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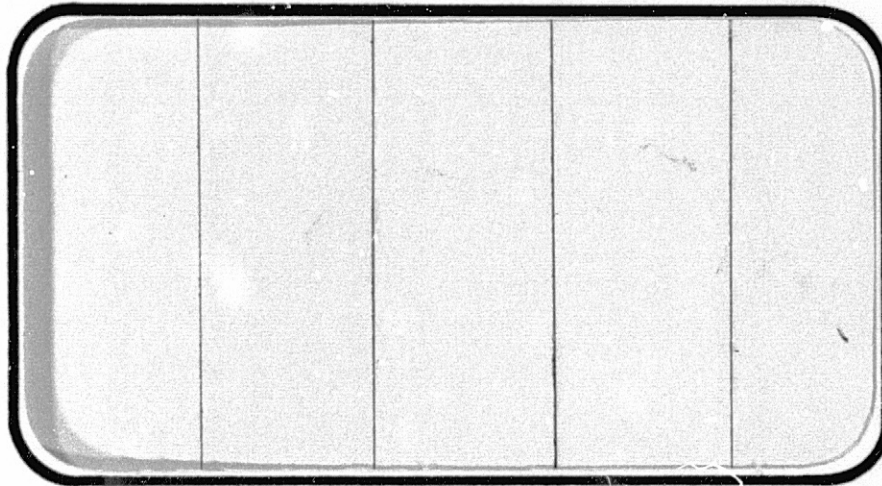
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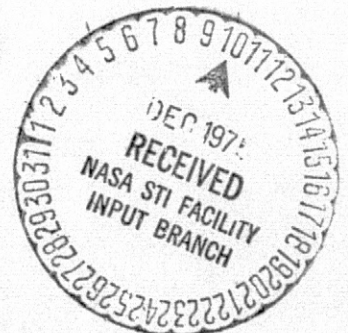
(NASA-CR-141813) AN INVESTIGATION IN THE  
MSFC 14-INCH TWT TO DETERMINE THE STATIC  
STABILITY CHARACTERISTICS OF THE 0.004-SCALE  
MODEL (74-OTS) SPACE SHUTTLE VEHICLE 5  
CONFIGURATION (IA33), VOLUME 3 (Chrysler

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SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT



JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANAGEMENT services

SPACE DIVISION



CHRYSLER CORPORATION

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VOLUME 3 OF 3

AN INVESTIGATION IN THE MSFC 14-INCH TWT  
TO DETERMINE THE STATIC STABILITY CHARACTERISTICS  
OF THE 0.004-SCALE MODEL (74-OTS) SPACE  
SHUTTLE VEHICLE 5 CONFIGURATION (IA33)

by

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Prepared under NASA Contract Number NAS9-13247

by

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for

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National Aeronautics and Space Administration  
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AN INVESTIGATION IN THE MSFC 14-INCH TWT  
TO DETERMINE THE STATIC STABILITY CHARACTERISTICS  
OF THE 0.004-SCALE MODEL (74-OTS) SPACE  
SHUTTLE VEHICLE 5 CONFIGURATION  
(IA33)

by

E. C. Allen, Rockwell International

ABSTRACT

This report presents data for wind tunnel test (IA33) of a 0.004-scale orbiter, external tank, and solid rocket motor integrated vehicle model (74-OTS) in the MSFC Trisonic Wind Tunnel.

The primary test objective was to obtain data on the static stability characteristics in both pitch and yaw of the Shuttle Vehicle 5 over a Mach number range of 0.6 through 4.96. The effect on vehicle aerodynamic characteristics of tank and SRB nose shape, SRB nozzle shroud flare angle, and orbiter/ET fairing were investigated.

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- (B) CY, CBL, CYN versus BETA  
CY versus CYN
- (C) (A) + CAF, CABT, CN, CLMF versus MACH
- (D) (B) + CY, CBL, CYN versus MACH
- (E) CN, CLMF, CAF versus ALPHA  
CN/DR, CLMDR, CAFDR versus MACH
- (F) CBL, CY, CYN versus BETA  
CYDR, CYNDR, CBLDR versus MACH
- (G) CN, CLMF, CAF versus ALPHA  
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## INTRODUCTION

The purposes of this test were: (1) to determine the static stability characteristics of the Shuttle Vehicle 5 configuration; (2) to determine the effect on the Vehicle 5 aerodynamic characteristics of ET and SRB nose shape, SRB nozzle shroud flare angle, orbiter to tank fairing, and sting location; (3) to provide flow visualization using thin film oil paint, and (4) to determine rudder, body flap, and inboard and outboard elevon hinge moments.

The mated vehicle model was mounted in three different ways: (1) the orbiter mounted on the balance with the SRB's attached to the tank and the tank in turn attached to the orbiter; (2) the tank mounted on the balance (with the sting protruding through the tank base) with the SRB's and orbiter attached to the tank, and (3) with the tank mounted on the balance and the balance in turn supported by a forked sting entering the nozzle of each SRB, extending forward into the SRB's then crossing over to the tank to provide a balance socket.

Data were obtained for Mach numbers from 0.6 through 4.96 at angles-of-attack and -sideslip from -10 to 10 degrees.

The Rockwell designation for this model is 74-OTS and the NASA Series number is IA33. The MSFC test number is TWT-594 A/B.

This report consists of 3 volumes arranged in the following manner:

- VOLUME 1 - Plotted Data Figures 4-12
- VOLUME 2 - Plotted Data Figures 13-26
- VOLUME 3 - Tabulated Source Data



## NOMENCLATURE

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
$A_b$		base area, in. <sup>2</sup>
$A_{b_e}$		tank base area, in. <sup>2</sup>
$A_{b_f}$		body flap area, in. <sup>2</sup>
$A_{b_f}$		orbiter/tank fairing base area, in. <sup>2</sup>
$A_{b_0}$		orbiter base area, in. <sup>2</sup>
$A_{b_s}$		SRB base area, in. <sup>2</sup>
$b_{ref}$	BREF	reference span, in. <sup>2</sup>
c.g.		center of gravity
$CAB_E$	CABE	tank base axial force coefficient
$CAB_F$	CABF	orbiter/tank fairing axial force coefficient
$CAB_0$	CABO	orbiter base axial force coefficient
$CAB_s$	CABS	SRB base axial force coefficient
$C_{A_f}$	CAF	forebody axial force coefficient
$C_{A_T}$	CA	total axial force coefficient
$C_l$	CBL	rolling moment coefficient in body axis system
$C_m$	CLM	pitching moment coefficient
$C_{m_U}$	CLMU	uncorrected pitching moment coefficient
$C_n$	CYN	yawing moment coefficient in the body axis system

NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
$C_{m_f}$	CLMF	forebody pitching moment coefficient
$C_{A_B}$	CABT	total base axial force coefficient
	CN/DR	normal force coefficient due to rudder deflection
	CLM/DR	pitching moment coefficient due to rudder deflection
	CAF/DR	forebody axial force due to rudder deflection
	CYDR	side force coefficient due to rudder deflection
	CYNDR	yawing moment coefficient due to rudder deflection
	CBLDR	rolling moment coefficient due to rudder deflection
	CN/DE	normal force coefficient due to elevon deflection
	CLMDE	pitching moment coefficient due to elevon deflection
	CAFDE	forebody axial force coefficient due to elevon deflection
	CYDE	side force coefficient due to elevon deflection
	CYNDE	yawing moment coefficient due to elevon deflection
	CBLDE	rolling moment coefficient due to elevon deflection
$C_{h_{eo}}$	CHEO	outboard elevon hinge moment coefficient
$C_{h_{ei}}$	CHEI	inboard elevon hinge moment coefficient
$C_{h_{bf}}$	CHBF	body flap hinge moment coefficient
$C_{h_r}$	CHR	rudder hinge moment coefficient

NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
CN	CN	normal force coefficient
CN <sub>BF</sub>	CNBF	body flap upper surface normal force coefficient, adjusted to freestream static pressure
CN <sub>B0</sub>	CNBO	orbiter base normal force coefficient
CN <sub>U</sub>	CNU	uncorrected normal force coefficient
CPB <sub>BF</sub>	CPBBF	body flap upper surface pressure coefficient
CPB <sub>E</sub>	CPBE	tank base pressure coefficient
CPB <sub>F</sub>	CPBF	orbiter/tank fairing base pressure coefficient
CPB <sub>0</sub>	CPBO	orbiter base pressure coefficient
CPB <sub>S</sub>	CPBS	SRB base pressure coefficient
C <sub>y</sub>	C <sub>y</sub>	side force coefficient (body or stability axis system)
$l_{ref}$	LREF	reference length, in.
M	MACH	Mach number
MRP	MRP	moment reference point
	XMRP	moment reference point on x-axis
	YMRP	moment reference point on y-axis
	ZMRP	moment reference point on z-axis
$P_{\infty}$		freestream static pressure, psi
$P_{b_{bf}}$		body flap upper surface pressure, psi

## NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
$P_{be}$		tank base pressure, psi
$P_{bf}$		orbiter/tank fairing base pressure, psi
$P_{bo}$		orbiter base pressure, psi
$P_{bs}$		SRB base pressure, psi
$P_t$		total pressure, psi
$q$	Q(P <sub>SI</sub> )	dynamic pressure, psi
RN/L	RN/L	Reynolds number per unit length; million/ft.
$S_{ref}$	SREF	reference area, in. <sup>2</sup>
$S_{bf_{ref}}$		body flap reference area, in. <sup>2</sup>
$S_{e_{ref}}$		elevon reference area, in. <sup>2</sup>
$S_{r_{ref}}$		rudder reference area, in. <sup>2</sup>
T		temperature, °F
$\alpha$	ALPHA	angle-of-attack, angle between the projection of the wind $X_w$ -axis on the body X, Z-plane and the body X-axis; deg.
$\beta$	BETA	sideslip angle, angle between the wind $X_w$ -axis and the projection of this axis on the body X, Z-plane; deg.
$\delta$		control surface deflection angle; deg. positive deflections are:
$\delta_a$	AILRON	aileron - left aileron trailing edge down
$\delta_e$	ELEVTR	elevator - trailing edge down

NOMENCLATURE (Concluded)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
$\delta_{BF}$	BDFLAP	body flap - trailing edge down
$\delta_{SB}$	SPDBRK	speed brake
$\delta_r$	RUDDER	rudder - trailing edge left
$\Delta\delta_r$	DRUDDR	rudder deflection increment
$\Delta\delta_e$	DELEVN	elevator deflection increment
Mg		pitching moment, in.-lb.
SUBSCRIPTS		
$b_e$		tank base
$b_f$		body flap
$b_o$		orbiter base
$b_s$		SRB base
$e$		elevator or elevon
$r$		rudder
SB		speed brake
$e_L$ & $e_R$		elevon left and right
$t$		total conditions
$w$		wind
ref		reference conditions
$\infty$		freestream conditions

## CONFIGURATIONS INVESTIGATED

The model geometry (0.004-scale) is shown in figure 2a. The model was constructed entirely of stainless steel.

As described in the introduction, the model was mounted on the sting/balance combination in three different ways; (1) the orbiter mounted on the balance with the SRB's attached to the tank and the tank in turn attached to the orbiter (see figure 2a); (2) the tank mounted on the balance (with the sting protruding through the tank base) with the SRB's and orbiter attached to the tank (see figure 2b); and (3) with the tank mounted on the balance and the balance in turn supported by a forked sting entering the nozzle of each SRB, extending forward into the SRB's then crossing over to the tank to provide a balance socket (see figure 2c).

The model had positionable elevons and rudders which could be deflected (by installing a control surface set to the desired angle) to the following angles.

$$\delta_{eL} \text{ \& } \delta_{eR} \text{ (deg) = -5, 0, 10, 15}$$

$$\delta_r \text{ (deg) = 0, -15, -20 for } \delta_{SB} = 0$$

The 0° rudder and the body flap were instrumented to provide hinge moments. The  $\delta_{eL} = 0^\circ$  elevon was split and the inboard and outboard sections were both instrumented to provide hinge moments.

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

### Orbiter

Forward Body and Cabin	VL70-000202C
Mid-body-wing/glove fairing	VL70-000200B
Aft body	VL70-000203
Vertical tail	VL70-000146A
Wing tip	VL70-006092
OMS/RCS Pods	VL70-008457
Tank	VL78-000041C
SRB	VL77-000066

CONFIGURATIONS INVESTIGATED (Continued)

The following nomenclature was used to designate model parts:

<u>Component</u>	<u>Definition</u>
<u>Orbiter</u>	
B62	fuselage - per VL70-000200B, 202C, & 203
C12	canopy - per VL70-000202C
E26	elevon - per VL70-000202B
F10	body flap - per VL70-000200B
W127	wing - per VL70-000200B
M14	OMS pods - per VL70-008457
N28	OMS nozzle - per VL70-008457
V8	vertical - per VL70-000146A
R5	rudder - per VL70-000146A
<u>Tank</u>	
AT16	attach structure, front ORB/ET - per SK-H-4011
AT25	strengthened attach structure, left rear ORB/ET - per VL78-000062B
AT26	strengthened attach structure, right rear ORB/ET - per VL78-000062B
AT24	attach structure, front ORB/ET (ET alone) - per SK-H-4011
FL5	LOX feed line ET/ORB - per VL78-000062A
FL6	LH <sub>2</sub> pressure line ET/ORB - per VL78-000062A
FL9	LH feed line ET/ORB - per VL78-000062A

CONFIGURATIONS INVESTIGATED (Continued)

FR6 umbilical door fairing support -  
per VL78-000062A

PT12 tank lightning rod - per VL78-000062A

PT13 LOX recirculation line - per VL78-000062A

PT14 LOX pressure line - per VL78-000062A

PT20 LOX pressure line and electrical conduit -  
per VL78-000062A

PT21 tank base extension

T20 tank - per VL78-000041C

T27 tank with 1208 in. radius ogive nose,  
LOX pressure line, and electrical conduit

SRB

PS7 attach rings and rear structural ring -  
per VL77-000066

PS8 electrical tunnel

PS9 tie down structure - per VL77-000066

S14 20° aft skirt

S15 28° nose shape

S18 SRB baseline - per VL70-000066

The following abbreviations were used to describe the model configurations tested:

T1P1 Tank + protuberances

S1P2 SRB's + protuberances

O1 Orbiter

T2 Tank long ogive nose



## CONFIGURATIONS INVESTIGATED (Concluded)

S3	SRB 29° nose shape
F2	Orbiter/tank fairing
S2	SRB 20° aft skirt
E1	Tank base extension

Details of the model components are given in table III. The various configuration components are illustrated by figure as indicated below:

- 1) Tank Protuberances, figure 2d and figure 2e.
- 2) Tank Long Ogive Nose and Tank Base Extension, figure 2f.
- 3) Orbiter/Tank Fairing, figure 2g.
- 4) SRB Protuberances, figure 2h.
- 5) SRB Alternate Nose Shape and Aft Skirt Flare, figure 2i.

## INSTRUMENTATION

Balance number 239 was used throughout the test regardless of whether the balance was installed in the orbiter or in the tank. The model-balance combination for the balance in the orbiter tests, was mounted to the tunnel pitch sector using the MSFC 5 degree offset sting with a straight extension. During the portion of the test for which the balance was in the tank and supported by the forked sting, the forked sting was mounted in the sector using the MSFC S-2 straight extension. When the balance was in the tank supported by a straight sting, the straight sting was mounted directly into the sector.

Pressure transducers were used to measure base pressures. Depending upon the model configuration as many as five base pressures were recorded. The configuration and associated base pressure measurement requirements are given below:

### Balance in Orbiter (see figure 2j)

- 1) Orbiter base pressure

$$P_{b_o} = 1, 2, 3, 5 \text{ (all manifolded together)}$$

- 2) Body flap base pressure

$$P_{b_{bf}} = 4$$

- 3) Tank base pressure

$$P_{b_e} = 6, 7, 8 \text{ (all manifolded together)}$$

- 4) SRB base pressure

$$P_{b_s} = 9, 10 \text{ (manifolded together)}$$

### Balance in Orbiter + FRg (see figure 2j)

- 1
  - 2
  - 3
  - 4
- } Same as listed above

- 5) Fairing base pressure

$$P_{b_f} = 11$$

INSTRUMENTATION (Concluded)

Balance in Tank (straight sting, see figure 2k)

- 1)
  - 2)
  - 3)
  - 4)
- } Same as listed above

Balance in Tank (forked sting, see figure 2l)

- 1)
  - 2)
  - 3)
- } Same as listed above

4) SRB base pressure

$$P_{b_s} = 9$$

## TEST FACILITY DESCRIPTION

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

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

Tunnel flow is established and controlled with a servo-actuated gate valve. The controlled air flows through the valve diffuser into the stilling chamber and heat exchanger where the air temperature can be controlled from ambient to approximately  $180^{\circ}\text{F}$ . The air then passes through the test section which contains the nozzle blocks and test region.

Downstream of the test section is a hydraulically controlled pitch sector that provides a total angle of attack range of  $20^{\circ}$  ( $\pm 10^{\circ}$ ). Sting offsets are available for obtaining various maximum angles of attack up to  $90^{\circ}$ .

## TEST PROCEDURES

For the oil flow portion of the test, the model was prepared by filling the cracks and openings with polyester resin putty, finishing with thin coats of white lacquer for color, and sealing with a thin coat of clear lacquer to protect the color coat from contamination by the artist's oil pigment used for flow visualization.

The model was dual sting mounted on two MSFC 0.5 in. dummy balances, one installed in the external tank and the other in the orbiter. Stings were such that the orbiter and tank assembly could be separated easily for preparation, photography and clean up.

Black and white photographs of the flow pattern on the top, side and bottom of the orbiter and of the top of the tank assembly were taken.

The oil flows were obtained in accord with the thin film technique with artist's oil pigments as described in the SRO Rockwell Internal Letter from P. Hawthorne to R. Crowder, dated 28 October 1973.

Shadowgraphs of the model upright and rolled left 90° were made. These photos were taken during the force runs whenever possible and are available on request from the Aerodynamics Group, Shuttle Aero Sciences, Space Division, Rockwell International.

## DATA REDUCTION

All model forces and moments (measured by the balance 239) were resolved in the body axis system and presented in the form of nondimensional coefficients. Data were corrected for weight tares and sting deflections. Data were also adjusted to be representative of a model with freestream static pressure acting on the orbiter base, orbiter body flap upper surface, External Tank base, and Solid Rocket Booster base. Orbiter, ET and SRB base pressures were recorded using tubes attached to the model sting with tube openings located near the base region. Comparison of base pressures sensed by these tubes with base pressures measured during other tests using pressure orifices located in the model skin indicated the tubes were not sensing an accurate base pressure. This error was due to the tube locations not being close enough to the model base, therefore measuring pressures in a region with appreciable flow velocities. Orbiter and ET base pressures were corrected for this (tube - tap) effect using the data presented in figure 2m, which was derived from a comparison of IA33 base pressures with base pressures from test IA53. Orbiter body flap upper surface pressures were determined using test IA81 data in addition to IA33 data, as shown on the curve in figure 2n. Coefficients were non-dimensionalized as shown below.

### INTEGRATED VEHICLE (TSO)

Balance Coefficients (Balance either in the orbiter or the external tank)

$$CNU = \frac{F_N}{qS_{ref}}, \text{ normal force coefficient uncorrected for base pressure forces.}$$

$$CN = CNU - CN_{B0} - CN_{BF}, \text{ normal force coefficient corrected for orbiter base pressure acting on the orbiter base and body flap.}$$

$$CAT = \frac{F_A}{qS_{ref}}, \text{ total axial force coefficient.}$$

$$CAF = CAT - CAB_0 - CAB_S - CAB_E, \text{ forebody axial force coefficient.}$$

$$CY = \frac{F_Y}{qS_{ref}}, \text{ side force coefficient.}$$

$$CLMU = \frac{M_y}{qS_{ref} l_{ref}}, \text{ pitching moment coefficient uncorrected for base pressure forces.}$$

DATA REDUCTION (Continued)

$$CLM = CLMU + CNB_0 \frac{x_1}{l_{ref}} + CN_{BF} \frac{x_2}{l_{ref}} - CAB_0 \frac{z_1}{l_{ref}}$$

pitching moment coefficient corrected for orbiter base pressure acting on the orbiter base and body flap.

$$CYN = \frac{M_z}{q S_{ref} b_{ref}}, \text{ yawing moment coefficient.}$$

$$CBL = \frac{M_x}{q S_{ref} b_{ref}}, \text{ rolling moment coefficient.}$$

$$CNB_0 = -CPB_{0IA33} \frac{A_{bORB}}{S_{ref}} \tan i_b, \text{ normal force component coefficient of orbiter base drag.}$$

$$CN_{BF} = -CPB_{bf} \frac{S_{bfref}}{S_{ref}}, \text{ body flap normal force coefficient.}$$

$$CAB_0 = -CPB_{0IA33} \frac{A_{bORB}}{S_{ref}}, \text{ axial force component coefficient of orbiter base drag.}$$

$$CABE = -CPB_{EIA33} \frac{A_{be}}{S_{ref}}, \text{ tank base axial force coefficient.}$$

$$CABS = -CPBS \frac{A_{bs}}{S_{ref}}, \text{ SRB base axial force coefficient.}$$

Where:

$$CPB_{0IA33} = \left( \frac{P_{b_0} - P_{\infty}}{q} \right)_{\text{MEASURED}} + \Delta CPB_0$$

$\Delta CPB_0$  is from figure 2m

DATA REDUCTION (Continued)

$$CPB_{EIA33} = \left( \frac{P_{be} - P_{\infty}}{q} \right)_{\text{MEASURED}} + \Delta CPBE$$

$\Delta CPBE$  is from figure 2m

$CPB_{bf} = C_{p_{bf}}$  as obtained from the curve on figure 2n for all datasets except A1C005, A1C006, A1C023 and A1C024

$CPB_{bf} = CPB_{0IA33}$  for datasets A1C005, A1C006, A1C023 and A1C024

INTEGRATED VEHICLE PLUS ORBITER/ET FAIRING (TSO + F)

(Balance in the Orbiter)

All coefficients were computed as indicated above except for the following:

$CAF = CAT - CAB_0 - CAB_S - CAB_E - CAB_F$ , forebody axial force coefficient

$$CLM = CLM_U + CN_{B0} \frac{X_1}{l_{ref}} + CN_{BF} \frac{X_2}{l_{ref}} - CAB_F \frac{Z_2}{l_{ref}} - CAB_0 \frac{Z_1}{l_{ref}}$$

pitching moment coefficient corrected for base pressure acting on the orbiter base, body flap, and orbiter/ET fairing

$$CABF = -CPB_F \frac{A_{Df}}{S_{ref}}, \text{ fairing base axial force coefficient}$$

Where:  $CPB_F = \frac{P_{bf} - P_{\infty}}{q}$ , fairing base pressure coefficient

SECOND STAGE VEHICLE (T0)

(Balance in the external tank)

All coefficients were computed as indicated above except for the following:

$CAF = CAT - CAB_0 - CAB_E$ , forebody axial force coefficient



## DATA REDUCTION (Continued)

### EXTERNAL TANK ALONE (T)

$$C_N = \frac{F_N}{qS_{ref}}, \text{ normal force coefficient}$$

$$C_{AF} = C_{AT} - C_{AB_E}, \text{ forebody axial force coefficient}$$

$$C_{LM} = \frac{M_y}{qS_{ref} \bar{c}_{ref}}, \text{ pitching moment coefficient}$$

### Hinge Moment Coefficients

#### Rudder

$$C_{h_r} = \frac{HM_r}{qS_{rref} \bar{c}_r}$$

Where:  $C_{h_r}$  = rudder hinge moment coefficient

$HM_r$  = rudder hinge moment

$S_{rref}$  = rudder reference area

$\bar{c}_r$  = rudder reference length

#### Elevon, Outboard

$$C_{h_{eo}} = \frac{HM_{eo}}{qS_{e_{ref}} \bar{c}_e}$$

Where:  $C_{h_{eo}}$  = outboard elevon hinge moment coefficient

$HM_{eo}$  = outboard elevon hinge moment

$S_{e_{ref}}$  = elevon reference area

$\bar{c}_e$  = elevon reference length

DATA REDUCTION (Continued)

Elevon, Inboard

$$C_{hei} = \frac{HM_{ei}}{qS_{e_{ref}} \bar{c}_e}$$

Where:  $C_{hei}$  = inboard elevon hinge moment coefficient

$HM_{ei}$  = inboard elevon hinge moment

Body Flap

$$C_{h_{bf}} = \frac{HM_{bf}}{qS_{bf_{ref}} \bar{c}_{bf}}$$

Where:  $C_{h_{bf}}$  = body flap hinge moment coefficient

$HM_{bf}$  = body flap hinge moment

$S_{bf_{ref}}$  = body flap reference area

$\bar{c}_{bf}$  = body flap reference length

Model reference dimensions used in the data reduction are:

<u>PARAMETER</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Reference Areas		
$S_{ref}$ (wing)	2690.00 ft. <sup>2</sup>	6.198 in. <sup>2</sup>
$S_{r_{ref}}$	101.15 ft. <sup>2</sup>	0.233 in. <sup>2</sup>
$S_{e_{ref}}$	210.00 ft. <sup>2</sup>	0.484 in. <sup>2</sup>
$S_{bf_{ref}}$	142.6 ft. <sup>2</sup>	0.329 in. <sup>2</sup>

DATA REDUCTION (Continued)

<u>PARAMETER</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Reference Lengths		
$l_{ref} = b_{ref}$	1290.0 in.	5.160 in.
$l_{bf}$ (distance from CG to body flap)	1365.0 in.	5.46 in.
$\bar{c}_r$	73.2 in.	0.293 in.
$\bar{c}_e$	90.7 in.	0.363 in.
$\bar{c}_{bf}$	81.0 in.	0.324 in.
Moment Reference Point from ET base on ET $\zeta$	1199.8 in.	4.799 in.
Base Areas		
Orbiter ( $A_{D_0}$ )	314.10 ft. <sup>2</sup>	0.724 in. <sup>2</sup>
Orbiter ( $A_{b_{oms}}$ )	122.57 ft. <sup>2</sup>	0.282 in. <sup>2</sup>
$A_{b_{ORB}}$	436.7 ft. <sup>2</sup>	1.006 in. <sup>2</sup>
Tank ( $A_{b_e}$ )	597.6 ft. <sup>2</sup>	1.377 in. <sup>2</sup>
Fairing ( $A_{bf}$ )	79.7 ft. <sup>2</sup>	0.184 in. <sup>2</sup>
SRB (2)		
$A_{b_s}$		
$S_1$ and $S_3$ (baseline)	402.1 ft. <sup>2</sup>	0.926 in. <sup>2</sup>
$S_2$ (20° flare)	498.2 ft. <sup>2</sup>	1.148 in. <sup>2</sup>

DATA REDUCTION (Concluded)

- $i_b$  = 14.75°, average orbiter base slant angle.  
 $X_1$  = 5.052 in., axial moment arm for orbiter base drag.  
 $X_2$  = 5.346 in., axial moment arm for body flap.  
 $Z_1$  = 1.344 in., vertical moment arm for orbiter base drag.  
 $Z_2$  = 0.730 in., vertical moment arm for fairing base drag.

TEST: IA-33 (TWT-594)

TABLE I.

DATE: 4/24/74

## TEST CONDITIONS

MACH NUMBER	REYNOLDS NUMBER (per unit length)	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)	STAGNATION PRESSURE (pounds/sq inch)
0.6	$5.0 \times 10^6$	4.35	100	22
0.8	6.0	6.45	100	22
0.9	6.2	7.36	100	22
0.95	6.4	7.74	100	22
1.0	6.5	8.14	100	22
1.10	6.6	9.29	100	22
1.2	6.7	10.68	100	22
1.25	6.7	11.48	100	22
1.46	6.5	9.47	100	22
1.96	7.0	10.20	100	28
2.99	4.0	5.19	140	30
4.96	4.8	3.07	140	90

BALANCE UTILIZED: MSFC 239

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF	<u>200 lbs.</u>	<u>±1.0 lb.</u>	<u>± 0.15</u>
SF	<u>100 lbs.</u>	<u>±0.5 lb.</u>	<u>± 0.08</u>
AF	<u>50 lbs.</u>	<u>±0.25 lb.</u>	<u>± 0.04</u>
PM	<u>196 in.lbs.</u>	<u>±1.0 in.lb.</u>	<u>± 0.18</u>
RM	<u>98 in.lbs</u>	<u>±0.5 in.lb.</u>	<u>± 0.09</u>
YM	<u>50 in.lbs</u>	<u>±0.2 in.lb.</u>	<u>± 0.05</u>

## COMMENTS:

Accuracy based on ±0.5% of balance capacity.  
Tolerance based on q=10 psi.

TABLE II.

TEST: MSFC PWT 594 (IA33)		DATA SET/RUN NUMBER COLLATION SUMMARY							DATE: 9 May - 21 June, 1974										
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES				NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)										
		$\alpha$	$\beta$	$\delta r$	$\delta e$				0.6	0.8	0.9	1.10	1.25	1.46	1.96	2.99	4.96	1.05	
P1E001	T <sub>1</sub> P <sub>1</sub>	A	0	-	-			7	1		2	3	4		18	237	23		
002	↓	0	B	-	-			7	16		15	13	14		17	240	24		
003	T <sub>1</sub> P <sub>1</sub> S <sub>1</sub> P <sub>2</sub>	0	B	-	-			7	9		10	11	12		20	239	21		
004	↓	A	0	-	-			7	8		7	6	5		19	238	22		
005	T <sub>1</sub> P <sub>1</sub> $\phi_1$	A	0	0	0			7	122		123	125	124		133	167	106		
006	↓	0	B	0	0			7	121		120	118	119		134	166	105		
007	T <sub>1</sub> P <sub>1</sub> S <sub>1</sub> P <sub>2</sub> $\phi_1$	A	0	0	0			10	130	129	128	126	127	109	132	108	107	131	
008		0	B	0	0			10	115	114	113	117	112	111	135	104	103	116	
009		5	B	0	0			9	159	158	157	155	156	141	136	160	161		
010		-5	B	0	0			9	145	144	143	146	142	140	139	165	164		
011		A	0	-15	0			6	49		50	52	51		78		81		
012		5	B	-15	0			6	217		218	220	219		184		181		
013		-5	B	-15	0			6	232		231	229	230		185		180		
014		A	0	-20	0			6	56		55	53	54		79		80		
015		5	B	-20	0			6	224		223	221	222		183		182		
016		-5	B	-20	0			6	225		226	228	227		186		179		
017		A	0	0	0			9	39	40	41	43	42	48	30	26	25		
018	↓	0	B	0	0			6	47		46	44	45		29		28		
		1	7	13	19	25	31	37	43	49	55	61	67	75	76				
		CN	CLMF	CY	CYN	CBZ	CAF	CNBO	CABO	CABS	CABE					10			
		$\alpha$ OR $\beta$	COEFFICIENTS							(IDVAR (1))		(IDVAR (2))		NDV					
		SCHEDULES	$\alpha A = -10$ TO $10^\circ$ ; $\Delta\alpha = 2^\circ$																
			$\beta B = -10$ TO $10^\circ$ ; $\Delta\beta = 2^\circ$																

TEST RUN NUMBERS

29

TABLE II. (Continued)

TEST: MSFC TWT 594 (TA33)			DATA SET/RUN NUMBER COLLATION SUMMARY										DATE:					
DATA SET IDENTIFIER	CONFIGURATION	SCHED.		PARAMETERS/VALUES				NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)									
		$\alpha$	$\beta$	$\delta r$	$\delta e$				0.6	0.8	0.9	1.10	1.25	1.46	1.96	2.99	4.96	
R1C 019	T1 P1 S1 P2 $\phi$ 1	A	0	0	0			8	244	243	242	245	241	262	260		264	
020	↓	0	B	0	0			6	257		256	254	255		259		265	
021	T2 P1 S3 P2 $\phi$ 1 F2	A	0	0	0			9	96	95	94	93	97	101	87	98	99	
022	↓	0	B	0	0			6	91		90	92	89		88		100	
023	T1 P1 $\phi$ 1	5	B	0	0			6	151		152	154	153		137		162	
024	↓	-5	B	0	0			6	150		149	147	148		138		163	
025	T1 P1 S2 P2 $\phi$ 1	A	0	0	0			9	57	58	59	61	60	110	77	83	82	
026	↓	0	B	0	0			6	65		64	62	63		76		102	
* 027	T1 P1 S1 P2 $\phi$ 1	A	0	0	-5													
* 028		0	B	0	-5													
029		A	0	0	10			5	248		247	246	249		261			
030		0	B	0	10			5	252		251	253	250		258			
* 031		A	0	0	15													
* 032		0	B	0	15													
033		0	B	-15	0			6	66		67	69	68		75		177	
034	↓	↓	↓	-20	0			6	73		72	70	71		74		178	
035	T1 P1 S3 P2 $\phi$ 1 F2	A	0	0	↓			2								86	85	
036	↓	0	B	↓	↓			1									84	

TEST RUN NUMBERS

30

1	7	13	19	25	31	37	43	49	55	61	67	75	78	
COEFFICENTS												IDVAR (1)	IDVAR (2)	NDV
SCHEDULES														

MSFC - Form 283-2 (Rev. May 1978) Run 263 removed; AXIAL FORCE N.G.  
 \* DATA UNRECORDED





DATA SET IDENTIFIER	CONFIGURATION	SCHED.		PARAMETERS/VALUES		NO. OF RUNS	MACH NUMBERS ( OR ALTERNATE INDEPENDENT VARIABLE )									
		$\alpha$	$\beta$	$\delta_r$	$\delta_e$		0.6	0.8	0.9	1.10	1.25	1.46	1.96	2.99	4.96	1.05*
R1C 101	$T_1 P_1$	A	0	-	-	7	1		2	3	4		18	237	23	
102	↓	0	B	-	-	7	16		15	13	14		17	240	24	
103	$T_1 P_1 S_1 P_2$	0	B	-	-	7	9		10	11	12		20	239	21	
104	↓	A	0	-	-	7	8		7	6	5		19	238	22	
105	$T_1 P_1 \phi_1$	A	0	0	0	7	122		123	125	124		133	167	106	
106	↓	0	B	0	0	7	121		120	118	119		134	166	105	
107	$T_1 P_1 S_1 P_2 \phi_1$	A	0	0	0	10	130	129	128	126	127	109	132	108	107	131
108		0	B	0	0	10	115	114	113	117	112	111	135	104	103	116
109		5	B	0	0	9	159	158	157	155	156	141	136	160	161	
110		-5	B	0	0	9	145	144	143	146	142	140	139	165	164	
111		A	0	-15	0	6	49		50	52	51		78		81	
112		5	B	-15	0	6	217		218	220	219		184		181	
113		-5	B	-15	0	6	232		231	229	230		185		180	
114		A	0	-20	0	6	56		55	53	54		79		80	
115		5	B	-20	0	6	224		223	221	222		183		182	
116		-5	R	-20	0	6	225		226	228	227		186		179	
117		A	0	0	0	9	39	40	41	43	42	48	30	26	25	
118		0	B	0	0	6	47		46	44	45		29		28	

TEST RUN NUMBERS

32

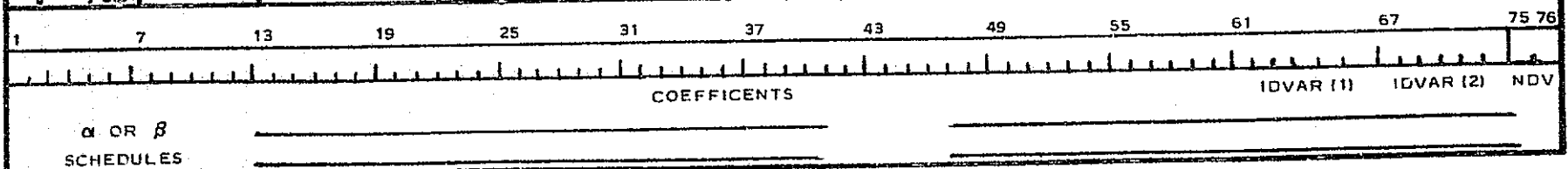
1	7	13	19	25	31	37	43	49	55	61	67	75	76		
CMBF	CABF												0.2		
COEFFICIENTS													IDVAR (1)	IDVAR (2)	NDV
$\alpha$ OR $\beta$	$\delta A = -10$ To $10^\circ$ ; $\delta \alpha = 2^\circ$														
SCHEDULES	$A = -10$ To $10^\circ$ ; $\Delta B = 2^\circ$														

TABLE II. (Continued)

TEST: MSFC TWI 594 (IA33)		DATA SET/RUN NUMBER COLLATION SUMMARY										DATE:					
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES				NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)								
		$\alpha$	$\beta$	$\delta_r$	$\delta_e$				0.6	0.8	0.9	1.10	1.25	1.46	1.96	2.99	4.26
RIC 119	$T_1 P_1 S_1 P_2 \theta_1$	A	0	0	0			8	244	243	242	245	241	262	260		264
120	↓	0	B					6	257		256	254	255		259		265
121	$T_2 P_1 S_3 P_2 \theta_1 F_2$	A	0					9	96	95	94	93	97	101	87	98	99
122	↓	0	B					6	91		90	92	89		88		100
123	$T_1 P_1 \theta_1$	5	B					6	151		152	154	153		137		162
124	↓	-5	B					6	150		149	147	148		138		163
125	$T_1 P_1 S_2 P_2 \theta_1$	A	0					9	57	58	59	61	60	110	77	83	82
126	↓	0	B		Y			6	65		64	62	63		76		102
* 127	$T_1 P_1 S_1 P_2 \theta_1$	A	0		-5												
* 128		0	B		-5												
129		A	0		10			5	248		247	246	249		261		
130		0	B		10			5	252		251	253	250		258		
* 131		A	0		15												
* 132		0	B	Y	15												
133		0	B	-15	0			6	66		67	69	68		75		177
134	↓	0	B	-20				6	73		72	70	71		74		178
135	$T_1 P_1 S_3 P_2 \theta_1 F_2$	A	0	0				2							86	85	
↓ 136	↓	0	B	0	Y			1								84	

TEST RUN NUMBERS

33







TEST: MSFC TWT 594 (JA 33)		DATA SET/RUN NUMBER COLLATION SUMMARY										DATE:					
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES				NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)								
		$\alpha$	$\beta$	$S_r$	$S_e$				0.6	0.8	0.9	1.10	1.25	1.46	1.96	2.99	4.96
* R1C 219	$T_1 P_1 S_1 P_2 \theta_1$	A	0	0	0			8	244	243	242	245	241	262	260		264
* 220	↓	0	B					6	257		256	254	255		259		265
221	$T_2 P_1 S_3 P_2 \theta_1 F_2$	A	0					9	96	95	94	93	97	101	87	98	99
222	↓	0	B					6	91		90	92	89		88		100
223	$T_1 P_1 \theta_1$	5	B					6	151		152	154	153		137		162
224	↓	-5	B					6	150		149	147	148		138		163
225	$T_1 P_1 S_2 P_2 \theta_1$	A	0					9	57	58	59	61	60	110	77	83	82
226	↓	0	B		Y			6	65		64	62	63		76		102
* 227	$T_1 P_1 S_1 P_2 \theta_1$	A	0		-5												
* 228		0	B		-5												
229		A	0		10			5	248		247	246	249		261		
230		0	B		10			5	252		251	253	250		258		
* 231		A	0		15												
* 232		0	B	Y	15												
233		0	B	-15	0			6	66		67	69	68		75		177
234	↓	0	B	-20				6	73		72	70	71		74		178
235	$T_1 P_1 S_3 P_2 \theta_1 F_2$	A	0	0				2								86	85
↓ 236	↓	0	B	0	↓			1									84

TEST RUN NUMBERS

36

1	7	13	19	25	31	37	43	49	55	61	67	75	76
COEFFICENTS										IDVAR (1)	IDVAR (2)	NDV	
α OR β		_____											
SCHEDULES		_____											



TABLE II. (Continued)

TEST: MSFC TWI 594 (IA33)			DATA SET RUN NUMBER COLLATION SUMMARY						DATE:							
DATA SET IDENTIFIER	CONFIGURATION	SC D.		PARAMETERS/VALUES		NO. OF RUNS	MATCH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)									
		$\alpha$	$\beta$	$S_r$	$S_e$		0.6	0.8	0.9	1.10	1.25	1.46	1.76	2.99	4.96	1.05
R1C 301	T, P <sub>1</sub>	A	0	-	-	7	1		2	3	4		18	237	23	
302	↓	O	B	-	-	7	16		15	13	14		17	240	24	
303	T, P <sub>1</sub> , S <sub>1</sub> , P <sub>2</sub>	O	B	-	-	7	9		10	11	12		20	239	21	
304	↓	A	0	-	-	7	8		7	6	5		19	238	22	
305	T, P <sub>1</sub> , $\phi_1$	A	0	0	0	7	122		123	125	124		133	167	106	
306	↓	O	B	0	0	7	121		120	118	119		134	166	105	
307	T, P <sub>1</sub> , S <sub>1</sub> , P <sub>2</sub> , $\phi_1$	A	0	0	0	10	130	129	128	126	127	109	132	108	107	121
308		O	B	0	0	10	115	114	113	117	112	111	135	104	103	116
309		S	B	0	0	9	159	158	157	155	156	141	136	160	161	
310		-S	B	0	0	9	145	144	143	146	142	140	139	165	164	
311		A	0	-15	0	6	49		50	52	51		78		81	
312		S	B	-15	0	6	217		218	220	219		184		181	
313		-S	B	-15	0	6	232		231	229	230		185		180	
314		A	0	-20	0	6	56		55	53	54		79		80	
315		S	B	-20	0	6	224		223	221	222		183		182	
316		-S	B	-20	0	6	225		226	228	227		186		179	
* 317		A	0	0	0	9	39	40	41	43	42	48	30	26	25	
* V 318		O	B	0	0	6	47		46	44	45		29		28	
		1	7	13	19	25	31	37	43	49	55	61	67	75	76	
CHEO, CHEI																0.2
		COEFFICIENTS										IDVAR (1)		IDVAR (2)		NDV
$\alpha$ OR $\beta$		S A = -10 TO 10°; A <sub>0</sub> = 2°														
SCHEDULES		B B = -10 TO 10°; $\Delta B = 2^\circ$														

38

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\*

TEST RUN NUMBERS

TABLE II. (Continued)

DATE :

TEST : MSFC TWT 594 (IA33)

DATA SET/RUN NUMBER COLLATION SUMMARY

※※

39

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES				NO. OF RUNS	MACH NUMBERS ( OR ALTERNATE INDEPENDENT VARIABLE )								
		α	β	Sr	Se				0.6	0.8	0.9	1.10	1.25	1.46	1.96	2.99	4.96
R2C 319	<u>T<sub>1</sub> P<sub>1</sub> S<sub>1</sub> P<sub>2</sub> Ø<sub>1</sub></u>	A	0	0	0			8	244	243	242	245	241	262	260		264
320	↓	0	B					6	257		256	254	255		259		265
321	<u>T<sub>2</sub> P<sub>1</sub> S<sub>3</sub> P<sub>2</sub> Ø<sub>1</sub> F<sub>2</sub></u>	A	0					9	96	95	94	93	97	101	87	98	99
322	↓	0	B					6	91		90	92	89		88		100
323	<u>T<sub>1</sub> P<sub>1</sub> Ø<sub>1</sub></u>	S	B					6	151		152	154	153		137		162
324	↓	-5	B					6	150		149	147	148		138		163
325	<u>T<sub>1</sub> P<sub>1</sub> S<sub>2</sub> P<sub>2</sub> Ø<sub>1</sub></u>	A	0					9	57	58	59	61	60	110	77	83	82
326	↓	0	B		∇			6	65		64	62	63		76		102
* 327	<u>T<sub>1</sub> P<sub>1</sub> S<sub>1</sub> P<sub>2</sub> Ø<sub>1</sub></u>	A	0		-5												
* 328		0	B		-5												
329		A	0		10			5	248		247	246	249		261		
330		0	B		10			5	252		251	253	250		258		
* 331		A	0		15												
* 332		0	B	∇	15												
333		0	B	-15	0			6	66		67	69	68		75		177
334		0	B	-20				6	73		72	70	71		74		178
335	<u>T<sub>1</sub> P<sub>1</sub> S<sub>3</sub> P<sub>2</sub> Ø<sub>1</sub> F<sub>2</sub></u>	A	0	0				2								86	85
∇ 336	↓	0	B	0	∇			1									84

TEST RUN NUMBERS

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

COEFFICIENTS

IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES



TEST: MSFC TRIT 594 (IA 33)

DATA SET - RUN NUMBER COLLATION SUMMARY

DATE :

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES		NO. OF RUNS	MACH NUMBERS ( OR ALTERNATE INDEPENDENT VARIABLE )								
		$\alpha$	$\beta$	$S_r$	$S_e$		0.6	0.8	0.9	1.10	1.25	1.46	1.96	2.99	4.96
R1C 337		A	0	0	0	9	172	171	170	168	169	173	174	175	176
338	<u>T, P, S, P<sub>2</sub> <math>\phi_1</math></u>	A	0		-5	5	200		199	197	198		187		
339		O	B		-5	5	195		194	196	193		192		
340		A	0		10	5	201		202	204	203		188		
341		O	B		10	5	208		207	205	206		191		
342		A	0		15	5	216		215	213	214		189		
343	$\nabla$	O	B		15	5	209		210	212	211		190		
* $\nabla$ 344	$\phi$ (- $\phi$ MS Pods)	A	0	$\nabla$	0	4	233		234	236	235				

TEST RUN NUMBERS

40

1	7	13	19	25	31	37	43	49	55	61	67	75	76
COEFFICIENTS											IDVAR (1)	IDVAR (2)	NDV
$\alpha$ OR $\beta$		_____					_____					_____	
SCHEDULES		_____					_____					_____	

TABLE II. (Continued)

TEST: <u>MSFC TWT 594 (IA33)</u>		DATA SET RUN NUMBER COLLATION SUMMARY										DATE:					
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES			NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)									
		$\alpha$	B	$\delta_r$	$\delta_e$			0.6	0.8	0.9	1.10	1.25	1.46	1.96	2.99	4.96	105
RIC 401	<u>T, P<sub>1</sub></u>	A	0	-	-		7	1		2	3	4		18	237	23	
402	↓	0	B	-	-		7	16		15	13	14		17	240	24	
403	<u>T, P<sub>1</sub>, S, P<sub>2</sub></u>	0	B	-	-		7	9		10	11	12		20	239	21	
404	↓	A	0	-	-		7	8		7	6	5		19	238	22	
405	<u>T, P<sub>1</sub>, <math>\theta_1</math></u>	A	0	0	0		7	122		123	125	124		133	167	106	
406	↓	0	B	0	0		7	121		120	118	119		134	166	105	
407	<u>T, P<sub>1</sub>, S, P<sub>2</sub>, <math>\theta_1</math></u>	A	0	0	0		10	130	129	128	126	127	109	132	108	107	131
408		0	B	0	0		10	115	114	113	117	112	111	135	104	103	116
409		5	B	0	0		9	159	158	157	155	156	141	136	160	161	
410		-5	B	0	0		9	145	144	143	146	142	140	139	165	164	
411		A	0	-15	0		6	49		50	52	51		78		81	
412		5	B	-15	0		6	217		218	220	219		184		181	
413		-5	B	-15	0		6	232		231	229	230		185		180	
414		A	0	-20	0		6	56		55	53	54		79		80	
415		5	B	-20	0		6	224		223	221	222		183		182	
416		-5	B	-20	0		6	225		226	228	227		186		179	
* 417		A	0	0	0		9	39	40	41	43	42	48	30	26	25	
* ↓ 418	↓	0	B	0	0		6	47		46	44	45		29		28	

TEST RUN NUMBERS

41

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\*

1	7	13	19	25	31	37	43	49	55	61	67	75	76
CHBF													91
COEFFICIENTS										IDVAR (1)	IDVAR (2)	NDV	
$\alpha$ OR B		A: -10 To 10°; $\Delta\alpha = 2^\circ$											
SCHEDULES		B: -10 To 10°; $\Delta B = 2^\circ$											

\* Data UNRECORDED

TEST: MSFC TWT 594 (IA 33)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE:

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES				NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)									
		$\alpha$	$\beta$	$S_r$	$S_e$					0.6	0.8	0.9	1.10	1.25	1.46	1.96	2.99	4.96
* 419	$T_1 P_1 S_1 P_2 \phi_1$	A	0	0	0			8	244	243	242	245	241	262	260		264	
* 420	↓	0	B					6	257		256	254	255		259		265	
421	$T_2 P_1 S_3 P_2 \phi_1 F_2$	A	0					9	96	95	94	93	97	101	87	98	99	
422	↓	0	B					6	91		90	92	89		88		100	
423	$T_1 P_1 \phi_1$	S	B					6	151		152	154	153		137		162	
424	↓	-5	B					6	150		149	147	148		138		163	
425	$T_1 P_1 S_2 P_2 \phi_1$	A	0					9	57	58	59	61	60	110	77	83	82	
426	↓	0	B		Y			6	65		64	62	63		76		102	
* 427	$T_1 P_1 S_1 P_2 \phi_1$	A	0		-5													
* 428		0	B		-5													
429		A	0		10			5	248		247	246	249		261			
430		0	B		10			5	252		251	253	250		258			
* 431		A	0		15													
* 432		0	B	Y	15													
433		0	B	-15	0			6	66		67	69	68		75		177	
434	↓	0	B	-20				6	73		72	70	71		74		178	
435	$T_1 P_1 S_3 P_2 \phi_1 F_2$	A	0	0				2								86	85	
↓ 436	↓	0	B	0	Y			1									84	

TEST RUN NUMBERS

42

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

COEFFICIENTS      IDVAR (1)      IDVAR (2)      NDV

$\alpha$  OR  $\beta$  \_\_\_\_\_

SCHEDULES \_\_\_\_\_

TABLE II. (Continued)

TEST: <u>MSFC TRWT 594 (TA35)</u>		DATA SET/RUN NUMBER COLLATION SUMMARY						DATE:							
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES		NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)								
		$\alpha$	$\beta$	$S_r$	$S_e$		0.6	0.8	0.9	1.10	1.25	1.46	1.96	2.99	4.96
R1C 437	$\emptyset_1$	A	0	0	0	9	172	171	170	168	169	173	174	175	176
438	<u>T.P.S, P<sub>2</sub> <math>\emptyset_1</math></u>	A	0		-5	5	200		199	197	198		187		
439		O	B		-5	5	195		194	196	193		192		
440		A	0		10	5	201		202	204	203		188		
441		O	B		10	5	208		207	205	206		191		
442		A	0		15	5	216		215	213	214		189		
443	$\gamma$	O	B		15	5	209		210	212	211		190		
444	$\emptyset$ (- $\emptyset$ MS Pods)	A	0	$\gamma$	0	4	233		234	236	235				

TEST RUN NUMBERS

43

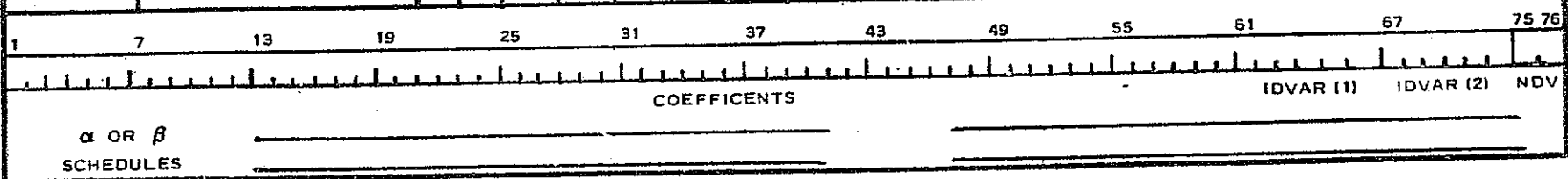




TABLE II. (Concluded)

TEST: IA33 (TWT-594B)		DATA SET/RUN NUMBER COLLATION SUMMARY						DATE: October 15-17, 1974												
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES				NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)											
		$\alpha$	$\beta$	$\delta_L$	$\delta_R$	$\delta_{SP}$	$\delta_{BF}$		0.6	0.8	0.9	1.0	1.10	1.20	1.46	1.96	2.75	2.78	3.99	4.2
RIC601	T, P, S, P <sub>2</sub> , $\theta_1$	A	0	-0.8	0.1	0	0.1	12	31	32	33	36	35	34	16	15	4	31	31	1
2		T	T	4.1	T	T	T	12	30	29	28	25	26	27	17	14	5	6	7	8
3		T	T	4.3	T	T	T	12	21	20	19	24	23	22	18	13	12	11	10	9
4	+Grit	V	V	-0.8	V	V	V	6	42	41	40	37	38	39						

45

TEST RUN NUMBERS

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

CNBF, CABF 03

$\alpha$  OR  $\beta$  SCHEDULES  $\alpha(A) = -10^\circ$  to  $15^\circ$ ;  $\Delta\alpha = 2^\circ$  IDVAR (1) IDVAR (2) NDV

TABLE III.  
MODEL DIMENSIONAL DATA

MODEL COMPONENT : BODY - R62

GENERAL DESCRIPTION : Configuration 140 C, orbiter fuselage, MCR  
200-R11. Similar to 140 A/B fuselage except aft body revised and  
improved midbody-wing-boot fairing.  $X_0 = 940$  to  $X_0 = 1040$ .

MODEL SCALE: 0.004

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

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (IML: Fwd Sta. $X_0=238$ ), In.	<u>1290.3</u>	<u>5.161</u>
Length (OML: Fwd Sta $X_0=235$ ), In.	<u>1293.3</u>	<u>5.173</u>
Max Width(@ $X_0 = 1528.3$ ), In.	<u>264.0</u>	<u>1.056</u>
Max Depth (@ $X_0 = 1464$ ), In.	<u>259.0</u>	<u>1.000</u>
Fineness Ratio	<u>4.899</u>	<u>4.899</u>
Area - Ft <sup>2</sup>	<u>                    </u>	<u>                    </u>
Max. Cross-Sectional	<u>240.885</u>	<u>0.0055</u>
Planform	<u>                    </u>	<u>                    </u>
Wetted	<u>                    </u>	<u>                    </u>
Base	<u>                    </u>	<u>                    </u>

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TABLE III. (Continued)  
MODEL DIMENSIONAL DATA

MODEL COMPONENT : CANOPY - C<sub>12</sub>

GENERAL DESCRIPTION : Configuration 140 C, orbiter canopy, vehicle  
cabin No. 31 updated to MCR 200-R<sub>1</sub>. Used with fuselage B<sub>62</sub>.

MODEL SCALE: 0.004

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

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length ( $X_0 = 434.643-578$ ), in.	<u>143.357</u>	<u>0.573</u>
Max Width (@ $X_0 = 513.127$ ), In.	<u>152.412</u>	<u>0.610</u>
Max Depth ( $Z_0 = 501$ to $449.39$ ), In.	<u>51.61</u>	<u>0.206</u>
Fineness Ratio	<u>                    </u>	<u>                    </u>
Area	<u>                    </u>	<u>                    </u>
Max. Cross-Sectional	<u>                    </u>	<u>                    </u>
Planform	<u>                    </u>	<u>                    </u>
Wetted	<u>                    </u>	<u>                    </u>
Base	<u>                    </u>	<u>                    </u>



## TABLE III. MODEL DIMENSIONAL DATA (Continued)

\*REVISED 4/24/74

MODEL COMPONENT: ELEVON - E<sub>26</sub>GENERAL DESCRIPTION: Configuration 140A/B Orbiter elevonsData are for one side.MODEL SCALE: 0.0040 MODEL DRAWING: SS-A00148, RELEASE 6DRAWING NUMBER: VL70-000200, -006089, -006092

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area - Ft <sup>2</sup>	<u>210.0</u>	<u>0.003</u>
Span (equivalent), In.	<u>349.2</u>	<u>1.397</u>
Inb'd equivalent chord, In.	<u>118.004</u>	<u>0.472</u>
Outb'd equivalent chord, In.	<u>55.192</u>	<u>0.221</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.2096</u>	<u>0.2096</u>
At Outb'd equiv. chord	<u>0.4004</u>	<u>0.4004</u>
Sweep Back Angles, degrees		
Leading Edge	<u>0.00</u>	<u>0.00</u>
Trailing edge	<u>-10.056</u>	<u>-10.056</u>
Hingeline	<u>0.00</u>	<u>0.00</u>
*Area Moment (Product of area & $\bar{c}$ ), Ft <sup>3</sup>	<u>1587.25</u>	<u>0.0001</u>
*Mean Aerodynamic Chord, In.	<u>90.7</u>	<u>0.363</u>

TABLE III. (Continued)  
MODEL DIMENSIONAL DATA

MODEL COMPONENT : BODY FLAP - F<sub>10</sub>

GENERAL DESCRIPTION : Configuration 140C, body flap, Hingeline  
located at X<sub>0</sub> = 1532, Z<sub>0</sub> = 238.

MODEL SCALE: 0.0040

DRAWING NUMBER : VI.70-000140C, VI.70-355114

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (X <sub>0</sub> =1525.5 to X <sub>0</sub> =1613), In.	<u>87.50</u>	<u>0.350</u>
Max Width (@ L.E., X <sub>0</sub> = 1525.5), In.	<u>256.00</u>	<u>1.024</u>
Max Depth (X <sub>0</sub> = 1532), In.	<u>19.798</u>	<u>0.0792</u>
Fineness Ratio	<u>                    </u>	<u>                    </u>
Area - Ft <sup>2</sup>	<u>                    </u>	<u>                    </u>
Max. Cross-Sectional (@H.L.)	<u>35.196</u>	<u>0.00056</u>
Planform	<u>135.00</u>	<u>0.0022</u>
Wetted	<u>                    </u>	<u>                    </u>
Base (X <sub>0</sub> = 1613)	<u>4.89</u>	<u>0.000078</u>

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: WING-W 127

GENERAL DESCRIPTION: Configuration 140C orbiter wing, MCR 200-B, similar to 140A/B wing W<sub>116</sub> but with refinements: improved wing-boot-midbody fairing (X<sub>0</sub> = 940 to X<sub>0</sub> = 1040); elevon split line relocated from Y<sub>0</sub>=281 to Y<sub>0</sub>=

MODEL SCALE: 0.0040

TEST NO.

DWG. NO. VL70-000140C, -000200B

DIMENSIONS:

FULL-SCALE

MODEL SCALE

TOTAL DATA

Area (Theo.) Ft<sup>2</sup>

Planform

2690.00

0.043

Span (Theo In.)

936.68

3.747

Aspect Ratio

2.265

2.265

Rate of Taper

1.177

1.177

Taper Ratio

0.200

0.200

Dihedral Angle, degrees

3.500

3.500

Incidence Angle, degrees

0.500

0.500

Aerodynamic Twist, degrees

3.000

3.000

Sweep Back Angles, degrees

Leading Edge

45.000

45.000

Trailing Edge

-10.056

-10.056

0.25 Element Line

35.209

35.209

Chords:

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

680.24

2.757

Tip, (Theo) B.P.

137.85

0.551

MAC

474.81

1.899

Fus. Sta. of .25 MAC

1136.83

4.597

W.P. of .25 MAC

200.58

1.162

B.L. of .25 MAC

182.13

0.729

EXPOSED DATA

Area (Theo) Ft<sup>2</sup>

1751.50

7.006

Span, (Theo) In. BP108

720.68

2.883

Aspect Ratio

2.059

2.059

Taper Ratio

0.245

0.245

Chords

Root BP108

562.09

2.248

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

137.85

0.551

MAC

392.83

1.571

Fus. Sta. of .25 MAC

1185.08

4.740

W.P. of .25 MAC

204.30

1.189

B.L. of .25 MAC

251.77

1.037

Airfoil Section (Rockwell Mod NASA)

XXXX-64

Root  $\frac{b}{2}$  =

0.113

0.113

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

0.12

0.12

Data for (1) of (2) Sides

Leading Edge Cuff  
Planform Area Ft<sup>2</sup>

113.18

0.0018

Leading Edge Intersects Fus M. L. @ Sta

500.00

2.000

Leading Edge Intersects Wing @ Sta

1024.00

4.096

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TABLE III. (Continued)  
MODEL DIMENSIONAL DATA

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

GENERAL DESCRIPTION : Preliminary IML version of short CMS pod.

(First used on 0.015 scale Model 36-0 for test No. 0A83).

MODEL SCALE: 0.0040

DRAWING NUMBER: VI.70-008457

DIMENSIONS : (For 1 of 2 sides).	FULL SCALE	MODEL SCALE
Length (OMS Fwd Sta X <sub>0</sub> =1311), In.	<u>254.00</u>	<u>1.016</u>
Max Width (@ X <sub>0</sub> = 1511), In.	<u>135.6</u>	<u>0.5424</u>
Max Depth (@ X = 1511), In.	<u>73.6</u>	<u>0.2944</u>
Fineness Ratio	<u>2.54080</u>	<u>2.54080</u>
Area - Ft <sup>2</sup>	<u>                    </u>	<u>                    </u>
Max. Cross-Sectional	<u>54.507</u>	<u>0.00087</u>
Planform	<u>                    </u>	<u>                    </u>
Wetted	<u>                    </u>	<u>                    </u>
Base	<u>                    </u>	<u>                    </u>

TABLE III. (Continued)  
MODEL DIMENSIONAL DATA

MODEL COMPONENT: OMS NOZZLES - N<sub>28</sub>

GENERAL DESCRIPTION: Configuration 140A/B Orbiter OMS nozzles

MODEL SCALE: 0.0040

DRAWING NUMBER: VL70-000140A (Location); SS-A00106, RELEASE 5 (Contour)

DIMENSIONS:	FULL SCALE	MODEL SCALE
MACH NO.		
Length - In.		
Gimbal Point to Exit Plane	_____	_____
Throat to Exit Plane	_____	_____
Diameter - In.		
Exit	_____	_____
Throat	_____	_____
Inlet	_____	_____
Area - ft <sup>2</sup>		
Exit	_____	_____
Throat	_____	_____
Gimbal Point (Station) - In.		
<del>Upper Nozzles</del> Left Nozzle		
X	<u>1518.0</u>	<u>6.072</u>
Y	<u>- 88.0</u>	<u>- 0.352</u>
Z	<u>492.0</u>	<u>1.968</u>
Right		
<del>Lower Nozzles</del>		
X	<u>1518.00</u>	<u>6.072</u>
Y	<u>88.0</u>	<u>0.352</u>
Z	<u>492.0</u>	<u>1.968</u>
Null Position - Deg.		
Left <del>Upper</del> Nozzle		
Pitch	<u>15°49'</u>	<u>15°49'</u>
Yaw	<u>12°17'</u>	<u>12°17'</u>
Right		
<del>Lower</del> Nozzle		
Pitch	<u>15°49'</u>	<u>15°49'</u>
Yaw	<u>12°17'</u>	<u>12°17'</u>

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\*REVISED 4/24/74

TABLE III. (Continued)  
MODEL DIMENSIONAL DATA

MODEL COMPONENT: VERTICAL - V<sub>8</sub>

GENERAL DESCRIPTION: Configuration 140C, orbiter vertical tail

(identical to configuration 140A/B vertical tail).

MODEL SCALE: 0.0040

DRAWING NUMBER: VL70-000140C, -000146B

DIMENSIONS: FULL SCALE MODEL SCALE

TOTAL DATA

Area (Theo) - Ft <sup>2</sup>		
Planform	<u>413.253</u>	<u>0.0065</u>
Span (Theo) - In.	<u>315.720</u>	<u>1.263</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>26.2</u>	<u>26.2</u>
0.25 Element Line	<u>41.130</u>	<u>41.130</u>
Chords:		
Root (Theo) WP	<u>268.500</u>	<u>1.074</u>
Tip (Theo) WP	<u>108.470</u>	<u>0.434</u>
MAC	<u>199.808</u>	<u>0.799</u>
Fus. Sta. of .25 MAC	<u>1463.50</u>	<u>5.854</u>
W.P. of .25 MAC	<u>635.522</u>	<u>2.542</u>
B.L. of .25 MAC	<u>0.000</u>	<u>0.000</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>2.00</u>	<u>0.028</u>
Void Area	<u>13.17</u>	<u>0.00021</u>
Blanketed Area	<u>0.00</u>	<u>0.000</u>

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: RUDDER - R<sub>5</sub>

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

MODEL SCALE: 0.0040

DRAWING NUMBER: VL70-000146B, -000095

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area - Ft <sup>2</sup>	<u>100.15</u>	<u>0.0016</u>
Span (equivalent) , In.	<u>201.00</u>	<u>0.804</u>
Inb'd equivalent chord , In.	<u>91.585</u>	<u>0.366</u>
Outb'd equivalent chord , In.	<u>50.833</u>	<u>0.203</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 ( Product of Area and $\bar{c}$ ), Ft <sup>3</sup>	<u>610.92</u>	<u>0.00039</u>
Mean Aerodynamic Chord	<u>73.2</u>	<u>0.293</u>

TABLE III. (Continued)  
MODEL DIMENSIONAL DATA

MODEL COMPONENT: ATTACH STRUCTURE - AT16

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

MODEL SCALE: 0.0040

MODEL DRAWING: SS-AC0117

DRAWING NO.: VL78-000062B, SK-H-4011

DIMENSIONS:	<u>MEMBER</u>		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
	#1	X <sub>O</sub>	394.38	1.578
		Y <sub>O</sub>	0.00	0.00
		Z <sub>O</sub>	LWR ML	LWR ML
		X <sub>T</sub>	1131.00	4.524
		Y <sub>T</sub>	561.298	0.187
		Z <sub>T</sub>	561.298	2.245
	#2	X <sub>O</sub>	394.38	1.578
		Y <sub>O</sub>	0	0
		Z <sub>O</sub>	LWR ML	LWR ML
		X <sub>T</sub>	1131.00	4.524
		Y <sub>T</sub>	- 46.8	- 0.187
		Z <sub>T</sub>	561.298	2.245
Diameter of members: (In.)			5.70	0.0228



TABLE III. (Continued)  
 MODEL DIMENSIONAL DATA

MODEL COMPONENT: ATTACH STRUCTURE - AT<sub>25</sub>

GENERAL DESCRIPTION: Strengthened attach structure, left rear orbiter to ET -  
 2 members.

MODEL SCALE: 0.0040

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

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Member No. 1 (Aft):	X <sub>O</sub>	1317.00	5.268
	Y <sub>O</sub>	- 96.50	- 0.386
	Z <sub>O</sub>	267.50	1.070
	X <sub>T</sub>	2058.00	8.232
	Y <sub>T</sub>	- 96.50	- 0.386
	Z <sub>T</sub>	515.50	2.062
	Diameter, In.	11.50	0.046
Member No. 2 (Forward):	X <sub>O</sub>	1317.00	5.268
	Y <sub>O</sub>	- 96.50	- 0.386
	Z <sub>O</sub>	267.50	1.070
	X <sub>T</sub>	1872.00	7.488
	Y <sub>T</sub>	- 125.88	- 0.503
	Z <sub>T</sub>	504.50	2.018
	Diameter, In.	15.50	0.062

TABLE III. (Continued)  
MODEL DIMENSIONAL DATA

MODEL COMPONENT: ATTACH STRUCTURE - AT<sub>26</sub>

GENERAL DESCRIPTION: Strengthening attach structure right rear Orbiter to ET -  
2 members.

MODEL SCALE: 0.0040

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

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Member No. 1 (Aft)	X <sub>O</sub>	1317.00	5.268
	Y <sub>O</sub>	96.50	0.386
	Z <sub>O</sub>	267.50	1.070
	X <sub>T</sub>	2058.00	8.232
	Y <sub>T</sub>	96.50	0.386
	Z <sub>T</sub>	515.50	2.062
	Diameter, In.	11.50	0.046
Member No. 2 (Forward)	X <sub>O</sub>	1317.00	5.268
	Y <sub>O</sub>	96.50	0.386
	Z <sub>O</sub>	267.50	1.070
	X <sub>T</sub>	1872.00	7.488
	Y <sub>T</sub>	125.68	0.503
	Z <sub>T</sub>	504.50	2.018
	Diameter, In.	15.50	0.062

TABLE III. (Continued)  
 MODEL DIMENSIONAL DATA

MODEL COMPONENT: ATTACH STRUCTURE - AT<sub>24</sub>

GENERAL DESCRIPTION: Forward orbiter/ET attach structure (2 member structure) simulating the attach structure after ET separation.

MODEL SCALE: 0.0040

MODEL DRAWING: SS-A00117

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Member #1	X <sub>O</sub>	346.00	1.384
	Y <sub>O</sub>	0.00	0.00
	Z <sub>O</sub>	280.07	1.120
	X <sub>T</sub>	1131.00	4.524
	Y <sub>T</sub>	46.00	0.184
	Z <sub>T</sub>	565.07	2.260
Member #2	X <sub>O</sub>	346.00	1.384
	Y <sub>O</sub>	0.00	0.00
	Z <sub>O</sub>	280.07	1.120
	X <sub>T</sub>	1131.00	4.524
	Y <sub>T</sub>	- 46.00	- 0.184
	Z <sub>T</sub>	280.07	1.120
Diameter of Members, In.		5.70	0.0228

TABLE III. (Continued)  
 MODEL DIMENSIONAL DATA

MODEL COMPONENT: FEEDLINE - FL<sub>5</sub>

GENERAL DESCRIPTION: LOX feedline simulated between ET and Orbiter.

MODEL SCALE: 0.0040

MODEL DRAWING: SS-AC0117

DRAWING NO.: VL78-000062B

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Leading edge at:	X <sub>T</sub>	1033.3	4.132
	Y <sub>T</sub>	70.0	0.280
	X <sub>T</sub>	1033.3	4.132
	Y <sub>T</sub>	- 70.0	- 0.280
Trailing edge at:	X <sub>T</sub>	2071.50	8.286
	Y <sub>T</sub>	70.00	0.280
	X <sub>T</sub>	2071.50	8.286
	Y <sub>T</sub>	70.00	0.280
Diameter, In.		18.80	0.188

Centerline of LOX feedline located radially at  $\phi = 23^{\circ}24'$

TABLE III. (Continued)  
 MODEL DIMENSIONAL DATA

MODEL COMPONENT: PRESSURE LINE - FL<sub>6</sub>

GENERAL DESCRIPTION: Max. cross-sectional area simulating LH<sub>2</sub> pressure line and electrical conduit box between ET and Orbiter.

MODEL SCALE: 0.0040

DRAWING NO.: VL78-000062B

MODEL DRAWING: SS-AC0117

DIMENSIONS:

		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Leading edge at:	X <sub>T</sub>	1127.1	4.508
	Y <sub>T</sub>	110.3	0.441
Trailing edge at:	X <sub>T</sub>	2062.1	8.248
	Y <sub>T</sub>	110.3	0.441

Centerline of LH pressure line located radially at  $\phi = 33^{\circ}45'$ .

TABLE III. (Continued)  
MODEL DIMENSIONAL DATA

MODEL COMPONENT : LH<sub>2</sub> UMBILICAL FEEDLINE - FL<sub>9</sub>

GENERAL DESCRIPTION : LH<sub>2</sub> Umbilical Feedline with an electrical quick-disconnect box between the Orbiter and ET.

MODEL SCALE: 0.0040

DRAWING NUMBER VL78-000062B

DIMENSIONS :	FULL SCALE	MODEL SCALE
Centerline at X	<u>2071.5</u>	<u>8.286</u>
Max Width	<u>31.2</u>	<u>0.125</u>
Max Depth	<u>37.5</u>	<u>0.150</u>
Diameter	<u>17.0</u>	<u>0.068</u>
Area	<u>                    </u>	<u>                    </u>
Max. Cross-Sectional	<u>                    </u>	<u>                    </u>
Planform	<u>                    </u>	<u>                    </u>
Wetted	<u>                    </u>	<u>                    </u>
Base	<u>                    </u>	<u>                    </u>

TABLE III. (Continued)  
 MODEL DIMENSIONAL DATA

MODEL COMPONENT: REAR ATTACH STRUCTURE FAIRING - FR<sub>6</sub>

GENERAL DESCRIPTION: Rear ET/Orbiter attach structure cross-member or beam fairing used in conjunction with AT<sub>12</sub>, AT<sub>13</sub>, FL<sub>1</sub> and FL<sub>2</sub>.

MODEL SCALE: 0.0040

DRAWING NO.: VL78-000062B

MODEL DRAWING: SS-A01256

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Leading edge centerline at	X <sub>T</sub>	2036.67	8.147
	Y <sub>T</sub>	0.00	0.00
	Z <sub>T</sub>	183.00	0.732
Maximum length, In.		64.00	0.256
Maximum width, In.		190.00	0.760

TABLE III. (Continued)  
MODEL DIMENSIONAL DATA

MODEL COMPONENT: ET PROTUBERANCE - PT<sub>12</sub>

GENERAL DESCRIPTION: Lightning rod attached to ET nose.

MODEL SCALE: 0.004

DRAWING NO.: VL78-000068A

<u>DIMENSIONS:</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length	30.90	0.124
Diameter, In.	3.20	0.013



TABLE III. (Continued)  
MODEL DIMENSIONAL DATA

MODEL COMPONENT: ET PROTUBERANCE - PT<sub>13</sub>

GENERAL DESCRIPTION: Maximum cross-sectional area simulating LOX recirculation line and electrical conduit box on planform view of External Tank, T<sub>20</sub>.

MODEL SCALE: 0.0040

MODEL DRAWING: SS-AC0117

DRAWING NO.: VL78-000062B

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Leading edge at:	X <sub>T</sub>	1208.3	4.833
	Y <sub>T</sub>	+ 95.0	+ 0.380
	X <sub>T</sub>	1208.3	4.833
	Y <sub>T</sub>	- 95.0	- 0.380
Trailing edge at:	X <sub>T</sub>	2060.5	8.242
	Y <sub>T</sub>	95.0	0.380
	X <sub>T</sub>	2060.5	8.242
	Y <sub>T</sub>	- 95.0	- 0.380

Centerline of LOX recirculation line located radially at  $\phi = 33^{\circ}45'$ .

TABLE III. (Continued)  
 MODEL DIMENSIONAL DATA

MODEL COMPONENT: ET PROTUBERANCE - PT<sub>14</sub>

GENERAL DESCRIPTION: LOX pressure line on Tank T20.

MODEL SCALE: 0.0040

DRAWING NO.: VL78-000062B

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Leading edge at:	X <sub>T</sub>	355.90	1.424
	Y <sub>T</sub>	6.0	0.024
Trailing edge at:	X <sub>T</sub>	2060.5	8.242
	Y <sub>T</sub>	.87,0	0.348

Centerline of LOX pressure line located radially at  $\phi = 23^{\circ}24'$ .

TABLE III. (Continued)  
 MODEL DIMENSIONAL DATA

MODEL COMPONENT: NOSE CONE LINES - PT<sub>20</sub>

GENERAL DESCRIPTION: Maximum cross-sectional area simulating the LOX pressure line and electrical conduit on top of external tank (T<sub>20</sub>) nose cone area.

MODEL SCALE: 0.0040

DRAWING NO.:

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Leading edge at:	X <sub>T</sub>	360.92	1.444
	Y <sub>T</sub>	34.0	0.136
Trailing edge at:	X <sub>T</sub>	955.1	3.820
	Y <sub>T</sub>	336.5	1.346

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

TABLE III. (Continued)  
 MODEL DIMENSIONAL DATA

MODEL COMPONENT: Tank base extension - FT<sub>21</sub>

GENERAL DESCRIPTION: Cylindrical base extension on external tank, T<sub>20</sub>.

MODEL SCALE: 0.0040

DRAWING NO.: VL72-000131, VL78-000062

MODEL DRAWING: LMSC R80058

<u>DIMENSIONS:</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length, In.	428.25	1.713
Diameter, In.	330.20	1.321
Area - Ft <sup>2</sup>		
Max. Cross-sectional	594.679	2.379
Base	594.679	2.379
WP of Extension centerline	400.00	1.600

TABLE III. (Continued)  
MODEL DIMENSIONAL DATA

MODEL COMPONENT : EXTERNAL TANK - T<sub>20</sub>

GENERAL DESCRIPTION : External Oxygen-Hydrogen tank

\_\_\_\_\_

\_\_\_\_\_

MODEL SCALE: 0.0040

DRAWING NUMBER : VI.72-000131, VI.78-000062

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length, In. (Nose @ $X_0=328.92$ )	<u>1846.905</u>	<u>7.388</u>
Max Width Dia, In. @ $X_0=975.675$	<u>333.2</u>	<u>1.333</u>
Max Depth , In.	<u>330.2</u>	<u>1.333</u>
Fineness Ratio	<u>5.65713</u>	<u>5.65713</u>
Area - Ft <sup>2</sup>	<u>        </u>	<u>        </u>
Max. Cross-Sectional	<u>605.534</u>	<u>0.0096</u>
Major Cross section	<u>594.679</u>	<u>0.0095</u>
WP of tank centerline (Z), In.	<u>400.000</u>	<u>0.0064</u>
Base (on 330.2 dia.)	<u>594.679</u>	<u>0.0095</u>

TABLE III. (Continued)  
MODEL DIMENSIONAL DATA

MODEL COMPONENT : EXTERNAL TANK - T<sub>27</sub>

GENERAL DESCRIPTION : External tank T<sub>20</sub> with 1208 In. radius ogive nose.

MODEL SCALE: 0.0010 MODEL DRAWING: LMS C R80058

DRAWING NUMBER: VL72-000131, VL78-000062

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length , In. (@ $X_0=328.92$ )	<u>1947.155</u>	<u>7.789</u>
Max. Dia, In. (@ $X_T = 975.675$ )	<u>333.2</u>	<u>1.333</u>
Major Diameter, In.	<u>330.2</u>	<u>1.333</u>
Fineness Ratio	<u>5.897</u>	<u>5.897</u>
Area - Ft <sup>2</sup> (@ $X_T 975.675$ )		
Max. Cross-Sectional	<u>605.534</u>	<u>0.0097</u>
Major Cross-section Platform	<u>594.679</u>	<u>0.0095</u>
Wetted		
Base (on 330.2 dia.)	<u>594.679</u>	<u>0.0095</u>
WP of tank centerline (Z)	400.00	0.0064

TABLE III. (Continued)  
MODEL DIMENSIONAL DATA

MODEL COMPONENT: SRB PROTUBERANCE - PS<sub>7</sub>

GENERAL DESCRIPTION: SRB/ET attach ring: two attach rings and one structural ring.

MODEL SCALE: 0.0040

DRAWING NO.: VL77-000066

DIMENSIONS (DATA FOR 1 OF 2):	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Centerline at X <sub>B</sub>	1505	6.020
	1517	6.068
	1852	7.408
Width	10	0.040
Height	10	0.040

TABLE III. (Continued)  
MODEL DIMENSIONAL DATA

MODEL COMPONENT: ELECTRICAL TUNNEL - FS<sub>8</sub>

GENERAL DESCRIPTION: Electrical tunnel on wall of solid rocket motor booster.

MODEL SCALE: 0.0040

DRAWING NO.: VL77-000036A

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length, In.	1341.5	5.366
Width ; In.	6.0	0.024
Height, In.	3.0	0.012
Leading edge angle (Deg.)	18	18



TABLE III. (Continued)  
MODEL DIMENSIONAL DATA

MODEL COMPONENT: Tie-DOWN STRUCTURE - PS-9

GENERAL DESCRIPTION: Tie-down lugs on shroud of solid rocket motor booster.

MODEL SCALE: 0.004

DRAWING NO.: VL77-000066

<u>DIMENSIONS:</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Number of tie-down lugs	4	4
Length, In.	64.00	0.256
Width, In.	13.00	0.052
Max. Height (at T. E.)	8.334	0.033
Angular position (from vertical), Deg.	60	60

TABLE III. (Continued)  
MODEL DIMENSIONAL DATA

MODEL COMPONENT: BOOSTER, SOLID ROCKET MOTOR - S<sub>14</sub>

GENERAL DESCRIPTION: SRB with 20° aft skirt

MODEL SCALE: 0.004

MODEL DRAWING: LMSC R80055, R80C56

DRAWING NO.: VL77-000066

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length (includes nozzle), In.	1789.40	7.158
Tank diameter, In.	146.00	0.584
Aft skirt diameter, In.	213.70	0.855
Skirt flare angle	20°	20°
Fineness ratio:	12.256	12.256
Area - Ft <sup>2</sup>		
Max. Cross-sectional (tank)	116.261	0.0019
Max. cross sectional (skirt)	249.079	0.0040
WL of BSRM centerline (Z <sub>T</sub> )	400.00	2.600
FS of BSRM nose (X <sub>T</sub> )	743.00	2.972
BP of BSRM centerline (Y <sub>T</sub> )	250.5	1.002

TABLE III. (Continued)  
 MODEL DIMENSIONAL DATA

MODEL COMPONENT: BOOSTER, SOLID ROCKET MOTOR - S<sub>15</sub>

GENERAL DESCRIPTION: SRB with 28° nose

MODEL SCALE: 0.004

MODEL DRAWING: LMSC R80055, R80056

DRAWING NO.: VL77-000066

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length (includes nozzle), In.	1846.40	7.386
Tank diameter, In.	146.00	0.584
Aft skirt diameter, in.	192.00	0.768
Nose planform angle	28°	28°
Nose side view angle	14°	14°
Fineness ratio	12.647	12.647
Area - Ft <sup>2</sup>		
Max. cross-sectional (tank)	116.261	0.0064
Max. cross-sectional (skirt)	201.062	0.0032
WL of BSRM centerline (Z <sub>T</sub> )	400.00	1.600
FS of BSRM nose (X <sub>T</sub> )	743.00	2.972
BP of BSRM centerline (Y <sub>T</sub> )	250.5	1.002

TABLE III. (Concluded)  
MODEL DIMENSIONAL DATA

MODEL COMPONENT : BOOSTER SOLID ROCKET MOTOR - S<sub>18</sub>

GENERAL DESCRIPTION : Configuration MCR 500. Data for 1 of 2 sides.

MODEL SCALE: 0.0040

DRAWING NUMBER: VI 77-000066

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (Includes nozzle), In.	<u>1989.4</u>	<u>7.958</u>
Max Width (Tank dia.), In.	<u>146.0</u>	<u>0.584</u>
Max Depth (Aft shroud), In.	<u>192.0</u>	<u>0.768</u>
Fineness Ratio	<u>9.06771</u>	<u>9.06771</u>
Area - Ft <sup>2</sup>	<u>                    </u>	<u>                    </u>
Max. Cross-Sectional	<u>201.06193</u>	<u>0.0032</u>
Planform	<u>                    </u>	<u>                    </u>
Wetted	<u>                    </u>	<u>                    </u>
Base	<u>                    </u>	<u>                    </u>
WP of BSRM centerline (Z <sub>T</sub> ), In.	400.00	1.600
FS of BSRM Nose (X <sub>T</sub> ), In.	743.00	2.972

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Notes:

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

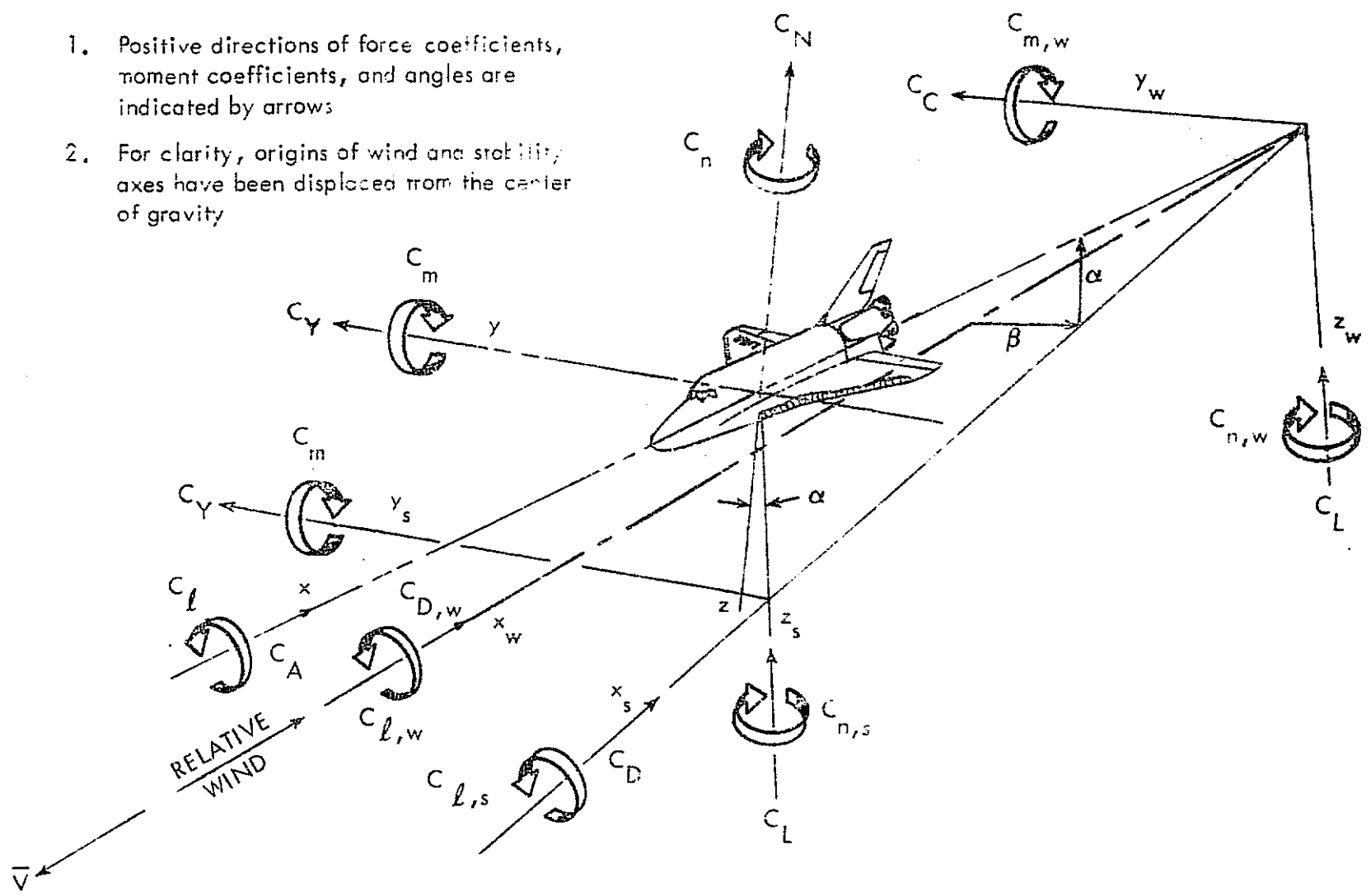
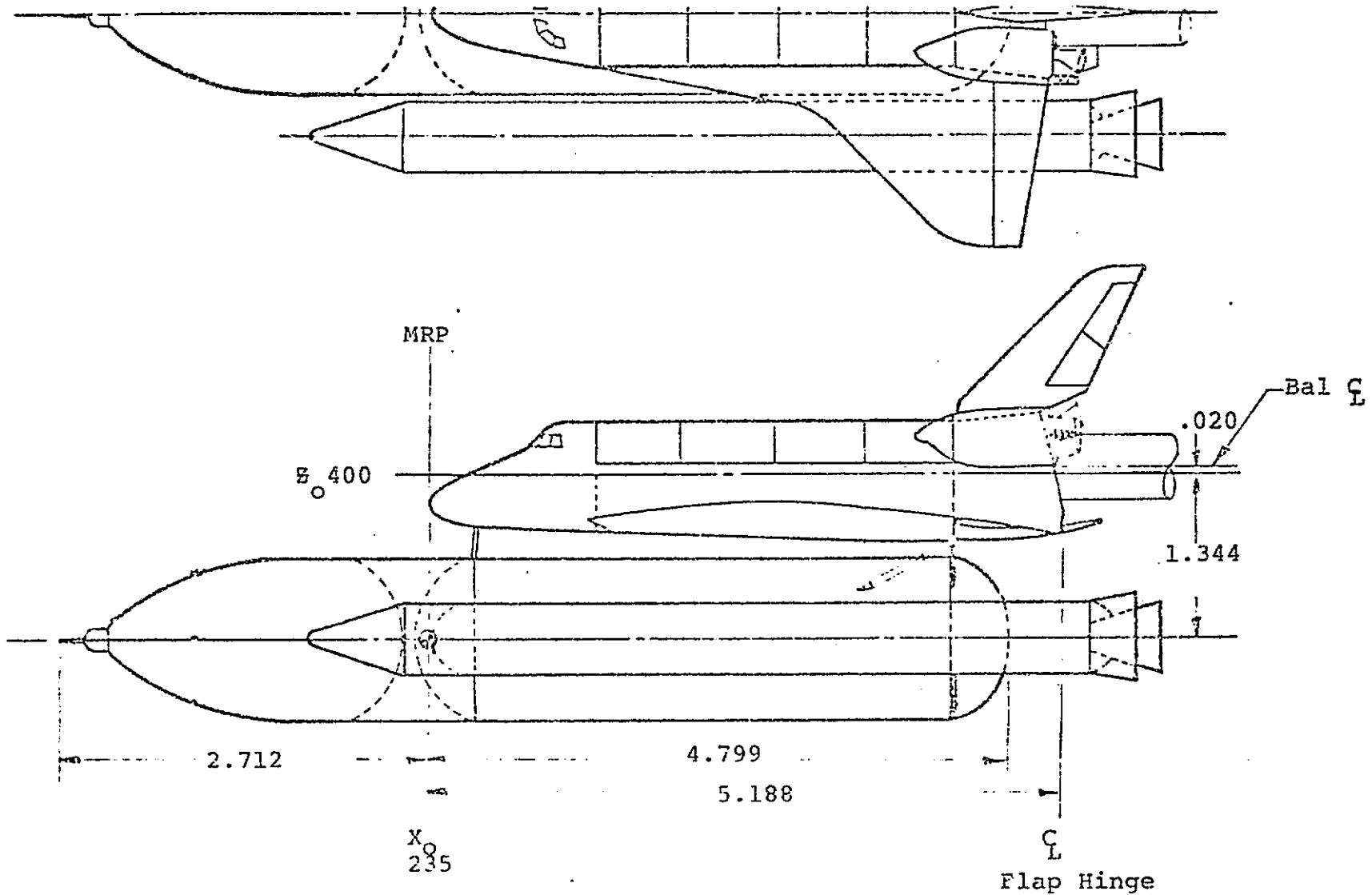


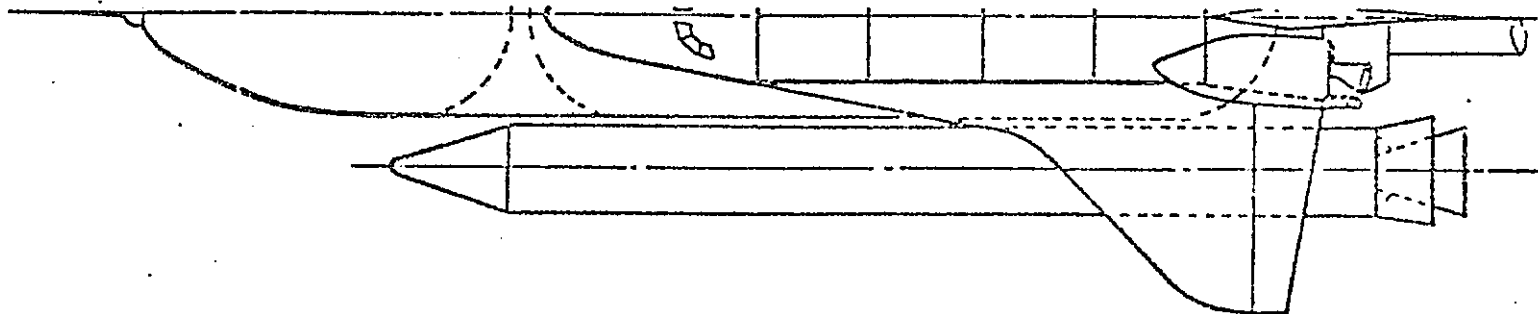
Figure 1. Axis Systems

77

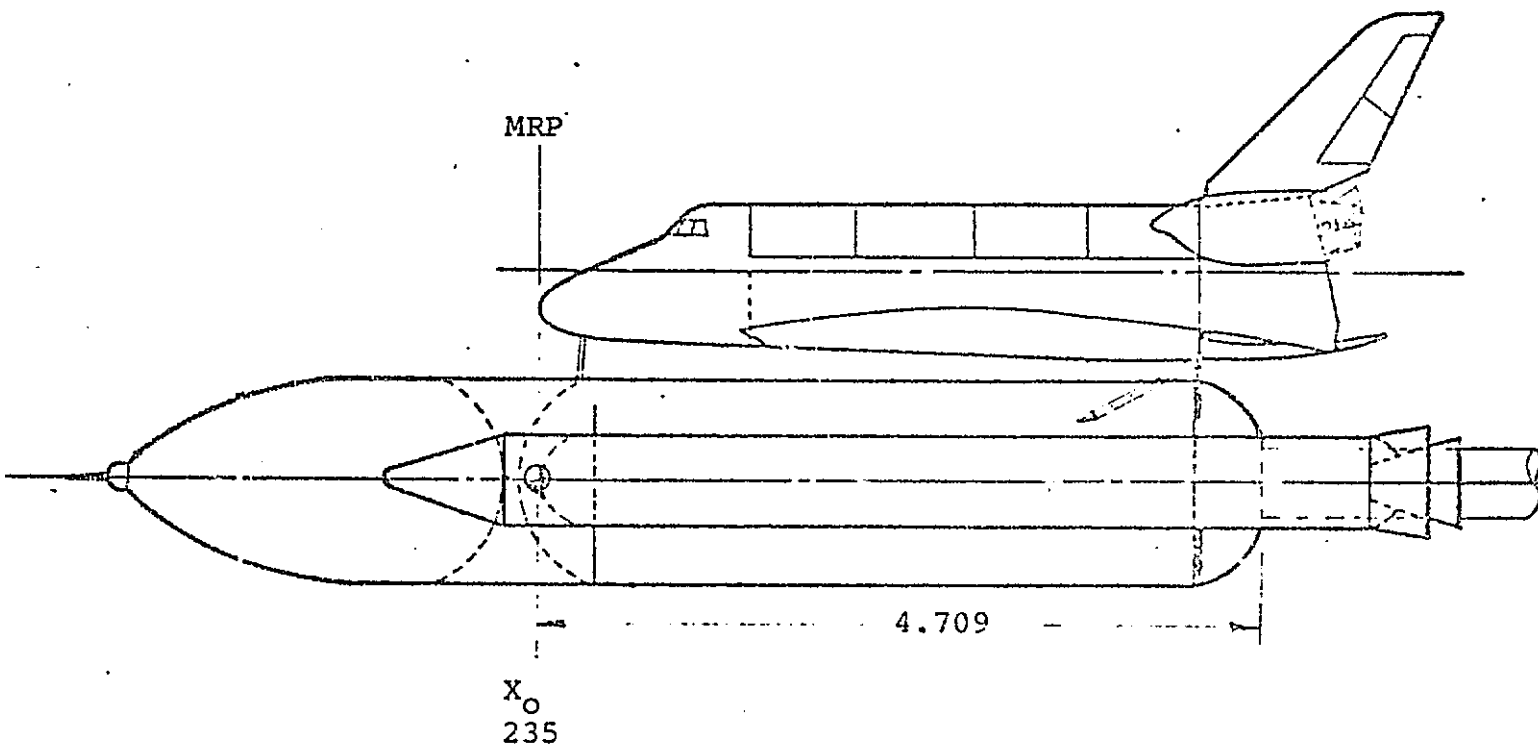


a. General Arrangement of Launch Vehicle Model  
(Balance In Orbiter)

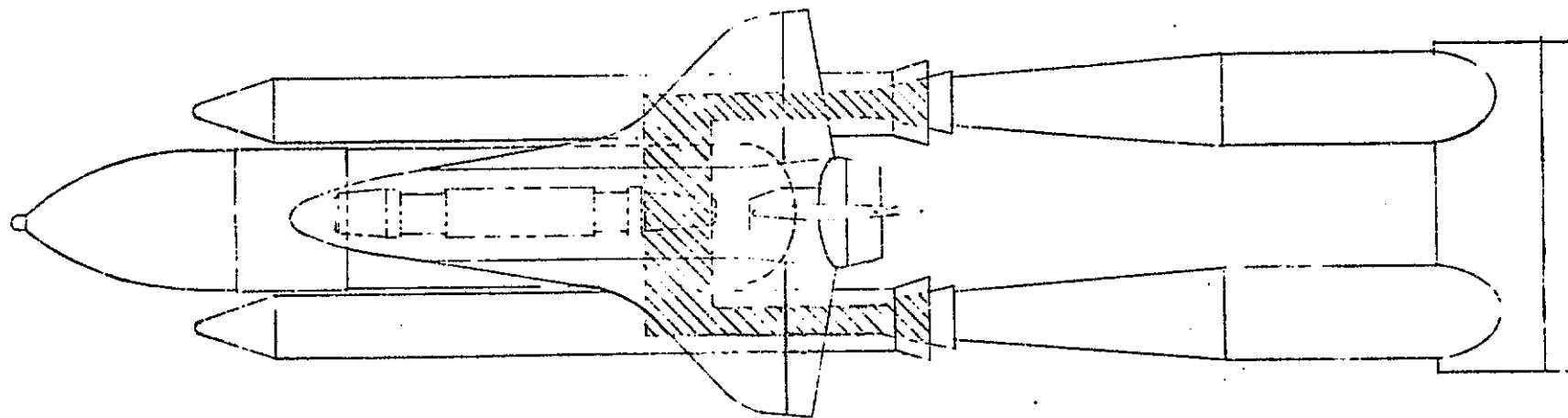
Figure 2. - Model Sketches and Graphs.



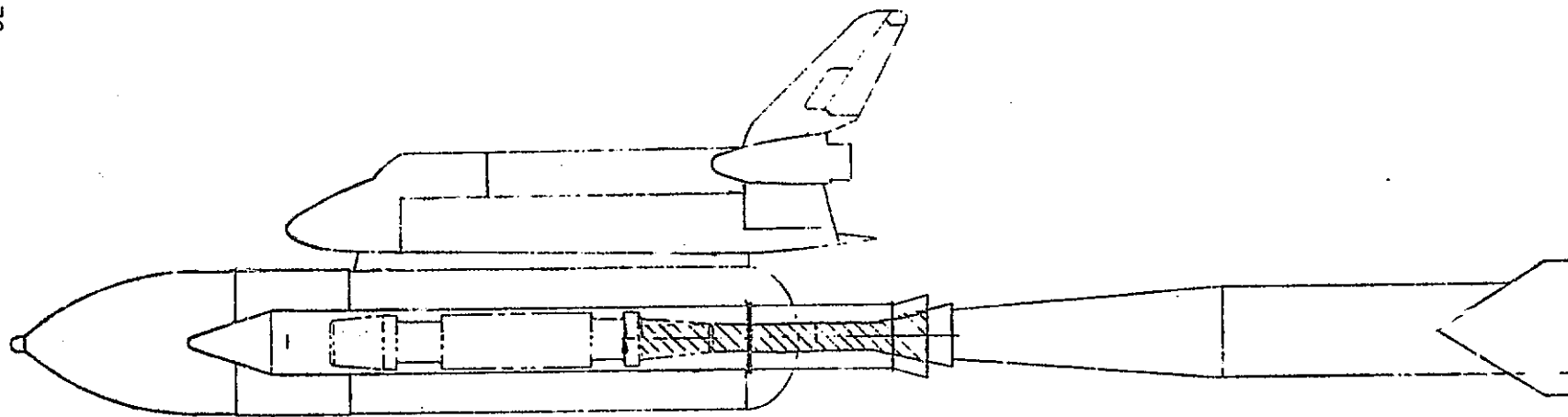
78



b. General Arrangement of Launch Vehicle Model  
(Balance in Tank, Straight Sting)  
Figure 2. - Continued.

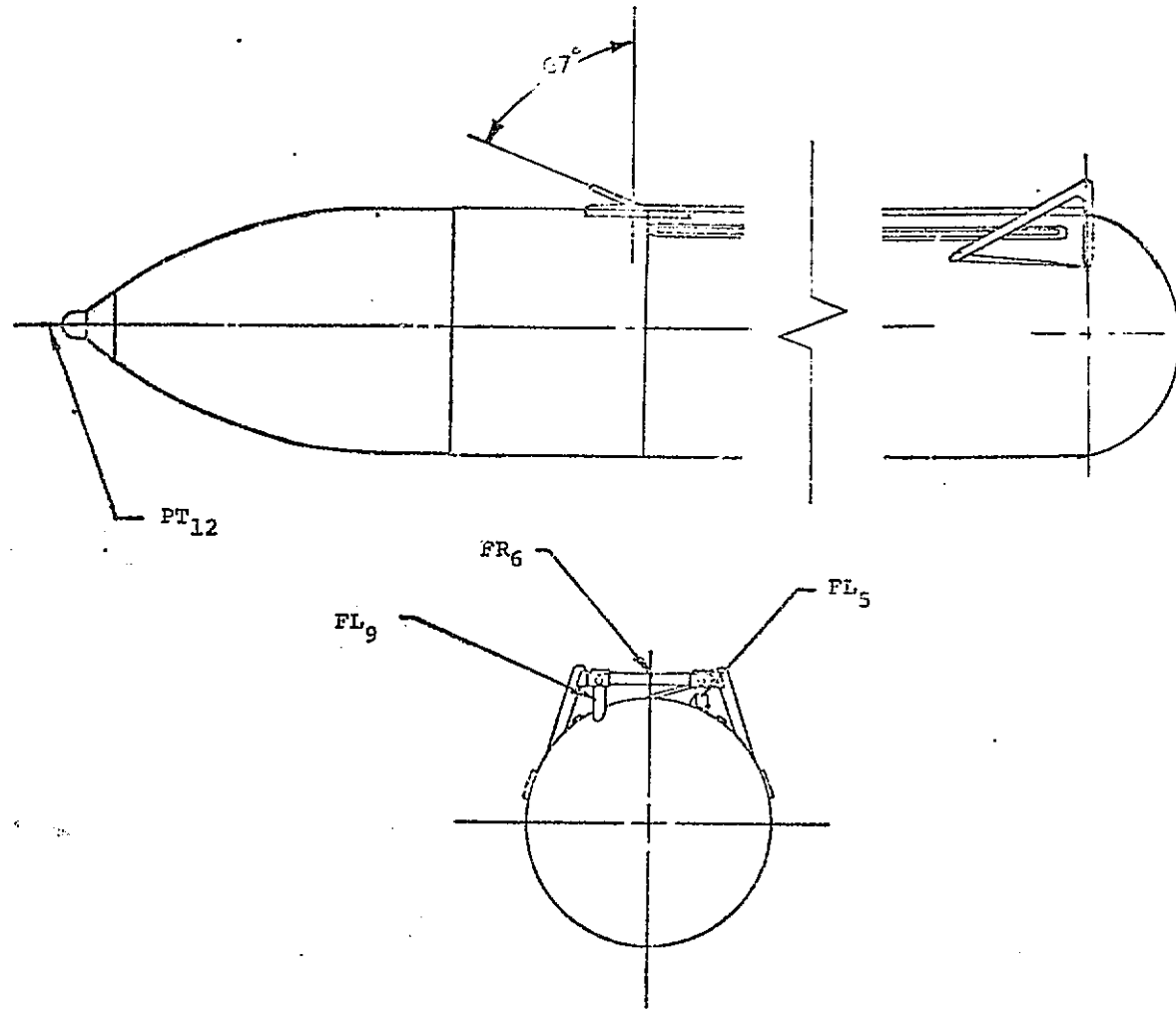


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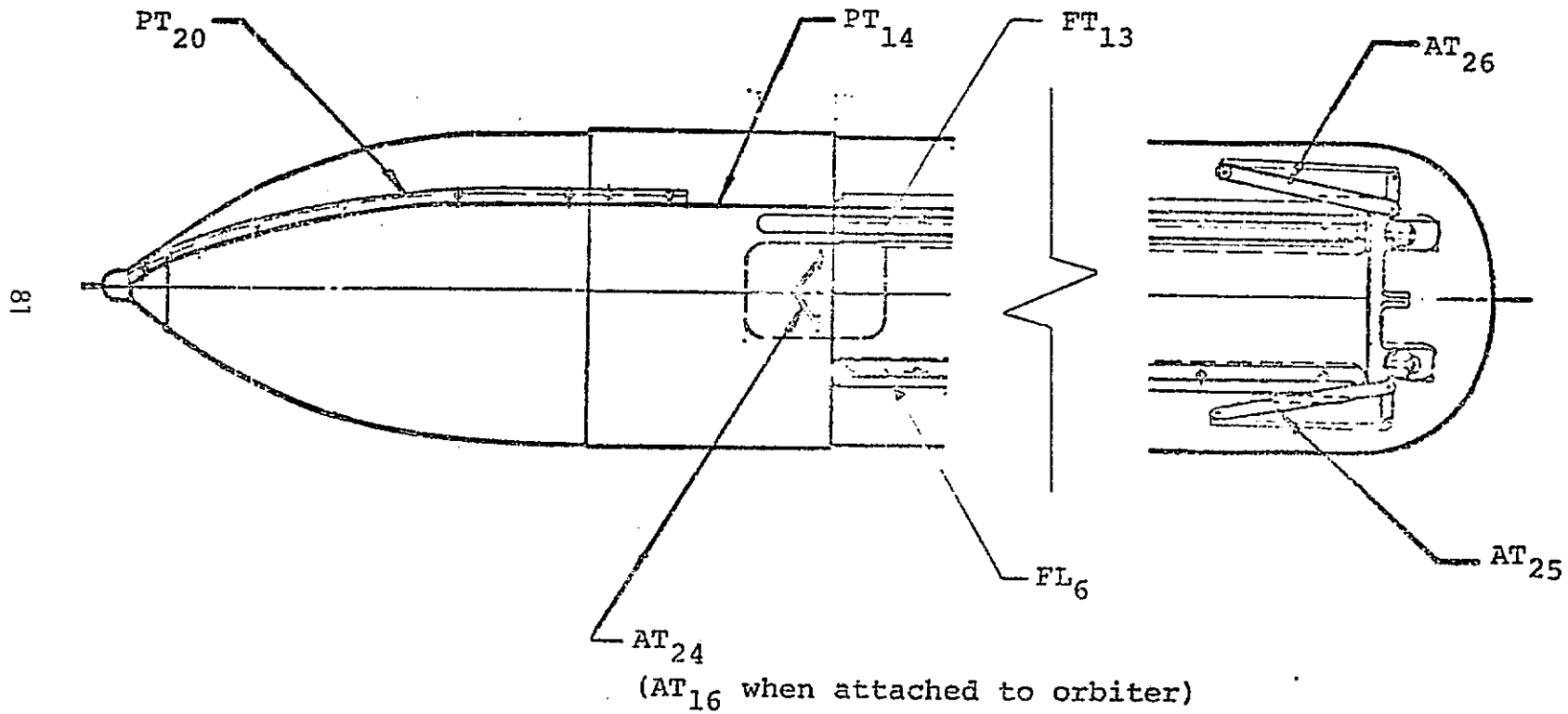


c. General Arrangement of Launch Vehicle Model  
(Balance in Tank, Forked Sting)  
Figure 2. - Continued.





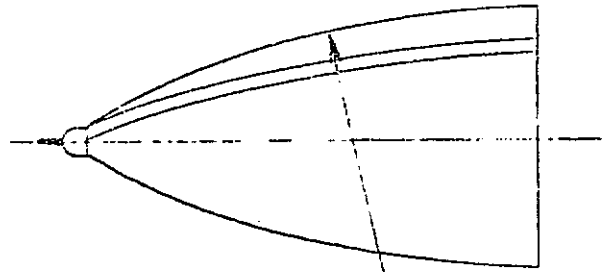
d. Tank (T<sub>20</sub>) Protuberances - Side View  
Figure 2. - Continued.



e. Tank (T<sub>20</sub>) Protuberances - Top View  
Figure 2. - Continued.

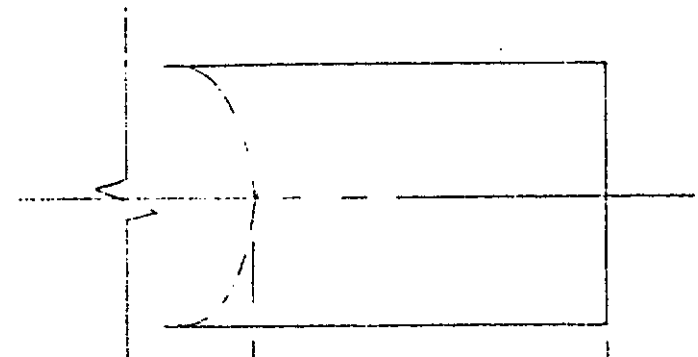
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1208R

T<sub>27</sub>

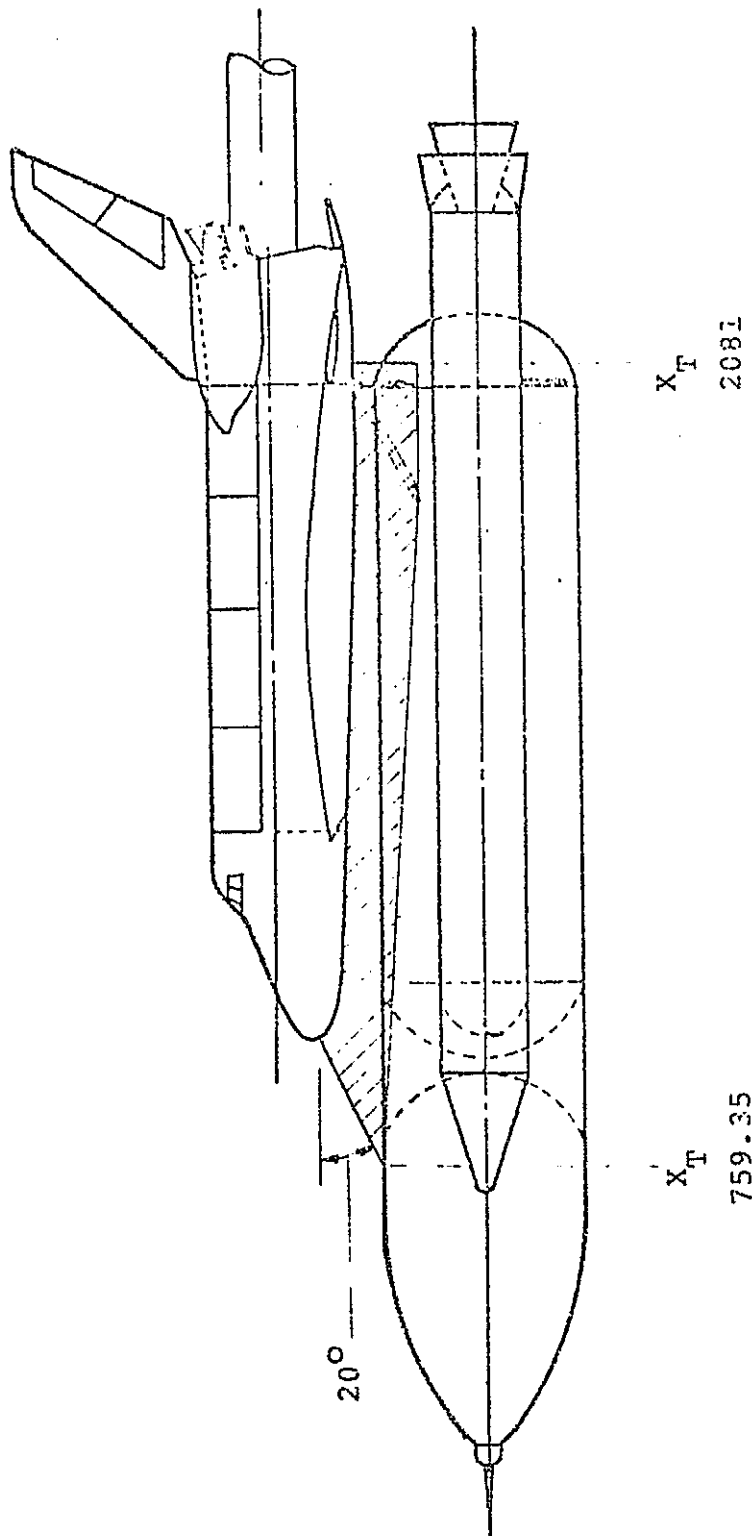


X<sub>T</sub>  
2175.83

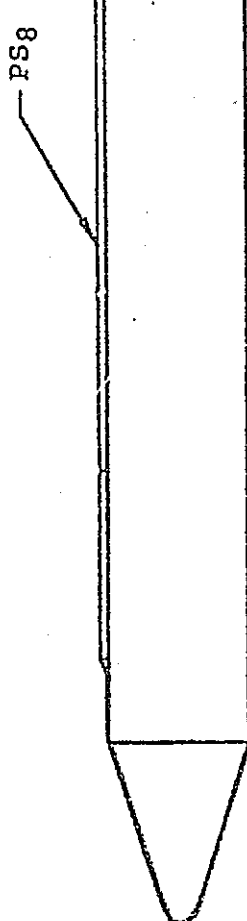
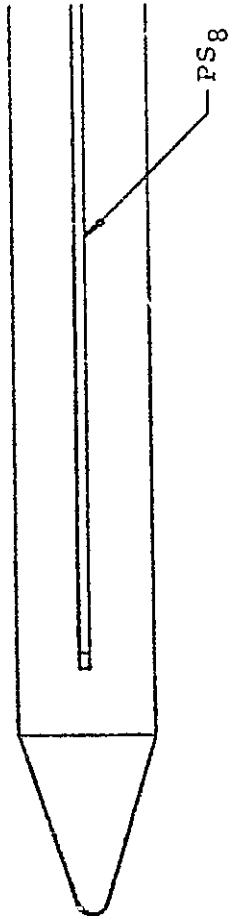
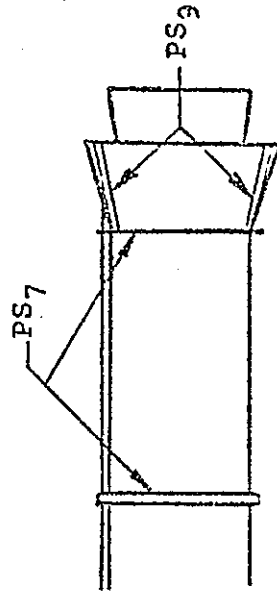
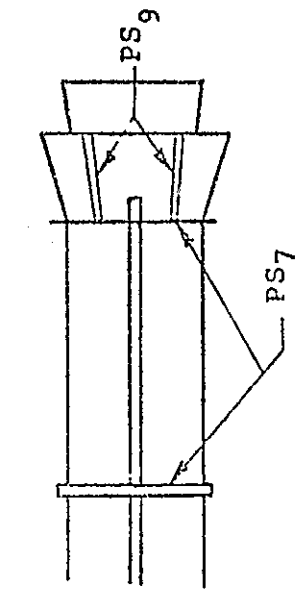
X<sub>T</sub>  
2629.08

PT<sub>21</sub>

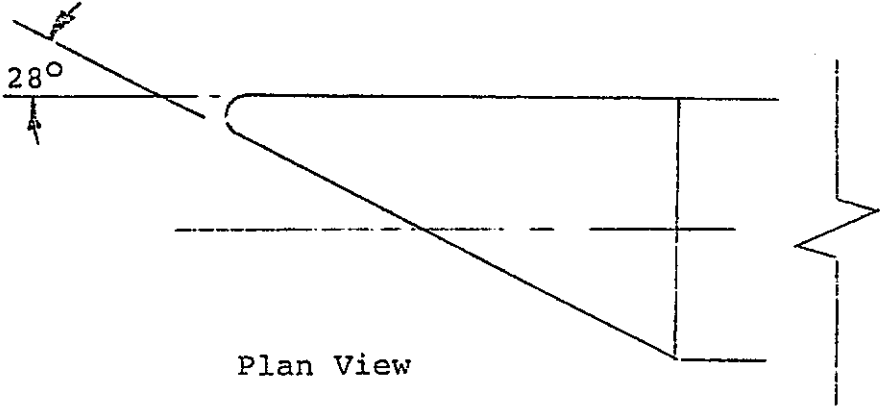
f. Tank Long Ogive Nose (T<sub>27</sub>) and Base Extension (PT<sub>21</sub>)  
Figure 2. - Continued)



g. Orbiter/Tank Fairing, FRg  
 Figure 2. - Continued.

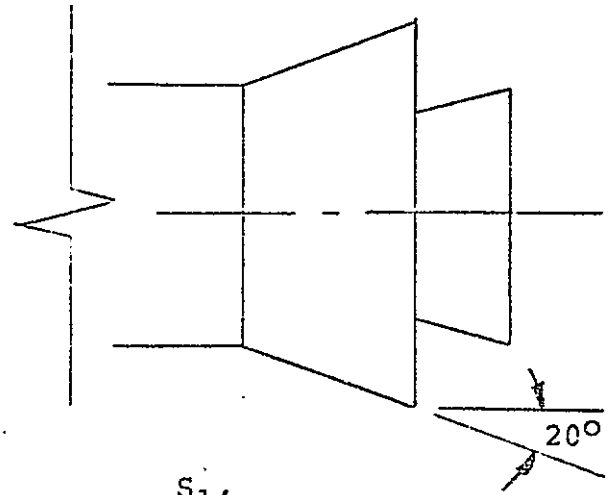


h. SRB (S<sub>18</sub>) Protuberances  
Figure 2. - Continued.

