NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

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NASA CR-134,439

DATA REPORT FOR TESTS ON THE HEAT TRANSFER EFFECTS OF THE 0.0175-SCALE ROCKWELL INTERNATIONAL SPACE SHUTTLE VEHICLE MODEL 22-OT IN THE AEDC 50-INCH B WIND TUNNEL (OH4B)

VOLUME 3 OF 3

SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANagement services

SPACE DIVISION CHRYSLER CORPORATION

January, 1975

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VOLUME 3 OF 3

By

T. F. Foster and W. J. Grifall,
Rockwell International Space Division
W. Martindale, AEDC

Prepared under NASA Contract Number NAS9-13247

By

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

for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number:	AEDC (VA 352)
NASA Series Number:	OH4B
Test Dates:	September 29 to October 4, 1973
Model Number:	22-OT

FACILITY COORDINATOR:

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DATA REPORT FOR TESTS ON THE HEAT TRANSFER EFFECTS OF THE 0.0175-SCALE ROCKWELL INTERNATIONAL SPACE SHUTTLE VEHICLE MODEL 22-OT IN THE AEDC 50-INCH B WIND TUNNEL (OH4B)

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ABSTRACT

Results of wind tunnel heat transfer tests of 0.0175-scale Rockwell International Space Shuttle Vehicle configurations for orbiter alone, tank alone, and orbiter plus external tank are presented in this report. Body flap shielding of SSME's during simulated entry was also investigated.

The tests were conducted at Mach 8 for thirteen Reynolds number per foot values ranging from 0.5×10^6 to 3.72×10^6.

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COEFFICIENT SCHEDULE:

A: HI/HO, HU/HO vs X/LT

B: HI/HO, HU/HO vs X/L

C: HI/HO, HU/HO vs X/C

D: HU/HO vs X/C

E: HI/HO vs X/L

F: HU/HO vs X/L

G: HU/HO vs X

NOTE: A large volume of working data plots were generated and released by the Data Management Services during initial data processing activities. However, for documentation purposes, only a small representative selection of plots are included. The data will remain on file and be available for any future applications.

INTRODUCTION

The experimental investigation described in this report was performed to obtain aerodynamic heating rate data in both ascent and entry flight regimes of the Space Shuttle Vehicle. Second stage ascent interference heating was investigated with the orbiter alone, tank alone and orbiter plus external tank configurations at angles of attack of -10°, -5°, 0°, and 5° and sideslip angles of 0° and -2°.

Orbiter entry heating data was obtained over an angle of attack range of 25° to 45° for sideslip angles of 0° and 5°. Effects of control surface deflections and body flap nozzle shielding were also investigated.

The test program was conducted in the Arnold Engineering Development Center VKF 50-inch B tunnel at Mach 8 for free-stream Reynolds number per foot values from 0.5×10^6 to 3.72×10^6.

NOMENCLATURE

Symbol	Plot Symbol	Definition
b		model skin thickness, span, in
c		chord, in
c_p		specific heat of model material, BTU/lbm - °R
h		heat transfer coefficient, BTU/ft^2-sec-°R
h_{ref}	HREF	reference heat transfer coefficient, BTU/ft^2-sec-R
h_i/h_o	HI/HO	ratio of interference heat transfer coefficient to stagnation heat transfer coefficient
h_i/h_u	HI/HU	ratio of interference heat transfer coefficient to undisturbed heat transfer coefficient
h_u/h_o	HU/HO	ratio of undisturbed heat transfer coefficient to stagnation heat transfer coefficient
H		enthalpy, BTU/lbm
r	HAW/HT	adiabatic wall temperature ratio, T_{aw}/T_o (recovery factor). NOTE: Where HAW/HT = 0.0 in displayed data, the heat transfer coefficient has been calculated using a recovery factor calculated from $T_{aw}/T_o = (0.867+0.133 \sin^{1.55} \delta)$, where $\delta = (\alpha + \theta)$. Alpha is the model angle of attack and theta is local surface angle.
L		length, in
M	MACH	Mach number
Re	RN/L	unit Reynolds number, per foot
t		time, sec
T		temperature, °R
T_o		stagnation temperature, °R
T_i		initial temperature, °R

NOMENCLATURE - Continued

Symbol	Plot Symbol	Definition
T_{aw}		adiabatic wall temperature, °R
Q_i		initial heat transfer rate, BTU/sec
T/C		thermocouple
W		model material density, lbm/ft^3
x	X	axial distance from nose to corresponding component, in
x/c	X/C	chordwise location, fraction of local chord
x/L	X/L	longitudinal location, fraction of length
y	Y	spanwise distance from centerline, in
x/LT	X/LT	longitudinal location on tank, fraction of length
z	Z	waterplane distance, in
2Y/B	2Y/B	spanwise location of semispan
Z/BV	Z/BV	vertical tail location, fraction of height
δ_a		aileron deflection angle, degrees
δ_{BF}	B.FLAP	body flap deflection angle, degrees
δ_r		rudder deflection angle, degrees
β	Beta	sideslip angle, degrees
α	ALPHA	angle of attack, degrees
δ_e	ELEVON	elevon deflection angle, degrees
ϕ	PHI	radial loaction on tank, degrees
ϕ	PHIN	radial location on orbiter nozzle, degrees

NOMENCLATURE - Concluded

Subscripts

aw	adiabatic wall condition
i	initial condition
O	Orbiter
T	tank
V	vertical tail
w	wall conditions
o	stagnation conditions

REMARKS

During the course of mated configuration testing, it was felt that the forward canopy to wing bottom surface seam may have affected transition. This seam was repaired with dental plaster and 48 transition study runs were made at the end of the test with the orbiter alone configuration. These runs (177-224) consisted of eleven Re/ft values at two angles of attack, and demonstrated that the seam did not prematurely trip the boundary layer.

The original run schedule did not include obtaining data from the 11 T/C's on the windshield, but during the test high heating rates were observed in the canopy area. Therefore, three runs (#31, 32, and 33) were added to the run schedule to obtain this data. The first 11 T/C's of the data acquisition system switch position No. 1 were replaced with the windshield T/C's for these runs.

CONFIGURATIONS INVESTIGATED

The 22-OT model is a 0.0175-scale replica of the Vehicle 3 configuration Rockwell International Space Shuttle Orbiter and external tank per Drawing Number VL70-000139. The model was a thin skin thermocouple model instrumented with 428 iron-constantan thermocouples and was sting mounted through the orbiter base. The tank was sting mounted to the orbiter sting.

Provisions were made to test elevon deflections of 0°, +5°, +10°; body flap deflections of 0°, +10°; and rudder flare angles of 0° and 40°. Entry orbiter nozzle heating data was obtained by replacing the orbiter main sting with an instrumented base plate and nozzle and an offset sting mounted through the vertical tail area. The offset sting simulated a rudder flare deflection angle of 40°.

The main model structure is 15-5 PH stainless steel with instrumented areas of 15-5 PH and 17-7 PH. Thermocouple locations and local skin thicknesses are presented in Table 4. The model instrumentation reference system is described in Figure 1. The configurations tested are described below with the component definitions given in Table 3.

B_{17}, C_7, M_4, F_5, W_{103}, E_{22}, V_7, R_5	Orbiter alone (O_1)
B_{17}, C_7, M_4, F_5, W_{103}, E_{22}, V_7, R_5, T_{10}	Orbiter plus tank (O_1 + T_{10})
T_{10}	Tank alone (T_{10})
B_{17}, C_7, M_4, F_5, W_{103}, E_{22}, V_7, R_5, N	Descent orbiter alone nozzle heating (O_2)

TEST FACILITY DESCRIPTION

The Arnold Engineering Development Center (AEDC) is an Air Force Facility located in Tullahoma, Tennessee. The tunnel used, Tunnel B, is located in the Von Karman Facility portion of this center. Engineering and other technical operations in this tunnel are performed by contractor personnel of ARO, Inc.

Tunnel B is a continuous, closed circuit, variable density wind tunnel with an axisymmetric contoured nozzle and a 50-inch diameter test section. The tunnel can be operated at a nominal Mach number of 6 or 8 at stagnation pressures from 20 to 300 and 50 to 900 psia, respectively, and at a stagnation temperature of up to 1350°R. The model may be injected into the tunnel for a test run and then retracted for model cooling or model changes without interrupting the tunnel flow.

TEST PROCEDURES

The model was installed upright for second stage testing and offset-sting nozzle heating and transition studies. The orbiter was inverted for entry, orbiter alone testing. All configurations were leveled in both pitch and yaw planes. Yaw angles were obtained by combinations of roll and pitch with the tunnel model support system.

All instrumentation leads were routed internally through the model support apparatus to the data acquisition patching network outside the tunnel. Two hundred ninety one thermocouples were connected to the instrumentation patch board. Since the data acquisition system capability was ninety-seven recorded thermocouples per run, three runs were necessary for one test point. Each run of the test point series corresponded to one switch position (97 channels) of the data acquisition system.

The model was injected into the flow and remained on centerline for approximately one second. After retraction, the model was cooled to an isothermal state by air from high pressure manifolds.

For orbiter transition studies and nozzle heating tests, the orbiter base and main sting were removed and replaced with an instrumented base plate and nozzle. The model was then mounted with an offset sting through the vertical tail area. Only two main engines were simulated and only the left nozzle was instrumented. Shadowgraphs were taken for each run of the program.

DATA REDUCTION

Thermocouple outputs were recorded on magnetic tape at the rate of 20 times per second from the start of the injection cycle until about 4 seconds after the model reached the tunnel centerline. The heat transfer coefficient, h, was computed from the relation

$$h = Wbc_p \frac{d\left[\ln\left(\frac{T_o - T_{wi}}{T_o - T_w}\right)\right]}{dt}$$

where

W = model skin density, lbm/ft^3

b = model skin thickness, ft

c_p = model skin specific heat, BTU/lbm - °R

T_{wi} = initial model skin temperature, °R

This relation was derived from the equation

$$h = \frac{Wbc_p \frac{dT_w}{dt}}{T_o - T_w}$$

which neglects conduction losses and the assumptions that h, W, and c_p are constants.

If conduction losses are indeed very small, then

$$\ln\left[\frac{T_o - T_{wi}}{T_o - T_w}\right]$$

versus time is very nearly linear. Even when conduction effects are significant, a small linear portion of the curve can generally be found

at early time. It is for this reason that a linear least squares curve fit of $\ln((T_o - T_{wi})/(T_o - T_w))$, begun as soon as it could be determined that the model had reached uniform flow, was used to compute the derivative

$$\frac{d\left[\ln\left(\frac{T_o - T_{wi}}{T_o - T_w}\right)\right]}{dt}$$

and then h.

The lengths of the curve fits were kept as short as possible and yet be consistent with system noise characteristics. These curve fit lengths are given below:

Range	No. of Points
$32 < \frac{dT_w}{dt}$	5
$16 < \frac{dT_w}{dt} \leq 32$	7
$8 < \frac{dT_w}{dt} \leq 16$	9
$4 < \frac{dT_w}{dt} \leq 8$	13
$2 < \frac{dT_w}{dt} \leq 4$	17
$1 < \frac{dT_w}{dt} \leq 2$	25
$\frac{dT_w}{dt} < 1$	41

REFERENCE

1. Foster, T.F.: Pretest Information for Testing of the 22-OT 0.0175-Scale Thin Skin Thermocouple model in the AEDC 50-inch B Wind Tunnel. Rockwell International Publication Number SD73-SH-0237, September 4, 1973.

TABLE I. - TEST CONDITIONS

TEST : OH4B

DATE : Sept. 1973

TEST CONDITIONS

MACH NUMBER	REYNOLDS NUMBER (per unit length)	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)
8	0.5×10^6/ft	110	800
8	0.68×10^6/ft	140	810
8	1.0×10^6/ft	210	815
8	1.25×10^6/ft	265	825
8	1.50×10^6/ft	325	835
8	1.75×10^6/ft	380	840
8	2.00×10^6/ft	425	840
8	2.25×10^6/ft	500	850
8	2.50×10^6/ft	545	850
8	2.75×10^6/ft	605	860
8	3.00×10^6/ft	675	870
8	3.35×10^6/ft	765	880
8	3.72×10^6/ft	860	880

BALANCE UTILIZED: _____

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

COMMENTS:

TABLE II.

TEST: 048 | DATA SET/RUN NUMBER COLLATION SUMMARY | DATE: SEPT. 29, 1973

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES RNL	∂_{BF}	∂_e	M	NO. OF RUNS	THERMOCOUPLE HOOKUP SCHEDULE 1	2	3	4	5	6	7	8	9	10
*( )TK( )01	O_1, T_{10}	-10	0	3.72	0	0	8	3	10	11	12							
		-5	0					3	7	8	9							
		0	0					3	1	2	3							
		5	0					3	4	5	6							
( )TK( )02		0	-2					3	13	14	15							
		0	0	3.72				3	1	2	3							
( )TK( )03		-10	0	0.68				3	25	26	27							
		-5	0					3	22	23	24							
		0	0					3	16	17	18							
		5	0					3	19	20	21							
( )TK( )04		0	-2					3	28	29	30							
		0	0	0.48				3	16	17	18							
( )TK( )05		-10	0	3.72				1				33						
		-5	0					1				32						
	O_1, T_{10}	0	0	3.72	0	0	8	1				31						

TEST RUN NUMBERS

*
The first character of the dataset identifier refers to recovery factor used: r=1.0 (R), r=0.9 (A), r=0.85 (B), r=0.0 (C). The fourth character of the dataset identifier identifies component data under consideration: wing data, tank data, orbiter data etc.

$O_1 + T_{10}$ configuration, Dep. Var. is HI/HO

O_1, O_2, T_{10} configurations, Dep. Var. is HU/HO

IDVAR (1) IDVAR (2) NDV

TEST: OH4B

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: SEPT 29 1973

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES	NO. OF RUNS	THERMOCOUPLE HOOKUP SCHEDULE 1	2	3	4	5	6	7	8	9	10
()TK()06	T10	-10	0	372 0 0 8	2			37		35					
		-5	0					36		36					
		0	0					35		34					
()TK()07		0	-2					41		40					
		0	0	372				35		34					
()TK()08		-10	0	0.68				47		46					
		-5	0					45		44					
		0	0					45		42					
()TK()09		0	-2					49		48					
	T10	0	0	0.68 0 0 8	2			43		42					

TEST RUN NUMBERS

TYPE OF DATA

α OR β SCHEDULES

IDVAR (1) IDVAR (2) NDV

TABLE II. - Continued.

TEST: CH48 — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: SEPT 29, 1973

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES RWL	∂_{BF}	∂_e	M	NO. OF RUNS	THERMOCOUPLE HOOKUP SCHEDULE 1	2	3	4	5	6	7	8	9	10
()TK()10	01	-5	0	3.72	0	0	8	3						53	54	55		
		0		3.72										50	51	52		
()TK()11		-5		0.68										59	60	61		
		0		0.68										56	57	58		
()TK()12		25		0.5										68	69	70		
		30												62	63	64		
		35		0.5										65	66	67		
()TK()13		30		1.0										71	72	73		
		35												74	75	76		
		40		1.0										77	78	79		
()TK()14		30		2.0										80	81	82		
		35		2.0										83	84	85		
()TK()15		25		3.72										86	87	88		
		30												89	90	91		
	01	35	0	3.72	0	0	8	3						92	93	94		

TEST RUN NUMBERS

TYPE OF DATA
α OR β
SCHEDULES

IDVAR (1) IDVAR (2) NDV

TEST: OH4B		DATA SET/RUN NUMBER COLLATION SUMMARY								DATE: SEPT 29, 1973										
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES				NO. OF RUNS	THERMOCOUPLE HOOKUP SCHEDULE									
		α	β	[illegible]	δ_{BF}	δ_E	M		1	2	3	4	5	6	7	8	9	10
()TK()16	C_1	30	0	3.2	0	0	8	1										
()TK()17		30	0		10	5		3								95		
		35	0											98	97	96		
()TK()18		30	-5											99	100	101		
		35	-5	3.72										102	103			
()TK()19		30	-5	2.0										104	105			
		35	-5											106	107			
()TK()20		30	0											108	109			
		35	0	2.0										113	114	115		
()TK()21		30	-5	0.5										110	111	112		
		35	-5											116	117			
()TK()22		30	0											118	119			
		35	0			5								120	121	122		
()TK()23		25	0			10								123	124	125		
		30	0											132	133	134		
	C_1	35	0	0.5	10	10	8	3						129	130	131		
														126	127	128		

TEST RUN NUMBERS

TYPE OF DATA

α OR β SCHEDULES

IDVAR (1) IDVAR (2) NDV

NASA-MSFC-MAF

TABLE II. - Continued.

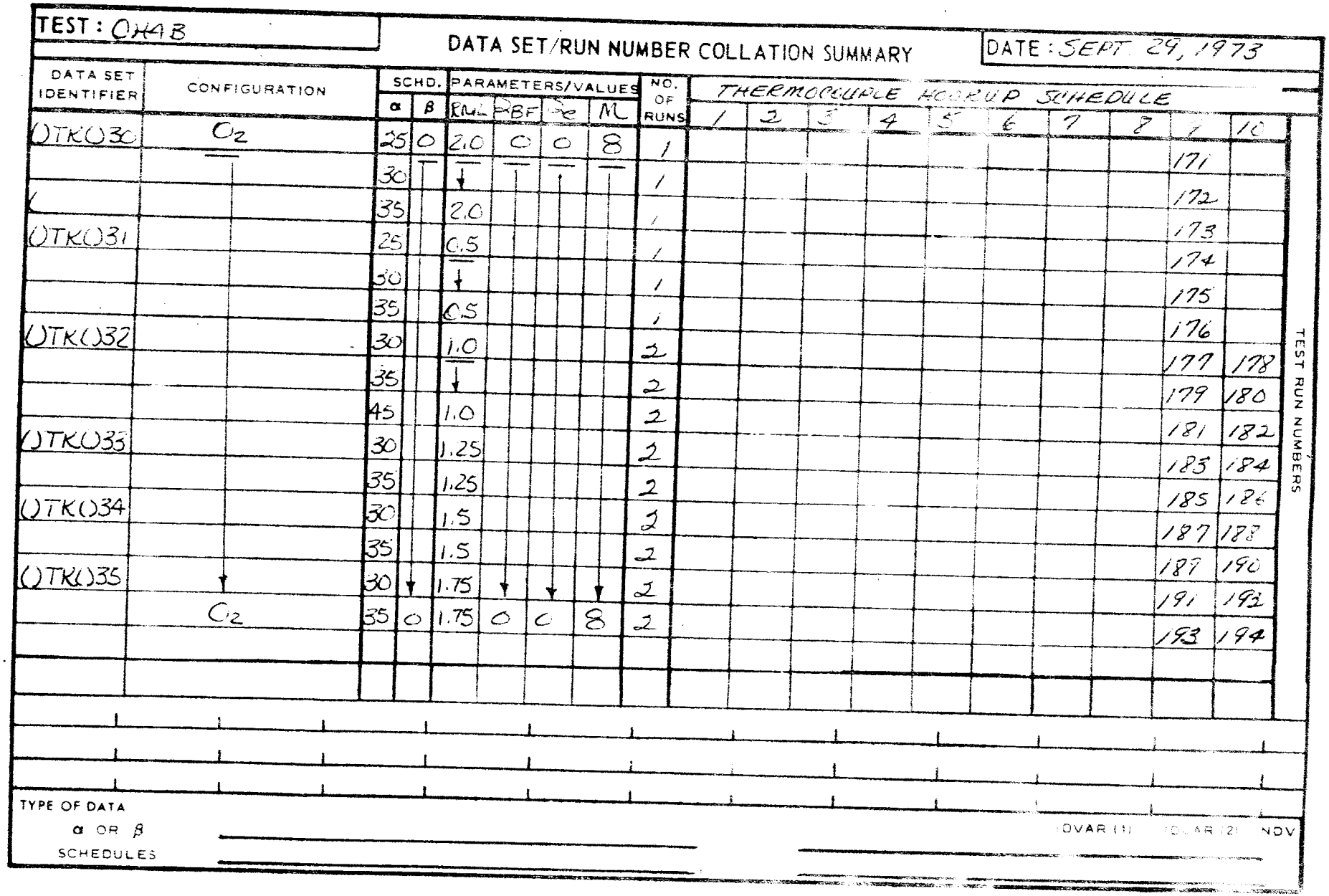
TEST: OR4B — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: SEPT 29, 1973

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES FUEL	∂BF	∂e	M	NO. OF RUNS	THERMOCOUPLE HOOKUP SCHEDULE 1	2	3	4	5	6	7	8	9	10
()TK()24	O_1	25	-5	0.5	10	10	8	2						137	138			
		30	-5	↓	↓	↓	↓	2						139	140			
		35	-5	0.5				2						135	136			
()TK()25		30	0	2.0				3						141	142	143		
		35	0	↓				3						144	145	146		
()TK()26		30	-5	↓				2						147	148			
		35	-5	2.0				2						149	150			
()TK()27		25	0	3.72				3						151	152	153		
		30	0	↓				3						154	155	156		
		35	0					3						157	158	159		
()TK()28		25	-5					2						166	167			
		30	-5		↓	↓		2						164	165			
	O_1	35	-5		10	10		2						160	163			
()TK()29	O_2	25	0		0	0		1									168	
		30	0	↓	↓	↓		1									169	
		35	0	3.72	0	0	8	1									170	

TEST RUN NUMBERS

TYPE OF DATA
α OR β
SCHEDULES

IDVAR (1) IDVAR (2) NDV



TEST: OH4B

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: SEPT 29, 1973

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES RMR	PBF	Re	M	NO. OF RUNS	THERMOCOUPLE HOOKUP SCHEDULE 1	2	3	4	5	6	7	8	9	10
OTKO30	O_2	25	0	2.0	0	0	8	1									171	
		30		↓	↓	↓	↓	1									172	
		35		2.0				1									173	
OTKO31		25		0.5				1									174	
		30		↓				1									175	
		35		0.5				1									176	
OTKO32		30		1.0				2									177	178
		35		↓				2									179	180
		45		1.0				2									181	182
OTKO33		30		1.25				2									183	184
		35		1.25				2									185	186
OTKO34		30		1.5				2									187	188
		35		1.5				2									189	190
OTKO35		30	↓	1.75	↓	↓	↓	2									191	192
	O_2	35	0	1.75	0	0	8	2									193	194

TEST RUN NUMBERS

TYPE OF DATA α OR β SCHEDULES

OVAR (1) OVAR (2) NDV

TABLE II. - Concluded.

TEST: CH43 — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: SEPT. 29, 1973

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES RNL	2_{BF}	2_e	M	NO. OF RUNS	THERMOCOUPLE HOOKUP SCHEDULE 1	2	3	4	5	6	7	8	9	10
)TK()36	O_2	30	0	2.0	0	0	8	2									195	196
		35		2.0													197	198
		45		2.0													199	200
)TK()37		30		2.25													201	202
		35		2.25													203	204
()TK()38		30		2.5													205	206
		35		2.5													207	208
)TK()39		30		2.75													209	210
		35		2.75													211	212
)TK()40		30		3.0													213	214
		35		3.0													215	216
)TK()41		30		3.35													217	218
		35		3.35													219	220
)TK()42		30		3.72													221	222
	O_2	35	0	3.72	0	0	8	2									223	224

TEST RUN NUMBERS

TYPE OF DATA
α OR β
SCHEDULES

IDVAR (1) IDVAR (2) NDV

TABLE III. - MODEL DIMENSIONAL DATA

MODEL COMPONENT: BODY - B_{17}

GENERAL DESCRIPTION: Fuselage, 3 configuration, lightweight orbiter per Rockwell lines drawing No. VL70-000139

MODEL SCALE: 0.0175

DRAWING NO.: VL70-000139

DIMENSIONS:	FULL SCALE	MODEL SCALE
Length - In.	1290.3	22.58025
Max. width - In.	267.6	4.6830
Max.depth - In.	244.5	4.27875
Fineness Ratio	4.82175	4.82175
Area - ft^2		
Max. Cross-sectional	386.67	0.11842
Planform		
Wetted		
Base		

TABLE III. - Continued.

MODEL COMPONENT: CANOPY - C_7

GENERAL DESCRIPTION: Configuration 3 per Rockwell Lines VL70-000139

Insufficient information to complete dimensional data at this time.

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000139

DIMENSIONS:	FULL SCALE	MODEL SCALE
Length (X_o = 433 to X_o = 670) - in FS	237	4.148
Max.Width		
Max.Depth (Z_o = to Z_o = 501) in FS		
Fineness ratio		
Area - ft^2		
Max. Cross-sectional		
Planform		
Wetted		
Base		

TABLE III. - Continued.

MODEL COMPONENT: OMS POD - M_4

GENERAL DESCRIPTION: Orbital maneuvering system pods located on the orbiter aft fuselage.

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000139

DIMENSIONS:

	FULL SCALE	MODEL SCALE
Length - In.	346.0	6.0550
Max. Width - In.	108.0	1.890
Max. Depth - In.	113.0	113.0
Fineness Ratio		
Area - ft^2		
Max cross sectional		
Planform		
Wetted		
Base		

℄ of OMS Pod

WP = 463.9 In. FS; WP 400 + 63.9 = 463.9

BP = 80.0 In. FS

LENGTH: 1214.0 to 1560.0 = 346.0 In. FS

NOTE: M_4 is identical to M_3 of 2A configuration, except intersection to body.

TABLE III. - Continued.

MODEL COMPONENT: BODY FLAP - F_5

GENERAL DESCRIPTION: 3 Configuration per Rockwell Lines VL70-000139

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000139

DIMENSIONS:	FULL SCALE	MODEL SCALE
Length - In.	84.70	1.48225
Max. width - In.	267.6	4.6830
Max. Depth		
Fineness Ratio		
Area - ft^2		
Max Cross-sectional		
Planform	142.5195	0.04365
Wetted		
Base	38.0958	0.01167

-TABLE III. - Continued.

MODEL COMPONENT: WING-W 103

GENERAL DESCRIPTION: Configuration 3 Orbiter per Lines VL70-000139.

NOTE: Same planform as W87, except dihedral at TE

Scale Model = 0.0175

TEST NO. DWG. NO. VL70-000139

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo.) Ft^2		
Planform	2690.00	0.82381
Span (Theo In.	936.68	16.39190
Aspect Ratio	2.265	2.265
Rate of Taper	1.177	1.177
Taper Ratio	0.200	0.200
Dihedral Angle, degrees (@ TE of Elevon)	3.500	3.500
Incidence Angle, degrees	3.000	3.000
Aerodynamic Twist, degrees	+3.000	+3.000
Sweep Back Angles, degrees		
Leading Edge	45.000	45.000
Trailing Edge	-10.24	-10.24
0.25 Element Line	35.209	35.209
Chords:		
Root (Theo) B.P.0.0.	689.24	12.06170
Tip, (Theo) B.P.	137.85	2.41238
MAC	474.81	8.30918
Fus. Sta. of .25 MAC	1136.89	19.82558
W.P. of .25 MAC	299.20	5.2360
B.L. of .25 MAC	182.13	3.18728
EXPOSED DATA		
Area (Theo) Ft^2	1752.29	0.53664
Span, (Theo) In. BP108	720.68	12.61190
Aspect Ratio	2.058	2.058
Taper Ratio	0.2451	0.2451
Chords		
Root BP108	562.40	9.8420
Tip 1.00 $\frac{b}{2}$	137.85	2.41238
MAC	393.03	6.87802
Fus. Sta. of .25 MAC	1185.31	20.74292
W.P. of .25 MAC	300.20	5.25350
B.L. of .25 MAC	251.76	2.51580
Airfoil Section (Rockwell Mod NASA) XXXX-64		
Root $\frac{b}{2}$ =	0.10	0.10
Tip $\frac{b}{2}$ =	0.12	0.12
Data for (1) of (2) Sides		
Leading Edge Cuff Planform Area Ft^2	120.33	0.03685
Leading Edge Intersects Fus M. L. @ Sta	560.0	9.800
Leading Edge Intersects Wing @ Sta	1035.0	18.11250

TABLE III. - Continued.

MODEL COMPONENT: ELEVON- E_{22}

GENERAL DESCRIPTION: 3 configuration per W_{103} Rockwell Lines Drawing VL70-000139 data for (1) of (2) sides.

SCALE MODEL: 0.0175

DRAWING NUMBER: VL70-000139

DIMENSIONS:	FULL SCALE	MODEL SCALE
Area - ft^2	205.52	0.06294
Span (equivalent) - In.	353.34	6.18345
Inb'd equivalent chord	114.78	2.00865
Outb'd equivalent chord	55.00	0.96250
Ratio movable surface chord/ total surface chord		
At inb'd equiv. chord	.208	.208
At outb'd equiv. chord	.400	.400
Sweep-back angles, degrees		
Leading edge	0.00	0.00
Trailing edge	- 10.24	- 10.24
Hingeline	0.00	0.00
Area Moment (Normal to hingeline) - ft^3 (Product of Area Moment)	1548.07	0.00829

TABLE III. - Continued.

MODEL COMPONENT: VERTICAL, V_7 (Lightweight Orbiter Configuration)

GENERAL DESCRIPTION: Centerline vertical tail, double-wedge airfoil with rounded leading edge.

NOTE: Same as V_5 but with manipulator housing removed.

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000139, VL70-000095

DIMENSIONS:

	FULL SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo) - ft^2	425.92	0.13044
Planform		
Span (Theo) - In.	315.72	5.52510
Aspect ratio	1.675	1.675
Rate of taper	0.507	0.507
Taper ratio	0.404	0.404
Sweep-back angles, degrees		
Leading edge	45.000	45.000
Trailing edge	26.249	26.249
0.25 Element line	41.130	41.130
Chords:		
Root (Theo) WP	268.50	4.69875
Tip (Theo) WP	108.47	1.89822
MAC	199.81	3.49667
Fus. Sta. of .25 MAC	1463.50	25.61125
W.P. of .25 MAC	635.522	11.12164
B.L. of .25 MAC	0.00	0.00
Airfoil section:		
Leading wedge anble - deg.	10.000	10.000
Trailing wedge angle - deg.	14.920	14.920
Leading edge radius	2.0	0.0350
Void area - FT^2	13.17	0.00403
Blanketed area	0.00	0.00

TABLE III. - Continued.

COMPONENT DIMENSIONAL DATA

MODEL COMPONENT: RUDDER - R_5

GENERAL DESCRIPTION: 2A, 3 and 3A configuration per Rockwell Lines Drawing VL70-000095

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000139, VL70-000095

DIMENSIONS:	FULL SCALE	MODEL SCALE
Area - ft^2	106.38	0.03258
Span (equivalent) - in.	201.0	3.5175
Inb'd equivalent chord	91.585	1.60274
Outb'd equivalent chord	50.833	0.88958
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	34.83	34.83
Trailing edge	26.25	26.25
Hingeline	34.83	34.83
Area Moment (normal to hingeline) - ft^3 Product of area and mean chord	526.13	0.00282

TABLE III. - Continued.

MODEL COMPONENT: EXTERNAL TANK - T_{10}

GENERAL DESCRIPTION: External Oxygen-hydrogen tank, 3 configuration, per Rockwell Lines drawing VL78-000041 and VL72-000088

MODEL SCALE: 0.0175

DRAWING NUMBER: VL72-000088, VL78-000041

DIMENSIONS:	FULL SCALE	MODEL SCALE
Length - In. (Nose @ X_T = 309)	1865	32.63750
Max. width (Dia) - In.	324	5.670
Max. depth	--	--
Fineness Ratio	5.75617	5.75617
Area - ft^2		
Max. Cross-Sectional	572.555	0.17534
Planform		
Wetted		
Base		
WP of Tank Centerline (X_T) In.	400.0	7.00

TABLE III. - Concluded.

MODEL COMPONENT: MPS NOZZLES - N

GENERAL DESCRIPTION: Only the exterior surface of the nozzle was simulated.

MODEL SCALE: 0.0175

DRAWING NUMBER: UL70-000139

DIMENSIONS:	FULL SCALE	MODEL SCALE
MACH NO.		
Length - In.		
Gimbal Point to Exit Plane		
Throat to Exit Plane		
Diameter - In.		
Exit		
Throat		
Inlet		
Area - ft^2		
Exit		
Throat		
Gimbal Point (Station) - In.		
Upper Nozzle		
X		
Y		
Z		
Lower Nozzles		
X		
Y		
Z		
Null Position - Deg.		
Upper Nozzle		
Pitch		
Yaw		
Lower Nozzle		
Pitch		
Yaw		

Table IV. -Orbiter T/C Locations
Model 22-OT

T/C NO.	X/L	FULL SCALE x_o	FULL SCALE y	FULL SCALE z	MODEL SCALE x FROM NOSE	MODEL SCALE y	MODEL SCALE z	ϕ	SKIN THICKNESS	REMARKS
1	0	238.00	0	--	0	0	--	0	.034	BOTTOM ℄
2	.005	244.45	↑	↑	.113	↑	↑	↑	.035	↑
3	.010	250.90			.226				.035	
4	.020	263.81			.452				.032	
5	.030	276.71			.677				.033	
6	.040	289.61			.903				.034	
7	.050	302.52			1.129				.033	
8	.060	315.42			1.355				.032	
9	.070	328.32			1.581				.034	
10	.080	341.22			1.806				.035	
11	.090	354.13			2.032				.035	↓
12	.100	367.03			2.258				.034	BOTTOM ℄
13									—	OPEN
14	.120	392.84			2.710				.035	BOTTOM ℄
15	.130	405.74			2.935				.036	↑
16	.140	418.64			3.161				.035	
17	.150	431.54			3.387				.034	
18	.160	444.45			3.613				.035	
19	.170	457.35			3.839				.035	
20	.180	470.25			4.064				.035	
21	.190	483.16			4.290				.035	
22	.200	496.06			4.516				.031	
23	.225	528.32			5.081				.031	
24	.250	560.58			5.645				.033	
25	.275	592.83			6.210				.033	
26	.300	625.09			6.774				.032	
27	.325	657.35			7.339				.033	
28	.350	689.60			7.903				.020	
29	.375	721.86			8.468				.028	
30	.400	754.12			9.032				.033	
31	.425	786.38	↓	↓	9.597	↓	↓	↓	.035	↓
32	.450	818.64	0	--	10.161	0	--	0	.034	BOTTOM ℄

Table IV.(Cont'd) Orbiter

T/C NO.	$\frac{x}{L}$	FULL SCALE x_o	FULL SCALE y	FULL SCALE z	MODEL SCALE (x FROM NOSE)	MODEL SCALE y	MODEL SCALE z	ϕ	SKIN THICKNESS	REMARKS
33	.475	850.89	0	--	10.726	0	--	0	.030	BOTTOM ℄
34	.500	883.15	↑	↑	11.290	↑	↑	↑	.030	↑
35	.525	915.41			11.855				.032	
36	.550	947.66			12.419				.031	
37	.575	979.92			12.984				.029	
38	.600	1012.18			13.548				.028	
39	.625	1044.44			14.113				.028	
40	.650	1076.70			14.677				.033	
41	.675	1108.95			15.242				.035	
42	.700	1141.21			15.806				.034	
43	.725	1173.47			16.371				.035	
44	.750	1205.72			16.935				.035	
45	.775	1237.98			17.500				.034	
46	.800	1270.24			18.064				.035	
47	.825	1302.50			18.624				.035	
48	.850	1334.76			19.193				.033	
49	.875	1367.01			19.758				.033	
50	.900	1399.27			20.322				.034	
51	.925	1431.53			20.887				.035	
52	.950	1463.78			21.451				.032	↓
53	.975	1496.04			22.016				.032	BOTTOM ℄
54	1.000	1528.3			22.580				.029	$\frac{x}{L}$=1.008@δ_{BF} =10± .03
55	1.013	1541.56			22.812				.032	δ_{BF} 10° ONLY ↑
56	1.025	1560.56			23.145				.032	BF
57	1.038	1574.30			23.385			↓	.032	δ_{BF} 10° ONLY ↓
58	1.050	1592.82			23.709			0	.030	.03
59	.010	250.90			.226			180	.035	TOP ℄
60	.025	270.26			.565			↑	.035	↑
61	.050	302.52			1.129				.035	
62	.075	334.77			1.694				.033	
63	.100	367.03	↓	↓	2.258	↓	↓	↓	.033	↓
64	.125	399.29	0	--	2.823	0	--	180	.031	TOP ℄

Table IV. (Cont'd) Orbiter

T/C NO.	$\frac{x}{L}$	FULL SCALE x_o	FULL SCALE y	FULL SCALE z	MODEL SCALE x FROM NOSE	MODEL SCALE y	MODEL SCALE z	ϕ	SKIN THICKNESS	REMARKS
65	.150	431.54	0	--	3.387	0	--	180	.026	TOP ℄
66	.160	444.45	↑	↑	3.613	↑	↑	↑	.031	↑
67	.170	457.35			3.839				.031	
68	.180	470.25			4.064				.030	
69	.200	496.06			4.516				.033	
70	.250	560.58			5.645				.030	
71	.300	625.09			6.774				.030	
72	.400	754.12			9.032				.030	
73	.500	883.15			11.290				.030	
74	.600	1012.18			13.548				.031	
75	.700	1141.21	↓	↓	15.806	↓	↓	↓	.032	↓
76	.800	1270.24	0	--	18.064	0	--	180	.030	TOP ℄
77			29.60	478.00	WINDOW #1	0.518	8.365	--	035	TOP LEFT
78			12.80	478.00	WINDOW #1	0.224	8.365	--	.035	TOP RIGHT
79			21.20	464.97	↑	0.371	8.137	↑	.033	CENTER
80			34.40	452.00	↓	0.602	7.910		.035	BOTTOM LEFT
81			6.00	452.00	WINDOW #1	0.105	7.910		.034	BOTTOM RIGHT
82			43.20	478.00	WINDOW #2	0.756	8.365		.035	TOP LEFT
83			34.80	478.00	WINDOW #2	0.609	8.365		.035	TOP RIGHT
84			44.80	464.97	↑	0.784	8.137		.035	CENTER
85			59.20	452.00	↓	1.036	7.910	↓	.035	BOTTOM LEFT
86			40.40	452.00	WINDOW #2	0.707	7.910	--	.035	BOTTOM RIGHT
87			62.40	464.97	WINDOW #3	1.092	8.137	140	.032	CENTER
88	.100	367.03	20.00	--	2.258	0.350	--	10	.035	FUSELAGE BOTTOM SURFACE
89	.150	431.54	24.00	--	3.387	0.420	--	10	.035	↑
90	.050	302.52	25.00	↑	1.129	0.438	--	14	.033	
91	.200	496.06	25.00		4.516	0.438	↑	11.5	.031	
92	.300	625.09	25.00		6.774	0.438		12	.033	
93	.200	496.06	50.00		4.516	0.875		24	.034	
94	.300	625.09	50.00		6.774	0.875		23	.036	
95	.400	754.12	50.00	↓	9.032	0.875	↓	21.5	.026	↓
96	.500	883.15	50.00	--	11.290	0.875	--	21.5	.026	FUSELAGE BOTTOM SURFACE

Table IV. (Cont'd) Orbiter

T/C NO.	x/L	FULL SCALE			MODEL SCALE			Φ	SKIN THICK-NESS	REMARKS
		x_o	y	z	x FROM NOSE	y	z			
97	.600	1012.18	50.00		13.548	0.875		21.5	.021	FUSELAGE SIDE
98	.700	1141.21	50.00		15.806	0.875		↕	.033	
99	.800	1270.24	50.00		18.064	0.875		↕	.033	
100	.900	1399.27	50.00		20.322	0.875		21.5	.034	FUSELAGE SIDE
101	1.000	1528.30	100.00		22.580	1.75		39	.031	BODY FLAP 10° = .034
102	1.050	1592.82	100.00		23.704	1.75		39	.028	BODY FLAP 18° = .033
103	.100	367.03	39.20		2.258	0.686		20	.033	FUSELAGE SIDE
104	.150	431.54	40.80		3.387	0.714		20	.031	↑
105	.050	302.52		303.60	1.129	--	5.313	22	.031	C.C.L. TANGENT
106	.100	367.03	52.00	--	2.258	0.910		24.5	.033	↕
107	.150	431.54	62.00	--	3.387	1.085	--	25.5	.031	↕
108	.200	496.06	65.60	287.20	4.516	1.148	5.026	31.5	.035	C.C.L. TANGENT
109	.300	625.09	74.46	--	6.774	1.303		34	.033	
110	.200	496.06	75.60	292.00	4.516	1.323	5.110	35	.030	
111	.150	431.54	79.20	304.80	3.387	1.386	5.334	40	.030	
112	.200	496.06	85.20	298.80	4.516	1.491	5.229	40	.034	
113	.300	625.09	91.43		6.774	1.600		40	.026	
114	.300	625.09	102.86		6.774	1.800		45	.023	
115	.050	302.52		325.60	1.129		5.698	35	.030	M.H.B. TANGENT
116	.100	367.03		317.60	2.258		5.558	39	.030	M.H.B. TANGENT
117	.150	431.54	83.60	314.4	3.387	1.463	5.502	45.5	.030	M.H.B. TANGENT
118	.200	496.06		320.00	4.516		5.600	51	.030	
119	.300	625.09		330.00	6.774		5.775	57.5	.021	
120	.300	625.09		340.00	6.774		5.950	61	.027	
121	.076	336.51		350.00	1.724		6.125	--	.030	RCS CENTER
122	.300	625.09		350.00	6.774		6.125	65	.026	
123	.800	1270.24		350.00	18.064		6.125	65	.017	
124	.900	1399.27		350.00	20.322		6.125	65	.033	
125	.975	1496.04		350.00	22.016		6.125	68	.034	
126	.975	1496.04		300.00	22.016		5.250	52.5	.032	
127	.050	302.52		342.40	1.129		5.992	25	.030	↓ TANGENT (UPPER)

Teble IV. (Cont'd) Orbiter

T/C NO.	$\frac{x}{L}$	FULL SCALE x_o	y	z	MODEL SCALE x FROM NOSE	y	z	ϕ	SKIN THICKNESS	REMARKS
128	.200	496.06	--	360.00	4.516	--	6.300	67.5	.026	FUSELAGE SIDE
129	.300	625.09	--	360.00	6.774		6.300	70	.023	
130	.600	1012.18		375.14	13.548		6.565	77	.031	
131	.050	302.52		376.40	1.129		6.622	60	.035	45° TANGENT
132	.100	367.03		410.00	2.258		7.175	119	.034	
133	.200	496.06		410.00	4.516		7.175	96.5	.028	
134	.300	625.09		430.00	6.774		7.525	106	.032	FUSELAGE SIDE
135	.400	754.12		430.00	9.032			105	.033	UPPER BODY
136	.500	883.15		430:00	11.290				.032	
137	.600	1012.18		430.00	13.548				.032	
138	.700	1141.21		430.00	15.806				.032	
139	.800	1270.24		430.00	18.064		7.525		.032	
140	.900	1399.27		370.00	20.322		6.475		.033	
141	.300	625.09		478.80	6.774		8.379	135	.031	
142	.400	754.12			9.032			135	.030	
143	.500	883.15			11.290			135	.033	
144	.600	1012.18			13.548			135	.033	
145	.700	1141.21			15.806			135	.032	
146	.600	1012.18		445.0	13.548		7.788	113	.032	
147	.600	1012.18		440.0	13.548		7.70	112	.032	
148	.750	1205.73		450.00	15.806		7.875	116	.032	
149	.750	1502.73		490.00	15.806		8.575	149	.034	UPPER BODY
150	.400	754.12			9.032			59.5	.031	WING UPPER CREASE
151	.500	883.15			11.290			63	.012	
152	.600	1012.18			13.548			65.5	.030	
153	.700	1141.21			15.806			64	.030	
154	.900	1399.27		222.0	20.322			--	.034	WING UPPER CREASE

Table IV. (Continued) Orbiter

T/C NO.	$\frac{2y}{b}$	$\frac{x}{c}$	FULL SCALE		MODEL SCALE		SKIN THICK-NESS	REMARKS
			x_o	y	x_o	y		
155	.250	.025	640.650	117.085	7.043	2.049	.031	WING BOTTOM
156	↑	.153	754.120	↑	9.030	↑	.035	SURFACE
157		.299	883.150		11.288		.028	↑
158		.444	1012.180		13.545		.023	
159		.590	1141.200		15.802		.034	
160	↓	.736	1270.230	↓	18.060	↓	.034	
161	.250	.900	1415.900	117.085	20.613	2.049	.034	
162	.301		754.000		9.030		.023	30° ROLL DOWN
163	.348		883.000		11.288		.028	30° ROLL DOWN
164	.400	.025	1002.063	187.336	13.364	3.278	.035	
165	↑	.100	1039.750	↑	14.031	↑	.034	
166		.200	1090.000		14.900		.034	
167		.302	1141.210		15.802		.035	
168		.559	1270.230		18.060		.032	
169	↓	.700	1341.250	↓	19.307	↓	.032	
170	.400	.900	1441.750	187.336	21.065	3.278	.032	ELEVON
171	.500		1067.470	234.170	14.516	4.098	.033	30° ROLL DOWN
172	↑	.025	1077.913	↑	14.696	↑	.035	
173		.177	1141.210		15.802		.030	
174		.300	1192.450		16.706		.031	
175		.487	1270.230		18.060		.034	
176		.600	1317.428		18.895		.034	
177		.700	1359.028	↓	19.618	↓	.033	
178	↓	.900	1442.350	234.170	21.075	4.098	.033	ELEVON
179	.600	.100	1152.000	281.004	15.995	4.918	.033	↓
180	↑	.200	1188.00	↑	16.625	↑	.031	
181		.300	1224.000		17.255		.026	
182		.428	1270.230		18.064		.026	
183	↓	.600	1332.000	↓	19.145	↓	.027	WING BOTTOM
184	.600	.700	1368.000	281.004	19.775	4.918	.024	SURFACE

Table IV. (Continued) Orbiter

T/C NO.	2y/b	x/c	FULL SCALE x_o	FULL SCALE y	MODEL SCALE x (FROM NOSE)	MODEL SCALE y	SKIN THICKNESS	REMARKS
185	.600	.800	1464.000	281.004	20.404	4.918	.035	[illegible] SURFACE
186	.600	.850	1422.000	↕	20.720		.033	ELEVON
187	.600	.90	1440.000	281.004	21.034		.034	
188	.750		1185.5	351.255	16.599	6.147	.035	L.E. ROLLED
189	↑	.025	1193.428	↑	16.720	↑	.035	DOWN 30°
190		.100	1214.228		17.084		.032	
191		.303	1270.230		18.064		.032	
192		.500	1325.028		19.023		.032	
193		.700	1380.400		19.992		.027	
194		.800	1408.100		20.476		.031	
195	↓	.850	1422.000	↓	20.719	↓	.035	
196	.750	.900	1435.800	351.255	20.962	6.147	.035	
197	.850	.100	1255.200	398.089	17.801	6.967	.031	
198	.850	.300	1299.600	398.089	18.578	6.967	.034	
199	.850	.500	1344.000	398.089	19.355	6.967	.032	
200	.900	.60	1373.028	421.506	19.863	7.376	.024	
201	.900	.30	1314.743	421.506	18.846	7.376	.030	
202	.950			444.857		7.785	.035	L.E. ROLLED 30°
203	↑	.050	1295.925	↑	18.514	↑	.035	
204		.100	1303.828		18.652		.035	
205		.300	1335.543		19.207		.024	
206		.500	1367.257		19.762		.022	
207	↓	.700	1398.950		20.316	↓	.035	
208	.950	.900	1430.650	↓	20.870	7.785	.030	
209	.966	0.00	1307.000	452.416	18.708	7.917	.032	L.E.
210	.993	0.00	1398.950	464.914	20.316	8.136	.031	L.E.
211	.600			281.004		4.918	.035	CLOSEOUT
212	↕			↕		↕	.035	↕
213	↓			↓		↓	.035	↓
214	.600			281.004		4.918	.035	WING BOTTOM CLOSEOUT

Table IV. (Continued) Orbiter

T/C NO.	$\frac{2y}{b}$	$\frac{x}{c}$	FULL SCALE		MODEL SCALE		SKIN THICK-NESS	REMARKS
			x_o	y	x (FROM NOSE)	y		
215	.600			281.004		4.918	.035	CLUSTER B SEE FIG. 6
216	.600			281.004		4.918	.035	
217	.600			281.004		4.918	.035	
218	.850			398.089		6.967	.020	CLUSTER C SEE FIG. 6
219	↑			↑		↑	.020	
220							.020	
221							.020	
222							.020	
223	↓			↓		↓	.020	
224	.850			398.089		6.967	.020	
225	.400	.050	1015.114	187.336	13.599	3.278	.025	WING TOP SURFACE
226	↑	.200	1090.428	↑	14.918	↑	.024	
227	↓	.600	1291.171	↓		↓	.033	
228	.400	.950	1466.875	187.336		3.278	.031	ELEVON
229	.600	.050	1134.886	281.004	15.696	4.918	.032	
230	.600	.200	1188.657	↑	16.637	↑	.031	
231	.600	.600	1332.028		19.146		.0	
232	↑	.800	1404.000		20.404		.032	ELEVON
233	↓	.900	1440.000	↓	21.034	↓	.034	
234	.600	.950	1458.000	281.004	21.349	4.918	.033	
235	.800	.050	1223.057	374.672	17.239	6.557	.033	
236	↑	.200	1260.257	↑	17.889	↑	.033	
237		.600	1359.514		19.627		.032	
238		.800	1408.780		20.488		.030	ELEVON
239	↓	.900	1433.690	↓	20.924	↓	.030	ELEVON
240	.800	.950	1446.145	374.672	21.192	6.557	.030	ELEVON

Table IV. (Continued)

Orbiter

T/C NO.	x/L	FULL SCALE			MODEL SCALE			φ	SKIN THICK-NESS	REMARKS
		x_o	y	z	x (FROM NOSE)	y	z			
241	.829	1307			18.715				.026	BOTTOM [illegible] OF OMS
242	.900	1399.27			20.318				.035	BOTTOM [illegible] OF OMS
243	.975	1496.04			22.011				.030	BOTTOM [illegible] OF OMS
244	1.000	1528.3			22.575				.034	BOTTOM OF FCS
245	1.014	1547.0			22.902				.035	BOTTOM OF FCS
246	.780	1245	95.0	474.0	17.608	1.662	8.295	127.9	.032	OMS PODS
247	.805	1276	112.9	474.0	18.173	1.976	8.295	123.8	.031	
248	.829	1307	124.5	474.0	18.715	2.179	8.295	120.8	.031	
249	.862	1350	132.6		19.460	2.320	8.295	119.1	.035	
250	.963	1480	142.5		21.740	2.494	8.295	117.5	.028	
251	1.000	1528.3	142.5		22.575	2.494	8.295	117.5	.033	
252	1.014	1547.0		474.0	22.902		8.295		.033	
253	.805	1276	105.5	488	18.173	1.846	8.540	129.5	.032	
254	.829	1307	117.0	498.7	18.715	2.048	8.727	130.0	.033	
255	.862	1350	126.5	506	19.460	2.214	8.855	130.0	.031	
256	.963	1480	134.5	513	21.740	2.354	8.978	130.0	.028	
257	1.000	1528.3		500	22.575		8.750		.031	
258	1.014	1547.0		500	22.902		8.750		.032	
259	.805	1276	95.0	494.3	18.173	1.662	8.650	135.0	.033	
260	.829	1307	95.0	511.0	18.715	1.662	8.942	139.0	.034	
261	.862	1350	95.0	521.0	19.460	1.662	9.118	142.1	.031	
262	.963	1480	95.0	530.0	21.740	1.662	9.275	144.0	.027	
263	.862	1350	65	517.5	19.460	1.138	9.056	151.2	.031	
264	.963	1480	65	527.0	21.740	1.138	9.222	153	.026	OMS PODS

Table IV. (Continued) Orbiter

T/C NO.	$\frac{z}{b_v}$	$\frac{x}{c}$	FULL SCALE x_o	FULL SCALE z	MODEL SCALE x (FROM NOSE)	MODEL SCALE z	SKIN THICKNESS	REMARKS
265	.159	.100	1353.00	550.20	19.513	9.628	.030	VERTICAL TAIL
266	↑	.300	1421.51	550.20	20.361	9.628	.030	↑
267	↓	.700	1498.66	550.20	22.062	9.628	.028	↓
268	.299	0.00		594.40		10.402	.033	L.E.
269	↑	.100	1394.94	↑	20.246	↑	.031	
270	↕	.300	1439.00	↕	21.018	↕	.031	
271	↕	.500	1483.06	↕	21.789	↕	.031	
272	↓	.700	1527.11	↓	22.559	↓	.022	
273	.299	.900	1571.17	594.40	23.330	10.402	.022	
274	.532	0.00		667.96		11.689	.034	L.E.
275	↑	.100	1538.31	↑	22.755	↑	.031	
276	↕	.300	1574.94	↕	23.396	↕	.032	
277	↕	.500	1611.57	↕	35.034	↕	.032	
278	↓	.700	1648.14	↓	24.677	↓	.023	
279	.532	.900	1684.77	667.96	25.318	11.689	.026	
280	.765	0.00		741.53		12.977	.034	L.E.
281	.765	.100	1461.00	↑	21.403	↑	.031	
282	↑	.300	1490.14	↕	21.912	↕	.031	
283	↕	.500	1519.29	↕	22.423	↕	.030	
284	↓	.700	1548.43	↓	22.933	↓	.024	
285	.765	.900	1577.57	741.53	23.442	12.977	.024	
286	.905	0.00		785.73		13.750	.033	L.E.
287	.905	.100	1576.49	785.73	23.424	13.750	.030	↓
288	.905	.500	1625.86	785.73	24.288	13.750	.030	VERTICAL TAIL

Table IV. Orbiter Left Main NOzzle T/C Locations
Model 22-OTS

T/C NO.	x FROM EXIT PLANE F.S.	x FROM EXIT PLANE M.S.	ϕ_n CLOCKWISE LOOKING FORWARD SKIN THICKNESS	ϕ_n CLOCKWISE LOOKING FORWARD 0° BOTTOM ℄
301	5"	0.088	.031	0°
302	↓	↓	.031	25°
303			.031	45°
304			.031	65°
305			.031	90°
306			.031	135°
307	↓	↓	.031	315°
308	10"	0.175	.031	0°
309	↓	↓	.031	25°
310			.031	45°
311			.031	65°
312	↓	↓	.031	90°
313	15"	0.263	.031	0°
314	↓	↓	.031	45°
315	↓	↓	.031	90°
316	25"	0.438	.031	0°
317	↓	↓	.031	45°
318			.031	65°
319	↓	↓	.031	90°
320	45"	0.788	.031	45°
321			.032	BASE PLATE
322			.034	↓
323			.031	
324			.032	↓

Table IV. External Tank Locations

T/C NO.	x_T FS	x^*_{ms}	$\frac{x}{L}$	θ	SKIN THICKNESS	REMARKS
501	383.60	1.306	.040	0°	.034	NOSE
502	458.20	2.6110	.080	↕	.034	NOSE
503	588.75	4.896	.150	↕	.035	NOSE
504	1055.00	13.055	.400	↕	.035	
505	1428.00	19.582	.600	↕	.034	
506	1801.00	26.110	.800	0°	.035	
507	1055.00	13.055	.400	45°	.035	
508	1241.50	16.319	.500	↕	.035	
509	1428.00	19.582	.600	↕	.034	
510	1614.50	22.846	.700	↕	.034	
511	1801.00	26.110	.800	↕	.035	
512	1987.5	29.374	.900	45°	↕	
513	868.5	9.791	.300	67.5°		
514	961.75	11.423	.350	↕		
515	1055.00	13.055	.400	↕	.035	
516	1241.50	16.319	.500	↕	.034	
517	1428.00	19.582	.600	↕	↕	
518	1521.25	21.214	.650	↕	↕	
519	1614.50	22.846	.700	↕	.034	
520	1707.75	24.478	.750	↕	.035	
521	1801.00	26.110	.800	↕	↕	
522	1987.5	29.374	.900	67.5°	↕	
523	682.00	6.528	.200	90°	↕	
524	775.25	8.159	.250	↕	↕	
525	821.88	8.975	.275	↕	↕	
526	868.50	9.791	.300	↕	↕	
527	915.12	10.607	.325	↕	↕	
528	961.75	11.423	.350	↕	.035	
529	1055.00	13.055	.400	↕	.034	
530	1148.25	14.687	.450	↕	.035	
531	1241.5	16.319	.500	↕	.034	
532	1334.75	17.951	.550	↕	.035	
533	1428.00	19.582	.600	90°	.034	

*MEASURED FROM NOSE

Table IV. (Continued)

(External Tank)

T/C NO.	x_T FS	x^*_{ms}	$\frac{x}{L}$	θ	SKIN THICKNESS	REMARKS
534	1521.25	21.214	.650	90°	.034	
535	1614.50	22.846	.700	↑	.034	
536	1707.75	24.478	.750		.035	
537	1801.00	26.110	.800		.035	
538	1894.25	27.742	.850	↓	.034	
539	1987.50	29.374	.900	90°		
540	821.88	8.975	.275	112.5°	.035	
541	868.50	9.791	.300	↑	↑	
542	915.12	10.607	.325			
543	961.75	11.423	.350			
544	1055.00	13.055	.400		↓	
545	1148.25	14.687	.450		.035	
546	1241.50	16.319	.500		.034	
547	1334.75	17.951	.550		.035	
548	1428.00	19.582	.600		.034	
549	1521.25	21.214	.650		.034	
550	1614.50	22.846	.700		.034	
551	1707.75	24.478	.750		.035	
552	1801.00	26.110	.800		↑	
553	1894.25	27.742	.850	↓	↓	
554	1987.50	29.374	.900	112.5°	.035	
555	1847.62	26.926	.825	123°	.034	
556	1894.25	27.742	.850	↑	.035	
557	1940.88	28.558	.875		.034	
558	1987.50	29.374	.900		.035	
559	2034.12	30.190	.925	↓	.035	
560	2099.40	31.332	.960	123°	.034	
561	915.12	10.607	.325	135°	.035	
562	961.75	11.423	.350	↑	↑	
563	1008.38	12.239	.375			
564	1055.00	13.055	.400		↓	
565	1148.25	14.687	.450		.035	
566	1241.50	16.319	.500		.034	
567	1334.75	17.951	.550		.035	
568	1428.00	19.582	.600	↓	.034	
569	1521.25	21.214	.650	135°	.034	

*MEASURED FROM NOSE

Table IV. (Continued)
(External Tank)

T/C NO.	x_T FS	x^*_{ms}	$\frac{x}{L}$	θ	SKIN THICKNESS	REMARKS
570	1614.50	22.846	.700	135°	.035	
571	1707.75	24.478	.750	↑	.034	
572	1801.00	26.110	.800		.035	
573	1894.25	27.742	.850		.034	
574	1987.50	29.374	.900	↓	.035	
575	2052.78	30.576	.935	135°		
576	1055.00	13.055	.400	151	.035	
577	1101.62	13.871	.425	157	↕	
578	1148.25	14.687	.450	↑	↕	
579	1194.88	15.503	.475		.035	
580	1241.50	16.319	.500		.034	
581	1334.75	17.951	.550		.035	
582	1428.00	19.582	.600		.034	
583	1521.25	21.214	.650		.034	
584	1614.50	22.846	.700		.035	
585	1707.75	24.478	.750		.035	
586	1801.00	26.110	.800		.035	
587	1894.25	27.742	.850	↓	.034	
588	1987.50	29.374	.900	157	.034	
589	1101.62	13.871	.425	161	.035	
590	1241.50	16.319	.500	165°	.034	
591	1614.50	22.846	.700	165°	.035	
592	1987.50	29.374	.900	165°	.034	
593	1055.00	13.055	.400	165°	.035	
594	309.00	0.000	0.000	180	.033	NOSE
595	318.32	0.163	.005	↑	.033	↓
596	327.65	0.326	.010		.034	
597	383.60	1.306	.040	↓	.033	
598	458.20	2.611	.080	180°	.035	

*MEASURED FROM NOSE

Table IV. (CONTINUED)
(External Tank)

T/C NO.	x_T FS	x^*_{ms}	$\frac{x}{L}$	θ	SKIN THICKNESS	REMARKS
599	588.75	4.896	.150	180°	.035	
600	682.00	6.528	.200		.034	
601	775.25	8.159	.250		.035	
602	868.50	9.791	.300			
603	961.75	11.423	.350			
604	1008.38	12.239	.375		.035	
605	1055.00	13.055	.400		.034	
606	1101.62	13.871	.425			
607	1148.25	14.687	.450			
608	1194.88	15.503	.475			
609	1241.50	16.319	.500		.034	
610	1288.12	17.135	.525		.035	
611	1334.75	17.951	.550		.035	
612	1381.38	18.767	.575		.034	
613	1428.00	19.582	.600			
614	1474.62	20.398	.625			
615	1521.25	21.214	.650			
616	1567.88	22.030	.675			
617	1614.50	22.846	.700		.034	
618	1707.75	24.478	.750		.035	
619	1801.00	26.110	.800		.035	
620	1894.25	27.742	.850		.035	
621	1987.5	29.374	.900		.034	
622	2056.50	30.581	.937		.034	
623	2127.38	31.822	.975	180°	.034	
624	458.20	2.611	.080	194°	.035	
625	587.75	4.896	.150	196°	.035	
626	868.50	9.791	.300	136°	.035	

*MEASURED FROM NOSE

Table VI. (Concluded)

(External Tank)

T/C NO.	x_T FS	x^*_{ms}	$\frac{x}{L}$	θ	SKIN THICKNESS	REMARKS
627	1241.50	16.319	.500	196°	.034	
628	1614.50	22.846	.700	196°	.034	
629	1987.50	29.374	.900	197°	.034	
630	588.75	4.896	.150	208°	.033	
631	1055.00	13.055	.400	↑	.034	
632	1428.00	19.582	.600	↕	.035	
633	1801.00	26.110	.800	↓	.035	
634	2056.50	30.581		208	.035	
635	1055.00	13.055	.400	216°	.034	
636	1241.50	16.319	.500	216°	.034	
637	1614.50	22.846	.700	216°	.034	
638	933.78	10.934	.335	222.5°	.036	
639	1055.00	13.055	.400	229°	.034	
640	1428.00	19.582	.600	229°	.035	
641	1801.00	26.110	.800	229°	.035	

*MEASURED FROM NOSE

TABLE V.

THERMOCOUPLE HOOKUP SCHEDULE

T/C Schedule 1

Channel No.	T/C No.	Channel No.	T/C No.	Channel No.	T/C No.
1	1	33	34	65	68
2	2	34	35	66	69
3	3	35	36	67	71
4	4	36	37	68	72
5	5	37	38	69	74
6	6	38	39	70	90
7	7	39	40	71	91
8	8	40	41	72	92
9	9	41	42	73	93
10	10	42	43	74	94
11	11	43	44	75	95
12	12	44	45	76	96
13	14	45	46	77	97
14	15	46	47	78	98
15	16	47	48	79	99
16	17	48	49	80	100
17	18	49	50	81	101
18	19	50	51	82	102
19	20	51	52	83	103
20	21	52	53	84	104
21	22	53	54	85	105
22	23	54	56	86	111
23	24	55	58	87	115
24	25	56	59	88	116
25	26	57	60	89	134
26	27	58	61	90	135
27	28	59	62	91	150
28	29	60	63	92	155
29	30	61	64	93	156
30	31	62	65	94	157
31	32	63	66	95	158
32	33	64	67	96	159
				97	160

TABLE V. - Continued.

THERMOCOUPLE HOOKUP SCHEDULE

T/C Schedule 2

Chan No.	T/C No	Chan No	T/C No	Chan No.	T/C No.
1	161	33	193	65	229
2	162	34	194	66	230
3	163	35	195	67	233
4	164	36	196	68	234
5	165	37	197	69	246
6	166	38	198	70	247
7	167	39	199	71	248
8	168	40	200	72	249
9	169	41	201	73	274
10	170	42	202	74	275
11	171	43	203	75	276
12	172	44	204	76	280
13	173	45	205	77	281
14	174	46	206	78	282
15	175	47	207	79	285
16	176	48	208	80	286
17	177	49	209	81	288
18	178	50	210	82	501
19	179	51	211	83	502
20	180	52	212	84	503
21	181	53	213	85	504
22	182	54	214	86	505
23	183	55	215	87	506
24	184	56	216	88	507
25	185	57	217	89	508
26	186	58	218	90	509
27	187	59	219	91	510
28	188	60	220	92	511
29	189	61	221	93	512
30	190	62	222	94	513
31	191	63	223	95	515
32	192	64	224	96	516
				97	517

TABLE V. - Continued.

