	-.3729	-.3837	-.447-	
135.000				-.3690	-.4029	-.5083		.3087
180.000			-.3445	-.3731	-.4356	-.4631	-.6432	
225.000						-.5393		.2963
270.000		-.3539	-.3629	-.3801			-.4364	
315.000				-.4128	-.4557	-.5736		-.0679

ALPHA (2) = -.515 BETA (1) = -4.003 MACH = 1.1012 RN/L = 4.3135 PO = 2106.7 P = 985.16

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3401		-.3549	-.3614	-.3722	-.4507	-.3290	
45.000				-.3929				
90.000			-.3570	-.3743	-.3945	-.4463	-.6674	
135.000				-.4081	-.4310	-.5845		.6091
180.000			-.3606	-.3567	-.3686	-.4488	-.6019	
225.000						-.4934		.2373
270.000		-.3532	-.3657	-.3969			-.4401	
315.000				-.4102	-.4322	-.5513		-.0665

ALPHA (2) = -.525 BETA (2) = .003 MACH = 1.1012 RN/L = 4.3135 PO = 2106.7 P = 985.16

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3087		-.3243	-.3549	-.3743	-.5181	-.3160	
45.000				-.3539				
90.000			-.3305	-.3524	-.3622	-.4660	-.5591	
135.000				-.3418	-.3732	-.5042		.3934
180.000			-.3326	-.3467	-.4208	-.4484	-.6403	
225.000						-.5471		.3844

ARC11-023!A80 OTS(SRB=N+ ORB=N) ET BASE (RE4H08)

ALPHA (2) = -.525 BETA (2) = .003

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3162	-.3313	-.3539			-.5064	
315.000				-.3524	-.3671	-.4560		-.0734

ALPHA (2) = -.426 BETA (3) = 4.012 MACH = 1.1012 RN/L = 4.3135 PO = 2106.7 P = 985.16

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3478		-.3557	-.3637	-.3777	-.4453	-.3273	
45.000				-.3826				
90.000			-.3622	-.3797	-.3867	-.4065	-.4459	
135.000				-.3789	-.4121	-.4771		.2141
180.000			-.3601	-.3790	-.4491	-.5723	-.7722	
225.000						-.5144		.4667
270.000		-.3542	-.3535	-.3705			-.5561	
315.000				-.4244	-.4596	-.5782		-.1142

ALPHA (3) = 3.881 BETA (1) = .006 MACH = 1.1017 RN/L = 4.3151 PO = 2105.5 P = 984.01

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3568		-.3649	-.3876	-.4102	-.5325	-.3239	
45.000				-.4062				
90.000			-.3678	-.3903	-.4148	-.4844	-.6785	
135.000				-.3932	-.4244	-.5308		.4464
180.000			-.3614	-.3822	-.4470	-.4985	-.7351	
225.000						-.5360		.3398
270.000		-.3831	-.3653	-.3936			-.5051	
315.000				-.4318	-.4868	-.6301		-.1316

ARC11-023IA80 OTS(SRB=N+ ORB=N) ET BASE (RE4H09) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.897 BETA (1) = .006 MACH = 1.2489 RN/L = 4.4001 PO = 2111.9 P = 816.48

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2450		-.2458	-.2967	-.3548	-.4706	-.1456	
45.000				-.3066				
90.000			-.2574	-.2748	-.2778	-.2884	-.4919	
135.000				-.2585	-.2930	-.4073		.4024
180.000			-.2529	-.3030	-.3260	-.3595	-.4648	
225.000						-.4459		.3248
270.000		-.2453	-.2411	-.2692			-.4708	
315.000				-.3311	-.3734	-.4930		-.0304

ALPHA (2) = -.482 BETA (1) = -4.006 MACH = 1.2477 RN/L = 4.3993 PO = 2111.9 P = 817.80

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2379		-.2411	-.2767	-.3083	-.4393	-.1842	
45.000				-.2563				
90.000			-.2506	-.2689	-.2699	-.4152	-.4855	
135.000				-.3000	-.3173	-.3954		.6307
180.000			-.2544	-.2533	-.2633	-.3423	-.3445	
225.000						-.3986		.2486
270.000		-.2294	-.2236	-.2632			-.4806	
315.000				-.3608	-.4018	-.4733		-.0127

ALPHA (2) = -.519 BETA (2) = .003 MACH = 1.2477 RN/L = 4.3993 PO = 2111.9 P = 817.80

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2265		-.2184	-.2700	-.3157	-.4396	-.1491	
45.000				-.2619				
90.000			-.2276	-.2458	-.2407	-.2621	-.4959	
135.000				-.2311	-.2830	-.4195		.4655
180.000			-.2566	-.3071	-.3271	-.3427	-.4593	
225.000						-.4296		.3759

ARC11-023IA80 OTS(SRB=N+ ORB=N) ET BASE (RE4H09)

ALPHA (2) = -.519 BETA (2) = .003

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2249	-.2187	-.2560			-.4824	
315.000				-.2943	-.3948	-.5128		-.0087

ALPHA (2) = -.462 BETA (3) = 4.009 MACH = 1.2477 RN/L = 4.3993 PO = 2111.9 P = 817.80

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2361		-.2540	-.2793	-.3066	-.4256	-.1916	
45.000				-.3282				
90.000			-.2410	-.2701	-.2735	-.3632	-.5046	
135.000				-.2618	-.2989	-.3755		.1762
180.000			-.2469	-.2952	-.3310	-.3956	-.5611	
225.000						-.3819		.4677
270.000		-.2453	-.2413	-.2851			-.4169	
315.000				-.2566	-.3695	-.5271		-.0163

ALPHA (3) = 3.854 BETA (1) = .006 MACH = 1.2493 RN/L = 4.3962 PO = 2111.9 P = 816.04

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2320		-.2200	-.2875	-.2854	-.4005	-.1787	
45.000				-.2619				
90.000			-.2324	-.2928	-.2511	-.2644	-.4726	
135.000				-.2504	-.2761	-.3756		.4810
180.000			-.2699	-.2995	-.3185	-.3345	-.5079	
225.000						-.3933		.3934
270.000		-.2290	-.2287	-.2632			-.3819	
315.000				-.2918		-.5218		-.0128

ARC11-023IA80 OTS(SRB=N+ ORB=N) ET BASE (RE4H10) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.904 BETA (1) = -.006 MACH = 1.4001 RN/L = 4.2924 PO = 2119.7 P = 665.99

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.1745		-.1621	-.1769	-.1888	-.2558	-.1877	
45.000				-.1823				
90.000			-.1579	-.2606	-.2478	-.2193	-.3983	
135.000				-.2007	-.2411	-.3271		.4243
180.000			-.1977	-.2426	-.2584	-.2633	-.3291	
225.000						-.3511		.3166
270.000		-.1793	-.1826	-.2036			-.3843	
315.000				-.2027	-.2456	-.3764		-.0697

ALPHA (2) = -.405 BETA (1) = -4.009 MACH = 1.4020 RN/L = 4.2945 PO = 2120.9 P = 664.59

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.1839		-.1652	-.1776	-.1938	-.2722	-.1626	
45.000				-.1947				
90.000			-.2126	-.2187	-.2117	-.2184	-.3519	
135.000				-.2627	-.2949	-.2629		.5600
180.000			-.1972	-.2080	-.2080	-.2578	-.2263	
225.000						-.3127		.2313
270.000		-.1771	-.1784	-.2095			-.3179	
315.000				-.1843	-.2372	-.3658		-.0427

ALPHA (2) = -.370 BETA (2) = .000 MACH = 1.4020 RN/L = 4.2945 PO = 2120.9 P = 664.59

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.1727		-.1447	-.1637	-.1827	-.2704	-.1746	
45.000				-.1749				
90.000			-.1815	-.2043	-.1992	-.1977	-.3955	
135.000				-.2179	-.2535	-.3343		.5243
180.000			-.1846	-.2282	-.2515	-.2486	-.3333	
225.000						-.3190		.3541

ARC11-023IA80 OTS(SRB=N+ ORB=N) ET BASE (RE4H10)

ALPHA (2) = -.370 BETA (2) = .000

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.1748	-.1749	-.2029			-.3828	
315.000				-.1777	-.1871	-.3330		-.0433

ALPHA (2) = -.453 BETA (3) = 4.012 MACH = 1.4020 RN/L = 4.2945 PO = 2120.9 P = 664.59

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.1754		-.1810	-.1976	-.2072	-.2843	-.1639	
45.000				-.2012				
90.000			-.1760	-.1835	-.1931	-.1837	-.3508	
135.000				-.1857	-.2095	-.2693		.1965
180.000			-.1758	-.2243	-.2492	-.2867	-.4420	
225.000						-.2597		.4402
270.000		-.1898	-.1900	-.2248			-.3494	
315.000				-.1755	-.1782	-.2927		-.0471

ALPHA (3) = 3.944 BETA (1) = -.006 MACH = 1.3972 RN/L = 4.2925 PO = 2121.1 P = 669.17

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.1715		-.1617	-.2178	-.2371	-.3407	-.0717	
45.000				-.1775				
90.000			-.1735	-.2262	-.2464	-.2809	-.3993	
135.000				-.2292	-.2709	-.3172		.5084
180.000			-.1766	-.2043	-.2211	-.2265	-.3479	
225.000						-.3008		.3910
270.000		-.1845	-.1657	-.1995			-.3620	
315.000				-.1837	-.2256	-.2971		.0492

ARC11-023IA80 OTS(SRB=N ORB=N+) ET BASE (RE4H11) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.957 BETA (1) = -.016 MACH = .59560 RN/L = 3.3845 PO = 2105.5 P = 1656.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3637		-.2990	-.3115	-.3737	-.7171	-.8672	
45.000				-.3727				
90.000			-.3666	-.4159	-.4429	-.6017	-.8035	
135.000				-.3705	-.4229	-.6355		.2139
180.000			-.3579	-.3542	-.4132	-.4676	-.6586	
225.000						-.7562		.1413
270.000		-.3557	-.3437	-.3681			-.6658	
315.000				-.3588	-.3782	-.5109		-.5823

ALPHA (2) = -.337 BETA (1) = -4.041 MACH = .59810 RN/L = 3.3979 PO = 2105.7 P = 1653.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3652		-.2905	-.3124	-.3368	-.6899	-.8044	
45.000				-.3763				
90.000			-.3646	-.4502	-.5010	-.5827	-.7928	
135.000				-.3832	-.4087	-.6704		.3193
180.000			-.3712	-.3954	-.4191	-.4610	-.6987	
225.000						-.6969		.0704
270.000		-.3382	-.3368	-.3509			-.6503	
315.000				-.3433	-.3524	-.5011		-.5744

ALPHA (2) = -.383 BETA (2) = -.022 MACH = .59810 RN/L = 3.3979 PO = 2105.7 P = 1653.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3423		-.2851	-.2962	-.3448	-.6970	-.8667	
45.000				-.3533				
90.000			-.3509	-.4118	-.4360	-.5726	-.7494	
135.000				-.3679	-.4152	-.6335		.2453
180.000			-.3475	-.3515	-.3902	-.4636	-.6647	
225.000						-.7377		.1762

ARC11-023IA80 OTS(SRB=N ORB=N+) ET BASE (RE4H11)

ALPHA (2) = -.383 BETA (2) = -.022

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3334	-.3256	-.3498			-.6717	
315.000				-.3402	-.3430	-.4482		-.5793

ALPHA (2) = -.400 BETA (3) = 3.997 MACH = .59810 RN/L = 3.3979 PO = 2105.7 P = 1653.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3364		-.2838	-.2983	-.3169	-.6570	-.8891	
45.000				-.3462				
90.000			-.3502	-.3720	-.3846	-.5564	-.7445	
135.000				-.3441	-.3688	-.5180		.0555
180.000			-.3349	-.3407	-.3701	-.4748	-.5640	
225.000						-.7540		.2294
270.000		-.3272	-.3235	-.3489			-.7026	
315.000				-.3393	-.3530	-.4389		-.5828

ALPHA (3) = 4.125 BETA (1) = -.025 MACH = .59930 RN/L = 3.4056 PO = 2106.2 P = 1652.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3473		-.2737	-.2901	-.3351	-.6967	-.8884	
45.000				-.3533				
90.000			-.3398	-.4011	-.4482	-.5253	-.7120	
135.000				-.3611	-.4208	-.6454		.2897
180.000			-.3278	-.3471	-.3934	-.4541	-.6581	
225.000						-.7466		.2397
270.000		-.3299	-.3227	-.3293			-.6387	
315.000				-.3378	-.3471	-.4468		-.5494

ARC11-023IA80 OTS(SRB=N ORB=N+) ET BASE (RE4H12) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -4.062 BETA (1) = -.012 MACH = .89970 RN/L = 4.2040 PO = 2099.9 P = 1242.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3823		-.3874	-.4082	-.4196	-.4482	-.7120	
45.000				-.4484				
90.000			-.3807	-.4202	-.4648	-.5762	-.8304	
135.000				-.3919	-.4571	-.6170		.2566
180.000			-.3570	-.3815	-.4012	-.4767	-.6156	
225.000						-.7137		.2557
270.000		-.3778	-.3776	-.3890			-.6388	
315.000				-.4342	-.4837	-.6469		-.4383

ALPHA (2) = -.383 BETA (1) = -4.028 MACH = .90127 RN/L = 4.2082 PO = 2100.1 P = 1240.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4031		-.4065	-.4049	-.4363	-.4466	-.7049	
45.000				-.4244				
90.000			-.3867	-.4322	-.5194	-.5563	-.8737	
135.000				-.3772	-.4306	-.6708		.4683
180.000			-.3772	-.4029	-.4613	-.5021	-.8427	
225.000						-.6976		.1375
270.000		-.4116	-.3847	-.4109			-.6425	
315.000				-.4730	-.5654	-.6539		-.4231

ALPHA (2) = -.383 BETA (2) = -.018 MACH = .90127 RN/L = 4.2082 PO = 2100.1 P = 1240.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3535		-.3469	-.3984	-.3868	-.4743	-.6768	
45.000				-.4192				
90.000			-.3807	-.4021	-.4488	-.5612	-.7711	
135.000				-.3957	-.4616	-.6291		.3685
180.000			-.3537	-.3577	-.3695	-.4748	-.6050	
225.000						-.6783		.3317

ARC11-023IA80 OTS(SRB=N ORB=N+) ET BASE (RE4H12)

ALPHA (2) = -.383 BETA (2) = -.016

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3559	-.3750	-.3755			-.5821	
315.000				-.3878	-.4127	-.6432		-.4071

ALPHA (2) = -.453 BETA (3) = 4.000 MACH = .90127 RN/L = 4.2082 PO = 2100.1 P = 1240.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3743		-.3797	-.4058	-.4121	-.4389	-.6833	
45.000				-.4545				
90.000			-.3618	-.3790	-.3917	-.5245	-.8097	
135.000				-.3970	-.4139	-.5577		.0745
180.000			-.4032	-.3978	-.4316	-.5148	-.7586	
225.000						-.7317		.3337
270.000		-.3733	-.3712	-.3774			-.5130	
315.000				-.3877	-.4145	-.5950		-.4165

ALPHA (3) = 3.947 BETA (1) = -.012 MACH = .90020 RN/L = 4.1982 PO = 2099.2 P = 1240.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3665		-.3705	-.3957	-.4066	-.4508	-.6830	
45.000				-.3989				
90.000			-.3639	-.3894	-.4343	-.5596	-.8176	
135.000				-.4157	-.5011	-.6462		.4201
180.000			-.3409	-.3720	-.3858	-.4631	-.6212	
225.000						-.6591		.3686
270.000		-.3717	-.3708	-.3757			-.4826	
315.000				-.3852	-.4117	-.5402		-.4185

ARC11-0231A80 OTS(SRB=N ORB=N+) ET BASE (RE4H13) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.950 BETA (1) = .006 MACH = 1.0974 RN/L = 4.3157 PO = 2105.5 P = 989.31

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3865		-.3950	-.4411	-.4877	-.6198	-.3049	
45.000				-.4519				
90.000			-.4136	-.4196	-.4187	-.4271	-.4533	
135.000				-.4259	-.4501	-.5565		.3042
180.000			-.4048	-.4747	-.4778	-.5153	-.6625	
225.000						-.5864		.2972
270.000		-.3967	-.4029	-.4179			-.4442	
315.000				-.4587	-.4951	-.6117		-.0717

ALPHA (2) = -.509 BETA (1) = -4.066 MACH = 1.1004 RN/L = 4.3182 PO = 2105.5 P = 985.62

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3844		-.4031	-.4094	-.4254	-.5229	-.3303	
45.000				-.4365				
90.000			-.4120	-.4256	-.4399	-.4573	-.6760	
135.000				-.4478	-.4720	-.6148		.6100
180.000			-.4130	-.4014	-.4277	-.5432	-.6066	
225.000						-.5153		.2359
270.000		-.3953	-.4101	-.4285			-.4494	
315.000				-.4556	-.4744	-.5948		-.0661

ALPHA (2) = -.552 BETA (2) = -.056 MACH = 1.1004 RN/L = 4.3182 PO = 2105.5 P = 985.62

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3585		-.3706	-.4012	-.4331	-.5799	-.3170	
45.000				-.4151				
90.000			-.3690	-.3911	-.4019	-.4843	-.5712	
135.000				-.3837	-.4165	-.5424		.3927
180.000			-.3898	-.4581	-.4598	-.4916	-.6768	
225.000						-.5804		.3751

ARC11-023IA80 OTS(SRB=N ORB=N+) ET BASE (RE4H13)

ALPHA (2) = -.552 BETA (2) = -.056

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3631	-.3650	-.3968			-.5027	
315.000				-.4660	-.4678	-.5748		-.0767

ALPHA (2) = -.486 BETA (3) = 3.950 MACH = 1.100 RN/L = 4.3182 PO = 2105.5 P = 985.62

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3928		-.4020	-.4112	-.4237	-.5138	-.3285	
45.000				-.4247				
90.000			-.4029	-.4216	-.4273	-.4400	-.4540	
135.000				-.4169	-.4460	-.5049		.2086
180.000			-.4046	-.4472	-.4996	-.6837	-.7869	
225.000						-.5697		.4577
270.000		-.3966	-.3978	-.4177			-.5848	
315.000				-.4650	-.4960	-.6121		-.1173

ALPHA (3) = 4.029 BETA (1) = -.069 MACH = 1.103 RN/L = 4.3205 PO = 2104.8 P = 982.12

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3917		-.3966	-.4232	-.4462	-.5800	-.3226	
45.000				-.4440				
90.000			-.4004	-.4174	-.4249	-.4665	-.6801	
135.000				-.4178	-.4534	-.5640		.4430
180.000			-.4300	-.4792	-.5084	-.5103	-.7514	
225.000						-.5784		.3449
270.000		-.3951	-.3949	-.4261			-.5306	
315.000				-.4697	-.5167	-.6548		-.1314

ARC11-023IA8(OTS(SRB=N ORB=N+) ET BASE (RE4H14) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0(IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.963 BETA (1) = .006 MACH = 1.2512 RN/L = 4.3841 PO = 2109.1 P = 812.89

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.000
PHI								
.000	-.2802		-.2810	-.3391	-.3987	-.4853	-.1455	
45.000				-.3524				
90.000			-.2890	-.3009	-.3001	-.3187	-.4959	
135.000				-.2930	-.3340	-.4403		.3893
180.000			-.3080	-.3516	-.3861	-.3822	-.4964	
225.000						-.4606		.3163
270.000		-.2803	-.2751	-.3053			-.4895	
315.000				-.3760	-.4151	-.5216		-.0297

ALPHA (2) = -.492 BETA (1) = -4.006 MACH = 1.2479 RN/L = 4.3874 PO = 2110.0 P = 816.96

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	8950	.9460	.9890	1.0000
PHI								
.000	-.2766		-.2819	-.3186	-.3512	-.4689	-.1846	
45.000				-.3772				
90.000			-.3033	-.3151	-.3187	-.3335	-.4858	
135.000				-.3186	-.3518	-.4178		.6302
180.000			-.2997	-.3120	-.3213	-.4038	-.4339	
225.000						-.4328		.2407
270.000		-.2647	-.2610	-.3109			-.4961	
315.000				-.3824	-.4018	-.4858		-.0138

ALPHA (2) = -.466 BETA (2) = .003 MACH = 1.2479 RN/L = 4.3874 PO = 2110.0 P = 816.96

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2618		-.2515	-.3082	-.3626	-.4703	-.1493	
45.000				-.3210				
90.000			-.2662	-.2780	-.2776	-.2998	-.4941	
135.000				-.2942	-.3409	-.4535		.4592
180.000			-.2974	-.3258	-.3425	-.3550	-.4234	
225.000						-.4368		.3665

ARC11-023IA80 OTS(SRB=N ORB=N+) ET BASE (RE4H14)

ALPHA (2) = -.466 BETA (2) = .003

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2575	-.2539	-.2934			-.5020	
315.000				-.3707	-.4283	-.5329		-.0090

ALPHA (2) = -.522 BETA (3) = 4.009 MACH = 1.2479 RN/L = 4.3874 PO = 2110.0 P = 816.96

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2728		-.2892	-.3170	-.3463	-.4645	-.1923	
45.000				-.3592				
90.000			-.2788	-.3066	-.2900	-.3850	-.5101	
135.000				-.2986	-.3280	-.3928		.1776
180.000			-.2892	-.3647	-.3886	-.4683	-.5903	
225.000						-.4008		.4635
270.000		-.2845	-.2772	-.3249			-.4439	
315.000				-.3097	-.4717	-.5464		-.0172

ALPHA (3) = 3.996 BETA (1) = .000 MACH = 1.2453 RN/L = 4.3815 PO = 2109.8 P = 819.58

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2699		-.2552	-.3065	-.3238	-.4387	-.1819	
45.000				-.3227				
90.000			-.2691	-.2805	-.2856	-.2984	-.4805	
135.000				-.2960	-.3197	-.4151		.4769
180.000			-.3134	-.3457	-.4023	-.3964	-.4763	
225.000						-.4242		.3858
270.000		-.2664	-.2621	-.2997			-.3999	
315.000				-.2986	-.4716	-.5508		-.0166

ARC11-023IA80 OTS(SRB=N ORB=N+) ET BASE (RE4H15) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.910 BETA (1) = -.006 MACH = 1.4040 RN/L = 4.2694 PO = 2117.6 P = 661.67

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2111		-.1948	-.2128	-.2278	-.3027	-.1852	
45.000				-.2137				
90.000			-.1928	-.2950	-.2753	-.2588	-.4015	
135.000				-.2478	-.2873	-.3627		.4204
180.000			-.2392	-.2512	-.2660	-.2771	-.3486	
225.000						-.3638		.3032
270.000		-.2094	-.2139	-.2512			-.4021	
315.000				-.2455	-.3111	-.3962		-.0690

ALPHA (2) = -.409 BETA (1) = -4.009 MACH = 1.4005 RN/L = 4.2782 PO = 2119.0 P = 665.37

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2107		-.1908	-.2105	-.2309	-.3162	-.1632	
45.000				-.2273				
90.000			-.2430	-.2418	-.2444	-.2515	-.3584	
135.000				-.3016	-.3611	-.2825		.5601
180.000			-.2347	-.2482	-.2644	-.2969	-.3132	
225.000						-.3241		.2228
270.000		-.2046	-.2057	-.2471			-.3288	
315.000				-.2224	-.2908	-.3917		-.0457

ALPHA (2) = -.446 BETA (2) = .000 MACH = 1.4005 RN/L = 4.2782 PO = 2119.0 P = 665.37

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2062		-.1804	-.2062	-.2263	-.3179	-.1750	
45.000				-.2169				
90.000			-.2193	-.2258	-.2211	-.2278	-.4019	
135.000				-.2420	-.2829	-.3591		.5118
180.000			-.2327	-.2639	-.3425	-.3084	-.3951	
225.000						-.3356		.3461

ARC11-023IA80 OTS(SRB=N ORB=N+) ET BASE (RE4H15)

ALPHA (2) = -.446 BETA (2) = .000

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2065	-.2088	-.2384			-.3956	
315.000				-.2169	-.2520	-.3784		-.0455

ALPHA (2) = -.509 BETA (3) = 4.009 MACH = 1.4005 RN/L = 4.2782 PO = 2119.0 P = 665.37

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2097		-.2118	-.2342	-.2469	-.3357	-.1654	
45.000				-.2423				
90.000			-.2150	-.2173	-.2165	-.2215	-.3562	
135.000				-.2133	-.2263	-.2792		.1986
180.000			-.2142	-.2727	-.3103	-.3195	-.4643	
225.000						-.2709		.4307
270.000		-.2211	-.2187	-.2544			-.3683	
315.000				-.2070	-.2120	-.3537		-.0505

ALPHA (3) = 3.848 BETA (1) = -.003 MACH = 1.4000 RN/L = 4.2776 PO = 2121.1 P = 666.55

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.1952		-.1724	-.2386	-.2630	-.3645	-.0714	
45.000				-.2096				
90.000			-.2059	-.2224	-.2207	-.2597	-.4035	
135.000				-.2519	-.3008	-.3387		.4999
180.000			-.2170	-.2080	-.3570	-.2851	-.3333	
225.000						-.3143		.3842
270.000		-.1914	-.1903	-.2150			-.3785	
315.000				-.1980	-.2809	-.3320		.0422

ARC11-0231A80 OTS(SRB=N ORB=N-) ET BASE (RE4H16) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.986 BETA (1) = -.012 MACH = .90160 RN/L = 4.2050 PO = 2099.2 P = 1239.1

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3774		-.3930	-.4126	-.4257	-.4582	-.7073	
45.000				-.4467				
90.000			-.3875	-.4296	-.4639	-.5831	-.8216	
135.000				-.3995	-.4536	-.6059		.2585
180.000			-.3615	-.3910	-.3840	-.4669	-.6375	
225.000						-.7183		.2558
270.000		-.3878	-.3845	-.4009			-.6452	
315.000				-.4360	-.5017	-.6580		-.4350

ALPHA (2) = -.350 BETA (1) = -4.031 MACH = .90357 RN/L = 4.2104 PO = 2098.7 P = 1236.1

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4034		-.3951	-.4030	-.4364	-.4550	-.6976	
45.000				-.4284				
90.000			-.3890	-.4301	-.5170	-.5570	-.8840	
135.000				-.3803	-.4357	-.6614		.4703
180.000			-.3677	-.3917	-.4205	-.5158	-.8348	
225.000						-.6900		.1427
270.000		-.4012	-.3837	-.4128			-.6421	
315.000				-.4780	-.5613	-.6717		-.4171

ALPHA (2) = -.301 BETA (2) = -.016 MACH = .90357 RN/L = 4.2104 PO = 2098.7 P = 1236.1

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3567		-.3543	-.4031	-.3919	-.4865	-.6671	
45.000				-.4379				
90.000			-.3921	-.4211	-.4644	-.5755	-.7861	
135.000				-.4037	-.4706	-.6340		.3709
180.000			-.3594	-.3712	-.3573	-.4665	-.6223	
225.000						-.6662		.3411

ARC11-023IA80 OTS(SRB=N ORB=N-) ET BASE (RE4H16)

ALPHA (2) = -.301 BETA (2) = -.016

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3603	-.3799	-.3767			-.5876	
315.000				-.3959	-.4273	-.6666		-.3983

ALPHA (2) = -.317 BETA (3) = 4.000 MACH = .90357 RN/L = 4.2104 PO = 2098.7 P = 1236.1

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3761		-.3790	-.4036	-.4058	-.4474	-.6798	
45.000				-.4445				
90.000			-.3665	-.3922	-.3973	-.5257	-.8043	
135.000				-.3932	-.4078	-.5533		.0771
180.000			-.3860	-.3938	-.4054	-.4973	-.7301	
225.000						-.7414		.3373
270.000		-.3723	-.3745	-.3807			-.5233	
315.000				-.3939	-.4227	-.5909		-.4159

ALPHA (3) = 3.947 BETA (1) = -.019 MACH = .90070 RN/L = 4.2030 PO = 2098.5 P = 1239.8

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3713		-.3793	-.4056	-.4117	-.4664	-.6821	
45.000				-.4046				
90.000			-.3803	-.3935	-.4299	-.5682	-.8340	
135.000				-.4192	-.5038	-.6634		.4210
180.000			-.3496	-.3791	-.3763	-.4721	-.6394	
225.000						-.6715		.3723
270.000		-.3761	-.3771	-.3851			-.4812	
315.000				-.3945	-.4185	-.5680		-.4200

ARC11-023IA80 OTS(SRB=N ORB=N-) ET BASE (RE4H17) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -4.020 BETA (1) = -.069 MACH = 1.0955 RN/L = 4.3161 PO = 2104.8 P = 990.02

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9990	1.0000
PHI								
.000	-.3852		-.3951	-.4448	-.4923	-.6236	-.3085	
45.000				-.4463				
90.000			-.4244	-.4417	-.4342	-.4381	-.4565	
135.000				-.4169	-.4436	-.5324		.3100
180.000			-.3974	-.3797	-.4485	-.5150	-.7016	
225.000						-.5662		.3034
270.000		-.4107	-.4231	-.4303			-.4446	
315.000				-.4685	-.5020	-.6231		-.0695

ALPHA (2) = -.479 BETA (1) = -4.069 MACH = 1.1010 RN/L = 4.3147 PO = 2104.3 P = 984.44

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3865		-.4114	-.4195	-.4369	-.5359	-.3295	
45.000				-.4512				
90.000			-.4224	-.4334	-.4491	-.4706	-.6775	
135.000				-.4447	-.4814	-.6308		.6140
180.000			-.3928	-.3991	-.4181	-.5121	-.7143	
225.000						-.5162		.2372
270.000		-.4012	-.4138	-.4351			-.4485	
315.000				-.4628	-.4804	-.6023		-.0655

ALPHA (2) = -.489 BETA (2) = -.056 MACH = 1.1010 RN/L = 4.3147 PO = 2104.3 P = 984.44

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3514		-.3798	-.4042	-.4405	-.5845	-.3171	
45.000				-.3969				
90.000			-.3959	-.4205	-.4401	-.5134	-.5763	
135.000				-.3889	-.4173	-.5389		.3964
180.000			-.3655	-.3537	-.4243	-.4890	-.6732	
225.000						-.5656		.3898

ARC11-023IA80 OTS(SRB=N ORB=N-) ET BASE (RE4H17)

ALPHA (2) = -.489 BETA (2) = -.056

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9830	1.0000
PHI								
270.000		-.3746	-.3867	-.4051			-.5233	
315.000				-.4007	-.4217	-.5272		-.0744

ALPHA (2) = -.486 BETA (3) = 3.947 MACH = 1.1010 RN/L = 4.3147 PO = 2104.3 P = 984.44

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3917		-.4071	-.4230	-.4369	-.5548	-.3261	
45.000				-.4347				
90.000			-.4105	-.4245	-.4270	-.4346	-.4515	
135.000				-.4269	-.4477	-.5099		.2200
180.000			-.4015	-.4061	-.4542	-.6304	.0000	
225.000						-.5397		.4713
270.000		-.4010	-.4079	-.4216			-.6097	
315.000				-.4907	-.5084	-.6335		-.1147

ALPHA (3) = 3.983 BETA (1) = -.083 MACH = 1.1056 RN/L = 4.3164 PO = 2104.1 P = 978.63

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3861		-.4034	-.4215	-.4490	-.5772	-.3191	
45.000				-.4405				
90.000			-.4164	-.4380	-.4510	-.4922	-.6788	
135.000				-.4232	-.4517	-.5512		.4485
180.000			-.3849	-.3776	-.4140	-.5432	-.7267	
225.000						-.5525		.3499
270.000		-.3931	-.4070	-.4278			-.6073	
315.000				-.4571	-.4845	-.6283		-.1279

ARC11-0231A80 OTS(SRB=N ORB=N-) ET BASE (RE4H18) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.953 BETA (1) = .000 MACH = 1.2490 RN/L = 4.3771 PO = 2108.4 P = 815.07

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2917		-.2950	-.3494	-.4130	-.4896	-.1465	
45.000				-.3644				
90.000			-.3154	-.3346	-.3362	-.3483	-.4938	
135.000				-.3137	-.3380	-.4419		.4184
180.000			-.2863	-.2889	-.3441	-.3912	-.5425	
225.000						-.4480		.3323
270.000		-.2926	-.2911	-.3318			-.4862	
315.000				-.3641	-.3868	-.4983		-.0297

ALPHA (2) = -.429 BETA (1) = -4.006 MACH = 1.2479 RN/L = 4.3753 PO = 2108.4 P = 816.19

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2884		-.3005	-.3384	-.3686	-.4823	-.1838	
45.000				-.3277				
90.000			-.3187	-.3283	-.3366	-.3470	-.4817	
135.000				-.3401	-.3676	-.4308		.6369
180.000			-.3061	-.3102	-.3165	-.3670	-.4571	
225.000						-.4031		.2592
270.000		-.2792	-.2797	-.3318			-.4951	
315.000				-.3844	-.4063	-.4829		-.0116

ALPHA (2) = -.423 BETA (2) = .003 MACH = 1.2479 RN/L = 4.3753 PO = 2108.4 P = 816.19

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2733		-.2702	-.3217	-.3780	-.4806	-.1506	
45.000				-.3568				
90.000			-.2871	-.2963	-.2957	-.3181	-.4858	
135.000				-.2799	-.3225	-.4422		.4787
180.000			-.2920	-.3040	-.3487	-.3680	-.5442	
225.000						-.4476		.3905

ARC11-023IA80 OTS(SRB=N ORB=N-) ET BASE (RE4H18)

ALPHA (2) = -.423 BETA (2) = .003

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2710	-.2708	-.3157			-.5090	
315.000				-.3824	-.4115	-.5212		-.0081

ALPHA (2) = -.416 BETA (3) = 4.009 MACH = 1.2479 RN/L = 4.3753 PO = 2108.4 P = 816.19

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2926		-.3062	-.3[illegible]	-.3665	-.4794	-.1923	
45.000				-.4[illegible]				
90.000			-.2997	-.3[illegible]2	-.3050	-.3774	-.5138	
135.000				-.3[illegible]		-.4180		.1809
180.000			-.2877			-.4302	-.6219	
225.000						-.3969		.4687
270.000		-.3024					-.4382	
315.000						3551		-.0160

ALPHA (3) = 3.993 BE[illegible] .003 MACH = 1.2456 RN/L = 4.3674 PO = 2108.4 P = 818.72

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2795		-.2739	-.3198	-.3421	-.4513	-.1828	
45.000				-.3533				
90.000			-.2907	-.3024	-.3066	-.3198	-.4807	
135.000				-.2898	-.3155	-.4089		.4821
180.000			-.3093	-.3070	-.3461	-.3694	-.5509	
225.000						-.4143		.3923
270.000		-.2788	-.2819	-.3262			-.4100	
315.000				-.3429	-.4807	-.5519		-.0166

ARC11-023IA80 OTS(SRB=N ORB=N-) ET BASE (RE4H19) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.848 BETA (1) = -.006 MACH = 1.4069 RN/L = 4.2698 PO = 2120.4 P = 659.90

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2275		-.2186	-.2402	-.2537	-.3288	-.1836	
45.000				-.2462				
90.000			-.2408	-.2428	-.2373	-.2445	-.3853	
135.000				-.2537	-.2832	-.3577		.4509
180.000			-.2518	-.2615	-.2858	-.2988	-.4184	
225.000						-.3711		.3252
270.000		-.2245	-.2370	-.2752			-.3834	
315.000				-.2638	-.3099	-.3869		-.0651

ALPHA (2) = -.357 BETA (1) = -4.009 MACH = 1.4043 RN/L = 4.2657 PO = 2120.4 P = 662.32

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2379		-.2263	-.2499	-.2638	-.3491	-.1641	
45.000				-.2431				
90.000			-.2797	-.2723	-.2714	-.2668	-.3506	
135.000				-.3374	-.3531	-.2689		.5675
180.000			-.2473	-.2434	-.2652	-.3106	-.3328	
225.000						-.2790		.2438
270.000		-.2177	-.2289	-.2585			-.3377	
315.000				-.2558	-.3061	-.3774		-.0421

ALPHA (2) = -.363 BETA (2) = .000 MACH = 1.4043 RN/L = 4.2657 PO = 2120.4 P = 662.32

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2222		-.1992	-.2254	-.2462	-.3311	-.1731	
45.000				-.2287				
90.000			-.2409	-.2534	-.2450	-.2461	-.3873	
135.000				-.2746	-.3038	-.3531		.5282
180.000			-.2412	-.2336	-.2651	-.2856	-.4184	
225.000						-.3347		.3671

ARC11-023IA80 OTS(SRB=N ORB=N-) ET BASE (RE4H19)

ALPHA (2) = -.363 BETA (2) = .000 .

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2216	-.2292	-.2690			-.3930	
315.000				-.2279	-.2809	-.3672		-.0427

ALPHA (2) = -.462 BETA (3) = 4.012 MACH = 1.4043 RN/L = 4.2657 PO = 2120.4 P = 662.32

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2308		-.2346	-.2531	-.3673	-.3517	-.1651	
45.000				-.2651				
90.000			-.2372	-.2379	-.2346	-.2440	-.3483	
135.000				-.2398	-.2591	-.3051		.1975
180.000			-.2236	-.2382	-.3044	-.3234	-.4658	
225.000						-.2942		.4393
270.000		-.2540	-.2477	-.2810			-.3545	
315.000				-.2385	-.2733	-.3859		-.0466

ALPHA (3) = 3.986 BETA (1) = -.003 MACH = 1.4018 RN/L = 4.2745 PO = 2122.5 P = 665.25

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2156		-.2076	-.2590	-.2861	-.3759	-.0671	
45.000				-.2445				
90.000			-.2144	-.2785	-.2894	-.3429	-.3978	
135.000				-.2863	-.3105	-.3309		.5206
180.000			-.2185	-.2115	-.2368	-.2395	-.4150	
225.000						-.3180		.4035
270.000		-.2092	-.2114	-.2409			-.3774	
315.000				-.2051	-.3248	-.3[illegible]		.0488

ARC11-023IA80 OTS(SRB=N CRB=N) ET BASE (RE4H20) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1230.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.868 BETA (1) = -.016 MACH = .59200 RN/L = 3.3619 PO = 2105.5 P = 1661.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3752		-.3110	-.3155	-.3873	-.7287	-.8781	
45.000				-.3759				
90.000			-.3710	-.4211	-.4522	-.6108	-.8142	
135.000				-.3796	-.4365	-.6419		.2096
180.000			-.3493	-.3768	-.3983	-.4588	-.7097	
225.000						-.7552		.1315
270.000		-.3593	-.3511	-.3716			-.6940	
315.000				-.3663	-.3799	-.5148		-.5925

ALPHA (2) = -.327 BETA (1) = -4.038 MACH = .59820 RN/L = 3.3862 PO = 2105.3 P = 1652.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3432		-.2690	-.3132	-.3297	-.6835	-.8890	
45.000				-.3703				
90.000			-.3611	-.4346	-.4830	-.5757	-.7813	
135.000				-.3761	-.3910	-.6684		.3224
180.000			-.3591	-.3748	-.3875	-.4505	-.7147	
225.000						-.6894		.0737
270.000		-.3243	-.3347	-.3387			-.6237	
315.000				-.3342	-.3297	-.5034		-.5957

ALPHA (2) = -.291 BETA (2) = -.022 MACH = .59820 RN/L = 3.3862 PO = 2105.3 P = 1652.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3574		-.3037	-.3018	-.3516	-.5958	-.8782	
45.000				-.3633				
90.000			-.3585	-.4152	-.4493	-.5801	-.7712	
135.000				-.3788	-.4348	-.6412		.2401
180.000			-.3365	-.3760	-.3974	-.4561	-.7079	
225.000						-.7425		.1739

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H20)

ALPHA (2) = -.291 BETA (2) = .022

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3536	-.3307	-.3547			-.6990	
315.000				-.3523	-.3599	-.4517		-.5945

ALPHA (2) = -.686 BETA (3) = 3.994 MACH = .59820 RN/L = 3.3862 PO = 2105.3 P = 1652.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3286		-.2736	-.3001	-.3124	-.6541	-.8845	
45.000				-.3378				
90.000			-.3502	-.3643	-.3894	-.5618	-.7320	
135.000				-.3406	-.3540	-.5130		.0643
180.000			-.3251	-.3430	-.3337	-.4554	-.6759	
225.000						-.7540		.2308
270.000		-.3142	-.3179	-.3468			-.7033	
315.000				-.3310	-.3358	-.4581		-.5762

ALPHA (3) = 4.016 BETA (1) = -.022 MACH = .60330 RN/L = 3.4092 PO = 2105.5 P = 1646.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.3950	.9460	.9890	1.0000
PHI								
.000	-.3424		-.2664	-.2852	-.3331	-.7006	-.8937	
45.000				-.3594				
90.000			-.3460	-.3698	-.4409	-.5326	-.7076	
135.000				-.3553	-.4179	-.6444		.2893
180.000			-.3294	-.3562	-.3606	-.4383	-.6809	
225.000						-.7488		.2436
270.000		-.3235	-.3253	-.3229			-.6353	
315.000				-.3392	-.3467	-.4452		-.5380

ARC11-023!A80 OTS(SRB=N ORB=N) ET BASE (RE4H21) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.977 BETA (1) = -.016 MACH = .90170 RN/L = 4.2042 PO = 2099.2 P = 1238.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3768		3935	-.4112	-.4140	-.4554	-.7075	
45.000				-.4449				
90.000			-. ,93	-.4189	-.4656	-.5787	-.8120	
135.000				-.3952	-.4453	-.6192		.2631
180.000			-.361[illegible]	-.3823	-.4005	-.4709	-.6253	
225.000						-.7113		.2619
270.000		-.3790	-.3813	-.3920			-.6371	
315.000				-.4217	-.5088	-.6438		-.4350

ALPHA (2) = -.327 BETA (1) = -4.028 MACH = .90320 RN/L = 4.2094 PO = 2099.4 P = 1237.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3886		-.3887	-.4072	-.4173	-.4576	-.6968	
45.000				-.4253				
90.000			-.3930	-.4263	-.5059	-.5595	-.8709	
135.000				-.3747	-.4144	-.6657		.4704
180.000			-.3723	-.3948	-.4097	-.5305	-.8657	
225.000						-.6973		.1421
270.000		-.3937	-.3836	-.4024			-.6286	
315.000				-.4639	-.5536	-.6693		-.4178

ALPHA (2) = -.317 BETA (2) = -.012 MACH = .90323 RN/L = 4.2094 PO = 2099.4 P = 1237.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3598		-.3635	-.4133	-.4037	-.4862	-.6639	
45.000				-.4339				
90.000			-.3914	-.4237	-.4536	-.5732	-.8117	
135.000				-.4035	-.4712	-.6424		.3671
180.000			-.3594	-.3729	-.3599	-.4750	-.6230	
225.000						-.6830		.3356

ARC11-0231A80 OTS(SRB=N ORB=N) ET BASE (RE4H21)

ALPHA (2) = -.317 BETA (2) = -.012

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3608	-.3919	-.3869			-.5850	
315.000				-.4137	-.4377	-.7039		-.3934

ALPHA (2) = -.650 BETA (3) = 4.000 MACH = .90323 RN/L = 4.2094 PO = 2099.4 P = 1237.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3659		-.3778	-.4042	-.4089	-.4428	-.6859	
45.000				-.4610				
90.000			-.3591	-.3943	-.3927	-.5310	-.8095	
135.000				-.3933	-.4044	-.5534		.0777
180.000			-.3991	-.3986	-.4198	-.5070	-.7106	
225.000						-.7383		.3358
270.000		-.3753	-.3715	-.3770			-.5074	
315.000				-.3943	-.4137	-.5972		-.4174

ALPHA (3) = 3.977 BETA (1) = -.012 MACH = .90240 RN/L = 4.2041 PO = 2098.5 P = 1237.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3627		-.3618	-.4020	-.4043	-.4637	-.6773	
45.000				-.4046				
90.000			-.3753	-.3949	-.4379	-.5591	-.8113	
135.000				-.4149	-.5003	-.6558		.4250
180.000			-.3503	-.3753	-.3673	-.4663	-.6172	
225.000						-.6663		.3709
270.000		-.3670	-.3721	-.3792			-.4763	
315.000				-.3837	-.4028	-.5748		-.4152

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H22) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.937 BETA (1) = -.063 MACH = 1.0978 RN/L = 4.3175 PO = 2104.8 P = 988.46

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3856		-.3917	-.4371	-.4849	-.6205	-.3052	
45.000				-.4438				
90.000			-.4154	-.4260	-.4229	-.4310	-.4542	
135.000				-.4187	-.4431	-.5520		.3090
180.000			-.3912	-.4042	-.4748	-.5234	-.7027	
225.000						-.5778		.2995
270.000		-.4018	-.4144	-.4270			-.4445	
315.000				-.4595	-.4953	-.6097		-.0695

ALPHA (2) = -.525 BETA (1) = -4.069 MACH = 1.1008 RN/L = 4.3153 PO = 2104.6 P = 984.73

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3905		-.4091	-.4213	-.4363	-.5332	-.3294	
45.000				-.4492				
90.000			-.4163	-.4329	-.4458	-.4609	-.6761	
135.000				-.4475	-.4777	-.6200		.6084
180.000			-.4037	-.4004	-.4184	-.5190	-.6717	
225.000						-.5183		.2382
270.000		-.3990	-.4141	-.4327			-.4491	
315.000				-.4501	-.4806	-.5977		-.0570

ALPHA (2) = -.439 BETA (2) = -.056 MACH = 1.1008 RN/L = 4.3153 PO = 2104.6 P = 984.73

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3538		-.3736	-.3965	-.4305	-.5740	-.3163	
45.000				-.3919				
90.000			-.3850	-.4096	-.4261	-.5069	-.5735	
135.000				-.3908	-.4181	-.5424		.3944
180.000			-.3697	-.3783	-.4603	-.5084	-.7168	
225.000						-.5755		.3796

ARC11-023(A80 OTS(SRB=N ORB=N) ET BASE (RE4H22)

ALPHA (2) = -.439 BETA (2) = -.056

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3648	-.3790	-.4054			-.5242	
315.000				-.4004	-.4162	-.5244		-.0753

ALPHA (2) = -.482 BETA (3) = 3.950 MACH = 1.1008 RN/L = 4.3153 PO = 2104.6 P = 984.73

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3956		-.4080	-.4195	-.4323	-.5285	-.3280	
45.000				-.4323				
90.000			-.4079	-.4244	-.4278	-.4411	-.4523	
135.000				-.4229	-.4498	-.5086		.2148
180.000			-.3999	-.4122	-.4858	-.6575	-.8014	
225.000						-.5573		.4648
270.000		-.4034	-.4047	-.4185			-.6075	
315.000				-.4749	-.5116	-.6268		-.1143

ALPHA (3) = 3.963 BETA (1) = -.063 MACH = 1.1046 RN/L = 4.3189 PO = 2104.1 P = 979.83

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3919		-.3970	-.4231	-.4454	-.5753	-.3199	
45.000				-.4475				
90.000			-.4068	-.4315	-.4345	-.4761	-.6781	
135.000				-.4202	-.4487	-.5586		.4510
180.000			-.4117	-.4039	-.4686	-.5076	-.7690	
225.000						-.5515		.3441
270.000		-.3950	-.3974	-.4304			-.5422	
315.000				-.4645	-.4951	-.6359		-.1290

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H23) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.917 BETA (1) = .003 MACH = 1.2460 RN/L = 4.3725 PO = 2108.4 P = 818.30

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2942		-.2956	-.3522	-.4137	-.4919	-.1502	
45.000				-.3658				
90.000			-.3122	-.3254	-.3253	-.3397	-.4982	
135.000				-.3123	-.3407	-.4475		.4016
180.000			-.2991	-.3417	-.3561	-.3664	-.5340	
225.000						-.4705		.3257
270.000		-.2913	-.2963	-.3273			-.4900	
315.000				-.3692	-.3933	-.5076		-.0347

ALPHA (2) = -.446 BETA (1) = -4.006 MACH = 1.2483 RN/L = 4.3668 PO = 2108.9 P = 816.03

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2866		-.2966	-.3316	-.3664	-.4782	-.1863	
45.000				-.3237				
90.000			-.3148	-.3253	-.3322	-.3423	-.4666	
135.000				-.3329	-.3624	-.4199		.6349
180.000			-.3018	-.3042	-.3047	-.3690	-.3902	
225.000						-.4144		.2460
270.000		-.2737	-.2729	.3221			-.4954	
315.000				-.3829	-.4096	-.4827		-.0137

ALPHA (2) = -.456 BETA (2) = .003 MACH = 1.2483 RN/L = 4.3668 PO = 2108.9 P = 816.03

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2704		-.2844	-.3183	-.3718	-.4770	-.1482	
45.000				-.3473				
90.000			-.2782	-.2868	-.2884	-.3092	-.4913	
135.000				-.2862	-.3329	-.4505		.4724
180.000			-.3108	-.3332	-.3644	-.3718	-.5209	
225.000						-.4543		.3752

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H23)

ALPHA (2) = -.456 BETA (2) = .003

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2679	-.2627	-.3053			-.5067	
315.000				-.3841	-.4773	-.5274		-.0077

ALPHA (2) = -.439 BETA (3) = 4.012 MACH = 1.2483 RN/L = 4.3668 PO = 2108.9 P = 816.03

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2891		-.3001	-.3317	-.3605	-.4739	-.1934	
45.000				-.3735				
90.000			-.2946	-.3189	-.3314	-.3870	-.5120	
135.000				-.3078	-.3480	-.4019		.1776
180.000			-.2933	-.3384	-.3754	-.4443	-.5889	
225.000						-.4054		.4618
270.000		-.2988	-.2941	-.3463			-.4411	
315.000				-.3565	-.4684	-.5535		-.0185

ALPHA (3) = 3.996 BETA (1) = .000 MACH = 1.2455 RN/L = 4.3668 PO = 2109.1 P = 819.16

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.5350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2774		-.2676	-.3147	-.3342	-.4456	-.1820	
45.000				-.3398				
90.000			-.2829	-.2960	-.3001	-.3122	-.4604	
135.000				-.2947	-.3171	-.4139		.4788
180.000			-.3142	-.3359	-.3679	-.3743	-.5517	
225.000						-.4227		.3857
270.000		-.2744	-.2749	-.3147			-.4043	
315.000				-.3235	-.4750	-.5532		-.0176

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H24) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.884 BETA (1) = -.003 MACH = 1.4001 RN/L = 4.2484 PO = 2114.0 P = 664.19

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2256		-.2165	-.2335	-.2492	-.3209	-.1887	
45.000				-.2364				
90.000			-.2318	-.2418	-.2329	-.2373	-.3977	
135.000				-.2482	-.2914	-.3662		.4211
180.000			-.2499	-.2853	-.3397	-.3260	-.4298	
225.000						-.3815		.3189
270.000		-.2299	-.2196	-.2648			-.3946	
315.000				-.2593	-.3225	-.3917		-.0707

ALPHA (2) = -.370 BETA (1) = -4.009 MACH = 1.3999 RN/L = 4.2511 PO = 2113.8 P = 664.35

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2143		-.1992	-.2249	-.2456	-.3340	- 1629	
45.000				-.2411				
90.000			-.2596	-.2633	-.2616	-.2632	-.3526	
135.000				-.3128	-.3170	-.2684		.5645
180.000			-.2366	-.2389	-.2459	-.2845	-.2918	
225.000						-.3085		.2354
270.000		-.2140	-.2146	-.2630			-.3341	
315.000				-.2456	-.3055	-.3979		-.0432

ALPHA (2) = -.370 BETA (2) = .000 MACH = 1.3999 RN/L = 4.2511 PO = 2113.8 P = 664.35

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2160		-.1916	-.2225	-.2405	-.3297	-.1738	
45.000				-.2270				
90.000			-.2345	-.2331	-.2352	-.2407	-.3986	
135.000				-.2675	-.2977	-.3660		.5208
180.000			-.2375	-.2733	-.3347	-.3062	-.4194	
225.000						-.3513		.3561

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H24)

ALPHA (2) = -.370 BETA (2) = .000

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2159	-.2222	-.2564			-.4021	
315.000				-.2248	-.2716	-.3796		-.0481

ALPHA (2) = -.429 BETA (3) = 4.012 MACH = 1.3999 RN/L = 4.2511 PO = 2113.8 P = 664.35

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2219		-.2246	-.2430	-.2597	-.3454	-.1639	
45.000				-.2560				
90.000			-.2270	-.2298	-.2266	-.2340	-.3508	
135.000				-.2295	-.2497	-.3015		.1984
180.000			-.2224	-.2607	-.3109	-.3367	-.4657	
225.000						-.2941		.4369
270.000		-.2343	-.2341	-.2649			-.3626	
315.000				-.2210	-.2405	-.3723		-.0470

ALPHA (3) = 3.894 BETA (1) = .000 MACH = 1.3947 RN/L = 4.2558 PO = 2114.0 P = 669.27

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2045		-.2024	-.2538	-.2761	-.3734	-.0712	
45.000				-.2366				
90.000			-.2052	-.2410	-.2865	-.3379	-.4046	
135.000				-.2833	-.3166	-.3426		.5140
180.000			-.2194	-.2470	-.2932	-.2562	-.4077	
225.000						-.3237		.3921
270.000		-.2020	-.2035	-.2340			-.3798	
315.000				-.2146	-.3169	-.3576		.0497

ARC11-023IA80 OTS(SRB=N- ORB=N) ET BASE (RE4H25) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -4.020 BETA (1) = -.063 MACH = 1.0964 RN/L = 4.3166 PO = 2104.1 P = 989.88

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4194		-.4252	-.4713	-.5231	-.6486	-.3102	
45.000				-.4851				
90.000			-.4550	-.4583	-.4618	-.4649	-.4589	
135.000				-.4536	-.4762	-.5778		.3088
180.000			-.4230	-.4394	-.4983	-.5367	-.7482	
225.000						-.6035		.2988
270.000		-.4364	-.4468	-.4610			-.4487	
315.000				-.4891	-.5195	-.6339		-.0723

ALPHA (2) = -.482 BETA (1) = -4.069 MACH = 1.1000 RN/L = 4.3184 PO = 2103.9 P = 985.34

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4171		-.4416	-.4562	-.4717	-.5846	-.3303	
45.000				-.4761				
90.000			-.4483	-.4667	-.4792	-.4930	-.6825	
135.000				-.4719	-.5007	-.6421		.6111
180.000			-.4201	-.4261	-.4462	-.5585	-.7104	
225.000						-.5274		.2360
270.000		-.4280	-.4437	-.4644			-.4538	
315.000				-.4862	-.5054	-.6206		-.0672

ALPHA (2) = -.489 BETA (2) = -.059 MACH = 1.1000 RN/L = 4.3184 PO = 2103.9 P = 985.34

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3798		-.3999	-.4279	-.4608	-.6025	-.3182	
45.000				-.4241				
90.000			-.4148	-.4331	-.4594	-.5065	-.5743	
135.000				-.4165	-.4396	-.5883		.3927
180.000			-.3994	-.4008	-.4254	-.5102	-.7537	
225.000						-.5999		.3739

ARC11-023IA80 OTS(SRB=N- ORB=N) ET BASE (RE4H25)

ALPHA (2) = -.489 BETA (2) = -.059

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3950	-.4064	-.4318			-.5328	
315.000				-.4257	-.4437	-.5542		-.0761

ALPHA (2) = -.453 BETA (3) = 3.950 MACH = 1.1000 RN/L = 4.3184 PO = 2103.9 P = 985.34

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4252		-.4408	-.4542	-.4691	-.5744	-.3303	
45.000				-.4672				
90.000			-.4370	-.4552	-.4607	-.4633	-.4581	
135.000				-.4522	-.4747	-.5295		.2153
180.000			-.4298	-.4368	-.5077	-.6723	-.8277	
225.000						-.5896		.4676
270.000		-.4347	-.4349	-.4498			-.6213	
315.000				-.5236	-.5462	-.6554		-.1175

ALPHA (3) = 4.029 BETA (1) = -.059 MACH = 1.1031 RN/L = 4.3201 PO = 2102.0 P = 980.74

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4206		-.4264	-.4494	-.4751	-.6019	-.3223	
45.000				-.4763				
90.000			-.4372	-.4533	-.4567	-.4583	-.6835	
135.000				-.4397	-.4731	-.5952		.4468
180.000			-.4442	-.4224	-.4784	-.5227	-.7980	
225.000						-.5755		.3431
270.000		-.4228	-.4267	-.4593			-.5621	
315.000				-.4859	-.5145	-.6458		-.1305

ARC11-023IA80 OTS(SRB=N- ORB=N) ET BASE (RE4H26) (13 JAN 75)

REFERENCE DATA

SREF	=	2690.0000 SQ.FT.	XMRP	=	.0000 IN.
LREF	=	1290.3000 IN.	YMRP	=	.0000 IN.
BREF	=	1290.3000 IN.	ZMRP	=	.0000 IN.
SCALE	=	.0200			

PARAMETRIC DATA

ELV-IB	=	.000	ELV-OB	=	.000
RN/L	=	4.250	MACH	=	1.250

ALPHA (1) = -3.983 BETA (1) = .000 MACH = 1.2472 RN/L = 4.3616 PO = 2107.7 P = 815.70

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	9890	1.0000
PHI								
.000	-.3170		-.3206	-.3808	-.4464	-.4926	-.1493	
45.000				-.3903				
90.000			-.3375	-.3485	-.3500	-.3607	-.4982	
135.000				-.3370	-.3626	-.4638		.4001
180.000			-.3212	-.3626	-.3785	-.4003	-.5719	
225.000						-.4807		.3245
270.000		-.3140	-.3129	-.3529			-.4953	
315.000				-.3818	-.4088	-.5196		-.0327

ALPHA (2) = -.443 BETA (1) = -4.006 MACH = 1.2481 RN/L = 4.3581 PO = 2107.7 P = 815.72

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	9890	1.0000
PHI								
.000	-.3123		-.3290	-.3693	-.4047	-.5107	-.1858	
45.000				-.3728				
90.000			-.3463	-.3589	-.3612	-.3647	-.4871	
135.000				-.3516	-.3746	-.4372		.6322
180.000			-.3213	-.3226	-.3360	-.3942	-.4137	
225.000						-.4104		.2490
270.000		-.3015	-.3071	-.3653			-.5014	
315.000				-.4039	-.4199	-.4968		-.0118

ALPHA (2) = -.426 BETA (2) = .003 MACH = 1.2481 RN/L = 4.3581 PO = 2107.7 P = 815.72

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2950		-.2893	-.3492	-.4051	-.4883	-.1521	
45.000				-.3958				
90.000			-.3031	-.3123	-.3111	-.3355	-.4923	
135.000				-.3123	-.3570	-.4708		.4667
180.000			-.3377	-.34[illegible]	[illegible]	-.3838	-.5474	
225.000						[illegible]		.3762

ARC11-023IA80 OTS(SRB=N- ORB=N) ET BASE (RE4H26)

ALPHA (2) = -.426 BETA (2) = .003

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2895	-.2874	-.3290				
315.000				-.4099	-.4391	5360	-.5134	-.0078

ALPHA (2) = -.456 BETA (3) = 4.016 MACH = 1.2481 RN/L = 4.3581 PO = 2107.7 P = 815.72

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3099		-.3224	-.3526	-.3826	-.4948	-.1889	
45.000				-.4210				
90.000			-.3181	-.3211	-.3197	-.3417	-.5067	
135.000				-.3305	-.3653	-.4257		
180.000			-.3126	-.3483	-.4005	-.4578	-.6049	.1795
225.000						-.4189		.4668
270.000		-.3200	-.3192	-.3650			-.4446	
315.000				-.4244	-.4956	-.5566		-.0149

ALPHA (3) = 4.020 BETA (1) = -.003 MACH = 1.2443 RN/L = 4.3536 PO = 2107.0 P = 819.62

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2987		-.2931	-.3395	-.3610	-.4669	-.1851	
45.000				-.3882				
90.000			-.3097	-.3182	-.3249	-.3350	-.4832	
135.000				-.3171	-.3412	-.4334		
180.000			-.3361	-.3539	-.4117	-.4052	-.5751	.4801
225.000						-.4358		.3928
270.000		-.2993	-.2960	-.3379			-.4215	
315.000				-.3834	-.5020	-.5601		-.0188

ARC11-023IA80 OTS(SRB=N- ORB=N) ET BASE (RE4H27) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.805 BETA (1) = .000 MACH = 1.4005 RN/L = 4.2336 PO = 2109.8 P = 662.52

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2577		-.2531	-.2720	-.2865	-.3520	-.1879	
45.000				-.2789				
90.000			-.2579	-.2706	-.2679	-.2748	-.3956	
135.000				-.2929	-.3440	-.4109		.4239
180.000			-.2862	-.2866	-.3136	-.3508	-.4367	
225.000						-.3617		.3161
270.000		-.2573	-.2615	-.3006			-.4004	
315.000				-.2659	-.2999	-.3916		-.0705

ALPHA (2) = -.353 BETA (1) = -4.006 MACH = 1.3984 RN/L = 4.2397 PO = 2110.7 P = 664.93

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2514		-.2460	-.2670	-.2890	-.3711	-.1664	
45.000				-.2886				
90.000			-.2943	-.3293	-.3427	-.3572	-.3565	
135.000				-.3558	-.3719	-.2797		.5642
180.000			-.2667	-.2690	-.2782	-.3332	-.3391	
225.000						-.3376		.2334
270.000		-.2382	-.2478	-.2846			-.3523	
315.000				-.2685	-.3053	-.3938		-.0479

ALPHA (2) = -.367 BETA (2) = .000 MACH = 1.3984 RN/L = 4.2397 PO = 2110.7 P = 664.83

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2420		-.2215	-.2512	-.2751	-.3536	-.1777	
45.000				-.2540				
90.000			-.2627	-.2621	-.2613	-.2667	-.3998	
135.000				-.2966	-.3256	-.3849		.5260
180.000			-.2709	-.2809	-.3613	-.3456	-.4403	
225.000						-.3560		.3548

ARC11-0231A80 CTS(SRB=N- ORB=N) ET BASE (RE4H27)

ALPHA (2) = -.367 BETA (2) = .000

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2431	-.2483	-.2869			-.4055	
315.000				-.2532	-.3147	-.3882		-.0484

ALPHA (2) = -.400 BETA (3) = 4.012 MACH = 1.3984 RN/L = 4.2397 PO = 2110.7 P = 664.83

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2467		-.2506	-.2703	-.2901	-.3669	-.1607	
45.000				-.2860				
90.000			-.2542	-.2528	-.2512	-.2612	-.3509	
135.000				-.2522	-.2703	-.3183		.1980
180.000			-.2450	-.2738	-.3450	-.3513	-.4829	
225.000						-.3004		.4388
270.000		-.2594	-.2589	-.2914			-.3662	
315.000				-.2480	-.2900	-.3961		-.0485

ALPHA (3) = 3.983 BETA (1) = .000 MACH = 1.3983 RN/L = 4.2365 PO = 2109.9 P = 664.56

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2214		-.2253	-.2696	-.3025	-.3841	-.0706	
45.000				-.2643				
90.000			-.2243	-.2586	-.3017	-.3593	-.4018	
135.000				-.2812	-.3330	-.3537		.5146
180.000			-.2448	-.2577	-.3465	-.2993	-.4182	
225.000						-.3271		.3900
270.000		-.2216	-.2210	-.2510			-.3814	
315.000				-.2527	-.3634	-.3684		.0497

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H28) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -4.000 BETA (1) = -.016 MACH = .59820 RN/L = 3.3864 PO = 2123.2 P = 1666.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3420		-.2697	-.2872	-.3518	-.6798	-.8390	
45.000				-.3453				
90.000			-.3408	-.3937	-.4251	-.5572	-.7714	
135.000				-.3524	-.3985	-.6063		.2232
180.000			-.3176	-.3494	-.3634	-.4384	-.6672	
225.000						-.7169		.1531
270.000		-.3260	-.3245	-.3419			-.6553	
315.000				-.3419	-.3480	-.4885		-.5586