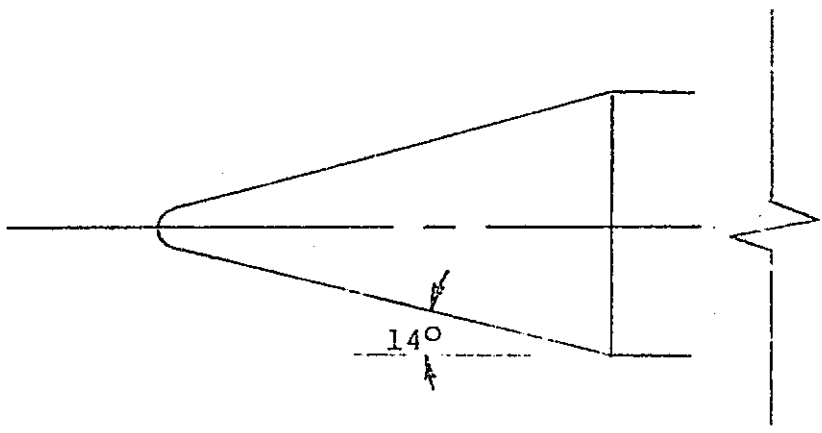


Plan View

S<sub>15</sub>



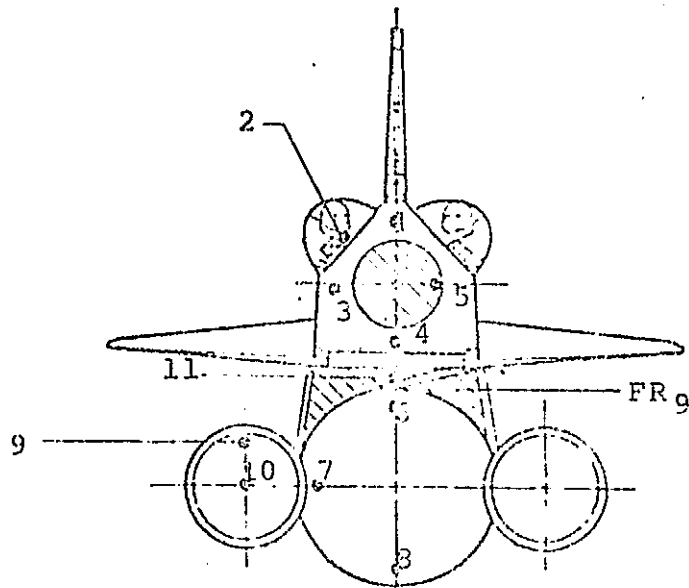
S<sub>14</sub>



Side View

i. SRB Alternate Nose Shape (S<sub>15</sub>) and Aft Skirt Flare (S<sub>14</sub>)

Figure 2. - Continued.



BALANCE IN ORBITER

Manifold tubes as follows:

$$P_{b_o} = 1, 2, 3, 5$$

$$P_{b_{bf}} = 4$$

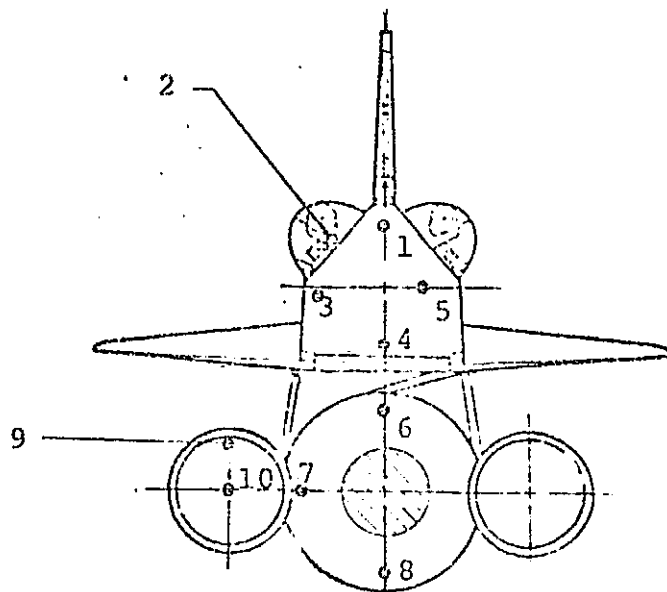
$$P_{b_e} = 6, 7, 8$$

$$P_{b_s} = 9, 10$$

with  $FR_9$  Installed

$$P_{b_f} = 11$$

- j. Definition of Base Pressure Tube Locations, Balance in Orbiter  
Figure 2. - Continued.



BALANCE IN TANK (Straight Sting)

Manifold tubes as follows

$$P_{b_o} = 1, 2, 3, 5$$

$$P_{b_{bf}} = 4$$

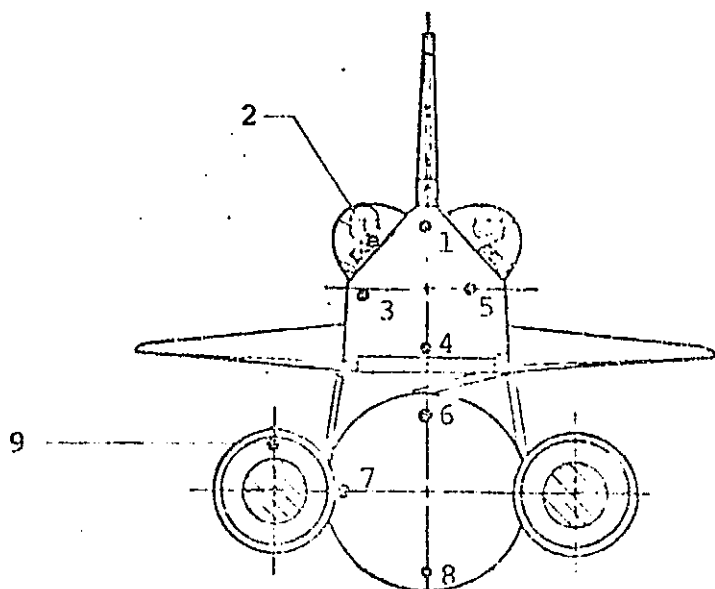
$$P_{b_e} = 6, 7, 8$$

$$P_{b_s} = 9, 10$$

k. Definition of Base Pressure Tube Locations,  
Balance in Tank (Straight Sting)

Figure 2. - Continued.





BALANCE IN TANK (Forked Sting)

Manifold tubes as follows:

$$P_{b_o} = 1, 2, 3, 5$$

$$P_{b_{bf}} = 4$$

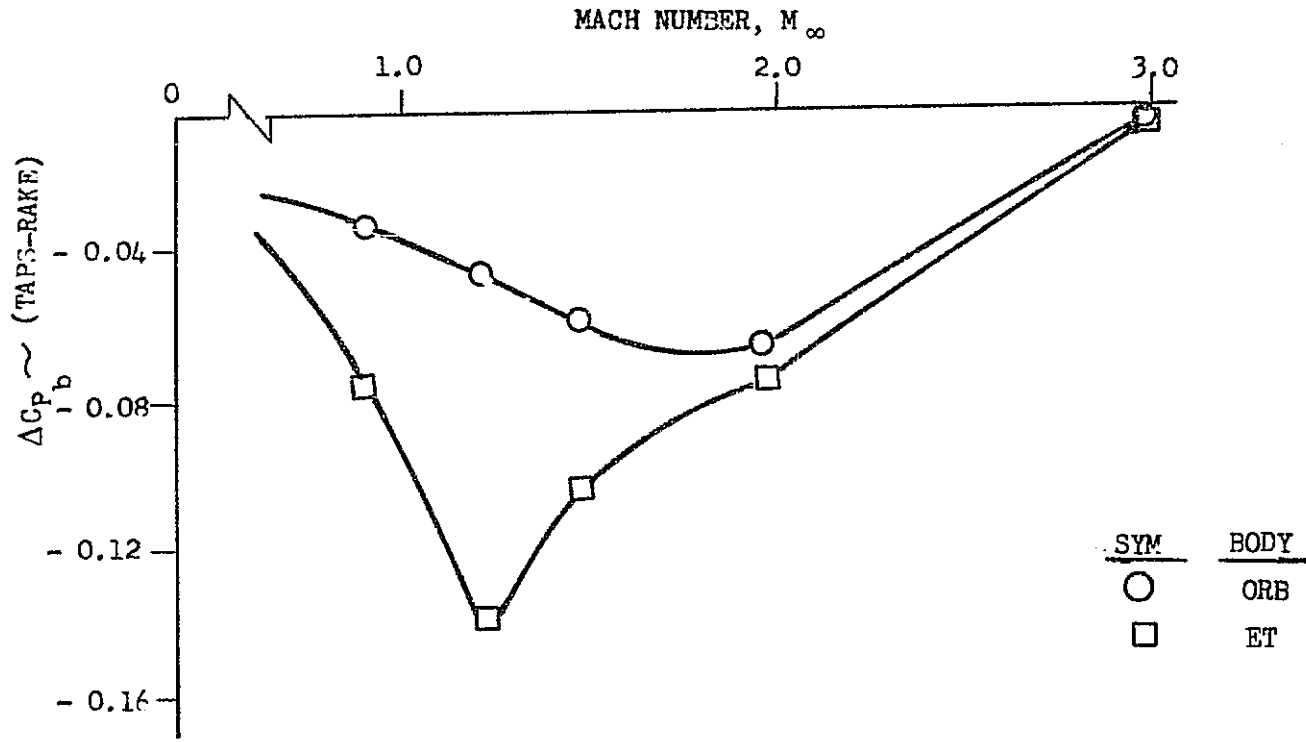
$$P_{b_e} = 6, 7, 8$$

$$P_{b_s} = 9$$

1. Definition of Base Pressure Tube Locations,  
Balance in Tank (Forked Sting)

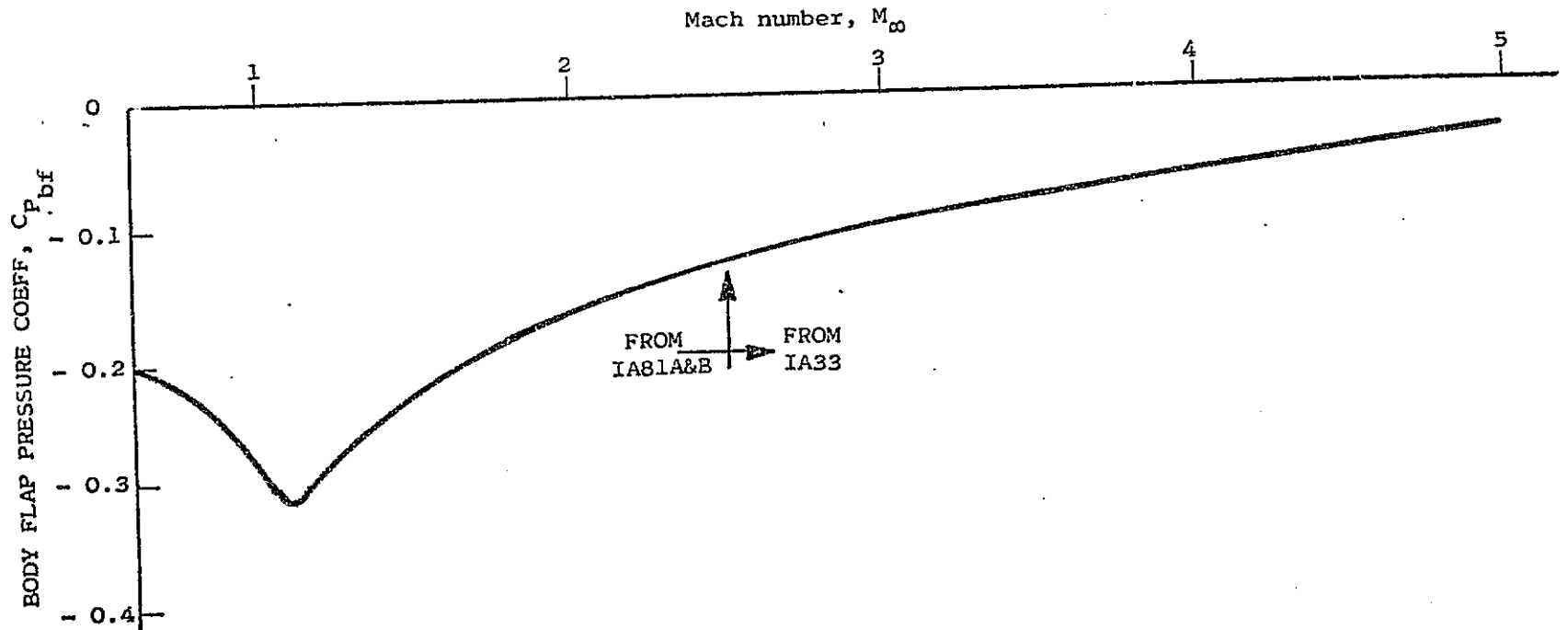
Figure 2. - Continued.

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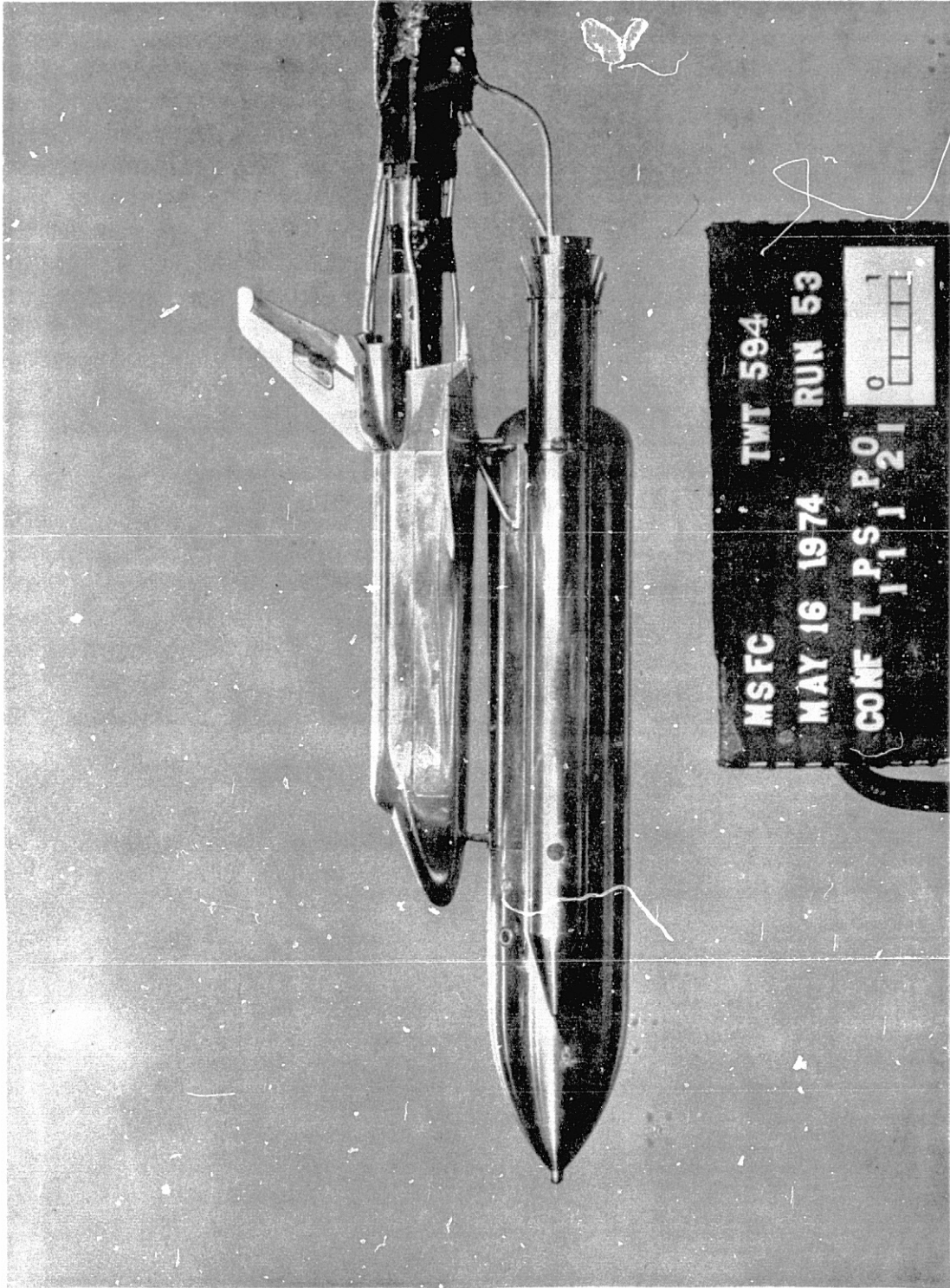


m. Base Pressure Coefficient Increment Due to Difference  
Between Pressure Taps and Rake  
Figure 2. - Continued.

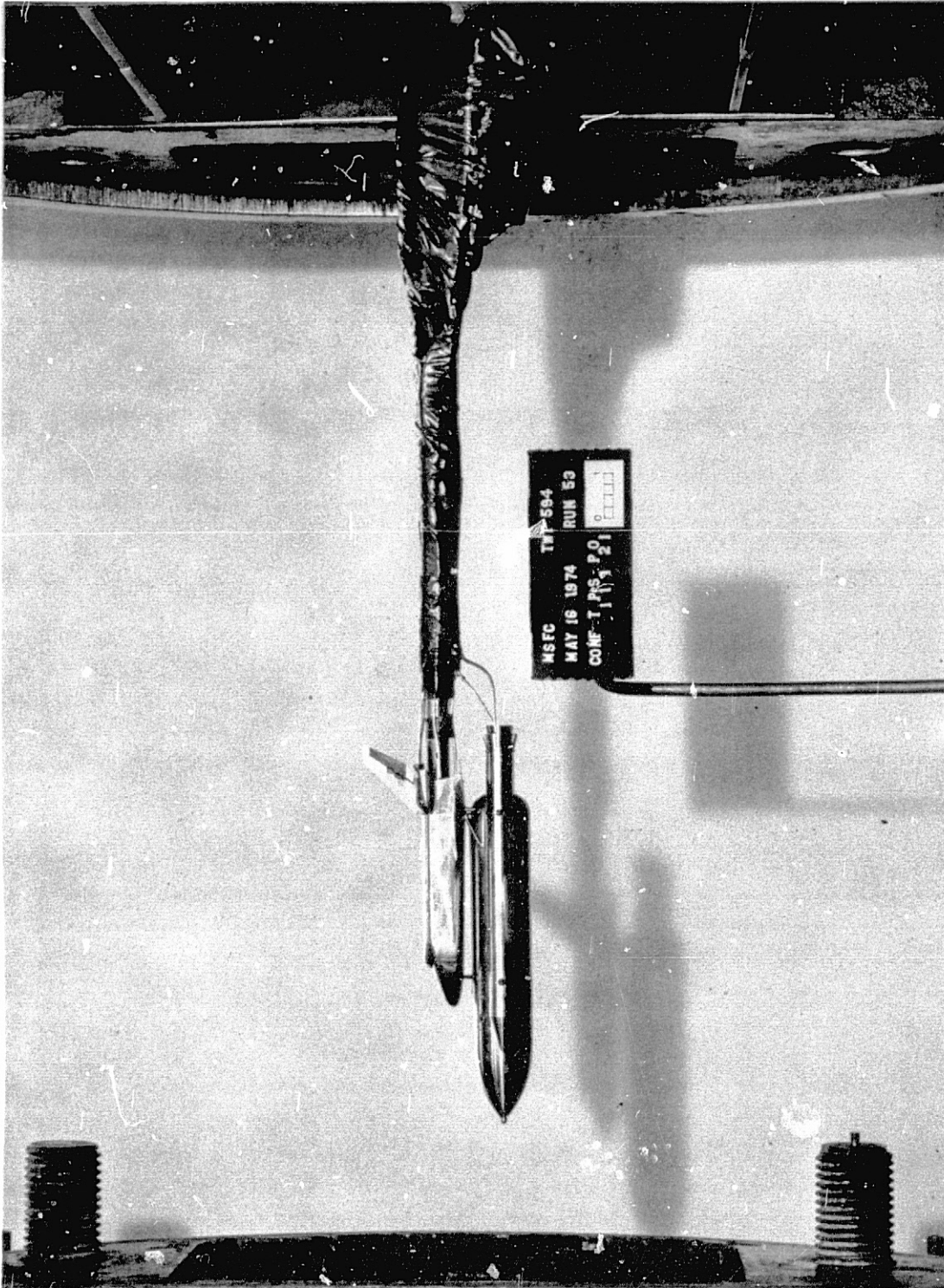
06



n. Orbiter Body Flap Pressure Coefficients  
Figure 2. - Concluded.



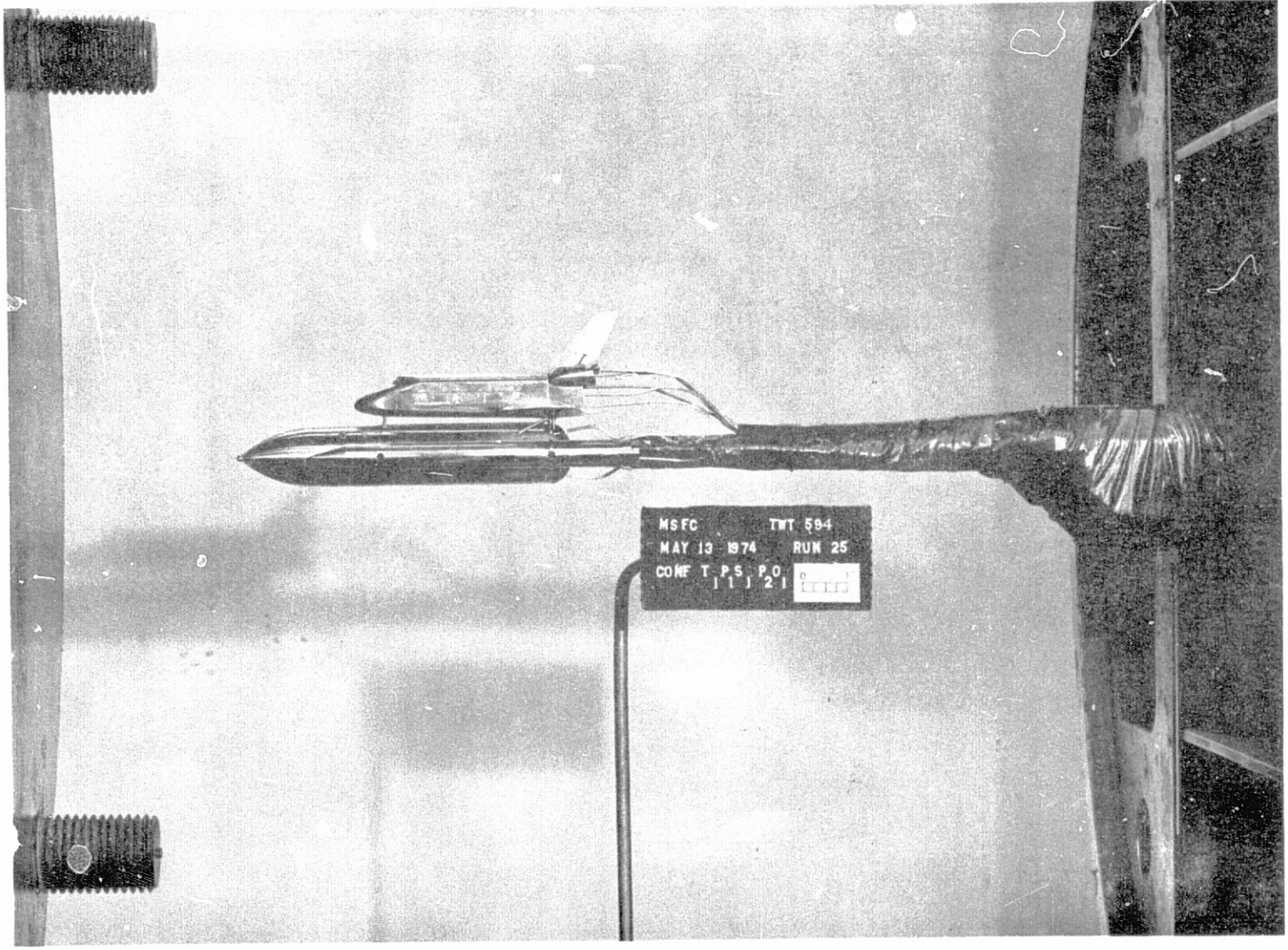
a. Photograph of Configuration T1P1S1P201  
Figure 3. - Model 1 Photographs.



b. Photograph of Tunnel Installation of Launch Vehicle Model (Balance In Orbiter)  
Figure 3. - Continued.

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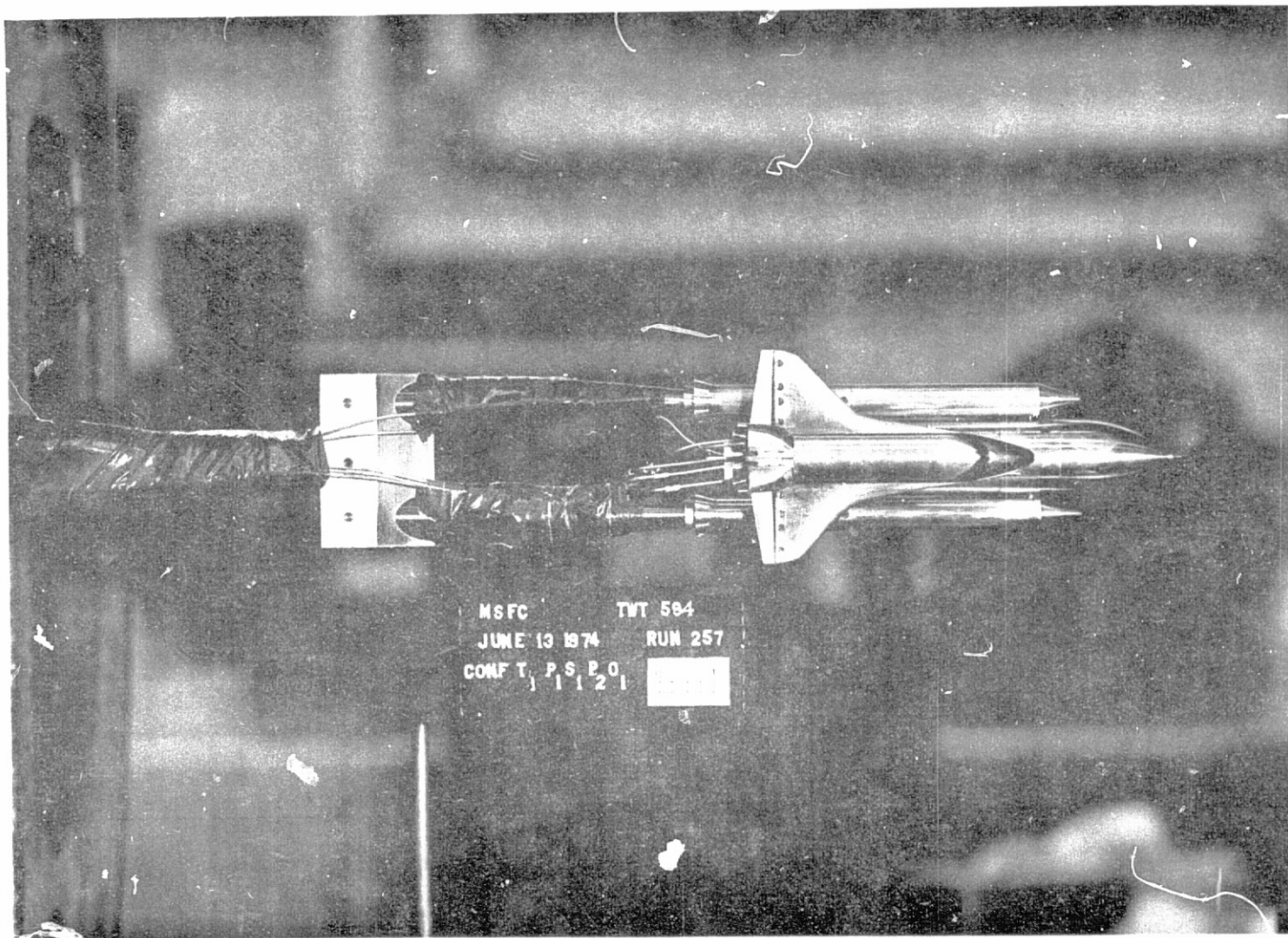
MSFC TWT 594  
MAY 13 1974 RUN 25  
CONF T P S P O  
1 1 2 1

c. Photograph of Tunnel Installation of Launch Vehicle  
Model (Balance In Tank)  
Figure 3. - Continued.

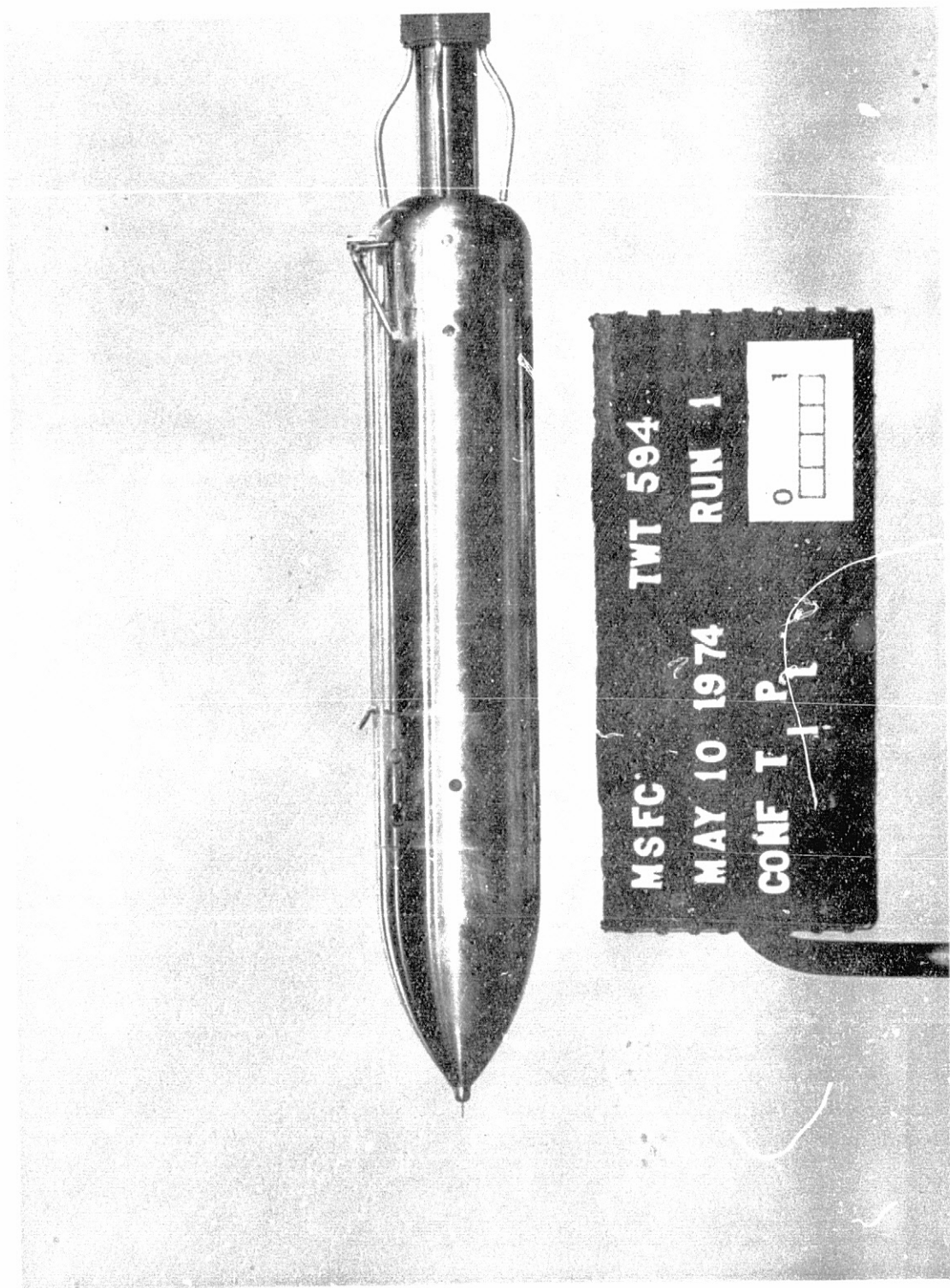


C.2

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d. Photograph of Tunnel Installation of Launch Vehicle Model (Balance In Tank, Forked Sting)  
Figure 3. - Continued.



e. Photograph of Configuration T<sub>1</sub>P<sub>1</sub>  
Figure 3. - Concluded.



APPENDIX  
TABULATED SOURCE DATA  
Volume 3

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DATE 23 OCT 75

1A33 TABULATED DATA

PAGE 1

MSFC 594(1A33) 740TS (TIP1)

ET STING

(AIC001) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000

PARAMETRIC DATA

		1 / 0	RN/L = 4.99		GRADIENT INTERVAL = -5.00/ 5.00						
MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.599	-10.510	.00440	-.00140	.00100	-.14270	.02270	.05912	.00000	.00000	.00000	.02278
.599	-8.560	.00440	-.00290	.00110	-.12830	.02590	.05872	.00000	.00000	.00000	.02248
.599	-6.560	.00560	-.00420	.00100	-.10980	.02820	.05802	.00000	.00000	.00000	.02108
.599	-4.520	.00170	-.00240	.00080	-.09490	.03310	.05932	.00000	.00000	.00000	.01788
.599	-2.460	.00370	-.00470	.00100	-.07250	.03710	.05682	.00000	.00000	.00000	.01758
.599	-.420	.00200	-.00390	.00110	-.05750	.03760	.05762	.00000	.00000	.00000	.01298
.599	1.630	-.00270	-.00170	.00060	-.03840	.03910	.05212	.00000	.00000	.00000	.01498
.599	3.690	-.01060	.00250	.00090	-.02340	.04400	.04882	.00000	.00000	.00000	.01378
.599	5.700	-.01050	.00250	.00070	-.01090	.05040	.04592	.00000	.00000	.00000	.01418
.599	7.730	-.00850	.00060	.00090	.00760	.05440	.04412	.00000	.00000	.00000	.01298
.599	9.680	-.01050	.00000	.00070	.02240	.05830	.04132	.00000	.00000	.00000	.01538
	GRADIENT	-.00151	.00062	-.00001	.00893	.00116	-.00125	.00000	.00000	.00000	-.00633

		2 / 0	PN/L = 6.27		GRADIENT INTERVAL = -5.00/ 5.00						
MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.901	-10.710	.00050	-.00030	.00030	-.16540	.02910	.03433	.00000	.00000	.00000	.07367
.901	-8.710	-.00150	-.00010	.00000	-.14240	.03080	.03253	.00000	.00000	.00000	.07367
.901	-6.670	-.00300	.00080	.00040	-.12030	.03290	.04253	.00000	.00000	.00000	.06047
.901	-4.580	-.00500	.00100	.00000	-.09860	.03330	.03253	.00000	.00000	.00000	.06577
.901	-2.530	-.00560	.00120	.00000	-.07420	.03260	.03313	.00000	.00000	.00000	.06377
.901	-.440	-.00710	.00180	.00000	-.05340	.03500	.03433	.00000	.00000	.00000	.05967
.901	1.650	-.00970	.00260	.00000	-.03150	.03670	.03163	.00000	.00000	.00000	.05957
.901	3.740	-.01000	.00240	.00000	-.01080	.03880	.02873	.00000	.00000	.00000	.06017
.901	5.800	-.00800	.00030	.00000	.01090	.04080	.02563	.00000	.00000	.00000	.06197
.901	7.850	-.01100	-.00060	.00000	.03080	.04270	.02183	.00000	.00000	.00000	.06227
.901	9.850	-.00890	-.00210	.00000	.05280	.04530	.02013	.00000	.00000	.00000	.06307
	GRADIENT	-.00068	.00020	.00000	.01048	.00073	-.00044	.00000	.00000	.00000	-.00074

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REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
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 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000

RUN NO. 3/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.099	-10.850	.00370	-.00180	.00050	-.16980	.01780	.06714	.00000	.00000	.00000	.10766
1.099	-8.820	.00330	-.00110	.00040	-.14300	.02020	.06464	.00000	.00000	.00000	.10796
1.099	-6.760	.00280	-.00110	.00060	-.11730	.02270	.06714	.00000	.00000	.00000	.10366
1.099	-4.650	.00370	-.00250	.00030	-.09390	.02560	.06814	.00000	.00000	.00000	.10006
1.099	-2.560	-.00030	-.00070	.00030	-.07370	.03050	.06614	.00000	.00000	.00000	.09906
1.099	-.440	-.00120	-.00060	.00010	-.05190	.03380	.06534	.00000	.00000	.00000	.09526
1.099	1.670	-.00110	-.00080	.00010	-.02620	.03490	.06684	.00000	.00000	.00000	.09306
1.099	3.770	-.00130	-.00180	.00020	-.00550	.04010	.06364	.00000	.00000	.00000	.09256
1.099	5.870	-.00290	-.00170	.00000	.01740	.04370	.06014	.00000	.00000	.00000	.09456
1.099	7.950	-.00460	-.00140	.00000	.03730	.04950	.05824	.00000	.00000	.00000	.09736
1.099	9.980	-.00740	-.00130	.00010	.06130	.05360	.05754	.00000	.00000	.00000	.09896
1.099	GRADIENT	-.00051	.00006	-.00002	.01065	.00158	-.00039	.00000	.00000	.00000	-.00100

RUN NO. 4/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.247	-10.910	.00070	-.00040	.00060	-.16950	.01320	.07721	.00000	.00000	.00000	.10349
1.247	-8.860	-.00080	.00010	.00050	-.13920	.01500	.07611	.00000	.00000	.00000	.10049
1.247	-6.780	-.00180	.00020	.00030	-.11190	.01660	.07461	.00000	.00000	.00000	.09859
1.247	-4.650	.00390	.00100	.00020	-.06950	.02140	.07261	.00000	.00000	.00000	.09819
1.247	-2.560	-.00490	.00140	.00000	-.06610	.02590	.07411	.00000	.00000	.00000	.09459
1.247	-.420	-.00500	.00140	.00010	-.04180	.03000	.07401	.00000	.00000	.00000	.09219
1.247	1.700	-.00600	.00140	.00000	-.01650	.03170	.07461	.00000	.00000	.00000	.09149
1.247	3.820	-.00670	.00070	.00000	.00690	.03510	.07341	.00000	.00000	.00000	.09139
1.247	5.920	-.00790	.00080	.00000	.03040	.03950	.07201	.00000	.00000	.00000	.09379
1.247	8.010	-.00910	.00090	.00000	.05300	.04500	.06941	.00000	.00000	.00000	.09679
1.247	10.050	-.01190	.00150	.00020	.07570	.05100	.06821	.00000	.00000	.00000	.09719
1.247	GRADIENT	-.00032	-.00003	-.00002	.01134	.00157	.00010	.00000	.00000	.00000	-.00083

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIP1)

ET STING

(AIC001) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
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 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000

		RUN NO.	18/ 0	RN/L =	7.07	GRADIENT INTERVAL =		-5.00/	5.00			
MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE	
1.957	-11.070	.00060	-.00040	.00020	-.19700	.01820	.10353	.00000	.00000	.00000	.05427	
1.957	-8.970	-.00190	.00140	.00010	-.15100	.01260	.10143	.00000	.00000	.00000	.04947	
1.957	-6.860	-.00150	.00100	.00000	-.11220	.00940	.10443	.00000	.00000	.00000	.04337	
1.957	-4.690	-.00340	.00200	.00000	-.08060	.01060	.10143	.00000	.00000	.00000	.04077	
1.957	-2.560	-.00360	.00180	-.00010	-.05240	.01290	.09873	.00000	.00000	.00000	.03917	
1.957	-.430	-.00480	.00230	-.00020	-.02670	.01690	.09693	.00000	.00000	.00000	.03967	
1.957	1.720	-.00580	.00270	-.00020	.00160	.01920	.09773	.00000	.00000	.00000	.03997	
1.957	3.850	-.00660	.00250	-.00020	.02630	.02380	.09803	.00000	.00000	.00000	.04177	
1.957	6.000	-.00700	.00200	-.00020	.05600	.02680	.09533	.00000	.00000	.00000	.04497	
1.957	8.140	-.00790	.00220	-.00010	.08930	.02970	.09683	.00000	.00000	.00000	.04667	
1.957	10.220	-.01040	.00270	-.00010	.12600	.02950	.09793	.00000	.00000	.00000	.04847	
	GRADIENT	-.00040	.00009	-.00002	.01254	.00153	-.00036	.00000	.00000	.00000	.00013	

		RUN NO.	237/ 0	RN/L =	4.56	GRADIENT INTERVAL =		-5.00/	5.00			
MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE	
2.990	-10.650	.00000	.00020	-.00050	-.19330	.02770	.10798	.00000	.00000	.00000	.02432	
2.990	-8.690	-.00060	.00010	.00040	-.15230	.01840	.10658	.00000	.00000	.00000	.01862	
2.990	-6.640	.00020	-.00090	.00000	-.11430	.01290	.10448	.00000	.00000	.00000	.01442	
2.990	-4.570	-.00050	-.00050	-.00010	-.08130	.01100	.10288	.00000	.00000	.00000	.01262	
2.990	-2.500	.00030	-.00060	.00000	-.05010	.01050	.10238	.00000	.00000	.00000	.01382	
2.990	-.420	-.00070	-.00100	.00010	-.02570	.01270	.10288	.00000	.00000	.00000	.01352	
2.990	1.640	-.00090	-.00090	.00020	.00550	.01320	.10338	.00000	.00000	.00000	.01672	
2.990	3.710	-.00180	-.00070	.00000	.03510	.01340	.10138	.00000	.00000	.00000	.01802	
2.990	5.750	-.00270	-.00080	.00000	.06300	.01320	.09988	.00000	.00000	.00000	.01812	
2.990	7.820	-.00370	-.00080	-.00010	.09770	.01090	.09788	.00000	.00000	.00000	.01842	
2.990	9.810	-.00540	.00010	-.00010	.13440	.00830	.09828	.00000	.00000	.00000	.02102	
	GRADIENT	-.00018	-.00003	.00002	.01393	.00036	-.00010	.00000	.00000	.00000	.00066	

MSFC 594(IA33) 740TS (T1P1)

ET STING

(A1C001) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

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 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000

RUN NO. 23/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.480	-.00380	.00296	.00030	-.16660	.01980	.10860	.00000	.00000	.00000	.00000
4.959	-8.520	-.00300	.00250	.00030	-.12850	.01380	.10450	.00000	.00000	.00000	.00080
4.959	-6.530	-.00370	.00240	.00020	-.09920	.01070	.10240	.00000	.00000	.00000	.00220
4.959	-4.480	-.00450	.00210	.00030	-.07270	.00890	.09660	.00000	.00000	.00000	.00260
4.959	-2.440	-.00380	.00180	.00010	-.04640	.00880	.09350	.00000	.00000	.00000	.00350
4.959	-.410	-.00050	-.00110	-.00060	-.02330	.01060	.09110	.00000	.00000	.00000	.00310
4.959	1.640	-.00570	.00080	.00000	.00940	.00720	.08980	.00000	.00000	.00000	.00360
4.959	3.690	-.00210	-.00010	.00010	.03550	.00830	.08860	.00000	.00000	.00000	.00440
4.959	5.700	-.00290	-.00090	-.00020	.06190	.00540	.08680	.00000	.00000	.00000	.00450
4.959	7.720	-.00360	-.00070	-.00080	.08830	.00470	.08620	.00000	.00000	.00000	.00460
4.959	9.680	-.00290	-.00050	-.00020	.12350	.00150	.08770	.00000	.00000	.00000	.00430
	GRADIENT	.00014	-.00026	-.00002	.01333	-.00014	-.00096	.00000	.00000	.00000	.00018

MSFC 594(IA33) 740TS (T1P1)

ET STING

(A1C002) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000

RUN NO. 16/ 0 RN/L = 4.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.596	-10.630	.11140	.00910	.00120	-.05660	.03730	.02872	.00000	.00000	.00000	.03888
.596	-8.660	.09040	.00640	.00080	-.05440	.03740	.03192	.00000	.00000	.00000	.03488
.596	-6.650	.06910	.00420	.00070	-.05440	.03680	.03122	.00000	.00000	.00000	.03468
.596	-4.580	.04970	.00100	.00060	-.05250	.03590	.03152	.00000	.00000	.00000	.03528
.596	-2.530	.02610	.00000	.00060	-.05420	.03640	.03112	.00000	.00000	.00000	.03388
.596	-.490	.00710	-.00080	.00050	-.05240	.03580	.03592	.00000	.00000	.00000	.02748
.596	1.580	-.01570	-.00380	.00020	-.05640	.03810	.04102	.00000	.00000	.00000	.02298
.596	3.650	-.03410	-.00790	.00010	-.05660	.03810	.03752	.00000	.00000	.00000	.02668
.596	5.670	-.05270	-.01070	.00000	-.05490	.03760	.04022	.00000	.00000	.00000	.02438
.596	7.700	-.07330	-.01260	.00000	-.05720	.03920	.03792	.00000	.00000	.00000	.02758
.596	9.670	-.09070	-.01670	-.00040	-.05540	.03720	.03422	.00000	.00000	.00000	.03058
	GRADIENT	-.01018	-.00036	-.00007	-.00051	.00030	.00126	.00000	.00000	.00000	-.00136

MSFC 594 (IA33) 740TS (TIP1)

ET STING

(AIC002) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000

RUN NO. 15/ 0    RN/L = 6.27    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.901	-10.860	.12870	.00600	.00110	-.05510	.03840	.01853	.00000	.00000	.00000	.06777
.901	-9.840	.10190	.00450	.00110	-.05500	.03490	.02313	.00000	.00000	.00000	.06347
.901	-6.780	.07710	.00210	.00080	-.05370	.03410	.02553	.00000	.00000	.00000	.06007
.901	-4.670	.05630	-.00130	.00070	-.05160	.03400	.02583	.00000	.00000	.00000	.05797
.901	-2.580	.03370	-.00310	.00070	-.04800	.03250	.02383	.00000	.00000	.00000	.05727
.901	-.490	.00320	.00120	.00030	-.05140	.03380	.02653	.00000	.00000	.00000	.04397
.901	1.610	-.02220	.00150	.00010	-.05370	.03560	.03443	.00000	.00000	.00000	.04717
.901	3.720	-.04440	-.00110	.00000	-.05340	.03510	.03913	.00000	.00000	.00000	.04677
.901	5.790	-.06630	-.00300	-.00020	-.05250	.03550	.03873	.00000	.00000	.00000	.04887
.901	7.860	-.08930	-.00550	-.00040	-.05390	.03540	.03403	.00000	.00000	.00000	.05347
.901	9.880	-.11440	-.00630	-.00080	-.05530	.03570	.03023	.00000	.00000	.00000	.05587
GRADIENT		-.01227	.00024	-.00010	-.00044	.00025	.00177	.00000	.00000	.00000	-.00155

RUN NO. 13/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.103	-11.060	.14430	.01340	.00120	-.06040	.03910	.06034	.00000	.00000	.00000	.09246
1.103	-9.020	.11180	.01130	.00090	-.05190	.03560	.06484	.00000	.00000	.00000	.08956
1.103	-6.900	.08400	.00790	.00090	-.04080	.02950	.06704	.00000	.00000	.00000	.08916
1.103	-4.750	.05630	.00590	.00060	-.03910	.02850	.06714	.00000	.00000	.00000	.08766
1.103	-2.650	.03070	.00360	.00040	-.03830	.02770	.06774	.00000	.00000	.00000	.08596
1.103	-.500	.00540	.00070	.00040	-.04110	.03020	.06664	.00000	.00000	.00000	.08566
1.103	1.630	-.01850	-.00220	.00000	-.04090	.03000	.06704	.00000	.00000	.00000	.08836
1.103	3.770	-.04230	-.00580	-.00030	-.04270	.03110	.06534	.00000	.00000	.00000	.08976
1.103	5.880	-.06860	-.00890	-.00040	-.04230	.03090	.06194	.00000	.00000	.00000	.09196
1.103	7.980	-.09210	-.01400	-.00070	-.04420	.03120	.05774	.00000	.00000	.00000	.09426
1.103	10.040	-.11840	-.01710	-.00090	-.04210	.02840	.05844	.00000	.00000	.00000	.09866
GRADIENT		-.01156	-.00137	-.00010	-.00045	.00035	-.00020	.00000	.00000	.00000	.00031

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OF POOR QUALITY

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000

PARAMETRIC DATA

RUN NO. 14/ 0		RN/L = 6.68		GRADIENT INTERVAL = -5.00/ 5.00							
MACH	BETA	CY	CYN	CSL	CN	CLMF	CAF	CABO	CNSO	CABS	CABE
1.246	-11.130	.14500	.01680	.00140	-.05570	.03360	.07121	.00000	.00000	.00000	.09039
1.246	-9.050	.10980	.01600	.00100	-.04750	.03130	.07221	.00000	.00000	.00000	.08929
1.246	-6.930	.08150	.01160	.00060	-.04270	.02940	.07251	.00000	.00000	.00000	.08859
1.246	-4.790	.05400	.00790	.00060	-.03990	.02830	.07251	.00000	.00000	.00000	.08739
1.246	-2.630	.02910	.00360	.00040	-.03550	.02550	.06851	.00000	.00000	.00000	.08079
1.246	-.500	.00360	.00100	.00020	-.03970	.02910	.07301	.00000	.00000	.00000	.08359
1.246	1.650	-.02180	-.00250	.00000	-.03820	.02880	.07301	.00000	.00000	.00000	.08759
1.246	3.800	-.04680	-.00630	-.00030	-.03670	.02740	.07441	.00000	.00000	.00000	.08999
1.246	5.920	-.07100	-.01170	-.00050	-.03910	.02690	.07391	.00000	.00000	.00000	.09439
1.246	8.050	-.09820	-.01590	-.00080	-.03840	.02620	.07241	.00000	.00000	.00000	.09489
1.246	10.130	-.12920	-.01850	-.00130	-.04090	.02670	.06501	.00000	.00000	.00000	.09439
	GRADIENT	-.01177	-.00161	-.00010	.00017	.00007	.00039	.00000	.00000	.00000	.00009

RUN NO. 17/ 0		RN/L = 7.06		GRADIENT INTERVAL = -5.00/ 5.00							
MACH	BETA	CY	CYN	CSL	CN	CLMF	CAF	CABO	CNSO	CABS	CABE
1.961	-11.280	.18250	-.00030	.00090	-.04210	.02480	.09173	.00000	.00000	.00000	.05227
1.961	-9.150	.13330	.00570	.00080	-.03510	.02170	.09143	.00000	.00000	.00000	.04807
1.961	-7.000	.09290	.00780	.00030	-.03040	.01970	.09233	.00000	.00000	.00000	.04507
1.961	-4.820	.06050	.00570	.00010	-.02870	.01880	.09663	.00000	.00000	.00000	.04337
1.961	-2.680	.03100	.00480	.00010	-.02660	.01890	.09543	.00000	.00000	.00000	.04567
1.961	-.500	.00420	.00110	-.00010	-.02470	.01760	.10133	.00000	.00000	.00000	.04267
1.961	1.670	-.02430	-.00250	-.00030	-.02610	.01810	.10283	.00000	.00000	.00000	.04117
1.961	3.860	-.05160	-.00670	-.00050	-.02770	.01890	.10423	.00000	.00000	.00000	.04177
1.961	6.010	-.08310	-.00900	-.00080	-.02560	.01790	.10153	.00000	.00000	.00000	.04327
1.961	8.200	-.12150	-.00930	-.00120	-.02780	.01820	.10593	.00000	.00000	.00000	.03887
1.961	10.290	-.16650	-.00290	-.00150	-.02730	.01700	.09613	.00000	.00000	.00000	.04707
	GRADIENT	-.01287	-.00157	-.00007	.00011	-.00012	.00100	.00000	.00000	.00000	-.00036

MSFC 594(IA33) 740TS (TIP1)

ET STING

(AIC002) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000

RUN NO. 240/ 0    RN/L = 4.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
2.990	-10.790	.17270	-.00750	.00070	-.02680	.01540	.09978	.00000	.00000	.00000	.02462
2.990	-8.780	.13220	-.00120	.00070	-.02300	.01470	.10068	.00000	.00000	.00000	.02512
2.990	-6.740	.09390	.00270	.00050	-.02110	.01370	.10269	.00000	.00000	.00000	.02362
2.990	-4.660	.06090	.00390	.00000	-.01970	.01230	.10238	.00000	.00000	.00000	.02192
2.990	-2.590	.03200	.00290	.00020	-.01690	.01170	.10288	.00000	.00000	.00000	.02092
2.990	-.490	.00310	.00200	.00000	-.01580	.01190	.10368	.00000	.00000	.00000	.02042
2.990	1.580	-.02390	-.00020	.00000	-.01820	.01180	.10208	.00000	.00000	.00000	.02102
2.990	3.650	-.05110	-.00220	.00000	-.01720	.01170	.10328	.00000	.00000	.00000	.02182
2.990	5.730	-.08330	-.00110	-.00030	-.01590	.01100	.10248	.00000	.00000	.00000	.02272
2.990	7.770	-.11950	.00220	-.00060	-.01590	.00950	.10088	.00000	.00000	.00000	.02422
2.990	9.770	-.15930	.00800	-.00040	-.01560	.00950	.10028	.00000	.00000	.00000	.02412
	GRADIENT	-.01346	-.00074	-.00001	.00018	-.00005	.00005	.00000	.00000	.00000	-.00001

RUN NO. 24/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.580	.14590	-.00440	.00000	-.01110	.00580	.09410	.00000	.00000	.00000	.00480
4.959	-8.620	.11510	-.00120	.00000	-.01990	.00950	.09310	.00000	.00000	.00000	.00510
4.959	-6.620	.08420	.00080	-.00010	-.01990	.00910	.09330	.00000	.00000	.00000	.00510
4.959	-4.590	.05780	.00190	-.00020	-.02030	.00880	.09100	.00000	.00000	.00000	.00510
4.959	-2.550	.03270	.00140	-.00010	-.01780	.00860	.09090	.00000	.00000	.00000	.00530
4.959	-.490	.00590	.00100	.00040	-.01800	.00890	.08990	.00000	.00000	.00000	.00460
4.959	1.570	-.01940	-.00090	.00000	-.01840	.00930	.09200	.00000	.00000	.00000	.00310
4.959	3.630	-.04600	-.00190	-.00010	-.01290	.00610	.09270	.00000	.00000	.00000	.00360
4.959	5.640	-.07090	-.00030	.00010	-.01630	.00820	.09380	.00000	.00000	.00000	.00470
4.959	7.660	-.10030	.00110	.00010	-.01340	.00670	.09420	.00000	.00000	.00000	.00550
4.959	9.620	-.13140	.00360	-.00030	-.01640	.01080	.09220	.00000	.00000	.00000	.00610
	GRADIENT	-.01263	-.00048	.00001	.00069	-.00023	.00026	.00000	.00000	.00000	-.00025



MSFC 594 (IA33) 740TS (TIPISIP2)

ET STING

(A1C003) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000

PARAMETRIC DATA

RUN NO. 9/ 0 RN/L = 4.96 GRADIENT INTERVAL = -5.00/ 5.00											
MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.594	-10.600	.11650	-.00790	-.00020	-.06530	.03780	.05902	.00000	.00000	.03990	.06708
.594	-8.630	.09610	-.00940	-.00010	-.06530	.03880	.05692	.00000	.00000	.03960	.06668
.594	-6.620	.07090	-.00660	.00030	-.06720	.04090	.05052	.00000	.00000	.04110	.06888
.594	-4.560	.04960	-.00560	.00080	-.06910	.04260	.05202	.00000	.00000	.03980	.06698
.594	-2.540	.02740	-.00370	.00090	-.06910	.04460	.05122	.00000	.00000	.03950	.06658
.594	-.480	.00540	-.00120	.00110	-.07320	.04640	.05282	.00000	.00000	.03870	.06538
.594	1.570	-.01960	.00230	.00110	-.07490	.04760	.06832	.00000	.00000	.03290	.05668
.594	3.630	-.03970	.00300	.00090	-.07110	.04540	.07502	.00000	.00000	.03060	.05328
.594	5.650	-.06010	.00410	.00190	-.08380	.05310	.06102	.00000	.00000	.03870	.06538
.594	7.670	-.08220	.00560	.00170	-.08180	.05080	.05212	.00000	.00000	.04310	.07188
.594	9.630	-.10390	.00700	.00210	-.07950	.04680	.05612	.00000	.00000	.04170	.06988
	GRADIENT	-.01101	.00113	.00002	-.00048	.00042	.00308	.00000	.00000	-.00122	-.00182

RUN NO. 10/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00											
MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.899	-10.820	.14310	-.01370	-.00290	-.08080	.04510	.05863	.00000	.00000	.05240	.09577
.899	-8.810	.11520	-.01300	-.00230	-.07800	.04420	.05773	.00000	.00000	.05140	.09427
.899	-6.760	.09030	-.01190	-.00200	-.07540	.04320	.05593	.00000	.00000	.05190	.09497
.899	-4.680	.06330	-.00890	-.00120	-.07300	.04080	.05093	.00000	.00000	.05210	.09517
.899	-2.600	.03670	-.00580	-.00080	-.06950	.03890	.04873	.00000	.00000	.05240	.09567
.899	-.500	.00920	-.00190	-.00030	-.07060	.03870	.05403	.00000	.00000	.04960	.09147
.899	1.590	-.01720	.00150	.00050	-.06910	.03910	.05533	.00000	.00000	.04920	.09087
.899	3.690	-.04250	.00370	.00080	-.07430	.04110	.05473	.00000	.00000	.05040	.09267
.899	5.730	-.06790	.00590	.00130	-.07970	.04190	.05303	.00000	.00000	.05210	.09517
.899	7.820	-.09570	.00940	.00200	-.07720	.04140	.05213	.00000	.00000	.05420	.09837
.899	9.820	-.12170	.01060	.00220	-.07740	.04140	.06393	.00000	.00000	.04970	.09167
	GRADIENT	-.01269	.00155	.00025	-.00011	.00004	.00068	.00000	.00000	-.00032	-.00047

MSFC 594(IA33) 740TS (TIPISIP2)

ET STING

(A1C003) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000

RUN NO. 11/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.100	-10.990	.16450	-.01520	-.00220	-.06900	.04040	.13214	.00000	.00000	.05570	.10946
1.100	-8.930	.13260	-.01590	-.00180	-.06790	.03960	.13064	.00000	.00000	.05470	.10796
1.100	-6.850	.10180	-.01430	-.00100	-.06680	.03970	.13144	.00000	.00000	.05330	.10596
1.100	-4.710	.07420	-.01380	-.00060	-.06420	.03910	.12584	.00000	.00000	.05410	.10706
1.100	-2.620	.04540	-.01130	-.00020	-.06120	.03680	.11884	.00000	.00000	.05560	.10936
1.100	-.500	.01260	-.00440	.00050	-.06130	.03680	.11834	.00000	.00000	.05390	.10686
1.100	1.610	-.01810	.00100	.00060	-.05560	.04200	.12064	.00000	.00000	.05250	.10476
1.100	3.730	-.04920	.00600	.00110	-.06100	.03790	.11634	.00000	.00000	.05560	.10936
1.100	5.820	-.07690	.00760	.00160	-.06130	.03600	.11614	.00000	.00000	.05700	.11156
1.100	7.920	-.10480	.00730	.00190	-.05930	.03440	.12224	.00000	.00000	.05570	.10946
1.100	9.960	-.13380	.00650	.00260	-.06270	.03450	.12084	.00000	.00000	.05740	.11206
1.100	GRADIENT	-.01470	.00246	.00020	.00009	.00013	-.00062	.00000	.00000	-.00000	-.00000

RUN NO. 12/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.247	-11.070	.17170	-.01410	-.00150	-.06460	.03860	.14871	.00000	.00000	.04870	.10239
1.247	-8.990	.13650	-.01420	-.00110	-.06290	.03770	.14761	.00000	.00000	.04810	.10149
1.247	-6.880	.10210	-.01210	-.00070	-.05960	.03720	.14561	.00000	.00000	.04790	.10119
1.247	-4.730	.06990	-.01020	-.00030	-.06030	.03790	.14321	.00000	.00000	.04830	.10179
1.247	-2.610	.04080	-.00880	-.00020	-.05950	.03760	.13701	.00000	.00000	.04970	.10389
1.247	-.490	.00930	-.00440	.00030	-.06220	.03970	.15731	.00000	.00000	.04000	.08949
1.247	1.630	-.02460	.00190	.00020	-.06000	.03890	.13401	.00000	.00000	.05100	.10579
1.247	3.770	-.05590	.00600	.00050	-.06010	.03680	.13801	.00000	.00000	.05170	.10679
1.247	5.870	-.08620	.00800	.00110	-.05710	.03430	.14321	.00000	.00000	.05120	.10609
1.247	7.990	-.11860	.00920	.00120	-.05790	.03370	.14611	.00000	.00000	.05120	.10619
1.247	10.050	-.15050	.00970	.00160	-.05850	.03360	.15051	.00000	.00000	.05040	.10499
1.247	GRADIENT	-.01492	.00203	.00009	-.00009	-.00004	-.00063	.00000	.00000	.00038	.00056

MSFC 594(1A33) 740TS (TIP1S1P2)

ET STING

(A1C003) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000

RUN NO. 20/ 0 RN/L = 7.08 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABD	CNBO	CABS	CABE
1.954	-11.250	.20420	-.02150	-.00090	-.03670	.02190	.15543	.00000	.00000	.02780	.05907
1.954	-9.130	.16030	-.01820	-.00050	-.03620	.02350	.15983	.00000	.00000	.02580	.05617
1.954	-6.990	.11930	-.01480	-.00030	-.03480	.02310	.15863	.00000	.00000	.02480	.05467
1.954	-4.800	.07980	-.01100	-.00010	-.03280	.02280	.15773	.00000	.00000	.02380	.05317
1.954	-2.650	.04230	-.00480	.00000	-.03510	.02460	.16063	.00000	.00000	.02410	.05357
1.954	-.500	.00490	.00000	.00000	-.03410	.02320	.16093	.00000	.00000	.02400	.05347
1.954	1.670	-.03100	.00330	.00040	-.03140	.02110	.16353	.00000	.00000	.02310	.05217
1.954	3.850	-.06900	.00780	.00050	-.03130	.02170	.16783	.00000	.00000	.02290	.05177
1.954	5.990	-.10670	.01150	.00040	-.03130	.02160	.16883	.00000	.00000	.02250	.05127
1.954	8.160	-.14870	.01570	.00060	-.03070	.02080	.17413	.00000	.00000	.02270	.05157
1.954	10.260	-.19230	.02030	.00050	-.03170	.02060	.18863	.00000	.00000	.01790	.04447
	GRADIENT	-.01715	.00211	.00007	.00031	-.00026	.00107	.00000	.00000	-.00013	-.00019

RUN NO. 239/ 0 RN/L = 4.56 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABD	CNBO	CABS	CABE
2.990	-10.770	.19180	-.02500	.00000	-.02310	.01500	.15198	.00000	.00000	.01820	.02382
2.990	-8.770	.14790	-.01600	.00010	-.02940	.01730	.15058	.00000	.00000	.01820	.02302
2.990	-6.740	.10910	-.01020	.00050	-.02570	.01590	.14958	.00000	.00000	.01820	.02192
2.990	-4.660	.07360	-.00640	.00050	-.02410	.01630	.15058	.00000	.00000	.01770	.02152
2.990	-2.580	.03730	-.00220	.00020	-.02410	.01610	.15208	.00000	.00000	.01700	.02142
2.990	-.490	.00450	.00020	.00050	-.02260	.01470	.15058	.00000	.00000	.01630	.02092
2.990	1.580	-.03000	.00360	.00070	-.02110	.01360	.15018	.00000	.00000	.01600	.02062
2.990	3.650	-.06380	.00640	.00100	-.02120	.01450	.15318	.00000	.00000	.01530	.02062
2.990	5.730	-.10100	.01070	.00070	-.02290	.01460	.15428	.00000	.00000	.01530	.02232
2.990	7.770	-.14080	.01700	.00150	-.02430	.01620	.15498	.00000	.00000	.01490	.02302
2.990	9.760	-.17990	.02560	.00130	-.02590	.01460	.15588	.00000	.00000	.01460	.02332
	GRADIENT	-.01646	.00151	.00007	.00042	-.00029	.00016	.00000	.00000	-.00028	-.00013

MSFC 594(1A33) 740TS (TIP1S1P2)

ET STING

(A1C003) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000

PARAMETRIC DATA

RUN NO. 21/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.580	.16050	-.01610	-.00060	-.01230	.00820	.14450	.00000	.00000	.00420	.00630
4.959	-8.620	.12720	-.01040	-.00030	-.00920	.00700	.14260	.00000	.00000	.00430	.00650
4.959	-6.620	.09370	-.00660	-.00100	-.01780	.00950	.14010	.00000	.00000	.00440	.00650
4.959	-4.570	.06310	-.00130	-.00070	-.01780	.01180	.13950	.00000	.00000	.00440	.00650
4.959	-2.540	.03200	.00080	-.00020	-.02060	.01360	.13830	.00000	.00000	.00420	.00620
4.959	-.480	.00390	.00120	.00020	-.01780	.01270	.13770	.00000	.00000	.00410	.00620
4.959	1.570	-.03100	.00520	-.00120	-.01760	.01050	.13820	.00000	.00000	.00400	.00600
4.959	3.630	-.05920	.00560	-.00010	-.02340	.01250	.13820	.00000	.00000	.00410	.00610
4.959	5.660	-.08690	.00830	.00020	-.01490	.00970	.13960	.00000	.00000	.00390	.00580
4.959	7.670	-.12210	.01330	.00010	-.01740	.01680	.14140	.00000	.00000	.00430	.00650
4.959	9.630	-.15690	.01960	.00040	-.01710	.00960	.14310	.00000	.00000	.00440	.00660
	GRADIENT	-.01500	.00089	.00001	-.00040	-.00008	-.00013	.00000	.00000	-.00004	-.00005

MSFC 594(1A33) 740TS (TIP1S1P2)

ET STING

(A1C004) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000

PARAMETRIC DATA

RUN NO. 8/ 0    RN/L = 4.99    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.599	-10.900	.00570	-.00120	.00180	-.42370	.08420	.08332	.00000	.00000	.03350	.05758
.599	-8.870	.00710	-.00240	.00180	-.36010	.08000	.08992	.00000	.00000	.03090	.05368
.599	-6.820	.00650	-.00340	.00190	-.31560	.08100	.09242	.00000	.00000	.02860	.05028
.599	-4.690	.00480	-.00320	.00170	-.24190	.07320	.10122	.00000	.00000	.02430	.04388
.599	-2.560	.00090	-.00240	.00160	-.16670	.06540	.10222	.00000	.00000	.02310	.04218
.599	-.450	-.00160	-.00120	.00120	-.09450	.05810	.09552	.00000	.00000	.02430	.04388
.599	1.680	-.00800	.00220	.00120	-.01720	.04630	.10902	.00000	.00000	.01710	.03318
.599	3.810	-.00970	.00270	.00130	.06170	.03670	.10862	.00000	.00000	.01680	.03278
.599	5.930	-.01360	.00370	.00120	.13880	.02060	.10422	.00000	.00000	.01810	.03478
.599	8.010	-.01600	.00480	.00100	.19560	.02390	.10112	.00000	.00000	.01990	.03738
.599	10.030	-.01960	.00540	.00080	.25660	.01920	.09672	.00000	.00000	.02090	.03888
	GRADIENT	-.00178	.00077	-.00006	.03563	-.00434	.00102	.00000	.00000	-.00099	-.00147

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MSFC 594(IA33) 740TS (TIPISIP2)

ET STING

(AIC004) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

DELTA = .000

PARAMETRIC DATA

RUN NO. 7/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.898	-11.440	.00360	-.00150	.00250	-.49620	.11090	.06613	.00000	.00000	.04880	.09027
.898	-9.300	.00190	-.00130	.00210	-.40640	.09750	.07463	.00000	.00000	.04560	.08567
.898	-7.190	.00110	-.00020	.00150	-.34450	.08570	.06843	.00000	.00000	.04720	.08797
.898	-4.930	.00230	-.00220	.00100	-.25420	.07240	.07733	.00000	.00000	.04260	.08107
.898	-2.740	.00050	-.00200	.00090	-.17250	.05560	.08523	.00000	.00000	.03780	.07407
.898	-.500	-.00460	.00000	.00060	-.08010	.03950	.08883	.00000	.00000	.03480	.06957
.898	1.760	-.00660	.00090	.00050	.01090	.02980	.08733	.00000	.00000	.03500	.06987
.898	4.010	-.00890	.00190	.00000	.09650	.01890	.08333	.00000	.00000	.03850	.07507
.898	6.190	-.01040	.00240	-.00010	.17670	.00630	.08813	.00000	.00000	.03370	.06787
.898	8.370	-.01820	.00510	-.00040	.25870	-.01120	.08483	.00000	.00000	.03340	.06747
.898	10.500	-.01800	.00440	-.00060	.33480	-.02030	.08333	.00000	.00000	.03290	.06667
	GRADIENT	-.00132	.00050	-.00011	.03954	-.00593	.00062	.00000	.00000	-.00049	-.00072

RUN NO. 6/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.100	-11.890	.00620	-.00140	.00150	-.53410	.09150	.12864	.00000	.00000	.05650	.11076
1.100	-9.630	.00760	-.00170	.00150	-.42870	.07900	.13114	.00000	.00000	.05480	.10816
1.100	-7.340	.00720	-.00190	.00120	-.33250	.07230	.13104	.00000	.00000	.05340	.10606
1.100	-5.080	.00370	.00010	.00110	-.25950	.06460	.12964	.00000	.00000	.05130	.10286
1.100	-2.820	.00340	-.00090	.00100	-.17460	.05260	.12854	.00000	.00000	.05050	.10186
1.100	-.510	.00000	.00010	.00060	-.08790	.04820	.12614	.00000	.00000	.05100	.10246
1.100	1.820	-.00210	.00090	.00030	.00910	.03900	.14174	.00000	.00000	.04410	.09226
1.100	4.120	-.00620	.00270	.00010	.10140	.02940	.14234	.00000	.00000	.04430	.09246
1.100	6.370	-.01060	.00450	.00010	.18870	.01300	.14844	.00000	.00000	.04140	.08826
1.100	8.610	-.01310	.00420	.00020	.26680	.00510	.14154	.00000	.00000	.04470	.09316
1.100	10.830	-.01710	.00460	.00030	.36420	-.00490	.13464	.00000	.00000	.04720	.09686
	GRADIENT	-.00133	.00050	-.00013	.03996	-.00340	.00246	.00000	.00000	-.00110	-.00166

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1A33 TABULATED DATA

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MSFC 594(1A33) 740TS (TIPISIP2)

ET STING

(A1C004) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 975.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000

PARAMETRIC DATA

		RUN NO.	5/ 0	RN/L =	6.68	GRADIENT INTERVAL = -5.00/ 5.00						
MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE	
1.247	-12.050	.00350	-.00170	.00170	-.54990	.09330	.14301	.00000	.00000	.04970	.10389	
1.247	-9.720	.00430	-.00260	.00150	-.42130	.07020	.14291	.00000	.00000	.04750	.10069	
1.247	-7.400	.00190	-.00160	.00120	-.31750	.06050	.14981	.00000	.00000	.04590	.09829	
1.247	-5.040	-.00050	-.00120	.00120	-.22830	.05570	.14951	.00000	.00000	.04580	.09819	
1.247	-2.800	-.00230	.00000	.00080	-.15520	.04620	.14191	.00000	.00000	.04740	.10059	
1.247	-.470	-.00400	.00050	.00050	-.06200	.03750	.13861	.00000	.00000	.04860	.10229	
1.247	1.890	-.00570	.00110	.00010	.03600	.02780	.15001	.00000	.00000	.04360	.09489	
1.247	4.230	-.00830	.00190	-.00010	.12860	.01770	.15711	.00000	.00000	.04090	.09089	
1.247	6.440	-.01170	.00250	.00000	.20110	.00690	.15071	.00000	.00000	.04350	.09469	
1.247	8.780	-.01380	.00280	-.00030	.29610	.00170	.14231	.00000	.00000	.04540	.09749	
1.247	11.090	-.01670	.00320	.00000	.41320	-.01500	.13991	.00000	.00000	.04580	.09819	
	GRADIENT	-.00084	.00027	-.00013	.04049	-.00406	.00243	.00000	.00000	-.00105	-.00156	

		RUN NO.	19/ 0	RN/L =	7.05	GRADIENT INTERVAL = -5.00/ 5.00						
MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE	
1.966	-12.070	.00060	.00170	.00150	-.58210	.15100	.16093	.00000	.00000	.02520	.05527	
1.966	-9.740	-.00010	.00080	.00110	-.43740	.10550	.15663	.00000	.00000	.02310	.05217	
1.966	-7.410	-.00050	-.00040	.00100	-.31380	.07130	.15763	.00000	.00000	.02160	.04997	
1.966	-5.050	-.00180	.00010	.00050	-.20650	.04770	.15733	.00000	.00000	.02190	.05037	
1.966	-2.720	-.00420	.00120	.00030	-.11220	.03170	.15693	.00000	.00000	.02130	.04957	
1.966	-.450	-.00570	.00180	.00000	-.03880	.02310	.15803	.00000	.00000	.02170	.05007	
1.966	1.830	-.00600	.00210	-.00010	.04130	.00770	.16183	.00000	.00000	.02140	.04967	
1.966	4.180	-.00690	.00210	-.00020	.12970	-.00430	.16473	.00000	.00000	.02180	.05017	
1.966	6.520	-.00720	.00140	.00000	.23770	-.02630	.16443	.00000	.00000	.01990	.04737	
1.966	8.900	-.00890	.00120	-.00010	.35690	-.05260	.16333	.00000	.00000	.02270	.05157	
1.966	11.260	-.01210	.00270	.00010	.49920	-.09250	.16493	.00000	.00000	.02460	.05437	
	GRADIENT	-.00037	.00013	-.00007	.03507	-.00537	.00118	.00000	.00000	.00005	.00006	

MSFC 594 (IA33) 740TS (TIPIS1P2)

ET STING

(A1C004) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF \* 2690.0000 SQ. FT XMRP = 976.0000 IN. YT  
 LREF \* 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. YT  
 SCALE = .0040

BETA = .000

RUN NO. 238/ 0 RN/L = 4.56 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
2.990	-10.960	-.00050	.00010	.00050	-.44000	.12180	.15108	.00000	.00000	.01790	.02562
2.990	-8.910	-.00100	.00000	.00050	-.34610	.09230	.15158	.00000	.00000	.01790	.02252
2.990	-6.820	-.00250	.00000	.00020	-.26110	.06760	.15088	.00000	.00000	.01760	.02072
2.990	-4.690	-.00320	.00040	-.00050	-.17470	.04500	.15228	.00000	.00000	.01710	.02042
2.990	-2.560	-.00510	.00090	-.00010	-.09810	.02830	.15298	.00000	.00000	.01660	.02042
2.990	-.420	-.00620	.00120	-.00060	-.03220	.01670	.15078	.00000	.00000	.01650	.02032
2.990	1.680	-.00540	.00030	.00000	.03710	.00130	.15288	.00000	.00000	.01620	.02122
2.990	3.810	-.00660	.00080	.00050	.10840	-.01170	.15368	.00000	.00000	.01690	.02092
2.990	5.930	-.00830	.00140	.00080	.18820	-.03100	.15158	.00000	.00000	.01760	.02082
2.990	8.020	-.00740	.00010	.00000	.27490	-.05470	.14908	.00000	.00000	.01820	.02062
2.990	10.100	-.01010	.00040	.00080	.36510	-.07920	.14728	.00000	.00000	.01790	.02162
	GRADIENT	-.00033	.00001	.00010	.03302	-.00661	.00013	.00000	.00000	-.00004	.00008

RUN NO. 22/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.610	.00440	-.00140	.00030	-.33690	.08510	.16820	.00000	.00000	-.00260	-.00390
4.959	-8.630	-.00190	.00130	.00020	-.26900	.06640	.16100	.00000	.00000	-.00130	-.00190
4.959	-6.610	-.00270	.00000	.00020	-.20160	.04850	.15390	.00000	.00000	.00040	.00060
4.959	-4.530	.00080	-.00210	.00010	-.14040	.03430	.14870	.00000	.00000	.00120	.00190
4.959	-2.490	.00000	-.00110	.00070	-.08170	.02260	.14480	.00000	.00000	.00340	.00510
4.959	-.410	-.00090	-.00140	.00050	-.03180	.01520	.14180	.00000	.00000	.00380	.00560
4.959	1.660	-.00010	-.00150	.00040	.02950	.00080	.14150	.00000	.00000	.00380	.00570
4.959	3.740	.00030	-.00210	.00040	.08880	-.01010	.14190	.00000	.00000	.00400	.00600
4.959	5.770	-.00310	-.00050	.00080	.14990	-.02580	.14230	.00000	.00000	.00390	.00590
4.959	7.810	-.00220	-.00090	.00060	.20830	-.04120	.14090	.00000	.00000	.00380	.00570
4.959	9.790	-.00300	-.00100	.00090	.28160	-.05990	.14160	.00000	.00000	.00400	.00600
	GRADIENT	-.00005	-.00002	.00001	.02745	-.00535	-.00082	.00000	.00000	.00029	.00042

DATE 23 OCT 75

TA33 TABULATED DATA

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MSFC 594(1A33) 740TS (T1P101)

ORB STING

(A1C005) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 122/ 0    RN/L = 4.98    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.598	-11.180	.01010	-.01230	.00400	-.65757	.38982	.01279	.03843	.01012	.00000	.12358
.598	-9.120	.01150	-.01330	.00360	-.55360	.32979	.03010	.03662	.00964	.00000	.10638
.598	-7.030	.01140	-.01450	.00370	-.44144	.26453	.02321	.03652	.00961	.00000	.10608
.598	-4.900	.01720	-.01630	.00430	-.34131	.20901	.04992	.03631	.00956	.00000	.08238
.598	-2.790	.01400	-.01460	.00410	-.25680	.16523	.05725	.03407	.00897	.00000	.07958
.598	-.650	.01210	-.01320	.00320	-.17382	.12168	.06664	.03259	.00858	.00000	.07068
.598	1.450	.01100	-.01260	.00260	-.09402	.08100	.06484	.03088	.00813	.00000	.06708
.598	3.590	.00650	-.01100	.00210	-.00309	.03171	.05715	.02897	.00763	.00000	.06618
.598	5.710	.00760	-.01050	.00300	.08527	-.01571	.04938	.02685	.00707	.00000	.06408
.598	7.810	.00440	-.00900	.00250	.17342	-.06494	.03926	.02567	.00673	.00000	.06098
.598	9.830	.00130	-.00700	.00210	.25729	-.11142	.02274	.02578	.00679	.00000	.06188
.598	GRADIENT	-.00115	.00059	-.00028	.03955	-.02068	.00104	-.00084	-.00022	.00000	-.00212

RUN NO. 123/ 0    RN/L = 6.27    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.900	-11.930	-.00910	.00360	.00080	-.74055	.44846	.05693	.05569	.01466	.00000	.09717
.900	-9.750	-.01420	.00600	-.00030	-.61419	.37397	.06246	.05187	.01366	.00000	.09457
.900	-7.540	-.01380	.00580	.00060	-.49125	.30068	.06566	.04957	.01279	.00000	.08957
.900	-5.280	-.01590	.00680	.00000	-.36408	.22668	.06756	.04506	.01186	.00000	.08507
.900	-3.030	-.01750	.00780	-.00090	-.25137	.16284	.06932	.04081	.01074	.00000	.08197
.900	-.770	-.01670	.00790	-.00100	-.14098	.10099	.07144	.03879	.01021	.00000	.07997
.900	1.450	-.01350	.00520	-.00230	-.03446	.04232	.07232	.03571	.00940	.00000	.07547
.900	3.700	-.01590	.00600	-.00360	.06718	-.01271	.07181	.03581	.00943	.00000	.07547
.900	5.920	-.01320	.00400	-.00270	.16559	-.06582	.07124	.03528	.00929	.00000	.07707
.900	8.100	-.01440	.00380	-.00190	.25347	-.11157	.06813	.03379	.00890	.00000	.07817
.900	10.200	-.01760	.00560	-.00150	.33400	-.15131	.06263	.03390	.00893	.00000	.06007
.900	GRADIENT	.00036	-.00036	-.00042	.04740	-.02612	.00037	-.00081	-.00021	.00000	-.00107

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REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

		RUN NO. 125/ 0	RN/L = 6.63	GRADIENT INTERVAL = -5.00/ 5.00							
MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.105	-12.430	-.01310	.00480	.00290	-.77338	.46359	.13910	.06354	.01673	.00000	.11146
1.105	-10.150	-.01190	.00470	.00150	-.64275	.39608	.13866	.06248	.01645	.00000	.11096
1.105	-7.840	-.01010	.00320	.00150	-.50592	.31948	.13818	.06057	.01595	.00000	.10956
1.105	-5.490	-.01120	.00410	.00090	-.36858	.24120	.14107	.05727	.01508	.00000	.10446
1.105	-3.160	-.01330	.00500	-.00030	-.23586	.16516	.14295	.05249	.01382	.00000	.10176
1.105	-.820	-.01430	.00580	-.00100	-.10880	.09318	.14513	.04781	.01259	.00000	.10016
1.105	1.480	-.01550	.00590	-.00190	.01066	.02578	.14601	.04483	.01180	.00000	.09826
1.105	3.800	-.01770	.00650	-.00290	.12917	-.04091	.14839	.04345	.01144	.00000	.09696
1.105	6.100	-.01830	.00550	-.00310	.24436	-.10538	.14436	.04228	.01113	.00000	.09496
1.105	8.360	-.01750	.00610	-.00260	.34925	-.16128	.13853	.04281	.01127	.00000	.09436
1.105	10.540	-.01780	.00560	-.00280	.44759	-.21229	.13512	.04122	.01085	.00000	.09436
	GRADIENT	-.00062	.00020	-.00038	.05240	-.02958	.00074	-.00130	-.00034	.00000	-.00070

		RUN NO. 124/ 0	RN/L = 6.66	GRADIENT INTERVAL = -5.00/ 5.00							
MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.256	-12.600	-.01240	.00540	.00220	-.79436	.48778	.16401	.06520	.01717	.00000	.11379
1.256	-10.270	-.00650	.00220	.00240	-.65134	.41198	.16474	.06467	.01703	.00000	.11279
1.256	-7.920	-.00810	.00320	.00100	-.50751	.33024	.16583	.06477	.01705	.00000	.11029
1.256	-5.560	-.00860	.00320	.00030	-.36959	.25024	.16717	.06424	.01691	.00000	.10859
1.256	-3.220	-.00950	.00380	-.00020	-.24060	.17539	.16974	.06137	.01616	.00000	.10699
1.256	-.880	-.01100	.00440	-.00070	-.12043	.10689	.17144	.05786	.01523	.00000	.10549
1.256	1.420	-.01240	.00510	-.00130	-.00530	.04062	.17166	.05425	.01428	.00000	.10279
1.256	3.750	-.01250	.00460	-.00160	.10934	-.02428	.17120	.05181	.01364	.00000	.10199
1.256	6.040	-.01330	.00450	-.00240	.21917	-.08478	.16722	.04989	.01314	.00000	.10129
1.256	8.340	-.01450	.00510	-.00300	.32208	-.14024	.15927	.04734	.01246	.00000	.10289
1.256	10.540	-.01430	.00500	-.00340	.42430	-.19339	.15198	.04883	.01286	.00000	.10299
	GRADIENT	-.00045	.00013	-.00021	.05019	-.02866	.00020	-.00139	-.00037	.00000	-.00076

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ORB STING

(AIC005) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 133/ 0    RN/L = 7.03    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.971	-12.600	-.00270	.00360	.00270	-.61988	.33138	.20741	.04032	.01062	.00000	.06557
1.971	-10.250	-.00460	.00460	.00210	-.49612	.27283	.20041	.04021	.01059	.00000	.06477
1.971	-7.890	-.00500	.00450	.00120	-.38886	.22006	.19292	.04011	.01056	.00000	.06197
1.971	-5.550	-.00620	.00500	.00030	-.28663	.16944	.18853	.03990	.01050	.00000	.05017
1.971	-3.230	-.00630	.00480	.00010	-.18916	.12118	.18477	.03926	.01034	.00000	.06167
1.971	-.910	-.00610	.00450	-.00010	-.09577	.07408	.18034	.03979	.01048	.00000	.06327
1.971	1.390	-.00690	.00440	-.00030	-.00207	.02598	.17714	.03979	.01048	.00000	.06497
1.971	3.720	-.00790	.00470	-.00050	.09012	-.01900	.17316	.03947	.01039	.00000	.06607
1.971	6.000	-.00850	.00510	-.00090	.17979	-.06316	.17579	.03883	.01022	.00000	.06677
1.971	8.320	-.00980	.00540	-.00180	.27161	-.10418	.18068	.03915	.01031	.00000	.06497
1.971	10.550	-.00990	.00540	-.00200	.35243	-.13610	.17609	.03894	.01025	.00000	.06467
	GRADIENT	-.00024	-.00002	-.00010	.04024	-.02024	-.00164	.00003	.00001	.00000	.00064

RUN NO. 167/ 0    RN/L = 4.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
2.990	-11.260	.00420	.00050	.00270	-.43612	.20106	.22500	.01597	.00421	.00000	.02902
2.990	-9.200	.00070	.00200	.00170	-.36791	.17393	.21584	.01714	.00451	.00000	.03042
2.990	-7.100	-.00010	.00230	.00140	-.29683	.14613	.20810	.01767	.00465	.00000	.03102
2.990	-4.960	-.00180	.00290	.00080	-.23036	.12007	.19851	.01757	.00463	.00000	.03152
2.990	-2.830	-.00330	.00370	.00030	-.16295	.09175	.19129	.01789	.00471	.00000	.03182
2.990	-.690	-.00310	.00300	.00000	-.10260	.06730	.18417	.01831	.00482	.00000	.03162
2.990	1.420	-.00380	.00330	.00000	-.04558	.04736	.17983	.01895	.00499	.00000	.03072
2.990	3.560	-.00530	.00360	-.00070	.02719	.01470	.17543	.01884	.00496	.00000	.02952
2.990	5.690	-.00330	.00200	-.00030	.09636	-.01488	.17112	.01906	.00502	.00000	.02842
2.990	7.800	-.00580	.00380	-.00110	.16042	-.03934	.16713	.01895	.00499	.00000	.02772
2.990	9.850	-.00560	.00270	-.00130	.22467	-.06488	.16475	.01852	.00488	.00000	.02692
	GRADIENT	-.00035	.00005	-.00016	.02971	-.01198	-.00275	.00017	.00004	.00000	-.00024

MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C005) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. YT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 106/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.730	.00070	.00330	.00160	-.31232	.13518	.22117	.00223	.00059	.00000	.00650
4.959	-8.770	.00050	.00270	.00240	-.27443	.12628	.21284	.00276	.00073	.00000	.00660
4.959	-6.750	.00070	.00250	.00140	-.22501	.10655	.20190	.00340	.00090	.00000	.00710
4.959	-4.700	.00100	.00200	.00150	-.18123	.08777	.18659	.00361	.00095	.00000	.00730
4.959	-2.610	.00570	-.00020	.00210	-.12899	.06643	.17378	.00372	.00098	.00000	.00740
4.959	-.550	.00000	.00360	.00000	-.08172	.04935	.16597	.00393	.00104	.00000	.00740
4.959	1.510	.00440	.00070	.00080	-.04415	.04067	.16045	.00415	.00109	.00000	.00740
4.959	3.580	.00310	.00130	.00000	.01729	.01383	.15355	.00425	.00112	.00000	.00710
4.959	5.620	.00450	-.00080	.00050	.06693	-.00370	.14784	.00436	.00115	.00000	.00690
4.959	7.670	.00190	-.00020	-.00080	.09927	-.01524	.14284	.00446	.00118	.00000	.00660
4.959	9.630	.00640	-.00290	.00170	.14887	-.03164	.14004	.00446	.00118	.00000	.00610
	GRADIENT	.00014	-.00002	-.00021	.02330	-.00840	-.00384	.00008	.00002	.00000	-.00002

MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C006) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. YT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 0/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.598	-11.130	.42920	-.15500	.07780	-.17214	.11832	.05516	.03737	.00984	.00000	.07838
.598	-9.050	.34710	-.12720	.06330	-.16671	.11741	.06462	.03631	.00956	.00000	.07578
.598	-6.930	.26560	-.09990	.05000	-.15699	.10965	.06288	.03864	.01017	.00000	.07738
.598	-4.780	.18540	-.07090	.03600	-.15954	.11393	.06781	.03652	.00961	.00000	.07448
.598	-2.630	.10870	-.04420	.02020	-.15524	.11082	.06866	.03737	.00984	.00000	.06988
.598	-.460	.03450	-.01890	.00690	-.15977	.11353	.06366	.03216	.00847	.00000	.07528
.598	1.680	-.06050	.02400	-.00790	-.16227	.11504	.05894	.03758	.00989	.00000	.07628
.598	3.840	-.12930	.04670	-.01990	-.15324	.10792	.06346	.03737	.00984	.00000	.07238
.598	5.950	-.19710	.07240	-.03210	-.15918	.11238	.06726	.03556	.00936	.00000	.07228
.598	8.090	-.26960	.09500	-.04400	-.16380	.11389	.06840	.03662	.00964	.00000	.06998
.598	10.140	-.34890	.12340	-.05810	-.16191	.11091	.05552	.03631	.00956	.00000	.07808
	GRADIENT	-.03706	.01408	-.00648	.00026	-.00036	-.00085	.00009	.00002	.00000	.00010

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (T1P101)

ORB STING

.A1C006) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

		RUN NO.	0/ 0	RN/L = 6.28	GRADIENT INTERVAL = -5.00/ 5.00						
MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABC	CNBO	CABS	CABE
.902	-11.970	.52710	-.20130	.09470	-.13804	.09504	.06004	.05059	.01332	.00000	.09907
.902	-9.730	.43060	-.16960	.07970	-.12980	.09133	.06753	.04900	.01290	.00000	.09607
.902	-7.440	.32820	-.13210	.06140	-.11961	.08645	.07455	.04868	.01282	.00000	.09037
.902	-5.130	.23020	-.09540	.04390	-.11474	.08272	.07571	.04602	.01212	.00000	.08547
.902	-2.820	.12930	-.05410	.02440	-.11499	.08531	.07723	.04389	.01156	.00000	.08237
.902	-.510	.03310	-.01420	.00720	-.12482	.09301	.07139	.03954	.01041	.00000	.08167
.902	1.780	-.06090	.02560	-.00900	-.12096	.08841	.06915	.04198	.01105	.00000	.08307
.902	4.060	-.15110	.05980	-.02560	-.10813	.07832	.07134	.04549	.01198	.00000	.08497
.902	6.330	-.23800	.09240	-.04150	-.10931	.07657	.06765	.04698	.01237	.00000	.08727
.902	8.620	-.33030	.12620	-.05840	-.11328	.07918	.06804	.05048	.01329	.00000	.09207
.902	10.820	-.42650	.16040	-.07500	-.11520	.07955	.05826	.05357	.01410	.00000	.09587
GRADIENT		-.04082	.01665	-.00725	.00106	-.00111	-.00087	.00031	.00008	.00000	.00040

		RUN NO.	0/ 0	RN/L = 6.63	GRADIENT INTERVAL = -5.00/ 5.00						
MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.096	-10.120	.46110	-.17440	.09620	-.17028	.14456	.15102	.05982	.01575	.00000	.12426
1.096	-7.710	.34510	-.13260	.07440	-.15637	.13793	.15415	.06099	.01606	.00000	.12006
1.096	-5.290	.23430	-.09150	.05240	-.14532	.13231	.15608	.05886	.01550	.00000	.11376
1.096	-2.920	.13420	-.05420	.03070	-.15095	.13742	.16084	.05451	.01435	.00000	.10726
1.096	-.540	.03610	-.01550	.00960	-.16490	.14845	.16083	.04951	.01303	.00000	.10666
1.096	1.800	-.05830	.02120	-.01090	-.16359	.14718	.16014	.05270	.01387	.00000	.10526
1.096	4.170	-.14970	.05410	-.03030	-.15093	.13577	.16565	.05599	.01474	.00000	.09976
1.096	6.530	-.24410	.08790	-.05040	-.14455	.12902	.16091	.05993	.01578	.00000	.10356
1.096	8.900	-.34490	.12240	-.06980	-.14558	.12731	.15080	.06184	.01628	.00000	.11126
1.096	11.240	-.45270	.15870	-.08940	-.15631	.13368	.14611	.06003	.01581	.00000	.11966
GRADIENT		-.04007	.01532	-.00862	.00006	-.00026	.00061	.00032	.00008	.00000	-.00101

MSFC 594(IA33) 740TS (T1P101)

ORB STING

(A1C006) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

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

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.255	-12.720	.58350	-.20760	.11470	-.15694	.10861	.15094	.06297	.01658	.00000	.12459
1.255	-10.270	.45410	-.16120	.09300	-.13131	.09983	.15881	.06020	.01585	.00000	.12039
1.255	-7.810	.33410	-.11860	.07150	-.11809	.09868	.16392	.06169	.01624	.00000	.11749
1.255	-5.350	.22070	-.07810	.04870	-.11083	.09769	.16522	.06329	.01666	.00000	.11219
1.255	-2.930	.11740	-.04050	.02660	-.10703	.09341	.16872	.06159	.01621	.00000	.10879
1.255	-.510	.02150	-.00620	.00600	-.11429	.10306	.16779	.05712	.01504	.00000	.10539
1.255	1.850	-.06820	.02500	-.01380	-.10811	.09933	.16851	.06020	.01585	.00000	.10559
1.255	4.260	-.16140	.05700	-.03340	-.10252	.09327	.17600	.06360	.01675	.00000	.09719
1.255	6.660	-.26050	.09130	-.05500	-.10848	.09509	.17185	.06626	.01745	.00000	.10109
1.255	9.110	-.36790	.12680	-.07550	-.11834	.09773	.16252	.06669	.01756	.00000	.11069
1.255	11.540	-.49460	.17020	-.09740	-.13362	.10331	.15235	.06786	.01787	.00000	.12229
1.255	GRADIENT	-.03870	.01353	-.00835	.00092	-.00083	.00094	.00038	.00010	.00000	-.00145

RUN NO. 0/ 0 RN/L = 7.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.967	-12.970	.60880	-.23250	.10120	-.10528	.06179	.17909	.04574	.01204	.00000	.06887
1.967	-10.370	.46210	-.17850	.08070	-.09223	.05906	.17386	.04447	.01171	.00000	.06507
1.967	-7.900	.34140	-.13080	.06230	-.08859	.06162	.17495	.04457	.01174	.00000	.06237
1.967	-5.420	.22700	-.08510	.04330	-.08218	.06213	.17694	.04319	.01137	.00000	.06187
1.967	-2.970	.12040	-.04390	.02360	-.08015	.06383	.17985	.04128	.01087	.00000	.05967
1.967	-.520	.02230	-.00660	.00500	-.08397	.06890	.18039	.03894	.01025	.00000	.06247
1.967	1.880	-.07020	.02620	-.01190	-.08302	.06653	.17701	.04021	.01059	.00000	.06227
1.967	4.340	-.17120	.06490	-.03100	-.08056	.06156	.18132	.04011	.01056	.00000	.06337
1.967	6.820	-.28110	.10550	-.05000	-.08430	.06047	.17977	.04255	.01120	.00000	.06187
1.967	9.380	-.41030	.15530	-.07090	-.09097	.06020	.18107	.04436	.01168	.00000	.06387
1.967	11.840	-.53960	.20520	-.08940	-.10017	.06158	.17632	.04521	.01190	.00000	.06727
1.967	GRADIENT	-.03976	.01477	-.00743	-.00001	-.00038	.00004	-.00009	-.00002	.00000	.00045

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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C006) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 WREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVT R = .000

RUN NO. 0/ 0    RN/L = 4.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
2.990	-11.290	.45150	-.17480	.07000	-.07104	.04751	.18447	.01991	.00524	.00000	.03162
2.990	-9.190	.36300	-.14000	.05760	-.07314	.05041	.18337	.01991	.00524	.00000	.03172
2.990	-7.040	.27470	-.10630	.04470	-.07855	.05553	.18229	.01959	.00516	.00000	.03132
2.990	-4.850	.18680	-.07110	.03180	-.08218	.06016	.18193	.01895	.00453	.00000	.03112
2.990	-2.670	.10370	-.03980	.01850	-.08303	.06162	.18175	.01852	.00488	.00000	.03072
2.990	-.470	.02260	-.00730	.00430	-.08630	.06280	.18127	.01831	.00482	.00000	.03052
2.990	1.700	-.05840	.02460	-.00930	-.08459	.06228	.18295	.01863	.00491	.00000	.02982
2.990	3.890	-.13780	.05490	-.02220	-.08256	.05955	.18556	.01842	.00485	.00000	.02602
2.990	6.060	-.22080	.08630	-.03560	-.08418	.05856	.18523	.01895	.00499	.00000	.02712
2.990	8.250	-.30920	.12140	-.04890	-.08339	.05596	.18600	.01948	.00513	.00000	.02982
2.990	10.340	-.39790	.15530	-.06110	-.08198	.05245	.18638	.01980	.00521	.00000	.03082
GRADIENT		-.03713	.01443	-.00622	-.00011	-.00003	.00039	-.00004	-.00001	.00000	-.00051

RUN NO. 0/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.750	.34690	-.13170	.05390	-.04630	.03236	.18835	.00255	.00067	.00000	.00630
4.959	-8.770	.28410	-.10640	.04380	-.06022	.03856	.18382	.00308	.00081	.00000	.00680
4.959	-6.700	.21320	-.07890	.03210	-.05828	.03572	.17941	.00319	.00084	.00000	.00690
4.959	-4.640	.14720	-.05150	.02140	-.05887	.04111	.17229	.00351	.00092	.00000	.00680
4.959	-2.550	.08190	-.02730	.01180	-.07039	.04283	.16738	.00372	.00098	.00000	.00690
4.959	-.450	.01980	-.00470	.00320	-.06336	.03889	.16497	.00383	.00101	.00000	.00690
4.959	1.630	-.04520	.01920	-.00580	-.06495	.03978	.16685	.00415	.00109	.00000	.00700
4.959	3.740	-.10600	.03950	-.01550	-.06685	.04218	.17125	.00415	.00109	.00000	.00700
4.959	5.800	-.16800	.06110	-.02470	-.06575	.04018	.17565	.00415	.00109	.00000	.00700
4.959	7.880	-.23090	.08570	-.03420	-.07051	.04103	.18015	.00425	.00112	.00000	.00700
4.959	9.870	-.30010	.11340	-.04420	-.05981	.03333	.18615	.00425	.00112	.00000	.00710
GRADIENT		-.03025	.01091	-.00436	.00045	-.00004	-.00012	.00008	.00002	.00000	.00003

ORIGINAL PAGE IS  
OF POOR QUALITY

MSFC 594(1A33) 740TS (TIP1S1P201)

ORB STING

(A1C007) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 130/ 0    RN/L = 4.99    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.599	-11.700	.00140	-.00040	.00600	-.81845	.34724	.11169	.03854	.01015	.04820	.08138
.599	-9.560	-.00140	.00150	.00440	-.68116	.29329	.11547	.03705	.00975	.04700	.07878
.599	-7.390	-.00030	.00000	.00370	-.54945	.24132	.12204	.03588	.00945	.04330	.07718
.599	-5.200	-.00570	.00520	.00290	-.43612	.19709	.12655	.03577	.00942	.04130	.07378
.599	-3.020	-.00790	.00350	.00210	-.32487	.15609	.13005	.03407	.00897	.04020	.07108
.599	-.800	-.01200	.00560	.00100	-.20898	.11601	.12610	.03333	.00877	.03890	.07078
.599	1.390	-.01200	.00530	.00170	-.09747	.07709	.12648	.03025	.00796	.03810	.07038
.599	3.600	-.01340	.00520	.00150	.02048	.03564	.11777	.03046	.00802	.03720	.07338
.599	5.810	-.01810	.00720	.00100	.13796	-.00371	.10733	.02940	.00774	.03940	.07318
.599	8.020	-.02160	.00760	-.00010	.25444	-.04437	.10109	.02833	.00746	.04090	.06668
.599	10.110	-.02120	.00760	.00040	.37290	-.02404	.08456	.02796	.00760	.04190	.06938
.599	GRADIENT	-.00075	.00022	-.00005	.05204	-.01815	-.00166	-.00063	-.00017	-.00044	.00029

RUN NO. 129/ 0    RN/L = 5.94    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.797	-12.630	-.00580	.00420	.00600	-.90490	.37188	.09894	.05154	.01357	.05250	.10033
.797	-10.350	-.00850	.00540	.00470	-.75518	.31353	.10407	.04920	.01295	.05190	.09683
.797	-8.040	-.00680	.00480	.00370	-.60684	.25516	.11002	.04675	.01231	.04760	.09233
.797	-5.680	-.01230	.00800	.00220	-.46130	.19975	.11499	.04548	.01197	.04470	.08903
.797	-3.380	-.01640	.00950	.00090	-.33494	.14655	.11122	.04335	.01141	.04360	.09133
.797	-1.030	-.01950	.00980	.00050	-.20430	.09995	.10730	.04207	.01108	.04320	.09213
.797	1.290	-.02290	.01080	-.00040	-.07612	.05031	.10436	.04101	.01080	.04080	.09163
.797	3.650	-.02410	.01100	-.00060	.05668	.00953	.09473	.03984	.01049	.04430	.09273
.797	6.020	-.02660	.01140	-.00080	.19619	-.03625	.09040	.03867	.01018	.04390	.08993
.797	8.360	-.02830	.01170	-.00150	.32897	-.08300	.08316	.03761	.00990	.04720	.08723
.797	10.540	-.02670	.00920	-.00230	.44686	-.13250	.07634	.03604	.01001	.04780	.08593
.797	GRADIENT	-.00113	.00023	-.00023	.05566	-.01968	-.00224	-.00049	-.00013	-.00001	.00013

DATE 23 OCT 75

IA33 TABULATED DATA

PAGE 23

MSFC 594 (IA33) 740TS (T1P1S1P201)

ORB STING

(A1C007) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 128/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CASE
.905	-13.240	-.00540	.00720	.00520	-1.00037	.41658	.09361	.06122	.01612	.05230	.11927
.905	-10.830	-.01350	.01180	.00400	-.81562	.34125	.10527	.05626	.01497	.05370	.11417
.905	-8.400	-.01760	.01410	.00250	-.64203	.26855	.11007	.05346	.01407	.05250	.10867
.905	-5.960	-.01810	.01470	.00070	-.48437	.20542	.12445	.04869	.01282	.04860	.09937
.905	-3.540	-.02340	.01670	-.00030	-.33046	.14355	.12572	.04751	.01251	.04610	.09607
.905	-1.130	-.02420	.01490	-.00070	-.18026	.07467	.12186	.04676	.01231	.04450	.09817
.905	1.270	-.02490	.01460	-.00280	-.03301	.01525	.12122	.04581	.01206	.04380	.09537
.905	3.650	-.02660	.01430	-.00450	.09654	-.03311	.11363	.04559	.01200	.04370	.09617
.905	6.080	-.02780	.01370	-.00430	.22896	-.06671	.10816	.04517	.01189	.04760	.09767
.905	8.480	-.02890	.01320	-.00340	.35455	-.10376	.10175	.04368	.01150	.05250	.09997
.905	10.730	-.02940	.01170	-.00330	.47523	-.14861	.09671	.04262	.01122	.05320	.09167
.905	GRADIENT	-.00043	-.00031	-.00061	.05959	-.02459	-.00154	-.00028	-.00007	-.00033	-.00010

RUN NO. 131/ 0    RN/L = 6.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CASE
1.049	-14.130	.00310	.00620	.00600	-1.15460	.50381	.17117	.07191	.01893	.07140	.12882
1.049	-11.560	-.00170	.00850	.00470	-.93522	.41593	.19619	.06819	.01795	.07280	.12382
1.049	-9.000	-.00360	.00950	.00340	-.73573	.33475	.20714	.06405	.01686	.07030	.11792
1.049	-6.400	-.00640	.01030	.00200	-.54916	.25953	.20962	.06266	.01650	.06850	.11572
1.049	-3.860	-.00780	.01010	.00100	-.38532	.19665	.21387	.06022	.01585	.06580	.11192
1.049	-1.330	-.00950	.01020	.00030	-.22421	.13372	.21205	.05714	.01504	.06290	.11102
1.049	1.130	-.00900	.00850	.00000	-.07143	.06835	.21427	.05342	.01406	.06080	.10662
1.049	3.630	-.01120	.00910	-.00060	.08643	-.00063	.20614	.05395	.01420	.06190	.10812
1.049	6.150	-.01100	.00650	-.00130	.24937	-.06498	.20123	.05076	.01336	.06390	.10732
1.049	8.580	-.01070	.00410	-.00150	.39214	-.11980	.18531	.05278	.01350	.06820	.10392
1.049	10.900	-.01170	.00280	-.00120	.51865	-.17188	.17798	.05161	.01359	.07050	.10272
1.049	GRADIENT	-.00039	-.00019	-.00020	.06290	-.02636	-.00084	-.00090	-.00024	-.00055	-.00063



DATE 23 OCT 75

IA3Z TABULATED DATA

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC007) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000    RUJDER = .000  
 ELEVTR = .000

PARAMETRIC DATA

RUN NO. 126/ 3    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.102	-14.370	-.00340	.00920	.03510	-1.16683	.49835	.21404	.06240	.01643	.06560	.11606
1.102	-11.720	-.00130	.00610	.00400	-.93471	.40698	.22604	.05740	.01511	.07040	.11326
1.102	-9.130	-.00010	.00400	.00340	-.74205	.33385	.23192	.05602	.01475	.07180	.11416
1.102	-6.540	-.00070	.00380	.00280	-.56520	.26642	.23157	.05507	.01450	.06960	.11646
1.102	-3.960	-.00350	.00420	.00200	-.39657	.20262	.22873	.05422	.01427	.06680	.11596
1.102	-1.390	-.00770	.00600	.00110	-.23565	.14445	.22805	.04879	.01265	.06390	.11546
1.102	1.120	-.00850	.00610	.00050	-.07123	.07327	.22564	.04720	.01243	.06030	.11326
1.102	3.640	-.01140	.00660	-.00040	.09719	-.00251	.22134	.04661	.01201	.05860	.10876
1.102	6.180	-.01540	.00740	-.00160	.26084	-.06776	.21432	.04582	.01206	.06200	.10576
1.102	8.660	-.01610	.00610	-.00130	.41277	-.13013	.21004	.04380	.01153	.06220	.09916
1.102	11.010	-.02280	.01010	-.00220	.54296	-.18473	.19332	.04422	.01164	.06380	.09836
1.102	GRADIENT	-.00097	.00029	-.00031	.06502	-.02712	-.00097	-.00109	-.00029	-.00111	-.00094

RUN NO. 127/ 1    RN/L = 6.69    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.253	-15.080	-.01190	.01230	.00530	-1.29122	.54422	.19335	.06626	.01745	.06500	.11879
1.253	-12.250	-.00610	.00790	.00490	-.99883	.41486	.22303	.06477	.01705	.06550	.11719
1.253	-9.430	-.00210	.00480	.00380	-.75215	.31399	.22945	.06446	.01697	.06520	.11489
1.253	-6.660	-.00190	.00350	.00260	-.53950	.23174	.22744	.06467	.01703	.06410	.11309
1.253	-4.010	-.00260	.00250	.00190	-.34861	.15906	.23039	.06392	.01693	.06140	.11379
1.253	-1.360	-.00480	.00240	.00120	-.17516	.09506	.23409	.05882	.01549	.05940	.11229
1.253	1.200	-.00860	.00410	.00000	-.01210	.03198	.23168	.05553	.01462	.05830	.11359
1.253	3.740	-.01020	.00390	-.00100	.13664	-.02832	.22696	.05425	.01429	.05970	.11259
1.253	6.270	-.01150	.00430	-.00170	.28825	-.08419	.22063	.05308	.01398	.06320	.11179
1.253	8.770	-.01230	.00340	-.00210	.43424	-.14327	.21307	.05234	.01378	.06290	.10699
1.253	11.240	-.01700	.00580	-.00350	.57720	-.19044	.20344	.05287	.01392	.06440	.10729
1.253	GRADIENT	-.00103	.00020	-.00038	.06273	-.02426	-.00048	-.00126	-.00033	-.00024	-.00009

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (T1P!S1P201)

ORB STING

(A1C007) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000    RUDDER = .000  
 ELEVR = .000

PARAMETRIC DATA

RUN NO. 109/ 0    RN/L = 6.52    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.464	-15.010	-.00880	.00780	.00420	-1.22874	.50509	.24305	.05753	.01515	.04990	.09682
1.464	-12.240	-.00440	.00400	.00450	-.97122	.39954	.26299	.05519	.01453	.05120	.09202
1.464	-9.440	-.00250	.00200	.00330	-.73125	.29694	.26064	.05604	.01475	.05110	.09152
1.464	-6.690	-.00360	.00200	.00280	-.52324	.21516	.25761	.05487	.01445	.04860	.09032
1.464	-4.010	-.00250	.00050	.00180	-.34014	.14621	.25693	.05296	.01394	.04660	.08812
1.464	-1.370	-.00390	.00070	.00080	-.16127	.07774	.25652	.04966	.01308	.04560	.08922
1.464	1.220	-.00660	.00130	.00000	.00305	.01606	.25351	.04807	.01266	.04450	.09022
1.464	3.770	-.00920	.00280	-.00050	.14790	-.03811	.25306	.04562	.01201	.04460	.09012
1.464	6.300	-.01140	.00390	-.00180	.29331	-.09204	.24994	.04594	.01210	.04500	.08952
1.464	8.770	-.01490	.00580	-.00220	.42841	-.14234	.23694	.04594	.01210	.04800	.09002
1.464	11.240	-.01640	.00480	-.00200	.57584	-.18777	.23235	.04584	.01207	.04920	.09092
1.464	GRADIENT	-.00088	.00029	-.00030	.06282	-.02371	-.00056	-.00091	-.00024	-.00028	.00031

RUN NO. 132/ 0    RN/L = 7.04    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.968	-14.660	.00230	.00420	.00460	-1.05399	.43415	.24526	.03766	.00992	.03290	.06997
1.968	-12.000	.00170	.00290	.00440	-.84734	.34928	.26311	.03862	.01017	.03530	.06877
1.968	-9.330	.00030	.00240	.00330	-.65478	.26670	.25808	.03915	.01031	.03500	.06727
1.968	-6.630	-.00150	.00260	.00210	-.47085	.19185	.25054	.03979	.01048	.03250	.06787
1.968	-3.970	-.00350	.00340	.00100	-.30652	.13000	.24340	.04043	.01064	.03160	.06697
1.968	-1.360	-.00460	.00340	.00030	-.16209	.07745	.23976	.04107	.01081	.03230	.06587
1.968	1.150	-.00600	.00410	-.00010	-.02451	.02713	.23967	.04266	.01123	.03450	.06747
1.968	3.710	-.00920	.00570	-.00100	.11667	-.02827	.23562	.04351	.01146	.03590	.06717
1.968	6.260	-.01190	.00720	-.00160	.26528	-.08865	.23849	.04234	.01115	.03680	.06687
1.968	8.880	-.01570	.00900	-.00250	.41754	-.14140	.23812	.04170	.01098	.03650	.06607
1.968	11.440	-.01590	.00940	-.00360	.56398	-.18182	.23526	.04117	.01084	.03720	.06807
1.968	GRADIENT	-.00072	.00030	-.00025	.05503	-.02054	-.00092	.00042	.00011	.00059	.00009

ORIGINAL PAGE IS  
OF POOR QUALITY

MSFC 594(IA33) 740TS (T1P1S1P201)

ORB STING

(A1C007) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 108/ 0 RN/L = 4.56 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
2.990	-11.810	.00390	.00020	.00310	-.67767	.26792	.28634	.01544	.00407	.01850	.03042
2.990	-9.690	.00360	-.00020	.00270	-.56723	.22657	.27520	.01608	.00423	.01920	.03012
2.990	-7.490	.00310	.00010	.00250	-.45275	.18547	.26257	.01651	.00435	.01930	.03022
2.990	-5.240	.00090	.00050	.00140	-.34199	.14479	.25094	.01704	.00449	.01920	.03002
2.990	-3.010	-.00020	.00170	.00100	-.23958	.11097	.24350	.01778	.00468	.01900	.02962
2.990	-.800	.00020	.00090	.00140	-.14394	.08122	.23909	.01799	.00474	.01890	.02832
2.990	1.400	.00000	.00100	.00050	-.05891	.05679	.23299	.01789	.00471	.01890	.02772
2.990	3.610	-.00070	.00080	-.00020	.03471	.02247	.22717	.01821	.00479	.01840	.02712
2.990	5.800	-.00060	.00070	-.00050	.13865	-.01678	.22236	.01842	.00485	.01760	.02652
2.990	8.000	-.00160	.00140	-.00080	.24272	-.05416	.21705	.01852	.00488	.01750	.02572
2.990	10.120	-.00270	.00110	-.00110	.35409	-.09703	.21425	.01863	.00491	.01730	.02462
GRADIENT		-.00008	-.00012	-.00020	.04116	-.01314	-.00250	.00005	.00001	-.00008	-.00037

RUN NO. 107/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.940	.00550	.00100	.00130	-.47380	.18393	.28210	.00170	.00045	.00250	.00630
4.959	-8.950	.00460	.00090	.00100	-.40321	.16183	.26587	.00213	.00056	.00430	.00650
4.959	-6.890	.00350	.00060	.00100	-.33261	.14061	.25253	.00287	.00076	.00470	.00650
4.959	-4.800	.00280	.00070	.00050	-.26232	.11621	.23710	.00330	.00087	.00510	.00660
4.959	-2.680	.00350	.00040	.00030	-.18917	.09216	.22459	.00351	.00092	.00520	.00660
4.959	-.590	.00700	-.00300	.00110	-.11903	.06981	.21688	.00372	.00098	.00530	.00650
4.959	1.500	.00480	-.00140	.00050	-.04849	.04836	.20967	.00393	.00104	.00530	.00650
4.959	3.610	.00410	-.00160	-.00010	.02186	.02511	.20365	.00415	.00109	.00540	.00660
4.959	5.690	.00180	-.00020	-.00020	.10423	-.00367	.19535	.00425	.00112	.00540	.00640
4.959	7.780	.00290	-.00080	.00000	.17743	-.03147	.18805	.00425	.00112	.00530	.00610
4.959	9.770	-.00040	.00110	-.00070	.25400	-.06014	.18454	.00436	.00115	.00530	.00570
GRADIENT		.00019	-.00030	-.00005	.03376	-.01076	-.00390	.00010	.00003	.00003	-.00000

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IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(A1C008) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 115/ 0    RN/L = 4.98    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.598	-11.070	.44480	-.18160	.06080	-.18000	.08977	.07623	.04290	.01129	.05720	.09878
.598	-9.020	.36180	-.14980	.05070	-.18964	.09959	.08710	.04003	.01054	.05640	.09518
.598	-6.910	.28240	-.12000	.04110	-.19254	.10482	.09164	.03928	.01034	.05420	.09458
.598	-4.750	.19560	-.08580	.02970	-.19422	.10704	.10044	.03769	.00992	.05130	.08818
.598	-2.590	.10920	-.04680	.01680	-.19736	.11041	.10522	.03631	.00956	.04900	.08388
.598	-.440	.02450	-.01010	.00580	-.19900	.11316	.11943	.03609	.00950	.04440	.07519
.598	1.670	-.04750	.02100	-.00360	-.18963	.10769	.12083	.03620	.00953	.04100	.07796
.598	3.820	-.11920	.05180	-.01310	-.18904	.10392	.12594	.03928	.01034	.03950	.07668
.598	5.940	-.20120	.08730	-.02500	-.18134	.09692	.12184	.03928	.01034	.03750	.08118
.598	8.080	-.28450	.12060	-.03560	-.17955	.09347	.12133	.04120	.01085	.03620	.08538
.598	10.110	-.36360	.15230	-.04680	-.18296	.09057	.10210	.04162	.01096	.03770	.09838
.598	GRADIENT	-.03675	.01603	-.00495	.00084	-.00042	.00311	.00014	.00004	-.00148	-.00135

RUN NO. 114/ 0    RN/L = 5.94    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.799	-11.590	.49850	-.20460	.06750	-.17830	.07666	.08209	.04888	.01287	.06070	.10313
.799	-9.440	.40570	-.16870	.05580	-.17629	.08028	.08756	.04771	.01256	.06010	.10233
.799	-7.220	.31520	-.13540	.04540	-.17668	.08311	.09433	.04654	.01225	.05790	.09903
.799	-4.980	.22370	-.09890	.03370	-.18224	.08825	.10462	.04335	.01141	.05250	.09363
.799	-2.740	.13000	-.05730	.01930	-.18441	.09213	.10773	.04324	.01139	.04930	.09113
.799	-.490	.03690	-.01640	.00710	-.18908	.09643	.10900	.04197	.01105	.04460	.08893
.799	1.730	-.05530	.02540	-.00460	-.17664	.08678	.11206	.04261	.01122	.04210	.09023
.799	3.960	-.13730	.06100	-.01550	-.16835	.08053	.11875	.04152	.01172	.03770	.09303
.799	6.160	-.22920	.10140	-.02900	-.16144	.07468	.11536	.04601	.01211	.03720	.09833
.799	8.390	-.31680	.13660	-.04020	-.16635	.07755	.11279	.04718	.01242	.03750	.09843
.799	10.530	-.40280	.16970	-.05120	-.16259	.07163	.10395	.04962	.01306	.03920	.10223
.799	GRADIENT	-.04060	.01801	-.00547	.00159	-.00093	.00146	.00008	.00002	-.00165	-.00010

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC008) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 113/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.899	-11.880	.53950	-.22550	.07670	-.16772	.06947	.09703	.05569	.01466	.06370	.11167
.899	-9.660	.44210	-.19010	.06500	-.15683	.06735	.10967	.05345	.01407	.06090	.10817
.899	-7.370	.33910	-.14930	.05050	-.14760	.06552	.11558	.04995	.01315	.05850	.10497
.899	-5.090	.23780	-.10690	.03570	-.14338	.06302	.11973	.04910	.01293	.05450	.09897
.899	-2.800	.13730	-.06080	.02000	-.15103	.06469	.11758	.04815	.01268	.05240	.09477
.899	-.510	.03660	-.01490	.00630	-.15726	.06782	.12258	.04485	.01181	.04590	.08977
.899	1.750	-.06420	.03360	-.00680	-.14882	.06375	.12360	.04623	.01217	.04330	.09357
.899	4.050	-.16070	.07650	-.02070	-.14032	.05725	.13039	.04963	.01307	.04150	.09597
.899	6.300	-.25260	.11500	-.03460	-.13797	.05535	.13089	.05133	.01352	.03920	.10017
.899	8.580	-.34670	.15420	-.04880	-.13590	.05433	.13457	.05335	.01405	.03960	.10337
.899	10.750	-.43430	.18910	-.06140	-.13688	.05170	.12605	.05707	.01503	.03880	.10747
	GRADIENT	-.04361	.02018	-.00593	.00178	-.00118	.00173	.00026	.00007	-.00155	.00032

RUN NO. 116/ 0 RN/L = 6.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.050	-12.340	.60510	-.25600	.09350	-.19261	.11425	.19446	.06362	.01675	.07500	.12502
1.050	-9.990	.48500	-.21050	.07740	-.18103	.10833	.20430	.06139	.01616	.07370	.12092
1.050	-7.610	.36810	-.16450	.06140	-.17147	.10475	.21006	.06192	.01630	.07350	.11662
1.050	-5.230	.25490	-.11700	.04450	-.16684	.10535	.21312	.06107	.01608	.07090	.11182
1.050	-2.870	.14780	-.06940	.02650	-.17004	.10970	.21643	.05916	.01557	.06880	.10862
1.050	-.520	.03970	-.01790	.00660	-.17812	.11855	.21677	.05682	.01496	.06520	.10672
1.050	1.790	-.07070	.03820	-.00940	-.17586	.11710	.21944	.05735	.01510	.06180	.10632
1.050	4.130	-.16950	.08320	-.02590	-.16432	.10822	.23232	.05756	.01515	.05650	.10822
1.050	6.460	-.27040	.12720	-.04260	-.16338	.10562	.23000	.05969	.01571	.05470	.11452
1.050	8.810	-.37110	.16540	-.05810	-.15843	.09908	.23488	.05990	.01577	.04990	.11452
1.050	11.090	-.47990	.20690	-.07360	-.16294	.10003	.22837	.06181	.01627	.04930	.12072
	GRADIENT	-.04557	.02204	-.00752	.00083	-.00025	.00216	-.00018	-.00005	-.00173	.00002

DATE 23 OCT 75

IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC008) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 117/ 0    RN/L = 6.62    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.099	-12.420	.61260	-.25840	.09590	-.18546	.10835	.20919	.05985	.01576	.07080	.12396
1.099	-10.050	.48580	-.21010	.07930	-.17956	.10995	.22089	.05645	.01486	.06770	.11806
1.099	-7.650	.36840	-.16340	.06230	-.17302	.10703	.22122	.05932	.01562	.06900	.11746
1.099	-5.250	.25310	-.11530	.04480	-.17371	.11285	.22609	.05815	.01531	.06630	.11186
1.099	-2.890	.14740	-.06880	.02690	-.18236	.12233	.22915	.05719	.01506	.06390	.11066
1.099	-.530	.04260	-.01990	.00920	-.19144	.13248	.22769	.05485	.01444	.06110	.11006
1.099	1.780	-.06270	.03220	-.00810	-.18701	.13015	.23439	.05475	.01441	.05680	.10896
1.099	4.130	-.16030	.07590	-.02500	-.17767	.12235	.24217	.05687	.01497	.05280	.11076
1.099	6.470	-.26000	.11850	-.04260	-.16782	.11278	.24381	.05783	.01523	.04900	.11276
1.099	8.830	-.36210	.15890	-.05840	-.16094	.10347	.24359	.05826	.01534	.04580	.11636
1.099	11.140	-.47220	.19980	-.07430	-.15862	.09928	.24421	.05783	.01523	.04270	.11816
1.099	GRADIENT	-.04400	.02080	-.00740	.00079	-.00009	.00196	-.00005	-.00001	-.00161	-.00003

RUN NO. 112/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.246	-12.630	.62080	-.25300	.09720	-.18533	.08731	.20845	.06286	.01655	.07070	.13289
1.246	-10.220	.48460	-.19820	.07840	-.16517	.07861	.21717	.06073	.01589	.06910	.12579
1.246	-7.750	.35710	-.14620	.06110	-.16467	.08806	.22176	.06265	.01649	.06820	.12399
1.246	-5.290	.23520	-.09520	.04260	-.16362	.09521	.22557	.06244	.01644	.06630	.12039
1.246	-2.900	.12420	-.04880	.02270	-.16033	.09691	.22695	.06286	.01655	.06460	.11589
1.246	-.510	.02740	-.00930	.00580	-.16208	.09784	.23039	.06042	.01591	.06100	.11179
1.246	1.830	-.06880	.03150	-.01040	-.15614	.09504	.23867	.06254	.01647	.05720	.11039
1.246	4.220	-.16520	.07110	-.02710	-.15732	.09394	.24242	.06509	.01714	.05570	.11549
1.246	6.610	-.27130	.11360	-.04570	-.15390	.08836	.24221	.06350	.01672	.05190	.11899
1.246	9.050	-.38640	.15870	-.06300	-.15960	.08659	.24245	.06275	.01652	.05040	.12549
1.246	11.440	-.51470	.21000	-.08080	-.16813	.08536	.23643	.06477	.01705	.05040	.13069
1.246	GRADIENT	-.04069	.01690	-.00699	.00063	-.00049	.00231	.00037	.00010	-.00129	-.00011

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OF POOR QUALITY

MSFC 594(1A33) 740TS (TIPIS1P201)

ORB STING

(A1C008) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 111/ 0 RN/L = 6.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.465	-12.640	.61770	-.25620	.09200	-.15636	.05502	.23497	.05721	.01566	.05240	.10222
1.465	-10.250	.48840	-.20140	.07580	-.14280	.05272	.24520	.05509	.01450	.05020	.09812
1.465	-7.780	.36170	-.14960	.05860	-.13473	.05509	.25088	.05370	.01414	.04790	.09362
1.465	-5.310	.23570	-.09560	.03960	-.12982	.05769	.25121	.05328	.01403	.04720	.09052
1.465	-2.890	.12400	-.04780	.02070	-.12895	.06134	.25154	.05264	.01386	.04720	.08692
1.465	-.520	.03010	-.01100	.00560	-.12434	.06064	.25557	.04881	.01285	.04800	.08512
1.465	1.840	-.06540	.02830	-.00910	-.12372	.05997	.26016	.05062	.01333	.04400	.08512
1.465	4.230	-.15790	.06350	-.02430	-.12241	.05709	.26043	.05285	.01392	.04190	.08742
1.465	6.630	-.26640	.10890	-.04730	-.12519	.05507	.26061	.05317	.01400	.04090	.08942
1.465	9.090	-.38630	.15760	-.05960	-.12564	.05004	.25777	.05562	.01464	.03970	.09292
1.465	11.490	-.51450	.21000	-.07080	-.13507	.05004	.25409	.05689	.01498	.03880	.09632
1.465	GRADIENT	-.03968	.01573	-.00631	.00085	-.00057	.00132	.00010	.00003	-.00084	.00006

RUN NO. 135/ 0 RN/L = 7.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.965	-12.840	.62350	-.26620	.08430	-.16087	.06533	.23224	.04479	.01179	.04120	.07347
1.965	-10.290	.47790	-.20700	.06630	-.14284	.06245	.22716	.04277	.01126	.03750	.07177
1.965	-7.830	.35950	-.15690	.05220	-.13868	.06480	.23107	.04255	.01120	.03720	.07097
1.965	-5.380	.24570	-.10830	.03700	-.13581	.06635	.23521	.04192	.01104	.03720	.06957
1.965	-2.950	.13630	-.05980	.02070	-.13763	.06980	.23897	.04085	.01076	.03580	.06807
1.965	-.520	.02960	-.01170	.00450	-.13940	.07138	.24458	.04075	.01073	.03340	.06397
1.965	1.870	-.07000	.03150	-.00920	-.13582	.06848	.25206	.04117	.01084	.03120	.06387
1.965	4.290	-.17310	.07580	-.02430	-.13718	.06540	.25667	.04255	.01120	.02970	.06727
1.965	6.740	-.28210	.12090	-.03960	-.13894	.06373	.25449	.04394	.01157	.02790	.06817
1.965	9.220	-.40110	.16690	-.05520	-.14488	.06503	.24702	.04521	.01190	.02660	.06977
1.965	11.680	-.52930	.22150	-.07030	-.14968	.06370	.24607	.04595	.01210	.02700	.07107
1.965	GRADIENT	-.04263	.01867	-.00617	.00020	-.00067	.00251	.00023	.00006	-.00085	-.00010

DATE 23 OCT 75

1A33 TABULATED DATA

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MSFC 594(1A33) 740TS (TIP1S1P201)

ORB STING

(AIC008) (12 SEP 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

		RUN NO.	104/ 0	RN/L =	4.57	GRADIENT INTERVAL =		-5.00/	5.00			
MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE	
2.990	-11.280	.47530	-.19500	.05830	-.11389	.06977	.24277	.01821	.00479	.02030	.02892	
2.990	-9.190	.37900	-.15280	.04680	-.10984	.06902	.23979	.01799	.00474	.02060	.02882	
2.990	-7.010	.28460	-.11350	.03510	-.10925	.06935	.23590	.01767	.00465	.02070	.02902	
2.990	-4.830	.19170	-.07470	.02410	-.11238	.07217	.23350	.01778	.00468	.02080	.02882	
2.990	-2.650	.10600	-.04050	.01300	-.11475	.07255	.23250	.01767	.00465	.02030	.02902	
2.990	-.460	.02910	-.01120	.00400	-.11614	.07422	.23419	.01799	.00474	.01950	.02832	
2.990	1.700	-.05010	.02080	-.00500	-.11557	.07374	.23568	.01810	.00477	.01820	.02832	
2.990	3.900	-.13040	.05120	-.01460	-.11487	.07144	.23958	.01810	.00477	.01710	.02832	
2.990	6.070	-.21800	.08580	-.02550	-.11179	.06887	.24177	.01821	.00479	.01540	.02902	
2.990	8.260	-.31050	.12460	-.03750	-.11533	.06960	.24424	.01874	.00493	.01440	.02922	
2.990	10.360	-.40470	.16400	-.04940	-.12186	.07122	.24603	.01884	.00496	.01460	.02952	
2.990	GRADIENT	-.03669	.01436	-.00437	-.00027	-.00001	.00070	.00005	.00001	-.00044	-.00008	

		RUN NO.	103/ 0	RN/L =	5.47	GRADIENT INTERVAL =		-5.00/	5.00			
MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE	
4.959	-10.760	.36530	-.14590	.04610	-.08971	.06771	.23423	.00287	.00076	.00510	.00620	
4.959	-8.750	.29470	-.11590	.03700	-.09056	.06556	.22902	.00308	.00081	.00520	.00640	
4.959	-6.700	.21940	-.08530	.02610	-.09095	.06284	.22200	.00340	.00090	.00530	.00660	
4.959	-4.620	.15480	-.05880	.01790	-.09233	.06311	.21798	.00372	.00098	.00550	.00670	
4.959	-2.530	.09120	-.03500	.01080	-.09366	.06274	.21137	.00383	.00101	.00560	.00680	
4.959	-.430	.02960	-.01210	.00400	-.10106	.06353	.21477	.00383	.00101	.00570	.00680	
4.959	1.650	-.05130	.02350	-.00710	-.09486	.05873	.21617	.00383	.00101	.00570	.00670	
4.959	3.750	-.10300	.03850	-.01200	-.09739	.05866	.21777	.00393	.00104	.00570	.00690	
4.959	5.820	-.17110	.05260	-.01960	-.10114	.05911	.22265	.00415	.00109	.00550	.00690	
4.959	7.910	-.24050	.09040	-.02780	-.09894	.05781	.22685	.00415	.00109	.00520	.00700	
4.959	9.900	-.30980	.11700	-.03600	-.09967	.05643	.23335	.00425	.00112	.00480	.00690	
4.959	GRADIENT	-.03146	.01210	-.00371	-.00054	-.00062	.00021	.00002	.00001	.00002	.00001	



MSFC 594(1A33) 740TS (T1P1S1P201)

ORB STING

(A1C009) ( 12 SEP 75 )

REFERENCE DATA.

