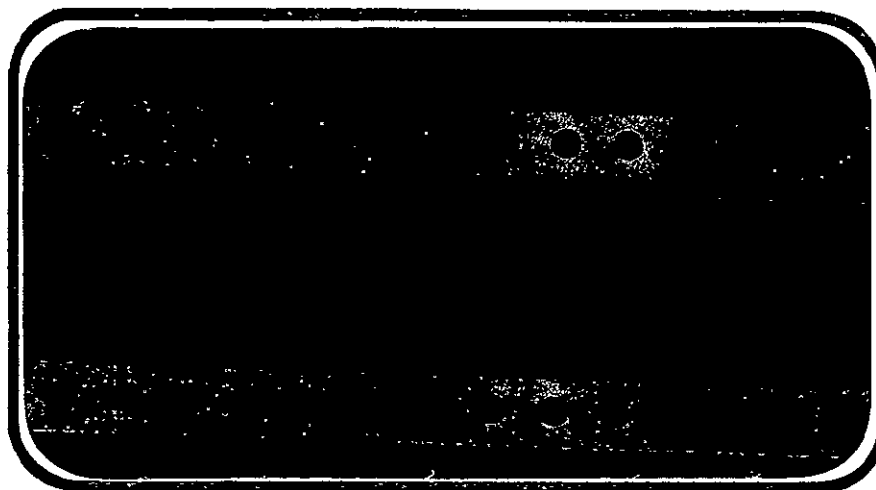




NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

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(NASA-CR-134441),	HYPERSONIC AEROHEATING	N75-24815
TEST OF SPACE SHUTTLE VEHICLE:		
CONFIGURATION 3 (MODEL 22 OTS) IN THE		
NASA-AMES 3.5-FOOT HYPERSONIC WIND TUNNEL		Unclas
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SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA Management services



May, 1975

DMS-DR-2148  
NASA CR-134,441

HYPERSONIC AEROHEATING TEST OF  
SPACE SHUTTLE VEHICLE CONFIGURATION 3  
(MODEL 22-OTS) IN THE NASA-AMES 3.5-FOOT  
HYPERSONIC WIND TUNNEL (IH20)  
VOLUME 2 OF 2

By

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Prepared under NASA Contract Number NAS9-13247

By

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for

Engineering Analysis Division  
Johnson Space Center  
National Aeronautics and Space Administration  
Houston, Texas



WIND TUNNEL TEST SPECIFICS:

Test Number: ARC 3,5-185  
NASA Series Number: IH20  
Model Number: 22-OTS  
Test Dates: 18 January through 6 February 1974  
Occupancy Hours: 192

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HYPERSONIC AEROHEATING TEST OF  
SPACE SHUTTLE VEHICLE CONFIGURATION 3  
(MODEL 22-OTS) IN THE NASA AMES 3.5-FOOT  
HYPERSONIC WIND TUNNEL (IH-20)

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ABSTRACT

This report presents the results of wind tunnel test IH20 conducted in the NASA-Ames Research Center 3.5-Foot Hypersonic Wind Tunnel. The model tested was an 0.0175-scale version of the vehicle 3 Space Shuttle Configuration. Temperature measurements were made on the launch configuration, orbiter plus tank, orbiter alone, tank alone, and solid rocket booster (SRB) alone to provide heat transfer data. The test was conducted at free-stream Mach numbers of 5.3 and 7.3 and at free-stream Reynolds numbers of  $1.5 \times 10^6$ ,  $3.7 \times 10^6$ ,  $5.0 \times 10^6$ , and  $7.0 \times 10^6$  per foot. The model was tested at angles of attack from  $-5^\circ$  to  $20^\circ$  and side slip angles of  $-5^\circ$  and  $0^\circ$ .

This report is presented in two volumes. Volume I contains a sample of plotted data and the tabulated QDOT data. Tabulated H/HO data are presented in Volume II.

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4	Effect of Repeatability						
	- External Tank	01+T15+S8	5.3	-5.0	A	Wind Tunnel Test	1-7
	- Body	01+T15+S8	5.3	-5.0	A	Wind Tunnel Test	8-14
	- Wing, Bottom	01+T15+S8	5.3	-5.0	B	Wind Tunnel Test	15-19
	- Wing, Top	01+T15+S8	5.3	-5.0	B	Wind Tunnel Test	20-22
	- Vertical	01+T15+S8	5.3	-5.0	C,D	Wind Tunnel Test	23-27
5	Effect of Repeatability						
	- SRB	SRB Alone	5.3	20.0	A	Wind Tunnel Test	28-34
6	Effect of Beta						
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7	Effect of Beta - SRB	01+T15+S8	5.3	-5.0	A	Beta	42-48
8	Effect of Beta - Body	01+T15+S8	5.3	-5.0	A	Beta	49-58
9	Effect of Beta - Wing	01+T15+S8	5.3	-5.0	B	Beta	59-66
10	Effect of Beta						
	- Vertical	01+T15+S8	5.3	-5.0	C	Beta	67-71
11	Effect of Reynolds No.						
	- External Tank	01+T15+S8	5.3	-5.0	A	RN/L	72-78
12	Effect of Reynolds No.						
	- SRB	01+T15+S8	5.3	-5.0	A	RN/L	79-85
13	Effect of Reynolds No.						
	- Body	01+T15+S8	5.3	-5.0	A	RN/L	86-95
14	Effect of Reynolds No.						
	- Wing	01+T15+S8	5.3	-5.0	B	RN/L	96-103

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FIGURE	TITLE	CONFIG.	MACH	ALPHA	COEFFICIENT SCHEDULE	CONDITIONS VARYING	PAGE NUMBERS
15	Effect of Reynolds No. - Vertical	01+T15+S8	5.3	-5.0	C,D	RN/L	104-108
16	Effect of Reynolds No. - External Tank	01+T15	7.3	0.0	A	RN/L	109-115
17	Effect of Reynolds No. - Body	01+T15	7.3	0.0	A	RN/L	116-125
18	Effect of Reynolds No. - Wing	01+T15	7.3	0.0	B	RN/L	126-133
19	Effect of Reynolds No. - Vertical	01+T15	7.3	0.0	C,D	RN/L	134-138
20	Effect of Reynolds No. - Body	01	5.3	-5.0	A	RN/L	139-148
21	Effect of Reynolds No. - Wing	01	5.3	-5.0	B	RN/L	149-156
22	Effect of Reynolds No. - Vertical	01	5.3	-5.0	C,D	RN/L	157-161
23	Effect of Reynolds No. - External Tank	01+T15+S8+X28	5.3	-5.0	A	RN/L	162-168
24	Effect of Reynolds No. - SRB	01+T15+S8+X28	5.3	-5.0	A	RN/L	169-175
25	Effect of Reynolds No. - Body	01+T15+S8+X28	5.3	-5.0	A	RN/L	176-185



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FIGURE	TITLE	CONFIG.	MACH	ALPHA	COEFFICIENT SCHEDULE	CONDITIONS VARYING	PAGE NUMBERS
26	Effect of Reynolds No. - Wing	01+T15+S8+X28	5.3	-5.0	B	RN/L	186-193
27	Effect of Reynolds No. - Vertical	01+T15+S8+X28	5.3	-5.0	C,D	RN/L	194-198
28	Effect of Reynolds No. - Body	01+X28	5.3	-5.0	A	RN/L	199-208
29	Effect of Reynolds No. - Wing	01+X28	5.3	-5.0	B	RN/L	209-216
30	Effect of Reynolds No. - Vertical	01+X28	5.3	-5.0	C,D	RN/L	217-221
31	Effect of Reynolds No. - External Tank	T15	5.3	-5.0	A	RN/L	222-228
32	Effect of Reynolds No. - External Tank	T15+X28	5.3	-5.0	A	RN/L	229-235
33	Effect of Reynolds No. - SRB	S8	5.3	-5.0	A	RN/L	236-242
34	Effect of Reynolds No. - SRB	S8	5.3	15.0	A	RN/L	243-249
35	Effect of Reynolds No. - SRB	S8	5.3	20.0	A	RN/L	250-256
36	Effect of Reynolds No. - SRB	S8+X28	5.3	-5.0	A	RN/L	257-263

INDEX OF DATA FIGURES (Concluded)

COEFFICIENT SCHEDULES:

- (A): H/HO vs. X/L
- (B): H/HO vs. X/C(WING)
- (C): H/HO vs. X/C(VERTICAL)
- (D): H/HO vs. Z/BV

## NOMENCLATURE

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
b		thickness of model skin
B		span length
C		specific heat of model skin material
c		chord length
$C_0, C_1, C_2$		constants in curve fit for C over model wall temperature range
$c_p$		specific heat of air stream (perfect gas value)
CHAN	CHAN	recording-system channel
$H_{aw}$	HAW	adiabatic wall enthalpy
$H_t$	HT	free-stream total enthalpy
	HO	average of free-stream total enthalpy values of all tunnel runs incorporated into an aero dataset
$H_w$	HW	enthalpy based on model wall temperature for given T/C location
h	H	heat-transfer coefficient at model wall for given T/C location
$h_s$	HS, HREF	stagnation-point heat-transfer coefficient for reference sphere
$h/h_s$	H/HO, H/HREF	ratio of model heat-transfer coefficient to heat-transfer coefficient of reference sphere for $H_{aw}/H_t = X.XXX$
IML		inner module line
L	Length	model reference length
$M_\infty$	MACH	free-stream Mach number

NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
$P_t$	PT	free-stream total pressure
	PO	average of free-stream total pressure values of all tunnel runs incorporated into an aero dataset
$\dot{q}$	QDOT	heat-transfer rate at model wall for given T/C location, BTU/ft <sup>2</sup> -sec
$\dot{q}_s$	QS, QREF	stagnation-point heat-transfer rate for reference sphere at initial time
$R_s$	RS	reference sphere radius at model scale equivalent to 0.305 m (1 ft) for full-scale vehicle
$Re_\infty/ft$		free-stream Reynolds number per foot
	RN/L	average of free-stream Reynolds number values (per foot) of all tunnel runs incorporated into an aero dataset
$Re_\infty,L$	REL	free-stream Reynolds number based on model reference length, L
	S	assumed chordwise location (for Clusters Band C) - see Figure 2
	S/R	body wetted running length
St	ST	Stanton number based on free-stream flow conditions and the model heat-transfer coefficient for $H_{aw}/H_t = X.XXX$
T		temperature
$T_t$	TT	free-stream total temperature
	TO	average of free-stream total temperature values of all tunnel runs incorporated into an aero dataset
$T_w$	TW	model wall temperature for given T/C location

NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
T/C	T/C	thermocouple
t		time
t <sub>i</sub>	TIME	initial time (before model insertion into flow) extrapolated from f(T <sub>w</sub> ) vs time
u, V		velocity
W		density of model skin material
X		axial distance measured from nose
	X/C	chordwise location, fraction of local chord
	X/L	longitudinal location, fraction of body length
Y		spanwise distance from centerline
	2Y/B	spanwise location, fraction of semi-span
Z		water plane distance
	Z/BV	spanwise location on vertical tail, fraction of exposed span
α	ALPHA	angle of attack, degrees
β	BETA	angle of sideslip, degrees
μ		viscosity of air
ρ		density of air
θ	THETA	external tank angular surface coordinate, measured clockwise looking forward. 0 degrees at bottom centerline
φ	PHI	orbiter angular surface coordinate, measured clockwise looking forward. 0 degrees at bottom centerline

## NOMENCLATURE (Concluded)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
$\psi$	PSI	SRB angular surface coordinate, measured clockwise looking forward. 0 degrees at bottom centerline

### SUBSCRIPTS

aw		adiabatic wall
i		initial value before model insertion
O		Orbiter
PG		perfect gas (calorically and thermally perfect gas)
s		reference sphere
S		SRB
t		free-stream total condition
T		tank
V		vertical tail
w		wall
$\infty$		free-stream

## MODEL DESCRIPTION

The 22-OTS model is a 0.0175-scale thin-skin thermocouple model of the Rockwell vehicle three (3) configuration lightweight orbiter with external tank and solid rocket booster. The orbiter, tank and SRB's can be tested alone or in the 1st and 2nd stage configurations. Orbiter control-surface deflections are as follows:

Elevons: -40°, 0°, +5°, +10°

Rudder Flare: 0°, 40° (outside surface included angle)

The orbiter body flap can be tested at 0° and at +10° by adding a 10° wedge to the stationary 0° deflection position. All orbiter control-surface deflections were set to 0° for this test program.

The structural area of the model is constructed of 15-5 PH with instrumentation areas of 15-5 PH and 17-7 PH stainless steel. The nominal skin thickness was machined to 0.030 inch at the instrumented areas. Local thermocouple (T/C) skin thicknesses are tabulated in Tables IV to VII. All thermocouples were laser welded to the thin-skin surface and the leads conveniently clamped in bundles within the model. Nominal thermocouple locations and skin thicknesses for wing leading edge clusters B & C are shown in Figure 2a; these values were used for data reduction and plotting. Actual (post test) thermocouple location and skin thicknesses for these instrumented areas are presented in Figure 2b.

## CONFIGURATIONS INVESTIGATED

1)  $O_1 + T_{15} + S_8$  (integrated vehicle)

$O_1$  = Orbiter =  $B_{17} C_7 M_4 F_5 W_{103} E_{22} V_7 R_5$

$B_{17}$  = body

$C_7$  = canopy

$M_4$  = OMS pods

$F_5$  = body flap

$W_{103}$  = wing

$E_{22}$  = elevon

$V_7$  = vertical tail

$R_5$  = rudder

$T_{15}$  = external tank (ET) with protuberances (plumbing lines and attach structure)

$S_8$  = solid rocket booster (SRB)

2)  $O_1 + T_{15} + S_8 + X_{28}$

$X_{28}$  = boundary layer trips

3)  $O_1 + T_{15}$

4)  $O_1$

5)  $O_1 + X_{28}$

6)  $T_{15}$

7)  $T_{15} + X_{28}$

8)  $S_8$

9)  $S_8 + X_{28}$



## TEST FACILITY

The NASA-Ames 3.5-Foot Hypersonic Wind Tunnel is a closed-circuit, blowdown-type tunnel capable of operating at nominal Mach numbers of 5, 7, and 10 at pressures to 1800 psia and temperatures to 3400°R for run times to four minutes. The major components of the facility include a gas storage system where the test gas is stored at 3000 psi, a storage heater filled with aluminum-oxide pebbles capable of heating the test gas to 3400°R, axisymmetric contoured nozzles with exit diameters of 42 inches for generating the desired Mach number, and a 900,000 ft<sup>3</sup> vacuum storage system which operates to pressures of 0.3 psia. The test section itself is an open-jet type enclosed within a chamber approximately 12-feet in diameter and 40-feet in length, arranged transversally to the flow direction.

A model support system is provided that can pitch models through an angle-of-attack range of -20 to +20 degrees, in a vertical plane, about a fixed point of rotation on the tunnel centerline. This rotation point is adjustable from 1 to 5 feet from the nozzle exit plane. The model normally is out of the test stream (strut centerline 37-inches from tunnel centerline) until the tunnel test conditions are established after which it is inserted. Insertion time is adjustable to as little as 1/2 second and models may be inserted at any strut angle.

A high-speed, analog-to-digital data acquisition system is used to record test data on magnetic tape. The present system is equipped to measure and record the outputs from 80 transducers in addition to 20 channels of tunnel parameters.

## TEST PROCEDURES

The models were mounted with base stings at a preset attitude on the tunnel quick-insert mechanism. The model was set in pitch by putting an inclinometer directly on the external surface. Proper roll relationships between the orbiter, external tank, and solid rocket boosters were assured by the attaching stings. The quick-insert mechanism injected the model into the air stream when steady-state test conditions were established and retracted the model at the completion of data acquisition. The model injection and retraction times were each set at about 1 second and the time on the tunnel centerline was also set at about 1 second.

The model wall temperature data for each thermocouple location and the tunnel conditions were recorded on magnetic tape at 0.07-second intervals during the test duration of about 3 seconds. Shadowgraphs were also taken during each run.

Data from a maximum of 75 thermocouples could be recorded for any given run. Thermocouples, in groups of fifteen, were connected to plugs. For a given run, any selected five of these plugs were connected to a junction box which was wired directly to a thermocouple reference-temperature box. Thus, thermocouple changes required simple plug changes at the junction box. All this equipment was in the test section. The outputs from the reference-temperature box were connected directly to the data-acquisition system for recording. Prior to testing, a thermocouple heat-response check, through the data-acquisition system, was performed on all thermocouples to assure proper hook-up, polarity, and response.

## DATA REDUCTION

All test data were reduced at the NASA/Ames Research Center using the data reduction techniques outlined below. The thermocouple data were reduced using the one-dimensional, thin-wall equation:

$$\dot{q} = WCb \frac{dT_w}{dt} = h (H_{aw} - H_w) \equiv hH_t \left( \frac{H_{aw}}{H_t} - \frac{H_w}{H_t} \right) \quad (1)$$

which neglects heat-conduction losses.

Assuming that  $W$  and  $h$  are constant and

$$C = C_0 + C_1 T_w + C_2 T_w^2 \text{ for } T_w \text{ ranges} \quad (2)$$

the integration of equation (1) for  $t = t_i$  to  $t$  and  $T_w = T_{wi}$  to  $T_w$  yields the linear equation:

$$f(T_w) = - \ln \left( \frac{T'_{aw} - T_w}{T'_{aw} - T_{wi}} \right) - \left[ \frac{C_1}{C'_{aw}} + \frac{C_2}{C'_{aw}} \left( T'_{aw} + \frac{T_w + T_{wi}}{2} \right) \right] \\ (T_w - T_{wi}) = \frac{hc_p}{WC'_{aw}b} (t - t_i) \quad (3)$$

where it is defined that:

$$T'_{aw} \equiv \frac{H_{aw}}{c_p} = \frac{H_{aw}}{H_t} \frac{H_t}{c_p} \geq (T_{aw})_{PG} \quad (4)$$

$$C'_{aw} \equiv C_0 + C_1 T'_{aw} + C_2 T'_{aw}{}^2 \quad (5)$$

$\neq$  specific heat at adiabatic wall temperature

The form of Eq (3) is  $f(T_w) = mt + a$  where  $m$  is the slope and  $a$  is the intercept for a straight line if heat-conduction errors are negligible. Thus, deviations from a straight line can indicate heat-conduction effects.

## DATA REDUCTION (Continued)

The slope,  $m$ , of  $f(T_w)$  vs  $t$  from Eq (3) is computed by a least-squares, straight-line fit over a finite time interval (approx. 1 sec.) beginning when the model reaches uniform tunnel flow. The value of the heat-transfer coefficient,  $h$ , is then determined from:

$$h = \frac{WC'_{aw}b}{c_p} m \quad (6)$$

Using this value of  $h$ , the heat-transfer rate is evaluated at the initial time,  $t_i$ , when the model is isothermal at the initial wall enthalpy,  $H_{wi}$

$$\dot{q} = \dot{q}_i = h (H_{aw} - H_{wi}) \equiv h H_t \left( \frac{H_{aw}}{H_t} - \frac{H_{wi}}{H_t} \right) \quad (7)$$

where  $H_{aw}/H_t$  is the same value used to evaluate  $h$ . The resultant value of  $\dot{q}$  is independent of the value of  $H_{aw}/H_t$  used for both the  $h$  and  $\dot{q}$  evaluations.

The reference sphere heating is also evaluated at the initial wall enthalpy by the method of Fay and Riddell (ref. 1):

$$\dot{q}_s = h_s (H_t - H_{wi}) \equiv h_s H_t \left( 1.0 - \frac{H_{wi}}{H_t} \right) \quad (8)$$

The model-to-sphere ratio of heat-transfer coefficients is then determined from Eqs. (7) and (8) as

$$\frac{h}{h_s} = \frac{\dot{q}_i}{\dot{q}_s} \left[ \frac{1.0 - H_{wi}/H_t}{H_{aw}/H_t - H_{wi}/H_t} \right] \quad (9)$$

## DATA REDUCTION (Concluded)

where  $\dot{q}_i$  is constant for all values of  $H_{aw}/H_t$ .

To determine  $h/h_s$  for various values of  $H_{aw}/H_t$ , the particular value of  $H_{aw}/H_t$  is substituted into Eq. (9).

The Stanton number is defined as

$$St \equiv \frac{h}{\rho u} = \frac{\dot{q}_i}{\rho u (H_{aw} - H_{wi})} \quad (10)$$

where for free-stream conditions,  $\rho u = \rho_\infty V_\infty$ .

The calculations of the model heating, reference sphere heating, and Reynolds number included the corrections of NACA report 1135 (ref. 3) for calorically imperfect thermally perfect air. Keyes' equation for viscosity (see ref. 3) was also used for the sphere heating and Reynolds number computations:

$$\mu = \frac{0.0232 \times 10^{-6} T^{0.5}}{1 + \frac{220}{T} \times 10^{-9}/T} \quad (11)$$

where the units for  $T$  and  $\mu$  are  $^{\circ}R$  and lb-sec/ft, respectively.

## REFERENCES

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2. Ames Research Staff: Equations, Tables, and Charts for Compressible Flow. NACA Rept. 1135, 1953.
3. Bertram, Mitchell H.: Comment on "Viscosity of Air." J. Spacecraft Rockets, Vol. 4, No. 2, Feb. 1967, pp. 287-288.



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TABLE II.

TEST: <u>IH 20</u>		DATA SET/RUN NUMBER COLLATION SUMMARY										DATE: <u>2/20/74</u>								
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		CONTROL DEFLECTION			NO. OF RUNS	T/C SCHEDULE												
		$\alpha$	$\beta$	M	RN/L			X1	X2	X3	X4	X5	X6	X7	X8	X9	X10			
<u>*RENO01</u>	$O_1 + T_{15} + S_8$	-5	0	5.3	1.5			3	4	5	6	7	8	9						
02	$O_1 + T_{15} + S_8$		0		5.0			16	15	14	13	12	11	10						
03	$O_1 + T_{15} + S_8$		-5		5.0			20	21	19	22	23	24	25						
04	$O_1 + T_{15} + S_8 + X_{28}$		0		1.5			33	34	35	36	37	38	39						
05	$O_1 + T_{15} + S_8 + X_{28}$	-5			5.0			32	31	30	29	28	27	26						
06	$O_1 + T_{15}$	0			5.0			41	44	45	48	49	52							
07		5		5.3	5.0			42	43	46	47	50	51							
08		0		7.3	3.7			53	54	55	56	57	58							
09		-5		7.3	7.0			66												
10	$O_1 + T_{15}$	0		7.3	7.0			65	64	63	62	60	59							
11	$O_1$	-5		5.3	1.5			90	85	84	83									
12		-5			5.0			86	89	91	94									
13		5			5.0			87	88	92	93									
14	$O_1$	0			7.0			67	68	69	70									
15	$O_1 + X_{28}$	-5			1.5			99	100	101	102									
16	$O_1 + X_{28}$	-5	0	5.3	5.0			98	97	96	95									

21

TEST RUN NUMBERS

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

H/H0

MACH      HAW/HT

COEFFICIENTS

IDVAR (1)      IDVAR (2)      NDV

$\alpha$  OR  $\beta$   
SCHEDULES

\*NOTE: See page 23 for Dataset Name key.

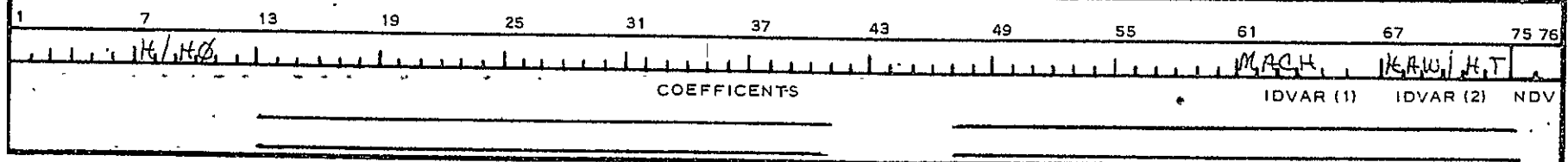


TABLE II, - Concluded

TEST: <u>IH20</u>		DATA SET/RUN NUMBER COLLATION SUMMARY							DATE: <u>2/26/74</u>										
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		CONTROL DEFLECTION			NO. OF RUNS	T/C SCHEDULE											
		$\alpha$	$\beta$	M	RNL			X1	X2	X3	X4	X5	X6	X7	X8	X9	X10		
* <u>RENO17</u>	<u>T15</u>	<u>-5</u>	<u>0</u>	<u>5.3</u>	<u>1.5</u>												<u>78</u>	<u>77</u>	
<u>18</u>	<u>T15</u>	<u>-5</u>		<u>5.3</u>	<u>5.0</u>												<u>73</u>	<u>76</u>	
<u>19</u>	<u>T15</u>	<u>5</u>		<u>5.3</u>	<u>5.0</u>												<u>74</u>	<u>75</u>	
<u>20</u>	<u>T15</u>	<u>0</u>		<u>7.3</u>	<u>7.0</u>												<u>72</u>	<u>71</u>	
<u>21</u>	<u>T15 + X28</u>	<u>-5</u>		<u>5.3</u>	<u>1.5</u>												<u>79</u>	<u>80</u>	
<u>22</u>	<u>T15 + X28</u>	<u>-5</u>			<u>5.0</u>												<u>82</u>	<u>81</u>	
<u>23</u>	<u>S8</u>	<u>-5</u>			<u>1.5</u>														<u>117</u>
<u>24</u>		<u>15</u>			<u>1.5</u>														<u>108</u>
<u>25</u>		<u>20</u>			<u>1.5</u>														<u>109</u>
<u>26</u>		<u>-5</u>			<u>5.0</u>														<u>106</u>
<u>27</u>		<u>15</u>			<u>5.0</u>														<u>107</u>
<u>28</u>	<u>S8</u>	<u>20</u>			<u>5.0</u>														<u>110</u>
<u>29</u>	<u>S8 + X28</u>	<u>-5</u>			<u>1.5</u>														<u>103</u>
* <u>RENO30</u>	<u>S8 + X28</u>	<u>5</u>	<u>0</u>	<u>5.3</u>	<u>5.0</u>														<u>104</u>

TEST RUN NUMBERS

22



\*NOTE: See page 23 for Dataset Name key.

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REN---datasets contain H/HO data

QEN---datasets contain QDOT data

4th Character of Dataset ID	Location of Thermocouple
A	Orbiter, Phi = 0.0 (Bottom CL)
B	Orbiter, Y = 0.438 (Fuselage Bottom Surface)
C	Orbiter, Y = 0.875 (Fuselage Side)
D	Orbiter, C.C.L. Tangent
E	Orbiter, M.H.B. Tangent
F	Orbiter RCS, Z = 6.125
G	Wing Upper Crease
H	Orbiter, Z = 7.525 (Upper Body)
I	Orbiter Windows
J	Orbiter, Z = 8.379 (Upper Body)
K	Orbiter, Phi = 180. (Top CL)
L	OMS Bottom Crease
M	Orbiter, Z = 8.295 (OMS Pods)
N	Orbiter, Phi = 130. (OMS Pods)
O	OMS Top
P	OMS Inside
Q	Orbiter Body Flap, Y = 1.75
R	Bottom RCS
S	Solid Booster
T	External Tank
U	Orbiter, Z = 8.75 (OMS Pods)
V	Vertical Tail
W	Wing Bottom Surface
X	Wing Upper Surface
Y	Clusters B and C
Z	Orbiter Body

TABLE III. - MODEL DIMENSIONAL DATA

MODEL COMPONENT : BODY - B17

GENERAL DESCRIPTION : Fuselage, 3 configuration, Lightweight Orbiter  
per Rockwell Lines VL70-000139.

---

MODEL SCALE: 0.0175

DRAWING NUMBER : VL70-000139

DIMENSIONS .	FULL SCALE	MODEL SCALE
Length - In.	<u>1290.3</u>	<u>22.580</u>
Max Width - In.	<u>267.6</u>	<u>4.683</u>
Max Depth - In.	<u>244.5</u>	<u>4.279</u>
Fineness Ratio	<u>4.82175</u>	<u>4.82175</u>
Area - Ft <sup>2</sup>	<u>                    </u>	<u>                    </u>
Max. Cross-Sectional	<u>386.67</u>	<u>0.1184</u>
Planform	<u>                    </u>	<u>                    </u>
Wetted	<u>                    </u>	<u>                    </u>
Base	<u>                    </u>	<u>                    </u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT : CANOPY - C<sub>7</sub>  
 GENERAL DESCRIPTION : Configuration 3 per Rockwell Lines VL70-000139  
 \_\_\_\_\_  
 \_\_\_\_\_  
 MODEL SCALE: 0.0175  
 DRAWING NUMBER VL70-000139

DIMENSIONS .	FULL SCALE	MODEL SCALE
Length ( $X_0 = 433$ to $X_0 = 578$ ) in. FS	<u>145.00</u>	<u>2.538</u>
Max Width	_____	_____
Max Depth	_____	_____
Fineness Ratio	_____	_____
Area	_____	_____
Max. Cross-Sectional	_____	_____
Planform	_____	_____
Wetted	_____	_____
Base	_____	_____

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ELEVON - E<sub>22</sub>

GENERAL DESCRIPTION: 3 Configuration per W<sub>103</sub> Rockwell Lines  
Lines VL70-000139 data for (1) of (2) sides.

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000139

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area - Ft <sup>2</sup>	<u>205.52</u>	<u>0.0629</u>
Span (equivalent) - In.	<u>353.34</u>	<u>6.183</u>
Inb'd equivalent chord - In.	<u>114.78</u>	<u>2.009</u>
Outb'd equivalent chord	<u>55.00</u>	<u>0.963</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.208</u>	<u>0.208</u>
At Outb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
Sweep Back Angles, degrees		
Leading Edge	<u>0.000</u>	<u>0.000</u>
Trailing Edge	<u>- 10.24</u>	<u>- 10.24</u>
Hingeline	<u>0.000</u>	<u>0.000</u>
Area Moment (Normal to hinge line) - Ft <sup>3</sup>	<u>1548.07</u>	<u>0.008297</u>

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TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT BODY FLAP - F5  
 GENERAL DESCRIPTION 3 Configuration per Rockwell Lines  
VL70-000139.  
MODEL SCALE: 0.0175  
 DRAWING NUMBER VL70-000139

DIMENSIONS	FULL SCALE	MODEL SCALE
Length - In.	<u>84.70</u>	<u>1.482</u>
Max Width - In.	<u>267.6</u>	<u>4.683</u>
Max Depth	<u>          </u>	<u>          </u>
Fineness Ratio	<u>          </u>	<u>          </u>
Area - Ft <sup>2</sup>	<u>          </u>	<u>          </u>
Max. Cross-Sectional	<u>          </u>	<u>          </u>
Planform	<u>142.5</u>	<u>0.0436</u>
Wetted	<u>          </u>	<u>          </u>
Base	<u>38.0958</u>	<u>0.0117</u>

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TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT : OMS POD - M<sub>1</sub>

GENERAL DESCRIPTION : Configuration 3 per Rockwell Lines VL70-000139

NOTE: M<sub>1</sub> identical to M<sub>2</sub>, except intersection to fuselage.

MODEL SCALE: 0.0175

DRAWING NUMBER : VL70-000139

DIMENSIONS	FULL SCALE	MODEL SCALE
Length - In.	<u>346.0</u>	<u>6.055</u>
Max Width - In.	<u>108.0</u>	<u>1.890</u>
Max Depth - In.	<u>113.0</u>	<u>1.978</u>
Fineness Ratio	<u>          </u>	<u>          </u>
Area	<u>          </u>	<u>          </u>
Max. Cross-Sectional	<u>          </u>	<u>          </u>
Planform	<u>          </u>	<u>          </u>
Wetted	<u>          </u>	<u>          </u>
Base	<u>          </u>	<u>          </u>

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TABLE III. - MODEL DIMENSIONAL DATA = Continued.

MODEL COMPONENT: RUDDER - R<sub>r</sub>

GENERAL DESCRIPTION: 2A, 3, 3A and 140A/B Configurations per Rockwell  
Lines Drawings

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000095, VL70-000139, VL70-000146A.

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area - Ft <sup>2</sup>	<u>106.38</u>	<u>0.0326</u>
Span (equivalent) - In.	<u>201.0</u>	<u>3.518</u>
Inb'd equivalent chord - In.	<u>91.585</u>	<u>1.603</u>
Outb'd equivalent chord	<u>50.833</u>	<u>0.8896</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
At Outb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
Sweep Back Angles, degrees		
Leading Edge	<u>34.83</u>	<u>34.83</u>
Trailing Edge	<u>26.25</u>	<u>26.25</u>
Hingeline	<u>34.83</u>	<u>34.83</u>
Area Moment (Normal to hinge line)-Ft <sup>3</sup>	<u>526.13</u>	<u>0.0028</u>

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TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: BOOSTER SOLID ROCKET MOTOR - Sg

GENERAL DESCRIPTION: Booster Solid Rocket, 3 Configuration, Body of Revolution, Data for (1) of (2) sides, per Rockwell Lines VL77-000036 and VL72-000088

MODEL SCALE: 0.0175

DRAWING NUMBER: VL72-000088, VL77-000036

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (Includes Nozzle) - In.	<u>1741.0</u>	<u>3.046</u>
Max. Width (Tank Dia.) - In.	<u>142.0</u>	<u>2.485</u>
Max Depth (Aft Shroud) - In.	<u>205.0</u>	<u>3.588</u>
Fineness-Ratio:	<u>8.49268</u>	<u>8.49268</u>
Area - Ft <sup>2</sup>	<u>                    </u>	<u>                    </u>
Max. Cross-Sectional	<u>229.21</u>	<u>0.070</u>
Planform:	<u>                    </u>	<u>                    </u>
Wetted:	<u>                    </u>	<u>                    </u>
Base	<u>                    </u>	<u>                    </u>
BP of BSRM Centerline (Z <sub>T</sub> ) - In.	<u>400.0</u>	<u>7.000</u>
FS of BSRM Nose (X <sub>T</sub> ) - In.	<u>200.0</u>	<u>3.500</u>

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TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT EXTERNAL TANK WITH PROTUBERANCES - T<sub>15</sub>  
 GENERAL DESCRIPTION External oxygen-hydrogen tank; Vehicle 3  
Configuration per Rockwell Lines VL78-000041B and VL72-000088B.

---

MODEL SCALE: 0.0175

DRAWING NUMBER VL78-000041B, VL72-000088B

DIMENSIONS	FULL SCALE	MODEL SCALE
Length - In. (Nose @ $X_T = 309$ )	<u>1865</u>	<u>32.638</u>
Max Width (Dia.) - In.	<u>324</u>	<u>5.67</u>
Max Depth	<u>          </u>	<u>          </u>
Fineness Ratio	<u>5.756</u>	<u>5.756</u>
Area - Ft <sup>2</sup>	<u>          </u>	<u>          </u>
Max. Cross-Sectional	<u>572.555</u>	<u>0.175</u>
Planform	<u>          </u>	<u>          </u>
Wetted	<u>          </u>	<u>          </u>
Base	<u>          </u>	<u>          </u>
WP of Tank Centerline ( $X_T$ ) - In.	<u>400.0</u>	<u>7.000</u>

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TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: VERTICAL - V<sub>7</sub>

GENERAL DESCRIPTION: Centerline vertical tail, doublewedge airfoil with rounded leading edge.

NOTE: Same as V<sub>5</sub>, but with manipulator housing removed.

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000139

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
TOTAL DATA		
Area (Theo) - Ft <sup>2</sup>		
Planform	<u>425.92</u>	<u>0.0130</u>
Span (Theo) - In.	<u>315.72</u>	<u>5.525</u>
Aspect Ratio	<u>1.675</u>	<u>1.675</u>
Rate of Taper	<u>0.507</u>	<u>0.507</u>
Taper Ratio	<u>0.404</u>	<u>0.404</u>
Sweep-Back Angles, Degrees.		
Leading Edge	<u>45.000</u>	<u>45.000</u>
Trailing Edge	<u>26.249</u>	<u>26.249</u>
0.25 Element Line	<u>41.130</u>	<u>41.130</u>
Chords:		
Root (Theo) WP	<u>268.50</u>	<u>4.699</u>
Tip (Theo) WP	<u>108.47</u>	<u>1.898</u>
MAC	<u>199.81</u>	<u>3.500</u>
Fus. Sta. of .25 MAC	<u>1463.50</u>	<u>25.611</u>
W.P. of .25 MAC	<u>635.522</u>	<u>11.122</u>
B.L. of .25 MAC	<u>0.00</u>	<u>0.00</u>
Airfoil Section		
Leading Wedge Angle - Deg.	<u>10.000</u>	<u>10.000</u>
Trailing Wedge Angle - Deg.	<u>14.920</u>	<u>14.920</u>
Leading Edge Radius	<u>2.0</u>	<u>0.035</u>
Void Area	<u>13.17</u>	<u>0.230</u>
Blanketed Area	<u>0.00</u>	<u>0.00</u>

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TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: WING-W<sub>103</sub>

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

~~NOTE: Same planform as W<sub>87</sub> except dihedral at trailing edge.~~

MODEL SCALE: 0.0175

TEST NO. \_\_\_\_\_ DWG. NO. VL70-000139

DIMENSIONS: ORIGINAL PAGE IS OF POOR QUALITY FULL-SCALE MODEL SCALE

TOTAL DATA

Area (Theo.) Ft <sup>2</sup>	2690.00	0.824
Planform		
Span (Theo) In.	936.68	16.392
Aspect Ratio	2.265	2.265
Rate of Taper	1.177	1.177
Taper Ratio	0.200	0.200
Dihedral Angle, degrees	3.500	3.500
Incidence Angle, degrees	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.O.O.	689.24	12.062
Tip, (Theo) B.P.	137.85	2.412
MAC	474.81	8.309
Fus. Sta. of .25 MAC	1136.89	19.896
W.P. of .25 MAC	299.20	5.236
B.L. of .25 MAC	182.13	3.187

EXPOSED DATA

Area (Theo) Ft <sup>2</sup>	1752.29	0.537
Span, (Theo) In. BP108	720.68	12.612
Aspect Ratio	2.058	2.058
Taper Ratio	0.2451	0.2451
Chords		
Root BP108	562.40	9.842
Tip 1.00 $\frac{b}{2}$	137.85	2.412
MAC	393.03	6.878
Fus. Sta. of .25 MAC	1185.31	20.743
W.P. of .25 MAC	300.20	5.254
B.L. of .25 MAC	251.76	4.406
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 <sup>2</sup>	120.33	0.037
Leading Edge Intersects Fus M. L. @ Sta	560.0	9.800
Leading Edge Intersects Wing @ Sta	1035.0	18.113

TABLE III. - MODEL DIMENSIONAL DATA - Concluded.

MODEL COMPONENT: BOUNDARY LAYER TRIPS - X<sub>28</sub>

GENERAL DESCRIPTION: 0.050 steel balls spot-welded to 1/4 inch wide x 0.005  
shim stock. The spacing centerline to centerline is 0.15 inches. The balls  
were placed 3.25 inches aft of the Orbiter nose, 3.5 inches aft of the tank  
nose, 3.15 inches aft of the SRB nose.

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

T/C NO.	$\frac{x}{L}$	FULL SCALE			MODEL SCALE			$\phi$	SKIN THICKNESS	REMARKS
		$x_0$	y	z	FROM NOSE	y	z			
1	0	238.00	0	--	0	0	--	0	.034	BOTTOM $\phi$
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 $\phi$
13									--	OPEN
14	.120	392.84			2.710				.035	BOTTOM $\phi$
15	.130	405.74			2.935				.035	▲
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 $\phi$

Table IV (Cont'd) Orbiter

T/C NO.	X/L	FULL SCALE			MODEL SCALE			φ	SKIN THICKNESS	REMARKS
		x <sub>0</sub>	y	z	(x FROM NOSE)	y	z			
33	.475	850.89	0	--	10.726	0	--	0	.030	BOTTOM φ
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 φ
54	1.000	1528.3 <sup>1)</sup>			22.580				.029	$\frac{x}{L}=1.008 \delta_{BF}=10\%$ .033
55	1.013	1541.56			22.812				.032	$\delta_{BF} 10^\circ$ ONLY ↑
56	1.025	1560.56			23.145				.032	BF ↓
57	1.038	1574.30			23.385			↓	.032	$\delta_{BF} 10^\circ$ ONLY ↓
58	1.050	1592.82			23.709			0	.030	↓ .032
59	.010	250.90			.226			180	.035	TOP φ
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 φ

Table IV. '(Cont'd) Orbiter

T/C NO.	$\frac{x}{L}$	FULL SCALE			MODEL SCALE			$\phi$	SKIN THICKNESS	REMARKS
		$x_0$	$y$	$z$	FROM NOSE	$y$	$z$			
65	.150	431.54	0	--	3.387	0	--	180	.026	TOP $\phi$
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 $\phi$
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.	$\frac{x}{L}$	FULL SCALE			MODEL SCALE			$\phi$	SKIN THICKNESS	REMARKS
		$x_0$	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 $10^\circ = .034$
102	1.050	1592.82	100.00		23.704	1.75		39	.028	BODY FLAP $10^\circ = .033$
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	42.5	.030	↓ TANGENT (UPPER)

Table IV (Cont'd) Orbiter

T/C NO.	X L	FULL SCALE			MODEL SCALE			φ	SKIN THICKNESS	REMARKS
		x <sub>0</sub>	y	z	x FROM NOSE	y	z			
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		332.0	20.322			--	.034	WING UPPER CREASE

Table IV (Continued) Orbiter

T/C NO.	$\frac{2y}{b}$	$\frac{x}{c}$	FULL SCALE		MODEL SCALE		SKIN THICKNESS	REMARKS
			$x_0$	$y$	$x_0$	$y$		
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.	$\frac{2y}{b}$	$\frac{x}{c}$	FULL SCALE		MODEL SCALE		SKIN THICKNESS	REMARKS
			$x_0$	$y$	$x$ (FROM NOSE)	$y$		
185	.600	.800	1454.000	281.004	20.404	4.918	.035	WING BOTTOM SURFACE
186	.600	.850	1422.000	↑	20.720		.033	ELEVON ↑
187	.600	.90	1446.000	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	CLUSTER B
212	↑			↑		↑	.035	↑
213	↓			↓		↓	.035	↓
214	.600			281.004		4.918	.035	WING BOTTOM SURFACE

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Table IV (Continued) Orbiter

T/C NO.	$\frac{2y}{b}$	$\frac{x}{c}$	FULL SCALE		MODEL SCALE		SKIN THICKNESS	REMARKS
			$x_0$	$y'$	$x$ (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			398.039		6.967	.020	CLUSTER C SEE FIG. 6
219	↑			↑		↑	.020	
220	↑			↑		↑	.020	
221	↓			↓		↓	.020	
222	↓			↓		↓	.020	
223	↓			↓		↓	.020	
224	.850			398.039		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	↑	.031	
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	1433.650	↓	20.924	↓	.030	ELEVON
240	.800	.950	1446.145	374.672	21.192	6.557	.030	ELEVON ↓

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Table IV (Continued)

Orbiter

T/C NO.	x [	FULL SCALE			MODEL SCALE			φ	SKIN THICKNESS	REMARKS
		x <sub>0</sub>	y	z	x (FROM NOSE)	y	z			
241	.829	1307			18.715				.026	BOTTOM CREASE OF OMS
242	.900	1399.27			20.318				.035	BOTTOM CREASE OF OMS
243	.975	1496.04			22.011				.030	BOTTOM CREASE OF OMS
244	1.000	1528.3			22.575				.034	BOTTOM OF RCS
245	1.014	1547.0			22.902				.035	BOTTOM OF RCS
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	A
248	.829	1307	124.5	474.0	18.715	2.179	8.295	120.8	.031	
249	.862	1350	132.6	A	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 (CONCLUDED) Orbiter

T/C NO.	$\frac{z}{b_v}$	$\frac{x}{c}$	FULL SCALE		MODEL SCALE		SKIN THICKNESS	REMARKS
			$x_0$	$z$	$x$ (FROM NOSE)	$z$		
265	.159	.100	1353.00	550.20	19.513	9.628	.030	VERTICAL TAIL
266	▲	.300	1411.51	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

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Table V Orbiter Left Main Nozzle T/C Locations  
Model 22-OTS

T/C NO.	x FROM EXIT PLANE		SKIN THICKNESS	$\phi_n$ CLOCKWISE LOOKING FORWARD 0° BOTTOM $\epsilon$
	F.S.	M.S.		
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	↓



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Table VI Solid Rocket Booster T/C Locations  
Model 22-OTS

T/C NO.	$x_s$ FS	$x_{ms}^*$	$\frac{x}{L}$	$\psi$	SKIN THICKNESS	REMARKS
701	200.000	0.000	0.000	90°	.022	NOSE
702	241.900	0.733	0.025	90°	.031	
703	283.800	1.467	0.050	90°	.031	
704	367.600	2.933	0.100	90°	.033	
705	870.400	11.732	0.400	90°	.029	
706	1373.200	20.531	0.700	90°	.030	
707	1507.280	22.877	0.780	90°	.030	
708	1540.800	23.464	0.800	90°	.029	
709	1708.400	26.397	0.900	90°	.031	
710	1758.680	27.277	0.930	90°	.034	
711	1859.240	29.037	0.990	90°	.036	
712	1373.200	20.531	0.700	135°	.030	
713	1708.400	26.397	0.900	135°	.030	
714	1758.680	27.277	0.930	135°	.034	
715	1859.240	29.037	0.990	135°	.035	
716	283.800	1.467	0.050	180°	.032	
717	367.600	2.933	0.100	180°	.034	
718	535.200	5.866	0.200	180°	.030	
719	870.400	11.732	0.400	180°	.030	
720	1038.000	14.665	0.500	180°	.029	
721	1205.600	17.598	0.600	180°	.030	
722	1289.400	19.065	0.650	180°	.030	
723	1373.200	20.531	0.700	180°	.029	
724	1457.000	21.998	0.750	180°	.029	
725	1507.280	22.877	0.780	180°	.030	
726	1540.800	23.464	0.800	180°	.028	
727	1624.600	24.931	0.850	180°	.028	
728	1708.400	26.397	0.900	180°	.028	
729	1758.680	27.277	0.930	180°	.032	
730	1808.960	28.157	0.960	180°	.034	SKIRT
731	1859.240	29.037	0.990	180°	.034	SKIRT
732	1715.000	26.514	0.904	210°	.028	SKIRT
733	1738.000	26.984	0.918	210°	.030	SEPARATION NOZZLES 15-5PH

\*MEASURED FROM NOSE

Table VI (Continued)  
(Solid Rocket Booster)

T/C NO.	$x_s$ FS	$x_{ms}^*$	$\frac{x}{L}$	$\psi$	SKIN THICKNESS	REMARKS
734	1750.000	27.130	0.925	210°	.032	SEPARATION NOZZLES
735	1792.200	27.864	0.950	210°	.033	15-5PH
736	1825.720	28.450	0.970	210°	.032	
737	1750.300	27.130	0.925	≈215°	.032	
738	1775.440	27.570	0.940	≈215°	.032	
739	1808.960	28.157	0.960	≈215°	.033	
740	325.700	2.200	0.075	225°	.035	
741	367.600	2.933	0.100	225°	.034	
742	451.400	4.400	0.150	225°	.032	
743	535.200	5.866	0.200	225°	.030	
744	702.800	8.799	0.300	225°	.028	
745	870.400	11.732	0.400	225°	.030	
746	1038.000	14.665	0.500	225°	.030	
747	1205.600	17.598	0.600	225°	.030	
748	1373.200	20.531	0.700	225°	.030	
749	1507.280	22.877	0.780	225°	.030	
750	1540.800	23.464	0.800	225°	.029	
751	1624.600	24.931	0.850	225°	.029	
752	1708.400	26.397	0.900	225°	.027	
753	1758.680	27.277	0.930	225°	.031	SKIRT
754	1808.960	28.157	0.960	225°	.032	
755	1859.240	29.037	0.990	225°	.032	
756	1758.68	27.277	0.930	240°	.030	
757	1808.960	28.157	0.960	240°	.031	
758	1859.240	29.037	0.990	240°	.032	
759	702.800	8.799	0.300	247.5°	.028	
760	870.400	11.732	0.400	247.5°	.030	
761	1038.000	14.665	0.500	247.5°	.030	
762	1205.600	17.598	0.600	247.5°	.030	
763	1289.400	19.065	0.650	247.5°	.031	
764	1373.200	20.531	0.700	247.5°	.030	
765	1457.000	21.998	0.750	247.5°	.031	
766	392.740	3.373	0.115	260°	.032	

\*MEASURED FROM NOSE

**Table VI (Concluded)**  
(Solid Rocket Booster)

T/C NO.	$x_s$ FS	$x_{ms}^*$	$\frac{x}{L}$	$\psi$	SKIN THICKNESS	REMARKS
767	203.816	0.067	0.002	270°	.035	ON 45° RAY FROM NOSE RADIUS
768	241.900	0.733	0.025	270°	.033	
769	283.800	1.467	0.050	270°	.033	
770	325.700	2.200	0.075	270°	.036	
771	367.600	2.933	0.100	270°	.036	
772	384.360	3.226	0.110	270°	.036	
773	417.880	3.813	0.130	270°	.032	
774	451.400	4.400	0.150	270°	.032	
775	535.200	5.866	0.200	270°	.030	
776	619.000	7.333	0.250	270°	.030	
777	702.800	8.799	0.300	270°	.028	
778	870.400	11.732	0.400	270°	.029	
779	1038.000	14.665	0.500	270°	.030	
780	1205.600	17.598	0.600	270°	.031	
781	1289.400	19.065	0.650	270°	.031	
782	1373.200	20.531	0.700	270°	.030	
783	1457.000	21.998	0.750	270°	.030	
784	1507.280	22.877	0.780	270°	.030	
785	1540.800	23.464	0.800	270°	.030	
786	1624.600	24.931	0.850	270°	.030	
787	1708.400	26.397	0.900	270°	.027	
788	1758.680	27.277	0.930	270°	.029	SKIRT ↓
789	1808.960	28.157	0.960	270°	.032	
790	1859.240	29.037	0.990	270°	.032	
791	702.800	8.799	0.300	315°	.029	
792	1038.000	14.665	0.500	315°	.030	
793	1373.000	20.531	0.700	315°	.029	
794	1507.280	22.877	0.780	315°	.028	
795	1540.800	23.464	0.800	315°	.028	
796	1708.400	26.397	0.900	315°	.028	
797	1758.680	27.277	0.930	315°	.030	
798	1859.240	29.037	0.990	315°	.032	

\*MEASURED FROM NOSE

Table VII External Tank Locations

T/C NO.	$x_T$ FS	$x_{ms}^*$	$\frac{x}{L}$	$\theta$	SKIN THICKNESS	REMARKS
501	381.60	1.306	.040	0°	.034	NOSE
502	458.70	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	↓	1.034	
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

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**Table VII(Continued)**  
(External Tank)

T/C NO.	$x_T$ FS	$x_{ms}^*$	$\frac{x}{L}$	$\theta$	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	968.50	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	

Table VII (Continued)  
(External Tank)

T/C NO.	$x_T$ FS	$x_{ms}$	$\frac{x}{L}$	$\theta$	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 VII (CONTINUED)**  
(External Tank)

T/C NO.	$x_T$ FS	$x_{ms}^*$	$\frac{x}{L}$	$\theta$	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	196°	.035	

\*MEASURED FROM NOSE

Table VII (Concluded)  
(External Tank)

T/C NO.	$x_T$ FS	$x_{ms}^*$	$\frac{x}{L}$	$\theta$	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

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TABLE VIII

(a) Thermocouple Schedule No. XI

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

TABLE VIII + Continued.

(b) Thermocouple Schedule No. X2

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
160	1	187	26	214	51
161	2	188	27	215	52
162	3	189	28	216	53
163	4	190	29	218	54
164	5	191	30	219	55
165	6	192	31	220	56
166	7	193	32	221	57
167	8	196	33	222	58
168	9	197	34	229	59
169	10	198	35	230	60
170	11	199	36	232	61
171	12	200	37	234	62
172	13	201	38	246	63
173	14	202	39	247	64
174	15	203	40	274	65
175	16	204	41	275	66
176	17	205	42	276	67
177	18	206	43	277	68
178	19	207	44	278	69
179	20	208	45	279	70
180	21	209	46	280	71
181	22	210	47	281	72
182	23	211	48	282	73
183	24	212	49	283	74
184	25	213	50	284	75

TABLE VIII- Continued.

(c) Thermocouple Schedule No. X3

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
5	1	57	26	119	51
7	2	70	27	120	52
9	3	73	28	121	53
11	4	75	29	122	54
15	5	76	30	123	55
17	6	77	31	124	56
19	7	78	32	125	57
21	8	80	33	126	58
23	9	81	34	127	59
25	10	82	35	128	60
27	11	83	36	129	61
29	12	85	37	130	62
31	13	86	38	131	63
33	14	89	39	132	64
35	15	103	40	133	65
37	16	106	41	136	66
39	17	107	42	137	67
41	18	108	43	138	68
43	19	109	44	139	69
45	20	110	45	140	70
47	21	112	46	141	71
49	22	113	47	142	72
51	23	114	48	143	73
53	24	117	49	144	74
55	25	118	50	145	75

TABLE VIII - Continued.

(d) Thermocouple Schedule No. X4

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
146	1	239	26	266	51
147	2	240	27	267	52
148	3	241	28	268	53
149	4	242	29	269	54
151	5	243	30	270	55
152	6	244	31	271	56
153	7	245	32	272	57
154	8	248	33	273	58
185	9	249	34	286	59
186	10	250	35	287	60
194	11	251	36	501	61
195	12	252	37	502	62
217	13	253	38	503	63
223	14	254	39	504	64
224	15	255	40	505	65
225	16	256	41	506	66
226	17	257	42	507	67
227	18	258	43	508	68
228	19	259	44	509	69
231	20	260	45	510	70
233	21	261	46	511	71
235	22	262	47	512	72
236	23	263	48	513	73
237	24	264	49	514	74
238	25	265	50	515	75

TABLE VIII - Continued.

(e) Thermocouple Schedule No. X5

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
516	1	541	26	566	51
517	2	542	27	567	52
518	3	543	28	568	53
519	4	544	29	569	54
520	5	545	30	570	55
521	6	546	31	571	56
522	7	547	32	572	57
523	8	548	33	573	58
524	9	549	34	574	59
525	10	550	35	575	60
526	11	551	36	576	61
527	12	552	37	577	62
528	13	553	38	578	63
529	14	554	39	579	64
530	15	555	40	580	65
531	16	556	41	581	66
532	17	557	42	582	67
533	18	558	43	583	68
534	19	559	44	584	69
535	20	560	45	585	70
536	21	561	46	586	71
537	22	562	47	587	72
538	23	563	48	588	73
539	24	564	49	589	74
540	25	565	50	590	75

TABLE VIII - Continued.

(f) Thermocouple Schedule No. X6

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
591	1	616	26	752	51
592	2	617	27	759	52
593	3	618	28	792	53
594	4	619	29	636	54
595	5	620	30	637	55
596	6	621	31	638	56
597	7	622	32	639	57
598	8	623	33	640	58
599	9	624	34	641	59
600	10	625	35	Open	60
601	11	626	36	701	61
602	12	627	37	702	62
603	13	628	38	703	63
604	14	629	39	704	64
605	15	630	40	705	65
606	16	631	41	708	66
607	17	632	42	709	67
608	18	633	43	710	68
609	19	634	44	711	69
610	20	635	45	714	70
611	21	706	46	715	71
612	22	707	47	716	72
613	23	713	48	717	73
614	24	744	49	718	74
615	25	749	50	719	75

TABLE VIII - Continued.

(g) Thermocouple Schedule No. X7

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
720	1	753	26	784	51
721	2	754	27	785	52
722	3	755	28	787	53
723	4	756	29	788	54
724	5	757	30	789	55
725	6	758	31	790	56
726	7	760	32	791	57
728	8	762	33	793	58
729	9	766	34	797	59
730	10	767	35	798	60
731	11	768	36	712	61
732	12	769	37	727	62
733	13	770	38	746	63
734	14	771	39	748	64
735	15	772	40	750	65
736	16	773	41	751	66
737	17	774	42	761	67
738	18	775	43	763	68
739	19	776	44	764	69
740	20	777	45	765	70
741	21	778	46	780	71
742	22	779	47	786	72
743	23	781	48	794	73
745	24	782	49	795	74
747	25	783	50	796	75

TABLE VIII - Continued.

(h) Thermocouple Schedule No. X8

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
501	1	526	26	551	51
502	2	527	27	552	52
503	3	528	28	553	53
504	4	529	29	554	54
505	5	530	30	555	55
506	6	531	31	556	56
507	7	532	32	557	57
508	8	533	33	558	58
509	9	534	34	559	59
510	10	535	35	560	60
511	11	536	36	561	61
512	12	537	37	562	62
513	13	538	38	563	63
514	14	539	39	564	64
515	15	540	40	565	65
516	16	541	41	566	66
517	17	542	42	567	67
518	18	543	43	568	68
519	19	544	44	569	69
520	20	545	45	570	70
521	21	546	46	571	71
522	22	547	47	572	72
523	23	548	48	573	73
524	24	549	49	574	74
525	25	550	50	575	75



TABLE VIII - Continued.

(i) Thermocouple Schedule No. x9

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
576	1	601	26	626	51
577	2	602	27	627	52
578	3	603	28	628	53
579	4	604	29	629	54
580	5	605	30	630	55
581	6	606	31	631	56
582	7	607	32	632	57
583	8	608	33	633	58
584	9	609	34	634	59
585	10	610	35	635	60
586	11	611	36	636	61
587	12	612	37	637	62
588	13	613	38	638	63
589	14	614	39	639	64
590	15	615	40	640	65
591	16	616	41	641	66
592	17	617	42	Open	67
593	18	618	43	Open	68
594	19	619	44	Open	69
595	20	620	45	Open	70
596	21	621	46	Open	71
597	22	622	47	Open	72
598	23	623	48	Open	73
599	24	624	49	Open	74
600	25	625	50	Open	75

TABLE VIII - Continued.

(j) Thermocouple Schedule No. X10

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
701	1	731	26	768	51
702	2	732	27	769	52
703	3	733	28	770	53
704	4	734	29	771	54
705	5	735	30	772	55
708	6	736	31	773	56
709	7	737	32	774	57
710	8	738	33	775	58
711	9	739	34	776	59
714	10	740	35	777	60
715	11	741	36	778	61
716	12	742	37	779	62
717	13	743	38	781	63
718	14	745	39	782	64
719	15	747	40	783	65
720	16	753	41	784	66
721	17	754	42	785	67
722	18	755	43	787	68
723	19	756	44	788	69
724	20	757	45	789	70
725	21	758	46	790	71
726	22	760	47	791	72
728	23	762	48	793	73
729	24	766	49	797	74
730	25	767	50	798	75

TABLE VIII - Continued.

(k) Thermocouple Schedule No. XII

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
37	1	106	26	521	51
39	2	107	27	522	52
41	3	108	28	523	53
43	4	109	29	524	54
45	5	110	30	525	55
47	6	129	31	526	56
49	7	130	32	527	57
51	8	131	33	528	58
53	9	132	34	529	59
Open	10	133	35	530	60
Open	11	136	36	531	61
70	12	137	37	532	62
73	13	138	38	533	63
75	14	139	39	534	64
76	15	140	40	535	65
77	16	141	41	536	66
78	17	142	42	537	67
80	18	143	43	538	68
81	19	144	44	539	69
82	20	145	45	540	70
83	21	516	46	541	71
85	22	517	47	542	72
86	23	518	48	543	73
89	24	519	49	544	74
103	25	520	50	545	75

TABLE VIII - Continued.

(1) Thermocouple Schedule No. X12

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
146	1	239	26	266	51
147	2	240	27	267	52
148	3	241	28	268	53
149	4	242	29	269	54
151	5	243	30	270	55
152	6	244	31	271	56
153	7	245	32	272	57
154	8	248	33	273	58
185	9	249	34	286	59
186	10	250	35	287	60
194	11	251	36	701	61
195	12	252	37	702	62
217	13	253	38	703	63
223	14	254	39	704	64
224	15	255	40	705	65
225	16	256	41	708	66
226	17	257	42	709	67
227	18	258	43	710	68
228	19	259=	44	711	69
231	20	260	45	714	70
233	21	261	46	715	71
235	22	262	47	716	72
236	23	263	48	717	73
237	24	264	49	718	74
238	25	265	50	719	75

TABLE VIII - Concluded.

(m) Thermocouple Schedule No. X13

Thermocouple No.	Channel	Thermocouple No.	Channel	Thermocouple No.	Channel
546	1	586	26	611	51
547	2	587	27	612	52
548	3	588	28	613	53
549	4	589	29	614	54
550	5	590	30	615	55
551	6	591	31	616	56
552	7	592	32	617	57
553	8	593	33	618	58
554	9	594	34	619	59
555	10	595	35	620	60
556	11	596	36	621	61
557	12	597	37	622	62
558	13	598	38	623	63
559	14	599	39	624	64
560	15	600	40	625	65
576	16	601	41	626	66
577	17	602	42	627	67
578	18	603	43	628	68
579	19	604	44	629	69
580	20	605	45	630	70
581	21	606	46	631	71
582	22	607	47	632	72
583	23	608	48	633	73
584	24	609	49	634	74
585	25	610	50	635	75

TABLE IX.  
 RUN NUMBER/TUNNEL CONDITION SUMMARY

Run #	Re <sub>∞</sub> 10 <sup>6</sup> /ft	PT lb/in <sup>2</sup>	TT °R	HT BTU/lbm
3	1.6836	134.84	1290.9	315.17
4	1.4477	126.22	1361.4	333.35
5	1.4387	120.49	1327.6	324.61
6	1.4437	120.67	1326.0	324.19
7	1.4590	120.12	1313.4	320.97
8	1.4747	120.31	1305.9	319.04
9	1.4622	120.12	1311.7	320.52
10	4.9470	406.24	1311.3	320.43
11	4.9525	404.51	1308.9	319.81
12	5.2494	404.23	1259.4	307.10
13	4.6685	404.05	1355.2	331.74
14	5.0172	404.96	1297.2	316.80
15	5.0054	404.78	1298.8	317.20
16	4.8190	397.18	1314.3	321.20
19	4.8670	405.98	1324.3	323.76
20	5.1112	403.68	1279.6	312.28
21	4.9160	405.51	1315.0	321.38
22	5.2780	405.64	1257.8	306.70
23	5.1233	405.33	1281.0	312.63
24	5.1423	405.33	1278.0	311.87
25	4.9430	400.76	1300.9	317.73
26	4.9983	404.42	1299.2	317.30
27	4.8679	404.42	1320.9	322.90
28	5.1244	406.63	1283.4	313.26
29	4.5597	402.53	1372.1	336.10
30	4.9941	405.72	1302.5	318.16
31	4.8403	404.26	1325.3	324.03
32	4.8777	402.22	1314.8	321.31
33	1.5445	121.10	1273.7	310.77
34	1.5245	126.88	1322.4	323.29
35	1.5333	117.56	1255.9	306.22
36	1.5105	126.70	1328.9	324.94
37	1.5943	126.99	1286.5	314.04
38	1.5416	120.78	1273.1	310.62
39	1.5033	120.23	1289.7	314.88
41	4.8771	405.51	1321.6	323.07
42	5.3537	422.15	1278.3	311.94
43	4.9191	400.40	1304.1	318.56
44	4.9551	393.82	1284.7	313.58
45	5.0179	399.67	1286.4	314.02
46	5.0863	405.41	1287.2	314.23
47	5.1460	405.93	1278.6	312.03

TABLE IX.  
(CONTINUED)

Run #	$Re_{\infty}$ $10^6/\text{ft}$	PT $\text{lb}/\text{in}^2$	TT $^{\circ}\text{R}$	HT $\text{BTU}/\text{lbm}$
48	4.8332	405.69	1329.5	325.10
49	4.9404	405.51	1310.9	320.33
50	5.0288	405.33	1296.1	316.50
51	4.8435	402.77	1321.7	323.10
52	5.0017	405.49	1300.8	317.72
53	3.7802	865.75	1479.2	364.02
54	3.5551	863.00	1530.7	377.56
55	3.8920	869.41	1457.6	358.36
56	3.6179	870.10	1522.4	375.36
57	3.4846	870.10	1556.2	384.29
58	3.6912	868.03	1502.4	370.12
59	6.6853	1635.22	1537.5	379.36
60	6.7733	1595.85	1504.1	370.56
62	6.8605	1641.02	1571.5	374.09
63	6.9870	1641.71	1501.7	369.93
64	7.3529	1657.28	1465.3	360.38
65	6.6534	1635.44	1542.0	380.53
66	6.7145	1633.03	1532.4	378.01
67	6.5520	1632.65	1554.3	383.79
68	6.7905	1643.67	1528.2	376.88
69	7.0178	1640.92	1497.4	368.79
70	6.8106	1648.45	1528.1	376.87
71	6.8692	1646.06	1519.2	374.51
72	6.7892	1648.49	1530.9	377.62
73	4.7615	397.33	1324.6	323.84
74	5.3867	405.72	1241.9	302.63
75	5.0705	403.45	1285.6	313.81
76	4.8762	403.34	1317.3	321.96
77	1.4781	120.96	1308.5	319.69
78	1.5313	121.51	1283.4	313.25
79	1.5025	121.33	1297.6	316.89
80	1.4894	121.47	1305.7	318.97
81	5.2368	405.74	1264.2	308.35
82	5.046	401.80	1286.2	313.97
83	1.4368	120.76	1330.5	325.37
84	1.6061	130.47	1302.4	318.14
85	1.3937	115.98	1322.3	323.25
86	4.9140	406.74	1317.9	322.10
87	4.9737	406.56	1307.5	319.45
88	4.9979	406.48	1303.4	318.39
89	4.8713	405.82	1323.2	323.49
90	1.2944	105.11	1302.1	318.06
91	5.0305	406.27	1297.7	316.92

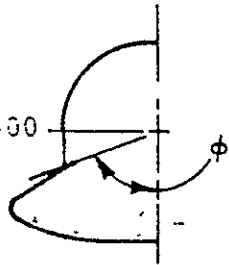
TABLE IX.  
(CONCLUDED)

Run #	Re <sub>∞</sub> 10 <sup>6</sup> /ft	PT lb/in <sup>2</sup>	TT °R	HT BTU/lbm
92	4.9490	405.28	1309.0	319.84
93	5.3241	403.21	1246.2	303.73
94	5.0158	403.54	1294.6	316.12
95	5.2283	405.90	1265.8	308.76
96	5.0700	405.54	1289.8	314.91
97	5.1445	405.35	1277.7	311.79
98	5.0579	405.46	1291.6	315.37
99	1.5562	120.55	1264.1	308.31
100	1.4682	121.10	1314.9	321.36
101	1.4366	120.19	1326.7	324.39
102	1.4599	121.87	1325.0	323.93
103	1.4788	121.65	1312.7	320.79
104	5.3870	395.61	1222.2	297.61
106	5.4448	404.73	1231.6	300.01
107	4.9393	403.97	1308.0	319.57
108	1.4498	122.79	1337.0	327.03
109	1.4012	118.76	1337.6	327.19
111	1.4385	121.33	1333.5	326.13



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$Z = 400$



VIEW LOOKING FORWARD  $\psi$ ,  
 $\theta$  AND  $\phi$  MEASURED FROM  
BOTTOM & CLOCKWISE

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$L_T = 1865.0$

$L_S = 1676.0$

$b/2 = 468.34$

$b_v = 315.72$

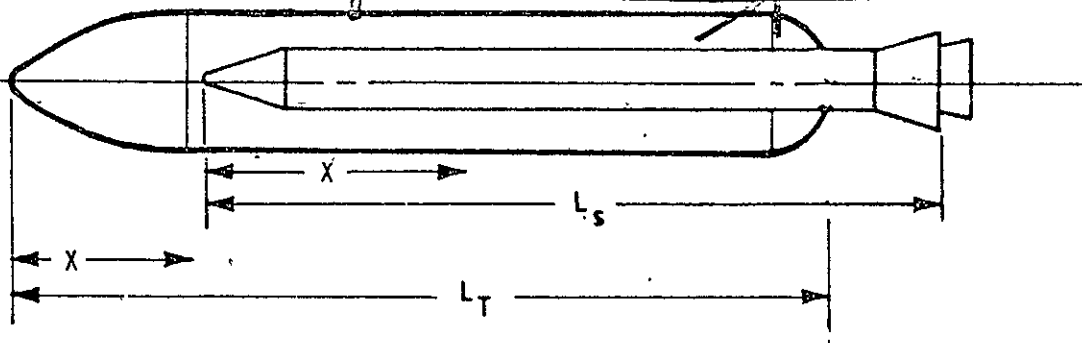
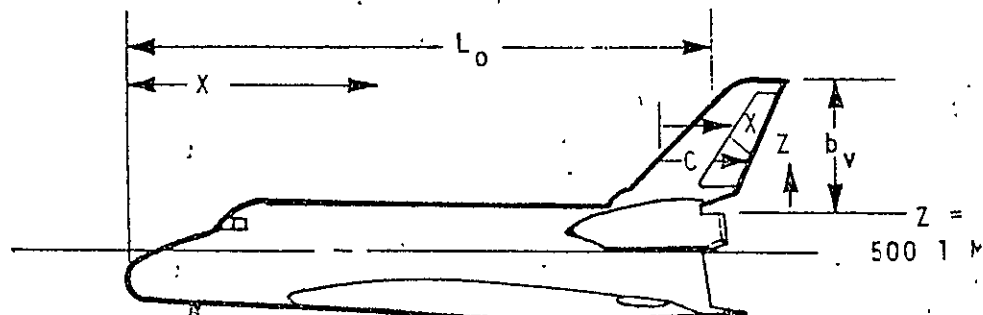
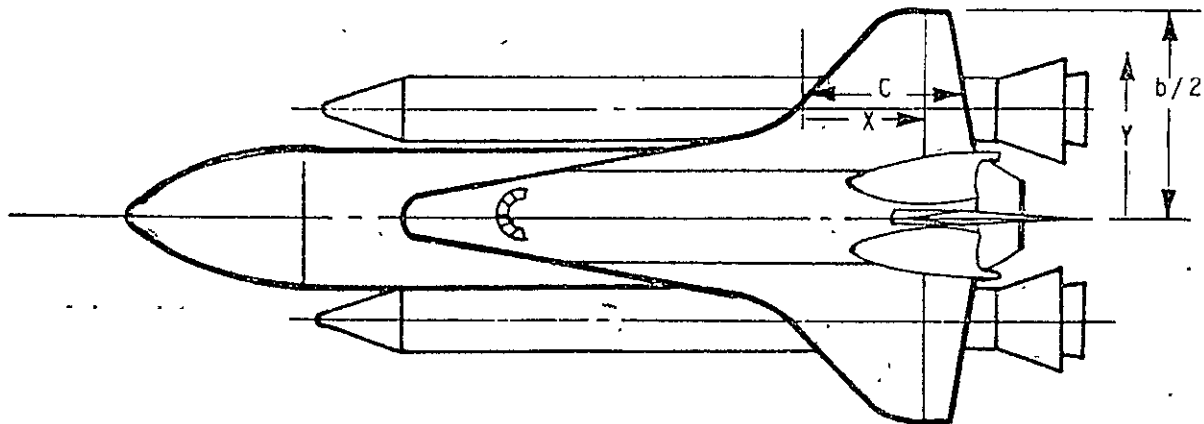
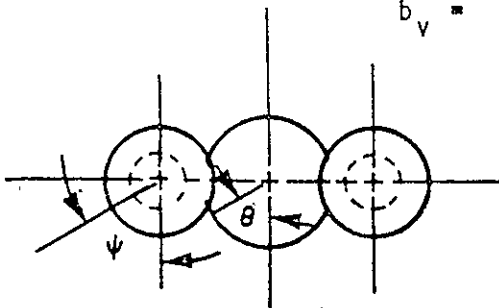
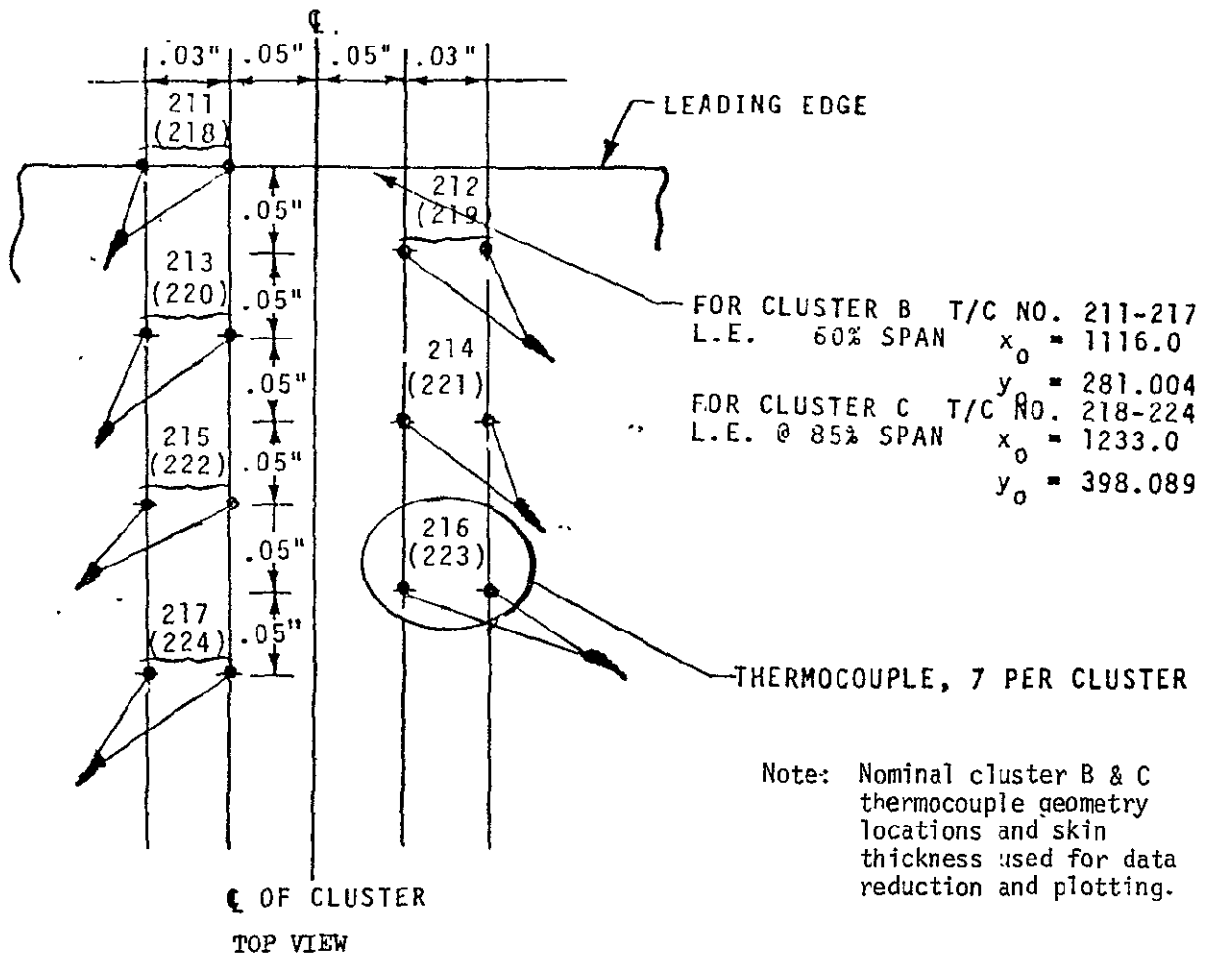
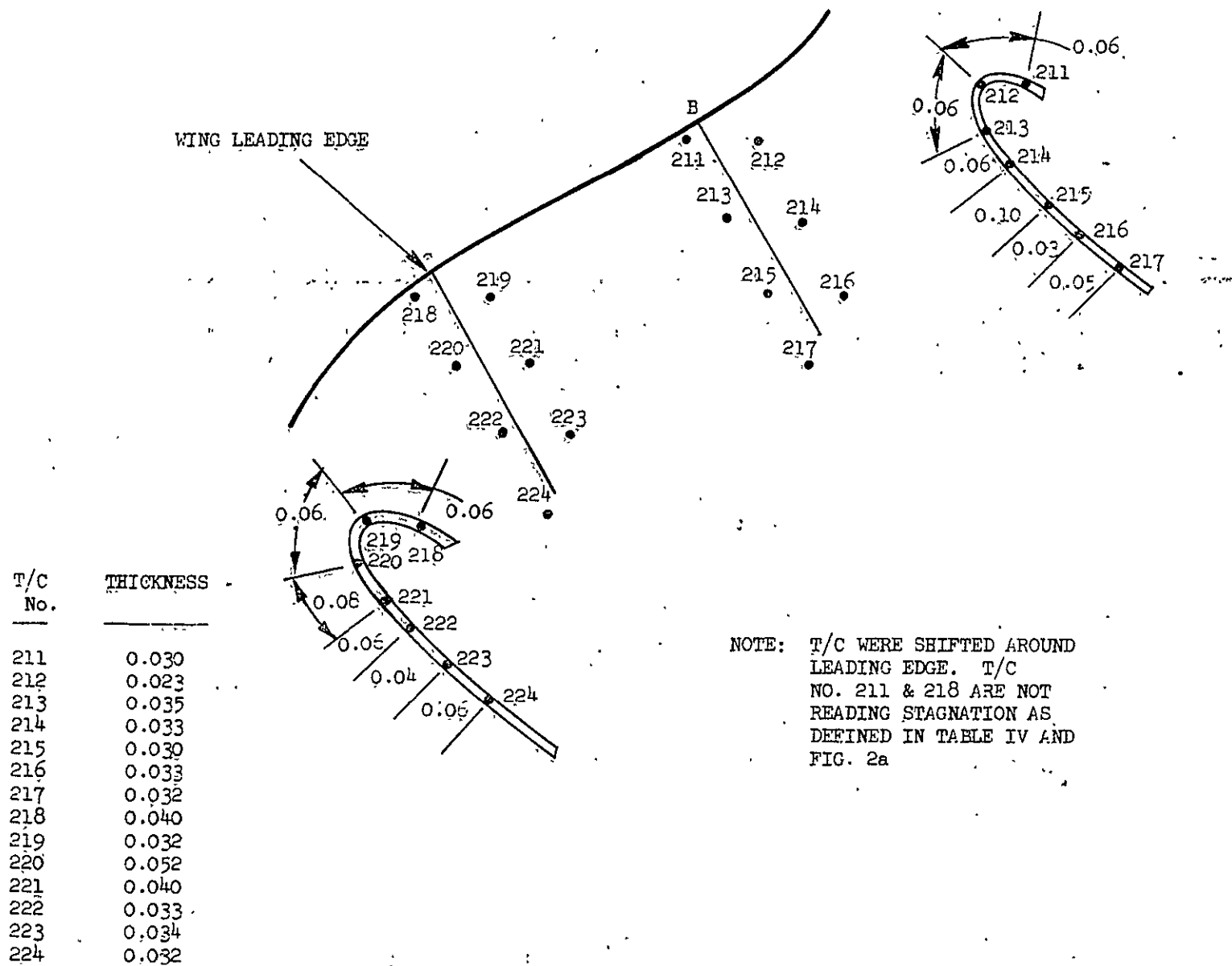


Figure 1. - Model instrumentation location system.