ALPHA (2) = -.264 BETA (1) = -4.034 MACH = .59700 RN/L = 3.3816 PO = 2123.7 P = 1668.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3293		-.2691	-.2810	-.3146	-.6355	-.8650	
45.000				-.3447				
90.000			-.3341	-.4227	-.4695	-.5433	-.7660	
135.000				-.3580	-.3710	-.6403		.3285
180.000			-.3269	-.3584	-.3988	-.4586	-.6834	
225.000						-.6649		.0860
270.000		-.3157	.3112	-.3245			-.5967	
315.000				-.3238	-.3320	-.4623		-.5792

ALPHA (2) = -.261 BETA (2) = -.019 MACH = .59700 RN/L = 3.3816 PO = 2123.7 P = 1668.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3187		-.2596	-.2689	-.3104	-.6554	-.8332	
45.000				-.3259				
90.000			-.3242	-.3781	-.4012	-.5307	-.7290	
135.000				-.3355	-.3920	-.6088		.2608
180.000			-.3092	-.3394	-.3517	-.4356	-.6672	
225.000						-.7049		.1917

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H28)

ALPHA (2) = -.261 BETA (2) = -.019

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3065	-.3016	-.3248			-.6407	
315.000				-.3172	-.3166	-.4164		-.5554

ALPHA (2) = -.274 BETA (3) = 3.991 MACH = .59700 RN/L = 3.3816 PO = 2123.7 P = 1668.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3081		-.2634	-.2748	-.2998	-.6188	-.8641	
45.000				-.3190				
90.000			-.3217	-.3598	-.3804	-.4997	-.7095	
135.000				-.3231	-.3420	-.4953		.0748
180.000			-.2967	-.3344	-.3392	-.4429	-.6860	
225.000						-.7201		.2397
270.000		-.3098	-.3049	-.3348			-.6881	
315.000				-.3169	-.3241	-.4268		-.5568

ALPHA (3) = 4.013 BETA (1) = -.019 MACH = .59700 RN/L = 3.3862 PO = 2124.6 P = 1669.6

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3075		-.2408	-.2599	-.2968	-.6566	-.8467	
45.000				-.3258				
90.000			-.3153	-.3716	-.4215	-.4965	-.6560	
135.000				-.3334	-.3853	-.6146		.2986
180.000			-.3016	-.3279	-.3405	-.4313	-.6512	
225.000						-.7088		.2545
270.000		-.2945	-.2941	-.2937			-.6046	
315.000				-.3064	-.3115	-.4118		-.5156

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H29) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.980 BETA (1) = -.006 MACH = .90100 RN/L = 4.2493 PO = 2121.1 P = 1252.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3366		-.3389	-.3693	-.3788	-.4086	-.7078	
45.000				-.3996				
90.000			-.3476	-.3880	-.4209	-.5274	-.7582	
135.000				-.3585	-.4138	-.5722		.2645
180.000			-.3252	-.3489	-.3547	-.4443	-.6089	
225.000						-.6891		.2664
270.000		-.3434	-.3448	-.3543			-.5898	
315.000				-.3818	-.4299	-.5818		-.4341

ALPHA (2) = -.320 BETA (1) = -4.022 MACH = .90373 RN/L = 4.2509 PO = 2123.0 P = 1250.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3541		-.3575	-.3618	-.3845	-.4052	-.6961	
45.000				-.3815				
90.000			-.3465	-.4034	-.4820	-.5154	-.7789	
135.000				-.3522	-.3950	-.6364		.4750
180.000			-.3396	-.3629	-.4089	-.4885	-.7360	
225.000						-.6525		.1529
270.000		-.3503	-.3422	-.3619			-.5822	
315.000				-.4126	-.5017	-.5887		-.4149

ALPHA (2) = -.310 BETA (2) = -.009 MACH = .90373 RN/L = 4.2509 PO = 2123.0 P = 1250.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3153		-.3148	-.3538	-.3487	-.4127	-.6717	
45.000				-.3774				
90.000			-.3361	-.3877	-.4333	-.5049	-.6978	
135.000				-.3605	-.4355	-.5914		.3759
180.000			-.3092	-.3284	-.3296	-.4461	-.6028	
225.000						-.6504		.3455

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H29)

ALPHA (2) = -.310 BETA (2) = -.009

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3169	-.3335	-.3332			-.5402	
315.000				-.3515	-.3814	-.5581		-.3986

ALPHA (2) = -.297 BETA (3) = 4.006 MACH = .90373 RN/L = 4.2509 PO = 2123.0 P = 1250.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3378		-.3573	-.3699	-.3803	-.4047	-.6757	
45.000				-.4063				
90.000			-.3306	-.3576	-.3706	-.4992	-.7756	
135.000				-.3533	-.3741	-.5154		.0861
180.000			-.3582	-.3615	-.3717	-.4781	-.7482	
225.000						-.7249		.3466
270.000		-.3455	-.3433	-.3478			-.4931	
315.000				-.3543	-.3924	-.5217		-.4070

ALPHA (3) = 3.986 BETA (1) = -.009 MACH = .89810 RN/L = 4.2418 PO = 2119.7 P = 1255.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3234		-.3232	-.3531	-.3620	-.4034	-.6858	
45.000				-.3590				
90.000			-.3271	-.3630	-.4097	-.5032	-.7188	
135.000				-.3708	-.4598	-.6151		.4240
180.000			-.3035	-.3279	-.3388	-.4458	-.6110	
225.000						-.6304		.3823
270.000		-.3322	-.3320	-.3321			-.4488	
315.000				-.3405	-.3637	-.4710		-.4125

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H30) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -4.016 BETA (1) = -.003 MACH = 1.0992 RN/L = 4.3334 PO = 2116.2 P = 992.05

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3950		-.4110	-.4600	-.5097	-.6362	-.3015	
45.000				-.4590				
90.000			-.4474	-.4751	-.4756	-.4646	-.4553	
135.000				-.4262	-.4522	-.5584		.3240
180.000			-.4003	-.4052	-.4211	-.5160	-.7365	
225.000						-.5679		.3025
270.000		-.4293	-.4420	-.4471			-.4416	
315.000				-.4876	-.5156	-.6284		-.0663

ALPHA (2) = -.370 BETA (1) = -4.006 MACH = 1.1030 RN/L = 4.2966 PO = 2115.2 P = 987.09

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4145		-.4371	-.4517	-.4645	-.5742	-.3262	
45.000				-.4814				
90.000			-.4502	-.4691	-.4796	-.4868	-.6762	
135.000				-.4709	-.5037	-.6477		.6191
180.000			-.4202	-.4249	-.4436	-.5453	-.7156	
225.000						-.5184		.2431
270.000		-.4246	-.4419	-.4668			-.4468	
315.000				-.4816	-.5018	-.6162		-.0645

ALPHA (2) = -.343 BETA (2) = .003 MACH = 1.1030 RN/L = 4.2966 PO = 2115.2 P = 987.09

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3619		-.3958	-.4143	-.4482	-.5872	-.3145	
45.000				-.4223				
90.000			-.4210	-.4485	-.4604	-.5038	-.5928	
135.000				-.4012	-.4247	-.5390		.3977
180.000			-.3669	-.3803	-.3875	-.4949	-.7225	
225.000						-.5669		.3898

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H30)

ALPHA (2) = -.343 BETA (2) = .003

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3891	-.4083	-.4213			-.5319	
315.000				-.4093	-.4296	-.5385		-.0743

ALPHA (2) = -.370 BETA (3) = 4.009 MACH = 1.1030 RN/L = 4.2966 PO = 2115.2 P = 987.00

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4220		-.4364	-.4496	-.4657	-.5704	-.3241	
45.000				-.4591				
90.000			-.4327	-.4434	-.4478	-.4551	-.4512	
135.000				-.4481	-.4732	-.5316		.2304
180.000			-.4205	-.4291	-.4318	-.5563	.0000	
225.000						-.5674		.4874
270.000		-.4289	-.4317	-.4491			-.6553	
315.000				-.5171	-.5435	-.6589		-.1160

ALPHA (3) = 3.894 BETA (1) = -.003 MACH = 1.1097 RN/L = 4.2923 PO = 2114.0 P = 978.29

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

P/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4021		-.4146	-.4366	-.4635	-.5844	-.3149	
45.000				-.4588				
90.000			-.4359	-.4549	-.4648	-.4728	-.6758	
135.000				-.4349	-.4626	-.5525		.4549
180.000			-.4066	-.4027	-.4251	-.5327	-.7685	
225.000						-.5657		.3539
270.000		-.4068	-.4231	-.4417			-.6369	
315.000				-.4701	-.5051	-.6454		-.1287

ARC11-023!A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H31) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.970 BETA (1) = -.003 MACH = 1.2502 RN/L = 4.3628 PO = 2115.4 P = 815.45

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3278		-.3487	-.4118	-.4785	-.4917	-.1479	
45.000				-.4028				
90.000			-.3908	-.4082	-.4092	-.4203	-.4924	
135.000				-.3531	-.3805	-.4610		.4462
180.000			-.3235	-.3895	-.3289	-.3866	-.5770	
225.000						-.4584		.3433
270.000		-.3441	-.3518	-.3927			-.4875	
315.000				-.3942	-.4144	-.5202		-.0269

ALPHA (2) = -.330 BETA (1) = -4.005 MACH = 1.2515 RN/L = 4.3608 PO = 2116.1 P = 815.32

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3395		-.3644	-.4066	-.4432	-.5344	-.1842	
45.000				-.4506				
90.000			-.3971	-.4029	-.4044	-.4120	-.4822	
135.000				-.3830	-.4088	-.4553		.6469
180.000			-.3395	-.3322	-.3656	-.4362	-.5254	
225.000						-.3924		.2797
270.000		-.3401	-.3473	-.4034			-.5067	
315.000				-.4504	-.4603	-.5298		-.0128

ALPHA (2) = -.317 BETA (2) = .003 MACH = 1.2515 RN/L = 4.3608 PO = 2116.1 P = 815.32

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3087		-.3218	-.3782	-.4354	-.4906	-.1489	
45.000				-.4402				
90.000			-.3623	-.3740	-.3699	-.3899	-.4819	
135.000				-.3396	-.3643	-.4391		.4986
180.000			-.3090	-.3076	-.2951	-.3850	-.5603	
225.000						-.4518		.3987

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4M31)

ALPHA (2) = -.317 BETA (2) = .003

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3215	-.3230	-.3753			-.5140	
315.000				-.3930	-.4214	-.5242		-.0084

ALPHA (2) = -.570 BETA (3) = 4.012 MACH = 1.2515 RN/L = 4.3608 PO = 2116.1 P = 815.32

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3440		-.3619	-.3900	-.4285	-.5272	-.1852	
45.000				-.4579				
90.000			-.3538	-.3511	-.3511	-.3770	-.5082	
135.000				-.3570	-.3796	-.4374		.1996
180.000			-.3367	-.3430	-.3555	-.4320	-.6459	
225.000						-.4164		.4912
270.000		-.3575	-.3546	-.4048			-.4696	
315.000				-.4728	-.4888	-.5573		-.0104

ALPHA (3) = 3.950 BETA (1) = -.003 MACH = 1.2493 RN/L = 4.3596 PO = 2116.9 P = 818.02

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3291		-.3270	-.3682	-.3941	-.4913	-.1797	
45.000				-.4308				
90.000			-.3422	-.3517	-.3565	-.3705	-.4856	
135.000				-.3354	-.3654	-.4089		.4772
180.000			-.3523	-.3407	-.3555	-.4183	-.6116	
225.000						-.4055		.3861
270.000		-.3284	-.3269	-.3733			-.4544	
315.000				-.4663	-.5153	-.5609		-.0163

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H32) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -4.043 BETA (1) = .000 MACH = 1.4047 RN/L = 4.2434 PO = 2120.4 P = 661.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3073		-.3039	-.3243	-.3423	-.3867	-.1881	
45.000				-.3428				
90.000			-.3200	-.3193	-.3157	-.3173	-.3768	
135.000				-.3539	-.3772	-.4182		.4605
180.000			-.3346	-.3300	-.3182	-.4276	-.4336	
225.000						-.3987		.3416
270.000		-.3110	-.3174	-.3224			-.3779	
315.000				-.3255	-.3634	-.4195		-.0710

ALPHA (2) = -.195 BETA (1) = -4.012 MACH = 1.4028 RN/L = 4.2458 PO = 2120.4 P = 663.72

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2990		-.2974	-.3199	-.3437	-.4066	-.1657	
45.000				-.3372				
90.000			-.3589	-.3532	-.3489	-.3446	-.3482	
135.000				-.4003	-.3942	-.2668		.5602
180.000			-.2964	-.2937	-.3113	-.3502	-.3707	
225.000						-.3543		.2696
270.000		-.2736	-.2976	-.3065			-.3583	
315.000				-.3261	-.3428	-.4186		-.0447

ALPHA (2) = -.211 BETA (2) = .000 MACH = 1.4028 RN/L = 4.2456 PO = 2120.4 P = 663.72

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2746		-.2720	-.2947	-.3217	-.3862	-.1765	
45.000				-.2956				
90.000			-.3144	-.3279	-.3113	-.3098	-.3869	
135.000				-.3301	-.3370	-.3722		.5404
180.000			-.2753	-.2693	-.2963	-.3009	-.4278	
225.000						-.3415		.3818

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H32)

ALPHA (2) = -.211 BETA (2) = .000

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2780	-.2854	-.3206			-.3998	
315.000				-.2980	-.3269	-.3940		-.0457

ALPHA (2) = .083 BETA (3) = 4.006 MACH = 1.4028 RN/L = 4.2458 PO = 2120.4 P = 663.72

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2927		-.2935	-.3203	-.3448	-.4139	-.1625	
45.000				-.3393				
90.000			-.2986	-.2979	-.2940	-.3030	-.3534	
135.000				-.2990	-.3148	-.3545		.2220
180.000			-.2824	-.2937	-.3165	-.3532	-.5089	
225.000						-.2778		.4404
270.000		-.3113	-.3055	-.3431			-.3740	
315.000				-.3163	-.3825	-.4212		-.0490

ALPHA (3) = 4.082 BETA (1) = .000 MACH = 1.3983 RN/L = 4.2463 PO = 2120.4 P = 667.87

SECTION (1)EXTERN/L TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2669		-.2656	-.3097	-.3462	-.3954	-.0737	
45.000				-.3560				
90.000			-.2624	-.3295	-.3401	-.3809	-.4015	
135.000				-.3522	-.3407	-.3511		.5226
180.000			-.2738	-.2859	-.2426	-.3085	-.4319	
225.000						-.3311		.3991
270.000		-.2630	-.2616	-.2954			-.4055	
315.000				-.3245	-.4249	-.3982		.0370

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H33) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 1.750 MACH = .600

ALPHA (1) = -3.953 BETA (1) = -.003 MACH = .59560 RN/L = 1.7428 PO = 1060.9 P = 834.63

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3280		-.2377	-.2812	-.3952	-.7242	-.8221	
45.000				-.3334				
90.000			-.3409	-.3870	-.4337	-.5300	-.7165	
135.000				-.3416	-.3925	-.5965		.2187
180.000			-.3183	-.3327	-.3416	-.4154	-.6186	
225.000						-.7105		.1522
270.000		-.3170	-.3190	-.3368			-.6414	
315.000				-.3203	-.3313	-.4854		-.5416

ALPHA (2) = -.271 BETA (1) = -4.044 MACH = .59443 RN/L = 1.7407 PO = 1060.2 P = 834.82

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3475		-.2543	-.2750	-.3803	-.7185	-.8669	
45.000				-.3528				
90.000			-.3361	-.4420	-.4878	-.5424	-.7480	
135.000				-.3636	-.3983	-.6471		.3193
180.000			-.3403	-.3567	-.4018	-.4544	-.6858	
225.000						-.6769		.0795
270.000		-.3344	-.3132	-.3401			-.6002	
315.000				-.3269	-.3421	-.4942		-.5871

ALPHA (2) = -.284 BETA (2) = -.031 MACH = .59443 RN/L = 1.7407 PO = 1060.2 P = 834.82

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3029		-.2169	-.2545	-.3497	-.7028	-.8067	
45.000				-.3164				
90.000			-.3216	-.3708	-.4027	-.5001	-.6584	
135.000				-.3246	-.3742	-.5893		.2624
180.000			-.3080	-.3171	-.3218	-.4040	-.6090	
225.000						-.6945		.1999

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H33)

ALPHA (2) = -.284 BETA (2) = -.031

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2928	-.2940	-.3178			-.5887	
315.000				-.2926	-.2933	-.4271		-.5262

ALPHA (2) = -.343 BETA (3) = 3.984 MACH = .59443 RN/L = 1.7407 PO = 1060.2 P = 834.82

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3321		-.2686	-.2719	-.3572	-.7004	-.8896	
45.000				-.3190				
90.000			-.3239	-.3572	-.4272	-.4922	-.6895	
135.000				-.3281	-.3627	-.4922		.0676
180.000			-.3052	-.3371	-.3523	-.4354	-.6930	
225.000						-.7337		.2233
270.000		-.3314	-.3163	-.3579			-.6750	
315.000				-.3350	-.3447	-.4520		-.5787

ALPHA (3) = 3.963 BETA (1) = -.003 MACH = .59300 RN/L = 1.7403 PO = 1060.2 P = 835.76

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3316		-.2365	-.2535	-.3656	-.7213	-.8620	
45.000				-.3421				
90.000			-.3158	-.3960	-.4466	-.5062	-.6526	
135.000				-.3372	-.4057	-.6106		.2819
180.000			-.3019	-.3324	-.3463	-.4150	-.6299	
225.000						-.7240		.2383
270.000		-.3150	-.3012	-.3151			-.5809	
315.000				-.3192	-.3303	-.4385		-.5187

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H34) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 2.250 MACH = .900

ALPHA (1) = -3.947 BETA (1) = .000 MACH = .90000 RN/L = 2.1578 PO = 1061.6 P = 627.70

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3375		-.3373	-.3727	-.3820	-.4095	-.7105	
45.000				-.4089				
90.000			-.3444	-.3984	-.4446	-.5137	-.6871	
135.000				-.3535	-.4073	-.5625		.2511
180.000			-.3204	-.3475	-.3487	-.4311	-.5909	
225.000						-.6771		.2486
270.000		-.3407	-.3500	-.3603			-.5785	
315.000				-.3972	-.4730	-.6094		-.4379

ALPHA (2) = -.264 BETA (1) = -4.044 MACH = .90150 RN/L = 2.1576 PO = 1060.4 P = 625.98

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3535		-.3459	-.3727	-.3857	-.4057	-.6945	
45.000				-.3840				
90.000			-.3549	-.3968	-.4773	-.5225	-.7292	
135.000				-.3486	-.3933	-.6381		.4745
180.000			-.3428	-.3639	-.3982	-.4861	-.6777	
225.000						-.6513		.1462
270.000		-.3527	-.3462	-.3699			-.5833	
315.000				-.4271	-.5002	-.5992		-.4175

ALPHA (2) = -.271 BETA (2) = -.031 MACH = .90150 RN/L = 2.1576 PO = 1060.4 P = 625.98

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3312		-.3288	-.3627	-.3729	-.4177	-.6777	
45.000				-.3877				
90.000			-.3408	-.4147	-.4492	-.[illegible]994	-.6559	
135.000				-.3663	-.4437	-.[illegible]37		.3579
180.000			-.3126	-.3380	-.3395	-.4355	-.5986	
225.000						-.6462		.3216

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H34)

ALPHA (2) = -.271 BETA (2) = -.031

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3324	-.3368	-.3472			-.5472	
315.000				-.3786	-.4043	-.6058		-.4085

ALPHA (2) = -.304 BETA (3) = 3.984 MACH = .90150 RN/L = 2.1576 PO = 1060.4 P = 625.28

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3322		-.3611	-.3757	-.3881	-.4045	-.6995	
45.000				-.4296				
90.000			-.3382	-.4123	-.4429	-.5051	-.6855	
135.000				-.3427	-.3656	-.4822		.0811
180.000			-.3077	-.3386	-.3399	-.4439	-.6347	
225.000						-.7054		.3369
270.000		-.3411	-.3427	-.3503			-.5233	
315.000				-.3604	-.3841	-.5771		-.4287

ALPHA (3) = 3.990 BETA (1) = -.003 MACH = .90350 RN/L = 2.1629 PO = 1061.6 P = 625.33

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3263		-.3271	-.3583	-.3682	-.4062	-.6789	
45.000				-.3583				
90.000			-.3343	-.3630	-.4142	-.5146	-.6868	
135.000				-.3746	-.4581	-.6059		.4150
180.000			-.3059	-.3335	-.3395	-.4377	-.6002	
225.000						-.6179		.3651
270.000		-.3335	-.3367	-.3383			-.5015	
315.000				-.3455	-.3618	-.5341		-.4098

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H35) (13 JAN 75)

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN. ELV-IB = .000 ELV-OB = .000
LREF = 1290.3000 IN. YMRP = .0000 IN. RN/L = 2.250 MACH = 1.100
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

ALPHA (1) = -3.957 BETA (1) = .000 MACH = 1.0935 RN/L = 2.2424 PO = 1058.8 P = 499.91

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4172		-.4297	-.4482	-.4693	-.5196	-.3264	
45.000				-.4587				
90.000			-.4741	-.4826	-.4789	-.477	-.4724	
135.000				-.4540	-.4751	-.5		.2927
180.000			-.4304	-.4373	-.4683	-.5574	-.7598	
225.000						-.5980		.2859
270.000		-.4507	-.4618	-.4577			-.4592	
315.000				-.5150	-.5454	-.5881		-.0805

ALPHA (2) = -.225 BETA (1) = -4.009 MACH = 1.0961 RN/L = 2.2501 PO = 1061.4 P = 499.48

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4355		-.4581	-.4596	-.4671	-.5125	-.3403	
45.000				-.5119				
90.000			-.4705	-.4905	-.5031	-.5091	-.6855	
135.000				-.4898	-.5217	-.6543		.5958
180.000			-.4450	-.4501	-.4745	-.5639	-.7106	
225.000						-.5285		.2365
270.000		-.4504	-.4616	-.4827			-.4628	
315.000				-.4939	-.5143	-.5598		-.0853

ALPHA (2) = -.225 BETA (2) = .000 MACH = 1.0961 RN/L = 2.2501 PO = 1061.4 P = 499.48

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3795		-.4145	-.4134	-.4235	-.4835	-.3279	
45.000				-.4300				
90.000			-.4391	-.4649	-.4791	-.5571	-.5805	
135.000				-.4228	-.4530	-.5449		.3685
180.000			-.3934	-.4025	-.4286	-.5194	-.7304	
225.000						-.5652		.3621

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H35)

ALPHA (2) = -.225 BETA (2) = .000

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.4323	-.4317	-.4618			-.5405	
315.000				-.4171	-.4262	-.4747		-.0887

ALPHA (2) = -.231 BETA (3) = 4.012 MACH = 1.0961 RN/L = 2.2501 PO = 1061.4 P = 499.48

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4498		-.4596	-.4627	-.4698	-.5138	-.3407	
45.000				-.4701				
90.000			-.4606	-.4715	-.4725	-.4747	-.4687	
135.000				-.4729	-.4939	-.5457		.2014
180.000			-.4490	-.4514	-.4627	-.5906	-.8484	
225.000						-.5719		.4636
270.000		-.4572	-.4596	-.4701			-.6896	
315.000				-.5524	-.5629	-.6021		-.1319

ALPHA (3) = 4.016 BETA (1) = -.003 MACH = 1.1017 RN/L = 2.2510 PO = 1060.9 P = 495.81

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4286		-.4404	-.4457	-.4575	-.5049	-.3307	
45.000				-.4952				
90.000			-.4592	-.4690	-.4798	-.4819	-.6825	
135.000				-.4565	-.4812	-.5712		.4381
180.000			-.4281	-.4325	-.4622	-.5692	-.7838	
225.000						-.5830		.3427
270.000		-.4340	-.4426	-.4522			-.6825	
315.000				-.5055	-.5245	-.5996		-.1452

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H36) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 2.250 MACH = 1.250

ALPHA (1) = -3.993 BETA (1) = .003 MACH = 1.2488 RN/L = 2.2675 PO = 1060.9 P = 410.21

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3367		-.3595	-.3939	-.4305	-.4720	-.1584	
45.000				-.3926				
90.000			-.3894	-.4143	-.4130	-.4112	-.4937	
135.000				-.3591	-.3900	-.4558		.4126
180.000			-.3317	-.3400	-.3470	-.4019	-.5688	
225.000						-.4427		.3199
270.000		-.3544	-.3591	-.4028			-.5108	
315.000				-.3986	-.4111	-.4615		-.0370

ALPHA (2) = -.145 BETA (1) = -4.003 MACH = 1.2488 RN/L = 2.2680 PO = 1060.9 P = 410.21

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3506		-.3712	-.3916	-.4119	-.4341	-.1921	
45.000				-.4652				
90.000			-.3833	-.4078	-.4034	-.3962	-.4896	
135.000				-.3855	-.3935	-.4344		.5863
180.000			-.3486	-.3426	-.3639	-.4303	-.5048	
225.000						-.3905		.2563
270.000		-.3513	-.3543	-.4135			-.5165	
315.000				-.4422	-.4441	-.4640		-.0252

ALPHA (2) = -.129 BETA (2) = .003 MACH = 1.2488 RN/L = 2.2680 PO = 1060.9 P = 410.21

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3120		-.3294	-.3556	-.3858	-.4186	-.1697	
45.000				-.4037				
90.000			-.3769	-.3951	-.3954	-.4011	-.5037	
135.000				-.3485	-.3947	-.4593		.5034
180.000			-.3047	-.3117	-.2980	-.3671	-.5357	
225.000						-.4326		.3885

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H36)

ALPHA (2) = -.129 BETA (2) = .003

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3304	-.3308	-.3842			-.5322	
315.000				-.3738	-.3884	-.4450		-.0225

ALPHA (2) = -.175 BETA (3) = 4.009 MACH = 1.2488 RN/L = 2.2680 PO = 1060.9 P = 410.21

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3455		-.3655	-.3763	-.3923	-.4233	-.1957	
45.000				-.4414				
90.000			-.3629	-.3826	-.3823	-.3799	-.4894	
135.000				-.3642	-.3878	-.4456		.1950
180.000			-.3416	-.3467	-.3604	-.4402	-.5930	
225.000						-.4223		.4609
270.000		-.3617	-.3604	-.4101			-.4998	
315.000				-.4707	-.4924	-.5202		-.0289

ALPHA (3) = 4.072 BETA (1) = .003 MACH = 1.2496 RN/L = 2.2672 PO = 1060.9 P = 409.77

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3330		-.3330	-.3594	-.3728	-.4070	-.1823	
45.000				-.4451				
90.000			-.3473	-.3578	-.3610	-.3713	-.4837	
135.000				-.3454	-.3683	-.4114		.4576
180.000			-.3575	-.3476	-.3559	-.4270	-.5676	
225.000						-.4124		.3798
270.000		-.3320	-.3333	-.3788			-.4859	
315.000				-.4754	-.4996	-.5405		-.0242

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H37) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 2.250 MACH = 1.400

ALPHA (1) = -4.013 BETA (1) = .003 MACH = 1.3998 RN/L = 2.2349 PO = 1061.6 P = 333.70

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/POD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3168		-.3149	-.3255	-.3376	-.3492	-.2027	
45.000				-.3501				
90.000			-.3291	-.3283	-.3248	-.3227	-.3965	
135.000				-.3504	-.3560	-.4070		.4353
180.000			-.3260	-.3239	-.3080	-.3995	-.4334	
225.000						-.4120		.3186
270.000		-.3230	-.3291	-.3326			-.4002	
315.000				-.3435	-.3735	-.3983		-.0857

ALPHA (2) = -.241 BETA (1) = -4.006 MACH = 1.3997 RN/L = 2.2285 PO = 1060.0 P = 333.23

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3081		-.3087	-.3230	-.3374	-.3567	-.1761	
45.000				-.3533				
90.000			-.3546	-.3549	-.3527	-.3495	-.3631	
135.000				-.4152	-.4261	-.2799		.5329
180.000			-.3018	-.3018	-.3287	-.3542	-.3743	
225.000						-.3548		.2453
270.000		-.2813	-.3118	-.3218			-.3864	
315.000				-.3427	-.3655	-.3976		-.0610

ALPHA (2) = -.264 BETA (2) = .003 MACH = 1.3997 RN/L = 2.2285 PO = 1060.0 P = 333.23

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/POD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2847		-.2916	-.3099	-.3282	-.3431	-.1869	
45.000				-.3240				
90.000			-.3340	-.3424	-.3347	-.3253	-.3984	
135.000				-.3237	-.3472	-.3719		.5150
180.000			-.2799	-.2750	-.2834	-.3200	-.4176	
225.000						-.3450		.3602

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H37)

ALPHA (2) = -.264 BETA (2) = .000

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2922	-.2983	-.3303			-.4214	
315.000				- 3194	-.3397	-.3682		-.0603

ALPHA (2) = -.267 BETA (3) = 4.009 MACH = 1.3997 RN/L = 2.2285 PO = 1060.0 P = 333.23

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3021		-.3042	-.3170	-.3292	-.3493	-.1733	
45.000				-.3545				
90.000			-.3098	-.3060	-.3051	-.3065	-.3546	
135.000				-.3092	-.3307	-.3694		.1912
180.000			-.2954	-.3017	-.3273	-.3719	-.4818	
225.000						-.2880		.4266
270.000		-.3213	-.3198	-.3551			-.3932	
315.000				-.3467	-.3764	-.3866		-.0595

ALPHA (3) = 4.010 BETA (1) = .003 MACH = 1.3956 RN/L = 2.2367 PO = 1060.2 P = 335.22

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2725		-.2765	-.3052	-.3242	-.3534	-.0848	
45.000				-.3630				
90.000			-.2755	-.3411	-.3530	-.3819	-.4098	
135.000				-.3539	-.3602	-.3638		.5136
180.000			-.2814	-.2708	-.3486	-.3275	-.4222	
225.000						-.3413		.3867
270.000		-.2756	-.2768	-.3092			-.4207	
315.000				-.3708	-.4161	-.4063		.0285

ARC11-0231A80 OTS(SRB=N ORB=N) ET BASE (RE4H38) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 1.750 MACH = .600

ALPHA (1) = -3.980 BETA (1) = -.003 MACH = .59910 RN/L = 1.7583 PO = 1060.9 P = 832.35

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3736		-.2746	-.3110	-.4505	-.7708	-.8780	
45.000				-.3642				
90.000			-.3665	-.4180	-.4723	-.5743	-.7689	
135.000				-.3803	-.4348	-.6315		.2012
180.000			-.3464	-.3632	-.3714	-.4348	-.6592	
225.000						-.7566		.1359
270.000		-.3479	-.3533	-.3741			-.6875	
315.000				-.3598	-.3850	-.5222		-.5834

ALPHA (2) = -.314 BETA (1) = -4.044 MACH = .59907 RN/L = 1.7686 PO = 1066.1 P = 836.42

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3422		-.2532	-.2916	-.3878	-.7488	-.8941	
45.000				-.3716				
90.000			-.3540	-.4495	-.4689	-.5680	-.7444	
135.000				-.3634	-.3906	-.6655		.3228
180.000			-.3587	-.3641	-.3858	-.4448	-.7039	
225.000						-.6946		.0784
270.000		-.3267	-.3309	-.3431			-.6135	
315.000				-.3268	-.3356	-.4997		-.5965

ALPHA (2) = -.317 BETA (2) = -.009 MACH = .59907 RN/L = 1.7683 PO = 1066.1 P = 836.42

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3511		-.2582	-.2890	-.3879	-.7481	-.8644	
45.000				-.3528				
90.000			-.3528	-.4019	-.4456	-.5482	-.7140	
135.000				-.3649	-.4308	-.6207		.2461
180.000			-.3381	-.3515	-.3589	-.4308	-.6545	
225.000						-.7461		.1783

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H38)

ALPHA (2) = -.317 BETA (2) = -.009

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3337	-.3240	-.3596			-.6499	
315.000				-.3327	-.3374	-.4644		-.5724

ALPHA (2) = -.627 BETA (3) = 3.981 MACH = .59907 RN/L = 1.7686 PO = 1066.1 P = 835.42

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3425		-.2771	-.2852	-.3700	-.7377	-.8995	
45.000				-.3414				
90.000			-.3501	-.3784	-.4392	-.5130	-.7107	
135.000				-.3407	-.3755	-.5157		.0594
180.000			-.3209	-.3524	-.3549	-.4342	-.6841	
225.000						-.7601		.2156
270.000		-.3405	-.3360	-.3586			-.6848	
315.000				-.3515	-.3494	-.468		-.5835

ALPHA (3) = 3.953 BETA (1) = -.003 MACH = .60350 RN/L = 1.7801 PO = 1066.6 P = 833.90

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3431		-.2352	-.2738	-.3683	-.7665	-.8771	
45.000				-.3542				
90.000			-.3509	-.4117	-.4545	-.5264	-.6793	
135.000				-.3515	-.4217	-.6234		.2854
180.000			-.3260	-.3414	-.3428	-.4261	-.6440	
225.000						-.7572		.2393
270.000		-.3184	-.3180	-.3180			-.5908	
315.000				-.3341	-.3294	-.4683		-.5365

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4:39) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 2.250 MACH = .900

ALPHA (1) = -3.986 BETA (1) = .003 MACH = .89730 RN/L = 2.1589 PO = 1063.0 P = 630.39

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3774		-.3794	-.4168	-.4267	-.4493	-.7198	
45.000				-.4581				
90.000			-.3822	-.4328	-.4850	-.5576	-.7434	
135.000				.3830	-.4524	-.5857		.2463
180.000			-.3525	-.3714	-.3660	-.4505	-.6243	
225.000						-.7105		.2462
270.000		-.3798	-.3774	-.3931			-.6227	
315.000				-.4417	-.5252	-.6635		-.4461

ALPHA (2) = -.294 BETA (1) = -4.044 MACH = .90407 RN/L = 2.1638 PO = 1061.8 P = 625.06

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3912		-.3936	-.4185	-.4269	-.4497	-.6975	
45.000				-.4185				
90.000			-.3991	-.4213	-.5014	-.5718	-.6014	
135.000				-.3771	-.4225	-.6598		.4718
180.000			-.3678	-.3976	-.4157	-.5365	-.8746	
225.000						-.6899		.1352
270.000		-.3920	-.3875	-.4084			-.6387	
315.000				-.4961	-.5798	-.6626		-.4212

ALPHA (2) = -.310 BETA (2) = -.028 MACH = .90407 RN/L = 2.1638 PO = 1061.8 P = 625.06

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3738		-.3714	-.4208	-.4165	-.4738	-.6637	
45.000				-.4524				
90.000			-.3877	-.4197	-.4772	-.5742	-.7512	
135.000				-.4165	-.4811	-.6293		.3543
180.000			-.3574	-.3814	-.3562	-.4734	-.6374	
225.000						-.6761		.3181

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H39)

ALPHA (2) = -.310 BETA (2) = -.028

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3761	-.3905	-.3905			-.6029	
315.000				-.4279	-.4792	-.6918		-.3998

ALPHA (2) = -.326 BETA (3) = 3.981 MACH = .90407 RN/L = .1638 PO = 1061.8 P = 625.06

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3754		-.3917	-.4115	-.4167	-.4395	-.6862	
45.000				-.4705				
90.000			-.3816	-.4115	-.4043	-.5447	-.7668	
135.000				-.3879	-.4087	-.5714		.0702
180.000			-.3991	-.3939	-.3875	-.4993	-.7298	
225.000						-.7452		.3317
270.000		-.3869	-.3832	-.3927			-.5425	
315.000				-.3983	-.4306	-.6938		-.4268

ALPHA (3) = 3.970 BETA (1) = .000 MACH = .90120 RN/L = 2.1596 PO = 1060.2 P = 626.02

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3622		-.3546	-.4036	-.4099	-.4550	-.6814	
45.000				-.4012				
90.000			-.3735	-.3974	-.4371	-.5742	-.7609	
135.000				-.4107	-.4956	-.6450		.4090
180.000			-.3427	-.3574	-.3469	-.4550	-.6280	
225.000						-.6622		.3574
270.000		-.3634	-.3792	-.3754			-.5383	
315.000				-.3810	-.3894	-.6234		-.4189

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H40) (13 JAN 75)

REFERENCE DATA

PARAMETRIC DAT

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN. ELV-IB = .000 ELV-OB = .000
LREF = 1290.3000 IN. YMRP = .0000 IN. RN/L = 2.256 MACH = 1.100
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

ALPHA (1) = -3.801 BETA (1) = -.006 MACH = 1.0940 RN/L = 2.2469 PO = 1059.5 P = 499.92

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4123		-.4215	-.4299	-.4544	-.5116	-.3240	
45.000				-.4506				
90.000			-.4527	-.4530	-.4516	-.4547	-.4588	
135.000				-.4527	-.4680	-.5025		.2895
180.000			-.4288	-.4237	-.5010	-.5709	-.7275	
225.000						-.6032		.2858
270.000		-.4357	-.4458	-.4428			-.4563	
315.000				-.5013	-.5231	-.5842		-.0790

ALPHA (2) = -.304 BETA (1) = -4.003 MACH = 1.0971 RN/L = 2.2528 PO = 1061.4 P = 498.93

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.9950	.9460	.9890	1.0000
PHI								
.000	-.4184		-.4386	-.4398	-.4483	-.4939	-.3392	
45.000				-.4927				
90.000			-.4436	-.4534	-.4730	-.4881	-.6776	
135.000				-.4612	-.4930	-.5261		.5898
180.000			-.4253	-.4253	-.4409	-.5170	-.7065	
225.000						-.5193		.2301
270.000		-.4298	-.4378	-.4529			-.4571	
315.000				-.4791	-.5005	-.5509		-.0814

ALPHA (2) = -.267 BETA (2) = .003 MACH = 1.0971 RN/L = 2.2528 PO = 1061.4 P = 498.93

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3694		-.3937	-.3976	-.4077	-.4746	-.3260	
45.000				-.4027				
90.000			-.4159	-.4531	-.4683	-.5403	-.5680	
135.000				-.4267	-.4467	-.5582		.3744
180.000			-.3929	-.3959	-.4771	-.5410	-.7019	
225.000						-.5630		.3539

DATE 23 JUL 76

TABULATED SOURCE DATA - IA80

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H40)

ALPHA (2) = -.267 BETA (2) = .003

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.4041	-.4142	-.4446			-.5380	-.0880
315.000				-.4033	-.4047	-.4657		

ALPHA (2) = -.490 BETA (3) = 4.016 MACH = 1.0971 RN/L = 2.2528 PO = 1061.4 P = 498.93

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4273		-.4368	-.4381	-.4448	-.4916	-.3384	
45.000				-.4489				
90.000			-.4384	-.4505	-.4547	-.4555	-.4620	.1924
135.000				-.4489	-.4727	-.5248		
180.000			-.4258	-.4347	-.5053	-.6831	-.7801	.4490
225.000						-.5517		
270.000		-.4334	-.4340	-.4428			-.6650	-.1288
315.000				-.5199	-.5375	-.5853		

ALPHA (3) = 3.983 BETA (1) = .003 MACH = 1.1029 RN/L = 2.2596 PO = 1063.7 P = 496.39

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4130		-.4194	-.4321	-.4399	-.4931	-.3281	
45.000				-.4739				
90.000			-.4251	-.4345	-.4362	-.4449	-.6770	.4417
135.000				-.4281	-.4642	-.5727		
180.000			-.4412	-.4227	-.4844	-.5693	-.7497	.3409
225.000						-.5636		
270.000		-.4170	-.4193	-.4571			-.6231	-.1427
315.000				-.4979	-.5312	-.6009		

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) EI BASE (RE4H41) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 2.500 MACH = .600

ALPHA (1) = -4.000 BETA (1) = -.022 MACH = .60170 RN/L = 2.5509 PO = 1557.4 P = 1219.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3387		-.2573	-.2729	-.3595	-.6943	-.8314	
45.000				-.3369				
90.000			-.3374	-.3867	-.4190	-.5439	-.7442	
135.000				-.3462	-.3987	-.6009		.2245
180.000			-.3120	-.3383	-.3558	-.4233	-.6459	
225.000						-.7086		.1569
270.000		-.3249	-.3199	-.3351			-.6422	
315.000				-.3268	-.3377	-.4771		-.5522

ALPHA (2) = -.261 BETA (1) = -4.041 MACH = .60297 RN/L = 2.5529 PO = 1556.0 P = 1217.1

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3299		-.2483	-.2733	-.3119	-.6679	-.8657	
45.000				-.3431				
90.000			-.3249	-.4227	-.4674	-.5377	-.7359	
135.000				-.3529	-.3808	-.6391		.3315
180.000			-.3291	-.3510	-.3945	-.4531	-.6770	
225.000						-.6707		.0944
270.000		-.3118	-.3083	-.3198			-.5750	
315.000				-.3133	-.3231	-.4675		-.5744

ALPHA (2) = -.271 BETA (2) = -.025 MACH = .60297 RN/L = 2.5529 PO = 1556.0 P = 1217.1

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3075		-.2410	-.2595	-.3175	-.6665	-.8260	
45.000				-.3240				
90.000			-.3254	-.3693	-.4076	-.5276	-.6835	
135.000				-.3405	-.3842	-.5975		.2612
180.000			-.3075	-.3295	-.3394	-.4207	-.6403	
225.000						-.7030		.1955

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H41)

ALPHA (2) = -.271 BETA (2) = -.025

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3030	-.2993	-.3207			-.6230	
315.000				-.3028	-.3037	-.4100		-.5420

ALPHA (2) = -.343 BETA (3) = 3.991 MACH = .60297 RN/L = 2.5529 PO = 1556.0 P = 1217.1

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3137		-.2463	-.2660	-.2952	-.6448	-.8628	
45.000				-.3154				
90.000			-.3232	-.3507	-.3912	-.4980	-.6890	
135.000				-.3164	-.3414	-.4829		.0782
180.000			-.2967	-.3292	-.3308	-.4372	-.6718	
225.000						-.7258		.2405
270.000		-.3082	-.3026	-.3350			-.6640	
315.000				-.3199	-.3171	-.4311		-.5540

ALPHA (3) = 3.944 BETA (1) = -.022 MACH = .60230 RN/L = 2.5548 PO = 1556.7 P = 1218.3

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3115		-.2345	-.2477	-.3080	-.6679	-.8363	
45.000				-.3214				
90.000			-.3134	-.3804	-.4200	-.4940	-.6424	
135.000				-.3329	-.3836	-.6062		.2929
180.000			-.2947	-.3251	-.3343	-.4167	-.6319	
225.000						-.7087		.2552
270.000		-.2918	-.2928	-.2928			-.5828	
315.000				-.3053	-.3062	-.4204		-.5027

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H42) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1200.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.250 MACH = .900

ALPHA (1) = -3.930 BETA (1) = .003 MACH = .90330 RN/L = 3.1425 PO = 1558.1 P = 918.01

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3427		-.3564	-.3828	-.3942	-.4184	-.7031	
45.000				-.4111				
90.000			-.3513	-.4089	-.4364	-.5235	-.7406	
135.000				-.3622	-.4198	-.5637		.2520
180.000			-.3247	-.3565	-.3576	-.4469	-.6144	
225.000						-.6842		.2562
270.000		-.3517	-.3456	-.3627			-.6028	
315.000				-.4040	-.4735	-.6245		-.4320

ALPHA (2) = -.284 BETA (1) = -4.041 MACH = .90200 RN/L = 3.1294 PO = 1556.9 P = 918.58

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3571		-.3539	-.3757	-.3826	-.4100	-.6804	
45.000				-.3862				
90.000			-.3548	-.3992	-.4709	-.5202	-.7736	
135.000				-.3537	-.3946	-.6373		.4759
180.000			-.3371	-.3583	-.4033	-.4988	-.6897	
225.000						-.6444		.1550
270.000		-.3569	-.3493	-.3648			-.5946	
315.000				-.4305	-.4994	-.6097		-.4030

ALPHA (2) = -.281 BETA (2) = -.028 MACH = .90200 RN/L = 3.1294 PO = 1556.9 P = 918.58

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3290		-.3258	-.3583	-.3689	-.4160	-.6857	
45.000				-.3768				
90.000			-.3360	-.4094	-.4497	-.5015	-.6887	
135.000				-.3689	-.4426	-.5947		.3667
180.000			-.3121	-.3406	-.3447	-.4431	-.6110	
225.000						-.6518		.3300

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H42)

ALPHA (2) = -.281 BETA (2) = -.028

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3363	-.3368	-.3501			-.5619	
315.000				-.3565	-.3923	-.5809		-.4146

ALPHA (2) = -.248 BETA (3) = 3.994 MACH = .90200 RN/L = 3.1294 PO = 1556.9 P = 918.58

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3375		-.3435	-.3691	-.3803	-.4099	-.6887	
45.000				-.4147				
90.000			-.3336	-.3598	-.3721	-.5263	-.7474	
135.000				-.3584	-.3764	-.5061		.0826
180.000			-.3137	-.3612	-.3647	-.4614	-.7050	
225.000						-.7190		.3432
270.000		-.3405	-.3339	-.3399			-.5006	
315.000				-.3511	-.3732	-.5350		-.4170

ALPHA (3) = 3.960 BETA (1) = .000 MACH = .89670 RN/L = 3.1185 PO = 1557.4 P = 924.11

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3275		-.3235	-.3550	-.3670	-.4063	-.6889	
45.000				-.3599				
90.000			-.3285	-.3689	-.4160	-.5063	-.7079	
135.000				-.3785	-.4603	-.6158		.4194
180.000			-.3068	-.3279	-.3398	-.4399	-.6066	
225.000						-.6290		.3729
270.000		-.3346	-.3342	-.3367			-.4743	
315.000				-.3460	-.3613	-.4951		-.4158

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H43) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.250 MACH = 1.100

ALPHA (1) = -4.016 BETA (1) = .003 MACH = 1.0981 RN/L = 3.2788 PO = 1555.3 P = 730.16

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3991		-.4173	-.4501	-.4815	-.5597	-.3053	
45.000				-.4529				
90.000			-.4527	-.4769	-.4732	-.4661	-.4559	
135.000				-.4330	-.4561	-.5602		.3124
180.000			-.4062	-.4138	-.4353	-.5248	-.7471	
225.000						-.5736		.2962
270.000		-.4343	-.4467	-.4508			-.4442	
315.000				-.5074	-.5294	-.6035		-.0697

ALPHA (2) = -.287 BETA (1) = -4.006 MACH = 1.0996 RN/L = 3.2682 PO = 1553.2 P = 727.81

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4228		-.4502	-.4548	-.4648	-.5362	-.3335	
45.000				-.4998				
90.000			-.4597	-.4787	-.4889	-.4993	-.6854	
135.000				-.4785	-.5132	-.6551		.6086
180.000			-.4301	-.4317	-.4565	-.5566	-.7195	
225.000						-.5206		.2434
270.000		-.4382	-.4511	-.4831			-.4585	
315.000				-.4916	-.5173	-.5872		-.0755

ALPHA (2) = -.291 BETA (2) = .000 MACH = 1.0996 RN/L = 3.2682 PO = 1553.2 P = 727.81

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3692		-.4063	-.4131	-.4289	-.5261	-.3199	
45.000				-.4288				
90.000			-.4315	-.4534	-.4666	-.5311	-.5895	
135.000				-.4085	-.4359	-.5413		.3867
180.000			-.3785	-.3882	-.4055	-.4970	-.7260	
225.000						-.5648		.3816

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H43)

ALPHA (2) = -.291 BETA (2) = .000

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.4031	-.4188	-.4371			-.5448	
315.000				-.4126	-.4228	-.5018		-.0796

ALPHA (2) = -.310 BETA (3) = 4.006 MACH = 1.0996 RN/L = 3.2682 PO = 1553.2 P = 727.81

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4325		-.4479	-.4538	-.4633	-.5331	-.3304	
45.000				-.4640				
90.000			-.4462	-.4596	-.4610	-.4656	-.4564	
135.000				-.4605	-.4820	-.5355		.2261
180.000			-.4314	-.4367	-.4480	-.5746	-.8681	
225.000						-.5720		.4800
270.000		-.4399	-.4423	-.4557			-.6772	
315.000				-.5427	-.5619	-.6311		-.1235

ALPHA (3) = 4.016 BETA (1) = .003 MACH = 1.1070 RN/L = 3.2713 PO = 1554.6 P = 721.83

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4121		-.4256	-.4391	-.4538	-.5351	-.3219	
45.000				-.4734				
90.000			-.4442	-.4614	-.4720	-.4801	-.6820	
135.000				-.4439	-.4688	-.5598		.4471
180.000			-.4172	-.4161	-.4396	-.5497	-.7996	
225.000						-.5658		.3506
270.000		-.4178	-.4310	-.4518			-.6659	
315.000				-.4902	-.5141	-.6256		-.1350

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H44) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.250 MACH = 1.250

ALPHA (1) = -3.953 BETA (1) = .000 MACH = 1.2532 RN/L = 3.2918 PO = 1554.6 P = 597.59

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3314		-.3515	-.3944	-.4446	-.4865	-.1484	
45.000				-.3962				
90.000			-.3814	-.4073	-.4112	-.4138	-.4924	
135.000				-.3541	-.3858	-.4596		.4381
180.000			-.3232	-.3302	-.3317	-.3894	-.5757	
225.000						-.4444		.3358
270.000		-.3467	-.3521	-.3947			-.5002	
315.000				-.3886	-.4112	-.4655		-.0281

ALPHA (2) = -.287 BETA (1) = -4.003 MACH = 1.2509 RN/L = 3.2855 PO = 1552.7 P = 598.69

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3585		-.3783	-.4051	-.4361	-.4778	-.1985	
45.000				-.4732				
90.000			-.3868	-.4123	-.4139	-.4047	-.4972	
135.000				-.3999	-.4198	-.4647		.6142
180.000			-.3478	-.3500	-.3710	-.4462	-.5314	
225.000						-.4091		.2608
270.000		-.3555	-.3588	-.4189			-.5295	
315.000				-.4555	-.4610	-.4953		-.0271

ALPHA (2) = -.277 BETA (2) = .003 MACH = 1.2509 RN/L = 3.2855 PO = 1552.7 P = 598.69

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3067		-.3220	-.3623	-.4054	-.4645	-.1543	
45.000				-.4293				
90.000			-.3645	-.3865	-.3853	-.3865	-.4860	
135.000				-.3408	-.3762	-.4398		.4968
180.000			-.3045	-.3074	-.2938	-.3607	-.5475	
225.000						-.4422		.3947

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H44)

ALPHA (2) = -.277 BETA (2) = .003

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3228	-.3244	-.3766			-.5207	
315.000				-.3883	-.4044	-.4825		-.0126

ALPHA (2) = -.376 BETA (3) = 4.012 MACH = 1.2509 RN/L = 3.2855 PO = 1552.7 P = 598.69

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3417		-.3587	-.3783	-.4024	-.4564	-.1829	
45.000				-.4609				
90.000			-.3527	-.3508	-.3512	-.3740	-.4990	
135.000				-.3595	-.3794	-.4364		.2032
180.000			-.3317	-.3434	-.3543	-.4327	-.6220	
225.000						-.4100		.4674
270.000		-.3561	-.3514	-.4039			-.4800	
315.000				-.4695	-.4908	-.5363		-.0138

ALPHA (3) = 3.947 BETA (1) = -.003 MACH = 1.2488 RN/L = 3.2905 PO = 1553.9 P = 600.81

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3301		-.3314	-.3619	-.3802	-.4405	-.1826	
45.000				-.4388				
90.000			-.3454	-.3541	-.3602	-.3705	-.4873	
135.000				-.3426	-.3632	-.4129		.4645
180.000			-.3561	-.3502	-.3561	-.4257	-.5946	
225.000						-.4129		.3719
270.000		-.3290	-.3289	-.3780			-.4730	
315.000				-.4721	-.5101	-.5544		-.0196

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H45) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.250 MACH = 1.400

ALPHA (1) = -3.990 BETA (1) = -.003 MACH = 1.4024 RN/L = 3.2259 PO = 1554.6 P = 486.87

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3112		-.3135	-.3253	-.3383	-.3636	-.1952	
45.000				-.3498				
90.000			-.3244	-.3216	-.3201	-.3210	-.3884	
135.000				-.3530	-.3644	-.4161		.4533
180.000			-.3268	-.3276	-.3150	-.4139	-.4348	
225.000						-.4063		.3299
270.000		-.3178	-.3227	-.3310			-.3941	
315.000				-.3342	-.3751	-.4141		-.0789

ALPHA (2) = -.284 BETA (1) = -4.000 MACH = 1.4054 RN/L = 3.2190 PO = 1553.7 P = 484.53

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3028		-.3028	-.3163	-.3331	-.3714	-.1658	
45.000				-.3416				
90.000			-.3580	-.3501	-.3484	-.3429	-.3500	
135.000				-.4047	-.4172	-.2675		.5506
180.000			-.2967	-.2992	-.3182	-.3553	-.3714	
225.000						-.3510		.2606
270.000		-.2810	-.3033	-.3101			-.3657	
315.000				-.3293	-.3474	-.4006		-.0486

ALPHA (2) = -.297 BETA (2) = .000 MACH = 1.4054 RN/L = 3.2190 PO = 1553.7 P = 484.53

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2761		-.2805	-.3002	-.3180	-.3528	-.1788	
45.000				-.3119				
90.000			-.3208	-.3304	-.3222	-.3141	-.3891	
135.000				-.3242	-.3401	-.3641		.5284
180.000			-.2770	-.2670	-.2422	-.3173	-.4202	
225.000						-.3371		.3736

ARC11-023(A80 OTS(SRB=OFF OPB=OFF) ET BASE (RE4H45)

ALPHA (2) = -.297 BETA (2) = .000

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2830	-.2889	-.3257			-.4077	
315.000				-.3063	-.3316	-.3784		-.0492

ALPHA (2) = -.294 BETA (3) = 4.009 MACH = 1.4054 RN/L = 3.2190 PO = 1553.7 P = 484.53

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2956		-.2989	-.3119	-.3249	-.3665	-.1659	
45.000				-.3447				
90.000			-.3030	-.2993	-.2974	-.3027	-.3547	
135.000				-.3045	-.3223	-.3601		.2052
180.000			-.2878	-.2953	-.3223	-.3633	-.5021	
225.000						-.2825		.4330
270.000		-.3134	-.3079	-.3471			-.3826	
315.000				-.3296	-.3790	-.3986		-.0502

ALPHA (3) = 3.980 BETA (1) = .000 MACH = 1.4028 RN/L = 3.2136 PO = 1553.2 P = 486.18

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9830	1.0000
PHI								
.000	-.2653		-.2670	-.3016	-.3271	-.3768	-.0765	
45.000				-.3435				
90.000			-.2666	-.3310	-.3414	-.3722	-.3934	
135.000				-.3523	-.3429	-.3504		.5202
180.000			-.2758	-.2649	-.2442	-.3204	-.4197	
225.000						-.3334		.3955
270.000		-.2651	-.2634	-.2977			-.4091	
315.000				.3222	-.4015	-.3828		.0170

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H46) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 2.500 MACH = .600

ALPHA (1) = -3.894 BETA (1) = -.022 MACH = .60060 RN/L = 2.5569 PO = 1558.8 P = 1221.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3575		-.2753	-.3021	-.3817	-.7372	-.8546	
45.000				-.3625				
90.000			-.3641	-.4184	-.4440	-.5869	-.7646	
135.000				-.3681	-.4168	-.6265		.2148
180.000			-.3438	-.3584	-.3610	-.4455	-.6632	
225.000						-.7456		.1407
270.000		-.3391	-.3359	-.3533			-.6779	
315.000				-.3505	-.3545	-.5089		-.5714

ALPHA (2) = -.350 BETA (1) = -4.041 MACH = .59890 RN/L = 2.5548 PO = 1557.9 P = 1222.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3426		-.2694	-.2907	-.3382	-.6989	-.8983	
45.000				-.3617				
90.000			-.3557	-.4401	-.4853	-.5622	-.7597	
135.000				-.3836	-.3940	-.5580		.3314
180.000			-.3460	-.3677	-.3915	-.4443	-.7139	
225.000						-.6902		.0779
270.000		-.3301	-.3285	-.3460			-.6230	
315.000				-.3278	-.3385	-.4933		-.5999

ALPHA (2) = -.320 BETA (2) = -.025 MACH = .59890 RN/L = 2.5548 PO = 1557.9 P = 1222.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3452		-.2747	-.2885	-.3616	-.7184	-.8682	
45.000				-.3516				
90.000			-.3539	-.4068	-.4437	-.5565	-.7299	
135.000				-.3690	-.4247	-.6287		.2465
180.000			-.3391	-.3555	-.3611	-.4362	-.6777	
225.000						-.7379		.1773

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H46)

ALPHA (2) = -.320 BETA (2) = -.025

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3314	-.3261	-.3533			-.6777	
315.000				-.3333	-.3407	-.4619		-.5775

ALPHA (2) = -.537 BETA (3) = 3.994 MACH = .59890 RN/L = 2.5548 PO = 1557.9 P = 1222.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3725		-.3135	-.2984	-.3501	-.6918	-.9141	
45.000				-.3483				
90.000			-.3443	-.3847	-.4391	-.5511	-.7558	
135.000				-.3600	-.3962	-.5231		.0486
180.000			-.3242	-.3651	-.3757	-.4544	-.7062	
225.000						-.7660		.2173
270.000		-.3641	-.3350	-.3698			-.7229	
315.000				-.3585	-.3771	-.4686		-.6016

ALPHA (3) = 4.076 BETA (1) = -.028 MACH = .60170 RN/L = 2.5615 PO = 1555.3 P = 1217.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3259		-.2337	-.2699	-.3314	-.7214	-.8632	
45.000				-.3409				
90.000			-.3384	-.3930	-.4370	-.5216	-.6652	
135.000				-.3460	-.3973	-.6238		.2913
180.000			-.3177	-.3317	-.3380	-.4261	-.6409	
225.000						-.7388		.2500
270.000		-.3013	-.3053	-.3139			-.6019	
315.000				-.3078	-.3103	-.4523		-.5226

ARC11-0231A80 OTS(SRB=N ORB=N) ET BASE (RE4H47) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.250 MACH = .900

ALPHA (1) = -4.033 BETA (1) = .000 MACH = .90410 RN/L = 3.1247 PO = 1556.7 P = 916.32

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3629		-.3667	-.4062	-.4130	-.4701	-.6976	
45.000				-.4429				
90.000			-.3880	-.4171	-.4624	-.5777	-.7804	
135.000				-.3880	-.4355	-.5891		.2572
180.000			-.3593	-.3710	-.3650	-.4524	-.6153	
225.000						-.7024		.2626
270.000		-.3735	-.3783	-.3875			-.6228	
315.000				-.4263	-.4852	-.6606		-.4289

ALPHA (2) = -.343 BETA (1) = -4.044 MACH = .90470 RN/L = 3.1302 PO = 1559.3 P = 917.26

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3815		-.3843	-.4183	-.4237	-.4603	-.6864	
45.000				-.4254				
90.000			-.3922	-.4156	-.5032	-.5712	-.8400	
135.000				-.3788	-.4167	-.6606		.4737
180.000			-.3679	-.3959	-.4041	-.5375	-.8611	
225.000						-.6959		.1441
270.000		-.3845	-.3845	-.4080			-.6363	
315.000				-.4798	-.5617	-.6820		-.4097

ALPHA (2) = -.340 BETA (2) = -.028 MACH = .90470 RN/L = 3.1302 PO = 1559.3 P = 917.26

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3643		-.3704	-.4098	-.4100	-.4892	-.6674	
45.000				-.4367				
90.000			-.3920	-.4209	-.4706	-.5640	-.7639	
135.000				-.4079	-.4736	-.6340		.3622
180.000			-.3497	-.3677	-.3604	-.4672	-.6264	
225.000						-.6781		.3291

ARC11-0231A80 OTS(SRB=N ORB=N) ET BASE (RE4H47)

ALPHA (2) = -.340 BETA (2) = -.028

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3691	-.3860	-.3815			-.5926	
315.000				-.4057	-.4512	-.6875		-.4007

ALPHA (2) = -.340 BETA (3) = 3.991 MACH = .90470 RN/L = 3.1302 PO = 1559.3 P = 917.26

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3557		-.3580	-.3895	-.3944	-.4481	-.6798	
45.000				-.4531				
90.000			-.3602	-.3797	-.3810	-.5373	-.7817	
135.000				-.3759	-.3861	.5490		.0816
180.000			-.4028	-.3740	-.3965	-.4899	-.7271	
225.000						-.7216		.3421
270.000		-.3556	-.3702	-.3653			-.5144	
315.000				-.3746	-.3900	-.5769		-.4137

ALPHA (3) = 3.927 BETA (1) = -.028 MACH = .90080 RN/L = 3.1258 PO = 1559.5 P = 921.25

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3670		-.3721	-.4013	-.4190	-.4594	-.6815	
45.000				-.4059				
90.000			-.3700	-.3948	-.4410	-.5654	-.7943	
135.000				-.4111	-.5019	-.6483		.4237
180.000			-.3388	-.3763	-.3638	-.4608	-.6355	
225.000						-.6646		.3629
270.000		-.3726	-.3717	-.3793			-.5068	
315.000				-.3866	-.4081	-.5908		-.4182

ARC11-023:A80 OTS(SRB=N ORB=N) ET BASE (RE4H48) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.250 MACH = 1.100

ALPHA (1) = -3.934 BETA (1) = .003 MACH = 1.0985 RN/L = 3.2696 PO = 1558.8 P = 731.42

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3927		-.4028	-.4339	-.4648	-.5514	-.3059	
45.000				-.4484				
90.000			-.4289	-.4383	-.4317	-.4359	-.4566	
135.000				-.4277	-.4524	-.5570		.3065
180.000			-.3975	-.4123	-.4810	-.5353	-.7155	
225.000						-.5807		.2952
270.000		-.4131	-.4245	-.4326			-.4450	
315.000				-.4872	-.5116	-.5855		-.0689

ALPHA (2) = -.413 BETA (1) = -4.006 MACH = 1.1014 RN/L = 3.2674 PO = 1557.4 P = 728.17

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3912		-.4142	-.4196	-.4309	-.4948	-.3296	
45.000				-.4678				
90.000			-.4194	-.4311	-.4466	-.4683	-.6761	
135.000				-.4440	-.4742	-.5190		.6051
180.000			-.4051	-.4037	-.4189	-.5188	-.7029	
225.000						-.5086		.2328
270.000		-.4027	-.4187	-.4419			-.4487	
315.000				-.4687	-.4837	-.5610		-.0701

ALPHA (2) = -.443 BETA (2) = .000 MACH = 1.1014 RN/L = 3.2674 PO = 1557.4 P = 728.17

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3574		-.3768	-.3956	-.4181	-.5089	-.3192	
45.000				-.3940				
90.000			-.3956	-.4295	-.4406	-.5268	-.5706	
135.000				-.4041	-.4331	-.5493		.3872
180.000			-.3823	-.3924	-.4668	-.5208	-.6943	
225.000						-.5682		.3767

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H48)

ALPHA (2) = -.443 BETA (2) = .000

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3736	-.3867	-.4126			-.5327	
315.000				-.3951	-.4096	-.4796		-.0789