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000  
 ELEVTB = .000

RUN NO. 159/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.598	-11.010	.43410	-.17840	.07370	.14522	-.02023	.07268	.03864	.01017	.05240	.09138
.598	-8.950	.35110	-.14710	.06200	.13912	-.01364	.08258	.03524	.00928	.04980	.08658
.598	-6.830	.26150	-.11130	.04870	.12794	-.00554	.08793	.03439	.00905	.04740	.08428
.598	-4.680	.17410	-.07430	.03360	.12073	.00174	.09466	.03216	.00847	.04560	.07998
.598	-2.540	.09130	-.03780	.01830	.12290	.00159	.11430	.03152	.00830	.04120	.06828
.598	-.380	.01060	-.00360	.00500	.11616	.00626	.10618	.03014	.00794	.04090	.07118
.598	1.750	-.06550	.02780	-.00860	.11593	.00536	.11921	.03142	.00827	.03760	.06948
.598	3.900	-.14560	.05190	-.02250	.12252	-.00086	.12284	.03259	.00858	.03770	.06958
.598	6.010	-.22230	.09590	-.03650	.12490	-.00641	.11430	.03492	.00919	.03620	.07398
.598	8.130	-.30010	.12760	-.04880	.12342	-.00824	.11308	.03524	.00928	.03720	.07688
.598	10.190	-.37820	.15790	-.06080	.12967	-.01771	.08743	.03620	.00953	.03930	.09278
	GRADIENT	-.03712	.01576	-.00648	-.00016	-.00007	.00285	.00003	.00001	-.00090	-.00091

RUN NO. 159/ 0 RN/L = 5.93 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.797	-11.500	.47750	-.19580	.07870	.16540	-.03622	.07654	.04473	.01178	.05680	.09913
.797	-9.320	.38560	-.16240	.06610	.16395	-.03140	.08561	.04186	.01102	.05510	.09583
.797	-7.120	.29540	-.12900	.05340	.16419	-.02900	.09308	.04059	.01059	.05030	.09163
.797	-4.860	.19610	-.08630	.03700	.16038	-.02270	.09929	.03718	.00979	.04810	.08813
.797	-2.640	.10510	-.04670	.02010	.15317	-.01577	.10120	.03687	.00971	.04530	.08573
.797	-.390	.01550	-.00830	.00550	.14876	-.01235	.09895	.03612	.00951	.04190	.08523
.797	1.820	-.07090	.03010	-.00910	.15786	-.01970	.10424	.03804	.01001	.04080	.08453
.797	4.030	-.15290	.06430	-.02340	.16055	-.02542	.11077	.03920	.01032	.03800	.08533
.797	6.250	-.24450	.10590	-.04000	.16575	-.03280	.10541	.04186	.01102	.03800	.09063
.797	8.480	-.33230	.14180	-.05440	.16184	-.03204	.10097	.04420	.01164	.03890	.09303
.797	10.620	-.41500	.17110	-.06550	.16288	-.03785	.09584	.04633	.01220	.03970	.09683
	GRADIENT	-.03930	.01700	-.00674	.00022	-.00042	.00117	.00023	.00006	-.00111	-.00031

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC009) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 157/ 0    RN/L = 6.29    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.905	-11.840	.52180	-.20970	.08270	.18944	-.05355	.09249	.05474	.01441	.06040	.10367
.905	-9.620	.42440	-.17490	.06870	.19894	-.05898	.10495	.05208	.01371	.05640	.09997
.905	-7.340	.32340	-.13700	.05410	.20374	-.06043	.11036	.05017	.01321	.05390	.09667
.905	-5.010	.21900	-.09550	.03600	.19937	-.05758	.11293	.04740	.01248	.05110	.09407
.905	-2.720	.12150	-.05460	.01930	.19754	-.05668	.11668	.04485	.01181	.04890	.09247
.905	-.420	.02120	-.00930	.00290	.18904	-.05318	.11588	.04485	.01181	.04390	.09267
.905	1.850	-.07780	.03530	-.01250	.19261	-.05696	.11607	.04496	.01184	.04610	.09357
.905	4.120	-.16730	.07200	-.02730	.19858	-.06235	.12150	.04623	.01217	.04360	.09587
.905	6.410	-.26620	.11560	-.04430	.19080	-.05628	.12268	.04995	.01315	.04290	.09387
.905	8.660	-.35830	.15440	-.05690	.19667	-.06025	.11857	.05346	.01407	.04010	.09817
.905	10.850	-.44650	.18960	-.07170	.19966	-.06360	.11233	.05580	.01469	.04050	.10377
.905	GRADIENT	-.04236	.01862	-.00681	.00029	-.00091	.00064	.00019	.00005	-.00073	.00062

RUN NO. 155/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.102	-12.320	.58840	-.24570	.10130	.22227	-.05505	.19674	.06240	.01643	.07080	.12406
1.102	-9.970	.47570	-.20570	.08460	.21999	-.05175	.20889	.05815	.01531	.06830	.12016
1.102	-7.580	.35520	-.15640	.06520	.21913	-.05175	.21237	.05687	.01497	.06720	.11616
1.102	-5.170	.23680	-.10500	.04510	.21972	-.04850	.21866	.05539	.01458	.06410	.11156
1.102	-2.810	.13550	-.06340	.02640	.21584	-.04400	.21931	.05453	.01436	.06420	.11036
1.102	-.450	.03330	-.01850	.00660	.21022	-.03960	.21886	.05198	.01369	.06340	.10996
1.102	1.890	-.07350	.03130	-.01320	.21266	-.04178	.22180	.05294	.01394	.06310	.11046
1.102	4.220	-.16680	.06990	-.03060	.21766	-.04910	.22933	.05411	.01425	.05890	.11096
1.102	6.570	-.26180	.10700	-.04850	.22064	-.05423	.22734	.05570	.01467	.05580	.11486
1.102	8.920	-.36650	.15010	-.06600	.22231	-.05740	.22763	.05581	.01469	.05310	.11656
1.102	11.250	-.48070	.19660	-.09260	.22091	-.05980	.22283	.05921	.01559	.05380	.11946
1.102	GRADIENT	-.04327	.01919	-.00814	.00033	-.00074	.00128	-.00001	-.00000	-.00069	.00010

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OF POOR QUALITY

MSFC 594(1A33) 740TS (T1P1S1P201)

ORB STING

(A1C009) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 156/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.255	-12.510	.58600	-.23500	.09590	.23423	-.07324	.19966	.06265	.01649	.06670	.12219
1.255	-10.120	.46160	-.18670	.07850	.23640	-.06982	.20936	.05935	.01563	.06620	.12059
1.255	-7.660	.33640	-.13670	.06060	.23591	-.06604	.21594	.05627	.01481	.06400	.11719
1.255	-5.210	.21820	-.08880	.04190	.23307	-.06134	.22246	.05414	.01425	.06150	.11429
1.255	-2.800	.11260	-.04650	.02200	.23785	-.06357	.22580	.05191	.01367	.06000	.10799
1.255	-.400	.01130	-.00400	.00250	.23743	-.06352	.22436	.05085	.01339	.05890	.10559
1.255	1.950	-.08490	.03590	-.01530	.23575	-.06267	.23070	.05191	.01367	.05700	.10789
1.255	4.340	-.18090	.07390	-.03390	.22605	-.05897	.23097	.05574	.01467	.05610	.11149
1.255	6.720	-.28470	.11520	-.05250	.24038	-.07137	.23035	.05445	.01434	.05190	.11469
1.255	9.150	-.39750	.15880	-.06830	.24274	-.08017	.22795	.05616	.01479	.04990	.11729
1.255	11.550	-.51720	.20390	-.08380	.24163	-.08819	.21737	.06073	.01599	.05200	.12099
	GRADIENT	-.04109	.01687	-.00780	-.00156	.00062	.00092	.00053	.00014	-.00057	.00050

RUN NO. 141/ 0 RN/L = 6.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.456	-12.520	.60590	-.25780	.09510	.24571	-.09158	.22580	.05849	.01540	.05240	.09362
1.456	-10.120	.47520	-.20240	.07720	.25162	-.08961	.23538	.05540	.01459	.05210	.09312
1.456	-7.670	.34330	-.14530	.05920	.25278	-.08478	.24025	.05253	.01383	.05200	.09112
1.456	-5.230	.22490	-.09390	.04080	.25112	-.08023	.24494	.04935	.01299	.04980	.08932
1.456	-2.830	.11610	-.04730	.02120	.25050	-.08019	.24930	.04828	.01271	.04810	.08552
1.456	-.430	.01660	-.00570	.00290	.24612	-.07642	.25141	.04477	.01179	.04610	.08562
1.456	1.920	-.07580	.03230	-.01330	.24907	-.07781	.25181	.04647	.01224	.04390	.08692
1.456	4.320	-.17110	.06980	-.03130	.25314	-.08156	.25135	.04924	.01296	.04370	.08842
1.456	6.700	-.27640	.11340	-.04910	.25480	-.08666	.25214	.05094	.01341	.04140	.08982
1.456	9.140	-.39050	.16040	-.06550	.25654	-.09511	.24503	.05455	.01436	.04090	.09282
1.456	11.540	-.51960	.21280	-.08130	.25430	-.10183	.23463	.05700	.01501	.04270	.09562
	GRADIENT	-.04009	.01636	-.00730	.00046	-.00023	.00027	.00019	.00005	-.00065	.00042

DATE 23 OCT 75

IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC009) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = 5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 136/ 0 RN/L = 7.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.962	-12.660	.60300	-.26440	.08490	.24024	-.08582	.22135	.04627	.01218	.04060	.06677
1.962	-10.140	.46230	-.20670	.06730	.23183	-.07745	.21959	.04404	.01160	.03880	.06467
1.962	-7.710	.34590	-.15640	.05200	.22864	-.07302	.22516	.04287	.01129	.03790	.06507
1.962	-5.270	.23000	-.10410	.03540	.22578	-.06975	.23289	.04234	.01115	.03780	.06567
1.962	-2.850	.12050	-.05340	.01760	.22442	-.06957	.23572	.04181	.01101	.03720	.06507
1.962	-.430	.01730	-.00650	.00190	.21973	-.06657	.23694	.04138	.01090	.03580	.06447
1.962	1.930	-.07560	.03360	-.01080	.22164	-.06772	.24338	.04287	.01129	.03360	.06467
1.962	4.350	-.17700	.07900	-.02630	.22445	-.07052	.24598	.04245	.01118	.03110	.06587
1.962	6.770	-.28600	.12710	-.04330	.22138	-.06935	.24269	.04234	.01115	.02860	.06657
1.962	9.250	-.40320	.17610	-.05920	.22221	-.07162	.23450	.04372	.01151	.02640	.06657
1.962	11.680	-.53000	.22770	-.07430	.22888	-.08035	.23709	.04574	.01204	.02580	.06607
GRADIENT		-.04113	.01825	-.00603	.00008	-.00017	.00155	.00014	.00004	-.00086	.00011

RUN NO. 160/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 3.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
2.990	-11.210	.44230	-.17660	.05730	.15490	-.03528	.22356	.02012	.00530	.01910	.02892
2.990	-9.100	.35640	-.14420	.04720	.14740	-.02855	.22150	.01938	.00510	.01920	.02862
2.990	-6.940	.26750	-.10850	.03620	.14251	-.02445	.22033	.01895	.00499	.01940	.02832
2.990	-4.760	.17610	-.06920	.02330	.13218	-.01673	.21962	.01906	.00502	.01970	.02822
2.990	-2.590	.09380	-.03420	.01200	.12370	-.01035	.21680	.01938	.00510	.01960	.02762
2.990	-.400	.02230	-.00840	.00290	.11687	-.00563	.21870	.01948	.00513	.01870	.02742
2.990	1.750	-.05080	.01910	-.00670	.11995	-.00820	.21892	.01916	.00505	.01850	.02712
2.990	3.940	-.12680	.04650	-.01650	.12513	-.01368	.22261	.01927	.00507	.01750	.02802
2.990	6.100	-.20950	.07950	-.02810	.12937	-.01953	.22350	.01948	.00513	.01590	.02822
2.990	8.260	-.29940	.11820	-.04040	.13781	-.02635	.22583	.01895	.00499	.01480	.02862
2.990	10.380	-.39580	.15880	-.05240	.13867	-.02990	.22904	.01874	.00493	.01440	.02912
GRADIENT		-.03452	.01300	-.00452	-.00082	.00038	.00037	.00001	.00000	-.00025	-.00004

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(A1C009) ( 12 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = 5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 161/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.680	.31960	-.11900	.04440	.10291	-.00236	.21090	.00510	.00134	.00530	.00710
4.959	-8.680	.25760	-.09650	.03570	.10405	-.00481	.20449	.00531	.00140	.00550	.00760
4.959	-6.630	.19110	-.07040	.02560	.09372	.00091	.19978	.00542	.00143	.00570	.00770
4.959	-4.550	.12650	-.04390	.01730	.08959	.00324	.19687	.00553	.00146	.00580	.00770
4.959	-2.470	.06610	-.02080	.00870	.08177	.00866	.19287	.00563	.00148	.00600	.00790
4.959	-.370	.01040	-.00070	.00020	.08217	.00695	.19267	.00563	.00148	.00610	.00770
4.959	1.690	-.03950	.01520	-.00670	.07904	.00899	.19286	.00574	.00151	.00630	.00770
4.959	3.790	-.09690	.03480	-.01500	.08264	.00409	.19466	.00574	.00151	.00630	.00780
4.959	5.850	-.15730	.05640	-.02260	.08677	-.00024	.19787	.00563	.00148	.00610	.00790
4.959	7.910	-.22040	.08070	-.03090	.09107	-.00594	.20157	.00563	.00148	.00670	.00810
4.959	9.920	-.28530	.10460	-.03950	.09847	-.01114	.20847	.00563	.00148	.00640	.00820
GRADIENT		-.02651	.00928	-.00384	-.00080	.00010	-.00021	.00003	.00001	-.00006	-.00000

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(A1C010) ( 12 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = -5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 145/ 0 RN/L = 5.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.602	-11.060	.44700	-.17920	.05380	-.47426	.19779	.08035	.04088	.01076	.06270	.09968
.602	-9.020	.37060	-.15230	.04500	-.47524	.20047	.08455	.04077	.01073	.06340	.09878
.602	-6.880	.29170	-.12570	.03660	-.47684	.20132	.09294	.03928	.01034	.06000	.09588
.602	-4.720	.20540	-.09220	.02690	-.47736	.20596	.09911	.03822	.01006	.05640	.09208
.602	-2.580	.12310	-.05510	.01670	-.48374	.21244	.11041	.03811	.01003	.05270	.08688
.602	-.420	.03760	-.01510	.00690	-.48345	.21284	.11939	.03954	.01015	.04750	.08038
.602	1.700	-.04070	.01930	-.00030	-.48429	.21039	.12720	.03833	.01009	.04350	.07728
.602	3.840	-.11160	.04970	-.00750	-.48476	.20696	.13571	.03822	.01006	.03860	.07618
.602	5.960	-.19210	.08480	-.01650	-.47419	.19739	.13710	.03833	.01009	.03630	.08198
.602	8.100	-.26930	.11410	-.02490	-.48132	.19927	.12618	.04035	.01062	.03950	.08768
.602	10.160	-.35130	.14450	-.03330	-.48242	.19699	.12135	.03918	.01031	.03590	.09118
GRADIENT		-.03728	.01674	-.00401	-.00072	-.00000	.00421	.00001	.00000	-.00209	-.00194

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = -5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 144/ 0 RN/L = 5.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.799	-11.600	.49840	-.19860	.05900	-.49634	.18828	.07936	.04941	.01301	.06570	.11033
.799	-9.410	.41320	-.17260	.05100	-.45022	.19071	.08566	.04781	.01259	.06510	.10573
.799	-7.200	.32330	-.13900	.04100	-.49442	.19873	.09380	.04707	.01239	.06230	.10233
.799	-4.950	.23090	-.10450	.03070	-.49938	.20381	.09913	.04654	.01225	.05870	.09923
.799	-2.710	.13670	-.06290	.01820	-.50461	.21113	.10593	.04665	.01228	.05460	.09473
.799	-.460	.04200	-.01830	.00740	-.51513	.21868	.10809	.04558	.01200	.04930	.09053
.799	1.740	-.04820	.02390	-.00100	-.50412	.21028	.12261	.04516	.01189	.04520	.08763
.799	3.980	-.13370	.06150	-.01030	-.49512	.20165	.12994	.04633	.01220	.04120	.08893
.799	6.180	-.22280	.10040	-.02060	-.49256	.19596	.12307	.04760	.01253	.03860	.09763
.799	8.390	-.30790	.13260	-.02990	-.50534	.20091	.11891	.04867	.01281	.03740	.09903
.799	10.540	-.39500	.16640	-.04100	-.50526	.19673	.10932	.04835	.01273	.03830	.10473
.799	GRADIENT	-.04097	.01877	-.00454	.00040	-.00023	.00351	-.00009	-.00002	-.00199	-.00124

RUN NO. 143/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.902	-11.940	.55810	-.23070	.06840	-.50219	.18055	.09914	.05559	.01463	.06640	.11137
.902	-9.700	.46340	-.19750	.05830	-.50351	.18890	.10590	.05452	.01435	.06490	.11047
.902	-7.400	.35850	-.15820	.04670	-.50813	.19928	.11261	.05272	.01388	.06240	.10737
.902	-5.080	.25430	-.11740	.03490	-.50351	.20130	.11411	.05112	.01346	.05760	.10367
.902	-2.790	.14900	-.06880	.02100	-.51922	.21590	.12258	.05155	.01357	.05470	.10017
.902	-.480	.04010	-.01610	.00830	-.52595	.22597	.11839	.04974	.01310	.05120	.09677
.902	1.770	-.06000	.03350	-.00330	-.50427	.20705	.12639	.05133	.01352	.04800	.10017
.902	4.060	-.15490	.07600	-.01370	-.49676	.19630	.12771	.05282	.01391	.04330	.10627
.902	6.320	-.25160	.11930	-.02550	-.49678	.19027	.12721	.05442	.01433	.03910	.11147
.902	8.590	-.34620	.15640	-.03640	-.49708	.18540	.12265	.05707	.01503	.03890	.11367
.902	10.810	-.44140	.19270	-.04770	-.51639	.19290	.12443	.05750	.01514	.04040	.11297
.902	GRADIENT	-.04438	.02123	-.00507	.00389	-.00340	.00102	.00024	.00006	-.00164	.00095

ORIGINAL PAGE IS  
 OF POOR QUALITY

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 146/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.102	-12.530	.64356	-.26780	.08460	-.61506	.26338	.20251	.06633	.01746	.08110	.12436
1.102	-10.140	.52090	-.22330	.06990	-.60281	.26410	.20925	.06729	.01772	.07970	.12416
1.102	-7.730	.40250	-.17950	.05580	-.60069	.27133	.21454	.06910	.01819	.07840	.12306
1.102	-5.290	.27770	-.12680	.03950	-.59973	.27683	.22337	.07037	.01853	.07590	.11936
1.102	-2.900	.15840	-.07160	.02340	-.60622	.28596	.22644	.06920	.01822	.07570	.11786
1.102	-.520	.04690	-.02010	.00970	-.62345	.29936	.22679	.06665	.01755	.07420	.11796
1.102	1.820	-.06080	.02980	-.00320	-.60554	.28443	.22954	.06740	.01774	.06980	.12146
1.102	4.200	-.17030	.08050	-.01670	-.61751	.29093	.24059	.06995	.01842	.06390	.11466
1.102	6.550	-.28200	.13150	-.03160	-.62195	.28806	.24666	.07048	.01856	.05840	.11636
1.102	8.930	-.38920	.17250	-.04510	-.62303	.28166	.24331	.06963	.01833	.05400	.12136
1.102	11.290	-.50010	.21110	-.05880	-.62584	.27551	.23690	.06814	.01794	.05360	.12536
1.102	GRADIENT	-.04627	.02141	-.00563	-.00069	.00001	.00191	.00013	.00003	-.00168	-.00026

RUN NO. 142/ 0 RN/L = 6.66 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.252	-12.790	.64990	-.25560	.08450	-.65651	.26021	.20587	.06584	.01733	.07540	.12149
1.252	-10.370	.52650	-.21360	.07020	-.63622	.25396	.21556	.06435	.01694	.07360	.11859
1.252	-7.860	.39670	-.16620	.05570	-.61723	.24916	.21733	.06477	.01705	.07330	.11749
1.252	-5.370	.26820	-.11330	.03900	-.61591	.25521	.22307	.06584	.01733	.06930	.11569
1.252	-2.940	.14640	-.05910	.02180	-.61826	.26406	.22318	.06562	.01728	.06790	.11369
1.252	-.520	.03640	-.01100	.00790	-.62526	.27219	.22183	.06488	.01708	.06600	.11119
1.252	1.870	-.07020	.03410	-.00550	-.62382	.27096	.22946	.06435	.01694	.06140	.11069
1.252	4.290	-.18010	.08250	-.01940	-.62664	.26761	.23642	.06669	.01756	.05670	.11129
1.252	6.700	-.29650	.13120	-.03550	-.64017	.26949	.23180	.06871	.01809	.05620	.11839
1.252	9.160	-.41790	.17800	-.05000	-.66022	.27334	.22979	.06892	.01815	.05480	.12419
1.252	11.580	-.54020	.22100	-.06440	-.68907	.28461	.23055	.06795	.01789	.05390	.12769
1.252	GRADIENT	-.04510	.01951	-.00569	-.00099	.00039	.00197	.00011	.00003	-.00159	-.00032

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIP1SIP201)

ORB STING

(AICD10) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 140/ 0 RN/L = 6.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.460	-12.780	.65360	-.26490	.08290	-.64941	.25399	.23850	.06008	.01582	.06130	.09562
1.460	-10.370	.52910	-.21780	.06800	-.62135	.24167	.24308	.05870	.01545	.05860	.09212
1.460	-7.920	.40510	-.16960	.05350	-.60639	.23904	.24654	.05774	.01520	.05590	.09262
1.460	-5.430	.27580	-.11490	.03730	-.59821	.24074	.24702	.05817	.01531	.05510	.09162
1.460	-2.980	.15110	-.05890	.02050	-.59627	.24274	.25329	.05689	.01498	.05370	.08922
1.460	-.540	.04150	-.01270	.00770	-.59552	.24374	.25309	.05519	.01453	.05140	.08672
1.460	1.880	-.06810	.03070	-.00450	-.59728	.24549	.26018	.05540	.01459	.04800	.08732
1.460	4.320	-.17910	.07720	-.01770	-.59955	.24374	.25904	.05604	.01475	.04590	.08902
1.460	6.780	-.30010	.12940	-.03270	-.61227	.24502	.25455	.05764	.01517	.04680	.09462
1.460	9.220	-.41640	.17480	-.04680	-.63290	.25262	.25157	.05891	.01551	.04420	.09942
1.460	11.630	-.53770	.21910	-.06180	-.65875	.26389	.24883	.05796	.01526	.04340	.10332
1.460	GRADIENT	-.04524	.01857	-.00521	-.00048	.00020	.00100	-.00010	-.00003	-.00110	-.00000

RUN NO. 139/ 0 RN/L = 7.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.966	-12.970	.64400	-.26000	.07990	-.61526	.23935	.18351	.04362	.01148	.04280	.07297
1.966	-10.460	.50540	-.20570	.06330	-.57825	.23005	.21174	.04319	.01137	.04030	.07017
1.966	-7.970	.39420	-.15680	.04950	-.56031	.22295	.22391	.04192	.01104	.03830	.07197
1.966	-5.480	.26530	-.10750	.03520	-.54612	.21878	.23076	.04117	.01084	.03720	.07237
1.966	-3.000	.14550	-.05570	.02010	-.54132	.21903	.23784	.03968	.01045	.03570	.06857
1.966	-.520	.03390	-.01030	.00660	-.53898	.21760	.24588	.03915	.01031	.03390	.06527
1.966	1.930	-.07290	.03080	-.00590	-.54234	.21732	.25052	.04011	.01055	.03310	.06557
1.966	4.420	-.18970	.07970	-.02000	-.54911	.21745	.25371	.04192	.01104	.03180	.06837
1.966	6.910	-.30540	.12650	-.03420	-.56132	.22273	.25704	.04308	.01134	.02930	.06917
1.966	9.390	-.42240	.17220	-.04900	-.57837	.23113	.24664	.04479	.01179	.02770	.06977
1.966	11.950	-.54990	.22280	-.06450	-.60294	.24040	.24045	.04468	.01176	.02820	.07027
1.966	GRADIENT	-.04502	.01810	-.00537	-.00108	-.00020	.00211	.00031	.00008	-.00051	-.00001



MSFC 594(1A33) 740TS (TIPISIP201)

ORB STING

(A1C010) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = -5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 165/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
2.990	-11.350	.51220	-.20750	.06040	-.36877	.15634	.26298	.01810	.00477	.02130	.03072
2.990	-9.220	.41390	-.16620	.04940	-.36347	.15344	.25848	.01810	.00477	.02150	.03092
2.990	-7.060	.31840	-.12830	.03790	-.35605	.15065	.25480	.01767	.00465	.02160	.03082
2.990	-4.850	.22270	-.09090	.02700	-.35528	.14997	.25160	.01778	.00468	.02140	.03072
2.990	-2.650	.13030	-.05250	.01660	-.35371	.14959	.25019	.01789	.00471	.02100	.03122
2.990	-.440	.03590	-.01230	.00640	-.35281	.14819	.24819	.01789	.00471	.02030	.03132
2.990	1.740	-.05130	.02170	-.00340	-.35454	.14822	.25159	.01799	.00474	.01930	.03082
2.990	3.940	-.14530	.06170	-.01470	-.35784	.14772	.25769	.01799	.00474	.01860	.03002
2.990	6.130	-.23850	.09940	-.02540	-.36211	.14829	.25949	.01789	.00471	.01760	.03032
2.990	8.320	-.33060	.13500	-.03680	-.37452	.15460	.26287	.01831	.00482	.01740	.03072
2.990	10.440	-.42670	.17370	-.04750	-.38238	.15685	.26735	.01852	.00488	.01640	.03102
GRADIENT		-.04177	.01727	-.00471	-.00027	-.00027	.00062	.00002	.00001	-.00033	-.00008

RUN NO. 164/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.760	.41030	-.17090	.04800	-.28333	.13661	.26408	.00372	.00098	.00600	.00730
4.959	-8.750	.32770	-.13230	.03720	-.27686	.13063	.25707	.00383	.00101	.00610	.00750
4.959	-6.690	.24660	-.09690	.02710	-.27357	.12523	.24985	.00425	.00112	.00630	.00790
4.959	-4.590	.17240	-.06860	.01900	-.27373	.12458	.24474	.00446	.00118	.00650	.00800
4.959	-2.510	.10030	-.03810	.01130	-.27118	.11964	.23982	.00468	.00123	.00670	.00820
4.959	-.390	.02800	-.00940	.00340	-.27728	.11994	.23602	.00468	.00123	.00670	.00800
4.959	1.690	-.04420	.02050	-.00370	-.27754	.12078	.23891	.00489	.00129	.00680	.00820
4.959	3.790	-.11210	.04620	-.01050	-.27824	.12018	.24401	.00489	.00129	.00680	.00820
4.959	5.870	-.18580	.07610	-.01950	-.28148	.12124	.25112	.00468	.00123	.00670	.00820
4.959	7.950	-.26700	.11100	-.02920	-.28958	.12644	.25412	.00468	.00123	.00650	.00830
4.959	9.960	-.34380	.14150	-.03900	-.29841	.12946	.26062	.00478	.00126	.00620	.00830
GRADIENT		-.03404	.01375	-.00353	-.00074	-.00036	-.00011	.00005	.00001	.00003	.00002

DATE 23 OCT 75

IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (T1P1S1P201)

ORB STING

(A1C011) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 WREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = -15.000  
 ELEVTR = .000

RUN NO. 49/ 0    RN/L = 4.99    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.599	-11.720	-.03310	.03450	-.01130	-.83672	.36344	.09154	.03769	.00992	.05120	.10578
.599	-9.580	-.03700	.03640	-.01300	-.70417	.31032	.09939	.03673	.00967	.04860	.10108
.599	-7.410	-.03880	.03720	-.01410	-.56874	.25709	.10600	.03662	.00964	.04540	.09698
.599	-5.210	-.04110	.03890	-.01410	-.46060	.21416	.10983	.03609	.00950	.04430	.09418
.599	-3.030	-.04650	.04090	-.01590	-.34000	.16981	.11644	.03418	.00900	.04250	.08858
.599	-.800	-.04870	.04170	-.01630	-.22089	.12881	.11567	.03375	.00889	.04080	.08598
.599	1.420	-.05180	.04340	-.01650	-.09828	.08401	.11170	.03333	.00877	.03950	.08578
.599	3.630	-.05310	.04330	-.01630	.02017	.04221	.10400	.03163	.00833	.03960	.08848
.599	6.840	-.05570	.04370	-.01730	.13467	.00434	.09684	.03088	.00813	.03840	.08668
.599	8.040	-.05830	.04500	-.01730	.26105	-.03936	.08111	.03131	.00824	.04190	.08728
.599	10.140	-.06110	.04520	-.01770	.37355	-.08881	.06850	.02982	.00785	.04450	.08668
GRADIENT		-.00103	.00040	-.00006	.05419	-.01926	-.00186	-.00036	-.00010	-.00045	-.00002

RUN NO. 50/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.904	-13.203	-.03350	.03790	-.01070	-1.00600	.42742	.10737	.05335	.01405	.05180	.11507
.904	-10.850	-.03620	.03800	-.01110	-.83108	.35627	.11671	.05102	.01343	.05280	.11007
.904	-8.410	-.03990	.03960	-.01240	-.65537	.28404	.12139	.04793	.01262	.05100	.10537
.904	-5.950	-.04240	.03990	-.01330	-.49744	.22097	.12551	.04591	.01209	.04810	.10317
.904	-3.550	-.04270	.03910	-.01350	-.34282	.15777	.12736	.04506	.01186	.04610	.10047
.904	-1.150	-.04510	.03960	-.01420	-.19719	.08912	.13063	.04230	.01114	.04350	.09647
.904	1.280	-.04670	.03910	-.01480	-.04187	.02244	.12472	.04070	.01072	.04320	.09587
.904	3.710	-.04870	.03920	-.01570	.09987	-.02989	.11795	.04017	.01058	.04370	.09537
.904	6.120	-.05250	.03940	-.01620	.23355	-.06486	.11317	.03985	.01049	.04670	.09807
.904	8.510	-.05290	.03820	-.01600	.36085	-.09961	.10516	.03837	.01010	.05100	.09627
.904	10.790	-.05490	.03760	-.01560	.48395	-.14896	.09837	.03985	.01049	.05270	.09207
GRADIENT		-.00081	-.00001	-.00003	.06127	-.02600	-.00141	-.00067	-.00018	-.00031	-.00066

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MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(A1C011) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMPP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = -15.000  
 ELEVTR = .000

RUN NO. 52/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.100	-14.540	-.03430	.03850	-.00010	-1.23233	.53963	.20407	.06697	.01763	.06590	.13056
1.100	-11.840	-.03030	.03510	-.00980	-.98039	.43368	.20856	.06378	.01679	.07260	.13106
1.100	-9.190	-.02540	.03130	-.01020	-.77406	.35303	.21512	.06102	.01606	.07200	.12826
1.100	-6.510	-.02470	.03030	-.01070	-.57104	.26987	.21329	.05826	.01534	.06920	.12346
1.100	-3.920	-.02560	.03010	-.01100	-.39176	.20067	.21644	.05570	.01467	.06710	.12006
1.100	-1.350	-.02870	.03050	-.01180	-.21748	.13417	.22231	.05273	.01388	.06540	.11846
1.100	1.190	-.02930	.03010	-.01170	-.05734	.07017	.21739	.05145	.01355	.06420	.12246
1.100	3.750	-.02920	.02890	-.01180	.11155	-.00250	.21193	.05071	.01335	.06390	.12006
1.100	6.300	-.03050	.02830	-.01190	.28055	-.06670	.20113	.05071	.01335	.06630	.12046
1.100	8.780	-.03230	.02700	-.01160	.43338	-.12925	.18930	.05135	.01352	.06870	.11936
1.100	11.150	-.04030	.03010	-.01220	.56640	-.18090	.17563	.05241	.01380	.07180	.11556
	GRADIENT	-.00045	-.00016	-.00009	.06537	-.02636	-.00072	-.00064	-.00017	-.00042	.00016

RUN NO. 51/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.247	-15.080	-.03020	.03400	-.00800	-1.30455	.56649	.23395	.06446	.01697	.05820	.11479
1.247	-12.240	-.03060	.03350	-.00840	-1.02298	.44156	.22564	.06307	.01661	.06180	.12079
1.247	-9.420	-.02790	.03010	-.00920	-.76678	.33279	.22681	.05850	.01540	.06120	.11779
1.247	-6.660	-.02690	.02970	-.00990	-.55211	.24818	.22946	.05595	.01473	.06220	.11639
1.247	-4.010	-.02810	.02720	-.01040	-.36191	.17356	.23262	.05329	.01403	.05990	.11519
1.247	-1.350	-.02930	.02730	-.01080	-.17939	.10263	.23522	.04979	.01311	.05870	.11409
1.247	1.220	-.03240	.02800	-.01170	-.02191	.04315	.23322	.04989	.01314	.05750	.11789
1.247	3.770	-.03320	.02650	-.01230	.12987	-.01732	.22764	.04957	.01305	.05920	.11669
1.247	6.310	-.03330	.02540	-.01240	.28659	-.07667	.21967	.05064	.01333	.06270	.11639
1.247	8.800	-.03440	.02410	-.01220	.43262	-.13710	.21528	.05053	.01330	.06330	.11039
1.247	11.260	-.03700	.02380	-.01250	.57459	-.18367	.20667	.05064	.01333	.06400	.10899
	GRADIENT	-.00071	-.00005	-.00025	.06304	-.02440	-.00065	-.00043	-.00011	-.00013	.00032

MSFC 594(1A33) 740TS (T1P1S1P201)

ORB STING

(A1C011) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = -15.000  
 ELEVTR = .000

RUN NO. 78/ 0 RN/L = 7.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.961	-14.930	-.01410	.02310	-.00440	-1.11117	.46760	.28170	.04213	.01109	.03350	.07307
1.961	-12.120	-.01570	.02300	-.00480	-.87490	.36425	.26944	.04149	.01092	.03520	.06977
1.961	-9.350	-.01600	.02080	-.00530	-.66674	.27532	.26182	.04011	.01056	.03520	.06827
1.961	-6.630	-.01810	.02100	-.00590	-.47576	.19747	.25718	.03905	.01028	.03290	.06677
1.961	-3.970	-.01740	.01940	-.00620	-.31151	.13533	.25107	.03826	.01034	.03170	.06637
1.961	-1.390	-.02030	.02010	-.00700	-.16482	.08192	.24874	.03958	.01045	.03270	.06607
1.961	1.220	-.02160	.02010	-.00730	-.01613	.02880	.24167	.04085	.01076	.03450	.06787
1.961	3.770	-.02420	.02080	-.00770	.12134	-.02630	.23992	.04170	.01098	.03540	.06697
1.961	6.300	-.02760	.02250	-.00820	.26914	-.08737	.24277	.04096	.01078	.03550	.06617
1.961	8.900	-.03230	.02410	-.00890	.42120	-.13932	.24609	.04075	.01073	.03590	.06567
1.961	11.490	-.03320	.02400	-.00950	.56760	-.17920	.24355	.03958	.01042	.03630	.06667
	GRADIENT	-.00084	.00016	-.00019	.05603	-.02083	-.00157	.00033	.00009	.00049	.00014

RUN NO. 81/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.960	-.00140	.00900	-.00160	-.47940	.19248	.26379	.00361	.00095	.00570	.00780
4.959	-8.950	-.00250	.00820	-.00150	-.41181	.17139	.26786	.00404	.00106	.00580	.00760
4.959	-6.870	-.00350	.00790	-.00230	-.33548	.14594	.25372	.00468	.00123	.00600	.00760
4.959	-4.770	-.00190	.00540	-.00140	-.26224	.12448	.23891	.00489	.00129	.00610	.00750
4.959	-2.670	-.00070	.00590	-.00090	-.18917	.09751	.22810	.00500	.00132	.00610	.00730
4.959	-.580	-.00180	.00480	-.00150	-.11962	.07556	.21869	.00521	.00137	.00630	.00740
4.959	1.520	-.00240	.00450	-.00190	-.05125	.05289	.21119	.00531	.00140	.00630	.00740
4.959	3.630	.00110	.00180	-.00100	.02162	.03041	.20618	.00542	.00143	.00620	.00740
4.959	5.710	-.00080	.00250	-.00110	.10118	-.00114	.19749	.00521	.00137	.00600	.00710
4.959	7.780	-.00150	.00230	-.00100	.17458	-.02654	.19169	.00521	.00137	.00600	.00650
4.959	9.800	-.00220	.00230	-.00110	.25971	-.05936	.18660	.00510	.00134	.00580	.00590
	GRADIENT	.00021	-.00041	-.00001	.03352	-.01109	-.00392	.00007	.00002	.00002	-.00000

MSFC 594(1A33) 740TS (T1P1S1P201)

ORB STING

(A1C012) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = -15.000  
 ELEVTR = .000

RUN NO. 217/ 1 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.598	-11.030	.41920	-.16000	.05720	.14191	-.01709	.09287	.03375	.00889	.05210	.08558
.598	-8.990	.32720	-.12340	.04220	.12676	-.00511	.10083	.03280	.00863	.04890	.08238
.598	-6.830	.23510	-.08270	.02730	.11668	.00651	.10662	.03120	.00822	.04800	.08118
.598	-4.660	.14550	-.04240	.01410	.11205	.01291	.11175	.03248	.00855	.04520	.08048
.598	-2.520	.05870	-.00420	.00000	.11118	.01601	.11822	.03120	.00822	.04250	.07698
.598	-.380	-.02410	.03390	-.01540	.10183	.02196	.12031	.03142	.00827	.04050	.07468
.598	1.760	-.10100	.06710	-.03270	.10747	.01579	.12145	.03237	.00852	.03840	.07768
.598	3.820	-.17770	.11880	-.04660	.10415	.01457	.13116	.03397	.00894	.03650	.07518
.598	6.000	-.26150	.13960	-.06130	.11401	.00581	.13017	.03375	.00889	.03570	.07728
.598	8.170	-.34930	.17620	-.07460	.11815	-.00016	.12959	.03514	.00925	.03520	.08068
.598	10.190	-.42380	.20390	-.08470	.13530	-.01391	.10407	.03875	.01020	.03930	.09398
.598	GRADIENT	-.03796	.01853	-.00726	-.00092	.00015	.00198	.00019	.00005	-.00101	-.00047

RUN NO. 218/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.901	-11.830	.50640	-.19480	.07430	.19084	-.05253	.09666	.04676	.01231	.05840	.10257
.901	-9.620	.40790	-.16140	.06150	.19932	-.05868	.10403	.04570	.01203	.05480	.10097
.901	-7.310	.30120	-.11900	.04380	.19832	-.05713	.11074	.04379	.01153	.05260	.09757
.901	-5.000	.20080	-.07840	.02650	.19708	-.05683	.11507	.04166	.01097	.05000	.09447
.901	-2.720	.10410	-.03560	.00900	.19373	-.05186	.11822	.04070	.01072	.04670	.09287
.901	-.420	.00210	.01240	-.00820	.18192	-.04768	.11665	.04187	.01102	.04540	.09167
.901	1.850	-.10310	.06310	-.02540	.18458	-.05233	.11907	.04166	.01097	.04310	.09427
.901	4.100	-.18990	.09940	-.04060	.19221	-.05923	.11542	.04421	.01164	.04230	.10097
.901	6.380	-.28670	.14220	-.05810	.20368	-.06455	.12160	.04623	.01217	.04060	.10207
.901	8.610	-.38040	.18570	-.07510	.18672	-.04973	.12374	.04719	.01242	.03840	.09857
.901	10.820	-.46930	.21860	-.08790	.18343	-.04836	.12359	.04793	.01262	.03820	.10147
.901	GRADIENT	-.04342	.01995	-.00741	-.00084	-.00023	.00007	.00027	.00007	-.00083	.00063

MSFC 594(1A33) 740TS (TIPISIP201)

ORB STING

(AIC012) ( 12 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = 5.000 RUDDER = -15.000  
 ELEVTR = .000

RUN NO. 220/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.102	-12.290	.56660	-.22820	.09330	.23436	-.06308	.20260	.05294	.01394	.06610	.11755
1.102	-9.950	.44860	-.18260	.07460	.23315	-.06155	.20732	.05262	.01385	.06640	.11586
1.102	-7.540	.32490	-.13160	.05440	.22816	-.05810	.21586	.05028	.01324	.06430	.11086
1.102	-5.150	.21100	-.08190	.03450	.22505	-.05345	.21925	.04879	.01285	.06240	.10836
1.102	-2.790	.11000	-.04110	.01520	.21549	-.04448	.22388	.04826	.01271	.06050	.10596
1.102	-.440	.01060	.00320	-.00390	.20772	-.03668	.22173	.04741	.01248	.06020	.10646
1.102	1.900	-.09630	.05400	-.02410	.20952	-.04040	.22538	.04816	.01268	.05900	.10636
1.102	4.220	-.19020	.09310	-.04240	.20662	-.04275	.22897	.05007	.01318	.05600	.10966
1.102	6.570	-.28400	.13120	-.06100	.20783	-.04293	.23214	.04890	.01287	.05160	.10976
1.102	8.990	-.39410	.17980	-.08080	.21460	-.04835	.23132	.05092	.01341	.05010	.11276
1.102	11.250	-.51020	.22730	-.09890	.21221	-.04905	.22744	.05390	.01419	.05000	.11616
1.102	GRADIENT	-.04311	.01940	-.00826	-.00106	.00007	.00081	.00026	.00007	-.00063	.00047

RUN NO. 219/ 1 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.248	-12.500	.57880	-.22690	.09050	.22316	-.06844	.21874	.05137	.01616	.06950	.12489
1.248	-10.140	.45240	-.17590	.07100	.22253	-.06161	.23113	.05808	.01529	.06790	.12109
1.248	-7.660	.32250	-.12170	.05130	.22215	-.05327	.23847	.05574	.01467	.06600	.11759
1.248	-5.190	.20110	-.07020	.03090	.22219	-.04972	.24636	.05255	.01394	.06250	.11379
1.248	-2.810	.09680	-.02750	.01170	.22974	-.05265	.24512	.05159	.01358	.06140	.11109
1.248	-.430	-.00430	.01620	-.00740	.22624	-.05040	.24353	.04968	.01308	.06020	.10969
1.248	1.950	-.10260	.05720	-.02630	.22500	-.04977	.24870	.05021	.01322	.05750	.11049
1.248	4.300	-.20020	.09770	-.04520	.22443	-.05082	.25686	.05085	.01339	.05400	.11179
1.248	6.690	-.30440	.14050	-.06420	.22812	-.05459	.25488	.05393	.01420	.05160	.11609
1.248	9.170	-.42170	.18710	-.08260	.22896	-.05951	.25108	.05723	.01507	.05070	.11999
1.248	11.520	-.54270	.23340	-.09880	.23368	-.06844	.24386	.06095	.01605	.05280	.12359
1.248	GRADIENT	-.04173	.01757	-.00800	-.00072	.00026	.00170	-.00007	-.00002	-.00105	.00012

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DATE 23 OCT 75

1A33 TABULATED DATA

MSFC 594(1A33) 740TS (T1P1S1P201)

ORB STING

(A1C012) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = 5.000 RUDDER = -15.000  
 ELEVTR = .000

RUN NO. 184/ 0 RN/L = 7.07 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.961	-12.580	.57780	-.24930	.07870	.24771	-.09032	.21420	.04372	.01151	.03960	.06667
1.961	-10.140	.45000	-.19660	.06290	.23874	-.08130	.21912	.04170	.01098	.03810	.06547
1.961	-7.690	.32960	-.14350	.04640	.23049	-.07370	.22363	.04000	.01053	.03730	.06597
1.961	-5.250	.21470	-.09050	.02970	.22876	-.07008	.23382	.04011	.01056	.03700	.06637
1.961	-2.840	.10440	-.03890	.01160	.22394	-.06723	.23718	.03905	.01028	.03630	.06577
1.961	-.420	.00410	.00580	-.00370	.21844	-.06440	.23743	.03830	.01008	.03530	.06507
1.961	1.940	-.09120	.04940	-.01710	.22165	-.06527	.24709	.04053	.01067	.03260	.06507
1.961	4.340	-.19150	.09300	-.03260	.21996	-.06692	.24751	.04202	.01106	.03090	.06617
1.961	6.780	-.29960	.14010	-.04900	.21574	-.06430	.24562	.04170	.01098	.02870	.06697
1.961	9.250	-.41890	.19070	-.06530	.21552	-.06572	.24603	.04330	.01140	.02610	.06597
1.961	11.680	-.54380	.24290	-.08030	.21952	-.07267	.23992	.04521	.01190	.02570	.06547
	GRADIENT	-.04113	.01834	-.00611	-.00037	.00000	.00170	.00047	.00012	-.00079	.00005

RUN NO. 181/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.680	.31590	-.11440	.04330	.10912	-.00719	.21028	.00542	.00143	.00570	.00780
4.959	-8.670	.24930	-.08900	.03320	.10479	-.00646	.20577	.00553	.00146	.00610	.00790
4.959	-6.630	.18430	-.06480	.02410	.09444	-.00182	.20096	.00574	.00151	.00630	.00830
4.959	-4.550	.12090	-.03970	.01610	.08995	.00186	.19724	.00606	.00160	.00650	.00840
4.959	-2.470	.06080	-.01490	.00680	.08780	.00411	.19453	.00627	.00165	.00660	.00840
4.959	-.380	.00780	.00260	-.00050	.08223	.03678	.19313	.00617	.00162	.00670	.00830
4.959	1.690	-.04960	.02230	-.01000	.08273	.00488	.19453	.00617	.00162	.00670	.00820
4.959	3.770	-.10500	.04160	-.01750	.08020	.00091	.19823	.00627	.00165	.00660	.00830
4.959	5.850	-.16550	.05440	-.02660	.08687	-.00046	.20062	.00638	.00168	.00650	.00850
4.959	7.910	-.23020	.08900	-.03400	.09160	-.00659	.20573	.00627	.00165	.00600	.00870
4.959	9.920	-.29790	.11510	-.04230	.10233	-.01512	.21133	.00617	.00162	.00580	.00880
	GRADIENT	-.02703	.00961	-.00404	-.00118	-.00005	.00009	.00002	.00000	.00001	..00002

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIP1SIP201)

ORB STING

(AIC013) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.000 RUDDER = -15.000  
 ELEVT R = .000

RUN NO. 232/ 0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.600	-11.060	.41880	-.15180	.04160	-.45695	.18804	.08479	.03854	.01015	.06420	.09718
.600	-8.980	.34000	-.12310	.03250	-.47221	.19934	.09256	.03726	.00981	.06340	.09848
.600	-6.870	.25990	-.09370	.02260	-.48769	.21274	.09051	.03641	.00959	.06160	.10208
.600	-4.720	.17210	-.05810	.01230	-.49058	.21894	.09694	.03599	.00947	.05800	.09808
.600	-2.580	.09020	-.02180	.00150	-.49502	.22486	.10231	.03552	.00961	.05630	.09568
.600	-.420	.00290	-.01850	-.00840	-.50578	.23129	.11223	.03450	.00908	.05010	.08838
.600	1.710	-.08010	.05790	-.01690	-.49884	.22129	.12740	.03662	.00964	.04370	.08228
.600	3.860	-.15830	.09170	-.02530	-.49766	.21619	.13227	.03705	.00975	.04150	.08198
.600	5.970	-.23700	.12710	-.03520	-.48516	.20699	.13067	.03705	.00975	.03870	.08718
.600	8.090	-.31540	.15770	-.04420	-.49119	.20737	.12846	.03907	.01029	.03650	.09228
.600	10.160	-.39850	.19060	-.05570	-.49580	.20714	.11879	.04024	.01059	.03730	.09738
.600	GRADIENT	-.03875	.01768	-.00436	-.00084	-.00042	.00446	.00010	.00003	-.00213	-.00213

RUN NO. 231/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.900	-11.890	.53200	-.21070	.05840	-.49848	.18049	.09518	.04985	.01312	.06930	.11127
.900	-9.690	.43680	-.17640	.04850	-.50261	.19185	.10522	.04921	.01296	.06750	.10927
.900	-7.370	.33400	-.13910	.03750	-.50665	.20094	.11105	.04708	.01240	.06420	.10797
.900	-5.070	.22900	-.09370	.02250	-.50718	.20697	.11344	.04719	.01242	.06050	.10687
.900	-2.780	.12300	-.04340	.00760	-.51436	.21885	.12062	.04751	.01251	.05570	.10247
.900	-.480	.01190	-.01280	-.00610	-.53925	.23837	.11779	.04634	.01220	.05510	.10127
.900	1.770	-.08680	.06140	-.01700	-.51645	.21994	.12625	.04708	.01240	.04930	.10617
.900	4.050	-.19020	.11030	-.02940	-.51168	.20819	.12998	.04985	.01312	.04250	.11227
.900	6.330	-.29210	.15870	-.04450	-.52050	.20990	.13673	.05070	.01335	.04000	.10637
.900	8.580	-.38600	.19700	-.05620	-.52268	.20805	.13287	.05176	.01363	.03960	.11307
.900	10.810	-.47930	.23120	-.06710	-.52673	.20425	.12627	.05346	.01407	.03960	.11657
.900	GRADIENT	-.04566	.02242	-.00536	.00134	-.00220	.00160	.00034	.00009	-.00199	.00151



MSFC 594(1A33) 740TS (T1P1S1P201)

ORB STING

(A1C013) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = -5.000 RUDDER = -15.000  
 ELEVTR = .000

RUN NO. 229/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.097	-12.470	.61070	-.24270	.07270	-.59891	.25670	.20188	.05006	.01581	.08040	.11676
1.097	-10.090	.49200	-.19960	.05780	-.59366	.26413	.20742	.06102	.01606	.08060	.11836
1.097	-7.690	.37180	-.15330	.04250	-.59501	.27313	.21672	.06272	.01651	.07830	.11696
1.097	-5.280	.25300	-.10220	.02630	-.59541	.27883	.22762	.06272	.01651	.07480	.11316
1.097	-2.900	.13390	-.04690	.01000	-.60096	.28753	.23352	.06102	.01606	.07370	.11176
1.097	-.520	.02260	.00570	-.00340	-.62013	.30370	.23326	.05709	.01503	.07230	.11406
1.097	1.820	-.08540	.05660	-.01650	-.60575	.29080	.24260	.05794	.01525	.06680	.11606
1.097	4.170	-.19010	.10420	-.02880	-.60188	.28630	.24775	.05879	.01548	.05900	.11796
1.097	6.540	-.30740	.15890	-.04460	-.61821	.29238	.25043	.06081	.01601	.05390	.11476
1.097	8.920	-.41960	.20460	-.05920	-.61951	.28778	.24853	.06081	.01601	.04900	.11766
1.097	11.280	-.53480	.24700	-.07420	-.62512	.28245	.24317	.06199	.01632	.04740	.11936
1.097	GRADIENT	-.04586	.02141	-.00550	.00048	-.00070	.00221	-.00025	-.00007	-.00210	.00087

RUN NO. 230/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.251	-12.730	.62450	-.23820	.07560	-.64018	.25009	.20350	.06190	.01630	.07780	.11789
1.251	-10.310	.49590	-.19180	.05980	-.62290	.24551	.21090	.06201	.01633	.07510	.11569
1.251	-7.820	.36750	-.14220	.04390	-.60946	.24448	.21763	.06148	.01619	.07120	.11409
1.251	-5.350	.24020	-.08760	.02650	-.60551	.25156	.22359	.06052	.01593	.07030	.11339
1.251	-2.920	.11920	-.03350	.00930	-.62266	.27283	.22524	.05957	.01568	.07060	.11499
1.251	-.510	.01050	.01430	-.00440	-.62956	.28166	.22529	.05882	.01549	.06800	.11379
1.251	1.860	-.09400	.05970	-.01740	-.62850	.27961	.23580	.06201	.01633	.06330	.11209
1.251	4.260	-.20450	.10900	-.03180	-.63567	.27779	.24560	.06531	.01719	.05600	.11279
1.251	6.690	-.31960	.15740	-.04690	-.63912	.27179	.23940	.06360	.01675	.05350	.11389
1.251	9.140	-.43650	.20000	-.06070	-.65585	.27486	.23511	.06180	.01627	.05210	.11899
1.251	11.580	-.56420	.24580	-.07610	-.68442	.28694	.23812	.06169	.01624	.05180	.12419
1.251	GRADIENT	-.04499	.01978	-.00570	-.00159	.00054	.00299	.00085	.00022	-.00203	-.00035

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.000 RUDDER = -15.000  
 ELEVTR = .000

RUN NO. 185/ 0 RN/L = 7.11 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.948	-12.940	.62830	-.24890	.07430	-.58034	.23233	.23619	.04734	.01246	.04020	.06997
1.948	-10.460	.49450	-.19240	.05740	-.56193	.22475	.23706	.04617	.01215	.03900	.06807
1.948	-8.020	.37990	-.14570	.04350	-.56291	.22148	.24495	.04457	.01174	.03700	.06647
1.948	-5.540	.25990	-.09490	.02850	-.54776	.21908	.25236	.04287	.01129	.03590	.06657
1.948	-3.070	.14320	-.04510	.01370	-.56260	.22400	.25925	.03958	.01042	.03590	.06647
1.948	-.550	.02570	-.00290	-.00140	-.56065	.22630	.26505	.03788	.00997	.03520	.06567
1.948	1.930	-.08730	.04640	-.01390	-.57106	.23025	.27321	.04021	.01059	.03310	.06587
1.948	4.420	-.20520	.09620	-.02800	-.56925	.22748	.27148	.04245	.01118	.03050	.06657
1.948	6.940	-.32610	.14430	-.04250	-.58870	.23575	.27504	.04489	.01182	.02770	.06597
1.948	9.450	-.44160	.18810	-.05570	-.61008	.24800	.26937	.04595	.01210	.02660	.06657
1.948	11.910	-.56960	.23690	-.07180	-.63914	.26008	.27300	.04542	.01196	.02620	.06607
	GRADIENT	-.04642	.01873	-.00552	-.00242	.00058	.00180	.00044	.00012	-.00073	.00002

RUN NO. 180/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.760	.40290	-.16460	.04520	-.28012	.13426	.26189	.00521	.00137	.00660	.00790
4.959	-8.740	.32050	-.12700	.03450	-.27381	.12764	.25587	.00553	.00146	.00680	.00830
4.959	-6.690	.24080	-.09200	.02500	-.27359	.12671	.24915	.00585	.00154	.00700	.00860
4.959	-4.590	.16370	-.06110	.01680	-.27032	.12314	.24465	.00595	.00157	.00720	.00870
4.959	-2.500	.09300	-.03240	.00830	-.27389	.12331	.23875	.00585	.00154	.00720	.00870
4.959	-.400	.02390	-.00430	.00170	-.27165	.11776	.23724	.00606	.00160	.00730	.00860
4.959	1.680	-.04960	.02680	-.00610	-.27755	.12096	.23854	.00606	.00160	.00730	.00870
4.959	3.800	-.12340	.05660	-.01560	-.27795	.12096	.24494	.00606	.00160	.00730	.00870
4.959	5.870	-.19710	.08710	-.02380	-.28402	.12454	.25195	.00595	.00157	.00720	.00890
4.959	7.970	-.27510	.11990	-.03370	-.29246	.12878	.25706	.00574	.00151	.00700	.00890
4.959	9.960	-.35620	.15440	-.04320	-.29771	.13114	.26387	.00553	.00146	.00670	.00890
	GRADIENT	-.03420	.01406	-.00378	-.00090	-.00032	.00002	.00002	.00001	.00001	-.00000

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DATE 20 NOV 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(A1C014) ( 18 NOV 75 )

PARAMETRIC DATA

BETA = .000 RUDDER = -20.000  
ELEVTR = .000

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
SCALE = .0040

RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLMF	CAF	CABO	CNBO	CABS	CABE	CY	CYN	CBL
.599	-11.730	-.84760	.37097	.10723	.03949	.01040	.05190	.09198	-.05480	.05680	-.02130
.599	-9.600	-.71779	.31949	.11320	.03833	.01009	.04810	.09038	-.05970	.05890	-.02250
.599	-7.420	-.58106	.26571	.11992	.03631	.00956	.04430	.08918	-.06290	.06050	-.02370
.599	-5.220	-.46813	.22026	.12518	.03694	.00973	.04340	.08178	-.06260	.06150	-.02370
.599	-3.020	-.35360	.17796	.12883	.03609	.00950	.04020	.07938	-.06470	.06080	-.02430
.599	-.820	-.23596	.13809	.12628	.03365	.00886	.03980	.07978	-.06680	.06130	-.02420
.599	1.400	-.11670	.09481	.12224	.03418	.00900	.03900	.07958	-.06700	.06110	-.02460
.599	3.630	.00432	.05234	.11494	.03259	.00858	.03990	.08088	-.07160	.06280	-.02490
.599	5.830	.12691	.00938	.11003	.03110	.00819	.04000	.07656	-.07290	.06250	-.02510
.599	8.020	.24720	-.03121	.09800	.03152	.00830	.04110	.07598	-.07520	.06190	-.02580
.599	10.130	.36137	-.07896	.08524	.03088	.00813	.04220	.07518	-.07450	.06120	-.02550
.599	GRADIENT	.05381	-.01895	-.00206	-.00045	-.00012	-.00008	.00019	-.00094	.00026	-.00010

RN/L = 6.26 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLMF	CAF	CABO	CNBO	CABS	CABE	CY	CYN	CBL
.895	-13.230	-1.01545	.43985	.10092	.05431	.01430	.05060	.11997	-.04930	.05360	-.01890
.895	-10.840	-.83856	.36752	.11085	.05208	.01371	.05330	.11347	-.04990	.05280	-.01890
.895	-8.380	-.66105	.29230	.12293	.04900	.01290	.04980	.10547	-.05550	.05560	-.02000
.895	-5.900	-.49749	.22749	.12846	.04687	.01234	.04660	.10147	-.05570	.05480	-.02080
.895	-3.490	-.34399	.16297	.13032	.04421	.01164	.04450	.09767	-.06010	.05630	-.02200
.895	-1.120	-.19735	.09447	.13232	.04251	.01119	.04240	.09407	-.05930	.05510	-.02220
.895	1.290	-.05295	.03579	.12856	.04177	.01100	.04070	.09297	-.06030	.05480	-.02220
.895	3.680	.08482	-.01376	.12230	.04113	.01083	.04190	.09217	-.06320	.05440	-.02340
.895	6.110	.22003	-.05206	.11672	.04070	.01072	.04580	.09647	-.06790	.05540	-.02390
.895	8.490	.34760	-.08991	.10826	.04007	.01055	.05010	.09557	-.06740	.05420	-.02340
.895	10.760	.47337	-.13909	.09815	.04017	.01058	.05100	.09147	-.07040	.05440	-.02380
.895	GRADIENT	.05982	-.02461	-.00116	-.00042	-.00011	-.00040	-.00074	-.00043	-.00025	-.00018

DATE 20 NOV 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC014) ( 18 NOV 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = -20.000  
 ELEVTR = .000

RUN NO. 53/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLMF	CAF	CABO	CN80	CABS	CABE	CY	CYN	CBL
1.104	-14.530	-1.23874	.55341	.21080	.06814	.01794	.06520	.12946	-.05120	.05740	-.01760
1.104	-11.790	-.98179	.44293	.21164	.06570	.01730	.07070	.12896	-.04870	.05490	-.01810
1.104	-9.170	-.77609	.36208	.21706	.06378	.01679	.07210	.12676	-.04300	.04940	-.01830
1.104	-6.520	-.58336	.28553	.22782	.06192	.01506	.06950	.12096	-.03930	.04690	-.01820
1.104	-3.930	-.40181	.21445	.22989	.05815	.01531	.06780	.11716	-.04190	.04670	-.01890
1.104	-1.350	-.22734	.14782	.23489	.05465	.01444	.06600	.11726	-.04240	.04550	-.01880
1.104	1.190	-.06339	.08198	.23284	.05390	.01419	.06400	.11746	-.04340	.04570	-.01880
1.104	3.780	.10844	.00822	.22515	.05379	.01416	.06490	.11656	-.04400	.04460	-.01880
1.104	6.300	.27405	-.05595	.21862	.05262	.01385	.06560	.11466	-.04560	.04440	-.01890
1.104	8.790	.42787	-.11980	.20686	.05368	.01413	.06820	.11086	-.04600	.04160	-.01930
1.104	11.150	.55917	-.17040	.18976	.05368	.01413	.07100	.11356	-.05330	.04460	-.01840
GRADIENT		.06594	-.02675	-.00063	-.00055	-.00014	-.00042	-.00006	-.00028	-.00024	.00001

RUN NO. 54/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLMF	CAF	CABO	CN80	CABS	CABE	CY	CYN	CBL
1.249	-15.060	-1.31248	.57974	.23199	.06722	.01770	.05970	.12239	-.04960	.05250	-.01780
1.249	-12.210	-1.02144	.44794	.22867	.06254	.01647	.06280	.12119	-.04980	.05140	-.01760
1.249	-9.400	-.76928	.34316	.23036	.05925	.01560	.06290	.11779	-.04470	.04690	-.01770
1.249	-6.640	-.55506	.25708	.23716	.05765	.01518	.06320	.11389	-.04210	.04410	-.01780
1.249	-4.000	-.36430	.18178	.24418	.05553	.01462	.06100	.11209	-.04260	.04270	-.01790
1.249	-1.350	-.18489	.11248	.24561	.05170	.01361	.05950	.11179	-.04430	.04260	-.01800
1.249	1.240	-.02140	.04763	.24300	.05021	.01322	.05720	.11319	-.04530	.04200	-.01790
1.249	3.790	.13200	-.01507	.23750	.05021	.01322	.05800	.11319	-.04500	.03990	-.01810
1.249	6.320	.28591	-.07269	.23075	.05096	.01342	.06140	.11229	-.04790	.04150	-.01880
1.249	8.810	.43241	-.13439	.22085	.05096	.01342	.06280	.10899	-.04740	.03900	-.01850
1.249	11.280	.57540	-.18062	.21028	.05212	.01372	.06440	.10889	-.04860	.03780	-.01850
GRADIENT		.06367	-.02525	-.00087	-.00067	-.00018	-.00044	.00018	-.00032	-.00035	-.00002

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC014) ( 18 NOV 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = -20.000  
 ELEVTR = .000

RUN NO. 79/ 0 RN/L = 7.07 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLMF	CAF	CABO	CNBO	CABS	CABE	CY	CYN	CBL
1.958	-14.980	-1.12096	.47740	.28922	.04170	.01098	.03350	.07377	-.02670	.03610	-.01060
1.958	-12.160	-.88622	.37338	.27566	.04117	.01064	.03500	.07077	-.02860	.03600	-.01090
1.958	-9.380	-.67258	.28248	.26843	.03990	.01050	.03510	.06887	-.02780	.03320	-.01080
1.958	-6.580	-.46990	.19993	.25999	.03883	.01022	.03250	.06667	-.02790	.03140	-.01100
1.958	-3.960	-.31218	.13960	.25458	.03915	.01031	.03160	.06627	-.02770	.03020	-.01100
1.958	-1.390	-.16985	.08845	.25304	.03979	.01048	.03280	.06637	-.02950	.03020	-.01160
1.958	1.170	-.02722	.03668	.25466	.04117	.01084	.03520	.06877	-.03100	.03000	-.01180
1.958	3.760	.11719	-.02015	.25011	.04192	.01104	.03590	.06777	-.03300	.03030	-.01180
1.958	6.310	.26708	-.08182	.24926	.04117	.01084	.03600	.06717	-.03490	.03050	-.01200
1.958	8.910	.41747	-.13360	.25017	.04085	.01076	.03600	.06677	-.03620	.03170	-.01240
1.958	11.490	.56618	-.17467	.24824	.03968	.01045	.03630	.06757	-.04070	.03180	-.01290
	GRADIENT	.05563	-.02065	-.00046	.00038	.00010	.00059	.00027	-.00067	.00000	-.00010

RUN NO. 80/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLMF	CAF	CABO	CNBO	CABS	CABE	CY	CYN	CBL
4.959	-10.960	-.47982	.19384	.28665	.00255	.00067	.00550	.00760	-.01440	.01890	-.00630
4.959	-8.940	-.40678	.17191	.27218	.00202	.00053	.00570	.00770	-.01260	.01690	-.00560
4.959	-6.870	-.33401	.14683	.25787	.00213	.00056	.00580	.00730	-.01220	.01460	-.00550
4.959	-4.770	-.25784	.12126	.24397	.00223	.00059	.00600	.00730	-.01170	.01370	-.00480
4.959	-2.670	-.18502	.09671	.23070	.00330	.00087	.00610	.00730	-.00970	.01130	-.00430
4.959	-.580	-.12039	.07716	.22087	.00393	.00104	.00610	.00730	-.01200	.01190	-.00460
4.959	1.520	-.04733	.05388	.21324	.00446	.00118	.00610	.00740	-.01130	.01150	-.00480
4.959	3.630	.02306	.02978	.20661	.00489	.00129	.00600	.00720	-.01350	.01130	-.00550
4.959	5.700	.09918	-.00044	.19709	.00521	.00137	.00600	.00710	-.01250	.01040	-.00490
4.959	7.780	.17835	-.02791	.18999	.00531	.00140	.00600	.00660	-.01190	.00930	-.00440
4.959	9.800	.26035	-.06061	.18569	.00531	.00140	.00600	.00610	-.01250	.00670	-.00500
	GRADIENT	.03333	-.01076	-.00439	.00031	.00008	-.00000	-.00000	-.00023	-.00022	-.00009

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(41C015) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = -20.000  
 ELEVTR = .000

RUN NO. 224/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.599	-11.020	.40650	-.15070	.05770	.14703	-.02138	.07879	.03673	.00967	.05210	.09728
.599	-8.960	.31660	-.11340	.04310	.13602	-.01016	.08604	.03599	.00947	.05130	.08618
.599	-6.820	.22210	-.07250	.02780	.12833	-.00121	.09995	.03407	.00897	.04710	.08128
.599	-4.670	.13030	-.03150	.01190	.11409	.01166	.10993	.03269	.00861	.04590	.07608
.599	-2.530	.04690	.00520	-.00350	.10818	.01566	.11151	.03312	.00872	.04340	.07548
.599	-.370	-.03520	.04270	-.01770	.09386	.02569	.11053	.03280	.00863	.04190	.07638
.599	1.750	-.11410	.07620	-.03120	.09805	.02149	.11140	.03322	.00875	.03910	.07978
.599	3.880	-.19490	.11360	-.04670	.09596	.01924	.12281	.03471	.00914	.03670	.07618
.599	6.020	-.27680	.15110	-.06190	.10035	.01214	.11909	.03514	.00925	.03590	.08048
.599	8.140	-.35580	.18360	-.07400	.10674	.00471	.10942	.03631	.00956	.03710	.08528
.599	10.200	-.43390	.21130	-.08460	.10735	.00007	.09773	.03779	.00995	.03820	.09328
	GRADIENT	-.03795	.01689	-.00678	-.00217	.00099	.00120	.00019	.00005	-.00106	.00021

RUN NO. 223/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.902	-11.870	.50170	-.18680	.07000	.17892	-.04443	.10184	.04719	.01242	.05850	.10317
.902	-9.630	.39970	-.15010	.05550	.18354	-.04660	.11133	.04555	.01200	.05520	.10107
.902	-7.320	.29370	-.10810	.03890	.18734	-.04836	.11392	.04411	.01161	.05240	.09797
.902	-5.010	.18810	-.06390	.02030	.18934	-.04783	.12199	.04294	.01130	.04930	.09447
.902	-2.720	.08640	-.01750	.00190	.18457	-.04206	.12610	.04283	.01128	.04630	.09357
.902	-.420	-.01620	.03030	-.01520	.17321	-.03671	.12328	.04304	.01133	.04280	.09127
.902	1.840	-.11750	.07910	-.03170	.18498	-.04198	.12995	.04357	.01147	.04240	.09367
.902	4.100	-.20540	.11630	-.04750	.19676	-.05503	.12461	.04591	.01209	.04180	.10357
.902	6.380	-.30580	.16100	-.06590	.18297	-.04228	.13023	.04740	.01248	.04100	.09827
.902	8.630	-.39880	.20310	-.08260	.18042	-.04163	.12861	.05102	.01343	.03950	.10237
.902	10.860	-.49060	.23200	-.09360	.17490	-.04203	.12829	.05144	.01354	.03810	.10437
	GRADIENT	-.04299	.01982	-.00725	.00212	-.00215	.00010	.00043	.00011	-.00061	.00142

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 OF POOR QUALITY

MSFC 594(IA33) 740TS (TIPIS1P2U1)

ORB STING

(AIC015) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = 5.000 RUDDER = -20.000  
 ELEVTR = .000

RUN NO. 221/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.101	-12.300	.55690	-.21920	.08880	.23528	-.06230	.20508	.05326	.01402	.06600	.11716
1.101	-9.950	.43740	-.17170	.06970	.23093	-.05790	.21438	.05156	.01357	.06540	.11426
1.101	-7.540	.31530	-.12020	.04910	.22674	-.05420	.21891	.05113	.01346	.06560	.11336
1.101	-5.150	.19040	-.06910	.02850	.22038	-.04773	.22354	.05060	.01332	.06340	.10976
1.101	-2.790	.09720	-.02690	.00860	.21241	-.03893	.22732	.04933	.01299	.06080	.10666
1.101	-.430	-.00640	.02030	-.01170	.20211	-.03103	.22552	.04933	.01299	.06120	.10976
1.101	1.900	-.11240	.07030	-.03150	.20265	-.03308	.22958	.04996	.01315	.05950	.10866
1.101	4.230	-.20420	.10820	-.04970	.20161	-.03331	.23866	.04858	.01279	.05390	.10706
1.101	6.560	-.30210	.14990	-.06920	.20476	-.03640	.23866	.05028	.01324	.05190	.11086
1.101	8.930	-.41090	.19660	-.08870	.20524	-.03770	.23891	.05113	.01346	.04900	.11136
1.101	11.260	-.52690	.24400	-.10580	.20420	-.03638	.23317	.05507	.01450	.05010	.11566
	GRADIENT	-.04319	.01947	-.00832	-.00137	.00064	.00163	-.00007	-.00002	-.00096	-.00025

RUN NO. 222/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.247	-12.480	.56160	-.21360	.08490	.23220	-.07322	.20286	.05935	.01563	.06650	.12379
1.247	-10.090	.43440	-.16220	.06510	.23188	-.06782	.21513	.05638	.01484	.06570	.12119
1.247	-7.640	.30610	-.10830	.04540	.22739	-.05927	.22587	.05404	.01423	.06390	.11739
1.247	-5.190	.18610	-.05770	.02570	.22155	-.05139	.23083	.05308	.01398	.06210	.11619
1.247	-2.800	.08180	-.01470	.00630	.21744	-.04587	.23457	.05234	.01378	.06100	.11289
1.247	-.410	-.01810	.02800	-.01300	.21675	-.04342	.23549	.05042	.01328	.05980	.11159
1.247	1.940	-.11500	.06820	-.03150	.21435	-.04274	.23864	.05117	.01347	.05770	.11149
1.247	4.310	-.21200	.10850	-.04990	.21563	-.04404	.24529	.05202	.01370	.05400	.11309
1.247	6.700	-.31620	.15120	-.06880	.21450	-.04449	.24413	.05478	.01442	.05160	.11759
1.247	9.120	-.42900	.19540	-.08580	.21629	-.04966	.23874	.05786	.01523	.05160	.12049
1.247	11.510	-.54660	.23860	-.10130	.21828	-.05844	.23106	.06095	.01605	.05290	.12369
	GRADIENT	-.04131	.01731	-.00790	-.00033	.00026	.00149	-.00001	-.00000	-.00098	.00002

DATE 23 OCT 75

1A33 TABULATED DATA

MSFC 594(1A33) 740TS (TIPISIP201)

ORB STING

(AIC015) (12 SEP 75)

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = -20.000  
ELEVTR = .000

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
SCALE = .0040

		RUN NO. 183/ 0		RN/L = 7.10		GRADIENT INTERVAL = -5.00/ 5.00					
MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.952	-12.640	.58410	-.24910	.07840	.24763	-.08997	.21784	.04479	.01179	.04070	.06787
1.952	-10.190	.45320	-.19470	.06150	.24069	-.08257	.22257	.04266	.01123	.03910	.06607
1.952	-7.720	.32600	-.13750	.04410	.22891	-.07185	.22446	.04107	.01081	.03820	.06697
1.952	-5.290	.21380	-.08570	.02720	.22700	-.06832	.24558	.04075	.01073	.03820	.06707
1.952	-2.850	.10100	-.03370	.00880	.22605	-.06645	.25454	.03979	.01048	.03760	.06647
1.952	-.420	-.00450	.01490	-.00780	.21870	-.06097	.24709	.03883	.01022	.03510	.06507
1.952	1.940	-.09850	.05620	-.02040	.21870	-.06067	.24979	.04053	.01057	.03240	.06487
1.952	4.350	-.19980	.10110	-.03640	.21888	-.06245	.25779	.04234	.01115	.03100	.06607
1.952	6.780	-.30710	.14750	-.05250	.21316	-.05942	.25291	.04202	.01106	.02870	.06687
1.952	9.280	-.42760	.19860	-.06880	.21237	-.06007	.25312	.04351	.01146	.02610	.06577
1.952	11.700	-.54910	.24890	-.08340	.21625	-.06732	.24688	.04585	.01207	.02630	.06627
GRADIENT		-.04159	.01860	-.00619	-.00086	.00051	.00052	.00039	.00010	-.00094	-.00006
		RUN NO. 182/ 0		RN/L = 5.47		GRADIENT INTERVAL = -5.00/ 5.00					
MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.680	.31430	-.11400	.04250	.10632	-.00479	.20988	.00542	.00143	.00580	.00760
4.959	-8.670	.24770	-.08990	.03220	.10187	-.00484	.20427	.00563	.00148	.00610	.00800
4.959	-6.630	.18430	-.06390	.02530	.09171	.00151	.20015	.00585	.00154	.00630	.00820
4.959	-4.550	.12090	-.03990	.01510	.08605	.00306	.19594	.00606	.00160	.00650	.00840
4.959	-2.470	.06230	-.01570	.00660	.08473	.00568	.19463	.00617	.00162	.00660	.00830
4.959	-.380	.00490	.00600	-.00230	.07627	.01334	.19582	.00638	.00168	.00670	.00830
4.959	1.690	-.04660	.02110	-.01010	.07350	.01331	.19533	.00627	.00165	.00690	.00830
4.959	3.790	-.10830	.04510	-.02060	.06024	.00856	.19822	.00648	.00171	.00670	.00840
4.959	5.870	-.16980	.06860	-.02870	.08127	.00464	.20202	.00638	.00168	.00640	.00850
4.959	7.910	-.23460	.09290	-.03650	.08887	-.00355	.20602	.00638	.00168	.00600	.00870
4.959	9.920	-.30090	.11780	-.04450	.09360	-.00889	.20993	.00627	.00165	.00570	.00880
GRADIENT		-.02722	.00392	-.00423	-.00118	.00089	.00025	.00005	.00001	.00003	.00000



MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC016) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.000    RUDDER = -20.000  
 ELEVTR = .000

RUN NO. 225/ 0    RN/L = 4.99    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.599	-11.060	.41090	-.14110	.03740	-.48364	.20822	.07154	-.03928	.01034	.06720	.10958
.599	-8.980	.32640	-.11020	.02690	-.48886	.21376	.08431	-.03822	.01006	.06450	.10458
.599	-6.870	.24680	-.08040	.01650	-.49522	.22012	.09359	-.03843	.01012	.06180	.10128
.599	-4.710	.15890	-.04460	.00520	-.49821	.22564	.10056	-.03726	.00981	.05980	.09798
.599	-2.570	.07000	-.00360	-.00610	-.49781	.23054	.10836	-.03726	.00981	.05420	.09588
.599	-.410	-.01580	.03650	-.01630	-.50225	.23037	.12123	-.03779	.00995	.04930	.08398
.599	1.700	-.09200	.07170	-.02340	-.50832	.23084	.12994	-.03769	.00992	.04540	.08328
.599	3.840	-.17310	.10860	-.03300	-.50286	.22464	.13996	-.03896	.01026	.04100	.08288
.599	5.960	-.25280	.14570	-.04350	-.49941	.21937	.13500	-.03992	.01051	.03950	.08878
.599	8.090	-.33230	.17570	-.05220	-.50233	.21794	.13141	-.04151	.01093	.03920	.09308
.599	10.160	-.41300	.20690	-.06260	-.50839	.21845	.12438	-.04364	.01149	.03660	.09708
.599	GRADIENT	-.03866	.01786	-.00439	-.00093	-.00008	.00469	.00018	.00005	-.00217	-.00201

RUN NO. 226/ 0    RN/L = 6.27    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.900	-11.890	.52080	-.19870	.05330	-.50468	.18540	.09608	-.04985	.01312	.06890	.11287
.900	-9.680	.42690	-.16710	.04470	-.50415	.19427	.10279	-.04974	.01310	.06790	.11177
.900	-7.360	.31880	-.12400	.03060	-.50786	.20522	.11228	-.04825	.01270	.06340	.11007
.900	-5.060	.21130	-.07650	.01550	-.51338	.21735	.11737	-.04836	.01273	.06000	.10797
.900	-2.770	.10290	-.02440	-.00030	-.52186	.22930	.12211	-.04942	.01301	.05650	.10597
.900	-.490	.00080	.02740	-.01300	-.55627	.25184	.12459	-.04793	.01262	.05400	.10197
.900	1.770	-.10320	.07920	-.02460	-.53936	.23810	.13661	-.04942	.01301	.04940	.10797
.900	4.050	-.20460	.12720	-.03690	-.52405	.22152	.13587	-.05165	.01360	.04310	.11287
.900	6.320	-.30810	.17650	-.05240	-.53119	.22362	.14500	-.05293	.01393	.04010	.10767
.900	8.590	-.40290	.21440	-.06410	-.53653	.22208	.14391	-.05272	.01388	.03920	.11287
.900	10.820	-.49920	.24980	-.07440	-.54073	.21880	.13915	-.05537	.01458	.03930	.11687
.900	GRADIENT	-.04518	.02230	-.00534	.00045	-.00163	.00234	.00036	.00009	-.00197	.00117

DATE 23 OCT 75

IA33 TABULATED DATA

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MCFC 594 (IA33) 740TS (TIPISIP201)

ORB STING

(AIC016) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.000    RUDDER = -20.000  
 ELEVTR = .000

RUN NO. 228/ 0    RN/L = 6.62    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.099	-12.470	.59910	-.23090	.06710	-.60028	.26015	.20084	.06070	.01598	.08120	.11846
1.099	-10.110	.47820	-.18630	.05170	-.59590	.26848	.20926	.06038	.01590	.08010	.11956
1.099	-7.680	.35390	-.13680	.03510	-.59597	.27790	.22055	.06219	.01637	.07700	.11666
1.099	-5.280	.23590	-.08540	.01830	-.59954	.28645	.23062	.06283	.01654	.07460	.11256
1.099	-2.900	.11590	-.02740	.00120	-.60556	.29763	.23822	.06102	.01606	.07290	.11266
1.099	-.520	.00220	.02670	-.01300	-.62398	.31355	.23854	.05730	.01509	.07200	.11596
1.099	1.820	-.10350	.07500	-.02520	-.61110	.30040	.24840	.05964	.01570	.06680	.11686
1.099	4.170	-.21180	.12630	-.03820	-.61394	.30240	.25573	.06091	.01604	.05920	.11036
1.099	6.540	-.32580	.17840	-.05300	-.62119	.30156	.25582	.06113	.01609	.05290	.11596
1.099	8.930	-.43980	.22470	-.06810	-.62392	.29835	.25347	.06198	.01632	.04870	.11786
1.099	11.280	-.55380	.26560	-.08210	-.63057	.29468	.25081	.06293	.01657	.04620	.11926
	GRADIENT	-.04624	.02163	-.00554	-.00053	.00003	.00265	.00008	.00002	-.00196	-.00025

RUN NO. 227/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.249	-12.730	.61430	-.22830	.07110	-.63875	.24996	.20811	.06180	.01627	.07810	.11749
1.249	-10.300	.48510	-.18010	.05440	-.62320	.24721	.21730	.06201	.01633	.07500	.11609
1.249	-7.820	.35440	-.12850	.03750	-.61114	.24866	.22314	.06137	.01616	.07170	.11399
1.249	-5.350	.22650	-.07290	.01970	-.61529	.26221	.23102	.06159	.01621	.07130	.11409
1.249	-2.920	.10440	-.01760	.00210	-.62196	.27693	.23664	.05957	.01568	.07040	.11449
1.249	-.510	-.00550	.03100	-.01220	-.62936	.28543	.23844	.05957	.01568	.06750	.11229
1.249	1.870	-.10980	.07570	-.02510	-.62709	.28261	.24572	.06159	.01621	.06210	.11109
1.249	4.260	-.22100	.12540	-.03970	-.63125	.28019	.25545	.06446	.01697	.05580	.11209
1.249	6.690	-.33670	.17370	-.05460	-.65190	.28531	.25580	.06541	.01722	.05470	.11549
1.249	9.150	-.45340	.21620	-.06810	-.66678	.28756	.25424	.06307	.01661	.05300	.12099
1.249	11.580	-.57750	.25870	-.08230	-.69392	.29821	.25077	.06244	.01644	.05230	.12409
	GRADIENT	-.04517	.01980	-.00578	-.00107	.00029	.00266	.00070	.00018	-.00206	-.00035

MSFC 594(1A33) 740TS (TIPIS1P201)

ORB STING

(A1C016) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = -5.000 RUDDER = -20.000  
 ELEVTR = .000

RUN NO. 186/ 0 RN/L = 7.08 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.956	-13.020	.63650	-.24630	.07220	-.60667	.24265	.24598	.04744	.01249	.04170	.07087
1.956	-10.500	.49040	-.18540	.05430	-.56903	.22915	.24096	.04617	.01215	.03920	.06807
1.956	-8.000	.36560	-.13430	.03870	-.54964	.22230	.24425	.04468	.01176	.03720	.06667
1.956	-5.490	.24090	-.08140	.02310	-.53845	.22008	.24998	.04245	.01118	.03530	.06547
1.956	-3.040	.12820	-.03260	.00930	-.55187	.22818	.26106	.03947	.01039	.03570	.06617
1.956	-.550	.01360	.01500	-.00630	-.55735	.23080	.26845	.03788	.00997	.03460	.06487
1.956	1.920	-.09720	.05800	-.01900	-.56462	.23210	.27340	.04043	.01064	.03280	.06547
1.956	4.410	-.21540	.10780	-.03340	-.56142	.23095	.27479	.04234	.01115	.02920	.06487
1.956	6.920	-.33380	.15520	-.04730	-.57830	.23815	.27604	.04489	.01182	.02730	.06547
1.956	9.390	-.44640	.19850	-.06060	-.59365	.24828	.26978	.04585	.01207	.02590	.06507
1.956	11.860	-.57330	.24720	-.07610	-.62396	.26210	.27320	.04553	.01199	.02610	.06537
	GRADIENT	-.04600	.01870	-.00555	-.00145	.00039	.00186	.00045	.00012	-.00086	-.00013

RUN NO. 179/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.760	.39360	-.15690	.04150	-.27928	.13491	.26178	.00542	.00143	.00660	.00790
4.959	-8.760	.31450	-.12150	.03150	-.28201	.13344	.25607	.00553	.00146	.00670	.00820
4.959	-6.690	.23370	-.08610	.02190	-.27306	.12668	.24906	.00574	.00151	.00690	.00850
4.959	-4.590	.15800	-.05620	.01380	-.27582	.12754	.24515	.00595	.00157	.00710	.00860
4.959	-2.500	.09040	-.02890	.00680	-.27379	.12281	.24185	.00585	.00154	.00710	.00850
4.959	-.390	.01540	.00300	-.00150	-.27395	.11946	.23804	.00606	.00160	.00720	.00860
4.959	1.690	-.05830	.03350	-.01020	-.27715	.12146	.24004	.00606	.00160	.00730	.00850
4.959	3.780	-.13040	.06350	-.01820	-.28312	.12654	.24835	.00595	.00157	.00720	.00870
4.959	5.890	-.20560	.09510	-.02780	-.28342	.12804	.25655	.00595	.00157	.00710	.00890
4.959	7.950	-.28370	.12820	-.03770	-.29506	.13388	.26196	.00574	.00151	.00690	.00890
4.959	9.960	-.36480	.16330	-.04770	-.30333	.13856	.26747	.00563	.00148	.00670	.00890
	GRADIENT	-.03466	.01442	-.00387	-.00086	-.00016	.00022	.00001	.00000	.00002	.00001

DATE 20 NOV 75

IA33 TABULATED DATA

PAGE 59

MSFC 594(IA33) 740TS (TIPISIP201) FORKED STING

(AIC017) ( 18 NOV 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 39/ 0 RN/L = 5.00 GRADIENT INTERVAL = -5.00/ 5.00											
MACH	ALPHA	CN	CLMF	CAF	CABO	CNBO	CABS	CABE	CY	CYN	CBL
.601	-11.120	-.78821	.33041	.10252	.03801	.01001	.04680	.07738	.01330	-.00840	.00200
.601	-9.060	-.65966	.28149	.10927	.03705	.00975	.04500	.07478	.01050	-.00700	.00200
.601	-6.970	-.53424	.23319	.10910	.03662	.00964	.04440	.07378	.00940	-.00730	.00180
.601	-4.850	-.42492	.18876	.10651	.03652	.00961	.04530	.07518	.00570	-.00540	.00210
.601	-2.730	-.30648	.14801	.10837	.03716	.00978	.04380	.07298	.00540	-.00550	.00220
.601	-.580	-.19053	.10906	.10688	.03694	.00973	.04290	.07168	.00310	-.00400	.00180
.601	1.560	-.07496	.07031	.10612	.03631	.00956	.04250	.07098	-.00120	-.00190	.00110
.601	3.710	.04524	.02824	.10526	.03556	.00936	.04090	.06869	-.00770	-.00020	.00110
.601	5.820	.15855	-.00958	.09814	.03588	.00945	.04070	.06838	-.01010	.00190	.00100
.601	7.940	.28094	-.05216	.08916	.03556	.00936	.04060	.06828	-.01330	.00260	.00110
.601	9.950	.38639	-.09971	.07778	.03535	.00931	.03990	.06708	-.01660	.00440	.00110
.601	GRADIENT	.05473	-.01862	-.00022	-.00013	-.00003	-.00047	-.00070	-.00156	.00065	-.00014
RUN NO. 40/ 0 RN/L = 5.94 GRADIENT INTERVAL = -5.00/ 5.00											
MACH	ALPHA	CN	CLMF	CAF	CABO	CNBO	CABS	CABE	CY	CYN	CBL
.798	-11.520	-.81972	.34015	.09537	.04250	.01119	.05450	.09443	.01140	-.00730	.00110
.798	-9.390	-.67779	.28563	.10048	.04239	.01116	.05120	.08953	.00870	-.00590	.00120
.798	-7.220	-.54981	.23640	.10168	.04059	.01069	.05000	.08773	.00870	-.00700	.00100
.798	-5.030	-.42591	.18680	.09888	.04059	.01069	.05080	.08893	.00640	-.00560	.00070
.798	-2.840	-.30307	.14068	.10212	.04006	.01055	.04880	.08593	.00440	-.00480	.00100
.798	-.640	-.18011	.09703	.10005	.03942	.01038	.04770	.08423	-.00130	-.00290	.00030
.798	1.570	-.06021	.05685	.09730	.03867	.01018	.04720	.08363	-.00370	-.00150	.00040
.798	3.820	.07126	.01518	.09619	.03878	.01021	.04610	.08193	-.00840	.00040	.00040
.798	5.990	.19076	-.02840	.08944	.03804	.01001	.04610	.08193	-.01120	.00170	.00040
.798	8.170	.31706	-.07242	.08469	.03878	.01021	.04570	.08133	-.01290	.00260	.00140
.798	10.270	.43950	-.12113	.08127	.03750	.00987	.04630	.08223	-.01960	.00540	.00120
.798	GRADIENT	.05602	-.01878	.00092	-.00021	-.00005	-.00039	-.00057	-.00184	.00077	-.00008

MSFC 594 (IA33) 74OTS (TIP(S)P201) FORKED STING

(AIC017) ( 18 NOV 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 41/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLMF	CAF	CABO	CNBO	CABS	CABE	CY	CYN	CBL
.899	-11.720	-.85173	.35629	.09958	.04474	.01178	.05890	.10537	.00190	.00010	.00000
.899	-9.560	-.70055	.29382	.10780	.04442	.01170	.05570	.10057	-.00100	.00200	-.00070
.899	-7.350	-.55457	.23667	.11447	.04335	.01142	.05280	.09627	-.00280	.00170	-.00060
.899	-5.080	-.40550	.17722	.11730	.04272	.01125	.05050	.09297	-.00120	.00100	-.00060
.899	-2.870	-.27325	.12112	.11510	.04102	.01080	.05120	.09387	-.00130	.00050	-.00050
.899	-.670	-.14347	.06454	.11112	.04070	.01072	.05080	.09337	-.00430	.00140	-.00090
.899	1.580	-.00516	.01004	.11175	.04028	.01060	.04950	.09137	-.00650	.00200	-.00060
.899	3.840	.12357	-.03641	.10591	.04092	.01077	.04980	.09187	-.00920	.00220	-.00110
.899	6.080	.24448	-.06846	.10532	.04241	.01116	.05090	.09347	-.01520	.00460	-.00080
.899	8.300	.36021	-.10176	.10077	.04155	.01094	.05040	.09277	-.01740	.00410	-.00130
.899	10.420	.47568	-.14653	.09857	.04166	.01097	.04790	.08897	-.02120	.00500	.00000
	GRADIENT	.05937	-.02354	-.00120	-.00003	-.00001	-.00025	-.00036	-.00116	.00025	-.00007

RUN NO. 43/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLMF	CAF	CABO	CNBO	CABS	CABE	CY	CYN	CBL
1.101	-12.110	-.98273	.43610	.25366	.05709	.01503	.05270	.10506	.01020	-.00450	.00080
1.101	-9.830	-.79892	.36153	.25552	.05592	.01472	.05200	.10406	.00770	-.00340	.00080
1.101	-7.530	-.63152	.29535	.25967	.05517	.01453	.05040	.10166	.00700	-.00290	.00100
1.101	-5.190	-.47770	.23862	.23778	.05166	.01360	.05750	.11216	.00590	-.00310	.00110
1.101	-2.900	-.32428	.17875	.23867	.05007	.01318	.05540	.10896	.00160	-.00090	.00040
1.101	-.580	-.17919	.12042	.23530	.05124	.01349	.05560	.10946	.00140	-.00150	.00050
1.101	1.710	-.02796	.05570	.22981	.05113	.01346	.05550	.10926	-.00320	.00170	.00020
1.101	3.990	.11514	-.00740	.21661	.05113	.01346	.05770	.11246	-.00490	.00260	-.00010
1.101	6.280	.26728	-.06763	.21004	.05060	.01332	.05670	.11096	-.00780	.00310	.00000
1.101	8.530	.40420	-.12383	.20339	.04975	.01316	.05470	.10796	-.00910	.00230	.00080
1.101	10.650	.52316	-.17910	.20206	.05028	.01324	.05050	.10176	-.01220	.00370	.00030
	GRADIENT	.06400	-.02714	-.00325	.00013	.00004	.00030	.00045	-.00105	.00060	-.00008

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IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIPISIP20) FORKED STING

(AIC017) ( 18 NOV 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 SREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 42/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLMF	CAF	CABO	CNBO	CABS	CABE	CY	CYN	CBL
1.246	-12.330	-1.00069	.42816	.23284	.05967	.01571	.05690	.11469	-.00040	-.00080	.00150
1.246	-9.980	-.79174	.34136	.23524	.05797	.01526	.05570	.11289	.00130	-.00140	.00150
1.246	-7.590	-.59626	.26221	.23890	.05691	.01498	.05560	.11269	.00120	-.00260	.00130
1.246	-5.220	-.41838	.18956	.24326	.05584	.01470	.05380	.10999	.00030	-.00210	.00060
1.246	-2.860	-.25801	.12823	.24487	.05404	.01423	.05300	.10979	-.00220	-.00040	.00010
1.246	-.520	-.10403	.07086	.24736	.05414	.01425	.05210	.10759	-.00650	.00120	-.00040
1.246	1.300	.03697	.01483	.23712	.05489	.01445	.05460	.11109	-.00760	.00210	-.00040
1.246	4.110	.17604	-.04087	.23605	.05616	.01479	.05380	.10999	-.00880	.00180	-.00080
1.246	6.400	.31679	-.09497	.23114	.05786	.01523	.05390	.11009	-.01070	.00220	-.00100
1.246	8.640	.44444	-.14914	.21809	.05882	.01549	.05560	.11269	-.01300	.00330	-.00050
1.246	10.870	.57080	-.19191	.21796	.05935	.01563	.05030	.10479	-.01630	.00450	-.00100
	GRADIENT	.06213	-.02425	-.00158	.00031	.00008	.00021	.00031	-.00090	.00032	-.00012

RUN NO. 48/ 0    RN/L = 6.52    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLMF	CAF	CABO	CNBO	CABS	CABE	CY	CYN	CBL
1.458	-12.360	-.96851	.40149	.25573	.05285	.01392	.04800	.09362	.00050	-.00180	.00100
1.458	-10.040	-.76528	.31281	.25735	.05083	.01338	.04610	.09072	-.00330	.00060	.00060
1.458	-7.660	-.58100	.23929	.25516	.04903	.01291	.04490	.08902	-.00290	.00010	.00020
1.458	-5.290	-.40857	.17201	.25190	.04658	.01226	.04490	.08902	-.00630	.00190	-.00010
1.458	-2.920	-.24697	.10334	.24850	.04499	.01184	.04620	.09102	-.00420	.00070	.00010
1.458	-.570	-.09246	.05123	.24665	.04584	.01207	.04650	.09142	-.00560	.00150	.00020
1.458	1.760	.04697	-.00079	.24575	.04573	.01204	.04530	.08952	-.00610	.00120	.00040
1.458	4.090	.18027	-.05051	.24151	.04647	.01224	.04500	.08912	-.00960	.00390	-.00030
1.458	6.380	.31339	-.10046	.23835	.04754	.01252	.04440	.08832	-.01050	.00430	-.00060
1.458	8.640	.43858	-.14696	.23172	.04796	.01263	.04360	.08712	-.01190	.00480	-.00020
1.458	10.900	.56748	-.18656	.23152	.04796	.01263	.04270	.08572	-.01220	.00470	-.00020
	GRADIENT	.0E083	-.02276	-.00094	.00019	.00005	-.00021	-.00033	-.00071	.00040	-.00004

ORIGINAL PAGE IS  
OF POOR QUALITY

MSFC 594(IA33) 740TS (TIPISIP201) FORKED STING

(AIC017) ( 18 NOV 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 30/ 0 RN/L = 7.07 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLMF	CAF	CABO	CNBO	CABS	CABE	CY	CYN	CBL
1.960	-12.290	-.87029	.36337	.26931	.04032	.01062	.03390	.06817	.00590	-.00200	.00190
1.960	-10.020	-.69707	.28748	.26466	.03947	.01039	.03160	.06477	.00450	-.00300	.00120
1.960	-7.660	-.52986	.21842	.25707	.03756	.00989	.03120	.06417	.00300	-.00220	.00070
1.960	-5.310	-.38018	.15943	.25064	.03798	.01000	.03170	.06497	.00070	-.00090	.00040
1.960	-2.960	-.24118	.10903	.24714	.03798	.01000	.03120	.06417	-.00230	.00080	.00000
1.960	-.610	-.10920	.06033	.24689	.03883	.01022	.03020	.06277	-.00590	.00220	-.00040
1.960	1.730	.02373	.01043	.24244	.04138	.01090	.02980	.06207	-.00750	.00330	-.00050
1.960	4.050	.15404	-.04320	.24252	.04170	.01098	.02880	.06067	-.00870	.00460	-.00050
1.960	6.350	.29209	-.10065	.24631	.04192	.01104	.02780	.05907	-.00940	.00490	-.00020
1.960	8.740	.43892	-.14972	.25733	.04330	.01140	.02680	.05767	-.01190	.00670	-.00040
1.960	11.040	.56586	-.18465	.24496	.04277	.01126	.02900	.06097	-.01330	.00730	-.00060
	GRADIENT	.05642	-.02167	-.00078	.00059	.00015	-.00033	-.00048	-.00089	.00053	-.00007

RUN NO. 26/ 0 RN/L = 4.56 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLMF	CAF	CABO	CNBO	CABS	CABE	CY	CYN	CBL
2.990	-11.110	-.62542	.25165	.27758	.01640	.00432	.01780	.02882	.00860	-.00490	.00150
2.990	-9.050	-.51807	.21219	.26857	.01661	.00437	.01730	.02792	.00690	-.00430	.00150
2.990	-6.950	-.40393	.16932	.25761	.01757	.00463	.01670	.02702	.00350	-.00240	.00150
2.990	-4.800	-.30061	.13089	.24859	.01789	.00471	.01600	.02612	.00360	-.00250	.00080
2.990	-2.670	-.20542	.09970	.24367	.01831	.00482	.01550	.02532	.00340	-.00160	.00130
2.990	-.530	-.11695	.07552	.23856	.01842	.00485	.01540	.02512	.00170	-.00160	.00120
2.990	1.600	-.03222	.04830	.23157	.01831	.00482	.01490	.02442	.00230	-.00130	.00060
2.990	3.740	.06127	.01449	.22654	.01874	.00493	.01460	.02392	-.00020	.00000	.00070
2.990	5.840	.15985	-.02190	.22372	.01916	.00505	.01390	.02302	-.00110	.00000	.00050
2.990	7.950	.25810	-.05695	.21700	.01938	.00510	.01360	.02252	-.00120	.00000	.00060
2.990	10.010	.36409	-.09536	.21598	.01980	.00521	.01330	.02202	-.00330	-.00070	.00050
	GRADIENT	.04201	-.01331	-.00263	.00008	.00002	-.00016	-.00025	-.00041	.00025	-.00004

DATE 20 NOV 75

IA33 TABULATED DATA

PAGE 63

MSFC 594(IA33) 740TS (TIPISIP201) FORKED STING

(A1C017) ( 18 NOV 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 25/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLMF	CAF	CABO	CNBO	CABS	CABE	CY	CYN	CBL
4.959	-10.730	-.48389	.18176	.28597	.06393	.00104	.00460	.00680	.00950	-.00260	.00140
4.959	-8.750	-.41063	.15929	.27044	.00446	.00118	.00480	.00720	.00610	-.00240	.00130
4.959	-6.700	-.33467	.13721	.25720	.00500	.00132	.00480	.00710	.00560	-.00200	.00090
4.959	-4.660	-.26417	.11571	.24320	.00500	.00132	.00460	.00690	.00300	-.00130	.00100
4.959	-2.580	-.18805	.09259	.23189	.00531	.00140	.00460	.00690	.00190	-.00090	.00090
4.959	-.520	-.11792	.07066	.22229	.00521	.00137	.00450	.00680	.00300	-.00140	.00070
4.959	1.560	-.04458	.05081	.21588	.00542	.00143	.00460	.00690	.00110	.00000	.00060
4.959	3.630	.02259	.03124	.21057	.00553	.00146	.00430	.00650	.00060	.00000	.00070
4.959	5.670	.09854	.00378	.20176	.00574	.00151	.00410	.00610	.00050	-.00060	.00000
4.959	7.710	.17768	-.02276	.19685	.00595	.00157	.00370	.00550	-.00110	.00000	.00020
4.959	9.700	.26234	-.05272	.19206	.00574	.00151	.00320	.00470	-.00250	.00130	-.00130
	GRADIENT	.03460	.01017	-.00392	.00006	.00001	-.00003	-.00004	-.00035	.00017	-.00004

MSFC 594(IA33) 740TS (TIPISIP201) FORKED STING

(A1C018) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 47/ 0 RN/L = 4.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.596	-10.790	.46220	-.19820	.06670	-.12887	.05952	.06606	.04736	.01247	.05730	.09308
.596	-8.780	.37850	-.16690	.05710	-.13267	.06517	.07628	.04545	.01197	.05370	.08768
.596	-6.720	.28700	-.12720	.04340	-.14447	.07567	.08658	.04205	.01107	.05090	.08348
.596	-4.640	.20070	-.09070	.03160	-.15495	.08299	.08957	.04045	.01065	.04920	.08088
.596	-2.560	.11150	-.05180	.01700	-.16230	.08979	.091E7	.03875	.01020	.04840	.07978
.596	-.490	.03020	-.01500	.00650	-.16698	.09509	.09622	.03790	.00998	.04530	.07508
.596	1.580	-.04660	.01780	-.00430	-.17224	.09704	.11201	.03811	.01003	.03880	.06558
.596	3.670	-.11960	.04990	-.01380	-.17003	.09469	.12522	.03960	.01043	.03500	.05988
.596	5.710	-.20070	.08640	-.02620	-.17234	.09337	.11315	.04077	.01073	.04020	.06758
.596	7.770	-.28040	.11900	-.03870	-.17103	.08944	.10621	.04151	.01093	.04290	.07158
.596	9.770	-.36500	.15570	-.05140	-.16847	.08699	.08902	.04470	.01177	.04900	.08078
	GRADIENT	-.03847	.01690	-.00540	-.00193	.00148	.00441	-.00011	-.00003	-.00183	-.00271



MSFC 594(1A33) 740TS (T1P1S1P201) FORKED STING

(A1C018) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 46/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.899	-11.170	.52060	-.22730	.08110	-.11320	.04857	.09409	.05144	.01354	.06420	.11327
.899	-9.070	.42530	-.19150	.06730	-.11041	.04625	.09472	.04921	.01296	.06210	.11017
.899	-6.960	.32810	-.15020	.05170	-.10458	.04350	.10006	.04644	.01223	.05910	.10567
.899	-4.790	.22920	-.10640	.03530	-.11526	.04562	.09858	.04485	.01181	.05770	.10357
.899	-2.650	.13270	-.06250	.01980	-.12537	.05289	.09981	.04262	.01122	.05600	.10107
.899	-.520	.03750	-.01850	.00550	-.13998	.06512	.09525	.04187	.01102	.05560	.10047
.899	1.610	-.05020	.02270	-.00690	-.13943	.06347	.10564	.04209	.01108	.05170	.09477
.899	3.760	-.13940	.06080	-.01930	-.12591	.05544	.11925	.04198	.01105	.04860	.09007
.899	5.880	-.22750	.07910	-.03300	-.13111	.05649	.11743	.04389	.01156	.04890	.09047
.899	8.010	-.32000	.14150	-.04840	-.12742	.05604	.10320	.04623	.01217	.05680	.10227
.899	10.040	-.41020	.16310	-.06230	-.13356	.06045	.08102	.05091	.01340	.06580	.11567
	GRADIENT	-.04308	.01964	-.00636	-.00165	.00141	.00221	-.00029	-.00008	-.00105	-.00156

RUN NO. 44/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.096	-11.420	.56530	-.24020	.09320	-.11185	.06788	.21006	.05868	.01545	.06900	.12926
1.096	-9.260	.45480	-.19920	.07700	-.11344	.07040	.21633	.05751	.01514	.06650	.12566
1.096	-7.070	.34570	-.15480	.06030	-.11830	.07780	.22381	.05624	.01481	.06420	.12206
1.096	-4.870	.23800	-.10930	.04320	-.12483	.08720	.22616	.05368	.01413	.06170	.11846
1.096	-2.690	.14040	-.06760	.02600	-.13477	.09657	.22564	.05230	.01377	.06020	.11626
1.096	-.530	.04190	-.02170	.00860	-.14786	.10560	.22101	.05113	.01346	.06050	.11656
1.096	1.630	-.05560	.02510	-.00830	-.14808	.10545	.22477	.05007	.01318	.05830	.11346
1.096	3.800	-.14880	.06810	-.02460	-.14260	.10327	.22869	.04975	.01310	.05720	.11176
1.096	5.950	-.24430	.10890	-.04230	-.13928	.09797	.21721	.05273	.01388	.06200	.11886
1.096	8.130	-.33870	.14660	-.05810	-.13259	.09147	.22079	.05315	.01399	.06290	.12026
1.096	10.250	-.43750	.18370	-.07180	-.13471	.08892	.20955	.05549	.01461	.06720	.12656
	GRADIENT	-.04476	.02066	-.00784	-.00226	.00189	.00019	-.00047	-.00012	-.00050	-.00075

DATE 23 OCT 75

1A33 TABULATED DATA

PAGE 65

MSFC 594(1A33) 740TS (T1P1S1P201) FORKED STING

(A1C018) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 45/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.253	-11.500	.55960	-.23440	.09150	-.09450	.04909	.21745	.06275	.01652	.06710	.12969
1.253	-9.320	.43720	-.18500	.07340	-.08909	.04679	.22728	.06233	.01641	.06330	.12409
1.253	-7.130	.32450	-.13840	.05590	-.08969	.05186	.23054	.05967	.01571	.06120	.12109
1.253	-4.910	.21660	-.09410	.03670	-.09164	.05759	.23338	.05723	.01507	.05900	.11779
1.253	-2.710	.11930	-.05330	.02180	-.09596	.06463	.23165	.05616	.01479	.05970	.11879
1.253	-.520	.02270	-.01000	.00520	-.10130	.06978	.22918	.05553	.01462	.05900	.11769
1.253	1.670	-.06550	.02620	-.01080	-.09763	.06993	.24292	.05489	.01445	.05450	.11109
1.253	3.880	-.15630	.06340	-.02690	-.09594	.06534	.23910	.05531	.01456	.05740	.11539
1.253	6.060	-.25240	.10290	-.04370	-.10133	.06466	.22496	.05755	.01515	.06410	.12529
1.253	8.260	-.35300	.14070	-.05890	-.10470	.06119	.22136	.05935	.01563	.06570	.12779
1.253	10.430	-.46190	.18220	-.07430	-.10825	.05849	.21556	.06105	.01607	.06690	.12949
GRADIENT		-.04238	.01796	-.00746	-.00047	.00090	.00103	-.00023	-.00006	-.00038	-.00057

RUN NO. 29/ 0 RN/L = 7.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.965	-11.540	.54940	-.23750	.07720	-.08220	.03505	.24571	.04872	.01283	.03360	.06777
1.965	-9.320	.42860	-.18960	.06110	-.08598	.04030	.23907	.04595	.01210	.03150	.06457
1.965	-7.140	.32020	-.14240	.04770	-.08958	.04463	.24182	.04521	.01190	.03090	.06377
1.965	-4.930	.21440	-.09570	.03320	-.09136	.04906	.24346	.04287	.01129	.03100	.06397
1.965	-2.730	.11620	-.05200	.01820	-.09774	.05490	.24505	.04129	.01087	.03050	.06307
1.965	-.510	.02090	-.01020	.00360	-.10124	.05768	.24481	.03962	.01017	.03040	.06297
1.965	1.700	-.07220	.02920	-.00940	-.09990	.05655	.24874	.03509	.01003	.03040	.06297
1.965	3.920	-.16900	.07270	-.02400	-.09504	.05320	.25588	.03745	.00986	.03030	.06287
1.965	6.120	-.26260	.11000	-.03810	-.09084	.04837	.26573	.03479	.00916	.03230	.06577
1.965	8.330	-.36960	.15650	-.05280	-.09535	.05215	.25977	.03256	.00857	.03370	.06737
1.965	10.500	-.48550	.20460	-.06730	-.09289	.05157	.26164	.02969	.00782	.03430	.06887
GRADIENT		-.04316	.01889	-.00642	-.00043	.00054	.00129	-.00063	-.00017	-.00007	-.00010