THERMOCOUPLE HOOKUP SCHEDULE

T/C Schedule 3

Chan No	T/C No	Chan No.	T/C No	Chan No.	T/C No
1	519	33	574	65	609
2	521	34	576	66	610
3	523	35	577	67	611
4	526	36	578	68	612
5	529	37	579	69	613
6	531	38	580	70	614
7	533	39	581	71	615
8	535	40	582	72	616
9	537	41	583	73	617
10	539	42	584	74	618
11	541	43	585	75	619
12	544	44	586	76	620
13	546	45	587	77	621
14	548	46	589	78	622
15	550	47	590	79	623
16	552	48	591	80	624
17	555	49	592	81	625
18	557	50	594	82	626
19	558	51	595	83	627
20	561	52	596	84	628
21	562	53	597	85	629
22	563	54	598	86	630
23	564	55	599	87	631
24	565	56	600	88	632
25	566	57	601	89	633
26	567	58	602	90	634
27	568	59	603	91	635
28	569	60	604	92	636
29	570	61	605	93	637
30	571	62	606	94	638
31	572	63	607	95	639
32	573	64	608	96	640
				97	641

TABLE V. - Continued.

THERMOCOUPLE HOOKUP SCHEDULE

T/C Schedule 4

Chan No	T/C No	Chan No	T/C No	Chan No	T/C No
1	77	33	34	65	68
2	78	34	35	66	69
3	79	35	36	67	71
4	80	36	37	68	72
5	81	37	38	69	74
6	82	38	39	70	90
7	83	39	40	71	91
8	84	40	41	72	92
9	85	41	42	73	93
10	86	42	43	74	94
11	87	43	44	75	95
12	12	44	45	76	96
13	14	45	46	77	97
14	15	46	47	78	98
15	16	47	48	79	99
16	17	48	49	80	100
17	18	49	50	81	101
18	19	50	51	82	102
19	20	51	52	83	103
20	21	52	53	84	104
21	22	53	54	85	105
22	23	54	56	86	111
23	24	55	58	87	115
24	25	56	59	88	116
25	26	57	60	89	134
26	27	58	61	90	135
27	28	59	62	91	150
28	29	60	63	92	155
29	30	61	64	93	156
30	31	62	65	94	157
31	32	63	66	95	158
32	33	64	67	96	159
				97	160

TABLE V. - Continued.

THERMOCOUPLE HOOKUP SCHEDULE

T/C Schedule 5

Chan No	T/C No
1	Open
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	Open
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	Open
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	501
83	502
84	503
85	504
86	505
87	506
88	507
89	508
90	509
91	510
92	511
93	512
94	513
95	515
96	516
97	517

TABLE V. - Continued.

T/C Schedule 6

THERMOCOUPLE HOOKUP SCHEDULE

Chan No	T/C No
1	59
2	60
3	61
4	62
5	63
6	64
7	65
8	66
9	67
10	68
11	69
12	70
13	71
14	72
15	73
16	74
17	75
18	76
19	88
20	89
21	90
22	91
23	92
24	101
25	102
26	103
27	104
28	105
29	106
30	107
31	108
32	109
33	110
34	111
35	112
36	113
37	114
38	115
39	116
40	117
41	118
42	119
43	120
44	121
45	122
46	123
47	124
48	125
49	126
50	127
51	128
52	129
53	130
54	131
55	132
56	133
57	134
58	135
59	136
60	137
61	138
62	139
63	140
64	141
65	142
66	143
67	144
68	145
69	146
70	147
71	148
72	149
73	150
74	151
75	152
76	153
77	154
78	155
79	156
80	157
81	158
82	159
83	160
84	161
85	162
86	163
87	164
88	165
89	166
90	167
91	168
92	169
93	170
94	171
95	172
96	173
97	174

TABLE V. - Continued.

THERMOCOUPLE HOOKUP SCHEDULE

T/C Schedule _ 7_

Chan No	T/C No	Chan No	T/C No	Chan No	T/C No
1	175	33	207	65	255
2	176	34	208	66	256
3	177	35	209	67	258
4	178	36	210	68	259
5	179	37	211	69	260
6	180	38	212	70	261
7	181	39	213	71	262
8	182	40	214	72	263
9	183	41	215	73	264
10	184	42	216	74	265
11	185	43	217	75	266
12	186	44	218	76	267
13	187	45	219	77	268
14	188	46	220	78	269
15	189	47	221	79	270
16	190	48	222	80	271
17	191	49	223	81	272
18	192	50	224	82	273
19	193	51	241	83	274
20	194	52	242	84	275
21	195	53	243	85	276
22	196	54	244	86	277
23	197	55	245	87	278
24	198	56	246	88	279
25	199	57	247	89	280
26	200	58	248	90	281
27	201	59	249	91	282
28	202	60	250	92	283
29	203	61	251	93	284
30	204	62	252	94	285
31	205	63	253	95	286
32	206	64	254	96	287
				97	288

TABLE V. - Continued.

THERMOCOUPLE HOOKUP SCHEDULE

T/C Schedule 8

Channel No.	T/C No.	Channel No.	T/C No.	Channel No.	T/C No.
1	1	33	34	65	84
2	2	34	35	66	85
3	3	35	36	67	86
4	4	36	37	68	87
5	5	37	38	69	93
6	6	38	39	70	94
7	7	39	40	71	95
8	8	40	41	72	96
9	9	41	42	73	97
10	10	42	43	74	98
11	11	43	44	75	99
12	12	44	45	76	100
13	14	45	46	77	225
14	15	46	47	78	226
15	16	47	48	79	227
16	17	48	49	80	228
17	18	49	50	81	229
18	19	50	51	82	230
19	20	51	52	83	231
20	21	52	53	84	232
21	22	53	54	85	233
22	23	54	55	86	234
23	24	55	56	87	235
24	25	56	57	88	236
25	26	57	58	89	237
26	27	58	77	90	238
27	28	59	78	91	239
28	29	60	79	92	240
29	30	61	80	93	Open
30	31	62	81	94	↕
31	32	63	82	95	
32	33	64	83	96	
				97	Open

TABLE V. - Continued.

THERMOCOUPLE HOOKUP SCHEDULE

T/C Schedule 9

Channel No.	T/C No.	Channel No.	T/C No.	Channel No.	T/C No.
1	301	33	9	65	42
2	302	34	10	66	43
3	303	35	11	67	44
4	304	36	12	68	45
5	305	37	14	69	46
6	306	38	15	70	47
7	307	39	16	71	48
8	308	40	17	72	49
9	309	41	18	73	50
10	310	42	19	74	51
11	311	43	20	75	52
12	312	44	21	76	53
13	313	45	22	77	54
14	314	46	23	78	56
15	315	47	24	79	58
16	316	48	25	80	93
17	317	49	26	81	94
18	318	50	27	82	95
19	319	51	28	83	96
20	319	52	29	84	97
21	321	53	30	85	98
22	322	54	31	86	99
23	323	55	32	87	100
24	324	56	33	88	91
25	1	57	34	89	108
26	2	58	35	90	110
27	3	59	36	91	112
28	4	60	37	92	92
29	5	61	38	93	109
30	6	62	39	94	113
31	7	63	40	95	114
32	8	64	41	96	Open
				97	Open

TABLE V. - Concluded.

THERMOCOUPLE HOOKUP SCHEDULE

T/C Schedule 10

Chan No	T/C No	Chan No	T/C No	Chan No	T/C No
1	155	33	187	65	219
2	156	34	188	66	220
3	157	35	189	67	221
4	158	36	190	68	222
5	159	37	191	69	223
6	160	38	192	70	224
7	161	39	193	71	Open
8	162	40	194	72	
9	163	41	195	73	
10	164	42	196	74	
11	165	43	197	75	
12	166	44	198	76	
13	167	45	199	77	
14	168	46	200	78	
15	169	47	201	79	
16	170	48	202	80	
17	171	49	203	81	
18	172	50	204	82	
19	173	51	205	83	
20	174	52	206	84	
21	175	53	207	85	
22	176	54	208	86	
23	177	55	209	87	
24	178	56	210	88	
25	179	57	211	89	
26	180	58	212	90	
27	181	59	213	91	
28	182	60	214	92	
29	183	61	215	93	
30	184	62	216	94	
31	185	63	217	95	
32	186	64	218	96	
				97	

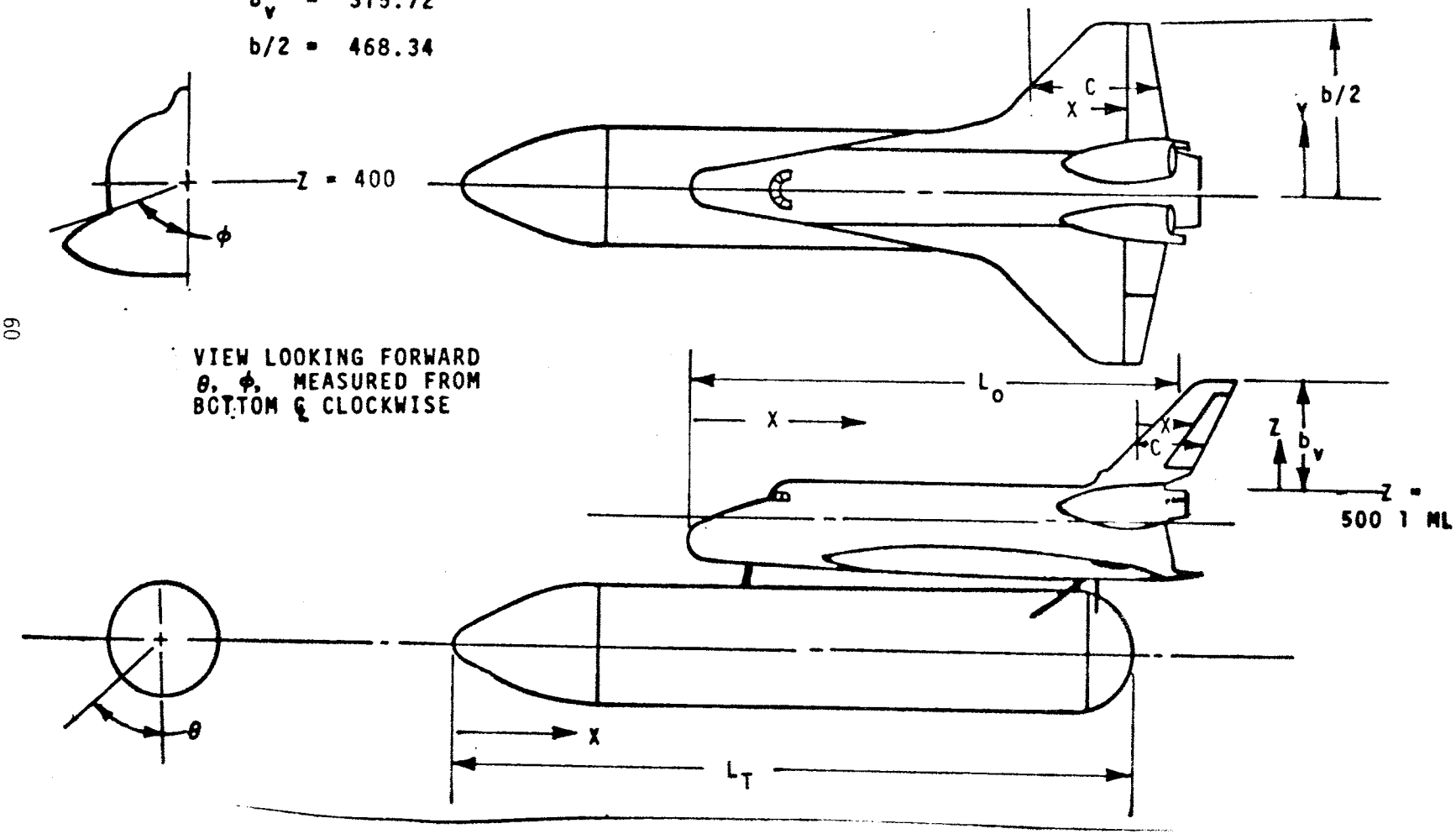
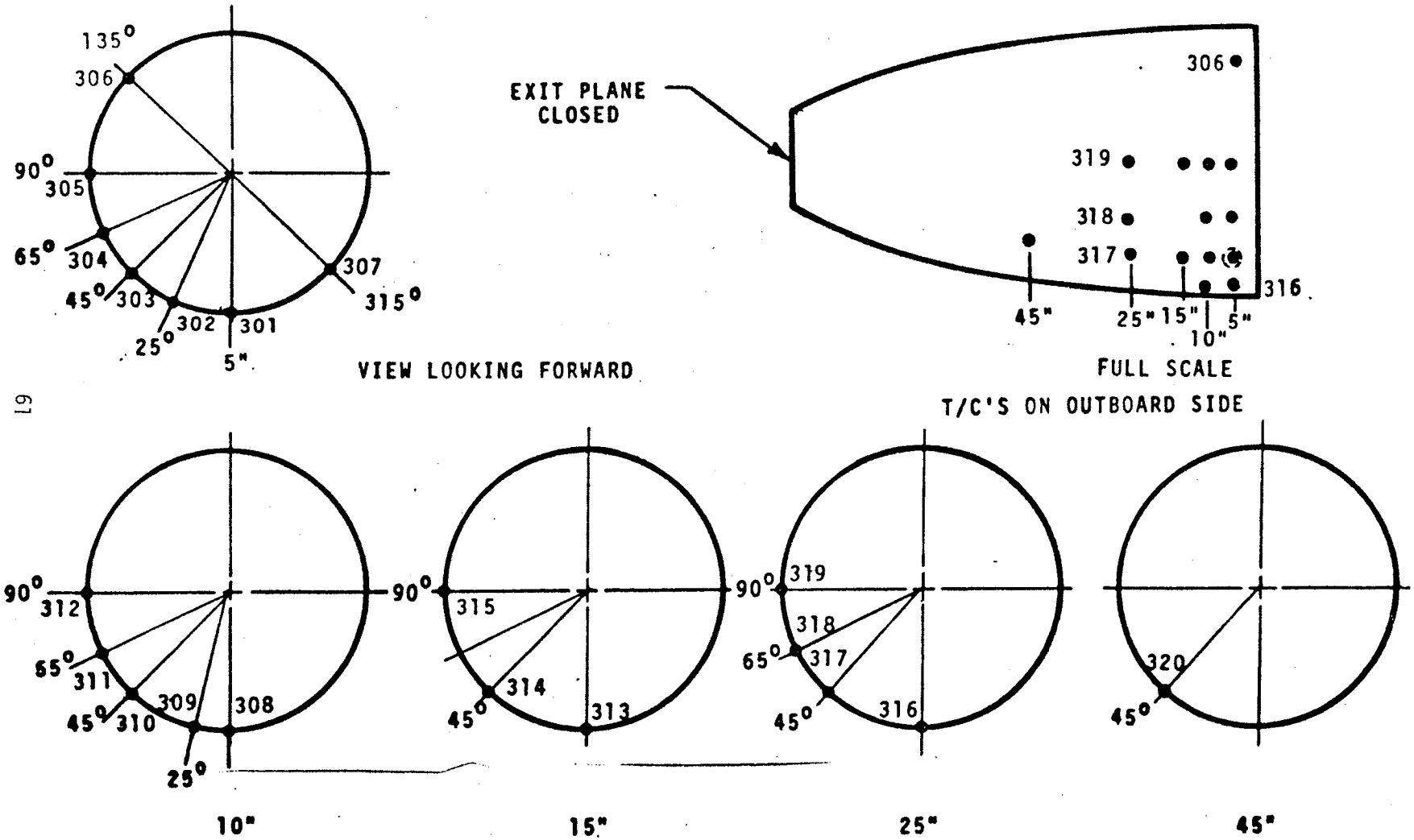
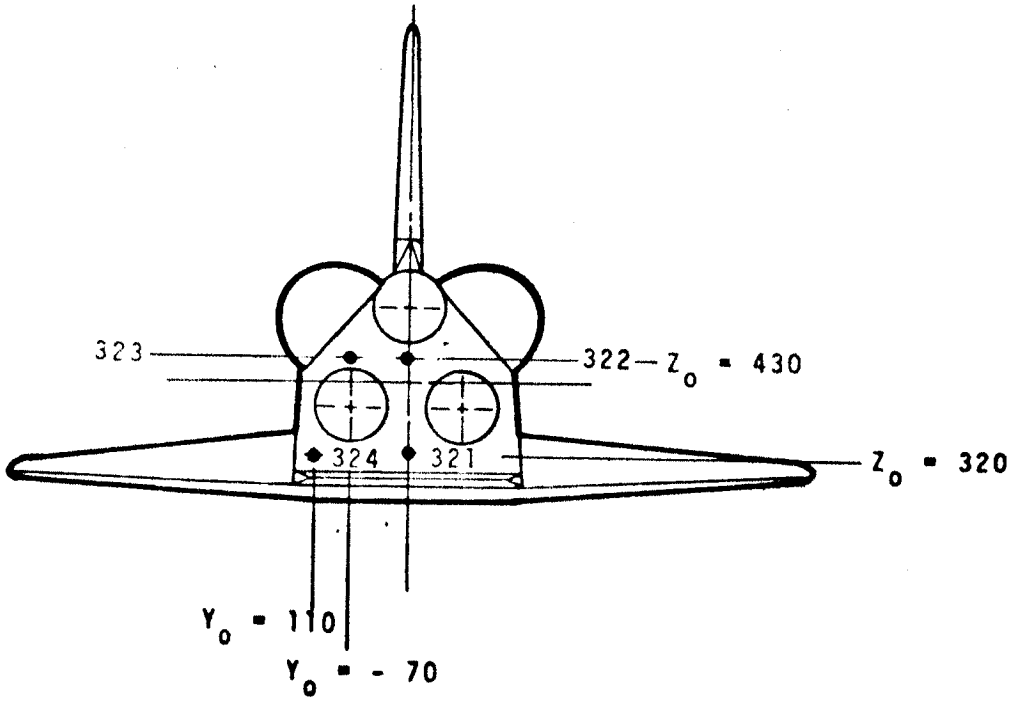


Figure 1. - Model instrumentation reference system.



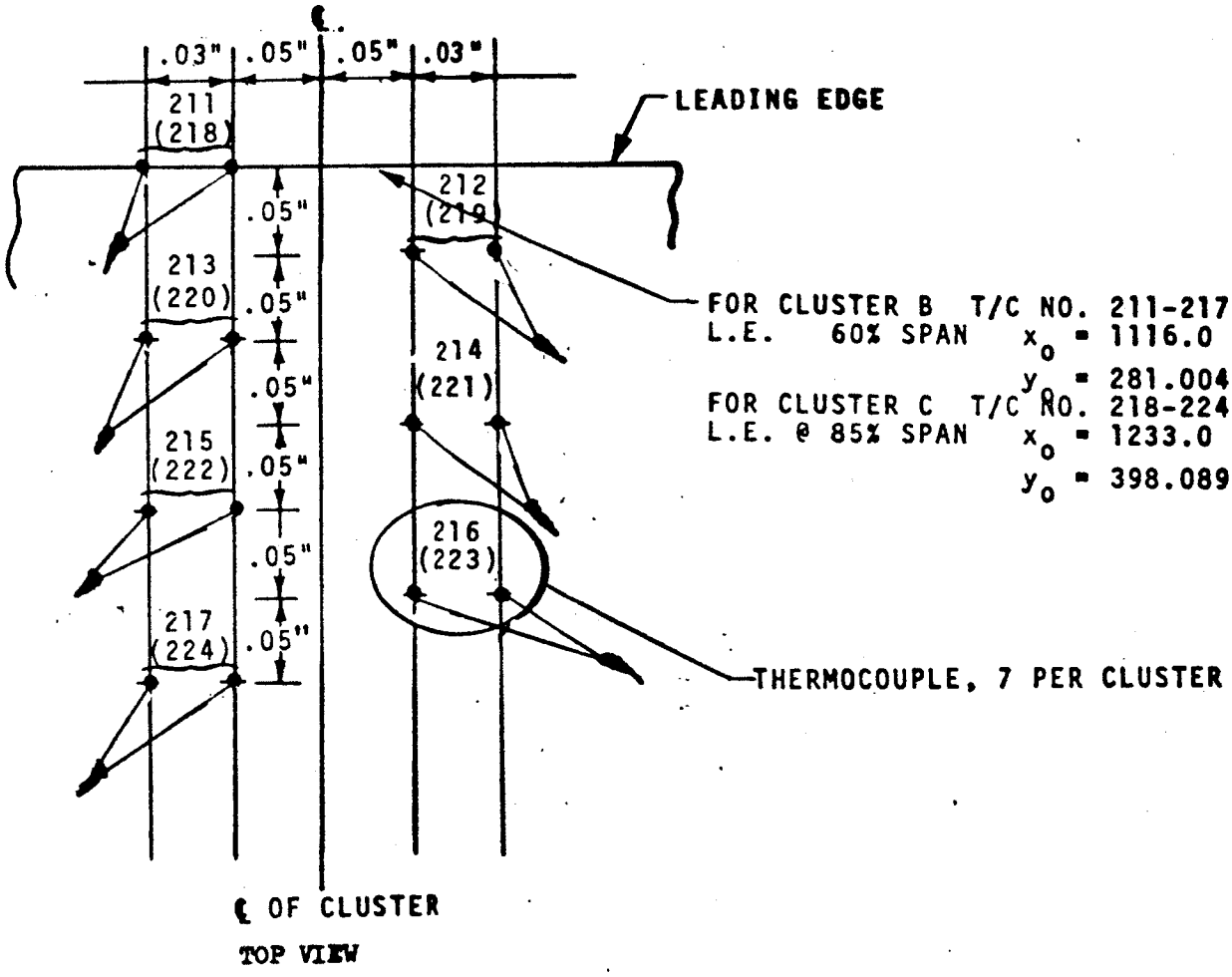
a. 22-OTS Instrumented nozzle

Figure 2. - Orbiter instrumentation.



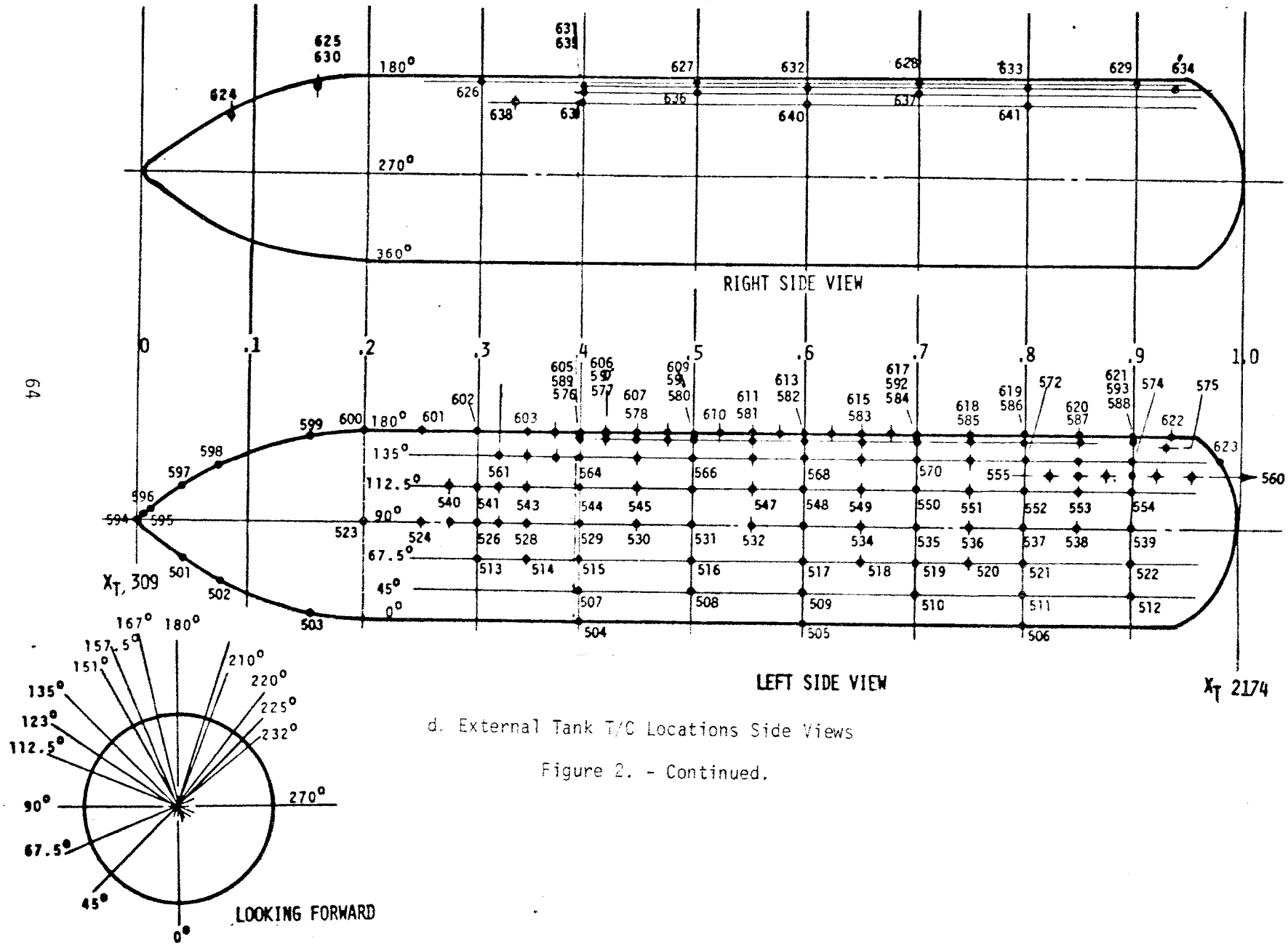
b. Instrumented Nozzle Base Plate
Model 22-OTS

Figure 2. - Continued.



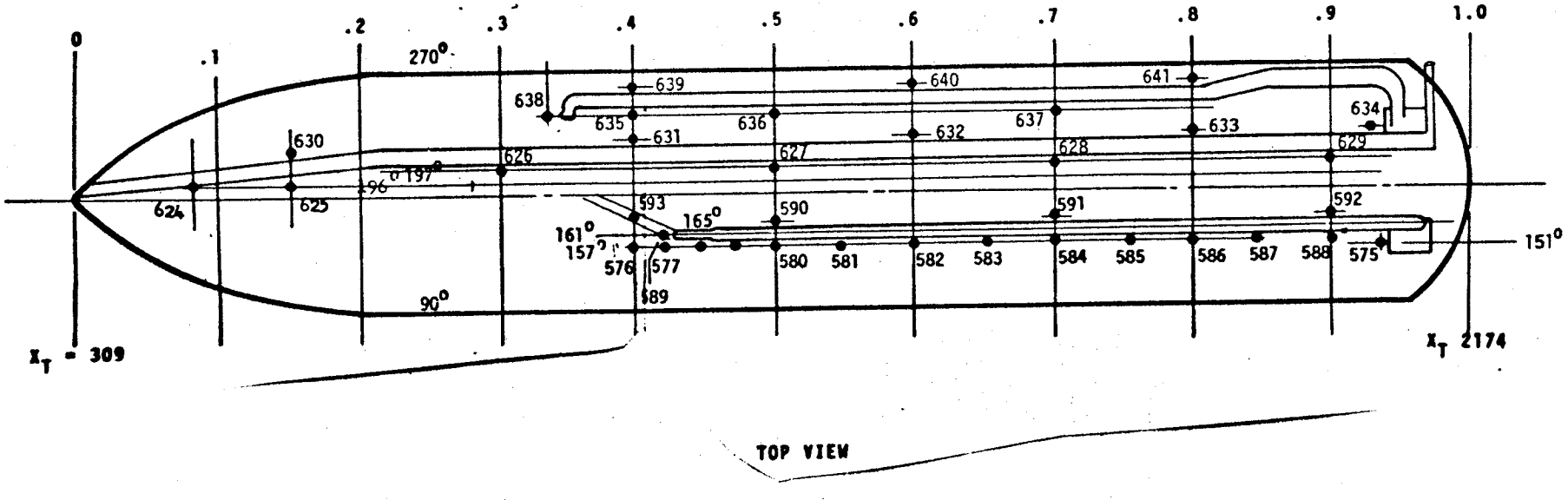
c. Wing Leading Edge Clusters B and C T/C Locations

Figure 2. - Continued.



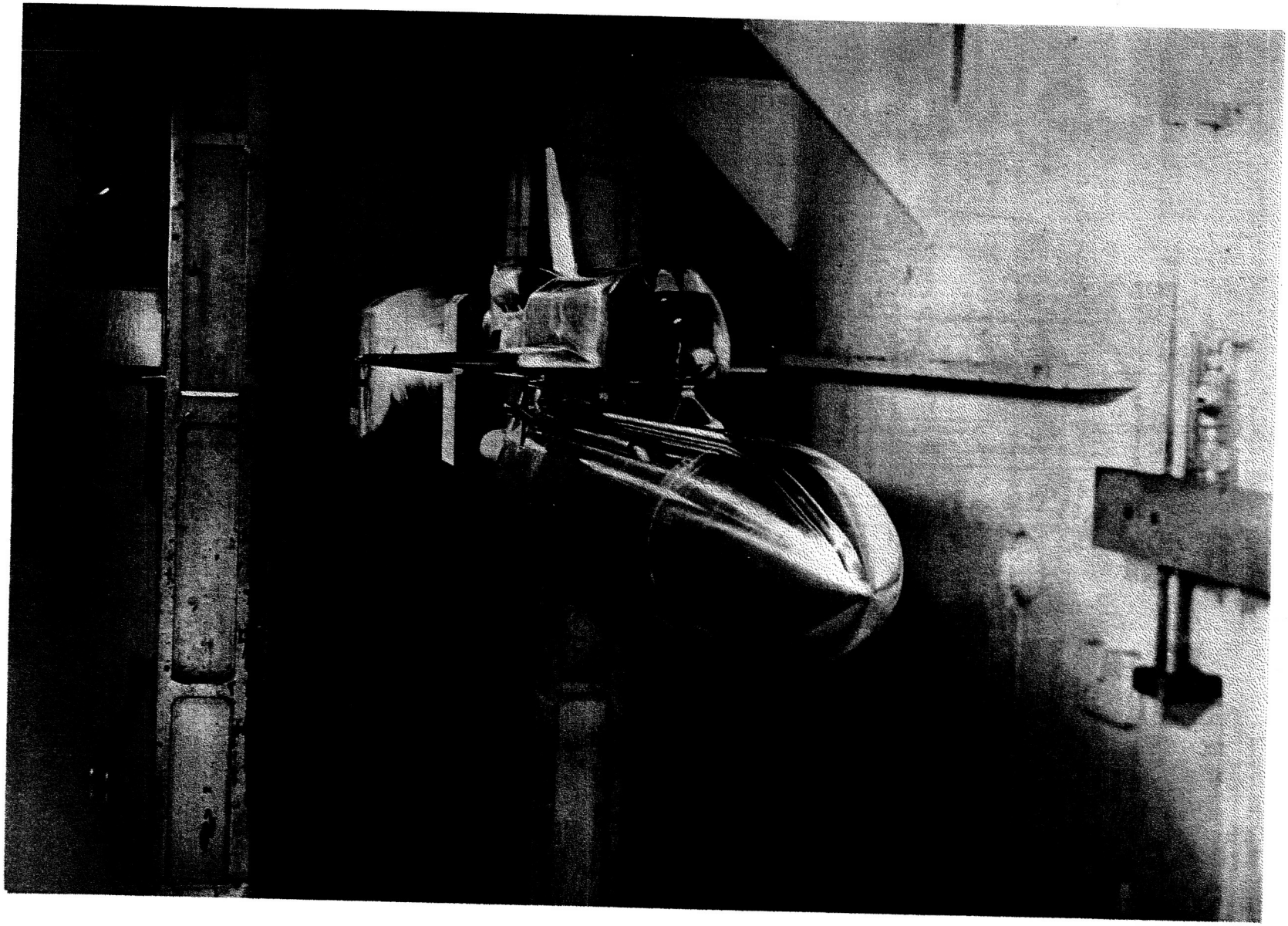
d. External Tank T/C Locations Side Views

Figure 2. - Continued.



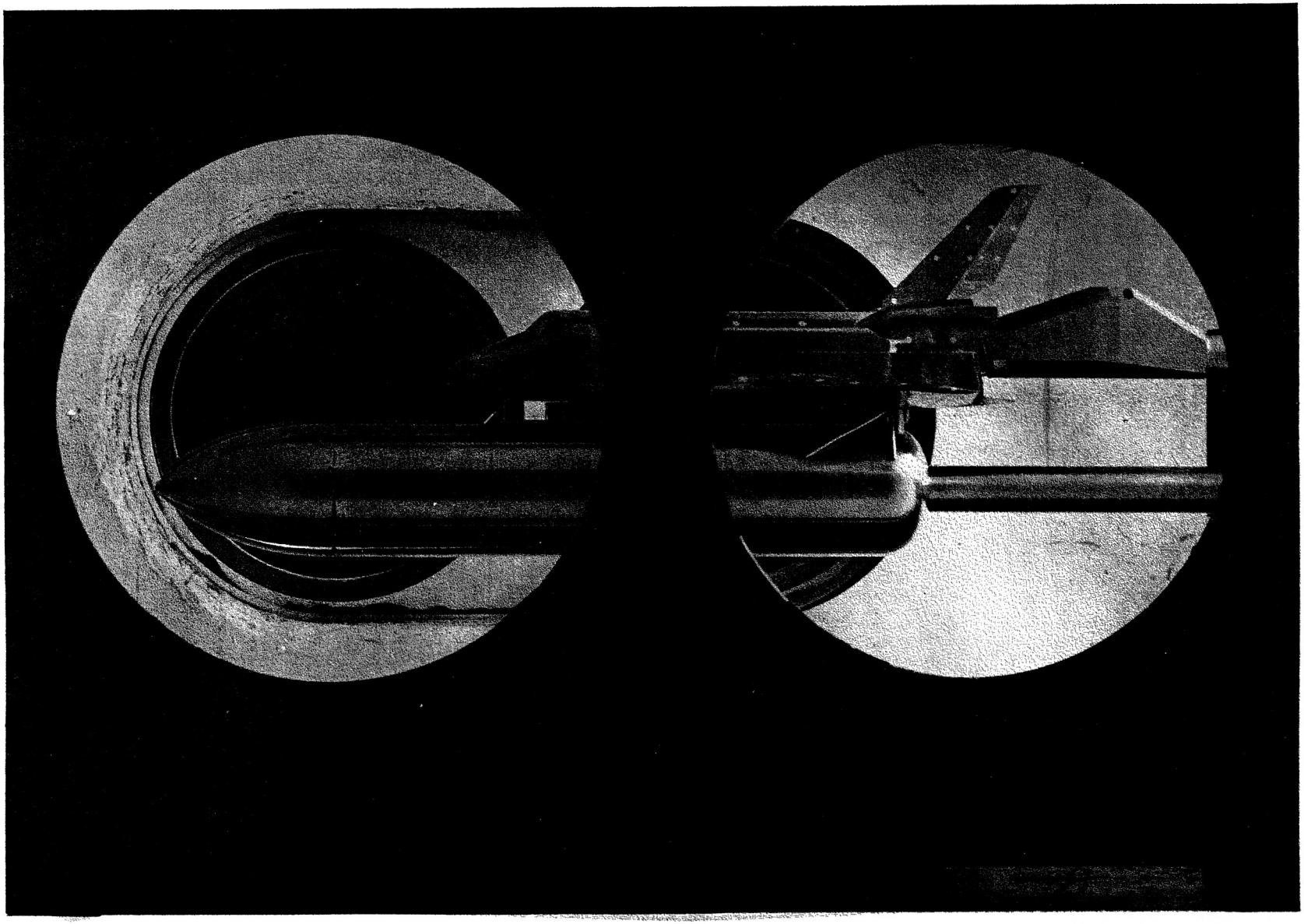
e. External Tank T/C Locations (Locations around plumbing only) Top View

Figure 2. - Concluded.



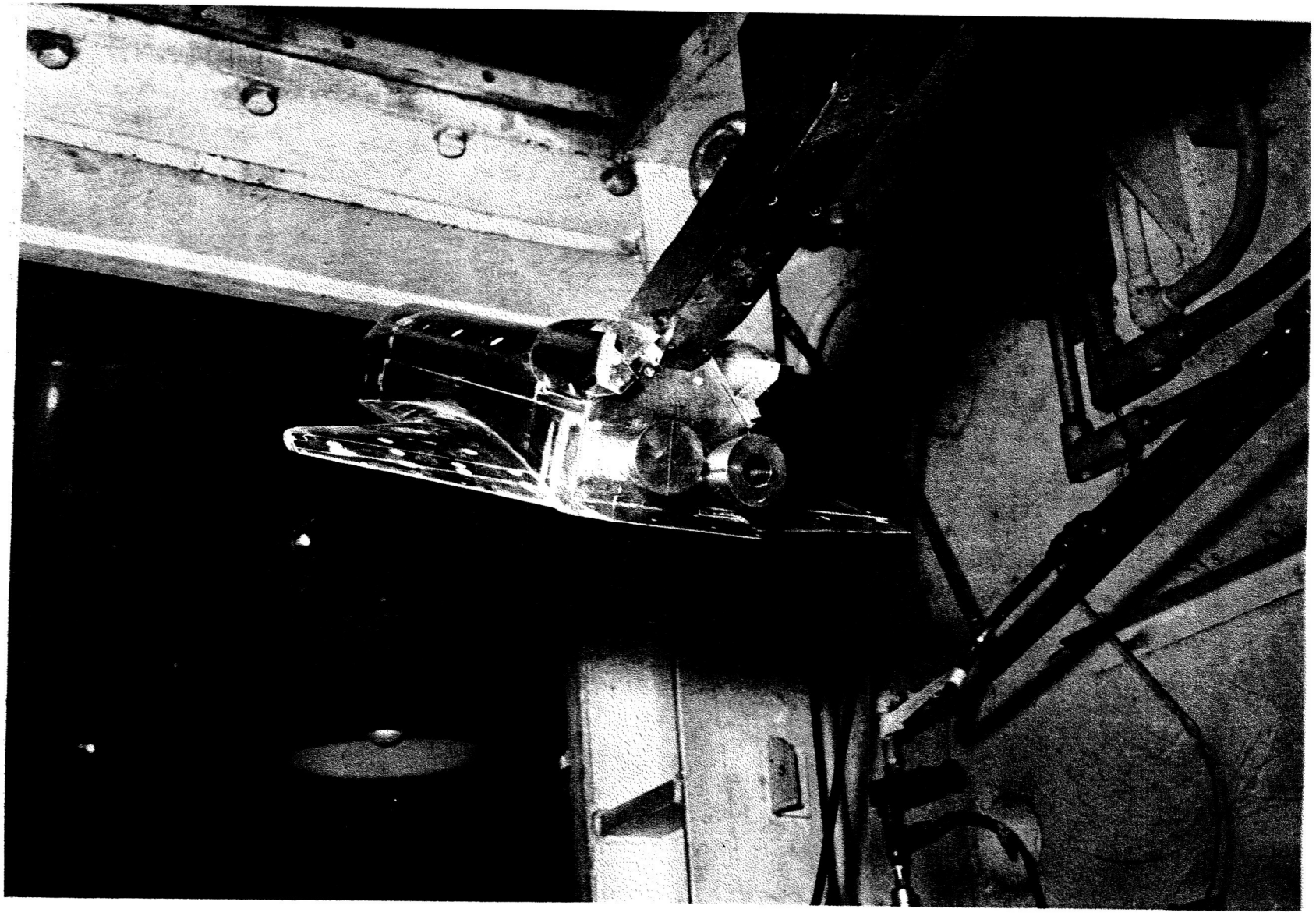
a. Second Stage Configuration Front View

Figure 3. - Model photographs.



b. Second Stage Configuration Side View

Figure 3. - Continued.



c. Re-entry Nozzle Heating Installation

Figure 3. - Concluded.

APPENDIX

TABULATED SOURCE DATA

Recovery Factor = 0.85
Recovery Factor = 0.0

Components are designated by the 4th character in the dataset identifier.

T	tank
B	orbiter fuselage
L	bottom wing surface
U	upper wing surface
V	vertical tail
N	left main nozzle
R	RCS center
P	base plate
M	OMS pod
Y	orbiter fuselage, Y = 0.875
C	wing upper crease
F	orbiter fuselage, Y = 7.525

AEDC VA352 OH4B O1+T10 EXTERNAL TANK (BTKT01) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HI/H0

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.000												.8691			
.005												.5361			
.010												.8002			
.040	.0988											.3611			
.080	.0472											.3800	.2035		
.150	.0110											.1183	.1583		.1013
.200				.0214								.0707			
.250				.0000								.0587			
.275				.0000	.0000										
.300			.0085	.0127	.0285							.0765	.0534		
.325				.0000	.0000		.0553								
.350			.0000	.0000	.0000		.0558					.0824			
.375							.0563					.0733			
.400	.0059	.0055	.0084	.0175	.0379		.0529		.0716		.0000	.1398			.0563
.425									.1678	.1645		.2879			
.450				.0000	.0000		.0684		.2460			.5239			
.475									.1722			.0863			
.500		.0039	.0101	.0206	.0485		.1073		.0908		.0834	.0333	.1229		
.525												.1769			
.550				.0000	.0000		.0670		.0389			.1573			
.575												.1127			
.600	.0186	.0028	.0000	.0099	.0316		.0452		.0480			.0827			.0716
.625												.0742			
.650			.0000	.0000	.0000		.0610		.0265			.0772			
.675												.0903			
.700		.0046	.0101	.0090	.0289		.0510		.0382		.0652	.0747	.0819		
.750			.0000	.0000	.0000		.0492		.0334			.0469			
.800	.0325	.0038	.0032	.0037	.0273		.0427		.0189			.0506			.0327
.825						.0609									
.850				.0000	.0000	.0000	.0713		.0151			.0393			
.875						.0313									
.900		.0089	.0000	.0149	.0000	.0401	.0411		.0000		.0763	.0664		.0724	
.925						.0000									
.935								.0000							
.937												.1196			.1506
.960						.0000									
.975												.0257			

PHI	216.0000	222.5000	229.0000

MACH (1) = 8.000 ALPHA (1) = -10.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HI/HO

PHI 216.0000222.5000229.0000

X/LT			
.335		.0664	
.400	.0755		.0722
.500	.1338		
.600			.0378
.700	.0542		
.800			.0000

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HI/HO

PHI .0000 45.0000 67.5000 90.0000112.5000123.0000135.0000151.0000157.0000161.0000165.0000180.0000196.0000197.0000208.0000

X/LT														
.000											.9163			
.005											.6167			
.010											.9370			
.040	.1422										.3161			
.080	.0751										.2534	.1471		
.150	.0207										.0799	.0997		.0781
.200				.0270							.0305			
.250				.0000							.0135			
.275				.0000	.0000									
.300			.0090	.0144	.0173						.0105	.0388		
.325				.0000	.0000		.0222							
.350			.0000	.0000	.0000		.0252				.0206			
.375							.0273				.0605			
.400	.0021	.0066	.0116	.0133	.0185		.0359	.0848		.0000	.0768			.0366
.425								.1044	.1036		.2041			
.450				.0000	.0000		.0547	.0638			.6270			
.475								.0486			.0737			
.500		.0077	.0097	.0207	.0374		.0435	.0477		.0723	.0218	.1027		
.525											.1334			
.550				.0000	.0000		.0709	.0286			.1384			
.575											.0952			
.600	.0065	.0144	.0000	.0295	.0237		.0528	.0358			.0673			.0522
.625											.0582			
.650			.0000	.0000	.0000		.0578	.0197			.0606			
.675											.0701			
.700		.0123	.0147	.0122	.0350		.0428	.0266		.0618	.0615	.0583		
.750			.0000	.0000	.0000		.0424	.0273			.0421			
.800	.0145	.0133	.0051	.0182	.0218		.0394	.0176			.0470			.0323
.825						.0496								
.850				.0000	.0000	.0000	.0619	.0132			.0361			
.875						.0232								

AEDC VA352 OH4B O1+T10 EXTERNAL TANK (BTKT01)

MACH (1) = 8.000 ALPHA (2) = -5.000

SECTION (1)EXTERNAL TANK DEFENDENT VARIABLE HI/HO

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.900		.0075	.0000	.0147	.0000	.0323	.0373		.0000		.0666	.0638		.0593	
.925						.0000									
.935								.0000							
.937												.1250			.1413
.960						.0000									
.975												.0191			

PHI	216.0000	222.5000	229.0000
X/LT			
.335		.0518	
.400	.0648		.0621
.500	.1463		
.600			.0205
.700	.0513		
.800			.0000

MACH (1) = 8.000 ALPHA (3) = .000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)EXTERNAL TANK DEFENDENT VARIABLE HI/HO

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.000												.9369			
.005												.5912			
.010												.8593			
.040	.1843											.2487			
.080	.1070											.2134	.1283		
.150	.0348											.0614	.0586		.0556
.200				.0167								.0193			
.250				.0000								.0068			
.275				.0000	.0000										
.300			.0091	.0084	.0147							.0035	.0254		
.325				.0000	.0000		.0107								
.350			.0000	.0000	.0000		.0076					.0198			
.375							.0174					.0365			
.400	.0082	.0081	.0083	.0066	.0112		.0283	.0458		.0000		.0418			.0234
.425								.0577	.0648			.1489			
.450				.0000	.0000		.0364	.0345				.5050			
.475								.0253				.0550			
.500		.0060	.0043	.0160	.0307		.0307	.0291		.0598		.0247	.0954		
.525												.0655			
.550				.0000	.0000		.0516	.0155				.0701			

MACH (1) = 8.000 ALPHA (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HI/HO

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.600	.0056	.0031	.0000	.0320	.0172		.0511		.0285			.0528			.0336
.625												.0444			
.650			.0000	.0000	.0000		.0452		.0221			.0355			
.675												.0383			
.700		.0118	.0138	.0311	.0250		.0463		.0188		.0331	.0465	.0283		
.750			.0000	.0000	.0000		.0360		.0190			.0364			
.800	.0030	.0175	.0314	.0246	.0273		.0373		.0142			.0349			.0248
.825						.0499									
.850				.0000	.0000	.0000	.0634		.0142			.0352			
.875						.0231									
.900		.0205	.0000	.0095	.0000	.0295	.0414		.0000		.0501	.0715		.0540	
.925						.0000									
.935								.0000							
.937												.1175			.1196
.960						.0000									
.975												.0171			

PHI	216.0000	222.5000	229.0000
X/LT			
.335		.0044	
.400	.0329		.0354
.500	.1285		
.600			.0195
.700	.0467		
.800			.0000

MACH (1) = 8.000 ALPHA (4) = 5.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HI/HO

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.000												.9585			
.005												.5099			
.010												.7085			
.040	.2255											.1958			
.080	.1370											.1729	.1066		
.150	.0522											.0425	.0314		.0417
.200				.0130								.0131			
.250				.0000								.0037			
.275				.0000	.0000										
.300			.0133	.0102	.0075							.0060	.0123		
.325				.0000	.0000		.0052								

AEDC VA352 OH4B O1+T10 EXTERNAL TANK (BTKT01)

MACH (1) = 8.000 ALPHA (4) = 5.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HI/HO

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.350			.0000	.0000	.0000		.0075					.0139			
.375							.0120					.0209			
.400	.0178	.0148	.0127	.0060	.0080		.0200	.0309		.0000		.0509			.0150
.425								.0390	.0473			.2489			
.450				.0000	.0000		.0220	.0095				.1919			
.475								.0110				.0286			
.500		.0133	.0086	.0080	.0279		.0281	.0157		.0462		.0355	.0526		
.525												.0433			
.550				.0000	.0000		.0367	.0108				.0428			
.575												.0465			
.600	.0172	.0142	.0000	.0158	.0269		.0389	.0181				.0396			.0234
.625												.0325			
.650			.0000	.0000	.0000		.0415	.0222				.0305			
.675												.0346			
.700		.0139	.0158	.0162	.0211		.0459	.0240		.0157		.0304	.0247		
.750			.0000	.0000	.0000		.0448	.0187				.0264			
.800	.0196	.0133	.0084	.0059	.0285		.0430	.0128				.0284			.0188
.825						.0203									
.850				.0000	.0000	.0000	.0740	.0266				.0414			
.875						.0296									
.900		.0149	.0000	.0209	.0000	.0364	.0563	.0000		.0591		.0816		.0498	
.925						.0000									
.935									.0000						
.937												.1103			.0787
.960						.0000									
.975												.0129			

PHI	216.0000	222.5000	229.0000
X/LT			
.335		.0028	
.400	.0105		.0437
.500	.0803		
.600			.0398
.700	.0361		
.800			.0000

AEDC VA352 OH4B O1+T10 EXTERNAL TANK (BTKT02) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 BETA (1) = -2.000 TI = 97.350 QI = 3.942 HREF = .049

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HI/HO

PHI .0000 45.0000 67.5000 90.0000112.5000123.0000135.0000151.0000157.0000161.0000165.0000180.0000196.0000197.0000208.0000

X/LT														
.000											.9524			
.005											.6191			
.010											.8044			
.040	.1897										.2821			
.080	.1070										.2214	.1487		
.150	.0349										.0612	.0537		.0468
.200				.0208							.0208			
.250				.0000							.0092			
.275				.0000	.0000									
.300			.0122	.0133	.0122						.0044	.0127		
.325				.0000	.0000		.0192							
.350			.0000	.0000	.0000		.0187				.0254			
.375							.0162				.0432			
.400	.0087	.0109	.0118	.0117	.0119		.0184		.0426		.0000	.0418			.0350
.425									.0671	.0642		.1529		
.450				.0000	.0000		.0401		.0664			.4793		
.475									.0436			.0616		
.500		.0094	.0102	.0077	.0351		.0372		.0545		.0809	.0356	.0909	
.525												.0676		
.550				.0000	.0000		.0521		.0310			.0727		
.575												.0662		
.600	.0073	.0063	.0000	.0277	.0344		.0580		.0348			.0540			.0219
.625												.0427		
.650			.0000	.0000	.0000		.0492		.0389			.0328		
.675												.0324		
.700		.0090	.0337	.0446	.0235		.0496		.0259		.0273	.0435	.0305	
.750			.0000	.0000	.0000		.0389		.0255			.0366		
.800	.0027	.0193	.0329	.0245	.0331		.0312		.0237			.0341			.0176
.825						.0739								
.850				.0000	.0000	.0000	.0713		.0158			.0389		
.875						.0315								
.900		.0263	.0000	.0152	.0000	.0322	.0558		.0000		.0698	.0834		.0431	
.925						.0000								
.935								.0000						
.937												.1285			.0432
.960						.0000								
.975												.0163		

PHI 216.0000222.5000229.0000

AEDC VA352 OH4B O1+T10 EXTERNAL TANK (BTKT02)

MACH (1) = 8.000 BETA (1) = -2.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HI/HO

PHI 216.0000222.5000229.0000

X/LT			
.335		.0110	
.400	.0429		.0398
.500	.0774		
.600			.0134
.700	.0396		
.800			.0000

MACH (1) = 8.000 BETA (2) = .000 TI = 97.350 QI = 3.942 HREF = .049

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HI/HO

PHI .0000 45.0000 67.5000 90.0000112.5000123.0000135.0000151.0000157.0000161.0000165.0000180.0000196.0000197.0000208.0000

X/LT														
.000											.9369			
.005											.5912			
.010											.8593			
.040	.1843										.2487			
.080	.1079										.2134	.1283		
.150	.0348										.0614	.0586		.0556
.200				.0167							.0193			
.250				.0000							.0068			
.275				.0000	.0000									
.300			.0091	.0084	.0147						.0035	.0254		
.325				.0000	.0000		.0107							
.350			.0000	.0000	.0000		.0076				.0198			
.375							.0174				.0365			
.400	.0082	.0081	.0083	.0066	.0112		.0283	.0458		.0000	.0418			.0234
.425								.0577	.0648		.1489			
.450				.0000	.0000		.0364	.0345			.5050			
.475								.0253			.0550			
.500		.0060	.0043	.0160	.0307		.0307	.0291		.0598	.0247	.0954		
.525											.0655			
.550				.0000	.0000		.0516	.0155			.0701			
.575											.0602			
.600	.0056	.0031	.0000	.0320	.0172		.0511	.0285			.0528			.0336
.625											.0444			
.650			.0000	.0000	.0000		.0452	.0221			.0355			
.675											.0383			
.700		.0118	.0138	.0311	.0250		.0463	.0188		.0331	.0465	.0283		
.750			.0000	.0000	.0000		.0360	.0190			.0364			
.800	.0030	.0175	.0314	.0246	.0273		.0373	.0142			.0349			.0248
.825						.0499								
.850				.0000	.0000	.0000	.0634	.0142			.0352			
.875						.0231								

MACH (1) = 6.000 BETA (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HI/HO

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.900		.0205	.0000	.0095	.0000	.0295	.0414		.0000		.0501	.0715		.0540	
.925						.0000									
.935								.0000							
.937												.1175			.1196
.960						.0000									
.975												.0171			

PHI	216.0000	222.5000	229.0000
X/LT			
.335		.0044	
.400	.0329		.0354
.500	.1285		
.600			.0195
.700	.0467		
.800			.0000

AEDC VA352 OH4B O1+T10 EXTERNAL TANK (BTKT03) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HI/HO

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.000												.8817			
.005												.5176			
.010												.6898			
.040	.1082											.3129			
.080	.0525											.3283	.1282		
.150	.0136											.0992	.0562		.0489
.200				.0190								.0476			
.250				.0000								.0293			
.275				.0000	.0000										
.300			.0076	.0094	.0157							.0269	.0269		
.325				.0000	.0000		.0208								
.350			.0000	.0000	.0000		.0117					.0233			
.375							.0203					.0287			
.400	.0034	.0035	.0041	.0052	.0130		.0213		.0382		.0000	.0520			.0172
.425									.0674	.0782		.2538			
.450				.0000	.0000		.0322		.0727			.3529			
.475									.0781			.0675			
.500		.0034	.0076	.0144	.0253		.1033		.0529		.0524	.0245	.0876		
.525												.0800			
.550				.0000	.0000		.0534		.0166			.0874			
.575												.0731			
.600	.0117	.0028	.0000	.0112	.0292		.0541		.0164			.0565			.0341
.625												.0557			
.650			.0000	.0000	.0000		.0550		.0096			.0547			
.675												.0496			
.700		.0033	.0102	.0123	.0239		.0526		.0128		.0206	.0406	.0273		
.750			.0000	.0000	.0000		.0436		.0112			.0317			
.800	.0079	.0039	.0056	.0049	.0249		.0391		.0038			.0267			.0180
.825						.0172									
.850				.0000	.0000	.0000	.0277		.0053			.0121			
.875						.0127									
.900		.0030	.0000	.0065	.0000	.0230	.0341		.0000		.0122	.0238		.0189	
.925						.0000									
.935								.0000							
.937												.1338			.0958
.960						.0000									
.975												.0145			

PHI	216.0000	222.5000	229.0000

AEDC VA352 OH4B O1+T10 EXTERNAL TANK (BTKT03)

MACH (1) = 8.000 ALPHA (1) = -10.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HI/HO

PHI 216.0000222.5000229.0000

X/LT			
.335		.0270	
.400	.0698		.0589
.500	.1686		
.600			.0090
.700	.0335		
.800			.0000

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 93.425 OI = .582 HREF = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HI/HO

PHI .0000 45.0000 67.5000 90.0000112.5000123.0000135.0000151.0000157.0000161.0000165.0000180.0000196.0000197.0000208.0000

X/LT														
.000											.9263			
.005											.4874			
.010											.7207			
.040	.1474										.2681			
.060	.0770										.2291	.1002		
.150	.0235										.0774	.0334		.0338
.200				.0188							.0331			
.250				.0000							.0172			
.275				.0000	.0000									
.300			.0084	.0107	.0131						.0097	.0180		
.325				.0000	.0000		.0141							
.350			.0000	.0000	.0000		.0086				.0141			
.375							.0126				.0256			
.400	.0025	.0052	.0056	.0054	.0092		.0141	.0244		.0000	.0337			.0120
.425								.0369	.0408		.1140			
.450				.0000	.0000		.0187	.0209			.3684			
.475								.0653			.0635			
.500		.0021	.0039	.0092	.0188		.0327	.0478		.0615	.0290	.1081		
.525											.0516			
.550				.0000	.0000		.0665	.0175			.0464			
.575											.0514			
.600	.0032	.0071	.0000	.0112	.0303		.0485	.0154			.0467			.0256
.625											.0390			
.650			.0000	.0000	.0000		.0543	.0079			.0417			
.675											.0440			
.700		.0069	.0148	.0144	.0276		.0422	.0099		.0170	.0349	.0265		
.750			.0000	.0000	.0000		.0396	.0111			.0284			
.800	.0121	.0060	.0080	.0071	.0200		.0307	.0039			.0247			.0156
.825						.0153								
.850				.0000	.0000	.0000	.0254	.0035			.0124			
.875						.0123								

AEDC VA352 OH4B O1+T10 EXTERNAL TANK (BTKT03)

MACH (1) = 8.000 ALPHA (2) = -5.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HI/H0

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.900		.0052	.0000	.0104	.0000	.0183	.0244		.0000		.0096	.0201		.0150	
.925						.0000									
.935								.0000							
.937												.1723			.0820
.960						.0000									
.975												.0122			

PHI	216.0000	222.5000	229.0000
X/LT			
.335		.0127	
.400	.0545		.0358
.500	.1139		
.600			.0093
.700	.0304		
.800			.0000

MACH (1) = 8.000 ALPHA (3) = .000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HI/H0

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.000												.9635			
.005												.4515			
.010												.6205			
.040	.1922											.2303			
.080	.1093											.1621	.0899		
.150	.0366											.0535	.0212		.0216
.200				.0177								.0200			
.250				.0000								.0087			
.275				.0000	.0000										
.300			.0096	.0099	.0103							.0036	.0046		
.325				.0000	.0000		.0065								
.350			.0000	.0000	.0000		.0070					.0110			
.375							.0088					.0212			
.400	.0088	.0090	.0076	.0054	.0058		.0091		.0159		.0000	.0232			.0074
.425									.0186	.0214		.0990			
.450				.0000	.0000		.0144		.0098			.2983			
.475									.0202			.0542			
.500		.0053	.0034	.0065	.0222		.0287		.0279		.0456	.0274	.0905		
.525												.0357			
.550				.0000	.0000		.0562		.0121			.0324			

AEDC VA352 OH4B O1+T10 EXTERNAL TANK (BTKT03)

MACH (1) = 8.000 ALPHA (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HI/HO

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.600	.0046	.0036	.0000	.0389	.0082		.0584		.0102			.0438			.0132
.625												.0356			
.650			.0000	.0000	.0000		.0560		.0128			.0325			
.675												.0366			
.700		.0087	.0096	.0165	.0259		.0445		.0146		.0117	.0317	.0161		
.750			.0000	.0000	.0000		.0316		.0084			.0248			
.800	.0029	.0128	.0268	.0181	.0239		.0212		.0028			.0203			.0089
.825						.0147									
.850				.0000	.0000	.0000	.0221		.0031			.0110			
.875						.0121									
.900		.0099	.0000	.0113	.0000	.0128	.0315		.0000		.0103	.0222		.0126	
.925						.0000									
.935								.0000							
.937												.0816			.0546
.960						.0000									
.975												.0110			

PHI	216.0000	222.5000	229.0000
X/LT			
.335		.0036	
.400	.0118		.0106
.500	.0550		
.600			.0060
.700	.0241		
.800			.0000

MACH (1) = 8.000 ALPHA (4) = 5.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HI/HO

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.000												.9750			
.005												.4108			
.010												.4908			
.040	.2301											.1899			
.080	.1391											.1149	.0749		
.150	.0551											.0334	.0150		.0171
.200				.0174								.0143			
.250				.0000								.0059			
.275				.0000	.0000										
.300			.0132	.0128	.0080							.0033	.0040		
.325				.0000	.0000		.0029								

AEDC VA352 OH4B O1+T10 EXTERNAL TANK (BTKT03)

MACH (1) = 8.000 ALPHA (4) = 5.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HI/HO

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.350			.0000	.0000	.0000		.0036					.0080			
.375							.0062					.0137			
.400	.0172	.0146	.0118	.0081	.0036		.0142	.0156		.0000		.0363			.0022
.425								.0297	.0311			.1631			
.450				.0000	.0000		.0141	.0138				.1154			
.475								.0142				.0189			
.500		.0130	.0096	.0043	.0131		.0250	.0153		.0373		.0168	.0293		
.525												.0175			
.550				.0000	.0000		.0373	.0061				.0169			
.575												.0156			
.600	.0159	.0139	.0000	.0037	.0301		.0417	.0076				.0149			.0077
.625												.0152			
.650			.0000	.0000	.0000		.0457	.0067				.0165			
.675												.0171			
.700		.0132	.0050	.0045	.0266		.0423	.0085		.0118		.0151	.0104		
.750			.0000	.0000	.0000		.0381	.0077				.0157			
.800	.0194	.0127	.0080	.0089	.0212		.0319	.0052				.0143			.0107
.825						.0091									
.850				.0000	.0000	.0000	.0250	.0065				.0225			
.875						.0089									
.900		.0121	.0000	.0074	.0000	.0109	.0369	.0000		.0155		.0267		.0132	
.925						.0000									
.935								.0000							
.937												.0313			.0264
.960						.0000									
.975												.0050			

PHI	216.0000	222.5000	229.0000
X/LT			
.335		.0036	
.400	.0022		.0028
.500	.0865		
.600			.0103
.700	.0097		
.800			.0000

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 BETA (1) = -2.000 TI = 93.550 QI = .681 HREF = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HI/HO

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.000												.9470			
.005												.4963			
.010												.5737			
.040	.1925											.2422			
.080	.1125											.1611	.0873		
.150	.0390											.0485	.0206		.0202
.200				.0220								.0172			
.250				.0000								.0085			
.275				.0000	.0000										
.300			.0129	.0119	.0136							.0030	.0032		
.325				.0000	.0000		.0116								
.350			.0000	.0000	.0000		.0090					.0122			
.375							.0056					.0165			
.400	.0094	.0115	.0112	.0108	.0086		.0058		.0164		.0000	.0256			.0113
.425									.0220	.0232		.0990			
.450				.0000	.0000		.0162		.0124			.3147			
.475									.0177			.0562			
.500		.0090	.0080	.0053	.0152		.0191		.0432		.0621	.0293	.0704		
.525												.0406			
.550				.0000	.0000		.0456		.0203			.0388			
.575												.0425			
.600	.0066	.0057	.0000	.0164	.0117		.0553		.0156			.0426			.0111
.625												.0364			
.650			.0000	.0000	.0000		.0504		.0128			.0279			
.675												.0267			
.700		.0057	.0265	.0443	.0282		.0490		.0123		.0182	.0275	.0134		
.750			.0000	.0000	.0000		.0366		.0100			.0252			
.800	.0038	.0115	.0159	.0178	.0320		.0324		.0070			.0234			.0030
.825						.0197									
.850				.0000	.0000	.0000	.0289		.0075			.0222			
.875						.0130									
.900		.0168	.0000	.0131	.0000	.0133	.0541		.0000		.0193	.0348		.0093	
.925						.0000									
.935								.0000							
.937															
.960												.1240			.0215
.975						.0000									
												.0133			

PHI	216.0000	222.5000	229.0000

AEDC VA352 OH4B O1+T10 EXTERNAL TANK (BTKT04)

MACH (1) = 8.000 BETA (1) = -2.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HI/HO

PHI 216.0000222.5000229.0000

X/LT			
.335		.0050	
.400	.0310		.0075
.500	.0392		
.600			.0075
.700	.0094		
.800			.0000

MACH (1) = 8.000 BETA (2) = .000 TI = 93.550 QI = .681 HREF = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HI/HO

PHI .0000 45.0000 67.5000 90.0000112.5000123.0000135.0000151.0000157.0000161.0000165.0000180.0000196.0000197.0000208.0000