ALPHA (2) = -.420 BETA (3) = 4.016 MACH = 1.1014 RN/L = 3.2674 PO = 1557.4 P = 728.17

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4048		-.4213	-.4259	-.4354	-.4995	-.3292	
45.000				-.4377				
90.000			-.4193	-.4349	-.4391	-.4438	-.4534	
135.000				-.4354	-.4603	-.5122		.2141
180.000			-.4119	-.4222	-.4960	-.6799	-.7942	
225.000						-.5562		.4696
270.000		-.4126	-.4146	-.4262			-.6327	
315.000				-.5066	-.5335	-.6055		-.1186

ALPHA (3) = 3.884 BETA (1) = .000 MACH = 1.1080 RN/L = 3.2705 PO = 1558.1 P = 722.58

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3931		-.3988	-.4188	-.4331	-.5180	-.3188	
45.000				-.4594				
90.000			-.4023	-.4223	-.4241	-.4537	-.6768	
135.000				-.4126	-.4507	-.5549		.4510
180.000			-.4271	-.4145	-.4720	-.5253	-.7588	
225.000						-.5611		.3510
270.000		-.3975	-.3987	-.4347			-.6735	
315.000				-.4782	-.5145	-.6270		-.1327

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H49) (21 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 ALPHA = .000

BETA (1) = -.063 MACH (1) = .908 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3303		-.3293	-.3540	-.3618	-.4162	-.6710	
45.000				-.3756				
90.000			-.3365	-.3831	-.4275	-.5062	-.7373	
135.000				-.3696	-.4520	-.5978		.3725
180.000			-.3098	-.3400	-.3428	-.4477	-.6150	
225.000						-.6478		.3525
270.000		-.3319	-.3344	-.3418			-.5254	
315.000				-.3572	-.3948	-.5729		-.4006

BETA (1) = -.063 MACH (2) = .947 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3795		-.3843	-.4063	-.4210	-.4905	-.5839	
45.000				-.4562				
90.000			-.3818	-.4199	-.4576	-.5674	-.7903	
135.000				-.4105	-.4933	-.6267		.3807
180.000			-.3547	-.3788	-.3839	-.4938	-.6656	
225.000						-.6718		.3694
270.000		-.3814	-.3797	-.3919			-.5614	
315.000				-.4468	-.5465	-.7139		-.3291

BETA (1) = -.063 MACH (3) = .998 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4210		-.4377	-.4637	-.4827	-.6070	-.4797	
45.000				-.4902				
90.000			-.4399	-.4642	-.4864	-.6229	-.7368	
135.000				-.4642	-.5242	-.6549		.3652
180.000			-.4160	-.4310	-.4268	-.5405	-.7566	
225.000						-.6924		.3826

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H49)

BETA (1) = -.063 MACH (3) = .998

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.4243	-.4377	-.4551			-.6412	
315.000				-.5197	-.5167	-.6291		-.2275

BETA (1) = -.063 MACH (4) = 1.050 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4160		-.4429	-.4542	-.4916	-.6408	-.3862	
45.000				-.4770				
90.000			-.4679	-.4890	-.5128	-.6203	-.5841	
135.000				-.4535	-.4886	-.6082		.3361
180.000			-.4193	-.4331	-.4312	-.5304	-.7500	
225.000						-.6402		.3765
270.000		-.4581	-.4644	-.5055			-.5214	
315.000				-.5095	-.5427	-.6609		-.1364

BETA (1) = -.063 MACH (5) = 1.102 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3592		-.3922	-.4115	-.4470	-.5895	-.3166	
45.000				-.4243				
90.000			-.4207	-.4447	-.4576	-.5126	-.6036	
135.000				-.3979	-.4270	-.5330		.3916
180.000			-.3670	-.3764	-.3838	-.4832	-.7117	
225.000						-.5700		.3862
270.000		-.3850	-.4119	-.4233			-.5474	
315.000				-.4212	-.4287	-.5477		-.0802

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H49)

BETA (1) = -.063 MACH (6) = 1.146 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3523		-.3597	-.3955	-.4313	-.5724	-.2807	
45.000				-.4303				
90.000			-.3674	-.3738	-.3844	-.3931	-.5962	
135.000				-.3547	-.3739	-.4900		.4421
180.000			-.3766	-.3645	-.3890	-.4735	-.6733	
225.000						-.5376		.4216
270.000		-.3501	-.3572	-.3996			-.5879	
315.000				-.4385	-.4657	-.5802		-.0718

BETA (1) = -.063 MACH (7) = 1.196 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3426		-.3431	-.3869	-.4316	-.5438	-.2231	
45.000				-.4521				
90.000			-.3509	-.3582	-.3570	-.3882	-.5357	
135.000				-.3349	-.3648	-.4605		.4422
180.000			-.3683	-.3640	-.3774	-.4585	-.6355	
225.000						-.5089		.4065
270.000		-.3357	-.3387	-.3949			-.5612	
315.000				-.4160	-.4412	-.5571		-.0435

BETA (1) = -.063 MACH (8) = 1.253 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3087		-.3074	-.3644	-.4204	-.5015	-.1625	
45.000				-.4077				
90.000			-.3274	-.3326	-.3310	-.3492	-.4741	
135.000				-.3144	-.3406	-.4225		.4809
180.000			-.3339	-.3306	-.3223	-.4000	-.5637	
225.000						-.4580		.4025
270.000		-.3053	-.3068	-.3583			-.5024	
315.000				-.4137	-.4337	-.5340		-.0076

ARC11-0231A80 OTS(SRB=N ORB=N) ET BASE (RE4H50) (21 JAN 75)

REFERENCE DATA

SREF = 2590.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 ALPHA = .000

BETA (1) = -.063 MACH (1) = .893 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3680		-.3670	-.3930	-.3991	-.4508	-.7082	
45.000				-.4218				
90.000			-.3763	-.4292	-.4801	-.5691	-.7867	
135.000				-.4137	-.4972	-.6432		.3624
180.000			-.3699	-.3822	-.4586	-.5043	-.6061	
225.000						-.7007		.3188
270.000		-.3761	-.3760	-.3843			-.5679	
315.000				-.3969	-.4315	-.6243		-.4313

BETA (1) = -.063 MACH (2) = .948 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4523		-.4704	-.4848	-.5047	-.6124	-.5837	
45.000				-.5445				
90.000			-.4687	-.4926	-.5271	-.6584	-.8884	
135.000				-.4890	-.5715	-.6953		.3706
180.000			-.4424	-.4411	-.5300	-.5728	-.7839	
225.000						-.7513		.3561
270.000		-.4590	-.4570	-.4731			-.6704	
315.000				-.5668	-.6643	-.8172		-.3316

BETA (1) = -.063 MACH (3) = .995 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.5084		-.5317	-.5533	-.5906	-.7433	-.4868	
45.000				-.5478				
90.000			-.5436	-.5669	-.5851	-.6897	-.7758	
135.000				-.5497	-.6091	-.7355		.3546
180.000			-.5084	-.5019	-.5972	-.6399	.0000	
225.000						-.7673		.3709

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H50)

BETA (1) = -.063 MACH (3) = .995

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.5197	-.5405	-.5623			-.7247	
315.000				-.5785	-.5899	-.7316		-.2332

BETA (1) = -.063 MACH (4) = 1.052 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4349		-.4625	-.4834	-.5172	-.6648	-.3833	
45.000				-.4957				
90.000			-.4944	-.5272	-.5471	-.6082	-.5725	
135.000				-.4801	-.5177	-.6380		.3351
180.000			-.4464	-.4485	-.5346	-.5946	-.8371	
225.000						-.6731		.3748
270.000		-.4782	-.4887	-.5242			-.5242	
315.000				-.5290	-.5500	-.6844		-.1334

BETA (1) = -.063 MACH (5) = 1.098 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3644		-.3834	-.4056	-.4429	-.5844	-.3250	
45.000				-.4063				
90.000			-.4017	-.4235	-.4266	-.5041	-.5956	
135.000				-.4044	-.4295	-.5500		.3832
180.000			-.3823	-.3942	-.4692	-.5239	-.7641	
225.000						-.5801		.3783
270.000		-.3780	-.3935	-.4126			-.5414	
315.000				-.4114	-.4298	-.5300		-.0860

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H50)

BETA (1) = -.063 MACH (6) = 1.149 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3405		-.3474	-.3804	-.4171	-.5602	-.2765	
45.000				-.4049				
90.000			-.3427	-.3485	-.3522	-.3776	-.5975	
135.000				-.3688	-.3882	-.5111		.4450
180.000			-.3779	-.3928	-.4255	-.4512	-.6552	
225.000						-.5496		.4110
270.000		-.3389	-.3331	-.3726			-.5802	
315.000				-.4586	-.4855	-.5961		-.0694

BETA (1) = -.063 MACH (7) = 1.197 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3028		-.2999	-.3441	-.3891	-.5124	-.2205	
45.000				-.3848				
90.000			-.3015	-.3122	-.3083	-.3327	-.5412	
135.000				-.3308	-.3466	-.4682		.4405
180.000			-.3446	-.3658	-.3892	-.4150	-.5965	
225.000						-.4993		.3912
270.000		-.2983	-.2963	-.3394			-.5506	
315.000				-.4252	-.4511	-.5746		-.0408

BETA (1) = -.063 MACH (8) = 1.250 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2690		-.2623	-.3146	-.3688	-.4788	-.1621	
45.000				-.3196				
90.000			-.2747	-.2833	-.2840	-.2997	-.4870	
135.000				-.2898	-.3269	-.4446		.4608
180.000			-.3161	-.3383	-.3645	-.3709	-.5239	
225.000						-.4468		.3804
270.000		-.2662	-.2603	-.3047			-.5021	
315.000				-.3786	-.4280	-.5316		-.0095

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H51) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = .980

ALPHA (1) = -3.950 BETA (1) = -.063 MACH = .98240 RN/L = 4.3057 PO = 2116.2 P = 1141.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4031		-.4190	-.4323	-.4545	-.5295	-.5180	
45.000				-.4522				
90.000			-.4266	-.4607	-.4993	-.5893	-.6538	
135.000				-.4237	-.4618	-.5915		.2479
180.000			-.3967	-.4093	-.4102	-.5124	-.7154	
225.000						-.6678		.2428
270.000		-.4062	-.4141	-.4493			-.6219	
315.000				-.4591	-.5183	-.6143		-.2483

ALPHA (2) = -.416 BETA (1) = -4.075 MACH = .98283 RN/L = 4.3109 PO = 2116.4 P = 1140.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4183		-.4343	-.4500	-.4646	-.5170	-.5247	
45.000				-.5244				
90.000			-.4204	-.4452	-.4996	-.6192	-.8470	
135.000				-.4204	-.4595	-.6986		.5110
180.000			-.4126	-.4213	-.4634	-.5803	-.7236	
225.000						-.5625		.1964
270.000		-.4073	-.4087	-.4417			-.6801	
315.000				-.4452	-.4454	-.5015		-.2501

ALPHA (2) = -.386 BETA (2) = -.063 MACH = .98283 RN/L = 4.3109 PO = 2116.4 P = 1140.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4110		-.4184	-.4559	-.4731	-.5907	-.4972	
45.000				-.4805				
90.000			-.4283	-.4589	-.4841	-.6119	-.7509	
135.000				-.4484	-.5052	-.5403		.3528
180.000			-.4054	-.4134	-.4114	-.5306	-.7379	
225.000						-.6977		.3771

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H51)

ALPHA (2) = -.386 BETA (2) = -.063

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.4139	-.4250	-.4406			-.6180	
315.000				-.5301	-.5679	-.6691		-.2400

ALPHA (2) = -.370 BETA (3) = 3.950 MACH = .98283 RN/L = 4.3109 PO = 2116.4 P = 1140.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4017		-.4090	-.4158	-.4206	-.4660	-.5229	
45.000				-.4363				
90.000			-.4243	-.4566	-.4808	-.6008	-.6868	
135.000				-.4509	-.4909	-.5864		.1452
180.000			-.4184	-.4369	-.4402	-.5593	-.8472	
225.000						-.6763		.3740
270.000		-.4145	-.4132	-.4217			-.6143	
315.000				-.4907	-.5215	-.6347		-.2700

ALPHA (3) = 4.076 BETA (1) = -.063 MACH = .98530 RN/L = 4.3166 PO = 2116.2 P = 1137.1

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4236		-.4265	-.4649	-.4909	-.5840	-.5085	
45.000				-.4905				
90.000			-.4305	-.4594	-.5035	-.6261	-.8582	
135.000				-.4625	-.5329	-.6729		.4214
180.000			-.4132	-.4208	-.4201	-.5337	-.7506	
225.000						-.6927		.4146
270.000		-.4298	-.4285	-.4429			-.6051	
315.000				-.4846	-.5991	-.8316		-.2835

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H52) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = .980

ALPHA (1) = -3.930 BETA (1) = -.063 MACH = .97970 RN/L = 4.2999 PO = 2109.1 P = 1140.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.5070		-.5225	-.5399	-.5655	-.6667	-.5245	
45.000				-.5615				
90.000			-.5358	-.5743	-.5973	-.6402	-.7114	
135.000				-.5416	-.5754	-.7044		.2360
180.000			-.5048	-.5061	-.6023	-.6378	-.9202	
225.000						-.7440		.2321
270.000		-.5299	-.5422	-.5689			-.6744	
315.000				-.5813	-.6461	-.7436		-.2561

ALPHA (2) = -.519 BETA (1) = -4.078 MACH = .98183 RN/L = 4.3033 PO = 2108.9 P = 1137.8

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4900		-.5083	-.5244	-.5338	-.6154	-.5312	
45.000				-.5972				
90.000			-.4939	-.5176	-.5585	-.6948	-.8948	
135.000				-.4807	-.5267	-.7627		.5048
180.000			-.4924	-.4831	-.5384	-.7298	.0000	
225.000						-.7125		.1852
270.000		-.4776	-.4807	-.5231			-.7048	
315.000				-.5125	-.5300	-.6152		-.2641

ALPHA (2) = -.476 BETA (2) = -.063 MACH = .98183 RN/L = 4.3033 PO = 2108.9 P = 1137.8

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4940		-.5219	-.5481	-.5707	-.7278	-.4962	
45.000				-.5401				
90.000			-.5370	-.5571	-.5661	-.6862	-.7878	
135.000				-.5438	-.5940	-.7251		.3375
180.000			-.5017	-.4944	-.5869	-.6307	-.8942	
225.000						-.7741		.3617

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H52)

ALPHA (2) = -.476 BETA (2) = -.063

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.5091	-.5295	-.5468			-.6828	
315.000				-.5861	-.5894	-.6888		-.2398

ALPHA (2) = -.499 BETA (3) = 3.953 MACH = .98183 RN/L = 4.3033 PO = 2108.9 P = 1137.8

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4830		-.4850	-.4870	-.5095	-.5789	-.5276	
45.000				-.5170				
90.000			-.5044	-.5368	-.5674	-.6727	-.7384	
135.000				-.5292	-.5704	-.6520		.1294
180.000			-.4959	-.5248	-.6088	-.6865	.0000	
225.000						-.6922		.3626
270.000		-.4898	-.4851	-.5133			-.7848	
315.000				-.5771	-.5904	-.6928		-.2756

ALPHA (3) = 3.993 BETA (1) = -.063 MACH = .98140 RN/L = 4.3065 PO = 2109.8 P = 1138.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.5240		-.5297	-.5596	-.5920	-.7318	-.5189	
45.000				-.6057				
90.000			-.5297	-.5540	-.5786	-.6756	-.9261	
135.000				-.5610	-.6368	-.7670		.4157
180.000			-.5153	-.5102	-.6014	-.6423	-.9020	
225.000						-.7751		.3951
270.000		-.5227	-.5281	-.5546			-.7344	
315.000				-.6315	-.7148	-.8658		-.2956

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H33) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.944 BETA (1) = .000 MACH = .60320 RN/L = 3.4712 PO = 2123.2 P = 1660.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3324		-.2708	-.2697	-.3276	-.6508	-.8236	
45.000				-.3316				
90.000			-.3280	-.3730	-.4044	-.5694	-.7532	
135.000				-.3421	-.3963	-.5943		.2276
180.000			-.3122	-.3424	-.3660	-.4263	-.6671	
225.000						-.6963		.1600
270.000		-.3210	-.3045	-.3293			-.6343	
315.000				-.3246	-.3387	-.4593		-.5463

ALPHA (2) = -.320 BETA (1) = -4.050 MACH = .60547 RN/L = 3.4696 PO = 2122.3 P = 1656.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3114		-.2496	-.2728	-.2899	-.5975	-.8467	
45.000				-.3279				
90.000			-.3134	-.4078	-.4497	-.4980	-.7349	
135.000				-.3587	-.3859	-.6237		.3358
180.000			-.3198	-.3396	-.3769	-.4494	-.6580	
225.000						-.6518		.0998
270.000		-.3044	-.2980	-.3054			-.5826	
315.000				-.3050	-.3121	-.4440		-.5590

ALPHA (2) = -.297 BETA (2) = .000 MACH = .60547 RN/L = 3.4696 PO = 2122.3 P = 1656.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2987		-.2493	-.2550	-.2933	-.6203	-.8138	
45.000				-.3108				
90.000			-.3128	-.3672	-.3927	-.5211	-.7076	
135.000				-.3296	-.3843	-.5961		.2630
180.000			-.3014	-.3296	-.3470	-.4255	-.6595	
225.000						-.6823		.2044

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H53)

ALPHA (2) = -.297 BETA (2) = .000

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2930	-.2889	-.3121			-.6184	
315.000				-.3020	-.2983	-.3880		-.5358

ALPHA (2) = -.314 BETA (3) = 3.978 MACH = .60547 RN/L = 3.4696 PO = 2122.3 P = 656.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2917		-.2493	-.2693	-.2724	-.5767	-.8317	
45.000				-.2964				
90.000			-.3076	-.3290	-.3491	-.5201	-.6917	
135.000				-.3084	-.3277	-.4778		.0784
180.000			-.2869	-.3150	-.3250	-.4432	-.6566	
225.000						-.6884		.2525
270.000		-.2871	-.2966	-.3137			-.6579	
315.000				-.3040	-.3107	-.4057		-.5419

ALPHA (3) = 4.053 BETA (1) = .000 MACH = .60520 RN/L = 3.4659 PO = 2121.8 P = 656.8

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2870		-.2293	-.2429	-.2798	-.6172	-.8214	
45.000				-.3087				
90.000			-.2969	-.3583	-.3985	-.4792	-.6366	
135.000				-.3248	-.3697	-.5964		.3040
180.000			-.2922	-.3144	-.3301	-.4172	-.6446	
225.000						-.6825		.2712
270.000		-.2783	-.2751	-.2745			-.5666	
315.000				-.2959	-.2983	-.4028		-.4959

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H54) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.940 BETA (1) = -.044 MACH = .89610 RN/L = 4.1894 PO = 2105.5 P = 1250.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3290		-.3286	-.3551	-.3645	-.3961	-.7190	
45.000				-.3824				
90.000			-.3375	-.3826	-.4173	-.5103	-.7559	
135.000				-.3433	-.4075	-.5619		.2726
180.000			-.3119	-.3375	-.3397	-.4288	-.5959	
225.000						-.6711		.2689
270.000		-.3324	-.3287	-.3475			-.5872	
315.000				-.3680	-.4054	-.5568		-.4413

ALPHA (2) = -.284 BETA (1) = -4.059 MACH = .89087 RN/L = 4.1758 PO = 2102.0 P = 1255.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3587		-.3407	-.3514	-.3675	-.3901	-.7146	
45.000				-.3716				
90.000			-.3475	-.4112	-.4754	-.5066	-.7554	
135.000				-.3536	-.3973	-.6405		.4685
180.000			-.3360	-.3612	-.4014	-.4797	-.7029	
225.000						-.6460		.1509
270.000		-.3578	-.3362	-.3511			-.5842	
315.000				-.3936	-.4590	-.5819		-.4298

ALPHA (2) = -.320 BETA (2) = -.041 MACH = .89087 RN/L = 4.1758 PO = 2102.0 P = 1255.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3152		-.3017	-.3453	-.3433	-.4011	-.6949	
45.000				-.3724				
90.000			-.3326	-.3903	-.4253	-.4998	-.6986	
135.000				-.3575	-.4282	-.5883		.3658
180.000			-.3056	-.3277	-.3281	-.4367	-.5968	
225.000						-.6453		.3405

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H54)

ALPHA (2) = -.320 BETA (2) = -.041

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3170	-.3287	-.3285			-.5439	
315.000				-.3456	-.3626	-.5113		-.4171

ALPHA (2) = -.314 BETA (3) = 3.975 MACH = .89087 RN/L = 4.1758 PO = 2102.0 P = 1255.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3456		-.3668	-.3575	-.3757	-.3945	-.7202	
45.000				-.3854				
90.000			-.3331	-.3644	-.3778	-.5181	-.7929	
135.000				-.3553	-.3839	-.5085		.0775
180.000			-.3489	-.3504	-.3739	-.4621	-.7169	
225.000						-.7135		.3342
270.000		-.3456	-.3289	-.3442			-.4883	
315.000				-.3497	-.3958	-.4716		-.4398

ALPHA (3) = 3.980 BETA (1) = -.038 MACH = .89310 RN/L = 4.1769 PO = 2101.3 P = 1251.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3169		-.3055	-.3393	-.3465	-.3971	-.6943	
45.000				-.3454				
90.000			-.3240	-.3520	-.4048	-.4997	-.7192	
135.000				-.3662	-.4494	-.6045		.4279
180.000			-.3016	-.3206	-.3297	-.4303	-.5930	
225.000						-.6210		.3813
270.000		-.3140	-.3171	-.3222			-.4388	
315.000				-.3257	-.3471	-.4549		-.4154

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H55) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.772 BETA (1) = -.066 MACH = 1.1026 RN/L = 4.3661 PO = 2116.2 P = 987.87

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3669		-.3866	-.4332	-.4829	-.6166	-.2945	
45.000				-.4288				
90.000			-.4218	-.4640	-.4639	-.4549	-.4514	
135.000				-.3998	-.4273	-.5345		.3273
180.000			-.3778	-.3835	-.3939	-.4790	-.6864	
225.000						-.5419		.3109
270.000		-.4076	-.4220	-.4295			-.4398	
315.000				-.4595	-.4876	-.6071		-.0674

ALPHA (2) = -.380 BETA (1) = -4.075 MACH = 1.1029 RN/L = 4.3716 PO = 2116.7 P = 987.69

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3976		-.4240	-.4384	-.4562	-.5644	-.3251	
45.000				-.4670				
90.000			-.4323	-.4520	-.4635	-.4794	-.6728	
135.000				-.4543	-.4868	-.6381		.6173
180.000			-.4022	-.4024	-.4238	-.5200	-.6962	
225.000						-.5119		.2484
270.000		-.4092	-.4254	-.4526			-.4425	
315.000				-.4696	-.4894	-.6062		-.0638

ALPHA (2) = -.357 BETA (2) = -.059 MACH = 1.1029 RN/L = 4.3716 PO = 2116.7 P = 987.69

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3472		-.3785	-.3992	-.4350	-.5808	-.3142	
45.000				-.4087				
90.000			-.4080	-.4297	-.4407	-.5146	-.5976	
135.000				-.3926	-.4130	-.5210		.3965
180.000			-.3487	-.3518	-.3652	-.4613	-.6900	
225.000						-.5548		.3931

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H55)

ALPHA (2) = -.357 BETA (2) = -.059

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3672	-.3940	-.4030			-.5348	
315.000				-.4085	-.4213	-.5403		-.0789

ALPHA (2) = -.367 BETA (3) = 3.956 MACH = 1.1029 RN/L = 4.3716 PO = 2116.7 P = 987.69

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4153		-.4274	-.4391	-.4521	-.5549	-.3292	
45.000				-.4569				
90.000			-.4230	-.4372	-.4431	-.4496	-.4534	
135.000				-.4345	-.4589	-.5212		.2269
180.000			-.4097	-.4192	-.4206	-.5413	.0000	
225.000						-.5561		.4808
270.000		-.4208	-.4235	-.4352			-.6489	
315.000				-.5115	-.5382	-.6388		-.1171

ALPHA (3) = 4.092 BETA (1) = -.059 MACH = 1.0997 RN/L = 4.3718 PO = 2114.7 P = 990.85

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4026		-.4207	-.4368	-.4617	-.5922	-.3272	
45.000				-.4663				
90.000			-.4455	-.4590	-.4662	-.4777	-.6919	
135.000				-.4390	-.4702	-.5686		.4429
180.000			-.4117	-.4100	-.4304	-.5320	-.7715	
225.000						-.5632		.3486
270.000		-.4111	-.4276	-.4390			-.6553	
315.000				-.4650	-.4930	-.6378		-.1344

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H56) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.950 BETA (1) = -.063 MACH = 1.2534 RN/L = 4.3988 PO = 2111.9 P = 811.60

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3164		-.3307	-.3911	-.4590	-.4888	-.1466	
45.000				-.3949				
90.000			-.3663	-.3933	-.3940	-.3989	-.4916	
135.000				-.3368	-.3676	-.4497		.4488
180.000			-.3122	-.3207	-.3182	-.3820	-.5510	
225.000						-.4426		.3445
270.000		-.3318	-.3377	-.3933			-.4776	
315.000				-.3695	-.3922	-.5069		-.0248

ALPHA (2) = -.324 BETA (1) = -4.075 MACH = 1.2533 RN/L = 4.3973 PO = 2112.4 P = 811.89

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3255		-.3460	-.3976	-.4267	-.5248	-.1804	
45.000				-.4163				
90.000			-.3719	-.3852	-.3857	-.3902	-.4773	
135.000				-.3673	-.3970	-.4450		.6377
180.000			-.3255	-.3207	-.3428	-.4231	-.5112	
225.000						-.3980		.2796
270.000		-.3200	-.3323	-.3876			-.5005	
315.000				-.4263	-.4405	-.5111		-.0108

ALPHA (2) = -.314 BETA (2) = -.063 MACH = 1.2533 RN/L = 4.3973 PO = 2112.4 P = 811.89

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3000		-.3054	-.3601	-.4163	-.4875	-.1489	
45.000				-.4160				
90.000			-.3427	-.3594	-.3484	-.3572	-.4790	
135.000				-.3245	-.3463	-.4325		.4972
180.000			-.2954	-.2998	-.2846	-.3610	-.5600	
225.000						-.4459		.4012

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H56)

ALPHA (2) = -.314 BETA (2) = -.063

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3089	-.3081	-.3591			-.5109	
315.000				-.3892	-.4141	-.5179		-.0076

ALPHA (2) = -.343 BETA (3) = 3.953 MACH = 1.2533 RN/L = 4.3973 PO = 2112.4 P = 811.89

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3254		-.3432	-.3750	-.4115	-.5083	-.1847	
45.000				-.4460				
90.000			-.3379	-.3350	-.3351	-.3553	-.5107	
135.000				-.3422	-.3677	-.4244		.1993
180.000			-.3174	-.3234	-.3332	-.4169	-.6377	
225.000						-.4052		.4812
270.000		-.3406	-.3377	-.3894			-.4657	
315.000				-.4693	-.4939	-.5557		-.0107

ALPHA (3) = 3.967 BETA (1) = -.066 MACH = 1.2519 RN/L = 4.3949 PO = 2112.6 P = 813.49

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3066		-.3017	-.3495	-.3708	-.4728	-.1762	
45.000				-.3934				
90.000			-.3230	-.3302	-.3363	-.3522	-.4811	
135.000				-.3173	-.3385	-.3955		.4670
180.000			-.3347	-.3291	-.3338	-.4098	-.5912	
225.000						-.3959		.3857
270.000		-.3047	-.3074	-.3529			-.4459	
315.000				-.4279	-.4980	-.5528		-.0126

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H57) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.953 BETA (1) = -.063 MACH = 1.4049 RN/L = 4.3087 PO = 2128.2 P = 664.20

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2941		-.2903	-.3116	-.3292	-.3771	-.1883	
45.000				-.3321				
90.000			-.3085	-.3064	-.3033	-.3030	-.3839	
135.000				-.3331	-.3591	-.4096		.4678
180.000			-.3198	-.3174	-.3048	-.4021	-.4313	
225.000						-.3940		.3434
270.000		-.2969	-.3044	-.3146			-.3788	
315.000				-.3138	-.3561	-.4130		-.0703

ALPHA (2) = -.317 BETA (1) = -4.075 MACH = 1.4057 RN/L = 4.3127 PO = 2132.4 P = 664.76

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2843		-.2838	-.3020	-.3213	-.3887	-.1648	
45.000				-.3137				
90.000			-.3408	-.3358	-.33[illegible]	-.3242	-.3484	
135.000				-.3850	-.3827	-.2620		.5624
180.000			-.2832	-.2820	-.3015	-.3420	-.3654	
225.000						-.3420		.2695
270.000		-.2568	-.2800	-.2893			-.3578	
315.000				-.3088	-.3290	-.4054		-.0422

ALPHA (2) = -.320 BETA (2) = -.059 MACH = 1.4057 RN/L = 4.3127 PO = 2132.4 P = 664.76

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2610		-.2554	-.2781	-.3012	-.3688	-.1739	
45.000				-.2771				
90.000			-.2999	-.3018	-.2945	-.2873	-.3850	
135.000				-.3127	-.3255	-.3594		.5399
180.000			-.2662	-.2564	-.2314	-.3016	-.4268	
225.000						-.3278		.3841

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H57)

ALPHA (2) = -.320 BETA (2) = -.059

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2655	-.2699	-.3190			-.3979	
315.000				-.2828	-.3121	-.3837		-.0422

ALPHA (2) = -.522 BETA (3) = 3.956 MACH = 1.4057 RN/L = 4.3127 PO = 2132.4 P = 664.76

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2772		-.2775	-.3004	-.3164	-.3876	-.1627	
45.000				-.3266				
90.000			-.2835	-.2814	-.2816	-.2865	-.3512	
135.000				-.2816	-.3019	-.3445		.2123
180.000			-.2677	-.2755	-.2982	-.3452	-.5055	
225.000						-.2804		.4391
270.000		-.2960	-.2931	-.3285			-.3812	
315.000				-.2947	-.3499	-.4031		-.0457

ALPHA (3) = 4.208 BETA (1) = -.069 MACH = 1.4030 RN/L = 4.2923 PO = 2121.8 P = 663.96

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2404		-.2408	-.2861	-.3180	-.3885	-.0688	
45.000				-.3149				
90.000			-.2419	-.3062	-.3200	-.3708	-.3950	
135.000				-.3350	-.3222	-.3363		.5273
180.000			-.2604	-.2466	-.2196	-.2875	-.4255	
225.000						-.3177		.4017
270.000		-.2418	-.2402	-.2758			-.3994	
315.000				-.2934	-.3990	-.3781		.0446

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H58) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.953 BETA (1) = .000 MACH = .59380 RN/L = 3.3921 PO = 2104.8 P = 1658.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3669		-.3025	-.3040	-.3726	-.6948	-.8659	
45.000				-.3681				
90.000			-.3552	-.4147	-.4370	-.5951	-.8094	
135.000				-.3816	-.4265	-.6277		.2072
180.000			-.3409	-.3723	-.3820	-.4453	-.6927	
225.000						-.7299		.1335
270.000		-.3493	-.3350	-.3625			-.6858	
315.000				-.3604	-.3723	-.5019		-.5846

ALPHA (2) = -.343 BETA (1) = -4.050 MACH = .59587 RN/L = 3.4000 PO = 2105.0 P = 1655.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3413		-.2774	-.2972	-.3203	-.6527	-.8851	
45.000				-.3614				
90.000			-.3445	-.4261	-.4768	-.5560	-.7644	
135.000				-.3804	-.3860	-.6610		.3222
180.000			-.3404	-.3722	-.3880	-.4375	-.7025	
225.000						-.5734		.0770
270.000		-.3269	-.3195	-.3366			-.6111	
315.000				-.3252	-.3411	-.4728		-.5991

ALPHA (2) = -.380 BETA (2) = .000 MACH = .59587 RN/L = 3.4000 PO = 2105.0 P = 1655.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3421		-.2812	-.2883	-.3326	-.6762	-.8603	
45.000				-.3509				
90.000			-.3456	-.4032	-.4275	-.5659	-.7435	
135.000				-.3650	-.4189	-.6324		.2421
180.000			-.3364	-.3611	-.3704	-.4394	-.6872	
225.000						-.7241		.1765

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H58)

ALPHA (2) = -.380 BETA (2) = .000

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3308	-.3217	-.3491			-.6646	
315.000				-.3353	-.3339	-.4358		-.5725

ALPHA (2) = -.385 BETA (3) = 3.978 MACH = .59597 RN/L = 3.4000 PO = 2105.0 P = 1655.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9830	1.0000
PHI								
.000	-.3408		-.2916	-.2962	-.3185	-.6337	-.8808	
45.000				-.3401				
90.000			-.3432	-.3753	-.3868	-.5662	-.7536	
135.000				-.3488	-.3676	-.5227		.0555
180.000			-.3223	-.3568	-.3596	-.4511	-.6977	
225.000						-.7395		.2277
270.000		-.3301	-.3317	-.3491			-.7126	
315.000				-.3429	-.3565	-.4493		-.5784

ALPHA (3) = 3.993 BETA (1) = -.003 MACH = .59700 RN/L = 3.4043 PO = 2104.8 P = 1654.1

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3285		-.2664	-.2751	-.3234	-.6827	-.8716	
45.000				-.3503				
90.000			-.3330	-.3952	-.4390	-.5248	-.6986	
135.000				-.3527	-.4148	-.6389		.2853
180.000			-.3299	-.3496	-.3662	-.4328	-.6701	
225.000						-.7278		.2467
270.000		-.3247	-.3192	-.3154			-.6248	
315.000				-.3286	-.3323	-.4449		-.5297

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H59) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.983 BETA (1) = -.038 MACH = .89250 RN/L = 4.1747 PO = 2100.6 P = 1252.1

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3729		-.3733	-.3953	-.4113	-.4439	-.7288	
45.000				-.4242				
90.000			-.3797	-.4179	-.4587	-.5668	-.8040	
135.000				-.3825	-.4496	-.6045		.2691
180.000			-.3554	-.3750	-.3793	-.4592	-.6262	
225.000						-.7133		.2614
270.000		-.3731	-.3726	-.3854			-.6351	
315.000				-.4127	-.4651	-.6189		-.4526

ALPHA (2) = -.370 BETA (1) = -4.059 MACH = .89213 RN/L = 4.1755 PO = 2100.4 P = 1252.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3911		-.3770	-.3979	-.4173	-.4435	-.7155	
45.000				-.4208				
90.000			-.3870	-.4329	-.5101	-.5508	-.8595	
135.000				-.3823	-.4273	-.6590		.4671
180.000			-.3723	-.3842	-.4062	-.5193	-.8597	
225.000						-.6939		.1391
270.000		-.3921	-.3753	-.3919			-.6268	
315.000				-.4478	-.5228	-.6522		-.4289

ALPHA (2) = -.403 BETA (2) = -.044 MACH = .89213 RN/L = 4.1755 PO = 2100.4 P = 1252.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3551		-.3497	-.3948	-.3987	-.4654	-.6881	
45.000				-.4219				
90.000			-.3798	-.4293	-.4616	-.5586	-.7897	
135.000				-.4060	-.4735	-.6268		.3607
180.000			-.3533	-.3745	-.3606	-.4527	-.6230	
225.000						-.6848		.3351

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H59)

ALPHA (2) = -.403 BETA (2) = -.044

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3585	-.3703	-.3705			-.5896	
315.000				-.3957	-.4087	-.6346		-.4152

ALPHA (2) = -.409 BETA (3) = 3.972 MACH = .89213 RN/L = 4.1756 PO = 2100.4 P = 1252.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3756		-.3824	-.3907	-.4001	-.4231	-.7240	
45.000				-.4255				
90.000			-.3528	-.3872	-.3964	-.5380	-.8326	
135.000				-.3835	-.4093	-.5403		.0701
180.000			-.3695	-.3842	-.4149	-.5092	-.7147	
225.000						-.7354		.3278
270.000		-.3754	-.3551	-.3677			-.5127	
315.000				-.3856	-.4097	-.5175		-.4454

ALPHA (3) = 4.076 BETA (1) = -.041 MACH = .89250 RN/L = 4.1726 PO = 2099.9 P = 1251.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3634		-.3524	-.3875	-.3970	-.4454	-.7013	
45.000				-.3960				
90.000			-.3678	-.4011	-.4432	-.5567	-.8088	
135.000				-.4158	-.4977	-.6474		.4162
180.000			-.3428	-.3699	-.3631	-.4552	-.6231	
225.000						-.6539		.3698
270.000		-.3593	-.3661	-.3695			-.4782	
315.000				-.3750	-.3943	-.5281		-.4265

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H60) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.937 BETA (1) = -.059 MACH = 1.1000 RN/L = 4.3718 PO = 2109.8 P = 988.18

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3739		-.3779	-.4246	-.4753	-.6120	-.2965	
45.000				-.4384				
90.000			-.4066	-.4088	-.4094	-.4165	-.4495	
135.000				-.4139	-.4369	-.5440		.3028
180.000			-.3857	-.4124	-.4710	-.5189	-.7050	
225.000						-.5669		.3031
270.000		-.3896	-.4029	-.4111			-.4433	
315.000				-.4410	-.4748	-.6001		-.0701

ALPHA (2) = -.528 BETA (1) = -4.075 MACH = 1.0987 RN/L = 4.3759 PO = 2110.0 P = 989.81

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3899		-.4131	-.4259	-.4426	-.5411	-.3334	
45.000				-.4489				
90.000			-.4174	-.4332	-.4451	-.4649	-.6813	
135.000				-.4382	-.4773	-.6258		.6108
180.000			-.3895	-.3978	-.4208	-.5253	-.5964	
225.000						-.5212		.2313
270.000		-.4026	-.4131	-.4322			-.4532	
315.000				-.4684	-.4882	-.6068		-.0670

ALPHA (2) = -.492 BETA (2) = -.063 MACH = 1.0987 RN/L = 4.3759 PO = 2110.0 P = 989.81

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3446		-.3608	-.3850	-.4197	-.5723	-.3115	
45.000				-.4152				
90.000			-.3598	-.3813	-.3943	-.4699	-.5677	
135.000				-.3737	-.4020	-.5296		.3969
180.000			-.3552	-.3939	-.4548	-.4938	-.7068	
225.000						-.5558		.3888

ARC11-02JIA80 OTS(SRB=N ORB=N) ET BASE (RE4H60)

ALPHA (2) = -.492 BETA (2) = -.063

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3486	-.3574	-.3838			-.5166	
315.000				-.4030	-.4243	-.5524		-.0732

ALPHA (2) = -.532 BETA (3) = 3.956 MACH = 1.0987 RN/L = 4.3753 PO = 2110.0 P = 989.81

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.946[illegible]	.9890	1.0000
PHI								
.000	-.4039		-.4161	-.4301	-.4415	-.5390	-.3396	
45.000				-.4455				
90.000			-.4176	-.4338	-.4357	-.4488	-.4658	
135.000				-.4280	-.4550	-.5164		.2094
180.000			-.4062	-.4152	-.4890	-.6644	-.8277	
225.000						-.5588		.4619
270.000		-.4072	-.4142	-.4250			-.6233	
315.000				-.4924	-.5162	-.6472		-.1231

ALPHA (3) = 4.013 BETA (1) = -.063 MACH = 1.1000 RN/L = 4.3823 PO = 2110.5 P = 989.47

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3923		-.3980	-.4238	-.4467	-.5799	-.3263	
45.000				-.4493				
90.000			-.4041	-.4238	-.4221	-.4605	-.6864	
135.000				-.4182	-.4500	-.5619		.4439
180.000			-.4029	-.4097	-.4760	-.5271	-.7848	
225.000						-.5573		.3430
270.000		-.3977	-.3998	-.4275			-.5449	
315.000				-.4571	-.4877	-.6426		-.1319

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H61) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.960 BETA (1) = -.066 MACH = 1.2528 RN/L = 4.3924 PO = 2109.8 P = 811.49

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2875		-.2860	-.3418	-.4029	-.4835	-.1444	
45.000				-.3614				
90.000			-.3004	-.3097	-.3095	-.3211	-.4930	
135.000				-.3027	-.3313	-.4452		.4097
180.000			-.2998	-.3509	-.3590	-.3822	-.5559	
225.000						-.4649		.3191
270.000		-.2855	-.2803	-.3164			-.4812	
315.000				-.3614	-.3905	-.5025		-.0273

ALPHA (2) = -.505 BETA (1) = -4.075 MACH = 1.2524 RN/L = 4.3922 PO = 2110.3 P = 812.12

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2789		-.2900	-.3315	-.3624	-.4791	-.1809	
45.000				-.3148				
90.000			-.3102	-.3219	-.3270	-.3352	-.4808	
135.000				-.3249	-.3524	-.4207		.6306
180.000			-.2933	-.2984	-.3210	-.3688	-.4205	
225.000						-.4109		.2536
270.000		-.2679	-.2688	-.3185			-.4883	
315.000				-.3775	-.4014	-.4804		-.0106

ALPHA (2) = -.459 BETA (2) = -.059 MACH = 1.2524 RN/L = 4.3922 PO = 2110.3 P = 812.12

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2687		-.2614	-.3186	-.3711	-.4745	-.1466	
45.000				-.3231				
90.000			-.2748	-.2831	-.2832	-.2969	-.4896	
135.000				-.2845	-.3290	-.4538		.4749
180.000			-.3102	-.3360	-.3628	-.3686	-.5344	
225.000						-.4499		.3765

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H61)

ALPHA (2) = -.459 BETA (2) = -.059

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2649	-.2619	-.3035			-.5067	
315.000				-.3781	-.4255	-.5265		-.0070

ALPHA (2) = -.462 BETA (3) = 3.953 MACH = 1.2524 RN/L = 4.3922 PO = 2110.3 P = 812.12

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.000
PHI								
.000	-.2767		-.2893	-.3213	-.3501	-.4655	-.1831	
45.000				-.3888				
90.000			-.2804	-.3053	-.2871	-.3856	-.5039	
135.000				-.3012	-.3371	-.3910		.1814
180.000			-.2794	-.3236	-.3630	-.4268	-.5880	
225.000						-.3947		.4632
270.000		-.2905	-.2844	-.3349			-.4324	
315.000				-.3391	-.4759	-.5442		-.0103

ALPHA (3) = 4.006 BETA (1) = -.063 MACH = 1.2481 RN/L = 4.3945 PO = 2110.5 P = 816.88

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2710		-.2567	-.3080	-.3274	-.4394	-.1823	
45.000				-.3155				
90.000			-.2750	-.2864	-.2914	-.3111	-.4795	
135.000				-.2899	-.3133	-.4084		.4728
180.000			-.3144	-.3288	-.3594	-.3719	-.5544	
225.000						-.4180		.3816
270.000		-.2695	-.2662	-.3085			-.4013	
315.000				-.3096	-.4696	-.5495		-.0168

ARC11-0231A80 OTS(SRB=N ORB=N) ET BASE (RE4H62) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.937 BETA (1) = -.069 MACH = 1.3993 RN/L = 4.2798 PO = 2114.0 P = 664.93

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2287		-.2168	-.2358	-.2510	-.3210	-.1897	
45.000				-.2397				
90.000			-.2335	-.2369	-.2372	-.2375	-.3985	
135.000				-.2485	-.2968	-.3683		.4242
180.000			-.2558	-.2851	-.3415	-.3283	-.4272	
225.000						-.3822		.3142
270.000		-.2317	-.2358	-.2674			-.3955	
315.000				-.2624	-.3199	-.3938		-.0716

ALPHA (2) = -.486 BETA (1) = -4.078 MACH = 1.3989 RN/L = 4.2779 PO = 2113.8 P = 665.32

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2237		-.2048	-.2288	-.2457	-.3351	-.1663	
45.000				-.2430				
90.000			-.2701	-.2637	-.2629	-.2610	-.3567	
135.000				-.3199	-.3290	-.2718		.5601
180.000			-.2388	-.2451	-.2519	-.2867	-.3185	
225.000						-.3232		.2328
270.000		-.2127	-.2138	-.2654			-.3392	
315.000				-.2451	-.3040	-.3912		-.0466

ALPHA (2) = -.486 BETA (2) = -.063 MACH = 1.3989 RN/L = 4.2773 PO = 2113.8 P = 665.32

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2162		-.1912	-.2184	-.2392	-.3278	-.1773	
45.000				-.2276				
90.000			-.2307	-.2326	-.2306	-.2326	-.4012	
135.000				-.2519	-.2935	-.3645		.5171
180.000			-.2426	-.2733	-.3427	-.3067	-.4229	
225.000						-.3450		.3525

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H62)

ALPHA (2) = -.486 BETA (2) = -.063

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2155	-.2195	-.2545			-.4020	
315.000				-.2202	-.2706	-.3755		-.0471

ALPHA (2) = -.499 BETA (3) = 3.953 MACH = 1.3989 RN/L = 4.2779 PO = 2113.8 P = 665.32

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2245		-.2265	-.2470	-.2626	-.3469	-.1549	
45.000				-.2569				
90.000			-.2260	-.2303	-.2263	-.2302	-.3523	
135.000				-.2340	-.2634	-.3090		.1943
180.000			-.2192	-.2575	-.3076	-.3370	-.4665	
225.000						-.3000		.4338
270.000		-.2394	-.2418	-.2717			-.3705	
315.000				-.2256	-.2480	-.3769		-.0494

ALPHA (3) = 4.020 BETA (1) = -.066 MACH = 1.3960 RN/L = 4.2780 PO = 2114.0 P = 668.11

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2018		-.1936	-.2507	-.2744	-.3710	-.0710	
45.000				-.2251				
90.000			-.2040	-.2586	-.2822	-.3266	-.4022	
135.000				-.3022	-.3213	-.3443		.5103
180.000			-.2314	-.2507	-.3003	-.2661	-.4168	
225.000						-.3144		.3900
270.000		-.1986	-.1971	-.2300			-.3792	
315.000				-.2149	-.3149	-.3530		.0506

ARC11-023IA80 OTS(SRB=N+ ORB=N) ET BASE (RE4H63) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = .980

ALPHA (1) = -3.868 BETA (1) = -.063 MACH = .98020 RN/L = 4.3081 PO = 2109.8 P = 1140.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4902		-.5156	-.5260	-.5467	-.6488	-.5230	
45.000				-.5519				
90.000			-.5208	-.5608	-.5744	-.6345	-.7065	
135.000				-.5239	-.5638	-.6892		.2410
180.000			-.4963	-.4930	-.5883	-.6297	-.8994	
225.000						-.7381		.2393
270.000		-.5131	-.5295	-.5599			-.6704	
315.000				-.5658	-.6343	-.7414		-.2546

ALPHA (2) = -.485 BETA (1) = -4.075 MACH = .97937 RN/L = 4.3059 PO = 2108.4 P = 1140.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4902		-.5130	-.5323	-.5522	-.6110	-.5336	
45.000				-.5937				
90.000			-.4958	-.5228	-.5621	-.7007	-.9009	
135.000				-.4920	-.5272	-.7692		.5063
180.000			-.4926	-.4976	-.5429	-.7157	-1.0185	
225.000						-.7030		.1828
270.000		-.4771	-.4833	-.5248			-.7021	
315.000				-.5267	-.5377	-.6321		-.2646

ALPHA (2) = -.456 BETA (2) = -.063 MACH = .97937 RN/L = 4.3039 PO = 2108.4 P = 1140.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4890		-.5113	-.5260	-.5618	-.6952	-.5036	
45.000				-.5264				
90.000			-.5129	-.5408	-.5548	-.6893	-.7983	
135.000				-.5273	-.5937	-.7197		.3372
180.000			-.4[illegible]	4842	-.5749	-.6077	-.8795	
225.000						-.7611		.3590

ARC11-0231A80 OTS(SRB=N+ ORB=N) ET BASE (RE4H63)

ALPHA (2) = -.456 BETA (2) = -.063

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.4963	-.5120	-.5318			-.7117	
315.000				-.6305	-.6509	-.7533		-.2477

ALPHA (2) = -.439 BETA (3) = 3.953 MACH = .97937 RN/L = 4.3059 PO = 2108.4 P = 1140.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4711		-.4868	-.4858	-.4957	-.5566	-.5347	
45.000				-.5136				
90.000			-.4927	-.5322	-.5527	-.6773	-.7510	
135.000				-.5229	-.5570	-.6563		.1265
180.000			-.4989	-.5179	-.6061	-.6805	-1.0193	
225.000						-.7025		.3612
270.000		-.4848	-.4892	-.5046			-.7619	
315.000				-.5592	-.6035	-.6975		-.2812

ALPHA (3) = 4.013 BETA (1) = -.069 MACH = .98150 RN/L = 4.3090 PO = 2108.4 P = 1137.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.5126		-.5165	-.5486	-.5732	-.7135	-.5131	
45.000				-.5788				
90.000			-.5171	-.5460	-.5637	-.6909	-.9227	
135.000				-.5543	-.6277	-.7563		.4158
180.000			-.5065	-.4959	-.5962	-.6288	-.8886	
225.000						-.7671		.3973
270.000		-.5185	-.5197	-.5373			-.7149	
315.000				-.6160	-.7014	-.8829		-.2940

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H64) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.973 BETA (1) = -.047 MACH = .58500 RN/L = 3.4024 PO = 2096.3 P = 1662.8

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3156		-.2504	-.2624	-.3269	-.6623	-.8012	
45.000				-.3186				
90.000			-.3276	-.3580	-.3874	-.5700	-.7459	
135.000				-.3287	-.37[illegible]	-.5847		.2298
180.000			-.3043	-.3240	-.3505	-.4192	-.6525	
225.000						-.6812		.1608
270.000		-.3063	-.2997	-.3136			-.6240	
315.000				-.3083	-.3269	-.4667		-.5346

ALPHA (2) = -.277 BETA (1) = -4.066 MACH = .58960 RN/L = 3.4202 PO = 2098.0 P = 1658.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3140		-.2476	-.2712	-.2878	-.6194	-.8434	
45.000				-.3294				
90.000			-.3206	-.[illegible]052	-.4532	-.5327	-.7405	
135.000				-.3594	-.3802	-.6881		.3266
180.000			-.3319	-.3453	-.3760	-.4552	-.6516	
225.000						-.6528		.0927
270.000		-.3049	-.2924	-.3051			-.5926	
315.000				-.3019	-.3103	-.4612		-.5633

ALPHA (2) = -.29[illegible] BETA (2) = -.047 MACH = .589[illegible] RN/L = 3.4202 PO = 2098.0 P = 1658.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE C

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3092		-.2497	-.2605	-.2991	-.6381	-.8206	
45.000				-.3176				
90.000			-.3176	-.3509	-.3861	-.5306	-.7208	
135.000				-.3361	-.3871	-.6002		.2541
180.000			-.3056	-.3350	-.3540	-.4322	-.6645	
225.000						-.6943		.1990

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H64)

ALPHA (2) = -.291 BETA (2) = -.047

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3001	-.2950	-.3139			-.6256	
315.000				-.3044	-.3115	-.4092		-.5466

ALPHA (2) = -.307 BETA (3) = 3.972 MACH = .58960 RN/L = 3.4202 PO = 2098.0 P = 1658.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3039		-.2583	-.2657	-.2870	-.6050	-.8411	
45.000				-.3072				
90.000			-.3122	-.3317	-.3654	-.6086	-.6938	
135.000				-.3139	-.3345	-.4820		.0702
180.000			-.2884	-.3267	-.3331	-.4419	-.6797	
225.000						-.6989		.2403
270.000		-.2993	-.2958	-.3246			-.6741	
315.000				-.3097	-.3147	-.4125		-.5437

ALPHA (3) = 3.957 BETA (1) = -.044 MACH = .59060 RN/L = 3.4224 PO = 2098.5 P = 1657.3

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2972		-.2334	-.2487	-.2885	-.6304	-.8285	
45.000				-.3156				
90.000			-.3030	-.3621	-.4030	-.4845	-.6452	
135.000				-.3315	-.3854	-.6061		.2941
180.000			-.2939	-.3241	-.3396	-.4215	-.6525	
225.000						-.6919		.2572
270.000		-.2828	-.2818	-.2850			-.5796	
315.000				-.2994	-.2980	-.4004		-.4996

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H65) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.977 BETA (1) = -.044 MACH = .89350 RN/L = 4.2056 PO = 2100.6 P = 1250.8

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3307		-.3279	-.3591	-.3665	-.3942	-.7253	
45.000				-.3748				
90.000			-.3383	-.3963	-.4265	-.5171	-.7570	
135.000				-.3485	-.4060	-.5666		.2753
180.000			-.3166	-.3391	-.3415	-.4325	-.6016	
225.000						-.6757		.2665
270.000		-.3346	-.3354	-.3473			-.5852	
315.000				-.3699	-.4076	-.5519		-.4478

ALPHA (2) = -.304 BETA (1) = -4.063 MACH = .89107 RN/L = 4.1787 PO = 2099.2 P = 1253.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3496		-.3477	-.3578	-.3622	-.3886	-.7191	
45.000				-.3788				
90.000			-.3450	-.4212	-.4695	-.5047	-.7373	
135.000				-.3513	-.3943	-.6453		.4692
180.000			-.3388	-.3595	-.3987	-.4790	-.6906	
225.000						-.6525		.1533
270.000		-.3584	-.3399	-.3533			-.5843	
315.000				-.3866	-.4575	-.5783		-.4328

ALPHA (2) = -.314 BETA (2) = -.044 MACH = .89107 RN/L = 4.1787 PO = 2099.2 P = 1253.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3110		-.2995	-.3452	-.3361	-.3924	-.6913	
45.000				-.3718				
90.000			-.3305	-.3928	-.4207	-.4986	-.6929	
135.000				-.3572	-.4258	-.5928		.3636
180.000			-.3067	-.3246	-.3225	-.4399	-.5914	
225.000						-.6493		.3432

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H65)

ALPHA (2) = -.314 BETA (2) = -.044

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3139	-.3270	-.3272			-.5386	
315.000				-.3416	-.3635	-.5176		-.4127

ALPHA (2) = -.317 BETA (3) = 3.972 MACH = .89107 RN/L = 4.1787 PO = 2099.2 P = 1253.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3385		-.3544	-.3596	-.3747	-.3915	-.7183	
45.000				-.3896				
90.000			-.3357	-.3598	-.3745	-.5195	-.7964	
135.000				-.3569	-.3794	-.5077		.0809
180.000			-.3486	-.3538	-.3765	-.4665	-.7234	
225.000						-.7143		.3372
270.000		-.3447	-.3300	-.3390			-.4856	
315.000				-.3476	-.3826	-.4694		-.4346

ALPHA (3) = 3.930 BETA (1) = -.041 MACH = .89120 RN/L = 4.1708 PO = 2098.5 P = 1252.6

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3208		-.3102	-.3434	-.3595	-.3951	-.7019	
45.000				-.3481				
90.000			-.3252	-.3627	-.4083	-.5076	-.7032	
135.000				-.3674	-.4573	-.6096		.4235
180.000			-.3037	-.3276	-.3330	-.4342	-.6056	
225.000						-.6280		.3777
270.000		-.3216	-.3182	-.3301			-.4433	
315.000				-.3315	-.3575	-.4615		-.4209

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H66) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.963 BETA (1) = -.063 MACH = 1.0996 RN/L = 4.4015 PO = 2123.2 P = 994.87

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	8950	.9460	.9590	1.0000
PHI								
.000	-.3852				40	-.6325	-.3020	
45.000								
90.000						-.4544	-.4489	
135.000					.4422	-.5512		.3288
180.000					3988	-.4078	-.4995	-.6958
225.000						-.5595		.3112
270.000		-.4185	-.4307	-.4335			-.4347	
315.000				-.4771	-.5050	-.6231		-.0593

ALPHA (2) = -.337 BETA (1) = -4.072 MACH = 1.0995 RN/L = 4.4038 PO = 2123.7 P = 995.30

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4207		-.4413	-.4530	-.4742	-.5824	-.3349	
45.000				-.4901				
90.000			-.4518	-.4723	-.4851	-.4988	-.6981	
135.000				-.4758	-.5111	-.6613		.6353
180.000			-.4188	-.4232	-.4484	-.5518	-.7337	
225.000						-.5294		.2529
270.000		-.4286	-.4455	-.4756			-.4555	
315.000				-.4923	-.5119	-.6327		-.0693

ALPHA (2) = -.334 BETA (2) = -.059 MACH = 1.0995 RN/L = 4.4038 PO = 2123.7 P = 995.30

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3591		-.3952	-.4123	-.4430	-.5822	-.3190	
45.000				-.4222				
90.000			-.4299	-.4521	-.4669	-.5317	-.5990	
135.000				-.4038	-.4295	-.5371		.3910
180.000			-.3738	-.3812	-.3932	-.4932	-.7182	
225.000						-.5585		.3802

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H65)

ALPHA (2) = -.334 BETA (2) = -.059

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.4012	-.4141	-.4394			-.5249	
315.000				-.4104	-.4320	-.5417		-.0723

ALPHA (2) = -.576 BETA (3) = 3.950 MACH = 1.0995 RN/L = 4.4038 PO = 2123.7 P = 995.30

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

P/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4125		-.4270	-.4388	-.4527	-.5608	-.3249	
45.000				-.4507				
90.000			-.4234	-.4344	-.4393	-.4454	-.4484	
135.000				-.4354	-.4637	-.5205		.2338
180.000			-.4119	-.4199	-.4220	-.5478	.0000	
225.000						-.5637		.4878
270.000		-.4194	-.4229	-.4386			-.6651	
315.000				-.5101	-.5422	-.6556		-.1165

ALPHA (3) = 3.953 BETA (1) = -.066 MACH = 1.1032 RN/L = 4.3993 PO = 2119.0 P = 988.53

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4225		-.4290	-.4528	-.4772	-.6153	-.3338	
45.000				-.4823				
90.000			-.4509	-.4677	-.4825	-.5161	-.7099	
135.000				-.4563	-.4741	-.5815		.4739
180.000			-.4226	-.4230	-.4453	-.5646	-.8197	
225.000						-.5741		.3681
270.000		-.4194	-.4351	-.4551			-.6725	
315.000				-.4853	-.5332	-.6754		-.1360

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H67) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -.327 BETA (1) = -4.072 MACH = 1.2493 RN/L = 4.4272 PO = 2123.0 P = 820.40

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3305		-.3508	-.3928	-.4311	-.5289	-.1839	
45.000				-.4343				
90.000			-.3735	-.3912	-.3912	-.3997	-.4826	
135.000				-.3716	-.4056	-.4539		.6464
180.000			-.3307	-.3253	-.3500	-.4328	-.5264	
225.000						-.3900		.2836
270.000		-.3316	-.3385	-.3941			-.5193	
315.000				-.4407	-.4468	-.5240		-.0117

ALPHA (1) = -.317 BETA (2) = -.059 MACH = 1.2493 RN/L = 4.4272 PO = 2123.0 P = 820.40

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3020		-.3118	-.3619	-.4139	-.4983	-.1597	
45.000				-.4094				
90.000			-.3444	-.3643	-.3487	-.3613	-.4817	
135.000				-.3227	-.3391	-.3938		.4978
180.000			-.3030	-.3041	-.3074	-.4013	-.5756	
225.000						-.4539		.3999
270.000		-.3101	-.3120	-.3648			-.5178	
315.000				-.3957	-.4132	-.5244		-.0079

ALPHA (1) = -.340 BETA (3) = 3.950 MACH = 1.2493 RN/L = 4.4272 PO = 2123.0 P = 820.40

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3281		-.3461	-.3782	-.4106	-.5153	-.1841	
45.000				-.4518				
90.000			-.3422	-.3380	-.3380	-.3591	-.5084	
135.000				-.3431	-.3684	-.4303		.2053
180.000			-.3205	-.3286	-.3356	-.4211	-.6435	
225.000						-.4074		.4762

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H67)

ALPHA (1) = -.340 BETA (3) = 3.950

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3435	-.3416	-.3908			-.4682	
315.000				-.4637	-.4846	-.5517		-.0081

ALPHA (2) = .000 BETA (1) = -.063 MACH = 1.2510 RN/L = 4.4292 PO = 2123.9 P = 818.86

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3091		-.3095	-.3629	-.4163	-.5029	-.1678	
45.000				-.3893				
90.000			-.3342	-.3487	-.3363	-.3513	-.4778	
135.000				-.3199	-.3380	-.4260		.4832
180.000			-.3377	-.3325	-.3355	-.4106	-.5763	
225.000						-.4549		.4019
270.000		-.3064	-.3075	-.3630			-.5139	
315.000				-.3988	-.4255	-.5298		-.0067

ALPHA (3) = 3.950 BETA (1) = -.066 MACH = 1.2490 RN/L = 4.4220 PO = 2123.2 P = 820.75

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3117		-.3107	-.3586	-.3810	-.4798	-.1795	
45.000				-.3909				
90.000			-.3307	-.3398	-.3450	-.3655	-.4785	
135.000				-.3289	-.3490	-.3914		.4661
180.000			-.3468	-.3366	-.3688	-.4294	-.6026	
225.000						-.4006		.3814
270.000		-.3103	-.3111	-.3575			-.4526	
315.000				-.4512	-.5044	-.5610		-.0126

ARC:1-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H68) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.944 BETA (1) = -.059 MACH = 1.4046 RN/L = 4.3918 PO = 2123.2 P = 662.88

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2935		-.2932	-.3073	-.3241	-.3735	-.1857	
45.000				-.3294				
90.000			-.3081	-.3051	-.3026	-.3035	-.3855	
135.000				-.3274	-.3433	-.3992		.4827
180.000			-.3132	-.3143	-.3067	-.4152	-.4382	
225.000						-.3920		.3437
270.000		-.2915	-.3049	-.3110			-.3823	
315.000				-.3120	-.3522	-.4124		-.0650

ALPHA (2) = -.320 BETA (1) = -4.072 MACH = 1.4079 RN/L = 4.3701 PO = 2122.5 P = 659.58

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2838		-.2843	-.3019	-.3206	-.3883	-.1604	
45.000				-.3138				
90.000			-.3389	-.3350	-.3297	-.3272	-.3467	
135.000				-.3852	-.3913	-.2597		.5598
180.000			-.2813	-.2807	-.3039	-.3483	-.3683	
225.000						-.3467		.2710
270.000		-.2587	-.2799	-.2891			-.3565	
315.000				-.3066	-.3247	-.4055		-.0412

ALPHA (2) = -.320 BETA (2) = -.059 MACH = 1.4079 RN/L = 4.3701 PO = 2122.5 P = 659.58

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2601		-.2551	-.2764	-.3014	-.3659	-.1736	
45.000				-.2782				
90.000			-.3008	-.3081	-.2987	-.2945	-.3834	
135.000				-.3014	-.3225	-.3516		.5402
180.000			-.2665	-.2582	-.2359	-.3209	-.4345	
225.000						-.3469		.3798

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H68)

ALPHA (2) = -.320 BETA (2) = -.059

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2654	-.2699	-.3215			-.3951	
315.000				-.2767	-.3126	-.3782		-.0392

ALPHA (2) = -.347 BETA (3) = 3.953 MACH = 1.4079 RN/L = 4.3701 PO = 2122.5 P = 659.58

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2749		-.2768	.2970	-.3121	-.3805	-.1587	
45.000				-.3226				
90.000			-.2814	-.2803	-.2783	-.2849	-.3470	
135.000				-.2783	-.3000	-.3464		.2242
180.000			-.2675	-.2754	-.2978	-.3471	-.5204	
225.000						-.2731		.4377
270.000		-.2946	-.2925	-.3257			-.3762	
315.000				-.2953	-.3536	-.4006		-.0394

ALPHA (3) = 3.[illegible]30 BETA (1) = -.063 MACH = 1.4068 RN/L = 4.3541 PO = 2121.8 P = 660.41