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a. 22-OTS wing leading-edge cluster B & C nominal thermocouple locations  
Figure 2. - Model sketches.

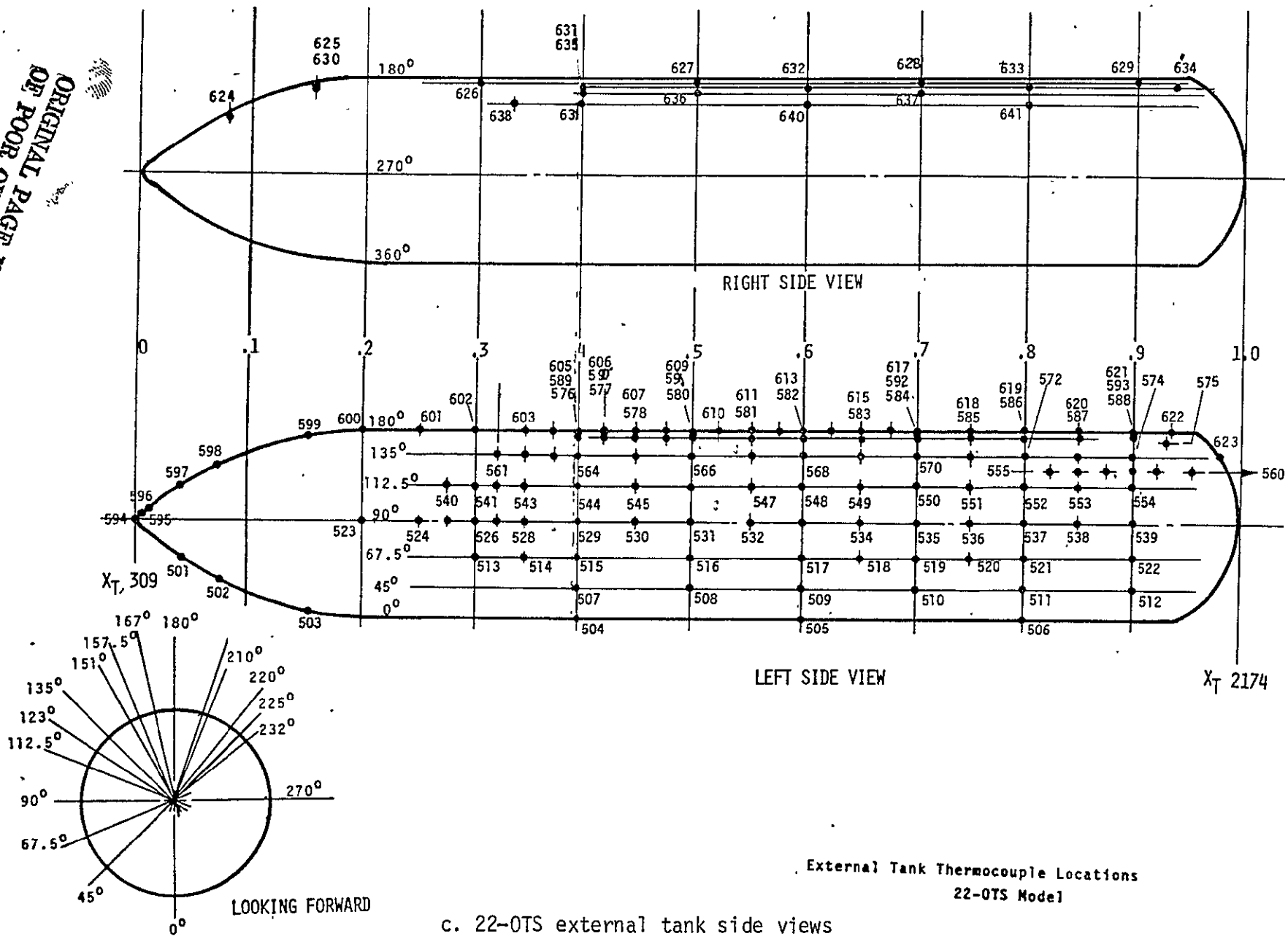


b. 22-OTS wing leading-edge clusters B & C actual thermocouple locations and skin thicknesses

Figure 2. - Continued.

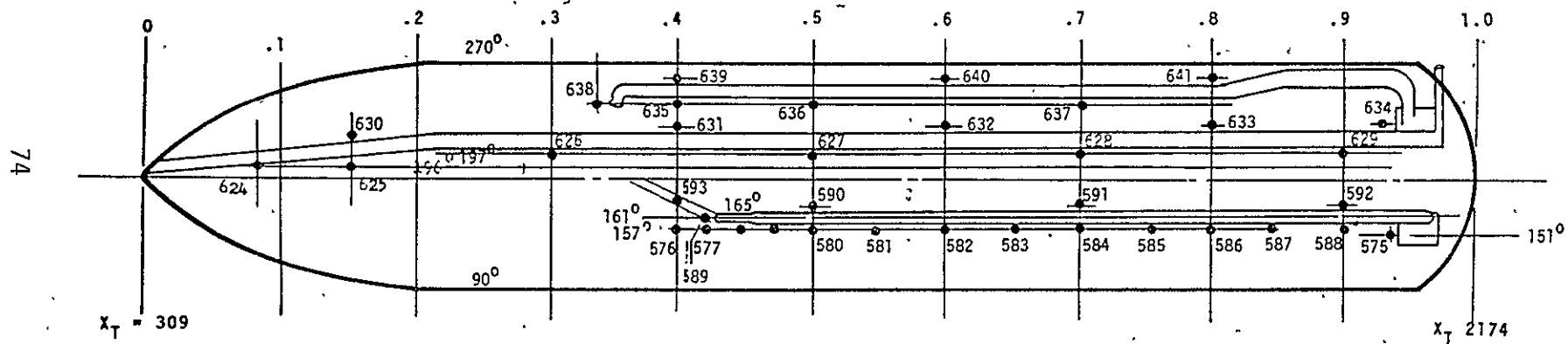
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c. 22-OTS external tank side views

Figure 2. - Continued.

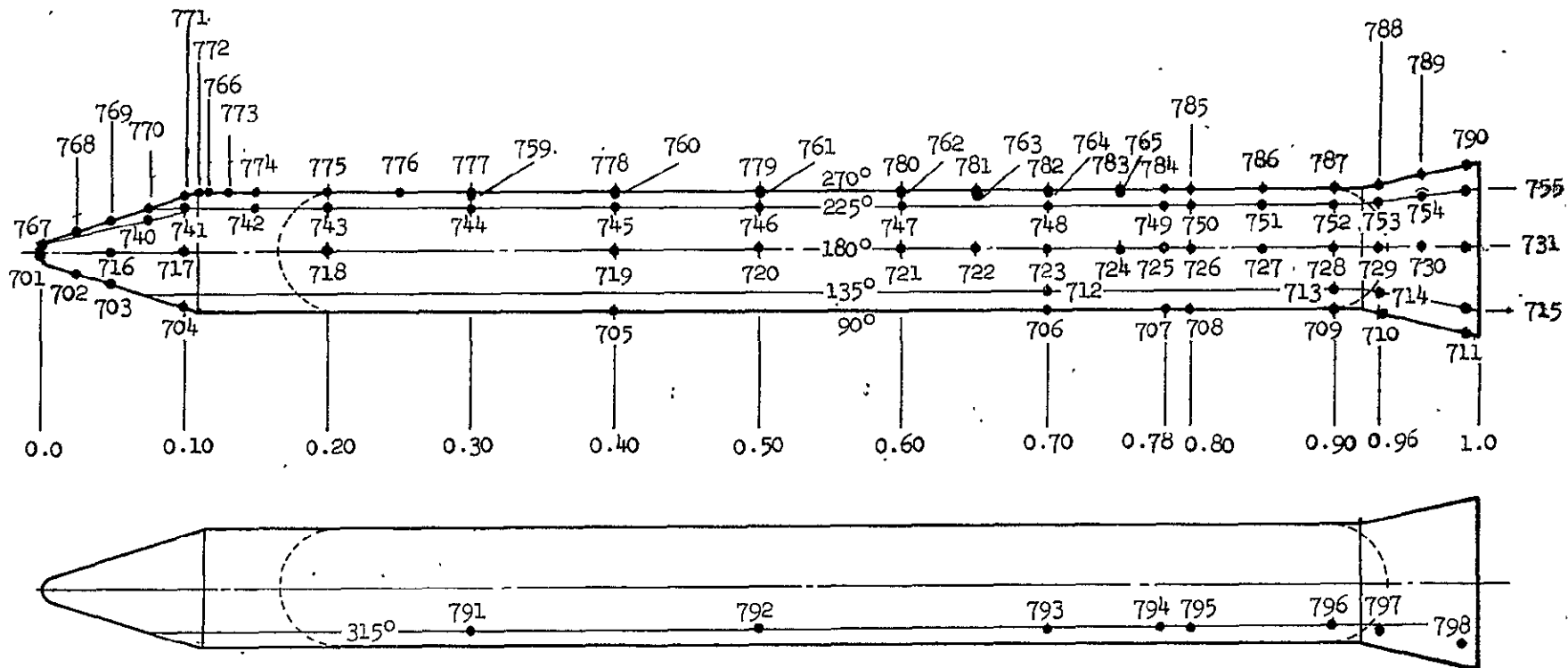


d. 22-OTS external tank top view

Figure 2. - Continued.

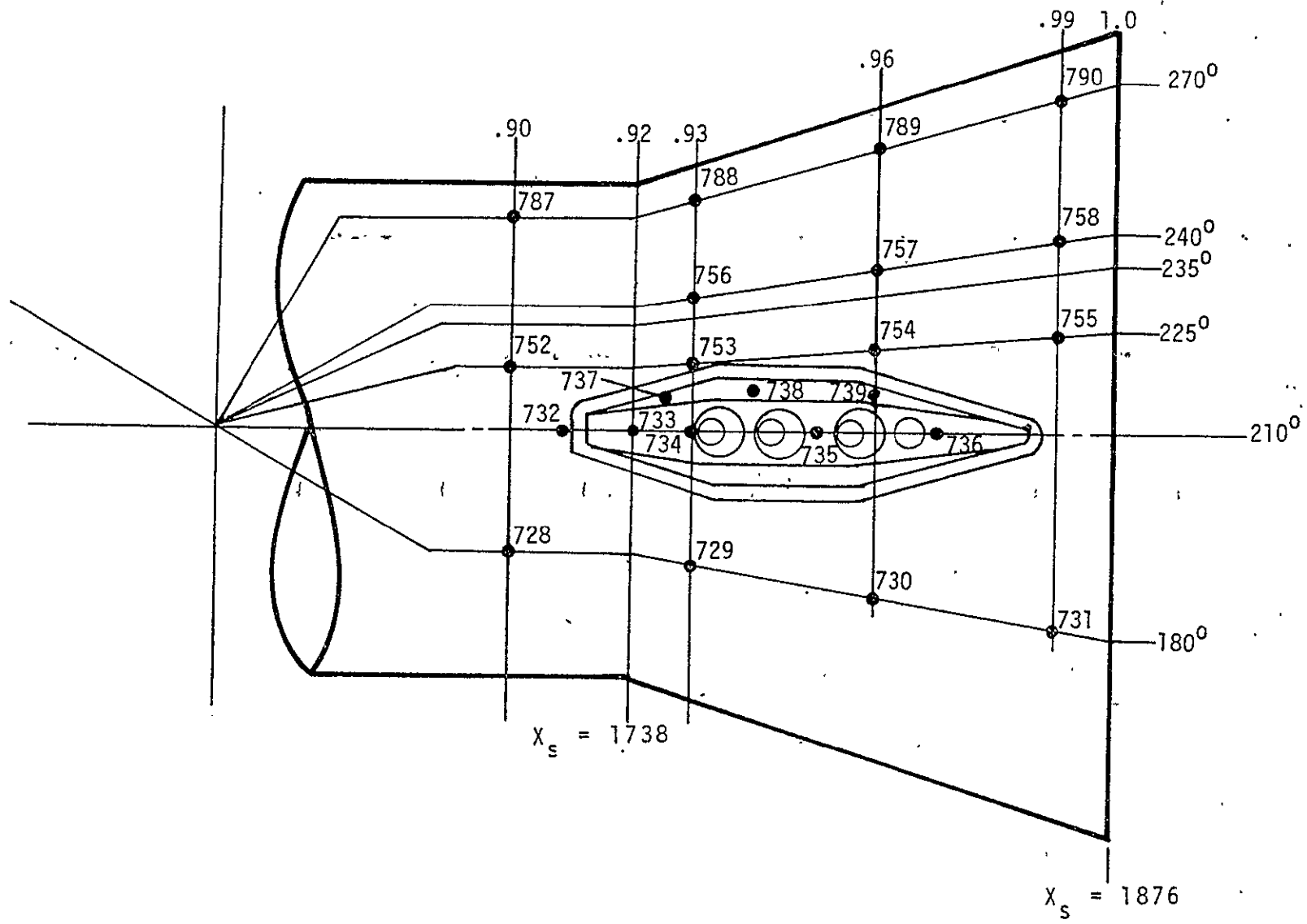
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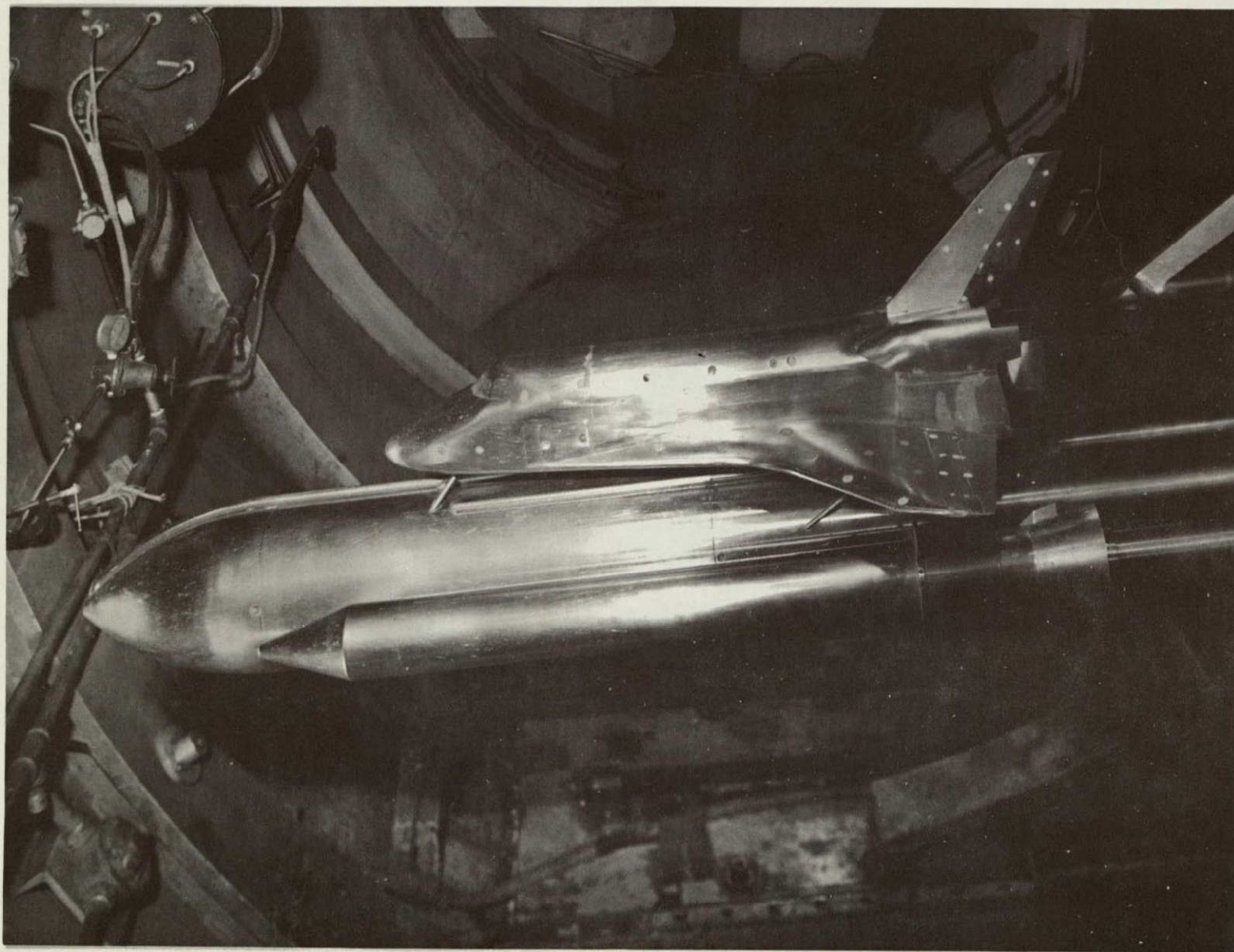
e. 22-OTS SRB

Figure 2. - Continued.



f. 22-OTS SRB skirt detail

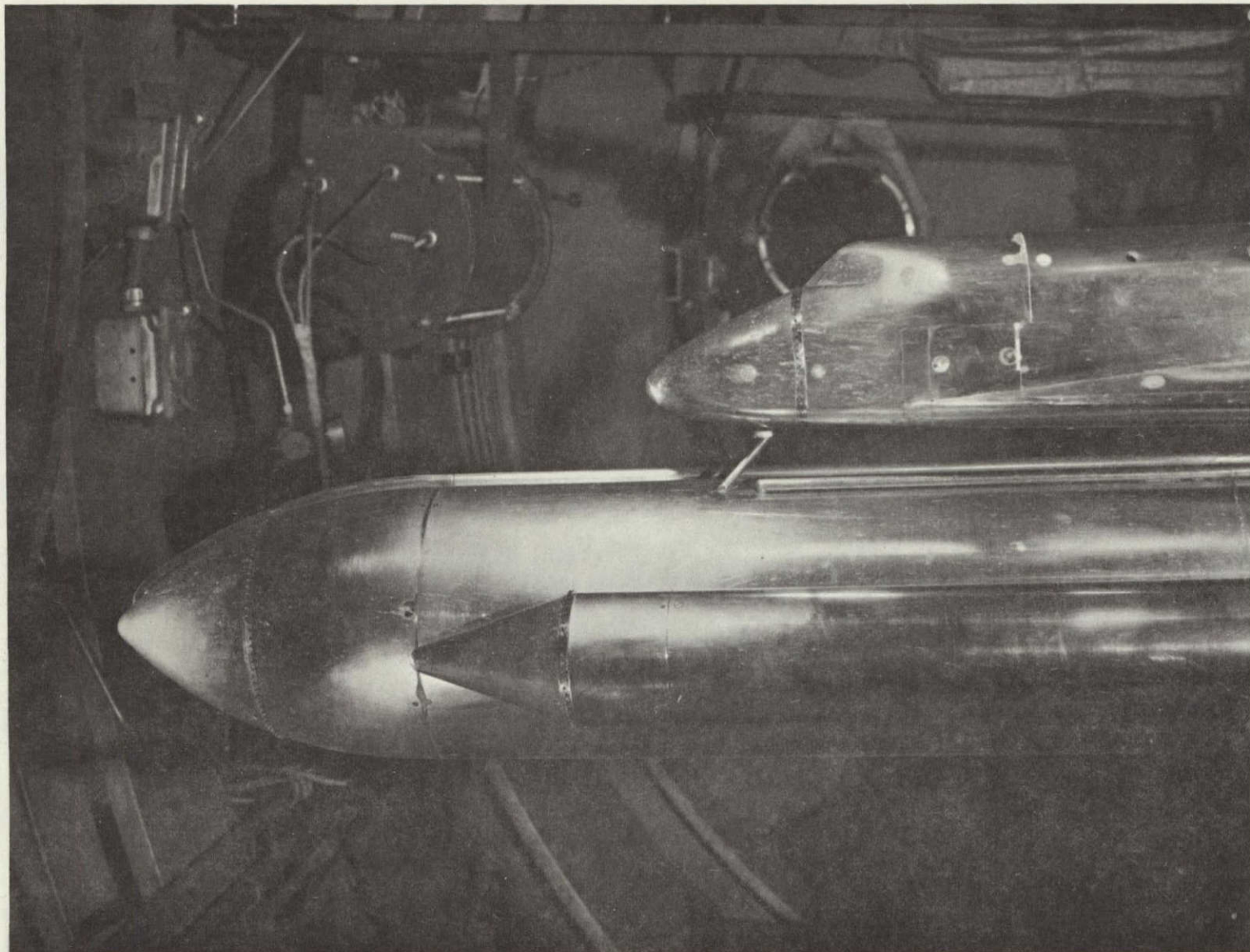
Figure 2. - Concluded.



a. Orbiter ( $O_1$ ), external tank ( $T_{15}$ ), and SRB ( $S_8$ ) in integrated configuration without boundary-layer trips;  $\alpha = -5^\circ$ ,  $\beta = 0^\circ$ .

Figure 3. - Model photographs.

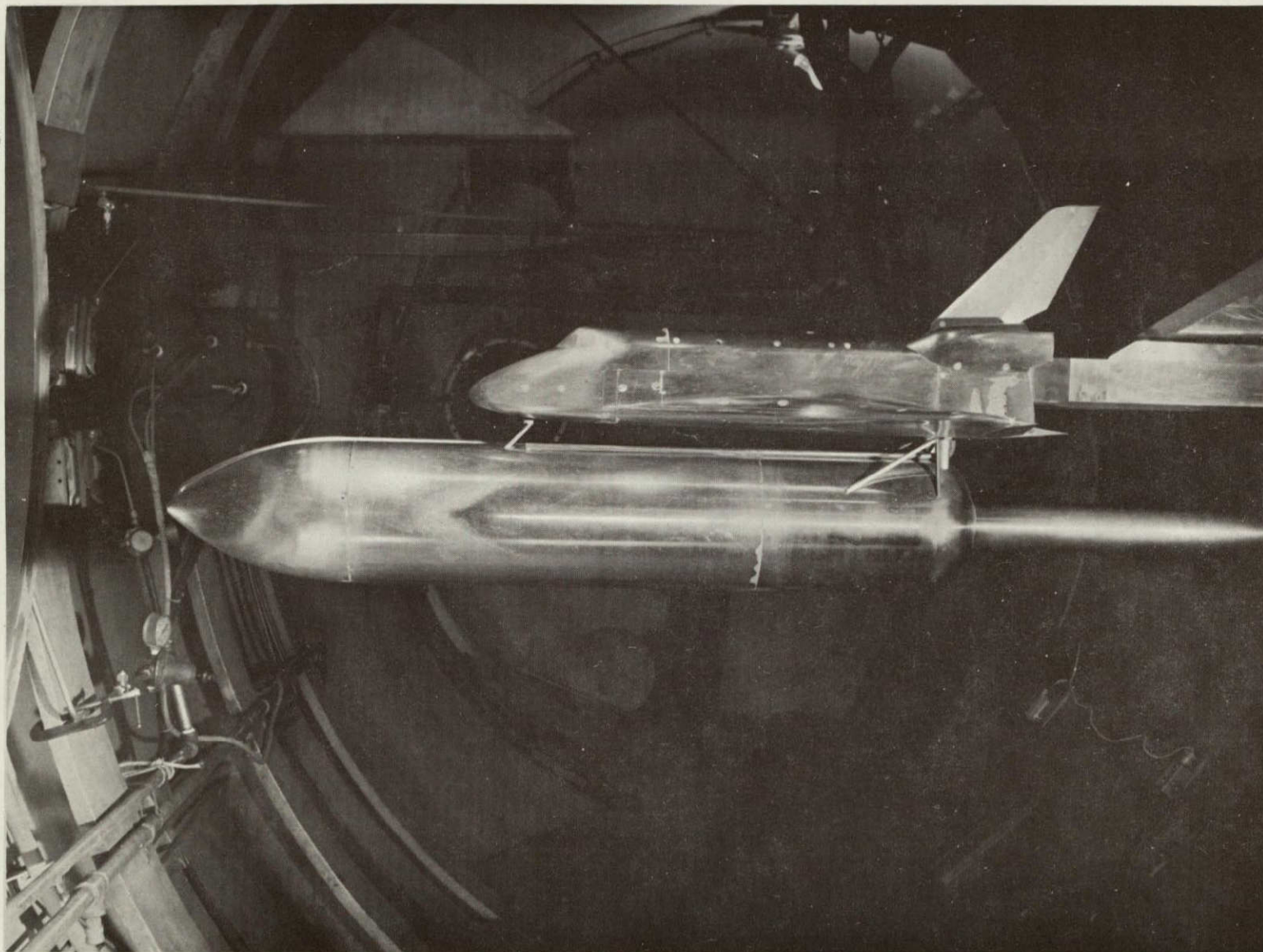




b. Orbiter ( $O_1$ ), external tank ( $T_{15}$ ), and SRB ( $S_8$ ) in integrated configuration with boundary-layer trips; ( $X_{28}$ )  $\alpha = -5^\circ$ ,  $\beta = 0^\circ$

Figure 3. - Continued.

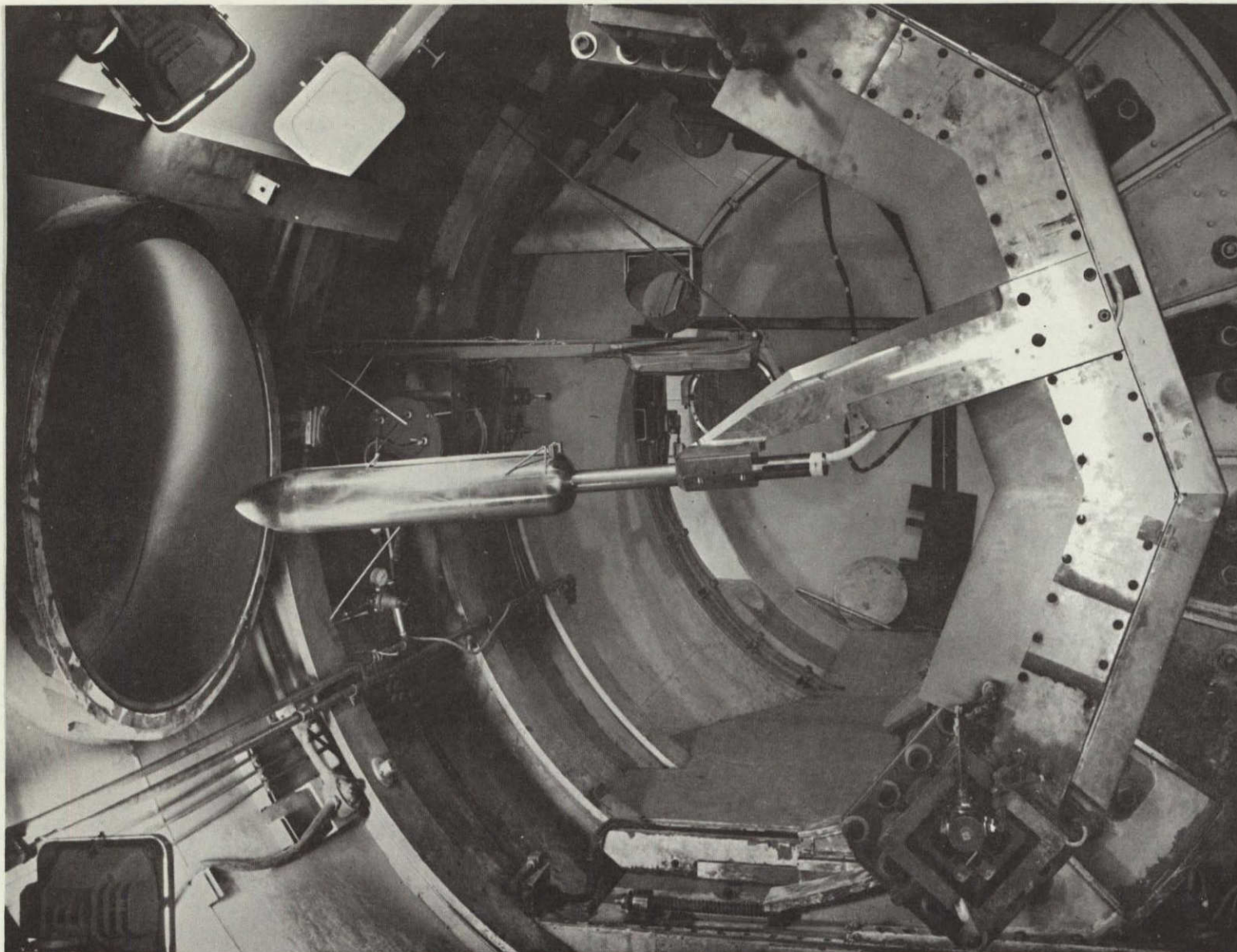




c. Orbiter (O<sub>1</sub>) and external tank (T<sub>15</sub>) in mated configuration without boundary-layer trips;  $\alpha = 0^\circ$ ,  $\beta = 0^\circ$

Figure 3. - Continued.

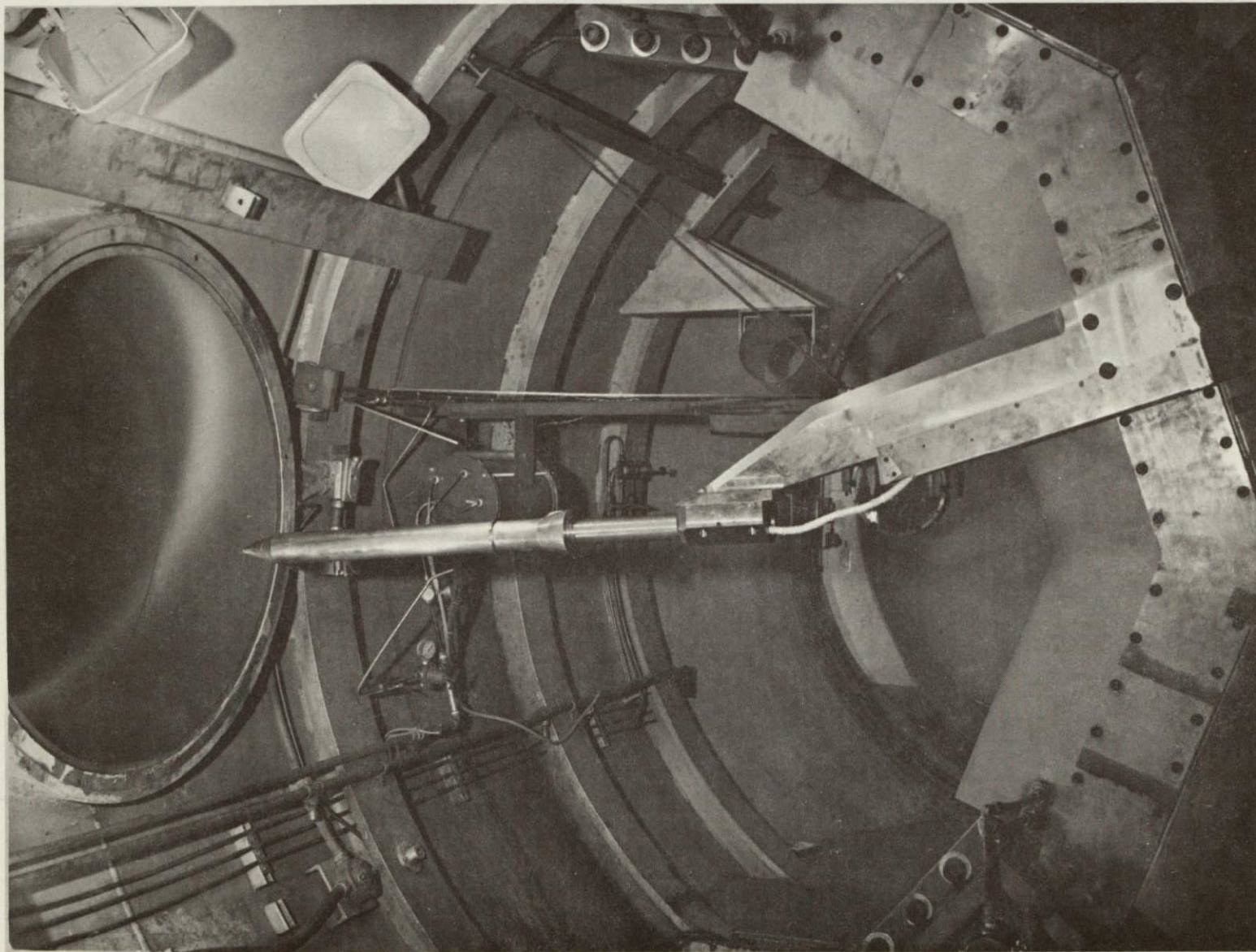




d. External tank ( $T_{15}$ ) alone without boundary-layer trips;  $\alpha = -5^\circ$ ,  $\beta = 0^\circ$

Figure 3. - Continued.





e. SRB ( $S_8$ ) alone without boundary-layer trips  $\alpha = -5^\circ$ ,  $\beta = 0^\circ$

Figure 3. - Concluded.

APPENDIX  
TABULATED SOURCE DATA  
VOLUME II  
H/HO DATA  
QDOT DATA (SEE VOL. I)

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

REN---datasets contain H/HO data

QEN---datasets contain QDOT data

4th Character of Dataset ID	Location of Thermocouple
A	Orbiter, Phi = 0.0 (Bottom CL)
B	Orbiter, Y = 0.438 (Fuselage Bottom Surface)
C	Orbiter, Y = 0.875 (Fuselage Side)
D	Orbiter, C.C.L. Tangent
E	Orbiter, M.H.B. Tangent
F	Orbiter RCS, Z = 6.125
G	Wing Upper Crease
H	Orbiter, Z = 7.525 (Upper Body)
I	Orbiter Windows
J	Orbiter, Z = 8.379 (Upper Body)
K	Orbiter, Phi = 180. (Top CL)
L	OMS Bottom Crease
M	Orbiter, Z = 8.295 (OMS Pods)
N	Orbiter, Phi = 130. (OMS Pods)
O	OMS Top
P	OMS Inside
Q	Orbiter Body Flap, Y = 1.75
R	Bottom RCS
S	Solid Booster
T	External Tank
U	Orbiter, Z = 8.75 (OMS Pods)
V	Vertical Tail
W	Wing Bottom Surface
X	Wing Upper Surface
Y	Clusters B and C
Z	Orbiter Body

ARC 3.5-185 IH2D O1+T15+S8

ORB PHI=0.0

(RENAD1) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.8812
.005	.5454
.010	.3566
.020	.1594
.030	.1009
.040	.0752
.050	.0561
.060	.0351
.070	.0424
.080	.1111
.090	.2011
.100	.6134
.120	.2280
.130	.1087
.140	.0788
.150	.0389
.160	.0707
.170	.0372
.180	.0657
.190	.0733
.200	.1273
.225	.0977
.250	.1064
.275	.0927
.300	.0703
.325	.0630
.350	.0302
.375	.0000
.400	.0908
.425	.0738
.450	.0826
.475	.0704
.500	.0704
.525	.0628
.550	.0727
.575	.0608
.600	.0696
.625	.0569

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ARC 3.5-185 IH2D O1+T15+S8

CRB PHI=0.0

(RENA01)

MACH ( 1 ) = 3.300 HAW/HT ( 1 ) = .850

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.650	.0598
.675	.0489
.700	.0542
.725	.0388
.750	.1523
.775	.1661
.800	.1630
.825	.1607
.850	.1277
.875	.0469
.900	.0370
.925	.0248
.950	.0153
.975	.0087
1.000	.0037
1.013	.0000
1.025	.0020
1.038	.0000
1.050	.0031

MACH ( 1 ) = 3.300 HAW/HT ( 2 ) = .900 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.7898
.005	.4889
.010	.3198
.020	.1430
.030	.0903
.040	.0675
.050	.0323
.060	.0315
.070	.0380
.080	.0998
.090	.1802
.100	.5509
.120	.2049
.130	.0975
.140	.0708
.150	.0349
.160	.0635
.170	.0334



ARC 3.5-185 IH20 01+T15+S8

ORB FHI=0.0

(RENA01)

MACH ( 1) = 5.300 HAW/HT ( 2) = .900

SECTION ( 1)BODY	DEPENDENT VARIABLE H/H0
PHI	.0000
X/L	
.180	.0591
.190	.0657
.200	.1144
.225	.0877
.250	.0956
.275	.0832
.300	.0632
.325	.0565
.350	.0451
.375	.0000
.400	.0816
.425	.0662
.450	.0742
.475	.0632
.500	.0632
.525	.0564
.550	.0653
.575	.0546
.600	.0625
.625	.0511
.650	.0537
.675	.0439
.700	.0487
.725	.0349
.750	.1369
.775	.1491
.800	.1465
.825	.1443
.850	.1148
.875	.0421
.900	.0332
.925	.0223
.950	.0137
.975	.0078
1.000	.0033
1.013	.0000
1.025	.0018
1.038	.0000
1.050	.0028

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OF POOR QUALITY

ARC 3.5-185 IH20 Q1+T15+S8 CRB FHI=0.0

(RENA01)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1) BODY

DEPENDENT VARIABLE H/HO

FHI .0000

X/L

.000	.6542
.005	.4051
.010	.2651
.020	.1166
.030	.0746
.040	.0560
.050	.0288
.060	.0262
.070	.0315
.080	.0829
.090	.1493
.100	.4577
.120	.1703
.130	.0808
.140	.0589
.150	.0289
.160	.0528
.170	.0277
.180	.0491
.190	.0545
.200	.0951
.225	.0729
.250	.0795
.275	.0690
.300	.0525
.325	.0469
.350	.0374
.375	.0000
.400	.0678
.425	.0550
.450	.0617
.475	.0524
.500	.0526
.525	.0468
.550	.0543
.575	.0453
.600	.0519
.625	.0424
.650	.0446
.675	.0365
.700	.0405
.725	.0289
.750	.1138
.775	.1238
.800	.1218

DATE 28 APR 75

TABULATED SOURCE DATA - IH2D

PAGE 5

ARC 3.5-185 IH2D O1+T15+S8

ORB PHI=D.0

(RENAD1)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000

SECTION ( 1) BODY DEPENDENT VARIABLE H/H0

PHI .0000

X/L

.825	.1198
.850	.0954
.875	.0350
.900	.0277
.925	.0185
.950	.0114
.975	.0065
1.000	.0028
1.013	.0000
1.025	.0015
1.038	.0000
1.050	.0023

ARC 3.5-185 IH2D O1+T15+S8 CRB Y=0.438

. (RENBD1) ( 07 APR 75 )

## REFERENCE DATA

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 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .4380

## X/L

.050 .0601  
 .200 .0610  
 .300 .0824

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .4380

## X/L

.050 .0539  
 .200 .0548  
 .300 .0740

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .4380

## X/L

.050 .0448  
 .200 .0456  
 .300 .0616

ARC 3.5-185 IH20 O1+T15+S8 CRB Y=0.875

(RENC01) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .8750

## X/L

.200 .0467  
 .300 .0832  
 .400 .0809  
 .500 .0722  
 .600 .0673  
 .700 .0631  
 .800 .1543  
 .900 .0209

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .8750

## X/L

.200 .0420  
 .300 .0748  
 .400 .0727  
 .500 .0649  
 .600 .0605  
 .700 .0567  
 .800 .1387  
 .900 .0188

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .8750

## X/L

.200 .0349  
 .300 .0622  
 .400 .0604  
 .500 .0540  
 .600 .0503  
 .700 .0472

ARC 3.5-185 IH2D Q1+T15+S8 CRB Y=0.875

(RENC01)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

Y .8750

X/L

.800 .1154

.900 .0157

ARC 3.5-185 IH20 O1+T15+S8 ORB C.C.L.TANGENT

(REND01) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0620  
 .100 .1168  
 .150 .1899  
 .200 .0741

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0556  
 .100 .1047  
 .150 .1703  
 .200 .0665

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0462  
 .100 .0868  
 .150 .1412  
 .200 .0551

ARC 3.5-185 IH20 O1+T15+S8

CRB M.H.B.TANGENT

(RENE01) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN. ALPHA = -5.000 BETA = .000  
 LREF = 1290.3000 IN. YMRP = .0000 IN. MACH = 5.300 RN/L = 1.500  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .1035  
 .100 .0554  
 .150 .1171

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0929  
 .100 .0498  
 .150 .1051

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0772  
 .100 .0414  
 .150 .0872



ARC 3.5-185 IH2D O1+T15+S8 CRB Z=6.125

(RENF01) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0827  
 .300 .0125  
 .800 .0258  
 .900 .0642  
 .975 .0535

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0741  
 .300 .0112  
 .800 .0232  
 .900 .0577  
 .975 .0481

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0614  
 .300 .0093  
 .800 .0193  
 .900 .0479  
 .975 .0399

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1-2

ARC 3.5-185 IH20 O1+T15+S8

WING UPPER CREASE

(RENG01) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN. ALPHA = -5.000 BETA = .000  
 LREF = 1290.3000 IN. YMRP = .0000 IN. MACH = 5.300 RN/L = 1.500  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

WINGUC 1.0000

## X/L

.400 .0646  
 .500 .0260  
 .600 .0505  
 .700 .0328  
 .900 .0531

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

WINGUC 1.0000

## X/L

.400 .0581  
 .500 .0234  
 .600 .0453  
 .700 .0295  
 .900 .0477

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

WINGUC 1.0000

## X/L

.400 .0483  
 .500 .0194  
 .600 .0377  
 .700 .0245  
 .900 .0397

ARC 3.5-185 IH20 O1+T15+S8 CRB Z=7.525

(RENHO1) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0459  
 .400 .0514  
 .500 .0367  
 .600 .0615  
 .700 .0516  
 .800 .0633

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0413  
 .400 .0462  
 .500 .0329  
 .600 .0552  
 .700 .0463  
 .800 .0569

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0343  
 .400 .0385  
 .500 .0274  
 .600 .0459  
 .700 .0385  
 .800 .0473

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ARC 3.5-185 IH2D 01+T15+S8

ORB WINDOWS

(RENI01) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

## SECTION ( 1 ) WINDOW

## DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

## X/L

.156	.5148		
.164	.5167		
.168	.4872		
.170		.8867	
.178			.7400
.182	.3341	.1856	.6070
.185			.4457
.191			.3620
.200		.2415	

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

## SECTION ( 1 ) WINDOW

## DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

## X/L

.156	.4614		
.164	.4631		
.168	.4366		
.170		.7961	
.178			.6630
.182	.2996	.1642	.5439
.185			.3995
.191			.3245
.200		.2170	

DATE 28 APR 75

TABULATED SOURCE DATA - IH20

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ARC 3.5-185 IH20 O1+T15+S8

ORB WINDOWS

(RENID1)

MACH ( 1) = 5.300 HAW/HT( 3) = 1.000 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1) WINDOW

DEPENDENT VARIABLE H/WO

Z 7.9100 8.1370 8.3650

X/L

.156	.3821		
.164	.3834		
.168	.3616		
.170		.6610	
.178			.5489
.182	.2482	.1335	.4504
.185			.3308
.191			.2689
.200		.1804	

ARC 3.5-185 IH20 O1+T15+S8 CRB Z=8.379

(RENJO1) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0340  
 .400 .0177  
 .500 .0039  
 .600 .0268  
 .700 .0391

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0305  
 .400 .0159  
 .500 .0035  
 .600 .0241  
 .700 .0352

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0253  
 .400 .0132  
 .500 .0029  
 .600 .0200  
 .700 .0292

ARC 3.5-185 IH20 01+T15+S8 CRB PHI=180

(RENK01) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.5205
.025	.2861
.050	.1871
.075	.1318
.100	.1154
.125	.0975
.150	.1941
.160	.7917
.170	.8444
.180	.6784
.200	.1107
.250	.0180
.300	.0069
.400	.0123
.500	.0366
.600	.0625
.700	.0645
.800	.0721

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.4668
.025	.2566
.050	.1679
.075	.1183
.100	.1036
.125	.0876
.150	.1743
.160	.7109
.170	.7580
.180	.6090
.200	.0995
.250	.0161

ARC 3.5-185 IH2D 01+T15+S8 CRB PHI=180

(RENK01)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.300	.0062
.400	.0111
.500	.0328
.600	.0562
.700	.0580
.800	.0648

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.3868
.025	.2129
.050	.1394
.075	.0983
.100	.0861
.125	.0728
.150	.1448
.160	.5903
.170	.6293
.180	.5056
.200	.0827
.250	.0134
.300	.0052
.400	.0092
.500	.0273
.600	.0468
.700	.0482
.800	.0538



ARC 3.5-185 IH20 01+T15+S8

CMS BOTTOM CREASE

(RENLD1) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT.    XMRP = .0000 IN.                    ALPHA = -5.000    BETA = .000  
 LREF = 1290.3000 IN.      YMRP = .0000 IN.                    MACH = 5.300    RN/L = 1.500  
 BREF = 1290.3000 IN.      ZMRP = .0000 IN.  
 SCALE = .0175

MACH ( 1 ) = 5.300    HAW/HT ( 1 ) = .850    RN/L = 1.487    FO = 123.250    TO = 1319.560    HO = 322.550

## SECTION ( 1 ) CMS

## DEPENDENT VARIABLE H/HO

CMS            1.0000

## X/L

.829    .0699  
 .900    .0961  
 .975    .0664

MACH ( 1 ) = 5.300    HAW/HT ( 2 ) = .900    RN/L = 1.487    FO = 123.250    TO = 1319.560    HO = 322.550

## SECTION ( 1 ) CMS

## DEPENDENT VARIABLE H/HO

CMS            1.0000

## X/L

.829    .0628  
 .900    .0864  
 .975    .0596

MACH ( 1 ) = 5.300    HAW/HT ( 3 ) = 1.000    RN/L = 1.487    FO = 123.250    TO = 1319.560    HO = 322.550

## SECTION ( 1 ) CMS

## DEPENDENT VARIABLE H/HO

CMS            1.0000

## X/L

.829    .0521  
 .900    .0718  
 .975    .0495

ARC 3.3-185 IH2D O1+T15+S8 CRB Z=8.293

(RENMO1) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2930

X/L

.780 .2332  
 .805 .2533  
 .829 .1950  
 .862 .1203  
 .963 .0777  
 1.000 .0882  
 1.014 .0747

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .2100  
 .805 .2279  
 .829 .1748  
 .862 .1079  
 .963 .0698  
 1.000 .0792  
 1.014 .0670

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .1751  
 .805 .1899  
 .829 .1449  
 .862 .0896  
 .963 .0580  
 1.000 .0657  
 1.014 .0556

ARC 3.5-185 IH20 O1+T15+S8 ORB PHI=130.

(RENN01) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L  
 .805 .2786  
 .829 .2379  
 .862 .1125  
 .963 .0805

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L  
 .805 .2498  
 .829 .2132  
 .862 .1009  
 .963 .0723

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L  
 .805 .2069  
 .829 .1766  
 .862 .0837  
 .963 .0601

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ARC 3.5-185 IH20 O1+T15+S8 OMS TCF

(RENO01) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

## SECTION ( 1 ) OMS

## DEPENDENT VARIABLE H/HO

Y 1.6620

## X/L

.805 .2805  
 .829 .2132  
 .862 .0886  
 .963 .0601

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

## SECTION ( 1 ) OMS

## DEPENDENT VARIABLE H/HO

Y 1.6620

## X/L

.805 .2515  
 .829 .1911  
 .862 .0795  
 .963 .0539

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

## SECTION ( 1 ) OMS

## DEPENDENT VARIABLE H/HO

Y 1.6620

## X/L

.805 .2084  
 .829 .1583  
 .862 .0659  
 .963 .0448

ARC 3.5-185 IH20 O1+T15+S8 OMS INSIDE

(RENPD1) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .0765  
 .963 .0964

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .0686  
 .963 .0865

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .0569  
 .963 .0718

ARC 3.5-185 IH2D O1+T15+S8 ORB Y=1.75

(RENG01) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0169  
 1.050 .0208

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0152  
 1.050 .0187

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0126  
 1.050 .0156

ARC 3.5-105 IH20 O1+T15+S8 BOTTOM RCS

(RENRO1) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0110  
 1.014 .0156

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0098  
 1.014 .0140

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0082  
 1.014 .0116

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ARC 3.5-185 IH20 01+T15+S8, SCLID BOOSTER

(RENS01) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BRFP = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

## SECTION ( 1 )SRB

## DEPENDENT VARIABLE H/H0

PS1 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L								
.000	.7469							
.002							.9339	
.025	.1148						.2316	
.050	.0788	.2034					.1375	
.075				.1386			.0617	
.100	.0597	.1510		.0989			.2753	
.110							.6786	
.115						.6500		
.130							.0883	
.150				.0777			.0959	
.200		.0805		.1123			.0561	
.250							.0332	
.300				.0531	.0343		.0306	.0060
.400	.0354	.0408		.0402	.0608		.0471	
.500		.0901		.0561	.0778		.0788	.0293
.600		.0520		.0690	.0676		.0661	
.650		.0589			.0664		.0604	
.700	.0091	.0244	.0614	.0474	.0584		.0568	.0204
.750			.0698		.1023		.0892	
.780	.0215		.2484	.0000			.4613	.0830
.800	.0078		.2254	.2292			.0314	.0307
.850			.0825	.1058			.0169	
.900	.0013	.0454	.0778	.0199			.0082	.0184
.904			.0662					
.918			.2889					
.925			.2193	.1230				
.930	.0167	.1157	.2147		.2755	.0841	.0137	.0456
.940				.0421				
.950			.0663					
.960			.1430	.0342	.0972	.0750	.0294	
.970			.0220					
.990	.0366	.0921	.0960	.0736	.0399		.0517	.0466





ARC 3.3-185 IH2D O1+T15+S8

SOLID BOOSTER

(RENS01)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 )SRB

DEPENDENT VARIABLE H/HO

Psi 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L

.100	.0446			.0732				.2040	
.110								.5034	
.115						.4824			
.130								.0658	
.150				.0578				.0714	
.200		.0600		.0834				.0417	
.250								.0247	
.300				.0395		.0256		.0227	.0045
.400	.0263		.0303	.0297		.0450		.0350	
.500		.0666		.0415		.0577		.0585	.0218
.600		.0384		.0511		.0501		.0491	
.650		.0435				.0493		.0448	
.700	.0068	.0180	.0454	.0351		.0434		.0422	.0151
.750			.0517			.0761		.0663	
.780	.0160		.1841	.0000				.3432	.0617
.800	.0058		.1671	.1703				.0234	.0229
.850			.0613	.0787				.0126	
.900	.0010	.0338	.0577	.0148				.0061	.0137
.904			.0491						
.918			.2141						
.925			.1625	.0912					
.930	.0125	.0861	.1591		.2042	.0624		.0102	.0338
.940				.0312					
.950			.0492						
.960			.1059	.0253	.0720	.0555		.0218	
.970			.0163						
.990	.0272	.0685	.0711	.0545	.0295			.0383	.0344





ARC 3.5-185 IH20 01+T15+S8

EXTERNAL TANK

(RENT01)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.900 .0333 .0328 .0747 .0680 .0764 .0675 .0597 .0791 .1066 .0851
.925 .1802 .2038
.935 .2575
.937 .1842
.960 .0892
.975 .0257

THETA 216.0000 222.5000 229.0000

X/L

.335 .0999
.400 .0835 .0860
.500 .1145
.600 .0760
.700 .0744
.800 .0536

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.000 .6406
.005 .4939
.010 .5529
.040 .1085 .2204
.080 .0583 .1662 .1198
.150 .0124 .0563 .0665 .0585
.200 .0185 .0261
.250 .0141 .0119
.275 .0102 .0166
.300 .0137 .1092 .0147 .0078 .0000
.325 .3538 .0561 .0202
.350 .0993 .1346 .1926 .0616 .0386
.375 .0424 .0622
.400 .0247 .0499 .0147 .0574 .0497 .0312 .0626 .0716 .0735 .0281
.425 .1121 .1081 .1802
.450 .0318 .0302 .0500 .1208 .3235
.475 .1074 .0515
.500 .0115 .0040 .0263 .0191 .1396 .0791 .0679 .0852 .1007
.525 .0719
.550 .0220 .0533 .0771 .0417 .0630
.575 .0676

ARC 3.5-185 IH20 O1+T15+S8

EXTERNAL TANK

(RENT01)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) TANK

DEPENDENT VARIABLE H/H0

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.600	.0297	.0075	.0064	.0399	.0522	.0610	.0346	.0718	.0327
.625								.0629	
.650			.0067	.0555	.0298	.0527	.0372	.0600	
.675								.0700	
.700		.0207	.0071	.0562	.0727	.0465	.0387	.0657	.0581
.750			.0092	.0525	.0806	.0393	.0293	.0560	
.800	.0264	.0176	.0115	.0457	.0676	.0435	.0181	.0530	.0342
.825						.0867			
.850				.0477	.0631	.0522	.0683	.0371	.0432
.875						.0643			
.900		.0277	.0272	.0619	.0563	.0633	.0559	.0495	.0656
.925						.1492			.0884
.935							.2134		.0706
.937								.1528	
.960						.0739			.1692
.975								.0214	

THETA 216.0000 222.5000 229.0000

X/L

.335		.0829							
.400	.0694		.0715						
.500	.0951								
.600			.0631						
.700	.0617								
.800			.0445						

ARC 3.5-185 IH20 01+Y15+S8 CRB Z=8.75

(RENUD1) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0731  
 1.014 .0666

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0656  
 1.014 .0597

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0545  
 1.014 .0495

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ARC 3.5-185 IH2D O1+T15+S8

WING UPPER SURF.

(RENXD1) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

## X/C

.050	.2066	.2185	.3300
.200	.0494	.0506	.0822
.600	.0032	.0121	.0175
.800		.0064	.0150
.900		.0071	.0152
.950	.0061	.0038	.0000

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

## X/C

.050	.1852	.1965	.2956
.200	.0444	.0456	.0737
.600	.0029	.0108	.0157
.800		.0057	.0135
.900		.0064	.0137
.950	.0055	.0034	.0000

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

## X/C

.050	.1534	.1636	.2447
.200	.0369	.0380	.0611
.600	.0024	.0090	.0131
.800		.0048	.0112
.900		.0053	.0113
.950	.0045	.0029	.0000



ARC 3.5-185 IH2D O1+T15+S8 CLUSTERS B AND C

(RENYD1) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500  
 S  
 .000 .4437 .1085  
 .050 .4165 .1998  
 .100 .2925 .1556  
 .150 .2190 .1210  
 .200 .1841 .0949  
 .250 .1346 .0690  
 .300 .1026 .0575

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500  
 S  
 .000 .3988 .0975  
 .050 .3744 .1796  
 .100 .2630 .1398  
 .150 .1968 .1087  
 .200 .1655 .0853  
 .250 .1210 .0618  
 .300 .0920 .0516

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500  
 S  
 .000 .3317 .0811  
 .050 .3114 .1493  
 .100 .2187 .1163  
 .150 .1638 .0904  
 .200 .1377 .0709  
 .250 .1007 .0512  
 .300 .0762 .0427

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ARC 3.5-185 IH20 O1+T15+S8 ORBITER BODY

(RENZO1) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
.000	.0361	.6134	.0389	.1273	.0703				
.238					.0824				
.254				.0610					
.278			.0817						
.281		.4505							
.474			.1141						
.477					.0832				
.499	.0601								
.510				.0467					
.555		.1438							
.672				.0741					
.696	.0620								
.713					.0886				
.728			.1899						
.746		.1168							
.780				.1188					
.882					.0583				
.890				.1333					
1.002			.1033						
1.003					.0482				
1.087								.0449	
1.155			.1171						
1.182		.0554							
1.201				.1046					
1.230	.1035								
1.326								.0531	
1.364				.0284					
1.444									.0535
1.458								.0642	
1.459					.0197				
1.554	.1126				.0125				
1.606								.0677	
1.608				.0235					
1.649					.0082				
1.750						.0505			
1.896								.0961	
1.933									.0664
1.975						.0597			

ARC 3.5-185 IH2D 01+T13+S8 ORBITER BODY

(RENZD1)

MACH ( 1) = 5.300 HAW/HT( 1) = .850

SECTION ( 1)BODY		DEPENDENT VARIABLE H/HO								
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
2.116				.0311						
2.316					.0459					
2.360	.1922									
2.497						.0615				
2.593						.0565				
2.630		.1426								
2.640						.0541				
2.735							.0696			
2.766				.2415						
2.883					.0340					
3.062						.0268				
3.168	.1871									
3.308			.1941							
3.351		.1154								
3.372							.0521			
3.540				.1107						
3.649					.0069					
3.844						.0625				

MACH ( 1) = 5.300 HAW/HT( 2) = .900 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1)BODY		DEPENDENT VARIABLE H/HO								
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0323	.5509	.0349	.1144	.0632					
.238					.0740					
.254				.0548						
.278			.0732							
.281		.4047								
.474			.1026							
.477					.0748					
.499	.0539									
.510				.0420						
.555		.1289								
.672				.0665						
.696	.0556									
.713					.0796					
.728			.1703							
.746		.1047								
.780				.1066						
.882					.0523					
.890				.1196						
1.002			.0928							

ARC 3.5-185 IH20 01+T45+S8

ORBITER BODY

(RENZ01)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/H0									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
1.003					.0433					
1.087									.0403	
1.155			.1051							
1.182		.0498								
1.201				.0939						
1.230	.0929									
1.326								.0477		
1.364					.0255					
1.444									.0481	
1.458								.0577		
1.459					.0177					
1.554	.1008				.0112					
1.606								.0608		
1.608				.0211						
1.649					.0073					
1.750						.0453				
1.896								.0864		
1.933									.0596	
1.975						.0537				
2.116				.0279						
2.316					.0413					
2.360	.1721									
2.487						.0552				
2.593						.0508				
2.630		.1279								
2.640						.0486				
2.735							.0625			
2.766				.2170						
2.883					.0305					
3.062						.0241				
3.168	.1679									
3.308			.1743							
3.351		.1036								
3.372							.0468			
3.540				.0995						
3.649					.0062					
3.844						.0562				

ARC 3.5-185 IH20 O1+T15+S8 ORBITER BODY

(RENZ01)

MACH ( 1 ) = 5.300 HAW/HT( 3 ) = 1.000 RN/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0268	.4577	.0289	.0951	.0525					
.238					.0616					
.254				.0456						
.278			.0606							
.281		.3362								
.474			.0852							
.477					.0622					
.499	.0448									
.510				.0349						
.555		.1067								
.672				.0551						
.696	.0462									
.713					.0661					
.728			.1412							
.746		.0868								
.780				.0384						
.882					.0434					
.890				.0992						
1.002			.0772							
1.003					.0359					
1.087									.0334	
1.155			.0872							
1.182		.0414								
1.201				.0779						
1.230	.0772									
1.326								.0397		
1.364					.0212					
1.444									.0399	
1.458								.0479		
1.459					.0147					
1.554	.0834				.0093					
1.606								.0505		
1.608				.0175						
1.649					.0061					
1.750						.0377				
1.896								.0718		
1.933									.0495	
1.975						.0446				
2.116				.0232						
2.316					.0343					
2.360	.1424									
2.497						.0459				
2.593						.0422				
2.630		.1061								
2.640						.0404				

ARC 3.5-185 IH20 O1+T15+S8

ORBITER BODY

(RENZ01)

MACH (1) = 5.300 HAW/HT(3) = 1.000

SECTION (1) BODY	DEPENDENT VARIABLE H/H0									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
2.735							.0519			
2.766				.1804						
2.883					.0253					
3.062						.0200				
3.168	.1394									
3.308			.1448							
3.351		.0861								
3.372							.0389			
3.540				.0827						
3.649					.0052					
3.844						.0468				

ARC 3.5-185 IH20 O1+T15+S8

WING BOTTOM SURF.

(REMOVED) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.000						.4437		.1085			.1303	.0396
.005		.0732	.0687		.3201		.3394			.1703		
.025	.1118			.1820	.2156		.2941					
.030										.1425		
.100				.0576		.0694	.0830	.1087		.1353		
.153	.1019											
.177					.0353							
.200				.0275		.0431						
.299	.0611											
.300					.0214	.0284		.0515	.0611	.0701		
.302				.0307								
.303							.0429					
.428						.0293						
.444	.0627											
.487					.0378							
.500							.0350	.0513		.0474		
.559				.1062								
.590	.0502											
.600					.0998	.0898			.0243			
.700				.1814	.1194	.0711	.0164			.0000		
.736	.2269											
.800						.0442	.0303					
.850						.0589	.0000					
.900	.0082			.0288	.0583	.0698	.0399			.0116		

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.000						.3988		.0975			.1168	.0356
.005		.0659	.0619		.2878		.3051			.1529		
.025	.1004			.1639	.1939		.2644					
.050										.1279		
.100				.0518		.0624	.0747	.0977		.1214		
.153	.0916											

ORIGINAL PAGE IS OF POOR QUALITY.

ARC 3.5-185 IH20 O1+T15+S8

WING BOTTOM SURF.

(REMOVED)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) WING		DEPENDENT VARIABLE H/HO										
2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.177					.0317							
.200				.0248		.0388						
.299	.0549											
.300					.0193	.0256		.0463	.0549	.0629		
.302				.0277								
.303							.0385					
.428						.0264						
.444	.0564											
.487					.0340							
.500							.0315	.0461		.0426		
.559				.0957								
.590	.0451											
.600					.0899	.0808			.0219			
.700				.1635	.1076	.0640	.0147				.0000	
.736	.2046											
.800						.0398	.0272					
.850						.0529	.0000					
.900	.0074			.0260	.0525	.0629	.0359				.0104	

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 R/V/L = 1.487 FO = 123.250 TO = 1319.560 HO = 322.550

SECTION ( 1 ) WING		DEPENDENT VARIABLE H/HO										
2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.000						.3317		.0811			.0969	.0295
.005		.0550	.0517		.2396		.2539			.1269		
.025	.0835			.1366	.1614		.2200					
.050										.1061		
.100				.0432		.0520	.0621	.0812		.1007		
.153	.0762											
.177					.0264							
.200				.0207		.0323						
.299	.0457											
.300					.0161	.0213		.0385	.0456	.0522		
.302				.0231								
.303							.0321					
.428						.0220						
.444	.0469											
.487					.0284							
.500							.0262	.0383		.0353		
.559				.0800								
.590	.0376											
.600					.0750	.0674			.0182			



ARC 3.5-185 IH2D O1+T15+S8

WING BOTTOM SURF.