MSFC 594(1A33) 740TS (TIPISIP201) FORKED STING

(A1C018) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 28/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.630	.36170	-.14300	.04540	-.09631	.06404	.24817	.00553	.00146	.00380	.00570
4.959	-8.660	.28490	-.11130	.03580	-.09983	.06276	.24057	.00563	.00148	.00380	.00570
4.959	-6.650	.21480	-.08320	.02640	-.09503	.06256	.23627	.00563	.00148	.00400	.00600
4.959	-4.600	.14640	-.05490	.01740	-.09898	.06531	.23078	.00542	.00143	.00400	.00600
4.959	-2.550	.07900	-.03030	.00910	-.09712	.06376	.22569	.00521	.00137	.00410	.00610
4.959	-.490	.01610	-.00610	.00230	-.09827	.06501	.22540	.00500	.00132	.00400	.00590
4.959	1.570	-.04940	.02050	-.00500	-.10244	.06688	.22601	.00489	.00129	.00380	.00570
4.959	3.620	-.11560	.04440	-.01260	-.10044	.06858	.23091	.00489	.00129	.00380	.00570
4.959	5.670	-.18300	.06920	-.02130	-.10448	.06984	.23672	.00468	.00123	.00280	.00420
4.959	7.700	-.25460	.09670	-.02950	-.09923	.06848	.24024	.00446	.00118	.00370	.00550
4.959	9.670	-.32630	.12460	-.03870	-.10310	.07076	.24464	.00436	.00115	.00360	.00540
	GRADIENT	-.03173	.01213	-.00360	-.00040	.00047	.00003	-.00007	-.00002	-.00003	-.00005

MSFC 594(1A33) 740TS (TIPISIP201) FORKED STING

(A1C019) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 244/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.598	-8.790	-.00330	.00190	-.00140	-.65623	.28306	.07001	.02972	.00782	.04720	.07808
.598	-6.710	-.01030	.00450	-.00190	-.53558	.23469	.08755	.03067	.00808	.04080	.06848
.598	-4.640	-.00650	.00120	-.00100	-.43108	.19641	.07960	.02993	.00788	.04370	.07268
.598	-2.550	-.00970	.00260	-.00100	-.31460	.15494	.08642	.02961	.00780	.04090	.06868
.598	-.470	-.01170	.00470	-.00120	-.19852	.11314	.08857	.03046	.00802	.03950	.06658
.598	1.610	-.01600	.00660	-.00190	-.07922	.07194	.08357	.03046	.00802	.03930	.06628
.598	3.720	-.01620	.00710	-.00180	.03876	.03219	.07893	.02940	.00774	.03840	.06488
.598	5.780	-.01950	.00780	-.00330	.15021	-.00677	.06994	.02918	.00768	.03700	.06288
.598	7.890	-.02280	.00940	-.00160	.27153	-.04994	.06176	.02886	.00760	.03570	.06088
	GRADIENT	-.00123	.00076	-.00012	.05628	-.01970	-.00020	-.00001	-.00000	-.00058	-.00086

MSFC 594(IA33) 740TS (TIPISIP20) FORKED STING

(AIC019) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 243/ 0 RN/L = 5.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.801	-9.010	-.00940	.00490	-.00380	-.65793	.27992	.08223	.03304	.00870	.04330	.07773
.801	-6.890	-.00540	.00150	-.00260	-.54206	.23097	.08557	.03240	.00853	.04160	.07523
.801	-4.780	-.00630	.00140	-.00300	-.41881	.17962	.08616	.03261	.00859	.03910	.07143
.801	-2.640	-.00850	.00220	-.00300	-.29569	.13482	.08831	.03176	.00836	.03810	.06993
.801	-.520	-.00930	.00210	-.00310	-.18211	.09345	.08533	.03144	.00828	.03810	.07003
.801	1.600	-.01230	.00350	-.00390	-.06098	.05172	.08053	.03134	.00825	.03780	.06953
.801	3.770	-.01550	.00500	-.00440	.06433	.01092	.07426	.03091	.00814	.03770	.06943
.801	5.890	-.01480	.00540	-.01130	.18939	-.03070	.06461	.02996	.00789	.03630	.06733
.801	8.050	-.01200	.00450	-.01410	.31815	-.07765	.05835	.02932	.00772	.03470	.06493
	GRADIENT	-.00104	.00040	-.00017	.05628	-.01970	-.00148	-.00018	-.00005	-.00015	-.00021

RUN NO. 242/ 1 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.900	-9.130	-.01410	.00800	-.00520	-.68476	.28379	.09286	.03496	.00921	.04410	.08347
.900	-6.970	-.01520	.00710	-.00640	-.54279	.22784	.09410	.03433	.00904	.04220	.08057
.900	-4.810	-.01450	.00630	-.00640	-.40344	.17324	.09940	.03263	.00859	.03960	.07667
.900	-2.690	-.01340	.00450	-.00490	-.27733	.11631	.09038	.03294	.00867	.03880	.07557
.900	-.550	-.01090	.00320	-.00430	-.15691	.07031	.08981	.03252	.00856	.03760	.07377
.900	1.590	-.01500	.00510	-.00570	-.03066	.02369	.08936	.03156	.00831	.03640	.07197
.900	3.770	-.01810	.00690	-.00500	.08960	-.01379	.08573	.03209	.00845	.03650	.07217
.900	5.940	-.02350	.00990	-.00540	.21404	-.04891	.08376	.03156	.00831	.03720	.07307
.900	8.140	-.02440	.01000	-.00310	.34053	-.08774	.07540	.03273	.00862	.03750	.07347
	GRADIENT	-.00041	.00009	-.00009	.05749	-.02176	-.00132	-.00011	-.00003	-.00040	-.00059

RUN NO. 245/ 1 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.098	-9.240	-.00610	.00540	-.00060	-.76050	.33996	.19732	.03912	.01030	.04690	.09646
1.098	-7.030	-.00580	.00400	-.00070	-.60671	.28302	.19998	.04146	.01092	.04630	.09556
1.098	-4.810	-.00510	.00310	-.00090	-.45683	.22924	.20250	.04114	.01083	.04470	.09316
1.098	-2.620	-.00340	.00220	-.00100	-.31492	.17477	.20167	.03997	.01052	.04340	.09126
1.098	-.440	-.00990	.00480	-.00120	-.16972	.11347	.19527	.03997	.01052	.04280	.09036
1.098	1.720	-.00800	.00250	-.00010	-.02510	.05264	.19378	.03646	.00960	.04070	.08722
1.098	3.900	-.00910	.00320	-.00110	.12278	-.01331	.18604	.03540	.00932	.03950	.08546
1.098	6.080	-.01160	.00350	-.00140	.27159	-.06976	.18458	.02966	.00781	.03880	.08436
1.098	8.280	-.01330	.00410	-.00170	.41349	-.12388	.19894	.00840	.00221	.03650	.08086
	GRADIENT	-.00058	.00002	-.00001	.06659	-.02790	-.00188	-.00069	-.00018	-.00060	-.00089

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MSFC 594(1A33) 740TS (T1P1S1P201) FORKED STING

(A1C019) ( 12 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 241/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.248	-9.320	-.00760	.00330	-.00030	-.74180	.32088	.19741	.04490	.01182	.04770	.10089
1.248	-7.060	-.00880	.00410	-.00130	-.56910	.25443	.19340	.04681	.01232	.04940	.10349
1.248	-4.840	-.00950	.00430	-.00130	-.40762	.19158	.19456	.04575	.01204	.04830	.10189
1.248	-2.620	-.01040	.00430	-.00120	-.25627	.13353	.19347	.04553	.01199	.04860	.10239
1.248	-.400	-.01180	.00370	-.00160	-.10734	.07630	.19048	.04543	.01196	.04900	.10289
1.248	1.770	-.01340	.00410	-.00220	.02674	.02188	.18329	.04702	.01238	.04970	.10389
1.248	3.980	-.01510	.00450	-.00270	.16500	-.03330	.17756	.04755	.01252	.04940	.10349
1.248	6.160	-.01630	.00560	-.00420	.30058	-.08389	.16880	.04640	.01274	.05000	.10429
1.248	8.340	-.01920	.00830	-.00600	.42554	-.13712	.16269	.04702	.01238	.04680	.09959
	GRADIENT	-.00064	.00001	-.00017	.06484	-.02548	-.00260	.00023	.00006	.00015	.00021

RUN NO. 262/ 0 RN/L = 6.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.456	-9.390	-.01000	.00380	-.00090	-.71470	.28788	.23519	.03840	.01011	.03790	.07862
1.456	-7.140	-.01090	.00330	-.00100	-.54566	.22323	.22978	.03861	.01016	.03780	.07852
1.456	-4.900	-.01110	.00370	-.00120	-.39216	.15893	.22428	.03861	.01016	.03830	.07912
1.456	-2.680	-.00960	.00190	-.00120	-.22662	.09921	.22221	.03808	.01002	.03770	.07832
1.456	-.450	-.01190	.00280	-.00170	-.07789	.04368	.22161	.03797	.01000	.03700	.07732
1.456	1.750	-.01120	.00110	-.00150	.06318	-.00879	.21791	.03808	.01002	.03700	.07722
1.456	3.970	-.01110	.00160	-.00180	.19651	-.05854	.21307	.03872	.01019	.03670	.07682
1.456	6.160	-.01440	.00350	-.00220	.32892	-.10617	.20743	.03946	.01039	.03740	.07782
1.456	8.380	-.01650	.00400	-.00210	.45398	-.15144	.19859	.03999	.01053	.03750	.07802
	GRADIENT	-.00007	-.00023	-.00007	.06529	-.02458	-.00120	.00001	.00000	-.00018	-.00026

RUN NO. 260/ 0 RN/L = 7.07 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.958	-9.400	-.00870	.00390	.00000	-.65751	.26364	.25767	.02406	.00633	.02650	.05717
1.958	-7.160	-.00820	.00260	-.00010	-.50317	.20352	.24280	.02693	.00709	.02800	.05937
1.958	-4.920	-.00900	.00260	-.00040	-.35962	.14962	.23730	.02523	.00664	.02820	.05977
1.958	-2.700	-.00950	.00260	-.00070	-.23127	.10285	.22744	.02958	.00779	.02830	.05997
1.958	-.480	-.01090	.00330	-.00050	-.10108	.05530	.21880	.03192	.00840	.02900	.05937
1.958	1.720	-.01030	.00280	-.00050	.03395	.00305	.21227	.03256	.00857	.02710	.05917
1.958	3.950	-.01040	.00340	-.00040	.17011	-.05043	.20994	.02969	.00782	.02710	.05807
1.958	6.120	-.01340	.00630	-.00100	.29610	-.09896	.21440	.02363	.00622	.02660	.05737
1.958	8.390	-.01680	.00860	-.00150	.43242	-.14257	.22688	.00875	.00230	.02740	.05847
	GRADIENT	-.00016	.00008	.00001	.05978	-.02256	-.00315	.00054	.00014	-.00015	-.00023

MSFC 594 (IA33) 740TS (TIP1SIP201) FORKED STING

(AIC018) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 254/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-8.600	.00090	.00100	.00190	-.38187	.14293	.25965	.00425	.00112	.00440	.00660
4.959	-6.560	-.00090	.00170	.00120	-.31078	.12294	.24552	.00468	.00123	.00460	.00690
4.959	-4.510	.00000	.00100	.00120	-.23748	.10214	.23222	.00468	.00123	.00450	.00680
4.959	-2.470	-.00060	.00010	.00100	-.17024	.08198	.22141	.00489	.00129	.00460	.00680
4.959	-.430	-.00250	.00160	.00080	-.09984	.06278	.21221	.00489	.00129	.00460	.00690
4.959	1.610	-.00040	.00060	.00070	-.03258	.04774	.20482	.00468	.00123	.00450	.00680
4.959	3.670	-.00360	.00190	.00000	.04352	.02344	.19922	.00468	.00123	.00440	.00660
4.959	5.690	-.00220	.00130	.00000	.10782	.00074	.18962	.00468	.00123	.00420	.00620
4.959	7.750	-.00100	.00070	.00000	.19252	-.02806	.18152	.00468	.00123	.00390	.00590
	GRADIENT	-.00034	.00011	-.00013	.03423	-.00938	-.00404	-.00001	-.00000	-.00001	-.00002

MSFC 594 (IA33) 740TS (TIP1SIP201) FORKED STING

(AIC020) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 257/ 1 RN/L = 4.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.596	-8.400	.34840	-.15010	.05000	-.14971	.07449	.06248	.03535	.00931	.04850	.07998
.596	-6.380	.26060	-.11350	.03780	-.15766	.08439	.07158	.03365	.00886	.04640	.07678
.596	-4.360	.18210	-.08080	.02630	-.16739	.09196	.08018	.03184	.00838	.04390	.07308
.596	-2.330	.10230	-.04710	.01390	-.17406	.09814	.08589	.03173	.00836	.04170	.06988
.596	-.320	.02440	-.01330	.00300	-.16807	.09741	.09272	.02950	.00777	.03830	.06478
.596	1.700	-.04700	.01620	-.00570	-.16517	.09399	.09858	.03025	.00796	.03610	.06148
.596	3.730	-.12210	.04890	-.01510	-.17040	.09429	.10030	.03152	.00830	.03740	.06338
.596	5.750	-.19770	.08100	-.02630	-.16118	.09580	.09811	.03233	.00877	.03760	.06368
.596	7.780	-.27530	.11330	-.03710	-.15702	.08354	.08766	.03386	.00891	.04100	.06868
	GRADIENT	-.03749	.01597	-.00507	.00004	.00003	.00262	-.00010	-.00003	-.00092	-.00137

MSFC 594(1A33) 740TS (T1P1S1P201) FORKED STING

(A1C020) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 255/ 1 RN/L = 6.26 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.898	-8.480	.38790	-.16940	.05630	-.11144	.04307	.08784	.03868	.01018	.04520	.08497
.898	-6.430	.29400	-.12980	.04240	-.11333	.04372	.09406	.03677	.00968	.04210	.08047
.898	-4.390	.19810	-.08810	.02730	-.11635	.04806	.09272	.03571	.00940	.04170	.07977
.898	-2.350	.11000	-.05040	.01380	-.13059	.05661	.09406	.03507	.00923	.03980	.07697
.898	-.320	.02460	-.01300	.00230	-.13953	.06221	.09568	.03294	.00867	.03800	.07427
.898	1.710	-.05650	.02160	-.00770	-.12991	.05439	.09426	.03326	.00876	.03800	.07437
.898	3.790	-.13880	.05510	-.01890	-.12779	.04914	.09600	.03433	.00904	.04090	.07857
.898	5.810	-.22590	.09290	-.03100	-.12588	.04676	.09237	.03656	.00963	.04280	.08147
.898	7.840	-.31430	.13170	-.04410	-.11912	.04449	.09354	.03709	.00977	.04250	.08107
.898	GRADIENT	-.04115	.01755	-.00558	-.00108	-.00001	.00033	-.00022	-.00006	-.00016	-.00024

RUN NO. 254/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.104	-8.550	.39950	-.16560	.06600	-.11465	.06984	.18125	.04199	.01106	.04910	.09976
1.104	-6.480	.29580	-.12500	.05060	-.11922	.07664	.18413	.04072	.01072	.04770	.09766
1.104	-4.410	.20280	-.08860	.03540	-.12948	.09702	.18726	.04018	.01058	.04580	.09476
1.104	-2.360	.11470	-.05320	.01970	-.13827	.09512	.19098	.03976	.01047	.04320	.09096
1.104	-.320	.02620	-.01440	.00400	-.15062	.10312	.19288	.03806	.01002	.04100	.08766
1.104	1.710	-.06300	.02690	-.01110	-.15347	.10397	.19057	.03827	.01008	.04230	.08966
1.104	3.780	-.15030	.06370	-.02580	-.14746	.09857	.18650	.03785	.00996	.04460	.09306
1.104	5.830	-.23560	.09930	-.04100	-.14319	.09467	.18415	.03870	.01019	.04590	.09486
1.104	7.890	-.32380	.13250	-.05470	-.13766	.08909	.17854	.04050	.01066	.04760	.09746
1.104	GRADIENT	-.04322	.01881	-.00749	-.00250	.00156	-.00010	-.00030	-.00008	-.00016	-.00023

RUN NO. 255/ 0 RN/L = 6.67 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.248	-8.570	.38270	-.15430	.06420	-.08996	.05015	.18632	.05159	.01358	.05440	.11089
1.248	-6.500	.28230	-.11560	.04900	-.09026	.05483	.19517	.04894	.01288	.05170	.10689
1.248	-4.430	.18360	-.07550	.03300	-.09109	.06200	.19528	.04713	.01241	.05030	.10489
1.248	-2.370	.09270	-.03870	.01690	-.09677	.06720	.19631	.04670	.01230	.04870	.10249
1.248	-.310	.01110	-.00660	.00220	-.10633	.07425	.19669	.04692	.01235	.04870	.10239
1.248	1.730	-.07300	.02770	-.01260	-.10804	.07495	.19597	.04734	.01246	.04970	.10389
1.248	3.830	-.15940	.06170	-.02800	-.10719	.07350	.19468	.04713	.01241	.04980	.10409
1.248	5.870	-.24920	.09790	-.04340	-.10786	.07113	.18967	.04894	.01288	.05220	.10759
1.248	7.960	-.34140	.13040	-.05740	-.10903	.06676	.18579	.05032	.01325	.05420	.11069
1.248	GRADIENT	-.04130	.01653	-.00735	-.00211	.00149	-.00008	.00003	.00001	.00000	-.00001

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIPISIP201) FORKED STING

(AIC020) ( 12 SEP 75 )

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
ELEVTR = .000

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
SCALE = .0040

RUN NO. 259/ 0 RN/L = 7.07 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.958	-8.560	.39560	-.16450	.05660	-.07009	.03432	.20742	.03941	.01011	.03140	.06457
1.958	-6.490	.28850	-.12480	.04350	-.07638	.03905	.20939	.03724	.00980	.03120	.06417
1.958	-4.420	.19560	-.08660	.03050	-.08193	.04452	.21305	.03628	.00955	.03070	.06347
1.958	-2.370	.10350	-.04600	.01630	-.08782	.05014	.21372	.03511	.00924	.02940	.06147
1.958	-.320	.01570	-.00860	.00310	-.09460	.05377	.21511	.03352	.00882	.02870	.06057
1.958	1.740	-.07360	.02860	-.00950	-.09487	.05362	.21617	.03416	.00899	.02930	.06127
1.958	3.810	-.16380	.06680	-.02380	-.09125	.05027	.21701	.03522	.00927	.02920	.06117
1.958	5.870	-.25540	.10620	-.03700	-.09107	.04925	.20791	.03681	.00969	.03050	.06307
1.958	7.950	-.35250	.14430	-.05020	-.09133	.04860	.21220	.03703	.00975	.02990	.06217
GRADIENT		-.04355	.01854	-.00653	-.00125	.00073	.00050	-.00015	-.00004	-.00015	-.00023

RUN NO. 265/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-8.390	.27120	-.10220	.03430	-.07247	.05031	.22430	.00500	.00132	.00470	.00700
4.959	-6.370	.19950	-.07460	.02470	-.07634	.05148	.21981	.00489	.00129	.00480	.00710
4.959	-4.350	.13520	-.04920	.01630	-.07771	.05456	.21612	.00478	.00126	.00480	.00720
4.959	-2.330	.07210	-.02690	.00860	-.07598	.05244	.20972	.00468	.00123	.00480	.00720
4.959	-.320	.01350	-.00490	.00160	-.08361	.05695	.20932	.00478	.00126	.00470	.00700
4.959	1.680	-.05060	.02130	-.00530	-.08191	.05806	.21172	.00478	.00126	.00480	.00710
4.959	3.720	-.11100	.04290	-.01320	-.08634	.06178	.21411	.00489	.00129	.00470	.00700
4.959	5.720	-.17850	.06710	-.02160	-.08459	.06064	.21830	.00510	.00134	.00490	.00730
4.959	7.760	-.25170	.09450	-.03080	-.08232	.06046	.22149	.00521	.00137	.00490	.00730
GRADIENT		-.03053	.01153	-.00562	-.00115	.00100	-.00010	.00002	.00000	-.00001	-.00002



MSFC 594(IA33) 740TS (T2P1S3P201F2) ORB STING

(A1C021) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 96/ 0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.600	-11.890	.00520	-.00500	.00510	-.89696	.38229	.05517	.03705	.00975	.04950	.10458
.600	-9.750	.00650	-.00540	.00550	-.76052	.32827	.06731	.03652	.00951	.04720	.09708
.600	-7.570	.00120	-.00290	.00460	-.62045	.27292	.07304	.03588	.00945	.04430	.09498
.600	-5.360	-.00150	-.00090	.00360	-.49732	.22501	.08089	.03503	.00922	.04240	.09008
.600	-3.160	-.00330	.00000	.00370	-.37621	.17964	.08649	.03344	.00880	.04220	.08558
.600	-.930	-.00550	.00090	.00310	-.25609	.13595	.08798	.03184	.00838	.03950	.08468
.600	1.240	-.00760	.00040	.00250	-.14602	.09571	.08272	.03120	.00622	.04030	.08388
.600	3.480	-.00980	.00140	.00210	-.01707	.04689	.08168	.03025	.00796	.03950	.08278
.600	5.670	-.01310	.00290	.00160	.10149	.00526	.07223	.02929	.00771	.03990	.08418
.600	7.890	-.01560	.00410	.00150	.22259	-.03614	.06343	.02929	.00771	.04040	.08278
.600	9.990	-.01470	.00240	.00160	.34436	-.08307	.05414	.02748	.00724	.04210	.08038
	GRADIENT	-.00098	.00017	-.00024	.05376	-.01985	-.00089	-.00046	-.00012	-.00033	-.00042

RUN NO. 95/ 0 RN/L = 5.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.798	-12.940	.00610	-.00480	.00590	-.99657	.39769	.04719	.05068	.01334	.04850	.11493
.798	-10.570	.00000	-.00150	.00500	-.81990	.33663	.06445	.04622	.01217	.04690	.10533
.798	-8.240	-.00290	.00000	.00410	-.66508	.27808	.07149	.04388	.01155	.04470	.10213
.798	-5.860	-.00810	.00200	.00270	-.51360	.22075	.07500	.04207	.01108	.04130	.10053
.798	-3.530	-.00830	.00180	.00270	-.37685	.16453	.07485	.04112	.01083	.04050	.09983
.798	-1.180	-.01090	.00270	.00200	-.24357	.11428	.07572	.04006	.01055	.04020	.09603
.798	1.150	-.01460	.00380	.00120	-.10949	.06473	.07458	.03899	.01027	.03930	.09143
.798	3.500	-.01520	.00350	.00160	.02319	.01538	.07274	.03793	.00999	.03970	.09123
.798	5.830	-.01850	.00480	.00090	.15371	-.02790	.06414	.03633	.00957	.04210	.09323
.798	8.170	-.02070	.00520	.00000	.29055	-.07900	.05994	.03463	.00912	.04220	.09103
.798	10.390	-.02100	.00420	-.00040	.41326	-.11843	.05529	.03538	.00931	.04370	.09253
	GRADIENT	-.00104	.00026	-.00017	.05697	-.02122	-.00032	-.00045	-.00012	-.00014	-.00130

DATE 23 OCT 75

1A33 TABULATED DATA

MSFC 594(1A33) 740TS (T2P1S3P201F2) ORB STING

(A1C021) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

		RUN NO.	94/ 0	RN/L =	6.28	GRADIENT INTERVAL = -5.00/ 5.00					
MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.905	-13.600	-.01660	.01520	-.00100	-1.09497	.42570	.05205	.06388	.01682	.04470	.12617
.905	-11.100	-.01640	.01510	-.00130	-.88614	.35513	.06827	.05846	.01539	.04560	.11727
.905	-8.630	-.01360	.01440	-.00140	-.69619	.28347	.08299	.05484	.01444	.04490	.11157
.905	-6.140	-.01880	.01640	-.00260	-.52020	.21427	.08909	.05144	.01354	.04590	.10807
.905	-3.690	-.02200	.01720	-.00340	-.35526	.14635	.09702	.04751	.01251	.04240	.10217
.905	-1.260	-.01900	.01490	-.00370	-.20505	.08527	.09659	.04634	.01220	.04080	.09967
.905	1.150	-.01890	.01260	-.00570	-.05235	.02067	.09309	.04634	.01220	.04020	.09667
.905	3.570	-.02320	.01390	-.00750	.08839	-.03318	.08958	.04655	.01226	.04180	.09687
.905	5.960	-.02540	.01470	-.00620	.21925	-.07238	.08820	.04442	.01170	.04490	.09727
.905	8.390	-.02480	.01200	-.00620	.35624	-.11618	.08158	.04485	.01181	.04760	.09777
.905	10.660	-.02530	.01160	-.00530	.47650	-.15161	.07486	.04347	.01144	.04890	.09827
	GRADIENT	-.00014	-.00050	-.00059	.06133	-.02494	-.00107	-.00012	-.00003	-.00010	-.00078

		RUN NO.	93/ 0	RN/L =	6.63	GRADIENT INTERVAL = -5.00/ 5.00					
MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.099	-14.910	.00070	.00770	.00570	-1.30904	.55261	.16737	.07537	.01984	.06260	.13716
1.099	-12.080	.00250	.00520	.00570	-1.03317	.44934	.17577	.07207	.01899	.07030	.13346
1.099	-9.400	.00470	.00200	.00470	-.82406	.37538	.18121	.06974	.01836	.07320	.13406
1.099	-6.760	.00480	.00130	.00390	-.63001	.30130	.18815	.06729	.01772	.07130	.13136
1.099	-4.150	.00200	.00200	.00250	-.44827	.23053	.18900	.06485	.01707	.06920	.12646
1.099	-1.560	-.00190	.00450	.00130	-.27403	.16188	.18738	.06166	.01623	.06750	.12506
1.099	.930	-.00280	.00390	.00070	-.10623	.08283	.18500	.05974	.01573	.06380	.12256
1.099	3.480	-.00930	.00680	-.00070	.06588	.00385	.18047	.05857	.01542	.06240	.11996
1.099	5.970	-.00940	.00570	-.00170	.23372	-.07170	.17886	.05539	.01458	.06250	.11716
1.099	8.490	-.00950	.00490	-.00220	.38856	-.13272	.16889	.05485	.01444	.06400	.11676
1.099	10.900	-.01130	.00510	-.00360	.52574	-.17520	.15901	.05453	.01436	.06690	.11506
	GRADIENT	-.00137	.00055	-.00040	.06739	-.02990	-.00110	-.00082	-.00022	-.00095	-.00087

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OF POOR QUALITY

MSFC 594(1A33) 740TS (T2P153P201F2) ORB STING

(A1C021) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELE YTR = .000

RUN NO. 97/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.254	-15.750	.00350	.00150	.00660	-1.45432	.60074	.17149	.06892	.01815	.06720	.13329
1.254	-12.750	-.00090	.00390	.00480	-1.13292	.46356	.16956	.06775	.01784	.06610	.12779
1.254	-9.600	-.00580	.00610	.00350	-.84757	.35089	.17270	.06531	.01719	.06510	.12439
1.254	-6.980	-.00330	.00260	.00260	-.61825	.26311	.17610	.06371	.01677	.06210	.12019
1.254	-4.270	-.00480	.00230	.00170	-.41814	.18671	.17422	.06329	.01666	.06050	.11919
1.254	-1.590	-.00800	.00430	.00040	-.22633	.10931	.17385	.05946	.01565	.05830	.11839
1.254	.990	-.00920	.00380	.00030	-.05204	.03399	.17088	.05723	.01507	.05820	.11719
1.254	3.580	-.01000	.00280	.00000	.11488	-.03512	.16833	.05638	.01484	.05950	.11609
1.254	6.120	-.01110	.00220	-.00120	.27135	-.09357	.16717	.05574	.01467	.05940	.11629
1.254	8.700	-.01330	.00360	-.00220	.42786	-.14866	.16260	.05531	.01456	.06090	.11639
1.254	11.230	-.01820	.00510	-.00350	.58155	-.19057	.15657	.05574	.01467	.06170	.11649
1.254	GRADIENT	-.00064	.00004	-.00020	.06768	-.02835	-.00079	-.00088	-.00023	-.00012	-.00040

RUN NO. 101/ 0 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.461	-15.570	-.00390	.00400	.00550	-1.36453	.55012	.19852	.05976	.01573	.05090	.10392
1.461	-12.710	-.00970	.00620	.00490	-1.08431	.43337	.20536	.05742	.01512	.05170	.09892
1.461	-9.820	-.00660	.00290	.00350	-.82000	.32607	.20169	.05700	.01501	.05010	.10002
1.461	-6.980	-.00550	.00070	.00190	-.59989	.24879	.19956	.05583	.01470	.04640	.09762
1.461	-4.270	-.00600	.00040	.00110	-.40524	.17456	.19451	.05487	.01445	.04630	.09522
1.461	-1.600	-.00880	.00170	.00030	-.22320	.10339	.19396	.05243	.01380	.04560	.09442
1.461	.980	-.00940	.00260	.00000	-.05513	.03386	.19124	.05105	.01344	.04530	.09392
1.461	3.570	-.01300	.00420	-.00090	.10621	-.03136	.18597	.05051	.01330	.04730	.09382
1.461	6.130	-.01410	.00380	-.00150	.26915	-.09478	.18183	.04956	.01305	.04810	.09452
1.461	8.720	-.01840	.00630	-.00250	.42252	-.14606	.17870	.05009	.01319	.04920	.09492
1.461	11.300	-.02310	.00850	-.00350	.58248	-.18741	.17791	.04988	.01313	.04880	.09352
1.461	GRADIENT	-.00083	.00047	-.00024	.06524	-.02633	-.00108	-.00056	-.00015	.00010	-.00018

DATE 23 OCT 75

IA33 TABULATED DATA

PAGE 75

MSFC 594(IA33) 740TS (T2P1S3P201F2) ORB STING

(A1C021) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 87/ 0    RN/L = 7.06    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.960	-15.540	-.00070	.00300	.00310	-1.22664	.48845	.23036	.03936	.01036	.03500	.07777
1.960	-12.660	-.00120	.00280	.00210	-.97425	.37975	.21814	.03979	.01048	.03720	.07357
1.960	-9.840	-.00630	.00510	.00070	-.75355	.29173	.20829	.04053	.01067	.03900	.07397
1.960	-6.980	-.00720	.00550	.00020	-.54156	.21162	.19817	.04096	.01078	.03470	.07397
1.960	-4.250	-.00720	.00450	.00000	-.36503	.14948	.18873	.04160	.01095	.03500	.07357
1.960	-1.590	-.00900	.00490	-.00050	-.20987	.09570	.18360	.04213	.01109	.03480	.07117
1.960	.960	-.00960	.00490	-.00080	-.07512	.05071	.18060	.04383	.01154	.03500	.07027
1.960	3.530	-.01150	.00500	-.00150	.06164	.00023	.17757	.04436	.01168	.03510	.06817
1.960	6.100	-.01550	.00750	-.00220	.20798	-.05004	.18569	.04574	.01204	.03670	.06797
1.960	8.820	-.01730	.00880	-.00220	.37782	-.10455	.18586	.04447	.01171	.03620	.06807
1.960	11.470	-.02070	.01000	-.00340	.54704	-.15495	.17801	.04367	.01148	.03500	.06817
1.960	GRADIENT	-.00052	.00006	-.00019	.05466	-.01904	-.00141	.00039	.00010	.00002	-.00066

RUN NO. 98/ 0    RN/L = 4.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
2.990	-12.070	.00420	-.00200	.00310	-.73991	.27097	.24285	.01523	.00401	.01930	.03142
2.990	-9.900	-.00070	.00010	.00170	-.62221	.22854	.23300	.01597	.00421	.02020	.03062
2.990	-7.680	-.00060	.00010	.00140	-.50267	.18789	.22157	.01661	.00437	.02020	.03062
2.990	-5.430	.00020	-.00030	.00090	-.38529	.14899	.20974	.01704	.00449	.01990	.03072
2.990	-3.170	-.00140	-.00030	.00060	-.27214	.11024	.20063	.01725	.00454	.02010	.02982
2.990	-.940	-.00390	.00130	.00020	-.17471	.08479	.19579	.01789	.00471	.01960	.02912
2.990	1.260	-.00280	.00000	.00000	-.08627	.06305	.18928	.01810	.00477	.01960	.02882
2.990	3.500	-.00220	-.00050	.00030	.01585	.02852	.18356	.01842	.00485	.01930	.02852
2.990	5.710	-.00210	-.00150	.00010	.12328	-.00543	.18002	.01906	.00502	.01890	.02802
2.990	7.950	-.00530	.00040	-.00070	.23281	-.04098	.17488	.01969	.00519	.01850	.02742
2.990	10.100	-.00510	-.00010	-.00090	.35256	-.08253	.17217	.01991	.00524	.01850	.02722
2.990	GRADIENT	-.00006	-.00009	-.00005	.04289	-.01202	-.00260	.00017	.00004	-.00011	-.00019

MSFC 594(IA33) 740TS (T2P1S3P201F2) ORB STING

(A1C021) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 99/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-11.100	.00350	-.00070	.00140	-.51958	.18951	.24508	.00202	.00053	.00520	.00640
4.959	-9.080	.00240	.00000	.00170	-.44359	.16711	.23396	.00244	.00064	.00540	.00670
4.959	-7.010	.00250	-.00040	.00140	-.36731	.14701	.21893	.00287	.00076	.00550	.00700
4.959	-4.910	.00280	-.00140	.00130	-.29135	.12304	.20580	.00340	.00090	.00570	.00680
4.959	-2.800	.00340	-.00200	.00080	-.21233	.09711	.19728	.00372	.00098	.00580	.00700
4.959	-.690	.00540	-.00350	.00080	-.14514	.07961	.18725	.00415	.00109	.00590	.00710
4.959	1.400	.00290	-.00200	.00110	-.06860	.05556	.17754	.00436	.00115	.00590	.00710
4.959	3.520	.00210	-.00250	.00320	.00505	.03001	.16973	.00457	.00120	.00580	.00700
4.959	5.600	.00010	-.00010	.00020	.08682	.00174	.16632	.00468	.00123	.00580	.00690
4.959	7.710	.00030	-.00150	.00000	.16886	-.02392	.16021	.00489	.00129	.00590	.00690
4.959	9.720	-.00060	-.00110	.00020	.25993	-.05649	.15470	.00500	.00132	.00590	.00660
GRADIENT		-.00009	-.00010	.00019	.03497	-.01081	-.00436	.00014	.00004	.00001	.00002

MSFC 594(IA33) 740TS (T2P1S3P201F2) ORB STING

(A1C022) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 91/ 0 RN/L = 4.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.595	-11.350	.50600	-.16610	.06960	-.19741	.10127	.04240	.03992	.01051	.05160	.09148
.595	-9.280	.41840	-.13930	.05860	-.20302	.10544	.05824	.03769	.00992	.04860	.08758
.595	-7.130	.32180	-.10750	.04620	-.21085	.11062	.06744	.03588	.00945	.04710	.08438
.595	-4.940	.22450	-.07260	.03250	-.22752	.12264	.07466	.03386	.00891	.04620	.08368
.595	-2.750	.11960	-.03300	.01600	-.23292	.12781	.08019	.03503	.00922	.04450	.08128
.595	-.540	.02470	-.00250	.00320	-.23795	.13169	.08690	.03322	.00875	.04150	.07918
.595	1.660	-.07610	.03290	-.01130	-.24160	.13369	.08630	.03492	.00919	.03710	.07748
.595	3.840	-.17030	.06640	-.02450	-.23149	.12584	.08581	.03641	.00959	.03490	.07908
.595	6.010	-.26590	.09740	-.03750	-.21891	.11341	.08412	.03801	.01001	.03400	.07948
.595	8.190	-.34800	.11820	-.04500	-.20612	.10099	.07455	.03918	.01031	.03330	.08268
.595	10.280	-.44640	.15070	-.05900	-.20238	.09399	.05872	.04130	.01087	.03520	.08528
GRADIENT		-.04485	.01565	-.00643	-.00076	.00056	.00129	.00023	.00006	-.00137	-.00059

MSFC 594 (IA33) 740TS (T2P1S3P201F2) ORB STING

(AIC022) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 90/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.902	-12.430	.59670	-.18970	.08140	-.18190	.06182	.06147	.05335	.01405	.05600	.10847
.902	-10.150	.49530	-.16220	.07030	-.17938	.06547	.07331	.05102	.01343	.05430	.10707
.902	-7.780	.37860	-.12580	.05390	-.17752	.06685	.07609	.04963	.01307	.05180	.10247
.902	-5.400	.27860	-.10100	.04510	-.17710	.07042	.08318	.04995	.01315	.04930	.09807
.902	-3.020	.15950	-.05610	.02690	-.16806	.06790	.08961	.04942	.01301	.04500	.09257
.902	-.640	.04870	-.01720	.01010	-.16888	.07137	.09454	.04719	.01242	.04210	.08997
.902	1.720	-.07200	.03130	-.01150	-.16794	.07030	.09436	.04857	.01279	.03940	.09127
.902	4.110	-.18530	.07210	-.02900	-.16481	.06770	.09411	.05112	.01346	.03720	.09187
.902	6.470	-.29340	.10750	-.04350	-.16448	.06302	.09552	.05250	.01382	.03770	.09647
.902	8.830	-.39480	.13510	-.05510	-.16569	.05822	.08840	.05293	.01393	.03830	.10057
.902	11.130	-.51170	.17180	-.07160	-.16891	.05325	.07679	.05644	.01486	.03850	.10337
	GRADIENT	-.04863	.01823	-.00797	.00045	-.00007	.00056	.00027	.00007	-.00110	-.00083

RUN NO. 92/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.099	-13.080	.68320	-.23170	.10370	-.18385	.08523	.16625	.06400	.01695	.07340	.12846
1.099	-10.620	.54670	-.18420	.08590	-.18000	.09033	.17745	.06229	.01640	.07130	.12695
1.099	-8.140	.41730	-.14230	.06750	-.18577	.10098	.18421	.06293	.01657	.07030	.12426
1.099	-5.630	.28910	-.09820	.04700	-.20016	.11586	.18706	.06368	.01676	.07010	.11876
1.099	-3.150	.16110	-.05110	.02620	-.20805	.12590	.18718	.06516	.01716	.06940	.11536
1.099	-.660	.04630	-.01480	.00820	-.21530	.13281	.19040	.06304	.01660	.06670	.11606
1.099	1.800	-.07400	.02700	-.01060	-.21343	.13095	.19324	.06240	.01643	.06210	.11696
1.099	4.290	-.19590	.06980	-.03060	-.20792	.12518	.19911	.06463	.01702	.05710	.11686
1.099	6.780	-.32450	.11430	-.05190	-.19174	.10751	.20480	.06474	.01704	.05330	.11826
1.099	9.290	-.44950	.15290	-.07090	-.18154	.09240	.19920	.06474	.01704	.05200	.12086
1.099	11.720	-.58100	.19490	-.08930	-.17835	.08013	.18772	.06782	.01766	.05250	.12296
	GRADIENT	-.04807	.01632	-.00764	.00009	-.00016	.00156	-.00009	-.00002	-.00167	.00022

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MSFC 594(IA33) 740TS (T2P1S3P201F2) ORB STING

(AIC022) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 89/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.256	-13.380	.70310	-.23250	.10440	-.18587	.06141	.13437	.06073	.01599	.06750	.12589
1.256	-10.850	.56060	-.18570	.08610	-.18235	.06754	.14847	.05914	.01557	.06410	.12619
1.256	-8.290	.41700	-.13670	.06550	-.17873	.07256	.15836	.05755	.01515	.06140	.11959
1.256	-5.720	.28180	-.08990	.04520	-.18813	.08711	.16255	.06286	.01655	.06150	.11579
1.256	-3.190	.15320	-.04470	.02390	-.19410	.09739	.16945	.06275	.01652	.06000	.11309
1.256	-.650	.03410	-.00700	.00570	-.19630	.10296	.17311	.06010	.01582	.05750	.11299
1.256	1.860	-.08770	.03430	-.01270	-.19555	.10189	.17456	.06105	.01607	.05650	.11279
1.256	4.410	-.21360	.07710	-.03370	-.19424	.09599	.17568	.06403	.01686	.05270	.11449
1.256	6.950	-.34870	.12330	-.05490	-.18770	.08426	.18151	.06350	.01672	.05030	.11769
1.256	9.560	-.48960	.16820	-.07560	-.19052	.07889	.17860	.06360	.01675	.05110	.12349
1.256	12.080	-.63460	.21590	-.09480	-.18277	.06436	.16406	.06605	.01739	.05060	.12489
	GRADIENT	-.04829	.01607	-.00755	.00001	-.00022	.00079	.00019	.00005	-.00091	.00016

RUN NO. 88/ 0 RN/L = 7.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.967	-13.900	.77180	-.27350	.10210	-.22666	.08301	.16470	.04893	.01288	.04110	.07447
1.967	-11.110	.59440	-.21430	.08140	-.19766	.07845	.15541	.04702	.01238	.03950	.07317
1.967	-8.460	.44330	-.16070	.06260	-.18538	.07850	.16957	.04595	.01210	.03820	.07147
1.967	-5.850	.30380	-.10970	.04450	-.18181	.08278	.17425	.04457	.01174	.03730	.07027
1.967	-3.260	.16670	-.05770	.02490	-.17948	.08580	.17897	.04255	.01120	.03660	.06997
1.967	-.650	.03430	-.00920	.00490	-.17911	.08943	.18377	.04266	.01123	.03440	.06997
1.967	1.930	-.09300	.03390	-.01350	-.17979	.08808	.18520	.04372	.01151	.03250	.06887
1.967	4.560	-.23040	.08450	-.03400	-.17967	.08285	.18759	.04404	.01160	.03040	.07047
1.967	7.180	-.37230	.13570	-.05290	-.18202	.07728	.16983	.04500	.01185	.02980	.07047
1.967	9.920	-.53080	.19080	-.07310	-.19748	.07418	.19120	.04712	.01241	.02920	.07227
1.967	12.540	-.68570	.24330	-.09150	-.21228	.07423	.18292	.04861	.01280	.03040	.07287
	GRADIENT	-.05064	.01804	-.00749	-.00005	-.00035	.00105	.00021	.00006	-.00079	.00002

MSFC 594(IA33) 740TS (T2P1S3P201F2) ORB STING

(AIC022) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 100/ 0 RN/L = 3.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CN20	CABS	CABE
4.959	-10.980	.44250	-.15370	.05590	-.11669	.05928	.19401	.00319	.00084	.00500	.00620
4.959	-8.950	.36150	-.12460	.04590	-.11915	.07004	.19010	.00340	.00090	.00520	.00650
4.959	-6.880	.27910	-.09500	.03560	-.11840	.06938	.18499	.00361	.00095	.00530	.00680
4.959	-4.770	.19500	-.06610	.02430	-.12043	.07041	.18338	.00372	.00098	.00540	.00690
4.959	-2.650	.11390	-.03960	.01340	-.11699	.06806	.18327	.00393	.00104	.00570	.00710
4.959	-.520	.03120	-.01170	.00380	-.11889	.06966	.18387	.00393	.00104	.00570	.00710
4.959	1.590	-.05260	.01690	-.00580	-.12369	.07056	.18527	.00393	.00104	.00580	.00700
4.959	3.730	-.13360	.04160	-.01570	-.12007	.06343	.18745	.00425	.00112	.00640	.00700
4.959	5.830	-.21870	.07100	-.02650	-.11897	.05783	.18915	.00425	.00112	.00580	.00720
4.959	7.950	-.30570	.10080	-.03800	-.12660	.06176	.19424	.00436	.00115	.00570	.00730
4.959	9.960	-.38640	.12780	-.04680	-.12277	.05633	.19885	.00425	.00112	.00530	.00710
GRADIENT		-.03878	.01280	-.00467	-.00028	-.00054	.00048	.00005	.00001	.00010	.00003

MSFC 594(IA33) 740TS (T1P101)

ORB STING

(AIC023) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 151/ 0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CN20	CABS	CABE
.600	-11.070	.41580	-.14160	.07320	.05544	-.00940	.05190	.03333	.00877	.00000	.07138
.600	-9.010	.34190	-.12270	.06150	.06171	-.00483	.04720	.03152	.00830	.00000	.06968
.600	-6.870	.26350	-.09790	.04830	.05821	-.00022	.05215	.03067	.00808	.00000	.06838
.600	-4.720	.18170	-.06760	.03360	.06210	-.00139	.05672	.02950	.00777	.00000	.06668
.600	-2.570	.10550	-.04080	.01930	.06015	.00008	.05750	.02823	.00743	.00000	.06478
.600	-.400	.03440	-.01840	.00720	.05826	.00154	.05880	.02483	.00654	.00000	.06128
.600	1.750	-.06570	.02670	-.00690	.05921	-.00018	.06150	.02812	.00740	.00000	.05888
.600	3.910	-.13250	.04890	-.01820	.05755	.00187	.06135	.02908	.00766	.00000	.06288
.600	6.030	-.20700	.07510	-.03210	.05329	.00183	.06094	.02918	.00768	.00000	.06518
.600	8.140	-.27320	.09550	-.04360	.05446	.00046	.05483	.02940	.00774	.00000	.06978
.600	10.210	-.34850	.11910	-.05610	.04588	.00242	.04688	.03003	.00791	.00000	.07398
GRADIENT		-.03705	.01392	-.00601	-.00047	.00029	.00061	-.00004	-.00001	.00000	-.00053



REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = 5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 152/ 0 RN/L = 6.29 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.904	-11.940	.51410	-.18350	.08550	.12228	-.04359	.04680	-.05123	.01349	.00000	.09607
.904	-9.640	.40900	-.15420	.07020	.13278	-.04620	.05752	-.04561	.01206	.00000	.09397
.904	-7.360	.31420	-.12290	.05420	.13785	-.05073	.06673	-.04400	.01158	.00000	.08847
.904	-5.030	.20980	-.08160	.03510	.14668	-.05700	.07144	-.04039	.01063	.00000	.08397
.904	-2.740	.11660	-.04610	.01880	.14341	-.05326	.07631	-.03592	.00946	.00000	.08087
.904	-.420	.02510	-.01160	.00370	.13489	-.04603	.07289	-.03613	.00951	.00000	.08007
.904	1.840	-.06480	.02500	-.01070	.13484	-.04619	.07507	-.03656	.00963	.00000	.08047
.904	4.130	-.14720	.05450	-.02470	.13403	-.04852	.07357	-.03826	.01007	.00000	.08327
.904	6.390	-.23820	.08920	-.04010	.13695	-.05149	.06888	-.04145	.01091	.00000	.08537
.904	8.670	-.33050	.12490	-.05540	.12882	-.04746	.05761	-.04761	.01254	.00000	.08857
.904	10.900	-.42540	.15730	-.07080	.12989	-.04758	.05375	-.05038	.01326	.00000	.09267
GRADIENT		-.03854	.01480	-.00634	-.00124	.00062	-.00027	.00033	.00009	.00000	.00033

RUN NO. 154/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.098	-12.480	.56780	-.19740	.10270	.17379	-.06218	.13114	-.06410	.01688	.00000	.12096
1.098	-10.090	.44670	-.15690	.08400	.17031	-.05640	.13877	-.05847	.01539	.00000	.12026
1.098	-7.660	.33390	-.11930	.06470	.17493	-.05698	.14701	-.05624	.01481	.00000	.11656
1.098	-5.220	.21780	-.07750	.04260	.18176	-.06051	.15202	-.05602	.01475	.00000	.11276
1.098	-2.820	.11760	-.04290	.02330	.17575	-.05623	.15364	-.05230	.01377	.00000	.11006
1.098	-.430	.02290	-.00990	.00480	.17035	-.05165	.15691	-.04773	.01257	.00000	.10786
1.098	1.910	-.06920	.02320	-.01340	.17161	-.05308	.15590	-.05135	.01352	.00000	.10666
1.098	4.290	-.15380	.04860	-.02930	.18001	-.05953	.15609	-.05475	.01441	.00000	.10826
1.098	6.630	-.24490	.07840	-.04740	.17974	-.06289	.15124	-.05570	.01467	.00000	.11036
1.098	9.020	-.35030	.11480	-.06550	.17404	-.06103	.14309	-.05826	.01534	.00000	.11616
1.098	11.400	-.46200	.15090	-.08400	.16921	-.05914	.13562	-.06102	.01606	.00000	.12176
GRADIENT		-.03829	.01299	-.00744	.00059	-.00048	.00027	.00046	.00012	.00000	-.00028

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (T1P101)

ORB STING

(A1C023) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .7040

PARAMETRIC DATA

ALPHA = 5.000    RUDDER = .000  
 ELEVTR = .000

		RUN NO.	153/ 0	RN/L =	6.68	GRADIENT INTERVAL =	-5.00/	5.00			
MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.250	-12.630	.56040	-.18680	.09670	.16951	-.06842	.14012	.06169	.01624	.00000	.12169
1.250	-10.220	.44230	-.15020	.08020	.16857	-.06299	.14995	.05616	.01479	.00000	.11979
1.250	-7.740	.32710	-.11260	.06140	.17326	-.06264	.15826	.05414	.01425	.00000	.11579
1.250	-5.260	.21130	-.07190	.04950	.17579	-.06165	.16393	.05308	.01399	.00000	.11239
1.250	-2.840	.10980	-.03750	.02170	.18004	-.06327	.16705	.05096	.01342	.00000	.10709
1.250	-.420	.01440	-.00400	.00300	.17487	-.05991	.16804	.04617	.01216	.00000	.10229
1.250	1.970	-.07580	.02690	-.01490	.17615	-.06026	.16850	.05010	.01319	.00000	.10369
1.250	4.330	-.16510	.05530	-.03170	.18103	-.06518	.16887	.05234	.01378	.00000	.10389
1.250	6.740	-.26160	.08880	-.05000	.17514	-.06392	.15905	.05436	.01431	.00000	.11119
1.250	9.170	-.36710	.12260	-.06720	.17568	-.06052	.15048	.05733	.01509	.00000	.11389
1.250	11.620	-.48530	.15770	-.08460	.15886	-.06037	.14264	.06127	.01613	.00000	.11939
	GRADIENT	-.03828	.01294	-.00745	.00017	-.00025	.00025	.00033	.00009	.00000	-.00035

		RUN NO.	137/ 0	RN/L =	7.07	GRADIENT INTERVAL =	-5.00/	5.00			
MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.957	-12.850	.58490	-.21580	.08830	.15193	-.06334	.15422	.04691	.01235	.00000	.06617
1.957	-10.340	.45030	-.16350	.06980	.15188	-.06006	.15974	.04479	.01179	.00000	.06317
1.957	-7.860	.32880	-.11810	.05260	.15086	-.05601	.16673	.04330	.01140	.00000	.06327
1.957	-5.360	.21400	-.07360	.03490	.15082	-.05192	.17471	.04032	.01062	.00000	.06497
1.957	-2.900	.10800	-.03330	.01710	.14948	-.04795	.17951	.03851	.01014	.00000	.06637
1.957	-.450	.01600	-.00270	.00250	.14970	-.04585	.18274	.03798	.01000	.00000	.06357
1.957	1.960	-.07000	.02420	-.01070	.14944	-.04684	.18402	.04011	.01056	.00000	.06487
1.957	4.420	-.14610	.05720	-.02610	.15625	-.05365	.17990	.04043	.01064	.00000	.06257
1.957	6.870	-.26880	.09390	-.04230	.14915	-.05287	.17185	.04128	.01087	.00000	.06437
1.957	9.410	-.38980	.13870	-.06020	.14642	-.05518	.16839	.04404	.01160	.00000	.06547
1.957	11.890	-.52070	.18750	-.07830	.14094	-.05464	.16185	.04638	.01221	.00000	.06427
	GRADIENT	-.03727	.01225	-.00586	.00087	-.00074	.00010	.00032	.00008	.00000	-.00042

MSFC 594(1A33) 740TS (T1P101)

ORB STING

(A1C023) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 162/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.670	.31440	-.11550	.05000	.08193	-.01132	.16129	.00521	.00137	.00000	.00750
4.959	-8.670	.24800	-.08990	.03880	.07130	-.00620	.15558	.00542	.00143	.00000	.00770
4.959	-6.630	.18610	-.06590	.02900	.06654	-.00324	.15297	.00553	.00146	.00000	.00780
4.959	-4.550	.12420	-.04260	.01910	.05584	.00346	.14927	.00553	.00146	.00000	.00790
4.959	-2.470	.06980	-.02400	.01090	.05614	.00186	.14877	.00553	.00146	.00000	.00810
4.959	-.380	.01550	-.00460	.00260	.04731	.00709	.14796	.00574	.00151	.00000	.00800
4.959	1.680	-.03700	.01360	-.00590	.05021	.00339	.14696	.00574	.00151	.00000	.00800
4.959	3.760	-.09570	.03460	-.01520	.05671	-.00331	.15146	.00574	.00151	.00000	.00830
4.959	5.850	-.15350	.05310	-.02320	.05761	-.00252	.15516	.00574	.00151	.00000	.00830
4.959	7.910	-.21390	.07510	-.03260	.06715	-.00875	.15745	.00595	.00154	.00000	.00830
4.959	9.910	-.27860	.10030	-.04260	.07441	-.01462	.15966	.00574	.00151	.00000	.00820
GRADIENT		-.02632	.00924	-.00411	-.00020	-.00058	.00012	.00003	.00001	.00000	.00003

MSFC 594(1A33) 740TS (T1P101)

ORB STING

(A1C024) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = -5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 150/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.598	-11.080	.44170	-.16410	.08140	-.35427	.20787	.04689	.04183	.01101	.00000	.09228
.598	-9.000	.35630	-.13350	.06700	-.34654	.20443	.03878	.04194	.01104	.00000	.10088
.598	-6.870	.27180	-.10420	.05270	-.35434	.20869	.04963	.04449	.01171	.00000	.08888
.598	-4.720	.19080	-.07630	.03810	-.36427	.21717	.04689	.04183	.01101	.00000	.09138
.598	-2.580	.11640	-.04910	.02340	-.37114	.22429	.03266	.03907	.01029	.00000	.10988
.598	-.410	.04630	-.02270	.00840	-.36925	.22127	.01703	.03450	.00908	.00000	.12578
.598	1.720	-.07770	.00800	-.00690	-.36587	.21739	.05881	.03471	.00914	.00000	.08408
.598	3.890	-.11860	.04120	-.01860	-.37428	.22433	.06506	.03896	.01026	.00000	.07418
.598	6.010	-.19780	.07200	-.03420	-.36628	.21571	.06231	.03981	.01048	.00000	.07468
.598	8.160	-.27400	.09670	-.04770	-.37591	.22095	.05705	.03918	.01031	.00000	.08238
.598	10.210	-.35390	.12540	-.06200	-.37937	.22082	.05449	.03843	.01012	.00000	.08428
GRADIENT		-.03592	.01357	-.00668	-.00069	.00035	.00290	-.00047	-.00012	.00000	-.00279

DATE 23 OCT 75

1A33 TABULATED DATA

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MSFC 594(1A33) 74015 (T1P101)

ORB STING

(A1C024) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XI  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = -5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 149/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.903	-11.990	.54350	-.20890	.10050	-.37402	.21811	.05800	.05123	.01349	.00000	.11107
.903	-9.710	.43660	-.17120	.08240	-.37284	.21984	.06204	.05059	.01332	.00000	.10527
.903	-7.400	.33350	-.13300	.06420	-.37406	.22288	.06818	.04995	.01315	.00000	.10037
.903	-5.070	.23140	-.09540	.04620	-.37581	.22463	.06990	.04953	.01304	.00000	.09247
.903	-2.770	.12930	-.05250	.02570	-.39117	.23882	.07079	.04793	.01262	.00000	.08937
.903	-.460	.03470	-.01390	.00830	-.40048	.24688	.06396	.04506	.01186	.00000	.08787
.903	1.810	-.05760	.02410	-.00740	-.38969	.23837	.06568	.04644	.01223	.00000	.09037
.903	4.100	-.14680	.05820	-.02380	-.38159	.22932	.06806	.04846	.01276	.00000	.08947
.903	6.390	-.23540	.09140	-.04020	-.38088	.22578	.06284	.05048	.01329	.00000	.09417
.903	8.670	-.33490	.12820	-.05810	-.38641	.22727	.06293	.05240	.01380	.00000	.09647
.903	10.900	-.43130	.16290	-.07490	-.38886	.22641	.05595	.05367	.01413	.00000	.10107
GRADIENT		-.04024	.01618	-.00718	.00172	-.00161	-.00029	.00013	.00003	.00000	.00012

RUN NO. 147/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.101	-12.510	.59590	-.22230	.12360	-.49115	.31281	.13874	.06740	.01774	.00000	.13576
1.101	-10.100	.47360	-.17920	.10190	-.48431	.31672	.14192	.06952	.01830	.00000	.13556
1.101	-7.690	.35690	-.13890	.07980	-.47744	.31906	.14772	.06942	.01828	.00000	.13136
1.101	-5.250	.24040	-.09490	.05540	-.47461	.32151	.15157	.07037	.01853	.00000	.12436
1.101	-2.860	.13490	-.05460	.03200	-.47915	.32672	.15619	.06655	.01752	.00000	.11696
1.101	-.480	.03720	-.01710	.01100	-.49976	.34505	.15546	.06538	.01721	.00000	.11806
1.101	1.870	-.05900	.02030	-.00950	-.49718	.34234	.15648	.06676	.01758	.00000	.11786
1.101	4.250	-.15620	.05670	-.02970	-.48926	.33266	.15894	.07080	.01864	.00000	.11326
1.101	6.610	-.25780	.09510	-.05170	-.48919	.32976	.15628	.07186	.01892	.00000	.11396
1.101	9.040	-.36540	.13290	-.07350	-.49064	.32612	.14660	.07144	.01881	.00000	.12086
1.101	11.410	-.48280	.17250	-.09570	-.49508	.32182	.13938	.06846	.01802	.00000	.12806
GRADIENT		-.04094	.01568	-.00868	-.00117	.00039	.00014	.00060	.00016	.00000	-.00048

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POOR QUALITY

MSFC 594(IA33) 74CTS (TIP101)

ORB STING

(AIC024) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = -5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 148/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.254	-12.730	.61210	-.22540	.12410	-.46546	.27784	.15076	.06775	.01784	.00000	.13159
1.254	-10.270	.47840	-.17640	.10200	-.44847	.27718	.15343	.06658	.01753	.00000	.12939
1.254	-7.800	.35220	-.13020	.07950	-.43023	.27355	.15957	.06584	.01733	.00000	.12289
1.254	-5.320	.23230	-.08510	.05480	-.41821	.27143	.16248	.06562	.01728	.00000	.11579
1.254	-2.880	.12220	-.04280	.02970	-.42173	.27835	.16647	.06584	.01733	.00000	.11089
1.254	-.470	.02530	-.00770	.00820	-.43088	.28833	.16550	.06371	.01677	.00000	.10999
1.254	1.910	-.06800	.02530	-.01320	-.43351	.28973	.16898	.06562	.01728	.00000	.10869
1.254	4.330	-.16770	.06120	-.03520	-.43478	.28695	.17103	.06829	.01798	.00000	.10899
1.254	6.750	-.27560	.10070	-.05880	-.43286	.27843	.16151	.06860	.01806	.00000	.11069
1.254	9.250	-.39490	.14250	-.08190	-.44612	.28082	.15450	.06701	.01764	.00000	.11779
1.254	11.690	-.53150	.19340	-.10710	-.46495	.28543	.14924	.06807	.01792	.00000	.12449
GRADIENT		-.04011	.01437	-.00900	-.00174	.00113	.00071	.00039	.00010	.00000	-.00029

RUN NO. 138/ 0 RN/L = 7.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.967	-12.930	.63560	-.25600	.11190	-.37285	.19111	.16715	.04298	.01132	.00000	.07607
1.967	-10.400	.49480	-.20230	.09270	-.35576	.19201	.18432	.04351	.01146	.00000	.07117
1.967	-7.890	.36540	-.14920	.07220	-.34141	.18797	.18594	.04308	.01134	.00000	.06877
1.967	-5.380	.24180	-.09950	.05040	-.33449	.18976	.18801	.04202	.01106	.00000	.06627
1.967	-2.910	.12830	-.05130	.02810	-.33011	.18929	.18954	.04138	.01090	.00000	.06427
1.967	-.460	.02230	-.00690	.00650	-.32627	.18837	.18879	.04064	.01070	.00000	.06217
1.967	1.960	-.06030	.03390	-.01440	-.32792	.18841	.19096	.04107	.01091	.00000	.06017
1.967	4.450	-.19070	.07810	-.03660	-.33529	.18836	.19021	.04202	.01106	.00000	.06157
1.967	6.930	-.30930	.12610	-.05880	-.34187	.18904	.18799	.04234	.01115	.00000	.06277
1.967	9.470	-.44020	.17860	-.08070	-.35464	.19110	.18548	.04245	.01118	.00000	.06597
1.967	12.000	-.58000	.23410	-.10120	-.37945	.19909	.18250	.04383	.01154	.00000	.07187
GRADIENT		-.04325	.01751	-.00878	-.00070	-.00011	.00017	.00010	.00003	.00000	-.00041

MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C024) ( 12 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = -5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 163/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.740	.37620	-.14810	.05670	-.16782	.07655	.21457	.00393	.00104	.00000	.00810
4.959	-8.730	.30370	-.11830	.04520	-.17448	.08101	.20796	.00404	.00106	.00000	.00840
4.959	-6.670	.22970	-.08800	.03410	-.17836	.08548	.20232	.00468	.00123	.00000	.00870
4.959	-4.580	.15560	-.05800	.02410	-.18742	.09144	.19692	.00478	.00126	.00000	.00880
4.959	-2.500	.08520	-.02750	.01360	-.18865	.09066	.19240	.00500	.00132	.00000	.00870
4.959	-.390	.01590	-.00130	.00320	-.18665	.08596	.18860	.00500	.00132	.00000	.00880
4.959	1.700	-.05220	.02370	-.00600	-.18781	.08812	.19230	.00510	.00134	.00000	.00890
4.959	3.780	-.11720	.04740	-.01560	-.18921	.08862	.19740	.00510	.00134	.00000	.00890
4.959	5.870	-.18470	.07520	-.02580	-.18473	.08634	.20339	.00531	.00140	.00000	.00910
4.959	7.940	-.25370	.10180	-.03610	-.18590	.08240	.20468	.00542	.00143	.00000	.00910
4.959	9.950	-.32630	.13210	-.04720	-.18930	.08250	.20938	.00542	.00143	.00000	.00910
	GRADIENT	-.03265	.01252	-.00473	-.00013	-.00039	.00004	.00004	.00001	.00000	.00002

MSFC 594(IA33) 740TS (TIP1S2P201)

ORB STING

(A1C025) ( 12 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 57/ 0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.599	-11.730	.00520	-.00290	.00540	-.83084	.35274	.09061	.03811	.01003	.07520	.09288
.599	-9.600	.00560	-.00250	.00420	-.69846	.29969	.10117	.03705	.00975	.07100	.08598
.599	-7.430	.00350	-.00260	.00310	-.56800	.24864	.10229	.03684	.00970	.06950	.08478
.599	-5.230	-.00190	.00110	.00200	-.45424	.20219	.10460	.03662	.00964	.06600	.08428
.599	-3.010	-.00310	.00080	.00200	-.32734	.15461	.11037	.03546	.00933	.06430	.07828
.599	-.820	-.00820	.00320	.00080	-.21368	.11269	.11173	.03450	.00908	.06310	.07608
.599	1.410	-.01240	.00560	.00070	-.08818	.06681	.10700	.03333	.00877	.06390	.07538
.599	3.640	-.01060	.00350	.00060	.03593	.02164	.10226	.03216	.00847	.06360	.07468
.599	5.820	-.01290	.00430	.00020	.14817	-.01619	.09590	.03163	.00833	.06170	.07468
.599	8.020	-.01460	.00400	-.00010	.26987	-.05739	.08360	.03163	.00833	.06560	.07318
.599	10.120	-.01500	.00390	-.00100	.38170	-.10506	.07172	.02961	.00760	.06760	.07128
	GRADIENT	-.00120	.00047	-.00019	.05480	-.02006	-.00131	-.00050	-.00013	-.00006	-.00052

MSFC 594(1A33) 740TS (TIP1S2P201)

ORB STING

(A1C025) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 59/ 0 RN/L = 5.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.800	-12.660	.00150	.00010	.00480	-.91265	.37863	.09345	.04452	.01172	.07750	.10313
.800	-10.370	-.00060	.00110	.00400	-.75644	.31808	.09756	.04261	.01122	.07190	.09563
.800	-8.050	-.00030	.00120	.00300	-.61241	.26130	.10948	.04059	.01069	.06640	.09023
.800	-5.690	-.00290	.00200	.00150	-.47056	.20558	.10914	.03963	.01043	.06400	.08943
.800	-3.410	-.00540	.00330	.00110	-.34061	.14955	.10820	.03867	.01018	.06340	.08883
.800	-1.050	-.00690	.00310	.00060	-.20511	.09938	.10844	.03793	.00999	.06300	.08703
.800	1.290	-.01160	.00490	.00000	-.07335	.04712	.10488	.03729	.00982	.05980	.08463
.800	3.670	-.01640	.00600	-.00100	.06192	.00187	.10242	.03665	.00965	.06100	.08363
.800	6.010	-.01890	.00710	-.00160	.20067	-.04785	.09397	.03570	.00940	.06310	.08223
.800	8.330	-.02280	.00820	-.00230	.33719	-.09727	.08365	.03602	.00948	.06820	.08043
.800	10.550	-.02510	.00920	-.00270	.46395	-.15002	.07737	.03580	.00943	.07150	.07853
	GRADIENT	-.00160	.00042	-.00029	.05684	-.02102	-.00089	-.00028	-.00007	.00044	-.00076

RUN NO. 59/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.904	-13.220	-.00160	.00550	.00280	-1.00502	.42777	.08694	.05229	.01377	.07780	.11567
.904	-10.820	-.00280	.00570	.00250	-.82380	.35155	.09904	.04878	.01284	.07600	.10947
.904	-8.400	-.00990	.00980	.00080	-.64759	.27720	.11086	.04687	.01234	.07270	.10357
.904	-5.940	-.01050	.00920	-.00020	-.48899	.21445	.12137	.04496	.01184	.06980	.09787
.904	-3.510	-.00840	.00660	-.00030	-.32889	.14769	.12188	.04304	.01133	.06680	.09477
.904	-1.150	-.00890	.00600	-.00060	-.17876	.07369	.12703	.04219	.01111	.06450	.08847
.904	1.280	-.01270	.00710	-.00080	-.02207	.00507	.12767	.03996	.01052	.06500	.08587
.904	3.690	-.01500	.00740	-.00190	.11594	-.04816	.11915	.04028	.01060	.06730	.08797
.904	6.090	-.01790	.00680	-.00270	.24081	-.07953	.11694	.04039	.01063	.06920	.08927
.904	8.460	-.01940	.00690	-.00260	.36667	-.11831	.10541	.04092	.01077	.07620	.09097
.904	10.740	-.02270	.00730	-.00300	.49854	-.16806	.09675	.04028	.01060	.07850	.08537
	GRADIENT	-.00098	.00015	-.00021	.06205	-.02730	-.00032	-.00044	-.00012	.00009	-.00095

,MSFC 594(1A33) 740TS (T1P1S2P201) ORB STING

(A1C025) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 61/ 1 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.101	-14.480	-.00350	.00850	.00460	-1.19597	.51688	.20581	.06293	.01657	.08950	.11646
1.101	-11.800	-.00070	.00490	.00360	-.95477	.41728	.21461	.05953	.01567	.09590	.11646
1.101	-9.190	-.00110	.00440	.00260	-.75457	.33963	.22892	.05762	.01517	.09510	.11326
1.101	-6.590	-.00220	.00420	.00210	-.57379	.27160	.24083	.05581	.01469	.09200	.10966
1.101	-4.020	-.00490	.00490	.00110	-.40317	.20653	.23733	.05422	.01427	.08890	.11046
1.101	-1.440	-.01160	.00870	.00000	-.23649	.14172	.23160	.05124	.01349	.08850	.11116
1.101	1.080	-.01390	.00990	-.00080	-.07077	.06985	.23220	.04965	.01307	.08430	.10836
1.101	3.600	-.01730	.01070	-.00170	.09903	-.00713	.22554	.04890	.01287	.08350	.10456
1.101	6.140	-.02030	.01060	-.00260	.26398	-.07438	.22065	.04869	.01282	.08420	.10066
1.101	8.630	-.02250	.01090	-.00260	.41944	-.13745	.21152	.04922	.01296	.08740	.09756
1.101	10.960	-.02770	.01240	-.00360	.54551	-.19061	.19376	.04858	.01279	.09130	.09826
1.101	GRADIENT	-.00156	.00073	-.00036	.06569	-.02808	-.00137	-.00069	-.00018	-.00080	-.00081

RUN NO. 60/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.254	-15.150	-.00280	.00360	.00490	-1.32439	.57534	.21667	.06424	.01691	.08290	.12199
1.254	-12.280	-.00330	.00420	.00420	-1.01926	.43283	.21864	.05957	.01568	.08230	.11709
1.254	-9.450	-.00220	.00300	.00270	-.76201	.32558	.22346	.05595	.01473	.08060	.11239
1.254	-6.700	-.00010	.00130	.00210	-.55059	.24191	.22975	.05436	.01431	.07900	.10969
1.254	-4.030	-.00210	.00110	.00120	-.35824	.16648	.23711	.05340	.01406	.07830	.10789
1.254	-1.390	-.00620	.00320	.00040	-.17479	.09383	.24282	.04979	.01311	.07870	.10529
1.254	1.200	-.00950	.00510	-.00050	-.01025	.02923	.24140	.04851	.01277	.07550	.10619
1.254	3.740	-.01020	.00320	-.00130	.14205	-.03365	.23724	.04777	.01268	.07750	.10459
1.254	6.280	-.01230	.00510	-.00250	.30001	-.09552	.23301	.04830	.01272	.08060	.10229
1.254	8.770	-.01380	.00480	-.00320	.44708	-.15730	.22350	.04840	.01274	.08080	.10049
1.254	11.240	-.01530	.00420	-.00360	.59133	-.20557	.21305	.04936	.01300	.08260	.09769
1.254	GRADIENT	-.00107	.00032	-.00032	.06432	-.02568	-.00003	-.00070	-.00019	-.00022	-.00039



MSFC 594(IA33) 740TS (T1P1S2P201)

ORB STING

(A1C025) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 110/ 0 RN/L = 6.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.467	-15.070	-.00880	.00680	.00450	-1.24131	.51432	.23037	.05551	.01461	.06490	.09892
1.467	-12.280	-.00650	.00560	.00490	-.98476	.40859	.25983	.05455	.01436	.06680	.09232
1.467	-9.450	-.00290	.00280	.00340	-.73621	.30164	.26032	.05477	.01442	.06490	.08962
1.467	-6.710	-.00440	.00300	.00260	-.53053	.22079	.26199	.05370	.01414	.06080	.08492
1.467	-4.020	-.00220	.00000	.00170	-.33592	.14272	.26015	.05253	.01383	.05930	.08402
1.467	-1.390	-.00530	.00170	.00050	-.16029	.07569	.26398	.04860	.01280	.05910	.08362
1.467	1.220	-.00850	.00330	-.00010	.00340	.01524	.26277	.04711	.01240	.05770	.08402
1.467	3.740	-.01060	.00390	-.00080	.14639	-.04059	.26150	.04489	.01182	.05870	.08362
1.467	6.290	-.01280	.00490	-.00150	.30059	-.09919	.25790	.04488	.01182	.06040	.08322
1.467	8.770	-.01720	.00700	-.00250	.43893	-.15251	.25094	.04435	.01168	.06160	.08192
1.467	11.260	-.01800	.00620	-.00220	.58612	-.19891	.24631	.04477	.01179	.06340	.08242
GRADIENT		-.00110	.00051	-.00031	.06246	-.02358	.00012	-.00095	-.00025	-.00012	-.00003

RUN NO. 77/ 0 RN/L = 7.07 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.959	-14.950	.00520	.00260	.00480	-1.11283	.46990	.27957	.04085	.01076	.04330	.06987
1.959	-12.130	.00290	.00340	.00420	-.87415	.36215	.26914	.03979	.01048	.04550	.06707
1.959	-9.350	.00040	.00340	.00290	-.66044	.26998	.26201	.03862	.01017	.04480	.06477
1.959	-6.600	-.00190	.00390	.00170	-.46681	.19237	.25798	.03734	.00983	.04190	.06277
1.959	-4.030	-.00220	.00350	.00100	-.31680	.13495	.25404	.03809	.01003	.04170	.06397
1.959	-1.440	-.00550	.00480	.00010	-.16894	.08068	.25231	.03862	.01017	.04340	.06387
1.959	1.160	-.00840	.00620	-.00060	-.01920	.02530	.24895	.03958	.01042	.04470	.06497
1.959	3.730	-.01110	.00740	-.00140	.12402	-.03212	.24733	.03990	.01050	.04560	.06417
1.959	6.280	-.01420	.00840	-.00170	.27559	-.09508	.25127	.03926	.01034	.04680	.06407
1.959	8.870	-.02020	.01120	-.00300	.42684	-.14843	.25058	.03905	.01028	.04730	.06337
1.959	11.450	-.02130	.01190	-.00380	.57402	-.19067	.24844	.03798	.01000	.04750	.06457
GRADIENT		-.00114	.00051	-.00031	.05689	-.02151	-.00091	.00025	.00006	.00050	.00007

DATE 23 OCT 75

IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (T1P1S2P201)

ORB STING

(A1C025) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 (.REF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 93/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
2.990	-11.830	.00810	-.00200	.00330	-.67799	.27159	.28444	.01704	.00449	.02380	.02902
2.990	-9.680	.00700	-.00210	.00310	-.56325	.22635	.27490	.01767	.00465	.02420	.02922
2.990	-7.490	.00560	-.00140	.00280	-.45377	.18795	.26238	.01810	.00477	.02480	.02932
2.990	-5.230	.00270	.00020	.00190	-.34055	.14592	.25096	.01842	.00485	.02490	.02922
2.990	-3.020	.00060	.00070	.00120	-.23623	.10850	.24484	.01874	.00493	.02480	.02852
2.990	-.810	.00030	.00080	.00100	-.14252	.08067	.24202	.01906	.00502	.02460	.02822
2.990	1.400	.00020	.00090	.00070	-.05573	.05550	.23764	.01874	.00493	.02460	.02782
2.990	3.620	-.00140	.00140	.00030	.04154	.01892	.23433	.01884	.00496	.02430	.02712
2.990	5.810	-.00410	.00240	-.00020	.14754	-.02208	.22883	.01884	.00496	.02350	.02612
2.990	8.000	-.00600	.00280	-.00110	.25037	-.05961	.22524	.01874	.00493	.02330	.02472
2.990	10.140	-.00530	.00130	-.00090	.36268	-.10303	.22412	.01906	.00502	.02330	.02362
GRADIENT		-.00028	.00010	-.00014	.04158	-.01328	-.00162	-.00000	-.00000	-.00007	-.00021

RUN NO. 82/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.970	.00820	-.00190	.00270	-.48875	.19684	.28670	.00340	.00090	.00710	.00760
4.959	-8.950	.00870	-.00250	.00260	-.41539	.17356	.27107	.00393	.00104	.00720	.00770
4.959	-6.870	.00480	-.00130	.00160	-.33885	.14641	.25783	.00457	.00120	.00740	.00740
4.959	-4.800	.00390	-.00030	.00190	-.26834	.12538	.24331	.00489	.00129	.00760	.00740
4.959	-2.680	.00320	-.00050	.00140	-.19207	.09781	.23210	.00500	.00132	.00780	.00730
4.959	-.580	.00530	-.00190	.00230	-.11884	.07478	.22421	.00489	.00129	.00770	.00710
4.959	1.520	.00460	-.00210	.00110	-.04857	.05161	.21800	.00500	.00132	.00760	.00730
4.959	3.630	.00250	-.00080	.00090	.02778	.02506	.21129	.00521	.00137	.00780	.00720
4.959	5.700	-.00080	.00130	.00010	.10125	-.00211	.20449	.00531	.00140	.00780	.00710
4.959	7.780	-.00150	.00130	.00050	.18658	-.03544	.19849	.00521	.00137	.00770	.00650
4.959	9.800	-.00060	.00030	.00000	.27131	-.06886	.19410	.00510	.00134	.00760	.00590
GRADIENT		-.00007	-.00012	-.00011	.03494	-.01172	-.00371	.00003	.00001	.00001	-.00002

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MSFC 594(1A33) 740TS (T1P1S2P201)

ORB STING

(A1C026) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVAT = .000

RUN NO. 65/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLM <sup>2</sup>	CAF	CABO	CNBO	CABS	CABE
.598	-11.080	.46320	-.20030	.06290	-.16028	.09004	.07754	.03599	.00947	.07430	.09578
.598	-9.010	.37740	-.16730	.05340	-.16831	.08791	.04502	.03460	.00911	.07230	.09558
.598	-6.870	.28840	-.12950	.04090	-.17670	.09539	.05740	.03492	.00919	.07120	.08938
.598	-4.720	.19810	-.09130	.02890	-.17701	.09749	.09128	.03535	.00931	.07160	.08918
.598	-2.580	.11380	-.05320	.01600	-.18173	.10196	.10158	.03354	.00883	.06740	.08538
.598	-.440	.02770	-.01250	.00440	-.18885	.10647	.11196	.03397	.00894	.06320	.07668
.598	1.700	-.05300	.02510	-.00510	-.18595	.10356	.11866	.03397	.00894	.06130	.07558
.598	3.850	-.13070	.05920	-.01600	-.17984	.09691	.11797	.03546	.00933	.05920	.08118
.598	5.970	-.21510	.09800	-.02790	-.17471	.08981	.12592	.03460	.00911	.05320	.07938
.598	8.090	-.29720	.13260	-.03900	-.17189	.08514	.11251	.03641	.00959	.05570	.08508
.598	10.150	-.38000	.16790	-.05050	-.17761	.08539	.10508	.03535	.00931	.05460	.09218
.598	GRADIENT	-.03849	.01771	-.00518	-.00046	.00002	.00329	.00003	.00001	-.00144	-.00120

RUN NO. 64/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLM <sup>2</sup>	CAF	CABO	CNBO	CABS	CABE
.901	-11.860	.54930	-.24290	.07990	-.14729	.05572	.09730	.04953	.01304	.07850	.10757
.901	-9.640	.45260	-.20570	.06680	-.14040	.05627	.10489	.04804	.01265	.08010	.10607
.901	-7.380	.34830	-.16160	.05090	-.13536	.05707	.11166	.04676	.01231	.07860	.10237
.901	-5.060	.24610	-.11840	.03530	-.13723	.05717	.11454	.04549	.01198	.07420	.09817
.901	-2.780	.14320	-.06960	.01900	-.14617	.06147	.12067	.04336	.01142	.07080	.09197
.901	-.500	.03860	-.01920	.00510	-.15571	.06834	.12055	.04198	.01105	.06690	.08847
.901	1.780	-.06250	.03110	-.00720	-.15733	.06907	.12694	.04209	.01108	.06270	.08897
.901	4.060	-.15750	.07430	-.01960	-.14901	.06269	.13143	.04389	.01156	.05870	.09237
.901	6.300	-.25480	.11990	-.03440	-.14902	.06130	.13201	.04432	.01167	.05790	.09577
.901	8.540	-.34400	.15810	-.04690	-.15309	.06332	.12193	.04570	.01203	.05910	.10367
.901	10.740	-.44160	.19960	-.06170	-.15393	.06120	.12308	.04815	.01268	.05770	.10627
.901	GRADIENT	-.04400	.02114	-.00562	-.00045	.00019	.00170	.00007	.00002	-.00178	.00007

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (T1P1S2P201)

ORB STING

(A1C026) ( 12 SEP 75 )

PARAMETRIC DATA

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RN/L = 6.62    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.098	-12.390	.61490	-.26640	.09550	-.17801	.09678	.20704	.05740	.01511	.09140	.12316
1.098	-10.020	.48930	-.21500	.07830	-.17202	.09810	.21598	.05666	.01492	.09130	.12186
1.098	-7.640	.37000	-.16810	.06140	-.16965	.10280	.22480	.05794	.01525	.09100	.11746
1.098	-5.220	.25750	-.12220	.04390	-.17320	.11128	.22996	.05698	.01500	.08930	.11416
1.098	-2.860	.15140	-.07580	.02580	-.18597	.12370	.23468	.05496	.01447	.08780	.11036
1.098	-.510	.04220	-.02290	.00790	-.19928	.13757	.23181	.05273	.01388	.08830	.11226
1.098	1.810	-.06070	.02790	-.00920	-.19676	.13705	.23479	.05305	.01397	.08520	.11296
1.098	4.170	-.16110	.07340	-.02610	-.19082	.12835	.24327	.05517	.01453	.08030	.11356
1.098	6.500	-.26680	.12010	-.04440	-.18377	.11805	.24407	.05687	.01497	.07600	.11806
1.098	8.860	-.37280	.16230	-.06070	-.17713	.10820	.24406	.05709	.01503	.07180	.12066
1.098	11.210	-.48290	.20090	-.07560	-.17236	.09713	.23715	.05719	.01506	.06900	.12316
1.098	GRADIENT	-.04444	.02129	-.00738	-.00051	.00057	.00123	.00004	.00001	-.00109	.00044

RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.247	-12.590	.61360	-.25570	.09480	-.16836	.07573	.21665	.05616	.01479	.08580	.12289
1.247	-10.180	.47870	-.19800	.07670	-.14752	.06793	.22515	.05446	.01434	.08330	.11939
1.247	-7.720	.35400	-.14880	.05910	-.13673	.06768	.23343	.05207	.01395	.08030	.11359
1.247	-5.260	.23230	-.09670	.04060	-.14896	.08448	.23746	.05425	.01428	.08260	.11329
1.247	-2.860	.12460	-.05200	.02190	-.15182	.08943	.23955	.05446	.01434	.08260	.10969
1.247	-.490	.02460	-.00940	.00490	-.15680	.09418	.24018	.05212	.01372	.08040	.10849
1.247	1.870	-.07000	.03100	-.01130	-.15297	.09171	.24390	.05351	.01409	.07770	.11039
1.247	4.250	-.16750	.07230	-.02780	-.15667	.09066	.24909	.05542	.01459	.07440	.11359
1.247	6.620	-.27330	.11570	-.04590	-.16744	.09379	.25128	.05723	.01507	.07220	.11829
1.247	9.050	-.38710	.15930	-.06190	-.17254	.09019	.24898	.05723	.01507	.07130	.12299
1.247	11.470	-.51320	.20850	-.07940	-.15846	.07278	.24066	.05425	.01428	.06560	.11979
1.247	GRADIENT	-.04098	.01745	-.00698	-.00045	.00005	.00137	.00018	.00005	-.00115	.00057

MSFC 594(IA33) 740TS (TIPIS2P201)

ORB STING

(A1C026) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 975.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 76/ 0 RN/L = 7.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.950	-12.710	.60850	-.26420	.08230	-.13760	.05573	.23477	.04606	.01213	.05110	.06947
1.950	-10.310	.48500	-.21120	.06690	-.12940	.05365	.23924	.04489	.01182	.04980	.06807
1.950	-7.870	.36360	-.15880	.05230	-.12833	.05650	.24257	.04426	.01165	.04940	.06717
1.950	-5.390	.24910	-.10930	.03730	-.13032	.06075	.24859	.04234	.01115	.04870	.06657
1.950	-2.950	.13800	-.06060	.02060	-.13508	.06608	.25228	.04075	.01073	.04660	.06657
1.950	-.530	.03140	-.01300	.00450	-.14420	.07263	.25829	.03883	.01022	.04470	.06637
1.950	1.900	-.07150	.03130	-.00920	-.14549	.07087	.26671	.04032	.01062	.04370	.06737
1.950	4.350	-.17040	.07650	-.02460	-.14140	.06488	.27288	.04075	.01073	.04080	.06797
1.950	6.780	-.28690	.12430	-.03980	-.14500	.06375	.27224	.04149	.01092	.03720	.06837
1.950	9.240	-.40140	.17200	-.05470	-.14620	.06385	.25724	.04489	.01182	.03440	.07047
1.950	11.730	-.53420	.22500	-.07000	-.15410	.06183	.26507	.04606	.01213	.03380	.06957
	GRADIENT	-.04324	.01897	-.00614	-.00084	-.00022	.00289	.00006	.00002	-.00076	.00021

RUN NO. 102/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.760	.37130	-.15130	.04510	-.09351	.06951	.24283	.00287	.00076	.00620	.00600
4.959	-8.750	.29600	-.11950	.03620	-.09063	.06493	.23312	.00292	.00078	.00640	.00640
4.959	-6.680	.22550	-.09000	.02630	-.09455	.06424	.22910	.00340	.00090	.00650	.00650
4.959	-4.620	.15810	-.06100	.01740	-.09870	.06558	.22439	.00361	.00095	.00680	.00660
4.959	-2.530	.09160	-.03610	.00950	-.10266	.06414	.21677	.00383	.00101	.00710	.00680
4.959	-.430	.02840	-.01170	.00350	-.09803	.05931	.21788	.00372	.00098	.00710	.00660
4.959	1.650	-.04220	.01850	-.00590	-.09586	.05863	.21777	.00383	.00101	.00710	.00680
4.959	3.750	-.10710	.04320	-.01090	-.09676	.05853	.22227	.00383	.00101	.00700	.00670
4.959	5.820	-.17650	.06450	-.01990	-.10056	.05814	.22627	.00383	.00101	.00690	.00680
4.959	7.910	-.24710	.09820	-.02840	-.09929	.05556	.23177	.00393	.00104	.00660	.00680
4.959	9.900	-.31640	.12540	-.03600	-.10476	.05924	.23857	.00383	.00101	.00600	.00680
	GRADIENT	-.23175	.01257	-.00344	.00051	-.00094	-.00015	.00002	.00001	.00002	.00001

ORIGINAL PAGE IS  
OF POOR QUALITY

DATE 23 OCT 75

1A33 TABULATED DATA

PAGE 93

MSFC 594(1A33) 740TS (TIPISIP201) FORKED STING

(A1C029) (12 SEP 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
ELEVTR = 10.000

RUN NO. 248/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.597	-8.820	-.01200	.00780	-.00280	-.48611	.14236	.08893	.03269	.00861	.03860	.06528
.597	-6.740	-.00710	.00410	-.00230	-.36364	.09629	.09473	.03280	.00863	.03700	.06278
.597	-4.670	-.01100	.00550	-.00500	-.26371	.05766	.09623	.03269	.00861	.03600	.06138
.597	-2.580	-.00930	.00420	-.00380	-.14128	.01511	.09840	.03333	.00877	.03480	.05958
.597	-.500	-.00930	.00430	-.00370	-.02743	-.02671	.09875	.03237	.00852	.03400	.05838
.597	1.580	-.01350	.00610	-.00350	.09501	-.07169	.09267	.03375	.00889	.03340	.05748
.597	3.690	-.01890	.00910	-.00230	.21665	-.11361	.08700	.03322	.00875	.03260	.05638
.597	5.750	-.02090	.00970	-.00390	.33359	-.15764	.07923	.03269	.00861	.03190	.05518
.597	7.850	-.02180	.01000	-.00420	.46265	-.20691	.06900	.03322	.00875	.03040	.05298
	GRADIENT	-.00096	.00044	.00027	.05733	-.02056	-.00116	.00007	.00002	-.00039	-.00058

RUN NO. 247/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.899	-9.170	-.01090	.00620	-.00200	-.56576	.19254	.10045	.03688	.00971	.04160	.07967
.899	-7.010	-.01100	.00570	-.00160	-.42950	.13221	.10513	.03550	.00935	.03840	.07497
.899	-4.860	-.01340	.00550	-.00140	-.29366	.07881	.10851	.03422	.00901	.03580	.07097
.899	-2.740	-.00810	.00120	-.00060	-.16685	.02241	.10523	.03379	.00890	.03460	.06917
.899	-.610	-.00980	.00190	-.00080	-.03535	-.03449	.10033	.03379	.00890	.03390	.06817
.899	1.530	-.01250	.00340	-.00030	.10006	-.08789	.10136	.03337	.00879	.03290	.06667
.899	3.710	-.01240	.00310	-.00050	.23320	-.13931	.09929	.03284	.00865	.03110	.06407
.899	5.870	-.01790	.00550	-.00040	.35478	-.17041	.09734	.03369	.00887	.03220	.06567
.899	8.070	-.02190	.00720	-.00040	.46823	-.19979	.09888	.03465	.00912	.03380	.06807
	GRADIENT	-.00011	-.00012	.00010	.06168	-.02543	-.00104	-.00015	-.00004	-.00052	-.00076

RUN NO. 246/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.098	-9.290	.00360	-.00370	-.00190	-.67416	.26549	.20004	.04390	.01156	.04610	.09526
1.098	-7.070	.00290	-.00440	-.00080	-.52084	.20877	.20222	.04422	.01164	.04530	.09406
1.098	-4.870	.00200	-.00420	-.00110	-.37177	.15212	.20046	.04359	.01148	.04390	.09196
1.098	-2.680	.00160	-.00400	-.00080	-.22858	.09704	.19930	.04284	.01128	.04300	.09066
1.098	-.510	-.00130	-.00390	-.00080	-.08753	.03689	.19659	.04305	.01134	.04220	.08946
1.098	1.660	-.00320	-.00190	-.00180	.05673	-.02316	.19042	.04242	.01117	.04150	.08836
1.098	3.860	-.00500	-.00080	-.00490	.19848	-.08151	.18581	.04263	.01122	.04040	.08676
1.098	6.050	-.00630	.00020	-.00740	.34056	-.13496	.17937	.04157	.01094	.03850	.08386
1.098	8.220	-.00870	.00060	-.00170	.47861	-.19178	.17393	.04061	.01069	.03600	.08026
	GRADIENT	-.00086	.00044	-.00039	.06540	-.02695	-.00175	-.00011	-.00003	-.00039	-.00058

MSFC 594(1A33) 740TS (TIPISIP201) FORKED STING

(A1C029) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = 10.000

RUN NO. 249/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.254	-9.390	-.00890	.00240	-.00070	-.66377	.24690	.20281	.04670	.01230	.04550	.09759
1.254	-7.140	-.00910	.00240	.00110	-.48390	.17520	.20286	.04755	.01252	.04520	.09719
1.254	-4.900	-.00830	.00250	.00270	-.33049	.12050	.20208	.04713	.01241	.04600	.09849
1.254	-2.680	-.00980	.00240	.00240	-.18113	.06433	.20305	.04766	.01255	.04620	.09879
1.254	-.470	-.00920	.00130	.00040	-.03409	.00798	.20181	.04830	.01272	.04610	.09859
1.254	1.710	-.01040	.00170	.00110	.10099	-.04625	.19742	.04989	.01314	.04620	.09869
1.254	3.930	-.01180	.00160	.00110	.23807	-.09907	.19022	.05149	.01356	.04670	.09949
1.254	6.110	-.01360	.00300	-.00090	.36940	-.14692	.18328	.05212	.01372	.04590	.09919
1.254	8.300	-.01790	.00660	-.00120	.49168	-.19540	.17950	.05181	.01364	.04310	.09419
	GRADIENT	-.00034	-.00011	-.00020	.06437	-.02494	-.00133	.00050	.00013	.00005	.00009

RUN NO. 261/ 0 RN/L = 7.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.961	-9.400	-.00720	.00210	-.00030	-.60948	.23437	.29125	-.01102	-.00290	.02700	.05797
1.961	-7.160	-.00680	.00100	-.00050	-.45741	.17567	.27767	-.00634	-.00167	.02770	.05897
1.961	-4.930	-.00920	.00260	-.00080	-.31721	.12337	.27397	-.00634	-.00167	.02760	.05877
1.961	-2.710	-.00870	.00100	-.00090	-.18894	.07677	.27060	-.00507	-.00133	.02720	.05817
1.961	-.500	-.00950	.00140	-.00090	-.05889	.02830	.26704	-.00411	-.00108	.02580	.05617
1.961	1.700	-.00910	.00150	-.00060	.07920	-.02683	.26447	-.00294	-.00077	.02510	.05517
1.961	3.930	-.00910	.00170	-.00050	.21743	-.08332	.26022	-.00039	-.00010	.02500	.05487
1.961	6.130	-.01170	.00460	-.00100	.34328	-.13147	.25853	-.00060	-.00016	.02470	.05447
1.961	8.380	-.01520	.00660	-.00140	.47406	-.17415	.25622	.00290	.00076	.02520	.05527
	GRADIENT	-.00001	-.00006	.00004	.06043	-.02336	-.00152	.00063	.00017	-.00033	-.00049

DATE 23 OCT 75

IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIPISIP201) FORKED STING

(AIC030) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = 10.000

RUN NO. 252/ 0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.599	-8.410	.33790	-.14240	.05220	.01065	-.05964	.08733	.03779	.00995	.03700	.06288
.599	-6.380	.25860	-.11050	.04220	.00807	-.05421	.09653	.03620	.00953	.03520	.06018
.599	-4.360	.17340	-.07530	.02760	-.00041	-.04749	.09972	.03460	.00911	.03450	.05908
.599	-2.340	.09820	-.04390	.01400	-.00552	-.04174	.10221	.03312	.00872	.03370	.05798
.599	-.320	.02210	-.01180	.00300	-.01673	-.03411	.09935	.03237	.00852	.03330	.05738
.599	1.690	-.05140	.01920	-.00730	-.01207	-.03729	.10492	.03290	.00866	.03150	.05468
.599	3.730	-.12560	.05070	-.01760	-.01133	-.03964	.10638	.03354	.00883	.03240	.05608
.599	5.750	-.20420	.08510	-.03020	-.01333	-.04201	.09953	.03620	.00953	.03370	.05798
.599	7.780	-.28230	.11710	-.04220	-.00245	-.05026	.09589	.03854	.01015	.03520	.06018
.599	GRADIENT	-.03699	.01559	-.00547	-.00140	.00100	.00079	-.00012	-.00003	-.00032	-.00046

RUN NO. 251/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.902	-8.500	.36890	-.15200	.05770	.01389	-.06106	.10025	.03858	.01016	.04100	.07877
.902	-6.450	.27700	-.11430	.04350	.01185	-.06076	.10218	.03645	.00960	.04010	.07737
.902	-4.410	.18920	-.07810	.02950	.00957	-.05996	.10393	.03560	.00937	.03840	.07487
.902	-2.360	.10460	-.04500	.01650	-.00200	-.05246	.10578	.03475	.00915	.03680	.07247
.902	-.320	.02890	-.01440	.00540	-.01699	-.04314	.10855	.03358	.00884	.03360	.06787
.902	1.720	-.05400	.01800	-.00590	-.00335	-.05544	.10892	.03571	.00940	.03410	.06847
.902	3.790	-.12820	.04510	-.01580	-.00497	-.05486	.11162	.03730	.00982	.03650	.07217
.902	5.810	-.21040	.07860	-.02840	-.00838	-.05441	.11061	.03922	.01032	.03690	.07267
.902	7.870	-.29790	.11530	-.04220	-.00255	-.05523	.10572	.04251	.01119	.03840	.07497
.902	GRADIENT	-.03864	.01511	-.00551	-.00149	.00035	.00091	.00021	.00006	-.00032	-.00046

RUN NO. 253/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.106	-8.570	.38420	-.15200	.06570	-.01386	-.01908	.19868	.04316	.01136	.04460	.09306
1.106	-6.490	.28740	-.11730	.05140	-.02223	-.00898	.20116	.04189	.01103	.04360	.09146
1.106	-4.420	.19770	-.08470	.03650	-.03478	.00227	.20034	.04210	.01108	.04280	.09026
1.106	-2.360	.11180	-.05110	.02120	-.04454	.00964	.20387	.04157	.01094	.04060	.08706
1.106	-.310	.02600	-.01440	.00550	-.05873	.02082	.20256	.04189	.01103	.03990	.08596
1.106	1.710	-.06200	.02560	-.00980	-.06251	.02222	.20068	.04146	.01092	.04140	.08826
1.106	3.780	-.14690	.06050	-.02460	-.05861	.01949	.19994	.04220	.01111	.04320	.09096
1.106	5.840	-.23110	.09340	-.03930	-.05386	.01269	.19584	.04390	.01156	.04470	.09316
1.106	7.910	-.31470	.12330	-.05280	-.04635	.00367	.19319	.04465	.01176	.04480	.09326
1.106	GRADIENT	-.04216	.01793	-.00748	-.00321	.00230	-.00019	.00001	.00000	.00008	.00013



DATE 23 OCT 75

1A33 TABULATED DATA

MSFC 594(1A33) 740TS (TIPISIP201) FORKED STING

(A1C030) ( 12 SEP 75 )

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
ELEVTR = 10.000

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
SCALE = .0040

RUN NO. 250/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.252	-8.580	.37870	-.15030	.06460	-.01378	-.01932	.20063	.05127	.01350	.04930	.10339
1.252	-6.510	.27800	-.11140	.04950	-.01849	-.01447	.20462	.04979	.01311	.04780	.10109
1.252	-4.430	.18180	-.07400	.03340	-.01367	-.00817	.20495	.04936	.01300	.04710	.10009
1.252	-2.370	.09310	-.03930	.01750	-.01852	-.00359	.20820	.04840	.01274	.04580	.09809
1.252	-.310	.01280	-.00810	.00340	-.02820	.00396	.20864	.04947	.01302	.04540	.09749
1.252	1.740	-.07220	.02620	-.01130	-.03446	.00660	.20673	.04968	.01308	.04700	.09989
1.252	3.810	-.16010	.06210	-.02670	-.03601	.00733	.20477	.05064	.01333	.04860	.10229
1.252	5.860	-.25040	.09780	-.04230	-.03857	.00563	.19875	.05276	.01389	.05120	.10609
1.252	7.960	-.34030	.12870	-.05590	-.04188	.00398	.19251	.05510	.01451	.05380	.10999
1.252	GRADIENT	-.04124	.01640	-.00724	-.00294	.00200	-.00009	.00019	.00005	.00020	.00030

RUN NO. 258/ 0 RN/L = 7.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.961	-8.550	.38650	-.16530	.05760	-.03706	.00457	.21858	.03905	.01028	.03050	.06327
1.961	-6.490	.28990	-.12490	.04430	-.04450	.00973	.22270	.03883	.01022	.03000	.06247
1.961	-4.420	.19510	-.08680	.03100	-.04828	.01522	.22304	.03798	.01000	.02900	.06087
1.961	-2.370	.10280	-.04660	.01620	-.03524	.02152	.22402	.03671	.00965	.02750	.05867
1.961	-.310	.01840	-.00980	.00290	-.06331	.02602	.22680	.03543	.00933	.02670	.05747
1.961	1.740	-.07350	.02780	-.01020	-.06267	.02528	.22806	.03607	.00950	.02730	.05837
1.961	3.810	-.16550	.06730	-.02460	-.05883	.02150	.22770	.03703	.00975	.02730	.05837
1.961	5.870	-.25740	.10670	-.03790	-.05973	.02075	.22099	.03894	.01025	.02810	.05957
1.961	7.940	-.35310	.14570	-.05120	-.05978	.02053	.22162	.04181	.01101	.02910	.06107
1.961	GRADIENT	-.04363	.01860	-.00669	-.00139	.00379	.00065	-.00012	-.00003	-.00017	-.00026

DATE 23 OCT 75

1A33 TABULATED DATA

MSFC 594(1A33) 740TS (TIPISIP201)

ORB STING

(A1C033) ( 12 SEP 75 )

PARAMETRIC DATA

REFERENCE DATA  
 SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000 FODDER = -15.000  
 ELEVTR = .000

RUN NO. 66/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABU	CNBO	CABS	CABE
.598	-11.080	.42120	-.15970	.04880	-.15938	.08142	.09237	.03716	.00978	.05370	.08738
.598	-9.000	.33590	-.12500	.03840	-.18058	.10076	.08578	.03524	.00928	.05590	.09608
.598	-6.890	.24870	-.08920	.02640	-.18889	.10976	.09455	.03567	.00939	.05240	.09308
.598	-4.720	.16050	-.05150	.01370	-.18703	.11234	.10254	.03429	.00903	.04950	.08988
.598	-2.580	.07790	-.01610	.00120	-.19802	.11976	.11211	.03312	.00872	.04670	.08408
.598	-.430	-.01040	.02500	-.01160	-.19731	.11834	.12109	.03344	.00880	.04240	.07598
.598	1.710	-.09010	.06120	-.02210	-.19172	.11444	.12226	.03386	.00891	.04040	.07838
.598	3.860	-.17110	.09770	-.03410	-.18978	.11046	.12478	.03524	.00928	.03790	.08318
.598	5.970	-.25130	.13510	-.04650	-.19029	.10704	.12171	.03641	.00959	.03640	.08648
.598	8.080	-.32920	.16640	-.05730	-.18754	.10137	.11546	.03737	.00984	.03660	.09248
.598	10.150	-.41230	.20110	-.06920	-.18756	.10111	.10332	.03631	.00956	.03730	.09938
.598	GRADIENT	-.03875	.01752	-.00554	.00004	-.00042	.00255	.00012	.00003	-.00138	-.00089

RUN NO. 67/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABC	CNBO	CABS	CABE
.899	-11.850	.51930	-.21060	.06970	-.14824	.06107	.09831	.04591	.01209	.05930	.10667
.899	-9.630	.41730	-.17110	.05630	-.14766	.06472	.10768	.04485	.01181	.05880	.10487
.899	-7.350	.31730	-.13000	.04160	-.14222	.06569	.11301	.04432	.01167	.05620	.10437
.899	-5.080	.21690	-.08690	.02530	-.14421	.06762	.11948	.04315	.01136	.05260	.09987
.899	-2.780	.11480	-.03930	.00810	-.15980	.07529	.12026	.04347	.01144	.05080	.09587
.899	-.500	.01240	-.00910	-.00670	-.16920	.08197	.12192	.04081	.01074	.04700	.09187
.899	1.770	-.08940	.05930	-.02100	-.16683	.07854	.12040	.04283	.01128	.04320	.08827
.899	4.060	-.18360	.10200	-.03520	-.16226	.07522	.13188	.04485	.01181	.04090	.09357
.899	6.320	-.28900	.15300	-.05350	-.15374	.07195	.13697	.04666	.01228	.03900	.08927
.899	8.560	-.37760	.19050	-.05720	-.15536	.07310	.13111	.04942	.01301	.04020	.10197
.899	10.750	-.46740	.22540	-.07970	-.16318	.07447	.12631	.05102	.01343	.04020	.10577
.899	GRADIENT	-.04375	.02080	-.00633	-.00022	-.00016	.00146	.00027	.00007	-.00147	-.00002

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC033) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = -15.000  
 ELEVTR = .000

RUN NO. 69/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.098	-12.390	.58897	-.23910	.08630	-.18742	.10550	.20188	.05666	.01492	.07280	.12636
1.098	-10.020	.46220	-.18850	.06840	-.18274	.10868	.21319	.05485	.01444	.07250	.12216
1.098	-7.620	.34280	-.14010	.05100	-.17887	.11245	.21957	.05687	.01497	.07190	.11866
1.098	-5.210	.22950	-.09330	.03280	-.18407	.12173	.22322	.05762	.01517	.07100	.11566
1.098	-2.850	.12250	-.04630	.01420	-.19450	.13352	.22647	.05507	.01450	.06980	.11506
1.098	-.510	.01770	.00240	-.00360	-.20683	.14620	.22586	.05368	.01413	.06900	.11756
1.098	1.820	-.08640	.05290	-.02170	-.19382	.13583	.22982	.05592	.01472	.06270	.12166
1.098	4.180	-.18650	.09780	-.03960	-.20012	.14030	.24058	.05666	.01492	.05850	.11766
1.098	6.510	-.28950	.14280	-.05750	-.19398	.13045	.24344	.05730	.01509	.05400	.11996
1.098	8.870	-.39960	.18780	-.07600	-.18910	.12173	.24025	.05889	.01551	.05090	.12386
1.098	11.240	-.51200	.22780	-.09160	-.18451	.11208	.24384	.05740	.01511	.04790	.12366
GRADIENT		-.04403	.02061	-.00766	-.00017	.00043	.00198	.00630	.00008	-.00172	.00051

RUN NO. 68/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.248	-12.600	.59440	-.23540	.08770	-.16976	.07973	.21065	.05616	.01479	.06550	.12589
1.248	-10.180	.45800	-.17650	.06890	-.14900	.07241	.21803	.05478	.01442	.06570	.12099
1.248	-7.720	.33030	-.12360	.05000	-.15354	.08461	.22725	.05606	.01476	.06560	.11889
1.248	-5.270	.20880	-.07180	.03030	-.15354	.09334	.23020	.05531	.01456	.06540	.11689
1.248	-2.860	.10050	-.02660	.01060	-.15720	.09911	.23393	.05478	.01442	.06450	.11289
1.248	-.490	.00140	.01480	-.00660	-.16278	.10493	.23422	.05319	.01400	.06240	.11379
1.248	1.860	-.09180	.05410	-.02260	-.15782	.10163	.23975	.05446	.01434	.05860	.11299
1.248	4.250	-.19030	.09510	-.04000	-.16482	.10336	.24599	.05712	.01504	.05590	.11699
1.248	6.640	-.29510	.13660	-.05840	-.16398	.09893	.24562	.05659	.01490	.05230	.11959
1.248	9.060	-.40950	.18090	-.07510	-.17124	.09741	.24485	.05606	.01476	.04930	.12379
1.248	11.470	-.53550	.23070	-.09290	-.17500	.09241	.23973	.05818	.01532	.04880	.12729
GRADIENT		-.04078	.01708	-.00709	-.00076	.00040	.00176	.00035	.00009	-.00125	.00049

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DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIP15IP201)

ORB STING

(A1C033) (12 SEP 75)

PARAMETRIC DATA

REFERENCE DATA  
 SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000 RUDDER = -15.000  
 ELEVTR = .000

RUN NO. 75/ 0 RN/L = 7.13 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.938	-12.770	.60100	-.25140	.07840	-.14458	.06068	.23200	.04712	.01241	.04140	.07177
1.938	-10.340	.47430	-.19660	.06270	-.13780	.06053	.23537	.04606	.01213	.03970	.07127
1.938	-7.880	.35160	-.14450	.04690	-.13314	.06168	.23810	.04542	.01196	.03840	.07027
1.938	-5.400	.23510	-.09420	.03060	-.13413	.06443	.24432	.04351	.01146	.03910	.07037
1.938	-2.950	.12360	-.04470	.01370	-.13888	.07040	.24947	.04255	.01120	.03770	.07017
1.938	-.530	.01640	.00280	-.00250	-.14546	.07512	.25637	.04096	.01079	.03540	.07037
1.938	1.910	-.08850	.04820	-.01660	-.14752	.07475	.26809	.04234	.01115	.03330	.07147
1.938	4.380	-.19890	.09620	-.03280	-.14756	.07107	.27516	.04287	.01129	.03180	.07277
1.938	6.850	-.31160	.14230	-.04870	-.15336	.06993	.27687	.04436	.01168	.03000	.07327
1.938	9.350	-.43070	.19010	-.06430	-.16077	.07195	.26718	.04744	.01249	.02860	.07517
1.938	11.840	-.56180	.24200	-.07960	-.16635	.07141	.26742	.04851	.01277	.02880	.07487
GRADIENT		-.04390	.01916	-.00629	-.00115	.00006	.00363	.00010	.00003	-.00081	.00036

RUN NO. 177/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.760	.35520	-.13780	.04360	-.08348	.06351	.23338	.00542	.00143	.00490	.00760
4.959	-8.750	.28330	-.10730	.03390	-.08723	.06296	.22797	.00563	.00148	.00510	.00790
4.959	-6.690	.21050	-.07850	.02430	-.09066	.06258	.22206	.00574	.00151	.00540	.00820
4.959	-4.610	.14320	-.04990	.01560	-.09182	.06324	.21595	.00595	.00157	.00570	.00830
4.959	-2.530	.07960	-.02580	.00770	-.09032	.06194	.21075	.00595	.00157	.00600	.00840
4.959	-.430	.01800	-.00140	.00130	-.09475	.06396	.21184	.00606	.00160	.00630	.00830
4.959	1.650	-.04970	.02600	-.00730	-.09290	.06221	.21243	.00627	.00165	.00650	.00840
4.959	3.750	-.11710	.05330	-.01610	-.09400	.06051	.21633	.00627	.00165	.00660	.00850
4.959	5.820	-.18230	.07600	-.02450	-.09525	.06016	.22074	.00606	.00160	.00670	.00870
4.959	7.880	-.24970	.10490	-.03290	-.09829	.06011	.22525	.00585	.00154	.00680	.00870
4.959	9.890	-.31610	.12930	-.04060	-.10016	.06119	.23246	.00574	.00151	.00670	.00870
GRADIENT		-.03110	.01235	-.00375	-.00033	-.00025	.00012	.00005	.00001	.00011	.00002

MSFC 594(1A33) 740TS (TIPIS1P201)

ORB STING

(A1C034) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = -20.000  
 ELEVTR = .000

RUN NO. 73/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.597	-11.040	.40140	-.14220	.04300	-.16777	.09072	.09359	.04013	.01057	.05550	.09028
.597	-8.990	.31540	-.10640	.03130	-.17412	.10064	.10394	.03769	.00992	.05350	.08868
.597	-6.850	.22490	-.06920	.01850	-.18234	.11039	.10770	.03662	.00954	.05250	.08808
.597	-4.710	.13680	-.03090	.00560	-.18426	.11394	.12126	.03556	.00936	.04800	.08188
.597	-2.570	.05410	.00530	-.00700	-.19423	.11976	.12308	.03694	.00973	.04560	.08148
.597	-.430	-.02950	.04450	-.01880	-.19573	.12296	.12398	.03694	.00973	.04320	.08038
.597	1.710	-.10570	.07710	-.02860	-.20385	.12557	.11833	.03779	.00995	.04250	.08848
.597	3.850	-.18420	.11340	-.04100	-.19856	.12082	.13462	.03971	.01045	.03890	.08048
.597	5.970	-.26740	.15110	-.05360	-.19611	.11547	.13150	.03992	.01051	.03730	.08608
.597	8.090	-.35120	.18650	-.06510	-.19848	.11399	.12082	.04130	.01087	.03850	.09288
.597	10.170	-.43100	.21930	-.07670	-.19754	.11297	.11225	.04077	.01073	.03780	.09808
GRADIENT		-.03747	.01684	-.00536	-.00179	.00091	.00103	.00043	.00011	-.00100	.00020

RUN NO. 72/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.899	-11.870	.50390	-.19480	.06320	-.15840	.07195	.10304	.04278	.01284	.06320	.10997
.899	-9.640	.40450	-.15740	.05180	-.14908	.07150	.11308	.04644	.01223	.06040	.10867
.899	-7.360	.29830	-.11300	.03490	-.14894	.07664	.11837	.04666	.01228	.05800	.10447
.899	-5.070	.19580	-.06770	.01770	-.15462	.08284	.12390	.04623	.01217	.05410	.10097
.899	-2.790	.09620	-.02090	.00030	-.15967	.08512	.12975	.04528	.01192	.05020	.09697
.899	-.490	-.00750	.02850	-.01460	-.16925	.08972	.12890	.04442	.01170	.04730	.09607
.899	1.780	-.10850	.07880	-.02900	-.16269	.08330	.14286	.04687	.01234	.04160	.09367
.899	4.040	-.20560	.12390	-.04380	-.16057	.08282	.14335	.04868	.01282	.03990	.09927
.899	6.300	-.30430	.17030	-.06110	-.16460	.08542	.14058	.04995	.01315	.03940	.10127
.899	8.550	-.39720	.21000	-.07510	-.16461	.08507	.13806	.05187	.01366	.03910	.10557
.899	10.740	-.48200	.24190	-.08630	-.16524	.08190	.13563	.05580	.01469	.03870	.10967
GRADIENT		-.04422	.02130	-.00645	.00016	-.00071	.07240	.00055	.00015	-.00161	.00006

DATE 23 OCT 75

1A33 TABULATED DATA

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MSFC 594(1A33) 740TS (TIPISIP201)

ORB STING

(A1C034) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = -20.000  
 ELEVTR = .000

RUN NO. 70/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.103	-12.390	.57570	-.22780	.08140	-.18890	.10970	.21071	.05624	.01481	.07240	.12516
1.103	-10.020	.44980	-.17660	.06350	-.18395	.11305	.22022	.05602	.01475	.07190	.12386
1.103	-7.610	.32840	-.12660	.04510	-.17985	.11750	.22830	.05794	.01525	.07110	.11886
1.103	-5.220	.21520	-.07880	.02610	-.18704	.13017	.23249	.05826	.01534	.07020	.11636
1.103	-2.850	.10470	-.02880	.00620	-.19821	.14192	.23685	.05549	.01461	.06850	.11426
1.103	-.510	-.00060	.02060	-.01190	-.20793	.15297	.23631	.05443	.01433	.06660	.11576
1.103	1.830	-.10210	.06910	-.02970	-.20624	.15318	.24269	.05485	.01444	.06180	.11486
1.103	4.180	-.20270	.11440	-.04740	-.20520	.14975	.25172	.05772	.01520	.05720	.11656
1.103	6.510	-.30770	.16060	-.06590	-.19943	.14085	.25194	.05900	.01553	.05450	.12136
1.103	8.880	-.41660	.20530	-.08370	-.19428	.13290	.25325	.05879	.01548	.05040	.12256
1.103	11.230	-.53190	.24710	-.09940	-.18874	.12253	.24787	.06017	.01584	.04880	.12746
1.103	GRADIENT	-.04369	.02041	-.00762	-.00082	.00101	.00218	.00030	.00008	-.00165	.00026

RUN NO. 71/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.246	-12.580	.58080	-.22350	.08420	-.17416	.08696	.21509	.05882	.01549	.07180	.12639
1.246	-10.170	.44500	-.16510	.06440	-.15742	.08236	.22459	.05712	.01504	.07020	.12279
1.246	-7.730	.31550	-.10880	.04460	-.16298	.09739	.23331	.05850	.01540	.06910	.12239
1.246	-5.260	.19330	-.05700	.02420	-.16508	.10719	.23901	.05850	.01540	.06730	.11999
1.246	-2.880	.08460	-.01070	.00430	-.16518	.11139	.24321	.05850	.01540	.06540	.11679
1.246	-.490	-.01590	.03180	-.01330	-.17189	.11726	.24204	.05627	.01481	.06270	.11739
1.246	1.870	-.10860	.07030	-.02960	-.16656	.11336	.24999	.05882	.01549	.05890	.11369
1.246	4.260	-.20810	.11210	-.04710	-.17365	.11586	.25701	.06180	.01627	.05600	.11849
1.246	6.640	-.31160	.15190	-.06480	-.18437	.12036	.25846	.06265	.01649	.05440	.12489
1.246	9.100	-.42490	.19400	-.08110	-.18928	.11636	.25584	.06307	.01661	.05320	.13109
1.246	11.490	-.55280	.24590	-.09910	-.17398	.09894	.24959	.06042	.01591	.04880	.12899
1.246	GRADIENT	-.04083	.01711	-.00717	-.00085	.00040	.00207	.00052	.00014	-.00135	.00006

MSFC 594(IA33) 740TS (T1P1S1P201)

ORB STING

(A1C034) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = -20.000  
 ELEVTR = .000

RUN NO. 74/ 0 RN/L = 7.03 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.971	-12.770	.59580	-.24560	.07580	-.14178	.06008	.23240	.04712	.01241	.04120	.07167
1.971	-10.250	.45520	-.18690	.05800	-.13096	.06000	.22920	.04553	.01199	.03890	.07057
1.971	-7.780	.33230	-.13380	.04230	-.12494	.06190	.23265	.04468	.01176	.03730	.06897
1.971	-5.340	.21830	-.08350	.02600	-.12729	.06620	.23715	.04298	.01132	.03800	.06917
1.971	-2.920	.10950	-.03440	.00910	-.13181	.07215	.24331	.04192	.01104	.03650	.06857
1.971	-.510	.00230	.01430	-.00740	-.14063	.07960	.24647	.04085	.01076	.03470	.06957
1.971	1.900	-.09790	.05870	-.02100	-.13756	.07810	.25242	.04170	.01098	.03190	.07027
1.971	4.330	-.20290	.10550	-.03670	-.13617	.07460	.25770	.04213	.01109	.03030	.07157
1.971	6.740	-.30540	.14700	-.05080	-.13896	.07375	.25441	.04362	.01148	.02840	.07107
1.971	9.220	-.42280	.19480	-.06650	-.14700	.07773	.25127	.04606	.01213	.02640	.07257
1.971	11.670	-.55040	.24670	-.08190	-.15222	.07691	.25317	.04766	.01255	.02670	.07247
	GRADIENT	-.04294	.01921	-.00625	-.00041	.00024	.00203	.00006	.00002	-.00090	.00039

RUN NO. 178/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.750	.35250	-.13350	.04220	-.08641	.06594	.23217	.00553	.00146	.00550	.00790
4.959	-8.740	.27880	-.10420	.03250	-.08693	.06376	.22687	.00563	.00148	.00560	.00820
4.959	-6.690	.19760	-.06860	.02120	-.08356	.05978	.21936	.00574	.00151	.00570	.00830
4.959	-4.610	.14020	-.04720	.01390	-.08872	.06344	.21555	.00595	.00157	.00610	.00850
4.959	-2.530	.07680	-.02280	.00710	-.08712	.06044	.21135	.00595	.00157	.00630	.00850
4.959	-.430	.01220	.00250	-.00120	-.09735	.06506	.21304	.00606	.00160	.00660	.00850
4.959	1.650	-.05530	.03130	-.00950	-.09245	.06256	.21304	.00606	.00160	.00680	.00850
4.959	3.740	-.13030	.06390	-.02040	-.09300	.06301	.21823	.00627	.00165	.00690	.00860
4.959	5.820	-.18790	.08130	-.02690	-.09772	.06174	.22265	.00595	.00157	.00690	.00870
4.959	7.890	-.25830	.11240	-.03600	-.09846	.06458	.22796	.00574	.00151	.00690	.00880
4.959	9.900	-.32900	.14060	-.04480	-.09916	.06419	.23606	.00574	.00151	.00680	.00880
	GRADIENT	-.03224	.01323	-.00408	-.00067	.00006	.00034	.00004	.00001	.00010	.00001