X/LT														
.000											.9635			
.005											.4515			
.010											.6205			
.040	.1922										.2303			
.080	.1093										.1621	.0899		
.150	.0366										.0535	.0212		.0216
.200				.0177							.0200			
.250				.0000							.0087			
.275				.0000	.0000									
.300			.0096	.0099	.0103						.0036	.0046		
.325				.0000	.0000		.0065							
.350			.0000	.0000	.0000		.0070				.0110			
.375							.0088				.0212			
.400	.0088	.0090	.0076	.0054	.0058		.0091	.0159		.0000	.0232			.0074
.425								.0186	.0214		.0990			
.450				.0000	.0000		.0144	.0098			.2983			
.475								.0202			.0542			
.500		.0053	.0034	.0065	.0222		.0287	.0279		.0456	.0274	.0905		
.525											.0357			
.550				.0000	.0000		.0562	.0121			.0324			
.575											.0429			
.600	.0046	.0036	.0000	.0389	.0082		.0584	.0102			.0438			.0132
.625											.0356			
.650			.0000	.0000	.0000		.0560	.0128			.0325			
.675											.0366			
.700		.0087	.0096	.0165	.0259		.0445	.0146		.0117	.0317	.0161		
.750			.0000	.0000	.0000		.0316	.0084			.0248			
.800	.0029	.0128	.0268	.0181	.0239		.0212	.0028			.0203			.0089
.825						.0147								
.850				.0000	.0000	.0000	.0221	.0031			.0110			

MACH (1) = 8.000 BETA (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HI/HO

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.900		.0099	.0000	.0113	.0000	.0128	.0315		.0000		.0103	.0222		.0126	
.925						.0000									
.935								.0000							
.937															
.960												.0816			.0546
.975						.0000									
												.0110			

PHI	216.0000	222.5000	229.0000
X/LT			
.335		.0036	
.400	.0118		.0106
.500	.0550		
.600			.0060
.700	.0241		
.800			.0000

AEDC VA352 OH4B T10 EXTERNAL TANK (BTKT06) (29 APR 74)

REFERENCE DATA

SREF = .0238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 97.667 QI = 3.957 HREF = .049

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HU/HO

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.000												.8789			
.005												.5452			
.010												.8062			
.040	.0993											.3675			
.080	.0464											.3812	.2021		
.150	.0108											.1130	.1608		.1034
.200				.0222								.0680			
.250				.0000								.0567			
.275				.0000	.0000										
.300			.0086	.0136	.0273							.0759	.0547		
.325				.0000	.0000		.0512								
.350			.0000	.0000	.0000		.0560					.0805			
.375							.0550					.0756			
.400	.0058	.0057	.0089	.0184	.0370		.0548		.0439		.0000	.0736			.0494
.425									.0858	.1397		.1072			
.450				.0000	.0000		.0537		.1038			.3974			
.475									.0918			.0901			
.500		.0030	.0105	.0206	.0380		.0498		.0907		.0768	.0177	.0920		
.525												.0514			
.550				.0000	.0000		.0534		.0314			.0888			
.575												.0806			
.600	.0172	.0017	.0000	.0200	.0326		.0483		.0243			.0665			.0312
.625												.0637			
.650			.0000	.0000	.0000		.0421		.0235			.0639			
.675												.0691			
.700		.0040	.0150	.0169	.0271		.0455		.0278		.0407	.0654	.0538		
.750			.0000	.0000	.0000		.0428		.0285			.0618			
.800	.0325	.0042	.0054	.0087	.0243		.0364		.0225			.0607			.0316
.825						.0534									
.850				.0000	.0000	.0000	.0657		.0161			.0552			
.875						.0302									
.900		.0048	.0000	.0137	.0000	.0394	.0487		.0000		.0577	.0466		.0641	
.925						.0000									
.935								.0000							
.937												.1443			.1517
.960						.0000									
.975												.0231			

PHI .816 .0000292 .5000299 .0000

AEDC VA352 OH4B T10 EXTERNAL TANK (BTKT06)

MACH (1) = 8.000 ALPHA (1) = -10.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HU/HO

PHI 216.0000222.5000229.0000

X/LT			
.335		.0669	
.400	.0770		.0713
.500	.0484		
.600			.0153
.700	.0282		
.800			.0000

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 97.667 QI = 3.957 HREF = .049

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HU/HO

PHI .0000 45.0000 67.5000 90.0000112.5000123.0000135.0000151.0000157.0000161.0000165.0000180.0000196.0000197.0000208.0000

X/LT														
.000											.9219			
.005											.6318			
.010											.9129			
.040	.1450										.3082			
.080	.0769										.2569	.1480		
.150	.0225										.0801	.0995		.0784
.200				.0285							.0300			
.250				.0000							.0142			
.275				.0000	.0000									
.300			.0094	.0139	.0180						.0108	.0388		
.325				.0000	.0000		.0226							
.350			.0000	.0000	.0000		.0249				.0150			
.375							.0274				.0168			
.400	.0021	.0071	.0115	.0139	.0182		.0317		.0351		.0244			.0378
.425									.0553	.0870	.0557			
.450				.0000	.0000		.0345		.0841		.4106			
.475									.0609		.1058			
.500		.0080	.0118	.0151	.0251		.0408		.0612		.0276	.0747		
.525										.0574	.0207			
.550				.0000	.0000		.0423		.0208		.0694			
.575											.0681			
.600	.0053	.0094	.0000	.0199	.0276		.0336		.0170		.0506			.0216
.625											.0421			
.650			.0000	.0000	.0000		.0359		.0154		.0370			
.675											.0366			
.700		.0106	.0173	.0200	.0284		.0342		.0176		.0366	.0215		
.750			.0000	.0000	.0000		.0345		.0150	.0295	.0387			
.800	.0147	.0098	.0127	.0145	.0262		.0333		.0126		.0378			.0187
.825						.0502								
.850				.0000	.0000	.0000	.0611		.0103		.0358			
.875						.0287								

AEDC VA352 OH4B T10 EXTERNAL TANK (BTKT06)

MACH (1) = 8.000 ALPHA (2) = -5.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HU/HO

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.900		.0084	.0000	.0188	.0000	.0310	.0383		.0000		.0477	.0273		.0462	
.925						.0000									
.935								.0000				.0951			.0826
.937															
.960						.0000						.0133			
.975															

PHI	216.0000	222.5000	229.0000
X/LT			
.335		.0514	
.400	.0644		.0613
.500	.0413		
.600			.0203
.700	.0189		
.800			.0000

MACH (1) = 8.000 ALPHA (3) = .000 TI = 97.667 QI = 3.957 HREF = .049

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HU/HO

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.000												.9534			
.005												.5989			
.010												.8260			
.040	.1894											.2451			
.080	.1064											.2165	.1308		
.150	.0349											.0590	.0580		.0546
.200				.0169								.0188			
.250				.0000								.0072			
.275				.0000	.0000										
.300			.0093	.0087	.0153							.0061	.0270		
.325				.0000	.0000		.0145								
.350			.0000	.0000	.0000		.0132					.0047			
.375							.0127					.0059			
.400	.0100	.0086	.0081	.0080	.0171		.0100		.0119		.0000	.0184			.0236
.425									.0261	.0307		.0471			
.450				.0000	.0000		.0076		.0394			.3276			
.475									.0575			.0839			
.500		.0072	.0070	.0071	.0195		.0120		.0459		.0258	.0234	.0351		
.525												.0529			
.550				.0000	.0000		.0226		.0221			.0474			
.575												.0388			

AEDC VA352 OH4B T10 EXTERNAL TANK (BTKT06)

MACH (1) = 8.000 ALPHA (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HU/H0

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	198.0000	197.0000	208.0000
X/LT															
.600	.0065	.0068	.0000	.0067	.0242		.0238		.0184			.0333			.0179
.625												.0307			
.650			.0000	.0000	.0000		.0184		.0162			.0276			
.675												.0267			
.700		.0060	.0170	.0107	.0254		.0224		.0188		.0124	.0252	.0127		
.750			.0000	.0000	.0000		.0226		.0176			.0265			
.800	.0061	.0056	.0062	.0062	.0245		.0225		.0134			.0265			.0138
.825						.0258									
.850				.0000	.0000	.0000	.0340		.0129			.0235			
.875						.0251									
.900		.0059	.0000	.0220	.0000	.0341	.0310		.0000		.0178	.0268		.0182	
.925						.0000									
.935								.0000							
.937												.0569			.0620
.960						.0000									
.975												.0091			

PHI	216.0000	222.5000	229.0000
X/LT			
.335		.0042	
.400	.0333		.0333
.500	.0206		
.600			.0213
.700	.0202		
.800			.0000

AEDC VA352 OH4B T10 EXTERNAL TANK (BTKT07) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 BETA (1) = -2.000 TI = 97.650 QI = 3.953 HREF = .049

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HU/HO

FHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.000												.9584			
.005												.6206			
.010												.8001			
.040	.1905											.2879			
.080	.1079											.2290	.1514		
.150	.0357											.0610	.0542		.0478
.200				.0206								.0207			
.250				.0000								.0091			
.275				.0000	.0000										
.300			.0125	.0126	.0117							.0075	.0177		
.325				.0000	.0000		.0180								
.350			.0000	.0000	.0000		.0197					.0062			
.375							.0228					.0042			
.400	.0091	.0114	.0123	.0109	.0116		.0235		.0118		.0000	.0145			.0181
.425									.0210	.0325		.0231			
.450				.0000	.0000		.0268		.0694			.1456			
.475									.0425			.0652			
.500		.0095	.0102	.0104	.0124		.0302		.0382		.0483	.0187	.0421		
.525												.0204			
.550				.0000	.0000		.0334		.0205			.0328			
.575												.0291			
.600	.0075	.0099	.0000	.0105	.0156		.0311		.0162			.0258			.0149
.625												.0230			
.650			.0000	.0000	.0000		.0305		.0124			.0221			
.675												.0202			
.700		.0096	.0094	.0099	.0221		.0298		.0137		.0231	.0188	.0181		
.750			.0000	.0000	.0000		.0283		.0121			.0184			
.800	.0076	.0096	.0113	.0101	.0259		.0271		.0090			.0186			.0119
.825						.0395									
.850				.0000	.0000	.0000	.0451		.0067			.0219			
.875						.0215									
.900		.0097	.0000	.0115	.0000	.0363	.0318		.0000		.0238	.0246		.0220	
.925						.0000									
.935								.0000							
.937												.0919			.0526
.960						.0000									
.975												.0082			

AEDC VA352 OH4B T10 EXTERNAL TANK (BTKT07)

MACH (1) = 8.000 BETA (1) = -2.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HU/HO

PHI 216.0000222.5000229.0000

X/LT			
.335		.0107	
.400	.0448		.0402
.500	.0259		
.600			.0204
.700	.0177		
.800			.0000

MACH (1) = 8.000 BETA (2) = .000 TI = 97.650 QI = 3.953 HREF = .049

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HU/HO

PHI .0000 45.0000 67.5000 90.0000112.5000123.0000135.0000151.0000157.0000161.0000165.0000180.0000196.0000197.0000208.0000

X/LT														
.000											.9534			
.005											.5989			
.010											.8260			
.040	.1894										.2451			
.080	.1064										.2165	.1308		
.150	.0349										.0590	.0580		.0546
.200				.0169							.0188			
.250				.0000							.0072			
.275				.0000	.0000									
.300			.0093	.0087	.0153						.0061	.0270		
.325				.0000	.0000		.0145							
.350			.0000	.0000	.0000		.0132				.0047			
.375							.0127				.0059			
.400	.0100	.0086	.0081	.0080	.0171		.0100	.0119		.0000	.0184			.0236
.425								.0261	.0307		.0471			
.450				.0000	.0000		.0076	.0394			.3276			
.475								.0575			.0839			
.500		.0072	.0070	.0071	.0195		.0120	.0459		.0258	.0234	.0351		
.525											.0529			
.550				.0000	.0000		.0226	.0221			.0474			
.575											.0388			
.600	.0065	.0068	.0000	.0067	.0242		.0238	.0184			.0333			.0179
.625											.0307			
.650			.0000	.0000	.0000		.0184	.0162			.0276			
.675											.0267			
.700		.0060	.0170	.0107	.0254		.0224	.0188		.0124	.0252	.0127		
.750			.0000	.0000	.0000		.0226	.0176			.0265			
.800	.0061	.0056	.0062	.0062	.0245		.0225	.0134			.0265			.0138
.825						.0258								
.850				.0000	.0000	.0000	.0340	.0129			.0235			
.875						.0251								

AEDC VA352 OH4B T10 EXTERNAL TANK (BTKT07)

MACH (1) = 8.000 BETA (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HU/HO

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.900		.0059	.0000	.0220	.0000	.0341	.0310		.0000		.0178	.0268		.0182	
.925						.0000									
.935								.0000				.0569			.0620
.937															
.960						.0000						.0091			
.975															

PHI	216.0000	222.5000	229.0000
X/LT			
.335		.0042	
.400	.0333		.0333
.500	.0206		
.600			.0213
.700	.0202		
.800			.0000

AEDC VA352 OH4B T10 EXTERNAL TANK (BTKT08) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRF = .0000 IN.
LREF = 22.5803 IN. YMRF = .0000 IN.
BREF = 16.3919 IN. ZMRF = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 92.367 QI = .679 HREF = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HU/HO

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.000												.8819			
.005												.5140			
.010												.6892			
.040	.1090											.3107			
.080	.0528											.3287	.1310		
.150	.0143											.0980	.0513		.0497
.200				.0193								.0422			
.250				.0000								.0295			
.275				.0000	.0000										
.300			.0074	.0117	.0165							.0263	.0312		
.325				.0000	.0000		.0249								
.350			.0000	.0000	.0000		.0235					.0234			
.375							.0236					.0186			
.400	.0030	.0049	.0075	.0116	.0193		.0235		.0180		.0000	.0120			.0195
.425								-	.0353	.0512		.0157			
.450				.0000	.0000		.0155		.0899			.4907			
.475									.0561			.0877			
.500		.0033	.0064	.0115	.0140		.0161		.0404		.0296	.0255	.0376		
.525												.0345			
.550				.0000	.0000		.0399		.0184			.0212			
.575												.0150			
.600	.0103	.0023	.0000	.0091	.0143		.0380		.0156			.0125			.0134
.625												.0349			
.650			.0000	.0000	.0000		.0301		.0091			.0403			
.675												.0455			
.700		.0019	.0110	.0140	.0239		.0403		.0088		.0156	.0510	.0201		
.750			.0000	.0000	.0000		.0390		.0077			.0584			
.800	.0180	.0019	.0063	.0056	.0204		.0272		.0042			.0600			.0094
.825						.0152									
.850				.0000	.0000	.0000	.0292		.0073			.0555			
.875						.0146									
.900		.0027	.0000	.0103	.0000	.0188	.0343		.0000		.0102	.0259		.0172	
.925						.0000									
.935								.0000							
.937												.0889			.1060
.960															
.975						.0000						.0151			

PHI	216.0000	222.5000	229.0000

AEDC VA352 OH4B T10 EXTERNAL TANK (BTKT08)

MACH (1) = 8.000 ALPHA (1) = -10.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HU/HO

PHI 216.0000222.5000229.0000

X/LT			
.335		.0286	
.400	.0690		.0628
.500	.0298		
.600			.0032
.700	.0197		
.800			.0000

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 92.367 QI = .670 HREF = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HU/HO

PHI .0000 45.0000 67.5000 90.0000112.5000123.0000135.0000151.0000157.0000161.0000165.0000180.0000196.0000197.0000208.0000

X/LT													
.000											.9397		
.005											.4927		
.010											.7083		
.040	.1502										.2678		
.080	.0789										.2227	.0988	
.150	.0240										.0766	.0324	.0341
.200				.0191							.0301		
.250				.0000							.0170		
.275				.0000	.0000								
.300			.0082	.0109	.0139						.0143	.0215	
.325				.0000	.0000		.0173						
.350			.0000	.0000	.0000		.0163				.0103		
.375							.0151				.0066		
.400	.0033	.0063	.0078	.0103	.0125		.0155		.0090	.0000	.0079		.0132
.425									.0146	.0197	.0155		
.450				.0000	.0000		.0122		.0298		.3791		
.475									.0188		.1251		
.500		.0045	.0056	.0084	.0104		.0106		.0194	.0164	.0324	.0282	
.525											.0361		
.550				.0000	.0000		.0134		.0116		.0439		
.575											.0387		
.600	.0033	.0043	.0000	.0084	.0102		.0203		.0096		.0321		.0152
.625											.0331		
.650			.0000	.0000	.0000		.0284		.0081		.0269		
.675											.0247		
.700		.0040	.0092	.0087	.0125		.0256		.0075	.0116	.0264	.0143	
.750			.0000	.0000	.0000		.0225		.0063		.0241		
.800	.0057	.0032	.0052	.0060	.0183		.0252		.0054		.0239		.0061
.825						.0110							
.850				.0000	.0000	.0000	.0232		.0060		.0203		

MACH (1) = 8.000 ALPHA (2) = -5.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HU/HO

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.900		.0025	.0000	.0100	.0000	.0094	.0281		.0000		.0097	.0123		.0109	
.925						.0000									
.935								.0000							
.937															
.960												.0327			.0649
.975						.0000									
												.0088			

PHI	216.0000	222.5000	229.0000
X/LT			
.335		.0124	
.400	.0564		.0335
.500	.0183		
.600			.0065
.700	.0096		
.800			.0000

MACH (1) = 8.000 ALPHA (3) = .000 TI = 92.367 QI = .670 HREF = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HU/HO

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.000												.9718			
.005												.4644			
.010												.6035			
.040	.1951											.2357			
.080	.1123											.1620	.0916		
.150	.0380											.0509	.0227		.0240
.200				.0195								.0294			
.250				.0000								.0101			
.275				.0000	.0000										
.300			.0103	.0098	.0105							.0076	.0080		
.325				.0000	.0000		.0096								
.350			.0000	.0000	.0000		.0100					.0053			
.375							.0101					.0041			
.400	.0086	.0094	.0091	.0090	.0096		.0089		.0062		.0000	.0046			.0104
.425									.0055	.0053		.0149			
.450				.0000	.0000		.0072		.0070			.1243			
.475									.0097			.0357			
.500		.0054	.0061	.0080	.0074		.0055		.0095		.0104	.0383	.0122		
.525												.0337			
.550				.0000	.0000		.0052		.0061			.0330			
.575												.0308			

AEDC VA352 OH4B T10 EXTERNAL TANK (BTKT08)

MACH (1) = 8.000 ALPHA (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HU/HO

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.600	.0063	.0072	.0000	.0071	.0065		.0057		.0077			.0279			.0063
.625												.0262			
.650			.0000	.0000	.0000		.0054		.0077			.0239			
.675												.0230			
.700		.0071	.0056	.0068	.0060		.0061		.0107		.0088	.0207	.0071		
.750			.0000	.0000	.0000		.0059		.0088			.0207			
.800	.0060	.0061	.0064	.0070	.0057		.0062		.0060			.0218			.0053
.825						.0029									
.850				.0000	.0000	.0000	.0051		.0042			.0189			
.875						.0035									
.900		.0053	.0000	.0045	.0000	.0113	.0136		.0000		.0072	.0129		.0072	
.925						.0000									
.935								.0000							
.937												.0367			.0415
.960						.0000									
.975												.0086			

PHI	216.0000	222.5000	229.0000
X/LT			
.335		.0053	
.400	.0094		.0114
.500	.0086		
.600			.0028
.700	.0094		
.800			.0000

AEDC VA352 OH4B T10 EXTERNAL TANK (BTKT09) (29 AFR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 BETA (1) = -2.000 TI = 92.200 QI = .660 HREF = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HU/HO

PHI .0000 45.0000 67.5000 90.0000112.5000123.0000135.0000151.0000157.0000161.0000165.0000180.0000196.0000197.0000208.0000

X/LT														
.000											.9529			
.005											.4956			
.010											.5684			
.040	.1970										.2390			
.080	.1125										.1709	.0901		
.150	.0388										.0503	.0192		.0199
.200				.0234							.0189			
.250				.0000							.0090			
.275				.0000	.0000									
.300			.0128	.0132	.0136						.0081	.0053		
.325				.0000	.0000		.0122							
.350			.0000	.0000	.0000		.0124				.0061			
.375							.0126				.0046			
.400	.0095	.0112	.0115	.0124	.0119		.0114		.0099	.0000	.0038			.0096
.425									.0084	.0113	.0109			
.450				.0000	.0000		.0094		.0122		.0572			
.475									.0094		.0296			
.500		.0087	.0111	.0114	.0107		.0089		.0087	.0245	.0143	.0349		
.525											.0179			
.550				.0000	.0000		.0076		.0064		.0206			
.575											.0194			
.600	.0072	.0100	.0000	.0105	.0097		.0068		.0063		.0186			.0059
.625											.0155			
.650			.0000	.0000	.0000		.0068		.0042		.0154			
.675											.0123			
.700		.0096	.0107	.0106	.0094		.0081		.0032	.0057	.0101	.0110		
.750			.0000	.0000	.0000		.0087		.0024		.0094			
.800	.0079	.0094	.0109	.0107	.0090		.0078		.0021		.0092			.0035
.825						.0049								
.850				.0000	.0000	.0000	.0094		.0013		.0058			
.875						.0079								
.900		.0087	.0000	.0109	.0000	.0107	.0104		.0000	.0035	.0122		.0021	
.925						.0000								
.935								.0000						
.937											.0132			.0305
.960						.0000								
.975											.0110			

PHI 216.0000222.5000229.0000

AEDC VA352 OH4B T10 EXTERNAL TANK (BTKT09)

MACH (1) = 8.000 BETA (1) = -2.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HU/HO

PHI 216.0000222.5000229.0000

X/LT			
.335		.0045	
.400	.0099		.0086
.500	.0137		
.600			.0050
.700	.0067		
.800			.0000

MACH (1) = 8.000 BETA (2) = .000 TI = 92.200 QI = .660 HREF = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HU/HO

PHI .0000 45.0000 67.5000 90.0000112.5000123.0000135.0000151.5000157.0000161.0000165.0000180.0000196.0000197.0000208.0000

X/LT													
.000											.9718		
.005											.4644		
.010											.6035		
.040	.1951										.2357		
.080	.1123										.1620	.0916	
.150	.0380										.0509	.0227	.0240
.200				.0195							.0204		
.250				.0000							.0101		
.275				.0000	.0000								
.300			.0103	.0098	.0105						.0076	.0080	
.325				.0000	.0000		.0096						
.350			.0000	.0000	.0000		.0100				.0053		
.375							.0101				.0041		
.400	.0086	.0094	.0091	.0090	.0096		.0089	.0062		.0000	.0046		.0104
.425								.0055	.0053		.0149		
.450				.0000	.0000		.0072	.0070			.1243		
.475								.0097			.0357		
.500		.0054	.0061	.0080	.0074		.0055	.0095		.0104	.0383	.0122	
.525											.0337		
.550				.0000	.0000		.0052	.0061			.0330		
.575											.0308		
.600	.0063	.0072	.0000	.0071	.0065		.0057	.0077			.0279		.0063
.625											.0262		
.650			.0000	.0000	.0000		.0054	.0077			.0239		
.675											.0230		
.700		.0071	.0056	.0068	.0060		.0061	.0107		.0088	.0207	.0071	
.750			.0000	.0000	.0000		.0059	.0088			.0207		
.800	.0060	.0061	.0064	.0070	.0057		.0062	.0060			.0218		.0053
.825						.0029							
.850				.0000	.0000	.0000	.0051	.0042			.0189		

AEDC VA352 OH4B T10 EXTERNAL TANK (BTKT09)

MACH (1) = 8.000 BETA (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE HU/HO

PHI	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	196.0000	197.0000	208.0000
X/LT															
.900		.0053	.0000	.0045	.0000	.0113	.0136		.0000		.0072	.0129		.0072	
.925						.0000									
.935								.0000							
.937												.0367			.0415
.960						.0000									
.975												.0086			

PHI	216.0000	222.5000	229.0000
X/LT			
.335		.0053	
.400	.0094		.0114
.500	.0086		
.600			.0028
.700	.0094		
.800			.0000

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTK801) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.6039	.3626	.1528		.0931	.0587	.1160	.1933	.0000			.2150	.4391	1.0124
10.000															.0000
14.000								.0838							.1367
20.000															
22.000								.0687							.0000
24.500															
35.000								.1084							.0463
39.000															
42.500								.0000				.0000			
48.000															
60.000								.0000							.0000
119.000															
180.000			.7078		.2542			.1367			.1192				.1999

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1643		.0797	.1503	.1256		.1003				.0666		.0645		
10.000					.0000										
20.000					.1167										
25.500					.0000										
40.000					.0525										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.1096			.3318		.9432				.9781		.7539		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1403		.1655	.1096	.1213	.0929	.0611	.0728	.0533	.0630	.0736	.0677	.0596	.0492
11.500				.1491											

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB01)

MACH (1) = 8.000 ALPHA (1) = -10.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.1630	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0598							
21.500												.0519			
23.000								.0346							
24.000				.1662											
31.500				.0000											
34.000								.0000							
35.000				.0000											
40.000				.0000				.0000							
45.000								.0000							
51.000				.0000											
57.500								.0000							
59.500												.0613			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0531			
106.000								.0497							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.1248		.0000		.0064				.0817			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0441	.0472	.0540	.0556	.0615	.0568	.0467	.0384	.0363	.0385	.0413	.0307	.1755	.1533	
21.500	.0442				.0472				.0326				.1186		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000															
135.000	.0000				.0000						.0000				
149.000									.0000						
180.000	.0000				.0617				.0000		.0000		.0000		

X/L	.8500	.8750	.9000	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI										

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB01)

MACH (1) = 8.000 ALPHA (1) = -10.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.8500	.8750	.9000	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI										
.000	.1207	.0485		.0104	.0070	.0000		.0038	.0000	.0055
21.500			.0135							
39.000					.0099					.0102
52.500				.0000						
55.000			.0000							
65.000			.0000							
68.000				.0000						
100.000			.0000							
108.000			.0000	.0000						
112.000					.0000					
113.000							.0000			

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.5199	.3145	.1383		.0801	.0656	.1305	.1858	.0000			.2000	.3581	.6430
10.000															.0000
14.000								.0894							
20.000															.1209
22.000								.0661							
24.500															.0000
35.000								.0933							
39.000															.0338
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.5494		.3051			.2099			.1327				.0785

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1135		.1574	.1660	.1229		.0856				.0468		.0737		
10.000					.0000										
20.000					.1025										
25.500					.0000										
40.000					.0440										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							

AEDC VA352 OH4B O1+T1O ORB. FUSELAGE (BTKB01)

MACH (1) = 8.000 ALPHA (2) = -5.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0574			.1586		.9745				1.0366		.6774		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1444		.1422	.0763	.0824	.0663	.0423	.0493	.0394	.0427	.0484	.0525	.0475	.0410
11.500				.1610											
12.000								.0486							
21.500												.0486			
23.000								.0310							
24.000				.1591											
31.500				.0000											
34.000								.0000							
35.000				.0000											
40.000				.0000				.0000							
45.000								.0000							
51.000				.0000											
57.500								.0000							
59.500												.0678			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0355			
106.000								.0330							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.1161		.0000		.0068				.0094			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0376	.0364	.0409	.0444	.0459	.0430	.0361	.0327	.0314	.0308	.0292	.0195	.1058	.1491	
21.500	.0408				.0316				.0301				.1117		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB01)

MACH (1) = 8.000 ALPHA (2) = -5.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0548				.0000				.0000		

X/L	.8500	.8750	.9000	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI										
.000	.0983	.0349		.0083	.0057	.0000		.0039	.0000	.0027
21.500			.0131							
39.000					.0067					.0065
52.500				.0000						
55.000			.0000							
65.000			.0000							
68.000				.0000						
100.000			.0000							
108.000			.0000	.0000						
112.000					.0000					
113.000							.0000			

MACH (1) = 8.000 ALPHA (3) = .000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4543	.2806	.1227		.0802	.0440	.0461	.0755	.0000			.1171	.2214	.6872
10.000															.0000
14.000								.0418							
20.000															.1167
22.000								.0449							
24.500															.0000
35.000								.0828							
39.000															.0325
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.4193		.2288			.1520			.1052				.0828

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB01)

MACH (1) = 8.000 ALPHA (3) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/H0

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0682		.0662	.0838	.0891		.0740				.0545		.0412		
10.000					.0000										
20.000					.0717										
25.500					.0000										
40.000					.0442										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0663			.1560		.9431				1.0143		.8631		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1026		.1184	.0643	.0721	.0569	.0426	.0373	.0280	.0276	.0312	.0366	.0373	.0363
11.500				.0643											
12.000								.0516							
21.500												.0332			
23.000								.0372							
24.000				.0203											
31.500				.0000											
34.000								.0000							
35.000				.0000											
40.000				.0000				.0000							
45.000								.0000							
51.000				.0000											
57.500								.0000							
59.500												.0330			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0259			
106.000								.0323							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0962		.0000		.0067				.0048			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB01)

MACH (1) = 8.000 ALPHA (3) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0307	.0276	.0271	.0297	.0292	.0285	.0270	.0231	.0211	.0160	.0181	.0321	.1164	.1602	
21.500	.0312				.0284				.0184				.0778		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0161				.0000				.0000		

X/L	.8500	.8750	.9000	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI										
.000	.0926	.0345		.0072	.0048	.0000		.0033	.0000	.0025
21.500			.0149							
39.000					.0057					.0060
52.500				.0000						
55.000			.0000							
65.000			.0000							
68.000				.0000						
100.000			.0000							
108.000			.0000	.0000						
112.000					.0000					
113.000							.0000			

MACH (1) = 8.000 ALPHA (4) = 5.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4358	.2745	.1365		.1309	.0950	.0695	.0472	.0000			.0704	.1390	.3230
10.000															.0000
14.000								.0883							
20.000															.0528
22.000								.0920							
24.500															.0099
35.000								.0661							
39.000															.0397

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB01)

MACH (1) = 0.000 ALPHA (4) = 5.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.3311		.1720			.1049			.0700				.0577

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0343		.0437	.0294	.0255		.0214				.0280		.0531		
10.000					.0000										
20.000					.0427										
25.500					.0000										
40.000					.0323										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0288			.0761		.4063				.6054		.6290		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0699		.0757	.0518	.0501	.0357	.0275	.0241	.0224	.0290	.0293	.0266	.0234	.0215
11.500				.0530											
12.000								.0347							
21.500												.0283			
23.000								.0349							
24.000				.0217											
31.500				.0000											
34.000								.0000							
35.000				.0000											
40.000				.0000				.0000							
45.000								.0000							
51.000				.0000											
57.500								.0000							
59.500												.0153			
61.000								.0000							
65.000								.0000							
70.000								.0000							

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB01)

MACH (1) = 0.000 ALPHA (4) = 5.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
96.500				.0000								.0203			
105.000								.0217							
106.000								.0000				.0000			
135.000															
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0983		.0000		.0070				.0070			
X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0201	.0205	.0206	.0210	.0187	.0198	.0209	.0165	.0187	.0521	.0827	.0769	.0791	.0780	
21.500	.0254				.0242				.0196				.0816		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0077				.0000				.0000		
X/L	.8500	.8750	.9000	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500					
PHI															
.000	.0445	.0191		.0031	.0025	.0000		.0034	.0000	.0047					
21.500			.0109												
39.000					.0050					.0044					
52.500				.0000											
55.000			.0000												
65.000			.0000												
68.000				.0000											
100.000			.0000												
108.000			.0000	.0000											
112.000					.0000										
113.000							.0000								

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 BETA (1) = -2.000 TI = 97.350 QI = 3.942 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4437	.2726	.1174		.0785	.0393	.0574	.0920	.0000			.1663	.2442	.7066
10.000															.0000
14.000								.0445							
20.000															.1100
22.000								.0503							
24.500															.0000
35.000								.0963							
39.000															.0314
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.4129		.2198			.1494			.1038				.0885

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0566		.0570	.0751	.0653		.0573				.0478		.0328		
10.000					.0000										
20.000					.0813										
25.500					.0000										
40.000					.0565										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0734			.1642		.8582				1.1207		.8273		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0484		.1053	.0857	.0910	.0706	.0536	.0454	.0303	.0286	.0277	.0358	.0399	.0373
11.500				.0280											

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB02)

MACH (1) = 8.000 BETA (1) = -2.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0513							
21.500												.0413			
23.000								.0405							
24.000				.0306											
31.500				.0000											
34.000								.0000							
35.000				.0000											
40.000				.0000				.0000							
45.000								.0000							
51.000				.0000											
57.500								.0000							
59.500												.0416			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0359			
106.000								.0404							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.1129		.0000		.0072				.0062			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0327	.0289	.0276	.0313	.0339	.0343	.0317	.0291	.0271	.0271	.0208	.0411	.1358	.1324	
21.500	.0350				.0360				.0304				.1436		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0038				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500

PHI

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB02)

MACH (1) = 8.000 BETA (1) = -2.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0970	.0329	.0179	.0170	.0114	.0079	.0055	.0000		.0038	.0000	.0037
21.500			.0088									
39.000							.0076					.0068
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 BETA (2) = .000 TI = 97.350 QI = 3.942 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4543	.2806	.1227		.0802	.0449	.0461	.0755	.0000			.1171	.2214	.6872
10.000															.0000
14.000								.0418							
20.000															.1167
22.000								.0449							
24.500															.0000
35.000								.0828							
39.000															.0325
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.4193		.2288			.1520			.1052				.0828

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0682		.0662	.0838	.0891		.0740				.0545		.0412		
10.000					.0000										
20.000					.0717										
25.500					.0000										
40.000					.0442										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB02)

MACH (1) = 8.000 BETA (2) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI														.0000	
156.000															.0000
159.200												.0000			
170.700										.0000					
171.900						.0000									
173.400											1.0143		.8631		
180.000		.0663			.1560		.9431								

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1026		.1184	.0643	.0721	.0569	.0426	.0373	.0280	.0276	.0312	.0366	.0373	.0363
11.500				.0643											
12.000								.0516							
21.500												.0332			
23.000								.0372							
24.000				.0203											
31.500				.0000											
34.000								.0000							
35.000				.0000											
40.000				.0000				.0000							
45.000								.0000							
51.000				.0000											
57.500								.0000							
59.500												.0330			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0259			
106.000								.0323							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0962		.0000		.0067				.0048			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0307	.0276	.0271	.0297	.0292	.0285	.0270	.0231	.0211	.0160	.0181	.0321	.1164	.1602	
21.500	.0312				.0284				.0184				.0778		
63.000	.0000														
64.000									.0000						
65.000													.0000		

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB02)

MACH (1) = 8.000 BETA (2) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0161				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0926	.0345	.0192	.0160	.0104	.0072	.0048	.0000		.0033	.0000	.0025
21.500			.0149									
39.000							.0057					.0060
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB03) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.5897	.3512	.1364		.0975	.0619	.0614	.1222	.0000			.1901	.3346	.6095
10.000															.0000
14.000								.0540							.0894
20.000															
22.000								.0639							.0000
24.500															
35.000								.1084							.0450
39.000															
42.500								.0000				.0000			
48.000															
60.000								.0000							.0000
119.000															.1046
180.000			.6690		.3900			.1351			.1068				

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0662		.0795	.1155	.0984		.0694				.0750		.0913		
10.000					.0000										
20.000					.1062										
25.500					.0000										
40.000					.0312										
45.500					.0000										
131.200									.0000					.0000	
145.400															
146.200								.0000						.0000	
156.000															.0000
159.200															
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0960			.1243		.5183				.3794		.3514		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0835		.0717	.0455	.0662	.0458	.0369	.0407	.0332	.0358	.0340	.0327	.0300	.0287
11.500				.1177											

MACH (1) = 8.000 ALPHA (1) = -10.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0421							
21.500												.0387			
23.000								.0401							
24.000				.1280											
31.500				.0000											
34.000								.0000							
35.000				.0000											
40.000				.0000				.0000							
45.000								.0000							
51.000				.0000											
57.500								.0000							
59.500												.0358			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0569			
106.000								.0314							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.1045		.0000		.0059				.0152			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0286	.0298	.0300	.0287	.0278	.0287	.0275	.0263	.0225	.0246	.0399	.0401	.0248	.0240	
21.500	.0285				.0168				.0161				.0185		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										.0000
105.000	.0000				.0000				.0000				.0000		
111.000															
112.000					.0000										
113.000					.0000										
116.000															
135.000	.0000				.0000						.0000				
149.000									.0000						
180.000	.0000				.0212						.0000				
									.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB03)

MACH (1) = 8.000 ALPHA (1) = -10.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0376	.0252	.0152	.0129	.0086	.0054	.0034	.0000		.0039	.0000	.0042
21.500			.0204				.0047					.0057
39.000						.0000						
52.500												
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000												

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.5196	.3157	.1345		.0930	.0621	.0432	.0707	.0000			.1389	.2402	.5843
10.000								.0489							.0000
14.000															.0894
20.000								.0597							
22.000															.0000
24.500								.0953							.0329
35.000															
39.000								.0000							
42.500												.0000			
48.000								.0000							.0000
60.000															.0920
119.000			.5261		.3017			.2079			.1517				
180.000															

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0420		.0467	.0683	.0668		.0551				.0505		.0763		
10.000					.0000										
20.000					.0858										
25.500					.0000										
40.000					.0372										
45.500					.0000										
131.200									.0000					.0000	
145.400															
146.200								.0000							

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB03)

MACH (1) = 8.000 ALPHA (2) = -5.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0635			.0788		.3578				.4982		.3419		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0798		.0691	.0520	.0553	.0447	.0312	.0286	.0236	.0275	.0286	.0306	.0289	.0285
11.500				.0948											
12.000								.0457							
21.500												.0386			
23.000								.0282							
24.000				.0678											
31.500				.0000											
34.000								.0000							
35.000				.0000											
40.000				.0000				.0000							
45.000								.0000							
51.000				.0000											
57.500								.0000							
59.500															
61.000												.0263			
65.000								.0000							
70.000								.0000							
96.500				.0000				.0000							
105.000															
106.000												.0141			
135.000								.0197							
140.000				.0000				.0000				.0000			
141.400	.0000														
151.000			.0000												
180.000				.0737		.0000		.0087				.0078			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0289	.0288	.0298	.0291	.0274	.0276	.0248	.0239	.0210	.0199	.0318	.0317	.0218	.0217	
21.500	.0296				.0158				.0193				.0164		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										

AEDC VA352 OH4B Q1+T10 ORB. FUSELAGE (BTKB03)

MACH (1) = 8.000 ALPHA (2) = -5.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0307				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0384	.0235	.0133	.0095	.0063	.0046	.0033	.0000		.0022	.0000	.0023
21.500			.0156									
39.000							.0031					.0046
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 ALPHA (3) = .000 TI = 93.425 Q1 = .682 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4577	.2846	.1216		.0889	.0744	.0822	.0698	.0000			.0597	.1341	.3818
10.000															.0000
14.000								.0787							
20.000															.0711
22.000								.0734							
24.500															.0000
35.000								.0886							
39.000															.0390
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.4171		.2291			.1496			.1050				.0907

X/L	.1200	.1250	.1300	.1400	.1500	.1550	.1600	.1650	.1700	.1740	.1800	.1810	.1820

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB03)

MACH (1) = 8.000 ALPHA (3) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0306		.0261	.0274	.0271		.0247				.0219		.0271		
10.000					.0000										
20.000					.0619										
25.500					.0000										
40.000					.0225										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0679			.0795		.3592				.5054		.3947		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0413		.0482	.0592	.0585	.0418	.0261	.0244	.0164	.0201	.0236	.0249	.0254	.0237
11.500				.0237											
12.000								.0644							
21.500												.0361			
23.000								.0376							
24.000				.0132											
31.500				.0000											
34.000								.0000							
35.000				.0000											
40.000				.0000				.0000							
45.000								.0000							
51.000				.0000											
57.500								.0000							
59.500												.0137			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0175			
106.000								.0221							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0820		.0000		.0061				.0041			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB03)

MACH (1) = 0.000 ALPHA (3) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0250	.0277	.0288	.0277	.0280	.0281	.0262	.0246	.0257	.0338	.0337	.0319	.0297	.0316	
21.500	.0314				.0230				.0201				.0236		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0040				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0317	.0175	.0110	.0079	.0050	.0040	.0022	.0000		.0031	.0000	.0043
21.500			.0109									
39.000							.0045					.0040
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 0.000 ALPHA (4) = 5.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4498	.2863	.2042		.1447	.1024	.0703	.0491	.0000			.0230	.0397	.0875
10.000															.0000
14.000								.1009							
20.000															.0258
22.000								.1070							
24.500															.0000
35.000								.0689							
															.0477

MACH (1) = 8.000 ALPHA (4) = 5.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/H0

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.3310		.1730			.1071			.0722				.0674

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0314		.0238	.0231	.0220		.0254				.0296		.0340		
10.000					.0000										
20.000					.0118										
25.500					.0000										
40.000					.0475										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0349			.0396		.1794				.3063		.3204		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0360		.0413	.0304	.0323	.0258	.0202	.0215	.0171	.0184	.0175	.0173	.0158	.0152
11.500				.0400											
12.000								.0380							
21.500												.0243			
23.000								.0243							
24.000				.0194											
31.500				.0000											
34.000								.0000							
35.000				.0000											
40.000				.0000				.0000							
45.000								.0000							
51.000				.0000											
57.500								.0000							
59.500												.0073			
61.000								.0000							
65.000								.0000							
70.000								.0000							

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB03)

MACH (1) = 8.000 ALPHA (4) = 5.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
96.500				.0000								.0105			
105.000								.0146							
106.000								.0000				.0000			
135.000															
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0771		.0000		.0082				.0076			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0139	.0142	.0131	.0139	.0124	.0128	.0122	.0116	.0106	.0114	.0160	.0217	.0307	.0333	
21.500	.0239				.0169				.0171				.0359		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		.0000
111.000															
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0069				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0182	.0101	.0062	.0045	.0024	.0024	.0030	.0000		.0038	.0000	.0047
21.500			.0064									
39.000							.0062					.0049
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB04) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRF = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 BETA (1) = -2.000 TI = 93.550 QI = .681 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4506	.2765	.1219		.0867	.0777	.0764	.0605	.0000			.0861	.1472	.3382
10.000															.0000
14.000								.0781							
20.000															.0689
22.000								.0739							
24.500															.0000
35.000								.0961							
39.000															.0498
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.3988		.2172			.1459			.1057				.0864

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0263		.0268	.0331	.0304		.0238				.0199		.0271		
10.000					.0000										
20.000					.0764										
25.500					.0000										
40.000					.0189										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0738			.0774		.3559				.4383		.4452		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0407		.0459	.0579	.0680	.0529	.0440	.0448	.0332	.0356	.0352	.0341	.0314	.0289
11.500				.0140											

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB04)

MACH (1) = 8.000 BETA (1) = -2.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE H1/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0477							
21.500												.0262			
23.000								.0211							
24.000				.0281											
31.500				.0000											
34.000								.0000							
35.000				.0000											
40.000				.0000				.0000							
45.000								.0000							
51.000				.0000											
57.500								.0000							
59.500												.0203			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0246			
106.000								.0248							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0828		.0000		.0059				.0051			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0249	.0246	.0237	.0256	.0220	.0209	.0183	.0143	.0082	.0076	.0086	.0111	.0323	.0693	
21.500	.0242				.0190				.0142				.0459		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0029				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500

PHI

MACH (1) = 8.000 BETA (1) = -2.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0864	.0327	.0216	.0136	.0081	.0058	.0039	.0000		.0039	.0000	.0033
21.500			.0111									
39.000							.0076					.0054
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 BETA (2) = .000 TI = 93.550 QI = .681 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4577	.2846	.1216		.0889	.0744	.0822	.0698	.0000			.0597	.1341	.3818
10.000															.0000
14.000								.0787							
20.000															.0711
22.000								.0734							
24.500															.0000
35.000								.0886							
39.000															.0390
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
160.000			.4171		.2291			.1496			.1950				.0907

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0306		.0261	.0274	.0271		.0247								
10.000					.0000						.0219		.0271		
20.000					.0619										
25.500					.0000										
40.000					.0225										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB04)

MACH (1) = 8.000 BETA (2) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0679			.0795		.3592				.5054		.3947		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0413		.0482	.0592	.0585	.0418	.0261	.0244	.0164	.0201	.0236	.0249	.0254	.0237
11.500				.0237											
12.000								.0644							
21.500												.0361			
23.000								.0376							
24.000				.0132											
31.500				.0000											
34.000								.0000							
35.000				.0000											
40.000				.0000				.0000							
45.000								.0000							
51.000				.0000											
57.500								.0000							
59.500												.0137			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0175			
106.000								.0221							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0820		.0000		.0061				.0041			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0250	.0277	.0288	.0277	.0280	.0281	.0262	.0246	.0257	.0338	.0337	.0319	.0297	.0316	
21.500	.0314				.0230				.0201				.0236		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB04)

MACH (1) = 8.000 BETA (2) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0040				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0317	.0175	.0110	.0079	.0050	.0040	.0022	.0000		.0031	.0000	.0043
21.500			.0109									
39.000							.0045					.0040
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB05) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 98.067 QI = 4.007 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HQ

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.0000	.0000	.0000		.0000	.0000	.0000	.0000	.0000			.0000	.0000	.0000
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0000		.0000	.0000	.0000		.0000				.0000		.0000		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.6845						
145.400														.5974	
146.200								.8580							
156.000														.4938	
159.200															.4603
170.700												.9421			
171.900										1.0056					
173.400						1.0908									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0000		.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11.500				.0000											

MACH (1) = 0.000 ALPHA (1) = -10.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0000							
21.500												.0000			
23.000								.0000							
24.000				.0000											
31.500				.0000											
34.000								.0000							
35.000				.0000											
40.000				.0000				.0000							
45.000								.0000							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.2720											
141.400	.7196														
151.000			.4577												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
21.500	.0000				.0000				.0000				.0000		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500

PHI

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB05)

MACH (1) = 8.000 ALPHA (1) = -10.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000		.0000	.0000	.0000
21.500			.0000				.0000					.0000
39.000						.0000						
52.500			.0000									
55.000			.0000			.0000						
65.000												
68.000			.0000			.0000						
100.000			.0000				.0000					
108.000									.0000			
112.000												
113.000												

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 98.067 QI = 4.007 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.0000	.0000	.0000		.0000	.0000	.0000	.0000	.0000			.0000	.0000	.0000
10.000															.0000
14.000								.0000							.0000
20.000															
22.000								.0000							.0000
24.500															
35.000								.0000							.0000
39.000															
42.500								.0000				.0000			
48.000															
60.000								.0000							.0000
119.000															.0000
180.000			.0000		.0000			.0000			.0000				

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0000		.0000	.0000	.0000		.0000				.0000		.0000		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.6376						
145.400														.6047	
146.200								.5623							

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB05)

MACH (1) = 8.000 ALPHA (2) = -5.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.3590	
159.200															.3400
170.700												.8100			
171.900										1.1465					
173.400						.5754									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0000		.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11.500				.0000											
12.000								.0000							
21.500												.0000			
23.000								.0000							
24.000				.0000											
31.500				.0000											
34.000								.0000							
35.000				.0000											
40.000				.0000				.0000							
45.000								.0000							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.2459											
141.400	.5353														
151.000			.4377												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
21.500	.0000				.0000				.0000				.0000		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB05)

MACH (1) = 8.000 ALPHA (2) = -5.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/H0

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000		.0000	.0000	.0000
21.500			.0000									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 ALPHA (3) = .000 TI = 98.067 QI = 4.007 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/H0

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.0000	.0000	.0000		.0000	.0000	.0000	.0000	.0000			.0000	.0000	.0000
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB05)

MACH (1) = 8.000 ALPHA (3) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0000		.0000	.0000	.0000		.0000				.0000		.0000		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.7708						
145.400														.5763	
146.200								.5283							
156.000														.4201	
159.200															.3280
170.700												1.0042			
171.900										1.0029					
173.400						.5351									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0000		.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11.500				.0000											
12.000								.0000							
21.500												.0000			
23.000								.0000							
24.000				.0000											
31.500				.0000											
34.000								.0000							
35.000				.0000											
40.000				.0000				.0000							
45.000								.0000							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.2371											
141.400	.4883														
151.000			.5160												
189.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE (BTKB05)

MACH (1) = 8.000 ALPHA (3) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
21.500	.0000				.0000				.0000				.0000		
63.000	.0000								.0000						
64.000													.0000		
65.000															
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		.0000
111.000															
112.000					.0000										
113.000					.0000						.0000				
116.000															
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000		.0000	.0000	.0000
21.500			.0000									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	.000	RN/L =	3.720
B.FLAP =	.000	ELEVON =	.000
HAW/HT =	.850		

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HI/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0607	.0675		.3892	.6850	.3887	.1484		.3558	.1762	.0492
.002						.6685		.2272				
.003						.3594		.1547				
.004						.2254		.0975				
.005						.1761		.0704				
.006						.1222		.0474				
.007						.0860		.0410				
.025	.1041			.2006	.2164		.3086					
.050										.1765		
.100				.0440		.0605	.0835	.0852		.1864		
.153	.0416											
.177					.0267							
.200				.0191		.0329						
.299	.0390											
.300					.0198	.0239		.0513	.0489	.0858		
.302				.0234								
.303							.0443					
.428						.0293						
.444	.0371											
.487					.0267							
.500							.0448	.0472		.0597		
.559				.0733								
.590	.0285											
.600					.0503	.0438			.0255			
.700				.0065	.0479	.0298	.0186			.0240		
.736	.0000											
.800						.0174	.0148					
.850						.0252	.0153					
.900	.0691			.0256	.0260	.0304	.0117			.0167		

AEDC VA352 OH4B O1+T10 ORB. BOTTOM SURFACE WING (BTKL01)

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HI/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0336	.0434		.3278	.5664	.4193	.1529		.1651	.1241	.0463
.002						.5445		.2587				
.003						.3113		.1856				
.004						.1988		.1198				
.005						.1493		.0856				
.006						.1078		.0646				
.007						.0775		.0567				
.025	.0973			.1489	.1893		.3284					
.050										.1350		
.100				.0354		.0555	.0813	.1096		.1307		
.153	.0240											
.177					.0264							
.200				.0192		.0327						
.299	.0353											
.300					.0203	.0191		.0575	.0615	.0736		
.302				.0280								
.303							.0402					
.428						.0215						
.444	.0318											
.487					.0098							
.500							.0327	.0515		.0631		
.559				.0558								
.590	.0238											
.600					.0393	.0176			.0239			
.700				.0058	.0387	.0216	.0136			.0358		
.736	.0000											
.800						.0233	.0121					
.850						.0291	.0128					
.900	.0533			.0206	.0260	.0228	.0102			.0230		

MACH (1) = 8.000 ALPHA (3) = .000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HI/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0246	.0303		.2864	.4604	.4022	.1232		.1744	.1422	.0374
.002						.4743		.2045				
.003						.2904		.1551				
.004						.1898		.1023				
.005						.1496		.0798				
.006						.1072		.0652				
.007						.0801		.0508				
.025	.0392			.1419	.1745		.3326					

MACH (1) = 8.000 ALPHA (3) = .000

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HI/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.050										.1468		
.100				.0419		.0570	.0890	.1058		.1428		
.153	.0201											
.177					.0255							
.200				.0242		.0323						
.299	.0272											
.300					.0202	.0189		.0510	.0550	.0656		
.302				.0177								
.303							.0460					
.428						.0221						
.444	.0277											
.487					.0152							
.500							.0386	.0444		.0436		
.559				.0590								
.590	.0253											
.600					.0316	.0170			.0313			
.700				.0068	.0349	.0194	.0163			.0259		
.736	.0000											
.800						.0198	.0162					
.850						.0274	.0174					
.900	.0511			.0237	.0234	.0255	.0133			.0202		

MACH (1) = 8.000 ALPHA (4) = 5.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HI/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0514	.0530		.2969	.4570	.4093	.1117		.1785	.1614	.0423
.002						.4989		.2024				
.003						.3476		.1600				
.004						.2307		.1157				
.005						.1854		.0891				
.006						.1355		.0640				
.007						.1012		.0578				
.025	.0655			.1813	.1996		.3606					
.050										.1566		
.100				.0587		.0723	.1142	.1089		.1529		
.153	.0285											
.177					.0393							
.200				.0306		.0437						
.299	.0095											
.300					.0337	.0244		.0509	.0595	.0821		
.302				.0266								

AEDC VA352 OH4B O1+T10 ORB. BOTTOM SURFACE WING (BTKL01)

MACH (1) = 0.000 ALPHA (4) = 5.000

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HI/H0

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.303							.0702					
.428						.0307						
.444	.0249											
.487					.0190							
.500							.0578	.0543		.0513		
.559				.0374								
.590	.0306											
.600					.0247	.0244			.0293			
.700				.0072	.0454	.0175	.0230			.0269		
.736	.0000											
.800						.0113	.0246					
.850						.0198	.0236					
.900	.0607			.0406	.0435	.0154	.0191			.0230		

AEDC VA352 OH4B O1+T10 ORB. BOTTOM SURFACE WING (BTKL02) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

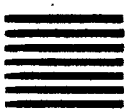
PARAMETRIC DATA

ALPHA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 BETA (1) = -2.000 TI = 97.350 QI = 3.942 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HI/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0419	.0563		.3414	.6068	.5600	.1905		.2979	.2466	.0945
.002						.9045		.3328				
.003						.4415		.1859				
.004						.2760		.1057				
.005						.2174		.0890				
.006						.1486		.0767				
.007						.1176		.0688				
.025	.0804			.1816	.2100		.3536					
.050										.3182		
.100				.0484		.0713	.1212	.1252		.2505		
.153	.0186											
.177					.0359							
.200				.0310		.0472						
.299	.0271											
.300					.0294	.0295		.0747	.0768	.1101		
.302				.0243								
.303							.0805					
.428						.0365						
.444	.0372											
.487					.0254							
.500							.0767	.0712		.0778		
.559				.0366								
.590	.0347											
.600					.0284	.0294			.0413			
.700				.0129	.0439	.0241	.0262			.0417		
.736	.0000											
.800						.0136	.0290					
.850						.0185	.0240					
.900	.0765			.0395	.0320	.0180	.0177			.0280		



AEDC VA352 OH4B O1+T10 ORB. BOTTOM SURFACE WING (BTKL02)

MACH (1) = 0.000 BETA (2) = .000 TI = 97.350 QI = 3.942 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HI/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0246	.0303		.2864	.4604	.4022	.1232		.1744	.1422	.0374
.002						.4743		.2045				
.003						.2904		.1551				
.004						.1898		.1023				
.005						.1496		.0798				
.006						.1072		.0652				
.007						.0801		.0508				
.025	.0392			.1419	.1745		.3326					
.050										.1468		
.100				.0419		.0570	.0890	.1058		.1428		
.153	.0201											
.177					.0255							
.200				.0242		.0323						
.299	.0272											
.300					.0202	.0189		.0510	.0550	.0656		
.302				.0177								
.303							.0460					
.428						.0221						
.444	.0277											
.487					.0152							
.500							.0386	.0444		.0436		
.559				.0590								
.590	.0253											
.600					.0316	.0170			.0313			
.700				.0068	.0349	.0194	.0163			.0259		
.736	.0000											
.800						.0198	.0162					
.850						.0274	.0174					
.900	.0511			.0237	.0234	.0255	.0133			.0202		

AEDC VA352 OH4B O1+T10 ORB. BOTTOM SURFACE WING (BTKL03) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HI/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0498	.0653		.3848	.6769	.4644	.1528		.2115	.1241	.0356
.002						.6310		.2249				
.003						.3395		.1542				
.004						.2120		.1096				
.005						.1649		.0804				
.006						.1135		.0610				
.007						.0856		.0523				
.025	.1240			.1803	.2197		.3525					
.050										.1667		
.100				.0464		.0594	.0815	.0981		.1423		
.153	.0179											
.177					.0283							
.200				.0207		.0368						
.299	.0150											
.300					.0167	.0198		.0482	.0539	.0583		
.302				.0126								
.303							.0394					
.428						.0250						
.444	.0123											
.487					.0076							
.500							.0317	.0401		.0399		
.559				.0179								
.590	.0081											
.600					.0089	.0140			.0173			
.700				.0044	.0112	.0081	.0119			.0222		
.736	.0000											
.800						.0039	.0113					
.850						.0052	.0126					
.900	.0259			.0159	.0095	.0058	.0096			.0168		

AEDC VA352 OH4B O1+T19 ORB. BOTTOM SURFACE WING (BTKL03)

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HI/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0324	.0430		.3211	.5469	.4056	.1606		.1826	.1352	.0386
.002						.5371		.2560				
.003						.2971		.1755				
.004						.2009		.1151				
.005						.1535		.0887				
.006						.1080		.0635				
.007						.0815		.0563				
.025	.0708			.1342	.1906		.3277					
.050										.1632		
.100				.0397		.0551	.0825	.1097		.1470		
.153	.0143											
.177					.0289							
.200				.0173		.0327						
.299	.0150											
.300					.0206	.0194		.0558	.0658	.0776		
.302				.0109								
.303							.0420					
.428						.0254						
.444	.0139											
.487					.0070							
.500							.0317	.0464		.0479		
.559				.0125								
.590	.0108											
.600					.0096	.0142			.0233			
.700				.0032	.0118	.0077	.0129			.0269		
.736	.0000											
.800						.0040	.0116					
.850						.0056	.0127					
.900	.0276			.0161	.0105	.0047	.0102			.0184		

MACH (1) = 8.000 ALPHA (3) = .000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HI/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0242	.0322		.2788	.4667	.4006	.1190		.1843	.1456	.0379
.002						.4708		.2006				
.003						.3095		.1460				
.004						.2023		.1224				
.005						.1591		.0829				
.006						.1102		.0730				
.007						.0859		.0641				
.025	.0358			.1352	.1762		.3414					

AEDC VA352 OH4B O1+T10 ORB. BOTTOM SURFACE WING (BTKL03)

MACH (1) = 8.000 ALPHA (3) = .000

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HI/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.050										.1528		
.100				.0481		.0618	.0910	.0994		.1487		
.153	.0086											
.177					.0305							
.200				.0270		.0378						
.299	.0074											
.300					.0251	.0201		.0541	.0617	.0663		
.302				.0179								
.303							.0465					
.428						.0257						
.444	.0148											
.487					.0181							
.500							.0389	.0517		.0461		
.559				.0109								
.590	.0139											
.600					.0129	.0190			.0256			
.700				.0033	.0090	.0137	.0159			.0257		
.736	.0000											
.800						.0070	.0153					
.850						.0089	.0169					
.900	.0211			.0153	.0073	.0078	.0143			.0195		

MACH (1) = 8.000 ALPHA (4) = 5.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HI/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0478	.0586		.3181	.4588	.4152	.1156		.1817	.1619	.0347
.002						.5090		.1981				
.003						.3649		.1597				
.004						.2496		.1249				
.005						.1980		.0951				
.006						.1498		.0759				
.007						.1118		.0668				
.025	.0519			.1776	.2150		.3784					
.050										.1598		
.100				.0658		.0814	.1082	.1095		.1581		
.153	.0274											
.177					.0447							
.200				.0374		.0475						
.299	.0104											
.300					.0374	.0275		.0549	.0647	.0805		
.302				.0308								

AEDC VA352 OH4B O1+T10 ORB. BOTTOM SURFACE WING (BTKL03)

MACH (1) = 8.000 ALPHA (4) = 5.000

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HI/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.303							.0601					
.428						.0348						
.444	.0082											
.487					.0299							
.500							.0525	.0563		.0540		
.559				.0139								
.590	.0073											
.600					.0226	.0250			.0219			
.700				.0082	.0159	.0191	.0218			.0331		
.736	.0000											
.800						.0107	.0223					
.850						.0154	.0239					
.900	.0224			.0155	.0080	.0124	.0222			.0285		

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 BETA (1) = -2.000 TI = 93.550 QI = .681 HREF = .020

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HI/H0

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
x/C												
.001		.0406	.0514		.3428	.6699	.5669	.1783		.2468	.1894	.0808
.002						.9633		.3288				
.003						.4190		.1713				
.004						.2605		.1047				
.005						.2015		.0882				
.006						.1445		.0742				
.007						.1136		.0655				
.025	.0613			.1777	.2118		.3435					
.050										.2122		
.100				.0530		.0732	.1147	.1234		.2085		
.153	.0182											
.177					.0353							
.200				.0327		.0445						
.299	.0064											
.300					.0280	.0257		.0649	.0687	.0842		
.302				.0226								
.303							.0662					
.428						.0338						
.444	.0044											
.487					.0239							
.500							.0615	.0667		.0561		
.559				.0134								
.590	.0066											
.600					.0191	.0242			.0277			
.700				.0076	.0134	.0187	.0219			.0354		
.736	.0000											
.800						.0089	.0205					
.850						.0140	.0213					
.900	.0380			.0143	.0067	.0106	.0162			.0246		

AEDC VA352 OH4B O1+T10 ORB. BOTTOM SURFACE WING (BTKL04)

MACH (1) = 8.000 BETA (2) = .000 TI = 93.550 @1 = .681 HREF = .020

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HI/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0242	.0322		.2788	.4667	.4906	.1190		.1843	.1456	.0379
.002						.4708		.2006				
.003						.3095		.1460				
.004						.2023		.1224				
.005						.1591		.0829				
.006						.1102		.0730				
.007						.0859		.0641				
.025	.0358			.1352	.1762		.3414					
.050										.1528		
.100				.0481		.0618	.0910	.0994		.1487		
.153	.0086											
.177					.0305							
.200				.0270		.0378						
.299	.0074											
.300					.0251	.0201		.0541	.0617	.0663		
.302				.0170								
.303							.0465					
.428						.0257						
.444	.0148											
.487					.0181							
.500							.0389	.0517		.0461		
.559				.0109								
.590	.0139											
.600					.0129	.0190			.0256			
.700				.0033	.0090	.0137	.0159			.0257		
.736	.0000											
.800						.0070	.0153					
.850						.0089	.0169					
.900	.0211			.0153	.0073	.0078	.0143			.0195		

AEDC VA352 OH4B O1+T10 ORB. BOTTOM SURFACE WING (BTKL05) (29 APR 74)

REFERENCE DATA

SREF = .0238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 98.067 QI = 4.007 HREF = .049

SECTION (1)BOTTOM SURF, WING DEPENDENT VARIABLE HI/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0000	.0000		.0000	.0000	.0000	.0000		.0000	.0000	.0000
.002						.0000		.0000				
.003						.0000		.0000				
.004						.0000		.0000				
.005						.0000		.0000				
.006						.0000		.0000				
.007						.0000		.0000				
.025	.0000			.0000	.0000		.0000					
.050										.0000		
.100				.0000		.0000	.0000	.0000		.0000		
.153	.0000											
.177					.0000							
.200				.0000		.0000						
.299	.0000											
.300					.0000	.0000		.0000	.0000	.0000		
.302				.0000								
.303							.0000					
.428						.0000						
.444	.0000											
.487					.0000							
.500							.0000	.0000		.0000		
.559				.0000								
.590	.0000											
.600					.0000	.0000			.0000			
.700				.0000	.0000	.0000	.0000			.0000		
.736	.0000											
.800						.0000	.0000					
.850						.0000	.0000					
.900	.0000			.0000	.0000	.0000	.0000			.0000		

AEDC VA352 OH4B O1+T10 ORB. BOTTOM SURFACE WING (BTKL05)

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 98.067 QI = 4.007 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HI/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0000	.0000		.0000	.0000	.0000	.0000		.0000	.0000	.0000
.002						.0000		.0000				
.003						.0000		.0000				
.004						.0000		.0000				
.005						.0000		.0000				
.006						.0000		.0000				
.007						.0000		.0000				
.025	.0000			.0000	.0000		.0000					
.050										.0000		
.100				.0000		.0000	.0000	.0000		.0000		
.153	.0000											
.177					.0000							
.200				.0000		.0000						
.299	.0000											
.300					.0000	.0000		.0000	.0000	.0000		
.302				.0000								
.303							.0000					
.428						.0000						
.444	.0000											
.487					.0000							
.500							.0000	.0000		.0000		
.559				.0000								
.590	.0000											
.600					.0000	.0000			.0000			
.700				.0000	.0000	.0000	.0000			.0000		
.736	.0000											
.800						.0000	.0000					
.850						.0000	.0000					
.900	.0000			.0000	.0000	.0000	.0000			.0000		

MACH (1) = 8.000 ALPHA (3) = .000 TI = 98.067 QI = 4.007 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HI/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0000	.0000		.0000	.0000	.0000	.0000		.0000	.0000	.0000
.002						.0000		.0000				
.003						.0000		.0000				
.004						.0000		.0000				
.005						.0000		.0000				
.006						.0000		.0000				
.007						.0000		.0000				
.025	.0000			.0000	.0000		.0000					

AEDC VA352 OH4B 01+T10 ORB. BOTTOM SURFACE WING (BTKL05)