(REMOVED)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.700				.1366	.0898	.0534	.0123			.0000		
.736	.1710											
.800						.0330	.0226					
.850						.0439	.0000					
.900	.0062			.0217	.0438	.0524	.0299			.0086		

ARC 3.5-185 IH20 O1+T15+S8

VERTICAL TAIL

(RENV01) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .4657 .4739 .0000 .8263  
 .100 .1009 .0987 .1293 .1704 .2918  
 .300 .1958 .1015 .0325 .0800  
 .500 .1651 .0839 .0506 .0000  
 .700 .0362 .0431 .0497 .0138  
 .900 .0338 .0597 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .4174 .4258 .0000 .7406  
 .100 .0905 .0885 .1162 .1531 .2618  
 .300 .1757 .0910 .0292 .0719  
 .500 .1482 .0755 .0455 .0000  
 .700 .0325 .0387 .0447 .0124  
 .900 .0303 .0537 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.487 PO = 123.250 TO = 1319.560 HO = 322.550

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .3456 .3539 .0000 .6134  
 .100 .0750 .0734 .0967 .1272 .2170  
 .300 .1457 .0755 .0243 .0598  
 .500 .1230 .0629 .0379 .0000  
 .700 .0270 .0322 .0372 .0103  
 .900 .0252 .0447 .0000

ARC 3.5-185 IH20 01+T15+S8

ORB Y=0.438

(RENBD2) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .4380

## X/L

.050 .0750  
 .200 .0743  
 .300 .1106

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .4380

## X/L

.050 .0664  
 .200 .0662  
 .300 .0988

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .4380

## X/L

.050 .0539  
 .200 .0544  
 .300 .0814

ARC 3.5-185 IH2D O1+T15+S8 ORB Y=0.875

(RENC02) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0879  
 .300 .1227  
 .400 .0872  
 .500 .0778  
 .600 .0733  
 .700 .0807  
 .800 .1650  
 .900 .0469

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0784  
 .300 .1097  
 .400 .0780  
 .500 .0697  
 .600 .0656  
 .700 .0723  
 .800 .1478  
 .900 .0420

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0643  
 .300 .0905  
 .400 .0645  
 .500 .0576  
 .600 .0542  
 .700 .0598

DATE 28 APR 75

TABULATED SOURCE DATA - IH20

PAGE 47

ARC 3.5-185 IH20 O1+T15+S8

ORB Y=0.875

(RENC02)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

Y .8750

X/L

.800 .1223

.900 .0348

ARC 3.5-185 IH20 O1+T15+S8

ORB C.C.L.TANGENT

(REND02) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0686  
 .100 .0554  
 .150 .1819  
 .200 .1102

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0607  
 .100 .0496  
 .150 .1628  
 .200 .0997

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0493  
 .100 .0410  
 .150 .1346  
 .200 .0817

ARC 3.5-183 IH20 01+T15+S8

ORB M.H.B.TANGENT

(RENE02) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0992  
 .100 .0493  
 .150 .0988

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0878  
 .100 .0439  
 .150 .0885

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0713  
 .100 .0360  
 .150 .0732

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OF POOR QUALITY

ARC 3.5-185 IH2D O1+T15+S8 CRB Z=6.125

(RENFO2) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .1990  
 .300 .0614  
 .800 .0351  
 .900 .0575  
 .975 .0492

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .1781  
 .300 .0550  
 .800 .0314  
 .900 .0515  
 .975 .0441

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .1472  
 .300 .0455  
 .800 .0260  
 .900 .0426  
 .975 .0364



ARC 3.5-185 IH2D O1+T15+S8

WING UPPER CREASE

(RENG02) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

WINGUC 1.0000

## X/L

.400 .0768  
 .500 .0415  
 .600 .0728  
 .700 .0515  
 .900 .0721

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

WINGUC 1.0000

## X/L

.400 .0687  
 .500 .0374  
 .600 .0656  
 .700 .0465  
 .900 .0650

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

WINGUC 1.0000

## X/L

.400 .0569  
 .500 .0313  
 .600 .0548  
 .700 .0389  
 .900 .0543

ARC 3.5-185 IH2D O1+T15+S8

ORB Z=7.525

(RENH02) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0491  
 .400 .0547  
 .500 .0600  
 .600 .0453  
 .700 .0533  
 .800 .0768

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0439  
 .400 .0490  
 .500 .0538  
 .600 .0406  
 .700 .0478  
 .800 .0689

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0362  
 .400 .0405  
 .500 .0446  
 .600 .0337  
 .700 .0396  
 .800 .0571

ARC 3.5-185 IH20 01+T15+S8 ORB WINDOWS

(RENID2) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5:000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) WINDOW

## DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

## X/L

.156	.7666		
.164	.6015		
.168	.5339		
.170		.9094	
.178			.9320
.182	.3813	.5519	.6799
.185			.5439
.191			.4368
.200	.2912		

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) WINDOW

## DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

## X/L

.156	.6853		
.164	.5377		
.168	.4774		
.170		.8075	
.178			.8335
.182	.3411	.4906	.6083
.185			.4862
.191			.3907
.200	.2597		

ARC 3.5-185 IH2D O1+T15+S8 CRB WINDOWS

(REN102)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) WINDOW

DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

X/L

.156	.5654		
.164	.4436		
.168	.3940		
.170		.6598	
.178			.6880
.182	.2818	.4014	.5024
.185			.4012
.191			.3227
.200	.2136		

ARC 3.5-185 IH20 Q1+T15+58 CRB Z=8.379

(RENJ02) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0540  
 .400 .0600  
 .500 .0623  
 .600 .0540  
 .700 .0658

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0484  
 .400 .0537  
 .500 .0558  
 .600 .0484  
 .700 .0590

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0400  
 .400 .0445  
 .500 .0462  
 .600 .0401  
 .700 .0489

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ARC 3.5-185 IH2D O1+T15+S8 CRB PHI=180

(RENK02) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY \* DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.5495
.025	.3200
.050	.2810
.075	.3650
.100	.3309
.125	.2773
.150	.4148
.160	.8091
.170	.9158
.180	.6885
.200	.1506
.250	.0205
.300	.0128
.400	.0637
.500	.0815
.600	.0823
.700	.0807
.800	.1285

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.4840
.025	.2824
.050	.2489
.075	.3242
.100	.2943
.125	.2469
.150	.3689
.160	.7191
.170	.8135
.180	.6119
.200	.1342
.250	.0184

ARC 3.5-185 IH20 O1+T15+S8

CRB PHI=180

(RENK02)

MACH ( 1) = 5.300 HAW/HT ( 2) = .900

SECTION ( 1)BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.300	.0114
.400	.0570
.500	.0731
.600	.0737
.700	.0724
.800	.1152

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1)BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.3908
.025	.2287
.050	.2026
.075	.2649
.100	.2410
.125	.2024
.150	.3021
.160	.5883
.170	.6649
.180	.5006
.200	.1102
.250	.0152
.300	.0094
.400	.0471
.500	.0606
.600	.0610
.700	.0600
.800	.0956

ARC 3.5-185 IH2D O1+T15+S8

CMS BOTTOM CREASE

(RENLO2) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

CMS 1.0000

X/L

.829 .0718  
 .900 .1136  
 .975 .0847

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

CMS 1.0000

X/L

.829 .0646  
 .900 .1024  
 .975 .0763

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

CMS 1.0000

X/L

.829 .0539  
 .900 .0856  
 .975 .0637



ARC 3.5-185 IH2D O1+T15+S8 CRB Z=8.295

(RENM02) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Z 8.2950

## X/L

.780 .2395  
 .805 .1912  
 .829 .1736  
 .862 .1369  
 .963 .0983  
 1.000 .1045  
 1.014 .0868

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Z 8.2950

## X/L

.780 .2135  
 .805 .1704  
 .829 .1558  
 .862 .1231  
 .963 .0886  
 1.000 .0939  
 1.014 .0780

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Z 8.2950

## X/L

.780 .1754  
 .805 .1398  
 .829 .1292  
 .862 .1025  
 .963 .0740  
 1.000 .0781  
 1.014 .0648

ARC 3.5-185 IH2D O1+T15+S8 CRB PHI=130.

(RENN02) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .3174  
 .829 .2831  
 .862 .1460  
 .963 .1023

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .2845  
 .829 .2538  
 .862 .1312  
 .963 .0921

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .2356  
 .829 .2102  
 .862 .1091  
 .963 .0768

ARC 3.5-185 IH2D 01+T15+S8 OMS TOP

(RENC02) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) OMS

## DEPENDENT VARIABLE H/HO

Y 1.6620

## X/L

.805 .0000  
 .829 .2746  
 .862 .1066  
 .963 .0034

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) OMS

## DEPENDENT VARIABLE H/HO

Y 1.6620

## X/L

.805 .0000  
 .829 .2461  
 .862 .0958  
 .963 .0030

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) OMS

## DEPENDENT VARIABLE H/HO

Y 1.6620

## X/L

.805 .0000  
 .829 .2038  
 .862 .0796  
 .963 .0025

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ARC 3.5-185 IH2D O1+715+S8 CMS INSIDE

(RENF02) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .1212  
 .963 .1187

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .1090  
 .963 .1068

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .0906  
 .963 .0890

ARC 3.5-185 IH2D O1+I15+S8 ORB Y=1.75

(RENQ02) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y 1.7500

X/L  
 1.000 .0338  
 1.050 .0279

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y 1.7500

X/L  
 1.000 .0302  
 1.050 .0249

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y 1.7500

X/L  
 1.000 .0249  
 1.050 .0204

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ARC 3.5-185 IH20 O1+T15+S6 BOTTOM RCS

(RENR02) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) RCS

## DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0121  
 1.014 .0159

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) RCS

## DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0109  
 1.014 .0143

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) RCS

## DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0091  
 1.014 .0119







ARC 3.5-185 IH20 O1+T15+S8

EXTERNAL TANK

(RENT02)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) TANK

DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.900	.0315	.0399	.0861	.0955	.1073	.1110		.0850	.1222	.1491	.1227		
.925					.2538								.2202
.935								.3018					
.937										.3089			
.960					.1234								
.975										.0368			

THETA 216.0000 222.5000 229.0000

X/L

.335		.0861		
.400	.1028		.1837	
.500	.1518			
.600		.0807		
.700	.0994			
.800		.0543		

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) TANK

DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.000											.5977		
.005											.5849		
.010											.5930		
.040	.0970										.3976		
.080	.0538										.3062	.2249	
.150	.0135										.1456	.1203	.1052
.200			.0486								.0802		
.250			.0347								.0583		
.275			.0347	.0402									
.300		.0340	.1296	.0394							.0564	.0000	
.325			.3698	.0860	.0432								
.350		.1370	.1798	.2351	.0779						.0547		
.375					.0544						.0528		
.400	.0335	.0370	.0207	.0688	.0797	.0364	.0719	.0770	.0957				.0469
.425							.0930	.1166	.1704				
.450			.0472	.0721	.0948		.1302		.4378				
.475							.1365		.1014				
.500	.0153	.0078	.0354	.0638	.1632	.1045	.0923	.2074	.1486				
.525								.1383					
.550			.0349	.0708	.1374	.0654		.0964					
.575								.0857					

ARC 3.5-185 IH20 O1+T15+S8

EXTERNAL TANK

(RENT02)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000

SECTION ( 1) TANK

DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.600	.0507	.0163	.0047	.0384	.0870	.0988	.0440	.1002	.0519
.625								.1043	
.650			.0162	.0596	.0909	.0768	.0467	.0962	
.675								.0991	
.700		.0252	.0127	.0795	.1007	.0886	.0486	.0792	.0846
.750			.0190	.0848	.1062	.0787	.0421	.0862	.0714
.800	.0301	.0198	.0198	.0721	.0920	.0806	.0277	.0719	.0475
.825						.1096			
.850				.0736	.0755	.0494	.0934	.0415	.0696
.875						.0786			
.900		.0263	.0328	.0707	.0783	.0881	.0911	.0699	.1008
.925						.2084		.1227	.1013
.935							.2481		.1820
.937									
.960						.1014		.2545	
.975								.0304	

THETA 216.0000 222.5000 229.0000

X/L

.335		.0711	
.400	.0850		.1518
.500	.1255		
.600		.0666	
.700	.0821		
.800		.0448	

DATE 28 APR 75

TABULATED SOURCE DATA - IH2D

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ARC 3.5-185 IH2D O1+T15+S8 ORB Z=8.75

(RENU02) ( 07 APR 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.7500

X/L  
 1.000 .0912  
 1.014 .0835

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.7500

X/L  
 1.000 .0820  
 1.014 .0750

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.7500

X/L  
 1.000 .0681  
 1.014 .0623

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ARC 3.5-105 IH2D O1+T15+S8

WING BOTTOM SURF.

(RENW02)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) WING	DEPENDENT VARIABLE H/HO											
2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.177					.0481							
.200				.0762	.0576							
.299	.0659											
.300					.0767	.0735		.1177	.0822	.0961		
.302				.0819								
.303							.0958					
.428						.0990						
.444	.0600											
.487					.1212							
.500							.1116	.1392		.1048		
.559				.0916								
.590	.0502											
.600					.0986	.0930			.0584			
.700				.1554	.1050	.0676	.0419				.0446	
.736	.2163											
.800						.0508	.0487					
.850						.0632	.0510					
.900	.0145			.0352	.0738	.0603	.0396				.0370	

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.951 PD = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1 ) WING	DEPENDENT VARIABLE H/HO											
2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.000						.4802		.0834			.1084	.0568
.005		.0758	.0790		.3538		.2972			.1454		
.025	.0794			.1737	.2280		.2550					
.050										.1147		
.100				.0663		.0604	.0672	.1011		.1121		
.153	.1081											
.177					.0397							
.200				.0629	.0476							
.299	.0545											
.300					.0634	.0600		.0972	.0678	.0787		
.302				.0677								
.303							.0792					
.428						.0818						
.444	.0504											
.487					.1002							
.500							.0922	.1149		.0860		
.559				.0758								
.590	.0416											
.600					.0815	.0769			.0482			

ARC 3.5-185 IH20 O1+T15+S8

WING BOTTOM SURF,

(REMOVED)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) WING		DEPENDENT VARIABLE H/H0										
2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.700				.1286	.0868	.0559	.0347			.0366		
.736	.1790											
.800						.0424	.0406					
.850						.0527	.0425					
.900	.0120			.0291	.0610	.0499	.0328			.0303		

ARC 3.5-185 IH2D O1+T15+S6 CLUSTERS B AND C

(RENY02) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000	.6585	.1139
.050	.2993	.2606
.100	.3768	.2052
.150	.2867	.1546
.200	.2271	.1234
.250	.1803	.0762
.300	.1273	.0638

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000	.5859	.1015
.050	.2663	.2321
.100	.3354	.1827
.150	.2553	.1376
.200	.2022	.1099
.250	.1605	.0684
.300	.1141	.0572

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000	.4802	.0834
.050	.2183	.1904
.100	.2749	.1499
.150	.2093	.1129
.200	.1658	.0902
.250	.1317	.0567
.300	.0946	.0474

ARC 3.5-185 IH20 O1+T15+S8

ORBITER BODY

(RENZO2) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HY ( 1 ) = .850 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
.000	.0554	.2227	.0778	.0756	.1171				
.238					.1106				
.254				.0743					
.278			.1284						
.281		.1607							
.474			.1342						
.477					.1227				
.499	.0750								
.510				.0879					
.555		.0866							
.672				.1102					
.696	.0686								
.713					.1326				
.728			.1819						
.746		.0554							
.780				.1410					
.882					.0043				
.890				.1466					
1.002			.1003						
1.003					.0919				
1.087									.0484
1.155			.0988						
1.182		.0493							
1.201				.1218					
1.230	.0992								
1.326								.0721	
1.364					.0449				
1.444									.0492
1.458								.0575	
1.459					.0571				
1.554	.1084				.0614				
1.606								.0546	
1.608			.1449						
1.649				.0563					
1.750						.0728			
1.896								.1136	
1.933									.0847
1.975					.0641				





ARC 3.5-185 IH20 O1+T15+S8 ORBITER BODY

(RENZ02)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/H0								
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
1.003					.0823				
1.087									.0433
1.155			.0885						
1.182		.0439							
1.201				.1091					
1.230	.0878								
1.326								.0650	
1.364					.0402				
1.444									.0441
1.458								.0515	
1.459					.0511				
1.554	.0969				.0550				
1.606								.0489	
1.608				.1298					
1.649					.0504				
1.750						.0656			
1.896								.1024	
1.933									.0763
1.975						.0575			
2.116				.1572					
2.316					.0439				
2.360	.2806								
2.497						.0406			
2.593						.0515			
2.630		.1806							
2.640						.0576			
2.735								.0668	
2.766				.2597					
2.883					.0484				
3.062						.0484			
3.168	.2489								
3.308			.3689						
3.351		.2943							
3.372								.0809	
3.540				.1342					
3.649					.0114				
3.844						.0737			

ARC 3.5-105 IH20 O1+T15+S8 ORBITER BODY

(RENZ02)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1)BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0410	.1617	.0577	.0554	.0862					
.238					.0814					
.254				.0544						
.278			.0950							
.281		.1165								
.474			.0976							
.477					.0905					
.499	.0539									
.510				.0643						
.555		.0640								
.672				.0817						
.696	.0493									
.713					.0984					
.728			.1346							
.746		.0410								
.780				.1044						
.882					.0031					
.890				.1086						
1.002			.0733							
1.003					.0681					
1.087									.0358	
1.155			.0732							
1.182		.0360								
1.201				.0902						
1.230	.0713									
1.326								.0543		
1.364				.0333						
1.444									.0364	
1.458								.0426		
1.459					.0423					
1.554	.0799				.0455					
1.606								.0405		
1.608				.1074						
1.649					.0417					
1.750						.0548				
1.896								.0856		
1.933									.0637	
1.975						.0476				
2.116				.1301						
2.316					.0362					
2.360	.2313									
2.497						.0337				
2.593						.0430				
2.630		.1492								
2.640						.0481				

ARC 3.5-185 IH2D O1+T15+S8 ORBITER BODY

(RENZ02)

MACH (1) = 3.300 HAW/HT(3) = 1.000

SECTION (1) BODY	DEPENDENT VARIABLE H/H0									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
2.735							.0557			
2.766				.2136						
2.883					.0400					
3.062						.0401				
3.168	.2026									
3.308			.3021							
3.351		.2410								
3.372							.0675			
3.540				.1102						
3.649					.0094					
3.844						.0610				





ARC 3.5-185 IH20 O1+T15+S8

SCL10 BOOSTER

(RENS02)

MACH ( 1 ) = 5.300 HAW/HT( 3 ) = 1.000

SECTION ( 1 )SRB

DEPENDENT VARIABLE H/HO

PSI 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L									
.100	.0716		.1125		.0987				.2453
.110									.5033
.115							.4517		
.130									.1014
.150					.0674				.1042
.200			.0647		.0819				.0670
.250									.0525
.300					.0527	.0530			.0471 .0034
.400	.0343		.0560		.0531	.0793			.0464
.500			.1142		.1091	.1166			.0845 .0265
.600			.0820		.1162	.1099			.0821
.650			.0835			.1095			.0802
.700	.0134	.0362	.0814		.0844	.0982			.0761 .0268
.750			.0696			.1270			.1218
.780	.0267		.2357		.0000				.3855 .0293
.800	.0061		.1772		.1262				.0307 .0242
.850			.0956		.1022				.0080
.900	.0000	.0383	.0777		.0207				.0080 .0126
.904				.0845					
.918				.2269					
.925				.1820	.1006				
.930	.0180	.1128	.2165			.1868	.0693		.0149 .0391
.940					.0407				
.950				.0498					
.960			.1117		.0319	.0676	.0513		.0322
.970			.0238						
.990	.0404	.0901	.0975		.0520	.0264			.0388 .0580

ARC 3.5-185 IH20 O1+T15+S8 CRB PHI=0.0

(RENA02) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) BCOY

## DEPENDENT VARIABLE H/HO

PHI .0000

## X/L

.000 .8160  
 .005 .5361  
 .010 .3634  
 .020 .1651  
 .030 .1105  
 .040 .0000  
 .050 .0554  
 .060 .0000  
 .070 .0259  
 .080 .0360  
 .090 .0884  
 .100 .2227  
 .120 .5049  
 .130 .2853  
 .140 .1439  
 .150 .0778  
 .160 .0508  
 .170 .0469  
 .180 .0626  
 .190 .0786  
 .200 .0756  
 .225 .1205  
 .250 .1216  
 .275 .1556  
 .300 .1171  
 .325 .1061  
 .350 .0921  
 .375 .1033  
 .400 .0894  
 .425 .0947  
 .450 .1186  
 .475 .1124  
 .500 .1029  
 .525 .0977  
 .550 .0847  
 .575 .0808  
 .600 .0869  
 .625 .0870



ARC 3.5-105 IH20 01+T15+S8

CRB PHI=0.0

(RENA02)

MACH ( 1) = 5.300

HAW/HT( 1) = .850

SECTION ( 1)BODY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.650	.0830
.675	.0826
.700	.0928
.725	.0913
.750	.0926
.775	.1140
.800	.1543
.825	.2403
.850	.1941
.875	.0970
.900	.0551
.925	.0330
.950	.0176
.975	.0118
1.000	.0064
1.013	.0000
1.025	.0033
1.038	.0000
1.050	.0048

MACH ( 1) = 5.300

HAW/HT( 2) = .900

RN/L = 4.951

FO

= 403.710

TO

= 1306.400

HO

= 319.180

SECTION ( 1)BODY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.7180
.005	.4720
.010	.3200
.020	.1456
.030	.0988
.040	.0000
.050	.0496
.060	.0000
.070	.0232
.080	.0319
.090	.0792
.100	.1978
.120	.4487
.130	.2556
.140	.1281
.150	.0697
.160	.0452
.170	.0420

ARC 3.5-185 IH20 O1+T15+S8

CRB PHI=0.0

(RENAD2)

WACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.180	.0558
.190	.0705
.200	.0674
.225	.1081
.250	.1087
.275	.1395
.300	.1046
.325	.0952
.350	.0822
.375	.0926
.400	.0798
.425	.0849
.450	.1061
.475	.1007
.500	.0919
.525	.0876
.550	.0757
.575	.0724
.600	.0777
.625	.0779
.650	.0742
.675	.0741
.700	.0829
.725	.0819
.750	.0829
.775	.1023
.800	.1380
.825	.2153
.850	.1736
.875	.0869
.900	.0493
.925	.0296
.950	.0158
.975	.0105
1.000	.0057
1.013	.0000
1.025	.0029
1.038	.0000
1.050	.0043

ARC 3.5-185 IH21 01+T15+S8 CRB FHI=0.0

(RENA02)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

SECTION ( 1) BODY

DEPENDENT VARIABLE H/HO

FHI .0000

X/L

.000	.5790
.005	.3809
.010	.2584
.020	.1178
.030	.0816
.040	.0000
.050	.0410
.060	.0000
.070	.0191
.080	.0261
.090	.0655
.100	.1617
.120	.3670
.130	.2116
.140	.1050
.150	.0577
.160	.0371
.170	.0348
.180	.0458
.190	.0584
.200	.0554
.225	.0897
.250	.0897
.275	.1156
.300	.0862
.325	.0788
.350	.0678
.375	.0767
.400	.0658
.425	.0704
.450	.0875
.475	.0835
.500	.0758
.525	.0725
.550	.0625
.575	.0600
.600	.0640
.625	.0646
.650	.0612
.675	.0614
.700	.0684
.725	.0679
.750	.0684
.775	.0848
.800	.1139

ARC 3.5-185 IH20 01+T15+S8

CRB FHI=0.0

(RENAD2)

WACH ( 1) = 5.300

HAW/HT ( 3) = 1.000

SECTION ( 1) BODY

DEPENDENT VARIABLE H/HO

FHI .0000

X/L

.825	.1782
.850	.1434
.875	.0720
.900	.0407
.925	.0245
.950	.0131
.975	.0087
1.000	.0047
1.013	.0000
1.025	.0024
1.038	.0000
1.050	.0035

ARC 3.5-185 IH20 Q1+T15+S8 WING UPPER SURF.

(RENX02) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

## X/C

.050 .3453 .4418 .5731  
 .200 .0955 .1408 .1958  
 .600 .0064 .0250 .0537  
 .800 .0169 .0464  
 .900 .0240 .0538  
 .950 .0223 .0221 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

## X/C

.050 .3099 .3932 .5136  
 .200 .0859 .1257 .1760  
 .600 .0058 .0226 .0484  
 .800 .0151 .0417  
 .900 .0217 .0483  
 .950 .0201 .0198 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.951 FO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

## X/C

.050 .2571 .3224 .4253  
 .200 .0716 .1034 .1463  
 .600 .0049 .0189 .0404  
 .800 .0125 .0348  
 .900 .0181 .0402  
 .950 .0167 .0163 .0000

ARC 3.5-185 IH20 O1+T15+S8

VERTICAL TAIL

(RENV02) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 )TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .4278 .4445 .0000 .6730  
 .100 .1278 .1065 .1463 .2027 .2071  
 .300 .2500 .1431 .0672 .0955  
 .500 .2172 .1295 .0632 .0000  
 .700 .0417 .0529 .0624 .0141  
 .900 .0564 .0870 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 )TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .3834 .3960 .0000 .6031  
 .100 .1147 .0955 .1305 .1808 .1857  
 .300 .2243 .1284 .0600 .0852  
 .500 .1953 .1157 .0565 .0000  
 .700 .0375 .0476 .0558 .0126  
 .900 .0507 .0776 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.951 PO = 403.710 TO = 1306.400 HO = 319.180

## SECTION ( 1 )TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .3176 .3251 .0000 .4993  
 .100 .0952 .0791 .1073 .1486 .1540  
 .300 .1864 .1066 .0494 .0702  
 .500 .1624 .0954 .0466 .0000  
 .700 .0312 .0397 .0460 .0104  
 .900 .0422 .0638 .0000

ARC 3.5-185 IH20 O1+T15+S8 CRB PHI=0.0

(RENA03) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000 .9442  
 .005 .5965  
 .010 .4083  
 .020 .1840  
 .030 .1107  
 .040 .0944  
 .050 .0613  
 .060 .0504  
 .070 .0366  
 .080 .0270  
 .090 .0418  
 .100 .1327  
 .120 .5838  
 .130 .3113  
 .140 .2080  
 .150 .1019  
 .160 .0970  
 .170 .0494  
 .180 .0733  
 .190 .0711  
 .200 .1149  
 .225 .1046  
 .250 .1603  
 .275 .1613  
 .300 .1746  
 .325 .1506  
 .350 .1222  
 .375 .1103  
 .400 .1102  
 .425 .0825  
 .450 .0972  
 .475 .1053  
 .500 .1197  
 .525 .0980  
 .550 .1168  
 .575 .0977  
 .600 .1035  
 .625 .0828

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OF POOR QUALITY

ARC 3.5-185 IH20 O1+T15+S8 CRB PHI=0.0

(RENA03)

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.650	.0847
.675	.0836
.700	.0947
.725	.0843
.750	.1038
.775	.2346
.800	.2760
.825	.1761
.850	.2351
.875	.1101
.900	.0696
.925	.0358
.950	.0234
.975	.0188
1.000	.0138
1.013	.0000
1.025	.0165
1.038	.0000
1.050	.0132

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.8410
.005	.5316
.010	.3640
.020	.1642
.030	.0984
.040	.0844
.050	.0546
.060	.0451
.070	.0326
.080	.0241
.090	.0372
.100	.1186
.120	.5221
.130	.2779
.140	.1862
.150	.0910
.160	.0869
.170	.0441



DATE 20 APR 75

TABULATED SOURCE DATA - IH20

PAGE 91

ARC 3.5-185 IH20 O1+T15+S8

ORB PHI=0.0

(RENAD3)

MACH ( 1) = 5.300 HAW/HT( 2) = .900

SECTION ( 1) BODY

DEPENDENT VARIABLE H/H0

PHI .0000

X/L

.180	.0656
.190	.0635
.200	.1029
.225	.0936
.250	.1436
.275	.1443
.300	.1564
.325	.1347
.350	.1094
.375	.0986
.400	.0986
.425	.0738
.450	.0871
.475	.0942
.500	.1071
.525	.0877
.550	.1046
.575	.0874
.600	.0926
.625	.0741
.650	.0758
.675	.0748
.700	.0848
.725	.0754
.750	.0930
.775	.2100
.800	.2472
.825	.1576
.850	.2106
.875	.0986
.900	.0624
.925	.0321
.950	.0209
.975	.0168
1.000	.0124
1.013	.0000
1.025	.0148
1.038	.0000
1.050	.0118

ARC 3.5-185 IH2D O1+T15+S8

ORB PHI=0.0

(RENA03)

MACH ( 1 ) = . 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI . . .0000

X/L

.000	.6902
.005	.4366
.010	.2991
.020	.1351
.030	.0805
.040	.0695
.050	.0448
.060	.0372
.070	.0268
.080	.0199
.090	.0306
.100	.0979
.120	.4311
.130	.2287
.140	.1539
.150	.0749
.160	.0718
.170	.0364
.180	.0542
.190	.0524
.200	.0851
.225	.0774
.250	.1188
.275	.1192
.300	.1293
.325	.1112
.350	.0904
.375	.0814
.400	.0816
.425	.0609
.450	.0720
.475	.0778
.500	.0886
.525	.0724
.550	.0865
.575	.0722
.600	.0766
.625	.0612
.650	.0627
.675	.0618
.700	.0702
.725	.0623
.750	.0770
.775	.1736
.800	.2045

DATE 28 APR 75

TABULATED SOURCE DATA - IH20

PAGE 93

ARC 3.5-185 IH20 O1+T15+S8

ORB FHI=0.0

(RENA03)

MACH ( 1) = 5.300

HAW/HT( 3) = 1.000

SECTION ( 1) BODY

DEPENDENT VARIABLE H/HO

FHI .0000

X/L

.825	.1303
.850	.1743
.875	.0816
.900	.0517
.925	.0265
.950	.0173
.975	.0139
1.000	.0103
1.013	.0000
1.025	.0123
1.038	.0000
1.050	.0098

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ARC 3.5-185 IH20 01+T15+S8 CRB Y=0.438

(REN803) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .1036  
 .200 .1585  
 .300 .1471

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0926  
 .200 .1419  
 .300 .1317

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0764  
 .200 .1174  
 .300 .1090

ARC 3.5-185 IH20 O1+T15+S8 CRB Y=0.875

(RENC03) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 Sq.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .8750

## X/L

.200 .1929  
 .300 .2187  
 .400 .1376  
 .500 .1211  
 .600 .1037  
 .700 .0910  
 .800 .2642  
 .900 .0224

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .8750

## X/L

.200 .1728  
 .300 .1959  
 .400 .1233  
 .500 .1085  
 .600 .0929  
 .700 .0816  
 .800 .2368  
 .900 .0201

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .8750

## X/L

.200 .1429  
 .300 .1622  
 .400 .1021  
 .500 .0898  
 .600 .0769  
 .700 .0676

ARC 3.5-185 IH20 O1+T15+S8 CRB Y=0.875

(RENC03)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000

SECTION ( 1) BODY DEPENDENT VARIABLE H/H0

Y .8750

X/L

.800 .1962

.900 .0167

ARC 3.5-185 IH2D O1+T15+S8

ORB C.C.L.TANGENT

(REND03) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .1033  
 .100 .0604  
 .150 .1458  
 .200 .2174

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0924  
 .100 .0539  
 .150 .1302  
 .200 .1943

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0762  
 .100 .0444  
 .150 .1072  
 .200 .1602

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ARC 3.5-185 IH2D O1+T15+S8 CRB M.H.B.TANGENT

(RENE03) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .1643  
 .100 .1527  
 .150 .0893

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .1468  
 .100 .1367  
 .150 .0798

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .1211  
 .100 .1130  
 .150 .0659



ARC 3.5-185 IH20 O1+T15+S8 CRB Z=6.125

(RENF03) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRF = .0000 IN.  
 LREF = 1290.3000 IN. YMRF = .0000 IN.  
 BREF = 1290.3000 IN. ZMRF = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .1510  
 .300 .0835  
 .800 .0517  
 .900 .1081  
 .975 .0875

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .1348  
 .300 .0747  
 .800 .0463  
 .900 .0968  
 .975 .0782

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .1109  
 .300 .0618  
 .800 .0383  
 .900 .0800  
 .975 .0646

ARC 3.5-105 IH20 01+T15+S8

WING UPPER CREASE

(RENG03) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .1526  
 .500 .0560  
 .600 .1011  
 .700 .0713  
 .900 .1122

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .1368  
 .500 .0498  
 .600 .0900  
 .700 .0635  
 .900 .0998

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .1133  
 .500 .0498  
 .600 .0738  
 .700 .0521  
 .900 .0818

ARC 3.5-185 IH2D O1+T15+S8 CRB Z=7.525

(RENM03) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .1108  
 .400 .0930  
 .500 .0682  
 .600 .0858  
 .700 .0961  
 .800 .1070

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0992  
 .400 .0833  
 .500 .0611  
 .600 .0769  
 .700 .0861  
 .800 .0959

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0821  
 .400 .0690  
 .500 .0506  
 .600 .0637  
 .700 .0712  
 .800 .0794

ARC 3.5-185 IH20 01+T15+S8 ORB WINDOWS

(RENI03) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) WINDOW

## DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

## X/L

.156	.8447		
.164	.6417		
.168	.5837		
.170		1.1516	
.178			.9696
.182	.4220	.7065	.7192
.185			.6004
.191			.4743
.200		.3757	

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) WINDOW

## DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

## X/L

.156	.7533		
.164	.5721		
.168	.5205		
.170		1.0291	
.178			.8641
.182	.3766	.6317	.6412
.185			.5354
.191			.4233
.200		.3364	

ARC 3.5-185 IH2D O1+T15+S8

ORB WINDOWS

(REN103)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1) WINDOW

DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

X/L

.156	.6193		
.164	.4702		
.168	.4278		
.170		.8486	
.178			.7096
.182	.3099	.5213	.5268
.185			.4401
.191			.3484
.200		.2783	

ARC 3.5-185 IH20 O1+T15+S8 CRB Z=8.379

(RENJ03) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Z 8.3790

## X/L

.300 .0615  
 .400 .0653  
 .500 .0502  
 .600 .0604  
 .700 .0631

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Z 8.3790

## X/L

.300 .0550  
 .400 .0585  
 .500 .0450  
 .600 .0541  
 .700 .0565

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Z 8.3790

## X/L

.300 .0454  
 .400 .0483  
 .500 .0372  
 .600 .0447  
 .700 .0468

DATE 28 APR 75

TABULATED SOURCE DATA - IH20

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ARC 3.5-185 IH20 O1+T15+S6

ORB PHI=180

(RENK03) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.5966
.025	.3230
.050	.2415
.075	.2080
.100	.3453
.125	.3067
.150	.4858
.160	.9711
.170	1.0907
.180	.8230
.200	.1672
.250	.0180
.300	.0501
.400	.0862
.500	.0782
.600	.0845
.700	.0694
.800	.1013

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.5318
.025	.2883
.050	.2158
.075	.1860
.100	.3088
.125	.2744
.150	.4345
.160	.8680
.170	.9745
.180	.7355
.200	.1497
.250	.0161

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ARC 3.5-185 IH20 O1+T15+S8

CRB PHI=180

(RENK03)

MACH ( 1) = 5.300 HAW/HT ( 2) = .900

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.300	.0449
.400	.0773
.500	.0701
.600	.0757
.700	.0622
.800	.0907

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 5.054 PO = 404.600 TO = 1290.900 HQ = 315.190

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.4369
.025	.2372
.050	.1779
.075	.1535
.100	.2350
.125	.2266
.150	.3587
.160	.7160
.170	.8034
.180	.6065
.200	.1237
.250	.0133
.300	.0371
.400	.0640
.500	.0580
.600	.0627
.700	.0515
.800	.0751



DATE 28 APR 75

TABULATED SOURCE DATA - IH20

ARC 3.5-185 IH20 01+T15+S8

CMS BOTTOM CREASE

(RENLO3) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

CMS 1.0000

X/L

.829 .1453  
 .900 .1989  
 .975 .1545

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

CMS 1.0000

X/L

.829 .1292  
 .900 .1771  
 .975 .1374

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

CMS 1.0000

X/L

.829 .1057  
 .900 .1452  
 .975 .1125

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OF POOR QUALITY

ARC 3.5-185 IH2D O1+T15+S8 CRB Z=8.295

(RENM03) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .2713  
 .805 .5226  
 .829 .3521  
 .862 .2620  
 .963 .1616  
 1.000 .1605  
 1.014 .1308

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .2430  
 .805 .4678  
 .829 .3122  
 .862 .2327  
 .963 .1437  
 1.000 .1423  
 1.014 .1159

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .2010  
 .805 .3866  
 .829 .2545  
 .862 .1902  
 .963 .1177  
 1.000 .1160  
 1.014 .0944

ARC 3.5-165 IH20 01+T15+S8 OMS TCF

(RENC03) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) OMS

## DEPENDENT VARIABLE H/HO

Y 1.6620

## X/L

.805 .5139  
 .829 .2986  
 .862 .1142  
 .963 .0794

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .800 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) OMS

## DEPENDENT VARIABLE H/HO

Y 1.6620

## X/L

.805 .4554  
 .829 .2645  
 .862 .1014  
 .963 .0705

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) OMS

## DEPENDENT VARIABLE H/HO

Y 1.6620

## X/L

.805 .3709  
 .829 .2154  
 .862 .0820  
 .963 .0576

ARC 3.5-185 IH20 01+T15+S8 OMS INSIDE

(RENPD3) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .0906  
 .963 .1201

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .0805  
 .963 .1067

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .0658  
 .963 .0873

ARC 3.5-185 IH2D 01+T15+S8 CRB Y=1.75

(RENG03) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0260  
 1.050 .0221

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0233  
 1.050 .0198

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0193  
 1.050 .0163

ORIGINAL PAGE(S)  
 OF POOR QUALITY

ARC 3.5-185 IH20 Q1+T15+S8 BOTTOM RCS

(RENRO3) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) RCS

## DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0207  
 1.014 .0169

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) RCS

## DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0184  
 1.014 .0150

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) RCS

## DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0150  
 1.014 .0122



ARC 3.5-185 IH2D O1+T15+S8

EXTERNAL TANK

(RENT03)

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850

SECTION ( 1 ) TANK DEPENDENT VARIABLE H/HO

THETA 216.0000222,5000229,0000

X/L

.335		.1251	
.400	.0873		.1453
.500	.1256		
.600			.0819
.700	.0492		
.800			.0568

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.000											.6996			
.005											.6734			
.010											.7692			
.040	.1233										.5013			
.080	.0676										.3706	.3104		
.150	.0373										.1479		.1271	.0891
.200				.0904							.0883			
.250				.0687							.0697			
.275				.0671	.0761									
.300			.0512	.1472	.0747						.0691		.0261	
.325				.4226	.1296				.0718					
.350			.1797	.3200	.3173				.1017		.0675			
.375									.0940		.0659			
.400	.0408	.0621	.0452	.1301	.1216				.0961	.0857	.0803	.1120		.0529
.425										.1162	.1508	.2276		
.450				.0767	.1036				.1473	.2123		.4651		
.475										.2161		.1516		
.500		.0249	.0156	.0545	.0829				.1068	.1978	.1070	.2285	.1996	
.525												.1788		
.550				.0545	.0807				.2012	.1021		.1227		
.575												.0982		
.600	.0343	.0199	.0066	.0511	.0733				.1616	.0898		.1043		.0267
.625												.1312		
.650			.0209	.0577	.1085				.1377	.0843		.1260		
.675												.1023		
.700		.0370	.0413	.0758	.1373				.1338	.0920	.0734	.0911	.0729	
.750			.0238	.0930	.1609				.1018	.0708		.0697		
.800	.0244	.0225	.0105	.0937	.1409				.0927	.0474		.0786		.0503
.825												.1515		
.850				.1043	.1235	.0712	.1139		.0546			.0783		
.875						.1234								



ARC 3.5-165 IH20 O1+T15+S8

EXTERNAL TANK

(RENT03)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.900	.0246	.0268	.1022	.1300	.1305	.1345	.1528	.1049	.1537	.1032				
.925					.2613								.1320	
.935							.3843							
.937									.2508					
.960					.1646									
.975									.0324					

THETA 216.0000 222.5000 229.0000

X/L

.335		.1118												
.400	.0780		.1297											
.500	.1122													
.600			.0731											
.700	.0439													
.800			.0507											

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.000													.5701		
.005													.5506		
.010													.6306		
.040	.1000												.4116		
.060	.0549												.3042	.2554	
.150	.0304												.1214	.1046	.0733
.200				.0742									.0725		
.250				.0564									.0573		
.275				.0550	.0624										
.300		.0418		.1205	.0613								.0567	.0215	
.325				.3458	.1062			.0589							
.350		.1469		.2625	.2601			.0834					.0554		
.375								.0771					.0541		
.400	.0334	.0500	.0369	.1067	.0997		.0780	.0703		.0659			.0919		.0436
.425								.0952	.1236				.1866		
.450				.0629	.0849		.1208	.1742					.3814		
.475								.1774					.1244		
.500	.0204	.0128	.0447	.0679		.0876		.1625		.0879			.1874	.1641	
.525													.1467		
.550			.0446	.0661		.1649		.0839					.1007		
.575													.0805		

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ARC 3.5-185 IH20 O1+T15+S8

EXTERNAL TANK

(RENT03)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000

SECTION ( 1) TANK

DEPENDENT VARIABLE H/H0

THETA .0000 45.0000 67.5000 90.0000 112.5000 125.0000 135.0000 151.0000 157.0000 161.0000 163.0000 180.0000 194.0000 196.0000 208.0000

X/L

.600	.0281	.0163	.0055	.0419	.0600	.1325	.0738	.0856	.0220		
.625								.1076			
.650			.0172	.0473	.0889	.1129	.0692	.1033			
.675								.0839			
.700		.0303	.0339	.0623	.1126	.1099	.0757	.0604	.0748	.0599	
.750			.0196	.0763	.1320	.0836	.0583	.0572			
.800	.0200	.0184	.0087	.0768	.1153	.0760	.0389	.0644		.0414	
.825						.1241					
.850				.0854	.1010	.0583	.0934	.0448	.0642		
.875						.1011					
.900		.0201	.0220	.0838	.1063	.1069	.1103	.1255	.0862	.1260	.0848
.925						.2141					.1087
.935							.3157				
.937								.2059			
.960						.1350					
.975								.0267			

THETA 216.0000 222.5000 229.0000

X/L

.335		.0918								
.400	.0643		.1069							
.500	.0925									
.600			.0602							
.700	.0362									
.800			.0417							

ARC 3.5-185 IH20 O1+T15+S8 . CRB Z=8.75

(RENU03) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .1042  
 1.014 .0989

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0924  
 1.014 .0876

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0753  
 1.014 .0714

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ARC 3.5-185 IH20 O1+T15+S8

VERTICAL TAIL

(RENV03) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .4071 .4930 .0000 .8564  
 .100 .2934 .1473 .1659 .2280 .4154  
 .300 .3333 .2740 .0867 .1182  
 .500 .2821 .2694 .0853 .0000  
 .700 .0500 .0875 .0750 .0231  
 .900 .0919 .1110 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .3605 .4412 .0000 .7565  
 .100 .2603 .1305 .1486 .2042 .3673  
 .300 .2958 .2436 .0777 .1060  
 .500 .2503 .2418 .0766 .0000  
 .700 .0444 .0777 .0673 .0207  
 .900 .0815 .0995 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .2935 .3647 .0000 .6133  
 .100 .2125 .1063 .1230 .1690 .2983  
 .300 .2415 .1985 .0644 .0878  
 .500 .2042 .2006 .0635 .0000  
 .700 .0363 .0634 .0559 .0172  
 .900 .0664 .0824 .0000

ARC 3.5-185 IH20 O1+T15+S8

WING BOTTOM SURF.

(REMOVED) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.000						.9569		.1659			.3666	.1226
.005		.1519	.1710		.7164		.5874			.3043		
.025	.2280			.3873	.4237		.4841					
.050										.2990		
.100				.1499		.1407	.1294	.2189		.2905		
.153	.1515											
.177					.1264							
.200				.1205		.1494						
.299	.0971											
.300					.1314	.1103		.2629	.2449	.2942		
.302				.1101								
.303							.2109					
.428						.1456						
.444	.1065											
.487					.1241							
.500							.1917	.2319		.2385		
.559				.1557								
.590	.1019											
.600					.1407	.1133			.1504			
.700				.1695	.1392	.1069	.0813			.0979		
.736	.1843											
.800						.0645	.0624					
.850						.0757	.0751					
.900	.0350			.1316	.1514	.0724	.0625			.0709		

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.000						.8555		.1486			.3278	.1098
.005		.1361	.1540		.6406		.5256			.2722		
.025	.2041			.3468	.3789		.4331					
.050										.2675		
.100				.1343		.1260	.1159	.1959		.2600		
.153	.1357											

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ARC 3.5-185 IH2D O1+T15+S8

WING BOTTOM SURF.

(REMOVED)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.177					.1133							
.200				.1080	.1339							
.299	.0870											
.300					.1178	.0989		.2356	.2193	.2633		
.302				.0988								
.303							.1891					
.428						.1306						
.444	.0955											
.487					.1113							
.500							.1719	.2078		.2136		
.559				.1398								
.590	.0914								.1349			
.600					.1262	.1016						
.700				.1520	.1249	.0959	.0729				.0878	
.736	.1654											
.800						.0572	.0553					
.850						.0671	.0665					
.900	.0315			.1181	.1358	.0650	.0560			.0635		

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.000						.7059		.1229			.2706	.0909
.005		.1127	.1275		.5286	.4342				.2249		
.025	.1688			.2868	.3128	.3578						
.050										.2209		
.100				.1111		.1041	.0958	.1619		.2147		
.153	.1124											
.177					.0938							
.200				.0895	.1108							
.299	.0721											
.300					.0976	.0819		.1950	.1814	.2176		
.302				.0819								
.303							.1567					
.428						.1082						
.444	.0791											
.487					.0923							
.500							.1425	.1721		.1767		
.559				.1160								
.590	.0758											
.600					.1046	.0843			.1118			

DATE 28 APR 75

TABULATED SOURCE DATA - IH20

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ARC 3.5-185 IH20 O1+T15+S8

WING BOTTOM SURF.

(REMOVED)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) WING	DEPENDENT VARIABLE H/H0											
ZY/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.700				.1261	.1036	.0796	.0605			.0727		
.736	.1372											
.800						.0467	.0450					
.850						.0547	.0541					
.900	.0261			.0980	.1126	.0539	.0465			.0525		

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ARC 3.5-185 IH20 O1+T15+S8 CLUSTERS B AND C

(RENY03) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRF = .0000 IN.  
 LREF = 1290.3000 IN. YMRF = .0000 IN.  
 BREF = 1290.3000 IN. ZMRF = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/H0

2Y/B .6000 .8500

S

.000 .9569 .1659  
 .050 .7049 .3792  
 .100 .5202 .2879  
 .150 .3996 .2171  
 .200 .3136 .1726  
 .250 .2431 .1288  
 .300 .1951 .1123

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/H0

2Y/B .6000 .8500

S

.000 .8355 .1486  
 .050 .6303 .3392  
 .100 .4652 .2576  
 .150 .3574 .1943  
 .200 .2805 .1544  
 .250 .2175 .1137  
 .300 .1727 .0992

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/H0

2Y/B .6000 .8500

S

.000 .7059 .1229  
 .050 .5202 .2801  
 .100 .3840 .2128  
 .150 .2951 .1605  
 .200 .2316 .1276  
 .250 .1797 .0922  
 .300 .1403 .0804



ARC 3.5-185 IH2D O1+T15+S8 ORBITER BODY

(RENZ03) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
.000	.0613	.1327	.1019	.1149	.1746				
.238					.1471				
.254				.1585					
.278			.1901						
.281	.0777								
.474		.2752							
.477					.2187				
.499	.1036								
.510			.1929						
.555	.0292								
.672			.2174						
.696	.1033								
.713				.1664					
.728		.1458							
.746	.0604								
.780			.1844						
.882				.1592					
.890			.1616						
1.002		.1025							
1.003				.1384					
1.087								.0818	
1.155		.0893							
1.182	.1527								
1.201			.1599						
1.230	.1643								
1.326							.1122		
1.364			.0963						
1.444								.0875	
1.458							.1081		
1.459			.0900						
1.554	.1410		.0835						
1.606							.1074		
1.608		.2061							
1.649			.0784						
1.750				.1011					
1.896							.1989		
1.933								.1545	
1.975			.1061						

ARC 3.5-185 IH2D O1+T15+S8

ORBITER BODY

(RENZ03)

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850

SECTION ( 1 ) BODY		DEPENDENT VARIABLE H/HO								
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
2.116				.2440						
2.316					.1108					
2.360	.2542									
2.497						.0858				
2.593						.0811				
2.630		.2185								
2.640						.0756				
2.735							.0824			
2.766				.3757						
2.883					.0615					
3.062						.0604				
3.168	.2415									
3.308			.4858							
3.351		.3453								
3.372							.0637			
3.540				.1672						
3.649					.0501					
3.844						.0845				

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY		DEPENDENT VARIABLE H/HO								
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0546	.1186	.0910	.1029	.1564					
.238					.1317					
.254				.1419						
.278			.1697							
.281		.0695								
.474			.2463							
.477					.1959					
.499	.0926									
.510				.1728						
.555		.0260								
.672				.1943						
.696	.0924									
.713					.1490					
.728			.1302							
.746		.0539								
.780				.1648						
.882					.1425					
.890				.1444						
1.002			.0917							

ARC 3.5-185 IH20 O1+T15+S8

ORBITER BODY

(RENZ03)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
1.003					.1238					
1.067									.0731	
1.153			.0798							
1.182		.1367								
1.201				.1429						
1.230	.1468									
1.326								.0998		
1.364					.0862					
1.444									.0782	
1.458								.0968		
1.459					.0806					
1.554	.1255				.0747					
1.606								.0961		
1.608				.1843						
1.649					.0702					
1.750						.0900				
1.896								.1771		
1.933									.1374	
1.973						.0951				
2.116				.2183						
2.316					.0992					
2.360	.2262									
2.497						.0769				
2.593						.0722				
2.630		.1952								
2.640						.0672				
2.735							.0733			
2.766				.3364						
2.883					.0550					
3.062						.0541				
3.168	.2158									
3.308		.4345								
3.351		.3088								
3.372							.0566			
3.540				.1497						
3.649					.0449					
3.844						.0757				

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ARC 3.5-185 IH2D O1+T15+58 CRBITER BODY

(RENZ03)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0448	.0979	.0749	.0851	.1293					
.238					.1090					
.254				.1174						
.278			.1397							
.281		.0574								
.474			.2036							
.477					.1622					
.499	.0764									
.510				.1429						
.555		.0214								
.672				.1602						
.696	.0762									
.713					.1232					
.728			.1072							
.746		.0444								
.780				.1359						
.882					.1178					
.890				.1191						
1.002			.0758							
1.003					.1023					
1.087									.0603	
1.155			.0659							
1.182		.1130								
1.201				.1179						
1.230	.1211									
1.326								.0818		
1.364					.0713					
1.444									.0646	
1.458								.0800		
1.459					.0666					
1.554	.1029				.0618					
1.606								.0795		
1.608				.1522						
1.649					.0581					
1.750						.0738				
1.896								.1452		
1.933									.1125	
1.975						.0787				
2.116				.1802						
2.316					.0821					
2.360	.1855									
2.497						.0637				
2.593						.0592				
2.630		.1608								
2.640						.0551				

DATE 20 APR 75

TABULATED SOURCE DATA - IH20

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ARC 3.5-185 IH20 01+T15+S8 ORBITER BODY

(RENZ03)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000

SECTION ( 1)BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
2.735							.0600			
2.766				.2783						
2.883					.0454					
3.062						.0447				
3.168	.1779									
3.308			.3587							
3.351		.2550								
3.372							.0464			
3.540				.1237						
3.649					.0371					
3.844						.0627				

ARC 3.5-185 IH20 O1+T15+S8 SOLID BOOSTER

(RENS03) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 PO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 )SRB

DEPENDENT VARIABLE H/H0

PSI 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L

.000	.0884								
.002									
.025	.1670							.9504	
.050	.1678	.2027						.2634	
.075								.1803	
.100	.1565	.6164		.1395				.0000	
.110				.1295				.3276	
.115								.7635	
.130							.7167		
.150				.1303				.1399	
.200		.3512		.1689				.2923	
.250								.1092	
.300								.0771	
.400	.1473	.1465		.1217	.0866			.0765	.0106
.500		.1240		.0964	.0906			.0596	
.600		.1682		.1970	.1425			.1278	.0509
.650		.1758		.1915	.1560			.1150	
.700	.0527	.1123	.1560		.1773			.1201	
.750			.1519		.1662			.1262	.0421
.780	.1075		.4190		.1476			.1406	
.800	.4008		.2694	.2902				.5222	.0401
.850			.2956	.1447				.1273	.0215
.900	.2953	.0999	.1575	.2232				.0237	
.904				.0582				.0153	.0098
.918			.1795						
.925			.4020						
.930	.1956	.2014	.3692	.3308	.2250				
.940									
.950				.0917					
.960			.1503						
.970			.2012	.0905	.1550	.1239		.0330	
.970			.0607						
.990	.4183	.1932	.1875		.1053	.0694		.0263	.0533



ARC 3.5-185 IH20 O1+T15+S8

SOLID BOOSTER

(RENS03)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 )SRB

DEPENDENT VARIABLE H/H0

PSI 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L

.100	.1138	.4493	.0933			.2364	
.110						.5521	
.115					.5189		
.130						.1020	
.150			.0949			.2137	
.200		.2559	.1227			.0797	
.250						.0561	
.300			.0887	.0632		.0557	.0077
.400	.1074	.1068	.0697	.0657		.0434	
.500		.0895	.1429	.1036		.0932	.0373
.600		.1215	.1390	.1136		.0840	
.650		.1270		.1293		.0878	
.700	.0385	.0815	.1129	.1200	.1214	.0924	.0310
.750		.1103		.1081		.1031	
.780	.0787	.3049	.2125			.3833	.0295
.800	.2925	.1958	.1059			.0935	.0158
.850		.2160	.1638			.0174	
.900	.2153	.0730	.1152	.0426		.0113	.0072
.904			.1313				
.918			.3509				
.925			.2405	.1638			
.930	.1431	.1469	.2692	.2477	.1001	.0267	.0198
.940				.0668			
.950			.1094				
.960		.1466	.0659	.1130	.0902	.0240	
.970			.0443				
.990	.3052	.1409	.1366	.0768	.0505	.0192	.0387



ARC 3.5-185 IH20 O1+T15+S8

ORB PHI=130.

(RENN03) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BRP = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .0000  
 .829 .4172  
 .862 .2035  
 .963 .1089

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .0000  
 .829 .3696  
 .862 .1807  
 .963 .0968

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .0000  
 .829 .3010  
 .862 .1476  
 .963 .0792

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ARC 3.5-185 IH20 O1+T15+S8 WING UPPER SURF.

(RENX03) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = -5.000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

## X/C

.050 .1647 .2733 .3015  
 .200 .0471 .0970 .1128  
 .600 .0070 .0145 .0327  
 .800 .0124 .0273  
 .900 .0111 .0345  
 .950 .0264 .0089 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

## X/C

.050 .1460 .2444 .2671  
 .200 .0419 .0870 .1001  
 .600 .0063 .0129 .0291  
 .800 .0111 .0242  
 .900 .0099 .0306  
 .950 .0235 .0080 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.054 FO = 404.600 TO = 1290.900 HO = 315.190

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

## X/C

.050 .1191 .2018 .2174  
 .200 .0343 .0721 .0818  
 .600 .0032 .0106 .0236  
 .800 .0093 .0198  
 .900 .0081 .0250  
 .950 .0193 .0066 .0000

ARC 3.5-185 IH2D O1+T15+88+X28 ORB Y=0.438

(REN004) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .4380

## X/L

.050 .0660  
 .200 .1357  
 .300 .0847

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .4380

## X/L

.050 .0590  
 .200 .1212  
 .300 .0756

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .4380

## X/L

.050 .0486  
 .200 .0998  
 .300 .0622

ARC 3.5-185 IH20 01+T15+S8+X28 CRB Y=0.875

(RENC04) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .1080  
 .300 .0794  
 .400 .0823  
 .500 .0728  
 .600 .0600  
 .700 .0555  
 .800 .1482  
 .900 .0185

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0965  
 .300 .0709  
 .400 .0735  
 .500 .0650  
 .600 .0535  
 .700 .0495  
 .800 .1323  
 .900 .0165

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0795  
 .300 .0584  
 .400 .0605  
 .500 .0535  
 .600 .0441  
 .700 .0408

DATE 28 APR 75

TABULATED SOURCE DATA - IH20

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ARC 3.5-185 IH20 O1+Y15+S8+X28 ORB Y=0.875

(RENC04)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000

SECTION ( 1) BODY DEPENDENT VARIABLE H/H0

Y .8750

X/L

.800 .1089

.900 .0136

ARC 3.5-185 IH2D O1+T15+S8+X28 ORB C.C.L.TANGENT

(REND04) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0658  
 .100 .1291  
 .150 .1778  
 .200 .1099

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0587  
 .100 .1150  
 .150 .1584  
 .200 .0979

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0484  
 .100 .0944  
 .150 .1301  
 .200 .0804

ARC 3.5-185 IH20 O1+T15+S8+X28 CRB H.H.B.TANGENT

(RENE04) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN. ALPHA = -5.000 BETA = .000  
 LREF = 1290.3000 IN. YMRP = .0000 IN. MACH = 5.300 RN/L = 1.500  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .1025  
 .100 .0512  
 .150 .0798

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0915  
 .100 .0458  
 .150 .0711

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0754  
 .100 .0377  
 .150 .0584

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ARC 3.5-185 IH2D O1+T15+S8+X28 CRB Z=6.125

(RENFO4) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0815  
 .300 .0399  
 .800 .0229  
 .900 .0579  
 .975 .0416

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0726  
 .300 .0355  
 .800 .0204  
 .900 .0516  
 .975 .0370

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0596  
 .300 .0292  
 .800 .0167  
 .900 .0424  
 .975 .0304



ARC 3.5-185 IH20 O1+Y15+S8+X28 WING UPPER CREASE

(RENGD4) ( 07 APR 75 )

## REFERENCE DATA

SREF. = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0522  
 .500 .0211  
 .600 .0451  
 .700 .0318  
 .900 .0567

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0466  
 .500 .0189  
 .600 .0404  
 .700 .0285  
 .900 .0508

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0384  
 .500 .0156  
 .600 .0334  
 .700 .0235  
 .900 .0420

ARC 3.5-185 IH20 O1+Y15+S8+X28 ORB Z=7.525

(RENHO4) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0328  
 .400 .0318  
 .500 .0427  
 .600 .0469  
 .700 .0434  
 .800 .0693

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0293  
 .400 .0284  
 .500 .0380  
 .600 .0418  
 .700 .0387  
 .800 .0617

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0241  
 .400 .0234  
 .500 .0312  
 .600 .0343  
 .700 .0318  
 .800 .0507

ARC 3.5-185 IH2D O1+T15+S8+X28 ORB WINDOWS

(RENI04) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BRFP = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

## SECTION ( 1 ) WINDOW

## DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

## X/L

.156	.7248		
.164	.7095		
.168	.6029		
.170		.9485	
.178			.9402
.182	.3644	.5082	.6847
.185			.4961
.191			.4043
.200		.2435	

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

## SECTION ( 1 ) WINDOW

## DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

## X/L

.156	.6457		
.164	.6320		
.168	.5370		
.170		.8466	
.178			.8374
.182	.3246	.4537	.6098
.185			.4418
.191			.3602
.200		.2174	

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ARC 3.5-185 IH20 01+T15+S9+X28 ORB WINDOWS

(REN104)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RNL = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) WINDOW

DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

X/L

.156	.9300		
.164	.5186		
.168	.4407		
.170		.6969	
.178			.6871
.182	.2664	.3735	.5004
.185			.3626
.191			.2956
.200		.1791	

ARC 3.5-185 IH20 O1+T15+S8+X28 CRB Z=8.379

(RENJ04) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0339  
 .400 .0220  
 .500 .0040  
 .600 .0307  
 .700 .0572

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0302  
 .400 .0196  
 .500 .0035  
 .600 .0273  
 .700 .0510

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0248  
 .400 .0161  
 .500 .0029  
 .600 .0224  
 .700 .0419

ARC 3.5-185 IH2D O1+T15+S8+X28 CRB PHI=180

(RENK04) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRF = .0000 IN.  
 LREF = 1290.3000 IN. YMRF = .0000 IN.  
 BREF = 1290.3000 IN. ZMRF = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010 .5181  
 .025 .2954  
 .050 .1966  
 .075 .1353  
 .100 .1154  
 .125 .0846  
 .150 .2625  
 .160 .9105  
 .170 .9162  
 .180 .7506  
 .200 .1200  
 .250 .0171  
 .300 .0090  
 .400 .0131  
 .500 .0535  
 .600 .0618  
 .700 .0567  
 .800 .0730

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010 .4621  
 .025 .2636  
 .050 .1755  
 .075 .1207  
 .100 .1030  
 .125 .0755  
 .150 .2343  
 .160 .8126  
 .170 .8176  
 .180 .6699  
 .200 .1071  
 .250 .0153

ARC 3.5-185 IH2D O1+T15+S6+X28 CRB FHI=180

(RENK04)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

FHI 180.0000

X/L

.300	.0081
.400	.0117
.500	.0477
.600	.0552
.700	.0505
.800	.0651

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

FHI 180.0000

X/L

.010	.3000
.025	.2169
.050	.1444
.075	.0994
.100	.0848
.125	.0622
.150	.1929
.160	.6688
.170	.6728
.180	.5513
.200	.0882
.250	.0126
.300	.0067
.400	.0096
.500	.0392
.600	.0454
.700	.0415
.800	.0534

ARC 3.5-185 IH20 O1+T15+S8+X28 OMS BOTTOM CREASE

(RENLO4) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

OMS 1.0000

X/L

.829 .0664  
 .900 .0870  
 .975 .0622

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

OMS 1.0000

X/L

.829 .0594  
 .900 .0779  
 .975 .0556

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

OMS 1.0000

X/L

.829 .0490  
 .900 .0644  
 .975 .0459



ARC 3.5-185 IH2D O1+T15+S8+X28 CRB Z=8.295

(RENM04) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .2295  
 .805 .2258  
 .829 .1840  
 .862 .1197  
 .963 .0800  
 1.000 .0847  
 1.014 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .2057  
 .805 .2022  
 .829 .1641  
 .862 .1069  
 .963 .0716  
 1.000 .0755  
 1.014 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .1702  
 .805 .1672  
 .829 .1349  
 .862 .0881  
 .963 .0591  
 1.000 .0621  
 1.014 .0000

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ARC 3.5-185 IH20 O1+T15+S6+X28 ORB PHI=130.

(REN04) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .2452  
 .829 .2255  
 .862 .1104  
 .963 .0770

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .2186  
 .829 .2010  
 .862 .0986  
 .963 .0688

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .1796  
 .829 .1651  
 .862 .0812  
 .963 .0568

ARC 3.5-105 IH20 01+T15+S8+X28 CMS TOP

(RENO04) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

## SECTION ( 1 ) CMS

## DEPENDENT VARIABLE H/HO

Y 1.6620

## X/L

.805 .2245  
 .829 .1872  
 .862 .0857  
 .963 .0586

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

## SECTION ( 1 ) CMS

## DEPENDENT VARIABLE H/HO

Y 1.6620

## X/L

.805 .2002  
 .829 .1669  
 .862 .0765  
 .963 .0524

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

## SECTION ( 1 ) CMS

## DEPENDENT VARIABLE H/HO

Y 1.6620

## X/L

.805 .1646  
 .829 .1372  
 .862 .0630  
 .963 .0432

ARC 3.5-185 IH20 01+T15+S8+X28 OMS INSIDE

(RENFO4) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMPF = .0000 IN.  
 LREF = 1290.3000 IN. YMPF = .0000 IN.  
 BREF = 1290.3000 IN. ZMPF = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .0778  
 .963 .1005

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .0695  
 .963 .0898

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .0574  
 .963 .0741

ARC 3.5-185 IH20 O1+T15+S8+X28 ORB Y=1.75

(RENG04) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0185  
 1.050 .0229

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0166  
 1.050 .0205

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0136  
 1.050 .0168

ARC 3.5-185 IH2D 01+T15+S0+X28 BOTTOM RCS

(REN04) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0061  
 1.014 .0125

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0054  
 1.014 .0111

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0045  
 1.014 .0092

ARC 3.5-185 IH20 O1+T15+S8+X28 CRB Z=8.75

(RENU04) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0695  
 1.014 .0630

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0620  
 1.014 .0561

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0510  
 1.014 .0460

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ARC 3.5-185 IH2D 01-T15+S8+X28 WING UPPER SURF.

(RENK04) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.2223	.2182	.3156
.200	.0534	.0555	.0783
.600	.0024	.0101	.0174
.800		.0055	.0139
.900		.0052	.0138
.950	.0091	.0042	.0000

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.1986	.1954	.2817
.200	.0478	.0497	.0700
.600	.0022	.0090	.0156
.800		.0050	.0125
.900		.0047	.0123
.950	.0082	.0037	.0000

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B	.4000	.6000	.8000
X/C			
.050	.1637	.1615	.2320
.200	.0395	.0412	.0577
.600	.0018	.0075	.0129
.800		.0041	.0103
.900		.0039	.0102
.950	.0067	.0031	.0000



ARC 3.5-185 IH20 O1+T15+S8+X28 CLUSTERS B AND C

(RENY04) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000 .4657 .1106  
 .050 .2082 .1995  
 .100 .2975 .1541  
 .150 .2310 .1160  
 .200 .1785 .0907  
 .250 .1392 .0639  
 .300 .0961 .0542

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000 .4169 .0991  
 .050 .1864 .1787  
 .100 .2663 .1380  
 .150 .2068 .1039  
 .200 .1598 .0812  
 .250 .1246 .0568  
 .300 .0856 .0482

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000 .3445 .0820  
 .050 .1540 .1477  
 .100 .2201 .1141  
 .150 .1709 .0859  
 .200 .1321 .0672  
 .250 .1031 .0465  
 .300 .0703 .0395

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ARC 3.5-185 IH20 01+T15+S8+X28 ORBITER BODY

(RENZ04) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/H0

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
.000	.0495	.6397	.0639	.1526	.0724				
.238					.0847				
.254				.1357					
.278			.1418						
.281		.5004							
.474			.1355						
.477					.0794				
.499	.0660								
.510				.1080					
.555		.1405							
.672				.1099					
.696	.0658								
.713					.0850				
.728			.1778						
.746		.1291							
.780				.1395					
.882					.0953				
.890				.1277					
1.002			.1108						
1.003					.0913				
1.087								.0506	
1.155			.0798						
1.182		.0512							
1.201				.0925					
1.230	.1025								
1.326								.0567	
1.364					.0314				
1.444									.0416
1.458								.0579	
1.459					.0361				
1.554	.1094				.0399				
1.606								.0491	
1.608				.1376					
1.649					.0362				
1.750						.0451			
1.896								.0870	
1.933									.0622
1.975						.0399			

ARC 3.5-185 IH2D O1+T15+S6+X28 ORBITER BODY

(RENZD4)

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850

SECTION ( 1 ) BODY		DEPENDENT VARIABLE H/HO								
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
2.116				.1284						
2.316					.0328					
2.360	.1939									
2.497						.0469				
2.593						.0481				
2.630		.1442								
2.640						.0514				
2.735							.0584			
2.766				.2435						
2.883					.0339					
3.062						.0307				
3.168	.1966									
3.308			.2625							
3.351		.1154								
3.372							.0725			
3.540				.1200						
3.649					.0090					
3.844						.0618				

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY		DEPENDENT VARIABLE H/HO								
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0441	.5712	.0570	.1363	.0846					
.238					.0756					
.254				.1212						
.278			.1263							
.281		.4469								
.474			.1210							
.477					.0709					
.499	.0390									
.510				.0965						
.555		.1252								
.672				.0979						
.696	.0587									
.713					.0758					
.728			.1584							
.746		.1150								
.780				.1243						
.882					.0849					
.890				.1138						
1.002			.0989							

ARC 3.5-185 IH20 O1+T15+S8+X28 ORBITER BODY

(REN204)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
1.003					.0814					
1.087									.0451	
1.155			.0711							
1.182		.0458								
1.201				.0824						
1.230	.0915									
1.326								.0508		
1.364					.0280					
1.444									.0370	
1.458								.0516		
1.459					.0322					
1.554	.0974				.0355					
1.606								.0438		
1.608				.1227						
1.649					.0322					
1.750						.0404				
1.896								.0779		
1.933									.0556	
1.975						.0356				
2.116				.1144						
2.316					.0293					
2.360	.1727									
2.497						.0418				
2.593						.0431				
2.630		.1285								
2.640						.0460				
2.735								.0522		
2.766				.2174						
2.883					.0302					
3.062						.0273				
3.168	.1755									
3.308			.2343							
3.351		.1030								
3.372								.0649		
3.540				.1071						
3.649					.0081					
3.844						.0552				

ARC 3.5-185 IH20 O1+T15+S8+X28 CRBITER BODY

(RENZ04)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
.000	.0361	.4704	.0468	.1122	.0532				
.238					.0622				
.254				.0998					
.278			.1037						
.281		.3692							
.474			.0997						
.477					.0584				
.499	.0486								
.510				.0795					
.555		.1027							
.672				.0804					
.696	.0484								
.713					.0623				
.728			.1301						
.746		.0944							
.780				.1020					
.882					.0697				
.890				.0934					
1.002			.0815						
1.003					.0668				
1.087								.0370	
1.155			.0584						
1.182		.0377							
1.201				.0677					
1.230	.0754								
1.326							.0420		
1.364				.0230					
1.444								.0304	
1.458							.0424		
1.459					.0264				
1.554	.0799				.0292				
1.606							.0359		
1.608				.1007					
1.649					.0265				
1.750						.0334			
1.896							.0644		
1.933								.0459	
1.975						.0292			
2.116			.0939						
2.316				.0241					
2.360	.1417								
2.497						.0345			
2.593						.0356			
2.630		.1055							
2.640						.0380			

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC 3.5-185 IH20 O1+T15+S8+X28 CRBITER BODY

(RENZ04)

MACH ( 1 ) = 3.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
2.735							.0431			
2.766				.1791						
2.803					.0248					
3.062						.0224				
3.168	.1444									
3.308			.1929							
3.351	.0848									
3.372							.0536			
3.540				.0882						
3.649					.0067					
3.844						.0454				







ARC 3.5-185 IH20 C1+T15+S8+X28 EXTERNAL TANK

(RENT04)

MACH ( 1 ) = 3.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.900	.0250	.0477	.0866	.0758	.0671	.0678		.0636	.0828	.1130	.0814			
.925					.1990									.2123
.935							.2579							
.937										.1770				
.960					.0963									
.975										.0253				

THETA 216.0000 222.5000 229.0000

X/L

.335	.0803													
.400	.0887		.1288											
.500	.1246													
.600			.0551											
.700	.0793													
.800			.0456											

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 ) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.000											.6576			
.005											.5177			
.010											.5784			
.040	.1041										.2525			
.080	.0963										.1754	.1267		
.150	.0289										.1152		.0818	.0765
.200				.0357							.0485			
.250				.0196							.0299			
.275				.0150	.0220									
.300		.0200	.1393	.0207							.0389		.0000	
.325			.3429	.0693	.0286									
.350		.1119	.1429	.1819	.0734						.0466			
.375					.0428						.0426			
.400	.0317	.0366	.0134	.0603	.0538	.0331	.0612	.0000			.0885			.0353
.425							.1075	.1178			.1794			
.450				.0355	.0323	.0411	.1449				.3793			
.475							.1269				.0693			
.500	.0000	.0052	.0265	.0217	.1265	.0790		.0629			.0924		.1035	
.525											.0861			
.550			.0317	.0546	.0943	.0420					.0820			
.575											.0780			

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC 3.5-185 IH2D O1+T15+S8+X28 EXTERNAL TANK

(RENT04)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.600	.0370	.0063	.0067	.0415	.0739	.0606	.0475	.0762	.0357
.625								.0715	
.650		.0000	.0609	.0552	.0552	.0346		.0743	
.675								.0743	
.700	.0242	.0076	.0584	.0924	.0445	.0418	.0651	.0737	.0579
.750		.0098	.0544	.0814	.0390	.0289		.0598	
.800	.0227	.0183	.0135	.0526	.0736	.0429	.0183	.0550	.0362
.825					.0956				
.850			.0546	.0677	.0563	.0686	.0347	.0447	
.875					.0684				
.900	.0205	.0395	.0717	.0627	.0556	.0561	.0527	.0683	.0932
.925					.1648				.0672
.935						.2135			.1753
.937								.1460	
.960					.0798				
.975								.0209	

THETA 216.0000 222.5000 229.0000

X/L

.335		.0663	
.400	.0733		.1064
.500	.1029		
.600		.0455	
.700	.0655		
.800		.0377	



ARC 3.5-185 IH2D O1+T15+S8+X28 SOLID BOOSTER

(RENS04)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 )SRB DEPENDENT VARIABLE H/HO

PSI 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L

.000	.6821								
.002								.8685	
.025	.1102							.2241	
.050	.0804	.1898						.1283	
.075				.0986				.0000	
.100	.0417	.1083		.0853				.1930	
.110								.5876	
.115							.5617		
.130								.0505	
.150				.0814				.1097	
.200		.0729		.0998				.0504	
.250								.0346	
.300				.0548	.0342			.0303	.0057
.400	.0280	.0361		.0440	.0587			.0493	
.500		.0871		.0520	.0753			.0831	.0257
.600		.0588		.0702	.0654			.0607	
.650		.0000			.0645			.0613	
.700	.0095	.0348	.0632	.0594	.0566			.0569	.0224
.750		.0672			.0965			.0912	
.780	.0231	.2488		.0000				.4595	.0838
.800	.0074	.2173		.1907				.0354	.0428
.850		.0816		.1072				.0192	
.900	.0000	.0462	.0775	.0221				.0096	.0264
.904			.0670						
.918			.2659						
.925			.2010	.1160					
.930	.0199	.1040	.1888	.2521	.0712			.0180	.0526
.940				.0389					
.950			.0651						
.960		.1308	.0323	.0934	.0756			.0336	
.970			.0216						
.990	.0325	.0825	.0904	.0702	.0395			.0544	.0491

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1 )SRB DEPENDENT VARIABLE H/HO

PSI 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L

.000	.5621								
.002								.7160	
.025	.0910							.1850	
.050	.0665	.1569						.1061	
.075				.0815				.0000	

## ARC 3.5-185 IH20 O1+T15+S8+X28 SOLID BOOSTER

(RENS04)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 )SR8

DEPENDENT VARIABLE H/H0

PSI 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L								
.100	.0345		.0895		.0706			.1597
.110								.4865
.115							.4651	
.130								.0419
.150					.0674			.0909
.200			.0603		.0826			.0418
.250								.0287
.300					.0453	.0282		.0251 .0047
.400	.0231		.0298		.0364	.0485		.0408
.500			.0719		.0512	.0623		.0687 .0212
.600			.0485		.0580	.0541		.0502
.650			.0000			.0533		.0507
.700	.0078	.0287	.0521		.0491	.0468		.0471 .0185
.750			.0555			.0799		.0755
.780	.0190		.2057		.0000			.3803 .0693
.800	.0061		.1797		.1578			.0293 .0354
.850			.0675		.0887			.0159
.900	.0000	.0381	.0641		.0183			.0079 .0218
.904				.0554				
.918				.2199				
.925				.1662	.0960			
.930	.0164	.0858	.1561		.2085	.0589		.0149 .0435
.940					.0322			
.950				.0538				
.960			.1081		.0267	.0773	.0625	.0278
.970				.0178				
.990	.0268	.0681	.0747		.0580	.0327		.0449 .0406

ARC 3.5-185 IH20 O1+T15+S8+X20 CRB PHI=0.0

(RENA04) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

PHI .0000

## X/L

.000	.8669
.005	.5603
.010	.3643
.020	.1588
.030	.1045
.040	.0800
.050	.0495
.060	.0720
.070	.1120
.080	.1477
.090	.3193
.100	.6397
.120	.2008
.130	.1234
.140	.0825
.150	.0639
.160	.0765
.170	.0937
.180	.0883
.190	.1359
.200	.1526
.225	.0952
.250	.0987
.275	.0932
.300	.0724
.325	.0731
.350	.0633
.375	.0822
.400	.0899
.425	.0889
.450	.0817
.475	.0752
.500	.0734
.525	.0694
.550	.0720
.575	.0687
.600	.0668
.625	.0619

ARC 3.5-185 IH2D 01+T15+S8+X28 ORB PHI=0.0

(RENAD4)

MACH ( 1) = 5.300 HAW/HT( 1) = .850

SECTION ( 1)BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.650	.0593
.675	.0539
.700	.0525
.725	.0424
.750	.1333
.775	.1839
.800	.1673
.825	.1651
.850	.1240
.875	.0501
.900	.0354
.925	.0253
.950	.0148
.975	.0086
1.000	.0033
1.013	.0000
1.025	.0023
1.038	.0000
1.050	.0029

ORIGINAL PAGE IS  
OF POOR QUALITY

MACH ( 1) = 5.300 HAW/HT( 2) = .900 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1)BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.7731
.005	.4998
.010	.3250
.020	.1417
.030	.0930
.040	.0000
.050	.0441
.060	.0643
.070	.0998
.080	.1319
.090	.2044
.100	.5712
.120	.1793
.130	.1099
.140	.0737
.150	.0570
.160	.0683
.170	.0835

ARC 3.5-105 IH2D O1+T15+S8+X28 QRB PHI=0.0

(RENA04)

MACH ( 1) = 5.300 HAW/HT( 2) = .900

SECTION ( 1)BODY	DEPENDENT VARIABLE H/H0
PHI	.0000
X/L	
.180	.0788
.190	.1211
.200	.1363
.225	.0849
.250	.0881
.275	.0830
.300	.0646
.325	.0651
.350	.0565
.375	.0732
.400	.0802
.425	.0792
.450	.0729
.475	.0670
.500	.0655
.525	.0618
.550	.0642
.575	.0612
.600	.0596
.625	.0551
.650	.0529
.675	.0480
.700	.0469
.725	.0578
.750	.1190
.775	.1638
.800	.1493
.825	.1471
.850	.1107
.875	.0447
.900	.0316
.925	.0225
.950	.0132
.975	.0077
1.000	.0030
1.013	.0000
1.025	.0021
1.038	.0000
1.050	.0026



ARC 3.5-185 IH20 01+T15+S8+X28 CRB PHI=0.0

(RENAD4)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1)BODY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.6356
.005	.4110
.010	.2673
.020	.1166
.030	.0763
.040	.0000
.050	.0361
.060	.0529
.070	.0819
.080	.1086
.090	.2333
.100	.4704
.120	.1477
.130	.0902
.140	.0607
.150	.0468
.160	.0563
.170	.0685
.180	.0649
.190	.0994
.200	.1122
.225	.0697
.250	.0725
.275	.0682
.300	.0532
.325	.0534
.350	.0465
.375	.0601
.400	.0660
.425	.0650
.450	.0600
.475	.0550
.500	.0539
.525	.0507
.550	.0528
.575	.0502
.600	.0490
.625	.0452
.650	.0435
.675	.0394
.700	.0386
.725	.0310
.750	.0979
.775	.1344
.800	.1228

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OF POOR QUALITY

ARC 3.5-185 IH20 O1+T15+S8+X28 CRB PHI=D.D

(RENAD4)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

PHI .0000

X/L

.825	.1207
.850	.0911
.875	.0567
.900	.0260
.925	.0185
.950	.0108
.975	.0063
1.000	.0025
1.013	.0000
1.025	.0017
1.038	.0000
1.050	.0021



ARC 3.5-185 IH20 O1+T15+S8+X28 WING BOTTOM SURF.