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DATE 23 OCT 75

1A33 TABULATED DATA

MSFC 594(1A33) 740TS (TIP1S3P201F2) CRB STING

(A1C035) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

		RUN NO.	86/ 0	RN/L =	4.57	GRADIENT INTERVAL =		-5.00/	5.00			
MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE	
2.990	-11.990	.00160	-.00010	.00250	-.71502	.27147	.26512	.01565	.00412	.01960	.03172	
2.990	-9.860	.00050	.00100	.00080	-.60265	.22997	.25637	.01651	.00435	.02070	.03092	
2.990	-7.650	.00000	.00110	.00150	-.48479	.18849	.24654	.01704	.00449	.02070	.03062	
2.990	-5.380	.00010	.00060	.00170	-.36880	.14699	.23492	.01746	.00460	.02020	.03052	
2.990	-3.150	-.00040	.00000	.00150	-.26144	.11012	.22619	.01799	.00474	.02010	.03022	
2.990	-1.940	-.00260	.00060	.00040	-.16775	.08272	.22076	.01842	.00485	.01960	.02962	
2.990	1.260	-.00230	.00000	.00020	-.07956	.05972	.21523	.01884	.00496	.01970	.02952	
2.990	3.480	-.00230	.00000	.00050	.01553	.02692	.21041	.01927	.00507	.01960	.02912	
2.990	5.670	-.00360	.00040	-.00010	.11601	-.00578	.20448	.01969	.00519	.01950	.02862	
2.990	7.910	-.00660	.00200	-.00090	.22530	-.04388	.19916	.02012	.00530	.01930	.02782	
2.990	10.040	-.00620	.00180	-.00060	.33779	-.08168	.19703	.02054	.00541	.01910	.02762	
2.990	GRADIENT	-.00024	-.00003	-.00014	.04161	-.01234	-.00239	.00019	.00005	-.00006	-.00015	

		RUN NO.	85/ 0	RN/L =	5.47	GRADIENT INTERVAL =		-5.00/	5.00			
MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE	
4.959	-11.050	.00590	-.00110	.00210	-.49971	.19031	.26423	.00287	.00076	.00640	.00800	
4.959	-9.050	.00490	-.00160	.00150	-.43250	.16979	.24939	.00361	.00095	.00660	.00820	
4.959	-7.000	.00390	-.00120	.00080	-.35641	.14538	.23646	.00404	.00106	.00680	.00830	
4.959	-4.900	.00600	-.00230	.00170	-.28030	.12036	.22414	.00436	.00115	.00690	.00810	
4.959	-2.780	.00380	-.00110	.00110	-.20388	.09374	.21252	.00468	.00123	.00690	.00820	
4.959	-.680	.00570	-.00320	.00110	-.13087	.07101	.20250	.00500	.00132	.00700	.00820	
4.959	1.420	.00490	-.00250	.00100	-.06331	.05214	.19467	.00553	.00146	.00700	.00840	
4.959	3.510	.00130	-.00070	-.00030	.01015	.02659	.18979	.00531	.00140	.00690	.00820	
4.959	5.590	.00190	-.00110	.00070	.08939	.00064	.18077	.00553	.00146	.00690	.00830	
4.959	7.680	.01470	-.00990	.00330	.16139	-.02616	.17597	.00553	.00146	.00690	.00820	
4.959	9.680	-.00050	.00000	-.00070	.24779	-.05836	.17467	.00553	.00146	.00690	.00790	
4.959	GRADIENT	-.00039	.00009	-.00019	.03432	-.01090	-.00421	.00013	.00003	.00000	.00002	



MSFC 594(1A33) 740TS (TIP1S3P20IF2) ORB STING

(A1C036) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 84/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.950	.42920	-.15460	.05420	-.11540	.06966	.21564	.00436	.00115	.00620	.00780
4.959	-8.930	.34880	-.12360	.04470	-.11185	.06561	.21163	.00457	.00120	.00630	.00800
4.959	-6.860	.26640	-.09290	.03420	-.10828	.06704	.21192	.00468	.00123	.00650	.00810
4.959	-4.730	.18590	-.06260	.02330	-.11089	.06784	.20370	.00510	.00134	.00670	.00830
4.959	-2.620	.10370	-.03340	.01200	-.10742	.06306	.19899	.00521	.00137	.00680	.00850
4.959	-.510	.02700	-.00680	.00320	-.11299	.06824	.19970	.00510	.00134	.00680	.00830
4.959	1.590	-.05820	.02080	-.00730	-.11188	.06471	.20198	.00542	.00143	.00680	.00820
4.959	3.720	-.13590	.04660	-.01660	-.11158	.06211	.20318	.00542	.00143	.00680	.00840
4.959	5.810	-.21660	.07530	-.02640	-.11381	.06244	.20737	.00553	.00146	.00680	.00840
4.959	7.920	-.29630	.10620	-.03700	-.11641	.05914	.21147	.00553	.00146	.00670	.00850
4.959	9.920	-.37540	.13460	-.04670	-.11326	.05689	.21616	.00574	.00151	.00640	.00840
	GRADIENT	-.03816	.01291	-.00469	-.06028	-.00046	.00009	.00004	.00001	.00001	-.00000

MSFC 594(1A33) 740TS (01)

ORB STING

(A1C037) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 172/ 0 RN/L = 5.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.600	-10.790	.01050	-.00690	.00570	-.64249	.44161	.00805	.03035	.00799	.00000	.00000
.600	-8.780	.00730	-.00450	.00420	-.53716	.37416	.01171	.03099	.00816	.00000	.00000
.600	-6.720	.00500	-.00390	.00430	-.43982	.30991	.01100	.03120	.00822	.00000	.00000
.600	-4.610	.00300	-.00230	.00380	-.33613	.24284	.01632	.03088	.00813	.00000	.00000
.600	-2.500	.00110	.00090	.00290	-.23547	.17919	.02285	.03025	.00796	.00000	.00000
.600	-.380	-.00540	.00380	.00140	-.14080	.11964	.02639	.02961	.00780	.00000	.00000
.600	1.720	-.00550	.00430	.00220	-.04369	.05706	.02586	.02844	.00749	.00000	.00000
.600	3.850	-.00870	.00630	.00170	.05900	-.01106	.02119	.02961	.00780	.00000	.00000
.600	5.940	-.01180	.00820	.00080	.16045	-.08051	.01188	.02982	.00785	.00000	.00000
.600	8.050	-.01390	.00990	.00070	.26451	-.15102	.00080	.03110	.00819	.00000	.00000
.600	10.070	-.01390	.01000	.00000	.37448	-.22669	-.01050	.03120	.00822	.00000	.00000
	GRADIENT	-.00132	.00097	-.00023	.04645	-.02980	.00060	-.00021	-.00005	.00000	.00000

DATE 23 OCT 75

1A33 TABULATED DATA

MSFC 594(1A33) 740TS (01)

ORB STING

(A1C037) ( 12 SEP 75 )

PARAMETRIC DATA

REFERENCE DATA  
 SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 171/ 0 RN/L = 5.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.798	-11.200	.00670	-.00410	.00360	-.70582	.49513	.01636	.03644	.00959	.00000	.00000
.798	-9.100	.00380	-.00280	.00290	-.59275	.42108	.01890	.03580	.00943	.00000	.00000
.798	-6.980	.00170	-.00120	.00360	-.48775	.35180	.01917	.03463	.00912	.00000	.00000
.798	-4.810	-.00170	.00100	.00280	-.38289	.28247	.01882	.03369	.00887	.00000	.00000
.798	-2.630	-.00440	.00300	.00200	-.26964	.20835	.02348	.03272	.00861	.00000	.00000
.798	-.450	-.00800	.00480	.00060	-.16560	.14102	.02671	.03219	.00847	.00000	.00000
.798	1.710	-.00800	.00580	.00070	-.06086	.07337	.02610	.03240	.00853	.00000	.00000
.798	3.910	-.01150	.00770	.00000	.05167	-.00275	.02090	.03230	.00850	.00000	.00000
.798	6.060	-.01430	.00970	-.00010	.16254	-.07700	.01624	.03166	.00833	.00000	.00000
.798	8.220	-.01650	.01100	-.00160	.28155	-.15833	.01132	.03198	.00842	.00000	.00000
.798	10.310	-.01860	.01230	-.00140	.39063	-.23125	.00793	.03357	.00884	.00000	.00000
GRADIENT		-.00107	.00074	-.00032	.04949	-.03239	.00031	-.00014	-.00004	.00000	.00000

RUN NO. 170/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABC	CNBO	CABS	CABE
.902	-11.410	.00330	-.00210	.00470	-.79685	.57809	.02673	.04177	.01100	.00000	.00000
.902	-9.310	.00190	-.00090	.00220	-.67772	.49641	.02825	.03975	.01046	.00000	.00000
.902	-7.140	-.00090	.00030	.00410	-.55169	.40864	.02957	.03773	.00993	.00000	.00000
.902	-4.930	-.00180	.00090	.00310	-.42919	.32426	.02872	.03698	.00974	.00000	.00000
.902	-2.710	-.00700	.00430	.00100	-.29794	.23494	.03087	.03603	.00949	.00000	.00000
.902	-.470	-.00800	.00490	.00000	-.17200	.15064	.03445	.03475	.00915	.00000	.00000
.902	1.740	-.00910	.00570	-.00250	-.04939	.06934	.03567	.03433	.00904	.00000	.00000
.902	3.940	-.00900	.00510	-.00350	.06979	-.01111	.03684	.03326	.00876	.00000	.00000
.902	6.140	-.01140	.00690	-.00320	.17981	-.08446	.03537	.03433	.00904	.00000	.00000
.902	8.310	-.01320	.00790	-.00230	.28937	-.15853	.03304	.03486	.00918	.00000	.00000
.902	10.440	-.01490	.00870	-.00310	.40962	-.24053	.02984	.03656	.00963	.00000	.00000
GRADIENT		-.00074	.00044	-.00075	.05618	-.03769	.00095	-.00041	-.00011	.00000	.00000

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 168/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.102	-11.620	.00130	.00000	.00410	-.63261	.64113	.07568	.06612	.01741	.00000	.00000
1.102	-9.460	.00060	.00000	.00380	-.70383	.55148	.07524	.06506	.01713	.00000	.00000
1.102	-7.230	-.00150	.00110	.00310	-.57451	.46063	.07598	.06272	.01651	.00000	.00000
1.102	-4.970	-.00390	.00250	.00200	-.43215	.35893	.07721	.06059	.01595	.00000	.00000
1.102	-2.690	-.00710	.00500	.00070	-.28103	.25013	.08156	.05974	.01573	.00000	.00000
1.102	-.400	-.00890	.00610	-.00030	-.13510	.14565	.08508	.05772	.01520	.00000	.00000
1.102	1.860	-.01020	.00700	-.00170	.00650	.04290	.08486	.05624	.01481	.00000	.00000
1.102	4.110	-.01010	.00670	-.00220	.14602	-.05788	.08316	.05464	.01439	.00000	.00000
1.102	6.370	-.01160	.00750	-.00330	.27820	-.15288	.07843	.05507	.01450	.00000	.00000
1.102	8.600	-.01380	.00920	-.00360	.40669	-.24302	.07380	.05740	.01511	.00000	.00000
1.102	10.770	-.01620	.01020	-.00450	.52923	-.32843	.06903	.06027	.01587	.00000	.00000
1.102	GRADIENT	-.00068	.00046	-.00048	.06358	-.04583	.00067	-.00068	-.00018	.00000	.00000

RUN NO. 169/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.252	-11.620	.00320	-.00230	.00420	-.77716	.59806	.08001	.05159	.01358	.00000	.00000
1.252	-9.450	.00120	.00000	.00330	-.65217	.51256	.07958	.05202	.01370	.00000	.00000
1.252	-7.210	-.00050	.00100	.00270	-.51880	.41698	.07928	.05212	.01372	.00000	.00000
1.252	-4.930	-.00310	.00280	.00160	-.37982	.31660	.08169	.05181	.01364	.00000	.00000
1.252	-2.660	-.00560	.00440	.00050	-.23770	.21266	.08513	.04947	.01302	.00000	.00000
1.252	-.380	-.00630	.00480	-.00030	-.10566	.11663	.08536	.04894	.01288	.00000	.00000
1.252	1.870	-.00600	.00600	-.00150	.02851	.01988	.08510	.04830	.01272	.00000	.00000
1.252	4.120	-.00880	.00640	-.00210	.15505	-.07177	.08229	.04851	.01277	.00000	.00000
1.252	6.380	-.00890	.00580	-.00260	.28354	-.16407	.07796	.04894	.01288	.00000	.00000
1.252	8.630	-.01140	.00770	-.00330	.41031	-.25377	.07181	.04979	.01311	.00000	.00000
1.252	10.810	-.01250	.00790	-.00380	.53325	-.34054	.06753	.05117	.01347	.00000	.00000
1.252	GRADIENT	-.00061	.00039	-.00042	.05904	-.04284	.00005	-.00034	-.00009	.00000	.00000

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (01)

ORB STING

(A1C037) ( 12 SEP 75 )

PARAMETRIC DATA

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 173/ 0 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.460	-11.430	.00430	-.00330	.00380	-.65536	.50308	.08968	.04392	.01156	.00000	.00000
1.460	-9.290	.00290	-.00220	.00310	-.54012	.42224	.09064	.04456	.01173	.00000	.00000
1.460	-7.090	.00150	-.00150	.00210	-.42262	.33831	.08999	.04531	.01193	.00000	.00000
1.450	-4.850	-.00080	-.00010	.00110	-.30746	.25641	.08972	.04658	.01226	.00000	.00000
1.460	-2.610	-.00260	.00140	.00080	-.19152	.17396	.08918	.04722	.01243	.00000	.00000
1.460	-.360	-.00440	.00260	.00000	-.07853	.09239	.08853	.04647	.01224	.00000	.00000
1.460	1.860	-.00540	.00280	-.00100	.03217	.01261	.08677	.04573	.01204	.00000	.00000
1.460	4.090	-.00630	.00340	-.00160	.14232	-.06636	.08211	.04669	.01229	.00000	.00000
1.460	6.320	-.00780	.00440	-.00210	.25352	-.14606	.07701	.04669	.01229	.00000	.00000
1.460	8.540	-.00790	.00440	-.00200	.36447	-.22441	.07303	.04647	.01224	.00000	.00000
1.460	10.690	-.01090	.00640	-.00270	.47748	-.30434	.07108	.04722	.01243	.00000	.00000
1.460	GRADIENT	-.00062	.00038	-.00032	.05026	-.03610	-.00079	-.00006	-.00002	.00000	.00000

RUN NO. 174/ 0 RN/L = 7.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.967	-11.300	.00380	-.00230	.00230	-.48721	.36124	.09671	.03124	.00824	.00000	.00000
1.967	-9.160	.00260	-.00160	.00160	-.40147	.30297	.09486	.03224	.00849	.00000	.00000
1.967	-7.000	.00100	-.00040	.00100	-.31637	.24515	.09249	.03341	.00880	.00000	.00000
1.967	-4.800	-.00010	.00020	.00030	-.23295	.18820	.09123	.03447	.00909	.00000	.00000
1.967	-2.610	-.00260	.00190	-.00030	-.14900	.12970	.08812	.03618	.00952	.00000	.00000
1.967	-.390	-.00450	.00320	-.00080	-.06274	.06913	.08509	.03671	.00966	.00000	.00000
1.967	1.800	-.00510	.00360	-.00120	.02373	.00817	.08313	.03607	.00950	.00000	.00000
1.967	4.010	-.00660	.00460	-.00140	.10671	-.04883	.08191	.03649	.00961	.00000	.00000
1.967	6.200	-.00730	.00510	-.00200	.19194	-.10865	.07831	.03639	.00958	.00000	.00000
1.967	8.390	-.00840	.00560	-.00250	.27377	-.16560	.07397	.03703	.00975	.00000	.00000
1.967	10.590	-.01060	.00700	-.00310	.35859	-.22303	.07136	.03734	.00983	.00000	.00000
1.967	GRADIENT	-.00070	.00048	-.00020	.03863	-.02703	-.00107	.00018	.00005	.00000	.00000

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000  
 ELEVTR = .000  
 RUDDER = .000

PARAMETRIC DATA

		RUN NO. 175/ 0		RN/L = 4.57		GRADIENT INTERVAL = -5.00/ 5.00					
MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
2.990	-10.610	.01020	-.00670	.00330	-.32656	.23309	.10304	.01236	.00325	.00000	.00000
2.990	-8.630	.00340	-.00200	.00160	-.27702	.19884	.09760	.01300	.00342	.00000	.00000
2.990	-6.590	.00150	-.00080	.00080	-.22153	.16282	.09453	.01417	.00373	.00060	.00000
2.990	-4.520	.00150	-.00060	.00100	-.16878	.12844	.09188	.01512	.00398	.00000	.00000
2.990	-2.460	.00040	-.00030	.00120	-.11845	.09550	.08824	.01576	.00415	.00000	.00000
2.990	-.370	-.00210	.00160	.00000	-.06649	.06122	.08371	.01629	.00429	.00000	.00000
2.990	1.680	.00040	-.00030	.00050	-.01660	.02772	.08148	.01672	.00440	.00000	.00000
2.990	3.760	-.00230	.00150	-.00040	.04068	-.00915	.07760	.01640	.00432	.00000	.00000
2.990	5.840	-.00480	.00250	-.00070	.10117	-.05076	.07218	.01682	.00443	.00000	.00000
2.990	7.890	-.00490	.00320	-.00110	.15844	-.08893	.06797	.01693	.00446	.00000	.00000
2.990	9.890	-.00590	.00380	-.00040	.22088	-.13005	.06570	.01640	.00432	.00000	.00000
2.990	GRADIENT	-.00037	.00020	-.00017	.02516	-.01657	-.00171	.00017	.00004	.00000	.00000

		RUN NO. 176/ 0		RN/L = 5.47		GRADIENT INTERVAL = -5.00/ 5.00					
MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
4.959	-10.380	.00270	-.00170	.00090	-.23697	.16501	.09801	.00159	.00042	.00000	.00000
4.959	-8.440	.00130	-.00020	.00160	-.21074	.14756	.09477	.00223	.00059	.00000	.00000
4.959	-6.450	.00120	.00010	.00090	-.17605	.12606	.09194	.00266	.00070	.00000	.00000
4.959	-4.420	.00090	-.00100	.00040	-.14091	.10161	.08293	.00287	.00076	.00000	.00000
4.959	-2.390	-.00200	.00150	.00000	-.10276	.07726	.07882	.00308	.00081	.00000	.00000
4.959	-.340	-.00350	.00300	-.00060	-.06185	.05004	.07290	.00340	.00090	.00000	.00000
4.959	1.690	-.00220	.00170	-.00010	-.02100	.02318	.06989	.00361	.00095	.00000	.00000
4.959	3.720	-.00510	.00410	-.00100	.02310	-.00551	.06699	.00361	.00095	.00000	.00000
4.959	5.770	-.00530	.00350	-.00020	.06424	-.03334	.06312	.00308	.00081	.00000	.00000
4.959	7.770	-.00390	.00310	-.00080	.11074	-.06194	.05082	.00308	.00081	.00000	.00000
4.959	9.720	-.00550	.00390	-.00130	.15464	-.09074	.05892	.00308	.00081	.00000	.00000
4.959	GRADIENT	-.00060	.00051	-.00014	.02013	-.01318	-.00201	.00010	.00003	.00000	.00000

ORIGINAL PAGE IS  
OF POOR QUALITY

DATE 23 OCT 75

1A33 TABULATED DATA

PAGE 109

MSFC 594(1A33) 740TS (TIPISIP201)

ORB STING

(A1C038) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. ZT  
SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER \* .000  
ELEVTR = -5.000

RUN NO. 200/ 0    RN/L = 4.99    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.600	-11.800	.01070	-.00690	.00590	-.91344	.41422	.10864	.03928	.01034	.05210	.08938
.600	-9.660	.00640	-.00440	.00410	-.77962	.36344	.11234	.03769	.00992	.05110	.08558
.600	-7.490	.00260	-.00230	.00280	-.64343	.30676	.11958	.03694	.00973	.04810	.08278
.600	-5.310	-.00160	.00190	.00210	-.53226	.26284	.11306	.03556	.00936	.04640	.08578
.600	-3.100	-.00090	-.00090	.00240	-.41051	.21801	.12012	.03460	.00911	.04590	.08118
.600	-.880	-.00520	.00070	.00200	-.29345	.17736	.12026	.03397	.00894	.04460	.07988
.600	1.330	-.01290	.00460	.00060	-.17441	.13756	.11913	.03269	.00861	.04290	.07808
.600	3.540	-.01410	.00450	.00000	-.06459	.10056	.10868	.03184	.00838	.04430	.07998
.600	5.730	-.01670	.00520	-.00040	.04992	.06381	.10440	.02993	.00788	.04400	.07718
.600	7.940	-.01860	.00550	-.00090	.17287	.02296	.08781	.02972	.00782	.04770	.07668
.600	10.060	-.01830	.00490	-.00140	.29074	-.02249	.07855	.02908	.00766	.04750	.07408
	GRADIENT	-.00214	.00091	-.00039	.05227	-.01772	-.00160	-.00043	-.00011	-.00029	-.00024

RUN NO. 199/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.902	-13.300	-.00770	.00770	.00130	-1.07061	.48020	.10640	.05452	.01435	.05520	.11177
.902	-10.910	-.00080	.00830	.00120	-.89329	.40800	.12466	.05027	.01324	.05460	.10537
.902	-8.500	-.00360	.01030	.00010	-.72578	.34027	.12834	.04719	.01242	.05440	.10437
.902	-6.060	-.01840	.01180	-.00100	-.56166	.27322	.13028	.04485	.01181	.05300	.10007
.902	-3.630	-.01900	.01030	-.00140	-.40787	.21157	.13187	.04336	.01142	.05100	.09677
.902	-1.240	-.01870	.01000	-.00180	-.26559	.14577	.13434	.04039	.01063	.04960	.09157
.902	1.160	-.02130	.01060	-.00320	-.11197	.07729	.12594	.03879	.01021	.04690	.09437
.902	3.580	-.02250	.01050	-.00390	.03621	.01914	.12160	.03773	.00993	.04770	.09257
.902	6.000	-.02850	.01250	-.00520	.17906	-.03101	.11159	.03794	.00999	.05070	.09317
.902	8.370	-.03210	.01310	-.00520	.30273	-.06648	.10478	.03805	.01002	.05680	.09377
.902	10.680	-.03630	.01440	-.00540	.43381	-.11384	.10264	.03698	.00974	.05380	.08887
	GRADIENT	-.00055	-.00001	-.00037	.06183	-.02687	-.00163	-.00077	-.00020	-.00052	-.00041

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = -5.000

RUN NO. 197/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.101	-14.590	-.00030	.00480	.00360	-1.28171	.58326	.21586	.06878	.01811	.06440	.11946
1.101	-11.910	.00060	.00260	.00240	-1.04148	.48783	.22357	.06527	.01718	.07230	.11886
1.101	-9.280	.00120	.00200	.00140	-.84101	.41190	.23338	.06346	.01671	.07420	.11706
1.101	-6.680	-.00020	.00240	.00040	-.65219	.33736	.24172	.06113	.01609	.07160	.11376
1.101	-4.100	-.00330	.00360	-.00020	-.47985	.27138	.23736	.05868	.01545	.06840	.11706
1.101	-1.520	-.00830	.00630	-.00150	-.30871	.20352	.23445	.05549	.01461	.06580	.11976
1.101	.990	-.01130	.00750	-.00230	-.14740	.13580	.22953	.05241	.01380	.06370	.11856
1.101	3.530	-.01420	.00870	-.00300	.02346	.05952	.22370	.04954	.01304	.06170	.11526
1.101	6.070	-.01930	.00990	-.00410	.19187	-.01045	.21527	.04837	.01273	.06470	.11416
1.101	8.560	-.02080	.00960	-.00450	.35087	-.07755	.20687	.04837	.01273	.06680	.10916
1.101	10.930	-.02790	.01350	-.00520	.49263	-.14150	.19391	.04773	.01257	.06830	.10756
	GRADIENT	-.00141	.00065	-.00036	.06580	-.02769	-.00181	-.00120	-.00032	-.00087	-.00026

RUN NO. 198/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.255	-15.180	-.00580	.00380	.00380	-1.35774	.60231	.21762	.06663	.01756	.06410	.12089
1.255	-12.320	-.00490	.00390	.00290	-1.05931	.46744	.22674	.06127	.01613	.06380	.11549
1.255	-9.480	-.00470	.00400	.00120	-.79804	.35733	.23329	.05872	.01546	.06290	.10989
1.255	-6.750	-.00590	.00400	.00030	-.58789	.27408	.24168	.05893	.01551	.06220	.10649
1.255	-4.060	-.00900	.00440	-.00050	-.38710	.19246	.24121	.05670	.01493	.05880	.10929
1.255	-1.410	-.01250	.00550	-.00150	-.21117	.12683	.23705	.05276	.01389	.05900	.11049
1.255	1.150	-.01440	.00550	-.00220	-.04941	.06345	.23692	.04989	.01314	.05760	.11059
1.255	3.660	-.01650	.00550	-.00300	.09913	.00323	.22995	.04936	.01300	.06020	.11099
1.255	6.200	-.01960	.00660	-.00390	.25088	-.05649	.22690	.04840	.01274	.06120	.10889
1.255	8.710	-.02230	.00760	-.00470	.40057	-.11630	.21668	.04883	.01286	.06290	.10539
1.255	11.180	-.02660	.00850	-.00550	.54461	-.16705	.20557	.04904	.01291	.06340	.10559
	GRADIENT	-.00095	.00013	-.00032	.06302	-.02454	-.00132	-.00097	-.00026	.00011	.00020

MSFC 594(IA33) 740TS (T1P1S1P201)

ORB STING

(A1C038) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = -5.000

RUN NO. 187/ 0 RN/L = 7.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.967	-15.000	.00320	.00270	.00400	-1.13226	.47860	.26692	.04170	.01098	.03280	.07007
1.967	-12.120	-.00030	.00400	.00330	-.88132	.37163	.26534	.03968	.01045	.03470	.06977
1.967	-9.340	-.00150	.00290	.00250	-.66980	.28295	.26084	.03809	.01003	.03470	.06647
1.967	-6.640	-.00240	.00290	.00160	-.48479	.20575	.25536	.03766	.00992	.03270	.06597
1.967	-4.000	-.00430	.00310	.00090	-.32059	.14285	.24766	.03766	.00992	.03190	.06587
1.967	-1.400	-.00850	.00520	.00000	-.17538	.09045	.24359	.03724	.00980	.03280	.06427
1.967	1.160	-.01080	.00620	-.00050	-.03323	.03887	.23793	.03820	.01006	.03410	.06717
1.967	3.710	-.01310	.00690	-.00100	.10463	-.01570	.23390	.03873	.01020	.03470	.06737
1.967	6.230	-.01630	.00920	-.00160	.24911	-.07708	.23022	.03841	.01011	.03530	.06817
1.967	8.850	-.02120	.01210	-.00280	.40252	-.12917	.23974	.03798	.01000	.03560	.06817
1.967	11.410	-.02300	.01230	-.00350	.55007	-.17288	.23275	.03628	.00955	.03590	.06887
1.967	GRADIENT	-.00112	.00048	-.00024	.05519	-.02052	-.00183	.00016	.00004	.00038	.00029

MSFC 594(IA33) 740TS (T1P1S1P201)

ORB STING

(A1C039) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = -5.000

RUN NO. 195/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.598	-11.080	.45710	-.19380	.06190	-.23706	.13966	.08951	.03822	.01006	.05630	.09508
.598	-9.010	.37120	-.16030	.05160	-.24899	.15234	.09441	.03641	.00959	.05590	.09348
.598	-6.890	.28190	-.12270	.03920	-.25315	.15734	.10149	.03514	.00925	.05400	.09228
.598	-4.750	.19960	-.08940	.02850	-.26294	.16464	.10701	.03471	.00914	.05070	.09038
.598	-2.600	.11100	-.05050	.01530	-.26651	.16741	.11012	.03460	.00911	.04690	.08938
.598	-.440	.02870	-.01390	.00510	-.27073	.16926	.11888	.03354	.00883	.04240	.08828
.598	1.680	-.04810	.01860	-.00440	-.26446	.16419	.12248	.03365	.00886	.03900	.08458
.598	3.830	-.11960	.04840	-.01330	-.26300	.16089	.13050	.03492	.00919	.03680	.08248
.598	5.950	-.20220	.08530	-.02470	-.26172	.15621	.12869	.03503	.00922	.03540	.08568
.598	8.060	-.28190	.11840	-.03550	-.26894	.15881	.11357	.03546	.00933	.03510	.09728
.598	10.130	-.36290	.15090	-.04660	-.26228	.15054	.10884	.03599	.00947	.03630	.09958
.598	GRADIENT	-.03720	.01608	-.00482	.00009	-.00050	.00277	-.00003	-.00001	-.00167	-.00096



MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(A1C039) ( 12 SF<sup>2</sup> 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = -5.000

RUN NO. 194/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.902	-11.880	.54220	-.23270	.07920	-.20384	.10342	.10460	.04783	.01259	.06300	.11047
.902	-9.650	.44070	-.19350	.06620	-.20214	.10665	.11397	.04666	.01228	.06110	.10727
.902	-7.380	.33730	-.15050	.05090	-.20172	.11027	.12096	.04506	.01186	.05820	.10457
.902	-5.080	.23630	-.10730	.03480	-.21015	.11752	.12500	.04442	.01170	.05490	.09987
.902	-2.790	.13720	-.06380	.01870	-.22100	.12502	.12550	.04272	.01125	.05150	.09817
.902	-.500	.03870	-.01840	.00500	-.23057	.13167	.12627	.03996	.01052	.04760	.09617
.902	1.760	-.06020	.02790	-.00820	-.22815	.12629	.13546	.04177	.01100	.04280	.09307
.902	4.050	-.15150	.06700	-.02110	-.21853	.12024	.14240	.04283	.01128	.03980	.09427
.902	6.290	-.24390	.10800	-.03530	-.21694	.11842	.14463	.04400	.01158	.03890	.09847
.902	8.550	-.33710	.14670	-.04970	-.21234	.11204	.14107	.04666	.01228	.03910	.10087
.902	10.750	-.42960	.18430	-.06350	-.21276	.10862	.13168	.04825	.01270	.03850	.10827
GRADIENT		-.04236	.01926	-.00582	.00043	-.00086	.00263	.00009	.00002	-.00175	-.00065

RUN NO. 196/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.100	-12.440	.61580	-.25980	.09510	-.23096	.14305	.21049	.05985	.01576	.07610	.13056
1.100	-10.060	.49100	-.21260	.07830	-.22889	.14730	.22243	.05921	.01559	.07470	.12526
1.100	-7.660	.37340	-.16790	.06180	-.22830	.15225	.23099	.06155	.01620	.07330	.11916
1.100	-5.250	.26360	-.12530	.04510	-.23628	.16348	.23198	.06336	.01668	.07280	.11686
1.100	-2.890	.15510	-.07800	.02650	-.24403	.17273	.23730	.05974	.01573	.06980	.11496
1.100	-.520	.04630	-.02610	.00760	-.25995	.18628	.23305	.05528	.01455	.06790	.11876
1.100	1.800	-.06310	.02870	-.01100	-.25658	.18498	.23931	.05613	.01478	.06480	.11756
1.100	4.160	-.16350	.07370	-.02860	-.25233	.17860	.24866	.05709	.01503	.05950	.11686
1.100	6.500	-.26720	.11840	-.04690	-.24866	.17213	.25095	.05719	.01506	.05690	.12056
1.100	8.860	-.37020	.15920	-.06150	-.24291	.16055	.25089	.05815	.01531	.05400	.12336
1.100	11.210	-.48250	.19910	-.07710	-.24024	.14955	.24622	.05942	.01565	.05270	.12466
GRADIENT		-.04538	.02172	-.00784	-.00093	.00070	.00169	-.00030	-.00008	-.00145	.00019

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IA33 TABULATED DATA

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MSFC 594 (IA33) 740TS (TIPIS1P201)

ORB STING

(AIC039) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = -5.000

RUN NO. 193/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.254	-12.610	.61540	-.25430	.09570	-.20759	.11038	.21748	.05893	.01551	.07060	.12219
1.254	-10.180	.47760	-.19730	.07710	-.19104	.10521	.22715	.05606	.01476	.06790	.11809
1.254	-7.730	.35000	-.14520	.05920	-.17940	.10376	.23311	.05670	.01493	.06480	.11109
1.254	-5.280	.23020	-.09600	.04040	-.18163	.11218	.23511	.05680	.01495	.06420	.11019
1.254	-2.870	.12200	-.05090	.02120	-.18463	.11936	.23776	.05414	.01425	.06240	.10889
1.254	-.480	.02330	-.00970	.00410	-.18797	.12166	.23529	.05202	.01370	.05960	.10909
1.254	1.860	-.07140	.03030	-.01190	-.18696	.12088	.24086	.05425	.01428	.05530	.10979
1.254	4.250	-.16740	.06890	-.02890	-.19396	.12201	.24600	.05691	.01498	.05250	.11189
1.254	6.630	-.27270	.11150	-.04710	-.20232	.12326	.24969	.05712	.01504	.05060	.11729
1.254	9.080	-.38810	.15700	-.06400	-.21084	.12158	.24558	.05723	.01507	.05090	.12349
1.254	11.470	-.51640	.20800	-.08150	-.21471	.11704	.24164	.05786	.01523	.04980	.12549
GRADIENT		-.04063	.01685	-.00702	-.00114	.00030	.00128	.00044	.00012	-.00143	.00041

RUN NO. 192/ 0    RN/L = 7.05    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.965	-12.820	.61760	-.26320	.08280	-.16319	.07171	.23795	.04638	.01221	.03980	.06817
1.965	-10.240	.46800	-.20190	.06430	-.14520	.06880	.23112	.04340	.01143	.03610	.06667
1.965	-7.790	.34870	-.15190	.05000	-.14313	.07133	.23372	.04351	.01146	.03570	.06477
1.965	-5.340	.23530	-.10330	.03510	-.14164	.07320	.23605	.04128	.01087	.03560	.06537
1.965	-2.920	.12770	-.05590	.01910	-.14688	.07870	.23788	.03915	.01031	.03500	.06537
1.965	-.490	.02290	-.00940	.00310	-.15291	.08310	.24303	.03660	.00964	.03400	.06567
1.965	1.890	-.07620	.03450	-.01030	-.15066	.08130	.24803	.03830	.01008	.03200	.06597
1.965	4.330	-.17890	.07890	-.02520	-.15598	.07920	.25478	.03915	.01031	.03070	.07037
1.965	6.750	-.28430	.12250	-.03990	-.15900	.07725	.25474	.04149	.01092	.02730	.06637
1.965	9.230	-.40210	.17030	-.05550	-.16968	.07888	.25433	.04330	.01140	.02640	.06647
1.965	11.690	-.52970	.22130	-.07020	-.18050	.08150	.25142	.04340	.01143	.02670	.06977
GRADIENT		-.04221	.01858	-.00606	-.00104	-.00001	.00231	.00007	.00002	-.00062	.00064

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIP151P201)

ORB STING

(A1C040) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = 10.000

		RUN NO. 201/ 0	RN/L = 4.97	GRADIENT INTERVAL = -5.00/ 5.00							
MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.596	-11.590	.00090	.00110	.00360	-.65842	.21279	.11055	.03918	.01031	.05360	.07808
.596	-9.480	.00000	.00070	.00060	-.52560	.15937	.10933	.03949	.01040	.05270	.07898
.596	-7.280	-.00500	.00430	.00220	-.39629	.11099	.11760	.03833	.01009	.04910	.07528
.596	-5.110	-.00220	.00260	.00240	-.28806	.06909	.12287	.03705	.00975	.04610	.07298
.596	-2.900	-.00970	.00550	.00110	-.16536	.02331	.12152	.03631	.00956	.04340	.07328
.596	-.680	-.01410	.00690	.00010	-.05021	-.01721	.12048	.03535	.00931	.04210	.07158
.596	1.520	-.01720	.00830	-.00030	.07465	-.06456	.11569	.03514	.00925	.04030	.06998
.596	3.730	-.01730	.00850	-.00090	.19923	-.10961	.11345	.03407	.00897	.03840	.06718
.596	5.950	-.02330	.01060	-.00160	.32770	-.15629	.10244	.03419	.00900	.04060	.06828
.596	8.150	-.02350	.00990	-.00190	.45387	-.20314	.09148	.03354	.00893	.04220	.06488
.596	10.260	-.02550	.01020	-.00270	.56719	-.24776	.08159	.03344	.00880	.04150	.06398
.596	GRADIENT	-.00117	.00047	-.00029	.05516	-.02019	-.00131	-.00031	-.00008	-.00076	-.00095

		RUN NO. 202/ 0	RN/L = 6.28	GRADIENT INTERVAL = -5.00/ 5.00							
MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.903	-13.040	-.01100	.00750	.00310	-.84742	.29442	.11605	.05038	.01326	.05770	.10467
.903	-10.670	-.01530	.00950	.00180	-.68656	.23522	.12848	.04825	.01270	.05740	.09947
.903	-8.270	-.02000	.01290	.00030	-.52706	.17377	.13346	.04676	.01231	.05500	.09747
.903	-5.840	-.02120	.01250	-.00010	-.37362	.11387	.13546	.04506	.01196	.05060	.09447
.903	-3.420	-.02200	.01180	-.00010	-.22444	.05462	.13843	.04400	.01158	.04760	.09187
.903	-1.020	-.01900	.00910	.00040	-.07317	-.01571	.13901	.04262	.01122	.04640	.08717
.903	1.400	-.02310	.00990	-.00030	.08638	-.08556	.13642	.04241	.01116	.04490	.08707
.903	3.830	-.02280	.00980	-.00110	.23461	-.14536	.13197	.04166	.01094	.04500	.08717
.903	6.220	-.02780	.01160	-.00220	.36738	-.18633	.12547	.04166	.01097	.04690	.08787
.903	8.580	-.03550	.01450	-.00290	.48238	-.21626	.12342	.04241	.01116	.05010	.08977
.903	10.860	-.03590	.01320	-.00350	.59801	-.25221	.11038	.04304	.01133	.05180	.08647
.903	GRADIENT	-.00027	-.00021	-.00015	.06358	-.02771	-.00091	-.00031	-.00008	-.00038	-.00059

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IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC040) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = 10.000

RUN NO. 204/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.103	-14.350	-.00060	.00430	.00410	-1.11018	.44335	.20494	.06070	.01598	.07450	.12776
1.103	-11.680	.00050	.00260	.00320	-.87447	.35025	.21627	.06027	.01587	.07980	.12826
1.103	-9.070	.00010	.00220	.00230	-.67696	.27600	.23058	.05836	.01537	.07830	.12546
1.103	-6.480	-.00150	.00220	.00170	-.49606	.20543	.23795	.05719	.01506	.07410	.12306
1.103	-3.900	-.00460	.00310	.00080	-.32532	.14050	.23678	.05666	.01492	.07160	.12116
1.103	-1.310	-.00870	.00490	-.00010	-.15181	.07255	.24109	.05475	.01441	.06720	.11896
1.103	1.220	-.01060	.00580	-.00030	.01779	-.00165	.23749	.05475	.01441	.06460	.11526
1.103	3.720	-.01360	.00620	-.00140	.17586	-.07050	.23073	.05411	.01425	.06170	.11086
1.103	6.270	-.01720	.00700	-.00200	.33750	-.13355	.22472	.05432	.01430	.06370	.10626
1.103	8.750	-.01900	.00570	-.00250	.48824	-.19308	.21685	.05379	.01416	.06420	.10136
1.103	11.120	-.02530	.00940	-.00300	.62798	-.25497	.20082	.05592	.01472	.06500	.10006
GRADIENT		-.00114	.00041	-.00027	.06590	-.02785	-.00085	-.00030	-.00008	-.00127	-.00128

RUN NO. 203/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.254	-14.980	-.01030	.00730	.00350	-1.21260	.48058	.20996	.05935	.01563	.06900	.12089
1.254	-12.120	-.00850	.00600	.00300	-.91656	.34821	.21790	.05691	.01498	.06910	.11839
1.254	-9.310	-.00690	.00490	.00200	-.66567	.24488	.22583	.05468	.01439	.06800	.11529
1.254	-6.590	-.00580	.00380	.00100	-.46231	.16763	.23897	.05404	.01423	.06590	.11279
1.254	-3.910	-.01040	.00470	.00000	-.26655	.09031	.24523	.05308	.01398	.06170	.11169
1.254	-1.260	-.01180	.00500	-.00040	-.09341	.02593	.24647	.05404	.01423	.05990	.11219
1.254	1.290	-.01490	.00510	-.00110	.06582	-.03579	.24458	.05393	.01420	.05780	.11019
1.254	3.820	-.01660	.00470	-.00190	.21377	-.09427	.23922	.05489	.01445	.05890	.10819
1.254	6.350	-.01890	.00510	-.00270	.36162	-.15122	.23531	.05510	.01451	.06000	.10499
1.254	8.850	-.02070	.00560	-.00320	.50533	-.20534	.22619	.05542	.01459	.06050	.10169
1.254	11.300	-.02710	.00790	-.00430	.64182	-.24964	.21636	.05584	.01470	.06130	.10129
GRADIENT		-.00084	.00000	-.00025	.06218	-.02391	-.00077	.00021	.00005	-.00041	-.00048

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC040) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = 10.000

RUN NO. 188/ 0 RN/L = 7.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.963	-14.890	.00230	.00350	.00310	-1.06014	.41628	.26981	.04202	.01106	.03540	.06807
1.963	-11.990	-.00110	.00410	.00270	-.80986	.31285	.26611	.04021	.01059	.03620	.06867
1.963	-9.250	-.00090	.00230	.00190	-.60852	.23065	.26661	.03651	.01014	.03580	.06637
1.963	-6.530	-.00200	.00280	.00130	-.42067	.15608	.25686	.03947	.01039	.03380	.06727
1.963	-3.950	-.00540	.00330	.00020	-.27279	.10027	.25711	.04032	.01062	.03300	.06537
1.963	-1.340	-.00790	.00430	-.00060	-.12607	.04833	.25424	.04138	.01090	.03400	.06417
1.963	1.220	-.01090	.00590	-.00140	.02136	-.00835	.25316	.04277	.01126	.03530	.06277
1.963	3.790	-.01320	.00680	-.00160	.16636	-.06735	.24986	.04277	.01126	.03620	.06147
1.963	6.320	-.01720	.00910	-.00230	.31193	-.12737	.24894	.04138	.01090	.03590	.06187
1.963	8.920	-.02030	.01120	-.00330	.45971	-.17633	.25321	.04032	.01062	.03520	.06207
1.963	11.490	-.02360	.01190	-.00380	.60196	-.21423	.24721	.03862	.01017	.03510	.06327
	GRADIENT	-.00102	.00047	-.00024	.05682	-.02170	-.00089	.00034	.00009	.00042	-.00051

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC041) ( 19 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = 10.000

RUN NO. 208/ 0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.599	-11.090	.45810	-.19210	.06980	.00698	-.05305	.09363	.04449	.01171	.05510	.08568
.599	-9.010	.37050	-.15770	.05810	.00883	-.04733	.10298	.04205	.01107	.05310	.08358
.599	-6.900	.28070	-.11990	.04410	-.00375	-.04113	.10873	.04120	.01085	.05070	.08038
.599	-4.740	.19310	-.08370	.03130	-.00569	-.03813	.11626	.03907	.01029	.04770	.07758
.599	-2.590	.10410	-.04520	.01710	-.00343	-.03699	.12297	.03886	.01023	.04390	.07448
.599	-1.430	.02390	-.01100	.00560	-.02199	-.02661	.11990	.03833	.01009	.04120	.07648
.599	1.700	-.05980	.02620	-.00720	-.02110	-.02661	.12447	.03875	.01020	.03710	.07838
.599	3.840	-.13170	.05580	-.01730	-.01929	-.03144	.13496	.03907	.01029	.03380	.07648
.599	5.970	-.21720	.09250	-.03100	-.01444	-.03691	.13190	.04003	.01054	.03170	.08108
.599	8.090	-.29830	.12620	-.04270	-.01422	-.04098	.12439	.04183	.01101	.03200	.08638
.599	10.160	-.38530	.16290	-.05650	-.02371	-.03991	.11415	.04258	.01121	.03270	.09398
	GRADIENT	-.03793	.01634	-.00566	-.00186	.00102	.00181	-.00001	-.00000	-.00161	.00008

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DATE 23 OCT 75

IA33 TABULATED DATA

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MSFC 594 (IA33) 740TS (TIP1S1P201)

ORB STING

(A1C041) ( 19 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF \* 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
LREF \* 1290.0000 IN. YMRP = .0000 IN. YT  
BREF \* 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
SCALE \* .0040

ALPHA = .001 RUDDER = .000  
ELEVTR = 10.000

RUN NO. 207/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00											
MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.900	-11.870	.52170	-.21250	.08360	-.03337	-.03485	.10749	.05133	.01352	.06380	.10927
.900	-9.620	.41820	-.17330	.06950	-.02575	-.03730	.11563	.04900	.01290	.06230	.10697
.900	-7.370	.31970	-.13330	.05390	-.02435	-.03516	.12405	.04708	.01240	.05990	.10377
.900	-5.070	.22050	-.09340	.03760	-.02270	-.03316	.13035	.04538	.01195	.05570	.09977
.900	-2.780	.12400	-.05290	.02110	-.03010	-.03033	.12979	.04464	.01175	.05170	.09637
.900	-.490	.03160	-.01390	.00760	-.04634	-.02108	.12773	.04400	.01158	.04590	.09847
.900	1.780	-.06530	.02990	-.00680	-.03829	-.02803	.14452	.04421	.01164	.04110	.09137
.900	4.060	-.15100	.06320	-.01940	-.03526	-.02970	.14733	.04559	.01200	.03860	.09547
.900	6.310	-.24110	.10060	-.03470	-.03539	-.02810	.15026	.04687	.01234	.03570	.10047
.900	8.590	-.33140	.13630	-.04920	-.04063	-.02750	.14658	.04815	.01268	.03780	.10277
.900	10.790	-.42330	.17160	-.06320	-.04771	-.02570	.14611	.05112	.01346	.03690	.10717
	GRADIENT	-.04050	.01720	-.06596	-.00033	-.06022	.00304	.00014	.00004	-.00194	-.00043

RUN NO. 205/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00											
MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.097	-12.400	.58540	-.23630	.09570	-.06298	.00258	.21759	.05996	.01579	.07390	.12686
1.097	-10.020	.46430	-.19090	.07900	-.06336	.00728	.22354	.05911	.01556	.07440	.12556
1.097	-7.620	.34850	-.14800	.06130	-.06465	.01318	.23266	.05868	.01545	.07320	.12106
1.097	-5.230	.24410	-.10910	.04490	-.07966	.02850	.23448	.05836	.01537	.07340	.11896
1.097	-2.850	.14120	-.06720	.02700	-.08911	.04045	.23879	.05815	.01531	.07130	.11736
1.097	-.500	.03700	-.01970	.00760	-.10146	.05233	.23735	.05719	.01506	.06800	.11666
1.097	1.810	-.06410	.02780	-.00940	-.09745	.05045	.24392	.05602	.01475	.06410	.11766
1.097	4.160	-.15950	.06850	-.02620	-.09486	.04545	.25139	.05645	.01486	.05770	.11926
1.097	6.500	-.25870	.10940	-.04380	-.08700	.03508	.25666	.05698	.01500	.05300	.11926
1.097	8.860	-.35630	.14420	-.05860	-.07883	.02242	.26050	.05634	.01483	.04880	.11786
1.097	11.210	-.46750	.18150	-.07470	-.07816	.01275	.25389	.05985	.01576	.04760	.12226
	GRADIENT	-.04293	.01945	-.00756	-.00057	.00056	.00190	-.00027	-.00007	-.00191	.00029

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(A1C04) ( 19 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER \* .000  
 ELEVTR = 10.000

RUN NO. 206/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.250	-12.590	.60420	-.24590	.09750	-.08444	.00853	.22139	.05872	.01546	.06980	.12319
1.250	-10.160	.46670	-.19100	.07790	-.06922	.00458	.23243	.05638	.01484	.06790	.11849
1.250	-7.710	.34350	-.14160	.05920	-.06195	.00693	.23867	.05574	.01467	.06670	.11589
1.250	-5.260	.22420	-.09220	.04120	-.06612	.01631	.24198	.05563	.01465	.06600	.11469
1.250	-2.860	.11920	-.04950	.02230	-.06797	.02138	.24443	.05468	.01439	.06370	.11329
1.250	-.470	.01940	-.00730	.00490	-.07152	.02405	.24419	.05372	.01414	.05950	.11179
1.250	1.870	-.07650	.03340	-.01160	-.07063	.02368	.25163	.05297	.01395	.05480	.11339
1.250	4.240	-.17210	.07220	-.02850	-.07628	.02381	.25748	.05393	.01420	.05230	.11539
1.250	6.650	-.27690	.11300	-.04660	-.07477	.01808	.25543	.05468	.01439	.04900	.11679
1.250	9.070	-.38920	.15630	-.06300	-.07906	.01353	.25225	.05616	.01479	.04680	.11939
1.250	11.470	-.51480	.20590	-.08050	-.09109	.01396	.24804	.05967	.01571	.04670	.12369
	GRADIENT	-.04102	.01717	-.00714	-.00102	.00029	.00197	-.00013	-.00003	-.00165	.00033

RUN NO. 191/ 0 RN/L = 7.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.963	-12.760	.61000	-.26300	.08510	-.09663	.02093	.24212	.04691	.01235	.04070	.06747
1.963	-10.260	.47320	-.20550	.06740	-.09010	.02145	.24104	.04489	.01182	.03810	.06677
1.963	-7.810	.35130	-.15340	.05240	-.08828	.02515	.24306	.04447	.01171	.03720	.06597
1.963	-5.360	.23980	-.10570	.03710	-.08936	.02862	.24796	.04287	.01129	.03730	.06577
1.963	-2.930	.13140	-.05860	.02040	-.09481	.03485	.25111	.04192	.01104	.03590	.06467
1.963	-.500	.02700	-.01190	.00440	-.10286	.04095	.25601	.04021	.01059	.03350	.06507
1.963	1.880	-.07330	.03260	-.00940	-.10049	.03805	.26256	.04107	.01081	.03140	.06557
1.963	4.330	-.17720	.07710	-.02520	-.10098	.03243	.26782	.04181	.01101	.02970	.06767
1.963	6.740	-.28280	.12130	-.04010	-.10198	.03023	.26382	.04181	.01101	.02620	.06697
1.963	9.240	-.40070	.16920	-.05600	-.11006	.03060	.26132	.04170	.01098	.02620	.06697
1.963	11.670	-.52700	.22110	-.07100	-.11946	.03165	.25911	.04362	.01148	.02660	.06817
	GRADIENT	-.04247	.01869	-.00623	-.00067	-.00042	.00234	.00002	.00001	-.00086	.00039

DATE 23 OCT 75

IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(A1C042) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = 15.000

RUN NO. 216/ 0    RN/L = 5.00    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.600	-11.570	.00210	.00020	.00390	-.60417	.16494	.11404	.03939	.01037	.05450	.07828
.600	-9.430	.00120	.00080	.00340	-.46866	.11304	.11766	.03896	.01026	.05210	.07788
.600	-7.260	-.00390	.00260	.00180	-.34139	.06389	.12240	.03833	.01009	.04920	.07528
.600	-5.090	-.00420	.00280	.00200	-.23556	.02179	.12787	.03705	.00975	.04600	.07168
.600	-2.860	-.00660	.00300	.00160	-.10318	-.02781	.12702	.03790	.00998	.04370	.07018
.600	-.630	-.01310	.00550	.00020	.01941	-.07296	.12851	.03641	.00959	.04090	.06868
.600	1.580	-.01210	.00510	.00020	.14773	-.12063	.12811	.03482	.00917	.03830	.06578
.600	3.800	-.01850	.00810	-.00090	.27018	-.16669	.11919	.03503	.00922	.03970	.06538
.600	6.010	-.01910	.00710	-.00120	.39518	-.21026	.11166	.03385	.00891	.03910	.06408
.600	8.210	-.02390	.00900	-.00210	.52045	-.25424	.09696	.03397	.00894	.04150	.06318
.600	10.330	-.02370	.00820	-.00300	.64249	-.30536	.08619	.03344	.00880	.04170	.06158
	GRADIENT	-.00156	.00067	-.00034	.05626	-.02092	-.00108	-.00046	-.00012	-.00066	-.00078

RUN NO. 215/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.903	-13.030	-.00800	.00620	.00340	-.83638	.28587	.13191	.05102	.01343	.05790	.10527
.903	-10.660	-.01290	.00930	.00160	-.67172	.22207	.13404	.04889	.01287	.05650	.10407
.903	-8.260	-.01390	.01000	.00090	-.51096	.15907	.13846	.04676	.01231	.05360	.10157
.903	-5.820	-.01440	.01030	-.00030	-.35464	.09819	.14346	.04517	.01189	.05100	.09747
.903	-3.380	-.01770	.01010	-.00030	-.19207	.03027	.14597	.04336	.01142	.04800	.09247
.903	-1.000	-.01530	.00780	-.00020	-.04852	-.03606	.15152	.04241	.01116	.04580	.08667
.903	1.420	-.01420	.00640	-.00050	.11581	-.11011	.14478	.04304	.01133	.04510	.08787
.903	3.880	-.02010	.00940	-.00210	.27346	-.17296	.14307	.04326	.01139	.04390	.08757
.903	6.260	-.02690	.01200	-.00310	.40188	-.21158	.13895	.04357	.01147	.04580	.08867
.903	8.510	-.03050	.01290	-.00340	.50991	-.23723	.13162	.04421	.01164	.05090	.08867
.903	10.910	-.02720	.00980	-.00230	.63089	-.27571	.12073	.04389	.01156	.04970	.08637
	GRADIENT	-.00026	-.00014	-.00024	.06451	-.02825	-.00063	.00001	.00000	-.00054	-.00055



MSFC 594(IA33) 740TS (TIP1S1P201)

ORB STING

(A1C042) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = 15.000

RUN NO. 213/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.101	-14.300	.00490	.00130	.00470	-1.06511	.40658	.21823	.06081	.01601	.07470	.13076
1.101	-11.650	.00600	.00000	.00380	-.82989	.31540	.23053	.05921	.01559	.07740	.12836
1.101	-9.020	.00610	-.00040	.00280	-.63344	.24137	.24019	.05826	.01534	.07570	.12446
1.101	-6.400	.00540	-.00050	.00230	-.44924	.17007	.24259	.05826	.01534	.07310	.12246
1.101	-3.800	.00170	.00080	.00130	-.26638	.09805	.24434	.05730	.01509	.06980	.11896
1.101	-1.190	-.00450	.00440	.00060	-.09110	.02828	.24076	.05698	.01500	.06670	.11816
1.101	1.320	-.00720	.00610	-.00060	.07578	-.04520	.23758	.05666	.01492	.06340	.11476
1.101	3.850	-.01140	.00780	-.00130	.24075	-.11655	.23322	.05602	.01475	.06120	.10926
1.101	6.400	-.00950	.00510	-.00140	.39770	-.17080	.23351	.05624	.01481	.06100	.10456
1.101	8.880	-.01110	.00350	-.00090	.55521	-.24080	.22373	.05581	.01469	.06240	.09806
1.101	11.270	-.01630	.00590	-.00170	.69117	-.29295	.20714	.05900	.01553	.06220	.09406
	GRADIENT	-.00165	.00089	-.00075	.06631	-.02817	-.00144	-.00016	-.00004	-.00114	-.00127

RUN NO. 214/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.253	-14.960	-.00710	.00610	.00410	-1.18636	.46146	.23219	.05882	.01549	.06810	.12259
1.253	-12.090	-.00680	.00620	.00340	-.89205	.32921	.23793	.05648	.01487	.06820	.11799
1.253	-9.280	-.00530	.00420	.00200	-.64015	.22498	.24648	.05383	.01417	.06650	.11339
1.253	-6.560	-.00440	.00280	.00170	-.44070	.15031	.25113	.05478	.01442	.06520	.11309
1.253	-3.890	-.00730	.00300	.00080	-.24970	.07631	.25263	.05478	.01442	.06230	.11249
1.253	-1.230	-.01130	.00530	-.00030	-.06780	.00591	.25423	.05478	.01442	.05910	.11019
1.253	1.340	-.01330	.00540	-.00080	.09540	-.05909	.25383	.05478	.01442	.05640	.10749
1.253	3.860	-.01540	.00550	-.00200	.24307	-.11807	.24952	.05489	.01445	.05620	.10529
1.253	6.380	-.01620	.00460	-.00260	.39104	-.17587	.24275	.05616	.01479	.05930	.10289
1.253	8.880	-.01850	.00520	-.00330	.53336	-.23009	.23255	.05606	.01476	.05880	.10109
1.253	11.360	-.02390	.00770	-.00400	.67936	-.27839	.22605	.05606	.01476	.05840	.09909
	GRADIENT	-.00106	.00030	-.00034	.06360	-.02511	-.00037	.00001	.00000	-.00082	-.00054

DATE 23 OCT 75

1433 TABULATED DATA

PAGE 121

MSFC 594(1A33) 740TS (T1P1S1P201)

ORB STING

(A1C042) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = 15.000

PARAMETRIC DATA

RUN NO. 189/ 0 RN/L = 7.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.964	-14.820	.00270	.00330	.00330	-1.03540	.40002	.27029	.04223	.01112	.03590	.06837
1.964	-11.930	-.00030	.00360	.00270	-.78739	.29837	.26621	.04032	.01062	.03630	.06887
1.964	-9.230	-.00070	.00210	.00210	-.59578	.22090	.27118	.03915	.01031	.03600	.06617
1.964	-6.570	-.00230	.00270	.00130	-.41791	.14970	.26813	.04000	.01053	.03420	.06587
1.964	-3.920	-.00480	.00300	.00050	-.25779	.09005	.26206	.04107	.01081	.03340	.06407
1.964	-1.320	-.00770	.00410	-.00040	-.11114	.03698	.26131	.04202	.01106	.03410	.06227
1.964	1.250	-.01070	.00580	-.00120	.03782	-.02052	.25973	.04330	.01140	.03570	.06077
1.964	3.810	-.01380	.00740	-.00150	.18092	-.07882	.25723	.04330	.01140	.03650	.05957
1.964	6.340	-.01630	.00890	-.00210	.32554	-.13940	.25402	.04170	.01098	.03620	.05997
1.964	8.960	-.02090	.01170	-.00360	.47644	-.18985	.25221	.04021	.01059	.03500	.05987
1.964	11.520	-.02350	.01170	-.00350	.61957	-.22615	.25699	.03894	.01025	.03450	.06147
1.964	GRADIENT	-.00116	.00058	-.00026	.05688	-.02190	-.00062	.00031	.00008	.00042	-.00058

MSFC 594(1A33) 740TS (T1P1S1P201)

ORB STING

(A1C043) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000 RUDDER = .000  
 ELEVTR = 15.000

PARAMETRIC DATA

RUN NO. 209/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.599	-11.080	.45070	-.18780	.07020	.06368	-.10013	.10328	.04375	.01152	.05190	.07968
.599	-9.020	.37010	-.15640	.06000	.06114	-.09543	.11280	.04162	.01096	.05010	.07718
.599	-6.890	.27550	-.11700	.04500	.05956	-.09173	.12085	.04077	.01073	.04800	.07288
.599	-4.740	.18980	-.08130	.03160	.05433	-.08806	.12744	.03939	.01037	.04560	.06908
.599	-2.590	.10330	-.04340	.01760	.05160	-.08551	.13127	.03875	.01020	.04270	.06948
.599	-.430	.02060	-.00910	.00480	.04654	-.08134	.12921	.03822	.01006	.04030	.06978
.599	1.690	-.05490	.02380	-.00640	.04437	-.08169	.13487	.03886	.01023	.03650	.07178
.599	3.850	-.13240	.05560	-.01850	.04841	-.08583	.14556	.03907	.01029	.03100	.06688
.599	5.960	-.21110	.08990	-.03130	.05516	-.09208	.14504	.03928	.01034	.02960	.07198
.599	8.080	-.29430	.12450	-.04410	.04929	-.09216	.13886	.04066	.01071	.02970	.07668
.599	10.150	-.37990	.16060	-.05790	.04632	-.09321	.12372	.04130	.01087	.02860	.08858
.599	GRADIENT	-.03740	.01589	-.00579	-.00089	.00039	.00186	-.00002	-.00001	-.00165	-.00010

DATE 23 OCT 75

IA33 TABULATED DATA

MSI 594(IA33) 740TS (T1P1S1P201)

ORB STING

(41C043) (12 SEP 75)

PARAMETRIC DATA

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000    RUDDER = .000  
 ELEVTR = 15.000

RUN NO. 210/ 0    RN/L = 6.26    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
.898	-11.820	.50670	-.20440	.08280	.01222	-.06878	.11593	.04910	.01293	.06080	.10477
.898	-9.600	.40770	-.16720	.06000	.01032	-.06470	.12538	.04644	.01223	.05990	.10107
.898	-7.340	.31070	-.12840	.05290	.01050	-.06276	.13335	.04538	.01195	.05790	.09827
.898	-5.050	.21710	-.09110	.03660	.00754	-.05986	.13842	.04411	.01161	.05470	.09557
.898	-2.770	.11990	-.05090	.02020	.00448	-.06058	.13945	.04357	.01147	.04980	.09327
.898	-.480	.03050	-.01330	.00650	-.00995	-.05256	.13615	.04368	.01150	.04530	.09497
.898	1.780	-.06630	.03020	-.00880	.00179	-.06148	.15538	.04315	.01136	.03980	.08777
.898	4.060	-.15070	.06340	-.02150	.00369	-.06241	.15993	.04389	.01156	.03620	.09077
.898	6.300	-.23750	.09870	-.03520	.00322	-.06105	.15910	.04453	.01172	.03510	.09507
.898	8.560	-.32850	.13500	-.05180	.00137	-.05958	.16013	.04740	.01248	.03510	.09927
.898	10.760	-.41810	.16900	-.06620	-.00124	-.05990	.15466	.04857	.01279	.03460	.10167
.898	GRADIENT	-.03994	.01698	-.00617	.00041	-.00053	.07354	.00002	.00000	-.00203	-.00064

RUN NO. 212/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.100	-12.360	.57240	-.22760	.09320	.02792	-.02632	.21831	.06123	.01612	.07360	.12916
1.100	-9.980	.44950	-.18270	.07620	-.02292	-.02457	.23062	.05932	.01562	.07240	.12456
1.100	-7.600	.33900	-.14270	.05950	-.02300	-.01910	.23980	.05864	.01570	.07380	.12126
1.100	-5.200	.23130	-.10270	.04220	-.03343	-.00555	.24414	.05900	.01553	.07270	.11766
1.100	-2.830	.12840	-.06060	.02400	-.04082	.00453	.24692	.05932	.01562	.07120	.11716
1.100	-.460	.02420	-.01300	.00530	-.05239	.01500	.24353	.05921	.01559	.06810	.11856
1.100	1.860	-.07650	.03280	-.01300	-.04820	.01148	.25486	.05698	.01500	.06510	.11526
1.100	4.200	-.17190	.07240	-.03000	-.04533	.00660	.26146	.05709	.01503	.05790	.11696
1.100	6.560	-.27260	.11310	-.04800	-.04121	-.00275	.25949	.05815	.01531	.05380	.11956
1.100	8.930	-.37320	.14710	-.06300	-.03553	-.01397	.25830	.05974	.01573	.04120	.12136
1.100	11.290	-.48370	.18350	-.07850	-.03693	-.02132	.25548	.06166	.01623	.04800	.12256
1.100	GRADIENT	-.04279	.01900	-.00770	-.00041	.00012	.00234	-.00038	-.00010	-.00183	-.00017

ORIGINAL PAGE IS  
OF POOR QUALITY

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(A1C043) (12 SEP 75)

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000 RUDDER = .000  
 ELEVTR = 15.000

PARAMETRIC DATA

RUN NO. 211/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.253	-12.590	.60250	-.24470	.09630	-.05748	-.01541	.22481	.05850	.01540	.06800	.12139
1.253	-10.150	.46640	-.19050	.07710	-.04348	-.01887	.23582	.05659	.01490	.06740	.11649
1.253	-7.710	.34150	-.13980	.05870	-.03514	-.01779	.24325	.05606	.01476	.06610	.11349
1.253	-5.270	.22390	-.09130	.04030	-.03655	-.00879	.24543	.05648	.01487	.06580	.11429
1.253	-2.850	.11600	-.04750	.02090	-.04018	-.00274	.24886	.05584	.01470	.06370	.11159
1.253	-.470	.01840	-.00720	.00380	-.04079	-.00169	.24875	.05436	.01431	.05960	.11009
1.253	1.870	-.07600	.03260	-.01240	-.04028	-.00169	.25548	.05393	.01420	.05540	.11859
1.253	4.240	-.17320	.07240	-.02940	-.04768	-.00032	.26041	.05510	.01451	.05280	.11339
1.253	6.650	-.27850	.11360	-.04730	-.04600	-.00612	.25838	.05553	.01462	.04920	.11509
1.253	9.080	-.39320	.15780	-.06420	-.05210	-.01067	.25487	.05744	.01512	.04750	.11719
1.253	11.490	-.51630	.20550	-.08120	-.06216	-.01129	.25020	.06031	.01588	.04680	.12059
1.253	GRADIENT	-.04075	.01692	-.00708	-.00093	.00031	.00175	-.00011	-.00003	-.00156	.00025

RUN NO. 190/ 0 RN/L = 7.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.962	-12.810	.61910	-.26580	.08730	-.08548	.00828	.25310	.04712	.01241	.04150	.06617
1.962	-10.240	.46970	-.20400	.06760	-.07287	.00903	.24454	.04479	.01179	.03820	.06537
1.962	-7.800	.34970	-.15280	.05260	-.07668	.01665	.24686	.04447	.01171	.03730	.06527
1.962	-5.360	.23870	-.10500	.03720	-.07615	.01895	.25384	.04319	.01137	.03630	.06577
1.962	-2.930	.13090	-.05770	.02060	-.08231	.02505	.25811	.04192	.01104	.03490	.06377
1.962	-.500	.02760	-.01220	.00440	-.08986	.03082	.26237	.04096	.01078	.03420	.06297
1.962	1.890	-.07540	.03360	-.01000	-.08394	.02700	.26675	.04128	.01087	.03060	.06337
1.962	4.330	-.17690	.07690	-.02560	-.08825	.02308	.27458	.04245	.01118	.02980	.06527
1.962	6.740	-.28060	.12000	-.04070	-.08822	.01925	.26909	.04234	.01115	.02690	.06507
1.962	9.240	-.40050	.16930	-.05680	-.09662	.01933	.26854	.04308	.01134	.02540	.06547
1.962	11.690	-.52820	.22020	-.07220	-.10464	.01823	.26839	.04394	.01157	.02530	.06567
1.962	GRADIENT	-.04245	.01860	-.00633	-.00050	-.00040	.00223	.00008	.00002	-.00078	.00020

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IA33 TABULATED DATA

MSFC 594(IA33) 740TS (O(-OMS PODS)) ORB STING

(A1C044) ( 12 SEP 75 )

PARAMETRIC DATA

BETA = .000 RUDDER = .000
ELEVTR = .000

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT
LREF = 1290.0000 IN. YMRP = .0000 IN. YT
BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT
SCALE = .0040

RUN NO. 233/ 0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

Table with columns: MACH, ALPHA, CY, CYN, CBL, CN, CLMF, CAF, CABO, CNBO, CABS, CABE. Rows include values for MACH .601 and GRADIENT.

RUN NO. 234/ 0 RN/L = 6.26 GRADIENT INTERVAL = -5.00/ 5.00

Table with columns: MACH, ALPHA, CY, CYN, CBL, CN, CLMF, CAF, CABO, CNBO, CABS, CABE. Rows include values for MACH .898 and GRADIENT.

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MSFC 594(1A33) 740TS (C(-OMS PODS)) ORB STING

(A1C044) ( 12 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 236/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.102	-11.530	.01080	-.00950	.00460	-.79094	.60617	.05325	.05145	.01355	.00000	.00000
1.102	-9.360	.00920	-.00850	.00430	-.65176	.50890	.05497	.05113	.01346	.00000	.00000
1.102	-7.110	.00740	-.00730	.00370	-.50644	.40497	.05797	.04763	.01254	.00000	.00000
1.102	-4.830	.00530	-.00590	.00330	-.34812	.28952	.06361	.04529	.01192	.00000	.00000
1.102	-2.550	.00320	-.00430	.00220	-.19116	.17509	.06830	.04390	.01156	.00000	.00000
1.102	-.260	.00160	-.00290	.00160	-.04037	.06592	.07231	.04359	.01148	.00000	.00000
1.102	1.990	-.0010	-.00170	.00090	.10221	-.03768	.07369	.04401	.01159	.00000	.00000
1.102	4.250	-.00300	.00010	-.00040	.24095	-.13773	.07385	.04465	.01176	.00000	.00000
1.102	6.500	-.00490	.00170	-.00040	.35811	-.21768	.06649	.04401	.01159	.00000	.00000
1.102	8.730	-.00660	.00440	-.00090	.40499	-.30728	.06114	.04826	.01271	.00000	.00000
1.102	10.900	-.00990	.00910	-.00140	.60679	-.39190	.05667	.04943	.01301	.00000	.00000
	GRADIENT	-.00098	.00064	-.00038	.06483	-.04702	.00114	-.00007	-.00001	.00000	.00000

RUN NO. 235/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CY	CYN	CBL	CN	CLMF	CAF	CABO	CNBO	CABS	CABE
1.253	-11.500	.00060	-.00690	.00430	-.71097	.54100	.05710	.04670	.01230	.00000	.00000
1.253	-9.330	.00600	-.00490	.00360	-.56949	.43983	.06082	.04638	.01221	.00000	.00000
1.253	-7.080	.00430	-.00380	.00270	-.43123	.34003	.06424	.04426	.01165	.00000	.00000
1.253	-4.830	.00220	-.00250	.00190	-.30019	.24522	.06944	.03916	.01031	.00000	.00000
1.253	-2.570	.00200	-.00240	.00190	-.16611	.14740	.07225	.03735	.00983	.00000	.00000
1.253	-.290	.00000	-.00060	.00110	-.03456	.05247	.07451	.03639	.00958	.00000	.00000
1.253	1.950	-.00220	.00080	.00030	.09468	-.04148	.07430	.03660	.00964	.00000	.00000
1.253	4.210	-.00340	.00200	.00000	.22481	-.13505	.07209	.03841	.01011	.00000	.00000
1.253	6.460	-.00610	.00360	-.00100	.34407	-.21858	.06754	.04086	.01076	.00000	.00000
1.253	8.700	-.00690	.00450	-.00120	.46821	-.30820	.06047	.04373	.01151	.00000	.00000
1.253	10.900	-.00840	.00520	-.00160	.60509	-.40507	.05727	.04723	.01244	.00000	.00000
	GRADIENT	-.00068	.00054	-.00024	.05800	-.04201	.00033	-.00010	-.00003	.00000	.00000

MSFC 594(IA33) 740TS (TIP101)

ORB STING

(AIC105) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 122/ 0    RN/L = 4.98    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.598	-11.180	.01255	.00000
.598	-9.120	.01196	.00000
.598	-7.030	.01193	.00000
.598	-4.900	.01186	.00000
.598	-2.790	.01113	.00000
.598	-.660	.01064	.00000
.598	1.450	.01009	.00000
.598	3.590	.00946	.00000
.598	5.710	.00877	.00000
.598	7.810	.00835	.00000
.598	9.830	.00842	.00000
	GRADIENT	-.00027	.00000

RUN NO. 123/ 0    RN/L = 6.27    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.900	-11.930	.01819	.00000
.900	-9.750	.01694	.00000
.900	-7.540	.01596	.00000
.900	-5.290	.01472	.00000
.900	-3.030	.01333	.00000
.900	-.770	.01267	.00000
.900	1.450	.01166	.00000
.900	3.700	.01170	.00000
.900	5.920	.01152	.00000
.900	8.100	.01104	.00000
.900	10.200	.01107	.00000
	GRADIENT	-.00026	.00000

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MSFC 594(1A33) 740TS (TIP101)

ORB STING

(AIC105) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SO. FT XMRP = 976.0000 IN. XT  
LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
ELEVTR = .000

RUN NO. 125/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.105	-12.430	.02075	.00000
1.105	-10.150	.02040	.00000
1.105	-7.840	.01978	.00000
1.105	-5.490	.01870	.00000
1.105	-3.160	.01714	.00000
1.105	-.820	.01561	.00000
1.105	1.480	.01464	.00000
1.105	3.800	.01419	.00000
1.105	6.100	.01381	.00000
1.105	8.360	.01398	.00000
1.105	10.540	.01346	.00000
	GRADIENT	-.00042	.00000

RUN NO. 124/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.256	-12.600	.02129	.00000
1.256	-10.270	.02112	.00000
1.256	-7.920	.02115	.00000
1.256	-5.560	.02098	.00000
1.256	-3.220	.02004	.00000
1.256	-.880	.01890	.00000
1.256	1.420	.01772	.00000
1.256	3.750	.01692	.00000
1.256	6.040	.01629	.00000
1.256	8.340	.01546	.00000
1.256	10.540	.01595	.00000
	GRADIENT	-.00045	.00000



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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(AIC105) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .300

RUN NO. 133/ 0    RN/L = 7.03    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.971	-12.600	.01317	.00000
1.971	-10.250	.01313	.00000
1.971	-7.890	.01310	.00000
1.971	-5.550	.01303	.00000
1.971	-3.230	.01282	.00000
1.971	-.910	.01299	.00000
1.971	1.390	.01299	.00000
1.971	3.720	.01289	.00000
1.971	6.000	.01268	.00000
1.971	8.320	.01279	.00000
1.971	10.550	.01272	.00000
	GRADIENT	.00001	.00000

RUN NO. 167/ 0    RN/L = 4.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
2.990	-11.260	.00522	.00000
2.990	-9.200	.00560	.00000
2.990	-7.100	.00577	.00000
2.990	-4.960	.00574	.00000
2.990	-2.830	.00584	.00000
2.990	-.690	.00599	.00000
2.990	1.420	.00619	.00000
2.990	3.560	.00615	.00000
2.990	5.690	.00622	.00000
2.990	7.800	.00619	.00000
2.990	9.850	.00605	.00000
	GRADIENT	.00006	.00000

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MSFC 594(1A33) 740TS (TIP101)

ORB STING

(AIC105) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 106/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
4.959	-10.730	.00073	.00000
4.959	-8.770	.00090	.00000
4.959	-6.750	.00111	.00000
4.959	-4.700	.00118	.00000
4.959	-2.610	.00121	.00000
4.959	- .550	.00128	.00000
4.959	1.510	.00135	.00000
4.959	3.580	.00139	.00000
4.959	5.620	.00142	.00000
4.959	7.670	.00146	.00000
4.959	9.630	.00146	.00000
	GRADIENT	.00003	.00000

MSFC 594(1A33) 740TS (TIP101)

ORB STING

(AIC105) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 0/ 0    RN/L = 4.98    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.598	-11.130	.01220	.00000
.598	-9.050	.01186	.00000
.598	-6.930	.01262	.00000
.598	-4.780	.01193	.00000
.598	-2.630	.01220	.00000
.598	- .460	.01050	.00000
.598	1.680	.01227	.00000
.598	3.840	.01220	.00000
.598	5.950	.01181	.00000
.598	8.090	.01196	.00000
.598	10.140	.01186	.00000
	GRADIENT	.00003	.00000

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C106) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 0/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.902	-11.970	.01652	.00000
.902	-9.730	.01600	.00000
.902	-7.440	.01590	.00000
.902	-5.130	.01503	.00000
.902	-2.820	.01433	.00000
.902	-.510	.01291	.00000
.902	1.760	.01371	.00000
.902	4.060	.01485	.00000
.902	6.330	.01534	.00000
.902	8.620	.01649	.00000
.902	10.820	.01749	.00000
.902	GRADIENT	.00010	.00000

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

MACH	BETA	CNBF	CABF
1.096	-10.120	.01954	.00000
1.096	-7.710	.01992	.00000
1.096	-5.290	.01922	.00000
1.096	-2.920	.01780	.00000
1.096	-.540	.01617	.00000
1.096	1.800	.01721	.00000
1.096	4.170	.01829	.00000
1.096	6.530	.01957	.00000
1.096	8.900	.02019	.00000
1.096	11.240	.01960	.00000
1.096	GRADIENT	.00011	.00000

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MSFC 594(1A33) 740TS (TIP101)

ORB STING

(A1C106) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

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

MACH	BETA	CNBF	CABF
1.255	-12.720	.02056	.00000
1.255	-10.270	.01966	.00000
1.255	-7.810	.02015	.00000
1.255	-5.350	.02067	.00000
1.255	-2.930	.02011	.00000
1.255	-.510	.01865	.00000
1.255	1.850	.01966	.00000
1.255	4.260	.02077	.00000
1.255	6.660	.02164	.00000
1.255	9.110	.02178	.00000
1.255	11.540	.02216	.00000
	GRADIENT	.00012	.00000

RUN NO.    0/ 0    RN/L = 7.05    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.967	-12.970	.01494	.00000
1.967	-10.370	.01452	.00000
1.967	-7.900	.01456	.00000
1.967	-5.420	.01410	.00000
1.967	-2.970	.01348	.00000
1.967	-.520	.01272	.00000
1.967	1.880	.01313	.00000
1.967	4.340	.01310	.00000
1.967	6.820	.01390	.00000
1.967	9.380	.01449	.00000
1.967	11.840	.01476	.00000
	GRADIENT	-.00003	.00000

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1A33 TABULATED DATA

MSFC 594(1A33) 740TS (T1P101)

ORB STING

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(A1C106) ( 11 SEP 75 )

PARAMETRIC DATA

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO.    0/ 0    RN/L = 4.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
2.990	-11.290	.00650	.00000
2.990	-9.190	.00650	.00000
2.990	-7.040	.00640	.00000
2.990	-4.850	.00619	.00000
2.990	-2.670	.00605	.00000
2.990	-1.470	.00598	.00000
2.990	1.700	.00608	.00000
2.990	3.890	.00601	.00000
2.990	6.060	.00619	.00000
2.990	8.250	.00636	.00000
2.990	10.340	.00647	.00000
GRADIENT		-.00001	.00000

RUN NO.    0/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
4.959	-10.750	.00083	.00000
4.959	-8.770	.00101	.00000
4.959	-6.700	.00104	.00000
4.959	-4.640	.00115	.00000
4.959	-2.550	.00121	.00000
4.959	-1.450	.00125	.00000
4.959	1.630	.00135	.00000
4.959	3.740	.00135	.00000
4.959	5.800	.00135	.00000
4.959	7.880	.00139	.00000
4.959	9.870	.00139	.00000
GRADIENT		.00003	.00000

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (T1P1S1P201)

ORB STING

(AIC107) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 130/ 0    RN/L = 4.99    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNSF	CABF
.599	-11.700	.01060	.00000
.599	-9.560	.01060	.00000
.599	-7.390	.01060	.00000
.599	-5.200	.01060	.00000
.599	-3.020	.01060	.00000
.599	-1.800	.01060	.00000
.599	1.390	.01060	.00000
.599	3.600	.01060	.00000
.599	5.810	.01060	.00000
.599	8.020	.01060	.00000
.599	10.110	.01060	.00000
	GRADIENT	.00000	.00000

RUN NO. 129/ 0    RN/L = 5.94    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNSF	CABF
.797	-12.630	.01193	.00000
.797	-10.350	.01193	.00000
.797	-8.040	.01193	.00000
.797	-5.680	.01193	.00000
.797	-3.380	.01193	.00000
.797	-1.030	.01193	.00000
.797	1.290	.01193	.00000
.797	3.650	.01193	.00000
.797	6.020	.01193	.00000
.797	8.350	.01193	.00000
.797	10.540	.01193	.00000
	GRADIENT	.00000	.00000

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594 (IA33) 740TS (TIP1S1P201)

ORB STING

(A1C107) ( 11 SEP 75 )

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
ELEVTR = .000

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
SCALE = .0040

RUN NO. 128/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.905	-13.240	.01325	.00000
.905	-10.830	.01325	.00000
.905	-8.400	.01325	.00000
.905	-5.960	.01325	.00000
.905	-3.540	.01325	.00000
.905	-1.130	.01325	.00000
.905	1.270	.01325	.00000
.905	3.650	.01325	.00000
.905	6.080	.01325	.00000
.905	8.480	.01325	.00000
.905	10.730	.01325	.00000
GRADIENT		-.00000	.00000

RUN NO. 131/ 0 RN/L = 6.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.049	-14.130	.01696	.00000
1.049	-11.560	.01696	.00000
1.049	-9.000	.01696	.00000
1.049	-6.400	.01696	.00000
1.049	-3.860	.01696	.00000
1.049	-1.330	.01696	.00000
1.049	1.130	.01696	.00000
1.049	3.630	.01696	.00000
1.049	6.150	.01696	.00000
1.049	8.580	.01696	.00000
1.049	10.900	.01696	.00000
GRADIENT		.00000	.00000

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC107) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 126/ 3    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.102	-14.370	.01670	.00000
1.102	-11.720	.01670	.00000
1.102	-9.130	.01670	.00000
1.102	-6.540	.01670	.00000
1.102	-3.960	.01670	.00000
1.102	-1.390	.01670	.00000
1.102	1.120	.01670	.00000
1.102	3.640	.01670	.00000
1.102	6.180	.01670	.00000
1.102	8.660	.01670	.00000
1.102	11.010	.01670	.00000
	GRADIENT	-.00000	.00000

RUN NO. 127/ 1    RN/L = 6.69    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.253	-15.080	.01458	.00000
1.253	-12.250	.01458	.00000
1.253	-9.430	.01458	.00000
1.253	-6.680	.01458	.00000
1.253	-4.010	.01458	.00000
1.253	-1.360	.01458	.00000
1.253	1.200	.01458	.00000
1.253	3.740	.01458	.00000
1.253	6.270	.01458	.00000
1.253	8.770	.01458	.00000
1.253	11.240	.01458	.00000
	GRADIENT	-.00000	.00000



DATE 23 OCT 75

1A33 TABULATED DATA

MSFC 594(1A33) 740TS (TIPISIP201)

ORB STING

(AIC107) ( 11 SEP 75 )

PARAMETRIC DATA

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 109/ 0    RN/L = 6.52    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.464	-15.010	.01219	.02000
1.464	-12.240	.01219	.00000
1.464	-9.440	.01219	.00000
1.464	-6.690	.01219	.00000
1.464	-4.010	.01219	.00000
1.464	-1.370	.01219	.00000
1.464	1.220	.01219	.00000
1.464	3.770	.01219	.00000
1.464	6.300	.01219	.00000
1.464	8.790	.01219	.00000
1.464	11.280	.01219	.00000
	GRADIENT	.00000	.00000

RUN NO. 132/ 0    RN/L = 7.04    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.968	-14.660	.00928	.00000
1.968	-12.000	.00928	.00000
1.968	-9.330	.00928	.00000
1.968	-6.630	.00928	.00000
1.968	-3.970	.00928	.00000
1.968	-1.380	.00928	.00000
1.968	1.150	.00928	.00000
1.968	3.710	.00928	.00000
1.968	6.260	.00928	.00000
1.968	8.880	.00928	.00000
1.968	11.440	.00928	.00000
	GRADIENT	.00000	.00000

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (T1P1S1P201)

ORB STING

(A1C107) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 108/ 0    RN/L = 4.56    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
2.990	-11.810	.00530	.00000
2.990	-9.690	.00530	.00000
2.990	-7.490	.00530	.00000
2.990	-5.240	.00530	.00000
2.990	-3.010	.00530	.00000
2.990	-.800	.00530	.00000
2.990	1.400	.00530	.00000
2.990	3.610	.00530	.00000
2.990	5.800	.00530	.00000
2.990	8.000	.00530	.00000
2.990	10.120	.00530	.00000
	GRADIENT	-.00000	.00000

RUN NO. 107/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
4.959	-10.940	.00265	.00000
4.959	-8.950	.00265	.00000
4.959	-6.890	.00265	.00000
4.959	-4.800	.00265	.00000
4.959	-2.680	.00265	.00000
4.959	-.590	.00265	.00000
4.959	1.500	.00265	.00000
4.959	3.610	.00265	.00000
4.959	5.690	.00265	.00000
4.959	7.780	.00265	.00000
4.959	9.770	.00265	.00000
	GRADIENT	-.00000	.00000

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIP1S1P201)

ORB STING

(A1C108) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.       YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.       ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 115/ 0    RN/L = 4.98    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.598	-11.070	.01060	.00000
.598	-9.020	.01060	.00000
.598	-6.910	.01060	.00000
.598	-4.750	.01060	.00000
.598	-2.590	.01060	.00000
.598	-.440	.01060	.00000
.598	1.670	.01060	.00000
.598	3.820	.01060	.00000
.598	5.940	.01060	.00000
.598	8.080	.01060	.00000
.598	10.110	.01060	.00000
	GRADIENT	.00000	.00000

RUN NO. 114/ 0    RN/L = 5.94    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.799	-11.590	.01193	.00000
.799	-9.440	.01193	.00000
.799	-7.220	.01193	.00000
.799	-4.980	.01193	.00000
.799	-2.740	.01193	.00000
.799	-.490	.01193	.00000
.799	1.730	.01193	.00000
.799	3.960	.01193	.00000
.799	6.160	.01193	.00000
.799	8.390	.01193	.00000
.799	10.530	.01193	.00000
	GRADIENT	.00000	.00000

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (T1P1S1P201)

ORB STING

(AIC108) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 113/ 0    RN/L = 6.27    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.899	-11.880	.01325	.00000
.899	-9.660	.01325	.00000
.899	-7.370	.01325	.00000
.899	-5.090	.01325	.00000
.899	-2.800	.01325	.00000
.899	-.510	.01325	.00000
.899	1.750	.01325	.00000
.899	4.050	.01325	.00000
.899	6.300	.01325	.00000
.899	8.580	.01325	.00000
.899	10.750	.01325	.00000
	GRADIENT	.00000	.00000

RUN NO. 116/ 0    RN/L = 6.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.050	-12.340	.01696	.00000
1.050	-9.990	.01696	.00000
1.050	-7.610	.01696	.00000
1.050	-5.230	.01696	.00000
1.050	-2.870	.01696	.00000
1.050	-.520	.01696	.00000
1.050	1.790	.01696	.00000
1.050	4.130	.01696	.00000
1.050	6.460	.01696	.00000
1.050	8.810	.01696	.00000
1.050	11.090	.01696	.00000
	GRADIENT	.00000	.00000

DATE 23 OCT 75

1A33 TABULATED DATA

MSFC 594(1A33) 740TS (TIP1S1P201)

ORB STING

(A1C108) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 E\_EVTR = .000

RUN NO. 117/ 0    RN/L = 6.62    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.099	-12.420	.01670	.00000
1.099	-10.050	.01670	.00000
1.099	-7.650	.01670	.00000
1.099	-5.250	.01670	.00000
1.099	-2.890	.01670	.00000
1.099	- .530	.01670	.00000
1.099	1.780	.01670	.00000
1.099	4.130	.01670	.00000
1.099	6.470	.01670	.00000
1.099	8.830	.01670	.00000
1.099	11.140	.01670	.00000
	GRADIENT	.00000	.00000

RUN NO. 112/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.246	-12.630	.01458	.00000
1.246	-10.220	.01458	.00000
1.246	-7.750	.01458	.00000
1.246	-5.290	.01458	.00000
1.246	-2.900	.01458	.00000
1.246	- .510	.01458	.00000
1.246	1.830	.01458	.00000
1.246	4.220	.01458	.00000
1.246	6.610	.01458	.00000
1.246	9.050	.01458	.00000
1.246	11.440	.01458	.00000
	GRADIENT	.00000	.00000

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (T1P1S1P201)

ORB STING

(A1C10B) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 111/ 0    RN/L = 6.51    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.465	-12.640	.01219	.00000
1.465	-10.250	.01219	.00000
1.465	-7.780	.01219	.00000
1.465	-5.310	.01219	.00000
1.465	-2.890	.01219	.00000
1.465	-.520	.01219	.00000
1.465	1.840	.01219	.00000
1.465	4.230	.01219	.00000
1.465	6.630	.01219	.00000
1.465	9.090	.01219	.00000
1.465	11.490	.01219	.00000
	GRADIENT	.00000	.00000

RUN NO. 135/ 0    RN/L = 7.05    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.965	-12.840	.00928	.00000
1.965	-10.290	.00928	.00000
1.965	-7.830	.00928	.00000
1.965	-5.380	.00928	.00000
1.965	-2.950	.00928	.00000
1.965	-.520	.00928	.00000
1.965	1.870	.00928	.00000
1.965	4.290	.00928	.00000
1.965	6.740	.00928	.00000
1.965	9.220	.00928	.00000
1.965	11.680	.00928	.00000
	GRADIENT	-.00000	.00000

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33: 740TS (T1P1S1P201))

ORB STING

(A1C10B) ( 11 SEP 75 )

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
ELEVTR = .000

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
SCALE = .0040

RUN NO. 104/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
2.990	-11.280	.00530	.00000
2.990	-9.190	.00530	.00000
2.990	-7.010	.00530	.00000
2.990	-4.830	.00530	.00000
2.990	-2.650	.00530	.00000
2.990	- .460	.00530	.00000
2.990	1.700	.00530	.00000
2.990	3.900	.00530	.00000
2.990	6.070	.00530	.00000
2.990	8.260	.00530	.00000
2.990	10.360	.00530	.00000
GRADIENT		-.00000	.00000

RUN NO. 103/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
4.959	-10.760	.00265	.00000
4.959	-8.750	.00265	.00000
4.959	-6.700	.00265	.00000
4.959	-4.620	.00265	.00000
4.959	-2.530	.00265	.00000
4.959	- .430	.00265	.00000
4.959	1.650	.00265	.00000
4.959	3.750	.00265	.00000
4.959	5.820	.00265	.00000
4.959	7.910	.00265	.00000
4.959	9.900	.00265	.00000
GRADIENT		-.00000	.00000

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1A33 TABULATED DATA

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MSFC 594(1A33) 740TS (TIP1S1P201)

ORB STING

(AIC109) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 159/ 0    RN/L = 4.98    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.598	-11.010	.01060	.00000
.598	-8.950	.01060	.00000
.598	-6.830	.01060	.00000
.598	-4.680	.01060	.00000
.598	-2.540	.01060	.00000
.598	- .380	.01060	.00000
.598	1.750	.01060	.00000
.598	3.900	.01060	.00000
.598	6.010	.01060	.00000
.598	8.130	.01060	.00000
.598	10.190	.01060	.00000
GRADIENT		-.00000	.00000

RUN NO. 158/ 0    RN/L = 5.93    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.797	-11.500	.01193	.00000
.797	-9.320	.01193	.00000
.797	-7.120	.01193	.00000
.797	-4.860	.01193	.00000
.797	-2.640	.01193	.00000
.797	- .390	.01193	.00000
.797	1.820	.01193	.00000
.797	4.030	.01193	.00000
.797	6.250	.01193	.00000
.797	8.480	.01193	.00000
.797	10.620	.01193	.00000
GRADIENT		.00000	.00000

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MSFC 594(1A33) 740TS (TIPISIP201)

ORB STING

(A1C109) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = 5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 157/ 0    RN/L = 6.29    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.905	-11.840	.01325	.00000
.905	-9.620	.01325	.00000
.905	-7.340	.01325	.00000
.905	-5.010	.01325	.00000
.905	-2.720	.01325	.00000
.905	-.420	.01325	.00000
.905	1.850	.01325	.00000
.905	4.120	.01325	.00000
.905	6.410	.01325	.00000
.905	8.660	.01325	.00000
.905	10.850	.01325	.00000
	GRADIENT	.00000	.00000

RUN NO. 155/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.102	-12.320	.01670	.00000
1.102	-9.970	.01670	.00000
1.102	-7.590	.01670	.00000
1.102	-5.170	.01670	.00000
1.102	-2.810	.01670	.00000
1.102	-.450	.01670	.00000
1.102	1.890	.01670	.00000
1.102	4.220	.01670	.00000
1.102	6.570	.01670	.00000
1.102	8.920	.01670	.00000
1.102	11.250	.01670	.00000
	GRADIENT	.00000	.00000

DATE 23 OCT 75

IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIP1SIP201)

ORB STING

(A1C109) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = 5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 156/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.255	-12.510	.01458	.00000
1.255	-10.120	.01458	.00000
1.255	-7.660	.01458	.00000
1.255	-5.210	.01458	.00000
1.255	-2.800	.01458	.00000
1.255	-.400	.01458	.00000
1.255	1.950	.01458	.00000
1.255	4.340	.01458	.00000
1.255	6.720	.01458	.00000
1.255	9.150	.01458	.00000
1.255	11.550	.01458	.00000
	GRADIENT	.00000	.00000

RUN NO. 141/ 0    RN/L = 6.53    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.456	-12.520	.01219	.00000
1.456	-10.120	.01219	.00000
1.456	-7.670	.01219	.00000
1.456	-5.230	.01219	.00000
1.456	-2.830	.01219	.00000
1.456	-.430	.01219	.00000
1.456	1.920	.01219	.00000
1.456	4.320	.01219	.00000
1.456	6.700	.01219	.00000
1.456	9.140	.01219	.00000
1.456	11.540	.01219	.00000
	GRADIENT	.00000	.00000

DATE 23 OCT 75

1A33 TABULATED DATA

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MSFC 594 (1A33) 740TS (TIP1S1P201)

ORB STING

(A1C109) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = 5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 136/ 0    RN/L = 7.06    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.962	-12.660	.00928	.00000
1.962	-10.140	.00928	.00000
1.962	-7.710	.00928	.00000
1.962	-5.270	.00928	.00000
1.962	-2.850	.00928	.00000
1.962	- .430	.00928	.00000
1.962	1.930	.00928	.00000
1.962	4.350	.00928	.00000
1.962	6.770	.00928	.00000
1.962	9.250	.00928	.00000
1.962	11.680	.00928	.00000
	GRADIENT	.00000	.00000

RUN NO. 160/ 0    RN/L = 4.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
2.990	-11.210	.00530	.00000
2.990	-9.100	.00530	.00000
2.990	-6.940	.00530	.00000
2.990	-4.760	.00530	.00000
2.990	-2.590	.00530	.00000
2.990	- .400	.00530	.00000
2.990	1.750	.00530	.00000
2.990	3.940	.00530	.00000
2.990	6.100	.00530	.00000
2.990	8.260	.00530	.00000
2.990	10.380	.00530	.00000
	GRADIENT	-.00000	.00000

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IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC109) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 161/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
4.959	-10.680	.00265	.00000
4.959	-8.680	.00265	.00000
4.959	-6.630	.00265	.00000
4.959	-4.550	.00265	.00000
4.959	-2.470	.00265	.00000
4.959	-.370	.00265	.00000
4.959	1.690	.00265	.00000
4.959	3.790	.00265	.00000
4.959	5.850	.00265	.00000
4.959	7.910	.00265	.00000
4.959	9.920	.00265	.00000
	GRADIENT	-.00000	.00000

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC110) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 145/ 0 RN/L = 5.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.602	-11.060	.01060	.00000
.602	-9.020	.01060	.00000
.602	-6.890	.01060	.00000
.602	-4.720	.01060	.00000
.602	-2.580	.01060	.00000
.602	-.420	.01060	.00000
.602	1.700	.01060	.00000
.602	3.840	.01060	.00000
.602	5.960	.01060	.00000
.602	8.100	.01060	.00000
.602	10.160	.01060	.00000
	GRADIENT	-.00000	.00000

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1A33 TABULATED DATA

MSFC 594(1A33) 740TS (TIPISIP201)

ORB STING

(A1C110) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 144/ 0    RN/L = 5.95    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.799	-11.600	.01193	.00000
.799	-9.410	.01193	.00000
.799	-7.200	.01193	.00000
.799	-4.950	.01193	.00000
.799	-2.710	.01193	.00000
.799	- .460	.01193	.00000
.799	1.740	.01193	.00000
.799	3.980	.01193	.00000
.799	6.180	.01193	.00000
.799	8.390	.01193	.00000
.799	10.540	.01193	.00000
	GRADIENT	.00000	.00000

RUN NO. 143/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.902	-11.940	.01325	.00000
.902	-9.700	.01325	.00000
.902	-7.400	.01325	.00000
.902	-5.080	.01325	.00000
.902	-2.790	.01325	.00000
.902	- .480	.01325	.00000
.902	1.770	.01325	.00000
.902	4.060	.01325	.00000
.902	6.320	.01325	.00000
.902	8.590	.01325	.00000
.902	10.810	.01325	.00000
	GRADIENT	.00000	.00000

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IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIPIS1P201)

ORB STING

(A1C110) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = -5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 146/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.102	-12.530	.01670	.00000
1.102	-10.140	.01670	.00000
1.102	-7.730	.01670	.00000
1.102	-5.290	.01670	.00000
1.102	-2.900	.01670	.00000
1.102	-.520	.01670	.00000
1.102	1.820	.01670	.00000
1.102	4.200	.01670	.00000
1.102	6.550	.01670	.00000
1.102	8.930	.01670	.00000
1.102	11.290	.01670	.00000
	GRADIENT	.00000	.00000

RUN NO. 142/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.252	-12.790	.01458	.00000
1.252	-10.370	.01458	.00000
1.252	-7.860	.01458	.00000
1.252	-5.370	.01458	.00000
1.252	-2.940	.01458	.00000
1.252	-.520	.01458	.00000
1.252	1.870	.01458	.00000
1.252	4.290	.01458	.00000
1.252	6.700	.01458	.00000
1.252	9.160	.01458	.00000
1.252	11.580	.01458	.00000
	GRADIENT	-.00000	.00000

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IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(A1C110) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = -5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 140/ 0    RN/L = 6.53    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.460	-12.780	.01219	.00000
1.460	-10.370	.01219	.00000
1.460	-7.920	.01219	.00000
1.460	-5.430	.01219	.00000
1.460	-2.980	.01219	.00000
1.460	-.540	.01219	.00000
1.460	1.880	.01219	.00000
1.460	4.320	.01219	.00000
1.460	6.780	.01219	.00000
1.460	9.220	.01219	.00000
1.460	11.630	.01219	.00000
	GRADIENT	.00000	.00000

RUN NO. 139/ 0    RN/L = 7.05    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.966	-12.970	.00928	.00000
1.966	-10.460	.00928	.00000
1.966	-7.970	.00928	.00000
1.966	-5.480	.00928	.00000
1.966	-3.000	.00928	.00000
1.966	-.520	.00928	.00000
1.966	1.930	.00928	.00000
1.966	4.420	.00928	.00000
1.966	6.910	.00928	.00000
1.966	9.390	.00928	.00000
1.966	11.850	.00928	.00000
	GRADIENT	-.00000	.00000

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1A33 TABULATED DATA

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MSFC 594(1A33) 740TS (T1P1S1P201)

ORB STING

(AIC110) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF \* 2690.0000 SQ. FT XMRP \* 976.0000 IN. XT  
 LREF \* 1290.0000 IN. YMRP \* .0000 IN. YT  
 BREF \* 1290.0000 IN. ZMRP \* 400.0000 IN. ZT  
 SCALE \* .0040

ALPHA = -5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 165/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
2.990	-11.350	.00530	.00000
2.990	-9.220	.00530	.00000
2.990	-7.060	.00530	.00000
2.990	-4.850	.00530	.00000
2.990	-2.650	.00530	.00000
2.990	-.440	.00530	.00000
2.990	1.740	.00530	.00000
2.990	3.940	.00530	.00000
2.990	6.130	.00530	.00000
2.990	8.320	.00530	.00000
2.990	10.440	.00530	.00000
GRADIENT	-.00000	.00000	.00000

RUN NO. 164/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
4.959	-10.760	.00265	.00000
4.959	-8.750	.00265	.00000
4.959	-6.690	.00265	.00000
4.959	-4.590	.00265	.00000
4.959	-2.510	.00265	.00000
4.959	-.390	.00265	.00000
4.959	1.690	.00265	.00000
4.959	3.790	.00265	.00000
4.959	5.870	.00265	.00000
4.959	7.950	.00265	.00000
4.959	9.960	.00265	.00000
GRADIENT	.00000	.00000	.00000

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IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC111) ( 11 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = -15.000  
 ELEVTR = .000

RUN NO. 49/ 0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.599	-11.720	.01060	.00000
.599	-9.580	.01060	.00000
.599	-7.410	.01060	.00000
.599	-5.210	.01060	.00000
.599	-3.030	.01060	.00000
.599	-.800	.01060	.00000
.599	1.420	.01060	.00000
.599	3.630	.01060	.00000
.599	5.840	.01060	.00000
.599	8.040	.01060	.00000
.599	10.140	.01060	.00000
	GRADIENT	.00000	.00000

RUN NO. 50/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.904	-13.200	.01325	.00000
.904	-10.850	.01325	.00000
.904	-8.410	.01325	.00000
.904	-5.950	.01325	.00000
.904	-3.550	.01325	.00000
.904	-1.150	.01325	.00000
.904	1.280	.01325	.00000
.904	3.710	.01325	.00000
.904	6.120	.01325	.00000
.904	8.510	.01325	.00000
.904	10.790	.01325	.00000
	GRADIENT	.00000	.00000

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1A33 TABULATED DATA

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MSFC 594(1A33) 740TS (TIP:SI201)

ORB STING

(AIC111) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000    RUDDER = -15.000  
 ELEVTR = .000

RUN NO. 52/ 0    RN/L = 6.62    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.100	-14.540	.01670	.00000
1.100	-11.840	.01670	.00000
1.100	-9.190	.01670	.00000
1.100	-6.510	.01670	.00000
1.100	-3.920	.01670	.00000
1.100	-1.350	.01670	.00000
1.100	1.190	.01670	.00000
1.100	3.750	.01670	.00000
1.100	6.300	.01670	.00000
1.100	8.780	.01670	.00000
1.100	11.150	.01670	.00000
	GRADIENT	.00000	.00000

RUN NO. 51/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.247	-15.080	.01458	.00000
1.247	-12.240	.01458	.00000
1.247	-9.420	.01458	.00000
1.247	-6.660	.01458	.00000
1.247	-4.010	.01458	.00000
1.247	-1.350	.01458	.00000
1.247	1.220	.01458	.00000
1.247	3.770	.01458	.00000
1.247	6.310	.01458	.00000
1.247	8.800	.01458	.00000
1.247	11.260	.01458	.00000
	GRADIENT	.00000	.00000

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594 (IA33) 740TS (TIP1S1P201)

ORB STING

(AIC111) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = -15.000  
 ELEVTR = .000

RUN NO. 78/ 0    RN/L = 7.06    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.961	-14.930	.00928	.00000
1.961	-12.120	.00928	.00000
1.961	-9.350	.00928	.00000
1.961	-6.630	.00928	.00000
1.961	-3.970	.00928	.00000
1.961	-1.390	.00928	.00000
1.961	1.220	.00928	.00000
1.961	3.770	.00928	.00000
1.961	6.300	.00928	.00000
1.961	8.900	.00928	.00000
1.961	11.490	.00928	.00000
	GRADIENT	.00000	.00000

RUN NO. 81/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
4.959	-10.960	.00265	.00000
4.959	-8.950	.00265	.00000
4.959	-6.870	.00265	.00000
4.959	-4.770	.00265	.00000
4.959	-2.670	.00265	.00000
4.959	-.580	.00265	.00000
4.959	1.520	.00265	.00000
4.959	3.630	.00265	.00000
4.959	5.710	.00265	.00000
4.959	7.780	.00265	.00000
4.959	9.800	.00265	.00000
	GRADIENT	-.00000	.00000

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IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIP1SIP201) ORB STING

(AIC112) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000    RUDDER = -15.000  
 ELEVTR = .000

RUN NO. 217/ 1    RN/L = 4.98    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.598	-11.030	.01060	.00000
.598	-8.990	.01060	.00000
.598	-6.830	.01060	.00000
.598	-4.660	.01060	.00000
.598	-2.520	.01060	.00000
.598	-.380	.01060	.00000
.598	1.760	.01060	.00000
.598	3.820	.01060	.00000
.598	6.000	.01060	.00000
.598	8.170	.01060	.00000
.598	10.190	.01060	.00000
	GRADIENT	-.00000	.00000

RUN NO. 218/ 0    RN/L = 6.27    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.901	-11.830	.01325	.00000
.901	-9.620	.01325	.00000
.901	-7.310	.01325	.00000
.901	-5.000	.01325	.00000
.901	-2.720	.01325	.00000
.901	-.420	.01325	.00000
.901	1.850	.01325	.00000
.901	4.100	.01325	.00000
.901	6.380	.01325	.00000
.901	8.610	.01325	.00000
.901	10.820	.01325	.00000
	GRADIENT	-.00000	.00000

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MSFC-594(IA33) 740TS (TIP1S1P201)

ORB STING

(AIC112) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = 5.000    RUDDER = -15.000  
 ELEVTR = .000

RUN NO. 220/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.102	-12.290	.01670	.00000
1.102	-9.950	.01670	.00000
1.102	-7.540	.01670	.00000
1.102	-5.150	.01670	.00000
1.102	-2.790	.01670	.00000
1.102	-.440	.01670	.00000
1.102	1.900	.01670	.00000
1.102	4.220	.01670	.00000
1.102	6.570	.01670	.00000
1.102	8.890	.01670	.00000
1.102	11.250	.01670	.00000
	GRADIENT	.00000	.00000

RUN NO. 219/ 1    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.248	-12.500	.01458	.00000
1.248	-10.140	.01458	.00000
1.248	-7.660	.01458	.00000
1.248	-5.190	.01458	.00000
1.248	-2.810	.01458	.00000
1.248	-.430	.01458	.00000
1.248	1.950	.01458	.00000
1.248	4.300	.01458	.00000
1.248	6.690	.01458	.00000
1.248	9.170	.01458	.00000
1.248	11.520	.01458	.00000
	GRADIENT	.00000	.00000

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MSFC 594(IA33) 740TS (T1P1S1P201)

ORB STING

(A1C112) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000    RUDDER = -15.000  
 ELEVTR = .000

RUN NO. 184/ 0    RN/L = 7.07    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.961	-12.580	.00928	.00000
1.961	-10.140	.00928	.00000
1.961	-7.690	.00928	.00000
1.961	-5.250	.00928	.00000
1.961	-2.840	.00928	.00000
1.961	-.420	.00928	.00000
1.961	1.940	.00928	.00000
1.961	4.340	.00928	.00000
1.961	6.780	.00928	.00000
1.961	9.250	.00928	.00000
1.961	11.680	.00928	.00000
	GRADIENT	.00000	.00000

RUN NO. 181/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
4.959	-10.680	.00265	.00000
4.959	-8.670	.00265	.00000
4.959	-6.630	.00265	.00000
4.959	-4.550	.00265	.00000
4.959	-2.470	.00265	.00000
4.959	-.380	.00265	.00000
4.959	1.690	.00265	.00000
4.959	3.770	.00265	.00000
4.959	5.850	.00265	.00000
4.959	7.910	.00265	.00000
4.959	9.920	.00265	.00000
	GRADIENT	-.00000	.00000

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MSFC 594 (IA33) 740TS (T1P1S1P201)

ORB STING

(AIC113) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = -5.000    RUDDER = -15.000  
 ELEVTR = .000

RUN NO. 232/ 0    RN/L = 4.99    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.600	-11.060	.01060	.00000
.600	-8.980	.01060	.00000
.600	-6.870	.01060	.00000
.600	-4.720	.01060	.00000
.600	-2.580	.01060	.00000
.600	-.420	.01060	.00000
.600	1.710	.01060	.00000
.600	3.860	.01060	.00000
.600	5.970	.01060	.00000
.600	8.090	.01060	.00000
.600	10.160	.01060	.00000
	GRADIENT	-.00000	.00000

RUN NO. 231/ 0    RN/L = 6.27    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.900	-11.890	.01325	.00000
.900	-9.690	.01325	.00000
.900	-7.370	.01325	.00000
.900	-5.070	.01325	.00000
.900	-2.780	.01325	.00000
.900	-.480	.01325	.00000
.900	1.770	.01325	.00000
.900	4.050	.01325	.00000
.900	6.330	.01325	.00000
.900	8.580	.01325	.00000
.900	10.810	.01325	.00000
	GRADIENT	.00000	.00000

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IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIP151P201)

ORB STING

(AIC113) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = -5.000    RUDDER = -15.000  
 ELEVTR = .000

RUN NO. 229/ 0    RN/L = 6.62    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.097	-12.470	.01670	.00000
1.097	-10.090	.01670	.00000
1.097	-7.690	.01670	.00000
1.097	-5.280	.01670	.00000
1.097	-2.900	.01670	.00000
1.097	-.520	.01670	.00000
1.097	1.820	.01670	.00000
1.097	4.170	.01670	.00000
1.097	6.540	.01670	.00000
1.097	8.920	.01670	.00000
1.097	11.280	.01670	.00000
GRADIENT		-.00000	.00000

RUN NO. 230/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.251	-12.730	.01458	.00000
1.251	-10.310	.01458	.00000
1.251	-7.820	.01458	.00000
1.251	-5.350	.01458	.00000
1.251	-2.920	.01458	.00000
1.251	-.510	.01458	.00000
1.251	1.860	.01458	.00000
1.251	4.260	.01458	.00000
1.251	6.690	.01458	.00000
1.251	9.140	.01458	.00000
1.251	11.580	.01458	.00000
GRADIENT		.00000	.00000

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MSFC 594(1A33) 740TS (T1P1S1P201)

ORB STING

(A1C113) ( 11 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = -5.000    RUDDER = -15.000  
 ELEVTR = .000

RUN NO. 185/ 0    RN/L = 7.11    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.948	-12.940	.00928	.00000
1.948	-10.460	.00928	.00000
1.948	-8.020	.00928	.00000
1.948	-5.540	.00928	.00000
1.948	-3.070	.00928	.00000
1.948	-.550	.00928	.00000
1.948	1.930	.00928	.00000
1.948	4.420	.00928	.00000
1.948	6.940	.00928	.00000
1.948	9.450	.00928	.00000
1.948	11.910	.00928	.00000
	GRADIENT	.00000	.00000

RUN NO. 180/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
4.959	-10.760	.00265	.00000
4.959	-8.740	.00265	.00000
4.959	-6.690	.00265	.00000
4.959	-4.590	.00265	.00000
4.959	-2.500	.00265	.00000
4.959	-.400	.00265	.00000
4.959	1.680	.00265	.00000
4.959	3.800	.00265	.00000
4.959	5.870	.00265	.00000
4.959	7.970	.00265	.00000
4.959	9.960	.00265	.00000
	GRADIENT	-.00000	.00000

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MSFC 594(1A33) 740TS (T1P1S1P201)

ORB STING

(AIC114) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = -20.000  
 ELEVTR = .000

RUN NO. 56/ 0    RN/L = 4.98    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.599	-11.730	.01060	.00000
.599	-9.600	.01060	.00000
.599	-7.420	.01060	.00000
.599	-5.220	.01060	.00000
.599	-3.020	.01060	.00000
.599	-.820	.01060	.00000
.599	1.400	.01060	.00000
.599	3.630	.01060	.00000
.599	5.830	.01060	.00000
.599	8.020	.01060	.00000
.599	10.130	.01060	.00000
	GRADIENT	-.00000	.00000

RUN NO. 55/ 0    RN/L = 6.26    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.895	-13.230	.01325	.00000
.895	-10.840	.01325	.00000
.895	-8.380	.01325	.00000
.895	-5.900	.01325	.00000
.895	-3.490	.01325	.00000
.895	-1.120	.01325	.00000
.895	1.290	.01325	.00000
.895	3.680	.01325	.00000
.895	6.110	.01325	.00000
.895	8.490	.01325	.00000
.895	10.760	.01325	.00000
	GRADIENT	.00000	.00000

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MSFC 594 (IA33) 740TS (TIPISIP201)

ORB STING

(A1C114) ( 11 SEP 75 )

PARAMETRIC DATA

BETA = .000 RUDDER = -20.000  
ELEVTR = .000

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
SCALE = .0040

RUN NO. 53/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.104	-14.530	.01670	.00000
1.104	-11.790	.01670	.00000
1.104	-9.170	.01670	.00000
1.104	-6.520	.01670	.00000
1.104	-3.930	.01670	.00000
1.104	-1.350	.01670	.00000
1.104	1.190	.01670	.00000
1.104	3.760	.01670	.00000
1.104	6.300	.01670	.00000
1.104	8.790	.01670	.00000
1.104	11.150	.01670	.00000
GRADIENT		-.00000	.00000

RUN NO. 54/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.249	-15.060	.01458	.00000
1.249	-12.210	.01458	.00000
1.249	-9.400	.01458	.00000
1.249	-6.640	.01458	.00000
1.249	-4.000	.01458	.00000
1.249	-1.350	.01458	.00000
1.249	1.240	.01458	.00000
1.249	3.790	.01458	.00000
1.249	6.320	.01458	.00000
1.249	8.810	.01458	.00000
1.249	11.280	.01458	.00000
GRADIENT		.00000	.00000

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MSFC 594(1A33) 740TS (T1P1S1P201)

ORB STING

(AIC114) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = -20.000  
 ELEVTR = .000

RUN NO. 79/ 0    RN/L = 7.07    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.958	-14.980	.00928	.00000
1.958	-12.160	.00928	.00000
1.958	-9.380	.00928	.00000
1.958	-6.580	.00928	.00000
1.958	-3.960	.00928	.00000
1.958	-1.390	.00928	.00000
1.958	1.170	.00928	.00000
1.958	3.760	.00928	.00000
1.958	6.310	.00928	.00000
1.958	8.910	.00928	.00000
1.958	11.490	.00928	.00000
	GRADIENT	.00000	.00000

RUN NO. 80/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
4.959	-10.960	.00265	.00000
4.959	-8.940	.00265	.00000
4.959	-6.870	.00265	.00000
4.959	-4.770	.00265	.00000
4.959	-2.670	.00265	.00000
4.959	-.580	.00265	.00000
4.959	1.520	.00265	.00000
4.959	3.630	.00265	.00000
4.959	5.700	.00265	.00000
4.959	7.780	.00265	.00000
4.959	9.800	.00265	.00000
	GRADIENT	-.00000	.00000

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MSFC 594 (IA33) 740TS (T1P1S1P201)

ORB STING

(AIC115) ( 11 SEP 75 )

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = -20.000  
ELEVTR = .000

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
SCALE = .0040

RUN NO. 224/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.599	-11.020	.01060	.00000
.599	-8.960	.01060	.00000
.599	-6.820	.01060	.00000
.599	-4.670	.01060	.00000
.599	-2.530	.01060	.00000
.599	-.370	.01060	.00000
.599	1.750	.01060	.00000
.599	3.820	.01060	.00000
.599	6.020	.01060	.00000
.599	8.140	.01060	.00000
.599	10.200	.01060	.00000
	GRADIENT	-.00000	.00000

RUN NO. 223/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.902	-11.870	.01325	.00000
.902	-9.630	.01325	.00000
.902	-7.320	.01325	.00000
.902	-5.010	.01325	.00000
.902	-2.720	.01325	.00000
.902	-.420	.01325	.00000
.902	1.840	.01325	.00000
.902	4.100	.01325	.00000
.902	6.380	.01325	.00000
.902	8.630	.01325	.00000
.902	10.860	.01325	.00000
	GRADIENT	.00000	.00000

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MSFC 594(1A33) 740TS (TIP1SIP201) ORB STING

(A1C115) ( 11 SEP 75 )

REFERENCED DATA

PARAMETRIC DATA

SREF = 2690.0000 SC  
 LREF = 1290.0000 IN.  
 BREF = 1290.0000 IN.  
 SCALE = .0040

XMRP = 975.0000 IN. XT  
 YMRP = .0000 IN. YT  
 ZMRP = 400.0000 IN. ZT

ALPHA = 5.000  
 ELEVTR = .000  
 RUDDER = -20.000

RUN NO. 221/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.101	-12.300	.01670	.00000
1.101	-9.950	.01670	.00000
1.101	-7.540	.01670	.00000
1.101	-5.150	.01670	.00000
1.101	-2.790	.01670	.00000
1.101	-1.430	.01670	.00000
1.101	1.900	.01670	.00000
1.101	4.230	.01670	.00000
1.101	6.560	.01670	.00000
1.101	8.930	.01670	.00000
1.101	11.260	.01670	.00000
GRADIENT		.00000	.00000

RUN NO. 222/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.247	-12.480	.01458	.00000
1.247	-10.090	.01458	.00000
1.247	-7.640	.01458	.00000
1.247	-5.190	.01458	.00000
1.247	-2.800	.01458	.00000
1.247	-1.410	.01458	.00000
1.247	1.940	.01458	.00000
1.247	4.310	.01458	.00000
1.247	6.700	.01458	.00000
1.247	9.120	.01458	.00000
1.247	11.510	.01458	.00000
GRADIENT		-.00000	.00000

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MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(A1C115) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = 5.000 RUDDER = -20.000  
 ELEVTR = .000

RUN NO. 183/ 0 RN/L = 7.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.952	-12.640	.00928	.00000
1.952	-10.190	.00928	.00000
1.952	-7.720	.00928	.00000
1.952	-5.290	.00928	.00000
1.952	-2.850	.00928	.00000
1.952	-.420	.00928	.00000
1.952	1.940	.00928	.00000
1.952	4.350	.00928	.00000
1.952	6.780	.00928	.00000
1.952	9.280	.00928	.00000
1.952	11.700	.00928	.00000
	GRADIENT	.00000	.00000

RUN NO. 182/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
4.959	-10.680	.00265	.00000
4.959	-8.670	.00265	.00000
4.959	-6.630	.00265	.00000
4.959	-4.550	.00265	.00000
4.959	-2.470	.00265	.00000
4.959	-.380	.00265	.00000
4.959	1.690	.00265	.00000
4.959	3.790	.00265	.00000
4.959	5.870	.00265	.00000
4.959	7.910	.00265	.00000
4.959	9.920	.00265	.00000
	GRADIENT	-.00000	.00000