MACH (1) = 8.000 ALPHA (3) = .000

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HI/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.050										.0000		
.150				.0000		.0000	.0000	.0000		.0000		
.153	.0000											
.177					.0000							
.250				.0000		.0000						
.299	.0000											
.300					.0000	.0000		.0000	.0000	.0000		
.302				.0000								
.303							.0000					
.428						.0000						
.444	.0000											
.467					.0000							
.500							.0000	.0000		.0000		
.559				.0000								
.590	.0000											
.600					.0000	.0000			.0000			
.700				.0000	.0000	.0000	.0000			.0000		
.736	.0000											
.800						.0000	.0000					
.850						.0000	.0000					
.900	.0000			.0000	.0000	.0000	.0000			.0000		

AEDC VA352 OH4B O1+T10 CRB. UPPER SURFACE WING (BTKU01) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HI/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0000	.2802	.0000
.200	.0000	.1100	.0000
.600	.0000	.0000	.0000
.800		.0140	.0000
.900		.0000	.0000
.950	.0000	.0171	.0000

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HI/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0000	.2373	.0000
.200	.0000	.0574	.0000
.600	.0000	.0000	.0000
.800		.0062	.0000
.900		.0000	.0000
.950	.0000	.0083	.0000

MACH (1) = 8.000 ALPHA (3) = .000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HI/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0000	.1696	.0000
.200	.0000	.0371	.0000
.600	.0000	.0000	.0000
.800		.0044	.0000
.900		.0000	.0000
.950	.0000	.0047	.0000

AEDC VA352 OH4B O1+T10 ORB. UPPER SURFACE WING (BTKU01)

MACH (1) = 8.000 ALPHA (4) = 5.000 T1 = 97.600 Q1 = 3.935 HREF = .049

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HI/H0

2Y/B	.4000	.6000	.8000
X/C			
.050	.0000	.1448	.0000
.200	.0000	.0286	.0000
.600	.0000	.0000	.0000
.800		.0012	.0000
.900		.0000	.0000
.950	.0000	.0025	.0000

AEDC VA352 OH4B O1+T10 ORB. UPPER SURFACE WING (BTKU02) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 BETA (1) = -2.000 TI = 97.350 QI = 3.942 HREF = .049

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HI/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0000	.1612	.0000
.200	.0000	.0341	.0000
.600	.0000	.0000	.0000
.800		.0026	.0000
.900		.0000	.0000
.950	.0000	.0025	.0000

MACH (1) = 8.000 BETA (2) = .000 TI = 97.350 QI = 3.942 HREF = .049

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HI/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0000	.1696	.0000
.200	.0000	.0371	.0000
.600	.0000	.0000	.0000
.800		.0044	.0000
.900		.0000	.0000
.950	.0000	.0047	.0000

AEDC VA352 OH4B O1+T10 ORB. UPPER SURFACE WING (BTKU03) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HI/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0000	.2256	.0000
.200	.0000	.0525	.0000
.600	.0000	.0000	.0000
.800		.0081	.0000
.900		.0000	.0000
.950	.0000	.0098	.0000

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HI/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0000	.2430	.0000
.200	.0000	.0589	.0000
.600	.0000	.0000	.0000
.800		.0063	.0000
.900		.0000	.0000
.950	.0000	.0061	.0000

MACH (1) = 8.000 ALPHA (3) = .000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HI/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0000	.1814	.0000
.200	.0000	.0395	.0000
.600	.0000	.0000	.0000
.800		.0052	.0000
.900		.0000	.0000
.950	.0000	.0053	.0000

AEDC VA352 OH4B O1+T10 ORB. UPPER SURFACE WING (BTKU03)

MACH (1) = 8.000 ALPHA (4) = 5.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HI/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0000	.1566	.0000
.200	.0000	.0307	.0000
.600	.0000	.0000	.0000
.800		.0037	.0000
.900		.0000	.0000
.950	.0000	.0036	.0000

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

ALPHA =	.000	RN/L =	.680
B.FLAP =	.000	ELEVON =	.000
HAW/HT =	.850		

MACH (1) = 8.000 BETA (1) = -2.000 TI = 93.550 QI = .681 HREF = .020

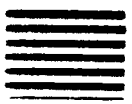
SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HI/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0000	.1693	.0000
.200	.0000	.0383	.0000
.600	.0000	.0000	.0000
.800		.0037	.0000
.900		.0000	.0000
.950	.0000	.0034	.0000

MACH (1) = 8.000 BETA (2) = .000 TI = 93.550 QI = .681 HREF = .020

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HI/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0000	.1814	.0000
.200	.0000	.0395	.0000
.600	.0000	.0000	.0000
.800		.0052	.0000
.900		.0000	.0000
.950	.0000	.0053	.0000



AEDC VA352 OH4B O1+T10 ORB. LEFT VERTICAL TAIL (BTKV01) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HI/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0000	.7147	.6826	.6643
.010					.0000
.100	.0000	.0000	.1740	.1871	
.300	.0000	.0000	.0780	.0832	
.500		.0000	.0000	.0000	.0213
.700	.0000	.0000	.0000	.0000	
.900		.0000	.0000	.0185	

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HI/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0000	.4469	.8174	.7538
.010					.0000
.100	.0000	.0000	.1179	.1686	
.300	.0000	.0000	.0346	.0744	
.500		.0000	.0000	.0000	.0535
.700	.0000	.0000	.0000	.0000	
.900		.0000	.0000	.0123	

MACH (1) = 8.000 ALPHA (3) = .000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HI/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0000	.3541	.5011	.5290
.010					.0000
.100	.0000	.0000	.0873	.1102	
.300	.0000	.0000	.0435	.0526	
.500		.0000	.0000	.0000	.0362
.700	.0000	.0000	.0000	.0000	
.900		.0000	.0000	.0126	

AEDC VA352 CH4B O1+T10 ORB. LEFT VERTICAL TAIL (BTKV01)

MACH (1) = 8.000 ALPHA (4) = 5.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)LEFT VERTICAL TAIL DEFENDENT VARIABLE HI/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0000	.3786	.5474	.4210
.010					.0000
.100	.0000	.0000	.0814	.0994	
.300	.0000	.0000	.0368	.0480	
.500		.0000	.0000	.0000	.0319
.700	.0000	.0000	.0000	.0000	
.900		.0000	.0000	.0102	

AEDC VA352 OH4B O1+T10 ORB. LEFT VERTICAL TAIL (BTKV02) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 BETA (1) = -2.000 TI = 97.350 QI = 3.942 HREF = .049

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HI/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0000	.4601	.8074	.5947
.010					.0000
.100	.0000	.0000	.0992	.1441	
.300	.0000	.0000	.0573	.0578	
.500		.0000	.0000	.0000	.0437
.700	.0000	.0000	.0000	.0000	
.900		.0000	.0000	.0162	

MACH (1) = 8.000 BETA (2) = .000 TI = 97.350 QI = 3.942 HREF = .049

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HI/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0000	.3541	.5011	.5290
.010					.0000
.100	.0000	.0000	.0873	.1102	
.300	.0000	.0000	.0435	.0526	
.500		.0000	.0000	.0000	.0362
.700	.0000	.0000	.0000	.0000	
.900		.0000	.0000	.0126	

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HI/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0000	.6979	1.0908	.7289
.010					.0000
.100	.0000	.0000	.1615	.1994	
.300	.0000	.0000	.0754	.1101	
.500		.0000	.0000	.0000	.0282
.700	.0000	.0000	.0000	.0000	
.900		.0000	.0000	.0215	

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 93.425 QI = .682 HREF = .020

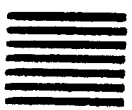
SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HI/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0000	.4527	.8688	.8163
.010					.0000
.100	.0000	.0000	.1159	.1573	
.300	.0000	.0000	.0528	.0725	
.500		.0000	.0000	.0000	.0471
.700	.0000	.0000	.0000	.0000	
.900		.0000	.0000	.0156	

MACH (1) = 8.000 ALPHA (3) = .000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HI/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0000	.3762	.5544	.5852
.010					.0000
.100	.0000	.0000	.0923	.1111	
.300	.0000	.0000	.0465	.0575	
.500		.0000	.0000	.0000	.0372
.700	.0000	.0000	.0000	.0000	
.900		.0000	.0000	.0136	



AEDC VA352 OH4B O1+T10 ORB. LEFT VERTICAL TAIL (BTKV03)

MACH (1) = 0.000 ALPHA (4) = 5.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HI/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0000	.3843	.5888	.4659
.010					.0000
.100	.0000	.0000	.0838	.1031	
.300	.0000	.0000	.0383	.0488	
.500		.0000	.0000	.0000	.0318
.700	.0000	.0000	.0000	.0000	
.900		.0000	.0000	.0117	

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

ALPHA =	.000	RN/L =	.680
B.FLAP =	.000	ELEVON =	.000
HAW/HT =	.850		

MACH (1) = 8.000 BETA (1) = -2.000 TI = 93.550 QI = .681 HREF = .020

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HI/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0000	.5103	.9435	.6478
.010					.0000
.100	.0000	.0000	.1068	.1412	
.300	.0000	.0000	.0600	.0597	
.500		.0000	.0000	.0000	.0444
.700	.0000	.0000	.0000	.0000	
.900		.0000	.0000	.0169	

MACH (1) = 8.000 BETA (2) = .000 TI = 93.550 QI = .681 HREF = .020

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HI/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0000	.3762	.5544	.5852
.010					.0000
.100	.0000	.0000	.0923	.1111	
.300	.0000	.0000	.0465	.0575	
.500		.0000	.0000	.0000	.0372
.700	.0000	.0000	.0000	.0000	
.900		.0000	.0000	.0136	

AEDC VA352 OH4B O1+T10 ORB. OMS POD (BTKH01) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)OMS POD DEPENDENT VARIABLE HI/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.3733	.2536	.1402	.0671	.0000	.0000	.0000
8.540		.0000					
8.650		.0000					
8.727			.0000				
8.750						.0000	.0000
8.855				.0000			
8.942			.0000				
8.978					.0000		
9.056				.0000			
9.118				.0000			
9.222					.0000		
9.275					.0000		

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)OMS POD DEPENDENT VARIABLE HI/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.2189	.1108	.1154	.0902	.0000	.0000	.0000
8.540		.0000					
8.650		.0000					
8.727			.0000				
8.750						.0000	.0000
8.855				.0000			
8.942			.0000				
8.978					.0000		
9.056				.0000			
9.118				.0000			
9.222					.0000		
9.275					.0000		

MACH (1) = 8.000 ALPHA (3) = .000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)OMS POD DEPENDENT VARIABLE HI/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0513	.2509	.1279	.0671	.0000	.0000	.0000
8.540		.0000					
8.650		.0000					
8.727			.0000				
8.750						.0000	.0000
8.855				.0000			
8.942			.0000				
8.978					.0000		
9.056				.0000			
9.118				.0000			
9.222					.0000		
9.275					.0000		

MACH (1) = 8.000 ALPHA (4) = 5.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)OMS POD DEPENDENT VARIABLE HI/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0452	.1679	.1079	.0558	.0000	.0000	.0000
8.540		.0000					
8.650		.0000					
8.727			.0000				
8.750						.0000	.0000
8.855				.0000			
8.942			.0000				
8.978					.0000		
9.056				.0000			
9.118				.0000			
9.222					.0000		
9.275					.0000		

AEDC VA352 OH4B O1+T10 ORB. OMS POD (BTKH02) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 BETA (1) = -2.000 TI = 97.350 QI = 3.942 HREF = .049

SECTION (1)OMS POD DEPENDENT VARIABLE HI/H0

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.2843	.3917	.2127	.1250	.0000	.0000	.0000
8.540		.0000					
8.650		.0000					
8.727			.0000				
8.750						.0000	.0000
8.855				.0000			
8.942			.0000				
8.978					.0000		
9.056				.0000			
9.118				.0000			
9.222					.0000		
9.275					.0000		

MACH (1) = 8.000 BETA (2) = .000 TI = 97.350 QI = 3.942 HREF = .049

SECTION (1)OMS POD DEPENDENT VARIABLE HI/H0

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0513	.2509	.1279	.0671	.0000	.0000	.0000
8.540		.0000					
8.650		.0000					
8.727			.0000				
8.750						.0000	.0000
8.855				.0000			
8.942			.0000				
8.978					.0000		
9.056				.0000			
9.118				.0000			
9.222					.0000		
9.275					.0000		

REFERENCE DATA

SREF = .6238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)OMS POD DEPENDENT VARIABLE HI/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.2967	.2129	.1098	.0612	.0000	.0000	.0000
8.540		.0000					
8.650		.0000					
8.727			.0000				
8.750						.0000	.0000
8.855				.0000			
8.942			.0000				
8.978					.0000		
9.056				.0000			
9.118				.0000			
9.222					.0000		
9.275					.0000		

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)OMS POD DEPENDENT VARIABLE HI/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0305	.0523	.0510	.0549	.0000	.0000	.0000
8.540		.0000					
8.650		.0000					
8.727			.0000				
8.750						.0000	.0000
8.855				.0000			
8.942			.0000				
8.978					.0000		
9.056				.0000			
9.118				.0000			
9.222					.0000		
9.275					.0000		

AEDC VA352 OH4B O1+T10 ORB. OMS POD (BTKM03)

MACH (1) = 8.000 ALPHA (3) = .000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)OMS POD DEPENDENT VARIABLE HI/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0146	.0402	.0710	.0544	.0000	.0000	.0000
8.540		.0000					
8.650		.0000					
8.727			.0000				
8.750						.0000	.0000
8.855				.0000			
8.942			.0000				
8.978					.0000		
9.056				.0000			
9.118				.0000			
9.222					.0000		
9.275					.0000		

MACH (1) = 8.000 ALPHA (4) = 5.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)OMS POD DEPENDENT VARIABLE HI/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0053	.0156	.0322	.0338	.0000	.0000	.0000
8.540		.0000					
8.650		.0000					
8.727			.0000				
8.750						.0000	.0000
8.855				.0000			
8.942			.0000				
8.978					.0000		
9.056				.0000			
9.118				.0000			
9.222					.0000		
9.275					.0000		

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 BETA (1) = -2.000 TI = 93.550 QI = .681 HREF = .020

SECTION (1)OMS POD DEPENDENT VARIABLE HI/H0

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0317	.2202	.1528	.0848	.0000	.0000	.0000
8.540		.0000					
8.650		.0000					
8.727			.0000				
8.750						.0000	.0000
8.855				.0000			
8.942			.0000				
8.978					.0000		
9.056				.0000			
9.118				.0000			
9.222					.0000		
9.275					.0000		

MACH (1) = 8.000 BETA (2) = .000 TI = 93.550 QI = .681 HREF = .020

SECTION (1)OMS POD DEPENDENT VARIABLE HI/H0

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0146	.0402	.0710	.0544	.0000	.0000	.0000
8.540		.0000					
8.650		.0000					
8.727			.0000				
8.750						.0000	.0000
8.855				.0000			
8.942			.0000				
8.978					.0000		
9.056				.0000			
9.118				.0000			
9.222					.0000		
9.275					.0000		

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE Y=0.875 (BTKY01) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1662	.0346	.0519	.0442	.0472	.0326	.1186	.0135

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1591	.0310	.0486	.0408	.0316	.0301	.1117	.0131

MACH (1) = 8.000 ALPHA (3) = .000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0203	.0372	.0332	.0312	.0284	.0184	.0778	.0149

MACH (1) = 8.000 ALPHA (4) = 5.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0217	.0349	.0283	.0254	.0242	.0196	.0816	.0109

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 BETA (1) = -2.000 TI = 97.350 QI = 3.942 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0306	.0405	.0413	.0350	.0360	.0304	.1436	.0088

MACH (1) = 8.000 BETA (2) = .000 TI = 97.350 QI = 3.942 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0203	.0372	.0332	.0312	.0284	.0184	.0778	.0149

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE Y=0.875 (BTKY03) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .680
B,FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1280	.0401	.0387	.0285	.0168	.0161	.0185	.0204

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0678	.0282	.0386	.0296	.0158	.0193	.0164	.0156

MACH (1) = 8.000 ALPHA (3) = .000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0132	.0376	.0361	.0314	.0230	.0201	.0236	.0109

MACH (1) = 8.000 ALPHA (4) = 5.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0194	.0243	.0243	.0239	.0169	.0171	.0359	.0064

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE Y=0.875 (BTKY04) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 BETA (1) = -2.000 TI = 93.550 QI = .681 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0281	.0211	.0262	.0242	.0190	.0142	.0459	.0111

MACH (1) = 8.000 BETA (2) = .000 TI = 93.550 QI = .681 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0132	.0376	.0361	.0314	.0230	.0201	.0236	.0109

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE Y=0.875 (BTKY05) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 98.067 QI = 4.007 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 98.067 QI = 4.007 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

MACH (1) = 8.000 ALPHA (3) = .000 TI = 98.067 QI = 4.007 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

REFERENCE DATA

SREF = .6238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0613	.0000	.0000	.0000	.0000

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0678	.0000	.0000	.0000	.0000

MACH (1) = 8.000 ALPHA (3) = .000 TI = 97.600 QI = 3.935 HREF = .049

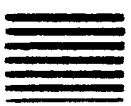
SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0330	.0000	.0000	.0000	.0000

MACH (1) = 8.000 ALPHA (4) = 5.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0153	.0000	.0000	.0000	.0000



AEDC VA352 OH4B O1+T10 ORB. WING UPPER CREASE (BTKC02) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 BETA (1) = -2.000 TI = 97.350 QI = 3.942 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0416	.0000	.0000	.0000	.0000

MACH (1) = 8.000 BETA (2) = .000 TI = 97.350 QI = 3.942 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0330	.0000	.0000	.0000	.0000

AEDC VA352 OH4B O1+T10 ORB. WING UPPER CREASE (BTKC03) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0358	.0000	.0000	.0000	.0000

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0263	.0000	.0000	.0000	.0000

MACH (1) = 8.000 ALPHA (3) = .000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0137	.0000	.0000	.0000	.0000

MACH (1) = 8.000 ALPHA (4) = 5.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0073	.0000	.0000	.0000	.0000

AEDC VA352 OH4B O1+T10 ORB. WING UPPER CREASE (BTKC04) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 BETA (1) = -2.000 TI = 93.550 QI = .681 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/H0

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0203	.0000	.0000	.0000	.0000

MACH (1) = 8.000 BETA (2) = .000 TI = 93.550 QI = .681 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/H0

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0137	.0000	.0000	.0000	.0000

AEDC VA352 OH48 O1+T10 ORB. WING UFFER CREASE (BTKC05) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRF = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRF = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 98.067 QI = 4.007 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0000	.0000	.0000	.0000	.0000

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 98.067 QI = 4.007 HREF = .049

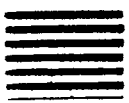
SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0000	.0000	.0000	.0000	.0000

MACH (1) = 8.000 ALPHA (3) = .000 TI = 98.067 QI = 4.007 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0000	.0000	.0000	.0000	.0000



AEDC VA352 OH4B O1+T10 ORB. FUSELAGE Z=7.525 (BTKF01) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
MAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0497	.0531	.0000	.0000	.0000	.0000

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0330	.0355	.0000	.0000	.0000	.0000

MACH (1) = 8.000 ALPHA (3) = .000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0323	.0259	.0000	.0000	.0000	.0000

MACH (1) = 8.000 ALPHA (4) = 5.000 TI = 97.600 QI = 3.935 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0217	.0203	.0000	.0000	.0000	.0000

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE Z=7.525 (BTKF02) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 BETA (1) = -2.000 TI = 97.350 QI = 3.942 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0404	.0359	.0000	.0000	.0000	.0000

MACH (1) = 8.000 BETA (2) = .000 TI = 97.350 QI = 3.942 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0323	.0259	.0000	.0000	.0000	.0000

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE Z=7.525 (BTKF03) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/H0

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0314	.0569	.0000	.0000	.0000	.0000

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/H0

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0197	.0141	.0000	.0000	.0000	.0000

MACH (1) = 8.000 ALPHA (3) = .000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/H0

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0221	.0175	.0000	.0000	.0000	.0000

MACH (1) = 8.000 ALPHA (4) = 5.000 TI = 93.425 QI = .682 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/H0

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0146	.0105	.0000	.0000	.0000	.0000

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE Z=7.525 (BTKF04) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

ALPHA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 BETA (1) = -2.000 TI = 93.550 QI = .681 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/H0

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0248	.0246	.0000	.0000	.0000	.0000

MACH (1) = 8.000 BETA (2) = .000 TI = 93.550 QI = .681 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/H0

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0221	.0175	.0000	.0000	.0000	.0000

AEDC VA352 OH4B O1+T10 ORB. FUSELAGE Z=7.525 (BTKF05) (29 APR 74)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .850

MACH (1) = 8.000 ALPHA (1) = -10.000 TI = 98.067 QI = 4.007 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0000	.0000	.0000	.0000	.0000	.0000

MACH (1) = 8.000 ALPHA (2) = -5.000 TI = 98.067 QI = 4.007 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0000	.0000	.0000	.0000	.0000	.0000

MACH (1) = 8.000 ALPHA (3) = .000 TI = 98.067 QI = 4.007 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HI/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0000	.0000	.0000	.0000	.0000	.0000

AEDC VA352 CH4B O1 ORB. FUSELAGE (CTKB10) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRF = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = -5.000 TI = 96.800 QI = 3.961 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.3634	.2639	.1175		.0769	.0539	.0391	.0280	.0000			.0190	.0165	.0141
10.000															.0180
14.000								.0547							
20.000															.0218
22.000								.0583							
24.500															.0301
35.000								.0784							
39.000															.0389
42.500								.0565							
48.000												.0577			
60.000								.1540							
119.000															.1182
180.000			.9743		.2442			.1611			.1153				.0978

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0116		.0106	.0091	.0082		.0076				.0071		.0067		
10.000					.0127										
20.000					.0123										
25.500					.0133										
40.000					.0196										
45.500					.0259										
131.200									.3391						
145.400														.4550	
146.200								.5575							
156.000														.3362	
159.200															.6205
170.700												.0251			
171.900										.8639					
173.400						.5769									
180.000		.0836			.2012		.7518				.3856		.7120		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0062		.0054	.0000	.0041	.0041	.0043	.0060	.0070	.0087	.0103	.0118	.0127	.0133
11.500				.0075											

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB10)

MACH (1) = 8.000 ALPHA (1) = -5.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0045							
21.500												.0049			
23.000								.0052							
24.000				.0079											
31.500				.0086											
34.000								.0047							
35.000				.0095											
40.000				.0140				.0059							
45.000								.0086							
51.000				.0244											
57.500								.0070							
59.500												.0375			
61.000								.0062							
65.000								.0068							
70.000								.0087							
96.500				.0217											
105.000												.0146			
106.000								.0196							
135.000								.0259				.0071			
140.000				.1955											
141.400	.5044														
151.000			.4285												
180.000				.0846		.0095		.0050				.0256			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0137	.0142	.0140	.0140	.0146	.0148	.0137	.0128	.0118	.0111	.0104	.0096	.0098	.0096	
21.500	.0072				.0099				.0171				.0259		
63.000	.0177														
64.000									.0303						
65.000													.0210		
65.500					.0467										
105.000	.0105				.0141				.0320				.0331		
111.000															.0404
112.000					.0094										
113.000					.0113										
116.000											.0364				
135.000	.0242				.0332				.0381						
149.000											.0388				
180.000	.0519				.0479				.0405				.0494		

X/L	.8500	.8750	.9000	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500

PHI

MACH (1) = 8.000 ALPHA (1) = -5.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI										
.000	.0094	.0086		.0046	.0059	.0009		.0061	.0000	.0062
21.500			.0197							
39.000					.0041					.0046
52.500				.0719						
55.000			.0322							
65.000			.0387							
68.000				.0385						
100.000			.0418							
108.000			.0461	.0338						
112.000					.0097					
113.000							.0090			

MACH (1) = 8.000 ALPHA (2) = .000 TI = 96.800 QI = 3.961 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.3829	.2951	.1405		.0966	.0715	.0542	.0385	.0000			.0279	.0240	.0209
10.000															.0263
14.000								.0733							
20.000															.0316
22.000								.0764							
24.500															.0441
35.000								.0840							
39.000															.0500
42.500								.0806							
48.000												.0540			
60.000								.1297							
119.000															.0947
180.000			.8515		.2013			.1279			.0888				.0731

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0170		.0151	.0132	.0115		.0107				.0101		.0093		
10.000					.0191										
20.000					.0202										
25.500					.0248										
40.000					.0311										
45.500					.0309										
131.200															
145.400									.3996						
146.200								.6472						.3869	

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB10)

MACH (1) = 8.000 ALPHA (2) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI														.3714	
156.000															.0085
159.200												.5409			
170.700										.0352					
171.900						.3902									
173.400							.5586				.3293		.6466		
180.000		.0576			.1280										

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0088		.0077	.0000	.0061	.0056	.0046	.0045	.0042	.0041	.0040	.0042	.0043	.0044
11.500				.0117											
12.000								.0068				.0098			
21.500															
23.000								.0152							
24.000				.1709											
31.500				.0176											
34.000								.0137							
35.000				.0196											
40.000				.0202				.0169							
45.000								.0198							
51.000				.0220											
57.500								.0074				.0255			
59.500															
61.000								.0058							
65.000								.0056							
70.000								.0062							
96.500				.0159											
105.000												.0257			
106.000								.0253							
135.000								.0248				.0134			
140.000				.3550											
141.400	.2327														
151.000			.2973												
180.000				.1040		.0061		.0038				.0094			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8299
PHI															
.000	.0047	.0051	.0051	.0058	.0053	.0065	.0070	.0076	.0078	.0080	.0089	.0088	.0086	.0092	
21.500	.0081				.0101				.0091				.0102		
63.000	.0097														
64.000									.0102						
65.000													.0102		
65.500					.0189										

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB10)

MACH (1) = 8.000 ALPHA (2) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0204				.0130				.0204				.0226		
111.000															.0340
112.000					.0158										
113.000					.0177										
116.000											.0198				
135.000	.0042				.0085				.0106						
149.000											.0186				
160.000	.0158				.0217				.0252				.0447		

X/L	.8500	.8750	.9000	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI										
.000	.0090	.0089		.0036	.0072	.0075		.0000	.0072	.0000
21.500			.0074							
39.000					.0052					.0036
52.500				.0100						
55.000			.0165							
65.000			.0216							
68.000				.0230						
100.000			.0253							
108.000			.0343	.0237						
112.000					.0065					
113.000							.0059			

AEDC VA352 OH4B O1 ORB. BOTTOM SURFACE WING (CTKL10) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = -5.000 TI = 96.800 QI = 3.961 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0164	.0250		.2557	.3511	.2070	.0666		.1139	.0772	.0128
.002						.3836		.1766				
.003						.2933		.1232				
.004						.2101		.0875				
.005						.1665		.0664				
.006						.1193		.0447				
.007						.0813		.0377				
.025	.0447			.1268	.1886		.2154					
.050										.1103		
.100				.0263		.0510	.0581	.0746		.0881		
.153	.0075											
.177					.0197							
.200				.0114		.0293						
.299	.0021											
.300					.0163	.0216		.0343	.0288	.0391		
.302				.0073								
.303							.0325					
.428						.0371						
.444	.0020											
.487					.0430							
.500							.0229	.0326		.0211		
.559				.0030								
.590	.0044											
.600					.0226	.0161			.0139			
.700				.0028	.0172	.0206	.0085			.0115		
.736	.0085											
.800						.0105	.0072					
.850						.0114	.0086					
.900	.0026			.0011	.0052	.0087	.0069			.0111		

AEDC VA352 OH4B 01 ORB. BOTTOM SURFACE WING (CTKL10)

MACH (1) = 8.000 ALPHA (2) = .000 TI = 96.800 QI = 3.961 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

ZY/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0368	.0422		.2678	.3503	.2434	.0668		.1219	.0847	.0228
.002						.4073		.1829				
.003						.3488		.1393				
.004						.2548		.1042				
.005						.2056		.0787				
.006						.1488		.0565				
.007						.1041		.0484				
.025	.0621			.1963	.2349		.2772					
.050										.1259		
.100				.0513		.0660	.0788	.0902		.1250		
.153	.0235											
.177					.0310							
.200				.0261		.0383						
.299	.0153											
.300					.0347	.0356		.0382	.0412	.0529		
.302				.0206								
.303							.0578					
.428						.0599						
.444	.0115											
.487					.0545							
.500							.0794	.0362		.0288		
.559				.0207								
.590	.0092											
.600					.0442	.0435			.0141			
.700				.0182	.0319	.0330	.0288			.0153		
.736	.0122											
.800						.0165	.0250					
.850						.0193	.0264					
.900	.0058			.0076	.0127	.0153	.0204			.0125		

AEDC VA352 OH4B 01 ORB. UPPER SURFACE WING (CTKU10) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = -5.000 TI = 96.800 QI = 3.961 HREF = .049

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.1859	.2539	.2647
.200	.0499	.0817	.0655
.600	.0035	.3779	.0158
.800		.0081	.0091
.900		.0101	.0094
.950	.0064	.0101	.0091

MACH (1) = 8.000 ALPHA (2) = .000 TI = 96.800 QI = 3.961 HREF = .049

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0053	.0037	.0101
.200	.1810	.2320	.2460
.600	.0310	.0523	.0514
.800		.2998	.0102
.900		.0080	.0081
.950	.0020	.0100	.0099

AEDC VA352 OH4B 01 ORB. LEFT VERTICAL TAIL (CTKV10) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5603 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3,720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = -5.000 TI = 96.800 QI = 3.961 HREF = .049

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.2066	.3017	.5214	.5797
.010					.2490
.100	.0701	.0685	.1070	.1442	
.300	.0797	.0219	.0488	.0640	
.500		.1096	.0209	.0455	.0552
.700	.0272	.0374	.0060	.0121	
.900		.0306	.0192	.0128	

MACH (1) = 8.000 ALPHA (2) = .000 TI = 96.800 QI = 3.961 HREF = .049

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.2316	.1887	.3516	.3688
.010					.1446
.100	.0723	.0673	.0711	.1033	
.300	.0535	.0239	.0348	.0490	
.500		.0485	.0206	.0332	.0349
.700	.0286	.0368	.0062	.0096	
.900		.0246	.0082	.0096	

AEDC VA352 OH4B O1 ORB. RCS CENTER (CTKR10) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = -5.000 TI = 96.800 QI = 3.961 HREF = .049

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/H0

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0577	.0068	.0210	.0387	.0385

MACH (1) = 8.000 ALPHA (2) = .000 TI = 96.800 QI = 3.961 HREF = .049

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/H0

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0540	.0056	.0102	.0216	.0230

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = -5.000 TI = 96.800 QI = 3.961 HREF = .049

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.3244	.1593	.0888	.0507	.0161	.0158	.0146
8.540		.2445					
8.650		.2899					
8.727			.1340				
8.750						.0000	.0183
8.855				.0458			
8.942			.1209				
8.978					.0207		
9.056				.0561			
9.118				.0308			
9.222					.0507		
9.275					.0212		

MACH (1) = 8.000 ALPHA (2) = .000 TI = 96.800 QI = 3.961 HREF = .049

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0448	.1311	.1198	.0712	.0345	.0375	.0311
8.540		.2357					
8.650		.1857					
8.727			.1872				
8.750						.0000	.0290
8.855				.0622			
8.942			.1258				
8.978					.0307		
9.056				.0596			
9.118				.0623			
9.222					.0528		
9.275					.0309		

AEDC VA352 OH4B 01 ORB. FUSELAGE Y=0.875 (CTKY10) (15 JAN 75)

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	.000	RN/L =	3.720
B.FLAP =	.000	ELEVON =	.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = -5.000 TI = 96.800 QI = 3.961 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0079	.0052	.0049	.0072	.0099	.0171	.0259	.0197

MACH (1) = 8.000 ALPHA (2) = .000 TI = 96.800 QI = 3.961 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1709	.0152	.0098	.0081	.0101	.0091	.0102	.0074

AEDC VA352 CH4B O1 ORB. WING UPPER CREASE (CTKC10) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = -5.000 TI = 96.800 QI = 3.961 HREF = .049

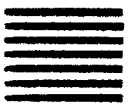
SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0375	.0177	.0467	.0303	.0322

MACH (1) = 8.000 ALPHA (2) = .000 TI = 96.800 QI = 3.961 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0255	.0097	.0189	.0102	.0165



AEDC VA352 OH4B O1 ORB. FUSELAGE Z=7.525 (CTKF10) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = -5.000 TI = 96.800 QI = 3.961 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0196	.0146	.0105	.0141	.0320	.0331

MACH (1) = 8.000 ALPHA (2) = .000 TI = 96.800 QI = 3.961 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0253	.0257	.0204	.0130	.0204	.0226

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB11) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRF = .0000 IN.
LREF = 22.5803 IN. YMRF = .0000 IN.
BREF = 16.3919 IN. ZMRF = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = -5.000 TI = 93.000 QI = .677 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

x/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.3670	.2684	.1191		.0801	.0564	.0416	.0306	.0000			.0224	.0196	.0162
10.000															.0205
14.000								.0561							
20.000															.0231
22.000								.0591							
24.500															.0318
35.000								.0791							
39.000															.0420
42.500								.0849							
48.000												.0588			
60.000								.1542							
119.000															.1160
180.000			.4592		.2426			.1616			.1167				.1006

x/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0141		.0155	.0114	.0101		.0100				.0090		.0081		
10.000					.0137										
20.000					.0139										
25.500					.0159										
40.000					.0217										
45.500					.0258										
131.200									.1552						
145.400														.2497	
146.200								.1978							
156.000														.2415	
159.200															.4056
170.700												.0207			
171.900										.4446					
173.400						.2644									
180.000		.0831			.0965		.3569				.3850		.3483		

x/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0079		.0066	.0000	.0047	.0053	.0046	.0050	.0056	.0059	.0062	.0067	.0070	.0073
11.500				.0079											

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB11)

MACH (1) = 8.000 ALPHA (1) = -5.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0052							
21.500												.0044			
23.000								.0066							
24.000				.0106											
31.500				.0111											
34.000								.0067							
35.000				.0117											
40.000				.0162				.0090							
45.000								.0101							
51.000				.0250											
57.500								.0062							
59.500												.0159			
61.000								.0076							
65.000								.0079							
70.000								.0086							
96.500				.0192											
105.000												.0165			
106.000								.0206							
135.000								.0298				.0126			
140.000				.1245											
141.400	.1990														
151.000			.3146												
180.000				.0649		.0075		.0056				.0121			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0079	.0082	.0092	.0095	.0111	.0110	.0116	.0115	.0123	.0123	.0130	.0130	.0143	.0150	
21.500	.0041				.0045				.0061				.0064		
63.000	.0080														
64.000									.0199						
65.000													.0327		
65.500					.0150										
105.000	.0089				.0038				.0039				.0059		
111.000															.0087
112.000					.0046										
113.000					.0051										
116.000											.0063				
135.000	.0103				.0207				.0310						
149.000											.0241				
180.000	.0168				.0181				.0162				.0172		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500

PHI

MACH (1) = 8.000 ALPHA (1) = -5.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0147	.0143	.0139	.0145	.0127	.0027	.0115	.0000		.0113	.0000	.0109
21.500			.0065									
39.000							.0022					.0027
52.500						.0156						
55.000			.0571									
65.000			.0249									
68.000						.0211						
100.000			.0322									
108.000			.0197			.0148						
112.000							.0044					
113.000									.0053			

MACH (1) = 8.000 ALPHA (2) = .000 TI = 93.000 QI = .677 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.3839	.2908	.1379		.0979	.0760	.0566	.0423	.0000			.0294	.0251	.0222
10.000															.0277
14.000								.0741							
20.000															.0322
22.000								.0769							
24.500															.0443
35.000								.0863							
39.000															.0507
42.500								.0739							
48.000												.0549			
60.000								.1295							
119.000															.0965
180.000			.3947		.2032			.1275			.0905				.0759

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0191		.0177	.0162	.0138		.0131				.0125		.0117		
10.000					.0188										
20.000					.0215										
25.500					.0267										
40.000					.0317										
45.500					.0328										
131.200									.1026						
145.400														.1933	
146.800								.1318							

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB11)

MACH (1) = 8.000 ALPHA (2) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.2084	
159.200															.3559
170.700												.0250			
171.900										.3398					
173.400						.1662									
180.000		.0609			.0620		.2604				.3360		.3181		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0111		.0100	.0000	.0070	.0067	.0058	.0058	.0053	.0047	.0045	.0043	.0039	.0039
11.500				.0118											
12.000								.0072							
21.500												.0075			
23.000								.0103							
24.000				.0164											
31.500				.0189											
34.000								.0134							
35.000				.0201											
40.000				.0256				.0141							
45.000								.0179							
51.000				.0237											
57.500								.0067							
59.500												.0121			
61.000								.0084							
65.000								.0084							
70.000								.0085							
96.500				.0195											
105.000												.0126			
106.000								.0160							
135.000								.0232				.0159			
140.000				.0981											
141.400	.1337														
151.000			.2762												
180.000				.0794		.0073		.0038				.0061			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0038	.0037	.0035	.0035	.0038	.0038	.0039	.0035	.0032	.0033	.0033	.0033	.0032	.0033	
21.500	.0065				.0049				.0047				.0046		
63.000	.0058														
64.000									.0054						
65.000													.0088		
65.500					.0085										

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB11)

MACH (1) = 8.000 ALPHA (2) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0070				.0041				.0043				.0040		
111.000															.0063
112.000					.0061										
113.000					.0082										
116.000											.0064				
135.000	.0084				.0034				.0040						
149.000											.0085				
180.000	.0110				.0133				.0135				.0250		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0030	.0029	.0026	.0031	.0029	.0038	.0026	.0000		.0031	.0000	.0027
21.500			.0044									
39.000							.0054					.0038
52.500						.0919						
55.000			.0247									
65.000			.0250									
68.000						.0178						
100.000			.0109									
108.000			.0121			.0115						
112.000							.0061					
113.000									.0057			

AEDC VA352 OH4B 01 ORB. BOTTOM SURFACE WING (CTKL11) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = -5.000 TI = 93.000 QI = .677 HREF = .020

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0178	.0265		.2523	.3606	.2606	.0729		.1172	.0779	.0152
.002						.3941		.1678				
.003						.2988		.1248				
.004						.2112		.0927				
.005						.1692		.0673				
.006						.1202		.0498				
.007						.0813		.0425				
.025	.0354			.1219	.1924		.2383					
.050										.1092		
.100				.0305		.0510	.0678	.0750		.1090		
.153	.0117											
.177					.0218							
.200				.0136		.0294						
.299	.0050											
.300					.0159	.0173		.0374	.0343	.0410		
.302				.0098								
.303							.0365					
.428						.0194						
.444	.0035											
.487					.0185							
.500							.0286	.0385		.0237		
.559				.0053								
.590	.0023											
.600					.0118	.0108			.0123			
.700				.0046	.0094	.0099	.0101			.0137		
.736	.0028											
.800						.0053	.0082					
.850						.0068	.0096					
.900	.0013			.0023	.0049	.0061	.0080			.0127		

AEDC VA352 OH4B O1 ORD. BOTTOM SURFACE WING (CTKL11)

MACH (1) = 8.000 ALPHA (2) = .000 TI = 93.000 Q1 = .677 HREF = .020

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0334	.0408		.2719	.3618	.2540	.0718		.1229	.0830	.0208
.002						.4166		.1865				
.003						.3492		.1405				
.004						.2542		.1068				
.005						.1906		.0815				
.006						.1499		.0583				
.007						.1052		.0497				
.025	.0461			.1912	.2344		.2890					
.050										.1282		
.100				.0564		.0674	.0864	.0937		.1272		
.153	.0232											
.177					.0310							
.200				.0288		.0378						
.299	.0146											
.300					.0255	.0236		.0411	.0425	.0510		
.302				.0226								
.303							.0568					
.428						.0294						
.444	.0129											
.487					.0275							
.500							.0390	.0355		.0296		
.559				.0165								
.590	.0107											
.600					.0192	.0172			.0158			
.700				.0126	.0163	.0158	.0146			.0163		
.736	.0117											
.800						.0086	.0130					
.850						.0105	.0147					
.900	.0045			.0066	.0084	.0098	.0116			.0140		

AEDC VA352 OH4B 01 ORB. UFFER SURFACE WING (CTKU11) (15 JAN 75)

REFERENCE DATA

SREF = .0230 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = -5.000 TI = 93.000 QI = .677 HREF = .020

SECTION (1)UFFER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.1663	.2510	.2713
.200	.0446	.0623	.0636
.600	.0052	.3097	.0200
.800		.0074	.0122
.900		.0085	.0130
.950	.0114	.0085	.0135

MACH (1) = 8.000 ALPHA (2) = .000 TI = 93.000 QI = .677 HREF = .020

SECTION (1)UFFER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.1624	.2246	.2407
.200	.0319	.0408	.0531
.600	.0025	.2328	.0108
.800		.0054	.0075
.900		.0055	.0082
.950	.0044	.0052	.0079

AEDC VA352 OH4B O1 ORB. LEFT VERTICAL TAIL (CTKV11) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = -5.000 TI = 93.000 QI = .677 HREF = .020

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.2164	.3158	.5641	.6035
.010					.2083
.100	.0808	.0707	.1046	.1375	
.300	.0493	.0330	.0519	.0655	
.500		.0265	.0347	.0461	.0484
.700	.0212	.0333	.0103	.0136	
.900		.0253	.0096	.0139	

MACH (1) = 8.000 ALPHA (2) = .000 TI = 93.000 QI = .677 HREF = .020

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.2577	.1896	.3807	.4117
.010					.1436
.100	.0768	.0703	.0737	.0999	
.300	.0597	.0329	.0361	.0501	
.500		.0280	.0259	.0336	.0346
.700	.0144	.0171	.0092	.0117	
.900		.0143	.0104	.0113	

AEDC VA352 OH4B O1 ORB. RCS CENTER (CTKR11) (15 JAN 75)

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	.000	RN/L =	.680
B.FLAP =	.000	ELEVON =	.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = -5.000 TI = 93.000 QI = .677 HREF = .020

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0588	.0079	.0327	.0249	.0211

MACH (1) = 8.000 ALPHA (2) = .000 TI = 93.000 QI = .677 HREF = .020

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0549	.0084	.0088	.0250	.0178

AEDC VA352 OH4B O1 ORB. OMS POD (CTKM11) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = -5.000 TI = 93.000 QI = .677 HREF = .020

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.1117	.0712	.0498	.0452	.0317	.0301	.0262
8.540		.1588					
8.650		.2555					
8.727			.1496				
8.750						.0000	.0151
8.855				.0674			
8.942			.1073				
8.978					.0183		
9.056				.0685			
9.118				.0301			
9.222					.0375		
9.275					.0133		

MACH (1) = 8.000 ALPHA (2) = .000 TI = 93.000 QI = .677 HREF = .020

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0082	.0336	.0621	.0507	.0255	.0278	.0212
8.540		.0471					
8.650		.0327					
8.727			.1122				
8.750						.0000	.0200
8.855				.0621			
8.942			.0407				
8.978					.0232		
9.056				.0223			
9.118				.0340			
9.222					.0288		
9.275					.0169		

AEDC VA352 OH4B 01 ORB. FUSELAGE Y=0.875 (CTKY11) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = -5.000 TI = 93.000 QI = .677 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0196	.0066	.0044	.0041	.0045	.0061	.0064	.0065

MACH (1) = 8.000 ALPHA (2) = .000 TI = 93.000 QI = .677 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0164	.0103	.0075	.0065	.0049	.0047	.0046	.0044

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5603 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = -5.000 TI = 93.000 QI = .677 HREF = .020

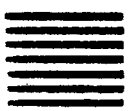
SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0159	.0080	.0150	.0199	.0571

MACH (1) = 8.000 ALPHA (2) = .000 TI = 93.000 QI = .677 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0121	.0058	.0085	.0054	.0247



AEDC VA352 OH4B O1 ORB. FUSELAGE Z=7.525 (CTKF11) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .680
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = -5.000 TI = 93.000 QI = .677 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0206	.0165	.0089	.0038	.0039	.0059

MACH (1) = 8.000 ALPHA (2) = .000 TI = 93.000 QI = .677 HREF = .020

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0160	.0126	.0070	.0041	.0043	.0040

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB12) (15 JAN 75)

REFERENCE DATA

SREF = .6238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4402	.4247	.2790		.2298	.1967	.1671	.1367	.0000			.1183	.1097	.1008
10.000															.1171
14.000								.2106							
20.000															.1246
22.000								.2039							
24.500															.1355
35.000								.1041							
39.000															.0781
42.500								.0810							
48.000												.0571			
60.000								.0445							
119.000															.0216
180.000			.0321		.0612			.0277			.0154				.0119

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0962		.0915	.0867	.0771		.0754				.0735		.0742		
10.000					.1037										
20.000					.0895										
25.500					.1099										
40.000					.0838										
45.500					.0602										
131.200									.0075						
145.400														.0125	
146.200								.0076							
156.000														.0182	
159.200															.0218
170.700												.0147			
171.900										.0174					
173.400						.0116									
180.000		.0083			.0063		.0160				.1407		.0319		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0745		.0671	.0000	.0588	.0635	.0558	.0643	.0613	.0593	.0584	.0561	.0536	.0517
11.500				.0747											

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB12)

MACH (1) = 8.000 ALPHA (1) = 25.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0654							
21.500												.0617			
23.000								.0733							
24.000				.0912											
31.500				.1057											
34.000								.0857							
35.000				.1022											
40.000				.1068				.0857							
45.000								.0859							
51.000				.0448											
57.500								.0122							
59.500												.0040			
61.000								.0250							
65.000								.0248							
70.000								.0185							
96.500				.0224											
105.000												.0125			
106.000								.0148							
135.000								.0035				.0020			
140.000				.0067											
141.400	.0077														
151.000			.0210												
180.000				.0137		.0035		.0028				.0051			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0506	.0488	.0494	.0483	.0493	.0491	.0477	.0465	.0427	.0426	.0416	.0389	.0364	.0328	
21.500	.0565				.0470				.0453				.0366		
63.000	.0011														
64.000									.0013						
65.000													.0004		
65.500					.0015										
105.000	.0285				.0227				.0089				.0035		
111.000															.0041
112.000					.0352										
113.000					.0384										
116.000											.0099				
135.000	.0025				.0032				.0054						
149.000											.0029				
180.000	.0058				.0056				.0058				.0039		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												

AEDC VA352 OH48 O1 ORB. FUSELAGE (CTKB12)

MACH (1) = 8.000 ALPHA (1) = 25.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0303	.0306	.0265	.0255	.0207	.0258	.0176	.0000		.0180	.0000	.0168
21.500			.0293									
39.000							.0310					.0258
52.500						.0038						
55.000			.0010									
65.000			.0013									
68.000						.0014						
100.000			.0018									
108.000			.0037			.0030						
112.000							.0022					
113.000									.0028			

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4328	.4296	.2965		.2481	.2157	.1864	.1576	.0000			.1357	.1288	.1206
10.000															.1367
14.000								.2370							
20.000															.1411
22.000								.2214							
24.500															.1521
35.000								.1007							
39.000															.0762
42.500								.0754							
48.000												.0516			
60.000								.0341							
119.000															.0148
180.000			.0400		.0447			.0196			.0121				.0087

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1149		.1080	.1017	.0942		.0947				.0910		.0894		
10.000					.1199										
20.000					.1103										
25.500					.1238										
40.000					.0868										
45.500					.0593										
131.200									.0056						
145.400														.0073	
146.200								.0054							

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB12)

MACH (1) = 0.000 ALPHA (2) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI														.0093	
156.000															.0136
159.200												.0083			
170.700										.0139					
171.900						.0132									
173.400											.1076		.0355		
180.000		.0071			.0073		.0197								

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0900		.0818	.0000	.0779	.0758	.0697	.0775	.0735	.0717	.0703	.0628	.0696	.0644
11.500				.0901											
12.000								.0779				.0750			
21.500															
23.000								.0877							
24.000				.1056											
31.500				.1193											
34.000								.1042							
35.000				.1153											
40.000				.0962				.1017							
45.000								.0959							
51.000				.0434											
57.500								.0105							
59.500												.0025			
61.000								.0198							
65.000								.0221							
70.000								.0208							
96.500				.0222											
105.000												.0132			
106.000								.0151							
135.000								.0027				.0015			
140.000				.0044											
141.400	.0053														
151.000			.0114												
180.000				.0125		.0032		.0022				.0039			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0617	.0608	.0613	.0625	.0609	.0599	.0592	.0551	.0535	.0531	.0521	.0472	.0459	.0414	
21.500	.0687				.0565				.0562				.0432		
63.000	.0007														
64.000									.0000						
65.000													.0002		
65.500					.0010										

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB12)

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0313				.0105				.0051				.0012		
111.000															.0020
112.000					.0152										
113.000					.0175										
116.000											.0058				
135.000	.0029				.0045				.0033						
149.000											.0029				
180.000	.0046				.0055				.0051				.0051		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0395	.0367	.0342	.0330	.0288	.0316	.0235	.0000		.0225	.0000	.0225
21.500			.0358									
39.000							.0371					.0316
52.500						.0039						
55.000			.0011									
65.000			.0004									
68.000						.0020						
100.000			.0004									
108.000			.0014			.0005						
112.000							.0012					
113.000									.0031			

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4153	.4279	.3080		.2677	.2323	.2067	.1758	.0000			.1533	.1464	.1336
10.000															.1577
14.000								.2553							
20.000															.1560
22.000								.2352							
24.500															.1638
35.000								.0974							
39.000															.0733
42.500								.0705							
48.000												.0508			
60.000								.0264							
119.000															.0125
180.000			.0466		.0325			.0153			.0093				.0079

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB12)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1317		.1264	.1180	.1109		.1123				.1075		.1062		
10.000					.1378										
20.000					.1282										
25.500					.1382										
40.000					.0926										
45.500					.0574										
131.200									.0040						
145.400														.0060	
146.200								.0048							
156.000														.0081	
159.200															.0128
170.700												.0024			
171.900										.0153					
173.400						.0210									
180.000		.0078			.0110		.0324				.0836		.0419		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1041		.0975	.0000	.0912	.0917	.0821	.0959	.0901	.0855	.0835	.0822	.0773	.0756
11.500				.1059											
12.000								.0918							
21.500												.0865			
23.000								.1024							
24.000				.1203											
31.500				.1329											
34.000								.1149							
35.000				.1303											
40.000				.1188				.1144							
45.000								.1048							
51.000				.0436											
57.500								.0094							
59.500												.0022			
61.000								.0184							
65.000								.0200							
70.000								.0212							
96.500				.0206											
105.000												.0168			
106.000								.0153							
135.000								.0020				.0014			
140.000				.0037											
141.400	.0042														
151.000			.0097												
180.000				.0165		.0033		.0022				.0019			

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB12)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0728	.0718	.0702	.0725	.0706	.0703	.0683	.0675	.0619	.0627	.0620	.0583	.0547	.0497	
21.500	.0784				.0649				.0669				.0522		
53.000	.0007														
64.000									.0006						
65.000													.0003		
65.500					.0006										
105.000	.0198				.0081				.0041				.0005		
111.000															.0005
112.000					.0108										
113.000					.0122										
116.000											.0035				
135.000	.0029				.0036				.0023						
149.000											.0031				
180.000	.0027				.0037				.0047				.0051		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0483	.0465	.0428	.0413	.0355	.0378	.0303	.0000		.0290	.0000	.0286
21.500			.0448									
39.000							.0439					.0378
52.500						.0043						
55.000			.0013									
65.000			.0010									
68.000						.0009						
100.000			.0007									
108.000			.0007			.0033						
112.000							.0044					
113.000									.0063			

AEDC VA352 OH4B 01 ORB. BOTTOM SURFACE WING (CTKL12) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0444	.0252		.3386	.1859	.2576	.0566		.1138	.0626	.0271
.002						.2417		.2024				
.003						.3619		.1959				
.004						.3067		.1769				
.005						.2870		.1602				
.006						.2498		.1335				
.007						.2086		.1191				
.025	.0502			.1945	.4057		.3524					
.050										.1465		
.100				.1591		.1441	.1797	.2091		.1237		
.153	.0981											
.177					.1199							
.200				.1035		.0951						
.299	.0639											
.300					.1169	.0850		.1040	.1243	.1128		
.302				.0869								
.303							.0894					
.428						.1016						
.444	.0604											
.487					.1040							
.500							.0926	.0819		.1019		
.559				.0720								
.590	.0451											
.600					.0902	.0794			.0508			
.700				.0662	.0808	.0584	.0418			.0641		
.736	.0509											
.800						.0341	.0391					
.850						.0466	.0501					
.900	.0186			.0381	.0481	.0435	.0448			.0600		

AEDC VA352 OH4B O1 ORB. BOTTOM SURFACE WING (CTKL12)

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0384	.0246		.3020	.1700	.2276	.0487		.1014	.0585	.0227
.002						.2739		.1838				
.003						.3602		.1839				
.004						.3916		.1729				
.005						.3249		.1589				
.006						.3329		.1304				
.007						.2725		.1185				
.025	.0494			.1891	.3890		.3235					
.050										.1368		
.100				.1618		.1842	.1902	.2147		.1423		
.153	.1143											
.177					.1197							
.200				.1083		.1364						
.299	.0750											
.300					.1106	.1063		.0929	.1286	.1335		
.302				.0943								
.303							.1129					
.428						.1167						
.444	.0659											
.487					.1139							
.500							.0999	.0984		.0927		
.559				.0754								
.590	.0507											
.600					.0826	.0763			.0488			
.700				.0697	.0735	.0628	.0500			.0525		
.736	.0588											
.800						.0384	.0451					
.850						.0530	.0598					
.900	.0222			.0421	.0557	.0467	.0533			.0555		

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0479	.0232		.2690	.2008	.2018	.0412		.0866	.0487	.0231
.002						.3401		.1552				
.003						.4718		.1601				
.004						.4927		.1547				
.005						.4178		.1462				
.006						.3813		.1283				
.007						.3146		.1207				
.025	.0478			.1619	.3580		.2962					

DATE 23 JAN 75 TABULATED DATA LISTING FOR OH4B (AEDC VA352)

AEDC VA352 OH4B 01 ORB. BOTTOM SURFACE WING (CTKL12)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.050										.1159		
.100				.1656		.2175	.2067	.2019		.1195		
.153	.1129											
.177					.1206							
.200				.1139		.1539						
.299	.0832											
.300					.1058	.1073		.1227	.1345	.1225		
.302				.0957								
.303							.1234					
.428						.1367						
.444	.0777											
.487					.1354							
.500							.1108	.1078		.1006		
.559				.0800								
.590	.0613											
.600					.0840	.0750			.0568			
.700				.0725	.0721	.0719	.0575			.0670		
.736	.0679											
.800						.0415	.0523					
.850						.0609	.0699					
.900	.0272			.0471	.0570	.0561	.0635			.0664		

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5603 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0375	.1050	.1398
.200	.0051	.0134	.0151
.600	.0005	.0030	.0052
.800		.0007	.0042
.900		.0015	.0057
.950	.0020	.0029	.0086

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.400 QI = .524 HREF = .018

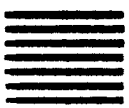
SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0287	.0960	.1128
.200	.0038	.0137	.0126
.600	.0006	.0078	.0068
.800		.0004	.0052
.900		.0016	.0066
.950	.0022	.0033	.0088

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0205	.0930	.0872
.200	.0032	.0125	.0110
.600	.0008	.0274	.0054
.800		.0016	.0041
.900		.0029	.0059
.950	.0029	.0040	.0085



AEDC VA352 OH4B O1 ORB. LEFT VERTICAL TAIL (CTKV12) (15 JAN 75)

REFERENCE DATA

PARAMETRIC DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN. BETA = .000 RN/L = .500
LREF = 22.5803 IN. YMRP = .0000 IN. B.FLAP = .000 ELEVON = .000
BREF = 16.3919 IN. ZMRP = .0000 IN. HAW/HT = .000
SCALE = .0175 SCALE

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0521	.0417	.0485	.0489
.010					.0275
.100	.0189	.0180	.0210	.0237	
.300	.0082	.0066	.0090	.0131	
.500		.0071	.0072	.0093	.0081
.700	.0037	.0040	.0036	.0043	
.900		.0036	.0051	.0048	

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0322	.0218	.0251	.0155
.010					.0168
.100	.0174	.0135	.0167	.0198	
.300	.0068	.0065	.0099	.0137	
.500		.0049	.0076	.0100	.0085
.700	.0025	.0014	.0029	.0049	
.900		.0017	.0033	.0050	

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0266	.0204	.0335	.0296
.010					.0273
.100	.0146	.0106	.0127	.0234	
.300	.0056	.0036	.0103	.0164	
.500		.0015	.0061	.0131	.0134
.700	.0009	.0017	.0020	.0066	
.900		.0027	.0027	.0057	

AEDC VA352 OH4B O1 ORB. RCS CENTER (CTKR12) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0571	.0248	.0004	.0013	.0014

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0516	.0221	.0002	.0004	.0020

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0508	.0200	.0003	.0010	.0009

AEDC VA352 OH4B O1 ORB. OMS POD (CTKM12) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0106	.0267	.0421	.0392	.0130	.0137	.0108
8.540		.0338					
8.650		.0252					
8.727			.0635				
8.750						.0000	.0119
8.855				.0336			
8.942			.0193				
8.978					.0171		
9.056				.0031			
9.118				.0089			
9.222					.0069		
9.275					.0033		

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0044	.0135	.0171	.0146	.0055	.0060	.0041
8.540		.0156					
8.650		.0105					
8.727			.0267				
8.750						.0000	.0056
8.855				.0200			
8.942			.0087				
8.978					.0084		
9.056				.0035			
9.118				.0045			
9.222					.0066		
9.275					.0044		

AEDC VA352 OH4B O1 ORB. OMS POD (CTKM12)

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0021	.0035	.0056	.0068	.0021	.0025	.0050
8.540		.0045					
8.650		.0040					
8.727			.0080				
8.750						.0000	.0036
8.855				.0091			
8.942			.0038				
8.978					.0041		
9.056				.0051			
9.118				.0029			
9.222					.0048		
9.275					.0029		

AEDC VA352 OH4B O1 ORB. FUSELAGE Y=0.875 (CTKY12) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRF = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0912	.0733	.0617	.0565	.0470	.0453	.0366	.0293

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1056	.0877	.0750	.0687	.0565	.0562	.0432	.0358

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1203	.1024	.0865	.0784	.0649	.0669	.0522	.0448

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0040	.0011	.0015	.0013	.0010

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0025	.0007	.0010	.0000	.0011

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0022	.0007	.0006	.0006	.0013

AEDC VA352 OH4B O1 ORB. FUSELAGE Z=7.525 (CTKF12) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0148	.0125	.0285	.0227	.0089	.0035

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0151	.0132	.0313	.0105	.0051	.0012

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.400 QI = .524 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0153	.0168	.0198	.0081	.0041	.0005

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB13) (15 JAN 75)

REFERENCE DATA

SREF = .6236 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4198	.4181	.2908		.2435	.2122	.1819	.1552	.0000			.1338	.1273	.1051
10.000															.1346
14.000								.2344							
20.000															.1399
22.000								.2183							
24.500															.1478
35.000								.0978							
39.000															.0743
42.500								.0720							
48.000												.0512			
60.000								.0319							
119.000															.0146
180.000			.0528		.0422			.0178			.0113				.0083

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1129		.1054	.0983	.0910		.0915				.0885		.0872		
10.000					.1182										
20.000					.1063										
25.500					.1237										
40.000					.0876										
45.500					.0575										
131.200									.0049						
145.400														.0081	
146.200								.0056							
156.000														.0115	
159.200															.0164
170.700												.0072			
171.900										.0158					
173.400						.0183									
180.000		.0067			.0092		.0304				.1070		.0453		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0858		.0805	.0000	.0760	.0747	.0692	.0781	.0751	.0714	.0709	.0672	.0640	.0607
11.500				.0887											

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB13)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0792							
21.500												.0722			
23.000								.0885							
24.000				.1034											
31.500				.1178											
34.000								.1000							
35.000				.1152											
40.000				.1124				.0995							
45.000								.0943							
51.000				.0415											
57.500								.0099							
59.500												.0026			
61.000								.0198							
65.000								.0220							
70.000								.0198							
96.500				.0211											
105.000												.0121			
106.000								.0147							
135.000								.0019				.0013			
140.000				.0044											
141.400	.0053														
151.000			.0140												
180.000				.0138		.0029		.0025				.0057			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0602	.0595	.0582	.0593	.0595	.0579	.0562	.0547	.0517	.0500	.0489	.0462	.0457	.0399	
21.500	.0657				.0556				.0556				.0403		
63.000	.0007														
64.000									.0001						
65.000													.0003		
65.500					.0011										
105.000	.0359				.0133				.0053				.0011		
111.000															.0018
112.000					.0205										
113.000					.0247										
116.000											.0074				
135.000	.0021				.0031				.0028						
149.000											.0032				
180.000	.0062				.0061				.0050				.0037		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500

PH*

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0378	.0357	.0335	.0313	.0276	.0316	.0220	.0000		.0237	.0000	.0224
21.500			.0348									
39.000							.0386					.0316
52.500						.0044						
55.000			.0009									
65.000			.0008									
68.000						.0029						
100.000			.0008									
108.000			.0013			.0010						
112.000							.0010					
113.000									.0020			

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4087	.4174	.3020		.2579	.2283	.2006	.1717	.0000			.1484	.1449	.1302
10.000															.1519
14.500								.2504							
20.000															.1523
22.000								.2322							
24.500															.1623
35.000								.0951							
39.000															.0712
42.500								.0669							
48.000												.0468			
60.000								.0256							
119.000															.0107
180.000			.0638		.0311			.0132			.0078				.0086

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1558		.1213	.1134	.1065		.1072				.1043		.1035		
10.000					.1386										
20.000					.1214										
25.500					.1338										
40.000					.0915										
45.500					.0571										
131.200									.0046						
145.400														.0071	
146.200								.0079							

DATE 23 JAN 75 TABULATED DATA LISTING FOR OH4B (AEDC VA352)

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB13)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI														.0101	
156.000															.0135
159.200												.0027			
170.700										.0171					
171.900						.0358									
173.400											.0779		.0515		
180.000		.0106			.0173		.0479								

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1054		.0963	.0000	.0890	.0786	.0798	.0899	.0911	.0863	.0822	.0805	.0760	.0708
11.500				.1065											
12.000								.0914				.0857			
21.500															
23.000								.1016							
24.000				.1196											
31.500				.1340											
34.000								.1144							
35.000				.1282											
40.000				.1202				.1064							
45.000								.1027							
51.000				.0394											
57.500								.0087							
59.500												.0020			
61.000								.0180							
65.000								.0197							
70.000								.0202							
96.500				.0213											
105.000												.0159			
106.000								.0152							
135.000								.0017				.0012			
140.000				.0043											
141.400	.0057														
151.000			.0111												
180.000				.0158		.0030		.0021				.0014			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0698	.0698	.0692	.0704	.0684	.0677	.0672	.0649	.0609	.0600	.0583	.0540	.0536	.0467	
21.500	.0763				.0625				.0641				.0497		
63.000	.0005														
64.000									.0012						
65.000													.0002		
65.500					.0007										

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0257				.0086				.0038				.0007		
111.000															.0005
112.000					.0143										
113.000					.0164										
116.000											.0026				
135.000	.0023				.0032				.0023						
149.000											.0038				
180.000	.0018				.0028				.0033				.0032		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0449	.0448	.0403	.0394	.0350	.0379	.0289	.0000		.0305	.0000	.0287
21.500			.0435									
39.000							.0466					.0379
52.500						.0056						
55.000			.0007									
65.000			.0009									
68.000						.0032						
100.000			.0004									
108.000			.0005			.0030						
112.000							.0060					
113.000									.0075			

MACH (1) = 8.000 ALPHA (3) = 40.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.3852	.4085	.3025		.2702	.2441	.2184	.1844	.0000			.1632	.1559	.1479
10.000															.1690
14.000								.2635							
20.000															.1698
22.000								.2458							
24.500															.1667
35.000								.0873							
39.000															.0665
42.500								.0648							
48.000												.0445			
60.000								.0196							
119.000															.0074
180.000			.0662		.0217			.0103			.0079				.0106

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB13)

MACH (1) = 6.000 ALPHA (3) = 40.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1446		.1381	.1275	.1217		.1215				.1203		.1182		
10.000					.1488										
20.000					.1349										
25.500					.1451										
40.000					.0951										
45.500					.0558				.0045						
131.200														.0084	
145.400								.0084							
146.200														.0089	
156.000															.0120
159.200												.0048			
170.700										.0196					
171.900						.0436									
173.400											.0583		.0511		
180.000		.0139			.0226		.0593								

