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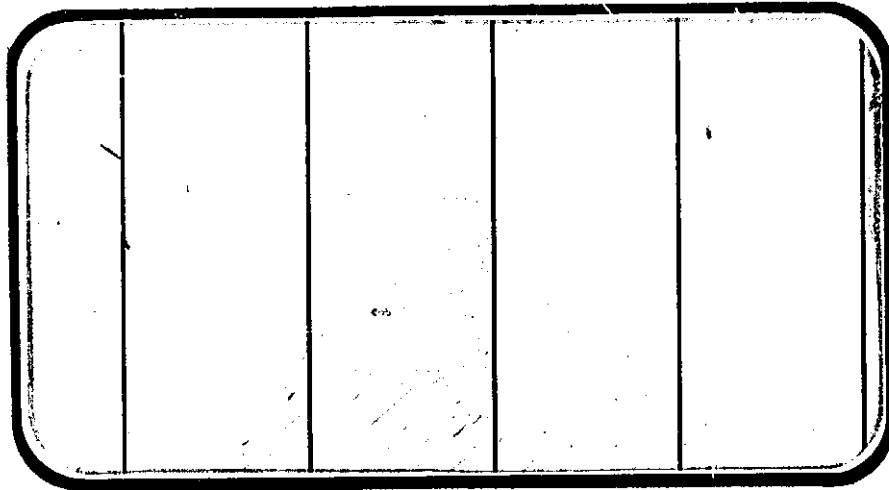
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National Aeronautics and  
Space Administration

Lyndon B. Johnson Space Center  
Houston, Texas 77058



(NASA-CR-151080) RESULTS OF TESTS USING A  
0.0125-SCALE MODEL (70-QT) OF THE SPACE  
SHUTTLE VEHICLE ORBITER IN THE AEDC VKF  
TUNNEL B (IA22), VOLUME 2 (Chrysler Corp.)  
620 p HC A99/MF A01

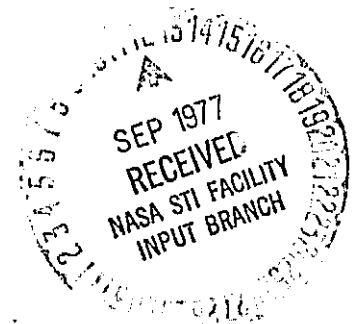
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# SPACE SHUTTLE AEROTHERMODYNAMIC DATA REPORT

Data Management SERVICES



May 1977

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VOLUME 2 OF 3

RESULTS OF TESTS USING A 0.0125-SCALE MODEL  
(70-OT) OF THE SPACE SHUTTLE VEHICLE ORBITER  
IN THE AEDC VKF TUNNEL B (IA22)

by

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WIND TUNNEL TEST SPECIFICS:

Test Number: AEDC V41B-D9A  
NASA Series Number: IA22  
Model Number: 70-OT  
Test Dates: May 4 through May 8, 1976  
Occupancy Hours: 48.7

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RESULTS OF TESTS USING A 0.0125-SCALE MODEL  
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ABSTRACT

An experimental investigation (test IA22) was conducted in the AEDC/VKF Tunnel B from May 4 through 8, 1976. Objective was to obtain interaction effects of RCS thruster jet plumes on SSV aerodynamics during staging to simulate RTLS abort. Investigated were interaction effects of the orbiter RCS thruster jet plumes on the orbiter and ET aerodynamics. RCS thruster jet plumes were simulated using both air and a 15 percent argon 85 percent helium gas mixture. The ET angle of attack range was -40 to +25 deg. at sideslip angles of 0, 3, and 6 degrees. Orbiter angle of attack was varied from -15 to +10 degrees at sideslip angles of 0 and 3 deg. External tank full scale separation distances simulated were 0 to 1400 in. axially; 0 to 54 in. laterally; and a range of -100 to 1000 in. vertically. Data were also obtained on the ET in the interference-free flow field, referred to as "Tank Isolated Data." Quiescent (no tunnel flow) thruster plume interaction data were obtained on the orbiter and orbiter-ET combination. Tests were conducted at Mach number 6 and a Reynolds number of 0.86 million per foot. Orbiter elevon deflections of

## ABSTRACT (Concluded)

0 and -10 deg. were investigated. Two-component force data (normal force and hinge moment) were obtained on one of the orbiter umbilical doors in the fully open and half open (90°) orientations. Three RCS thruster configurations were simulated. Data report is in three volumes. Vol. 1 contains plotted data; Vol. 2 contains tabulated data sets R, S, T, U, AVK001 through R, S, T, U, AVK081; and Vol. 3 contains tabulated data sets R, S, T, U, AVK082 through R, S, T, U, AVK175.

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PLOT SCHEDULES:

- (A)  $C_N, C_m, C_A, C_Y, C_n,$  and  $C_{\bar{x}}$  vs. Z (w/o RCS thrust)
- (B)  $C_N, C_m, C_A, C_Y, C_n,$  and  $C_{\bar{z}}$  vs. Z
- (C) Z vs. X

## INTRODUCTION

RCS thruster jet interactions with aerodynamic characteristics during the Space Shuttle RTLS abort maneuver were investigated using a 0.0125-scale model of the orbiter vehicle 102 (preliminary) and external tank in the AEDC VKF Tunnel B during May 1976. Data were obtained through a pitch and yaw angle matrix at a Mach number of 6.0 and unit Reynolds number of 0.86 million per foot.

Test variables were separation parameters, elevon deflection angle, umbilical door position, and RCS thruster configuration. Orbiter and tank aerodynamic forces and moments were individually measured. Model base and cavity pressures were also measured.

This is a three-volume data report. Vol. 1 contains plotted data; Vol. 2 contains tabulated data sets R, S, T, U, AVK001 through R, S, T, U, AVK081; and Vol. 3 contains tabulated data sets R, S, T, U, AVK082 through R, S, T, U, AVK175.

## NOMENCLATURE

<u>Plot Symbol</u>	<u>Mnemonic</u>	<u>Definition</u>
$A_D$		umbilical door reference area, ft. <sup>2</sup>
$A_{RCS}$		RCS reference area, ft. <sup>2</sup>
$A_{EDC}$		Arnold Engineering Development Center
$b_{ref}$	BREF	reference span, in.
$C_A$		axial force coefficient
$C_{A_T}$	CA	total axial force coefficient
$C_{A_{T_R}}$	CAR	total axial force coefficient with RCS thrust included
$C_{D_{MD}}$	CHMD	umbilical door hinge moment coefficient
$C_l$	CBL	body axis rolling moment coefficient
$C_{l_R}$	CBLR	body axis rolling moment coefficient with RCS thrust included
$C_m$	CLM	pitching moment coefficient
$C_{m_R}$	CIMR	pitching moment with RCS thrust included
$C_n$	CYN	body axis yawing moment coefficient
$C_{n_R}$	CYNR	body axis rolling moment coefficient with RCS thrust included
$C_N$	CN	normal force coefficient
$C_{N_{FD}}$	CNFD	umbilical door normal force coefficient
$C_{N_R}$	CNR	normal force coefficient with RCS thrust included
$C_{P_{B_1}}, C_{P_{B_2}}$	CPB1, CPB2	orbiter base pressure coefficient
$C_{P_{B_3}}, C_{P_{B_4}}$	CPB3, CPB4	ET base pressure coefficient balance

NOMENCLATURE (Continued)

<u>Plot Symbol</u>	<u>Mnemonic</u>	<u>Definition</u>
$C_{PC1}$	CPC1	orbiter balance cavity pressure coefficient
$C_{PC2}$	CPC2	ET balance cavity pressure coefficient
$C_{ref}$		reference chord, inches
$C_{TAD}$	CTAD	aft down-firing RCS thrust coefficient
$C_{TAS}$	CTAS	aft side-firing RCS thrust coefficient
$C_{TAU}$	CTAU	aft upward-firing RCS thrust coefficient
$C_{TFD}$	CTFD	forward down-firing RCS thrust coefficient
$C_{TFS}$	CTFS	forward side-firing RCS thrust coefficient
$C_{TFU}$	CTFU	forward upward-firing RCS thrust coefficient
$C_Y$	CY	side force coefficient
$C_{YR}$	CYR	side force coefficient with RCS thrust included
ET		external tank
$R_i$		calibration factor for $i^{th}$ RCS nozzle, lbs/psi
$l_D$		umbilical door reference length, in.
$l_{ref}$		reference length, orbiter body length, in.
$M_\infty$	MACH	freestream Mach no.
MRP	MRP	moment reference point
n		number of RCS jets firing
$P_{B1}, P_{B2}$	PB1, PB2	orbiter base pressures, psia
$P_{B3}, P_{B4}$	PB3, PB4	ET base pressures, psia
$P_{C1}$	PC1	orbiter balance cavity pressure, psia

NOMENCLATURE (Continued)

<u>Plot Symbol</u>	<u>Mnemonic</u>	<u>Definition</u>
PC2	PC2	ET balance cavity pressure, psia
PC5	PC5	orbiter RCS plenum chamber pressure $PC5=P_{RC1}$ , psia
$P_{RC1}$	PRC	primary RCS plenum chamber pressure measurement, psia
$P_{RC2}$	PRC2	back-up RCS plenum chamber pressure measurement, psia
$q_{\infty}$	Q(P <sub>SI</sub> )	freestream dynamic pressure, psia
RCS	RCS	reaction control system
Re/ft	RE/FT	unit Reynolds number, per foot
S	SREF	orbiter and ET reference area, ft. <sup>2</sup>
$T_{\infty}$		freestream static temperature, °R
$T_{AD}$	TAD	aft down-firing RCS thrust, lbs.
TAU	TAU	aft up-firing RCS thrust, lbs.
$T_{FD}$	TFD	forward down-firing RCS thrust, lbs.
TFU	TFU	forward up-firing RCS thrust, lbs.
$T_j$		RCS thrust firing in j <sup>th</sup> direction
$T_o$	TO	tunnel stilling chamber temperature, °R
$X_{MRP}$	XMRP	longitudinal station of MRP, in.
$X_o$	XO	orbiter longitudinal station, in.
$X_T$	XT	ET longitudinal station, in.
$Y_{MRP}$	YMRP	lateral station of MRP, in.
$Y_o$	YO	orbiter lateral station, in.
$Y_T$	YT	ET lateral station, in.
$Z_{MRP}$	ZMRP	vertical station of MRP, in.

## NOMENCLATURE (Continued)

<u>Plot Symbol</u>	<u>Mnemonic</u>	<u>Definition</u>
$Z_O$	ZO	orbiter vertical station, in.
$Z_T$	ZT	ET vertical station, in.
$\alpha_O$	ALPHA	orbiter angle of attack, deg.
$\alpha_T$	ALPHAT	ET angle of attack, deg.
$\beta_O$	BETA	orbiter angle of sideslip, deg.
$\beta_T$	BETAT	ET angle of sideslip, deg.
$\delta_a$	AILRON	aileron deflection angle, deg.
$\delta_{BF}$	BDFLAP	body flap deflection angle, deg.
$\delta_e$	ELEVON	elevon deflection angle, deg.
$\delta_{eL}$	ELV-L	left elevon deflection angle, deg.
$\delta_{eR}$	ELV-R	right elevon deflection angle, deg.
$\delta_R$	RUDDER	rudder deflection angle, deg.
$\delta_{SB}$	SPDBRK	speed brake deflection angle, deg.
$\Delta_X$	X	longitudinal displacement of tank nose from its mated position with respect to the orbiter, positive downstream, inches full scale
$\Delta_Y$	Y	lateral displacement of the tank nose from its mated position with respect to the orbiter, positive left, inches full scale
$\Delta_Z$	Z	vertical displacement of the tank nose from its mated position with respect to the orbiter, positive down, inches full scale
$\Delta \alpha$	DALPHA	differential angle of attack between orbiter and ET, $\alpha_T - \alpha_O$ , deg.
$\Delta \beta$	DBETA	differential angle of sideslip between orbiter and ET, $\beta_T - \beta_O$ , deg.

NOMENCLATURE (Continued)

<u>Plot Symbol</u>	<u>Mnemonic</u>	<u>Definition</u>
$\Delta\phi$		differential roll angle between orbiter and ET, $\phi_T - \phi_O$ , deg.
$\phi_O$	PHIO	orbiter roll angle, deg.
$\phi_T$	PHIT	tank roll angle, deg.
$C_T$		thrust coefficient for RCS firing in jth direction
	CTS	captive trajectory system
$\Delta P_B$	DLPBAL	differential pressure across VTB-7 balance, psi
$\Delta T$	DT	differential temperature across umbilical doors, °F
	GAS	RCS gas mixture, air or argon/helium (AR/HE)
	HMD	umbilical door hinge moment, in./lbs
MRC	MRC	moment reference center, in.
	NFD	umbilical door normal force, lbs.
	OMS	orbiter maneuvering system
$P_\infty$		freestream static pressure, psf
$P_c$		RCS plenum chamber pressure
$P_{RCS}$		reaction control system pressure
	IML	inner mold line
	OML	outer mold line
	PS3	W-1131 S/A sting static pressure, psia
	RNTF	Rockwell International Rocket Nozzle Test Facility



NOMENCLATURE (Concluded)

<u>Plot Symbol</u>	<u>Mnemonic</u>	<u>Definition</u>
	RTLS	return to launch site
	T	tunnel freestream static temperature, °F
	TB1   TB2	measured balance temperature, °F
	TGAS	RCS gas temperature, °F
$\delta_{UMB}$	UMBLDR	umbilical door position
	WM	mass flow from nozzle, lbs/sec.
	ZSWEEP	parameter to denote increasing Z

SUBSCRIPTS

S	orbiter spike coordinates, CTS
T	ET target coordinates, CTS

## CONFIGURATIONS INVESTIGATED

The model used for these tests was a 0.0125-scale replica of the Rockwell International Space Shuttle Vehicle Configuration 102 (preliminary) orbiter and external tank designated model 70-OT. The SSV orbiter configuration is composed of a configuration control drawing VC70-000024 wing with modified OMS pods, VC70-000002A elevons and control drawing VC70-000002, MDV-70 baseline TML body. A three-view drawing of the orbiter configuration is shown in Figure 2a and b. The external tank configuration is shown in Figure 2c. Figure 2d shows the mated orbiter and tank.

The orbiter was constructed of steel to withstand the environment of the AEDC/VKF Tunnel B. The elevon settings, body flap, speed brake, and rudder remained at 0 degrees deflection throughout the test. Two umbilical doors provided on this model were tested at 0° (open) and 90° during the test. Figure 2e shows the umbilical door configuration.

Twenty-seven RCS thrusters were simulated on the model. The model RCS system is composed of three (3) nozzle "blocks" each with nine (9) nozzles simulating RCS thrusters, and two (2) alternate air supply systems as shown on Figure 2f. Each thruster was operated either by itself or in combination with other thrusters as shown on Figure 2g. The plenums for each block were connected to the tunnel high pressure air system via the model support sting. Nozzle air entered the model through the VTB flow-through balance (Figure 2h) making both nose and aft RCS thrusters metric.

## CONFIGURATIONS INVESTIGATED (Continued)

The external tank model aft of  $X_T$  362.5 (full scale) was built to the outer mold lines depicted on drawing VC78-000002C. The isentropic nose probes forward of  $X_T$  362.5 is based on NASA drawing 82600203049. External tanks and their components, shown in Figure 2c, are of steel construction.

Orbiter configurations were denoted as follows:

$$O_1 = B_{64} C_{16} E_{63} F_{14} M_{19} N_{94} V_{23} W_{129}$$

$$O_2 = B_{64} C_{16} E_{63} F_{14} M_{20} N_{94} N_{96} N_{97} V_{23} W_{129}$$

$$O_3 = B_{64} C_{16} E_{63} F_{14} M_{21} N_{94} N_{95} N_{96} N_{97} V_{23} W_{129}$$

$$O_4 = B_{64} C_{16} E_{63} F_{14} M_{21} N_{94} N_{95} N_{96} N_{97} U_1 V_{23} W_{129}$$

Where individual orbiter components were defined as (refer to

Figure 2a):

<u>Component</u>	<u>Definition</u>	<u>Model Drawings</u>
B <sub>64</sub>	Body	SS-A01357
C <sub>16</sub>	Canopy	SS-A01357
E <sub>63</sub>	Elevons	SS-A01356
F <sub>14</sub>	Body Flap	SS-A01357
M <sub>19</sub>	Orbiter Maneuvering System	SS-A01357 SS-A01358 SS-A01670
M <sub>20</sub>	Orbiter Maneuvering System	SS-A01357 SS-A01358 SS-A01670
M <sub>21</sub>	Orbiter Maneuvering System	SS-A01357 SS-A01358 SS-A01670

CONFIGURATIONS INVESTIGATED (Continued)

<u>Component</u>	<u>Definition</u>	<u>Model Drawings</u>
N <sub>94</sub>	Main Propulsion Nozzles	SS-A01357
N <sub>95</sub>	Forward Reaction Control System (see below)	SS-A01663
N <sub>96</sub>	Left Aft Reaction Control System (see below)	SS-A01670
N <sub>97</sub>	Right Aft Reaction Control System (see below)	SS-A01670
U <sub>1</sub>	Umbilical Doors	SS-A01356
V <sub>23</sub>	Vertical Tail	SS-A01357
W <sub>129</sub>	Wing	SS-A01356

A general arrangement configuration drawing is shown in Figure 2a.

The following nomenclature was used for designation of nozzle block configurations (refer to Figures 2f and g):

<u>Config-uration</u>	<u>Position</u>	<u>Reference Drawing</u>	<u>Thruster Numbers</u>	<u>Thruster Position</u>
N <sub>95</sub>	Orbiter Nose	VS70-42109 (Model Drawing No. SS-A01663)	113	Upper Side Firing, Left Side
			123	Lower Side Firing, Left Side
			116	Forward Down Firing, Left Side
			126	Aft Down Firing, Left Side
			136	Forward Down Firing, Right Side
			146	Aft Down Firing, Right Side

CONFIGURATIONS INVESTIGATED (Continued)

<u>Config- uration</u>	<u>Position</u>	<u>Reference Drawing</u>	<u>Thruster Numbers</u>	<u>Thruster Position</u>
N <sub>95</sub> (cont'd)	Orbiter Nose	VS70-42109 (Model Drawing No. SS-A01663)	115	Up Firing, Left Side
			125	Up Firing, Center
			135	Up Firing, Right Side
N <sub>96</sub>	Left OMS Pod	VL70-008470 (Model Drawing No. SS-A01670)	245	Up Firing, Forward
			225	Up Firing, Center
			215	Up Firing, Aft
			246	Down Firing, Forward
			226	Down Firing, Center
			236	Down Firing, Aft
			243	Side Firing, Forward
			223	Side Firing, Center
			233	Side Firing, Aft
			N <sub>97</sub>	Right OMS Pod
325	Up Firing, Center			
315	Up Firing, Aft			
346	Down Firing, Forward			
326	Down Firing, Center			

CONFIGURATIONS INVESTIGATED (Continued)

<u>Config-uration</u>	<u>Position</u>	<u>Reference Drawing</u>	<u>Thruster Numbers</u>	<u>Thruster Position</u>
Ng7 (cont'd)	Right OMS Pod	VL70-008470 (Model Drawing No. SS-A01670)	336	Down Firing, Aft
			344	Side Firing, Forward
			324	Side Firing, Center
			334	Side Firing, Aft

The RCS nozzles were calibrated in the intermitted blowdown-vacuum test section 7' x 5' x 16' Test Chamber Rocket Nozzle Test Facility at the Rockwell International Los Angeles Division prior to the test. The calibration determined nozzle thrust as a function of plenum chamber pressure (Pc). Test chamber and nozzle plenum chamber pressures were recorded by a dial gage. Nozzle thrust was measured by a Revere No. 244267, 10-lb. capacity load cell. All 3 nozzle blocks were calibrated under vacuum conditions to simulate RTLS abort separation conditions encountered in the AEDC Tunnel B.

The following nomenclature was used to designate external tank components:

$$ET = T_{33} \quad AT_{125} \quad AT_{126} \quad AT_{127} \quad FL_{12} \quad FL_{13} \quad FR_{13} \quad PT_{29} \quad PT_{30} \quad PT_{33} \quad PT_{35} \quad PT_{36} \\ PT_{37}$$

where the model tank components were defined as follows (refer to Figure 2c).

CONFIGURATIONS INVESTIGATED (Continued)

<u>Symbol</u>	<u>Component Description</u>	<u>Drawing</u>
T <sub>33</sub>	External Tank	SS-A01353
AT <sub>125</sub>	Attach Structure (forward)	SS-A01354
AT <sub>126</sub>	Attach Structure (aft right)	
AT <sub>127</sub>	Attach Structure (aft left)	
FL <sub>12</sub>	Feedline (LO <sub>2</sub> ) Upper Right	
FL <sub>13</sub>	Feedline (ET to Orbiter)	
FR <sub>13</sub>	Aft Attach Structure Fairing	
PT <sub>29</sub>	Electrical Conduit, R.H. Forward Nose	
PT <sub>30</sub>	Electrical Conduit, and LO <sub>2</sub> Lines (Upper Right)	
PT <sub>33</sub>	LH <sub>2</sub> Pressure Line (Upper Left)	
PT <sub>35</sub>	Forward SRB/ET Attach Fitting	
PT <sub>36</sub>	Aft Lower SRB/ET Attach Fitting	
PT <sub>37</sub>	Aft Upper SRB/ET Attach Fitting	

Detailed model component dimensional data are given in Table III.

The orbiter was mounted in AEDC Tunnel B in an inverted position as shown in Figure 2i. The LTV VTB-7 flow-through balance measured orbiter forces and moments. The balance was supported by the Rockwell W-1131 S/A sting and 11158 support mechanism which mounted on the tunnel primary sector. External tank forces and moments were measured by the AEDC VKF 4.00-Y-36-049 internal strain gage balance, which attached to the Rockwell VY109630 sting and was supported by the tunnel capture trajectory system (CTS). Figures 2j and k define the axis system used

## CONFIGURATIONS INVESTIGATED (Concluded)

to define orbiter and tank separation distances and angles. Figure 3 shows photographs of the model installed in the tunnel.

The orbiter and external tank models were each instrumented to measure two (2) base and one (1) cavity pressure. Each RCS plenum chamber (nose, left aft, and right aft) was instrumented to measure its RCS supply air pressure.

Orbiter umbilical door was instrumented to measure door hinge moment and normal force.



## TEST FACILITY DESCRIPTION

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

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

## DATA REDUCTION

Standard AEDC methods were used to compute tunnel parameters and nozzle mass flow. Base and balance cavity pressures were reduced to pressure coefficients. No base or cavity corrections were applied to the balance data.

Data from both balances were reduced to coefficient form in body axes affixed to the orbiter and tank. Nominal model attitude and position data were determined using standard AEDC methods. Linear and angular displacements of the models due to sting/balance deflections under load were calculated and applied to correct nominal model attitude and position values.

Orbiter balance data were corrected to remove interactions caused by RCS supply air flowing through the VTB-7 balance during runs with RCS nozzles firing. An additional set of orbiter data, with RCS thrust removed, was also calculated and is presented. RCS thrust was calculated using tares obtained during static firings of the various RCS nozzle configurations made with the RCS system installed on the orbiter fuselage in AEDC Tunnel B when the tunnel was not blowing. Thrust coefficients were also calculated for these runs. Thrust was calculated based on the RNTF nozzle calibrations (discussed under Configurations Investigated). This involved the following calculations:

$$T_j = \sum_{\substack{\text{all } i \\ \text{firing}}} R_i PC_i - nP_\infty A_{RCS}$$

$$C_{T_j} = \frac{T_j}{q_\infty A_{RCS}}$$

DATA REDUCTION (Continued)

where:

j = direction of jet	i = index denoting jets which were firing
FD = forward down	116, 126, 136, and/or 146
FS = forward side	113 and/or 123
FU = forward up	115, 125, and/or 135
AD = aft down	226, 236, 246, 326, 336, and/or 346
AS = aft side	223, 233, 243, 324, 334, and/or 344
AU = aft up	215, 225, 245, 315, 325, and/or 345

Figures 2f and g show these jet locations on the model and jet configurations fired during this test.

Umbilical door hinge moment and normal force data were reduced to coefficient form as follows:

$$C_{hMD} = \frac{h_{MD}}{q_{\infty} A_D l_D}$$

$$C_{NFD} = \frac{N_{FD}}{q_{\infty} A_D}$$

The following reference dimensions and constants were used:

<u>Symbol</u>	<u>Description</u>	<u>Value</u>	
		<u>Full Scale</u>	<u>Model Scale</u>
$A_D$	umbilical door reference area, ft. <sup>2</sup>	17.2	0.0026875

DATA REDUCTION (Concluded)

<u>Symbol</u>	<u>Description</u>	<u>Value</u>	
		<u>Full Scale</u>	<u>Model Scale</u>
$A_{RCS}$	RCS reference area, ft. <sup>2</sup>	1.0	0.000156
$l_{ref}, C_{ref}, b_{ref}$	orbiter and ET reference length, in.	1290.3	16.129
$l_D$	umbilical door reference length, in.	50.592	0.6324
$S$	orbiter and ET reference area, ft. <sup>2</sup>	2690.0	0.4203
$X_{MRP_O}$	orbiter moment reference point longitudinal station, in. $X_O$	1089.6	13.62
$X_{MRP_T}$	ET moment reference point longitudinal station, in. $X_T$	1328.72	16.609
$Y_{MRP_O}$	orbiter moment reference point lateral station, in. $Y_O$	0.0	0.0
$Y_{MRP_T}$	ET moment reference point lateral station, in. $Y_T$	0.0	0.0
$Z_{MRP_O}$	orbiter moment reference point vertical station, in. $Z_O$	375.0	4.688
$Z_{MRP_T}$	ET moment reference point vertical station, in. $Z_T$	416.4	5.205

## REFERENCES

1. NA74-518 "Structural Analysis of the 0.0125-Scale SSV Model (70-OT)," December, 1975.
2. SD74-SH-0094, "Pretest Information for External Tank Separation Test IA17 Using the 0.010-Scale SSV Model (52-OT) in the AEDC-VKF Tunnel B," February 22, 1974.
3. SD75-SH-0148, "Pretest Information for Separation Test IA114 Using the 0.010-Scale SSV Model (52-OT) in the AEDC-VKF Tunnel B," July 8, 1975.
4. SD75-SH-0256, "Pretest Information for RTLS Abort Separation Tests IA22/OA169 Using the 0.0125-Scale SSV Model (70-OT) in the AEDC-VKF Tunnel B," dated February 16, 1976.

TABLE I.

TEST : IA22		DATE : Post-test	
TEST CONDITIONS			
MACH NUMBER	UNIT REYNOLDS NUMBER (million per foot)	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)
5.9	0.86	0.65	391

Orbiter: LTV VTB-7

BALANCE UTILIZED: External Tank: 4.00-Y-36-049

	VTB-7	4.00-Y-36-049	COEFFICIENT TOLERANCE:
NF	<u>± 80 lb.</u>	<u>± 200 lb.</u>	_____
SF	<u>± 40 lb.</u>	<u>± 200 lb.</u>	_____
AF	<u>± 30 lb.</u>	<u>± 100 lb.</u>	_____
PM	<u>± 320 in.-lb.</u>	<u>± 680 in.-lb.</u>	_____
RM	<u>± 160 in.-lb.</u>	<u>± 680 in.-lb.</u>	_____
YM	<u>± 25 in.-lb.</u>	<u>± 100 in.-lb.</u>	_____

COMMENTS:

TABLE II.

TEST: IA22, AEDC V41B-D9A

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: POST-TEST

DATA SET IDENTIFIER	CONFIGURATION	IV2 Z	PARAMETERS								DALPHA ( $\alpha$ )						
			X	Y	$\alpha_0$	$\beta_0$	$\Delta\beta$	$P_c$	$S_e$	$S_{umb}$	-20	-15	-10	-5	0	5	10
VK001	04/ET (RC1)	A	0	0	-15	0	0	978	0	0	2662	2650	2654	2658	2660		
02			200								2663	2651	2655	2659	2667		
03			400								2664	2652	2656	2660	2668		
04			600								2665	2653	2657	2661	2669		
05			0		-10						2670	2674	2678	2682	2686		
06			200								2671	2675	2679	2683	2687		
07			400								2672	2676	2680	2684	2688		
08			600								2673	2677	2681	2685	2689		
09			0		-5						(INCREASING Z)		2352		2366		2368
10			0								(DECREASING Z)		2353		2367		2369
11			0								2690	2694	2705	2713	2370	2376	
12			200								2691	2702	2706	2714	2371	2377	
13			400								2692	2703	2707	2715	2372	2378	
14			600								2693	2704	2708	2716			
15			0	54				3					2709		2373	2379	
16			200										2710		2374	2380	
17			400										2711		2375	2381	
18			600										2712				

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1000 NUMBER

7 13 19 25 31 37 43 49 55 61 67 75 75  
REFER TO LAST PAGE OF TABLE

$\alpha$  OR  $\beta$  COEFFICIENTS  
SC-EDULES A) -50 to 1000 inches (full scale)  
in total

IDVAR (1) IDVAR (2) NCL

TABLE II. (Continued)

TEST: IA22, AEDC V41B-D9A		DATA SET RUN NUMBER COLLATION SUMMARY									DATE: POST-TEST							
DATA SET IDENTIFIER	CONFIGURATION	IV2	PARAMETERS								DALPHA ( $\Delta\alpha$ )							
			Z	X	Y	$\alpha_0$	$\beta_0$	$\Delta\beta$	$P_c$	$\delta_c$	$\delta_{sum}$	-20	-15	-10	-5	0	5	10
VK019	OA/ET (RC1)	A	0	0	-5	3	0	978	0	0	2787	2791	2795	2799	2486	2489		
20			200								2788	2792	2796	2800	2487	2490		
21			400								2789	2793	2797	2801	2488	2491		
22			600								2790	2794	2798	2802				
23	(RC2)		0								2847	2851	2855	2859	2480	2483		
24			200								2848	2852	2856	2860	2481	2484		
25			400								2849	2853	2857	2861	2482	2485		
26			600								2850	2854	2858	2862	2459	2462		
27	(RC3)		0			0					2807	2811	2815	2819	2460	2463		
28			200								2808	2812	2816	2820	2461	2464		
29			400								2809	2813	2817	2821				
30			600								2810	2814	2818	2822				
31	(RC1)		0			0					2751	2755	2759	2388	2394	2400		
32			200								2752	2756	2760	2389	2395	2401		
33			400								2753	2757	2761	2390	2396	2402		
34			600								2754	2758	2762					
35			0	54				3						2391	2397	2403		
36			200	54				3						2392	2398	2404		

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COEFFICIENTS

10VAR (1) 10VAR (2) NOV

$\alpha$  OR  $\beta$   
SCHEDULES

A) -50 to 1000 inches (full scale)  
in total



TABLE II. (Continued)

TEST: IA22, AEDC V41B-D9A		DATA SET/RUN NUMBER COLLATION SUMMARY									DATE: POST-TEST							
DATA SET IDENTIFIER	CONFIGURATION	IV2	PARAMETERS								DALPHA ( $\Delta\alpha$ )							
			Z	X	Y	$\alpha_0$	$\beta_0$	$\Delta\beta$	$P_c$	$\delta_e$	SUMB	-20	-15	-10	-5	0	5	10
VK037	O4/ET (RC1)	A	400	54	0	0	3	978	0	0				2393	2399	2405		
38			0	0		3	0				2775	2779	2783	2492	2495	2498		
39			200								2776	2780	2784	2493	2496	2499		
40			400								2777	2781	2785	2494	2497	2500		
41			600								2778	2782	2786					
42	(RC2)		0								2835	2839	2843					
43			200								2836	2840	2844					
44			400								2837	2841	2845					
45			600								2838	2842	2846					
46	(RC3)		0			0					2823	2827	2831	2465	2468	2471		
47			200								2824	2828	2832	2466	2469	2472		
48			400								2825	2829	2833	2467	2470	2473		
49			600								2826	2830	2834					
50	(RC1)		0		5						2743	2747	2423	2429	2435	2441		
51			0										2415	2420				
52			200								2744	2748	2424	2430	2436	2442		
53			200										2416	2421				
54			400								2745	2749	2425	2431	2437	2443		

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$\alpha$  OR  $\beta$  SCHEDULES A) -50 to 1000 inches (full scale) COEFFICIENTS in total! ID, AP (1) IC, AF (2) ND

TABLE II. (Continued)

TEST: IA22, AEDC V41B-D9A		DATA SET RUN NUMBER COLLATION SUMMARY								DATE: POST-TEST							
DATA SET IDENTIFIER	CONFIGURATION	IV2	PARAMETERS							DALPHA ( $\Delta\alpha$ )							
			Z	X	Y	$\alpha_0$	$\beta_0$	$\Delta\beta$	$P_c$	$\delta_e$	Sum	-20	-15	-10	-5	0	5
VK055	O4/ET (RC1)	A	400	0	5	0	0	978	0	0			2417	2422			
56			600	0			0				2746	2750					
57			0	54			3						2426	2432	2438	2444	
58			200										2427	2433	2439	2445	
59			200										2418				
60			400										2428	2434	2440	2446	
61			400	↓	↓			↓	↓				2419				
62			0	0	-5		0	0					2350	(INCREASING Z)			
63			0										2351	(DECREASING Z)			
64			0								2717	2721	2725	2729	2382	2385	
65			200								2718	2722	2726	2730	2383	2386	
66			400								2719	2723	2727	2731	2384	2387	
67			600					↓			2720	2724	2728	2732			
68	(RC2)		0				3				2863	2867	2871	2875			
69			200								2864	2868	2872	2876			
70			400								2865	2869	2873	2877			
71			600					↓	↓		2866	2870	2874				
72	(RC1)		0	↓	0	0	↓	↓	↓		2763	2767	2771	2406	2409	2412	

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REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

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a OR B SCHEDULES A) -50 to 1000 inches (full scale) COEFFICIENTS in total

ID:AR (11) ID:AR (2) NO.

TABLE II. (Continued)

TEST: IA22, AEDC V41B-D9A		DATA SET/RUN NUMBER COLLATION SUMMARY										DATE: POST-TEST					
DATA SET IDENTIFIER	CONFIGURATION	IV2	PARAMETERS								DALPHA ( $\alpha$ )						
			Z	X	Y	$\alpha_0$	$\beta_0$	$\Delta\beta$	$P_c$	$\delta_c$	$\delta_{umb}$	-20	-15	-10	-5	0	5
VK073	OA/ET (RCI)	A	200	0	0	0	0	0	0	0	2764	2768	2772	2407	2410	2413	
74			400								2765	2769	2773	2408	2411	2414	
75			600								2766	2770	2774				
76			0		5						2735	2739	2447	2450	2453	2456	
77			200								2736	2740	2448	2451	2454	2457	
78			400								2737	2741	2449	2452	2455	2458	
79			600								2738	2742					
80			0		-5			978		90					2606	2607	
81			200										2586	2588	2590	2592	
82			400				1						2587	2589	2591	2593	
83			0				3						2574	2577	2580	2583	
84			200				3						2575	2578	2581	2584	
85			400				3						2576	2579	2582	2585	
86			0		0	0							2616	2617	2618		
87			200				0						2608	2610	2612	2614	
88			400				0						2609	2611	2613	2615	
89			0				3						2562	2565	2568	2571	
90			200				3						2563	2566	2569	2572	

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α OR β SCHEDULES      A) -50 to 1000 inches (full scale) in total      COEFFICIENTS      IDLAR (1)      IDVAR (2)      NDV

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TABLE II. (Continued)

TEST: IA22, AEXC VA1B-D9A		DATA SET RUN NUMBER COLLATION SUMMARY										DATE: POST-TEST						
DATA SET IDENTIFIER	CONFIGURATION	IVL	PARAMETERS								DALPHA ( $\alpha$ )							
			Z	X	Y	$\alpha_0$	$\beta_0$	$\Delta\beta$	$P_c$	$\delta e$	Sum	-20	-15	-10	-5	0	5	10
VK091	04/ET (RC1)	A	400	0	0	3	0	978	0	90			2564	2567	2570	2573		
92			0		-5	0		0					2594	2597	2600	2603		
93			200					0					2595	2598	2601	2604		
94			400					0					2596	2599	2602	2605		
95			0					978	-10	0			2627	2629	2631	2633		
96			400										2628	2630	2632	2634		
97			0		0								2619	2621	2623	2625		
98			400		0								2620	2622	2624	2626		
99			0		-5			0					2635	2637	2639			
100			400					0					2636	2638	2640			
101			0					978		90			2538	2540	2542	2544		
102			400										2539	2541	2543	2545		
103			0			3							2546	2548	2550	2552		
104			400			3							2547	2549	2551	2553		
105			0		0	0							2537	2531	2533	2535		
106			200										2521	2523	2525	2527		
107			400										2530	2532	2534	2536		
108			400										2522	2524	2526	2528		

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1 7 13 19 25 31 37 43 49 55 61 67 73 75 76

REFER TO LAST PAGE OF TABLE

$\alpha$  OR  $\beta$  SCHEDULES A) -50 to 1000 inches (full scale) in total COEFFICIENTS IDVAR (1) IDVAR (2) NEW

TABLE II. (Continued)

DATE: POST-TEST

TEST: IA22, AEDC V41B-D9A

DATA SET RUN NUMBER COLLATION SUMMARY

DATA SET IDENTIFIER	CONFIGURATION	PARAMETERS									DALPHA ( $\alpha$ )						
		Z	X	Y	$\alpha_0$	$\beta_0$	$\Delta\beta$	$P_c$	$S_e$	$S_{UMB}$	-20	-15	-10	-5	0	5	10
VK109	OA/ET (RC1)	A	0	0	0	3	0	978	-10	90			2554	2556	2558	2560	
110			400	0	0	3	0	978	-10	90			2555	2557	2559	2561	
111			0	0	0	0	0	0	-10	90			2529				

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

REFER TO LAST PAGE OF TABLE

$\alpha$  OF  $\beta$  SCHEDULES  
 A) -50 to 1000 inches (full scale) in total

IDVAR (1) IDVAR (2) NOV

TABLE II. (Continued)

TEST: IA22, AEDC Y41B-D9A DATA SET RUN NUMBER COLLATION SUMMARY DATE: POST-TEST

DATA SET IDENTIFIER	CONFIGURATION	PARAMETERS									VERTICAL SEPARATION DISTANCE (Z)							
		X	Y	$\alpha_0$	$\beta_0$	$\Delta\alpha$	$\Delta\beta$	$P_c$	$S_e$	$S_{UMB}$	-100	-75	-50	15	100	200	400	600
VK 112	O4/ET (RC1)	B	0	-5	0	10	0	978	0	0		2915		2916	2917	2918	2919	2920
113			0			15	0				2927		2928	2929	2930	2931	2932	2933
114			0			20	0				2934		2935	2936		2937	2938	2939
115			54			10	3					2921		2922	2923	2924	2925	2926
116			0		3	10	0					2947		2948	2949	2950	2951	2952
117						15					2953		2954	2955	2956	2957	2958	2959
118						20					2960		2961	2962		2963	2964	2965
119	(RC2)					10						2997		2998	2999			
120						15					3000		3001					
121						20					3002		3003					
122	(RC3)				0	10						3022		3023	3024	3025	3026	3027
123						15					3028		3029	3030	3031	3032	3033	3034
124						20					3035		3036	3037		3038	3039	3040
125	(RC1)			0		10						2879		2880	2881	2882	2883	2884
126						15					2885		2886	2887	2888	2889	2890	2891
127					3	10						2966		2967	2968	2969	2970	2971
128					3	15					2972		2973	2974	2975	2976	2977	2978

LIST RUN NUMBER

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REPRODUCIBILITY OF THIS PAGE IS POOR

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

REFER TO LAST PAGE OF TABLE

$\alpha$  or  $\beta$  SCHEDULES      B) 0 to 1400 inches (full scale)      COEFFICIENTS      \* Z = 500 inches      IDVAR (1)      IDVAR (2)      NCV

TABLE II. (Continued)

TEST: IA22, AEDC VA1B-D9A		DATA SET RUN NUMBER COLLATION SUMMARY										DATE: POST-TEST								
DATA SET IDENTIFIER	CONFIGURATION	PARAMETERS										VERTICAL SEPARATION DISTANCE (Z)								
		X	Y	$\alpha_0$	$\beta_0$	$\Delta\alpha$	$\Delta\beta$	$P_c$	$S_e$	SUMB	-100	-75	-50	15	100	200	400	600		
VK129	O4/ET (RC2)	B	0	0	3	10	c	978	0	0			3004		3005	3006				
130	↓				3	15							3007		3008					
131	(RC3)				c	10							3009		3010	3011	3012	3013	3014	
132	↓					15							3015		3016	3017	3018	3019	3020	3021
133	(RC1)				5	10							2902		2903	2904	2905	2906	2907	
134	↓					15							2908		2909	2910	2911	2912	2913	2914
135	↓				3	10							3057		3058	3059	3060	3061	3062	
136	↓					15							3063		3064	3065	3066	3067	3068	3069
137	(RC2)					10							2992		2993	2994				
138	↓					15							2995		2996					
139	(RC3)				0	10							3041		3042	3043				
140	↓					10							3044		3045	3046	3047	3048	3049	
141	↓					15							3050		3051	3052	3053	3054	3055	3056
142	(RC1)				10	10							2979		2980	2981	2982	2983	2984	
143	(RC1)				10	15							2985		2986	2987	2988	2989	2990	2991*

LIST RUN NUMBER

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

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COEFFICIENTS  
B) 0 to 1400 inches (full scale)

\* Z = 440 inches

$\alpha$  OR  $\beta$   
SCHEDULES

10 VAR (1)    12 VAR (2)    NOV

TABLE II. (Continued)

TEST: IA22, AEDC V41B-D9A		DATA SET RUN NUMBER COLLATION SUMMARY										DATE: POST-TEST						
DATA SET IDENTIFIER	CONFIGURATION	IV2		PARAMETERS							VERTICAL SEPARATION DISTANCE (Z)							
		X	Y	$\alpha_0$	$\beta_0$	$\Delta\alpha$	$\Delta\beta$	$P_c$	$\delta_e$	$\delta_{umb}$	-100	-75	-50	15	100	200	400	600
-YK144	O4/ET (RCI)	B	0	-5	0	10	0	0	0	0		2940		2941	2942			
145				-5		15					2943		2944					
146				-5		20					2945		2946					
147				0		10						2892		2893	2894			
148				0		15					2895		2896					
149				5		10						2897		2898	2899			
150				5		15					2900		2901					
151				-5		10		978	-10			3078		3079	3080			
152				-5		15					3081		3082					
153				-5		20					3083		3084					
154				0		10						3085		3086	3087			
155				0		15					3088		3089					
156				5		10						3073		3074	3075			
157				5		15					3076		3077					
158				0		10		0				3090		3091	3092			
159				0		15		0			3093		3094					

34

TEST RUN NUMBER

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

REFER TO LAST PAGE OF TABLE

$\alpha$  OR  $\beta$  SCHEDULES      COEFFICIENTS      B) 0 to 1400 inches (full scale)

10 VAR (1)      10 VAR (2)      NOV



TABLE II. (Continued)

TEST: IA22, AEDC V41B-D9A		DATA SET/RUN NUMBER COLLATION SUMMARY										DATE: POST-TEST						
DATA SET IDENTIFIER	CONFIGURATION	INZ	PARAMETERS									DALPHA ( $\Delta\alpha$ )						
			Z	X	Y	$\alpha_0$	$\beta_0$	$\Delta\beta$	Pc	GAS	$\delta_e$	$\delta_{UMB}$	-15	-10	-5	0	5	10
-VK160	O4/ET (RC1)	A	0	0	-5	0	0	978	Ar/H <sub>2</sub>	0	0			2503	2504	2505		
161			400					978							2506			
162			0					403						2507	2508			
163			0					760						2509	2510	2511		
164			0					400						2512	2513	2514		
											RCS PLENUM PRESSURE (PRC)							
		$\Delta\alpha\Delta\beta$	X	Y	Z	$\alpha_0$	$\beta_0$	$\delta_e$	$\delta_{UMB}$	0	978							
-VK165	O4/ET (RC1)	C	0	D	0	E	0	0	0		2502							
166			0				0	0			2501							
167			0				-5	0			2641							
168			0				-5	0				2734						
169			0				-5	0			2733							
*170			0				-15	0				2878						

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

REFER TO LAST PAGE OF TABLE

COEFFICIENTS

A) -50 to 1000 inches (full scale) in total

C) 0° to -24°

D) 0 to 600 inches E) 0 to 1200 inches

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

IDLAR (1) IDLAR (2) NDV

\* R/V DATA NOT AVAILABLE (NO TUNNEL AIR, M=0)

TABLE II. (Continued)

TEST: IA22, AFDC V4IB-D9A			DATA SET RUN NUMBER COLLATION SUMMARY						DATE: Post-test				
DATA SET IDENTIFIER	CONFIGURATION	EVA /DT	BT			MACH NUMBERS							
			0°	3°	6°	33		34		35		36	
-VK 171	ET	F	2803	2804	2805								
172	↓	F	2806										
173		G	2515	2516	2517								
174		G	2518	2519	2520								
175	↓	H	3070	3071	3072								

36

TEST RUN NUMBER

1 7 13 19 25 31 37 43 49 55 61 67 73 76

$\alpha$  or  $\beta$   
SCHEDULES

F)  $-10.5^\circ \rightarrow -40^\circ$ ,  $\Delta\alpha = 2.5^\circ$  COEFFICIENTS  
 G)  $-15^\circ \rightarrow 15^\circ$ ,  $\Delta\alpha = 2.5^\circ$

H)  $25^\circ \rightarrow -5^\circ$ ,  $\Delta\alpha = 2.5^\circ$

IDVAR (1) IDVAR (2) NDV

TABLE II. (Concluded)  
IA22 SOURCE DATA SCHEDULE

DESCRIPTION	DATASET	INDEPENDENT VARIABLES		COEFFICIENTS									
		FIRST	SECOND	1	2	3	4	5	6	7	8	9	10
Orb. with RCS Thrust & ET Separating	*RVK---	DALPHA	Z	X	Y	BETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
		Z	X	Y	DALPHA	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
		PRC	DALPHA	X	Y	Z	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
Orb. without RCS Thrust & ET Separating	SVK---	DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL	--
		Z	X	ALPHA	DALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
		PRC	DALPHA	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL	--
Umb. Door & RCS Thrust Data with ET Separating	*TVK---	DALPHA	Z	Y	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
		Z	X	Y	DALPHA	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
		PRC	DALPHA	Z	Z	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
ET Data Separating from Orb.	AVK---	DALPHA	Z	ALPHA	ALPHAT	BETA	BETAT	CN	CLM	CA	CY	CYN	CBL
		Z	X	ALPHA	ALPHAT	BETA	BETAT	CN	CLM	CA	CY	CYN	CBL
		PRC	DALPHA	X	Z	ALPHAT	BETAT	CN	CLM	CA	CY	CYN	CBL
Press. & Temp. Data	*UVK---	DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T	--
		Z	X	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T	--
		PRC	DALPHA	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T	--	--
ET Isolated Data	AVK171 AVK175	BETAT	ALPHAT	CN	CLM	CY	CYN	CBL	CA	MACH	--	--	--

\* When the RCS was off (non-firing), these data sets are omitted.

TABLE III. MODEL DIMENSIONAL DATA

MODEL COMPONENT: ATTACH STRUCTURE - AT<sub>125</sub>

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

MODEL SCALE: 0.0125

DRAWING NO.: VC72-000002, VC78-000002C

DIMENSIONS (Location of end pins centerline)	<u>MEMBER</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
	#1	X <sub>o</sub> 388.15	4.852
		Y <sub>o</sub> 0	0
		Z <sub>o</sub> 283.107	3.539
		X <sub>T</sub> 1129.90	14.124
		Y <sub>T</sub> 44.00	0.550
		Z <sub>T</sub> 562.395	7.030
	#2	X <sub>o</sub> 388.15	4.852
		Y <sub>o</sub> 0	0
		Z <sub>o</sub> 283.107	3.539
		X <sub>T</sub> 1129.90	14.124
		Y <sub>T</sub> - 44.00	- 0.550
		Z <sub>T</sub> 562.395	7.030
Diameter, In.	#1	6.0	0.075
	#2	6.0	0.075

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: ATTACH STRUCTURE - AT<sub>126</sub>

GENERAL DESCRIPTION: Right rear orbiter/ET attach structure (3 member structure)

MODEL SCALE: 0.0125

DRAWING NUMBER: VC72-000002, VC78-000002C

DIMENSIONS: (Location of end pins centerline)	<u>MEMBER</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
VERTICAL STRUT	X <sub>O</sub>	1317.00	16.463
	Y <sub>O</sub>	96.50	1.206
	Z <sub>O</sub>	267.556	3.344
	X <sub>T</sub>	2058.00	25.725
	Y <sub>T</sub>	125.98	1.575
	Z <sub>T</sub>	515.78	6.447
THRUST STRUT	X <sub>O</sub>	1317.00	16.463
	Y <sub>O</sub>	96.50	1.206
	Z <sub>O</sub>	267.556	3.344
	X <sub>T</sub>	1888.98	23.612
	Y <sub>T</sub>	125.98	1.575
	Z <sub>T</sub>	515.78	6.447
DIAGONAL CROSS STRUT	X <sub>O</sub>	1317.00	16.463
	Y <sub>O</sub>	88.0	1.100
	Z <sub>O</sub>	260.056	3.251
	X <sub>T</sub>	2058.00	25.725
	Y <sub>T</sub>	- 14.00	- 0.175
	Z <sub>T</sub>	569.10	7.114
Diameter of members, In.:	VERTICAL	11.50	0.144
	THRUST	15.50	0.194
	DIAGONAL	4.00	0.050

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: ATTACH STRUCTURE - AT<sub>127</sub>

GENERAL DESCRIPTION: Left rear orbiter/ET attach structure (2 member structure).

MODEL SCALE: 0.0125

DRAWING NUMBER: VC72-000002, VC78-000002C

DIMENSIONS: (Location of end pins centerline)	<u>MEMBER</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
VERTICAL STRUT	X <sub>O</sub>	1317.00	16.463
	Y <sub>O</sub>	- 96.50	- 1.206
	Z <sub>O</sub>	267.556	3.344
	X <sub>T</sub>	2058.00	25.725
	Y <sub>T</sub>	- 125.98	- 1.575
	Z <sub>T</sub>	515.78	6.447
THRUST STRUT	X <sub>O</sub>	1317.00	16.463
	Y <sub>O</sub>	- 96.50	- 1.206
	Z <sub>O</sub>	267.556	3.344
	X <sub>T</sub>	1888.98	23.612
	Y <sub>T</sub>	- 125.98	- 1.575
	Z <sub>T</sub>	515.78	6.447
Diameter, In.	VERTICAL	11.50	0.144
	THRUST	15.50	0.194

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: BODY - B64

GENERAL DESCRIPTION: The body is to the Baseline Definition Space Shuttle Vehicle Conf. 5, MCR 200, Rev. 7, dated 10/17/74.

DRAWING NUMBER: VC70-000002, \*MDV-70 Baseline IML

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Ref. Length ( $X_0 = 238-1528.3$ )	1290.3	16.129
*Length (IML $X_0 = 239.5$ )	1288.8	16.110
(1) Length (OML $X_0 = 235-1528.3$ )	1293.3	16.166
(OML) Max Width ( $X_0 = 1516.8013$ ), In.	262.7184	3.284
(IML) Max. Width ( $X_0 = 1516.8013$ ), IN.	260.7184	3.34
(OML) Max Depth ( $X_0 = 1463.316$ )	248.575	3.107
(IML) Max. Depth ( $X_0 = 1463.316$ )	246.575	3.082
Fineness Ratio	5.1365	5.1365
IML Fineness Ratio	5.1525	5.1525
Area - Ft <sup>2</sup>		
Max. Cross-Sectional (@ $X_0 = 1463.316$ )	340.82	0.053

(IML--inner mold line; OML--outer mold line)

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: CANOPY - C<sub>16</sub>

GENERAL DESCRIPTION: Orbiter 102 canopy per MCR 1750, R1 Baseline

MODEL SCALE: 0.0125

DRAWING NUMBER: VC70-000002A, MD-V70

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length ( $X_0 = 433.0793$ to $X_0 = 670$ ), In.	236.9207	2.962
Max Width ( $X_0 = 594$ ), In.	194.4394	2.430
Max Depth (@ $X = 992$ ), In.	58.8007	0.735
Fineness Ratio		
Area - Ft. <sup>2</sup>		
Max. Cross-Sectional @ $X_0 = 520$	45.6558	0.007



TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: ELEVONS - E<sub>63</sub>

GENERAL DESCRIPTION: Elevon for Configuration 5, hingeline at  $X_0 = 1387$ , elevon split line,  $Y_0 = 312.5$ , 6.0" gaps beveled ledges, and center-bodies "OML" used on W<sub>129</sub>.Ref. MCR 200, Rev. 7, dated 10-17-74.

MODEL SCALE: 0.0125

DRAWING NUMBER: VC70-000002A

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Area used for $C_{He}$ computation.	210.0	0.033
Area - Ft <sup>2</sup>	206.57	0.032
Span (equivalent), In.	346.44	4.331
Inb'd equivalent chord, In.	116.50	1.456
Outb'd equivalent chord, In.	55.219	0.690
Ratio movable surface chord/ total surface chord		
At inb'd equiv. chord	0.2137	0.2137
At outb'd equiv. chord	0.3999	0.3999
Sweep Back Angles, degrees		
Leading Edge	0.00	0.00
Trailing Edge	- 10.056	- 10.056
Hingeline	0.00	0.00
Area Moment (Product of area & $\bar{c}$ ), Ft <sup>3</sup>	1540.74	0.004
Mean Aerodynamic Chord, In.	89.50	1.119

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: BODY FLAP - F<sub>14</sub>

GENERAL DESCRIPTION: The orbiter body flap, for Conf. 5 "OML" is to be used with B<sub>64</sub>. Hingeline @ X = 1532.0, Y = - 128.00. Baseline MCR 200 Rev. 7, dated 10/17/74.

MODEL SCALE: 0.0125

DRAWING NUMBER: VC70-000002, MD V-70

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Area - Ft <sup>2</sup>	135.75	0.021
Span (equivalent), In.	238.00	3.017
Inb'd equivalent chord, In.	81.00	1.013
Outb'd equivalent chord, In.	81.0	1.013
Area Moment (MAC X TOTAL AREA), Ft <sup>3</sup>	916.313	0.0018
Mean Aerodynamic Chord, In.	81.0	1.0125

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: FEEDLINE - FL<sub>12</sub>

GENERAL DESCRIPTION: LO<sub>2</sub> feedline on upper right-hand of tank.

MODEL SCALE: 0.0125

DRAWING NUMBER: VC78-000002C

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Leading Edge at: (Centerline)	X <sub>T</sub>	1000.667	12.508
	Y <sub>T</sub>	70.00	0.875
	Z <sub>T</sub>	554.66	6.933
Trailing edge at: (Centerline)	X <sub>T</sub>	2071.50	25.894
	Y <sub>T</sub>	70.0	0.875
	Z <sub>T</sub>	564.33	7.054
Line diameter, In. (17.00 I.D.)		18.16 O.D.	0.227 (OD)

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: FEEDLINE - FL<sub>13</sub>

GENERAL DESCRIPTION: LH<sub>2</sub> feedline between ET and orbiter

MODEL SCALE: 0.0125

DRAWING NUMBER: VC78-000002C

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Leading edge at: (Centerline)	X <sub>T</sub>	2071.50	25.894
	Y <sub>T</sub>	- 70.0	- 0.875
	Z <sub>T</sub>	604.056	7.551
Trailing edge at: (Centerline)	X <sub>T</sub>	2080.14	26.002
	Y <sub>T</sub>	- 55.21	- 0.690
	Z <sub>T</sub>	550.36	6.880
Line diameter, In. (17.00 I.D.)		18.16 O.D.	0.227 (0. D.)

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: AFT ATTACH STRUCTURE FAIRING - FR<sub>13</sub>

GENERAL DESCRIPTION: Aft orbiter/ET attach structure cross beam

MODEL SCALE: 0.0125

DRAWING NUMBER: VC78-000002C, 82600209023

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Leading edge Centerline at:	X <sub>T</sub>	2035.31	25.441
	Y <sub>T</sub>	0.0	0.0
	Z <sub>T</sub>	587.95	7.349
Maximum Length, In.		179.7	2.246
Width at Y <sub>T</sub> 0.0, In.		15.38	0.192
Thickness at Y 0.0, In.		14.50	0.181

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: OMS PODS (OML) - M<sub>19</sub>

GENERAL DESCRIPTION: Orbital maneuvering system pod. Short pod for orbiter 102/vehicle 5, MCR 1750 R1 baseline. Same lines as M18 (Rev. 11/11/75) but modified to match M<sub>21</sub> OMS pod dimensions.

MODEL SCALE: 0.0125

DRAWING NUMBER: VC70-000002A, VL70-008410, MD-V70

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length, In., including RCS package (X <sub>0</sub> 1311 to X <sub>0</sub> 1569.64), In.	258.64	3.233
Length (X <sub>0</sub> 1311 to X <sub>0</sub> 1511), In.	200.0	2.50
Max Width (X <sub>p</sub> 304, X <sub>p</sub> 1511), In.	135.546	1.694
Max Depth (X <sub>p</sub> 304, X <sub>p</sub> 1511), In.	74.36	0.930
Fineness Ratio		
Area - Ft <sup>2</sup>		
Max. Cross-Sectional @ X <sub>p</sub> = 304	59.091	0.00096

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: OMS PODS (OML) - M<sub>20</sub>

GENERAL DESCRIPTION: Orbital maneuvering system pod, short pod for orbiter 102/vehicle 5, MCR 1750 M1 baseline. Same lines as M18 (Rev. 11/11/75), but modified for nonmetric RCS. Pod is nonmetric aft of X<sub>0</sub> 18.590 (model scale).

MODEL SCALE: 0.0125

DRAWING NUMBER: VC70-000002A, VL70-008410, MD-V70

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length, In., including RCS package (X <sub>0</sub> 1311 to X <sub>0</sub> 1569.64), In.	258.64	3.233
Length (X <sub>0</sub> 1311 to X <sub>0</sub> 1511), In.	200.0	2.50
Max Width (X <sub>P</sub> 304, X <sub>P</sub> 1511), In.	135.546	1.694
Max Depth (X <sub>P</sub> 304, X <sub>P</sub> 1511), In.	74.36	0.930
Fineness Ratio		
Area - Ft <sup>2</sup>		
Max. Cross-Sectional @ X <sub>P</sub> = 304	59.091	0.00096

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: OMS PODS (OML) - M<sub>21</sub>

GENERAL DESCRIPTION: Orbital maneuvering system pod. Short pod for orbiter 102/vehicle 5, MCR 1750 R1 baseline. Same lines as M18 (Rev. 11/11/75), but OML changed to accommodate plumbing for RCS air system.

MODEL SCALE: 0.0125

DRAWING NUMBER: VC70-000002A, VL70-008410, MD-V70

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length, In., including RCS (Package X <sub>o</sub> 1311 to X <sub>o</sub> 1569.64), IN.	258.64	3.233
Length (X <sub>o</sub> 1311 to X <sub>o</sub> 1511), In.	200.0	2.50
Max Width (X <sub>p</sub> = 304, X <sub>p</sub> 1511), In.	135.546	1.694
Max Depth (X <sub>o</sub> 304, X <sub>o</sub> 1511), In.	74.36	0.930
Fineness Ratio		
Area - Ft <sup>2</sup>		
Max. Cross-Sectional @ X <sub>p</sub> = 304	59.091	0.00096



TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: MPS NOZZLES - N94

GENERAL DESCRIPTION: The main propulsion nozzles are laval-bell shaped and are located on the aft planes of the orbiter. These dimensions are external and are not to be scaled for plume tests.

MODEL SCALE: 0.0125

DRAWING NUMBER: VC70-000002, VL70-008144, RS009169, RS009107, 13M15000

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
MACH NO.		
Length - In.		
Gimbal Point to Exit Plane	157.0	1.963
Throat to Exit Plane		
Diameter - In.		
Exit	97.914	1.224
Throat		
Inlet		
Area - Ft. <sup>2</sup>		
Exit	52.290	0.008
Throat		
Gimbal Point (Station) - In.		
Upper Nozzle		
X <sub>o</sub>	1445.00	18.063
Y <sub>o</sub>	0	0
Z <sub>o</sub>	443.0	5.538
Lower Nozzles		
X <sub>o</sub>	1468.170	18.352
Y <sub>o</sub>	53.0	0.663
Z <sub>o</sub>	342.640	4.283
Null Position - Deg.		
Upper Nozzle		
Pitch	16.0	16.0
Yaw	0.0	0.0
Lower Nozzle		
Pitch	10.0	10.0
Yaw	3.5	3.5

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: NOZZLE - N<sub>95</sub>

GENERAL DESCRIPTION: Forward RCS thruster nozzles in nose of orbiter 102.

MODEL SCALE: 0.0125      DRAWING NUMBER: VC70-000002, FL70-008725,  
VL70-008726

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Nozzle Length, In. (Centerline, base to OML pierce point:)			
Forward-Firing thruster No.	122	24.779	0.3098
	112	25.022	0.313
	132	25.022	0.313
Up-Firing thruster No.	125	15.290	0.191
	115	15.595	0.195
	135	15.595	0.195
Down-Firing thruster No.	116	25.574	0.3196
	136	23.395	0.292
	126	23.395	0.292
	146	23.395	0.292
Upper yaw thruster No.	113	15.945	0.199
	134	15.945	0.199
Lower yaw thruster No.	123	15.154	0.189
	144	15.154	0.189
Diameter, In.			
Exit		10.894	0.136
Throat		2.042	0.030
Inlet		3.92	0.049
Area, Ft <sup>2</sup>			
Exit		0.6473	0.00010
Throat		0.0227	0.0000035
Area Ratio		28.5	0.356
Nozzle Location (Centerline Pierce Point at OML):			

TABLE III. MODEL DIMENSIONAL DATA (Continued)

NOZZLE - N<sub>95</sub>

Page Two

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Forward-Firing Thruster No. 122	X <sub>o</sub>	305.201	3.815
	Y <sub>o</sub>	0.0	0.0
	Z <sub>o</sub>	394.350	4.929
112	X <sub>o</sub>	305.443	3.818
	Y <sub>o</sub>	- 14.00	- 0.175
	Z <sub>o</sub>	392.950	4.911
132	X <sub>o</sub>	305.443	3.818
	Y <sub>o</sub>	14.00	0.175
	Z <sub>o</sub>	392.950	4.911
Up-Firing Thruster No. 125	X <sub>o</sub>	351.044	4.388
	Y <sub>o</sub>	0.0	0.0
	Z <sub>o</sub>	414.450	5.1506
115	X <sub>o</sub>	351.062	4.388
	Y <sub>o</sub>	- 14.091	- 0.176
	Z <sub>o</sub>	413.465	5.168
135	X <sub>o</sub>	351.062	4.388
	Y <sub>o</sub>	14.091	0.176
	Z <sub>o</sub>	413.465	5.168
Down-Firing Thruster No. 116	X <sub>o</sub>	333.900	4.174
	Y <sub>o</sub>	- 62.931	- 0.787
	Z <sub>o</sub>	354.675	4.433
136	X <sub>o</sub>	333.900	4.174
	Y <sub>o</sub>	+ 62.931	+ 0.787
	Z <sub>o</sub>	354.675	4.433
126	X <sub>o</sub>	348.500	4.356
	Y <sub>o</sub>	- 67.180	- 0.839
	Z <sub>o</sub>	356.915	4.462
146	X <sub>o</sub>	348.500	4.356
	Y <sub>o</sub>	67.180	0.839
	Z <sub>o</sub>	356.915	4.462

TABLE III. MODEL DIMENSIONAL DATA (Continued)

NOZZLE - N95

Page Three

DIMENSIONS:			<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Upper Yaw Thruster, No.	113	X <sub>o</sub>	362.819	4.535
		Y <sub>o</sub>	- 69.539	- 0.869
		Z <sub>o</sub>	373.634	4.670
	134	X	362.819	4.535
		Y <sub>o</sub>	69.539	0.869
		Z <sub>o</sub>	373.634	4.670
Lower Yaw Thruster, No.	123	X <sub>o</sub>	364.814	4.560
		Y <sub>o</sub>	- 71.484	- 1.094
		Z <sub>o</sub>	359.500	4.494
	144	X	364.814	4.560
		Y <sub>o</sub>	71.484	1.094
		Z <sub>o</sub>	359.500	4.494

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: RCS NOZZLES - N<sub>96</sub> (L.H.), N<sub>97</sub> (R.H.)

GENERAL DESCRIPTION: Aft RCS thrusters, orbiter 102 (data listed are for one of two sides).

MODEL SCALE: 0.0125

DRAWING NUMBER: VC70-000002A, MDC 73J321001A, BCD V70-30-915-09

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length, In.		
Overall	18.63	0.233
Mounting surface to exit plane	12.88	0.160
Diameter, In.		
Exit	10.50	0.131
Inlet	5.34	0.067
Exit Area, Ft <sup>2</sup>	0.6013	0.00009
Yaw Thrusters - Exit Plane $\phi$ .		
Forward nozzle, X <sub>0</sub>	1516.00	18.950
2nd nozzle, X <sub>0</sub>	1529.00	19.110
3rd nozzle, X <sub>0</sub>	1542.00	19.270
Aft nozzle, X <sub>0</sub>	1555.00	19.430
Scarf angle	16°20'	16°20'
Pitch Up Thrusters - Exit Plane $\phi$ .		
Forward nozzle, X <sub>0</sub>	1516.00	18.950
Middle nozzle, X <sub>0</sub>	1529.00	19.110
Aft nozzle, X <sub>0</sub>	1542.00	19.270
Y <sub>0</sub>	132.00	1.650
Z <sub>0</sub>	493.38	6.167

TABLE III. MODEL DIMENSIONAL DATA (Continued)

RCS NOZZLES, N<sub>96</sub> and N<sub>97</sub>

Page two

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Pitch Down Thrusters - Mounting Surface $\perp$		
Forward nozzle		
X <sub>o</sub>	1516.00	18.950
Y <sub>o</sub>	110.055	1.376
Z <sub>o</sub>	437.403	5.468
Middle nozzle		
X <sub>o</sub>	1529.00	19.110
Y <sub>o</sub>	111.00	1.387
Z <sub>o</sub>	440.00	5.500
Aft nozzle		
X <sub>o</sub>	1542.00	19.270
Y <sub>o</sub>	111.945	1.399
Z <sub>o</sub>	442.597	5.532
Nozzle cant angle (Typ.)	12 Deg.	12 Deg.
Aft firing thrusters - Mounting Surface $\perp$		
Inboard nozzle		
X <sub>o</sub>	1557.46	19.467
Y <sub>o</sub>	124.00	1.550
Z <sub>o</sub>	473.44	5.918
Outboard nozzle		
X <sub>o</sub>	1557.46	19.467
Y <sub>o</sub>	137.00	1.713
Z <sub>o</sub>	473.44	5.918
Nozzle cant angle (Typ.)	10 Deg.	10 Deg.

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: EXTERNAL TANK PROTUBERANCE - PT<sub>29</sub>

GENERAL DESCRIPTION: Electrical conduit on the right-hand forward section of tank.

MODEL SCALE: 0.0125

DRAWING NUMBER: VC78-000002C

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Leading edge at:	X <sub>T</sub>	349.00	4.363
	Y <sub>T</sub>	5.90	0.074
	Z <sub>T</sub>	409.5	5.119
Trailing edge at:	X <sub>T</sub>	860.8	10.760
	Y <sub>T</sub>	96.13	1.202
	Z <sub>T</sub>	537.29	6.716
Conduit size, In.		2 x 6	0.025 x 0.075

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: EXTERNAL TANK PROTUBERANCE - PT<sub>30</sub>

GENERAL DESCRIPTION: Electrical conduit on upper right-hand quadrant of tank (aft of intertank external stringer section). Includes LO<sub>2</sub> antigeysers line and LO<sub>2</sub> pressure line.

MODEL SCALE: 0.0125

DRAWING NO.: VC78-000002C

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Leading edge at:	X <sub>T</sub>	1114.0	13.925
	Y <sub>T</sub>	100.29	1.254
	Z <sub>T</sub>	534.28	6.679
Trailing edge at:	X <sub>T</sub>	2046.0	25.575
	Y <sub>T</sub>	100.29	1.254
	Z <sub>T</sub>	534.28	6.679
Conduit size, In.		2 x 10	0.025 x 0.125



TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: EXTERNAL TANK PROTUBERANCE - PT<sub>33</sub>  
 GENERAL DESCRIPTION: LH<sub>2</sub> pressure line on external tank.  
 MODEL SCALE: 0.0125  
 DRAWING NUMBER: VC78-000002C

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Leading edge at:	X <sub>T</sub>	1058.0	13.225
	Y <sub>T</sub>	- 85.185	- 1.0648
	Z <sub>T</sub>	547.54	6.844
Trailing edge at:	X <sub>T</sub>	2083.88	26.049
	Y <sub>T</sub>	- 80.92	- 1.012
	Z <sub>T</sub>	547.54	6.844
Line diameter, In.		2.00	0.025

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: EXTERNAL TANK PROTUBERANCE - PT<sub>35</sub>

GENERAL DESCRIPTION: Forward ET/SRB attach fitting, tank side only,  
data listed for one of two sides.

MODEL SCALE: 0.0125

DRAWING NUMBER: VC78-000002C, VC72-000012, VC72-000002E

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Centerline of attach pin	X <sub>T</sub>	985.70	12.321
	Y <sub>T</sub>	172.5	2.156
	Z <sub>T</sub>	400.0	5.00
	X <sub>B</sub>	442.7	5.534
	Y <sub>B</sub>	78.0	0.975
	Z <sub>B</sub>	0.0	0.0
Length, In.		15.25	0.191
Width, In.		11.5	0.144
Depth, In.		12.0	0.150

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: EXTERNAL TANK PROTUBERANCE - PT<sub>36</sub>

GENERAL DESCRIPTION: Aft lower ET/SRB attach fitting, tank side only.

Data given for one side only.

MODEL SCALE: 0.0125

DRAWING NUMBER: VC78-000002C, VC72-000002E, 82600209086

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Centerline of attach bolt hole	X <sub>T</sub>	2058.0	25.725
	Y <sub>T</sub>	161.75	2.022
	Z <sub>T</sub>	343.0	4.288
Length, In.		18.75	0.234
Width, In.		6.50	0.082
Maximum height, In. (from ET OSL)		10.35	0.129

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: EXTERNAL TANK PROTUBERANCE - PT<sub>37</sub>

GENERAL DESCRIPTION: Aft upper ET/SRB attach fitting for cross and diagonal struts. Data listed for tank side; one side only.

MODEL SCALE: 0.0125

DRAWING NUMBER: VC78-000002C, VC72-000002E, 82600209081

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Centerline of cross strut bolt hole	X <sub>T</sub>	2058.00	25.725
	Y <sub>T</sub>	161.75	2.022
	Z <sub>T</sub>	457.00	5.713
Centerline of diagonal strut bolt hole	X <sub>T</sub>	2058.00	25.725
	Y <sub>T</sub>	163.91	2.049
	Z <sub>T</sub>	449.82	5.623
Length, In.		26.00	0.325
Maximum width, In.		7.00	0.087
Maximum height, In. (from OSL)		10.00	0.125

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: EXTERNAL TANK - T<sub>33</sub>

GENERAL DESCRIPTION: External tank with spike nose. Dimensions are calculated to the outer mold line (OML)

MODEL SCALE: 0.0125

DRAWING NUMBER: VC78-000002B, Spike Nose Dwg. No.: 82600203049

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length	1852.486	23.156
Max. Dia. (OML), In.	333.00	4.163
Max Depth		
Fineness Ratio	5.563	5.563
Area - Ft <sup>2</sup>		
Max. Cross-Sectional	604.807	0.094

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: UMBILICAL DOORS - U<sub>1</sub>

GENERAL DESCRIPTION: Orbiter/ET umbilical/attach doors. Rectangular doors in lower surface of orbiter to accommodate LO<sub>2</sub> and LH<sub>2</sub> feedlines. Data are listed for one of two sides.

MODEL SCALE: 0.0125

DRAWING NUMBER: VC72-000002E, VC70-000002A, VC72-000010A, VC70-355102

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length, In. (X <sub>0</sub> 1311 to X <sub>0</sub> 1361.5)	50.50	0.631
Width, In. (Y <sub>0</sub> 52.90 to Y <sub>0</sub> 103.09)	50.19	0.627
Planform Area - Ft <sup>2</sup>	17.6	0.0028
Forward Hinge and Linkage, X <sub>T</sub>	1315.75	16.447
Aft Hinge and Linkage, X <sub>T</sub>	1356.75	16.959

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: VERTICAL - V<sub>23</sub> (Outer Mold Lines)

GENERAL DESCRIPTION: The vertical tail is double-wedge shaped and mounted dorsally on the aft fuselage. These data correspond to configuration 140C.