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2395		-.2343	-.2852	-.3167	-.3847	-.0644	
45.000				-.2943				
90.000			-.2506	-.3099	-.3238	-.3672	-.3858	
135.000				-.3278	-.3172	-.3285		.5322
180.000			-.2612	-.2463	-.2390	-.3182	-.4393	
225.000						-.3280		.4028
270.000		-.2416	-.2418	-.2740			-.3971	
315.000				-.2754	-.3943	-.3693		.0319

ARC11-023IA80 OTS(SRE=N ORB=N) ET BASE (RE4H69) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.920 BETA (1) = -.044 MACH = .59500 RN/L = 3.4551 PO = 2109.8 P = 1660.6

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3500		-.2849	-.2980	-.3590	-.7006	-.8490	
45.000				-.3559				
90.000			-.3603	-.4063	-.4192	-.6073	-.7922	
135.000				-.3717	-.4171	-.6253		.2151
180.000			-.3423	-.3575	-.3763	-.4397	-.6799	
225.000						-.7258		.1470
270.000		-.3434	-.3360	-.3530			-.6609	
315.000				-.3485	-.3569	-.4862		-.5703

ALPHA (2) = -.376 BETA (1) = -4.066 MACH = .59743 RN/L = 3.4632 PO = 2109.3 P = 1657.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3401		-.2837	-.3034	-.3204	-.6567	-.8807	
45.000				-.3609				
90.000			-.3553	-.4321	-.4811	-.5614	-.7690	
135.000				-.3733	-.3943	-.6563		.3244
180.000			-.3439	-.3683	-.3923	-.4433	-.6929	
225.000						-.6707		.0820
270.000		-.3256	-.3207	-.3289			-.6296	
315.000				-.3272	-.3342	-.4903		-.5885

ALPHA (2) = -.373 BETA (2) = -.050 MACH = .59743 RN/L = 3.4632 PO = 2109.3 P = 1657.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3355		-.2740	-.2875	-.3316	-.6757	-.8587	
45.000				-.3425				
90.000			-.3483	-.4087	-.4077	-.5652	-.7605	
135.000				-.3661	-.4161	-.6317		.2428
180.000			-.3302	-.3576	-.3663	-.4431	-.6831	
225.000						-.7235		.1822

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H69)

ALPHA (2) = -.373 BETA (2) = -.050

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3253	-.3203	-.3433			-.6699	
315.000				-.3361	-.3291	-.4433		-.5756

ALPHA (2) = -.426 BETA (3) = 3.969 MACH = .59743 RN/L = 3.4632 PO = 2109.3 P = 1657.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3286		-.2826	-.2864	-.3136	-.6349	-.8772	
45.000				-.3363				
90.000			-.3346	-.3560	-.3899	-.5403	-.7429	
135.000				-.3413	-.3595	-.5076		.0568
180.000			-.3157	-.3569	-.3482	-.4440	-.6865	
225.000						-.7353		.2282
270.000		-.3255	-.3201	-.3454			-.7078	
315.000				-.3294	-.3506	-.4421		-.5759

ALPHA (3) = 3.947 BETA (1) = -.044 MACH = .59880 RN/L = 3.4697 PO = 2109.8 P = 1655.6

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3398		-.2682	-.2835	-.3248	.6865	-.8692	
45.000				-.3478				
90.000			-.3382	-.3995	-.4392	-.5209	-.6901	
135.000				-.3635	-.4176	-.6416		.2855
180.000			-.3283	-.3534	-.3585	-.4402	-.6751	
225.000						-.7330		.2451
270.000		-.3198	-.3139	-.3135			-.6294	
315.000				-.3251	-.3335	-.4306		-.5303

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H70) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.897 BETA (1) = -.041 MACH = .89150 RN/L = 4.1731 PO = 2102.0 P = 1254.3

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3784		-.3783	-.4044	-.4156	-.4457	-.7318	
45.000				-.4327				
90.000			-.3843	-.4317	-.4654	-.5758	-.8273	
135.000				-.4031	-.4591	-.6195		.2625
180.000			-.3862	-.3811	-.3783	-.4652	-.6363	
225.000						-.7221		.2591
270.000		-.3743	-.3811	-.3921			-.6414	
315.000				-.4180	-.4717	-.6348		-.4545

ALPHA (2) = -.383 BETA (1) = -4.063 MACH = .89050 RN/L = 4.1731 PO = 2101.3 P = 1255.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3849		-.3714	-.3985	-.4037	-.4315	-.7193	
45.000				-.4189				
90.000			-.3810	-.4505	-.5057	-.5507	-.8374	
135.000				-.3834	-.4227	-.6830		.4669
180.000			-.3717	-.3971	-.4058	-.5147	-.8466	
225.000						-.6859		.1634
270.000		-.3893	-.3894	-.4009			-.6280	
315.000				-.4404	-.5254	-.6564		-.4330

ALPHA (2) = -.357 BETA (2) = -.047 MACH = .89050 RN/L = 4.1731 PO = 2101.3 P = 1255.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3564		-.3510	-.3931	-.3877	-.4600	-.6951	
45.000				-.4184				
90.000			-.3801	-.4199	-.4613	-.5461	-.7804	
135.000				-.4057	-.4722	-.6304		.3602
180.000			-.3503	-.3721	-.3601	-.4657	-.6118	
225.000						-.6812		.3299

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H70)

ALPHA (2) = -.357 BETA (2) = -.047

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3578	-.3702	-.3692			-.5801	
315.000				-.3857	-.4140	-.6032		-.4209

ALPHA (2) = -.370 BETA (3) = 3.972 MACH = .89050 RN/L = 4.1731 PO = 2101.3 P = 1255.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3932		-.3940	-.4031	-.4168	-.4222	-.7260	
45.000				-.4451				
90.000			-.3569	-.4004	-.4060	-.5447	-.8428	
135.000				-.3966	-.4208	-.5539		.0632
180.000			-.3894	-.4033	-.4372	-.5069	-.7301	
225.000						-.7464		.3248
270.000		-.3915	-.3748	-.3844			-.5282	
315.000				-.3924	-.4300	-.5440		-.4476

ALPHA (3) = 4.020 BETA (1) = -.041 MACH = .89260 RN/L = 4.1823 PO = 2101.3 P = 1252.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3629		-.3523	-.3882	-.3988	-.4449	-.7010	
45.000				-.3939				
90.000			-.3687	-.3961	-.4353	-.5595	-.8096	
135.000				-.4100	-.4983	-.6524		.4175
180.000			-.3442	-.3700	-.3638	-.4576	-.6240	
225.000						-.6605		.3670
270.000		-.3652	-.3654	-.3717			-.4771	
315.000				-.3789	-.4000	-.5467		-.4296

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H71) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .00 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.963 BETA (1) = -.066 MACH = 1.0977 RN/L = 4.3743 PO = 2107.0 P = 989.57

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4218		-.4248	-.4829	-.5313	-.6848	-.3343	
45.000				-.4925				
90.000			-.4588	-.4603	-.4591	-.4715	-.4936	
135.000				-.4683	-.4914	-.6178		.3547
180.000			-.4412	-.4710	-.5247	-.5842	-.7948	
225.000						-.6374		.3372
270.000		-.4377	-.4545	-.4623			-.4804	
315.000				-.5060	-.5412	-.6778		-.0652

ALPHA (2) = -.545 BETA (1) = -4.072 MACH = 1.1017 RN/L = 4.3738 PO = 2107.7 P = 985.11

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4751		-.5009	-.5135	-.5353	-.6530	-.4066	
45.000				-.5644				
90.000			-.5081	-.5277	-.5421	-.5708	-.8365	
135.000				-.5425	-.5816	-.7653		.7585
180.000			-.4844	-.4932	-.5135	-.6477	-.8559	
225.000						-.6353		.2915
270.000		-.4910	-.5065	-.5249			-.5544	
315.000				-.5657	-.5938	-.7440		-.0805

ALPHA (2) = -.667 BETA (2) = -.059 MACH = 1.1017 RN/L = 4.3738 PO = 2107.7 P = 985.11

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4161		-.4359	-.4693	-.5073	-.6802	-.3769	
45.000				-.4814				
90.000			-.4515	-.4887	-.4955	-.6106	-.6830	
135.000				-.4657	-.4941	-.6458		.4758
180.000			-.4562	-.4802	-.5560	-.6121	-.8661	
225.000						-.6605		.4619

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H71)

ALPHA (2) = -.667 BETA (2) = -.059

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.4331	-.4477	-.4902			-.6290	
315.000				-.4668	-.4825	-.6171		-.0840

ALPHA (2) = -.519 BETA (3) = 3.953 MACH = 1.1017 RN/L = 4.3738 PO = 2107.7 P = 985.11

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4530		-.4652	-.4796	-.4964	-.6094	-.3772	
45.000				-.4 52				
90.000			-.4666	-.4814	-.4855	-. 74	-.5212	
135.000				-.4804	-.5147	-.5 9		.2519
180.000			-.4548	-.4700	-.5557	-.7489	-.9468	
225.000						-.6480		.5497
270.000		-.4599	-.4623	-.4820			-.7173	
315.000				-.5505	-.5874	-.7306		-.1348

ALPHA (3) = 3.990 BETA (1) = -.066 MACH = 1.1080 RN/L = 4.3708 PO = 2107.0 P = 977.00

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.5002		-.4994	-.5371	-.5677	-.7322	-.4088	
45.000				-.5764				
90.000			-.5118	-.5317	-.5418	-.5812	-.8642	
135.000				-.5306	-.5714	-.7199		.5843
180.000			-.5436	-.5378	-.5950	-.6536	-.9955	
225.000						-.7136		.4454
270.000		-.4991	-.5029	-.5415			-.6663	
315.000				-.5851	-.6627	-.8488		-.1702

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H72) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -4.003 BETA (1) = -.066 MACH = 1.2534 RN/L = 4.4018 PO = 2110.5 P = 811.05

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2876		-.2894	-.3468	-.4104	-.4788	-.1369	
45.000				-.3619				
90.000			-.3053	-.3204	-.3151	-.3282	-.4862	
135.000				-.3074	-.3300	-.4383		.4189
180.000			-.2962	-.3433	-.3494	-.3789	-.5462	
225.000						-.4585		.3235
270.000		-.2862	-.2829	-.3185			-.4542	
315.000				-.3439	-.3711	-.4885		-.0107

ALPHA (2) = -.502 BETA (1) = -4.072 MACH = 1.2515 RN/L = 4.3936 PO = 2110.5 P = 813.15

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2815		-.2917	-.3311	-.3632	-.4775	-.1770	
45.000				-.3205				
90.000			-.3124	-.3247	-.3236	-.3372	-.4760	
135.000				-.3284	-.3544	-.4190		.6337
180.000			-.2989	-.3048	-.3199	-.3882	-.4378	
225.000						-.4080		.2537
270.000		-.2712	-.2723	-.3191			-.4970	
315.000				-.3939	-.4049	-.4818		-.0061

ALPHA (2) = -.528 BETA (2) = -.059 MACH = 1.2515 RN/L = 4.3996 PO = 2110.5 P = 813.16

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2665		-.2596	-.3162	-.3681	-.4735	-.1521	
45.000				-.3085				
90.000			-.2783	-.2842	-.2816	-.2992	-.4924	
135.000				-.2807	-.3282	-.4478		.4848
180.000			-.3109	-.3333	-.3630	-.3730	-.5366	
225.000						-.4492		.3778

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H72)

ALPHA (2) = -.528 BETA (2) = -.059

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2635	-.2607	-.3029			-.5053	
315.000				-.3790	-.4159	-.5241		-.0038

ALPHA (2) = -.538 BETA (3) = 3.953 MACH = 1.2515 RN/L = 4.3996 PO = 2110.5 P = 813.16

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2820		-.2952	-.3265	-.3567	-.4713	-.1856	
45.000				-.3899				
90.000			-.2888	-.3063	-.2983	-.3514	-.5087	
135.000				-.2986	-.3343	-.3991		.1869
180.000			-.2862	-.3297	-.3697	-.4424	-.6031	
225.000						-.4034		.4603
270.000		-.2960	-.2894	-.3355			-.4360	
315.000				-.3554	-.4836	-.5474		-.0118

ALPHA (3) = 3.953 BETA (1) = -.063 MACH = 1.2505 RN/L = 4.4051 PO = 2110.5 P = 814.22

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2714		-.2620	-.3102	-.3284	-.4393	-.1786	
45.000				-.3106				
90.000			-.2775	-.2872	-.2937	-.3137	-.4692	
135.000				-.2974	-.3115	-.4052		.4720
180.000			-.3209	-.3308	-.3692	-.3771	-.5593	
225.000						-.4129		.3874
270.000		-.2684	-.2666	-.3046			-.4052	
315.000				-.3276	-.4774	-.5505		-.0106

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H73) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -.522 BETA (1) = -4.072 MACH = 1.4084 RN/L = 4.3191 PO = 2112.8 P = 656.17

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2218		-.2084	-.2268	-.2448	-.3205	-.1605	
45.000				-.2415				
90.000			-.2672	-.2583	-.2586	-.2592	-.3503	
135.000				-.3305	-.3444	-.2710		.5592
180.000			-.2429	-.2440	-.2539	-.2930	-.3240	
225.000						-.3090		.2352
270.000		-.2139	-.2183	-.2646			-.3369	
315.000				-.2545	-.3017	-.3940		-.0409

ALPHA (1) = -.502 BETA (2) = -.059 MACH = 1.4084 RN/L = 4.3191 PO = 2112.8 P = 656.17

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2111		-.1854	-.2122	-.2311	-.3176	-.1734	
45.000				-.2221				
90.000			-.2273	-.2307	-.2266	-.2299	-.3939	
135.000				-.2556	-.2903	-.3535		.5183
180.000			-.2443	-.2625	-.3319	-.3286	-.4333	
225.000						-.3394		.3509
270.000		-.2118	-.2143	-.2520			-.3968	
315.000				-.2194	-.2699	-.3722		-.0385

ALPHA (1) = -.535 BETA (3) = 3.953 MACH = 1.4084 RN/L = 4.3191 PO = 2112.8 P = 656.17

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2198		-.2242	-.2425	-.2530	-.3287	-.1620	
45.000				-.2519				
90.000			-.2237	-.2265	-.2265	-.2288	-.3473	
135.000				-.2295	-.2522	-.3015		.2084
180.000			-.2172	-.2540	-.3093	-.3383	-.4790	
225.000						-.2921		.4365

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H73)

ALPHA (1) = -.535 BETA (3) = 3.953

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2401	-.2351	-.2695			-.3679	
315.000				-.2241	-.2481	-.3716		-.0407

ALPHA (2) = .000 BETA (1) = -.063 MACH = 1.4118 RN/L = 4.3069 PO = 2111.9 P = 652.69

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2077		-.1791	-.2091	-.2293	-.3158	-.1701	
45.000				-.2212				
90.000			-.2275	-.2302	-.2208	-.2304	-.3993	
135.000				-.2585	-.2892	-.3467		.5168
180.000			-.2403	-.2567	-.3342	-.3163	-.4239	
225.000						-.3387		.3580
270.000		-.2091	-.2132	-.2485			-.3904	
315.000				-.2122	-.2587	-.3759		-.0368

ALPHA (3) = .020 BETA (1) = -.063 MACH = 1.4046 RN/L = 4.3270 PO = 2113.3 P = 659.80

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2131		-.1828	-.2117	-.2332	-.3233	-.1732	
45.000				-.2266				
90.000			-.2309	-.2361	-.2304	-.2328	-.3970	
135.000				-.2589	-.2934	-.3511		.5132
180.000			-.2401	-.2619	-.3249	-.3190	-.4433	
225.000						-.3362		.3558
270.000		-.2127	-.2184	-.2538			-.3991	
315.000				-.2143	-.2616	-.3770		-.0404

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H74) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.950 BETA (1) = -.009 MACH = .60200 RN/L = 3.5046 PO = 2121.1 P = 1660.3

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3182		-.2567	-.2682	-.3166	-.6540	-.8121	
45.000				-.3260				
90.000			-.3274	-.3676	-.3868	-.5574	-.7455	
135.000				-.3348	-.3017	-.5837		.2318
180.000			-.3054	-.3335	-.3503	-.4230	-.6550	
225.000						-.6877		.1633
270.000		-.3024	-.2997	-.3210			-.6171	
315.000				-.3139	-.3236	-.4552		-.5368

ALPHA (2) = -.301 BETA (1) = -4.044 MACH = .60423 RN/L = 3.5076 PO = 2121.3 P = 1657.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3131		-.2495	-.2701	-.2880	-.6102	-.8515	
45.000				-.3285				
90.000			-.3218	-.4005	-.4515	-.5312	-.7351	
135.000				-.3572	-.3748	-.6342		.3331
180.000			-.3265	-.3454	-.3758	-.4532	-.6540	
225.000						-.6531		.0920
270.000		-.3047	-.2971	-.3106			-.5907	
315.000				-.3045	-.3106	-.4427		-.5775

ALPHA (2) = -.287 BETA (2) = -.006 MACH = .60423 RN/L = 3.5076 PO = 2121.3 P = 1657.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2995		-.2403	-.2589	-.2869	-.6171	-.8125	
45.000				-.3072				
90.000			-.3160	-.3640	-.3855	-.5290	-.6958	
135.000				-.3347	-.3868	-.5977		.2617
180.000			-.2989	-.3320	-.3454	-.4257	-.6534	
225.000						-.6813		.2047

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H74)

ALPHA (2) = -.287 BETA (2) = -.006

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2942	-.2919	-.3072			-.6192	
315.000				-.3002	-.3006	-.3961		-.5375

ALPHA (2) = -.317 BETA (3) = 3.988 MACH = .60423 RN/L = 3.5076 PO = 2121.3 P = 1657.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3047		-.2585	-.2651	-.2877	-.5801	-.8479	
45.000				-.3044				
90.000			-.3061	-.3249	-.3687	-.5146	-.7046	
135.000				-.3145	-.3354	-.4820		.0750
180.000			-.2859	-.3274	-.3324	-.4451	-.6752	
225.000						-.6946		.2483
270.000		-.2984	-.2950	-.3250			-.6662	
315.000				-.3102	-.3129	-.3969		-.5541

ALPHA (3) = 3.947 BETA (1) = -.009 MACH = .60510 RN/L = 3.5081 PO = 2121.8 P = 1655.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3031		-.2327	-.2489	-.2814	-.6204	-.8370	
45.000				-.3146				
90.000			-.2975	-.3579	-.4081	-.4852	-.6488	
135.000				-.3314	-.3803	-.6026		.3024
180.000			-.2918	-.3250	-.3407	-.4232	-.6458	
225.000						-.6826		.2629
270.000		-.2888	-.2821	-.2928			-.5917	
315.000				-.2965	-.3116	-.3938		-.4969

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE-H75) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.980 BETA (1) = -.012 MACH = .90260 RN/L = 4.2512 PO = 2122.5 P = 1251.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3398		-.3471	-.3679	-.3749	-.4070	-.7056	
45.000				-.4001				
90.000			-.3453	-.3899	-.4278	-.5363	-.7581	
135.000				-.3532	-.4141	-.5647		.2695
180.000			-.3233	-.3474	-.3478	-.4427	-.5981	
225.000						-.6818		.2625
270.000		-.3443	-.3385	-.3530			-.5971	
315.000				-.3887	-.4396	-.5844		-.4292

ALPHA (2) = -.324 BETA (1) = -4.047 MACH = .90460 RN/L = 4.2477 PO = 2121.6 P = 1248.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3543		-.3442	-.3646	-.3752	-.4007	-.6918	
45.000				-.3823				
90.000			-.3508	-.4057	-.4762	-.5091	-.7779	
135.000				-.3505	-.3928	-.6438		.4761
180.000			-.3341	-.3607	-.3981	-.4841	-.7000	
225.000						-.6430		.1558
270.000		-.3579	-.3454	-.3542			-.5760	
315.000				-.3951	-.4707	-.5947		-.4106

ALPHA (2) = -.317 BETA (2) = -.006 MACH = .90460 RN/L = 4.2477 PO = 2121.6 P = 1248.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3144		-.3006	-.3536	-.3426	-.4159	-.6658	
45.000				-.3765				
90.000			-.3375	-.3815	-.4264	-.5050	-.7086	
135.000				-.3547	-.4284	-.5950		.3735
180.000			-.3097	-.3249	-.3203	-.4439	-.5829	
225.000						-.6455		.3480

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H75)

ALPHA (2) = -.317 BETA (2) = -.006

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3114	-.3340	-.3253			-.5356	
315.000				-.3501	-.3695	-.5481		-.3947

ALPHA (2) = -.396 BETA (3) = 3.984 MACH = .90460 RN/L = 4.2477 PO = 2121.6 P = 1248.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3425		-.3532	-.3705	-.3843	-.4134	-.6790	
45.000				-.4136				
90.000			-.3347	-.3552	-.3691	-.5010	-.7864	
135.000				-.3590	-.3763	-.5239		.0870
180.000			-.3600	-.3638	-.3628	-.4813	-.7329	
225.000						-.7262		.3452
270.000		-.3399	-.3456	-.3448			-.4915	
315.000				-.3683	-.3885	-.5143		-.4066

ALPHA (3) = 4.076 BETA (1) = -.012 MACH = .90480 RN/L = 4.2388 PO = 2121.1 P = 1247.6

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3193		-.3140	-.3436	-.3531	-.4039	-.6714	
45.000				-.3514				
90.000			-.3285	-.3567	-.4074	-.5118	-.7322	
135.000				-.3713	-.4551	-.6173		.4346
180.000			-.3089	-.3234	-.3293	-.4325	-.5981	
225.000						-.6191		.3864
270.000		-.3225	-.3282	-.3269			-.4439	
315.000				-.3299	-.3561	-.4769		-.4000

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H76) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.934 BETA (1) = .009 MACH = 1.1011 RN/L = 4.4175 PO = 2123.9 P = 993.44

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3692		-.3843	-.4415	-.4870	-.6326	-.2942	
45.000				-.4371				
90.000			-.4309	-.4493	-.4493	-.4484	-.4470	
135.000				-.4044	-.4261	-.5373		.3109
180.000			-.3840	-.3876	-.3840	-.4849	-.6755	
225.000						-.5472		.3012
270.000		-.4050	-.4235	-.4256			-.4378	
315.000				-.4571	-.4814	-.6076		-.0754

ALPHA (2) = -.238 BETA (1) = -3.994 MACH = 1.1063 RN/L = 4.4170 PO = 2123.4 P = 986.84

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4003		-.4303	-.4471	-.4670	-.5833	-.3275	
45.000				-.4733				
90.000			-.4426	-.4587	-.4722	-.4880	-.6680	
135.000				-.4527	-.4914	-.6402		.5913
180.000			-.4078	-.4082	-.4282	-.5240	-.6968	
225.000						-.5154		.2415
270.000		-.4158	-.4354	-.4604			-.4490	
315.000				-.4741	-.4948	-.6127		-.0682

ALPHA (2) = -.307 BETA (2) = .009 MACH = 1.1063 RN/L = 4.4170 PO = 2123.4 P = 985.84

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3377		-.3587	-.3899	-.4289	-.5761	-.3088	
45.000				-.3985				
90.000			-.3931	-.4148	-.4335	-.4977	-.5770	
135.000				-.3751	-.4028	-.5175		.3997
180.000			-.3442	-.3544	-.3529	-.4483	-.6640	
225.000						-.5533		.4058

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H76)

ALPHA (2) = -.307 BETA (2) = .009

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3571	-.3776	-.3877			-.5571	
315.000				-.4055	-.4151	-.5393		-.0796

ALPHA (2) = -.271 BETA (3) = 4.034 MACH = 1.1063 RN/L = 4.4170 PO = 2123.4 P = 986.84

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3976		-.4082	-.4214	-.4361	-.5439	-.3207	
45.000				-.4266				
90.000			-.4010	-.4172	-.4266	-.4351	-.4394	
135.000				-.4148	-.4464	-.5030		.2184
180.000			-.3903	-.3988	-.4028	-.5197	-.8367	
225.000						-.5424		.4613
270.000		-.4026	-.4030	-.4148			-.6276	
315.000				-.4761	-.4974	-.6201		-.1007

ALPHA (3) = 4.026 BETA (1) = .012 MACH = 1.1056 RN/L = 4.4135 PO = 2121.8 P = 986.83

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3905		-.4113	-.4272	-.4525	-.5868	-.3203	
45.000				-.4578				
90.000			-.4336	-.4488	-.4607	-.4683	-.6880	
135.000				-.4309	-.4544	-.5554		.4455
180.000			-.3947	-.3956	-.4117	-.5203	-.7531	
225.000						-.5506		.3466
270.000		-.3940	-.4140	-.4265			-.6534	
315.000				-.4561	-.4801	-.6282		-.1314

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H77) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.881 BETA (1) = .012 MACH = 1.2507 RN/L = 4.4817 PO = 2123.2 P = 818.92

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3167		-.3308	-.3886	-.4586	-.4937	-.1500	
45.000				-.3928				
90.000			-.3642	-.3869	-.3889	-.3957	-.4929	
135.000				-.3389	-.3680	-.4572		.4423
180.000			-.3102	-.3178	-.3112	-.3850	-.5406	
225.000						-.4451		.3456
270.000		-.3293	-.3360	-.3786			-.4888	
315.000				-.3753	-.4014	-.5068		-.0296

ALPHA (2) = -.238 BETA (1) = -3.994 MACH = 1.2534 RN/L = 4.4652 PO = 2123.9 P = 816.27

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3223		-.3413	-.3845	-.4217	-.5263	-.1816	
45.000				-.4095				
90.000			-.3676	-.3792	-.3821	-.3916	-.4819	
135.000				-.3660	-.3969	-.4432		.6348
180.000			-.3238	-.3214	-.3411	-.4202	-.5142	
225.000						-.3911		.2794
270.000		-.3185	-.3257	-.3827			-.5104	
315.000				-.4196	-.4402	-.5094		-.0119

ALPHA (2) = -.258 BETA (2) = .009 MACH = 1.2534 RN/L = 4.4652 PO = 2123.9 P = 816.27

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2975		-.3052	-.3635	-.4224	-.4895	-.1489	
45.000				-.4209				
90.000			-.3353	-.3461	-.3522	-.3639	-.4853	
135.000				-.3282	-.3483	-.4383		.4985
180.000			-.3042	-.3086	-.2883	-.3720	-.5301	
225.000						-.4447		.3990

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H77)

ALPHA (2) = -.258 BETA (2) = .009

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3040	-.3086	-.3599			-.5129	
315.000				-.3912	-.4082	-.5265		-.0094

ALPHA (2) = -.281 BETA (3) = 4.031 MACH = 1.2534 RN/L = 4.4652 PO = 2123.9 P = 816.27

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3226		-.3384	-.3685	-.4068	-.5121	-.1831	
45.000				-.4355				
90.000			-.3347	-.3313	-.3296	-.3498	-.5063	
135.000				-.3377	-.3668	-.4291		.2039
180.000			-.3139	-.3219	-.3303	-.4134	-.6439	
225.000						-.4010		.4740
270.000		-.3374	-.3353	-.3841			-.4688	
315.000				-.4666	-.4975	-.5564		-.0120

ALPHA (3) = 3.953 BETA (1) = .016 MACH = 1.2486 RN/L = 4.4578 PO = 2122.5 P = 820.98

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3080		-.3044	-.3506	-.3731	-.4764	-.1788	
45.000				-.4078				
90.000			-.3230	-.3327	-.3379	-.3571	-.4845	
135.000				-.3169	-.3390	-.4034		.4731
180.000			-.3376	-.3262	-.3273	-.4106	-.5693	
225.000						-.4045		.3872
270.000		-.3059	-.3091	-.3535			-.4530	
315.000				-.4224	-.5092	-.5534		-.0154

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H78) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-CB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.980 BETA (1) = -.066 MACH = 1.4100 RN/L = 4.3522 PO = 2122.5 P = 657.63

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2936		-.2914	-.3094	-.3259	-.3766	-.1867	
45.000				-.3302				
90.000			-.3056	-.3033	-.3009	-.3040	-.3806	
135.000				-.3318	-.3592	-.4102		.4590
180.000			-.3161	-.3158	-.3047	-.4032	-.4255	
225.000						-.3921		.3430
270.000		-.2975	-.3014	-.3121			-.3828	
315.000				-.3101	-.3533	-.4110		-.0667

ALPHA (2) = -.238 BETA (1) = -4.072 MACH = 1.4075 RN/L = 4.3434 PO = 2123.2 P = 660.25

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2843		-.2813	-.3007	-.3230	-.3944	-.1646	
45.000				-.3132				
90.000			-.3410	-.3335	-.3309	-.3253	-.3498	
135.000				-.3795	-.3839	-.2646		.5622
180.000			-.2829	-.2812	-.3033	-.3426	-.3599	
225.000						-.3398		.2592
270.000		-.2605	-.2804	-.2904			-.3613	
315.000				-.3091	-.3307	-.4067		-.0439

ALPHA (2) = -.228 BETA (2) = -.060 MACH = 1.4075 RN/L = 4.3434 PO = 2123.2 P = 660.25

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2606		-.2553	-.2789	-.3060	-.3718	-.1736	
45.000				-.2769				
90.000			-.2961	-.2995	-.2899	-.2858	-.3857	
135.000				-.3163	-.3300	-.3649		.5423
180.000			-.2680	-.2609	-.2562	-.3070	-.4225	
225.000						-.3279		.3840

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H78)

ALPHA (2) = -.228 BETA (2) = -.063

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2654	-.2711	-.3204			-.4011	
315.000				-.2850	-.3166	-.3856		-.0421

ALPHA (2) = -.261 BETA (3) = 3.953 MACH = 1.4075 RN/L = 4.3434 PO = 2123.2 P = 650.25

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2758		-.2767	-.2970	-.3131	-.3838	-.1643	
45.000				-.3273				
90.000			-.2812	-.2806	-.2794	-.2853	-.3498	
135.000				-.2818	-.3028	-.3466		.2158
180.000			-.2684	-.2753	-.2981	-.3447	-.5141	
225.000						-.2785		.4416
270.000		-.2944	-.2915	-.3284			-.3788	
315.000				-.2961	-.3509	-.3958		-.0451

ALPHA (3) = 3.920 BETA (1) = -.066 MACH = 1.4043 RN/L = 4.3377 PO = 2123.2 P = 663.16

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2459		-.2392	-.2894	-.3259	-.3868	-.0713	
45.000				-.2897				
90.000			-.2438	-.3060	-.3207	-.3724	-.4067	
135.000				-.3405	-.3319	-.3434		.5266
180.000			-.2627	-.2462	-.2220	-.2822	-.4240	
225.000						-.3236		.4069
270.000		-.2422	-.2416	-.2762			-.3988	
315.000				-.2677	-.3605	-.3621		.0194

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H79) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -4.105 BETA (1) = -.006 MACH = .59090 RN/L = 3.4170 PO = 2104.1 P = 1661.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.5350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3597		-.2791	-.2883	-.3603	-.6986	-.8497	
45.000				-.3500				
90.000			-.3500	-.3997	-.4149	-.5996	-.7927	
135.000				-.3584	-.4121	-.6146		.2154
180.000			-.3354	-.3526	-.3644	-.4333	-.6814	
225.000						-.7235		.1413
270.000		-.3353	-.3272	-.3491			-.6616	
315.000				-.3386	-.3507	-.4900		-.5637

ALPHA (2) = -.383 BETA (1) = -4.047 MACH = .59743 RN/L = 3.4453 PO = 2104.1 P = 1653.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3423		-.2803	-.2976	-.3233	-.6517	-.8820	
45.000				-.3557				
90.000			-.3454	-.4319	-.4820	-.5535	-.7827	
135.000				-.3744	-.3947	-.6534		.3231
180.000			-.3454	-.3665	-.3919	-.4383	-.7003	
225.000						-.6718		.0909
270.000		-.3323	-.3208	-.3315			-.6310	
315.000				-.3281	-.3430	-.4865		-.5939

ALPHA (2) = -.380 BETA (2) = -.009 MACH = .59743 RN/L = 3.4453 PO = 2104.1 P = 1653.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3365		-.2772	-.2870	-.3346	-.6724	-.8540	
45.000				-.3487				
90.000			-.3522	-.4075	-.4206	-.5582	-.7558	
135.000				-.3629	-.4168	-.6357		.2456
180.000			-.3391	-.3577	-.3666	-.4485	-.6825	
225.000						-.7277		.1865

ARC11-023IA80 OTS=SRB=N ORB=N) ET BASE (RE4H79)

ALPHA (2) = -.380 BETA (2) = -.009

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3245	-.3235	-.3398			-.6654	
315.000				-.3343	-.3349	-.4366		-.5751

ALPHA (2) = -.499 BETA (3) = 3.981 MACH = .59743 RN/L = 3.4453 PO = 2104.1 P = 1653.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3324		-.2780	-.2882	-.3082	-.6303	-.8818	
45.000				-.3322				
90.000			-.3308	-.3600	-.3803	-.5390	-.7318	
135.000				-.3401	-.3658	-.5116		.0616
180.000			-.3137	-.3457	-.3404	-.4413	-.6822	
225.000						-.7284		.2353
270.000		-.3160	-.3150	-.3454			-.6924	
315.000				-.3325	-.3343	-.4361		-.5790

ALPHA (3) = 3.960 BETA (1) = -.012 MACH = .59700 RN/L = 3.4428 PO = 2104.1 P = 1653.6

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3324		-.2698	-.2855	-.3252	-.6826	-.8808	
45.000				-.3442				
90.000			-.3351	-.4056	-.4415	-.5231	-.6968	
135.000				-.3649	-.4191	-.6402		.2848
180.000			-.3306	-.3573	-.3644	-.4399	-.6823	
225.000						-.7342		.2418
270.000		-.3220	-.3137	-.3214			-.6291	
315.000				-.3331	-.3396	-.4387		-.5384

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H80) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.897 BETA (1) = -.009 MACH = .89640 RN/L = 4.1815 PO = 2097.1 P = 1244.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3751		-.3889	-.4065	-.4162	-.4487	-.7191	
45.000				-.4317				
90.000			-.3806	-.4199	-.4647	-.5706	-.8270	
135.000				-.3951	-.4563	-.6104		.2661
180.000			-.3617	-.3784	-.3873	-.4608	-.6341	
225.000						-.7187		.2597
270.000		-.3842	-.3742	-.3904			-.6370	
315.000				-.4276	-.4852	-.6397		-.4455

ALPHA (2) = -.353 BETA (1) = -.050 MACH = .90047 RN/L = 4.1929 PO = 2097.3 P = 1239.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3867		-.3788	-.4044	-.4144	-.4489	-.7006	
45.000				-.4224				
90.000			-.3930	-.4323	-.5044	-.5508	-.8692	
135.000				-.3814	-.4191	-.6673		.4726
180.000			-.3757	-.3835	-.4053	-.6282	-.8632	
225.000						-.6950		.1443
270.000		-.3873	-.3782	-.4004			-.6220	
315.000				-.4574	-.5350	-.6577		-.4188

ALPHA (2) = -.363 BETA (2) = -.009 MACH = .90047 RN/L = 4.1929 PO = 2097.3 P = 1239.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3608		-.3514	-.4016	-.3954	-.4712	-.6835	
45.000				-.4253				
90.000			-.3804	-.4158	-.4560	-.5521	-.8047	
135.000				-.3970	-.4778	-.6259		.3600
180.000			-.3525	-.3705	-.3704	-.4637	-.6202	
225.000						-.6846		.3321

ARC11-023IA60 OTS(SRB=N ORB=N) ET BASE (RE4H80)

ALPHA (2) = -.363 BETA (2) = -.009

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3638	-.3710	-.3760			-.5943	
315.000				-.3958	-.4209	-.6424		-.4125

ALPHA (2) = -.519 BETA (3) = 3.981 MACH = .90047 RN/L = 4.1929 PO = 2097.3 P = 1239.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3785		-.3774	-.4061	-.4080	-.4475	-.6828	
45.000				-.4486				
90.000			-.3623	-.3878	-.3922	-.5322	-.8125	
135.000				-.3912	-.4068	-.5546		.0782
180.000			-.4006	-.3940	-.4124	-.5138	-.7408	
225.000						-.7462		.3396
270.000		-.3735	-.3778	-.3749			-.5189	
315.000				-.3862	-.4249	-.6018		-.4163

ALPHA (3) = 3.980 BETA (1) = -.012 MACH = .89790 RN/L = 4.1840 PO = 2097.8 P = 1243.1

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3649		-.3699	-.3849	-.4023	-.4503	-.6888	
45.000				-.3930				
90.000			-.3682	-.3879	-.4376	-.5549	-.8140	
135.000				-.4078	-.5024	-.6439		.4238
180.000			-.3465	-.3719	-.7663	-.4582	-.6239	
225.000						-.6824		.3711
270.000		-.3661	-.3631	-.3733			-.4809	
315.000				-.3788	-.4011	-.5354		-.4215

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4HB1) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.937 BETA (1) = .012 MACH = 1.0996 RN/L = 4.3760 PO = 2105.5 P = 986.57

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3736		-.3782	-.4260	-.4768	-.6128	-.2972	
45.000				-.4344				
90.000			-.4041	-.4089	-.4101	-.4181	-.4504	
135.000				-.4120	-.4346	-.5423		.3030
180.000			-.3858	-.4231	-.4695	-.5156	-.7013	
225.000						-.5537		.3010
270.000		-.3892	-.3957	-.4120			-.4457	
315.000				-.4401	-.4679	-.5901		-.0750

ALPHA (2) = -.396 BETA (1) = -3.994 MACH = 1.1021 RN/L = 4.3810 PO = 2105.0 P = 983.89

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3813		-.4070	-.4195	-.4363	-.5448	-.3309	
45.000				-.4480				
90.000			-.4106	-.4275	-.4434	-.4686	-.6603	
135.000				-.4351	-.4622	-.6097		.5813
180.000			-.3905	-.3867	-.4043	-.5182	-.6707	
225.000						-.5219		.2297
270.000		-.3917	-.4088	-.4241			-.4530	
315.000				-.4530	-.4759	-.5947		-.0668

ALPHA (2) = -.380 BETA (2) = .009 MACH = 1.1021 RN/L = 4.3810 PO = 2106.0 P = 983.89

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3356		-.3564	-.3862	-.4196	-.5721	-.3100	
45.000				-.4018				
90.000			-.3566	-.3738	-.3878	-.4806	-.5589	
135.000				-.3669	-.3986	-.5307		.3988
180.000			-.3585	-.3922	-.4505	-.4922	-.6900	
225.000						-.5540		.3913

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (REFHB1)

ALPHA (2) = -.380 BETA (2) = .009

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3515	-.3545	-.3733			-.4933	
315.000				-.4285	-.4427	-.5571		-.0804

ALPHA (2) = -.393 BETA (3) = 4.031 MACH = 1.1021 RN/L = 4.3810 PO = 2106.0 P = 983.89

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3937		-.4073	-.4205	-.4305	-.5233	-.3343	
45.000				-.4257				
90.000			-.4057	-.4160	-.4293	-.4438	-.4589	
135.000				-.4187	-.4461	-.5106		.2041
180.000			-.4014	-.4101	-.4853	-.6421	-.8213	
225.000						-.5517		.4500
270.000		-.4007	-.4040	-.4177			-.6216	
315.000				-.4803	-.5033	-.6118		-.1168

ALPHA (3) = 3.894 BETA (1) = .012 MACH = 1.1031 RN/L = 4.3843 PO = 2106.2 P = 982.65

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3892		-.3959	-.4182	-.4491	-.5735	-.3241	
45.000				-.4487				
90.000			-.4003	-.4112	-.4212	-.4359	-.6821	
135.000				-.4158	-.4506	-.5600		.4436
180.000			-.4097	-.4064	-.4731	-.5192	-.7901	
225.000						-.5573		.3421
270.000		-.3914	-.3946	-.4250			-.5540	
315.000				-.4613	-.4931	-.6370		-.1339

ARC11-0231A80 OTS(SRB=N ORB=N) ET BASE (RE4H82) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.957 BETA (1) = .016 MACH = 1.2439 RN/L = 4.4220 PO = 2109.1 P = 820.87

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2931		-.2948	-.3506	-.4146	-.4954	-.1520	
45.000				-.3695				
90.000			-.3053	-.3131	-.3149	-.3252	-.5013	
135.000				-.3027	-.3382	-.4515		.3947
180.000			-.3106	-.3596	-.3664	-.3985	-.5537	
225.000						-.4722		.3211
270.000		-.2916	-.2879	-.3237			-.4985	
315.000				-.3677	-.3945	-.5118		-.0369

ALPHA (2) = -.395 BETA (1) = -3.994 MACH = 1.2511 RN/L = 4.4175 PO = 2109.6 P = 813.25

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2746		-.2654	-.3220	-.3575	-.4767	-.1798	
45.000				-.3131				
90.000			-.3060	-.3188	-.3230	-.3339	-.4821	
135.000				-.3179	-.3470	-.4103		.6250
180.000			-.2915	-.2975	-.3137	-.4179	-.4299	
225.000						-.4115		.2495
270.000		-.2625	-.2659	-.3134			-.4981	
315.000				-.3775	-.4023	-.4794		-.0113

ALPHA (2) = -.396 BETA (2) = .009 MACH = 1.2511 RN/L = 4.4175 PO = 2109.6 P = 813.25

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2627		-.2600	-.3141	-.3703	-.4740	-.1459	
45.000				-.3332				
90.000			-.2720	-.2794	-.2772	-.2929	-.4963	
135.000				-.2823	-.3340	-.4507		.4742
180.000			-.3049	-.3360	-.3592	-.3699	-.5074	
225.000						-.4451		.3787

ARC11-0231A80 OTS(SRB=N ORB=N) ET BASE (RE4H82)

ALPHA (2) = -.396 BETA (2) = .009

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2624	-.2579	-.3004			-.5121	
315.000				-.3712	-.4209	-.5247		-.0092

ALPHA (2) = -.380 BETA (3) = 4.031 MACH = 1.2511 RN/L = 4.4175 PO = 2109.6 P = 813.25

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2752		-.2872	-.3212	-.3514	-.4686	-.1872	
45.000				-.3741				
90.000			-.2819	-.2976	-.2919	-.3115	-.5076	
135.000				-.2933	-.3238	-.3958		.1815
180.000			-.2820	-.3258	-.3611	-.4307	-.5928	
225.000						-.3961		.4600
270.000		-.2863	-.2851	-.3318			-.4420	
315.000				-.3311	-.4770	-.5441		-.0142

ALPHA (3) = 3.877 BETA (1) = .009 MACH = 1.2502 RN/L = 4.4099 PO = 2109.1 P = 813.99

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2661		-.2556	-.3036	-.3248	-.4395	-.1774	
45.000				-.3289				
90.000			-.2703	-.2822	-.2875	-.3075	-.4726	
135.000				-.2852	-.3095	-.4043		.4784
180.000			-.3067	-.3302	-.3603	-.3686	-.5358	
225.000						-.4168		.3867
270.000		-.2564	-.2631	-.3017			-.4064	
315.000				-.3040	-.4619	-.5448		-.0129

ARC11-0231A80 OTS(SRB=N ORB=N) ET BASE (RE4H83) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.983 BETA (1) = -.066 MACH = 1.4086 RN/L = 4.3187 PO = 2118.3 P = 657.67

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2233		-.2096	-.2273	-.2423	-.3165	-.1846	
45.000				-.2333				
90.000			-.2255	-.2498	-.2479	-.2298	-.3960	
135.000				-.2475	-.2984	-.3640		.4159
180.000			-.2519	-.2748	-.3227	-.3291	-.4109	
225.000						-.3813		.3131
270.000		-.2261	-.2314	-.2595			-.3947	
315.000				-.2624	-.3192	-.3919		-.0650

ALPHA (2) = -.380 BETA (1) = -4.059 MACH = 1.4054 RN/L = 4.3138 PO = 2117.4 P = 660.32

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2250		-.2084	-.2280	-.2448	-.3311	-.1659	
45.000				-.2426				
90.000			-.2663	-.2618	-.2608	-.2616	-.3516	
135.000				-.3275	-.3340	-.2719		.5606
180.000			-.2425	-.2451	-.2566	-.2934	-.3168	
225.000						-.3182		.2345
270.000		-.2164	-.2195	-.2660			-.3369	
315.000				-.2624	-.3014	-.3954		-.0456

ALPHA (2) = -.380 BETA (2) = -.059 MACH = 1.4054 RN/L = 4.3138 PO = 2117.4 P = 660.32

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2116		-.1892	-.2176	-.2366	-.3229	-.1746	
45.000				-.2270				
90.000			-.2276	-.2313	-.2262	-.2309	-.3930	
135.000				-.2446	-.2857	-.3634		.5240
180.000			-.2430	-.2713	-.3368	-.3085	-.4081	
225.000						-.3477		.3547

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H83)

ALPHA (2) = -.380 BETA (2) = -.059

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2118	-.2172	-.2524			-.3994	
315.000				-.2214	-.2655	-.3734		-.0450

ALPHA (2) = -.409 BETA (3) = 3.953 MACH = 1.4054 RN/L = 4.3138 PO = 2117.4 P = 660.32

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2191		-.2225	-.2415	-.2527	-.3371	-.1655	
45.000				-.2539				
90.000			-.2208	-.2255	-.2222	-.2281	-.3490	
135.000				-.2309	-.2578	-.3063		.1911
180.000			-.2166	-.2568	-.3033	-.3407	-.4583	
225.000						-.2916		.4366
270.000		-.2366	-.2340	-.2673			-.3705	
315.000				-.2228	-.2417	-.3679		-.0451

ALPHA (3) = 3.828 BETA (1) = .000 MACH = 1.4102 RN/L = 4.2670 PO = 2116.9 P = 655.67

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2018		-.1713	-.2434	-.2676	-.3656	-.0682	
45.000				-.2146				
90.000			-.2005	-.2202	-.2284	-.2381	-.3978	
135.000				-.2512	-.2734	-.3390		.5116
180.000			-.2258	-.2493	-.3101	-.2597	-.3887	
225.000						-.3107		.3975
270.000		-.1929	-.2072	-.2213			-.3736	
315.000				-.2011	-.2634	-.3148		.0140

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H84) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 2.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.953 BETA (1) = -.044 MACH = .59570 RN/L = 3.4174 PO = 2114.7 P = 1663.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3555		-.2907	-.2813	-.3552	-.6599	-.8540	
45.000				-.3453				
90.000			-.3356	-.4073	-.4254	-.5802	-.7957	
135.000				-.3598	-.4144	-.6091		.2133
180.000			-.3279	-.3612	-.3862	-.4352	-.6871	
225.000						-.7144		.1436
270.000		-.3459	-.3199	-.3521			-.6731	
315.000				-.3504	-.3624	-.4787		-.5736

ALPHA (2) = -.284 BETA (1) = -4.063 MACH = .59877 RN/L = 3.4302 PO = 2114.0 P = 1659.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3208		-.2518	-.2700	-.2933	-.6075	-.8532	
45.000				-.3287				
90.000			-.3188	-.4087	-.4545	-.5252	-.7355	
135.000				-.3531	-.3797	-.6268		.3336
180.000			-.3181	-.3462	-.3756	-.4432	-.6645	
225.000						-.6432		.0943
270.000		-.3017	-.2965	-.3136			-.5720	
315.000				-.3073	-.3228	-.4558		-.5719

ALPHA (2) = -.291 BETA (2) = -.047 MACH = .59877 RN/L = 3.4302 PO = 2114.0 P = 1659.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2876		-.2351	-.2523	-.2877	-.6237	-.8013	
45.000				-.3068				
90.000			-.3095	-.3596	-.3803	-.5292	-.6929	
135.000				-.3255	-.3660	-.5833		.2634
180.000			-.2962	-.3204	-.3333	-.4225	-.6407	
225.000						-.6761		.2093

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H84)

ALPHA (2) = -.291 BETA (2) = -.047

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2825	-.2789	-.3034			-.6095	
315.000				-.2911	-.2898	-.3879		-.5292

ALPHA (2) = -.320 BETA (3) = 3.969 MACH = .59877 RN/L = 3.4302 PO = 2114.0 P = 1659.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3181		-.2706	-.2703	-.2964	-.5938	-.8577	
45.000				-.3102				
90.000			-.3065	-.3410	-.3596	-.5102	-.7105	
135.000				-.3181	-.3517	-.4790		.0720
180.000			-.2928	-.3308	-.3459	-.4456	-.6798	
225.000						-.7077		.2454
270.000		-.3120	-.2955	-.3325			-.6880	
315.000				-.3191	-.3270	-.4182		-.5628

ALPHA (3) = 3.973 BETA (1) = -.044 MACH = .59840 RN/L = 3.4294 PO = 2112.6 P = 1658.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2956		-.2332	-.2464	-.2814	-.6261	-.8221	
45.000				-.3094				
90.000			-.2974	-.3558	-.4038	-.4759	-.6367	
135.000				-.3215	-.3760	-.5969		.3006
180.000			-.2929	-.3201	-.3383	-.4161	-.6448	
225.000						-.6846		.2654
270.000		-.2813	-.2776	-.2814			-.5745	
315.000				-.2933	-.3006	-.3850		-.4921

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H85) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = 0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 2.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.937 BETA (1) = -.050 MACH = .90250 RN/L = 4.2680 PO = 2118.3 P = 1249.1

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3330		-.3350	-.3650	-.3728	-.4039	-.7053	
45.000				-.3953				
90.000			-.3410	-.3843	-.4225	-.5338	-.7414	
135.000				-.3558	-.4102	-.5638		.2704
180.000			-.3183	-.3384	-.3457	-.4381	-.5961	
225.000						-.6758		.2677
270.000		-.3354	-.3380	-.3481			-.5860	
315.000				-.3808	-.4197	-.5808		-.4308

ALPHA (2) = -.301 BETA (1) = -4.066 MACH = .89937 RN/L = 4.2393 PO = 2116.4 P = 1252.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3453		-.3361	-.3604	-.3687	-.4029	-.6960	
45.000				-.3781				
90.000			-.3497	-.4259	-.4653	-.5051	-.7678	
135.000				-.3531	-.3891	-.6401		.4737
180.000			-.3346	-.3598	-.3923	-.4905	-.6927	
225.000						-.6469		.1563
270.000		-.3461	-.3404	-.3533			-.5735	
315.000				-.3925	-.4671	-.5825		-.4146

ALPHA (2) = -.304 BETA (2) = -.047 MACH = .89937 RN/L = 4.2393 PO = 2116.4 P = 1252.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3251		-.3217	-.3501	-.3594	-.4080	-.6764	
45.000				-.3790				
90.000			-.3322	-.3848	-.4394	-.4992	-.7220	
135.000				-.3623	-.4423	-.5945		.3633
180.000			-.3093	-.3330	-.3391	-.4478	-.6051	
225.000						-.6500		.3420

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H85)

ALPHA (2) = -.304 BETA (2) = -.047

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3265	-.3316	-.3406			-.5492	
315.000				-.3576	-.3907	-.5507		-.4042

ALPHA (2) = -.320 BETA (3) = 3.969 MACH = .89937 RN/L = 4.2393 PO = 2116.4 P = 1252.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3395		-.3500	-.3711	-.3778	-.4068	-.7007	
45.000				-.4030				
90.000			-.3358	-.3566	-.3737	-.5099	-.7972	
135.000				-.3653	-.3792	-.5184		.0754
180.000			-.3546	-.3616	-.3764	-.4752	-.7108	
225.000						-.7244		.3383
270.000		-.3464	-.3390	-.3406			-.4921	
315.000				-.3519	-.3873	-.4968		-.4258

ALPHA (3) = 3.977 BETA (1) = -.044 MACH = .89910 RN/L = 4.2250 PO = 2114.7 P = 1251.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3198		-.3110	-.3413	-.3532	-.3939	-.6849	
45.000				-.3544				
90.000			-.3236	-.3616	-.4073	-.5017	-.7114	
135.000				-.3668	-.4582	-.6091		.4272
180.000			-.2990	-.3290	-.3321	-.4389	-.5957	
225.000						-.6288		.3825
270.000		-.3225	-.3212	-.3292			-.4479	
315.000				-.3304	-.3542	-.4619		-.4114

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H86) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 2.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -4.013 BETA (1) = .016 MACH = 1.1058 RN/L = 4.4715 PO = 2118.3 P = 985.01

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3615		-.3759	-.4292	-.4884	-.6225	-.2867	
45.000				-.4271				
90.000			-.4167	-.4431	-.4430	-.4424	-.4391	
135.000				-.3958	-.4183	-.5288		.3177
180.000			-.3702	-.3797	-.3783	-.4723	-.6963	
225.000						-.5385		.3081
270.000		-.4002	-.4124	-.4215			-.4336	
315.000				-.4439	-.4693	-.5997		-.0677

ALPHA (2) = -.304 BETA (1) = -3.991 MACH = 1.1047 RN/L = 4.4560 PO = 2115.9 P = 985.23

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3972		-.4279	-.4476	-.4637	-.5825	-.3287	
45.000				-.4715				
90.000			-.4394	-.4549	-.4625	-.4832	-.6685	
135.000				-.4505	-.4810	-.6347		.5854
180.000			-.4033	-.4062	-.4025	-.5204	-.7074	
225.000						-.5131		.2397
270.000		-.4134	-.4325	-.4554			-.4482	
315.000				-.4634	-.4861	-.6076		-.0583

ALPHA (2) = -.267 BETA (2) = .039 MACH = 1.1047 RN/L = 4.4560 PO = 2115.9 P = 985.23

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3515		-.3810	-.4019	-.4402	-.5880	-.3129	
45.000				-.4024				
90.000			-.4106	-.4352	-.4482	-.5016	-.5736	
135.000				-.3841	-.4133	-.5255		.3868
180.000			-.3545	-.3679	-.3750	-.4716	-.7158	
225.000						-.5535		.3958

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H86)

ALPHA (2) = -.267 BETA (2) = .009

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3799	-.3946	-.4133			-.5454	
315.000				-.3987	-.4152	-.5302		-.0754

ALPHA (2) = -.327 BETA (3) = 4.034 MACH = 1.1047 RN/L = 4.4560 PO = 2115.9 P = 985.23

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3956		-.4053	-.4174	-.4323	-.5387	-.3176	
45.000				-.4227				
90.000			-.3934	-.4154	-.4259	-.4364	-.4365	
135.000				-.4069	-.4430	-.4983		.2160
180.000			-.3873	-.3951	-.3994	-.5150	.0000	
225.000						-.5400		.4631
270.000		-.3984	-.3998	-.4134			-.6211	
315.000				-.4841	-.5030	-.6118		-.0974

ALPHA (3) = 3.986 BETA (1) = .016 MACH = 1.1038 RN/L = 4.4466 PO = 2116.2 P = 986.43

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3927		-.4121	-.4314	-.4548	-.5894	-.3221	
45.000				-.4585				
90.000			-.4346	-.4517	-.4611	-.4927	-.6886	
135.000				-.4309	-.4585	-.5586		.4474
180.000			-.3975	-.3980	-.4193	-.5263	-.7717	
225.000						-.5445		.3465
270.000		-.3980	-.4 80	-.4322			-.6565	
315.000				-.4621	-.4892	-.6304		-.1300

ARC11-0231A80 OTS(SRB=N ORB=N) ET BASE (RE4H87) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 2.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.871 BETA (1) = -.044 MACH = .59840 RN/L = 3.4324 PO = 2111.9 P = 1657.8

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3451		-.2789	-.2886	-.3538	-.6942	-.8483	
45.000				-.3524				
90.000			-.3552	-.3953	-.4203	-.5966	-.7815	
135.000				-.3668	-.4087	-.6170		.2211
180.000			-.3380	-.3539	-.3781	-.4319	-.6703	
225.000						-.7165		.1465
270.000		-.3342	-.3273	-.3429			-.6450	
315.000				-.3452	-.3510	-.4874		-.5567

ALPHA (2) = -.350 BETA (1) = -4.066 MACH = .59830 RN/L = 3.4341 PO = 2111.9 P = 1657.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3351		-.2737	-.2913	-.3135	-.6498	-.8749	
45.000				-.3505				
90.000			-.3392	-.4249	-.4688	-.5525	-.7591	
135.000				-.3662	-.3855	-.6488		.3276
180.000			-.3433	-.3631	-.3824	-.4325	-.6899	
225.000						-.6618		.0782
270.000		-.3162	-.3133	-.3238			-.6107	
315.000				-.3276	-.3345	-.4643		-.5850

ALPHA (2) = -.380 BETA (2) = -.050 MACH = .59830 RN/L = 3.4341 PO = 2111.9 P = 1657.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3303		-.2722	-.2936	-.3334	-.6716	-.8537	
45.000				-.3456				
90.000			-.3440	-.4068	-.4154	-.5693	-.7506	
135.000				-.3655	-.4160	-.6384		.2454
180.000			-.3435	-.3597	-.3758	-.4470	-.6830	
225.000						-.7178		.1861

ARC11-023IA80 OTS(SRS=N ORB=N) ET BASE (RE4H87)

ALPHA (2) = -.380 BETA (2) = -.050

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3255	-.3254	-.3420			-.6555	
315.000				-.3350	-.3321	-.4359		-.5674

ALPHA (2) = -.423 BETA (3) = 3.969 MACH = .59830 RN/L = 3.4341 PO = 2111.9 P = 1657.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3212		-.2734	-.2855	-.3049	-.6227	-.8667	
45.000				-.3178				
90.000			-.3299	-.3556	-.3674	-.5394	-.7321	
135.000				-.3378	-.3539	-.4931		.0650
180.000			-.3168	-.3372	-.3477	-.4482	-.6730	
225.000						-.7269		.2379
270.000		-.3195	-.3089	-.3359			-.6832	
315.000				-.3272	-.3381	-.4146		-.5612

ALPHA (3) = 3.986 BETA (1) = -.047 MACH = .59740 RN/L = 3.4327 PO = 2111.2 P = 1658.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3357		-.2647	-.2821	-.3195	-.6833	-.8767	
45.000				-.3419				
90.000			-.3352	-.3936	-.4347	-.5206	-.6931	
135.000				-.3685	-.4144	-.6339		.2847
180.000			-.3297	-.3544	-.3585	-.4384	-.6651	
225.000						-.7250		.2438
270.000		-.3184	-.3101	-.3173			-.6168	
315.000				-.3282	-.3372	-.4420		-.5361

ARC11-0231A80 OTS(SRB=N ORB=N) ET BASE (RE4H88) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 3.000 ELV-OB = 2.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.963 BETA (1) = -.044 MACH = .89500 RN/L = 4.1900 PO = 2107.0 P = 1252.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3732		-.3774	-.4059	-.4150	-.4439	-.7247	
45.000				-.4390				
90.000			-.3827	-.4229	-.4672	-.5654	-.8378	
135.000				-.3921	-.4503	-.6076		.2687
180.000			-.3614	-.3823	-.3929	-.4601	-.6309	
225.000						-.7226		.2603
270.000		-.3748	-.3754	-.3876			-.6378	
315.000				-.4223	-.4719	-.6465		-.4489

ALPHA (2) = -.383 BETA (1) = -4.066 MACH = .89813 RN/L = 4.1944 PO = 2106.2 P = 1247.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3828		-.3748	-.4025	-.4129	-.4442	-.7089	
45.000				-.4190				
90.000			-.3856	-.4257	-.5023	-.5485	-.8548	
135.000				-.3785	-.4239	-.6752		.4689
180.000			-.3701	-.3787	-.4070	-.5237	-.8566	
225.000						-.6911		.1434
270.000		-.3891	-.3831	-.3921			-.6254	
315.000				-.4501	-.5239	-.6575		-.4255

ALPHA (2) = -.376 BETA (2) = -.047 MACH = .89813 RN/L = 4.1944 PO = 2106.2 P = 1247.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3415		-.3443	-.3954	-.3889	-.4680	-.6798	
45.000				-.4205				
90.000			-.3762	-.4130	-.4572	-.5649	-.7787	
135.000				-.4021	-.4620	-.6314		.3591
180.000			-.3590	-.3684	-.3570	-.4636	-.6122	
225.000						-.6855		.3372

ARC11-0231A80 OTS(SRB=N ORB=N) ET BASE (RE4H88)

ALPHA (2) = -.376 BETA (2) = -.047

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3497	-.3753	-.3758			-.5751	
315.000				-.3967	-.4132	-.6294		-.4099

ALPHA (2) = -.409 BETA (3) = 3.969 MACH = .89813 RN/L = 4.1944 PO = 2106.2 P = 1247.9

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3622		-.3735	-.3929	-.3914	-.4337	-.6951	
45.000				-.4322				
90.000			-.3606	-.3879	-.3813	-.5293	-.8114	
135.000				-.3801	-.3977	-.5422		.0782
180.000			-.3845	-.3748	-.4078	-.5004	-.7139	
225.000						-.7345		.3390
270.000		-.3585	-.3602	-.3629			-.5013	
315.000				-.3714	-.4142	-.5529		-.4236

ALPHA (3) = 3.940 BETA (1) = -.044 MACH = .89700 RN/L = 4.1933 PO = 2107.0 P = 1249.8

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3672		-.3621	-.3827	-.4035	-.4520	-.6920	
45.000				-.3926				
90.000			-.3684	-.3979	-.4435	-.5574	-.8176	
135.000				-.4104	-.5041	-.6509		.4239
180.000			-.3422	-.3685	-.3667	-.4552	-.6244	
225.000						-.5649		.3716
270.000		-.3582	-.3649	-.3751			-.4821	
315.000				-.3804	-.4036	-.5307		-.4246

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H89) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 2.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.970 BETA (1) = .016 MACH = 1.1009 RN/L = 4.4134 PO = 2105.5 P = 985.03

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3692		-.3776	-.4230	-.4756	-.6119	-.2937	
45.000				-.4310				
90.000			-.4019	-.4089	-.4128	-.4147	-.4490	
135.000				-.4143	-.4334	-.5386		.3028
180.000			-.3850	-.4193	-.4671	-.5153	-.6992	
225.000						-.5662		.3004
270.000		-.3898	-.3990	-.4138			-.4456	
315.000				-.4362	-.4684	-.5904		-.0753

ALPHA (2) = -.436 BETA (1) = -3.994 MACH = 1.1059 RN/L = 4.4313 PO = 2113.1 P = 982.43

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3798		-.4045	-.4195	-.4358	-.5447	-.3260	
45.000				-.4354				
90.000			-.4100	-.4255	-.4376	-.4658	-.6596	
135.000				-.4233	-.4597	-.6069		.5805
180.000			-.3840	-.3948	-.4015	-.5157	-.6874	
225.000						-.5130		.2289
270.000		-.3913	-.4034	-.4258			-.4472	
315.000				-.4460	-.4673	-.5917		-.0641

ALPHA (2) = -.429 BETA (2) = .009 MACH = 1.1059 RN/L = 4.4313 PO = 2113.1 P = 982.43

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3411		-.3560	-.3835	-.4197	-.5759	-.3070	
45.000				-.4044				
90.000			-.3526	-.3751	-.3833	-.4738	-.5551	
135.000				-.3673	-.3941	-.5304		.4039
180.000			-.3593	-.3828	-.4428	-.4903	-.6881	
225.000						-.5540		.3953

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H89)

ALPHA (2) = -.429 BETA (2) = .009

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3459	-.3507	-.3739			-.4934	
315.000				-.4376	-.4389	-.5498		-.0748

ALPHA (2) = -.466 BETA (3) = 4.031 MACH = 1.1059 RN/L = 4.4313 PO = 2113.1 P = 982.43

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3824		-.3904	-.4025	-.4149	-.5239	-.3233	
45.000				-.4107				
90.000			-.3905	-.4069	-.4166	-.4256	-.4468	
135.000				-.4011	-.4335	-.4895		.2109
180.000			-.3817	-.3920	-.4635	-.6181	-.8059	
225.000						-.5313		.4521
270.000		-.3841	-.3865	-.4013			-.6000	
315.000				-.4635	-.4813	-.5997		-.1024