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1212		.1083	.0000	.1018	.1024	.0925	.1060	.1029	.0963	.0922	.0883	.0847	.0808
11.500				.1187											
12.000								.1032				.0975			
21.500															
23.000								.1105							
24.000				.1330											
31.500				.1435											
34.000								.1245							
35.000				.1379											
40.000				.1255				.1239							
45.000								.1098							
51.000				.0377											
57.500								.0077							
59.500												.0017			
61.000								.0157							
65.000								.0185							
70.000								.0201							
96.500				.0207											
105.000												.0216			
106.000								.0148							
135.000								.0015				.0011			
140.000				.0043											
141.400	.0071														
151.000			.0099												
				.0150		.0032		.0011				.0019			

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB13)

MACH (1) = 8.000 ALPHA (3) = 40.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0819	.0817	.0781	.0775	.0756	.0759	.0757	.0722	.0666	.0675	.0670	.0623	.0599	.0533	
21.500	.0876				.0717				.0735				.0563		
63.000	.0005														
64.000									.0007						
65.000													.0004		
65.500					.0004										
105.000	.0200				.0074				.0014				.0009		
111.000															.0004
112.000					.0115										
113.000					.0130										
116.000											.0017				
135.000	.0023				.0027				.0021						
149.000											.0052				
180.000	.0029				.0031				.0031				.0024		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0520	.0524	.0483	.0464	.0433	.0458	.0358	.0000		.0363	.0000	.0370
21.500			.0542									
39.000							.0569					.0458
52.500						.0068						
55.000			.0018									
65.000			.0019									
68.000						.0031						
100.000			.0020									
108.000			.0014			.0052						
112.000							.0075					
113.000									.0080			

AEDC VA352 OH4B O1 ORB. BOTTOM SURFACE WING (CTKL13) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0462	.0241		.2984	.1667	.2231	.0472		.1003	.0586	.0308
.002						.2748		.1842				
.003						.3569		.1790				
.004						.3892		.1682				
.005						.3176		.1543				
.006						.3272		.1301				
.007						.2629		.1166				
.025	.0491			.1757	.3877		.3058					
.050										.1340		
.100				.1601		.1815	.1806	.2102		.1392		
.153	.1091											
.177					.1123							
.200				.1107		.1342						
.299	.0770											
.300					.1062	.1082		.1595	.1384	.1291		
.302				.0945								
.303							.1151					
.428						.1162						
.444	.0658											
.487					.1096							
.500							.0979	.1630		.1231		
.559				.0745								
.590	.0501											
.600					.0832	.0746			.1141			
.709				.0707	.0742	.0597	.0506			.1145		
.736	.0570											
.800						.0346	.0426					
.850						.0512	.0595					
.900	.0232			.0427	.0540	.0475	.0530			.1071		

AEDC VA352 OH4B 01 ORB. BOTTOM SURFACE WING (CTKL13)

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

ZY/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0462	.0232		.2639	.1967	.1965	.0407		.0840	.0517	.0323
.002						.3301		.1498				
.003						.4592		.1523				
.004						.4729		.1442				
.005						.4125		.1353				
.006						.3813		.1183				
.007						.3135		.1086				
.025	.0481			.1584	.3573		.2863					
.050										.1179		
.100				.1622		.2141	.2063	.1914		.1217		
.153	.1174											
.177					.1117							
.200				.1120		.1506						
.299	.0839											
.300					.1024	.1097		.1164	.1667	.1765		
.302				.0958								
.303							.1180					
.428						.1373						
.444	.0746											
.487					.1269							
.500							.1078	.1067		.1459		
.559				.0783								
.590	.0567											
.600					.0844	.0739			.0585			
.700				.0717	.0719	.0665	.0587			.0802		
.736	.0645											
.800						.0384	.0493					
.850						.0589	.0707					
.900	.0274			.0481	.0584	.0547	.0625			.0703		

MACH (1) = 8.000 ALPHA (3) = 40.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

ZY/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0465	.0240		.2277	.1811	.1828	.0334		.0708	.0439	.0265
.002						.2864		.1262				
.003						.4652		.1348				
.004						.4435		.1378				
.005						.4091		.1340				
.006						.3584		.1238				
.007						.3098		.1184				
.025	.0489			.1472	.3158		.2689					

AEDC VA352 OH4B 01 ORB. BOTTOM SURFACE WING (CTKL13)

MACH (1) = 8.000 ALPHA (3) = 40.000

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.050										.1019		
.100				.1567		.2285	.2103	.1960		.1079		
.153	.1243											
.177					.1054							
.200				.1124		.1510						
.299	.0940											
.300					.0982	.1066		.1271	.1390	.1272		
.302				.0985								
.303							.1217					
.428						.1239						
.444	.0811											
.487					.1357							
.500							.1165	.1156		.1091		
.559				.0790								
.590	.0656											
.600					.0869	.0740			.0607			
.700				.0757	.0753	.0698	.0638			.0738		
.736	.0755											
.800						.0416	.0524					
.850						.0675	.0781					
.900	.0317			.0511	.0617	.0646	.0724			.0768		

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)UFFER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0267	.0937	.1092
.200	.0033	.0128	.0112
.600	.0006	.0165	.0080
.800		.0005	.0061
.900		.0018	.0083
.950	.0020	.0038	.0115

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.100 QI = 1.003 HREF = .025

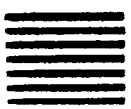
SECTION (1)UFFER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0207	.0853	.0794
.200	.0031	.0119	.0096
.600	.0008	.0203	.0051
.800		.0008	.0041
.900		.0022	.0066
.950	.0028	.0041	.0101

MACH (1) = 8.000 ALPHA (3) = 40.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)UFFER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0147	.0695	.0593
.200	.0022	.0094	.0069
.600	.0017	.0544	.0014
.800		.0011	.0013
.900		.0021	.0040
.950	.0028	.0047	.0081



AEDC VA352 OH4B 01 ORB. LEFT VERTICAL TAIL (CTKV13) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0247	.0199	.0212	.0145
.010					.0159
.100	.0159	.0143	.0158	.0166	
.300	.0068	.0071	.0110	.0160	
.500		.0047	.0092	.0152	.0126
.700	.0022	.0015	.0034	.0067	
.900		.0026	.0035	.0072	

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0242	.0221	.0408	.0307
.010					.0254
.100	.0156	.0115	.0164	.0313	
.300	.0063	.0043	.0120	.0278	
.500		.0019	.0092	.0222	.0181
.700	.0019	.0021	.0028	.0132	
.900		.0026	.0039	.0141	

MACH (1) = 8.000 ALPHA (3) = 40.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0107	.0121	.0282	.0435
.010					.0230
.100	.0131	.0054	.0082	.0186	
.300	.0072	.0027	.0036	.0117	
.500		.0026	.0030	.0083	.0094
.700	.0026	.0015	.0019	.0047	
.900		.0035	.0048	.0060	

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/H0

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0512	.0220	.0003	.0008	.0029

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.100 QI = 1.003 HREF = .025

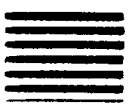
SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/H0

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0468	.0197	.0002	.0009	.0032

MACH (1) = 8.000 ALPHA (3) = 40.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/H0

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0445	.0185	.0004	.0019	.0031



AEDC VA352 OH4B 01 ORB. OMS POD (CTKM13) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0050	.0173	.0194	.0170	.0052	.0048	.0036
8.540		.0207					
8.650		.0141					
8.727			.0336				
8.750						.0000	.0050
8.855				.0241			
8.942			.0104				
8.978					.0089		
9.056				.0032			
9.118				.0047			
9.222					.0066		
9.275					.0041		

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0019	.0022	.0036	.0063	.0018	.0022	.0048
8.540		.0031					
8.650		.0039					
8.727			.0057				
8.750						.0000	.0030
8.855				.0088			
8.942			.0046				
8.978					.0044		
9.056				.0076			
9.118				.0031			
9.222					.0035		
9.275					.0029		

AEDC VA352 OH4B O1 ORB. OMS POD (CTKH13)

MACH (1) = 8.000 ALPHA (3) = 40.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0020	.0026	.0037	.0039	.0015	.0049	.0078
8.540		.0039					
8.650		.0061					
8.727			.0055				
8.750						.0000	.0068
8.855				.0051			
8.942			.0081				
8.978					.0058		
9.056				.0129			
9.118				.0053			
9.222					.0061		
9.275					.0063		

AEDC VA352 OH4B O1 ORB. FUSELAGE Y=0.875 (CTKY13) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRF = .0000 IN.
LREF = 22.5803 IN. YMRF = .0000 IN.
BREF = 16.3919 IN. ZMRF = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1034	.0885	.0722	.0657	.0556	.0556	.0403	.0348

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1196	.1016	.0857	.0763	.0625	.0641	.0497	.0435

MACH (1) = 8.000 ALPHA (3) = 40.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1330	.1105	.0975	.0876	.0717	.0735	.0563	.0542

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0026	.0007	.0011	.0001	.0009

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0020	.0005	.0007	.0012	.0007

MACH (1) = 8.000 ALPHA (3) = 40.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0017	.0005	.0004	.0007	.0018

AEDC VA352 OH4B 01 ORB. FUSELAGE Z=7.525 (CTKF13) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0147	.0121	.0359	.0133	.0053	.0011

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0152	.0159	.0257	.0086	.0038	.0007

MACH (1) = 8.000 ALPHA (3) = 40.000 TI = 94.100 QI = 1.003 HREF = .025

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0148	.0216	.0200	.0074	.0014	.0009

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.550 QI = 1.994 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4196	.4197	.2812		.2392	.2120	.1817	.1537	.0000			.1313	.1235	.1148
10.000															.1351
14.000								.2320							
20.000															.1399
22.000								.2181							
24.500															.1495
35.000								.0983							
39.000															.0740
42.500								.0724							
48.000												.0510			
60.000								.0311							
119.000															.0139
180.000			.0689		.0405			.0166			.0090				.0080

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1117		.1047	.0966	.0897		.0903				.0894		.0874		
10.000					.1195										
20.000					.1084										
25.500					.1233										
40.000					.0874										
45.500					.0565										
131.200									.0052						
145.400														.0079	
146.200								.0065							
156.000														.0141	
159.200															.0204
170.700												.0071			
171.900										.0196					
173.400						.0318									
180.000		.0079			.0142		.0437				.1034		.0528		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0846		.0811	.0000	.0739	.0747	.0681	.0767	.0750	.0730	.0723	.0707	.0655	.0624
11.500				.0882											

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB14)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0782							
21.500												.0738			
23.000								.0867							
24.000				.1042											
31.500				.1188											
34.000								.0983							
35.000				.1164											
40.000				.1104				.0925							
45.000								.0913							
51.000				.0409											
57.500								.0103							
59.500												.0025			
61.000								.0205							
65.000								.0225							
70.000								.0194							
96.500				.0209											
105.000												.0107			
106.000								.0147							
135.000								.0016				.0010			
140.000				.0049											
141.400	.0054														
151.000			.0168												
180.000				.0141		.0027		.0028				.0089			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0614	.0619	.0622	.0606	.0620	.0604	.0622	.0595	.0567	.0586	.0593	.0572	.0607	.0620	
21.500	.0638				.0529				.0602				.0566		
63.000	.0007														
64.000									.0008						
65.000													.0004		
65.500					.0009										
105.000	.0315				.0198				.0065				.0021		
111.000															.0023
112.000					.0379										
113.000					.0415										
116.000											.0099				
135.000	.0016				.0028				.0046						
149.000											.0046				
180.000	.0074				.0063				.0053				.0021		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500

PHI

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB14)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0655	.0680	.0674	.0692	.0662	.0812	.0730	.0000		.0789	.0000	.0830
21.500			.0684									
39.000							.0813					.0812
52.500						.0042						
55.000			.0014									
65.000			.0019									
68.000						.0017						
100.000			.0027									
108.000			.0020			.0020						
112.000							.0026					
113.000									.0040			

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.550 QI = 1.994 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4043	.4162	.2997		.2556	.2279	.2008	.1726	.0000			.1490	.1417	.1305
10.000															.1530
14.000								.2506							
20.000															.1562
22.000								.2340							
24.500															.1615
35.000								.0930							
39.000															.0713
42.500								.0673							
48.000												.0466			
60.000								.0233							
119.000															.0102
180.000			.0774		.0290			.0125			.0082				.0093

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1281		.1168	.1115	.1023		.1034				.1017		.1032		
10.000					.1359										
20.000					.1226										
25.500					.1355										
40.000					.0918										
45.500					.0558										
131.200									.0050						
145.400														.0082	
148.200								.0105							

DATE 23 JAN 75 TABULATED DATA LISTING FOR OH4B (AEDC VA352)

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB14)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI														.0101	
156.000															.0143
159.200												.0041			
170.700										.0198					
171.900						.0502									
173.400							.0620				.0777		.0611		
180.000		.0132			.0245										

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1043		.0940	.0000	.0896	.0886	.0810	.0919	.0922	.0875	.0859	.0819	.0773	.0717
11.500				.1055											
12.000								.0921				.0867			
21.500															
23.000								.1009							
24.000				.1194											
31.500				.1347											
34.000								.1136							
35.000				.1272											
40.000				.1193				.1090							
45.000								.1010							
51.000				.0400											
57.500								.0087				.0019			
59.500															
61.000								.0191							
65.000								.0208							
70.000								.0221							
96.500				.0209								.0169			
105.000															
106.000								.0145							
135.000								.0013				.0010			
140.000				.0054											
141.400	.0083														
151.000			.0119												
180.000				.0162		.0031		.0020				.0018			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0713	.0709	.0707	.0718	.0715	.0723	.0739	.0732	.0714	.0764	.0782	.0790	.0890	.0953	
21.500	.0749				.0621				.0768				.0830		
63.000	.0005														
64.000									.0005						
65.000													.0003		
65.500					.0006										

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB14)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0313				.0118				.0045				.0010		
111.000															.0008
112.000					.0192										
113.000					.0222										
116.000											.0033				
135.000	.0014				.0025				.0047						
149.000											.0063				
180.000	.0017				.0014				.0015				.0029		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0994	.1006	.1013	.1081	.1016	.1047	.1114	.0000		.1190	.0000	.1263
21.500			.1038									
39.000							.1060					.1047
52.500						.0061						
55.000			.0008									
65.000			.0008									
68.000						.0041						
100.000			.0007									
108.000			.0006			.0020						
112.000							.0061					
113.000									.0078			

AEDC VA352 OH4B O1 ORB. BOTTOM SURFACE WING (CTKL14) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.550 QI = 1.994 HREF = .035

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0433	.0237		.2952	.1660	.2128	.0513		.0981	.0579	.0429
.002						.2646		.1842				
.003						.3471		.1805				
.004						.3846		.1728				
.005						.3207		.1616				
.006						.3261		.1444				
.007						.2647		.1376				
.025	.0472			.1689	.3835		.3128					
.050										.1322		
.100				.1595		.1813	.2258	.2241		.1382		
.153	.1089											
.177					.1100							
.200				.1088		.1310						
.299	.0778											
.300					.1097	.1145		.3329	.1957	.1512		
.302				.0907								
.303							.1200					
.428						.1156						
.444	.0646											
.487					.1070							
.500							.0975	.3171		.1839		
.559				.0764								
.590	.0494											
.600					.0825	.0734			.1501			
.700				.0723	.0779	.0541	.0525			.1423		
.736	.0735											
.800						.0314	.0379					
.850						.0510	.0599					
.900	.0425			.0486	.0568	.0467	.0533			.1332		

AEDC VA352 OH48 O1 ORB. BOTTOM SURFACE WING (CTKL14)

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.550 QI = 1.994 HREF = .035

SECTION (1)BOTTOM SURF, WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0440	.0235		.2598	.1950	.1860	.0401		.0990	.0710	.0519
.002						.3241		.1513				
.003						.4607		.1600				
.004						.4806		.1537				
.005						.4233		.1588				
.006						.3779		.1400				
.007						.3139		.1391				
.025	.0495			.1570	.3461		.2728					
.050										.1483		
.100				.1626		.2128	.2051	.2622		.1670		
.153	.1112											
.177					.1094							
.200				.1109		.1516						
.299	.0831											
.300					.1048	.1166		.1685	.3638	.2786		
.302				.0967								
.303							.1161					
.428						.1404						
.444	.0725											
.487					.1336							
.500							.1104	.1085		.2439		
.559				.0867								
.590	.0602											
.600					.0882	.0756			.0755			
.700				.0847	.0789	.0655	.0604			.1592		
.736	.0936											
.800						.0361	.0474					
.850						.0956	.0723					
.900	.0562			.0622	.0703	.0583	.0669			.1002		

AEDC VA352 OH4B 01 ORB. UPPER SURFACE WING (CTKU14) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.550 QI = 1.994 HREF = .035

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0275	.0935	.1081
.200	.0031	.0121	.0098
.600	.0004	.0312	.0101
.800		.0006	.0081
.900		.0018	.0141
.950	.0026	.0040	.0189

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.550 QI = 1.994 HREF = .035

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0200	.0868	.0736
.200	.0025	.0116	.0076
.600	.0003	.0153	.0064
.800		.0008	.0064
.900		.0022	.0097
.950	.0033	.0055	.0137

AEDC VA352 OH4B 01 ORB. LEFT VERTICAL TAIL (CTKV14) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.550 QI = 1.994 HREF = .035

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0131	.0118	.0203	.0279
.010					.0285
.100	.0149	.0092	.0095	.0187	
.300	.0083	.0059	.0078	.0133	
.500		.0051	.0085	.0122	.0141
.700	.0030	.0020	.0038	.0084	
.900		.0020	.0050	.0087	

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.550 QI = 1.994 HREF = .035

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0201	.0304	.0500	.0401
.010					.0234
.100	.0153	.0096	.0287	.0268	
.300	.0077	.0050	.0208	.0269	
.500		.0025	.0210	.0290	.0153
.700	.0019	.0020	.0064	.0126	
.900		.0030	.0064	.0107	

AEDC VA352 OH4B O1 ORB. RCS CENTER (CTKR14) (15 JAN 75)

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	.000	RN/L =	2.000
B.FLAP =	.000	ELEVON =	.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.550 QI = 1.994 HREF = .035

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0510	.0225	.0004	.0019	.0017

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.550 QI = 1.994 HREF = .035

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0466	.0208	.0003	.0008	.0041

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.
LREF =	22.5803 IN.	YMRP =	.0000 IN.
BREF =	16.3919 IN.	ZMRP =	.0000 IN.
SCALE =	.0175 SCALE		

PARAMETRIC DATA

BETA =	.000	RN/L =	2.000
B.FLAP =	.000	ELEVON =	.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.550 QI = 1.994 HREF = .035

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0059	.0281	.0365	.0293	.0058	.0050	.0036
8.540		.0372					
8.650		.0269					
8.727			.0492				
8.750						.0000	.0047
8.855				.0288			
8.942			.0197				
8.978					.0128		
9.056				.0078			
9.118				.0057			
9.222					.0049		
9.275					.0037		

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.550 QI = 1.994 HREF = .035

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0061	.0045	.0039	.0082	.0036	.0033	.0047
8.540		.0074					
8.650		.0113					
8.727			.0065				
8.750						.0000	.0036
8.855				.0060			
8.942			.0075				
8.978					.0081		
9.056				.0126			
9.118				.0047			
9.222					.0035		
9.275					.0038		

AEDC VA352 OH4B 01 ORB. FUSELAGE Y=0.875 (CTKY14) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.550 QI = 1.994 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1042	.0867	.0738	.0638	.0529	.0602	.0566	.0684

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.550 QI = 1.994 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1194	.1009	.0867	.0749	.0621	.0768	.0830	.1038

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	.000	RN/L =	2.000
B.FLAP =	.000	ELEVON =	.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.550 QI = 1.994 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0025	.0007	.0009	.0008	.0014

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.550 QI = 1.994 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0019	.0005	.0006	.0005	.0008

AEDC VA352 OH4B O1 ORB. FUSELAGE Z=7.525 (CTKF14) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.550 QI = 1.994 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0147	.0107	.0315	.0198	.0065	.0021

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.550 QI = 1.994 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0145	.0169	.0313	.0118	.0045	.0010

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB15) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRF = .0000 IN.
LREF = 22.5803 IN. YMRF = .0000 IN.
BREF = 16.3919 IN. ZMRF = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4299	.4211	.2758		.2272	.1929	.1655	.1381	.0000			.1149	.1090	.0998
10.000															.1153
14.000								.2180							
20.000															.1231
22.000								.2091							
24.500															.1365
35.000								.1041							
39.000															.0782
42.500								.0786							
48.000												.0536			
60.000								.0411							
119.000															.0190
180.000			.0557		.0553			.0245			.0125				.0095

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0948		.0894	.0813	.0730		.0731				.0718		.0704		
10.000					.1003										
20.000					.0958										
25.500					.1096										
40.000					.0833										
45.500					.0572										
131.200									.0084						
145.400														.0190	
146.200								.0088							
156.000														.0279	
159.200															.0409
170.700												.0157			
171.900										.0262					
173.400						.0224									
180.000		.0056			.0099		.0335				.1346		.0425		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0736		.0639	.0000	.0586	.0597	.0550	.0623	.0608	.0592	.0601	.0583	.0557	.0503
11.500				.0712											

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB15)

MACH (1) = 8.000 ALPHA (1) = 25.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0646							
21.500												.0613			
23.000								.0728							
24.000				.0891											
31.500				.1020											
34.000								.0820							
35.000				.0989											
40.000				.1013				.0774							
45.000								.0798							
51.000				.0404											
57.500								.0137							
59.500												.0040			
61.000								.0298							
65.000								.0261							
70.000								.0164							
96.500				.0215											
105.000												.0139			
106.000								.0137							
135.000								.0020				.0008			
140.000				.0140											
141.400	.0082														
151.000			.0355												
180.000				.0112		.0018		.0023				.0095			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0501	.0501	.0495	.0497	.0514	.0522	.0538	.0550	.0543	.0604	.0659	.0669	.0863	.0979	
21.500	.0558				.0467				.0580				.0757		
63.000	.0017														
64.000									.0011						
65.000													.0014		
65.500					.0021										
105.000	.0216				.0434				.0309				.0080		
111.000															.0094
112.000					.0275										
113.000					.0251										
116.000											.0599				
135.000	.0029				.0060				.0058						
149.000											.0062				
180.000	.0096				.0068				.0058				.0067		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500

PHI

MACH (1) = 8.000 ALPHA (1) = 25.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.1076	.1120	.1128	.1150	.1063	.1156	.1137	.0000		.1134	.0000	.1200
21.500			.1099									
39.000							.1254					.1156
52.500						.0092						
55.000			.0034									
65.000			.0049									
68.000						.0075						
100.000			.0056									
108.000			.0055			.0076						
112.000							.0030					
113.000									.0034			

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4163	.4224	.2971		.2456	.2127	.1837	.1577	.0000			.1333	.1256	.1159
10.000															.1339
14.000								.2394							
20.000															.1414
22.000								.2263							
24.500															.1504
35.000								.1012							
39.000															.0748
42.500								.0739							
48.000												.0513			
60.000								.0307							
119.000															.0139
180.000			.0743		.0397			.0166			.0089				.0084

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1139		.1041	.0976	.0886		.0891				.0885		.0878		
10.000					.1172										
20.000					.1082										
25.500					.1262										
40.000					.0900										
45.500					.0572										
131.200									.0051						
145.400														.0095	
146.200								.0081							

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB15)

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0183	
159.200															.0240
170.700												.0125			
171.900										.0220					
173.400						.0442									
180.000		.0094			.0203		.0535				.1028		.0541		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0863		.0823	.0000	.0793	.0766	.0682	.0769	.0781	.0762	.0759	.0742	.0703	.0677
11.500				.0893											
12.000								.0767							
21.500												.0760			
23.000								.0875							
24.000				.1062											
31.500				.1192											
34.000								.0984							
35.000				.1147											
40.000				.1119				.0959							
45.000								.0919							
51.000				.0412											
57.500								.0108							
59.500												.0026			
61.000								.0234							
65.000								.0251							
70.000								.0205							
96.500				.0213											
105.000												.0108			
106.000								.0148							
135.000								.0014				.0009			
140.000				.0067											
141.400	.0059														
151.000			.0196												
180.000				.0124		.0030		.0036				.0084			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0662	.0692	.0714	.0767	.0818	.0880	.0988	.1126	.1251	.1447	.1620	.1712	.2077	.2249	
21.500	.0708				.0703				.1340				.2122		
63.000	.0007														
64.000									.0009						
65.000													.0006		

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB15)

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0227				.0458				.0097				.0041		
111.000															.0029
112.000					.0392										
113.000					.0324										
116.000											.0201				
135.000	.0022				.0043				.0054						
149.000											.0031				
180.000	.0069				.0048				.0046				.0033		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.2343	.2209	.2058	.1965	.1721	.1440	.1707	.0000		.1669	.0000	.1681
21.500			.2027									
39.000							.1676					
52.500						.0070						.1440
55.000			.0027									
65.000			.0030									
68.000						.0029						
100.000			.0037									
108.000			.0042			.0036						
112.000							.0025					
113.000									.0035			

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4025	.4172	.3001		.2592	.2261	.2041	.1737	.0000			.1480	.1443	.1330
10.000															.1533
14.000								.2557							
20.000															.1589
22.000								.2392							
24.500															.1636
35.000								.0953							
39.000															.0710
42.500								.0686							
48.000												.0482			
60.000								.0240							
119.000															.0096
180.000			.0874		.0277			.0120			.0088				.0118

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB15)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1313		.1236	.1135	.1050		.1053				.1069		.1051		
10.000					.1314										
20.000					.1279										
25.500					.1381										
40.000					.0946										
45.500					.0562										
131.200									.0055						
145.400														.0101	
146.200								.0124							
156.000														.0147	
159.200															.0205
170.700												.0070			
171.900										.0205					
173.400						.0590									
180.000		.0171			.0295		.0676				.0897		.0648		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1086		.0978	.0000	.0970	.0915	.0845	.0934	.0876	.0900	.0907	.0898	.0889	.0861
11.500				.1048											
12.000								.0935							
21.500												.0887			
23.000								.1049							
24.000				.1220											
31.500				.1349											
34.000								.1140							
35.000				.1304											
40.000				.1198				.1101							
45.000								.1031							
51.000				.0408											
57.500								.0090							
59.500												.0017			
61.000								.0208							
65.000								.0224							
70.000								.0219							
96.500				.0204											
105.000												.0167			
106.000								.0148							
135.000								.0009				.0006			
140.000				.0059											
141.400	.0090														
151.000			.0147												
180.000				.0138		.0019		.0015				.0022			

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB15)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0935	.1008	.1147	.1290	.1512	.1794	.2028	.2218	.2414	.2608	.2718	.2648	.2917	.2942	
21.500	.0948				.1413				.2574				.2813		
63.000	.0004														
64.000									.0018						
65.000													.0005		
65.500					.0007										
105.000	.0264				.0203				.0060				.0015		
111.000															.0014
112.000					.0331										
113.000					.0329										
116.000											.0060				
135.000	.0014				.0031				.0057						
149.000											.0055				
180.000	.0022				.0027				.0045				.0052		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.2800	.2543	.2376	.2280	.2027	.1630	.1974	.0000		.1959	.0000	.1948
21.500			.2333									
39.000							.1865					.1630
52.500						.0090						
55.000			.0015									
65.000			.0014									
68.000						.0055						
100.000			.0013									
108.000			.0013			.0024						
112.000							.0057					
113.000									.0086			

AEDC VA352 OH4B 01 ORB. BOTTOM SURFACE WING (CTKL15) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0415	.0247		.3102	.1868	.2641	.0558		.1104	.0630	.0331
.002						.2312		.2019				
.003						.3605		.1946				
.004						.2999		.1799				
.005						.2844		.1604				
.006						.2491		.1329				
.007						.2032		.1195				
.025	.0473			.1825	.4066		.3784					
.050										.1399		
.100				.1589		.1496	.3259	.2100		.1429		
.153	.0946											
.177					.1147							
.200				.1017		.0919						
.299	.0647											
.300					.1376	.1588		.2311	.1211	.1189		
.302				.0848								
.303							.3924					
.428						.3372						
.444	.0579											
.487					.4078							
.500							.3967	.3152		.1126		
.559				.0860								
.590	.0475											
.600					.2012	.1056			.1277			
.700				.1057	.2514	.2432	.1615			.1342		
.736	.1023											
.800						.1424	.1620					
.850						.1800	.1889					
.900	.0746			.0875	.1532	.1530	.1547			.1258		

AEDC VA352 OH4B 01 ORB. BOTTOM SURFACE WING (CTKL15)

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0418	.0236		.2835	.1694	.2890	.0540		.1013	.0711	.0485
.002						.2693		.1921				
.003						.3536		.1969				
.004						.3957		.2082				
.005						.3257		.2050				
.006						.3417		.2181				
.007						.2759		.2188				
.025	.0513			.1698	.3856		.4569					
.050										.1406		
.100				.1641		.1906	.4368	.3188		.1528		
.153	.1022											
.177					.1180							
.200				.1187		.1590						
.299	.0749											
.300					.1296	.1355		.4276	.3496	.2735		
.302				.1088								
.303							.1615					
.428						.1484						
.444	.0706											
.487					.2825							
.500							.2480	.4330		.2211		
.559				.1774								
.590	.1066											
.600					.1963	.1181			.1854			
.700				.1983	.2143	.2097	.1827			.1860		
.736	.2527											
.800						.1376	.1871					
.850						.1853	.2243					
.900	.1096			.1595	.1529	.1639	.1859			.1730		

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0434	.0248		.2655	.2018	.1901	.0466		.1336	.0836	.0624
.002						.3197		.2009				
.003						.4880		.2320				
.004						.5097		.2446				
.005						.4461		.2691				
.006						.4228		.2512				
.007						.3599		.2614				
.025	.0510			.1684	.3649		.2916					

AEDC VA352 OH4B 01 ORB. BOTTOM SURFACE WING (CTKL15)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.050										.1850		
.100				.1938		.2591	.2542	.4496		.2034		
.153	.1117											
.177					.1574							
.200				.1690		.2010						
.299	.0844											
.300					.1850	.1650		.4571	.4653	.3282		
.302				.1881								
.303							.1867					
.428						.2205						
.444	.1222											
.487					.3427							
.500							.1775	.4078		.2887		
.559				.3022								
.590	.2272											
.600					.2631	.1965			.1850			
.700				.2732	.2594	.2298	.1177			.2222		
.736	.3536											
.800						.1611	.1865					
.850						.2096	.2534					
.900	.1247			.1992	.1854	.1855	.2152			.1929		

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5893 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0381	.1041	.1300
.200	.0033	.0120	.0113
.600	.0008	.0381	.0103
.800		.0027	.0093
.900		.0050	.0182
.950	.0059	.0090	.0268

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.867 QI = 3.955 HREF = .049

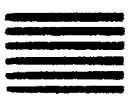
SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0261	.0960	.1076
.200	.0027	.0108	.0090
.600	.0005	.0289	.0127
.800		.0011	.0140
.900		.0041	.0235
.950	.0044	.0091	.0294

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0195	.0890	.0837
.200	.0038	.0114	.0075
.600	.0008	.0183	.0074
.800		.0008	.0085
.900		.0035	.0107
.950	.0043	.0083	.0195



AEDC VA352 OH4B O1 ORB. LEFT VERTICAL TAIL (CTKV15) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0948	.0512	.0535	.0923
.010					.0467
.100	.0202	.0161	.0201	.0362	
.300	.0056	.0100	.0149	.0242	
.500		.0103	.0137	.0184	.0240
.700	.0035	.0048	.0058	.0086	
.900		.0051	.0076	.0090	

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0141	.0248	.0449	.0488
.010					.0317
.100	.0151	.0095	.0261	.0300	
.300	.0089	.0061	.0213	.0294	
.500		.0060	.0151	.0273	.0192
.700	.0037	.0030	.0048	.0121	
.900		.0038	.0069	.0102	

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0157	.0297	.0540	.0448
.010					.0276
.100	.0165	.0100	.0220	.0346	
.300	.0077	.0091	.0208	.0287	
.500		.0060	.0213	.0236	.0190

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0536	.0261	.0014	.0049	.0075

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.867 QI = 3.955 HREF = .049

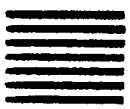
SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0513	.0251	.0006	.0030	.0029

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0482	.0224	.0005	.0014	.0055



AEDC VA352 OH4B 01 ORB. OMS POD (CTKM15) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0298	.1128	.0671	.0312	.0342	.0369	.0277
8.540		.0814					
8.650		.0576					
8.727			.0634				
8.750						.0000	.0159
8.855				.0290			
8.942			.0188				
8.978					.0104		
9.056				.0051			
9.118				.0057			
9.222					.0068		
9.275					.0046		

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0379	.1019	.0646	.0661	.0093	.0112	.0105
8.540		.1001					
8.650		.0449					
8.727			.0708				
8.750						.0000	.0089
8.855				.0233			
8.942			.0159				
8.978					.0202		
9.056				.0126			
9.118				.0047			
9.222					.0069		
9.275					.0045		

AEDC VA352 OH4B 01 ORB. OMS POD (CTKH15)

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0064	.0048	.0093	.0290	.0054	.0047	.0040
8.540		.0074					
8.650		.0095					
8.727			.0139				
8.750						.0000	.0049
8.855				.0201			
8.942			.0089				
8.978					.0116		
9.056				.0088			
9.118				.0040			
9.222					.0026		
9.275					.0028		

AEDC VA352 OH4B 01 ORB. FUSELAGE Y=0.875 (CTKY15) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0891	.0728	.0613	.0558	.0467	.0580	.0757	.1099

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1062	.0875	.0760	.0708	.0703	.1340	.2122	.2027

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1220	.1049	.0887	.0948	.1413	.2574	.2813	.2333

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0040	.0017	.0021	.0011	.0034

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.867 QI = 3.955 HREF = .049

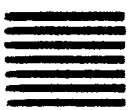
SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0026	.0007	.0011	.0009	.0027

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0017	.0004	.0007	.0018	.0015



AEDC VA352 OH4B O1 ORB. FUSELAGE Z=7.525 (CTKF15) (15 JAN 75)

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.				
LREF =	22.5803 IN.	YMRP =	.0000 IN.				
BREF =	16.3919 IN.	ZMRP =	.0000 IN.				
SCALE =	.0175 SCALE						

PARAMETRIC DATA

BETA =	.000	RN/L =	3.720
B.FLAP =	.000	ELEVON =	.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0137	.0139	.0216	.0434	.0309	.0080

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0148	.0108	.0227	.0458	.0097	.0041

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.867 QI = 3.955 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0148	.0167	.0264	.0203	.0060	.0015

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB16) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.500 QI = 3.958 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4195	.4228	.2875		.2441	.2124	.1848	.1570	.0000			.1322	.1272	.1152
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1118		.1058	.0978	.0894		.0906				.0887		.0884		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0051						
145.400														.0093	
146.200								.0082							
156.000														.0182	
159.200															.0235
170.700												.0125			
171.900										.0228					
173.400						.0444									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0908		.0821	.0000	.0743	.0728	.0672	.0782	.0759	.0776	.0770	.0744	.0719	.0677
11.500				.0000											

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB16)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0000							
21.500												.0750			
23.000								.0872							
24.000				.1064											
31.500				.0000											
34.000								.0000							
35.000				.0000											
40.000				.0000				.0000							
45.000								.0000							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0066											
141.400	.0059														
151.000			.0195												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0671	.0688	.0710	.0750	.0801	.0882	.0985	.1117	.1226	.1413	.1624	.1715	.2108	.2295	
21.500	.0694				.0720				.1316				.2112		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.2276	.2184	.2114	.1937	.1749	.0000	.1714	.0000		.1659	.0000	.1681
21.500			.2112									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

TABULATED DATA LISTING FOR OH4B (AEDC VA352)

AEDC VA352 OH4B 01 ORB. UPPER SURFACE WING

(CTKU16) (15 JAN 75)

REFERENCE DATA

PARAMETRIC DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.	BETA =	.000
LREF =	22.5803 IN.	YMRP =	.0000 IN.	B.FLAP =	.000
BREF =	16.3919 IN.	ZMRP =	.0000 IN.	HAW/HT =	.000
SCALE =	.0175 SCALE				

RN/L = 3.720
ELEVON = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.500 BI = 3.958 HREF = .049

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0262	.0946	.1150
.200	.0043	.0117	.0091
.600	.0005	.0339	.0122
.800		.0010	.0145
.900		.0037	.0232
.950	.0049	.0084	.0310

AEDC VA352 OH4B O1 ORB. FUSELAGE Y=0.875 (CTKY16) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.500 QI = 3.958 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1064	.0872	.0750	.0694	.0720	.1316	.2112	.2112

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB17) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 5.000
MAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.700 QI = 3.949 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4200	.4232	.2919		.2448	.2109	.1856	.1578	.0000			.1336	.1273	.1161
10.000															.1349
14.000								.2404							
20.000															.1420
22.000								.2274							
24.500															.1527
35.000								.1015							
39.000															.0746
42.500								.0730							
48.000												.0517			
60.000								.0310							
119.000															.0138
180.000			.0723		.0384			.0163			.0095				.0088

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1131		.1031	.0979	.0892		.0896				.0877		.0885		
10.000					.1201										
20.000					.1080										
25.500					.1244										
40.000					.0899										
45.500					.0571										
131.200									.0050						
145.400														.0093	
146.200								.0078							
156.000														.0176	
159.200															.0238
170.700												.0220			
171.900										.0217					
173.400						.0448									
180.000		.0092			.0203		.0549				.1024		.0547		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0870		.0824	.0000	.0780	.0764	.0689	.0768	.0766	.0776	.0762	.0744	.0715	.0684
11.500				.0808											

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB17)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0799							
21.500												.0765			
23.000								.0880							
24.000				.1068											
31.500				.1200											
34.000								.0999							
35.000				.1157											
40.000				.1120				.0969							
45.000								.0945							
51.000				.0409											
57.500								.0103							
59.500												.0026			
61.000								.0236							
65.000								.0246							
70.000								.0205							
96.500				.0205											
105.000												.0101			
106.000								.0148							
135.000								.0013				.0009			
140.000				.0065											
141.400	.0057														
151.000			.0193												
180.000				.0129		.0030		.0034				.0078			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0686	.0687	.0734	.0759	.0809	.0886	.1006	.1137	.1263	.1472	.1664	.1761	.2100	.2316	
21.500	.0708				.0715				.1360				.2115		
63.000	.0007														
64.000									.0003						
65.000													.0006		
65.500					.0011										
105.000	.0224				.0445				.0091				.0041		
111.000															.0035
112.000					.0397										
113.000					.0330										
116.000											.0195				
135.000	.0021				.0046				.0051						
149.000											.0030				
180.000	.0071				.0049				.0046				.0031		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB17)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.2317	.2121	.2045	.1904	.1705	.3833	.3231	.4300		.4323	.4339	.4318
21.500			.2042									
39.000							.2967					.3833
52.500						.0043						
55.000			.0028									
65.000			.0031									
68.000						.0034						
100.000			.0038									
108.000			.0040			.0039						
112.000							.0024					
113.000									.0031			

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.700 QI = 3.949 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4045	.4183	.2981		.2589	.2261	.2025	.1724	.0000			.1470	.1438	.1322
10.000															.1521
14.000								.2547							
20.000															.1578
22.000								.2408							
24.500															.1638
35.000								.0950							
39.000															.0712
42.500								.0689							
48.000												.0478			
60.000								.0240							
119.000															.0095
180.000			.0868		.0279			.0122			.0079				.0123

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1303		.1214	.1132	.1059		.1066				.1057		.1038		
10.000					.1299										
20.000					.1195										
25.500					.1394										
40.000					.0945										
45.500					.0575										
131.200									.0055						
145.400														.0100	
146.200								.0120							

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB17)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0144	
159.200															.0206
170.700												.0086			
171.900										.0200					
173.400						.0588									
180.000		.0177			.0294		.0695				.0764		.0645		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1024		.0972	.0000	.0976	.0933	.0850	.0943	.0884	.0896	.0901	.0910	.0874	.0884
11.500				.1049											
12.000								.0952							
21.500												.0882			
23.000								.1044							
24.000				.1212											
31.500				.1358											
34.000								.1151							
35.000				.1310											
40.000				.1265				.1124							
45.000								.1024							
51.000				.0400											
57.500								.0091							
59.500												.0017			
61.000								.0210							
65.000								.0225							
70.000								.0216							
96.500				.0210											
105.000															
106.000												.0173			
135.000								.0149							
140.000				.0061				.0011				.0007			
141.400	.0085														
151.000			.0149												
180.000				.0136		.0021		.0016				.0020			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0936	.1015	.1143	.1267	.1516	.1817	.1985	.2262	.2403	.2591	.2727	.2709	.2903	.2969	
21.500	.0934				.1426				.2559				.2812		
63.000	.0004														
64.000									.0018						
65.000													.0006		
65.500					.0007										

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB17)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0276				.0205				.0060				.0017		
111.000															.0016
112.000					.0327										
113.000					.0330										
116.000											.0060				
135.000	.0015				.0032				.0061						
149.000											.0054				
180.000	.0022				.0028				.0042				.0053		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.2789	.2512	.2391	.2261	.2038	.3678	.3987	.5010		.4498	.4402	.4289
21.500			.2305									
39.000							.3230					.3678
52.500						.0051						
55.000			.0019									
65.000			.0017									
68.000						.0046						
100.000			.0016									
108.000			.0015			.0028						
112.000							.0026					
113.000									.0038			

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	.000	RN/L =	3.720
B.FLAP =	10.000	ELEVON =	5.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.700 QI = 3.949 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3910	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
x/c												
.001		.0419	.0245		.2857	.1690	.2885	.0543		.0992	.0697	.0604
.002						.2690		.1935				
.003						.3562		.1992				
.004						.3936		.2102				
.005						.3256		.2071				
.006						.3420		.2184				
.007						.2784		.2172				
.025	.0508			.1648	.3883		.4596					
.050										.1391		
.100				.1680		.1909	.4401	.3176		.1492		
.153	.1014											
.177					.1180							
.200				.1179		.1547						
.299	.0717											
.300					.1293	.1381		.4245	.3476	.2776		
.302				.1101								
.303							.1438					
.428						.1533						
.444	.0703											
.487					.2939							
.500							.2569	.4368		.2221		
.559				.1812								
.590	.1054											
.600					.2103	.1254			.1821			
.700				.2047	.2377	.2100	.1801			.2347		
.736	.2509											
.800						.2052	.2651					
.850						.2687	.3122					
.900	.1405			.2316	.2339	.2407	.2661			.2242		

TABULATED DATA LISTING FOR OH4B (AEDC VA352)

AEDC VA352 OH4B 01 ORB. BOTTOM SURFACE WING (CTKL17)

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.700 QI = 3.949 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0434	.0241		.2657	.2010	.1993	.0480		.1259	.0823	.0741
.002						.3202		.2003				
.003						.4893		.2322				
.004						.5109		.2439				
.005						.4531		.2703				
.006						.4280		.2512				
.007						.3620		.2591				
.025	.0509			.1661	.3694		.2928					
.050										.1880		
.100				.1939		.2623	.2483	.4476		.2057		
.153	.1126											
.177					.1592							
.200				.1715		.1984						
.299	.0850											
.300					.1867	.1658		.2896	.4663	.3371		
.302				.1923								
.303							.1763					
.428						.2272						
.444	.1221											
.487					.3518							
.500							.1815	.1944		.3005		
.559				.3041								
.590	.2333											
.600					.2664	.1957			.1519			
.700				.2707	.2608	.2316	.0966			.3001		
.736	.3528											
.800						.2164	.1260					
.850						.2843	.1796					
.900	.1577			.2669	.2458	.2615	.1668			.2353		

REFERENCE DATA

SREF = .8238 SQ.FT. XMRF = .0000 IN.
LREF = 22.5803 IN. YMRF = .0000 IN.
BREF = 16.3919 IN. ZMRF = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.700 QI = 3.949 HREF = .049

SECTION (1)UFFER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0028	.0703	.1648
.200	.0508	.1054	.1680
.600	.1014	.2509	.1179
.800		.1405	.1101
.900		.0419	.1812
.950	.0717	.0245	.2047

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.700 QI = 3.949 HREF = .049

SECTION (1)UFFER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0019	.1221	.1661
.200	.0509	.2333	.1930
.600	.1126	.3528	.1715
.800		.1577	.1923
.900		.0434	.3041
.950	.0850	.0241	.2707

AEDC VA352 OH4B O1 ORB. LEFT VERTICAL TAIL (CTKV17) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.700 QI = 3.949 HREF = .049

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0136	.0237	.0428	.0484
.010					.0319
.100	.0156	.0098	.0254	.0300	
.300	.0090	.0061	.0198	.0288	
.500		.0059	.0095	.0271	.0191
.700	.0038	.0028	.0049	.0122	
.900		.0035	.0070	.0107	

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.700 QI = 3.949 HREF = .049

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0151	.0294	.0538	.0448
.010					.0279
.100	.0162	.0104	.0225	.0352	
.300	.0080	.0087	.0205	.0290	
.500		.0064	.0216	.0236	.0192
.700	.0019	.0024	.0087	.0104	
.900		.0040	.0094	.0097	

AEDC VA352 CH4B O1 ORB. RCS CENTER (CTKR17) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.729
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.700 QI = 3.949 HREF = .049

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0517	.0246	.0006	.0031	.0034

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.700 QI = 3.949 HREF = .049

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0478	.0225	.0006	.0017	.0046

AEDC VA352 OH4B O1 ORB. OMS POD (CTKM17) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.700 QI = 3.949 HREF = .049

SECTION (1)OMS POD DEPENDENT VARIABLE HU/H0

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0375	.1211	.0713	.0754	.0113	.0114	.0097
8.540		.0942					
8.650		.0449					
8.727			.0628				
8.750						.0000	.0144
8.855				.0195			
8.942			.0162				
8.978					.0185		
9.056				.0130			
9.118				.0049			
9.222					.0069		
9.275					.0046		

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.700 QI = 3.949 HREF = .049

SECTION (1)OMS POD DEPENDENT VARIABLE HU/H0

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0066	.0055	.0099	.0284	.0059	.0080	.0098
8.540		.0086					
8.650		.0101					
8.727			.0151				
8.750						.0000	.0082
8.855				.0206			
8.942			.0093				
8.978					.0125		
9.056				.0088			
9.118				.0041			
9.222					.0030		
9.275					.0030		

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5603 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.700 QI = 3.949 HREF = .049

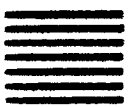
SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1068	.0880	.0765	.0708	.0715	.1360	.2115	.2042

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.700 QI = 3.949 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1212	.1044	.0882	.0934	.1426	.2559	.2812	.2305



AEDC VA352 OH4B 01 ORB. WING UPPER CREASE (CTKC17) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.700 QI = 3.949 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0026	.0007	.0011	.0003	.0028

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.700 QI = 3.949 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0017	.0004	.0007	.0018	.0019

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	.000	RN/L =	3.720
B.FLAP =	10.000	ELEVON =	5.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.700 QI = 3.949 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0148	.0191	.0224	.0445	.0091	.0041

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.700 QI = 3.949 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0149	.0173	.0276	.0205	.0060	.0017

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB18) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.200 QI = 3.933 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.0000	.0000	.0000		.0000	.0000	.0000	.0000	.0000			.0000	.0000	.0000
10.000															.1412
14.000								.2497							
20.000															.1535
22.000								.2430							
24.500															.1692
35.000								.1184							
39.000															.0932
42.500								.0889							
48.000												.0618			
60.000								.0358							
119.000															.0160
180.000			.0296		.0441			.0161			.0095				.0074

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0000		.0000	.0000	.0000		.0000				.0000		.0000		
10.000					.1262										
20.000					.1215										
25.500					.1424										
40.000					.1082										
45.500					.0738										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0071			.0093		.0192				.1091		.0321		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0000		.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11.500				.0966											

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB18)

MACH (1) = 0.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0849							
21.500												.0000			
23.000								.0000							
24.000				.0000											
31.500				.1347											
34.000								.1103							
35.000				.1347											
40.000				.1359				.1079							
45.000								.1106							
51.000				.0549											
57.500								.0181							
59.500												.0056			
61.000								.0392							
65.000								.0374							
70.000								.0254							
96.500				.0257											
105.000												.0145			
106.000								.0181							
135.000								.0019				.0013			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0150		.0071		.0037				.0063			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
21.500	.0000				.0000				.0000				.0000		
63.000	.0019														
64.000									.0008						
65.000													.0023		
65.500					.0030										
105.000	.0259				.0456				.0620				.0145		
111.000															.0758
112.000					.0317										
113.000					.0319										
116.000											.0589				
135.000	.0025				.0037				.0040						
149.000											.0121				
180.000	.0075				.0048				.0024				.0039		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500

PHI

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB18)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000		.0000	.0000	.0000
21.500			.0000									
39.000							.3110					.4253
52.500						.0080						
55.000			.0055									
65.000			.0075									
68.000						.0086						
100.000			.0075									
108.000			.0375			.0356						
112.000							.0075					
113.000									.0072			

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.200 QI = 3.933 MREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.0000	.0000	.0000		.0000	.0000	.0000	.0000	.0000			.0000	.0000	.0000
10.000															.1625
14.000								.2730							
20.000															.1737
22.000								.2614							
24.500															.1870
35.000								.1195							
39.000															.0963
42.500								.0888							
48.000												.0627			
60.000								.0303							
119.000															.0130
180.000			.0193		.0292			.0114			.0072				.0075

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0000		.0000	.0000	.0000		.0000				.0000		.0000		
10.000					.1465										
20.000					.1327										
25.500					.1554										
40.000					.1217										
45.500					.0800										
131.200									.0000						
145.400														.0000	
146.200								.0000							

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB18)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0099			.0121		.0205				.0783		.0207		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0000		.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11.500				.1106											
12.000								.0981							
21.500												.0000			
23.000								.0000							
24.000				.0000											
31.500				.1567											
34.000								.1267							
35.000				.1493											
40.000				.1348				.1250							
45.000								.1239							
51.000				.0619											
57.500								.0190							
59.500												.0043			
61.000								.0413							
65.000								.0422							
70.000								.0336							
96.500				.0297											
105.000												.0196			
106.000								.0202							
135.000								.0015				.0012			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0098		.0099		.0037				.0034			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
21.500	.0000				.0000				.0000				.0000		
63.000	.0018														
64.000															
65.000									.0034						
65.500					.0032								.0020		

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB18)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0309				.0644				.0645				.0174		
111.000															.0052
112.000					.0423										
113.000					.0387										
116.000											.0656				
135.000	.0021				.0039				.0050						
149.000											.0062				
180.000	.0030				.0033				.0048				.0044		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000		.0000	.0000	.0000
21.500			.0000									
39.000							.3287					.4068
52.500						.0075						
55.000			.0090									
65.000			.0093									
68.000						.0082						
100.000			.0099									
108.000			.0059			.0065						
112.000							.0033					
113.000									.0042			

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	-5.000	RN/L =	3.720
B.FLAP =	10.000	ELEVON =	5.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.200 QI = 3.933 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0536	.0285		.3327	.1765	.2987	.0536		.1562	.0925	.0430
.002						.2750		.2463				
.003						.4047		.2318				
.004						.3949		.2051				
.005						.3486		.1733				
.006						.3179		.1413				
.007						.2580		.1277				
.025	.0641			.2096	.4276		.4212					
.050										.1995		
.100				.1804		.1879	.2078	.2276		.2072		
.153	.1275											
.177					.1464							
.200				.1251		.1336						
.299	.0838											
.300					.1282	.1005		.1159	.1274	.1364		
.302				.1091								
.303							.2487					
.428						.1139						
.444	.0768											
.487					.1326							
.500							.3645	.1439		.1069		
.559				.1329								
.590	.0878											
.600					.1313	.0935			.1037			
.700				.1508	.1373	.0781	.1779			.0882		
.736	.1905											
.800						.0794	.2974					
.850						.1305	.3158					
.900	.1759			.2166	.2150	.1435	.2759			.1968		

AEDC VA352 OH4B 01 ORB. BOTTOM SURFACE WING (CTKL18)

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.200 QI = 3.933 HREF = .049

SECTION (1)BOTTOM SURF. WING DEFENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0531	.0325		.2790	.1722	.2051	.0514		.1243	.0872	.0690
.002						.2771		.1913				
.003						.4221		.2153				
.004						.4526		.2370				
.005						.4070		.2516				
.006						.3959		.2623				
.007						.3412		.2681				
.025	.0722			.1958	.3949		.3074					
.050										.1864		
.100				.1925		.2678	.2697	.4087		.2052		
.153	.1354											
.177					.1378							
.200				.1380		.2050						
.299	.0899											
.300					.1365	.1578		.4671	.4108	.2882		
.302				.1215								
.303							.1886					
.428						.2058						
.444	.0887											
.487					.2764							
.500							.1875	.3235		.2628		
.559				.1474								
.590	.1140											
.600					.2459	.1733			.1873			
.700				.1685	.2371	.1986	.0991			.2604		
.736	.2216											
.800						.1850	.1200					
.850						.2517	.1722					
.900	.1618			.2068	.2418	.2338	.1542			.2560		

AEDC VA352 OH48 01 ORB. LEFT VERTICAL TAIL (CTKV18) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.200 QI = 3.933 HREF = .049

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0092	.0414	.0356	.0389
.010					.0473
.100	.0144	.0467	.0525	.0422	
.300	.0093	.0368	.0684	.0409	
.500		.0419	.0558	.0348	.0255
.700	.0053	.0149	.0129	.0247	
.900		.0132	.0147	.0204	

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.200 QI = 3.933 HREF = .049

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0142	.0266	.0621	.0670
.010					.0381
.100	.0168	.0146	.0426	.0430	
.300	.0077	.0100	.0381	.0275	
.500		.0090	.0309	.0235	.0197
.700	.0020	.0038	.0079	.0110	
.900		.0048	.0081	.0099	

AEDC VA352 OH4B O1 ORB. RCS CENTER (CTKR18) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.200 QI = 3.933 HREF = .049

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0618	.0374	.0023	.0075	.0086

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.200 QI = 3.933 HREF = .049

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0627	.0422	.0020	.0093	.0082

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.200 QI = 3.933 HREF = .049

SECTION (1)CMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0654	.1916	.1097	.0631	.0179	.0165	.0119
8.540		.1380					
8.650		.0744					
8.727			.0955				
8.750						.0000	.0094
8.855				.0373			
8.942			.0290				
8.978					.0118		
9.056				.0043			
9.118				.0079			
9.222					.0043		
9.275					.0046		

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.200 QI = 3.933 HREF = .049

SECTION (1)CMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0663	.1453	.0983	.0812	.0237	.0224	.0189
8.540		.0985					
8.650		.0428					
8.727			.0644				
8.750						.0000	.0201
8.855				.0260			
8.942			.0155				
8.978					.0182		
9.056				.0088			
9.118				.0052			
9.222					.0034		
9.275					.0027		

AEDC VA352 OH4B 01 ORB. WING UPPER CREASE (CTKC18) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 3.720
δ.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.200 QI = 3.933 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0056	.0019	.0030	.0008	.0055

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.200 QI = 3.933 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0043	.0018	.0032	.0034	.0090

AEDC VA352 OH4B 01 ORB. FUSELAGE Z=7.525 (CTKF18) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.200 QI = 3.933 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0181	.0145	.0259	.0456	.0620	.0145

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.200 QI = 3.933 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0202	.0196	.0309	.0644	.0645	.0174

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB19) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.650 QI = 1.983 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.0000	.0000	.0000		.0000	.0000	.0000	.0000	.0000			.0000	.0000	.0000
10.000															.1418
14.000								.2561							
20.000															.1526
22.000								.2442							
24.500															.1739
35.000								.1279							
39.000															.1025
42.500								.0958							
48.000												.0675			
60.000								.0408							
119.000															.0193
180.000			.0132		.0436			.0179			.0086				.0067

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0000		.0000	.0000	.0000		.0000				.0000		.0000		
10.000					.1270										
20.000					.1165										
25.500					.1425										
40.000					.1166										
45.500					.0823										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0038			.0023		.0056				.1082		.0137		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0000		.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB19)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0838							
21.500												.0000			
23.000								.0000							
24.000				.0000											
31.500				.1347											
34.000								.1142							
35.000				.1353											
40.000				.1429				.1168							
45.000								.1194							
51.000				.0619											
57.500								.0237							
59.500												.0076			
61.000								.0498							
65.000								.0456							
70.000								.0290							
96.500				.0298											
105.000												.0186			
106.000								.0207							
135.000								.0025				.0014			
149.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0078		.0038		.0023				.0069			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
21.500	.0000				.0000				.0000				.0000		
63.000	.0028														
64.000									.0031						
65.000													.0011		
65.500					.0032										
105.000	.0296				.0625				.0479				.0117		
111.000															.0156
112.000					.0372										
113.000					.0333										
116.000											.0779				
135.000	.0024				.0029				.0046						
149.000											.0107				
180.000	.0053				.0041				.0036				.0028		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500

PHI

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB19)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000		.0000	.0000	.0000
21.500			.0000									
39.000							.1671					.2935
52.500						.0070						
55.000			.0023									
65.000			.0047									
68.000						.0133						
100.000			.0084									
108.000			.0154			.0152						
112.000							.0067					
113.000									.0060			

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.650 QI = 1.983 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.0000	.0000	.0000		.0000	.0000	.0000	.0000	.0000			.0000	.0000	.0000
10.000															.1575
14.000								.2695							
20.000															.1696
22.000								.2553							
24.500															.1850
35.000								.1204							
39.000															.0966
42.500								.0884							
48.000												.0645			
60.000								.0322							
119.000															.0144
180.000			.0160		.0305			.0125			.0074				.0061

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0000		.0000	.0000	.0000		.0000				.0000		.0000		
10.000					.1463										
20.000					.1340										
25.500					.1568										
40.000					.1201										
45.500					.0825										
131.200									.0000						
145.400														.0000	
146.200								.0000							

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB19)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0069			.0091		.0172				.0800		.0135		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0000		.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11.500				.1105											
12.000								.0957							
21.500												.0000			
23.000								.0000							
24.000				.0000											
31.500				.1491											
34.000								.1270							
35.000				.1498											
40.000				.1513				.1244							
45.000								.1233							
51.000				.0605											
57.500								.0180							
59.500												.0048			
61.000								.0389							
65.000								.0413							
70.000								.0345							
96.500				.0290											
105.000												.0186			
106.000								.0209							
135.000								.0020				.0014			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0080		.0069		.0045				.0032			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
21.500	.0000				.0000				.0000				.0000		
63.000	.0015														
64.000									.0011						
65.000													.0018		
65.500					.0022										

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB19)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0353				.0658				.0203				.0075		
111.000															.0113
112.000					.0666										
113.000					.0534										
116.000											.0440				
135.000	.0021				.0036				.0052						
149.000											.0066				
180.000	.0020				.0024				.0031				.0029		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000		.0000	.0000	.0000
21.500			.0000									
39.000							.2023					.2792
52.500						.0073						
55.000			.0030									
65.000			.0038									
68.000						.0086						
100.000			.0058									
108.000			.0094			.0059						
112.000							.0033					
113.000									.0039			

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.650 PI = 1.983 HREF = .035

SECTION (1)BOTTOM SURF, WING DEPENDENT VARIABLE HU/HO

Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0612	.0311		.3584	.1840	.2853	.0503		.1301	.0761	.0433
.002						.2893		.2248				
.003						.4349		.2165				
.004						.3934		.1945				
.005						.3540		.1705				
.006						.2988		.1377				
.007						.2533		.1255				
.025	.0756			.2281	.4500		.3945					
.050										.1718		
.100				.1859		.1985	.2077	.2282		.1768		
.153	.1331											
.177					.1397							
.200				.1221		.1333						
.299	.0885											
.300					.1278	.0939		.1184	.1369	.1455		
.302				.1003								
.303							.3154					
.428						.1084						
.444	.0778											
.487					.1107							
.500							.2013	.2179		.1127		
.559				.0843								
.590	.0590											
.600					.0895	.0875			.0556			
.700				.0843	.0782	.0618	.0620			.0679		
.736	.0735											
.800						.0429	.0624					
.850						.0777	.0892					
.900	.1124			.0695	.0641	.0702	.0751			.0862		

DATE 23 JAN 75

TABULATED DATA LISTING FOR OH4B (AEDC VA352)

AEDC VA352 OH4B O1 ORB. BOTTOM SURFACE WING (CTKL19)

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.650 QI = 1.983 HREF = .035

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0552	.0328		.2950	.1663	.2182	.0462		.1051	.0688	.0553
.002						.2540		.1775				
.003						.4008		.1828				
.004						.3909		.1762				
.005						.3571		.1655				
.006						.3288		.1424				
.007						.2736		.1345				
.025	.0712			.1971	.4004		.3135					
.050										.1466		
.100				.1832		.2037	.2049	.2317		.1524		
.153	.1387											
.177					.1348							
.200				.1281		.1328						
.299	.0913											
.300					.1226	.1024		.3122	.1793	.1509		
.302				.1082								
.303							.1196					
.428						.1121						
.444	.0778											
.487					.1183							
.500							.1071	.3281		.1646		
.559				.0843								
.590	.0592											
.600					.1032	.0973			.1319			
.700				.0851	.0865	.0638	.0541			.1882		
.736	.0803											
.800						.0432	.0452					
.850						.0832	.0842					
.900	.1443			.0745	.0683	.0806	.0793			.1813		

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRF =	.0000 IN.		
LREF =	22.5803 IN.	YMRF =	.0000 IN.		
BREF =	16.3919 IN.	ZMRF =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	-5.000	RN/L =	2.000
B.FLAP =	10.000	ELEVON =	5.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.650 QI = 1.983 HREF = .035

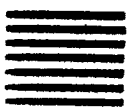
SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0139	.0238	.0496	.0827
.010					.0414
.100	.0177	.0098	.0315	.0351	
.300	.0090	.0090	.0523	.0219	
.500		.0100	.0396	.0327	.0108
.700	.0032	.0036	.0124	.0163	
.900		.0037	.0150	.0133	

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.650 QI = 1.983 HREF = .035

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0093	.0245	.0187	.0126
.010					.0253
.100	.0128	.0171	.0414	.0323	
.300	.0052	.0106	.0502	.0344	
.500		.0129	.0402	.0234	.0225
.700	.0022	.0055	.0115	.0119	
.900		.0051	.0121	.0107	



TABULATED DATA LISTING FOR OH4B (AEDC VA352)

AEDC VA352 OH4B 01 ORB. RCS CENTER

(CTKR19) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.650 QI = 1.983 HREF = .035

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/H0

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0675	.0456	.0011	.0047	.0133

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.650 QI = 1.983 HREF = .035

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/H0

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0645	.0413	.0018	.0038	.0086

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	-5.000	RN/L =	2.000
B.FLAP =	10.000	ELEVON =	5.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.650 QI = 1.983 HREF = .035

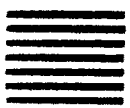
SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0564	.1430	.0862	.0370	.0194	.0223	.0226
8.540		.1046					
8.650		.0619					
8.727			.0787				
8.750						.0000	.0088
8.855				.0364			
8.942			.0237				
8.978					.0108		
9.056				.0070			
9.118				.0074			
9.222					.0071		
9.275					.0052		

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.650 QI = 1.983 HREF = .035

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0732	.1526	.0660	.0467	.0443	.0383	.0287
8.540		.1052					
8.650		.0557					
8.727			.0648				
8.750						.0000	.0176
8.855				.0210			
8.942			.0219				
8.978					.0115		
9.056				.0080			
9.118				.0074			
9.222					.0043		
9.275					.0038		



TABULATED DATA LISTING FOR OH4B (AEDC VA352)

AEDC VA352 OH4B 01 ORB. WING UPPER CREASE

(CTKC19) (15 JAN 75)

REFERENCE DATA

PARAMETRIC DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.	BETA =	-5.000	RN/L =	2.000
LREF =	22.5803 IN.	YMRP =	.0000 IN.	B.FLAP =	10.000	ELEVON =	5.000
BREF =	16.3919 IN.	ZMRP =	.0000 IN.	HAW/HT =	.000		
SCALE =	.0175 SCALE						

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.650 QI = 1.983 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0076	.0028	.0032	.0031	.0023

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.650 QI = 1.983 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0048	.0015	.0022	.0011	.0030

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	-5.000	RN/L =	2.000
B.FLAP =	10.000	ELEVON =	5.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.650 QI = 1.983 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0207	.0186	.0296	.0625	.0479	.0117

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.650 QI = 1.983 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0209	.0186	.0353	.0658	.0203	.0075