MODEL SCALE: 0.0125

DRAWING NUMBER: VC70-000002, master dimensions

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
TOTAL DATA		
Area (Theo) - Ft <sup>2</sup>		
Planform	413.253	0.065
Span (Theo) - In.	315.72	3.947
Aspect Ratio	1.675	1.675
Rate of Taper	0.507	0.507
Taper Ratio	0.404	0.404
Sweep-Back Angles, Degrees		
Leading Edge	45.000	45.000
Trailing Edge	26.25	26.25
0.25 Element Line	41.13	41.13
Chords:		
Root (Theo) WP	268.50	3.356
Tip (Theo) WP	108.47	1.356
MAC	199.81	2.498
Fus. Sta. of .25 MAC	1463.50	18.294
W.P. of .25 MAC	635.52	7.944
B.L. of .25 MAC	0.0	0.0
Airfoil Section		
Leading Wedge Angle - Deg.	10.0	10.0
Trailing Wedge Angle - Deg.	14.92	14.92
Leading Edge Radius	2.00	0.0250
Void Area	13.17	0.0002
Blanketed Area	0.0	0.0

TABLE III. MODEL DIMENSIONAL DATA (Concluded)

MODEL COMPONENT:	WING - W129	
GENERAL DESCRIPTION:	The wing is the primary lifting device and is mounted horizontally and is symmetric about the plane $Y_0 = 0$ . A cuff fair the fuselage to the wing's leading edge at $T_0 = 940$ to $X_0 1084$ .	
MODEL SCALE:	0.0125	DRAWING NUMBER: VC70-000024
DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
<u>TOTAL DATA</u>		
Area (Theo.) Ft <sup>2</sup>		
Planform	2690.00	0.420
Span (Theo) In.	936.68	11.709
Aspect Ratio	2.265	2.265
Rate of Taper	1.773	1.773
Taper Ratio	0.200	0.200
Dihedral Angle, degrees	3.500	3.500
Incidence Angle, degrees	0.500	0.500
Sweep Back Angles, degrees		
Leading Edge	45.0	45.0
Trailing Edge	10.056	10.056
0.25 Element Line	35.209	35.209
Chords:		
Root (Theo) B.P.O.O.	689.243	8.616
Tip, (Theo) B.P.	137.849	1.723
MAC	474.812	5.935
Fus. Sta. of .25 MAC	1136.834	14.210
W.P. of .25 MAC	290.857	3.636
B.L. of .25 MAC	182.132	2.277
<u>EXPOSED DATA</u>		
Area (Theo) Ft <sup>2</sup>	1751.50	0.274
Span, (Theo) in. BP108	720.68	9.009
Aspect Ratio	2.060	2.060
Taper Ratio	0.245	0.245
Chords		
Root BP108	562.090	7.026
Tip 1.00 b/2	137.849	1.723
MAC	392.826	4.910
Fus. Sta. of .25 MAC	1186.50	14.831
W.P. of .25 MAC	293.683	3.671
B.L. of .25 MAC	251.769	3.147
Airfoil Section (Rockwell Mod NASA)XXXX-64		
Root b/2 =	0.114	0.114
Tip b/2 =	0.120	0.120
Data for (1) of (2) Sides		
Leading Edge Cuff		
Planform Area Ft <sup>2</sup>	145.4	0.0227
Leading Edge Intersects Fus M. L. @ Sta.	400.0	6.250
Leading Edge Intersects Wing @ Sta.	1024.0	12.800



**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

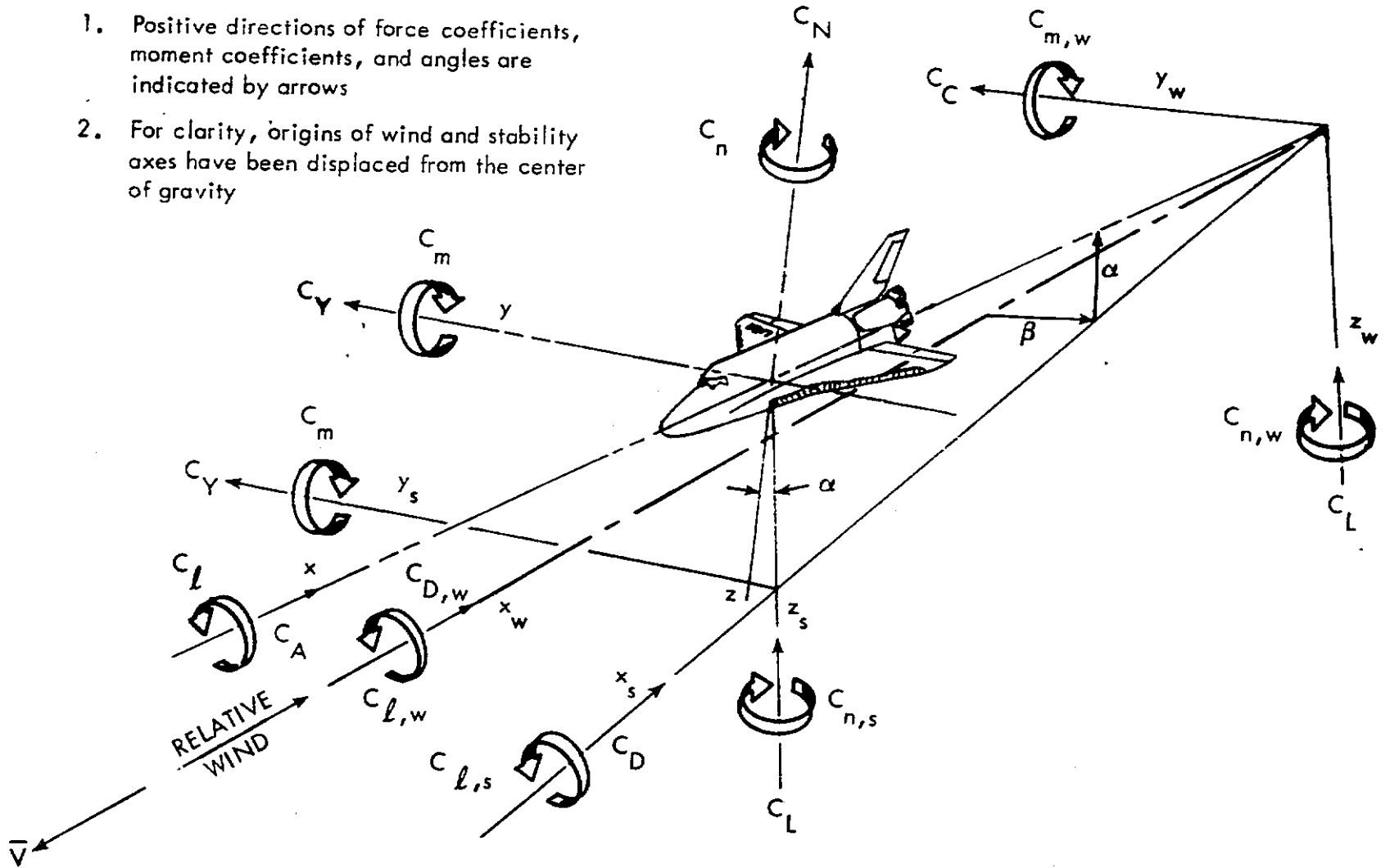
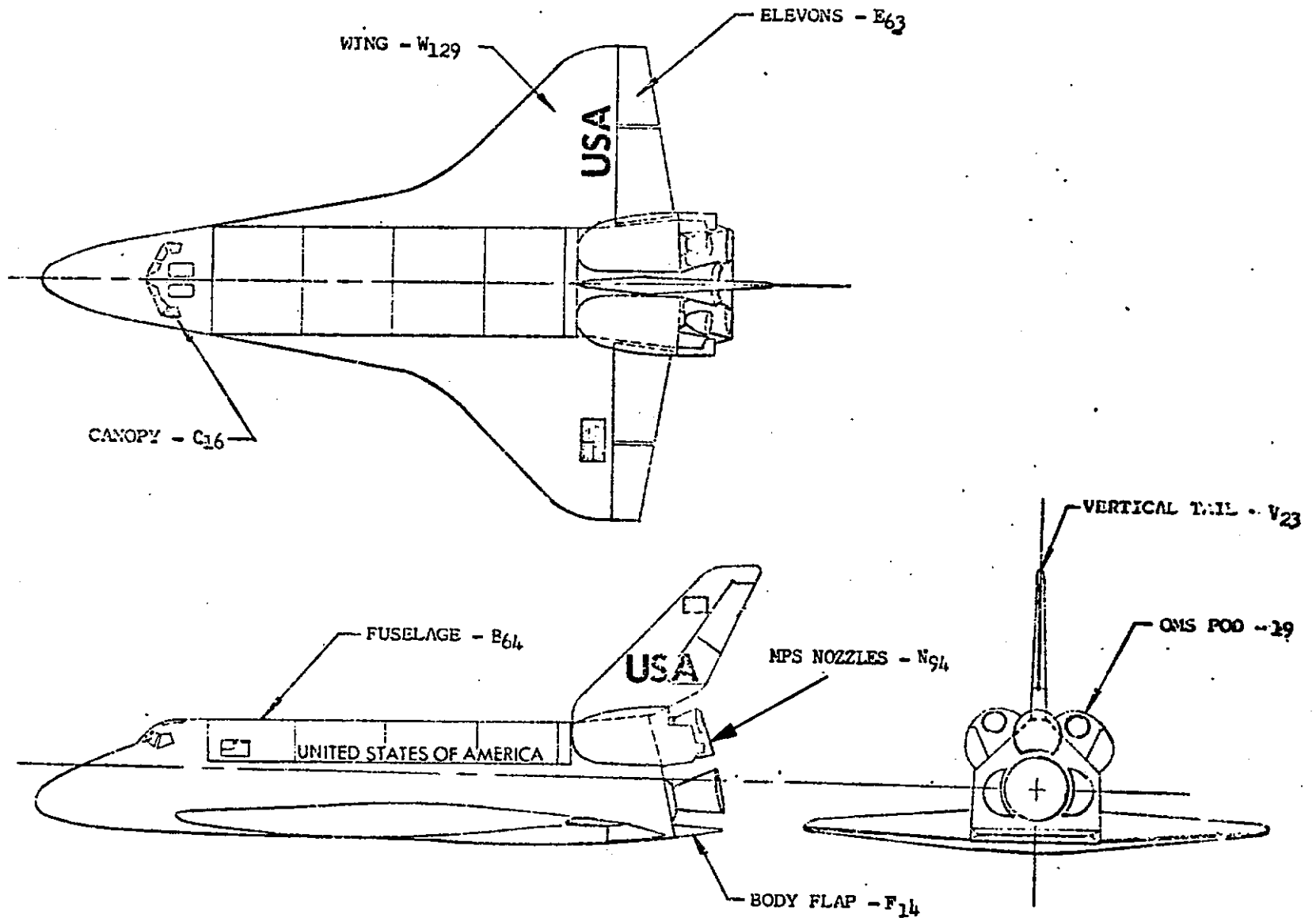
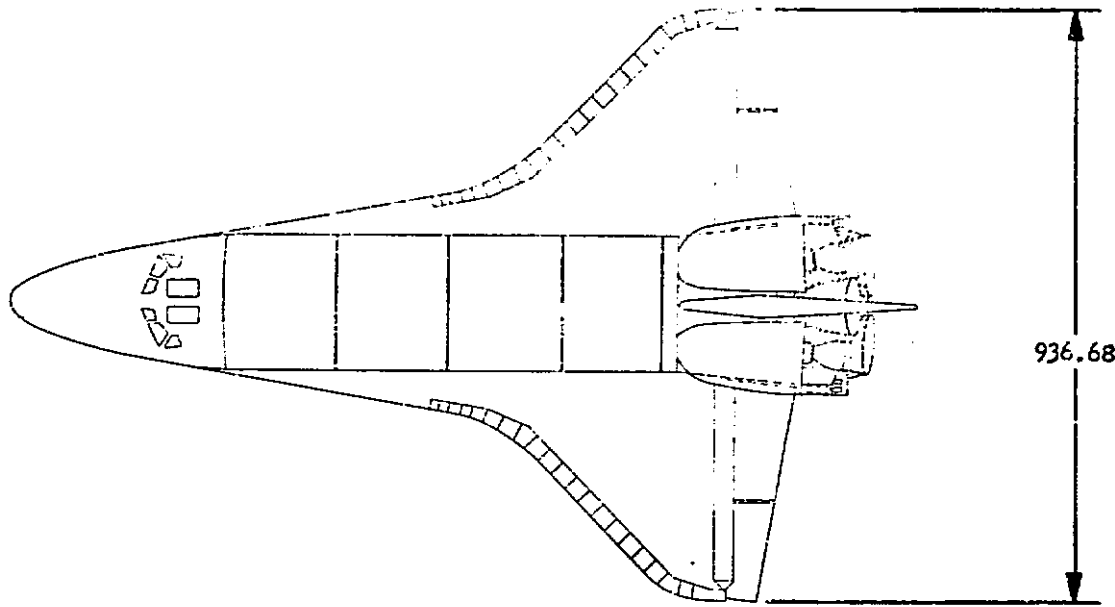


Figure 1. Axis systems.

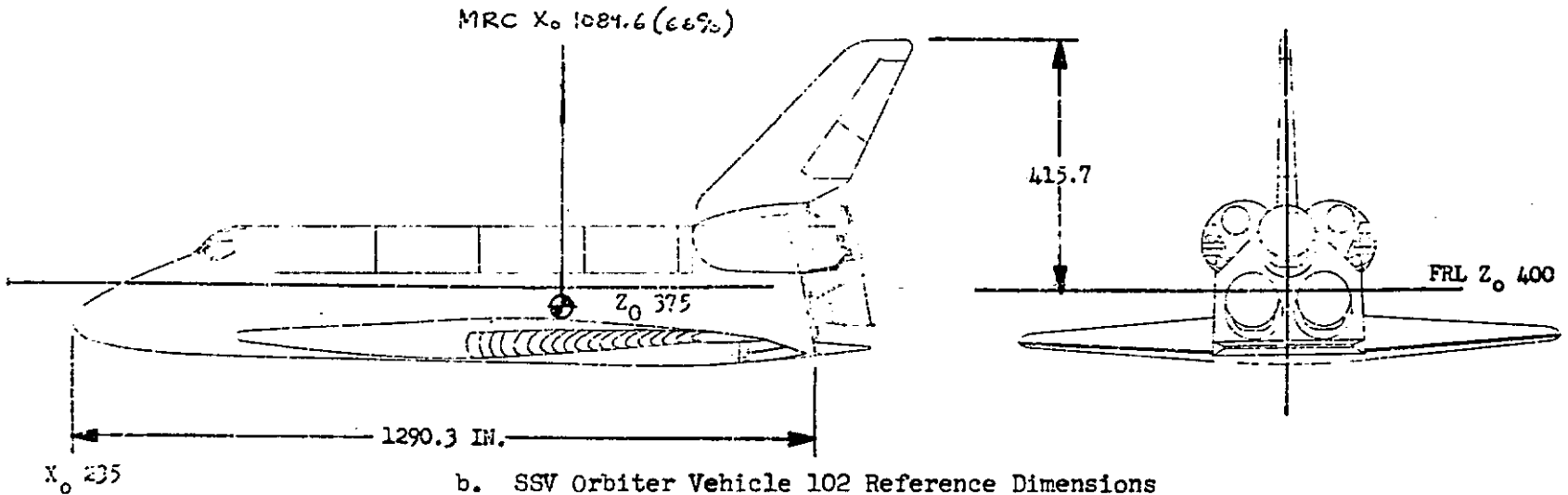


a. SSV Orbiter Configuration Diagram  
Figure 2. Model sketches.

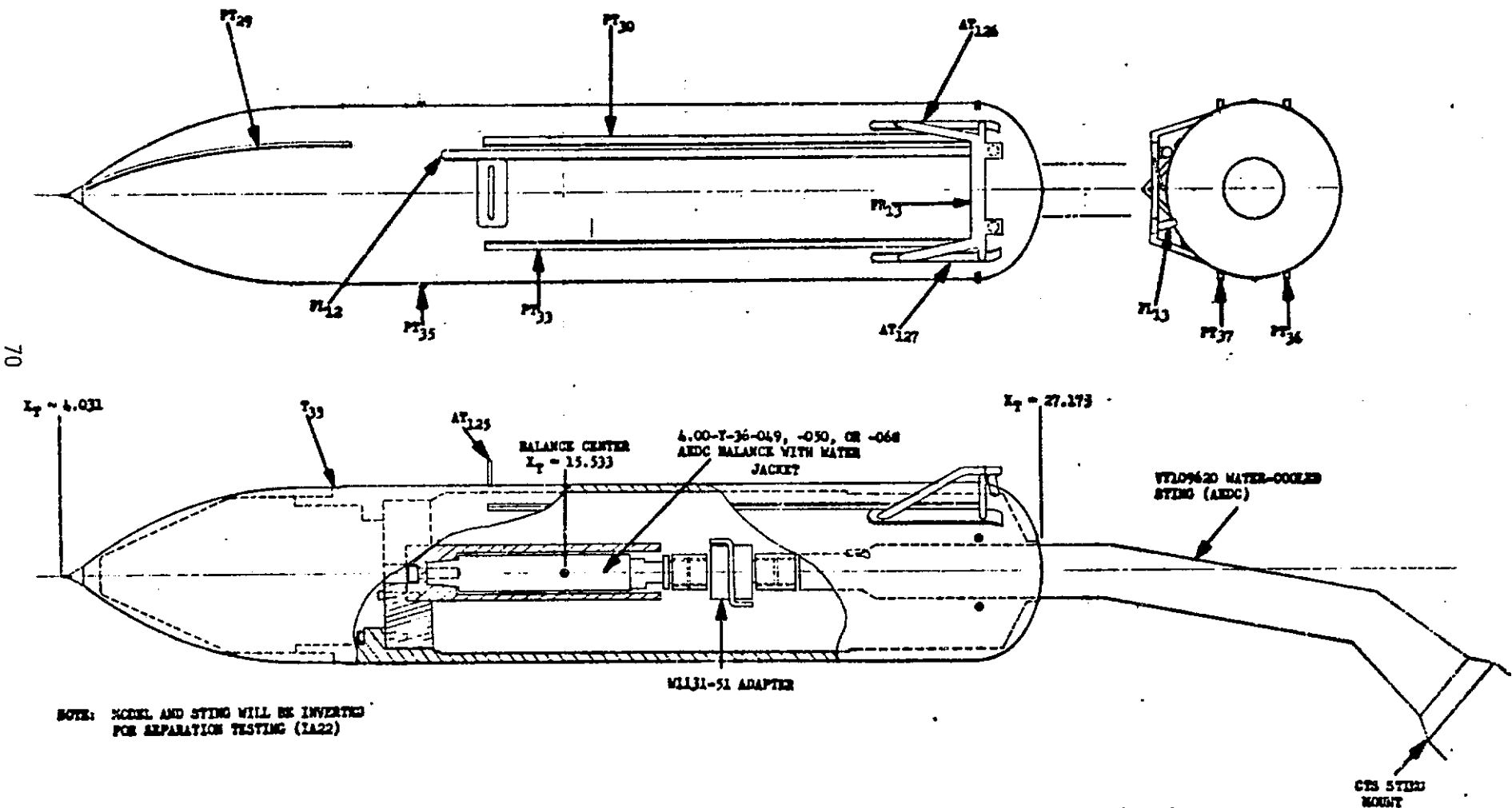


REFERENCE DIMENSIONS  
FULL SCALE

AREA	2690.0 FT <sup>2</sup>
LENGTH	1290.3 IN.
XCG (66%)	854.59



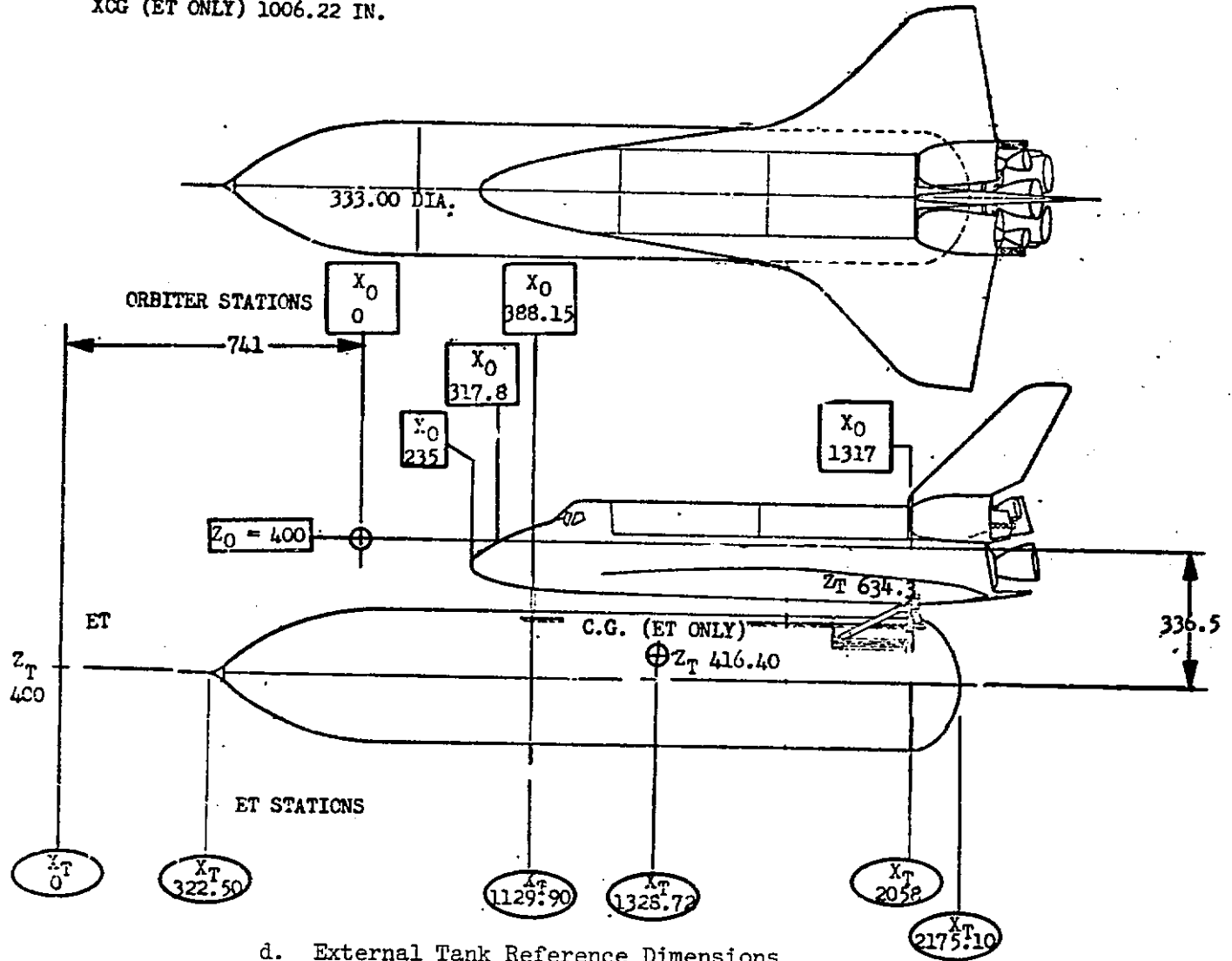
b. SSV Orbiter Vehicle 102 Reference Dimensions  
Figure 2. Continued.



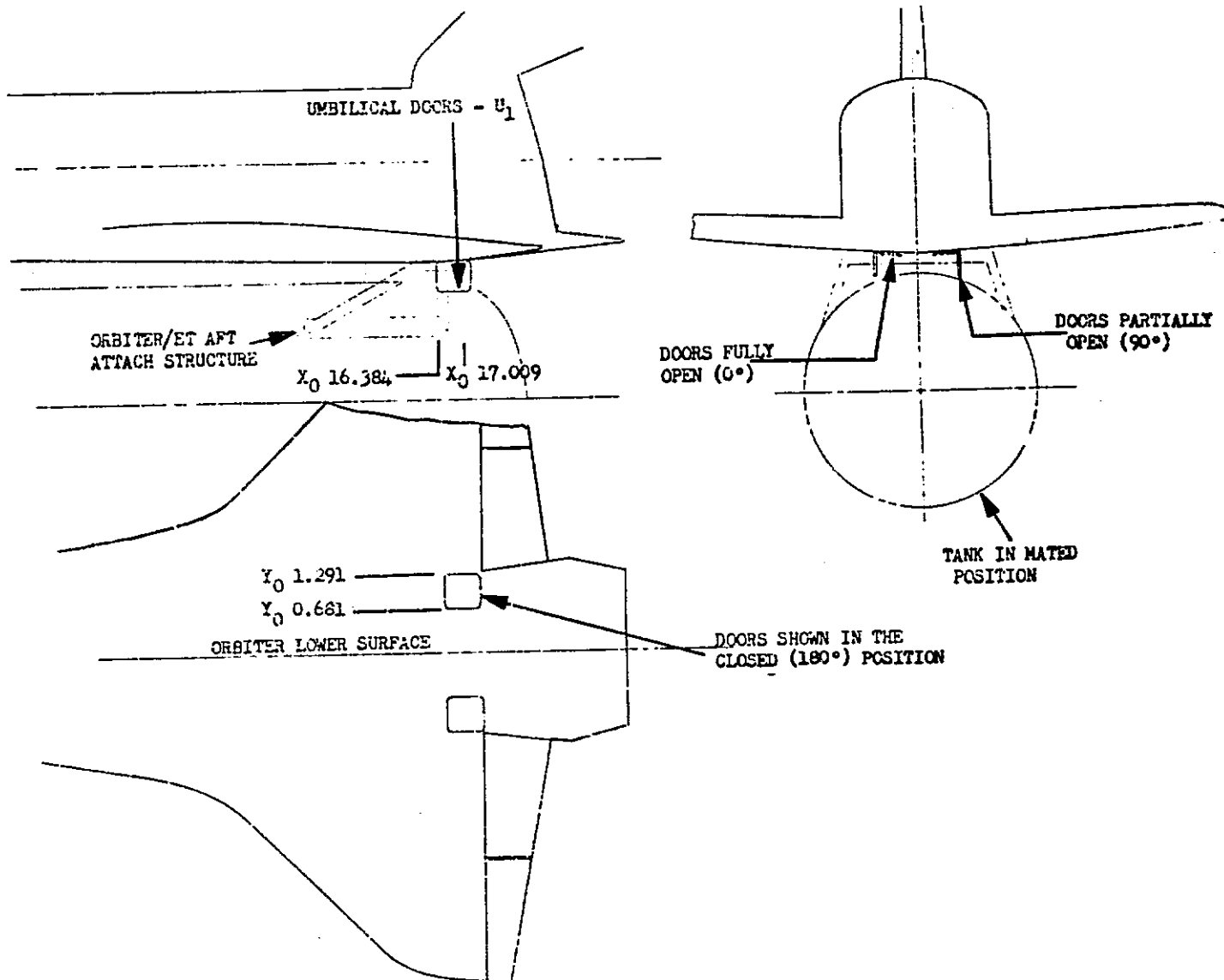
c. SSV External Tank Configuration Diagram and Installation (CTS)  
Figure 2. Continued.

REFERENCE DIMENSIONS

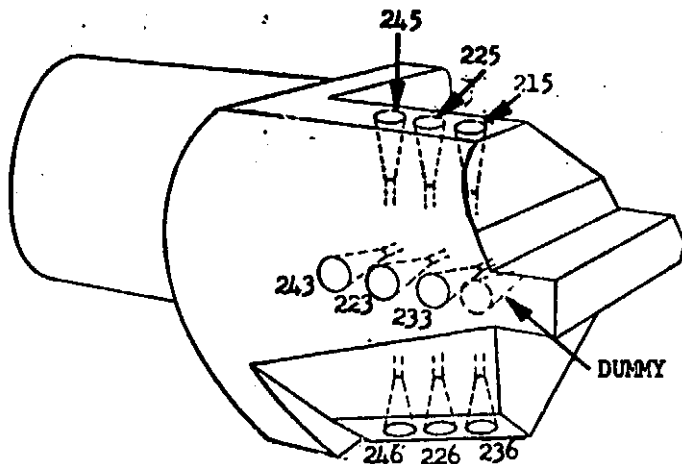
FULL SCALE  
 AREA 2690 FT<sup>2</sup>  
 LENGTH 1290.3 IN.  
 XCG (ET ONLY) 1006.22 IN.



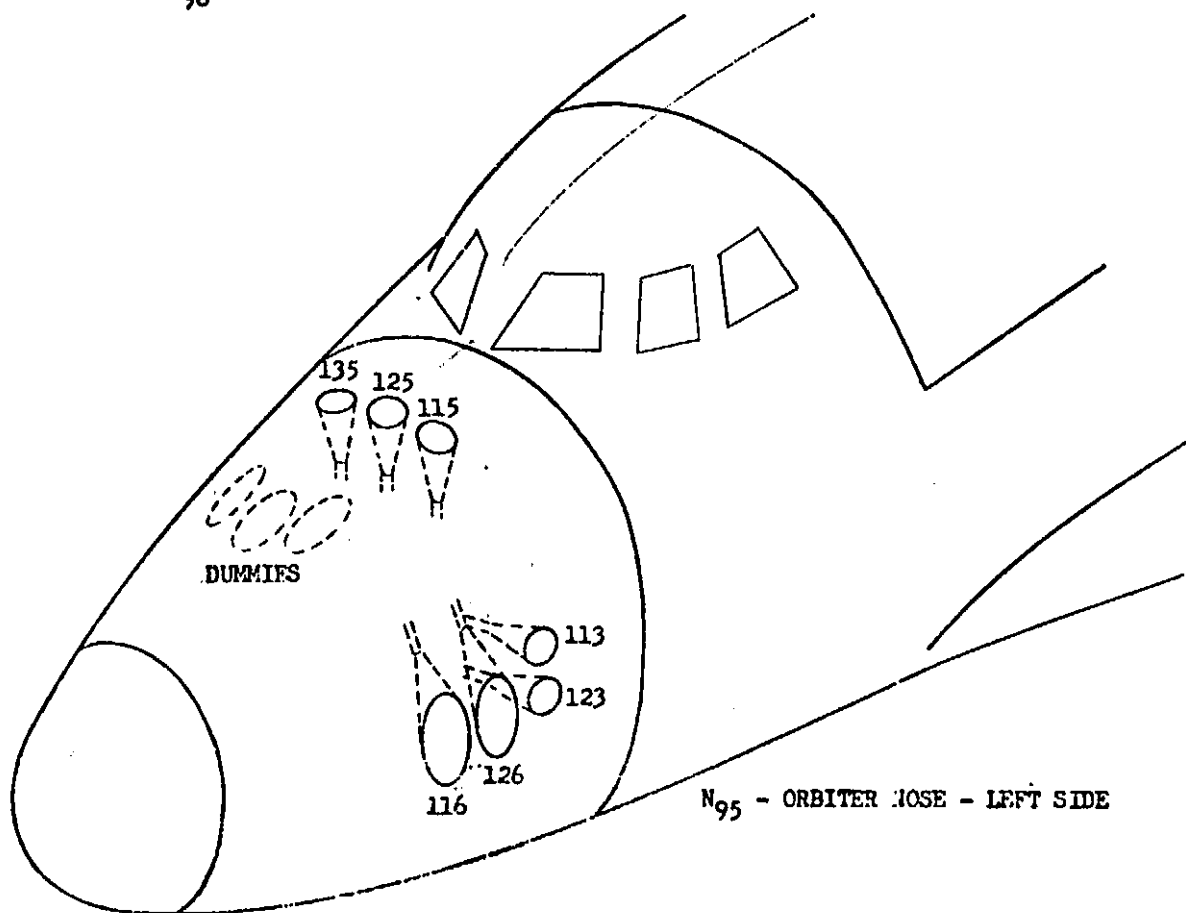
d. External Tank Reference Dimensions  
 Figure 2. Continued.



e. Orbiter Umbilical Door Configuration  
Figure 2. Continued.

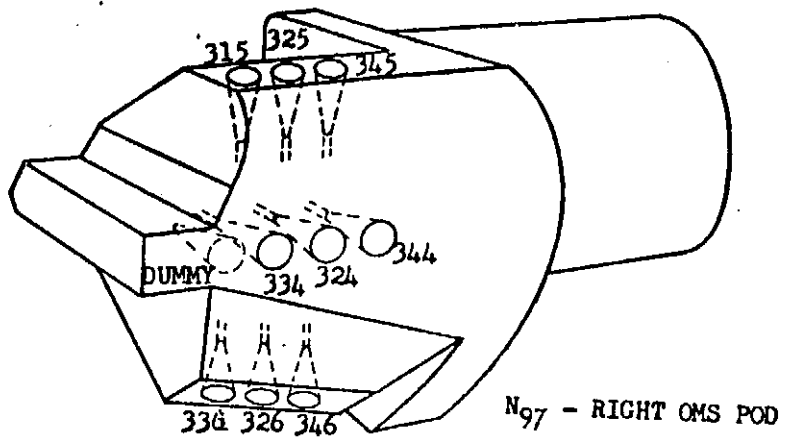


N<sub>96</sub> - LEFT OMS POD

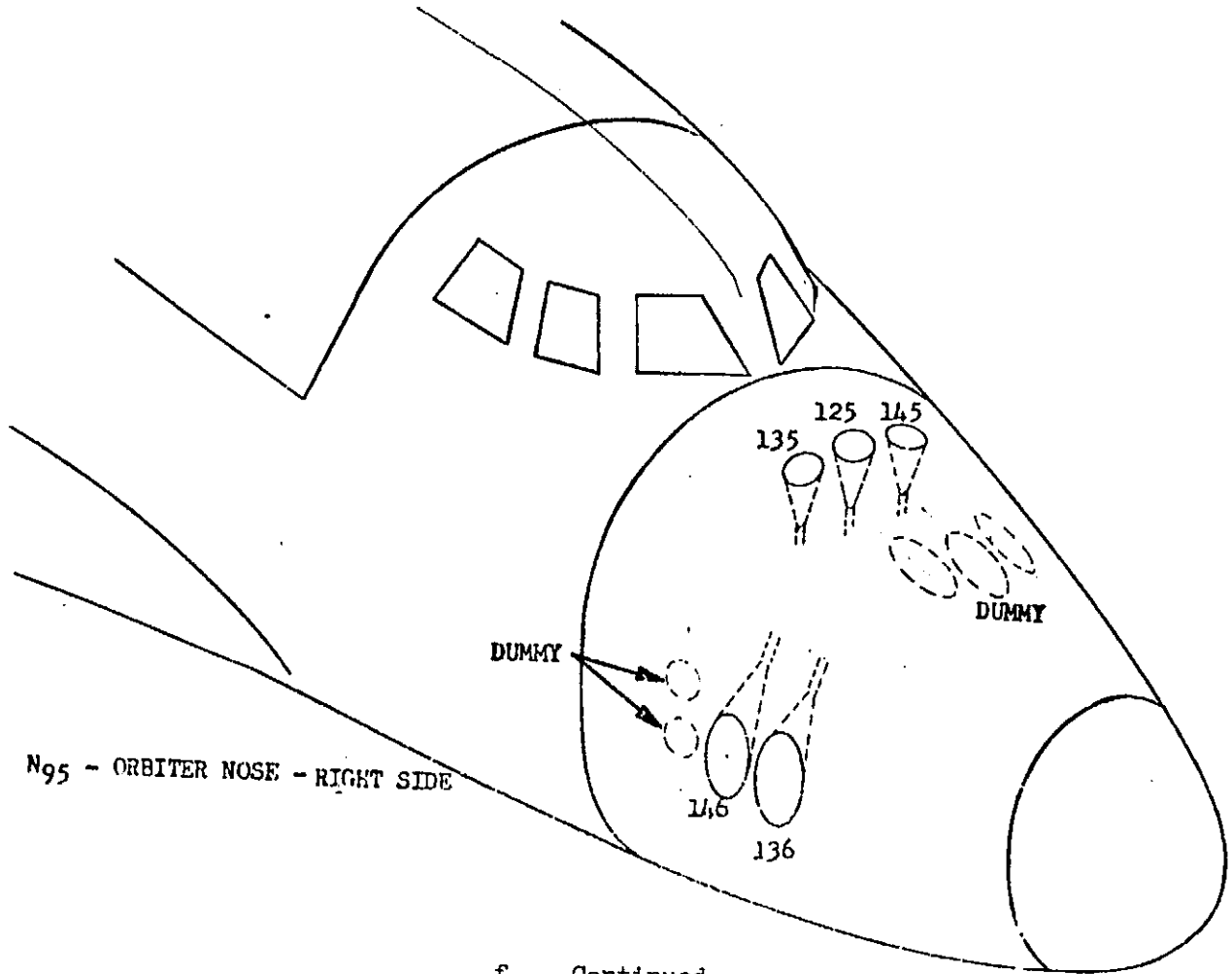


N<sub>95</sub> - ORBITER NOSE - LEFT SIDE

f. RCS Thruster Configuration  
Figure 2. Continued.



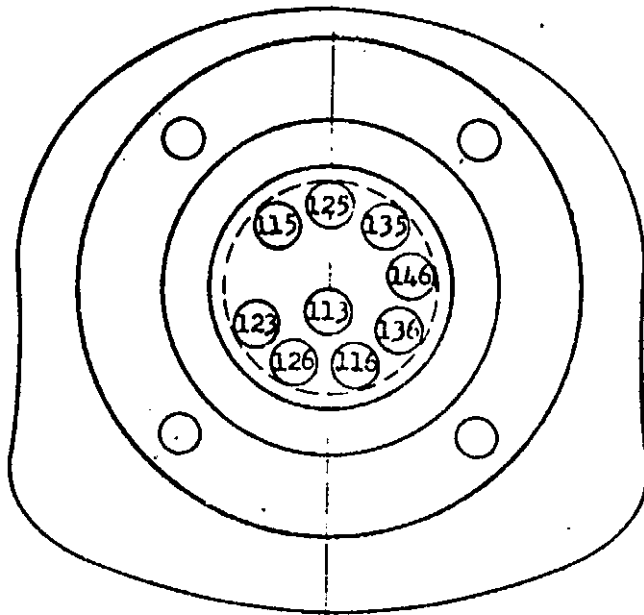
N97 - RIGHT OMS POD



N95 - ORBITER NOSE - RIGHT SIDE

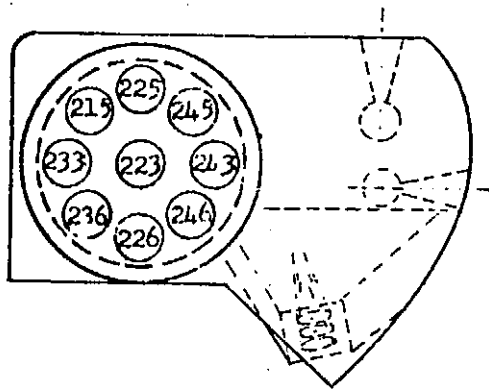
f. Continued  
Figure 2. Continued.





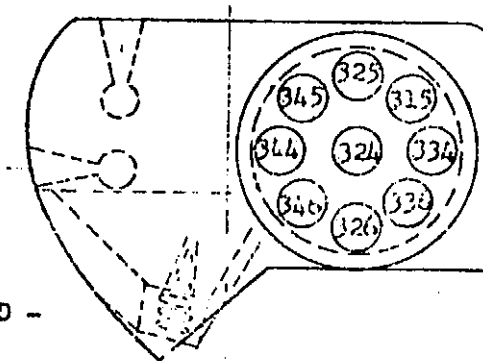
N95

NOSE - LOOKING FORWARD



N96

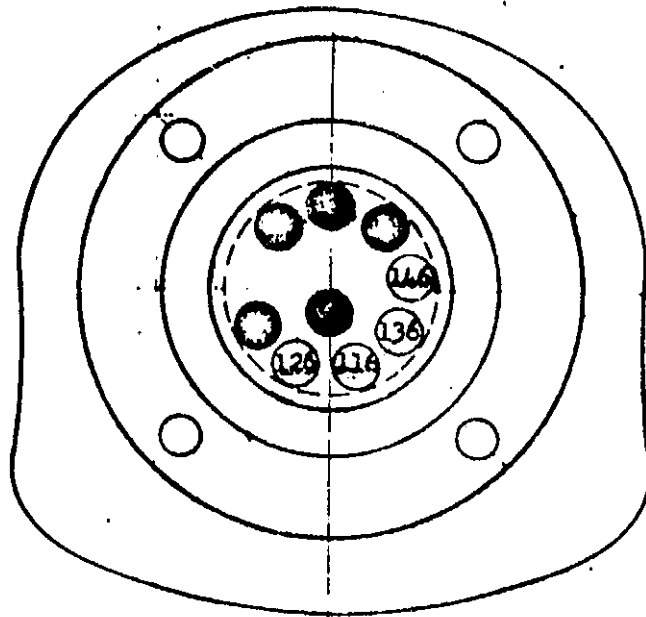
LEFT-HAND OMS/RCS POD--LOOKING AFT



N97

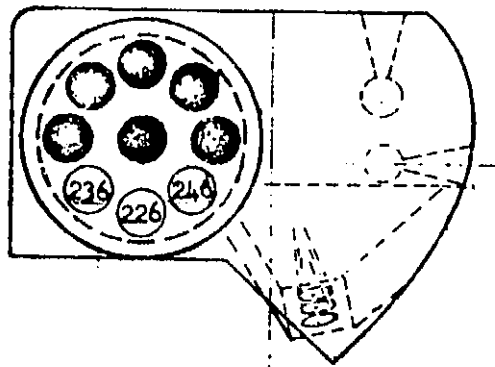
RIGHT-HAND OMS/RCS POD -  
LOOKING AFT

g. RCS Thruster Hookup- RC1, RC2 and RC3  
Figure 2. Continued.



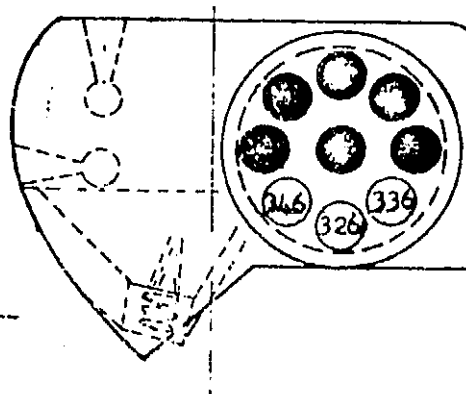
N95

"NOSE - LOOKING FORWARD



N96

LEFT-HAND OMS/RCS POD---LOOKING AFT

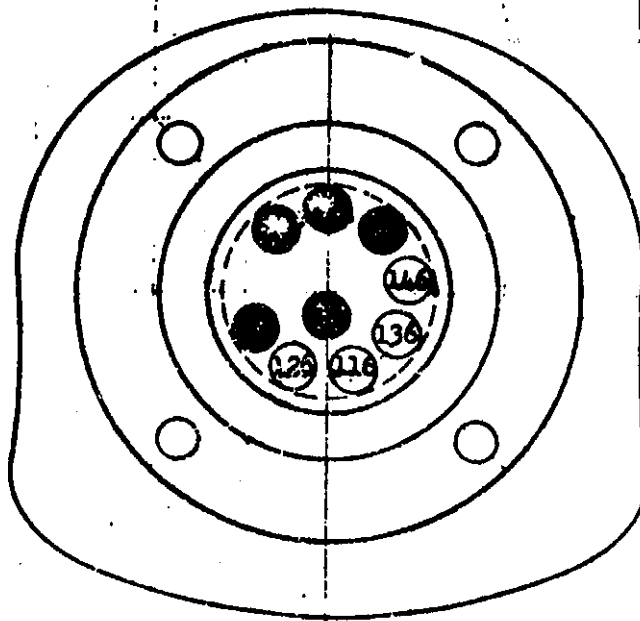


N97

RIGHT-HAND OMS/RCS POD---  
LOOKING AFT

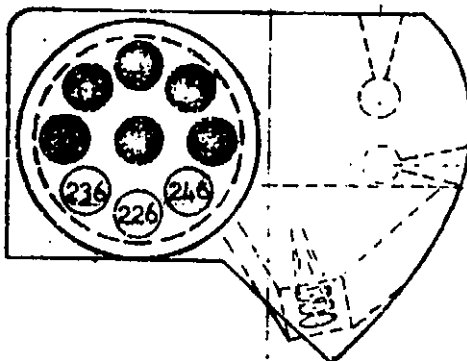
RCS Thruster Hook-up--RCL.

g. Continued  
Figure 2. Continued.



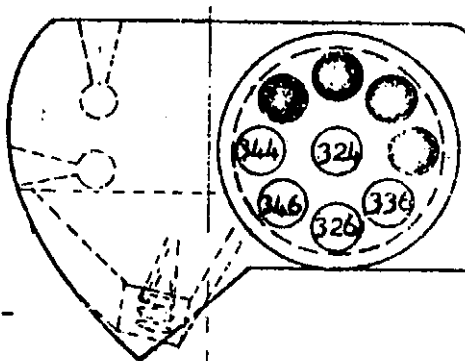
N95

NOSE - LOOKING FORWARD



N96

LEFT-HAND OMS/RCS POD--LOOKING AFT

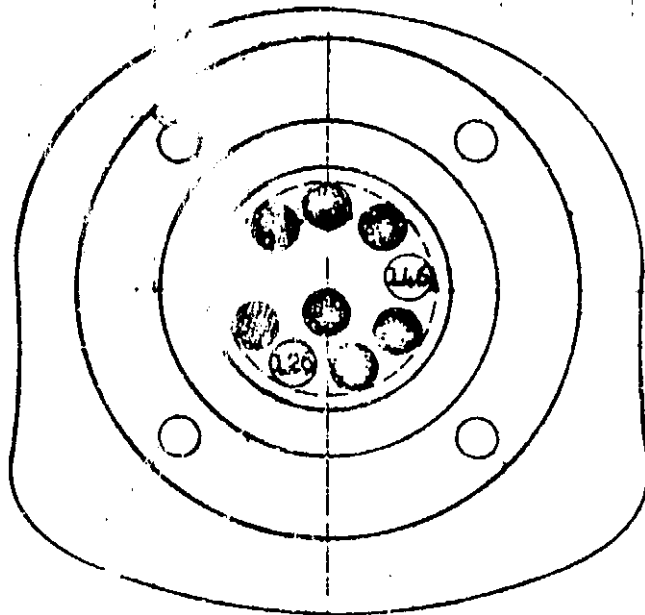


N97

RIGHT-HAND OMS/RCS POD--

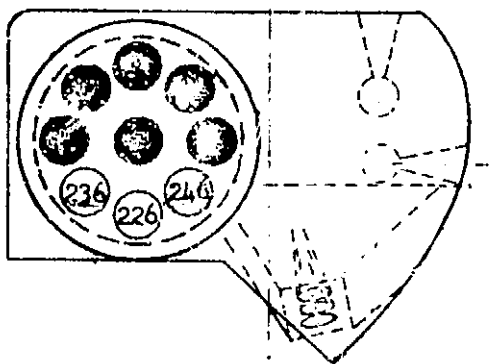
LOOKING AFT

RCS Thruster Hook-up--RC2  
 g. Continued  
 Figure 2. Continued.



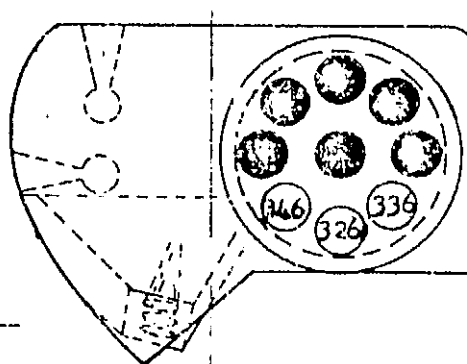
N95

NOSE - LOOKING FORWARD



N96

LEFT-HAND OMS/RCS POD--LOOKING AFT



N97

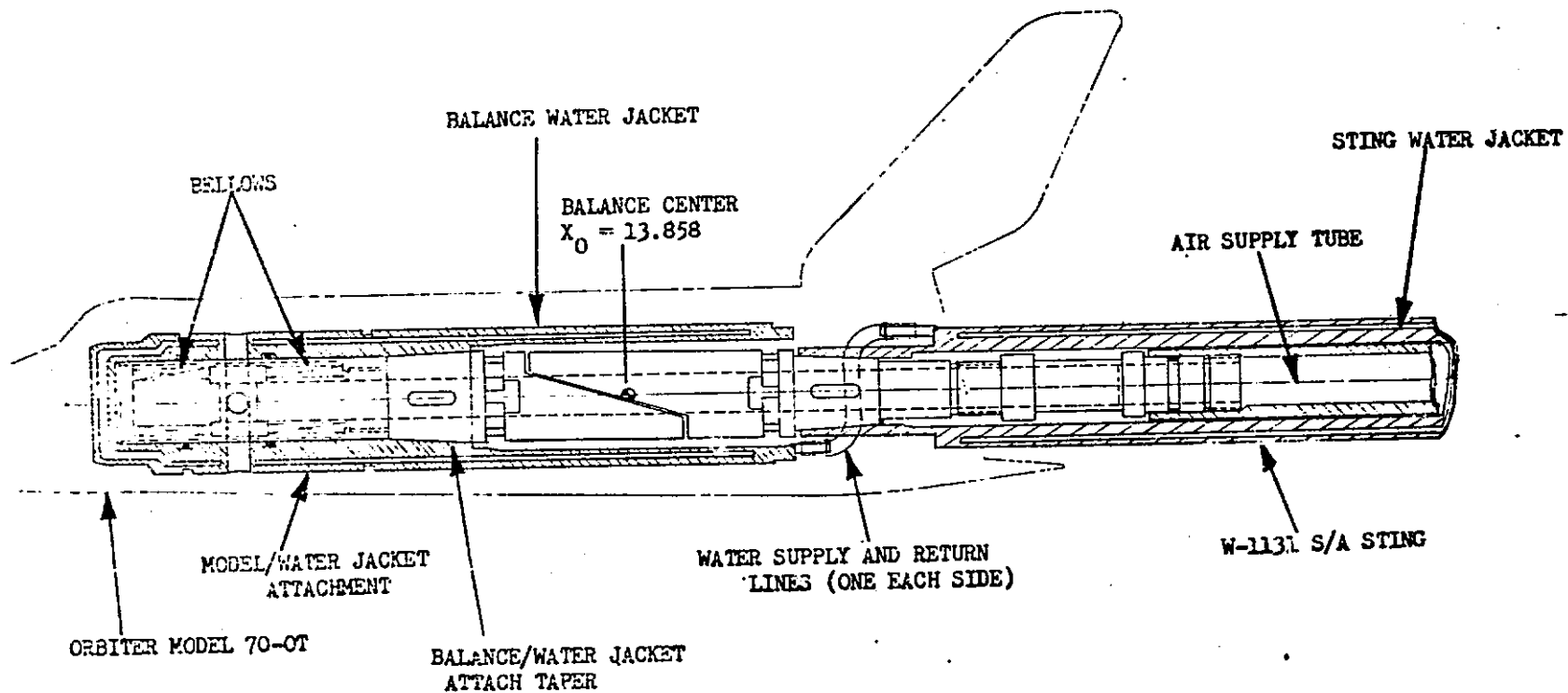
RIGHT-HAND OMS/RCS POD--

LOOKING AFT

RCS Thruster Hook-up--RC3

g. Concluded.

Figure 2. Continued.



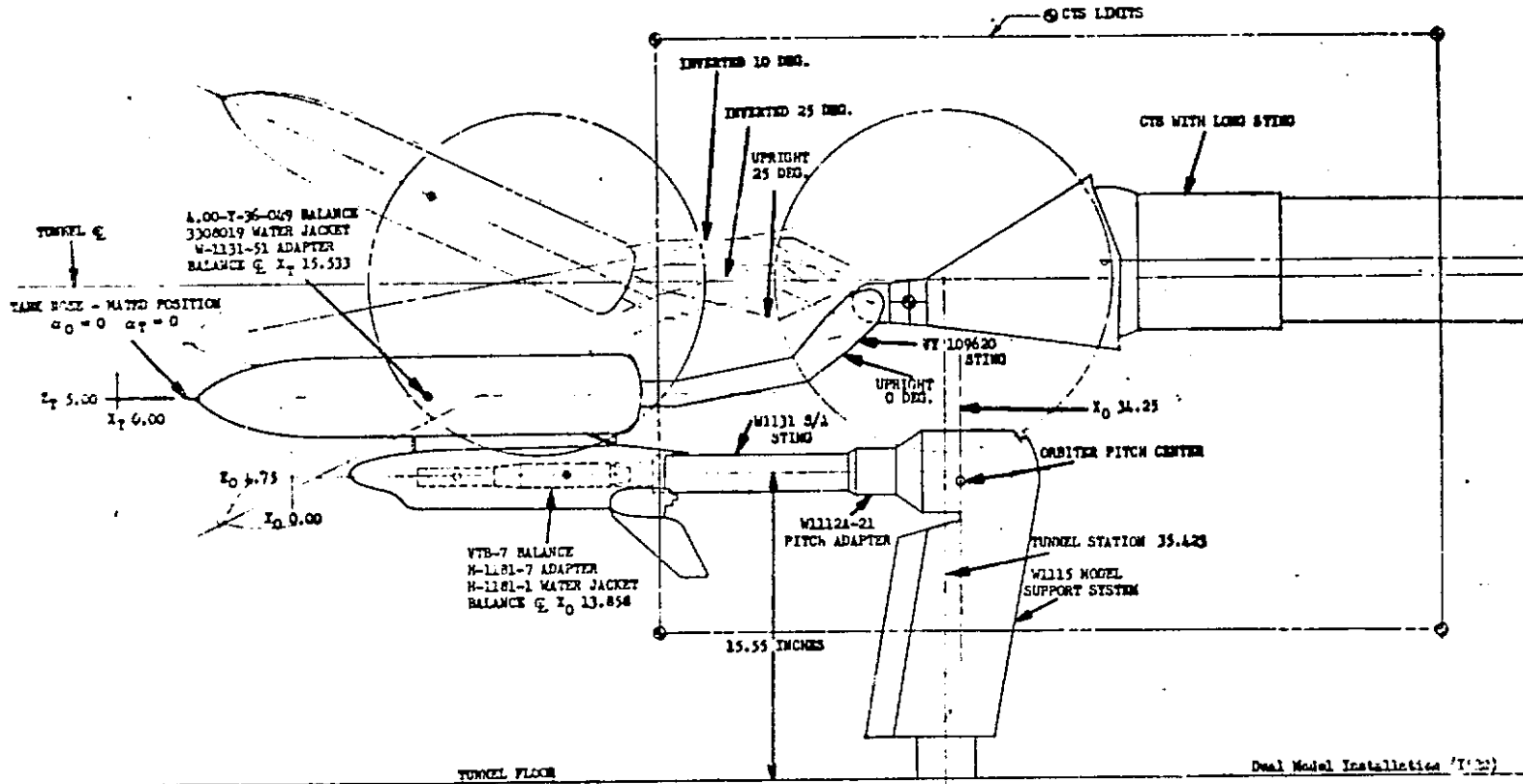
h. VTB-7 Flow Through Balance Installation - Orbiter and O/ET  
Figure 2. Continued.

TUNNEL CEILING

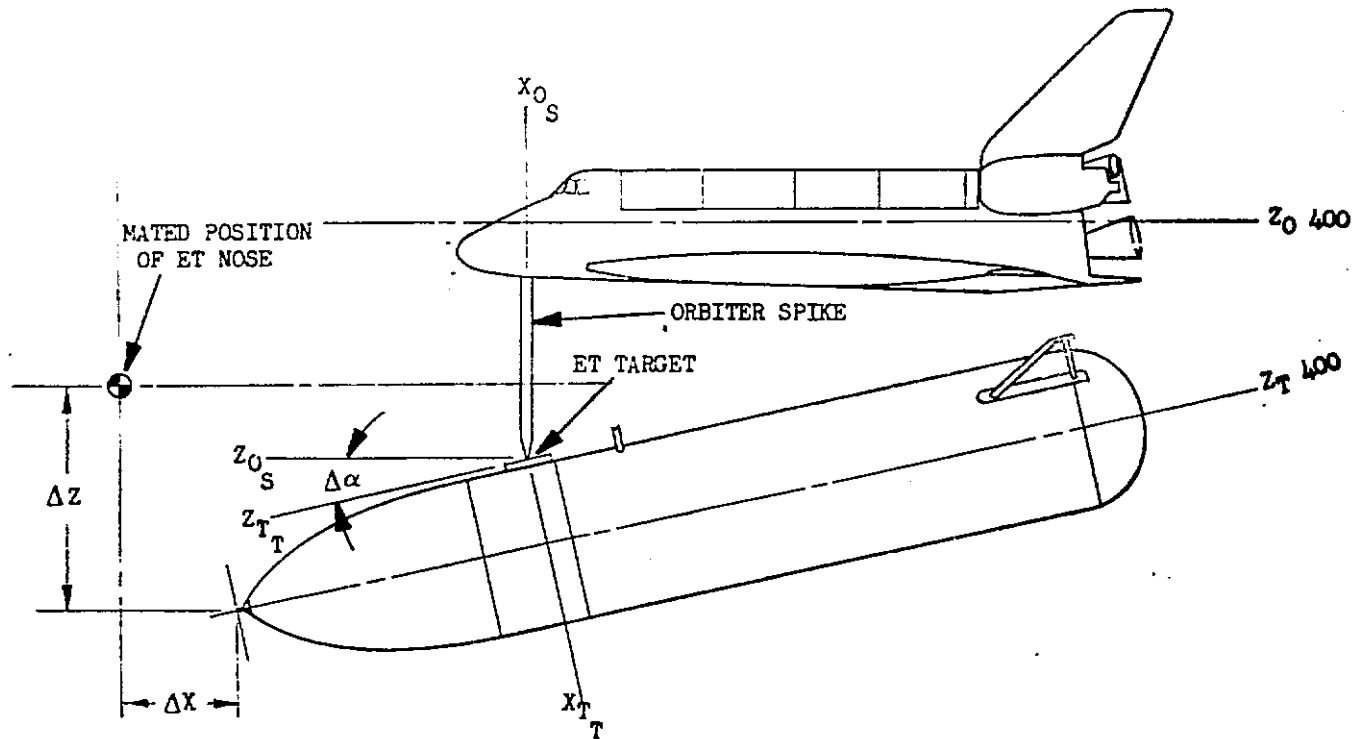
TANK STING POSITIONS

- (A) UPRIGHT - 25 DEG. PREBEND ( $\alpha_T = -40$  DEG. TO  $-10$  DEG.)
- (B) UPRIGHT - 0 DEG. PREBEND ( $\alpha_T = -15$  DEG. TO  $+15$  DEG.)
- (C) INVERTED - 10 DEG. PREBEND ( $\alpha_T = -5$  DEG. TO  $+25$  DEG.)
- (D) INVERTED - 25 DEG. PREBEND ( $\alpha_T = -10$  DEG. TO  $+40$  DEG.)

30



1. Dual Model Installation (IA22)  
 Figure 2. Continued.



$X_{0S}, Z_{0S}$  ARE ORBITER SPIKE COORDINATES

$X_{TT}, Z_{TT}$  ARE ET TARGET COORDINATES

$$\Delta X = \Delta X_0 - (\Delta X_T - \Delta Z_T \tan \Delta \alpha) \cos \Delta \alpha$$

$$\Delta X = \Delta Z_0 + \Delta Z_T / \cos \Delta \alpha + (\Delta X_T - \Delta Z_T \tan \Delta \alpha) \sin \Delta \alpha - 336.5$$

where  $\Delta X_0 = X_{0S} + 741 - 322.5$

$$\Delta X_T = X_{TT} - 322.5$$

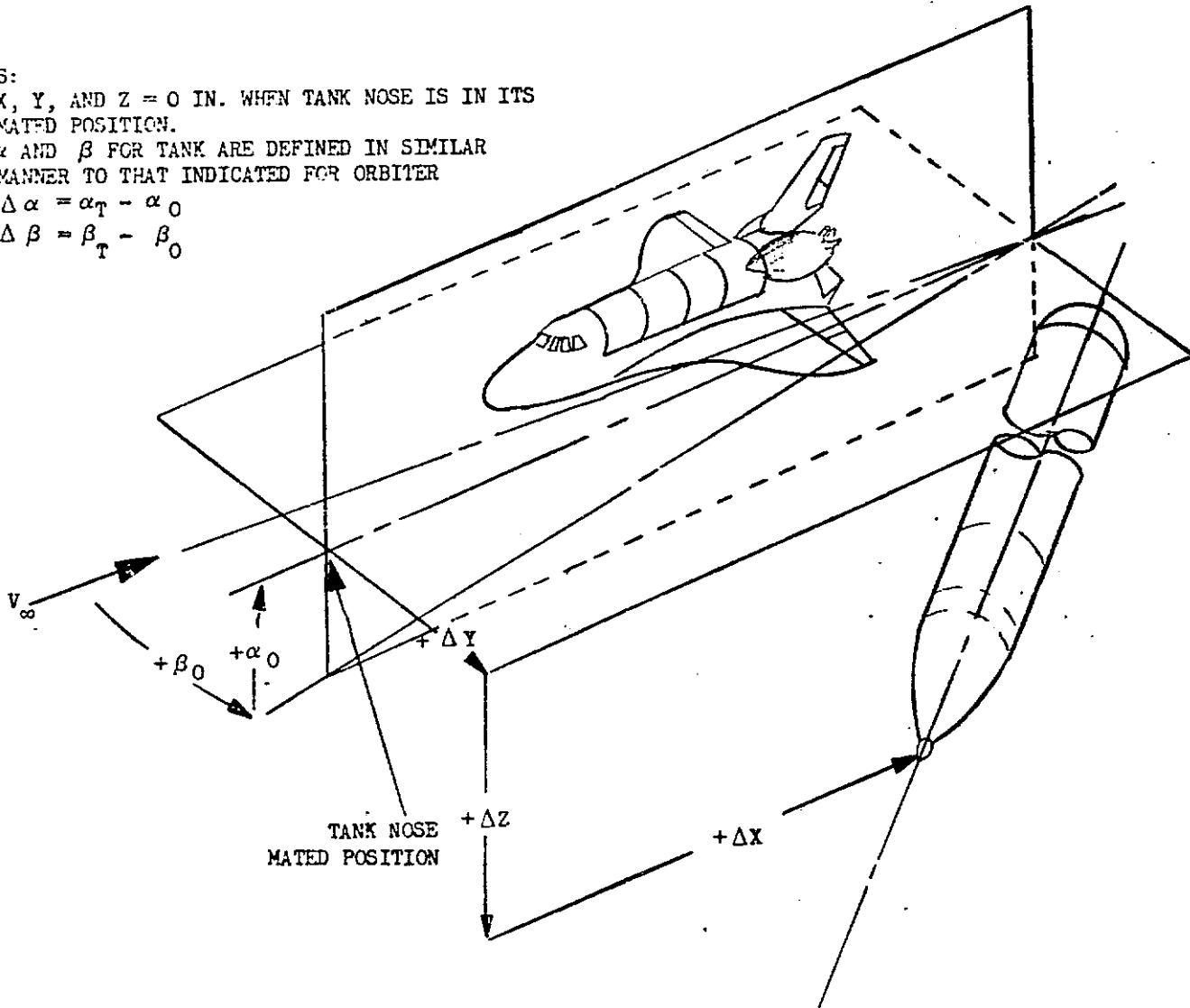
$$\Delta Z_0 = 400 - Z_{0S}$$

$$\Delta Z_T = Z_{TT} - 400$$

j. Captive Trajectory System Initial Conditions  
Figure 2. Continued.

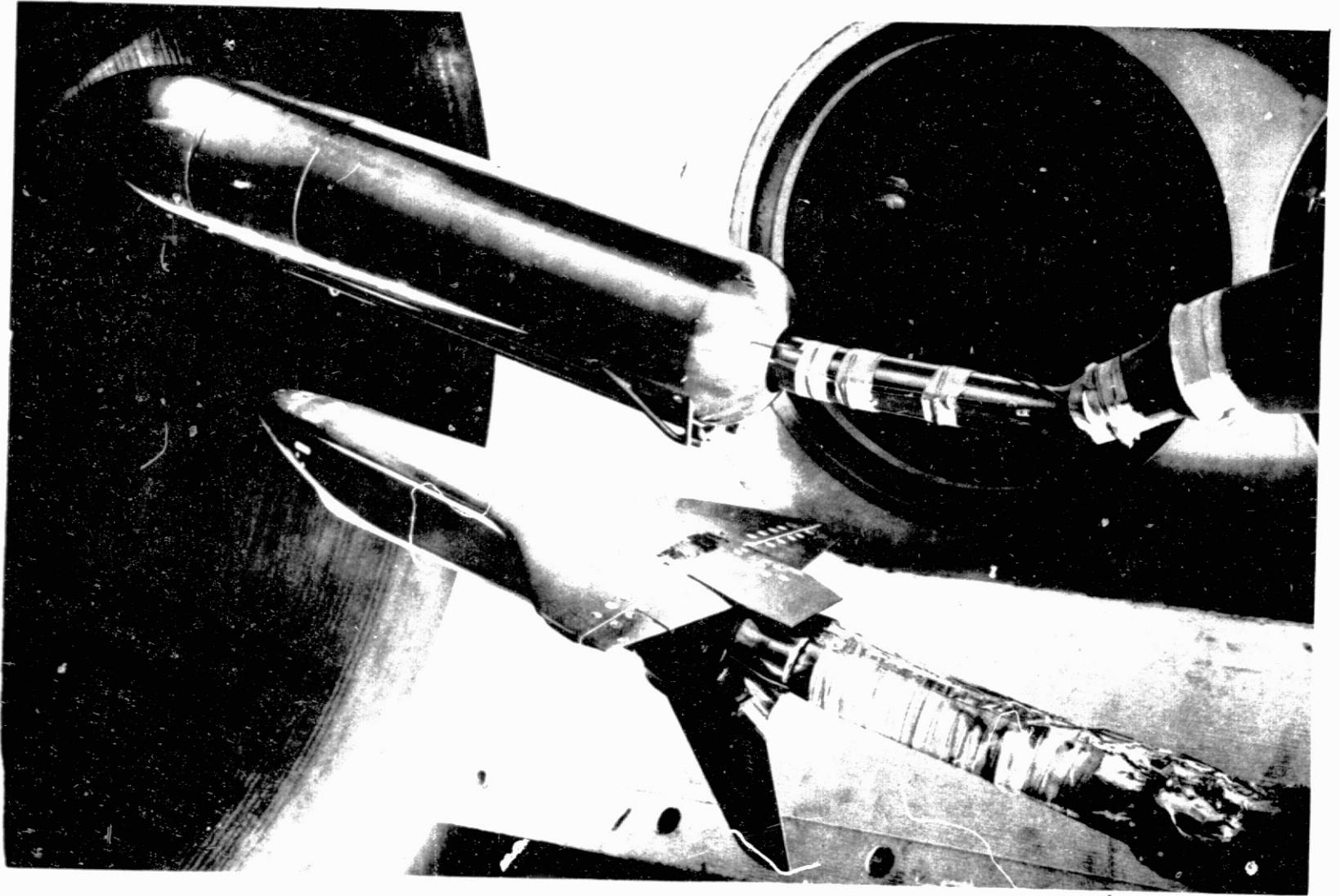
NOTES:

1. X, Y, AND Z = 0 IN. WHEN TANK NOSE IS IN ITS MATED POSITION.
2.  $\alpha$  AND  $\beta$  FOR TANK ARE DEFINED IN SIMILAR MANNER TO THAT INDICATED FOR ORBITER
3.  $\Delta\alpha = \alpha_T - \alpha_0$   
 $\Delta\beta = \beta_T - \beta_0$

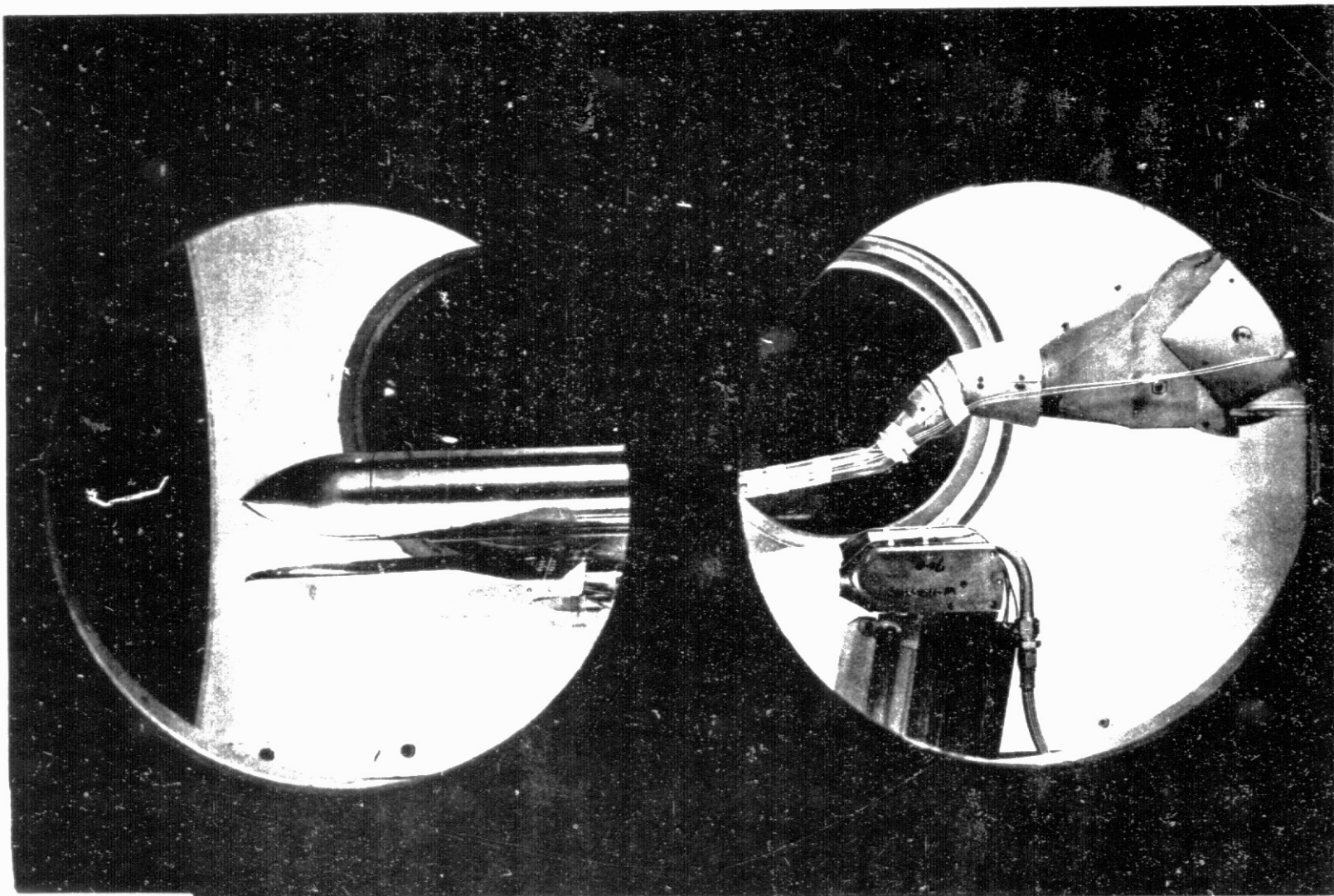


k. External Tank Separation from Orbiter  
Figure 2. Concluded.





a. Orbiter/Tank Separation in Tunnel B  
Figure 3. Model photographs.



b. Sting Arrangement with Orbiter and Tank Installed in Tunnel B  
Figure 3. Concluded.

APPENDIX

TABULATED SOURCE DATA

- VOLUME 2 (pages 1-530, datasets R, S, T, U, AVK001 through R, S, T, U, AVK081)
- VOLUME 3 (pages 531-1144, datasets R, S, T, U, AVK082 through R, S, T, U, AVK175)

- (1) \*\*\*\* denotes places where CHMD and CNFD data not available for T data.
- (2) When the RCS was off (non-firing), U datasets are omitted.
- (3) Zero values for CTFS, CTFU, CTAS, and CTAU in the T datasets . denotes places where data not available.