ALPHA (3) = 3.851 BETA (1) = .012 MACH = 1.1043 RN/L = 4.4260 PO = 2112.6 P = 984.21

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3881		-.3922	-.4176	-.4412	-.5788	-.3207	
45.000				-.4468				
90.000			-.3988	-.4095	-.4156	-.4568	-.6790	
135.000				-.4109	-.4456	-.5589		.4468
180.000			-.4112	-.4193	-.4651	-.5147	-.7787	
225.000						-.5613		.3409
270.000		-.3891	-.3914	-.4190			-.5499	
315.000				-.4628	-.4982	-.6447		-.1288

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H90) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.960 BETA (1) = -.003 MACH = .59840 RN/L = 3.4955 PO = 2121.1 P = 1665.1

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3348		-.2644	-.2768	-.3325	-.6662	-.8205	
45.000				-.3345				
90.000			-.3328	-.3802	-.4065	-.5724	-.7612	
135.000				-.3444	-.3969	-.5960		.2282
180.000			-.3161	-.3369	-.3570	-.4327	-.6650	
225.000						-.7088		.1587
270.000		-.3137	-.3127	-.3280			-.6321	
315.000				-.3222	-.3424	-.4736		-.5435

ALPHA (2) = -.267 BETA (1) = -4.003 MACH = .59907 RN/L = 3.4936 PO = 2121.1 P = 1664.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3252		-.2560	-.2767	-.3052	-.6194	-.8629	
45.000				-.3384				
90.000			-.3190	-.4172	-.4566	-.5271	-.7506	
135.000				-.3642	-.3826	-.6317		.3306
180.000			-.3227	-.3506	-.3806	-.4542	-.6745	
225.000						-.6528		.0881
270.000		-.3083	-.3005	-.3209			-.6019	
315.000				-.3093	-.3189	-.4629		-.5736

ALPHA (2) = -.291 BETA (2) = .012 MACH = .59907 RN/L = 3.4936 PO = 2121.1 P = 1664.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3047		-.2446	-.2641	-.2965	-.6325	-.8176	
45.000				-.3180				
90.000			-.3116	-.3736	-.3984	-.5393	-.7085	
135.000				-.3309	-.3774	-.6034		.2584
180.000			-.3038	-.3353	-.3404	-.4366	-.6619	
225.000						-.6933		.2004

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H90)

ALPHA (2) = -.291 BETA (2) = .012

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2912	-.2946	-.3194			-.6292	
315.000				-.3031	-.3027	-.4000		-.5403

ALPHA (2) = -.294 BETA (3) = 4.028 MACH = .59907 RN/L = 3.4936 PO = 2121.1 P = 1664.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3105		-.2559	-.2663	-.2878	-.5973	-.6580	
45.000				-.3158				
90.000			-.3147	-.3410	-.3754	-.5122	-.7111	
135.000				-.3130	-.3434	-.4856		.0758
180.000			-.2892	-.3284	-.3250	-.4427	-.6758	
225.000						-.7113		.2471
270.000		-.2993	-.2991	-.3345			-.6745	
315.000				-.3192	-.3188	-.4131		-.5598

ALPHA (3) = 3.973 BETA (1) = .006 MACH = .59860 RN/L = 3.4896 PO = 2121.1 P = 1664.8

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3099		-.2441	-.2549	-.2697	-.6314	-.8334	
45.000				-.3156				
90.000			-.3081	-.3657	-.4096	-.4831	-.6519	
135.000				-.3367	-.3805	-.6100		.2973
180.000			-.2910	-.3268	-.3483	-.4279	-.6549	
225.000						-.6944		.2636
270.000		-.2953	-.2873	-.2849			-.5871	
315.000				-.3033	-.3064	-.3976		-.5052

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H91) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.980 BETA (1) = -.003 MACH = .90430 RN/L = 4.2125 PO = 2104.8 P = 1238.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3368		-.3448	-.3705	-.3724	-.4040	-.7028	
45.000				-.4001				
90.000			-.3429	-.3853	-.4328	-.5286	-.7581	
135.000				-.3533	-.4099	-.5686		.2698
180.000			-.3214	-.3456	-.3452	-.4426	-.5949	
225.000						-.6794		.2665
270.000		-.3394	-.3417	-.3577			-.5923	
315.000				-.3855	-.4395	-.5742		-.4294

ALPHA (2) = -.267 BETA (1) = -4.003 MACH = .90037 RN/L = 4.1975 PO = 2104.1 P = 1243.6

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3521		-.3452	-.3639	-.3729	-.4022	-.6831	
45.000				-.3676				
90.000			-.3484	-.4125	-.4719	-.5106	-.7834	
135.000				-.3520	-.3900	-.6415		.4738
180.000			-.3341	-.3545	-.4025	-.4863	-.6855	
225.000						-.6461		.1595
270.000		-.3565	-.3455	-.3548			-.5740	
315.000				-.4017	-.4690	-.5963		-.4048

ALPHA (2) = -.291 BETA (2) = .012 MACH = .90037 RN/L = 4.1975 PO = 2104.1 P = 1243.6

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3313		-.3319	-.3515	-.3604	-.4001	-.6896	
45.000				-.3824				
90.000			-.3332	-.3998	-.4417	-.4994	-.7242	
135.000				-.3683	-.4488	-.6034		.3663
180.000			-.3088	-.3413	-.3471	-.4477	-.6099	
225.000						-.6577		.3409

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H91)

ALPHA (2) = -.291 BETA (2) = .012

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3365	-.3358	-.3445			-.5609	
315.000				-.3653	-.3911	-.5385		-.4148

ALPHA (2) = -.284 BETA (3) = 4.028 MACH = .90037 RN/L = 4.1975 PO = 2104.1 P = 1243.6

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3340		-.3533	-.3642	-.3735	-.3991	-.6879	
45.000				-.4048				
90.000			-.3325	-.3590	-.3642	-.5080	-.7829	
135.000				-.3517	-.3719	-.5144		.0864
180.000			-.3543	-.3584	-.3673	-.4664	-.6891	
225.000						-.7208		.3454
270.000		-.3436	-.3410	-.3390			-.4790	
315.000				-.3430	-.3838	-.4941		-.4158

ALPHA (3) = 3.970 BETA (1) = -.003 MACH = .90050 RN/L = 4.1955 PO = 2102.7 P = 1242.6

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3230		-.3135	-.3475	-.3548	-.3991	-.6787	
45.000				-.3552				
90.000			-.3255	-.3677	-.4135	-.5038	-.7259	
135.000				-.3683	-.4599	-.6094		.4295
180.000			-.3047	-.3269	-.3322	-.4368	-.5963	
225.000						-.6237		.3808
270.000		-.3242	-.3231	-.3271			-.4444	
315.000				-.3324	-.3626	-.4746		-.4070

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H92) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.957 BETA (1) = .003 MACH = 1.0978 RN/L = 4.3356 PO = 2110.5 P = 991.11

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3872		-.4048	-.4555	-.5059	-.6393	-.3005	
45.000				-.4511				
90.000			-.4444	-.4625	-.4601	-.4653	-.4568	
135.000				-.4174	-.4420	-.5466		.3119
180.000			-.3962	-.4029	-.4162	-.5064	-.7172	
225.000						-.5576		.2974
270.000		-.4 35	-.4383	-.4471			-.4469	
315.000				-.4743	-.5043	-.6169		-.0753

ALPHA (2) = -.284 BETA (1) = -3.994 MACH = 1.0997 RN/L = 4.3377 PO = 2110.5 P = 988.87

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4173		-.4494	-.4639	-.4796	-.5986	-.3356	
45.000				-.4892				
90.000			-.4608	-.4733	-.4870	-.5084	-.6816	
135.000				-.4706	-.5034	-.6539		.5911
180.000			-.4281	-.4235	-.4441	-.5369	-.7127	
225.000						-.5311		.2409
270.000		-.4336	-.4490	-.4796			-.4574	
315.000				-.4916	-.5133	-.6267		-.0741

ALPHA (2) = -.281 BETA (2) = .000 MACH = 1.0997 RN/L = 4.3377 PO = 2110.5 P = 988.87

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3549		-.3858	-.4098	-.4463	-.5897	-.3154	
45.000				-.4205				
90.000			-.4115	-.4354	-.4490	-.5109	-.5795	
135.000				-.3892	-.4152	-.5274		.3881
180.000			-.3604	-.3707	-.3755	-.4692	-.6911	
225.000						-.5646		.3928

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H92)

ALPHA (2) = -.281 BETA (2) = .000

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3750	-.4006	-.4081			-.5493	
315.000				-.4196	-.4228	-.5396		-.0813

ALPHA (2) = -.320 BETA (3) = 4.028 MACH = 1.0997 RN/L = 4.3377 PO = 2110.5 P = 988.87

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4222		-.4329	-.4471	-.4601	-.5652	-.3315	
45.000				-.4573				
90.000			-.4307	-.4428	-.4505	-.4551	-.4558	
135.000				-.4425	-.4576	-.5246		.2240
180.000			-.4184	-.4234	-.4281	-.5469	-.8648	
225.000						-.5587		.4676
270.000		-.4288	-.4317	-.4452			-.6644	
315.000				-.5133	-.5323	-.6437		-.1145

ALPHA (3) = 3.977 BETA (1) = .003 MACH = 1.0998 RN/L = 4.3390 PO = 2109.8 P = 988.41

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4060		-.4246	-.4422	-.4676	-.5990	-.3270	
45.000				-.4711				
90.000			-.4493	-.4638	-.4759	-.4853	-.6945	
135.000				-.4416	-.4734	-.5724		.4449
180.000			-.4075	-.4079	-.4277	-.5313	-.7782	
225.000						-.5653		.3488
270.000		-.4133	-.4323	-.4452			-.6646	
315.000				-.4636	-.4986	-.6276		-.1336

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H93) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.953 BETA (1) = .006 MACH = 1.2528 RN/L = 4.3463 PO = 2110.5 P = 811.76

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3220		-.3390	-.3996	-.4684	-.4877	-.1462	
45.000				-.4036				
90.000			-.3692	-.3967	-.3951	-.4040	-.4888	
135.000				-.3471	-.3739	-.4549		.4441
180.000			-.3171	-.3251	-.3161	-.3829	-.5402	
225.000						-.4482		.3423
270.000		-.3368	-.3423	-.3868			-.4859	
315.000				-.3803	-.4045	-.5111		-.0271

ALPHA (2) = -.238 BETA (1) = -3.997 MACH = 1.2535 RN/L = 4.3462 PO = 2111.4 P = 811.30

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3322		-.3568	-.3964	-.4394	-.5279	-.1818	
45.000				-.4355				
90.000			-.3798	-.3948	-.3923	-.4020	-.4829	
135.000				-.3732	-.4014	-.4458		.6331
180.000			-.3317	-.3259	-.3469	-.4277	-.5177	
225.000						-.3892		.2754
270.000		-.3302	-.3379	-.3939			-.5105	
315.000				-.4381	-.4514	-.5161		-.0131

ALPHA (2) = -.231 BETA (2) = .000 MACH = 1.2535 RN/L = 4.3462 PO = 2111.4 P = 811.30

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3075		-.3156	-.3686	-.4287	-.4886	-.1490	
45.000				-.4335				
90.000			-.3491	-.3697	-.3595	-.3747	-.4873	
135.000				-.3310	-.3654	-.4439		.4918
180.000			-.3000	-.3078	-.2942	-.3606	-.5440	
225.000						-.4486		.3963

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H93)

ALPHA (2) = -.231 BETA (2) = .000

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3169	-.3187	-.3693			-.5169	
315.000				-.3920	-.4203	-.5187		-.0089

ALPHA (2) = -.284 BETA (3) = 4.034 MACH = 1.2535 RN/L = 4.3462 PO = 2111.4 P = 811.30

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3340		-.3498	-.3852	-.4188	-.5209	-.1846	
45.000				-.4526				
90.000			-.3469	-.3419	-.3397	-.3610	-.5100	
135.000				-.3499	-.3768	-.4352		.1945
180.000			-.3256	-.3325	-.3425	-.4226	-.6317	
225.000						-.4085		.4750
270.000		-.3495	-.3490	-.3980			-.4744	
315.000				-.4693	-.4963	-.5577		-.0133

ALPHA (3) = 3.977 BETA (1) = .000 MACH = 1.2524 RN/L = 4.3409 PO = 2110.5 P = 812.19

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3175		-.3130	-.3600	-.3813	-.4793	-.1769	
45.000				-.4281				
90.000			-.3326	-.3379	-.3450	-.3640	-.4796	
135.000				-.3275	-.3495	-.4025		.4715
180.000			-.3462	-.3329	-.3333	-.4135	-.5791	
225.000						-.4040		.3874
270.000		-.3154	-.3176	-.3819			-.4524	
315.000				-.4511	-.5099	-.5531		-.0135

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H94) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.887 BETA (1) = .016 MACH = 1.4070 RN/L = 4.3762 PO = 2135.2 P = 664.38

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2971		-.2938	-.3122	-.3294	-.3776	-.1872	
45.000				-.3329				
90.000			-.3059	-.3066	-.3036	-.3029	-.3850	
135.000				-.3358	-.3585	-.4101		.4704
180.000			-.3141	-.3140	-.3039	-.3995	-.4301	
225.000						-.3915		.3485
270.000		-.2995	-.3052	-.3171			-.3834	
315.000				-.3134	-.3584	-.4153		-.0650

ALPHA (2) = -.271 BETA (1) = -3.991 MACH = 1.4086 RN/L = 4.3552 PO = 2132.6 P = 662.12

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2876		-.2854	-.3053	-.3301	-.3960	-.1618	
45.000				-.3204				
90.000			-.3447	-.3398	-.3349	-.3302	-.3495	
135.000				-.3845	-.3817	-.2636		.5670
180.000			-.2861	-.2850	-.3056	-.3451	-.3623	
225.000						-.3477		.2709
270.000		-.2609	-.2839	-.2935			-.3557	
315.000				-.3113	-.3325	-.4101		-.0405

ALPHA (2) = -.251 BETA (2) = .009 MACH = 1.4086 RN/L = 4.3552 PO = 2132.6 P = 662.12

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2592		-.2595	-.2932	-.3092	-.3758	-.1708	
45.000				-.2852				
90.000			-.3016	-.3114	-.2998	-.2928	-.3882	
135.000				-.3140	-.3257	-.3638		.5413
180.000			-.2643	-.2628	-.2312	-.2927	-.4189	
225.000						-.3291		.3897

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4H94)

ALPHA (2) = -.251 BETA (2) = .009

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2653	-.2714	-.3207			-.3978	
315.000				-.2850	-.3179	-.3826		-.0396

ALPHA (2) = -.284 BETA (3) = 4.031 MACH = 1.4086 RN/L = 4.3552 PO = 2132.6 P = 662.12

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	.2775		-.2798	-.2990	-.3178	-.3885	-.1599	
45.000				-.3292				
90.000			-.2847	-.2832	-.2811	-.2887	-.3454	
135.000				-.2857	-.3042	-.3494		.2117
180.000			-.2716	-.2789	-.3036	-.3463	-.5108	
225.000						-.2721		.4463
270.000		-.2961	-.2930	-.3296			-.3726	
315.000				-.3013	-.3563	-.3978		-.0417

ALPHA (3) = 3.973 BETA (1) = .006 MACH = 1.3982 RN/L = 4.3323 PO = 2123.9 P = 669.12

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2562		-.2514	-.2977	-.3339	-.396	-.0721	
45.000				-.3345				
90.000			-.2527	-.3168	-.3296	-.3771	-.4089	
135.000				-.3426	-.3378	-.3507		.5225
180.000			-.2632	-.2549	-.2290	-.2937	-.4292	
225.000						-.3306		.4000
270.000		-.2542	-.2539	-.2856			-.4044	
315.000				-.3004	-.3978	-.3686		.0435

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H95) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.950 BETA (1) = .006 MACH = .58310 RN/L = 3.4103 PO = 2111.9 P = 1677.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3766		-.3124	-.3033	-.3812	-.7135	-.8657	
45.000				-.3696				
90.000			-.3639	-.4180	-.4613	-.6008	-.8172	
135.000				-.3721	-.4284	-.6324		.2070
180.000			-.3436	-.3709	-.3972	-.4450	-.7034	
225.000						-.7384		.1335
270.000		-.3618	-.3389	-.3680			-.6977	
315.000				-.3634	-.3868	-.5107		-.5874

ALPHA (2) = -.297 BETA (1) = -4.003 MACH = .59743 RN/L = 3.4671 PO = 2111.9 P = 1659.1

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3467		-.2844	-.2922	-.3258	-.6527	-.8959	
45.000				-.3533				
90.000			-.3468	-.4359	-.4918	-.5609	-.7767	
135.000				-.3711	-.4030	-.6558		.3239
180.000			-.3444	-.3714	-.3958	-.4352	-.7125	
225.000						-.6685		.0801
270.000		-.3340	-.3221	-.3382			-.6295	
315.000				-.3320	-.3514	-.4931		-.6044

ALPHA (2) = -.307 BETA (2) = .012 MACH = .59743 RN/L = 3.4671 PO = 2111.9 P = 1659.1

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3152		-.2635	-.2884	-.3219	-.6810	-.8381	
45.000				-.3445				
90.000			-.3524	-.3941	-.4084	-.5734	-.7366	
135.000				-.3561	-.3958	-.6281		.2544
180.000			-.3301	-.3445	-.3544	-.4432	-.6575	
225.000						-.7172		.1929

ARC11-0231A80 OTS(SRB=N ORB=N) ET BASE (RE4H95)

ALPHA (2) = -.307 BETA (2) = .012

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3152	-.3195	-.3288			-.6389	
315.000				-.3195	-.3233	-.4367		-.5601

ALPHA (2) = -.376 BETA (3) = 4.022 MACH = .59743 RN/L = 3.4671 PO = 2111.9 P = 1659.1

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3484		-.2957	-.2943	-.3272	-.6298	-.8910	
45.000				-.3354				
90.000			-.3388	-.3686	-.4208	-.5545	-.7606	
135.000				-.3364	-.3782	-.5190		.0562
180.000			-.3209	-.3537	-.3599	-.4517	-.7004	
225.000						-.7354		.2329
270.000		-.3384	-.3247	-.3521			-.7297	
315.000				-.3479	-.3599	-.4476		-.5817

ALPHA (3) = 4.020 BETA (1) = -.003 MACH = .60100 RN/L = 3.4818 PO = 2111.9 P = 1654.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3278		-.2558	-.2844	-.3184	-.6866	-.8794	
45.000				-.3425				
90.000			-.3367	-.3959	-.4329	-.5247	-.6845	
135.000				-.3586	-.4025	-.6438		.2901
180.000			-.3313	-.3484	-.3529	-.4418	-.6744	
225.000						-.7243		.2448
270.000		-.3092	-.3170	-.3158			-.6122	
315.000				-.3232	-.3213	-.4393		-.5327

DATE 23 JUL 76

TABULATED SOURCE DATA - IA80

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H96) (13 JAN 75)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	.0000 IN.
LREF =	1290.3000 IN.	YMRP =	.0000 IN.
BREF =	1290.3000 IN.	ZMRP =	.0000 IN.
SCALE =	.0200		

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.891 BETA (1) = -.003 MACH = .90360 RN/L = 4.2068 PO = 2105.2 P = 1240.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3720		-.3846	-.4015	-.4120	-.4546	-.7002	
45.000				-.4370				
90.000			-.3829	-.4110	-.4495	-.5677	-.8142	
135.000				-.3923	-.4459	-.6052		.2655
180.000			-.3524	-.3777	-.3907	-.4622	-.6223	
225.000						-.7028		.2597
270.000		-.3748	-.3759	-.3865			-.6305	
315.000				-.4208	-.4878	-.6411		-.4281

ALPHA (2) = -.390 BETA (1) = -4.003 MACH = .89957 RN/L = 4.1991 PO = 2105.5 P = 1245.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3942		-.3938	-.4097	-.4295	-.4483	-.6987	
45.000				-.4289				
90.000			-.3872	-.4312	-.5139	-.5629	-.8798	
135.000				-.3848	-.4243	-.6746		.4696
180.000			-.3750	-.3943	-.4160	-.5354	-.8698	
225.000						-.6966		.1411
270.000		-.3964	-.3885	-.4111			-.6391	
315.000				-.4702	-.5601	-.6689		-.4188

ALPHA (2) = -.360 BETA (2) = .012 MACH = .89957 RN/L = 4.1991 PO = 2105.5 P = 1245.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3843		-.3685	-.3947	-.4056	-.4672	-.6661	
45.000				-.4222				
90.000			-.3798	-.4154	-.4699	-.5698	-.7793	
135.000				-.4046	-.4794	-.6360		.3593
180.000			-.3553	-.3795	-.3704	-.4706	-.6256	
225.000						-.6820		.3316

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H96)

ALPHA (2) = -.360 BETA (2) = .012

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3675	-.3792	-.3811			-.5956	
315.000				-.3968	-.4370	-.6432		-.4145

ALPHA (2) = -.406 BETA (3) = 4.031 MACH = .89957 RN/L = 4.1991 PO = 2105.5 P = 1245.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3676		-.3744	-.3902	-.4049	-.4408	-.6858	
45.000				-.4389				
90.000			-.3545	-.3791	-.3843	-.5257	-.8104	
135.000				-.3898	-.3948	-.5460		.0781
180.000			-.3882	-.3880	-.4079	-.4968	-.7240	
225.000						-.7264		.3358
270.000		-.3640	-.3636	-.3638			-.5066	
315.000				-.3864	-.4085	-.5559		-.4180

ALPHA (3) = 3.986 BETA (1) = -.003 MACH = .90050 RN/L = 4.1971 PO = 2105.5 P = 124-.3

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3658		-.3665	-.3832	-.4026	-.4625	-.6820	
45.000				-.3904				
90.000			-.3678	-.3908	-.4382	-.5548	-.8118	
135.000				-.4079	-.4979	-.6448		.4247
180.000			-.3381	-.3701	-.3692	-.4510	-.6316	
225.000						-.6526		.3753
270.000		-.3696	-.3632	-.3720			-.478	
315.000				-.3803	-.4095	-.5309		-.4156

ARC11-0231A80 OTS(SRB=N ORB=N) ET BASE (RE4H97) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.963 BETA (1) = .003 MACH = 1.0995 RN/L = 4.3360 PO = 2105.5 P = 986.72

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3741		-.3763	-.4279	-.4771	-.6118	-.2969	
45.000				-.4373				
90.000			-.4038	-.4116	-.4118	-.4185	-.4500	
135.000				-.4127	-.4339	-.5427		.3025
180.000			-.3856	-.4163	-.4696	-.5160	-.6929	
225.000						-.5670		.2989
270.000		-.3895	-.4031	-.4156			-.4472	
315.000				-.4446	-.4664	-.5917		-.0751

ALPHA (2) = -.409 BETA (1) = -3.997 MACH = 1.0997 RN/L = 4.3375 PO = 2105.5 P = 986.54

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3814		-.4178	-.4273	-.4431	-.5516	-.3343	
45.000				-.4495				
90.000			-.4198	-.4370	-.4498	-.4789	-.6717	
135.000				-.4443	-.4749	-.6195		.5863
180.000			-.3933	-.4089	-.4200	-.5272	-.6968	
225.000						-.5248		.2330
270.000		-.4015	-.4181	-.4392			-.4554	
315.000				-.4635	-.4882	-.6068		-.0708

ALPHA (2) = -.386 BETA (2) = -.003 MACH = 1.0997 RN/L = 4.3375 PO = 2105.5 P = 986.54

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3469		-.3604	-.3864	-.4221	-.5762	-.3126	
45.000				-.3900				
90.000			-.3602	-.3849	-.4124	-.4880	-.5596	
135.000				-.3759	-.4080	-.5300		.3916
180.000			-.3646	-.3894	-.4500	-.4961	-.6880	
225.000						-.5655		.3895

ARC11-0231A80 OTS(SRB=N ORB=N) ET BASE (RE4H97)

ALPHA (2) = -.386 BETA (2) = -.003

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3545	-.3577	-.3847			-.5154	
315.000				-.4376	-.4306	-.5450		-.0772

ALPHA (2) = -.429 BETA (3) = 4.028 MACH = 1.0997 RN/L = 4.3375 PO = 2105.5 P = 986.54

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3963		-.4105	-.4219	-.4316	-.5229	-.3331	
45.000				-.4335				
90.000			-.4092	-.4243	-.4321	-.4415	-.4557	
135.000				-.4215	-.4505	-.5070		.2127
180.000			-.4037	-.4169	-.4827	-.6533	-.8139	
225.000						-.5552		.4632
270.000		-.4011	-.4070	-.4227			-.6183	
315.000				-.4830	-.5049	-.6165		-.1176

ALPHA (3) = 4.033 BETA (1) = -.003 MACH = 1.0997 RN/L = 4.3440 PO = 2106.2 P = 986.87

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3971		-.4007	-.4230	-.4489	-.5793	-.3272	
45.000				-.4525				
90.000			-.4030	-.4197	-.4322	-.4752	-.6881	
135.000				-.4202	-.4564	-.5546		.4410
180.000			-.4091	-.4076	-.4722	-.5149	-.7794	
225.000						-.5640		.3367
270.000		-.3990	-.4001	-.4243			-.5526	
315.000				-.4663	-.4962	-.6354		-.1325

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H98) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.973 BETA (1) = .003 MACH = 1.2526 RN/L = 4.3420 PO = 2108.4 P = 811.19

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2862		-.2882	-.3429	-.4052	-.4849	-.1439	
45.000				-.3568				
90.000			-.3026	-.3112	-.3097	-.3184	-.4933	
135.000				-.2986	-.3311	-.4437		.3959
180.000			-.2988	-.3473	-.3565	-.3854	-.5154	
225.000						-.4668		.3207
270.000		-.2843	-.2810	-.3168			-.4855	
315.000				-.3615	-.3922	-.5074		-.0289

ALPHA (2) = -.482 BETA (1) = -3.994 MACH = 1.2535 RN/L = 4.3392 PO = 2107.9 P = 809.98

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2779		-.2875	-.3227	-.3573	-.4718	-.1800	
45.000				-.3140				
90.000			-.3086	-.3184	-.3240	-.3364	-.4815	
135.000				-.3171	-.3477	-.4111		.6280
180.000			-.2965	-.3004	-.3169	-.3817	-.4186	
225.000						-.4140		.2460
270.000		-.2656	-.2651	-.3143			-.4959	
315.000				-.3808	-.4042	-.4779		-.0110

ALPHA (2) = -.439 BETA (2) = -.003 MACH = 1.2535 RN/L = 4.3392 PO = 2107.9 P = 809.98

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2671		-.2607	-.3154	-.3689	-.4709	-.1455	
45.000				-.3319				
90.000			-.2726	-.2816	-.2791	-.2992	-.4983	
135.000				-.2780	-.3365	-.4556		.4718
180.000			-.3070	-.3412	-.3639	-.3874	-.4826	
225.000						-.4511		.3743

ARC11-023|A80 OTS(SRB=N ORB=N) ET BASE (RE4H98)

ALPHA (2) = -.439 BETA (2) = -.003

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2617	-.2593	-.2990			-.5109	
315.000				-.3735	-.4224	-.5237		-.0085

ALPHA (2) = -.416 BETA (3) = 4.028 MACH = 1.2535 RN/L = 4.3392 PO = 2107.9 P = 809.98

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2763		-.2859	-.3216	-.3501	-.4651	-.1845	
45.000				-.3645				
90.000			-.2828	-.2896	-.3210	-.3857	-.5062	
135.000				-.2904	-.3367	-.4037		.1773
180.000			-.2807	-.3244	-.3600	-.4280	-.5758	
225.000						-.3931		.4572
270.000		-.2840	-.2856	-.3329			-.4312	
315.000				-.3319	-.4696	-.5431		-.0132

ALPHA (3) = 4.020 BETA (1) = .003 MACH = 1.2508 RN/L = 4.3353 PO = 2107.7 P = 812.82

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2681		-.2597	-.3056	-.3235	-.4361	-.1782	
45.000				-.3303				
90.000			-.2692	-.2802	-.2911	-.3103	-.4748	
135.000				-.2876	-.3117	-.4070		.4773
180.000			-.3092	-.3274	-.3630	-.3665	-.5317	
225.000						-.4161		.3853
270.000		-.2681	-.2642	-.2990			-.4013	
315.000				-.3006	-.4642	-.5440		-.0133

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H99) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.944 BETA (1) = .009 MACH = 1.4093 RN/L = 4.2699 PO = 2108.4 P = 653.90

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2222		-.2090	-.2272	-.2422	-.3157	-.1835	
45.000				-.2330				
90.000			-.2282	-.2412	-.2283	-.2305	-.3923	
135.000				-.2409	-.2958	-.3639		.4284
180.000			-.2504	-.2825	-.3322	-.3231	-.4038	
225.000						-.3744		.3170
270.000		-.2250	-.2305	-.2592			-.3933	
315.000				-.2605	-.3098	-.3885		-.0638

ALPHA (2) = -.403 BETA (1) = -3.991 MACH = 1.4102 RN/L = 4.2615 PO = 2109.3 P = 653.35

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2206		-.2040	-.2245	-.2402	-.3247	-.1612	
45.000				-.2381				
90.000			-.2621	-.2565	-.2537	-.2551	-.3509	
135.000				-.3234	-.3375	-.2691		.5641
180.000			-.2377	-.2435	-.2510	-.2878	-.3083	
225.000						-.3157		.2347
270.000		-.2143	-.2150	-.2616			-.3328	
315.000				-.2476	-.3017	-.3931		-.0403

ALPHA (2) = -.386 BETA (2) = .012 MACH = 1.4102 RN/L = 4.2615 PO = 2109.3 P = 653.35

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2124		-.1867	-.2149	-.2357	-.3183	-.1716	
45.000				-.2253				
90.000			-.2259	-.2295	-.2264	-.2277	-.3929	
135.000				-.2516	-.2861	-.3592		.5251
180.000			-.2373	-.2709	-.3378	-.3044	-.3979	
225.000						-.3431		.3566

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4H99)

ALPHA (2) = -.386 BETA (2) = .012

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2115	-.2152	-.2503			-.3926	
315.000				-.2201	-.2725	-.3696		-.0404

ALPHA (2) = -.443 BETA (3) = 4.034 MACH = 1.4102 RN/L = 4.2615 PO = 2109.3 P = 653.36

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2169		-.2201	-.2367	-.2495	-.3286	-.1642	
45.000				-.2500				
90.000			-.2195	-.2222	-.2219	-.2260	-.3452	
135.000				-.2291	-.2567	-.3028		.1951
180.000			-.2137	-.2531	-.3007	-.3312	-.4495	
225.000						-.2896		.4402
270.000		-.2322	-.2313	-.2638			-.3644	
315.000				-.2205	-.2401	-.3646		-.0446

ALPHA (3) = 3.864 BETA (1) = .012 MACH = 1.4084 RN/L = 4.2570 PO = 2109.1 P = 654.92

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2025		-.1868	-.2497	-.2707	-.3682	-.0697	
45.000				-.2192				
90.000			-.2163	-.2326	-.2364	-.3223	-.3985	
135.000				-.2563	-.3173	-.3299		.5156
180.000			-.2223	-.2444	-.3048	-.2613	-.3799	
225.000						-.3152		.3937
270.000		-.1966	-.1975	-.2267			-.3741	
315.000				-.2029	-.2679	-.3039		.0081

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4HA0) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BRLF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.894 BETA (1) = .000 MACH = .60180 RN/L = 3.5043 PO = 2121.1 P = 1660.6

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3193		-.2527	-.2748	-.3279	-.6629	-.8179	
45.000				-.3333				
90.000			-.3346	-.3752	-.3965	-.5636	-.7543	
135.000				-.3447	-.3823	-.6048		.2328
180.000			-.3130	-.3360	-.3525	-.4321	-.6623	
225.000						-.7011		.1638
270.000		-.3092	-.3103	-.3241			-.6273	
315.000				-.3214	-.3253	-.4625		-.5399

ALPHA (2) = -.281 BETA (1) = -4.003 MACH = .59723 RN/L = 3.4829 PO = 2122.3 P = 1667.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3297		-.2559	-.2844	-.3065	-.6244	-.8654	
45.000				-.3462				
90.000			-.3295	-.4204	-.4681	-.5401	-.7541	
135.000				-.3592	-.3892	-.6418		.3319
180.000			-.3230	-.3561	-.3888	-.4620	-.6788	
225.000						-.6667		.0894
270.000		-.3127	-.3097	-.3230			-.5916	
315.000				-.3113	-.3287	-.4673		-.5749

ALPHA (2) = -.287 BETA (2) = .012 MACH = .59723 RN/L = 3.4829 PO = 2122.3 P = 1667.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3145		-.2564	-.2667	-.3042	-.6391	-.8255	
45.000				-.3206				
90.000			-.3250	-.3759	-.3980	-.5366	-.7270	
135.000				-.3421	-.3919	-.6027		.2569
180.000			-.3094	-.3366	-.3540	-.4374	-.6585	
225.000						-.6974		.1939

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4HA0)

ALPHA (2) = -.287 BETA (2) = .012

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3039	-.2961	-.3162			-.6357	
315.000				-.3111	-.3128	-.4109		-.5529

ALPHA (2) = -.301 BETA (3) = 4.028 MACH = .59723 RN/L = 3.4829 PO = 2122.3 P = 1667.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3207		-.2692	-.2789	-.3065	-.6130	-.8648	
45.000				-.3179				
90.000			-.3217	-.3545	-.3923	-.5102	-.7320	
135.000				-.3271	-.3513	-.5025		.0700
180.000			-.3063	-.3338	-.3509	-.4543	-.6966	
225.000						-.7254		.2397
270.000		-.3200	-.3172	-.3417			-.6983	
315.000				-.3294	-.3351	-.4419		-.5723

ALPHA (3) = 3.986 BETA (1) = .012 MACH = .59790 RN/L = 3.4847 PO = 2122.5 P = 1666.8

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3145		-.2432	-.2592	-.2935	-.6442	-.8506	
45.000				-.3250				
90.000			-.3138	-.3766	-.4199	-.4967	-.6625	
135.000				-.3414	-.3953	-.6119		.2954
180.000			-.2984	-.3336	-.3537	-.4023	-.6727	
225.000						-.6394		.2559
270.000		-.2988	-.2916	-.2884			-.6014	
315.000				-.3107	-.3138	-.4044		-.5134

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4HA1) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.996 BETA (1) = .009 MACH = .89940 RN/L = 4.2300 PO = 2121.8 P = 1255.3

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3353		-.3353	-.3671	-.3742	-.4036	-.7122	
45.000				-.4004				
90.000			-.3441	-.3912	-.4339	-.5191	-.7614	
135.000				-.3544	-.4101	-.5726		.2725
180.000			-.3176	-.3406	-.3438	-.4407	-.5950	
225.000						-.6835		.2707
270.000		-.3433	-.3415	-.3482			-.5922	
315.000				-.3788	-.4325	-.5085		-.4359

ALPHA (2) = -.281 BETA (1) = -4.006 MACH = .90087 RN/L = 4.2382 PO = 2122.0 P = 1253.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3516		-.3446	-.3600	-.3758	-.4015	-.6937	
45.000				-.3794				
90.000			-.3478	-.4120	-.4721	-.5101	-.7804	
135.000				-.3494	-.3892	-.6383		.4745
180.000			-.3371	-.3614	-.3982	-.4821	-.6970	
225.000						-.6477		.1577
270.000		-.3516	-.3462	-.3562			-.5754	
315.000				-.4032	-.4691	-.5913		-.4107

ALPHA (2) = -.284 BETA (2) = .009 MACH = .90087 RN/L = 4.2382 PO = 2122.0 P = 1253.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3237		-.3211	-.3634	-.3571	-.4126	-.6772	
45.000				-.3831				
90.000			-.3359	-.4030	-.4415	-.5037	-.7198	
135.000				-.3655	-.4460	-.5995		.3707
180.000			-.3123	-.3368	-.3394	-.4539	-.6045	
225.000						-.6577		.3429

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4HA1)

ALPHA (2) = -.284 BETA (2) = .009

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3278	-.3379	-.3426			-.5538	
315.000				-.3613	-.3881	-.5607		-.4059

ALPHA (2) = -.281 BETA (3) = 4.028 MACH = .90087 RN/L = 4.2382 PO = 2122.0 P = 1253.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3449		-.3447	-.3711	-.3786	-.4060	-.6948	
45.000				-.4082				
90.000			-.3345	-.3606	-.3695	-.5109	-.7891	
135.000				-.3548	-.3794	-.5171		.0816
180.000			-.3407	-.3650	-.3707	-.4679	-.6984	
225.000						-.7212		.3407
270.000		-.3441	-.3399	-.3429			-.4910	
315.000				-.3559	-.3808	-.4967		-.4208

ALPHA (3) = 4.023 BETA (1) = .016 MACH = .90100 RN/L = 4.2328 PO = 2121.8 P = 1253.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3207		-.3108	-.3520	-.3573	-.4021	-.6784	
45.000				-.3552				
90.000			-.3264	-.3591	-.4001	-.5063	-.7297	
135.000				-.3731	-.4568	-.6114		.4288
180.000			-.2964	-.3270	-.3292	-.4430	-.5971	
225.000						-.6242		.3833
270.000		-.3251	-.3240	-.3284			-.4410	
315.000				-.3394	-.3575	-.4636		-.4067

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4HA2) (13 JAN 75)

REFERENCE DATA

SREF = 2630.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1230.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.967 BETA (1) = .006 MACH = 1.0986 RN/L = 4.3563 PO = 2114.0 P = 991.79

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3949		-.4095	-.4671	-.5150	-.6453	-.3010	
45.000				-.4596				
90.000			-.4470	-.4768	-.4665	-.4586	-.4552	
135.000				-.4262	-.4476	-.5503		.3095
180.000			-.4013	-.4088	-.4177	-.5161	-.7253	
225.000						-.5653		.3019
270.000		-.4280	-.4432	-.4526			-.4463	
315.000				-.4818	-.5067	-.6217		-.0743

ALPHA (2) = -.284 BETA (1) = -4.003 MACH = 1.1004 RN/L = 4.3594 PO = 2113.8 P = 989.54

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4246		-.4565	-.4724	-.4872	-.6039	-.3362	
45.000				-.4911				
90.000			-.4633	-.4823	-.4925	-.5078	-.6809	
135.000				-.4746	-.5067	-.6583		.5945
180.000			-.4278	-.4319	-.4492	-.5468	-.7188	
225.000						-.5303		.2426
270.000		-.4409	-.4544	-.4836			-.4580	
315.000				-.4965	-.4985	-.6293		-.0743

ALPHA (2) = -.258 BETA (2) = -.012 MACH = 1.1004 RN/L = 4.3594 PO = 2113.8 P = 989.54

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3570		-.3878	-.4101	-.4502	-.5948	-.3141	
45.000				-.4104				
90.000			-.4115	-.4341	-.4471	-.5049	-.5810	
135.000				-.3918	-.4170	-.5294		.3957
180.000			-.3605	-.3721	-.3766	-.4709	-.6917	
225.000						-.5577		.3985

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4HA2)

ALPHA (2) = -.258 BETA (2) = -.012

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3752	-.3933	-.4085			-.5587	
315.000				-.4290	-.4410	-.5523		-.0829

ALPHA (2) = -.301 BETA (3) = 4.016 MACH = 1.1004 RN/L = 4.3594 PO = 2113.8 P = 989.54

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4277		-.4425	-.4574	-.4697	-.5813	-.3332	
45.000				-.4657				
90.000			-.4419	-.4536	-.4562	-.4640	-.4579	
135.000				-.4555	-.4775	-.5350		.2205
180.000			-.4265	-.4364	-.4374	-.5581	-.8737	
225.000						-.5627		.4717
270.000		-.4357	-.4407	-.4564			-.6615	
315.000				-.5203	-.5417	-.6554		-.1153

ALPHA (3) = 3.947 BETA (1) = .000 MACH = 1.1030 RN/L = 4.3633 PO = 2114.0 P = 986.41

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4078		-.4261	-.4422	-.4687	-.6023	-.3239	
45.000				-.4630				
90.000			-.4501	-.4686	-.4751	-.4860	-.6902	
135.000				-.4447	-.4724	-.5694		.4482
180.000			-.4048	-.4095	-.4252	-.5330	-.7841	
225.000						-.5621		.3454
270.000		-.4149	-.4318	-.4455			-.6529	
315.000				-.4739	-.4981	-.6361		-.1312

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4HA3) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETR C DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.947 BETA (1) = -.006 MACH = 1.2545 RN/L = 4.3671 PO = 2114.0 P = 811.27

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3265		-.3443	-.4096	-.4784	-.4869	-.1457	
45.000				-.4062				
90.000			-.3771	-.4057	-.4037	-.4113	-.4893	
135.000				-.3516	-.3776	-.4567		.4432
180.000			-.3207	-.3286	-.3177	-.3959	-.5520	
225.000						-.4510		.3403
270.000		-.3427	-.3489	-.3912			-.4882	
315.000				-.3909	-.4177	-.5183		-.0261

ALPHA (2) = -.248 BETA (1) = -4.000 MACH = 1.2545 RN/L = 4.3581 PO = 2114.0 P = 811.32

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3362		-.3610	-.4027	-.4473	-.5311	-.1791	
45.000				-.4513				
90.000			-.3852	-.4012	-.4047	-.4073	-.4767	
135.000				-.3806	-.4043	-.4478		.6306
180.000			-.3369	-.3331	-.3509	-.4310	-.5158	
225.000						-.3888		.2755
270.000		-.3361	-.3409	-.3974			-.5089	
315.000				-.4449	-.4634	-.5217		-.0115

ALPHA (2) = -.244 BETA (2) = -.006 MACH = 1.2545 RN/L = 4.3581 PO = 2114.0 P = 811.32

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3087		-.3241	-.3780	-.4377	-.4881	-.1471	
45.000				-.4366				
90.000			-.3515	-.3919	-.3769	-.3856	-.4884	
135.000				-.3437	-.3712	-.4438		.5029
180.000			-.3059	-.3097	-.2913	-.3600	-.5373	
225.000						-.4513		.3972

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4HA3)

ALPHA (2) = -.244 BETA (2) = -.006

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3227	-.3221	-.3753			-.5187	
315.000				-.3938	-.4258	-.5224		-.0092

ALPHA (2) = -.271 BETA (3) = 4.022 MACH = 1.2545 RN/L = 4.3581 PO = 2114.0 P = 811.32

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3433		-.3600	-.3934	-.4337	-.5295	-.1862	
45.000				-.4605				
90.000			-.3525	-.3506	-.3503	-.3663	-.5141	
135.000				-.3594	-.3859	-.4413		.1928
180.000			-.3341	-.3413	-.3541	-.4311	-.6381	
225.000						-.4125		.4709
270.000		-.3594	-.3555	-.4083			-.4796	
315.000				-.4797	-.5013	-.5558		-.0144

ALPHA (3) = 3.986 BETA (1) = .003 MACH = 1.2546 RN/L = 4.3551 PO = 2114.0 P = 811.12

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3228		-.3222	-.3671	-.3889	-.4895	-.1756	
45.000				-.4343				
90.000			-.3388	-.3468	-.3531	-.3714	-.4787	
135.000				-.3382	-.3622	-.4089		.4706
180.000			-.3516	-.3403	-.3340	-.4139	-.5806	
225.000						-.4036		.3833
270.000		-.3225	-.3227	-.3695			-.4582	
315.000				-.4624	-.5108	-.5527		-.0122

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4HA4) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.947 BETA (1) = .006 MACH = 1.4033 RN/L = 4.3439 PO = 2107.0 P = 659.02

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3020		-.2992	-.3208	-.3382	-.3871	-.1887	
45.000				-.3403				
90.000			-.3165	-.3160	-.3111	-.3135	-.3861	
135.000				-.3448	-.3673	-.4204		.4581
180.000			-.3216	-.3228	-.3131	-.4127	-.4278	
225.000						-.3974		.3432
270.000		-.3064	-.3150	-.3209			-.3880	
315.000				-.3239	-.3663	-.4219		-.0716

ALPHA (2) = -.267 BETA (1) = -3.994 MACH = 1.4040 RN/L = 4.3128 PO = 2099.2 P = 655.94

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2992		-.2972	-.3181	-.3404	-.4055	-.1660	
45.000				-.3368				
90.000			-.3571	-.3501	-.3472	-.3424	-.3538	
135.000				-.4020	-.3953	-.2664		.5614
180.000			-.2958	-.2958	-.3146	-.3565	-.3667	
225.000						-.3521		.2551
270.000		-.2751	-.2974	-.3095			-.3618	
315.000				-.3257	-.3486	-.4222		-.0467

ALPHA (2) = -.277 BETA (2) = -.003 MACH = 1.4040 RN/L = 4.3128 PO = 2099.2 P = 655.94

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2741		-.2706	-.2962	-.3217	-.3835	-.1766	
45.000				-.2993				
90.000			-.3114	-.3172	-.3120	-.3002	-.3917	
135.000				-.3254	-.3360	-.3697		.5402
180.000			-.2733	-.2673	-.2435	-.3119	-.4229	
225.000						-.3361		.3846

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) ET BASE (RE4HA4)

ALPHA (2) = -.277 BETA (2) = -.003

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2768	-.2806	-.3318			-.4050	
315.000				-.2971	-.3275	-.3928		-.0457

ALPHA (2) = -.284 BETA (3) = 4.019 MACH = 1.4040 RN/L = 4.3128 PO = 2099.2 P = 655.94

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2900		-.2947	-.3139	-.3331	-.3989	-.1668	
45.000				-.3423				
90.000			-.2969	-.2962	-.2945	-.2994	-.3549	
135.000				-.2965	-.3190	-.3585		.2104
180.000			-.2833	-.2919	-.3163	-.3555	-.5213	
225.000						-.3787		.4377
270.000		-.3085	-.3051	-.3427			-.3831	
315.000				-.3169	-.3667	-.4069		-.0483

ALPHA (3) = 3.986 BETA (1) = .006 MACH = 1.3970 RN/L = 4.2777 PO = 2085.7 P = 658.16

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2612		-.2591	-.3069	-.3446	-.3960	-.0726	
45.000				-.3594				
90.000			-.2612	-.3265	-.3387	-.3809	-.4101	
135.000				-.3516	-.3458	-.3573		.5193
180.000			-.2695	-.2638	-.2404	-.3032	-.4313	
225.000						-.3352		.4002
270.000		-.2600	-.2611	-.2942			-.4085	
315.000				-.3297	-.4220	-.3939		.0427

ARC11-0231A80 OTS(SRB=N ORB=N) ET BASE (RE4HA5) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.983 BETA (1) = .012 MACH = .59900 RN/L = 3.4730 PO = 2113.3 P = 1658.1

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3701		-.3003	-.3075	-.3804	-.7061	-.8727	
45.000				-.3751				
90.000			-.3656	-.4195	-.4388	-.6052	-.8138	
135.000				-.3805	-.4255	-.6280		.2125
180.000			-.3447	-.3686	-.3876	-.4479	-.7038	
225.000						-.7481		.1364
270.000		-.3605	-.3358	-.3697			-.6881	
315.000				-.3690	-.3807	-.5057		-.5789

ALPHA (2) = -.337 BETA (1) = -4.005 MACH = .60037 RN/L = 3.4773 PO = 2112.8 P = 1656.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3389		-.2764	-.2957	-.3238	-.6740	-.8828	
45.000				-.3622				
90.000			-.3519	-.4387	-.4850	-.5696	-.7719	
135.000				-.3698	-.3948	-.6576		.3250
180.000			-.3444	-.3746	-.3934	-.4428	-.7115	
225.000						-.6877		.0774
270.000		-.3252	-.3296	-.3406			-.6149	
315.000				-.3290	-.3399	-.4884		-.6021

ALPHA (2) = -.370 BETA (2) = .009 MACH = .60037 RN/L = 3.4773 PO = 2112.8 P = 1656.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3453		-.2855	-.2990	-.3455	-.6890	-.8694	
45.000				-.3614				
90.000			-.3563	-.4160	-.4379	-.5839	-.7623	
135.000				-.3722	-.4255	-.5462		.2448
180.000			-.3442	-.3668	-.3749	-.4535	-.6993	
225.000						-.7412		.1815

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4HA5)

ALPHA (2) = -.370 BETA (2) = .009

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3352	-.3290	-.3491			-.6852	
315.000				-.3381	-.3445	-.4461		-.5783

ALPHA (2) = -.453 BETA (3) = 4.025 MACH = .60037 RN/L = 3.4773 PO = 2112.8 P = 1656.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3373		-.2915	-.3006	-.3251	-.6469	-.6877	
45.000				-.3404				
90.000			-.3418	-.3711	-.3973	-.5374	-.7445	
135.000				-.3503	-.3660	-.5200		.0585
180.000			-.3207	-.3575	-.3554	-.4509	-.6981	
225.000						-.7490		.2310
270.000		-.3346	-.3275	-.3503			-.7150	
315.000				-.3397	-.3581	-.4465		-.5809

ALPHA (3) = 3.910 BETA (1) = .009 MACH = .60100 RN/L = 3.4798 PO = 2112.6 P = 1655.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3336		-.2650	-.2881	-.3265	-.7032	-.8852	
45.000				-.3509				
90.000			-.3526	-.4141	-.4481	-.5350	-.6932	
135.000				-.3598	-.4151	-.6482		.2847
180.000			-.3306	-.3601	-.3638	-.4442	-.6848	
225.000						-.7432		.2430
270.000		-.3231	-.3187	-.3217			-.6371	
315.000				-.3343	-.3306	-.4574		-.5411

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4HA6) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.937 BETA (1) = .016 MACH = .90250 RN/L = 4.2121 PO = 2111.9 P = 1245.3

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3845		-.3936	-.4035	-.4210	-.4569	-.7042	
45.000				-.4454				
90.000			-.3863	-.4258	-.4575	-.5753	-.8152	
135.000				-.3985	-.4581	-.6073		.2561
180.000			-.3668	-.3825	-.3825	-.4577	-.6341	
225.000						-.7128		.2587
270.000		-.3829	-.3799	-.3965			-.6467	
315.000				-.4380	-.5092	-.6579		-.4329

ALPHA (2) = -.376 BETA (1) = -4.006 MACH = .90930 RN/L = 4.2268 PO = 2111.9 P = 1236.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3922		-.3936	-.4113	-.4271	-.4654	-.6826	
45.000				-.4327				
90.000			-.3981	-.4321	-.5107	-.5727	-.6882	
135.000				-.3900	-.4169	-.6741		.4762
180.000			-.3796	-.3945	-.4151	-.5404	-.8736	
225.000						-.6987		.1514
270.000		-.3976	-.3965	-.4067			-.6313	
315.000				-.4660	-.5646	-.6821		-.4028

ALPHA (2) = -.353 BETA (2) = .009 MACH = .90930 RN/L = 4.2268 PO = 2111.9 P = 1236.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3682		-.3733	-.4087	-.4139	-.4896	-.6669	
45.000				-.4389				
90.000			-.3910	-.4167	-.4650	-.5789	-.8131	
135.000				-.4145	-.4795	-.6371		.3660
180.000			-.3618	-.3795	-.3729	-.4735	-.6335	
225.000						-.6857		.3359

ARC11-023(A80 OTS(SRB=N ORB=N) ET BASE (RE4HA6)

ALPHA (2) = -.353 BETA (2) = .009

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3716	-.3886	-.3888			-.5971	
315.000				-.4127	-.4497	-.6823		-.3991

ALPHA (2) = -.420 BETA (3) = 4.022 MACH = .90930 RN/L = 4.2268 PO = 2111.9 P = 1236.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3674		-.3741	-.4124	-.4106	-.4545	-.6548	
45.000				-.4688				
90.000			-.3677	-.3997	-.3850	-.5354	-.7992	
135.000				-.3983	-.4012	-.5703		.0812
180.000			-.4098	-.4045	-.4106	-.5148	-.7447	
225.000						-.7387		.3399
270.000		-.3676	-.3848	-.3892			-.5213	
315.000				-.3971	-.4217	-.6630		-.4016

ALPHA (3) = 3.910 BETA (1) = .006 MACH = .91060 RN/L = 4.2296 PO = 2111.9 P = 1234.3

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3600		-.3618	-.4030	-.4056	-.4772	-.6582	
45.000				-.4086				
90.000			-.3859	-.3983	-.4314	-.5738	-.8105	
135.000				-.4231	-.4936	-.6491		.4342
180.000			-.3534	-.3756	-.3561	-.4616	-.6247	
225.000						-.6631		.3763
270.000		-.3638	-.3712	-.3736			-.4710	
315.000				-.3828	-.4010	-.5753		-.4003

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4HA7) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.996 BETA (1) = .006 MACH = 1.0997 RN/L = 4.3565 PO = 2107.7 P = 987.56

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3780		-.3808	-.4307	-.4665	-.6160	-.2975	
45.000				-.4328				
90.000			-.4072	-.4165	-.4142	-.4235	-.4525	
135.000				-.4114	-.4389	-.5409		.3036
180.000			-.3822	-.4102	-.4673	-.5123	-.6998	
225.000						-.5676		.3015
270.000		-.3920	-.4024	-.4200			-.4450	
315.000				-.4488	-.4678	-.5946		-.0751

ALPHA (2) = -.416 BETA (1) = -4.003 MACH = 1.0993 RN/L = 4.3567 PO = 2107.7 P = 988.07

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3920		-.4194	-.4315	-.4497	-.5585	-.3360	
45.000				-.4500				
90.000			-.4223	-.4385	-.4509	-.4786	-.6687	
135.000				-.4504	-.4746	-.6232		.5769
180.000			-.3961	-.4054	-.4201	-.5414	-.6930	
225.000						-.5223		.2297
270.000		-.4052	-.4196	-.4397			-.4557	
315.000				-.4642	-.4899	-.6036		-.0710

ALPHA (2) = -.403 BETA (2) = -.012 MACH = 1.0993 RN/L = 4.3567 PO = 2107.7 P = 988.07

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3483		-.3681	-.3972	-.4320	-.5876	-.3161	
45.000				-.3919				
90.000			-.3693	-.3921	-.4213	-.4832	-.5570	
135.000				-.3808	-.4087	-.5414		.3900
180.000			-.3672	-.3905	-.4531	-.4973	-.6964	
225.000						-.5715		.3899

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4HA7)

ALPHA (2) = -.403 BETA (2) = -.012

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3552	-.3664	-.3982			-.5197	
315.000				-.4218	-.4237	-.5657		-.0800

ALPHA (2) = -.426 BETA (3) = 4.019 MACH = 1.0993 RN/L = 4.3567 PO = 2107.7 P = 988.07

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4038		-.4152	-.4279	-.4410	-.5421	-.3375	
45.000				-.4463				
90.000			-.4178	-.4322	-.4430	-.4546	-.4632	
135.000				-.4297	-.4573	-.5191		.2061
180.000			-.4147	-.4237	-.4924	-.6645	-.8229	
225.000						-.5666		.4594
270.000		-.4100	-.4182	-.4259			-.6297	
315.000				-.4819	-.5104	-.6259		-.1200

ALPHA (3) = 3.798 BETA (1) = .009 MACH = 1.0994 RN/L = 4.3619 PO = 2107.7 P = 987.85

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3975		-.4050	-.4292	-.4488	-.5885	-.3288	
45.000				-.4541				
90.000			-.4143	-.4302	-.4302	-.4706	-.6836	
135.000				-.4241	-.4560	-.5676		.4404
180.000			-.4070	-.3969	-.4727	-.5173	-.7802	
225.000						-.5591		.3381
270.000		-.4012	-.4034	-.4314			-.5581	
315.000				-.4640	-.4982	-.5407		-.1332

ARC11-0231A80 OTS(SRB=N ORB=N) ET BASE (RE4HA8) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.986 BETA (1) = .009 MACH = 1.2550 RN/L = 4.3537 PO = 2109.1 P = 808.83

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2879		-.2916	-.3434	-.4098	-.4838	-.1440	
45.000				-.3640				
90.000			-.3077	-.3202	-.3172	-.3238	-.4904	
135.000				-.3079	-.3351	-.4425		.3939
180.000			-.2979	-.3385	-.3543	-.3823	-.5105	
225.000						-.4660		.3208
270.000		-.2876	-.2828	-.3167			-.4932	
315.000				-.3628	-.3928	-.5108		-.0287

ALPHA (2) = -.400 BETA (1) = -4.003 MACH = 1.2517 RN/L = 4.3574 PO = 2109.1 P = 812.36

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2808		-.2888	-.3270	-.3592	-.4769	-.1796	
45.000				-.3349				
90.000			-.3124	-.3230	-.3269	-.4818	-.4814	
135.000				-.3176	-.3342	-.4008		.6273
180.000			-.2955	-.3048	-.3184	-.4441	-.4122	
225.000						-.4094		.2450
270.000		-.2685	-.2597	-.3153			-.4954	
315.000				-.3788	-.4099	-.4791		-.0092

ALPHA (2) = -.393 BETA (2) = -.012 MACH = 1.2517 RN/L = 4.3574 PO = 2109.1 P = 812.36

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2675		-.2640	-.3172	-.3745	-.4741	-.1462	
45.000				-.3369				
90.000			-.2746	-.2820	-.2812	-.2987	-.4885	
135.000				-.2780	-.3266	-.4481		.4710
180.000			-.3044	-.3399	-.3535	-.3572	-.4850	
225.000						-.4486		.3710

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4HA8)

ALPHA (2) = -.393 BETA (2) = -.012

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2647	-.2628	-.2994			-.5116	
315.000				-.3785	-.4222	-.5225		-.0075

ALPHA (2) = -.413 BETA (3) = 4.022 MACH = 1.2517 RN/L = 4.3574 PO = 2109.1 P = 812.36

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2826		-.2968	-.3272	-.3597	-.4728	-.1917	
45.000				-.3841				
90.000			-.2862	-.2954	-.2968	-.3122	-.5089	
135.000				-.3055	-.3339	-.4120		.1669
180.000			-.2876	-.3354	-.3679	-.4308	-.5823	
225.000						-.4035		.4578
270.000		-.2923	-.2957	-.3391			-.4469	
315.000				-.3408	-.4789	-.5469		-.0186

ALPHA (3) = 3.947 BETA (1) = .003 MACH = 1.2539 RN/L = 4.3574 PO = 2109.1 P = 810.01

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2675		-.2592	-.3061	-.3249	-.4369	-.1761	
45.000				-.3422				
90.000			-.2717	-.2836	-.2919	-.3125	-.4707	
135.000				-.2852	-.3124	-.4031		.4736
180.000			-.3100	-.3288	-.3638	-.3661	-.5274	
225.000						-.4154		.3909
270.000		-.2654	-.2633	-.3013			-.4073	
315.000				-.3140	-.4664	-.5425		-.0106

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4HA9) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.940 BETA (1) = .009 MACH = 1.4085 RN/L = 4.2899 PO = 2110.5 P = 655.32

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	.2224		-.2131	-.2323	-.2459	-.3185	-.1844	
45.000				-.2377				
90.000			-.2263	-.2359	-.2304	-.2344	-.3977	
135.000				-.2451	-.2964	-.3645		.4232
180.000			-.2500	-.2857	-.3313	-.3271	-.4084	
225.000						-.3755		.3188
270.000		-.2268	-.2329	-.2623			-.3959	
315.000				-.2503	-.3199	-.3913		-.0670

ALPHA (2) = -.449 BETA (1) = -3.997 MACH = 1.4066 RN/L = 4.2802 PO = 2110.5 P = 657.03

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2230		-.2069	-.2237	-.2437	-.3290	-.1624	
45.000				-.2397				
90.000			-.2659	-.2583	-.2583	-.2559	-.3539	
135.000				-.3173	-.3322	-.2678		.5626
180.000			-.2386	-.2449	-.2546	-.2844	-.3144	
225.000						-.3141		.2367
270.000		-.2152	-.2182	-.2618			-.3344	
315.000				-.2514	-.3053	-.3956		-.0425

ALPHA (2) = -.380 BETA (2) = -.006 MACH = 1.4066 RN/L = 4.2802 PO = 2110.5 P = 657.03

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2160		-.1923	-.2184	-.2391	-.3232	-.1746	
45.000				-.2247				
90.000			-.2288	-.2344	-.2287	-.2299	-.3978	
135.000				-.2555	-.2918	-.3637		.5280
180.000			-.2360	-.2706	-.3330	-.3008	-.3942	
225.000						-.3485		.3538

ARC11-023IA80 OTS(SRB=N ORB=N) ET BASE (RE4HA9)

ALPHA (2) = -.380 BETA (2) = -.006

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2148	-.2187	-.2525			-.3999	
315.000				-.2220	-.2694	-.3760		-.0442

ALPHA (2) = -.443 BETA (3) = 4.025 MACH = 1.4066 RN/L = 4.2802 PO = 2110.5 P = 657.03

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2194		-.2240	-.2403	-.2534	-.3349	-.1640	
45.000				-.2553				
90.000			-.2228	-.2281	-.2245	-.2298	-.3513	
135.000				-.2342	-.2597	-.3052		.1930
180.000			-.2178	-.2583	-.3066	-.3336	-.4510	
225.000						-.2902		.4388
270.000		-.2367	-.2327	-.2621			-.3690	
315.000				-.2219	-.2382	-.3712		-.0443

ALPHA (3) = 3.821 BETA (1) = .006 MACH = 1.4030 RN/L = 4.2706 PO = 2109.8 P = 657.37

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2063		-.1910	-.2494	-.2769	-.3699	-.0708	
45.000				-.2232				
90.000			-.2213	-.2678	-.2789	-.3283	-.4032	
135.000				-.2887	-.3183	-.3382		.5146
180.000			-.2175	-.2449	-.2947	-.2585	-.3805	
225.000						-.3208		.3928
270.000		-.1999	-.1974	-.2272			-.3776	
315.000				-.2082	-.2780	-.3172		.0080

ARC11-023IA80 CTS(SRB=N ORB NO.2 OUTJET BASE (RE4HB0) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -4.013 BETA (1) = .006 MACH = .60070 RN/L = 3.5069 PO = 2116.2 P = 1658.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3679		-.2952	-.3123	-.3857	-.7329	-.8639	
45.000				-.3757				
90.000			-.3812	-.4233	-.4390	-.6274	-.8155	
135.000				-.3716	-.4159	-.6412		.2169
180.000			-.3557	-.3745	-.3818	-.4525	-.7056	
225.000						-.7553		.1426
270.000		-.3468	-.3443	-.3592			-.6797	
315.000				-.3565	-.3652	-.5256		-.5828

ALPHA (2) = -.271 BETA (1) = -4.006 MACH = .59863 RN/L = 3.4917 PO = 2115.4 P = 1660.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3701		-.3016	-.3227	-.3515	-.6848	-.9303	
45.000				-.3833				
90.000			-.3679	-.4564	-.5143	-.5940	-.8191	
135.000				-.3916	-.4139	-.6848		.3149
180.000			-.3621	-.3981	-.4211	-.4689	-.7457	
225.000						-.7184		.0592
270.000		-.3548	-.3429	-.3611			-.6523	
315.000				-.3597	-.3655	-.5145		-.6245

ALPHA (2) = -.310 BETA (2) = .003 MACH = .59863 RN/L = 3.4917 PO = 2115.4 P = 1660.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3369		-.2798	-.3050	-.3408	-.7127	-.8698	
45.000				-.3654				
90.000			-.3714	-.4222	-.4263	-.5926	-.7659	
135.000				-.3732	-.4016	-.6543		.2469
180.000			-.3434	-.3732	-.3671	-.4641	-.6916	
225.000						-.7494		.1845

ARC11-0231A80 OTS(SRB=N ORB NO.2 OUTJET BASE (RE4HB0)

ALPHA (2) = -.310 BETA (2) = .003

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3275	-.3383	-.3560			-.6657	
315.000				-.3381	-.3361	-.4608		-.5782