(REMOVED)

MACH ( 1) = 5.300 HAW/HT ( 2) = .900

SECTION ( 1)WING	DEPENDENT VARIABLE H/HO											
ZY/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.177					.0000							
.200				.0291		.0371						
.299	.0315											
.300					.0210	.0242		.0485	.0535	.0596		
.302				.0351								
.303							.0391					
.428						.0309						
.444	.0559											
.487					.0534							
.500							.0326	.0514		.0408		
.559					.0999							
.590	.0420											
.600					.1119	.0918			.0223			
.700				.1571	.1004	.0719	.0142				.0000	
.736	.2146											
.800						.0432	.0296					
.850						.0538	.0377					
.900	.0082			.0252	.0518	.0568	.0390			.0099		

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 1.536 FO = 122.890 TO = 1290.000 HO = 314.960

SECTION ( 1)WING	DEPENDENT VARIABLE H/HO											
ZY/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.000						.3445		.0820			.0910	.0320
.005		.0505	.0548		.2414		.0000			.1158		
.025	.0784			.1400	.1578		.2140					
.050										.0965		
.100				.0449		.0496	.0600	.0781		.0943		
.153	.0708											
.177					.0000							
.200				.0241		.0307						
.299	.0424											
.300					.0174	.0201		.0402	.0442	.0493		
.302				.0291								
.303							.0324					
.428						.0256						
.444	.0460											
.487					.0443							
.500							.0270	.0426		.0337		
.559				.0829								
.590	.0346											
.600					.0928	.0761			.0185			

ARC 3.5-185 IH2D O1+T15+S8+X28 WING BOTTOM SURF.

(RENWD4)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) WING	DEPENDENT VARIABLE H/H0											
2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.700				.1303	.0833	.0596	.0118			.0000		
.736	.1780											
.800						.0355	.0243					
.850						.0442	.0309					
.900	.0068			.0209	.0429	.0471	.0323			.0082		

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## ARC 3.5-185 IH20 O1+T15+S8+X28 VERTICAL TAIL

(RENV04) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .4925 .5062 .0000 .8170  
 .100 .1039 .0937 .1288 .1692 .2899  
 .300 .2050 .0833 .0358 .0825  
 .500 .1697 .0720 .0574 .0000  
 .700 .0367 .0451 .0519 .0170  
 .900 .0338 .0576 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .4392 .4533 .0000 .7272  
 .100 .0928 .0836 .1154 .1517 .2582  
 .300 .1831 .0743 .0321 .0739  
 .500 .1515 .0646 .0514 .0000  
 .700 .0328 .0403 .0466 .0153  
 .900 .0301 .0517 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.536 PO = 122.890 TO = 1290.000 HO = 314.960

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .3610 .3750 .0000 .5961  
 .100 .0763 .0687 .0955 .1256 .2118  
 .300 .1309 .0612 .0266 .0613  
 .500 .1248 .0536 .0427 .0000  
 .700 .0271 .0332 .0387 .0127  
 .900 .0248 .0428 .0000

ARC 3.5-185 IH20 O1+T15+S8+X28 CRB Y=0.438

(RENBD5) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

Y .4380

X/L

.050 .0633  
 .200 .1026  
 .300 .1220

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

Y .4380

X/L

.050 .0739  
 .200 .0914  
 .300 .1088

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

Y .4380

X/L

.050 .0603  
 .200 .0750  
 .300 .0895

ARC 3.5-185 IH20 Q1+T15+S8+X28 CRB Y=0.875

(RENC05) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 DREF = 1200.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .1104  
 .300 .1333  
 .400 .0885  
 .500 .0863  
 .600 .0730  
 .700 .0753  
 .800 .1768  
 .900 .0340

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0984  
 .300 .1190  
 .400 .0790  
 .500 .0771  
 .600 .0651  
 .700 .0673  
 .800 .1580  
 .900 .0304

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0808  
 .300 .0980  
 .400 .0651  
 .500 .0635  
 .600 .0536  
 .700 .0555



DATE 28 APR 75

TABULATED SOURCE DATA - IH2D

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ARC 3.5-185 IH2D O1+T15+S8+X28 ORB Y=0.675

(RENC05)

MACH ( 1) = 5.300 HAW/HT( 3) = 1.000

SECTION ( 1)BODY

DEPENDENT VARIABLE H/HO

Y .6750

X/L

.800 .1303

.900 .0250

ARC 3.5-185 IH20 O1+T15+S8+X28 CRB C.C.L.TANGENT

(REND05) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

CCLT 1.0000

X/L

.050	.0856
.100	.0751
.150	.2133
.200	.1342

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

CCLT 1.0000

X/L

.050	.0760
.100	.0669
.150	.1902
.200	.1198

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

CCLT 1.0000

X/L

.050	.0619
.100	.0550
.150	.1564
.200	.0986

ARC 3.5-185 IH20 O1+T15+S8+X28 CRB M.H.B.TANGENT

(RENE05) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/H0

MHB 1.0000

## X/L

.050 .1236  
 .100 .1281  
 .150 .1281

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/H0

MHB 1.0000

## X/L

.050 .1096  
 .100 .1141  
 .150 .1144

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/H0

MHB 1.0000

## X/L

.050 .0893  
 .100 .0936  
 .150 .0942

ARC 3.5-185 IH20 O1+T15+S8+X28 CRB Z=6.125

(RENF05) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0815  
 .300 .0718  
 .800 .0330  
 .900 .0520  
 .975 .0493

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0727  
 .300 .0642  
 .800 .0295  
 .900 .0465  
 .975 .0440

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0597  
 .300 .0530  
 .800 .0244  
 .900 .0384  
 .975 .0362

ARC 3.5-185 IH20 O1+T15+S8+X28 WING UPPER CREASE

(RENG05) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L  
 .400 .0779  
 .500 .0357  
 .600 .0632  
 .700 .0454  
 .900 .0640

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L  
 .400 .0696  
 .500 .0321  
 .600 .0569  
 .700 .0409  
 .900 .0576

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L  
 .400 .0574  
 .500 .0267  
 .600 .0474  
 .700 .0341  
 .900 .0480

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ARC 3.5-185 IH2D O1+T15+58+X28 CRB Z=7.525

(RENH05) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0614  
 .400 .0692  
 .500 .0607  
 .600 .0513  
 .700 .0570  
 .800 .0607

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0548  
 .400 .0529  
 .500 .0543  
 .600 .0459  
 .700 .0509  
 .800 .0722

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0451  
 .400 .0436  
 .500 .0448  
 .600 .0379  
 .700 .0421  
 .800 .0596

ARC 3.5-185 IH20 01+T15+S8+X28 CRB WINDOWS

(REN105) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

## SECTION ( 1 ) WINDOW

## DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

## X/L

.156	.7451		
.164	.6049		
.168	.5367		
.170		.9805	
.178			1.0229
.182	.3949	.5892	.7453
.185			.5843
.191			.4563
.200		.3030	

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

## SECTION ( 1 ) WINDOW

## DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

## X/L

.156	.6634		
.164	.5386		
.168	.4779		
.170		.8709	
.178			.9099
.182	.3519	.5239	.6633
.185			.5202
.191			.4066
.200		.2701	

ARC 3.5-185 IH20 O1+T15+S8+X28 CRB WINDOWS

(REN105)

MACH ( 1) = 5.300 HAW/HT( 3) = 1.000 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1) WINDOW

DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

X/L

.156	.5441		
.164	.4417		
.169	.3919		
.170		.7119	
.178			.7452
.182	.2889	.4288	.5436
.185			.4266
.191			.3339
.200		.2219	



ARC 3.5-185 IH20 O1+T15+S8+X28 CRB Z=8.379

(RENJ05) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/H0

Z 8.3790

X/L

.300 .0570  
 .400 .0588  
 .500 .0614  
 .600 .0558  
 .700 .0636

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/H0

Z 8.3790

X/L

.300 .0508  
 .400 .0525  
 .500 .0549  
 .600 .0499  
 .700 .0569

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/H0

Z 8.3790

X/L

.300 .0419  
 .400 .0433  
 .500 .0452  
 .600 .0412  
 .700 .0470

ARC 3.5-185 IH2D O1+T15+S8+X28 CRB PHI=180

(RENK05) ( 07 APR 75 )

## REFERENCE DATA

SKEF = 2690.0000 SQ.FT.    XMRP = .0000 IN.  
 LKEF = 1290.3000 IN.    YMRP = .0000 IN.  
 BREP = 1290.3000 IN.    ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000    BETA = .000  
 MACH = 5.300    RN/L = 5.000

MACH ( 1 ) = 5.300    HAW/HT ( 1 ) = .850    RN/L = 4.895    FO = 404.330    TO = 1316.890    HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

PHI 180.0000

X/L

.010	.5673
.025	.3623
.050	.3389
.075	.3244
.100	.3439
.125	.2849
.150	.3561
.160	.8766
.170	1.0168
.180	.7744
.200	.1555
.250	.0236
.300	.0287
.400	.0687
.500	.0813
.600	.0863
.700	.0848
.800	.1339

MACH ( 1 ) = 5.300    HAW/HT ( 2 ) = .900    RN/L = 4.895    FO = 404.330    TO = 1316.890    HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

PHI 180.0000

X/L

.010	.5009
.025	.3203
.050	.3003
.075	.2883
.100	.3077
.125	.2535
.150	.3167
.160	.7792
.170	.9033
.180	.6886
.200	.1386
.250	.0211

ARC 3.5-185 IH2D O1+T15+S8+X28 ORB FHI=180

(RENK05)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

FHI 180.0000

X/L

.300	.0236
.400	.0614
.500	.0729
.600	.0771
.700	.0759
.800	.1197

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

FHI 180.0000

X/L

.010	.4059
.025	.2605
.050	.2451
.075	.2357
.100	.2519
.125	.2077
.150	.2594
.160	.6375
.170	.7384
.180	.5637
.200	.1138
.250	.0173
.300	.0211
.400	.0506
.500	.0601
.600	.0635
.700	.0626
.800	.0987

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ARC 3.5-185 IH20 01+T13+S8+X28 CMS BOTTOM CREASE

(RENLO5) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

CMS 1.0000

X/L

.829 .0707  
 .900 .1099  
 .975 .0882

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

CMS 1.0000

X/L

.829 .0635  
 .900 .0989  
 .975 .0794

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

CMS 1.0000

X/L

.829 .0528  
 .900 .0825  
 .975 .0661

ARC 3.5-185 IH20 O1+T15+S8+X28 CRB Z=8.295

(RENMOD5) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780	.2331
.805	.1725
.829	.1595
.862	.1264
.963	.0928
1.000	.1431
1.014	.0816

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780	.2077
.805	.1534
.829	.1428
.862	.1134
.963	.0835
1.000	.1284
1.014	.0732

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780	.1706
.805	.1257
.829	.1101
.862	.0942
.963	.0695
1.000	.1064
1.014	.0606

ARC 3.5-185 IH2D 01+T15+S8+X28 CRB PHI=130.

(RENN05) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = .5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .2740  
 .829 .2529  
 .862 .1373  
 .963 .0983

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .2452  
 .829 .2263  
 .862 .1232  
 .963 .0884

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .2026  
 .829 .1871  
 .862 .1022  
 .963 .0735

ARC 3.5-185 IH2D 01+T15+S8+X28 OMS TOP

(RENC05) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BRP = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .3469  
 .829 .2724  
 .862 .1095  
 .963 .0736

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .3104  
 .829 .2437  
 .862 .0982  
 .963 .0661

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .2565  
 .829 .2013  
 .862 .0814  
 .963 .0549

ARC 3.5-185 IH20 O1+T15+S8+X28 CMS INSIDE

(RENPO5) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

## SECTION ( 1 ) CMS

## DEPENDENT VARIABLE H/HO

Y 1.1380

## X/L

.862 .1175  
 .963 .1143

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

## SECTION ( 1 ) CMS

## DEPENDENT VARIABLE H/HO

Y 1.1380

## X/L

.862 .1054  
 .963 .1027

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

## SECTION ( 1 ) CMS

## DEPENDENT VARIABLE H/HO

Y 1.1380

## X/L

.862 .0874  
 .963 .0853



ARC 3.5-185 IH20 O1+T15+S8+X28 CRB Y=1.75

(RENG05) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y 1.7500

X/L  
 1.000 .0353  
 1.050 .0388

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y 1.7500

X/L  
 1.000 .0315  
 1.050 .0345

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y 1.7500

X/L  
 1.000 .0259  
 1.050 .0283

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ARC 3.5-185 IH20 01+T15+S8+X28 BOTTOM RCS

(RENR05) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0118

1.014 .0162

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0106

1.014 .0145

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0088

1.014 .0120

ARC 3.5-185 IH20 Q1+T15+S9+X20 CRB Z=8.75

(RENU05) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.7500

X/L  
 1.000 .0869  
 1.014 .0796

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.7500

X/L  
 1.000 .0780  
 1.014 .0713

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.7500

X/L  
 1.000 .0646  
 1.014 .0590

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## ARC 3.5-185 IH20 O1+T15+S8+X28 VERTICAL TAIL

(RENV05) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000	.4151	.4242	.0000	.7414	
.100	.1207	.1091	.1355	.1925	.3502
.300	.2419	.1505	.0646	.1086	
.500	.2259	.1147	.0916	.0000	
.700	.0370	.0559	.0606	.0237	
.900	.0568	.0781	.0000		

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000	.3715	.3776	.0000	.6630	
.100	.1081	.0976	.1207	.1713	.3135
.300	.2168	.1348	.0576	.0967	
.500	.2027	.1024	.0817	.0000	
.700	.0332	.0502	.0541	.0211	
.900	.0509	.0696	.0000		

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000	.3069	.3096	.0000	.5472	
.100	.0895	.0807	.0991	.1405	.2591
.300	.1796	.1116	.0474	.0794	
.500	.1680	.0844	.0672	.0000	
.700	.0276	.0417	.0446	.0174	
.900	.0422	.0572	.0000		

ARC 3.5-185 IH20 O1+T15+S8+X28 CLUSTERS B AND C

(RENYD5) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) WING DEPENDENT VARIABLE H/HO

ZY/B .6000 .8500

S

.000	.6884	.1243
.050	.4631	.2623
.100	.4005	.2026
.150	.3236	.1519
.200	.2487	.1189
.250	.2014	.0771
.300	.1264	.0636

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) WING DEPENDENT VARIABLE H/HO

ZY/B .6000 .8500

S

.000	.6122	.1108
.050	.4116	.2334
.100	.3561	.1803
.150	.2877	.1352
.200	.2212	.1057
.250	.1793	.0690
.300	.1149	.0569

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) WING DEPENDENT VARIABLE H/HO

ZY/B .6000 .8500

S

.000	.5012	.0910
.050	.3368	.1913
.100	.2914	.1477
.150	.2355	.1107
.200	.1811	.0866
.250	.1469	.0570
.300	.0950	.0471

ARC 3.5-185 IH20 O1+T15+S8+X28 ORBITER BODY

(REN205) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
.000	.0569	.2774	.1724	.0862	.1182				
.238					.1220				
.254				.1026					
.278			.2160						
.281		.2058							
.474			.2224						
.477					.1333				
.499	.0833								
.510				.1104					
.555		.1048							
.672				.1342					
.696	.0656								
.713					.1325				
.728			.2133						
.746		.0751							
.780				.1665					
.882					.1254				
.890				.1640					
1.002			.1332						
1.003					.1075				
1.087								.0486	
1.155			.1281						
1.182		.1281							
1.201				.1315					
1.230	.1236								
1.326								.0640	
1.364					.0488				
1.444								.0493	
1.458								.0520	
1.459					.0635				
1.554	.1282				.0718				
1.606								.0534	
1.608			.1512						
1.649				.0650					
1.750					.0632				
1.896								.1099	
1.933									.0882
1.975					.0578				

ARC 3.5-185 IH2D O1+T15+S8+X28 ORBITER BODY

(RENZ05)

MACH ( 1) = . 5.300 HAW/HT( 1) = .850

SECTION ( 1)BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
2.116				.1816						
2.316					.0614					
2.360	.2715									
2.497						.0513				
2.593						.0549				
2.630		.2978								
2.640						.0602				
2.735							.0736			
2.766				.3030						
2.883					.0570					
3.062						.0558				
3.168	.3389									
3.308			.3561							
3.351		.3459								
3.372							.0890			
3.540				.1555						
3.649					.0287					
3.844						.0863				

MACH ( 1) = 5.300 HAW/HT( 2) = .900 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1)BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0506	.2465	.1537	.0768	.1054					
.238					.1088					
.254				.0914						
.278			.1925							
.281		.1828								
.474			.1978							
.477					.1190					
.499	.0739									
.510				.0984						
.555		.0933								
.672				.1198						
.696	.0760									
.713					.1184					
.728			.1902							
.746		.0669								
.780				.1486						
.882					.1121					
.890				.1463						
1.002			.1365							

ARC 3.5-185 IH20 O1+T15+S8+X28 ORBITER BODY

(RENZ05)

MACH ( 1) = 5.300 HAW/HT ( 2) = .900

SECTION ( 1) BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
1.003					.0961					
1.087									.0434	
1.155			.1144							
1.182		.1141								
1.201				.1174						
1.230	.1096									
1.326								.0576		
1.364					.0436					
1.444									.0440	
1.458								.0465		
1.459					.0567					
1.554	.1140				.0642					
1.606								.0477		
1.608				.1351						
1.649					.0581					
1.750						.0569				
1.896								.0989		
1.933									.0794	
1.975						.0517				
2.116				.1622						
2.316					.0548					
2.360	.2414									
2.497						.0459				
2.593						.0494				
2.630		.2656								
2.640						.0542				
2.735							.0662			
2.766				.2701						
2.883					.0508					
3.062						.0499				
3.168	.3005									
3.308			.3167							
3.351		.3077								
3.372							.0801			
3.540				.1386						
3.649					.0256					
3.844							.0771			



ARC 3.5-185 IH20 O1+T15+S8+X28 ORBITER BODY

(RENZ05)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
.000	.0414	.2016	.1264	.0631	.0867				
.238					.0895				
.254				.0750					
.278			.1581						
.281	.1495								
.474		.1620							
.477					.0880				
.499	.0603								
.510				.0808					
.555	.0766								
.672				.0986					
.696	.0619								
.713					.0977				
.728			.1564						
.746	.0530								
.780				.1223					
.882					.0924				
.890				.1204					
1.002		.1120							
1.003					.0792				
1.087									.0357
1.155		.0942							
1.182	.0936								
1.201			.0966						
1.230	.0893								
1.326							.0480		
1.364				.0360					
1.444								.0362	
1.458							.0384		
1.459					.0468				
1.554	.0933				.0530				
1.606							.0394		
1.608			.1112						
1.649				.0479					
1.750					.0474				
1.896							.0825		
1.933								.0661	
1.975					.0427				
2.116			.1337						
2.316				.0451					
2.360	.1975								
2.497					.0379				
2.593					.0411				
2.630	.2183								
2.640					.0451				

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ARC 3.5-185 IH20 O1+T15+S8+X28 ORBITER BODY

(RENZ05)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000

SECTION ( 1)BODY	DEPENDENT VARIABLE H/H0									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
2.735							.0551			
2.766				.2219						
2.883					.0419					
3.062						.0412				
3.168	.2451									
3.308			.2594							
3.351		.2519								
3.372							.0667			
3.540				.1138						
3.649					.0211					
3.844						.0635				



ARC 3.5-185 IH2D O1+T15+S8+X28 EXTERNAL TANK

(RENTD5)

MACH ( 1) = 5.300 HAW/HT ( 1) = .850

SECTION ( 1)TANK DEPENDENT VARIABLE H/HO

THETA 216.0000222.5000229.0000

X/L			
.335		.0907	
.400	.1154		.2002
.500	.1573		
.600			.0862
.700	.1091		
.800			.0619

MACH ( 1) = 5.300 HAW/HT ( 2) = .900 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1)TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L														
.000														.7048
.005														.6834
.010														.6975
.040	.1138													.4793
.080	.0583													.3862
.150	.0655													.1871
.200				.0728										.0994
.250				.0522										.0737
.275				.0521	.0590									
.300			.0404	.1999	.0581									.0705
.325				.4997	.1328									.0624
.350			.1428	.2561	.3228									.0665
.375														.0646
.400	.0315	.0390	.0235	.0922	.1085			.0591	.1093		.0900	.1169		.0609
.425									.1465	.1823		.2082		
.450				.0602	.1006			.1328	.2003			.5182		
.475									.2103			.1274		
.500		.0000	.0084	.0457	.0901			.2584	.1428		.1344	.2671	.1771	
.525												.1736		
.550				.0500	.1038			.1950	.0922			.1168		
.575												.1056		
.600	.0588	.0185	.0063	.0564	.1266			.1274	.0495			.1144		.0603
.625												.1285		
.650			.0177	.0873	.1208			.1050	.0611			.1297		
.675												.1185		
.700		.0331	.0104	.1156	.1406			.1221	.0639		.0919	.0983	.0792	
.750			.0162	.1140	.1493			.1043	.0548			.1040		
.800	.0335	.0213	.0242	.1002	.1246			.1124	.0420			.0859		.0582
.825								.1396						
.850				.1026	.1035			.0748	.1325			.0619		.0807
.875								.1077						

ARC 3.5-185 IH2D O1+T15+S8+X28 EXTERNAL TANK

(RENT05)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.900	.0262	.0443	.0936	.1058	.1154	.1192	.0946	.1042	.1259	.1021				
.925					.1355									.2264
.935							.3160							
.937									.2231					
.960					.1396									
.975									.0366					

THETA 216.0000 222.5000 229.0000

X/L

.335		.0812												
.400	.1034		.1793											
.500	.1410													
.600			.0772											
.700	.0977													
.800			.0554											

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.000														.5780
.005														.5624
.010														.5754
.040	.0931													.3958
.080	.0478													.3187 .2278
.150	.0539													.1544 .1152 .1025
.200			.0602											.0821
.250			.0432											.0608
.275			.0430	.0488										
.300		.0334	.1649	.0480										.0581 .0512
.325			.4122	.1098		.0565								
.350		.1181	.2118	.2669		.0963								.0549
.375						.0516								.0533
.400	.0261	.0323	.0195	.0762	.0897	.0489	.0904	.0742	.0963					.0504
.425							.1211	.1507	.1716					
.450			.0498	.0832	.1098		.1657		.4270					
.475							.1741		.1050					
.500	.0000	.0070	.0378	.0745	.2137		.1183	.1113	.2202					.1463
.525									.1431					
.550			.0414	.0859	.1613	.0764			.0963					
.575									.0871					

ORIGINAL PAGE IS OF POOR QUALITY

ARC 3.5-185 IH2D O1+T15+S8+X28 EXTERNAL TANK

(RENT05)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000

SECTION ( 1) TANK

DEPENDENT VARIABLE H/HO

THETA	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	194.0000	196.0000	208.0000
X/L															
.600	.0488	.0153	.0052	.0467	.1047		.1055		.0410			.0943			.0499
.625												.1059			
.650			.0147	.0722	.0999		.0869		.0507			.1069			
.675												.0976			
.700		.0275	.0086	.0957	.1163		.1011		.0530		.0759	.0811		.0654	
.750			.0134	.0944	.1234		.0864		.0454			.0857			
.800	.0278	.0177	.0200	.0829	.1030		.0931		.0348			.0708			.0481
.825						.1155									
.850				.0849	.0856	.0620	.1097		.0513			.0665			
.875						.0892									
.900		.0218	.0367	.0776	.0876	.0955	.0967		.0785		.0861	.1038		.0843	
.925						.1122									.1873
.935								.2620							
.937												.1842			
.960						.1156									
.975												.0302			

THETA 216.0000 222.5000 229.0000

X/L

.335		.0671	
.400	.0856		.1483
.500	.1167		
.600			.0638
.700	.0809		
.800			.0458

ARC 3.5-185 IH2D 01+T15+S8+X28 SOLID BOOSTER

(RENS05) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 )SRB

DEPENDENT VARIABLE H/HO

PSI 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L	90.0000	135.0000	180.0000	210.0000	215.0000	225.0000	240.0000	247.5000	260.0000	270.0000	315.0000
.000	.6208										
.002										.8617	
.025	.1134									.2259	
.050	.0778		.1915							.1356	
.075					.1199					.0000	
.100	.0725		.1196		.1130					.3031	
.110										.7789	
.115								.6509			
.130										.0991	
.150					.1042					.1407	
.200		.0971			.1000					.0851	
.250										.0685	
.300					.0766	.0701				.0619	.0085
.400	.0403	.0677			.0887	.1199				.0668	
.500		.1465			.1652	.1659				.1202	.0375
.600		.1123			.1581	.1468				.1107	
.650		.1166				.1506				.1099	
.700	.0167	.0510	.1099		.1193	.1322				.1045	.0308
.750		.0935				.1739				.1646	
.780	.0313	.3067			.0000					.5256	.0349
.800	.0034	.2390			.1502					.0452	.0245
.850		.1289			.1384					.0143	
.900	.0000	.0527	.1009		.0299					.0104	.0226
.904			.1098								
.918			.3143								
.925			.2464	.1445							
.930	.0224	.1431	.2937		.2507	.0888				.0295	.0639
.940				.0563							
.950			.0701								
.960		.1531		.0444	.0932	.0667				.0579	
.970			.0340								
.990	.0494	.1166	.1317		.0704	.0356				.0640	.0747

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ARC 3.5-185 IH20 O1+T15+S8+X28 SOLID BOOSTER

(RENS05)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 )SRB DEPENDENT VARIABLE H/HO

PSI 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L								
.100	.0536		.0882		.0022			.2206
.110								.5679
.115							.4752	
.130								.0727
.150					.0762			.1034
.200			.0717		.0730			.0625
.250								.0501
.300					.0564	.0517		.0453 .0063
.400	.0298		.0497		.0645	.0875		.0489
.500			.1063		.1205	.1213		.0880 .0277
.600			.0816		.1155	.1075		.0813
.650			.0847			.1104		.0807
.700	.0123	.0372	.0800		.0875	.0971		.0769 .0227
.750			.0683			.1280		.1213
.780	.0231		.2248		.0000			.3878 .0258
.800	.0025		.1749		.1106			.0334 .0181
.850			.0947		.1021			.0105
.900	.0000	.0389	.0742		.0221			.0077 .0167
.904				.0807				
.918				.2302				
.925				.1803	.1058			
.930	.0165	.1054	.2155		.1838	.0651		.0216 .0467
.940					.0412			
.950				.0513				
.960			.1122		.0325	.0682	.0489	.0424
.970				.0249				
.990	.0363	.0859	.0965		.0515	.0260		.0468 .0545

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ARC 3.5-185 IH20 O1+T15+S8+X28 ORB FHI=0.0

(RENAD5) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BCCY

DEPENDENT VARIABLE H/HO

FHI .0000

X/L

.000	.8729
.005	.6069
.010	.4038
.020	.1726
.030	.1132
.040	.0900
.050	.0569
.060	.0352
.070	.0274
.080	.0629
.090	.0953
.100	.2774
.120	.5034
.130	.2843
.140	.1728
.150	.1724
.160	.1015
.170	.1123
.180	.1094
.190	.1037
.200	.0862
.225	.1187
.250	.1190
.275	.1513
.300	.1182
.325	.1189
.350	.1021
.375	.1077
.400	.0902
.425	.0891
.450	.1267
.475	.1202
.500	.1159
.525	.1015
.550	.0905
.575	.0865
.600	.0883
.625	.0910

ARC 3.5-185 IH2D 01+T15+S8+X28 ORB FHI=0.0

(RENAD5)

MACH ( 1) = 5.300 HAW/HT( 1) = .850

SECTION ( 1)BOCY DEPENDENT VARIABLE H/HO

FHI .0000

X/L

.650	.0926
.675	.0927
.700	.0839
.725	.0862
.750	.1227
.775	.1302
.800	.2057
.825	.2310
.850	.1851
.875	.0859
.900	.0466
.925	.0337
.950	.0197
.975	.0128
1.000	.0072
1.013	.0000
1.025	.0029
1.038	.0000
1.050	.0032

MACH ( 1) = 5.300 HAW/HT( 2) = .900 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1)BOCY DEPENDENT VARIABLE H/HO

FHI .0000

X/L

.000	.7702
.005	.5358
.010	.3566
.020	.1526
.030	.1005
.040	.0000
.050	.0506
.060	.0312
.070	.0244
.080	.0559
.090	.0849
.100	.2465
.120	.4475
.130	.2534
.140	.1538
.150	.1537
.160	.0903

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ARC 3.5-185 IH2D O1+T15+S8+X28 CRB PHI=0.0

(RENAD5)

MACH ( 1) = 5.300 HAW/HT( 2) = .900

SECTION ( 1) BODY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L	
.100	.0974
.150	.0925
.200	.0768
.225	.1060
.250	.1062
.275	.1350
.300	.1054
.325	.1062
.350	.0911
.375	.0961
.400	.0804
.425	.0796
.450	.1130
.475	.1073
.500	.1034
.525	.0906
.550	.0807
.575	.0772
.600	.0787
.625	.0812
.650	.0826
.675	.0828
.700	.0749
.725	.0770
.750	.1095
.775	.1163
.800	.1836
.825	.2063
.850	.1653
.875	.0768
.900	.0416
.925	.0301
.950	.0176
.975	.0114
1.000	.0064
1.013	.0000
1.025	.0026
1.038	.0000
1.050	.0028

ARC 3.5-185 IH20 01+T15+S8+X28 CRB FHI=0.0

(RENAD5)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

FHI .0000

X/L

.000	.6235
.005	.4340
.010	.2891
.020	.1239
.030	.0821
.040	.0000
.050	.0414
.060	.0255
.070	.0200
.080	.0457
.090	.0696
.100	.2016
.120	.3662
.130	.2081
.140	.1260
.150	.1264
.160	.0740
.170	.0824
.180	.0799
.190	.0761
.200	.0631
.225	.0874
.250	.0874
.275	.1112
.300	.0867
.325	.0874
.350	.0748
.375	.0791
.400	.0661
.425	.0655
.450	.0930
.475	.0884
.500	.0850
.525	.0746
.550	.0664
.575	.0636
.600	.0647
.625	.0669
.650	.0680
.675	.0682
.700	.0616
.725	.0634
.750	.0902
.775	.0958
.800	.1510

ARC 3.5-185 IH20 Q1+T15+S8+X28 ORB FHI=0.0

(RENA05)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000

SECTION ( 1) BODY DEPENDENT VARIABLE H/H0

FHI .0000

X/L

.825 .1700

.850 .1361

.875 .0633

.900 .0343

.925 .0248

.950 .0145

.975 .0094

1.000 .0053

1.013 .0000

1.025 .0022

1.038 .0000

1.050 .0023

ARC 3.5-185 IH20 01+T15+S8+X28 WING UPPER SURF.

(RENX05) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN. ALPHA = -5.000 BETA = .000  
 LREF = 1290.3000 IN. YMRP = .0000 IN. MACH = 5.300 RN/L = 5.000  
 BRP = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000  
 X/C  
 .050 .3351 .4284 .5629  
 .200 .0907 .1344 .1932  
 .600 .0048 .0211 .0469  
 .800 .0165 .0438  
 .900 .0224 .0536  
 .950 .0211 .0251 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000  
 X/C  
 .050 .3002 .3812 .5037  
 .200 .0815 .1200 .1733  
 .600 .0044 .0190 .0422  
 .800 .0148 .0393  
 .900 .0201 .0481  
 .950 .0190 .0224 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 FO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000  
 X/C  
 .050 .2484 .3124 .4162  
 .200 .0678 .0988 .1437  
 .600 .0036 .0159 .0351  
 .800 .0122 .0327  
 .900 .0167 .0399  
 .950 .0158 .0184 .0000

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ARC 3.5-185 IH20 O1+T15+S8+X28 WING BOTTOM SURF.

(REMOVED)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/H0

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.177					.0000							
.200				.0714		.0577						
.299	.0697											
.300					.0640	.0697		.1122	.0923	.0824		
.302				.0822								
.303							.0881					
.428						.0983						
.444	.0718											
.487					.1148							
.500							.1092	.1398		.0964		
.559				.0925								
.590	.0570											
.600					.1020	.0979			.0879			
.700				.1536	.1079	.0691	.0402			.0435		
.738	.2126											
.800						.0528	.0485					
.850						.0641	.0526					
.900	.0122			.0311	.0747	.0604	.0402			.0331		

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.895 PO = 404.330 TO = 1316.890 HO = 321.870

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/H0

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.000						.5012		.0910			.1059	.0452
.005		.0717	.0786		.3516		.0000			.1456		
.025	.0780			.1631	.2167		.2571					
.050										.1161		
.100				.0591		.0601	.0630	.1073		.1111		
.153	.1077											
.177					.0000							
.200				.0587		.0474						
.299	.0575											
.300					.0528	.0575		.0920	.0755	.0673		
.302				.0677								
.303							.0724					
.428						.0810						
.444	.0592											
.487					.0946							
.500							.0898	.1147		.0788		
.559				.0763								
.590	.0470											
.600					.0840	.0807			.0475			

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ARC 3.5-185 IH2D O1+T15+S8+X28 WING BOTTOM SURF.

(REMOVED)

MACH ( 1) = 5.300 HAW/HT( 3) = 1.000

SECTION ( 1) WING

DEPENDENT VARIABLE H/HO

ZY/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.700				.1267	.0888	.0569	.0331			.0356		
.736	.1756											
.800						.0439	.0404					
.850						.0533	.0436					
.900	.0101			.0256	.0615	.0497	.0331			.0270		

ARC 3.5-185 IH20 O1+T15

ORB Y=0.438

(REN006) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0607  
 .200 .0464  
 .300 .0832

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0607  
 .200 .0412  
 .300 .0741

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0492  
 .200 .0337  
 .300 .0609

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ARC 3.5-185 IH2D O1+T15

CRB Y=D.875

(RENC06) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .8750

## X/L

.200 .0411  
 .300 .0664  
 .400 .0700  
 .500 .0635  
 .600 .0583  
 .700 .0466  
 .800 .1291  
 .900 .0185

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .8750

## X/L

.200 .0366  
 .300 .0593  
 .400 .0625  
 .500 .0567  
 .600 .0520  
 .700 .0417  
 .800 .1144  
 .900 .0165

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .8750

## X/L

.200 .0300  
 .300 .0488  
 .400 .0315  
 .500 .0467  
 .600 .0429  
 .700 .0343

DATE 28 APR 75

TABULATED SOURCE DATA - IH2D

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ARC 3.5-185 IH2D O1+T15

ORB Y=0.875

(RENC06)

MACH ( 1) = 5.300

HAW/HT ( 3) = 1.000

SECTION ( 1) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.800 .0943

.900 .5136

ARC 3.5-185 IH20 01+T15

ORB C.C.L.TANGENT

(REND06) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0607  
 .100 .1325  
 .150 .1218  
 .200 .0755

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0536  
 .100 .1181  
 .150 .1087  
 .200 .0675

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0434  
 .100 .0970  
 .150 .0894  
 .200 .0536

ARC 3.5-185 IH20 O1+T15

ORB M.H.B.TANGENT

(RENED6) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0798  
 .100 .0631  
 .150 .1134

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0705  
 .100 .0561  
 .150 .1013

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0571  
 .100 .0458  
 .150 .0836

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ARC 3.5-185 IH20 01+T15

ORB Z=6.125

(RENF06) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0705  
 .300 .0457  
 .800 .0182  
 .900 .0380  
 .975 .0326

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0628  
 .300 .0409  
 .800 .0163  
 .900 .0340  
 .975 .0292

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0516  
 .300 .0339  
 .800 .0135  
 .900 .0282  
 .975 .0241



ARC 3.5-185 IH2D O1+T15

WING UPPER CREASE

(RENG06) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0511  
 .500 .0273  
 .600 .0480  
 .700 .0329  
 .900 .0430

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0456  
 .500 .0244  
 .600 .0430  
 .700 .0295  
 .900 .0385

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0376  
 .500 .0202  
 .600 .0357  
 .700 .0244  
 .900 .0319

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ARC 3.5-185 IH20 01+T15

CRB Z=7.525

(REMH06) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175'

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0364  
 .400 .0488  
 .500 .0470  
 .600 .0499  
 .700 .0432  
 .800 .0496

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0325  
 .400 .0436  
 .500 .0421  
 .600 .0447  
 .700 .0387  
 .800 .0445

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0267  
 .400 .0359  
 .500 .0349  
 .600 .0371  
 .700 .0321  
 .800 .0369

ARC 3.5-185 IH20 O1+T15

CRB WINDOWS

(RENID6) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

## SECTION ( 1 ) WINDOW

## DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

## X/L

.156	.7611		
.164	.5780		
.168	.5026		
.170		.8308	
.178			.9726
.182	.3409	.4808	.6931
.185			.5189
.191			.4182
.200	.2422		

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

## SECTION ( 1 ) WINDOW

## DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

## X/L

.156	.6783		
.164	.5149		
.168	.4478		
.170		.7367	
.178			.8661
.182	.3041	.4266	.6174
.185			.4624
.191			.3731
.200	.2155		

ARC 3.5-185 IH2D O1+T15

ORB WINDOWS

(RENID6)

MACH ( 1 ) = 0.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) WINDOW

DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

X/L

.156	.5572		
.164	.4227		
.168	.3676		
.170		.6006	
.178			.7105
.182	.2500	.3482	.5068
.185			.3798
.191			.3069
.200		.1766	

ARC 3.5-185 IH2D O1+T15

CRB Z=8.379

(RENJD6) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT( 1 ) = .850 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0462  
 .400 .0509  
 .500 .0528  
 .600 .0386  
 .700 .0414

MACH ( 1 ) = 5.300 HAW/HT( 2 ) = .900 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0413  
 .400 .0456  
 .500 .0473  
 .600 .0346  
 .700 .0371

MACH ( 1 ) = 5.300 HAW/HT( 3 ) = 1.000 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0341  
 .400 .0377  
 .500 .0392  
 .600 .0286  
 .700 .0307

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ARC 3.5-185 IH2D 01+T15

CRB PHI=180

(RENK06) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.4398
.025	.2419
.050	.1684
.075	.1648
.100	.1918
.125	.2059
.150	.3655
.160	.7449
.170	.8372
.180	.6926
.200	.1507
.250	.0204
.300	.0092
.400	.0413
.500	.0380
.600	.0416
.700	.0493
.800	.0810

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.3871
.025	.2134
.050	.1490
.075	.1462
.100	.1703
.125	.1830
.150	.3247
.160	.6612
.170	.7427
.180	.6148
.200	.1341
.250	.0182

ARC 3.5-185 IH2D O1+T15

ORB PHI=180

(RENK06)

MACH ( 1) = 5.300 HAW/HT ( 2) = .900

SECTION ( 1)BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.300	.0082
.400	.0369
.500	.0341
.600	.0371
.700	.0442
.800	.0726

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1)BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.3122
.025	.1728
.050	.1211
.075	.1193
.100	.1392
.125	.1497
.150	.2654
.160	.5399
.170	.6058
.180	.5020
.200	.1098
.250	.0151
.300	.0067
.400	.0304
.500	.0282
.600	.0306
.700	.0367
.800	.0602

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ARC 3.5-185 IH20 01+T15

OMS BOTTOM CREASE

(RENLOG) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

OMS 1.0000

X/L

.829 .0637  
 .900 .0911  
 .975 .0719

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

OMS 1.0000

X/L

.829 .0571  
 .900 .0817  
 .975 .0645

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

OMS 1.0000

X/L

.829 .0472  
 .900 .0677  
 .975 .0534



ARC 3.5-185 IH20 01+T15

ORB Z=8.295

(RENMD6) ( 07 APR 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.2950

X/L  
 .780 .2450  
 .805 .2586  
 .829 .1679  
 .862 .1058  
 .963 .0720  
 1.000 .0000  
 1.014 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.2950

X/L  
 .780 .2182  
 .805 .2301  
 .829 .1501  
 .862 .0948  
 .963 .0646  
 1.000 .0000  
 1.014 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.2950

X/L  
 .780 .1791  
 .805 .1886  
 .829 .1239  
 .862 .0784  
 .963 .0535  
 1.000 .0000  
 1.014 .0000

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ARC 3.5-185 IH2D 01+T15

OHS TOP

(REN006) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

## SECTION ( 1 ) OMS

## DEPENDENT VARIABLE H/HO

Y 1.6620

## X/L

.805 .0849  
 .829 .2111  
 .862 .0800  
 .963 .0705

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

## SECTION ( 1 ) OMS

## DEPENDENT VARIABLE H/HO

Y 1.6620

## X/L

.805 .0759  
 .829 .1086  
 .862 .0715  
 .963 .0631

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

## SECTION ( 1 ) OMS

## DEPENDENT VARIABLE H/HO

Y 1.6620

## X/L

.805 .0626  
 .829 .1555  
 .862 .0591  
 .963 .0522

ARC 3.5-185 IH2D 01+T15

OMS INSIDE

(RENF06) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FY. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .0953  
 .963 .0750

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .0853  
 .963 .0672

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .0705  
 .963 .0556

ARC 3.5-185 IH20 O1+T15

CRB Y=1.75

(RENGD6) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y 1.7500

X/L  
 1.000 .0162  
 1.050 .0157

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y 1.7500

X/L  
 1.000 .0144  
 1.050 .0139

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y 1.7500

X/L  
 1.000 .0118  
 1.050 .0114

ARC 3.5-185 IH20 01+T15

BOTTOM RCS

(RENR06) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) RCS DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L  
 1.000 .0120  
 1.014 .0161

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) RCS DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L  
 1.000 .0108  
 1.014 .0144

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) RCS DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L  
 1.000 .0089  
 1.014 .0120

ARC 3.5-185 IH20 O1+T15

CRB Z=8.75

(RENU06) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0658  
 1.014 .0593

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0590  
 1.014 .0531

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0488  
 1.014 .0439

ARC 3.5-185 IH20 01+T15

CLUSTERS B AND C

(RENY06) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B	.6000	.8500
S		
.000	.5589	.1097
.050	.4421	.2296
.100	.3453	.1893
.150	.2852	.1439
.200	.2144	.1201
.250	.1728	.0973
.300	.1193	.0761

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B	.6000	.8500
S		
.000	.4969	.0976
.050	.3930	.2042
.100	.3070	.1684
.150	.2536	.1280
.200	.1907	.1068
.250	.1537	.0781
.300	.1066	.0681

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B	.6000	.8500
S		
.000	.4067	.0801
.050	.3215	.1671
.100	.2513	.1378
.150	.2076	.1048
.200	.1562	.0875
.250	.1259	.0644
.300	.0879	.0562

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC 3.5-185 IH2D O1+T15

ORBITER BODY

(RENZ06) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 SREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
.090	.0861	.5009	.0872	.1062	.0722				
.238					.0832				
.254				.0464					
.278			.0864						
.281		.4861							
.474			.1029						
.477					.0664				
.499	.0687								
.510				.0411					
.555		.1518							
.672				.0755					
.696	.0607								
.713					.0883				
.728			.1218						
.746		.1325							
.780				.1040					
.882					.0890				
.890				.0970					
1.002			.0867						
1.003					.0691				
1.087									.0274
1.155			.1134						
1.182		.0631							
1.201				.0977					
1.230	.0798								
1.326								.0430	
1.364					.0377				
1.444									.0326
1.458								.0380	
1.459					.0425				
1.554	.0944				.0457				
1.606								.0390	
1.608				.1174					
1.649					.0440				
1.750						.0480			
1.896								.0911	
1.933									.0719
1.975						.0322			



ARC 3.5-185 IH20 OI+T15

ORBITER BODY

(RENZ06)

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850

SECTION ( 1 )	BODY	DEPENDENT VARIABLE H/HO									
X/L		.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R											
2.116					.1155						
2.316						.0364					
2.360	.1582										
2.497							.0499				
2.593							.0560				
2.630		.1775									
2.640							.0609				
2.735								.0568			
2.766					.2422						
2.883						.0462					
3.062							.0386				
3.168	.1684										
3.308				.3655							
3.351		.1918									
3.372								.0421			
3.540					.1507						
3.649						.0092					
3.844							.0416				

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 )	BODY	DEPENDENT VARIABLE H/HO									
X/L		.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R											
.000	.0766	.4438	.0778	.0944	.0643						
.238					.0741						
.254					.0412						
.278				.0771							
.281		.4306									
.474				.0912							
.477						.0593					
.499	.0607										
.510					.0366						
.555		.1352									
.672					.0675						
.696	.0536										
.713						.0791					
.728				.1067							
.746	.1181										
.780					.0929						
.882						.0797					
.890					.0866						
1.002				.0770							

ARC 3.5-185 IH20 O1+T15

ORBITER BODY

(RENZ06)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
1.003					.0618					
1.087									.0245	
1.155			.1013							
1.182		.0561								
1.201				.0874						
1.230	.0705									
1.326								.0385		
1.364					.0338					
1.444									.0292	
1.458								.0340		
1.459					.0380					
1.554	.0839				.0409					
1.606								.0349		
1.608				.1050						
1.649					.0395					
1.750						.0430				
1.896								.0817		
1.933									.0645	
1.975						.0289				
2.116				.1033						
2.316					.0325					
2.360	.1406									
2.497						.0447				
2.593						.0501				
2.630		.1584								
2.640						.0546				
2.735							.0509			
2.766				.2155						
2.883					.0413					
3.062						.0346				
3.168	.1490									
3.308			.3247							
3.351		.1703								
3.372							.0378			
3.540				.1341						
3.649					.0082					
3.844						.0371				

ARC 3.5-185 IH20 O1+T15

ORBITER BODY

(RENZ06)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0627	.3614	.0641	.0773	.0528					
.238					.0609					
.254				.0337						
.278			.0634							
.281		.3505								
.474			.0744							
.477					.0488					
.499	.0492									
.510				.0300						
.555		.1110								
.672				.0556						
.696	.0434									
.713					.0655					
.728			.0894							
.746		.0970								
.780				.0766						
.882					.0659					
.890				.0714						
1.002			.0630							
1.003					.0511					
1.087									.0202	
1.155			.0836							
1.182		.0458								
1.201				.0721						
1.230	.0571									
1.326								.0319		
1.364					.0279					
1.444									.0241	
1.458								.0282		
1.459					.0315					
1.554	.0686				.0339					
1.606								.0289		
1.608				.0867						
1.649					.0327					
1.750						.0357				
1.896								.0677		
1.933									.0534	
1.975						.0239				
2.116				.0853						
2.316					.0267					
2.360	.1150									
2.497						.0371				
2.593						.0415				
2.630		.1304								
2.640						.0452				

ARC 3.5-185 IH20 O1+T15

ORBITER BODY

(RENZ06)

MACH ( 1) = 5.300 HAW/HT( 3) = 1.000

SECTION ( 1) BODY		DEPENDENT VARIABLE H/NO								
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
2.735							.0422			
2.766				.1766						
2.863					.0341					
3.062						.0286				
3.168	.1211									
3.308			.2654							
3.351		.1392								
3.372							.0313			
3.540				.1098						
3.649					.0067					
3.844						.0306				

ARC 3.5-185 IH2D OI+T15

EXTERNAL TANK

(RENTD6) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) TANK

DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.000														.0000
.005														.8136
.010														.8352
.040	.1912													.5248
.080	.1267													.3705 .2818
.150	.0724													.1276 .1053 .1135
.200				.0715										.0637
.250				.0521										.0460
.275				.0541	.0540									
.300			.0361	.0537	.0536									.0466 .0000
.325				.0530	.0526		.0506							
.350			.0507	.0585	.0528		.0507							.0442
.375							.0504							.0678
.400	.0537	.0590	.0585	.0527	.0526		.0511	.0824		.0871				.0745 .0450
.425								.0993	.1014					.1888
.450				.0556	.0569		.0596	.0908						.4858
.475								.0713						.0824
.500		.0000	.0616	.0546	.0518		.0662	.0853		.1063				.0970 .1487
.525														.1393
.550				.0571	.0623		.0986	.0593						.0973
.575														.0988
.600	.0519	.0529	.0606	.0461	.0509		.1075	.0748						.1083 .0567
.625														.1004
.650			.0562	.0569	.0653		.1149	.0596						.0814
.675														.0731
.700	.0531	.0442	.0495	.0840			.1094	.0495		.0707				.0895 .0509
.750			.0403	.0540	.0886		.0893	.0521						.0749
.800	.0502	.0449	.0477	.0550	.0841		.0896	.0316						.0605 .0465
.825						.1504								
.850				.0595	.0880	.0453	.1309	.0446						.0748
.875						.0623								
.900	.0401	.0567	.0676	.0943	.0807	.0714	.0818	.0828		.1191				.0873
.925					.1268									.1918
.935							.2450							
.937														.2242
.960					.0262									
.975														.0296

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ARC 3.5-185 IH20 OI+T15

EXTERNAL TANK

(RENT06)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.900 .0360 .0507 .0604 .0842 .0722 .0639 .0733 .0741 .1063 .0781
.925 .1134 .1717
.935 .2193
.937 .2002
.960 .0235
.975 .0265

THETA 216.0000 222.5000 229.0000

X/L

.335 .0384
.400 .0474 .0492
.500 .1531
.600 .0459
.700 .0609
.800 .0341

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.000 .0000
.005 .5922
.010 .6110
.040 .1406 .3853
.080 .0934 .2719 .2077
.150 .0535 .0937 .0777 .0038
.200 .0527 .0470
.250 .0385 .0339
.275 .0398 .0398
.300 .0268 .0395 .0395 .0343 .0000
.325 .0391 .0388 .0373
.350 .0377 .0431 .0389 .0374
.375 .0371 .0498
.400 .0400 .0439 .0435 .0388 .0376 .0607 .0639 .0547 .0333
.425 .0731 .0747 .1385
.450 .0729 .3566
.475 .0527 .0605
.500 .0000 .0455 .0403 .0381 .0487 .0630 .0787 .0712 .1097
.525 .1024
.550 .0421 .0459 .0726 .0439 .0715
.575 .0726

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ARC 3.5-185 IH20 01+T15

EXTERNAL TANK

(RENT06)

MACH ( 1 ) = 3.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) TANK

DEPENDENT VARIABLE H/H0

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.600	.0387	.0394	.0447	.0340	.0375	.0792	.0553	.0795	.0420
.625								.0738	
.650			.0415	.0419	.0481	.0847	.0441	.0598	
.675								.0536	
.700		.0396	.0327	.0365	.0619	.0807	.0367	.0522	.0658
.750			.0298	.0398	.0653	.0660	.0386	.0551	.0376
.800	.0375	.0335	.0352	.0405	.0619	.0661	.0234	.0444	.0344
.825						.1108			
.850				.0438	.0648	.0334	.0967	.0330	.0549
.875						.0460			
.900		.0299	.0419	.0498	.0694	.0596	.0527	.0606	.0612
.925						.0936		.0875	.0644
.935							.1813		.1420
.937								.1650	
.960						.0194			
.975								.0218	

THETA 216.0000 222.5000 229.0000

X/L

.335		.0317							
.400	.0392		.0406						
.500	.4267								
.600			.0379						
.700	.0504								
.800			.0282						



ARC 3.5-185 IH2D 01+T15

CRB PHI=0.0

(RENA06) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

PHI .0000

## X/L

.000	.7095
.005	.4506
.010	.0000
.020	.1328
.030	.0894
.040	.0000
.050	.0861
.060	.1279
.070	.1820
.080	.1915
.090	.3867
.100	.5009
.120	.1819
.130	.0953
.140	.0893
.150	.0872
.160	.0851
.170	.0753
.180	.0630
.190	.0557
.200	.1062
.225	.1055
.250	.0965
.275	.1045
.300	.0722
.325	.0700
.350	.0446
.375	.0533
.400	.0745
.425	.0903
.450	.0812
.475	.0686
.500	.0569
.525	.0511
.550	.0498
.575	.0654
.600	.0721
.625	.0686

ARC 3.5-185 IH20 O1+T15

CRB PHI=D.0

(RENA06)

MACH ( 1) = 5.300 HAW/HT ( 1) = .850

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.650	.0602
.675	.0831
.700	.0456
.725	.0521
.750	.1159
.775	.1254
.800	.1241
.825	.1791
.850	.1283
.875	.0510
.900	.0292
.925	.0240
.950	.0155
.975	.0096
1.000	.0093
1.013	.0000
1.025	.0114
1.038	.0000
1.050	.0142

MACH ( 1) = 5.300 HAW/HT ( 2) = .900 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.6234
.005	.3963
.010	.0000
.020	.1169
.030	.0793
.040	.0000
.050	.0766
.060	.1131
.070	.1621
.080	.1695
.090	.3447
.100	.4438
.120	.1613
.130	.0851
.140	.0793
.150	.0778
.160	.0756
.170	.0672

DATE 28 APR 75

TABULATED SOURCE DATA - IH20

PAGE 253

ARC 3.5-185 IH20 O1+T15

CRB PHI=0.0

(RENA06)

MACH ( 1) = 5.300 HAW/HT ( 2) = .900

SECTION ( 1) BODY DEFENDENT VARIABLE H/MO

PHI .0000

X/L

.100	.0560
.150	.0490
.200	.0944
.225	.0945
.250	.0860
.275	.0935
.300	.0643
.325	.0626
.350	.0398
.375	.0477
.400	.0664
.425	.0809
.450	.0724
.475	.0614
.500	.0507
.525	.0458
.550	.0444
.575	.0585
.600	.0643
.625	.0614
.650	.0537
.675	.0475
.700	.0407
.725	.0466
.750	.1034
.775	.1123
.800	.1107
.825	.1604
.850	.1146
.875	.0457
.900	.0261
.925	.0215
.950	.0139
.975	.0086
1.000	.0083
1.013	.0000
1.025	.0102
1.038	.0000
1.050	.0127

ARC 3.5-185 IH2D O1+T15

CRB PHI=0.0

(RENAME)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.5016
.005	.3192
.010	.0000
.020	.0944
.030	.0648
.040	.0000
.050	.0627
.060	.0919
.070	.1330
.080	.1380
.090	.2831
.100	.3614
.120	.1315
.130	.0700
.140	.0647
.150	.0641
.160	.0617
.170	.0554
.180	.0458
.190	.0410
.200	.0773
.225	.0781
.250	.0707
.275	.0773
.300	.0528
.325	.0517
.350	.0326
.375	.0394
.400	.0545
.425	.0669
.450	.0595
.475	.0507
.500	.0416
.525	.0378
.550	.0365
.575	.0483
.600	.0528
.625	.0507
.650	.0442
.675	.0393
.700	.0334
.725	.0386
.750	.0851
.775	.0929
.800	.0911

DATE 28 APR 75

TABULATED SOURCE DATA - IH2D

PAGE 255

ARC 3.5-185 IH2D O1+T15

CRB PHI=0.0

(RENAD6)

MACH ( 1 ) = 5.300 HAW/HT( 3 ) = 1.000

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.825	.1326
.850	.0943
.875	.0379
.900	.0215
.925	.0178
.950	.0114
.975	.0072
1.000	.0068
1.013	.0000
1.025	.0083
1.038	.0000
1.050	.0104

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ARC 3.5-185 IH2D OI+T15

CRB PHI=130.

(RENN06) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .3363  
 .829 .2190  
 .862 .0895  
 .963 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .3005  
 .829 .1957  
 .862 .0801  
 .963 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 PO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .2478  
 .829 .1614  
 .862 .0663  
 .963 .0000

ARC 3.5-185 IH2D 01+T15

WING UPPER SURF.

(RENXD6) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

ZY/B .4000 .6000 .8000

X/C

.050 .2881 .2932 .3207  
 .200 .0730 .1006 .0922  
 .600 .0028 .0142 .0228  
 .800 .0079 .0195  
 .900 .0109 .0252  
 .950 .0108 .0100 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

ZY/B .4000 .6000 .8000

X/C

.050 .2573 .2611 .2864  
 .200 .0654 .0898 .0825  
 .600 .0025 .0128 .0205  
 .800 .0070 .0175  
 .900 .0097 .0226  
 .950 .0097 .0090 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

ZY/B .4000 .6000 .8000

X/C

.050 .2119 .2141 .2359  
 .200 .0541 .0739 .0682  
 .600 .0021 .0106 .0170  
 .800 .0058 .0145  
 .900 .0081 .0187  
 .950 .0080 .0074 .0000

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ARC 3.5-185 IH2D O1+T15

WING BOTTOM SURF.

(REMOVED)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.177					.0000							
.200				.0574		.0575						
.299	.0493											
.300					.0704	.0783		.1472	.1665	.1401		
.302				.0689								
.303							.1036					
.428						.1076						
.444	.0493											
.487					.0956							
.500							.1215	.1608		.1361		
.559				.0921								
.590	.0457											
.600					.0989	.0789			.0695			
.700				.0801	.0598	.0594	.0468				.0000	
.736	.2307											
.800						.0410	.0389					
.850						.0459	.0407					
.900	.0103			.0369	.0373	.0368	.0295				.0413	

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.000						.4067		.0801			.0904	.0384
.005		.0386	.0542		.3235		.0000			.1204		
.025	.0567			.1402	.1954		.2362					
.050										.1025		
.100				.0528		.0537	.0741	.1105		.0989		
.153	.0399											
.177					.0000							
.200				.0472		.0472						
.299	.0406											
.300					.0579	.0643		.1207	.1362	.1144		
.302				.0567								
.303							.0851					
.428						.0885						
.444	.0406											
.487					.0787							
.590							.0998	.1318		.1112		
.559				.0759								
.590	.0377											
.600					.0813	.0649			.0570			

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ARC 3.5-185 IH20 O1+T15

WING BOTTOM SURF.

(REND6)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/H0

ZY/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.700				.0659	.0492	.0488	.0385			.0000		
.736	.1901											
.800						.0341	.0323					
.850						.0380	.0337					
.900	.0085			.0304	.0307	.0302	.0243			.0337		

ARC 3.5-185 IH20 01+T15

VERTICAL TAIL

(RENV05) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

## SECTION ( 1 )TAIL

## DEPENDENT VARIABLE H/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.4410	.3880	.0000	.6485
.100	.0980	.1008	.1082	.1396	.2548
.300	.1777	.0528	.0600	.0716	
.500		.1541	.0483	.0535	.0000
.700	.0363	.0529	.0128	.0152	
.900		.0435	.0310	.0000	

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

## SECTION ( 1 )TAIL

## DEPENDENT VARIABLE H/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.3942	.3456	.0000	.5802
.100	.0877	.0902	.0965	.1245	.2282
.300	.1590	.0473	.0535	.0639	
.500		.1381	.0431	.0478	.0000
.700	.0325	.0475	.0114	.0135	
.900		.0390	.0276	.0000	

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.938 FO = 402.620 TO = 1305.700 HO = 319.000

## SECTION ( 1 )TAIL

## DEPENDENT VARIABLE H/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.3251	.2837	.0000	.4793
.100	.0724	.0745	.0794	.1023	.1888
.300	.1314	.0391	.0441	.0526	
.500		.1144	.0355	.0394	.0000
.700	.0269	.0394	.0094	.0112	
.900		.0323	.0227	.0000	

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ARC 3.5-185 IH20 O1+T15

CRB Y=0.438

(REN07) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.-FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0584  
 .200 .0520  
 .300 .0576

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0518  
 .200 .0463  
 .300 .0513

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0421  
 .200 .0379  
 .300 .0421

ARC 3.5-185 IH20 O1+T15

ORB Y=0.875

(RENC07) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/H0

Y .8750

## X/L

.200 .0348  
 .300 .0580  
 .400 .0694  
 .500 .0533  
 .600 .0526  
 .700 .1042  
 .800 .1412  
 .900 .0165

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/H0

Y .8750

## X/L

.200 .0309  
 .300 .0517  
 .400 .0619  
 .500 .0475  
 .600 .0469  
 .700 .0930  
 .800 .1260  
 .900 .0147

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/H0

Y .8750

## X/L

.200 .0253  
 .300 .0425  
 .400 .0509  
 .500 .0391  
 .600 .0386  
 .700 .0765

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ARC 3.5-185 IH2D O1+T15

ORB Y=0.875

(RENC07)

MACH ( 1) = 5.300

HAW/HT ( 3) = 1.000

SECTION ( 1) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.800 .1037

.900 .0121

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0515  
 .100 .1291  
 .150 .1136  
 .200 .0708

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0456  
 .100 .1151  
 .150 .1013  
 .200 .0631

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0371  
 .100 .0945  
 .150 .0832  
 .200 .0519

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 OF POOR QUALITY

ARC 3.5-185 IH20 01+T15

CRB M.H.B.TANGENT

(RENE07) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0715  
 .100 .0539  
 .150 .1041

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0633  
 .100 .0479  
 .150 .0929

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0515  
 .100 .0393  
 .150 .0764



ARC 3.5-185 IH2D O1+T15

ORB Z=6.125

(RENF07) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0579  
 .300 .0312  
 .800 .0193  
 .900 .0449  
 .975 .0307

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0516  
 .300 .0279  
 .800 .0173  
 .900 .0401  
 .975 .0274

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0424  
 .300 .0230  
 .800 .0142  
 .900 .0330  
 .975 .0226

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ARC 3.5-185 IH20 01+T15

WING UPPER CREASE

(RENG07) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0445  
 .500 .0204  
 .600 .0377  
 .700 .0259  
 .900 .0422

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0398  
 .500 .0182  
 .600 .0337  
 .700 .0231  
 .900 .0376

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0327  
 .500 .0149  
 .600 .0277  
 .700 .0190  
 .900 .0309

ARC 3.5-185 IH20 O1+T15

ORB Z=7.525

(RENHD7) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0428  
 .400 .0405  
 .500 .0446  
 .600 .0455  
 .700 .0397  
 .800 .0391

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0381  
 .400 .0361  
 .500 .0399  
 .600 .0407  
 .700 .0355  
 .800 .0350

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0313  
 .400 .0297  
 .500 .0329  
 .600 .0336  
 .700 .0293  
 .800 .0288

ARC 3.5-185 IH20 01+T15

ORB WINDOWS

(RENID7) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

## SECTION ( 1 ) WINDOW

## DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

## X/L

.156	.5292		
.164	.4618		
.168	.4260		
.170		.6587	
.178			.7487
.182	.2880	.3739	.5455
.185			.4961
.191			.3274
.200		.1805	

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

## SECTION ( 1 ) WINDOW

## DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

## X/L

.156	.4714		
.164	.4114		
.168	.3794		
.170		.5845	
.178			.6666
.182	.2567	.3320	.4858
.185			.3617
.191			.2918
.200		.1607	

DATE 28 APR 75

TABULATED SOURCE DATA - IH20

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ARC 3.5-185 IH20 G1+T15

CRB WINDOWS

(REN107)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RM/L = 5.063 PD = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1) WINDOW

DEPENDENT VARIABLE H/HO

Z . 7.9100 8.1370 8.3650

X/L

.156	.3870		
.164	.3376		
.168	.3113		
.170		.4770	
.178			.5466
.182	.2108	.2713	.3985
.185			.2968
.191			.2397
.200		.1318	

ARC 3.5-185 IH20 Q1+T15

ORB Z=0.379

(RENJ07) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 0.3790

X/L

.300 .0299  
 .400 .0230  
 .500 .0409  
 .600 .0365  
 .700 .0337

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.063 FO = 497.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 0.3790

X/L

.300 .0267  
 .400 .0205  
 .500 .0365  
 .600 .0326  
 .700 .0301

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 0.3790

X/L

.300 .0220  
 .400 .0169  
 .500 .0301  
 .600 .0269  
 .700 .0248

ARC 3.5-185 IH20 01+T15

ORB PHI=180

(RENK07) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 180.0000

.X/L

.010 .3299  
 .025 .1699  
 .050 .1037  
 .075 .0699  
 .100 .0649  
 .125 .0664  
 .150 .1986  
 .160 .5853  
 .170 .6447  
 .180 .5367  
 .200 .1014  
 .250 .0140  
 .300 .0036  
 .400 .0203  
 .500 .0328  
 .600 .0311  
 .700 .0393  
 .800 .0557

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010 .2912  
 .025 .1502  
 .050 .0919  
 .075 .0621  
 .100 .0577  
 .125 .0590  
 .150 .1764  
 .160 .5198  
 .170 .5722  
 .180 .4767  
 .200 .0903  
 .250 .0125

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ARC 3.5-185 IH20 01+T15

ORB PHI=180

(RENK07)

MACH ( 1) = 5.300 HAW/HT ( 2) = .900

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.300	.0032
.400	.0181
.500	.0293
.600	.0278
.700	.0351
.800	.0498

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.2358
.025	.1219
.050	.0749
.075	.0507
.100	.0472
.125	.0483
.150	.1442
.160	.4246
.170	.4672
.180	.3895
.200	.0740
.250	.0103
.300	.0026
.400	.0149
.500	.0241
.600	.0229
.700	.0290
.800	.0410



ARC 3.5-185 IH2D 01+T15

OMS BOTTOM CREASE

(RENLD7) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

OMS 1.0000

X/L

.829 .0553  
 .900 .0694  
 .975 .0545

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

OMS 1.0000

X/L

.829 .0492  
 .900 .0619  
 .975 .0467

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

OMS 1.0000

X/L

.829 .0404  
 .900 .0509  
 .975 .0400

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ARC 3.5-105 IH20 O1+T15

CRB Z=8.295

(RENM07) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .1640  
 .805 .2115  
 .829 .1464  
 .862 .0971  
 .963 .0698  
 1.000 .0000  
 1.014 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .1463  
 .805 .1883  
 .829 .1302  
 .862 .0865  
 .963 .0622  
 1.000 .0000  
 1.014 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .1202  
 .805 .1544  
 .829 .1065  
 .862 .0709  
 .963 .0512  
 1.000 .0000  
 1.014 .0000

ARC 3.5-185 IH2D 01+T15

CRB PHI=130.