V41B-D9A (1A22), ORBITER (04RC1) W/ST SEPARATING

(RVK001) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -15.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMELDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2652/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	C.MR	CYR	CYNR	CBLR	CAR	WM
-19.988	624.770	-.28342	.24872	.00607	.31772	-.11554	.00026	-.00027	.00426	.03009	.23416
-19.956	693.450	-.15935	.14199	.00649	.27523	-.12652	-.00209	-.00003	.00323	.03133	.23431
-19.928	799.970	-.27795	-.16571	.00122	.21991	-.13116	-.00309	.00011	.00130	.02078	.23455
-19.933	1000.100	.10517	.14564	.00417	.10052	-.12410	-.00577	.00058	-.00127	.01245	.23413
	GRADIENT	.00000	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2650/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	C.MR	CYR	CYNR	CBLR	CAR	WM
-14.991	474.770	-.25976	-.12490	.00044	.29228	-.11511	.00067	.00029	.00322	.03083	.23202
-15.015	500.150	.02374	-.23149	.00059	.25872	-.11972	.00040	.00028	.00327	.03223	.23209
-14.934	549.670	-.00404	.07954	.00511	.23053	-.12692	-.00167	.00051	.00220	.03183	.23421
-14.970	599.620	.01570	.05469	.00337	.19525	-.12976	-.00230	.00049	.00213	.02379	.23475
-14.952	699.230	-.05481	.33935	.00945	.12110	-.12913	-.00045	.00081	.00090	.01484	.23451
-14.931	799.670	.00520	.12407	.00557	.09353	-.12224	.00012	.00093	.00025	.01536	.23462
-14.910	999.090	-.11842	.27700	.00935	.04007	-.11519	-.00274	.00121	.00051	.02594	.23493
	GRADIENT	.00000	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2654/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	C.MR	CYR	CYNR	CBLR	CAR	WM
-10.000	324.690	-.05727	-.10170	.00310	.29253	-.11186	-.00041	.00017	.00352	.03128	.23535
-10.053	350.480	.16792	.13245	-.00204	.23500	-.11525	-.00135	.00039	.00249	.03208	.23501
-10.022	399.640	.14479	-.05533	.00249	.18151	-.12075	-.00206	.00073	.00170	.02835	.23459
-9.990	449.220	.16326	-.05429	.00225	.14848	-.12540	-.00210	.00073	.00108	.02283	.23483
-9.938	499.280	.10176	.30457	.00707	.11043	-.12659	-.00184	.00053	.00006	.01694	.23487
-9.935	599.640	.01618	.22323	.00708	.05277	-.12307	-.00130	.00083	-.00010	.01683	.23535
-9.949	699.650	.04923	.07517	.00749	.07537	-.13075	-.00269	.00111	.00106	.02111	.23531
-9.950	799.510	.07232	.23244	.00393	.05170	-.11546	-.00316	.00114	.00058	.02350	.23522
-10.083	1000.100	.30351	.17415	-.00020	-.00441	-.13591	-.00425	.00082	.00057	.02613	.23528
	GRADIENT	.00000	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000















V41B-D9A (IA22), ORBITER (O4RC1) W/ET SEPARATING

(RVK001) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -15.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2662/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	C.MR	CYR	CYNR	CBLR	CAR	WM
-19.989	624.770	-.28342	.24872	.00607	.31772	-.11554	.00026	-.00027	.00426	.03009	.23416
-19.956	699.450	-.15935	.14199	.00649	.27923	-.12652	-.00209	-.00003	.00323	.03133	.23431
-19.928	799.970	-.27795	-.16571	.00122	.21991	-.13116	-.00309	.00011	.00130	.02078	.23455
-19.933	1000.100	.10517	.14564	.00417	.10052	-.12410	-.00577	.00058	-.00127	.01245	.23413
	GRADIENT	.00000	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2650/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	C.MR	CYR	CYNR	CBLR	CAR	WM
-14.991	474.770	-.25976	-.12490	.00044	.29228	-.11511	.00067	.00029	.00322	.03083	.23202
-15.015	500.150	.02574	-.23149	.00059	.25972	-.11972	.00040	.00028	.00327	.03223	.23209
-14.934	549.670	-.00404	.07554	.00511	.23053	-.12622	-.00167	.00051	.00220	.03183	.23421
-14.970	599.620	.01570	.05463	.00337	.19325	-.12976	-.00230	.00049	.00213	.02379	.23475
-14.952	699.230	-.05401	.33935	.00946	.12110	-.12913	-.00045	.00081	.00090	.01484	.23451
-14.931	799.670	.00520	.12407	.00557	.09953	-.12224	.00012	.00093	.00025	.01536	.23462
-14.910	999.090	-.11842	.27700	.00935	.04007	-.11519	-.00274	.00121	.00051	.02594	.23493
	GRADIENT	.00000	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2654/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	C.MR	CYR	CYNR	CBLR	CAR	WM
-10.000	324.590	-.05727	-.10170	.00310	.29253	-.11126	-.00041	.00017	.00352	.03128	.23535
-10.053	350.480	.16792	.13245	-.00204	.23500	-.11525	-.00135	.00039	.00249	.03208	.23501
-10.022	399.640	.14479	-.05533	.00249	.18151	-.12075	-.00206	.00073	.00170	.02835	.23459
-9.990	449.220	.16536	-.05429	.00285	.14648	-.12540	-.00210	.00073	.00108	.02283	.23483
-9.938	499.280	.10176	.30467	.00707	.11043	-.12659	-.00184	.00053	.00006	.01694	.23487
-9.955	599.640	.01618	.22955	.00708	.00277	-.12307	-.00130	.00083	-.00010	.01683	.23535
-9.949	699.650	.04933	.07317	.00748	.07397	-.12075	-.00269	.00111	.00106	.02111	.23531
-9.950	799.510	.07232	.22244	.00393	.05170	-.11546	-.00316	.00114	.00058	.02350	.23522
-10.083	1000.100	.17415	.30351	-.00020	-.00441	-.10591	-.00425	.00082	.00057	.02613	.23528
	GRADIENT	.00000	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000



























V41B-D9A (A22), ORBITER (04 RC): W/ET SEPARATING

(SVK002) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -15.000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2659/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CSL
-5.026	174.950	-14.9920	-.00138	.00279	-.15835	.00889	.06896	.00452	-.00060	.00197
-5.029	200.110	-14.99330	-.00143	.00324	-.16517	.00371	.06940	.00428	-.00062	.00171
-4.922	249.640	-15.00370	-.00209	.00413	-.18918	-.00459	.07459	.00348	-.00010	.00122
-5.045	300.210	-15.00930	-.00221	.00045	-.22135	-.00937	.07218	.00362	-.00006	.00097
-5.042	400.040	-15.01310	-.00226	.00139	-.27733	-.01021	.06642	.00353	-.00003	.00050
-5.057	500.350	-15.00760	-.00231	.00035	-.3027	-.00293	.05919	.00352	.00011	.00050
-5.062	600.630	-15.00590	-.00209	.00473	-.3289	-.00022	.07056	.00304	-.00006	.00047
-5.055	700.490	-15.00570	-.00207	.00392	-.33717	.00108	.07100	.00310	-.00007	.00059
-4.945	799.100	-15.00570	-.00209	.00622	-.33918	.00100	.07129	.00290	-.00005	.00059
-4.971	898.930	-15.00590	-.00207	.00429	-.33219	.00100	.07123	.00310	-.00007	.00059
	GRADIENT	.00000	.00000	.00000	.00010	.00000	.00000	.00000	.00000	.00000

RUN NO. 2667/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CSL
-.046	15.352	-14.96932	-.00100	.01207	-.20834	.03545	.08321	.00406	-.00063	.00093
-.050	50.577	-14.97739	-.00067	.01152	-.2025	.02522	.07714	.00422	-.00107	.00078
-.020	100.090	-14.99915	-.00133	-.00033	-.20534	.01225	.07352	.00394	-.00061	.00118
-.007	149.630	-14.99129	-.00170	.00326	-.21911	.00307	.07346	.00203	-.00035	.00099
-.050	199.430	-15.00009	-.00179	.00315	-.22317	.00079	.07322	.00199	-.00029	.00091
-.041	300.050	-15.01146	-.00203	.00033	-.22918	-.00739	.06546	.00257	-.00014	.00062
-.057	400.170	-15.00082	-.00230	-.00034	-.31811	-.00134	.06319	.00239	-.00014	.00044
-.057	500.390	-15.00099	-.00193	.00166	-.32813	.00090	.06317	.00247	-.00015	.00060
-.020	600.210	-15.00590	-.00198	.00422	-.33319	.00094	.06907	.00232	-.00013	.00059
.028	700.030	-15.00591	-.00194	.00356	-.33911	.00095	.06990	.00240	-.00017	.00060
.008	879.030	-15.00567	-.00196	.00413	-.33715	.00101	.06994	.00264	-.00016	.00060
	GRADIENT	.00000	.00000	.00000	.00010	.00000	.00000	.00000	.00000	.00000







V41B-D9A (A22), ORBITER 04RC1) W/ET SEPARATING

(UVK002) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1009.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -15.000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UM3LDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2653/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	P#3	DLPBAL	TB1	TB2	DT	T
-19.994	625.040	991.61000	991.61000	85.00000	981.11000	979.25999	69.00000	73.00000	8.96480	99.64200
-20.054	700.650	991.12000	991.12000	85.00000	981.12000	979.25999	69.00000	73.00000	-2.74150	99.64200
-20.002	800.000	990.50000	990.50000	85.00000	980.10000	979.25999	69.00000	73.00000	-10.49400	99.64200
-20.095	1001.600	979.47000	979.47000	85.00000	979.17000	979.25999	69.00000	73.00000	-7.04200	99.64200
	GRADIENT	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2651/ 0 RN/L = .89 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	P#3	DLPBAL	TB1	TB2	DT	T
-14.976	474.800	973.03000	973.03000	75.00000	973.13000	973.13000	77.00000	73.00000	2.95430	99.64200
-14.999	499.830	972.93000	972.93000	75.00000	972.13000	973.13000	77.00000	73.00000	-.35065	99.64200
-15.025	550.300	972.73000	972.73000	75.00000	972.13000	973.13000	77.00000	73.00000	-3.77750	99.64200
-15.040	600.540	973.03000	973.03000	75.00000	973.13000	973.13000	77.00000	73.00000	-7.47160	99.64200
-15.052	700.610	972.93000	972.93000	75.00000	972.13000	973.13000	77.00000	73.00000	-9.49990	99.64200
-14.999	799.550	972.93000	972.93000	75.00000	972.13000	973.13000	77.00000	73.00000	-7.80190	99.64200
-15.046	1000.500	973.33000	973.33000	75.00000	973.13000	973.13000	77.00000	73.00000	-3.42020	99.64200
	GRADIENT	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2555/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	P#3	DLPBAL	TB1	TB2	DT	T
-9.995	324.970	991.30000	991.30000	75.00000	991.10000	979.60000	78.00000	74.00000	1.26360	99.64200
-9.992	349.630	991.47000	991.47000	75.00000	991.17000	979.60000	78.00000	74.00000	2.06930	99.64200
-10.023	400.170	991.31000	991.31000	75.00000	991.10000	979.60000	78.00000	74.00000	-.64199	99.64200
-10.024	449.930	991.60000	991.60000	75.00000	991.60000	979.60000	78.00000	74.00000	-6.81950	99.64200
-10.052	500.040	990.50000	990.50000	75.00000	990.50000	979.60000	78.00000	74.00000	-12.85300	99.64200
-10.053	600.330	991.16000	991.16000	75.00000	991.16000	979.60000	78.00000	74.00000	-16.69700	99.64200
-10.078	700.790	990.75000	990.75000	75.00000	990.75000	979.60000	78.00000	74.00000	-16.37500	99.64200
-10.013	799.440	990.64000	990.64000	75.00000	990.64000	979.60000	78.00000	74.00000	-16.53000	99.64200
-9.929	993.510	979.91000	979.91000	75.00000	979.11000	979.60000	78.00000	74.00000	-14.92100	99.64200
	GRADIENT	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000





























































































































V41B-D9A (IA22), ORBITER(OIRC1) W/ET SEPARATING

(SVK008) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -10.000 BETA = .000  
 DSETA = .000 X = 600.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2673/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DSETA	CN	CLM	CA	CY	CYN	CBL
-19.989	625.010	-10.01300	-.00183	.00235	-.15171	-.01675	.05237	.00978	-.00057	.00059
-20.049	700.640	-10.00200	-.00216	.00122	-.17197	-.01062	.05527	.00907	-.00019	-.00006
-20.077	801.370	-10.00200	-.00191	-.00273	-.20157	-.00219	.06064	.00793	-.00031	.00015
-20.073	1001.100	-10.00000	-.00161	-.00005	-.25153	.00302	.06347	.00772	-.00053	.00030
	GRADIENT	.00000	.00000	.00000	.00100	.00000	.00000	.00000	.00000	.00000

RUN NO. 2677/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DSETA	CN	CLM	CA	CY	CYN	CBL
-15.000	475.090	-10.01000	-.00191	-.00023	-.13191	-.01416	.05732	.00922	-.00047	.00074
-15.006	500.230	-10.01000	-.00195	.00690	-.15197	-.01383	.05594	.00996	-.00042	.00050
-15.012	550.160	-10.00800	-.00172	-.01293	-.18130	-.01069	.05491	.00934	-.00061	.00030
-15.036	600.430	-10.00400	-.00197	-.00002	-.19179	-.00524	.05707	.00845	-.00030	.00070
-15.042	700.690	-10.00100	-.00164	-.00354	-.23139	.00095	.06113	.00776	-.00053	.00042
-15.014	799.510	-10.00000	-.00159	.00459	-.25195	.00355	.06235	.00756	-.00055	.00029
-15.069	1000.600	-9.99900	-.00161	.00187	-.28119	.00352	.06339	.00772	-.00052	.00029
	GRADIENT	.00000	.00000	.00000	.00100	.00000	.00000	.00000	.00000	.00000

RUN NO. 2681/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DSETA	CN	CLM	CA	CY	CYN	CBL
-10.027	325.320	-10.00300	-.00185	.00223	-.11118	-.00246	.06324	.00834	-.00044	.00036
-10.004	350.140	-10.00500	-.00185	.00799	-.13184	-.00260	.06148	.00857	-.00047	.00028
-10.005	400.040	-10.00200	-.00163	.01067	-.16112	-.01079	.05221	.00811	-.00047	.00044
-10.014	449.730	-10.00700	-.00172	.00223	-.18101	-.00320	.05339	.00803	-.00059	.00062
-10.036	500.180	-10.00300	-.00189	-.00395	-.20113	-.00339	.05789	.00793	-.00036	.00048
-10.034	600.470	-10.00000	-.00159	-.00176	-.23137	.00271	.06155	.00771	-.00056	.00032
-10.060	700.500	-9.99900	-.00159	-.00168	-.25142	.00389	.06225	.00761	-.00055	.00026
-10.008	799.430	-9.99900	-.00159	.00231	-.25172	.00362	.06233	.00772	-.00055	.00026
-10.024	999.650	-9.99900	-.00160	.00245	-.28125	.00386	.06231	.00765	-.00054	.00026
	GRADIENT	.00000	.00000	.00000	.00100	.00000	.00000	.00000	.00000	.00000

V41B-D9A (IA22),ORBITER(OA RCI) W/ET SEPARATING

(SVK008) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -10.000 BETA = .000  
 DBETA = .000 X = 600.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2685/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.016	174.820	-9.90340	-.00129	.00045	-.12771	.00900	.06044	.00903	-.00075	.00045
-5.034	200.330	-9.99360	-.00152	.00206	-.11713	.00257	.06516	.00797	-.00059	.00081
-5.019	250.040	-10.00200	-.00179	-.00336	-.14036	-.00487	.06430	.00781	-.00044	.00051
-5.001	293.730	-10.00710	-.00164	.00379	-.17034	-.00330	.06097	.00816	-.00065	.00051
-5.025	400.320	-10.00440	-.00170	.00630	-.21356	-.00330	.05916	.00759	-.00051	.00030
-5.058	500.420	-9.90330	-.00155	-.01335	-.25156	.00229	.06228	.00760	-.00059	.00027
-5.059	600.300	-9.90370	-.00155	-.00010	-.25700	.00335	.06336	.00771	-.00058	.00026
-5.058	700.240	-9.90330	-.00153	.00497	-.26729	.00335	.06328	.00763	-.00050	.00027
-5.031	800.110	-9.90370	-.00155	-.00100	-.25714	.00335	.06311	.00780	-.00059	.00027
-4.967	933.590	-9.90330	-.00153	.00325	-.26738	.00335	.06325	.00767	-.00050	.00027
	GRADIENT	.00000	.00000	.00000	.00030	.00000	.00000	.00000	.00000	.00000

RUN NO. 2689/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.528	49.560	-9.97737	-.00089	.00526	-.16724	.02310	.05890	.00952	-.00095	-.00001
-.539	99.924	-9.93195	-.00123	.00325	-.16331	.01725	.05743	.00955	-.00071	.00063
-.514	149.240	-9.93176	-.00143	-.00306	-.14630	.00355	.06473	.00767	-.00064	.00078
-.519	199.220	-9.93335	-.00154	-.00217	-.14422	.00380	.06557	.00707	-.00056	.00084
-.533	249.590	-10.00437	-.00160	.01109	-.22131	-.00412	.05790	.00650	-.00060	.00073
-.554	400.490	-10.00003	-.00155	.00375	-.24439	.00172	.06223	.00705	-.00059	.00033
-.552	500.370	-9.90335	-.00154	-.00022	-.23024	.00370	.06303	.00710	-.00059	.00024
-.577	600.640	-9.90393	-.00154	.00134	-.25212	.00357	.06300	.00594	-.00058	.00024
-.509	799.410	-9.90321	-.00152	.00334	-.25237	.00370	.06305	.00698	-.00059	.00024
-.462	878.730	-9.90335	-.00155	.01274	-.25232	.00363	.06320	.00695	-.00057	.00024
	GRADIENT	.00000	.00000	.00000	.00030	.00000	.00000	.00000	.00000	.00000















DATE 06 MAY 77

TABULATED SOURCE DATA. 1A22. (AEDC V41B-D9A)

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V41B-D9A (1A22), ORBITER (OIRC1) W/ET SEPARATING

(RVK009) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 OBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLOR = .000 RCS = 1.000  
 ZSWEEP = 1.000 GAS = 1.000

RUN NO. 2352/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DEETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-10.002	316.970	-.05370	.46069	.00924	.41928	-.00027	-.01319	.00015	.00239	.00665	.23194
-10.028	342.180	.05920	-.03418	-.00302	.37824	-.00416	-.01400	.00021	.00176	.00747	.23157
-10.004	391.740	-.03971	-.24672	.00033	.33221	-.01069	-.01235	-.00008	.00089	.00362	.23169
-9.972	441.360	-.10998	.10534	.00395	.30994	-.02039	-.01233	-.00019	.00085	.00269	.23190
-9.976	491.140	-.03949	-.17452	.00045	.26036	-.02015	-.01179	-.00007	.00023	-.00382	.23167
-9.955	590.740	-.02540	.31987	.00775	.21426	-.01116	-.01319	.00008	.00021	-.00472	.23200
-9.993	691.020	-.10600	.05923	.00350	.17511	-.00239	-.01421	.00018	.00023	-.00337	.23167
-10.067	792.300	.21638	.18412	-.00127	.16053	-.00100	-.01394	-.00009	.00078	.00057	.23190
-10.036	891.800	.14105	.26308	.00335	.16127	-.00039	-.01402	-.00009	.00078	.00054	.23193
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2365/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DEETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
.003	11.422	.18573	.36598	.00790	.16395	.00770	-.01441	.00042	.00063	.02277	.23344
-.018	42.276	.03620	-.12023	-.00074	.20164	.01304	-.01305	.00026	.00045	.02259	.23349
.009	91.593	.07234	.00323	.00433	.22936	.01533	-.01031	.00019	.00078	.01359	.23379
.015	141.290	.03429	.27578	.00334	.24168	.01186	-.01478	.00030	.00062	.00999	.23421
.025	190.940	.05773	.25765	.00330	.21545	.00759	-.01434	.00048	-.00015	.00401	.23387
.039	290.680	.11424	.10571	.00271	.19366	.00289	-.01354	.00031	.00005	.00332	.23402
.033	390.710	.15277	-.11761	.00291	.18357	-.00226	-.01377	.00027	.00015	.00176	.23348
-.002	491.220	.22060	.10209	.00444	.16512	-.00073	-.01395	.00028	.00024	.00010	.23354
-.044	591.830	.24375	-.04974	-.00156	.16155	-.00057	-.01389	.00003	.00077	.00353	.23371
.001	791.290	.14324	.63397	.01039	.16073	-.00042	-.01355	.00004	.00076	.00340	.23395
-.000	931.280	.21530	-.55669	-.00346	.16114	-.00043	-.01393	.00004	.00077	.00332	.23376
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2368/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DEETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
10.041	-135.040	1.59700	.37140	.00355	.14310	-.00785	-.01399	-.00025	.00001	-.00179	.23153
9.977	-109.220	.02057	.02095	.00165	.14237	-.00785	-.01332	-.00031	.00007	.00366	.23147
9.947	-57.212	-.04322	-.15559	-.00133	.16116	.00350	-.01361	.00032	.00005	.01845	.23173
10.011	6.239	.15417	.22248	.00222	.19373	.00837	-.01104	.00026	.00030	.01136	.23183
10.022	90.674	.25119	-.146020	-.01723	.19006	.01125	-.01425	.00022	.00100	.00585	.23195
10.019	190.400	.29907	.64203	.01277	.19552	.00195	-.01377	-.00002	.00078	.00691	.23155
9.987	251.150	.17395	.11625	.00455	.18991	-.00048	-.01368	-.00005	.00072	.00380	.23225
	GRADIENT	.02448	.03532	.00083	.02996	.00141	-.00175	.00004	.00013	.00180	.03680

V41B-D9A (IA22), ORBITER (O-RC1) W/ET SEPARATING

(SVK009) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 ZSWEEP = 1.000 GAS = 1.000

RUN NO. 2352/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
-10.002	316.970	-4.97700	-.00088	.00924	.08184	.01069	.05063	-.00580	-.00079	.00244
-10.028	342.180	-4.92200	-.00099	-.00302	.04171	.00583	.05159	-.00658	-.00074	.00181
-10.004	391.740	-4.99100	-.00020	.00033	-.00210	.00030	.04771	-.00494	-.00103	.00093
-9.972	441.360	-5.00030	-.00092	.00395	-.02157	-.00940	.04681	-.00492	-.00114	.00090
-9.976	491.140	-5.00220	-.00055	.00045	-.07134	-.00915	.04032	-.00437	-.00102	.00027
-9.955	590.740	-4.99100	-.00100	.00775	-.12178	-.00015	.03947	-.00576	-.00036	.00025
-9.983	691.020	-4.99020	-.00097	.00550	-.15932	.00253	.04091	-.00679	-.00077	.00027
-10.067	792.300	-4.99000	-.00067	-.00127	-.17133	.01002	.04477	-.00651	-.00104	.00082
-10.036	991.800	-4.99000	-.00057	.00536	-.17146	.01005	.04482	-.00658	-.00104	.00082
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2366/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
.003	11.422	-4.99035	-.00110	.00790	-.14800	.01870	.02594	-.00699	-.00053	.00067
-.018	42.276	-4.97516	-.00153	-.00074	-.13134	.02405	.02677	-.00553	-.00009	.00050
.008	91.593	-4.97134	-.00090	.00453	-.10659	.02626	.05777	-.00339	-.00075	.00083
.015	141.290	-4.97433	-.00090	.00234	-.09228	.02226	.05417	-.00736	-.00064	.00066
.025	190.940	-4.97342	-.00117	.00530	-.11959	.01659	.04221	-.00691	-.00046	-.00011
.039	290.660	-4.97426	-.00105	.00271	-.13122	.01335	.04730	-.00625	-.00053	.00010
.033	390.710	-4.97370	-.00108	.00291	-.14175	.00970	.04574	-.00639	-.00057	.00020
-.002	491.220	-4.97036	-.00108	.00444	-.16198	.01025	.04416	-.00655	-.00066	.00028
-.044	591.890	-4.97315	-.00031	-.00156	-.17272	.01042	.04762	-.00648	-.00091	.00082
.001	791.290	-4.97314	-.00082	.01039	-.17361	.01057	.04749	-.00644	-.00090	.00081
-.000	931.280	-4.96911	-.00081	-.00646	-.17336	.01056	.04743	-.00652	-.00090	.00082
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2368/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
10.041	-135.040	-4.99700	-.00060	.00365	-.19457	.00323	.04274	-.00650	-.00120	.00106
9.977	-108.280	-4.97060	-.00055	.00186	-.19239	.00324	.05320	-.00594	-.00126	.00011
9.947	-57.212	-4.97570	-.00107	-.00093	-.17842	.01459	.06297	-.00613	-.00063	.00010
10.011	6.299	-4.97910	-.00097	.00522	-.14871	.01966	.05596	-.00357	-.00069	.00085
10.022	90.674	-4.97770	-.00094	-.01785	-.14735	.02233	.05035	-.00678	-.00073	.00105
10.019	190.400	-4.99570	-.00071	.01277	-.14169	.01303	.05131	-.00629	-.00097	.00083
9.987	251.150	-4.99790	-.00072	.00465	-.14728	.01060	.04827	-.00621	-.00100	.00077
	GRADIENT	-.79046	-.00015	.00083	-.02351	.00317	.00897	-.00057	-.00011	.00013

V418-D9A (IA22).ORBITER(04RC1) W/ET SEPARATING

(TVK009) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 ZSMCEP = 1.000 GAS = 1.000

RUN NO. 2352/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-10.002	316.970	-.05370	.46068	.....	.....	441.37000	.00000	.00000	660.55000	.00000	.00000
-10.028	342.180	.05920	-.03416	.....	.....	442.81000	.00000	.00000	662.70000	.00000	.00000
-10.004	391.740	-.02371	-.24672	.....	.....	442.55000	.00000	.00000	662.26000	.00000	.00000
-9.972	441.350	-.16228	.10534	.....	.....	442.75000	.00000	.00000	662.87000	.00000	.00000
-9.976	491.140	-.03949	-.17432	.....	.....	443.04000	.00000	.00000	663.04000	.00000	.00000
-9.955	590.740	-.02340	.31937	.....	.....	443.50000	.00000	.00000	663.74000	.00000	.00000
-9.933	691.020	-.10500	.00023	.....	.....	443.47000	.00000	.00000	663.65000	.00000	.00000
-10.067	792.300	.21638	.12412	.....	.....	443.64900	.00000	.00000	663.93000	.00000	.00000
-10.036	991.200	.14103	.22203	.....	.....	444.41000	.00000	.00000	665.10000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2365/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
.003	11.422	.18573	.35583	.....	.....	443.32000	.00000	.00000	663.55000	.00000	.00000
-.018	42.276	.03520	-.12203	.....	.....	443.42000	.00000	.00000	663.61000	.00000	.00000
.008	91.583	.07224	.02226	.....	.....	443.33000	.00000	.00000	663.53000	.00000	.00000
.015	141.230	.03423	.27572	.....	.....	443.35000	.00000	.00000	663.57000	.00000	.00000
.025	190.940	.03773	.23706	.....	.....	443.51000	.00000	.00000	663.90000	.00000	.00000
.039	230.680	.11424	.10571	.....	.....	441.42000	.00000	.00000	660.62000	.00000	.00000
.033	390.710	.15277	-.11761	.....	.....	441.35000	.00000	.00000	660.52000	.00000	.00000
-.002	491.220	.22050	.10283	.....	.....	442.23000	.00000	.00000	661.83000	.00000	.00000
-.044	591.630	.24975	-.04974	.....	.....	442.48000	.00000	.00000	662.21000	.00000	.00000
.001	791.230	.14224	.63337	.....	.....	442.53000	.00000	.00000	662.32000	.00000	.00000
-.000	931.280	.21630	-.52363	.....	.....	442.75000	.00000	.00000	662.67000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2358/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
10.041	-135.040	1.59700	.37140	.....	.....	446.97000	.00000	.00000	669.93000	.00000	.00000
9.977	-102.280	.02057	.02023	.....	.....	447.00000	.00000	.00000	669.09000	.00000	.00000
9.947	-57.212	-.04022	-.15223	.....	.....	446.83000	.00000	.00000	668.74000	.00000	.00000
10.011	6.259	.15417	.22348	.....	.....	446.83000	.00000	.00000	668.47000	.00000	.00000
10.022	90.674	.25119	-1.43020	.....	.....	446.63000	.00000	.00000	668.41000	.00000	.00000
10.019	190.400	.20007	.64203	.....	.....	446.63000	.00000	.00000	668.41000	.00000	.00000
9.987	251.150	.17226	.11625	.....	.....	446.35000	.00000	.00000	667.92000	.00000	.00000
	GRADIENT	.02448	.03532	.....	.....	70.90567	.00000	.00000	106.12319	.00000	.00000

V41B-D9A (IA22), ORBITER(041C1) W/ET SEPARATING

(UVK009) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMLDR = .000 RCS = 1.000  
 ZSWEEP = 1.000 GAS = 1.000

RUN NO. 2352/ 0 RN/L = .85 GRAIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-10.002	316.970	973.83000	973.86000	87.00000	973.85000	973.62000	86.00000	74.00000	8.67860	99.76800
-10.028	342.180	973.61000	973.61000	87.00000	973.61000	973.62000	86.00000	74.00000	21.63400	99.76800
-10.004	391.740	973.48000	973.48000	87.00000	973.48000	973.62000	86.00000	74.00000	17.71600	99.76800
-9.972	441.360	973.07000	973.07000	87.00000	973.07000	973.62000	86.00000	74.00000	17.07000	99.76800
-9.976	491.140	973.13000	973.13000	87.00000	973.13000	973.62000	86.00000	74.00000	15.75500	99.76800
-9.955	590.740	973.17000	973.17000	87.00000	973.17000	973.62000	86.00000	74.00000	11.33700	99.76800
-9.993	691.020	973.10000	973.10000	87.00000	973.10000	973.62000	86.00000	74.00000	4.00910	99.76800
-10.067	792.300	972.93000	972.93000	87.00000	972.93000	973.62000	86.00000	74.00000	-1.77864	99.76800
-10.036	991.800	973.20000	973.20000	87.00000	973.20000	973.62000	86.00000	74.00000	-4.14380	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2366/ 0 RN/L = .85 GRAIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
.003	11.422	976.83000	976.83000	82.00000	976.83000	976.60339	84.00000	75.00000	-12.30200	99.76800
-.018	42.276	976.91000	976.91000	82.00000	976.91000	976.60339	84.00000	75.00000	-11.44500	99.76800
.008	91.523	976.83000	976.83000	82.00000	976.83000	976.60339	84.00000	75.00000	-9.87780	99.76800
.015	141.290	977.34000	977.34000	82.00000	977.34000	976.60339	84.00000	75.00000	-9.94350	99.76800
.025	190.940	977.33000	977.33000	82.00000	977.33000	976.60339	84.00000	75.00000	-10.65700	99.76800
.035	290.690	977.32000	977.32000	82.00000	977.32000	976.60339	84.00000	75.00000	-11.69700	99.76800
.033	390.710	977.72000	977.72000	82.00000	977.72000	976.60339	84.00000	75.00000	-12.18300	99.76800
-.002	491.220	977.76000	977.76000	82.00000	977.76000	976.60339	84.00000	75.00000	-12.61800	99.76800
-.044	591.630	977.72000	977.72000	82.00000	977.72000	976.60339	84.00000	75.00000	-12.63200	99.76800
.001	791.290	977.93000	977.93000	82.00000	977.93000	976.60339	84.00000	75.00000	-12.83300	99.76800
-.000	931.280	979.46800	979.46800	82.00000	979.46800	976.60339	84.00000	75.00000	-13.23500	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2368/ 0 RN/L = .85 GRAIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
10.041	-135.040	977.33000	977.33000	80.00000	977.33000	977.10939	68.00000	72.00000	-9.12840	99.76800
9.977	-109.220	977.07000	977.07000	80.00000	977.07000	977.10939	68.00000	72.00000	-8.55930	99.76800
9.947	-57.212	977.05000	977.05000	80.00000	977.05000	977.10939	68.00000	72.00000	-8.33060	99.76800
10.011	6.299	976.65000	976.65000	80.00000	976.65000	977.10939	68.00000	72.00000	-10.06800	99.76800
10.022	90.674	976.57000	976.57000	80.00000	976.57000	977.10939	68.00000	72.00000	-12.63500	99.76800
10.019	190.400	976.57000	976.57000	80.00000	976.57000	977.10939	68.00000	72.00000	-13.98900	99.76800
9.987	251.150	976.45000	976.45000	80.00000	976.45000	977.10939	68.00000	72.00000	-14.47700	99.76800
	GRADIENT	155.04642	155.04642	12.70043	155.04642	155.12145	10.75336	11.43039	-1.59835	15.83870

DATE 06 MAY 77

TABULATED SOURCE DATA, IA22, (AEDC V41B-D9A)

PAGE 05

V41B-D9A (IA22), ET SEPARATING FROM ORB (04RC1)

(AVK009) (04 MAY 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 OBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 ZSWEEP = 1.000 GAS = 1.000

RUN NO. 2352/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-10.002	316.970	-.05370	.45068	-14.97900	.00836	-.35621	-.00148	.00882	-.00232	.00100	.12330
-10.028	342.180	.05920	-.03418	-15.01000	-.00401	-.31632	-.02299	.00517	.00037	.00080	.10857
-10.004	391.740	-.03971	-.24672	-14.92500	-.00047	-.29361	-.03082	.00676	.00016	.00068	.10107
-9.972	441.360	-.10929	.10504	-14.97200	.00313	-.30463	-.01971	.00591	-.00029	.00073	.10655
-9.978	491.140	-.03949	-.17452	-14.97800	-.00051	-.31544	-.09814	.00207	-.00070	.00069	.11432
-9.955	550.740	-.02540	.31997	-14.95100	.00575	-.33690	.01755	.00776	-.00150	.00055	.13440
-9.983	691.020	-.10500	.03023	-14.97200	.00452	-.32553	.02545	.00912	-.00276	.00089	.14614
-10.067	792.300	.21639	.16412	-15.05700	-.00194	-.25499	-.01563	.00483	.00012	.00042	.11372
-10.035	991.600	.14105	.26599	-15.02600	.00469	-.21447	-.03941	.00385	.00039	.00028	.10567
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2355/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
.003	11.422	.18573	.35598	-4.97780	.00691	-.09578	-.02732	-.00067	.00035	.00037	.06563
-.018	42.276	.03620	-.12895	-4.99350	-.00227	-.11809	-.02936	-.00265	.00135	.00046	.08778
.008	91.533	.07224	.02226	-4.99310	.00373	-.13035	-.02057	.00327	.00042	.00016	.03894
.015	141.290	.03429	.27578	-4.99330	.00494	-.13707	-.01376	.00276	.00033	.00021	.09111
.025	190.940	.05773	.25765	-4.99470	.00413	-.13355	-.00490	.00242	.00042	.00025	.09480
.039	290.630	.11434	.10571	-4.99310	.00155	-.14291	.01001	.00265	.00044	.00025	.10177
-.033	390.710	.19277	-.11731	-4.99700	.00183	-.14245	.02007	.00425	-.00042	.00023	.11017
-.002	491.220	.22060	.10269	-4.99370	.00237	-.11447	.01390	.00465	-.00090	.00038	.10917
-.044	591.680	.24975	-.04974	-5.02290	-.00236	-.06068	-.01257	.00237	.00035	.00005	.08816
.001	791.290	.14324	.63397	-4.99230	.00538	-.06170	-.01479	.00228	.00050	-.00001	.09216
-.000	931.280	.21560	-.55269	-4.99360	-.00727	-.06207	-.01490	.00193	.00045	-.00000	.09415
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2359/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
10.041	-135.040	1.59700	.37140	5.04400	.00805	.06471	.00997	.00292	-.00031	-.00001	.08642
9.977	-108.290	.02057	.02095	4.99070	.00131	.05729	.00527	.00160	.00032	.00005	.08695
9.947	-57.212	-.04922	-.15559	4.99090	-.00190	.00655	.00314	.00134	.00054	.00018	.08942
10.011	6.299	.15417	.22248	5.03190	.00425	-.01201	.01611	.00312	.00017	.00005	.09218
10.022	90.674	.25119	-1.46020	5.04430	-.01870	-.02043	.03354	.00499	-.00040	.00010	.09905
10.019	190.400	.25207	.64203	5.03330	.01205	-.00757	.04219	.00379	-.00136	.00008	.10265
9.987	251.150	.17366	.11625	4.99090	.00393	.00249	.03718	.00349	-.00131	.00010	.10087
	GRADIENT	.02448	.03532	.79824	.00067	-.00191	.00256	.00049	.00003	.00001	.01463

V41B-D9A (1A22), ORBITER (O4RC1) W/ET SEPARATING

(RVK010) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.3000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 ZSWEEP = 2.000 GAS = 1.000

RUN NO. 2353/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-9.558	316.930	-.04019	.51849	.01438	.41635	-.00031	-.01322	.00017	.00231	.00680	.23231
-10.000	342.290	-.00233	.14923	.00346	.37441	-.00437	-.01397	.00022	.00165	.00766	.23190
-10.033	392.740	.15711	-.03335	.00148	.33070	-.01090	-.01231	-.00009	.00088	.00363	.23196
-10.020	442.590	.07809	.36886	.00355	.30715	-.02077	-.01235	-.00015	.00088	.00316	.23207
-10.049	492.590	.22228	-.04309	.00121	.25735	-.02050	-.01165	-.00010	.00029	-.00308	.23234
-10.012	592.180	.23055	-.29132	-.00478	.21066	-.01151	-.01292	.00008	.00026	-.00392	.23213
-9.932	690.910	.05791	.19309	.01086	.17102	-.00273	-.01432	.00013	.00034	-.00201	.23196
-9.939	791.250	.01640	.34119	.00782	.15532	-.00116	-.01375	-.00009	.00078	.00148	.23179
-10.000	921.420	.12333	.16762	.00444	.15721	-.00116	-.01333	-.00008	.00079	.00148	.23186
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2367/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
.021	6.963	.31777	.60005	.01214	.17992	.00731	-.01481	.00032	.00067	.02435	.23420
-.008	41.695	.22939	.23232	.00503	.19728	.01236	-.01370	.00073	.00042	.02469	.23389
-.015	91.925	.12319	-.07934	.00074	.22504	.01551	-.01351	.00021	.00065	.01563	.23396
-.022	142.230	.03029	-.03902	.00034	.23794	.01165	-.01508	.00019	.00060	.01175	.23429
-.035	192.420	.06346	-.23394	.00048	.21302	.00728	-.01478	.00039	-.00016	.00537	.23435
-.028	222.320	.15747	.01257	.00049	.19351	.00330	-.01398	.00022	-.00011	.00328	.23381
.005	391.800	.13447	.32979	.00537	.18958	-.00234	-.01421	.00017	.00014	.00199	.23450
.042	491.050	.14672	.21341	.00235	.16940	-.00070	-.01469	.00020	.00020	.00012	.23456
.009	591.410	.21233	.11034	.00324	.16525	-.00055	-.01431	-.00004	.00075	.00355	.23435
.004	791.330	.18329	-.00223	.00026	.16353	-.00038	-.01430	-.00004	.00075	.00374	.23453
-.072	933.630	-.46461	.10639	.00302	.16305	-.00044	-.01422	-.00004	.00075	.00400	.23456
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2369/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
9.998	-133.820	.17721	-.06290	.00322	.14077	-.00766	-.01425	-.00038	-.00001	-.00205	.23217
10.027	-109.960	.35070	.53358	.01070	.13557	-.00787	-.01356	-.00035	.00011	.00977	.23217
9.973	-58.468	.11340	.62918	.01072	.15906	.00349	-.01355	.00026	.00001	.01862	.23259
9.948	7.191	.04351	.87764	.01474	.19722	.00397	-.01115	.0002	.00080	.01120	.23207
9.934	92.304	.00476	.18348	.00412	.16355	.01123	-.01447	.00017	.00099	.00559	.23253
9.975	191.550	.20345	.71013	.01221	.19443	.00193	-.01392	-.00005	.00076	.00654	.23205
10.051	249.870	1.76610	.00812	.00355	.18321	-.00036	-.01380	-.00008	.00071	.00365	.23214
	GRADIENT	.00605	.12205	.00205	.02610	.00125	-.00155	.00003	.00011	.00156	.03227



## V41B-09A (1A22), ORBITER (4RC1) W/ET SEPARATING

(SVK010) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0530 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLOR = .000 RCS = 1.000  
 ZSWEEP = 2.000 GAS = 1.000

RUN NO. 2353/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CSL
-9.968	316.930	-4.97700	-.00091	.01438	.03445	.01059	.05057	-.00586	-.00076	.00235
-10.000	342.290	-4.98300	-.00101	.00346	.01273	.00653	.05141	-.00662	-.00072	.00169
-10.033	392.740	-4.99100	-.00079	.00149	-.01044	-.00002	.04730	-.00497	-.00103	.00093
-10.020	442.590	-5.00100	-.00065	.00355	-.01339	-.00091	.04876	-.00502	-.00108	.00093
-10.049	492.590	-5.00200	-.00094	.00121	-.01295	-.00035	.04048	-.00434	-.00103	.00033
-10.012	522.180	-4.99700	-.00101	-.00478	-.113018	-.00064	.03972	-.00559	-.00085	.00031
-9.932	660.910	-4.99000	-.00092	.01086	-.11532	.00814	.04164	-.00599	-.00081	.00039
-9.959	791.250	-4.99500	-.00069	.00782	-.117414	.00972	.04514	-.00641	-.00103	.00032
-10.000	991.420	-4.99040	-.00069	.00444	-.117422	.00973	.04519	-.00649	-.00102	.00033
	GRADIENT	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2357/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CSL
.021	6.953	-4.99120	-.00100	.01214	-.113071	.01817	.06795	-.00748	-.00061	.00071
-.009	41.695	-4.97532	-.00139	.00303	-.113358	.02373	.05233	-.00537	-.00020	.00047
-.015	91.925	-4.97160	-.00093	.00074	-.111531	.02638	.05628	-.00317	-.00073	.00059
-.022	142.230	-4.97449	-.00078	.00064	-.013370	.02254	.05548	-.00773	-.00074	.00064
-.035	192.420	-4.97975	-.00106	.00049	-.113042	.01824	.04935	-.00739	-.00055	-.00012
-.028	292.320	-4.99335	-.00094	.00049	-.113710	.01456	.04768	-.00562	-.00073	-.00006
.005	391.600	-4.99137	-.00065	.00537	-.113059	.00631	.04572	-.00359	-.00079	.00019
.042	491.050	-4.99000	-.00097	.00535	-.113971	.01044	.04485	-.00718	-.00076	.00024
.009	591.410	-4.99315	-.00072	.00324	-.113350	.01059	.04327	-.00630	-.00100	.00079
.004	791.390	-4.99303	-.00072	.00025	-.117453	.01074	.04855	-.00630	-.00099	.00079
-.072	933.650	-4.99312	-.00072	.00302	-.117443	.01055	.04851	-.00674	-.00099	.00079
	GRADIENT	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2369/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CSL
9.959	-133.820	-4.99030	-.00046	.00322	-.113539	.00339	.04228	-.00680	-.00133	.00004
10.027	-109.620	-4.99340	-.00051	.01070	-.113377	.00319	.05312	-.00610	-.00129	.00015
9.973	-59.463	-4.99570	-.00100	.01072	-.117754	.01455	.06301	-.00610	-.00369	.00006
9.948	7.191	-4.97950	-.00092	.01474	-.118893	.02003	.05558	-.00369	-.00074	.00085
9.954	92.304	-4.97740	-.00078	.00412	-.11791	.02235	.04996	-.00702	-.00078	.00104
9.975	191.550	-4.99550	-.00057	.01221	-.114247	.01305	.05097	-.00635	-.00100	.00081
10.061	249.870	-4.99750	-.00068	.00555	-.11792	.01071	.04812	-.00633	-.00103	.00075
	GRADIENT	-.63245	-.00013	.00205	-.01070	.00279	.00773	-.00051	-.00010	.00012

V41B-D9A (1A22), ORBITER (MRC1) W/ET SEPARATING

(TVK010) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 ZSHEEP = 2.000 GAS = 1.000

RUN NO. 2353/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-9.988	316.930	-.04019	.51849	*****	*****	439.30000	.00000	.00000	657.46000	.00000	.00000
-10.000	342.290	-.00283	.14923	*****	*****	439.04000	.00000	.00000	657.05000	.00000	.00000
-10.033	392.740	.15711	-.03995	*****	*****	438.34000	.00000	.00000	656.01000	.00000	.00000
-10.020	442.590	.07009	.29095	*****	*****	437.53000	.00000	.00000	654.80000	.00000	.00000
-10.049	492.590	.22228	-.04309	*****	*****	437.23000	.00000	.00000	654.35000	.00000	.00000
-10.012	592.180	.23056	-.29132	*****	*****	437.53000	.00000	.00000	655.43000	.00000	.00000
-9.932	690.910	.05791	.19505	*****	*****	439.06000	.00000	.00000	655.60000	.00000	.00000
-9.960	791.250	.01640	.34119	*****	*****	439.22000	.00000	.00000	655.84000	.00000	.00000
-10.000	991.420	.12338	.16762	*****	*****	438.70000	.00000	.00000	656.56000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2367/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
.021	6.963	.31777	.60005	*****	*****	437.65000	.00000	.00000	654.98000	.00000	.00000
-.008	41.695	.22939	.22262	*****	*****	437.93000	.00000	.00000	655.40000	.00000	.00000
-.015	91.925	.12318	-.07934	*****	*****	439.08000	.00000	.00000	655.62000	.00000	.00000
-.022	142.230	.03029	-.03902	*****	*****	439.59000	.00000	.00000	656.59000	.00000	.00000
-.035	192.420	.09346	-.23524	*****	*****	441.48000	.00000	.00000	656.68000	.00000	.00000
-.028	292.320	.15747	.01257	*****	*****	445.57000	.00000	.00000	656.84000	.00000	.00000
.005	391.800	.13447	.32979	*****	*****	449.63000	.00000	.00000	671.91000	.00000	.00000
.042	491.050	.14572	.21341	*****	*****	449.02000	.00000	.00000	671.79000	.00000	.00000
.009	591.410	.21237	.11034	*****	*****	448.81000	.00000	.00000	671.66000	.00000	.00000
.004	791.390	.18928	-.05023	*****	*****	447.75000	.00000	.00000	670.10000	.00000	.00000
-.072	933.660	-.46461	.10539	*****	*****	446.76000	.00000	.00000	668.62000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2369/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
9.998	-133.820	.17721	-.06290	*****	*****	444.98000	.00000	.00000	665.95000	.00000	.00000
10.027	-109.960	.35070	.56559	*****	*****	445.21000	.00000	.00000	656.30000	.00000	.00000
9.973	-58.468	.11340	.62818	*****	*****	445.60000	.00000	.00000	666.83000	.00000	.00000
9.948	7.191	.04351	.87754	*****	*****	445.41000	.00000	.00000	666.60000	.00000	.00000
9.954	92.304	.05476	.18348	*****	*****	445.37000	.00000	.00000	666.53000	.00000	.00000
9.975	191.550	.29545	.71013	*****	*****	445.93000	.00000	.00000	667.41000	.00000	.00000
10.061	249.870	1.73510	.00812	*****	*****	446.27000	.00000	.00000	667.89000	.00000	.00000
	GRADIENT	.00605	.12205	*****	*****	61.93205	.00000	.00000	92.69792	.00000	.00000

V41B-D9A (IA22), ORBITER ((4RC1)) W/ET SEPARATING

(UVK010) (2, APR 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 ZSWEEP = 2.000 GAS = 1.000

RUN NO. 2353/ 0 RN/L = .86 GFADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PSI	DLPBAL	TB1	TB2	DT	T
-9.538	316.930	974.15000	974.15000	88.00000	974.15000	973.09000	88.00000	75.00000	16.74500	99.76800
-10.000	342.250	974.05000	974.05000	89.00000	974.05000	973.09000	88.00000	75.00000	11.64500	99.76800
-10.033	392.740	973.95000	973.95000	88.00000	973.95000	973.09000	88.00000	75.00000	-2.13750	99.76800
-10.020	442.530	974.10000	974.10000	89.00000	974.10000	973.09000	88.00000	75.00000	-6.80040	99.76800
-10.049	492.590	973.92000	973.92000	88.00000	973.92000	973.09000	88.00000	75.00000	-12.21900	99.76800
-10.012	542.180	973.53000	973.53000	88.00000	973.53000	973.09000	88.00000	75.00000	-14.30400	99.76800
-3.932	620.910	973.34000	973.34000	88.00000	973.34000	973.09000	88.00000	75.00000	-14.28000	99.76800
-9.539	791.250	973.70000	973.70000	89.00000	973.70000	973.09000	88.00000	75.00000	-12.87900	99.76900
-10.000	991.420	973.31000	973.31000	89.00000	973.31000	973.09000	88.00000	75.00000	-12.35300	99.76900
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2367/ 0 RN/L = .85 GFADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PSI	DLPBAL	TB1	TB2	DT	T
.021	6.963	976.30000	976.30000	78.00000	976.30000	976.14939	64.00000	74.00000	-10.73600	99.76800
-.008	41.625	976.44000	976.44000	78.00000	976.44000	976.14939	64.00000	74.00000	-12.29100	99.76800
-.015	91.633	976.20000	976.20000	78.00000	976.20000	976.14939	64.00000	74.00000	-12.12000	99.76800
-.022	142.230	976.37000	976.37000	78.00000	976.37000	976.14939	64.00000	74.00000	-13.18300	99.76900
-.035	192.420	976.50000	976.50000	78.00000	976.50000	976.14939	64.00000	74.00000	-14.77400	99.76800
-.028	292.320	976.24000	976.24000	78.00000	976.24000	976.14939	64.00000	74.00000	-15.15300	99.76900
.005	391.600	976.22000	976.22000	78.00000	976.22000	976.14939	64.00000	74.00000	-15.55200	99.76800
.042	491.050	976.54000	976.54000	78.00000	976.54000	976.14939	64.00000	74.00000	-15.58300	99.76800
.039	591.410	976.30000	976.30000	78.00000	976.30000	976.14939	64.00000	74.00000	-15.29100	99.76900
.004	791.300	976.50000	976.50000	78.00000	976.50000	976.14939	64.00000	74.00000	-15.44400	99.76800
-.072	933.630	976.30000	976.30000	78.00000	976.30000	976.14939	64.00000	74.00000	-15.48200	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2359/ 0 RN/L = .85 GFADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PSI	DLPBAL	TB1	TB2	DT	T
9.998	-133.820	975.92000	975.92000	80.00000	975.92000	976.05000	66.00000	72.00000	-11.67200	99.76800
10.027	-109.650	975.94000	975.94000	80.00000	975.94000	976.05000	65.00000	72.00000	-12.34200	99.76800
9.973	-59.459	976.30000	976.30000	80.00000	976.30000	976.05000	66.00000	72.00000	-13.45400	99.76800
9.948	7.191	975.60000	975.60000	80.00000	975.60000	976.05000	66.00000	72.00000	-15.21900	99.76800
9.954	92.304	976.28000	976.28000	80.00000	976.28000	976.05000	65.00000	72.00000	-15.32200	99.76800
9.975	191.550	976.09000	976.09000	80.00000	976.09000	976.05000	65.00000	72.00000	-14.65900	99.76800
10.061	249.870	976.28000	976.28000	80.00000	976.28000	976.05000	66.00000	72.00000	-14.44600	99.76800
	GRADIENT	135.70603	135.70803	11.12466	135.70203	135.73028	9.17801	10.01239	-2.11637	13.67382

V418-D9A (IA22), ET SEPARATING FROM ORB (O4RC1)

(AVK010) ( 04 MAY 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 ZSKEEP = 2.000 GAS = 1.000

RUN NO. 2353/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-9.938	316.930	-.04019	.51649	-14.94300	.01347	-.35350	-.00127	.00914	-.00235	.00096	.12353
-10.000	342.290	-.00203	.14923	-14.90300	.00245	-.31336	-.00237	.00549	-.00044	.00078	.10860
-10.033	392.740	.15711	-.05303	-15.02400	.00023	-.20451	-.03002	.00335	.00007	.00067	.10229
-10.020	442.520	.07009	.30003	-15.02100	.00579	-.30042	-.01030	.00715	-.00032	.00072	.10639
-10.049	492.530	.22253	-.04309	-15.05100	.00027	-.31714	-.00209	.00799	-.00078	.00039	.11318
-10.012	522.190	.20003	-.23132	-15.00000	-.00378	-.33729	.01705	.00015	-.00149	.00056	.13292
-9.922	520.910	.03781	.10009	-14.90000	.00004	-.30004	.00432	.00047	-.00031	.00037	.14535
-9.939	791.250	.01540	.34119	-14.90000	.00714	-.28051	-.01735	.00460	.00018	.00037	.11349
-10.000	991.420	.12333	.16752	-14.90000	.00376	-.21422	-.03034	.00326	.00047	.00029	.10778
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2357/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
.021	6.953	.31777	.60005	-4.90000	.01114	-.00002	-.00274	.00020	.00033	.00035	.08639
-.009	41.603	.20079	.20002	-4.90000	.00335	-.11002	-.00233	-.00275	.00117	.00046	.08715
-.015	91.925	.12318	-.07834	-4.90000	-.00009	-.13141	-.00203	.00248	.00032	.00018	.08593
-.022	142.230	.02009	-.05302	-4.90000	.00017	-.12310	-.01377	.00354	.00041	.00020	.09029
-.035	192.420	.00045	-.23354	-5.01440	-.00053	-.13977	-.00482	.00230	.00045	.00025	.09366
-.028	292.320	.15747	.01237	-5.01200	-.00045	-.14451	.00378	.00250	.00049	.00025	.10107
.005	391.600	.13447	.32979	-4.90450	.00441	-.14377	.02111	.00439	-.00041	.00021	.11039
.042	491.050	.14672	.21341	-4.94700	.00003	-.11472	.01443	.00430	-.00092	.00037	.11660
.009	591.410	.21203	.11034	-4.97970	.00002	-.00043	-.01201	.00228	.00035	.00004	.08915
.004	791.300	.10023	-.00093	-4.90450	-.00046	-.00001	-.01483	.00220	.00047	-.00002	.09197
-.072	935.620	-.46431	.10039	-5.00070	.00230	-.00009	-.01502	.00225	.00049	-.00001	.09360
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2359/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
9.933	-133.220	.17721	-.00000	5.00110	.00276	.00374	.00373	.00301	-.00034	-.00002	.08518
10.027	-109.600	.30070	.50003	5.00000	.01020	.00375	.00330	.00129	.00029	.00005	.08325
9.973	-58.469	.11340	.62318	4.90700	.00972	.00776	.00324	.00116	.00065	.00019	.08643
9.948	7.191	.04351	.67754	4.90000	.01002	-.01340	.01801	.00303	.00022	.00005	.09071
9.954	92.304	.09476	.18348	4.97800	.00334	-.00067	.03365	.00303	-.00048	.00011	.09764
9.975	191.530	.20345	.71013	4.90000	.01154	-.00752	.04233	.00413	-.00128	.00007	.10166
10.061	249.870	1.70310	.00312	5.07350	.00487	.00003	.03713	.00328	-.00129	.00009	.10034
	GRADIENT	.00605	.12205	.63097	.00192	-.00189	.00223	.00042	.00003	.00001	.01261



V41B-D9A (1A22), ORBITER (ORC1) W/ET SEPARATING

(RVK011) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLOR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2713/ 0 RN/L = .87 GR.DIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-5.511	199.500	.13771	-.03772	.00330	.30959	.01486	-.00459	-.00060	.00120	-.00406	.22993
-5.513	249.200	.15560	.07241	-.00008	.26458	.00393	-.00461	-.00007	.00055	-.01004	.23002
-5.489	258.550	.08195	-.00539	.00354	.24621	-.00425	-.00432	.00000	.00049	-.01034	.22999
-5.468	399.440	.19177	-.00922	.00263	.21160	-.00974	-.00353	-.00014	.00047	-.01044	.23013
-5.473	483.620	.09739	.05034	.00330	.16010	-.00326	-.00423	-.00011	.00034	-.01320	.22984
-5.516	553.200	.07305	.06487	.00330	.14397	-.00075	-.00423	-.00011	.00046	-.01232	.22996
-5.538	700.010	.04205	.01808	-.00138	.13535	.00026	-.00434	-.00011	.00040	-.01162	.22993
-5.527	799.310	.21900	-.13625	-.00047	.13522	.00074	-.00439	-.00011	.00041	-.01164	.22990
-5.516	819.210	.20310	.13054	.00349	.13557	.00073	-.00424	-.00012	.00041	-.01181	.22987
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2370/ 0 RN/L = .85 GR.DIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-.002	11.605	.18465	.44930	.00308	.19187	.00934	-.01409	.00006	.00068	.02363	.23101
-.021	42.248	.21242	-.15281	-.00105	.20224	.01635	-.01374	.00042	.00111	.02120	.23049
.011	91.523	.09466	-.03574	.00325	.23459	.01739	-.01201	-.00018	.00137	.01412	.23071
.016	141.170	.17575	.30757	.00335	.24359	.01321	-.01438	-.00000	.00076	.01054	.23089
.020	190.970	.07053	-.01608	.00192	.21626	.00259	-.01332	-.00017	.00002	.00474	.23113
.039	290.730	.07245	.12444	.00309	.20436	.00413	-.01338	-.00001	.00026	.00359	.23077
.029	390.750	.16597	-.03528	.00300	.18712	-.00086	-.01359	-.00007	.00039	.00189	.23095
-.001	491.230	.17533	.15223	.00335	.16324	.00070	-.01359	-.00009	.00049	.00028	.23123
-.042	591.630	.21015	.05773	-.00005	.16422	.00093	-.01364	-.00026	.00033	.00350	.23089
-.000	791.300	.25472	1.01250	.01625	.16351	.00112	-.01352	-.00027	.00093	.00356	.23146
-.000	931.230	.22345	.44453	.00778	.15337	.00112	-.01363	-.00027	.00094	.00350	.23131
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2376/ 0 RN/L = .86 GR.DIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
4.953	-57.126	.30781	-.32554	-.00374	.15544	-.00049	-.01322	-.00016	.00007	.01125	.22947
4.935	7.767	.00001	-.23502	-.00293	.19477	.00091	-.01459	-.00019	.00090	.01886	.23020
5.000	41.388	.12034	-.12301	.00271	.20949	.01132	-.01325	-.00015	.00106	.01214	.23105
5.011	91.283	.15313	.31433	.00322	.20323	.01262	-.01439	-.00028	.00050	.00582	.23174
5.033	190.480	.24328	.24229	.00710	.16978	.00231	-.01425	-.00002	.00054	.00136	.23191
5.024	290.660	.24924	-.01221	.00235	.19425	.00152	-.01374	-.00030	.00053	.00248	.23200
4.992	391.240	.20354	.24341	.00511	.17031	.00035	-.01399	-.00026	.00043	-.00045	.23296
4.975	591.630	.20787	-.53359	-.00573	.16218	.00132	-.01405	-.00040	.00098	.00294	.23268
	GRADIENT	.00122	-.03026	-.00012	.02508	.00128	-.00188	-.00002	.00012	.00243	.02964

V41B-D9A (1A22), ORBITER (C+RC) W/ET SEPARATING

(SVK011) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2690/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-20.004	624.990	-4.99300	-.00095	-.00009	.17513	-.00205	.04594	.00732	-.00109	.00326
-19.959	629.520	-5.00160	-.00118	.00419	.12349	-.01605	.04570	.00721	-.00108	.00321
-19.935	728.250	-5.00300	-.00132	.00671	.06353	-.02006	.04126	.00556	-.00097	.00318
-20.045	929.410	-4.99400	-.00124	-.00101	-.14770	.00440	.02779	.00418	-.00075	.00063
	GRADIENT	.00000	.00000	.00000	.00300	.00000	.00000	.00000	.00000	.00000

RUN NO. 2694/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-15.008	474.540	-4.99400	-.00076	.00343	.14328	-.00026	.04776	.00516	-.00122	.00302
-15.031	499.610	-4.99200	-.00101	.00243	.11045	-.00632	.04841	.00538	-.00107	.00337
-14.920	548.640	-5.00200	-.00109	.00914	.07321	-.02034	.04693	.00535	-.00119	.00314
-14.975	593.920	-5.00200	-.00022	.00532	.01325	-.02055	.03979	.00771	-.00139	.00241
-14.947	623.320	-5.00700	-.00114	.00315	-.02223	-.01509	.03248	.00595	-.00113	.00054
-14.980	723.610	-5.00000	-.00128	.00513	-.10055	-.00539	.03500	.00493	-.00025	.00055
-15.010	923.320	-4.99300	-.00100	-.00071	-.12346	.01224	.03976	.00377	-.00028	.00065
	GRADIENT	.00000	.00000	.00000	.00300	.00000	.00000	.00000	.00000	.00000

RUN NO. 2705/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-10.008	324.440	-4.99000	-.00090	.00142	.05200	.00929	.03916	.00311	-.00095	.00224
-10.032	343.600	-4.99300	-.00097	.00307	.02101	.00537	.03344	.00359	-.00093	.00171
-10.001	359.090	-4.99000	-.00033	.00359	-.00327	-.00491	.03781	.00493	-.00122	.00161
-9.973	448.930	-5.00200	-.00090	-.00442	-.04242	-.01190	.03529	.00571	-.00126	.00107
-9.933	499.040	-5.00300	-.00094	.00359	-.02309	-.00225	.02912	.00523	-.00133	.00032
-9.966	523.640	-4.99340	-.00105	.00419	-.13365	.00009	.02932	.00433	-.00098	.00062
-10.010	623.160	-4.99000	-.00036	.00200	-.17760	.00297	.03163	.00322	-.00094	.00043
-10.023	809.230	-4.99000	-.00033	-.00331	-.15413	.01171	.03225	.00336	-.00099	.00048
-10.040	923.620	-4.99000	-.00027	.00511	-.15412	.01166	.03259	.00336	-.00100	.00048
	GRADIENT	.00000	.00000	.00000	.00300	.00000	.00000	.00000	.00000	.00000

V41B-D9A (IA22), ORBITER (C/R C1) W/ET SEPARATING

(SVK011) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 OBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2713/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	OBETA	CN	CLM	CA	CY	CYN	CBL
-5.511	199.500	-4.93920	-.00003	.00330	-.01369	.02568	.03936	.00271	-.00153	.00125
-5.513	249.200	-4.93000	-.00078	-.00008	-.03790	.01473	.03328	.00267	-.00100	.00060
-5.469	293.550	-4.92030	-.00093	.00334	-.03263	.00355	.03302	.00297	-.00092	.00053
-5.469	333.440	-4.91190	-.00092	.00263	-.11359	.00105	.03235	.00375	-.00106	.00052
-5.473	433.620	-4.90360	-.00093	.00330	-.16351	.00354	.03016	.00306	-.00104	.00038
-5.516	593.200	-4.92030	-.00092	.00260	-.16491	.01006	.03105	.00306	-.00104	.00050
-5.558	700.010	-4.93030	-.00081	-.00138	-.19307	.01145	.03169	.00294	-.00104	.00045
-5.527	799.310	-4.93930	-.00091	-.00047	-.19375	.01154	.03175	.00290	-.00104	.00045
-5.516	819.210	-4.93930	-.00080	.00349	-.19377	.01155	.03162	.00306	-.00105	.00046
	GRADIENT	.00000	.00000	.00000	.00300	.00000	.00000	.00000	.00000	.00000

RUN NO. 2370/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	OBETA	CN	CLM	CA	CY	CYN	CBL
-.002	11.605	-4.97871	-.00059	.00368	-.14368	.02067	.05788	-.00666	-.00088	.00072
-.021	42.248	-4.97230	-.00100	-.00106	-.13223	.02737	.05544	-.00630	-.00052	.00116
.011	91.523	-4.96978	-.00035	.00326	-.10360	.02840	.05833	-.00458	-.00113	.00142
.016	141.170	-4.97313	-.00036	.00335	-.09169	.02423	.05476	-.00595	-.00095	.00091
.020	190.870	-4.97645	-.00031	.00192	-.11293	.01971	.04895	-.00649	-.00078	.00007
.039	290.730	-4.97909	-.00034	.00308	-.13373	.01514	.04778	-.00595	-.00096	.00030
.029	330.750	-4.97035	-.00039	.00300	-.14303	.01015	.04609	-.00625	-.00102	.00044
-.001	491.230	-4.93778	-.00063	.00335	-.16372	.01171	.04446	-.00626	-.00103	.00053
-.042	591.630	-4.92738	-.00047	-.00005	-.17354	.01159	.04765	-.00622	-.00121	.00098
-.000	791.300	-4.93739	-.00047	.01625	-.17121	.01212	.04772	-.00610	-.00121	.00098
-.000	931.290	-4.93759	-.00046	.00778	-.17133	.01212	.04764	-.00622	-.00121	.00098
	GRADIENT	.00000	.00000	.00000	.00300	.00000	.00000	.00000	.00000	.00000

RUN NO. 2376/ 0 RN/L = .84 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	OBETA	CN	CLM	CA	CY	CYN	CBL
4.953	-57.126	-4.93030	-.00061	-.00374	-.18342	.01054	.05555	-.00578	-.00111	.00011
4.955	7.767	-4.97636	-.00040	-.00093	-.14137	.02095	.05320	-.00714	-.00114	.00094
5.000	41.393	-4.97663	-.00045	.00271	-.12733	.02239	.05356	-.00579	-.00110	.00110
5.011	91.283	-4.97539	-.00027	.00322	-.12776	.02336	.05013	-.00695	-.00123	.00054
5.033	190.460	-4.97639	-.00051	.00710	-.14139	.01959	.04544	-.00744	-.00096	.00058
5.024	290.660	-4.97291	-.00041	.00236	-.13329	.01248	.04647	-.00635	-.00124	.00058
4.922	331.240	-4.93793	-.00047	.00311	-.16327	.01132	.04335	-.00649	-.00120	.00047
4.975	591.630	-4.93745	-.00030	-.00573	-.17173	.01229	.04698	-.00656	-.00135	.00103
	GRADIENT	-.64099	-.00005	-.00012	-.01320	.00270	.00814	-.00092	-.00015	.00012





V418-D9A (IA22),ORBITER(C4RC1) W/ET SEPARATING

(TVK011) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2713/ 0 RN/L = .87 GFADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.511	199.500	.13771	-.03772	.01536	-.06492	435.65000	.00000	.00000	652.30000	.00000	.00000
-5.513	249.200	.15030	.07241	.01730	-.07293	434.81000	.00000	.00000	650.73000	.00000	.00000
-5.489	293.930	.09196	-.00638	-.01932	-.13450	435.27000	.00000	.00000	651.43000	.00000	.00000
-5.468	339.440	.09177	-.05932	.01739	-.03347	434.54000	.00000	.00000	650.32000	.00000	.00000
-5.473	493.620	.09739	.05934	.02335	-.00318	435.11000	.00000	.00000	651.19000	.00000	.00000
-5.516	599.200	.07005	.02487	.03324	-.00725	435.21000	.00000	.00000	651.33000	.00000	.00000
-5.559	700.010	.24205	.01809	.02329	-.00603	434.73000	.00000	.00000	650.61000	.00000	.00000
-5.527	799.310	.21900	-.13325	.02474	-.00107	435.44000	.00000	.00000	651.69000	.00000	.00000
-5.516	819.210	.20310	.13054	.02159	.00339	435.53000	.00000	.00000	652.44000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2370/ 0 RN/L = .85 GFADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-.002	11.605	.18465	.44990	*****		444.17000	.00000	.00000	654.74000	.00000	.00000
-.021	42.248	.21242	-.15261	*****		444.02000	.00000	.00000	654.57000	.00000	.00000
.011	91.523	.09405	-.06274	*****		443.81000	.00000	.00000	654.19000	.00000	.00000
.016	141.170	.17575	.30757	*****		443.75000	.00000	.00000	654.17000	.00000	.00000
.020	190.870	.07053	-.01900	*****		443.70000	.00000	.00000	654.03000	.00000	.00000
.039	293.730	.07246	.18144	*****		443.50000	.00000	.00000	653.93000	.00000	.00000
.029	393.730	.10037	-.02000	*****		443.50000	.00000	.00000	653.94000	.00000	.00000
-.001	491.230	.17035	.12123	*****		443.30000	.00000	.00000	653.57000	.00000	.00000
-.042	591.630	.01015	.03773	*****		443.13000	.00000	.00000	653.18000	.00000	.00000
-.000	791.300	.20472	1.01200	*****		443.20000	.00000	.00000	653.29000	.00000	.00000
-.000	931.230	.22345	.44453	*****		443.04000	.00000	.00000	653.05000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2375/ 0 RN/L = .84 GFADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
4.933	-57.126	.30781	-.22554	*****		444.57000	.00000	.00000	655.34000	.00000	.00000
4.956	7.767	.00031	-.28302	*****		444.93000	.00000	.00000	655.91000	.00000	.00000
5.000	41.382	.12334	-.12301	*****		445.64000	.00000	.00000	667.24000	.00000	.00000
5.011	91.283	.15513	.31439	*****		444.70000	.00000	.00000	665.62000	.00000	.00000
5.033	190.480	.24528	.24229	*****		442.30000	.00000	.00000	661.95000	.00000	.00000
5.024	290.660	.24024	-.01221	*****		441.50000	.00000	.00000	660.75000	.00000	.00000
4.982	391.240	.20394	.24341	*****		441.56000	.00000	.00000	660.83000	.00000	.00000
4.975	591.630	.20787	-.53339	*****		442.00000	.00000	.00000	661.49000	.00000	.00000
	GRADIENT	.00122	-.03026	*****		57.22724	.00000	.00000	65.73580	.00000	.00000



V418-D9A (1A22),ORBITER((4RC1) W/ET SEPARATING

(UW0011) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0690 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2713/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	FRC	FRC2	TGAS	FSI	DLPBAL	TB1	TB2	DT	T
-5.511	159.500	976.62000	976.62000	83.00000	976.62000	976.30000	72.00000	78.00000	19.47900	99.51600
-5.513	249.200	976.62000	976.62000	83.00000	976.62000	976.30000	72.00000	78.00000	17.57200	99.51600
-5.489	293.900	976.70000	976.70000	83.00000	976.70000	976.30000	72.00000	78.00000	15.46400	99.51600
-5.488	350.440	977.02000	977.02000	83.00000	977.02000	976.30000	72.00000	78.00000	15.63100	99.51600
-5.473	400.000	976.00000	976.00000	83.00000	976.00000	976.30000	72.00000	78.00000	12.23000	99.51600
-5.516	559.200	976.62000	976.62000	83.00000	976.62000	976.30000	72.00000	78.00000	8.60510	99.51600
-5.523	700.010	976.40000	976.40000	83.00000	976.40000	976.30000	72.00000	78.00000	6.07490	99.51600
-5.527	739.310	976.00000	976.00000	83.00000	976.00000	976.30000	72.00000	78.00000	3.70470	99.51600
-5.516	819.210	976.62000	976.62000	83.00000	976.62000	976.30000	72.00000	78.00000	2.19000	99.51600
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2370/ 0 RN/L = .65 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	FRC	FRC2	TGAS	FSI	DLPBAL	TB1	TB2	DT	T
-0.002	11.600	976.11000	976.11000	81.00000	976.11000	976.00000	69.00000	72.00000	-8.03140	99.76900
-0.021	42.013	976.00000	976.00000	81.00000	976.00000	976.00000	69.00000	72.00000	-7.70340	99.76900
.011	91.553	976.00000	976.00000	81.00000	976.00000	976.00000	69.00000	72.00000	-6.72310	99.76900
.016	141.170	976.70000	976.70000	81.00000	976.70000	976.00000	69.00000	72.00000	-6.92000	99.76900
.020	190.670	976.00000	976.00000	81.00000	976.00000	976.00000	69.00000	72.00000	-7.67750	99.76900
.039	230.730	976.00000	976.00000	81.00000	976.00000	976.00000	69.00000	72.00000	-8.60450	99.76900
.059	270.730	976.40000	976.40000	81.00000	976.40000	976.00000	69.00000	72.00000	-9.41150	99.76900
-0.001	401.870	976.00000	976.00000	81.00000	976.00000	976.00000	69.00000	72.00000	-9.60050	99.76900
-0.042	531.800	976.00000	976.00000	81.00000	976.00000	976.00000	69.00000	72.00000	-9.60050	99.76900
-0.000	701.000	976.40000	976.40000	81.00000	976.40000	976.00000	69.00000	72.00000	-10.15000	99.76900
-0.000	931.800	976.00000	976.00000	81.00000	976.00000	976.00000	69.00000	72.00000	-10.70300	99.76900
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2376/ 0 RN/L = .84 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	FRC	FRC2	TGAS	FSI	DLPBAL	TB1	TB2	DT	T
4.900	-57.125	903.54000	903.00000	84.00000	903.00000	903.42000	69.00000	75.00000	-12.39200	99.76900
4.925	7.737	903.40000	903.40000	84.00000	903.40000	903.42000	69.00000	75.00000	-12.40500	99.76900
5.000	41.300	979.91000	979.00000	84.00000	979.00000	903.42000	69.00000	75.00000	-12.64500	99.76900
5.011	91.623	972.40000	972.40000	84.00000	972.40000	903.42000	69.00000	75.00000	-13.91700	99.76900
5.033	190.460	974.00000	974.00000	84.00000	974.00000	903.42000	69.00000	75.00000	-14.00000	99.76900
5.024	290.660	976.00000	976.00000	84.00000	976.00000	903.42000	69.00000	75.00000	-14.63300	99.76900
4.992	391.240	977.21000	977.21000	84.00000	977.21000	903.42000	69.00000	75.00000	-14.62300	99.76900
4.975	591.630	978.67000	978.67000	84.00000	978.67000	903.42000	69.00000	75.00000	-14.27900	99.76900
	GRADIENT	124.81782	124.81782	10.81499	124.8782	124.68332	8.75459	9.65524	-1.60744	12.84511