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB20) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.900 QI = 1.980 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4183	.4221	.2821		.2428	.2107	.1838	.1557	.0000			.1321	.1238	.1161
10.000															.1350
14.000								.2331							
20.000															.1388
22.000								.2235							
24.500															.1508
35.000								.0997							
39.000															.0742
42.500								.0740							
48.000												.0527			
60.000								.0318							
119.000															.0145
180.000			.0669		.0408			.0172			.0103				.0080

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1110		.1048	.0983	.0882		.0903				.0877		.0872		
10.000					.1300										
20.000					.1076										
25.500					.1241										
40.000					.0890										
45.500					.0567										
131.200									.0052						
145.400														.0077	
146.200								.0061							
156.000														.0144	
159.200															.0204
170.700												.0072			
171.900										.0199					
173.400						.0319									
180.000		.0075			.0141		.0447				.1045		.0533		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0822		.0809	.0000	.0696	.0671	.0702	.0777	.0764	.0736	.0734	.0711	.0669	.0620
11.500				.0890											

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB20)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0796							
21.500												.0732			
23.000								.0894							
24.000				.1055											
31.500				.1209											
34.000								.0989							
35.000				.1173											
40.000				.1134				.0913							
45.000								.0918							
51.000				.0402											
57.500								.0100							
59.500												.0027			
61.000								.0215							
65.000								.0229							
70.000								.0206							
96.500				.0207											
105.000												.0110			
106.000								.0153							
135.000								.0015				.0006			
140.000				.0049											
141.400	.0054														
151.000			.0168												
180.000				.0144		.0027		.0028				.0085			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0611	.0615	.0615	.0583	.0611	.0613	.0616	.0606	.0558	.0586	.0602	.0583	.0648	.0668	
21.500	.0649				.0538				.0608				.0592		
63.000	.0007														
64.000									.0005						
65.000													.0005		
65.500					.0010										
105.000	.0314				.0199				.0067				.0021		
111.000															.0024
112.000					.0382										
113.000					.0431										
116.000											.0097				
135.000	.0017				.0028				.0045						
149.000											.0051				
180.000	.0074				.0066				.0051				.0021		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500

PHI

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB20)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0697	.0715	.0705	.0719	.0676	.3493	.1798	.3002		.3718	.3901	.3893
21.500			.0732									.3493
39.000							.1901					
52.500						.0040						
55.000			.0008									
65.000			.0014									
68.000						.0014						
100.000			.0024									
108.000			.0019			.0020						
112.000							.0016					
113.000									.0019			

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.900 QI = 1.980 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4079	.4192	.3032		.2581	.2267	.2003	.1687	.0000			.1481	.1436	.1310
10.000															.1523
14.000								.2515							
20.000															.1558
22.000								.2360							
24.500															.1621
35.000								.0948							
39.000															.0713
42.500								.0695							
48.000												.0471			
60.000								.0251							
119.000															.0099
180.000			.0762		.0292			.0123			.0077				.0096

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1301		.1232	.1141	.1060		.1093				.1049		.1048		
10.000					.1325										
20.000					.1218										
25.500					.1376										
40.000					.0938										
45.500					.0561										
131.200									.0047						
145.400														.0077	
146.200								.0104							

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB20)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0104	
159.200															.0149
170.700												.0049			
171.900										.0209					
173.400						.0512									
180.000		.0134			.0242		.0632				.0775		.0609		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1111		.0962	.0000	.0856	.0882	.0801	.0933	.0889	.0886	.0856	.0827	.0788	.0731
11.500				.1043											
12.000								.0918							
21.500												.0848			
23.000								.1004							
24.000				.1223											
31.500				.1343											
34.000								.1134							
35.000				.1269											
40.000				.1210				.1085							
45.000								.1047							
51.000				.0451											
57.500								.0089							
59.500												.0019			
61.000								.0192							
65.000								.0210							
70.000								.0214							
96.500				.0209											
105.000												.0175			
106.000								.0144							
135.000								.0014				.0009			
140.000				.0051											
141.400	.0078														
151.000			.0120												
180.000				.0160		.0030		.0018				.0016			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0725	.0714	.0733	.0742	.0742	.0736	.0763	.0762	.0735	.0784	.0800	.0794	.0908	.0950	
21.500	.0753				.0636				.0775				.0834		
63.000	.0005														
64.000									.0005						
65.000													.0003		
65.500					.0006										

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB20)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8299
PHI															
105.000	.0316				.0108				.0046				.0009		.0007
111.000															
112.000					.0192										
113.000					.0223						.0036				
116.000									.0047						
135.000	.0015				.0025						.0068				
149.000									.0016				.0030		
180.000	.0015				.0014										

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0950	.1003	.0993	.1041	.0984	.3429	.2222	.3755		.4171	.4184	.3977
21.500			.1012									
39.000							.2412					.3429
52.500						.0052						
55.000			.0005									
65.000			.0005									
68.000						.0017						
100.000			.0008									
108.000			.0007			.0014						
112.000							.0020					
113.000									.0036			

AEDC VA352 OH4B O1 ORB. BOTTOM SURFACE WING (CTKL20) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.900 PI = 1.980 HREF = .035

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0427	.0239		.2953	.1622	.2129	.0494		.0996	.0593	.0555
.002						.2638		.1822				
.003						.3572		.1806				
.004						.3757		.1730				
.005						.3165		.1609				
.006						.3251		.1475				
.007						.2638		.1400				
.025	.0504			.1718	.3846		.3179					
.050										.1349		
.100				.1610		.1817	.2285	.2243		.1399		
.153	.1073											
.177					.1122							
.200				.1096		.1325						
.299	.0766											
.300					.1098	.1136		.3313	.1971	.1521		
.302				.0928								
.303							.1178					
.428						.1153						
.444	.0629											
.487					.1045							
.500							.0990	.3176		.1817		
.559				.0763								
.590	.0485											
.650					.0845	.0743			.1446			
.700				.0731	.0788	.0542	.0498			.1966		
.736	.0696											
.800						.0342	.0464					
.850						.0686	.0768					
.900	.1125			.0642	.0835	.0642	.0722			.1775		

AEDC VA352 OH4B 01 ORB. BOTTOM SURFACE WING (CTKL20)

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.900 QI = 1.980 WREF = .035

SECTION (1)BOTTOM SURF. WING DEFENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0441	.0237		.2597	.1965	.1890	.0383		.0986	.0719	.0672
.002						.3226		.1482				
.003						.4593		.1618				
.004						.4802		.1517				
.005						.4155		.1574				
.006						.3864		.1358				
.007						.3158		.1361				
.025	.0524			.1568	.3409		.2746					
.050										.1500		
.100				.1624		.2092	.2019	.2558		.1693		
.153	.1140											
.177					.1074							
.200				.1142		.1519						
.299	.0828											
.300					.1052	.1152		.1675	.3523	.2727		
.302				.0966								
.303							.1141					
.428						.1412						
.444	.0700											
.487					.1296							
.500							.1095	.1108		.2371		
.559				.0839								
.590	.0615											
.600					.0895	.0760			.0718			
.700				.0835	.0800	.0642	.0571			.2033		
.736	.0959											
.800						.0390	.0505					
.850						.0787	.0899					
.900	.1388			.0855	.0912	.0768	.0829			.1305		

AEDC VA352 OH4B O1 ORB. UPPER SURFACE WING (CTKU20) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.900 QI = 1.980 HREF = .035

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0008	.0629	.1718
.200	.0504	.0485	.1610
.600	.1073	.0696	.1096
.800		.1125	.0928
.900		.0427	.0763
.950	.0766	.0239	.0731

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.900 QI = 1.980 HREF = .035

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0005	.0700	.1568
.200	.0524	.0615	.1624
.600	.1140	.0959	.1142
.800		.1388	.0966
.900		.0441	.0839
.950	.0828	.0237	.0835

AEDC VA352 OH4B 01 ORB. LEFT VERTICAL TAIL (CTKV20) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 5.000
NAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.900 QI = 1.980 HREF = .035

SECTION (1)LEFT VERTICAL TAIL DEFENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0116	.0122	.0207	.0278
.010					.0280
.100	.0161	.0092	.0096	.0179	
.300	.0086	.0063	.0080	.0137	
.500		.0048	.0090	.0130	.0134
.700	.0029	.0020	.0036	.0073	
.900		.0020	.0048	.0093	

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.900 QI = 1.980 HREF = .035

SECTION (1)LEFT VERTICAL TAIL DEFENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0201	.0308	.0514	.0417
.010					.0225
.100	.0153	.0105	.0286	.0265	
.300	.0079	.0051	.0214	.0266	
.500		.0029	.0219	.0282	.0153
.700	.0015	.0018	.0060	.0128	
.900		.0029	.0055	.0105	

AEDC VA352 OH4B O1 ORB. RCS CENTER (CTKR20) (15 JAN 75)

REFERENCE DATA

SREF = .8236 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.900 QI = 1.980 HREF = .035

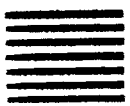
SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0527	.0229	.0005	.0014	.0014

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.900 QI = 1.980 HREF = .035

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0471	.0210	.0003	.0005	.0017



AEDC VA352 OH4B 01 ORB. OMS POD (CTKM20) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.900 QI = 1.980 HREF = .035

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0065	.0279	.0352	.0288	.0061	.0053	.0041
8.540		.0376					
8.650		.0276					
8.727			.0500				
8.750						.0000	.0050
8.855				.0297			
8.942			.0206				
8.978					.0123		
9.056				.0075			
9.118				.0061			
9.222					.0051		
9.275					.0040		

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.900 QI = 1.980 HREF = .035

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0059	.0047	.0043	.0070	.0040	.0044	.0068
8.540		.0074					
8.650		.0114					
8.727			.0069				
8.750						.0000	.0044
8.855				.0064			
8.942			.0079				
8.978					.0080		
9.056				.0113			
9.118				.0051			
9.222					.0038		
9.275					.0040		

AEDC VA352 OH4B O1 ORB. FUSELAGE Y=0.875 (CTKY20) (15 JAN 75)

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	.000	RN/L =	2.000
B.FLAP =	10.000	ELEVON =	5.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.900 QI = 1.980 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1055	.0894	.0732	.0640	.0538	.0608	.0592	.0732

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.900 QI = 1.980 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1223	.1004	.0848	.0753	.0636	.0775	.0834	.1012

AEDC VA352 OH4B 01 ORB. WING UFFER CREASE (CTKC20) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.900 QI = 1.980 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
FHI					
62.000	.0027	.0007	.0010	.0005	.0008

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.900 QI = 1.980 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
FHI					
62.000	.0019	.0005	.0006	.0005	.0005

AEDC VA352 OH4B O1 ORB. FUSELAGE Z=7.525 (CTKF20) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRF = .0000 IN.
LREF = 22.5803 IN. YMRF = .0000 IN.
BREF = 16.3919 IN. ZMRF = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.900 QI = 1.980 HREF = .035

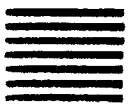
SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0153	.0110	.0314	.0199	.0067	.0021

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.900 QI = 1.980 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0144	.0175	.0316	.0198	.0046	.0009



AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB21) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = .500
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 91.950 QI = .518 HREF = .017

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.0000	.0000	.0000		.0000	.0000	.0000	.0000	.0000			.0000	.0000	.0000
10.000															.1473
14.000								.2541							
20.000															.1581
22.000								.2486							
24.500															.1728
35.000								.1314							
39.000															.1020
42.500								.1020							
48.000												.0712			
60.000								.0429							
119.000															.0213
180.000			.0120		.0463			.0209			.0116				.0082

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0000		.0000	.0000	.0000		.0000				.0000		.0000		
10.000					.1110										
20.000					.1126										
25.500					.1452										
40.000					.1156										
45.500					.0852										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0009
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0053			.0033		.0067				.1144		.0114		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0000		.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11.500				.0966											

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB21)

MACH (1) = 6.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE MU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0853							
21.500												.0000			
23.000								.0000							
24.000				.0000											
31.500				.1375											
34.000								.1188							
35.000				.1389											
40.000				.1454				.1158							
45.000								.1212							
51.000				.0639											
57.500								.0203							
59.500												.0072			
61.000								.0427							
65.000								.0434							
70.000								.0313							
96.500				.0302											
105.000												.0192			
106.000								.0207							
135.000								.0034				.0020			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0061		.0053		.0018				.0041			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
21.500	.0000				.0000				.0000				.0000		
63.000	.0021														
64.000									.0018						
65.000													.0009		
65.500					.0026										
105.000	.0392				.0570				.0169				.0069		
111.000															.0073
112.000					.0664										
113.000					.0609										
116.000											.0200				
135.000	.0033				.0041				.0075						
149.000											.0046				
180.000	.0048				.0039				.0042				.0030		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												

FH:

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB21)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000		.0000	.0000	.0000
21.500			.0000									
39.000							.0369					.2066
52.500						.0015						
55.000			.0013									
65.000			.0011									
68.000						.0016						
100.000			.0031									
106.000			.0084			.0060						
112.000							.0035					
113.000									.0043			

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 91.950 QI = .518 HREF = .017

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.0000	.0000	.0000		.0000	.0000	.0000	.0000	.0000			.0000	.0000	.0000
10.000															.1670
14.000								.2755							
20.000															.1746
22.000								.2640							
24.500															.1882
35.000								.1238							
39.000															.0984
42.500								.0928							
48.000												.0661			
60.000								.0346							
119.000															.0159
180.000			.0164		.0347			.0147			.0083				.0065

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0000		.0000	.0000	.0000		.0000				.0000		.0000		
10.000					.1452										
20.000					.1345										
25.500					.1611										
40.000					.1231										
45.500					.0828										
131.200									.0000						
145.400														.0000	
146.200								.0000							

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB21)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0058			.0054		.0108				.0857		.0131		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0000		.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11.500				.1117											
12.000								.1000							
21.500												.0000			
23.000								.0000							
24.000				.0000											
31.500				.1527											
34.000								.1308							
35.000				.1529											
40.000				.1567				.1303							
45.000								.1312							
51.000				.0642											
57.500								.0163							
59.500												.0045			
61.000								.0352							
65.000								.0382							
70.000								.0361							
96.500				.0309											
105.000												.0223			
106.000								.0221							
135.000								.0026				.0020			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0069		.0058		.0026				.0028			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
21.500	.0000				.0000				.0000				.0000		
63.000	.0011														
64.000									.0009						
65.000													.0003		
65.500					.0017										

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB21)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0539				.0248				.0109				.0046		
111.000															.0060
112.000					.0381										
113.000					.0451										
116.000											.0160				
135.000	.0034				.0058				.0061						
149.000											.0035				
180.000	.0029				.0028				.0034				.0055		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000		.0000	.0000	.0000
21.500			.0000									
39.000							.0527					.1896
52.500						.0034						
55.000			.0018									
65.000			.0016									
68.000						.0047						
100.000			.0031									
108.000			.0052			.0042						
112.000							.0027					
113.000									.0033			

AEDC VA352 OH4B O1 CRB. BOTTOM SURFACE WING (CTKL21) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = .500
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 91.950 QI = .518 HREF = .017

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0634	.0326		.3712	.1947	.2938	.0546		.1324	.0794	.0408
.002						.3005		.2284				
.003						.4388		.2220				
.004						.4016		.1987				
.005						.3657		.1746				
.006						.3044		.1443				
.007						.2584		.1329				
.025	.0759			.2455	.4655		.4049					
.050										.1801		
.100				.1899		.2035	.2008	.2304		.1885		
.153	.1340											
.177					.1456							
.200				.1260		.1326						
.299	.0876											
.300					.1307	.0875		.1169	.1402	.1554		
.302				.1062								
.303							.0950					
.428						.1093						
.444	.0786											
.487					.1176							
.500							.1040	.1203		.1204		
.559				.0895								
.590	.0627											
.600					.0948	.0916			.0544			
.700				.0838	.0808	.0661	.0495			.0826		
.736	.0705											
.800						.0522	.0664					
.850						.0772	.0796					
.900	.0617			.0683	.0629	.0696	.0699			.0843		

AEDC VA352 OH4B O1 ORB. BOTTOM SURFACE WING (CTKL21)

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 91.950 QI = .518 HREF = .017

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

ZY/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0619	.0324		.3094	.1730	.2290	.0475		.1096	.0713	.0374
.002						.2678		.1832				
.003						.4196		.1871				
.004						.3983		.1787				
.005						.3682		.1695				
.006						.3386		.1463				
.007						.2845		.1342				
.025	.0711			.2131	.4110		.3315					
.050										.1544		
.100				.1901		.2094	.2111	.2411		.1621		
.153	.1411											
.177					.1444							
.200				.1337		.1417						
.299	.0942											
.300					.1271	.0985		.1062	.1526	.1466		
.302				.1134								
.303							.1245					
.428						.1173						
.444	.0855											
.487					.1246							
.500							.1141	.1094		.1069		
.559				.0910								
.590	.0692											
.600					.1057	.0983			.0463			
.700				.0868	.0871	.0697	.0544			.0631		
.736	.0791											
.800						.0500	.0549					
.850						.0839	.0890					
.900	.0774			.0731	.0694	.0815	.0819			.0788		

AEDC VA352 OH4B 01 ORB. LEFT VERTICAL TAIL (CTKV21) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = .500
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 91.950 QI = .518 HREF = .017

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0198	.0088	.0351	.0504
.010					.0462
.100	.0168	.0112	.0145	.0382	
.300	.0104	.0079	.0092	.0233	
.500		.0080	.0099	.0164	.0159
.700	.0028	.0030	.0060	.0098	
.900		.0042	.0088	.0099	

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 91.950 QI = .518 HREF = .017

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0060	.0313	.0314	.0264
.010					.0317
.100	.0097	.0050	.0466	.0346	
.300	.0062	.0091	.0283	.0246	
.500		.0152	.0243	.0248	.0135
.700	.0019	.0039	.0100	.0143	
.900		.0048	.0127	.0125	

AEDC VA352 CH4B 01 ORB. RCS CENTER (CTKR21) (15 JAN 75)

REFERENCE DATA

PARAMETRIC DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.	BETA =	-5.000
LREF =	22.5803 IN.	YMRP =	.0000 IN.	B.FLAP =	10.000
BREF =	16.3919 IN.	ZMRP =	.0000 IN.	HAW/HT =	.000
SCALE =	.0175 SCALE				

RN/L = .509
ELEVON = 5.000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 91.950 QI = .518 HREF = .017

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0712	.0434	.0009	.0011	.0016

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 91.950 QI = .518 HREF = .017

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0661	.0382	.0003	.0016	.0047

AEDC VA352 OH4B 01 ORB. OMS POD (CTKM21) (15 JAN 75)

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5893 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	-5.000	RN/L =	.500
B.FLAP =	10.000	ELEVON =	5.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 91.950 QI = .518 HREF = .017

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0293	.1065	.0992	.0738	.0607	.0545	.0420
8.540		.1129					
8.650		.0591					
8.727			.1043				
8.750						.0000	.0200
8.855				.0371			
8.942			.0295				
8.978					.0140		
9.056				.0047			
9.118				.0097			
9.222					.0056		
9.275					.0040		

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 91.950 QI = .518 HREF = .017

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0165	.0766	.0803	.0699	.0276	.0206	.0148
8.540		.0728					
8.650		.0382					
8.727			.0645				
8.750						.0000	.0196
8.855				.0288			
8.942			.0243				
8.978					.0198		
9.056				.0040			
9.118				.0089			
9.222					.0041		
9.275					.0028		

AEDC VA352 OH4B O1 ORB. WING UPPER CREASE (CTKC21) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5853 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = .500
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 91.950 QI = .518 HREF = .017

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0072	.0021	.0026	.0018	.0013

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 91.950 QI = .518 HREF = .017

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0045	.0011	.0017	.0009	.0018

AEDC VA352 OH4B 01 ORB. FUSELAGE Z=7.525 (CTKF21) (15 JAN 75)

REFERENCE DATA

BREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = .500
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 91.950 QI = .518 HREF = .017

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

x/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0207	.0192	.0392	.0570	.0169	.0069

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 91.950 QI = .518 HREF = .017

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

x/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0221	.0223	.0539	.0248	.0109	.0046

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB22) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 93.400 QI = .523 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4340	.4291	.2943		.2505	.2169	.1907	.1571	.0000			.1368	.1315	.1212
10.000															.1401
14.000								.2365							.1436
20.000															
22.000								.2225							.1532
24.500															
35.000								.1023							.0777
39.000															
42.500								.0753				.0537			
48.000															
60.000								.0336							.0159
119.000															.0085
180.000			.0357		.0444			.0195			.0109				

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1143		.1081	.1007	.0922		.0938				.0899		.0913		
10.000					.1138										
20.000					.1029										
25.500					.1241										
40.000					.0875										
45.500					.0595										
131.200									.0056					.0077	
145.400															
146.200								.0058						.0100	
156.000															.0152
159.200												.0070			
170.700															
171.900										.0149					
173.400						.0146									
180.000		.0071			.0074		.0210				.1070		.0356		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0836		.0836	.0000	.0752	.0749	.0689	.0774	.0791	.0738	.0726	.0699	.0655	.0640
11.500				.0898											

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB22)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0797							
21.500												.0752			
23.000								.0876							
24.000				.1060											
31.500				.1170											
34.000								.1054							
35.000				.1179											
40.000				.1119				.1022							
45.000								.0976							
51.000				.0424											
57.500								.0105							
59.500												.0026			
61.000								.0194							
65.000								.0214							
70.000								.0209							
96.500				.0226											
105.000												.0127			
106.000								.0155							
135.000								.0026				.0020			
140.000				.0048											
141.400	.0054														
151.000			.0120												
180.000				.0129		.0029		.0023				.0037			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0616	.0623	.0607	.0581	.0617	.0613	.0580	.0562	.0524	.0521	.0513	.0480	.0461	.0414	
21.500	.0687				.0576				.0573				.0436		
63.000	.0006														
64.000									.0004						
65.000													.0001		
65.500					.0014										
105.000	.0299				.0134				.0054				.0015		
111.000															.0022
112.000					.0157										
113.000					.0179										
116.000											.0066				
135.000	.0029				.0043				.0031						
149.000											.0026				
180.000	.0042				.0050				.0050				.0053		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB22)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0390	.0385	.0326	.0189	.0089	.1257	.0231	.0360		.0723	.1134	.1505
21.500			.0372									
39.000							.0239					.1257
52.500						.0017						
55.000			.0011									
65.000			.0009									
68.000						.0030						
100.000			.0002									
108.000			.0007			.0012						
112.000							.0017					
113.000									.0020			

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 93.400 QI = .523 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4164	.4252	.3079		.2630	.2339	.1993	.1933	.0000			.1553	.1482	.1369
10.000															.1560
14.000								.2554							
20.000															.1523
22.000								.2398							
24.500															.1644
35.000								.0981							
39.000															.0739
42.500								.0719							
48.000												.0497			
60.000								.0267							
119.000															.0120
180.000			.0534		.0313			.0143			.0093				.0080

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1308		.1260	.1175	.1077		.1114				.1061		.1059		
10.000					.1438										
20.000					.1155										
25.500					.1384										
40.000					.0938										
45.500					.0590										
131.200									.0043						
145.400														.0061	
146.200								.0051							

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB22)

MACH (1) = 0.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0074	
159.200															.0127
170.700												.0051			
171.900										.0165					
173.400						.0217									
180.000		.0080			.0111		.0332				.0833		.0435		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1152		.0973	.0000	.0876	.0893	.0837	.0972	.0931	.0858	.0836	.0816	.0789	.0753
11.500				.1090											
12.000								.0941							
21.500												.0863			
23.000								.1022							
24.000				.1197											
31.500				.1343											
34.000								.1166							
35.000				.1302											
40.000				.1246				.1130							
45.000								.1080							
51.000				.0410											
57.500								.0092							
59.500												.0021			
61.000								.0183							
65.000								.0199							
70.000								.0202							
96.500				.0214											
105.000												.0177			
106.000								.0156							
135.000								.0023				.0017			
140.000				.0039											
141.400	.0043														
151.000			.0095												
180.000				.0140		.0035		.0022				.0019			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0725	.0724	.0720	.0714	.0717	.0706	.0684	.0659	.0630	.0633	.0622	.0559	.0558	.0497	
21.500	.0797				.0674				.0668				.0519		
63.000	.0007														
64.000									.0006						
65.000													.0005		
65.500					.0009										

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB22)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0207				.0081				.0035				.0008		
111.000															.0009
112.000					.0116										
113.000					.0133										
116.000											.0027				
135.000	.0031				.0037				.0027						
149.000											.0035				
160.000	.0028				.0034				.0047				.0052		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0480	.0459	.0399	.0248	.0100	.1747	.0283	.0505		.1069	.1690	.2239
21.500			.0436									
39.000							.0326					.1747
52.500						.0021						
55.000			.0024									
65.000			.0019									
68.000						.0027						
100.000			.0019									
108.000			.0006			.0015						
112.000							.0012					
113.000									.0014			

AEDC VA352 OH4B O1 ORB. BOTTOM SURFACE WING (CTKL22) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRF = .0000 IN.
LREF = 22.5803 IN. YMRF = .0000 IN.
BREF = 16.3919 IN. ZMRF = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 93.400 QI = .523 HREF = .018

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0453	.0245		.3031	.1726	.2440	.0479		.1031	.0620	.0247
.002						.2840		.1832				
.003						.3631		.1844				
.004						.3947		.1709				
.005						.3281		.1572				
.006						.3366		.1302				
.007						.2679		.1186				
.025	.0000			.1754	.3852		.3196					
.050										.1404		
.100				.1636		.1867	.1903	.2096		.1441		
.153	.1092											
.177					.1200							
.200				.1106		.1355						
.299	.0771											
.300					.1124	.1058		.0918	.1295	.1346		
.302				.0938								
.303							.1169					
.428						.1197						
.444	.0689											
.487					.1259							
.500							.1028	.1038		.0893		
.559				.0779								
.590	.0546											
.699					.0845	.0776			.0477			
.700				.0723	.0754	.0632	.0490			.0683		
.736	.0582											
.800						.0429	.0612					
.850						.0727	.0787					
.900	.0395			.0569	.0679	.0661	.0740			.0763		

AEDC VA352 OH4B O1 ORB. BOTTOM SURFACE WING (CTKL22)

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 93.400 QI = .523 HREF = .018

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0483	.0239		.2686	.2033	.2061	.0408		.0851	.0502	.0292
.002						.3362		.1553				
.003						.4774		.1576				
.004						.4853		.1551				
.005						.4159		.1462				
.006						.3909		.1293				
.007						.3218		.1211				
.025	.0000			.1657	.3554		.2955					
.050										.1193		
.100				.1656		.2210	.2100	.2047		.1222		
.153	.1217											
.177					.1169							
.200				.1149		.1520						
.299	.0869											
.300					.1076	.1071		.1259	.1351	.1212		
.302				.0954								
.303							.1213					
.428						.1324						
.444	.0775											
.487					.1328							
.500							.1135	.1143		.0999		
.559				.0795								
.590	.0605											
.600					.0868	.0765			.0562			
.700				.0733	.0735	.0711	.0548			.0806		
.736	.0682											
.800						.0454	.0581					
.850						.0746	.0885					
.900	.0563			.0609	.0816	.0714	.0835			.0832		

AEDC VA352 OH4B O1 ORB. UPPER SURFACE WING (CTKU22) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 93.400 QI = .523 HREF = .018

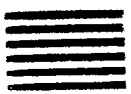
SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0011	.0689	.1754
.200	.0000	.0546	.1636
.600	.1092	.0582	.1106
.800		.0395	.0938
.900		.0453	.0779
.950	.0771	.0245	.0723

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 93.400 QI = .523 HREF = .018

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0024	.0775	.1657
.200	.0000	.0605	.1656
.600	.1217	.0682	.1149
.800		.0563	.0954
.900		.0483	.0795
.950	.0869	.0239	.0733



AEDC VA352 OH4B 01 ORB. LEFT VERTICAL TAIL (CTKV22) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 93.400 QI = .523 HREF = .018

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0349	.0264	.0297	.0207
.010					.0183
.100	.0171	.0000	.0162	.0193	
.300	.0073	.0079	.0101	.0134	
.500		.0057	.0080	.0100	.0088
.700	.0025	.0025	.0034	.0055	
.900		.0021	.0042	.0055	

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 93.400 QI = .523 HREF = .018

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0288	.0204	.0344	.0317
.010					.0240
.100	.0154	.0000	.0140	.0221	
.300	.0063	.0047	.0090	.0175	
.500		.0024	.0064	.0142	.0150
.700	.0022	.0015	.0020	.0076	
.900		.0028	.0030	.0074	

AEDC VA352 OH4B O1 ORB. RCS CENTER (CTKR22) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 93.400 QI = .523 HREF = .018

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0537	.0214	.0001	.0009	.0030

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 93.400 QI = .523 HREF = .018

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0497	.0199	.0005	.0019	.0027

AEDC VA352 OH4B 01 ORB. OMS POD (CTKM22) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 93.400 QI = .523 HREF = .018

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0051	.0132	.0143	.0133	.0055	.0057	.0057
8.540		.0150					
8.650		.0110					
8.727			.0223				
8.750						.0000	.0062
8.855				.0179			
8.942			.0094				
8.978					.0082		
9.056				.0043			
9.118				.0050			
9.222					.0074		
9.275					.0044		

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 93.400 QI = .523 HREF = .018

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0024	.0033	.0053	.0068	.0024	.0028	.0018
8.540		.0039					
8.650		.0035					
8.727			.0072				
8.750						.0000	.0033
8.855				.0086			
8.942			.0039				
8.978					.0036		
9.056				.0058			
9.118				.0035			
9.222					.0048		
9.275					.0033		

AEDC VA352 OH4B 01 ORB. FUSELAGE Y=0.875 (CIKY22) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRF = .0000 IN.
LREF = 22.5803 IN. YMRF = .0000 IN.
BREF = 16.3919 IN. ZMRF = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 93.400 QI = .523 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1060	.0876	.0752	.0687	.0576	.0573	.0436	.0372

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 93.400 QI = .523 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1197	.1022	.0863	.0797	.0674	.0668	.0519	.0436

AEDC VA352 OH4B O1 ORB. WING UPPER CREASE (CTKC22) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 93.400 QI = .523 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0026	.0006	.0014	.0004	.0011

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 93.400 QI = .523 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0021	.0007	.0009	.0006	.0024

AEDC VA352 OH4B O1 ORB. FUSELAGE Z=7.525 (CTKF22) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = 10.000 ELEVON = 5.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 93.400 QI = .523 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0155	.0127	.0299	.0134	.0054	.0015

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 93.400 QI = .523 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0156	.0177	.0207	.0081	.0035	.0008

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB23) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4483	.4285	.2788		.2315	.1973	.1698	.1385	.0000			.1165	.1105	.1001
10.000															.1174
14.000								.2146							
20.000															.1242
22.000								.2030							
24.500															.1360
35.000								.1052							
39.000															.0777
42.500								.0801							
48.000												.0550			
60.000								.0449							
119.000															.0225
180.000			.0341		.0600			.0284			.0159				.0123

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0963		.0901	.0839	.0784		.0765				.0730		.0722		
10.000					.1010										
20.000					.0959										
25.500					.1078										
40.000					.0850										
45.500					.0608										
131.200									.0076						
145.400														.0123	
146.200								.0080							
156.000														.0184	
159.200															.0238
170.700												.0152			
171.900										.0172					
173.400						.0118									
180.000		.0084			.0065		.0159				.1407		.0333		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0701		.0677	.0000	.0598	.0603	.0568	.0633	.0634	.0602	.0559	.0577	.0560	.0528
11.500				.0755											

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB23)

MACH (1) = 8.000 ALPHA (1) = 25.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0643							
21.500												.0609			
23.000								.0730							
24.000				.0907											
31.500				.1040											
34.000								.0880							
35.000				.1017											
40.000				.1032				.0877							
45.000								.0852							
51.000				.0438											
57.500								.0130							
59.500												.0039			
61.000								.0246							
65.000								.0251							
70.000								.0187							
96.500				.0241											
105.000												.0129			
106.000								.0150							
135.000								.0039				.0020			
140.000				.0072											
141.400	.0079														
151.000			.0209												
180.000				.0131		.0036		.0024				.0052			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0513	.0514	.0483	.0521	.0487	.0502	.0477	.0456	.0435	.0417	.0410	.0381	.0369	.0331	
21.500	.0572				.0471				.0470				.0358		
63.000	.0013														
64.000									.0009						
65.000													.0003		
65.500					.0020										
105.000	.0299				.0238				.0088				.0038		
111.000															.0039
112.000					.0332										
113.000					.0365										
116.000											.0099				
135.000	.0031				.0036				.0056						
149.000											.0033				
180.000	.0063				.0059				.0058				.0038		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												

FH:

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB23)

MACH (1) = 8.000 ALPHA (1) = 25.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0308	.0300	.0248	.0132	.0082	.1160	.0157	.0232		.0445	.0676	.0879
21.500			.0304									
39.000							.0240					.1160
52.500						.0013						
55.000			.0010									
65.000			.0010									
68.000						.0024						
100.000			.0018									
108.000			.0037			.0028						
112.000							.0021					
113.000									.0026			

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4355	.4323	.3183		.2473	.2188	.1888	.1573	.0000			.1366	.1293	.1209
10.000															.1394
14.000								.2404							
20.000															.1436
22.000								.2238							
24.500															.1520
35.000								.1014							
39.000															.0767
42.500								.0738							
48.000												.0517			
60.000								.0350							
119.000															.0162
180.000			.0404		.0456			.0212			.0135				.0091

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1160		.1073	.0995	.0926		.0939				.0901		.0899		
10.000					.1382										
20.000					.1116										
25.500					.1236										
40.000					.0905										
45.500					.0697										
131.200									.0057						
145.400														.0072	
146.200								.0057							

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB23)

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0099	
159.200															.0148
170.700												.0068			
171.900										.0164					
173.400						.0142									
180.000		.0077			.0076		.0215				.1077		.0359		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1032		.0832	.0000	.0749	.0759	.0692	.0791	.0773	.0740	.0711	.0701	.0641	.0644
11.500				.0941											
12.000								.0800							
21.500												.0757			
23.000								.0884							
24.000				.1085											
31.500				.1230											
34.000								.1026							
35.000				.1172											
40.000				.1158				.1031							
45.000								.0988							
51.000				.0443											
57.500								.0108							
59.500												.0029			
61.000								.0208							
65.000								.0226							
70.000								.0209							
96.500				.0229											
105.000												.0147			
106.000								.0154							
135.000								.0026				.0018			
140.000				.0047											
141.400	.0053														
151.000			.0117												
180.000				.0132		.0031		.0024				.0039			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0622	.0596	.0624	.0637	.0602	.0602	.0602	.0566	.0527	.0523	.0509	.0488	.0461	.0421	
21.500	.0679				.0573				.0565				.0436		
63.000	.0007														
64.000									.0007						
65.000													.0005		
65.500					.0009										

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB23)

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0311				.0123				.0051				.0012		
111.000															.0016
112.000					.0162										
113.000					.0190										
116.000											.0065				
135.000	.0031				.0049				.0033						
149.000											.0030				
180.000	.0047				.0051				.0046				.0049		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0395	.0367	.0319	.0182	.0100	.1674	.0217	.0352		.0700	.1107	.1476
21.500			.0352									
39.000							.0317					.1674
52.500						.0018						
55.000			.0013									
65.000			.0017									
68.000						.0023						
100.000			.0012									
108.000			.0012			.0008						
112.000							.0010					
113.000									.0020			

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4151	.4276	.2999		.2650	.2357	.2101	.1776	.0000			.1543	.1492	.1382
10.000															.1581
14.000								.2549							
20.000															.1592
22.000								.2361							
24.500															.1665
35.000								.0978							
39.000															.0747
42.500								.0696							
48.000												.0498			
60.000								.0278							
119.000															.0115
180.000			.0550		.0331			.0144			.0087				.0076

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB23)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1356		.1319	.1193	.1109		.1097				.1082		.1065		
10.000					.1549										
20.000					.1244										
25.500					.1402										
40.000					.0932										
45.500					.0583				.0045						
131.200														.0060	
145.400								.0049							
146.200														.0081	
156.000															.0136
159.200												.0042			
170.700										.0151					
171.900						.0224									
173.400											.0829		.0424		
180.000		.0075			.0115		.0315								

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1067		.0966	.0000	.0877	.0865	.0828	.0919	.0911	.0862	.0843	.0827	.0792	.0765
11.500				.1077											
12.000								.0938				.0889			
21.500															
23.000								.1032							
24.000				.1211											
31.500				.1351											
34.000								.1167							
35.000				.1325											
40.000				.1237				.1125							
45.000								.1075							
51.000				.0428											
57.500								.0089							
59.500												.0023			
61.000								.0179							
65.000								.0192							
70.000								.0207							
96.500				.0208											
105.000												.0176			
106.000								.0151							
135.000								.0019				.0015			
140.000				.0040											
141.400	.0046														
151.000			.0101												
180.000				.0138		.0033		.0020				.0031			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB23)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0737	.0723	.0735	.0740	.0723	.0715	.0713	.0673	.0637	.0639	.0626	.0576	.0549	.0497	
21.500	.0808				.0662				.0684				.0526		
63.000	.0007														
64.000									.0005						
65.000													.0003		
65.500					.0009										
105.000	.0201				.0068				.0034				.0005		
111.000															.0009
112.000					.0112										
113.000					.0130										
116.000											.0025				
135.000	.0028				.0033				.0019						
149.000											.0028				
180.000	.0029				.0037				.0046				.0050		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0476	.0455	.0399	.0229	.0115	.2050	.0294	.0485		.0996	.1742	.2276
21.500			.0431									
39.000							.0460					.2050
52.500						.0026						
55.000			.0011									
65.000			.0011									
68.000						.0017						
100.000			.0012									
108.000			.0007			.0043						
112.000							.0060					
113.000									.0057			

AEDC VA352 OH4B 01 ORB. BOTTOM SURFACE WING (CTKL23) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0446	.0248		.3374	.1837	.2537	.0563		.1162	.0653	.0229
.002						.2435		.2025				
.003						.3597		.1928				
.004						.3131		.1786				
.005						.2829		.1610				
.006						.2541		.1335				
.007						.2070		.1194				
.025	.0505			.1987	.4083		.3529					
.050										.1504		
.100				.1625		.1456	.1788	.2151		.1510		
.153	.0960											
.177					.1184							
.200				.1034		.0949						
.299	.0684											
.300					.1147	.0843		.1066	.1260	.1294		
.302				.0859								
.303							.0920					
.428						.0968						
.444	.0604											
.487					.1056							
.500							.0932	.0879		.1015		
.559				.0726								
.590	.0471											
.600					.0914	.0783			.0554			
.700				.0685	.0792	.0568	.0412			.0551		
.736	.0509											
.800						.0449	.0559					
.850						.0908	.0966					
.900	.0751			.0763	.0990	.0886	.0915			.1024		

AEDC VA352 OH4B O1 ORB. BOTTOM SURFACE WING (CTKL23)

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0459	.0243		.3048	.1715	.2297	.0482		.1028	.0614	.0175
.002						.2287		.1858				
.003						.3689		.1847				
.004						.3967		.1714				
.005						.3329		.1594				
.006						.3371		.1313				
.007						.2709		.1197				
.025	.0513			.1790	.3889		.3232					
.050										.1420		
.100				.1635		.1839	.1946	.2136		.1454		
.153	.1088											
.177					.1213							
.200				.1097		.1362						
.299	.0775											
.300					.1103	.1041		.0998	.1318	.1373		
.302				.0931								
.303							.1132					
.428						.1187						
.444	.0691											
.487					.1176							
.500							.1016	.1071		.0918		
.559				.0751								
.590	.0554											
.600					.0845	.0764			.0510			
.700				.0732	.0754	.0604	.0491			.0551		
.736	.0574											
.800						.0395	.0640					
.850						.0923	.1122					
.900	.0900			.0801	.1034	.0900	.1074			.1083		

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0482	.0237		.2700	.2005	.2074	.0418		.0877	.0491	.0215
.002						.3370		.1569				
.003						.4703		.1587				
.004						.4875		.1541				
.005						.4195		.1443				
.006						.3867		.1297				
.007						.3195		.1190				
.025	.0496			.1657	.3533		.2964					

AEDC VA352 OH4B 01 ORB. BOTTOM SURFACE WING (CTKL23)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.050										.1212		
.100				.1641		.2186	.2093	.2011		.1238		
.153	.1188											
.177					.1187							
.200				.1143		.1529						
.299	.0855											
.300					.1055	.1095		.1211	.1341	.1268		
.302				.0968								
.303							.1237					
.428						.1341						
.444	.0760											
.467					.1331							
.500							.1153	.1178		.1025		
.559				.0797								
.590	.0618											
.600					.0860	.0751			.0582			
.700				.0734	.0739	.0640	.0545			.0590		
.736	.0676											
.800						.0354	.0673					
.850						.0916	.1193					
.900	.1005			.0801	.1035	.0903	.1196			.1022		

AEDC VA352 OH4B 01 ORB. UPPER SURFACE WING (CTKU23) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0010	.0604	.1987
.200	.0505	.0471	.1625
.600	.0960	.0509	.1034
.800		.0751	.0859
.900		.0446	.0726
.950	.0684	.0248	.0685

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0013	.0691	.1790
.200	.0513	.0554	.1635
.600	.1088	.0574	.1097
.800		.0900	.0931
.900		.0459	.0751
.950	.0775	.0243	.0732

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0011	.0760	.1657
.200	.0496	.0618	.1641
.600	.1188	.0676	.1143
.800		.1005	.0968
.900		.0482	.0797
.950	.0855	.0237	.0734

AEDC VA352 OH4B 01 ORB. LEFT VERTICAL TAIL (CTKV23) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0540	.0440	.0516	.0510
.010					.0248
.100	.0186	.0168	.0204	.0240	
.300	.0084	.0072	.0091	.0130	
.500		.0070	.0066	.0084	.0075
.700	.0033	.0034	.0037	.0047	
.900		.0037	.0052	.0048	

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0357	.0256	.0292	.0205
.010					.0176
.100	.0163	.0148	.0166	.0202	
.300	.0072	.0061	.0100	.0139	
.500		.0049	.0083	.0100	.0088
.700	.0024	.0022	.0030	.0050	
.900		.0016	.0044	.0051	

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0285	.0214	.0347	.0308
.010					.0247
.100	.0155	.0122	.0130	.0234	
.300	.0059	.0049	.0083	.0177	
.500		.0030	.0060	.0138	.0142
.700	.0018	.0018	.0017	.0071	
.900		.0033	.0036	.0071	

AEDC VA352 OH4B O1 ORB. RCS CENTER (CTKR23) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5893 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0550	.0251	.0003	.0010	.0024

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0517	.0226	.0005	.0017	.0023

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0498	.0192	.0003	.0011	.0017

AEDC VA352 OH4B O1 ORB. OMS POD (CTKM23) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0103	.0266	.0430	.0385	.0139	.0128	.0094
8.540		.0331					
8.650		.0250					
8.727			.0625				
8.750						.0000	.0105
8.855				.0335			
8.942			.0195				
8.978					.0167		
9.056				.0032			
9.118				.0089			
9.222					.0068		
9.275					.0034		

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0050	.0138	.0158	.0153	.0057	.0056	.0046
8.540		.0162					
8.650		.0111					
8.727			.0251				
8.750						.0000	.0057
8.855				.0202			
8.942			.0091				
8.978					.0089		
9.056				.0039			
9.118				.0048			
9.222					.0081		
9.275					.0044		

AEDC VA352 OH4B 01 ORB. OMS POD (CTKH23)

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0023	.0034	.0055	.0066	.0013	.0091	.0140
8.540		.0042					
8.650		.0037					
8.727			.0075				
8.750						.0000	.0060
8.855				.0085			
8.942			.0039				
8.978					.0034		
9.056				.0056			
9.118				.0033			
9.222					.0050		
9.275					.0033		

AEDC VA352 OH4B O1 ORB. FUSELAGE Y=0.875 (CTKY23) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRF = .0000 IN.
LREF = 22.5803 IN. YMRF = .0000 IN.
BREF = 16.3919 IN. ZMRF = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0907	.0730	.0609	.0572	.0471	.0470	.0358	.0304

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1085	.0884	.0757	.0679	.0573	.0565	.0436	.0352

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1211	.1032	.0889	.0808	.0662	.0684	.0526	.0431

AEDC VA352 OH4B 01 ORB. WING UPPER CREASE (CTKC23) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0039	.0013	.0020	.0009	.0010

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0029	.0007	.0009	.0007	.0013

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0023	.0007	.0009	.0005	.0011

AEDC VA352 OH4B 01 ORB. FUSELAGE Z=7.525 (CTKF23) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0150	.0129	.0299	.0238	.0088	.0038

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.433 QI = .521 HREF = .018

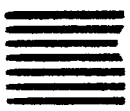
SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0154	.0147	.0311	.0123	.0051	.0012

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.433 QI = .521 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0151	.0176	.0201	.0068	.0034	.0005



AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB24) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = .500
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.0000	.0000	.0000		.0000	.0000	.0000	.0000	.0000			.0000	.0000	.0000
10.000															.1237
14.000								.2273							
20.000															.1363
22.000								.2243							
24.500															.1595
35.000								.1313							
39.000															.1075
42.500								.1043							
48.000												.0733			
60.000								.0558							
119.000															.0284
180.000			.0232		.0613			.0291			.0180				.0121

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0000		.0000	.0000	.0000		.0000				.0000		.0000		
10.000					.1065										
20.000					.1075										
25.500					.1287										
40.000					.1127										
45.500					.0855										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0079			.0054		.0116				.1414		.0258		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0000		.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11.500				.0810											

AEDC VA352 CH4B O1 ORB. FUSELAGE (CTKB24)

MACH (1) = 8.000 ALPHA (1) = 25.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0701							
21.500												.0000			
23.000								.0000							
24.000				.0000											
31.500				.1165											
34.000								.0984							
35.000				.1219											
40.000				.1328				.1027							
45.000								.1119							
51.000				.0689											
57.500								.0313							
59.500												.0114			
61.000								.0486							
65.000								.0391							
70.000								.0272							
96.500				.0345											
105.000												.0184			
106.000								.0209							
135.000								.0052				.0024			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0140		.0079		.0020				.0041			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
21.500	.0000				.0000				.0000				.0000		
63.000	.0034														
64.000									.0024						
65.000													.0027		
65.500					.0042										
105.000	.0286				.0474				.0446				.0158		
111.000															.0143
112.000					.0351										
113.000					.0326										
116.000											.0587				
135.000	.0033				.0040				.0051						
149.000											.0030				
180.000	.0044				.0050				.0047				.0029		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500

PHI

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB24)

MACH (1) = 8.000 ALPHA (1) = 25.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000		.0000	.0000	.0000
21.500			.0000									
39.000							.0383					.2246
52.500						.0033						
55.000			.0028									
65.000			.0045									
68.000						.0044						
100.000			.0075									
108.000			.0090			.0096						
112.000							.0067					
113.000									.0072			

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.0000	.0000	.0000		.0000	.0000	.0000	.0000	.0000			.0000	.0000	.0000
10.000															.1469
14.000								.2544							
20.000															.1557
22.000								.2428							
24.500															.1738
35.000								.1294							
39.000															.0990
42.500								.0958							
48.000												.0699			
60.000								.0441							
119.000															.0203
180.000			.0134		.0497			.0215			.0125				.0091

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0000		.0000	.0000	.0000		.0000				.0000		.0000		
10.000					.1303										
20.000					.1267										
25.500					.1418										
40.000					.1175										
45.500					.0843										
131.200									.0000						
145.400														.0000	
146.200								.0000							

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB24)

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0057			.0042		.0074				.1129		.0120		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0000		.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11.500				.0990											
12.000								.0841							
21.500												.0000			
23.000								.0000							
24.000				.0000											
31.500				.1341											
34.000								.1138							
35.000				.1382											
40.000				.1446				.1181							
45.000								.1194							
51.000				.0658											
57.500								.0207							
59.500												.0067			
61.000								.0413							
65.000								.0418							
70.000								.0304							
96.500				.0330											
105.000												.0199			
106.000								.0209							
135.000								.0032				.0019			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0070		.0057		.0019				.0036			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
21.500	.0000				.0000				.0000				.0000		
63.000	.0019														
64.000									.0015						
65.000													.0010		
65.500					.0024										

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB24)

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0396				.0511				.0169				.0062		
111.000															.0080
112.000					.0618										
113.000					.0592										
116.000											.0203				
135.000	.0031				.0045				.0081						
149.000											.0042				
180.000	.0043				.0046				.0045				.0027		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000		.0000	.0000	.0000
21.500			.0000									
39.000							.0508					.2841
52.500						.0018						
55.000			.0013									
65.000			.0012									
68.000						.0021						
100.000			.0039									
108.000			.0085			.0067						
112.000							.0056					
113.000									.0052			

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.0000	.0000	.0000		.0000	.0000	.0000	.0000	.0000			.0000	.0000	.0000
10.000															.1633
14.000								.2712							
20.000															.1724
22.000								.2586							
24.500															.1859
35.000								.1221							
39.000															.0999
42.500								.0892							
48.000												.0662			
60.000								.0348							
119.000															.0157
180.000			.0148		.0336			.0147			.0094				.0066

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB24)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0000		.0000	.0000	.0000		.0000				.0000		.0000		
10.000					.1324										
20.000					.1329										
25.500					.1594										
40.000					.1211										
45.500					.0834										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0056			.0048		.0100				.0828		.0118		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0000		.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11.500				.1111											
12.000								.0984							
21.500												.0000			
23.000								.0000							
24.000				.0000											
31.500				.1505											
34.000								.1307							
35.000				.1511											
40.000				.1500				.1281							
45.000								.1288							
51.000				.0623											
57.500								.0166							
59.500												.0045			
61.000								.0341							
65.000								.0373							
70.000								.0349							
96.500				.0301											
105.000												.0224			
106.000								.0217							
135.000								.0028				.0019			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0075		.0056		.0028				.0022			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB24)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
21.500	.0000				.0000				.0000				.0000		
63.000	.0014														
64.000									.0010						
65.000													.0006		
65.500					.0016										
105.000	.0531				.0224				.0106				.0048		
111.000															.0058
112.000					.0365										
113.000					.0432										
116.000											.0157				
135.000	.0034				.0058				.0062						
149.000											.0043				
180.000	.0027				.0030				.0039				.0053		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000		.0000	.0000	.0000
21.500			.0000									
39.000							.0767					.2738
52.500						.0026						
55.000			.0030									
65.000			.0022									
68.000						.0027						
100.000			.0030									
108.000			.0051			.0044						
112.000							.0035					
113.000									.0038			

AEDC VA352 OH4B 01 ORB. BOTTOM SURFACE WING (CTKL24) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRF = .0000 IN.
LREF = 22.5803 IN. YMRF = .0000 IN.
BREF = 16.3919 IN. ZMRF = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = .500
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0628	.0380		.3814	.2119	.3009	.0628		.1535	.0911	.0310
.002						.3133		.2376				
.003						.4292		.2231				
.004						.3878		.1968				
.005						.3500		.1732				
.006						.3056		.1370				
.007						.2525		.1221				
.025	.0785			.2684	.4511		.4055					
.050										.1974		
.100				.1862		.1838	.1957	.2200		.1986		
.153	.1194											
.177					.1263							
.200				.1152		.1287						
.299	.0798											
.300					.1185	.0802		.1137	.1202	.1307		
.302				.0940								
.303							.1058					
.428						.1037						
.444	.0707											
.487					.1022							
.500							.0705	.1021		.1003		
.559				.0833								
.590	.0552											
.600					.0861	.0767			.0566			
.700				.0802	.0720	.0575	.0356			.0536		
.736	.0613											
.800						.0494	.0645					
.850						.0928	.0937					
.900	.0890			.0895	.0834	.0918	.0853			.0931		

AEDC VA352 OH4B O1 ORB. BOTTOM SURFACE WING (CTKL24)

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0603	.0332		.3682	.1919	.2919	.0542		.1328	.0772	.0261
.002						.2955		.2256				
.003						.4381		.2191				
.004						.3957		.1973				
.005						.3609		.1732				
.006						.3020		.1415				
.007						.2511		.1304				
.025	.0736			.2375	.4564		.3984					
.050										.1754		
.100				.1879		.1976	.2041	.2285		.1787		
.153	.1272											
.177					.1445							
.200				.1236		.1288						
.299	.0875											
.300					.1275	.0859		.1255	.1425	.1557		
.302				.1035								
.303							.0926					
.428						.1073						
.444	.0813											
.487					.1176							
.500							.1062	.1239		.1230		
.559				.0890								
.590	.0639											
.600					.0935	.0905			.0575			
.700				.0847	.0797	.0643	.0493			.0576		
.736	.0699											
.800						.0552	.0483					
.850						.1017	.1066					
.900	.1112			.0982	.0883	.0994	.0963			.1044		

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0602	.0312		.3076	.1708	.2276	.0489		.1081	.0706	.0239
.002						.2645		.1799				
.003						.4078		.1837				
.004						.3979		.1758				
.005						.3609		.1663				
.006						.3308		.1433				
.007						.2804		.1310				
.025	.0707			.2093	.4137		.3212					

AEDC VA352 OH4B O1 ORB. BOTTOM SURFACE WING (CTKL24)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.050										.1512		
.100				.1874		.2084	.2128	.2344		.1563		
.153	.1412											
.177					.1449							
.200				.1309		.1400						
.299	.0946											
.300					.1235	.0984		.1027	.1507	.1464		
.302				.1121								
.303							.1210					
.428						.1144						
.444	.0867											
.487					.1210							
.500							.1135	.1142		.1040		
.559				.0908								
.590	.0674											
.600					.1042	.1001			.0508			
.700				.0843	.0848	.0651	.0534			.0445		
.736	.0773											
.800						.0463	.0635					
.850						.1097	.1169					
.900	.1276			.0993	.0883	.1089	.1082			.1056		

AEDC VA352 OH4B 01 ORB. LEFT VERTICAL TAIL (CTKV24) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = .500
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0469	.0251	.0237	.0485
.010					.0513
.100	.0152	.0133	.0107	.0303	
.300	.0084	.0094	.0099	.0190	
.500		.0104	.0086	.0113	.0181
.700	.0053	.0030	.0041	.0075	
.900		.0041	.0056	.0076	

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0209	.0087	.0323	.0495
.010					.0451
.100	.0172	.0105	.0125	.0362	
.300	.0099	.0088	.0083	.0217	
.500		.0071	.0092	.0160	.0149
.700	.0029	.0036	.0059	.0096	
.900		.0039	.0096	.0095	

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0065	.0314	.0319	.0261
.010					.0321
.100	.0100	.0105	.0445	.0362	
.300	.0058	.0094	.0231	.0243	
.500		.0145	.0240	.0261	.0133
.700	.0014	.0046	.0093	.0142	
.900		.0048	.0124	.0116	

AEDC VA352 OH4B 01 ORB. RCS CENTER (CTKR24) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = .500
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0733	.0391	.0027	.0045	.0044

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.233 QI = .523 HREF = .018

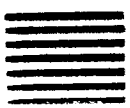
SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0699	.0418	.0010	.0012	.0021

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0662	.0373	.0006	.0022	.0027



AEDC VA352 OH4B 01 ORB, OMS POD (CTKM24) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = .500
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0516	.1848	.1238	.0811	.0338	.0382	.0324
8.540		.1376					
8.650		.0739					
8.727			.0916				
8.750						.0000	.0130
8.855				.0431			
8.942			.0280				
8.978					.0159		
9.056				.0045			
9.118				.0087			
9.222					.0070		
9.275					.0037		

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

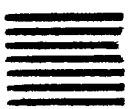
X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0254	.0998	.0963	.0717	.0604	.0536	.0432
8.540		.1071					
8.650		.0562					
8.727			.1037				
8.750						.0000	.0186
8.855				.0344			
8.942			.0270				
8.978					.0140		
9.056				.0043			
9.118				.0099			
9.222					.0052		
9.275					.0041		

AEDC VA352 OH4B O1 ORB. OMS POD (CTKM24)

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

x/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0179	.0725	.0835	.0727	.0213	.0204	.0175
8.540		.0721					
8.650		.0381					
8.727			.0633				
8.750						.0000	.0190
8.855				.0268			
8.942			.0236				
8.978					.0199		
9.056				.0042			
9.118				.0088			
9.222					.0043		
9.275					.0028		



AEDC VA352 OH4B 01 ORB. WING UPPER CREASE (CTKC24) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = .500
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0114	.0034	.0042	.0024	.0028

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0067	.0019	.0024	.0015	.0013

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0045	.0014	.0016	.0010	.0030

AEDC VA352 OH4B O1 ORB. FUSELAGE Z=7.525 (CTKF24) (15 JAN 75)

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	-5.000	RN/L =	.500
B.FLAP =	10.000	ELEVON =	10.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0209	.0184	.0286	.0474	.0446	.0158

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 93.233 QI = .523 HREF = .018

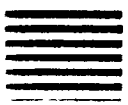
SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0209	.0199	.0396	.0511	.0169	.0062

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 93.233 QI = .523 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0217	.0224	.0531	.0224	.0106	.0048



AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB25) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.650 QI = 1.985 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4167	.4184	.2875		.2406	.2094	.1814	.1540	.0000			.1332	.1316	.1156
10.000															.1361
14.000								.2363							
20.000															.1400
22.000								.2224							
24.500															.1504
35.000								.0996							
39.000															.0658
42.500								.0730							
48.000												.0519			
60.000								.0308							
119.000															.0141
180.000			.0588		.0406			.0175			.0096				.0079

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1122		.1015	.0981	.0913		.0907				.0889		.0882		
10.000					.1128										
20.000					.1091										
25.500					.1244										
40.000					.0899										
45.500					.0563										
131.200									.0051						
145.400														.0079	
146.200								.0066							
156.000														.0138	
159.200															.0201
170.700												.0079			
171.900										.0183					
173.400						.0320									
180.000		.0073			.0149		.0438				.1034		.0535		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0836		.0819	.0000	.0700	.0760	.0690	.0763	.0745	.0747	.0734	.0693	.0662	.0620
11.500				.0901											

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB25)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0792							
21.500												.0737			
23.000								.0892							
24.000				.1060											
31.500				.1216											
34.000								.1001							
35.000				.1176											
40.000				.1129				.0919							
45.000								.0906							
51.000				.0376											
57.500								.0105							
59.500												.0025			
61.000								.0209							
65.000								.0223							
70.000								.0201							
96.500				.0207											
105.000												.0109			
106.000								.0154							
135.000								.0017				.0010			
140.000				.0049											
141.400	.0053														
151.000			.0169												
180.000				.0143		.0031		.0030				.0074			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0612	.0608	.0610	.0613	.0613	.0604	.0615	.0605	.0581	.0590	.0618	.0597	.0663	.0684	
21.500	.0642				.0529				.0593				.0612		
63.000	.0007														
64.000									.0006						
65.000													.0004		
65.500					.0009										
105.000	.0317				.0211				.0063				.0017		
111.000															.0024
112.000					.0381										
113.000					.0423										
116.000											.0097				
135.000	.0017				.0027				.0045						
149.000											.0050				
180.000	.0074				.0061				.0050				.0019		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500

PHI

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB25)

MACH (1) = 0.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0710	.0722	.0712	.0746	.0695	.3656	.1799	.3025		.3690	.3898	.3873
21.500			.0770									
39.000							.2671					.3656
52.500						.0034						
55.000			.0015									
65.000			.0016									
68.000						.0020						
100.000			.0024									
108.000			.0019			.0020						
112.000							.0017					
113.000									.0022			

MACH (1) = 0.000 ALPHA (2) = 35.000 TI = 94.650 QI = 1.985 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4045	.4186	.2969		.2651	.2298	.2025	.1720	.0000			.1474	.1425	.1320
10.000															.1511
14.000								.2527							
20.000															.1568
22.000								.2378							
24.500															.1616
35.000								.0929							
39.000															.0703
42.500								.0682							
48.000												.0475			
60.000								.0243							
119.000															.0102
180.000			.0757		.0289			.0125			.0080				.0094

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1284		.1185	.1128	.1036		.1058				.1030		.1030		
10.000					.1385										
20.000					.1219										
25.500					.1378										
40.000					.0930										
45.500					.0567										
131.200									.0049						
145.400														.0076	
146.200								.0104							

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB25)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0102	
159.200															.0154
170.700												.0058			
171.900										.0188					
173.400						.0493									
180.000		.0134			.0253		.0635				.0771		.0610		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1056		.0973	.0000	.0850	.0879	.0806	.0925	.0871	.0863	.0862	.0824	.0763	.0749
11.500				.1036											
12.000								.0921							
21.500												.0843			
23.000								.1012							
24.000				.1223											
31.500				.1350											
34.000								.1152							
35.000				.1280											
40.000				.1222				.1017							
45.000								.1040							
51.000				.0398											
57.500								.0089							
59.500												.0019			
61.000								.0189							
65.000								.0206							
70.000								.0213							
96.500				.0215											
105.000												.0169			
106.000								.0150							
135.000								.0013				.0010			
140.000				.0049											
141.400	.0082														
151.000			.0116												
180.000				.0160		.0029		.0019				.0014			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0712	.0731	.0721	.0733	.0742	.0739	.0762	.0750	.0763	.0765	.0822	.0812	.0928	.0983	
21.500	.0759				.0638				.0768				.0823		
63.000	.0005														
64.000									.0008						
65.000													.0005		
65.500					.0006										

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB25)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0306				.0109				.0044				.0009		
111.000															.0007
112.000					.0198										
113.000					.0225										
116.000											.0037				
135.000	.0016				.0024				.0045						
149.000											.0062				
180.000	.0014				.0015				.0017				.0029		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.1017	.1027	.1010	.1058	.1016	.3469	.2280	.3769		.4213	.4090	.3933
21.500			.1011									
39.000							.3059					.3469
52.500						.0043						
55.000			.0014									
65.000			.0013									
68.000						.0028						
100.000			.0005									
108.000			.0008			.0028						
112.000							.0027					
113.000									.0034			

AEDC VA352 OH4B 01 ORB. BOTTOM SURFACE WING (CTKL25) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.650 QI = 1.985 HREF = .035

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0430	.0239		.2963	.1624	.2161	.0493		.0984	.0591	.0511
.002						.2635		.1798				
.003						.3555		.1809				
.004						.3795		.1716				
.005						.3216		.1592				
.006						.3274		.1475				
.007						.2658		.1387				
.025	.0491			.1710	.3822		.3156					
.050										.1333		
.100				.1619		.1808	.2313	.2232		.1397		
.153	.1083											
.177					.1095							
.200				.1114		.1325						
.299	.0752											
.300					.1085	.1153		.3351	.2104	.1630		
.302				.0918								
.303							.1191					
.428						.1123						
.444	.0629											
.487					.0941							
.500							.1007	.3451		.1886		
.559				.0763								
.590	.0487											
.600					.0844	.0739			.1550			
.700				.0729	.0786	.0425	.0462			.1963		
.736	.0718											
.800						.0381	.0582					
.850						.1097	.1266					
.900	.1388			.1197	.1428	.1068	.1201			.2478		

AEDC VA352 OH4B 01 ORB. BOTTOM SURFACE WING (CTKL25)

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.650 QI = 1.985 HREF = .035

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0436	.0235		.2585	.1965	.1841	.0388		.1008	.0734	.0654
.002						.3216		.1498				
.003						.4627		.1603				
.004						.4790		.1510				
.005						.4172		.1605				
.006						.3851		.1379				
.007						.3151		.1373				
.025	.0483			.1580	.3499		.2729					
.050										.1563		
.100				.1635		.2140	.2028	.2668		.1743		
.153	.1117											
.177					.1076							
.200				.1124		.1509						
.299	.0848											
.300					.1017	.1170		.1652	.3674	.2795		
.302				.0964								
.303							.1135					
.428						.1382						
.444	.0717											
.487					.1327							
.500							.1110	.1141		.2453		
.559				.0882								
.590	.0614											
.600					.0888	.0758			.0770			
.700				.0874	.0779	.0494	.0544			.1912		
.736	.0971											
.800						.0407	.0682					
.850						.1307	.1412					
.900	.1610			.1794	.1480	.1583	.1342			.2264		

AEDC VA352 OH4B O1 ORB. UPPER SURFACE WING (CTKU25) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.650 QI = 1.985 HREF = .035

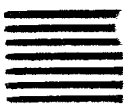
SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0015	.0629	.1710
.200	.0491	.0487	.1619
.600	.1083	.0718	.1114
.800		.1388	.0918
.900		.0430	.0763
.950	.0752	.0239	.0729