ALPHA (2) = -.310 BETA (3) = 4.025 MACH = .59863 RN/L = 3.4917 PO = 2115.4 P = 1660.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3705		-.3083	-.3209	-.3411	-.6898	-.9191	
45.000				-.3641				
90.000			-.3693	-.4002	-.4071	-.5877	-.7888	
135.000				-.3700	-.4013	-.5422		.0470
180.000			-.3415	-.3786	-.3810	-.4777	-.7215	
225.000						-.7811		.2191
270.000		-.3541	-.3464	-.3782			-.7410	
315.000				-.3690	-.3769	-.4689		-.6022

ALPHA (3) = 3.930 BETA (1) = .009 MACH = .59910 RN/L = 3.4923 PO = 2115.4 P = 1659.7

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3503		-.2879	-.2999	-.3462	-.7225	-.8941	
45.000				-.3707				
90.000			-.3585	-.4240	-.4607	-.5484	-.7191	
135.000				-.3726	-.4208	-.6618		.2837
180.000			-.3442	-.3688	-.3782	-.4601	-.7063	
225.000						-.7610		.2388
270.000		-.3364	-.3309	-.3316			-.6517	
315.000				-.3421	-.3500	-.4536		-.5518

ARC11-023IA80 OTS(SRB=N ORB NO.2 OUTJET BASE (RE4HB1) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -4.069 BETA (1) = .009 MACH = .90080 RN/L = 4.2148 PO = 2109.8 P = 1246.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4020		-.4159	-.4309	-.4355	-.4759	-.7128	
45.000				-.4736				
90.000			-.4073	-.4627	-.4889	-.6086	-.8487	
135.000				-.4280	-.4830	-.6406		.2578
180.000			-.3912	-.4205	-.4125	-.4994	-.6719	
225.000						-.7445		.2571
270.000		-.4045	-.4041	-.4198			-.6711	
315.000				-.4629	-.5298	-.6839		-.4393

ALPHA (2) = -.304 BETA (1) = -4.006 MACH = .90390 RN/L = 4.2180 PO = 2109.6 P = 1242.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3979		-.3999	-.4208	-.4260	-.4598	-.6974	
45.000				-.4375				
90.000			-.3960	-.4420	-.5187	-.5753	-.8862	
135.000				-.3925	-.4342	-.6900		.4723
180.000			-.3882	-.4002	-.4245	-.5420	-.8456	
225.000						-.7128		.1442
270.000		-.4037	-.3939	-.4077			-.6402	
315.000				-.4722	-.5548	-.6783		-.4167

ALPHA (2) = -.317 BETA (2) = .003 MACH = .90390 RN/L = 4.2180 PO = 2109.6 P = 1242.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3717		-.3737	-.4218	-.4105	-.5000	-.6659	
45.000				-.4648				
90.000			-.4051	-.4515	-.4751	-.5947	-.8303	
135.000				-.4286	-.4980	-.6626		.3638
180.000			-.3757	-.3980	-.3786	-.4976	-.6576	
225.000						-.7071		.3403

ARC!1-0231A80 OTS(SRB=N ORB NO.2 OUT)ET BASE (RE4HB1)

ALPHA (2) = -.317 BETA (2) = .003

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3771	-.3992	-.3974			-.6017	
315.000				-.4207	-.4559	-.6948		-.3990

ALPHA (2) = -.357 BETA (3) = 4.025 MACH = .90390 RN/L = 4.2180 PO = 2109.6 P = 1242.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3972		-.3950	-.4122	-.4274	-.4574	-.6868	
45.000				-.4511				
90.000			-.3658	-.4023	-.4091	-.5463	-.8287	
135.000				-.4082	-.4221	-.5628		.0717
180.000			-.4053	-.4148	-.4331	-.5138	-.7667	
225.000						-.7639		.3355
270.000		-.3975	-.3843	-.3935			-.5441	
315.000				-.3999	-.4410	-.6304		-.4201

ALPHA (3) = 3.986 BETA (1) = .019 MACH = .90670 RN/L = 4.2222 PO = 2109.8 P = 1238.4

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3759		-.3691	-.4078	-.4148	-.4806	-.6664	
45.000				-.4154				
90.000			-.3877	-.4152	-.4489	-.5827	-.8515	
135.000				-.4331	-.5203	-.6724		.4239
180.000			-.3665	-.3938	-.3718	-.4788	-.6521	
225.000						-.6810		.3757
270.000		-.3707	-.3843	-.3852			-.4932	
315.000				-.4000	-.4080	-.6072		-.4099

ARC11-023IA80 OTS(SRB=N ORB NO.2 OUT)ET BASE (RE4HB2) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

PHA (1) = -3.973 BETA (1) = -.009 MACH = 1.0946 RN/L = 4.3814 PO = 2106.2 P = 993.13

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4129		-.4177	-.4692	-.5189	-.6483	-.3094	
45.000				-.4795				
90.000			-.4459	-.4582	-.4546	-.4605	-.4615	
135.000				-.4586	-.4735	-.5740		.3040
180.000			-.4256	-.4435	-.5002	-.5428	-.7675	
225.000						-.5988		.2975
270.000		-.4309	-.4447	-.4574			-.4607	
315.000				-.4827	-.5004	-.6263		-.0807

ALPHA (2) = -.393 BETA (1) = -4.006 MACH = 1.0958 RN/L = 4.3828 PO = 2105.7 P = 991.34

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4026		-.4292	-.4430	-.4625	-.5709	-.3331	
45.000				-.4617				
90.000			-.4324	-.4502	-.4624	-.4857	-.6669	
135.000				-.4499	-.4788	-.6247		.5786
180.000			-.4028	-.4099	-.4279	-.5504	-.7130	
225.000						-.5299		.2312
270.000		-.4145	-.4256	-.4518			-.4559	
315.000				-.4711	-.4940	-.6158		-.0683

ALPHA (2) = -.340 BETA (2) = -.016 MACH = 1.0958 RN/L = 4.3828 PO = 2105.7 P = 991.34

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3834		-.3961	-.4263	-.4676	-.6126	-.3239	
45.000				-.4207				
90.000			-.4152	-.4326	-.4659	-.4916	-.5659	
135.000				-.4222	-.4413	-.5632		.3807
180.000			-.4048	-.4207	-.4834	-.5204	-.7525	
225.000						-.5899		.3787

ARC11-0231A80 OTS(SRB=N ORB NO.2 OUT)ET BASE (RE4HB2)

ALPHA (2) = -.340 BETA (2) = -.016

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3913	-.4024	-.4270			-.5469	
315.000				-.4220	-.4499	-.5496		-.0835

ALPHA (2) = -.357 BETA (3) = 4.016 MACH = 1.0958 RN/L = 4.3828 PO = 2105.7 P = 991.34

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4307		-.4429	-.4572	-.4701	-.5712	-.3440	
45.000				-.4687				
90.000			-.4422	-.4589	-.4620	-.4736	-.4692	
135.000				-.4534	-.4785	-.5323		.2035
180.000			-.4312	-.4414	-.5113	-.6846	-.8516	
225.000						-.5875		.4568
270.000		-.4372	-.4400	-.4531			-.6514	
315.000				-.5151	-.5441	-.6505		-.1257

ALPHA (3) = 4.026 BETA (1) = -.016 MACH = 1.1011 RN/L = 4.3891 PO = 2106.2 P = 985.19

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4154		-.4198	-.4381	-.4689	-.6029	-.3259	
45.000				-.4788				
90.000			-.4261	-.4381	-.4427	-.4580	-.6874	
135.000				-.4360	-.4718	-.5818		.4392
180.000			-.4360	-.4355	-.4810	-.5234	-.8032	
225.000						-.5741		.3422
270.000		-.4159	-.4196	-.4495			-.5719	
315.000				.4747	-.5087	-.6588		-.1316

ARC11-023IA80 OTS(SRB=N ORB NO.2 OUT)ET BASE (RE4HB3) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.947 BETA (1) = -.003 MACH = 1.2463 RN/L = 4.4021 PO = 2107.0 P = 817.37

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3180		-.3228	-.3820	-.4484	-.4957	-.1458	
45.000				-.3971				
90.000			-.3322	-.3380	-.3377	-.3511	-.5003	
135.000				-.3319	-.3677	-.4725		.3929
180.000			-.3367	-.3815	-.4024	-.4171	-.5722	
225.000						-.4869		.3224
270.000		-.3170	-.3126	-.3502			-.5059	
315.000				-.3862	-.4173	-.5217		-.0340

ALPHA (2) = -.400 BETA (1) = -4.000 MACH = 1.2440 RN/L = 4.3992 PO = 2107.0 P = 819.92

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3061		-.3160	-.3537	-.3902	-.5025	-.1936	
45.000				-.3645				
90.000			-.3342	-.3471	-.3515	-.3590	-.4982	
135.000				-.3450	-.3793	-.4443		.6283
180.000			-.3163	-.3270	-.3388	-.3891	-.4419	
225.000						-.4257		.2448
270.000		-.2925	-.2928	-.3487			-.5229	
315.000				-.4028	-.4235	-.4967		-.0176

ALPHA (2) = -.370 BETA (2) = -.009 MACH = 1.2440 RN/L = 4.3992 PO = 2107.0 P = 819.92

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2933		-.2905	-.3452	-.4097	-.4885	-.1489	
45.000				-.3882				
90.000			-.2989	-.3075	-.3060	-.3216	-.4904	
135.000				-.3168	-.3518	-.4680		.4583
180.000			-.3249	-.3590	-.4034	-.3957	-.5309	
225.000						-.4541		.3750

ARC11-023;A80 OTS(SRB=N ORB NO.2 OUT)ET BASE (RE4HB3)

ALPHA (2) = -.370 BETA (2) = -.009

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2890	-.2849	-.3298			-.5208	
315.000				-.4137	-.4408	-.5339		-.0107

ALPHA (2) = -.420 BETA (3) = 4.019 MACH = 1.2440 RN/L = 4.3992 PO = 2107.0 P = 819.92

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3076		-.3188	-.3475	-.3816	-.4958	-.1935	
45.000				-.4100				
90.000			-.3064	-.3320	-.3163	-.3880	-.5129	
135.000				-.3195	-.3647	-.4241		.1735
180.000			-.3076	-.3451	-.3840	-.4519	-.6029	
225.000						-.4201		.4612
270.000		-.3125	-.3177	-.3584			-.4545	
315.000				-.4041	-.4872	-.5558		-.0209

ALPHA (3) = 3.986 BETA (1) = -.012 MACH = 1.2457 RN/L = 4.4035 PO = 2107.7 P = 818.39

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2930		-.2850	-.3303	-.3528	-.4619	-.1826	
45.000				-.3804				
90.000			-.2959	-.3085	-.3124	-.3349	-.4812	
135.000				-.3127	-.3384	-.4342		.4913
180.000			-.3320	-.3470	-.3940	-.4042	-.5671	
225.000						-.4343		.3858
270.000		-.2905	-.2872	-.3291			-.4285	
315.000				-.3711	-.4965	-.5562		-.0178

ARC11-023IA80 OTS(SRB=N ORB NO.2 OUTJET BASE (RE4HB4) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.957 BETA (1) = -.003 MACH = 1.4002 RN/L = 4.3550 PO = 2109.8 P = 662.79

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2506		-.2424	-.2694	-.2772	-.3517	-.1914	
45.000				-.2707				
90.000			-.2603	-.2610	-.2582	-.2616	-.4010	
135.000				-.2840	-.3385	-.3982		.4207
180.000			-.2826	-.3064	-.3369	-.3413	-.4539	
225.000						-.3951		.3151
270.000		-.2529	-.2614	-.2946			-.4036	
315.000				-.2977	-.3363	-.4058		-.0721

ALPHA (2) = -.443 BETA (1) = -4.000 MACH = 1.3986 RN/L = 4.3450 PO = 2109.6 P = 664.22

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2461		-.2297	-.2612	-.2833	-.3613	-.1651	
45.000				-.2642				
90.000			-.2914	-.2914	-.2861	-.2865	-.3595	
135.000				-.3561	-.3508	-.2782		.5606
180.000			-.2568	-.2702	-.2839	-.3236	-.3645	
225.000						-.3032		.2363
270.000		-.2256	-.2379	-.2556			-.3474	
315.000				-.2570	-.3165	-.3871		-.0453

ALPHA (2) = -.406 BETA (2) = -.006 MACH = 1.3986 RN/L = 4.3460 PO = 2109.6 P = 664.22

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2416		-.2201	-.2502	-.2745	-.3542	-.1771	
45.000				-.2554				
90.000			-.2587	-.2598	-.2556	-.2595	-.4034	
135.000				-.2795	-.3172	-.3857		.5244
180.000			-.2686	-.2907	-.3526	-.3443	-.4318	
225.000						-.3543		.3535

ARC11-023IA80 OTS(SRB=N ORB NO.2 OUTJET BASE (RE4HB4)

ALPHA (2) = -.406 BETA (2) = -.006

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2412	-.2463	-.2835			-.4155	
315.000				-.2534	-.3125	-.3876		-.0466

ALPHA (2) = -.446 BETA (3) = 4.019 MACH = 1.3986 RN/L = 4.3460 PO = 2109.6 P = 664.22

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2484		-.2 18	-.2715	-.2880	-.3719	-.1631	
45.000				-.2880				
90.000			-.24P5	5	-.2490	-.2550	-.3566	
135.000					-.2802	-.3215		.1904
180.000					-.3311	-.3534	-.4740	
225.000						-.3011		.4365
270.000							-.3825	
315.000					-.2891	-.3945		-.0495

ALPHA (3) = 3.953 BETA (1) = -.009 MACH = 1.3971 RN/L = 4.3340 PO = 2109.8 P = 665.69

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2291		-.2287	-.2795	-.3134	-.3893	-.0733	
45.000				-.2770				
90.000			-.2404	-.2522	-.2636	-.2689	-.4100	
135.000				-.2771	-.3300	-.3455		.5092
180.000			-.2536	-.2597	-.3497	-.3180	-.4251	
225.000						-.3244		.3929
270.000		-.2250	-.2325	-.2561			-.3967	
315.000				-.2625	-.3767	-.3799		.0498

ARC11-023IA80 OTS(SRB=N ORB NO.) OUTJET BASE (RE4HB5) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -4.072 BETA (1) = .012 MACH = .58560 RN/L = 3.4206 PO = 2115.4 P = 1677.1

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4164		-.3534	-.3182	-.4239	-.7368	-.9088	
45.000				-.3839				
90.000			-.3737	-.4302	-.4917	-.6216	-.8528	
135.000				-.3977	-.4769	-.6474		.2027
180.000			-.3543	-.3956	-.4412	-.4611	-.7451	
225.000						-.7601		.1165
270.000		-.4100	-.3486	-.3917			-.7388	
315.000				-.3984	-.4355	-.5187		-.6219

ALPHA (2) = -.284 BETA (1) = -4.003 MACH = .60257 RN/L = 3.4870 PO = 2114.9 P = 1654.8

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3498		-.2801	-.3049	-.3320	-.6672	-.9005	
45.000				-.3767				
90.000			-.3564	-.4458	-.4888	-.5755	-.7870	
135.000				-.3771	-.4008	-.6688		.3239
180.000			-.3473	-.3801	-.4008	-.4486	-.7173	
225.000						-.6915		.0773
270.000		-.3346	-.3297	-.3473			-.6386	
315.000				-.3402	-.3435	-.4990		-.6093

ALPHA (2) = -.337 BETA (2) = .003 MACH = .60257 RN/L = 3.4870 PO = 2114.9 P = 1654.8

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3581		-.2900	-.3015	-.3495	-.7000	-.8740	
45.000				-.3606				
90.000			-.3596	-.4177	-.4369	-.5906	-.7709	
135.000				-.3734	-.4346	-.6413		.2464
180.000			-.3451	-.3677	-.3822	-.4552	-.7057	
225.000						-.7419		.1747

ARC11-023IA80 OTS(SRB=N ORB NO.1 OUT)ET BASE (RE4HB5)

ALPHA (2) = -.337 BETA (2) = .003

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3484	-.3299	-.3505			-.6896	
315.000				-.3424	-.3573	-.4522		-.5835

ALPHA (2) = -.367 BETA (3) = 4.025 MACH = .60257 RN/L = 3.4870 PO = 2114.9 P = 1654.8

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3422		-.2857	-.2994	-.3233	-.6594	-.8926	
45.000				-.3424				
90.000			-.3468	-.3701	-.3943	-.5630	-.7536	
135.000				-.3458	-.3670	-.5316		.0560
180.000			-.3238	-.3576	-.3500	-.4535	-.6898	
225.000						-.7517		.2295
270.000		-.3294	-.3333	-.3532			-.7207	
315.000				-.3471	-.3463	-.4496		-.5877

ALPHA (3) = 3.868 BETA (1) = .006 MACH = .59730 RN/L = 3.4653 PO = 2114.7 P = 1661.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3504		-.2792	-.2941	-.3393	-.7059	-.8923	
45.000				-.3613				
90.000			-.3565	-.4205	-.4552	-.5501	-.7141	
135.000				-.3681	-.4288	-.6525		.2839
180.000			-.3414	-.3623	-.3760	-.4556	-.6957	
225.000						-.7563		.2360
270.000		-.3330	-.3256	-.3287			-.6449	
315.000				-.3448	-.3 00	32		-.5525

ARC11-023IAB0 OTS(SRB=N ORB NO.1 OUT)E1 BASE (RE4HB6) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -4.013 BETA (1) = .009 MACH = .89890 RN/L = 4.2040 PO = 2109.8 P = 1249.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3932		-.3971	-.4218	-.4357	-.4526	-.7150	
45.000				-.4599				
90.000			-.3870	-.4409	-.4707	-.5755	-.8459	
135.000				-.4128	-.4709	-.6143		.2545
180.000			-.3660	-.3905	-.4097	-.4776	-.6465	
225.000						-.7249		.2533
270.000		-.3920	-.3900	-.4013			-.6535	
315.000				-.4470	-.5026	-.6655		-.4424

ALPHA (2) = -.317 BETA (1) = -4.003 MACH = .90107 RN/L = 4.2091 PO = 2108.6 P = 1245.3

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3947		-.3935	-.4082	-.4209	-.4490	-.6907	
45.000				-.4199				
90.000			-.3899	-.4289	-.5028	-.5548	-.8649	
135.000				-.3752	-.4269	-.6660		.4747
180.000			-.3694	-.3893	-.4194	-.5307	-.8750	
225.000						-.6940		.1487
270.000		-.4003	-.3849	-.4006			-.6301	
315.000				-.4638	-.5511	-.6624		-.4107

ALPHA (2) = -.310 BETA (2) = .003 MACH = .90107 RN/L = 4.2091 PO = 2108.6 P = 1245.3

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3751		-.3755	-.4036	-.4087	-.4662	-.6909	
45.000				-.4293				
90.000			-.3796	-.4241	-.4653	-.5624	-.8005	
135.000				-.4137	-.4934	-.6438		.3601
180.000			-.3529	-.3872	-.3799	-.4740	-.6327	
225.000						-.6880		.3286

ARC11-0231A80 OTS ...3=N ORB NO.1 OUTJET BASE (RE4HB6)

ALPHA (2) = -.310 BETA (2) = .003

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3765	-.3839	-.3849			-.6077	
315.000				-.4093	-.4412	-.6626		-.4200

ALPHA (2) = -.340 BETA (3) = 4.025 MACH = .90107 RN/L = 4.2091 PO = 2108.6 P = 1245.3

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3782		-.3814	-.4006	-.4125	-.4411	-.6834	
45.000				-.4548				
90.000			-.3605	-.3896	-.3972	-.5452	-.8233	
135.000				-.3950	-.4131	-.5617		.0751
180.000			-.4045	-.3900	-.4235	-.5071	-.7425	
225.000						-.7438		.3403
270.000		-.3828	-.3856	-.3728			-.5209	
315.000				-.3940	-.4289	-.5899		-.4156

ALPHA (3) = 3.854 BETA (1) = .009 MACH = .90130 RN/L = 4.2066 PO = 2109.1 P = 1245.3

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3704		-.3618	-.3959	-.4049	-.4632	-.6916	
45.000				-.4045				
90.000			-.3728	-.4021	-.4474	-.5683	-.8207	
135.000				-.4180	-.5043	-.6558		.4223
180.000			-.3501	-.3744	-.3738	-.4676	-.6216	
225.000						-.6630		.3678
270.000		-.3708	-.3746	-.3758			-.4889	
315.000				-.3846	-.4051	-.5715		-.4167

ARC11-023IA80 OTS(SRB=N ORB NO.1 OUTJET BASE (RE4HB7) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -4.003 BETA (1) = -.012 MACH = 1.0992 RN/L = 4.3803 PO = 2102.7 P = 985.74

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3791		-.3804	-.4334	-.4812	-.6206	-.2992	
45.000				-.4428				
90.000			-.4092	-.4106	-.4079	-.4206	-.4499	
135.000				-.4154	-.4317	-.5397		.2944
180.000			-.3853	-.4209	-.4687	-.5158	-.6900	
225.000						-.5698		.2955
270.000		-.3903	-.4046	-.4192			-.4446	
315.000				-.4478	-.4687	-.5987		-.0738

ALPHA (2) = -.393 BETA (1) = -4.006 MACH = 1.1052 RN/L = 4.3824 PO = 2102.7 P = 978.47

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3753		-.4022	-.4177	-.4319	-.5438	-.3276	
45.000				-.4365				
90.000			-.4066	-.4209	-.4360	-.4673	-.6540	
135.000				-.4295	-.4555	-.6101		.5738
180.000			-.3821	-.3907	-.4071	-.5190	-.6737	
225.000						-.5156		.2283
270.000		-.3896	-.4026	-.4280			-.4480	
315.000				-.4497	-.4711	-.5940		-.0549

ALPHA (2) = -.347 BETA (2) = -.019 MACH = 1.1052 RN/L = 4.3824 PO = 2102.7 P = 978.47

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3456		-.3566	-.3921	-.4263	-.5836	-.3087	
45.000				-.3858				
90.000			-.3654	-.3896	-.4006	-.4799	-.5305	
135.000				-.3812	-.4028	-.5325		.3843
180.000			-.3615	-.3875	-.4447	-.4877	-.6831	
225.000						-.5673		.3904

ARC11-023IA80 OTS(SRB=N ORB NO.1 OUTJET BASE (RE4HB7)

ALPHA (2) = -.347 BETA (2) = -.019

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3518	-.3595	-.3823			-.5234	
315.000				-.4001	-.4284	-.5372		-.0741

ALPHA (2) = -.383 BETA (3) = 4.012 MACH = 1.1052 RN/L = 4.3824 PO = 2102.7 P = 978.47

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3793		-.3878	-.3996	-.4133	-.5099	-.3215	
45.000				-.4133				
90.000			-.3877	-.4003	-.4056	-.4183	-.4455	
135.000				-.4025	-.4391	-.4978		.2043
180.000			-.3817	-.3991	-.4654	-.6199	-.8015	
225.000						-.5372		.4456
270.000		-.3826	-.3845	-.3993			-.5980	
315.000				-.4606	-.4792	-.5885		-.1014

ALPHA (3) = 4.049 BETA (1) = -.012 MACH = 1.1075 RN/L = 4.3846 PO = 2102.7 P = 975.68

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3849		-.3895	-.4094	-.4366	-.5682	-.3195	
45.000				-.4422				
90.000			-.3950	-.4092	-.4206	-.4443	-.6712	
135.000				-.4065	-.4445	-.5537		.4397
180.000			-.4075	-.4102	-.4632	-.4998	-.7648	
225.000						-.5547		.3445
270.000		-.3878	-.3881	-.4187			-.5344	
315.000				-.4533	-.4845	-.6380		-.1275

ARC11-023IA80 OTS(SRB=N ORB NO.1 OUT)ET BASE (RE4H88) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.914 BETA (1) = -.009 MACH = 1.2513 RN/L = 4.3952 PO = 2104.1 P = 810.95

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2955		-.3027	-.3538	-.4250	-.4987	-.1464	
45.000				-.3710				
90.000			-.3151	-.3249	-.3260	-.3350	-.4942	
135.000				-.3160	-.3435	-.4489		.3942
180.000			-.3052	-.3501	-.3610	-.3901	-.5341	
225.000						-.4712		.3200
270.000		-.2946	-.2924	-.3276			-.4960	
315.000				-.3721	-.3940	-.5118		-.0297

ALPHA (2) = -.353 BETA (1) = -4.006 MACH = 1.2491 RN/L = 4.3920 PO = 2104.8 P = 813.54

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2902		-.3002	-.3399	-.3759	-.4917	-.1853	
45.000				-.3386				
90.000			-.3227	-.3328	-.3399	-.3482	-.4893	
135.000				-.3331	-.3587	-.4261		.6255
180.000			-.3043	-.3161	-.3317	-.3931	-.4464	
225.000						-.4184		.2436
270.000		-.2772	-.2796	-.3335			-.5083	
315.000				-.3999	-.4131	-.4898		-.0162

ALPHA (2) = -.367 BETA (2) = -.016 MACH = 1.2491 RN/L = 4.3920 PO = 2104.8 P = 813.54

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2767		-.2739	-.3292	-.3898	-.4835	-.1483	
45.000				-.3632				
90.000			-.2831	-.2942	-.2889	-.3083	-.4914	
135.000				-.2953	-.3443	-.4585		.4598
180.000			-.3148	-.3525	-.3804	-.3790	-.5065	
225.000						-.4563		.3708

ARC11-023IA80 OTS(SRB=N ORB NO.1 OUTJET BASE (RE4HB8)

ALPHA (2) = -.367 BETA (2) = -.016

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2745	-.2715	-.3113			-.5164	
315.000				-.3989	-.4305	-.5329		-.0102

ALPHA (2) = -.393 BETA (3) = 4.016 MACH = 1.2491 RN/L = 4.3920 PO = 2104.8 P = 813.54

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2871		-.2995	-.3303	-.3657	-.4825	-.1892	
45.000				-.3929				
90.000			-.2934	-.2998	-.3226	-.3148	-.5082	
135.000				-.3023	-.3382	-.4032		.1749
180.000			-.2931	-.3363	-.3704	-.4364	-.5886	
225.000						-.4059		.4657
270.000		-.2966	-.2951	-.3422			-.4465	
315.000				-.3532	-.4784	-.5485		-.0157

ALPHA (3) = 4.053 BETA (1) = -.012 MACH = 1.2485 RN/L = 4.3917 PO = 2104.1 P = 813.89

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2790		-.2707	-.3176	-.3406	-.4508	-.1814	
45.000				-.3595				
90.000			-.2853	-.2970	-.3036	-.3225	-.4803	
135.000				-.2972	-.3252	-.4150		.4780
180.000			-.3184	-.3421	-.3789	-.3800	-.5475	
225.000						-.4263		.3805
270.000		-.2785	-.2753	-.3155			-.4197	
315.000				-.3336	-.4805	-.5506		-.0159

ARC11-0231A80 OTS(SRB=N ORB NO.1 OUTJET BASE (RE4HB9) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.934 BETA (1) = -.009 MACH = 1.4069 RN/L = 4.3421 PO = 2107.0 P = 655.71

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2300		-.2165	-.2375	-.2524	-.3284	-.1839	
45.000				-.2406				
90.000			-.2364	-.2400	-.2396	-.2402	-.3964	
135.000				-.2556	-.3029	-.3721		.4269
180.000			-.2527	-.2880	-.3307	-.3320	-.4211	
225.000						-.3817		.3185
270.000		-.2318	-.2384	-.2673			-.3978	
315.000				-.2631	-.3185	-.3930		-.0704

ALPHA (2) = -.426 BETA (1) = -4.006 MACH = 1.4068 RN/L = 4.3356 PO = 2107.7 P = 655.95

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2256		-.2070	-.2273	-.2485	-.3365	-.1629	
45.000				-.2452				
90.000			-.2702	-.2653	-.2643	-.2599	-.3551	
135.000				-.3287	-.3349	-.2707		.5646
180.000			-.2449	-.2520	-.2614	-.2942	-.3371	
225.000						-.3206		.2327
270.000		-.2186	-.2206	-.2671			-.3402	
315.000				-.2512	-.3067	-.3977		-.0462

ALPHA (2) = -.383 BETA (2) = -.016 MACH = 1.4068 RN/L = 4.3356 PO = 2107.7 P = 655.95

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2168		-.1950	-.2204	-.2426	-.3280	-.1748	
45.000				-.2292				
90.000			-.2317	-.2351	-.2322	-.2345	-.3957	
135.000				-.2562	-.2945	-.3668		.5275
180.000			-.2394	-.2735	-.3326	-.3114	-.4060	
225.000						-.3433		.3580

ARC11-0231A80 OTS(SRB=N ORB NO.1 OUT)ET BASE (RE4HB9)

ALPHA (2) = -.383 BETA (2) = -.016

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.2180	-.2230	-.2547			-.3977	
315.000				-.2247	-.2651	-.3751		-.0495

ALPHA (2) = -.436 BETA (3) = 4.016 MACH = 1.4068 RN/L = 4.3356 PO = 2107.7 P = 655.95

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2261		-.2311	-.2477	-.2573	-.3470	-.1618	
45.000				-.2598				
90.000			-.2291	-.2313	-.2294	-.2311	-.3502	
135.000				-.2351	-.2609	-.3081		.1925
180.000			-.2193	-.2606	-.3121	-.3448	-.4566	
225.000						-.2903		.4359
270.000		-.2394	-.2380	-.2676			-.3734	
315.000				-.2257	-.2447	-.3763		-.0516

ALPHA (3) = 4.046 BETA (1) = -.012 MACH = 1.4068 RN/L = 4.3293 PO = 2108.4 P = 655.24

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.2059		-.1967	-.2534	-.2811	-.3739	-.0664	
45.000				-.2337				
90.000			-.2080	-.2333	-.2772	-.3071	-.4002	
135.000				-.2644	-.3146	-.3422		.5099
180.000			-.2190	-.2509	-.2973	-.2652	-.3791	
225.000						-.3183		.3974
270.000		-.1998	-.2006	-.2294			-.3793	
315.000				-.2183	-.3050	-.3414		.0371

ARC11-0231A80 OTS(ET SPOIL(SRB=ORB=OFF)ET BASE (RE4HC0) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -4.029 BETA (1) = .016 MACH = .89710 RN/L = 4.2461 PO = 2124.6 P = 1260.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3723		-.2991	-.2725	-.2829	-.2622	.4031	
45.000				-.2945				
90.000			-.3316	-.3215	-.3475	-.4887	-.7133	
135.000				-.3777	-.4598	-.6376		.2553
180.000			-.3832	-.3799	-.4093	-.4597	-.6308	
225.000						-.6707		.2558
270.000		-.3727	-.3417	-.3719			-.6621	
315.000				-.3120	-.3168	-.2930		.2857

ALPHA (2) = -.241 BETA (1) -4.009 MACH = .90283 RN/L = 4.2516 PO = 2122.7 P = 1251.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3359		-.3067	-.3050	-.2944	-.2933	.4140	
45.000				-.3248				
90.000			-.3427	-.4057	-.4358	-.5006	-.8288	
135.000				-.4628	-.4935	-.7095		.4739
180.000			-.3615	-.3647	-.3939	-.4833	-.6818	
225.000						-.6036		.1604
270.000		-.3244	-.3328	-.3617			-.5943	
315.000				-.2948	-.2966	-.2933		.3557

ALPHA (2) = -.264 BETA (2) = -.003 MACH = .90283 RN/L = 4.2516 PO = 2122.7 P = 1251.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3539		-.2785	-.2737	-.2670	-.2599	.4057	
45.000				-.2831				
90.000			-.3274	-.3258	-.3403	-.4972	-.7438	
135.000				-.3922	-.5025	-.6771		.3660
180.000			-.3840	-.3708	-.3873	-.4664	-.6246	
225.000						-.6523		.3445

ARC11-023IA80 OTS(ET SPOIL(SRB=ORB=OFF)ET BASE (RE4HC0)

ALPHA (2) = -.264 BETA (2) = -.003

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3529	-.3470	-.3890			-.6498	
315.000				-.3000	-.2974	-.2855		.3084

ALPHA (2) = -.291 BETA (3) = 4.022 MACH = .90283 RN/L = 4.2516 PO = 2122.7 P = 1251.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3073		-.2898	-.2903	-.2789	-.2880	.4136	
45.000				-.2879				
90.000			-.3036	-.3093	-.3172	-.4609	-.6098	
135.000				-.3308	-.3624	-.5058		.0941
180.000			-.3471	-.3516	-.3568	-.4689	-.6944	
225.000						-.7120		.3521
270.000		-.3321	-.3282	-.3588			-.5489	
315.000				-.3059	-.2981	-.2943		.3159

ALPHA (3) = 3.980 BETA (1) = .016 MACH = .90820 RN/L = 4.2637 PO = 2123.2 P = 1244.2

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3334		-.2762	-.2690	-.2576	-.2629	.4272	
45.000				-.2847				
90.000			-.3144	-.3517	-.3791	-.4868	-.7377	
135.000				-.4128	-.5028	-.6981		.4325
180.000			-.3678	-.3674	-.3713	-.4699	-.6234	
225.000						-.6530		.3936
270.000		-.3355	-.3366	-.3688			-.5666	
315.000				-.2954	-.2888	-.2914		.2593

ARC11-023IA80 OTS(ET SPOIL(SRB=ORB=OFF)ET BASE (RE4HC1) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -4.000 BETA (1) = .012 MACH = 1.1039 RN/L = 4.4630 PO = 2123.2 P = 989.56

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4441		-.4200	-.4157	-.4128	-.4085	.4231	
45.000				-.4135				
90.000			-.4278	-.4359	-.4562	-.5447	-.4116	
135.000				-.4728	-.4941	-.5888		.3137
180.000			-.4794	-.4731	-.5158	-.5965	-.8056	
225.000						-.6327		.3060
270.000		-.4462	-.4432	-.4515			-.4180	
315.000				-.4229	-.4244	-.4166		.4552

ALPHA (2) = -.264 BETA (1) = -4.009 MACH = 1.1017 RN/L = 4.4844 PO = 2124.6 P = 992.96

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4567		-.4618	-.4539	-.4517	-.4490	.5651	
45.000				-.4727				
90.000			-.4782	-.5094	-.5312	-.6483	-.5638	
135.000				-.5107	-.5336	-.6675		.5822
180.000			-.4603	-.4613	-.4860	-.5927	-.7513	
225.000						-.6190		.2327
270.000		-.4470	-.4348	-.4436			-.4365	
315.000				-.4442	-.4400	-.4379		.5310

ALPHA (2) = -.284 BETA (2) = .000 MACH = 1.1017 RN/L = 4.4844 PO = 2124.6 P = 992.96

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4439		-.4236	-.4193	-.4168	-.4132	.5101	
45.000				-.4246				
90.000			-.4413	-.4455	-.4411	-.6303	-.3924	
135.000				-.4963	-.5005	-.5976		.3776
180.000			-.4681	-.4614	-.4921	-.6106	-.8485	
225.000						-.6254		.3921

ARC11-023IA80 OTS(ET SPOIL(SRB=ORB=OFF)ET BASE (RE4HC1)

ALPHA (2) = -.284 BETA (2) = .000

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.4471	-.4443	-.4465			-.4114	
315.000				-.4276	-.4254	-.4231		.5208

ALPHA (2) = -.297 BETA (3) = 4.022 MACH = 1.1017 RN/L = 4.4844 PO = 2124.6 P = 992.96

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	.4534		-.4544	-.4503	-.4475	-.4444	.5848	
45.000				-.4411				
90.000			-.4246	-.4406	-.4598	-.5697	-.4420	
135.000				-.4805	-.5230	-.5756		.2237
180.000			-.4489	-.4496	-.4567	-.5872	.0000	
225.000						-.5812		.4796
270.000		-.4561	-.4492	-.4739			-.5895	
315.000				-.4752	-.4588	-.4648		.4683

ALPHA (3) = 3.910 BETA (1) = .016 MACH = 1.1026 RN/L = 4.4864 PO = 2123.9 P = 991.59

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4389		-.4258	-.4206	-.4194	-.4143	.5354	
45.000				-.4218				
90.000			-.4478	-.4544	-.5212	-.6757	-.6207	
135.000				-.5145	-.5263	-.6164		.4401
180.000			-.4993	-.4878	-.5496	-.6419	.0000	
225.000						-.5989		.3505
270.000		-.4663	-.4640	-.4887			-.6051	
315.000				-.4459	-.4434	-.4387		.3895

ARC11-023IA80 OTS(ET SPOIL(SRB=ORB=NOM)ET BASE (RE4HC2) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.996 BETA (1) = .016 MACH = .90230 RN/L = 4.2244 PO = 2111.2 P = 1245.1

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3026		-.2845	-.2850	-.2740	-.2826	.4117	
45.000				-.2981				
90.000			-.3416	-.3314	-.3254	-.4844	-.6920	
135.000				-.3608	-.4122	-.6092		.2628
180.000			-.3685	-.3630	-.3893	-.4358	-.5943	
225.000						-.6457		.2656
270.000		-.3386	-.3436	-.3347			-.6284	
315.000				-.2961	-.2772	-.2788		.2887

ALPHA (2) = -.284 BETA (1) = -4.012 MACH = .90030 RN/L = 4.2241 PO = 2110.5 P = 1247.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3259		-.3064	-.3020	-.2991	-.2969	.4072	
45.000				-.3180				
90.000			-.3397	-.4082	-.4415	-.4885	-.6245	
135.000				-.4890	-.5028	-.7385		.4711
180.000			-.3729	-.3863	-.3957	-.4901	-.7715	
225.000						-.6347		.1492
270.000		-.3658	-.3607	-.3825			-.6410	
315.000				-.3261	-.3165	-.3184		.3414

ALPHA (2) = -.360 BETA (2) = -.003 MACH = .90030 RN/L = 4.2241 PO = 2110.5 P = 1247.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3385		-.2780	-.3015	-.2760	-.2890	.4099	
45.000				-.3136				
90.000			-.3506	-.3345	-.3481	-.5414	-.7582	
135.000				-.4372	-.5411	-.7013		.3575
180.000			-.3942	-.4220	-.4042	-.4924	-.6542	
225.000						-.6913		.3439

ARC11-023:A80 OTS(ET SPOIL(SRB=ORB=NOM)ET BASE (RE4HC2)

ALPHA (2) = -.360 BETA (2) = -.003

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.3582	-.3586	-.3894			-.6431	
315.000				-.3017	-.2874	-.2961		.3161

ALPHA (2) = -.330 BETA (3) = 4.019 MACH = .90030 RN/L = 4.2241 PO = 2110.5 P = 1247.5

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3288		-.3159	-.3106	-.3091	-.2958	.4026	
45.000				-.3286				
90.000			-.3504	-.3463	-.3571	-.5068	-.6624	
135.000				-.3840	-.4110	-.5647		.0758
180.000			-.3706	-.3922	-.4146	-.4971	-.7303	
225.000						-.7365		.3414
270.000		-.3548	-.3476	-.3765			-.5738	
315.000				-.3347	-.3198	-.3185		.3071

ALPHA (3) = 3.927 BETA (1) = .012 MACH = .89920 RN/L = 4.2176 PO = 2110.5 P = 1249.0

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.3583		-.2838	-.2826	-.2713	-.2761	.4267	
45.000				-.3036				
90.000			-.3530	-.3589	-.3919	-.5340	-.7853	
135.000				-.4768	-.5893	-.7331		.4216
180.000			-.4024	-.4126	-.4274	-.4820	-.6541	
225.000						-.7104		.3811
270.000		-.3705	-.3609	-.3955			-.5820	
315.000				-.3036	-.2930	-.2969		.2585

ARC11-023IA80 OTS(ET SPOIL(SRB=ORB=NOM)ET BASE (RE4HC3) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -4.033 BETA (1) = .016 MACH = 1.1036 RN/L = 4.4660 PO = 2114.0 P = 985.75

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4211		-.3859	-.3832	-.3799	-.3766	.4265	
45.000				-.3767				
90.000			-.3940	-.3979	-.4183	-.5133	-.4118	
135.000				-.4344	-.4702	-.5733		.2977
180.000			-.4475	-.4671	-.4999	-.5711	-.7854	
225.000						-.6133		.2955
270.000		-.4201	-.4147	-.4218			-.4121	
315.000				-.3933	-.3888	-.3839		.4548

ALPHA (2) = -.433 BETA (1) = -4.009 MACH = 1.1009 RN/L = 4.4637 PO = 2114.0 P = 989.05

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4297		-.4402	-.4328	-.4320	-.4271	.5644	
45.000				-.4526				
90.000			-.4415	-.4851	-.5086	-.5770	-.5889	
135.000				-.4792	-.5005	-.6406		.5808
180.000			-.4364	-.4364	-.4613	-.5868	-.7253	
225.000						-.6023		.2253
270.000		-.4251	-.4129	-.4196			-.4517	
315.000				-.4191	-.4179	-.4147		.5294

ALPHA (2) = -.446 BETA (2) = -.003 MACH = 1.1009 RN/L = 4.4637 PO = 2114.0 P = 989.05

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4059		-.3824	-.3723	-.3741	-.3694	.5156	
45.000				-.3757				
90.000			-.3929	-.4023	-.3981	-.5669	-.3591	
135.000				-.4547	-.4756	-.5849		.3913
180.000			-.4445	-.4465	-.4793	-.5126	-.7772	
225.000						-.5954		.3941

ARC11-023IA80 OTS(ET SPOIL(SRB=ORB=NOM)ET BASE (RE4HC3)

ALPHA (2) = -.446 BETA (2) = -.003

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
270.000		-.4065	-.4016	-.4129			-.3989	
315.000				-.3842	-.3837	-.3770		.5123

ALPHA (2) = -.456 BETA (3) = 4.022 MACH = 1.1009 RN/L = 4.4637 PO = 2114.0 P = 989.05

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4311		-.4367	-.4357	-.4338	-.4297	.5839	
45.000				-.4243				
90.000			-.4132	-.4256	-.4524	-.5610	-.4418	
135.000				-.4567	-.5024	-.5610		.2036
180.000			-.4284	-.4348	-.5014	-.6822	-.8625	
225.000						-.5757		.4616
270.000		-.4452	-.4362	-.4620			-.5964	
315.000				-.4570	-.4495	-.4502		.4553

ALPHA (3) = 3.844 BETA (1) = .003 MACH = 1.1023 RN/L = 4.4653 PO = 2114.7 P = 987.65

SECTION (1)EXTERNAL TANK BASE DEPENDENT VARIABLE CP

R/ROD	.0000	.4500	.6350	.8400	.8950	.9460	.9890	1.0000
PHI								
.000	-.4185		-.3981	-.3931	-.3906	-.3882	.5356	
45.000				-.3891				
90.000			-.4163	-.4255	-.4896	-.6368	-.6108	
135.000				-.4773	-.5058	-.6028		.4446
180.000			-.4638	-.4518	-.4948	-.5638	-.8124	
225.000						-.5855		.3461
270.000		-.4402	-.4358	-.4636			-.5781	
315.000				-.4207	-.4174	-.4130		.3902

ARC11-023IA80 OTS(SRB=N++ ORB=N) SRB SKIRT (RE4I01) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -4.013 BETA (1) = -.019 MACH = .59860 RN/L = 3.3812 PO = 2110.5 P = 1656.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3175
90.000	-.3442
180.000	-.3384
270.000	-.5249

ALPHA (2) = -.314 BETA (1) = -4.034 MACH = .59953 RN/L = 3.3878 PO = 2110.3 P = 1655.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3270
90.000	-.3187
180.000	-.3180
270.000	-.4828

ALPHA (2) = -.340 BETA (2) = -.019 MACH = .59953 RN/L = 3.3878 PO = 2110.3 P = 1655.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3228
90.000	-.3317
180.000	-.3345
270.000	-.5063

ARC11-023IA80 OTS(SRB=N++ ORB=N) SRB SKIRT (RE4I01)

ALPHA (2) = -.459 BETA (3) = 3.997 MACH = .59953 RN/L = 3.3878 PO = 2110.3 P = 1655.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3373
90.000	-.3653
180.000	-.3571
270.000	-.5035

ALPHA (3) = 4.039 BETA (1) = -.019 MACH = .59860 RN/L = 3.3874 PO = 2109.8 P = 1655.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3138
90.000	-.3244
180.000	-.3315
270.000	-.5028

ARC11-023IA80 OTS(SRB=N++ ORB=N) SRB SKIRT (RE4102) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.901 BETA (1) = -.012 MACH = .90550 RN/L = 4.2328 PO = 2108.4 P = 1239.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2801
90.000	-.2825
180.000	-.2589
270.000	-.3405

ALPHA (2) = -.347 BETA (1) = -4.025 MACH = .90060 RN/L = 4.2176 PO = 2106.2 P = 1244.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2420
90.000	-.2509
180.000	-.2481
270.000	-.2699

ALPHA (2) = -.380 BETA (2) = -.009 MACH = .90060 RN/L = 4.2176 PO = 2106.2 P = 1244.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2315
90.000	-.2491
180.000	-.2327
270.000	-.3249

ARC11-023IA80 OTS(SRB=N++ ORB=N) SRB SKIRT (RE4102)

ALPHA (2) = -.456 BETA (3) = 4.003 MACH = .90060 RN/L = 4.2176 PO = 2106.2 P = 1244.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2901
90.000	-.2984
180.000	-.2746
270.000	-.3477

ALPHA (3) = 3.977 BETA (1) = -.009 MACH = .89810 RN/L = 4.2116 PO = 2105.5 P = 1247.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2525
90.000	-.2504
180.000	-.2498
270.000	-.3508

ARC11-023IA80 OTS(SRB=N++ ORB=N) SRB SKIRT (RE4I03) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.920 BETA (1) = -.003 MACH = 1.0986 RN/L = 4.3008 PO = 2109.8 P = 989.84

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2819
90.000	-.3036
180.000	-.2933
270.000	-.3882

ALPHA (2) = -.621 BETA (1) = -4.006 MACH = 1.1024 RN/L = 4.3086 PO = 2109.6 P = 985.11

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2803
90.000	-.2886
180.000	-.2894
270.000	-.3631

ALPHA (2) = -.641 BETA (2) = .000 MACH = 1.1024 RN/L = 4.3086 PO = 2109.6 P = 985.11

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2952
90.000	-.3141
180.000	-.3081
270.000	-.3759

ARC11-023IA80 OTS(SRB=N++ ORB=N) SRB SKIRT (RE4103)

ALPHA (2) = -.492 BETA (3) = 4.009 MACH = 1.1024 RN/L = 4.3086 PO = 2109.6 P = 985.11

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3361
90.000	-.3611
180.000	-.3443
270.000	-.3791

ALPHA (3) = 3.944 BETA (1) = -.003 MACH = 1.1088 RN/L = 4.3102 PO = 2108.4 P = 976.70

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3211
90.000	-.3263
180.000	-.3224
270.000	-.4386

ARC11-023IA80 OTS(SRB=N++ ORB=N) SRB SKIRT (RE4I04) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -4.165 BETA (1) = .000 MACH = 1.2595 RN/L = 4.4972 PO = 2140.2 P = 815.83

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1179
90.000	-.1333
180.000	-.1205
270.000	-.1736

ALPHA (2) = -.495 BETA (1) = -4.000 MACH = 1.2534 RN/L = 4.4312 PO = 2113.5 P = 812.32

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1265
90.000	-.1476
180.000	-.1315
270.000	-.1425

ALPHA (2) = -.528 BETA (2) = .000 MACH = 1.2534 RN/L = 4.4312 PO = 2113.5 P = 812.32

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1275
90.000	-.1492
180.000	-.1486
270.000	-.2029

ARC11-023IA80 OTS(SRB=N++ ORB=N) SRB SKIRT (RE4104)

ALPHA (2) = -.555 BETA (3) = 4.006 MACH = 1.2534 RN/L = 4.4312 PO = 2113.5 P = 812.32

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1742
90.000	-.2009
180.000	-.1909
270.000	-.2132

ALPHA (3) = 3.831 BETA (1) = .006 MACH = 1.2464 RN/L = 4.4257 PO = 2113.3 P = 819.82

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1616
90.000	-.1820
180.000	-.1754
270.000	-.2497

ARC11-023IA80 OTS(SRB=N++ ORB=N) SRB SKIRT (RE4105) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.950 BETA (1) = -.003 MACH = 1.4026 RN/L = 4.3103 PO = 2124.6 P = 665.23

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.0533
90.000	-.0557
180.000	-.0399
270.000	-.0644

ALPHA (2) = -.436 BETA (1) = -4.009 MACH = 1.4051 RN/L = 4.3040 PO = 2123.0 P = 662.38

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.0223
90.000	-.0335
180.000	-.0365
270.000	-.0292

ALPHA (2) = -.482 BETA (2) = -.003 MACH = 1.4051 RN/L = 4.3040 PO = 2123.0 P = 662.38

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.0487
90.000	-.0658
180.000	-.0602
270.000	-.0957

ARC11-023IA80 OTS(SRB=N++ ORB=N) SRB SKIRT (RE4105)

ALPHA (2) = -.505 BETA (3) = 4.009 MACH = 1.4051 RN/L = 4.3040 PO = 2123.0 P = 662.38

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.0811
90.000	-.1066
180.000	-.1057
270.000	-.1226

ALPHA (3) = 3.881 BETA (1) = -.006 MACH = 1.4020 RN/L = 4.3020 PO = 2122.5 P = 665.10

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.0481
90.000	-.0733
180.000	-.0730
270.000	-.1170

ARC11-073IA80 OTS(SRB=N+ ORB=N) SRB SKIRT (RE4106) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.848 BETA (1) = -.019 MACH = .59810 RN/L = 3.3852 PO = 2109.1 P = 1656.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3645
90.000	-.3769
180.000	-.3690
270.000	-.5724

ALPHA (2) = -.350 BETA (1) = -4.038 MACH = .59800 RN/L = 3.3843 PO = 2108.4 P = 1655.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3490
90.000	-.3429
180.000	-.3349
270.000	-.5270

ALPHA (2) = -.314 BETA (2) = -.022 MACH = .59800 RN/L = 3.3843 PO = 2108.4 P = 1655.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3458
90.000	-.3584
180.000	-.3540
270.000	-.5539

DATE 23 JUL 76

TABULATED SOURCE DATA - IA80

ARC11-023IA80 OTS(SRB=N+ ORB=N) SRB SKIRT (RE4106)

ALPHA (2) = -.396 BETA (3) = 3.997 MACH = .59800 RN/L = 3.3843 PO = 2108.4 P = 1655.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3759
90.000	-.4009
180.000	-.3905
270.000	-.5571

ALPHA (3) = 3.970 BETA (1) = -.022 MACH = .59820 RN/L = 3.3879 PO = 2107.7 P = 1654.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3465
90.000	-.3578
180.000	-.3601
270.000	-.5440

ARC11-023IA80 OTS(SRB=N+ ORB=N) SRB SKIRT (RE4107) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.930 BETA (1) = -.009 MACH = .89930 RN/L = 4.2036 PO = 2101.3 P = 1243.3

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3519
90.000	-.3645
180.000	-.3533
270.000	-.4614

ALPHA (2) = -.376 BETA (1) = -4.028 MACH = .90183 RN/L = 4.2093 PO = 2101.3 P = 1239.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3134
90.000	-.3239
180.000	-.3222
270.000	-.3931

ALPHA (2) = -.330 BETA (2) = -.012 MACH = .90183 RN/L = 4.2093 PO = 2101.3 P = 1239.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3543
90.000	-.3621
180.000	-.3601
270.000	-.4987

ARC11-0231A80 OTS(SRB=N+ ORB=N) SRB SKIRT (RE4107)

ALPHA (2) = -.330 BETA (3) = 4.003 MACH = .90183 RN/L = 4.2093 PO = 2101.3 P = 1239.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4148
90.000	-.4206
180.000	-.4146
270.000	-.5496

ALPHA (3) = 3.927 BETA (1) = -.016 MACH = .90100 RN/L = 4.2086 PO = 2101.3 P = 1241.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3457
90.000	-.3560
180.000	-.3552
270.000	-.5184

ARC11-023IA80 OTS(SRB=N+ ORB=N) SRB SKIRT (RE4108) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.907 BETA (1) = .000 MACH = 1.0989 RN/L = 4.3130 PO = 2107.0 P = 988.16

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3561
90.000	-.3741
180.000	-.3637
270.000	-.4452

ALPHA (2) = -.515 BETA (1) = -4.003 MACH = 1.1012 RN/L = 4.3135 PO = 2106.7 P = 985.16

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3355
90.000	-.3467
180.000	-.3440
270.000	-.4255

ALPHA (2) = -.525 BETA (2) = .003 MACH = 1.1012 RN/L = 4.3135 PO = 2106.7 P = 985.16

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3528
90.000	-.3761
180.000	-.3696
270.000	-.4248

ARC11-0231A80 OTS(SRB=N+ ORB=N) SRB SKIRT (RE4108)

ALPHA (2) = -.426 BETA (3) = 4.012 MACH = 1.1012 RN/L = 4.3135 PO = 2106.7 P = 985.16

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4102
90.000	-.4431
180.000	-.4221
270.000	-.4555

ALPHA (3) = 3.881 BETA (1) = .006 MACH = 1.1017 RN/L = 4.3151 PO = 2105.5 P = 984.01

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3878
90.000	-.4000
180.000	-.3929
270.000	-.4680

ARC11-023IA80 OTS(SRB=N+ ORB=N) SRB SKIRT (RE4109) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.897 BETA (1) = .006 MACH = 1.2489 RN/L = 4.4001 PO = 2111.9 P = 816.48

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1751
90.000	-.1898
180.000	-.1796
270.000	-.2324

ALPHA (2) = -.482 BETA (1) = -4.006 MACH = 1.2477 RN/L = 4.3993 PO = 2111.9 P = 817.80

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1714
90.000	-.1937
180.000	-.1742
270.000	-.1942

ALPHA (2) = -.519 BETA (2) = .003 MACH = 1.2477 RN/L = 4.3993 PO = 2111.9 P = 817.80

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1775
90.000	-.1969
180.000	-.1955
270.000	-.2457

ARC11-023IA80 OTS(SRB=N+ ORB=N) SRB SKIRT (RE4I09)

ALPHA (2) = -.462 BETA (3) = 4.009 MACH = 1.2477 RN/L = 4.3993 PO = 2111.9 P = 817.80

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2366
90.000	-.2624
180.000	-.2522
270.000	-.2754

ALPHA (3) = 3.854 BETA (1) = .006 MACH = 1.2493 RN/L = 4.3962 PO = 2111.9 P = 816.04

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1952
90.000	-.2183
180.000	-.2129
270.000	-.2718

ARC11-0231A80 OTS(SRB=N+ ORB=N) SRB SKIRT (RE4110) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.904 BETA (1) = -.006 MACH = 1.4001 RN/L = 4.2924 PO = 2119.7 P = 665.99

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.0856
90.000	-.0884
180.000	-.0730
270.000	-.1115

ALPHA (2) = -.406 BETA (1) = -4.009 MACH = 1.4020 RN/L = 4.2945 PO = 2120.9 P = 664.59

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.0544
90.000	-.0622
180.000	-.0667
270.000	-.0754

ALPHA (2) = -.370 BETA (2) = .000 MACH = 1.4020 RN/L = 4.2945 PO = 2120.9 P = 664.59

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.0757
90.000	-.0950
180.000	-.0897
270.000	-.1266

ARC11-023IA80 OTS(SRB=N+ ORB=N) SRB SKIRT (RE4110)

ALPHA (2) = -.453 BETA (3) = 4.012 MACH = 1.4020 RN/L = 4.2945 PO = 2120.9 P = 664.59

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1146
90.000	-.1393
180.000	-.1409
270.000	-.1582

ALPHA (3) = 3.944 BETA (1) = -.006 MACH = 1.3972 RN/L = 4.2925 PO = 2121.1 P = 669.17

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.0818
90.000	-.1078
180.000	-.1059
270.000	-.1436

ARC11-023IA80 OTS(SRB=N ORB=N+) SRB SKIRT (RE4III) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.957 BETA (1) = -.016 MACH = .59560 RN/L = 3.3845 PO = 2105.5 P = 1656.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4301
90.000	-.4391
180.000	-.4232
270.000	-.6989

ALPHA (2) = -.337 BETA (1) = -4.041 MACH = .59810 RN/L = 3.3979 PO = 2105.7 P = 1653.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4347
90.000	-.4008
180.000	-.4022
270.000	-.6396

ALPHA (2) = -.383 BETA (2) = -.022 MACH = .59810 RN/L = 3.3979 PO = 2105.7 P = 1653.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4234
90.000	-.4245
180.000	-.4178
270.000	-.6697

ARC11-023IA80 OTS(SRB=N ORB=N+) SRB SKIRT (RE4111)

ALPHA (2) = -.400 BETA (3) = 3.997 MACH = .59810 RN/L = 3.3979 PO = 2105.7 P = 1653.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4319
90.000	-.4424
180.000	-.4335
270.000	-.6687

ALPHA (3) = 4.125 BETA (1) = -.025 MACH = .59930 RN/L = 3.4056 PO = 2106.2 P = 1652.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4074
90.000	-.4101
180.000	-.4146
270.000	-.6305

ARC11-023IA80 OTS(SRB=N ORB=N+) SRB SKIRT (RE4112) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -4.062 BETA (1) = -.012 MACH = .89970 RN/L = 4.2040 PO = 2099.9 P = 1242.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4179
90.000	-.4278
180.000	-.4215
270.000	-.4988

ALPHA (2) = -.383 BETA (1) = -4.028 MACH = .90127 RN/L = 4.2082 PO = 2100.1 P = 1240.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3875
90.000	-.3887
180.000	-.3879
270.000	-.4692

ALPHA (2) = -.383 BETA (2) = -.016 MACH = .90127 RN/L = 4.2082 PO = 2100.1 P = 1240.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3915
90.000	-.4045
180.000	-.3997
270.000	-.5727

ARC11-023IA80 OTS(SRB=N ORB=N+) SRB SKIRT (RE4112)

ALPHA (2) = -.453 BETA (3) = 4.000 MACH = .90127 RN/L = 4.2082 PO = 2100.1 P = 1240.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4715
90.000	-.4715
180.000	-.4592
270.000	-.6409

ALPHA (3) = 3.947 BETA (1) = -.012 MACH = .90020 RN/L = 4.1982 PO = 2099.2 P = 1240.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4104
90.000	-.4215
180.000	-.4254
270.000	-.6319

ARC11-0231A80 OTS(SRB=N ORB=N+) SRB SKIRT (RE4113) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.950 BETA (1) = .006 MACH = 1.0974 RN/L = 4.3157 PO = 2105.5 P = 989.31

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4608
90.000	-.4800
180.000	-.4687
270.000	-.5303

ALPHA (2) = -.509 BETA (1) = -4.066 MACH = 1.1004 RN/L = 4.3182 PO = 2105.5 P = 985.62

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4357
90.000	-.4514
180.000	-.4509
270.000	-.5178

ALPHA (2) = -.552 BETA (2) = -.056 MACH = 1.1004 RN/L = 4.3182 PO = 2105.5 P = 985.62

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4552
90.000	-.4768
180.000	-.4719
270.000	-.5237

ARC11-023IA80 OTS(SRB=N ORB=N+) SRB SKIRT (RE4113)

ALPHA (2) = -.486 BETA (3) = 3.950 MACH = 1.1004 RN/L = 4.3182 PO = 2105.5 P = 985.62

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5051
90.000	-.5436
180.000	-.5214
270.000	-.5482

ALPHA (3) = 4.029 BETA (1) = -.069 MACH = 1.1030 RN/L = 4.3205 PO = 2104.8 P = 982.12

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4745
90.000	-.4951
180.000	-.4876
270.000	-.5424

ARC11-023IA80 OTS(SRB=N ORB=N+) SRB SKIRT (RE4114) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.963 BETA (1) = .006 MACH = 1.2512 RN/L = 4.3841 PO = 2109.1 P = 812.89

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2680
90.000	-.2844
180.000	-.2719
270.000	-.3257

ALPHA (2) = -.492 BETA (1) = -4.006 MACH = 1.2479 RN/L = 4.3874 PO = 2110.0 P = 816.96

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2744
90.000	-.2866
180.000	-.2698
270.000	-.2966

ALPHA (2) = -.466 BETA (2) = .003 MACH = 1.2479 RN/L = 4.3874 PO = 2110.0 P = 816.96

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2802
90.000	-.3032
180.000	-.2937
270.000	-.3325

ARC11-0231A80 OTS(SRB=N ORB=N+) SRB SKIRT (RE4114)

ALPHA (2) = -.522 BETA (3) = 4.009 MACH = 1.2479 RN/L = 4.3874 PO = 2110.0 P = 816.96

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3447
90.000	-.3698
180.000	-.3570
270.000	-.3741

ALPHA (3) = 3.996 BETA (1) = .000 MACH = 1.2453 RN/L = 4.3815 PO = 2109.8 P = 819.58

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2997
90.000	-.3262
180.000	-.3182
270.000	-.3585

ARC11-023IA80 OTS(SRB=N ORB=N+) SRB SKIRT (RE4115) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.910 BETA (1) = -.006 MACH = 1.4040 RN/L = 4.2694 PO = 2117.6 P = 661.67

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1601
90.000	-.1672
180.000	-.1519
270.000	-.2189

ALPHA (2) = -.409 BETA (1) = -4.009 MACH = 1.4005 RN/L = 4.2782 PO = 2119.0 P = 665.37

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1245
90.000	-.1332
180.000	-.1323
270.000	-.1698

ALPHA (2) = -.446 BETA (2) = .000 MACH = 1.4005 RN/L = 4.2782 PO = 2119.0 P = 665.37

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1665
90.000	-.1863
180.000	-.1783
270.000	-.2162

ARC11-u231A80 OTS(SRB=N ORB=N+) SRB SKIRT (RE4115)

ALPHA (2) = -.509 BETA (3) = 4.009 MACH = 1.4005 RN/L = 4.2782 PO = 2119.0 P = (.37

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2141
90.000	-.2452
180.000	-.2366
270.000	-.2475

ALPHA (3) = 3.848 BETA (1) = -.006 MACH = 1.4000 RN/L = 4.2775 PO = 2121.1 P = 868.55

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1697
90.000	-.2042
180.000	-.2131
270.000	-.2229

ARC11-023IA80 OTS(SRB=N ORB=N-) SRE SKIRT (RE4116) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.986 BETA (1) = -.012 MACH = .90160 RN/L = 4.2050 PO = 2099.2 P = 1239.1

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4193
90.000	-.4334
180.000	-.4253
270.000	-.5363

ALPHA (2) = -.350 BETA (1) = -4.031 MACH = .90357 RN/L = 4.2104 PO = 2098.7 P = 1236.1

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3859
90.000	-.3904
180.000	-.3985
270.000	-.4686

ALPHA (2) = -.301 BETA (2) = -.016 MACH = .90357 RN/L = 4.2104 PO = 2098.7 P = 1236.1

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3947
90.000	-.4041
180.000	-.4085
270.000	-.5882

ARC11-023IA80 OTS(SRB=N ORB=N-) SRB SKIRT (RE4116)

ALPHA (2) = -.317 BETA (3) = 4.000 MACH = .90357 RN/L = 4.2104 PO = 2098.7 P = 1236.1

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4675
90.000	-.4649
180.000	-.4615
270.000	-.6401

ALPHA (3) = 3.947 BETA (1) = -.019 MACH = .90070 RN/L = 4.2030 PO = 2098.5 P = 1239.8

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4206
90.000	-.4239
180.000	-.4231
270.000	-.6271

ARC11-0231A80 OTS(SRB=N ORB=N-) SRB SKIRT (RE4117) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -4.020 BETA (1) = -.069 MACH = 1.0966 RN/L = 4.3161 PO = 2104.8 P = 990.02

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4619
90.000	-.4854
180.000	-.4745
270.000	-.5204

ALPHA (2) = -.479 BETA (1) = -4.069 MACH = 1.1010 RN/L = 4.3147 PO = 2104.3 P = 984.44

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4362
90.000	-.4503
180.000	-.4450
270.000	-.5211