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MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC116) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.000    RUDDER = -20.000  
 ELEVTR = .000

RUN NO. 225/ 0    RN/L = 4.99    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.599	-11.060	.01060	.00000
.599	-8.980	.01060	.00000
.599	-6.870	.01060	.00000
.599	-4.710	.01060	.00000
.599	-2.570	.01060	.00000
.599	- .410	.01060	.00000
.599	1.700	.01060	.00000
.599	3.840	.01060	.00000
.599	5.960	.01060	.00000
.599	8.090	.01060	.00000
.599	10.160	.01060	.00000
	GRADIENT	.00000	.00000

RUN NO. 226/ 0    RN/L = 6.27    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.900	-11.890	.01325	.00000
.900	-9.680	.01325	.00000
.900	-7.360	.01325	.00000
.900	-5.060	.01325	.00000
.900	-2.770	.01325	.00000
.900	- .490	.01325	.00000
.900	1.770	.01325	.00000
.900	4.050	.01325	.00000
.900	6.320	.01325	.00000
.900	8.590	.01325	.00000
.900	10.820	.01325	.00000
	GRADIENT	.00000	.00000



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MSFC 594(1A33) 740TS (TIP1S1P201)

ORB STING

(AIC116) ( 11 SEP 75 )

PARAMETRIC DATA

ALPHA = -5.000 RUDDER = -20.000  
ELEVTR = .000

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
SCALE = .0040

RUN NO. 228/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.099	-12.470	.01670	.00000
1.099	-10.110	.01670	.00000
1.099	-7.680	.01670	.00000
1.099	-5.280	.01670	.00000
1.099	-2.900	.01670	.00000
1.099	-.520	.01670	.00000
1.099	1.820	.01670	.00000
1.099	4.170	.01670	.00000
1.099	6.540	.01670	.00000
1.099	8.930	.01670	.00000
1.099	11.280	.01670	.00000
	GRADIENT	-.00000	.00000

RUN NO. 227/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.249	-12.730	.01458	.00000
1.249	-10.300	.01458	.00000
1.249	-7.820	.01458	.00000
1.249	-5.350	.01458	.00000
1.249	-2.920	.01458	.00000
1.249	-.510	.01458	.00000
1.249	1.870	.01458	.00000
1.249	4.260	.01458	.00000
1.249	6.690	.01458	.00000
1.249	9.150	.01458	.00000
1.249	11.580	.01458	.00000
	GRADIENT	.00000	.00000

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MSFC 594(IA33) 740TS (T1P1S1P201)

ORB STING

(A1C116) ( 11 SEP 75 )

PARAMETRIC DATA

ALPHA = -5.000 RUDDER = -20.000  
ELEVTR = .000

REFERENCE DATA

SREF = 2690.0001 SQ. FT XMRP = 976.0000 IN. XT  
LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
SCALE = .0040

RUN NO. 186/ 0 RN/L = 7.08 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.956	-13.020	.00928	.00000
1.956	-10.500	.00928	.00000
1.956	-8.000	.00928	.00000
1.956	-5.490	.00928	.00000
1.956	-3.040	.00928	.00000
1.956	-.550	.00928	.00000
1.956	1.920	.00928	.00000
1.956	4.410	.00928	.00000
1.956	6.920	.00928	.00000
1.956	9.390	.00928	.00000
1.956	11.860	.00928	.00000
GRADIENT		-.00000	.00000

RUN NO. 179/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
4.959	-10.760	.00265	.00000
4.959	-8.760	.00265	.00000
4.959	-6.690	.00265	.00000
4.959	-4.590	.00265	.00000
4.959	-2.500	.00265	.00000
4.959	-.390	.00265	.00000
4.959	1.690	.00265	.00000
4.959	3.780	.00265	.00000
4.959	5.890	.00265	.00000
4.959	7.950	.00265	.00000
4.959	9.950	.00265	.00000
GRADIENT		.00000	.00000

MSFC 594(1A33) 740TS (TIPIS1P201) FORKED STING

(AIC117) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

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

MACH	ALPHA	CNBF	CABF
.601	-11.120	.01060	.00000
.601	-9.060	.01060	.00000
.601	-6.970	.01060	.00000
.601	-4.850	.01060	.00000
.601	-2.730	.01060	.00000
.601	-.580	.01060	.00000
.601	1.560	.01060	.00000
.601	3.710	.01060	.00000
.601	5.820	.01060	.00000
.601	7.940	.01060	.00000
.601	9.950	.01060	.00000
	GRADIENT	.00000	.00000

RUN NO. 40/ 0    RN/L = 5.94    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.798	-11.520	.01193	.00000
.798	-9.390	.01193	.00000
.798	-7.220	.01193	.00000
.798	-5.030	.01193	.00000
.798	-2.840	.01193	.00000
.798	-.640	.01193	.00000
.798	1.570	.01193	.00000
.798	3.820	.01193	.00000
.798	5.990	.01193	.00000
.798	8.170	.01193	.00000
.798	10.270	.01193	.00000
	GRADIENT	.00000	.00000

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MSFC 594(1A33) 740TS (T1P1S1P201) FORKED STING

(A1C117) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 41/ 0    RN/L = 6.27    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.899	-11.720	.01325	.00000
.899	-9.560	.01325	.00000
.899	-7.350	.01325	.00000
.899	-5.080	.01325	.00000
.899	-2.870	.01325	.00000
.899	-.670	.01325	.00000
.899	1.580	.01325	.00000
.899	3.840	.01325	.00000
.899	6.080	.01325	.00000
.899	8.300	.01325	.00000
.899	10.420	.01325	.00000
	GRADIENT	.00000	.00000

RUN NO. 43/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.101	-12.110	.01670	.00000
1.101	-9.830	.01670	.00000
1.101	-7.530	.01670	.00000
1.101	-5.190	.01670	.00000
1.101	-2.900	.01670	.00000
1.101	-.580	.01670	.00000
1.101	1.710	.01670	.00000
1.101	3.990	.01670	.00000
1.101	6.280	.01670	.00000
1.101	8.530	.01670	.00000
1.101	10.650	.01670	.00000
	GRADIENT	.00000	.00000

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MSFC 594(IA33) 740TS (T1P1S1P201) FORKED STING

(AIC117) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 42/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.246	-12.330	.01458	.00000
1.246	-9.980	.01458	.00000
1.246	-7.590	.01458	.00000
1.246	-5.220	.01458	.00000
1.246	-2.860	.01458	.00000
1.246	-.520	.01458	.00000
1.246	1.800	.01458	.00000
1.246	4.110	.01458	.00000
1.246	6.400	.01458	.00000
1.246	8.640	.01458	.00000
1.246	10.870	.01458	.00000
	GRADIENT	-.00000	.00000

RUN NO. 48/ 0    RN/L = 6.52    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.458	-12.360	.01219	.00000
1.458	-10.040	.01219	.00000
1.458	-7.660	.01219	.00000
1.458	-5.280	.01219	.00000
1.458	-2.920	.01219	.00000
1.458	-.570	.01219	.00000
1.458	1.760	.01219	.00000
1.458	4.090	.01219	.00000
1.458	6.380	.01219	.00000
1.458	8.640	.01219	.00000
1.458	10.900	.01219	.00000
	GRADIENT	.00000	.00000

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(AIC117) ( 11 SEP 75 )

MSFC 594(IA33) 740TS (TIP1S1P201) FORKED STING

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 30/ 0    RN/L = 7.07    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.960	-12.290	.00928	.00000
1.960	-10.020	.00928	.00000
1.960	-7.660	.00928	.00000
1.960	-5.310	.00928	.00000
1.960	-2.960	.00928	.00000
1.960	-.610	.00928	.00000
1.960	1.730	.00928	.00000
1.960	4.050	.00928	.00000
1.960	6.350	.00928	.00000
1.960	8.740	.00928	.00000
1.960	11.040	.00928	.00000
	GRADIENT	-.00000	.00000

RUN NO. 26/ 0    RN/L = 4.56    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
2.990	-11.110	.00530	.00000
2.990	-9.050	.00530	.00000
2.990	-6.950	.00530	.00000
2.990	-4.800	.00530	.00000
2.990	-2.670	.00530	.00000
2.990	-.530	.00530	.00000
2.990	1.600	.00530	.00000
2.990	3.740	.00530	.00000
2.990	5.840	.00530	.00000
2.990	7.950	.00530	.00000
2.990	10.010	.00530	.00000
	GRADIENT	-.00000	.00000

MSFC 594(1A33) 740TS (TIP1S1P201) FORKED STING

(A1C117) ( 11 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 25/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
4.959	-10.730	.00265	.00000
4.959	-8.750	.00265	.00000
4.959	-6.700	.00265	.00000
4.959	-4.660	.00265	.00000
4.959	-2.580	.00265	.00000
4.959	-.520	.00265	.00000
4.959	1.560	.00265	.00000
4.959	3.630	.00265	.00000
4.959	5.670	.00265	.00000
4.959	7.710	.00265	.00000
4.959	9.700	.00265	.00000
	GRADIENT	-.00000	.00000

MSFC 594(1A33) 740TS (TIP1S1P201) FORKED STING

(A1C118) ( 11 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 47/ 0 RN/L = 4.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.596	-10.790	.01060	.00000
.596	-8.780	.01060	.00000
.596	-6.720	.01060	.00000
.596	-4.640	.01060	.00000
.596	-2.560	.01060	.00000
.596	-.490	.01060	.00000
.596	1.580	.01060	.00000
.596	3.670	.01060	.00000
.596	5.710	.01060	.00000
.596	7.770	.01060	.00000
.596	9.770	.01060	.00000
	GRADIENT	-.00000	.00000

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MSFC 594(1A33) 740TS (TIP151P201) FORKED STING

(A1C118) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 46/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.899	-11.170	.01325	.00000
.899	-9.070	.01325	.00000
.899	-6.960	.01325	.00000
.899	-4.790	.01325	.00000
.899	-2.650	.01325	.00000
.899	-.520	.01325	.00000
.899	1.610	.01325	.00000
.899	3.760	.01325	.00000
.899	5.880	.01325	.00000
.899	8.010	.01325	.00000
.899	10.040	.01325	.00000
	GRADIENT	-.00000	.00000

RUN NO. 44/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.096	-11.420	.01670	.00000
1.096	-9.260	.01670	.00000
1.096	-7.070	.01670	.00000
1.096	-4.870	.01670	.00000
1.096	-2.690	.01670	.00000
1.096	-.530	.01670	.00000
1.096	1.630	.01670	.00000
1.096	3.800	.01670	.00000
1.096	5.950	.01670	.00000
1.096	8.130	.01670	.00000
1.096	10.250	.01670	.00000
	GRADIENT	-.00000	.00000

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MSFC 594(IA33) 740TS (TIP1SIP201) FORKED STING

(AIC112) ( 11 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 45/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.253	-11.500	.01458	.00000
1.253	-9.320	.01458	.00000
1.253	-7.130	.01458	.00000
1.253	-4.910	.01458	.00000
1.253	-2.710	.01458	.00000
1.253	-.520	.01458	.00000
1.253	1.670	.01458	.00000
1.253	3.880	.01458	.00000
1.253	6.060	.01458	.00000
1.253	8.260	.01458	.00000
1.253	10.430	.01458	.00000
	GRADIENT	.00000	.00000

RUN NO. 29/ 0 RN/L = 7.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.965	-11.540	.00928	.00000
1.965	-9.320	.00928	.00000
1.965	-7.140	.00928	.00000
1.965	-4.930	.00928	.00000
1.965	-2.730	.00928	.00000
1.965	-.510	.00928	.00000
1.965	1.700	.00928	.00000
1.965	3.920	.00928	.00000
1.965	6.120	.00928	.00000
1.965	8.330	.00928	.00000
1.965	10.500	.00928	.00000
	GRADIENT	.00000	.00000

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MSFC 594(1A33) 740TS (TIPIS1P201) FORKED STING

(A1C118) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 28/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNSF	CABF
4.959	-10.630	.00265	.00000
4.959	-8.650	.00265	.00000
4.959	-6.650	.00265	.00000
4.959	-4.600	.00265	.00000
4.959	-2.550	.00265	.00000
4.959	-.490	.00265	.00000
4.959	1.570	.00265	.00000
4.959	3.620	.00265	.00000
4.959	5.670	.00265	.00000
4.959	7.700	.00265	.00000
4.959	9.670	.00265	.00000
	GRADIENT	-.00000	.00000

MSFC 594(1A33) 740TS (TIPIS1P201) FORKED STING

(A1C119) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 244/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNSF	CABF
.598	-8.790	.01060	.00000
.598	-6.710	.01060	.00000
.598	-4.640	.01060	.00000
.598	-2.550	.01060	.00000
.598	-.470	.01060	.00000
.598	1.610	.01060	.00000
.598	3.720	.01060	.00000
.598	5.780	.01060	.00000
.598	7.890	.01060	.00000
	GRADIENT	.00000	.00000

MSFC 594(1A33) 740TS (TIP15IP201) FORKED STING

(A1C119) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 243/ 0    RN/L = 5.55    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNSF	CABF
.801	-9.010	.01193	.00000
.801	-6.890	.01193	.00000
.801	-4.780	.01193	.00000
.801	-2.640	.01193	.00000
.801	-.520	.01193	.00000
.801	1.600	.01193	.00000
.801	3.770	.01193	.00000
.801	5.890	.01193	.00000
.801	8.050	.01193	.00000
	GRADIENT	-.00000	.00000

RUN NO. 242/ 1    RN/L = 6.27    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNSF	CABF
.900	-9.130	.01325	.00000
.900	-6.970	.01325	.00000
.900	-4.810	.01325	.00000
.900	-2.690	.01325	.00000
.900	-.550	.01325	.00000
.900	1.590	.01325	.00000
.900	3.770	.01325	.00000
.900	5.940	.01325	.00000
.900	8.140	.01325	.00000
	GRADIENT	.00000	.00000

RUN NO. 245/ 1    RN/L = 6.62    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNSF	CABF
1.098	-9.240	.01670	.00000
1.098	-7.030	.01670	.00000
1.098	-4.810	.01670	.00000
1.098	-2.620	.01670	.00000
1.098	-.440	.01670	.00000
1.098	1.720	.01670	.00000
1.098	3.900	.01670	.00000
1.098	6.080	.01670	.00000
1.098	8.280	.01670	.00000
	GRADIENT	-.00000	.00000

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MSFC 594(IA33) 740TS (TIPIS1P201) FORKED STING

(AIC119) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 241/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.248	-9.320	.01458	.00000
1.248	-7.060	.01458	.00000
1.248	-4.840	.01458	.00000
1.248	-2.620	.01458	.00000
1.248	-.400	.01458	.00000
1.248	1.770	.01458	.00000
1.248	3.980	.01458	.00000
1.248	6.160	.01458	.00000
1.248	8.340	.01458	.00000
	GRADIENT	.00000	.00000

RUN NO. 262/ 0    RN/L = 6.53    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.456	-9.390	.01219	.00000
1.456	-7.140	.01219	.00000
1.456	-4.900	.01219	.00000
1.456	-2.680	.01219	.00000
1.456	-.450	.01219	.00000
1.456	1.750	.01219	.00000
1.456	3.970	.01219	.00000
1.456	6.160	.01219	.00000
1.456	8.380	.01219	.00000
	GRADIENT	.00000	.00000

RUN NO. 260/ 0    RN/L = 7.07    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.958	-9.400	.00928	.00000
1.958	-7.160	.00928	.00000
1.958	-4.920	.00928	.00000
1.958	-2.700	.00928	.00000
1.958	-.480	.00928	.00000
1.958	1.720	.00928	.00000
1.958	3.950	.00928	.00000
1.958	6.120	.00928	.00000
1.958	8.390	.00928	.00000
	GRADIENT	.00000	.00000

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MSFC 594(1A33) 740TS (T1P1S1P201) FORKED STING

(A1C119) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000    RUDDER = .000  
 ELEVTR = .000

PARAMETRIC DATA

RUN NO. 264/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
4.959	-8.600	.00265	.00000
4.959	-6.560	.00265	.00000
4.959	-4.510	.00265	.00000
4.959	-2.470	.00265	.00000
4.959	-1.430	.00265	.00000
4.959	1.610	.00265	.00000
4.959	3.670	.00265	.00000
4.959	5.690	.00265	.00000
4.959	7.750	.00265	.00000
GRADIENT		.00000	.00000

MSFC 594(1A33) 740TS (T1P1S1P201) FORKED STING

(A1C120) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

PARAMETRIC DATA

RUN NO. 257/ 1    RN/L = 4.97    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.595	-8.400	.01060	.00000
.596	-6.380	.01060	.00000
.596	-4.360	.01060	.00000
.596	-2.330	.01060	.00000
.596	-1.320	.01060	.00000
.596	1.700	.01060	.00000
.596	3.730	.01060	.00000
.596	5.750	.01060	.00000
.596	7.780	.01060	.00000
GRADIENT		-.00000	.00000

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MSFC 594(1A33) 740TS (T1P1S1P201) FORKED STING

(A1C120) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 256/ 1    RN/L = 6.26    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.898	-8.480	.01325	.00000
.898	-6.430	.01325	.00000
.898	-4.390	.01325	.00000
.898	-2.350	.01325	.00000
.898	-.320	.01325	.00000
.898	1.710	.01325	.00000
.898	3.790	.01325	.00000
.898	5.810	.01325	.00000
.898	7.840	.01325	.00000
	GRADIENT	.00000	.00000

RUN NO. 254/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.104	-8.550	.01670	.00000
1.104	-6.480	.01670	.00000
1.104	-4.410	.01670	.00000
1.104	-2.360	.01670	.00000
1.104	-.320	.01670	.00000
1.104	1.710	.01670	.00000
1.104	3.780	.01670	.00000
1.104	5.830	.01670	.00000
1.104	7.890	.01670	.00000
	GRADIENT	-.00000	.00000

RUN NO. 255/ 0    RN/L = 6.67    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.248	-8.570	.01458	.00000
1.248	-6.500	.01458	.00000
1.248	-4.430	.01458	.00000
1.248	-2.370	.01458	.00000
1.248	-.310	.01458	.00000
1.248	1.730	.01458	.00000
1.248	3.830	.01458	.00000
1.248	5.870	.01458	.00000
1.248	7.960	.01458	.00000
	GRADIENT	.00000	.00000

MSFC 594(1A33) 740TS (11P1S1P201) FORKED STING

(A1C120) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 259/ 0    RN/L = 7.07    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.958	-8.560	.00928	.00000
1.958	-6.490	.00928	.00000
1.958	-4.420	.00928	.00000
1.958	-2.370	.00928	.00000
1.958	-.320	.00928	.00000
1.958	1.740	.00928	.00000
1.958	3.810	.00928	.00000
1.958	5.870	.00928	.00000
1.958	7.950	.00928	.00000
	GRADIENT	.00000	.00000

RUN NO. 265/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
4.959	-8.390	.00265	.00000
4.959	-6.370	.00265	.00000
4.959	-4.350	.00265	.00000
4.959	-2.330	.00265	.00000
4.959	-.320	.00265	.00000
4.959	1.690	.00265	.00000
4.959	3.720	.00265	.00000
4.959	5.720	.00265	.00000
4.959	7.760	.00265	.00000
	GRADIENT	.00000	.00000

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MSFC 594(IA33) 740TS (T2P1S3P201F2) ORB STING

(AIC121) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETR'C DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 96/ 0    RN/L = 4.99    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.600	-11.890	.01060	.00950
.600	-9.750	.01060	.00880
.600	-7.570	.01060	.00860
.600	-5.360	.01060	.00820
.600	-3.160	.01060	.00810
.600	- .930	.01060	.00780
.600	1.240	.01060	.00790
.600	3.480	.01060	.00770
.600	5.670	.01060	.00790
.600	7.890	.01060	.00780
.600	9.990	.01060	.00780
GRADIENT		.00000	-.00005

RUN NO. 95/ 0    RN/L = 5.94    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.798	-12.940	.01193	.00980
.798	-10.570	.01193	.00970
.798	-8.240	.01193	.00910
.798	-5.860	.01193	.00850
.798	-3.530	.01193	.00830
.798	-1.180	.01193	.00800
.798	1.150	.01193	.00770
.798	3.500	.01193	.00760
.798	5.830	.01193	.00770
.798	8.170	.01193	.00730
.798	10.390	.01193	.00750
GRADIENT		-.00000	-.00010



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NSFC 594 (IA33) 740TS (T2P1S3P201F2) ORB STING

(A1C121) ( 11 SEP 75 )

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

RUN NO. 94/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.905	-13.600	.01325	.00940
.905	-11.100	.01325	.00960
.905	-8.630	.01325	.00930
.905	-6.140	.01325	.00910
.905	-3.690	.01325	.00830
.905	-1.250	.01325	.00800
.905	1.150	.01325	.00790
.905	3.570	.01325	.00790
.905	5.960	.01325	.00800
.905	8.390	.01325	.00810
.905	10.660	.01325	.00830
GRADIENT		.00000	-.00005

RUN NO. 93/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.099	-14.910	.01670	.01140
1.099	-12.080	.01670	.01130
1.099	-9.400	.01670	.01140
1.099	-6.760	.01670	.01130
1.099	-4.150	.01670	.01090
1.099	-1.560	.01670	.01060
1.099	.930	.01670	.01040
1.099	3.480	.01670	.01030
1.099	5.970	.01670	.00990
1.099	8.490	.01670	.00990
1.099	10.900	.01670	.00970
GRADIENT		.00000	-.00008

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MSFC 594(1A33) 740TS (T2P153P201F2) ORB STING

(A1C121) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMPP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 97/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.254	-15.750	.01458	.01190
1.254	-12.750	.01458	.01120
1.254	-9.800	.01458	.01070
1.254	-6.980	.01458	.01030
1.254	-4.270	.01458	.01010
1.254	-1.590	.01458	.00990
1.254	.990	.01458	.01000
1.254	3.580	.01458	.00990
1.254	6.120	.01458	.01020
1.254	8.700	.01458	.01030
1.254	11.230	.01458	.01000
GRADIENT		.00000	-.00002

RUN NO. 101/ 0    RN/L = 6.52    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.461	-15.570	.01219	.00990
1.461	-12.710	.01219	.00960
1.461	-9.820	.01219	.00960
1.461	-6.980	.01219	.00900
1.461	-4.270	.01219	.00870
1.461	-1.600	.01219	.00860
1.461	.980	.01219	.00870
1.461	3.570	.01219	.00860
1.461	6.130	.01219	.00870
1.461	8.720	.01219	.00890
1.461	11.300	.01219	.00860
GRADIENT		.00900	-.00001

MSFC 594(1A33) 740TS (T2P1S3P201F2) ORB STING

(A1C121) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000    RUDDER = .000  
 ELEVTR = .000

## PARAMETRIC DATA

RUN NO. 87/ 0    RN/L = 7.06    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.960	-15.540	.00928	.00720
1.960	-12.660	.00928	.00690
1.960	-9.840	.00928	.00700
1.960	-6.980	.00928	.00690
1.960	-4.250	.00928	.00680
1.960	-1.590	.00928	.00670
1.960	.960	.00928	.00660
1.960	3.530	.00928	.00630
1.960	6.100	.00928	.00630
1.960	8.820	.00928	.00620
1.960	11.470	.00928	.00590
	GRADIENT	.00000	-.00006

RUN NO. 98/ 0    RN/L = 4.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
2.990	-12.070	.00530	.00370
2.990	-9.900	.00530	.00370
2.990	-7.680	.00530	.00360
2.990	-5.430	.00530	.00360
2.990	-3.170	.00530	.00350
2.990	-.940	.00530	.00350
2.990	1.260	.00530	.00350
2.990	3.500	.00530	.00350
2.990	5.710	.00530	.00340
2.990	7.950	.00530	.00330
2.990	10.100	.00530	.00320
	GRADIENT	-.00000	.00000

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MSFC 594(IA33) 740TS (T2P1S3P201F2) ORB STING

(AIC121) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000    RUDDER = .000  
 ELEVTR = .000

PARAMETRIC DATA

RUN NO. 99/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
4.959	-11.100	.00265	.00080
4.959	-9.080	.00265	.00080
4.959	-7.010	.00265	.00090
4.959	-4.910	.00265	.00090
4.959	-2.800	.00265	.00090
4.959	-.690	.00265	.00100
4.959	1.400	.00265	.00100
4.959	3.520	.00265	.00100
4.959	5.600	.00265	.00100
4.959	7.710	.00265	.00090
4.959	9.720	.00265	.00090
	GRADIENT	-.00000	.00001

MSFC 594(IA33) 740TS (T2P1S3P201F2) ORB STING

(AIC122) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

PARAMETRIC DATA

RUN NO. 91/ 0    RN/L = 4.95    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.595	-11.350	.01060	.00900
.595	-9.280	.01060	.00840
.595	-7.130	.01060	.00830
.595	-4.940	.01060	.00820
.595	-2.750	.01060	.00820
.595	-.540	.01060	.00770
.595	1.660	.01060	.00750
.595	3.840	.01060	.00770
.595	6.010	.01060	.00790
.595	8.190	.01060	.00830
.595	10.280	.01060	.00860
	GRADIENT	-.00000	-.00008

MSFC 594(1A33) 740TS (T2PIS3P201F2) ORB STING

(A1C122) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 90/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.902	-12.430	.01325	.01040
.902	-10.150	.01325	.01010
.902	-7.780	.01325	.00970
.902	-5.400	.01325	.00930
.902	-3.020	.01325	.00860
.902	-.640	.01325	.00830
.902	1.720	.01325	.00840
.902	4.110	.01325	.00860
.902	6.470	.01325	.00950
.902	8.830	.01325	.00990
.902	11.130	.01325	.01030
	GRADIENT	.00000	.00000

RUN NO. 92/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.099	-13.080	.01670	.01180
1.099	-10.620	.01670	.01160
1.099	-8.140	.01670	.01140
1.099	-5.630	.01670	.01090
1.099	-3.150	.01670	.01060
1.099	-.660	.01670	.01070
1.099	1.800	.01670	.01120
1.099	4.290	.01670	.01120
1.099	6.780	.01670	.01150
1.099	9.290	.01670	.01190
1.099	11.720	.01670	.01230
	GRADIENT	.00000	.00009

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MSFC 594(IA33) 740TS (T2P1S3P201F2) ORB STING

(A1C122) ( 11 SEP 75 )  
PARAMETRIC DATA

REFERENCE DATA

SREF =	2690.0000 SQ. FT	XMRP =	976.0000 IN. XT
LREF =	1290.0000 IN.	YMRP =	.0000 IN. YT
BREF =	1290.0000 IN.	ZMRP =	400.0000 IN. ZT
SCALE =	.0040		

ALPHA =	.000	RUDDER =	.000
ELEVTR =	.000		

RUN NO. 89/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.256	-13.380	.01458	.01250
1.256	-10.850	.01458	.01140
1.256	-8.290	.01458	.01070
1.256	-5.720	.01458	.01040
1.256	-3.190	.01458	.00990
1.256	-.650	.01458	.00990
1.256	1.860	.01458	.01040
1.256	4.410	.01458	.01080
1.256	6.950	.01458	.01110
1.256	9.560	.01458	.01190
1.256	12.080	.01458	.01210
	GRADIENT	.00000	.00013

RUN NO. 88/ 0 RN/L = 7.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.967	-13.200	.00928	.00760
1.967	-11.110	.00928	.00740
1.967	-8.460	.00928	.00710
1.967	-5.850	.00928	.00700
1.967	-3.260	.00928	.00690
1.967	-.650	.00928	.00660
1.967	1.930	.00928	.00670
1.967	4.560	.00928	.00680
1.967	7.180	.00928	.00690
1.967	9.920	.00928	.00710
1.967	12.540	.00928	.00720
	GRADIENT	.00000	-.00001

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MSFC 594(IA33) 740TS (T2P1S3P201F2) ORB STING

(A1C122) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 100/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
4.959	-10.980	.00265	.00090
4.959	-8.950	.00265	.00090
4.959	-6.880	.00265	.00100
4.959	-4.770	.00265	.00100
4.959	-2.650	.00265	.00100
4.959	-.520	.00265	.00100
4.959	1.590	.00265	.00100
4.959	3.730	.00265	.00100
4.959	5.830	.00265	.00100
4.959	7.950	.00265	.00100
4.959	9.960	.00265	.00100
	GRADIENT	-.00000	.00000

MSFC 594(IA33) 740TS (T1P101)

ORB STING

(A1C123) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 151/ 0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.600	-11.070	.01088	.00000
.600	-9.010	.01029	.00000
.600	-6.870	.01002	.00000
.600	-4.720	.00953	.00000
.600	-2.570	.00922	.00000
.600	-.400	.00611	.00000
.600	1.750	.00918	.00000
.600	3.910	.00950	.00000
.600	6.030	.00953	.00000
.600	8.140	.00950	.00000
.600	10.210	.00981	.00000
	GRADIENT	-.00001	.00000

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MSFC 594(1A33) 740TS (TIP101)

ORB STING

(A1C123) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 152/ 0    RN/L = 6.29    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.904	-11.840	.01673	.00000
.904	-9.640	.01496	.00000
.904	-7.360	.01437	.00000
.904	-5.030	.01319	.00000
.904	-2.740	.01173	.00000
.904	-.420	.01180	.00000
.904	1.840	.01194	.00000
.904	4.130	.01249	.00000
.904	6.390	.01354	.00000
.904	8.670	.01555	.00000
.904	10.900	.01645	.00000
	GRADIENT	.00011	.00000

RUN NO. 154/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.098	-12.480	.02093	.00000
1.098	-10.090	.01909	.00000
1.098	-7.660	.01836	.00000
1.098	-5.220	.01830	.00000
1.098	-2.820	.01708	.00000
1.098	-.430	.01559	.00000
1.098	1.910	.01677	.00000
1.098	4.290	.01788	.00000
1.098	6.630	.01819	.00000
1.098	9.020	.01902	.00000
1.098	11.400	.01993	.00000
	GRADIENT	.00015	.00000



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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(AIC123) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 153/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.250	-12.630	.02015	.00000
1.250	-10.220	.01834	.00000
1.250	-7.740	.01768	.00000
1.250	-5.260	.01733	.00000
1.250	-2.840	.01664	.00000
1.250	-.420	.01508	.00000
1.250	1.970	.01636	.00000
1.250	4.330	.01709	.00000
1.250	6.740	.01775	.00000
1.250	9.170	.01872	.00000
1.250	11.620	.02001	.00000
	GRADIENT	.00011	.00000

RUN NO. 137/ 0    RN/L = 7.07    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.957	-12.850	.01532	.00000
1.957	-10.340	.01463	.00000
1.957	-7.860	.01414	.00000
1.957	-5.360	.01317	.00000
1.957	-2.900	.01258	.00000
1.957	-.450	.01240	.00000
1.957	1.960	.01310	.00000
1.957	4.420	.01320	.00000
1.957	6.870	.01348	.00000
1.957	9.410	.01438	.00000
1.957	11.890	.01515	.00000
	GRADIENT	.00011	.00000

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MSFC 594 (IA33) 740TS (TIP101)

ORB STING

(AIC123) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 162/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
4.959	-10.670	.00170	.00000
4.959	-8.670	.00177	.00000
4.959	-6.630	.00181	.00000
4.959	-4.550	.00181	.00000
4.959	-2.470	.00181	.00000
4.959	-.380	.00187	.00000
4.959	1.680	.00187	.00000
4.959	3.760	.00187	.00000
4.959	5.850	.00187	.00000
4.959	7.910	.00191	.00000
4.959	9.910	.00187	.00000
	GRADIENT	.00001	.00000

MSFC 594 (IA33) 740TS (TIP101)

ORB STING

(AIC124) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 150/ 0    RN/L = 4.98    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.598	-11.080	.01366	.00000
.598	-9.000	.01370	.00000
.598	-6.870	.01453	.00000
.598	-4.720	.01366	.00000
.598	-2.580	.01276	.00000
.598	-.410	.01127	.00000
.598	1.720	.01134	.00000
.598	3.890	.01272	.00000
.598	6.010	.01300	.00000
.598	8.160	.01279	.00000
.598	10.210	.01255	.00000
	GRADIENT	-.00015	.00000

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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C124) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = . 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = . 0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = -5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 149/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.903	-11.990	.01673	.00000
.903	-9.710	.01652	.00000
.903	-7.400	.01631	.00000
.903	-5.070	.01617	.00000
.903	-2.770	.01565	.00000
.903	-.460	.01472	.00000
.903	1.810	.01517	.00000
.903	4.100	.01583	.00000
.903	6.390	.01649	.00000
.903	8.670	.01711	.00000
.903	10.900	.01753	.00000
	GRADIENT	.00004	.00000

RUN NO. 147/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.101	-12.510	.02201	.00000
1.101	-10.100	.02270	.00000
1.101	-7.690	.02267	.00000
1.101	-5.250	.02298	.00000
1.101	-2.860	.02173	.00000
1.101	-.480	.02135	.00000
1.101	1.870	.02180	.00000
1.101	4.250	.02312	.00000
1.101	6.610	.02347	.00000
1.101	9.040	.02333	.00000
1.101	11.410	.02236	.00000
	GRADIENT	.00019	.00000

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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C124) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 148/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.254	-12.730	.02212	.00000
1.254	-10.270	.02174	.00000
1.254	-7.800	.02150	.00000
1.254	-5.320	.02143	.00000
1.254	-2.880	.02150	.00000
1.254	-.470	.02081	.00000
1.254	1.910	.02143	.00000
1.254	4.330	.02230	.00000
1.254	6.750	.02240	.00000
1.254	9.250	.02188	.00000
1.254	11.690	.02223	.00000
	GRADIENT	.00013	.00000

RUN NO. 138/ 0    RN/L = 7.05    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.967	-12.930	.01404	.00000
1.967	-10.400	.01421	.00000
1.967	-7.890	.01407	.00000
1.967	-5.380	.01372	.00000
1.967	-2.910	.01351	.00000
1.967	-.460	.01327	.00000
1.967	1.960	.01341	.00000
1.967	4.450	.01372	.00000
1.967	6.930	.01383	.00000
1.967	9.470	.01386	.00000
1.967	12.000	.01431	.00000
	GRADIENT	.00003	.00000

DATE 23 OCT 75

1A33 TABULATED DATA

MSFC 594(1A33) 740TS (T1P101)

ORB STING

(A1C124) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 163/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
4.959	-10.740	.00128	.00000
4.959	-8.730	.00132	.00000
4.959	-6.670	.00153	.00000
4.959	-4.580	.00156	.00000
4.959	-2.500	.00163	.00000
4.959	-1.390	.00163	.00000
4.959	1.700	.00167	.00000
4.959	3.780	.00167	.00000
4.959	5.870	.00174	.00000
4.959	7.940	.00177	.00000
4.959	9.950	.00177	.00000
	GRADIENT	.00001	.00000

MSFC 594(1A33) 740TS (T1P1S2P201)

ORB STING

(A1C125) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 57/ 0    RN/L = 4.09    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.599	-11.730	.01060	.00000
.599	-9.600	.01060	.00000
.599	-7.430	.01060	.00000
.599	-5.230	.01060	.00000
.599	-3.010	.01060	.00000
.599	-1.820	.01060	.00000
.599	1.410	.01060	.00000
.599	3.640	.01060	.00000
.599	5.820	.01060	.00000
.599	8.020	.01060	.00000
.599	10.120	.01060	.00000
	GRADIENT	-.00000	.00000

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MSFC 594(IA33) 740TS (T1P1S2P201)

ORB STING

(AIC125) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 58/ 0    RN/L = 5.95    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.800	-12.660	.01193	.00000
.800	-10.370	.01193	.00000
.800	-8.050	.01193	.00000
.800	-5.690	.01193	.00000
.800	-3.410	.01193	.00000
.800	-1.050	.01193	.00000
.800	1.290	.01193	.00000
.800	3.670	.01193	.00000
.800	6.010	.01193	.00000
.800	8.330	.01193	.00000
.800	10.550	.01193	.00000
	GRADIENT	.00000	.00000

RUN NO. 59/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.904	-13.220	.01325	.00000
.904	-10.820	.01325	.00000
.904	-8.400	.01325	.00000
.904	-5.940	.01325	.00000
.904	-3.510	.01325	.00000
.904	-1.150	.01325	.00000
.904	1.280	.01325	.00000
.904	3.690	.01325	.00000
.904	6.090	.01325	.00000
.904	8.460	.01325	.00000
.904	10.740	.01325	.00000
	GRADIENT	-.00000	.00000

MSFC 594(1A33) 74QTS (TIP1S2P201)

ORB STING

(A1C125) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 61/ 1 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.101	-14.480	.01670	.00000
1.101	-11.800	.01670	.00000
1.101	-9.190	.01670	.00000
1.101	-6.590	.01670	.00000
1.101	-4.020	.01670	.00000
1.101	-1.440	.01670	.00000
1.101	1.080	.01670	.00000
1.101	3.600	.01670	.00000
1.101	6.140	.01670	.00000
1.101	8.630	.01670	.00000
1.101	10.960	.01670	.00000
	GRADIENT	.00000	.00000

RUN NO. 60/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.254	-15.150	.01458	.00000
1.254	-12.280	.01458	.00000
1.254	-9.450	.01458	.00000
1.254	-6.700	.01458	.00000
1.254	-4.030	.01458	.00000
1.254	-1.390	.01458	.00000
1.254	1.200	.01458	.00000
1.254	3.740	.01458	.00000
1.254	6.280	.01458	.00000
1.254	8.770	.01458	.00000
1.254	11.240	.01458	.00000
	GRADIENT	.00000	.00000

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1A33 TABULATED DATA

MSFC 594(1A33) 740TS (T1P1S2P201)

ORB STING

(A1C125) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 110/ 0    RN/L = 6.51    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.467	-15.070	.01219	.00000
1.467	-12.280	.01219	.00000
1.467	-9.450	.01219	.00000
1.467	-6.710	.01219	.00000
1.467	-4.020	.01219	.00000
1.467	-1.390	.01219	.00000
1.467	1.220	.01219	.00000
1.467	3.740	.01219	.00000
1.467	6.290	.01219	.00000
1.467	8.770	.01219	.00000
1.467	11.260	.01219	.00000
	GRADIENT	-.00000	.00000

RUN NO. 77/ 0    RN/L = 7.07    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.959	-14.950	.00928	.00000
1.959	-12.130	.00928	.00000
1.959	-9.350	.00928	.00000
1.959	-6.500	.00928	.00000
1.959	-4.030	.00928	.00000
1.959	-1.440	.00928	.00000
1.959	1.160	.00928	.00000
1.959	3.730	.00928	.00000
1.959	6.280	.00928	.00000
1.959	8.870	.00928	.00000
1.959	11.450	.00928	.00000
	GRADIENT	.00000	.00000

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MSFC 594(IA33) 740TS (T1P1S2P201)

ORB STING

(AIC125) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 83/ 0    RN/L = 4.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
2.990	-11.830	.00530	.00000
2.990	-9.680	.00530	.00000
2.990	-7.490	.00530	.00000
2.990	-5.300	.00530	.00000
2.990	-3.020	.00530	.00000
2.990	-0.810	.00530	.00000
2.990	1.400	.00530	.00000
2.990	3.620	.00530	.00000
2.990	5.810	.00530	.00000
2.990	8.000	.00530	.00000
2.990	10.140	.00530	.00000
	GRADIENT	-.00000	.00000

RUN NO. 82/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
4.959	-10.970	.00265	.00000
4.959	-8.950	.00265	.00000
4.959	-6.870	.00265	.00000
4.959	-4.800	.00265	.00000
4.959	-2.680	.00265	.00000
4.959	-0.580	.00265	.00000
4.959	1.520	.00265	.00000
4.959	3.630	.00265	.00000
4.959	5.700	.00265	.00000
4.959	7.780	.00265	.00000
4.959	9.800	.00265	.00000
	GRADIENT	-.00000	.00000

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MSFC 594(1A33) 740TS (T1P1S2P201)

ORB STING

(AIC126) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

PARAMETRIC DATA

RUN NO. 65/ 0    RN/L = 4.98    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.598	-11.080	.01060	.00000
.598	-9.010	.01060	.00000
.598	-6.870	.01060	.00000
.598	-4.720	.01060	.00000
.598	-2.580	.01060	.00000
.598	-1.440	.01060	.00000
.598	1.700	.01060	.00000
.598	3.850	.01060	.00000
.598	5.970	.01060	.00000
.598	8.090	.01060	.00000
.598	10.150	.01060	.00000
	GRADIENT	-.00000	.00000

RUN NO. 64/ 0    RN/L = 6.27    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.901	-11.860	.01325	.00000
.901	-9.640	.01325	.00000
.901	-7.380	.01325	.00000
.901	-5.060	.01325	.00000
.901	-2.780	.01325	.00000
.901	-1.500	.01325	.00000
.901	1.780	.01325	.00000
.901	4.060	.01325	.00000
.901	6.300	.01325	.00000
.901	8.540	.01325	.00000
.901	10.740	.01325	.00000
	GRADIENT	.00000	.00000

MSFC 594 (IA33) 740TS (TIP1S2P201)

ORB STING

(AIC12L) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 YREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 62/ 0    RN/L = 6.62    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.098	-12.390	.01670	.00000
1.098	-10.020	.01670	.00000
1.098	-7.640	.01670	.00000
1.098	-5.220	.01670	.00000
1.098	-2.860	.01670	.00000
1.098	-.510	.01670	.00000
1.098	1.810	.01670	.00000
1.098	4.170	.01670	.00000
1.098	6.500	.01670	.00000
1.098	8.860	.01670	.00000
1.098	11.210	.01670	.00000
	GRADIENT	.00000	.00000

RUN NO. 63/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.247	-12.590	.01458	.00000
1.247	-10.180	.01458	.00000
1.247	-7.720	.01458	.00000
1.247	-5.260	.01458	.00000
1.247	-2.860	.01458	.00000
1.247	-.490	.01458	.00000
1.247	1.870	.01458	.00000
1.247	4.250	.01458	.00000
1.247	6.620	.01458	.00000
1.247	9.050	.01458	.00000
1.247	11.470	.01458	.00000
	GRADIENT	-.00000	.00000

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IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (T1PIS2P201)

ORB STING

(A1C126) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .300    RUDDER = .000  
 ELEVTR = .000

RUN NO. 76/ 0    RN/L = 7.09    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.950	-12.710	.00928	.00000
1.950	-10.310	.00928	.00000
1.950	-7.870	.00928	.00000
1.950	-5.390	.00928	.00000
1.950	-2.950	.00928	.00000
1.950	-.530	.00928	.00000
1.950	1.900	.00928	.00000
1.950	4.350	.00928	.00000
1.950	6.780	.00928	.00000
1.950	9.240	.00928	.00000
1.950	11.730	.00928	.00000
	GRADIENT	.00000	.00000

RUN NO. 102/ 0    RN/L = 5.    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
4.959	-10.760	.00265	.00000
4.959	-8.750	.00265	.00000
4.959	-6.680	.00265	.00000
4.959	-4.620	.00265	.00000
4.959	-2.530	.00265	.00000
4.959	-.430	.00265	.00000
4.959	1.650	.00265	.00000
4.959	3.750	.00265	.00000
4.959	5.820	.00265	.00000
4.959	7.910	.00265	.00000
4.959	9.900	.00265	.00000
	GRADIENT	-.00000	.00000

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MSFC 594(IA33) 740TS (T1P1S1P201) FORKED STING

(A1C129) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = 10.000

RUN NO. 248/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.597	-8.820	.01060	.00000
.597	-6.740	.01060	.00000
.597	-4.670	.01060	.00000
.597	-2.580	.01060	.00000
.597	- .500	.01060	.00000
.597	1.580	.01060	.00000
.597	3.690	.01060	.00000
.597	5.750	.01060	.00000
.597	7.850	.01060	.00000
	GRADIENT	-.00000	.00000

RUN NO. 247/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.899	-9.170	.01325	.00000
.899	-7.010	.01325	.00000
.899	-4.860	.01325	.00000
.899	-2.740	.01325	.00000
.899	- .610	.01325	.00000
.899	1.530	.01325	.00000
.899	3.710	.01325	.00000
.899	5.870	.01325	.00000
.899	8.070	.01325	.00000
	GRADIENT	-.00000	.00000

RUN NO. 246/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.098	-9.290	.01670	.00000
1.098	-7.070	.01670	.00000
1.098	-4.870	.01670	.00000
1.098	-2.680	.01670	.00000
1.098	- .510	.01670	.00000
1.098	1.660	.01670	.00000
1.098	3.860	.01670	.00000
1.098	6.050	.01670	.00000
1.098	8.220	.01670	.00000
	GRADIENT	-.00000	.00000

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MSFC 594 (IA33) 740TS (T1P1S1P201) FORKED STING

(A1C129) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000    RUDDER = .000  
 ELEVTR = 10.000

RUN NO. 249/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.254	-9.390	.01458	.00000
1.254	-7.140	.01458	.00000
1.254	-4.900	.01458	.00000
1.254	-2.660	.01458	.00000
1.254	- .470	.01458	.00000
1.254	1.710	.01458	.00000
1.254	3.930	.01458	.00000
1.254	6.110	.01458	.00000
1.254	8.300	.01458	.00000
	GRADIENT	.00000	.00000

RUN NO. 261/ 0    RN/L = 7.06    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.961	-9.400	.00928	.00000
1.961	-7.160	.00928	.00000
1.961	-4.930	.00928	.00000
1.961	-2.710	.00928	.00000
1.961	- .500	.00928	.00000
1.961	1.700	.00928	.00000
1.961	3.930	.00928	.00000
1.961	6.130	.00928	.00000
1.961	8.380	.00928	.00000
	GRADIENT	.00000	.00000

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MSFC 594(1A33) 740TS (T1P1S1P201) FORKED STING

(AIC130) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000 RUDDER = .000  
 ELEVTR = 10.000

RUN NO. 252/ 0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.599	-8.410	.01060	.00000
.599	-6.380	.01060	.00000
.599	-4.360	.01060	.00000
.599	-2.340	.01060	.00000
.599	-.320	.01060	.00000
.599	1.690	.01060	.00000
.599	3.730	.01060	.00000
.599	5.750	.01060	.00000
.599	7.780	.01060	.00000
	GRADIENT	.00000	.00000

RUN NO. 251/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.902	-8.500	.01325	.00000
.902	-6.450	.01325	.00000
.902	-4.410	.01325	.00000
.902	-2.360	.01325	.00000
.902	-.320	.01325	.00000
.902	1.720	.01325	.00000
.902	3.790	.01325	.00000
.902	5.810	.01325	.00000
.902	7.870	.01325	.00000
	GRADIENT	.00000	.00000

RUN NO. 253/ 0 RN/L = 6.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.106	-8.570	.01670	.00000
1.106	-6.490	.01670	.00000
1.106	-4.420	.01670	.00000
1.106	-2.360	.01670	.00000
1.106	-.310	.01670	.00000
1.106	1.710	.01670	.00000
1.106	3.780	.01670	.00000
1.106	5.840	.01670	.00000
1.106	7.910	.01670	.00000
	GRADIENT	-.00000	.00000

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MSFC 594(1A33) 740TS (T1P1S1P201) FORKED STING

(A1C138) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000    RUDDER = .000  
 ELEVTR = 10.000

RUN NO. 250/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.252	-8.580	.01458	.00000
1.252	-6.510	.01458	.00000
1.252	-4.430	.01458	.00000
1.252	-2.370	.01458	.00000
1.252	-.310	.01458	.00000
1.252	1.740	.01458	.00000
1.252	3.810	.01458	.00000
1.252	5.860	.01458	.00000
1.252	7.960	.01458	.00000
	GRADIENT	.00000	.00000

RUN NO. 258/ 0    RN/L = 7.06    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.961	-8.550	.00928	.00000
1.961	-6.490	.00928	.00000
1.961	-4.420	.00928	.00000
1.961	-2.370	.00928	.00000
1.961	-.310	.00928	.00000
1.961	1.740	.00928	.00000
1.961	3.810	.00928	.00000
1.961	5.870	.00928	.00000
1.961	7.940	.00928	.00000
	GRADIENT	.00000	.00000



MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC133) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. YT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. YT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = -15.000  
 ELEVTR = .000

RUN NO. 66/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.598	-11.080	.01060	.00000
.598	-9.000	.01060	.00000
.598	-6.890	.01060	.00000
.598	-4.720	.01060	.00000
.598	-2.580	.01060	.00000
.598	-.430	.01060	.00000
.598	1.710	.01060	.00000
.598	3.860	.01060	.00000
.598	5.970	.01060	.00000
.598	8.080	.01060	.00000
.598	10.150	.01060	.00000
	GRADIENT	-.00000	.00000

RUN NO. 67/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.899	-11.850	.01325	.00000
.899	-9.630	.01325	.00000
.899	-7.350	.01325	.00000
.899	-5.080	.01325	.00000
.899	-2.780	.01325	.00000
.899	-.500	.01325	.00000
.899	1.770	.01325	.00000
.899	4.060	.01325	.00000
.899	6.320	.01325	.00000
.899	8.560	.01325	.00000
.899	10.750	.01325	.00000
	GRADIENT	.00000	.00000

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IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (T1P1S1P201)

ORB STING

(AIC133) ( 11 SEP 75 )

REFERENCE DATA.

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000    RUDDER = -15.000  
 ELEVTR = .000

RUN NO. 69/ 0    RN/L = 6.62    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.098	-12.390	.01670	.00000
1.098	-10.020	.01670	.00000
1.098	-7.620	.01670	.00000
1.098	-5.210	.01670	.00000
1.098	-2.850	.01670	.00000
1.098	- .510	.01670	.00000
1.098	1.820	.01670	.00000
1.098	4.180	.01670	.00000
1.098	6.510	.01670	.00000
1.098	8.870	.01670	.00000
1.098	11.240	.01670	.00000
	GRADIENT	.00000	.00000

RUN NO. 68/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.248	-12.600	.01458	.00000
1.248	-10.180	.01458	.00000
1.248	-7.720	.01458	.00000
1.248	-5.270	.01458	.00000
1.248	-2.860	.01458	.00000
1.248	- .490	.01458	.00000
1.248	1.860	.01458	.00000
1.248	4.250	.01458	.00000
1.248	6.640	.01458	.00000
1.248	9.060	.01458	.00000
1.248	11.470	.01458	.00000
	GRADIENT	.00000	.00000

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IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (T1P1S1P201)

ORB STING

(AIC133) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.       YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.       ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000    RUDDER = -15.000  
 ELEVTR = .000

PARAMETRIC DATA

RUN NO. 75/ 0    RN/L = 7.13    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.938	-12.770	.00928	.00000
1.938	-10.340	.00928	.00000
1.938	-7.880	.00928	.00000
1.938	-5.400	.00928	.00000
1.938	-2.950	.00928	.00000
1.938	-.530	.00928	.00000
1.938	1.910	.00928	.00000
1.938	4.380	.00928	.00000
1.938	6.850	.00928	.00000
1.938	9.350	.00928	.00000
1.938	11.840	.00928	.00000
	GRADIENT	-.00000	.00000

RUN NO. 177/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
4.959	-10.760	.00265	.00000
4.959	-8.750	.00265	.00000
4.959	-6.690	.00265	.00000
4.959	-4.610	.00265	.00000
4.959	-2.530	.00265	.00000
4.959	-.430	.00265	.00000
4.959	1.650	.00265	.00000
4.959	3.750	.00265	.00000
4.959	5.820	.00265	.00000
4.959	7.880	.00265	.00000
4.959	9.890	.00265	.00000
	GRADIENT	-.00000	.00000

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MSFC 594(IA33) 740TS (TIP1S1P201)

ORB STING

(A1C134) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000    RUDDER = -20.000  
 ELEVTR = .000

RUN NO. 73/ 0    RN/L = 4.98    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.597	-11.040	.01060	.00000
.597	-8.990	.01060	.00000
.597	-6.850	.01060	.00000
.597	-4.710	.01060	.00000
.597	-2.570	.01060	.00000
.597	-.430	.01060	.00000
.597	1.710	.01060	.00000
.597	3.850	.01060	.00000
.597	5.970	.01060	.00000
.597	8.090	.01060	.00000
.597	10.170	.01060	.00000
	GRADIENT	.00000	.00000

RUN NO. 72/ 0    RN/L = 6.27    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.899	-11.870	.01325	.00000
.899	-9.640	.01325	.00000
.899	-7.360	.01325	.00000
.899	-5.070	.01325	.00000
.899	-2.790	.01325	.00000
.899	-.490	.01325	.00000
.639	1.780	.01325	.00000
.899	4.040	.01325	.00000
.899	6.300	.01325	.00000
.899	8.550	.01325	.00000
.899	10.740	.01325	.00000
	GRADIENT	.00000	.00000

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MSFC 594(1A33) 740TS (TIPIS1P201)

ORB STING

(A1C134) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. YT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. YT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = -20.000  
 ELEVTR = .000

RUN NO. 70/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.103	-12.390	.01670	.00000
1.103	-10.020	.01670	.00000
1.103	-7.610	.01670	.00000
1.103	-5.220	.01670	.00000
1.103	-2.850	.01670	.00000
1.103	-.510	.01670	.00000
1.103	1.830	.01670	.00000
1.103	4.180	.01670	.00000
1.103	6.510	.01670	.00000
1.103	8.880	.01670	.00000
1.103	11.230	.01670	.00000
	GRADIENT	.00000	.00000

RUN NO. 71/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.246	-12.580	.01458	.00000
1.246	-10.170	.01458	.00000
1.246	-7.730	.01458	.00000
1.246	-5.260	.01458	.00000
1.246	-2.880	.01458	.00000
1.246	-.490	.01458	.00000
1.246	1.870	.01458	.00000
1.246	4.260	.01458	.00000
1.246	6.640	.01458	.00000
1.246	9.100	.01458	.00000
1.246	11.490	.01458	.00000
	GRADIENT	-.00000	.00000

MSFC 594(1A33) 740TS (TIP1S1P201)

ORB STING

(A1C134) (-11-SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = -20.000  
 ELEVTR = .000

RUN NO. 74/ 0 RN/L = 7.03 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.971	-12.770	.00928	.00000
1.971	-10.250	.00928	.00000
1.971	-7.780	.00928	.00000
1.971	-5.340	.00928	.00000
1.971	-2.920	.00928	.00000
1.971	-.510	.00928	.00000
1.971	1.900	.00928	.00000
1.971	4.330	.00928	.00000
1.971	6.740	.00928	.00000
1.971	9.220	.00928	.00000
1.971	11.670	.00928	.00000
	GRADIENT	-.00000	.00000

RUN NO. 178/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
4.959	-10.750	.00265	.00000
4.959	-8.740	.00265	.00000
4.959	-6.690	.00265	.00000
4.959	-4.610	.00265	.00000
4.959	-2.530	.00265	.00000
4.959	-.430	.00265	.00000
4.959	1.650	.00265	.00000
4.959	3.740	.00265	.00000
4.959	5.820	.00265	.00000
4.959	7.890	.00265	.00000
4.959	9.900	.00265	.00000
	GRADIENT	-.00000	.00000

MSFC 594(1A33) 740TS (T1P153P201F2) ORB STING

(A1C135) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 86/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
2.990	-11.990	.00530	.00380
2.990	-9.860	.00530	.00380
2.990	-7.650	.00530	.00380
2.990	-5.380	.00530	.00370
2.990	-3.150	.00530	.00370
2.990	-.940	.00530	.00360
2.990	1.260	.00530	.00360
2.990	3.480	.00530	.00360
2.990	5.670	.00530	.00350
2.990	7.910	.00530	.00330
2.990	10.040	.00530	.00330
	GRADIENT	-.00000	-.00001

RUN NO. 85/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
4.959	-11.050	.00265	.00100
4.959	-9.060	.00265	.00110
4.959	-7.000	.00265	.00110
4.959	-4.900	.00265	.00110
4.959	-2.780	.00265	.00120
4.959	-.680	.00265	.00110
4.959	1.420	.00265	.00120
4.959	3.510	.00265	.00120
4.959	5.590	.00265	.00120
4.959	7.680	.00265	.00120
4.959	9.680	.00265	.00110
	GRADIENT	-.00000	.00001

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MSFC 594(1A33) 740TS (TIPIS3P201F2) ORB STING

(A1C136) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 84/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
4.959	-10.950	.00265	.00110
4.959	-8.930	.00265	.00120
4.959	-6.860	.00265	.00120
4.959	-4.730	.00265	.00120
4.959	-2.620	.00265	.00120
4.959	-.510	.00265	.00120
4.959	1.590	.00265	.00120
4.959	3.720	.00265	.00120
4.959	5.810	.00265	.00120
4.959	7.920	.00265	.00120
4.959	9.920	.00265	.00120
	GRADIENT	.00000	.00000

MSFC 594(1A33) 740TS (01)

ORB STING

(A1C137) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 172/ 0 RN/L = 5.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.600	-10.790	.01060	.00000
.600	-8.780	.01060	.00000
.600	-6.720	.01060	.00000
.600	-4.610	.01060	.00000
.600	-2.500	.01060	.00000
.600	-.380	.01060	.00000
.600	1.720	.01060	.00000
.600	3.850	.01060	.00000
.600	5.940	.01060	.00000
.600	8.050	.01060	.00000
.600	10.070	.01060	.00000
	GRADIENT	-.00000	.00000



MSFC 594 (IA33) 740TS (01)

ORB STING

(AIC137) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELLVTR = .000

RUN NO. 171/ 0    RN/L = 5.95    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.798	-11.200	.01193	.00000
.798	-9.100	.01193	.00000
.798	-6.980	.01193	.00000
.798	-4.810	.01193	.00000
.798	-2.630	.01193	.00000
.798	-.450	.01193	.00000
.798	1.710	.01193	.00000
.798	3.910	.01193	.00000
.798	6.060	.01193	.00000
.798	8.220	.01193	.00000
.798	10.310	.01193	.00000
	GRADIENT	.00000	.00000

RUN NO. 170/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.902	-11.410	.01325	.00000
.902	-9.310	.01325	.00000
.902	-7.140	.01325	.00000
.902	-4.930	.01325	.00000
.902	-2.710	.01325	.00000
.902	-.470	.01325	.00000
.902	1.740	.01325	.00000
.902	3.940	.01325	.00000
.902	6.140	.01325	.00000
.902	8.310	.01325	.00000
.902	10.440	.01325	.00000
	GRADIENT	-.00000	.00000

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MSFC 594(IA33) 740TS (01)

ORB STING

(AIC137) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 168/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.102	-11.620	.01670	.00000
1.102	-9.460	.01670	.00000
1.102	-7.230	.01670	.00000
1.102	-4.970	.01670	.00000
1.102	-2.690	.01670	.00000
1.102	-.400	.01670	.00000
1.102	1.860	.01670	.00000
1.102	4.110	.01670	.00000
1.102	6.370	.01670	.00000
1.102	8.600	.01670	.00000
1.102	10.770	.01670	.00000
	GRADIENT	.00000	.00000

RUN NO. 169/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.252	-11.620	.01458	.00000
1.252	-9.450	.01458	.00000
1.252	-7.210	.01458	.00000
1.252	-4.930	.01458	.00000
1.252	-2.660	.01458	.00000
1.252	-.380	.01458	.00000
1.252	1.870	.01458	.00000
1.252	4.120	.01458	.00000
1.252	6.380	.01458	.00000
1.252	8.630	.01458	.00000
1.252	10.910	.01458	.00000
	GRADIENT	-.00000	.00000

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PARAMETRIC DATA

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RIDDER = .000  
 ELEVTR = .000

RUN NO. 173/ 0 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.460	-11.430	.01219	.00000
1.460	-9.290	.01219	.00000
1.460	-7.090	.01219	.00000
1.460	-4.850	.01219	.00000
1.460	-2.610	.01219	.00000
1.460	-.360	.01219	.00000
1.460	1.860	.01219	.00000
1.460	4.090	.01219	.00000
1.460	6.320	.01219	.00000
1.460	8.540	.01219	.00000
1.460	10.690	.01219	.00000
GRADIENT		-.00000	.00000

RUN NO. 174/ 0 RN/L = 7.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.967	-11.300	.00928	.00000
1.967	-9.160	.00928	.00000
1.967	-7.000	.00928	.00000
1.967	-4.800	.00928	.00000
1.967	-2.610	.00928	.00000
1.967	-.390	.00928	.00000
1.967	1.800	.00928	.00000
1.967	4.010	.00928	.00000
1.967	6.200	.00928	.00000
1.967	8.390	.00928	.00000
1.967	10.500	.00928	.00000
GRADIENT		.00000	.00000

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MSFC 594(IA33) 740TS (01)

ORB STING

(AIC137) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 175/ 0    RN/L = 4.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
2.990	-10.610	.00530	.00000
2.990	-8.630	.00530	.00000
2.990	-6.590	.00530	.00000
2.990	-4.520	.00530	.00000
2.990	-2.460	.00530	.00000
2.990	-.370	.00530	.00000
2.990	1.680	.00530	.00000
2.990	3.760	.00530	.00000
2.990	5.840	.00530	.00000
2.990	7.890	.00530	.00000
2.990	9.890	.00530	.00000
	GRADIENT	-.00000	.00000

RUN NO. 176/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
4.959	-10.380	.00265	.00000
4.959	-8.440	.00265	.00000
4.959	-6.450	.00265	.00000
4.959	-4.420	.00265	.00000
4.959	-2.390	.00265	.00000
4.959	-.340	.00265	.00000
4.959	1.690	.00265	.00000
4.959	3.720	.00265	.00000
4.959	5.770	.00265	.00000
4.959	7.770	.00265	.00000
4.959	9.720	.00265	.00000
	GRADIENT	.00000	.00000

MSFC 594 (IA33) 740TS (T1P1S1P201)

ORB STING

(A1C13B) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = -5.000

RUN NO. 200/ 0    RN/L = 4.99    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.600	-11.800	.01060	.00000
.600	-9.660	.01060	.00000
.600	-7.490	.01060	.00000
.600	-5.310	.01060	.00000
.600	-3.100	.01060	.00000
.600	-.880	.01060	.00000
.600	1.330	.01060	.00000
.600	3.540	.01060	.00000
.600	5.730	.01060	.00000
.600	7.940	.01060	.00000
.600	10.060	.01060	.00000
	GRADIENT	.00000	.00000

RUN NO. 199/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.902	-13.300	.01325	.00000
.902	-10.910	.01325	.00000
.902	-8.500	.01325	.00000
.902	-6.060	.01325	.00000
.902	-3.630	.01325	.00000
.902	-1.240	.01325	.00000
.902	1.160	.01325	.00000
.902	3.580	.01325	.00000
.902	6.000	.01325	.00000
.902	8.370	.01325	.00000
.902	10.680	.01325	.00000
	GRADIENT	-.00000	.00000

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MSFC 594(1A33) 740TS (TIP:SI:P201)

ORB STING

(AIC138) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000    RUDDER = .000  
 ELEVTR = -5.000

RUN NO. 197/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.101	-14.590	.01670	.00000
1.101	-11.910	.01670	.00000
1.101	-9.280	.01670	.00000
1.101	-6.680	.01670	.00000
1.101	-4.100	.01670	.00000
1.101	-1.520	.01670	.00000
1.101	.990	.01670	.00000
1.101	3.530	.01670	.00000
1.101	6.070	.01670	.00000
1.101	8.560	.01670	.00000
1.101	10.930	.01670	.00000
	GRADIENT	.00000	.00000

RUN NO. 198/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.255	-15.180	.01458	.00000
1.255	-12.320	.01458	.00000
1.255	-9.480	.01458	.00000
1.255	-6.750	.01458	.00000
1.255	-4.060	.01458	.00000
1.255	-1.410	.01458	.00000
1.255	1.150	.01458	.00000
1.255	3.660	.01458	.00000
1.255	6.200	.01458	.00000
1.255	8.710	.01458	.00000
1.255	11.180	.01458	.00000
	GRADIENT	.00000	.00000

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MSFC 594(IA33) 740TS (TIP1S1P201)

ORB STING

(A1C138) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = -5.000

RUN NO. 187/ 0 RN/L = 7.02 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.967	-15.000	.00928	.00000
1.967	-12.120	.00928	.00000
1.967	-9.340	.00928	.00000
1.967	-6.640	.00928	.00000
1.967	-4.000	.00928	.00000
1.967	-1.400	.00928	.00000
1.967	1.160	.00928	.00000
1.967	3.710	.00928	.00000
1.967	6.230	.00928	.00000
1.967	8.850	.00928	.00000
1.967	11.410	.00928	.00000
	GRADIENT	.00000	.00000

MSFC 594(IA33) 740TS (TIP1S1P201)

ORB STING

(A1C139) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = -5.000

RUN NO. 195/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.598	-11.080	.01060	.00000
.598	-9.010	.01060	.00000
.598	-6.890	.01060	.00000
.598	-4.750	.01060	.00000
.598	-2.600	.01060	.00000
.598	-.440	.01060	.00000
.598	1.680	.01060	.00000
.598	3.830	.01060	.00000
.598	5.950	.01060	.00000
.598	8.060	.01060	.00000
.598	10.130	.01060	.00000
	GRADIENT	-.00000	.00000

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MSFC 594(1A33) 740TS (TIPISIP201)

ORB STING

(AIC139) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000 RUDDER = .000  
 ELEVTR = -5.000

RUN NO. 194/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNSF	CABF
.902	-11.880	.01325	.00000
.902	-9.650	.01325	.00000
.902	-7.380	.01325	.00000
.902	-5.080	.01325	.00000
.902	-2.790	.01325	.00000
.902	-.500	.01325	.00000
.902	1.760	.01325	.00000
.902	4.050	.01325	.00000
.902	6.290	.01325	.00000
.902	8.550	.01325	.00000
.902	10.750	.01325	.00000
	GRADIENT	.00000	.00000

RUN NO. 196/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNSF	CABF
1.100	-12.440	.01670	.00000
1.100	-10.060	.01670	.00000
1.100	-7.660	.01670	.00000
1.100	-5.250	.01670	.00000
1.100	-2.890	.01670	.00000
1.100	-.520	.01670	.00000
1.100	1.800	.01670	.00000
1.100	4.160	.01670	.00000
1.100	6.500	.01670	.00000
1.100	8.860	.01670	.00000
1.100	11.210	.01670	.00000
	GRADIENT	.00000	.00000



MSFC 594 (IA33) 740TS (TIPISIP201)

ORB STING

(AIC139) ( 11 SEP 75 )

## PARAMETRIC DATA

## REFERENCE DATA

SREF = 2590.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 !OFF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000    RUDDER = .000  
 ELEVTR = -5.000

RUN NO. 193/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.254	-12.610	.01458	.00000
1.254	-10.180	.01458	.00000
1.254	-7.730	.01458	.00000
1.254	-5.280	.01458	.00000
1.254	-2.870	.01458	.00000
1.254	-.480	.01458	.00000
1.254	1.860	.01458	.00000
1.254	4.250	.01458	.00000
1.254	6.630	.01458	.00000
1.254	9.080	.01458	.00000
1.254	11.470	.01458	.00000
	GRADIENT	.00000	.00000

RUN NO. 192/ 0    RN/L = 7.05    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.965	-12.820	.00928	.00000
1.965	-10.240	.00928	.00000
1.965	-7.790	.00928	.00000
1.965	-5.340	.00928	.00000
1.965	-2.920	.00928	.00000
1.965	-.490	.00928	.00000
1.965	1.890	.00928	.00000
1.965	4.330	.00928	.00000
1.965	6.750	.00928	.00000
1.965	9.230	.00928	.00000
1.965	11.690	.00928	.00000
	GRADIENT	-.00000	.00000

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MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC140) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000    RUDDER = .000  
 ELEVTR = 10.000

RUN NO. 201/ 0    RN/L = 4.97    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.596	-11.590	.01060	.00000
.596	-9.480	.01060	.00000
.596	-7.280	.01060	.00000
.596	-5.110	.01060	.00000
.596	-2.900	.01060	.00000
.596	-.680	.01060	.00000
.596	1.520	.01060	.00000
.596	3.730	.01060	.00000
.596	5.950	.01060	.00000
.596	8.150	.01060	.00000
.596	10.260	.01060	.00000
GRADIENT		.00000	.00000

RUN NO. 202/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.903	-13.040	.01325	.00000
.903	-10.670	.01325	.00000
.903	-8.270	.01325	.00000
.903	-5.840	.01325	.00000
.903	-3.420	.01325	.00000
.903	-1.020	.01325	.00000
.903	1.400	.01325	.00000
.903	3.830	.01325	.00000
.903	6.220	.01325	.00000
.903	8.580	.01325	.00000
.903	10.860	.01325	.00000
GRADIENT		-.00000	.00000

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MSFC 594(1A33) 740TS (TIPISIP201)

ORB STING

(A1C140) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = 10.000

RUN NO. 204/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.103	-14.350	.01670	.00000
1.103	-11.680	.01670	.00000
1.103	-9.070	.01670	.00000
1.103	-6.480	.01670	.00000
1.103	-3.900	.01670	.00000
1.103	-1.310	.01670	.00000
1.103	1.220	.01670	.00000
1.103	3.720	.01670	.00000
1.103	6.270	.01670	.00000
1.103	8.750	.01670	.00000
1.103	11.120	.01670	.00000
	GRADIENT	-.00000	.00000

RUN NO. 203/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.254	-14.980	.01458	.00000
1.254	-12.120	.01458	.00000
1.254	-9.310	.01458	.00000
1.254	-6.590	.01458	.00000
1.254	-3.910	.01458	.00000
1.254	-1.260	.01458	.00000
1.254	1.290	.01458	.00000
1.254	3.820	.01458	.00000
1.254	6.350	.01458	.00000
1.254	8.850	.01458	.00000
1.254	11.300	.01458	.00000
	GRADIENT	-.00000	.00000

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MSFC 594(1A33) 740TS (TIP1S1P201)

ORB STING

(A1C140) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = 10.000

RUN NO. 188/ 0    RN/L = 7.06    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.963	-14.890	.00928	.00000
1.963	-11.990	.00928	.00000
1.963	-9.250	.00928	.00000
1.963	-6.530	.00928	.00000
1.963	-3.950	.00928	.00000
1.963	-1.340	.00928	.00000
1.963	1.220	.00928	.00000
1.963	3.790	.00928	.00000
1.963	6.320	.00928	.00000
1.963	8.920	.00928	.00000
1.963	11.490	.00928	.00000
	GRADIENT	.00000	.00000

MSFC 594(1A33) 740TS (TIP1S1P201)

ORB STING

(A1C141) ( 11 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = 10.000

RUN NO. 208/ 0    RN/L = 4.99    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.599	-11.090	.01060	.00000
.599	-9.010	.01060	.00000
.599	-6.900	.01060	.00000
.599	-4.740	.01060	.00000
.599	-2.590	.01060	.00000
.599	-.430	.01060	.00000
.599	1.700	.01060	.00000
.599	3.840	.01060	.00000
.599	5.970	.01060	.00000
.599	8.090	.01060	.00000
.599	10.160	.01060	.00000
	GRADIENT	-.00000	.00000

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC141) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 FJDDER = .000  
 ELEVTR = 10.000

RUN NO. 207/ 0 RN/L = 8.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.900	-11.870	.01325	.00000
.900	-9.620	.01325	.00000
.900	-7.370	.01325	.00000
.900	-5.070	.01325	.00000
.900	-2.780	.01325	.00000
.900	-.490	.01325	.00000
.900	1.780	.01325	.00000
.900	4.060	.01325	.00000
.900	6.310	.01325	.00000
.900	8.590	.01325	.00000
.900	10.790	.01325	.00000
	GRADIENT	-.00000	.00000

RUN NO. 205/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.097	-12.400	.01670	.00000
1.097	-10.020	.01670	.00000
1.097	-7.620	.01670	.00000
1.097	-5.230	.01670	.00000
1.097	-2.860	.01670	.00000
1.097	-.500	.01670	.00000
1.097	1.810	.01670	.00000
1.097	4.160	.01670	.00000
1.097	6.500	.01670	.00000
1.097	8.860	.01670	.00000
1.097	11.210	.01670	.00000
	GRADIENT	.00000	.00000

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MSFC 594(1A33) 740TS (TIP1S1P201)

ORB STING

(A1C141) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000 RUDDER = .000  
 ELEVTR = 10.000

RUN NO. 206/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.250	-12.590	.01458	.00000
1.250	-10.160	.01458	.00000
1.250	-7.710	.01458	.00000
1.250	-5.260	.01458	.00000
1.250	-2.860	.01458	.00000
1.250	-.470	.01458	.00000
1.250	1.870	.01458	.00000
1.250	4.240	.01458	.00000
1.250	6.650	.01458	.00000
1.250	9.070	.01458	.00000
1.250	11.470	.01458	.00000
	GRADIENT	-.00000	.00000

RUN NO. 191/ 0 RN/L = 7.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.963	-12.760	.00928	.00000
1.963	-10.260	.00928	.00000
1.963	-7.810	.00928	.00000
1.963	-5.360	.00928	.00000
1.963	-2.930	.00928	.00000
1.963	-.500	.00928	.00000
1.963	1.880	.00928	.00000
1.963	4.330	.00928	.00000
1.963	6.740	.00928	.00000
1.963	9.240	.00928	.00000
1.963	11.670	.00928	.00000
	GRADIENT	-.00000	.00000

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MSFC 594 (IA33) 740TS (T1P1S1P201)

ORB STING

(AIC142) ( 11 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2890.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000    RUDDER = .000  
 ELEVTR = 15.000

RUN NO. 216/ 0    RN/L = 5.00    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.600	-11.570	.01060	.00000
.600	-9.430	.01060	.00000
.600	-7.250	.01060	.00000
.600	-5.090	.01060	.00000
.600	-2.860	.01060	.00000
.600	-.630	.01060	.00000
.600	1.580	.01060	.00000
.600	3.800	.01060	.00000
.600	6.010	.01060	.00000
.600	8.210	.01060	.00000
.600	10.330	.01060	.00000
	GRADIENT	.00000	.00000

RUN NO. 215/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.903	-13.030	.01325	.00000
.903	-10.660	.01325	.00000
.903	-8.260	.01325	.00000
.903	-5.820	.01325	.00000
.903	-3.380	.01325	.00000
.903	-1.000	.01325	.00000
.903	1.420	.01325	.00000
.903	3.880	.01325	.00000
.903	6.260	.01325	.00000
.903	8.610	.01325	.00000
.903	10.910	.01325	.00000
	GRADIENT	.00000	.00000

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MSFC 594 (IA33) 740TS (TIP15IP201)

ORB STING

(A1C142) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 403.0000 IN. ZT  
 SCALE = .0040

BETA = .000    RUDDER = .000  
 ELEVTR = 15.000

RUN NO. 213/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.101	-14.300	.01670	.00000
1.101	-11.650	.01670	.00000
1.101	-9.020	.01670	.00000
1.101	-6.400	.01670	.00000
1.101	-3.800	.01670	.00000
1.101	-1.190	.01670	.00000
1.101	1.320	.01670	.00000
1.101	3.850	.01670	.00000
1.101	6.400	.01670	.00000
1.101	8.880	.01670	.00000
1.101	11.270	.01670	.00000
	GRADIENT	-.00000	.00000

RUN NO. 214/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.253	-14.960	.01458	.00000
1.253	-12.090	.01458	.00000
1.253	-9.280	.01458	.00000
1.253	-6.560	.01458	.00000
1.253	-3.890	.01458	.00000
1.253	-1.230	.01458	.00000
1.253	1.340	.01458	.00000
1.253	3.860	.01458	.00000
1.253	6.380	.01458	.00000
1.253	8.880	.01458	.00000
1.253	11.360	.01458	.00000
	GRADIENT	.00000	.00000



MSFC 594(1A33) 740TS (TIP1S1P201)

ORB STING

(A1C142) ( 11 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = 15.000

RUN NO. 189/ 0 RN/L = 7.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.964	-14.820	.00928	.00000
1.964	-11.930	.00928	.00000
1.964	-9.230	.00928	.00000
1.964	-6.570	.00928	.00000
1.964	-3.920	.00928	.00000
1.954	-1.320	.00928	.00000
1.964	1.250	.00928	.00000
1.964	3.810	.00928	.00000
1.964	6.340	.00928	.00000
1.964	8.960	.00928	.00000
1.964	11.520	.00928	.00000
	GRADIENT	-.00000	.00000

MSFC 594(1A33) 740TS (TIP1S1P201)

ORB STING

(A1C143) ( 11 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000 RUDDER = .000  
 ELEVTR = 15.000

RUN NO. 209/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.599	-11.080	.01060	.00000
.599	-9.020	.01060	.00000
.599	-6.890	.01060	.00000
.599	-4.740	.01060	.00000
.599	-2.590	.01060	.00000
.599	-.430	.01060	.00000
.599	1.690	.01060	.00000
.599	3.850	.01060	.00000
.599	5.960	.01060	.00000
.599	8.020	.01060	.00000
.599	10.150	.01060	.00000
	GRADIENT	-.00000	.00000

MSFC 594(1A33) 740TS (TIP)SIPP01)

ORB STING

(A1C143) ( 11 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000    RUDDER = .000  
 ELEVTR = 15.000

RUN NO. 210/ 0    RN/L = 6.26    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
.898	-11.820	.01325	.00000
.898	-9.600	.01325	.00000
.898	-7.340	.01325	.00000
.898	-5.050	.01325	.00000
.898	-2.770	.01325	.00000
.898	-.480	.01325	.00000
.898	1.780	.01325	.00000
.898	4.060	.01325	.00000
.898	6.300	.01325	.00000
.898	8.560	.01325	.00000
.898	10.760	.01325	.00000
	GRADIENT	.00000	.00000

RUN NO. 212/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.100	-12.360	.01670	.00000
1.100	-9.980	.01670	.00000
1.100	-7.600	.01670	.00000
1.100	-5.200	.01670	.00000
1.100	-2.830	.01670	.00000
1.100	-.460	.01670	.00000
1.100	1.660	.01670	.00000
1.100	4.200	.01670	.00000
1.100	6.560	.01670	.00000
1.100	8.930	.01670	.00000
1.100	11.290	.01670	.00000
	GRADIENT	.00000	.00000

MSFC 594(IA33) 740TS (T1P1S1P201)

ORB STING

(A1C143) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = 15.000

RUN NO. 211/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.253	-12.590	.01458	.00000
1.253	-10.150	.01458	.00000
1.253	-7.710	.01458	.00000
1.253	-5.270	.01458	.00000
1.253	-2.850	.01458	.00000
1.253	-.470	.01458	.00000
1.253	1.870	.01458	.00000
1.253	4.240	.01458	.00000
1.253	6.650	.01458	.00000
1.253	9.080	.01458	.00000
1.253	11.490	.01458	.00000
	GRADIENT	.00000	.00000

RUN NO. 190/ 0    RN/L = 7.06    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNBF	CABF
1.962	-12.810	.00928	.00000
1.962	-10.240	.00928	.00000
1.962	-7.800	.00928	.00000
1.962	-5.360	.00928	.00000
1.962	-2.930	.00928	.00000
1.962	-.500	.00928	.00000
1.962	1.890	.00928	.00000
1.962	4.330	.00928	.00000
1.962	6.740	.00928	.00000
1.962	9.240	.00928	.00000
1.962	11.690	.00928	.00000
	GRADIENT	-.00000	.00000

MSFC 594 (IA33) 740TS (O(-OMS PODS)) ORB STING

(AIC144) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 233/ 0    RN/L = 4.99    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.601	-10.780	.01060	.00000
.601	-8.770	.01060	.00000
.601	-6.690	.01060	.00000
.601	-4.570	.01060	.00000
.601	-2.470	.01060	.00000
.601	-.340	.01060	.00000
.601	1.760	.01060	.00000
.601	3.870	.01060	.00000
.601	5.980	.01060	.00000
.601	8.050	.01060	.00000
.601	10.100	.01060	.00000
	GRADIENT	-.00000	.00000

RUN NO. 234/ 0    RN/L = 6.26    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.898	-11.340	.01325	.00000
.898	-9.240	.01325	.00000
.898	-7.040	.01325	.00000
.898	-4.850	.01325	.00000
.898	-2.620	.01325	.00000
.898	-.380	.01325	.00000
.898	1.810	.01325	.00000
.898	4.010	.01325	.00000
.898	6.210	.01325	.00000
.898	8.380	.01325	.00000
.898	10.460	.01325	.00000
	GRADIENT	-.00000	.00000

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MSFC 594(1A33) 740TS (O(-OMS PODS)) ORB STING

(A1C144) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 236/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNSF	CABF
1.102	-11.530	.01670	.00000
1.102	-9.360	.01670	.00000
1.102	-7.110	.01670	.00000
1.102	-4.830	.01670	.00000
1.102	-2.550	.01670	.00000
1.102	-.260	.01670	.00000
1.102	1.990	.01670	.00000
1.102	4.250	.01670	.00000
1.102	6.500	.01670	.00000
1.102	8.730	.01670	.00000
1.102	10.900	.01670	.00000
	GRADIENT	.00000	.00000

RUN NO. 235/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNSF	CABF
1.253	-11.500	.01458	.00000
1.253	-9.330	.01458	.00000
1.253	-7.080	.01458	.00000
1.253	-4.830	.01458	.00000
1.253	-2.570	.01458	.00000
1.253	-.290	.01458	.00000
1.253	1.950	.01458	.00000
1.253	4.210	.01458	.00000
1.253	6.460	.01458	.00000
1.253	8.700	.01458	.00000
1.253	10.900	.01458	.00000
	GRADIENT	-.00000	.00000

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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C205) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 101.1500 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 122/ 0    RN/L = 4.98    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
.598	-11.180	.00000
.598	-9.120	.00000
.598	-7.030	-.00050
.598	-4.900	-.00050
.598	-2.790	-.00110
.598	-.660	-.00110
.598	1.450	-.00110
.598	3.590	-.00220
.598	5.710	-.00280
.598	7.810	-.00390
.598	9.830	-.00330
	GRADIENT	-.00016

RUN NO. 123/ 0    RN/L = 6.27    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
.900	-11.930	.00860
.900	-9.750	.00620
.900	-7.540	.00360
.900	-5.280	.00420
.900	-3.030	.00290
.900	-.770	.00260
.900	1.450	.00030
.900	3.700	.00090
.900	5.920	.00130
.900	8.100	.00130
.900	10.200	-.00060
	GRADIENT	-.00037

MSFC 594(IA33) 740TS (T1P101)

ORB STING

(A1C205) ( 12 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 125/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
1.105	-12.430	-.00300
1.105	-10.150	-.00250
1.105	-7.840	-.00160
1.105	-5.490	-.00190
1.105	-3.160	-.00130
1.105	-.820	-.00240
1.105	1.480	-.00300
1.105	3.800	-.00190
1.105	6.100	-.00270
1.105	8.360	-.00360
1.105	10.540	-.00410
	GRADIENT	-.00010

RUN NO. 124/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
1.256	-12.600	.00020
1.256	-10.270	-.00020
1.256	-7.920	-.00050
1.256	-5.560	-.00130
1.256	-3.220	-.00180
1.256	-.880	-.00260
1.256	1.420	-.00390
1.256	3.750	-.00340
1.256	6.040	-.00310
1.256	8.340	-.00360
1.256	10.540	-.00470
	GRADIENT	-.00026

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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C205) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 133/ 0 RN/L = 7.03 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
1.971	-12.600	.00230
1.971	-10.250	.00190
1.971	-7.890	.00120
1.971	-5.550	.00170
1.971	-3.230	.00160
1.971	-.910	.00110
1.971	1.390	.00000
1.971	3.720	-.00070
1.971	6.000	-.00040
1.971	8.320	-.00210
1.971	10.550	-.00250
GRADIENT		-.00035

RUN NO. 157/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
2.990	-11.260	-.00140
2.990	-9.200	-.00180
2.990	-7.100	-.00510
2.990	-4.960	-.00230
2.990	-2.830	-.00140
2.990	-.690	-.00370
2.990	1.420	.00000
2.990	3.560	-.00280
2.990	5.690	.00000
2.990	7.800	.00000
2.990	9.850	.00320
GRADIENT		.00002

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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C205) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 106/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
4.959	-10.730	-.00150
4.959	-8.770	.00070
4.959	-6.750	.00000
4.959	-4.700	.00000
4.959	-2.610	.00000
4.959	-.550	.00000
4.959	1.510	.00000
4.959	3.580	.00000
4.959	5.620	.00000
4.959	7.670	.00000
4.959	9.630	-.00150
	GRADIENT	.00000

MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C206) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 121/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
.598	-11.130	-.02190
.598	-9.050	-.01630
.598	-6.930	-.00780
.598	-4.780	.00730
.598	-2.630	.00890
.598	-.460	.00000
.598	1.680	-.00610
.598	3.840	-.01240
.598	5.950	-.00560
.598	8.090	.01360
.598	10.140	.02710
	GRADIENT	-.00252

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MSFC 594 (IA33) 740TS (TIP101)

ORB STING

(AIC206) ( 12 SEP 75 )

REFERENCE DATA

SREF \* 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF \* 73.2000 IN. YMRP = .0000 IN. YT  
 BREF \* .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE \* .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 120/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
.902	-11.970	-.04950
.902	-9.730	-.03490
.902	-7.440	-.00820
.902	-5.130	.03020
.902	-2.820	.02790
.902	-.510	.00930
.902	1.760	-.00820
.902	4.060	-.03240
.902	6.330	-.02940
.902	8.620	-.00090
.902	10.820	.01720
GRADIENT		-.00868

RUN NO. 118/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.096	-10.120	-.06270
1.096	-7.710	-.02820
1.096	-5.290	-.02180
1.096	-2.920	-.01810
1.096	-.540	-.00700
1.096	1.800	.00020
1.096	4.170	.01590
1.096	6.530	.02520
1.096	8.900	.02920
1.096	11.240	.04850
GRADIENT		.00463

MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C206) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 119/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.255	-12.720	-.13440
1.255	-10.270	-.09290
1.255	-7.810	-.06420
1.255	-5.350	-.05000
1.255	-2.930	-.03330
1.255	-.510	-.01300
1.255	1.850	.00680
1.255	4.260	.02620
1.255	6.660	.04090
1.255	9.110	.04960
1.255	11.540	.06450
	GRADIENT	.00829

RUN NO. 134/ 0 RN/L = 7.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.967	-12.970	-.13600
1.967	-10.370	-.11390
1.967	-7.900	-.09060
1.967	-5.420	-.06090
1.967	-2.970	-.03310
1.967	-.520	-.00860
1.967	1.880	.02090
1.967	4.340	.03690
1.967	6.820	.05150
1.967	9.380	.06890
1.967	11.840	.08200
	GRADIENT	.00984

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MSFC 594 (IA33) 740TS (TIP101)

ORB STING

(A1C206) ( 12 SEP 75 )

REFERENCE DATA

SREF = 101.1500 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 166/ 0    RN/L = 4.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
2.990	-11.290	-.08310
2.990	-9.190	-.06670
2.990	-7.040	-.05170
2.990	-4.850	-.03360
2.990	-2.670	-.01830
2.990	-.470	-.00650
2.990	1.700	.01030
2.990	3.890	.02530
2.990	6.060	.04180
2.990	8.250	.05740
2.990	10.340	.06900
	GRADIENT	.00672

RUN NO. 105/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
4.959	-10.750	-.05560
4.959	-8.770	-.04450
4.959	-6.700	-.03570
4.959	-4.640	-.02140
4.959	-2.550	-.01430
4.959	-.450	-.00390
4.959	1.630	.00000
4.959	3.740	.00390
4.959	5.800	.01740
4.959	7.880	.02860
4.959	9.870	.03650
	GRADIENT	.00310

MSFC 594(1A33) 740TS (T1P1S1P201)

ORB STING

(A1C207) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 130/ 0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
.599	-11.700	.00160
.599	-9.560	.00050
.599	-7.390	.00000
.599	-5.200	-.00050
.599	-3.020	.00000
.599	-.800	.00000
.599	1.390	-.00160
.599	3.600	-.00160
.599	5.810	-.00220
.599	8.020	-.00220
.599	10.110	-.00220
	GRADIENT	-.00029

RUN NO. 129/ 0 RN/L = 5.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
.797	-12.630	.00750
.797	-10.350	.00900
.797	-8.040	.00710
.797	-5.680	.00630
.797	-3.380	.00410
.797	-1.030	.00150
.797	1.290	.00000
.797	3.650	.00000
.797	6.020	-.00110
.797	8.360	-.00190
.797	10.540	-.00190
	GRADIENT	-.00059

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1A33 TABULATED DATA

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MSFC 594(1A33) 740TS (TIPIS1P201)

ORB STING

(A1C207) ( 12 SEP 75 )

REFERENCE DATA

SREF = 101.1500 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 128/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
.905	-13.240	.00950
.905	-10.830	.00820
.905	-8.400	.00680
.905	-5.960	.00360
.905	-3.540	.00160
.905	-1.130	.00130
.905	1.270	.00260
.905	3.650	.00160
.905	6.080	.00160
.905	8.480	.00130
.905	10.730	.00000
	GRADIENT	.00005

RUN NO. 131/ 0    RN/L = 6.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
1.049	-14.130	-.00400
1.049	-11.560	-.00400
1.049	-9.000	-.00280
1.049	-6.400	-.00110
1.049	-3.960	.00000
1.049	-1.330	.00020
1.049	1.130	-.00020
1.049	3.630	-.00110
1.049	6.150	-.00080
1.049	8.580	.00110
1.049	10.900	-.00400
	GRADIENT	-.00015

ORIGINAL PAGE IS  
OF POOR QUALITY

DATE 23 OCT 75

IA33 TABULATED DATA

PAGE 246

MSFC 594(IA33) 740TS (T:PISIP201)

ORB STING

(A1C207) ( 12 SEP 75 )

REFERENCE DATA

SREF =	101.1500 SQ. FT	XMRP =	976.0000 IN. XT
LREF =	73.2000 IN.	YMRP =	.0000 IN. YT
BREF =	.0000 IN.	ZMRP =	400.0000 IN. ZT
SCALE =	.0040		

BETA = .000 RUDDER = .000  
 ELEVTR = .000

PARAMETRIC DATA

RUN NO. 126/ 3 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
1.102	-14.370	.00000
1.102	-11.720	.00000
1.102	-9.130	.00000
1.102	-6.540	.00000
1.102	-3.950	.00000
1.102	-1.390	.00000
1.102	1.120	.00000
1.102	3.640	.00000
1.102	6.180	.00000
1.102	8.660	.00000
1.102	11.010	.00000
	GRADIENT	.00000

RUN NO. 127/ 1 RN/L = 6.69 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
1.253	-15.080	.00000
1.253	-12.250	.00000
1.253	-9.430	-.00070
1.253	-6.680	-.00070
1.253	-4.010	-.00130
1.253	-1.360	-.00260
1.253	1.200	-.00310
1.253	3.740	-.00180
1.253	6.270	-.00150
1.253	8.770	-.00260
1.253	11.240	-.00390
	GRADIENT	-.00008

DATE 23 OCT 75

1A33 TABULATED DATA

PAGE 247

MSFC 594(1A33) 740TS (TIPISIP201)

ORB STING

(A1C207) ( 12 SEP 75 )

REFERENCE DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 109/ 0 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
1.464	-15.010	-.00180
1.464	-12.240	-.00250
1.464	-9.440	-.00300
1.464	-6.690	-.00300
1.464	-4.010	-.00380
1.464	-1.370	-.00300
1.464	1.220	-.00300
1.464	3.770	-.00280
1.464	6.300	-.00300
1.464	8.790	-.00430
1.464	11.280	-.00510
	GRADIENT	.00012

RUN NO. 132/ 0 RN/L = 7.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
1.968	-14.860	.00090
1.968	-12.000	.00090
1.968	-9.330	.00020
1.968	-6.630	.00020
1.968	-3.970	.00090
1.968	-1.380	.00000
1.968	1.150	-.00040
1.968	3.710	-.00110
1.968	6.260	-.00230
1.968	8.880	-.00330
1.968	11.440	-.00420
	GRADIENT	-.00025



MSFC 594(1A33) 740TS (TIPISIP201)

ORB STING

(A1C207) ( 12 SEP 75 )

REFERENCE DATA

SREF =	101.1500 SQ. FT	XMRP =	976.0000 IN. XT
LREF =	73.2000 IN.	YMRP =	.0000 IN. YT
BREF =	.0000 IN.	ZMRP =	400.0000 IN. ZT
SCALE =	.0040		

PARAMETRIC DATA

BETA =	.000	RUDDER =	.000
ELEVTR =	.000		

RUN NO. 108/ 0 RN/L = 4.56 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
2.990	-11.810	.00000
2.990	-9.690	-.00280
2.990	-7.490	-.00510
2.990	-5.240	-.00790
2.990	-3.010	-.00650
2.990	-.800	-.00650
2.990	1.400	-.00510
2.990	3.610	-.00230
2.990	5.800	-.00090
2.990	8.000	-.00040
2.990	10.120	-.00230
	GRADIENT	.00063

RUN NO. 107/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
4.959	-10.940	-.00390
4.959	-8.950	.00000
4.959	-6.890	.00000
4.959	-4.800	.00000
4.959	-2.680	.00000
4.959	-.590	.00000
4.959	1.500	.00000
4.959	3.610	-.00150
4.959	5.690	-.00070
4.959	7.780	-.00150
4.959	9.770	-.00230
	GRADIENT	-.00014

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IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIP:SI201) ORB STING

(AIC208) ( 12 SEP 75 )

REFERENCE DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 115/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
.598	-11.070	-.02510
.598	-9.020	-.01830
.598	-6.910	-.01110
.598	-4.750	.00330
.598	-2.590	.00820
.598	-.440	-.00050
.598	1.670	-.00220
.598	3.820	-.00790
.598	5.940	-.00500
.598	8.080	.01770
.598	10.110	.02880
GRADIENT		-.00153

RUN NO. 114/ 0 RN/L = 5.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
.799	-11.590	-.01960
.799	-9.440	-.00180
.799	-7.220	-.00450
.799	-4.980	.01130
.799	-2.740	.01880
.799	-.490	.00520
.799	1.730	-.00560
.799	3.960	-.01990
.799	6.160	-.01560
.799	8.390	.00190
.799	10.530	.00490
GRADIENT		-.00388

MSFC 594(1A33) 740TS (TIP131P201)

ORB STING

(AIC208) ( 12 SEP 75 )

REFERENCE DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 113/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
.899	-11.880	-.04100
.899	-9.660	-.02640
.899	-7.370	-.00090
.899	-5.090	.05220
.899	-2.800	.03050
.899	-.510	.01120
.899	1.750	-.00530
.899	4.050	-.03020
.899	6.300	-.03120
.899	8.580	-.00520
.899	10.750	.01190
GRADIENT		-.00871

RUN NO. 116/ 0 RN/L = 6.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.050	-12.340	-.10770
1.050	-9.990	-.05710
1.050	-7.610	-.01930
1.050	-5.230	-.00830
1.050	-2.870	-.01040
1.050	-.520	-.00570
1.050	1.790	.00140
1.050	4.130	.01350
1.050	6.460	.01560
1.050	8.810	.02460
1.050	11.090	.04450
GRADIENT		.00338

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1A33 TABULATED DATA

MSFC 594(1A33) 740TS (TIPISIP201) ORB STING

(AIC208) ( 2 SEP 75 )

REFERENCE DATA

SREF = 101.1500 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 LLEVTR = .000

RUN NO. 117/ 0    RN/L = 6.62    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.099	-12.420	-.10050
1.099	-10.050	-.06320
1.099	-7.650	-.02780
1.099	-5.250	-.02370
1.099	-2.890	-.02190
1.099	-.530	-.01030
1.099	1.780	.00000
1.099	4.130	.01620
1.099	6.470	.02370
1.099	8.830	.02650
1.099	11.140	.04570
	GRADIENT	.00533

RUN NO. 112/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.246	-12.630	-.12070
1.246	-10.220	-.08490
1.246	-7.750	-.05510
1.246	-5.290	-.04360
1.246	-2.900	-.03120
1.246	-.510	-.01340
1.246	1.830	.00210
1.246	4.220	.01730
1.246	6.610	.03070
1.246	9.050	.03840
1.246	11.440	.05400
	GRADIENT	.00679

MSFC 594(IA33) 740TS (T1P1S1P201)

ORB STING

(A1C208) ( 12 SEP 75 )

REFERENCE DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 111/ 0 RN/L = 6.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.465	-12.640	-.12470
1.465	-10.250	-.10190
1.465	-7.780	-.07070
1.465	-5.310	-.04900
1.465	-2.890	-.02680
1.465	-.520	-.01240
1.465	1.840	.00100
1.465	4.230	.01670
1.465	6.630	.03470
1.465	9.090	.04380
1.465	11.490	.06070
	GRADIENT	.00607

RUN NO. 135/ 0 RN/L = 7.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.965	-12.840	-.13520
1.965	-10.290	-.10820
1.965	-7.830	-.08430
1.965	-5.380	-.05620
1.965	-2.950	-.03120
1.965	-.520	-.00660
1.965	1.870	.02120
1.965	4.290	.03810
1.965	6.740	.05300
1.965	9.220	.06820
1.965	11.680	.08340
	GRADIENT	.00977

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIP1S1P201)

ORB STING

(A1C208) ( 12 SEP 75 )

REFERENCE DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 104/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
2.990	-11.280	-.06100
2.990	-9.190	-.05450
2.990	-7.010	-.04420
2.990	-4.830	-.03010
2.990	-2.650	-.01780
2.990	-.460	-.01260
2.990	1.700	-.00470
2.990	3.900	.00980
2.990	6.070	.02070
2.990	8.260	.03290
2.990	10.360	.03950
	GRADIENT	.00426

RUN NO. 103/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
4.959	-10.760	-.05480
4.959	-8.750	-.04770
4.959	-6.700	-.04370
4.959	-4.620	-.03100
4.959	-2.530	-.02140
4.959	-.430	-.01110
4.959	1.650	-.00710
4.959	3.750	.00070
4.959	5.820	.01350
4.959	7.910	.02380
4.959	9.900	.03100
	GRADIENT	.00371

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 OF POOR QUALITY

MSFC 594 (IA33) 740TS (T1P1S1P201)

ORB STING

(A1C209) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 101.1500 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = 5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 159/ 0    RN/L = 4.98    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
.598	-11.010	-.02720
.598	-8.950	-.02190
.598	-6.830	-.00780
.598	-4.680	.00610
.598	-2.540	.01180
.598	-.380	-.00050
.598	1.750	-.00730
.598	3.900	-.01080
.598	6.010	.00050
.598	8.130	.02210
.598	10.190	.03340
	GRADIENT	-.00247

RUN NO. 158/ 0    RN/L = 5.93    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
.797	-11.500	-.03350
.797	-9.320	-.01520
.797	-7.120	-.01100
.797	-4.860	.01670
.797	-2.640	.01930
.797	-.390	.00150
.797	1.820	-.01100
.797	4.030	-.02060
.797	6.250	-.00300
.797	8.480	.01930
.797	10.620	.02200
	GRADIENT	-.00472

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IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(A1C209) ( 12 SEP 75 )

REFERENCE DATA

SREF = 101.1500 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 157/ 0    RN/L = 6.29    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
.905	-11.840	-.03070
.905	-9.620	-.01590
.905	-7.340	-.00320
.905	-5.010	.03210
.905	-2.720	.02920
.905	-.420	.01020
.905	1.850	-.01180
.905	4.120	-.03180
.905	6.410	-.01800
.905	8.660	.01770
.905	10.850	.04460
	GRADIENT	-.00899

RUN NO. 155/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.102	-12.320	-.07190
1.102	-9.970	-.04160
1.102	-7.580	-.01340
1.102	-5.170	.00000
1.102	-2.810	-.00440
1.102	-.450	-.00780
1.102	1.890	-.00580
1.102	4.220	.00000
1.102	6.570	-.00220
1.102	8.920	.00670
1.102	11.250	.02760
	GRADIENT	.00065



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1A33 TABULATED DATA

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MSFC 594(1A33) 740TS (TIPIS1P201)

ORB STING

(A1C209) ( 12 SEP 75 )

REFERENCE DATA

SREF =	101.1500 SQ. FT	XMRP =	976.0000 IN. XT
LREF =	73.2000 IN.	YMRP =	.0000 IN. YT
BREF =	.0000 IN.	ZMRP =	400.0000 IN. ZT
SCALE =	.0040		

PARAMETRIC DATA

ALPHA =	5.000	RUDDER =	.000
ELEVTR =	.000		

RUN NO. 156/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.255	-12.510	-.09620
1.255	-10.120	-.06220
1.255	-7.660	-.03350
1.255	-5.210	-.03040
1.255	-2.800	-.01520
1.255	-.400	-.00730
1.255	1.950	.00570
1.255	4.340	.01620
1.255	6.720	.02590
1.255	9.150	.03270
1.255	11.550	.04660
	GRADIENT	.00451

RUN NO. 141/ 0 RN/L = 6.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.456	-12.520	-.12560
1.456	-10.120	-.09480
1.456	-7.670	-.06040
1.456	-5.230	-.04040
1.456	-2.830	-.02370
1.456	-.430	-.00740
1.456	1.920	.00690
1.456	4.320	.02340
1.456	6.700	.03710
1.456	9.140	.04700
1.456	11.540	.05950
	GRADIENT	.00654

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IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(A1C209) ( 12 SEP 75 )

## PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000  
ELEVTR = .000

## REFERENCE DATA

SREF \* 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
LREF = 73.2000 IN. YMRP = .0000 IN. YT  
BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
SCALE = .0040

RUN NO. 136/ 0 RN/L = 7.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.962	-12.660	-.12090
1.962	-10.140	-.09800
1.962	-7.710	-.07960
1.962	-5.270	-.05060
1.962	-2.850	-.02580
1.962	-.430	-.00780
1.962	1.930	.01680
1.962	4.350	.02800
1.962	6.770	.04700
1.962	9.250	.05890
1.962	11.680	.07140
	GRADIENT	.00776

RUN NO. 160/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
2.990	-11.210	-.06810
2.990	-9.100	-.05060
2.990	-6.940	-.04230
2.990	-4.760	-.02770
2.990	-2.590	-.00650
2.990	-.400	-.00040
2.990	1.750	.00470
2.990	3.940	.01450
2.990	6.100	.03570
2.990	8.260	.04280
2.990	10.380	.05220
	GRADIENT	.00440

MSFC 594(1A33) 740TS (TIPISIP201)

ORB STING

(A1C209) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 161/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
4.959	-10.680	-.04050
4.959	-8.680	-.03260
4.959	-6.630	-.02700
4.959	-4.550	-.01510
4.959	-2.470	-.00310
4.959	-.370	.00070
4.959	1.690	.00390
4.959	3.790	.01350
4.959	5.850	.02580
4.959	7.910	.03260
4.959	9.920	.03810
	GRADIENT	.00308

MSFC 594(1A33) 740TS (TIPISIP201)

ORB STING

(A1C210) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = -5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 145/ 0 RN/L = 5.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
.602	-11.060	-.02060
.602	-9.020	-.01670
.602	-6.880	-.00610
.602	-4.720	.00600
.602	-2.580	.01060
.602	-.420	.00220
.602	1.700	-.00050
.602	3.840	-.00880
.602	5.960	-.00600
.602	8.100	.01620
.602	10.160	.02860
	GRADIENT	-.00190

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1A33 TAGULATED DATA

MSFC 594(1A33) 740TS (T1P1S1P201)

ORB STING

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(A1C210) ( 12 SEP 75 )

PARAMETRIC DATA

REFERENCE DATA

ALPHA = -5.000 RUDDER = .000  
ELEVTR = .000

SREF \* 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
LREF \* 73.2000 IN. YMRP = .0000 IN. YT  
BREF \* .0000 IN. ZMRP = 400.0000 IN. ZT  
SCALE \* .0040

RUN NO. 144/ 0 RN/L = 5.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
.799	-11.600	-.01840
.799	-9.410	-.00490
.799	-7.200	.00000
.799	-4.950	.01900
.799	-2.710	.02650
.799	-.460	.01160
.799	1.740	.00150
.799	3.980	-.01470
.799	6.180	-.01330
.799	8.390	.01180
.799	10.540	.01950
GRADIENT		-.00414

RUN NO. 143/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
.902	-11.940	-.05640
.902	-9.700	-.02440
.902	-7.400	.00360
.902	-5.080	.04200
.902	-2.790	.03570
.902	-.480	.01640
.902	1.770	.00000
.902	4.060	-.02930
.902	6.320	-.03560
.902	8.590	.00260
.902	10.810	.03660
GRADIENT		-.00927

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MSFC 594(IA33) 740TS (TIP1SIP201)

ORB STING

(AIC210) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = -5.000 RUDDER = .000  
 ELEVTR = .000

## PARAMETRIC DATA

RUN NO. 146/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.102	-12.530	-.11980
1.102	-10.140	-.07650
1.102	-7.730	-.04770
1.102	-5.290	-.04680
1.102	-2.900	-.03570
1.102	-.520	-.01560
1.102	1.820	.00860
1.102	4.200	.03100
1.102	6.550	.04430
1.102	8.930	.04020
1.102	11.290	.05610
	GRADIENT	.00949

RUN NO. 142/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.252	-12.790	-.15740
1.252	-10.370	-.11210
1.252	-7.860	-.08040
1.252	-5.370	-.05610
1.252	-2.940	-.03590
1.252	-.520	-.00940
1.252	1.870	.01520
1.252	4.290	.03390
1.252	6.700	.05230
1.252	9.160	.06300
1.252	11.580	.08180
	GRADIENT	.00972

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MSFC 5941(A33) 740TS (TIPISIF201)

ORB STING

(AIC210) ( 12 SEP 75 )

REFERENCE DATA

SREF = 101.1500 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN.      YMRP = .0000 IN. YT  
 BREF = .0000 IN.        ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.003    RUDDER = .000  
 ELEVTR = .000

RUN NO. 140/ 0    RN/L = 6.53    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.460	-12.780	-.15850
1.460	-10.370	-.12580
1.460	-7.920	-.08970
1.460	-5.430	-.05850
1.460	-2.980	-.02910
1.460	-.540	-.00790
1.460	1.880	.01520
1.460	4.320	.03370
1.460	6.780	.05300
1.460	9.220	.06450
1.460	11.630	.08310
GRADIENT		.00870

RUN NO. 139/ 0    RN/L = 7.05    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.966	-12.970	-.14110
1.966	-10.460	-.11260
1.966	-7.970	-.08660
1.966	-5.480	-.05720
1.966	-3.000	-.03190
1.966	-.520	-.00430
1.966	1.930	.02380
1.966	4.420	.03980
1.966	6.910	.05400
1.966	9.390	.06920
1.966	11.850	.08500
GRADIENT		.00984

PARAMETRIC DATA

REFERENCE DATA

SREF = 101.1500 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = -5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO 135/ 0    RN/L = 4.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
2.990	-11.350	-.09030
2.990	-9.220	-.07600
2.990	-7.060	-.05770
2.990	-4.850	-.03940
2.990	-2.650	-.02020
2.990	-.440	-.00610
2.990	1.740	.00610
2.990	3.940	.02440
2.990	6.130	.04130
2.990	8.320	.05830
2.990	10.440	.07140
	GRADIENT	.00701

RUN NO. 164/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
4.959	-10.760	-.07640
4.959	-8.750	-.06680
4.959	-6.690	-.05400
4.959	-4.590	-.03100
4.959	-2.510	-.01350
4.959	-.390	-.00150
4.959	1.690	.00630
4.959	3.790	.01900
4.959	5.870	.03420
4.959	7.950	.04930
4.959	9.960	.06440
	GRADIENT	.00572

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IA33 TABULATED DATA

MSFC 594(IA33) 740TS (T2P1S3P201F2) ORB STING

(AIC221) ( 12 SEP 75 )

REFERENCE DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 96/ 0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
.600	-11.890	-.00150
.600	-9.750	-.00220
.600	-7.570	-.00390
.600	-5.360	-.00390
.600	-3.160	-.00390
.600	-.930	-.00390
.600	1.240	-.00390
.600	3.480	-.00610
.600	5.670	-.00560
.600	7.890	-.00610
.600	9.990	-.00620
.600	GRADIENT	-.00030

RUN NO. 95/ 0 RN/L = 5.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
.798	-12.940	.00150
.798	-10.570	.00260
.798	-8.240	.00110
.798	-5.860	.00030
.798	-3.530	.00000
.798	-1.180	-.00070
.798	1.150	-.00260
.798	3.500	-.00340
.798	5.830	-.00410
.798	8.170	-.00410
.798	10.390	-.00420
.798	GRADIENT	-.00052



MSFC 594(IA33) 740TS (T2P153P201F2) ORB STING

(A1C221) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 CLEVTR = .000

RUN NO. 94/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
.905	-13.600	-.01750
.905	-11.100	-.01780
.905	-8.630	-.01540
.905	-6.140	-.01440
.905	-3.690	-.01470
.905	-1.260	-.01270
.905	1.150	-.00980
.905	3.570	-.00720
.905	5.960	-.00690
.905	8.390	-.00680
.905	10.660	.00130
	GRADIENT	.00105

RUN NO. 93/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
1.099	-14.910	.02010
1.099	-12.080	.02010
1.099	-9.400	.01870
1.099	-6.760	.01820
1.099	-4.150	.01670
1.099	-1.560	.01590
1.099	.930	.01360
1.099	3.480	.01170
1.099	5.970	.00920
1.099	8.490	.00440
1.099	10.900	.00470
	GRADIENT	+.00068

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1A33 TABULATED DATA

MSFC 594(1A33) 740TS (T2P1S3P201F2) ORB STING

(A1C221) ( 12 SEP 75 )

REFERENCE DATA

SREF = 101.1500 SQ. FT XMRP = 976 0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 97/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
1.254	-15.750	-.00230
1.254	-12.750	-.00280
1.254	-9.800	-.00280
1.254	-6.980	-.00260
1.254	-4.270	-.00340
1.254	-1.590	-.00390
1.254	.990	-.00470
1.254	3.580	-.00410
1.254	6.120	-.00490
1.254	8.700	-.00470
1.254	11.230	-.00410
	GRADIENT	-.00011

RUN NO. 101/ 0 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
1.461	-15.570	-.00280
1.461	-12.710	-.00360
1.461	-9.820	-.00380
1.461	-6.980	-.00360
1.461	-4.270	-.00380
1.461	-1.600	-.00380
1.461	.980	-.00360
1.461	3.570	-.00360
1.461	6.130	-.00460
1.461	8.720	-.00410
1.461	11.300	-.00430
	GRADIENT	.00033

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1A33 TABULATED DATA

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MSFC 594(1A33) 740TS (T2P1S3P201F2) ORB STING

(A1C221) ( 12 SEP 75 )

REFERENCE DATA

SREF = 101.1500 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN.       YMRP = .0000 IN. YT  
 BREF = .0000 IN.        ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 87/ 0    RN/L = 7.06    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
1.960	-15.540	.01390
1.960	-12.660	.01330
1.960	-9.840	.01310
1.960	-6.980	.01140
1.960	-4.250	.01170
1.960	-1.590	.01070
1.960	.960	.01040
1.960	3.530	.00950
1.960	6.100	.00780
1.960	8.820	.00560
1.960	11.470	.00520
	GRADIENT	-.00027

RUN NO. 96/ 0    RN/L = 4.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
2.990	-12.070	.00000
2.990	-9.900	-.00180
2.990	-7.680	-.00090
2.990	-5.430	-.00180
2.990	-3.170	-.00180
2.990	-.940	-.00510
2.990	1.260	-.00470
2.990	3.500	-.00320
2.990	5.710	-.00180
2.990	7.950	-.00280
2.990	10.100	-.00180
	GRADIENT	-.00017

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1A33 TABULATED DATA

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MSFC 594(1A33) 740TS (T2P1S3P201F2) ORB STING

(A1C221) ( 12 SEP 75 )

REFERENCE DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 99/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
4.959	-11.100	-.00870
4.959	-9.080	-.01030
4.959	-7.010	-.00790
4.959	-4.910	-.00310
4.959	-2.800	-.00230
4.959	- .690	-.00550
4.959	1.400	-.00710
4.959	3.520	-.00870
4.959	5.600	-.00870
4.959	7.710	-.00870
4.959	9.720	-.00870
	GRADIENT	-.00076

MSFC 594(1A33) 740TS (T2P1S3P201F2) ORB STING

(A1C221) ( 12 SEP 75 )

REFERENCE DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 91/ 0 RN/L = 4.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
.595	-11.350	-.00790
.595	-9.280	.00000
.595	-7.130	.00730
.595	-4.940	.01580
.595	-2.750	.01410
.595	- .540	.01020
.595	1.660	.01360
.595	3.840	.01240
.595	6.010	.02610
.595	8.190	.02620
.595	10.280	.03890
	GRADIENT	-.00033

MSFC 594(1A33) 740TS (T2P1S3P201F2) ORB STING

(A1C222) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 90/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
.902	-12.430	-.03300
.902	-10.150	-.02200
.902	-7.780	.00550
.902	-5.400	.01610
.902	-3.020	.02620
.902	-.640	.01710
.902	1.720	-.00890
.902	4.110	-.01420
.902	6.470	.01640
.902	8.830	.02470
.902	11.130	.06510
	GRADIENT	-.00619

RUN NO. 92/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.099	-13.080	-.06490
1.099	-10.620	-.02320
1.099	-8.140	.00970
1.099	-5.630	.01390
1.099	-3.150	.01620
1.099	-.660	.01560
1.099	1.800	.01850
1.099	4.290	.01640
1.099	6.780	.02820
1.099	9.290	.04490
1.099	11.720	.09160
	GRADIENT	.00014

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IA33 TABULATED DATA

MSFC 594(IA33) 740TS (T2P1S3P201F2) ORB STING

(A1C222) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 101.1500 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 89/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.256	-13.380	-.12560
1.256	-10.850	-.07830
1.256	-8.290	-.03240
1.256	-5.720	-.00520
1.256	-3.190	.01440
1.256	-.650	.01750
1.256	1.860	.02300
1.256	4.410	.02860
1.256	6.950	.05070
1.256	9.560	.08150
1.256	12.080	.13260
GRADIENT		.00190

RUN NO. 88/ 0    RN/L = 7.05    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.967	-13.900	-.12780
1.967	-11.110	-.10300
1.967	-8.460	-.06530
1.967	-5.850	-.02500
1.967	-3.260	.00020
1.967	-.650	.00400
1.967	1.930	.01790
1.967	4.560	.03990
1.967	7.180	.06980
1.967	9.920	.10780
1.957	12.540	.13320
GRADIENT		.00511

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MSFC 594(IA33) 740TS (T2P1S3P201F2) ORB STING

(A1C222) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 100/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
4.959	-10.980	-.05090
4.959	-8.950	-.04290
4.959	-6.880	-.04050
4.959	-4.770	-.03180
4.959	-2.650	-.01740
4.959	-.520	-.00790
4.959	1.590	-.00870
4.959	3.730	.00000
4.959	5.830	.01510
4.959	7.950	.02140
4.959	9.960	.03570
	GRADIENT	.00340

MSFC 594(IA33) 740TS (T1P101)

ORB STING

(A1C223) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 151/ 0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
.600	-11.070	-.02700
.600	-9.010	-.02180
.600	-6.870	-.00830
.600	-4.720	.01060
.600	-2.570	.01390
.600	-.400	.00000
.600	1.750	-.00610
.600	3.910	-.00950
.600	6.030	.00000
.600	8.140	.02190
.600	10.210	.03440
	GRADIENT	-.00279

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1A33 TABULATED DATA

MSFC 594(1A33) 740TS (T1P101)

ORB STING

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(A1C223) ( 12 SEP 75 )

PARAMETRIC DATA

REFERENCE DATA

SREF = 101.1500 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = 5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 152/ 0    RN/L = 6.29    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
.904	-11.940	-.02660
.904	-9.640	-.01970
.904	-7.360	-.00360
.904	-5.030	.03250
.904	-2.740	.02790
.904	-.420	.01010
.904	1.840	-.01170
.904	4.130	-.03030
.904	6.390	-.02350
.904	8.670	.01410
.904	10.900	.03660
	GRADIENT	-.00859

RUN NO. 154/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.098	-12.480	-.08050
1.098	-10.090	-.04130
1.098	-7.660	-.01060
1.098	-5.220	-.00220
1.098	-2.820	.00110
1.098	-.430	-.00440
1.098	1.910	-.00810
1.098	4.290	-.00360
1.098	6.630	-.00420
1.098	9.020	.00020
1.098	11.400	.01980
	GRADIENT	-.00075



MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C223) ( 12 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = 5.005 RUDDER = .000  
 ELEVTTR = .000

RUN NO. 153/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.250	-12.630	-.09150
1.250	-10.220	-.05990
1.250	-7.740	-.03020
1.250	-5.260	-.02470
1.250	-2.840	-.01260
1.250	-.420	-.00440
1.250	1.970	-.00020
1.250	4.330	.00810
1.250	6.740	.01860
1.250	9.170	.02390
1.250	11.620	.03750
	GRADIENT	.00277

RUN NO. 137/ 0 RN/L = 7.07 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.957	-12.850	-.11420
1.957	-10.340	-.09090
1.957	-7.860	-.07370
1.957	-5.360	-.04940
1.957	-2.900	-.02760
1.957	-.450	-.00660
1.957	1.960	.01840
1.957	4.420	.02970
1.957	6.870	.04520
1.957	9.410	.05830
1.957	11.890	.06870
	GRADIENT	.00808

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(A33 TABULATED DATA

MSFC 594(1A33) 740TS (TIP101)

ORB STING

(A1C223) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = 5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 162/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
4.959	-10.670	-.04770
4.959	-8.670	-.03810
4.959	-6.630	-.03020
4.959	-4.550	-.02140
4.959	-2.470	-.00710
4.959	-.380	-.00070
4.959	1.680	.00390
4.959	3.760	.01350
4.959	5.850	.02620
4.959	7.910	.03890
4.959	9.910	.04450
	GRADIENT	.00389

MSFC 594(1A33) 740TS (TIP101)

ORB STING

(A1C224) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = -5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 150/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
.598	-11.080	-.01910
.598	-9.000	-.01400
.598	-6.670	-.00560
.598	-4.720	.00950
.598	-2.580	.01230
.598	-.410	.00160
.598	1.720	.00000
.598	3.890	-.00890
.598	6.010	-.00560
.598	8.160	.01630
.598	10.210	.03350
	GRADIENT	-.00228

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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(AIC224) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = -5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 149/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
.903	-11.990	-.05010
.903	-9.710	-.02260
.903	-7.400	.00360
.903	-5.070	.04240
.903	-2.770	.03680
.903	-.460	.01620
.903	1.810	.00000
.903	4.100	-.02750
.903	6.390	-.03560
.903	8.670	.00090
.903	10.900	.03010
	GRADIENT	-.00914