V418-D8A (1A22) ET SEPARATING FROM ORB (04RC1)

(AVK011) (04 MAY 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DSETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UNBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2713/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-5.511	199.500	.13771	-.03772	-10.47900	.00327	-.21874	-.01437	.01381	-.00091	.00020	.10783
-5.513	249.200	.15000	-.07241	-10.49300	-.00033	-.21530	-.02611	.00901	.00059	.00010	.09319
-5.469	299.950	.09196	-.00338	-10.47700	.00257	-.21826	-.01941	.00997	.00043	.00012	.09969
-5.468	399.440	.19177	-.00222	-10.46300	.00172	-.23182	-.00086	.01166	-.00035	.00012	.11151
-5.473	499.620	.08739	.05054	-10.46700	.00242	-.21376	.01783	.01210	-.00101	.00004	.12620
-5.516	599.200	.07205	.06467	-10.50300	.00199	-.21639	.01212	.01166	-.00124	.00031	.12677
-5.539	700.010	.24205	.01808	-10.55300	-.00219	-.19460	-.02271	.00768	.00052	-.00013	.09914
-5.527	799.310	.21930	-.13325	-10.51600	-.00129	-.13227	-.03150	.00759	.00130	-.00017	.09834
-5.516	819.210	.23010	.13054	-10.50500	.00239	-.13733	-.03129	.00769	.00133	-.00017	.10021
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2370/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
.002	11.605	.18455	.44990	-4.90040	.00939	-.19128	-.02804	-.00043	.00041	.00036	.08696
-.021	42.249	.21242	-.15231	-4.97000	-.00905	-.13272	-.00239	-.00182	.00127	.00045	.08717
.011	91.523	.03123	-.03074	-4.90330	.00301	-.13409	-.02032	.00392	.00047	.00017	.08506
.015	141.170	.17575	.30757	-4.95700	.00579	-.13754	-.01355	.00338	.00024	.00019	.09070
.020	190.870	.07053	-.01308	-4.93330	.00111	-.13978	-.00459	.00235	.00051	.00023	.09480
.039	290.730	.07246	.12444	-4.94550	.00239	-.13358	.01042	.00281	.00034	.00024	.10225
.029	390.750	.16597	-.03528	-4.93970	.00231	-.14313	.02132	.00429	-.00048	.00023	.11089
-.001	491.230	.17535	.15226	-4.90000	.00470	-.14499	.01376	.00457	-.00039	.00038	.10879
-.042	591.630	.21015	.05773	-5.02970	-.00032	-.03365	-.01222	.00257	.00037	.00004	.08658
-.000	791.300	.23472	1.01250	-4.92720	.01579	-.03225	-.01494	.00228	.00049	-.00002	.09139
-.000	931.200	.22345	.44423	-4.90000	.00722	-.03333	-.01502	.00246	.00055	-.00001	.09359
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2376/ 0 RN/L = .84 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
4.958	-57.126	.30721	-.32554	-.03190	-.00433	-.01487	-.00974	.00142	.00048	.00007	.08528
4.956	7.787	.00031	-.23502	-.02307	-.00133	-.03026	-.01102	.00224	.00073	.00020	.08617
5.000	41.323	.12234	-.12501	.02307	.00226	-.03087	-.00512	.00515	-.00025	.00009	.08768
5.011	91.283	.15313	.31439	.03322	.00495	-.03029	.00346	.00346	.00041	.00014	.09277
5.033	120.400	.24223	.24229	.03371	.00349	-.03540	.02160	.00230	-.00002	.00018	.09354
5.024	290.650	.24924	-.01221	.03759	.00193	-.03054	.03016	.00366	-.00027	.00014	.10506
4.992	391.240	.20394	.24341	.00447	.00654	-.03932	.01910	.00359	-.00035	.00008	.10030
4.975	591.630	.20787	-.53359	-.01225	-.00503	-.03578	.00126	.00236	.00024	-.00002	.08976
GRADIENT		.00122	-.03026	-.00297	-.00017	-.03758	-.00142	.00029	.00009	.00003	.01109



V41B-D9A (IA22), ORBITER (04RC1) 4/ET SEPARATING

(RVK012) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2714/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DSETA	CNR	CL 1R	CYR	CYNR	CBLR	CAR	WM
-5.517	199.920	200.13000	.39438	.00331	.29205	.02279	-.00396	-.00023	.00144	-.01400	.22995
-5.514	249.850	200.13000	-.20286	.00022	.26935	-.01152	-.00452	.00005	.00075	-.01080	.22953
-5.554	300.350	200.15000	-.57243	-.00732	.23976	-.01237	-.00388	-.00013	.00047	-.00909	.22989
-5.552	400.320	200.27000	.49908	.00759	.18442	-.01758	-.00410	-.00009	.00037	-.01190	.22956
-5.543	500.220	200.24000	-.51477	-.00433	.15222	-.01291	-.00421	-.00009	.00033	-.01303	.23000
-5.503	599.590	200.23000	-.16486	-.00095	.13941	.01016	-.00445	-.00011	.00044	-.01203	.22984
-5.459	699.720	200.11000	-.03100	.00523	.13509	.01074	-.00429	-.00013	.00042	-.01177	.22924
-5.507	799.250	200.25000	.12012	.00341	.13546	.01073	-.00438	-.00011	.00041	-.01179	.23014
-5.513	819.220	200.10000	-.13230	.00167	.13537	.01076	-.00440	-.00011	.00041	-.01176	.22972
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2371/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DSETA	CNR	CL 1R	CYR	CYNR	CBLR	CAR	WM
-.005	11.694	200.12000	-.02647	-.00029	.23510	.01703	-.01129	-.00012	.00112	.01503	.23229
-.032	42.491	200.17000	.35918	.00973	.24403	.01374	-.01374	-.00001	.00093	.01018	.23202
-.016	92.395	200.15000	-.46243	-.00165	.25623	.01055	-.01354	-.00003	.00098	.00626	.23187
-.029	142.130	200.20000	.80003	.01618	.23572	.01013	-.01417	.00000	.00072	.00518	.23241
-.042	192.510	200.19000	.68400	.01442	.22205	.01335	-.01408	.00012	.00025	.00352	.23245
-.039	232.340	200.18000	-.50047	-.00003	.20812	.01111	-.01359	-.00014	.00040	.00293	.23227
-.023	322.000	200.17000	.73329	.01183	.17733	-.01092	-.01338	-.00008	.00039	.00027	.23206
.012	491.630	200.24000	-.06535	.00228	.16303	.01011	-.01370	-.00019	.00091	.00195	.23159
.040	591.040	200.23000	.60000	.01234	.16323	.01109	-.01343	-.00027	.00094	.00732	.23183
.001	791.310	200.24000	.27530	.00704	.16278	.01113	-.01352	-.00027	.00094	.00335	.23162
-.000	931.740	200.19000	.13535	.00494	.16323	.01110	-.01344	-.00027	.00093	.00343	.23202
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2377/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DSETA	CNR	CL 1R	CYR	CYNR	CBLR	CAR	WM
5.025	-59.682	200.30000	.49825	.01001	.17637	.01629	-.01371	-.00045	.00036	.01958	.23093
4.979	6.929	200.29000	1.53640	.02547	.21613	.01216	-.01429	.00009	.00071	.01180	.23151
4.955	42.203	200.04000	-.04935	.00250	.22222	.01780	-.01375	-.00036	.00089	.01025	.23139
4.951	92.622	200.07000	-.02059	.00242	.20827	.01129	-.01439	-.00005	.00043	.00393	.23190
4.951	192.110	200.19000	-.30185	-.00277	.20334	.01427	-.01410	-.00016	.00071	.00461	.23207
4.954	292.100	200.19000	-.17336	-.00114	.18037	-.01002	-.01332	-.00029	.00044	.00111	.23207
5.028	391.150	200.28000	.03916	.00310	.16550	.01067	-.01413	-.00024	.00053	-.00080	.23200
4.991	591.390	200.22000	.08155	.00442	.16262	.01131	-.01415	-.00041	.00099	.00267	.23252
	GRADIENT	28.89139	.22634	.00358	.03119	.01320	-.00206	.00001	.00010	.00170	.03341





V41B-D9A (IA22),ORBITER(O4RC1) W/ET SEPARATING

(SVK012) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2590.0000 SQ.FT. XMRP = 1059.5000 IN. XO  
 LREF = 1200.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0123

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 URFLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2714/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.517	150.020	-4.99900	-.00022	.00031	-.00073	.01373	.03057	.00333	-.00116	.00149
-5.514	240.000	-4.99900	-.00020	.00022	-.00062	.02000	.02022	.00277	-.00068	.00079
-5.534	300.000	-4.99900	-.00020	-.00072	-.00063	.00000	.00000	.00341	-.00105	.00051
-5.532	400.000	-4.99900	-.00020	.00000	-.14400	.00000	.00154	.00020	-.00102	.00042
-5.543	500.020	-4.99900	-.00023	-.00433	-.17004	.00000	.00000	.00308	-.00102	.00039
-5.503	550.500	-4.99910	-.00031	-.00025	-.19067	.01097	.05137	.00254	-.00104	.00048
-5.459	620.720	-4.99910	-.00079	.00023	-.13303	.01155	.03161	.00300	-.00106	.00046
-5.507	700.000	-4.99910	-.00031	.00041	-.15005	.01155	.03162	.00291	-.00103	.00046
-5.513	810.000	-4.99910	-.00031	.00157	-.13031	.01157	.03153	.00239	-.00104	.00045
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2371/ 0 RN/L = .55 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.008	11.694	-4.99900	-.00031	-.00029	-.00007	.00002	.05911	-.00389	-.00106	.00116
-.032	42.491	-4.99912	-.00034	.00073	-.00003	.04073	.05427	-.00633	-.00095	.00088
-.016	92.355	-4.99913	-.00034	-.00103	-.07742	.03155	.05276	-.00513	-.00058	.00103
-.029	149.130	-4.99914	-.00031	.01016	-.02004	.02111	.04237	-.00576	-.00054	.00076
-.042	192.610	-4.99914	-.00033	.01402	-.11091	.01003	.04773	-.00057	-.00082	.00029
-.029	232.340	-4.99914	-.00030	-.00103	-.12002	.01010	.04785	-.00503	-.00108	.00044
-.023	332.000	-4.99910	-.00030	.01102	-.15719	.01007	.04439	-.00327	-.00103	.00043
.012	431.630	-4.99910	-.00035	.00000	-.16451	.01110	.04006	-.00329	-.00113	.00035
.040	591.040	-4.99910	-.00046	.01234	-.17118	.01208	.04743	-.00202	-.00122	.00059
.001	791.310	-4.99937	-.00046	.00704	-.17177	.01212	.04748	-.00321	-.00122	.00029
-.000	931.340	-4.99925	-.00046	.00164	-.17127	.01209	.04754	-.00603	-.00121	.00058
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2377/ 0 RN/L = .26 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
5.025	-59.622	-4.99930	-.00019	.01001	-.15509	.01721	.06343	-.00634	-.00139	.00041
4.979	6.929	-4.99900	-.00054	.02547	-.11654	.03310	.05569	-.00691	-.00085	.00075
4.955	42.203	-4.99918	-.00032	.00000	-.10647	.02373	.05413	-.00538	-.00130	.00094
4.951	92.002	-4.99921	-.00034	.00242	-.12344	.02224	.04769	-.00700	-.00099	.00048
4.961	192.330	-4.99903	-.00022	-.00277	-.13023	.01523	.04051	-.00571	-.00110	.00075
4.904	232.100	-4.99913	-.00044	-.00114	-.14753	.01094	.04509	-.00543	-.00123	.00049
5.029	391.150	-4.99909	-.00049	.00310	-.15329	.01154	.04323	-.00574	-.00118	.00057
4.991	591.350	-4.99941	-.00030	.00442	-.17142	.01229	.04673	-.00574	-.00135	.00103
	GRADIENT	-.71325	-.00008	.00359	-.01683	.00478	.00804	-.00100	-.00012	.00011



V41B-D9A (1A22),ORBITER(O4RC1) H/ET SEPARATING

(TVK012) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 WELDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2714/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHFD	CNFD	C'FD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.517	159.920	200.13000	.35428	.01737	-.01230	435.16000	.00000	.00000	651.43000	.00000	.00000
-5.514	249.850	200.13000	-.22365	.00265	-.05320	435.14000	.00000	.00000	652.12000	.00000	.00000
-5.554	300.300	200.15000	-.57243	-.01250	-.08375	435.10000	.00000	.00000	651.17000	.00000	.00000
-5.552	400.320	200.27000	.40308	-.00355	.00625	435.16000	.00000	.00000	652.53000	.00000	.00000
-5.543	500.250	200.24000	-.31477	.01090	.03405	435.11000	.00000	.00000	652.07000	.00000	.00000
-5.503	503.500	200.23000	-.18406	.01217	.01019	435.11000	.00000	.00000	651.93000	.00000	.00000
-5.459	603.720	200.11000	-.03100	.01355	.01455	435.11000	.00000	.00000	651.83000	.00000	.00000
-5.507	799.250	200.23000	.12012	.01520	.01221	435.13000	.00000	.00000	651.83000	.00000	.00000
-5.513	819.200	200.10000	-.13030	.01675	.01025	435.17000	.00000	.00000	651.71000	.00000	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2371/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHFD	CNFD	C'FD	CTFS	CTFU	CTAD	CTAS	CTAU
-.006	11.894	200.12000	-.05547	.....	.....	442.10000	.00000	.00000	652.18000	.00000	.00000
-.032	42.491	200.17000	-.30218	.....	.....	442.13000	.00000	.00000	652.20000	.00000	.00000
-.016	92.353	200.15000	-.40043	.....	.....	442.10000	.00000	.00000	652.47000	.00000	.00000
-.029	142.130	200.20000	-.60000	.....	.....	442.10000	.00000	.00000	652.10000	.00000	.00000
-.042	192.510	200.15000	-.65000	.....	.....	442.13000	.00000	.00000	652.50000	.00000	.00000
-.039	292.340	200.12000	-.50217	.....	.....	442.14000	.00000	.00000	652.75000	.00000	.00000
-.023	392.000	200.17000	-.75000	.....	.....	442.10000	.00000	.00000	652.00000	.00000	.00000
.012	491.000	200.23000	-.00000	.....	.....	442.10000	.00000	.00000	652.00000	.00000	.00000
.040	591.040	200.20000	.00000	.....	.....	442.10000	.00000	.00000	652.57000	.00000	.00000
.001	791.310	200.20000	.27000	.....	.....	442.14000	.00000	.00000	652.74000	.00000	.00000
-.000	931.340	200.15000	.13535	.....	.....	442.10000	.00000	.00000	652.60000	.00000	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2377/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHFD	CNFD	C'FD	CTFS	CTFU	CTAD	CTAS	CTAU
5.025	-59.602	200.30000	.45225	.....	.....	440.10000	.00000	.00000	653.63000	.00000	.00000
4.979	6.929	200.20000	1.50040	.....	.....	440.10000	.00000	.00000	659.23000	.00000	.00000
4.955	42.203	200.04000	-.04003	.....	.....	440.10000	.00000	.00000	659.00000	.00000	.00000
4.951	92.622	200.07000	-.02053	.....	.....	441.20000	.00000	.00000	650.30000	.00000	.00000
4.951	192.330	200.16000	-.30123	.....	.....	441.50000	.00000	.00000	650.83000	.00000	.00000
4.924	292.100	200.15000	-.17323	.....	.....	441.51000	.00000	.00000	650.75000	.00000	.00000
5.028	391.150	200.20000	.02916	.....	.....	441.54000	.00000	.00000	651.25000	.00000	.00000
4.991	591.520	200.22000	.00155	.....	.....	442.10000	.00000	.00000	651.75000	.00000	.00000
GRADIENT	26.69139		.22534	.....	.....	63.10027	.00000	.00000	95.13522	.00000	.00000

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR



V418-D9A (1A22), ORBITER (04RC1) W/ET SEPARATING

(UVK012) ( 20 APR 77 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2714/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-5.517	199.920	976.77000	976.77000	88.00000	976.77000	973.50000	72.00000	78.00000	6.15660	99.51600
-5.514	249.850	976.84000	976.84000	88.00000	976.84000	973.50000	72.00000	78.00000	5.42040	99.51600
-5.554	300.350	976.83000	976.83000	88.00000	976.83000	973.50000	72.00000	78.00000	1.54730	99.51600
-5.552	400.320	976.57000	976.57000	88.00000	976.57000	973.50000	72.00000	78.00000	-4.16520	99.51600
-5.543	500.220	976.77000	976.77000	88.00000	976.77000	973.50000	72.00000	78.00000	-4.36690	99.51600
-5.503	599.580	976.55000	976.55000	88.00000	976.55000	973.50000	72.00000	78.00000	-3.93930	99.51600
-5.459	699.720	976.53000	976.53000	88.00000	976.53000	973.50000	72.00000	78.00000	-3.07520	99.51600
-5.507	799.250	976.65000	976.65000	88.00000	976.65000	973.50000	72.00000	78.00000	-2.02580	99.51600
-5.513	819.280	976.71000	976.71000	88.00000	976.71000	973.50000	72.00000	78.00000	-1.04850	99.51600
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2371/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-.006	11.694	977.73000	977.73000	82.00000	977.73000	973.75999	67.00000	72.00000	-7.54010	99.76900
-.032	42.491	977.41000	977.41000	82.00000	977.41000	973.75999	67.00000	72.00000	-8.21890	99.76900
-.016	92.396	977.63000	977.63000	82.00000	977.63000	973.75999	67.00000	72.00000	-8.83950	99.76900
-.029	142.130	977.24000	977.24000	82.00000	977.24000	973.75999	67.00000	72.00000	-9.59180	99.76900
-.042	192.510	977.33000	977.33000	82.00000	977.33000	973.75999	67.00000	72.00000	-11.89500	99.76900
-.039	292.340	977.11000	977.11000	82.00000	977.11000	973.75999	67.00000	72.00000	-12.77600	99.76900
-.023	392.090	977.00000	977.00000	82.00000	977.00000	973.75999	67.00000	72.00000	-13.22600	99.76900
.012	491.630	976.44000	976.44000	82.00000	976.44000	973.75999	67.00000	72.00000	-12.93700	99.76900
.040	591.040	976.33000	976.33000	82.00000	976.33000	973.75999	67.00000	72.00000	-12.41300	99.76900
.001	791.310	976.12000	976.12000	82.00000	976.12000	973.75999	67.00000	72.00000	-12.05700	99.76900
-.000	931.340	975.93000	975.93000	82.00000	975.93000	973.75999	67.00000	72.00000	-11.64800	99.76900
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2377/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
5.025	-59.682	978.32000	978.32000	84.00000	978.32000	973.82000	68.00000	75.00000	-13.44200	99.76900
4.979	6.929	978.74000	978.74000	84.00000	978.74000	973.82000	68.00000	75.00000	-14.02100	99.76900
4.955	42.203	979.00000	979.00000	84.00000	979.00000	973.82000	68.00000	75.00000	-14.24400	99.76900
4.951	92.622	979.35000	979.35000	84.00000	979.35000	973.82000	68.00000	75.00000	-14.64500	99.76900
4.951	192.330	979.63000	979.63000	84.00000	979.63000	973.82000	68.00000	75.00000	-14.81100	99.76900
4.934	292.100	979.55000	979.55000	84.00000	979.55000	973.82000	68.00000	75.00000	-14.35900	99.76900
5.028	391.150	979.73000	979.73000	84.00000	979.73000	973.82000	68.00000	75.00000	-14.35200	99.76900
4.991	591.390	980.05000	980.05000	84.00000	980.05000	973.82000	68.00000	75.00000	-13.93200	99.76900
GRADIENT		141.24455	141.24455	12.12226	141.24455	141.40041	9.81326	10.82345	-2.02341	14.39778

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1329.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UNBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2691/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-20.015	625.400	200.05000	-.06549	-25.02900	-.00275	-.54161	-.03822	.02127	.00090	.00124	.11402
-20.058	700.680	200.42000	-.15084	-25.08300	-.00399	-.53195	-.03771	.02335	-.00066	.00117	.12091
-20.015	799.660	200.06000	.06928	-25.02700	.00321	-.57161	-.00479	.02488	-.00261	.00113	.13998
-19.939	999.890	199.80000	-.15483	-24.93100	.00575	-.61122	.05015	.02519	-.00499	.00133	.19037
	GRADIENT	.00000	.00000	.00000	.00000	.00100	.00000	.00000	.00000	.00000	.00000

RUN NO. 2702/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-14.981	474.400	200.01000	-.14237	-19.99200	-.00104	-.43009	-.02911	.01693	.00166	.00119	.12343
-15.020	499.940	200.11000	-.02771	-20.02400	-.00112	-.40139	-.04814	.01581	.00178	.00076	.10651
-15.035	550.090	200.23000	-.24948	-20.04300	-.00270	-.4001	-.04699	.01782	.00061	.00080	.11035
-15.059	600.280	200.45000	-.27207	-20.06500	-.00427	-.41127	-.03449	.01891	-.00008	.00082	.11503
-15.069	700.720	200.36000	-.11535	-20.06400	-.00172	-.44183	-.00333	.01907	-.00132	.00051	.13167
-14.950	799.250	200.10000	.14225	-19.94200	.00718	-.47195	.02239	.01650	-.00237	.00057	.15884
-15.009	999.300	200.07000	.13899	-19.99300	.00231	-.37165	-.01502	.01257	-.00035	.00021	.12968
	GRADIENT	.00000	.00000	.00000	.00000	.00100	.00000	.00000	.00000	.00000	.00000

RUN NO. 2706/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-9.983	324.460	200.12000	.43660	-14.98100	.01118	-.35189	-.01001	.01895	-.00190	.00095	.12961
-9.998	349.540	200.18000	.29352	-14.92300	.00700	-.31101	-.03073	.01378	.00056	.00061	.11465
-10.039	399.960	200.23000	.53346	-15.03900	.00333	-.28134	-.04657	.01117	.00167	.00040	.10089
-10.037	449.900	200.28000	.06570	-15.03700	.00053	-.28199	-.03715	.01205	.00106	.00045	.10398
-10.057	500.360	200.36000	.09123	-15.05300	.00133	-.30134	-.02568	.01399	.00031	.00046	.10979
-10.058	600.490	200.41000	-.01590	-15.04900	-.00019	-.32197	-.00103	.01399	-.00049	.00030	.12139
-10.030	699.780	200.21000	.04825	-15.02000	.00051	-.34102	.02215	.01430	-.00141	.00025	.14166
-9.927	799.490	200.08000	.22174	-14.91600	.00876	-.31130	.01337	.01375	-.00174	.00045	.14327
-10.013	999.370	200.17000	-.32839	-15.00200	-.00355	-.21164	-.04019	.00947	.00109	.00001	.10688
	GRADIENT	.00000	.00000	.00000	.00000	.00100	.00000	.00000	.00000	.00000	.00000

V41B-D9A (1A22).ET SEPARATING FROM ORB (04RC1)

(AVK012) (04 MAY 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2714/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEL	CA
-5.517	159.920	200.13000	.39438	-10.49700	.00569	-.23 58	-.03043	.00539	.00174	.00018	.10591
-5.514	249.850	200.13000	-.28266	-10.49300	-.00076	-.22 41	-.03270	.01226	.00068	.00020	.10118
-5.554	300.360	200.15000	-.57243	-10.54500	-.00819	-.20 03	-.03589	.00775	.00148	.00015	.09586
-5.552	400.320	200.27000	.45823	-10.54700	.00664	-.22 47	-.01890	.01023	.00048	.00018	.10325
-5.543	500.220	200.24000	-.31477	-10.53400	-.00520	-.23 97	.00097	.01155	-.00036	.00012	.11267
-5.503	599.680	200.20000	-.16486	-10.49200	-.00176	-.24 77	.01753	.01165	-.00111	.00003	.12697
-5.459	698.720	200.11000	-.03100	-10.44800	.00444	-.20 59	.00712	.01080	-.00108	.00022	.12534
-5.507	799.250	200.25000	.12012	-10.49300	.00260	-.14 82	-.02611	.00757	.00109	-.00012	.09747
-5.513	819.280	200.10000	-.13650	-10.50300	.00087	-.14 24	-.03019	.00712	.00108	-.00015	.09727
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2371/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEL	CA
-.006	11.694	200.12000	-.02647	-4.95380	-.00060	-.14 73	-.04409	.00065	-.00002	.00040	.09325
-.032	42.491	200.17000	.35919	-4.95990	.00939	-.15 13	-.03890	.01066	-.00179	.00033	.09545
-.016	92.299	200.15000	-.45843	-4.98120	-.00228	-.14 07	-.02686	.00708	-.00011	.00014	.09527
-.029	142.130	200.20000	.89329	-5.00460	.01557	-.13 23	-.02802	.00132	.00140	.00025	.08383
-.042	192.510	200.19000	.83400	-5.02400	.01360	-.13 69	-.02229	.00220	.00133	.00028	.08958
-.038	292.340	200.12000	-.59947	-5.02340	-.00743	-.13 65	-.00549	.00255	.00063	.00022	.09524
-.023	392.090	200.17000	.75339	-5.01160	.01100	-.14 01	.00749	.00315	.00020	.00016	.10336
.012	491.630	200.24000	-.05333	-4.97570	-.00028	-.13 05	.02012	.00333	-.00033	.00019	.11004
.040	591.040	200.20000	.60200	-4.94760	.01189	-.10 10	.00929	.00429	-.00061	.00028	.10718
.001	791.310	200.24000	.27750	-4.92330	.00859	-.08 40	-.01515	.00244	.00053	-.00002	.09169
-.000	931.340	200.15000	.13535	-4.99300	.00439	-.05 25	-.01519	.00256	.00052	-.00001	.09258
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2377/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEL	CA
5.025	-59.682	200.30000	.49925	.04270	.00392	-.03 05	-.31818	-.00295	-.00008	.00015	.08846
4.979	6.929	200.20000	1.56840	.01330	.02493	-.07 41	-.02083	.00214	.00031	.00010	.08911
4.955	42.203	200.04000	-.04995	-.00448	.00238	-.07 30	-.01555	.00411	.00032	.00011	.09019
4.951	92.622	200.07000	-.02059	-.02491	.00188	-.06 97	-.00936	.00333	.00059	.00016	.08993
4.961	192.330	200.16000	-.30166	-.02213	-.00329	-.07 01	.00627	.00340	.00052	.00014	.09366
4.964	292.100	200.16000	-.17336	-.00378	-.00159	-.07 66	.01568	.00250	.00034	.00007	.09992
5.028	391.150	200.25000	.06916	.04051	.00261	-.06 58	.02816	.00382	-.00015	.00012	.10485
4.991	591.390	200.22000	.08155	.00379	.00413	-.06 12	.00119	.00390	-.00001	-.00003	.08821
GRADIENT	28.89139	.00000	.22634	.00192	.00360	-.01 45	-.00301	.00031	.00004	.00001	.01286





V418-D9A (1A22), ORBITER(04RC1) W/ET SEPARATING

(RVK013) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XQ  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UNBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2715/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CSLR	CAR	MM
-5.542	200.500	400.15000	.35870	.01077	.28530	.00574	-.00461	.00013	.00039	-.01152	.22948
-5.490	248.890	400.11000	.47591	.00495	.28076	-.00370	-.00354	-.00021	.00066	-.00901	.23002
-5.517	299.190	400.06000	.04891	.00012	.25273	-.01239	-.00352	-.00019	.00062	-.00717	.22975
-5.494	398.780	400.09000	.08339	.00446	.16895	-.00630	-.00436	-.00010	.00036	-.01312	.22993
-5.470	498.610	400.09000	.25615	.00692	.14726	-.00114	-.00421	-.00010	.00041	-.01280	.23001
-5.470	598.510	400.07000	.00344	.00271	.13548	.00071	-.00422	-.00011	.00042	-.01181	.22975
-5.479	698.730	400.13000	.24022	.00615	.13513	.00073	-.00419	-.00012	.00040	-.01163	.22995
-5.531	799.280	400.14000	.06199	.00155	.13565	.00039	-.00423	-.00012	.00042	-.01185	.22976
-5.520	819.370	400.24000	.11797	.00294	.13564	.00072	-.00419	-.00012	.00042	-.01178	.23011
GRADIENT		.00000	.00000	.00000	.00000	.00010	.00000	.00000	.00000	.00000	.00000

RUN NO. 2372/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CSLR	CAR	MM
.002	23.622	400.19000	-.24403	-.00063	.27120	.03116	-.01242	-.00035	.00082	.00793	.23070
.020	41.133	400.15000	.06078	-.00070	.26268	.02731	-.01363	-.00015	.00106	.00449	.23033
.045	90.546	400.21000	-.22284	.00317	.24949	.01618	-.01451	.00003	.00088	.00032	.23067
.021	141.180	400.15000	.40791	.00558	.25751	.00710	-.01462	.00008	.00059	.00365	.23109
-.002	191.450	400.13000	-.09162	-.00546	.24157	.00212	-.01284	-.00027	.00013	-.00047	.23036
.033	290.640	400.23000	-.40824	-.00632	.19765	-.00173	-.01395	-.00030	.00051	.00063	.23015
.046	390.550	400.16000	.03607	.00589	.17003	-.00012	-.01391	-.00023	.00044	-.00164	.22992
.040	490.720	400.27000	.47550	.01008	.16484	.00039	-.01388	-.00042	.00100	.00205	.23081
.017	590.900	400.19000	-.13514	.00133	.16103	.00119	-.01355	-.00041	.00100	.00227	.23060
-.047	791.840	400.30000	-.26148	-.00177	.16063	.00117	-.01390	-.00041	.00100	.00239	.23076
.001	931.280	400.22000	-.11629	-.00030	.16056	.00110	-.01379	-.00039	.00099	.00233	.23112
GRADIENT		.00000	.00000	.00000	.00000	.00010	.00000	.00000	.00000	.00000	.00000

RUN NO. 2378/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CSLR	CAR	MM
4.986	-59.364	400.22000	-.17359	.00107	.24597	.03349	-.01247	-.00033	.00006	.01562	.23107
5.056	4.985	400.25000	.20227	.00503	.23521	.02451	-.01536	-.00017	.00103	.00541	.23136
5.010	41.006	400.06000	.17128	.00537	.22651	.01738	-.01576	-.00012	.00023	.00309	.23112
5.008	90.992	400.21000	.00858	.00231	.22575	.00812	-.01544	-.00007	.00057	.00376	.23082
5.023	190.660	400.28000	-.20165	-.00453	.20524	.00219	-.01419	-.00041	.00041	.00199	.23080
5.038	290.470	400.31000	-.26330	.00019	.17652	.00029	-.01460	-.00041	.00046	.00059	.23066
5.026	390.580	400.36000	-.16535	-.00159	.17013	.00014	-.01484	-.00049	.00096	.00241	.23070
4.999	590.860	400.32000	.03288	.00376	.16255	.00204	-.01478	-.00055	.00104	.00382	.23010
GRADIENT		.00000	.00000	.00000	.00000	.00010	.00000	.00000	.00000	.00000	.00000







REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2715/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CFD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.542	200.500	400.15000	.35970	.00711	-.01225	435.27000	.00000	.00000	651.43000	.00000	.00000
-5.490	248.830	400.11000	.47591	-.00139	-.03153	435.77000	.00000	.00000	652.16000	.00000	.00000
-5.517	299.190	400.06000	.04891	.00970	-.02790	435.30000	.00000	.00000	652.35000	.00000	.00000
-5.494	393.790	400.09000	.08339	.02792	.00397	435.35000	.00000	.00000	651.83000	.00000	.00000
-5.470	498.610	400.09000	.25615	.02497	.00601	435.38000	.00000	.00000	652.03000	.00000	.00000
-5.470	598.510	400.07000	.00344	.02157	.00655	435.17000	.00000	.00000	651.72000	.00000	.00000
-5.479	698.730	400.13000	.24022	.01910	.00918	435.12000	.00000	.00000	651.50000	.00000	.00000
-5.531	799.280	400.14000	.06199	.01699	.01109	435.70000	.00000	.00000	652.06000	.00000	.00000
-5.520	819.370	400.24000	.11797	.01539	.01236	435.35000	.00000	.00000	651.99000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.70000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2372/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CFD	CTFS	CTFU	CTAD	CTAS	CTAU
.002	23.622	400.19000	-.24403	.....	.....	439.12000	.00000	.00000	658.23000	.00000	.00000
.020	41.133	400.15000	.06078	.....	.....	439.17000	.00000	.00000	658.30000	.00000	.00000
.045	90.546	400.21000	-.22694	.....	.....	439.12000	.00000	.00000	658.23000	.00000	.00000
.021	141.180	400.15000	.40791	.....	.....	439.15000	.00000	.00000	658.12000	.00000	.00000
-.002	191.450	400.13000	-.09162	.....	.....	439.11000	.00000	.00000	657.92000	.00000	.00000
.033	290.640	400.23000	-.40824	.....	.....	439.30000	.00000	.00000	657.45000	.00000	.00000
.046	390.550	400.16000	.03307	.....	.....	439.80000	.00000	.00000	657.27000	.00000	.00000
.040	490.720	400.27000	.47550	.....	.....	439.13000	.00000	.00000	657.39000	.00000	.00000
.017	590.900	400.19000	-.13514	.....	.....	438.70000	.00000	.00000	656.55000	.00000	.00000
-.047	791.840	400.30000	-.26148	.....	.....	438.16000	.00000	.00000	655.89000	.00000	.00000
.001	931.280	400.22000	-.11629	.....	.....	438.17000	.00000	.00000	655.90000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2378/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CFD	CTFS	CTFU	CTAD	CTAS	CTAU
4.986	-59.364	400.22000	-.17350	.....	.....	438.70000	.00000	.00000	656.55000	.00000	.00000
5.056	4.985	400.25000	.20227	.....	.....	438.19000	.00000	.00000	656.09000	.00000	.00000
5.010	41.006	400.08000	.17129	.....	.....	438.17000	.00000	.00000	655.61000	.00000	.00000
5.008	90.992	400.21000	.00258	.....	.....	437.75000	.00000	.00000	655.13000	.00000	.00000
5.023	190.660	400.26000	-.20165	.....	.....	437.15000	.00000	.00000	654.45000	.00000	.00000
5.036	290.470	400.31000	-.26330	.....	.....	437.60000	.00000	.00000	654.25000	.00000	.00000
5.026	390.520	400.35000	-.16533	.....	.....	435.14000	.00000	.00000	653.76000	.00000	.00000
4.999	590.650	400.32000	.03228	.....	.....	436.11000	.00000	.00000	653.12000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000



V418-D9A (A22), ORBITER (04RC1) W/ET SEPARATING

(UVK013) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2715/ 0 RN/L = .67 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	T81	T82	DT	T
-5.542	200.500	976.76000	976.76000	88.00000	976.76000	£76.53999	72.00000	78.00000	1.18850	99.51600
-5.490	219.890	976.90000	976.90000	88.00000	976.90000	£76.53999	72.00000	79.00000	1.09080	99.51600
-5.517	299.190	976.71000	976.71000	88.00000	976.71000	£76.53999	72.00000	79.00000	5.17710	99.51600
-5.484	359.760	976.80000	976.80000	88.00000	976.80000	£76.53999	72.00000	78.00000	7.93420	99.51600
-5.470	459.610	976.70000	976.70000	88.00000	976.70000	£76.53999	72.00000	79.00000	6.63360	99.51600
-5.470	559.510	976.72000	976.72000	89.00000	976.72000	£76.53999	72.00000	79.00000	4.55200	99.51600
-5.479	659.730	976.87000	976.87000	89.00000	976.87000	£76.53999	72.00000	79.00000	2.45290	99.51600
-5.531	799.230	976.75000	976.75000	88.00000	976.75000	£76.53999	72.00000	79.00000	.50199	99.51600
-5.520	819.370	976.64000	976.64000	88.00000	976.64000	£76.53999	72.00000	79.00000	-.75593	99.51600
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2372/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	T81	T82	DT	T
.002	23.622	976.28000	976.28000	84.00000	976.28000	£76.06000	68.00000	74.00000	-10.19000	99.76800
.020	41.123	976.39000	976.39000	84.00000	976.39000	£76.06000	68.00000	74.00000	-11.09800	99.76800
.045	90.547	976.28000	976.28000	84.00000	976.28000	£76.06000	68.00000	74.00000	-13.52600	99.76800
.021	141.181	976.60000	976.60000	84.00000	976.60000	£76.06000	68.00000	74.00000	-16.14000	99.76800
-.002	191.450	976.30000	976.30000	84.00000	976.30000	£76.06000	68.00000	74.00000	-15.85100	99.76800
.033	290.640	976.09000	976.09000	84.00000	976.09000	£76.06000	68.00000	74.00000	-13.61800	99.76800
.046	390.550	976.82000	976.82000	84.00000	976.82000	£76.06000	68.00000	74.00000	-12.33000	99.76800
.040	490.720	976.49000	976.49000	84.00000	976.49000	£76.06000	68.00000	74.00000	-11.63100	99.76800
.017	590.900	976.22000	976.22000	84.00000	976.22000	£76.06000	68.00000	74.00000	-11.65600	99.76800
-.047	791.840	976.20000	976.20000	84.00000	976.20000	£76.06000	68.00000	74.00000	-12.21000	99.76800
.001	931.280	976.22000	976.22000	84.00000	976.22000	£76.06000	68.00000	74.00000	-12.71200	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2378/ 0 RN/L = .96 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	T81	T82	DT	T
4.928	-59.384	977.19000	977.19000	84.00000	977.19000	£76.95999	68.00000	75.00000	-10.62700	99.76800
5.058	4.685	976.93000	976.93000	84.00000	976.93000	£76.95999	68.00000	75.00000	-11.49000	99.76800
5.010	41.005	976.75000	976.75000	84.00000	976.75000	£76.95999	68.00000	75.00000	-12.69200	99.76800
5.008	90.992	976.52000	976.52000	84.00000	976.52000	£76.95999	68.00000	75.00000	-13.52200	99.76800
5.023	190.660	975.92000	975.92000	84.00000	975.92000	£76.95999	68.00000	75.00000	-12.43600	99.76800
5.036	290.470	975.69000	975.69000	84.00000	975.69000	£76.95999	68.00000	75.00000	-11.73000	99.76800
5.026	390.580	975.45000	975.45000	84.00000	975.45000	£76.95999	68.00000	75.00000	-11.60300	99.76800
4.999	590.860	974.93000	974.93000	84.00000	974.93000	£76.95999	68.00000	75.00000	-11.47300	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REPRODUCIBILITY OF THE  
 ORIGINAL PAGE IS POOR

























V41B-D8A (IA22), ORBITER (OHIC1) W/ET SEPARATING

(RVK015) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = 3.000 X = .000  
 Y = 54.000 ELEVON = .000  
 UNBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2373/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	HM
-.007	23.468	.11396	54.13000	2.99810	.19950	.01168	-.01416	.00212	.00083	.02013	.23148
-.012	41.930	.13322	53.66900	2.99120	.21120	.01533	-.01343	.00091	.00017	.01856	.23271
.008	91.551	.04839	53.55900	2.98590	.23849	.01768	-.01061	.00079	.00039	.01336	.23346
.016	141.310	.07000	53.83700	2.98310	.24621	.01399	-.01607	.00046	.00017	.00727	.23209
.026	190.950	.15783	54.03400	2.99330	.22093	.00893	-.01431	-.00001	.00004	.00199	.23145
.037	290.710	.02372	53.57900	2.99010	.20394	.00466	-.01291	-.00041	.00015	.00087	.23040
.036	390.680	.14039	53.75200	2.99730	.19008	-.00041	-.01376	-.00031	.00059	-.00034	.23051
-.002	491.210	.16372	54.15000	3.00320	.17092	.00110	-.01383	-.00025	.00050	-.00157	.23048
-.045	592.030	.19725	54.16600	2.99740	.16384	.00112	-.01397	-.00043	.00099	.00255	.23028
.027	791.340	.15551	53.47300	2.98930	.16043	.00110	-.01386	-.00040	.00099	.00335	.23009
-.002	931.330	.16493	53.65100	2.99170	.15930	.00112	-.01387	-.00039	.00098	.00366	.22936
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2379/ 0 RN/L = .8 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	HM
4.948	-57.016	.35863	55.75300	3.05070	.15827	.00108	-.01882	.00010	.00069	.01641	.23102
4.962	7.562	.08824	53.42300	2.98450	.19364	.00988	-.01551	.00036	-.00003	.01968	.23101
4.999	41.337	.07739	54.03200	2.99350	.20580	.01181	-.00791	.00091	.00119	.01560	.23164
5.007	91.291	.18372	53.55100	2.99140	.20414	.01416	-.01590	.00005	.00026	.00636	.23082
5.039	190.510	.27212	53.50300	2.99150	.18952	.00397	-.01554	-.00009	.00047	.00281	.23154
5.025	290.680	.19056	53.69700	2.99310	.19410	.00237	-.01398	-.00055	.00069	.00275	.23099
4.993	391.320	.21979	54.02300	2.98000	.17235	.00116	-.01466	-.00044	.00057	-.00037	.23150
4.975	591.610	.16196	53.65700	2.99020	.16552	.00217	-.01530	-.00058	.00034	.00284	.23119
	GRADIENT	.01167	7.06467	.39467	.02561	.00131	-.00206	.00005	-.00000	.00260	.03055

DATE 06 MAY 77

TABULATED SOURCE DATA, 1A21, (AEDC V41B-D9A)

PAGE 130

V41B-D9A (1A22).ORBITER(04FC1) W/ET SEPARATING

(SVK015) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = 3.000 X = .000  
 Y = 54.000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2709/ 0 RN/L = .87 GRACIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
-10.008	324.570	-4.93000	-.00150	2.99340	.04936	.00946	.03796	.00090	-.00036	-.00174
-10.032	349.660	-4.93000	-.00150	2.99750	.01941	.00592	.03723	.00196	-.00042	-.00164
-10.002	393.020	-4.93000	-.00100	2.99570	-.00715	-.00518	.02578	.00395	-.00108	-.00122
-9.975	448.900	-5.00330	-.00120	2.99250	-.04183	-.01225	.03400	.00371	-.00095	-.00024
-9.990	499.040	-5.00450	-.00130	2.99390	-.09554	-.01010	.02937	.00371	-.00084	.00088
-9.964	558.700	-4.99550	-.00110	2.99530	-.12841	-.00020	.02881	.00311	-.00087	-.00001
-10.009	659.120	-4.99100	-.00090	2.99930	-.17548	.00231	.03053	.00335	-.00101	.00047
-10.082	800.230	-4.99200	-.00090	2.99330	-.19346	.01152	.03214	.00320	-.00104	.00046
-10.037	999.570	-4.99300	-.00080	2.99970	-.19310	.01154	.03231	.00309	-.00102	.00045
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2373/ 0 RN/L = .85 GRACIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
-1.007	23.468	-4.97651	-.00280	2.99910	-.13703	.02274	.06451	-.00670	.00117	.00088
-1.012	41.930	-4.97275	-.00150	2.99120	-.12524	.02640	.05301	-.00596	-.00004	.00021
.008	91.551	-4.93039	-.00140	2.99390	-.10035	.02831	.05205	-.00311	-.00016	.00044
.016	141.310	-4.97239	-.00100	2.99310	-.09272	.02312	.05197	-.00956	-.00050	.00021
.026	190.550	-4.97805	-.00090	2.99390	-.11724	.02095	.04832	-.00741	-.00096	.00008
.037	290.710	-4.99249	-.00030	2.99010	-.13125	.01577	.04549	-.00542	-.00136	.00020
.036	390.690	-4.93783	-.00040	2.99730	-.14916	.01071	.04427	-.00627	-.00126	.00064
-.002	491.210	-4.99738	-.00050	3.00320	-.16557	.01219	.04294	-.00635	-.00120	.00055
-.045	592.030	-4.99753	-.00030	2.99740	-.17024	.01210	.04682	-.00657	-.00137	.00104
.027	791.340	-4.99738	-.00030	2.99330	-.17114	.01207	.04708	-.00651	-.00133	.00103
-.002	931.330	-4.99739	-.00030	2.99170	-.17057	.01197	.04722	-.00655	-.00132	.00103
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2379/ 0 RN/L = .87 GRACIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
4.948	-57.016	-4.99781	-.00080	3.05070	-.17093	.01190	.05383	-.01152	-.00082	.00074
4.952	7.532	-4.97813	-.00180	2.99450	-.13553	.02070	.05309	-.00831	-.00057	.00001
4.999	41.337	-4.97578	-.00170	2.99350	-.12313	.02263	.05901	-.00062	-.00002	.00123
5.007	91.291	-4.97351	-.00090	2.99140	-.12455	.02499	.04977	-.00260	-.00028	.00031
5.038	190.510	-4.97910	-.00050	2.99160	-.12231	.01978	.04630	-.00833	-.00101	.00051
5.025	290.690	-4.93499	-.00020	2.99540	-.13662	.01324	.04637	-.00665	-.00149	.00073
4.993	391.320	-4.99713	-.00020	2.99900	-.16014	.01209	.04348	-.00729	-.00138	.00061
4.975	591.610	-4.98551	.00000	2.99020	-.16750	.01313	.04683	-.00791	-.00162	.00108
	GRADIENT	-.65831	-.00013	.39457	-.01753	.00274	.00834	-.00110	-.00008	.00000

V41B-D9A (IA22), ORBITER (04F01) H/ET SEPARATING

(TVK015) (20 APR 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DETA = 3.000 X = .000  
 Y = 54.000 ELEVON = .000  
 UHMLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2709/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-10.008	324.570	.10598	53.83000	-.24632	-.46703	437.14000	.00000	.00000	654.21000	.00000	.00000
-10.033	349.660	.26468	54.25300	.09325	-.04113	436.80000	.00000	.00000	653.71000	.00000	.00000
-10.002	399.020	.08598	53.95200	.05449	-.04293	436.64000	.00000	.00000	653.47000	.00000	.00000
-9.975	448.900	-.02224	53.16700	.03506	-.05795	436.73000	.00000	.00000	653.61000	.00000	.00000
-9.990	499.040	.05300	54.06300	.01597	-.07391	436.74000	.00000	.00000	653.61000	.00000	.00000
-9.954	599.700	.02974	53.91300	.03927	-.02913	436.64000	.00000	.00000	653.47000	.00000	.00000
-10.008	699.120	-.00637	53.92200	.03782	-.02453	436.55000	.00000	.00000	653.34000	.00000	.00000
-10.082	800.260	.34145	53.44300	.03105	-.01847	436.35000	.00000	.00000	653.05000	.00000	.00000
-10.037	999.670	.26594	54.27300	.02189	-.00416	436.74000	.00000	.00000	652.12000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2373/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-.007	23.469	.11396	54.13000	.....	.....	415.47000	.00000	.00000	666.69000	.00000	.00000
-.012	41.930	.13322	53.23900	.....	.....	416.14000	.00000	.00000	667.69000	.00000	.00000
.008	91.551	.04839	53.55900	.....	.....	418.53000	.00000	.00000	671.27000	.00000	.00000
.016	141.310	.07000	53.83700	.....	.....	418.65000	.00000	.00000	671.44000	.00000	.00000
.026	190.950	.15783	54.05400	.....	.....	418.03000	.00000	.00000	670.51000	.00000	.00000
.037	290.710	.02672	53.57900	.....	.....	417.81000	.00000	.00000	670.18000	.00000	.00000
.036	390.680	.14039	53.75200	.....	.....	417.73000	.00000	.00000	670.06000	.00000	.00000
-.002	491.210	.16372	54.15000	.....	.....	416.74000	.00000	.00000	669.53000	.00000	.00000
-.045	592.030	.19725	54.18300	.....	.....	412.35000	.00000	.00000	662.02000	.00000	.00000
.027	791.340	.15551	53.47300	.....	.....	413.90000	.00000	.00000	655.85000	.00000	.00000
-.002	931.330	.16499	53.65100	.....	.....	417.17000	.00000	.00000	654.27000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2379/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
4.948	-57.016	.35853	55.75300	.....	.....	415.77000	.00000	.00000	652.17000	.00000	.00000
4.962	7.562	.05324	53.42300	.....	.....	415.78000	.00000	.00000	652.18000	.00000	.00000
4.999	41.337	.07739	54.03200	.....	.....	415.67000	.00000	.00000	652.01000	.00000	.00000
5.007	91.291	.18372	53.53100	.....	.....	415.62000	.00000	.00000	651.95000	.00000	.00000
5.038	190.510	.27212	53.59500	.....	.....	415.54000	.00000	.00000	651.82000	.00000	.00000
5.025	290.680	.19056	53.69700	.....	.....	417.77000	.00000	.00000	655.16000	.00000	.00000
4.993	391.320	.21979	54.02300	.....	.....	410.12000	.00000	.00000	659.68000	.00000	.00000
4.975	591.610	.16196	53.65700	.....	.....	411.48000	.00000	.00000	660.72000	.00000	.00000
	GRADIENT	.01167	7.06467	.....	.....	17.62761	.00000	.00000	86.24438	.00000	.00000

V41B-D9A (1A22),ORBITER(04R:1) W/ET SEPARATING

(UVK015) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = 3.000 X = .000  
 Y = 54.000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2709/ 0 RN/L = .87 GRAD'ENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLP3AL	T81	T82	DT	T
-10.008	324.570	976.11000	976.11000	87.00000	976.11000	975.60000	72.00000	79.00000	33.65300	99.51600
-10.033	349.650	975.64000	975.64000	87.00000	975.64000	975.60000	72.00000	79.00000	31.04100	99.51600
-10.002	359.020	975.63000	975.63000	87.00000	975.63000	975.63000	72.00000	79.00000	27.00400	99.51600
-9.975	448.900	976.17000	976.17000	87.00000	976.17000	975.60000	72.00000	79.00000	27.69400	99.51600
-9.990	459.040	976.18000	976.18000	87.00000	976.18000	975.63000	72.00000	79.00000	25.74600	99.51600
-9.964	598.700	976.45000	976.45000	87.00000	976.45000	975.60000	72.00000	79.00000	16.93300	99.51600
-10.008	699.120	976.25000	976.25000	87.00000	976.25000	975.60000	72.00000	79.00000	8.23720	99.51600
-10.082	800.280	976.31000	976.31000	87.00000	976.31000	975.60000	72.00000	79.00000	3.13200	99.51600
-10.037	999.670	976.33000	976.33000	87.00000	976.33000	975.60000	72.00000	79.00000	-1.22150	99.51600
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2373/ 0 RN/L = .85 GRAD'ENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLP3AL	T81	T82	DT	T
-.007	23.468	978.47000	978.47000	83.00000	978.47000	978.25000	68.00000	74.00000	-11.99500	99.76800
-.012	41.930	978.97000	978.97000	83.00000	978.97000	978.22000	68.00000	74.00000	-10.70200	99.76800
.008	91.551	933.71000	933.71000	83.00000	933.71000	978.25000	68.00000	74.00000	-9.24520	99.76800
.016	141.310	932.43000	932.43000	83.00000	932.42000	978.25000	68.00000	74.00000	-9.52310	99.76800
.026	190.950	931.12000	931.12000	83.00000	931.12000	978.25000	68.00000	74.00000	-10.37200	99.76800
.037	299.710	979.15000	979.15000	83.00000	979.15000	978.25000	68.00000	74.00000	-11.20000	99.76800
.036	390.650	977.60000	977.60000	83.00000	977.60000	978.25000	68.00000	74.00000	-11.73500	99.76800
-.002	491.210	976.32000	976.32000	83.00000	976.32000	978.25000	68.00000	74.00000	-12.01000	99.76800
-.045	592.030	976.62000	976.62000	83.00000	976.62000	978.25000	68.00000	74.00000	-12.20600	99.76800
.027	791.340	975.69000	975.69000	83.00000	975.69000	978.25000	68.00000	74.00000	-12.62000	99.76800
-.002	931.330	974.27000	974.27000	83.00000	974.27000	978.25000	68.00000	74.00000	-13.12300	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2379/ 0 RN/L = .87 GRAD'ENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLP3AL	T81	T82	DT	T
4.948	-57.016	975.00000	975.00000	84.00000	975.00000	974.76000	68.00000	75.00000	-12.59300	99.76800
4.962	7.552	975.01000	975.01000	84.00000	975.01000	974.76000	68.00000	75.00000	-12.54500	99.76800
4.999	41.337	975.23000	975.23000	84.00000	975.23000	974.76000	68.00000	75.00000	-12.14200	99.76800
5.007	91.291	975.63000	975.63000	84.00000	975.63000	974.76000	68.00000	75.00000	-13.45900	99.76800
5.038	190.510	975.93000	975.93000	84.00000	975.93000	974.76000	68.00000	75.00000	-14.62300	99.76800
5.025	290.630	976.00000	976.00000	84.00000	976.00000	974.76000	68.00000	75.00000	-14.56200	99.76800
4.993	391.320	976.40000	976.40000	84.00000	976.40000	974.76000	68.00000	75.00000	-14.41400	99.76800
4.975	591.610	976.53000	976.53000	84.00000	976.53000	974.76000	68.00000	75.00000	-13.99700	99.76800
	GRADIENT	128.93547	128.93547	11.10817	128.93547	128.90505	8.93233	9.91801	-1.65895	13.19334

V41B-D9A (1A22), ET SEPARATING FROM ORG (04RC1)

(AVK015) (04 MAY 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DETA = 3.000 X = .000  
 Y = 54.000 ELEVON = .000  
 UMLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2709/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-10.008	324.570	.10598	53.83000	-14.55800	2.99190	-.32920	-.01600	-.03473	-.00892	.00072	.11979
-10.033	349.660	.26468	54.25300	-15.01800	2.99600	-.30802	-.02812	-.03719	-.00787	.00063	.10571
-10.002	399.020	.08598	53.55200	-14.99300	2.99470	-.29764	-.02877	-.03702	-.00776	.00060	.10546
-9.975	448.900	-.02224	53.16700	-14.97800	2.99130	-.30924	-.01717	-.03702	-.00721	.00059	.11196
-9.990	499.040	.05300	54.06300	-14.95300	2.99550	-.32328	-.00441	-.03690	-.00597	.00058	.12073
-9.964	598.700	.02974	53.91300	-14.96000	2.99520	-.34618	.02174	-.03540	-.00765	.00065	.14063
-10.008	699.120	-.00697	53.92200	-14.99900	2.99300	-.32501	.02184	-.03272	-.00904	.00064	.14791
-10.082	800.250	.34145	53.44300	-15.07100	2.99740	-.24907	-.02161	-.03482	-.00908	.00030	.11095
-10.037	999.670	.26594	54.27300	-15.02600	2.99390	-.21632	-.03533	-.03430	-.00909	.00037	.11057
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2373/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-.007	23.468	.11396	54.13000	-4.98380	2.99530	-.11068	-.02667	-.04775	-.01129	.00069	.08674
-.012	41.930	.13322	53.83900	-4.98480	2.99370	-.12350	-.02725	-.04416	-.01051	.00081	.08774
.008	91.551	.04839	53.55300	-4.99120	2.99450	-.13487	-.01891	-.04087	-.00282	.00059	.09156
.016	141.310	.07000	53.83700	-4.99380	2.99410	-.13350	-.01377	-.03345	-.00901	.00055	.09060
.026	190.950	.15783	54.09400	-4.99190	2.99330	-.13784	-.00511	-.03397	-.00780	.00057	.09453
.037	290.710	.02372	53.57900	-4.94560	2.99390	-.14299	.01036	-.03760	-.00729	.00048	.10353
.036	390.680	.14039	53.75200	-4.99150	2.99390	-.14442	.02239	-.03291	-.00919	.00052	.11359
-.002	491.210	.16372	54.15000	-4.98660	3.00270	-.11643	.01538	-.02648	-.01128	.00041	.11379
-.045	592.030	.19725	54.16500	-5.03210	2.99710	-.06929	-.01317	-.03059	-.01064	.00026	.08907
.027	791.340	.15251	53.47300	-4.99110	2.99900	-.06325	-.01487	-.03116	-.01044	.00035	.09371
-.002	931.330	.18499	53.65100	-4.99370	2.99140	-.06372	-.01500	-.03127	-.01029	.00035	.09391
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2379/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
4.948	-57.016	.35963	55.75300	-.04001	3.04990	-.02249	-.00959	-.04712	-.00994	.00050	.08586
4.962	7.562	.08924	53.42300	-.01573	2.98350	-.05997	-.00399	-.03415	-.00911	.00062	.08616
4.999	41.337	.07739	54.03200	.02372	2.99190	-.06422	-.00269	-.03701	-.00774	.00045	.08919
5.007	91.291	.12372	53.55100	.03359	2.99090	-.07551	.00559	-.03525	-.00813	.00060	.09386
5.038	190.510	.27212	53.59300	.05030	2.99110	-.07281	.02254	-.03308	-.00848	.00048	.10207
5.025	290.680	.19036	53.69700	.04042	2.99520	-.07013	.03081	-.02226	-.01091	.00037	.10750
4.993	391.320	.21979	54.02800	.00557	2.99780	-.03934	.01921	-.02796	-.01157	.00026	.10063
4.975	591.610	.16196	53.65700	-.01111	2.99020	-.00595	.00107	-.03044	-.01067	.00029	.08725
	GRADIENT	.01167	7.06467	-.00208	.39454	-.00793	-.00119	-.00452	-.00121	.00008	.01139

V41B-D9A (1A22), ORBITER(04RC1) W/ET SEPARATING

(RVK018) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = 3.000 X = 200.000  
 Y = 54.000 ELEVON = .000  
 UMELDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2710/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-9.989	324.460	200.05000	53.94500	2.99900	.39199	-.02190	-.00223	-.00021	-.00029	-.01258	.23028
-9.989	349.530	200.03000	53.96100	2.99900	.34612	-.02050	-.00345	-.00004	-.00015	-.00798	.22989
-10.030	399.950	200.23000	53.87300	2.99650	.28193	-.01851	-.00283	-.00026	.00035	-.00671	.23022
-10.034	449.930	200.26000	53.84100	2.99640	.22160	-.01593	-.00290	-.00024	.00039	-.01132	.23034
-10.058	500.350	200.33000	54.01000	2.99330	.18578	-.01212	-.00435	-.00006	.00039	-.01297	.23038
-10.061	600.460	200.33000	53.95700	2.99510	.15300	-.00230	-.00402	-.00009	.00043	-.01235	.23008
-10.007	699.910	200.20000	53.78100	2.993100	.14027	-.00021	-.00420	-.00009	.00047	-.01117	.23035
-9.929	798.530	200.03000	53.87400	2.99590	.13549	.00074	-.00406	-.00011	.00042	-.01102	.23023
-10.013	999.410	200.11000	54.23300	2.99970	.13547	.00075	-.00413	-.00012	.00041	-.01096	.23020
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2374/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-.004	23.727	200.14000	53.89300	2.99570	.23169	.02305	-.00735	.00275	.00050	.01522	.23394
-.032	42.241	200.17000	54.03200	3.00250	.24563	.02784	-.01315	.00219	.00021	.01134	.23323
-.022	92.428	200.17000	54.23000	3.00190	.25058	.02071	-.01336	.00079	.00043	.00923	.23238
-.022	142.120	200.20000	54.18100	3.00100	.23476	.01009	-.01425	-.00018	.00030	.00580	.23243
-.040	192.470	200.26000	53.90600	3.00150	.21526	.00404	-.01421	.00022	-.00007	.00421	.23031
-.036	292.400	200.25000	54.02600	2.99600	.19336	.00115	-.01220	-.00048	.00053	.00345	.22659
-.029	392.180	200.21000	53.78300	2.99200	.17130	-.00022	-.01370	-.00027	.00053	.00070	.22839
.016	491.620	200.12000	54.04400	2.99360	.16462	-.00014	-.01398	-.00032	.00092	.00286	.22895
.045	590.930	200.07000	54.17300	2.99330	.15764	.00104	-.01367	-.00040	.00097	.00406	.22943
.003	791.390	200.22000	53.95100	2.99390	.15778	.00111	-.01390	-.00037	.00097	.00380	.22954
-.016	931.350	200.19000	54.01800	2.99750	.15905	.00110	-.01368	-.00041	.00098	.00370	.23058
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2380/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
5.013	-59.271	200.12000	54.11200	3.00490	.18358	.01021	-.01160	.00136	.00018	.01626	.23172
4.935	6.817	200.17000	54.09700	2.99340	.22387	.02257	-.01509	.00180	.00047	.01035	.23177
4.975	42.097	200.22000	53.92900	2.99910	.25123	.01901	-.01543	.00024	.00081	.00873	.23170
4.947	92.592	200.19000	54.07500	3.00150	.21618	.01205	-.01619	-.00031	.00060	.00243	.23139
4.961	192.320	200.15000	53.64600	2.99210	.20788	.00514	-.01442	-.00042	.00047	.00379	.23280
4.980	292.130	200.15000	53.69100	2.99730	.19055	.00089	-.01458	-.00045	.00068	.00027	.23212
5.031	391.070	200.30000	53.92000	2.99480	.17259	.00171	-.01460	-.00038	.00055	-.00148	.23207
4.987	591.390	200.13000	53.92300	2.99530	.16348	.00217	-.01465	-.00058	.00105	.00228	.23209
GRADIENT		29.36249	7.93390	.43583	.03328	.00331	-.00221	.00026	.00007	.00152	.03400



V41B-D8A (1A22),ORBITER(4RC1) H/ET SEPARATING

(SVK016) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = 3.000 X = 200.000  
 Y = 54.000 ELEVON = .000  
 UNLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2710/ 0 RN/L = .87 GFADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
-9.989	324.460	-4.99730	-.00090	2.99900	.06305	-.01119	.03081	.00506	-.00113	-.00025
-9.989	349.530	-4.99370	-.00120	2.99900	.01704	-.00939	.03542	.00384	-.00096	-.00011
-10.030	399.550	-5.00000	-.00090	2.99950	-.04997	-.00770	.03556	.00446	-.00119	.00039
-10.034	449.930	-5.00100	-.00090	2.99940	-.10752	-.00511	.03209	.00439	-.00117	.00043
-10.058	500.350	-4.99900	-.00110	2.99930	-.14371	-.00129	.03048	.00294	-.00099	.00044
-10.061	600.460	-4.99100	-.00080	2.99510	-.17651	.00632	.03111	.00328	-.00101	.00047
-10.007	699.810	-4.99000	-.00090	2.99100	-.18334	.01059	.03217	.00308	-.00102	.00051
-9.929	799.530	-4.99910	-.00090	2.99590	-.18379	.01155	.03241	.00324	-.00104	.00046
-10.013	999.410	-4.99900	-.00080	2.99970	-.18350	.01155	.03242	.00316	-.00105	.00045
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2374/ 0 RN/L = .87 GFADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
-.004	23.727	-4.99555	-.00350	2.99570	-.05726	.03296	.05860	-.00006	.00182	.00054
-.032	42.241	-4.99912	-.00270	3.00350	-.08271	.03663	.05464	-.00597	.00126	.00026
-.022	92.429	-4.99347	-.00130	3.00190	-.07710	.03147	.05245	-.00610	-.00014	.00048
-.022	142.120	-4.97600	-.00040	3.00100	-.05272	.02085	.04638	-.00699	-.00110	.00035
-.040	192.470	-4.99242	-.00030	3.00150	-.11030	.01477	.04729	-.00597	-.00071	-.00002
-.036	292.400	-4.99303	-.00020	2.99900	-.12036	.01190	.04656	-.00496	-.00140	.00057
-.029	392.180	-4.99391	-.00050	2.99900	-.15527	.00334	.04390	-.00644	-.00119	.00058
.016	491.620	-4.99256	-.00040	2.99330	-.16310	.01063	.04608	-.00652	-.00124	.00097
.045	590.930	-4.98785	-.00030	2.99050	-.16326	.01181	.04727	-.00641	-.00132	.00102
.003	791.390	-4.98773	-.00030	2.99330	-.17089	.01190	.04714	-.00662	-.00130	.00102
-.016	931.360	-4.98771	-.00030	2.99750	-.17073	.01193	.04719	-.00637	-.00134	.00102
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2380/ 0 RN/L = .86 GFADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
5.013	-59.271	-4.97843	-.00220	3.00490	-.14384	.02127	.06064	-.00415	.00041	.00020
4.985	6.817	-4.99553	-.00240	2.99940	-.16374	.03363	.05475	-.00763	.00085	.00052
4.975	42.097	-4.99950	-.00080	2.99910	-.16313	.03007	.05309	-.00798	-.00071	.00086
4.947	92.592	-4.97545	-.00020	3.00150	-.12083	.02313	.04637	-.00872	-.00126	.00064
4.961	192.320	-4.93197	-.00020	2.99210	-.12775	.01617	.04806	-.00699	-.00136	.00052
4.990	292.130	-4.99363	-.00020	2.99730	-.14465	.01190	.04448	-.00715	-.00140	.00072
5.031	391.070	-4.99267	-.00030	2.99480	-.16243	.01271	.04270	-.00717	-.00132	.00060
4.987	591.380	-4.99352	-.00010	2.99330	-.16319	.01317	.04642	-.00723	-.00153	.00109
	GRADIENT	-.72838	-.00035	.43983	-.01510	.00493	.00803	-.00112	.00012	.00008

V41B-D9A (IA22), ORBITER (C/R/C) W/ET SEPARATING

(TVK016) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = 3.000 X = 200.000  
 Y = 54.000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2710/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-9.989	324.460	200.05000	53.94500	-.00151	-.09297	435.42000	.00000	.00000	651.65000	.00000	.00000
-9.989	349.530	200.03000	53.96100	-.00904	-.09211	435.61000	.00000	.00000	651.92000	.00000	.00000
-10.030	399.950	200.23000	53.87300	-.01605	-.06749	435.36000	.00000	.00000	651.56000	.00000	.00000
-10.034	449.930	200.26000	53.84100	.01507	.02945	435.65000	.00000	.00000	652.00000	.00000	.00000
-10.058	500.350	200.33000	54.01000	.01173	.02655	436.14000	.00000	.00000	652.73000	.00000	.00000
-10.061	600.460	200.35000	53.95700	.01073	.01496	436.18000	.00000	.00000	652.78000	.00000	.00000
-10.007	699.810	200.20000	53.78100	.01256	.01407	434.92000	.00000	.00000	650.99000	.00000	.00000
-9.929	793.530	200.03000	53.87400	.01259	.00976	435.87000	.00000	.00000	652.31000	.00000	.00000
-10.013	999.410	200.11000	54.23300	.01435	.00747	435.45000	.00000	.00000	651.68000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2374/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-.004	23.727	200.14000	53.89300	*****	*****	435.43000	.00000	.00000	651.66000	.00000	.00000
-.032	42.241	200.17000	54.03200	*****	*****	434.62000	.00000	.00000	650.44000	.00000	.00000
-.022	92.428	200.17000	54.23000	*****	*****	433.75000	.00000	.00000	649.14000	.00000	.00000
-.022	142.120	200.20000	54.16100	*****	*****	433.47000	.00000	.00000	648.73000	.00000	.00000
-.040	192.470	200.23000	53.90300	*****	*****	432.40000	.00000	.00000	647.12000	.00000	.00000
-.036	292.400	200.25000	54.02600	*****	*****	432.73000	.00000	.00000	647.62000	.00000	.00000
-.029	392.180	200.21000	53.78900	*****	*****	433.60000	.00000	.00000	648.92000	.00000	.00000
.016	491.620	200.12000	54.04400	*****	*****	433.80000	.00000	.00000	649.22000	.00000	.00000
.045	590.930	200.07000	54.17600	*****	*****	433.64000	.00000	.00000	648.97000	.00000	.00000
.003	791.390	200.23000	53.93100	*****	*****	435.05000	.00000	.00000	651.10000	.00000	.00000
-.016	931.360	200.18000	54.01900	*****	*****	436.52000	.00000	.00000	653.30000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2380/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
5.013	-59.271	200.12000	54.11200	*****	*****	445.45000	.00000	.00000	666.65000	.00000	.00000
4.985	6.817	200.17000	54.09700	*****	*****	445.57000	.00000	.00000	666.83000	.00000	.00000
4.975	42.097	200.22000	53.92900	*****	*****	445.24000	.00000	.00000	666.33000	.00000	.00000
4.947	92.592	200.13000	54.07500	*****	*****	446.11000	.00000	.00000	667.64000	.00000	.00000
4.951	192.320	200.15000	53.64600	*****	*****	444.27000	.00000	.00000	664.89000	.00000	.00000
4.980	292.130	200.15000	53.69100	*****	*****	443.71000	.00000	.00000	664.04000	.00000	.00000
5.031	391.070	200.30000	53.92000	*****	*****	443.48000	.00000	.00000	663.70000	.00000	.00000
4.987	591.380	200.13000	53.92800	*****	*****	443.00000	.00000	.00000	662.95000	.00000	.00000
	GRADIENT	29.36249	7.93390	*****	*****	65.35968	.00000	.00000	97.81592	.00000	.00000

V41B-D9A (IA22).ORBITER(OHRC1) W/ET SEPARATING

(UVK016) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = 3.000 X = 200.000  
 Y = 54.000 ELEVON = .000  
 UNELDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2710/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLP8AL	T81	T82	DT	T
-9.989	324.460	976.13000	976.13000	86.00000	976.13000	975.96999	71.00000	79.00000	8.48470	99.51600
-9.999	349.530	976.07000	976.06000	86.00000	976.06100	975.96999	71.00000	79.00000	5.96110	99.51600
-10.030	359.950	976.00000	976.00000	86.00000	976.00100	975.96999	71.00000	79.00000	1.77480	99.51600
-10.034	449.930	976.17000	976.17000	86.00000	976.17100	975.96999	71.00000	79.00000	-3.16420	99.51600
-10.058	500.350	975.22000	975.22000	86.00000	975.22100	975.96999	71.00000	79.00000	-5.99990	99.51600
-10.061	600.460	975.90000	975.90000	86.00000	975.90100	975.96999	71.00000	79.00000	-6.62630	99.51600
-10.007	699.810	976.10000	976.10000	86.00000	976.10100	975.96999	71.00000	79.00000	-5.93570	99.51600
-9.929	799.530	976.16000	976.16000	86.00000	976.16100	975.96999	71.00000	79.00000	-5.15480	99.51600
-10.013	999.410	976.18000	976.18000	86.00000	976.18100	975.96999	71.00000	79.00000	-4.36130	99.51600
	GRADIENT	.00000	.00000	.00000	.00100	.00000	.00000	.00000	.00000	.00000

RUN NO. 2374/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLP8AL	T81	T82	DT	T
-.004	23.727	978.09000	978.09000	84.00000	978.09100	975.50000	68.00000	75.00000	-8.42900	99.76800
-.032	42.241	975.30000	975.30000	84.00000	975.30100	975.50000	68.00000	75.00000	-9.17510	99.76800
-.022	92.428	972.87000	972.87000	84.00000	972.87100	975.50000	68.00000	75.00000	-10.47100	99.76800
-.022	142.120	970.81000	970.81000	84.00000	970.81100	975.50000	68.00000	75.00000	-11.41600	99.76800
-.040	192.470	969.41000	969.41000	84.00000	969.41100	975.50000	69.00000	75.00000	-13.51800	99.76800
-.035	292.400	969.69000	969.69000	84.00000	969.69100	975.50000	68.00000	75.00000	-14.28700	99.76800
-.029	392.180	970.14000	970.14000	84.00000	970.14100	975.50000	68.00000	75.00000	-15.04800	99.76800
.016	491.620	971.07000	971.07000	84.00000	971.07100	975.50000	69.00000	75.00000	-15.08700	99.76800
.045	590.930	972.62000	972.62000	84.00000	972.62100	975.50000	68.00000	75.00000	-14.67500	99.76800
.003	791.390	974.37000	974.37000	84.00000	974.37100	975.50000	68.00000	75.00000	-14.34000	99.76800
-.016	931.350	975.73000	975.73000	84.00000	975.73100	975.50000	68.00000	75.00000	-14.04400	99.76800
	GRADIENT	.00000	.00000	.00000	.00100	.00000	.00000	.00000	.00000	.00000