ALPHA (2) = -.489 BETA (2) = -.055 MACH = 1.1010 RN/L = 4.3147 PO = 2104.3 P = 984.44

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4641
90.000	-.4933
180.000	-.4836
270.000	-.5234

ARC11-023IA80 OTS(SRB=N ORB=N-) SRB SKIRT (RE4117)

ALPHA (2) = -.486 BETA (3) = 3.947 MACH = 1.1010 RN/L = 4.3147 PO = 2104.3 P = 984.44

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5181
90.000	-.5512
180.000	-.5256
270.000	-.5474

ALPHA (3) = 3.983 BETA (1) = -.063 MACH = 1.1056 RN/L = 4.3164 PO = 2104.1 P = 978.63

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4799
90.000	-.5059
180.000	-.5022
270.000	-.5386

ARC11-023IA80 OTS(SRB=N ORB=N-) SRB SKIRT (RE4118) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.953 BETA (1) = .000 MACH = 1.2490 RN/L = 4.3771 PO = 2108.4 P = 815.07

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2869
90.000	-.3074
180.000	-.2920
270.000	-.3285

ALPHA (2) = -.429 BETA (1) = -4.006 MACH = 1.2479 RN/L = 4.3753 PO = 2108.4 P = 816.19

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2829
90.000	-.3054
180.000	-.2853
270.000	-.3098

ALPHA (2) = -.423 BETA (2) = .003 MACH = 1.2479 RN/L = 4.3753 PO = 2108.4 P = 816.19

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2935
90.000	-.3149
180.000	-.3087
270.000	-.3387

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TABULATED SOURCE DATA - IA80

ARC11-023IA80 OTS(SRB=N ORB=N-) SRB SKIRT (RE4!18)

ALPHA (2) = -.416 BETA (3) = 4.009 MACH = 1.2479 RN/L = 4.3753 PO = 2108.4 P = 816.19

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3626
90.000	-.3852
180.000	-.3746
270.000	-.3847

ALPHA (3) = 3.993 BETA (1) = .003 MACH = 1.2456 RN/L = 4.3674 PO = 2108.4 P = 818.72

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3128
90.000	-.3453
180.000	-.3377
270.000	-.3654

ARC11-023IA80 OTS(SRB=N ORB=N-) SRB SKIRT (RE4119) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.848 BETA (1) = -.006 MACH = 1.4069 RN/L = 4.2698 PO = 2120.4 P = 659.90

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1729
90.000	-.1823
180.000	-.1653
270.000	-.2218

ALPHA (2) = -.357 BETA (1) = -4.009 MACH = 1.4043 RN/L = 4.2657 PO = 2120.4 P = 662.32

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1469
90.000	-.1664
180.000	-.1603
270.000	-.1860

ALPHA (2) = -.363 BETA (2) = .000 MACH = 1.4043 RN/L = 4.2657 PO = 2120.4 P = 662.32

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1791
90.000	-.2047
180.000	-.1981
270.000	-.2171

ARC11-023IA80 OTS(SRB=N ORB=N-) SRB SKIRT (RE4119)

ALPHA (2) = -.462 BETA (3) = 4.012 MACH = 1.4043 RN/L = 4.2657 PO = 2120.4 P = 662.32

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2366
90.000	-.2581
180.000	-.2524
270.000	-.2598

ALPHA (3) = 3.986 BETA (1) = -.003 MACH = 1.4018 RN/L = 4.2745 PO = 2122.5 P = 665.25

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1847
90.000	-.2186
180.000	-.2158
270.000	-.2291

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4I20) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.868 BETA (1) = -.016 MACH = .59200 RN/L = 3.3619 PO = 2105.5 P = 1661.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4426
90.000	-.4524
180.000	-.4395
270.000	-.7027

ALPHA (2) = -.327 BETA (1) = -4.038 MACH = .59820 RN/L = 3.3862 PO = 2105.3 P = 1652.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4211
90.000	-.3868
180.000	-.3913
270.000	-.6182

ALPHA (2) = -.291 BETA (2) = -.022 MACH = .59820 RN/L = 3.3862 PO = 2105.3 P = 1652.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4376
90.000	-.4359
180.000	-.4355
270.000	-.6759

ARC11-0231A80 OTS(SRB=N ORB=N) SRB SKIRT (RE4120)

ALPHA (2) = -.386 BETA (3) = 3.994 MACH = .59820 RN/L = 3.3862 PO = 2105.3 P = 1652.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4142
90.000	-.4344
180.000	-.4306
270.000	-.6428

ALPHA (3) = 4.016 BETA (1) = -.022 MACH = .60330 RN/L = 3.4092 PO = 2105.5 P = 1646.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4045
90.000	-.4093
180.000	-.4089
270.000	-.6271

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4121) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.977 BETA (1) = -.016 MACH = .90170 RN/L = 4.2042 PO = 2099.2 P = 1238.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4050
90.000	-.4211
180.000	-.4108
270.000	-.5050

ALPHA (2) = -.327 BETA (1) = -4.028 MACH = .90323 RN/L = 4.2094 PO = 2099.4 P = 1237.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3837
90.000	-.3765
180.000	-.3730
270.000	-.4643

ALPHA (2) = -.317 BETA (2) = -.012 MACH = .90323 RN/L = 4.2094 PO = 2099.4 P = 1237.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4140
90.000	-.4174
180.000	-.4140
270.000	-.5766

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4121)

ALPHA (2) = -.350 BETA (3) = 4.000 MACH = .90323 RN/L = 4.2094 PO = 2099.4 P = 1237.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4670
90.000	-.4630
180.000	-.4537
270.000	-.6337

ALPHA (3) = 3.977 BETA (1) = -.012 MACH = .90240 RN/L = 4.2041 PO = 2098.5 P = 1237.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4083
90.000	-.4176
180.000	-.4228
270.000	-.6270

ARC11-0231A80 OTS(SRB=N ORB=N) SRB SKIRT (RE4122) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.937 BETA (1) = -.063 MACH = 1.0978 RN/L = 4.3175 PO = 2104.8 P = 988.46

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4589
90.000	-.4800
180.000	-.4672
270.000	-.5223

ALPHA (2) = -.525 BETA (1) = -4.069 MACH = 1.1008 RN/L = 4.3153 PO = 2104.6 P = 984.73

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4364
90.000	-.4511
180.000	-.4487
270.000	-.5190

ALPHA (2) = -.439 BETA (2) = -.056 MACH = 1.1008 RN/L = 4.3153 PO = 2104.6 P = 984.73

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4644
90.000	-.4887
180.000	-.4819
270.000	-.5207

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4122)

ALPHA (2) = -.482 BETA (3) = 3.950 MACH = 1.1008 RN/L = 4.3153 PO = 2104.6 P = 984.73

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5055
90.000	-.5442
180.000	-.5202
270.000	-.5476

ALPHA (3) = 3.963 BETA (1) = -.063 MACH = 1.1046 RN/L = 4.3189 PO = 2104.1 P = 979.83

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4761
90.000	-.5021
180.000	-.4945
270.000	-.5375

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4123) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.917 BETA (1) = .003 MACH = 1.2460 RN/L = 4.3726 PO = 2108.4 P = 818.30

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2851
90.000	-.3057
180.000	-.2917
270.000	-.3349

ALPHA (2) = -.446 BETA (1) = -4.006 MACH = 1.2483 RN/L = 4.3668 PO = 2108.9 P = 816.03

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2815
90.000	-.3020
180.000	-.2823
270.000	-.3082

ALPHA (2) = -.456 BETA (2) = .003 MACH = 1.2483 RN/L = 4.3668 PO = 2108.9 P = 816.03

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2872
90.000	-.3092
180.000	-.3039
270.000	-.3367

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4123)

ALPHA (2) = -.439 BETA (3) = 4.012 MACH = 1.2483 RN/L = 4.3668 PO = 2108.9 P = 816.03

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3579
90.000	-.3824
180.000	-.3718
270.000	-.3825

ALPHA (3) = 3.986 BETA (1) = .000 MACH = 1.2455 RN/L = 4.3668 PO = 2109.1 P = 819.16

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3092
90.000	-.3412
180.000	-.3306
270.000	-.3632

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4124) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.984 BETA (1) = -.003 MACH = 1.4001 RN/L = 4.2484 PO = 2114.0 P = 664.19

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1704
90.000	-.1787
180.000	-.1616
270.000	-.2220

ALPHA (2) = -.370 BETA (1) = -4.009 MACH = 1.3999 RN/L = 4.2511 PO = 2113.8 P = 664.35

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1341
90.000	-.1486
180.000	-.1444
270.000	-.1751

ALPHA (2) = -.370 BETA (2) = .000 MACH = 1.3999 RN/L = 4.2511 PO = 2113.8 P = 664.35

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1741
90.000	-.1985
180.000	-.1925
270.000	-.2155

ARC11-0231A80 OTS(SRB=N ORB=N) SRB SKIRT (RE4124)

ALPHA (2) = -.429 BETA (3) = 4.012 MACH = 1.3999 RN/L = 4.2511 PO = 2113.8 P = 664.35

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2285
90.000	-.2536
180.000	-.2456
270.000	-.2555

ALPHA (3) = 3.894 BETA (1) = .000 MACH = 1.3947 RN/L = 4.2558 PO = 2114.0 P = 669.27

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1793
90.000	-.2108
180.000	-.2094
270.000	-.2264

ARC11-0231A80 OTS(SRB=N- ORB=N) SRB SKIRT (RE4125) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -4.020 BETA (1) = -.063 MACH = 1.0964 RN/L = 4.3166 PO = 2104.1 P = 989.88

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5543
90.000	-.5777
180.000	-.5664
270.000	-.6045

ALPHA (2) = -.482 BETA (1) = -4.069 MACH = 1.1000 RN/L = 4.3184 PO = 2103.9 P = 985.34

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5285
90.000	-.5471
180.000	-.5394
270.000	-.5967

ALPHA (2) = -.489 BETA (2) = -.059 MACH = 1.1000 RN/L = 4.3184 PO = 2103.9 P = 985.34

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5595
90.000	-.5910
180.000	-.5772
270.000	-.6071

DATE 23 JUL 76

TABULATED SOURCE DATA - IA80

ARC11-023IA80 OTS(SRB=N- ORB=N) SRB SKIRT (RE4I25)

ALPHA (2) = -.453 BETA (3) = 3.950 MACH = 1.1000 RN/L = 4.3184 PO = 2103.9 P = 985.34

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5991
90.000	-.6327
180.000	-.6148
270.000	-.6281

ALPHA (3) = 4.029 BETA (1) = -.059 MACH = 1.1031 RN/L = 4.3201 PO = 2102.0 P = 980.74

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5739
90.000	-.6102
180.000	-.5997
270.000	-.6247

ARC11-023IA80 OTS(SRB=N- ORB=N) SRB SKIRT (RE4126) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.983 BETA (1) = .000 MACH = 1.2472 RN/L = 4.3616 PO = 2107.7 P = 816.70

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3697
90.000	-.3992
180.000	-.3727
270.000	-.4039

ALPHA (2) = -.443 BETA (1) = -4.006 MACH = 1.2481 RN/L = 4.3581 PO = 2107.7 P = 815.72

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3617
90.000	-.3919
180.000	-.3722
270.000	-.3900

ALPHA (2) = -.426 BETA (2) = .003 MACH = 1.2481 RN/L = 4.3581 PO = 2107.7 P = 815.72

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3798
90.000	-.4011
180.000	-.3993
270.000	-.4123

ARC11-023IA80 OTS(SRB=N- ORB=N) SRB SKIRT (RE4126)

ALPHA (2) = -.456 BETA (3) = 4.016 MACH = 1.2481 RN/L = 4.3581 PO = 2107.7 P = 815.72

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4461
90.000	-.4645
180.000	-.4541
270.000	-.4571

ALPHA (3) = 4.020 BETA ( ) = -.003 MACH = 1.2443 RN/L = 4.3536 PO = 2107.0 P = 819.62

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3966
90.000	-.4304
180.000	-.4220
270.000	-.4385

ARC11-023IA80 OTS(SRB=N- ORB=N SRB SKIRT (RE4127) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.805 BETA (1) = .000 MACH = 1.4005 RN/L = 4.2336 PO = 2109.8 P = 662.52

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2571
90.000	-.2676
180.000	-.2474
270.000	-.2978

ALPHA (2) = -.353 BETA (1) = -4.006 MACH = 1.3984 RN/L = 4.2397 PO = 2110.7 P = 664.83

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2175
90.000	-.2360
180.000	-.2300
270.000	-.2641

ALPHA (2) = -.367 BETA (2) = .000 MACH = 1.3984 RN/L = 4.2397 PO = 2110.7 P = 664.83

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2555
90.000	-.2858
180.000	-.2811
270.000	-.2903

ARC1!-023IA80 OTS(SRB=N- ORB=N) SRB SKIRT (RE4I27)

ALPHA (2) = -.400 BETA (3) = 4.012 MACH = 1.3984 RN/L = 4.2397 PO = 2110.7 P = 664.83

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3166
90.000	-.3310
180.000	-.3232
270.000	-.3308

ALPHA (3) = 3.983 BETA (1) = .000 MACH = 1.3983 RN/L = 4.2365 PO = 2109.8 P = 664.56

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2636
90.000	-.2939
180.000	-.2877
270.000	-.2946

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4128) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OS = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -4.000 BETA (1) = -.016 MACH = .59820 RN/L = 3.3864 PO = 2123.2 P = 1666.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3652
90.000	-.3291
180.000	-.3451
270.000	-.4459

ALPHA (2) = -.264 BETA (1) = -4.034 MACH = .59700 RN/L = 3.3816 PO = 2123.7 P = 1668.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3356
90.000	-.2973
180.000	-.3130
270.000	-.4213

ALPHA (2) = -.261 BETA (2) = -.019 MACH = .59700 RN/L = 3.3816 PO = 2123.7 P = 1668.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3490
90.000	-.3108
180.000	-.3285
270.000	-.3926

ARC11-0231A80 OTS(SRB=OFF ORB=OFF SRB SKIRT (RE4128)

ALPHA (2) = -.274 BETA (3) = 3.991 MACH = .59700 RN/L = 3.3816 PO = 2123.7 P = 1668.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3580
90.000	-.3201
180.000	-.3450
270.000	-.3851

ALPHA (3) = 4.013 BETA (1) = -.019 MACH = .59700 RN/L = 3.3862 PO = 2124.6 P = 1669.6

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3316
90.000	-.3074
180.000	-.3207
270.000	-.3893

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIR (RE4129) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMPP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.980 BETA (1) = -.006 MACH = .90100 RN/L = 4.2493 PO = 2121.1 P = 1252.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3202
90.000	-.2980
180.000	-.3064
270.000	-.4121

ALPHA (2) = -.320 BETA (1) = -4.022 MACH = .90373 RN/L = 4.2509 PO = 2123.0 P = 1250.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2961
90.000	-.2814
180.000	-.2813
270.000	-.3822

ALPHA (2) = -.310 BETA (2) = -.009 MACH = .90373 RN/L = 4.2509 PO = 2123.0 P = 1250.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2947
90.000	-.2693
180.000	-.2866
270.000	-.3771

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4129)

ALPHA (2) = -.297 BETA (3) = 4.006 MACH = .90373 RN/L = 4.2509 PO = 2123.0 P = 1250.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3367
90.000	-.3165
180.000	-.3444
270.000	-.3827

ALPHA (3) = 3.985 BETA (1) = -.009 MACH = .89810 RN/L = 4.2418 PO = 2119.7 P = 1255.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3099
90.000	-.3023
180.000	-.3132
270.000	-.3865

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4I30) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -4.016 BETA (1) = -.003 MACH = 1.0992 RN/L = 4.3334 PO = 2116.2 P = 992.05

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5745
90.000	-.5882
180.000	-.5850
270.000	-.5916

ALPHA (2) = -.370 BETA (1) = -4.006 MACH = 1.1030 RN/L = 4.2966 PO = 2115.2 P = 987.00

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5358
90.000	-.5426
180.000	-.5284
270.000	-.5568

ALPHA (2) = -.343 BETA (2) = .003 MACH = 1.1030 RN/L = 4.2966 PO = 2115.2 P = 987.00

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5601
90.000	-.5721
180.000	-.5539
270.000	-.5733

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4I30)

ALPHA (2) = -.370 BETA (3) = 4.009 MACH = 1.1030 RN/L = 4.2966 PO = 2115.2 P = 987.00

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5548
90.000	-.5747
180.000	-.5521
270.000	-.5655

ALPHA (3) = 3.894 BETA (1) = -.003 MACH = 1.1097 RN/L = 4.2923 PO = 2114.0 P = 978.29

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5542
90.000	-.5734
180.000	-.5613
270.000	-.5748

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4I31) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.970 BETA (1) = -.003 MACH = 1.2502 RN/L = 4.3628 PO = 2115.4 P = 816.45

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5154
90.000	-.5313
180.000	-.5071
270.000	-.5220

ALPHA (2) = -.330 BETA (1) = -4.006 MACH = 1.2515 RN/L = 4.3608 PO = 2116.1 P = 815.32

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4946
90.000	-.5139
180.000	-.5120
270.000	-.5031

ALPHA (2) = -.317 BETA (2) = .003 MACH = 1.2515 RN/L = 4.3608 PO = 2116.1 P = 815.32

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5261
90.000	-.5383
180.000	-.5318
270.000	-.5291

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4131)

ALPHA (2) = -.370 BETA (3) = 4.012 MACH = 1.2515 RN/L = 4.3608 PO = 2116.1 P = 815.32

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5326
90.000	-.5441
180.000	-.5175
270.000	-.5232

ALPHA (3) = 3.950 BETA (1) = -.003 MACH = 1.2493 RN/L = 4.3586 PO = 2116.9 P = 818.02

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5447
90.000	-.5539
180.000	-.5592
270.000	-.5506

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4I32) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -4.043 BETA (1) = .000 MACH = 1.4047 RN/L = 4.2434 PO = 2120.4 P = 661.94

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4299
90.000	-.4394
180.000	-.4291
270.000	-.4409

ALPHA (2) = -.195 BETA (1) = -4.012 MACH = 1.4028 RN/L = 4.2458 PO = 2120.4 P = 663.72

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4012
90.000	-.4238
180.000	-.4200
270.000	-.4336

ALPHA (2) = -.211 BETA (2) = .000 MACH = 1.4026 RN/L = 4.2458 PO = 2120.4 P = 663.72

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4475
90.000	-.4527
180.000	-.4542
270.000	-.4444

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4132)

ALPHA (2) = .083 BETA (3) = 4.006 MACH = 1.4028 RN/L = 4.2458 PO = 2120.4 P = 663.72

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4690
90.000	-.4760
180.000	-.4673
270.000	-.4645

ALPHA (3) = 4.082 BETA (1) = .000 MACH = 1.3983 RN/L = 4.2463 PO = 2120.4 P = 667.87

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4577
90.000	-.4781
180.000	-.4780
270.000	-.4770

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4133) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 1.750 MACH = .600

ALPHA (1) = -3.953 BETA (1) = -.003 MACH = .59560 RN/L = 1.7428 PO = 1060.9 P = 834.63

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3557
90.000	-.3172
180.000	-.3433
270.000	-.4188

ALPHA (2) = -.271 BETA (1) = -4.044 MACH = .59443 RN/L = 1.7407 PO = 1060.2 P = 834.82

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3473
90.000	-.3252
180.000	-.3279
270.000	-.4298

ALPHA (2) = -.284 BETA (2) = -.031 MACH = .59443 RN/L = 1.7407 PO = 1060.2 P = 834.82

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3287
90.000	-.2873
180.000	-.3151
270.000	-.3553

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4133)

ALPHA (2) = -.343 BETA (3) = 3.984 MACH = .59443 RN/L = 1.7407 PO = 1060.2 P = 834.82

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3773
90.000	-.3372
180.000	-.3669
270.000	-.4001

ALPHA (3) = 3.963 BETA (1) = -.003 MACH = .59300 RN/L = 1.7403 PO = 1060.2 P = 835.76

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3479
90.000	-.3223
180.000	-.3403
270.000	-.3853

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4134) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 2.250 MACH = .900

ALPHA (1) = -3.947 BETA (1) = .000 MACH = .90000 RN/L = 2.1578 PO = 1061.6 P = 627.70

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3241
90.000	-.2916
180.000	-.3124
270.000	-.4178

ALPHA (2) = -.264 BETA (1) = -4.044 MACH = .90150 RN/L = 2.1576 PO = 1060.4 P = 625.98

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2989
90.000	-.2793
180.000	-.2821
270.000	-.3883

ALPHA (2) = -.271 BETA (2) = -.031 MACH = .90150 RN/L = 2.1576 PO = 1060.4 P = 625.98

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3157
90.000	-.2869
180.000	-.3050
270.000	-.4005

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4134)

ALPHA (2) = -.304 BETA (3) = 3.984 MACH = .90150 RN/L = 2.1576 PO = 1060.4 P = 625.98

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3502
90.000	-.3216
180.000	-.3562
270.000	-.3719

ALPHA (3) = 3.990 BETA (1) = -.003 MACH = .90350 RN/L = 2.1629 PO = 1061.6 P = 625.33

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3133
90.000	-.3045
180.000	-.3157
270.000	-.3914

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4135) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 2.250 MACH = 1.100

ALPHA (1) = -3.957 BETA (1) = .000 MACH = 1.0935 RN/L = 2.2424 PO = 1058.8 P = 499.91

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5912
90.000	-.6062
180.000	-.6045
270.000	-.6124

ALPHA (2) = -.225 BETA (1) = -4.009 MACH = 1.0961 RN/L = 2.2501 PO = 1061.4 P = 499.48

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5560
90.000	-.5628
180.000	-.5513
270.000	-.5761

ALPHA (2) = -.225 BETA (2) = .000 MACH = 1.0961 RN/L = 2.2501 PO = 1061.4 P = 499.48

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5852
90.000	-.5967
180.000	-.5781
270.000	-.5967

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4135)

ALPHA (2) = -.231 BETA (3) = 4.012 MACH = 1.0961 RN/L = 2.2501 PO = 1061.4 P = 499.48

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5770
90.000	-.5980
180.000	-.5749
270.000	-.5916

ALPHA (3) = 4.016 BETA (1) = -.003 MACH = 1.1017 RN/L = 2.2510 PO = 1060.9 P = 495.81

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5746
90.000	-.5959
180.000	-.5827
270.000	-.5949

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4136) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 2.250 MACH = 1.250

ALPHA (1) = -3.993 BETA (1) = .003 MACH = 1.2488 RN/L = 2.2675 PO = 1060.9 P = 410.21

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5166
90.000	-.5361
180.000	-.5077
270.000	-.5208

ALPHA (2) = -.145 BETA (1) = -4.003 MACH = 1.2488 RN/L = 2.2680 PO = 1060.9 P = 410.21

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4997
90.000	-.5226
180.000	-.5178
270.000	-.5096

ALPHA (2) = -.129 BETA (2) = .003 MACH = 1.2488 RN/L = 2.2690 PO = 1060.9 P = 410.21

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5261
90.000	-.5424
180.000	-.5347
270.000	-.5328

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4136)

ALPHA (2) = -.175 BETA (3) = 4.009 MACH = 1.2488 RN/L = 2.2600 PO = 1060.9 P = 410.21

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5342
90.000	-.5505
180.000	-.5247
270.000	-.5320

ALPHA (3) = 4.072 BETA (1) = .003 MACH = 1.2496 RN/L = 2.2672 PO = 1060.9 P = 409.77

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5408
90.000	-.5621
180.000	-.5618
270.000	-.5516

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4137) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 2.250 MACH = 1.400

ALPHA (1) = -4.013 BETA (1) = .003 MACH = 1.3998 RN/L = 2.2349 PO = 1061.6 P = 333.70

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4391
90.000	-.4538
180.000	-.4438
270.000	-.4510

ALPHA (2) = -.241 BETA (1) = -4.006 MACH = 1.3997 RN/L = 2.2285 PO = 1060.0 P = 333.23

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4080
90.000	-.4336
180.000	-.4283
270.000	-.4411

ALPHA (2) = -.264 BETA (2) = .000 MACH = 1.3997 RN/L = 2.2285 PO = 1060.0 P = 333.23

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4492
90.000	-.4611
180.000	-.4652
270.000	-.4545

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4137)

ALPHA (2) = -.267 BETA (3) = 4.009 MACH = 1.3997 RN/L = 2.2285 PO = 1060.0 P = 333.23

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4661
90.000	-.4817
180.000	-.4689
270.000	-.4702

ALPHA (3) = 4.010 BETA (1) = .003 MACH = 1.3956 RN/L = 2.2367 PO = 1060.2 P = 335.22

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4663
90.000	-.4863
180.000	-.4863
270.000	-.4800

ARC11-023;A80 OTS(SRB=N ORB=N) SRB SKIRT (RE4138) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 1.750 MACH = .600

ALPHA (1) = -3.980 BETA (1) = -.003 MACH = .59910 RN/L = 1.7583 PO = 1060.9 P = 832.35

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4529
90.000	-.4590
180.000	-.4461
270.000	-.7024

ALPHA (2) = -.314 BETA (1) = -4.044 MACH = .59907 RN/L = 1.7686 PO = 1065.1 P = 836.42

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4300
90.000	-.4029
180.000	-.3975
270.000	-.6432

ALPHA (2) = -.317 BETA (2) = -.009 MACH = .59907 RN/L = 1.7686 PO = 1066.1 P = 836.42

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4355
90.000	-.4295
180.000	-.4281
270.000	-.6797

ARC11-0231A80 OTS(SRB=N ORB=N) SRB SKIRT (RE4138)

ALPHA (2) = -.327 BETA (3) = 3.991 MACH = .59907 RN/L = 1.7686 PO = 1066.1 P = 835.42

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4586
90.000	-.4627
180.000	-.4586
270.000	-.6837

ALPHA (3) = 3.950 BETA (1) = -.003 MACH = .60350 RN/L = 1.7801 PO = 1066.6 P = 833.90

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4101
90.000	-.4194
180.000	-.4188
270.000	-.6421

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4139) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 2.250 MACH = .900

ALPHA (1) = -3.986 BETA (1) = .003 MACH = .89730 RN/L = 2.1589 PO = 1063.0 P = 630.39

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4236
90.000	-.4424
180.000	-.4331
270.000	-.5757

ALPHA (2) = -.294 BETA (1) = -4.044 MACH = .90407 RN/L = 2.1638 PO = 1061.8 P = 625.06

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4035
90.000	-.3967
180.000	-.4047
270.000	-.5003

ALPHA (2) = -.310 BETA (2) = -.028 MACH = .90407 RN/L = 2.1638 PO = 1061.8 P = 625.06

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4325
90.000	-.4388
180.000	-.4396
270.000	-.6218

ARC11-0231A80 OTS(SRB=N ORB=N) SRB SKIRT (RE4139)

ALPHA (2) = -.320 BETA (3) = 3.981 MACH = .90407 RN/L = 2.1638 PO = 1061.8 P = 625.06

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4961
90.000	-.4869
180.000	-.4758
270.000	-.6667

ALPHA (3) = 3.970 BETA (1) = .000 MACH = .90120 RN/L = 2.1596 PO = 1060.2 P = 626.02

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4197
90.000	-.4333
180.000	-.4313
270.000	-.6390

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4140) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 2.250 MACH = 1.100

ALPHA (1) = -3.801 BETA (1) = -.006 MACH = 1.0940 RN/L = 2.2469 PO = 1059.5 P = 499.92

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5116
90.000	-.5334
180.000	-.5218
270.000	-.5647

ALPHA (2) = -.304 [illegible] MACH = 1.0971 RN/L = 2.2528 PO = 1061.4 P = 498.93

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4865
90.000	-.5058
180.000	-.4993
270.000	-.5526

ALPHA (2) = -.267 BETA (2) = .003 MACH = 1.0971 RN/L = 2.2528 PO = 1061.4 P = 498.93

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5145
90.000	-.5504
180.000	-.5369
270.000	-.5681

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4140)

ALPHA (2) = -.390 BETA (3) = 4.016 MACH = 1.0971 RN/L = 2.2523 PO = 1061.4 P = 498.93

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5598
90.000	-.5958
180.000	-.5751
270.000	-.5920

ALPHA (3) = 3.983 BETA (1) = .003 MACH = 1.1029 RN/L = 2.2596 PO = 1063.7 P = 496.39

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5177
90.000	-.5528
180.000	-.5420
270.000	-.5730

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4141) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 2.500 MACH = .600

ALPHA (1) = -4.000 BETA (1) = -.022 MACH = .60170 RN/L = 2.5509 PO = 1557.4 P = 1219.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3598
90.000	-.3230
180.000	-.3423
270.000	-.4348

ALPHA (2) = -.261 BETA (1) = -4.041 MACH = .60297 RN/L = 2.5529 PO = 1556.0 P = 1217.1

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3281
90.000	-.2942
180.000	-.3030
270.000	-.4071

ALPHA (2) = -.271 BETA (2) = -.025 MACH = .60297 RN/L = 2.5529 PO = 1556.0 P = 1217.1

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3347
90.000	-.2913
180.000	-.3187
270.000	-.3793

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4141)

ALPHA (2) = -.343 BETA (3) = 3.991 MACH = .60297 RN/L = 2.5529 PO = 1556.0 P = 1217.1

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3588
90.000	-.3113
180.000	-.3428
270.000	-.3808

ALPHA (3) = 3.944 BETA (1) = -.022 MACH = .60230 RN/L = 2.5548 PO = 1556.7 P = 1218.3

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3312
90.000	-.3038
180.000	-.3192
270.000	-.3799

ARC11-023IA80 OTS(SRB: ORB=OFF) SRB SKIRT (RE4142) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.250 MACH = .900

ALPHA (1) = -3.930 BETA (1) = .003 MACH = .90330 RN/L = 3.1425 PO = 1558.1 P = 918.01

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3305
90.000	-.2998
180.000	-.3207
270.000	-.4249

ALPHA (2) = -.284 BETA (1) = -4.041 MACH = .90200 RN/L = 3.1294 PO = 1556.9 P = 918.58

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2953
90.000	-.2724
180.000	-.2765
270.000	-.3793

ALPHA (2) = -.281 BETA (2) = -.028 MACH = .90200 RN/L = 3.1294 PO = 1555.9 P = 918.58

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3097
90.000	-.2858
180.000	-.3065
270.000	-.3983

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4142)

ALPHA (2) = -.249 BETA (3) = 3.994 MACH = .90200 RN/L = 3.1294 PO = 1556.9 P = 918.58

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3295
90.000	-.3080
180.000	-.3407
270.000	-.3810

ALPHA (3) = 3.960 BETA (1) = .000 MACH = .89670 RN/L = 3.1185 PO = 1557.4 P = 924.11

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3107
90.000	-.3057
180.000	-.3167
270.000	-.3899

ARC11-023(A80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4143) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.250 MACH = 1.100

ALPHA (1) = -4.016 BETA (1) = .003 MACH = 1.0981 RN/L = 3.2788 PO = 1555.3 P = 730.16

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5766
90.000	-.5919
180.000	-.5882
270.000	-.5972

ALPHA (2) = -.287 BETA (1) = -4.006 MACH = 1.0996 RN/L = 3.2682 PO = 1553.2 P = 727.81

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5473
90.000	-.5538
180.000	-.5417
270.000	-.5677

ALPHA (2) = -.291 BETA (2) = .000 MACH = 1.0996 RN/L = 3.2682 PO = 1553.2 P = 727.81

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5701
90.000	-.5831
180.000	-.5658
270.000	-.5835

DATE 23 JUL 76

TABULATED SOURCE DATA - IA80

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4143)

ALPHA (2) = -.310 BETA (3) = 4.006 MACH = 1.0996 RN/L = 3.2682 PO = 1553.2 P = 727.81

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5651
90.000	-.5862
180.000	-.5630
270.000	-.5783

ALPHA (3) = 4.016 BETA (1) = .003 MACH = 1.1070 RN/L = 3.2713 PO = 1554.6 P = 721.83

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5625
90.000	-.5817
180.000	-.5688
270.000	-.5817

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4144) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.250 MACH = 1.250

ALPHA (1) = -3.953 BETA (1) = .000 MACH = 1.2532 RN/L = 3.2918 PO = 1554.6 P = 597.59

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5137
90.000	-.5332
180.000	-.5072
270.000	-.5209

ALPHA (2) = -.287 BETA (1) = -4.003 MACH = 1.2509 RN/L = 3.2855 PO = 1552.7 P = 598.69

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5092
90.000	-.5313
180.000	-.5273
270.000	-.5180

ALPHA (2) = -.277 BETA (2) = .003 MACH = 1.2509 RN/L = 3.2855 PO = 1552.7 P = 598.69

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5257
90.000	-.5391
180.000	-.5322
270.000	-.5289

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4144)

ALPHA (2) = -.376 BETA (3) = 4.012 MACH = 1.2509 RN/L = 3.2853 PO = 1552.7 P = 598.69

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5314
90.000	-.5426
180.000	-.5166
270.000	-.5229

ALPHA (3) = 3.947 BETA (1) = -.003 MACH = 1.2488 RN/L = 3.2905 PO = 1553.9 P = 600.81

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5444
90.000	-.5627
180.000	-.5614
270.000	-.5494

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4145) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.250 MACH = 1.400

ALPHA (1) = -3.990 BETA (1) = -.003 MACH = 1.4024 RN/L = 3.2259 PO = 1554.6 P = 485.87

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4369
90.000	-.4476
180.000	-.4374
270.000	-.4459

ALPHA (2) = -.284 BETA (1) = -4.000 MACH = 1.4054 RN/L = 3.2190 PO = 1553.7 P = 484.53

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4012
90.000	-.4242
180.000	-.4213
270.000	-.4328

ALPHA (2) = -.297 BETA (2) = .000 MACH = 1.4054 RN/L = 3.2190 PO = 1553.7 P = 484.53

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4455
90.000	-.4525
180.000	-.4563
270.000	-.4457

DATE 23 JUL 76

TABULATED SOURCE DATA - IA80

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4145)

ALPHA (2) = -.294 BETA (3) = 4.009 MACH = 1.4054 RN/L = 3.2190 PO = 1553.7 P = 484.53

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4615
90.000	-.4732
180.000	-.4624
270.000	-.4634

ALPHA (3) = 3.980 BETA (1) = .000 MACH = 1.4028 RN/L = 3.2136 PO = 1553.2 P = 486.18

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4661
90.000	-.4804
180.000	-.4800
270.000	-.4747

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4I46) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 2.500 MACH = .600

ALPHA (1) = -3.894 BETA (1) = -.022 MACH = .60060 RN/L = 2.5569 PO = 1558.8 P = 1221.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4409
90.000	-.4384
180.000	-.4315
270.000	-.6978

ALPHA (2) = -.350 BETA (1) = -4.041 MACH = .59890 RN/L = 2.5548 PO = 1557.9 P = 1222.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4231
90.000	-.3969
180.000	-.3941
270.000	-.6460

ALPHA (2) = -.320 BETA (2) = -.025 MACH = .59890 RN/L = 2.5548 PO = 1557.9 P = 1222.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4355
90.000	-.4318
180.000	-.4355
270.000	-.6751

ARC11-023(A80 OTS(SRB=N ORB=N) SRB SKIRT (RE4(46)

ALPHA (2) = -.337 BETA (3) = 3.994 MACH = .59890 RN/L = 2.5548 PO = 1557.9 P = 1222.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4637
90.000	-.4821
180.000	-.4765
270.000	-.7107

ALPHA (3) = 4.076 BETA (1) = -.028 MACH = .60170 RN/L = 2.5615 PO = 1555.3 P = 1217.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3940
90.000	-.4000
180.000	-.4046
270.000	-.6189

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4147) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.250 MACH = .900

ALPHA (1) = -4.033 BETA (1) = .000 MACH = .90410 RN/L = 3.1247 PO = 1556.7 P = 916.32

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4199
90.000	-.4335
180.000	-.4275
270.000	-.5533

ALPHA (2) = -.343 BETA (1) = -4.044 MACH = .90470 RN/L = 3.1302 PO = 1559.3 P = 917.26

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3967
90.000	-.3913
180.000	-.3951
270.000	-.4763

ALPHA (2) = -.340 BETA (2) = -.028 MACH = .90470 RN/L = 3.1302 PO = 1559.3 P = 917.26

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4201
90.000	-.4319
180.000	-.4346
270.000	-.6108

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4147)

ALPHA (2) = -.340 BETA (3) = 3.991 MACH = .90470 RN/L = 3.1302 PO = 1559.3 P = 917.26

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4663
90.000	-.4671
180.000	-.4583
270.000	-.6439

ALPHA (3) = 3.927 BETA (1) = -.028 MACH = .90080 RN/L = 3.1258 PO = 1559.5 P = 921.25

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4255
90.000	-.4359
180.000	-.4380
270.000	-.6557

DATE 23 JUL 76

TABULATED SOURCE DATA - IA80

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIR

(RE4I48) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.250 MACH = 1.100

ALPHA (1) = -3.934 BETA (1) = .003 MACH = 1.0985 RN/L = 3.2696 PO = 1558.8 P = 731.42

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4814
90.000	-.5042
180.000	-.4920
270.000	-.5385

ALPHA (2) = -.413 BETA (1) = -4.006 MACH = 1.1014 RN/L = 3.2674 PO = 1557.4 P = 728.17

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4501
90.000	-.4639
180.000	-.4605
270.000	-.5202

ALPHA (2) = -.443 BETA (2) = .000 MACH = 1.1014 RN/L = 3.2674 PO = 1557.4 P = 728.17

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4835
90.000	-.5135
180.000	-.5026
270.000	-.5394

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4148)

ALPHA (2) = -.420 BETA (3) = 4.016 MACH = 1.1014 RN/L = 3.2674 PO = 1557.4 P = 728.17

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5286
90.000	-.5647
180.000	-.5426
270.000	-.5656

ALPHA (3) = 3.884 BETA (1) = .000 MACH = 1.1080 RN/L = 3.2705 PO = 1558.1 P = 722.58

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4804
90.000	-.5093
180.000	-.4987
270.000	-.5423

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4149) (21 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 ALPHA = .000

BETA (1) = -.063 MACH (1) = .908 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3128
90.000	-.2826
180.000	-.3062
270.000	-.3983

BETA (1) = -.063 MACH (2) = .947 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3387
90.000	-.3146
180.000	-.3450
270.000	-.3988

BETA (1) = -.063 MACH (3) = .998 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4904
90.000	-.4792
180.000	-.4781
270.000	-.5152

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4149)

BETA (1) = -.063 MACH (4) = 1.050 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5835
90.000	-.5890
180.000	-.5825
270.000	-.6009

BETA (1) = -.063 MACH (5) = 1.102 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5803
90.000	-.5900
180.000	-.5822
270.000	-.5914

BETA (1) = -.063 MACH (6) = 1.146 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5074
90.000	-.5250
180.000	-.5128
270.000	-.5259

BETA (1) = -.063 MACH (7) = 1.196 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5444
90.000	-.5561
180.000	-.5412
270.000	-.5531

ARC11-023IA90 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4149)

BETA (1) = -.063 MACH (8) = 1.253 ALPHA = .87925-01 RN/L = 4.3824 PO = 2112.8 P = 1025.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5280
90.000	-.5387
180.000	-.5277
270.000	-.5280

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4150) (21 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 ALPHA = .000

BETA (1) = -.063 MACH (1) = .893 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4006
90.000	-.4145
180.000	-.4126
270.000	-.5888

BETA (1) = -.063 MACH (2) = .948 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5276
90.000	-.5417
180.000	-.5368
270.000	-.7365

BETA (1) = -.063 MACH (3) = .995 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.6709
90.000	-.6809
180.000	-.6730
270.000	-.7382

DATE 23 JUL 76

TABULATED SOURCE DATA - IA80

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4150)

BETA (1) = -.063 MACH (4) = 1.052 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5680
90.000	-.5960
180.000	-.5863
270.000	- 6290

BETA (1) = -.063 MACH (5) = 1.098 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4883
90.000	-.5161
180.000	-.5058
270.000	-.5450

BETA (1) = -.063 MACH (6) = 1.149 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3966
90.000	-.4136
180.000	-.4059
270.000	-.4645

BETA (1) = -.063 MACH (7) = 1.197 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3454
90.000	-.3613
180.000	-.3519
270.000	-.3960

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4I50)

BETA (1) = -.063 MACH (8) = 1.250 ALPHA = -.66125-02 RN/L = 4.3693 PO = 2107.0 P = 1025.6

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3003
90.000	-.3174
180.000	-.3089
270.000	-.3455

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4151) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = .980

ALPHA (1) = -3.950 BETA (1) = -.063 MACH = .98240 RN/L = 4.3057 PO = 2116.2 P = 1141.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4642
90.000	-.4336
180.000	-.4500
270.000	-.4836

ALPHA (2) = -.416 BETA (1) = -4.075 MACH = .98283 RN/L = 4.3109 PO = 2116.4 P = 1140.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3989
90.000	-.3933
180.000	-.3811
270.000	-.4664

ALPHA (2) = -.386 BETA (2) = -.063 MACH = .98283 RN/L = 4.3109 PO = 2116.4 P = 1140.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4569
90.000	-.4406
180.000	-.4448
270.000	-.4858

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4151)

ALPHA (2) = -.370 BETA (3) = 3.950 MACH = .98283 RN/L = 4.3109 PO = 2116.4 P = 1140.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4601
90.000	-.4400
180.000	-.4579
270.000	-.4805

ALPHA (3) = 4.076 BETA (1) = -.063 MACH = .98530 RN/L = 4.3166 PO = 2116.2 P = 1137.1

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4086
90.000	-.4343
180.000	-.4240
270.000	-.4558

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4152) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = .980

ALPHA (1) = -3.930 BETA (1) = -.063 MACH = .97970 RN/L = 4.2999 PO = 2109.1 P = 1140.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.6419
90.000	-.6503
180.000	-.6448
270.000	-.7638

ALPHA (2) = -.519 BETA (1) = -4.078 MACH = .98183 RN/L = 4.3033 PO = 2108.9 P = 1137.8

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5465
90.000	-.5423
180.000	-.5495
270.000	-.7140

ALPHA (2) = -.476 BETA (2) = -.063 MACH = .98183 RN/L = 4.3033 PO = 2108.9 P = 1137.8

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.6498
90.000	-.6577
180.000	-.6447
270.000	-.7471

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4152)

ALPHA (2) = -.499 BETA (3) = 3.953 MACH = .98183 RN/L = 4.3033 PO = 2108.9 P = 1137.8

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.6548
90.000	-.6681
180.000	-.6574
270.000	-.7213

ALPHA (3) = 3.993 BETA (1) = -.063 MACH = .98140 RN/L = 4.3065 PO = 2109.8 P = 1138.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.6542
90.000	-.6577
180.000	-.6526
270.000	-.7910

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4153) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.944 BETA (1) = .000 MACH = .60320 RN/L = 3.4712 PO = 2123.2 P = 1660.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3598
90.000	-.3265
180.000	-.3473
270.000	-.4502

ALPHA (2) = -.320 BETA (1) = -4.050 MACH = .60547 RN/L = 3.4696 PO = 2122.3 P = 1656.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3290
90.000	-.2915
180.000	-.3059
270.000	-.4148

ALPHA (2) = -.297 BETA (2) = .000 MACH = .60547 RN/L = 3.4696 PO = 2122.3 P = 1656.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3400
90.000	-.3069
180.000	-.3219
270.000	-.3873

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4153)

ALPHA (2) = -.314 BETA (3) = 3.978 MACH = .60547 RN/L = 3.4696 PO = 2122.3 P = 1656.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3501
90.000	-.3075
180.000	-.3362
270.000	-.3738

ALPHA (3) = 4.053 BETA (1) = .000 MACH = .60520 RN/L = 3.4659 PO = 2121.8 P = 1656.8

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3244
90.000	-.3053
180.000	-.3174
270.000	-.3827

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4154) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.940 BETA (1) = -.044 MACH = .89610 RN/L = 4.1894 PO = 2105.5 P = 1250.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3205
90.000	-.2861
180.000	-.3122
270.000	-.4184

ALPHA (2) = -.284 BETA (1) = -4.059 MACH = .89087 RN/L = 4.1758 PO = 2102.0 P = 1255.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3028
90.000	-.2779
180.000	-.2840
270.000	-.3950

ALPHA (2) = -.320 BETA (2) = -.041 MACH = .89087 RN/L = 4.1758 PO = 2102.0 P = 1255.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3092
90.000	-.2782
180.000	-.2980
270.000	-.3896

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4154)

ALPHA (2) = -.314 BETA (3) = 3.975 MACH = .89087 RN/L = 4.1758 PO = 2102.0 P = 1255.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3421
90.000	-.3194
180.000	-.3493
270.000	-.3848

ALPHA (3) = 3.980 BETA (1) = -.038 MACH = .89310 RN/L = 4.1769 PO = 2101.3 P = 1251.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3020
90.000	-.2963
180.000	-.3106
270.000	-.3780

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4155) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.772 BETA (1) = -.066 MACH = 1.1026 RN/L = 4.3661 PO = 2116.2 P = 987.87

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5797
90.000	-.5902
180.000	-.5873
270.000	-.5953

ALPHA (2) = -.380 BETA (1) = -4.075 MACH = 1.1029 RN/L = 4.3716 PO = 2116.7 P = 987.69

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5353
90.000	-.5412
180.000	-.5327
270.000	-.5584

ALPHA (2) = -.357 BETA (2) = -.059 MACH = 1.1029 RN/L = 4.3716 PO = 2116.7 P = 987.69

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5676
90.000	-.5793
180.000	-.5605
270.000	-.5791

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4155)

ALPHA (2) = -.367 BETA (3) = 3.956 MACH = 1.1029 RN/L = 4.3716 PO = 2116.7 P = 987.69

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5658
90.000	-.5836
180.000	-.5671
270.000	-.5802

ALPHA (3) = 4.092 BETA (1) = -.059 MACH = 1.0997 RN/L = 4.3718 PO = 2114.7 P = 990.85

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5781
90.000	-.5987
180.000	-.5931
270.000	-.6004

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4156) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.950 BETA (1) = -.063 MACH = 1.2534 RN/L = 4.3988 PO = 2111.9 P = 811.60

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5239
90.000	-.5374
180.000	-.5144
270.000	-.5283

ALPHA (2) = -.324 BETA (1) = -4.075 MACH = 1.2533 RN/L = 4.3973 PO = 2112.4 P = 811.89

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4986
90.000	-.5199
180.000	-.5149
270.000	-.5122

ALPHA (2) = -.314 BETA (2) = -.063 MACH = 1.2533 RN/L = 4.3973 PO = 2112.4 P = 811.89

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5296
90.000	-.5385
180.000	-.5356
270.000	-.5283

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4156)

ALPHA (2) = -.343 BETA (3) = 3.953 MACH = 1.2533 RN/L = 4.3973 PO = 2112.4 P = 811.89

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5317
90.000	-.5432
180.000	-.5221
270.000	-.5244

ALPHA (3) = 3.967 BETA (1) = -.066 MACH = 1.2519 RN/L = 4.3949 PO = 2112.6 P = 813.49

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5463
90.000	-.3587
180.000	-.5576
270.000	-.5480

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4157) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.953 BETA (1) = -.053 MACH = 1.4049 RN/L = 4.3087 PO = 2128.2 P = 664.20

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4406
90.000	-.4479
180.000	-.4382
270.000	-.4492

ALPHA (2) = -.317 BETA (1) = -4.075 MACH = 1.4057 RN/L = 4.3127 PO = 2132.4 P = 664.76

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3985
90.000	-.4194
180.000	-.4162
270.000	-.4363

ALPHA (2) = -.320 BETA (2) = -.059 MACH = 1.4057 RN/L = 4.3127 PO = 2132.4 P = 664.76

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4427
90.000	-.4493
180.000	-.4532
270.000	-.4459

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4157)

ALPHA (2) = -.522 BETA (3) = 3.956 MACH = 1.4057 RN/L = 4.3127 PO = 2132.4 P = 664.76

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4564
90.000	-.4669
180.000	-.4595
270.000	-.4575

ALPHA (3) = 4.208 BETA (1) = -.069 MACH = 1.4030 RN/L = 4.2923 PO = 2121.8 P = 663.96

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4642
90.000	-.4759
180.000	-.4746
270.000	-.4701

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4158) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.953 BETA (1) = .000 MACH = .59380 RN/L = 3.3921 PO = 2104.8 P = 1658.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4380
90.000	-.4453
180.000	-.4397
270.000	-.7146

ALPHA (2) = -.343 BETA (1) = -4.050 MACH = .59587 RN/L = 3.4000 PO = 2105.0 P = 1655.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4078
90.000	-.3916
180.000	-.3888
270.000	-.6344

ALPHA (2) = -.380 BETA (2) = .000 MACH = .59587 RN/L = 3.4000 PO = 2105.0 P = 1655.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4190
90.000	-.4231
180.000	-.4248
270.000	-.6871

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4158)

ALPHA (2) = -.386 BETA (3) = 3.978 MACH = .59587 RN/L = 3.4000 PO = 2105.0 P = 1655.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4396
90.000	-.4556
180.000	-.4483
270.000	-.6876

ALPHA (3) = 3.993 BETA (1) = -.003 MACH = .59700 RN/L = 3.4043 PO = 2104.8 P = 1654.1

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4011
90.000	-.4094
180.000	-.4094
270.000	-.6544

ARC11-0231A80 OTS(SRB=N ORB=N) SRB SKIRT (RE4159) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.983 BETA (1) = -.038 MACH = .89250 RN/L = 4.1747 PO = 2100.6 P = 1252.1

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4100
90.000	-.4241
180.000	-.4172
270.000	-.5545

ALPHA (2) = -.370 BETA (1) = -4.059 MACH = .89213 RN/L = 4.1756 PO = 2100.4 P = 1252.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3755
90.000	-.3778
180.000	-.3755
270.000	-.4761

ALPHA (2) = -.403 BETA (2) = -.044 MACH = .89213 RN/L = 4.1756 PO = 2100.4 P = 1252.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4033
90.000	-.4130
180.000	-.4053
270.000	-.5949

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4159)

ALPHA (2) = -.409 BETA (3) = 3.972 MACH = .89213 RN/L = 4.1756 PO = 2100.4 P = 1252.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4663
90.000	-.4591
180.000	-.4530
270.000	-.6462

ALPHA (3) = 4.076 BETA (1) = -.041 MACH = .89250 RN/L = 4.1726 PO = 2099.9 P = 1251.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4049
90.000	-.4120
180.000	-.4160
270.000	-.6223

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4160) (15 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.937 BETA (1) = -.059 MACH = 1.1000 RN/L = 4.3718 PO = 2109.8 P = 988.18

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4674
90.000	-.4912
180.000	-.4796
270.000	-.5226

ALPHA (2) = -.528 BETA (1) = -4.075 MACH = 1.0987 RN/L = 4.3759 PO = 2110.0 P = 989.81

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4431
90.000	-.4622
180.000	-.4562
270.000	-.5234

ALPHA (2) = -.492 BETA (2) = -.063 MACH = 1.0987 RN/L = 4.3759 PO = 2110.0 P = 989.81

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4606
90.000	-.4826
180.000	-.4770
270.000	-.5186

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4160)

ALPHA (2) = -.532 BETA (3) = 3.956 MACH = 1.0987 RN/L = 4.3759 PO = 2110.0 P = 989.81

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5299
90.000	-.5634
180.000	-.5438
270.000	-.5695

ALPHA (3) = 4.013 BETA (1) = -.063 MACH = 1.1000 RN/L = 4.3823 PO = 2110.5 P = 988.47

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4939
90.000	-.5169
180.000	-.5091
270.000	-.5522

ARC11-0231A80 OTS(SRB=N ORB=N) SRB SKIRT (RE4161) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.960 BETA (1) = -.066 MACH = 1.2528 RN/L = 4.3924 PO = 2109.8 P = 811.49

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2799
90.000	-.2971
180.000	-.2828
270.000	-.3206

ALPHA (2) = -.505 BETA (1) = -4.075 MACH = 1.2524 RN/L = 4.3922 PO = 2110.3 P = 812.12

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2699
90.000	-.3057
180.000	-.2829
270.000	-.3072

ALPHA (2) = -.459 BETA (2) = -.059 MACH = 1.2524 RN/L = 4.3922 PO = 2110.3 P = 812.12

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2982
90.000	-.3190
180.000	-.3098
270.000	-.3410

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4161)

ALPHA (2) = -.462 BETA (3) = 3.953 MACH = 1.2524 RN/L = 4.3922 PO = 2110.3 P = 812.12

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3608
90.000	-.3822
180.000	-.3710
270.000	-.3808

ALPHA (3) = 4.006 BETA (1) = -.063 MACH = 1.2481 RN/L = 4.3945 PO = 2110.5 P = 815.88

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3153
90.000	-.3436
180.000	-.3375
270.000	.3703

ARC11-023IAB0 OTS(SRB=N ORB=N) SRB SKIRT (RE4162) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.937 BETA (1) = -.069 MACH = 1.3993 RN/L = 4.2798 PO = 2114.0 P = 664.93

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1818
90.000	-.1505
180.000	-.1711
270.000	-.2279

ALPHA (2) = -.486 BETA (1) = -4.078 MACH = 1.3989 RN/L = 4.2779 PO = 2113.8 P = 665.32

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1387
90.000	-.1506
180.000	-.1476
270.000	-.1826

ALPHA (2) = -.486 BETA (2) = -.063 MACH = 1.3989 RN/L = 4.2779 PO = 2113.8 P = 665.32

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1858
90.000	-.2028
180.000	-.1965
270.000	-.2215

ARC11-0231A80 OTS(SRB=N ORB=N) SRB SKIRT (RE4162)

ALPHA (2) = -.499 BETA (3) = 3.953 MACH = 1.3989 RN/L = 4.2779 PO = 2113.8 P = 665.32

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2395
90.000	-.2634
180.000	-.2558
270.000	-.2627

ALPHA (3) = 4.020 BETA (1) = -.066 MACH = 1.3960 RN/L = 4.2780 PO = 2114.0 P = 668.11

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1916
90.000	-.2210
180.000	-.2185
270.000	-.2370

ARC11-023IA80 OTS(SRB=N+ ORB=N) SRB SKIRT (RE4163) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 4.000
RN/L = 4.250 MACH = .980

ALPHA (1) = -3.868 BETA (1) = -.063 MACH = .98020 RN/L = 4.3081 PO = 2109.8 P = 1140.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5668
90.000	-.5763
180.000	-.5622
270.000	-.5652

ALPHA (2) = -.486 BETA (1) = -4.075 MACH = .97937 RN/L = 4.3059 PO = 2108.4 P = 1140.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4807
90.000	-.4911
180.000	-.4872
270.000	-.6179

ALPHA (2) = -.456 BETA (2) = -.063 MACH = .97937 RN/L = 4.3059 PO = 2108.4 P = 1140.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5621
90.000	-.5708
180.000	-.5638
270.000	-.6588

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TABULATED SOURCE DATA - IA80

ARC11-023IA80 OTS(SRB=N+ ORB=N) SRB SKIRT (RE4163)

ALPHA (2) = -.439 BETA (3) = 3.953 MACH = .97937 RN/L = 4.3059 PO = 2108.4 P = 1140.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5724
90.000	-.5910
180.000	-.5728
270.000	-.6355

ALPHA (3) = 4.013 BETA (1) = -.069 MACH = .98150 RN/L = 4.3090 PO = 2108.4 P = 1137.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5725
90.000	-.5789
180.000	-.5597
270.000	-.7085

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4I64) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.973 BETA (1) = -.047 MACH = .58500 RN/L = 3.4024 PO = 2096.3 P = 1662.8

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3455
90.000	-.3165
180.000	-.3216
270.000	-.4317

ALPHA (2) = -.277 BETA (1) = -4.066 MACH = .58960 RN/L = 3.4202 PO = 2098.0 P = 1658.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3210
90.000	-.2864
180.000	-.3055
270.000	-.4129

ALPHA (2) = -.291 BETA (2) = -.047 MACH = .58960 RN/L = 3.4202 PO = 2098.0 P = 1658.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3445
90.000	-.2989
180.000	-.3280
270.000	-.3983

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4164)

ALPHA (2) = -.307 BETA (3) = 3.972 MACH = .58960 RN/L = 3.4202 PO = 2098.0 P = 1658.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3548
90.000	-.3122
180.000	-.3452
270.000	-.3877

ALPHA (3) = 3.957 BETA (1) = -.044 MACH = .59060 RN/L = 3.4224 PO = 2098.5 P = 1657.3

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3238
90.000	-.2967
180.000	-.3160
270.000	-.3786

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4165) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.256 MACH = .900

ALPHA (1) = -3.977 BETA (1) = -.044 MACH = .89350 RN/L = 4.2056 PO = 2100.6 P = 1250.8

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3202
90.000	-.2868
180.000	-.3133
270.000	-.421[illegible]

ALPHA (2) = -.304 BETA (1) = -4.063 MACH = .89107 RN/L = 4.1787 PO = 2099.2 P = 1253.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2950
90.000	-.2734
180.000	-.2763
270.000	-.3918

ALPHA (2) = -.314 BETA (2) = -.044 MACH = .89107 RN/L = 4.1787 PO = 2099.2 P = 1253.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3012
90.000	-.2714
180.000	-.2904
270.000	-.3804

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4165)

ALPHA (2) = -.317 BETA (3) = 3.972 MACH = .89107 RN/L = 4.1787 PO = 2099.2 P = 1253.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3344
90.000	-.3178
180.000	-.3426
270.000	-.3732

ALPHA (3) = 3.930 BETA (1) = -.041 MACH = .89120 RN/L = 4.1708 PO = 2098.5 P = 1252.6

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3078
90.000	-.3047
180.000	-.3082
270.000	-.3920

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4166) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.963 BETA (1) = -.063 MACH = 1.0996 RN/L = 4.4015 PO = 2123.2 P = 994.87

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5757
90.000	-.5891
180.000	-.5838
270.000	-.5930

ALPHA (2) = -.337 BETA (1) = -4.072 MACH = 1.0995 RN/L = 4.4038 PO = 2123.7 P = 995.30

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5494
90.000	-.5540
180.000	-.5453
270.000	-.5726

ALPHA (2) = -.334 BETA (2) = -.059 MACH = 1.0995 RN/L = 4.4038 PO = 2123.7 P = 995.30

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5752
90.000	-.5849
180.000	-.5677
270.000	-.5866

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4166)

ALPHA (2) = -.376 BETA (3) = 3.950 MACH = 1.0995 RN/L = 4.4038 PO = 2123.7 P = 995.30

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5578
90.000	-.5767
180.000	-.5563
270.000	-.5733

ALPHA (3) = 3.953 BETA (1) = -.066 MACH = 1.1032 RN/L = 4.3993 PO = 2119.0 P = 988.53

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5900
90.000	-.6079
180.000	-.5979
270.000	-.6075

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4167) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -.327 BETA (1) = -4.072 MACH = 1.2493 RN/L = 4.4272 PO = 2123.0 P = 820.40

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5026
90.000	-.5201
180.000	-.5171
270.000	-.5144

ALPHA (1) = -.317 BETA (2) = -.059 MACH = 1.2493 RN/L = 4.4272 PO = 2123.0 P = 820.40

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5293
90.000	-.5390
180.000	-.5331
270.000	-.5282

ALPHA (1) = -.340 BETA (3) = 3.950 MACH = 1.2493 RN/L = 4.4272 PO = 2123.0 P = 820.40

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5297
90.000	-.5393
180.000	-.5183
270.000	-.5223

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TABULATED SOURCE DATA - IA80

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4167)

ALPHA (2) = .000 BETA (1) = -.063 MACH = 1.2510 RN/L = 4.4292 PO = 2123.9 P = 818.86

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5269
90.000	-.5342
180.000	-.5228
270.000	-.5246

ALPHA (3) = 3.960 BETA (1) = -.066 MACH = 1.2490 RN/L = 4.4220 PO = 2123.2 P = 820.75

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5532
90.000	-.5638
180.000	-.5616
270.000	-.5528

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4168) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.944 BETA (1) = -.059 MACH = 1.4046 RN/L = 4.3918 PO = 2123.2 P = 662.88

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4325
90.000	-.4426
180.000	-.4342
270.000	-.4437

ALPHA (2) = -.320 BETA (1) = -4.072 MACH = 1.4079 RN/L = 4.3701 PO = 2122.5 P = 659.58

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3998
90.000	-.4173
180.000	-.4143
270.000	-.4354

ALPHA (2) = -.320 BETA (2) = -.059 MACH = 1.4079 RN/L = 4.3701 PO = 2122.5 P = 659.58

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4397
90.000	-.4484
180.000	-.4510
270.000	-.4461

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4168)

ALPHA (2) = -.347 BETA (3) = 3.953 MACH = 1.4079 RN/L = 4.3701 PO = 2122.5 P = 659.58

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4512
90.000	-.4604
180.000	-.4520
270.000	-.4532

ALPHA (3) = 3.960 BETA (1) = -.063 MACH = 1.4068 RN/L = 4.3541 PO = 2121.8 P = 660.41

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4636
90.000	-.4717
180.000	-.4730
270.000	-.4696

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4169) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.920 BETA (1) = -.044 MACH = .59500 RN/L = 3.4551 PO = 2109.8 P = 1660.6

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4249
90.000	-.4271
180.000	-.4146
270.000	-.6856

ALPHA (2) = -.376 BETA (1) = -4.066 MACH = .59743 RN/L = 3.4632 PO = 2109.3 P = 1657.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4121
90.000	-.3881
180.000	-.3822
270.000	-.6287

ALPHA (2) = -.373 BETA (2) = -.050 MACH = .59743 RN/L = 3.4632 PO = 2109.3 P = 1657.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4241
90.000	-.4199
180.000	-.4151
270.000	-.6673

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4169)

ALPHA (2) = -.426 BETA (3) = 3.969 MACH = .59743 RN/L = 3.4632 PO = 2109.3 P = 1657.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4244
90.000	-.4460
180.000	-.4379
270.000	-.6678

ALPHA (3) = 3.947 BETA (1) = -.044 MACH = .59880 RN/L = 3.4697 PO = 2109.8 P = 1655.6

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3939
90.000	-.4045
180.000	-.4062
270.000	-.6431

ARC11-0231A80 OTS(SRB=N ORB=N) SRB SKIRT (RE4170) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.897 BETA (1) = -.041 MACH = .89150 RN/L = 4.1731 PO = 2102.0 P = 1254.3

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4125
90.000	-.4286
180.000	-.4220
270.000	-.5444

ALPHA (2) = -.383 BETA (1) = -4.063 MACH = .89050 RN/L = 4.1731 PO = 2101.3 P = 1255.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3711
90.000	-.3666
180.000	-.3696
270.000	-.4613

ALPHA (2) = -.357 BETA (2) = -.047 MACH = .89050 RN/L = 4.1731 PO = 2101.3 P = 1255.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3954
90.000	-.4045
180.000	-.3991
270.000	-.5905

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4170)

ALPHA (2) = -.370 BETA (3) = 3.972 MACH = .89050 RN/L = 4.1731 PO = 2101.3 P = 1255.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4730
90.000	-.4675
180.000	-.4644
270.000	-.6620

ALPHA (3) = 4.020 BETA (1) = -.041 MACH = .89260 RN/L = 4.1823 PO = 2101.3 P = 1252.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4050
90.000	-.4130
180.000	-.4173
270.000	-.6245

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4171) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.963 BETA (1) = -.066 MACH = 1.0977 RN/L = 4.3743 PO = 2107.0 P = 989.57

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5060
90.000	-.5281
180.000	-.5117
270.000	-.5725

ALPHA (2) = -.545 BETA (1) = -4.072 MACH = 1.1017 RN/L = 4.3738 PO = 2107.7 P = 985.11

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5339
90.000	-.5607
180.000	-.5542
270.000	-.6422