RUN NO. 147/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.101	-12.510	-.11590
1.101	-10.100	-.07630
1.101	-7.690	-.04700
1.101	-5.250	-.04690
1.101	-2.860	-.03280
1.101	-.480	-.01420
1.101	1.870	.00860
1.101	4.250	.03330
1.101	6.610	.04210
1.101	9.040	.04550
1.101	11.410	.06090
	GRADIENT	.00934

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MSFC 594(IA33) 740TS (T1P101)

ORB STING

(A1C224) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 101.1500 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = -5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 148/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.254	-12.730	-.15850
1.254	-10.270	-.11070
1.254	-7.800	-.08080
1.254	-5.320	-.05630
1.254	-2.880	-.03640
1.254	-.470	-.00940
1.254	1.910	.01810
1.254	4.330	.03760
1.254	6.750	.05350
1.254	9.250	.06430
1.254	11.690	.08180
	GRADIENT	.01039

RUN NO. 138/ 0    RN/L = 7.05    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.967	-12.930	-.14130
1.967	-10.400	-.11790
1.967	-7.890	-.09340
1.967	-5.380	-.06260
1.967	-2.910	-.03390
1.967	-.460	-.00670
1.967	1.960	.02580
1.967	4.150	.04480
1.967	6.930	.05880
1.967	9.470	.07370
1.967	12.000	.08950
	GRADIENT	.01096

MSFC 594(IA33) 740TS (T1P)01)

ORB STING

(AIC224) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = -5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 163/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
4.959	-10.740	-.06830
4.959	-8.730	-.05720
4.959	-6.670	-.04050
4.959	-4.560	-.02300
4.959	-2.500	-.01110
4.959	-.390	.00070
4.959	1.700	.00550
4.959	3.780	.01900
4.959	5.870	.02460
4.959	7.940	.04130
4.959	9.950	.05790
	GRADIENT	.00481

MSFC 594(IA33) 740TS (TIPIS2P201F2)

ORB STING

(AIC225) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 57/ 0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
.599	-11.730	.00000
.599	-9.600	.00000
.599	-7.430	.00000
.599	-5.230	.00000
.599	-3.010	.00000
.599	-.820	.00000
.599	1.410	.00000
.599	3.640	.00000
.599	5.820	.00000
.599	8.020	.00000
.599	10.120	.00000
	GRADIENT	.00000

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MSFC 594 (IA33) 740TS (TIP1S2P201F2) ORB STING

(A1C225) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF \* 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF \* 73.2000 IN. YMRP = ,0000 IN. YT  
 BREF \* .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE \* .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 58/ 0 RN/L = 5.95 GRADIENT INTERVAL = -5.00/ 5.0

MACH	ALPHA	CHR
.800	-12.660	.00000
.800	-10.370	.00000
.800	-8.050	.00000
.800	-5.690	.00000
.800	-3.410	.00000
.800	-1.050	.00000
.800	1.290	.00000
.800	3.670	.00000
.800	6.010	.00000
.800	8.330	.00000
.800	10.550	.00000
	GRADIENT	.00000

RUN NO. 59/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
.904	-13.220	.00000
.904	-10.820	.00000
.904	-8.400	.00000
.904	-5.940	.00000
.904	-3.510	.00000
.904	-1.150	.00000
.904	1.280	.00000
.904	3.690	.00000
.904	6.090	.00000
.904	8.460	.00000
.904	10.740	.00000
	GRADIENT	.00000

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MSFC 594(1A33) 740TS (TIP1S2P201F2) ORB STING

(A1C225) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 101.1500 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN.      YMRP = .0000 IN. YT  
 BREF = .0000 IN.        ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 61/ 1    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
1.101	-14.480	.00000
1.101	-11.800	.00000
1.101	-9.190	.00000
1.101	-6.590	.00000
1.101	-4.020	.00000
1.101	-1.440	.00000
1.101	1.080	.00000
1.101	3.600	.00000
1.101	6.140	.00000
1.101	8.630	.00000
1.101	10.960	.00000
	GRADIENT	.00000

RUN NO. 60/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
1.254	-15.150	.00000
1.254	-12.280	.00000
1.254	-9.450	.00000
1.254	-6.700	.00000
1.254	-4.030	.00000
1.254	-1.390	.00000
1.254	1.200	.00000
1.254	3.740	.00000
1.254	6.280	.00000
1.254	8.770	.00000
1.254	11.240	.00000
	GRADIENT	.00000

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MSFC 594(1A33) 740TS (11P1S2P201F2) ORB STING

(A1C225) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 110/ 0 RN/L = 6.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
1.467	-15.070	-.00180
1.467	-12.280	-.00200
1.467	-9.450	-.00280
1.467	-6.710	-.00310
1.467	-4.020	-.00280
1.467	-1.390	-.00280
1.467	1.220	-.00380
1.467	3.740	-.00360
1.467	6.290	-.00280
1.467	8.770	-.00510
1.467	11.260	-.00430
	GRADIENT	-.00013

RUN NO. 77/ 0 RN/L = 7.07 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
1.959	-14.950	.00000
1.959	-12.130	.00000
1.959	-9.350	.00000
1.959	-6.500	.00000
1.959	-4.030	.00000
1.959	-1.440	.00000
1.959	1.160	.00000
1.959	3.730	.00000
1.959	6.280	.00000
1.959	8.870	.00000
1.959	11.450	.00000
	GRADIENT	.00000



MSFC 594(1A33) 740TS (T1P1S2P201F2) ORB STING

(A1C225) ( 12 SEP 75 )

## REFERENCE DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 83/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
2.990	-11.830	.00000
2.990	-9.680	.00000
2.990	-7.490	.00000
2.990	-5.230	.00000
2.990	-3.020	.00000
2.990	-.810	.00000
2.990	1.400	.00000
2.990	3.620	.00000
2.990	5.810	.00000
2.990	8.000	.00000
2.990	10.140	.00000
	GRADIENT	.00000

RUN NO. 82/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
4.959	-10.970	.00000
4.959	-8.950	.00000
4.959	-6.870	.00000
4.959	-4.800	.00000
4.959	-2.680	.00000
4.959	-.580	.00000
4.959	1.520	.00000
4.959	3.630	.00000
4.959	5.700	.00000
4.959	7.780	.00000
4.959	9.800	.00000
	GRADIENT	.00000

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MSFC 594(1A33) 740TS (TIP1S2P201F2) ORB STING

(A1C225) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 65/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
.598	-11.080	.00000
.598	-9.010	.00000
.598	-6.870	.00000
.598	-4.720	.00000
.598	-2.580	.00000
.598	-.440	.00000
.598	1.700	.00000
.598	3.850	.00000
.598	5.970	.00000
.598	8.090	.00000
.598	10.150	.00000
	GRADIENT	.00000

RUN NO. 64/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
.901	-11.860	.00000
.901	-9.640	.00000
.901	-7.380	.00000
.901	-5.060	.00000
.901	-2.780	.00000
.901	-.500	.00000
.901	1.780	.00000
.901	4.060	.00000
.901	6.300	.00000
.901	8.540	.00000
.901	10.740	.00000
	GRADIENT	.00000

MSFC 594 (1A33) 740TS (T1P1S2P201F2) ORB STING

(A1C226) ( 12 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF \* 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF \* 73.2700 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 62/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.098	-12.390	.00000
1.098	-10.020	.00000
1.098	-7.640	.00000
1.098	-5.220	.00000
1.098	-2.860	.00000
1.098	-.510	.00000
1.098	1.810	.00000
1.098	4.170	.00000
1.098	6.500	.00000
1.098	8.860	.00000
1.098	11.210	.00000
	GRADIENT	.00000

RUN NO. 63/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.247	-12.590	.00000
1.247	-10.180	.00000
1.247	-7.720	.00000
1.247	-5.260	.00000
1.247	-2.860	.00000
1.247	-.490	.00000
1.247	1.870	.00000
1.247	4.250	.00000
1.247	6.620	.00000
1.247	9.050	.00000
1.247	11.470	.00000
	GRADIENT	.00000

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MSFC 594(1A33) 740TS (TIPIS2P201F2) ORB STING

(AIC226) ( 12 SEP 75 )

REFERENCE DATA

SREF =	101.1500 SQ. FT	XMRP =	976.0000 IN. XT
LREF =	73.2000 IN.	YMRP =	.0000 IN. YT
BREF =	.0000 IN.	ZMRP =	400.0000 IN. ZT
SCALE =	.0040		

PARAMETRIC DATA

ALPHA =	.000	RUDDER =	.000
ELEVTR =	.000		

RUN NO. 76/ 0 RN/L = 7.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
1.950	-12.710	.00000
1.950	-10.310	.00000
1.950	-7.870	.00000
1.950	-5.390	.00000
1.950	-2.950	.00000
1.950	-.530	.00000
1.950	1.900	.00000
1.950	4.350	.00000
1.950	6.780	.00000
1.950	9.240	.00000
1.950	11.730	.00000
	GRADIENT	.00000

RUN NO. 102/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
4.959	-10.760	-.05010
4.959	-8.750	-.04290
4.959	-6.680	-.03890
4.959	-4.620	-.02780
4.959	-2.530	-.01900
4.959	-.430	-.00870
4.959	1.650	-.00150
4.959	3.750	.00390
4.959	5.820	.00870
4.959	7.910	.02460
4.959	9.900	.03100
	GRADIENT	.00387

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MSFC 594(1A33) 740TS (TIP193P201F2) ORB STING

(A1C235) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 86/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
2.990	-11.990	-.00140
2.990	-9.860	-.00320
2.990	-7.650	-.00320
2.990	-5.380	-.00420
2.990	-3.150	-.00420
2.990	-.940	-.00320
2.990	1.260	-.00230
2.990	3.480	.00000
2.990	5.670	.00000
2.990	7.910	-.00040
2.990	10.040	-.00180
	GRADIENT	.00061

RUN NO. 85/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
4.959	-11.050	.00230
4.959	-9.060	.00310
4.959	-7.000	.00230
4.959	-4.900	.00230
4.959	-2.780	.00070
4.959	-.680	.00000
4.959	1.420	.00000
4.959	3.510	.00000
4.959	5.590	.00070
4.959	7.680	.00070
4.959	9.680	.00070
	GRADIENT	-.00025

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MSFC 594(IA33) 740TS (T1P1S3P201F2) ORB STING

(A1C236) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 84/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR
4.959	-10.950	-.06280
4.959	-8.930	-.05720
4.959	-6.860	-.04610
4.959	-4.730	-.02780
4.959	-2.620	-.01510
4.959	-.510	-.00070
4.959	1.590	.00310
4.959	3.720	.01980
4.959	5.810	.03330
4.959	7.920	.04920
4.959	9.920	.05960
	GRADIENT	.00537

MSFC 594(IA33) 740TS (01)

ORB STING

(A1C237) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 172/ 0 RN/L = 5.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
.600	-10.790	.00220
.600	-8.780	.00050
.600	-6.720	.00000
.600	-4.610	.00000
.600	-2.500	.00000
.600	-.380	-.00050
.600	1.720	.00000
.600	3.850	.00000
.600	5.940	-.00160
.600	8.050	-.00110
.600	10.070	-.00160
	GRADIENT	-.00000

MSFC 594(1A33) 740TS (01)

ORB STING

(A1C237) ( 12 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 171/ 0 RN/L = 5.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
.798	-11.200	.00860
.798	-9.100	.00670
.798	-6.980	.00480
.798	-4.810	.00410
.798	-2.630	.00150
.798	-.450	.00000
.798	1.710	-.00180
.798	3.910	-.00150
.798	6.060	-.00260
.798	8.220	-.00260
.798	10.310	-.00420
	GRADIENT	-.00067

RUN NO. 170/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
.902	-11.410	.01020
.902	-9.310	.00820
.902	-7.140	.00620
.902	-4.930	.00620
.902	-2.710	.00550
.902	-.470	.00330
.902	1.740	.00230
.902	3.940	.00090
.902	6.140	.00030
.902	8.310	.00090
.902	10.440	.00000
	GRADIENT	-.00062

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MSFC 594(1A33) 740TS (01)

ORB STING

(A1C237) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 168/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
1.102	-11.620	-.00250
1.102	-9.460	-.00360
1.102	-7.230	-.00360
1.102	-4.970	-.00250
1.102	-2.690	-.00220
1.102	- .400	-.00220
1.102	1.860	-.00300
1.102	4.110	-.00360
1.102	6.370	-.00410
1.102	8.600	-.00580
1.102	10.770	-.00780
	GRADIENT	-.00013

RUN NO. 169/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
1.252	-11.620	-.00280
1.252	-9.450	-.00210
1.252	-7.210	-.00200
1.252	-4.930	-.00210
1.252	-2.660	-.00260
1.252	- .380	-.00260
1.252	1.870	-.00280
1.252	4.120	-.00360
1.252	6.380	-.00440
1.252	8.630	-.00490
1.252	10.810	-.00730
	GRADIENT	-.00014

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MSFC 594(IA33) 740TS (01)

ORL STING

(AIC237) ( 12 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVR = .000

RUN NO. 173/ 0 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
1.460	-11.430	-.00150
1.460	-9.290	-.00250
1.460	-7.090	-.00250
1.460	-4.850	-.00150
1.460	-2.610	-.00180
1.460	-.366	-.00100
1.460	1.860	-.00180
1.460	4.090	-.00120
1.460	6.320	-.00150
1.460	8.540	-.00280
1.460	10.690	-.00280
	GRADIENT	.00003

RUN NO. 174/ 0 RN/L = 7.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
1.967	-11.300	.00120
1.967	-9.160	.00160
1.967	-7.000	.00160
1.967	-4.800	.00090
1.967	-2.610	.00110
1.967	-.390	.00120
1.967	1.800	.00160
1.967	4.010	.00090
1.967	6.200	.00000
1.967	8.390	.00000
1.967	10.500	-.00070
	GRADIENT	.00002

6.5

DATE 23 OCT 75

IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (01)

ORB STING

(A1C237) ( 12 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 101.1500 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 73.2000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 175/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
2.990	-10.610	-.00370
2.990	-8.630	-.00180
2.990	-6.590	-.00090
2.990	-4.520	-.00040
2.990	-2.460	-.00140
2.990	-.370	-.00040
2.990	1.680	-.00040
2.990	3.760	.00000
2.990	5.840	.00000
2.990	7.890	.00180
2.990	9.890	.00320
GRADIENT		.00009

RUN NO. 176/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR
4.959	-10.380	.00000
4.959	-8.440	.00070
4.959	-6.450	.00310
4.959	-4.420	.00230
4.959	-2.390	.00230
4.959	-.340	.00070
4.959	1.690	.00230
4.959	3.720	.00230
4.959	5.770	.00310
4.959	7.770	.00310
4.959	9.720	.00310
GRADIENT		-.00000

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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C305) ( 11 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN. YMRP = .0000 IN. YT  
 BRP = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 122/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
.598	-11.180	.04140	.04200
.598	-9.120	.03420	.03580
.598	-7.030	.02330	.03200
.598	-4.900	.02070	.02770
.598	-2.790	.01940	.02420
.598	-1.660	.01920	.02870
.598	1.450	.02410	.02890
.598	3.590	.02210	.03040
.598	5.710	.02080	.03040
.598	7.810	.01480	.03040
.598	9.830	.00850	.03130
	GRADIENT	.00035	.00048

RUN NO. 123/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
.900	-11.930	.06060	.06140
.900	-9.750	.04190	.05070
.900	-7.540	.03720	.04460
.900	-5.280	.02520	.03790
.900	-3.030	.02680	.03790
.900	-1.770	.02770	.04010
.900	1.450	.03340	.04180
.900	3.700	.03320	.04250
.900	5.920	.03180	.04470
.900	8.100	.02350	.04510
.900	10.200	.01010	.04360
	GRADIENT	.00111	.00069

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MSFC 594 (IA33) 740TS (TIP101)

ORB STING

(AIC305) ( 11 SEP 75 )

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
ELEVTR = .000

REFERENCE DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
LREF = 90.7000 IN. YMRP = .0000 IN. YT  
BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
SCALE = .0040

RUN NO. 125/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
1.105	-12.430	.09170	.13350
1.105	-10.150	.07680	.11160
1.105	-7.840	.06190	.09660
1.105	-5.490	.05610	.08540
1.105	-3.160	.05830	.08270
1.105	- .820	.05760	.08590
1.105	1.480	.05230	.08920
1.105	3.800	.03480	.09040
1.105	6.100	.01650	.08800
1.105	8.360	-.00690	.08610
1.105	10.540	-.02950	.08380
	GRADIENT	-.00327	.00114

RUN NO. 124/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
1.256	-12.600	.10710	.15330
1.256	-10.270	.09180	.14420
1.256	-7.920	.08030	.13500
1.256	-5.560	.06640	.13020
1.256	-3.220	.04830	.12700
1.256	- .880	.02750	.12190
1.256	1.420	.00830	.11480
1.256	3.750	-.00860	.10840
1.256	6.040	-.02360	.10240
1.256	8.340	-.04190	.09380
1.256	10.540	-.05620	.07770
	GRADIENT	-.00618	-.00271

MSFC 594(IA33) 740TS (T1P101)

ORB STING

(AIC305) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 133/ 0 RN/L = 7.03 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
1.971	-12.600	.05150	.14370
1.971	-10.250	.03920	.12250
1.971	-7.890	.02590	.10420
1.971	-5.550	.01140	.08880
1.971	-3.230	-.00160	.07360
1.971	-.910	-.01470	.06040
1.971	1.390	-.02710	.04720
1.971	3.720	-.03570	.03220
1.971	6.000	-.04400	.01510
1.971	8.320	-.05310	-.00660
1.971	10.550	-.05990	-.02320
	GRADIENT	-.00495	-.00594

RUN NO. 167/ 0 RN/L = 4.67 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
2.990	-11.250	.01750	.06640
2.990	-9.200	.01070	.05720
2.990	-7.100	.00890	.04420
2.990	-4.950	.00430	.03450
2.990	-2.830	.00050	.02460
2.990	-.690	-.00120	.01600
2.990	1.420	-.00590	.00710
2.990	3.560	-.01150	.00000
2.990	5.690	-.01730	-.00620
2.990	7.800	-.02400	-.01050
2.990	9.850	-.03000	-.01690
	GRADIENT	-.00178	-.00406

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IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C305) ( 11 SEP 75 )

REFERENCE DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 106/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
4.959	-10.730	.00670	.01510
4.959	-8.770	.00680	.01110
4.959	-6.750	.00550	.00770
4.959	-4.700	.00210	.00830
4.959	-2.610	.00060	.00300
4.959	-.550	.00000	.00030
4.959	1.510	-.00180	-.00090
4.959	3.580	-.00430	-.00180
4.959	5.620	-.00770	-.00490
4.959	7.670	-.01230	-.00770
4.959	9.630	-.01540	-.00920
GRADIENT		-.00073	-.00117

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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C306) ( 11 SEP 75 )

REFERENCE DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 121/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
.598	-11.130	.02880	.06880
.598	-9.050	.02800	.06320
.598	-6.930	.02730	.05790
.598	-4.780	.02470	.05010
.598	-2.630	.02280	.04080
.598	-.460	.02120	.02830
.598	1.680	.02070	.02900
.598	3.840	.01860	.02360
.598	5.950	.01750	.02560
.598	8.090	.01740	.02500
.598	10.140	.01660	.02540
GRADIENT		-.00066	-.00282

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IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C306) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 120/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHE1
.902	-11.970	.04800	.10050
.902	-9.730	.04660	.09320
.902	-7.440	.04320	.08360
.902	-5.130	.03810	.07040
.902	-2.820	.03450	.06010
.902	-.510	.03260	.04850
.902	1.760	.02420	.03020
.902	4.060	.01730	.01590
.902	6.330	.01350	.00640
.902	8.620	.00610	-.00370
.902	10.820	.00370	-.00490
GRADIENT		-.00262	-.00658

RUN NO. 118/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHE1
1.096	-10.120	.04120	.19660
1.096	-7.710	.04980	.17120
1.096	-5.290	.05340	.13890
1.096	-2.920	.05850	.11660
1.096	-.540	.05940	.10160
1.096	1.800	.06210	.08220
1.096	4.170	.06200	.06540
1.096	6.530	.05690	.05610
1.096	8.900	.05330	.05070
1.096	11.240	.05130	.05110
GRADIENT		.00056	-.00733

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IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(AIC306) ( 11 SEP 75 )

PARAMETRIC DATA

REFERENCE DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .3040

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 119/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHE0	CHE1
1.255	-12.720	-.01560	.16200
1.255	-10.270	-.01460	.15640
1.255	-7.810	-.00960	.15160
1.255	-5.350	-.00170	.14580
1.255	-2.930	.01060	.13200
1.255	-.510	.02330	.11990
1.255	1.850	.03620	.10570
1.255	4.260	.04680	.09560
1.255	6.600	.05490	.08990
1.255	9.110	.05700	.09090
1.255	11.540	.05730	.09280
	GRADIENT	.00508	-.00516

RUN NO. 134/ 0    RN/L = 7.05    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHE0	CHE1
1.967	-12.970	-.02920	.05310
1.967	-10.370	-.02420	.04420
1.967	-7.900	-.02090	.04230
1.967	-5.420	-.01930	.04350
1.967	-2.970	-.01910	.04680
1.967	-.520	-.01870	.05460
1.967	1.880	-.01730	.05880
1.967	4.340	-.01410	.06500
1.967	6.820	-.00820	.06400
1.967	9.380	-.00330	.06510
1.967	11.840	.00130	.06510
	GRADIENT	.00067	.00242



MSFC 594 (IA33) 740TS (T1P101)

ORB STING

(A1C306) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 166/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
2.990	-11.290	-.00910	-.00940
2.990	-9.190	-.00780	-.00820
2.990	-7.040	-.00600	-.00650
2.990	-4.850	-.00490	-.00030
2.990	-2.670	-.00360	.00160
2.990	-.470	-.00270	.00850
2.990	1.700	-.00100	.01160
2.990	3.890	-.00290	.01460
2.990	6.060	-.00430	.01840
2.990	8.250	-.00450	.02130
2.990	10.340	-.00250	.02460
	GRADIENT	.00030	.00182

RUN NO. 105/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
4.959	-10.750	-.00670	-.01230
4.959	-8.770	-.00550	-.00980
4.959	-6.700	-.00430	-.00640
4.959	-4.640	-.00370	-.00270
4.959	-2.550	-.00300	-.00060
4.959	-.450	-.00210	-.00150
4.959	1.630	-.00150	.00000
4.959	3.740	-.00060	-.00060
4.959	5.800	-.00120	-.00120
4.959	7.880	-.00330	.00120
4.959	9.870	-.00370	.00150
	GRADIENT	.00037	.00023

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IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(A1C307) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 130/ 0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
.599	-11.700	.03890	.05230
.599	-9.560	.02940	.04930
.599	-7.390	.02470	.04660
.599	-5.200	.02270	.04500
.599	-3.020	.02130	.04450
.599	-.800	.02380	.04690
.599	1.390	.02410	.04610
.599	3.600	.02380	.04920
.599	5.810	.02120	.04910
.599	8.020	.01550	.05090
.599	10.110	.00900	.05030
	GRADIENT	.00035	.00060

RUN NO. 129/ 0 RN/L = 5.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
.797	-12.630	.05520	.06000
.797	-10.350	.03880	.05560
.797	-8.040	.03200	.05030
.797	-5.680	.02820	.04850
.797	-3.380	.02680	.04770
.797	-1.030	.02980	.04820
.797	1.290	.03410	.05190
.797	3.650	.03310	.05390
.797	6.020	.02900	.05360
.797	8.360	.02090	.05170
.797	10.540	.00650	.04580
	GRADIENT	.00099	.00095

MSFC 594(1A33) 740TS (T1P1S1P201)

ORB STING

(A1C307) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 128/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
.905	-13.240	.06550	.07360
.905	-10.830	.06790	.06770
.905	-8.400	.05210	.05650
.905	-5.960	.04700	.04970
.905	-3.540	.04420	.04470
.905	-1.130	.03770	.04050
.905	1.270	.03670	.04160
.905	3.650	.03760	.04450
.905	6.080	.03240	.04590
.905	8.480	.02490	.04460
.905	10.730	.00970	.03740
	GRADIENT	-.00087	.00002

RUN NO. 131/ 0 RN/L = 6.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
1.049	-14.130	.10890	.16390
1.049	-11.560	.09120	.14400
1.049	-9.000	.08390	.12280
1.049	-6.400	.08630	.11590
1.049	-3.860	.08950	.11220
1.049	-1.330	.08770	.11080
1.049	1.130	.07680	.11310
1.049	3.630	.06260	.10510
1.049	6.150	.04290	.10460
1.049	8.580	.02400	.09970
1.049	10.900	.00360	.09620
	GRADIENT	-.00367	-.00064

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IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (T1P1S1P201)

ORB STING

(A1C307) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 126/ 3 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHE0	CHE1
1.102	-14.370	.00000	.00000
1.102	-11.720	.00000	.00000
1.102	-9.130	.00000	.00000
1.102	-6.540	.00000	.00000
1.102	-3.960	.00000	.00000
1.102	-1.390	.00000	.00000
1.102	1.120	.00000	.00000
1.102	3.640	.00000	.00000
1.102	6.180	.00000	.00000
1.102	8.660	.00000	.00000
1.102	11.010	.00000	.00000
	GRADIENT	.00000	.00000

RUN NO. 127/ 1 RN/L = 6.69 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHE0	CHE1
1.253	-15.080	.11240	.19400
1.253	-12.250	.09650	.16940
1.253	-9.430	.08580	.16350
1.253	-6.680	.06710	.15540
1.253	-4.010	.05080	.15200
1.253	-1.360	.03180	.15120
1.253	1.200	.01430	.14920
1.253	3.740	-.00360	.14530
1.253	6.270	-.02120	.13410
1.253	8.770	-.03610	.11170
1.253	11.240	-.04830	.09960
	GRADIENT	-.00700	-.00085

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MSFC 594 (IA33) 740TS (T1P1S1P2Q1)

ORB STING

(A1C307) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 109/ 0 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
1.464	-15.010	.10580	.17840
1.464	-12.240	.08520	.16460
1.464	-9.440	.06230	.15450
1.464	-6.690	.03290	.14150
1.464	-4.010	.01040	.13060
1.464	-1.370	-.01040	.11980
1.464	1.220	-.02630	.11380
1.464	3.770	-.03740	.10870
1.464	6.300	-.04630	.09450
1.464	8.790	-.05340	.07840
1.464	11.280	-.05800	.06580
	GRADIENT	-.00615	-.00277

RUN NO. 132/ 0 RN/L = 7.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
1.968	-14.660	.02870	.12760
1.968	-12.000	.01760	.10930
1.968	-9.330	.00720	.09300
1.968	-6.630	-.00460	.07730
1.938	-3.970	-.01650	.06250
1.968	-1.380	-.03230	.04860
1.968	1.150	-.04770	.03530
1.968	3.710	-.05930	.02340
1.968	6.260	-.06250	.01660
1.968	8.880	-.06140	.00660
1.968	11.440	-.04950	.00150
	GRADIENT	-.00562	-.00511

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

PAGE 301

(A1C307) ( 11 SEP 75 )

REFERENCE DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.       YMRP = .0000 IN. YT  
 BREF = .0000 IN.        ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 108/ 0    RN/L = 4.56    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
2.990	-11.810	.00180	.04150
2.990	-9.690	.00030	.03560
2.990	-7.490	.00000	.02640
2.990	-5.240	.00000	.01810
2.990	-3.010	-.00180	.01130
2.990	-.800	-.00380	.00520
2.990	1.400	-.00650	-.00010
2.990	3.610	-.01170	-.00960
2.990	5.800	-.02010	-.01750
2.990	8.000	-.02680	-.02220
2.990	10.120	-.03930	-.02450
	GRADIENT	-.00147	-.00308

RUN NO. 107/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
4.959	-10.940	.00210	.00520
4.959	-8.950	.00300	.00340
4.959	-6.890	.00210	.00300
4.959	-4.800	.00180	.00180
4.959	-2.680	.00120	.00000
4.959	-.590	-.00060	-.00060
4.959	1.500	-.00150	.00000
4.959	3.610	-.00300	-.00300
4.959	5.690	-.00490	-.00610
4.959	7.780	-.00890	-.01110
4.959	9.770	-.01290	-.01290
	GRADIENT	-.00059	-.00046

REFERENCE DATA

PARAMETRIC DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN. YMRP = .0 JO IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 115/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
.598	-11.070	.02880	.07580
.598	-9.020	.02870	.07310
.598	-6.910	.02940	.06770
.598	-4.750	.02850	.06350
.598	-2.590	.02890	.05440
.598	-.440	.02950	.05210
.598	1.670	.02670	.04520
.598	3.820	.02350	.04200
.598	5.940	.02080	.03850
.598	8.080	.02000	.03580
.598	10.110	.01700	.03120
	GRADIENT	-.00057	-.00244

RUN NO. 114/ 0 RN/L = 5.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
.799	-11.590	.03750	.09270
.799	-9.440	.03770	.08720
.799	-7.220	.03740	.08060
.799	-4.980	.03630	.07320
.799	-2.740	.03440	.06500
.799	-.490	.03310	.05860
.799	1.730	.02920	.04630
.799	3.960	.02660	.04170
.799	6.160	.02420	.03750
.799	8.390	.02000	.02990
.799	10.530	.01540	.02750
	GRADIENT	-.00110	-.00367

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIP151P201)

ORB STING

(A1C308) ( 11 SEP 75 )

REFERENCE DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 113/ 0    RN/L = 6.27    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
.899	-11.880	.04580	.10470
.899	-9.660	.04696	.09960
.899	-7.370	.04730	.08920
.899	-5.090	.04530	.07830
.899	-2.800	.03970	.06640
.899	-.510	.03760	.05620
.899	1.750	.03210	.03690
.899	4.050	.02220	.01990
.899	6.300	.01520	.01230
.899	8.580	.00530	.00280
.899	10.750	.00230	.00010
	GRADIENT	-.00254	-.00696

RUN NO. 116/ 0    RN/L = 6.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
1.050	-12.340	.05650	.20950
1.050	-9.990	.06210	.19670
1.050	-7.610	.06840	.17960
1.050	-5.230	.07020	.15200
1.050	-2.870	.07570	.12930
1.050	-.520	.08350	.11930
1.050	1.790	.08650	.09350
1.050	4.130	.07890	.07340
1.050	6.460	.07100	.06010
1.050	8.810	.06470	.05540
1.050	11.090	.06020	.04540
	GRADIENT	.00054	-.00830



DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC30B) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCAL = .0040

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 117/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHE1
1.099	-12.420	.04120	.22180
1.099	-10.050	.04740	.21510
1.099	-7.650	.05800	.18890
1.099	-5.250	.06500	.16270
1.099	-2.890	.07360	.14680
1.099	-1.530	.07980	.13690
1.099	1.780	.08420	.11060
1.099	4.130	.08310	.08970
1.099	6.470	.07580	.07700
1.099	8.830	.07100	.07030
1.099	11.140	.06670	.06030
GRADIENT		.00141	-.00845

RUN NO. 112/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHE1
1.246	-12.630	-.01270	.18130
1.246	-10.220	-.01230	.17440
1.246	-7.750	-.00520	.17180
1.246	-5.290	.00370	.16930
1.246	-2.900	.01710	.16070
1.246	-1.510	.02900	.15040
1.246	1.830	.04390	.13500
1.246	4.220	.05830	.12870
1.246	6.610	.06580	.11720
1.246	9.050	.06890	.11420
1.246	11.440	.06950	.10630
GRADIENT		.00584	-.00470

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIPIS:P201)

ORB STING

(AIC308) ( 11 SEP 75 )

REFERENCE DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 111/ 0    RN/L = 6.51    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
1.465	-12.640	-.03430	.13120
1.465	-10.250	-.03370	.12850
1.465	-7.780	-.03430	.12200
1.465	-5.310	-.03370	.11750
1.465	-2.890	-.02870	.11590
1.465	-.520	-.02040	.11200
1.465	1.840	-.00600	.11520
1.465	4.230	.00800	.11370
1.465	6.630	.01990	.10530
1.465	9.090	.02960	.10010
1.465	11.490	.03700	.10100
	GRADIENT	.00525	-.00014

RUN NO. 135/ 0    RN/L = 7.05    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
1.965	-12.840	-.05860	.03790
1.965	-10.290	-.05440	.02840
1.965	-7.870	-.04770	.02630
1.965	-5.390	-.04300	.03190
1.965	-2.950	-.03900	.03450
1.965	-.520	-.03790	.04070
1.965	1.870	-.03400	.04910
1.965	4.290	-.02680	.05400
1.965	6.740	-.01990	.05980
1.965	9.220	-.01240	.05800
1.965	11.680	-.00300	.06010
	GRADIENT	.00168	.00277

MSFC 594(1A33) 740TS (TIP1SIP201)

ORB STING

(AIC308) 11 SEP 75

## REFERENCE DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 104/ 0    RN/L = 4.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
2.990	-11.280	-.01180	-.02800
2.990	-9.190	-.00850	-.02410
2.990	-7.010	-.00730	-.01770
2.990	-4.830	-.00650	-.00910
2.990	-2.650	-.00600	-.00580
2.990	-1.460	-.00470	-.00250
2.990	1.700	-.00380	-.00120
2.990	3.900	-.00580	.00160
2.990	6.070	-.00800	.00670
2.990	8.260	-.00850	.01090
2.990	10.360	-.00530	.01270
	GRADIENT	.00016	.00119

RUN NO. 103/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
4.959	-10.760	-.00670	-.01450
4.959	-8.750	-.00520	-.01200
4.959	-6.700	-.00300	-.00770
4.959	-4.620	-.00300	-.00800
4.959	-2.530	-.00150	-.00770
4.959	-1.430	-.00060	-.00550
4.959	1.650	.00000	-.00430
4.959	3.750	-.00060	-.00490
4.959	5.820	-.00120	-.00330
4.959	7.910	-.00060	-.00400
4.959	9.900	-.00090	-.00430
	GRADIENT	.00030	.00046

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1A33 TABULATED DATA

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MSFC 594(1A33) 740TS (TIPISIP201)

ORB STING

(A1C309) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF \* 210.0000 SQ. FT XMRP \* 975.0000 IN. XT  
 LREF \* 90.7000 IN. YMRP \* .0000 IN. YT  
 BREF \* .0000 IN. ZMRP \* 400.0000 IN. ZT  
 SCALE \* .0040

ALPHA \* 5.000 RUDDER \* .000  
 ELEVTR \* .000

RUN NO. 159/ 0 RN/L \* 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
.598	-11.010	.01960	.07720
.598	-8.950	.01980	.07210
.598	-6.830	.01980	.06760
.598	-4.680	.02120	.05300
.598	-2.540	.02200	.06140
.598	-.380	.02250	.05280
.598	1.750	.02160	.04640
.598	3.900	.02010	.04220
.598	6.010	.01770	.03680
.598	8.130	.01740	.03330
.598	10.190	.01510	.02880
GRADIENT		-.00011	-.00264

RUN NO. 158/ 0 RN/L = 5.93 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
.797	-11.500	.01940	.09050
.797	-9.320	.02230	.08700
.797	-7.120	.02700	.08120
.797	-4.860	.02760	.07490
.797	-2.640	.02930	.06870
.797	-.390	.03200	.06040
.797	1.820	.02990	.04770
.797	4.030	.02730	.04310
.797	6.250	.02510	.03630
.797	8.480	.02220	.03010
.797	10.620	.01930	.02280
GRADIENT		.00006	-.00380

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OF POOR QUALITY

MSFC 594 (IA33) 740TS (T1P1S1P201)

ORB STING

(A1C309) ( 11 SEP 75 )

REFERENCE DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 157/ 0 RN/L = 6.29 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHE1
.905	-11.840	.02930	.09350
.905	-9.620	.03130	.09060
.905	-7.340	.03210	.08560
.905	-5.010	.03290	.07930
.905	-2.720	.03200	.06810
.905	-.420	.03510	.05540
.905	1.850	.03190	.03690
.905	4.120	.02660	.02840
.905	6.410	.02210	.01580
.905	8.660	.01620	.00970
.905	10.850	.01400	.00750
	GRADIENT	-.00085	-.00604

RUN NO. 155/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHE1
1.102	-12.320	-.01610	.15240
1.102	-9.970	-.00970	.15450
1.102	-7.580	-.00390	.14530
1.102	-5.170	.00730	.13540
1.102	-2.810	.02160	.12170
1.102	-.450	.03300	.11790
1.102	1.890	.04460	.09460
1.102	4.220	.05200	.07250
1.102	6.570	.05190	.05990
1.102	8.920	.05620	.05540
1.102	11.250	.05550	.04900
	GRADIENT	.00439	-.00729

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIP1SIP201)

ORB STING

(A1C309) ( 11 SEP 75 )

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000  
ELEVTR = .000

REFERENCE DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
LREF = 90.7000 IN. YMRP = .0000 IN. YT  
BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
SCALE = .0040

RUN NO. 156/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHE0	CHE1
1.255	-12.510	-.04650	.11570
1.255	-10.120	-.04540	.11880
1.255	-7.660	-.04320	.12090
1.255	-5.210	-.03910	.12850
1.255	-2.800	-.03160	.13000
1.255	-.400	-.01950	.12730
1.255	1.950	-.00350	.11380
1.255	4.340	.01410	.10590
1.255	6.720	.02330	.09410
1.255	9.150	.03380	.08500
1.255	11.550	.03780	.07930
GRADIENT		.00644	-.00361

RUN NO. 141/ 0 RN/L = 6.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHE0	CHE1
1.456	-12.520	-.05600	.07300
1.456	-10.120	-.05580	.07110
1.456	-7.670	-.05510	.07470
1.456	-5.230	-.05280	.07720
1.456	-2.830	-.05010	.08240
1.456	-.430	-.04510	.08860
1.456	1.920	-.03920	.09670
1.456	4.320	-.02680	.09710
1.456	6.700	-.01480	.08720
1.456	9.140	-.00360	.08370
1.456	11.540	.00430	.08230
GRADIENT		.00319	.00227

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 59411A33) 740TS (TIP1S1P201)

ORB STING

(AIC309) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF \* 210.0000 SQ. FT XMRP \* 976.0000 IN. XT  
 LREF \* 90.7000 IN. YMRP \* .0000 IN. YT  
 BREF \* .0000 IN. ZMRP \* 400.0000 IN. ZT  
 SCALE \* .0040

ALPHA \* 5.000 RUDDER \* .000  
 ELEVTR \* .000

RUN NO. 136/ 0 RN/L = 7.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
1.962	-12.660	-.07590	-.00080
1.962	-10.140	-.07610	-.00750
1.962	-7.710	-.07520	-.01190
1.962	-5.270	-.07360	-.00830
1.962	-2.850	-.07160	-.00170
1.962	-.430	-.06780	.01100
1.962	1.930	-.05800	.02680
1.962	4.350	-.05110	.03040
1.962	6.770	-.04330	.03860
1.962	9.250	-.03210	.04350
1.962	11.680	-.02290	.04850
	GRADIENT	.00297	.00468

RUN NO. 160/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
2.990	-11.210	-.02750	-.04840
2.990	-9.100	-.02350	-.04540
2.990	-6.940	-.02170	-.04180
2.990	-4.760	-.01970	-.03910
2.990	-2.590	-.01760	-.03590
2.990	-.400	-.01770	-.02860
2.990	1.750	-.01750	-.01820
2.990	3.940	-.02150	-.00890
2.990	6.100	-.02080	-.00510
2.990	8.260	-.01600	.00000
2.990	10.380	-.01460	.00120
	GRADIENT	-.00016	.00359

DATE 23 OCT 75

IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(A1C309) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = 5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 161/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
4.959	-10.680	-.01850	-.02870
4.959	-8.680	-.01260	-.02500
4.959	-6.630	-.01080	-.01970
4.959	-4.550	-.00980	-.01540
4.959	-2.470	-.00710	-.01230
4.959	-.370	-.00490	-.00770
4.959	1.690	-.00270	-.00670
4.959	3.790	-.00150	-.00400
4.959	5.850	-.00210	-.00210
4.959	7.910	-.00330	-.00330
4.959	9.920	-.00300	-.00270
	GRADIENT	.00101	.00136

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(A1C310) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = -5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 145/ 0    RN/L = 5.01    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
.602	-11.050	.02830	.07770
.602	-9.020	.02830	.07310
.602	-6.880	.02840	.06990
.602	-4.720	.02750	.06220
.602	-2.580	.02680	.05660
.602	-.420	.02650	.05020
.602	1.700	.02280	.04580
.602	3.840	.01360	.04460
.602	5.960	.01890	.04020
.602	8.100	.01930	.04110
.602	10.160	.01930	.04110
	GRADIENT	-.00092	-.00215



DATE 23 OCT 75

IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (T1P1S1P201)

ORB STING

(AIC310) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = -5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 144/ 0    RN/L = 5.95    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEG	CHEI
.799	-11.600	.03670	.09090
.799	-9.410	.03490	.08580
.799	-7.200	.03370	.07750
.799	-4.950	.03240	.07030
.799	-2.710	.03070	.06270
.799	-.480	.03060	.05620
.799	1.740	.02640	.04730
.799	3.980	.02210	.04470
.799	6.180	.02140	.03950
.799	8.390	.01950	.03360
.799	10.540	.01940	.03100
	GRADIENT	-.00112	-.00298

RUN NO. 143/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEG	CHEI
.902	-11.940	.05240	.10840
.902	-9.700	.05270	.10260
.902	-7.400	.05260	.09460
.902	-5.080	.04950	.08300
.902	-2.790	.04910	.07530
.902	-.480	.04740	.06440
.902	1.770	.03630	.04230
.902	4.060	.02470	.03440
.902	6.320	.01420	.02190
.902	8.590	.00610	.01420
.902	10.810	-.00100	.00570
	GRADIENT	-.00369	-.00635

DATE 23 OCT 75

IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIP1S1P201)

ORB STING

(A1C310) ( 11 SEP 75 )

REFERENCE DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.        YMRP = .0000 IN. YT  
 BRFB = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 146/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHE0	CHE1
1.102	-12.530	.08510	.23340
1.102	-10.140	.09140	.22900
1.102	-7.730	.09790	.21700
1.102	-5.290	.09220	.19330
1.102	-2.900	.08790	.16590
1.102	-.520	.08470	.15240
1.102	1.820	.08140	.12040
1.102	4.200	.07870	.10910
1.102	6.550	.07480	.09960
1.102	8.930	.07330	.09150
1.102	11.290	.07450	.07970
GRADIENT		-.00131	-.00856

RUN NO. 142/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHE0	CHE1
1.252	-12.790	.03470	.21310
1.252	-10.370	.03870	.20390
1.252	-7.860	.04570	.19400
1.252	-5.370	.05710	.18680
1.252	-2.940	.06780	.17640
1.252	-.520	.07150	.16400
1.252	1.870	.07450	.15190
1.252	4.290	.07650	.13690
1.252	6.700	.07390	.12720
1.252	9.160	.07220	.11840
1.252	11.580	.07470	.11150
GRADIENT		.00121	-.00542

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OF POOR QUALITY

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1A33 TABULATED DATA

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MSFC 594(1A33) 740TS (TIPISIP201)

ORB STING

(A1C310) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = -5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 140/ 0    RN/L = 6.53    GRADIENT INTERVAL = -5.00, 5.00

MACH	BETA	CHE0	CHE1
1.460	-12.780	.00250	.18110
1.460	-10.370	.00650	.17550
1.460	-7.920	.00990	.16290
1.460	-5.430	.01700	.16040
1.460	-2.980	.02790	.15630
1.460	-.540	.03900	.14810
1.460	1.880	.04910	.14200
1.460	4.320	.06050	.13430
1.460	6.780	.06570	.12900
1.460	9.220	.07090	.11850
1.460	11.630	.07790	.11600
	GRADIENT	.00444	-.00296

RUN NO. 139/ 0    RN/L = 7.05    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHE0	CHE1
1.966	-12.970	-.02840	.09350
1.966	-10.460	-.02230	.08500
1.966	-7.970	-.01680	.08620
1.966	-5.480	-.01070	.08480
1.966	-3.000	-.00440	.07920
1.966	-.520	-.00090	.07920
1.966	1.930	.00170	.08460
1.966	4.420	.00900	.09260
1.966	6.910	.01900	.09500
1.966	9.390	.02250	.09230
1.966	11.850	.02620	.09410
	GRADIENT	.00173	.00185

DATE 23 OCT 75

IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (T1P15IP201)

ORB STING

(A1C310) ( 11 SEP 75 )

REFERENCE DATA

SREF \* 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF \* 90.7000 IN. YMRP = .0000 IN. YT  
 BREF \* .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE \* .0040

PARAMETR.C DATA

ALPHA = -5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 165/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
2.990	-11.350	-.00450	-.00450
2.990	-9.220	-.00230	-.00180
2.990	-7.060	-.00050	.00360
2.990	-4.850	.00000	.00960
2.990	-2.650	.00000	.01240
2.990	-.440	-.00010	.01660
2.990	1.740	-.00070	.02060
2.990	3.940	-.00340	.02410
2.990	6.130	-.00340	.02820
2.990	8.320	-.00380	.03100
2.990	10.440	.00000	.03270
	GRADIENT	-.00034	.00169

RUN NO. 164/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
4.959	-10.760	-.00090	-.00680
4.959	-8.750	-.00030	-.00710
4.959	-6.690	.00030	-.00610
4.959	-4.590	.00090	-.00210
4.959	-2.510	.00120	-.00180
4.959	-.390	.00210	.00090
4.959	1.690	.00150	.00090
4.959	3.790	.00090	.00030
4.959	5.870	-.00090	.00240
4.959	7.950	-.00240	.00400
4.959	9.960	-.00210	.00830
	GRADIENT	.00001	.00036

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1A33 TABULATED DATA

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MSFC 594(1A33) 740TS (T2P1S3P201F2) ORB STING

(A1C321) ( 11 SEP 75 )

REFERENCE DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 96/ 0    RN/L = 4.99    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHE1
.600	-11.890	.04310	.06550
.600	-9.750	.04050	.05700
.600	-7.570	.03560	.05370
.600	-5.360	.03140	.05210
.600	-3.160	.02680	.05280
.600	-.930	.02810	.05250
.600	1.240	.03010	.05300
.600	3.480	.02820	.05530
.600	5.670	.02610	.05410
.600	7.890	.02140	.05220
.600	9.990	.01530	.05020
	GRADIENT	.00028	.00036

RUN NO. 95/ 0    RN/L = 5.94    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHE1
.798	-12.940	.05510	.07470
.798	-10.570	.04700	.06640
.798	-8.240	.04420	.06110
.798	-5.860	.03710	.05920
.798	-3.530	.03300	.05850
.798	-1.180	.03410	.05690
.798	1.150	.03840	.05960
.798	3.500	.03770	.06160
.798	5.830	.03430	.06020
.798	8.170	.02790	.05900
.798	10.390	.01310	.05340
	GRADIENT	.00079	.00061

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1A33 TABULATED DATA

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MSFC 594(1A33) 740TS (T2P1S3P201F2) ORB STING

(A1C321) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 04/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
.905	-13.600	.07970	.08860
.905	-11.100	.07360	.08150
.905	-8.630	.06850	.07070
.905	-6.140	.05690	.06070
.905	-3.690	.04950	.05380
.905	-1.260	.04440	.04740
.905	1.150	.04360	.04640
.905	3.570	.04200	.04950
.905	5.960	.03620	.05230
.905	8.390	.02500	.04530
.905	10.660	.01020	.04500
	GRADIENT	-.00096	-.00058

RUN NO. 93/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
1.099	-14.910	.12600	.20750
1.099	-12.080	.10510	.18820
1.099	-9.400	.09210	.16820
1.099	-6.760	.08140	.15610
1.099	-4.150	.08440	.14920
1.099	-1.560	.08410	.14780
1.099	.930	.07280	.13700
1.099	3.480	.05510	.12260
1.099	5.970	.03400	.10850
1.099	8.490	.01310	.09830
1.099	10.900	-.00720	.09690
	GRADIENT	-.00390	-.00356

DATE 23 OCT 75

1A33 TABULATED DATA

MSFC 594(1A33) 740TS (T2P1S3P201F2) ORB STING

(A1C321) ( 11 SEP 75 )

REFERENCE DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.9000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 97/ 0    RN/L = 6.69    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHE0	CHE1
1.254	-15.750	.11450	.19160
1.254	-12.750	.09680	.18520
1.254	-9.800	.08410	.17830
1.254	-6.980	.06350	.16790
1.254	-4.270	.04350	.15980
1.254	-1.590	.02350	.15130
1.254	.990	.00810	.14050
1.254	3.580	-.00650	.13100
1.254	6.120	-.01850	.12540
1.254	8.700	-.03330	.11430
1.254	11.230	-.04430	.10180
	GRADIENT	-.00633	-.00372

RUN NO. 101/ 0    RN/L = 6.52    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHE0	CHE1
1.461	-15.570	.11380	.16850
1.461	-12.710	.09390	.15570
1.461	-9.820	.06490	.14760
1.461	-6.980	.03330	.13960
1.461	-4.270	.00830	.12700
1.461	-1.600	-.01690	.11470
1.461	.980	-.03580	.10570
1.461	3.570	-.04550	.09700
1.461	6.130	-.04620	.08580
1.461	8.720	-.05220	.07350
1.461	11.300	-.05810	.06150
	GRADIENT	-.00692	-.00380

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MSFC 594(IA33) 740TS (T2P1S3P201F2) ORB STING

(A1C321) ( 11 SEP 75 )

REFERENCE DATA

SREF =	210.0000 SQ. FT	XMRP =	976.0000 IN. XT
LREF =	90.7000 IN.	YMRP =	.0000 IN. YT
BREF =	.0000 IN.	ZMRP =	400.0000 IN. ZT
SCALE =	.0040		

PARAMETRIC DATA

BETA =	.000	RUDDER =	.000
ELEVTR =	.000		

RUN NO. 87/ 0 RN/L = 7.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
1.960	-15.540	.05670	.13910
1.960	-12.660	.04480	.11710
1.960	-9.840	.03350	.09740
1.960	-6.980	.02110	.07810
1.960	-4.250	.00960	.05890
1.960	-1.590	-.00200	.03840
1.960	.960	-.01520	.01780
1.960	3.530	-.03290	.00520
1.960	6.100	-.05230	-.00260
1.960	8.820	-.06730	-.01360
1.960	11.470	-.06630	-.01990
	GRADIENT	-.00543	-.00702

RUN NO. 98/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
2.990	-12.070	.01110	.05000
2.990	-9.900	.00620	.04430
2.990	-7.680	.00340	.03360
2.990	-5.430	.00160	.02490
2.990	-3.170	.00000	.01650
2.990	-.940	-.00160	.01170
2.990	1.260	-.00450	.00800
2.990	3.500	-.00740	.00090
2.990	5.710	-.01310	-.00670
2.990	7.950	-.01770	-.01970
2.990	10.100	-.02260	-.02040
	GRADIENT	-.00113	-.00229

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OF POOR QUALITY



DATE 23 OCT 75

## IA33 TABULATED DATA

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MSFC 594 (IA33) 740TS (T2P1S3P201F2) ORB STING

(A1C321) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 99/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
4.959	-11.100	.00330	.00830
4.959	-9.080	.00150	.00370
4.959	-7.010	.00210	.00090
4.959	-4.910	.00090	.00090
4.959	-2.800	.00000	.00000
4.959	-.690	.00000	-.00120
4.959	1.400	-.00150	-.00090
4.959	3.520	-.00330	-.00120
4.959	5.600	-.00430	-.00330
4.959	7.710	-.00670	-.00330
4.959	9.720	-.01110	-.00590
	GRADIENT	-.00047	-.00024

MSFC 594 (IA33) 740TS (T2P1S3P201F2) ORB STING

(A1C322) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 91/ 0 RN/L = 4.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
.595	-11.350	.03080	.07180
.595	-9.280	.03000	.06980
.595	-7.130	.02990	.06560
.595	-4.940	.03100	.06300
.595	-2.750	.03110	.05950
.595	-.540	.03060	.05640
.595	1.660	.02840	.05490
.595	3.840	.02800	.05140
.595	6.010	.02620	.04940
.595	8.190	.02590	.04550
.595	10.280	.02440	.04450
	GRADIENT	-.00040	-.00127

DATE 23 OCT 75

IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (T2P1S3P201F2) ORB STING

(AIC322) ( 11 SEP 75 )

REFERENCE DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.      YMRP = .0000 IN. YT  
 BREF = .0000 IN.        ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 90/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
.902	-12.430	.05150	.11170
.902	-10.150	.05540	.10180
.902	-7.780	.05520	.09190
.902	-5.400	.05170	.08170
.902	-3.020	.04670	.06680
.902	-.640	.04400	.05540
.902	1.720	.03910	.04310
.902	4.110	.03250	.02960
.902	6.470	.02090	.01590
.902	8.830	.01370	.01150
.902	11.130	.01270	.01660
GRADIENT		-.00200	-.00522

RUN NO. 92/ 0    RN/L = 6.62    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
1.099	-13.080	.02430	.22240
1.099	-10.620	.03240	.21760
1.099	-8.140	.04480	.20860
1.099	-5.630	.06160	.18710
1.099	-3.150	.07360	.16730
1.099	-.660	.07940	.15520
1.099	1.800	.08510	.14560
1.099	4.290	.08520	.13970
1.099	6.780	.08260	.13340
1.099	9.290	.08120	.13170
1.099	11.720	.08020	.12900
GRADIENT		.00163	-.00373

MSFC 594(1A33) 740TS (T2P1S3P201F2) ORB STING

(A1C322) ( 11 SEP 75 )

REFERENCE DATA

SREF \* 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF \* 90.7000 IN. YMRP = .0000 IN. YT  
 BREF \* .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE \* .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 89/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
1.256	-13.380	-.01940	.15830
1.256	-10.850	-.01850	.16410
1.256	-8.290	-.01880	.16000
1.256	-5.720	-.01060	.16040
1.256	-3.190	.00170	.15880
1.256	-.650	.01730	.15200
1.256	1.860	.03190	.14730
1.256	4.410	.04740	.14400
1.256	6.950	.05530	.14340
1.256	9.560	.05980	.14630
1.256	12.080	.06130	.14270
	GRADIENT	.00599	-.00194

RUN NO. 88/ 0 RN/L = 7.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
1.967	-13.900	-.03770	.01490
1.967	-11.110	-.03080	.00480
1.967	-8.460	-.02400	.00520
1.967	-5.850	-.01890	.00940
1.967	-3.260	-.01370	.01760
1.967	-.650	-.00790	.02490
1.967	1.930	-.00370	.02890
1.967	4.560	-.00090	.03920
1.967	7.180	.00300	.05150
1.967	9.920	.00730	.06290
1.967	12.540	.00950	.06670
	GRADIENT	.00184	.00264

DATE 23 OCT 75

1A33 TABULATED DATA

MSFC 594(1A33) 740TS (T2P1S3P201F2) ORB STING

(A1C322) ( 11 SEP 75 )

REFERENCE DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 100/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHE0	CHE1
4.959	-10.980	-.00770	-.00150
4.959	-8.950	-.00640	-.00060
4.959	-6.880	-.00490	-.00060
4.959	-4.770	-.00300	.00000
4.959	-2.650	-.00210	-.00030
4.959	-.520	.00000	-.00180
4.959	1.590	.00150	-.00150
4.959	3.730	.00150	.00000
4.959	5.830	.00090	.00120
4.959	7.950	.00150	.00030
4.959	9.960	.00090	.00120
	GRADIENT	.00059	-.00006

MSFC 594(1A33) 740TS (T1P101) ORB STING

(A1C323) ( 11 SEP 75 )

REFERENCE DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 151/ 0    RN/L = 4.99    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHE0	CHE1
.600	-11.070	.02250	.06810
.600	-9.010	.02300	.06570
.600	-6.870	.02360	.06070
.600	-4.720	.02350	.05470
.600	-2.570	.02340	.04830
.600	-.400	.02290	.04160
.600	1.750	.02350	.03290
.600	3.910	.02150	.02840
.600	6.030	.01890	.02700
.600	8.140	.01830	.02750
.600	10.210	.01560	.02430
	GRADIENT	-.00018	-.00315

MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C323) ( 11 SEP 75 )

REFERENCE DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.       YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 152/ 0    RN/L = 6.29    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
.904	-11.940	.02860	.10540
.904	-9.640	.03000	.10080
.904	-7.360	.03160	.09220
.904	-5.030	.03240	.07970
.904	-2.740	.03520	.06460
.904	-.420	.03450	.05090
.904	1.840	.03330	.03320
.904	4.130	.02880	.02290
.904	6.390	.02080	.01570
.904	8.670	.01550	.00810
.904	10.900	.01600	.00300
	GRADIENT	-.00089	-.00624

RUN NO. 154/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
1.098	-12.480	-.03210	.13290
1.098	-10.090	-.02830	.13960
1.098	-7.660	-.02270	.13970
1.098	-5.220	-.01380	.12540
1.098	-2.820	.00110	.11080
1.098	-.430	.01200	.09920
1.098	1.910	.02510	.07740
1.098	4.290	.03320	.06550
1.098	6.630	.03970	.05530
1.098	9.020	.04170	.04830
1.098	11.400	.04320	.04210
	GRADIENT	.00462	-.00666

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MSFC 594(1A33) 740TS (TIP101)

ORB STING

(A1C323) ( 11 SEP 75 )

REFERENCE DATA

SREF	=	210.0000 SQ. FT	XMRP	=	976.0000 IN. XT
LREF	=	90.7000 IN.	YMRP	=	.0000 IN. YT
BREF	=	.0000 IN.	ZMRP	=	400.0000 IN. ZT
SCALE	=	.0040			

PARAMETRIC DATA

ALPHA	=	5.000	RUDDER	=	.000
ELEVTR	=	.000			

RUN NO. 153/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
1.250	-12.630	-.05190	.10740
1.250	-10.220	-.04860	.11090
1.250	-7.740	-.04570	.11470
1.250	-5.260	-.04030	.11950
1.250	-2.840	-.03340	.11130
1.250	-.420	-.02380	.09840
1.250	1.970	-.00890	.09040
1.250	4.330	.00480	.08400
1.250	6.740	.01530	.07450
1.250	9.170	.02310	.06640
1.250	11.620	.02900	.07240
	GRADIENT	.00542	-.00376

RUN NO. 137/ 0 RN/L = 7.07 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
1.957	-12.850	-.06240	.00000
1.957	-10.340	-.05880	-.00310
1.957	-7.860	-.05560	-.00440
1.957	-5.360	-.05320	-.00440
1.957	-2.900	-.04980	.00280
1.957	-.450	-.04570	.01760
1.957	1.960	-.03990	.02860
1.957	4.420	-.03620	.04160
1.957	6.870	-.03260	.04290
1.957	9.410	-.02590	.04610
1.957	11.890	-.01920	.04480
	GRADIENT	.00191	.00523

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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C323) ( 11 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF \* 210.0000 SQ. FT XMRP \* 976.0000 IN. XT  
 LREF \* 90.7000 IN. YMRP \* .0000 IN. YT  
 BREF \* .0000 IN. ZMRP \* 400.0000 IN. ZT  
 SCALE \* .0040

ALPHA \* 5.000 RUDDER \* .000  
 ELEVTR \* .000

RUN NO. 162/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
4.959	-10.670	-.01660	-.02220
4.959	-8.670	-.01450	-.01730
4.959	-6.630	-.01200	-.01650
4.959	-4.550	-.00890	-.01290
4.959	-2.470	-.00860	-.00950
4.959	-.380	-.00860	-.00740
4.959	1.680	-.00510	-.00430
4.959	3.760	-.00490	-.00330
4.959	5.850	-.00430	-.00330
4.959	7.910	-.00490	-.00210
4.959	9.910	-.00400	-.00330
	GRADIENT	.00053	.00117

MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C324) ( 11 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF \* 210.0000 SQ. FT XMRP \* 976.0000 IN. XT  
 LREF \* 90.7000 IN. YMRP \* .0000 IN. YT  
 BREF \* .0000 IN. ZMRP \* 400.0000 IN. ZT  
 SCALE \* .0040

ALPHA \* -5.000 RUDDER \* .000  
 ELEVTR \* .000

RUN NO. 150/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
.598	-11.080	.02910	.06780
.598	-9.000	.02810	.05760
.598	-6.870	.02600	.05170
.598	-4.720	.02470	.04570
.598	-2.580	.02340	.03800
.598	-.410	.02060	.03020
.598	1.720	.01880	.03440
.598	3.890	.01830	.03120
.598	6.010	.01550	.02590
.598	8.160	.01690	.02830
.598	10.210	.01560	.03060
	GRADIENT	-.00081	-.00152

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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C324) ( 11 SEP 75 )

REFERENCE DATA

SREF \* 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF \* 90.7000 IN. YMRP = .0000 IN. YT  
 BREF \* .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE \* .0040

PARAMETRIC DATA

ALPHA = -5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 149/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
.903	-11.990	.04770	.09950
.903	-9.710	.04380	.08980
.903	-7.400	.04120	.08140
.903	-5.070	.03510	.06830
.903	-2.770	.03140	.05820
.903	-.460	.02710	.04470
.903	1.810	.02360	.03330
.903	4.100	.01950	.02190
.903	6.390	.01390	.01580
.903	8.670	.00610	.00520
.903	10.900	.00370	-.00200
	GRADIENT	-.00171	-.00526

RUN NO. 147/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
1.101	-12.510	.06170	.20530
1.101	-10.100	.06620	.19530
1.101	-7.690	.07070	.17820
1.101	-5.250	.06970	.14830
1.101	-2.860	.06980	.12530
1.101	-.480	.07030	.11290
1.101	1.870	.06780	.09640
1.101	4.250	.06220	.08110
1.101	6.610	.05910	.07270
1.101	9.040	.06090	.07090
1.101	11.410	.06380	.06810
	GRADIENT	-.00107	-.00630



MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C324) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.       YMRP = .0000 IN. YT  
 BREF = .0000 IN.       ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = -5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 148/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHE0	CHE1
1.254	-12.730	.03550	.19470
1.254	-10.270	.03610	.18670
1.254	-7.800	.04100	.17670
1.254	-5.320	.04880	.16180
1.254	-2.880	.05900	.14850
1.254	- .470	.06710	.13650
1.254	1.910	.07450	.12540
1.254	4.330	.07290	.11350
1.254	6.750	.06790	.10460
1.254	9.250	.07200	.10400
1.254	11.690	.07650	.10670
	GRADIENT	.00204	-.00484

RUN NO. 138/ 0    RN/L = 7.05    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHE0	CHE1
1.967	-12.930	.00550	.11210
1.967	-10.400	.00920	.10200
1.967	-7.890	.01370	.09890
1.967	-5.380	.01740	.09720
1.967	-2.910	.01710	.09550
1.967	- .460	.01690	.09350
1.967	1.960	.01590	.08910
1.967	4.450	.01940	.08920
1.967	6.930	.01940	.08600
1.967	9.470	.02560	.09070
1.967	12.000	.03150	.09930
	GRADIENT	.00024	-.00095

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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C324) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = -5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 163/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
4.959	-10.740	.00090	.00000
4.959	-8.730	.00090	.00240
4.959	-6.670	.00460	.00030
4.959	-4.580	.00490	.00460
4.959	-2.500	.00330	.00400
4.959	-.390	.00460	.00740
4.959	1.700	.00330	.00670
4.959	3.780	.00400	.00890
4.959	5.870	.00430	.00710
4.959	7.940	.00210	.01080
4.959	9.950	.00030	.01350
	GRADIENT	-.00009	.00054

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MSFC 594(IA33) 740TS (TIP1S2P20)

ORB STING

(A1C325) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 57/ 0    RN/L = 4.99    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
.599	-11.730	.00000	.00000
.599	-9.600	.00000	.00000
.599	-7.430	.00000	.00000
.599	-5.230	.00000	.00000
.599	-3.010	.00000	.00000
.599	-.820	.00000	.00000
.599	1.410	.00000	.00000
.599	3.640	.00000	.00000
.599	5.820	.00000	.00000
.599	8.020	.00000	.00000
.599	10.120	.00000	.00000
	GRADIENT	.00000	.00000

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IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIP1S2P201)

ORB STING

(AIC325) ( 11 SEP 75 )

REFERENCE DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 58/ 0    RN/L = 5.95    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHE0	CHE1
.800	-12.660	.00000	.00000
.800	-10.370	.00000	.00000
.800	-8.050	.00000	.00000
.800	-5.690	.00000	.00500
.800	-3.410	.00000	.00000
.800	-1.050	.00000	.00000
.800	1.290	.00000	.00000
.800	3.670	.00000	.00000
.800	6.010	.00000	.00000
.800	8.330	.00000	.00000
.800	10.550	.00000	.00000
	GRADIENT	.00000	.00000

RUN NO. 59/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHE0	CHE1
.904	-13.220	.00000	.00000
.904	-10.820	.00000	.00000
.904	-8.400	.00000	.00000
.904	-5.940	.00000	.00000
.904	-3.510	.00000	.00000
.904	-1.150	.00000	.00000
.904	1.280	.00000	.00000
.904	3.690	.00000	.00000
.904	6.090	.00000	.00000
.904	8.460	.00000	.00000
.904	10.740	.00000	.00000
	GRADIENT	.00000	.00000

MSFC 594(IA33) 740TS (TIP1S2P201)

ORB STING

(A1C325) ( 11 SEP 75 )

REFERENCE DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN. YMRP = .0000 IN. YT  
 BRP = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 61/ 1 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHE0	CHE1
1.101	-14.480	.00000	.00000
1.101	-11.800	.00000	.00000
1.101	-9.190	.00000	.00000
1.101	-6.590	.00000	.00000
1.101	-4.020	.00000	.00000
1.101	-1.440	.00000	.00000
1.101	1.080	.00000	.00000
1.101	3.600	.00000	.00000
1.101	6.140	.00000	.00000
1.101	8.630	.00000	.00000
1.101	10.960	.00000	.00000
	GRADIENT	.00000	.00000

RUN NO. 60/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHE0	CHE1
1.254	-15.150	.00000	.00000
1.254	-12.280	.00000	.00000
1.254	-9.450	.00000	.00000
1.254	-6.700	.00000	.00000
1.254	-4.030	.00000	.00000
1.254	-1.390	.00000	.00000
1.254	1.200	.00000	.00000
1.254	3.740	.00000	.00000
1.254	6.280	.00000	.00000
1.254	8.770	.00000	.00000
1.254	11.240	.00000	.00000
	GRADIENT	.00000	.00000

MSFC 594(IA33) 740TS (TIPIS2P201)

ORB STING

(A1C325) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 110/ 0 RN/L = 6.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHE0	CHE1
1.467	-15.070	.10580	.17840
1.467	-12.280	.08790	.16290
1.467	-9.450	.06160	.15230
1.467	-6.710	.03330	.13990
1.467	-4.020	.01020	.12790
1.467	-1.390	-.01000	.11960
1.467	1.220	-.02650	.11300
1.467	3.740	-.03710	.10830
1.467	6.290	-.04550	.09200
1.467	8.770	-.05340	.07400
1.467	11.260	-.05740	.06170
	GRADIENT	-.00613	-.00253

RUN NO. 77/ 0 RN/L = 7.07 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHE0	CHE1
1.959	-14.950	.00000	.00000
1.959	-12.130	.00000	.00000
1.959	-9.350	.00000	.00000
1.959	-6.600	.00000	.00000
1.959	-4.030	.00000	.00000
1.959	-1.440	.00000	.00000
1.959	1.160	.00000	.00000
1.959	3.730	.00000	.00000
1.959	6.280	.00000	.00000
1.959	8.870	.00000	.00000
1.959	11.450	.00000	.00000
	GRADIENT	.00000	.00000

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MSFC 594 (IA33) 740TS (T1P192P201)

ORB STING

(A1C325) ( 11 SEP 75 )

REFERENCE DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 83/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
2.990	-11.830	.00000	.00000
2.990	-9.680	.00000	.00000
2.990	-7.490	.00000	.00000
2.990	-5.230	.00000	.00000
2.990	-3.020	.00000	.00000
2.990	-.810	.00000	.00000
2.990	1.400	.00000	.00000
2.990	3.620	.00000	.00000
2.990	5.810	.00000	.00000
2.990	8.000	.00000	.00000
2.990	10.140	.00000	.00000
	GRADIENT	.00000	.00000

RUN NO. 82/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
4.959	-10.970	.00000	.00000
4.959	-8.950	.00000	.00000
4.959	-6.870	.00000	.00000
4.959	-4.800	.00000	.00000
4.959	-2.680	.00000	.00000
4.959	-.580	.00000	.00000
4.959	1.520	.00000	.00000
4.959	3.630	.00000	.00000
4.959	5.700	.00000	.00000
4.959	7.780	.00000	.00000
4.959	9.800	.00000	.00000
	GRADIENT	.00000	.00000

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MSFC 594:1A33) 740TS (TIP1S2P201)

ORB STING

(AIC326) ( 11 SEP 75 )

REFERENCE DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 65/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
.598	-11.080	.00000	.00000
.598	-9.010	.00000	.00000
.598	-6.870	.00000	.00000
.598	-4.720	.00000	.00000
.598	-2.580	.00000	.00000
.598	-.440	.00000	.00000
.598	1.700	.00000	.00000
.598	3.850	.00000	.00000
.598	5.970	.00000	.00000
.598	8.090	.00000	.00000
.598	10.150	.00000	.00000
	GRADIENT	.00000	.00000

RUN NO. 64/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
.901	-11.860	.00000	.00000
.901	-9.640	.00000	.00000
.901	-7.380	.00000	.00000
.901	-5.060	.00000	.00000
.901	-2.780	.00000	.00000
.901	-.500	.00000	.00000
.901	1.780	.00000	.00000
.901	4.060	.00000	.00000
.901	6.300	.00000	.00000
.901	8.540	.00000	.00000
.901	10.740	.00000	.00000
	GRADIENT	.00000	.00000

DATE 23 OCT 75

1A33 TABULATED DATA

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MSFC 594(1A33) 740TS (T1P1S2P201)

ORB STING

(A1C326) ( 11 SEP 75 )

REFERENCE DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

PARAMETRIC DATA

RUN NO. 62/ 0    RN/L = 6.62    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHE0	CHE1
1.098	-12.390	.00000	.00000
1.098	-10.020	.00000	.00000
1.098	-7.640	.00000	.00000
1.098	-5.220	.00000	.00000
1.098	-2.860	.00000	.00000
1.098	- .510	.00000	.00000
1.098	1.810	.00000	.00000
1.098	4.170	.00000	.00000
1.098	6.500	.00000	.00000
1.098	8.860	.00000	.00000
1.098	11.210	.00000	.00000
	GRADIENT	.00000	.00000

RUN NO. 63/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHE0	CHE1
1.247	-12.590	.00000	.00000
1.247	-10.180	.00000	.00000
1.247	-7.720	.00000	.00000
1.247	-5.260	.00000	.00000
1.247	-2.860	.00000	.00000
1.247	- .490	.00000	.00000
1.247	1.870	.00000	.00000
1.247	4.250	.00000	.00000
1.247	6.620	.00000	.00000
1.247	9.050	.00000	.00000
1.247	11.470	.00000	.00000
	GRADIENT	.00000	.00000

ORIGINAL DATA IS  
OF POOR QUALITY



MSFC 594(1A33) 740TS (T1P1S2P201)

ORB STING

(A1C326) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.       YMRP = .0000 IN. YT  
 BREF = .0000 IN.        ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 76/ 0    RN/L = 7.09    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHE1
1.950	-12.710	.00000	.00000
1.950	-10.310	.00000	.00000
1.950	-7.870	.00000	.00000
1.950	-5.390	.00000	.00000
1.950	-2.950	.00000	.00000
1.950	- .530	.00000	.00000
1.950	1.900	.00000	.00000
1.950	4.350	.00000	.00000
1.950	6.780	.00000	.00000
1.950	9.240	.00000	.00000
1.950	11.730	.00000	.00000
	GRADIENT	.00000	.00000

RUN NO. 102/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHE1
4.959	-10.760	-.00520	-.01390
4.959	-8.750	-.00460	-.01140
4.959	-6.680	-.00150	-.00770
4.959	-4.620	-.00090	-.00890
4.959	-2.530	-.00030	-.00640
4.959	- .430	-.00060	-.00300
4.959	1.650	.00000	-.00300
4.959	3.750	.00000	-.00430
4.959	5.820	-.00060	-.00240
4.959	7.910	-.00060	-.00060
4.959	9.900	-.00060	-.00150
	GRADIENT	.00010	.00060

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MSFC 594(IA33) 740TS (T1P1S3P201F2) ORB STING

(A1C335) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 86/ 0    RN/L = 4.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHE0	CHE1
2.990	-11.990	.01000	.04830
2.990	-9.860	.00650	.04170
2.990	-7.650	.00380	.03370
2.990	-5.380	.00120	.02690
2.990	-3.150	.00000	.01990
2.990	-1.940	-.00180	.01530
2.990	1.260	-.00400	.00980
2.990	3.480	-.00760	.00430
2.990	5.670	-.01180	-.00030
2.990	7.910	-.01670	-.01760
2.990	10.040	-.02420	-.01670
	GRADIENT	-.00113	-.00235

RUN NO. 95/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHE0	CHE1
4.959	-11.050	.00270	.00890
4.959	-9.060	.00210	.00890
4.959	-7.000	.00370	.00490
4.959	-4.900	.00210	.00270
4.959	-2.780	.00120	.00150
4.959	-1.680	.00000	.00090
4.959	1.420	.00000	.00030
4.959	3.510	-.00210	.00000
4.959	5.590	-.00430	.00000
4.959	7.620	-.00610	-.00240
4.959	9.680	-.01110	.00000
	GRADIENT	-.00046	-.00031

MSFC 594(IA33) 740TS (T1P153P201F2) ORB STING

(A1C336) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 84/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHEO	CHEI
4.959	-10.950	-.00770	.00000
4.959	-8.930	-.00490	-.00120
4.959	-6.860	-.00330	.00000
4.959	-4.730	-.00150	.00000
4.959	-2.620	-.00030	.00000
4.959	-.510	.00000	.00030
4.959	1.590	.00120	.00000
4.959	3.720	.00120	.00120
4.959	5.810	.00150	.00240
4.959	7.920	.00210	.00090
4.959	9.920	.00210	.00030
	GRADIENT	.00033	.00011

MSFC 594(IA33) 740TS (01)

ORB STING

(A1C337) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 172/ 0 RN/L = 5.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
.600	-10.790	.04110	.05950
.600	-8.780	.03590	.05140
.600	-6.720	.02700	.04140
.600	-4.610	.02420	.03700
.600	-2.500	.02250	.04050
.600	-.380	.02300	.04170
.600	1.720	.02450	.04250
.600	3.850	.02210	.03990
.600	5.940	.01850	.03700
.600	8.050	.01210	.03210
.600	10.070	.00590	.02530
	GRADIENT	-.00010	.00037

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MSFC 594(1A33) 740TS (01)

ORB STING

(A1C337) ( 11 SEP 75 )

REFERENCE DATA

SREF = 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 90.7000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 171/ 0    RN/L = 5.95    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHE0	CHE1
.798	-11.200	.05630	.07430
.798	-9.100	.04890	.06220
.798	-6.980	.03960	.04600
.798	-4.810	.02820	.04150
.798	-2.630	.02740	.04110
.798	- .450	.02750	.04640
.798	1.710	.03350	.04840
.799	3.910	.03100	.04900
.798	6.060	.02530	.04590
.798	8.220	.01470	.03950
.798	10.310	.00310	.02980
	GRADIENT	.00054	.00102

RUN NO. 170/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHE0	CHE1
.902	-11.410	.08010	.11170
.902	-9.310	.06580	.08160
.902	-7.140	.05620	.05520
.902	-4.930	.03300	.03980
.902	-2.710	.03070	.04340
.902	- .470	.03180	.05380
.902	1.740	.04120	.06300
.902	3.940	.03730	.06280
.902	6.140	.03130	.06750
.902	8.310	.02550	.06950
.902	10.440	.01030	.06300
	GRADIENT	.00086	.00296

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MSFC 594(IA33) 740TS (01)

ORB STING

(AIC337) ( 11 SEP 75 )

## REFERENCE DATA

SREF \* 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF \* 90.7000 IN. YMRP = .0000 IN. YT  
 BREF \* .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE \* .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 168/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHE1
1.102	-11.620	.11920	.16900
1.102	-9.460	.10310	.14640
1.102	-7.230	.08000	.12870
1.102	-4.970	.06820	.11590
1.102	-2.690	.05740	.10870
1.102	-.400	.04880	.09510
1.102	1.860	.03560	.08140
1.102	4.110	.01550	.06860
1.102	6.370	-.00730	.05330
1.102	8.600	-.02980	.03360
1.102	10.770	-.04870	.00770
	GRADIENT	-.00560	-.00537

RUN NO. 169/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHE1
1.252	-11.620	.11710	.16240
1.252	-9.450	.09700	.14390
1.252	-7.210	.08390	.13050
1.252	-4.930	.06640	.11860
1.252	-2.660	.04390	.10480
1.252	-.380	.02420	.09290
1.252	1.870	.00920	.07790
1.252	4.120	-.00940	.06120
1.252	6.380	-.02870	.04060
1.252	8.630	-.04420	.01510
1.252	10.810	-.06060	-.01300
	GRADIENT	-.00823	-.00626

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IA33 TABULATED DATA

MSFC 594(IA33) 740TS (01)

ORB STING

(AIC337) ( 11 SEP 75 )

REFERENCE DATA

SREF \* 210.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF \* 90.7000 IN.       YMRP = .0000 IN. YT  
 BREF \* .0000 IN.        ZMRP = 400.0000 IN. ZT  
 SCALE \* .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 173/ 0    RN/L = 6.52    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
1.460	-11.430	.10850	.16900
1.460	-9.290	.08690	.15290
1.460	-7.090	.06660	.13490
1.460	-4.850	.04450	.11900
1.460	-2.610	.01980	.10480
1.460	-.360	.00130	.08900
1.460	1.860	-.01470	.06930
1.460	4.090	-.02510	.04400
1.460	6.320	-.03830	.02020
1.460	8.540	-.05090	-.00670
1.460	10.690	-.06450	-.03350
	GRADIENT	-.00777	-.00830

RUN NO. 174/ 0    RN/L = 7.05    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHEI
1.967	-11.300	.04920	.14840
1.967	-9.160	.03980	.12540
1.967	-7.000	.03070	.10350
1.967	-4.800	.01910	.08390
1.967	-2.610	.00520	.06770
1.967	-.390	-.00660	.04810
1.967	1.800	-.01700	.02970
1.967	4.010	-.02750	.01070
1.967	6.200	-.03570	-.01300
1.967	8.390	-.04580	-.03260
1.967	10.500	-.05670	-.04970
	GRADIENT	-.00524	-.00842

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IA33 TABULATED DATA

MSFC 594(IA33) 740TS (01)

ORB STING

(AIC337) ( 1 SEP 75 )

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
ELEVTR = .000

REFERENCE DATA

SREF = 210.0000 SQ. FT XMRP = 976.0000 IN. XT  
LREF = 90.7000 IN. YMRP = .0000 IN. YT  
BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
SCALE = .0040

RUN NO. 175/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHEO	CHE1
2.990	-10.610	.02560	.08620
2.990	-8.630	.01840	.05880
2.990	-6.590	.01200	.04630
2.990	-4.520	.00640	.03420
2.990	-2.460	.00120	.02130
2.990	-.370	-.00090	.01190
2.990	1.680	-.00540	.00450
2.990	3.750	-.01090	-.00340
2.990	5.840	-.01570	-.01160
2.990	7.890	-.02260	-.01970
2.990	9.890	-.02790	-.02790
	GRADIENT	-.00199	-.00444

RUN NO. 176/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 3.00

MACH	ALPHA	CHEO	CHE1
4.959	-10.380	.01630	.02460
4.959	-8.440	.01320	.02090
4.959	-6.450	.01010	.01350
4.959	-4.420	.00640	.00950
4.959	-2.390	.00370	.00740
4.959	-.340	.00000	.00210
4.959	1.690	-.00120	.00000
4.959	3.720	-.00490	-.00090
4.959	5.770	-.00830	-.00860
4.959	7.770	-.01140	-.01080
4.959	9.720	-.01630	-.01230
	GRADIENT	-.00135	-.00139

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IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C405) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF \* 135.0000 SQ. FT XMRP = 976.0000 IN. XB  
 LREF \* 81.0000 IN. YMRP = .0000 IN. YB  
 BREF \* .0000 IN. ZMRP = 400.0000 IN. ZB  
 SCALE \* .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 122/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
.598	-11.180	-.03238
.598	-9.120	-.03332
.598	-7.030	-.01543
.598	-4.900	-.00568
.598	-2.790	-.00464
.598	- .660	-.00360
.598	1.450	-.00180
.598	3.590	-.00104
.598	5.710	-.00104
.598	7.810	-.00426
.598	9.830	-.01041
	GRADIENT	.00057

RUN NO. 123/ 0 RN/L = 6.27 GRADIENT INTEPVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
.900	-11.930	.02518
.900	-9.750	.02386
.900	-7.540	.02073
.900	-5.280	.01789
.900	-3.030	.01837
.900	- .770	.01789
.900	1.450	.01903
.900	3.700	.01998
.900	5.920	.02177
.900	8.100	.02282
.900	10.200	.02064
	GRADIENT	.00027

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MSFC 594(1A33) 740TS (TIP101)

ORB STING

(A1C405) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 135.0000 SQ. FT XMRP = 975.0000 IN. XB  
 LREF = 81.0000 IN. YMRP = .0000 IN. YB  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 125/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
1.105	-12.430	.02480
1.105	-10.150	.01960
1.105	-7.840	.01770
1.105	-5.490	.01515
1.105	-3.160	.01695
1.105	-.820	.01922
1.105	1.480	.02045
1.105	3.800	.01865
1.105	6.100	.01893
1.105	8.360	.01869
1.105	10.540	.01893
	GRADIENT	.00027

RUN NO. 124/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
1.256	-12.600	.00009
1.256	-10.270	.00502
1.256	-7.920	.00653
1.256	-5.560	.00521
1.256	-3.220	.00871
1.256	-.880	.01041
1.256	1.420	.01004
1.256	3.750	.00805
1.256	6.040	.00738
1.256	8.340	-.00028
1.256	10.540	-.00435
	GRADIENT	-.00010

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IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIP:01)

ORB STING

(AIC405) ( 11 SEP 75 )

REFERENCE DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YB  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 133/ 0    RN/L = 7.03    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
1.971	-12.600	.00199
1.971	-10.250	.00151
1.971	-7.890	-.00076
1.971	-5.550	-.00492
1.971	-3.230	-.00218
1.971	-.910	-.00322
1.971	1.390	-.00596
1.971	3.720	-.00776
1.971	6.000	-.00918
1.971	8.320	-.01628
1.971	10.550	-.01676
	GRADIENT	-.00084

RUN NO. 157/ 0    RN/L = 4.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
2.990	-11.260	.00511
2.990	-9.200	.00388
2.990	-7.100	.00331
2.990	-4.960	.00663
2.990	-2.830	.00473
2.990	-.690	.00360
2.990	1.420	.00322
2.990	3.560	.00142
2.990	5.690	-.00028
2.990	7.800	-.00473
2.990	9.850	-.00748
	GRADIENT	-.00056

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IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C405) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN. YMRP = .0000 IN. YB  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 106/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
4.959	-10.730	.00350
4.959	-8.770	.00407
4.959	-6.750	.00303
4.959	-4.700	.00199
4.959	-2.610	.00350
4.959	-.550	.00199
4.959	1.510	.00246
4.959	3.580	.00246
4.959	5.620	.00246
4.959	7.670	.00047
4.959	9.630	.00199
	GRADIENT	-.00000

MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C406) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN. YMRP = .0000 IN. YB  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 121/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
.598	-11.130	.01117
.598	-9.050	.00464
.598	-6.930	-.00682
.598	-4.780	-.00757
.598	-2.630	-.00890
.598	-.460	-.00682
.598	1.680	-.01439
.598	3.840	-.01297
.598	5.950	-.00795
.598	8.090	-.00180
.598	10.140	.00464
	GRADIENT	-.00075

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MSFC 594(1A33) 740TS (TIP101)

ORB STING

(A1C406) ( 11 SEP 75 )

REFERENCE DATA

SREF \* 135.0000 SQ. FT XMRP = 976.0000 IN. XB  
 LREF \* 61.0000 IN. YMRP = .0000 IN. YB  
 BREF \* .0000 IN. ZMRP = 400.0000 IN. ZB  
 SCALE \* .0040

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 120/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
.902	-11.970	.01837
.902	-9.730	.02026
.902	-7.440	.01666
.902	-5.130	.01202
.902	-2.820	.01155
.902	-.510	.02121
.902	1.760	.01325
.902	4.060	.00757
.902	6.330	.00890
.902	8.620	.01183
.902	10.820	.01401
	GRADIENT	-.00086

RUN NO. 118/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.096	-10.120	.00871
1.096	-7.710	.00123
1.096	-5.290	-.00388
1.096	-2.920	-.00123
1.096	-.540	.01070
1.096	1.800	.00388
1.096	4.170	-.00985
1.096	6.530	-.01306
1.096	8.900	-.00966
1.096	11.240	.00691
	GRADIENT	-.00138

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MSFC 594(IA33) 74OTS (TIP101)

ORB STING

(AIC406) ( 11 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN. YMRP = .0000 IN. YB  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 119/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.255	-12.720	.00596
1.255	-10.270	.00284
1.255	-7.810	-.00076
1.255	-5.350	-.00852
1.255	-2.930	-.01439
1.255	-.510	-.00445
1.255	1.850	-.01202
1.255	4.260	-.02206
1.255	6.660	-.02064
1.255	9.110	-.00937
1.255	11.540	-.00331
	GRADIENT	-.00127

RUN NO. 134/ 0 RN/L = 7.05 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.967	-12.970	-.01079
1.967	-10.370	-.01146
1.967	-7.900	-.00966
1.967	-5.420	-.00719
1.967	-2.970	-.00871
1.967	-.520	-.00435
1.967	1.880	-.01259
1.967	4.340	-.00880
1.967	6.820	-.01269
1.967	9.380	-.01373
1.967	11.840	-.00985
	GRADIENT	-.00035

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IA33 TABULATED DATA

PAGE 349

MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C406) ( 11 SEP 75 )

REFERENCE DATA

SREF =	135.0000 SQ. FT	XMRP =	976.0000 IN. XB
LREF =	81.0000 IN.	YMRP =	.0000 IN. YB
BREF =	.0000 IN.	ZMRP =	400.0000 IN. ZB
SCALE =	.0040		

PARAMETRIC DATA

ALPHA =	.000	RUDDER =	.000
ELEVTR =	.000		

RUN NO. 166/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
2.990	-11.290	.00388
2.990	-9.190	.00388
2.990	-7.040	.00388
2.990	-4.850	.00331
2.990	-2.670	.00625
2.990	-.470	.00208
2.990	1.700	.00360
2.990	3.890	-.00208
2.990	6.060	-.00085
2.990	8.250	.00388
2.990	10.340	.00360
	GRADIENT	-.00062

RUN NO. 105/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
4.959	-10.750	.00000
4.959	-8.770	.00000
4.959	-6.700	.00000
4.959	-4.640	.00000
4.959	-2.550	.00095
4.959	-.450	.00095
4.959	1.630	.00047
4.959	3.740	.00095
4.959	5.800	.00199
4.959	7.880	.00047
4.959	9.870	.00199
	GRADIENT	.00007

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MSFC 594(1A33) 740TS (TIP1SIP201)

ORB STING

(A1C407) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF \* 135.0000 SQ. FT XMRP = 975.0000 IN. XB  
 LREF \* 81.0000 IN. YMRP = .0000 IN. YB  
 BREF \* .0000 IN. ZMRP = 400.0000 IN. ZB  
 SCALE \* .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 130/ 0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
.599	-11.700	.00322
.599	-9.560	.00142
.599	-7.390	.00104
.599	-5.200	.00028
.599	-3.020	.00000
.599	-.800	.00312
.599	1.390	.00530
.599	3.600	.00682
.599	5.810	.00757
.599	8.020	.00540
.599	10.110	.00540
	GRADIENT	.00103

RUN NO. 129/ 0 RN/L = 5.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
.797	-12.630	.01751
.797	-10.350	.01354
.797	-8.040	.01278
.797	-5.680	.01373
.797	-3.380	.01685
.797	-1.030	.01884
.797	1.290	.02054
.797	3.650	.02149
.797	6.020	.02225
.797	8.360	.02130
.797	10.540	.02121
	GRADIENT	.00067

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1A33 TABULATED DATA

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MSFC 594(1A33) 740TS (TIPIS1P201)

ORB STING

(A1C407) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YB  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 128/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
.905	-13.240	.03134
.905	-10.830	.02802
.905	-8.400	.02244
.905	-5.960	.01789
.905	-3.540	.01363
.905	-1.130	.02282
.905	1.270	.01865
.905	3.650	.01448
.905	6.080	.02386
.905	8.480	.02783
.905	10.730	.02708
GRADIENT		-.00006

RUN NO. 131/ 0    RN/L = 6.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
1.049	-14.130	.02073
1.049	-11.560	.01789
1.049	-9.000	.01534
1.049	-6.400	.01363
1.049	-3.860	.01354
1.049	-1.330	.01306
1.049	1.130	.00000
1.049	3.630	-.00237
1.049	6.150	-.00180
1.049	8.580	-.00587
1.049	10.900	-.00312
GRADIENT		-.00243



MSFC 594 (IA33) 740TS (TIP15IP201) ORB STING

(A1C407) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 135.0000 SQ FT XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN. YMRP = .0000 IN. YB  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 126/ 3 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
1.102	-14.370	.00000
1.102	-11.720	.00000
1.102	-9.130	.00000
1.102	-6.540	.00000
1.102	-3.960	.00000
1.102	-1.390	.00000
1.102	1.120	.00000
1.102	3.640	.00000
1.102	6.180	.00000
1.102	8.660	.00000
1.102	11.010	.00000
	GRADIENT	.00000

RUN NO. 127/ 1 RN/L = 6.69 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
1.253	-15.080	.00748
1.253	-12.250	.00502
1.253	-9.430	.00398
1.253	-6.680	.00114
1.253	-4.010	.00265
1.253	-1.360	-.01041
1.253	1.200	-.00899
1.253	3.740	-.01004
1.253	6.270	-.01202
1.253	8.770	-.01155
1.253	11.240	-.01089
	GRADIENT	-.00143

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IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(A1C407) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF \* 135.0000 SQ. FT XMRP = 976.0000 IN. XB  
 LREF \* 81.0000 IN. YMRP = .0000 IN. YB  
 BREF \* .0000 IN. ZMRP = 400.0000 IN. ZB  
 SCALE \* .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 109/ 0 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
1.464	-15.010	.00057
1.464	-12.240	.00189
1.464	-9.440	.00256
1.464	-6.690	.00426
1.464	-4.010	-.01354
1.464	-1.370	-.01070
1.464	1.220	-.00890
1.464	3.770	-.00757
1.464	6.300	-.00824
1.464	8.790	-.00653
1.464	11.280	-.00587
GRADIENT		.00076

RUN NO. 132/ 0 RN/L = 7.04 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
1.968	-14.660	.00057
1.968	-12.000	-.00151
1.968	-9.330	-.00284
1.968	-6.630	-.00379
1.968	-3.970	-.00625
1.968	-1.380	-.01004
1.968	1.150	-.01070
1.968	3.710	-.01089
1.968	6.260	-.01108
1.968	8.880	-.01212
1.968	11.440	-.01325
GRADIENT		-.00057

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OF POOR QUALITY

MSFC 594(1A33) 740TS (T1P1S1P201)

ORB STING

(A1C407) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN. YMRP = .0000 IN. YB  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 108/ 0 RN/L = 4.56 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
2.990	-11.810	.00966
2.990	-9.690	.00899
2.990	-7.490	.00814
2.990	-5.240	.00719
2.990	-3.010	.00540
2.990	-.800	.00331
2.990	1.400	.00114
2.990	3.610	.00057
2.990	5.800	.00000
2.990	8.000	-.00208
2.990	10.120	-.00331
	GRADIENT	-.00076

RUN NO. 107/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
4.959	-10.940	.00350
4.959	-8.950	.00303
4.959	-6.890	.00246
4.959	-4.800	.00199
4.959	-2.680	.00199
4.959	-.590	.00199
4.959	1.500	.00199
4.959	3.610	.00199
4.959	5.690	.00095
4.959	7.780	.00095
4.959	9.770	.00095
	GRADIENT	.00000

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MSFC 594(IA33) 740TS (T1P1S1P201)

ORB STING

(A1C408) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 135.0000 SQ. FT XMRP = 376.0000 IN. XB  
 LREF = 81.0000 IN. YMRP = .0000 IN. YB  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 115/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
.598	-11.070	-.00530
.598	-9.020	-.00104
.598	-6.910	.00170
.598	-4.750	.00000
.598	-2.590	.00133
.598	-.440	.00502
.598	1.670	.00464
.598	3.820	-.00066
.598	5.940	-.00246
.598	8.080	-.00142
.598	10.110	-.00142
	GRADIENT	.00009

RUN NO. 114/ 0 RN/L = 5.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
.799	-11.590	.00218
.799	-9.440	.00767
.799	-7.220	.00937
.799	-4.980	.01193
.799	-2.740	.01325
.799	-.490	.01325
.799	1.730	.01780
.799	3.960	.01543
.799	6.160	.01411
.799	8.390	.00852
.799	10.530	.00587
	GRADIENT	.00053

MSFC 594(IA33) 740TS (TIPIS1P201)

ORB STING

(A1C408) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN. YMRP = .0000 IN. YB  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 113/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
.899	-11.880	.01013
.899	-9.660	.01439
.899	-7.370	.01770
.899	-5.090	.01704
.899	-2.800	.01780
.899	-.510	.01808
.899	1.750	.01486
.899	4.050	.01051
.899	6.300	.00937
.899	8.580	.00776
.899	10.750	.00701
	GRADIENT	-.00110

RUN NO. 116/ 0 RN/L = 6.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.050	-12.340	.00719
1.050	-9.990	.00606
1.050	-7.610	.00047
1.050	-5.230	-.00399
1.050	-2.870	-.00256
1.050	-.520	.00350
1.050	1.790	.00312
1.050	4.130	.00568
1.050	6.460	.00492
1.050	8.810	.00123
1.050	11.090	.00454
	GRADIENT	.00105

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MSFC 594(IA33) 740TS (T1P1S1P201)

ORB STING

(A1C408) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YB  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 117/ 0    RN/L = 6.62    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.099	-12.420	.00786
1.099	-10.050	.00511
1.099	-7.650	-.00066
1.099	-5.250	-.00767
1.099	-2.890	-.00606
1.099	-.530	.00265
1.099	1.780	.00265
1.099	4.130	.00227
1.099	6.470	.00104
1.099	8.830	.00085
1.099	11.140	.00587
	GRADIENT	.00107

RUN NO. 112/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.246	-12.630	.00284
1.246	-10.220	-.00161
1.246	-7.750	-.00615
1.246	-5.290	-.00757
1.246	-2.900	-.01325
1.246	-.510	-.00843
1.246	1.830	-.01619
1.246	4.220	-.01363
1.246	6.610	-.01004
1.246	9.050	.00000
1.246	11.440	.00218
	GRADIENT	-.00037

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC408) ( 11 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YB  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 111/ 0    RN/L = 6.51    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.465	-12.640	-.01183
1.465	-10.250	-.01572
1.465	-7.780	-.01998
1.465	-5.310	-.01837
1.465	-2.890	-.02064
1.465	-.520	-.01108
1.465	1.840	-.01912
1.465	4.230	-.01979
1.465	6.630	-.01619
1.465	9.090	-.01496
1.465	11.490	-.01221
	GRADIENT	-.00023

RUN NO. 135/ 0    RN/L = 7.05    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.965	-12.840	.00161
1.965	-10.290	-.00123
1.965	-7.830	-.00426
1.965	-5.380	-.00502
1.965	-2.950	-.00596
1.965	-.520	-.01041
1.965	1.870	-.01108
1.965	4.290	-.01089
1.965	6.740	-.00786
1.965	9.220	-.01136
1.965	11.680	-.01032
	GRADIENT	-.00064

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MSFC 594(IA33) 740TS (TIP1SIP201) ORB STING

(AIC408) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF \* 135.0000 SC FT XMRP = 976.0000 IN. XB  
 LREF \* 81.0000 IN YMRP = .0000 IN. YB  
 BREF \* .0000 ZMRP = 400.0000 IN. ZB  
 SCALE \* .0040

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 104/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
2.990	-11.280	.00322
2.990	-9.190	.00511
2.990	-7.010	.00540
2.990	-4.830	.00568
2.990	-2.650	.00483
2.990	-.460	.00237
2.990	1.700	.00293
2.990	3.900	.00511
2.990	6.070	.00568
2.990	8.260	.00483
2.990	10.360	.00293
GRADIENT		-.00014

RUN NO. 103/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
4.959	-10.760	.00000
4.959	-8.750	.00000
4.959	-6.700	.00000
4.959	-4.620	.00000
4.959	-2.530	.00151
4.959	-.430	.00047
4.959	1.650	.00151
4.959	3.750	.00151
4.959	5.820	.00151
4.959	7.910	.00199
4.959	9.900	.00199
GRADIENT		.00014

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IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (TIP1S1P201)

ORB STING

(AIC409) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YB  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

ALPHA = 5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 159/ 0    RN/L = 4.98    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
.598	-11.010	-.00577
.598	-8.950	-.00284
.598	-6.830	.00000
.598	-4.680	.00246
.598	-2.540	.00699
.598	-.380	.00956
.598	1.750	.00691
.598	3.900	.00142
.598	6.010	-.00284
.598	8.130	-.00398
.598	10.190	-.00284
	GRADIENT	-.00019

RUN NO. 158/ 0    RN/L = 5.93    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
.797	-11.500	.00483
.797	-9.320	.00947
.797	-7.120	.01193
.797	-4.860	.01628
.797	-2.640	.01581
.797	-.390	.01553
.797	1.820	.02206
.797	4.030	.01931
.797	6.250	.01600
.797	8.480	.01164
.797	10.620	.00748
	GRADIENT	.00055

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IA33 TABULATED DATA

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MSFC 594(IA33) 740TS (T1P1S1P201)

ORB STING

(AIC409) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN. YMRP = .0000 IN. YB  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

ALPHA = 5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 157/ 0 RN/L = 6.29 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
.905	-11.840	.00691
.905	-9.620	.00918
.905	-7.340	.00985
.905	-5.010	.01221
.905	-2.720	.01306
.905	-.420	.00672
.905	1.850	.01912
.905	4.120	.02054
.905	6.410	.00644
.905	8.660	.00691
.905	10.850	.00824
	GRADIENT	.00152

RUN NO. 155/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.102	-12.320	-.00663
1.102	-9.970	-.00246
1.102	-7.580	-.00331
1.102	-5.170	-.00511
1.102	-2.810	-.00246
1.102	-.450	.00009
1.102	1.890	.00407
1.102	4.220	.00322
1.102	6.570	.00189
1.102	8.920	.00189
1.102	11.250	.00000
	GRADIENT	.00090

MSFC 594(IA33) 740TS (T1P1S1P201)

ORB STING

(A1C409) ( 11 SEP 75 )

REFERENCE DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. X8  
 LREF = 81.0000 IN. YMRP = .0000 IN. Y0  
 BREF = .0000 IN. ZMRP = 400.0000 IN. Z8  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 156/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.255	-12.510	-.01411
1.255	-10.120	-.00786
1.255	-7.660	-.00615
1.255	-5.210	-.00918
1.255	-2.800	-.00786
1.255	-.400	-.00464
1.255	1.950	-.00568
1.255	4.340	-.00918
1.255	6.720	-.00464
1.255	9.150	-.00161
1.255	11.550	-.00549
	GRADIENT	-.00021

RUN NO. 141/ 0 RN/L = 6.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.456	-12.520	-.03276
1.456	-10.120	-.02906
1.456	-7.670	-.02764
1.456	-5.230	-.01998
1.456	-2.830	-.01780
1.456	-.430	-.00492
1.456	1.920	-.01164
1.456	4.320	-.01780
1.456	6.700	-.01950
1.456	9.140	-.02102
1.456	11.540	-.02111
	GRADIENT	-.00028

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IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC409) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YB  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

ALPHA = 5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 136/ 0    RN/L = 7.06    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.962	-12.660	-.00426
1.962	-10.140	-.00256
1.962	-7.710	-.00426
1.962	-5.270	-.00596
1.962	-2.850	-.00824
1.962	-.430	-.01032
1.962	1.930	-.01335
1.962	4.350	-.01079
1.962	6.770	-.00766
1.962	9.250	-.00776
1.962	11.680	-.00909
	GRADIENT	-.00045

RUN NO. 160/ 0    RN/L = 4.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
2.990	-11.210	.00293
2.990	-9.100	.00322
2.990	-6.940	.00331
2.990	-4.760	.00331
2.990	-2.590	.00028
2.990	-.400	.00028
2.990	1.750	.00000
2.990	3.940	.00085
2.990	6.100	-.00028
2.990	8.260	.00208
2.990	10.380	.00265
	GRADIENT	-.00024

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MSFC 594(1A33) 740TS (T1P1S1P201)

ORB STING

(A1C409) ( 11 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN. YMRP = .0000 IN. YB  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

ALPHA = 5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 161/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
4.959	-10.680	-.00047
4.959	-9.680	.00000
4.959	-6.630	.00000
4.959	-4.550	.00047
4.959	-2.470	.00000
4.959	-.370	.00000
4.959	1.690	.00000
4.959	3.790	.00000
4.959	5.850	.00000
4.959	7.910	.00000
4.959	9.970	.00047
	GRADIENT	-.00005

MSFC 594(1A33) 740TS (T1P1S1P201)

ORB STING

(A1C410) ( 11 SEP 75 )

## REFERENCE DATA

## PARAMETRIC DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN. YMRP = .0000 IN. YB  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

ALPHA = -5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 145/ 0 RN/L = 5.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
.602	-11.060	.00388
.602	-9.020	.00710
.602	-6.880	.00748
.602	-4.720	.00388
.602	-2.580	.00284
.602	-.420	.00322
.602	1.700	.00682
.602	3.840	.00104
.602	5.960	.00000
.602	8.100	.00170
.602	10.160	.00388
	GRADIENT	-.00008

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MSFC 594(1A33) 740TS (T1P1S1P201)

ORB STING

(A1C410) ( 11 SEP 75 )

REFERENCE DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.       YMRP = .0000 IN. YB  
 BREF = .0000 IN.        ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 144/ 0    RN/L = 5.95    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
.799	-11.600	.01950
.799	-9.410	.01714
.799	-7.200	.01704
.799	-4.950	.01221
.799	-2.710	.01098
.799	-.460	.01079
.799	1.740	.01609
.799	3.980	.01477
.799	6.180	.01581
.799	8.390	.00757
.799	10.540	.01250
	GRADIENT	.00046

RUN NO. 143/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
.902	-11.940	.01704
.902	-9.700	.02215
.902	-7.400	.02555
.902	-5.080	.02338
.902	-2.790	.02083
.902	-.480	.01496
.902	1.770	.02338
.902	4.060	.02518
.902	6.320	.02348
.902	8.590	.02518
.902	10.810	.01647
	GRADIENT	.00094

MSFC 594 (IA33) 740TS (T1P1S1P201) ORB STING

(A1C410) ( 11 SEP 75 )

REFERENCE DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YB  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 146/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.102	-12.530	.00549
1.102	-10.140	.00691
1.102	-7.730	.00066
1.102	-5.290	-.00710
1.102	-2.900	-.00909
1.102	-.520	-.00208
1.102	1.820	.01089
1.102	4.200	-.01647
1.102	6.550	-.01231
1.102	8.930	-.00606
1.102	11.290	-.00142
	GRADIENT	-.00040

RUN NO. 142/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.252	-12.790	.00180
1.252	-10.370	.00028
1.252	-7.860	-.00350
1.252	-5.370	-.01136
1.252	-2.940	-.01155
1.252	-.520	-.01477
1.252	1.870	-.01808
1.252	4.290	-.01819
1.252	6.700	-.01515
1.252	9.100	-.00805
1.252	11.580	-.00133
	GRADIENT	-.00096

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MSFC 594(1A33) 740TS (TIP(SIP20))

ORB STING

(AIC410) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YB  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

ALPHA = -5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 140/ 0    RN/L = 6.53    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.460	-12.780	.00000
1.460	-10.370	-.00454
1.460	-7.920	-.00843
1.460	-5.430	-.01164
1.460	-2.980	-.01448
1.460	-.540	-.01325
1.460	1.860	-.02111
1.460	4.320	-.01893
1.460	6.780	-.01316
1.460	9.220	-.00985
1.460	11.630	-.00454
	GRADIENT	-.00017

RUN NO. 139/ 0    RN/L = 7.05    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.966	-12.970	.00776
1.966	-10.460	.00577
1.966	-7.970	.00563
1.966	-5.480	.00445
1.966	-3.000	.00028
1.966	-.520	-.00473
1.966	1.930	-.00729
1.966	4.420	-.00511
1.966	6.910	-.00435
1.966	9.390	-.00464
1.966	11.850	-.00114
	GRADIENT	-.00076



MSFC 594(IA33) 740TS (TIPISIP201)

ORB STING

(AIC410) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YB  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = -5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 165/ 0    RN/L = 4.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
2.990	-11.350	.00360
2.990	-9.220	.00322
2.990	-7.060	.00596
2.990	-4.850	.00568
2.990	-2.650	.00568
2.990	-.440	.00568
2.990	1.740	.00719
2.990	3.940	.00663
2.990	6.130	.00691
2.990	8.320	.00568
2.990	10.440	.00511
	GRADIENT	.00015

RUN NO. 164/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
4.959	-10.760	.00000
4.959	-8.750	.00000
4.959	-6.690	.00000
4.959	-4.590	.00000
4.959	-2.510	.00047
4.959	-.390	.00000
4.959	1.690	.00000
4.959	3.790	.00047
4.959	5.870	.00000
4.959	7.950	.00151
4.959	9.960	.00000
	GRADIENT	.00002

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MSFC 594(IA33) 740TS (T2P1S3P201F2) ORB STING

(A1C421) ( 11 SEP 75 )

REFERENCE DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.      YMRP = .0000 IN. YB  
 BREF = .0000 IN.        ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .003

RUN NO. 96/ 0    RN/L = 4.99    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
.600	-11.890	.00000
.600	-9.750	-.00066
.600	-7.570	-.00142
.600	-5.360	-.00284
.600	-3.160	-.00368
.600	- .930	-.00360
.600	1.240	-.00246
.600	3.480	-.00246
.600	5.670	-.00246
.600	7.890	-.00246
.600	9.990	-.00028
	GRADIENT	.00024

RUN NO. 95/ 0    PN/L = 5.94    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
.798	-12.940	.03976
.798	-10.570	.02594
.798	-8.240	.02073
.798	-5.860	.01619
.798	-3.530	.01619
.798	-1.180	.01695
.798	1.150	.01856
.798	3.500	.01912
.798	5.830	.02168
.798	8.170	.02073
.798	10.390	.02480
	GRADIENT	.00045

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IA33 TABULATED DATA

MSFC 594(IA33) 740TS (T2P1S3P201F2) ORB STING

(A1C421) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YB  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 94/ 0    RN/L = 6.29    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
.905	-13.600	.02121
.905	-11.100	.02793
.905	-8.630	.02793
.905	-6.140	.02499
.905	-3.690	.02225
.905	-1.260	.02111
.905	1.150	.02282
.905	3.570	.02319
.905	5.960	.02660
.905	8.390	.02802
.905	10.660	.03427
GRADIENT		.00619

RUN NO. 93/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
1.099	-14.910	-.00966
1.099	-12.080	.00644
1.099	-9.400	.01411
1.099	-6.760	.01581
1.099	-4.150	.01430
1.099	-1.560	.01411
1.099	.930	.01212
1.099	3.480	.00871
1.099	5.970	.00966
1.099	8.490	.01108
1.099	10.900	.01070
GRADIENT		-.00074

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MSFC 594(1A33) 740TS (T2PIS3P20IF2) ORB STING

(A1C421) ( 11 SEP 75 )

REFERENCE DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YB  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 97/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
1.254	-15.750	.00937
1.254	-12.750	.00066
1.254	-9.800	.00454
1.254	-6.980	.00435
1.254	-4.270	.00303
1.254	-1.590	.00066
1.254	.990	-.00095
1.254	3.580	-.00227
1.254	6.120	-.00151
1.254	8.700	-.00161
1.254	11.230	-.00530
	GRADIENT	-.00067

RUN NO. 101/ 0    RN/L = 6.52    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
1.461	-15.570	.00738
1.461	-12.710	.00142
1.461	-9.820	.00047
1.461	-6.980	.00000
1.461	-4.270	-.00407
1.461	-1.600	-.00719
1.461	.980	-.00985
1.461	3.570	-.00956
1.461	6.130	-.00719
1.461	8.720	-.00492
1.461	11.300	-.00606
	GRADIENT	-.00073

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MSFC 594(1A33) 740TS (T2P1S3P201F2) ORB STING

(A1C421) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YB  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 87/ 0    RN/L = 7.06    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
1.960	-15.540	.01344
1.960	-12.660	.00909
1.960	-9.840	.00871
1.960	-6.980	.00521
1.960	-4.250	.00331
1.960	-1.590	.00104
1.960	.960	.00133
1.960	3.530	.00000
1.960	6.100	-.00208
1.960	8.820	-.00151
1.960	11.470	-.00559
	GRADIENT	-.00037

RUN NO. 98/ 0    RN/L = 4.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
2.990	-12.070	.00719
2.990	-9.900	.00596
2.990	-7.680	.00525
2.990	-5.430	.00511
2.990	-3.170	.00331
2.990	-.940	.00331
2.990	1.260	.00208
2.990	3.500	.00237
2.990	5.710	.00000
2.990	7.950	-.00085
2.990	10.100	-.00142
	GRADIENT	-.00018

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## IA33 TABULATED DATA

MSFC 594(IA33) 740TS (T2P1S3P201F2) ORB STING

(A1C421) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN. YMRP = .0000 IN. YB  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

## PARAMETRIC DATA

RUN NO. 99/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
4.959	-11.100	.00246
4.959	-9.080	.00199
4.959	-7.010	.00246
4.959	-4.910	.00000
4.959	-2.800	.00000
4.959	-.690	.00047
4.959	1.400	.00047
4.959	3.520	.00000
4.959	5.600	.00047
4.959	7.710	.00000
4.959	9.720	-.00047
	GRADIENT	.00002

MSFC 594(IA33) 740TS (T2P1S3P201F2) CRB STING

(A1C422) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. YB  
 LREF = 81.0000 IN. YMRP = .0000 IN. YB  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

## PARAMETRIC DATA

RUN NO. 91/ 0 RN/L = 4.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
.595	-11.350	-.01164
.595	-9.280	-.01231
.595	-7.130	-.01297
.595	-4.940	-.00691
.595	-2.750	-.00360
.595	-.540	-.00180
.595	1.660	-.00142
.595	3.840	-.00180
.595	6.010	-.00577
.595	8.190	-.01060
.595	10.260	-.01240
	GRADIENT	.00056

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1A33 TABULATED DATA

MSFC 594(1A33) 740TS (T2P1S3P201F2) ORB STING

(A1C422) ( 11 SEP 75 )

REFERENCE DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YB  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 90/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
.902	-12.430	.01505
.902	-10.150	.01732
.902	-7.780	.02064
.902	-5.400	.02026
.902	-3.020	.02225
.902	-.640	.02282
.902	1.720	.01988
.902	4.110	.01524
.902	6.470	.01534
.902	8.830	.01269
.902	11.130	.00398
GRADIENT		-.00101

RUN NO. 92/ 0    RN/L = 6.62    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.099	-13.080	.01903
1.099	-10.620	.01505
1.099	-8.140	.00928
1.099	-5.630	.00852
1.099	-3.150	.00511
1.099	-.660	.00682
1.099	1.900	.01079
1.099	4.290	.00511
1.099	6.780	.00464
1.099	9.290	.00833
1.099	11.720	.01089
GRADIENT		.00016

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MSFC 594(1A33) 740TS (T2P1S3P201F2) ORB STING

(A1C422) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YB  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 89/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.256	-13.380	.00899
1.256	-10.850	.01022
1.256	-8.290	.00786
1.256	-5.720	.00587
1.256	-3.190	.00312
1.256	-.650	.00227
1.256	1.860	-.00379
1.256	4.410	-.00454
1.256	6.950	-.00114
1.256	9.560	.00066
1.256	12.080	.00076
GRADIENT		-.00115

RUN NO. 88/ 0    RN/L = 7.05    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.967	-13.900	.00208
1.967	-11.110	.00123
1.967	-8.460	.00000
1.967	-5.850	.00104
1.967	-3.260	.00303
1.967	-.650	.00237
1.967	1.930	.00379
1.967	4.560	.00161
1.967	7.180	-.00151
1.967	9.920	-.00303
1.967	12.540	-.00331
GRADIENT		-.00011



DATE 23 OCT 75

1A33 TABULATED DATA

MSFC 594(1A33) 740TS (T2P1S3P201F2) ORB STING

(A1C422) ( 11 SEP 75 )

PARAMETRIC DATA

ALPHA = .000 RUDDER = .000  
ELEVTR = .000

REFERENCE DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. XB  
LREF = 81.0000 IN. YMRP = .0000 IN. YB  
BREF = .0000 IN. ZMRP = 400.0000 IN. ZB  
SCALE = .0040

RUN NO. 100/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
4.959	-10.980	-.00047
4.959	-8.950	.00000
4.959	-6.880	.00000
4.959	-4.770	.00047
4.959	-2.650	.00000
4.959	-.520	.00151
4.959	1.590	.00199
4.959	3.730	.00151
4.959	5.830	.00000
4.959	7.950	.00047
4.959	9.960	.00000
	GRADIENT	.00019

MSFC 594(1A33) 740TS (T1P101)

ORB STING

(A1C423) ( 11 SEP 75 )

PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000  
ELEVTR = .000

REFERENCE DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. XB  
LREF = 81.0000 IN. YMRP = .0000 IN. YB  
BREF = .0000 IN. ZMRP = 400.0000 IN. ZB  
SCALE = .0040

RUN NO. 151/ 0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
.600	-11.070	.00000
.600	-9.010	.00142
.600	-6.870	.00208
.600	-4.720	.00000
.600	-2.570	-.00028
.600	-.400	-.00284
.600	1.750	-.00426
.600	3.910	-.00322
.600	6.030	-.00284
.600	8.140	.00142
.600	10.210	.00062
	GRADIENT	-.00048

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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C423) ( 11 SEP 75 )

REFERENCE DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YB  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 152/ 0    RN/L = 6.29    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
.904	-11.940	.01070
.904	-9.640	.02291
.904	-7.360	.01912
.904	-5.030	.01912
.904	-2.740	.02566
.904	-.420	.02603
.904	1.840	.02471
.904	4.130	.02509
.904	6.390	.02187
.904	8.670	.01846
.904	10.900	.01922
	GRADIENT	-.00013

RUN NO. 154/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.098	-12.480	.00000
1.098	-10.090	.00909
1.098	-7.660	.00511
1.098	-5.220	.00189
1.098	-2.820	.00691
1.098	-.430	.01448
1.098	1.910	.01269
1.098	4.290	.00691
1.098	6.630	.00701
1.098	9.020	.00909
1.098	11.400	.01590
	GRADIENT	-.00007

MSFC 594(1A33) 740TS (TIP101)

ORB STING

(A1C423) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. XD  
 LREF = 81.0000 IN. YMRP = .0000 IN. YB  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = 5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 153/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.250	-12.630	-.00133
1.250	-10.220	.00379
1.250	-7.740	.00180
1.250	-5.260	-.00227
1.250	-2.840	-.00464
1.250	-.420	.00398
1.250	1.970	-.00133
1.250	4.330	-.00180
1.250	6.740	-.00133
1.250	9.170	-.00483
1.250	11.620	.00454
	GRADIENT	.00014

RUN NO. 137/ 0 RN/L = 7.07 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.957	-12.850	-.01505
1.957	-10.340	-.01657
1.957	-7.860	-.01496
1.957	-5.360	-.01136
1.957	-2.900	-.01127
1.957	-.450	-.00928
1.957	1.960	-.01335
1.957	4.420	-.01647
1.957	6.870	-.01382
1.957	9.410	-.01430
1.957	11.890	-.01647
	GRADIENT	-.00081

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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C423) ( 11 SEP 75 )

REFERENCE DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YB  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = 5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 162/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
4.959	-10.670	-.00047
4.959	-8.670	-.00047
4.959	-6.630	.00000
4.959	-4.550	.00047
4.959	-2.470	.00047
4.959	-.380	.00000
4.959	1.680	.00000
4.959	3.760	.00000
4.959	5.850	.00047
4.959	7.910	.00047
4.959	9.910	.00000
	GRADIENT	-.00007

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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C424) ( 11 SEP 75 )

REFERENCE DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YB  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 150/ 0    RN/L = 4.98    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
.598	-11.080	.00322
.598	-9.000	-.00360
.598	-6.970	-.01193
.598	-4.720	-.01155
.598	-2.580	-.00090
.598	-.410	-.02206
.598	1.720	-.02357
.598	3.890	-.01183
.598	6.010	-.00966
.598	8.100	-.00404
.598	10.210	.00000
	GRADIENT	-.00071

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IA33 TABULATED DATA

MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C424) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN. YMRP = .0000 IN. YB  
 BREF = .0000 IN. ZMRP = 100.0000 IN. ZB  
 SCALE = .0040

## PARAMETRIC DATA

ALPHA = -5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 149/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
.903	-11.990	.02499
.903	-9.710	.02291
.903	-7.400	.01912
.903	-5.070	.01240
.903	-2.770	.01439
.903	-.460	.01922
.903	1.810	.01799
.903	4.100	.00786
.903	6.390	.00909
.903	8.670	.00653
.903	10.900	.01032
	GRADIENT	-.00091

RUN NO. 147/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.101	-12.510	.01979
1.101	-10.100	.01639
1.101	-7.690	.00843
1.101	-5.250	-.00568
1.101	-2.860	-.00303
1.101	-.490	.01089
1.101	1.870	.00549
1.101	4.250	-.01581
1.101	6.610	-.01931
1.101	9.040	-.01202
1.101	11.410	-.00142
	GRADIENT	-.00185

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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C424) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YB  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