(RENN07) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .2469  
 .829 .1673  
 .862 .0708  
 .963 .0068

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .2194  
 .829 .1487  
 .862 .0630  
 .963 .0060

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .1794  
 .829 .1216  
 .862 .0517  
 .963 .0050

ARC 3.5-185 IH20 01+T15

OMS TOP

(RENC07) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .2083  
 .829 .1299  
 .862 .0487  
 .963 .0442

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .1851  
 .829 .1155  
 .862 .0433  
 .963 .0394

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .1515  
 .829 .0945  
 .862 .0355  
 .963 .0324

DATE 28 APR 75

TABULATED SOURCE DATA - IH2D

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ARC 3.5-185 IH2D 01+T15

OMS INSIDE

(RENFD7) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) OMS DEPENDENT VARIABLE H/HO

Y 1.1380

X/L  
 .862 .0576  
 .963 .0488

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) OMS DEPENDENT VARIABLE H/HO

Y 1.1380

X/L  
 .862 .0513  
 .963 .0435

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) OMS DEPENDENT VARIABLE H/HO

Y 1.1380

X/L  
 .862 .0420  
 .963 .0357

ARC 3.5-185 IH2D 01+T15

CRB Y=1.75

(RENG07) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0035  
 1.050 .0053

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0032  
 1.050 .0047

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0026  
 1.050 .0038

ARC 3.5-185 IH20 01+T15

BOTTOM RCS

(RENR07) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 )RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0080  
 1.014 .0139

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 )RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0071  
 1.014 .0124

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 )RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0058  
 1.014 .0102

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ARC 3.5-185 IH20 O1+T15 CRB Z=8.75

(RENU07) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0324  
 1.014 .0497

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0467  
 1.014 .0443

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0383  
 1.014 .0363



REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000 .4045 .0908  
 .050 .3349 .1841  
 .100 .3230 .1559  
 .150 .2616 .1402  
 .200 .2174 .1163  
 .250 .1796 .1079  
 .300 .1445 .0955

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000 .3598 .0809  
 .050 .2977 .1637  
 .100 .2873 .1386  
 .150 .2327 .1247  
 .200 .1934 .1035  
 .250 .1598 .0959  
 .300 .1283 .0849

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000 .2947 .0664  
 .050 .2437 .1341  
 .100 .2352 .1135  
 .150 .1906 .1022  
 .200 .1584 .0847  
 .250 .1310 .0784  
 .300 .1049 .0694

ARC 3.5-185 IH2D O1+T15

ORBITER BODY

(RENZ07) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BRREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
.000	.0932	.4157	.0787	.1155	.0570				
.238					.0576				
.254				.0520					
.278			.0661						
.281		.3645							
.474			.0866						
.477					.0580				
.499	.0584								
.510				.0348					
.555		.1377							
.672				.0708					
.696	.0515								
.713					.0794				
.728			.1136						
.746		.1291							
.780				.0995					
.882					.0834				
.890				.0992					
1.002			.0788						
1.003					.0619				
1.087								.0333	
1.155			.1041						
1.182		.0539							
1.201				.0954					
1.230	.0715								
1.326							.0422		
1.364				.0379					
1.444								.0307	
1.458							.0449		
1.459				.0364					
1.554	.0801			.0312					
1.606							.0363		
1.608			.0175						
1.649				.0138					
1.750					.0377				
1.896							.0694		
1.933								.0545	
1.975					.0332				

ARC 3.5-185 IH20 O1+Y15

ORBITER BODY

(RENZ07)

MACH ( 1) = 5.300 HAW/HT ( 1) = .850

SECTION ( 1)BODY		DEPENDENT VARIABLE H/HO								
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
2.116				.0238						
2.316					.0428					
2.360	.1230									
2.497						.0455				
2.593						.0449				
2.630		.0876								
2.640						.0467				
2.735							.0400			
2.766				.1805						
2.883					.0299					
3.062						.0365				
3.168	.1037									
3.308			.1986							
3.351		.0649								
3.372							.0343			
3.540				.1014						
3.649					.0036					
3.844						.0311				

MACH ( 1) = 5.300 HAW/HT ( 2) = .900 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1)BODY		DEPENDENT VARIABLE H/HO								
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0829	.3688	.0701	.1027	.0507					
.238					.0513					
.254					.0463					
.278			.0589							
.281		.3235								
.474			.0769							
.477					.0517					
.499	.0518									
.510				.0309						
.555		.1226								
.672				.0631						
.696	.0456									
.713					.0709					
.728			.1013							
.746		.1151								
.780				.0887						
.882					.0745					
.890					.0885					
1.002			.0700							

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ARC 3.5-185 IH20 Q1+T15      ORBITER BODY      (RENZ07)

MACH ( 1) = 5.300      HAW/HT ( 2) = .900

SECTION ( 1) BODY      DEPENDENT VARIABLE H/HO

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
1.003					.0553				
1.087									.0297
1.155			.0929						
1.182		.0479							
1.201				.0851					
1.230	.0633								
1.326								.0376	
1.364					.0338				
1.444									.0274
1.458								.0401	
1.459					.0325				
1.554	.0713				.0279				
1.606								.0324	
1.608				.0156					
1.649					.0123				
1.750						.0337			
1.896								.0619	
1.933									.0487
1.975									.0297
2.116				.0213					
2.316					.0381				
2.360	.1095								
2.497						.0407			
2.593						.0401			
2.630		.0781							
2.640						.0416			
2.735							.0356		
2.766				.1607					
2.883					.0267				
3.062						.0326			
3.168	.0919								
3.308			.1764						
3.351	.0577								
3.372							.0306		
3.540				.0903					
3.649					.0032				
3.844						.0278			

ARC 3.5-185 IH2D O1+T15

ORBITER BODY

(RENZ07)

MACH ( 1 ) = 3.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0680	.3010	.0576	.0842	.0416					
.238					.0421					
.254				.0379						
.278			.0484							
.281		.2640								
.474			.0629							
.477					.0425					
.499	.0421									
.510				.0253						
.555		.1006								
.672				.0519						
.696	.0371									
.713					.0584					
.728			.0832							
.746		.0945								
.780				.0729						
.882					.0613					
.890				.0727						
1.002			.0573							
1.003					.0455					
1.087									.0244	
1.155			.0764							
1.182		.0393								
1.201				.0700						
1.230	.0515									
1.326								.0309		
1.364					.0279					
1.444									.0226	
1.458								.0330		
1.459					.0268					
1.554	.0584				.0230					
1.606								.0267		
1.608				.0129						
1.649					.0102					
1.750						.0277				
1.896								.0509		
1.933									.0400	
1.975						.0245				
2.116				.0175						
2.316					.0313					
2.360	.0897									
2.497						.0336				
2.593						.0329				
2.630		.0642								
2.640						.0342				

ARC 3.5-185 IH20 01+T15

ORBITER BODY

(RENZ07)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/H0									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
2.735										.0293
2.766				.1318						
2.883					.0220					
3.062						.0269				
3.168	.0749									
3.308			.1442							
3.351		.0472								
3.372									.0251	
3.540				.0740						
3.649					.0026					
3.844						.0229				

ARC 3.5-185 IH2D O1+T15

EXTERNAL TANK

(RENT07) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BRFP = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 PD = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) TANK

DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.000														.0000
.005														.7013
.010														.7306
.040	.2233													.3795
.080	.1485													.2846 .2344
.150	.0672													.0887 .0647 .0846
.200				.0767										.0413
.250				.0547										.0297
.275				.0555	.0424									
.300		.0624		.0544	.0534									.0346 .0018
.325				.0541	.0583	.0253								
.350		.0626		.0595	.0567	.0261								.0338
.375						.0341								.0635
.400	.0460	.0745	.0618	.0553	.0519	.0437	.0575	.0613						.0607 .0195
.425							.0763	.0850						.1450
.450				.0548	.0481	.0591	.0750							.3932
.475							.0556							.0680
.500		.0000	.0620	.0525	.0559	.0553	.0787	.0752						.0482 .0849
.525														.1080
.550				.0501	.0533	.0546	.0624							.0890
.575														.0867
.600	.0640	.0682	.0579	.0595	.0556	.0750	.0752							.0758 .0500
.625														.0734
.650			.0580	.0510	.0516	.0969	.0622							.0655
.675														.0919
.700		.0670	.0583	.0437	.0552	.1091	.0643	.0794						.0825 .0592
.750			.0614	.0443	.0614	.1020	.0611							.0680
.800	.0764	.0643	.0601	.0443	.0596	.1031	.0485							.0769 .0620
.825						.1685								
.850				.0441	.0749	.0508	.1582	.0629						.1016
.875						.0636								
.900		.0638	.0590	.0460	.0858	.0996	.0816	.1088	.1025	.1408			.1021	
.925						.1396								.1673
.935								.3030						
.937										.2356				
.960						.0233								
.975										.0273				





ARC 3.5-185 IH20 O1+T15

EXTERNAL TANK

(RENTD7)

MACH ( 1) = 5.300 HAW/HT ( 2) = .900

SECTION ( 1) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.900	.0570	.0528	.0411	.0767	.0890	.0730	.0974	.0919	.1261	.0915	.1502
.925					.1248						
.935						.2712					
.937									.2112		
.960					.0208						
.975									.0244		

THETA 216.0000 222.5000 229.0000

X/L

.335	.0321										
.400	.0304	.0574									
.500	.1067										
.600		.0541									
.700	.0640										
.800		.0488									

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.000									.0000					
.005									.5178					
.010									.5411					
.040	.1630								.2815					
.080	.1085								.2109	.1742				
.150	.0492								.0657		.0481	.0629		
.200				.0563					.0307					
.250				.0402					.0220					
.275				.0408	.0311									
.300		.0457	.0400	.0392					.0256		.0013			
.325			.0398	.0428	.0186									
.350		.0459	.0437	.0417	.0192				.0251					
.375					.0250				.0470					
.400	.0338	.0548	.0453	.0406	.0381	.0321	.0423	.0454	.0449			.0145		
.425							.0560	.0625	.1074					
.450			.0403	.0354	.0435		.0553		.2910					
.475							.0410		.0504					
.500	.0000	.0457	.0386	.0411	.0407	.0581		.0555	.0357		.0631			
.525									.0800					
.550			.0369	.0392	.0401	.0461			.0659					
.575									.0642					

ARC 3.5-185 IH20 01+T15

EXTERNAL TANK

(RENT07)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) TANK DEPENDENT VARIABLE H/MO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.600	.0471	.0501	.0426	.0438	.0409	.0552	.0556	.0561	.0372
.625								.0543	
.650			.0427	.0375	.0379	.0712	.0459	.0484	
.675								.0680	
.700		.0492	.0430	.0322	.0406	.0804	.0476	.0590	.0440
.750			.0453	.0326	.0452	.0752	.0452	.0504	
.800	.0563	.0473	.0443	.0326	.0439	.0760	.0358	.0569	.0462
.825					.1242				
.850				.0325	.0551	.0375	.1169	.0753	
.875						.0469			
.900		.0470	.0435	.0339	.0632	.0735	.0805	.0762	.1044
.925						.1031			.0759
.935							.2241		.1247
.937								.1749	
.960						.0172			
.975								.0203	

THETA 216.0000 222.5000 229.0000

X/L

.335		.0266							
.400	.0252		.0477						
.500	.0885								
.600			.0449						
.700	.0531								
.800			.0405						

ARC 3.5-185 IH20 01+T15

CRB PHI=0.0

(RENA07) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN. ALPHA = 5.000 BETA = .000  
 LREF = 1290.3000 IN. YMRP = .0000 IN. MACH = 5.300 RN/L = 5.000  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 )BCDY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000 .5881  
 .005 .4099  
 .010 .0000  
 .020 .1241  
 .030 .0892  
 .040 .0000  
 .050 .0932  
 .060 .1268  
 .070 .1887  
 .080 .1737  
 .090 .3678  
 .100 .4157  
 .120 .1428  
 .130 .1003  
 .140 .0832  
 .150 .0787  
 .160 .0534  
 .170 .0491  
 .180 .0311  
 .190 .0664  
 .200 .1155  
 .225 .0952  
 .250 .0877  
 .275 .0821  
 .300 .0570  
 .325 .0540  
 .350 .0378  
 .375 .0621  
 .400 .0761  
 .425 .0766  
 .450 .0589  
 .475 .0544  
 .500 .0452  
 .525 .0625  
 .550 .0639  
 .575 .0664  
 .600 .0554  
 .625 .0572

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OF POOR QUALITY

ARC 3.5-185 IH20 O1+T15

ORB PHI=0.0

(REN07)

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.650	.0534
.675	.0664
.700	.0980
.725	.1454
.750	.0990
.775	.1133
.800	.1447
.825	.1712
.850	.0941
.875	.0426
.900	.0341
.925	.0222
.950	.0088
.975	.0052
1.000	.0009
1.013	.0000
1.025	.0023
1.038	.0000
1.050	.0025

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.063 FO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.5182
.005	.3614
.010	.0000
.020	.1096
.030	.0793
.040	.0000
.050	.0829
.060	.1124
.070	.1681
.080	.1541
.090	.3276
.100	.3688
.120	.1268
.130	.0894
.140	.0740
.150	.0701
.160	.0474
.170	.0438

ARC 3.5-185 IH20 01+T15

CRB PHI=0.0

(RENAD7)

HACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.180	.0276
.190	.0592
.200	.1027
.225	.0850
.250	.0782
.275	.0732
.300	.0507
.325	.0482
.350	.0336
.375	.0354
.400	.0678
.425	.0683
.450	.0524
.475	.0486
.500	.0402
.525	.0557
.550	.0569
.575	.0593
.600	.0493
.625	.0510
.650	.0476
.675	.0593
.700	.0873
.725	.1297
.750	.0882
.775	.1011
.800	.1289
.825	.1528
.850	.0839
.875	.0380
.900	.0304
.925	.0199
.950	.0079
.975	.0046
1.000	.0008
1.015	.0000
1.025	.0021
1.038	.0000
1.050	.0022

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OF POOR QUALITY

ARC 3.5-185 IH2D 01+T15

ORB FHI=0.0

(RENAD7)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.963 PO. = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

FHI .0000

X/L

.000	.4186
.005	.2922
.010	.0000
.020	.0888
.030	.0649
.040	.0000
.050	.0680
.060	.0916
.070	.1379
.080	.1257
.090	.2689
.100	.3010
.120	.1035
.130	.0734
.140	.0605
.150	.0576
.160	.0388
.170	.0360
.180	.0226
.190	.0486
.200	.0842
.225	.0700
.250	.0642
.275	.0603
.300	.0416
.325	.0396
.350	.0275
.375	.0455
.400	.0556
.425	.0562
.450	.0430
.475	.0400
.500	.0330
.525	.0459
.550	.0467
.575	.0488
.600	.0404
.625	.0419
.650	.0391
.675	.0488
.700	.0716
.725	.1068
.750	.0725
.775	.0832
.800	.1088

DATE 28 APR 75

TABULATED SOURCE DATA - IH2D

PAGE 297

ARC 3.5-185 IH2D 01+T15

CRB PHI=0.0

(RENA07)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.825	.1258
.850	.0689
.875	.0313
.900	.0250
.925	.0164
.950	.0065
.975	.0038
1.000	.0007
1.013	.0000
1.025	.0017
1.038	.0000
1.050	.0018

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OF POOR QUALITY

ARC 3.5-185 IH20 01+T15

WING UPPER SURF.

(RENK07) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

ZY/B .4000 .6000 .8000

## X/C

.050 .1518 .1678 .2670  
 .200 .0304 .0422 .0591  
 .600 .0012 .0054 .0125  
 .800 .0009 .0087  
 .900 .0020 .0056  
 .950 .0101 .0023 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

ZY/B .4000 .6000 .8000

## X/C

.050 .1349 .1496 .2374  
 .200 .0271 .0378 .0527  
 .600 .0011 .0048 .0112  
 .800 .0008 .0078  
 .900 .0018 .0050  
 .950 .0090 .0021 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

ZY/B .4000 .6000 .8000

## X/C

.050 .1104 .1229 .1942  
 .200 .0223 .0312 .0433  
 .600 .0009 .0040 .0092  
 .800 .0007 .0064  
 .900 .0014 .0041  
 .950 .0074 .0017 .0000





ARC 3.5-185 IH20 O1+T15 WING BOTTOM SURF.

(REMOVED)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) WING		DEPENDENT VARIABLE H/HO											
2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930	
X/C													
.177					.0000								
.200				.0538		.0935							
.299	.0465												
.300					.1118	.1005		.1781	.1694	.0957			
.302				.0653									
.303							.1244						
.428						.1364							
.444	.0531												
.487					.1261								
.500							.1609	.1912		.1198			
.559				.1332									
.590	.0534												
.600					.1084	.1061			.0817				
.700				.1005	.0854	.0777	.0624				.0764		
.736	.2444												
.800						.0503	.0634						
.850						.0630	.0664						
.900	.0128			.0631	.0533	.0520	.0484				.0586		

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

SECTION ( 1 ) WING		DEPENDENT VARIABLE H/HO											
2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930	
X/C													
.000						.2947		.0664			.0931	.0276	
.005		.0456	.0475		.2313		.0000			.1164			
.025	.0534			.1403	.1747		.2337						
.050										.1030			
.100				.0588		.0739	.0909	.1088		.1007			
.153	.0409												
.177					.0000								
.200				.0443		.0769							
.299	.0383												
.300					.0921	.0827		.1460	.1386	.0781			
.302				.0538									
.303							.1022						
.428						.1123							
.444	.0437												
.487					.1039								
.500							.1323	.1567		.0979			
.559				.1100									
.590	.0440												
.600					.0893	.0873			.0670				

DATE 28 APR 75

TABULATED SOURCE DATA - IH20

PAGE 301

ARC 3.5-185 IH20 Q1+T15

WING BOTTOM SURF.

(REMOVED)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

ZY/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.700				.0829	.0704	.0639	.0513			.0627		
.736	.2019											
.800						.0414	.0521					
.850						.0518	.0545					
.900	.0106			.0520	.0439	.0428	.0398			.0479		

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ARC 3.5-185 IH20 O1+T15

VERTICAL TAIL

(RENV07) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .3692 .3139 .0000 .5252  
 .100 .0797 .0805 .0914 .1173 .2129  
 .300 .1493 .0418 .0442 .0602  
 .500 .1232 .0275 .0509 .0000  
 .700 .0238 .0339 .0087 .0145  
 .900 .0277 .0303 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .3284 .2799 .0000 .4677  
 .100 .0709 .0716 .0816 .1047 .1897  
 .300 .1330 .0372 .0395 .0538  
 .500 .1098 .0246 .0455 .0000  
 .700 .0212 .0302 .0078 .0130  
 .900 .0247 .0270 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.063 PO = 407.020 TO = 1294.300 HO = 316.060

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .2689 .2301 .0000 .3836  
 .100 .0582 .0587 .0672 .0861 .1558  
 .300 .1091 .0305 .0325 .0443  
 .500 .0903 .0203 .0375 .0000  
 .700 .0174 .0249 .0064 .0107  
 .900 .0203 .0222 .0000

ARC 3.5-185 IH20 OI+T15

ORB Y=0.438

(REND08) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.700

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 FO = 867.730 TO = 1508.100 HD = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0497  
 .200 .0171  
 .300 .0470

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 3.670 FO = 867.730 TO = 1508.100 HD = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0451  
 .200 .0155  
 .300 .0426

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 3.670 FO = 867.730 TO = 1508.100 HD = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0380  
 .200 .0131  
 .300 .0359

ARC 3.5-185 IH20 01+T15

ORB Y=0.875

(RENC08) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.700

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0354  
 .300 .0487  
 .400 .0353  
 .500 .0386  
 .600 .0352  
 .700 .0264  
 .800 .1093  
 .900 .0138

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0321  
 .300 .0441  
 .400 .0320  
 .500 .0350  
 .600 .0319  
 .700 .0239  
 .800 .0991  
 .900 .0125

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0271  
 .300 .0372  
 .400 .0270  
 .500 .0295  
 .600 .0268  
 .700 .0202

DATE 28 APR 75

TABULATED SOURCE DATA - IH2D

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ARC 3.5-185 IH2D O1+T15

ORB Y=0.875

(RENC08)

MACH ( 1 ) = 7.300

HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.800 .0835

.900 .0106

ARC 3.5-185 IH2D 01+T15

CRB C.C.L.TANGENT

(REND08) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.700

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0481  
 .100 .0950  
 .150 .1004  
 .200 .0663

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0436  
 .100 .0860  
 .150 .0910  
 .200 .0600

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0367  
 .100 .0723  
 .150 .0765  
 .200 .0400



ARC 3.5-185 IH2D O1+T15

CRB M.H.B.TANGENT

(RENE08) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XHRF = .0000 IN.  
 LREF = 1290.3000 IN. YHRF = .0000 IN.  
 BREF = 1290.3000 IN. ZHRF = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.700

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0860  
 .100 .0359  
 .150 .0452

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0780  
 .100 .0325  
 .150 .0410

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0657  
 .100 .0274  
 .150 .0345

ARC 3.5-185 IH20 O1+T15

CRB Z=6.125

(RENF08) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.700

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0677  
 .300 .0055  
 .800 .0163  
 .900 .0275  
 .975 .0265

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0613  
 .300 .0050  
 .800 .0148  
 .900 .0250  
 .975 .0241

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0515  
 .300 .0042  
 .800 .0125  
 .900 .0211  
 .975 .0203

ARC 3.5-185 IH2D Q1+T15

WING UPPER CREASE

(RENG08) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN. ALPHA = .000 BETA = .000  
 LREF = 1290.3000 IN. YMRP = .0000 IN. MACH = 7.300 RN/L = 3.700  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) WING DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L  
 .400 .0383  
 .500 .0188  
 .600 .0285  
 .700 .0179  
 .900 .0262

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) WING DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L  
 .400 .0347  
 .500 .0171  
 .600 .0259  
 .700 .0163  
 .900 .0238

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) WING DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L  
 .400 .0293  
 .500 .0144  
 .600 .0219  
 .700 .0137  
 .900 .0201

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ARC 3.5-185 IH2D O1+T15

CRD Z=7.525

(REMH08) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.700

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0349  
 .400 .0276  
 .500 .0223  
 .600 .0227  
 .700 .0314  
 .800 .0230

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0317  
 .400 .0251  
 .500 .0202  
 .600 .0206  
 .700 .0284  
 .800 .0209

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0267  
 .400 .0211  
 .500 .0171  
 .600 .0174  
 .700 .0240  
 .800 .0176

ARC 3.5-185 IH20 01+T15

CRB WINDOWS

(REN108) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.700

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 FO = 867.730 TO = 1508.100 HD = 371.620

SECTION ( 1 ) WINDOW

DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

X/L

.156	.6119		
.164	.5722		
.168	.5261		
.170	.9969		
.178		1.0133	
.182	.3544	.5387	.7543
.185			.5244
.191			.4102
.200	.2296		

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 3.670 FO = 867.730 TO = 1508.100 HD = 371.620

SECTION ( 1 ) WINDOW

DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

X/L

.156	.5540		
.164	.5180		
.168	.4764		
.170	.9036		
.178		.9174	
.182	.3210	.4884	.6829
.185			.4748
.191			.3715
.200	.2081		

ARC 3.5-185 IH2D O1+T15

ORB WINDOWS

(REN108)

MACH ( 1) = 7.300 HAW/HT ( 3) = 1.000 RN/L = 3.670 PD = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1) WINDOW

DEPENDENT VARIABLE M/HO

Z 7.9100 8.1370 8.3650

X/L

.156	.4659		
.164	.4355		
.168	.4006		
.170		.7611	
.178			.7713
.182	.2700	.4114	.5742
.185			.3993
.191			.3126
.200		.1754	

ARC 3.5-185 IH20 O1+T15

ORB Z=8.379

(RENJ08) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.670

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.3790

X/L  
 .300 .0260  
 .400 .0165  
 .500 .0126  
 .600 .0108  
 .700 .0027

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.3790

X/L  
 .300 .0236  
 .400 .0149  
 .500 .0115  
 .600 .0098  
 .700 .0025

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.3790

X/L  
 .300 .0199  
 .400 .0126  
 .500 .0097  
 .600 .0083  
 .700 .0021

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ARC 3.5-185 IH20 O1+T15

ORB PHI=180

(RENK08) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.700

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010 .4458  
 .025 .2421  
 .050 .1547  
 .075 .1045  
 .100 .0871  
 .125 .0692  
 .150 .0843  
 .160 .8453  
 .170 .9507  
 .180 .7824  
 .200 .1130  
 .250 .0119  
 .300 .0058  
 .400 .0047  
 .500 .0045  
 .600 .0176  
 .700 .0247  
 .800 .0465

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010 .4038  
 .025 .2194  
 .050 .1402  
 .075 .0947  
 .100 .0789  
 .125 .0618  
 .150 .1670  
 .160 .7661  
 .170 .8616  
 .180 .7091  
 .200 .1024  
 .250 .0108



ARC 3.5-185 IH20 Q1+T15

ORB PHI=180

(RENK00)

MACH ( 1) = 7.300 HAW/HT ( 2) = .900

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.300	.0052
.400	.0043
.500	.0041
.600	.0160
.700	.0224
.800	.0422

MACH ( 1) = 7.300 HAW/HT ( 3) = 1.000 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.3398
.025	.1847
.050	.1181
.075	.0798
.100	.0665
.125	.0521
.150	.1407
.160	.6452
.170	.7256
.180	.5972
.200	.0863
.250	.0091
.300	.0044
.400	.0036
.500	.0035
.600	.0135
.700	.0189
.800	.0356

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ARC 3.5-185 IH20 01+T15

OMS BOTTOM CREASE

(REN08) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.700

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

OMS 1.0000

X/L

.829 .0520  
 .900 .0523  
 .975 .0325

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

OMS 1.0000

X/L

.829 .0472  
 .900 .0475  
 .975 .0296

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

OMS 1.0000

X/L

.829 .0399  
 .900 .0401  
 .975 .0250

ARC 3.5-185 IH20 01+T15

CRB PHI=130.

(RENN08) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.700

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L  
 .805 .2904  
 .829 .1380  
 .862 .0489  
 .963 .0124

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L  
 .805 .2635  
 .829 .1252  
 .862 .0444  
 .963 .0112

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L  
 .805 .2224  
 .829 .1057  
 .862 .0375  
 .963 .0095

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ARC 3.5-185 IH20 01+T15

QMS TCF

(RENC08) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.700

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

## SECTION ( 1 ) QMS

## DEPENDENT VARIABLE H/HO

Y 1.6620

## X/L

.805 .2623  
 .829 .1306  
 .862 .0485  
 .963 .0438

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

## SECTION ( 1 ) QMS

## DEPENDENT VARIABLE H/HO

Y 1.6620

## X/L

.805 .2381  
 .829 .1185  
 .862 .0440  
 .963 .0398

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

## SECTION ( 1 ) QMS

## DEPENDENT VARIABLE H/HO

Y 1.6620

## X/L

.805 .2010  
 .829 .1000  
 .862 .0372  
 .963 .0336

ARC 3.5-185 IH20 01+T15

QMS INSIDE

(RENP08) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.700

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) QMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .0619  
 .963 .0436

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) QMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .0562  
 .963 .0396

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) QMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .0475  
 .963 .0335

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ARC 3.5-185 IH20 O1+T15

CRB Y=1.75

(RENGD8) ( 07 APR 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.700

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

Y 1.7500

X/L

1.000 .0068  
 1.050 .0040

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

Y 1.7500

X/L

1.000 .0062  
 1.050 .0036

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

Y 1.7500

X/L

1.000 .0052  
 1.050 .0031

ARC 3.5-185 IH20 O1+T15

BOTTOM RCS

(RENR08) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.700

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0052

1.014 .0095

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0048

1.014 .0086

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0040

1.014 .0073

ARC 3.5-185 IH20 01+T15

CRB Z=8.75

(RENU08) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.700

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0228  
 1.014 .0230

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0207  
 1.014 .0209

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0175  
 1.014 .0176



ARC 3.5-185 IH2D OI+T15

CLUSTERS B AND C

(RENY08) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.700

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000 .3929 .0992  
 .050 .2965 .1971  
 .100 .2604 .1521  
 .150 .1952 .1241  
 .200 .1498 .0990  
 .250 .1211 .0767  
 .300 .0898 .0680

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000 .3566 .0901  
 .050 .2692 .1790  
 .100 .2364 .1381  
 .150 .1772 .1126  
 .200 .1360 .0899  
 .250 .1099 .0696  
 .300 .0814 .0617

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000 .3010 .0761  
 .050 .2272 .1511  
 .100 .1996 .1166  
 .150 .1496 .0951  
 .200 .1148 .0759  
 .250 .0928 .0587  
 .300 .0687 .0521

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ARC 3.5-185 IH20 01+T15

CRBITER BODY

(RENZ08) ( 07 APR 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.700

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
.000	.0495	.4760	.0673	.0376	.0561				
.238					.0470				
.254				.0171					
.278			.0792						
.281		.4166							
.474			.0879						
.477					.0487				
.499	.0497								
.510				.0354					
.555		.1141							
.672				.0663					
.696	.0481								
.713					.0645				
.728			.1004						
.746		.0950							
.780				.0805					
.882					.0586				
.890				.0628					
1.002			.0648						
1.003					.0408				
1.087								.0165	
1.155			.0452						
1.182		.0359							
1.201				.0231					
1.230	.0860								
1.326							.0262		
1.364				.0049					
1.444								.0265	
1.458							.0275		
1.459					.0025				
1.554	.0975				.0055				
1.606							.0307		
1.608			.0249						
1.649				.0056					
1.750					.0285				
1.896							.0523		
1.933								.0325	
1.975					.0301				

ARC 3.5-185 IH20 01+115

ORBITER BODY

(RENZ08)

MACH ( 1) = 7.300 HAW/HT ( 1) = .850

SECTION ( 1)BODY	DEPENDENT VARIABLE H/H0									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
2.116				.0226						
2.316					.0349					
2.360	.1563									
2.497						.0227				
2.593						.0189				
2.630		.1120								
2.640						.0197				
2.735							.0291			
2.766				.2296						
2.883					.0260					
3.062						.0108				
3.168	.1547									
3.308			.1843							
3.351		.0871								
3.372							.0134			
3.540				.1130						
3.649					.0058					
3.844						.0176				

MACH ( 1) = 7.300 HAW/HT ( 2) = .900 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1)BODY	DEPENDENT VARIABLE H/H0									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0448	.4315	.0610	.0341	.0509					
.238					.0426					
.254				.0155						
.278			.0717							
.281		.3777								
.474			.0797							
.477					.0441					
.499	.0451									
.510				.0321						
.555		.1033								
.672				.0600						
.696	.0436									
.713					.0585					
.728			.0910							
.746		.0860								
.780				.0730						
.882					.0532					
.890				.0569						
1.002			.0588							

ARC 3.5-185 IH20 O1+T15

ORBITER BODY

(RENZ08)

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/H0									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
1.003					.0370					
1.087									.0150	
1.155			.0410							
1.182		.0325								
1.201				.0210						
1.230	.0780									
1.326								.0238		
1.364					.0045					
1.444									.0241	
1.458								.0250		
1.459					-.0023					
1.554	.0882				.0050					
1.606								.0278		
1.608				.0225						
1.649					.0051					
1.750						.0259				
1.896								.0475		
1.933									.0296	
1.975						.0273				
2.116				.0205						
2.316					.0317					
2.360	.1413									
2.497						.0206				
2.593						.0172				
2.630		.1014								
2.640						.0179				
2.735							.0264			
2.766				.2081						
2.883					.0236					
3.062						.0098				
3.168	.1402									
3.308			.1670							
3.351		.0789								
3.372							.0122			
3.540				.1024						
3.649					.0052					
3.844						.0160				

ARC 3.5-185 IH20 01+T15

CRBITER BODY

(RENZ08)

MACH ( 1) = 7.300 HAW/HT( 3) = 1.000 RN/L = 3.670 PD = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
.000	.0376	.3635	.0513	.0287	.0428				
.238					.0359				
.254				.0131					
.278			.0603						
.281		.3183							
.474			.0671						
.477					.0372				
.499	.0380								
.510				.0271					
.555		.0868							
.672				.0505					
.696	.0367								
.713					.0493				
.728			.0765						
.746		.0723							
.780				.0614					
.882					.0448				
.890				.0479					
1.002			.0495						
1.003					.0312				
1.087									.0126
1.155			.0345						
1.182		.0274							
1.201				.0177					
1.230	.0657								
1.326							.0201		
1.364					.0038				
1.444								.0203	
1.458							.0211		
1.459					-.0019				
1.554	.0740				.0042				
1.606								.0235	
1.608				.0190					
1.649					.0043				
1.750						.0219			
1.896							.0401		
1.933								.0250	
1.975						.0231			
2.116				.0173					
2.316					.0267				
2.360	.1186								
2.497						.0174			
2.593						.0145			
2.630		.0853							
2.640						.0151			

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC 3.5-185 IH20 O1+T15

CRBITER BODY

(RENZ08)

MACH ( 1) = 7.300 HAW/HT ( 3) = 1.000

SECTION ( 1) BODY		DEPENDENT VARIABLE H/H0								
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
2.735									.0223	
2.766				.1754						
2.883					.0199					
3.062						.0083				
3.168	.1181									
3.308			.1407							
3.351		.0665								
3.372									.0103	
3.540				.0863						
3.649					.0044					
3.844									.0135	

ARC 3.5-185 IH20 01+T15

EXTERNAL TANK

(RENT08) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.700

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) TANK

DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.000														.0000
.005														.6951
.010														.7807
.040	.1727													.3390
.080	.0951													.2688
.150	.0240													.0876
.200				.0188										.0757
.250				.0100										.0314
.275				.0097	.0225									.0126
.300			.0059	.0090	.0234									.0110
.325				.0086	.0262			.0201						.0000
.350			.0037	.0082	.0275			.0219						.0162
.375								.0221						.0478
.400	.0000	.0076	.0037	.0095	.0327			.0274	.0589	.0687				.0557
.425									.0654	.0676				.1659
.450				.0126	.0365			.0406	.0569					.5554
.475									.0270					.0749
.500	.0000	.0064	.0191	.0366				.0346	.0427	.0823				.0382
.525														.1042
.550				.0365	.0408			.0519	.0202					.0800
.575														.0665
.600	.0038	.0042	.0193	.0333	.0178			.0538	.0361					.0677
.625														.0599
.650			.0265	.0412	.0223			.0514	.0321					.0486
.675														.0441
.700	.0152	.0270	.0273	.0286				.0619	.0224	.0307				.0467
.750		.0284	.0205	.0382				.0398	.0288					.0485
.800	.0038	.0222	.0314	.0145	.0349			.0434	.0185					.0353
.825								.0692						
.850				.0158	.0580			.0143	.0775	.0195				.0432
.875								.0260						
.900	.0235	.0318	.0192	.0592	.0341	.0416		.0490		.0673	.0934			.0658
.925								.0778						
.935									.1705					.1350
.937														.1573
.960								.0102						
.975														.0218

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC 3.5-185 IH2D 01+T15

EXTERNAL TANK

(RENT08)

MACH ( 1) = 7.300 HAW/HT( 1) = .850

SECTION ( 1) TANK DEPENDENT VARIABLE H/HO

THETA 216.0000222.5000229.0000

X/L

.335		.0201	
.400	.0396		.0447
.500	.1249		
.600			.0194
.700	.0533		
.800			.0192

MACH ( 1) = 7.300 HAW/HT( 2) = .900 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.000											.0000			
.005											.6304			
.010											.7084			
.040	.1570										.3076			
.080	.0865										.2439	.1615		
.150	.0218										.0794		.0687	.0673
.200				.0171							.0285			
.250				.0091							.0114			
.275				.0088	.0204									
.300			.0054	.0082	.0213						.0100		.0000	
.325				.0078	.0238	.0183								
.350			.0033	.0074	.0249	.0199					.0147			
.375						.0201					.0434			
.400	.0000	.0069	.0034	.0086	.0297	.0249	.0535			.0623	.0505			.0292
.425							.0594	.0614			.1505			
.450				.0114	.0332	.0369	.0517				.5035			
.475							.0246				.0679			
.500		.0000	.0059	.0174	.0332	.0315	.0388			.0748	.0346		.1061	
.525											.0944			
.550				.0332	.0370	.0472	.0184				.0725			
.575											.0603			
.600	.0034	.0038	.0175	.0302	.0162	.0489	.0328				.0614			.0326
.625											.0543			
.650			.0240	.0374	.0203	.0467	.0292				.0441			
.675											.0400			
.700		.0138	.0246	.0248	.0260	.0563	.0204			.0278	.0423		.0257	
.750			.0259	.0186	.0347	.0362	.0262				.0440			
.800	.0034	.0202	.0285	.0131	.0317	.0395	.0168				.0320			.0244
.825						.0629								
.850				.0144	.0527	.0130	.0705	.0178			.0392			
.875						.0236								



ARC 3.5-185 IH20 01+T15

EXTERNAL TANK

(RENT08)

MACH ( 1) = 7.300 HAW/HT ( 2) = .900

SECTION ( 1)TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.900	.0214	.0289	.0174	.0456	.0310	.0379		.0446	.0611	.0847	.0597			
.925					.0708									.1226
.935							.1551							
.937										.1428				
.960					.0093									
.975										.0198				

THETA 216.0000 222.5000 229.0000

X/L

.335		.0183												
.400	.0359		.0406											
.500	.1134													
.600			.0176											
.700	.0484													
.800			.0174											

MACH ( 1) = 7.300 HAW/HT ( 3) = 1.000 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1)TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.000											.0000			
.005											.5314			
.010											.5977			
.040	.1328										.2597			
.080	.0732										.2058	.1363		
.150	.0185										.0670		.0580	.0568
.200			.0145								.0240			
.250			.0077								.0096			
.275			.0075	.0173										
.300		.0045	.0069	.0180							.0084		.0000	
.325			.0066	.0201	.0155									
.350		.0028	.0063	.0211	.0168						.0124			
.375					.0170						.0365			
.400	.0000	.0059	.0029	.0073	.0251	.0210	.0453		.0525	.0426				.0247
.425							.0503	.0519		.1268				
.450			.0097	.0281	.0312		.0438			.4244				
.475							.0208			.0572				
.500	.0000	.0049	.0147	.0281	.0266		.0329		.0633	.0292		.0895		
.525										.0796				
.550			.0280	.0313	.0399	.0155				.0611				
.575										.0598				

ARC 3.5-185 IH20 01+T15

EXTERNAL TANK

(RENT08)

MACH ( 1) = 7.300 HAW/HT( 3) = 1.000

SECTION ( 1)TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.600	.0029	.0032	.0148	.0255	.0137	.0413	.0278	.0517	.0275
.625								.0457	
.650			.0203	.0316	.0171	.0395	.0247	.0371	
.675								.0337	
.700		.0117	.0208	.0210	.0220	.0476	.0173	.0357	.0216
.750			.0219	.0157	.0293	.0306	.0222	.0371	
.800	.0029	.0171	.0241	.0111	.0268	.0334	.0143	.0269	.0206
.825					.0532				
.850				.0121	.0446	.0110	.0596	.0150	.0330
.875					.0200				
.900		.0181	.0244	.0147	.0386	.0263	.0321	.0377	.0515
.925						.0599			.0714
.935							.1314		.0504
.937								.1204	
.960						.0079			.1035
.975								.0167	

THETA 216.0000 222.5000 229.0000

X/L

.335		.0154							
.400	.0303		.0343						
.500	.0958								
.600			.0149						
.700	.0408								
.800			.0147						

ARC 3.5-185 IH2D Q1+T15

CRB PHI=0.0

(RENA08) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.700

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 PO = 867.730 TO = 1506.100 HO = 371.620

SECTION ( 1 ) BCCY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.9239
.005	.4814
.010	.3108
.020	.1355
.030	.0941
.040	.0000
.050	.0495
.060	.0750
.070	.1248
.080	.0523
.090	.3048
.100	.4760
.120	.1395
.130	.0776
.140	.0733
.150	.0673
.160	.0576
.170	.0496
.180	.0395
.190	.0322
.200	.0376
.225	.0789
.250	.0809
.275	.0759
.300	.0561
.325	.0525
.350	.0339
.375	.0352
.400	.0323
.425	.0428
.450	.0464
.475	.0463
.500	.0396
.525	.0358
.550	.0318
.575	.0315
.600	.0314
.625	.0361

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ARC 3.5-185 IH20 Q1+T15

CRB PHI=0.0

(RENADO)

MACH ( 1 ) = 7.300 HAW/HT( 1 ) = .850

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.650	.0345
.675	.0331
.700	.0286
.725	.0281
.750	.0290
.775	.0552
.800	.1251
.825	.1398
.850	.1019
.875	.0431
.900	.0237
.925	.0192
.950	.0113
.975	.0086
1.000	.0051
1.013	.0000
1.025	.0025
1.038	.0000
1.050	.0021

MACH ( 1 ) = 7.300 HAW/HT( 2 ) = .900 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.8368
.005	.4360
.010	.2815
.020	.1228
.030	.0850
.040	.0000
.050	.0448
.060	.0680
.070	.1129
.080	.0474
.090	.2759
.100	.4315
.120	.1265
.130	.0703
.140	.0664
.150	.0610
.160	.0522
.170	.0449

ARC 3.5-185 IH20 01+T15

CRB FHI=0.0

(RENAD8)

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/HO
FHI	.0000
X/L	
.180	.0358
.190	.0291
.200	.0341
.225	.0715
.250	.0734
.275	.0689
.300	.0509
.325	.0476
.350	.0307
.375	.0319
.400	.0293
.425	.0388
.450	.0421
.475	.0420
.500	.0359
.525	.0325
.550	.0288
.575	.0285
.600	.0285
.625	.0327
.650	.0313
.675	.0301
.700	.0259
.725	.0255
.750	.0263
.775	.0501
.800	.1134
.825	.1266
.850	.0924
.875	.0391
.900	.0214
.925	.0174
.950	.0102
.975	.0078
1.000	.0046
1.013	.0000
1.025	.0023
1.038	.0000
1.050	.0019

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC 3.5-185 IH2D O1+T15

CRB PHI=D.0

(RENA08)

MACH ( 1) = 7.300 HAW/HT ( 3) = 1.000 RN/L = 3.670 FO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1) BODY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.7040
.005	.3668
.010	.2369
.020	.1034
.030	.0713
.040	.0000
.050	.0376
.060	.0573
.070	.0948
.080	.0400
.090	.2320
.100	.3635
.120	.1066
.130	.0591
.140	.0560
.150	.0513
.160	.0440
.170	.0378
.180	.0302
.190	.0245
.200	.0287
.225	.0603
.250	.0618
.275	.0580
.300	.0428
.325	.0401
.350	.0259
.375	.0269
.400	.0247
.425	.0327
.450	.0354
.475	.0354
.500	.0302
.525	.0273
.550	.0243
.575	.0240
.600	.0240
.625	.0276
.650	.0264
.675	.0253
.700	.0218
.725	.0215
.750	.0221
.775	.0422
.800	.0955

DATE 28 APR 75

TABULATED SOURCE DATA - IH2D

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ARC 3.5-185 IH2D O1+T15

CRB FHI=0.0

(RENA08)

MACH ( 1 ) = 7.500 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) BODY DEFENDENT VARIABLE H/HO

FHI .0000

X/L

.825	.1068
.850	.0778
.875	.0330
.900	.0181
.925	.0147
.950	.0086
.975	.0066
1.000	.0039
1.013	.0000
1.025	.0019
1.038	.0000
1.050	.0016

ARC 3.5-185 IH2D O1+T15

ORB Z=8.295

(RENM08) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.700

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .1030  
 .805 .0001  
 .829 .1275  
 .862 .0715  
 .963 .0366  
 1.000 .0403  
 1.014 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .0935  
 .805 .0000  
 .829 .1157  
 .862 .0649  
 .963 .0332  
 1.000 .0366  
 1.014 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .0790  
 .805 .0000  
 .829 .0976  
 .862 .0548  
 .963 .0281  
 1.000 .0309  
 1.014 .0000



ARC 3.5-185 IH20 01+T15

WING UPPER SURF.

(RENX08) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.700

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

## X/C

.050 .1623 .1662 .2830  
 .200 .0345 .0415 .0568  
 .600 .0021 .0058 .0112  
 .800 .0027 .0083  
 .900 .0034 .0079  
 .950 .0016 .0007 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

## X/C

.050 .1473 .1509 .2569  
 .200 .0314 .0377 .0516  
 .600 .0019 .0053 .0102  
 .800 .0024 .0075  
 .900 .0031 .0072  
 .950 .0014 .0006 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

## X/C

.050 .1243 .1274 .2168  
 .200 .0265 .0318 .0436  
 .600 .0016 .0045 .0086  
 .800 .0021 .0064  
 .900 .0026 .0061  
 .950 .0012 .0005 .0000

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OF POOR QUALITY



ARC 3.5-185 IH20 O1+T15

WING BOTTOM SURF.

(RENM08)

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) WING		DEPENDENT VARIABLE H/H0										
2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.177					.0000							
.200				.0196		.0300						
.299	.0301											
.300					.0211	.0226		.0750	.0820	.0611		
.302				.0168								
.303							.0421					
.428						.0308						
.444	.0283											
.487					.0241							
.500							.0427	.0852		.0624		
.559				.0570								
.590	.0277											
.600					.0384	.0379			.0273			
.700				.0492	.0428	.0311	.0172				.0289	
.736	.1445											
.800						.0225	.0149					
.850						.0294	.0168					
.900	.0066			.0244	.0229	.0265	.0124				.0183	

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 3.670 PO = 867.730 TO = 1508.100 HO = 371.620

SECTION ( 1 ) WING		DEPENDENT VARIABLE H/H0										
2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.000						.3010		.0761			.0848	.0183
.005		.0248	.0311		.2023		.0000			.1117		
.025	.0377			.1072	.1355		.2284					
.050										.0949		
.100				.0323		.0416	.0655	.0884		.0905		
.153	.0236											
.177					.0000							
.200				.0166		.0253						
.299	.0254											
.300					.0179	.0191		.0634	.0692	.0515		
.302				.0142								
.303							.0356					
.428						.0260						
.444	.0238											
.487					.0204							
.500							.0361	.0720		.0527		
.559				.0482								
.590	.0234											
.600					.0325	.0320			.0231			

ORIGINAL PAGE IS OF POOR QUALITY

ARC 3.5-185 IH20 O1+T15

WING BOTTOM SURF.

(REMOVED)

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) WING	DEPENDENT VARIABLE H/HO											
ZY/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.700				.0416	.0362	.0263	.0145			.0244		
.736	.1222											
.800						.0190	.0126					
.850						.0248	.0142					
.900	.0056			.0206	.0194	.0224	.0105			.0154		

ARC 3.5-185 IH20 O1+T15

VERTICAL TAIL

(RENV08) ( 07 APR 75 )

## REFERENCE DATA

SREF = . 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 3.700

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 3.670 FO = 867.730 TO = 1508.100 HD = 371.620

## SECTION ( 1 )TAIL

## DEPENDENT VARIABLE H/H0

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .4323 .3172 .0000 .5113  
 .100 .0754 .0832 .0834 .1047 .1897  
 .300 .0451 .0354 .0000 .0491  
 .500 .0432 .0289 .0331 .0000  
 .700 .0180 .0449 .0093 .0100  
 .900 .0367 .0077 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 3.670 FO = 867.730 TO = 1508.100 HD = 371.620

## SECTION ( 1 )TAIL

## DEPENDENT VARIABLE H/H0

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .3924 .2882 .0000 .4644  
 .100 .0685 .0755 .0758 .0952 .1724  
 .300 .0410 .0322 .0000 .0446  
 .500 .0392 .0262 .0301 .0000  
 .700 .0164 .0408 .0084 .0091  
 .900 .0333 .0070 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 3.670 FO = 867.730 TO = 1508.100 HD = 371.620

## SECTION ( 1 )TAIL

## DEPENDENT VARIABLE H/H0

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .3313 .2436 .0000 .3925  
 .100 .0578 .0638 .0641 .0805 .1457  
 .300 .0346 .0272 .0000 .0377  
 .500 .0332 .0222 .0255 .0000  
 .700 .0139 .0345 .0071 .0077  
 .900 .0282 .0059 .0000

ARC 3.5-185 IH20 O1+T15

CRB FHI=0.0

(RENA09) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.715 FO = 1633.030 TO = 1532.400 HO = 378.010

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

FHI .0000

## X/L

.000 .9622  
 .005 .7373  
 .010 .4598  
 .020 .1862  
 .030 .0000  
 .040 .0000  
 .050 .0000  
 .060 .0416  
 .070 .0000  
 .080 .0451  
 .090 .0000  
 .100 .2567  
 .120 .4106  
 .130 .0000  
 .140 .1273  
 .150 .0000  
 .160 .0579  
 .170 .0000  
 .180 .0692  
 .190 .0000  
 .200 .0586  
 .225 .0000  
 .250 .1200  
 .275 .0000  
 .300 .1043  
 .325 .0000  
 .350 .0603  
 .375 .0000  
 .400 .0638  
 .425 .0000  
 .450 .0750  
 .475 .0000  
 .500 .0795  
 .525 .0000  
 .550 .0628  
 .575 .0000  
 .600 .0511  
 .625 .0000

ARC 3.5-185 IH20 01+J15

CRB PHI=0.0

(RENA09)

MACH ( 1) = 7.300 HAW/HT ( 1) = .850

SECTION ( 1)BCGY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.650	.0562
.675	.0000
.700	.0606
.725	.0000
.750	.0579
.775	.0000
.800	.1031
.825	.0000
.850	.1573
.875	.0000
.900	.0349
.925	.0000
.950	.0158
.975	.0000
1.000	.0062
1.013	.0000
1.025	.0082
1.038	.0000
1.050	.0103

MACH ( 1) = 7.300 HAW/HT ( 2) = .900 RN/L = 6.715 FO = 1633.030 TO = 1532.400 HO = 378.010

SECTION ( 1)BCGY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.8706
.005	.6674
.010	.4161
.020	.1686
.030	.0000
.040	.0000
.050	.0000
.060	.0378
.070	.0000
.080	.0409
.090	.0000
.100	.2328
.120	.3725
.130	.0000
.140	.1155
.150	.0000
.160	.0526
.170	.0000

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ARC 3.5-185 IH20 O1+T15

CRB PHI=0.0

(RENAD9)

MACH ( 1) = 7.300 HAW/HT( 2) = .900

SECTION ( 1) BODY DEPENDENT VARIABLE H/H0

PHI .0000

X/L

.180	.0628
.190	.0000
.200	.0532
.225	.0000
.250	.1089
.275	.0000
.300	.0947
.325	.0000
.350	.0548
.375	.0000
.400	.0579
.425	.0000
.450	.0681
.475	.0000
.500	.0722
.525	.0000
.550	.0570
.575	.0000
.600	.0463
.625	.0000
.650	.0511
.675	.0000
.700	.0550
.725	.0000
.750	.0526
.775	.0000
.800	.0936
.825	.0000
.850	.1429
.875	.0000
.900	.0317
.925	.0000
.950	.0143
.975	.0000
1.000	.0056
1.013	.0000
1.025	.0074
1.038	.0000
1.050	.0094



ARC 3.5-185 IH20 O1+T15

CRB FHI=0.0

(RENA09)

MACH ( 1) = 7.300 HAW/HT( 3) = 1.000 RV/L = 6.715 FO = 1633.030 TO = 1532.400 HO = 378.010

SECTION ( 1)BCDY

DEPENDENT VARIABLE H/HO

FHI .0000

X/L

.000	.7313
.005	.5608
.010	.3498
.020	.1418
.030	.0000
.040	.0000
.050	.0000
.060	.0318
.070	.0000
.080	.0345
.090	.0000
.100	.1963
.120	.3141
.130	.0000
.140	.0974
.150	.0000
.160	.0443
.170	.0000
.180	.0530
.190	.0000
.200	.0449
.225	.0000
.250	.0920
.275	.0000
.300	.0799
.325	.0000
.350	.0462
.375	.0000
.400	.0489
.425	.0000
.450	.0575
.475	.0000
.500	.0609
.525	.0000
.550	.0481
.575	.0000
.600	.0391
.625	.0000
.650	.0431
.675	.0000
.700	.0464
.725	.0000
.750	.0444
.775	.0000
.800	.0791

ARC 3.5-185 IH20 01+T15

CRB PHI=0.0

(RENA09)

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.825	.0000
.850	.1207
.875	.0000
.900	.0268
.925	.0000
.950	.0121
.975	.0000
1.000	.0047
1.013	.0000
1.025	.0063
1.038	.0000
1.050	.0079

ARC 3.5-185 IH2D O1+T15

CRB Y=0.438

(REN009) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2699.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = 378.010

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0727  
 .200 .0340  
 .300 .0940

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = 378.010

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0659  
 .200 .0309  
 .300 .0854

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = 378.010

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0555  
 .200 .0261  
 .300 .0721

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ARC 3.5-185 IH20 O1+T15

CRB Y=0.875

(RENC09) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.715 FO = 1633.030 TO = 1532.400 HO = 378.010

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .8750

## X/L

.200 .0562  
 .300 .0950  
 .400 .0562  
 .500 .0664  
 .600 .0482  
 .700 .0371  
 .800 .1161  
 .900 .0223

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.715 FO = 1633.030 TO = 1532.400 HO = 378.010

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .8750

## X/L

.200 .0510  
 .300 .0863  
 .400 .0510  
 .500 .0603  
 .600 .0437  
 .700 .0337  
 .800 .1055  
 .900 .0202

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.715 FO = 1633.030 TO = 1532.400 HO = 378.010

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .8750

## X/L

.200 .0430  
 .300 .0729  
 .400 .0431  
 .500 .0510  
 .600 .0370  
 .700 .0285

DATE 28 APR 75

TABULATED SOURCE DATA - IH20

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ARC 3.5-185 IH20 O1+T15

CRB Y=0.875

(RENC09)

MACH ( 1 ) = 7.300

HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .0750

X/L

.800 .0892

.900 .0171

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ARC 3.5-185 IH2D Q1+T15

ORB C.C.L.TANGENT

(REND09) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = 378.010

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0799  
 .100 .0000  
 .150 .0000  
 .200 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = 378.010

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0724  
 .100 .0000  
 .150 .0000  
 .200 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = 378.010

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0610  
 .100 .0000  
 .150 .0000  
 .200 .0000

ARC 3.5-185 IH20 01+T15

CRB M.H.B.TANGENT

(RENE09) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = 378.010

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .1443  
 .100 .1232  
 .150 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = 378.010

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .1309  
 .100 .1118  
 .150 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = 378.010

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .1103  
 .100 .0944  
 .150 .0000

ARC 3.5-185 IH20 01+T15

WING UPPER CREASE

(RENG09) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = 378.010

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

WINGUC 1.0000

## X/L

.400 .0577  
 .500 .0000  
 .600 .0000  
 .700 .0000  
 .900 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = 378.010

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

WINGUC 1.0000

## X/L

.400 .0524  
 .500 .0000  
 .600 .0000  
 .700 .0000  
 .900 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = 378.010

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

WINGUC 1.0000

## X/L

.400 .0443  
 .500 .0000  
 .600 .0000  
 .700 .0000  
 .900 .0000



ARC 3.5-185 IH20 O1+T15

CRB Z=7.525

(RENH09) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = 378.010

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0479  
 .400 .0378  
 .500 .0000  
 .600 .0000  
 .700 .0000  
 .800 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = 378.010

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0435  
 .400 .0343  
 .500 .0000  
 .600 .0000  
 .700 .0000  
 .800 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = 378.010

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0368  
 .400 .0290  
 .500 .0000  
 .600 .0000  
 .700 .0000  
 .800 .0000

ARC 3.5-185 IH20 01+T15

ORB WINDOWS

(RENT09) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT( 1 ) = .850 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = 378.010

## SECTION ( 1 ) WINDOW

## DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

## X/L

.156	.0000		
.164	.0000		
.168	.0000		
.170		.8707	
.178			.0000
.182	.0000	.5570	.0000
.185			.0000
.191			.0000
.200		.2658	

MACH ( 1 ) = 7.300 HAW/HT( 2 ) = .900 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = 378.010

## SECTION ( 1 ) WINDOW

## DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

## X/L

.156	.0000		
.164	.0000		
.168	.0000		
.170		.7896	
.178			.0000
.182	.0000	.5054	.0000
.185			.0000
.191			.0000
.200		.2414	

ARC 3.5-185 IH20 O1+T15

ORB WINDOWS

(REN109)

MACH ( 1) = 7.300 HAW/HT ( 3) = 1.000 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = 378.010

SECTION ( 1) WINDOW

DEPENDENT VARIABLE H/H0

Z 7.9100 8.1370 8.3650

X/L

.156	.0000		
.164	.0000		
.168	.0000		
.170		.6656	
.178			.0000
.182	.0000	.4263	.0000
.185			.0000
.191			.0000
.200		.2039	

ARC 3.5-185 IH20 01+T15

CRB PHI=180

(RENK09) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.715 FO = 1633.030 TO = 1532.400 HD = 378.010

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/H0

PHI 180.0000

## X/L

.010 .7020  
 .025 .4304  
 .050 .2547  
 .075 .2245  
 .100 .3058  
 .125 .2817  
 .150 .4780  
 .160 .7660  
 .170 .8268  
 .180 .8411  
 .200 .1940  
 .250 .0000  
 .300 .0024  
 .400 .0278  
 .500 .0000  
 .600 .0473  
 .700 .0000  
 .800 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.715 FO = 1633.030 TO = 1532.400 HD = 378.010

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/H0

PHI 180.0000

## X/L

.010 .6354  
 .025 .3898  
 .050 .2309  
 .075 .2036  
 .100 .2774  
 .125 .2555  
 .150 .4336  
 .160 .6946  
 .170 .7496  
 .180 .7627  
 .200 .1760  
 .250 .0000

ARC 3.5-185 IH20 OI+T15

CRB PHI=180

(RENK09)

MACH ( 1) = 7.300 HAW/HT ( 2) = .900

SECTION ( 1)BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.300	.0022
.400	.0253
.500	.0000
.600	.0430
.700	.0000
.800	.0000

MACH ( 1) = 7.300 HAW/HT ( 3) = 1.000 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = 378.010

SECTION ( 1)BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.5340
.025	.3279
.050	.1945
.075	.1716
.100	.2339
.125	.2155
.150	.3656
.160	.5855
.170	.6317
.180	.6430
.200	.1486
.250	.0000
.300	.0018
.400	.0214
.500	.0000
.600	.0364
.700	.0000
.800	.0000

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ARC 3.5-185 IH20 01+T15

CRB Y=1.75

(RENG09) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = 378.010

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

Y 1.7500

X/L

1.000 .0057  
 1.050 .0038

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = 378.010

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

Y 1.7500

X/L

1.000 .0051  
 1.050 .0035

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = 378.010

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

Y 1.7500

X/L

1.000 .0043  
 1.050 .0029



ARC 3.5-185 IH20 O1+T15

WING BOTTOM SURF.

(REMOVED)

MACH ( 1) = 7.300 HAW/HT ( 2) = .900

SECTION ( 1)WING		DEPENDENT VARIABLE H/HO										
2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.177					.0000	.0000						
.200				.0000	.0000							
.299	.0404											
.300					.0000	.0000		.0000	.0000	.0000		
.302				.0000								
.303							.0000					
.428						.0000						
.444	.0361											
.487					.0000							
.500							.0000	.0000		.0000		
.559				.0000								
.590	.0365											
.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) = 7.300 HAW/HT ( 3) = 1.000 RN/L = 6.715 FO = 1633.030 TO = 1532.400 HO = 378.010

SECTION ( 1)WING		DEPENDENT VARIABLE H/HO										
2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.000						.0000		.0000			.0000	.0000
.005		.0000	.0000		.0000		.0000			.0000		
.025	.0649			.0000	.0000		.0000					
.050										.0000		
.100				.0000		.0000	.0000	.0000		.0000		
.153	.0514											
.177					.0000							
.200				.0000		.0000						
.299	.0342											
.300					.0000	.0000		.0000	.0000	.0000		
.302				.0000								
.303							.0000					
.428						.0000						
.444	.0305											
.487					.0000							
.500							.0000	.0000		.0000		
.559				.0000								
.590	.0309											
.600					.0000	.0000			.0000			



DATE 28 APR 75

TABULATED SOURCE DATA - IH2D

PAGE 363

ARC 3.5-185 IH2D 01+T15

WING BOTTOM SURF.

(REMOVED)

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) WING DEPENDENT VARIABLE H/HO

ZY/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.700				.0000	.0000	.0000	.0000			.0000		
.736	.0000											
.800						.0000	.0000					
.850						.0000	.0000					
.900	.0000			.0000	.0000	.0000	.0000			.0000		

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ARC 3.5-185 IH20 01+T15

CRBITER BODY

(REN209) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.715 FO = 1633.030 TO = 1532.400 HO = 378.010

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
.000	.0000	.2567	.0000	.0586	.1043				
.238					.0940				
.254				.0340					
.278			.0000						
.281		.1667							
.474			.1309						
.477					.0950				
.499	.0727								
.510				.0562					
.555		.0000							
.672				.0000					
.696	.0799								
.713					.0000				
.728			.0000						
.746		.0000							
.780				.0000					
.882					.0000				
.890				.0000					
1.002			.0959						
1.003					.0000				
1.087								.0000	
1.155			.0000						
1.182		.1232							
1.201				.0000					
1.230	.1443								
1.326								.0000	
1.364					.0000				
1.444								.0000	
1.458								.0000	
1.459					.0000				
1.534	.0000				.0000				
1.606								.0000	
1.608				.0000					
1.649					.0000				
1.750						.0000			
1.896								.0000	
1.933									.0000
1.975						.0000			

ARC 3.5-185 IH20 01+T15

ORBITER BODY

(RENZ09)

MACH ( 1) = 7.300 HAW/HT ( 1) = .850

SECTION ( 1)BODY

DEPENDENT VARIABLE H/HO

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
2.116				.0000					
2.316					.0479				
2.360	.0000								
2.497						.0000			
2.593						.0000			
2.630		.0000							
2.640						.0000			
2.735							.0000		
2.766				.2658					
2.883					.0000				
3.062						.0000			
3.168	.2547								
3.308			.4780						
3.351		.3058							
3.372							.0000		
3.540				.1940					
3.649					.0024				
3.844						.0473			

MACH ( 1) = 7.300 HAW/HT ( 2) = .900 RN/L = 6.715 PO = 1633.030 TO = 1532.400 HO = .378.010

SECTION ( 1)BODY

DEPENDENT VARIABLE H/HO

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
.000	.0000	.2328	.0000	.0532	.0947				
.238					.0854				
.254					.0309				
.278			.0000						
.281		.1512							
.474			.1188						
.477					.0863				
.499	.0659								
.510				.0510					
.555		.0000							
.672				.0000					
.696	.0724								
.713					.0000				
.728			.0000						
.746		.0000							
.780				.0000					
.882					.0000				
.890				.0000					
.902			.0870						

ARC 3.5-185 IH20 01+T15

CGBITER BODY

(RENZ09)

MACH ( 1) = 7.300 HAW/HT ( 2) = .900

SECTION ( 1) BODY	DEPENDENT VARIABLE H/H0									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
1.003					.0000					
1.087									.0000	
1.155			.0000							
1.182		.1118								
1.201				.0000						
1.230	.1309									
1.326								.0000		
1.364					.0000					
1.444									.0000	
1.458								.0000		
1.459					.0000					
1.554	.0000				.0000					
1.606								.0000		
1.608				.0000						
1.649					.0000					
1.750						.0000				
1.896								.0000		
1.933									.0000	
1.975						.0000				
2.116				.0000						
2.316					.0435					
2.360	.0000									
2.497						.0000				
2.593						.0000				
2.630		.0000								
2.640						.0000				
2.735							.0000			
2.766				.2414						
2.883					.0000					
3.062						.0000				
3.168	.2309									
3.308		.4336								
3.351	.2774									
3.372							.0000			
3.540				.1760						
3.649					.0022					
3.844						.0430				

ARC 3.5-185 IH2D O1+T15

CRBITER BODY

(RENZ09)

HACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.715 PD = 1633.030 TO = 1532.400 HQ = 378.010

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0000	.1963	.0000	.0449	.0799					
.238				.0261	.0721					
.254										
.278			.0000							
.281		.1275								
.474			.1002							
.477					.0729					
.499	.0555									
.510				.0430						
.555		.0000								
.672				.0000						
.696	.0610									
.713					.0000					
.728			.0000							
.746		.0000								
.780				.0000						
.882					.0000					
.890				.0000						
1.002			.0735							
1.003					.0000					
1.087									.0000	
1.155			.0000							
1.182		.0944								
1.201				.0000						
1.230	.1103									
1.326								.0000		
1.364					.0000					
1.444									.0000	
1.458								.0000		
1.459					.0000					
1.554	.0000				.0000					
1.606								.0000		
1.608				.0000						
1.649					.0000					
1.750						.0000				
1.896								.0000		
1.933									.0000	
1.975						.0000				
2.116				.0000						
2.316					.0368					
2.360	.0000									
2.497						.0000				
2.593						.0000				
2.630		.0000								
2.640						.0000				

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ARC 3.5-185 IH20 01+T15

ORBITER BODY

(REN209)

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/H0

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
2.735							.0030		
2.766				.2039					
2.883					.0000				
3.062						.0000			
3.168	.1945								
3.308			.3656						
3.351		.2339							
3.372							.0000		
3.540				.1486					
3.649					.0018				
3.844						.0364			

ARC 3.5-185 IH2D Q1+T15

CRB Y=0.438

(RENB10) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y .4380

X/L  
 .050 .0456  
 .200 .0121  
 .300 .0552

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y .4380

X/L  
 .050 .0415  
 .200 .0111  
 .300 .0502

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y .4380

X/L  
 .050 .0351  
 .200 .0094  
 .300 .0425

ARC 3.5-185 IH20 Q1+T15

ORB Y=0.875

(RENC10) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LRCP = 1290.3000 IN. YMRP = .0000 IN.  
 BRCP = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0412  
 .300 .0647  
 .400 .0415  
 .500 .0504  
 .600 .0383  
 .700 .0309  
 .800 .1025  
 .900 .0128

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0375  
 .300 .0589  
 .400 .0378  
 .500 .0459  
 .600 .0348  
 .700 .0282  
 .800 .0933  
 .900 .0116

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0318  
 .300 .0500  
 .400 .0321  
 .500 .0389  
 .600 .0295  
 .700 .0239



DATE 28 APR 75

TABULATED SOURCE DATA - IH2D

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ARC 3.5-185 IH2D D1+T15

CRB Y=0.875

(RENC10)

MACH ( 1) = 7.300

HAW/HT( 3) = 1.000

SECTION ( 11800Y

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.800 .0792

.900 .0099

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ARC 3.5-185 IH20 01+T15

ORB C.C.L.TANGENT

(REND10) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN. ALPHA = .000 BETA = .000  
 LREF = 1290.3000 IN. YMRP = .0000 IN. MACH = 7.300 RN/L = 7.000  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

MACH ( 1) = 7.300 HAW/HT ( 1) = .850 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0514  
 .100 .0982  
 .150 .1003  
 .200 .0565

MACH ( 1) = 7.300 HAW/HT ( 2) = .900 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0467  
 .100 .0891  
 .150 .0910  
 .200 .0513

MACH ( 1) = 7.300 HAW/HT ( 3) = 1.000 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0395  
 .100 .0751  
 .150 .0767  
 .200 .0432

ARC 3.5-185 IH2D O1+T15

CRB M.H.B.TANGENT

(RENE1D) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0886  
 .100 .0450  
 .150 .0679

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0806  
 .100 .0409  
 .150 .0616

MACH ( -1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0682  
 .100 .0347  
 .150 .0520

ARC 3.5-185 IH2D O1+T15

ORB Z=6.125

(RENF10) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Z 6.1250

## X/L

.076 .0899  
 .300 .0275  
 .800 .0113  
 .900 .0230  
 .975 .0183

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Z 6.1250

## X/L

.076 .0815  
 .300 .0249  
 .800 .0103  
 .900 .0209  
 .975 .0166

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Z 6.1250

## X/L

.076 .0687  
 .300 .0210  
 .800 .0086  
 .900 .0176  
 .975 .0140

ARC 3.5-185 IH20 01+T15

WING UPPER CREASE

(RENG10) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) WING DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L  
 .400 .0452  
 .500 .0166  
 .600 .0279  
 .700 .0160  
 .900 .0165

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) WING DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L  
 .400 .0412  
 .500 .0150  
 .600 .0253  
 .700 .0146  
 .900 .0150

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) WING DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L  
 .400 .0350  
 .500 .0127  
 .600 .0213  
 .700 .0123  
 .900 .0126

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ARC 3.5-185 IH20 O1+T15

ORB Z=7.525

(RENH10) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HD = 372.480

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/H0

Z 7.5250

X/L	
.300	.0334
.400	.0267
.500	.0276
.600	.0296
.700	.0231
.800	.0204

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HD = 372.480

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/H0

Z 7.5250

X/L	
.300	.0304
.400	.0261
.500	.0250
.600	.0268
.700	.0210
.800	.0185

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HD = 372.480

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/H0

Z 7.5250

X/L	
.300	.0258
.400	.0221
.500	.0211
.600	.0226
.700	.0177
.800	.0156

ARC 3.5-185 IH20 Q1+Y15

ORB WINDOWS

(RENI10) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN. ALPHA = .000 BETA = .000  
 LREF = 1290.3000 IN. YMRP = .0000 IN. MACH = 7.300 RN/L = 7.000  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) WINDOW DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

X/L  
 .156 .8531  
 .164 .6858  
 .168 .5887  
 .170 .7372  
 .178 .8528  
 .182 .3644 .5939 .8554  
 .185 .6172  
 .191 .4795  
 .200 .2615

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) WINDOW DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

X/L  
 .156 .7734  
 .164 .6217  
 .168 .5337  
 .170 .6701  
 .178 .7728  
 .182 .3304 .5401 .7753  
 .185 .5595  
 .191 .4348  
 .200 .2380

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ARC 3.5-185 IH2D O1+T15

ORB WINDOWS

(REN11D)

MACH ( 1) = 7.300 HAW/HT ( 3) = 1.000 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1) WINDOW

DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

X/L

.156 .6516

.164 .5238

.168 .4496

.170 .5670

.178 .6508

.182 .2784 .4572 .6530

.185 .4713

.191 .3665

.200 .2017



ARC 3.5-185 IH20 O1+T15

ORB Z=8.379

(RENJ10) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Z 8.3790

## X/L

.300 .0295  
 .400 .0159  
 .500 .0129  
 .600 .0145  
 .700 .0150

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Z 8.3790

## X/L

.300 .0267  
 .400 .0144  
 .500 .0117  
 .600 .0131  
 .700 .0136

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Z 8.3790

## X/L

.300 .0225  
 .400 .0122  
 .500 .0099  
 .600 .0111  
 .700 .0115

ORIGINAL PAGE IS  
 OF POOR QUALITY

ARC 3.5-185 IH20 01+T15

CMS BOTTOM CREASE

(REN10) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRF = .0000 IN.  
 LREF = 1290.3000 IN. YMRF = .0000 IN.  
 BREF = 1290.3000 IN. ZMRF = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

## SECTION ( 1 ) CMS

## DEPENDENT VARIABLE H/HO

CMS 1.0000

## X/L

.829 .0430  
 .900 .0533  
 .975 .0346

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

## SECTION ( 1 ) CMS

## DEPENDENT VARIABLE H/HO

CMS 1.0000

## X/L

.829 .0390  
 .900 .0484  
 .975 .0314

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

## SECTION ( 1 ) CMS

## DEPENDENT VARIABLE H/HO

CMS 1.0000

## X/L

.829 .0328  
 .900 .0408  
 .975 .0265

ARC 3.5-185 IH20 01+T15

CRB FHI=130.