RUN NO. 2380/ 0 RN/L = .66 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	CLP8AL	T81	T82	DT	T
5.013	-59.271	978.92000	978.92000	84.00000	978.92100	978.21000	69.00000	75.00000	-13.34000	99.76800
4.985	6.817	979.18000	979.18000	84.00000	979.18100	978.21000	69.00000	75.00000	-14.16000	99.76800
4.975	42.097	979.44000	979.44000	84.00000	979.44100	978.21000	69.00000	75.00000	-14.45200	99.76800
4.947	92.592	979.30000	979.30000	84.00000	979.30100	978.21000	68.00000	75.00000	-14.64000	99.76800
4.961	182.320	979.29000	979.29000	84.00000	979.29100	978.21000	69.00000	75.00000	-14.65000	99.76800
4.980	292.130	979.51000	979.51000	84.00000	979.51100	978.21000	69.00000	75.00000	-14.16500	99.76800
5.031	391.070	979.00000	979.00000	84.00000	979.00100	978.21000	68.00000	75.00000	-14.08200	99.76800
4.987	591.390	978.44000	978.44000	84.00000	978.44100	978.21000	69.00000	75.00000	-13.63200	99.76800
	GRADIENT	143.63375	143.63375	12.32177	143.63375	143.49146	9.97477	11.00158	-2.07710	14.63475

V41B-D9A (1A22), ET SEPARATING FROM ORG (04RC1)

(AVK016) (04 MAY 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = 3.000 X = 200.000  
 Y = 54.000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2710/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEL	CA
-9.989	324.460	200.05000	53.94500	-14.98800	2.99310	-.35466	-.01203	-.02974	-.01239	.00113	.12799
-9.989	349.530	200.03000	53.96100	-14.98800	2.99780	-.31771	-.03023	-.03299	-.01041	.00089	.11512
-10.030	359.950	200.23000	53.87300	-15.03000	2.99570	-.28341	-.04603	-.03639	-.00662	.00068	.10092
-10.034	449.930	200.28000	53.84100	-15.03500	2.99450	-.29702	-.03694	-.03780	-.00786	.00070	.10556
-10.058	500.350	200.33000	54.01000	-15.05700	2.99770	-.30220	-.02613	-.03934	-.00732	.00070	.10807
-10.061	600.460	200.38000	53.95700	-15.06200	2.99430	-.33095	-.00036	-.03666	-.00547	.00064	.12268
-10.007	699.810	200.20000	53.78100	-14.99700	2.99010	-.34705	.02341	-.02535	-.00729	.00072	.14339
-10.029	792.530	200.03000	53.87400	-14.91800	2.99510	-.31039	.01410	-.03393	-.00895	.00059	.14408
-10.013	939.410	200.11000	54.23300	-15.00200	2.99300	-.21747	-.03305	-.03487	-.00823	.00037	.10858
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2374/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEL	CA
-.004	23.727	200.14000	53.89300	-4.93310	2.99220	-.14259	-.03951	-.04120	-.01421	.00071	.09477
-.032	42.241	200.17000	54.03200	-4.95070	3.00090	-.14949	-.03320	-.03768	-.01377	.00058	.09666
-.022	92.428	200.17000	54.23000	-4.99710	3.00060	-.14525	-.02339	-.03068	-.01144	.00060	.09528
-.022	142.120	200.20000	54.18100	-4.99300	3.00090	-.13071	-.02760	-.03766	-.01059	.00070	.08935
-.040	192.470	200.20000	53.90300	-5.02200	3.00060	-.13031	-.02183	-.03904	-.00944	.00059	.08991
-.036	292.400	200.25000	54.02500	-5.02150	2.99780	-.13512	-.00352	-.04050	-.00740	.00059	.09693
-.029	392.180	200.21000	53.79200	-5.01760	2.99050	-.14033	.00356	-.03783	-.00713	.00048	.10478
.016	491.620	200.12000	54.04400	-4.97290	2.99320	-.13937	.02156	-.03277	-.00928	.00055	.11433
.045	590.930	200.07000	54.17800	-4.94300	2.99220	-.10369	.01027	-.02971	-.01093	.00032	.11076
.003	791.390	200.23000	53.93100	-4.92300	2.99650	-.06271	-.01503	-.03172	-.01055	.00035	.09212
-.016	931.360	200.18000	54.01200	-5.00330	2.99720	-.06302	-.01486	-.03176	-.01038	.00035	.09262
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2360/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEL	CA
5.013	-59.271	200.12000	54.11200	.03437	3.00270	-.04808	-.01938	-.04420	-.01402	.00051	.09093
4.985	6.817	200.17000	54.08700	.01667	2.92300	-.06816	-.01935	-.04060	-.01139	.00055	.08943
4.975	42.097	200.22000	53.92900	.00700	2.92330	-.07308	-.01515	-.03503	-.01136	.00055	.09051
4.947	92.522	200.19000	54.07500	-.02815	3.00130	-.05949	-.00900	-.03598	-.00953	.00064	.08951
4.961	192.320	200.15000	53.64900	-.02137	2.93190	-.07319	-.00751	-.03671	-.00779	.00055	.09424
4.980	292.130	200.15000	53.63100	-.00333	2.93710	-.07220	.02029	-.03401	-.00315	.00044	.10027
5.031	391.070	200.30000	53.92000	.04473	2.99450	-.09515	.02928	-.02873	-.01068	.00041	.10663
4.987	591.390	200.13000	53.92600	.00078	2.99320	-.00644	.00113	-.03016	-.01068	.00028	.08728
	GRADIENT	29.36249	7.93390	.00289	.43948	-.01000	-.00288	-.00596	-.00167	.00008	.01312













V41B-D9A (IA22), ORBITER (O4RC1) W/ET SEPARATING

(RVK01B) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 OBETA = 3.000 X = 600.000  
 Y = 54.000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2712/ 0 RN/L = .87 (RADIANT INTERVAL = -5.00/ 5.00)

DALPHA	Z	X	Y	OBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-10.025	324.920	600.15000	54.00700	2.93770	.29087	-.01756	-.00263	-.00032	.00214	-.00692	.22915
-9.997	349.710	600.14000	54.32000	3.00340	.26414	-.01803	-.00265	-.00031	.00143	-.00871	.22976
-10.002	399.760	600.14000	53.98400	2.99750	.21284	-.01540	-.00298	-.00029	.00051	-.01207	.22973
-10.020	449.920	600.19000	54.23900	3.00020	.17934	-.01042	-.00336	-.00016	.00010	-.01406	.22958
-10.045	500.300	600.33000	54.04100	2.99330	.16001	-.00359	-.00407	-.00007	.00044	-.01311	.23033
-10.059	600.330	600.33000	54.21100	3.00120	.13554	.00054	-.00427	-.00009	.00041	-.01163	.22970
-10.063	700.460	600.33000	53.74400	2.99400	.13500	.00057	-.00425	-.00011	.00041	-.01168	.22954
-10.002	799.930	600.33000	54.03300	2.99310	.13511	.00057	-.00413	-.00009	.00040	-.01165	.22930
-9.969	899.840	600.12000	53.92300	2.99430	.13513	.00059	-.00420	-.00011	.00041	-.01169	.22903
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

V41B-D9A (IA22), ORBITER (O4RC1) W/ET SEPARATING

(SVK01B) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 OBETA = 3.000 X = 600.000  
 Y = 54.000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2712/ 0 RN/L = .87 (RADIANT INTERVAL = -5.00/ 5.00)

DALPHA	Z	ALPHA	BETA	OBETA	CA	CLM	CA	CY	CYN	CBL
-10.025	324.920	-4.99300	-.00080	2.93770	-.03778	-.00576	.03643	.00465	-.00125	.00219
-9.997	349.710	-4.99370	-.00080	3.00340	-.03378	-.00725	.03454	.00462	-.00124	.00148
-10.002	399.760	-5.00000	-.00080	2.99750	-.11520	-.00462	.03120	.00429	-.00121	.00056
-10.020	449.920	-4.99700	-.00090	3.00020	-.14932	.00038	.02928	.00393	-.00108	.00014
-10.045	500.300	-4.99200	-.00090	2.99330	-.15224	.00723	.03031	.00323	-.00100	.00049
-10.059	600.330	-4.99300	-.00080	3.00120	-.15287	.01133	.03168	.00301	-.00102	.00046
-10.063	700.460	-4.99300	-.00080	2.99400	-.19386	.01147	.03169	.00303	-.00104	.00046
-10.002	799.930	-4.99300	-.00090	2.99310	-.19353	.01146	.03169	.00315	-.00102	.00045
-9.969	899.840	-4.99320	-.00080	2.99430	-.19387	.01150	.03170	.00309	-.00103	.00045
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR



V41B-D9A (1A22), ET SEPARATING FROM ORB (04RC1)

(AVK018) ( 04 MAY 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DEETA = 3.000 X = 600.000  
 Y = 54.000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2712/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEB	CA
-10.025	324.920	600.15000	54.00700	-15.02400	2.92390	-.35739	-.04457	-.04826	-.00562	.00069	.12400
-9.997	349.710	600.14000	54.32000	-14.93700	3.00260	-.38393	-.04128	-.04686	-.00939	.00060	.12277
-10.002	393.760	600.14000	53.93400	-15.00200	2.92370	-.38334	-.05540	-.04270	-.00789	.00074	.11400
-10.020	449.920	600.13000	54.28000	-15.01700	2.92330	-.30034	-.03018	-.04132	-.00744	.00077	.10257
-10.045	500.300	600.23000	54.04100	-15.03700	2.93700	-.28508	-.05472	-.03375	-.00781	.00074	.10575
-10.059	600.330	600.35000	54.21100	-15.04000	3.00040	-.30156	-.03767	-.04109	-.00708	.00036	.10911
-10.053	700.460	600.32000	53.74400	-15.02000	2.92330	-.32182	-.01482	-.04060	-.00226	.00033	.11642
-10.012	799.830	600.32000	54.03200	-14.92200	2.92320	-.38075	-.00002	-.03334	-.00334	.00059	.13105
-9.989	999.840	600.12000	53.92000	-14.92000	2.92400	-.27780	-.00416	-.03509	-.00818	.00039	.13290
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

V41B-D9A (1A22), ORBITER (04RC1) W/ET SEPARATING

(RVK019) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1069.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DEETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2787/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DEETA	CNR	CLMR	CYR	CYNR	CELR	CAR	HM
-20.009	624.900	.05225	-.17390	-.00688	.51328	-.01592	-.03467	-.00140	.00086	-.00014	.23675
-19.957	653.630	-.14218	.16434	-.00074	.46711	-.03180	-.03499	-.00127	.00144	-.00144	.23829
-19.938	799.370	-.31654	-.30000	-.00354	.39323	-.03260	-.03159	-.00198	.00336	-.00628	.23555
-20.040	999.440	.03594	-.11018	-.00515	.19433	-.00791	-.03462	-.00111	.00085	-.00784	.23698
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR



V41B-D9A (1A22), ORBITER (4R1) W/ET SEPARATING

(RVK019) (20 APR 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLOR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2486/ 0 RN/L = .87 GRADIENT INT. RVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	HM
-.001	19.458	.21323	-.42924	-.01072	.17779	.00767	-.04212	-.00106	-.00045	.01854	.23493
-.014	50.059	.12395	.19017	-.00190	.19540	.01186	-.04634	-.00084	-.00014	.01827	.23438
.012	99.486	.14517	.04253	-.00326	.22195	.01429	-.04422	.00020	.00024	.00977	.23464
.019	149.150	.05473	-.05929	-.00428	.22657	.00897	-.04267	.00011	.00039	.00525	.23329
.018	198.830	.04834	.17435	-.00280	.20052	.00450	-.04311	.00039	.00056	.00009	.23497
.038	298.670	.06952	.10493	-.00329	.19701	-.00205	-.03939	-.00004	.00052	.00458	.23520
-.009	398.730	.10694	-.40176	-.00489	.17592	-.00602	-.03665	.00072	.00050	.00155	.23434
-.010	499.270	.16204	-.06237	-.00079	.16198	-.00523	-.04034	.00062	.00040	.00109	.23496
-.043	599.950	.20994	-.02658	-.00399	.14939	-.00271	-.03792	.00077	-.00029	.00249	.23496
.001	799.260	.15462	.14841	-.00182	.14910	-.00265	-.03796	.00076	-.00029	.00246	.23423
.001	939.210	.16089	.05518	-.00299	.14997	-.00269	-.03788	.00077	-.00030	.00243	.23464
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2489/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	HM
4.957	-49.135	.21718	2.52260	.05531	.14403	-.00250	-.03722	-.00052	-.00051	.01134	.23398
4.971	15.206	.11877	.16335	-.00213	.18747	.00430	-.04145	-.00164	-.00031	.01597	.23451
4.993	49.405	.16934	.17673	-.00235	.19324	.00544	-.03516	-.00103	-.00011	.00663	.23784
5.011	99.173	.19430	-.43341	-.00897	.20055	.00793	-.04160	-.00012	.00046	.00270	.23463
5.026	198.390	.30313	.03371	-.00200	.19212	.00144	-.04221	.00051	.00054	.00132	.23449
5.023	298.720	.27340	.10356	.00315	.18950	-.00393	-.03905	.00058	.00095	.00082	.23464
4.985	399.320	.23934	.11472	-.00080	.17042	-.00571	-.04043	.00083	.00016	-.00195	.23447
4.975	599.580	.23725	-.10013	-.00651	.15444	-.00240	-.03803	.00068	-.00031	-.00010	.23377
GRADIENT	.00781	.01074	-.00014	-.00014	.01233	.00028	-.00273	-.00011	-.00002	.00105	.01542



V418-D9A (IA22), ORBITER (O4RC1) W/ET SEPARATING

(SVK019) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2799/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.506	199.480	-4.98950	3.00143	-.00613	-.00671	.02342	.04987	-.03275	-.00227	.00067
-5.517	249.120	-4.99040	3.00132	-.00632	-.05596	.01365	.04315	-.03230	-.00229	.00035
-5.493	299.010	-4.99330	3.00076	-.00486	-.07521	.00559	.04093	-.03095	-.00190	.00037
-5.467	398.460	-4.99310	3.00115	-.00365	-.11104	.00022	.04079	-.02656	-.00240	.00125
-5.470	498.630	-4.99430	3.00047	-.00447	-.15204	.00394	.04003	-.02812	-.00178	.00012
-5.513	599.020	-4.99270	3.00047	-.00333	-.17294	.00714	.04249	-.02839	-.00170	.00013
-5.571	700.020	-4.99130	3.00045	-.01395	-.17249	.00339	.04325	-.02654	-.00169	.00007
-5.525	799.280	-4.99100	3.00048	-.00758	-.17632	.00338	.04335	-.02870	-.00172	.00006
-5.516	819.210	-4.99160	3.00044	-.00064	-.17659	.00541	.04323	-.02872	-.00170	.00006
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2486/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.001	19.458	-4.99969	3.00102	-.01072	-.14951	.01842	.06170	-.03487	-.00198	-.00040
-.014	50.059	-4.97623	3.00090	-.00190	-.13174	.02261	.03141	-.03909	-.00176	-.00009
.012	99.488	-4.97261	2.99976	-.00336	-.10508	.02504	.05290	-.03597	-.00072	.00028
.019	149.150	-4.97725	2.99978	-.00428	-.09935	.01970	.04931	-.03544	-.00082	.00042
.018	198.830	-4.99259	2.99940	-.00260	-.12637	.01524	.04320	-.03587	-.00053	.00060
.038	299.670	-4.99068	2.99979	-.00329	-.12971	.00658	.04767	-.03214	-.00096	.00056
-.009	399.730	-4.99345	2.99979	-.00429	-.15053	.00471	.04462	-.03141	-.00020	.00065
-.010	499.270	-4.99343	2.99999	-.00079	-.16433	.00349	.04413	-.03311	-.00030	.00045
-.043	599.920	-4.99105	2.99979	-.00339	-.17673	.00000	.04550	-.03069	-.00015	-.00025
.001	799.260	-4.99164	2.99992	-.00182	-.17691	.00205	.04544	-.03074	-.00016	-.00025
.001	899.210	-4.99164	2.99979	-.00239	-.17594	.00305	.04334	-.03064	-.00015	-.00026
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2489/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
4.957	-49.135	-4.99182	3.00019	.05531	-.18894	.00937	.05499	-.02988	-.00145	-.00046
4.971	15.206	-4.99376	3.00163	-.00213	-.14447	.01521	.03974	-.03409	-.00258	-.00027
4.993	49.405	-4.97635	3.00035	-.00235	-.13370	.01935	.05040	-.02291	-.00197	-.00006
5.011	99.173	-4.97233	2.99997	-.00307	-.13129	.01874	.04648	-.03425	-.00106	.00050
5.026	199.390	-4.99301	2.99920	-.00200	-.13974	.01234	.04509	-.03466	-.00042	.00059
5.023	299.720	-4.99105	2.99995	.00315	-.14398	.00638	.04463	-.03069	-.00035	.00100
4.985	399.320	-4.99349	2.99930	-.00090	-.16194	.00522	.04188	-.03307	-.00011	.00020
4.975	599.580	-4.99122	2.99971	-.00361	-.17828	.00653	.04379	-.03066	-.00006	-.00027
	GRADIENT	-.32775	.19740	-.00014	-.00950	.00100	.00393	-.00224	-.00017	-.00002





V41B-D9A (1A22),ORBITE(104RC1) W/ET SEPARATING

(TVK019) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2799/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.505	199.480	.02774	-.12149	.00939	-.13676	433.55000	.00000	.00000	648.84000	.00000	.00000
-5.517	249.120	.12062	-.26090	.02304	-.12315	433.47000	.00000	.00000	648.72000	.00000	.00000
-5.493	299.010	.09512	-.16090	.00291	-.12111	432.90000	.00000	.00000	647.87000	.00000	.00000
-5.467	398.460	.11163	-.16527	.01989	-.07613	433.56000	.00000	.00000	648.86000	.00000	.00000
-5.470	498.630	.13681	-.19229	.03269	-.04315	433.06000	.00000	.00000	648.11000	.00000	.00000
-5.513	599.020	.11420	-.29224	.03994	-.0357	433.00000	.00000	.00000	648.03000	.00000	.00000
-5.571	700.020	.23490	-.84449	.03542	-.03113	432.93000	.00000	.00000	647.94000	.00000	.00000
-5.525	799.200	.29336	-.36766	.03267	-.02616	433.24000	.00000	.00000	648.32000	.00000	.00000
-5.516	819.210	.37929	-.23511	.03070	-.02317	433.07000	.00000	.00000	648.12000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2486/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-.001	19.458	.21323	-.42924	-.00707	-.10214	433.24000	.00000	.00000	648.38000	.00000	.00000
-.014	50.059	.12385	-.15017	.03916	-.02112	433.04000	.00000	.00000	648.06000	.00000	.00000
.012	99.436	.14617	-.04253	.02304	-.05113	432.00000	.00000	.00000	647.83000	.00000	.00000
.019	149.150	.09473	-.09333	-.00293	-.09710	432.21000	.00000	.00000	646.84000	.00000	.00000
.018	198.630	.04934	-.17435	.02328	-.04210	432.70000	.00000	.00000	647.57000	.00000	.00000
.038	298.670	.09352	-.10493	.02690	-.04135	432.47000	.00000	.00000	647.23000	.00000	.00000
-.009	398.730	.10694	-.40176	.00356	-.07014	432.25000	.00000	.00000	646.91000	.00000	.00000
-.010	499.270	.16204	-.02237	.02756	-.02012	431.93000	.00000	.00000	646.42000	.00000	.00000
-.043	599.930	.20094	-.02838	.02318	-.02318	431.63000	.00000	.00000	646.04000	.00000	.00000
.001	799.250	.15462	-.14641	.02343	-.02717	431.40000	.00000	.00000	645.62000	.00000	.00000
.001	939.210	.16093	.05518	.02250	-.02719	432.73000	.00000	.00000	647.61000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2489/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
4.957	-49.135	.21718	2.52260	.01786	-.01414	438.11000	.00000	.00000	655.67000	.00000	.00000
4.971	15.206	.11877	.16335	.01694	-.01014	439.33000	.00000	.00000	657.59000	.00000	.00000
4.993	49.405	.16934	.17673	-.01536	-.05312	439.33000	.00000	.00000	657.57000	.00000	.00000
5.011	93.173	.19430	-.43341	.01979	-.00313	439.33000	.00000	.00000	657.59000	.00000	.00000
5.026	193.390	.30913	.03371	.01911	-.01519	439.29000	.00000	.00000	657.41000	.00000	.00000
5.023	298.720	.27340	.10656	.00281	-.02914	439.70000	.00000	.00000	659.05000	.00000	.00000
4.985	399.320	.23834	-.11472	.01175	-.01017	439.94000	.00000	.00000	659.41000	.00000	.00000
4.975	599.580	.23725	-.10013	.01585	-.00917	440.43000	.00000	.00000	659.14000	.00000	.00000
	GRADIENT	.00781	.01074	.00125	-.00010	28.89583	.00000	.00000	43.24477	.00000	.00000



V41B-D9A (IA22), ORBITER (O4RC1) W/ET SEPARATING

(UVK019) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1089.0000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2799/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	P33	DLPBAL	T81	T82	DT	T
-5.506	199.480	979.06000	980.06000	83.00000	980.36000	979.65000	85.00000	77.00000	24.62800	99.76800
-5.517	249.120	979.65000	979.63000	83.00000	979.95000	979.85000	85.00000	77.00000	22.24900	99.76800
-5.493	299.010	979.55000	979.55000	83.00000	979.55000	979.85000	85.00000	77.00000	19.41900	99.76800
-5.467	398.480	979.62000	979.62000	83.00000	979.52000	979.85000	85.00000	77.00000	16.23600	99.76800
-5.470	498.630	979.91000	979.91000	83.00000	979.91000	979.85000	85.00000	77.00000	13.28000	99.76800
-5.513	599.020	979.79000	979.79000	83.00000	979.79000	979.85000	85.00000	77.00000	10.46700	99.76800
-5.571	700.020	979.63000	979.63000	83.00000	979.63000	979.85000	85.00000	77.00000	8.24730	99.76800
-5.525	799.280	979.63000	979.63000	83.00000	979.63000	979.85000	85.00000	77.00000	6.26270	99.76800
-5.516	819.210	979.94000	979.94000	83.00000	979.94000	979.85000	85.00000	77.00000	4.92980	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2488/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	P33	DLPBAL	T81	T82	DT	T
-.001	19.458	977.00000	977.00000	79.00000	977.30000	976.78000	65.00000	73.00000	-2.77710	99.89400
-.014	50.059	977.02000	977.02000	79.00000	977.32000	976.78000	65.00000	73.00000	-.25946	99.89400
.012	99.486	976.63000	976.63000	79.00000	976.39000	976.78000	65.00000	73.00000	-1.19467	99.89400
.019	149.150	976.11000	976.11000	79.00000	976.11000	976.78000	65.00000	73.00000	-1.57660	99.89400
.018	193.830	976.23000	976.23000	79.00000	976.23000	976.78000	65.00000	73.00000	-2.24220	99.89400
.038	293.670	976.70000	976.70000	79.00000	976.70000	976.78000	65.00000	73.00000	-.29243	99.89400
-.009	393.730	976.63000	976.63000	79.00000	976.63000	976.78000	65.00000	73.00000	1.08160	99.89400
-.010	499.270	976.91000	976.91000	79.00000	976.91000	976.78000	65.00000	73.00000	1.77180	99.89400
-.043	599.930	976.82000	976.82000	79.00000	976.82000	976.78000	65.00000	73.00000	1.71120	99.89400
.001	799.280	976.63000	976.63000	79.00000	976.63000	976.78000	65.00000	73.00000	1.16300	99.89400
.001	939.210	976.80000	976.80000	79.00000	976.80000	976.78000	65.00000	73.00000	.46781	99.89400
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2489/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	P33	DLPBAL	T81	T82	DT	T
4.957	-49.135	976.36000	976.36000	81.00000	976.36000	976.14939	64.00000	73.00000	-4.04360	99.89400
4.971	15.206	976.80000	976.80000	81.00000	976.30000	976.14939	64.00000	73.00000	-4.21960	99.89400
4.933	49.405	977.25000	977.25000	81.00000	977.25000	976.14939	64.00000	73.00000	-4.47660	99.89400
5.011	99.173	977.27000	977.27000	81.00000	977.27000	976.14939	64.00000	73.00000	-4.36750	99.89400
5.026	193.390	977.59000	977.59000	81.00000	977.59000	976.14939	64.00000	73.00000	-4.42160	99.89400
5.023	298.720	977.47000	977.47000	81.00000	977.47000	976.14939	64.00000	73.00000	-3.61250	99.89400
4.985	399.320	977.04000	977.04000	81.00000	977.04000	976.14939	64.00000	73.00000	-3.01890	99.89400
4.975	599.580	977.14000	977.14000	81.00000	977.14000	976.14939	64.00000	73.00000	-2.53240	99.89400
	GRADIENT	64.17204	64.17204	5.32694	64.17204	64.19505	4.20586	4.80074	-.27749	6.56938



V41B-D9A (1A22), ET SEPARATING FROM ORB (04RC1)

(AVK019) (04 MAY 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2799/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHA	BETAT	CN	CLM	CY	CYN	CEL	CA
-5.506	199.480	.02774	-.12149	-10.47500	2.99530	-.20.92	-.01185	-.03082	-.01004	.00045	.11340
-5.517	249.120	.12062	-.26090	-10.49700	2.99300	-.21548	-.02521	-.03454	-.00875	.00031	.09983
-5.493	299.010	.09512	-.16090	-10.48200	2.99590	-.21382	-.02118	-.03495	-.00839	.00030	.10002
-5.467	399.460	.11163	-.16527	-10.46300	2.99750	-.22035	-.00237	-.03528	-.00759	.00026	.11309
-5.470	499.630	.13081	-.19229	-10.46400	2.99300	-.24256	.01625	-.03309	-.00799	.00022	.12692
-5.513	599.020	.11420	-.29224	-10.50300	3.110430	-.21934	.01247	-.02979	-.00930	.00025	.12980
-5.571	700.020	.23450	-.64449	-10.56200	2.99350	-.15579	-.02252	-.02974	-.00920	.00020	.10160
-5.525	799.260	.29025	-.36766	-10.51600	2.99230	-.13936	-.03119	-.03019	-.00923	.00022	.10124
-5.516	819.210	.37929	-.23511	-10.50700	2.99590	-.13938	-.03087	-.03026	-.00914	.00023	.10069
	GRADIENT	.00000	.00030	.00000	.10000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2486/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHA	BETAT	CN	CLM	CY	CYN	CEL	CA
-.001	19.458	.21323	-.42924	-4.99180	2.99030	-.10734	-.02350	-.03357	-.01058	.00058	.08708
-.014	50.059	.12355	-.19017	-4.99040	2.99200	-.12377	-.02566	-.03268	-.01018	.00049	.08652
.012	99.486	.14617	.04253	-4.99110	2.99510	-.13478	-.01622	-.03574	-.00913	.00038	.09136
.019	149.150	.09473	-.05828	-4.99910	2.99550	-.13593	-.01069	-.03457	-.00893	.00045	.09207
.018	198.830	.04834	.17435	-4.99480	2.99330	-.13226	-.00349	-.03670	-.00905	.00034	.09623
.038	299.670	.09032	.10493	-4.99100	2.99330	-.13785	.01030	-.03508	-.00763	.00028	.10448
-.009	399.730	.10894	-.40176	-5.00250	2.99390	-.14065	.02135	-.02930	-.00952	.00033	.11332
-.010	499.270	.16204	-.09237	-5.00350	2.99320	-.10752	.01079	-.02828	-.01105	.00020	.11084
-.043	599.950	.20934	-.02658	-5.03440	2.99480	-.06442	-.01485	-.02772	-.01042	.00020	.08954
.001	799.250	.15462	.14641	-4.99040	2.99700	-.06291	-.01515	-.02912	-.01021	.00027	.09302
.001	939.210	.16038	.05518	-4.99030	2.99320	-.06320	-.01515	-.02680	-.01019	.00027	.09421
	GRADIENT	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2489/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHA	BETAT	CN	CLM	CY	CYN	CEL	CA
4.957	-49.135	.21718	2.52260	-.03432	3.10550	-.02518	-.00681	-.03354	-.00823	.00048	.08583
4.971	15.205	.11877	.16335	-.01246	2.99350	-.05767	-.00642	-.02997	-.00923	.00025	.08514
4.993	49.405	.16994	.17673	.01355	2.99350	-.06434	-.00082	-.03233	-.00804	.00022	.08806
5.011	99.173	.19430	-.43341	.03065	2.99130	-.07248	.00686	-.03265	-.00783	.00030	.09347
5.026	198.390	.30813	.03371	.03559	2.99720	-.07035	.02228	-.03049	-.00837	.00021	.10200
5.023	298.720	.27340	.10956	.03235	3.110210	-.05512	.02979	-.02648	-.01082	.00012	.10717
4.985	399.320	.23934	.11472	-.00339	2.99300	-.02229	.01594	-.02463	-.01157	.00011	.09326
4.975	599.530	.23725	-.10013	-.01562	2.99210	-.00493	.00069	-.02728	-.01046	.00019	.08790
	GRADIENT	.00781	.01074	-.00082	.19725	-.00379	-.00042	-.00170	-.00061	.00002	.00560



REFERENCE DATA

SREF = 2630.0000 SQ.FT. XMRP = 1069.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 OETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2800/ 0 RN/L = .68 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	OSETA	CN?	CLMR	CYR	CYNR	CBLR	CAR	WM
-5.514	199.640	200.10000	.18559	-.00037	.37445	.00043	-.04150	-.00109	.00134	-.00250	.23427
-5.512	249.830	200.12000	-.06226	-.00295	.27655	-.00354	-.03804	-.00114	.00043	-.00145	.23415
-5.552	300.350	200.23000	.11677	-.00001	.24228	-.00719	-.03603	-.00142	.00030	-.00096	.23445
-5.554	400.300	200.23000	.00287	-.00252	.13590	-.00935	-.03525	-.00109	.00109	-.00271	.23445
-5.552	500.240	200.27000	-.10179	-.00353	.15176	-.00520	-.03517	-.00080	-.00007	-.00179	.23374
-5.506	593.600	200.23000	.04327	-.00220	.14912	-.00234	-.03558	-.00077	.00003	.00026	.23392
-5.455	683.710	200.15000	.20356	-.00054	.14650	-.00234	-.03534	-.00030	.00001	.00031	.23415
-5.507	799.290	200.22000	-.23239	-.00616	.14237	-.00237	-.03591	-.00030	.00002	.00022	.23407
-5.512	819.230	200.18000	.06339	-.00224	.14639	-.00235	-.03595	-.00077	.00001	.00018	.23433
GRADIENT	.00000	.00000	.00000	.00000	.07000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2487/ 0 RN/L = .67 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	OSETA	CN?	CLMR	CYR	CYNR	CBLR	CAR	WM
-.005	19.748	200.12000	-.10536	-.01110	.22981	.02420	-.04036	-.00242	-.00116	.01492	.23428
-.033	50.376	200.10000	.06305	.00139	.23110	.02325	-.04618	.00016	.00003	.00760	.23501
-.027	100.420	200.11000	-.05212	-.00341	.24531	.01593	-.04442	.00012	.00025	.00284	.23518
-.016	150.010	200.15000	.44500	.00253	.23410	.00315	-.04334	.00039	.00063	.00180	.23480
-.029	200.450	200.15000	.16504	.00198	.23698	.00065	-.04333	.00066	.00040	-.00124	.23489
-.036	300.410	200.22000	.26320	.00084	.13469	-.00472	-.03206	.00048	.00077	.00380	.23471
-.024	400.110	200.19000	.37316	-.00509	.13899	-.00332	-.04041	.00077	.00027	.00065	.23488
.024	459.420	200.13000	.11213	-.00469	.13482	-.00402	-.03794	.00076	-.00017	.00175	.23487
.036	559.030	200.11000	.45305	.00311	.14910	-.00272	-.03784	.00077	-.00029	.00254	.23510
.001	739.310	200.23000	.13945	-.00235	.14875	-.00269	-.03792	.00077	-.00029	.00249	.23425
.001	939.340	200.21000	-.03181	-.00373	.14913	-.00258	-.03802	.00076	-.00030	.00241	.23468
GRADIENT	.00000	.00000	.00000	.00000	.07000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2490/ 0 RN/L = .65 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	OSETA	CN?	CLMR	CYR	CYNR	CBLR	CAR	WM
5.009	-51.180	200.26000	.01055	-.00446	.17015	.00559	-.04335	-.00180	-.00049	.01605	.23409
4.973	15.022	200.15000	-.05451	-.00521	.21239	.01755	-.04329	.00033	.00002	.00708	.23368
4.963	50.233	200.14000	.01699	-.00035	.23237	.01204	-.04201	-.00037	.00038	.00550	.23443
4.944	100.440	200.16000	-.05147	-.00359	.23058	.00601	-.04272	.00049	.00048	-.00031	.23513
4.972	200.290	200.10000	-.01084	-.00457	.13231	-.00077	-.03552	.00012	.00010	.00315	.23428
4.976	300.040	200.13000	.45975	-.00435	.13355	-.00538	-.04083	.00030	.00108	-.00069	.23507
5.033	359.010	200.23000	.01367	-.00186	.13526	-.00455	-.03801	.00084	-.00004	-.00124	.23443
4.990	529.330	200.21000	.14191	-.00169	.13482	-.00239	-.03909	.00025	-.00029	.00005	.23468
GRADIENT	13.32379		-.00363	-.00035	.01414	.00117	-.00228	.00002	.00000	.00047	.01558

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR





V41B-D9A (IA22), ORBITER (O4RC1) W/ET SEPARATING

(SVK020 (20 APR 77))

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1069.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UNBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2800/ 0 RN/L = .68 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.514	193.640	-4.93180	3.00097	-.00037	-.02283	.01118	.04053	-.03425	-.00201	.00139
-5.512	249.030	-4.93370	3.00095	-.00225	-.05049	.00721	.04169	-.03079	-.00237	.00048
-5.552	300.350	-4.93130	3.00111	-.00001	-.00473	.00355	.04217	-.02378	-.00234	.00035
-5.554	400.300	-4.93230	3.00072	-.00332	-.13723	.00223	.04042	-.02601	-.00202	.00113
-5.552	500.240	-4.93200	3.00045	-.00332	-.16323	.00034	.04135	-.02793	-.00172	-.00003
-5.503	603.600	-4.93310	3.00030	-.00030	-.17733	.00009	.04331	-.02334	-.00169	.00007
-5.455	703.710	-4.93170	3.00034	-.00034	-.17030	.00010	.04344	-.02359	-.00172	.00003
-5.507	793.200	-4.93110	3.00046	-.00316	-.17045	.00029	.04333	-.02336	-.00169	.00006
-5.512	819.250	-4.93150	3.00044	-.00024	-.17025	.00029	.04353	-.02371	-.00170	.00006
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2487/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.005	19.748	-4.93329	3.00270	-.01110	-.00031	.03300	.00227	-.03307	-.00335	-.00111
-.023	50.378	-4.93227	3.00093	-.00133	-.00722	.00004	.00691	-.03090	-.00078	.00008
-.027	100.420	-4.97005	2.99931	-.00341	-.00265	.00577	.00016	-.03714	-.00031	.00029
-.016	150.010	-4.93003	2.99945	-.00365	-.10379	.01532	.04504	-.03537	-.00054	.00027
-.029	200.450	-4.93371	2.99312	.00163	-.12030	.01161	.04165	-.03207	-.00027	.00045
-.036	300.410	-4.93136	2.99706	.00034	-.13118	.00000	.04320	-.03093	-.00044	.00032
-.024	400.110	-4.93439	2.99379	-.00509	-.16309	.00006	.04334	-.03320	-.00014	.00031
.024	459.420	-4.93239	2.99379	-.00469	-.17030	.00039	.04471	-.03073	-.00016	-.00012
.036	503.030	-4.93163	2.99379	.00311	-.17571	.00753	.04351	-.03032	-.00015	-.00025
.001	593.310	-4.93163	2.99376	-.00233	-.17707	.00002	.04546	-.03071	-.00015	-.00025
.001	633.340	-4.93169	2.99373	-.00373	-.17715	.00004	.04544	-.03078	-.00016	-.00025
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2490/ 0 RN/L = .65 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
5.009	-51.180	-4.93545	3.00165	-.00446	-.16263	.01754	.05397	-.03597	-.00274	-.00044
4.973	15.022	-4.97032	2.99971	-.00221	-.12097	.00330	.05104	-.03591	-.00061	.00007
4.933	50.233	-4.97009	3.00035	-.10023	-.11124	.02301	.05050	-.03462	-.00131	.00042
4.974	100.440	-4.93183	2.99923	-.00039	-.13341	.01623	.04331	-.03334	-.00045	.00053
4.972	200.220	-4.93773	2.99357	-.00757	-.12437	.01018	.04709	-.03214	-.00032	.00014
4.976	300.040	-4.93382	2.99375	-.00435	-.14957	.00329	.04304	-.03345	-.00014	.00110
5.033	399.010	-4.93268	2.99376	-.00185	-.16758	.00339	.04265	-.03083	-.00010	.00001
4.990	599.330	-4.93117	2.99339	-.00169	-.17655	.00357	.04403	-.03071	-.00010	-.00025
	GRADIENT	-.33089	.19869	-.00035	-.00605	.00190	.00340	-.00239	-.00004	.00000

REPRODUCIBILITY OF THE  
 ORIGINAL PAGE IS POOR



REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 102913000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 EREF = 1290.3000 INCHES ZMRP = 379.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 OSETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UNCLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2800/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHFD	CNFJ	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.514	159.640	200.10000	.12339	.01906	-.02223	432.00000	.00000	.00000	647.63000	.00000	.00000
-5.512	249.630	200.12000	-.02223	.00114	-.07243	433.00000	.00000	.00000	648.07000	.00000	.00000
-5.532	300.300	200.22000	.11677	-.02732	-.10310	433.00000	.00000	.00000	647.92000	.00000	.00000
-5.554	400.300	200.23000	.00237	-.00218	-.01503	433.00000	.00000	.00000	647.00000	.00000	.00000
-5.552	500.240	200.27000	-.10179	.02049	-.00143	433.00000	.00000	.00000	649.00000	.00000	.00000
-5.505	600.800	200.22000	.04237	.02123	-.00104	432.10000	.00000	.00000	648.07000	.00000	.00000
-5.483	623.710	200.15000	.20000	.02337	-.01333	432.00000	.00000	.00000	648.71000	.00000	.00000
-5.507	799.200	200.22000	-.22239	.02339	-.01333	433.01000	.00000	.00000	648.00000	.00000	.00000
-5.512	819.600	200.10000	.00000	.02004	-.01333	433.00000	.00000	.00000	648.00000	.00000	.00000
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2497/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHFD	CNFJ	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-.005	19.740	200.12000	-.10535	.02734	-.01304	435.12000	.00000	.00000	651.19000	.00000	.00000
-.033	50.375	200.10000	.06205	.02735	-.05131	434.70000	.00000	.00000	650.61000	.00000	.00000
-.027	100.420	200.11000	-.02212	.02311	-.03115	434.70000	.00000	.00000	650.00000	.00000	.00000
-.016	150.010	200.10000	.44500	-.00033	-.07123	434.00000	.00000	.00000	649.50000	.00000	.00000
-.023	200.430	200.15000	.16004	.00109	-.03104	435.40000	.00000	.00000	648.74000	.00000	.00000
-.033	300.410	200.20000	.20000	.00153	-.03178	431.00000	.00000	.00000	645.00000	.00000	.00000
-.024	400.110	200.10000	.37316	.00037	-.04129	430.51000	.00000	.00000	643.00000	.00000	.00000
.024	459.420	200.13000	.11213	.01939	-.02120	431.10000	.00000	.00000	645.25000	.00000	.00000
.036	559.030	200.11000	.45005	.01976	-.02105	431.27000	.00000	.00000	645.43000	.00000	.00000
.001	799.310	200.20000	.13045	.02033	-.02101	431.20000	.00000	.00000	645.45000	.00000	.00000
.001	939.340	200.21000	-.03101	.02073	-.02149	431.00000	.00000	.00000	646.35000	.00000	.00000
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2460/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHFD	CNFJ	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
5.009	-51.160	200.25000	.01055	.01915	-.00100	440.00000	.00000	.00000	639.74000	.00000	.00000
4.973	15.022	200.15000	-.05451	.02200	-.01122	441.27000	.00000	.00000	650.40000	.00000	.00000
4.933	50.250	200.14000	.01033	.00041	-.02103	441.00000	.00000	.00000	650.00000	.00000	.00000
4.844	100.440	200.10000	-.05147	.00334	-.02103	440.77000	.00000	.00000	650.00000	.00000	.00000
4.972	200.250	200.10000	-.01034	.00000	-.00104	441.00000	.00000	.00000	650.00000	.00000	.00000
4.976	300.040	200.13000	.45005	-.01142	-.04123	440.00000	.00000	.00000	650.00000	.00000	.00000
5.033	300.010	200.20000	.01367	.01419	-.03107	440.00000	.00000	.00000	650.00000	.00000	.00000
4.890	559.330	200.21000	.14191	.01383	-.00100	441.00000	.00000	.00000	650.00000	.00000	.00000
GRADIENT		13.32379	-.00363	.00146	-.00108	29.37492	.00000	.00000	43.562.9	.00000	.00000



V41B-D9A (1A22), ORBITER (04RC1) W/ET SEPARATING

(UVK020) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UM3LDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2800/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-5.514	199.840	980.01000	990.01000	83.00000	980.01000	979.80000	84.00000	77.00000	2.78580	99.76800
-5.512	249.830	979.83000	979.83000	83.00000	979.83000	979.80000	84.00000	77.00000	2.06930	99.76800
-5.552	300.350	979.97000	979.97000	83.00000	979.97000	979.80000	84.00000	77.00000	.84807	99.76800
-5.554	400.300	980.01000	980.01000	83.00000	980.01000	979.80000	84.00000	77.00000	-.92937	99.76800
-5.552	500.240	979.83000	979.83000	83.00000	979.83000	979.80000	84.00000	77.00000	-.69304	99.76800
-5.509	500.600	979.71000	979.71000	83.00000	979.71000	979.80000	84.00000	77.00000	-.51112	99.76800
-5.455	603.710	979.75000	979.75000	83.00000	979.75000	979.80000	84.00000	77.00000	.27557	99.76800
-5.507	799.220	979.80000	979.80000	83.00000	979.80000	979.80000	84.00000	77.00000	1.27460	99.76800
-5.512	819.220	979.80000	979.80000	83.00000	979.80000	979.80000	84.00000	77.00000	2.11790	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2487/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-.005	19.748	976.54000	976.54000	79.00000	976.54000	977.53000	64.00000	73.00000	-2.35710	100.02000
-.033	50.376	976.51000	976.51000	79.00000	976.51000	977.53000	64.00000	73.00000	-2.56310	100.02000
-.027	100.420	976.64000	976.64000	79.00000	976.64000	977.53000	64.00000	73.00000	-2.87650	100.02000
-.018	150.010	976.35000	976.35000	79.00000	976.35000	977.53000	64.00000	73.00000	-3.06810	100.02000
-.029	200.450	976.55000	976.55000	79.00000	976.55000	977.53000	64.00000	73.00000	-3.13290	100.02000
-.036	300.410	976.69000	976.69000	79.00000	976.69000	977.53000	64.00000	73.00000	-1.83990	100.02000
-.024	400.110	977.03000	977.03000	79.00000	977.03000	977.53000	64.00000	73.00000	-2.50780	100.02000
.024	499.420	977.03000	977.03000	79.00000	977.03000	977.53000	64.00000	73.00000	-2.39350	100.02000
.036	599.030	977.33000	977.33000	79.00000	977.33000	977.53000	64.00000	73.00000	-2.13540	100.02000
.001	799.310	977.33000	977.33000	79.00000	977.33000	977.53000	64.00000	73.00000	-1.59050	100.02000
.001	939.340	977.77000	977.77000	79.00000	977.77000	977.53000	64.00000	73.00000	-1.07123	100.02000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2490/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
5.009	-51.180	976.09000	976.09000	81.00000	976.09000	976.53000	66.00000	73.00000	-5.00460	100.02000
4.973	15.022	976.03000	976.03000	81.00000	976.03000	976.53000	66.00000	73.00000	-5.69100	100.02000
4.933	50.239	976.33000	976.33000	81.00000	976.33000	976.53000	66.00000	73.00000	-4.86570	100.02000
4.944	100.440	976.44000	976.44000	81.00000	976.44000	976.53000	66.00000	73.00000	-4.85510	100.02000
4.972	200.290	976.52000	976.52000	81.00000	976.52000	976.53000	66.00000	73.00000	-2.89050	100.02000
4.976	300.040	976.83000	976.83000	81.00000	976.83000	976.53000	66.00000	73.00000	-3.25340	100.02000
5.033	359.010	976.50000	976.50000	81.00000	976.50000	976.53000	66.00000	73.00000	-3.16200	100.02000
4.990	599.330	976.76000	976.76000	81.00000	976.76000	976.53000	66.00000	73.00000	-2.77200	100.02000
	GRADIENT	64.97670	64.97670	5.39209	64.97670	65.00793	4.39356	4.65954	-.37684	6.65823



V41B-D9A (1A22), ET SEPARATING FROM ORB (04RC1)

(AVK020) (04 MAY 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 OBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UME LR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2800/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEB	CA
-5.514	199.840	200.10000	.18569	-10.48300	3.00060	-.23774	-.02793	-.03804	-.00243	.00036	.10863
-5.512	249.830	200.12000	-.08226	-10.48300	2.99300	-.22079	-.03227	-.05238	-.00233	.00038	.10272
-5.552	300.350	200.23000	.11677	-10.54300	3.00110	-.20629	-.03391	-.03593	-.00226	.00039	.09708
-5.554	400.300	200.23000	.00287	-10.54900	2.99920	-.21228	-.02006	-.03591	-.00774	.00037	.10228
-5.552	500.240	200.27000	-.10179	-10.54600	2.99450	-.23475	.00025	-.03475	-.00756	.00032	.11376
-5.506	599.600	200.23000	.04327	-10.48300	2.99430	-.24118	.01716	-.03220	-.00223	.00028	.12778
-5.455	699.710	200.15000	.20333	-10.44700	3.00000	-.20514	.00708	-.02337	-.00951	.00023	.12689
-5.507	799.230	200.22000	-.22339	-10.48300	2.99430	-.14833	-.02347	-.02332	-.00941	.00015	.09331
-5.512	819.250	200.18000	.08333	-10.50400	2.99320	-.14153	-.02333	-.03012	-.00919	.00014	.09597
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2487/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEB	CA
-.005	19.748	200.12000	-.10536	-4.93340	2.99160	-.14746	-.03335	-.02073	-.01200	.00063	.09320
-.033	50.376	200.10000	.03305	-4.93310	3.00140	-.15195	-.03438	-.02395	-.01299	.00042	.09428
-.027	100.420	200.11000	-.03212	-4.93710	2.99330	-.14234	-.02677	-.03233	-.01059	.00037	.09475
-.016	150.010	200.15000	.44500	-4.93730	3.00240	-.12340	-.02437	-.03357	-.00975	.00038	.09048
-.029	200.450	200.15000	.12304	-5.01490	3.00110	-.12327	-.01930	-.03399	-.00904	.00035	.08555
-.036	300.410	200.22000	.20320	-5.02700	2.99320	-.13102	-.00493	-.03347	-.00746	.00038	.09710
-.024	400.110	200.19000	.37316	-5.01790	2.99370	-.12004	.00375	-.03470	-.00753	.00032	.10470
.024	499.420	200.13000	.11213	-4.93300	2.99410	-.13638	.02078	-.02849	-.00999	.00041	.11398
.035	599.030	200.11000	.43395	-4.93570	3.00190	-.09742	.00339	-.02671	-.01030	.00019	.10730
.001	799.310	200.23000	.13245	-4.93100	2.99340	-.06297	-.01549	-.02653	-.01021	.00026	.09127
.001	939.340	200.21000	-.03161	-4.93050	2.99310	-.06341	-.01527	-.02237	-.01012	.00027	.09314
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2490/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEB	CA
5.009	-51.180	200.26000	.01055	.02625	2.99740	-.04544	-.01952	-.02376	-.01111	.00035	.08609
4.973	15.022	200.15000	-.05451	.00218	2.99450	-.07203	-.01763	-.03101	-.01007	.00033	.08917
4.933	50.238	200.14000	.01699	-.01189	2.99300	-.08303	-.01251	-.02934	-.01038	.00032	.09007
4.944	100.440	200.16000	-.03147	-.03773	2.99360	-.08276	-.00931	-.03319	-.00349	.00026	.09095
4.972	200.220	200.10000	-.01034	-.01893	2.99300	-.06742	.00042	-.03407	-.00206	.00026	.09473
4.976	300.040	200.13000	.45875	-.01232	2.99440	-.08232	.00039	-.03132	-.00337	.00024	.10115
5.033	399.010	200.25000	.01367	.03692	2.99390	-.06121	.02334	-.02491	-.01142	.00018	.10709
4.990	599.330	200.21000	.14191	-.00157	2.99700	-.00458	.00092	-.02752	-.01050	.00020	.08801
	GRADIENT	13.32379	-.00363	.00015	.19934	-.00480	-.00117	-.00206	-.00067	.00002	.00587



REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0123

PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UNCLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2789/ 0 RN/L = .65 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLNR	CYR	CYNR	CELR	CAR	HM
-20.040	625.430	400.32000	-.35719	-.00301	.33931	-.04001	-.03018	-.00009	.00211	-.01735	.23449
-20.013	700.020	400.64000	.00005	-.00303	.29871	-.03734	-.03008	.00020	.00263	-.01829	.23388
-19.937	783.100	353.70000	.00002	-.03003	.20310	-.01073	-.03009	-.00115	.00103	-.00908	.23409
-20.015	809.720	400.00000	.00007	.00000	.16103	-.00005	-.03019	-.00078	.00009	-.00359	.23310
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2793/ 0 RN/L = .67 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLNR	CYR	CYNR	CELR	CAR	HM
-15.035	475.120	400.20000	-.18251	-.00402	.33059	-.03311	-.03142	-.00030	.00163	-.01177	.23315
-15.059	500.170	400.20000	-.30018	-.01101	.27009	-.01005	-.03190	-.00020	.00134	-.00311	.23339
-15.011	549.800	400.00000	-.20723	-.00319	.21003	-.01003	-.03149	.00027	.00214	-.01216	.23374
-14.805	600.800	353.70000	.10001	-.00007	.10000	-.01007	-.03102	-.00003	.00102	-.01015	.23345
-14.934	625.600	353.70000	.01011	-.00010	.10011	-.00007	-.03003	-.00002	-.00001	-.00337	.23377
-14.954	709.570	353.70000	-.00049	-.00000	.10001	-.00003	-.03004	-.00077	.00005	-.00202	.23386
-14.953	953.130	353.70000	.00013	.00135	.15107	-.00003	-.03003	-.00074	.00005	-.00109	.23398
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2797/ 0 RN/L = .69 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLNR	CYR	CYNR	CELR	CAR	HM
-10.053	353.600	400.10000	.07023	-.00001	.30001	-.01078	-.03503	-.00159	.00100	-.00295	.23357
-10.010	349.350	400.00000	-.07144	-.00003	.31003	-.02010	-.03407	-.00159	.00173	-.00134	.23394
-10.051	359.710	400.10000	-.00009	-.00009	.24215	-.01744	-.03190	-.00039	.00130	-.00476	.23359
-10.004	449.330	400.12000	-.30006	-.00713	.19106	-.01279	-.03217	.00012	.00147	-.00782	.23368
-9.994	499.200	400.12000	-.50004	-.01003	.17000	-.00792	-.03007	-.00100	.00054	-.00629	.23418
-9.970	559.600	400.00000	-.20163	-.00004	.16010	-.00345	-.03005	-.00076	.00010	-.00141	.23380
-9.934	629.570	400.00000	-.10728	-.00420	.14000	-.00241	-.03003	-.00076	.00004	-.00075	.23412
-9.957	709.610	400.00000	-.00104	-.00217	.14000	-.00229	-.03003	-.00077	.00003	-.00049	.23366
-10.091	1009.000	400.42000	-.20005	-.00005	.14005	-.00241	-.03079	-.00077	.00002	-.00072	.23403
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

V418-D9A (1A22).ORBITER(04R:1) W/ET SEPARATING

(RVK021) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DSETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UNBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2601/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DSETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-5.543	200.360	400.10000	-.11023	-.00717	.29387	.00250	-.03970	-.00105	-.00016	.00008	.23430
-5.482	248.660	400.11000	-.23461	-.00512	.26222	-.00515	-.03676	-.00153	.00051	.00111	.23378
-5.519	299.260	400.21000	-.39707	-.00717	.23309	-.01270	-.03411	-.00164	.00109	.00071	.23439
-5.489	353.870	400.11000	-.24414	-.00325	.17558	-.00509	-.03531	-.00058	.00045	-.00371	.23409
-5.472	499.650	400.01000	.01450	-.00470	.15372	-.00419	-.03233	-.00031	.00006	-.00065	.23322
-5.470	593.550	400.00000	.20003	.00019	.14830	-.00340	-.03233	-.00077	.00001	.00037	.23427
-5.481	623.720	400.17000	-.16009	-.00325	.14221	-.00239	-.03337	-.00078	.00001	.00026	.23439
-5.531	799.310	400.23000	.29154	.00298	.14374	-.00239	-.03237	-.00076	.00002	.00057	.23358
-5.524	819.450	400.27000	-.20314	-.00312	.14239	-.00233	-.03237	-.00077	.00001	.00046	.23398
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2468/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DSETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-.046	20.857	400.03000	.47477	.00514	.25575	.02542	-.04642	-.00062	-.00054	.00722	.23590
.029	48.809	400.03000	.32482	-.00306	.24760	.02418	-.04637	.00058	-.00002	.00332	.23470
.046	99.549	400.04000	.00004	-.00006	.24139	.01178	-.04707	.00071	.00055	.00257	.23410
.022	149.020	400.13000	.15723	.00246	.23324	.00220	-.04463	.00055	.00045	.00237	.23366
.002	199.240	400.03000	.30062	.00057	.23737	-.00445	-.04078	.00055	.00051	.00213	.23418
.032	299.640	400.17000	.29733	-.00330	.19193	-.00370	-.04039	.00074	.00122	.00057	.23413
.034	359.620	400.32000	.00351	-.00499	.15771	-.00375	-.04035	.00033	.00010	-.00051	.23407
.034	499.790	400.22000	-.03476	-.00307	.15407	-.00206	-.03759	.00031	-.00027	.00145	.23437
.023	599.630	400.10000	-.20121	-.00129	.15346	-.00245	-.03211	.00053	-.00030	.00154	.23455
-.054	799.630	400.31000	.22303	.00073	.15279	-.00246	-.03203	.00022	-.00030	.00144	.23376
.010	939.270	400.27000	.27746	.00000	.15317	-.00242	-.03753	.00035	-.00030	.00135	.23472
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2491/ 0 RN/L = .65 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DSETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
4.984	-50.481	400.14000	-.46576	-.01005	.23375	.00334	-.04454	-.00162	-.00032	.01105	.23428
5.050	13.033	400.21000	.15430	.00002	.23122	.01007	-.04539	.00040	.00032	.00238	.23397
5.063	48.531	400.21000	.12769	.00103	.22103	.01073	-.04400	.00049	.00023	.00169	.23463
5.004	99.003	400.20000	.00221	-.00003	.21003	.00245	-.04255	.00031	.00033	-.00022	.23421
5.023	153.520	400.20000	-.21054	-.01103	.20026	-.00333	-.04109	.00033	.00022	.00165	.23463
5.023	203.530	400.20000	-.50031	-.01432	.17003	-.00316	-.04037	.00033	.00029	-.00131	.23501
5.021	303.610	400.20000	-.00049	-.00393	.16035	-.00370	-.03908	.00037	-.00014	-.00057	.23454
4.993	353.630	400.21000	.40673	.00352	.15039	-.00223	-.03507	.00029	-.00030	.00011	.23399
	GRADIENT	30.70037	.00802	.00075	.01725	.00145	-.00331	.00003	.00002	.00021	.01794



V41B-D9A (1A22).ORBITER(04RC1) W/ET SEPARATING

(SVK021) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMSLOR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2801/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
-5.543	200.360	-4.99020	3.00097	-.00717	-.03337	.01326	.04324	-.03145	-.00197	-.00011
-5.482	248.860	-4.99200	3.00132	-.00512	-.04509	.00561	.04427	-.02951	-.00245	.00055
-5.519	299.260	-4.99360	3.00127	-.00717	-.07516	-.00194	.04387	-.02666	-.00256	.00113
-5.479	399.870	-4.99360	3.00086	-.00295	-.15147	.00256	.03941	-.02836	-.00190	.00049
-5.472	498.660	-4.99360	3.00050	-.00470	-.16936	.00654	.04240	-.02343	-.00173	.00011
-5.470	598.520	-4.99160	3.00051	.00019	-.17855	.00835	.04352	-.02868	-.00170	.00006
-5.481	698.720	-4.99130	3.00046	-.00256	-.17841	.00335	.04374	-.02873	-.00170	.00005
-5.531	799.310	-4.99140	3.00042	.00248	-.17822	.00835	.04369	-.02883	-.00168	.00006
-5.524	819.450	-4.99090	3.00052	-.00812	-.17871	.00842	.04363	-.02869	-.00169	.00005
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2489/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
-.046	20.857	-4.99735	3.00096	.00614	-.07241	.04024	.05063	-.04113	-.00154	-.00050
.029	49.809	-4.99258	2.99956	-.00306	-.09187	.03502	.04690	-.04166	-.00035	.00003
.046	99.549	-4.97414	2.99926	-.00056	-.08797	.02260	.04501	-.03977	-.00022	.00070
.022	149.020	-4.99247	2.99924	.00246	-.07925	.01303	.04593	-.03675	-.00038	.00049
.002	199.240	-4.99317	2.99953	.00057	-.09214	.00639	.04565	-.03347	-.00088	.00056
.032	299.640	-4.99335	2.99930	-.00330	-.13910	.03414	.04406	-.03338	-.00019	.00126
.034	399.620	-4.99363	2.99939	-.00499	-.16212	.00509	.04299	-.03294	-.00010	.00015
.034	499.790	-4.99164	2.99977	-.00307	-.17549	.00797	.04492	-.03069	-.00012	-.00023
.023	599.860	-4.99135	2.99939	-.00129	-.17751	.00838	.04506	-.03080	-.00008	-.00025
-.054	799.890	-4.99134	2.99874	.00056	-.17747	.00839	.04500	-.03071	-.00011	-.00025
.010	939.270	-4.99133	2.99870	.00000	-.17747	.00844	.04496	-.03056	-.00008	-.00026
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2491/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
4.984	-50.481	-4.99905	3.00195	-.01005	-.09993	.04030	.05505	-.03755	-.00256	-.00027
5.050	13.036	-4.99939	2.99958	.00932	-.10904	.02985	.04672	-.03829	-.00054	.00036
5.008	49.961	-4.97635	2.99944	.00186	-.11231	.02175	.04569	-.03759	-.00045	.00071
5.004	99.003	-4.99399	2.99923	-.00553	-.11587	.01344	.04390	-.03554	-.00044	.00087
5.026	198.520	-4.99015	2.99906	-.01156	-.13240	.00739	.04603	-.03127	-.00039	.00057
5.028	298.530	-4.99355	2.99972	-.01432	-.15862	.00465	.04263	-.03324	-.00009	.00034
5.021	399.610	-4.99155	2.99973	-.00993	-.17118	.00730	.04348	-.03066	-.00007	-.00010
4.993	599.830	-4.99103	2.99938	.00332	-.17052	.00930	.04434	-.03064	-.00005	-.00026
	GRADIENT	-.39117	.23011	.00075	-.00836	.00229	.00358	-.00294	-.00004	.00003

V418-D9A (1A22).ORBITER(04RC1) W/ET SEPARATING

(TVK021) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2789/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-20.040	625.430	400.32000	-.35719	.04396	-.15954	445.63000	.00000	.00000	656.93000	.00000	.00000
-20.013	700.020	400.04000	.00836	.07194	-.07767	445.53000	.00000	.00000	667.42000	.00000	.00000
-19.967	793.100	399.75000	.06232	.05357	-.09390	445.43000	.00000	.00000	666.62000	.00000	.00000
-20.015	999.720	400.20000	.43897	.05508	-.07697	443.61000	.00000	.00000	663.90000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.03000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2793/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-15.035	475.120	400.22000	-.19251	-.01168	-.23366	437.23000	.00000	.00000	654.40000	.00000	.00000
-15.058	500.170	400.20000	-.33218	.02753	-.18559	436.93000	.00000	.00000	653.93000	.00000	.00000
-15.011	549.530	400.06000	-.29726	.09102	-.06071	436.97000	.00000	.00000	653.96000	.00000	.00000
-14.996	599.360	399.93000	.16281	.05457	-.09463	437.02000	.00000	.00000	654.03000	.00000	.00000
-14.964	699.900	399.90000	.01011	.05569	-.07392	436.70000	.00000	.00000	653.55000	.00000	.00000
-14.954	799.570	399.95000	-.06449	.05302	-.06009	436.60000	.00000	.00000	653.41000	.00000	.00000
-14.953	999.130	399.78000	.05913	.04769	-.05333	436.53000	.00000	.00000	653.35000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.03000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2797/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-10.053	325.580	400.15000	.07526	.00774	-.10052	433.41000	.00000	.00000	648.63000	.00000	.00000
-10.010	349.360	400.05000	-.07144	-.00751	-.12824	433.61000	.00000	.00000	648.93000	.00000	.00000
-10.051	399.710	400.15000	-.00849	.01718	-.08907	433.33000	.00000	.00000	648.53000	.00000	.00000
-10.004	449.330	400.12000	-.33336	.03050	-.06312	433.42000	.00000	.00000	648.63000	.00000	.00000
-9.994	499.200	400.12000	-.63354	.04022	-.04139	433.24000	.00000	.00000	648.37000	.00000	.00000
-9.970	599.800	400.03000	-.20189	.03351	-.03337	432.93000	.00000	.00000	647.91000	.00000	.00000
-9.964	698.570	400.06000	-.10728	.03660	-.03723	433.43000	.00000	.00000	648.64000	.00000	.00000
-9.967	798.610	400.04000	-.00184	.03359	-.03177	432.71000	.00000	.00000	647.58000	.00000	.00000
-10.091	1000.000	400.42000	-.28555	.03003	-.02454	433.77000	.00000	.00000	649.17000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.03000	.00000	.00000	.00000	.00000	.00000

V41B-D9A (IA22), ORBITER(04RC1) /ET SEPARATING

(TVK021) (20 APR 77)

REFERENCE DATA

GREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2801/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CT'D	CTFS	CTFU	CTAD	CTAS	CTAU
-5.543	200.360	400.10000	-.11023	.00542	-.03831	433.17000	.00000	.00000	648.28000	.00000	.00000
-5.482	248.860	400.11000	-.23461	-.00893	-.07615	433.25000	.00000	.00000	648.40000	.00000	.00000
-5.519	299.260	400.21000	-.39707	-.00752	-.05474	433.13000	.00000	.00000	648.28000	.00000	.00000
-5.489	398.870	400.11000	-.24414	.00235	-.04903	432.81000	.00000	.00000	647.74000	.00000	.00000
-5.472	498.650	400.01000	.01450	.02788	-.01753	432.83000	.00000	.00000	646.57000	.00000	.00000
-5.470	598.520	400.09000	.20355	.02004	-.01635	433.05000	.00000	.00000	648.05000	.00000	.00000
-5.481	698.720	400.17000	-.19289	.02359	-.01639	432.34000	.00000	.00000	647.04000	.00000	.00000
-5.531	799.310	400.23000	.29124	.02451	-.01579	432.87000	.00000	.00000	647.72000	.00000	.00000
-5.524	819.450	400.27000	-.26914	.02318	-.01452	433.25000	.00000	.00000	648.39000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2488/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CT'D	CTFS	CTFU	CTAD	CTAS	CTAU
-.046	20.857	400.03000	.47477	.02320	-.03459	435.77000	.00000	.00000	652.06000	.00000	.00000
.029	48.809	400.03000	.32452	.02550	-.03744	435.33000	.00000	.00000	653.09000	.00000	.00000
.046	98.549	400.04000	.08594	.02621	-.04390	435.97000	.00000	.00000	652.47000	.00000	.00000
.022	149.020	400.13000	.18723	.01403	-.05932	435.15000	.00000	.00000	652.73000	.00000	.00000
.002	199.240	400.03000	.36552	-.00418	-.06355	435.83000	.00000	.00000	653.74000	.00000	.00000
.032	299.640	400.17000	.29783	.00133	-.05534	435.53000	.00000	.00000	653.39000	.00000	.00000
.034	399.620	400.32000	.09351	.02755	-.01728	435.53000	.00000	.00000	653.39000	.00000	.00000
.034	498.790	400.22000	-.03476	.02410	-.02038	435.21000	.00000	.00000	652.87000	.00000	.00000
.023	598.650	400.18000	-.20121	.02190	-.01972	435.73000	.00000	.00000	653.69000	.00000	.00000
-.054	799.890	400.31000	.25206	.01931	-.01724	437.17000	.00000	.00000	654.27000	.00000	.00000
.010	939.270	400.27000	.27746	.01895	-.01629	437.67000	.00000	.00000	655.01000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2491/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CT'D	CTFS	CTFU	CTAD	CTAS	CTAU
4.984	-50.481	400.14000	-.48676	.01744	-.00521	441.67000	.00000	.00000	661.02000	.00000	.00000
5.050	13.036	400.21000	.10460	.02119	-.02501	442.07000	.00000	.00000	661.60000	.00000	.00000
5.008	48.961	400.21000	.12709	.01736	-.03194	441.67000	.00000	.00000	661.00000	.00000	.00000
5.004	99.003	400.20000	.00621	.00418	-.05169	442.81000	.00000	.00000	662.75000	.00000	.00000
5.026	199.520	400.30000	-.21034	.01039	-.02834	443.33000	.00000	.00000	663.56000	.00000	.00000
5.028	299.530	400.28000	-.53991	-.00451	-.04291	443.31000	.00000	.00000	663.46000	.00000	.00000
5.021	399.610	400.28000	-.03949	.01815	-.00769	443.21000	.00000	.00000	663.31000	.00000	.00000
4.993	599.830	400.21000	.40673	.01458	-.00427	443.93000	.00000	.00000	664.45000	.00000	.00000
	GRADIENT	30.70037	.00802	.00163	-.00192	33.91148	.00000	.00000	50.75176	.00000	.00000



V41B-D9A (IA22),ORBITER(O4RC) 1/ET SEPARATING

(UVK021) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LRCF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BRFF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 OBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLOR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2901/ 0 RN/L = .68 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPCAL	TB1	TB2	DT	T
-5.543	200.360	980.17000	980.17000	83.00000	980.17000	979.93000	84.00000	77.00000	.17909	99.76800
-5.482	248.860	979.83000	979.83000	83.00000	979.83000	979.93000	84.00000	77.00000	.15066	99.76800
-5.519	293.250	930.18000	930.18000	83.00000	930.18000	979.93000	84.00000	77.00000	3.76970	99.76800
-5.469	333.870	930.32000	930.32000	83.00000	930.32000	979.93000	84.00000	77.00000	6.83330	99.76800
-5.472	483.630	979.93000	979.93000	83.00000	979.93000	979.93000	84.00000	77.00000	6.53220	99.76800
-5.470	533.820	979.93000	979.93000	83.00000	979.93000	979.93000	84.00000	77.00000	5.74760	99.76800
-5.481	603.720	979.73000	979.73000	83.00000	979.73000	979.93000	84.00000	77.00000	4.10800	99.76800
-5.531	793.310	979.91000	979.91000	83.00000	979.91000	979.93000	84.00000	77.00000	2.43500	99.76800
-5.524	819.450	979.83000	979.83000	83.00000	979.83000	979.93000	84.00000	77.00000	1.35980	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2488/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPCAL	TB1	TB2	DT	T
.046	20.657	977.23000	977.23000	79.00000	977.23000	977.03000	64.00000	73.00000	-4.42980	100.02000
.029	48.809	977.33000	977.33000	79.00000	977.33000	977.03000	64.00000	73.00000	-6.12640	100.02000
.046	98.549	976.90000	976.90000	79.00000	976.90000	977.03000	64.00000	73.00000	-7.50970	100.02000
.022	149.020	976.81000	976.81000	79.00000	976.81000	977.03000	64.00000	73.00000	-8.68560	100.02000
.002	199.240	976.87000	976.87000	79.00000	976.87000	977.03000	64.00000	73.00000	-7.37990	100.02000
.032	293.640	976.21000	976.21000	79.00000	976.21000	977.03000	64.00000	73.00000	-4.04300	100.02000
.034	323.620	976.33000	976.33000	79.00000	976.33000	977.03000	64.00000	73.00000	-1.76090	100.02000
.034	423.730	976.03000	976.03000	79.00000	976.03000	977.03000	64.00000	73.00000	-.77512	100.02000
.023	523.830	976.03000	976.03000	79.00000	976.03000	977.03000	64.00000	73.00000	-.77876	100.02000
-.054	793.620	976.72000	976.72000	79.00000	976.72000	977.03000	64.00000	73.00000	-1.24170	100.02000
.010	933.270	976.34000	976.34000	79.00000	976.34000	977.03000	64.00000	73.00000	-1.83240	100.02000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2491/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPCAL	TB1	TB2	DT	T
4.954	-50.481	976.54000	976.54000	80.00000	976.54000	976.32000	65.00000	73.00000	-6.16050	100.02000
5.050	13.035	976.41000	976.41000	80.00000	976.41000	976.32000	65.00000	73.00000	-8.53470	100.02000
5.008	48.531	976.50000	976.50000	80.00000	976.50000	976.32000	65.00000	73.00000	-9.80020	100.02000
5.004	99.003	976.16000	976.16000	80.00000	976.16000	976.32000	66.00000	73.00000	-10.72200	100.02000
5.026	193.520	977.32000	977.32000	80.00000	977.32000	976.32000	66.00000	73.00000	-8.55550	100.02000
5.028	293.530	977.17000	977.17000	80.00000	977.17000	976.32000	65.00000	73.00000	-6.91180	100.02000
5.021	393.610	976.03000	976.03000	80.00000	976.03000	976.32000	66.00000	73.00000	-4.93410	100.02000
4.993	593.820	976.67000	976.67000	80.00000	976.67000	976.32000	66.00000	73.00000	-4.21730	100.02000
	GRADIENT	74.82433	74.82433	6.13385	74.82433	74.81819	5.06290	5.55923	-.65930	7.67260

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR





V41B-09A (1A22), ET SEPARATING FROM O/B (04RC1)

(AVK021) (04 MAY 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.2000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 OSETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2801/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-5.543	200.360	400.10000	-.11023	-10.52300	2.99380	-.21538	-.03628	-.04170	-.00782	.00035	.11094
-5.482	248.860	400.11000	-.23461	-10.47000	2.99520	-.24985	-.03144	-.03994	-.00351	.00035	.11035
-5.519	299.260	400.21000	-.39707	-10.51500	2.99410	-.2769	-.04399	-.03546	-.00937	.00043	.10106
-5.489	398.870	400.11000	-.24414	-10.48500	2.99170	-.2088	-.03549	-.03582	-.00801	.00041	.09979
-5.472	498.650	400.01000	.01450	-10.46500	2.99390	-.21240	-.01626	-.03527	-.00744	.00039	.10624
-5.470	598.520	400.09000	.26896	-10.46200	3.00070	-.23400	-.00299	-.03363	-.00780	.00031	.11681
-5.481	698.720	400.17000	-.19339	-10.47200	2.99480	-.20548	.01600	-.03124	-.00851	.00034	.12903
-5.531	799.310	400.23000	.29194	-10.52200	3.00250	-.11325	-.00024	-.02330	-.00832	.00021	.12060
-5.524	819.450	400.27000	-.26814	-10.51500	2.99240	-.14114	-.00811	-.02961	-.00931	.00018	.11479
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	-.00000	.00000	.00000	.00000