ALPHA (2) = -.667 BETA (2) = -.059 MACH = 1.1017 RN/L = 4.3738 PO = 2107.7 P = 985.11

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5587
90.000	-.5941
180.000	-.5789
270.000	-.6261

ARC11-0231A80 OTS(SRB=N ORB=N) SRB SKIRT (RE4171)

ALPHA (2) = -.519 BETA (3) = 3.953 MACH = 1.1017 RN/L = 4.3738 PO = 2107.7 P = 985.11

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5919
90.000	-.6344
180.000	-.6081
270.000	-.6409

ALPHA (3) = 3.990 BETA (1) = -.066 MACH = 1.1080 RN/L = 4.3708 PO = 2107.0 P = 977.00

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.6130
90.000	-.6410
180.000	-.6289
270.000	-.6891

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4172) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -4.003 BETA (1) = -.066 MACH = 1.2534 RN/L = 4.4018 PO = 2110.5 P = 811.05

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2819
90.000	-.3001
180.000	-.2830
270.000	-.3180

ALPHA (2) = -.502 BETA (1) = -4.072 MACH = 1.2515 RN/L = 4.3996 PO = 2110.5 P = 813.16

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2632
90.000	-.3012
180.000	-.2798
270.000	-.3009

ALPHA (2) = -.528 BETA (2) = -.059 MACH = 1.2515 RN/L = 4.3996 PO = 2110.5 P = 813.16

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2904
90.000	-.3137
180.000	-.3033
270.000	-.3330

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4172)

ALPHA (2) = -.538 BETA (3) = 3.953 MACH = 1.2515 RN/L = 4.3996 PO = 2110.5 P = 813.16

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3599
90.000	-.3828
180.000	-.3719
270.000	-.3814

ALPHA (3) = 3.953 BETA (1) = -.063 MACH = 1.2505 RN/L = 4.4051 PO = 2110.5 P = 814.22

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3057
90.000	-.3377
180.000	-.3299
270.000	-.3619

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4173) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = -4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -.522 BETA (1) = -4.072 MACH = 1.4084 RN/L = 4.3191 PO = 2112.8 P = 656.17

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1316
90.000	-.1474
180.000	-.1441
270.000	-.1789

ALPHA (1) = -.502 BETA (2) = -.059 MACH = 1.4084 RN/L = 4.3191 PO = 2112.8 P = 656.17

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1772
90.000	-.1928
180.000	-.1867
270.000	-.2122

ALPHA (1) = -.535 BETA (3) = 3.953 MACH = 1.4084 RN/L = 4.3191 PO = 2112.8 P = 656.17

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2272
90.000	-.2501
180.000	-.2474
270.000	-.2548

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4173)

ALPHA (2) = .000 BETA (1) = -.063 MACH = 1.4118 RN/L = 4.3069 PO = 2111.9 P = 652.69

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1751
90.000	-.1933
180.000	-.1894
270.000	-.2113

ALPHA (3) = .020 BETA (1) = -.063 MACH = 1.4046 RN/L = 4.3270 PO = 2113.3 P = 659.80

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1811
90.000	-.1983
180.000	-.1991
270.000	-.2168

ARC1I-023IA80 OTS(SRB=OFF ORB=OFF) SP3 SKIRT (RE4I74) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.950 BETA (1) = -.009 MACH = .60200 RN/L = 3.5046 PO = 2121.1 P = 1660.3

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3500
90.000	-.3132
180.000	-.3334
270.000	-.4323

ALPHA (2) = -.301 BETA (1) = -4.044 MACH = .60423 RN/L = 3.5076 PO = 2121.3 P = 1657.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3320
90.000	-.2868
180.000	-.3047
270.000	-.4117

ALPHA (2) = -.287 BETA (2) = -.006 MACH = .60423 RN/L = 3.5076 PO = 2121.3 P = 1657.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3319
90.000	-.2957
180.000	-.3187
270.000	-.3925

ARC11-023(A80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4174)

ALPHA (2) = -.317 BETA (3) = 3.988 MACH = .60423 RN/L = 3.5076 P0 = 2121.3 P = 1657.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE.CP

XB/LB .9500

PHI	
.000	-.3589
90.000	-.3159
180.000	-.3435
270.000	-.3788

ALPHA (3) = 3.947 BETA (1) = -.009 MACH = .60510 RN/L = 3.5081 P0 = 2121.8 P = 1656.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3245
90.000	-.3041
180.000	-.3228
270.000	-.3968

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRE SKIRT (RE4175) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 900
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.980 BETA (1) = -.012 MACH = .90260 RN/L = 4.2512 PO = 2122.5 P = 1251.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3290
90.000	-.2909
180.000	-.3161
270.000	-.4286

ALPHA (2) = -.324 BETA (1) = -4.047 MACH = .90460 RN/L = 4.2477 PO = 2121.6 P = 1248.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2942
90.000	-.2760
180.000	-.2779
270.000	-.3834

ALPHA (2) = -.317 BETA (2) = -.006 MACH = .90460 RN/L = 4.2477 PO = 2121.6 P = 1248.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2973
90.000	-.2702
180.000	-.2681
270.000	-.3875

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4175)

ALPHA (2) = -.396 BETA (3) = 3.984 MACH = .90460 RN/L = 4.2477 PO = 2121.6 P = 1248.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3382
90.000	-.3170
180.000	-.3432
270.000	-.3774

ALPHA (3) = 4.076 BETA (1) = -.012 MACH = .90480 RN/L = 4.2388 PO = 2121.1 P = 1247.6

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3020
90.000	-.2968
180.000	-.3067
270.000	-.3828

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4176) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.934 BETA (1) = .009 MACH = 1.1011 RN/L = 4.4175 PO = 2123.9 P = 993.44

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	- 5769
90.000	-.5852
180.000	-.5816
270.000	-.5877

ALPHA (2) = -.238 BETA (1) = -3.994 MACH = 1.1063 RN/L = 4.4170 PO = 2123.4 P = 986.84

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5398
90.000	-.5454
180.000	-.5362
270.000	-.5625

ALPHA (2) = -.307 BETA (2) = .009 MACH = 1.1063 RN/L = 4.4170 PO = 2123.4 P = 986.84

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5507
90.000	-.5652
180.000	-.5501
270.000	-.5657

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4176)

ALPHA (2) = -.271 BETA (3) = 4.034 MACH = 1.1063 RN/L = 4.4170 PO = 2123.4 P = 986.84

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5488
90.000	-.5651
180.000	-.5466
270.000	-.5606

ALPHA (3) = 4.026 BETA (1) = .012 MACH = 1.1056 RN/L = 4.4135 PO = 2121.8 P = 986.83

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5626
90.000	-.5823
180.000	-.5759
270.000	-.5849

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4177) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.881 BETA (1) = .012 MACH = 1.2507 RN/L = 4.4817 PO = 2123.2 P = 818.92

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5152
90.000	-.5281
180.000	-.5048
270.000	-.5209

ALPHA (2) = -.238 BETA (1) = -3.994 MACH = 1.2534 RN/L = 4.4652 PO = 2123.9 P = 816.27

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4900
90.000	-.5088
180.000	-.5059
270.000	-.5040

ALPHA (2) = -.258 BETA (2) = .009 MACH = 1.2534 RN/L = 4.4652 PO = 2123.9 P = 816.27

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5197
90.000	-.5309
180.000	-.5257
270.000	-.5211

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4177)

ALPHA (2) = -.281 BETA (3) = 4.031 MACH = 1.2534 RN/L = 4.4652 PO = 2123.9 P = 816.27

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5205
90.000	-.5307
180.000	-.5105
270.000	-.5138

ALPHA (3) = 3.953 BETA (1) = .016 MACH = 1.2486 RN/L = 4.4578 PO = 2122.5 P = 820.98

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5419
90.000	-.5538
180.000	-.5513
270.000	-.5419

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4178) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.980 BETA (1) = -.066 MACH = 1.4100 RN/L = 4.3522 PO = 2122.5 P = 657.63

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4324
90.000	-.4419
180.000	-.4315
270.000	-.4441

ALPHA (2) = -.238 BETA (1) = -4.072 MACH = 1.4075 RN/L = 4.3434 PO = 2123.2 P = 660.25

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4001
90.000	-.4185
180.000	-.4151
270.000	-.4355

ALPHA (2) = -.228 BETA (2) = -.063 MACH = 1.4075 RN/L = 4.3434 PO = 2123.2 P = 660.25

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4395
90.000	-.4489
180.000	-.4496
270.000	-.4432

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4178)

ALPHA (2) = -.261 BETA (3) = 3.953 MACH = 1.4075 RN/L = 4.3434 PO = 2123.2 P = 660.25

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4530
90.000	-.4625
180.000	-.4524
270.000	-.4538

ALPHA (3) = 3.920 BETA (1) = -.066 MACH = 1.4043 RN/L = 4.3377 PO = 2123.2 P = 663.16

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4629
90.000	-.4716
180.000	-.4707
270.000	-.4703

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4179) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -4.105 BETA (1) = -.006 MACH = .59090 RN/L = 3.4170 PO = 2104.1 P = 1651.4

SECTION (1)SP3 INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4159
90.000	-.4261
180.000	-.4116
270.000	-.6969

ALPHA (2) = -.383 BETA (1) = -4.047 MACH = .59743 RN/L = 3.4453 PO = 2104.1 P = 1653.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4121
90.000	-.3869
180.000	-.3845
270.000	-.6329

ALPHA (2) = -.380 BETA (2) = -.009 MACH = .59743 RN/L = 3.4453 PO = 2104.1 P = 1653.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4108
90.000	-.4197
180.000	-.4177
270.000	-.6758

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4179)

ALPHA (2) = -.499 BETA (3) = 3.981 MACH = .59743 RN/L = 3.4453 PO = 2104.1 P = 1653.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4207
90.000	-.4413
180.000	-.4317
270.000	-.6762

ALPHA (3) = 3.960 BETA (1) = -.012 MACH = .59700 RN/L = 3.4428 PO = 2104.1 P = 1653.6

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4006
90.000	-.4102
180.000	-.4096
270.000	-.6515

ARC11-0231A80 OTS(SRB=N ORB=N) SRB SKIRT (RE4180) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.897 BETA (1) = -.009 MACH = .89640 RN/L = 4.1815 PO = 2097.1 P = 1244.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4203
90.000	-.4329
180.000	-.4231
270.000	-.5525

ALPHA (2) = -.353 BETA (1) = -4.050 MACH = .90047 RN/L = 4.1929 PO = 2097.3 P = 1239.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3706
90.000	-.3714
180.000	-.3698
270.000	-.4527

ALPHA (2) = -.363 BETA (2) = -.009 MACH = .90047 RN/L = 4.1929 PO = 2097.3 P = 1239.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4044
90.000	-.4124
180.000	-.4077
270.000	-.6013

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4180)

ALPHA (2) = -.519 BETA (3) = 3.981 MACH = .90047 RN/L = 4.1929 PO = 2097.3 P = 1239.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4572
90.000	-.4604
180.000	-.4578
270.000	-.6405

ALPHA (3) = 3.980 BETA (1) = -.012 MACH = .89790 RN/L = 4.1840 PO = 2097.8 P = 1243.1

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3978
90.000	-.4081
180.000	-.4128
270.000	-.6084

ARC11-0231A80 OTS(SRB=N ORB=N) SRB SKIRT (REV181) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.937 BETA (1) = .012 MACH = 1.0996 RN/L = 4.3760 PO = 2105.5 P = 986.57

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4594
90.000	-.4838
180.000	-.4697
270.000	-.5154

ALPHA (2) = -.396 BETA (1) = -3.994 MACH = 1.1021 RN/L = 4.3810 PO = 2106.0 P = 983.89

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4345
90.000	-.4554
180.000	-.4485
270.000	-.5148

ALPHA (2) = -.380 BETA (2) = .009 MACH = 1.1021 RN/L = 4.3810 PO = 2106.0 P = 983.89

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4494
90.000	-.4745
180.000	-.4620
270.000	-.5092

ARC11-0231A80 OTS(SRB=N ORB=N) SRB SKIRT (RE4181)

ALPHA (2) = -.393 BETA (3) = 4.031 MACH = 1.1021 RN/L = 4.3810 PO = 2106.0 P = 983.89

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5182
90.000	-.5547
180.000	-.5342
270.000	-.5597

ALPHA (3) = 3.894 BETA (1) = .012 MACH = 1.1031 RN/L = 4.3843 PO = 2106.2 P = 982.65

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4831
90.000	-.5076
180.000	-.4981
270.000	-.5417

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4182) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.967 BETA (1) = .016 MACH = 1.2439 RN/L = 4.4220 PO = 2109.1 P = 820.87

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2916
90.000	-.3079
180.000	-.2943
270.000	-.3295

ALPHA (2) = -.396 BETA (1) = -3.994 MACH = 1.2511 RN/L = 4.4175 PO = 2109.6 P = 813.25

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2586
90.000	-.2951
180.000	-.2730
270.000	-.2963

ALPHA (2) = -.396 BETA (2) = .009 MACH = 1.2511 RN/L = 4.4175 PO = 2109.6 P = 813.25

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2865
90.000	-.3083
180.000	-.2978
270.000	-.3320

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4182)

ALPHA (2) = -.380 BETA (3) = 4.031 MACH = 1.2511 RN/L = 4.4175 PO = 2109.6 P = 813.25

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3512
90.000	-.3751
180.000	-.3625
270.000	-.3739

ALPHA (3) = 3.877 BETA (1) = .009 MACH = 1.2502 RN/L = 4.4099 PO = 2109.1 P = 813.99

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3055
90.000	-.3339
180.000	-.3273
270.000	-.3596

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4183) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.983 BETA (1) = -.066 MACH = 1.4086 RN/L = 4.3187 PO = 2118.3 P = 657.57

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1706
90.000	-.1790
180.000	-.1595
270.000	-.2211

ALPHA (2) = -.380 BETA (1) = -4.059 MACH = 1.4054 RN/L = 4.3138 PO = 2117.4 P = 660.32

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1385
90.000	-.1512
180.000	-.1490
270.000	-.1844

ALPHA (2) = -.380 BETA (2) = -.059 MACH = 1.4054 RN/L = 4.3138 PO = 2117.4 P = 660.32

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1784
90.000	-.1924
180.000	-.1859
270.000	-.2117

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4183)

ALPHA (2) = -.409 BETA (3) = 3.953 MACH = 1.4054 RN/L = 4.3138 PO = 2117.4 P = 660.32

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2281
90.000	-.2507
180.000	-.2457
270.000	-.2519

ALPHA (3) = 3.828 BETA (1) = .000 MACH = 1.4102 RN/L = 4.2670 PO = 2116.9 P = 655.67

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1739
90.000	-.2035
180.000	-.1998
270.000	-.2204

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4184) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 2.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.953 BETA (1) = -.044 MACH = .59570 RN/L = 3.4174 PO = 2114.7 P = 1663.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3869
90.000	-.3495
180.000	-.3694
270.000	-.4866

ALPHA (2) = -.284 BETA (1) = -4.063 MACH = .59877 RN/L = 3.4302 PO = 2114.0 P = 1659.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3286
90.000	-.2949
180.000	-.3145
270.000	-.4205

ALPHA (2) = -.291 BETA (2) = -.047 MACH = .59877 RN/L = 3.4302 PO = 2114.0 P = 1659.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3297
90.000	-.2913
180.000	-.3131
270.000	-.3760

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4184)

ALPHA (2) = -.320 BETA (3) = 3.969 MACH = .59877 RN/L = 3.4302 PO = 2114.0 P = 1659.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3627
90.000	-.3278
180.000	-.3552
270.000	-.3966

ALPHA (3) = 3.973 BETA (1) = -.044 MACH = .59840 RN/L = 3.4294 PO = 2112.6 P = 1658.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3264
90.000	-.3015
180.000	-.3162
270.000	-.3966

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4185) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 2.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.937 BETA (1) = -.050 MACH = .90250 RN/L = 4.2680 PO = 2118.3 P = 1249.1

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3241
90.000	-.2946
180.000	-.3132
270.000	-.4280

ALPHA (2) = -.301 BETA (1) = -4.066 MACH = .89937 RN/L = 4.2393 PO = 2116.4 P = 1252.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2984
90.000	-.2740
180.000	-.2758
270.000	-.3834

ALPHA (2) = -.304 BETA (2) = -.047 MACH = .89937 RN/L = 4.2393 PO = 2116.4 P = 1252.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3127
90.000	-.2877
180.000	-.3088
270.000	-.3962

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4185)

ALPHA (2) = -.320 BETA (3) = 3.969 MACH = .89937 RN/L = 4.2393 PO = 2116.4 P = 1252.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3364
90.000	-.3150
180.000	-.3467
270.000	-.3769

ALPHA (3) = 3.977 BETA (1) = -.044 MACH = .89910 RN/L = 4.2250 PO = 2114.7 P = 1251.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3026
90.000	-.2947
180.000	-.3088
270.000	-.3776

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4186) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 2.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -4.013 BETA (1) = .016 MACH = 1.1058 RN/L = 4.4715 PO = 2118.3 P = 985.01

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5726
90.000	-.5789
180.000	-.5758
270.000	-.5833

ALPHA (2) = -.304 BETA (1) = -3.991 MACH = 1.1047 RN/L = 4.4560 PO = 2115.9 P = 985.23

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5373
90.000	-.5461
180.000	-.5368
270.000	-.5600

ALPHA (2) = -.267 BETA (2) = .009 MACH = 1.1047 RN/L = 4.4560 PO = 2115.9 P = 985.23

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5679
90.000	-.5797
180.000	-.5637
270.000	-.5786

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4186)

ALPHA (2) = -.327 BETA (3) = 4.034 MACH = 1.1047 RN/L = 4.4560 PO = 2115.9 P = 985.23

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5478
90.000	-.5618
180.000	-.5449
270.000	-.5583

ALPHA (3) = 3.985 BETA (1) = .016 MACH = 1.1038 RN/L = 4.4466 PO = 2116.2 P = 986.43

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5660
90.000	-.5876
180.000	-.5793
270.000	-.5882

ARC11-0231A80 OTS(SRB=N ORB=N) SRB SKIRT (RE4187) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 2.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.871 BETA (1) = -.044 MACH = .59840 RN/L = 3.4324 PO = 2111.9 P = 1657.8

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4172
90.000	-.4271
180.000	-.4100
270.000	-.6870

ALPHA (2) = -.350 BETA (1) = -4.066 MACH = .59830 RN/L = 3.4341 PO = 2111.9 P = 1657.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4006
90.000	-.3827
180.000	-.3766
270.000	-.6339

ALPHA (2) = -.380 BETA (2) = -.050 MACH = .59830 RN/L = 3.4341 PO = 2111.9 P = 1657.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4116
90.000	-.4165
180.000	-.4104
270.000	-.6695

DATE 23 JUL 76

TABULATED SOURCE DATA - IA80

ARC11-0231A80 OTS(SRB=N ORB=N) SRB SKIRT (RE4187)

ALPHA (2) = -.423 BETA (3) = 3.969 MACH = .59830 RN/L = 3.4341 PO = 2111.9 P = 1657.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4151
90.000	-.4357
180.000	-.4185
270.000	-.6673

ALPHA (3) = 3.986 BETA (1) = -.047 MACH = .59740 RN/L = 3.4327 PO = 2111.2 P = 1658.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3935
90.000	-.4010
180.000	-.4048
270.000	-.6543

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIR (RE4188) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 2.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.963 BETA (1) = -.044 MACH = .89500 RN/L = 4.1900 PO = 2107.0 P = 1252.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4153
90.000	-.4277
180.000	-.4230
270.000	-.5437

ALPHA (2) = -.383 BETA (1) = -4.066 MACH = .89813 RN/L = 4.1944 PO = 2106.2 P = 1247.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3716
90.000	-.3745
180.000	-.3716
270.000	-.4613

ALPHA (2) = -.375 BETA (2) = -.047 MACH = .89813 RN/L = 4.1944 PO = 2106.2 P = 1247.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4018
90.000	-.4083
180.000	-.3955
270.000	-.5847

DATE 23 JUL 76

TABULATED SOURCE DATA - IA80

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4186)

ALPHA (2) = -.409 BETA (3) = 3.969 MACH = .89813 RN/L = 4.1944 PO = 2106.2 P = 1247.9

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4503
90.000	-.4458
180.000	-.4404
270.000	-.6299

ALPHA (3) = 3.940 BETA (1) = -.044 MACH = .89700 RN/L = 4.1933 PO = 2107.0 P = 1249.8

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4125
90.000	-.4174
180.000	-.4225
270.000	-.6272

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4169) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 8.000 ELV-OB = 2.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.970 BETA (1) = .016 MACH = 1.1009 RN/L = 4.4134 PO = 2105.5 P = 985.03

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4676
90.000	-.4914
180.000	-.4807
270.000	-.5216

ALPHA (2) = -.436 BETA (1) = -3.994 MACH = 1.1059 RN/L = 4.4313 PO = 2113.1 P = 982.43

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4405
90.000	-.4568
180.000	-.4503
270.000	-.5140

ALPHA (2) = -.429 BETA (2) = .009 MACH = 1.1059 RN/L = 4.4313 PO = 2113.1 P = 982.43

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4515
90.000	-.4739
180.000	-.4611
270.000	-.5088

ARC11-0231A80 OTS(SRB=N ORB=N SRB SKIRT (RE=189)

ALPHA (2) = -.466 BETA (3) = 4.031 MACH = 1.1059 RN/L = 4.4313 PO = 2113.1 P = 982.43

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE C'

XB/LB .9500

PHI	
.000	-.5120
90.000	-.5442
180.000	-.5266
270.000	-.5507

ALPHA (3) = 3.851 BETA (1) = .012 MACH = 1.1043 RN/L = 4.4260 PO = 2112.6 P = 984.21

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4856
90.000	-.5103
180.000	-.4976
270.000	-.5429

ARC11-023(A80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4190) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.960 BETA (1) = -.003 MACH = .59840 RN/L = 3.4955 PO = 2121.1 P = 1665.1

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3546
90.000	-.3209
180.000	-.3393
270.000	-.4477

ALPHA (2) = -.267 BETA (1) = -4.003 MACH = .59907 RN/L = 3.4936 PO = 2121.1 P = 1664.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3287
90.000	-.2981
180.000	-.3093
270.000	-.4234

ALPHA (2) = -.291 BETA (2) = .012 MACH = .59907 RN/L = 3.4936 PO = 2121.1 P = 1664.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3384
90.000	-.3031
180.000	-.3285
270.000	-.3797

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4190)

ALPHA (2) = -.294 BETA (3) = 4.028 MACH = .59907 RN/L = 3.493E PO = 2121.1 P = 1664.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3590
90.000	-.3150
180.000	-.3453
270.000	-.3791

ALPHA (3) = 3.973 BETA (1) = .006 MACH = .59860 RN/L = 3.4896 PO = 2121.1 P = 1664.8

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3299
90.000	-.3051
180.000	-.3194
270.000	-.3884

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4191) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.980 BETA (1) = -.003 MACH = .90430 RN/L = 4.2125 PO = 2104.8 P = 1238.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3229
90.000	-.2833
180.000	-.3126
270.000	-.4214

ALPHA (2) = -.267 BETA (1) = -4.003 MACH = .90037 RN/L = 4.1975 PO = 2104.. P = 1243.6

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2952
90.000	-.2741
180.000	-.2807
270.000	-.3839

ALPHA (2) = -.291 BETA (2) = .012 MACH = .90037 RN/L = 4.1975 PO = 2104.1 P = 1243.6

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3171
90.000	-.2857
180.000	-.3057
270.000	-.4007

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4191)

ALPHA (2) = -.284 BETA (3) = 4.028 MACH = .90037 RN/L = 4.1975 PO = 2104.1 P = 1243.6

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3343
90.000	-.3099
180.000	-.3370
270.000	-.3745

ALPHA (3) = 3.970 BETA (1) = -.003 MACH = .90050 RN/L = 4.1955 PO = 2102.7 P = 1242.6

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3010
90.000	-.2990
180.000	-.3093
270.000	-.3844

DATE 23 JUL 76

TABULATED SOURCE DATA - IA80

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4192) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.957 BETA (1) = .003 MACH = 1.0978 RN/L = 4.3356 PO = 2110.5 P = 991.11

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5878
90.000	-.5956
180.000	-.5937
270.000	-.6011

ALPHA (2) = -.284 BETA (1) = -3.994 MACH = 1.0997 RN/L = 4.3377 PO = 2110.5 P = 988.87

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5468
90.000	-.5540
180.000	-.5463
270.000	-.5709

ALPHA (2) = -.281 BETA (2) = .000 MACH = 1.0997 RN/L = 4.3377 PO = 2110.5 P = 988.87

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5640
90.000	-.5764
180.000	-.5620
270.000	-.5786

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4192)

ALPHA (2) = -.320 BETA (3) = 4.028 MACH = 1.0997 RN/L = 4.3377 PO = 2110.5 P = 988.87

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5675
90.000	-.5837
180.000	-.5636
270.000	-.5798

ALPHA (3) = 3.977 BETA (1) = .003 MACH = 1.0998 RN/L = 4.3390 PO = 2109.8 P = 988.41

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5728
90.000	-.5957
180.000	-.5881
270.000	-.5959

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.953 BETA (1) = .006 MACH = 1.2528 RN/L = 4.3463 PO = 2110.5 P = 811.76

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5188
90.000	-.5349
180.000	-.5111
270.000	-.5262

ALPHA (2) = -.238 BETA (1) = -3.997 MACH = 1.2535 RN/L = 4.3462 PO = 2111.4 P = 811.30

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4976
90.000	-.5198
180.000	-.5153
270.000	-.5098

ALPHA (2) = -.231 BETA (2) = .000 MACH = 1.2535 RN/L = 4.3462 PO = 2111.4 P = 811.30

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5268
90.000	-.5391
180.000	-.5345
270.000	-.5311

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4193)

ALPHA (2) = -.284 BETA (3) = 4.034 MACH = 1.2535 RN/L = 4.3462 PO = 2111.4 P = 811.30

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5323
90.000	-.5435
180.000	-.5208
270.000	-.5240

ALPHA (3) = 3.977 BETA (1) = .000 MACH = 1.2524 RN/L = 4.3409 PO = 2110.5 P = 812.19

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5464
90.000	-.5598
180.000	-.5572
270.000	-.5477

ARC11-023IA80 01S(SRB=OFF ORB=OFF) SRB SKIRT (RE4194) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.887 BETA (1) = .016 MACH = 1.4070 RN/L = 4.3762 PO = 2135.2 P = 664.38

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4311
90.000	-.4413
180.000	-.4299
270.000	.4427

ALPHA (2) = -.271 BETA (1) = -3.991 MACH = 1.4086 RN/L = 4.3553 PO = 2132.6 P = 662.12

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3923
90.000	-.4158
180.000	-.4120
270.000	-.4293

ALPHA (2) = -.251 BETA (2) = .009 MACH = 1.4086 RN/L = 4.3552 PO = 2132.6 P = 662.12

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4380
90.000	-.4450
180.000	-.4467
270.000	-.4374

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4194)

ALPHA (2) = -.284 BETA (3) = 4.031 MACH = 1.4086 RN/L = 4.3552 PO = 2132.6 P = 662.12

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4552
90.000	-.4627
180.000	-.4525
270.000	-.4528

ALPHA (3) = 3.973 BETA (1) = .006 MACH = 1.3982 RN/L = 4.3323 PO = 2123.9 P = 669.12

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4622
90.000	-.4732
180.000	-.4740
270.000	-.4718

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4195) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.960 BETA (1) = .006 MACH = .58310 RN/L = 3.4103 PO = 2111.5 P = 1677.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4449
90.000	-.4477
180.000	-.4438
270.000	-.7175

ALPHA (2) = -.297 BETA (1) = -4.003 MACH = .59743 RN/L = 3.4671 PO = 2111.9 P = 1659.1

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4149
90.000	-.3982
180.000	-.3920
270.000	-.6448

ALPHA (2) = -.307 BETA (2) = .012 MACH = .59743 RN/L = 3.4671 PO = 2111.9 P = 1659.1

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3998
90.000	-.4057
180.000	-.4019
270.000	-.6482

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE=193)

ALPHA (2) = -.376 BETA (3) = 4.022 MACH = .59743 RN/L = 3.4671 PO = 2111.9 P = 1659.1

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4349
90.000	-.4574
180.000	-.4526
270.000	-.6922

ALPHA (3) = 4.020 BETA (1) = -.003 MACH = .60100 RN/L = 3.4818 PO = 2111.9 P = 1654.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3914
90.000	-.4007
180.000	-.3977
270.000	-.6290

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4196) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.891 BETA (1) = -.003 MACH = .90360 RN/L = 4.2068 PO = 2106.2 P = 1240.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4171
90.000	-.4319
180.000	-.4273
270.000	-.5373

ALPHA (2) = -.390 BETA (1) = -4.003 MACH = .89957 RN/L = 4.1991 PO = 2105.5 P = 1245.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3839
90.000	-.3845
180.000	-.3788
270.000	-.4651

ALPHA (2) = -.360 BETA (2) = .012 MACH = .89957 RN/L = 4.1991 PO = 2105.5 P = 1245.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4069
90.000	-.4225
180.000	-.4169
270.000	-.5995

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4196)

ALPHA (2) = -.406 BETA (3) = 4.031 MACH = .89957 RN/L = 4.1991 PO = 2105.5 P = 1245.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4594
90.000	-.4594
180.000	-.4443
270.000	-.6206

ALPHA (3) = 3.986 BETA (1) = -.003 MACH = .90050 RN/L = 4.1971 PO = 2105.5 P = 1244.3

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4057
90.000	-.4141
180.000	-.4192
270.000	-.6235

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4197) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.963 BETA (1) = .003 MACH = 1.0995 RN/L = 4.3360 PO = 2105.5 P = 986.72

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4629
90.000	-.4852
180.000	-.4742
270.000	-.5194

ALPHA (2) = -.409 BETA (1) = -3.997 MACH = 1.0997 RN/L = 4.3375 PO = 2105.5 P = 986.54

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4455
90.000	-.4620
180.000	-.4564
270.000	-.5280

ALPHA (2) = -.386 BETA (2) = -.003 MACH = 1.0997 RN/L = 4.3375 PO = 2105.5 P = 986.54

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4576
90.000	-.4827
180.000	-.4756
270.000	-.5168

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4197)

ALPHA (2) = -.429 BETA (3) = 4.028 MACH = 1.0997 RN/L = 4.3375 PO = 2105.5 P = 986.54

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5177
90.000	-.5526
180.000	-.5330
270.000	-.5603

ALPHA (3) = 4.033 BETA (1) = -.003 MACH = 1.0997 RN/L = 4.3440 PO = 2106.2 P = 986.87

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4920
90.000	-.5154
180.000	-.5082
270.000	-.5505

ARC11-0231A80 OTS(SRB=N ORB=N) SRB SKIRT (RE4198) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.973 BETA (1) = .003 MACH = 1.2526 RN/L = 4.3420 PO = 2108.4 P = 811.19

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2773
90.000	-.2933
180.000	-.2805
270.000	-.3218

ALPHA (2) = -.482 BETA (1) = -3.994 MACH = 1.2535 RN/L = 4.3392 PO = 2107.9 P = 809.98

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2680
90.000	-.2936
180.000	-.2744
270.000	-.2998

ALPHA (2) = -.439 BETA (2) = -.003 MACH = 1.2535 RN/L = 4.3392 PO = 2107.9 P = 809.98

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2690
90.000	-.3057
180.000	-.2991
270.000	-.3349

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4198)

ALPHA (2) = -.416 BETA (3) = 4.028 MACH = 1.2535 RN/L = 4.3392 PO = 2107.9 P = 809.98

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3492
90.000	-.3726
180.000	-.3616
270.000	-.3724

ALPHA (3) = 4.020 BETA (1) = .003 MACH = 1.2508 RN/L = 4.3353 PO = 2107.7 P = 812.82

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3017
90.000	-.3289
180.000	-.3210
270.000	-.3571

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4199) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = 4.000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.944 BETA (1) = .009 MACH = 1.4093 RN/L = 4.2699 PO = 2108.4 P = 653.90

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1701
90.000	-.1782
180.000	-.1588
270.000	-.2234

ALPHA (2) = -.403 BETA (1) = -3.991 MACH = 1.4102 RN/L = 4.2615 PO = 2109.3 P = 653.36

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1361
90.000	-.1460
180.000	-.1414
270.000	-.1792

ALPHA (2) = -.386 BETA (2) = .012 MACH = 1.4102 RN/L = 4.2615 PO = 2109.3 P = 653.36

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1747
90.000	-.1941
180.000	-.1650
270.000	-.2151

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4199)

ALPHA (2) = -.443 BETA (3) = 4.034 MACH = 1.4102 RN/L = 4.2615 PO = 2109.3 P = 653.36

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2266
90.000	-.2522
180.000	-.2455
270.000	-.2515

ALPHA (3) = 3.864 BETA (1) = .012 MACH = 1.4084 RN/L = 4.2570 PO = 2109.1 P = 654.92

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1766
90.000	-.2079
180.000	-.2039
270.000	-.2244

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4IA0) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.894 BETA (1) = .000 MACH = .60180 RN/L = 3.5043 PO = 2121.1 P = 1660.6

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3497
90.000	-.3105
180.000	-.3318
270.000	-.4210

ALPHA (2) = -.281 BETA (1) = -4.003 MACH = .59723 RN/L = 3.4829 PO = 2122.3 P = 1667.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3247
90.000	-.2984
180.000	-.3117
270.000	-.4189

ALPHA (2) = -.287 BETA (2) = .012 MACH = .59723 RN/L = 3.4829 PO = 2122.3 P = 1667.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3444
90.000	-.3001
180.000	-.3267
270.000	-.3914

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE41A0)

ALPHA (2) = -.301 BETA (3) = 4.028 MACH = .59723 RN/L = 3.4829 PO = 2122.3 P = 1667.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3716
90.000	-.3296
180.000	-.3586
270.000	-.3921

ALPHA (3) = 3.986 BETA (1) = .012 MACH = .59790 RN/L = 3.4847 PO = 2122.5 P = 1666.8

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3359
90.000	-.3168
180.000	-.3274
270.000	-.4006

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4IA1) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.996 BETA (1) = .009 MACH = .89940 RN/L = 4.2300 PO = 2121.8 P = 1255.3

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3226
90.000	-.2866
180.000	-.3102
270.000	-.4193

ALPHA (2) = -.281 BETA (1) = -4.006 MACH = .90087 RN/L = 4.2382 PO = 2122.0 P = 1253.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2955
90.000	-.2721
180.000	-.2791
270.000	-.3789

ALPHA (2) = -.284 BETA (2) = .009 MACH = .90087 RN/L = 4.2382 PO = 2122.0 P = 1253.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3092
90.000	-.2782
180.000	-.2975
270.000	-.3870

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4IA1)

ALPHA (2) = -.281 BETA (3) = 4.028 MACH = .90087 RN/L = 4.2382 PO = 2122.0 P = 1253.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3377
90.000	-.3104
180.000	-.3481
270.000	-.3824

ALPHA (3) = 4.023 BETA (1) = .016 MACH = .90100 RN/L = 4.2328 PO = 2121.8 P = 1253.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3065
90.000	-.3035
180.000	-.3067
270.000	-.3889

DATE 23 JUL 76

TABULATED SOURCE DATA - IA80

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (REV1A2) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.967 BETA (1) = .006 MACH = 1.0986 RN/L = 4.3563 PO = 2114.0 P = 991.79

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5814
90.000	-.5923
180.000	-.5901
270.000	-.5960

ALPHA (2) = -.284 BETA (1) = -4.003 MACH = 1.1004 RN/L = 4.3594 PO = 2113.8 P = 989.54

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5446
90.000	-.5487
180.000	-.5423
270.000	-.5582

ALPHA (2) = -.258 BETA (2) = -.012 MACH = 1.1004 RN/L = 4.3594 PO = 2113.8 P = 989.54

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5589
90.000	-.5694
180.000	-.5553
270.000	-.5729

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4IA2)

ALPHA (2) = -.301 BETA (3) = 4.015 MACH = 1.1004 RN/L = 4.3594 PO = 2113.8 P = 989.54

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5664
90.000	-.5845
180.000	-.5651
270.000	-.5785

ALPHA (3) = 3.947 BETA (1) = .000 MACH = 1.1030 RN/L = 4.3633 PO = 2114.0 P = 986.41

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5630
90.000	-.5844
180.000	-.5752
270.000	-.5867

ARC11-0231A80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE41A3) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-1B = .000 ELV-0B = 4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.947 BETA (1) = -.006 MACH = 1.2545 RN/L = 4.3671 PO = 2114.0 P = 811.27

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5172
90.000	-.5335
180.000	-.5089
270.000	-.5239

ALPHA (2) = -.248 BETA (1) = -4.000 MACH = 1.2545 RN/L = 4.3581 PO = 2114.0 P = 811.32

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4933
90.000	-.5180
180.000	-.5119
270.000	-.5041

ALPHA (2) = -.244 BETA (2) = -.005 MACH = 1.2545 RN/L = 4.3581 PO = 2114.0 P = 811.32

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5275
90.000	-.5404
180.000	-.5349
270.000	-.5310

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4IA3)

ALPHA (2) = -.271 BETA (3) = 4.022 MACH = 1.2545 RN/L = 4.3581 PO = 2114.0 P = 811.32

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5348
90.000	-.5468
180.000	-.5224
270.000	-.5259

ALPHA (3) = 3.985 BETA (1) = .003 MACH = 1.2546 RN/L = 4.3551 PO = 2114.0 P = 811.12

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5394
90.000	-.5560
180.000	-.5573
270.000	-.5447

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4IA4) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.947 BETA (1) = .006 MACH = 1.4033 RN/L = 4.3439 PO = 2107.0 P = 659.02

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4326
90.000	-.4429
180.000	-.4309
270.000	-.4408

ALPHA (2) = -.267 BETA (1) = -3.994 MACH = 1.4040 RN/L = 4.3128 PO = 2099.2 P = 655.94

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3972
90.000	-.4224
180.000	-.4190
270.000	-.4328

ALPHA (2) = -.277 BETA (2) = -.003 MACH = 1.4040 RN/L = 4.3128 PO = 2099.2 P = 655.94

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4431
90.000	-.4507
180.000	-.4524
270.000	-.4435

ARC11-023IA80 OTS(SRB=OFF ORB=OFF) SRB SKIRT (RE4IA4)

ALPHA (2) = -.284 BETA (3) = 4.019 MACH = 1.4040 RN/L = 4.3128 PO = 2099.2 P = 655.94

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4623
90.000	-.4691
180.000	-.4590
270.000	-.4584

ALPHA (3) = 3.986 BETA (1) = .006 MACH = 1.3970 RN/L = 4.2777 PO = 2085.7 P = 658.16

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4613
90.000	-.4761
180.000	-.4765
270.000	-.4715

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE41A5) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-CB = 4.000
RN/L = 3.400 MACH = .600

ALPHA (1) = -3.983 BETA (1) = .012 MACH = .59900 RN/L = 3.4730 PO = 2113.3 P = 1658.1

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4435
90.000	-.4450
180.000	-.4344
270.000	-.6954

ALPHA (2) = -.337 BETA (1) = -4.006 MACH = .60037 RN/L = 3.4773 PO = 2112.8 P = 1656.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4202
90.000	-.3901
180.000	-.3887
270.000	-.6326

ALPHA (2) = -.370 BETA (2) = .009 MACH = .60037 RN/L = 3.4773 PO = 2112.8 P = 1656.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4266
90.000	-.4279
180.000	-.4239
270.000	-.6577

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4IA5)

ALPHA (2) = -.453 BETA (3) = 4.025 MACH = .60037 RN/L = 3.4773 PO = 2112.8 P = 1656.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4315
90.000	-.4557
180.000	-.4428
270.000	-.6653

ALPHA (3) = 3.910 BETA (1) = .009 MACH = .60100 RN/L = 3.4798 PO = 2112.6 P = 1655.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3974
90.000	-.4045
180.000	-.4095
270.000	-.6286

ARC11-0231A80 OTS(SRB=N ORB=N) SRB SKIRT (RE41A6) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.937 BETA (1) = .016 MACH = .90250 RN/L = 4.2121 PO = 2111.9 P = 1245.3

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4273
90.000	-.4395
180.000	-.4317
270.000	-.5380

ALPHA (2) = -.376 BETA (1) = -4.006 MACH = .90930 RN/L = 4.2268 PO = 2111.9 P = 1235.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3777
90.000	-.3827
180.000	-.3815
270.000	-.4704

ALPHA (2) = -.353 BETA (2) = .009 MACH = .90930 RN/L = 4.2268 PO = 2111.9 P = 1236.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4172
90.000	-.4301
180.000	-.4215
270.000	-.6055

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4IA6)

ALPHA (2) = -.420 BETA (3) = 4.022 MACH = .90930 RN/L = 4.2268 PO = 2111.9 P = 1236.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4771
90.000	-.4755
180.000	-.4555
270.000	-.6330

ALPHA (3) = 3.910 BETA (1) = .006 MACH = .91060 RN/L = 4.2296 PO = 2111.9 P = 1234.3

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4049
90.000	-.4126
180.000	-.4120
270.000	-.6122

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE41A7) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.996 BETA (1) = .006 MACH = 1.0997 RN/L = 4.3565 PO = 2107.7 P = 987.56

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4691
90.000	-.4906
180.000	-.4788
270.000	-.5254

ALPHA (2) = -.416 BETA (1) = -4.003 MACH = 1.0993 RN/L = 4.3567 PO = 2107.7 P = 988.07

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4460
90.000	-.4589
180.000	-.4576
270.000	-.5278

ALPHA (2) = -.403 BETA (2) = -.012 MACH = 1.0993 RN/L = 4.3567 PO = 2107.7 P = 988.07

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4595
90.000	-.4834
180.000	-.4764
270.000	-.5168

ARC11-0231A80 OTS(SRB=N ORB=N) SRB SKIRT (RE41A7)

ALPHA (2) = -.426 BETA (3) = 4.019 MACH = 1.0993 RN/L = 4.3557 PO = 2107.7 P = 988.07

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5183
90.000	-.5549
180.000	-.5347
270.000	-.5595

ALPHA (3) = 3.798 BETA (1) = .009 MACH = 1.0994 RN/L = 4.3619 PO = 2107.7 P = 987.85

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4895
90.000	-.5188
180.000	-.5045
270.000	-.5480

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT. (RE41A8) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.986 BETA (1) = .009 MACH = 1.2550 RN/L = 4.3537 PO = 2109.1 P = 809.83

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2782
90.000	-.2345
180.000	-.2830
270.000	-.3255

ALPHA (2) = -.400 BETA (1) = -4.003 MACH = 1.2517 RN/L = 4.3574 PO = 2109.1 P = 812.36

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2740
90.000	-.2917
180.000	-.2725
270.000	-.2938

ALPHA (2) = -.393 BETA (2) = -.012 MACH = 1.2517 RN/L = 4.3574 PO = 2109.1 P = 812.35

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2843
90.000	-.3057
180.000	-.2982
270.000	-.3335

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4IA8)

ALPHA (2) = -.413 BETA (3) = 4.022 MACH = 1.2517 RN/L = 4.3574 PO = 2109.1 P = 812.36

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3553
90.000	-.3799
180.000	-.3685
270.000	-.3794

ALPHA (3) = 3.947 BETA (1) = .003 MACH = 1.2539 RN/L = 4.3574 PO = 2109.1 P = 810.01

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2995
90.000	-.3257
180.000	-.3176
270.000	-.3516

ARC11-023IA80 OTS(SRB=N ORB=N) SRB SKIRT (RE4IA9) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = 4.000
RN/L = 4.2_0 MACH = 1.400

ALPHA (1) = -3.940 BETA (1) = .009 MACH = 1.4085 RN/L = 4.2899 PO = 2110.5 P = 655.32

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1703
90.000	-.1783
180.000	-.1613
270.000	-.2236

ALPHA (2) = -.449 BETA (1) = -3.997 MACH = 1.4066 RN/L = 4.2802 PO = 2110.5 P = 657.03

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1375
90.000	-.1460
180.000	-.1436
270.000	-.1761

ALPHA (2) = -.380 BETA (2) = -.006 MACH = 1.4066 RN/L = 4.2802 PO = 2110 P = 657.03

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1733
90.000	-.1965
180.000	-.1876
270.000	-.2153

ARC11-0231A80 OTS:SRB=N ORB=N) SRB SKIRT (RE41A9)

ALPHA (2) = -.443 BETA (3) = 4.025 MACH = 1.4066 RN/L = 4.2802 PO = 2110.5 P = 657.03

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2266
90.000	-.2534
180.000	-.2460
270.000	-.2532

ALPHA (3) = 3.821 BETA (1) = .006 MACH = 1.4060 RN/L = 4.2706 PO = 2109.8 P = 657.37

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1790
90.000	-.2073
180.000	-.2019
270.000	-.2251

ARC11-023IA80 OTS(SRB=N ORB NO.2 OUT)SRB SKIRT (RE4180) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -4.013 BETA (1) = .006 MACH = .60070 RN/L = 3.5069 PO = 2116.2 P = 1658.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4301
90.000	-.4277
180.000	-.4186
270.000	-.6778

ALPHA (2) = -.271 BETA (1) = -4.006 MACH = .59863 RN/L = 3.4917 PO = 2115.4 P = 1660.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4377
90.000	-.4106
180.000	-.4052
270.000	-.6519

ALPHA (2) = -.310 BETA (2) = .003 MACH = .59863 RN/L = 3.4917 PO = 2115.4 P = 1660.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4175
90.000	-.4098
180.000	-.4125
270.000	-.6421

ARC11-023IA80 OTS(SRB=N ORB NO.2 OUT)SRB SKIRT (RE4IB0)

ALPHA (2) = -.310 BETA (3) = 4.025 MACH = .59863 RN/L = 3.4917 PO = 2115.4 P = 1660.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4469
90.000	-.4610
180.000	-.4589
270.000	-.6839

ALPHA (3) = 3.930 BETA (1) = .009 MACH = .59910 RN/L = 3.4923 PO = 2115.4 P = 1659.7

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4080
90.000	-.4192
180.000	-.4141
270.000	-.6329

ARC11-0231A80 OTS(SRB=N ORB NO.2 OUT)SRB SKIRT (RE41B1) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -4.069 BETA (1) = .009 MACH = .90080 RN/L = 4.2148 PO = 2109.8 P = 1246.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4394
90.000	-.4531
180.000	-.4428
270.000	-.5662

ALPHA (2) = -.304 BETA (1) = -4.006 MACH = .90390 RN/L = 4.2180 PO = 2109.6 P = 1242.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3840
90.000	-.3812
180.000	-.3819
270.000	-.4727

ALPHA (2) = -.317 BETA (2) = .003 MACH = .90390 RN/L = 4.2180 PO = 2109.6 P = 1242.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4172
90.000	-.4230
180.000	-.4158
270.000	-.5983

ARC11-023(A80 OTS(SRB=N ORB NO.2 OUT)SRB SKIRT (RE4IB1)

ALPHA (2) = -.357 BETA (3) = 4.025 MACH = .90390 RN/L = 4.2180 PO = 2109.6 P = 1242.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4787
90.000	-.4883
180.000	-.4821
270.000	-.6592

ALPHA (3) = 3.986 BETA (1) = .019 MACH = .90670 RN/L = 4.2222 PO = 2109.8 P = 1238.4

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4211
90.000	-.4215
180.000	-.4269
270.000	-.6279

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -3.973 BETA (1) = -.009 MACH = 1.0946 RN/L = 4.3814 PO = 2106.2 P = 993.13

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4773
90.000	-.5040
180.000	-.4911
270.000	-.5312

ALPHA (2) = -.393 BETA (1) = -4.006 MACH = 1.0958 RN/L = 4.3828 PO = 2105.7 P = 991.34

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4423
90.000	-.4601
180.000	-.4561
270.000	-.5203

ALPHA (2) = -.340 BETA (2) = -.016 MACH = 1.0958 RN/L = 4.3828 PO = 2105.7 P = 991.34

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4749
90.000	-.5058
180.000	-.4965
270.000	-.5295

ARC11-023IA80 OTS(SRB=N ORB NO.2 OUT)SRB SKIRT (RE4182)

ALPHA (2) = -.357 BETA (3) = 4.016 MACH = 1.0958 RN/L = 4.3828 PO = 2105.7 P = 991.34

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5331
90.000	-.5703
180.000	-.5504
270.000	-.5719

ALPHA (3) = 4.026 BETA (1) = -.016 MACH = 1.1011 RN/L = 4.3891 PO = 2106.2 P = 985.19

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4861
90.000	-.5190
180.000	-.5108
270.000	-.5452

ARC11-023IA80 OTS(SRB=N ORB NO.2 OUT)SRB SKIRT (RE4183) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.947 BETA (1) = -.003 MACH = 1.2463 RN/L = 4.4021 PO = 2107.0 P = 817.37

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2961
90.000	-.3178
180.000	-.3030
270.000	-.3349

ALPHA (2) = -.400 BETA (1) = -4.000 MACH = 1.2440 RN/L = 4.3992 PO = 2107.0 P = 819.92

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2916
90.000	-.3147
180.000	-.2939
270.000	-.3194

ALPHA (2) = -.370 BETA (2) = -.009 MACH = 1.2440 RN/L = 4.3992 PO = 2107.0 P = 819.92

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3037
90.000	-.3309
180.000	-.3207
270.000	-.3447

ARC11-0231A80 OTS(SRB=N ORB NO.2 OUT)SRB SKIRT (RE41B3)

ALPHA (2) = -.420 BETA (3) = 4.019 MACH = 1.2440 RN/L = 4.3992 PO = 2107.0 P = 819.92

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3704
90.000	-.3927
180.000	-.3828
270.000	-.3898

ALPHA (3) = 3.986 BETA (1) = -.012 MACH = 1.2457 RN/L = 4.4005 PO = 2107.7 P = 818.39

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3122
90.000	-.3471
180.000	-.3385
270.000	-.3643

ARC11-023IA80 OTS(SRB=N ORB NO.2 OUT)SRB SKIRT (RE41B4) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.957 BETA (1) = -.003 MACH = 1.4002 RN/L = 4.3550 PO = 2109.8 P = 662.79

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1905
90.000	-.2017
180.000	-.1823
270.000	-.2271

ALPHA (2) = -.443 BETA (1) = -4.000 MACH = 1.3986 RN/L = 4.3460 PO = 2109.6 P = 664.22

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1486
90.000	-.1656
180.000	-.1637
270.000	-.1860

ALPHA (2) = -.406 BETA (2) = -.006 MACH = 1.3986 RN/L = 4.3460 PO = 2109.6 P = 664.22

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1952
90.000	-.2209
180.000	-.2149
270.000	-.2297

ARC11-023(A80 OTS(SRB=N ORB NO.2 OUT)SRB SKIRT (RE4!B4)

ALPHA (2) = -.446 BETA (3) = 4.019 MACH = 1.3986 RN/L = 4.3460 PO = 2109.6 P = 664.22

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2481
90.000	-.2694
180.000	-.2621
270.000	-.2690

ALPHA (3) = 3.953 BETA (1) = -.009 MACH = 1.3971 RN/L = 4.3340 PO = 2109.8 P = 665.69

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1960
90.000	-.2362
180.000	-.2292
270.000	-.2400

ARC11-023(A80 OTS(SRB=N ORB NO.1 OUT)SRB SKIRT (RE4185) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 3.400 MACH = .600

ALPHA (1) = -4.072 BETA (1) = .012 MACH = .58560 RN/L = 3.4206 PO = 2115.4 P = 1677.1

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4752
90.000	-.4844
180.000	-.4763
270.000	-.7354

ALPHA (2) = -.284 BETA (1) = -4.003 MACH = .60257 RN/L = 3.4870 PO = 2114.9 P = 1654.8

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4202
90.000	-.3925
180.000	-.3915
270.000	-.6272

ALPHA (2) = -.337 BETA (2) = .003 MACH = .60257 RN/L = 3.4870 PO = 2114.9 P = 1654.8

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4262
90.000	-.4272
180.000	-.4252
270.000	-.6649

ARC11-023IA80 OTS(SRB=N ORB NO.1 OUT)SRB SKIRT (RE4185)

ALPHA (2) = -.367 BETA (3) = 4.025 MACH = .60257 RN/L = 3.4870 PO = 2114.9 P = 1654.8

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4305
90.000	-.4513
180.000	-.4456
270.000	-.6642

ALPHA (3) = 3.869 BETA (1) = .006 MACH = .59730 RN/L = 3.4653 PO = 2114.7 P = 1661.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4117
90.000	-.4131
180.000	-.4158
270.000	-.6371

ARC11-023IA80 OTS(SRB=N ORB NO.1 OUT)SRB SKIRT (RE4IB6) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -4.013 BETA (1) = .009 MACH = .89890 RN/L = 4.2040 PO = 2109.8 P = 1249.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4361
90.000	-.4526
180.000	-.4387
270.000	-.5628

ALPHA (2) = -.317 BETA (1) = -4.003 MACH = .90107 RN/L = 4.2091 PO = 2108.6 P = 1245.3

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3811
90.000	-.3839
180.000	-.3837
270.000	-.4669

ALPHA (2) = -.310 BETA (2) = .003 MACH = .90107 RN/L = 4.2091 PO = 2108.6 P = 1245.3

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4206
90.000	-.4311
180.000	-.4305
270.000	-.6200

ARC11-023IA80 OTS(SRB=N ORB NO.1 OUT)SRB SKIRT (RE41B6)

ALPHA (2) = -.340 BETA (3) = 4.025 MACH = .90107 RN/L = 4.2091 PO = 2108.6 P = 1245.3

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4690
90.000	-.4732
180.000	-.4646
270.000	-.6527

ALPHA (3) = 3.854 BETA (1) = .009 MACH = .90130 RN/L = 4.2066 PO = 2109.1 P = 1245.3

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4140
90.000	-.4254
180.000	-.4265
270.000	-.6383

ARC11-023IA80 OTS(SRB=N ORB NO.1 OUT)SRB SKIRT (RE4187) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -4.003 BETA (1) = -.012 MACH = 1.0992 RN/L = 4.3803 PO = 2102.7 P = 985.74

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4597
90.000	-.4811
180.000	-.4693
270.000	-.5247

ALPHA (2) = -.393 BETA (1) = -4.006 MACH = 1.1052 RN/L = 4.3824 PO = 2102.7 P = 978.47

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4285
90.000	-.4430
180.000	-.4418
270.000	-.5199

ALPHA (2) = -.347 BETA (2) = -.019 MACH = 1.1052 RN/L = 4.3824 PO = 2102.7 P = 978.47

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4544
90.000	-.4810
180.000	-.4686
270.000	-.5113

ARC11-0231A80 OTS(SRB=N ORB NO.1 OUT)SRB SKIRT (RE41B7)

ALPHA (2) = -.383 BETA (3) = 4.012 MACH = 1.1052 RN/L = 4.3824 PO = 2102.7 P = 978.47

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4997
90.000	-.5359
180.000	-.5168
270.000	-.5406

ALPHA (3) = 4.049 BETA (1) = -.012 MACH = 1.1075 RN/L = 4.3846 PO = 2102.7 P = 975.68

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4725
90.000	-.4952
180.000	-.4848
270.000	-.5355

ARC11-0231A80 OTS(SRB=N ORB NO.1 OUT)SRB SKIRT (RE4188) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.250

ALPHA (1) = -3.914 BETA (1) = -.009 MACH = 1.2513 RN/L = 4.3952 PO = 2104.1 P = 810.95

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2981
90.000	-.3159
180.000	-.3034
270.000	-.3467

ALPHA (2) = -.353 BETA (1) = -4.006 MACH = 1.2491 RN/L = 4.3920 PO = 2104.8 P = 813.54

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2998
90.000	-.3201
180.000	-.3010
270.000	-.3283

ALPHA (2) = -.367 BETA (2) = -.016 MACH = 1.2491 RN/L = 4.3920 PO = 2104.8 P = 813.54

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3107
90.000	-.3314
180.000	-.3222
270.000	-.3574

ARC11-0231A80 OTS(SRB=N ORB NO.1 OUT)SRB SKIRT (RE4188)

ALPHA (2) = -.393 BETA (3) = 4.016 MACH = 1.2491 RN/L = 4.3920 PO = 2104.8 P = 813.54

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3754
90.000	-.3991
180.000	-.3874
270.000	-.3969

ALPHA (3) = 4.053 BETA (1) = -.012 MACH = 1.2485 RN/L = 4.3917 PO = 2104.1 P = 813.89

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3236
90.000	-.3553
180.000	-.3456
270.000	-.3758

ARC11-023(1A80 OTS(SRB=N ORB NO.1 OUT)SRB SKIRT (RE4189) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.400

ALPHA (1) = -3.934 BETA (1) = -.009 MACH = 1.4069 RN/L = 4.3421 PO = 2107.0 P = 655.71

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1724
90.000	-.1798
180.000	-.1622
270.000	-.2257

ALPHA (2) = -.426 BETA (1) = -4.006 MACH = 1.4068 RN/L = 4.3356 PO = 2107.7 P = 655.95

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1375
90.000	-.1474
180.000	-.1458
270.000	-.1783

ALPHA (2) = -.383 BETA (2) = -.016 MACH = 1.4068 RN/L = 4.3356 PO = 2107.7 P = 655.95

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1742
90.000	-.1988
180.000	-.1894
270.000	-.2161

ARC11-023(A80 OTS(SRB=N ORB NO.1 OUT)SRB SKIRT (RE41B9)

ALPHA (2) = -.436 BETA (3) = 4.016 MACH = 1.4068 RN/L = 4.3356 PO = 2107.7 P = 655.95

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2293
90.000	-.2539
180.000	-.2488
270.000	-.2564

ALPHA (3) = 4.046 BETA (1) = -.012 MACH = 1.4068 RN/L = 4.3293 PO = 2108.4 P = 656.24

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.1793
90.000	-.2072
180.000	-.2050
270.000	-.2238

ARC11-023IA80 OTS(ET SPOIL(SRB=ORB=OFF)SRB SKIRT (RE4IC0) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -4.029 BETA (1) = .016 MACH = .89710 RN/L = 4.2461 PO = 2124.6 P = 1260.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3253
90.000	-.2854
180.000	-.3086
270.000	-.3459

ALPHA (2) = -.241 BETA (1) = -4.009 MACH = .90283 RN/L = 4.2516 PO = 2122.7 P = 1251.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.2720
90.000	-.2345
180.000	-.2406
270.000	-.2911

ALPHA (2) = -.264 BETA (2) = -.003 MACH = .90283 RN/L = 4.2516 PO = 2122.7 P = 1251.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3163
90.000	-.2726
180.000	-.3047
270.000	-.3317

ARC11-023IA80 OTS(ET SPOIL(SRB=ORB=OFF)SRB SKIRT (RE4IC0)

ALPHA (2) = -.291 BETA (3) = 4.022 MACH = .90283 RN/L = 4.2516 PO = 2122.7 P = 1251.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3330
90.000	-.3007
180.000	-.3316
270.000	-.3448

ALPHA (3) = 3.980 BETA (1) = .016 MACH = .90820 RN/L = 4.2637 PO = 2123.2 P = 1244.2

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3172
90.000	-.3021
180.000	-.3057
270.000	-.3400

ARC11-023(A80 OTS(ET SPOIL(SRB=ORB=OFF)SRB SKIRT (RE4(C1) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -4.000 BETA (1) = .012 MACH = 1.1039 RN/L = 4.4630 PO = 2123.2 P = 989.56

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5404
90.000	-.5509
180.000	-.5440
270.000	-.5583

ALPHA (2) = -.264 BETA (1) = -4.009 MACH = 1.1017 RN/L = 4.4844 PO = 2124.6 P = 992.96

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4617
90.000	-.4568
180.000	-.4505
270.000	-.4935

ALPHA (2) = -.284 BETA (2) = .000 MACH = 1.1017 RN/L = 4.4844 PO = 2124.6 P = 992.96

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5592
90.000	-.5698
180.000	-.5536
270.000	-.5732

ARC11-0231A80 OTS(ET SPOIL(SRB=ORB=OFF)SRB SKIRT (RE4IC1)

ALPHA (2) = -.297 BETA (3) = 4.022 MACH = 1.1017 RN/L = 4.4844 PO = 2124.6 P = 992.96

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5410
90.000	-.5562
180.000	-.5388
270.000	-.5499

ALPHA (3) = 3.910 BETA (1) = .016 MACH = 1.1026 RN/L = 4.4864 PO = 2123.9 P = 991.59

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5621
90.000	-.5763
180.000	-.5648
270.000	-.5732

ARC11-023IA80 OTS(ET SPOIL(SRB=ORB=NOM)SRB SKIRT (RE4IC2) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = .900

ALPHA (1) = -3.996 BETA (1) = .016 MACH = .90230 RN/L = 4.2244 PO = 2111.2 P = 1245.1

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4396
90.000	-.4498
180.000	-.4534
270.000	-.4679

ALPHA (2) = -.284 BETA (1) = -4.012 MACH = .90030 RN/L = 4.2241 PO = 2110.5 P = 1247.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.3954
90.000	-.4133
180.000	-.4183
270.000	-.3950

ALPHA (2) = -.360 BETA (2) = -.003 MACH = .90030 RN/L = 4.2241 PO = 2110.5 P = 1247.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4475
90.000	-.4562
180.000	-.4626
270.000	-.5921

ARC11-023(A80 OTS(ET SPOIL(SRB=ORB=NOM)SRB SKIRT (RE4(C2)

ALPHA (2) = -.330 BETA (3) = 4.019 MACH = .90030 RN/L = 4.2241 PO = 2110.5 P = 1247.5

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5105
90.000	-.5250
180.000	-.5211
270.000	-.7046

ALPHA (3) = 3.927 BETA (1) = .012 MACH = .89920 RN/L = 4.2176 PO = 2110.5 P = 1249.0

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4488
90.000	-.4682
180.000	-.4592
270.000	-.6302

ARC11-023IA80 OTS(ET SPOIL(SRB=ORB=NOM)SRB SKIRT (RE41C3) (13 JAN 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.
LREF = 1290.3000 IN. YMRP = .0000 IN.
BREF = 1290.3000 IN. ZMRP = .0000 IN.
SCALE = .0200

PARAMETRIC DATA

ELV-IB = .000 ELV-OB = .000
RN/L = 4.250 MACH = 1.100

ALPHA (1) = -4.033 BETA (1) = .016 MACH = 1.1036 RN/L = 4.4660 PO = 2114.0 P = 985.75

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4581
90.000	-.4777
180.000	-.4659
270.000	-.5303

ALPHA (2) = -.433 BETA (1) = -4.009 MACH = 1.1009 RN/L = 4.4637 PO = 2114.0 P = 989.05

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4047
90.000	-.4121
180.000	-.4218
270.000	-.5101

ALPHA (2) = -.446 BETA (2) = -.003 MACH = 1.1009 RN/L = 4.4637 PO = 2114.0 P = 989.05

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4472
90.000	-.4794
180.000	-.4745
270.000	-.5155

ARC11-0231A80 OTS(ET SPOIL(SRB=ORB=NOM)SRB SKIRT (RE4IC3)

ALPHA (2) = -.456 BETA (3) = 4.022 MACH = 1.1009 RN/L = 4.4637 PO = 2114.0 P = 989.05

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.5453
90.000	-.5692
180.000	-.5520
270.000	-.5656

ALPHA (3) = 3.844 BETA (1) = .003 MACH = 1.1023 RN/L = 4.4653 PO = 2114.7 P = 987.65

SECTION (1)SRB INSIDE SKIRT DEPENDENT VARIABLE CP

XB/LB .9500

PHI	
.000	-.4911
90.000	-.5301
180.000	-.5273
270.000	-.5546