(RENN10) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1) = 7.300 HAW/HT ( 1) = .850 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1) BODY

DEPENDENT VARIABLE H/HO

FHI 130.0000

X/L

.805 .2695  
 .829 .1541  
 .862 .0510  
 .963 .0172

MACH ( 1) = 7.300 HAW/HT ( 2) = .900 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1) BODY

DEPENDENT VARIABLE H/HO

FHI 130.0000

X/L

.805 .2440  
 .829 .1395  
 .862 .0462  
 .963 .0158

MACH ( 1) = 7.300 HAW/HT ( 3) = 1.000 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1) BODY

DEPENDENT VARIABLE H/HO

FHI 130.0000

X/L

.805 .2052  
 .829 .1174  
 .862 .0389  
 .963 .0131

ARC 3.5-185 IH2D O1+T15

OMS TOP

(RENO10) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .2458  
 .829 .1251  
 .862 .0463  
 .963 .0448

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .2226  
 .829 .1133  
 .862 .0419  
 .963 .0406

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .1872  
 .829 .0952  
 .862 .0353  
 .963 .0341

ARC 3.5-185 IH20 01+T15

CMS INSIDE

(REN10) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .0000 BETA = .0000  
 MACH = 7.3000 RN/L = 7.0000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) CMS DEPENDENT VARIABLE H/HO

Y 1.1380

X/L  
 .862 .0605  
 .963 .0508

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) CMS DEPENDENT VARIABLE H/HO

Y 1.1380

X/L  
 .862 .0548  
 .963 .0461

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) CMS DEPENDENT VARIABLE H/HO

Y 1.1380

X/L  
 .862 .0461  
 .963 .0388

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ARC 3.5-185 IH2D O1+T15

CRB Y=1.75

(RENG1D) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0050

1.050 .0020

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0045

1.050 .0018

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0039

1.050 .0015

ARC 3.5-185 IH20 01+T15

CRB Z=8.75

(RENU10) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

Z 8.7500

X/L

1.000 .0280  
 1.014 .0276

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

Z 8.7500

X/L

1.000 .0254  
 1.014 .0250

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

Z 8.7500

X/L

1.000 .0214  
 1.014 .0211

ARC 3.5-185 IH20 01+T15

CLUSTERS B AND C

(RENY10) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000	.4360	.0992
.050	.3578	.2206
.100	.2817	.1763
.150	.2206	.1462
.200	.1698	.1192
.250	.1491	.0822
.300	.0968	.0683

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000	.3940	.0897
.050	.3234	.1995
.100	.2547	.1594
.150	.1994	.1322
.200	.1535	.1078
.250	.1348	.0745
.300	.0875	.0619

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000	.3304	.0753
.050	.2712	.1674
.100	.2136	.1338
.150	.1672	.1110
.200	.1287	.0905
.250	.1131	.0627
.300	.0736	.0521



ARC 3.5-185 IH2D O1+T15 ORBITER BODY

(RENZ10) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0382	.5756	.0773	.0392	.0750					
.238					.0552					
.254				.0121						
.278			.0710							
.281		.4308								
.474			.0830							
.477					.0647					
.499	.0456									
.510				.0412						
.555		.1077								
.672				.0565						
.696	.0514									
.713					.0731					
.728			.1003							
.746		.0982								
.780				.0810						
.882					.0647					
.890				.0591						
1.002			.0832							
1.003					.0424					
1.087									.0158	
1.155			.0679							
1.182		.0450								
1.201				.0603						
1.230	.0886									
1.326								.0165		
1.364				.0188						
1.444									.0183	
1.458								.0230		
1.459				.0194						
1.554	.0928			.0275						
1.606								.0290		
1.608			.0856							
1.649				.0292						
1.750						.0279				
1.896								.0533		
1.933									.0346	
1.975						.0185				

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ARC 3.5-185 IH20 O1+T15

CRBITER BODY

(RENZ10)

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/H0								
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
1.003					.0385				
1.087									.0144
1.155			.0616						
1.182		.0409							
1.201				.0547					
1.230	.0606								
1.326								.0150	
1.364					.0170				
1.444									.0166
1.458								.0209	
1.459					.0176				
1.554	.0841				.0249				
1.606								.0263	
1.608				.0776					
1.649					.0265				
1.750						.0253			
1.896								.0464	
1.933									.0314
1.975						.0168			
2.116				.1082					
2.316					.0304				
2.360	.1486								
2.497						.0268			
2.593						.0247			
2.630		.2485							
2.640						.0263			
2.735							.0244		
2.766				.2380					
2.883					.0267				
3.062						.0131			
3.168	.1525								
3.308			.2480						
3.351		.0953							
3.372							.0188		
3.540				.1120					
3.649					.0009				
3.844						.0156			

ARC 3.5-185 IH20 01+T15

ORBITER BODY

(RENZ10)

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HD = 372.480

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/H0									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0292	.4431	.0591	.0302	.0578					
.238					.0425					
.254				.0094						
.278			.0543							
.281		.3318								
.474			.0639							
.477					.0500					
.499	.0351									
.510				.0318						
.555		.0823								
.672				.0432						
.696	.0395									
.713					.0560					
.728			.0767							
.746		.0751								
.780				.0620						
.882					.0495					
.890					.0452					
1.002			.0641							
1.003					.0324					
1.087									.0121	
1.155			.0520							
1.182		.0347								
1.201				.0461						
1.230	.0682									
1.326								.0126		
1.364					.0144					
1.444									.0140	
1.458								.0176		
1.459					.0148					
1.554	.0708				.0210					
1.606								.0222		
1.608				.0655						
1.649					.0223					
1.750						.0213				
1.896								.0408		
1.933									.0265	
1.975						.0141				
2.116				.0913						
2.316					.0258					
2.360	.1252									
2.497						.0226				
2.593						.0209				
2.630		.2095								
2.640						.0221				

ARC 3.5-185 IH20 O1+T15

CRBITER BODY

(RENZ10)

MACH ( 1) = 7.300 HAW/HT ( 3) = 1.000

SECTION ( 1) BODY DEPENDENT VARIABLE H/H0

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
2.735							.0205		
2.766				.2017					
2.883					.0225				
3.062						.0111			
3.168	.1289								
3.308			.2100						
3.351		.0807							
3.372							.0158		
3.540				.0949					
3.649					.0008				
3.844							.0132		

ARC 3.5-165 IH20 01+T15

EXTERNAL TANK

(RENT10) ( 07 APR 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) TANK

DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	194.0000	196.0000	208.0000
.000											.0000			
.005											.7862			
.010											.8400			
.040	.1686										.5013			
.080	.0900										.3518	.2511		
.150	.0196										.1178		.0988	.1023
.200				.0247							.0513			
.250				.0183							.0312			
.275				.0240	.0400									
.300			.0119	.0279	.0415						.0335		.0000	
.325				.0317	.0407	.0360								
.350			.0079	.0397	.0395	.0348					.0325			
.375						.0328					.0519			
.400	.0000	.0377	.0099	.0410	.0397	.0307	.0666		.0742	.0632				.0380
.425							.0712	.0728		.1683				
.450				.0421	.0395	.0403	.0651			.5044				
.475							.0322			.0825				
.500		.0000	.0217	.0410	.0382	.0337	.0556		.1033	.0689			.1477	
.525										.1235				
.550				.0392	.0442	.0559	.0341			.0822				
.575										.0625				
.600	.0304	.0323	.0405	.0349	.0242	.0719	.0398			.0809				.0443
.625										.0801				
.650			.0352	.0421	.0322	.0752	.0443			.0678				
.675										.0581				
.700		.0328	.0298	.0310	.0480	.0820	.0000		.0403	.0572		.0373		
.750			.0320	.0226	.0535	.0604	.0355			.0628				
.800	.0297	.0264	.0342	.0259	.0484	.0548	.0201			.0450				.0309
.825						.0961								
.850				.0308	.0621	.0186	.0921		.0360	.0457				
.875						.0332								
.900		.0248	.0257	.0356	.0538	.0424	.0483		.0485	.0603	.0860		.0672	
.925						.0893								
.935								.1912						.1503
.937											.1588			
.960						.0097								
.975											.0235			

ARC 3.5-185 IH20 OI+T15

EXTERNAL TANK

(RENT10)

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850

SECTION ( 1 ) TANK DEPENDENT VARIABLE H/HO

THETA 216.0000222.5000229.0000

X/L		
.335	.0309	
.400	.0408	.0369
.500	.1360	
.600		.0228
.700	.0582	
.800		.0163

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L														
.000													.0300	
.005													.7126	
.010													.7621	
.040	.1528												.4551	
.080	.0816												.3193	.2281
.150	.0178												.1069	.0898 .0930
.200				.0223									.0466	
.250				.0166									.0283	
.275				.0217	.0362									
.300			.0108	.0252	.0375								.0304	.0000
.325				.0287	.0368		.0326							
.350			.0072	.0360	.0357		.0315						.0295	
.375							.0297						.0471	
.400	.0000	.0342	.0090	.0371	.0359		.0277	.0603		.0673	.0573			.0345
.425								.0645	.0659		.1527			
.450				.0381	.0357		.0365	.0590			.4575			
.475								.0292			.0749			
.500		.0000	.0197	.0371	.0346		.0305	.0504		.0936	.0625		.1341	
.525											.1120			
.550				.0355	.0400		.0506	.0309			.0745			
.575											.0567			
.600	.0276	.0293	.0367	.0316	.0219		.0651	.0361			.0734		.0403	
.625											.0726			
.650			.0319	.0381	.0291		.0680	.0402			.0615			
.675											.0527			
.700		.0297	.0270	.0280	.0434		.0742	.0000		.0366	.0519		.0339	
.750			.0290	.0204	.0484		.0547	.0322			.0570			
.800	.0270	.0240	.0309	.0235	.0438		.0496	.0182			.0408			.0281
.825							.0670							
.850				.0279	.0562		.0169	.0834		.0326	.0415			
.875							.0301							

ARC 3.5-185 IH20 01+T15

EXTERNAL TANK

(RENT10)

MACH ( 1) = 7.300 HAW/HT ( 2) = .900

SECTION ( 1)TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.900	.0225	.0233	.0322	.0487	.0384	.0438		.0440	.0548	.0781	.0611			
.925					.0809								.1366	
.935							.1733							
.937										.1442				
.960					.0088									
.975										.0214				

THETA 216.0000 222.5000 229.0000

X/L

.335		.0281												
.400	.0371		.0335											
.500	.1236													
.600			.0207											
.700	.0529													
.800			.0148											

MACH ( 1) = 7.300 HAW/HT ( 3) = 1.000 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1)TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.000											.0000			
.005											.6002			
.010											.6429			
.040	.1286										.3843			
.080	.0687										.2695	.1928		
.150	.0150										.0902		.0759	.0786
.200			.0188								.0393			
.250			.0139								.0239			
.275			.0183	.0304										
.300		.0091	.0212	.0315							.0257		.0000	
.325			.0241	.0309				.0274						
.350		.0061	.0302	.0300				.0264			.0249			
.375								.0249			.0397			
.400	.0000	.0289	.0076	.0312	.0302			.0233	.0506	.0568	.0484		.0292	
.425									.0542	.0554	.1288			
.450			.0320	.0300			.0306	.0496			.3859			
.475								.0245			.0632			
.500	.0000	.0165	.0312	.0290		.0257	.0424		.0787	.0527		.1133		
.525										.0945				
.550			.0298	.0336		.0425		.0260		.0629				
.575										.0479				



ARC 3.5-185 IH20 O1+T15

EXTERNAL TANK

(RENT10)

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) TANK

DEPENDENT VARIABLE H/H0

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.600	.0233	.0247	.0308	.0265	.0183	.0547	.0304	.0619	.0340
.625								.0612	
.650			.0268	.0320	.0244	.0572	.0338	.0518	
.675								.0444	
.700		.0251	.0227	.0236	.0365	.0625	.0000	.0309	.0438
.750			.0244	.0172	.0407	.0460	.0271	.0481	.0286
.800	.0228	.0202	.0260	.0197	.0368	.0418	.0154	.0344	.0237
.825					.0731				
.850			.0234	.0473	.0142	.0702	.0274	.0350	
.875					.0253				
.900		.0190	.0196	.0270	.0410	.0323	.0368	.0370	.0463
.925					.0681			.0659	.0516
.935						.1460			.1154
.937								.1218	
.960					.0374				
.975								.0181	

THETA 216.0000 222.5000 229.0000

X/L

.335		.0237							
.400	.0314		.0284						
.500	.1045								
.600			.0175						
.700	.0447								
.800			.0125						

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ARC 3.5-165 IH2D 01+T15

CRB PHI=0.0

(RENA10) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) BCOY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.8252
.005	.5355
.010	.3483
.020	.1491
.030	.0963
.040	.0000
.050	.0382
.060	.0538
.070	.0816
.080	.1326
.090	.2368
.100	.5756
.120	.1930
.130	.1198
.140	.0749
.150	.0773
.160	.0769
.170	.0708
.180	.0567
.190	.0497
.200	.0392
.225	.0908
.250	.1010
.275	.0946
.300	.0750
.325	.0643
.350	.0452
.375	.0425
.400	.0395
.425	.0505
.450	.0695
.475	.0688
.500	.0603
.525	.0523
.550	.0448
.575	.0416
.600	.0389
.625	.0469

ARC 3.5-185 IH2D O1+T15

ORB PHI=0.0

(RENA10)

MACH ( 1) = 7.300 HAW/HT ( 1) = .850

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.650	.0502
.675	.0518
.700	.0435
.725	.0437
.750	.0390
.775	.0728
.800	.1250
.825	.1469
.850	.1205
.875	.0497
.900	.0255
.925	.0181
.950	.0128
.975	.0084
1.000	.0061
1.013	.0000
1.025	.0039
1.038	.0000
1.050	.0020

MACH ( 1) = 7.300 HAW/HT ( 2) = .900 RN/L = 6.985 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.7488
.005	.4859
.010	.3162
.020	.1354
.030	.0872
.040	.0500
.050	.0346
.060	.0489
.070	.0739
.080	.1206
.090	.2146
.100	.5234
.120	.1755
.130	.1086
.140	.0681
.150	.0701
.160	.0699
.170	.0642

ARC 3.5-185 IH20 O1+T15

ORB PHI=0.0

(RENA10)

MACH ( 1) = 7.300 HAW/HT ( 2) = .900

SECTION ( 1) BODY

DEPENDENT VARIABLE H/H0

PHI .0000

X/L

.180	.0516
.190	.0451
.200	.0356
.225	.0823
.250	.0919
.275	.0857
.300	.0682
.325	.0583
.350	.0411
.375	.0385
.400	.0360
.425	.0458
.450	.0633
.475	.0624
.500	.0549
.525	.0475
.550	.0408
.575	.0377
.600	.0354
.625	.0426
.650	.0457
.675	.0470
.700	.0396
.725	.0396
.750	.0355
.775	.0660
.800	.1137
.825	.1332
.850	.1097
.875	.0451
.900	.0232
.925	.0164
.950	.0117
.975	.0076
1.000	.0056
1.013	.0000
1.025	.0036
1.038	.0000
1.050	.0019

ARC 3.5-185 IH2D O1+T15

ORB PHI=0.0

(RENA1D)

MACH ( 1) = 7.300 HAW/HT ( 3) = 1.000 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1) BODY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.6317
.005	.4101
.010	.2669
.020	.1144
.030	.0734
.040	.0000
.050	.0292
.060	.0414
.070	.0623
.080	.1021
.090	.1808
.100	.4431
.120	.1486
.130	.0915
.140	.0577
.150	.0591
.160	.0592
.170	.0541
.180	.0437
.190	.0380
.200	.0302
.225	.0694
.250	.0779
.275	.0723
.300	.0578
.325	.0491
.350	.0348
.375	.0325
.400	.0305
.425	.0386
.450	.0536
.475	.0526
.500	.0465
.525	.0400
.550	.0346
.575	.0318
.600	.0300
.625	.0359
.650	.0388
.675	.0396
.700	.0335
.725	.0334
.750	.0301
.775	.0556
.800	.0964

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ARC 3.5-185 IH20 01+T15

CRB PHI=0.0

(RENA10)

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/H0

PHI .0000

X/L

.625	.1123
.850	.0930
.875	.0380
.900	.0197
.925	.0138
.950	.0099
.975	.0064
1.000	.0047
1.013	.0000
1.025	.0030
1.038	.0000
1.050	.0016

ARC 3.5-185 IH2D O1+T15

CRB PHI=180

(RENK10) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT( 1 ) = .850 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HD = 372.480

SECTION ( 1 )BCOY

DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010 .4850  
 .025 .2623  
 .050 .1678  
 .075 .1170  
 .100 .1048  
 .125 .0947  
 .150 .2727  
 .160 .7215  
 .170 .5965  
 .180 .6999  
 .200 .1231  
 .250 .0123  
 .300 .0010  
 .400 .0000  
 .500 .0000  
 .600 .0171  
 .700 .0288  
 .800 .0463

MACH ( 1 ) = 7.300 HAW/HT( 2 ) = .900 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HD = 372.480

SECTION ( 1 )BODY

DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010 .4402  
 .025 .2382  
 .050 .1529  
 .075 .1064  
 .100 .0953  
 .125 .0861  
 .150 .2480  
 .160 .6560  
 .170 .5423  
 .180 .6364  
 .200 .1120  
 .250 .0111

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OF POOR QUALITY

ARC 3.5-185 IH20 01+T15

CRB PHI=180

(RENK10)

MACH ( 1) = 7.300 HAW/HT ( 2) = .900

SECTION ( 1) BODY DEPENDENT VARIABLE H/H0

PHI 180.0000

X/L

.300	.0009
.400	.0000
.500	.0000
.600	.0156
.700	.0261
.800	.0420

MACH ( 1) = 7.300 HAW/HT ( 3) = 1.000 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1) BODY DEPENDENT VARIABLE H/H0

PHI 180.0000

X/L

.010	.3716
.025	.2012
.050	.1289
.075	.0900
.100	.0807
.125	.0729
.150	.2100
.160	.5552
.170	.4588
.180	.5385
.200	.0949
.250	.0094
.300	.0008
.400	.0000
.500	.0000
.600	.0132
.700	.0220
.800	.0354



ARC 3.5-105 IH20 01+T15

CRB Z=8.295

(RENMI0) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .1699  
 .805 .2307  
 .829 .1442  
 .862 .0842  
 .963 .0441  
 1.000 .0496  
 1.014 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .1537  
 .805 .2086  
 .829 .1306  
 .862 .0763  
 .963 .0400  
 1.000 .0449  
 1.014 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .1290  
 .805 .1751  
 .829 .1099  
 .862 .0642  
 .963 .0337  
 1.000 .0378  
 1.014 .0000

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ARC 3.5-185 IH2D Q1+T15

WING UPPER SURF.

(RENX1D) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

ZY/B .4000 .6000 .8000

## X/C

.050 .2331 .2931 .3008  
 .200 .0479 .0835 .0640  
 .600 .0000 .0000 .0062  
 .800 .0000 .0000 .0041  
 .900 .0012 .0046  
 .950 .0000 .0000 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

ZY/B .4000 .6000 .8000

## X/C

.050 .2109 .2650 .2723  
 .200 .0434 .0756 .0580  
 .600 .0000 .0000 .0056  
 .800 .0000 .0000 .0037  
 .900 .0011 .0042  
 .950 .0000 .0000 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

ZY/B .4000 .6000 .8000

## X/C

.050 .1772 .2223 .2289  
 .200 .0365 .0635 .0488  
 .600 .0000 .0000 .0047  
 .800 .0000 .0000 .0031  
 .900 .0009 .0035  
 .950 .0000 .0000 .0000

ARC 3.5-185 IH20 01+T15

WING BOTTOM SURF.

(RENEWED) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.000						.4360		.0992			.1019	.0241
.005		.0380	.0516		.3679	.0000				.1435		
.025	.0609			.1478	.2336	.3290						
.050										.1209		
.100				.0426		.0602	.0997	.1455		.1192		
.153	.0452											
.177					.0000							
.200				.0341		.0355						
.299	.0360											
.300					.0282	.0393		.1370	.1543	.1158		
.302				.0438								
.303							.0950					
.428						.0729						
.444	.0343											
.487					.0800							
.500							.1013	.1470		.1121		
.559				.0705								
.590	.0368											
.600					.0854	.0643			.0697			
.700				.0679	.0603	.0459	.0390			.0000		
.736	.1695											
.800						.0182	.0168					
.850						.0265	.0131					
.900	.0066			.0277	.0252	.0326	.0205			.0243		

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.000						.3940		.0897			.0921	.0218
.005		.0344	.0467		.3325	.0000				.1297		
.025	.0555			.1337	.2111	.2975						
.050										.1092		
.100				.0385		.0545	.0902	.1315		.1077		
.153	.0411											

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ARC 3.5-185 IH2D O1+T15

WING BOTTOM SURF.

(RENEWID)

MACH ( 1) = 7.300 HAW/HT ( 2) = .900

SECTION ( 1) WING

DEPENDENT VARIABLE H/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.177					.0000							
.200				.0308		.0321						
.299	.0328											
.300					.0255	.0356		.1239	.1395	.1046		
.302				.0396								
.303							.0859					
.428						.0660						
.444	.0312											
.487					.0724							
.500							.0917	.1329		.1013		
.559				.0638								
.590	.0336											
.600					.0773	.0582			.0631			
.700				.0615	.0546	.0415	.0353			.0000		
.736	.1535											
.800						.0165	.0152					
.850						.0240	.0119					
.900	.0060			.0250	.0228	.0295	.0186			.0220		

MACH ( 1) = 7.300 HAW/HT ( 3) = 1.000 RNL = 6.885 PO = 1634.420 TO = 1511.400 HO = 372.480

SECTION ( 1) WING

DEPENDENT VARIABLE H/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.000						.3304		.0753			.0771	.0183
.005		.0289	.0392		.2788	.0000				.1087		
.025	.0470			.1122	.1771	.2497						
.050										.0916		
.100				.0323		.0457	.0757	.1104		.0903		
.153	.0349											
.177					.0000							
.200				.0259		.0269						
.299	.0278											
.300					.0215	.0299		.1040	.1170	.0877		
.302				.0333								
.303							.0722					
.428						.0554						
.444	.0265											
.487					.0609							
.500							.0770	.1116		.0849		
.559				.0537								
.590	.0285											
.600					.0650	.0489			.0530			

ARC 3,5-185 IH2D O1+T15

WING BOTTOM SURF.

(RENN10)

MACH ( 1) = 7.300 HAW/HT ( 3) = 1.000

SECTION ( 1)WING	DEPENDENT VARIABLE H/HO											
ZY/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.700				.0517	.0459	.0349	.0297			.0000		
.736	.1290											
.800						.0139	.0128					
.850						.0203	.0100					
.900	.0051			.0210	.0192	.0248	.0156			.0184		

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ARC 3.5-185 IH20 O1+T15

VERTICAL TAIL

(RENV10) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/H0

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .0000 .4212 .2958 .0000 .5045  
 .100 .0798 .0878 .0865 .1065 .2048  
 .300 .0620 .0420 .0000 .0493  
 .500 .0766 .0321 .0298 .0000  
 .700 .0165 .0481 .0065 .0066  
 .900 .0367 .0054 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/H0

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .0000 .3814 .2677 .0000 .4571  
 .100 .0723 .0795 .0783 .0964 .1857  
 .300 .0562 .0381 .0000 .0446  
 .500 .0695 .0290 .0270 .0000  
 .700 .0149 .0436 .0059 .0060  
 .900 .0333 .0049 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.885 FO = 1634.420 TO = 1511.400 HO = 372.480

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/H0

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .0000 .3207 .2249 .0000 .3847  
 .100 .0609 .0669 .0658 .0811 .1564  
 .300 .0473 .0321 .0000 .0375  
 .500 .0586 .0245 .0227 .0000  
 .700 .0126 .0368 .0049 .0050  
 .900 .0280 .0041 .0000

ARC 3.5-185 IH20 01

CRB PHI=0.0

(RENA11) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.433 PO = 118.080 TO = 1314.300 HD = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.7695
.005	.4588
.010	.2954
.020	.1284
.030	.0866
.040	.0661
.050	.0470
.060	.0364
.070	.0291
.080	.0258
.090	.0218
.100	.0192
.120	.0155
.130	.0166
.140	.0121
.150	.0124
.160	.0098
.170	.0128
.180	.0086
.190	.0107
.200	.0069
.225	.0071
.250	.0063
.275	.0125
.300	.0057
.325	.0143
.350	.0081
.375	.0185
.400	.0147
.425	.0223
.450	.0201
.475	.0231
.500	.0229
.525	.0251
.550	.0268
.575	.0289
.600	.0291
.625	.0318

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ARC 3.5-185 IH2D 01

ORB PHI=0.0

(RENA11)

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.650	.0301
.675	.0304
.700	.0242
.725	.0317
.750	.0217
.775	.0313
.800	.0222
.825	.0354
.850	.0237
.875	.0301
.900	.0222
.925	.0252
.950	.0194
.975	.0210
1.000	.0191
1.013	.0000
1.025	.0182
1.038	.0000
1.050	.0184

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.6891
.005	.4110
.010	.2647
.020	.1151
.030	.0776
.040	.0593
.050	.0421
.060	.0327
.070	.0261
.080	.0232
.090	.0195
.100	.0172
.120	.0139
.130	.0149
.140	.0109
.150	.0111
.160	.0088
.170	.0114



ARC 3.5-185 IH20 01

CRB FHI=0.0

(RENA11)

MACH ( 1 ) = 5.300 HAW/HT( 2 ) = .900

SECTION ( 1 ) BODY DEFENDENT VARIABLE H/HO

FHI .0000

X/L

.180	.0077
.190	.0096
.200	.0062
.225	.0064
.250	.0057
.275	.0112
.300	.0051
.325	.0128
.350	.0073
.375	.0166
.400	.0132
.425	.0200
.450	.0181
.475	.0207
.500	.0205
.525	.0225
.550	.0240
.575	.0259
.600	.0261
.625	.0285
.650	.0270
.675	.0273
.700	.0217
.725	.0285
.750	.0194
.775	.0281
.800	.0200
.825	.0318
.850	.0213
.875	.0270
.900	.0200
.925	.0226
.950	.0174
.975	.0189
1.000	.0172
1.013	.0000
1.025	.0163
1.038	.0000
1.050	.0165

ARC 3.5-185 IH20 01

CRB FHI=0.0

(RENA11)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

FHI .0000

X/L

.000	.5700
.005	.5401
.010	.52191
.020	.0953
.030	.0642
.040	.0492
.050	.0349
.060	.0271
.070	.0217
.080	.0192
.090	.0162
.100	.0143
.120	.0115
.130	.0123
.140	.0090
.150	.0092
.160	.0073
.170	.0095
.180	.0064
.190	.0079
.200	.0051
.225	.0053
.250	.0047
.275	.0093
.300	.0042
.325	.0106
.350	.0061
.375	.0138
.400	.0110
.425	.0166
.450	.0150
.475	.0172
.500	.0170
.525	.0187
.550	.0200
.575	.0215
.600	.0217
.625	.0237
.650	.0224
.675	.0226
.700	.0180
.725	.0236
.750	.0162
.775	.0233
.800	.0166

DATE 28 APR 75

TABULATED SOURCE DATA - IH20

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ARC 3.5-185 IH20 01

ORB PHI=0.0

(RENA11)

MACH ( 1) = 5.300 HAW/HT( 3) = 1.000

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.825	.0264
.850	.0177
.875	.0223
.900	.0166
.925	.0187
.950	.0144
.975	.0156
1.000	.0142
1.013	.0000
1.025	.0136
1.038	.0000
1.050	.0137

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ARC 3.5-185 IH20 01

CRB Y=0.438

(RENB11) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0666  
 .200 .0076  
 .300 .0018

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0597  
 .200 .0068  
 .300 .0016

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0496  
 .200 .0057  
 .300 .0014

ARC 3.5-185 IH2D 01

CRB Y=0.075

(RENC11) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 DREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.433 FO = 118.000 TO = 1314.300 HO = 321.210

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .8750

## X/L

.200 .0118  
 .300 .0092  
 .400 .0095  
 .500 .0133  
 .600 .0153  
 .700 .0184  
 .800 .0206  
 .900 .0167

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.433 FO = 118.000 TO = 1314.300 HO = 321.210

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .8750

## X/L

.200 .0106  
 .300 .0082  
 .400 .0086  
 .500 .0119  
 .600 .0137  
 .700 .0166  
 .800 .0185  
 .900 .0150

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.433 FO = 118.000 TO = 1314.300 HO = 321.210

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .8750

## X/L

.200 .0088  
 .300 .0068  
 .400 .0071  
 .500 .0099  
 .600 .0114  
 .700 .0138

ARC 3.5-185 IH2D O1

CRB Y=0.875

(RENC11)

MACH ( 1) = 5.300

HAW/HT( 3) = 1.000

SECTION ( 1) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.800 .0154

.900 .0124

ARC 3.5-185 IH20 01

ORB C.C.L.TANGENT

(REND11) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

CCLT 1.0000

X/L  
 .050 .0652  
 .100 .0401  
 .150 .0192  
 .200 .0122

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

CCLT 1.0000

X/L  
 .050 .0585  
 .100 .0359  
 .150 .0172  
 .200 .0110

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/H0

CCLT 1.0000

X/L  
 .050 .0485  
 .100 .0298  
 .150 .0143  
 .200 .0091

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ARC 3.5-185 IH20 01

ORB M.H.B.TANGENT

(RENE11) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMPF = .0000 IN.  
 LREF = 1290.3000 IN. YMPF = .0000 IN.  
 BREF = 1290.3000 IN. ZMPF = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0946  
 .100 .0517  
 .150 .0319

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0849  
 .100 .0465  
 .150 .0286

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0705  
 .100 .0366  
 .150 .0237



ARC 3.5-185 IH20 01

CRB Z=6.125

(RENF11) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0711  
 .300 .0070  
 .800 .0228  
 .900 .0576  
 .975 .0563

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0638  
 .300 .0063  
 .800 .0204  
 .900 .0517  
 .975 .0504

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0529  
 .300 .0052  
 .800 .0169  
 .900 .0428  
 .975 .0418

ARC 3.5-185 IH2D 01

WING UPPER CREASE

(RENG11) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175.

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0517  
 .500 .0239  
 .600 .0491  
 .700 .0349  
 .900 .0550

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0464  
 .500 .0215  
 .600 .0442  
 .700 .0314  
 .900 .0495

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0386  
 .500 .0179  
 .600 .0369  
 .700 .0262  
 .900 .0412

ARC 3.5-185 IH20 01

CRB Z=7.525

(RENH11) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0254  
 .400 .0228  
 .500 .0277  
 .600 .0315  
 .700 .0533  
 .800 .0496

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0228  
 .400 .0205  
 .500 .0248  
 .600 .0282  
 .700 .0478  
 .800 .0445

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0190  
 .400 .0170  
 .500 .0206  
 .600 .0234  
 .700 .0397  
 .800 .0369

ARC 3.5-185 IH20 01

CRB WINDOWS

(REN111) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1) = 5.300 HAW/HT ( 1) = .850 RN/L = 1.433 PO = 118.080 TO = 1314.300 HD = 321.210

## SECTION ( 1) WINDOW

## DEPENDENT VARIABLE H/H0

Z 7.9100 8.1370 8.3650

## X/L

.156	.6282		
.164	.6067		
.168	.5539		
.170		.7571	
.178			.7739
.182	.3808	.4259	.5802
.185			.3998
.191			.3178
.200		.1981	

MACH ( 1) = 5.300 HAW/HT ( 2) = .900 RN/L = 1.433 PO = 118.080 TO = 1314.300 HD = 321.210

## SECTION ( 1) WINDOW

## DEPENDENT VARIABLE H/H0

Z 7.9100 8.1370 8.3650

## X/L

.156	.5631		
.164	.5439		
.168	.4965		
.170		.6795	
.178			.6935
.182	.3414	.3824	.5201
.185			.3584
.191			.2850
.200		.1781	

ARC 3.5-185 IH20 01

ORB WINDOWS

(RENI11)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 1.433 FO = 110.080 TO = 1314.300 HO = 321.210

SECTION ( 1) WINDOW

DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

X/L

.156	.4665		
.164	.4506		
.168	.4113		
.170		.5639	
.178			.5743
.182	.2829	.3176	.4308
.185			.2970
.191			.2362
.200		.1481	

ARC 3.5-185 IH20 01

CRB Z=8.379

(RENJ11) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = . -5.000 BETA = . .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0353  
 .400 .0064  
 .500 .0326  
 .600 .0199  
 .700 .0342

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0317  
 .400 .0058  
 .500 .0293  
 .600 .0178  
 .700 .0307

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0263  
 .400 .0048  
 .500 .0243  
 .600 .0148  
 .700 .0255

ARC 3.5-185 IH2D 01

ORB PHI=180

(RENK11) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

PHI 180.0000

## X/L

.010 .4925  
 .025 .2832  
 .050 .1878  
 .075 .1330  
 .100 .1152  
 .125 .0973  
 .150 .2137  
 .160 .7068  
 .170 .7270  
 .180 .6144  
 .200 .1380  
 .250 .0127  
 .300 .0039  
 .400 .0211  
 .500 .0561  
 .600 .0392  
 .700 .0556  
 .800 .0521

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

PHI 180.0000

## X/L

.010 .4411  
 .025 .2538  
 .050 .1685  
 .075 .1193  
 .100 .1034  
 .125 .0873  
 .150 .1918  
 .160 .6343  
 .170 .6523  
 .180 .5514  
 .200 .1240  
 .250 .0114

ARC 3.5-185 IH20 01

ORB PHI=180

(RENK11)

MACH ( 1) = 5.300 HAW/HT ( 2) = .900

SECTION ( 1)BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.300	.0035
.400	.0190
.500	.0503
.600	.0532
.700	.0499
.800	.0467

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1)BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.3649
.025	.2102
.050	.1397
.075	.0990
.100	.0858
.125	.0725
.150	.1592
.160	.5262
.170	.5411
.180	.4576
.200	.1030
.250	.0095
.300	.0029
.400	.0158
.500	.0417
.600	.0442
.700	.0414
.800	.0387



ARC 3.5-185 IH2D 01

OMS BOTTOM CREASE

(REN11) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

OMS 1.0000

X/L

.829 .0711  
 .900 .0939  
 .975 .0702

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

OMS 1.0000

X/L

.829 .0639  
 .900 .0845  
 .975 .0631

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

OMS 1.0000

X/L

.829 .0532  
 .900 .0704  
 .975 .0526

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ARC 3.5-185 IH20 O1

CRB Z=8.295

(REN11) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .3532  
 .805 .2406  
 .829 .1120  
 .862 .0594  
 .963 .0200  
 1.000 .0172  
 1.014 .0171

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .3172  
 .805 .2159  
 .829 .1006  
 .862 .0534  
 .963 .0180  
 1.000 .0154  
 1.014 .0153

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .2635  
 .805 .1792  
 .829 .0835  
 .862 .0444  
 .963 .0150  
 1.000 .0128  
 1.014 .0127

ARC 3.5-185 IH20 01

CRB PHI=130.

(RENN11) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .2704  
 .829 .1516  
 .862 .0598  
 .963 .0302

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .2428  
 .829 .1361  
 .862 .0537  
 .963 .0271

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .2015  
 .829 .1130  
 .862 .0447  
 .963 .0226

ARC 3.5-185 IH20 01

OMS TOP

(RENO11) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .2868  
 .829 .1561  
 .862 .0511  
 .963 .0339

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .2576  
 .829 .1401  
 .862 .0459  
 .963 .0305

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .2139  
 .829 .1163  
 .862 .0381  
 .963 .0254

ARC 3.5-185 IH20 01

CMS INSIDE

(RENFI1) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L  
 .862 .0626  
 .963 .0825

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L  
 .862 .0563  
 .963 .0741

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L  
 .862 .0468  
 .963 .0617

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ARC 3.5-185 IH2D 01

CRB Y=1.75

(RENG11) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1) = 5.300 HAW/HT ( 1) = .850 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0298  
 1.050 .0182

MACH ( 1) = 5.300 HAW/HT ( 2) = .900 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0267  
 1.050 .0163

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0222  
 1.050 .0135

ARC 3.5-185 IH2D 01

BOTTOM RCS

(RENR11) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0105  
 1.014 .0120

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0095  
 1.014 .0108

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0079  
 1.014 .0090

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ARC 3.5-185 IH20 01

CRB Z=8.75

(RENU11) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0253  
 1.014 .0206

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0227  
 1.014 .0185

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0189  
 1.014 .0154



ARC 3.5-185 IH2D 01

VERTICAL TAIL

(RENV11) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

## SECTION ( 1 ) TAIL DEPENDENT VARIABLE H/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.4618	.5759	.0000	.8227
.100	.0889	.0942	.1386	.1748	.2881
.300	.1282	.0336	.0591	.0826	
.500		.1718	.0286	.0553	.0000
.700	.0280	.0530	.0127	.0149	
.900		.0453	.0288	.0000	

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

## SECTION ( 1 ) TAIL DEPENDENT VARIABLE H/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.4147	.5170	.0000	.7379
.100	.0799	.0846	.1245	.1569	.2586
.300	.1153	.0302	.0531	.0742	
.500		.1544	.0257	.0497	.0000
.700	.0252	.0477	.0114	.0134	
.900		.0407	.0259	.0000	

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

## SECTION ( 1 ) TAIL DEPENDENT VARIABLE H/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.3444	.4293	.0000	.6118
.100	.0664	.0702	.1034	.1303	.2145
.300	.0958	.0251	.0441	.0616	
.500		.1284	.0213	.0413	.0000
.700	.0210	.0397	.0095	.0111	
.900		.0339	.0215	.0000	



ARC 3.5-185 IH20 01

WING BOTTOM SURF.

(RENW11)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) WING	DEPENDENT VARIABLE H/HO											
2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.177					.0279							
.200				.0143	.0349							
.299	.0032											
.300					.0243	.0253		.0530	.0621	.0771		
.302				.0064								
.303							.0392					
.428						.0291						
.444	.0048											
.487					.0249							
.500							.0341	.0602		.0657		
.559				.0033								
.590	.0074											
.600					.0244	.0198			.0245			
.700				.0046	.0191	.0126	.0124				.0282	
.736	.0205											
.800						.0076	.0121					
.850						.0088	.0126					
.900	.0223			.0063	.0058	.0079	.0099				.0201	

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) WING	DEPENDENT VARIABLE H/HO											
2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.000						.4110		.0974			.0827	.0375
.005		.0310	.0424		.2604	.2820				.1062		
.025	.0571			.1252	.1583	.2323						
.050										.0915		
.100				.0276		.0479	.0601	.0837		.0907		
.153	.0066											
.177					.0232							
.200				.0119	.0290							
.299	.0026											
.300					.0202	.0211		.0439	.0514	.0639		
.302				.0053								
.303							.0325					
.428						.0242						
.444	.0040											
.487					.0207							
.500							.0283	.0500		.0545		
.559				.0027								
.590	.0061											
.600					.0203	.0164			.0203			

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ARC 3.5-185 IH20 01

WING BOTTOM SURF.

(RENW11)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.700				.0039	.0158	.0105	.0103			.0234		
.736	.0171											
.800						.0063	.0100					
.850						.0073	.0105					
.900	.0185			.0052	.0048	.0066	.0082			.0166		

ARC 3.5-185 IH20 01

WING UPPER SURF.

(RENX11) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

## X/C

.050	.2153	.2701	.3744
.200	.0593	.0685	.0952
.600	.0056	.0117	.0194
.800		.0057	.0159
.900		.0088	.0173
.950	.0130	.0014	.0160

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

## X/C

.050	.1932	.2425	.3360
.200	.0533	.0616	.0856
.600	.0050	.0105	.0174
.800		.0052	.0143
.900		.0079	.0155
.950	.0116	.0012	.0143

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

## X/C

.050	.1604	.2014	.2788
.200	.0443	.0512	.0711
.600	.0042	.0088	.0145
.800		.0043	.0119
.900		.0066	.0129
.950	.0097	.0010	.0119

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ARC 3.5-185 IH20 01

CLUSTERS B AND C

(RENY11) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000 .5526 .1307  
 .050 .3101 .2237  
 .100 .3124 .1692  
 .150 .2410 .1208  
 .200 .1730 .0931  
 .250 .1437 .0620  
 .300 .0928 .0538

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000 .4957 .1173  
 .050 .2781 .2007  
 .100 .2802 .1518  
 .150 .2162 .1084  
 .200 .1552 .0835  
 .250 .1289 .0557  
 .300 .0833 .0483

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000 .4110 .0974  
 .050 .2306 .1664  
 .100 .2324 .1259  
 .150 .1793 .0899  
 .200 .1288 .0693  
 .250 .1070 .0462  
 .300 .0692 .0401

ARC 3.5-185 IH20 01

ORBITER BODY

(RENZ11) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/H0									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0470	.0192	.0124	.0069	.0057					
.238					.0018					
.254				.0076						
.278			.0196							
.281		.0240								
.474			.0137							
.477					.0092					
.499	.0666									
.510				.0118						
.555		.0310								
.672				.0122						
.696	.0652									
.713					.0081					
.728			.0192							
.746		.0401								
.780				.0138						
.882					.0074					
.890					.0175					
1.002			.0265							
1.003					.0114					
1.087									.0509	
1.155			.0319							
1.182		.0517								
1.201				.0288						
1.230	.0946									
1.326								.0550		
1.364					.0066					
1.444									.0563	
1.458								.0576		
1.459					-.0026					
1.554	.0965				.0070					
1.606								.0688		
1.608			.0242							
1.649				.0089						
1.750						.0491				
1.896								.0939		
1.933									.0702	
1.975					.0352					

ARC 3.5-105 IH20 01

ORBITER BODY

(RENZ11)

MACH ( 1) = 5.300 HAW/HT( 1) = .850

SECTION ( 1)BODY		DEPENDENT VARIABLE H/H0								
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
2.116				.0277						
2.316					.0254					
2.360	.1616									
2.497						.0315				
2.593						.0001				
2.630		.1177								
2.640						.0179				
2.735							.0378			
2.766				.1981						
2.883					.0353					
3.062						.0199				
3.168	.1878									
3.308			.2137							
3.351		.1152								
3.372							.0455			
3.540				.1380						
3.649					.0039					
3.844						.0592				

MACH ( 1) = 5.300 HAW/HT( 2) = .900 RN/L = 1.433 PO = 118.080 TO = 1314.300 HO = 321.210

SECTION ( 1)BODY		DEPENDENT VARIABLE H/H0								
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0421	.0172	.0111	.0062	.0051					
.238					.0016					
.254				.0068						
.278			.0176							
.281		.0216								
.474			.0123							
.477					.0082					
.499	.0597									
.510				.0106						
.555		.0278								
.672				.0110						
.696	.0585									
.713					.0073					
.728			.0172							
.746		.0359								
.780				.0124						
.882					.0067					
.890				.0157						
1.002			.0238							



DATE 28 APR 75

TABULATED SOURCE DATA - IH20

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ARC 3.5-185 IH20 01

ORBITER BODY

(RENZ11)

MACH ( 1) = 5.300 HAW/HT ( 2) = .900

SECTION ( 1)BODY	DEPENDENT VARIABLE H/H0									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
1.003					.0102					
1.087									.0456	
1.155			.0286							
1.182		.0465								
1.201				.0259						
1.230	.0849									
1.326								.0495		
1.364					.0059					
1.444									.0504	
1.458								.0517		
1.459					-.0023					
1.554	.0865				.0063					
1.606								.0617		
1.608				.0217						
1.649					.0080					
1.750						.0442				
1.896								.0845		
1.933									.0631	
1.975						.0316				
2.116				.0248						
2.316					.0228					
2.360	.1449									
2.497						.0282				
2.593						.0001				
2.630		.1056								
2.640						.0161				
2.735							.0340			
2.766				.1781						
2.883					.0317					
3.062						.0178				
3.168	.1685									
3.308		.1918								
3.331		.1034								
3.372								.0410		
3.540				.1240						
3.649					.0035					
3.844						.0532				

ARC 3.5-185 IH2D 01

ORBITER BODY

(RENZ11)

MACH ( 1 ) = 5.300 HAW/HT( 3 ) = 1.000 RN/L = 1.433 FO = 118.080 TO = 1314.300 HO = 321.210

SECTION, ( 1 ) BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0349	.0143	.0092	.0051	.0042					
.238					.0014					
.254				.0057						
.278			.0146							
.281		.0179								
.474			.0102							
.477					.0068					
.499	.0496									
.510				.0088						
.555		.0230								
.672				.0091						
.696	.0485									
.713					.0061					
.728			.0143							
.746		.0298								
.780				.0103						
.882					.0055					
.890				.0130						
1.002			.0198							
1.003					.0084					
1.087									.0378	
1.155			.0237							
1.182		.0386								
1.201				.0214						
1.230	.0705									
1.326								.0412		
1.364					.0049					
1.444									.0418	
1.458								.0428		
1.459					.0019					
1.554	.0717				.0052					
1.606								.0511		
1.608				.0180						
1.649					.0066					
1.750						.0369				
1.896								.0704		
1.933									.0526	
1.975						.0262				
2.116				.0208						
2.316					.0190					
2.360	.1200									
2.497						.0234				
2.593						.0001				
2.630		.0876								
2.640						.0134				

ARC 3.5-185 IH2D\_O1

CRBITER BODY

(RENZ11)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
2.735							.0283			
2.766				.1481						
2.883					.0263					
3.062						.0148				
3.168	.1397									
3.308			.1592							
3.351		.0858								
3.372							.0341			
3.540				.1030						
3.649					.0029					
3.844						.0442				

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ARC 3.5-185 IH20 01

CRB PHI=0.0

(RENA12) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMPF = .0000 IN.  
 LREF = 1290.3000 IN. YMPF = .0000 IN.  
 BREF = 1290.3000 IN. ZMPF = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.7427
.005	.4923
.010	.3172
.020	.1273
.030	.0862
.040	.0635
.050	.0470
.060	.0340
.070	.0281
.080	.0241
.090	.0205
.100	.0171
.120	.0138
.130	.0118
.140	.0105
.150	.0092
.160	.0084
.170	.0080
.180	.0075
.190	.0076
.200	.0061
.225	.0043
.250	.0051
.275	.0069
.300	.0093
.325	.0138
.350	.0166
.375	.0248
.400	.0316
.425	.0337
.450	.0359
.475	.0368
.500	.0361
.525	.0379
.550	.0380
.575	.0383
.600	.0379
.625	.0401

ARC 3.5-185 IH20 01

CRB PHI=0.0

(RENA12)

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.650	.0380
.675	.0372
.700	.0361
.725	.0364
.750	.0351
.775	.0339
.800	.0366
.825	.0350
.850	.0346
.875	.0299
.900	.0274
.925	.0252
.950	.0220
.975	.0211
1.000	.0211
1.013	.0000
1.025	.0193
1.038	.0000
1.050	.0185

MACH ( 1 ) \* 5.300 HAW/HT ( 2 ) \* .800 RN/L \* 4.958 PO \* 405.990 TO \* 1308.400 HD \* 319.660

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.6625
.005	.4394
.010	.2832
.020	.1137
.030	.0770
.040	.0568
.050	.0421
.060	.0305
.070	.0251
.080	.0216
.090	.0184
.100	.0153
.120	.0124
.130	.0106
.140	.0094
.150	.0082
.160	.0076
.170	.0072

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ARC 3.5-185 IH2D 01

CRB FHI=0.0

(RENA12)

MACH ( 1) = 5.300 HAW/HT( 2) = .900

SECTION ( 1)BOCY

DEPENDENT VARIABLE H/HO

FHI .0000

X/L

.180	.0067
.190	.0068
.200	.0055
.225	.0038
.250	.0046
.275	.0062
.300	.0083
.325	.0123
.350	.0149
.375	.0223
.400	.0284
.425	.0302
.450	.0322
.475	.0330
.500	.0324
.525	.0340
.550	.0341
.575	.0344
.600	.0340
.625	.0359
.650	.0341
.675	.0333
.700	.0324
.725	.0327
.750	.0315
.775	.0304
.800	.0328
.825	.0313
.850	.0311
.875	.0268
.900	.0246
.925	.0226
.950	.0198
.975	.0189
1.000	.0190
1.013	.0000
1.025	.0173
1.038	.0000
1.050	.0166

ARC 3.5-185 IH20 01

CRB PHI=0.0

(RENA12)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1) BODY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.5448
.005	.3616
.010	.2333
.020	.0938
.030	.0635
.040	.0470
.050	.0347
.060	.0252
.070	.0208
.080	.0179
.090	.0152
.100	.0127
.120	.0102
.130	.0088
.140	.0078
.150	.0068
.160	.0063
.170	.0059
.180	.0056
.190	.0056
.200	.0046
.225	.0032
.250	.0038
.275	.0051
.300	.0069
.325	.0102
.350	.0123
.375	.0184
.400	.0236
.425	.0250
.450	.0267
.475	.0274
.500	.0269
.525	.0282
.550	.0283
.575	.0285
.600	.0282
.625	.0298
.650	.0283
.675	.0276
.700	.0269
.725	.0271
.750	.0262
.775	.0252
.800	.0273

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC 3.5-185 IH20 01

CRB PHI=0.0

(RENA12)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000

SECTION ( 1) BODY

DEPENDENT VARIABLE H/H0

PHI .0000

X/L

.825	.0260
.850	.0258
.875	.0222
.900	.0204
.925	.0187
.950	.0164
.975	.0157
1.000	.0158
1.013	.0000
1.025	.0144
1.038	.0000
1.050	.0138



ARC 3.5-185 IH2D 01

CRB Y=0.875

(RENC12) ( 07 APR 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0112  
 .300 .0383  
 .400 .0422  
 .500 .0454  
 .600 .0452  
 .700 .0450  
 .800 .0413  
 .900 .0287

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0101  
 .300 .0344  
 .400 .0379  
 .500 .0408  
 .600 .0406  
 .700 .0405  
 .800 .0371  
 .900 .0258

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0083  
 .300 .0286  
 .400 .0315  
 .500 .0340  
 .600 .0338  
 .700 .0337

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OF POOR QUALITY

ARC 3.5-185 IH2D O1

ORB Y=0.875

(RENC12)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

Y .8750

X/L

.800 .0309

.900 .0215

ARC 3.5-185 IH20 01

ORB C.C.L.TANGENT

(REND12) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0461  
 .100 .0372  
 .150 .0159  
 .200 .0106

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0413  
 .100 .0334  
 .150 .0143  
 .200 .0095

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0341  
 .100 .0276  
 .150 .0118  
 .200 .0079

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ARC 3.5-185 IH2D 01

CRB M.H.B.TANGENT

(RENE12) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0888  
 .100 .0495  
 .150 .0292

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0796  
 .100 .0444  
 .150 .0262

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0658  
 .100 .0369  
 .150 .0217

ARC 3.5-185 IH2D 01

ORB Z=6.125

(RENF12) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Z 6.1250

## X/L

.076 .0673  
 .300 .0521  
 .800 .0388  
 .900 .0574  
 .975 .0671

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Z 6.1250

## X/L

.076 .0604  
 .300 .0468  
 .800 .0348  
 .900 .0515  
 .975 .0601

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Z 6.1250

## X/L

.076 .0501  
 .300 .0389  
 .800 .0289  
 .900 .0427  
 .975 .0498

ARC 3.5-185 IH2D 01

WING UPPER CREASE

(RENG12) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0719  
 .500 .0343  
 .600 .0712  
 .700 .0487  
 .900 .0820

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0647  
 .500 .0308  
 .600 .0638  
 .700 .0437  
 .900 .0735

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0539  
 .500 .0253  
 .600 .0529  
 .700 .0362  
 .900 .0608

ARC 3.5-185 IH20 01

CRB Z=7.525

(RENH12) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0282  
 .400 .0565  
 .500 .0645  
 .600 .0729  
 .700 .0643  
 .800 .0624

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0253  
 .400 .0508  
 .500 .0579  
 .600 .0655  
 .700 .0577  
 .800 .0560

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0210  
 .400 .0423  
 .500 .0481  
 .600 .0544  
 .700 .0479  
 .800 .0465

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ARC 3.5-185 IH2D 01

CRB WINDOWS

(RENI12) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

## SECTION ( 1 ) WINDOW

## DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

## X/L

.156	.9616		
.164	.7224		
.168	.6275		
.170		1.0022	
.178			1.0170
.182	.4251	.5694	.7346
.185			.5527
.191			.4687
.200		.2906	

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

## SECTION ( 1 ) WINDOW

## DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

## X/L

.156	.8608		
.164	.6467		
.168	.5618		
.170		.8978	
.178			.9096
.182	.3808	.5104	.6574
.185			.4948
.191			.4199
.200		.2609	



DATE 28 APR 75

TABULATED SOURCE DATA - IH2D

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ARC 3.5-185 IH2D 01

ORB WINDOWS

(RENI12)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) WINDOW

DEPENDENT VARIABLE H/HO

Z	7.9100	8.1370	8.3650
X/L			
.156	.7116		
.164	.5347		
.168	.4645		
.170		.7429	
.178			.7511
.182	.3151	.4227	.5432
.185			.4991
.191			.3476
.200		.2167	

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC 3.5-185 IH2D 01

ORB Z=8.379

(RENJ12) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0544  
 .400 .0488  
 .500 .0704  
 .600 .0677  
 .700 .0659

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0488  
 .400 .0438  
 .500 .0632  
 .600 .0607  
 .700 .0591

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0404  
 .400 .0363  
 .500 .0524  
 .600 .0504  
 .700 .0491

ARC 3.5-185 IH20 01

CRB FHI=180

(RENK12) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

FHI 180.0000

X/L

.010	.4743
.025	.2715
.050	.1897
.075	.1429
.100	.1336
.125	.1336
.150	.3901
.160	.9615
.170	.9740
.180	.8003
.200	.1840
.250	.0139
.300	.0037
.400	.0794
.500	.0854
.600	.0775
.700	.0712
.800	.0844

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

FHI 180.0000

X/L

.010	.4234
.025	.2427
.050	.1698
.075	.1280
.100	.1197
.125	.1197
.150	.3495
.160	.8610
.170	.8720
.180	.7167
.200	.1651
.250	.0125

ARC 3.5-185 IH20 01

CRB FHI=180

(RENK12)

MACH ( 1) = 5.300 HAW/HT ( 2) = .900

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

FHI 180.0000

X/L

.300	.0034
.400	.0714
.500	.0767
.600	.0697
.700	.0639
.800	.0757

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

FHI 180.0000

X/L

.010	.3485
.025	.2001
.050	.1403
.075	.1060
.100	.0991
.125	.0992
.150	.2893
.160	.7122
.170	.7209
.180	.5929
.200	.1370
.250	.0104
.300	.0028
.400	.0594
.500	.0637
.600	.0579
.700	.0531
.800	.0628

ARC 3.5-185 IH2D 01

OMS BOTTOM CREASE

(REN12) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

OMS 1.0000

X/L

.829 .0774  
 .900 .1081  
 .975 .0920

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

OMS 1.0000

X/L

.829 .0693  
 .900 .0969  
 .975 .0825

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

OMS 1.0000

X/L

.829 .0573  
 .900 .0803  
 .975 .0683

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ARC 3.5-185 IH2D 01

ORB Z=8.295

(REN12) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .3582  
 .805 .2854  
 .829 .1666  
 .862 .0985  
 .963 .0688  
 1.000 .0783  
 1.014 .0684

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .3207  
 .805 .2550  
 .829 .1489  
 .862 .0882  
 .963 .0617  
 1.000 .0701  
 1.014 .0612

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .2653  
 .805 .2102  
 .829 .1228  
 .862 .0729  
 .963 .0511  
 1.000 .0579  
 1.014 .0505

ARC 3,5-185 IH2D 01

CRB PHI=130.

(RENN12) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .4132  
 .829 .2419  
 .862 .0836  
 .963 .0811

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .3691  
 .829 .2162  
 .862 .0748  
 .963 .0727

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .3042  
 .829 .1762  
 .862 .0618  
 .963 .0602

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ARC 3.5-185 IH20 01

CMS TOP

(RENO12) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

## SECTION ( 1 ) OMS

## DEPENDENT VARIABLE H/HO

Y 1.6620

## X/L

.805 .4483  
 .829 .2401  
 .862 .0739  
 .963 .0630

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

## SECTION ( 1 ) OMS

## DEPENDENT VARIABLE H/HO

Y 1.6620

## X/L

.805 .4006  
 .829 .2145  
 .862 .0661  
 .963 .0564

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

## SECTION ( 1 ) OMS

## DEPENDENT VARIABLE H/HO

Y 1.6620

## X/L

.805 .3303  
 .829 .1768  
 .862 .0546  
 .963 .0466



ARC 3.5-185 IH20 01

OMS INSIDE

(REN12) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRF = .0000 IN.  
 LREF = 1290.3000 IN. YMRF = .0000 IN.  
 BREF = 1290.3000 IN. ZMRF = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) OMS DEPENDENT VARIABLE H/HO

Y 1.1380

X/L  
 .862 .1018  
 .963 .1005

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) OMS DEPENDENT VARIABLE H/HO

Y 1.1380

X/L  
 .862 .0911  
 .963 .0900

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) OMS DEPENDENT VARIABLE H/HO

Y 1.1380

X/L  
 .862 .0752  
 .963 .0744

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ARC 3:5-185 IH2D 01

CRB Y=1.75

(RENG12) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0189

1.050 .0120

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0170

1.050 .0108

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0141

1.050 .0089

ARC 3.5-185 IH2D 01

BOTTOM RCS

(RENR12) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0121

1.014 .0174

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0108

1.014 .0156

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0089

1.014 .0129

ARC 3.5-185 IH20 01

ORB Z=8.75

(RENU12) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.7500

X/L  
 1.000 .0675  
 1.014 .0604

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.7500

X/L  
 1.000 .0604  
 1.014 .0541

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.7500

X/L  
 1.000 .0499  
 1.014 .0446

ARC 3.5-185 IH20 01

WING BOTTOM SURF.

(RENW12) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT., XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.000						.7899		.1134			.1268	.0512
.005		.0387	.0711		.4865	.4614				.1752		
.025	.0878			.1709	.2800	.3762						
.050										.1358		
.100				.0309		.0712	.0817	.1399		.1256		
.153	.0061											
.177					.0312							
.200				.0120		.0452						
.299	.0020											
.300					.0311	.0536		.0792	.0872	.0952		
.302				.0068								
.303						.0554						
.428						.0871						
.444	.0053											
.487					.0523							
.500							.1121	.1186		.1112		
.559				.0131								
.590	.0212											
.600					.0472	.0588			.0620			
.700				.0226	.0325	.0385	.0416				.0465	
.736	.0518											
.800						.0197	.0288					
.850						.0206	.0311					
.900	.0217			.0146	.0101	.0149	.0210				.0328	

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.000						.7057		.1015			.1130	.0457
.005		.0347	.0638		.4349	.4128				.1563		
.025	.0789			.1531	.2503	.3365						
.050										.1211		
.100				.0277		.0636	.0731	.1250		.1120		
.153	.0055											

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ARC 3.5-185 IH20 01

WING BOTTOM SURF.

(RENW12)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.177					.0279							
.200				.0108	.0405							
.299	.0018											
.300					.0279	.0480		.0708	.0778	.0848		
.302				.0061								
.303							.0496					
.428						.0781						
.444	.0048											
.487					.0469							
.500							.1003	.1059		.0991		
.559				.0118								
.590	.0190											
.600					.0423	.0527			.0554			
.700				.0203	.0292	.0345	.0373			.0415		
.736	.0466											
.800						.0177	.0258					
.850						.0184	.0279					
.900	.0195			.0131	.0091	.0134	.0188			.0292		

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.000						.5817		.0838			.0928	.0375
.005		.0288	.0530		.3588	.3409				.1286		
.025	.0655			.1260	.2064	.2779						
.050										.0995		
.100				.0229		.0525	.0604	.1030		.0921		
.153	.0046											
.177					.0231							
.200				.0089	.0335							
.299	.0015											
.300					.0231	.0398		.0583	.0639	.0696		
.302				.0051								
.303							.0410					
.428						.0647						
.444	.0040											
.487					.0389							
.500							.0829	.0872		.0814		
.559				.0098								
.590	.0158											
.600					.0350	.0436			.0456			

ARC 3.5-185 IH20 Q1

WING BOTTOM SURF.

(REMW12)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

ZY/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.700				.0169	.0242	.0286	.0308			.0342		
.756	.0388											
.800						.0147	.0214					
.850						.0153	.0231					
.900	.0162			.0109	.0075	.0110	.0155			.0240		

ARC 3.5-185 IH2D O1

WING UPPER SURF.

(RENX12) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

## X/C

.050 .3928 .5322 .7980  
 .200 .1230 .1730 .2662  
 .600 .0102 .0297 .0592  
 .800 .0149 .0516  
 .900 .0253 .0594  
 .950 .0262 .0133 .0641

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

## X/C

.050 .3505 .4756 .7128  
 .200 .1102 .1551 .2383  
 .600 .0092 .0267 .0522  
 .800 .0134 .0463  
 .900 .0226 .0532  
 .950 .0235 .0120 .0574

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

## X/C

.050 .2885 .3922 .5873  
 .200 .0911 .1285 .1971  
 .600 .0076 .0221 .0433  
 .800 .0111 .0383  
 .900 .0188 .0440  
 .950 .0195 .0099 .0475



ARC 3.5-185 IH20 01

CLUSTERS B AND C

(RENY12) ( 07 APR 75 )

REFERENCE DATA

SREF = 2690.0000 Sq.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) WING DEPENDENT VARIABLE H/HO

ZY/B .6000 .8500

S

.000 .7899 .1134  
 .050 .5473 .2923  
 .100 .3899 .2124  
 .150 .3310 .1566  
 .200 .2293 .1156  
 .250 .2030 .0735  
 .300 .1250 .0617

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) WING DEPENDENT VARIABLE H/HO

ZY/B .6000 .8500

S

.000 .7057 .1015  
 .050 .4889 .2612  
 .100 .3483 .1898  
 .150 .2957 .1400  
 .200 .2048 .1033  
 .250 .1815 .0657  
 .300 .1118 .0551

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) WING DEPENDENT VARIABLE H/HO

ZY/B .6000 .8500

S

.000 .5817 .0838  
 .050 .4028 .2154  
 .100 .2670 .1565  
 .150 .2437 .1154  
 .200 .1688 .0851  
 .250 .1497 .0542  
 .300 .0922 .0455

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ARC 3.5-185 IH20 01

ORBITER BODY

(RENZ12) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
.000	.0470	.0171	.0092	.0061	.0093				
.238					-.0055				
.254				.0001					
.278			.0181						
.281		.0172							
.474			-.0026						
.477					.0383				
.499	.0588								
.510				.0112					
.555		.0288							
.672				.0106					
.696	.0461								
.713					.0070				
.728			.0159						
.746		.0372							
.780				.0107					
.882					.0076				
.890				.0143					
1.002			.0371						
1.003					.0123				
1.087								.0788	
1.155			.0292						
1.182		.0495							
1.201				.0293					
1.230	.0888								
1.326							.0820		
1.364				.0475					
1.444								.0671	
1.458							.0574		
1.459					.0446				
1.554	.0935				.0521				
1.606							.0734		
1.608			.0994						
1.649				.0455					
1.750					.0712				
1.896							.1081		
1.933								.0920	
1.975					.0328				

ARC 3.5-185 IH2D 01

ORBITER BODY

(RENZ12)

HACH ( 1) = 5.300 HAW/HT ( 1) = .850

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
2.116				.1239					
2.316					.0282				
2.360	.1661								
2.497						.0729			
2.593						-.0001			
2.630		.1948							
2.640						.0618			
2.735							.0717		
2.766				.2906					
2.883					.0544				
3.062						.0677			
3.168	.1897								
3.308			.3901						
3.351		.1336							
3.372							.0750		
3.540				.1840					
3.649					.0037				
3.844						.0775			

HACH ( 1) = 5.300 HAW/HT ( 2) = .900 RN/L = 4.958 FO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
.000	.0421	.0153	.0082	.0055	.0083				
.238					-.0049				
.254				.0001					
.278			.0163						
.281		.0155							
.474			-.0023						
.477					.0344				
.499	.0526								
.510				.0101					
.555		.0258							
.672				.0095					
.696	.0413								
.713					.0063				
.728			.0143						
.746		.0334							
.780				.0096					
.882					.0068				
.890				.0129					
1.002			.0333						

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ARC 3.5-185 IH20 01

ORBITER BODY

(RENZ12)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 )	BODY									DEPENDENT VARIABLE H/HO
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
1.093					.0110					
1.087									.0706	
1.155			.0262							
1.182		.0444								
1.201				.0262						
1.230	.0796									
1.326								.0735		
1.364					.0426					
1.444									.0601	
1.458								.0515		
1.459					.0400					
1.554	.0837				.0468					
1.606								.0659		
1.608				.0892						
1.649					.0408					
1.750						.0638				
1.896								.0969		
1.933									.0825	
1.975						.0295				
2.116				.1112						
2.316					.0253					
2.360	.1485									
2.497						.0655				
2.593						.0001				
2.630		.1746								
2.640						.0554				
2.735							.0643			
2.766				.2609						
2.883					.0488					
3.062						.0607				
3.168	.1698									
3.308			.3495							
3.351		.1197								
3.372							.0672			
3.540				.1651						
3.649					.0034					
3.844						.0697				

ARC 3.5-185 IH2D O1

ORBITER BODY

(RENZ12)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1) BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0347	.0127	.0068	.0046	.0069					
.238					-.0041					
.254				.0001						
.278			.0135							
.281		.0128								
.474			-.0019							
.477					.0286					
.499	.0436									
.510				.0083						
.555		.0214								
.672				.0079						
.696	.0341									
.713					.0052					
.728			.0118							
.746		.0276								
.780				.0080						
.882					.0056					
.890				.0107						
1.002			.0276							
1.003					.0091					
1.087									.0584	
1.155			.0217							
1.182		.0369								
1.201				.0218						
1.230	.0658									
1.326							.0608			
1.364					.0354					
1.444								.0498		
1.458							.0427			
1.459					.0332					
1.554	.0691				.0389					
1.606							.0546			
1.608				.0740						
1.649					.0339					
1.750						.0529				
1.896							.0803			
1.933								.0683		
1.975						.0245				
2.116			.0923							
2.316				.0210						
2.360	.1226									
2.497						.0544				
2.593						-.0001				
2.630		.1446								
2.640						.0459				

ARC 3.5-185 IH20 01

ORBITER BODY

(RENZ12)

MACH ( 1) = 5.300 HAW/HT( 3) = 1.000

SECTION ( 1)BODY	DEPENDENT VARIABLE H/H0									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
2.735							.0532			
2.766				.2167						
2.883					.0404					
3.062						.0504				
3.168	.1403									
3.308			.2893							
3.351		.0991								
3.372							.0556			
3.540				.1370						
3.649					.0028					
3.844						.0579				

ARC 3,5-185 IH2D 01

CRB Y=0.438

(RENB12) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0588  
 .200 .0000  
 .300 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0526  
 .200 .0000  
 .300 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0436  
 .200 .0000  
 .300 .0000

ARC 3.5-185 IH20 Q1

VERTICAL TAIL

(RENV12) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .4175 .4599 .0000 .9420  
 .100 .0962 .0938 .1446 .1926 .3586  
 .300 .1695 .0780 .0778 .1053  
 .500 .1968 .0638 .0800 .0000  
 .700 .0207 .0599 .0262 .0172  
 .900 .0608 .0552 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .3732 .4105 .0000 .8413  
 .100 .0861 .0839 .1292 .1720 .3206  
 .300 .1517 .0698 .0696 .0941  
 .500 .1762 .0571 .0715 .0000  
 .700 .0185 .0537 .0235 .0154  
 .900 .0544 .0494 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.958 PO = 405.590 TO = 1308.400 HO = 319.660

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .3078 .3380 .0000 .6931  
 .100 .0711 .0693 .1065 .1416 .2646  
 .300 .1253 .0577 .0575 .0775  
 .500 .1458 .0473 .0590 .0000  
 .700 .0153 .0445 .0194 .0127  
 .900 .0450 .0408 .0000



DATE 28 APR 75

TABULATED SOURCE DATA - IH2D

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ARC 3.5-185 IH2D 01

CRB PHI=0.0

(RENA13) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 )BC0Y

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.7598
.005	.5608
.010	.3966
.020	.1915
.030	.1367
.040	.1058
.050	.0825
.060	.0629
.070	.0538
.080	.0479
.090	.0424
.100	.0376
.120	.0357
.130	.0313
.140	.0326
.150	.0316
.160	.0347
.170	.0348
.180	.0383
.190	.0429
.200	.0369
.225	.0376
.250	.0459
.275	.0000
.300	.0519
.325	.0745
.350	.0516
.375	.0776
.400	.0654
.425	.0721
.450	.0647
.475	.0708
.500	.0643
.525	.0669
.550	.0652
.575	.0677
.600	.0675
.625	.0702

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ARC 3.5-185 IH2D 01

ORB PHI=0.0

(RENA13)

MACH ( 1) = 5.300 HAW/HT ( 1) = .850

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.650	.0658
.675	.0650
.700	.0630
.725	.0628
.750	.0609
.775	.0592
.800	.0635
.825	.0625
.850	.0587
.875	.0533
.900	.0492
.925	.0464
.950	.0390
.975	.0381
1.000	.0382
1.013	.0000
1.025	.0349
1.038	.0000
1.050	.0331

MACH ( 1) = 5.300 HAW/HT ( 2) = .900 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.6759
.005	.4990
.010	.3530
.020	.1706
.030	.1222
.040	.0944
.050	.0738
.060	.0562
.070	.0482
.080	.0428
.090	.0380
.100	.0336
.120	.0319
.130	.0280
.140	.0291
.150	.0284
.160	.0311
.170	.0312

ARC 3.5-185 IH20 01

ORB PHI=0.0

(RENA13)

MACH ( 1) = 5.300 HAW/HT ( 2) = .900

SECTION ( 1) BODY DEPENDENT VARIABLE H/H0

PHI .0000

X/L

.180	.0342
.190	.0385
.200	.0330
.225	.0337
.250	.0412
.275	.0000
.300	.0465
.325	.0668
.350	.0462
.375	.0695
.400	.0585
.425	.0646
.450	.0580
.475	.0635
.500	.0576
.525	.0600
.550	.0584
.575	.0607
.600	.0605
.625	.0630
.650	.0590
.675	.0583
.700	.0565
.725	.0563
.750	.0546
.775	.0531
.800	.0569
.825	.0561
.850	.0526
.875	.0478
.900	.0441
.925	.0416
.950	.0349
.975	.0342
1.000	.0342
1.013	.0000
1.025	.0313
1.038	.0000
1.050	.0296

ARC 3.5-185 IH2D 01

ORB PHI=0.0

(RENA13)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1) BODY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.5536
.005	.4089
.010	.2894
.020	.1400
.030	.1009
.040	.0776
.050	.0610
.060	.0463
.070	.0399
.080	.0353
.090	.0315
.100	.0278
.120	.0264
.130	.0232
.140	.0241
.150	.0235
.160	.0257
.170	.0259
.180	.0283
.190	.0319
.200	.0273
.225	.0280
.250	.0341
.275	.0000
.300	.0385
.325	.0553
.350	.0382
.375	.0576
.400	.0484
.425	.0536
.450	.0480
.475	.0526
.500	.0477
.525	.0497
.550	.0483
.575	.0503
.600	.0500
.625	.0522
.650	.0489
.675	.0483
.700	.0468
.725	.0467
.750	.0452
.775	.0440
.800	.0472

DATE 26 APR 75

TABULATED SOURCE DATA - IH2D

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ARC 3.5-185 IH2D 01

ORB PHI=0.0

(RENA13)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.825	.0465
.850	.0436
.875	.0396
.900	.0365
.925	.0345
.950	.0290
.975	.0283
1.000	.0284
1.013	.0000
1.025	.0259
1.038	.0000
1.050	.0245

ARC 3.5-185 IH2D 01

CRB Y=0.438

(RENB13) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .1090  
 .200 .0293  
 .300 .0365

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0973  
 .200 .0263  
 .300 .0327

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0801  
 .200 .0217  
 .300 .0271

ARC 3:5-185 IH20 Q1

ORB Y=0.875

(RENC13) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0367  
 .300 .0259  
 .400 .0299  
 .500 .0441  
 .600 .0533  
 .700 .0755  
 .800 .0794  
 .900 .0625

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0329  
 .300 .0233  
 .400 .0268  
 .500 .0396  
 .600 .0478  
 .700 .0677  
 .800 .0713  
 .900 .0561

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0272  
 .300 .0193  
 .400 .0222  
 .500 .0328  
 .600 .0396  
 .700 .0562

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ARC 3.5-185 IH20 01

ORB Y=0.875

(RENC13)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000

SECTION ( 1)BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.800 .0591

.900 .0465



ARC 3.5-185 IH20 01

CRB C.C.L.TANGENT

(REND13) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT( 1 ) = .850 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .1033  
 .100 .0749  
 .150 .0530  
 .200 .0462

MACH ( 1 ) = 5.300 HAW/HT( 2 ) = .900 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0922  
 .100 .0671  
 .150 .0475  
 .200 .0415

MACH ( 1 ) = 5.300 HAW/HT( 3 ) = 1.000 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0759  
 .100 .0556  
 .150 .0394  
 .200 .0344

ARC 3.5-185 IH20 01

CRB M.H.B.,TANGENT

(RENE13) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN. ALPHA = 5.000 BETA = .000  
 LREF = 1290.3000 IN. YMRP = .0000 IN. MACH = 5.300 RN/L = 5.000  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .1102  
 .100 .0754  
 .150 .0589

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0984  
 .100 .0675  
 .150 .0529

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0811  
 .100 .0558  
 .150 .0439

ARC 3.5-185 IH20 01

ORB Z=6.125

(RENFI3) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT( 1 ) = .850 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 6.1250

X/L  
 .076 .0624  
 .300 .0244  
 .800 .0218  
 .900 .0566  
 .975 .0463

MACH ( 1 ) = 5.300 HAW/HT( 2 ) = .900 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 6.1250

X/L  
 .076 .0560  
 .300 .0219  
 .800 .0196  
 .900 .0508  
 .975 .0415

MACH ( 1 ) = 5.300 HAW/HT( 3 ) = 1.000 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 6.1250

X/L  
 .076 .0464  
 .300 .0182  
 .800 .0162  
 .900 .0421  
 .975 .0343

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ARC 3.5-185 IH20 01

WING UPPER CREASE

(RENG13) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) WING DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0541  
 .500 .0210  
 .600 .0477  
 .700 .0305  
 .900 .0528

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) WING DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0485  
 .500 .0187  
 .600 .0426  
 .700 .0272  
 .900 .0471

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) WING DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0403  
 .500 .0154  
 .600 .0351  
 .700 .0224  
 .900 .0387

ARC 3.5-185 IH20 O1

ORB Z=7.525

(REN#13) ( 07 APR 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 7.5250

X/L  
 .300 .0473  
 .400 .0435  
 .500 .0487  
 .600 .0435  
 .700 .0316  
 .800 .0328

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 7.5250

X/L  
 .300 .0424  
 .400 .0390  
 .500 .0437  
 .600 .0390  
 .700 .0284  
 .800 .0295

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 7.5250

X/L  
 .300 .0351  
 .400 .0324  
 .500 .0363  
 .600 .0324  
 .700 .0235  
 .800 .0244

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 OF POOR QUALITY

ARC 3.5-185 IH20 01

ORB WINDOWS

(RENI13) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

## SECTION ( 1 ) WINDOW

## DEPENDENT VARIABLE H/H0

Z 7.9100 8.1370 8.3650

## X/L

.156	.6145		
.164	.5163		
.168	.4571		
.170		.7292	
.178			.7838
.182	.3004	.4027	.5840
.185			.4303
.191			.3487
.200		.1965	

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

## SECTION ( 1 ) WINDOW

## DEPENDENT VARIABLE H/H0

Z 7.9100 8.1370 8.3650

## X/L

.156	.5505		
.164	.4626		
.168	.4095		
.170		.6518	
.178			.7016
.182	.2693	.3601	.5230
.185			.3855
.191			.3126
.200		.1761	

DATE 26 APR 75

TABULATED SOURCE DATA - IH2D

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ARC 3.5-185 IH2D O1

ORB WINDOWS

(RENI13)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1) WINDOW

DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

X/L

.156	.4556		
.164	.3829		
.168	.3390		
.170		.5375	
.178			.5800
.182	.2231	.2973	.4326
.185			.3191
.191			.2590
.200		.1458	

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ARC 3.5-185 IH20 01

ORB Z=8.379

(RENJ13) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0297  
 .400 .0284  
 .500 .0386  
 .600 .0299  
 .700 .0315

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0266  
 .400 .0255  
 .500 .0346  
 .600 .0268  
 .700 .0283

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0221  
 .400 .0212  
 .500 .0287  
 .600 .0222  
 .700 .0234



ARC 3.5-185 IH2D 01

CRB PHI=180

(RENK13) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.3820
.025	.1933
.050	.1186
.075	.0858
.100	.0959
.125	.1195
.150	.2800
.160	.6679
.170	.7486
.180	.6284
.200	.1196
.250	.0156
.300	.0066
.400	.0106
.500	.0301
.600	.0364
.700	.0398
.800	.0511

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.3402
.025	.1724
.050	.1060
.075	.0768
.100	.0858
.125	.1070
.150	.2504
.160	.5971
.170	.6691
.180	.5621
.200	.1072
.250	.0140

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ARC 3.5-185 IH2D 01

CRB PHI=180

(RENK13.)