RUN NO. 2488/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-.046	20.857	400.03000	.47477	-5.00310	3.00710	-.11327	-.05221	-.03160	-.01179	.00071	.10114
.029	48.809	400.03000	.32452	-4.93330	2.99550	-.11048	-.04165	-.03327	-.01004	.00051	.10222
.046	98.549	400.04000	.08594	-4.92770	2.99930	-.15816	-.02229	-.03327	-.01043	.00022	.10212
.022	149.020	400.13000	.18723	-4.93040	3.00170	-.15371	-.02445	-.03268	-.01190	.00029	.09838
.002	199.240	400.03000	.36552	-4.92530	3.00020	-.17320	-.03144	-.03390	-.01172	.00037	.09355
.032	298.840	400.17000	.3783	-4.95110	2.99250	-.11563	-.02134	-.03864	-.00851	.00047	.09167
.034	398.620	400.32000	.09551	-4.95920	2.99370	-.11260	-.00395	-.03741	-.00730	.00039	.09919
.034	498.790	400.22000	-.03476	-4.95740	2.99570	-.11729	.01084	-.03329	-.00798	.00034	.10627
.023	598.850	400.18000	-.20121	-4.96920	2.99740	-.11112	.01887	-.02760	-.01047	.00044	.11358
-.054	799.890	400.31000	.25206	-5.04520	2.99930	-.01241	-.01578	-.02891	-.01044	.00026	.09101
.010	939.270	400.27000	.27746	-4.93110	2.99970	-.01339	-.01539	-.02882	-.01022	.00027	.09287
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2491/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
4.984	-50.481	400.14000	-.48576	.02455	2.99190	-.11034	-.04001	-.03918	-.00622	.00045	.10341
5.050	13.036	400.21000	.10460	.09161	3.00950	-.09127	-.02032	-.02953	-.01137	.00019	.09835
5.009	48.951	400.21000	.12709	.03175	3.00130	-.08081	-.01752	-.02694	-.01309	.00021	.09476
5.004	99.003	400.20000	.00321	.02022	2.99360	-.01552	-.01238	-.03142	-.01155	.00032	.09226
5.026	198.520	400.30000	-.21034	.03535	2.99750	-.01183	-.00903	-.03486	-.00548	.00036	.09474
5.028	298.530	400.23000	-.53091	.03465	2.98440	-.01655	-.00769	-.03317	-.00900	.00029	.09639
5.021	398.610	400.26000	-.03549	.02864	2.99590	-.01629	.02106	-.02917	-.00891	.00025	.10163
4.993	598.680	400.21000	.40673	.00147	3.00520	-.02064	.00948	-.02547	-.01141	.00013	.09341
	GRADIENT	30.70037	.00802	.00626	.23086	-.01700	-.00156	-.00227	-.00087	.00001	.00754







V41B-D9A (1A22), ORBITER (O4RC1) W/ET SEPARATING

(TVK022) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1099.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DEETA = .000 X = 600.000  
 Y = .000 ELEVON = .000  
 UMFLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2790/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	ITFD	CTFS	CTFU	CTAD	CTAS	CTAU
-20.013	625.170	600.11000	.06501	.06213	-.01145	442.23000	.00000	.00000	661.84000	.00000	.00000
-20.028	700.450	600.21000	-.00243	.03469	-.05960	442.68000	.00000	.00000	662.50000	.00000	.00000
-20.004	799.530	600.02000	-.14704	.04067	-.05280	443.40000	.00000	.00000	663.59000	.00000	.00000
-20.052	1000.500	600.23000	.11911	.04682	-.05773	443.29000	.00000	.00000	663.42000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2794/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	ITFD	CTFS	CTFU	CTAD	CTAS	CTAU
-14.993	474.590	600.14000	.60630	.03222	-.09175	435.61000	.00000	.00000	651.92000	.00000	.00000
-15.004	499.930	600.19000	.25593	.07860	.02891	435.67000	.00000	.00000	652.02000	.00000	.00000
-15.026	549.960	600.21000	.07412	.03076	-.02720	435.91000	.00000	.00000	652.37000	.00000	.00000
-15.035	600.150	600.30000	-.15335	.03035	-.02081	435.47000	.00000	.00000	651.72000	.00000	.00000
-15.070	700.600	600.41000	-.24100	.03262	-.02383	435.11000	.00000	.00000	652.67000	.00000	.00000
-15.007	799.410	600.09000	-.07026	.03414	-.03181	436.26000	.00000	.00000	652.90000	.00000	.00000
-15.005	999.800	600.23000	-.08172	.04003	-.04255	436.72000	.00000	.00000	653.59000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2799/ 0 RN/L = .89 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	ITFD	CTFS	CTFU	CTAD	CTAS	CTAU
-10.018	324.910	600.14000	.25297	-.00844	-.14702	433.53000	.00000	.00000	648.82000	.00000	.00000
-9.994	349.650	600.15000	-.08928	-.01208	-.14703	433.16000	.00000	.00000	648.27000	.00000	.00000
-10.002	399.730	600.12000	.14835	.03303	-.03559	433.35000	.00000	.00000	648.55000	.00000	.00000
-10.024	449.800	600.15000	.01315	.02647	-.00003	433.06000	.00000	.00000	648.10000	.00000	.00000
-10.054	500.300	600.25000	.75506	.02034	-.00911	433.91000	.00000	.00000	649.36000	.00000	.00000
-10.056	600.340	600.33000	.15821	.02059	-.01176	433.65000	.00000	.00000	648.59000	.00000	.00000
-10.059	700.490	600.25000	.31435	.02219	-.01325	433.33000	.00000	.00000	648.59000	.00000	.00000
-10.009	800.000	600.23000	.00339	.02346	-.01825	432.93000	.00000	.00000	647.92000	.00000	.00000
-9.967	929.780	600.05000	-.10598	.02368	-.01656	433.53000	.00000	.00000	648.82000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REPRODUCIBILITY OF THE  
 ORIGINAL PAGE IS POOR









V41B-D9A (1A22) ET SEPARATING FROM ORB (04RC1)

(AVK022) (04 MAY 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = 600.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2802/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHA	BETAT	CN	CLM	CY	CYN	CSL	CA
-5.552	200.450	600.24000	-.01962	-10.53700	2.99490	-.26276	-.05147	-.04256	-.00739	.00049	.11187
-5.511	249.970	600.25000	-.04957	-10.50500	2.99850	-.27269	-.03603	-.04247	-.00971	.00041	.11645
-5.504	299.840	600.25000	-.25254	-10.50300	2.99440	-.25193	-.04068	-.04218	-.00858	.00032	.10778
-5.547	400.330	600.26000	-.20284	-10.54200	3.00220	-.21805	-.04846	-.03796	-.00825	.00054	.10169
-5.558	500.380	600.31000	-.03150	-10.54900	2.99550	-.21853	-.03233	-.03288	-.00689	.00049	.10089
-5.552	600.290	600.23000	-.19518	-10.54300	2.99310	-.22917	-.01226	-.03558	-.00742	.00041	.10769
-5.531	699.950	600.35000	-.15521	-10.52300	2.99220	-.23565	.00557	-.03341	-.00810	.00031	.11955
-5.513	799.460	600.19000	-.10471	-10.50500	2.99760	-.23051	.01410	-.03094	-.00903	.00038	.12767
-5.479	819.020	600.11000	-.00752	-10.47000	2.99390	-.22532	.01320	-.03020	-.00941	.00033	.12785
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

V41B-D9A (1A22) ORBITER (04FC2) W/ET SEPARATING

(RVK023) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2847/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CSLR	CAR	MM
-20.008	624.920	.00861	.24638	-.00262	.50144	-.01676	-.12183	.02630	-.00355	.00085	.27538
-19.956	698.630	-.16118	-.02405	-.00253	.45631	-.03294	-.12020	.02554	-.00296	-.00037	.27552
-19.933	798.290	-.27825	-.18325	-.00573	.38045	-.03354	-.11745	.02499	-.00071	-.00627	.27550
-20.050	999.550	.04270	.05655	-.00377	.19753	-.00907	-.11936	.02609	-.00481	-.00426	.27545
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2851/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CSLR	CAR	MM
-15.005	474.550	.08126	-.44575	-.01071	.46838	-.01439	-.11952	.02506	-.00439	-.00046	.27590
-15.029	499.600	.17532	-.82751	-.01227	.42915	-.02089	-.11628	.02392	-.00340	.00020	.27650
-14.962	548.880	-.06708	.45907	.00345	.39538	-.03301	-.11604	.02453	-.00164	-.00158	.27587
-14.971	598.960	.00451	-.05265	-.00406	.33542	-.03315	-.11342	.02497	-.00233	-.00947	.27616
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

V41B-D9A (1A22), ORBITER (04FC2) W/ET SEPARATING

(RVK023) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.300 BETA = 3.000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2855/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-10.010	324.540	.08176	-.03851	-.00513	.38463	-.00371	-.12435	.02557	-.00447	-.00214	.27624
-10.030	349.650	.12232	-.25603	-.00801	.34699	-.00644	-.12105	.02487	-.00456	-.00653	.27596
-10.007	399.110	.04560	-.66518	-.01280	.31476	-.01652	-.11605	.02353	-.00339	-.00924	.27596
-9.982	448.910	.11603	.09386	-.00189	.27738	-.02239	-.11247	.02451	-.00289	-.01207	.27637
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2859/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-5.511	199.460	.17515	-.30934	-.00853	.31796	.01220	-.12199	.02479	-.00458	-.00112	.27577
-5.519	249.230	.19331	-.15872	-.00636	.26983	.00215	-.12216	.02497	-.00491	-.00540	.27569
-5.497	298.930	.15254	.03476	-.00347	.24987	-.00508	-.12027	.02486	-.00478	-.00843	.27601
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2480/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
.007	19.477	.11423	.03023	-.00542	.17564	.00825	-.12642	.02591	-.00569	.01892	.27896
-.012	50.046	.05580	-.35776	-.00670	.19799	.01149	-.13094	.02619	-.00589	.01964	.27879
.013	99.450	.12682	-.23907	-.00630	.22307	.01339	-.12938	.02728	-.00525	.01091	.27617
.018	149.140	.11114	-.01691	-.00501	.22735	.00863	-.12693	.02682	-.00517	.00698	.27771
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2483/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
4.958	-49.197	.32341	2.00610	.06860	.14286	-.00272	-.12365	.02665	-.00569	.01478	.27843
4.971	15.307	.09390	.17204	-.00213	.18763	.00350	-.12594	.02546	-.00577	.01975	.27857
4.896	49.345	.06370	.20034	-.00122	.18344	.00025	-.12169	.02508	-.00530	.01057	.27859
5.011	99.112	.20155	-.12067	-.00497	.19037	.00731	-.12326	.02679	-.00509	.00734	.27850
5.029	198.400	.28034	.09977	-.00020	.19139	.00079	-.12713	.02769	-.00505	.00603	.28082
5.025	298.750	.23971	.52214	.00822	.19726	-.00453	-.12394	.02789	-.00455	.00544	.28092
4.984	399.340	.23469	.20518	.00141	.16932	.00507	-.12675	.02335	-.00543	.00206	.28186
4.977	599.620	.25752	-.10678	-.00392	.15311	-.00263	-.12502	.02854	-.00578	.00361	.28077
	GRADIENT	.00587	.01124	-.00014	.01226	.00024	-.00823	.00166	-.00038	.00129	.01820





## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 OBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2855/ 0 RN/L = .88 GRAD ENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-10.010	324.540	.08176	-.03851	-.13267	-.36261	4:2.33000	.00000	.00000	647.02000	214.47000	.00000
-10.030	349.650	.12232	-.23503	.02337	-.16545	4:1.48000	.00000	.00000	645.74000	214.05000	.00000
-10.007	399.110	.04530	-.63518	.03416	-.14132	4:1.55000	.00000	.00000	645.85000	214.09000	.00000
-9.982	448.910	.11803	.09365	.02542	-.13355	4:1.81000	.00000	.00000	646.23000	214.21000	.00000
	GRADIENT	.00000	.00000	.00000	.00300	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2859/ 0 RN/L = .88 GRAD ENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.511	199.460	.17515	-.30834	.02067	-.13408	4:2.80000	.00000	.00000	647.72000	214.70000	.00000
-5.519	249.230	.19331	-.15872	.02433	-.13015	4:3.18000	.00000	.00000	648.29000	214.89000	.00000
-5.497	293.930	.15254	.03476	.00315	-.12603	4:3.48000	.00000	.00000	648.73000	215.04000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2480/ 0 RN/L = .87 GRAD ENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
.007	19.477	.11423	.09023	-.01486	-.02520	4:5.65000	.00000	.00000	652.05000	216.14000	.00000
-.012	50.046	.06530	-.35776	.03237	-.00948	4:6.24000	.00000	.00000	652.87000	216.41000	.00000
.013	99.450	.12632	-.23907	.02158	-.03253	4:5.93000	.00000	.00000	652.45000	216.27000	.00000
.018	149.140	.11114	-.01691	-.00716	-.09757	4:5.31000	.00000	.00000	651.48000	215.93000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2483/ 0 RN/L = .86 GRAD ENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
4.958	-49.197	.32341	2.00610	.02685	-.02694	4:7.08000	.00000	.00000	654.09000	216.82000	.00000
4.971	15.307	.06230	.17204	.02572	-.02220	4:6.22000	.00000	.00000	653.74000	216.70000	.00000
4.936	49.345	.06370	.28034	-.01317	-.07493	4:3.75000	.00000	.00000	653.69000	216.60000	.00000
5.011	99.112	.20153	-.12037	.02235	-.01571	4:7.51000	.00000	.00000	654.77000	217.04000	.00000
5.029	193.400	.25234	.05977	.02349	-.02542	4:7.37000	.00000	.00000	654.55000	216.97000	.00000
5.025	298.750	.23971	.52214	.00632	-.03545	4:9.78000	.00000	.00000	659.12000	218.15000	.00000
4.984	399.340	.23468	.20518	.01519	-.01730	4:8.01000	.00000	.00000	659.51000	218.28000	.00000
4.977	599.620	.25752	-.10678	.01652	-.01437	4:8.93000	.00000	.00000	659.89000	218.74000	.00000
	GRADIENT	.00587	.01124	.00175	-.00145	78.53727	.00000	.00000	42.70656	14.15692	.00000

REPRODUCIBILITY OF THE  
 ORIGINAL PAGE IS POOR







REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UNBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2855/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-10.010	324.540	.08176	-.03851	-14.99100	2.95780	-.33132	-.01440	-.03594	-.00872	.00055	.11270
-10.030	349.650	.12232	-.25603	-15.01600	2.96550	-.30618	-.02750	-.03755	-.00790	.00051	.10358
-10.007	399.110	.04550	-.66618	-15.00300	2.96200	-.29503	-.02917	-.03676	-.00823	.00039	.10519
-9.982	448.910	.11803	.09398	-14.98500	2.97170	-.30608	-.01807	-.03751	-.00757	.00036	.11131
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2859/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-5.511	199.460	.17515	-.30934	-10.48000	2.96540	-.25095	-.01165	-.03113	-.00994	.00039	.11060
-5.519	249.230	.19331	-.15872	-10.50000	2.96730	-.21536	-.02512	-.03470	-.00880	.00025	.09794
-5.497	298.930	.15264	.03476	-10.48700	2.97010	-.21388	-.02087	-.03566	-.00831	.00025	.09893
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2480/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
.007	19.477	.11423	.09023	-4.97330	2.95760	-.10742	-.02558	-.03206	-.01036	.00059	.09028
-.012	50.046	.08590	-.35776	-4.98920	2.96610	-.12385	-.02551	-.03192	-.01020	.00048	.08633
.013	99.450	.12862	-.23907	-4.95930	2.96300	-.13484	-.01612	-.03510	-.00911	.00036	.09100
.018	149.140	.11114	-.01691	-4.95920	2.96390	-.13493	-.01072	-.03422	-.00870	.00045	.09183
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2483/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
4.958	-49.197	.32341	2.00610	-.03404	3.04060	-.02471	-.00875	-.03306	-.00825	.00048	.08588
4.971	15.307	.08280	.17204	-.01300	2.97130	-.05751	-.00630	-.02555	-.00920	.00026	.08518
4.996	49.345	.08370	.26294	.01653	2.97090	-.06349	-.00052	-.03201	-.00902	.00023	.08933
5.011	99.112	.20155	-.12067	.03129	2.96710	-.07153	.00897	-.03231	-.00783	.00030	.09371
5.029	198.400	.25994	.08977	.04270	2.97070	-.06921	.02231	-.03083	-.00848	.00023	.10259
5.025	298.750	.23971	.52214	.03352	2.97620	-.06555	.02974	-.02585	-.01079	.00013	.10741
4.984	399.340	.23468	.20518	-.00924	2.97160	-.03186	.01562	-.02475	-.01145	.00012	.09833
4.977	599.620	.25752	-.10678	-.01449	2.96310	-.00520	.00077	-.02742	-.01044	.00020	.08835
	GRADIENT	.00587	.01124	-.00085	.19411	-.00376	-.00041	-.00167	-.00060	.00002	.00556



DATE 06 MAY 77

TABULATED SOURCE DATA, IA22, (AEDC V41B-D9A)

PAGE 193

V41B-D9A (IA22), ORBITER (OIRC2) W/ET SEPARATING

(RVK024) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2484/ 0 RN/L = .86 GR.DIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	HM
5.010	-51.194	200.26000	-.00893	-.00633	.16862	.00609	-.12928	.02528	-.00597	.01919	.27932
4.972	14.941	200.11000	.25159	-.00055	.21050	.01709	-.12911	.02753	-.00534	.01002	.27928
4.979	50.174	200.10000	.14009	.00144	.22040	.01143	-.12700	.02658	-.00527	.00978	.27894
4.959	100.350	200.15000	.10220	-.00307	.20051	.00531	-.12718	.02763	-.00546	.00339	.27955
4.970	200.250	200.07000	.32139	-.00028	.19759	-.00163	-.12521	.02746	-.00560	.00746	.27717
4.990	300.390	200.18000	.22730	-.00701	.18147	-.00223	-.12693	.02914	-.00458	.00336	.27913
5.033	399.000	200.22000	.22263	.00020	.16371	-.00501	-.12426	.02829	-.00553	.00258	.28013
4.989	599.270	200.21000	.08775	-.00250	.15283	-.00267	-.12453	.02845	-.00575	.00371	.27975
	GRADIENT	13.39335	.01684	-.00004	.01409	.00114	-.00864	.00184	-.00036	.00067	.01869

V41B-D9A (IA22), ORBITER (OIRC2) W/ET SEPARATING

(SVK024) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2848/ 0 RN/L = .87 GR.DIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-20.027	625.510	-5.01400	2.97324	-.00644	.12144	-.03311	.02852	-.03173	-.00087	.00311
-20.071	700.620	-5.01700	2.97168	-.00138	.0145	-.03030	.02032	-.02927	.00044	.00285
-20.005	799.550	-5.01200	2.97101	-.00651	-.04182	-.02171	.01625	-.02539	.00112	.00135
-19.941	899.830	-4.99400	2.97229	.00371	-.14448	.00208	.02223	-.03311	.00033	.00061
	GRADIENT	.00000	.00000	.00000	.00100	.00000	.00000	.00000	.00000	.00000

RUN NO. 2852/ 0 RN/L = .88 GR.DIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-14.970	474.330	-5.01200	2.97252	-.00132	.10162	-.03007	.02833	-.02928	-.00027	.00194
-15.015	499.930	-5.00900	2.97201	-.00551	.03449	-.02294	.02436	-.02751	.00016	.00284
-15.034	550.120	-5.00300	2.97140	-.00200	-.04102	-.02008	.02161	-.02936	.00077	.00230
-15.063	600.390	-5.00300	2.97077	-.00587	-.09447	-.01534	.01631	-.02692	.00140	.00256
	GRADIENT	.00000	.00000	.00000	.00100	.00000	.00000	.00000	.00000	.00000

V41B-D9A (1A22), ORBITER (O-RC2) W/ET SEPARATING

(SVK024) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 OBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2856/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	OBETA	CN	CLM	CA	CY	CYN	CBL
-9.990	324.520	-4.99950	2.97539	-.00379	.05938	-.01294	.01207	-.02977	-.00275	.00133
-9.985	349.520	-4.99950	2.97516	-.01466	.01131	-.01105	.01689	-.02891	-.00249	.00106
-10.028	399.950	-5.00000	2.97365	-.00245	-.05101	-.00924	.02191	-.02610	-.00115	.00151
-10.058	450.270	-5.00000	2.97279	-.00229	-.10187	-.00623	.01742	-.02741	-.00037	.00165
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2860/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	OBETA	CN	CLM	CA	CY	CYN	CBL
-5.511	199.930	-4.99200	2.97390	-.00200	-.02158	.00949	.01859	-.03688	-.00103	.00123
-5.511	249.820	-4.99600	2.97427	-.00197	-.05136	.00616	.01935	-.03319	-.00147	.00082
-5.540	300.100	-4.99190	2.97429	-.00239	-.09142	.00221	.02189	-.03163	-.00155	.00056
	GRADIENT	.00000	.00000	.00000	.00100	.00000	.00000	.00000	.00000	.00000

RUN NO. 2481/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	OBETA	CN	CLM	CA	CY	CYN	CBL
-.003	19.824	-4.99355	2.97427	-.01047	-.09135	.03352	.04826	-.04019	-.00094	-.00122
-.029	50.418	-4.99287	2.97173	.00037	-.09131	.03725	.04146	-.04467	.00138	-.00016
-.024	100.370	-4.97004	2.97176	.00004	-.06175	.02573	.03995	-.04250	.00122	.00020
-.028	150.070	-4.99981	2.97152	.00059	-.10104	.01491	.03570	-.04106	.00131	.00044
	GRADIENT	.00000	.00000	.00300	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2484/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	OBETA	CN	CLM	CA	CY	CYN	CBL
5.010	-51.194	-4.92261	2.97383	-.00633	-.16146	.01615	.05081	-.04197	-.00077	-.00001
4.972	14.941	-4.97063	2.97155	-.00055	-.12149	.02718	.04173	-.04156	.00140	.00003
4.979	50.174	-4.97525	2.97246	.00144	-.11190	.02150	.04142	-.03963	.00051	.00000
4.959	100.360	-4.98173	2.97117	-.00307	-.13105	.01539	.03506	-.03974	.00153	-.00010
4.970	200.250	-4.98811	2.97129	-.00068	-.13163	.00845	.03910	-.03786	.00139	-.00024
4.980	300.080	-4.99313	2.97051	-.00701	-.15120	.00380	.03504	-.03936	.00204	-.00079
5.033	399.000	-4.99280	2.97020	.00020	-.17164	.00596	.03423	-.03588	.00221	-.00026
4.989	599.270	-4.99110	2.97010	-.00250	-.18195	.00744	.03540	-.03714	.00234	-.00038
	GRADIENT	-.33268	.19889	-.00004	-.00133	.00182	.00279	-.00278	.00009	.00000





DATE 05 MAY 77

TABULATED SOURCE DATA, 1A22, (AEDC V41B-D9A)

PAGE 197

V41B-D9A (1A22), ORBITER (04-1C2) W/ET SEPARATING

(UYK024) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2856/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	OLPBAL	T81	T82	DT	T
-9.990	324.520	977.37000	977.37000	86.00000	977.37010	976.96999	86.00000	77.00000	19.05800	99.76800
-9.985	349.520	977.44000	977.44000	86.00000	977.44010	976.96999	86.00000	77.00000	19.61400	99.76800
-10.028	399.960	977.44000	977.44000	86.00000	977.44010	976.96999	86.00000	77.00000	19.43500	99.76800
-10.058	450.270	977.16000	977.16000	86.00000	977.16010	976.96999	86.00000	77.00000	19.31800	99.76800
	GRADIENT	.00000	.00000	.00000	.00010	.00000	.00000	.00000	.00000	.00000

RUN NO. 2860/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	OLPBAL	T81	T82	DT	T
-5.511	199.930	977.41000	977.41000	86.00000	977.41010	977.31000	87.00000	78.00000	10.08200	99.76800
-5.511	249.820	977.15000	977.15000	86.00000	977.15010	977.31000	87.00000	78.00000	12.29500	99.76800
-5.540	300.100	977.51000	977.51000	86.00000	977.51010	977.31000	87.00000	78.00000	15.07100	99.76800
	GRADIENT	.00000	.00000	.00000	.00010	.00000	.00000	.00000	.00000	.00000

RUN NO. 2481/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	OLPBAL	T81	T82	DT	T
-.003	19.824	975.63000	975.63000	76.00000	975.63010	976.12000	77.00000	72.00000	-5.75170	99.89400
-.029	50.418	975.63000	975.63000	76.00000	975.63010	976.12000	77.00000	72.00000	-6.41290	99.89400
-.024	100.370	976.30000	976.30000	76.00000	976.30010	976.12000	77.00000	72.00000	-6.27350	99.89400
-.028	150.070	976.34000	976.34000	76.00000	976.34010	976.12000	77.00000	72.00000	-6.53990	99.89400
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2484/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	OLPBAL	T81	T82	DT	T
5.010	-51.194	976.87000	976.87000	77.00000	976.87010	979.65000	78.00000	72.00000	-7.63560	99.89400
4.972	14.941	977.52000	977.52000	77.00000	977.52010	979.65000	78.00000	72.00000	-8.39970	99.89400
4.979	50.174	977.03000	977.03000	77.00000	977.03010	979.65000	78.00000	72.00000	-7.61560	99.89400
4.959	100.350	977.78000	977.78000	77.00000	977.78010	979.65000	78.00000	72.00000	-7.50680	99.89400
4.970	200.250	976.80000	976.80000	77.00000	976.80010	979.65000	78.00000	72.00000	-5.54090	99.89400
4.980	300.080	978.09000	978.09000	77.00000	978.09010	979.65000	78.00000	72.00000	-5.85210	99.89400
5.033	399.000	979.11000	979.11000	77.00000	979.11010	979.65000	78.00000	72.00000	-5.84720	99.89400
4.989	599.270	979.63000	979.63000	77.00000	979.63010	979.65000	78.00000	72.00000	-5.52740	99.89400
	GRADIENT	65.42935	65.42935	5.15360	65.42915	65.55857	5.22053	4.81995	-.56219	6.68590







REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. Z0  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2857/ 0 RN/L = .88 GFADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-10.053	325.570	400.09000	-.04197	-.00669	.33952	-.01932	-.11580	.02345	-.00373	-.01359	.27655
-10.012	349.290	400.00000	-.01071	-.00273	.31211	-.02045	-.11467	.02334	-.00297	-.01164	.27617
-10.052	399.730	400.14000	-.08708	-.00270	.23716	-.01787	-.11319	.02492	-.00366	-.01366	.27655
-10.010	449.230	400.06000	-.20823	-.00357	.19003	-.01384	-.11465	.02602	-.00413	-.01299	.27648
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2861/ 0 RN/L = .88 GFADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-5.539	200.460	400.25000	-.09457	-.00871	.29265	.00220	-.12027	.02460	-.00535	-.01270	.27626
-5.489	248.920	400.12000	.08067	-.00289	.27991	-.00548	-.11715	.02354	-.00434	-.01110	.27556
-5.518	299.280	400.09000	.01299	-.00051	.24897	-.01297	-.11475	.02336	-.00390	-.01198	.27587
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2482/ 0 RN/L = .86 GFADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-.047	20.831	400.03000	.35332	.00185	.25993	.02853	-.13428	.02658	-.00598	.00864	.27831
.031	48.847	400.02000	-.04847	-.00500	.24548	.02392	-.13491	.02777	-.00521	.00371	.27800
.042	98.573	400.03000	-.00105	-.00176	.23970	.01119	-.13224	.02788	-.00468	.00335	.27778
.021	149.080	400.21000	.24616	.00292	.24753	.00165	-.12912	.02767	-.00487	.00323	.27927
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2485/ 0 RN/L = .86 GFADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
4.989	-50.435	400.19000	.04297	-.00336	.23221	.02823	-.13266	.02562	-.00570	.01492	.27925
5.049	13.007	400.25000	.20946	.01225	.22171	.01843	-.13155	.02768	-.00520	.00581	.27928
5.009	48.865	400.12000	.01832	.00095	.21834	.00939	-.13039	.02770	-.00485	.00496	.27610
5.001	99.039	400.19000	.54314	.00254	.21371	.00183	-.12939	.02766	-.00457	.00256	.27890
5.026	188.540	400.23000	.02814	-.00737	.19437	-.00488	-.12279	.02730	-.00495	.00764	.27844
5.026	258.440	400.24000	-.16201	-.00313	.16831	-.00693	-.12370	.02747	-.00528	.00386	.27902
5.022	389.640	400.25000	-.16018	-.00403	.15845	-.00474	-.12447	.02765	-.00541	.00288	.27822
4.993	598.930	400.27000	.06348	.00272	.15159	-.00273	-.12446	.02333	-.00573	.00249	.27878
	GRADIENT	30.77189	.01610	.00044	.01705	.00142	-.01011	.00213	-.00040	.00045	.02147

V41B-09A (1A22), 07BITER((4RC2) W/ET SEPARATING

(SVK025) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0070 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UNBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2849/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEL
-20.043	625.460	-5.01800	2.97138	-.00008	-.00330	-.03061	.01678	-.02867	.00068	.00230
-20.014	699.860	-5.00700	2.97090	-.00270	-.05524	-.01395	.01659	-.02835	.00129	.00214
-19.968	799.000	-4.99500	2.97249	-.00139	-.13242	-.00031	.02582	-.03280	.00016	.00075
-20.015	999.800	-4.99200	2.97184	-.00374	-.17712	.00505	.03300	-.03394	.00073	-.00004
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2853/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEL
-15.041	475.180	-5.01000	2.97229	-.00499	-.00523	-.02289	.01722	-.02824	-.00003	.00222
-15.053	500.080	-5.00600	2.97160	-.00500	-.05359	-.01477	.02335	-.02980	.00063	.00171
-15.017	549.550	-5.00400	2.97101	.00509	-.11498	-.00927	.02006	-.02934	.00124	.00217
-14.999	599.370	-4.99300	2.97127	-.00897	-.13391	-.00333	.02291	-.02955	.00112	.00066
	GRADIENT	.00000	.00000	.00000	.00300	.00000	.00000	.00000	.00000	.00000

RUN NO. 2857/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEL
-10.053	325.570	-4.99300	2.97488	-.00588	.01378	-.00941	.01753	-.02988	-.00219	.00154
-10.012	349.290	-5.00000	2.97493	-.00273	-.01541	-.01055	.01346	-.02891	-.00228	.00230
-10.052	399.730	-5.00100	2.97320	-.00270	-.05134	-.00797	.01744	-.02733	-.00070	.00181
-10.010	449.230	-4.99300	2.97197	-.00367	-.13331	-.00395	.01809	-.02893	.00041	.00113
	GRADIENT	.00000	.00000	.00000	.00300	.00000	.00000	.00000	.00000	.00000

RUN NO. 2861/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEL
-5.539	200.460	-4.97530	2.97401	-.00871	-.03709	.01213	.01851	-.03409	-.00112	-.00006
-5.489	249.920	-4.97770	2.97508	-.00288	-.05124	.00449	.02024	-.03060	-.00228	.00097
-5.518	299.280	-4.99350	2.97511	-.00051	-.08143	-.00302	.01929	-.02840	-.00240	.00150
	GRADIENT	.00000	.00000	.00000	.00300	.00000	.00000	.00000	.00000	.00000

RUN NO. 2482/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEL
-.047	20.831	-4.95778	2.97265	.00195	-.07255	.03855	.04012	-.04739	.00065	-.00065
.031	48.847	-4.95257	2.97130	-.00500	-.06359	.03393	.03514	-.04813	.00188	.00012
.042	98.578	-4.97445	2.97026	-.00176	-.09213	.02119	.03476	-.04552	.00200	.00065
.021	149.080	-4.93277	2.97099	.00292	-.06437	.01155	.03465	-.04238	.00179	.00045
	GRADIENT	.00000	.00000	.00000	.00300	.00000	.00000	.00000	.00000	.00000

V41B-D9A (IA22), ORBITER(01RC2) W/ET SEPARATING

(SVK025) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UM3LDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2485/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEL
4.989	-50.433	-4.93050	2.97376	-.00338	-.10243	.03931	.04650	-.04520	-.00048	-.00033
5.049	13.007	-4.93053	2.97145	.01223	-.11377	.02034	.03757	-.04297	.00152	.00019
5.009	48.535	-4.97370	2.97135	.00093	-.11355	.02008	.03366	-.04228	.00158	.00052
5.001	99.039	-4.93431	2.97116	.00254	-.12375	.01191	.03422	-.04198	.00158	.00079
5.026	199.540	-4.93122	2.97097	-.00737	-.13333	.00501	.03871	-.03702	.00170	.00032
5.026	299.440	-4.93422	2.97043	-.00813	-.15315	.00299	.03470	-.03295	.00207	-.00005
5.022	399.840	-4.93339	2.97043	-.00403	-.17162	.00321	.03412	-.03220	.00211	-.00012
4.993	599.500	-4.93125	2.97019	.00232	-.16300	.00733	.03407	-.03728	.00232	-.00038
	GRADIENT	-.38202	.22345	.00094	-.00375	.00219	.00269	-.00337	.00012	.00001

V41B-D9A (IA22), ORBITER(01RC2) W/ET SEPARATING

(TVK025) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UM3LDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2849/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CNFD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-20.043	625.460	400.21000	.16111	.05250	-.15345	433.91000	.00000	.00000	649.39000	215.26000	.00000
-20.014	699.660	400.03000	-.06222	.05723	-.06297	433.70000	.00000	.00000	649.07000	215.15000	.00000
-19.958	799.000	399.79000	.20250	.04732	-.06223	433.94000	.00000	.00000	649.43000	215.27000	.00000
-20.015	999.800	400.03000	.02978	.05517	-.07723	435.47000	.00000	.00000	651.71000	216.03000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2853/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CNFD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-15.041	475.180	400.17000	-.05907	-.01210	-.22556	432.34000	.00000	.00000	647.03000	214.48000	.00000
-15.053	500.090	400.20000	-.03200	.02253	-.16223	431.45000	.00000	.00000	645.71000	214.04000	.00000
-15.017	549.560	400.12000	.30070	.03753	-.05469	432.61000	.00000	.00000	647.43000	214.61000	.00000
-14.999	599.370	400.05000	-.15902	.05241	-.08193	432.42000	.00000	.00000	647.15000	214.52000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

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V41B-D9A (1A22), ORBITER (ORC2) W/ET SEPARATING

(TVK029) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2857/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHRD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-10.053	325.570	400.09000	.04197	.00783	-.10327	431.76000	.00000	.00000	646.17000	214.19000	.00000
-10.012	349.290	400.00000	-.01071	-.00645	-.13559	431.48000	.00000	.00000	645.75000	214.05000	.00000
-10.052	399.730	400.14000	.08708	.02178	-.09480	431.43000	.00000	.00000	645.68000	214.03000	.00000
-10.010	449.230	400.06000	-.20823	.03339	-.07361	431.24000	.00000	.00000	645.38000	213.93000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2861/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHRD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.539	200.460	400.25000	-.09457	.01818	-.04955	433.07000	.00000	.00000	648.13000	214.84000	.00000
-5.489	248.920	400.12000	.08067	-.02293	-.08231	434.93000	.00000	.00000	650.91000	215.76000	.00000
-5.518	299.280	400.09000	.01299	-.00197	-.07112	433.94000	.00000	.00000	649.43000	215.27000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2482/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHRD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-.047	20.831	400.03000	.39832	.02579	-.03312	436.67000	.00000	.00000	653.52000	216.63000	.00000
.031	48.847	400.08000	-.04847	.02796	-.03528	436.14000	.00000	.00000	652.72000	216.36000	.00000
.042	98.578	400.08000	-.00105	.02824	-.04615	435.81000	.00000	.00000	652.23000	216.20000	.00000
.021	149.080	400.21000	.24816	.01481	-.06056	435.91000	.00000	.00000	652.38000	216.25000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2485/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHRD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
4.989	-50.435	400.19000	.04297	.01799	-.01161	439.52000	.00000	.00000	657.78000	218.04000	.00000
5.049	13.007	400.25000	.20946	.02251	-.02902	440.62000	.00000	.00000	659.42000	218.58000	.00000
5.009	48.865	400.12000	.01832	.01531	-.02512	439.84000	.00000	.00000	658.26000	218.20000	.00000
5.001	99.039	400.19000	.54314	.00337	-.05669	439.28000	.00000	.00000	657.44000	217.93000	.00000
5.026	198.540	400.28000	.02814	.01095	-.03135	431.05000	.00000	.00000	645.11000	213.84000	.00000
5.026	299.440	400.24000	-.18201	-.00443	-.04589	427.85000	.00000	.00000	640.31000	212.25000	.00000
5.022	398.640	400.26000	-.16018	.01829	-.01177	433.50000	.00000	.00000	648.77000	215.05000	.00000
4.993	598.980	400.27000	.06348	.01645	-.01019	438.13000	.00000	.00000	655.70000	217.35000	.00000
	GRADIENT	30.77189	.01610	.00173	-.00223	33.87561	.00000	.00000	50.69732	16.80480	.00000





V41B-D9A (1A22), ET SEPARATING FROM ORB (04RC2)

(AVK025) (04 MAY 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.2000 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2657/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETA*	CN	CLM	CY	CYN	CBL	CA
-10.053	325.570	400.09000	.04167	-15.05100	2.96810	-.35573	-.02829	-.03728	-.00848	.00080	.12262
-10.012	349.290	400.00000	-.01071	-15.01200	2.97220	-.34538	-.02913	-.03309	-.00894	.00042	.11748
-10.052	399.730	400.14000	.03708	-15.05300	2.97010	-.28729	-.05560	-.03542	-.00822	.00037	.09821
-10.010	449.230	400.06000	-.20823	-15.00900	2.96910	-.28336	-.05308	-.03357	-.00915	.00047	.10134
	GRADIENT	.00000	.00000	.00000	.00010	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2661/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETA*	CN	CLM	CY	CYN	CBL	CA
-5.539	200.460	400.25000	-.05457	-10.51900	2.96510	-.25957	-.03467	-.04374	-.00729	.00029	.11182
-5.489	248.920	400.12000	.08067	-10.47700	2.97210	-.25201	-.03069	-.04170	-.00755	.00026	.10968
-5.518	299.280	400.03000	.01299	-10.51500	2.97410	-.21875	-.04348	-.03756	-.00871	.00034	.09958
	GRADIENT	.00000	.00000	.00000	.00010	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2482/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETA*	CN	CLM	CY	CYN	CBL	CA
-.047	20.831	400.03000	.39932	-5.00500	2.97410	-.16535	-.05141	-.03633	-.00929	.00078	.10239
.031	48.847	400.08000	-.04647	-4.93180	2.96670	-.16208	-.04042	-.03535	-.00853	.00053	.10291
.042	98.578	400.08000	-.00105	-4.93250	2.96010	-.15032	-.02747	-.03498	-.00912	.00022	.10191
.021	149.080	400.21000	.24616	-4.93200	2.97310	-.15337	-.02409	-.03350	-.01065	.00029	.09876
	GRADIENT	.00000	.00000	.00000	.00010	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2485/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETA*	CN	CLM	CY	CYN	CBL	CA
4.989	-50.435	400.19000	.04297	.02951	2.97010	-.10074	-.03901	-.03958	-.00448	.00043	.10257
5.049	13.007	400.25000	.20946	.08045	2.99310	-.09138	-.01948	-.03121	-.00589	.00019	.09810
5.009	48.835	400.12000	.01832	.03251	2.97210	-.08053	-.01692	-.02303	-.01183	.00020	.09437
5.001	99.039	400.19000	.54314	.01629	2.97310	-.05426	-.01930	-.03133	-.01136	.00033	.08937
5.026	198.540	400.28000	.02914	.03478	2.96310	-.05033	-.00843	-.03395	-.00917	.00025	.09367
5.026	299.440	400.24000	-.16901	.03228	2.96210	-.06474	.00818	-.03224	-.00795	.00030	.09599
5.022	399.640	400.26000	-.16018	.02661	2.96910	-.05422	.02112	-.02317	-.00691	.00023	.10172
4.993	598.930	400.27000	.06343	.00134	2.97210	-.01891	.00905	-.02521	-.01128	.00013	.09312
	GRADIENT	30.77189	.01610	.00619	.22919	-.00703	-.00150	-.00240	-.00076	.00001	.00754









V41B-D9A (A22), ORBITER (O4RC2) W/ET SEPARATING

(UWK026) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = 3.000  
 DBETA = .000 X = 600.000  
 Y = .000 ELEVON = .000  
 UNBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2850/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	P#3	DLP2AL	TB1	TB2	DT	T
-20.011	625.120	975.63000	975.63000	84.00000	975.11000	976.00999	85.00000	76.00000	2.93940	99.76800
-20.038	700.390	976.01000	976.01000	84.00000	976.11000	976.00999	85.00000	76.00000	3.43390	99.76800
-20.006	799.530	975.76000	975.76000	84.00000	975.76000	976.00999	85.00000	76.00000	5.52510	99.76800
-20.054	1000.500	976.21000	976.21000	84.00000	976.21000	976.00999	85.00000	76.00000	9.74270	99.76800
	GRADIENT	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2854/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	P#3	DLP2AL	TB1	TB2	DT	T
-14.999	474.550	976.63000	976.63000	85.00000	976.11000	976.59000	85.00000	77.00000	14.62100	99.64200
-15.005	499.920	976.97000	976.97000	85.00000	976.11000	976.59000	85.00000	77.00000	10.45500	99.64200
-15.027	549.890	976.55000	976.55000	85.00000	976.55000	976.59000	85.00000	77.00000	11.37500	99.64200
-15.032	600.080	976.78000	976.78000	85.00000	976.78000	976.59000	85.00000	77.00000	14.65000	99.64200
	GRADIENT	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2858/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	P#3	DLP2AL	TB1	TB2	DT	T
-10.025	324.950	977.07000	977.07000	86.00000	977.07000	977.03000	86.00000	78.00000	19.74000	99.76800
-9.936	349.650	977.19000	977.19000	86.00000	977.19000	977.03000	86.00000	78.00000	18.52400	99.76800
-10.000	399.700	977.49000	977.49000	86.00000	977.49000	977.03000	86.00000	78.00000	14.97900	99.76800
-10.039	450.190	977.22000	977.22000	86.00000	977.22000	977.03000	86.00000	78.00000	13.57100	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2862/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	P#3	DLP2AL	TB1	TB2	DT	T
-5.557	200.500	977.31000	977.31000	86.00000	977.31000	977.39000	87.00000	78.00000	14.41600	99.76800
-5.515	249.920	977.38000	977.38000	86.00000	977.38000	977.39000	87.00000	78.00000	16.32100	99.76800
-5.518	299.940	977.59000	977.59000	86.00000	977.59000	977.39000	87.00000	78.00000	13.61900	99.76800
	GRADIENT	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000





REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2819/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNF	CLMR	CYR	CYNR	CBLR	CAR	WM
-5.510	199.500	.03591	.29992	.00704	.21549	-.02091	-.00430	-.00024	.00178	-.00621	.18925
-5.505	248.590	.21445	.30333	.00334	.21370	-.03139	-.00488	.00033	.00058	-.00932	.18832
-5.499	259.140	.02349	.23484	.00511	.17546	-.03576	-.00471	.00010	.00056	-.01001	.18939
-5.472	399.570	.15147	.23726	.00347	.14011	-.04017	-.00393	-.00008	.00061	-.01025	.18839
-5.497	499.930	.04710	-1.93330	-.02577	.11513	-.03755	-.00470	.00013	.00025	-.00770	.18937
-5.562	599.780	.27173	.36943	.00375	.09537	-.03450	-.00440	.00001	.00025	-.00402	.18855
-5.557	699.520	.24793	.05337	.00239	.09273	-.03334	-.00439	-.00001	.00022	-.00350	.18818
-5.512	799.140	.19333	-.14006	-.00003	.09205	-.03529	-.00435	-.00001	.00023	-.00369	.18962
-5.512	819.200	.31447	-.01844	.00164	.09236	-.03326	-.00440	.00001	.00022	-.00355	.18790
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2459/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNF	CLMR	CYR	CYNR	CBLR	CAR	WM
-.087	26.992	-.58344	.34976	.00544	.14599	-.02204	-.01298	.00015	.00060	.02383	.18933
.002	41.568	.11249	.32772	.00663	.12347	-.01924	-.01358	.00035	.00077	.02188	.18750
.028	91.367	.10730	.61293	.01060	.17420	-.02204	-.01221	-.00006	.00016	.02283	.19150
.014	141.310	.04617	.03425	.00182	.18053	-.02032	-.01307	.00018	.00024	.00981	.18777
.020	190.930	.10133	.00210	.00402	.14509	-.02774	-.01341	.00051	.00047	.00340	.19052
.033	239.620	.15733	-.10497	-.00035	.14522	-.03334	-.01235	.00040	.00054	.01438	.18023
.013	339.040	.18003	.14752	.00373	.18295	-.03716	-.01241	.00047	.00015	.01162	.18805
-.032	491.600	.09739	-.02503	-.00063	.10912	-.03539	-.01210	.00038	.00017	.01355	.18764
-.004	591.500	.21411	.19333	.00530	.09917	-.03357	-.01208	.00037	.00004	.01471	.18818
.001	791.370	.22057	-.11290	.00022	.09535	-.03335	-.01205	.00035	.00005	.01477	.18940
.002	931.230	.17047	.21019	.00520	.09541	-.03338	-.01212	.00037	.00006	.01471	.18863
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2462/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNF	CLMR	CYR	CYNR	CBLR	CAR	WM
4.988	-57.915	.31991	-.50202	-.00513	.10196	-.03304	-.01110	-.00043	-.00035	.01553	.18898
4.986	6.800	.11153	-.18467	-.00121	.12002	-.02938	-.01251	.00016	-.00045	.02502	.18870
4.993	41.363	.11925	.12340	.00319	.13537	-.02701	-.01197	.00021	-.00012	.02008	.18859
5.005	91.239	.15238	-.03323	.00238	.13709	-.02023	-.01335	.00039	.00070	.00319	.18849
5.035	190.530	.18332	-.04635	.00076	.13375	-.02772	-.01553	.00035	.00040	.01059	.18875
5.008	291.030	.17006	-.03378	.00322	.13019	-.02349	-.01225	.00036	.00058	.00223	.18949
4.977	391.560	.18345	.01745	.00076	.11787	-.03334	-.01182	.00047	.00011	.01018	.18813
4.998	591.340	.28077	-.24457	-.00176	.10153	-.03344	-.01114	.00053	-.00019	.01138	.18863
	GRADIENT	.01640	-.02716	-.00018	.01912	-.00439	-.00184	.00002	.00007	.00368	.02775





V418-D9A (IA22), ORBITER (04RC3) W/ET SEPARATING

(SVK027) ( ) APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2819/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.510	199.500	-5.00500	-.00093	.00704	-.02379	.02124	.02759	.00455	-.00040	.00204
-5.508	248.990	-5.01520	-.00170	.00534	-.07551	.01074	.02447	.00397	-.00016	.00084
-5.499	299.140	-5.02080	-.00152	.00511	-.09931	.00531	.02372	.00413	-.00006	.00093
-5.472	353.570	-5.02340	-.00140	.00347	-.13905	.00155	.02352	.00502	-.00024	.00087
-5.487	499.930	-5.02500	-.00159	-.02377	-.16927	.00456	.02606	.00415	-.00003	.00051
-5.562	599.780	-5.02330	-.00142	.00375	-.18392	.00755	.02977	.00446	-.00016	.00051
-5.527	699.520	-5.02250	-.00140	.00299	-.18531	.00918	.03027	.00446	-.00017	.00048
-5.512	799.140	-5.02320	-.00139	-.00003	-.18638	.00815	.03010	.00450	-.00018	.00049
-5.512	819.200	-5.02250	-.00141	.00164	-.18648	.00815	.03021	.00445	-.00016	.00049
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2459/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.087	26.992	-5.00945	-.00124	.00544	-.13271	.02000	.05754	-.00415	-.00001	.00086
.002	41.568	-5.00729	-.00141	.00563	-.13956	.02272	.05553	-.00476	-.00019	.00103
.028	91.367	-5.00322	-.00102	.01060	-.10398	.01994	.05649	-.00339	-.00022	.00042
.014	141.310	-5.00740	-.00125	.00182	-.11764	.02146	.04347	-.00425	-.00002	.00050
.020	190.800	-5.01209	-.00179	.00402	-.13234	.01620	.04203	-.00450	-.00044	.00074
.033	230.020	-5.02007	-.00189	-.00036	-.13190	.00337	.04759	-.00555	-.00024	.00081
.013	291.040	-5.02441	-.00181	.00373	-.15343	.00472	.04520	-.00361	-.00030	.00041
-.032	491.800	-5.02376	-.00170	-.00653	-.16719	.00602	.04699	-.00334	-.00022	.00043
-.004	591.500	-5.02230	-.00165	.00530	-.17721	.00814	.04815	-.00332	-.00021	.00030
.001	791.370	-5.02242	-.00163	.00082	-.17698	.00807	.04823	-.00328	-.00018	.00031
.002	931.250	-5.02239	-.00167	.00520	-.17737	.00809	.04820	-.00335	-.00021	.00032
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2462/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
4.988	-57.915	-5.02122	-.00079	-.03513	-.18029	.00955	.04968	-.00215	-.00060	-.00008
4.986	6.800	-5.01708	-.00135	-.03121	-.15260	.01277	.05922	-.00355	-.00001	.00072
4.993	41.365	-5.01403	-.00139	.00319	-.14343	.01571	.05433	-.00299	-.00005	.00015
5.005	91.269	-5.00799	-.00145	.00208	-.14635	.02255	.04248	-.00436	-.00021	.00097
5.035	190.560	-5.01587	-.00185	.00076	-.14510	.01332	.04494	-.00395	-.00048	.00067
5.008	291.050	-5.02185	-.00165	.00328	-.15329	.00738	.04421	-.00324	-.00019	.00085
4.977	391.560	-5.02332	-.00180	.00076	-.16343	.00303	.04456	-.00281	-.00031	.00038
4.998	591.340	-5.02135	-.00183	-.00176	-.18306	.00551	.04532	-.00212	-.00036	.00009
	GRADIENT	-.73779	-.00020	-.00018	-.02244	.00188	.00871	-.00052	-.00000	.00011



V41B-D9A (IA22), ORBITER(04RC3) W/ET SEPARATING

(TVK027) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 OBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2819/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFI	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.510	199.500	.03591	.29992	.03810	-.04199	221.28000	.00000	.00000	653.65000	.00000	.00000
-5.506	248.990	.21446	.39553	.01312	-.10355	221.23000	.00000	.00000	653.48000	.00000	.00000
-5.499	299.140	.08349	.23484	.05094	-.00422	220.88000	.00000	.00000	652.46000	.00000	.00000
-5.472	359.570	.15147	.23728	.00576	-.07139	221.16000	.00000	.00000	653.28000	.00000	.00000
-5.487	493.950	.04710	-.92350	.04222	.00131	221.07000	.00000	.00000	653.01000	.00000	.00000
-5.552	599.760	.27172	.33943	.03331	-.00102	221.23000	.00000	.00000	653.65000	.00000	.00000
-5.527	699.520	.24793	.05337	.02930	-.00129	221.13000	.00000	.00000	653.20000	.00000	.00000
-5.512	799.140	.19036	-.14006	.02322	.00492	221.25000	.00000	.00000	653.53000	.00000	.00000
-5.512	819.200	.31447	-.01844	.02365	.00494	221.09000	.00000	.00000	653.08000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2459/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFI	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-.087	26.992	-.59344	.34976	-.01064	-.09159	220.75000	.00000	.00000	652.07000	.00000	.00000
.002	41.568	.11249	.32772	.04691	.01164	220.30000	.00000	.00000	650.73000	.00000	.00000
.028	91.367	.10730	.61233	.02735	-.02134	220.41000	.00000	.00000	651.05000	.00000	.00000
.014	141.310	.04617	.05425	.01347	-.04122	220.41000	.00000	.00000	651.05000	.00000	.00000
.020	190.990	.10133	.09210	.02807	-.03422	220.21000	.00000	.00000	650.49000	.00000	.00000
.033	290.820	.15753	-.18497	.00212	-.05124	220.05000	.00000	.00000	650.00000	.00000	.00000
.013	391.040	.16306	.14752	.00565	-.05122	219.95000	.00000	.00000	649.43000	.00000	.00000
-.032	491.800	.09739	-.02203	.02465	-.01469	219.93000	.00000	.00000	646.70000	.00000	.00000
-.004	591.500	.21411	.19033	.02170	-.01462	219.93000	.00000	.00000	646.83000	.00000	.00000
.001	791.370	.22057	-.11290	.01636	-.01192	219.11000	.00000	.00000	647.23000	.00000	.00000
.002	931.250	.17647	.21019	.01743	-.0178	219.30000	.00000	.00000	647.79000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2462/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFI	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
4.988	-57.915	.31991	-.50202	.01434	.00193	223.63000	.00000	.00000	660.57000	.00000	.00000
4.985	6.800	.11153	-.16467	.01370	-.0015	223.94000	.00000	.00000	661.49000	.00000	.00000
4.993	41.335	.11925	-.12340	.01154	.00137	224.31000	.00000	.00000	662.88000	.00000	.00000
5.005	91.289	.16258	-.05323	.01690	-.01600	224.59000	.00000	.00000	663.41000	.00000	.00000
5.035	190.590	.19552	-.04635	.01755	-.01792	224.91000	.00000	.00000	664.35000	.00000	.00000
5.008	291.050	.17006	-.03978	-.00132	-.02125	225.02000	.00000	.00000	664.83000	.00000	.00000
4.977	391.560	.16645	.01745	.02070	.01473	225.11000	.00000	.00000	664.94000	.00000	.00000
4.998	591.340	.26077	-.24457	.01339	.00192	225.49000	.00000	.00000	666.07000	.00000	.00000
	GRADIENT	.01640	-.02716	.00201	-.00017	32.95187	.00000	.00000	97.27651	.00000	.00000

V41B-D9A (1A22), ORBITER (O4RC3) W/ET SEPARATING

(UVK027) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UNBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2807/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-20.010	625.000	975.00000	975.00000	86.00000	975.00000	974.80000	89.00000	76.00000	19.98300	99.76800
-19.934	623.300	975.10000	975.10000	86.00000	975.10000	974.80000	89.00000	76.00000	24.93200	99.76800
-19.980	799.830	974.97000	974.97000	86.00000	974.97000	974.80000	89.00000	76.00000	36.79300	99.76800
-20.012	999.520	975.01000	975.01000	86.00000	975.01000	974.80000	89.00000	76.00000	29.81700	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2811/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-14.993	474.520	975.03000	975.03000	89.00000	975.03000	974.82999	89.00000	77.00000	30.42800	99.76800
-15.018	499.440	975.22000	975.22000	89.00000	975.22000	974.82999	89.00000	77.00000	28.48600	99.76300
-14.977	548.840	975.46000	975.46000	89.00000	975.46000	974.82999	89.00000	77.00000	27.75600	99.76800
-14.979	599.990	975.44000	975.44000	89.00000	975.44000	974.82999	89.00000	77.00000	32.29900	99.76800
-14.962	699.650	975.26000	975.26000	89.00000	975.26000	974.82999	89.00000	77.00000	31.70200	99.76800
-15.074	800.290	975.39000	975.39000	89.00000	975.39000	974.82999	89.00000	77.00000	26.64400	99.76800
-15.065	999.980	975.64000	975.64000	89.00000	975.64000	974.82999	89.00000	77.00000	19.60000	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2815/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-10.013	324.510	975.31000	975.31000	84.00000	975.31000	975.09000	86.00000	78.00000	26.99000	99.76800
-10.032	349.600	975.52000	975.52000	84.00000	975.52000	975.09000	86.00000	78.00000	26.50100	99.76800
-9.997	399.010	975.53000	975.53000	84.00000	975.53000	975.09000	86.00000	78.00000	24.09900	99.76800
-9.996	449.890	975.52000	975.52000	84.00000	975.52000	975.09000	86.00000	78.00000	21.72800	99.76800
-9.988	499.070	975.67000	975.67000	84.00000	975.67000	975.09000	86.00000	78.00000	17.85900	99.76800
-9.994	599.090	975.69000	975.69000	84.00000	975.69000	975.09000	86.00000	78.00000	12.73300	99.76800
-10.068	700.100	975.80000	975.80000	84.00000	975.80000	975.09000	86.00000	78.00000	9.32480	99.76800
-10.042	799.640	975.73000	975.73000	84.00000	975.73000	975.09000	86.00000	78.00000	6.99850	99.76800
-10.015	899.220	975.82000	975.82000	84.00000	975.82000	975.09000	86.00000	78.00000	4.60390	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REPRODUCIBILITY OF THE  
 ORIGINAL PAGE IS POOR

V41B-D9A (IA22), ORBITER(04RC3) W/ET SEPARATING

(UVK027) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1069.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = 9.0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UNBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2819/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	T81	T82	DT	T
-5.510	193.500	976.23000	976.23000	83.00000	976.23000	976.00999	86.00000	78.00300	18.24600	99.76900
-5.506	248.930	976.47000	976.47000	83.00000	976.47000	976.00999	86.00000	78.00000	16.27000	99.76800
-5.499	259.140	976.32000	976.32000	83.00000	976.32000	976.00999	86.00000	78.00000	13.13900	99.76800
-5.472	393.570	976.17000	976.17000	83.00000	976.17000	976.00999	86.00000	78.00000	10.70200	99.76900
-5.487	493.930	976.24000	976.24000	83.00000	976.24000	976.00999	86.00000	78.00000	8.43370	99.76900
-5.562	559.720	976.22000	976.22000	83.00000	976.22000	976.00999	86.00000	78.00000	6.70780	99.76900
-5.527	639.520	976.05000	976.05000	83.00000	976.05000	976.00999	86.00000	78.00000	5.16170	99.76900
-5.512	759.140	976.05000	976.05000	83.00000	976.05000	976.00999	86.00000	78.00000	3.59790	99.76900
-5.512	819.200	976.87000	976.87000	83.00000	976.87000	976.00999	86.00000	78.00000	2.51590	99.76900
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2459/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	T81	T82	DT	T
-0.087	26.992	972.92000	972.92000	82.00000	972.92000	972.70000	68.00000	73.00000	-7.48020	99.64200
.002	41.558	971.62000	971.62000	82.00000	971.62000	972.70000	68.00000	73.00000	-7.55280	99.64200
.023	91.357	972.32000	972.32000	82.00000	972.32000	972.70000	68.00000	73.00000	-5.90480	99.64200
.014	141.310	972.33000	972.33000	82.00000	972.32000	972.70000	68.00000	73.00000	-6.81700	99.64200
.020	190.930	974.41000	974.41000	82.00000	974.41000	972.70000	68.00000	73.00000	-7.57530	99.64200
.033	290.820	973.67000	973.67000	82.00000	973.67000	972.70000	68.00000	73.00000	-7.40220	99.64200
.013	391.040	972.83000	972.83000	82.00000	972.83000	972.70000	68.00000	73.00000	-6.27580	99.64200
-0.032	491.800	972.03000	972.03000	82.00000	972.03000	972.70000	68.00000	73.00000	-4.00210	99.64200
-0.064	591.500	971.64000	971.64000	82.00000	971.64000	972.70000	68.00000	73.00000	-3.21410	99.64200
.001	791.370	972.40000	972.40000	82.00000	972.40000	972.70000	68.00000	73.00000	-3.42520	99.64200
.002	931.250	972.75000	972.75000	82.00000	972.75000	972.70000	68.00000	73.00000	-3.53580	99.64200
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2462/ 0 RN/L = .66 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	T81	T82	DT	T
4.988	-57.915	972.43000	972.43000	81.00000	972.43000	972.23000	66.00000	74.00000	-6.04290	99.64200
4.986	6.600	972.31000	972.31000	81.00000	972.31000	972.23000	66.00000	74.00000	-6.81810	99.64200
4.993	41.333	972.42000	972.42000	81.00000	972.42000	972.23000	66.00000	74.00000	-7.03770	99.64200
5.005	91.233	972.20000	972.20000	81.00000	972.20000	972.23000	66.00000	74.00000	-9.03500	99.64200
5.035	190.520	972.10000	972.10000	81.00000	972.10000	972.23000	66.00000	74.00000	-10.39200	99.64200
5.008	291.050	971.60000	971.60000	81.00000	971.60000	972.23000	66.00000	74.00000	-9.16520	99.64200
4.977	391.560	971.60000	971.60000	81.00000	971.60000	972.23000	66.00000	74.00000	-7.34300	99.64200
4.998	591.340	971.67000	971.67000	81.00000	971.67000	972.23000	66.00000	74.00000	-6.07010	99.64200
	GRADIENT	142.98466	142.93466	11.91159	142.93466	142.97289	9.70574	10.82219	-1.00265	14.65302



DATE 06 MAY 77

TABULATED SOURCE DATA, IA22, (AEDC V418-D9A)

V418-D9A (IA22), ET SEPARATING FROM ORB (04RC3)

(AVK027) (04 MAY 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2819/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA	
-5.510	199.500	.03591	.29992	-10.51300	.00611	-.23081	-.01255	.01190	.00004	.00011	.11090
-5.506	248.950	.21446	.39353	-10.52100	.00465	-.20211	-.02093	.01021	.00100	-.00003	.10187
-5.499	299.140	.06349	.23484	-10.52000	.00360	-.20081	-.01791	.01053	.00077	-.00002	.10230
-5.472	333.570	.15147	.23726	-10.49300	.00507	-.21469	-.00037	.01139	-.00010	-.00006	.11597
-5.487	499.950	.04710	-1.93090	-10.51200	-.02736	-.20536	.00558	.01226	-.00077	.00014	.12648
-5.552	539.730	.27173	.39943	-10.52900	.00333	-.19029	-.02189	.00390	.00111	-.00016	.10255
-5.527	659.520	.24793	.05337	-10.55900	.00159	-.14130	-.03157	.00260	.00127	-.00019	.10087
-5.512	799.140	.19335	-.14006	-10.53500	-.00142	-.14029	-.03166	.00390	.00134	-.00021	.10196
-5.512	819.200	.31447	-.01644	-10.53400	.00222	-.14057	-.03162	.00841	.00137	-.00020	.10196
-5.512	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2459/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-0.087	26.922	-.59344	.34976	-5.09390	.00520	-.11319	-.02240	.00604	.00043	.00029	.08971
.002	41.559	.11249	.32772	-5.00490	.00522	-.11448	-.02102	.00632	.00038	.00022	.09035
.028	91.367	.10730	.61223	-4.99350	.00559	-.11637	-.01529	.00510	.00041	.00007	.09046
.014	141.310	.04617	.05425	-4.99330	.00557	-.11917	-.00333	.00429	.00055	.00013	.09184
.020	190.990	.10133	.06210	-4.99240	.00223	-.11754	-.00204	.00390	.00041	.00005	.09591
.033	290.820	.18753	-.16497	-4.99710	-.00204	-.12005	.00347	.00539	.00013	.00006	.10291
.013	391.040	.16926	.14752	-5.01140	.00392	-.10223	.00906	.00759	-.00058	.00018	.10815
-.032	491.800	.09739	-.02603	-5.05590	-.00233	-.00325	-.01239	.00533	.00073	-.00002	.08945
-.004	591.500	.21411	.19093	-5.02640	.00354	-.00261	-.01565	.00463	.00081	-.00006	.08999
.001	791.370	.22057	-.11290	-5.02150	-.00083	-.00202	-.01525	.00511	.00072	-.00007	.09367
.002	931.250	.17647	.21019	-5.02030	.00353	-.00346	-.01533	.00485	.00076	-.00007	.09439
.002	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2452/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
4.938	-57.915	.31991	-.50202	-.03312	-.00593	-.02350	-.00861	.00733	-.00016	.00005	.08491
4.936	6.600	.11153	-.18437	-.03009	-.00255	-.04446	-.00398	.00597	.00041	.00006	.08527
4.933	41.355	.11925	.12040	-.02073	.00181	-.05037	.00129	.00529	.00051	.00006	.08757
5.005	91.229	.15228	-.03323	-.00279	.00063	-.05707	.01012	.00462	.00039	.00001	.09395
5.033	190.590	.19352	-.04333	.01933	-.00111	-.05419	.02065	.00500	.00055	.00005	.10091
5.008	291.050	.17005	-.03378	-.01305	.00163	-.03319	.00193	.00342	-.00022	-.00002	.10032
4.977	391.530	.16345	.01745	-.01322	-.00104	-.00237	.00177	.00302	.00034	-.00007	.06334
4.938	591.340	.26077	-.24457	-.02325	-.00359	-.00355	.00059	.00494	.00043	-.00009	.08865
4.938	GRADIENT	.01640	-.02716	-.00454	-.00038	-.00654	-.00057	.00086	.00006	.00001	.01269





DATE 05 MAY 77

TABULATED SOURCE DATA, IA22, (AEC V41B-D9A)

PAGE 223

V41B-D9A (IA22), ORBITER (04RC3) W/ET SEPARATING

(RVK029) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UNCLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2620/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CLR	CLMR	CYR	CYMR	CLBR	CAR	WM
-5.491	193.550	200.15000	-.03425	.00209	.8227	-.00007	-.00451	.00039	.00143	-.01204	.18939
-5.513	249.000	200.00000	.03109	.01432	.0021	-.00074	-.00457	.00013	.00032	-.00061	.18906
-5.543	300.200	200.00000	.00010	.00430	.17200	-.00074	-.00302	-.00007	.00033	-.00045	.18225
-5.531	400.210	200.00000	.44015	.00150	.1716	-.00003	-.00418	-.00002	.00043	-.00073	.18531
-5.516	400.740	200.21000	.70419	.01205	.0491	-.00003	-.00453	.00007	.00033	-.00003	.18316
-5.437	500.600	200.10000	-.30033	-.00023	.00205	-.00004	-.00419	-.00002	.00022	-.00031	.18323
-5.459	600.300	200.15000	-.22542	-.00037	.10225	-.00004	-.00423	-.00001	.00022	-.00045	.18374
-5.510	700.300	200.21000	-.42007	-.00405	.10212	-.00004	-.00430	-.00002	.00022	-.00034	.18344
-5.512	819.320	200.17000	.00005	.00004	.10213	-.00003	-.00435	-.00001	.00022	-.00037	.18225
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2460/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CLR	CLMR	CYR	CYMR	CLBR	CAR	WM
-.004	23.701	200.05000	.25332	.00446	.7824	-.01235	-.01202	-.00031	.00035	.02097	.18972
-.023	42.372	200.12000	-.05170	.00334	.6006	-.01273	-.01187	-.00013	.00022	.01714	.18939
-.014	92.103	200.13000	-.00000	.00125	.6207	-.01631	-.01319	.00015	.00009	.01295	.18003
-.021	142.000	200.22000	-.21000	-.00005	.5700	-.00002	-.01321	.00009	.00047	.00005	.18005
-.037	192.000	200.14000	.10004	.00178	.4218	-.00002	-.01233	.00035	.00014	.00341	.18332
-.021	270.000	200.11000	.00007	.00041	.3000	-.00001	-.01159	.00031	.00049	.01223	.18000
.003	300.000	200.14000	.31271	.00015	.1024	-.00000	-.01200	.00045	.00016	.01203	.18023
.031	491.210	200.20000	.10314	.00004	.0000	-.00002	-.01200	.00000	.00014	.01440	.18003
.000	591.420	200.20000	.17379	.00005	.0000	-.00003	-.01165	.00003	.00006	.01422	.18330
-.002	791.480	200.20000	.17514	.00405	.0000	-.00003	-.01159	.00007	.00006	.01472	.18046
-.001	931.300	200.21000	.12605	.00435	.0000	-.00003	-.01216	.00007	.00006	.01474	.18853
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2463/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CLR	CLMR	CYR	CYMR	CLBR	CAR	WM
4.992	-58.681	200.12000	.15443	.00705	.2165	-.00424	-.01233	.00013	.00125	.01917	.18773
4.982	6.783	200.11000	-.05242	.00001	.5402	-.01604	-.01235	.00039	.00002	.01216	.18752
4.984	42.187	200.00000	.16724	.00403	.5104	-.01765	-.01303	.00027	.00060	.00747	.18308
4.967	92.300	200.14000	-.00000	.00119	.4210	-.00000	-.01257	.00054	.00074	.00651	.18017
4.975	152.120	200.14000	-.00001	.00003	.4713	-.00003	-.01115	.00100	.00100	.01273	.18224
5.004	291.610	200.20000	-.15005	-.00000	.2377	-.00004	-.01000	.00055	-.00001	.00903	.18815
5.023	391.210	200.20000	.01007	.00007	.0000	-.00004	-.01000	.00104	-.00005	.00904	.18741
5.001	591.200	200.11000	-.13547	.00003	.0000	-.00004	-.01004	.00104	-.00004	.01000	.18024
GRADIENT	29.47535		-.00772	.00044	.00201	-.00248	-.00169	.00006	.00013	.00179	.02763



V418-D9A (IA22), ORBITER(04RC3) W/ET SEPARATING

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1099.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 WHELDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2820/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
-5.491	193.560	-5.01820	-.00182	.00259	-.02535	.00312	.02083	.00431	.00021	.00169
-5.513	249.800	-5.01720	-.00152	.01432	-.09009	.00339	.02417	.00429	-.00004	.00058
-5.545	300.850	-5.02020	-.00139	.00450	-.10037	.00342	.02735	.00324	-.00023	.00030
-5.531	403.210	-5.02120	-.00143	.00030	-.16177	.00423	.02102	.00487	-.00018	.00039
-5.516	403.740	-5.02420	-.00151	.01245	-.17373	.00245	.02703	.00430	-.00010	.00049
-5.497	503.000	-5.02310	-.00139	-.00023	-.18000	.00312	.03043	.00403	-.00019	.00048
-5.499	600.300	-5.02020	-.00139	-.00037	-.18031	.00314	.03359	.00481	-.00018	.00048
-5.510	703.350	-5.02200	-.00139	-.00405	-.18318	.00059	.03034	.00452	-.00018	.00048
-5.512	819.320	-5.02200	-.00140	.00254	-.18305	.00007	.03012	.00456	-.00017	.00048
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	-.00000	.00000

RUN NO. 2460/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
-.004	23.701	-4.99930	-.00030	.00446	-.00054	.00037	.03425	-.00390	-.00047	.00061
-.023	42.372	-4.99997	-.00091	.00334	-.00044	.00078	.03043	-.00315	-.00030	.00048
-.014	62.189	-5.00245	-.00114	.00125	-.00024	.00333	.04634	-.00443	-.00002	.00125
-.021	142.000	-5.01135	-.00170	-.00005	-.11774	.01700	.04169	-.00447	.00042	.00073
-.037	192.450	-5.01333	-.00134	.00178	-.13322	.01535	.03375	-.00484	.00049	.00040
-.021	232.250	-5.00922	-.00162	.00041	-.13009	.00335	.04032	-.00324	.00015	.00074
.003	331.600	-5.00009	-.00181	.00316	-.18002	.00429	.04533	-.00303	.00030	.00042
.031	431.210	-5.00224	-.00163	.00004	-.17009	.00703	.04777	-.00345	.00022	.00040
.000	531.430	-5.02244	-.00163	.00335	-.17003	.00001	.04020	-.00322	.00022	.00032
-.002	791.460	-5.02241	-.00155	.00493	-.17893	.00303	.04812	-.00334	.00020	.00032
-.001	931.350	-5.02244	-.00167	.00435	-.17747	.00006	.04819	-.00339	.00021	.00032
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	-.00000	.00000	.00000

RUN NO. 2463/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
4.532	-50.601	-5.01226	-.00123	.00723	-.10007	.01073	.03333	-.00460	-.00003	.00152
4.932	6.783	-5.01410	-.00142	.00301	-.13002	.02315	.04033	-.00082	.00022	.00115
4.934	42.187	-5.00454	-.00130	.00403	-.13371	.02333	.04193	-.00400	.00010	.00087
4.937	62.358	-5.01207	-.00179	.00119	-.14246	.01784	.04094	-.00455	.00047	.00101
4.975	152.120	-5.01037	-.00232	.00093	-.13737	.00379	.04715	-.00213	.00033	.00020
5.004	291.510	-5.02350	-.00273	-.00000	-.16073	.00203	.04245	-.00156	.00078	.00025
5.023	391.210	-5.02036	-.00241	.00307	-.17516	.00723	.04330	-.00180	.00037	.00001
5.001	531.230	-5.02132	-.00239	.00036	-.18495	.00009	.04447	-.00180	.00087	-.00007
	GRADIENT	-.73720	-.00021	.00044	-.01915	.00335	.00337	-.00056	.00003	.00017

DATE 06 MAY 77

TABULATED SOURCE DATA, IA22, (AEOC V41B-D9A)