ALPHA = -5.000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 148/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.254	-12.730	.01325
1.254	-10.270	.00852
1.254	-7.800	.00180
1.254	-5.320	-.00786
1.254	-2.880	-.01155
1.254	- .470	-.00331
1.254	1.910	-.01259
1.254	4.330	-.02026
1.254	6.750	-.02149
1.254	9.250	-.01146
1.254	11.690	-.00417
	GRADIENT	-.00147

RUN NO. 138/ 0    RN/L = 7.05    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.967	-12.930	.00473
1.967	-10.400	.00275
1.967	-7.890	-.00123
1.967	-5.380	.00038
1.967	-2.910	-.00123
1.967	- .460	-.00473
1.967	1.960	-.00426
1.967	4.450	-.00454
1.967	6.930	-.00426
1.967	9.470	-.00265
1.967	12.000	.00104
	GRADIENT	-.00039

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MSFC 594(IA33) 740TS (TIP101)

ORB STING

(A1C424) ( 11 SEP 75 )

REFERENCE DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN. YMRP = .0000 IN. YB  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

PARAMETRIC DATA

ALPHA = -5.000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 163/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
4.959	-10.740	-.00095
4.959	-8.730	-.00047
4.959	-6.670	.00001
4.959	-4.580	.00000
4.959	-2.500	.00000
4.959	-.390	.00000
4.959	1.700	.00199
4.959	3.780	.00095
4.959	5.870	.00151
4.959	7.940	.00047
4.959	9.950	.00000
	GRADIENT	.00019

MSFC 594(IA33) 740TS (TIP1S2P201)

ORB STING

(A1C425) ( 11 SEP 75 )

REFERENCE DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 81.0000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 57/ 0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
.599	-11.730	.00000
.599	-9.600	.00000
.599	-7.430	.00000
.599	-5.230	.00000
.599	-3.010	.00000
.599	-.820	.00000
.599	1.410	.00000
.599	3.640	.00000
.599	5.820	.00000
.599	8.020	.00000
.599	10.120	.00000
	GRADIENT	.00030

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MSFC 594(1A33) 740TS (TIPIS2P201) ORB STING

(A1C425) ( 11 SEP 75 )

REFERENCE DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 81.0000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 58/ 0 RN/L = 5.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
.800	-12.660	.00000
.800	-10.370	.00000
.800	-8.050	.00000
.800	-5.690	.00000
.800	-3.410	.00000
.800	-1.050	.00000
.800	1.290	.00000
.800	3.670	.00000
.800	6.010	.00000
.800	8.330	.00000
.800	10.550	.00000
	GRADIENT	.00000

RUN NO. 59/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
.904	-13.220	.00000
.904	-10.820	.00000
.904	-8.400	.00000
.904	-5.940	.00000
.904	-3.510	.00000
.904	-1.150	.00000
.904	1.280	.00000
.904	3.690	.00000
.904	6.090	.00000
.904	8.460	.00000
.904	10.740	.00000
	GRADIENT	.00000

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MSFC 594(IA33) 740TS (T1P1S2P201) ORB STING

(A1C425) ( 11 SEP 75 )

REFERENCE DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 81.0000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 61/ 1 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
1.101	-14.480	.00000
1.101	-11.800	.00000
1.101	-9.190	.00000
1.101	-6.590	.00000
1.101	-4.020	.00000
1.101	-1.440	.00000
1.101	1.080	.00000
1.101	3.600	.00000
1.101	6.140	.00000
1.101	8.630	.00000
1.101	10.960	.00000
	GRADIENT	.00000

RUN NO. 60/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
1.254	-15.150	.00000
1.254	-12.280	.00000
1.254	-9.450	.00000
1.254	-6.700	.00000
1.254	-4.030	.00000
1.254	-1.390	.00000
1.254	1.200	.00000
1.254	3.740	.00000
1.254	6.280	.00000
1.254	8.770	.00000
1.254	11.240	.00000
	GRADIENT	.00000

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MSFC 594(IA33) 740TS (T1P1S2P201)

ORB STING

(A1C425) ( 11 SEP 75 )

REFERENCE DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 81.0000 IN. YMRP = .0000 IN. YT  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 110/ 0 RN/L = 6.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
1.467	-15.070	-.00757
1.467	-12.280	-.01354
1.467	-9.450	-.01505
1.467	-6.710	-.01590
1.467	-4.020	-.01647
1.467	-1.390	-.01401
1.467	1.220	-.01496
1.467	3.740	-.01259
1.467	6.290	-.01183
1.467	8.770	-.01155
1.467	11.260	-.01098
	GRADIENT	.00041

RUN NO. 77/ 0 RN/L = 7.07 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
1.959	-14.950	.00000
1.959	-12.130	.00000
1.959	-9.350	.00000
1.959	-6.600	.00000
1.959	-4.030	.00000
1.959	-1.440	.00000
1.959	1.160	.00000
1.959	3.730	.00000
1.959	6.280	.00000
1.959	8.870	.00000
1.959	11.450	.00000
	GRADIENT	.00000

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MSFC 594(1A33) 740TS (TIPIS2P201)

ORB STING

(A1C425) ( 11 SEP 75 )

REFERENCE DATA

SREF =	135.0000 SQ. FT	XMRP =	976.0000 IN. XT
LREF =	81.0000 IN.	YMRP =	.0000 IN. YT
BREF =	.0000 IN.	ZMRP =	400.0000 IN. ZT
SCALE =	.0040		

PARAMETRIC DATA

BETA =	.000	RUDDER =	.000
ELEVTR =	.000		

RUN NO. 83/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
2.990	-11.830	.00000
2.990	-9.680	.00000
2.990	-7.490	.00000
2.992	-5.230	.00000
2.990	-3.020	.00000
2.990	-.810	.00000
2.990	1.400	.00000
2.990	3.620	.00000
2.990	5.810	.00000
2.990	8.000	.00000
2.990	10.140	.00000
	GRADIENT	.00000

RUN NO. 82/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
4.959	-10.970	.00000
4.959	-8.950	.00000
4.959	-6.870	.00000
4.959	-.800	.00000
4.959	-2.680	.00000
4.959	-.580	.00000
4.959	1.520	.00000
4.959	3.630	.00000
4.959	5.700	.00000
4.959	7.780	.00000
4.959	9.800	.00000
	GRADIENT	.00000

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MSFC 594(IA33) 740TS (T1P1S2P201)

ORB STING

(AIC426) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 133.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 65/ 0    RN/L = 4.98    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
.598	-11.080	.00000
.598	-9.310	.00000
.598	-6.870	.00000
.598	-4.720	.00000
.598	-2.580	.00000
.598	-1.440	.00000
.598	1.700	.00000
.598	3.850	.00000
.598	5.970	.00000
.598	8.090	.00000
.598	10.150	.00000
	GRADIENT	.00000

RUN NO. 64/ 0    RN/L = 6.27    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
.901	-11.860	.00000
.901	-9.640	.00000
.901	-7.380	.00000
.901	-5.060	.00000
.901	-2.780	.00000
.901	-1.500	.00000
.901	1.780	.00000
.901	4.060	.00000
.901	6.300	.00000
.901	8.540	.00000
.901	10.740	.00000
	GRADIENT	.00000

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IA33 TABULATED DATA

MSFC 594(IA33) 740TS (T1P1S2P201)

ORB STING

(A1C426) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 62/ 0    RN/L = 6.62    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.098	-12.390	.00000
1.098	-10.020	.00000
1.098	-7.640	.00000
1.098	-5.220	.00000
1.098	-2.860	.00000
1.098	-.510	.00000
1.098	1.810	.00000
1.098	4.170	.00000
1.098	6.500	.00000
1.098	8.860	.00000
1.098	11.210	.00000
	GRADIENT	.00000

RUN NO. 63/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.247	-12.590	.00000
1.247	-10.190	.00000
1.247	-7.720	.00000
1.247	-5.260	.00000
1.247	-2.860	.00000
1.247	-.490	.00000
1.247	1.870	.00000
1.247	4.250	.00000
1.247	6.620	.00000
1.247	9.050	.00000
1.247	11.470	.00000
	GRADIENT	.00000

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MSFC 594(1A33) 740TS (TIP152P201)

ORB STING

(A10426) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 81.0000 IN.        YMRP = .0900 IN. YT  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

ALPHA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 76/ 0    RN/L = 7.09    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
1.950	-12.710	.00000
1.950	-10.310	.00000
1.950	-7.870	.00000
1.950	-5.390	.00000
1.950	-2.950	.00000
1.950	-1.530	.00000
1.950	1.900	.00000
1.950	4.350	.00000
1.950	6.780	.00000
1.950	9.240	.00000
1.950	11.730	.00000
	GRADIENT	.00000

RUN NO. 102/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
4.959	-10.760	.00000
4.959	-8.750	.00000
4.959	-6.680	.00047
4.959	-4.620	.00199
4.959	-2.530	.00199
4.959	-1.430	.00000
4.959	1.650	.00151
4.959	3.750	.00199
4.959	5.820	.00151
4.959	7.910	.00000
4.959	9.900	.00199
	GRADIENT	-.00002

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## IA33 TABULATED DATA

MSFC 594 (IA33) 740TS (T1P1S3P201F2) ORB STING

(A1C435) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN. YMRP = .0000 IN. YB  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

## PARAMETRIC DATA

RUN NO. 86/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
2.990	-11.990	.00625
2.990	-9.860	.00625
2.990	-7.650	.00568
2.990	-5.380	.00445
2.990	-3.150	.00293
2.990	-.940	.00180
2.990	1.260	.00208
2.990	3.480	.00142
2.990	5.670	.00000
2.990	7.910	-.00180
2.990	10.040	-.00208
	GRADIENT	-.00019

RUN NO. 85/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
4.959	-11.050	.00246
4.959	-9.060	.00047
4.959	-7.000	.00151
4.959	-4.900	.00047
4.959	-2.780	.00047
4.959	-.680	.00047
4.959	1.420	.00047
4.959	3.510	.00047
4.959	5.590	.00000
4.959	7.680	.00000
4.959	9.680	-.00047
	GRADIENT	-.00000

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MSFC 594(IA33) 740TS (TIP1S3P201F2) ORB STING

(AIC436) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN. YMRP = .0000 IN. YB  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

ALPHA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 84/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHBF
4.959	-10.950	.00000
4.959	-8.930	.00151
4.959	-6.860	.00199
4.959	-4.730	.00199
4.959	-2.620	.00199
4.959	-.510	.00151
4.959	1.590	.00199
4.959	3.720	.00151
4.959	5.810	.00151
4.959	7.920	.00000
4.959	9.920	.00047
GRADIENT		-.00000

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MSFC 594(IA33) 740TS (01)

ORB STING

(AIC437) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 135.0000 SQ. FT XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN. YMRP = .0000 IN. YB  
 BREF = .0000 IN. ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

BETA = .000 RUDDER = .000  
 ELEVTR = .000

RUN NO. 172/ 0 RN/L = 5.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
.600	-10.790	-.01155
.600	-8.780	-.01259
.600	-6.720	-.01723
.600	-4.610	-.01392
.600	-2.500	-.01288
.600	-.380	-.01174
.600	1.720	-.01212
.600	3.850	-.01212
.600	5.940	-.01363
.600	8.050	-.01430
.600	10.070	-.01695
GRADIENT		.00021



MSFC 594(1A33) 740TS (01)

ORB STING

(A1C437) ( 11 SEP 75 )

REFERENCE DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YB  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 171/ 0    RN/L = 5.95    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
.798	-11.200	-.00871
.798	-9.100	-.01202
.798	-6.980	-.01344
.798	-4.810	-.01325
.798	-2.630	-.01297
.798	-.450	-.01269
.798	1.710	-.01212
.798	3.910	-.01250
.798	6.060	-.01278
.798	8.220	-.01325
.798	10.310	-.01477
GRADIENT		.00011

RUN NO. 170/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
.902	-11.410	-.01420
.902	-9.310	-.01893
.902	-7.140	-.02111
.902	-4.930	-.02111
.902	-2.710	-.01931
.902	-.470	-.01818
.902	1.740	-.01790
.902	3.940	-.01695
.902	6.140	-.01770
.902	8.310	-.01799
.902	10.440	-.01799
GRADIENT		.00044

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1A33 TABULATED DATA

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MSFC 594(1A33) 740TS (01)

ORB STING

(A1C437) ( 11 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YB  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 168/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
1.102	-11.620	.03664
1.102	-9.460	.03058
1.102	-7.230	.02698
1.102	-4.970	.02215
1.102	-2.690	.01553
1.102	-.400	.00909
1.102	1.860	.00549
1.102	4.110	.00189
1.102	6.370	-.00284
1.102	8.600	-.01430
1.102	10.770	-.02651
	GRADIENT	-.00223

RUN NO. 169/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
1.252	-11.620	.02774
1.252	-9.450	.02206
1.252	-7.210	.01657
1.252	-4.930	.01089
1.252	-2.660	.00435
1.252	-.380	-.00350
1.252	1.870	-.01146
1.252	4.120	-.02291
1.252	6.380	-.03541
1.252	8.630	-.04610
1.252	10.810	-.05851
	GRADIENT	-.00368

MSFC 594(IA33) 740TS (01)

ORB STING

(A1C437) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YB  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000    RUDDER = .000  
 ELEVTR = .000

RUN NO. 173/ 0    RN/L = 6.52    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
1.460	-11.430	.02424
1.460	-9.290	.01714
1.460	-7.090	.00985
1.460	-4.850	.00142
1.460	-2.610	-.00426
1.460	-.360	-.01269
1.460	1.860	-.02395
1.460	4.090	-.03162
1.460	6.320	-.04194
1.460	8.540	-.05500
1.460	10.690	-.07025
	GRADIENT	-.00384

RUN NO. 174/ 0    RN/L = 7.05    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
1.967	-11.300	.01732
1.967	-9.160	.00928
1.967	-7.000	.00502
1.967	-4.800	-.00161
1.967	-2.610	-.00843
1.967	-.390	-.01534
1.967	1.800	-.02291
1.967	4.010	-.03029
1.967	6.200	-.04213
1.967	8.390	-.05368
1.967	10.500	-.06674
	GRADIENT	-.00326

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594(IA33) 740TS (01)

ORB STING

(A1C437) ( 11 SEP 75 )

## REFERENCE DATA

SREF = 135.0000 SQ. FT    XMRP = 976.0000 IN. XB  
 LREF = 81.0000 IN.        YMRP = .0000 IN. YB  
 BREF = .0000 IN.         ZMRP = 400.0000 IN. ZB  
 SCALE = .0040

BETA = .000    RUDDER = .000  
 ELEVTR = .000

## PARAMETRIC DATA

RUN NO. 175/ 0    RN/L = 4.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
2.990	-10.610	.00502
2.990	-8.630	.00208
2.990	-6.590	.00000
2.990	-4.520	-.00417
2.990	-2.460	-.00663
2.990	-.370	-.00899
2.990	1.680	-.01411
2.990	3.760	-.01837
2.990	5.840	-.02225
2.990	7.890	-.02831
2.990	9.890	-.03465
	GRADIENT	-.00173

RUN NO. 176/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHBF
4.959	-10.380	.00151
4.959	-8.440	.00000
4.959	-6.450	.00000
4.959	-4.420	.00000
4.959	-2.390	-.00047
4.959	-.340	.00000
4.959	1.690	-.00095
4.959	3.720	-.00350
4.959	5.770	-.00559
4.959	7.770	-.00814
4.959	9.720	-.01373
	GRADIENT	-.00037

MSFC 594 (IA33) 74-OTS T1P1S1P201

ORB STING

(RIC501) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVTR = -.800  
 RUDDER = .100 SPD BK = .000  
 BDFLAP = .100

RUN NO. 31/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.598	-11.700	-.82100	.33880	.00290	.00000	.00250	.09870	.00900	.03430	.06570	.09080
.598	-9.570	-.67510	.27990	-.00120	.00230	.00160	.11250	.00890	.03400	.05900	.08110
.598	-7.340	-.53550	.22500	-.00120	.00200	.00110	.11040	.00870	.03330	.05780	.08440
.598	-5.180	-.42920	.18330	-.00790	.00570	.00060	.11660	.00870	.03310	.05640	.08160
.598	-2.970	-.30080	.13430	-.01130	.00580	-.00010	.11870	.00840	.03200	.05780	.07590
.598	-.740	-.17790	.08940	-.01340	.00690	-.00020	.12440	.00800	.03050	.05570	.07250
.598	1.470	-.05470	.04590	-.01360	.00630	.00000	.11620	.00810	.03080	.05700	.07230
.598	3.690	.08630	.00760	-.01850	.00880	-.00110	.11330	.00800	.03040	.05530	.0740
.598	5.930	.18900	-.03410	-.02230	.01010	-.00220	.10360	.00760	.02910	.05650	.06980
.598	8.160	.32000	-.08060	-.02510	.01030	-.00300	.09240	.00760	.02910	.05710	.06940
.598	10.230	.43940	-.13330	-.02550	.00990	-.00280	.08130	.00750	.02860	.05810	.06610
.598	-.740	-.18040	.09090	-.01010	.00570	.00010	.12080	.00810	.03080	.05680	.07410
GRADIENT		.05518	-.01909	-.00098	.00038	-.00013	-.00110	-.00005	-.00020	-.00028	-.00062

RUN NO. 32/ 0 RN/L = 5.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.802	-12.670	-.92310	.37470	-.00560	.00270	.00270	.10720	.01100	.04200	.06910	.09070
.802	-10.380	-.74950	.30400	-.00550	.00290	.00210	.11950	.01010	.03840	.06410	.08630
.802	-7.990	-.59330	.24280	-.00610	.00430	.00090	.12160	.01000	.03790	.05930	.08350
.802	-5.640	-.44200	.18200	-.00880	.00520	.00020	.12280	.00980	.03720	.05550	.08380
.802	-3.290	-.29990	.12000	-.01040	.00470	-.00010	.12500	.00950	.03620	.05640	.07900
.802	-.950	-.16380	.06970	-.01300	.00600	-.00060	.12520	.00910	.03470	.05530	.07820
.802	1.390	-.02920	.01970	-.01660	.00760	-.00150	.12310	.00890	.03410	.05480	.07760
.802	3.760	.10610	-.02290	-.01950	.00810	-.00220	.11980	.00880	.03370	.05500	.07670
.802	6.170	.25200	-.06980	-.02200	.00890	-.00250	.11170	.00870	.03320	.05750	.07480
.802	8.540	.39460	-.12260	-.02580	.00960	-.00320	.10760	.00870	.03320	.05950	.07070
.802	10.710	.52200	-.18010	-.02550	.00900	-.00240	.10140	.00850	.03250	.06110	.07090
.802	-.960	-.16520	.07000	-.01070	.00450	-.00020	.12700	.00900	.03450	.05430	.07810
GRADIENT		.05758	-.02038	-.00132	.00050	-.00031	-.00075	-.00010	-.00034	-.00020	-.00032

DATE 23 OCT 75

1A33 TABULATED DATA

MSFC 594 (1A33) 74-OTS T1P1S1P201

ORB STING

(R1C501) ( 22 SEP 75 )

PARAMETRIC DATA

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 ELEVTR = -.800  
 RUDDER = .100 SPD BK = .000  
 BDFLAP = .100

ORIGINAL PAGE IS OF POOR QUALITY

		RUN NO.	33/ 0	RN/L =	6.28	GRADIENT INTERVAL = -5.00/ 5.00					
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.903	-13.310	-1.02780	.42610	-.01650	.01130	.00060	.11830	.01350	.05150	.07050	.10150
.903	-10.840	-.81130	.33350	-.01430	.01100	.00020	.13160	.01230	.04690	.06890	.09540
.903	-8.320	-.62040	.25370	-.01240	.01100	-.00010	.13980	.01140	.04360	.06440	.08960
.903	-5.840	-.44280	.17890	-.01380	.01110	-.00090	.14220	.01070	.04080	.06020	.08360
.903	-3.420	-.29020	.11640	-.01780	.01210	-.00150	.14870	.01030	.03910	.05740	.07980
.903	-1.000	-.12620	.03940	-.02360	.01470	-.00270	.15160	.01010	.03840	.05870	.07220
.903	1.400	.02750	-.02720	-.02190	.01330	-.00270	.14940	.00960	.03650	.05730	.07310
.903	3.780	.15430	-.07160	-.02330	.01220	-.00330	.14330	.00970	.03680	.05780	.07310
.903	6.260	.26390	-.10130	-.02620	.01150	-.00380	.13830	.00930	.03540	.06220	.07550
.903	8.670	.41770	-.13720	-.03040	.01320	-.00390	.13240	.00950	.03610	.06820	.07260
.903	10.930	.54900	-.19150	-.02690	.00960	-.00390	.12410	.00920	.03510	.07160	.07230
.903	-1.000	-.13180	.04320	-.01750	.01030	-.00180	.14390	.01000	.03810	.05850	.07480
.903	GRADIENT	.06198	-.02629	-.00062	-.00004	-.00023	-.00076	-.00010	-.00037	-.00001	-.00080

		RUN NO.	36/ 0	RN/L =	6.48	GRADIENT INTERVAL = -5.00/ 5.00					
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.992	-13.950	-1.17270	.53480	-.00790	.00490	.00180	.17810	.01870	.07130	.09110	.12160
.992	-11.400	-.93020	.42600	.00000	.00310	.00130	.20250	.01710	.06490	.03320	.11300
.992	-8.790	-.71850	.33610	-.00280	.00460	.00090	.21750	.01590	.06070	.09040	.10700
.992	-6.210	-.52760	.25700	-.00750	.00740	-.00040	.22030	.01530	.05830	.08620	.10400
.992	-3.720	-.36170	.19030	-.01240	.00990	-.00090	.22370	.01460	.05560	.08410	.10100
.992	-1.180	-.19340	.12470	-.01560	.01140	-.00150	.22490	.01490	.05660	.08300	.09570
.992	1.270	-.03380	.04430	-.01610	.01050	-.00220	.22000	.01480	.05650	.08060	.09860
.992	3.700	.12510	-.02600	-.01730	.00980	-.00250	.22490	.01460	.05570	.08320	.09600
.992	6.240	.29970	-.10450	-.02110	.01020	-.00290	.20990	.01490	.05660	.08640	.09560
.992	8.750	.44940	-.15250	-.02370	.00970	-.00350	.20180	.01450	.05510	.08940	.09440
.992	11.060	.58440	-.20330	-.02010	.00570	-.00290	.18590	.01470	.05580	.09400	.09830
.992	-1.160	-.19630	.12300	-.01410	.01020	-.00100	.22080	.01460	.05570	.08250	.09790
.992	GRADIENT	.06580	-.02950	-.00062	-.00005	-.00022	-.00005	-.00000	.00001	-.00021	-.00049

MSFC 594 (1A33) 74-OTS TIPISIP201

ORB STING

(RIC501) ( 22 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 ELEVTR = -.800  
 RUDDER = .100 SPDBK = .000  
 BDFLAP = .100

RUN NO. 35/ 0 RN/L = 6.62 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.102	-14.370	-1.19000	.53240	.00730	-.00170	.00350	.22820	.01420	.05420	.07950	.09540
1.102	-11.680	-.93420	.42250	.00060	.00260	.00230	.24440	.01350	.05130	.07890	.09210
1.102	-8.980	-.71650	.33120	.00250	.00140	.00170	.25420	.01330	.05080	.07850	.08940
1.102	-6.360	-.52750	.25780	.00130	.00170	.00110	.26020	.01260	.04790	.07490	.08750
1.102	-3.820	-.35960	.19300	-.00110	.00210	.00050	.26400	.01180	.04510	.07150	.08380
1.102	-1.220	-.18790	.12190	-.00770	.00700	-.00370	.26650	.01120	.04260	.07080	.08410
1.102	1.270	-.02190	.04470	-.00870	.00790	-.00110	.26470	.01110	.04240	.06810	.08120
1.102	3.770	.14080	-.02730	-.01050	.00570	-.00170	.26290	.01060	.04040	.06690	.07420
1.102	6.390	.31140	-.09240	-.01440	.00660	-.00230	.25580	.01060	.04020	.06950	.07170
1.102	8.910	.46180	-.15120	-.01620	.00680	-.00230	.24540	.01000	.03820	.07260	.06480
1.102	11.240	.58870	-.19750	-.01640	.00430	-.00260	.22740	.01020	.03880	.07810	.06800
1.102	-1.210	-.18760	.12600	-.00450	.00390	-.00050	.26580	.01050	.04030	.06970	.08190
	GRADIENT	.06600	-.02921	-.00116	.00040	-.00028	-.00020	-.00015	-.00057	-.00065	-.00125

RUN NO. 34/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.202	-14.990	-1.26790	.52740	-.00780	.00290	.00310	.22500	.01580	.06020	.08020	.09840
1.202	-12.160	-.98320	.40630	-.00980	.00630	.00170	.24370	.01460	.05570	.08130	.09360
1.202	-9.310	-.73120	.30550	-.00720	.00460	.00100	.25780	.01380	.05270	.07750	.08940
1.202	-6.560	-.51470	.21920	-.01050	.00610	.00000	.26570	.01340	.05100	.07340	.08550
1.202	-3.910	-.31880	.14120	-.01280	.00730	-.00090	.27270	.01300	.04930	.06980	.08340
1.202	-1.230	-.13750	.07230	-.01750	.01060	-.00190	.28080	.01160	.04410	.06710	.08240
1.202	1.310	.02190	.00760	-.01800	.00870	-.00230	.27650	.01160	.04410	.06660	.08280
1.202	3.800	.17570	-.05780	-.01900	.00770	-.00270	.27220	.01130	.04320	.06780	.08060
1.202	6.410	.33540	-.11580	-.01880	.00630	-.00320	.26550	.01130	.04310	.07050	.07860
1.202	8.960	.49190	-.17780	-.01860	.00580	-.00330	.25340	.01140	.04340	.07360	.07700
1.202	11.400	.63090	-.21950	-.02280	.00550	-.00460	.23860	.01180	.04500	.07870	.07880
1.202	-1.220	-.13520	.07110	-.01760	.01050	-.00190	.27890	.01170	.04460	.06800	.08340
	GRADIENT	.06402	-.02578	-.00075	-.00002	-.00023	-.00021	-.00020	-.00072	-.00026	-.00031

DATE 23 OCT 75

IA33 FACULATED DATA

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MSFC 594 (IA33) 74-OTS T1P1S1P201

ORB STING

(RIC501) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 ELEVTR = -.800  
 RUDDER = .100 SPDBK = .000  
 BDFLAP = .100

PARAMETRIC DATA

RUN NO. 16/ 0 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.460	-14.990	-1.21780	.49870	-.00550	.00150	.00320	.25960	.01330	.03080	.05940	.07780
1.460	-12.200	-.95040	.38320	-.00780	.00380	.00180	.28070	.01250	.04760	.06220	.07220
1.460	-9.300	-.70050	.28050	-.00880	.00390	.00080	.26620	.01190	.04520	.05950	.06970
1.460	-6.590	-.49300	.19660	-.01670	.00820	-.00050	.28970	.01110	.04250	.05570	.06780
1.460	-3.890	-.29710	.11790	-.01320	.00720	-.00040	.29410	.01030	.03910	.05230	.06560
1.460	-1.230	-.11780	.05190	-.01480	.00710	-.00120	.29630	.00940	.03600	.05270	.06530
1.460	1.380	.04910	-.00850	-.01580	.00690	-.00170	.29540	.00950	.03610	.05190	.06660
1.460	3.920	.19490	-.06190	-.01690	.00790	-.00220	.29440	.00920	.03510	.05310	.06680
1.460	6.520	.34370	-.11520	-.02040	.00940	-.00270	.29150	.00920	.03520	.05500	.06530
1.460	9.090	.49620	-.16760	-.02370	.01120	-.00340	.28670	.00940	.03580	.05640	.06560
1.460	11.540	.63380	-.20520	-.02620	.01130	-.00380	.28380	.00930	.03560	.05760	.06380
1.460	-1.200	-.11200	.05080	-.01470	.00660	-.00130	.29460	.00940	.03590	.05240	.06480
GRADIENT		.06311	-.02304	-.00047	.00007	-.00023	.00000	-.00012	-.00046	.00006	.00019

RUN NO. 15/ 0 RN/L = 7.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.954	-14.690	-1.05570	.44040	.00250	-.00120	.00270	.27730	.00810	.03080	.03710	.05250
1.954	-12.010	-.83740	.34160	-.00130	.00220	.00170	.28300	.00800	.03070	.04200	.05180
1.954	-9.250	-.63080	.25240	-.00360	.00330	.00080	.28340	.00780	.02990	.04080	.05010
1.954	-6.560	-.45340	.18310	-.00190	.00190	.00040	.28700	.00760	.02910	.03600	.04670
1.954	-3.890	-.28510	.11880	-.00460	.00340	-.00020	.28030	.00760	.02890	.03670	.04690
1.954	-1.290	-.13890	.06790	-.00560	.00460	-.00070	.27950	.00760	.02900	.03710	.04710
1.954	1.320	.00960	.01410	-.00850	.00550	-.00110	.27930	.00800	.03050	.03840	.04750
1.954	3.860	.15590	-.04550	-.01100	.00610	-.00150	.27540	.00800	.03040	.04000	.04650
1.954	6.490	.31350	-.11080	-.01360	.00690	-.00170	.27150	.00780	.02990	.03970	.04580
1.954	9.120	.46450	-.16190	-.01890	.00910	-.00260	.26960	.00760	.02920	.03980	.04650
1.954	11.660	.60780	-.19790	-.01910	.00780	-.00290	.27350	.00720	.02760	.04040	.04740
1.954	-1.270	-.13370	.06640	-.00760	.00570	-.00090	.27960	.00760	.02910	.03710	.04700
GRADIENT		.05690	-.02114	-.00092	.00034	-.00017	-.00057	.00006	.00023	.00043	-.00003



DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594 (IA33) 74-OTS TIP1S1P201

ORB STING

(R1C501) ( 22 SEP 75 )

PARAMETRIC DATA

REFERENCE DATA  
 SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.        YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.        ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000    ELEVTR = -.800  
 RUDDER = .100    SPOBK = .000  
 BDFLAP = .100

RN/L = 5.19    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
2.740	-12.370	-.76030	.30320	-.00010	.00190	.00120	.29090	.00480	.01830	.02520	.03230
2.740	-10.120	-.62400	.24790	-.00170	.00310	.00120	.28000	.00500	.01910	.02640	.03250
2.740	-7.790	-.49190	.19940	-.00320	.00280	.00060	.26960	.00500	.01900	.02710	.03300
2.740	-5.460	-.36410	.15200	-.00370	.00270	.00000	.26020	.00520	.02000	.02660	.03350
2.740	-3.150	-.24120	.10710	-.00460	.00360	.00010	.25630	.00530	.02040	.02590	.03270
2.740	-.810	-.13360	.07670	-.00440	.00420	-.00040	.25350	.00530	.02040	.02570	.03170
2.740	1.410	-.03630	.04760	-.00130	.00420	.00090	.24860	.00540	.02050	.02620	.03090
2.740	3.670	.06600	.00970	-.00810	.00540	-.00070	.24550	.00550	.02090	.02550	.03020
2.740	5.980	.18190	-.03200	-.00840	.00530	-.00090	.24280	.00540	.02080	.02510	.02810
2.740	8.280	.30070	-.07620	-.01010	.00480	-.00140	.24020	.00540	.02080	.02520	.02710
2.740	10.470	.42810	-.12510	-.01100	.00550	-.00200	.23750	.00530	.02040	.02500	.02610
2.740	-.850	-.13630	.07860	-.00590	.00530	.00020	.25320	.00530	.02040	.02580	.03160
2.740	GRADIENT	.04493	-.01416	-.00032	.00011	-.00005	-.00164	.00003	.00007	-.00003	-.00037

RN/L = 4.56    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
2.990	-11.820	-.69510	.27140	.00050	.00200	.00090	.28690	.00400	.01520	.02240	.02870
2.990	-9.680	-.57130	.22990	.00000	.00130	.00090	.27640	.00420	.01600	.02340	.02860
2.990	-7.430	-.45090	.18490	-.00310	.00320	.00030	.26410	.00430	.01650	.02370	.02880
2.990	-5.210	-.34190	.14810	-.00180	.00280	.00050	.25340	.00450	.01720	.02340	.02870
2.990	-2.960	-.23090	.10820	-.00310	.00300	.00020	.24740	.00460	.01750	.02290	.02780
2.990	-.740	-.13550	.08010	-.00340	.00360	.00000	.24420	.00470	.01790	.02280	.02690
2.990	1.440	-.04530	.05100	-.00350	.00290	-.00030	.23960	.00480	.01830	.02270	.02640
2.990	3.650	.05350	.01440	-.00520	.00360	-.00080	.23390	.00480	.01850	.02190	.02620
2.990	5.910	.16140	-.02390	-.00650	.00350	-.00100	.23190	.00480	.01830	.02170	.02470
2.990	8.120	.27090	-.06510	-.00760	.00360	-.00140	.22770	.00470	.01810	.02150	.02310
2.990	10.220	.38400	-.10750	-.00960	.00410	-.00200	.22560	.00470	.01790	.02170	.02230
2.990	-.750	-.13730	.08160	-.00260	.00250	.00020	.24400	.00470	.01810	.02270	.02680
2.990	GRADIENT	.04286	-.01411	-.00029	.00005	-.00015	-.00205	.00003	.00015	-.00014	-.00024

DATE 23 OCT 75

1A33 TABULATED DATA

PAGE 401

MSFC 594 (1A33) 74-OTS TIPIS1P201

ORB STING

(R1C501) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 ELEVTR = -.870  
 RUDDER = .100 SPDBK = .069  
 BOFLAP = .100

PARAMETRIC DATA

RUN NO. 2/ 1 RN/L = 5.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
4.000	-11.370	-.55710	.21410	.00110	.00200	.00100	.28550	.00210	.00800	.01310	.01520
4.000	-9.310	-.46770	.18460	.00150	.00170	.00120	.27310	.00230	.00880	.01340	.01510
4.000	-7.140	-.38410	.16160	.00050	.00170	.00060	.25830	.00240	.00910	.01350	.01490
4.000	-4.970	-.29460	.13180	-.00020	.00160	.00090	.24620	.00250	.00951	.01360	.01500
4.000	-2.820	-.20530	.10060	.00000	-.00050	.00000	.23460	.00250	.00960	.01350	.01470
4.000	-.640	-.11990	.07370	-.00030	.00080	.00030	.22950	.00260	.00990	.01330	.01430
4.000	1.500	-.04080	.04950	-.00090	.00000	-.00100	.22470	.00260	.01020	.01310	.01440
4.000	3.640	.04050	.01940	-.00280	.00220	-.00110	.21870	.00270	.01040	.01300	.01400
4.000	5.850	.13110	-.01210	-.01260	.00780	-.00290	.21260	.00270	.01030	.01280	.01370
4.000	7.990	.22360	-.04650	-.00070	.00000	.00010	.20780	.00270	.01040	.01260	.01310
4.000	10.030	.31750	-.08170	-.00330	.00010	-.00080	.20420	.00270	.01030	.01250	.01230
4.000	-.650	-.12410	.07660	-.00030	.00090	.00060	.22960	.00260	.01010	.01320	.01420
GRADIENT		.03875	-.01281	-.00028	.00008	-.00023	-.00301	.00002	.00011	-.00007	-.00011

RUN NO. 1/ 1 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
4.959	-10.920	-.47590	.19140	.00940	-.00190	.00230	.27640	.00100	.00380	.00780	.00850
4.959	-8.920	-.40250	.16730	.00570	.00070	.00070	.26440	.00110	.00430	.00790	.00850
4.959	-6.820	-.32950	.14370	.00610	-.00030	.00090	.24830	.00140	.00530	.00850	.00840
4.959	-4.720	-.25630	.12010	.00540	.00050	.00070	.23550	.00140	.00550	.00840	.00850
4.959	-2.630	-.18340	.09650	.00900	-.00200	.00180	.22650	.00150	.00570	.00850	.00840
4.959	-.540	-.11560	.07410	.00530	-.00100	.00040	.21910	.00140	.00550	.00820	.00830
4.959	1.550	-.03960	.04900	.00600	-.00200	.00090	.21390	.00160	.00620	.00840	.00850
4.959	3.640	.03119	.02410	.00250	-.00050	.00000	.21130	.00150	.00590	.00820	.00840
4.959	5.750	.10710	-.00500	.00330	-.00180	.00040	.20170	.00160	.00640	.00820	.00830
4.959	7.850	.18970	-.03730	-.00050	-.00170	-.00010	.19200	.00160	.00610	.00790	.00780
4.959	9.830	.27180	-.06630	-.00110	-.00070	.00000	.19280	.00180	.00620	.00800	.00770
4.959	-.540	-.11320	.07140	.00700	-.00110	.00100	.21680	.00160	.00640	.00830	.00830
GRADIENT		.03438	-.01151	-.00042	-.00010	-.00011	-.00292	.00001	.00006	-.00002	-.00000

ORIGINAL PAGE IS  
OF POOR QUALITY

PARAMETRIC DATA

REFERENCE DATA  
 SREF = 2690.0000 SQ. FT. XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .100 ELEVTR = -4.100  
 RUDDER = .100 SPDBK = .000  
 BDFLAP = .100

		RUN NO.	30/ 0	RN/L =	4.98	GRADIENT INTERVAL =		-5.00/	5.00				
		MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
		.598	-11.760	-.90310	.40440	.00170	-.00060	.00280	.10340	.00930	.03560	.06530	.09170
		.598	-9.640	-.75690	.34630	-.00110	.00200	.00130	.11380	.00900	.03430	.05900	.08890
		.598	-7.410	-.61480	.28910	-.00100	.00170	.00100	.12080	.00900	.03440	.05720	.08190
		.598	-5.230	-.50510	.24500	-.00340	.00320	.00070	.12540	.00860	.03270	.05810	.07960
		.598	-3.010	-.37750	.19720	-.01110	.00570	-.00050	.12540	.00860	.03300	.05750	.07840
		.598	-.810	-.26090	.15530	-.01210	.00550	-.00080	.12280	.00830	.03170	.05900	.07800
		.598	1.390	-.14380	.11610	-.01130	.00430	-.00030	.12270	.00800	.03050	.05760	.07640
		.598	3.600	-.02690	.07810	-.01600	.00570	-.00130	.11870	.00790	.03000	.05650	.07430
		.598	5.860	.10480	.03350	-.01990	.00820	-.00180	.11030	.00750	.02880	.05620	.07270
		.598	8.080	.22560	-.00710	-.02050	.00750	-.00210	.09600	.00740	.02820	.05970	.07190
		.598	10.150	.34330	-.05560	-.01910	.00640	-.00140	.08770	.00740	.02810	.05950	.06970
		.598	-.600	-.25820	.15520	-.01020	.00470	.00000	.12320	.00840	.03210	.06060	.07700
		.598	GRADIENT	.05306	-.01800	-.00063	.00008	-.00009	-.00092	-.00011	-.00046	-.00020	-.00063

		RUN NO.	29/ 0	RN/L =	5.96	GRADIENT INTERVAL =		-5.00/	5.00				
		MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
		.804	-12.810	-1.01850	.45110	-.00360	.00160	.00270	.10950	.01120	.04290	.06960	.09650
		.804	-10.480	-.83740	.37580	-.00360	.00190	.00170	.11870	.01080	.04130	.06630	.09060
		.804	-8.020	-.62600	.27410	-.40320	.16990	-.10970	.11150	.00960	.03670	.05480	.08690
		.804	-5.720	-.50690	.23870	-.00960	.00580	-.00040	.12890	.00980	.03730	.05700	.08630
		.804	-3.390	-.37310	.17880	-.01290	.00650	-.00110	.12990	.00960	.03670	.05540	.08450
		.804	-1.030	-.22900	.12310	-.01440	.00650	-.00180	.13080	.00920	.03490	.05730	.08060
		.804	1.320	-.08520	.06620	-.01920	.00840	-.00280	.12760	.00900	.03430	.05680	.08100
		.804	3.700	.05450	.02150	-.02140	.00960	-.00290	.12330	.00880	.03350	.05620	.08140
		.804	6.110	.19510	-.02340	-.02380	.01010	-.00450	.11660	.00850	.03250	.05760	.07860
		.804	8.460	.32970	-.05890	-.03090	.01250	-.00590	.10740	.00860	.03270	.05090	.07630
		.804	10.630	.45610	-.12480	-.03060	.01120	-.00560	.10290	.00840	.03190	.05280	.07410
		.804	-.1030	-.23280	.12600	-.01950	.00950	-.00230	.12920	.00920	.03500	.05780	.08260
		.804	GRADIENT	.06040	-.02238	-.09128	.00047	-.00027	-.00096	-.00011	-.00043	.00008	-.00038

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594 (IA33) 74-OTS TIPISIP201

ORB STING

(R1C502) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 ELEVTR = -4.100  
 RUDDER = .100 SPOBK = .000  
 BDFLAP = .100

PARAMETRIC DATA

ORIGINAL PAGE IS  
OF POOR QUALITY

RUN NO. 28/ 0 RN/L = 6.26 GRADIENT INTERVAL = -5.00/ 5.00											
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.896	-13.400	-1.11410	.49770	-.01720	.01200	-.00040	.11980	.01400	.05330	.06970	.10650
.896	-10.940	-.89820	.40510	-.01370	.01070	-.00010	.13170	.01230	.04700	.06920	.09860
.896	-8.420	-.70280	.32320	-.01270	.01040	-.00060	.13970	.01170	.04460	.06520	.09300
.896	-5.940	-.53370	.25400	-.01610	.01110	-.00140	.14510	.01090	.04150	.06140	.09060
.896	-3.510	-.36900	.18390	-.02070	.01310	-.00250	.15130	.01000	.03800	.05990	.08160
.896	-1.120	-.21750	.11330	-.02210	.01310	-.00270	.14910	.00970	.03720	.06090	.07770
.896	1.290	-.06230	.04620	-.02470	.01400	-.00370	.14860	.00940	.03570	.05810	.07640
.896	3.700	.09070	-.01800	-.02850	.01480	-.00490	.14390	.00940	.03600	.05990	.07520
.896	6.200	.24190	-.06610	-.03050	.01420	-.00560	.14020	.00880	.03340	.06250	.07580
.896	8.620	.38060	-.10690	-.03560	.01600	-.00590	.13510	.00900	.03430	.06930	.07560
.896	10.860	.50590	.15520	-.02840	.01030	-.00530	.12510	.00920	.03500	.07120	.07230
.896	-1.110	-.21320	.11050	-.02240	.01300	-.00260	.14530	.00990	.03760	.06130	.07750
.896	GRADIENT	.06382	-.02799	-.00108	.00025	-.00034	-.00094	-.00009	-.00031	-.00013	-.00085

RUN NO. 25/ 0 RN/L = 6.48 GRADIENT INTERVAL = -5.00/ 5.00											
MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.992	-14.100	-1.25830	.60510	-.00280	.00230	.00230	.19220	.01900	.07230	.09380	.12280
.992	-11.470	-1.01190	.49590	-.00070	.00360	.00130	.20920	.01800	.06860	.09350	.11460
.992	-8.870	-.80280	.40710	-.00020	.00290	.00050	.21780	.01690	.06440	.09190	.11140
.992	-6.340	-.61860	.33220	-.00480	.00510	-.00060	.22440	.01610	.06150	.08900	.10780
.992	-3.810	-.44330	.26000	-.00850	.00730	-.00070	.22570	.01490	.05690	.08870	.10580
.992	-1.280	-.27370	.18830	-.01270	.00940	-.00150	.22820	.01450	.05520	.08680	.10000
.992	1.170	-.10200	.10280	-.01580	.01110	-.00250	.22580	.01440	.05490	.08480	.10040
.992	3.640	.06660	.02560	-.01810	.01070	-.00360	.22790	.01420	.05420	.08710	.09770
.992	6.160	.24410	-.05690	-.02120	.01040	-.00400	.21350	.01410	.05390	.08940	.09890
.992	8.700	.41270	-.11830	-.02440	.01010	-.00420	.20450	.01410	.05350	.09380	.09550
.992	11.020	.55420	-.17380	-.02180	.00720	-.00330	.19210	.01400	.05340	.09670	.09780
.992	-1.270	-.27080	.18700	-.01410	.01010	-.00180	.22280	.01470	.05580	.08740	.10050
.992	GRADIENT	.06860	-.03179	-.00129	.00048	-.00039	.00017	-.00009	-.00034	-.00028	-.00097

MSFC 594 (IA33) 74-OTS T1P1S1P201

ORB STING

(RIC502) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVTR = -4.100  
 RUDDER = .100 SPDBK = .000  
 BDFLAP = .100

RUN NO. 26/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.099	-14.490	-1.27040	.59930	.01120	-.00350	.00330	.24340	.01460	.05540	.07930	.09610
1.099	-11.800	-1.02140	.49410	.00430	.00040	.00230	.25450	.01370	.05210	.07870	.09310
1.099	-9.090	-.79200	.39620	.00510	-.00020	.00160	.26590	.01280	.04890	.07520	.08660
1.099	-6.470	-.59940	.31470	.00170	.00200	.00060	.26840	.01260	.04780	.07330	.08480
1.099	-3.900	-.42330	.24350	-.00060	.00260	-.00010	.27090	.01170	.04460	.07070	.08250
1.099	-1.320	-.24920	.17170	-.00480	.00470	-.00100	.27210	.01070	.04070	.07040	.08140
1.099	1.170	-.08360	.09480	-.00480	.00330	-.00140	.27010	.01020	.03870	.06820	.07910
1.099	3.680	.08730	.01260	-.00970	.00580	-.00230	.26570	.01020	.03880	.07000	.07580
1.099	6.280	.26170	-.05640	-.01400	.00670	-.00290	.25930	.00990	.03780	.07180	.07370
1.099	8.820	.42330	-.12120	-.01290	.00440	-.00220	.24960	.00970	.03700	.07440	.06740
1.099	GRADIENT	.06728	-.03050	-.00108	.00033	-.00028	-.00069	-.00020	-.00077	-.00017	-.00069

RUN NO. 27/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.197	-15.100	-1.34170	.58500	-.00780	.00370	.00260	.23290	.01650	.06280	.08010	.10050
1.197	-12.260	-1.05090	.46080	-.01030	.00750	.00130	.25120	.01560	.05950	.08060	.09540
1.197	-9.390	-.79220	.35570	-.00870	.00660	.00040	.26450	.01460	.05550	.07710	.09110
1.197	-6.650	-.57100	.26500	-.01000	.00670	-.00030	.26970	.01420	.05390	.07450	.08910
1.197	-3.980	-.37110	.18320	-.01430	.00870	-.00150	.27590	.01350	.05130	.07060	.08630
1.197	-1.320	-.18550	.11030	-.01890	.01210	-.00240	.28090	.01240	.04740	.06890	.08410
1.197	1.240	-.02240	.04570	-.01990	.01080	-.00310	.27880	.01200	.04560	.06750	.08380
1.197	3.760	.13290	-.02070	-.01990	.00920	-.00340	.27590	.01160	.04420	.06910	.08160
1.197	6.380	.30410	-.08740	-.01880	.00680	-.00370	.26680	.01140	.04360	.07090	.08090
1.197	8.930	.46460	-.15340	-.01850	.00580	-.00410	.25360	.01150	.04390	.07450	.08030
1.197	11.360	.60970	-.20050	-.02510	.00620	-.00510	.24020	.01170	.04470	.07990	.08140
1.197	-1.300	-.18330	.11080	-.01760	.01140	-.00200	.27900	.01260	.04790	.06960	.08490
1.197	GRADIENT	.06500	-.02624	-.00070	.00001	-.00025	-.00007	-.00024	-.00090	-.00023	-.00056

DATE 23 OCT 75

IA33 TABULATED DATA

PAGE 405

MSFC 594 (IA33) 74-OTS TIPISIP201

ORB STING

(R1C502) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    ELEVTR = -4.100  
 RUDDER = .100    SPOBK = .000  
 BDFLAP = .100

RUN NO. 17/ 0    RN/L = 6.52    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.461	-15.060	-1.26130	.53730	-.00590	.00320	.00260	.27310	.01290	.04910	.05790	.07880
1.461	-12.260	-.98980	.41810	-.00940	.00510	.00100	.28680	.01250	.04770	.06100	.07240
1.461	-9.380	-.73800	.31290	-.00930	.00480	.00030	.29200	.01220	.04650	.05750	.06950
1.461	-6.630	-.52530	.22530	-.01590	.00790	-.00080	.29100	.01190	.04520	.05260	.06690
1.461	-3.930	-.32710	.14390	-.01240	.00640	-.00070	.29130	.01120	.04250	.05130	.06490
1.461	-1.270	-.14440	.07470	-.01490	.00720	-.00160	.29320	.01060	.03820	.05150	.06450
1.461	1.340	.02360	.01250	-.01560	.00720	-.00200	.29380	.00950	.03610	.05160	.06630
1.461	3.880	.16940	-.04080	-.01630	.00770	-.00270	.29230	.00940	.03570	.05380	.06770
1.461	6.480	.31930	-.09550	-.01970	.00940	-.00300	.29070	.00930	.03520	.05530	.06590
1.461	9.050	.47260	-.14860	-.02390	.01180	-.00370	.28390	.00950	.03620	.05710	.06750
1.461	11.510	.61540	-.18920	-.02540	.01150	-.00390	.28250	.00930	.03540	.05730	.06560
1.461	-1.240	-.13780	.07310	-.01470	.00700	-.00170	.29170	.01000	.03820	.05120	.06440
GRADIENT		.06368	-.02368	-.00048	.00015	-.00025	.00014	-.00023	-.00087	.00029	.00039

RUN NO. 14/ 0    RN/L = 7.10    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.949	-14.640	-1.05840	.44930	.00090	.00000	.00190	.27890	.00790	.03000	.03580	.05320
1.949	-12.080	-.86350	.36240	-.00230	.00330	.00120	.28690	.00780	.02990	.04160	.05210
1.949	-9.340	-.66460	.27680	-.00360	.00340	.00030	.28770	.00780	.02960	.04130	.05030
1.949	-6.640	-.48180	.20360	-.00180	.00220	.00000	.28720	.00790	.03000	.03750	.04810
1.949	-3.940	-.30720	.13530	-.00380	.00280	-.00080	.28180	.00780	.02960	.03900	.04580
1.949	-1.340	-.15950	.08350	-.00620	.00460	-.00120	.28150	.00750	.02870	.03860	.04690
1.949	1.280	-.00900	.02960	-.00870	.00550	-.00190	.28140	.00770	.02920	.03900	.04870
1.949	3.830	.13780	-.02930	-.01170	.00630	-.00230	.27720	.00770	.02920	.03970	.04830
1.949	6.480	.29430	-.09380	-.01390	.00690	-.00240	.27300	.00760	.02890	.04010	.04770
1.949	9.110	.45150	-.14880	-.01660	.00950	-.00290	.27070	.00730	.02800	.04030	.04850
1.949	11.650	.59580	-.18620	-.01960	.00900	-.00380	.27470	.00710	.02720	.04060	.04900
1.949	-1.300	-.15440	.08190	-.00630	.00470	-.00120	.28180	.00760	.02900	.03840	.04710
GRADIENT		.05729	-.02112	-.00101	.00044	-.00020	-.00053	-.00000	-.00003	.00021	.00036

MSFC 594 (1A33) 74-OTS TIP1S1P201

ORB STING

(R1C502) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVTR = -4.100  
 RUDDER = .100 SPDBK = .000  
 BDFLAP = .100

RUN NO. 5/ 0 RN/L = 5.19 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
2.740	-12.360	-.76880	.31160	.00100	.00120	.00080	.29270	.00480	.01830	.02530	.03200
2.740	-10.130	-.63130	.25530	-.00060	.00210	.00050	.28100	.00500	.01910	.02590	.03190
2.740	-7.800	-.50190	.20830	-.00240	.00380	.00000	.27080	.00500	.01920	.02710	.03260
2.740	-5.460	-.37090	.16000	-.00390	.00290	-.00060	.26240	.00530	.02010	.02580	.03370
2.740	-3.130	-.24810	.11590	-.00510	.00320	-.00040	.25690	.00520	.02000	.02630	.03260
2.740	-.810	-.14020	.08360	-.00690	.00530	-.00080	.25370	.00520	.02000	.02600	.03160
2.740	1.400	-.04270	.05400	-.00640	.00440	-.00100	.24860	.00530	.02030	.02680	.03100
2.740	3.660	.05910	.01610	-.00760	.00450	-.00150	.24500	.00540	.02050	.02620	.03040
2.740	6.000	.17920	-.02880	-.00840	.00550	-.00150	.24310	.00530	.02040	.02530	.02880
2.740	8.280	.29670	-.07140	-.01100	.00570	-.00210	.23970	.00530	.02040	.02520	.02770
2.740	10.470	.42320	-.11980	-.01190	.00610	-.00250	.23750	.00520	.02000	.02490	.02670
2.740	-.850	-.14290	.08780	-.00690	.00590	-.00060	.25310	.00520	.02000	.02610	.03160
GRADIENT		.04514	-.01457	-.00031	.00014	-.00016	-.00181	.00003	.00008	.00002	-.00032

RUN NO. 6/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLN	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
2.990	-11.820	-.68970	.27710	.00010	.00080	.00020	.28670	.00390	.01500	.02230	.02840
2.990	-9.680	-.57370	.23340	-.00110	.00100	-.00010	.27560	.00420	.01610	.02330	.02860
2.990	-7.420	-.45450	.19070	-.00160	.00200	.00010	.26430	.00440	.01680	.02360	.02860
2.990	-5.180	-.33990	.14850	-.00200	.00200	.00040	.25320	.00450	.01740	.02330	.02860
2.990	-2.960	-.23090	.10820	-.00400	.00320	-.00010	.24780	.00460	.01770	.02330	.02780
2.990	-.740	-.13530	.08200	-.00360	.00310	.00090	.24510	.00470	.01800	.02320	.02690
2.990	1.450	-.04520	.05430	-.00380	.00290	-.00050	.24040	.00470	.01800	.02340	.02660
2.990	3.650	.05370	.01610	-.00640	.00300	-.00190	.23520	.00470	.01820	.02280	.02600
2.990	5.910	.15800	-.02070	-.00760	.00330	-.00170	.23090	.00480	.01820	.02240	.02490
2.990	8.120	.27110	-.06340	-.00860	.00430	-.00180	.22650	.00470	.01800	.02200	.02340
2.990	10.230	.38370	-.10600	-.00620	.00190	-.00140	.22550	.00460	.01780	.02160	.02280
2.990	-.740	-.13720	.08350	-.00370	.00310	-.00060	.24320	.00470	.01810	.02320	.02670
GRADIENT		.04287	-.01380	-.00034	-.00004	-.00031	-.00193	.00001	.00007	-.00006	-.00026

DATE 23 OCT 75

1A33 TABULATED DATA

MSFC 594 (1A33) 74-OTS TIPIS1P201

ORB STING

(RIC502) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVTR = -4.100  
 RUDDER = .100 SPDBK = .000  
 BDFLAP = .100

RUN NO. 7/ 0 RN/L = 5.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
4.000	-11.380	-.56590	.22080	.00530	-.00030	.00110	.28860	.00210	.00810	.01310	.01520
4.000	-9.310	-.47640	.19130	.00460	.00000	.00010	.27430	.00230	.00870	.01340	.01510
4.000	-7.150	-.39900	.17230	.00460	-.00060	.00070	.25960	.00240	.00910	.01360	.01490
4.000	-4.970	-.29720	.13440	.00280	-.00020	.00050	.24650	.00240	.00930	.01360	.01510
4.000	-2.800	-.20550	.10190	.00020	.00100	-.00050	.23630	.00250	.00960	.01340	.01480
4.000	-.640	-.12020	.07560	.00160	.00000	.00040	.22970	.00260	.00990	.01340	.01440
4.000	1.500	-.04330	.05230	.00420	-.00200	.00040	.22380	.00270	.01020	.01330	.01460
4.000	3.640	.04010	.02040	.03120	.00010	-.00050	.21970	.00270	.01030	.01330	.01420
4.000	5.850	.12990	-.01020	-.00030	.00040	-.00040	.21460	.00270	.01040	.01320	.01390
4.000	7.990	.22350	-.04450	-.00070	.00090	-.00060	.20780	.00270	.01020	.01270	.01330
4.000	10.040	.31730	-.07940	-.00130	-.00050	-.00090	.20500	.00260	.01010	.01250	.01250
4.000	-.640	-.12450	.07810	.00280	.00000	.00020	.22990	.00260	.01000	.01330	.01420
4.000	GRADIENT	.03089	-.01290	.00004	-.00011	-.00005	-.00307	.00004	.00012	-.00003	-.00009

RUN NO. 8/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
4.959	-10.930	-.48410	.19520	.00220	.00230	-.00240	.27900	.00100	.00380	.00790	.00840
4.959	-8.920	-.40750	.17300	-.00050	.00310	.00010	.26800	.00110	.00440	.00810	.00840
4.959	-6.820	-.33010	.14760	.01750	-.00880	.00550	.25050	.00120	.00480	.00830	.00850
4.959	-4.720	-.25550	.12180	.00060	.00270	.00130	.23750	.00130	.00520	.00840	.00850
4.959	-2.630	-.18210	.09610	-.00130	.00420	.00050	.22790	.00140	.00530	.00840	.00850
4.959	-.520	-.10270	.06860	-.00240	.00360	.00230	.22110	.00150	.00570	.00830	.00840
4.959	1.570	-.03380	.05050	-.00290	.00400	-.00140	.21520	.00150	.00590	.00830	.00870
4.959	3.650	.03710	.02340	.00090	.00140	-.00010	.21170	.00150	.00590	.00830	.00850
4.959	5.780	.11440	-.00470	-.01010	.00830	-.00170	.20100	.00160	.00610	.00820	.00840
4.959	7.860	.19540	-.03370	-.00040	.00200	-.00070	.19710	.00160	.00610	.00800	.00820
4.959	9.850	.28380	-.06970	-.00260	.00220	-.00020	.19280	.00150	.00590	.00790	.00770
4.959	-.520	-.10640	.07220	-.00080	.00320	-.00030	.21860	.00150	.00600	.00830	.00850
4.959	GRADIENT	.03479	-.01158	-.00005	-.00013	-.00022	-.00307	.00002	.00010	-.00001	.00001



REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 ELEVTR = 4.300  
 RUDDER = .100 SPDBK = .000  
 BDFLAP = .100

RUN NO. 21/ 0 RN/L = 4.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.597	-11.620	-.72580	.26520	-.00550	.00590	.00240	.10090	.00950	.03620	.06730	.08390
.597	-9.480	-.58280	.20860	-.00660	.00620	.00160	.11010	.00930	.03540	.06170	.08000
.597	-7.260	-.44440	.15370	-.00870	.00710	.00130	.11700	.00900	.03420	.05910	.07600
.597	-5.100	-.33540	.11050	-.01130	.00790	.00120	.12250	.00870	.03300	.05610	.07360
.597	-2.890	-.20840	.06420	-.01350	.00860	.00040	.12610	.00850	.03230	.05570	.07050
.597	-.660	-.08890	.01870	-.01550	.00910	.00020	.12320	.00830	.03160	.05600	.06920
.597	1.550	.03800	-.02690	-.01680	.00930	.00030	.12180	.00830	.03160	.05410	.06660
.597	3.770	.16420	-.06850	-.02300	.01190	-.00060	.11870	.00840	.03200	.05170	.06600
.597	6.020	.29240	-.11350	-.02450	.01230	-.00020	.10960	.00800	.03050	.05240	.06430
.597	8.240	.42010	-.16050	-.02710	.01260	-.00110	.09210	.00800	.03070	.05660	.06500
.597	10.310	.53940	-.21410	-.02750	.01250	-.00070	.08400	.00770	.02950	.05750	.06070
.597	-.660	-.08840	.01900	-.01670	.00930	.00020	.12520	.00820	.03140	.05570	.06740
.597	GRADIENT	.05609	-.02000	-.00134	.00046	-.00013	-.00140	-.00001	-.00004	-.00063	-.00073

RUN NO. 20/ 0 RN/L = 5.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.797	-12.610	-.83760	.30190	-.01610	.01150	.00180	.10920	.01090	.04170	.07080	.08750
.797	-10.250	-.65240	.22650	-.01810	.01310	.00100	.11960	.01030	.03910	.06550	.08130
.797	-7.860	-.49010	.16050	-.01600	.01210	.00050	.12390	.00980	.03750	.06030	.07850
.797	-5.520	-.34220	.10140	-.02000	.01390	.00000	.12360	.00980	.03740	.05660	.07910
.797	-3.200	-.21110	.04780	-.02240	.01420	-.00070	.12440	.00960	.03670	.05640	.07610
.797	-.830	-.06860	-.00780	-.02590	.01500	-.00140	.12710	.00940	.03590	.05570	.07200
.797	1.510	.06800	-.05850	-.02670	.01470	-.00170	.12430	.00940	.03590	.05270	.07240
.797	3.890	.20670	-.10140	-.02990	.01580	-.00220	.12050	.00920	.03520	.05400	.07180
.797	6.290	.35240	-.15050	-.03170	.01540	-.00290	.11160	.00890	.03410	.05590	.06970
.797	8.630	.48330	-.19430	-.03210	.01480	-.00310	.10510	.00930	.03530	.05760	.06750
.797	10.760	.59090	-.23770	-.03200	.01300	-.00360	.10480	.00910	.03470	.05860	.06620
.797	-.810	-.07000	-.00640	-.02390	.01320	-.00100	.12660	.00940	.03570	.05440	.07330
.797	GRADIENT	.05887	-.02110	-.00099	.00019	-.00020	-.00061	-.00005	-.00019	-.00043	-.00053

DATE 23 OCT 75

1A33 TABULATED DATA

MSFC 594 (1A33) 74-OTS TIP1S1P201

ORB STING

(RIC503) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVTR = 4.300  
 RUDDER = .100 SPDBK = .000  
 BDFLAP = .100

RUN NO. 19/ 0 RN/L = 6.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.900	-13.260	-.95360	.36300	-.02370	.01570	.00140	.12220	.01320	.05020	.07380	.10040
.900	-10.730	-.72440	.26180	-.02410	.01710	.00000	.13310	.01170	.04460	.07150	.09220
.900	-8.210	-.53710	.18540	-.02310	.01710	-.00020	.14280	.01110	.04250	.06550	.08610
.900	-5.750	-.36060	.11190	-.02710	.01830	-.00140	.14390	.01070	.04090	.06090	.08220
.900	-3.330	-.20980	.05010	-.02560	.01630	-.00160	.14440	.01050	.03990	.05010	.07790
.900	-.920	-.06120	-.01780	-.02410	.01450	-.00150	.14950	.00980	.03720	.05840	.07070
.900	1.490	.09050	-.07970	-.02620	.01420	-.00060	.14490	.00990	.03780	.05820	.07220
.900	3.880	.22790	-.13140	-.03140	.01730	-.00110	.14600	.00970	.03710	.05670	.06930
.900	6.330	.36060	-.16680	-.03550	.01710	-.00260	.13920	.00970	.03710	.05180	.07170
.900	8.750	.49000	-.20160	-.03510	.01620	-.00220	.13230	.01000	.03790	.06920	.07080
.900	11.020	.62180	-.25170	-.03110	.01140	-.00230	.12800	.01020	.03880	.06870	.07130
.900	-.910	-.05660	-.02000	-.02380	.01390	-.00140	.15320	.00970	.03720	.05700	.07020
.900	GRADIENT	.06093	-.02523	-.00081	.00011	.00010	.00001	-.00010	-.00032	-.00043	-.00101

RUN NO. 24/ 0 RN/L = 6.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
.997	-13.900	-1.10090	.46980	.00000	.00250	.00360	.18840	.01800	.06840	.09320	.11720
.997	-11.260	-.85480	.36370	-.00490	.00720	.00200	.20980	.01640	.06260	.09510	.11250
.997	-8.670	-.64920	.27890	-.00570	.00700	.00160	.22200	.01550	.05890	.09230	.10520
.997	-6.120	-.46800	.20660	-.00860	.00790	.00070	.22870	.01510	.05750	.08830	.10140
.997	-3.620	-.30170	.14010	-.01200	.00940	.00020	.22980	.01520	.05770	.08550	.09820
.997	-1.110	-.14280	.07590	-.01520	.01040	-.00020	.22840	.01570	.05970	.08390	.09420
.997	1.320	.01570	.00210	-.01600	.00980	-.00060	.23390	.01540	.05850	.08140	.09290
.997	3.800	.18390	-.07560	-.01760	.00970	-.00090	.22610	.01550	.05920	.08360	.09330
.997	6.300	.34280	-.14130	-.02190	.00990	-.00180	.22300	.01510	.05750	.08510	.08790
.997	8.820	.49570	-.19090	-.02450	.01040	-.00240	.21140	.01520	.05780	.09010	.08810
.997	11.140	.63600	-.24620	-.02240	.00780	-.00170	.19950	.01540	.05880	.09230	.08930
.997	-.910	-.13920	.07440	-.01360	.00960	.00000	.22360	.01560	.05930	.08430	.09530
.997	GRADIENT	.06542	-.02910	-.00071	.00001	-.00015	-.00023	.00002	.00014	-.00033	-.00065

MSFC 594 (IA33) 74-OTS T1P1S1P201

ORB STING

(RIC503) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVTR = 4.300  
 RUDDER = .100 SPDBK = .000  
 BOFLAP = .100

RUN NO. 23/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.104	-14.340	-1.14040	.48290	.00200	.00260	.00390	.23400	.01460	.05570	.08360	.09890
1.104	-11.660	-.89230	.37690	.00070	.00140	.00310	.24330	.01380	.05240	.08480	.09600
1.104	-8.970	-.67790	.29230	.00190	.00070	.00270	.26030	.01320	.05010	.08400	.09200
1.104	-6.340	-.48710	.21700	.00070	.00060	.00210	.26740	.01270	.04840	.08060	.08700
1.104	-3.770	-.31490	.14840	-.00410	.00400	.00110	.26680	.01280	.04870	.07900	.08910
1.104	-1.190	-.14220	.07890	-.01100	.00680	-.00030	.26840	.01260	.04810	.07630	.08710
1.104	1.330	.02520	.00370	-.01230	.00810	-.00070	.26770	.01270	.04850	.07320	.08420
1.104	3.850	.19030	-.06890	-.01270	.00520	-.00100	.26550	.01210	.04600	.07130	.07690
1.104	6.440	.35130	-.12740	-.01520	.00770	-.00200	.25710	.01230	.04700	.07300	.07610
1.104	8.960	.50940	-.19140	-.01730	.00730	-.00210	.24910	.01190	.04540	.07610	.06920
1.104	11.300	.63760	-.23820	-.02140	.00880	-.00240	.23310	.01230	.04700	.07900	.06900
1.104	-1.170	-.13710	.07730	-.01060	.00660	-.00020	.26570	.01270	.04820	.07720	.08790
	GRADIENT	.06631	-.02865	-.00107	.00024	-.00026	-.00018	-.00008	-.00030	-.00103	-.00155

RUN NO. 22/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.203	-14.920	-1.23130	.49190	-.00860	.00170	.00390	.22590	.01540	.05880	.08310	.09880
1.203	-12.100	-.94740	.37130	-.00960	.00490	.00310	.24260	.01460	.05570	.08240	.09390
1.203	-9.240	-.69190	.27050	-.01030	.00650	.00130	.26370	.01400	.05320	.07820	.08920
1.203	-6.490	-.47440	.18460	-.01210	.00710	.00070	.27240	.01320	.05040	.07400	.08650
1.203	-3.820	-.27860	.10720	-.01450	.00800	-.00020	.28270	.01240	.04710	.07030	.08360
1.203	-1.180	-.09560	.03660	-.01980	.01120	-.00120	.28830	.01170	.04450	.06780	.08240
1.203	1.370	.06490	-.02620	-.02090	.01000	-.00150	.28500	.01160	.04440	.06690	.08090
1.203	3.890	.21650	-.09030	-.01900	.00670	-.00160	.27970	.01180	.04480	.06850	.07890
1.203	6.490	.37470	-.14700	-.02030	.00670	-.00220	.27380	.01170	.04450	.06990	.07680
1.203	9.040	.52890	-.20630	-.01970	.00610	-.00240	.26210	.01180	.04480	.07220	.07500
1.203	11.480	.66310	-.24160	-.02670	.00880	-.00370	.24650	.01250	.04750	.07700	.07490
1.203	-1.160	-.09110	.03560	-.01800	.00990	-.00080	.28560	.01180	.04500	.06850	.08230
	GRADIENT	.06411	-.02552	-.00058	-.00019	-.00018	-.00047	-.00007	-.00028	-.00025	-.00061

DATE 23 OCT 75

IA33 TABULATED DATA

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MSFC 594 (IA33) 74-OTS TIP1S1P201

ORB STING

(RIC503) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000    ELEVTR = 4.300  
 RUDDER = .100    SPOBK = .000  
 BDFLAP = .100

PARAMETRIC DATA

RUN NO. 18/ 0    RN/L = 6.52    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.461	-14.930	-1.17770	.46620	-.00710	.00310	.00380	.26470	.01310	.04990	.06480	.07710
1.461	-12.140	-.91250	.35250	-.00730	.00310	.00290	.27950	.01180	.04510	.06540	.07190
1.461	-9.280	-.66940	.25450	-.00960	.00450	.00160	.28910	.01110	.04220	.06280	.06930
1.461	-6.530	-.45510	.16990	-.01700	.00820	.00030	.29190	.01050	.04010	.05900	.06680
1.461	-3.850	-.26720	.09670	-.01260	.00590	.00030	.29570	.01000	.03800	.05580	.06520
1.461	-1.190	-.08900	.02820	-.01350	.00540	-.00010	.30040	.00970	.03680	.05530	.06450
1.461	1.430	.08060	-.03360	-.01440	.00570	-.00030	.29930	.00950	.03630	.05490	.06490
1.461	3.940	.22410	-.08650	-.01650	.00700	-.00120	.29930	.00960	.03670	.05510	.06490
1.461	6.530	.37180	-.14050	-.01940	.00800	-.00170	.29500	.00980	.03730	.05640	.06380
1.461	9.120	.52150	-.19050	-.02320	.01020	-.00260	.29040	.00980	.03730	.05720	.06340
1.461	11.590	.66210	-.22730	-.02540	.01050	-.00270	.28770	.00990	.03780	.05810	.06310
1.461	-1.170	-.08320	.02660	-.01420	.00590	-.00030	.29820	.00970	.03710	.05510	.06470
1.461	GRADIENT	.06327	-.02354	-.00048	.00014	-.00018	.00026	-.00005	-.00017	-.00010	-.00002

RUN NO. 13/ 0    RN/L = 7.04    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
1.968	-14.610	-1.02190	.41880	.00010	.00090	.00220	.29200	.00810	.03080	.03840	.05180
1.968	-11.950	-.80930	.31960	.00000	.00030	.00200	.28210	.00800	.03070	.04230	.05080
1.968	-9.200	-.60480	.23280	-.00330	.00300	.00090	.28970	.00790	.03000	.04090	.04900
1.968	-6.520	-.42840	.16350	-.00150	.00150	.00040	.29240	.00780	.02960	.03680	.04670
1.968	-3.850	-.26210	.10100	-.00480	.00300	-.00030	.28780	.00780	.02990	.03690	.04640
1.968	-1.210	-.10640	.04610	-.00750	.00490	-.00090	.28340	.00810	.03090	.03820	.04550
1.968	1.390	.04210	-.00980	-.00890	.00530	-.00090	.28110	.00850	.03230	.03970	.04470
1.968	3.940	.19100	-.07240	-.01130	.00630	-.00130	.27550	.00840	.03200	.04010	.04290
1.968	6.540	.34510	-.13630	-.01390	.00680	-.00150	.27160	.00830	.03160	.04000	.04280
1.968	9.150	.48980	-.18320	-.01720	.00870	-.00210	.27050	.00810	.03090	.03950	.04330
1.968	11.630	.61850	-.21590	-.01730	.00830	-.00300	.26920	.00760	.02900	.04030	.04400
1.968	-1.130	-.09180	.04040	-.00770	.00510	-.00120	.27960	.00790	.03030	.03740	.04420
1.968	GRADIENT	.05806	-.02218	-.07080	.00040	-.00012	-.00151	.00008	.00030	.00043	-.00043

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MSFC 594 (IA33) 74-OTS TIPISIP201

ORB STING

(RIC503) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000 ELEVTR = 4.300  
 RUDDER = .100 SPOBK = .000  
 BDFLAP = .100

PARAMETRIC DATA

RUN NO. 12/ 0 RN/L = 5.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
2.740	-12.330	-.74470	.29190	-.00070	.00230	.00080	.29380	.00480	.01830	.02500	.03400
2.740	-10.100	-.60840	.23690	-.00320	.00290	.00050	.28320	.00500	.01920	.02650	.03420
2.740	-7.770	-.47560	.18700	-.00300	.00250	.00030	.27440	.00510	.01940	.02720	.03290
2.740	-5.440	-.34840	.14010	-.00490	.00320	-.00010	.26650	.00520	.02000	.02690	.03230
2.740	-3.130	-.22700	.09710	-.00600	.00380	-.00050	.26110	.00540	.02060	.02640	.03120
2.740	-.830	-.11970	.06560	-.00640	.00500	-.00020	.25760	.00550	.02100	.02580	.03060
2.740	1.430	-.01920	.03540	-.00820	.00530	-.00100	.25430	.00550	.02110	.02590	.02950
2.740	3.690	.08520	-.00390	-.00740	.00400	-.00090	.25170	.00560	.02130	.02540	.02850
2.740	6.030	.20560	-.04930	-.00970	.00510	-.00120	.25030	.00560	.02130	.02490	.02610
2.740	8.310	.32710	-.09480	-.01000	.00420	-.00130	.24820	.00560	.02140	.02570	.02480
2.740	10.520	.45190	-.14220	-.01230	.00540	-.00220	.24600	.00550	.02100	.02500	.02420
2.740	-.830	-.11940	.06630	-.00790	.00590	-.00030	.25720	.00550	.02090	.02570	.03050
GRADIENT		.04565	-.01466	-.00026	.00004	-.00009	-.00139	.00003	.00010	-.00013	-.00040

RUN NO. 11/ 0 RN/L = 4.57 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
2.990	-11.800	-.66950	.25900	-.00110	.00170	.00010	.28940	.00420	.01630	.02210	.02900
2.990	-9.660	-.55320	.21580	-.00420	.00310	-.00040	.27810	.00440	.01690	.02350	.02870
2.990	-7.410	-.43750	.17520	-.00300	.00250	.00020	.26630	.00450	.01720	.02380	.02840
2.990	-5.160	-.31410	.12790	-.00350	.00250	.00000	.25660	.00460	.01770	.02360	.02820
2.990	-2.950	-.22030	.09870	-.00560	.00350	-.00050	.24980	.00470	.01790	.02330	.02720
2.990	-.740	-.12520	.07150	-.00500	.00400	-.00040	.24720	.00480	.01840	.02290	.02630
2.990	1.460	-.03320	.04240	-.00690	.00480	-.00110	.24290	.00490	.01870	.02280	.02570
2.990	3.660	.06720	.00380	-.00650	.00390	-.00100	.24040	.00490	.01880	.02220	.02510
2.990	5.900	.17330	-.03430	-.00890	.00440	-.00160	.23740	.00490	.01880	.02210	.02290
2.990	8.130	.28600	-.07680	-.00900	.00490	-.00130	.23420	.00490	.01880	.02190	.02130
2.990	10.240	.40240	-.12170	-.01110	.00500	-.00220	.23390	.00480	.01850	.02150	.02030
2.990	-.730	-.12520	.07220	-.00600	.00430	-.00060	.24670	.00490	.01850	.02280	.02630
GRADIENT		.04333	-.01424	-.00026	.00009	-.00010	-.00148	.00003	.00014	-.00015	-.00031

DATE 23 OCT 75

1A33 TABULATED DATA

MSFC 594 (1A33) 74-OTS TIP1S1P201

ORB ST1N3

(R1C503) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVTR = 4.300  
 RUDDER = .100 SPDBK = .000  
 BDFLAP = .100

RUN NO. 10/ 0 RN/L = 5.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
4.000	-11.370	-.54810	.20430	.00030	.00200	.00040	.28650	.00210	.00830	.01300	.01530
4.000	-9.300	-.45800	.17580	.00160	.00110	.00100	.27420	.00230	.00910	.01340	.01520
4.000	-7.130	-.37420	.15280	.00060	.00120	.00060	.25930	.00240	.00940	.01350	.01500
4.000	-4.960	-.28090	.12160	.00090	.00080	.00100	.24790	.00250	.00970	.01350	.01510
4.000	-2.820	-.19520	.09270	-.00170	.00150	-.00020	.23670	.00260	.00990	.01350	.01480
4.000	-.640	-.11210	.06750	-.00020	.00070	.00000	.23080	.00260	.01010	.01370	.01440
4.000	1.510	-.03080	.04140	-.00160	.00150	-.00060	.22610	.00270	.01040	.01360	.01440
4.000	3.650	.05050	.00950	-.00460	.00320	-.00200	.22070	.00280	.01070	.01300	.01390
4.000	5.830	.14280	-.02230	-.01030	.00620	-.00240	.21470	.00280	.01070	.01270	.01340
4.000	8.000	.23370	-.05360	-.00370	.00190	-.00050	.21120	.00280	.01070	.01240	.01250
4.000	10.040	.33140	-.09160	-.00420	.00070	-.00080	.20870	.00280	.01060	.01230	.01150
4.000	-.630	-.11210	.06810	-.00120	.00190	.00030	.23040	.00270	.01040	.01310	.01410
4.000	GRADIENT	.03839	-.01278	-.00050	.00022	-.00030	-.00302	.00003	.00012	-.00007	-.00013

RUN NO. 9/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CNBO	CABO	CABS	CABE
4.959	-10.910	-.46720	.18340	.00520	.00060	.00190	.27850	.00120	.00470	.00810	.00880
4.959	-8.910	-.39380	.15990	.00260	.00090	.00040	.26470	.00130	.00500	.00820	.00860
4.959	-6.810	-.31750	.13580	.00180	.00280	.00090	.25160	.00140	.00540	.00840	.00860
4.959	-4.720	-.24710	.11280	.00100	.00270	.00110	.23790	.00140	.00560	.00850	.00860
4.959	-2.620	-.17100	.08650	.00160	.00160	.00110	.22900	.00150	.00570	.00850	.00860
4.959	-.570	-.09780	.06310	.00090	.00190	.00040	.22140	.00150	.00600	.00840	.00860
4.959	1 J	-.03060	.04380	.00300	.00000	.00030	.21560	.00160	.00610	.00830	.00870
4.959	3 J	.04550	.01460	.00100	.00070	-.00020	.21130	.00160	.00630	.00820	.00840
4.959	5 J	.12790	-.01720	.00030	.00020	.00020	.20400	.00160	.00630	.00810	.00820
4.959	7.860	.20410	-.04290	-.00020	.00080	-.00060	.20010	.00160	.00640	.00800	.00750
4.959	9.850	.29520	-.07980	-.00100	.00000	-.00010	.19560	.00160	.00620	.00790	.00710
4.959	-.520	-.09540	.06300	.00510	-.00090	.00140	.22170	.00160	.00620	.00810	.00820
4.959	GRADIENT	.03469	-.01143	.00007	-.00027	-.00016	-.00318	.00002	.00009	-.00004	-.00001

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVTR = -.800  
 RUDDER = .100 SPDBK = .000  
 BDFLAP = .100

RUN NO. 42/ 0 RN/L = 4.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CN80	CABO	CABS	CABE
.599	-11.680	-.80430	.33100	-.00680	.00480	.00160	.11690	.00860	.03290	.06020	.08470
.599	-9.560	-.66660	.27760	-.00360	.00290	.00140	.12260	.00850	.03240	.05560	.08300
.599	-7.330	-.53140	.22370	-.00780	.00460	.00050	.12390	.00840	.03210	.05480	.08080
.599	-5.170	-.41650	.17790	-.01460	.00850	-.00080	.12530	.00850	.03230	.05340	.07900
.599	-2.940	-.28960	.12960	-.01670	.00800	-.00110	.13790	.00790	.03000	.05130	.07060
.599	-.730	-.16860	.08500	-.01670	.00770	-.00120	.13170	.00810	.03090	.05300	.07230
.599	1.460	-.05290	.04410	-.02210	.01040	-.00220	.13440	.00740	.02830	.05100	.06960
.599	3.690	.07610	.00050	-.02480	.01120	-.00270	.13030	.00720	.02760	.04970	.06730
.599	5.940	.19380	-.03880	-.02530	.01070	-.00300	.12180	.00730	.02780	.05040	.06700
.599	8.150	.31950	-.08150	-.03020	.01210	-.00440	.10950	.00730	.02780	.05140	.06500
.599	10.220	.43550	-.13160	-.02850	.01090	-.00400	.09710	.00730	.02790	.05440	.06580
.599	-.730	-.17290	.08780	-.01560	.00750	-.00060	.13440	.00790	.03010	.05380	.07000
.599	GRADIENT	.05493	-.01939	-.00134	.00056	-.00026	-.00091	-.00013	-.00044	-.00031	-.00057

RUN NO. 41/ 0 RN/L = 5.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CN80	CABO	CABS	CABE
.801	-12.680	-.90600	.36290	-.00540	.00490	.00170	.11960	.01070	.04060	.06730	.08960
.801	-10.380	-.74270	.30020	-.00730	.00500	.00100	.12680	.00990	.03760	.06330	.08730
.801	-7.970	-.57830	.23650	-.01100	.00710	.00000	.13470	.00960	.03670	.05420	.08200
.801	-5.630	-.43260	.17810	-.01020	.00630	-.00050	.13740	.00930	.03550	.05230	.07980
.801	-3.280	-.29640	.12060	-.01540	.00810	-.00090	.13550	.00900	.03430	.05220	.07960
.801	-.940	-.16200	.06960	-.01800	.00920	-.00160	.13530	.00880	.03370	.05250	.07630
.801	1.390	-.02720	.01820	-.01860	.00860	-.00200	.13190	.00870	.03310	.05160	.07670
.801	3.760	.10930	-.02560	-.01930	.00880	-.00210	.12630	.00860	.03300	.05230	.07610
.801	6.170	.24880	-.07100	-.02230	.00930	-.00310	.12070	.00840	.03210	.05390	.07270
.801	8.500	.38850	-.12160	-.02710	.01110	-.00400	.11460	.00840	.03210	.05580	.06970
.801	10.720	.52540	-.17900	-.02790	.00980	-.00420	.10660	.00850	.03260	.06010	.07010
.801	-.940	-.15920	.06890	-.01370	.00680	-.00110	.13410	.00900	.03450	.05240	.07730
.801	GRADIENT	.05765	-.02089	-.00052	.00006	-.00017	-.00132	-.00006	-.00019	-.00003	-.00043

DATE 23 OCT 75

IA33 TABULATED DATA

MSFC 594B(IA33) 74-OTS TIP1S1P201+GRIT ORB STING

(R1C504) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVTR = -.800  
 RUDDER = .100 SPD8K = .000  
 BOFLAP = .100

RUN NO. 40/ 0 RN/L = 6.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CN80	CAB0	CABS	CABE
.904	-13.290	-1.01540	.42000	-.01460	.01000	.00130	.12740	.01310	.05000	.06910	.10200
.904	-10.830	-.80280	.32930	-.01600	.01160	.00070	.14100	.01210	.04500	.06610	.09540
.904	-8.330	-.61900	.25410	-.01570	.01110	-.00020	.14730	.01130	.04370	.06150	.08920
.904	-5.890	-.45240	.18600	-.01550	.01080	-.00080	.15080	.01070	.04060	.05850	.08490
.904	-3.400	-.28130	.11250	-.01840	.01180	-.00160	.14740	.01010	.03940	.05520	.08030
.904	-1.020	-.13660	.04560	-.02040	.01200	-.00210	.15610	.00960	.03640	.05380	.07240
.904	1.380	.00790	-.01050	-.02470	.01340	-.00290	.15140	.00950	.03620	.05370	.07360
.904	3.770	.14200	-.05950	-.02580	.01320	-.00310	.14890	.00930	.03540	.05330	.07180
.904	6.240	.28030	-.10480	-.02990	.01430	-.00420	.14410	.00950	.03610	.06030	.07100
.904	8.640	.40740	-.13490	-.03610	.01570	-.00490	.13990	.00910	.03470	.06470	.07030
.904	10.930	.54210	-.18190	-.03420	.01230	-.00530	.12810	.00930	.03540	.07030	.07480
.904	-1.010	-.13450	.04550	-.02370	.01370	-.00230	.15000	.00980	.03740	.05650	.07470
GRADIENT		.05915	-.02393	-.00111	.00023	-.00022	-.00001	-.00010	-.00038	.00001	-.00102

RUN NO. 37/ 0 RN/L = 6.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CBL	CAF	CN80	CAB0	CABS	CABE
.993	-13.960	-1.17410	.53610	-.00710	.00480	.00230	.18360	.01870	.07130	.09240	.12220
.993	-11.370	-.93020	.42790	.00030	.00250	.00190	.20530	.01690	.06430	.09300	.11230
.993	-8.760	-.71550	.33610	-.00130	.00330	.00160	.22120	.01590	.06050	.09050	.10630
.993	-6.220	-.52910	.25890	-.00640	.00600	.00030	.22740	.01480	.05650	.08680	.10320
.993	-3.700	-.36130	.19050	-.01010	.00820	-.00010	.22810	.01440	.05480	.08460	.10040
.993	-1.190	-.20110	.12570	-.01490	.01060	-.00110	.22870	.01450	.05520	.08340	.09570
.993	1.260	-.03780	.04840	-.01620	.01020	-.00180	.22680	.01460	.05560	.08030	.09750
.993	3.700	.12620	-.02540	-.01780	.01040	-.00240	.22800	.01450	.05540	.08300	.09550
.993	6.240	.30050	-.10580	-.02210	.01100	-.00280	.21660	.01440	.05500	.08680	.09380
.993	8.750	.45320	-.15580	-.02470	.01080	-.00320	.20690	.01420	.05390	.09030	.09140
.993	11.070	.59010	-.20410	-.02420	.00850	-.00280	.19720	.01410	.05380	.09300	.09340
.993	-1.170	-.19630	.12280	-.01410	.01010	-.00090	.22570	.01470	.05600	.08230	.09680
GRADIENT		.06595	-.02940	-.00099	.00025	-.00031	-.00009	.00002	.00009	-.00032	-.00053



REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVTR = -.800  
 RUDDER = .100 SPDBK = .000  
 BDFLAP = .100

RUN NO. 38/ 0 RN/L = 6.63 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CEL	CAF	CNBO	CABO	CABS	CABE
1.107	-14.370	-1.19020	.53760	.01040	-.00310	.00390	.24160	.01400	.05320	.07770	.09380
1.107	-11.670	-.93770	.42820	.00480	.00100	.00310	.25380	.01300	.04940	.07740	.08980
1.107	-8.970	-.71400	.33390	.00440	.00010	.00220	.26590	.01220	.04660	.07360	.08380
1.107	-6.370	-.52750	.25690	.00200	.00130	.00160	.27050	.01200	.04570	.07060	.08250
1.107	-3.780	-.35650	.19000	-.00040	.00180	.00070	.27490	.01060	.04060	.06650	.08140
1.107	-1.220	-.18640	.12200	-.00430	.00380	.00000	.27420	.01000	.03830	.06660	.07850
1.107	1.270	-.02690	.04890	-.00540	.00250	-.00070	.27180	.00990	.03790	.06370	.07590
1.107	3.770	.14000	-.03020	-.00770	.00330	-.00130	.26840	.00990	.03760	.06560	.07230
1.107	6.370	.31020	-.09480	-.01170	.00420	-.00160	.26040	.01020	.03910	.06810	.07040
1.107	8.880	.45970	-.15470	-.01340	.00350	-.00160	.25360	.00930	.03560	.07080	.06330
1.107	11.190	.58890	-.20640	-.01560	.00380	-.00190	.23590	.00960	.03670	.07610	.06600
1.107	-1.220	-.18630	.12270	-.00230	.00220	.00020	.27230	.01000	.03820	.06690	.07850
1.107	GRADIENT	.06559	-.02918	-.00092	.00013	-.00027	-.00087	-.00009	-.00038	-.00023	-.00107

RUN NO. 39/ 0 RN/L = 6.68 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CLM	CY	CYN	CEL	CAF	CNBO	CABO	CABS	CABE
1.196	-14.980	-1.27070	.52970	-.00330	.00040	.00390	.22970	.01580	.06000	.07820	.09850
1.196	-12.140	-.98280	.40890	-.00730	.00510	.00220	.25230	.01450	.05530	.07950	.09270
1.196	-9.280	-.73280	.30790	-.00630	.00390	.00080	.26220	.01420	.05410	.07670	.09040
1.196	-6.560	-.51780	.22270	-.00970	.00540	-.00010	.26970	.01380	.05260	.07250	.08740
1.196	-3.890	-.32250	.14450	-.01390	.00780	-.00130	.27680	.01290	.04910	.06890	.08660
1.196	-1.240	-.13870	.07320	-.01800	.01080	-.00220	.28290	.01180	.04490	.06760	.08380
1.196	1.300	.02120	.00810	-.01830	.00920	-.00250	.28210	.01140	.04350	.06590	.08240
1.196	3.820	.17650	-.05800	-.02000	.00810	-.00320	.27370	.01150	.04400	.06780	.08220
1.196	6.460	.34050	-.11840	-.01750	.00500	-.00320	.26640	.01140	.04360	.06890	.07980
1.196	8.950	.49180	-.18270	-.01800	.00340	-.00360	.25700	.01150	.04380	.07280	.07630
1.196	11.390	.63350	-.22710	-.02420	.00780	-.00400	.24080	.01190	.04540	.07970	.07860
1.196	-1.230	-.13600	.07270	-.01850	.01140	-.00230	.28530	.01160	.04400	.06650	.08300
1.196	GRADIENT	.06457	-.02620	-.00073	-.00002	-.00023	-.00038	-.00018	-.00066	-.00020	-.00057

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1A33 TABULATED DATA

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MSFC 594 (1A33) 74-OTS TIPISIP201

ORB STING

(RIC601) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    ELEVTR = -.800  
 RUDDER = .100    SPDBK = .000  
 BDFLAP = .100

RUN NO. 31/ 0    RN/L = 4.98    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.598	-11.700	.01210	.00000
.598	-9.570	.01190	.00000
.598	-7.340	.01160	.00000
.598	-5.180	.01170	.00000
.598	-2.970	.01150	.00000
.598	-.740	.01120	.00000
.598	1.470	.01080	.00000
.598	3.690	.01090	.00000
.598	5.930	.01050	.00000
.598	8.160	.01040	.00000
.598	10.230	.01020	.00000
.598	-.740	.01120	.00000
	GRADIENT	-.00010	.00000

RUN NO. 32/ 0    RN/L = 5.96    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.802	-12.670	.01390	.00000
.802	-10.380	.01280	.00000
.802	-7.990	.01280	.00000
.802	-5.640	.01260	.00000
.802	-3.290	.01230	.00000
.802	-.950	.01200	.00000
.802	1.390	.01180	.00000
.802	3.760	.01180	.00000
.802	6.170	.01140	.00000
.802	8.540	.01140	.00000
.802	10.710	.01130	.00000
.802	-.960	.01200	.00000
	GRADIENT	-.00007	.00000

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MSFC 594 (1A33) 74-OTS TIP1S1P201

ORB STING

(R1C601) ( 22 SEP 75 )

REFERENCE DATA

SREF = 269.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 129.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 129.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    ELEVTR = -.800  
 RUDDER = .100    SPDBK = .000  
 BDFLAP = .100

RUN NO. 33/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.903	-13.310	.01560	.00000
.903	-10.840	.01490	.00000
.903	-8.320	.01420	.00000
.903	-5.840	.01330	.00000
.903	-3.420	.01310	.00000
.903	-1.000	.01260	.00000
.903	1.400	.01240	.00000
.903	3.780	.01250	.00000
.903	6.260	.01220	.00000
.903	8.670	.01210	.00000
.903	10.930	.01210	.00000
.903	-1.000	.01270	.00000
GRADIENT		-.00008	.00000

RUN NO. 35/ 0    RN/L = 6.48    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.992	-13.950	.02090	.00000
.992	-11.400	.01940	.00000
.992	-8.790	.01880	.00000
.992	-6.210	.01880	.00000
.992	-3.720	.01890	.00000
.992	-1.180	.01970	.00000
.992	1.270	.01950	.00000
.992	3.700	.01940	.00000
.992	6.240	.01910	.00000
.992	8.750	.01880	.00000
.992	11.060	.01900	.00000
.992	-1.160	.01950	.00000
GRADIENT		.00005	.00000

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IA33 TABULATED DATA

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MSFC 594 (IA33) 74-OTS T1P1S1P201

ORB STING

(R1C6D1) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 IREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 IREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    ELEVTR = -.800  
 RUDDER = .100    SPDBK = .000  
 BDFLAP = .100

RUN NO. 35/ 0    RN/L = 6.62    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.102	-14.370	.01580	.00000
1.102	-11.680	.01490	.00000
1.102	-8.980	.01520	.00000
1.102	-6.360	.01490	.00000
1.102	-3.820	.01480	.00000
1.102	-1.220	.01480	.00000
1.102	1.270	.01460	.00000
1.102	3.770	.01440	.00000
1.102	6.390	.01430	.00000
1.102	8.910	.01370	.00000
1.102	11.240	.01380	.00000
1.102	-1.210	.01400	.00000
	GRADIENT	-.00006	.00000

RUN NO. 34/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.202	-14.990	.01780	.00000
1.202	-12.160	.01670	.00000
1.202	-9.310	.01620	.00000
1.202	-6.560	.01610	.00000
1.202	-3.910	.01570	.00000
1.202	-1.230	.01510	.00000
1.202	1.310	.01520	.00000
1.202	3.800	.01520	.00000
1.202	6.410	.01520	.00000
1.202	8.960	.01540	.00000
1.202	11.400	.01580	.00000
1.202	-1.220	.01530	.00000
	GRADIENT	-.00006	.00000

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1A33 TABULATED DATA

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MSFC 594 (1A33) 74-OTS TIPISIP201

ORB STING

(R1C601) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVTR = -.800  
 RUDDER = .100 SPD8K = .000  
 BDFLAP = .100

RUN NO. 16/ 0 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.460	-14.990	.01590	.00000
1.460	-12.200	.01410	.00000
1.460	-9.300	.01280	.00000
1.460	-6.590	.01240	.00000
1.460	-3.890	.01210	.00000
1.460	-1.230	.01220	.00000
1.460	1.380	.01200	.00000
1.460	3.920	.01210	.00000
1.460	6.520	.01210	.00000
1.460	9.090	.01230	.00000
1.460	11.540	.01230	.00000
1.460	-1.200	.01210	.00000
GRADIENT		-.00001	.00000

RUN NO. 15/ 0 RN/L = 7.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.954	-14.690	.01010	.00000
1.954	-12.010	.00970	.00000
1.954	-9.250	.00890	.00000
1.954	-6.560	.00920	.00000
1.954	-3.890	.00950	.00000
1.954	-1.290	.00960	.00000
1.954	1.320	.01000	.00000
1.954	3.860	.01000	.00000
1.954	6.490	.00980	.00000
1.954	9.120	.00970	.00000
1.954	11.660	.00920	.00000
1.954	-1.270	.00970	.00000
GRADIENT		.00007	.00000

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1A33 TABULATED DATA

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MSFC 594 (1A33) 74-OTS T1P1S1P201

ORB STING

(R1C601) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    ELEVTR = -.800  
 RUDDER = .100    SPDBK = .000  
 BDFLAP = .100

RUN NO. 4/ 0    RN/L = 5.19    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
2.740	-12.370	.00610	.00000
2.740	-10.120	.00630	.00000
2.740	-7.790	.00590	.00000
2.740	-5.460	.00630	.00000
2.740	-3.150	.00650	.00000
2.740	-.810	.00650	.00000
2.740	1.410	.00660	.00000
2.740	3.670	.00670	.00000
2.740	5.980	.00670	.00000
2.740	8.280	.00680	.00000
2.740	10.470	.00680	.00000
2.740	-.850	.00660	.00000
	GRADIENT	.00003	.00000

RUN NO. 3/ 1    RN/L = 4.56    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
2.990	-11.820	.00500	.00000
2.990	-9.680	.00520	.00000
2.990	-7.430	.00530	.00000
2.990	-5.210	.00550	.00000
2.990	-2.960	.00570	.00000
2.990	-.740	.00580	.00000
2.990	1.440	.00580	.00000
2.990	3.650	.00590	.00000
2.990	5.910	.00590	.00000
2.990	8.120	.00590	.00000
2.990	10.220	.00590	.00000
2.990	-.750	.00580	.00000
	GRADIENT	.00003	.00000

MSFC 594 (IA33) 74-OTS TIP1S1P201

ORB STING

(RIC601) ( 22 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000    ELEVTR = -.800  
 RUDDER = .100    SPDBK = .000  
 BDFLAP = .100

RUN NO.    2/ 1    RN/L =    5.54    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
4.000	-11.370	.00260	.00000
4.000	-9.310	.00290	.00000
4.000	-7.140	.00290	.00000
4.000	-4.970	.00310	.00000
4.000	-2.820	.00320	.00000
4.000	-1.640	.00320	.00000
4.000	1.500	.00330	.00000
4.000	3.640	.00340	.00000
4.000	5.950	.00340	.00000
4.000	7.990	.00340	.00000
4.000	10.030	.00330	.00000
4.000	- .650	.00330	.00000
	GRADIENT	.00003	.00000

RUN NO.    1/ 1    RN/L =    5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
4.959	-10.920	.00140	.00000
4.959	-8.920	.00150	.00000
4.959	-6.820	.00160	.00000
4.959	-4.720	.00180	.00000
4.959	-2.630	.00190	.00000
4.959	- .540	.00190	.00000
4.959	1.550	.00200	.00000
4.959	3.640	.00200	.00000
4.959	5.750	.00200	.00000
4.959	7.850	.00200	.00000
4.959	9.830	.00210	.00000
4.959	- .540	.00200	.00000
	GRADIENT	.00002	.00000

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IA33 TABULATED DATA

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MSFC 594 (IA33) 74-OTS TIP1S1P201

ORB STING

(RIC602) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. YT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    ELEVTR = -4.100  
 RUDDER = .100    SPOBK = .000  
 BDFLAP = .100

RUN NO. 30/ 0    RN/L = 4.98    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.598	-11.760	.01220	.00000
.598	-9.640	.01200	.00000
.598	-7.410	.01170	.00000
.598	-5.230	.01170	.00000
.598	-3.010	.01140	.00000
.598	-.810	.01140	.00000
.598	1.390	.01080	.00000
.598	3.600	.01060	.00000
.598	5.860	.01020	.00000
.598	8.080	.01000	.00000
.598	10.150	.01030	.00000
.598	-.800	.01130	.00000
	GRADIENT	-.00014	.00000

RUN NO. 29/ 0    RN/L = 5.96    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.804	-12.810	.01400	.00000
.804	-10.480	.01390	.00000
.804	-8.030	.01270	.00000
.804	-5.720	.01280	.00000
.804	-3.390	.01270	.00000
.804	-1.030	.01200	.00000
.804	1.320	.01190	.00000
.804	3.700	.01180	.00000
.804	6.110	.01140	.00000
.804	8.460	.01140	.00000
.804	10.630	.01110	.00000
.804	-1.030	.01220	.00000
	GRADIENT	-.00012	.00000



MSFC 594 (1A33) 74-OTS T1P1S1P201

ORB STING

(RIC602) ( 22 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000    ELEVTR = -4.100  
 RUDDER = .100    SPDBK = .000  
 BDFLAP = .100

RUN NO. 28/ 0    RN/L = 6.26    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.896	-13.400	.01590	.00000
.896	-10.940	.01490	.00000
.896	-8.420	.01400	.00000
.896	-5.940	.01370	.00000
.896	-3.510	.01260	.00000
.896	-1.120	.01260	.00000
.896	1.290	.01210	.00000
.896	3.700	.01200	.00000
.896	6.200	.01150	.00000
.896	8.620	.01170	.00000
.896	10.860	.01190	.00000
.896	-1.110	.01240	.00000
	GRADIENT	-.00010	.00000

RUN NO. 25/ 0    RN/L = 6.48    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.992	-14.100	.02090	.00000
.992	-11.470	.02000	.00000
.992	-8.870	.01880	.00000
.992	-6.340	.01830	.00000
.992	-3.810	.01820	.00000
.992	-1.280	.01890	.00000
.992	1.170	.01880	.00000
.992	3.640	.01860	.00000
.992	6.160	.01840	.00000
.992	8.700	.01820	.00000
.992	11.020	.01840	.00000
.992	-1.270	.01890	.00000
	GRADIENT	.00004	.00000

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MSFC 594 (1A33) 74-OTS TIP1SIP201

ORB STING

(RIC602) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    ELEVTR = -4.100  
 RUDDER = .100    SPDBK = .000  
 BDFLAP = .100

RUN NO. 26/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.099	-14.490	.01620	.00000
1.099	-11.800	.01480	.00000
1.099	-9.090	.01430	.00000
1.099	-6.470	.01420	.00000
1.099	-3.900	.01370	.00000
1.099	-1.320	.01320	.00000
1.099	1.170	.01310	.00000
1.099	3.680	.01330	.00000
1.099	6.280	.01300	.00000
1.099	8.820	.01300	.00000
	GRADIENT	-.00005	.00000

RUN NO. 27/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.197	-15.100	.01860	.00000
1.197	-12.260	.01760	.00000
1.197	-9.390	.01650	.00000
1.197	-6.650	.01630	.00000
1.197	-3.990	.01590	.00000
1.197	-1.320	.01520	.00000
1.197	1.240	.01510	.00000
1.197	3.760	.01510	.00000
1.197	6.380	.01520	.00000
1.197	8.930	.01530	.00000
1.197	11.360	.01560	.00000
1.197	-1.300	.01540	.00000
	GRADIENT	-.00010	.00000

MSFC 594 (1A33) 74-OTS TIP1S1P201

ORB STING

(R1C602) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000 ELEVTR = -4.100  
 RUDDER = .100 SPDBK = .000  
 BCFLAP = .100

RUN NO. 17/ 0 RN/L = 6.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.461	-15.060	.01600	.00000
1.461	-12.260	.01440	.00000
1.461	-9.380	.01320	.00000
1.461	-6.630	.01240	.00000
1.461	-3.930	.01180	.00000
1.461	-1.270	.01170	.00000
1.461	1.340	.01190	.00000
1.461	3.880	.01190	.00000
1.461	6.480	.01190	.00000
1.461	9.050	.01210	.00000
1.461	11.510	.01210	.00000
1.461	-1.240	.01170	.00000
	GRADIENT	.00002	.00000

RUN NO. 14/ 0 RN/L = 7.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.949	-14.640	.00990	.00000
1.949	-12.080	.00990	.00000
1.949	-9.340	.00900	.00000
1.949	-6.640	.00910	.00000
1.949	-3.940	.00930	.00000
1.949	-1.340	.00950	.00000
1.949	1.280	.00970	.00000
1.949	3.830	.00970	.00000
1.949	6.480	.00970	.00000
1.949	9.110	.00960	.00000
1.949	11.650	.00910	.00000
1.949	-1.300	.00950	.00000
	GRADIENT	.00005	.00000

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MSFC 594 (1A33) 74-OTS TIP1S1P201

ORB STING

(R1C602) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.       YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.       ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    ELEVTR = -4.100  
 RUDDER = .100    SPDBK = .000  
 BDFLAP = .100

RUN NO. 5/ 0    RN/L = 5.19    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
2.740	-12.360	.00600	.00000
2.740	-10.130	.00630	.00000
2.740	-7.800	.00580	.00000
2.740	-5.460	.00630	.00000
2.740	-3.130	.00650	.00000
2.740	-.810	.00640	.00000
2.740	1.400	.00650	.00000
2.740	3.660	.00650	.00000
2.740	6.000	.00660	.00000
2.740	8.280	.00670	.00000
2.740	10.470	.00650	.00000
2.740	-.850	.00640	.00000
	GRADIENT	.00000	.00000

RUN NO. 6/ 0    RN/L = 4.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
2.990	-11.820	.00510	.00000
2.990	-9.680	.00510	.00000
2.990	-7.420	.00530	.00000
2.990	-5.180	.00560	.00000
2.990	-2.960	.00570	.00000
2.990	-.740	.00580	.00000
2.990	1.450	.00580	.00000
2.990	3.650	.00580	.00000
2.990	5.910	.00580	.00000
2.990	8.120	.00590	.00000
2.990	10.230	.00580	.00000
2.990	-.740	.00580	.00000
	GRADIENT	.00001	.00000

MSFC 594 (IA33) 74-OTS TIP1S1P201

ORB STING

(RIC602) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    ELEVTR = -4.100  
 RUDDER = .100    SPOBK = .000  
 BDFLAP = .100

RUN NO. 7/ 0    RN/L = 5.54    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
4.000	-11.380	.00280	.00000
4.000	-9.310	.00290	.00000
4.000	-7.150	.00300	.00000
4.000	-4.970	.00310	.00000
4.000	-2.800	.00320	.00000
4.000	-1.640	.00330	.00000
4.000	1.500	.00330	.00000
4.000	3.640	.00340	.00000
4.000	5.850	.00340	.00000
4.000	7.990	.00340	.00000
4.000	10.040	.00330	.00000
4.000	-1.640	.00330	.00000
	GRADIENT	.00003	.00000

RUN NO. 8/ 0    RN/L = 5.47    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
4.959	-10.930	.00140	.00000
4.959	-8.920	.00160	.00000
4.959	-6.820	.00170	.00000
4.959	-4.720	.00180	.00000
4.959	-2.630	.00190	.00000
4.959	-1.520	.00190	.00000
4.959	1.570	.00200	.00000
4.959	3.650	.00200	.00000
4.959	5.780	.00210	.00000
4.959	7.860	.00210	.00000
4.959	9.850	.00210	.00000
4.959	-1.520	.00200	.00000
	GRADIENT	.00002	.00000

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MSFC 594 (IA33) 74-OTS TIPISIP201

ORB STING

(RIC603) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    ELEVTR = 4.300  
 RUDDER = .100    SPDBK = .000  
 BOFLAP = .100

RUN NO. 21/ 0    RN/L = 4.98    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.597	-11.620	.01250	.00000
.597	-9.480	.01220	.00000
.597	-7.260	.01210	.00000
.597	-5.100	.01180	.00000
.597	-2.890	.01160	.00000
.597	-.660	.01120	.00000
.597	1.550	.01110	.00000
.597	3.770	.01120	.00000
.597	6.020	.01080	.00000
.597	8.240	.01070	.00000
.597	10.310	.01050	.00000
.597	-.660	.01100	.00000
GRADIENT		-.00006	.00000

RUN NO. 20/ 0    RN/L = 5.94    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.797	-12.610	.01420	.00000
.797	-10.250	.01350	.00000
.797	-7.860	.01300	.00000
.797	-5.520	.01290	.00000
.797	-3.200	.01260	.00000
.797	-.830	.01250	.00000
.797	1.510	.01220	.00000
.797	3.890	.01210	.00000
.797	5.290	.01190	.00000
.797	8.630	.01210	.00000
.797	10.760	.01200	.00000
.797	-.810	.01240	.00000
GRADIENT		-.00008	.00000

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IA33 TABULATED DATA

MSFC 594 (IA33) 74-OTS TIP1S1P201

ORB STING

(RIC603) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    ELEVTR = 4.300  
 RUDDER = .100    SPOBK = .000  
 BDFLAP = .100

RUN NO. 19/ 0    RN/L = 6.27    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.900	-13.260	.01670	.00000
.900	-10.730	.01520	.00000
.900	-8.210	.01460	.00000
.900	-5.750	.01410	.00000
.900	-3.330	.01360	.00000
.900	- .920	.01270	.00000
.900	1.490	.01310	.00000
.900	3.880	.01280	.00000
.900	6.330	.01280	.00000
.900	8.750	.01300	.00000
.900	11.020	.01330	.00000
.900	- .910	.01270	.00000
	GRADIENT	-.00008	.00000

RUN NO. 24/ 0    RN/L = 6.49    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.997	-13.900	.02150	.00000
.997	-11.260	.02040	.00000
.997	-8.570	.01970	.00000
.997	-6.120	.01980	.00000
.997	-3.620	.01960	.00000
.997	-1.110	.02030	.00000
.997	1.320	.02000	.00000
.997	3.800	.02020	.00000
.997	6.300	.01980	.00000
.997	8.820	.01980	.00000
.997	11.140	.02000	.00000
.997	-1.100	.02020	.00000
	GRADIENT	.00007	.00000

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1A33 TABULATED DATA

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MSFC 594 (1A33) 74-OTS TIP1S1P201

ORB STING

(RIC603) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    ELEVTR = 4.300  
 RUDDER = .100    SPDBK = .000  
 BDFLAP = .100

RUN NO. 23/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.104	-14.340	.01650	.00000
1.104	-11.660	.01630	.00000
1.104	-8.970	.01650	.00000
1.104	-6.340	.01660	.00000
1.104	-3.770	.01680	.00000
1.104	-1.190	.01640	.00000
1.104	1.330	.01650	.00000
1.104	3.850	.01600	.00000
1.104	6.440	.01620	.00000
1.104	8.960	.01590	.00000
1.104	11.300	.01640	.00000
1.104	-1.170	.01650	.00000
	GRADIENT	-.00009	.00000

RUN NO. 22/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.203	-14.920	.01780	.00000
1.203	-12.100	.01720	.00000
1.203	-9.240	.01670	.00000
1.203	-6.490	.01660	.00000
1.203	-3.820	.01610	.00000
1.203	-1.180	.01530	.00000
1.203	1.370	.01540	.00000
1.203	3.890	.01570	.00000
1.203	6.490	.01560	.00000
1.203	9.040	.01560	.00000
1.203	11.480	.01650	.00000
1.203	-1.160	.01550	.00000
	GRADIENT	-.00004	.00000



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1A33 TABULATED DATA

MSFC 594 (1A33) 74-OTS TIP1S1P201

ORB STING

(R1C603) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRF = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    ELEVTR = 4.300  
 RUDDER = .100    SPDBK = .000  
 BDFLAP = .100

RUN NO. 18/ 0    RN/L = 6.52    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.461	-14.930	.01520	.00000
1.461	-12.140	.01320	.00000
1.461	-9.280	.01250	.00000
1.461	-6.530	.01270	.00000
1.461	-3.850	.01270	.00000
1.461	-1.190	.01230	.00000
1.461	1.430	.01260	.00000
1.461	3.940	.01300	.00000
1.461	6.530	.01300	.00000
1.461	9.120	.01310	.00000
1.461	11.590	.01330	.00000
1.461	-1.170	.01240	.00000
	GRADIENT	.00005	.00000

RUN NO. 13/ 0    RN/L = 7.04    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.968	-14.610	.00990	.00000
1.968	-11.950	.00930	.00000
1.968	-9.200	.00900	.00000
1.968	-6.520	.00940	.00000
1.968	-3.850	.00980	.00000
1.968	-1.210	.01010	.00000
1.968	1.390	.01050	.00000
1.968	3.940	.01050	.00000
1.968	6.540	.01040	.00000
1.968	9.150	.01010	.00000
1.968	11.630	.00990	.00000
1.968	-1.130	.00990	.00000
	GRADIENT	.00010	.00000

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MSFC 594 (IA33) 74-OTS TIPISIP201

ORB STING

(RIC603) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    ELEVTR = 4.300  
 RUDDER = .100    SPDBK = .000  
 BDFLAP = .100

RUN NO. 12/ 0    RN/L = 5.20    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
2.740	-12.330	.00610	.00000
2.740	-10.100	.00620	.00000
2.740	-7.770	.00630	.00000
2.740	-5.440	.00640	.00000
2.740	-3.130	.00660	.00000
2.740	- .830	.00680	.00000
2.740	1.430	.00690	.00000
2.740	3.690	.00690	.00000
2.740	6.030	.00690	.00000
2.740	8.310	.00700	.00000
2.740	10.520	.00690	.00000
2.740	- .830	.00680	.00000
	GRADIENT	.00004	.00000

RUN NO. 11/ 0    RN/L = 4.57    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
2.990	-11.800	.00530	.00000
2.990	-9.660	.00550	.00000
2.990	-7.410	.00560	.00000
2.990	-5.160	.00570	.00000
2.990	-2.950	.00580	.00000
2.990	- .740	.00600	.00000
2.990	1.460	.00610	.00000
2.990	3.660	.00610	.00000
2.990	5.900	.00610	.00000
2.990	8.130	.00620	.00000
2.990	10.240	.00610	.00000
2.990	- .730	.00600	.00000
	GRADIENT	.00005	.00000

MSFC 594 (IA33) 74-OTS TIP1S1P201

ORB STING

(RIC603) ( 22 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN. YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN. ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000 ELEVTR = 4.300  
 RUDDER = .100 SPDBK = .000  
 BDFLAP = .100

RUN NO. 10/ 0 RN/L = 5.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
4.000	-11.370	.00270	.00000
4.000	-9.300	.00300	.00000
4.000	-7.130	.00310	.00000
4.000	-4.900	.00320	.00000
4.000	-2.820	.00330	.00000
4.000	-.640	.00340	.00000
4.000	1.510	.00350	.00000
4.000	3.650	.00350	.00000
4.000	5.830	.00350	.00000
4.000	8.000	.00350	.00000
4.000	10.040	.00350	.00000
4.000	-.630	.00340	.00000
	GRADIENT	.00004	.00000

RUN NO. 9/ 0 RN/L = 5.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
4.959	-10.910	.00170	.00000
4.959	-8.910	.00170	.00000
4.959	-6.810	.00180	.00000
4.959	-4.720	.00190	.00000
4.959	-2.620	.00200	.00000
4.959	-.520	.00200	.00000
4.959	1.560	.00200	.00000
4.959	3.650	.00210	.00000
4.959	5.790	.00210	.00000
4.959	7.860	.00210	.00000
4.959	9.850	.00210	.00000
4.959	-.520	.00210	.00000
	GRADIENT	.00002	.00000

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MSFC 594B(1A33) 74-OTS TIPISIP201+GRIT ORB STING

(RIC604) ( 22 SEP 75 )

REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

PARAMETRIC DATA

BETA = .000    ELEVTR = -.600  
 RUDDER = .100    SPDBK = .000  
 BDFLAP = .100

RUN NO. 42/ 0    RN/L = 4.99    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.599	-11.680	.01140	.00000
.599	-9.560	.01140	.00000
.599	-7.330	.01150	.00000
.599	-5.170	.01130	.00000
.599	-2.940	.01080	.00000
.599	-.730	.01100	.00000
.599	1.460	.01020	.00000
.599	3.690	.01020	.00000
.599	5.940	.01020	.00000
.599	8.150	.01000	.00000
.599	10.220	.00990	.00000
.599	-.730	.01090	.00000
GRADIENT		-.00012	.00000

RUN NO. 41/ 0    RN/L = 5.95    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.801	-12.680	.01350	.00000
.801	-10.380	.01270	.00000
.801	-7.970	.01250	.00000
.801	-5.630	.01210	.00000
.801	-3.280	.01210	.00000
.801	-.940	.01170	.00000
.801	1.390	.01170	.00000
.801	3.760	.01160	.00000
.801	6.170	.01130	.00000
.801	8.500	.01110	.00000
.801	10.720	.01130	.00000
.801	-.940	.01200	.00000
GRADIENT		-.00006	.00000

MSFC 594B(IA33) 74-OTS TIP151P201+CRIT ORB STING

(RIC604) ( 22 SEP 75 )

## REFERENCE DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.    YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.    ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

## PARAMETRIC DATA

BETA = .000    ELEVTR = -.800  
 RUDDER = .100    SPDBK = .000  
 BDFLAP = .100

RUN NO. 40/ 0    RN/L = 6.28    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.904	-13.290	.01560	.00000
.904	-10.830	.01510	.00000
.904	-8.330	.01420	.00000
.904	-5.890	.01360	.00000
.904	-3.400	.01300	.00000
.904	-1.020	.01220	.00000
.904	1.380	.01240	.00000
.904	3.770	.01210	.00000
.904	6.240	.01210	.00000
.904	8.640	.01190	.00000
.904	10.930	.01210	.00000
.904	-1.010	.01260	.00000
	GRADIENT	-.00010	.00000

RUN NO. 37/ 0    RN/L = 6.48    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
.993	-13.960	.02120	.00000
.993	-11.370	.01920	.00000
.993	-8.760	.01870	.00000
.993	-6.220	.01850	.00000
.993	-3.700	.01870	.00000
.993	1.190	.01910	.00000
.993	1.260	.01930	.00000
.993	3.700	.01930	.00000
.993	6.240	.01900	.00000
.993	8.750	.01860	.00000
.993	11.070	.01850	.00000
.993	-1.170	.01940	.00000
	GRADIENT	.00008	.00000

DATE 23 OCT 75

1A33 TABULATED DATA

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MSFC 5948(1A33) 74-OTS TIP1S1P201+GRIT ORB STING

(R1C604) ( 22 SEP 75 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ. FT    XMRP = 976.0000 IN. XT  
 LREF = 1290.0000 IN.      YMRP = .0000 IN. YT  
 BREF = 1290.0000 IN.      ZMRP = 400.0000 IN. ZT  
 SCALE = .0040

BETA = .000    ELEVTR = -.800  
 RUDDER = .100    SPDBK = .000  
 BDFLAP = .100

RUN NO. 39/ 0    RN/L = 6.63    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.107	-14.370	.01540	.00000
1.107	-11.670	.01450	.00000
1.107	-8.970	.01420	.00000
1.107	-6.370	.01410	.00000
1.107	-3.780	.01360	.00000
1.107	-1.220	.01340	.00000
1.107	1.270	.01330	.00000
1.107	3.770	.01350	.00000
1.107	6.370	.01350	.00000
1.107	8.880	.01300	.00000
1.107	11.190	.01300	.00000
1.107	-1.220	.01330	.00000
GRADIENT		-.00002	.00000

RUN NO. 39/ 0    RN/L = 6.68    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNBF	CABF
1.196	-14.980	.01760	.00000
1.196	-12.140	.01670	.00000
1.196	-9.280	.01660	.00000
1.196	-6.560	.01630	.00000
1.196	-3.890	.01590	.00000
1.196	-1.240	.01560	.00000
1.196	1.300	.01500	.00000
1.196	3.820	.01530	.00000
1.196	6.460	.01520	.00000
1.196	8.950	.01530	.00000
1.196	11.390	.01590	.00000
1.196	-1.230	.01540	.00000
GRADIENT		-.00009	.00000

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