MACH ( 1) = 5.300 HAW/HT ( 2) = .900

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.300	.0059
.400	.0095
.500	.0270
.600	.0326
.700	.0357
.800	.0458

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.2791
.025	.1418
.050	.0874
.075	.0634
.100	.0708
.125	.0884
.150	.2068
.160	.4927
.170	.5518
.180	.4642
.200	.0887
.250	.0117
.300	.0049
.400	.0079
.500	.0224
.600	.0271
.700	.0297
.800	.0380

ARC 3.5-185 IH20 01

CMS BOTTOM CREASE

(REN13) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

CMS 1.0000

X/L

.829 .0558  
 .900 .0752  
 .975 .0571

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

CMS 1.0000

X/L

.829 .0497  
 .900 .0671  
 .975 .0509

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

CMS 1.0000

X/L

.829 .0408  
 .900 .0552  
 .975 .0419

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ARC 3,5-185 IH20 01

CRB Z=8.295

(RENM13) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .1055  
 .805 .1782  
 .829 .1419  
 .862 .1019  
 .963 .0729  
 1.000 .0781  
 1.014 .0650

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .0943  
 .805 .1590  
 .829 .1263  
 .862 .0908  
 .963 .0650  
 1.000 .0696  
 1.014 .0579

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .0777  
 .805 .1308  
 .829 .1033  
 .862 .0746  
 .963 .0533  
 1.000 .0572  
 1.014 .0475

ARC 3.5-185 IH20 Q1

CRB PHI=130.

(RENN13) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .2394  
 .829 .1735  
 .862 .0781  
 .963 .0527

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .2130  
 .829 .1544  
 .862 .0696  
 .963 .0470

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .1744  
 .829 .1265  
 .862 .0571  
 .963 .0387

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ARC 3.5-185 IH20 01

CMS TCF

(RENO13) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ:FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .2175  
 .829 .1352  
 .862 .0511  
 .963 .0465

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .1935  
 .829 .1203  
 .862 .0455  
 .963 .0415

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .1586  
 .829 .0986  
 .862 .0373  
 .963 .0341

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OF POOR QUALITY

ARC 3.5-185 IH20 01

CMS INSIDE

(RENF13) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) CMS DEPENDENT VARIABLE H/HO

Y 1.1380

X/L  
 .862 .0583  
 .963 .0505

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) CMS DEPENDENT VARIABLE H/HO

Y 1.1380

X/L  
 .862 .0519  
 .963 .0450

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) CMS DEPENDENT VARIABLE H/HO

Y 1.1380

X/L  
 .862 .0426  
 .963 .0370

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ARC 3.5-185 IH20 01

CRB Y=1.75

(REN213) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y 1.7500

X/L  
 1.000 .0508  
 1.050 .0460

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y 1.7500

X/L  
 1.000 .0455  
 1.050 .0412

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y 1.7500

X/L  
 1.000 .0377  
 1.050 .0341

ARC 3.5-185 IH20 01

BOTTOM RCS

(RENR13) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRF = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) RCS DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L  
 1.000 .0081  
 1.014 .0157

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) RCS DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L  
 1.000 .0072  
 1.014 .0140

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) RCS DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L  
 1.000 .0060  
 1.014 .0115

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ARC 3.5-185 IH20 01

ORB-2=8.75

(RENU13) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0544  
 1.014 .0515

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0485  
 1.014 .0459

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0399  
 1.014 .0376

ARC 3.5-185 IH2D 01

VERTICAL TAIL

(RENV13) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .3790 .3248 .0000 .5165  
 .100 .0974 .0893 .0933 .1139 .2094  
 .300 .1530 .0638 .0500 .0577  
 .500 .1307 .0358 .0404 .0000  
 .700 .0238 .0396 .0171 .0114  
 .900 .0301 .0378 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .3373 .2901 .0000 .4594  
 .100 .0867 .0795 .0834 .1018 .1865  
 .300 .1363 .0568 .0447 .0516  
 .500 .1165 .0320 .0362 .0000  
 .700 .0212 .0353 .0153 .0102  
 .900 .0268 .0338 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .2764 .2390 .0000 .3763  
 .100 .0712 .0652 .0688 .0840 .1529  
 .300 .1119 .0466 .0369 .0426  
 .500 .0957 .0265 .0299 .0000  
 .700 .0174 .0290 .0126 .0085  
 .900 .0220 .0279 .0000



ARC 3.5-185 IH20 01

WING BOTTOM SURF.

(REMW13)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.177					.1625							
.200				.1385	.1794							
.299	.0325											
.300					.1610	.1306		.1906	.1557	.0942		
.302				.1304								
.303							.1992					
.428						.1736						
.444	.0299											
.487					.1621							
.500							.1811	.2016		.1243		
.559				.1287								
.590	.0307											
.600					.1405	.1373			.0893			
.700				.1000	.1086	.0995	.0717			.0841		
.736	.1052											
.800						.0570	.0654					
.850						.0635	.0691					
.900	.0374			.0494	.0515	.0509	.0577			.0659		

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.000						.5999		.0898			.1154	.0357
.005		.0812	.0688		.5315		.3897			.1370		
.025	.0745			.3036	.3963		.3374					
.050										.1213		
.100				.1615		.1774	.1476	.1205		.1202		
.153	.0392											
.177					.1341							
.200				.1143		.1480						
.299	.0269											
.300					.1330	.1079		.1570	.1280	.0773		
.302				.1078								
.303							.1644					
.428						.1434						
.444	.0248											
.487					.1339							
.500							.1495	.1661		.1021		
.559				.1064								
.590	.0255											
.600					.1161	.1134			.0736			

ARC 3.5-185 IH20 01

WING BOTTOM SURF.

(RENW13)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) WING	DEPENDENT VARIABLE H/HO											
2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.700				.0827	.0897	.0822	.0593			.0693		
.736	.0871											
.800						.0469	.0539					
.850						.0523	.0568					
.900	.0309			.0408	.0426	.0420	.0476			.0542		

ARC 3.5-185 IH2D 01

WING UPPER SURF.

(RENX13) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) WING DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

X/C

.050 .3108 .3893 .3954  
 .200 .0462 .0918 .1289  
 .600 .0005 .0077 .0207  
 .800 .0034 .0136  
 .900 .0041 .0150  
 .950 .0053 .0027 .0164

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) WING DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

X/C

.050 .2761 .3475 .3514  
 .200 .0412 .0822 .1149  
 .600 .0004 .0069 .0185  
 .800 .0031 .0121  
 .900 .0037 .0134  
 .950 .0047 .0024 .0146

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) WING DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

X/C

.050 .2257 .2861 .2875  
 .200 .0338 .0679 .0943  
 .600 .0003 .0057 .0152  
 .800 .0025 .0100  
 .900 .0030 .0110  
 .950 .0039 .0020 .0120

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ARC 3.5-185 IH20 01

CLUSTERS B AND C

(RENY13) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000 .8176 .1219  
 .050 .8141 .2366  
 .100 .6065 .1940  
 .150 .5202 .1674  
 .200 .4290 .1361  
 .250 .3775 .1256  
 .300 .3192 .1099

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000 .7294 .1090  
 .050 .7262 .2111  
 .100 .5411 .1732  
 .150 .4642 .1494  
 .200 .3827 .1215  
 .250 .3369 .1118  
 .300 .2840 .0978

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

.000 .5999 .0898  
 .050 .5973 .1738  
 .100 .4450 .1425  
 .150 .3818 .1230  
 .200 .3149 .1000  
 .250 .2774 .0916  
 .300 .2328 .0802

ARC 3.5-185 IH20 01

CRBITER BODY

(RENZ13) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
.000	.0825	.0376	.0316	.0369	.0519				
.238					.0365				
.254				.0293					
.278			.0655						
.281	.0449								
.474			.0340						
.477					.0259				
.499	.1090								
.510				.0367					
.555		.0558							
.672				.0462					
.696	.1033								
.713					.0443				
.728			.0530						
.746	.0749								
.780				.0453					
.882					.0458				
.890					.0574				
1.002			.0575						
1.003					.0473				
1.087								.0415	
1.155			.0589						
1.182	.0754								
1.201			.0533						
1.230	.1102								
1.326							.0528		
1.364				.0405					
1.444								.0463	
1.458							.0566		
1.459					.0213				
1.554	.0951				.0244				
1.606							.0577		
1.608			.0374						
1.649				.0221					
1.750					.0477				
1.896							.0752		
1.933								.0571	
1.975					.0448				

ARC 3.5-185 IH20 01

ORBITER BODY

(RENZ13)

MACH ( 1) = 5.300 HAW/HT ( 1) = .850

SECTION ( 1)BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
2.116				.0312						
2.316					.0473					
2.360	.1219									
2.497						.0435				
2.593						-.0001				
2.630		.0880								
2.640						.0459				
2.735								.0281		
2.766				.1965						
2.883					.0297					
3.062						.0299				
3.168	.1186									
3.308			.2800							
3.351		.0959								
3.372							.0366			
3.540			.1196							
3.649					.0066					
3.844						.0364				

MACH ( 1) = 5.300 HAW/HT ( 2) = .900 RN/L = 5.061 PO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1)BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0738	.0336	.0284	.0330	.0465					
.238					.0327					
.254				.0263						
.278			.0587							
.281	.0401									
.474			.0304							
.477					.0233					
.499	.0973									
.510				.0329						
.555		.0500								
.672				.0415						
.696	.0922									
.713					.0398					
.728			.0475							
.746	.0671									
.780				.0406						
.882					.0410					
.890				.0515						
1.002			.0514							

ARC 3.5-105 IH20 01

ORBITER BODY

(RENZ13)

HACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
1.003					.0424					
1.087									.0372	
1.155			.0529							
1.182		.0675								
1.201				.0478						
1.230	.0984									
1.326								.0471		
1.364					.0364					
1.444									.0415	
1.458								.0508		
1.459					.0191					
1.554	.0852				.0219					
1.606								.0517		
1.608				.0336						
1.649					.0199					
1.750						.0426				
1.896								.0671		
1.933									.0509	
1.975						.0402				
2.116				.0280						
2.316					.0424					
2.360	.1092									
2.497						.0390				
2.593						.0001				
2.630		.0789								
2.640						.0409				
2.735							.0251			
2.766				.1761						
2.803					.0266					
3.062						.0268				
3.168	.1060									
3.308		.2504								
3.351		.0858								
3.372							.0326			
3.540				.1072						
3.649					.0059					
3.844						.0326				

ARC 3.5-185 IH20 O1

ORBITER BODY

(RENZ13)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.061 FO = 405.380 TO = 1291.500 HO = 315.350

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0610	.0278	.0235	.0273	.0385					
.238					.0271					
.254				.0217						
.278			.0486							
.281	.0331									
.474			.0251							
.477					.0193					
.499	.0801									
.510				.0272						
.555	.0414									
.672				.0344						
.696	.0759									
.713					.0330					
.728			.0394							
.746	.0556									
.780				.0337						
.882					.0340					
.890				.0427						
1.002			.0426							
1.003					.0352					
1.087									.0308	
1.155			.0439							
1.182	.0558									
1.201				.0397						
1.230	.0811									
1.326									.0387	
1.364					.0302					
1.444									.0343	
1.458									.0421	
1.459					.0159					
1.554	.0705				.0182					
1.606									.0429	
1.608				.0279						
1.649					.0165					
1.750						.0351				
1.896								.0552		
1.933									.0419	
1.975						.0334				
2.116				.0232						
2.316					.0351					
2.360	.0903									
2.497						.0324				
2.593						-.0001				
2.630	.0655									
2.640						.0337				

ARC 3.5-185 IH20 01

ORBITER BODY

(RENZ13)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/H0								
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
2.735							.0206		
2.766				.1458					
2.883					.0221				
3.062						.0222			
3.168	.0874								
3.308			.2068						
3.351		.0708							
3.372							.0269		
3.540				.0887					
3.649					.0049				
3.844						.0271			

ARC 3.5-185 IH2D O1

ORB Y=0.875

(RENC14) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0143  
 .300 .0074  
 .400 .0115  
 .500 .0165  
 .600 .0213  
 .700 .0281  
 .800 .0282  
 .900 .0191

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0130  
 .300 .0068  
 .400 .0104  
 .500 .0151  
 .600 .0193  
 .700 .0256  
 .800 .0257  
 .900 .0174

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0109  
 .300 .0057  
 .400 .0088  
 .500 .0127  
 .600 .0164  
 .700 .0217

DATE 28 APR 75

TABULATED SOURCE DATA - IH20

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ARC 3.5-185 IH20.01

CRB Y=0.875

(RENC14)

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/H0

Y .8750

X/L

.800 .0218

.900 .0147

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ARC 3.5-185 IH20 01

CRB C.C.L.TANGENT

(REND14) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0733  
 .100 .0483  
 .150 .0250  
 .200 .0158

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0664  
 .100 .0437  
 .150 .0226  
 .200 .0143

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0560  
 .100 .0366  
 .150 .0190  
 .200 .0120

ARC 3.5-185 IH20 01

ORB M.H.B.TANGENT

(RENE14) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT.    XMRF = .0000 IN.    ALPHA = .000    BETA = .000  
 LREF = 1290.3000 IN.    YMRF = .0000 IN.    MACH = 7.300    RN/L = 7.000  
 BREF = 1290.3000 IN.    ZMRF = .0000 IN.  
 SCALE = .0175

MACH ( 1 ) = 7.300    HAW/HT ( 1 ) = .850    RN/L = 6.793    FO = 1641.420    TO = 1527.000    HO = 376.580

SECTION ( 1 ) BODY    DEPENDENT VARIABLE H/HO

MHB    1.0000

X/L  
 .050    .0907  
 .100    .0521  
 .150    .0278

MACH ( 1 ) = 7.300    HAW/HT ( 2 ) = .900    RN/L = 6.793    FO = 1641.420    TO = 1527.000    HO = 376.580

SECTION ( 1 ) BODY    DEPENDENT VARIABLE H/HO

MHB    1.0000

X/L  
 .050    .0822  
 .100    .0474  
 .150    .0252

MACH ( 1 ) = 7.300    HAW/HT ( 3 ) = 1.000    RN/L = 6.793    FO = 1641.420    TO = 1527.000    HO = 376.580

SECTION ( 1 ) BODY    DEPENDENT VARIABLE H/HO

MHB    1.0000

X/L  
 .050    .0692  
 .100    .0400  
 .150    .0212

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ARC 3.5-185 IH20 01

CRB Z=6.125

(RENF14) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0673  
 .300 .0254  
 .800 .0129  
 .900 .0313  
 .975 .0231

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0609  
 .300 .0230  
 .800 .0117  
 .900 .0283  
 .975 .0209

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0511  
 .300 .0193  
 .800 .0098  
 .900 .0238  
 .975 .0176

ARC 3.5-185 IH20 01

WING UPPER CREASE

(RENG14) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0386  
 .500 .0171  
 .600 .0330  
 .700 .0218  
 .900 .0301

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0351  
 .500 .0156  
 .600 .0300  
 .700 .0198  
 .900 .0273

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0297  
 .500 .0132  
 .600 .0253  
 .700 .0167  
 .900 .0230

ARC 3.5-185 IH20 01

CRB Z=7.525

(RENH14) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0237  
 .400 .0255  
 .500 .0267  
 .600 .0281  
 .700 .0288  
 .800 .0331

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0216  
 .400 .0232  
 .500 .0242  
 .600 .0254  
 .700 .0260  
 .800 .0299

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0183  
 .400 .0196  
 .500 .0203  
 .600 .0214  
 .700 .0219  
 .800 .0251

ARC 3.5-185 IH20 01

ORB WINDOWS

(RENI14) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) WINDOW

DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

X/L

.156	.6521		
.164	.6105		
.168	.5405		
.170		.7895	
.178			.9278
.182	.3248	.5033	.7646
.185			.5321
.191			.4194
.200		.2250	

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) WINDOW

DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

X/L

.156	.5892		
.164	.5516		
.168	.4883		
.170		.7163	
.178			.8378
.182	.2936	.4569	.6907
.185			.4808
.191			.3791
.200		.2045	

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ARC 3.5-185 IH2D-01

CRB WINDOWS

(RENT14)

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.793 (PO) = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) WINDOW

DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

.X/L

.156 .4938

.164 .4623

.168 .4093

.170 .6043

.178 .7018

.182 .2463 .3857 .5787

.185 .4030

.191 .3180

.200 .1729

ARC 3.5-185 IH2D 01

CRB Z=8.379

(RENJ14) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRF = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.3790

X/L  
 .300 .0323  
 .400 .0182  
 .500 .0072  
 .600 .0221  
 .700 .0262

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.3790

X/L  
 .300 .0292  
 .400 .0165  
 .500 .0065  
 .600 .0200  
 .700 .0237

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.3790

X/L  
 .300 .0245  
 .400 .0139  
 .500 .0055  
 .600 .0168  
 .700 .0199

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 OF POOR QUALITY



ARC 3.5-185 IH2D O1

CRB PHI=180

(RENK14) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.4199
.025	.2330
.050	.1448
.075	.0956
.100	.0779
.125	.0543
.150	.1861
.160	.7445
.170	.6840
.180	.7353
.200	.1398
.250	.0076
.300	.0009
.400	.0076
.500	.0300
.600	.0309
.700	.0378
.800	.0534

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.3800
.025	.2110
.050	.1313
.075	.0867
.100	.0707
.125	.0493
.150	.1689
.160	.6755
.170	.6205
.180	.6671
.200	.1270
.250	.0068

ARC 3.5-185 IH2D 01

CRB PHI=180

(RENK14)

MACH ( 1) = 7.300 HAW/HT ( 2) = .900

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.300	.0008
.400	.0070
.500	.0271
.600	.0281
.700	.0342
.800	.0483

MACH ( 1) = 7.300 HAW/HT ( 3) = 1.000 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.3193
.025	.1775
.050	.1106
.075	.0732
.100	.0596
.125	.0416
.150	.1426
.160	.5698
.170	.5233
.180	.5628
.200	.1073
.250	.0057
.300	.0007
.400	.0059
.500	.0228
.600	.0238
.700	.0288
.800	.0406

ARC 3.5-185 IH20 01

CMS BOTTOM CREASE

(REN14) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

CMS 1.0000

X/L

.829 .0445  
 .900 .0569  
 .975 .0402

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

CMS 1.0000

X/L

.829 .0404  
 .900 .0516  
 .975 .0365

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

CMS 1.0000

X/L

.829 .0341  
 .900 .0436  
 .975 .0308

ARC 3.5-185 IH2D 01

CRB PHI=130.

(RENN14) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .2308  
 .829 .2002  
 .862 .0781  
 .963 .0546

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .2091  
 .829 .1814  
 .862 .0708  
 .963 .0495

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .1761  
 .829 .1528  
 .862 .0597  
 .963 .0418

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ARC 3.5-185 IH20 01

OMS TOP

(RENO14) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .0000  
 .829 .1603  
 .862 .0638  
 .963 .0443

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .0000  
 .829 .1452  
 .862 .0579  
 .963 .0402

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .0000  
 .829 .1223  
 .862 .0488  
 .963 .0339

ARC 3.5-185 IH2D 01

OMS INSIDE

(RENF14) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .0802  
 .963 .0706

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .0727  
 .963 .0640

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .0613  
 .963 .0540

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ARC 3.5-185 IH20 01

ORB Y=1.75

(RENG14) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y 1.7500

X/L  
 1.000 .0099  
 1.050 .0082

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y 1.7500

X/L  
 1.000 .0090  
 1.050 .0074

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y 1.7500

X/L  
 1.000 .0077  
 1.050 .0063

ARC 3.5-185 IH2D 01

BOTTOM RCS

(RENR14) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L  
 1.000 .0057  
 1.014 .0067

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L  
 1.000 .0052  
 1.014 .0061

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L  
 1.000 .0044  
 1.014 .0051



ARC 3.5-185 IH20 01

CRB Z=8.75

(RENU14) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0485  
 1.014 .0431

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0440  
 1.014 .0390

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0371  
 1.014 .0329

ARC 3.5-185 IH2D 01

VERTICAL TAIL

(RENV14) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) TAIL

DEPENDENT VARIABLE H/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.3316	.2959	.0001	.5693
.100	.0792	.0698	.0821	.1260	.2300
.300	.1021	.0290	.0380	.0567	
.500		.0871	.0195	.0420	.0000
.700	.0335	.0387	.0065	.0109	
.900		.0289	.0242	.0000	

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) TAIL

DEPENDENT VARIABLE H/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.3004	.2681	.0000	.5159
.100	.0718	.0633	.0744	.1142	.2085
.300	.0926	.0263	.0344	.0514	
.500		.0790	.0177	.0381	.0000
.700	.0304	.0352	.0059	.0099	
.900		.0263	.0220	.0000	

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) TAIL

DEPENDENT VARIABLE H/HO

Z/BV	.1590	.2990	.5320	.7650	.9050
X/C					
.000		.2527	.2257	.0000	.4345
.100	.0605	.0533	.0627	.0963	.1758
.300	.0780	.0222	.0291	.0433	
.500		.0667	.0149	.0322	.0000
.700	.0257	.0297	.0050	.0084	
.900		.0221	.0185	.0000	

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ARC 3.5-185 IH20 01

CLUSTERS B AND C

(RENY14) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

ZY/B .6000 .8500

S

.000 .7590 .1490  
 .050 .5772 .1993  
 .100 .4773 .1579  
 .150 .3708 .1230  
 .200 .2776 .0975  
 .250 .2216 .0660  
 .300 .1417 .0554

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

ZY/B .6000 .8500

S

.000 .6074 .1351  
 .050 .5226 .1806  
 .100 .4322 .1430  
 .150 .3358 .1115  
 .200 .2514 .0883  
 .250 .2007 .0598  
 .300 .1285 .0502

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

ZY/B .6000 .8500

S

.000 .5782 .1130  
 .050 .4395 .1521  
 .100 .3635 .1204  
 .150 .2825 .0938  
 .200 .2115 .0743  
 .250 .1689 .0504  
 .300 .1083 .0423

ARC 3.5-185 IH20 01

CRBITER BODY

(RENZ14) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT( 1 ) = .850 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
.000	.0580	.0125	.0114	.0040	-.0121				
.238					-.0031				
.254				.0079					
.278			.0200						
.281		.0247							
.474			.0156						
.477					.0074				
.499	.0740								
.510				.0143					
.555		.0345							
.672				.0158					
.696	.0733								
.713					.0140				
.728			.0250						
.746		.0483							
.780				.0175					
.882					.0177				
.890				.0186					
1.002			.0317						
1.003					.0221				
1.087								.0257	
1.155			.0278						
1.182		.0521							
1.201				.0377					
1.230	.0907								
1.326								.0301	
1.364					.0228				
1.444									.0231
1.458								.0313	
1.459					.0168				
1.554	.0918				.0254				
1.606								.0291	
1.608			.0488						
1.649					.0251				
1.750						.0330			
1.896								.0569	
1.933									.0402
1.975					.0222				

ARC 3.5-185 IH2D 01

CRBITER BODY

(RENZ14)

MACH ( 1) = 7.300 HAW/HT ( 1) = .850

SECTION ( 1)BODY		DEPENDENT VARIABLE H/HO								
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
2.116				.0731						
2.316					.0237					
2.360	.1471									
2.497						.0281				
2.593						.0289				
2.630		.2020								
2.640						.0315				
2.735							.0386			
2.766				.2250						
2.883					.0323					
3.062						.0221				
3.168	.1448									
3.308			.1861							
3.351		.0779								
3.372							.0421			
3.540				.1398						
3.649					.0009					
3.844						.0309				

MACH ( 1) = 7.300 HAW/HT ( 2) = .900 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1)BODY		DEPENDENT VARIABLE H/HO								
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0523	.0113	.0103	.0036	-.0110					
.238					-.0029					
.254				.0064						
.278			.0181							
.281		.0224								
.474			.0142							
.477					.0068					
.499	.0671									
.510				.0130						
.555		.0312								
.672				.0143						
.696	.0664									
.713					.0127					
.728			.0226							
.746	.0437									
.780				.0158						
.882					.0160					
.890				.0169						
1.002			.0288							

ARC 3.5-185 IH2D 01

ORBITER BODY

(RENZ14)

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/H0									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
1.003					.0200					
1.087									.0232	
1.155			.0252							
1.182		.0474								
1.201				.0341						
1.230	.0822									
1.326								.0273		
1.364					.0206					
1.444									.0209	
1.458								.0283		
1.459					.0152					
1.554	.0829				.0230					
1.606								.0264		
1.608				.0442						
1.649					.0227					
1.750						.0300				
1.896								.0516		
1.933									.0365	
1.975						.0200				
2.116				.0662						
2.316					.0216					
2.360	.1329									
2.497						.0254				
2.593						.0262				
2.630		.1027								
2.640						.0286				
2.735							.0350			
2.766				.2045						
2.883					.0292					
3.062						.0200				
3.168	.1313									
3.308		.1689								
3.351		.0707								
3.372							.0382			
3.540				.1270						
3.649					.0008					
3.844						.0281				

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ARC 3.5-185 IH2D 01

ORBITER BODY

(RENZ14)

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.793 PD = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0438	.0095	.0087	.0030	-.0093					
.238					-.0024					
.254				.0054						
.278			.0152							
.281		.0189								
.474			.0120							
.477					.0057					
.499	.0565									
.510				.0109						
.555		.0262								
.672				.0120						
.696	.0560									
.713					.0107					
.728			.0190							
.746		.0366								
.780				.0133						
.882					.0135					
.890				.0141						
1.002			.0243							
1.003					.0168					
1.087									.0195	
1.155			.0212							
1.182		.0400								
1.201				.0286						
1.230	.0692									
1.326								.0230		
1.364					.0173					
1.444									.0176	
1.458								.0238		
1.459					.0127					
1.554	.0694				.0193					
1.606								.0221		
1.608			.0371							
1.649					.0191					
1.750						.0253				
1.896								.0436		
1.933									.0308	
1.975						.0168				
2.116			.0556							
2.316				.0183						
2.360	.1113									
2.497						.0214				
2.593						.0221				
2.630		.1533								
2.640						.0241				

DATE 26 APR 75

TABULATED SOURCE DATA - IH20

PAGE 545

ARC 3.5-185 IH20 01

ORBITER BODY

(RENZ14)

MACH ( 1) = 7.300 HAW/HT ( 3) = 1.000

SECTION ( 1) BODY DEPENDENT VARIABLE H/H0

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
2.735							.0296		
2.766				.1729					
2.883					.0245				
3.062						.0168			
3.168	.1106								
3.308			.1426						
3.351		.0596							
3.372							.0323		
3.540				.1073					
3.649					.0007				
3.844							.0238		

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OF POOR QUALITY



ARC 3.5-185 IH20 01

GRB PHI=0.0

(RENA14) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000 .7429  
 .005 .5027  
 .010 .3348  
 .020 .1471  
 .030 .1065  
 .040 .0000  
 .050 .0580  
 .060 .0345  
 .070 .0358  
 .080 .0227  
 .090 .0265  
 .100 .0125  
 .120 .0100  
 .130 .0155  
 .140 .0000  
 .150 .0114  
 .160 .0000  
 .170 .0099  
 .180 .0000  
 .190 .0090  
 .200 .0040  
 .225 .0049  
 .250 .0000  
 .275 .0045  
 .300 .0000  
 .325 .0037  
 .350 .0000  
 .375 .0036  
 .400 .0000  
 .425 .0042  
 .450 .0000  
 .475 .0065  
 .500 .0000  
 .525 .0089  
 .550 .0000  
 .575 .0129  
 .600 .0000  
 .625 .0169

ARC 3.5-195 IH2D O1

ORB FHI=0.0

(RENA14)

MACH ( 1) = 7.300 HAW/HT ( 1) = .850

SECTION ( 1)BODY DEPENDENT VARIABLE H/HO

FHI .0000

X/L

.650	.0130
.675	.0197
.700	.0140
.725	.0214
.750	.0159
.775	.0217
.800	.0173
.825	.0254
.850	.0189
.875	.0225
.900	.0138
.925	.0198
.950	.0115
.975	.0166
1.000	.0092
1.013	.0000
1.025	.0046
1.038	.0000
1.050	.0043

MACH ( 1) = 7.300 HAW/HT ( 2) = .900 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1)BODY DEPENDENT VARIABLE H/HO

FHI .0000

X/L

.000	.6719
.005	.4547
.010	.3029
.020	.1331
.030	.0961
.040	.0000
.050	.0523
.060	.0313
.070	.0323
.080	.0206
.090	.0240
.100	.0113
.120	.0091
.130	.0140
.140	.0000
.150	.0103
.160	.0000
.170	.0090

ARC 3.5-185 IH2D 01

ORB PHI=0.0

(RENA14)

HACH ( 1) = 7.300 HAW/HT( 2) = .990

SECTION ( 1) BODY

DEPENDENT VARIABLE H/H0

PHI . . . . .0000

X/L

.180	.0000
.190	.0001
.200	.0036
.225	.0045
.250	.0000
.275	.0041
.300	.0000
.325	.0033
.350	.0000
.375	.0032
.400	.0000
.425	.0038
.450	.0000
.475	.0059
.500	.0000
.525	.0081
.550	.0000
.575	.0116
.600	.0000
.625	.0153
.650	.0118
.675	.0178
.700	.0127
.725	.0193
.750	.0145
.775	.0196
.800	.0158
.825	.0230
.850	.0172
.875	.0203
.900	.0126
.925	.0179
.950	.0104
.975	.0150
1.000	.0084
1.013	.0000
1.025	.0042
1.038	.0000
1.050	.0039

ARC 3.5-185 IH20 01

CRB PHI=0.0

(RENA14)

MACH ( 1) = 7.300 HAW/HT ( 3) = 1.000 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1) BCGY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.5640
.005	.3818
.010	.2544
.020	.1119
.030	.0804
.040	.0000
.050	.0438
.060	.0264
.070	.0271
.080	.0174
.090	.0201
.100	.0095
.120	.0077
.130	.0117
.140	.0000
.150	.0087
.160	.0000
.170	.0075
.180	.0000
.190	.0068
.200	.0030
.225	.0037
.250	.0000
.275	.0034
.300	.0000
.325	.0028
.350	.0000
.375	.0027
.400	.0000
.425	.0032
.450	.0000
.475	.0049
.500	.0000
.525	.0068
.550	.0000
.575	.0098
.600	.0000
.625	.0128
.650	.0100
.675	.0149
.700	.0108
.725	.0162
.750	.0123
.775	.0165
.800	.0133

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ARC 3.5-185 IH2D 01

CORB PHI=0.0

(RENA14)

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L	
.825	.0193
.850	.0146
.875	.0171
.900	.0107
.925	.0150
.950	.0088
.975	.0126
1.000	.0071
1.013	.0000
1.025	.0035
1.038	.0000
1.050	.0033

ARC 3.5-185 IH20 01

CR8 Y=D.438

(REN814) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y .4380

X/L  
 .050 .0740  
 .200 .0070  
 .300 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y .4380

X/L  
 .050 .0671  
 .200 .0064  
 .300 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y .4380

X/L  
 .050 .0565  
 .200 .0054  
 .300 .0000

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ARC 3.5-185 IH2D 01

ORB Z=8.295

(RENM14) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .1827  
 .805 .1715  
 .829 .1306  
 .862 .0812  
 .963 .0504  
 1.000 .0558  
 1.014 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .1656  
 .805 .1553  
 .829 .1184  
 .862 .0736  
 .963 .0458  
 1.000 .0506  
 1.014 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .1395  
 .805 .1307  
 .829 .0997  
 .862 .0621  
 .963 .0386  
 1.000 .0427  
 1.014 .0000

ARC 3.5-185 IH20 01

WING UPPER SURF.

(RENX14) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BRP = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

X/C

.050 .1949 .4655 .3442  
 .200 .0393 .1153 .1344  
 .600 .0029 .0109 .0194  
 .800 .0074 .0127  
 .900 .0080 .0130  
 .950 .0034 .0075 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

X/C

.050 .1765 .4216 .3119  
 .200 .0357 .1046 .1219  
 .600 .0026 .0099 .0177  
 .800 .0068 .0115  
 .900 .0072 .0118  
 .950 .0031 .0068 .0000

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.793 FO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

X/C

.050 .1406 .3547 .2625  
 .200 .0301 .0882 .1028  
 .600 .0022 .0084 .0149  
 .800 .0057 .0097  
 .900 .0061 .0100  
 .950 .0026 .0058 .0000

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ARC 3.5-185 IH2D 01

WING BOTTOM SURF.

(REMW14)

MACH ( 1 ) = 7.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) WING		DEPENDENT VARIABLE H/HO											
2Y/B		.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C													
	.177					.0000							
	.200				.0277		.0472						
	.299	.0119											
	.300					.0777	.0577		.0672	.0654	.0501		
	.302				.0318								
	.303							.0728					
	.428						.0897						
	.444	.0091											
	.487					.0781							
	.500							.0962	.0970		.0402		
	.559				.0000								
	.590	.0061											
	.600					.0635	.0601			.0489			
	.700				.0470	.0441	.0408	.0385				.0266	
	.736	.0156											
	.800						.0208	.0293					
	.850						.0221	.0294					
	.900	.0102			.0144	.0136	.0170	.0218				.0247	

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000 RN/L = 6.793 PO = 1641.420 TO = 1527.000 HO = 376.580

SECTION ( 1 ) WING		DEPENDENT VARIABLE H/HO											
2Y/B		.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C													
	.000						.5782		.1138			.0914	.0163
	.005		.0382	.0428		.4410		.0000			.1126		
	.025	.0566			.1546	.2699		.2722					
	.050										.0972		
	.100				.0419		.0635	.0773	.0851		.0934		
	.153	.0174											
	.177					.0000							
	.200				.0233		.0397						
	.299	.0101											
	.300					.0655	.0487		.0566	.0550	.0421		
	.302				.0268								
	.303							.0614					
	.428						.0756						
	.444	.0077											
	.487					.0659							
	.500							.0811	.0817		.0339		
	.559				.0000								
	.590	.0052											
	.600					.0536	.0507			.0412			

ARC 3.5-185 IH20 01

WING BOTTOM SURF.

(RENEW14)

MACH ( 1) = 7.300 HAW/HT ( 3) = 1.000

SECTION ( 1) WING	DEPENDENT VARIABLE H/H0											
2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.700				.0396	.0372	.0344	.0325			.0224		
.736	.0132											
.800						.0175	.0248					
.850						.0187	.0248					
.900	.0086			.0122	.0115	.0143	.0184			.0208		

ARC 3.5-185 IH2D 01+X28

CRB PHI=0.0

(RENA15) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.480 PD = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.7576
.005	.4540
.010	.2875
.020	.1209
.030	.0871
.040	.0623
.050	.0488
.060	.0338
.070	.0298
.080	.0237
.090	.0222
.100	.0173
.120	.0142
.130	.0127
.140	.0087
.150	.00139
.160	.0103
.170	.0112
.180	.0098
.190	.0100
.200	.0078
.225	.0055
.250	.0054
.275	.0061
.300	.0063
.325	.0078
.350	.0081
.375	.0124
.400	.0153
.425	.0170
.450	.0193
.475	.0203
.500	.0232
.525	.0231
.550	.0257
.575	.0266
.600	.0275
.625	.0281

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ARC 3.5-185 IH20 01+X28

CRB FHI=0.0

(RENA15)

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

FHI .0000

X/L

.650	.0267
.675	.0269
.700	.0256
.725	.0270
.750	.0254
.775	.0263
.800	.0272
.825	.0283
.850	.0268
.875	.0251
.900	.0226
.925	.0225
.950	.0194
.975	.0186
1.000	.0187
1.013	.0000
1.025	.0174
1.038	.0000
1.050	.0168

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.480 RO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

FHI .0000

X/L

.000	.6770
.005	.4058
.010	.2570
.020	.1081
.030	.0784
.040	.0557
.050	.0439
.060	.0303
.070	.0268
.080	.0212
.090	.0200
.100	.0155
.120	.0127
.130	.0114
.140	.0078
.150	.0125
.160	.0092
.170	.0101

ARC 3.5-165 IH20 O1+X28

CRB PHI=0.0

(RENA15)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) BC0Y DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.180	.0068
.190	.0090
.200	.0070
.225	.0049
.250	.0049
.275	.0055
.300	.0057
.325	.0070
.350	.0072
.375	.0111
.400	.0137
.425	.0152
.450	.0172
.475	.0182
.500	.0207
.525	.0207
.550	.0230
.575	.0239
.600	.0246
.625	.0252
.650	.0239
.675	.0241
.700	.0228
.725	.0242
.750	.0227
.775	.0236
.800	.0243
.825	.0254
.850	.0239
.875	.0225
.900	.0202
.925	.0202
.950	.0174
.975	.0167
1.000	.0167
1.013	.0000
1.025	.0156
1.038	.0000
1.050	.0150

ARC 3.5-185 IH20 O1+X28

CRB FHI=0.0

(RENA15)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1) BODY

DEPENDENT VARIABLE H/HO

FHI .0000

X/L

.000	.5582
.005	.3348
.010	.2121
.020	.0893
.030	.0652
.040	.0461
.050	.0366
.060	.0250
.070	.0223
.080	.0175
.090	.0166
.100	.0128
.120	.0105
.130	.0095
.140	.0065
.150	.0104
.160	.0076
.170	.0084
.180	.0073
.190	.0075
.200	.0058
.225	.0041
.250	.0040
.275	.0046
.300	.0047
.325	.0058
.350	.0060
.375	.0092
.400	.0113
.425	.0127
.450	.0142
.475	.0152
.500	.0171
.525	.0172
.550	.0189
.575	.0198
.600	.0203
.625	.0210
.650	.0197
.675	.0200
.700	.0188
.725	.0201
.750	.0187
.775	.0196
.800	.0201

DATE 28 APR 75

TABULATED SOURCE DATA - IH20

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ARC 3.5-185 IH20 01+X28

CRB FHI=0.0

(RENA15)

MACH ( 1) = 5.300

HAW/HT ( 3) = 1.000

SECTION ( 1) BODY

DEPENDENT VARIABLE H/H0

FHI .0000

X/L	
.825	.0211
.850	.0197
.875	.0187
.900	.0167
.925	.0150
.950	.0143
.975	.0138
1.000	.0138
1.013	.0000
1.025	.0128
1.038	.0000
1.050	.0124

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ARC 3.5-185 IH20 O1+X28

ORB Y=0.438

(RENB15) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN. ALPHA = -5.000 BETA = .000  
 LREF = 1290.3000 IN. YMRP = .0000 IN. MACH = 5.300 RN/L = 1.500  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0637  
 .200 .0123  
 .300 .0028

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0570  
 .200 .0110  
 .300 .0025

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0472  
 .200 .0091  
 .300 .0021

ARC 3.5-185 IH20 O1+X28

CRB Y=0.875

(RENC15) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0149  
 .300 .0108  
 .400 .0170  
 .500 .0230  
 .600 .0282  
 .700 .0332  
 .800 .0302  
 .900 .0215

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0133  
 .300 .0097  
 .400 .0152  
 .500 .0205  
 .600 .0252  
 .700 .0296  
 .800 .0270  
 .900 .0192

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.200 .0110  
 .300 .0080  
 .400 .0126  
 .500 .0170  
 .600 .0208  
 .700 .0245

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OF POOR QUALITY

ARC 3.5-185 IH20 O1+X28

ORB.Y=0.875

(RENC15)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y .8750.

X/L

.800 .0223

.900 .0158

DATE 20 APR 75

TABULATED SOURCE DATA - IH2D

ARC 3.5-185 IH2D O1+X28

CRB C.C.L.TANGENT

(REND15) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0617  
 .100 .0380  
 .150 .0344  
 .200 .0161

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0553  
 .100 .0342  
 .150 .0309  
 .200 .0145

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L

.050 .0457  
 .100 .0285  
 .150 .0258  
 .200 .0121

ARC 3.5-185 IH20 01+X28

CRB M.H.B.TANGENT

(RENE15) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0919  
 .100 .0503  
 .150 .0753

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0823  
 .100 .0451  
 .150 .0677

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0681  
 .100 .0373  
 .150 .0564

ARC 3.5-185 IH20 01+X28

CRB Z=6.125

(RENF15) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.480 PO = 120.930 TO = 1307.700 HQ = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0699  
 .300 .0308  
 .800 .0258  
 .900 .0679  
 .975 .0502

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.480 PO = 120.930 TO = 1307.700 HQ = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0629  
 .300 .0277  
 .800 .0232  
 .900 .0610  
 .975 .0451

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.480 PO = 120.930 TO = 1307.700 HQ = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0524  
 .300 .0231  
 .800 .0193  
 .900 .0506  
 .975 .0374

ARC 3.5-185 IH2D O1+X28

WING UPPER CREASE

(RENG15) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0574  
 .500 .0202  
 .600 .0438  
 .700 .0321  
 .900 .0493

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0514  
 .500 .0181  
 .600 .0394  
 .700 .0288  
 .900 .0443

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L

.400 .0424  
 .500 .0150  
 .600 .0327  
 .700 .0239  
 .900 .0367

ARC 3.5-185 IH20 01+X28

ORB Z=7.525

(REMH15) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0207  
 .400 .0174  
 .500 .0136  
 .600 .0356  
 .700 .0494  
 .800 .0486

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0185  
 .400 .0156  
 .500 .0122  
 .600 .0320  
 .700 .0444  
 .800 .0436

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300 .0153  
 .400 .0129  
 .500 .0102  
 .600 .0266  
 .700 .0369  
 .800 .0363

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ARC 3.5-185 IH20 01+X28

ORB WINDOWS

(REN115) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.480 PO = 120.930 TO = 1307.700 HQ = 319.500

## SECTION ( 1 ) WINDOW

## DEPENDENT VARIABLE H/H0

Z 7.9100 8.1370 8.3650

## X/L

.156	.7812		
.164	.6358		
.168	.5282		
.170		.8419	
.178			.8327
.182	.3139	.4385	.6155
.185			.4403
.191			.3579
.200		.2126	

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.480 PO = 120.930 TO = 1307.700 HQ = 319.500

## SECTION ( 1 ) WINDOW

## DEPENDENT VARIABLE H/H0

Z 7.9100 8.1370 8.3650

## X/L

.156	.7023		
.164	.5717		
.168	.4750		
.170		.7534	
.178			.7484
.182	.2824	.3926	.5534
.185			.3960
.191			.3219
.200		.1906	

ARC 3.5-185 IH2D O1+X28

ORB WINDOWS

(RENI15)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1) WINDOW

DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

X/L

.156	.5842		
.164	.4758		
.168	.3953		
.170		.6225	
.178			.6225
.182	.2351	.3247	.4605
.185			.3296
.191			.2680
.200		.1578	

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ARC 3.5-185 IH2D 01+X28

CRB Z=8.379

(RENJ15) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0421  
 .400 .05121  
 .500 .0343  
 .600 .0538  
 .700 .0555

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0379  
 .400 .0109  
 .500 .0309  
 .600 .0484  
 .700 .0498

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0315  
 .400 .0091  
 .500 .0257  
 .600 .0402  
 .700 .0414

ARC 3.5-185 IH2D O1+X28

CRB PHI=180

(RENK15) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.4729
.025	.2703
.050	.1800
.075	.1265
.100	.1101
.125	.0733
.150	.3309
.160	.8820
.170	.8252
.180	.6714
.200	.1395
.250	.0120
.300	.0056
.400	.0299
.500	.0593
.600	.0555
.700	.0506
.800	.0521

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.4227
.025	.2417
.050	.1611
.075	.1132
.100	.0985
.125	.0656
.150	.2960
.160	.7889
.170	.7381
.180	.6008
.200	.1249
.250	.0108

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ARC 3.5-185 IH20 Q1+X28

CRB PHI=180

(RENK15)

MACH ( 1) = 5.300 HAW/HT( 2) = .900

SECTION ( 1)BODY DEPENDENT VARIABLE H/H0

PHI 180.0000

X/L

.300	.0050
.400	.0268
.500	.0533
.600	.0497
.700	.0455
.800	.0469

MACH ( 1) = 5.300 HAW/HT( 3) = 1.000 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1)BODY DEPENDENT VARIABLE H/H0

PHI 180.0000

X/L

.010	.3486
.025	.1995
.050	.1330
.075	.0935
.100	.0814
.125	.0542
.150	.2445
.160	.6515
.170	.6094
.180	.4963
.200	.1033
.250	.0090
.300	.0041
.400	.0222
.500	.0444
.600	.0411
.700	.0378
.800	.0389

ARC 3.5-185 IH2D 01+X28

OMS BOTTOM CREASE

(REN15) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN. ALPHA = -5.0000 BETA = .0000  
 LREF = 1290.3000 IN. YMRP = .0000 IN. MACH = 5.3000 RN/L = 1.5000  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

MACH ( 1 ) = 5.3000 HAW/HT ( 1 ) = .850 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

## SECTION ( 1 ) OMS

## DEPENDENT VARIABLE H/HO

OMS 1.0000

## X/L

.829 .0664  
 .900 .0917  
 .975 .0689

MACH ( 1 ) = 5.3000 HAW/HT ( 2 ) = .900 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

## SECTION ( 1 ) OMS

## DEPENDENT VARIABLE H/HO

OMS 1.0000

## X/L

.829 .0596  
 .900 .0823  
 .975 .0619

MACH ( 1 ) = 5.3000 HAW/HT ( 3 ) = 1.000 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

## SECTION ( 1 ) OMS

## DEPENDENT VARIABLE H/HO

OMS 1.0000

## X/L

.829 .0494  
 .900 .0683  
 .975 .0514

ARC 3.5-185 IH20 O1+X28

CRB Z=8.295

(RENM15) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .3724  
 .805 .2404  
 .829 .1227  
 .862 .0626  
 .963 .0220  
 1.000 .0210  
 1.014 .0216

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .3336  
 .805 .2152  
 .829 .1099  
 .862 .0561  
 .963 .0197  
 1.000 .0188  
 1.014 .0194

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.2950

X/L

.780 .2760  
 .805 .1779  
 .829 .0911  
 .862 .0465  
 .963 .0164  
 1.000 .0156  
 1.014 .0161

ARC 3.5-185 IH2D 01+X28

CRB PHI=130.

(RENN15) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .3094  
 .829 .1771  
 .862 .0652  
 .963 .0335

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .2773  
 .829 .1587  
 .862 .0565  
 .963 .0300

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 130.0000

X/L

.805 .2296  
 .829 .1314  
 .862 .0485  
 .963 .0249



ARC 3.5-185 IH20 01+X28 CMS TOP

(RENO15) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .3434  
 .829 .1856  
 .862 .0558  
 .963 .0392

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .3078  
 .829 .1663  
 .862 .0500  
 .963 .0352

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) CMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .2550  
 .829 .1377  
 .862 .0415  
 .963 .0292

ARC 3.5-185 IH20 O1+X28

OMS INSIDE

(RENF15) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) OMS DEPENDENT VARIABLE H/HO

Y 1.1380

X/L  
 .862 .0716  
 .963 .0849

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) OMS DEPENDENT VARIABLE H/HO

Y 1.1380

X/L  
 .862 .0642  
 .963 .0762

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) OMS DEPENDENT VARIABLE H/HO

Y 1.1380

X/L  
 .862 .0532  
 .963 .0632

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ARC 3.5-185 IH20 O1+X28

ORB Y=1.75

(RENQ15) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0224

1.050 .0107

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0200

1.050 .0095

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y 1.7500

X/L

1.000 .0165

1.050 .0079

ARC 3.5-105 IH20 Q1+X20

BOTTOM RCS

(REN15) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT( 1 ) = .850 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0112  
 1.014 .0126

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0100  
 1.014 .0113

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0083  
 1.014 .0094

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ARC 3.5-185 IH20 01+X28

ORB Z=8.75

(RENU15) (07 APR 75)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0301  
 1.014 .0258

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0270  
 1.014 .0232

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0224  
 1.014 .0192



ARC 3.5-185 IH20 O1+X28

WING BOTTOM SURF.

(REHW15)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.177					.0263							
.200				.0125		.0341						
.299	.0027											
.300					.0242	.0236		.0512	.0566	.0709		
.302				.0054								
.303							.0353					
.428						.0310						
.444	.0047											
.487					.0271							
.500							.0318	.0584		.0585		
.559				.0039								
.590	.0080											
.600					.0240	.0237			.0217			
.700				.0053	.0180	.0149	.0130				.0253	
.736	.0233											
.800						.0076	.0125					
.850						.0091	.0137					
.900	.0215			.0066	.0056	.0073	.0103				.0194	

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.000						.3841		.0879			.0734	.0323
.005		.0289	.0451		.2527		.2670			.0980		
.025	.0692			.1172	.1560		.2209					
.050										.0846		
.100				.0256		.0460	.0569	.0830		.0820		
.153	.0073											
.177					.0217							
.200				.0104		.0282						
.299	.0022											
.300					.0201	.0195		.0423	.0467	.0584		
.302				.0045								
.303							.0292					
.428						.0257						
.444	.0039											
.487					.0224							
.500							.0263	.0482		.0482		
.559				.0032								
.590	.0066											
.600					.0199	.0197			.0179			

ARC 3.5-185 IH20 01+X28

WING BOTTOM SURF,

(REMW15)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) WING DEPENDENT VARIABLE H/H0

ZY/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.700				.0044	.0149	.0123	.0108			.0208		
.736	.0193											
.800						.0063	.0104					
.850						.0075	.0114					
.900	.0178			.0055	.0046	.0061	.0085			.0160		



ARC 3.5-185 IH20 O1+X20

WING UPPER SURF.

(RENX15) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

## X/C

.050 .2271 .2580 .3716  
 .200 .0682 .0684 .0948  
 .600 .0056 .0112 .0193  
 .800 .0078 .0157  
 .900 .0096 .0159  
 .950 .0129 .0071 .0155

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

## X/C

.050 .2035 .2312 .3331  
 .200 .0612 .0613 .0851  
 .600 .0051 .0101 .0173  
 .800 .0070 .0141  
 .900 .0086 .0143  
 .950 .0116 .0064 .0139

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .4000 .6000 .8000

## X/C

.050 .1684 .1914 .2758  
 .200 .0508 .0509 .0706  
 .600 .0042 .0084 .0144  
 .800 .0058 .0117  
 .900 .0072 .0119  
 .950 .0096 .0053 .0115

ARC 3.5-185 IH20 O1+X28

CLUSTERS B AND C

(RENY15) (07 APR 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BRP = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000 .5194 .1187  
 .050 .5008 .2178  
 .100 .3049 .1663  
 .150 .2342 .1211  
 .200 .1750 .0943  
 .250 .1370 .0645  
 .300 .0942 .0552

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000 .4648 .1063  
 .050 .4482 .1949  
 .100 .2729 .1488  
 .150 .2096 .1084  
 .200 .1566 .0844  
 .250 .1227 .0578  
 .300 .0844 .0495

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000 .3841 .0879  
 .050 .3703 .1610  
 .100 .2253 .1230  
 .150 .1733 .0896  
 .200 .1294 .0697  
 .250 .1014 .0479  
 .300 .0699 .0410

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ARC 3.5-185 IH20 01+X28

ORBITER BODY

(RENZ15) ( 07 APR 75 )

- REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
.000	.0488	.0173	.0139	.0070	.0063				
.238					.0028				
.254				.0123					
.278			.0279						
.281		.0235							
.474			.0145						
.477					.0108				
.499	.0637								
.510				.0149					
.555		.0293							
.672				.0161					
.696	.0617								
.713					.0114				
.728			.0344						
.746		.0380							
.780				.0176					
.882					.0134				
.890				.0260					
1.002			.0531						
1.003					.0167				
1.087								.0487	
1.155			.0753						
1.182		.0503							
1.201				.0657					
1.230	.0919								
1.326							.0493		
1.364					.0251				
1.444								.0502	
1.458							.0679		
1.459					.0258				
1.554	.1011				.0308				
1.606							.0599		
1.608			.0786						
1.649				.0343					
1.750					.0438				
1.896							.0917		
1.933								.0689	
1.975					.0410				

ARC 3.5-185 IH2D O1+X28

ORBITER BODY

(RENZ15)

MACH ( 1) = 5.300 HAW/HT ( 1) = .850

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

X/L .0500 .1000 .1500 .2000 .3000 .6000 .7500 .9000 .9750

S/R

2.116				.0878					
2.316					.0207				
2.360	.1727								
2.497						.0356			
2.593						-.0001			
2.630		.1303							
2.640						-.0002			
2.735							.0545		
2.766				.2126					
2.883					.0421				
3.062						.0538			
3.160	.1800								
3.308			.3309						
3.351		.1101							
3.372							.0572		
3.540				.1395					
3.649					.0056				
3.844						.0555			

MACH ( 1) = 5.300 HAW/HT ( 2) = .900 RN/L = 1.480 PO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

X/L .0500 .1000 .1500 .2000 .3000 .6000 .7500 .9000 .9750

S/R

.000	.0439	.0155	.0125	.0070	.0057				
.238					.0025				
.254				.0110					
.278			.0251						
.281		.0211							
.474			.0130						
.477					.0097				
.499	.0570								
.510				.0133					
.555		.0264							
.672				.0145					
.696	.0553								
.713					.0102				
.728			.0309						
.746		.0342							
.780				.0158					
.882					.0121				
.890					.0234				
1.002			.0475						

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ARC 3.5-185 IH2D O1+X28

ORBITER BODY

(RENZ15)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/HO								
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
1.003					.0150				
1.087									.0437
1.155			.0677						
1.182		.0451							
1.201				.0591					
1.230	.0823								
1.326								.0443	
1.364					.0225				
1.444									.0451
1.458								.0610	
1.459					.0232				
1.554	.0910				.0277				
1.606								.0538	
1.608				.0707					
1.649					.0308				
1.750						.0394			
1.896								.0823	
1.933									.0619
1.975						.0368			
2.116				.0790					
2.316					.0185				
2.360	.1553								
2.497						.0320			
2.593						-.0000			
2.630		.1173							
2.640						-.0002			
2.735								.0489	
2.766				.1906					
2.883					.0379				
3.062						.0484			
3.168	.1611								
3.308		.2960							
3.351		.0985							
3.372							.0514		
3.540				.1249					
3.649					.0050				
3.844						.0497			

ARC 3.5-165 IH20 01+X28

ORBITER BODY

(RENZ15)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

SECTION ( 1) BODY	DEPENDENT VARIABLE H/H0									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0366	.0128	.0104	.0058	.0047					
.238					.0021					
.254				.0091						
.278			.0209							
.281		.0174								
.474			.0107							
.477					.0080					
.499	.0472									
.510				.0110						
.555		.0220								
.672				.0121						
.696	.0457									
.713					.0085					
.728			.0258							
.746		.0285								
.780				.0132						
.882					.0100					
.890				.0195						
1.002			.0393							
1.003					.0125					
1.087									.0363	
1.155			.0564							
1.182		.0373								
1.201				.0492						
1.230	.0681									
1.326								.0367		
1.364					.0187					
1.444									.0374	
1.458								.0506		
1.459					.0193					
1.554	.0758				.0231					
1.606								.0446		
1.608				.0589						
1.649					.0256					
1.750						.0327				
1.896								.0683		
1.933									.0514	
1.975						.0306				
2.116				.0658						
2.316					.0153					
2.360	.1293									
2.497						.0266				
2.593						-.0000				
2.630		.0977								
2.640						-.0001				

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ARC 3.5-185 IH20 01+X28

ORBITER BODY

(RENZ15)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000

SECTION ( 1)BODY	DEPENDENT VARIABLE H/H0									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
2.735									.0406	
2.766				.1578						
2.883					.0315					
3.062						.0402				
3.168	.1330									
3.308		.2445								
3.351	.0814									
3.372								.0426		
3.540			.1033							
3.649				.0041						
3.844						.0411				

ARC 3.5-185 IH20 01+X28

VERTICAL TAIL

(RENV15) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRF = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .4503 .5270 .0000 .8358  
 .100 .0947 .0928 .1324 .1701 .2857  
 .300 .1340 .0355 .0000 .0813  
 .500 .1695 .0275 .0576 .0000  
 .700 .0303 .0540 .0121 .0171  
 .900 .0452 .0295 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .4108 .4720 .0000 .7493  
 .100 .0849 .0832 .1186 .1524 .2563  
 .300 .1202 .0318 .0000 .0729  
 .500 .1521 .0246 .0517 .0000  
 .700 .0272 .0485 .0109 .0153  
 .900 .0405 .0264 .0000

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.480 FO = 120.930 TO = 1307.700 HO = 319.500

## SECTION ( 1 ) TAIL

## DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

## X/C

.000 .3402 .3905 .0000 .6208  
 .100 .0704 .0690 .0982 .1261 .2125  
 .300 .0996 .0264 .0000 .0603  
 .500 .1263 .0204 .0428 .0000  
 .700 .0226 .0403 .0090 .0127  
 .900 .0337 .0219 .0000

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ARC 3.5-185 IH20 01+X28

CRB PHI=0.0

(RENA16) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMPF = .0000 IN.  
 LREF = 1290.3000 IN. YMPF = .0000 IN.  
 BREF = 1290.3000 IN. ZMPF = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.125 FO = 405.560 TO = 1281.200 HD = 312.710

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/H0

PHI .0000

## X/L

.000	.7454
.005	.5037
.010	.3236
.020	.1277
.030	.0845
.040	.0631
.050	.0466
.060	.0335
.070	.0279
.080	.0234
.090	.0201
.100	.0169
.120	.0136
.130	.0099
.140	.0090
.150	.0228
.160	.0236
.170	.0259
.180	.0263
.190	.0264
.200	.0260
.225	.0247
.250	.0333
.275	.0348
.300	.0327
.325	.0347
.350	.0301
.375	.0362
.400	.0357
.425	.0332
.450	.0325
.475	.0316
.500	.0306
.525	.0304
.550	.0304
.575	.0299
.600	.0305
.625	.0316

ARC 3.5-185 IH2D O1+X28

ORB PHI=0.0

(RENA16)

MACH ( 1) = 5.300 HAW/HT ( 1) = .850

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.650	.0303
.675	.0300
.700	.0295
.725	.0303
.750	.0293
.775	.0287
.800	.0311
.825	.0312
.850	.0300
.875	.0274
.900	.0250
.925	.0238
.950	.0200
.975	.0197
1.000	.0194
1.013	.0000
1.025	.0179
1.038	.0000
1.050	.0174

MACH ( 1) = 5.300 HAW/HT ( 2) = .900 RN/L = 5.125 PO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1) BODY DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.6630
.005	.4483
.010	.2882
.020	.1139
.030	.0752
.040	.0564
.050	.0415
.060	.0300
.070	.0249
.080	.0209
.090	.0180
.100	.0151
.120	.0122
.130	.0088
.140	.0080
.150	.0204
.160	.0211
.170	.0231

ARC 3.5-185 IH20 O1+X28

CRB PHI=D.0

(RENA16)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.180	.0233
.190	.0235
.200	.0232
.225	.0221
.250	.0298
.275	.0311
.300	.0292
.325	.0310
.350	.0269
.375	.0324
.400	.0319
.425	.0297
.450	.0290
.475	.0282
.500	.0273
.525	.0272
.550	.0271
.575	.0268
.600	.0272
.625	.0283
.650	.0271
.675	.0268
.700	.0264
.725	.0271
.750	.0262
.775	.0257
.800	.0278
.825	.0279
.850	.0269
.875	.0245
.900	.0223
.925	.0213
.950	.0179
.975	.0176
1.000	.0173
1.013	.0000
1.025	.0160
1.038	.0000
1.050	.0156

ARC 3.5-185 IH20 O1+X28

CRB PHI=0.0

(RENA16)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1) BODY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.000	.5430
.005	.3675
.010	.2364
.020	.0935
.030	.0617
.040	.0464
.050	.0341
.060	.0247
.070	.0205
.080	.0173
.090	.0148
.100	.0124
.120	.0100
.130	.0073
.140	.0066
.150	.0160
.160	.0174
.170	.0191
.180	.0194
.190	.0194
.200	.0192
.225	.0182
.250	.0246
.275	.0257
.300	.0241
.325	.0255
.350	.0222
.375	.0267
.400	.0263
.425	.0245
.450	.0240
.475	.0233
.500	.0225
.525	.0224
.550	.0224
.575	.0221
.600	.0225
.625	.0233
.650	.0224
.675	.0221
.700	.0210
.725	.0224
.750	.0216
.775	.0212
.800	.0230

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OF POOR QUALITY

ARC 3.5-185 IH20 01+X28

CRB PHI=0.0

(RENA16)

MACH ( 1) = 5.300

HAW/HT ( 3) = 1.000

SECTION ( 1) BODY

DEPENDENT VARIABLE H/HO

PHI .0000

X/L

.825 .0230

.850 .0222

.875 .0202

.900 .0184

.925 .0176

.950 .0147

.975 .0145

1.000 .0143

1.013 .0000

1.025 .0132

1.038 .0000

1.050 .0129

ARC 3.5-185 IH2D 01+X28

CRB Y=0.438

(REN816) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.125 PO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0613  
 .200 .0382  
 .300 .0360

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.125 PO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0547  
 .200 .0342  
 .300 .0322

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.125 PO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .4380

X/L

.050 .0451  
 .200 .0282  
 .300 .0266

ORIGINAL PAGE IS  
 OF POOR QUALITY

ARC 3.5-185 IH20 Q14X28

ORB N=0.875

(RENC16) (07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT( 1 ) = .850 RN/L = 5.125 FO = .405,560 TO = 1281.200 HO = 312.710

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .8750

## X/L

.200 .0570  
 .300 .0419  
 .400 .0400  
 .500 .0409  
 .600 .0380  
 .700 .0372  
 .800 .0353  
 .900 .0255

MACH ( 1 ) = 5.300 HAW/HT( 2 ) = .900 RN/L = 5.125 FO = .405,560 TO = 1281.200 HO = 312.710

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .8750

## X/L

.200 .0510  
 .300 .0375  
 .400 .0358  
 .500 .0366  
 .600 .0340  
 .700 .0333  
 .800 .0316  
 .900 .0228

MACH ( 1 ) = 5.300 HAW/HT( 3 ) = 1.000 RN/L = 5.125 FO = .405,560 TO = 1281.200 HO = 312.710

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

Y .8750

## X/L

.200 .0422  
 .300 .0310  
 .400 .0296  
 .500 .0302  
 .600 .0281  
 .700 .0275

DATE 28 APR 75

TABULATED SOURCE DATA - IH2D

PAGE 601

ARC 3.5-185 IH2D O1+X28

CRB Y=0.875

(RENC16)

MACH ( 1 ) = 5.300

HAW/HT( 3 ) = 1.000

SECTION: ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Y .8750

X/L

.800 .0261

.900 .0188

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OF POOR QUALITY



ARC 3.5-185 IH2D 01+X28

CRB C.C.L.TANGENT

(REND16) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L  
 .050 .0462  
 .100 .0374  
 .150 .0626  
 .200 .0613

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L  
 .050 .0413  
 .100 .0334  
 .150 .0559  
 .200 .0548

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

CCLT 1.0000

X/L  
 .050 .0341  
 .100 .0275  
 .150 .0461  
 .200 .0452

ARC 3.5-185 IH2D O1+X28

ORB M.H.B.TANGENT

(RENE16) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.125 PO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0910  
 .100 .0513  
 .150 .1089

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.125 PO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0813  
 .100 .0459  
 .150 .0974

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.125 PO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

MHB 1.0000

X/L

.050 .0670  
 .100 .0379  
 .150 .0803

ARC 3.5-185 IH20 01+X28

CRB Z=6.125

(RENF16) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.125 PO = 405.560 TO = 1281.200 HD = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0672  
 .300 .0535  
 .800 .0395  
 .900 .0358  
 .975 .0365

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.125 PO = 405.560 TO = 1281.200 HD = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0601  
 .300 .0479  
 .800 .0353  
 .900 .0499  
 .975 .0505

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.125 PO = 405.560 TO = 1281.200 HD = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 6.1250

X/L

.076 .0495  
 .300 .0395  
 .800 .0292  
 .900 .0412  
 .975 .0416

ARC 3.5-185 IH20 O1+X28

WING UPPER CREASE -

(RENG16) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) WING DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L  
 .400 .0736  
 .500 .0325  
 .600 .0683  
 .700 .0496  
 .900 .0820

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) WING DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L  
 .400 .0659  
 .500 .0291  
 .600 .0610  
 .700 .0443  
 .900 .0732

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) WING DEPENDENT VARIABLE H/HO

WINGUC 1.0000

X/L  
 .400 .0545  
 .500 .0239  
 .600 .0503  
 .700 .0366  
 .900 .0602

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ARC 3.5-185 IH20 O1+X28

CRB Z=7.525

(RENH16) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = 4.850 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300	.0300
.400	.0557
.500	.0588
.600	.0663
.700	.0573
.800	.0573

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300	.0268
.400	.0499
.500	.0526
.600	.0593
.700	.0513
.800	.0513

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 7.5250

X/L

.300	.0222
.400	.0413
.500	.0435
.600	.0490
.700	.0424
.800	.0424

ARC 3.5-185 IH20 01+X28

ORB WINDOWS

(RENI16) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) WINDOW

DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

X/L

.156	.9036		
.164	.6996		
.168	.5894		
.170		.9645	
.178			1.0241
.182	.3989	.5605	.7428
.185			.5685
.191			.4872
.200		.2910	

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) WINDOW

DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

X/L

.156	.8059		
.164	.6239		
.168	.5256		
.170		.8613	
.178			.9124
.182	.3560	.5009	.6621
.185			.5070
.191			.4349
.200		.2605	

ARC 3.5-185 IH2D O1+X28

ORB WINDOWS

(RENI16)

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1) WINDOW

DEPENDENT VARIABLE H/HO

Z 7.9100 8.1370 8.3650

X/L

.156	.6625		
.164	.5130		
.168	.4321		
.170		.7094	
.178			.7490
.182	.2929	.4131	.5439
.185			.4168
.191			.3580
.200		.2155	

ARC 3.5-185 IH20 O1+X28

ORB Z=8.379

(RENJ16) ( 07 APR 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

PARAMETRIC DATA

.ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0548  
 .400 .0537  
 .500 .0717  
 .600 .0626  
 .700 .0615

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0489  
 .400 .0480  
 .500 .0641  
 .600 .0560  
 .700 .0550

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.3790

X/L

.300 .0403  
 .400 .0396  
 .500 .0529  
 .600 .0462  
 .700 .0454

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ARC 3.5-185 IH2D O1+X28

ORB PHI=180

(RENK16) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.4885
.025	.2806
.050	.2008
.075	.1602
.100	.1665
.125	.1894
.150	.4834
.160	.9219
.170	.9971
.180	.8285
.200	.1920
.250	.0137
.300	.0106
.400	.0769
.500	.0808
.600	.0737
.700	.0659
.800	.0778

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.4348
.025	.2501
.050	.1792
.075	.1431
.100	.1488
.125	.1692
.150	.4318
.160	.8231
.170	.8899
.180	.7398
.200	.1718
.250	.0122

ARC 3.5-185 IH2D O1+X28

CRB PHI=180

(REMK16)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.300	.0095
.400	.0689
.500	.0722
.600	.0660
.700	.0590
.800	.0696

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.125 PO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

PHI 180.0000

X/L

.010	.3564
.025	.2056
.050	.1475
.075	.1179
.100	.1226
.125	.1395
.150	.3558
.160	.6778
.170	.7325
.180	.6095
.200	.1419
.250	.0101
.300	.0078
.400	.0570
.500	.0596
.600	.0546
.700	.0487
.800	.0574

ARC 3.5-185 IH2D O1+X28

OMS BOTTOM CREASE

(REN16) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

## SECTION ( 1 ) OMS

## DEPENDENT VARIABLE H/HO

OMS 1.0000

## X/L

.829 .0746  
 .900 .1093  
 .975 .0904

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

## SECTION ( 1 ) OMS

## DEPENDENT VARIABLE H/HO

OMS 1.0000

## X/L

.829 .0665  
 .900 .0976  
 .975 .0807

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

## SECTION ( 1 ) OMS

## DEPENDENT VARIABLE H/HO

OMS 1.0000

## X/L

.829 .0547  
 .900 .0804  
 .975 .0665

ARC 3.5-185 IH20 O1+X28

ORB Z=8.295

(RENH16) ( 07 APR 75 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.2950

X/L  
 .780 .3439  
 .805 .2796  
 .829 .1672  
 .862 .0999  
 .963 .0708  
 1.000 .0834  
 1.014 .0710

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.2950

X/L  
 .780 .3067  
 .805 .2492  
 .829 .1489  
 .862 .0891  
 .963 .0632  
 1.000 .0743  
 1.014 .0633

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Z 8.2950

X/L  
 .780 .2523  
 .805 .2046  
 .829 .1221  
 .862 .0733  
 .963 .0521  
 1.000 .0611  
 1.014 .0519

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ARC 3.5-185 IH20 O1+X28

CRB FHI=130.