PAGE 226

V41B-D9A (IA22), ORBITER (O4RC3) W/ET SEPARATING

(TVK028) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UNSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2808/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-20.030	625.520	200.13000	-.25350	.31071	.28148	218.39000	.00000	.00000	644.21000	.00000	.00000
-20.065	700.490	200.31000	-.04044	.18167	.15554	218.14000	.00000	.00000	644.36000	.00000	.00000
-19.978	799.590	200.05000	.02949	.03016	-.07558	218.15000	.00000	.00000	644.30000	.00000	.00000
-19.970	999.210	199.60000	.02728	.04476	-.04146	218.34000	.00000	.00000	644.07000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.30000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2812/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-14.963	474.200	199.92000	-.02293	.27492	.24263	219.30000	.00000	.00000	648.94000	.00000	.00000
-15.028	500.050	200.13000	-.80947	.02494	-.12333	219.76000	.00000	.00000	649.15000	.00000	.00000
-15.031	549.990	200.20000	.15537	.10216	.12213	219.21000	.00000	.00000	649.60000	.00000	.00000
-15.056	600.210	200.47000	-.26194	.01270	-.00209	219.70000	.00000	.00000	649.22000	.00000	.00000
-15.041	700.370	200.35000	.06663	.04133	-.03214	218.70000	.00000	.00000	646.03000	.00000	.00000
-14.908	799.480	199.60000	.03409	.04472	-.01738	218.32000	.00000	.00000	644.83000	.00000	.00000
-15.010	999.470	200.03000	.19195	.04847	-.03149	218.30000	.00000	.00000	646.31000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.30000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2816/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-9.566	324.120	200.05000	.36611	.02312	-.08903	221.20000	.00000	.00000	653.32000	.00000	.00000
-9.998	349.640	200.18000	.09492	-.00921	-.10639	220.37000	.00000	.00000	651.82000	.00000	.00000
-10.032	399.940	200.25000	.05107	-.03261	.00444	221.16000	.00000	.00000	653.33000	.00000	.00000
-10.028	449.630	200.20000	-.27439	-.00573	-.05306	221.31000	.00000	.00000	653.73000	.00000	.00000
-10.037	500.390	200.20000	.45022	.02493	.01204	221.25000	.00000	.00000	653.45000	.00000	.00000
-10.021	550.910	200.27000	-.02463	.02031	.01203	221.23000	.00000	.00000	653.47000	.00000	.00000
-9.990	600.630	200.03000	.45025	.02175	.01057	221.30000	.00000	.00000	652.81000	.00000	.00000
-9.997	799.320	200.17000	.26237	.02353	.00761	221.18000	.00000	.00000	653.35000	.00000	.00000
-10.014	999.370	200.24000	.47615	.02699	.00221	221.30000	.00000	.00000	652.82000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.30000	.00000	.00000	.00000	.00000	.00000

V418-09A (IA22), ORBITER (O4RC3) 1/ET SEPARATING

(TVK028) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2820/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHFD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.491	199.560	200.15000	-.03425	.01020	-.03150	220.45000	.00000	.00000	651.17000	.00000	.00000
-5.513	249.800	200.08000	-.65109	-.01007	-.05944	221.22000	.00000	.00000	653.47000	.00000	.00000
-5.545	300.250	200.24000	.23010	.02749	.03478	221.35000	.00000	.00000	653.64000	.00000	.00000
-5.551	400.210	200.26000	.11615	-.00568	-.01833	221.01000	.00000	.00000	652.83000	.00000	.00000
-5.516	499.740	200.21000	.79419	.01342	.02537	220.55000	.00000	.00000	651.43000	.00000	.00000
-5.467	593.850	200.14000	-.39053	.01452	.02330	220.80000	.00000	.00000	652.41000	.00000	.00000
-5.499	699.320	200.15000	-.22342	.01598	.02124	220.90000	.00000	.00000	652.71000	.00000	.00000
-5.510	799.330	200.21000	-.42097	.01754	.01839	220.51000	.00000	.00000	651.35000	.00000	.00000
-5.512	819.320	200.17000	.05265	.01879	.01684	220.50000	.00000	.00000	651.45000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2460/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHFD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-.004	23.701	200.05000	.25332	.02337	.00055	217.95000	.00000	.00000	643.82000	.00000	.00000
-.023	42.372	200.12000	-.05170	.02400	-.00499	217.95000	.00000	.00000	643.82000	.00000	.00000
-.014	92.189	200.16000	-.02050	.02108	-.02187	218.65000	.00000	.00000	645.77000	.00000	.00000
-.021	142.000	200.22000	-.21599	-.00231	-.05129	218.35000	.00000	.00000	644.69000	.00000	.00000
-.037	192.450	200.14000	.14564	.00310	-.02333	219.25000	.00000	.00000	644.80000	.00000	.00000
-.021	292.250	200.11000	.00357	-.01354	-.02442	219.25000	.00000	.00000	644.77000	.00000	.00000
.003	391.690	200.14000	.31271	.01216	-.00375	219.25000	.00000	.00000	644.70000	.00000	.00000
.031	491.210	200.22000	.16914	.01369	-.00571	218.51000	.00000	.00000	645.44000	.00000	.00000
.000	591.430	200.20000	.17379	.01434	-.00723	218.55000	.00000	.00000	645.63000	.00000	.00000
-.002	791.460	200.20000	.17514	.01506	-.00293	218.65000	.00000	.00000	645.63000	.00000	.00000
-.001	931.350	200.21000	.12535	.01553	-.00977	218.55000	.00000	.00000	645.63000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2463/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHFD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
4.592	-58.681	200.19000	.15443	.01744	.00449	225.65000	.00000	.00000	656.42000	.00000	.00000
4.982	6.768	200.11000	-.05242	.01763	-.00634	225.65000	.00000	.00000	656.67000	.00000	.00000
4.964	42.187	200.06000	.16724	.01370	-.00351	225.65000	.00000	.00000	655.47000	.00000	.00000
4.967	92.368	200.14000	-.08327	.01401	-.00455	225.40000	.00000	.00000	655.02000	.00000	.00000
4.975	192.120	200.14000	-.05031	-.01273	-.01523	225.40000	.00000	.00000	655.87000	.00000	.00000
5.004	291.610	200.20000	-.15005	-.01131	-.01331	225.40000	.00000	.00000	655.87000	.00000	.00000
5.023	391.210	200.20000	.01837	.00239	.00733	225.25000	.00000	.00000	655.54000	.00000	.00000
5.001	591.260	200.11000	-.13547	.00532	.00323	225.71000	.00000	.00000	655.63000	.00000	.00000
	GRADIENT	29.47936	-.00772	.00260	-.00093	33.21838	.00000	.00000	98.21302	.00000	.00000

V418-D9A (1A22), ORBITER (RCS) W/ET SEPARATING

(UVK028) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DSETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2908/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLF2AL	T81	T82	DT	T
-20.030	625.530	974.45000	974.45000	85.00000	974.45000	974.57000	83.00000	76.00000	30.37200	99.64200
-20.035	700.450	974.72000	974.72000	85.00000	974.72000	974.57000	83.00000	76.00000	19.65700	99.64200
-19.978	759.590	974.75000	974.75000	85.00000	974.75000	974.57000	83.00000	76.00000	12.55300	99.64200
-19.970	989.210	974.75000	974.75000	85.00000	974.75000	974.57000	83.00000	76.00000	17.32100	99.64200
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2912/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLF2AL	T81	T82	DT	T
-14.853	474.200	975.45000	975.45000	85.00000	975.45000	975.57000	89.00000	78.00000	13.27700	99.76300
-15.029	500.050	975.74000	975.74000	85.00000	975.74000	975.57000	89.00000	78.00000	2.93460	99.76300
-15.031	549.930	975.84000	975.84000	85.00000	975.84000	975.57000	89.00000	78.00000	-8.47830	99.76300
-15.055	600.210	975.84000	975.84000	85.00000	975.84000	975.57000	89.00000	78.00000	-12.37500	99.76300
-15.041	700.370	975.81000	975.81000	85.00000	975.81000	975.57000	89.00000	78.00000	3.42330	99.76300
-14.503	753.450	975.81000	975.81000	85.00000	975.81000	975.57000	89.00000	78.00000	8.04700	99.76300
-15.010	903.470	975.75000	975.75000	85.00000	975.75000	975.57000	89.00000	78.00000	12.02100	99.76300
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2916/ 0 RN/L = .67 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLF2AL	T81	T82	DT	T
-9.956	324.120	975.63000	975.63000	84.00000	975.63000	975.22000	86.00000	78.00000	9.32350	99.76900
-9.959	349.640	975.91000	975.91000	84.00000	975.91000	975.22000	86.00000	78.00000	3.05220	99.76900
-10.032	393.540	975.72000	975.72000	84.00000	975.72000	975.22000	86.00000	78.00000	-2.26190	99.76900
-10.023	449.620	975.87000	975.87000	84.00000	975.87000	975.22000	86.00000	78.00000	-4.73030	99.76900
-10.057	500.390	975.84000	975.84000	84.00000	975.84000	975.22000	86.00000	78.00000	-4.10300	99.76900
-10.021	559.910	975.82000	975.82000	84.00000	975.82000	975.22000	86.00000	78.00000	-1.62030	99.76900
-9.950	659.630	975.63000	975.63000	84.00000	975.63000	975.22000	86.00000	78.00000	-.72726	99.76900
-9.997	799.320	975.75000	975.75000	84.00000	975.75000	975.22000	86.00000	78.00000	.25251	99.76900
-10.014	999.370	975.48000	975.48000	84.00000	975.48000	975.22000	86.00000	78.00000	1.74380	99.76900
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REPRODUCIBILITY OF THE  
 ORIGINAL PAGE IS POOR

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XGRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YGRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZGRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UNSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2820/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	CLF3AL	T81	T82	DT	T
-5.491	189.580	975.00000	975.00000	83.00000	975.00000	975.00000	63.00000	73.00000	2.42150	99.76900
-5.513	249.200	975.00000	975.00000	83.00000	975.00000	975.00000	63.00000	73.00000	-1.00310	99.76000
-5.545	300.250	975.00000	975.00000	83.00000	975.00000	975.00000	63.00000	73.00000	-3.57910	99.76500
-5.551	400.210	975.00000	975.00000	83.00000	975.00000	975.00000	63.00000	73.00000	-3.97100	99.76000
-5.516	469.740	975.00000	975.00000	83.00000	975.00000	975.00000	63.00000	73.00000	-2.92220	99.76000
-5.467	529.620	975.00000	975.00000	83.00000	975.00000	975.00000	63.00000	73.00000	-2.30000	99.76300
-5.493	629.320	975.00000	975.00000	83.00000	975.00000	975.00000	63.00000	73.00000	-1.60000	99.76000
-5.510	729.330	975.00000	975.00000	83.00000	975.00000	975.00000	63.00000	73.00000	-.74470	99.76000
-5.512	819.320	975.00000	975.00000	83.00000	975.00000	975.00000	63.00000	73.00000	.04032	99.76000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2460/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	CLF3AL	T81	T82	DT	T
-0.004	23.701	973.40000	973.40000	81.00000	973.40000	973.40000	67.00000	73.00000	-6.32840	99.76900
-0.023	42.372	973.00000	973.00000	81.00000	973.00000	973.00000	67.00000	73.00000	-6.73200	99.76300
-0.014	62.189	973.00000	973.00000	81.00000	973.00000	973.00000	67.00000	73.00000	-7.43720	99.76000
-0.021	142.000	973.00000	973.00000	81.00000	973.00000	973.00000	67.00000	73.00000	-7.10000	99.76000
-0.037	162.480	973.00000	973.00000	81.00000	973.00000	973.00000	67.00000	73.00000	-6.70000	99.76000
-0.021	222.250	973.40000	973.40000	81.00000	973.40000	973.40000	67.00000	73.00000	-7.00000	99.76000
.003	391.620	973.00000	973.00000	81.00000	973.00000	973.00000	67.00000	73.00000	-6.47310	99.76300
.031	491.210	973.00000	973.00000	81.00000	973.00000	973.00000	67.00000	73.00000	-6.12040	99.76000
.000	591.430	973.00000	973.00000	81.00000	973.00000	973.00000	67.00000	73.00000	-5.90000	99.76000
-0.002	791.420	973.00000	973.00000	81.00000	973.00000	973.00000	67.00000	73.00000	-5.40000	99.76000
-0.001	931.350	973.00000	973.00000	81.00000	973.00000	973.00000	67.00000	73.00000	-5.02770	99.76000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2463/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	CLF3AL	T81	T82	DT	T
4.992	-58.681	971.19000	971.19000	83.00000	971.19000	971.19000	67.00000	74.00000	-9.13710	99.64200
4.992	6.769	971.07000	971.07000	83.00000	971.07000	971.07000	67.00000	74.00000	-9.55110	99.64200
4.964	42.187	971.27000	971.27000	83.00000	971.27000	971.17000	67.00000	74.00000	-8.78140	99.64200
4.937	92.223	971.10000	971.10000	83.00000	971.10000	971.17000	67.00000	74.00000	-7.44630	99.64200
4.975	192.120	971.37000	971.37000	83.00000	971.37000	971.17000	67.00000	74.00000	-5.40000	99.64200
5.004	291.610	971.00000	971.00000	83.00000	971.00000	971.17000	67.00000	74.00000	-6.24410	99.64200
5.023	391.210	971.00000	971.00000	83.00000	971.00000	971.17000	67.00000	74.00000	-6.60720	99.64200
5.001	591.260	971.37000	971.37000	83.00000	971.37000	971.17000	67.00000	74.00000	-6.43340	99.64200
	GRADIENT	143.05387	143.05387	12.22746	143.05387	143.07160	9.87036	10.90159	-1.40706	14.67914

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

V41B-D9A (1A22), ET SEPARATING FROM ORG (04RC3)

(AVK020) (04 MAY 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XREF = 1329.7200 IN. XT  
 LREF = 1290.3000 INCHES YREF = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZREF = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 CBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UNCLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2809/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-20.030	633.520	200.13000	-.25350	-25.03100	-.00290	-.51035	-.00377	.02579	-.00063	.00097	.12172
-20.035	709.450	200.31000	-.04094	-25.11700	-.00332	-.51019	-.00334	.02498	-.00109	.00067	.13134
-19.978	739.530	200.00000	.00449	-25.09300	.00333	-.51200	.00303	.02477	-.00223	.00078	.15706
-19.970	659.210	199.00000	.02728	-24.00000	.00176	-.51037	-.00347	.02059	-.00102	.00045	.15509
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2612/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-14.653	474.200	199.00000	-.02203	-20.01300	.00130	-.40763	-.01918	.01631	.00157	.00094	.12347
-15.023	500.050	200.13000	-.60247	-20.07200	-.01312	-.31017	-.04340	.01631	.00157	.00047	.10937
-15.031	519.900	200.00000	-.10337	-20.07500	.00143	-.31022	-.00315	.01764	.00045	.00045	.11572
-15.056	630.210	200.47000	-.25194	-20.00000	-.00350	-.40009	-.00446	.01763	-.00008	.00041	.12408
-15.041	700.370	200.30000	.00233	-20.00000	-.00185	-.40265	.00457	.01923	-.00120	.00039	.14552
-14.968	753.400	199.00000	.00409	-19.93300	.00343	-.40397	.01723	.01938	-.00262	.00056	.16295
-15.010	629.470	200.03000	.19193	-20.00000	.00338	-.31047	-.04293	.01351	.00064	.00015	.12249
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2316/ 0 RN/L = .97 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-9.956	324.120	200.05000	.30511	-15.00000	.01303	-.31641	-.00039	.01724	-.00214	.00073	.13414
-9.939	349.640	200.10000	.00492	-15.00000	.00002	-.31141	-.00052	.01293	.00136	.00041	.11542
-10.032	363.910	200.23000	.05107	-15.00000	.00129	-.21313	-.04022	.01249	.00123	.00018	.10381
-10.029	449.600	200.00000	-.27439	-15.00000	-.00208	-.20322	-.03018	.01323	.00073	.00018	.10957
-10.057	500.390	200.00000	.40002	-15.00000	.00597	-.20478	-.01913	.01365	.00023	.00015	.11408
-10.021	533.910	200.07000	-.02433	-15.04000	-.00179	-.31169	.00259	.01376	-.00054	.00013	.13144
-9.950	605.600	200.00000	.40125	-14.00000	.01151	-.20004	.00435	.01445	-.00135	.00032	.14010
-9.997	759.320	200.17000	.20237	-15.00000	.00433	-.21005	-.00251	.00937	.00125	-.00009	.11220
-10.014	929.370	200.24000	.47315	-15.03700	.00743	-.21025	-.03373	.01032	.00139	-.00001	.11052
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000



REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

DATE 06 MAY 77

TABULATED SOURCE DATA, IA22, AEDC V41B-D9A)

(AVK028) (04 MAY 77)

V41B-D9A (IA22), ET SEPARATING FROM ORB (04RC3)

PARAMETRIC DATA

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1329.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

ALPHA = -5.000 BETA = .000  
 DSETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLOR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2820/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CI	CLM	CY	CYN	CEL	CA
-5.491	199.530	200.15000	-.03425	-10.50000	.00075	-.03508	-.01495	.00355	.00131	.00004	.11435
-5.513	249.800	200.03000	.25109	-10.50000	.01200	-.02050	-.02024	.00371	.00140	-.00002	.10238
-5.545	300.250	200.24000	.23010	-10.50000	.00250	-.02222	-.03053	.00331	.00127	-.00002	.05549
-5.551	400.210	200.20000	.44515	-10.57300	.00206	-.03714	-.01421	.01154	.00039	-.00004	.10759
-5.516	459.740	200.21000	.70119	-10.54100	.01034	-.01403	.00140	.01154	-.00021	-.00005	.11733
-5.467	500.000	200.10000	-.30003	-10.40000	-.00161	-.0737	.00102	.01230	-.00072	.00011	.12501
-5.459	500.000	200.10000	-.22242	-10.50000	-.00253	-.03000	-.00203	.00303	.00109	-.00016	.10316
-5.510	600.330	200.10000	-.42007	-10.50000	-.00045	-.00000	-.03173	.00343	.00124	-.00020	.10051
-5.510	723.330	200.21000	-.42007	-10.50000	-.00153	-.4074	-.03123	.00320	.00122	-.00021	.10004
-5.512	819.320	200.17000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2460/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CI	CLM	CY	CYN	CEL	CA
-.004	23.701	200.00000	.23332	-5.00000	.00000	-.00000	-.00014	.00000	.00071	.00035	.09728
-.023	42.372	200.10000	-.05170	-5.00000	.00273	-.00000	-.00075	.00375	.00001	.00019	.09795
-.014	92.169	200.10000	-.00000	-5.01000	.00011	-.00000	-.00027	.00304	.00116	.00003	.05222
-.021	142.000	200.22000	-.21503	-5.00220	-.00101	-.1222	-.01009	.00445	.00152	.00010	.09009
-.037	192.450	200.14000	.14054	-5.00000	-.00003	-.0971	-.01503	.00303	.00138	.00004	.00373
-.021	292.250	200.11000	.00357	-5.04230	-.00120	-.1505	-.00167	.00303	.00350	.00002	.09706
-.003	391.630	200.14000	-.31271	-5.00000	.00355	-.1073	.00772	.00711	-.00011	.00010	.10304
.031	491.210	200.20000	.12314	-4.82210	.00405	-.10371	.00303	.00719	-.00022	.00015	.10314
.000	591.430	200.20000	.17379	-5.00230	.00197	-.10416	-.01459	.00329	.00070	-.00006	.00008
-.002	791.430	200.20000	.17314	-5.02410	.00350	-.10000	-.01540	.00363	.00035	-.00007	.09209
-.001	931.350	200.21000	.12003	-5.00000	.00000	-.10000	-.01523	.00455	.00075	-.00007	.05239
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2463/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CI	CLM	CY	CYN	CEL	CA
4.502	-58.691	200.10000	.15443	-.00000	.00372	-.00000	-.01448	.00701	-.00129	.00002	.02532
4.932	6.703	200.11000	-.00242	-.00210	.00153	-.10000	-.01123	.00000	.00040	-.00002	.00000
4.934	42.187	200.00000	.16724	-.04114	.00273	-.10123	-.00004	.00377	.00003	.00006	.00004
4.967	92.359	200.14000	-.00000	-.00000	-.00000	-.14000	-.00101	.00375	.00000	-.00000	.00000
4.975	182.120	200.14000	-.00000	-.04337	-.00149	-.15137	.01057	.00439	.00000	.00000	.00000
5.004	291.610	200.20000	-.05031	-.01540	-.00233	-.14000	.01919	.00591	.00014	-.00005	.09776
5.023	391.210	200.20000	.01037	-.00000	.00000	-.10000	.01425	.00511	.00014	-.00000	.00000
5.001	591.630	200.11000	-.13047	-.00000	-.00000	-.10000	.00107	.00452	.00046	-.00000	.00000
GRADIENT	29.47596		-.00772	-.00326	.00023	-.10000	-.10166	.00101	.00006	-.00000	.01325



V41B-D9A (1A22), ORBITER (04RC3) W/ET SEPARATING

(RVK029) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2821/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CI MR	CYR	CYNR	CELR	CAR	WM
-5.547	200.470	400.19000	-.00789	.00353	.23356	-.12971	-.00392	.00001	.00079	-.00839	.18837
-5.485	248.780	400.10000	.00410	.00044	.20926	-.13995	-.00380	.00002	.00102	-.00426	.18811
-5.533	299.440	400.15000	-.01667	-.00050	.16025	-.14196	-.00320	-.00015	.00067	-.00662	.18797
-5.489	399.820	399.99000	-.01522	.00523	.11047	-.13755	-.00464	.00020	.00000	-.00895	.18797
-5.475	493.640	400.12000	-.30394	-.00509	.09376	-.13343	-.00418	.00000	.00025	-.00429	.18855
-5.497	593.720	400.12000	.15034	.00478	.09230	-.13307	-.00428	-.00001	.00021	-.00325	.18823
-5.522	699.300	400.21000	-.62992	-.00226	.09207	-.13393	-.00420	-.00000	.00021	-.00318	.18825
-5.548	799.770	400.29000	-.93707	-.01328	.09216	-.13391	-.00420	-.00003	.00022	-.00306	.18825
-5.515	819.290	400.24000	-.55017	-.00593	.09235	-.13392	-.00435	-.00001	.00022	-.00303	.18825
	GRADIENT	.00000	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2461/ 0 RN/L = .89 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CI MR	CYR	CYNR	CELR	CAR	WM
-.033	24.615	399.99000	.02925	.00156	.20096	-.10589	-.01274	.00009	.00079	.01297	.18872
.012	41.197	400.13000	.52143	.01327	.19484	-.10924	-.01280	.00019	.00072	.01132	.18860
.042	90.595	400.15000	-.06720	.00219	.18393	-.12051	-.01304	.00062	.00071	.01000	.18842
.011	141.240	400.10000	.01728	.00080	.17390	-.12491	-.01313	.00061	.00017	.00896	.18849
.000	191.320	400.09000	-.11026	.00047	.16035	-.13185	-.01210	.00043	.00002	.01117	.18902
.031	290.650	400.16000	.12313	.00323	.12555	-.12643	-.01236	.00036	.00048	.01083	.18819
.035	390.800	400.29000	.02251	.00322	.11415	-.13365	-.01224	.00039	.00024	.01233	.18933
.021	491.090	400.19000	-.28275	-.00075	.10082	-.13357	-.01202	.00036	.00000	.01408	.18840
-.005	591.250	400.15000	.26446	.00497	.10078	-.13356	-.01189	.00035	-.00002	.01401	.18849
-.024	791.730	400.26000	-.03545	.00077	.09925	-.13317	-.01115	.00037	-.00022	.01371	.18851
.001	931.240	400.29000	.05170	.00302	.09939	-.13315	-.01118	.00037	-.00023	.01356	.18849
	GRADIENT	.00000	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2464/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CI MR	CYR	CYNR	CELR	CAR	WM
4.910	-56.154	399.83000	.31028	.00183	.16517	-.10461	-.01304	-.00073	.00018	.01579	.18765
5.049	4.911	400.29000	-.36621	.00190	.17433	-.11377	-.01424	.00013	.00104	.00969	.18822
5.001	41.082	400.15000	.34906	.00760	.16597	-.12138	-.01421	.00051	.00081	.00647	.18736
4.993	91.271	400.23000	.23521	.00248	.15366	-.12406	-.01371	.00053	.00014	.00396	.18785
5.028	190.550	400.23000	-.27335	-.00258	.15227	-.13438	-.01288	.00030	.00039	.01094	.18757
5.026	290.670	400.22000	-.13556	.00154	.13056	-.13718	-.01318	.00043	.00015	.00932	.18799
5.018	390.950	400.21000	.29771	.00300	.11233	-.13373	-.01190	.00041	-.00009	.01078	.18841
4.977	591.440	400.21000	-.12541	.00103	.10531	-.13243	-.01148	.00093	-.00027	.01041	.18827
	GRADIENT	.00000	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000







DATE 06 MAY 77

TABULATED SOURCE DATA, IA22, (LEDC V41B-D9A)

V41B-D9A (IA22), ORBITER (OHR3) // ET SEPARATING

(TVK029) (20 APR 77)

REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1009.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DEETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2821/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHFD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.547	200.470	400.19000	-.00709	.00239	-.03230	220.97000	.00000	.00000	652.71000	.00000	.00000
-5.485	248.780	400.10000	.00410	-.00655	-.00309	220.97000	.00000	.00000	652.51000	.00000	.00000
-5.533	239.440	400.15000	-.01057	.00160	-.06347	221.20000	.00000	.00000	653.43000	.00000	.00000
-5.468	359.220	399.92000	-.01522	.03128	.00926	220.47000	.00000	.00000	651.15000	.00000	.00000
-5.475	423.640	400.12000	-.30324	.02793	.00911	220.07000	.00000	.00000	651.72000	.00000	.00000
-5.487	523.760	400.12000	.10224	.02321	.01034	220.67000	.00000	.00000	651.70000	.00000	.00000
-5.522	623.300	400.21000	-.02222	.02270	.01223	220.97000	.00000	.00000	651.46000	.00000	.00000
-5.548	723.770	400.20000	-.03707	.02032	.01403	220.77000	.00000	.00000	651.00000	.00000	.00000
-5.515	819.290	400.24000	-.03917	.01022	.01635	220.57000	.00000	.00000	651.49000	.00000	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2461/ 0 RN/L = .89 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHFD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-.033	24.615	399.99000	.02925	.01939	-.01630	217.57000	.00000	.00000	642.60000	.00000	.00000
.012	41.197	400.13000	-.02143	.01909	-.02021	217.47000	.00000	.00000	642.29000	.00000	.00000
.042	90.593	400.15000	-.05720	.02253	-.02232	217.27000	.00000	.00000	641.65000	.00000	.00000
.011	141.240	400.10000	.01723	-.00043	-.04349	215.90000	.00000	.00000	640.72000	.00000	.00000
.000	191.320	400.09000	-.11026	-.02420	-.03739	216.97000	.00000	.00000	640.84000	.00000	.00000
.031	290.650	400.15000	.12313	-.00187	-.03015	218.07000	.00000	.00000	643.95000	.00000	.00000
.038	390.800	400.29000	.02231	.02328	-.00531	219.57000	.00000	.00000	648.45000	.00000	.00000
.021	491.090	400.19000	-.02275	.02101	-.00244	220.47000	.00000	.00000	651.15000	.00000	.00000
-.005	591.250	400.15000	.02446	.01793	-.00309	221.17000	.00000	.00000	653.27000	.00000	.00000
-.024	791.730	400.23000	-.03345	.01575	-.00326	221.47000	.00000	.00000	654.03000	.00000	.00000
.001	931.290	400.23000	.05170	.01417	-.00175	221.87000	.00000	.00000	655.25000	.00000	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2464/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHFD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
4.910	-56.154	399.23000	.31029	.00214	-.00043	226.17000	.00000	.00000	658.11000	.00000	.00000
5.049	4.911	400.20000	-.30321	.01480	-.01232	226.17000	.00000	.00000	658.13000	.00000	.00000
5.001	41.032	400.15000	.34006	.01530	-.01549	226.17000	.00000	.00000	658.02000	.00000	.00000
4.993	91.271	400.23000	.20221	-.01037	-.04309	226.17000	.00000	.00000	658.20000	.00000	.00000
5.029	190.550	400.26000	-.27395	-.00304	-.03353	226.17000	.00000	.00000	658.67000	.00000	.00000
5.026	290.670	400.22000	-.13525	.00455	-.00323	226.17000	.00000	.00000	659.69000	.00000	.00000
5.018	390.950	400.21000	.29771	.01303	.00335	226.17000	.00000	.00000	659.74000	.00000	.00000
4.977	591.440	400.21000	-.12341	.01037	.01112	226.47000	.00000	.00000	659.97000	.00000	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000











V418-D9A (IA22), ORBITER (O4RC:1) W/ET SEPARATING

(RVK030) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 600.000  
 Y = .000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2810/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-20.028	625.270	600.16000	.24092	.00399	.16309	-.05073	-.00371	-.00003	.00113	-.01624	.18735
-20.022	700.310	600.20000	.24523	.00556	.12122	-.03908	-.00390	-.00003	.00085	-.01217	.18766
-20.008	799.630	600.04000	.20366	.00563	.09016	-.03430	-.00418	-.00002	.00019	-.00400	.18773
-20.029	1000.000	600.03000	.26042	.00324	.08123	-.03389	-.00429	-.00002	.00021	-.00362	.18773
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2814/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-15.004	474.570	600.16000	.16200	.00311	.15677	-.050	.00268	-.00023	.00066	-.01559	.18791
-15.014	499.770	600.14000	.24243	.00639	.14779	-.0480	.00375	-.00003	.00099	-.01545	.18784
-15.017	549.740	600.09000	-.34635	.00052	.12675	-.04029	.00397	-.00005	.00089	-.01290	.18763
-15.034	600.070	600.27000	-.00180	-.00022	.11207	-.03905	-.00469	.00014	.00016	-.00817	.18777
-15.058	700.320	600.31000	.15130	.00384	.09119	-.03400	-.00413	-.00000	.00021	-.00437	.18903
-15.038	800.320	600.33000	.57191	.00882	.09148	-.03359	-.00417	.00001	.00021	-.00422	.18758
-14.971	999.050	600.04000	.22743	.00874	.09137	-.03358	-.00424	.00001	.00021	-.00428	.18791
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2818/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-10.017	324.810	600.07000	.00456	.00363	.20884	-.05010	-.00299	-.00017	.00098	-.00889	.18837
-9.975	349.610	600.20000	1.20250	.02129	.18049	-.04944	-.00321	-.00015	.00094	-.01068	.18851
-10.018	399.780	600.18000	1.44030	.02221	.13323	-.04482	-.00395	-.00005	.00077	-.01330	.18832
-10.028	449.810	600.22000	.15753	.00523	.11532	-.03940	-.00458	.00022	.00016	-.01104	.18830
-10.044	500.120	600.22000	-.22302	-.00327	.10516	-.03575	-.00453	.00007	.00021	-.00597	.18832
-10.053	600.280	600.24000	.12375	.00283	.07257	-.03406	-.00440	.00001	.00022	-.00397	.18816
-10.041	700.170	600.22000	-.16107	-.00183	.09302	-.07415	-.00443	.00003	.00022	-.00406	.18802
-9.950	799.790	600.23000	.35961	.01114	.09291	-.03417	-.00427	.00001	.00022	-.00428	.18809
-10.014	999.310	600.14000	-.03956	.00251	.09319	-.03417	-.00430	.00001	.00021	-.00431	.188 9
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR





DATE 08 MAY 77

TABULATED SOURCE DATA, IA22, (AEDC V41B-D9A)

PAGE 245

V41B-D9A (IA22), ORBITER (O4RC3) W/ET SEPARATING

(TVKJ30) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 600.000  
 Y = .000 ELEVON = .000  
 UNBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2810/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-20.028	625.270	600.16000	.24092	.03108	-.03352	218 00000	.00000	.00000	643.95000	.00000	.00000
-20.022	700.310	600.20000	.24623	.03843	-.02723	217 99000	.00000	.00000	643.92000	.00000	.00000
-20.008	799.630	600.04000	.20386	.04037	-.02500	218.17000	.00000	.00000	644.45000	.00000	.00000
-20.029	1000.000	600.05000	.26042	.04845	-.03387	218.14000	.00000	.00000	644.35000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2814/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-15.004	474.570	600.16000	.16200	.04795	.02793	220 41000	.00000	.00000	651.05000	.00000	.00000
-15.014	499.770	600.14000	.24243	.02465	-.00061	220 07000	.00000	.00000	650.05000	.00000	.00000
-15.017	549.740	600.09000	-.34635	.02653	-.00036	220 18000	.00000	.00000	650.37000	.00000	.00000
-15.034	600.070	600.27000	-.00180	.02324	.00470	220 07000	.00000	.00000	650.05000	.00000	.00000
-15.058	700.320	600.31000	.15130	.02597	-.00114	220 09000	.00000	.00000	650.11000	.00000	.00000
-15.038	800.320	600.33000	.57181	.02398	-.00745	219 97000	.00000	.00000	649.76000	.00000	.00000
-14.971	999.050	600.04000	.22773	.03305	-.01492	219 63000	.00000	.00000	649.41000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2818/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-10.017	324.810	600.07000	.00456	.00351	-.09345	221 50000	.00000	.00000	654.29000	.00000	.00000
-9.975	349.610	600.20000	1.20250	.01603	-.02303	221 32000	.00000	.00000	653.95000	.00000	.00000
-10.018	399.780	600.18000	1.44030	.01956	.01934	221 08000	.00000	.00000	653.04000	.00000	.00000
-10.028	449.810	600.22000	.15753	.01670	.01659	221 29000	.00000	.00000	653.65000	.00000	.00000
-10.044	500.120	600.22000	-.22902	.01349	.01536	221 35000	.00000	.00000	653.87000	.00000	.00000
-10.053	600.280	600.24000	.12875	.01433	.01754	221 27000	.00000	.00000	653.61000	.00000	.00000
-10.041	700.170	600.28000	-.16107	.01529	.01615	221 83000	.00000	.00000	655.25000	.00000	.00000
-9.950	798.790	600.23000	.36861	.01654	.01443	222 08000	.00000	.00000	656.01000	.00000	.00000
-10.014	999.310	600.14000	-.03996	.01870	.01040	221 76000	.00000	.00000	655.06000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	00000	.00000	.00000	.00000	.00000	.00000













REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1069.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2394/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLNR	CYR	CYNR	CBLR	CAR	MM
-.047	13.083	-.00468	.15744	.00261	.21135	.00157	-.01079	-.00026	.00004	.00118	.23307
-.027	42.441	.07729	.16781	.00257	.22606	.01051	-.01108	.00027	.00036	.00715	.23287
-.016	92.116	.10001	-.14995	.00094	.26722	.01672	-.01204	.00004	-.00019	.00993	.23335
.010	141.300	.07181	-.04087	.00100	.26370	.01335	-.01125	-.00039	-.00016	.00013	.23348
.017	190.870	-.01247	.00036	.00421	.27230	.01893	-.01117	.00003	-.00043	-.00365	.23339
.029	290.550	.11101	.19237	.00517	.25410	.01035	-.01201	.00001	-.00020	-.00392	.23344
.018	391.030	.04203	.04449	.00474	.27400	.00349	-.01235	.00011	.00002	-.00139	.23315
-.030	491.610	.05740	-.16334	-.00078	.23027	.00120	-.01132	-.00009	.00005	-.00454	.23307
-.018	591.440	.17334	-.07938	.00104	.23335	.00233	-.01160	-.00009	.00018	-.00485	.23325
-.005	791.310	.10787	-.20121	-.00035	.23216	.00448	-.01159	-.00019	.00034	-.00319	.23364
-.009	871.290	.20393	.08772	.00379	.23173	.00451	-.01178	-.00019	.00033	-.00333	.23329
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2400/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLNR	CYR	CYNR	CBLR	CAR	MM
5.028	-59.539	1.16690	-.03957	.00586	.19603	-.00426	-.01236	-.00016	.00017	-.01047	.23373
4.942	8.215	-.04731	-.06597	-.00110	.22512	.01059	-.01150	-.00004	.00057	.00520	.23342
4.995	41.697	.06557	-.32513	-.00367	.24158	.01352	-.01333	.00004	.00012	.00668	.23370
5.010	91.124	.05355	-.02030	.00202	.25732	.01330	-.01185	-.00035	-.00013	-.00143	.23353
5.041	190.310	.16790	.05717	.00534	.25399	.01466	-.01238	-.00008	-.00003	-.00515	.23359
5.008	290.850	.03027	.07834	.00303	.26374	.00931	-.01226	.00010	.00025	-.00363	.23356
4.938	391.510	.02079	.20320	.00263	.26275	.00212	-.01197	-.00016	.00009	-.00302	.23353
4.985	531.240	.15347	.24223	.00345	.24173	.00326	-.01219	-.00015	.00022	-.00493	.23341
GRADIENT		-.00576	-.00802	-.00013	.02740	.00129	-.00140	-.00000	.00007	.00063	.02841



V41B-D9A (1A22), ORBITER (O4RC1) W/ET SEPARATING

(SVK031) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UNBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2388/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.004	166.590	.04150	-.00019	-.00169	.00964	.03469	.05125	-.00372	-.00114	.00077
-4.999	191.470	.04090	.00048	.00488	.02044	.03352	.04740	-.00474	-.00174	.00033
-4.994	241.180	.03350	-.00041	-.00693	.00852	.02607	.04170	-.00379	-.00104	-.00014
-4.975	290.930	.02330	-.00057	.00121	-.02498	.01872	.03597	-.00447	-.00098	-.00030
-4.963	390.850	.02150	-.00078	.00148	-.04251	.01551	.03799	-.00495	-.00083	-.00016
-4.973	490.860	.01690	-.00052	.00605	-.04750	.01052	.04029	-.00422	-.00105	.00004
-5.037	591.780	.01710	-.00065	.00234	-.08712	.01279	.03386	-.00405	-.00100	-.00002
-5.017	691.710	.01660	-.00054	.00274	-.09373	.01483	.03031	-.00434	-.00107	.00034
-4.985	791.350	.01500	-.00049	-.00142	-.09332	.01540	.03028	-.00426	-.00112	.00039
-4.998	891.260	.01900	-.00046	.00159	-.05354	.01537	.03943	-.00417	-.00114	.00039
-4.998		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
GRADIENT										

RUN NO. 2394/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.047	13.083	.01524	-.00046	.00261	-.11662	.01234	.04440	-.00353	-.00119	.00009
-.027	42.441	.02412	-.00092	.00257	-.10171	.02129	.05038	-.00382	-.00065	.00040
-.016	92.116	.03174	-.00056	.00094	-.05066	.02749	.05316	-.00477	-.00029	-.00014
.010	141.300	.03446	-.00007	.00100	-.03334	.02333	.04339	-.00388	-.00130	-.00012
.017	190.870	.03225	-.00056	.00421	-.05573	.02774	.03861	-.00391	-.00089	-.00038
.029	290.590	.02581	-.00060	.00517	-.06391	.02114	.03934	-.00474	-.00092	-.00015
.018	391.050	.01599	-.00080	.00474	-.05346	.01427	.04187	-.00498	-.00082	.00006
-.030	491.610	.01676	-.00064	-.00078	-.07765	.01198	.03971	-.00425	-.00100	.00009
-.018	591.440	.01772	-.00061	.00104	-.08331	.01362	.03869	-.00453	-.00101	.00022
-.005	791.310	.01891	-.00048	-.00065	-.09340	.01524	.04001	-.00433	-.00111	.00038
-.009	871.290	.01891	-.00048	.00378	-.09338	.01528	.03839	-.00452	-.00111	.00037
-.009		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
GRADIENT										

RUN NO. 2400/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
5.028	-59.538	.00920	-.00062	.00366	-.13299	.00655	.03292	-.00527	-.00109	.00021
4.942	8.215	.02400	-.00057	-.00110	-.10424	.02140	.04834	-.00420	-.00097	.00061
4.955	41.697	.02759	-.00057	-.00367	-.08746	.02434	.05003	-.00504	-.00099	.00017
5.010	91.124	.02200	-.00010	.00202	-.07149	.02330	.04193	-.00455	-.00128	-.00008
5.041	190.310	.02310	-.00045	.00354	-.07592	.02347	.03225	-.00509	-.00100	.00001
5.008	290.850	.02400	-.00071	.00503	-.06238	.01912	.03978	-.00597	-.00092	.00030
4.968	391.510	.01650	-.00053	.00263	-.05916	.01262	.04036	-.00468	-.00108	.00012
4.985	531.240	.01870	-.00052	.00645	-.08739	.01467	.03847	-.00490	-.00108	.00027
4.985		.00292	-.00007	-.00013	-.01269	.00260	.00592	-.00051	-.00012	.00007
GRADIENT										





REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 OBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMELDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2388/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.004	166.590	-.02762	-.35417	-.11094	-.27301	438.21000	.00000	.00000	655.82000	.00000	.00000
-4.999	191.470	.02820	.09162	.07315	-.00372	438.16000	.00000	.00000	655.75000	.00000	.00000
-4.994	241.180	.03878	-.78350	.01477	-.07700	439.28000	.00000	.00000	655.89000	.00000	.00000
-4.975	290.930	-.03415	-.05155	.02550	-.05593	437.88000	.00000	.00000	655.30000	.00000	.00000
-4.963	350.850	-.11182	-.09353	.02637	-.05229	438.22000	.00000	.00000	655.83000	.00000	.00000
-4.973	490.860	.02230	.12995	.01984	-.06238	437.76000	.00000	.00000	655.15000	.00000	.00000
-5.037	591.780	.07386	.11090	.04156	-.01620	437.68000	.00000	.00000	654.93000	.00000	.00000
-5.017	691.710	.17840	.05293	.03708	-.02731	437.82000	.00000	.00000	655.23000	.00000	.00000
-4.965	791.330	.13977	-.22823	.03498	-.02533	437.66000	.00000	.00000	655.00000	.00000	.00000
-4.993	991.260	.14539	-.03477	.03279	-.02442	437.17000	.00000	.00000	654.26000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2394/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-.047	13.083	-.00468	.15744	.00289	-.04601	433.99000	.00000	.00000	649.50000	.00000	.00000
-.027	42.441	.07729	.16781	.03072	-.00234	433.82000	.00000	.00000	649.33000	.00000	.00000
-.016	92.116	.10001	-.14035	.02610	-.00691	433.84000	.00000	.00000	649.37000	.00000	.00000
.010	141.300	.07161	-.04037	.01073	-.02167	434.87000	.00000	.00000	649.63000	.00000	.00000
.017	190.870	-.01247	.09036	.02359	.00638	434.82000	.00000	.00000	649.65000	.00000	.00000
.029	290.590	.11101	.19237	.01546	-.01142	434.19000	.00000	.00000	649.81000	.00000	.00000
.018	391.050	.04208	.04449	.00698	-.03397	434.25000	.00000	.00000	649.85000	.00000	.00000
-.030	491.610	.05740	-.16264	.01559	-.00666	434.05000	.00000	.00000	649.51000	.00000	.00000
-.018	591.440	.17534	-.07588	.02314	-.00454	433.93000	.00000	.00000	649.49000	.00000	.00000
-.005	791.310	.10787	-.20121	.02262	-.00801	433.59000	.00000	.00000	648.91000	.00000	.00000
-.009	871.290	.20393	.08772	.02197	-.00778	433.79000	.00000	.00000	649.20000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2400/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
5.028	-59.538	1.15690	-.03857	.01757	.00143	435.53300	.00000	.00000	651.81000	.00000	.00000
4.942	8.215	-.04731	-.06597	.01583	-.01053	435.93000	.00000	.00000	652.48000	.00000	.00000
4.995	41.697	.06357	-.32513	.01928	-.01228	435.54000	.00000	.00000	651.83000	.00000	.00000
5.010	91.124	.05355	-.02030	.02243	.00517	435.24000	.00000	.00000	651.37000	.00000	.00000
5.041	190.310	.16790	.05717	.01805	.00105	435.80000	.00000	.00000	651.92000	.00000	.00000
5.008	290.850	.03327	.07234	.00793	-.01011	435.65000	.00000	.00000	651.93000	.00000	.00000
4.968	391.510	.02878	.28330	.00175	-.02236	435.40000	.00000	.00000	651.61000	.00000	.00000
4.985	531.240	.15347	.24223	.01851	.00305	435.65000	.00000	.00000	652.00000	.00000	.00000
	GRADIENT	-.00576	-.00802	.00241	-.00128	63.06768	.00000	.00000	79.42061	.00000	.00000

V418-D9A (1A22), ORBITER (MRC1) W/ET SEPARATING

(1A031) (20 APR 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2751/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-20.008	624.910	977.45000	977.45000	86.00000	977.43000	977.25999	71.00000	76.00000	30.74000	99.64200
-19.952	698.380	977.40000	977.40000	86.00000	977.43000	977.25999	71.00000	76.00000	34.54500	99.64200
-19.948	798.410	977.39000	977.39000	86.00000	977.33000	977.25999	71.00000	76.00000	41.25900	99.64200
-20.014	999.390	977.69000	977.69000	86.00000	977.63000	977.25999	71.00000	76.00000	24.93700	99.64200
	GRADIENT	.00000	.00000	.00000	.03000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2755/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-15.901	474.560	978.97000	978.97000	85.00000	978.97000	978.78999	22.00000	76.00000	32.36400	99.64200
-15.016	499.410	979.00000	979.00000	85.00000	979.03000	978.78999	22.00000	76.00000	31.63800	99.64200
-14.980	548.790	979.07000	979.07000	85.00000	979.07000	978.78999	22.00000	76.00000	30.56900	99.64200
-14.979	599.900	979.02000	979.02000	85.00000	979.03000	978.78999	22.00000	76.00000	30.39200	99.64200
-14.974	693.660	979.01000	979.01000	85.00000	979.03000	978.78999	22.00000	76.00000	27.85300	99.64200
-15.081	800.230	979.07000	979.07000	85.00000	979.07000	978.78999	22.00000	76.00000	24.12100	99.64200
-15.067	999.950	979.11000	979.11000	85.00000	979.11000	978.78999	22.00000	76.00000	18.02000	99.64200
	GRADIENT	.00000	.00000	.00000	.03000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2759/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-10.509	349.580	980.05000	980.05000	84.00000	980.03000	979.87000	5.00000	77.00000	30.84100	99.64200
-10.507	399.140	980.30000	980.30000	84.00000	980.33000	979.87000	5.00000	77.00000	29.14800	99.64200
-10.486	448.580	980.15000	980.15000	84.00000	980.15000	979.87000	5.00000	77.00000	27.17300	99.64200
-10.486	498.990	980.28000	980.28000	84.00000	980.23000	979.87000	5.00000	77.00000	23.51600	99.64200
-10.483	598.680	980.05000	980.05000	84.00000	980.03000	979.87000	5.00000	77.00000	19.35500	99.64200
-10.568	699.970	980.29000	980.29000	84.00000	980.23000	979.87000	5.00000	77.00000	15.24000	99.64200
-10.550	799.810	980.52000	980.52000	84.00000	980.52000	979.87000	5.00000	77.00000	12.46600	99.64200
-10.510	999.230	980.30000	980.30000	84.00000	980.33000	979.87000	5.00000	77.00000	9.33420	99.64200
	GRADIENT	.00000	.00000	.00000	.03000	.00000	.00000	.00000	.00000	.00000

DATE 06 MAY 77

TABULATED SOURCE DATA, 1A22, (AEDC V41B-D9A)  
V41B-D9A (1A22), ORBITER (HRC) W/ET SEPARATING

PAGE 257

(UVK031) (20 APR 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
OBETA = .000 X = .000  
Y = .000 ELEVON = .000  
UMBLDR = .000 RCS = 1.000  
GAS = 1.000

RUN NO. 2388/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	T81	T82	DT	T
-5.004	166.590	978.03000	978.03000	85.00000	978.03000	977.82000	70.00000	76.00000	16.83700	99.76800
-4.999	191.470	977.93000	977.93000	85.00000	977.93000	977.82000	70.00000	76.00000	21.17100	99.76800
-4.994	241.180	978.14000	978.14000	85.00000	978.14000	977.82000	70.00000	76.00000	18.12200	99.76800
-4.975	290.930	977.74000	977.74000	85.00000	977.74000	977.82000	70.00000	76.00000	15.34700	99.76800
-4.953	390.650	978.05000	978.05000	85.00000	978.05000	977.82000	70.00000	76.00000	14.08100	99.76800
-4.973	490.860	977.52000	977.52000	85.00000	977.52000	977.82000	70.00000	76.00000	11.41000	99.76800
-5.037	591.780	977.28000	977.28000	85.00000	977.28000	977.82000	70.00000	76.00000	9.01620	99.76800
-5.017	691.710	977.16000	977.16000	85.00000	977.16000	977.82000	70.00000	76.00000	6.05410	99.76800
-4.995	791.360	977.30000	977.30000	85.00000	977.30000	977.82000	70.00000	76.00000	3.49420	99.76800
-4.998	991.260	977.16000	977.16000	85.00000	977.16000	977.82000	70.00000	76.00000	.81564	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2394/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	T81	T82	DT	T
-.047	13.083	976.29000	976.29000	83.00000	976.29000	976.07939	68.00000	76.00000	-5.89970	99.76800
-.027	42.441	976.04000	976.04000	83.00000	976.04000	976.07729	68.00000	76.00000	-6.59920	99.76800
-.016	92.116	976.10000	976.10000	83.00000	976.10000	976.07939	68.00000	76.00000	-5.89970	99.76800
.010	141.300	976.83000	976.83000	83.00000	976.83000	976.07939	68.00000	76.00000	-5.42850	99.76800
.017	190.870	976.81000	976.81000	83.00000	976.81000	976.07939	68.00000	76.00000	-4.83390	99.76800
.029	290.590	976.75000	976.75000	83.00000	976.75000	976.07939	68.00000	76.00000	-5.56140	99.76800
.018	391.050	976.60000	976.60000	83.00000	976.60000	976.07939	68.00000	76.00000	-4.84290	99.76800
-.030	491.610	976.45000	976.45000	83.00000	976.45000	976.07939	68.00000	76.00000	-4.35760	99.76800
-.018	591.440	976.20000	976.20000	83.00000	976.20000	976.07939	68.00000	76.00000	-5.05770	99.76800
-.005	791.310	975.89000	975.89000	83.00000	975.89000	976.07999	68.00000	76.00000	-5.91740	99.76800
-.009	991.290	975.84000	975.84000	83.00000	975.84000	976.07999	68.00000	76.00000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2400/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	T81	T82	DT	T
5.028	-59.538	974.46000	974.46000	81.00000	974.46000	974.25000	66.00000	74.00000	-7.70440	99.76800
4.942	8.215	974.50000	974.50000	81.00000	974.50000	974.25000	66.00000	74.00000	-8.86990	99.76800
4.995	41.697	974.49000	974.49000	81.00000	974.49000	974.25000	66.00000	74.00000	-10.37900	99.76800
5.010	91.124	974.29000	974.29000	81.00000	974.29000	974.25000	66.00000	74.00000	-10.08400	99.76800
5.041	190.310	974.14000	974.14000	81.00000	974.14000	974.25000	66.00000	74.00000	-9.80310	99.76800
5.008	290.650	974.24000	974.24000	81.00000	974.24000	974.25000	66.00000	74.00000	-9.55790	99.76800
4.968	391.510	974.17000	974.17000	81.00000	974.17000	974.25000	66.00000	74.00000	-9.07340	99.76800
4.985	531.240	974.26000	974.26000	81.00000	974.26000	974.25000	66.00000	74.00000	-8.00230	99.76800
	GRADIENT	118.61725	118.61725	9.85941	118.6725	118.56632	9.03359	9.00736	-1.00197	12.14397



V41B-D9A (1A22), ET SEPARATING FROM ORB (04RC1)

(AVK031) ( 04 MAY 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1329.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2388/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-5.004	166.590	-.02762	-.35417	-4.96260	-.00189	-.16528	-.00428	.00352	-.00025	.00019	.09066
-4.999	191.470	.02820	-.09162	-4.95940	.00535	-.16562	-.00066	.00406	-.00054	.00039	.09600
-4.994	241.180	.03876	-.78950	-4.95090	-.00935	-.14747	-.00240	.00417	-.00060	.00024	.09264
-4.975	290.930	-.03415	-.05155	-4.94930	.00064	-.14450	.00451	.00390	-.00023	.00021	.09525
-4.953	350.850	-.11182	-.09353	-4.94130	.00070	-.14725	.01731	.00398	-.00030	.00017	.10556
-4.973	490.850	.02236	.12936	-4.93590	.00544	-.13365	.02316	.00567	-.00095	.00023	.11440
-5.037	591.750	.07356	.11080	-5.01970	.00189	-.06591	-.00307	.00346	.00026	.00015	.09539
-5.017	691.710	.17540	.05293	-4.93050	.00220	-.06368	-.01569	.00289	.00053	-.00001	.08909
-4.995	791.360	.13977	-.22623	-4.97620	-.00191	-.06286	-.01527	.00275	.00058	-.00002	.09051
-4.998	991.260	.14568	-.03477	-4.97920	.00113	-.06273	-.01506	.00276	.00046	-.00002	.09370
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2394/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-.047	13.083	-.00468	.15744	-.03161	.00215	-.01290	-.00035	.00102	.00078	.00017	.08164
-.027	42.441	.07729	.16781	-.00243	.00165	-.04025	-.01104	-.00469	.00177	.00032	.08248
-.016	92.116	.10001	-.14935	.01594	.00038	-.06951	-.00484	.00275	.00053	.00016	.08415
.010	141.300	.07161	-.04087	.04396	.00093	-.07755	.00479	.00327	.00043	.00016	.08907
.017	190.870	-.01247	.09036	.04956	.00356	-.07951	.01595	.00218	-.00003	.00011	.09416
.029	290.590	.11101	.19237	.03443	.00457	-.07608	.02625	.00312	-.00045	.00017	.10255
.018	391.050	.04208	.04449	.07755	.00394	-.03149	.02936	.00449	-.00090	.00019	.10689
-.030	491.610	.05740	-.16234	-.01357	-.00142	-.01852	.00734	.00340	-.00009	-.00002	.08795
-.018	591.440	.17534	-.07558	.00018	.00044	-.00514	.00121	.00230	-.00025	-.00003	.08697
-.005	791.310	.10787	-.20121	.01439	-.00113	-.00538	.00109	.00256	.00027	-.00003	.08979
-.009	871.290	.20393	.09772	.01023	.00331	-.00593	.00116	.00232	.00013	-.00003	.08999
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2400/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
5.028	-53.538	1.16690	-.03857	5.03750	.00324	.05346	.00755	.00339	-.00005	-.00000	.08220
4.942	8.215	-.04731	-.06587	4.95570	-.00167	.00872	.00285	.00412	.00027	.00015	.08439
4.995	41.697	.06567	-.36513	5.02230	-.00424	-.01206	.00941	.00441	.00039	.00010	.08591
5.010	91.124	.05355	-.02030	5.04230	.00192	-.02064	.02219	.00460	.00000	.00008	.09035
5.041	190.310	.16790	.05717	5.07050	.00489	-.01530	.04026	.00469	-.00104	.00003	.09950
5.008	290.850	.06227	.07894	5.03210	.00431	.00398	.04020	.00401	-.00172	.00004	.10257
4.968	391.510	.02878	.28390	4.93650	.00210	.03975	.02135	.00177	-.00027	-.00004	.08716
4.985	531.240	.15347	.24223	5.00410	.00594	.04869	.01805	.00222	-.00006	-.00006	.08777
GRADIENT		-.00576	-.00802	.60443	-.00020	.00106	.00035	.00050	.00003	.00002	.01027



V418-D9A (A22).ORBITE!(04RC!) W/ET SEPARATING

(RVK032) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2389/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	HM
-5.011	167.230	200.19000	-.08162	.00153	.36818	.01929	-.01048	-.00014	.00056	.00005	.23343
-5.010	192.200	200.09000	-.16929	.00001	.36219	.01355	-.01083	-.00006	.00025	-.00368	.23367
-5.017	242.080	200.12000	.07748	.00300	.32612	.00787	-.01173	-.00004	.00013	-.00454	.23310
-5.036	292.470	200.23000	-.21540	-.00078	.29812	.00620	-.01210	-.00002	-.00029	-.00578	.23282
-5.036	392.400	200.10000	-.26030	-.00140	.28918	.00175	-.01197	.00010	-.00022	-.00145	.23322
-5.000	491.660	200.22000	.74159	.01014	.25611	.00019	-.01165	-.00009	.00007	-.00559	.23289
-4.952	591.080	200.11000	.07406	.00209	.24116	.00240	-.01169	-.00010	.00016	-.00565	.23343
-4.991	691.520	200.16000	.02515	.00245	.23416	.00448	-.01148	-.00021	.00034	-.00409	.23331
-5.002	791.490	200.16000	.01295	.00220	.23414	.00451	-.01160	-.00018	.00033	-.00413	.23253
-4.999	991.380	200.19000	.02056	.00267	.23416	.00452	-.01158	-.00020	.00034	-.00417	.23298
GRADIENT	.00000	.00000	.00000	.00000	.00010	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2395/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	HM
-.001	11.202	200.09000	-.35901	-.00287	.25312	.01990	-.01220	-.00044	-.00011	.01115	.23247
-.032	42.224	200.06000	.05122	.00391	.28018	.02246	-.01053	.00011	-.00034	.00536	.23226
-.034	92.370	200.07000	-.04334	.00180	.30112	.02425	-.01127	-.00049	-.00006	.00246	.23259
-.038	142.310	200.07000	.06253	.00331	.29210	.01809	-.01122	.00008	.00016	-.00262	.23220
-.047	192.440	200.03000	-.12486	.00070	.26711	.01178	-.01181	-.00003	-.00032	-.00592	.23274
-.031	292.310	200.12100	-.00593	.00293	.27318	.00593	-.01276	.00022	.00019	-.00295	.23280
-.001	391.920	200.05000	.29082	.00453	.27213	.00006	-.01150	-.00011	.00009	-.00281	.23231
.027	491.010	200.16000	.05008	.00442	.23915	.00205	-.01124	-.00010	-.00011	-.00544	.23311
-.007	591.440	200.11000	-.08518	.00096	.23313	.00410	-.01149	-.00016	.00030	-.00352	.23367
-.007	791.360	200.13000	.00322	.00369	.23212	.00444	-.01158	-.00020	.00033	-.00327	.23325
-.008	871.330	200.26000	-.09753	.00094	.23219	.00446	-.01152	-.00020	.00033	-.00325	.23290
GRADIENT	.00000	.00000	.00000	.00000	.00010	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2401/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	HM
5.047	-60.236	200.15000	-.04630	.00176	.21413	.00298	-.01348	-.00012	-.00012	.00591	.23289
4.991	6.591	200.06000	.04356	.00337	.26119	.02273	-.01072	-.00031	-.00001	.00260	.23325
4.970	42.164	200.06000	-.06351	.00157	.27214	.02221	-.01239	-.00078	.00007	.00021	.23278
4.952	92.694	199.93000	.11897	.00267	.20913	.01549	-.01193	-.00006	.00006	-.00381	.23331
4.957	192.340	199.93000	-.23335	-.00187	.26415	.01032	-.01220	-.00006	-.00011	-.00438	.23348
4.999	291.660	200.04000	-.16527	.00010	.27510	.00426	-.01248	-.00002	-.00005	-.00130	.23338
5.022	391.220	200.18000	.30100	.00992	.25113	.00249	-.01210	-.00014	.00008	-.00510	.23329
4.988	531.350	199.96000	-.10845	.00112	.23715	.00507	-.01215	-.00019	.00034	-.00405	.23324
GRADIENT	30.35305		.00665	.00051	.03910	.00345	-.00163	-.00005	-.00000	.00039	.03539





V41B-D9A (IA22), ORBITER (O4RC1) W/ET SEPARATING

(SVK032) (20 APR 77)

REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 200.000  
 = .000 ELEVON = .000  
 JMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2389/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.011	167.230	.03930	-.00032	.00153	.33929	.03012	.04352	-.00318	-.00107	.00050
-5.010	192.200	.03320	-.00049	.00001	.33298	.02438	.03922	-.00353	-.00099	.00029
-5.017	242.030	.02630	-.00059	.00300	-.30344	.01870	.03993	-.00442	-.00097	.00017
-5.036	292.470	.02350	-.00063	-.00072	-.33209	.01706	.03780	-.00478	-.00095	-.00025
-5.036	392.400	.01910	-.00091	-.00140	-.34035	.01259	.04204	-.00467	-.00083	-.00018
-5.000	491.950	.01810	-.00065	.01014	-.37279	.01102	.03790	-.00434	-.00101	.00011
-4.952	591.080	.01740	-.00060	.00609	-.39790	.01323	.03783	-.00439	-.00103	.00020
-4.991	691.520	.01690	-.00046	.00245	-.39573	.01534	.03948	-.00416	-.00114	.00039
-5.002	791.450	.01890	-.00049	.00220	-.39379	.01536	.03942	-.00428	-.00111	.00038
-4.999	891.390	.01900	-.00047	.00267	-.39250	.01537	.03939	-.00427	-.00113	.00038
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2395/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.001	11.202	.03400	.00003	-.00287	-.37354	.03055	.05430	-.00495	-.00137	-.00006
-.032	42.224	.04315	-.00049	.00391	-.34653	.03921	.04850	-.00328	-.00081	-.00030
-.034	92.370	.04011	.00014	.00180	-.32525	.03480	.04561	-.00402	-.00142	-.00001
-.038	142.310	.03419	-.00058	.00331	-.33537	.02885	.04056	-.00396	-.00024	.00020
-.047	192.440	.02725	-.00054	.00970	-.35024	.02253	.03724	-.00456	-.00095	-.00028
-.031	292.310	.02299	-.00087	.00293	-.35402	.01759	.04021	-.00551	-.00070	.00023
-.001	391.920	.01674	-.00062	.00453	-.35480	.01081	.04036	-.00424	-.00103	.00013
-.027	491.010	.01704	-.00062	.00442	-.38772	.01281	.03775	-.00398	-.00102	-.00006
-.007	591.440	.01663	-.00052	.00066	-.39389	.01486	.03967	-.00424	-.00108	.00034
-.007	791.330	.01897	-.00047	.00359	-.39336	.01520	.03993	-.00432	-.00112	.00038
-.008	871.330	.01899	-.00047	.00094	-.39327	.01522	.03995	-.00426	-.00112	.00038
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2401/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
5.047	-60.236	.01660	-.00055	.00176	-.31447	.01379	.04930	-.00619	-.00105	-.00087
4.981	6.591	.03580	-.00011	.00337	-.36719	.03354	.04597	-.00344	-.00123	.00003
4.970	42.164	.03700	.00043	.00157	-.35492	.03302	.04359	-.00510	-.00171	.00012
4.952	92.634	.03420	-.00040	.00257	-.35220	.03029	.03957	-.00467	-.00029	.00010
4.957	192.340	.02320	-.00032	-.00187	-.33493	.02174	.03903	-.00491	-.00059	-.00006
4.989	291.680	.02070	-.00034	.00010	-.35341	.01507	.04208	-.00519	-.00025	-.00001
5.022	391.220	.01790	-.00055	.00992	-.37758	.01330	.03930	-.00481	-.00106	.00012
4.988	531.350	.01980	-.00046	.00112	-.39151	.01588	.03936	-.00486	-.00112	.00038
GRADIENT		.00558	-.00002	.00051	-.31019	.00509	.00697	-.00052	-.00019	.00001



V41B-D9A (A22), ORBITER-O4RC1) W/ET SEPARATING

(TVK032) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UNSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2389/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.011	167.230	200.19000	-.08162	.02538	-.03320	436.29000	.00000	.00000	652.94000	.00000	.00000
-5.010	192.200	200.09000	-.16929	.01533	-.04927	435.43000	.00000	.00000	653.15000	.00000	.00000
-5.017	242.000	200.12000	-.07748	.00574	-.06020	435.33000	.00000	.00000	653.05000	.00000	.00000
-5.033	282.470	200.23000	-.21540	.02042	-.01114	437.49000	.00000	.00000	654.74000	.00000	.00000
-5.036	392.400	200.10000	-.23050	.00744	-.04000	435.46000	.00000	.00000	653.20000	.00000	.00000
-5.000	491.000	200.23000	.74159	.02131	-.02000	435.43000	.00000	.00000	653.10000	.00000	.00000
-4.952	591.000	200.11000	.07405	.02700	-.01590	435.37000	.00000	.00000	653.03000	.00000	.00000
-4.991	691.520	200.16000	.02615	.02783	-.02111	437.33000	.00000	.00000	654.51000	.00000	.00000
-5.002	791.490	200.16000	.01256	.02331	-.02149	437.12000	.00000	.00000	654.19000	.00000	.00000
-4.999	991.390	200.19000	.02056	.03001	-.02251	437.18000	.00000	.00000	654.25000	.00000	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2395/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-.001	11.202	200.09000	-.35801	.01874	.00271	433.05000	.00000	.00000	648.11000	.00000	.00000
-.032	42.224	200.05000	.05122	.01935	.00411	432.52000	.00000	.00000	648.00000	.00000	.00000
-.034	92.370	200.07000	-.04594	.01653	.00005	433.07000	.00000	.00000	648.13000	.00000	.00000
-.038	142.310	200.07000	.02253	.00414	-.02225	433.34000	.00000	.00000	648.53000	.00000	.00000
-.047	192.440	200.03000	-.12426	.02205	.02205	433.10000	.00000	.00000	648.23000	.00000	.00000
-.031	292.310	200.12000	-.00093	.00746	-.0104	433.24000	.00000	.00000	648.38000	.00000	.00000
-.001	391.920	200.02000	.23032	-.00044	-.03492	433.22000	.00000	.00000	648.46000	.00000	.00000
.027	491.010	200.16000	.05008	.02135	.00151	433.43000	.00000	.00000	648.72000	.00000	.00000
-.007	591.440	200.11000	-.02518	.02053	-.00781	433.54000	.00000	.00000	648.82000	.00000	.00000
-.007	791.390	200.13000	.00022	.02063	-.00734	433.62000	.00000	.00000	648.95000	.00000	.00000
-.008	971.330	200.25000	-.09753	.02115	-.00321	433.52000	.00000	.00000	648.82000	.00000	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2401/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
5.047	-60.236	200.19000	-.04630	.01447	.00191	435.50000	.00000	.00000	651.75000	.00000	.00000
4.991	6.591	200.06000	.04356	.01451	.00421	435.33000	.00000	.00000	651.51000	.00000	.00000
4.970	42.164	200.03000	-.06331	.01491	.00601	435.32000	.00000	.00000	651.49000	.00000	.00000
4.952	92.654	199.92000	.11697	.01693	.01111	435.41000	.00000	.00000	651.62000	.00000	.00000
4.957	192.340	199.92000	-.23365	.01208	.00009	435.61000	.00000	.00000	651.93000	.00000	.00000
4.939	291.630	200.04000	-.16327	.00314	-.01911	435.52000	.00000	.00000	651.53000	.00000	.00000
5.022	391.220	200.19000	.30100	.01523	.02421	435.61000	.00000	.00000	651.52000	.00000	.00000
4.938	531.350	199.92000	-.10045	.01635	-.00031	435.71000	.00000	.00000	652.07000	.00000	.00000
GRADIENT	30.35305	.00665	.00665	.00220	.00031	68.04818	.00000	.00000	98.84693	.00000	.00000



V41B-D9A (1A22), ORBITER(104RC1) W/ET SEPARATING

(UVK032) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLOR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2389/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PE3	DLPBAL	TB1	TB2	DT	T
-5.011	167.230	977.12000	977.12000	85.00000	977.12000	976.92999	70.00000	76.00000	4.23230	99.76800
-5.010	192.200	977.43000	977.43000	85.00000	977.43000	976.92999	70.00000	76.00000	3.73550	99.76800
-5.017	242.080	977.29000	977.29000	85.00000	977.29000	976.92999	70.00000	76.00000	.90715	99.76800
-5.036	292.470	977.40000	977.40000	85.00000	977.40000	976.92999	70.00000	76.00000	-2.65550	99.76800
-5.036	392.400	977.51000	977.51000	85.00000	977.51000	976.92999	70.00000	76.00000	-4.06290	99.76800
-5.000	491.930	977.44000	977.44000	85.00000	977.44000	976.92999	70.00000	76.00000	-4.84220	99.76800
-4.932	591.030	977.30000	977.30000	85.00000	977.30000	976.92999	70.00000	76.00000	-5.12590	99.76800
-4.991	691.520	977.53000	977.53000	85.00000	977.53000	976.92999	70.00000	76.00000	-4.06290	99.76800
-5.002	791.490	977.05000	977.05000	85.00000	977.05000	976.92999	70.00000	76.00000	-3.84490	99.76800
-4.999	891.380	977.14000	977.14000	85.00000	977.14000	976.92999	70.00000	76.00000	-2.48960	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2395/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PE3	DLPBAL	TB1	TB2	DT	T
-.001	11.202	974.20000	974.20000	83.00000	974.20000	975.16000	68.00000	76.00000	-4.65800	99.76800
-.032	42.224	974.04000	974.04000	83.00000	974.04000	975.16000	68.00000	76.00000	-4.34780	99.76800
-.034	92.370	974.23000	974.23000	83.00000	974.23000	975.16000	68.00000	76.00000	-4.17470	99.76800
-.038	142.310	974.35000	974.35000	83.00000	974.35000	975.16000	68.00000	76.00000	-4.72410	99.76800
-.047	192.440	974.46000	974.46000	83.00000	974.46000	975.16000	68.00000	76.00000	-5.31970	99.76800
-.031	292.310	974.61000	974.61000	83.00000	974.61000	975.16000	68.00000	76.00000	-6.46720	99.76800
-.001	391.920	974.72000	974.72000	83.00000	974.72000	975.16000	68.00000	76.00000	-7.67300	99.76800
.027	491.010	975.11000	975.11000	83.00000	975.11000	975.16000	68.00000	76.00000	-8.47420	99.76800
-.007	591.440	975.27000	975.27000	83.00000	975.27000	975.16000	68.00000	76.00000	-8.60140	99.76800
-.007	791.380	975.46000	975.46000	83.00000	975.46000	975.16000	68.00000	76.00000	-7.97610	99.76800
-.008	871.330	975.37000	975.37000	83.00000	975.37000	975.16000	68.00000	76.00000	-7.52930	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2401/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PE3	DLPBAL	TB1	TB2	DT	T
5.047	-60.236	973.91000	973.91000	81.00000	973.91000	974.16000	66.00000	74.00000	-7.52580	99.76800
4.981	6.591	974.02000	974.02000	81.00000	974.02000	974.16000	66.00000	74.00000	-6.93520	99.76800
4.970	42.164	973.53000	973.53000	81.00000	973.53000	974.16000	66.00000	74.00000	-6.71800	99.76800
4.952	92.694	974.16000	974.16000	81.00000	974.16000	974.16000	66.00000	74.00000	-6.58000	99.76800
4.957	192.340	974.16000	974.16000	81.00000	974.16000	974.16000	66.00000	74.00000	-6.60790	99.76800
4.989	291.660	974.12000	974.12000	81.00000	974.12000	974.16000	66.00000	74.00000	-7.41190	99.76800
5.022	391.220	974.23000	974.23000	81.00000	974.23000	974.16000	66.00000	74.00000	-7.95470	99.76800
4.928	531.350	974.37000	974.37000	81.00000	974.37000	974.16000	66.00000	74.00000	-8.17110	99.76800
	GRADIENT	147.77806	147.77806	12.28930	147.77806	147.79930	10.01350	11.22726	-1.05221	15.13678



V41B-D9A (IA22), ET SEP/RATING FROM ORB (O4RC1)