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.650 QI = 1.985 HREF = .035

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0014	.0717	.1580
.200	.0483	.0614	.1635
.600	.1117	.0971	.1124
.800		.1610	.0964
.900		.0436	.0882
.950	.0848	.0235	.0874



AEDC VA352 OH4B 01 ORB. LEFT VERTICAL TAIL (CTKV25) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.650 QI = 1.985 HREF = .035

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0118	.0120	.0209	.0275
.010					.0266
.100	.0158	.0091	.0110	.0176	
.300	.0087	.0061	.0078	.0138	
.500		.0052	.0083	.0130	.0132
.700	.0032	.0015	.0036	.0087	
.900		.0018	.0048	.0093	

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.650 QI = 1.985 HREF = .035

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0198	.0310	.0512	.0412
.010					.0221
.100	.0154	.0096	.0287	.0253	
.300	.0077	.0047	.0214	.0259	
.500		.0030	.0216	.0289	.0150
.700	.0020	.0014	.0059	.0130	
.900		.0028	.0051	.0111	

AEDC VA352 OH4B O1 ORB. RCS CENTER (CTKR25) (15 JAN 75)

REFERENCE DATA

SREF =	.8236 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	.000	RN/L =	2.000
B.FLAP =	10.000	ELEVON =	10.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.650 QI = 1.985 HREF = .035

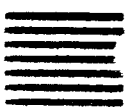
SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0519	.0223	.0004	.0016	.0020

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.650 QI = 1.985 HREF = .035

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0475	.0206	.0005	.0013	.0028



AEDC VA352 OH4B 01 ORB. OMS POD (CTKM25) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.650 QI = 1.985 HREF = .035

SECTION (1)OMS POD DEPENDENT VARIABLE HU/H0

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0061	.0270	.0353	.0280	.0068	.0051	.0046
8.540		.0364					
8.650		.0270					
8.727			.0502				
8.750						.0000	.0047
8.855				.0299			
8.942			.0202				
8.978					.0131		
9.056				.0076			
9.118				.0058			
9.222					.0053		
9.275					.0039		

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.650 QI = 1.985 HREF = .035

SECTION (1)OMS POD DEPENDENT VARIABLE HU/H0

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0059	.0045	.0041	.0070	.0041	.0109	.0165
8.540		.0070					
8.650		.0110					
8.727			.0069				
8.750						.0000	.0064
8.855				.0062			
8.942			.0081				
8.978					.0081		
9.056				.0112			
9.118				.0051			
9.222					.0038		
9.275					.0039		

AEDC VA352 OH4B 01 ORB. FUSELAGE Y=0.875 (CTKY25) (15 JAN 75)

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5603 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	.000	RN/L =	2.000
B.FLAP =	10.000	ELEVON =	10.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.650 QI = 1.985 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1060	.0892	.0737	.0642	.0529	.0593	.0612	.0770

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.650 QI = 1.985 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1223	.1012	.0843	.0759	.0638	.0768	.0823	.1011

AEDC VA352 OH4B 01 ORB. WING UPPER CREASE (CTKC25) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.650 QI = 1.985 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0025	.0007	.0009	.0006	.0015

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.650 QI = 1.985 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0019	.0005	.0006	.0008	.0014

AEDC VA352 OH4B O1 ORB. FUSELAGE Z=7.525 (CTKF25) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5893 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 8.000
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.650 QI = 1.985 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0154	.0109	.0317	.0211	.0063	.0017

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.650 QI = 1.985 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0150	.0169	.0306	.0109	.0044	.0009

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB26) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.450 QI = 1.983 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.0000	.0000	.0000		.0000	.0000	.0000	.0000	.0000			.0000	.0000	.0000
10.000															.1427
14.000								.2501							
20.000															.1553
22.000								.2460							
24.500															.1749
35.000								.1258							
39.000															.1004
42.500								.0948							
48.000												.0673			
60.000								.0407							
119.000															.0190
180.000			.0123		.0427			.0174			.0098				.0064

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0000		.0000	.0000	.0000		.0000				.0000		.0000		
10.000					.1387										
20.000					.1172										
25.500					.1423										
40.000					.1167										
45.500					.0804										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0037			.0025		.0057				.1098		.0143		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0000		.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11.500				.0940											

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB26)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0842							
21.500												.0000			
23.000								.0000							
24.000				.0000											
31.500				.1320											
34.000								.1145							
35.000				.1360											
40.000				.1417				.1175							
45.000								.1184							
51.000				.0605											
57.500								.0228							
59.500												.0076			
61.000								.0492							
65.000								.0451							
70.000								.0291							
96.500				.0299											
105.000															
106.000												.0183			
135.000								.0205							
140.000				.0000				.0026				.0014			
141.400	.0000														
151.000			.0000												
180.000				.0079		.0037		.0022				.0066			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
21.500	.0000				.0000				.0000				.0000		
63.000	.0025								.0018				.0011		
64.000															
65.000					.0032										
65.500					.0618				.0448				.0113		
105.000	.0288														.0155
111.000					.0367										
112.000					.0334										
113.000											.0793				
116.000					.0030				.0047						
135.000	.0022										.0106				
149.000					.0041				.0035				.0027		
180.000	.0056														

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB26)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000		.0000	.0000	.0000
21.500			.0000									
39.000							.3449					.4009
52.500						.0064						
55.000			.0019									
65.000			.0048									
68.000						.0127						
100.000			.0083									
108.000			.0139			.0214						
112.000							.0070					
113.000									.0068			

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.450 QI = 1.983 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.0000	.0000	.0000		.0000	.0000	.0000	.0000	.0000			.0000	.0000	.0000
10.000															.1590
14.000								.2708							
20.000															.1698
22.000								.2558							
24.500															.1856
35.000								.1219							
39.000															.0955
42.500								.0903							
48.000												.0643			
60.000								.0315							
119.000															.0137
180.000			.0160		.0297			.0124			.0076				.0063

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0000		.0000	.0000	.0000		.0000				.0000		.0000		
10.000					.1452										
20.000					.1329										
25.500					.1560										
40.000					.1219										
45.500					.0802										
131.200									.0000						
145.400														.0000	
146.200								.0000							

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB26)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0077			.0087		.0178				.0796		.0129		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0000		.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11.500				.1107											
12.000								.0963							
21.500												.0000			
23.000								.0000							
24.000				.0000											
31.500				.1509											
34.000								.1253							
35.000				.1503											
40.000				.1522				.1245							
45.000								.1225							
51.000				.0598											
57.500								.0173							
59.500												.0046			
61.000								.0397							
65.000								.0416							
70.000								.0336							
96.500				.0294											
105.000												.0186			
106.000								.0219							
135.000								.0029				.0015			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0075		.0077		.0044				.0034			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
21.500	.0000				.0000				.0000				.0000		
63.000	.0015								.0000				.0000		
64.000															
65.000									.0014						
65.500					.0023								.0020		

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB26)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0348				.0722				.0193				.0081		
111.000															.0114
112.000					.0657										
113.000					.0539										
116.000											.0435				
135.000	.0021				.0035				.0052						
149.000											.0070				
180.000	.0022				.0023				.0029				.0028		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000		.0000	.0000	.0000
21.500			.0000									
39.000							.3679					.3865
52.500						.0063						
55.000			.0033									
65.000			.0036									
68.000						.0090						
100.000			.0056									
108.000			.0099			.0049						
112.000							.0042					
113.000									.0053			

AEDC VA352 OH4B O1 ORB. BOTTOM SURFACE WING (CTKL26) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.450 QI = 1.983 HREF = .035

SECTION (1)BOTTOM SURF, WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0612	.0314		.3580	.1849	.2813	.0516		.1269	.0749	.0246
.002						.2673		.2222				
.003						.4290		.2146				
.004						.3905		.1917				
.005						.3538		.1704				
.006						.3012		.1387				
.007						.2499		.1264				
.025	.0735			.2354	.4506		.3887					
.050										.1680		
.100				.1856		.1970	.2087	.2262		.1752		
.153	.1294											
.177					.1382							
.200				.1210		.1316						
.299	.0873											
.300					.1276	.0940		.1161	.1372	.1468		
.302				.0978								
.303							.3150					
.428						.1065						
.444	.0758											
.487					.1120							
.500							.2016	.2319		.1160		
.559				.0853								
.590	.0593											
.600					.0900	.0869			.0651			
.700				.0827	.0773	.0570	.0654			.0479		
.736	.0738											
.800						.0489	.1013					
.850						.1148	.1509					
.900	.1399			.1224	.0988	.1057	.1190			.1369		

AEDC VA352 OH4B O1 ORB. BOTTOM SURFACE WING (CTKL26)

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.450 QI = 1.983 HREF = .035

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0589	.0324		.2974	.1659	.2189	.0472		.1057	.0673	.0536
.002						.2554		.1777				
.003						.3955		.1825				
.004						.3928		.1732				
.005						.3570		.1652				
.006						.3282		.1452				
.007						.2790		.1372				
.025	.0699			.1961	.3970		.3148					
.050										.1469		
.100				.1845		.2030	.2068	.2281		.1539		
.153	.1367											
.177					.1324							
.200				.1278		.1334						
.299	.0917											
.300					.1229	.1041		.3190	.1896	.1581		
.302				.1073								
.303							.1210					
.428						.1147						
.444	.0808											
.487					.1181							
.500							.1078	.3437		.1756		
.559				.0847								
.590	.0616											
.600					.1032	.0975			.1433			
.700				.0839	.0855	.0594	.0501			.1827		
.736	.0807											
.800						.0477	.0449					
.850						.1192	.1273					
.900	.1655			.1178	.1068	.1157	.1205			.2443		

AEDC VA352 OH4B O1 ORB. LEFT VERTICAL TAIL (CTKV26) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.450 QI = 1.983 HREF = .035

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
x/C					
.000		.0143	.0226	.0508	.0832
.010					.0423
.100	.0174	.0104	.0327	.0354	
.300	.0092	.0087	.0526	.0234	
.500		.0096	.0403	.0311	.0102
.700	.0025	.0026	.0130	.0161	
.900		.0037	.0149	.0131	

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.450 QI = 1.983 HREF = .035

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
x/C					
.000		.0095	.0246	.0184	.0122
.010					.0251
.100	.0119	.0162	.0420	.0328	
.300	.0055	.0104	.0493	.0331	
.500		.0123	.0406	.0236	.0226
.700	.0022	.0056	.0115	.0115	
.900		.0050	.0114	.0105	

AEDC VA352 OH4B 01 ORB. RCS CENTER (CTKR26) (15 JAN 75)

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	-5.000	RN/L =	2.000
B.FLAP =	10.000	ELEVON =	10.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.450 QI = 1.983 HREF = .035

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0673	.0451	.0011	.0048	.0127

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.450 QI = 1.983 HREF = .035

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0643	.0416	.0020	.0036	.0090

AEDC VA352 OH4B O1 ORB. OMS POD (CTKM26) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.450 QI = 1.983 HREF = .035

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0556	.1435	.0864	.0369	.0180	.0194	.0159
8.540		.1053					
8.650		.0604					
8.727			.0778				
8.750						.0000	.0092
8.855				.0357			
8.942			.0233				
8.978					.0115		
9.056				.0078			
9.118				.0079			
9.222					.0073		
9.275					.0049		

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.450 QI = 1.983 HREF = .035

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0764	.1549	.0643	.0451	.0447	.0388	.0299
8.540		.1010					
8.650		.0568					
8.727			.0666				
8.750						.0000	.0165
8.855				.0211			
8.942			.0219				
8.978					.0197		
9.056				.0074			
9.118				.0077			
9.222					.0044		
9.275					.0040		

AEDC VA352 OH4B 01 ORB. WING UPPER CREASE (CTKC26) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.450 QI = 1.983 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0076	.0025	.0032	.0018	.0019

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.450 QI = 1.983 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0046	.0015	.0023	.0014	.0033

AEDC VA352 OH4B 01 ORB. FUSELAGE Z=7.525 (CTKF26) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 2.000
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.450 QI = 1.983 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0205	.0183	.0288	.0618	.0448	.0113

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.450 QI = 1.983 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0210	.0186	.0348	.0722	.0193	.0081

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB27) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0250	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4338	.4226	.2726		.2278	.1940	.1659	.1375	.0000			.1163	.1090	.1008
10.000															.1157
14.000								.2180							
20.000															.1243
22.000								.2083							
24.500															.1377
35.000								.1055							
39.000															.0784
42.500								.0777							
48.000												.0548			
60.000								.0413							
119.000															.0186
180.000			.0571		.0567			.0244			.0129				.0094

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1207		.0883	.0821	.0745		.0738				.0725		.0699		
10.000					.0937										
20.000					.0944										
25.500					.1091										
40.000					.0844										
45.500					.0577										
131.200									.0088						
145.400														.0189	
146.200								.0094							
156.000														.0277	
159.200															.0411
170.700												.0120			
171.900										.0261					
173.400						.0231									
180.000		.0056			.0102		.0333				.1354		.0428		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0702		.0642	.0000	.0560	.0591	.0554	.0622	.0607	.0587	.0594	.0572	.0541	.0509
11.500				.0719											

AEDC VA352 OH4B O1 ORB, FUSELAGE (CTK827)

MACH (1) = 8.000 ALPHA (1) = 25.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1630	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0642							
21.500												.0633			
23.000								.0743							
24.000				.0904											
31.500				.1038											
34.000								.0835							
35.000				.1026											
40.000				.1045				.0809							
45.000								.0796							
51.000				.0414											
57.500								.0142							
59.500												.0040			
61.000								.0297							
65.000								.0260							
70.000								.0168							
96.500				.0216											
105.000												.0136			
106.000								.0139							
135.000								.0023				.0009			
140.000				.0140											
141.490	.0083														
151.000			.0349												
180.000				.0111		.0020		.0026				.0092			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0497	.0492	.0490	.0507	.0512	.0523	.0539	.0555	.0551	.0608	.0673	.0705	.0854	.0968	
21.500	.0582				.0472				.0590				.0741		
63.000	.0022														
64.000									.0014						
65.000													.0014		
65.500					.0021										
105.000	.0218				.0491				.0311				.0074		
111.000															.0093
112.000					.0274										
113.000					.0246										
116.000											.0593				
135.000	.0030				.0060				.0052						
149.000											.0063				
180.000	.0095				.0068				.0059				.0066		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB27)

MACH (1) = 8.000 ALPHA (1) = 25.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.1961	.1198	.1110	.1151	.1977	.4017	.2143	.3364		.3832	.3902	.4017
21.500			.1109									
39.000							.2678					.4017
52.500						.0053						
55.000			.0039									
65.000			.0044									
68.000						.0077						
100.000			.0049									
108.000			.0055			.0085						
112.000							.0032					
113.000									.0041			

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4185	.4229	.2791		.2461	.2127	.1859	.1560	.0000			.1350	.1271	.1169
10.000															.1352
14.000								.2416							
20.000															.1429
22.000								.2255							
24.500															.1521
35.000								.1022							
39.000															.0764
42.500								.0741							
48.000												.0513			
60.000								.0316							
119.000															.0138
180.000			.0761		.0395			.0173			.0089				.0087

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1133		.1059	.0982	.0893		.0922				.0910		.0896		
10.000					.1238										
20.000					.1115										
25.500					.1252										
40.000					.0910										
45.500					.0581										
131.200									.0053						
145.400														.0098	
146.200								.0080							

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB27)

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0188	
159.200															.0240
170.700												.0178			
171.900										.0225					
173.400						.0441									
180.000		.0095			.0208		.0548				.1033		.0543		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0910		.0826	.0000	.0699	.0707	.0674	.0775	.0761	.0771	.0770	.0748	.0720	.0667
11.500				.0887											
12.000								.0779							
21.500												.0756			
23.000								.0878							
24.000				.1074											
31.500				.1219											
34.000								.0993							
35.000				.1156											
40.000				.1129				.1010							
45.000								.0937							
51.000				.0414											
57.500								.0108							
59.500												.0027			
61.000								.0228							
65.000								.0240							
70.000								.0205							
96.500				.0211											
105.000												.0118			
106.000								.0147							
135.000								.0015				.0009			
140.000				.0066											
141.400	.0062														
151.000			.0199												
180.000				.0128		.0030		.0036				.0088			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0678	.0690	.0702	.0769	.0817	.0907	.1014	.1148	.1280	.1494	.1697	.1778	.2144	.2347	
21.500	.0711				.0709				.1344				.2123		
63.000	.0007														
64.000									.0013						
65.000													.0008		
65.500					.0011										

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB27)

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0227				.0459				.0095				.0042		
111.000															.0032
112.000					.0400										
113.000					.0331										
116.000											.0196				
135.000	.0021				.0043				.0056						
149.000											.0033				
180.000	.0074				.0050				.0046				.0036		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.2327	.2178	.2054	.1998	.1760	.3974	.2693	.4158		.4372	.4383	.4356
21.500			.2043									
39.000							.2815					.3974
52.500						.0044						
55.000			.0025									
65.000			.0027									
68.000						.0035						
100.000			.0035									
108.000			.0041			.0041						
112.000							.0029					
113.000									.0036			

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.4016	.4199	.3021		.2587	.2278	.2035	.1745	.0000			.1492	.1435	.1321
10.000															.1543
14.000								.2559							
20.000															.1605
22.000								.2383							
24.500															.1644
35.000								.0941							
39.000															.0711
42.500								.0694							
48.000												.0475			
60.000								.0241							
115.000															.0097
180.000			.0889		.0285			.0124			.0084				.0120

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB27)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1304		.1196	.1136	.1058		.1073				.1061		.1044		
10.000					.1326										
20.000					.1271										
25.500					.1421										
40.000					.0942										
45.500					.0563										
131.200									.0057						
145.400														.0097	
146.200								.0125							
156.000														.0147	
159.200															.0207
170.700												.0070			
171.900										.0205					
173.400						.0589									
180.000		.0170			.0298		.0704				.0767		.0647		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1113		.0985	.0000	.0862	.0913	.0828	.0926	.0874	.0905	.0912	.0912	.0887	.0877
11.500				.1048											
12.000								.0951							
21.500												.0884			
23.000								.1026							
24.000				.1226											
31.500				.1358											
34.000								.1158							
35.000				.1312											
40.000				.1233				.1063							
45.000								.1036							
51.000				.0402											
57.500								.0093							
59.500												.0018			
61.000								.0210							
65.000								.0220							
70.000								.0214							
96.500				.0207											
105.000												.0177			
106.000								.0150							
135.000								.0010				.0007			
140.000				.0060											
141.400	.0086														
151.000			.0148												
180.000				.0140		.0021		.0014				.0022			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB27)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0940	.1019	.1121	.1312	.1552	.1871	.2057	.2275	.2450	.2621	.2734	.2663	.2934	.2963	
21.500	.0947				.1407				.2517				.2801		
63.000	.0904														
64.000									.0012						
65.000													.0008		
65.500					.0008										
105.000	.0266				.0212				.0062				.0017		
111.000															.0011
112.000					.0351										
113.000					.0332										
116.000											.0058				
135.000	.0015				.0031				.0061						
149.000											.0058				
180.000	.0023				.0030				.0043				.0054		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.2779	.2508	.2370	.2273	.2028	.3774	.2875	.4436		.4478	.4398	.4314
21.500			.2350									
39.000							.2820					.3774
52.500						.0043						
55.000			.0024									
65.000			.0024									
68.000						.0024						
100.000			.0023									
108.000			.0017			.0027						
112.000							.0029					
113.000									.0039			

AEDC VA352 OH4B O1 ORB. BOTTOM SURFACE WING (CTKL27) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0412	.0246		.3080	.1878	.2633	.0525		.1086	.0643	.0428
.002						.2311		.2019				
.003						.3634		.1951				
.004						.3073		.1786				
.005						.2772		.1624				
.006						.2523		.1347				
.007						.2068		.1187				
.025	.0489			.1816	.4065		.3769					
.050										.1424		
.100				.1599		.1509	.3236	.2137		.1441		
.153	.0959											
.177					.1150							
.200				.1032		.0907						
.299	.0671											
.300					.1457	.1390		.2363	.1246	.1194		
.302				.0852								
.303							.3830					
.428						.3081						
.444	.0570											
.487					.4080							
.500							.4055	.3331		.1176		
.559				.0973								
.590	.0474											
.600					.1870	.1024			.1346			
.700				.1337	.2395	.2423	.1698			.1850		
.736	.1004											
.800						.3175	.3406					
.850						.4190	.3859					
.900	.1370			.3275	.3360	.3719	.3168			.2305		

AEDC VA352 OH4B O1 ORB. BOTTOM SURFACE WING (CTKL27)

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0413	.0245		.2867	.1696	.2844	.0540		.1014	.0744	.0631
.002						.2702		.1927				
.003						.3545		.1991				
.004						.3957		.2125				
.005						.3271		.2097				
.006						.3457		.2223				
.007						.2798		.2226				
.025	.0510			.1635	.3814		.4620					
.050										.1452		
.100				.1660		.1935	.4394	.3259		.1574		
.153	.1046											
.177					.1200							
.200				.1227		.1575						
.299	.0756											
.300					.1335	.1379		.4349	.3624	.2830		
.302				.1136								
.303							.1427					
.428						.1546						
.444	.0737											
.487					.3107							
.500							.2738	.4656		.2299		
.559				.1878								
.590	.1071											
.600					.2534	.1324			.1922			
.700				.2012	.2716	.2169	.1917			.2433		
.736	.2570											
.800						.3125	.3937					
.850						.4195	.4615					
.900	.1732			.3551	.3633	.3826	.3981			.3026		

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0429	.0248		.2648	.2024	.1906	.0464		.1269	.0846	.0817
.002						.3169		.2029				
.003						.4755		.2334				
.004						.4959		.2461				
.005						.4495		.2713				
.006						.4204		.2527				
.007						.3585		.2610				
.025	.0520			.1656	.3639		.2868					

AEDC VA352 OH4B 01 ORB. BOTTOM SURFACE WING (CTKL27)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.050										.1901		
.100				.1899		.2547	.2398	.4521		.2083		
.153	.1100											
.177					.1482							
.200				.1611		.1972						
.299	.0869											
.300					.1797	.1486		.2898	.4898	.3426		
.302				.1860								
.303							.1668					
.428						.2153						
.444	.1138											
.487					.3351							
.500							.1744	.1888		.3078		
.559				.2956								
.590	.2270											
.600					.2604	.1917			.1428			
.700				.2661	.2556	.2257	.0951			.2926		
.736	.3554											
.800						.3197	.2360					
.850						.4226	.4018					
.900	.2005			.3665	.3495	.3794	.4139			.3492		

AEDC VA352 OH4B O1 ORB. UPPER SURFACE WING (CTKU27) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0039	.0570	.1816
.200	.0489	.0474	.1599
.600	.0959	.1004	.1032
.800		.1370	.0852
.900		.0412	.0973
.950	.0671	.0246	.1337

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0025	.0737	.1635
.200	.0510	.1071	.1660
.600	.1046	.2570	.1227
.800		.1732	.1136
.900		.0413	.1878
.950	.0756	.0245	.2012

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)UPPER SURFACE WING DEPENDENT VARIABLE HU/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.0024	.1138	.1656
.200	.0520	.2270	.1899
.600	.1100	.3554	.1611
.800		.2005	.1860
.900		.0429	.2956
.950	.0869	.0248	.2661

AEDC VA352 OH4B O1 ORB. LEFT VERTICAL TAIL (CTKV27) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0928	.0482	.0502	.0927
.010					.0486
.100	.0206	.0157	.0193	.0362	
.300	.0057	.0095	.0149	.0242	
.500		.0098	.0139	.0180	.0252
.700	.0037	.0045	.0056	.0088	
.900		.0046	.0071	.0093	

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0138	.0244	.0430	.0481
.010					.0319
.100	.0158	.0092	.0269	.0304	
.300	.0093	.0061	.0219	.0296	
.500		.0064	.0152	.0268	.0190
.700	.0035	.0028	.0052	.0118	
.900		.0037	.0070	.0103	

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0155	.0291	.0538	.0452
.010					.0286
.100	.0162	.0099	.0218	.0357	
.300	.0074	.0087	.0202	.0292	
.500		.0073	.0208	.0235	.0190
.700	.0022	.0031	.0087	.0104	
.900		.0045	.0100	.0103	

AEDC VA352 OH4B O1 ORB. RCS CENTER (CTKR27) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/H0

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0548	.0260	.0014	.0044	.0077

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/H0

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0513	.0240	.0008	.0027	.0035

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/H0

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0475	.0220	.0008	.0024	.0024

AEDC VA352 OH4B 01 ORB. OMS POD (CTKM27) (15 JAN 75)

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	.000	RN/L =	3.720
B.FLAP =	10.000	ELEVON =	10.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0304	.1148	.0686	.0308	.0264	.0371	.0303
8.540		.0810					
8.650		.0581					
8.727			.0650				
8.750						.0000	.0137
8.855				.0294			
8.942			.0194				
8.978					.0109		
9.056				.0050			
9.118				.0060			
9.222					.0073		
9.275					.0037		

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0377	.0974	.0615	.0722	.0102	.0109	.0103
8.540		.0993					
8.650		.0451					
8.727			.0665				
8.750						.0000	.0108
8.855				.0211			
8.942			.0168				
8.978					.0199		
9.056				.0127			
9.118				.0051			
9.222					.0072		
9.275					.0045		

AEDC VA352 OH4B 01 ORB. OMS POD (CTKM27)

MACH (1) = 8.000 ALFHA (3) = 35.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0065	.0083	.0091	.0289	.0058	.0125	.0196
8.540		.0066					
8.650		.0093					
8.727			.0126				
8.750						.0000	.0071
8.855				.0208			
8.942			.0087				
8.978					.0109		
9.056				.0089			
9.118				.0041			
9.222					.0028		
9.275					.0030		

AEDC VA352 OH4B O1 ORB. FUSELAGE Y=0.875 (CTKY27) (15 JAN 75)

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	.000	RN/L =	3.720
B.FLAP =	10.000	ELEVON =	10.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0904	.0743	.0633	.0582	.0472	.0590	.0741	.1100

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1074	.0878	.0756	.0711	.0709	.1344	.2123	.2043

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1226	.1026	.0884	.0947	.1407	.2517	.2801	.2350

AEDC VA352 OH4B 01 ORB. WING UPPER CREASE (CTKC27) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0040	.0022	.0021	.0014	.0039

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0027	.0007	.0011	.0013	.0025

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0018	.0004	.0008	.0012	.0024

AEDC VA352 OH4B O1 ORB. FUSELAGE Z=7.525 (CTKF27) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0139	.0136	.0218	.0491	.0311	.0074

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.367 QI = 3.936 HREF = .049

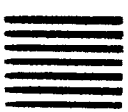
SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0147	.0118	.0227	.0459	.0095	.0042

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.367 QI = 3.936 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0150	.0177	.0266	.0212	.0062	.0017



AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB28) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.0000	.0000	.0000		.0000	.0000	.0000	.0000	.0000			.0000	.0000	.0000
10.000															.1244
14.000								.2309							
20.000															.1371
22.000								.2279							
24.500															.1613
35.000								.1331							
39.000															.1059
42.500								.1004							
48.000												.0712			
60.000								.0521							
119.000															.0259
180.000			.0282		.0582			.0259			.0135				.0089

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0000		.0000	.0000	.0000		.0000				.0000		.0000		
10.000					.1180										
20.000					.1031										
25.500					.1305										
40.000					.1137										
45.500					.0836										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.790												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0054			.0055		.0105				.1355		.0336		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0000		.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11.500				.0785											

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB28)

MACH (1) = 8.000 ALPHA (1) = 25.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0761							
21.500												.0000			
23.000								.0000							
24.000				.0000											
31.500				.1179											
34.000								.1031							
35.000				.1243											
40.000				.1351				.1063							
45.000								.1100							
51.000				.0631											
57.500								.0531							
59.500												.0172			
61.000								.0550							
65.000								.0379							
70.000								.0257							
96.500				.0312											
105.000												.0196			
106.000								.0204							
135.000								.0034				.0015			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0117		.0054		.0017				.0058			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
21.500	.0000				.0000				.0000				.0000		
63.000	.0057								.0000				.0000		
64.000															
65.000									.0061						
65.500					.0077								.0032		
105.000	.0260				.0367										
111.000									.0362				.0324		
112.000															.0641
113.000					.0340										
116.000					.0339										
135.000	.0021										.0396				
149.000					.0025				.0028						
180.000	.0058										.0049				
					.0027				.0014				.0046		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500

PHI

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB28)

MACH (1) = 8.000 ALPHA (1) = 25.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000		.0000	.0000	.0000
21.500			.0000									
39.000							.2958					.4327
52.500						.0053						
55.000			.0042									
65.000			.0054									
68.000						.0182						
100.000			.0092									
108.000			.0291			.0310						
112.000							.0070					
113.000									.0065			

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.0000	.0000	.0000		.0000	.0000	.0000	.0000	.0000			.0000	.0000	.0000
10.000															.1443
14.000								.2576							
20.000															.1588
22.000								.2489							
24.500															.1803
35.000								.1295							
39.000															.1007
42.500								.0968							
48.000												.0667			
60.000								.0398							
119.000															.0179
180.000			.0132		.0424			.0178			.0090				.0063

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0000		.0000	.0000	.0000		.0000				.0000		.0000		
10.000					.1330										
20.000					.1226										
25.500					.1457										
40.000					.1172										
45.500					.0805										
131.200									.0000						
145.400														.0000	
146.200								.0000							

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB28)

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0000	
159.200															.0000
170.750												.0000			
171.950										.0000					
173.400						.0000									
180.000		.0040			.0033		.0062				.1102		.0163		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0000		.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11.500				.0984											
12.000								.0866							
21.500												.0000			
23.000								.0000							
24.000				.0000											
31.500				.1397											
34.000								.1144							
35.000				.1400											
40.000				.1429				.1159							
45.000								.1169							
51.000				.0612											
57.500								.0236							
59.500												.0074			
61.000								.0498							
65.000								.0431							
70.000								.0280							
96.500				.0293											
105.000												.0172			
106.000								.0202							
135.000								.0025							
140.000				.0000								.0014			
141.400	.0000														
151.000			.0000												
180.000				.0105		.0040		.0051				.0072			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
21.500	.0000				.0000										
63.000	.0029								.0000				.0000		
64.000															
65.000									.0032						
65.500					.0050								.0020		

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB28)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0274				.0440				.0771				.0278		
111.000															.0369
112.000					.0364										
113.000					.0330										
116.000											.0471				
135.000	.0027				.0032				.0043						
149.000											.0111				
180.000	.0067				.0035				.0027				.0046		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000		.0000	.0000	.0000
21.500			.0000									
39.000							.3580					.4667
52.500						.0076						
55.000			.0080									
65.000			.0123									
68.000						.0117						
100.000			.0187									
108.000			.0204			.0158						
112.000							.0066					
113.000									.0069			

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.0000	.0000	.0000	.0000		.0000	.0000	.0000	.0000	.0000			.0000	.0000	.0000
10.000															.1595
14.000								.2719							
20.000															.1731
22.000								.2591							
24.500															.1876
35.000								.1202							
39.000															.0951
42.500								.0903							
48.000												.0628			
60.000								.0302							
119.000															.0125
180.000			.0215		.0289			.0112			.0071				.0079

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820

AEDC VA352 OH4B 01 ORB. FUSELAGE (CTKB28)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0000		.0000	.0000	.0000		.0000				.0000		.0000		
10.000					.1616										
20.000					.1364										
25.500					.1578										
40.000					.1195										
45.500					.0802										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0100			.0132		.0220				.0777		.0223		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0000		.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11.500				.1117											
12.000								.0992							
21.500												.0000			
23.000								.0000							
24.000				.0000											
31.500				.1524											
34.000								.1289							
35.000				.1515											
40.000				.1540											
45.000								.1256							
51.000				.0598				.1220							
57.500								.0183							
59.500												.0040			
61.000								.0405							
65.000								.0416							
70.000								.0336							
96.500				.0289											
105.000												.0199			
106.000								.0197							
135.050								.0014				.0012			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0103		.0100		.0034				.0025			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290

AEDC VA352 OH4B O1 ORB. FUSELAGE (CTKB28)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
21.500	.0000				.0000				.0000				.0000		
63.000	.0017														
64.000									.0022						
65.000													.0020		
65.500					.0030										
105.000	.0306				.0631				.0594				.0154		
111.000															.0273
112.000					.0417										
113.000					.0385										
116.000											.0683				
135.000	.0022				.0040				.0054						
149.000											.0063				
180.000	.0032				.0034				.0047				.0043		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000		.0000	.0000	.0000
21.500			.0000									
39.000							.3438					.4347
52.500						.0068						
55.000			.0096									
65.000			.0093									
68.000						.0101						
100.000			.0092									
108.000			.0107			.0090						
112.000							.0063					
113.000									.0077			

AEDC VA352 OH4B O1 ORB. BOTTOM SURFACE WING (CTKL28) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRF = .0000 IN.
LREF = 22.5803 IN. YMRF = .0000 IN.
BREF = 16.3919 IN. ZMRF = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0567	.0343		.3543	.1747	.2983	.0550		.1501	.0872	.0284
.002						.2695		.2396				
.003						.3791		.2227				
.004						.3759		.1947				
.005						.3285		.1691				
.006						.3045		.1350				
.007						.2525		.1199				
.025	.0740			.2557	.4421		.4120					
.050										.1927		
.100				.1873		.1852	.1949	.2198		.1949		
.153	.1196											
.177					.1221							
.200				.1162		.1325						
.299	.0781											
.300					.1175	.1015		.1077	.1132	.1158		
.302				.0986								
.303							.2426					
.428						.1568						
.444	.0650											
.487					.3490							
.500							.3556	.1185		.0931		
.559				.2016								
.590	.0529											
.600					.2270	.0973			.0569			
.700				.2681	.2487	.2343	.1799			.0409		
.736	.0858											
.800						.3747	.3825					
.850						.4555	.4042					
.900	.1236			.3752	.3603	.3909	.3378			.1074		

AEDC VA352 OH4B 01 CRB. BOTTOM SURFACE WING (CTKL28)

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0578	.0314		.3445	.1861	.2864	.0487		.1268	.0751	.0352
.002						.2744		.2228				
.003						.4228		.2159				
.004						.3930		.1965				
.005						.3585		.1722				
.006						.3059		.1405				
.007						.2575		.1302				
.025	.0712			.2253	.4504		.4016					
.050										.1699		
.100				.1896		.2044	.3109	.2325		.1743		
.153	.1315											
.177					.1415							
.200				.1258		.1380						
.299	.0852											
.300					.1320	.1054		.1958	.1384	.1478		
.302				.1030								
.303							.4428					
.428						.1186						
.444	.0782											
.487					.1386							
.500							.3754	.3288		.1191		
.559				.1566								
.590	.0731											
.600					.1893	.1059			.1433			
.700				.2359	.2655	.0911	.1522			.1544		
.736	.1419											
.800						.2904	.3950					
.850						.4724	.4855					
.900	.1676			.4113	.3869	.4456	.4199			.2555		

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0531	.0323		.2788	.1685	.2136	.0522		.1075	.0804	.0658
.002						.2471		.1859				
.003						.3916		.1955				
.004						.3856		.2066				
.005						.3620		.2084				
.006						.3382		.2229				
.007						.2858		.2216				
.025	.0710			.1968	.3833		.3328					

AEDC VA352 OH4B O1 ORB. BOTTOM SURFACE WING (CTKL28)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.050										.1573		
.100				.1919		.2112	.2892	.3242		.1727		
.153	.1350											
.177					.1348							
.200				.1373		.1446						
.299	.0910											
.300					.1339	.1172		.4491	.3638	.2710		
.302				.1201								
.303							.1386					
.428						.1327						
.444	.0849											
.487					.1560							
.500							.1212	.4641		.2248		
.559				.1465								
.590	.1081											
.600					.1486	.1184			.1831			
.700				.1595	.1741	.0943	.0667			.2341		
.736	.2186											
.800						.2789	.1885					
.850						.4733	.4178					
.900	.2138			.3631	.4138	.4590	.4070			.3065		

AEDC VA352 OH4B 01 ORB. LEFT VERTICAL TAIL (CTKV28) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0095	.0412	.0455	.0304
.010					.0351
.100	.0061	.0075	.0477	.0398	
.300	.0070	.0110	.0435	.0245	
.500		.0153	.0492	.0349	.0132
.700	.0046	.0092	.0155	.0172	
.900		.0103	.0170	.0159	

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0139	.0395	.0975	.0649
.010					.0435
.100	.0166	.0207	.0503	.0523	
.300	.0083	.0228	.0508	.0370	
.500		.0213	.0446	.0349	.0209
.700	.0026	.0053	.0120	.0157	
.900		.0045	.0141	.0138	

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1)LEFT VERTICAL TAIL DEPENDENT VARIABLE HU/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.0133	.0260	.0177	.0132
.010					.0270
.100	.0153	.0303	.0507	.0334	
.300	.0068	.0222	.0432	.0382	
.500		.0207	.0351	.0312	.0227
.700	.0023	.0062	.0102	.0125	
.900		.0052	.0118	.0111	

AEDC VA352 OH4B 01 ORB. RCS CENTER (CTKR28) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0712	.0379	.0032	.0054	.0182

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0667	.0431	.0020	.0123	.0117

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1)RCS CENTER DEPENDENT VARIABLE HU/HO

X/L	.0760	.3000	.8000	.9000	.9750
Z					
6.125	.0628	.0416	.0020	.0093	.0101

AEDC VA352 OH4B 01 ORB. OMS POD (CTKM28) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALFHA (1) = 25.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0678	.1690	.1013	.0622	.0209	.0222	.0191
8.540		.1365					
8.650		.0764					
8.727			.0904				
8.750						.0000	.0132
8.855				.0422			
8.942			.0278				
8.978					.0141		
9.056				.0042			
9.118				.0076			
9.222					.0059		
9.275					.0035		

MACH (1) = 8.000 ALFHA (2) = 30.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0459	.1395	.0874	.0462	.0208	.0210	.0179
8.540		.1016					
8.650		.0580					
8.727			.0779				
8.750						.0000	.0120
8.855				.0347			
8.942			.0232				
8.978					.0101		
9.056				.0071			
9.118				.0071			
9.222					.0057		
9.275					.0053		

AEDC VA352 OH4B O1 ORB. OMS POD (CTKM28)

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1)OMS POD DEPENDENT VARIABLE HU/HO

X/L	.7800	.8050	.8290	.8620	.9630	1.0000	1.0140
Z							
8.295	.0585	.1193	.0758	.0426	.0361	.0413	.0338
8.540		.0875					
8.650		.0521					
8.727			.0618				
8.750						.0000	.0134
8.855				.0236			
8.942			.0207				
8.978					.0105		
9.056				.0056			
9.118				.0062			
9.222					.0035		
9.275					.0031		

AEDC VA352 OH4B O1 ORB. WING UPPER CREASE (CTKC28) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0172	.0057	.0077	.0061	.0042

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0074	.0029	.0050	.0032	.0080

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.4000	.5000	.6000	.7000	.9000
PHI					
62.000	.0040	.0017	.0030	.0022	.0096

AEDC VA352 OH4B O1 ORB. FUSELAGE Z=7.525 (CTKF28) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = -5.000 RN/L = 3.720
B.FLAP = 10.000 ELEVON = 10.000
HAW/HT = .000

MACH (1) = 2.000 ALPHA (1) = 25.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0204	.0196	.0260	.0367	.0362	.0324

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.300 QI = 3.930 HREF = .049

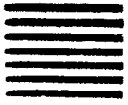
SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0202	.0172	.0274	.0440	.0771	.0278

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.300 QI = 3.930 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.3000	.4000	.5000	.6000	.7000	.8000
Z						
7.525	.0197	.0199	.0306	.0631	.0594	.0154



AEDC VA352 OH4B 02 ORB. FUSELAGE (CTKB29) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.067 QI = 3.940 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.3277	.4257	.4109	.2765		.2233	.1936	.1625	.1362	.1242			.1119	.1063	.0976
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0887		.0827	.0755	.0705		.0716				.0700		.0702		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0713		.0649	.0000	.0564	.0584	.0544	.0610	.0653	.0577	.0570	.0575	.0531	.0492
11.500				.0000											

AEDC VA352 OH4B 02 ORB. FUSELAGE (CTKB29)

MACH (1) = 8.000 ALPHA (1) = 25.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0000							
21.500												.0619			
23.000								.0749							
24.000				.0879											
31.500				.1016											
34.000								.0000							
35.000				.0985											
40.000				.1000				.0780							
45.000								.0790							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0497	.0491	.0489	.0509	.0507	.0512	.0533	.0519	.0525	.0570	.0637	.0649	.0820	.0939	
21.500	.0564				.0461				.0571				.0742		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500

PHI

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB29)

MACH (1) = 8.000 ALPHA (1) = 25.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.1036	.1102	.1135	.1172	.1063	.1119	.1149	.0000		.0000	.0000	.1114
21.500			.1144									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.067 QI = 3.940 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.2987	.4136	.4140	.2927		.2423	.2130	.1858	.1563	.1415			.1308	.1251	.1154
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1106		.1037	.0971	.0886		.0883				.0877		.0861		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB29)

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0850		.0784	.0000	.0694	.0741	.0680	.0780	.0828	.0748	.0749	.0715	.0686	.0644
11.500				.0000											
12.000								.0000							
21.500												.0775			
23.000								.0910							
24.000				.1039											
31.500				.1180											
34.000								.0000							
35.000				.1143											
40.000				.1113				.0927							
45.000								.0888							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0650	.0661	.0709	.0805	.0831	.0912	.1054	.1153	.1264	.1455	.1641	.1772	.2110	.2274	
21.500	.0693				.0701				.1291				.2026		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB29)

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.2268	.2174	.2067	.1966	.1682	.1717	.1679	.0000		.0000	.0000	.1560
21.500			.2079									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.067 QI = 3.940 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.2692	.3979	.3996	.2978		.2578	.2297	.2014	.1726	.1587			.1467	.1414	.1293
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB29)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1278		.1191	.1123	.1042		.1049				.1048		.1034		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1630	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1051		.0957	.0000	.0848	.0887	.0808	.0900	.0961	.0879	.0872	.0870	.0848	.0846
11.500				.0000											
12.000								.0000							
21.500												.0880			
23.000								.0999							
24.000				.1193											
31.500				.1346											
34.000								.0000							
35.000				.1305											
40.000				.1195				.1070							
45.000								.1023							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290

DATE 83 JAN 75 TABULATED DATA LISTING FOR OH4B (AEDC VA352)

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB29)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0891	.0949	.1075	.1185	.1483	.1748	.1945	.2178	.2300	.2500	.2643	.2590	.2858	.2930	
21.500	.0922				.1294				.2403				.2785		
63.000	.0000								.0000						
64.000													.0000		
65.000															
65.500					.0000								.0000		
105.000	.0000				.0000				.0000						.0000
111.000															
112.000					.0000										
113.000					.0000						.0000				
116.000									.0000						
135.000	.0000				.0000						.0000				
149.000									.0000				.0000		
180.000	.0000				.0000										

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0360	1.0500
PHI												
.000	.2714	.2491	.2336	.2279	.1955	.1971	.1934	.0000		.0846	.0000	.1808
21.500			.2333				.0000					.0000
39.000						.0000						
52.500												
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

AEDC VA352 OH4B O2 ORB. LEFT MAIN NOZZLE (CTKN29) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.067 QI = 3.940 HREF = .049

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

X	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0194	.0310	.0193	.0074	
25.000	.0229	.0473			
45.000	.0143	.0145	.0144	.0175	.0170
65.000	.0551	.0470		.0462	
90.000	.0352	.0332	.0358	.0384	
135.000	.0209				
315.000	.0140				

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.067 QI = 3.940 HREF = .049

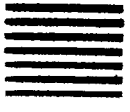
SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

X	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0467	.0717	.0472	.0130	
25.000	.0590	.0871			
45.000	.0172	.0160	.0139	.0145	.0288
65.000	.0351	.0349		.0552	
90.000	.0375	.0358	.0355	.0305	
135.000	.0054				
315.000	.0373				

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.067 QI = 3.940 HREF = .049

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

X	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0744	.0961	.0876	.0260	
25.000	.0768	.0921			
45.000	.0315	.0279	.0217	.0166	.0411
65.000	.0454	.0470		.0633	
90.000	.0485	.0502	.0562	.0654	
135.000	.0032				
315.000	.0548				



AEDC VA352 OH4B 02 ORB. BASE PLATE (CTKP29) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.067 QI = 3.940 HREF = .049

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0024		.0024
7.520	.0009	.0020	

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.067 QI = 3.940 HREF = .049

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0017		.0021
7.520	.0017	.0005	

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.067 QI = 3.940 HREF = .049

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0033		.0054
7.520	.0015	.0011	

AEDC VA352 OH4B O2 ORB. FUSELAGE Y=0.875 (CTKY29) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 97.067 QI = 3.940 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0879	.0749	.0619	.0564	.0461	.0571	.0742	.1144

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 97.067 QI = 3.940 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1039	.0910	.0775	.0693	.0701	.1291	.2026	.2070

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 97.067 QI = 3.940 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1193	.0999	.0880	.0922	.1294	.2403	.2785	.2333

AEDC VA352 OH4B 02 ORB. FUSELAGE (CTKB30) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 94.933 QI = 1.986 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.3331	.4268	.4116	.2685		.2203	.1912	.1629	.1370	.1247			.1125	.1104	.1007
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0922		.0857	.0787	.0727		.0735				.0706		.0677		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0690		.0626	.0000	.0562	.0562	.0520	.0598	.0634	.0548	.0559	.0531	.0513	.0486
11.500				.0000											

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB30)

MACH (1) = 8.000 ALPHA (1) = 25.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0000							
21.500												.0595			
23.000								.0735							
24.000				.0892											
31.500				.1045											
34.000								.0000							
35.000				.1023											
40.000				.0984				.0826							
45.000								.0823							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
79.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0460	.0489	.0462	.0453	.0463	.0463	.0457	.0442	.0413	.0412	.0390	.0368	.0362	.0328	
21.500	.0544				.0441				.0455				.0339		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB30)

MACH (1) = 8.000 ALPHA (1) = 25.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0314	.0325	.0289	.0276	.0260	.0264	.0254	.0000		.0265	.0000	.0255
21.500			.0340									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 94.933 QI = 1.986 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.3001	.4148	.4228	.2886		.2420	.2112	.1859	.1549	.1436			.1330	.1262	.1166
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1123		.1035	.0986	.0885		.0883				.0862		.0863		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB30)

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1250	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0000	
159.200															.0000
170.750												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0865		.0814	.0000	.0730	.0730	.0681	.0755	.0805	.0723	.0719	.0682	.0651	.0612
11.500				.0000											
12.000								.0000							
21.500												.0748			
23.000								.0907							
24.000				.0996											
31.500				.1156											
34.000								.0000							
35.000				.1108											
40.000				.1101				.0943							
45.000								.0800							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0590	.0432	.0586	.0613	.0606	.0580	.0600	.0576	.0544	.0578	.0590	.0560	.0606	.0619	
21.500	.0649				.0535				.0601				.0521		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB30)

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0650	.0681	.0674	.0702	.0644	.0689	.0728	.0000		.0760	.0000	.0785
21.500			.0643									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 94.933 QI = 1.986 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.2672	.3965	.4130	.2997		.2541	.2256	.1988	.1708	.1569			.1472	.1404	.1319
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB30)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1308		.1203	.1146	.1022		.1054				.1039		.1046		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1040		.0964	.0000	.0666	.0868	.0805	.0929	.0998	.0877	.0815	.0808	.0773	.0733
11.500				.0000											
12.000								.0000							
21.500												.0835			
23.000								.0997							
24.000				.1182											
31.500				.1322											
34.000								.0000							
35.000				.1270											
40.000				.1199				.1063							
45.000								.1037							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB30)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0717	.0711	.0715	.0686	.0732	.0736	.0749	.0758	.0743	.0808	.0831	.0824	.0971	.1034	
21.500	.0765				.0638				.0779				.0901		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.1090	.1108	.1086	.1136	.1059	.1143	.1201	.0000		.1175	.0000	.1232
21.500			.1114									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

AEDC VA352 OH4B O2 - ORB. LEFT MAIN NOZZLE (CTKN30) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 94.933 QI = 1.986 HREF = .035

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

x	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0099	.0176	.0111	.0047	
25.000	.0111	.0214			
45.000	.0056	.0059	.0055	.0061	.0067
65.000	.0120	.0117		.0133	
90.000	.0148	.0158	.0159	.0175	
135.000	.0148				
315.000	.0073				

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 94.933 QI = 1.986 HREF = .035

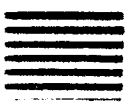
SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

x	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0285	.0429	.0277	.0086	
25.000	.0352	.0554			
45.000	.0102	.0093	.0075	.0058	.0077
65.000	.0142	.0137		.0117	
90.000	.0204	.0180	.0165	.0150	
135.000	.0029				
315.000	.0188				

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 94.933 QI = 1.986 HREF = .035

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

x	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0560	.0791	.0559	.0159	
25.000	.0692	.0879			
45.000	.0216	.0190	.0137	.0095	.0130
65.000	.0308	.0318		.0318	
90.000	.0391	.0366	.0365	.0358	
135.000	.0027				
315.000	.0411				



AEDC VA352 OH4B 02 ORB. BASE PLATE (CTKF30) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = .000 ELEVON = .000
HAU/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 94.933 QI = 1.986 HREF = .035

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0010		.0013
7.520	.0004	.0012	

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 94.933 QI = 1.986 HREF = .035

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0005		.0007
7.520	.0013	.0008	

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 94.933 QI = 1.986 HREF = .035

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0009		.0027
7.520	.0016	.0009	

AEDC VA352 OH4B O2 ORB. FUSELAGE Y=0.875 (CTKY30) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 94.933 QI = 1.986 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0892	.0735	.0595	.0544	.0441	.0455	.0339	.0340

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 94.933 QI = 1.986 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0996	.0907	.0748	.0649	.0535	.0601	.0521	.0643

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 94.933 QI = 1.986 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1182	.0997	.0835	.0765	.0638	.0779	.0901	.1114

AEDC VA352 OH4B 02 ORB. FUSELAGE (CTKB31) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRF = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 92.933 QI = .523 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.3364	.4315	.4158	.2767		.2281	.1948	.1665	.1404	.1237			.1160	.1077	.1035
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.0955		.0885	.0816	.0764		.0749				.0739		.0723		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0712		.0657	.0000	.0576	.0575	.0545	.0620	.0685	.0582	.0563	.0572	.0537	.0512
11.500				.0000											

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB31)

MACH (1) = 8.000 ALPHA (1) = 25.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0000							
21.500												.0616			
23.000								.0744							
24.000				.0891											
31.500				.1018											
34.000								.0000							
35.500				.1022											
40.000				.1007				.0835							
45.000								.0843							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0501	.0796	.0486	.0496	.0484	.0488	.0486	.0452	.0424	.0430	.0404	.0400	.0362	.0328	
21.500	.0565				.0462				.0468				.0354		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000														.0000	
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB31)

MACH (1) = 8.000 ALPHA (1) = 25.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0313	.0294	.0258	.0244	.0205	.0206	.0176	.0000		.0179	.0000	.0150
21.500			.0280									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 92.933 QI = .523 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.3085	.4263	.4369	.3032		.2480	.2234	.1847	.1602	.1444			.1364	.1283	.1272
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1178		.1090	.1924	.0947		.0945				.0922		.0911		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB31)

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION (11)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
FHI															
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
FHI															
.000		.0900		.0828	.0000	.0751	.0746	.0694	.0788	.0850	.0746	.0737	.0708	.0681	.0631
11.500				.0000											
12.000								.0000							
21.500												.0766			
23.000								.0867							
24.000				.1053											
31.500				.1201											
34.000								.0000							
35.000				.1178											
40.000				.1144				.1003							
45.000								.0966							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
FHI															
.000	.0628	.0772	.0633	.0662	.0620	.0606	.0596	.0578	.0535	.0522	.0505	.0484	.0457	.0422	
21.500	.0693				.0560				.0540				.0431		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										

AEDC VA352 OH4B O2 ORB, FUSELAGE (CTKB31)

MACH (1) = 8.000 ALPHA (2) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0401	.0385	.0344	.0323	.0273	.0270	.0239	.0000		.0234	.0000	.0217
21.500			.0378									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 92.933 QI = .523 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.2786	.4154	.4308	.3073		.2637	.2374	.2049	.1773	.1623			.1531	.1445	.1410
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB31)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1760	.1800	.1810	.1820
PHI															
.000	.1336		.1264	.1159	.1102		.1067				.1072		.1051		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1066		.0968	.0000	.0943	.0898	.0848	.0954	.1013	.0864	.0828	.0810	.0771	.0757
11.500				.0000											
12.000								.0000							
21.500												.0855			
23.000								.1028							
24.000				.1241											
31.500				.1362											
34.000								.0000							
35.000				.1304											
40.000				.1204				.1135							
45.000								.1083							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290

AEDC VA352 OH4B 02 ORB. FUSELAGE (CTKB31)

MACH (1) = 8.000 ALPHA (3) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0731	.0720	.0723	.0693	.0699	.0707	.0680	.0673	.0626	.0626	.0598	.0561	.0530	.0492	
21.500	.0785				.0676				.0667				.0521		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0469	.0456	.0414	.0397	.0346	.0321	.0300	.0000		.0292	.0000	.0273
21.500			.0453									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

AEDC VA352 OH4B O2 ORB. LEFT MAIN NOZZLE (CTKN31) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = .000 ELEVON = .000
HAW/HT = .300

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 92.933 QI = .523 HREF = .018

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

X	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0051	.0082	.0057	.0023	
25.000	.0053	.0104			
45.000	.0016	.0017	.0015	.0013	.0012
65.000	.0036	.0020		.0023	
90.000	.0038	.0044	.0043	.0050	
135.000	.0065				
315.000	.0029				

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 92.933 QI = .523 HREF = .018

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

X	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0108	.0175	.0120	.0050	
25.000	.0126	.0232			
45.000	.0038	.0038	.0019	.0022	.0019
65.000	.0041	.0030		.0034	
90.000	.0055	.0053	.0056	.0060	
135.000	.0020				
315.000	.0068				

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 92.933 QI = .523 HREF = .018

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

X	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0225	.0314	.0215	.0074	
25.000	.0277	.0401			
45.000	.0071	.0062	.0042	.0036	.0030
65.000	.0039	.0045		.0052	
90.000	.0085	.0089	.0089	.0091	
135.000	.0029				
315.000	.0154				

AEDC VA352 OH4B 02 ORB. BASE PLATE (CTKF31) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 92.933 QI = .523 HREF = .018

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0008		.0013
7.520	.0010	.0015	

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 92.933 QI = .523 HREF = .018

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0013		.0010
7.520	.0009	.0013	

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 92.933 QI = .523 HREF = .018

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0012		.0017
7.520	.0022	.0010	

AEDC VA352 OH4B O2 ORB. FUSELAGE Y=0.875 (CTKY31) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = .500
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 25.000 TI = 92.933 QI = .523 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.0891	.0744	.0616	.0565	.0462	.0468	.0354	.0280

MACH (1) = 8.000 ALPHA (2) = 30.000 TI = 92.933 QI = .523 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1053	.0887	.0766	.0693	.0560	.0540	.0431	.0378

MACH (1) = 8.000 ALPHA (3) = 35.000 TI = 92.933 QI = .523 HREF = .018

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1241	.1028	.0855	.0785	.0676	.0667	.0521	.0453

AEDC VA352 OH4B 02 ORB. FUSELAGE (CTKB32) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 93.400 QI = 1.000 HREF = .024

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.2993	.4204	.4150	.2896		.2429	.2156	.1907	.1575	.1464			.1324	.1256	.1140
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1101		.1036	.0988	.0884		.0920				.0883		.0872		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0879		.0797	.0000	.0718	.0728	.0674	.0751	.0822	.0710	.0704	.0678	.0640	.0605
11.500				.0000											

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB32)

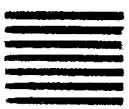
MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0000							
21.500												.0709			
23.000								.0847							
24.000				.1032											
31.500				.1162											
34.000								.0000							
35.000				.1144											
40.000				.1098				.0966							
45.000								.0946							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0599	.0604	.0589	.0624	.0619	.0586	.0578	.0544	.0502	.0511	.0493	.0455	.0434	.0389	
21.500	.0663				.0536				.0554				.0396		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												



AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB32)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0361	.0358	.0325	.0300	.0256	.0245	.0217	.0000		.0212	.0000	.0183
21.500			.0343									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 93.400 QI = 1.000 HREF = .024

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.2742	.4064	.4257	.2957		.2581	.2306	.1992	.1713	.1596			.1478	.1430	.1302
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1284		.1215	.1140	.1079		.1078				.1066		.1050		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB32)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1058		.0970	.0000	.0847	.0865	.0816	.0914	.1002	.0857	.0823	.0781	.0746	.0729
11.500				.0000											
12.000								.0000							
21.500												.0839			
23.000								.1029							
24.000				.1225											
31.500				.1357											
34.000								.0000							
35.000				.1297											
40.000				.1183				.1093							
45.000								.1050							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0705	.0649	.0697	.0656	.0702	.0681	.0675	.0660	.0613	.0614	.0596	.0548	.0552	.0492	
21.500	.0764				.0625				.0639				.0490		
63.000	.0000														
64.000									.0000				.0000		
65.000															
65.500					.0000										

AEDC VA352 OH4B 02 ORB. FUSELAGE (CTKB32)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0460	.0458	.0405	.0397	.0340	.0324	.0299	.0000		.0298	.0000	.0280
21.500			.0443									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 ALPHA (3) = 45.000 TI = 93.400 QI = 1.000 HREF = .024

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.2078	.3615	.3925	.3058		.2752	.2493	.2260	.1922	.1798			.1713	.1643	.1592
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB32)

MACH (1) = 8.000 ALPHA (3) = 45.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1516		.1459	.1395	.1291		.1329				.1312		.1283		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1290		.1175	.0000	.1075	.1085	.1021	.1156	.1231	.1050	.1023	.1000	.0983	.0924
11.500				.0000											
12.000								.0000							
21.500												.1051			
23.000								.1228							
24.000				.1427											
31.500				.1571											
34.000								.0000							
35.000				.1488											
40.000				.1321				.1246							
45.000								.1166							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB32)

MACH (1) = 8.000 ALPHA (3) = 45.000

SECTION (1)ORBITER FUSELAGE DEFENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0888	.0814	.0873	.0874	.0856	.0830	.0796	.0793	.0737	.0753	.0733	.0655	.0630	.0568	
21.500	.0972				.0780				.0798				.0596		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.550					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0569	.0571	.0549	.0557	.0495	.0476	.0468	.0000		.0481	.0000	.0477
21.500			.0575									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

AEDC VA352 OH4B O2 ORB. BOTTOM SURFACE WING (CTKL32) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 93.400 QI = 1.000 HREF = .024

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0443	.0322		.2908	.1676	.2187	.0468		.1004	.0607	.0201
.002						.2699		.1800				
.003						.3575		.1802				
.004						.4021		.1685				
.005						.3186		.1555				
.006						.3262		.1300				
.007						.2612		.1189				
.025	.0356			.1706	.3774		.3063					
.050										.1366		
.100				.1625		.1815	.1852	.2133		.1394		
.153	.1084											
.177					.1138							
.200				.1079		.1323						
.299	.0761											
.300					.1079	.1057		.1651	.1429	.1339		
.302				.0908								
.303							.1143					
.428						.1164						
.444	.0658											
.487					.0936							
.500							.0981	.1768		.1316		
.559				.0715								
.590	.0496											
.600					.0793	.0879			.1210			
.700				.0694	.0735	.0584	.0546			.0998		
.736	.0554											
.800						.0351	.0414					
.850						.0500	.0586					
.900	.0209			.0426	.0548	.0466	.0547			.1062		

AEDC VA352 OH4B O2 ORB. BOTTOM SURFACE WING (CTKL32)

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 93.400 QI = 1.000 HREF = .024

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0467	.0325		.2598	.1991	.1978	.0387		.0857	.0535	.0258
.002						.3270		.1478				
.003						.4631		.1505				
.004						.4963		.1438				
.005						.4134		.1405				
.006						.3830		.1187				
.007						.3130		.1090				
.025	.0352			.1589	.3499		.2859					
.050										.1198		
.100				.1616		.2195	.2041	.1909		.1262		
.153	.1189											
.177					.1122							
.200				.1129		.1488						
.299	.0846											
.300					.0980	.1066		.1267	.1875	.1920		
.302				.0961								
.303							.1182					
.428						.1356						
.444	.0759											
.487					.0905							
.500							.1088	.1145		.1568		
.559				.0766								
.590	.0568											
.600					.0856	.1071			.0636			
.700				.0754	.0715	.0669	.0620			.0800		
.736	.0637											
.800						.0370	.0486					
.850						.0595	.0724					
.900	.0252			.0485	.0606	.0546	.0658			.0749		

MACH (1) = 8.000 ALPHA (3) = 45.000 TI = 93.400 QI = 1.000 HREF = .024

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0471	.0310		.1928	.1444	.1695	.0263		.0667	.0437	.0250
.002						.2433		.1075				
.003						.4167		.1205				
.004						.3966		.1257				
.005						.3759		.1222				
.006						.3232		.1192				
.007						.2822		.1141				
.025	.0329			.1330	.2749		.2526					

AEDC VA352 OH4B 02 ORB. BOTTOM SURFACE WING (CTKL32)

MACH (1) = 0.000 ALPHA (3) = 45.000

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/H0

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.050										.1012		
.100				.1461		.2210	.2113	.1869		.1093		
.153	.1294											
.177					.1022							
.200				.1111		.1490						
.299	.0968											
.300					.0972	.0979		.1273	.1494	.1371		
.302				.0940								
.303							.1291					
.428						.1136						
.444	.0862											
.487					.0898							
.500							.1224	.1237		.1158		
.559				.0801								
.590	.0716											
.600					.0873	.1050			.0675			
.700				.0769	.0801	.0697	.0705			.0675		
.736	.0634											
.800						.0458	.0562					
.850						.0786	.0866					
.900	.0311			.0579	.0633	.0723	.0791			.0841		

AEDC VA352 OH4B O2 ORB. LEFT MAIN NOZZLE (CTKN32) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 93.400 QI = 1.000 HREF = .024

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

X	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0151	.0207	.0146	.0045	
25.000	.0192	.0249			
45.000	.0045	.0045	.0030	.0019	.0028
65.000	.0030	.0033		.0033	
90.000	.0077	.0083	.0071	.0061	
135.000	.0017				
315.000	.0100				

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 93.400 QI = 1.000 HREF = .024

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

X	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0297	.0356	.0287	.0091	
25.000	.0351	.0338			
45.000	.0107	.0095	.0074	.0042	.0037
65.000	.0072	.0071		.0077	
90.000	.0173	.0177	.0173	.0148	
135.000	.0022				
315.000	.0212				

MACH (1) = 8.000 ALPHA (3) = 45.000 TI = 93.400 QI = 1.000 HREF = .024

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

X	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0536	.0821	.0429	.0208	
25.000	.0857	.0775			
45.000	.0200	.0190	.0165	.0094	.0108
65.000	.0220	.0231		.0246	
90.000	.0516	.0549	.0583	.0564	
135.000	.0071				
315.000	.0442				

AEDC VA352 OH4B 02 ORB. BASE PLATE (CTKP32) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 93.400 QI = 1.000 HREF = .024

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0005		.0006
7.520	.0000	.0009	

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 93.400 QI = 1.000 HREF = .024

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0010		.0014
7.520	.0018	.0011	

MACH (1) = 8.000 ALPHA (3) = 45.000 TI = 93.400 QI = 1.000 HREF = .024

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0015		.0026
7.520	.0017	.0017	

AEDC VA352 OH4B O2 ORB. FUSELAGE Y=0.875 (CTKY32) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 93.400 QI = 1.000 HREF = .024

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1032	.0847	.0700	.0663	.0536	.0554	.0396	.0343

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 93.400 QI = 1.000 HREF = .024

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1225	.1029	.0839	.0764	.0625	.0639	.0490	.0443

MACH (1) = 8.000 ALPHA (3) = 45.000 TI = 93.400 QI = 1.000 HREF = .024

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1427	.1228	.1051	.0972	.0780	.0798	.0596	.0575

AEDC VA352 OH4B 02 ORB. FUSELAGE (CTKB33) (15 JAN 75)

REFERENCE DATA

SREF = .8230 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.250
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.250 QI = 1.253 HREF = .027