(RENN16) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.125 PO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

FHI 130.0000

X/L

.805 .4016  
 .829 .2427  
 .862 .0816  
 .963 .0845

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.125 PO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

FHI 130.0000

X/L

.805 .3572  
 .829 .2159  
 .862 .0728  
 .963 .0755

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.125 PO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

FHI 130.0000

X/L

.805 .2926  
 .829 .1770  
 .862 .0598  
 .963 .0622

ARC 3.5-185 IH2D 01+X28

OMS TOP

(RENO16) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .4404  
 .829 .2423  
 .862 .0777  
 .963 .0712

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .3920  
 .829 .2156  
 .862 .0693  
 .963 .0635

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.6620

X/L

.805 .3214  
 .829 .1767  
 .862 .0569  
 .963 .0522

ARC 3.5-185 IH20 O1+X28

OMS INSIDE

(RENF16) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .1090  
 .963 .1107

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .0971  
 .963 .0987

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) OMS

DEPENDENT VARIABLE H/HO

Y 1.1380

X/L

.862 .0798  
 .963 .0812

ARC 3.5-185 IH2D O1+X28

ORB Y=1.75

(RENG16) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN. ALPHA = -5.000 BETA = .000  
 LREF = 1290.3000 IN. YMRP = .0000 IN. MACH = 5.300 RN/L = 5.000  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y 1.7500

X/L  
 1.000 .0105  
 1.050 .0116

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y 1.7500

X/L  
 1.000 .0165  
 1.050 .0103

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

Y 1.7500

X/L  
 1.000 .0137  
 1.050 .0085

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ARC 3.5-165 IH20 01+X28

BOTTOM RCS

(RENR16) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0132  
 1.014 .0173

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0118  
 1.014 .0154

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) RCS

DEPENDENT VARIABLE H/HO

RCS 1.0000

X/L

1.000 .0097  
 1.014 .0127

ARC 3.5-185 IH2D O1+X28

CRB Z=8.75

(RENU16) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.125 PO = 405.560 TO = 1281.200 HD = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0718  
 1.014 .0636

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.125 PO = 405.560 TO = 1281.200 HD = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0640  
 1.014 .0567

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.125 PO = 405.560 TO = 1281.200 HD = 312.710

SECTION ( 1 ) BODY

DEPENDENT VARIABLE H/HO

Z 8.7500

X/L

1.000 .0526  
 1.014 .0466



ARC 3.5-185 IH2D O1+X28

WING BOTTOM SURF.

(RENW16)

MACH ( 1) = 5.300 HAW/HT ( 2) = .900

SECTION ( 1)WING

DEPENDENT VARIABLE H/HO

2Y/B .2500 .3010 .3480 .4000 .5000 .6000 .7500 .8500 .9000 .9500 .9660 .9930

X/C

.177 .0275  
 .200 .0110 .0396  
 .299 .0011  
 .300 .0268 .0490 .0907 .0877 .0969  
 .302 .0064  
 .393 .0548  
 .428 .0834  
 .444 .0074  
 .487 .0477  
 .500 .1068 .1202 .1079  
 .559 .0099  
 .590 .0223  
 .600 .0432 .0551 .0598  
 .700 .0219 .0294 .0364 .0367 .0419  
 .736 .0495  
 .800 .0176 .0279  
 .850 .0184 .0283  
 .900 .0195 .0148 .0091 .0144 .0213 .0302

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 5.125 PO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1)WING

DEPENDENT VARIABLE H/HO

2Y/B .2500 .3010 .3480 .4000 .5000 .6000 .7500 .8500 .9000 .9500 .9660 .9930

X/C

.000 .6182 .1356 .0947 .0427  
 .005 .0297 .0563 .3914 .3656 .1324  
 .025 .0636 .1335 .2153 .2949  
 .050 .0998  
 .100 .0230 .0531 .0603 .1093 .0927  
 .153 .0023  
 .177 .0227  
 .200 .0091 .0326  
 .299 .0009  
 .300 .0221 .0404 .0746 .0720 .0794  
 .302 .0053  
 .303 .0452  
 .428 .0688  
 .444 .0061  
 .487 .0393  
 .500 .0881 .0989 .0885  
 .559 .0082  
 .590 .0184  
 .600 .0357 .0454 .0492

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ARC 3.5-185 IH20 O1+X28

WING BOTTOM SURF.

(RENW16)

MACH ( 1) = 5.300 HAW/HT( 3) = 1.000

SECTION ( 1) WING	DEPENDENT VARIABLE H/H0											
2Y/B	.2500	.3010	.3480	.4000	.5000	.6000	.7500	.8500	.9000	.9500	.9660	.9930
X/C												
.700				.0181	.0243	.0300	.0303			.0344		
.736	.0409											
.800						.0145	.0230					
.850						.0151	.0233					
.900	.0161			.0122	.0075	.0118	.0175			.0248		

ARC 3.5-183 IH20 O1+X20

WING UPPER SURF.

(RENX16) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

ZY/B .4000 .6000 .8000

X/C

.050 .3960 .5605 .8012  
 .200 .1306 .1801 .2691  
 .600 .0104 .0299 .0594  
 .800 .0183 .0528  
 .900 .0265 .0612  
 .950 .0289 .0188 .0657

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

ZY/B .4000 .6000 .8000

X/C

.050 .3520 .4996 .7133  
 .200 .1166 .1610 .2401  
 .600 .0093 .0268 .0531  
 .800 .0164 .0472  
 .900 .0237 .0547  
 .950 .0258 .0169 .0586

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) WING

DEPENDENT VARIABLE H/HO

ZY/B .4000 .6000 .8000

X/C

.050 .2881 .4104 .5848  
 .200 .0959 .1329 .1976  
 .600 .0077 .0221 .0439  
 .800 .0135 .0390  
 .900 .0196 .0450  
 .950 .0212 .0139 .0483

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ARC 3.5-185 IH20 01+X28

CLUSTERS B AND C

(RENY16) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2890.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.125 PO = 405.560 TO = 1281.200 HO = 312.710

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000 .8450 .1842  
 .050 .5567 .3201  
 .100 .4181 .2309  
 .150 .3425 .1622  
 .200 .2452 .1207  
 .250 .1994 .0789  
 .300 .1329 .0655

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.125 PO = 405.560 TO = 1281.200 HO = 312.710

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000 .7529 .1646  
 .050 .4960 .2855  
 .100 .3725 .2059  
 .150 .3052 .1446  
 .200 .2185 .1076  
 .250 .1779 .0703  
 .300 .1183 .0583

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.125 PO = 405.560 TO = 1281.200 HO = 312.710

## SECTION ( 1 ) WING

## DEPENDENT VARIABLE H/HO

2Y/B .6000 .8500

S

.000 .6182 .1356  
 .050 .4072 .2348  
 .100 .3059 .1692  
 .150 .2506 .1189  
 .200 .1795 .0884  
 .250 .1464 .0577  
 .300 .0970 .0478

ARC 3.5-185 IH20 O1+X28

ORBITER BODY

(RENZ16) ( 07 APR 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .9175

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.125 FO = 405.560 TO = 1281.200 HD = 312.710

## SECTION ( 1 ) BODY

## DEPENDENT VARIABLE H/HO

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
.000	.0466	.0169	.0228	.0260	.0327				
.238					.0360				
.254				.0382					
.278			.0509						
.281		.0196							
.474			.0178						
.477					.0419				
.499	.0613								
.510				.0570					
.555		.0272							
.672				.0613					
.696	.0462								
.713					.0183				
.728			.0626						
.746		.0374							
.780				.0418					
.882					.0078				
.890				.0379					
1.002			.1007						
1.003					.0106				
1.087								.0776	
1.155			.1089						
1.182		.0513							
1.201				.1087					
1.230	.0910								
1.326							.0820		
1.364					.0449				
1.444								.0565	
1.458							.0558		
1.459					.0443				
1.554	.0904				.0535				
1.606							.0624		
1.608			.1367						
1.649					.0483				
1.750						.0683			
1.896							.1093		
1.933								.0904	
1.975					.0303				

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ARC 3.5-185 IH20 O1+X28

CRBITER BODY

(REN216)

MACH ( 1) = 5.300 HAW/HT ( 1) = .850

SECTION ( 1) BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
2.116				.1287						
2.316					.0300					
2.360	.1792									
2.497						.0663				
2.593						-.0001				
2.630		.1980								
2.640						.0649				
2.735							.0722			
2.766				.2910						
2.883					.0548					
3.062						.0626				
3.168	.2008									
3.308			.4834							
3.351		.1665								
3.372							.0765			
3.540				.1920						
3.649					.0106					
3.844						.0737				

MACH ( 1) = 5.300 HAW/HT ( 2) = .900 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1) BODY	DEPENDENT VARIABLE H/HO									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0415	.0151	.0204	.0232	.0292					
.238					.0322					
.254				.0342						
.278			.0454							
.281		.0175								
.474			.0159							
.477					.0375					
.499	.0547									
.510				.0510						
.555		.0242								
.672				.0548						
.696	.0413									
.713					.0163					
.728			.0559							
.746		.0334								
.780				.0374						
.882					.0070					
.890				.0339						
1.002			.0901							

ARC 3.5-105 1M2D 01+X28

ORBITER BODY

(RENZ16)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/H0									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
1.003					.0095					
1.087									.0693	
1.155			.0974							
1.182		.0459								
1.201				.0971						
1.230	.0813									
1.326								.0732		
1.364					.0401					
1.444									.0505	
1.458								.0499		
1.459					.0396					
1.554	.0806				.0479					
1.606								.0558		
1.608				.1222						
1.649					.0432					
1.750						.0610				
1.896								.0976		
1.933									.0807	
1.975						.0271				
2.116				.1151						
2.316					.0268					
2.360	.1596									
2.497						.0593				
2.593						-.0001				
2.630		.1768								
2.640						.0580				
2.735							.0644			
2.766				.2605						
2.883					.0489					
3.062						.0560				
3.168	.1792									
3.308			.4310							
3.351		.1488								
3.372							.0683			
3.540				.1718						
3.649					.0095					
3.844						.0660				

ARC 3.5-185 IH20 O1+X28

CRBITER BODY

(RENZ16)

MACH ( 1 ) = 5.300 HAW/HT( 3 ) = 1.000 RN/L = 5.125 PO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) BODY	DEPENDENT VARIABLE H/H0									
X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750	
S/R										
.000	.0341	.0124	.0168	.0192	.0241					
.238					.0266					
.254				.0282						
.278			.0374							
.281		.0145								
.474			.0132							
.477					.0310					
.499	.0451									
.510				.0422						
.555		.0199								
.672				.0452						
.696	.0341									
.713					.0135					
.728			.0461							
.746		.0275								
.780				.0308						
.882					.0057					
.890				.0279						
1.002			.0745							
1.003					.0078					
1.087									.0571	
1.155			.0803							
1.182		.0379								
1.201				.0800						
1.230	.0670									
1.326							.0602			
1.364					.0331					
1.444									.0416	
1.458							.0412			
1.459					.0327					
1.554	.0662				.0395					
1.606							.0460			
1.608				.1008						
1.649					.0356					
1.750						.0503				
1.896							.0804			
1.933								.0665		
1.975						.0224				
2.116				.0950						
2.316					.0222					
2.360	.1311									
2.497						.0490				
2.593						-.0001				
2.630		.1456								
2.640						.0477				

ARC 3.5-185 IH20 01+X28

ORBITER BODY

(RENZ16)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) BODY DEPENDENT VARIABLE H/HO

X/L	.0500	.1000	.1500	.2000	.3000	.6000	.7500	.9000	.9750
S/R									
2.735							.0530		
2.766				.2155					
2.883					.0403				
3.062						.0462			
3.168	.1475								
3.308			.3558						
3.351		.1226							
3.372							.0563		
3.540				.1419					
3.649					.0078				
3.844						.0546			

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ARC 3.5-185 IH20 O1+X28

VERTICAL TAIL

(RENV16) ( 07 APR 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = .312.710

SECTION ( 1 ) TAIL DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

X/C

.000	.3982	.5011	.0000	.8928
.100	.1101	.0987	.1423	.1914
.300	.1937	.0805	.0822	.1082
.500	.2044	.0624	.0798	.0000
.700	.0330	.0553	.0213	.0165
.900	.0576	.0546	.0000	

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) TAIL DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

X/C

.000	.3547	.4472	.0000	.7946
.100	.0981	.0879	.1271	.1708
.300	.1727	.0718	.0735	.0966
.500	.1824	.0558	.0713	.0000
.700	.0294	.0494	.0191	.0148
.900	.0514	.0487	.0000	

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.125 FO = 405.560 TO = 1281.200 HO = 312.710

SECTION ( 1 ) TAIL DEPENDENT VARIABLE H/HO

Z/BV .1590 .2990 .5320 .7650 .9050

X/C

.000	.2911	.3681	.0000	.6512
.100	.0805	.0722	.1047	.1405
.300	.1419	.0590	.0606	.0796
.500	.1502	.0461	.0588	.0000
.700	.0242	.0407	.0157	.0122
.900	.0423	.0401	.0000	

ARC 3.5-185 IH2D T15

EXTERNAL TANK

(RENT17) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.505 FO = 121.240 TO = 1296.000 HQ = 316.470

SECTION ( 1 ) TANK

DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.000												.0000		
.005												.7102		
.010												.7977		
.040	.1563											.3070		
.080	.0870											.2239	.1598	
.150	.0271											.0805	.0396	.0759
.200			.0214									.0353		
.250			.0127									.0163		
.275			.0125	.0243										
.300		.0108	.0131	.0249								.0140	.0483	
.325			.0132	.0259		.0233								
.350		.0107	.0174	.0263		.0206						.0201		
.375						.0208						.0234		
.400	.0041	.0086	.0110	.0255	.0325	.0223	.0402		.0554	.0405			.0538	
.425							.0647	.0946		.0802				
.450			.0378	.0404		.0543	.1090			.4157				
.475							.0953			.0913				
.500		.0000	.0243	.0411	.0424	.0574	.0898		.0849	.0170	.0802			
.525										.0628				
.550			.0377	.0434		.0596	.0301			.1015				
.575										.0781				
.600	.0060	.0113	.0378	.0353	.0403	.0518	.0296			.0605			.0270	
.625										.0562				
.650			.0336	.0348	.0371	.0466	.0326			.0561				
.675										.0587				
.700		.0369	.0294	.0319	.0363	.0546	.0000	.0466		.0557	.0347			
.750			.0265	.0316	.0357	.0501	.0321			.0546				
.800	.0209	.0360	.0269	.0317	.0347	.0493	.0255			.0523			.0300	
.825						.0828								
.850			.0335	.0692	.0195	.0903	.0196			.0499				
.875					.0359									
.900	.0289	.0292	.0362	.0627	.0424	.0331	.0503	.0584	.0414	.0672				
.925					.0958									.1295
.935							.1605							
.937										.1308				
.960					.0132									
.975										.0170				

ORIGINAL PAGE IS OF POOR QUALITY



ARC 3.5-185 IH20 T15

EXTERNAL TANK

(RENT17)

MACH ( 1) = 5.300 HAW/HT ( 2) = .900

SECTION ( 1) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.900	.0259	.0261	.0324	.0562	.0379	.0296	.0452	.0524	.0372	.0604	.1163
.925					.0857						
.935							.1438				
.937									.1174		
.960					.0118						
.975									.0153		

THETA 216.0000 222.5000 229.0000

X/L

.335	.0506										
.400	.0705	.0466									
.500	.0472										
.600		.0375									
.700	.0172										
.800		.0225									

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 1.505 FO = 121.240 TO = 1296.000 HO = 316.470

SECTION ( 1) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.000										.0000				
.005										.5257				
.010										.5918				
.040	.1145									.2282				
.080	.0638									.1664	.1190			
.130	.0199									.0598		.0668	.0565	
.200			.0158							.0262				
.250			.0094							.0121				
.275			.0093	.0179										
.300		.0080	.0097	.0184						.0104		.0360		
.325			.0098	.0191				.0172						
.350		.0079	.0128	.0194				.0152				.0150		
.375								.0154				.0174		
.400	.0030	.0064	.0081	.0188	.0240		.0165	.0299	.0411	.0301		.0401		
.425								.0481	.0703	.0596				
.450			.0280	.0299			.0402	.0811		.3089				
.475								.0709		.0679				
.500	.0000	.0180	.0304	.0313			.0424	.0668	.0632	.0127	.0597			
.525										.0467				
.550			.0279	.0321			.0440	.0224		.0754				
.575										.0580				

ORIGINAL PAGE IS OF POOR QUALITY



ARC 3.5-185 IH20 T15

EXTERNAL TANK

(RENT:7)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) TANK

DEPENDENT VARIABLE H/HO

THETA	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	194.0000	196.0000	200.0000
X/L															
.600	.0044	.0084	.0280	.0261	.0298		.0382		.0220			.0449			.0201
.625												.0417			
.650			.0248	.0258	.0274		.0344		.0242			.0416			
.675												.0436			
.700		.0273	.0218	.0236	.0268		.0404		.0000		.0346	.0414		.0259	
.750			.0196	.0234	.0264		.0371		.0239			.0406			
.800	.0155	.0266	.0199	.0235	.0257		.0364		.0189			.0389			.0223
.825						.0613									
.850				.0248	.0513	.0144	.0668		.0146			.0371			
.875						.0266									
.900		.0214	.0216	.0268	.0465	.0314	.0245		.0375		.0434	.0308		.0501	
.925						.0709									.0965
.935								.1191							
.937												.0974			
.960						.0098									
.975												.0127			

THETA 216.0000 222.5000 229.0000

X/L			
.333		.0420	
.400	.0585		.0387
.500	.0392		
.600			.0311
.700	.0142		
.800			.0187

DATE 28 APR 75

TABULATED SOURCE DATA - IH20

ARC 3.5-185 IH20 T15

EXTERNAL TANK

(RENT18), ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT.    XMRP = .0000 IN.  
 LREF = 1290.3000 IN.      YMRP = .0000 IN.  
 BREF = 1290.3000 IN.      ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000    BETA = .000  
 MACH = 5.300     RN/L = 5.000

MACH ( 1 ) = 5.300    HAW/HT ( 1 ) = .850    RN/L = 4.819    PO = 400.340    TO = 1321.000    HO = 322.900

SECTION ( 1 ) TANK

DEPENDENT VARIABLE H/HO

THETA    .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L	H/HO													
.000														
.005														
.010														
.040	.1460													
.080	.0850													
.150	.0371													
.200				.0643										
.250				.0456										
.275				.0471	.0515									
.300			.0429	.0464	.0504									
.325				.0451	.0507	.0528								
.350			.0424	.0492	.0502	.0504								
.375						.0429								
.400	.0355	.0389	.0402	.0408	.0498	.0405	.0714			.0874	.0671			.0705
.425							.0877	.1200			.1035			
.450				.0416	.0485	.0655	.0899				.3416			
.475							.1029				.0865			
.500		.0000	.0383	.0409	.0445	.0544	.0997		.0718	.0209		.0736		
.525										.1192				
.550				.0424	.0446	.0585	.0448			.1184				
.575										.0811				
.600	.0323	.0342	.0354	.0405	.0396	.0719	.0530			.0723				.0384
.625										.0829				
.650			.0349	.0404	.0373	.0757	.0482			.0940				
.675										.0877				
.700		.0335	.0333	.0367	.0432	.0792	.0000		.0616	.0815		.0428		
.750			.0309	.0355	.0455	.0704	.0489			.0807				
.800	.0321	.0300	.0302	.0361	.0353	.0674	.0376			.0764				.0399
.825						.1233								
.850				.0383	.0714	.0338	.1175	.0332		.0773				
.875						.0525								
.900		.0292	.0324	.0385	.0691	.0629	.0345	.0677	.0824	.0924		.0680		
.925						.1222								.1358
.935							.1429							
.937										.1502				
.960						.0145								
.975										.0051				



ARC 3.5-185 IH20 T15

EXTERNAL TANK

(RENT18)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.900	.0261	.0289	.0343	.0615	.0560	.0307		.0607	.0739	.0828	.0610			
.925					.1089									.1219
.935							.1278							
.937										.1346				
.960					.0129									
.975										.0045				

THETA 216.0000 222.5000 229.0000

X/L

.335		.0385												
.400	.0873		.0370											
.500	.0541													
.600			.0544											
.700	.0139													
.800			.0347											

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.819 FO = 400.340 TO = 1321.000 HO = 322.900

SECTION ( 1 ) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.000												.0000		
.005												.6286		
.010												.6230		
.040	.1039											.4275		
.080	.0607											.3106	.2075	
.150	.0266											.1300		.0970 .1109
.200			.0470									.0729		
.250			.0335									.0568		
.275			.0344	.0376										
.300			.0312	.0338	.0368							.0590	.0408	
.325				.0329	.0370	.0385								
.350			.0309	.0359	.0367	.0367						.0551		
.375						.0313						.0517		
.400	.0259	.0284	.0294	.0298	.0364	.0296		.0527		.0646	.0496			.0525
.425								.0648	.0887		.0766			
.450			.0304	.0354		.0479		.0666			.2528			
.475								.0762			.0640			
.500	.0000	.0280	.0300	.0325		.0398		.0739		.0533	.0155		.0548	
.525											.0883			
.550			.0310	.0326		.0428		.0332			.0877			
.575											.0601			

ORIGINAL PAGE IS OF POOR QUALITY

ARC 3.5-185 IH20 T15

EXTERNAL TANK

(RENT18)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) TANK

DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.600	.0237	.0251	.0260	.0297	.0290	.0527	.0393	.0536	.0286
.625								.0614	
.650			.0256	.0296	.0273	.0554	.0358	.0696	
.675								.0650	
.700		.0247	.0245	.0271	.0318	.0583	.0000	.0457	.0319
.750			.0229	.0262	.0336	.0519	.0363	.0599	
.800	.0236	.0220	.0221	.0265	.0258	.0493	.0279	.0566	.0297
.825						.0903			
.850				.0280	.0522	.0247	.0860	.0246	.0573
.875						.0384			
.900		.0214	.0238	.0282	.0505	.0252	.0502	.0612	.0685
.925						.0460			.0507
.935						.0894			.1012
.937							.1054		
.960						.0106		.1115	
.975								.0038	

THETA 216.0000 222.5000 229.0000

X/L

.335		.0319							
.400	.0725		.0307						
.500	.0450								
.600			.0452						
.700	.0116								
.800			.0288						



ARC 3.5-185 IH2D T15

EXTERNAL TANK

(RENT19)

MACH ( 1) = 5.300 HAW/HT( 1) = .850

SECTION ( 1)TANK DEPENDENT VARIABLE H/HO

THETA 216.0000222.5000229.0000

X/L		
.335		.0320
.400	.0345	.0599
.500	.0396	
.600		.0344
.700	.0211	
.800		.0221

MACH ( 1) = 5.300 HAW/HT( 2) = .900 RN/L = 5.229 PO = 404.590 TO = 1263.800 HO = 308.220

SECTION ( 1)TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000112.5000123.0000135.0000151.0000157.0000161.0000165.0000180.0000194.0000196.0000208.0000

X/L										
.000										.0000
.005										.6579
.010										.6846
.040	.2734									.3516
.080	.3748									.2678 2220
.150	.1549									.0844 .0599 .0787
.200				.0622						.0384
.250				.0464						.0242
.275				.0477	.0442					
.300			.0553	.0468	.0424					.0288 .0218
.325				.0470	.0420	.0316				
.350			.0553	.0509	.0404	.0286				.0278
.375						.0250				.0266
.400	.0705	.0621	.0553	.0470	.0401	.0226	.0310	.0315	.0219	.0176
.425							.0405	.0516	.0470	
.450				.0472	.0387	.0366	.0488		.1769	
.475							.0405		.0517	
.500		.0000	.0546	.0463	.0370	.0349	.0423	.0333	.0228	.0335
.525									.0860	
.550				.0455	.0357	.0376	.0287		.0611	
.575									.0443	
.600	.0615	.0583	.0521	.0455	.0330	.0343	.0277		.0372	.0248
.625									.0427	
.650			.0521	.0451	.0322	.0324	.0224		.0470	
.675									.0462	
.700		.0587	.0520	.0426	.0317	.0342	.0000	.0269	.0450	.0341
.750			.0512	.0425	.0289	.0320	.0208		.0467	
.800	.0675	.0578	.0499	.0402	.0252	.0280	.0191		.0473	.0290
.825						.0490				
.850				.0391	.0365	.0386	.0378	.0177	.0504	
.875						.0338				

ARC 3.5-185 IH20 T15

EXTERNAL TANK

(RENT19)

MACH ( 1 ) = 3.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.900	.0580	.0494	.0407	.0334	.0327	.0400	.0398	.0456	.0508	.0462				
.925					.0812									.0817
.935							.1471							
.937									.1509					
.960					.0215									
.975									.0078					

THETA 216.0000 222.5000 229.0000

X/L

.335	.0286													
.400	.0309	.0537												
.500	.0355													
.600		.0309												
.700	.0189													
.800		.0199												

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 5.229 FO = 404.590 TO = 1263.800 HO = 308.220

SECTION ( 1 ) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.000											.0000			
.025											.5416			
.050											.5647			
.075											.2902			
.100	.2237										.2210	.1836		
.125	.3068										.0696	.0496	.0652	
.150	.1269										.0317			
.200				.0511							.0200			
.250				.0382										
.275				.0392	.0363									
.300		.0454	.0384	.0348							.0238	.0180		
.325			.0366	.0345	.0259									
.350		.0453	.0417	.0332	.0235						.0230			
.375					.0205						.0220			
.400	.0577	.0509	.0453	.0386	.0329	.0185	.0255	.0260	.0181				.0146	
.425							.0334	.0426	.0388					
.450				.0387	.0317	.0301	.0403		.1461					
.475							.0335		.0428					
.500		.0000	.0448	.0380	.0304	.0286	.0349	.0275	.0188	.0277				
.525									.0711					
.550				.0373	.0292	.0308	.0237		.0505					
.575									.0366					

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ARC 3.5-185 IH20 T15

EXTERNAL TANK

(RENT19)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) TANK

DEPENDENT VARIABLE H/H0

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.600	.0505	.0476	.0428	.0373	.0271	.0281	.0229	.0307	.0206	
.625								.0353		
.650			.0428	.0370	.0264	.0266	.0185	.0389		
.675								.0382		
.700		.0482	.0428	.0350	.0261	.0281	.0000	.0223	.0372	.0283
.750			.0420	.0349	.0237	.0263	.0172	.0386		
.800	.0554	.0475	.0410	.0330	.0207	.0230	.0158	.0391		.0240
.825					.0403					
.850				.0320	.0299	.0310	.0147	.0416		
.875						.0277				
.900		.0476	.0405	.0334	.0274	.0268	.0328	.0377	.0421	.0383
.925						.0666				.0677
.935							.1209			
.937								.1250		
.960						.0176				
.975								.0064		

THETA 216.0000 222.5000 229.0000

X/L

.335		.0237								
.400	.0256		.0446							
.500	.0295									
.600			.0257							
.700	.0157									
.800			.0165							

ARC 3.5-185 IH20 T15

EXTERNAL TANK

(RENT20) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = .000 BETA = .000  
 MACH = 7.300 RN/L = 7.000

MACH ( 1 ) = 7.300 HAW/HT ( 1 ) = .850 RN/L = 6.829 PO = 1647.280 TO = 1525.100 HO = 576.060

SECTION ( 1 ) TANK

DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.000														.0000
.005														.8201
.010														.8670
.040	.1809													.5102
.080	.1073													.3658 .2604
.150	.0351													.1203 .0963 .1074
.200				.0440										.0514
.250				.0283										.0304
.275				.0322	.0343									
.300			.0218	.0327	.0315									.0328 .1797
.325				.0331	.0295									
.350			.0293	.0371	.0293									.0317
.375						.0328								.0283
.400	.0169	.0395	.0330	.0327	.0295	.0258								.0291
.425						.0379				.0358				.0233
.450						.0503	.0706							.0604
.475				.0323	.0240	.0297				.0594				.2924
.500						.0620								.0654
.525		.0000	.0364	.0289	.0213	.0311				.0594	.0469			.0123 .0455
.550				.0261	.0246	.0291				.0229				.0611
.575						.0644								.0644
.600	.0343	.0334	.0350	.0315	.0247	.0248				.0192				.0451
.625														.0358 .0316
.650			.0352	.0327	.0235	.0260				.0242				.0322
.675														.0291
.700		.0326	.0341	.0311	.0233	.0289				.0000	.0319			.0312
.750			.0330	.0302	.0205	.0283				.0279				.0291
.800	.0341	.0308	.0314	.0289	.0163	.0273				.0239				.0340
.825														.0322
.850				.0275	.0227	.0144	.0415			.0235				.0322 .0233
.875						.0229								
.900		.0301	.0299	.0271	.0197	.0301	.0244			.0566	.0448			.0262 .0473
.925						.0541								
.935														.0719
.937								.1273						
.960						.0202								.0844
.975														.0067

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ARC 3.5-185 IH20 T15

EXTERNAL TANK

(RENT20)

MACH ( 1) = 7.300 HAW/HT ( 1) = .050

SECTION ( 1) TANK DEPENDENT VARIABLE H/HO

THETA 216.0000222.5000229.0000

X/L		
.335	.0265	
.400	.0380	.0324
.500	.0241	
.600		.0366
.700	.0210	
.800		.0238

MACH ( 1) = 7.300 HAW/HT ( 2) = .900 RN/L = 6.829 PO = 1647.280 TO = 1525.100 HO = 376.060

SECTION ( 1) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L														
.000													.0000	
.005													.7434	
.010													.7866	
.040	.1641												.4632	
.080	.0974												.3320	.2367
.150	.0319												.1092	.0875 .0976
.200				.0400									.0466	
.250				.0257									.0276	
.275				.0292	.0312									
.300			.0198	.0298	.0286								.0298	.1613
.325				.0301	.0269		.0299							
.350			.0267	.0338	.0267		.0282						.0287	
.375							.0258						.0264	
.400	.0153	.0359	.0301	.0297	.0268		.0235	.0343		.0325		.0212		.0356
.425								.0457	.0641			.0548		
.450				.0294	.0218		.0270	.0539				.2654		
.475								.0563				.0594		
.500		.0000	.0331	.0263	.0194		.0283	.0540		.0425		.0112	.0414	
.525												.0555		
.550				.0237	.0224		.0265	.0208				.0585		
.575												.0409		
.600	.0312	.0304	.0318	.0287	.0225		.0225	.0175				.0325		.0287
.625												.0293		
.650			.0320	.0298	.0214		.0236	.0219				.0265		
.675												.0284		
.700		.0297	.0310	.0283	.0212		.0263	.0000		.0290		.0303	.0190	
.750			.0300	.0275	.0187		.0257	.0254				.0309		
.800	.0310	.0281	.0286	.0263	.0148		.0249	.0217				.0292		.0212
.825							.0310							
.850				.0250	.0207		.0131	.0378		.0213		.0285		
.875							.0209							

ARC 3.5-185 IH20 T15

EXTERNAL TANK

(RENT20)

MACH ( 1) = 7.300 HAW/HT ( 2) = .900

SECTION ( 1) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.900	.0274	.0272	.0247	.0179	.0273	.0222	.0514	.0407	.0238	.0430	.0654
.925					.0492						
.935							.1160				
.937									.0767		
.960					.0184						
.975									.0061		

THETA 216.0000 222.5000 229.0000

X/L

.335	.0240	
.400	.0346	.0295
.500	.0219	
.600		.0333
.700	.0191	
.800		.0216

MACH ( 1) = 7.300 HAW/HT ( 3) = 1.000 RN/L = 6.829 FO = 1647.280 TO = 1525.100 HO = 376.060

SECTION ( 1) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.000										.0000			
.005										.6263			
.010										.6635			
.040	.1385									.3911			
.080	.0823									.2803	.2001		
.150	.0269									.0922		.0740	.0826
.200				.0339						.0394			
.250				.0218						.0234			
.275				.0248	.0264								
.300			.0168	.0252	.0243					.0252		.1339	
.325				.0255	.0228		.0253						
.350			.0226	.0286	.0226		.0239			.0243			
.375							.0219			.0223			
.400	.0130	.0304	.0254	.0252	.0227		.0199	.0290	.0274	.0179		.0301	
.425								.0385	.0541	.0462			
.450				.0249	.0185		.0229	.0455		.2241			
.475								.0475		.0502			
.500	.0000	.0281	.0223	.0164		.0239		.0456	.0359	.0095		.0350	
.525										.0469			
.550				.0201	.0190		.0224	.0176		.0494			
.575										.0346			

ARC 3.5-185 IH20 T15

EXTERNAL TANK

(RENT20)

MACH ( 1 ) = 7.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) TANK

DEPENDENT VARIABLE H/H0

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.600	.0265	.0257	.0269	.0243	.0190	.0191	.0148	.0274	.0243
.625								.0247	
.650			.0271	.0252	.0181	.0200	.0185	.0224	
.675								.0240	
.700		.0251	.0262	.0240	.0180	.0222	.0000	.0245	.0256
.750			.0254	.0233	.0158	.0218	.0215	.0261	.0161
.800	.0263	.0238	.0242	.0222	.0125	.0211	.0184	.0247	.0179
.825					.0263				
.850				.0211	.0175	.0111	.0320	.0180	.0241
.875						.0177			
.900		.0232	.0230	.0209	.0152	.0232	.0188	.0435	.0344
.925						.0417		.0201	.0364
.935							.0985		.0533
.937								.0649	
.960					.0156				
.975								.0052	

THETA 216.0000 222.5000 229.0000

X/L

.335		.0203							
.400	.0292		.0250						
.500	.0185								
.600			.0281						
.700	.0162								
.800			.0183						

ARC 3.5-185 IH2D T15\*X28

EXTERNAL TANK

(RENT21) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.496 FO = 121.400 TO = 1301.700 HO = 317.930

SECTION ( 1 ) TANK

DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.000														.0000
.005														.7128
.010														.7635
.040	.1573													.3116
.080	.0884													.2215 .1632
.150	.0451													.1448 .1141 .0987
.200				.0451										.0605
.250				.0241										.0339
.275				.0226	.0274									
.300			.0201	.0222	.0268									.0427 .0447
.325				.0200	.0288									
.350			.0205	.0198	.0319	.0317								.0596
.375						.0302								.0600
.400	.0147	.0312	.0242	.0267	.0399	.0312								.0535 .0512
.425						.0325	.0551	.0639						
.450							.0855	.1156						.1015
.475				.0379	.0438		.0885							.3281
.500		.0000	.0319	.0402	.0435	.0537	.0863							.0882
.525							.0879	.0680						.0172 .0742
.550				.0396	.0438	.0527								.0641
.575							.0315							.0848
.600	.0280	.0314	.0327	.0362	.0388	.0482	.0303							.0593 .0261
.625														.0591
.650			.0311	.0349	.0352	.0434	.0312							.0616
.675														.0603
.700		.0311	.0290	.0314	.0342	.0545	.0000	.0426						.0570 .0356
.750			.0280	.0318	.0328	.0494	.0336							.0547
.800	.0274	.0302	.0269	.0313	.0335	.0485	.0271							.0523 .0316
.825						.0817								
.850				.0339	.0681	.0210	.0922	.0211						.0497
.875						.0362								
.900		.0280	.0282	.0343	.0629	.0420	.0342	.0481	.0617	.0405				.0670
.925						.0971								.1292
.935							.1489							
.937														.1280
.960						.0148								
.975														.0178

ORIGINAL PAGE IS OF POOR QUALITY



ARC 3.5-105 IH20 T15+X20

EXTERNAL TANK

(RENT21)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900

SECTION ( 1 ) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L														
.900	.0251	.0253	.0308	.0564	.0376	.0306	.0432	.0554	.0364	.0602				
.925					.0870								.1162	
.935							.1335							
.937									.1150					
.960					.0133									
.975									.0160					

THETA 216.0000 222.5000 229.0000

X/L														
.335		.0502												
.400	.0708		.0437											
.500	.0460													
.600			.0379											
.700	.0192													
.800			.0247											

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.496 PO = 121.400 TO = 1301.700 HO = 317.930

SECTION ( 1 ) TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L														
.000										.0000				
.005										.5300				
.010										.5687				
.040	.1168									.2325				
.080	.0658									.1653	.1221			
.150	.0336									.1081		.0854	.0739	
.200				.0334						.0452				
.250				.0179						.0253				
.275				.0168	.0204									
.300			.0149	.0165	.0199					.0319		.0335		
.325				.0149	.0214		.0235							
.350			.0153	.0147	.0237		.0224			.0445				
.375							.0232			.0448				
.400	.0110	.0232	.0180	.0198	.0297		.0242	.0411	.0477	.0399			.0384	
.425								.0639	.0864	.0758				
.450				.0282	.0325		.0398	.0662		.2453				
.475								.0646		.0660				
.500		.0000	.0237	.0299	.0323		.0399	.0658	.0509	.0129		.0557		
.525										.0480				
.550				.0294	.0325		.0391	.0236		.0634				
.575										.0507				

ORIGINAL PAGE IS  
OF POOR QUALITY



ARC 3.5-185 IH2D T15+X28

EXTERNAL TANK

(RENT21)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 ) TANK

DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.600	.0209	.0234	.0243	.0269	.0288	.0358	.0227	.0443	.0196		
.625								.0441			
.650		.0231	.0259	.0261	.0321	.0233	.0233	.0460			
.675								.0450			
.700		.0231	.0215	.0233	.0254	.0404	.0000	.0318	.0425	.0266	
.750			.0208	.0236	.0243	.0366	.0250	.0408			
.800	.0205	.0225	.0200	.0232	.0249	.0359	.0202	.0390		.0236	
.825					.0607						
.850				.0252	.0506	.0156	.0685	.0157	.0371		
.875						.0269					
.900		.0209	.0210	.0255	.0467	.0312	.0254	.0360	.0461	.0303	.0501
.925						.0721					.0966
.935							.1106				
.937								.0957			
.960						.0110					
.975								.0133			

THETA 216.0000 222.5000 229.0000

X/L

.335		.0418		
.400	.0590		.0364	
.500	.0384			
.600			.0315	
.700	.0160			
.800			.0205	

ARC 3.5-185 IH20 T15\*X28

EXTERNAL TANK

(RENT22) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.141 FO = 403.770 TO = 1275.200 HO = 311.160

SECTION ( 1 ) TANK

DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000 112.5000 123.0000 135.0000 151.0000 157.0000 161.0000 165.0000 180.0000 194.0000 196.0000 208.0000

X/L

.000																		.0000
.005																		.8671
.010																		.8840
.040	.1838																	.5924
.080	.1896																	.4324 .2899
.150	.0970																	.1852 .1298 .1566
.200						.0685												.1032
.250						.0494												.0791
.275						.0513	.0580											
.300			.0448			.0498	.0548											.0802 .0502
.325						.0482	.0518		.0482									
.350			.0433			.0516	.0517		.0386									.0762
.375									.0290									.0725
.400	.0364	.0388	.0421		.0448	.0496		.0273	.0733		.0879							.0688 .0721
.425									.0884	.1199								.1083
.450					.0458	.0480		.0686	.0899									.3473
.475									.1094									.0850
.500		.0000	.0396		.0441	.0462		.0584	.1010		.0761							.0222 .0745
.525																		.1240
.550					.0436	.0435		.0592	.0450									.1149
.575																		.0831
.600	.0310	.0340	.0356		.0403	.0396		.0712	.0533									.0774 .0354
.625																		.0864
.650			.0339		.0403	.0351		.0749	.0480									.0956
.675																		.0898
.700		.0320	.0326		.0366	.0372		.0762	.0000		.0595							.0856 .0429
.750			.0308		.0385	.0393		.0673	.0487									.0834
.800	.0300	.0296	.0304		.0389	.0422		.0632	.0380									.0823 .0392
.825								.1237										
.850					.0397	.0727		.0322	.1174		.0336							.0817
.875								.0531										
.900		.0289	.0324		.0420	.0704		.0611	.0290		.0676		.0999	.0947				.0713
.925								.1111										.1450
.935									.1541									
.937																		.1752
.960								.0075										
.975																		.0039

ORIGINAL PAGE IS OF POOR QUALITY



ARC 3.5-185 IH20 T15+X28

EXTERNAL TANK

(RENT22)

MACH ( 1) = 5.300 HAW/HT( 2) = .900

SECTION ( 1)TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000112.5000123.0000135.0000151.0000157.0000161.0000165.0000180.0000194.0000196.0000208.0000

X/L

.900 .0258 .0289 .0375 .0629 .0546 .0259 .0604 .0893 .0846 .0638
.925 .0992 .1297
.935 .1379
.937 .1566
.960 .0067
.975 .0034

THETA 216.0000222.5000229.0000

X/L

.335 .0396
.400 .0910 .0379
.500 .0594
.600 .0508
.700 .0116
.800 .0353

MACH ( 1) = 5.300 HAW/HT( 3) = 1.000 RN/L = 5.141 FO = 403.770 TO = 1275.200 HO = 311.160

SECTION ( 1)TANK DEPENDENT VARIABLE H/HO

THETA .0000 45.0000 67.5000 90.0000112.5000123.0000135.0000151.0000157.0000161.0000165.0000180.0000194.0000196.0000208.0000

X/L

.000 .0000
.005 .6326
.010 .6475
.040 .1346 .4351
.080 .1390 .3173 .2138
.150 .0713 .1358 .0957 .1155
.200 .0506 .0758
.250 .0365 .0581
.275 .0378 .0428
.300 .0367 .0405 .0588 .0370
.325 .0355 .0382 .0355
.350 .0319 .0380 .0381 .0285 .0559
.375 .0213 .0532
.400 .0268 .0286 .0311 .0330 .0365 .0202 .0538 .0645 .0506 .0532
.425 .0649 .0881 .0795
.450 .0661 .2550
.475 .0805 .0625
.500 .0000 .0292 .0325 .0340 .0431 .0743 .0560 .0163 .0549
.525 .0911
.550 .0321 .0321 .0437 .0331 .0844
.575 .0611

ORIGINAL PAGE IS OF POOR QUALITY

ARC 3.5-185 IH20 T15+X28

EXTERNAL TANK

(RENT22)

MACH ( 1 ) = 5.300 HAW/HT( 3 ) = 1.000

SECTION ( 1 ) TANK

DEPENDENT VARIABLE H/H0

THETA	.0000	45.0000	67.5000	90.0000	112.5000	123.0000	135.0000	151.0000	157.0000	161.0000	165.0000	180.0000	194.0000	196.0000	208.0000
X/L															
.600	.0230	.0251	.0262	.0297	.0292		.0524		.0393			.0569			.0251
.625												.0635			
.650			.0250	.0297	.0259		.0552		.0353			.0702			
.675												.0661			
.700		.0237	.0241	.0271	.0275		.0562		.0000		.0438	.0630		.0317	
.750			.0227	.0284	.0290		.0496		.0358			.0614			
.800	.0222	.0219	.0224	.0287	.0311		.0465		.0280			.0605			.0289
.825						.0913									
.850				.0293	.0536	.0238	.0866		.0248			.0601			
.875						.0391									
.900		.0213	.0239	.0309	.0519	.0450	.0214		.0498		.0737	.0697		.0527	
.925						.0818									.1070
.935								.1140							
.937												.1291			
.960						.0055									
.975												.0028			

THETA 216.0000 222.5000 229.0000

X/L

.335		.0326	
.400	.0751		.0312
.500	.0490		
.600		.0420	
.700	.0096		
.800		.0292	

ARC 3.5-185 IH20 S8

SOLID BOOSTER

(RENS23) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.439 FO = 121.330 TO = 1333.500 HO = 326.130

SECTION ( 1 )SRB

DEPENDENT VARIABLE H/HO

PSI 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L

.000	.6643								
.002								.7025	
.025	.1398							.1581	
.050	.1173	.1760						.1250	
.075				.1422				.0000	
.100	.0998	.1411		.1340				.1070	
.110								.1854	
.115							.2267		
.130								.0704	
.150				.0270				.0948	
.200		.0303		.0163				.0599	
.250								.0394	
.300				.0000	.0000			.0453	.0355
.400	.0217	.0354		.0300	.0345			.0000	
.500		.0351		.0000	.0000			.0000	.0000
.600		.0392		.0325	.0263			.0000	
.650		.0397			.0000			.0176	
.700	.0000	.0000	.0385	.0000	.0000			.0000	.0162
.750		.0428			.0000			.0189	
.780	.0000	.1931		.0000				.0305	.0000
.800	.0077	.0367		.0000				.0051	.0000
.850		.0000		.0000				.0000	
.900	.0000	.0000	.0685	.0000				.0239	.0000
.904			.0794						
.918			.4540						
.925			.3903	.1882					
.930	.0931	.1956	.2610		.3573	.1859		.1043	.0543
.940				.0613					
.950			.0822						
.960		.1963		.0533	.1525	.1732		.1498	
.970			.0274						
.990	.1397	.1636	.1960		.1109	.1391		.1373	.0827

ARC 3.5-185 IH20 S8

SOLID BOOSTER

(RENS23)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.439 FO = 121.330 TO = 1333.500 HO = 326.130

SECTION ( 1 )SRB

DEPENDENT VARIABLE H/HO

PS1 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L									
.000	.5920								
.002								.6263	
.025	.1247							.1412	
.050	.1048		.1580					.1118	
.075					.1273			.0000	
.100	.0893		.1263		.1199			.0958	
.110								.1660	
.115							.2031		
.130								.0631	
.150					.0243			.0850	
.200			.0272		.0146			.0537	
.250								.0353	
.300					.0000	.0000		.0406	.0318
.400	.0194		.0317		.0269	.0309		.0000	
.500			.0314		.0000	.0000		.0000	.0000
.600			.0350		.0291	.0236		.0000	
.650			.0355			.0000		.0157	
.700	.0000	.0000	.0344		.0000	.0000		.0000	.0145
.750			.0382			.0000		.0169	
.780	.0000		.1728		.0000			.0273	.0000
.800	.0069		.0328		.0000			.0046	.0000
.850			.0000		.0000			.0000	
.900	.0000	.0000	.0613		.0000			.0214	.0000
.904				.0711					
.918				.4059					
.925				.3488	.1682				
.930	.0834	.1750	.2334			.3197	.1663	.0933	.0486
.940						.0548			
.950				.0735					
.960			.1756		.0477	.1364	.1549	.1340	
.970				.0245					
.990	.1251	.1464	.1753			.0993	.1245	.1228	.0741

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.439 FO = 121.330 TO = 1333.500 HO = 326.130

SECTION ( 1 )SRB

DEPENDENT VARIABLE H/HO

PS1 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L								
.000	.4861							
.002								.5147
.025	.1026							.1163
.050	.0864		.1304					.0922
.075					.1052			.0000

ARC 3.5-185 IH20 S8

SOLID BOOSTER

(RENS23)

MACH ( 1 ) = 5.300 HAW/HT( 3 ) = 1.000

SECTION ( 1 )SRB DEPENDENT VARIABLE H/HO

P&I 99.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L									
.100	.0737		.1044		.0991				.0792
.110									.1373
.115							.1681		
.130									.0522
.150					.0201				.0705
.200			.0225		.0121				.0445
.250									.0291
.300					.0000		.0000		.0335 .0263
.400	.0161		.0261		.0222		.0255		.0000
.500			.0259		.0000		.0000		.0000 .0000
.600			.0289		.0240		.0195		.0000
.650			.0293				.0000		.0130
.700	.0000	.0000	.0284		.0000		.0000		.0000 .0120
.750			.0316				.0000		.0140
.780	.0000		.1428		.0000				.0226 .0000
.800	.0057		.0271		.0000				.0038 .0000
.850			.0000		.0000				.0000
.900	.0000	.0000	.0507		.0000				.0177 .0000
.904					.0587				
.918					.3349				
.925					.2877	.1388			
.930	.0690	.1445	.1927			.2640	.1373		.0770 .0402
.940						.0452			
.950					.0607				
.960			.1450		.0394	.1127	.1279		.1106
.970					.0202				
.990	.1033	.1209	.1448			.0820	.1028		.1014 .0612

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ARC 3.5-185 IH2D S8

SOLID BOOSTER

(RENS24) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 15.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.450 FO = 122.790 TO = 1337.000 HO = 327.030

SECTION ( 1 )SR8

DEPENDENT VARIABLE H/HO

PSI 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L	90.0000	135.0000	180.0000	210.0000	215.0000	225.0000	240.0000	247.5000	260.0000	270.0000	315.0000
.000	.6922										
.002										.9142	
.025	.0511									.3763	
.050	.0239		.1343							.2889	
.075						.1957				.0000	
.100	.0237		.1127			.1877				.2180	
.110										.3502	
.115								.3976			
.130										.1312	
.150						.0845				.2427	
.200			.0228			.1060				.1738	
.250										.1460	
.300						.0000	.0000			.1302	.1233
.400	.0462		.0318			.0737	.1274			.0000	
.500			.0260			.0000	.0000			.0000	.0000
.600			.0234			.0927	.1304			.0000	
.650			.0241				.0000			.1471	
.700	.0000	.0000	.0218			.0000	.0000			.0000	.1043
.750			.0209				.0000			.1614	
.780	.0000		.0574			.0000				.4933	.0000
.800	.0262		.0293			.0000				.1861	.0000
.850			.0000			.0000				.0000	
.900	.0038	.0000	.0204			.0000				.1478	.0000
.904					.0772						
.918					.4620						
.925					.4586	.5296					
.930	.0319	.0577	.0991			.6351	.3813			.3870	.2958
.940						.2521					
.950					.1535						
.960			.0986			.1967	.3645	.3549		.3710	
.970					.0574						
.990	.0944	.0468	.0982			.2284	.3458			.3720	.2817

ARC 3.5-185 IH2D S8

SOLID BOOSTER

(RENS24)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.450 PO = 122.790 TO = 1337.000 HO = 327.030

SECTION ( 1 )SRB

DEPENDENT VARIABLE H/HO

PSI 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L									
.000	.6189								
.002								.8176	
.025	.0457							.3368	
.050	.0214	.1204						.2589	
.075				.1755				.0000	
.100	.0212	.1011		.1684				.1956	
.110								.3143	
.115						.3569			
.130								.1178	
.150				.0760				.2181	
.200		.0205		.0952				.1561	
.250								.1309	
.300				.0000	.0000			.1168	.1107
.400	.0415	.0286		.0661	.1143			.0000	
.500		.0233		.0000	.0000			.0000	.0000
.600		.0210		.0832	.1171			.0000	
.650		.0216			.0000			.1321	
.700	.0000	.0000	.0195	.0000	.0000			.0000	.0937
.750			.0188		.0000			.1450	
.780	.0000		.0516	.0000				.4433	.0000
.800	.0235	.0263		.0000				.1672	.0000
.850		.0000		.0000				.0000	
.900	.0035	.0000	.0184	.0000				.1328	.0000
.904			.0693						
.918			.4146						
.925			.4114	.4754					
.930	.0287	.0518	.0889		.5704	.3424		.3477	.2659
.940				.2263					
.950			.1378						
.960		.0885		.1766	.3273	.3187		.3332	
.970			.0515						
.990	.0848	.0420	.0881		.2051	.3106		.3342	.2532

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.450 PO = 122.790 TO = 1337.000 HO = 327.030

SECTION ( 1 )SRB

DEPENDENT VARIABLE H/HO

PSI 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L								
.000	.5107							
.002								.6750
.025	.0378							.2785
.050	.0177	.0997						.2144
.075				.1456				.0000

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ARC 3.5-185 IH2D S8

SOLID BOOSTER

(RENS24)

MACH ( 1 ) = 5.300 HAW/HT( 3 ) = 1.000

SECTION ( 1 )SRB

DEPENDENT VARIABLE H/HO

PSI 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L									
.100	.0176		.0839		.1397				.1622
.110									.2607
.115							.2962		
.130									.0979
.150					.0632				.1814
.200			.0171		.0792				.1297
.250									.1086
.300					.0000	.0000			.0968 .0920
.400	.0345		.0237		.0548	.0948			.0000
.500			.0194		.0000	.0000			.0000 .0000
.600			.0175		.0690	.0972			.0000
.650			.0179			.0000			.1097
.700	.0000	.0000	.0162		.0000	.0000			.0000 .0780
.750			.0156			.0000			.1206
.780	.0000		.0428		.0000				.3686 .0000
.800	.0196		.0219		.0000				.1390 .0000
.850			.0000		.0000				.0000
.900	.0029	.0000	.0152		.0000				.1105 .0000
.904				.0576					
.918				.3440					
.925				.3413	.3945				
.930	.0236	.0430	.0738		.4739	.2845			.2889 .2212
.940					.1878				
.950				.1143					
.960			.0735		.1466	.2719	.2646		.2768
.970				.0428					
.990	.0705	.0349	.0731		.1705	.2581			.2778 .2106

ARC 3.5-185 IH2D S8

SOLID BOOSTER

(RENS25) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 20.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.401 FO = 118.760 TO = 1337.600 HO = 327.190

SECTION ( 1 )SRB

DEPENDENT VARIABLE H/HO

FSI 99.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L

.000	.7409								
.002								.9922	
.025	.0383							.4463	
.050	.0208	.1363						.3355	
.075				.2185				.0000	
.100	.0536	.1090		.2067				.2518	
.110								.3819	
.115						.4496			
.130								.1494	
.150				.1088				.3145	
.200		.0289		.1030				.2062	
.250								.1672	
.300				.0000	.0000			.1742	.1508
.400	.0228	.0309		.0949	.1742			.0000	.0000
.500		.0281		.0000	.0000			.0000	.0000
.600		.0230		.1226	.1865			.0000	.0000
.650		.0274			.0000			.2294	
.700	.0000	.0000	.0296	.0000	.0000			.0000	.1614
.750			.0263		.0000			.2310	
.780	.0000	.0767		.0000				.6661	.0000
.800	.0282	.0395		.0000				.2570	.0000
.850		.0000		.0000				.0000	.0000
.900	.0000	.0000	.0268	.0000				.2056	.0000
.904			.1142						
.918			.5734						
.925			.5709	.6777					
.930	.0421	.0267	.1199		.8009	.4834		.4973	.3793
.940				.3464					
.950			.1970						
.960		.1147		.2631	.4534	.4517		.4654	
.970			.0785						
.990	.0481	.0211	.1153		.2742	.4237		.4436	.3465

ARC 3.5-185 IH20 S8

SOLID BOOSTER

(RENS25)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 1.401 FO = 118.760 TO = 1337.600 HO = 327.190

SECTION ( 1 )SRB

DEPENDENT VARIABLE H/HO

FS1 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L

.000	.6640								
.002								.8895	
.025	.0344							.4004	
.050	.0187	.1224						.3013	
.075				.1963				.0000	
.100	.0481	.0979		.1857				.2263	
.110								.3433	
.115						.4041			
.130								.1344	
.150				.0978				.2830	
.200		.0260		.0926				.1854	
.250								.1502	
.300				.0000	.0000			.1564	.1356
.400	.0205	.0278		.0852	.1564			.0000	
.500		.0253		.0000	.0000			.0000	.0000
.600		.0206		.1101	.1675			.0000	
.650		.0246			.0000			.2061	
.700	.0000	.0000	.0265	.0000	.0000			.0000	.1452
.750		.0237			.0000			.2076	
.780	.0000	.0689		.0000				.5988	.0000
.800	.0253	.0355		.0000				.2310	.0000
.850		.0000		.0000				.0000	
.900	.0000	.0000	.0241	.0000				.1848	.0000
.904			.1026						
.918			.5148						
.925			.5125	.6085					
.930	.0378	.0240	.1076		.7195	.4343		.4468	.3409
.940				.3111					
.950			.1769						
.960		.1030		.2363	.4073	.4057		.4180	
.970			.0705						
.990	.0432	.0190	.1036		.2463	.3806		.3985	.3113

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 1.401 FO = 118.760 TO = 1337.600 HO = 327.190

SECTION ( 1 )SRB

DEPENDENT VARIABLE H/HO

FS1 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L

.000	.5499								
.002								.7369	
.025	.0285							.3322	
.050	.0155	.1016						.2502	
.075				.1631				.0000	

ARC 3.5-185 IH2D S8

SCLID BOOSTER

(RENS25)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 )SRB DEPENDENT VARIABLE H/HO

PS1 99.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L

.100	.0400		.0814		.1543				.1882
.110									.2855
.115							.3362		
.130									.1118
.150					.0815				.2357
.200			.0216		.0771				.1543
.250									.1249
.300					.0000	.0000		.1300	.1128
.400	.0171		.0231		.0707	.1300		.0000	
.500			.0210		.0000	.0000		.0000	.0000
.600			.0171		.0915	.1392		.0000	
.650			.0204			.0000		.1713	
.700	.0000	.0000	.0220		.0000	.0000		.0000	.1208
.750			.0196			.0000		.1727	
.780	.0000		.0573		.0000			.4981	.0000
.800	.0211		.0295		.0000			.1921	.0000
.850			.0000		.0000			.0000	
.900	.0000	.0000	.0200		.0000			.1538	.0000
.904				.0853					
.918				.4274					
.925				.4254	.5054				
.930	.0315	.0199	.0894		.5980	.3609		.3714	.2836
.940					.2584				
.950				.1469					
.960			.0855		.1963	.3385	.3370	.3474	
.970				.0586					
.990	.0359	.0158	.0860		.2047	.3162		.3312	.2588

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ARC 3.5-185 IH20 S8

SOLID BOOSTER

(RENS26)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 )SRB

DEPENDENT VARIABLE H/HO

PSI 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L									
.100	.0704		.1005		.0950				.0748
.110									.1679
.115							.1845		
.130									.0625
.150					.0306				.0785
.200			.0179		.0525				.0480
.250									.0436
.300					.0000	.0000			.0367 .0337
.400	.0150		.0402		.0534	.0491			.0000
.500			.0531		.0000	.0000			.0000 .0000
.600			.0575		.0539	.0430			.0000
.650			.0610			.0000			.0276
.700	.0000	.0000	.0629		.0000	.0000			.0000 .0284
.750			.0690			.0000			.0322
.780	.0000		.2619		.0000				.0822 .0000
.800	.0230		.0760		.0000				.0289 .0000
.850			.0000		.0000				.0000
.900	.0016	.0000	.0590		.0000				.0293 .0000
.904					.0800				
.918					.3774				
.925					.3420	.1546			
.930	.0926	.1439	.1925		.2169	.1280			.0896 .0578
.940					.0602				
.950					.0721				
.960			.1710		.0550	.0000	.1423		.1104
.970					.0331				
.990	.1164	.1548	.1704		.1342	.1525			.1105 .0660



ARC 3.5-105 IH20 S8

SOLID BOOSTER

(RENS27)

MACH ( 1) = 5.300 HAW/HT ( 2) = .900 RN/L = 4.939 FO = 403.970 TO = 1308.000 HO = 319.570

SECTION ( 1)SRB DEPENDENT VARIABLE H/HO

PSI 90.0000135.0000100.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L

.000	.5894								
.002								.7972	
.025	.0433							.3331	
.050	.0191	.1164						.2599	
.075				.2323				.0000	
.100	.0392	.1008		.2390				.1993	
.110								.3991	
.115							.4423		
.130								.1540	
.150				.1597				.2558	
.200		.0615		.1309				.2058	
.250								.1944	
.300				.0000	.0000			.1667	.1415
.400	.0493	.0381		.0994	.1569			.0000	
.500		.0324		.0000	.0000			.0000	.0000
.600		.0282		.1141	.1544			.0000	
.650		.0290			.0000			.1690	
.700	.0000	.0000	.0260	.0000				.0000	.1275
.750		.0253			.0000			.1756	
.780	.0000	.0604		.0000				.4918	.0000
.800	.0147	.0394		.0000				.2188	.0000
.850		.0000		.0000				.0000	
.900	.0000	.0000	.0260	.0000				.1912	.0000
.904			.1296						
.918			.5723						
.925			.5996	.6555					
.930	.0782	.0630	.1043		.6394	.4421		.4492	.3394
.940				.3413					
.950			.1657						
.960		.1321		.2527	.4591	.4508		.4751	
.970			.0815						
.990	.0927	.0483	.1319		.2982	.4373		.4681	.3485

MACH ( 1) = 5.300 HAW/HT ( 3) = 1.000 RN/L = 4.939 FO = 403.970 TO = 1308.000 HO = 319.570

SECTION ( 1)SRB DEPENDENT VARIABLE H/HO

PSI 90.0000135.0000100.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L

.000	.4838								
.002								.6549	
.025	.0357							.2742	
.050	.0157	.0961						.2143	
.075				.1919				.0000	



ARC 3.5-185 IH2D S8

SCLID BOOSTER

(RENS20) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = 20.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT( 1 ) = .850 RN/L = 4.944 PO = 402.610 TO = 1304.500 HO = 318.660

SECTION ( 1 )SRB

DEPENDENT VARIABLE H/HO

PSI 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L

.000	.6919								
.002								.9801	
.025	.0358							.4613	
.050	.0263	.1335						.4254	
.075				.2293				.0000	
.100	.0683	.1111		.2155				.7282	
.110								.7865	
.115							.6622		
.130								.2204	
.150				.2083				.3860	
.200		.0678		.1687				.3109	
.250								.2652	
.300				.0000	.0000			.2522	.1955
.400	.0444	.0427		.1520	.2416			.0000	.0000
.500		.0355		.0000	.0000			.0000	.0000
.600		.0302		.1778	.2544			.0000	
.650		.0364			.0000			.3000	
.700	.0000	.0000	.0387	.0000	.0000			.0000	.2213
.750		.0440			.0000			.2990	
.780	.0000	.1039		.0000				.8091	.0000
.800	.0434	.0610		.0000				.3206	.0000
.850		.0000		.0000				.0000	
.900	.0000	.0000	.0413	.0000				.3004	.0000
.904			.2032						
.918			.7913						
.925			.8342	.9610					
.930	.0600	.0433	.1523		.9221	.6516		.6587	.4914
.940				.5301					
.950			.2853						
.960		.1812		.3829	.6659	.6466		.6799	
.970			.1374						
.990	.0599	.0249	.1809		.4337	.6028		.6384	.4859

ARC 3.5-185 IH20 S8

SCLTD BOOSTER

(RENS20)

MACH ( 1 ) = 5.300 HAW/HT ( 2 ) = .900 RN/L = 4.944 FO = 402.610 TO = 1304.500 HO = 318.660

SECTION ( 1 )SRB

DEPENDENT VARIABLE H/HO

FSI 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L									
.000	.6169								
.002								.8742	
.025	.0320							.4120	
.050	.0235	.1193						.3804	
.075				.2051				.0000	
.100	.0611	.0994		.1928				.6521	
.110								.7044	
.115						.5930			
.130								.1975	
.150				.1866				.3461	
.200		.0607		.1511				.2785	
.250								.2373	
.300				.0000	.0000			.2255	.1750
.400	.0398	.0382		.1358	.2160			.0000	
.500		.0318		.0000	.0000			.0000	.0000
.600		.0270		.1590	.2276			.0000	
.650		.0326			.0000			.2685	
.700	.0000	.0000	.0346	.0000	.0000			.0000	.1982
.750		.0394			.0000			.2678	
.780	.0000	.0930		.0000				.7250	.0000
.800	.0389	.0545		.0000				.2870	.0000
.830		.0000		.0000				.0000	
.900	.0000	.0000	.0369	.0000				.2691	.0000
.904			.1818						
.918			.7071						
.925			.7452	.8592					
.930	.0538	.0387	.1361	.8249	.5827			.5895	.4400
.940				.4742					
.950			.2550						
.960		.1619	.3426	.5956	.5781			.6082	
.970			.1229						
.990	.0536	.0223	.1616	.3879	.5389			.5710	.4348

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000 RN/L = 4.944 FO = 402.610 TO = 1304.500 HO = 318.660

SECTION ( 1 )SRB

DEPENDENT VARIABLE H/HO

FSI 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L									
.000	.5069								
.002								.7188	
.025	.0264							.3394	
.050	.0194	.0984						.3140	
.075				.1694				.0000	

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ARC 3.5-185 IH20 S8

SOLID BOOSTER

(RENS28)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 )SRB DEPENDENT VARIABLE H/H0

FSI 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L									
.100	.0505		.0021		.1592				.5394
.110									.5828
.115							.4906		
.130									.1635
.150					.1545				.2868
.200			.0503		.1250				.2304
.250									.1960
.300					.0000	.0000			.1861 .1446
.400	.0329		.0315		.1120	.1782			.0000
.500			.0262		.0000	.0000			.0000 .0000
.600			.0223		.1312	.1880			.0000
.650			.0268			.0000			.2219
.700	.0000	.0000	.0285		.0000	.0000			.0000 .1640
.750			.0325			.0000			.2216
.780	.0000		.0768		.0000				.6003 .0000
.800	.0322		.0449		.0000				.2374 .0000
.850			.0000		.0000				.0000
.900	.0000	.0000	.0305		.0000				.2228 .0000
.904				.1502					
.918				.5831					
.925				.6142	.7089				
.930	.0445	.0319	.1123		.6812	.4810			.4871 .3639
.940					.3915				
.950				.2103					
.960			.1335		.2829	.4918	.4770		.5023
.970				.1015					
.990	.0443	.0184	.1332		.3202	.4446			.4715 .3592

ARC 3.5-105 IH2D S8+X28

SOLID BOOSTER

(RENS29) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 1.500

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 1.479 FO = 121.650 TO = 1312.700 HO = 320.790

SECTION ( 1 )SRB

DEPENDENT VARIABLE H/HO

FSI 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L

.000	.6587								
.002								.6974	
.025	.1395							.1572	
.050	.1160		.1766					.1223	
.075					.1140			-.0000	
.100	.0584		.0830		.1065			.0555	
.110								.1832	
.115							.2070		
.130								.0599	
.150					.0543			.0909	
.200			.0725		.0664			.0530	
.250								.0329	
.300					.0000	.0000		.0364	.0383
.400	.0385		.0736		.0529	.0510		.0900	
.500			.0671		.0000	.0000		.0000	.0000
.600			.0664		.0575	.0465		.0000	
.650			.0673			.0000		.0330	
.700	.0000	.0000	.0665		.0000	.0000		.0000	.0202
.750			.0603			.0000		.0272	
.780	.0000		.2805		.0000			.0964	.0000
.800	.0237		.0718		.0000			.0283	.0000
.850			.0000		.0000			.0000	
.900	.0000	.0000	.0600		.0000			.0267	.0000
.904				.0642					
.910				.3729					
.925				.3462	.1574				
.930	.0841	.1469	.2031		.2523	.1371		.0912	.0685
.940					.0498				
.950				.0843					
.960			.1708		.0537	.1505	.1385	.1153	
.970				.0273					
.990	.1161	.1453	.1709		.1110	.1302		.1130	.0748





ARC 3.3-185 IH20 S8+X28

SCLID BOOSTER

(RENS29)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 )SRB

DEPENDENT VARIABLE H/H0

P31 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L									
.100	.0431		.0614		.0787				.0411
.110									.1356
.115								.1533	
.130									.0444
.150					.0404				.0676
.200			.0539		.0493				.0393
.250									.0243
.300					.0000	.0000			.0269 .0284
.400	.0287		.0545		.0390	.0376			.0000
.500			.0497		.0000	.0000			.0000 .0000
.600			.0492		.0424	.0343			.0000
.650			.0498			.0000			.0244
.700	.0000	.0000	.0492		.0000	.0000			.0000 .0209
.750			.0446			.0000			.0202
.780	.0000		.2081		.0000				.0048 .0000
.800	.0177		.0532		.0000				.0209 .0000
.850			.0000		.0000				.0000
.900	.0000	.0000	.0446		.0000				.0198 .0000
.904					.0476				
.918					.2756				
.925					.2557	.1163			
.930	.0626	.1091	.1506			.1866 .1014			.0674 .0508
.940						.0368			
.950					.0623				
.960			.1267		.0398	.1114 .1023			.0851
.970					.0202				
.990	.0863	.1080	.1267			.0823 .0964			.0836 .0554

ARC 3.5-185 IH20 S8+X28

SOLID BOOSTER

(RENS30) ( 07 APR 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = .0000 IN.  
 LREF = 1290.3000 IN. YMRP = .0000 IN.  
 BREF = 1290.3000 IN. ZMRP = .0000 IN.  
 SCALE = .0175

ALPHA = -5.000 BETA = .000  
 MACH = 5.300 RN/L = 5.000

MACH ( 1 ) = 5.300 HAW/HT ( 1 ) = .850 RN/L = 5.387 FO = 395.610 TO = 1222.209 HO = 297.610

SECTION ( 1 )SRB.

DEPENDENT VARIABLE H/HO

PSI 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L

.000	.6187								
.002								.6674	
.025	.1357							.1479	
.050	.1095		.1718					.1102	
.075				.1320				.0000	
.100	.0642		.0990	.1273				.0534	
.110								.2226	
.115						.2694			
.130								.0669	
.150				.0675				.1015	
.200			.0937	.0886				.0661	
.250								.0500	
.300				.0000	.0000			.0472	.0457
.400	.0502		.1083	.0768	.0664			.0000	
.500			.0919	.0000	.0000			.0000	.0000
.600			.0842	.0716	.0567			.0000	
.650			.0862		.0000			.0309	
.700	.0000	.0000	.0868	.0000	.0000			.0000	.0357
.750			.0880		.0000			.0423	
.780	.0000		.3487	.0000				.0000	.0000
.800	.0353		.1014	.0000				.0409	.0000
.850			.0000	.0000				.0000	
.900	.0000	.0000	.0807	.0000				.0394	.0000
.904			.1082						
.918			.5089						
.925			.4576	.2054					
.930	.1126	.1876	.2579		.2886	.1682		.1224	.0736
.940					.0787				
.950			.1045						
.960			.2320	.0757	.2156	.1868		.1497	
.970			.0456						
.990	.1508	.2069	.2321		.1782	.2006		.1485	.0856



ARC 3.5-185 IH20 S8+X28

SOLID BOOSTER

(RENS30)

MACH ( 1 ) = 5.300 HAW/HT ( 3 ) = 1.000

SECTION ( 1 )SRB

DEPENDENT VARIABLE H/H0

FSI 90.0000135.0000180.0000210.0000215.0000225.0000240.0000247.5000260.0000270.0000315.0000

X/L									
.100	.0462		.0715		.0920				.0386
.110									.1610
.115								.1949	
.130									.0485
.150					.0489				.0736
.200			.0679		.0641				.0477
.250									.0361
.300					.0000	.0000			.0340 .0329
.400	.0363		.0782		.0554	.0479			.0000
.500			.0664		.0000	.0000			.0000 .0000
.600			.0608		.0516	.0409			.0000
.650			.0623			.0000			.0222
.700	.0000	.0000	.0627		.0000	.0000			.0000 .0257
.750			.0636			.0000			.0305
.780	.0000		.2525		.0000				.0000 .0000
.800	.0256		.0731		.0000				.0294 .0000
.850			.0000		.0000				.0000
.900	.0000	.0000	.0584		.0000				.0284 .0000
.904				.0781					
.918				.3652					
.925				.3280	.1473				
.930	.0814	.1354	.1857			.2081	.1211		.0879 .0530
.940					.0566				
.950				.0750					
.960			.1668		.0545	.1556	.1345		.1076
.970				.0329					
.990	.1087	.1492	.1669		.1286	.1444			.1066 .0616