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.3018	.4215	.4260	.2881		.2437	.2172	.1856	.1539	.1424			.1316	.1239	.1171
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1112		.1023	.0970	.0892		.0904				.0882		.0871		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0874		.0800	.0000	.0714	.0707	.0671	.0744	.0833	.0698	.0669	.0656	.0635	.0617
11.500				.0000											

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB33)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0000							
21.500												.0725			
23.000								.0858							
24.000				.1016											
31.500				.1173											
34.000								.0000							
35.000				.1144											
40.000				.1095				.0976							
45.000								.0950							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0523	.0590	.0594	.0576	.0592	.0574	.0564	.0539	.0509	.0510	.0502	.0470	.0443	.0400	
21.500	.0650				.0517				.0544				.0400		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500

PHI

AEDC VA352 OH4B 02 ORB. FUSELAGE (CTKB33)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0384	.0373	.0346	.0336	.0281	.0276	.0255	.0000		.0247	.0000	.0237
21.500			.0361									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.250 QI = 1.253 HREF = .027

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.2701	.4055	.4143	.2977		.2544	.2276	.1995	.1722	.1578			.1461	.1388	.1321
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1288		.1209	.1130	.1048		.1053				.1045		.1015		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB33)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1760	.1800	.1810	.1820
PHI															
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1050		.0957	.0000	.0842	.0852	.0806	.0913	.0998	.0856	.0804	.0802	.0755	.0711
11.500				.0000											
12.000								.0000							
21.500												.0828			
23.000								.1009							
24.000				.1185											
31.500				.1353											
34.000								.0000							
35.000				.1275											
40.000				.1185				.1068							
45.000								.1011							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0704	.0710	.0694	.0710	.0698	.0689	.0683	.0660	.0602	.0612	.0597	.0559	.0558	.0515	
21.500	.0751				.0608				.0642				.0495		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										

AEDC VA352 OH4B 02 ORB. FUSELAGE (CTKB33)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0497	.0484	.0452	.0438	.0398	.0384	.0372	.0000		.0410	.0000	.0395
21.500			.0456									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

AEDC VA352 OH4B O2 ORB. BOTTOM SURFACE WING (CTKL33) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.250
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.250 QI = 1.253 HREF = .027

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0461	.0323		.2957	.1673	.2180	.0461		.1015	.0604	.0216
.002						.2683		.1812				
.003						.3497		.1819				
.004						.3553		.1701				
.005						.3209		.1574				
.006						.3263		.1338				
.007						.2634		.1211				
.025	.0350			.1717	.3809		.2959					
.050										.1375		
.100				.1565		.1834	.1769	.2146		.1415		
.153	.1094											
.177					.1113							
.200				.1076		.1313						
.299	.0772											
.300					.1086	.1070		.2374	.1542	.1354		
.302				.0901								
.303							.1147					
.428						.1177						
.444	.0647											
.487					.0910							
.500							.0969	.2299		.1475		
.559				.0725								
.590	.0485											
.600					.0807	.0864			.1311			
.700				.0693	.0717	.0567	.0559			.1086		
.736	.0554											
.800						.0328	.0410					
.859						.0506	.0605					
.900	.0208			.0426	.0558	.0470	.0542			.1139		

AEDC VA352 OH4B O2 ORB. BOTTOM SURFACE WING (CTKL33)

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.250 QI = 1.253 HREF = .027

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

ŋY/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0452	.0323		.2686	.2002	.1920	.0382		.0860	.0592	.0289
.002						.3205		.1460				
.003						.4574		.1496				
.004						.4640		.1416				
.005						.4132		.1341				
.006						.3766		.1179				
.007						.3154		.1106				
.025	.0348			.1566	.3439		.2727					
.050										.1256		
.100				.1612		.2143	.2008	.1929		.1344		
.153	.1151											
.177					.1102							
.200				.1107		.1512						
.299	.0844											
.300					.1015	.1071		.1310	.2533	.2344		
.302				.0937								
.303							.1189					
.428						.1369						
.444	.0701											
.487					.0907							
.500							.1104	.1127		.1909		
.559				.0701								
.590	.0561											
.600					.0839	.1056			.0667			
.700				.0735	.0699	.0651	.0616			.0935		
.736	.0656											
.800						.0356	.0470					
.850						.0580	.0705					
.900	.0281			.0488	.0589	.0540	.0650			.0790		

AEDC VA352 OH4B O2 ORB. LEFT MAIN NOZZLE (CTKN33) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.250
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.250 QI = 1.253 HREF = .027

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

X	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0187	.0248	.0174	.0061	
25.000	.0236	.0279			
45.000	.0063	.0062	.0045	.0030	.0038
65.000	.0043	.0045		.0046	
90.000	.0096	.0096	.0089	.0077	
135.000	.0019				
315.000	.0131				

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.250 QI = 1.253 HREF = .027

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

X	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0328	.0404	.0336	.0104	
25.000	.0392	.0375			
45.000	.0126	.0109	.0078	.0051	.0049
65.000	.0087	.0097		.0110	
90.000	.0228	.0226	.0221	.0196	
135.000	.0023				
315.000	.0225				

AEDC VA352 OH4B O2 ORB. BASE PLATE (CTKP33) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.250
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.250 QI = 1.253 HREF = .027

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/H0

Y	.0000	1.2250	1.9250
Z			
5.600	.0005		.0007
7.520	.0004	.0004	

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.250 QI = 1.253 HREF = .027

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/H0

Y	.0000	1.2250	1.9250
Z			
5.600	.0007		.0014
7.520	.0019	.0011	

AEDC VA352 OH4B 02 ORB. FUSELAGE Y=0.875 (CTKY33) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.250
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.250 QI = 1.253 HREF = .027

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1016	.0858	.0725	.0650	.0517	.0544	.0400	.0361

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.250 QI = 1.253 HREF = .027

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1185	.1009	.0828	.0751	.0608	.0642	.0495	.0456

AEDC VA352 OH4B 02 ORB. FUSELAGE (CTKB34) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.500
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.900 QI = 1.534 HREF = .030

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.3007	.4180	.4248	.2899		.2396	.2118	.1825	.1550	.1416			.1324	.1258	.1155
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1118		.1032	.0961	.0893		.0884				.0868		.0856		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0873		.0800	.0000	.0713	.0722	.0665	.0752	.0800	.0695	.0696	.0674	.0621	.0597
11.500				.0000											

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTK834)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0000							
21.500												.0722			
23.000								.0871							
24.000				.1048											
31.900				.1191											
34.000								.0000							
35.000				.1145											
40.000				.1085				.0980							
45.000								.0927							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0586	.0583	.0577	.0644	.0586	.0575	.0564	.0544	.0513	.0514	.0509	.0477	.0472	.0433	
21.500	.0642				.0520				.0548				.0412		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500

PHI

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB34)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0422	.0417	.0391	.0375	.0340	.0347	.0335	.0000		.0343	.0000	.0337
21.500			.0407									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.900 Q1 = 1.534 HREF = .030

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.2689	.4040	.4155	.2968		.2568	.2262	.2019	.1717	.1576			.1464	.1415	.1340
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1293		.1212	.1136	.1041		.1067				.1047		.1045		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB34)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1052		.0971	.0000	.0857	.0890	.0830	.0931	.0981	.0859	.0828	.0802	.0737	.0712
11.500				.0000											
12.000								.0000							
21.500												.0835			
23.000								.1001							
24.000				.1247											
31.500				.1335											
34.000								.0000							
35.000				.1296											
40.000				.1194				.1057							
45.000								.1006							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0710	.0697	.0698	.0701	.0697	.0678	.0689	.0670	.0634	.0653	.0633	.0605	.0636	.0596	
21.500	.0740				.0604				.0663				.0537		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB34)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEFENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0611	.0610	.0598	.0604	.0538	.0592	.0580	.0000		.0600	.0000	.0592
21.500			.0585									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

AEDC VA352 OH4B O2 ORB. BOTTOM SURFACE WING (CTKL34) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.500
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.900 QI = 1.534 HREF = .030

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0434	.0316		.2940	.1652	.2097	.0466		.0982	.0602	.0078
.002						.2688		.1811				
.003						.3521		.1773				
.004						.3912		.1672				
.005						.3135		.1565				
.006						.3238		.1381				
.007						.2678		.1252				
.025	.0361			.1689	.3809		.2970					
.050										.1341		
.100				.1588		.1833	.1863	.2176		.1404		
.153	.1088											
.177					.1083							
.200				.1074		.1325						
.299	.0745											
.300					.1067	.1087		.2847	.1657	.1444		
.302				.0908								
.303							.1174					
.428						.1167						
.444	.0624											
.487					.0928							
.500							.0972	.2746		.1625		
.559				.0718								
.590	.0483											
.600					.0811	.0855			.1394			
.700				.0705	.0725	.0560	.0551			.1143		
.736	.0553											
.800						.0319	.0393					
.850						.0497	.0603					
.900	.0239			.0427	.0575	.0463	.0540			.1215		

AEDC VA352 OH4B O2 ORB. BOTTOM SURFACE WING (CTKL34)

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.900 QI = 1.534 HREF = .030

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0436	.0322		.2693	.1975	.1898	.0373		.0910	.0672	.0498
.002						.3251		.1457				
.003						.4586		.1546				
.004						.4664		.1455				
.005						.4077		.1418				
.006						.3840		.1233				
.007						.3138		.1190				
.025	.0347			.1575	.3461		.2725					
.050										.1346		
.100				.1591		.2184	.1989	.2150		.1491		
.153	.1129											
.177					.1094							
.200				.1109		.1500						
.299	.0837											
.300					.1025	.1141		.1479	.3177	.2596		
.302				.0949								
.303							.1178					
.428						.1356						
.444	.0706											
.487					.0901							
.500							.1107	.1130		.2231		
.559				.0769								
.590	.0557											
.600					.0843	.1064			.0737			
.700				.0772	.0716	.0656	.0625			.1227		
.736	.0734											
.800						.0355	.0459					
.850						.0590	.0713					
.900	.0317			.0520	.0639	.0548	.0675			.0908		

AEDC VA352 OH4B 02 ORB. LEFT MAIN NOZZLE (CTKN34) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.500
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.900 QI = 1.534 HREF = .030

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

x	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0220	.0282	.0201	.0069	
25.000	.0257	.0339			
45.000	.0069	.0066	.0055	.0033	.0041
65.000	.0066	.0066		.0061	
90.000	.0137	.0131	.0118	.0097	
135.000	.0023				
315.000	.0150				

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.900 QI = 1.534 HREF = .030

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

x	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0389	.0494	.0388	.0122	
25.000	.0456	.0524			
45.000	.0151	.0133	.0098	.0063	.0063
65.000	.0156	.0149		.0165	
90.000	.0305	.0292	.0275	.0252	
135.000	.0027				
315.000	.0263				

AEDC VA352 OH4B O2 ORB. BASE PLATE (CTKF34) (15 JAN 75)

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	.000	RN/L =	1.500
B.FLAP =	.000	ELEVON =	.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.900 QI = 1.534 HREF = .030

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0005		.0008
7.520	.0012	.0004	

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.900 QI = 1.534 HREF = .030

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0006		.0012
7.520	.0016	.0012	

AEDC VA352 OH4B O2 ORB. FUSELAGE Y=0.875 (CTKY34) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.500
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.900 QI = 1.534 HREF = .030

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1048	.0871	.0722	.0642	.0520	.0548	.0412	.0407

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.900 QI = 1.534 HREF = .030

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1247	.1001	.0835	.0740	.0604	.0663	.0537	.0585

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB35) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.750
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.200 QI = 1.797 HREF = .033

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.3055	.4146	.3850	.2873		.2396	.2103	.1823	.1550	.1415			.1302	.1187	.1194
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1089		.1031	.0967	.0886		.0847				.0876		.0857		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000		.								
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0896		.0809	.0000	.0715	.0727	.0668	.0742	.0791	.0692	.0681	.0664	.0617	.0592
11.500				.0000											

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB35)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0000							
21.500												.0713			
23.000								.0875							
24.000				.1014											
31.500				.1135											
34.000								.0000							
35.000				.1112											
40.000				.1087				.0965							
45.000								.0908							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0578	.0573	.0580	.0608	.0586	.0570	.0577	.0551	.0521	.0540	.0544	.0510	.0522	.0512	
21.500	.0638				.0533				.0557				.0470		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500

PHI

AEDC VA352 OH4B 02 ORB. FUSELAGE (CTKB35)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEFENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0519	.0534	.0510	.0523	.0466	.0500	.0511	.0000		.0534	.0000	.0543
21.500			.0518									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.200 QI = 1.797 HREF = .033

SECTION (1)ORBITER FUSELAGE DEFENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.2679	.3998	.3982	.2991		.2560	.2274	.2002	.1697	.1563			.1461	.1383	.1275
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1257		.1186	.1119	.1057		.1058				.1042		.1034		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTK835)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1034		.0962	.0000	.0856	.0857	.0805	.0907	.1000	.0853	.0816	.0800	.0750	.0711
11.500				.0000											
12.000								.0000							
21.500												.0838			
23.000								.1000							
24.000				.1176											
31.500				.1325											
34.000								.0000							
35.000				.1263											
40.000				.1185				.1048							
45.000								.0999							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0696	.0685	.0694	.0680	.0694	.0703	.0701	.0695	.0651	.0684	.0687	.0666	.0737	.0743	
21.500	.0742				.0609				.0708				.0676		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB35)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0762	.0775	.0768	.0781	.0735	.0776	.0845	.0000		.0867	.0000	.0889
21.500			.0802									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

AEDC VA352 OH4B O2 ORB. BOTTOM SURFACE WING (CTKL35) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.750
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.200 QI = 1.797 HREF = .033

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0428	.0313		.2907	.1625	.2114	.0478		.0788	.0587	.0418
.002						.2642		.1816				
.003						.3540		.1805				
.004						.3794		.1699				
.005						.3169		.1592				
.006						.3271		.1427				
.007						.2655		.1332				
.025	.0358			.1673	.3711		.2897					
.050										.1194		
.100				.1588		.1850	.2024	.2176		.1354		
.153	.1075											
.177					.1086							
.200				.1083		.1331						
.299	.0746											
.300					.1035	.1112		.3078	.1824	.1464		
.302				.0889								
.303							.1178					
.428						.1173						
.444	.0618											
.487					.0924							
.500							.0984	.3117		.1813		
.559				.0709								
.590	.0474											
.600					.0804	.0854			.1476			
.700				.0717	.0757	.0556	.0553			.1196		
.736	.0607											
.800						.0300	.0390					
.850						.0500	.0603					
.900	.0294			.0456	.0606	.0461	.0538			.1272		

AEDC VA352 OH4B O2 ORB. BOTTOM SURFACE WING (CTKL35)

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.200 QI = 1.797 HREF = .033

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0418	.0319		.2602	.1954	.1854	.0383		.0958	.0684	.0517
.002						.3185		.1479				
.003						.4585		.1563				
.004						.4633		.1473				
.005						.4134		.1497				
.006						.3817		.1324				
.007						.3139		.1353				
.025	.0358			.1562	.3484		.2713					
.050										.1448		
.100				.1621		.2128	.1995	.2435		.1660		
.153	.1114											
.177					.1080							
.200				.1088		.1491						
.299	.0846											
.300					.1013	.1115		.1699	.3551	.2685		
.302				.0945								
.303							.1162					
.428						.1362						
.444	.0758											
.487					.0911							
.500							.1100	.1136		.2410		
.559				.0771								
.590	.0592											
.600					.0852	.1052			.0804			
.700				.0813	.0741	.0657	.0620			.1488		
.736	.0812											
.800						.0348	.0456					
.850						.0592	.0715					
.900	.0422			.0578	.0644	.0553	.0673			.1044		

AEDC VA352 OH4B O2 ORB. LEFT MAIN NOZZLE (CTKN35) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.750
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.200 QI = 1.797 HREF = .033

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

x	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0245	.0345	.0241	.0072	
25.000	.0310	.0440			
45.000	.0083	.0078	.0064	.0044	.0055
65.000	.0102	.0100		.0084	
90.000	.0176	.0158	.0150	.0134	
135.000	.0027				
315.000	.0168				

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.200 QI = 1.797 HREF = .033

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

x	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0477	.0641	.0469	.0128	
25.000	.0576	.0725			
45.000	.0206	.0168	.0114	.0077	.0088
65.000	.0235	.0234		.0245	
90.000	.0344	.0332	.0319	.0308	
135.000	.0029				
315.000	.0334				

AEDC VA352 OH4B 02 ORB. BASE PLATE (CTKF35) (15 JAN 75)

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	.000	RN/L =	1.750
B.FLAP =	.000	ELEVON =	.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.200 QI = 1.797 HREF = .033

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0005		.0007
7.520	.0013	.0007	

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.200 QI = 1.797 HREF = .033

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0008		.0021
7.520	.0015	.0009	

AEDC VA352 OH4B O2 ORB. FUSELAGE Y=0.875 (CTKY35) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 1.750
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.200 QI = 1.797 HREF = .033

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1014	.0875	.0713	.0638	.0533	.0557	.0470	.0518

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.200 QI = 1.797 HREF = .033

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1176	.1000	.0838	.0742	.0609	.0708	.0676	.0802

AEDC VA352 OH4B 02 ORB. FUSELAGE (CTKB36) (15 JAN 75)

REFERENCE DATA

$SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
S.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.967 PI = 1.984 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.3018	.4148	.4229	.2868		.2414	.2128	.1841	.1565	.1428			.1309	.1233	.1096
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1061		.1027	.0957	.0879		.0885				.0868		.0862		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0861		.0793	.0000	.0717	.0730	.0686	.0745	.0795	.0706	.0694	.0660	.0635	.0592
11.500				.0000											

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB36)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0000							
21.500												.0734			
23.000								.0891							
24.000				.1048											
31.500				.1164											
34.000								.0000							
35.000				.1131											
40.000				.1094				.0958							
45.000								.0906							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0597	.0588	.0579	.0634	.0589	.0584	.0595	.0578	.0549	.0580	.0570	.0545	.0589	.0590	
21.500	.0651				.0533				.0575				.0535		
63.000	.0000														
64.000									.0000						
65.000													.0000		
85.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500

PHI

AEDC VA352 CH4B O2 ORB. FUSELAGE (CTKB36)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0615	.0647	.0645	.0663	.0630	.0676	.0704	.0000		.0734	.0000	.0746
21.500			.0645									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.967 QI = 1.984 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.2664	.4009	.4062	.2996		.2550	.2265	.1976	.1707	.1578			.1478	.1432	.1285
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1289		.1224	.1106	.1043		.1066				.1046		.1038		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB36)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1048		.0972	.0000	.0852	.0856	.0803	.0921	.1016	.0853	.0833	.0812	.0766	.0723
11.500				.0000											
12.000								.0000							
21.500												.0847			
23.000								.0997							
24.000				.1224											
31.500				.1333											
34.000								.0000							
35.000				.1273											
40.000				.1205				.1060							
45.000								.1018							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0705	.0724	.0704	.0701	.0730	.0730	.0738	.0740	.0724	.0763	.0808	.0766	.0922	.0992	
21.500	.0755				.0626				.0753				.0867		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										

AEDC VA352 OH4B 02 ORB. FUSELAGE (CTKB36)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.1033	.1062	.1068	.1113	.1035	.1126	.1176	.0000		.1184	.0000	.1218
21.500			.1080									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 ALPHA (3) = 45.000 TI = 94.967 QI = 1.984 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.2042	.3589	.3995	.3070		.2714	.2503	.2250	.1918	.1792			.1712	.1550	.1601
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB36)

MACH (1) = 8.000 ALPHA (3) = 45.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1503		.1445	.1383	.1297		.1309				.1308		.1290		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1291		.1169	.0000	.1097	.1081	.1022	.1122	.1212	.1051	.1005	.0997	.0959	.0931
11.500				.0000											
12.000								.0000							
21.500												.1062			
23.000								.1231							
24.000				.1424											
31.500				.1574											
34.000								.0000							
35.000				.1493											
40.000				.1340				.1237							
45.000								.1143							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB36)

MACH (1) = 8.000 ALPHA (3) = 45.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0920	.0848	.0887	.0912	.0864	.0876	.0867	.0847	.0800	.0834	.0841	.0795	.0828	.0852	
21.500	.0948				.0770				.0860				.0797		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0930	.1000	.1024	.1141	.1101	.1231	.1324	.0000		.1388	.0000	.1465
21.500			.1044									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

AEDC VA352 OH4B O2 ORB. BOTTOM SURFACE WING (CTKL36) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.967 QI = 1.984 HREF = .035

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0430	.0317		.2939	.1597	.2204	.0489		.1006	.0601	.0296
.002						.2656		.1838				
.003						.3548		.1801				
.004						.3920		.1736				
.005						.3162		.1605				
.006						.3279		.1476				
.007						.2661		.1355				
.025	.0383			.1697	.3731		.3127					
.050										.1340		
.100				.1596		.1837	.2207	.2242		.1398		
.153	.1096											
.177					.1097							
.200				.1071		.1348						
.299	.0752											
.300					.1060	.1111		.3321	.1940	.1575		
.302				.0915								
.303							.1167					
.428						.1167						
.444	.0668											
.487					.0940							
.500							.0977	.3406		.1908		
.559				.0734								
.590	.0482											
.600					.0838	.0852			.1527			
.700				.0770	.0789	.0557	.0553			.1287		
.736	.0661											
.800						.0316	.0397					
.850						.0513	.0622					
.900	.0372			.0506	.0661	.0470	.0555			.1362		

AEDC VA352 CH48 02 ORB. BOTTOM SURFACE WING (CTKL36)

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.967 QI = 1.984 HREF = .035

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0448	.0324		.2585	.1959	.1870	.0393		.0993	.0732	.0298
.002						.3217		.1515				
.003						.4562		.1609				
.004						.4699		.1558				
.005						.4183		.1628				
.006						.3850		.1430				
.007						.3179		.1488				
.025	.0380			.1529	.3436		.2688					
.050										.1556		
.100				.1612		.2129	.2052	.2699		.1702		
.153	.1117											
.177					.1082							
.200				.1094		.1510						
.299	.0858											
.300					.1007	.1094		.1845	.3785	.2771		
.302				.0946								
.303							.1129					
.428						.1392						
.444	.0739											
.487					.0931							
.500							.1103	.1153		.2495		
.559				.0841								
.590	.0612											
.600					.0888	.1060			.0884			
.700				.0882	.0773	.0658	.0650			.1634		
.736	.0932											
.800						.0348	.0460					
.850						.0607	.0745					
.900	.0544			.0654	.0661	.0584	.0688			.1244		

MACH (1) = 8.000 ALPHA (3) = 45.000 TI = 94.967 QI = 1.984 HREF = .035

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0457	.0315		.1804	.1460	.1703	.0284		.0695	.0464	.0160
.002						.2417		.1076				
.003						.4126		.1145				
.004						.3805		.1232				
.005						.3652		.1182				
.006						.3204		.1152				
.007						.2821		.1095				
.025	.0346			.1271	.2551		.2507					

AEDC VA352 OH4B O2 ORB. BOTTOM SURFACE WING (CTKL36)

MACH (1) = 8.000 ALPHA (3) = 45.000

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

%Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.050										.1032		
.100				.1476		.2167	.2014	.1758		.1128		
.153	.1259											
.177					.0910							
.200				.1140		.1488						
.299	.0935											
.300					.0996	.1047		.1242	.1472	.1335		
.302				.0986								
.303							.1290					
.428						.1134						
.444	.0789											
.487					.0986							
.500							.1230	.1270		.1110		
.559				.1012								
.590	.0745											
.600					.0999	.1143			.0681			
.700				.1087	.1049	.0763	.0742			.0721		
.736	.1107											
.800						.0526	.0591					
.850						.0933	.0976					
.900	.0677			.1070	.0897	.0898	.0888			.0975		

AEDC VA352 OH4B O2 ORB. LEFT MAIN NOZZLE (CTKN36) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.967 QI = 1.984 HREF = .035

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

X	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0275	.0418	.0276	.0085	
25.000	.0349	.0547			
45.000	.0097	.0090	.0071	.0057	.0074
65.000	.0126	.0131		.0110	
90.000	.0203	.0177	.0165	.0152	
135.000	.0027				
315.000	.0190				

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.967 QI = 1.984 HREF = .035

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

X	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0562	.0775	.0561	.0162	
25.000	.0687	.0874			
45.000	.0210	.0186	.0143	.0098	.0126
65.000	.0324	.0309		.0313	
90.000	.0391	.0367	.0364	.0363	
135.000	.0029				
315.000	.0411				

MACH (1) = 8.000 ALPHA (3) = 45.000 TI = 94.967 QI = 1.984 HREF = .035

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

X	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0908	.1268	.1223	.0476	
25.000	.0831	.1072			
45.000	.0431	.0386	.0302	.0191	.0254
65.000	.0709	.0608		.0672	
90.000	.0741	.0717	.0815	.1033	
135.000	.0080				
315.000	.0674				

AEDC VA352 OH4B 02 ORB. BASE PLATE (CTKP36) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.967 QI = 1.984 HREF = .035

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0006		.0008
7.520	.0014	.0007	

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.967 QI = 1.984 HREF = .035

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0010		.0018
7.520	.0016	.0010	

MACH (1) = 8.000 ALPHA (3) = 45.000 TI = 94.967 QI = 1.984 HREF = .035

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0055		.0070
7.520	.0031	.0022	

AEDC VA352 OH4B O2 ORB. FUSELAGE Y=0.875 (CTKY36) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 94.967 QI = 1.984 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1048	.0891	.0734	.0651	.0533	.0575	.0535	.0645

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 94.967 QI = 1.984 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1224	.0997	.0847	.0755	.0626	.0753	.0867	.1080

MACH (1) = 8.000 ALPHA (3) = 45.000 TI = 94.967 QI = 1.984 HREF = .035

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1424	.1231	.1062	.0948	.0770	.0860	.0797	.1044

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB37) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.250
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.200 QI = 2.341 HREF = .038

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.2973	.4154	.4154	.2860		.2420	.2097	.1792	.1534	.1414			.1296	.1253	.1115
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1120		.1038	.0962	.0872		.0871				.0865		.0847		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0852		.0797	.0000	.0722	.0718	.0676	.0754	.0783	.0705	.0679	.0664	.0636	.0607
11.500				.0000											

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB37)

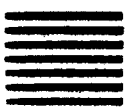
MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0000							
21.500												.0733			
23.000								.0887							
24.000				.1014											
31.500				.1149											
34.000								.0000							
35.000				.1111											
40.000				.1089				.0930							
45.000								.0897							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0590	.0602	.0587	.0600	.0612	.0612	.0620	.0619	.0606	.0669	.0713	.0716	.0826	.0880	
21.500	.0651				.0540				.0638				.0733		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												



AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB37)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.0943	.0984	.0994	.1071	.0937	.1019	.1067	.0000		.1087	.0000	.1100
21.500			.0995									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.200 QI = 2.341 HREF = .038

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.2678	.4002	.4112	.2972		.2533	.2265	.1966	.1711	.1568			.1483	.1420	.1328
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1271		.1196	.1110	.1047		.1058				.1037		.1045		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB37)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HO/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1062		.0967	.0000	.0858	.0853	.0789	.0907	.1002	.0856	.0834	.0816	.0761	.0722
11.500				.0000											
12.000								.0000							
21.500												.0835			
23.000								.1008							
24.000				.1213											
31.500				.1331											
34.000								.0000							
35.000				.1270											
40.000				.1195				.1063							
45.000								.1030							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0714	.0714	.0740	.0764	.0770	.0787	.0823	.0862	.0883	.0974	.1050	.1063	.1301	.1438	
21.500	.0756				.0664				.0948				.1314		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB37)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.1499	.1507	.1502	.1550	.1391	.1493	.1542	.0000		.1511	.0000	.1520
21.500			.1568									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

AEDC VA352 OH4B O2 ORB. BOTTOM SURFACE WING (CTKL37) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.250
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.200 QI = 2.341 HREF = .038

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0420	.0315		.2931	.1633	.2206	.0504		.0983	.0612	.0167
.002						.2632		.1826				
.003						.3542		.1809				
.004						.3838		.1735				
.005						.3201		.1638				
.006						.3291		.1543				
.007						.2637		.1461				
.025	.0352			.1651	.3733		.3295					
.050										.1345		
.100				.1615		.1754	.2645	.2274		.1413		
.153	.1057											
.177					.1083							
.200				.1075		.1360						
.299	.0740											
.300					.1091	.1154		.3487	.2252	.1727		
.302				.0891								
.303							.1192					
.428						.1187						
.444	.0625											
.487					.0960							
.500							.1007	.3648		.1986		
.559				.0788								
.590	.0513											
.600					.0924	.0881			.1600			
.700				.0856	.0972	.0583	.0578			.1381		
.736	.0808											
.800						.0326	.0389					
.850						.0555	.0629					
.900	.0541			.0629	.0841	.0519	.0563			.1460		

AEDC VA352 OH4B O2 ORB. BOTTOM SURFACE WING (CTKL37)

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.200 BI = 2.341 HREF = .038

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0419	.0328		.2591	.1980	.1830	.0402		.1075	.0749	.0332
.002						.3230		.1576				
.003						.4589		.1740				
.004						.4744		.1717				
.005						.4191		.1847				
.006						.3845		.1674				
.007						.3132		.1780				
.025	.0348			.1533	.3421		.2682					
.050										.1655		
.100				.1596		.2134	.2102	.3189		.1834		
.153	.1104											
.177					.1062							
.200				.1122		.1551						
.299	.0849											
.300					.1047	.1172		.2021	.4068	.2890		
.302				.0994								
.303							.1154					
.428						.1391						
.444	.0735											
.487					.0999							
.500							.1123	.1196		.2658		
.559				.1010								
.590	.0717											
.600					.0973	.1140			.1004			
.700				.1081	.0898	.0720	.0662			.1836		
.736	.1308											
.800						.0400	.0486					
.850						.0688	.0777					
.900	.0785			.0885	.0794	.0651	.0693			.1372		

AEDC VA352 OH4B 02 ORB. LEFT MAIN NOZZLE (CTKN37) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.250
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.200 QI = 2.341 HREF = .038

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

x	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0336	.0531	.0340	.0100	
25.000	.0413	.0707			
45.000	.0114	.0108	.0095	.0078	.0127
65.000	.0232	.0214		.0219	
90.000	.0238	.0220	.0216	.0201	
135.000	.0030				
315.000	.0244				

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.200 QI = 2.341 HREF = .038

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

x	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0661	.0910	.0665	.0188	
25.000	.0745	.0943			
45.000	.0242	.0209	.0162	.0116	.0209
65.000	.0450	.0405		.0425	
90.000	.0443	.0436	.0444	.0445	
135.000	.0030				
315.000	.0509				

AEDC VA352 OH4B O2 ORB. BASE PLATE (CTKF37) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.250
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.200 QI = 2.341 HREF = .038

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0005		.0008
7.520	.0011	.0007	

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.200 QI = 2.341 HREF = .038

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0018		.0023
7.520	.0017	.0011	

AEDC VA352 OH4B O2 ORB. FUSELAGE Y=0.875 (CTKY37) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.250
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.200 QI = 2.341 HREF = .038

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1014	.0887	.0733	.0651	.0540	.0638	.0733	.0995

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.200 QI = 2.341 HREF = .038

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1213	.1008	.0835	.0756	.0664	.0948	.1314	.1568

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB38) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.500
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALFHA (1) = 30.000 TI = 95.550 QI = 2.536 HREF = .039

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.3037	.4189	.4222	.2895		.2415	.2135	.1795	.1560	.1427			.1333	.1265	.1131
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1129		.1048	.0964	.0876		.0893				.0869		.0867		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0859		.0795	.0000	.0737	.0730	.0685	.0770	.0819	.0727	.0712	.0690	.0653	.0606
11.500				.0000											

AEDC VA352 OH48 O2 ORB. FUSELAGE (CTKB38)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0000							
21.500												.0744			
23.000								.0919							
24.000				.1015											
31.500				.1172											
34.000								.0000							
35.000				.1119											
40.000				.1117				.0954							
45.000								.0898							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000															
106.000												.0000			
135.000								.0000							
140.000				.0000				.0000				.0000			
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0610	.0617	.0604	.0624	.0628	.0630	.0657	.0664	.0650	.0723	.0758	.0783	.0930	.1013	
21.500	.0666				.0570				.0701				.0859		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500

PH:

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB38)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.1113	.1147	.1132	.1212	.1073	.1160	.1189	.0000		.1228	.0000	.1229
21.500			.1132									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.550 QI = 2.536 HREF = .039

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.2689	.4028	.4269	.3007		.2542	.2283	.1999	.1706	.1572			.1480	.1399	.1324
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1258		.1193	.1119	.1034		.1050				.1040		.1022		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200															

AEDC VA352 OH4B 02 ORB. FUSELAGE (CTKB38)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI														.0000	
156.000															.0000
159.200												.0000			
170.700										.0000					
171.900						.0000									
173.400											.0000		.0000		
180.000		.0000			.0000		.0000								

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1043		.0973	.0000	.0865	.0868	.0804	.0882	.0994	.0879	.0853	.0821	.0779	.0727
11.500				.0000											
12.000								.0000							
21.500												.0861			
23.000								.0999							
24.000				.1185											
31.500				.1339											
34.000								.0000							
35.000				.1269											
40.000				.1194				.1060							
45.000								.1033							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0743	.0743	.0764	.0823	.0813	.0862	.0922	.1004	.1058	.1165	.1304	.1362	.1637	.1779	
21.500	.0788				.0693				.1110				.1550		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB38)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.1796	.1794	.1775	.1787	.1605	.1692	.1691	.0000		.1642	.0000	.1611
21.500			.1768									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

AEDC VA352 OH4B O2 ORB. BOTTOM SURFACE WING (CTKL38) (15 JAN 75)

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	.000	RN/L =	2.500
B.FLAP =	.000	ELEVON =	.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.550 PI = 2.536 HREF = .039

SECTION (1) BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0410	.0320		.2909	.1642	.2269	.0503		.0996	.0601	.0306
.002						.2654		.1822				
.003						.3533		.1829				
.004						.3752		.1781				
.005						.3185		.1666				
.006						.3272		.1579				
.007						.2647		.1510				
.025	.0353			.1617	.3766		.3404					
.050										.1348		
.100				.1583		.1742	.2858	.2334		.1393		
.153	.1039											
.177					.1053							
.200				.1064		.1348						
.299	.0760											
.300					.1070	.1183		.3688	.2432	.1858		
.302				.0899								
.303							.1173					
.428						.1192						
.444	.0556											
.487					.0971							
.500							.0995	.3872		.2054		
.559				.0829								
.590	.0524											
.600					.0963	.0884			.1614			
.700				.0907	.1146	.0609	.0578			.1464		
.736	.0936											
.800						.0366	.0461					
.850						.0587	.0698					
.900	.0620			.0698	.1000	.0549	.0668			.1509		

AEDC VA352 OH4B O2 ORB. BOTTOM SURFACE WING (CTKL38)

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.550 QI = 2.536 HREF = .039

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0419	.0326		.2607	.1967	.1803	.0417		.1119	.0766	.0517
.002						.3232		.1654				
.003						.4657		.1854				
.004						.4717		.1836				
.005						.4179		.2024				
.006						.3776		.1871				
.007						.3170		.1975				
.025	.0348			.1520	.3378		.2690					
.050										.1713		
.100				.1567		.2137	.1976	.3457		.1920		
.153	.1103											
.177					.1086							
.200				.1136		.1567						
.299	.0830											
.300					.1070	.1196		.2208	.4187	.2939		
.302				.1017								
.303							.1189					
.428						.1481						
.444	.0752											
.487					.1089							
.500							.1166	.1248		.2740		
.559				.1152								
.590	.0838											
.600					.1097	.1221			.1091			
.700				.1263	.1068	.0805	.0678			.1989		
.736	.1676											
.800						.0485	.0523					
.850						.0813	.0818					
.900	.1022			.1102	.0932	.0792	.0738			.1540		

AEDC VA352 OH4B O2 ORB. LEFT MAIN NOZZLE (CTKN38) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.500
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.550 QI = 2.536 HREF = .039

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

x	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0353	.0579	.0360	.0098	
25.000	.0447	.0741			
45.000	.0129	.0117	.0095	.0094	.0143
65.000	.0256	.0238		.0260	
90.000	.0260	.0239	.0234	.0226	
135.000	.0035				
315.000	.0263				

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.550 QI = 2.536 HREF = .039

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

x	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0671	.0922	.0739	.0210	
25.000	.0736	.0908			
45.000	.0255	.0225	.0182	.0120	.0267
65.000	.0409	.0442		.0475	
90.000	.0453	.0454	.0480	.0481	
135.000	.0031				
315.000	.0548				

AEDC VA352 OH4B 02 ORB. BASE PLATE (CTKF38) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.500
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.550 QI = 2.536 HREF = .039

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0007		.0011
7.520	.0013	.0008	

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.550 QI = 2.536 HREF = .039

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0024		.0029
7.520	.0017	.0010	

AEDC VA352 OH4B 02 ORB. FUSELAGE Y=0.875 (CTKY38) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

SETA = .000 RN/L = 2.500
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 95.550 QI = 2.536 HREF = .039

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1015	.0919	.0744	.0666	.0579	.0701	.0859	.1132

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 95.550 QI = 2.536 HREF = .039

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1185	.0999	.0861	.0788	.0693	.1110	.1550	.1768

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB39) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.750
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 96.100 QI = 2.816 HREF = .041

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.2991	.4158	.4322	.2886		.2420	.2130	.1858	.1554	.1419			.1313	.1249	.1171
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1126		.1042	.0974	.0880		.0888				.0855		.0869		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
175.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1850	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0851		.0789	.0000	.0731	.0728	.0680	.0751	.0807	.0722	.0695	.0675	.0650	.0613

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB39)

MACH (1) = 6.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0000							
21.500												.0700			
23.000								.0917							
24.000				.1059											
31.500				.1153											
34.000								.0000							
35.000				.1120											
40.000				.1095				.0945							
45.000								.0943							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0605	.0624	.0609	.0629	.0649	.0664	.0700	.0719	.0733	.0838	.0913	.0944	.1173	.1286	
21.500	.0663				.0585				.0777				.1086		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500

PH:

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB39)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.1389	.1374	.1318	.1453	.1284	.1363	.1369	.0000		.1389	.0000	.1340
21.500			.1396									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 96.100 QI = 2.816 HREF = .041

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.2679	.4027	.4202	.2978		.2554	.2272	.2004	.1698	.1573			.1464	.1413	.1312
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1292		.1193	.1113	.1031		.1056				.1043		.1028		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB39)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1053		.0963	.0000	.0866	.0869	.0795	.0895	.1001	.0866	.0849	.0828	.0789	.0773
11.500				.0000											
12.000								.0000							
21.500												.0865			
23.000								.0999							
24.000				.1166											
31.500				.1326											
34.000								.0000							
35.000				.1262											
40.000				.1187				.1064							
45.000								.1024							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000															
106.000												.0000			
135.000								.0000							
140.000				.0000				.0000				.0000			
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0753	.0954	.0798	.0837	.0893	.0974	.1058	.1180	.1281	.1453	.1603	.1652	.2000	.2157	
21.500	.0802				.0786				.1320				.1913		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB39)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
160.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.2149	.2031	.1979	.1973	.1735	.1777	.1781	.0000		.1707	.0000	.1664
21.500			.2020									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

AEDC VA352 OH4B O2 ORB. BOTTOM SURFACE WING (CTKL39) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.750
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 96.100 PI = 2.816 HREF = .041

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

Z/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0425	.0318		.2920	.1677	.2340	.0513		.0984	.0613	.0519
.002						.2657		.1831				
.003						.3564		.1859				
.004						.3930		.1787				
.005						.3256		.1722				
.006						.3300		.1699				
.007						.2647		.1617				
.025	.0350			.1605	.3723		.3581					
.050										.1346		
.100				.1590		.1778	.3222	.2435		.1396		
.153	.1044											
.177					.1076							
.200				.1083		.1392						
.299	.0778											
.300					.1119	.1172		.3806	.2754	.2089		
.302				.0932								
.303							.1201					
.428						.1233						
.444	.0639											
.467					.1008							
.500							.1054	.4039		.2091		
.559				.0894								
.590	.0568											
.600					.1132	.0936			.1661			
.700				.1027	.1422	.0705	.0642			.1509		
.736	.1080											
.800						.0427	.0480					
.850						.0690	.0704					
.900	.0746			.0818	.1189	.0621	.0600			.1562		

AEDC VA352 OH4B O2 ORB. BOTTOM SURFACE WING (CTKL39)

MACH (1) = 8.000 ALPHA (2) = 35.000 T1 = 96.100 Q1 = 2.816 HREF = .041

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0417	.0329		.2597	.1957	.1842	.0426		.1150	.0784	.0323
.002						.3250		.1753				
.003						.4615		.1955				
.004						.4854		.1966				
.005						.4192		.2185				
.006						.3820		.1993				
.007						.3145		.2135				
.025	.0356			.1525	.3443		.2686					
.050										.1785		
.100				.1619		.2203	.2079	.3714		.1889		
.153	.1097											
.177					.1147							
.200				.1159		.1609						
.299	.0838											
.300					.1196	.1186		.2354	.4434	.3052		
.302				.1066								
.303							.1244					
.428						.1551						
.444	.0711											
.487					.1200							
.500							.1226	.1320		.2832		
.559				.1455								
.590	.1038											
.600					.1240	.1362			.1163			
.700				.1536	.1233	.0930	.0705			.2157		
.736	.2078											
.800						.0605	.0549					
.850						.0946	.0858					
.900	.1056			.1314	.1053	.0927	.0776			.1686		

AEDC VA352 OH4B O2 ORB. LEFT MAIN NOZZLE (CTKN39) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 2.750
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 96.100 QI = 2.816 HREF = .041

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

x	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0387	.0615	.0384	.0101	
25.000	.0475	.0789			
45.000	.0135	.0128	.0114	.0102	.0185
65.000	.0296	.0280		.0332	
90.000	.0288	.0258	.0265	.0248	
135.000	.0034				
315.000	.0290				

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 96.100 QI = 2.816 HREF = .041

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

x	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0679	.0960	.0770	.0233	
25.000	.0712	.0898			
45.000	.0271	.0249	.0183	.0136	.0298
65.000	.0461	.0443		.0531	
90.000	.0471	.0475	.0512	.0541	
135.000	.0030				
315.000	.0550				

AEDC VA352 OH4B 02 ORB. BASE PLATE (CTKP39) (15 JAN 75)

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	.000	RN/L =	2.750
B.FLAP =	.000	ELEVON =	.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 96.100 QI = 2.816 HREF = .041

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0009		.0013
7.520	.0010	.0005	

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 96.100 QI = 2.816 HREF = .041

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0028		.0036
7.520	.0015	.0010	

AEDC VA352 OH4B O2 ORB. FUSELAGE Y=0.875 (CTKY39) (15 JAN 75)

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5853 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	.000	RN/L =	2.750
B.FLAP =	.000	ELEVON =	.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 96.100 @I = 2.816 HREF = .041

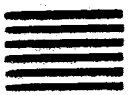
SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

x/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1059	.0917	.0700	.0663	.0585	.0777	.1586	.1396

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 96.100 @I = 2.816 HREF = .041

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

x/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1166	.0999	.0865	.0802	.0786	.1320	.1913	.2020



AEDC VA352 OH4B 02 ORB. FUSELAGE (CTKB40) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 96.900 QI = 3.118 HREF = .044

SECTION (1)ORBITER FUSELAGE DEFENDENT VARIABLE HU/H0

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.3017	.4182	.4202	.2890		.2418	.2101	.1857	.1551	.1413			.1316	.1257	.1151
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1109		.1040	.0977	.0899		.0888				.0863		.0876		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0866		.0789	.0000	.0722	.0739	.0685	.0757	.0817	.0724	.0709	.0682	.0651	.0618
11.500				.0000											

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB40)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HS

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0000							
21.500												.0759			
23.000								.0906							
24.000				.1031											
31.500				.1156											
34.000								.0000							
35.000				.1126											
40.000				.1104				.0937							
45.000								.0903							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
79.000								.0000							
96.500				.0000											
105.000												.0000			
106.500								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0616	.0682	.0613	.0642	.0683	.0700	.0747	.0788	.0819	.0962	.1080	.1097	.1498	.1552	
21.500	.0681				.0592				.0846				.1212		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB40)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.1640	.1648	.1629	.1611	.1439	.1480	.1495	.0000		.1462	.0000	.1431
21.500			.1570									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 96.900 QI = 3.118 HREF = .044

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.2689	.4006	.4171	.2996		.2565	.2259	.2018	.1720	.1571			.1460	.1392	.1310
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1276		.1178	.1109	.1043		.1038				.1042		.1024		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200															
145.400									.0000						
146.200														.0000	
								.0000							

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB40)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1050		.0964	.0000	.0876	.0863	.0797	.0906	.1002	.0878	.0842	.0845	.0807	.0771
11.500				.0000											
12.000								.0000							
21.500												.0862			
23.000								.0971							
24.000				.1146											
31.500				.1326											
34.000								.0000							
35.000				.1281											
40.000				.1194				.1076							
45.000								.1031							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0776	.0894	.0843	.0874	.0990	.1124	.1280	.1457	.1570	.1784	.1941	.2012	.2372	.2502	
21.500	.0849				.0900				.1631				.2272		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB40)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEFENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.2430	.2269	.2155	.2110	.1849	.1898	.1840	.0000		.1755	.0000	.1695
21.500			.2168									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

AEDC VA352 OH4B O2 ORB. BOTTOM SURFACE WING (CTKL40) (15 JAN 75)

REFERENCE DATA

SREF = .8236 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 96.900 QI = 3.118 HREF = .044

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0414	.0324		.2906	.1631	.2490	.0517		.0994	.0619	.0268
.002						.2641		.1843				
.003						.3567		.1849				
.004						.3855		.1885				
.005						.3180		.1801				
.006						.3280		.1816				
.007						.2634		.1742				
.025	.0346			.1600	.3746		.3814					
.050										.1354		
.100				.1591		.1819	.3550	.2589		.1420		
.153	.1024											
.177					.1070							
.200				.1078		.1386						
.299	.0757											
.300					.1112	.1220		.3953	.3038	.2336		
.302				.0924								
.303							.1254					
.428						.1241						
.444	.0668											
.487					.1112							
.500							.1164	.4244		.2131		
.559				.0993								
.590	.0657											
.600					.1459	.1098			.1763			
.700				.1192	.1869	.0945	.0945			.1611		
.736	.1462											
.800						.0685	.0939					
.850						.0950	.1355					
.900	.0891			.1017	.1417	.0848	.1199			.1631		

AEDC VA352 OH4B O2 ORB. BOTTOM SURFACE WING (CTKL40)

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 96.900 QI = 3.118 HREF = .044

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0417	.0333		.2599	.2017	.1829	.0438		.1196	.0800	.0334
.002						.3245		.1843				
.003						.4617		.2099				
.004						.4739		.2163				
.005						.4181		.2398				
.006						.3886		.2244				
.007						.3270		.2369				
.025	.0347			.1538	.3465		.2705					
.050										.1823		
.100				.1682		.2272	.2096	.4005		.1969		
.153	.1098											
.177					.1212							
.200				.1257		.1699						
.299	.0831											
.300					.1352	.1336		.2642	.4503	.3161		
.302				.1232								
.303							.1337					
.428						.1683						
.444	.0836											
.487					.1527							
.500							.1294	.1472		.2928		
.559				.1963								
.590	.1307											
.600					.1647	.1721			.1313			
.700				.2029	.1677	.1362	.0794			.2248		
.736	.2676											
.800						.0972	.0875					
.850						.1370	.1299					
.900	.1183			.1639	.1387	.1313	.1009			.1873		

AEDC VA352 OH4B O2 ORB. LEFT MAIN NOZZLE (CTKN40) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 96.900 QI = 3.118 HREF = .044

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

x	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0393	.0629	.0392	.0105	
25.000	.0497	.0845			
45.000	.0142	.0131	.0115	.0120	.0214
65.000	.0305	.0308		.0410	
90.000	.0311	.0290	.0291	.0264	
135.000	.0038				
315.000	.0311				

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 96.900 QI = 3.118 HREF = .044

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

x	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0706	.0946	.0797	.0242	
25.000	.0735	.0919			
45.000	.0281	.0256	.0195	.0148	.0322
65.000	.0505	.0452		.0575	
90.000	.0476	.0492	.0538	.0599	
135.000	.0029				
315.000	.0546				

AEDC VA352 OH4B 02 ORB. BASE PLATE (CTKP40) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 96.900 QI = 3.118 HREF = .044

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0012		.0016
7.520	.0012	.0007	

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 96.900 QI = 3.118 HREF = .044

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0029		.0040
7.520	.0014	.0011	

AEDC VA352 OH4B O2 ORB. FUSELAGE Y=0.875 (CTKY40) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.000
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 96.900 QI = 3.118 HREF = .044

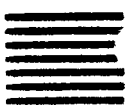
SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1031	.0906	.0759	.0681	.0592	.0846	.1212	.1570

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 96.900 QI = 3.118 HREF = .044

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1146	.0971	.0862	.0849	.0900	.1631	.2272	.2168



AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB41) (15 JAN 75)

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	.000	RN/L =	3.350
B.FLAP =	.000	ELEVON =	.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.600 QI = 3.536 HREF = .046

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.3031	.4166	.4255	.2871		.2434	.2139	.1847	.1552	.1407			.1304	.1234	.1126
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1115		.1036	.0965	.0874		.0880				.0866		.0842		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0860		.0781	.0000	.0726	.0737	.0677	.0772	.0823	.0725	.0734	.0688	.0666	.0642
11.500				.0000											

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB41)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0000							
21.500												.0747			
23.000								.0899							
24.000				.1008											
31.500				.1153											
34.000								.0000							
35.000				.1127											
40.000				.1116				.0939							
45.000								.0868							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0625	.0892	.0657	.0663	.0711	.0769	.0843	.0905	.0968	.0880	.1305	.1262	.1664	.1848	
21.500	.0693				.0620				.1010				.1529		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB41)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.1916	.1879	.1819	.1788	.1554	.1602	.1580	.0000		.1526	.0000	.1470
21.500			.1806									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.600 QI = 3.536 HREF = .046

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.2680	.4012	.4200	.2985		.2547	.2268	.1993	.1715	.1568			.1460	.1427	.1311
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1283		.1198	.1117	.1011		.1058				.1031		.1027		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200															
145.400									.0000						
146.200								.0000						.0000	

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB41)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1047		.0968	.0000	.0875	.0887	.0802	.0917	.0991	.0880	.0891	.0849	.0819	.0795
11.500				.0000											
12.000								.0000							
21.500												.0866			
23.000								.1007							
24.000				.1186											
31.500				.1331											
34.000								.0000							
35.000				.1274											
40.000				.1212				.1085							
45.000								.1021							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0823	.0819	.0929	.1022	.1156	.1353	.1520	.1720	.1920	.2141	.2294	.2326	.2652	.2773	
21.500	.0878				.1043				.1968				.2596		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB41)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.2634	.2400	.2274	.2217	.1912	.1934	.1891	.0000		.1841	.0000	.1713
21.500			.2262									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

AEDC VA352 OH4B O2 ORB. BOTTOM SURFACE WING (CTKL41) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.350
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.600 QI = 3.536 HREF = .046

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0413	.0326		.2905	.1662	.2635	.0516		.1003	.0652	.0284
.002						.2631		.1876				
.003						.3489		.1876				
.004						.3684		.1933				
.005						.3155		.1870				
.006						.3311		.1923				
.007						.2625		.1885				
.025	.0353			.1602	.3715		.4099					
.050										.1367		
.100				.1554		.1802	.4014	.2766		.1413		
.153	.1034											
.177					.1081							
.200				.1109		.1433						
.299	.0752											
.300					.1144	.1276		.4087	.3308	.2589		
.302				.0972								
.303							.1324					
.428						.1312						
.444	.0682											
.487					.1248							
.500							.1757	.4425		.2208		
.559				.1278								
.590	.0736											
.600					.1904	.1569			.1804			
.700				.1544	.2393	.1481	.1652			.1711		
.736	.1854											
.800						.1069	.1542					
.850						.1422	.1813					
.900	.1028			.1306	.1644	.1248	.1488			.1675		

AEDC VA352 OH4B O2 ORB. BOTTOM SURFACE WING (CTKL41)

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.600 QI = 3.536 HREF = .046

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0418	.0335		.2570	.1988	.1881	.0454		.1217	.0816	.0365
.002						.3128		.1938				
.003						.4703		.2229				
.004						.4788		.2351				
.005						.4274		.2549				
.006						.3949		.2453				
.007						.3361		.2561				
.025	.0358			.1592	.3490		.2737					
.050										.1831		
.100				.1575		.2353	.2197	.4227		.1992		
.153	.1068											
.177					.1284							
.200				.1333		.1773						
.299	.0818											
.300					.1507	.1409		.2913	.4675	.3237		
.302				.1393								
.303							.1424					
.428						.1852						
.444	.0936											
.487					.1811							
.500							.1427	.1618		.2966		
.559				.2327								
.590	.1636											
.600					.2016	.2175			.1438			
.700				.2368	.2054	.1833	.0897			.2369		
.736	.3087											
.800						.1266	.1010					
.850						.1779	.1292					
.900	.1229			.1908	.1584	.1681	.1076			.2017		

AEDC VA352 OH4B O2 ORB. LEFT MAIN NOZZLE (CTKN41) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.350
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.600 QI = 3.536 HREF = .046

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

x	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0405	.0644	.0408	.0109	
25.000	.0512	.0852			
45.000	.0148	.0140	.0118	.0136	.0251
65.000	.0325	.0328		.0488	
90.000	.0343	.0319	.0311	.0271	
135.000	.0039				
315.000	.0330				

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.600 QI = 3.536 HREF = .046

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

x	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0719	.0981	.0824	.0245	
25.000	.0761	.0937			
45.000	.0293	.0263	.0199	.0150	.0368
65.000	.0465	.0464		.0616	
90.000	.0500	.0505	.0544	.0632	
135.000	.0029				
315.000	.0538				

AEDC VA352 OH4B O2 ORB. BASE PLATE (CTKF41) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.350
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.600 QI = 3.536 HREF = .046

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0013		.0015
7.520	.0008	.0006	

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.600 QI = 3.536 HREF = .046

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0029		.0061
7.520	.0013	.0013	

AEDC VA352 OH4B O2 ORB. FUSELAGE Y=0.875 (CTKY41) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRF = .0000 IN.
LREF = 22.5803 IN. YMRF = .0000 IN.
BREF = 16.3919 IN. ZMRF = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.350
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.600 QI = 3.536 HREF = .046

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1008	.0899	.0747	.0693	.0620	.1010	.1529	.1806

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.600 QI = 3.536 HREF = .046

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1186	.1007	.0866	.0878	.1043	.1968	.2596	.2262

AEDC VA352 OH4B 02 ORB. FUSELAGE (CTKB42) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
MAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.059 QI = 3.937 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.2987	.4180	.4274	.2925		.2429	.2136	.1839	.1576	.1430			.1308	.1267	.1153
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1117		.1047	.0970	.0874		.0882				.0870		.0867		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200									.0000						
145.400														.0000	
146.200								.0000							
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.0353		.0772	.0000	.0714	.0740	.0686	.0771	.0821	.0739	.0711	.0707	.0687	.0635
11.500				.0000											

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB42)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
12.000								.0000							
21.500												.0796			
23.000								.0917							
24.000				.1019											
31.500				.1187											
34.000								.0000							
35.000				.1149											
40.000				.1117				.0941							
45.000								.0904							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0655	.0709	.0696	.0741	.0812	.0908	.1003	.1125	.1227	.1447	.1628	.1723	.2080	.2244	
21.500	.0694				.0696				.1215				.1987		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500

PHI

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB42)

MACH (1) = 8.000 ALPHA (1) = 30.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.2254	.2160	.2020	.1975	.1677	.1706	.1658	.0000		.1611	.0000	.1579
21.500			.2050									
39.000							.0000					.0000
52.500						.0000						
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.050 QI = 3.937 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.0000	.0050	.0100	.0200	.0250	.0300	.0400	.0500	.0600	.0700	.0750	.0760	.0800	.0900	.1000
PHI															
.000	.2684	.3981	.4135	.3003		.2567	.2278	.2032	.1726	.1574			.1469	.1419	.1296
10.000															.0000
14.000								.0000							
20.000															.0000
22.000								.0000							
24.500															.0000
35.000								.0000							
39.000															.0000
42.500								.0000							
48.000												.0000			
60.000								.0000							
119.000															.0000
180.000			.0000		.0000			.0000			.0000				.0000

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
.000	.1284		.1186	.1119	.1032		.1051				.1040		.1027		
10.000					.0000										
20.000					.0000										
25.500					.0000										
40.000					.0000										
45.500					.0000										
131.200															
145.400									.0000						
146.200								.0000						.0000	

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTK842)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.1200	.1250	.1300	.1400	.1500	.1560	.1600	.1620	.1670	.1690	.1700	.1780	.1800	.1810	.1820
PHI															
156.000														.0000	
159.200															.0000
170.700												.0000			
171.900										.0000					
173.400						.0000									
180.000		.0000			.0000		.0000				.0000		.0000		

X/L	.1830	.1900	.1910	.2000	.2250	.2500	.2750	.3000	.3250	.3500	.3750	.4000	.4250	.4500	.4750
PHI															
.000		.1057		.0965	.0000	.0895	.0894	.0816	.0913	.0954	.0886	.0861	.0866	.0859	.0854
11.500				.0000											
12.000								.0000							
21.500												.0873			
23.000								.1008							
24.000				.1216											
31.500				.1353											
34.000								.0000							
35.000				.1287											
40.000				.1195				.1067							
45.000								.1021							
51.000				.0000											
57.500								.0000							
59.500												.0000			
61.000								.0000							
65.000								.0000							
70.000								.0000							
96.500				.0000											
105.000												.0000			
106.000								.0000							
135.000								.0000				.0000			
140.000				.0000											
141.400	.0000														
151.000			.0000												
180.000				.0000		.0000		.0000				.0000			

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
.000	.0879	.1419	.1043	.1187	.1685	.1712	.1940	.2184	.2331	.2512	.2640	.2621	.2875	.2915	
21.500	.0934				.1262				.2414				.2896		
63.000	.0000														
64.000									.0000						
65.000													.0000		
65.500					.0000										

AEDC VA352 OH4B O2 ORB. FUSELAGE (CTKB42)

MACH (1) = 8.000 ALPHA (2) = 35.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/H0

X/L	.5000	.5250	.5500	.5750	.6000	.6250	.6500	.6750	.7000	.7250	.7500	.7750	.8000	.8250	.8290
PHI															
105.000	.0000				.0000				.0000				.0000		
111.000															.0000
112.000					.0000										
113.000					.0000										
116.000											.0000				
135.000	.0000				.0000				.0000						
149.000											.0000				
180.000	.0000				.0000				.0000				.0000		

X/L	.8500	.8750	.9000	.9250	.9500	.9750	1.0000	1.0130	1.0140	1.0250	1.0380	1.0500
PHI												
.000	.2732	.2488	.2343	.2271	.2002	.2012	.1945	.0000		.1859	.0000	.1792
21.500			.2325									
39.000							.0000					
52.500						.0000						.0000
55.000			.0000									
65.000			.0000									
68.000						.0000						
100.000			.0000									
108.000			.0000			.0000						
112.000							.0000					
113.000									.0000			

TABULATED DATA LISTING FOR OH4B (AEDC VA352)

AEDC VA352 OH4B O2 ORB. BOTTOM SURFACE WING (CTKL42) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRF = .0000 IN.
LREF = 22.5603 IN. YMRF = .0000 IN.
BREF = 16.3919 IN. ZMRF = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.050 QI = 3.937 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0414	.0331		.2834	.1689	.2869	.0522		.1006	.0708	.0287
.002						.2651		.1929				
.003						.3494		.1980				
.004						.4017		.2074				
.005						.3227		.2022				
.006						.3385		.2131				
.007						.2713		.2106				
.025	.0385			.1630	.3803		.4501					
.050										.1404		
.100				.1659		.1931	.4426	.3037		.1505		
.153	.1040											
.177					.1197							
.200				.1197		.1567						
.299	.0752											
.300					.1311	.1369		.4274	.3586	.2816		
.302				.1120								
.303							.1461					
.428						.1667						
.444	.0708											
.487					.1667							
.500							.3219	.4649		.2299		
.559				.1738								
.590	.0992											
.600					.2586	.2632			.1694			
.700				.2047	.2819	.2230	.2093			.1845		
.736	.2435											
.800						.1473	.1787					
.850						.1942	.2188					
.900	.1108			.1595	.1815	.1705	.1898			.1778		

AEDC VA352 OH4B 02 ORB. BOTTOM SURFACE WING (CTKL42)

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.050 QI = 3.937 HREF = .049

SECTION (1)BOTTOM SURF. WING DEPENDENT VARIABLE HU/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.001		.0420	.0336		.2623	.2036	.1936	.0465		.1273	.0818	.0354
.002						.3164		.2023				
.003						.4709		.2330				
.004						.4960		.2516				
.005						.4507		.2731				
.006						.4236		.2663				
.007						.3568		.2764				
.025	.0358			.1630	.3658		.2879					
.050										.1913		
.100				.1844		.2489	.2327	.4526		.2103		
.153	.1108											
.177					.1464							
.200				.1600		.1935						
.299	.0836											
.300					.1790	.1597		.3157	.4894	.3384		
.302				.1786								
.303							.1631					
.428						.2144						
.444	.1128											
.487					.2369							
.500							.1653	.1921		.3084		
.559				.3054								
.590	.2096											
.600					.2636	.2802			.1555			
.700				.2757	.2595	.2435	.1097			.2480		
.736	.3471											
.800						.1625	.1454					
.850						.2198	.2268					
.900	.1292			.2011	.1855	.2028	.2272			.2211		

AEDC VA352 OM4B O2 ORB. LEFT MAIN NOZZLE (CTKN42) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.050 QI = 3.937 HREF = .049

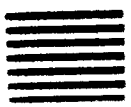
SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

x	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0431	.0677	.0431	.0113	
25.000	.0546	.0800			
45.000	.0153	.0143	.0127	.0145	.0275
65.000	.0352	.0352		.0541	
90.000	.0377	.0349	.0342	.0288	
135.000	.0042				
315.000	.0363				

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.050 QI = 3.937 HREF = .049

SECTION (1)NOZZLE DEPENDENT VARIABLE HU/HO

x	.0880	.1750	.2630	.4380	.7880
PHIN					
.000	.0758	.0990	.0861	.0266	
25.000	.0805	.0971			
45.000	.0309	.0287	.0225	.0165	.0419
65.000	.0471	.0370		.0665	
90.000	.0499	.0519	.0567	.0642	
135.000	.0031				
315.000	.0535				



AEDC VA352 OH4B O2 ORB. BASE PLATE (CTKP42) (15 JAN 75)

REFERENCE DATA

SREF =	.8238 SQ.FT.	XMRP =	.0000 IN.		
LREF =	22.5803 IN.	YMRP =	.0000 IN.		
BREF =	16.3919 IN.	ZMRP =	.0000 IN.		
SCALE =	.0175 SCALE				

PARAMETRIC DATA

BETA =	.000	RN/L =	3.720
B.FLAP =	.000	ELEVON =	.000
HAW/HT =	.000		

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.050 QI = 3.937 HREF = .049

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0016		.0015
7.520	.0013	.0005	

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.050 QI = 3.937 HREF = .049

SECTION (1)BASE PLATE DEPENDENT VARIABLE HU/HO

Y	.0000	1.2250	1.9250
Z			
5.600	.0033		.0050
7.520	.0017	.0015	

AEDC VA352 OH4B 02 ORB. FUSELAGE Y=0.875 (CTKY42) (15 JAN 75)

REFERENCE DATA

SREF = .8238 SQ.FT. XMRP = .0000 IN.
LREF = 22.5803 IN. YMRP = .0000 IN.
BREF = 16.3919 IN. ZMRP = .0000 IN.
SCALE = .0175 SCALE

PARAMETRIC DATA

BETA = .000 RN/L = 3.720
B.FLAP = .000 ELEVON = .000
HAW/HT = .000

MACH (1) = 8.000 ALPHA (1) = 30.000 TI = 97.050 QI = 3.937 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1019	.0917	.0796	.0694	.0696	.1215	.1987	.2050

MACH (1) = 8.000 ALPHA (2) = 35.000 TI = 97.050 QI = 3.937 HREF = .049

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE HU/HO

X/L	.2000	.3000	.4000	.5000	.6000	.7000	.8000	.9000
Y								
.875	.1216	.1008	.0873	.0934	.1262	.2414	.2806	.2325