(AVK032) (04 MAY 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2389/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETA1	CN	CLM	CY	CYN	CBL	CA
-5.011	167.230	200.19000	-.08162	-4.97230	.00121	-.16844	-.01508	.00415	.00013	.00038	.09671
-5.010	192.200	200.09000	-.16929	-4.97670	-.00019	-.16742	-.00871	.00256	.00033	.00042	.09559
-5.017	242.080	200.12000	.07748	-4.99070	.00212	-.14411	-.01251	.00316	.00054	.00019	.09048
-5.036	292.470	200.23000	-.21540	-5.01290	-.00111	-.13564	-.00997	.00214	.00024	.00020	.09309
-5.036	392.400	200.10000	-.26030	-5.01650	-.00212	-.14283	.00429	.00338	.00026	.00020	.09753
-5.000	491.560	200.22000	.74159	-4.99410	.00510	-.14489	.01879	.00492	-.00045	.00016	.10847
-4.952	591.080	200.11000	.07406	-4.93510	.00519	-.12287	.01731	.00595	-.00114	.00034	.11073
-4.991	691.520	200.16000	.02615	-4.97130	.00119	-.07156	-.01059	.00322	.00046	.00003	.09029
-5.002	791.490	200.18000	.01296	-4.99310	.00119	-.06235	-.01544	.00250	.00051	-.00003	.09003
-4.939	891.330	200.19000	.02055	-4.97970	.00219	-.06232	-.01514	.00268	.00045	-.00003	.09292
GRADIENT	.00000	.00000	.00000	.00000	.00010	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2395/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETA1	CN	CLM	CY	CYN	CBL	CA
-.001	11.202	200.09000	-.35801	.03256	-.00214	-.05463	-.02241	.00154	.00022	.00022	.08802
-.032	42.224	200.05000	.05122	.01159	.00312	-.02138	-.01930	.00425	.00003	.00032	.08927
-.034	92.370	200.07000	-.04954	.00341	.00114	-.03171	-.01028	.00364	.00028	.00004	.08950
-.038	142.310	200.07000	.00253	-.00333	.00212	-.07125	-.00513	.00281	.00032	.00016	.08663
-.047	192.440	200.03000	-.12466	-.01930	.00016	-.07257	.00249	.00411	.00003	.00013	.08974
-.031	292.310	200.12000	-.00093	-.00768	.00116	-.07324	.01667	.00235	-.00006	.00010	.09706
-.001	391.920	200.05000	.28062	.01611	.00311	-.07143	.02669	.00317	-.00024	.00004	.10394
.027	491.010	200.16000	.05008	.04436	.00311	-.04875	.02449	.00484	-.00057	.00015	.10530
-.007	591.440	200.11000	-.08518	.01135	.00014	-.00917	.00269	.00258	.00025	-.00003	.08575
-.007	791.330	200.13000	.08022	.01160	.00312	-.00233	.00117	.00219	.00018	-.00004	.08848
-.008	871.330	200.23000	-.09753	.01056	.00017	-.00557	.00113	.00221	.00010	-.00003	.08991
GRADIENT	.00000	.00000	.00000	.00000	.00010	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2401/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETA1	CN	CLM	CY	CYN	CBL	CA
5.047	-60.236	200.19000	-.04630	5.05320	.00121	.04377	.00249	.00134	.00031	-.00000	.08517
4.981	6.591	200.05000	.04386	5.01760	.00312	-.00634	-.00323	.00320	.00001	-.00009	.08511
4.970	42.184	200.03000	-.05351	5.00700	.00211	-.01806	.00245	.00328	.00010	.00007	.08591
4.952	92.694	199.90000	.11697	4.92330	.00212	-.01556	.01173	.00403	.00015	.00008	.09024
4.957	192.340	199.98000	-.23695	4.92920	-.00219	-.01619	.02935	.00466	-.00076	.00007	.09444
4.989	291.660	200.01000	-.16527	5.01010	-.00014	-.00947	.02931	.00447	-.00129	.00001	.10100
5.022	391.220	200.09000	.30100	5.03990	.00917	.01452	.03431	.00493	-.00137	.00008	.10073
4.988	531.350	199.96000	-.10845	5.00720	.00016	.04881	.01794	.00148	-.00013	-.00005	.08682
GRADIENT	71.35305	.00665	.76127	.00019	-.00101	-.00049	.00049	.00049	.00000	.00001	.01291

V41B-D9A (1A22), ORBITER (ORC1) W/ET SEPARATING

(RVK033) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1069.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2753/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-20.046	525.500	400.30000	.02751	.00061	.39859	-.03296	.00156	-.00053	.00142	-.03411	.23345
-20.004	529.250	399.65000	.28421	.00809	.30245	-.01331	-.00054	-.00021	.00066	-.03145	.23359
-19.961	533.000	399.69000	.38330	.00899	.26214	-.00083	-.00153	-.00014	.00055	-.02399	.23353
-19.948	538.190	399.54000	.29529	.01043	.23084	.00493	-.00182	-.00010	.00060	-.02063	.23377
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2757/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-15.031	474.930	400.16000	.31698	.00997	.40949	-.02769	-.00049	-.00026	.00116	-.02823	.23364
-15.058	500.020	400.11000	-.14593	-.00605	.34924	-.01655	-.00043	-.00030	.00089	-.02554	.23399
-15.019	549.390	399.92000	.77836	.01468	.28904	-.01109	-.00092	-.00025	.00052	-.02712	.23326
-14.998	589.240	399.94000	.12764	.00548	.26078	-.00307	-.00178	-.00007	.00053	-.02545	.23452
-14.951	639.590	399.81000	-.09772	-.00121	.23569	.00328	-.00168	-.00013	.00055	-.02145	.23390
-14.966	738.610	399.84000	-.39555	-.00236	.22949	.00497	-.00186	-.00015	.00059	-.02046	.23392
-15.093	1000.000	400.30000	-.16000	.00414	.22931	.00495	-.00168	-.00013	.00059	-.02041	.23405
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2761/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-10.510	349.900	400.03000	.37261	.00708	.38322	-.01222	-.00192	.00007	.00120	-.02085	.23406
-10.558	399.780	400.12000	-.19348	-.00427	.34252	-.01097	-.00072	-.00030	.00041	-.01933	.23429
-10.508	449.230	400.05000	-1.04400	-.01200	.25306	-.00747	-.00148	-.00017	.00075	-.02338	.23465
-10.491	499.130	399.95000	-.84660	-.00953	.25519	-.00134	-.00175	-.00012	.00055	-.02314	.23429
-10.470	598.550	399.90000	-.44149	-.00274	.23970	.00236	-.00172	-.00015	.00053	-.02218	.23452
-10.477	698.590	399.94000	-.23647	-.00569	.23017	.00495	-.00180	-.00016	.00060	-.02103	.23423
-10.525	799.300	400.07000	-.48923	-.00553	.23017	.00500	-.00196	-.00016	.00058	-.02094	.23402
-10.571	999.940	400.27000	-.51295	-.00889	.22967	.00496	-.00187	-.00015	.00058	-.02077	.23408
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR



V41B-D9A (IA22, ORBITEF (04RC1) W/ET SEPARATING

(RVK033) ( 20 APR 77 )

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2390/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CELR	CAR	WM
-5.021	167.060	400.02000	.21442	.00321	.34612	.01568	-.01214	-.00005	.00006	-.00425	.23334
-4.966	191.240	400.08000	-.11203	.00237	.35036	.01142	-.01209	-.00005	.00014	-.00205	.23334
-4.978	240.950	400.00000	.18531	.00528	.34030	.00426	-.01205	.00006	.00008	-.00286	.23349
-5.005	291.400	400.06000	-.17084	.00123	.30935	.00113	-.01246	.00026	-.00017	-.00439	.23352
-4.958	390.760	400.02000	.04047	-.00197	.28118	-.00129	-.01157	-.00009	.00020	-.00411	.23338
-4.962	490.700	399.95000	.04956	.00393	.24339	.00142	-.01137	-.00006	-.00016	-.00673	.23298
-4.947	590.560	400.04000	.16327	.00542	.23553	.00397	-.01142	-.00014	.00031	-.00464	.23356
-5.005	691.370	400.02000	.19453	.00485	.23371	.00449	-.01167	-.00019	.00035	-.00407	.23301
-5.036	791.840	400.08000	-.07741	-.00065	.23339	.00450	-.01149	-.00018	.00035	-.00394	.23250
-4.999	891.310	400.13000	-.14910	-.00002	.23354	.00447	-.01169	-.00020	.00034	-.00382	.23344
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2395/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CELR	CAR	WM
-.010	11.651	400.14000	.01404	.00263	.32552	.03917	-.01201	-.00045	-.00006	.00551	.23353
.027	40.760	400.15000	.10194	.00345	.32131	.03229	-.01234	.00001	-.00001	.00326	.23336
.047	90.310	400.16000	.02241	.00425	.31451	.02034	-.01236	-.00015	-.00003	-.00180	.23388
.015	140.840	400.05000	.03225	.00549	.31035	.01206	-.01257	-.00011	-.00011	-.00252	.23347
.005	191.150	400.09000	-.44333	-.00490	.25548	.00737	-.01222	-.00003	-.00011	-.00331	.23353
.026	290.640	400.12000	-.04552	-.00220	.29719	.00270	-.01221	-.00014	-.00016	.00025	.23409
.028	390.590	400.33000	.02141	.00302	.25358	.00166	-.01223	-.00016	.00015	-.00480	.23341
.015	490.780	400.14000	.21482	.00487	.24170	.00359	-.01234	-.00019	.00028	-.00447	.23385
-.013	591.430	400.23000	-.12785	.00117	.23506	.00538	-.01208	-.00028	.00041	-.00309	.23364
-.022	791.560	400.24000	-.06377	.00066	.23540	.00538	-.01196	-.00031	.00041	-.00313	.23412
-.002	871.280	400.25000	.16546	.00534	.23510	.00533	-.01222	-.00030	.00042	-.00319	.23403
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2402/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CELR	CAR	WM
4.997	-58.460	400.03000	.17420	.00312	.28525	.03377	-.01256	-.00041	-.00012	.00586	.23396
5.051	5.095	400.17000	-.09347	.00426	.29685	.02653	-.01276	.00012	.00002	.00051	.23343
5.009	40.939	400.08000	.05194	.00424	.29153	.02019	-.01213	-.00002	-.00005	-.00306	.23308
5.008	90.873	400.17000	-.14819	.00157	.27846	.01255	-.01235	-.00003	-.00028	-.00440	.23272
5.028	190.590	400.19000	-.02453	-.00090	.27337	.00770	-.01353	.00022	.00033	-.00371	.23325
5.037	290.350	400.28000	-.14825	.00344	.27071	.00148	-.01215	-.00016	.00015	-.00327	.23346
5.019	390.730	400.28000	-.03733	.00204	.24328	.00313	-.01197	-.00017	-.00002	-.00567	.23331
4.965	531.490	400.19000	-.05706	.00114	.23522	.00549	-.01204	-.00024	.00037	-.00356	.23343
GRADIENT	78.54325	.00000	-.01952	.00084	.05822	.00521	-.00250	.00002	.00000	.00010	.04582



V41B-D9A (IA22), ORBITER (O4RC1) W/ET SEPARATING

(SVK033) (20 APR 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2390/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.021	167.060	.03440	-.00045	.00321	.01639	.02651	.03923	-.00483	-.00098	-.00011
-4.966	191.240	.03080	-.00051	.00237	.02071	.02225	.04062	-.00478	-.00098	.00019
-4.978	240.950	.02370	-.00073	.00628	.01096	.01508	.04058	-.00475	-.00087	.00012
-5.005	291.400	.01940	-.00099	.00123	-.01999	.01195	.03906	-.00516	-.00067	-.00013
-4.939	390.760	.01580	-.00066	-.00197	-.04814	.00953	.03933	-.00427	-.00102	.00025
-4.962	490.700	.01670	-.00067	.00333	-.00331	.01224	.03370	-.00408	-.00099	-.00012
-4.947	590.930	.01850	-.00055	.00542	-.00329	.01479	.03878	-.00413	-.00107	.00035
-5.005	691.370	.01900	-.00048	.00485	-.00351	.01531	.03936	-.00437	-.00112	.00039
-5.036	791.840	.01890	-.00049	-.00055	-.00340	.01531	.03948	-.00418	-.00111	.00040
-4.999	891.310	.01900	-.00047	-.00002	-.00358	.01528	.03959	-.00439	-.00113	.00039
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2396/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.010	11.651	.05517	.00031	.00253	-.00197	.04593	.04870	-.00476	-.00137	-.00002
.027	40.760	.04864	-.00029	.00345	-.00635	.03306	.04648	-.00508	-.00091	.00003
.047	90.310	.03739	-.00028	.00423	-.01253	.03109	.04139	-.00511	-.00107	.00001
.015	140.840	.02228	-.00043	.00549	-.01678	.02282	.04069	-.00541	-.00103	-.00007
.005	191.150	.02456	-.00059	-.00490	-.02212	.01814	.03990	-.00502	-.00095	-.00006
.026	290.640	.01937	-.00053	-.00220	-.04048	.01345	.04347	-.00495	-.00106	-.00011
.028	390.590	.01736	-.00053	.00302	-.07373	.01242	.03941	-.00497	-.00108	.00019
.015	490.760	.01553	-.00047	.00487	-.00300	.01436	.03975	-.00503	-.00112	.00033
-.013	591.430	.01903	-.00035	.00117	-.00234	.01614	.04012	-.00482	-.00121	.00045
-.022	791.550	.01999	-.00033	.00066	-.00238	.01615	.04010	-.00470	-.00123	.00046
-.002	871.280	.01984	-.00033	.00534	-.00255	.01610	.04002	-.00496	-.00122	.00047
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2402/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
4.937	-59.460	.04800	.00019	.00312	-.04379	.04458	.04925	-.00526	-.00134	-.00008
5.051	5.095	.04190	-.00049	.00425	-.03236	.03734	.04390	-.00546	-.00081	.00006
5.009	40.939	.03590	-.00043	.00424	-.03705	.03100	.04033	-.00484	-.00095	-.00001
5.008	90.873	.02830	-.00052	.00157	-.05067	.02337	.03900	-.00507	-.00096	-.00024
5.026	190.590	.02360	-.00084	-.00080	-.05562	.01651	.03971	-.00633	-.00071	.00037
5.037	290.390	.01790	-.00054	.00344	-.05922	.01229	.04011	-.00486	-.00108	.00020
5.019	390.730	.01810	-.00051	.00204	-.08531	.01393	.03773	-.00467	-.00110	.00002
4.965	531.490	.01920	-.00041	.00114	-.09373	.01630	.03982	-.00476	-.00116	.00042
	GRADIENT	.00222	-.00010	.00024	-.00635	.00733	.00862	-.00107	-.00016	.00001



V41B-D9A (IA22), ORBITER(04RC) W/ET SEPARATING

(TVK033) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UNBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2390/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.021	167.060	400.02000	.21442	.02581	-.02928	433.46000	.00000	.00000	653.20000	.00000	.00000
-4.566	191.240	400.03000	-.11203	.01740	-.04438	433.35000	.00000	.00000	653.03000	.00000	.00000
-4.978	240.950	400.00000	.18631	.00762	-.03546	433.95000	.00000	.00000	652.44000	.00000	.00000
-5.005	291.400	400.08000	-.17084	.01849	-.06240	433.09000	.00000	.00000	652.65000	.00000	.00000
-4.968	390.760	400.02000	.04047	.01543	-.07035	433.92000	.00000	.00000	652.39000	.00000	.00000
-4.962	490.700	399.93000	.04956	.03765	-.02057	433.89000	.00000	.00000	652.34000	.00000	.00000
-4.947	590.960	400.04000	.16327	.03302	-.02645	433.79000	.00000	.00000	652.20000	.00000	.00000
-5.005	691.370	400.02000	.19453	.03400	-.02850	433.93000	.00000	.00000	652.39000	.00000	.00000
-5.036	791.840	400.03000	-.07741	.03240	-.02548	433.83000	.00000	.00000	652.33000	.00000	.00000
-4.999	891.310	400.13000	-.14910	.03031	-.02439	433.78000	.00000	.00000	652.18000	.00000	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2396/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-.010	11.651	400.14000	.01404	.01218	.00524	433.50000	.00000	.00000	648.78000	.00000	.00000
.027	40.760	400.15000	.10194	.00773	-.00520	433.73000	.00000	.00000	649.11000	.00000	.00000
.317	90.310	400.16000	.02241	.01008	-.00165	433.43000	.00000	.00000	648.67000	.00000	.00000
.015	140.840	400.06000	.03225	.00405	-.01239	433.67000	.00000	.00000	649.03000	.00000	.00000
.005	191.150	400.09000	-.44366	-.01356	-.04935	433.65000	.00000	.00000	649.00000	.00000	.00000
.026	290.640	400.12000	-.04552	.00016	-.03403	433.71000	.00000	.00000	649.08000	.00000	.00000
.028	390.590	400.33000	.02141	.02029	.00349	433.65000	.00000	.00000	649.01000	.00000	.00000
.015	490.780	400.14000	.21482	.02054	.00031	433.78000	.00000	.00000	649.19000	.00000	.00000
-.013	591.430	400.23000	-.12765	.02045	-.00343	433.64000	.00000	.00000	648.98000	.00000	.00000
-.022	791.560	400.24000	-.08577	.01997	-.00406	433.87000	.00000	.00000	649.32000	.00000	.00000
-.002	871.280	400.25000	.16346	.01540	-.00304	433.71000	.00000	.00000	649.08000	.00000	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2402/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
4.997	-58.460	400.03000	.17420	.01386	.00729	433.55000	.00000	.00000	651.84000	.00000	.00000
5.051	5.095	400.17000	-.09347	.01511	.00031	433.51000	.00000	.00000	651.78000	.00000	.00000
5.009	40.939	400.00000	.03194	.01029	-.00200	433.52000	.00000	.00000	651.81000	.00000	.00000
5.008	90.873	400.17000	-.14219	-.00250	-.02227	433.60000	.00000	.00000	652.00000	.00000	.00000
5.026	190.590	400.15000	-.02458	.00526	-.01009	433.76000	.00000	.00000	652.15000	.00000	.00000
5.037	290.390	400.29000	-.14625	-.00147	-.02648	433.41000	.00000	.00000	651.62000	.00000	.00000
5.019	390.730	400.28000	-.03733	.01894	.01056	433.62000	.00000	.00000	651.97000	.00000	.00000
4.965	531.490	400.19000	-.05706	.01835	.00236	433.44000	.00000	.00000	651.67000	.00000	.00000
GRADIENT	78.54325		-.01952	.00297	.00169	65.47260	.00000	.00000	127.92793	.00000	.00000



V41B-D9A (IA22), ORBITER (OHR:1) H/ET SEPARATING

(UYK033) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMELDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2390/ 0 RN/L = .87 GRAD ENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLP8AL	T81	T82	DT	T
-5.021	167.060	977.50000	977.50000	85.00000	977.50000	977.26999	69.00000	76.00000	3.33530	99.76800
-4.966	191.240	977.26000	977.26000	85.00000	977.26000	977.26999	69.00000	76.00000	2.51150	99.76800
-4.978	240.950	977.33000	977.33000	85.00000	977.33000	977.26999	69.00000	76.00000	2.65920	99.76800
-5.005	291.400	977.16000	977.16000	85.00000	977.16000	977.26999	69.00000	76.00000	5.23560	99.76800
-4.958	390.760	977.26000	977.26000	85.00000	977.26000	977.26999	69.00000	76.00000	6.94370	99.76800
-4.962	490.700	977.19000	977.19000	85.00000	977.19000	977.26999	69.00000	76.00000	6.29520	99.76800
-4.947	590.560	976.97000	976.97000	85.00000	976.97000	977.26999	69.00000	76.00000	3.82710	99.76800
-5.005	691.370	976.78000	976.78000	85.00000	976.78000	977.26999	69.00000	76.00000	1.36430	99.76800
-5.036	791.840	976.69000	976.69000	85.00000	976.69000	977.26999	69.00000	76.00000	-1.70227	99.76800
-4.999	891.310	976.94000	976.94000	85.00000	976.94000	977.26999	69.00000	76.00000	-2.85560	99.76800
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2396/ 0 RN/L = .87 GRAD ENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLP8AL	T81	T82	DT	T
-0.010	11.651	976.64000	976.64000	82.00000	976.64000	976.42999	67.00000	75.00000	-5.84500	99.76800
.027	40.760	976.66000	976.66000	82.00000	976.66000	976.42999	67.00000	75.00000	-5.89990	99.76800
.047	90.310	976.48000	976.48000	82.00000	976.48000	976.42999	67.00000	75.00000	-6.12230	99.76800
.015	140.840	976.54000	976.54000	82.00000	976.54000	976.42999	67.00000	75.00000	-6.32630	99.76800
.005	191.150	976.49000	976.49000	82.00000	976.49000	976.42999	67.00000	75.00000	-5.09970	99.76800
.026	290.640	976.62000	976.62000	82.00000	976.62000	976.42999	67.00000	75.00000	-2.47080	99.76800
.028	390.590	976.51000	976.51000	82.00000	976.51000	976.42999	67.00000	75.00000	-1.09490	99.76800
.015	490.780	976.78000	976.78000	82.00000	976.78000	976.42999	67.00000	75.00000	-.94911	99.76800
-.013	591.430	976.46000	976.46000	82.00000	976.46000	976.42999	67.00000	75.00000	-1.92100	99.76800
-.022	791.560	976.50000	976.50000	82.00000	976.50000	976.42999	67.00000	75.00000	-3.50520	99.76800
-.002	871.280	976.62000	976.62000	82.00000	976.62000	976.42999	67.00000	75.00000	-4.62920	99.76800
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2402/ 0 RN/L = .87 GRAD ENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLP8AL	T81	T82	DT	T
4.997	-59.460	974.03000	974.03000	81.00000	974.03000	973.82000	66.00000	74.00000	-8.28100	99.89400
5.051	5.055	973.93000	973.93000	81.00000	973.93000	973.82000	66.00000	74.00000	-8.33390	99.89400
5.009	40.939	973.93000	973.93000	81.00000	973.93000	973.82000	66.00000	74.00000	-8.63110	99.89400
5.009	90.973	973.79000	973.79000	81.00000	973.79000	973.82000	66.00000	74.00000	-8.80760	99.89400
5.026	190.590	974.00000	974.00000	81.00000	974.00000	973.82000	66.00000	74.00000	-7.85770	99.89400
5.037	290.390	973.70000	973.70000	81.00000	973.70000	973.82000	66.00000	74.00000	-6.66350	99.89400
5.019	390.730	973.70000	973.70000	81.00000	973.70000	973.82000	66.00000	74.00000	-5.24910	99.89400
4.965	531.490	973.77000	973.77000	81.00000	973.77000	973.82000	66.00000	74.00000	-5.33350	99.89400
GRADIENT		191.15782	191.15782	15.89825	191.15782	191.13623	12.95413	14.52433	-1.63672	19.60667





DATE 06 MAY 77

TABULATED SOURCE DATA, IA22, (AEDC V41B-D9A)

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V41B-D9A (IA22).ET SEPARATING FROM ORB (04RC1)

(AVK033) (04 MAY 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UNBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2390/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-5.021	167.060	400.02000	.21442	-4.99620	.00276	-.17725	-.02240	.00015	.00125	.00018	.10349
-4.965	191.240	400.09000	-.11203	-4.93530	.00185	-.18413	-.01410	.00264	.00023	.00022	.10876
-4.978	240.550	400.00000	.16331	-4.66460	.00335	-.17736	-.00777	.00590	-.00068	.00021	.10850
-4.939	291.400	400.00000	-.17034	-4.60330	.00024	-.14775	-.01775	.00316	-.00070	.00028	.09428
-4.532	350.760	400.02000	.04047	-4.58240	-.00233	-.13733	-.00343	.00276	-.00093	.00023	.09315
-4.947	450.700	400.00000	.04923	-4.84570	.00316	-.14309	-.00335	.00337	-.00008	.00013	.10323
-5.005	590.930	400.04000	.16327	-4.92000	.00497	-.13705	.01000	.00463	-.00053	.00019	.10901
-5.036	691.370	400.02000	-.15453	-4.80330	.00437	-.10459	.00318	.00314	-.00078	.00024	.10554
-4.999	791.840	400.08000	-.07741	-5.01760	-.00114	-.03350	-.01464	.00273	.00039	-.00000	.08222
	891.310	400.13000	-.14810	-4.83030	-.00049	-.00329	-.01623	.00209	.00045	-.00003	.09208
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2356/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-.010	11.651	400.14000	.01404	.04533	.00294	-.11029	-.04030	.00479	.00015	.00033	.10122
.027	40.760	400.15000	.10194	.07546	.00316	-.10459	-.02691	.00358	.00043	.00021	.10030
.047	90.310	400.16000	.09241	.08441	.00339	-.10297	-.01077	.00190	.00013	.00004	.10176
.015	140.840	400.08000	.03225	.04423	.00307	-.09222	-.00229	.00394	-.00093	-.00002	.09637
.005	191.150	400.00000	-.44336	.02043	-.00348	-.07223	-.00339	.00393	-.00106	.00011	.09334
.026	290.640	400.12000	-.04552	.04543	-.00274	-.06205	.00253	.00405	-.00058	.00018	.09239
.028	330.590	400.33000	.02141	.04531	-.00249	-.06205	.00253	.00234	.00011	.00003	.09276
.015	430.720	400.14000	.21402	.05323	.00410	-.07035	.01797	.00234	.00011	.00003	.09239
-.013	591.430	400.23000	-.12735	.00722	.00032	-.03187	.01516	.00332	-.00022	.00012	.10402
-.022	791.560	400.24000	-.02377	-.00227	.00033	-.09225	.00132	.00340	-.00032	-.00000	.09328
-.002	871.280	400.23000	.16546	.01741	.00501	-.00353	.00132	.00215	.00025	-.00003	.08932
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2402/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
4.997	-58.460	400.03000	.17420	5.04510	.00331	-.04464	-.02359	.00534	.00147	.00002	.10485
5.051	5.053	400.17000	-.09247	5.00330	.00377	-.04392	-.00105	.00311	-.00093	-.00010	.09774
5.009	40.939	400.03000	.05194	5.04450	.00331	-.03233	.00332	.00503	-.00114	-.00012	.09306
5.008	90.673	400.17000	-.14919	5.03320	.00105	-.01923	.00265	.00406	-.00136	.00002	.08533
5.026	190.630	400.19000	-.02459	5.04200	-.00163	-.00857	.01447	.00222	.00033	.00012	.09362
5.037	290.390	400.23000	-.14223	5.05430	.00330	-.01106	.03079	.00464	-.00039	.00007	.09310
5.019	390.730	400.23000	-.03733	5.03780	.00153	-.00235	.03099	.00332	-.00106	-.00002	.10179
4.965	531.490	400.19000	-.05706	4.99530	.00973	-.04139	.02072	.00149	-.00033	-.00004	.08518
	GRADIENT	78.54325	-.01552	.99567	.00074	-.00909	-.00021	.00120	-.00018	-.00002	.01918



DATE 06 MAY 77

TABULATED SOURCE DATA, 1A22, (AEDC V41B-D9A)

PAGE 281

V41B-D9A (1A22), ORBITER (04-1C1) W/ET SEPARATING

(SVK034) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. YMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 500.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2754/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-20.022	625.320	.00500	-.00084	.00922	-.03678	-.00146	-.01499	.00689	-.00118	.00079
-20.043	700.340	.01500	-.00079	.00297	-.07339	.00956	.02031	.00580	-.00108	.00063
-20.006	799.540	.01900	-.00075	.00453	-.10144	.01542	.02330	.00572	-.00105	.00064
-20.006	999.700	.01900	-.00075	.00153	-.10335	.01599	.02350	.00546	-.00104	.00063
	GRADIENT	.00000	.00000	.00000	.00030	.00000	.00000	.00000	.00000	.00000

RUN NO. 2758/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-15.003	474.720	.00500	-.00085	.00263	-.02036	-.00293	.01717	.00685	-.00119	.00073
-15.010	499.740	.00800	-.00084	.00565	-.04971	.00061	.01650	.00609	-.00115	.00067
-15.019	549.850	.01400	-.00082	.00329	-.06937	.00668	.01954	.00561	-.00106	.00057
-15.051	600.490	.01600	-.00078	-.00493	-.08534	.01187	.02147	.00564	-.00106	.00030
-15.061	700.510	.01900	-.00071	.00599	-.10251	.01584	.02374	.00554	-.00108	.00064
-14.992	799.770	.01900	-.00073	.00959	-.10278	.01589	.02363	.00561	-.00107	.00063
-14.981	999.990	.01900	-.00072	.00804	-.10271	.01590	.02370	.00556	-.00107	.00064
	GRADIENT	.00300	.00000	.00000	.00030	.00000	.00000	.00000	.00000	.00000

RUN NO. 2762/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-10.497	349.770	.00300	-.00082	-.00308	.04015	-.00400	.02529	.00618	-.00120	.00075
-10.506	399.800	.00300	-.00079	.00375	-.02639	.00059	.02029	.00637	-.00120	.00054
-10.519	449.870	.01300	-.00084	-.00225	-.07532	.00787	.01977	.00547	-.00106	.00051
-10.556	500.350	.01600	-.00076	.00210	-.08719	.01169	.02134	.00570	-.00109	.00038
-10.553	600.350	.01900	-.00070	.00542	-.10030	.01545	.02353	.00529	-.00109	.00062
-10.538	700.100	.01900	-.00072	-.00170	-.10233	.01536	.02370	.00546	-.00108	.00063
-10.437	799.700	.01900	-.00069	.00534	-.10278	.01583	.02372	.00554	-.00110	.00064
-10.511	999.230	.02000	-.00069	-.00852	-.10251	.01585	.02336	.00539	-.00110	.00062
	GRADIENT	.00000	.00000	.00000	.00030	.00000	.00000	.00000	.00000	.00000







REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = 3.000 X = .000  
 Y = 54.000 ELEVON = .000  
 UMELDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2391/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	HM
-5.002	166.590	.09913	54.24400	2.93250	.34028	.02405	-.01038	.00020	-.00197	.00896	.23192
-4.993	191.510	-.00403	53.85400	2.95310	.35089	.02261	-.01509	.00021	-.00159	.00415	.23336
-4.989	241.170	-.12825	54.05900	2.99740	.33682	.01540	-.01239	.00061	-.00178	-.00155	.23358
-4.972	290.830	-.01306	53.60500	2.99940	.30426	.00778	-.01345	.00035	-.00134	-.00703	.23268
-4.950	390.740	.03338	53.90300	2.95310	.28747	.00465	-.01239	.00032	-.00026	-.00499	.23387
-4.978	490.620	.12492	54.03400	3.00160	.29156	-.00041	-.01100	-.00024	.00025	-.00259	.23369
-5.030	591.830	.12427	54.10300	2.99340	.24209	.00165	-.01124	-.00006	-.00020	-.00512	.23288
-5.004	691.710	.19189	54.12000	2.99790	.23353	.00337	-.01169	-.00011	.00028	-.00438	.23306
-4.997	791.380	.14634	53.75500	2.99270	.23324	.00449	-.01141	-.00021	.00034	-.00354	.23210
-4.995	991.220	.20143	53.93600	2.99350	.23324	.00446	-.01143	-.00020	.00035	-.00351	.23298
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2397/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	HM
-.076	13.353	.05086	55.67200	3.04530	.21605	.00521	-.01323	-.00054	.00008	.00152	.23389
-.041	42.397	.08105	54.12500	2.99330	.23765	.01229	-.01244	.00166	-.00026	.00597	.23321
-.016	91.953	.06206	53.63200	2.99160	.22973	.01620	-.01266	.00049	-.00062	.00841	.23354
-.001	141.240	.01409	53.74500	2.99100	.28450	.01906	-.01356	.00026	-.00046	-.00012	.23363
.017	190.930	.03455	54.20200	2.99310	.27300	.01820	-.01215	.00040	-.00108	-.00422	.23360
.032	290.510	.03339	53.92300	2.99330	.26771	.01128	-.01270	.00013	-.00033	-.00440	.23354
.016	391.050	.04055	54.02400	3.00110	.27023	.00423	-.01215	.00002	-.00018	-.00160	.23408
-.030	491.730	.02577	53.82400	2.99340	.25420	.03208	-.01159	-.00016	.00028	-.00501	.23322
-.021	591.510	.07824	53.72200	2.99120	.24197	.03377	-.01206	-.00015	.00024	-.00512	.23360
-.012	791.350	.07450	53.93300	2.99250	.23571	.00544	-.01198	-.00025	.00039	-.00377	.23397
-.009	871.330	.09923	53.95700	2.99450	.23556	.00543	-.01205	-.00023	.00040	-.00378	.23355
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2403/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	HM
5.032	-59.440	1.23530	55.61200	3.04370	.19912	-.00515	-.01393	-.00124	-.00024	-.00969	.23326
4.946	3.076	-.05354	54.66400	3.00130	.22502	.01030	-.01411	.00153	-.00063	.00485	.23322
4.994	41.560	.12299	53.74400	2.99490	.24334	.01300	-.01404	.00062	-.00045	.00739	.23352
5.011	91.213	.07873	53.95300	2.99330	.25559	.01822	-.01184	.00049	.00023	-.00066	.23305
5.039	190.390	.06928	54.13700	3.00570	.23422	.01482	-.01245	-.00014	-.00044	-.00485	.23257
5.002	290.830	.05142	54.19400	3.00410	.26717	.00833	-.01321	.00024	.00007	-.00350	.23349
4.972	391.520	.03251	53.57200	2.99330	.26597	.00211	-.01189	-.00025	.00025	-.00282	.23320
4.987	531.290	.10770	54.05500	2.99440	.24154	.00393	-.01217	-.00017	.00020	-.00496	.23300
GRADIENT		-.00653	6.77092	.37162	.02766	.00135	-.00175	.00019	.00009	.00060	.02888

V41B-D9A (IA22), ORBITER (041C1) W/ET SEPARATING

(SVK035) (20 APR 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = 3.000 X = .000  
 Y = 54.000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2391/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.002	103.830	.04100	-.00000	2.00000	.01157	.03465	.05231	-.00309	-.00073	-.00192
-4.893	191.510	.04100	-.00000	2.00000	.02273	.03541	.04732	-.00780	-.00071	-.00154
-4.803	241.170	.03570	-.00110	2.00740	.02021	.02020	.04181	-.00511	-.00032	-.00173
-4.972	290.820	.02300	-.00100	2.00000	-.02414	.01000	.02322	-.00617	-.00057	-.00130
-4.950	320.740	.02100	-.00100	2.00000	-.04110	.01545	.02003	-.00510	-.00051	-.00022
-4.978	400.820	.01570	-.00000	3.00160	-.04718	.01040	.04076	-.00372	-.00117	.00029
-5.030	591.830	.01700	-.00070	2.00000	-.00000	.01236	.03723	-.00303	-.00099	-.00016
-5.004	691.710	.01000	-.00000	2.00700	-.00000	.01409	.03003	-.00441	-.00104	.00033
-4.937	791.300	.01000	-.00000	2.00070	-.00000	.01530	.02374	-.00413	-.00114	.00039
-4.955	821.220	.01000	-.00000	2.00000	-.00000	.01536	.02375	-.00415	-.00113	.00039
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2397/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.076	13.353	.01075	-.00010	3.04030	-.11336	.01602	.04493	-.00593	-.00147	.00012
-.041	42.337	.00000	-.00230	2.00000	-.02130	.02000	.04025	-.00515	-.00073	-.00021
-.016	91.933	.00513	-.00100	2.00100	-.00033	.02001	.05180	-.00537	-.00044	-.00084
-.001	141.240	.00312	-.00070	2.00100	-.03414	.02007	.04327	-.00637	-.00057	-.00036
.017	190.960	.00346	-.00100	2.00000	-.02200	.02000	.02915	-.00426	-.00052	-.00104
.032	250.510	.00374	-.00070	2.00000	-.00127	.02000	.03003	-.00541	-.00080	-.00029
.016	391.050	.02001	-.00070	3.00110	-.05039	.01504	.04179	-.00496	-.00091	-.00013
-.030	491.730	.01739	-.00000	2.00000	-.07438	.01229	.03939	-.00470	-.00108	.00032
-.021	591.510	.01000	-.00000	2.00120	-.00000	.01459	.03026	-.00477	-.00107	.00029
-.012	791.350	.01000	-.00040	2.00000	-.00000	.01625	.03001	-.00469	-.00118	.00044
-.009	871.300	.01000	-.00040	2.00000	-.00000	.01623	.03000	-.00476	-.00115	.00044
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2403/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
5.032	-59.440	.00000	.00000	3.04370	-.13004	.00566	.03372	-.00664	-.00217	-.00020
4.946	8.076	.02430	-.00220	3.00130	-.10420	.02172	.04227	-.00682	-.00060	.00068
4.934	41.550	.02710	-.00130	2.00100	-.00000	.02231	.05000	-.00674	-.00031	-.00040
5.011	91.213	.00000	-.00100	2.00000	-.00043	.02003	.04273	-.00465	-.00044	.00028
5.033	180.200	.00000	-.00000	3.00000	-.07476	.02002	.02004	-.00516	-.00107	-.00040
5.002	290.830	.02000	-.00000	3.00410	-.06129	.01914	.02001	-.00592	-.00069	.00011
4.972	391.520	.01640	-.00050	2.00000	-.05006	.01293	.04057	-.00460	-.00117	.00030
4.987	531.290	.01970	-.00050	2.00000	-.08740	.01464	.03842	-.00488	-.00110	.00024
	GRADIENT	.00301	-.00027	.37162	-.01290	.00269	.00598	-.00084	.00007	.00008



DATE 06 MAY 77

TABULATED SOURCE DATA, 1A2, (AEDC V41B-D9A)

V41B-D9A (1A22), ORBITER (O'RC1) W/LT SEPARATING

(TVK035) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 OBETA = 3.000 X = .000  
 Y = 54.000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2391/ 0 RN/L = .87 GR/DIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHFD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.002	186.590	.09913	54.24400	-.05551	-.24255	435.11000	.00000	.00000	651.17000	.00000	.00000
-4.993	191.510	-.00483	53.65400	.07263	-.01801	435.27000	.00000	.00000	651.42000	.00000	.00000
-4.989	241.170	.12695	54.06500	.02237	-.00021	435.12000	.00000	.00000	651.19000	.00000	.00000
-4.972	250.630	-.01305	53.60900	.03548	-.03993	435.10000	.00000	.00000	651.16000	.00000	.00000
-4.960	390.740	.03333	53.96000	.02535	-.00227	435.32000	.00000	.00000	651.50000	.00000	.00000
-4.978	490.820	.12492	54.03400	.02097	-.06056	435.15000	.00000	.00000	651.23000	.00000	.00000
-5.030	591.650	.12427	54.10000	.04213	-.01407	435.00000	.00000	.00000	651.15000	.00000	.00000
-5.004	691.710	.19123	54.12000	.03345	-.02554	435.24000	.00000	.00000	651.37000	.00000	.00000
-4.997	791.380	.14004	53.72000	.03425	-.02005	435.31000	.00000	.00000	651.48000	.00000	.00000
-4.995	991.220	.20143	53.93000	.03181	-.02120	435.16000	.00000	.00000	651.25000	.00000	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2397/ 0 RN/L = .87 GR/DIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHFD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-.076	13.353	.05005	55.67200	-.01602	-.00231	435.60000	.00000	.00000	651.62000	.00000	.00000
-.041	42.397	.00105	54.12000	.00481	.02013	435.42000	.00000	.00000	651.64000	.00000	.00000
-.016	91.953	.02205	53.60000	.02005	.00239	435.30000	.00000	.00000	651.60000	.00000	.00000
-.001	141.240	.01409	53.74000	.00550	-.01042	435.60000	.00000	.00000	651.64000	.00000	.00000
.017	190.930	.03455	54.60000	.01759	.01034	435.37000	.00000	.00000	651.65000	.00000	.00000
.032	220.510	.03039	53.92000	.01216	-.00322	435.40000	.00000	.00000	651.70000	.00000	.00000
.016	391.050	.04005	54.00400	.00431	-.02707	435.48000	.00000	.00000	651.70000	.00000	.00000
-.030	491.730	.02377	53.62400	.01006	.00123	435.61000	.00000	.00000	651.62000	.00000	.00000
-.021	591.510	.07004	53.72000	.02003	.00209	435.42000	.00000	.00000	651.63000	.00000	.00000
-.012	791.350	.07450	53.92000	.02605	-.00153	435.41000	.00000	.00000	651.63000	.00000	.00000
-.009	871.380	.03023	53.93700	.02059	-.00187	435.30000	.00000	.00000	651.53000	.00000	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2403/ 0 RN/L = .87 GR/DIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHFD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
5.032	-59.440	1.25930	55.61200	.01620	.00203	435.71000	.00000	.00000	652.07000	.00000	.00000
4.946	8.076	-.05004	54.00400	.01717	-.00721	435.70000	.00000	.00000	652.10000	.00000	.00000
4.954	41.530	.12579	53.74000	.01000	-.00203	435.60000	.00000	.00000	652.21000	.00000	.00000
5.011	91.213	.00773	53.60000	.02029	.00531	435.60000	.00000	.00000	651.60000	.00000	.00000
5.039	190.330	.09328	54.13700	.01701	.00254	435.42000	.00000	.00000	651.71000	.00000	.00000
5.002	290.830	.05142	54.19400	.00349	-.00974	435.71000	.00000	.00000	652.07000	.00000	.00000
4.972	391.520	.03251	53.57200	.00134	-.02000	435.50000	.00000	.00000	651.83000	.00000	.00000
4.997	531.250	.10770	54.05300	.01648	.00456	435.42000	.00000	.00000	651.64000	.00000	.00000
GRADIENT	-.00653	6.77092	.00213	-.00089	53.63763	.00000	.00000	.00000	80.75356	.00000	.00000

V41B-D9A (IA22), ORBITER(GIRC1) W/ET SEPARATING

(UVK035) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = 3.000 X = .000  
 Y = 54.000 ELEVON = .000  
 UYSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2391/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PSI	DLFDAL	TBI	T82	DT	T
-5.002	166.590	976.40000	976.40000	84.00000	976.40000	976.10000	69.00000	76.00000	10.60500	99.76900
-4.993	191.510	976.20000	976.20000	84.00000	976.20000	976.10000	69.00000	76.00000	15.07300	99.76900
-4.939	241.170	976.43000	976.43000	84.00000	976.43000	976.10000	69.00000	76.00000	15.07100	99.76900
-4.972	290.830	976.30000	976.30000	84.00000	976.30000	976.10000	69.00000	76.00000	13.17900	99.76900
-4.950	300.740	976.40000	976.40000	84.00000	976.40000	976.10000	69.00000	76.00000	11.62300	99.76900
-4.979	490.220	976.40000	976.40000	84.00000	976.40000	976.10000	69.00000	76.00000	9.64720	99.76900
-5.030	591.000	976.37000	976.37000	84.00000	976.37000	976.10000	69.00000	76.00000	7.50040	99.76900
-5.004	691.710	976.70000	976.70000	84.00000	976.70000	976.10000	69.00000	76.00000	4.62420	99.76900
-4.997	791.330	976.30000	976.30000	84.00000	976.30000	976.10000	69.00000	76.00000	2.22010	99.76900
-4.995	931.220	976.51000	976.51000	84.00000	976.51000	976.10000	69.00000	76.00000	-1.35445	99.76900
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2397/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PSI	DLFDAL	TBI	T82	DT	T
-.076	13.353	976.60000	976.60000	81.00000	976.60000	976.43000	66.00000	74.00000	-8.03590	99.76900
-.041	42.397	976.14000	976.14000	81.00000	976.14000	976.43000	66.00000	74.00000	-7.60970	99.76900
-.016	91.933	976.40000	976.40000	81.00000	976.40000	976.43000	66.00000	74.00000	-6.12170	99.76900
-.001	141.240	976.44000	976.44000	81.00000	976.44000	976.43000	66.00000	74.00000	-5.93470	99.76900
.017	190.920	976.00000	976.00000	81.00000	976.00000	976.43000	66.00000	74.00000	-5.54000	99.76900
.032	290.510	976.20000	976.20000	81.00000	976.20000	976.43000	66.00000	74.00000	-4.90420	99.76900
.016	391.030	976.20000	976.20000	81.00000	976.20000	976.43000	66.00000	74.00000	-5.72210	99.76900
-.030	491.730	976.00000	976.00000	81.00000	976.00000	976.43000	66.00000	74.00000	-4.92710	99.76900
-.021	591.510	976.10000	976.10000	81.00000	976.10000	976.43000	66.00000	74.00000	-4.33430	99.76900
-.012	791.330	976.12000	976.12000	81.00000	976.12000	976.43000	66.00000	74.00000	-5.15040	99.76900
-.009	871.380	976.01000	976.01000	81.00000	976.01000	976.43000	66.00000	74.00000	-6.06310	99.76900
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2403/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PSI	DLFDAL	TBI	T82	DT	T
5.032	-59.440	973.60000	973.60000	81.00000	973.60000	973.67000	66.00000	74.00000	-8.46940	99.76900
4.946	8.076	973.60000	973.60000	81.00000	973.60000	973.67000	66.00000	74.00000	-9.39330	99.76900
4.994	41.560	973.61000	973.61000	81.00000	973.61000	973.67000	66.00000	74.00000	-11.05500	99.76900
5.011	91.213	973.40000	973.40000	81.00000	973.40000	973.67000	66.00000	74.00000	-10.16400	99.76900
5.039	190.320	973.30000	973.30000	81.00000	973.30000	973.67000	66.00000	74.00000	-9.81650	99.76900
5.002	290.630	973.20000	973.20000	81.00000	973.20000	973.67000	66.00000	74.00000	-9.54690	99.76900
4.972	391.020	973.53000	973.53000	81.00000	973.53000	973.67000	66.00000	74.00000	-9.20030	99.76900
4.987	531.290	973.25000	973.25000	81.00000	973.25000	973.67000	66.00000	74.00000	-8.62230	99.76900
	GRADIENT	120.54778	120.54778	10.02935	120.54778	120.55016	9.17206	9.16261	-1.16189	12.35318

V41B-D9A (1A22), ET SEPARATING FROM ORB (04RC1)

(AVK035) (04 MAY 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = 3.000 X = .000  
 Y = 54.000 ELEVON = .000  
 UBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2391/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHA	BETA	CI	CLM	CY	CYN	CEL	CA
-5.002	166.590	.09913	54.24400	-4.95970	2.99390	-.6817	-.00164	-.04085	-.00887	.00054	.09301
-4.993	191.510	-.00483	53.86400	-4.95250	2.99450	-.6351	-.00106	-.03874	-.00913	.00056	.09779
-4.999	241.170	.12653	54.06900	-4.95540	2.99530	-.4664	-.00246	-.03665	-.00891	.00052	.09389
-4.972	230.630	-.01306	53.60300	-4.94710	2.99540	-.4298	.00456	-.03934	-.00817	.00051	.09540
-4.960	390.740	.03339	53.90800	-4.93790	2.99510	-.4533	.01772	-.03668	-.00831	.00050	.10738
-4.978	490.820	.12492	54.03400	-4.93100	3.00110	-.3770	.02405	-.03029	-.01092	.00050	.11594
-5.030	591.860	.12427	54.10900	-5.01340	2.99770	-.18408	-.00334	-.03069	-.01071	.00028	.09915
-5.004	691.710	.19188	54.1.000	-4.99540	2.99730	-.16327	-.01571	-.03072	-.01046	.00033	.08956
-4.997	791.380	.14854	53.75500	-4.97830	2.99220	-.16352	-.01522	-.03105	-.01028	.00034	.09138
-4.995	991.220	.20143	53.93900	-4.97570	2.99500	-.16279	-.01483	-.03155	-.01031	.00034	.09402
GRADIENT		.00000	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2397/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHA	BETA	CI	CLM	CY	CYN	CEL	CA
-.076	13.353	.05086	55.67200	-.05730	3.04970	-.02669	-.00760	-.04157	-.01020	.00049	.08338
-.041	42.387	.08105	54.12600	-.01359	2.99100	-.14833	-.00691	-.04773	-.00738	.00059	.08402
-.016	91.953	.06206	53.63900	.01699	2.99050	-.17061	-.00299	-.03066	-.00807	.00047	.08510
-.001	141.240	.01409	53.74600	.03355	2.99330	-.17782	.00555	-.03279	-.00839	.00064	.08871
.017	190.990	.03455	54.25900	.05074	2.99310	-.18046	.01599	-.03517	-.00792	.00057	.09399
.032	250.510	.03339	53.92300	.05330	2.99290	-.17474	.02342	-.03121	-.00990	.00047	.10407
.016	391.050	.04655	54.05400	.03722	3.00040	-.16147	.03001	-.02870	-.01183	.00020	.10827
-.030	491.730	.06877	53.92400	-.01264	2.99390	-.11801	.00709	-.02785	-.01153	.00020	.08903
-.021	591.510	.07624	53.72900	-.00260	2.99070	-.10612	.00118	-.02943	-.01071	.00026	.08750
-.012	791.350	.07450	53.93300	.00822	2.99520	-.10534	.00081	-.03033	-.01070	.00028	.08782
-.009	871.380	.09923	53.95700	.01129	2.99410	-.10574	.00103	-.02989	-.01060	.00027	.08972
GRADIENT		.00000	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2403/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHA	BETA	CI	CLM	CY	CYN	CEL	CA
5.032	-59.440	1.23630	55.61200	5.04070	3.04430	.15278	.00991	-.03927	-.00827	.00039	.08279
4.946	8.076	-.05354	54.68400	4.99990	2.99310	.10784	.00440	-.04558	-.00524	.00047	.08458
4.994	41.560	.12298	53.74400	5.02140	2.99350	-.10974	.01148	-.03278	-.00701	.00031	.08429
5.011	91.213	.07673	53.95300	5.04320	2.99430	-.11819	.02262	-.03160	-.00707	.00037	.09045
5.039	190.360	.09528	54.13700	5.05770	3.00530	-.11218	.03256	-.02769	-.01101	.00031	.09912
5.002	290.830	.05142	54.19400	5.02390	3.00320	.10741	.03358	-.03638	-.01335	.00012	.10163
4.972	391.520	.03251	53.57200	4.99020	2.99760	.14138	.02136	-.02695	-.01213	.00022	.08623
4.987	531.290	.10770	54.05500	5.00550	2.99390	.14827	.01846	-.03040	-.01087	.00026	.08716
GRADIENT		-.00663	6.77092	.61537	.37135	.10097	.00054	-.00564	-.00065	.00006	.01047

V41B-D9A (1A22), ORBITER (O4RC1) W/ET SEPARATING

(RVK036) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = 3.000 X = 200.000  
 Y = 54.000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2392/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-5.023	167.286	200.05000	53.55600	2.99060	.36775	.01850	-.01110	.00092	-.00120	-.00046	.23275
-5.004	192.060	200.14000	54.04000	2.99770	.36483	.01184	-.01318	.00052	-.00154	-.00356	.23297
-5.014	242.040	200.07000	53.95200	2.99780	.32607	.00751	-.01309	.00043	-.00096	-.00432	.23309
-5.035	292.470	200.17000	54.25500	3.00410	.29778	.00606	-.01258	.00035	-.00061	-.00499	.23348
-5.039	392.450	200.12000	53.75100	2.99220	.26313	.00157	-.01143	.00002	-.00058	-.00106	.23298
-5.005	491.920	200.13000	53.90200	2.99080	.25550	.00010	-.01159	-.00010	.00032	-.00509	.23340
-4.956	591.030	200.00000	54.25300	3.00010	.24046	.00246	-.01134	-.00010	.00014	-.00524	.23358
-4.995	691.400	200.12000	54.04200	2.99780	.23229	.00449	-.01135	-.00018	.00034	-.00359	.23328
-4.998	791.440	200.13000	53.72100	2.99210	.23299	.00448	-.01169	-.00018	.00034	-.00364	.23366
-5.001	891.440	200.07000	54.10200	2.99790	.23279	.00450	-.01150	-.00019	.00033	-.00364	.23357
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2398/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-.002	11.247	200.05000	54.35200	3.00050	.26201	.02289	-.01079	.00077	.00001	.01061	.23359
-.034	42.111	200.05000	54.01600	2.99310	.26503	.02328	-.01015	.00184	-.00105	.00615	.23350
-.027	92.411	200.10000	54.01100	3.00110	.30544	.02539	-.01244	.00050	-.00124	.00131	.23331
-.037	142.230	200.07000	54.01300	2.99320	.29761	.01639	-.01185	.00031	-.00068	-.00333	.23341
-.045	192.510	200.07000	53.94000	2.99340	.27049	.01287	-.01327	.00019	-.00069	-.00666	.23394
-.029	292.350	200.10000	53.77500	2.99070	.27710	.00784	-.01301	.00031	-.00007	-.00371	.23385
.001	391.920	200.05000	53.99000	2.99300	.27598	.00102	-.01152	-.00025	.00061	-.00329	.23331
.031	490.990	200.11000	54.34500	3.00240	.24347	.00297	-.01184	-.00013	-.00014	-.00593	.23373
-.006	591.500	200.12000	53.76500	2.99390	.23716	.00508	-.01197	-.00019	-.00034	-.00402	.23420
-.008	791.350	200.16000	53.95400	2.99390	.23520	.00540	-.01209	-.00025	.00040	-.00373	.23355
-.010	871.310	200.02000	53.35100	2.99330	.23547	.00545	-.01202	-.00025	.00038	-.00378	.23331
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2404/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
5.032	-59.892	200.17000	53.88900	3.00100	.21865	.00497	-.01737	-.00002	.00021	.00459	.23284
4.980	6.567	200.04000	54.12900	3.00030	.25943	.02315	-.00955	.00049	-.00046	.00422	.23314
4.972	42.265	200.14000	53.86300	2.99220	.27623	.02233	-.01331	-.00005	-.00097	.00044	.23390
4.944	92.740	200.04000	53.86400	2.99350	.26766	.01937	-.01237	.00033	-.00039	-.00379	.23353
4.960	192.250	200.13000	53.61400	2.99310	.26309	.01103	-.01290	.00008	-.00036	-.00416	.23349
4.994	291.790	200.04000	54.12500	2.99340	.27626	.00422	-.01218	-.00012	-.00032	-.00131	.23229
5.032	391.270	200.05000	53.31800	2.99130	.25145	.00242	-.01226	-.00017	.00018	-.00488	.23284
4.990	531.400	200.02000	53.72700	2.99390	.23594	.00506	-.01228	-.00020	.00032	-.00401	.23308
GRADIENT		30.45954	8.24207	.45685	.03935	.00352	-.00145	.00007	-.00007	.00064	.03550

V41B-D9A (IA22), ORBITER(04RC1) W/ET SEPARATING

(SVK036) (20 APR 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = 3.000 X = 200.000  
 Y = 54.000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2392/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.023	167.280	.03820	-.00140	2.99050	-.03978	.02928	.04280	-.00394	-.00011	-.00116
-5.004	192.060	.03190	-.00110	2.99770	-.03651	.02263	.03974	-.00591	-.00041	-.00149
-5.014	242.040	.02610	-.00110	2.99780	-.00256	.01831	.03902	-.00581	-.00049	-.00092
-5.035	292.470	.02340	-.00100	3.00410	-.03079	.01686	.03834	-.00530	-.00058	-.00057
-5.039	392.450	.01630	-.00090	2.99220	-.03935	.01236	.04227	-.00415	-.00091	-.00054
-5.005	491.920	.01600	-.00060	2.99030	-.07194	.01089	.03822	-.00431	-.00102	.00036
-4.956	591.030	.01750	-.00060	3.00010	-.08778	.01325	.03805	-.00406	-.00102	.00019
-4.995	691.400	.01890	-.00050	2.99780	-.09391	.01528	.03973	-.00408	-.00111	.00038
-4.988	791.440	.01890	-.00050	2.99210	-.09551	.01527	.03959	-.00441	-.00111	.00039
-5.001	891.440	.01900	-.00050	2.99790	-.09558	.01528	.03957	-.00423	-.00111	.00038
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2398/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.002	11.247	.03522	-.00130	3.00050	-.06701	.03349	.05400	-.00350	-.00015	.00005
-.034	42.111	.04429	-.00240	2.99310	-.04414	.04049	.04956	-.00286	-.00091	-.00101
-.027	92.411	.04135	-.00090	3.00110	-.02366	.03620	.04471	-.00515	-.00043	-.00120
-.037	142.230	.03478	-.00020	2.99320	-.03167	.02940	.04010	-.00455	-.00062	-.00063
-.045	192.510	.02030	-.00020	2.99340	-.05397	.02369	.03578	-.00597	-.00074	-.00065
-.029	292.350	.02401	-.00090	2.99070	-.05206	.01865	.03970	-.00572	-.00062	.00012
.001	391.920	.01774	-.00050	2.99300	-.05269	.01183	.04008	-.00423	-.00118	.00065
.031	490.930	.01801	-.00030	3.00240	-.03533	.01377	.03744	-.00456	-.00106	-.00010
-.006	591.500	.01934	-.00050	2.99330	-.09166	.01528	.03934	-.00468	-.00112	.00038
-.008	791.350	.01936	-.00040	2.99390	-.09306	.01620	.03934	-.00480	-.00118	.00044
-.010	871.310	.01939	-.00040	2.99530	-.09340	.01625	.03959	-.00473	-.00117	.00043
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2404/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
5.032	-59.892	.01850	-.00050	3.00100	-.11340	.01592	.04812	-.01005	-.00095	.00026
4.980	6.567	.03700	-.00100	3.00030	-.07091	.03397	.04764	-.00226	-.00044	-.00041
4.972	42.265	.03710	-.00030	2.99220	-.05406	.03315	.04387	-.00651	-.00098	-.00093
4.944	92.740	.03420	-.00080	2.99350	-.06132	.03038	.03959	-.00508	-.00060	-.00034
4.960	192.250	.02620	-.00060	2.99310	-.06514	.02185	.03925	-.00561	-.00084	-.00031
4.994	291.790	.02050	-.00020	2.99340	-.05256	.01502	.04205	-.00490	-.00104	-.00027
5.032	391.270	.01780	-.00050	2.99130	-.07741	.01323	.03650	-.00498	-.00110	.00023
4.990	531.400	.01930	-.00040	2.99330	-.09197	.01826	.03937	-.00500	-.00113	.00036
	GRADIENT	.00563	-.00015	.45685	-.01078	.00517	.00725	-.00034	-.00007	-.00006

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = 3.000 X = 200.000  
 Y = 54.000 ELEVON = .000  
 UMBLOR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2392/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.023	167.280	200.05000	53.55500	.01864	-.03146	434.13000	.00000	.00000	649.71000	.00000	.00000
-5.004	192.060	200.14000	54.04000	.01161	-.04825	434.59000	.00000	.00000	650.40000	.00000	.00000
-5.014	242.040	200.07000	53.95200	-.00179	-.06574	435.00000	.00000	.00000	651.02000	.00000	.00000
-5.035	292.470	200.17000	54.25500	.02793	-.00544	434.83000	.00000	.00000	650.91000	.00000	.00000
-5.039	392.450	200.12000	53.75100	.00554	-.04692	434.83000	.00000	.00000	650.75000	.00000	.00000
-5.005	491.920	200.13000	53.90200	.02134	-.01444	434.75000	.00000	.00000	650.65000	.00000	.00000
-4.956	591.030	200.00000	54.25300	.02512	-.01003	434.45000	.00000	.00000	650.24000	.00000	.00000
-4.995	691.400	200.12000	54.04200	.02634	-.01646	434.83000	.00000	.00000	650.76000	.00000	.00000
-4.988	791.440	200.13000	53.72100	.02754	-.01769	434.84000	.00000	.00000	650.77000	.00000	.00000
-5.001	891.440	200.07000	54.10200	.02032	-.01833	434.83000	.00000	.00000	650.51000	.00000	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2398/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-.002	11.247	200.05000	54.35200	.01640	.00348	435.82000	.00000	.00000	651.75000	.00000	.00000
-.034	42.111	200.05000	54.01800	.01765	.01022	435.72000	.00000	.00000	652.09000	.00000	.00000
-.027	92.411	200.10000	54.01100	.01432	.00591	435.84000	.00000	.00000	651.97000	.00000	.00000
-.037	142.230	200.07000	54.01300	.00234	-.01710	435.87000	.00000	.00000	652.32000	.00000	.00000
-.045	192.510	200.07000	53.54000	.02337	.02483	435.82000	.00000	.00000	652.42000	.00000	.00000
-.029	292.350	200.10000	53.77500	.00520	-.01333	435.70000	.00000	.00000	652.07600	.00000	.00000
.001	391.920	200.05000	53.92000	-.00051	-.02300	435.33000	.00000	.00000	651.51000	.00000	.00000
.031	490.990	200.11000	54.34500	.02050	.00343	435.83000	.00000	.00000	651.36000	.00000	.00000
-.006	591.500	200.12000	53.70500	.01978	-.00279	435.83000	.00000	.00000	651.40000	.00000	.00000
-.008	791.350	200.16000	53.95400	.01955	-.00217	435.32000	.00000	.00000	651.49000	.00000	.00000
-.010	871.310	200.06000	53.85100	.02000	-.00265	435.33000	.00000	.00000	651.51000	.00000	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2404/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
5.032	-59.892	200.17000	53.88900	.01036	.00119	436.83000	.00000	.00000	653.83000	.00000	.00000
4.990	6.567	200.04000	54.12900	.01312	.00426	435.82000	.00000	.00000	652.24000	.00000	.00000
4.972	42.265	200.14000	53.85300	.01294	.00709	435.54000	.00000	.00000	652.42000	.00000	.00000
4.944	92.740	200.04000	53.86400	.01734	.01294	435.47000	.00000	.00000	651.73000	.00000	.00000
4.950	192.250	200.13000	53.61400	.01035	.00039	435.82000	.00000	.00000	652.00000	.00000	.00000
4.994	291.790	200.04000	54.12500	.00174	-.02193	435.82000	.00000	.00000	651.40000	.00000	.00000
5.032	391.270	200.05000	53.31800	.01422	.00531	435.30000	.00000	.00000	651.47000	.00000	.00000
4.990	531.400	200.02000	53.72700	.01659	.00113	435.35000	.00000	.00000	651.59000	.00000	.00000
GRADIENT	30.45954		8.24207	.00200	.00065	66.35112	.00000	.00000	99.31480	.00000	.00000

DATE 06 MAY 77

TABULATED SOURCE DATA, 1A22, (AEDC V41B-D9A)

PAGE 293

V41B-D9A (1A22), ORBITER (MRC1) // ET SEPARATING

(UVK036) (20 APR 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1099.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DEETA = 3.000 X = 200.000  
 Y = 54.000 ELEVON = .000  
 UNELDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2392/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	FRC	FRC2	TGAS	PS3	DLFBAL	TB1	TB2	DT	T
-5.023	167.200	976.61000	976.61000	84.00000	976.61000	976.14000	69.00000	76.00000	2.97600	99.76800
-5.004	192.050	976.60000	976.60000	84.00000	976.60000	976.14000	69.00000	76.00000	2.57740	99.76800
-5.014	242.040	976.60000	976.60000	84.00000	976.60000	976.14000	69.00000	76.00000	-1.34072	99.76800
-5.035	292.470	976.40000	976.40000	84.00000	976.40000	976.14000	69.00000	76.00000	-3.20030	99.76800
-5.039	392.450	976.20000	976.20000	84.00000	976.20000	976.14000	69.00000	76.00000	-5.35030	99.76800
-5.005	491.920	976.00000	976.00000	84.00000	976.00000	976.14000	69.00000	76.00000	-5.70910	99.76800
-4.956	591.030	976.00000	976.00000	84.00000	976.00000	976.14000	69.00000	76.00000	-6.09180	99.76800
-4.995	691.400	976.20000	976.20000	84.00000	976.20000	976.14000	69.00000	76.00000	-5.60290	99.76800
-4.909	791.440	976.20000	976.20000	84.00000	976.20000	976.14000	69.00000	76.00000	-4.80020	99.76800
-5.001	891.440	976.20000	976.20000	84.00000	976.20000	976.14000	69.00000	76.00000	-3.63330	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2398/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	FRC	FRC2	TGAS	PS3	DLFBAL	TB1	TB2	DT	T
- .002	11.247	975.30000	975.30000	81.00000	975.30000	975.73000	66.00000	74.00000	-4.91340	99.76800
- .034	42.111	975.20000	975.20000	81.00000	975.20000	975.73000	66.00000	74.00000	-4.35370	99.76800
- .027	92.411	975.20000	975.20000	81.00000	975.20000	975.73000	66.00000	74.00000	-4.12890	99.76800
- .037	142.230	975.70000	975.70000	81.00000	975.70000	975.73000	66.00000	74.00000	-4.52090	99.76800
- .045	192.610	975.00000	975.00000	81.00000	975.00000	975.73000	66.00000	74.00000	-5.47730	99.76800
- .029	292.350	975.01000	975.01000	81.00000	975.01000	975.73000	66.00000	74.00000	-6.75180	99.76800
- .001	391.920	975.00000	975.00000	81.00000	975.00000	975.73000	66.00000	74.00000	-8.00030	99.76800
- .031	490.630	975.70000	975.70000	81.00000	975.70000	975.73000	66.00000	74.00000	-8.82970	99.76800
- .006	591.500	975.77000	975.77000	81.00000	975.77000	975.73000	66.00000	74.00000	-8.93230	99.76800
- .008	791.350	975.01000	975.01000	81.00000	975.01000	975.73000	66.00000	74.00000	-8.32030	99.76800
- .010	871.310	975.00000	975.00000	81.00000	975.00000	975.73000	66.00000	74.00000	-7.78910	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2404/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	FRC	FRC2	TGAS	PS3	DLFBAL	TB1	TB2	DT	T
5.032	-59.892	973.13000	973.13000	80.00000	973.13000	972.00000	66.00000	74.00000	-8.02740	99.76800
4.990	6.957	973.10000	973.10000	80.00000	973.10000	972.00000	66.00000	74.00000	-7.67210	99.76800
4.972	42.203	973.40000	973.40000	80.00000	973.40000	972.00000	66.00000	74.00000	-7.00370	99.76800
4.944	92.740	972.00000	972.00000	80.00000	972.00000	972.00000	66.00000	74.00000	-7.22930	99.76800
4.950	192.250	973.00000	973.00000	80.00000	973.00000	972.00000	66.00000	74.00000	-7.65110	99.76800
4.994	291.790	972.00000	972.00000	80.00000	972.00000	972.00000	66.00000	74.00000	-8.75230	99.76800
5.032	391.270	972.00000	972.00000	80.00000	972.00000	972.00000	66.00000	74.00000	-8.93370	99.76800
4.990	531.400	973.17000	973.17000	80.00000	973.17000	972.00000	66.00000	74.00000	-9.22710	99.76800
	GRADIENT	148.18345	148.18345	12.18138	148.18345	148.14955	10.04964	11.26778	-1.16821	15.19140

V41B-D9A (1A22), ET SEPARATING FROM ORB (04RC1)

(AVK036) (04 MAY 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = 3.000 X = 200.000  
 Y = 54.000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2392/ 0 RN/L = .97 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-5.023	167.280	200.05000	53.55500	-4.98500	2.98920	-.17251	-.01305	-.03897	-.00985	.00076	.09856
-5.004	192.060	200.14000	54.04000	-4.97250	2.99550	-.17038	-.00671	-.03795	-.01051	.00082	.10024
-5.014	242.040	200.07000	53.53200	-4.98780	2.99570	-.14436	-.01218	-.03562	-.00966	.00055	.09284
-5.035	222.470	200.17000	54.23500	-5.01070	3.00310	-.13566	-.01004	-.04100	-.00982	.00062	.09325
-5.039	322.450	200.12000	53.75100	-5.01950	2.99140	-.11101	.00455	-.02234	-.00761	.00053	.09875
-5.005	491.920	200.13000	53.90200	-4.93340	2.99320	-.11521	.01931	-.03466	-.00668	.00049	.10947
-4.956	591.030	200.00000	54.23300	-4.93340	2.99350	-.12264	.01834	-.02930	-.01105	.00042	.11545
-4.995	691.400	200.12000	54.04200	-4.97630	2.99730	-.03972	-.01094	-.03003	-.01074	.00022	.09073
-4.938	791.440	200.13000	53.72100	-4.93350	2.99160	-.03200	-.01530	-.03074	-.01033	.00033	.09013
-5.001	991.440	200.07000	54.10200	-4.98160	2.99740	-.03297	-.01502	-.03166	-.01035	.00034	.09193
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2399/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-.002	11.247	200.05000	54.35200	.03467	2.99920	-.03915	-.02114	-.05228	-.00277	.00069	.08796
-.034	42.111	200.05000	54.01800	.01077	2.99570	-.01258	-.01055	-.04309	-.01023	.00058	.08996
-.027	92.411	200.10000	54.01100	.01403	3.00020	-.03591	-.00977	-.03422	-.01100	.00052	.08286
-.037	142.230	200.07000	54.01300	-.00208	2.99740	-.07309	-.00520	-.03465	-.00943	.00059	.08671
-.045	192.510	200.07000	53.94000	-.01828	2.99350	-.07435	.00350	-.03530	-.00564	.00051	.09010
-.029	222.350	200.10000	53.77500	-.00504	2.99230	-.07249	.01171	-.02539	-.00828	.00048	.09797
.001	391.920	200.05000	53.90000	.01691	2.99250	-.07176	.02771	-.03036	-.01021	.00048	.10547
.031	490.930	200.11000	54.34500	.04922	3.00180	-.01823	.02482	-.02760	-.01158	.00023	.10654
-.006	591.500	200.12000	53.72500	.01401	2.99340	-.01902	.00239	-.02927	-.01102	.00022	.08639
-.008	791.350	200.16000	53.95400	.01198	2.99540	-.01514	.00095	-.03032	-.01071	.00028	.08856
-.010	871.310	200.08000	53.85100	.00990	2.99490	-.01529	.00108	-.03026	-.01066	.00028	.08852
	GRADIENT	.00000	.00000	.00000	.00000	-.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2404/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
5.032	-59.892	200.17000	53.88900	5.05010	3.00050	.03599	.00389	-.03769	-.01306	.00046	.08523
4.980	6.567	200.04000	54.12900	5.01720	2.99930	-.01570	-.00203	-.04147	-.01026	.00047	.08523
4.972	42.265	200.14000	53.66300	5.00970	2.99750	-.0231	.00328	-.03566	-.00974	.00051	.08592
4.944	92.740	200.04000	53.86400	4.97300	2.99200	-.0638	.01298	-.03407	-.00796	.00047	.08650
4.960	192.250	200.13000	53.61400	4.92840	2.99350	-.0438	.02973	-.03175	-.00917	.00044	.09364
4.954	291.790	200.04000	54.12500	5.01480	2.99480	-.01599	.03259	-.02640	-.01159	.00034	.10012
5.032	391.270	200.05000	53.31600	5.05000	2.99980	.0329	.03240	-.02516	-.01283	.00014	.08273
4.990	531.400	200.02000	53.72700	5.00930	2.99340	.01651	.01247	-.03035	-.01081	.00026	.08696
	GRADIENT	30.45554	8.24207	.76396	.45670	-.01102	-.00031	-.00631	-.00156	.00007	.01298



V418-D9A (1A22), ORBITER(04RC1) W/ET SEPARATING

(RVK037) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = 3.000 X = 400.000  
 Y = 54.000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2393/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLIR	CYR	CYNR	CBLR	CAR	HM
-5.022	167.100	400.13000	54.02000	2.99310	.34456	.0569	-.01336	.00081	-.00089	-.00450	.23282
-4.994	191.260	400.02000	53.79200	2.99100	.34825	.0161	-.01240	.00045	-.00060	-.00242	.23352
-4.977	240.970	400.02000	53.76800	2.99320	.33994	.01401	-.01249	.00039	.00005	-.00219	.23287
-5.010	291.390	400.00000	53.95300	2.99370	.30879	.01982	-.01188	.00037	-.00044	-.00309	.23363
-4.968	390.740	400.00000	54.10200	2.99020	.27960	-.01133	-.01121	-.00017	.00068	-.00352	.23266
-4.961	490.690	399.99000	54.02000	2.99540	.24265	.01141	-.01113	-.00009	-.00034	-.00644	.23328
-4.975	590.890	400.01000	54.24200	3.00430	.23421	.01397	-.01166	-.00010	.00027	-.00412	.23304
-5.008	691.440	400.12000	54.14500	3.00180	.23275	.01448	-.01155	-.00021	.00034	-.00358	.23256
-5.042	792.020	400.15000	54.27200	2.99310	.23290	.01448	-.01139	-.00019	.00034	-.00355	.23363
-4.999	891.280	400.17000	54.00800	2.99300	.23262	.01446	-.01155	-.00020	.00034	-.00348	.23249
GRADIENT	.00000	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2399/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLIR	CYR	CYNR	CBLR	CAR	HM
-.084	13.860	400.03000	53.75700	2.99980	.32312	.01799	-.00998	.00197	-.00138	.00383	.23300
.016	40.815	400.12000	54.05100	2.99060	.32210	.01184	-.01049	.00116	-.00096	.00147	.23370
.042	90.423	400.15000	53.55300	2.98260	.31497	.01056	-.01291	.00012	-.00132	-.00268	.23392
.016	140.990	400.12000	53.55200	2.99480	.31274	.01215	-.01299	.00034	-.00056	-.00310	.23322
-.001	191.210	400.13000	53.92200	2.99760	.29334	.01717	-.01324	.00031	-.00010	-.00399	.23339
.029	290.620	400.11000	53.48300	2.97990	.28731	.01277	-.01155	-.00022	-.00053	-.00061	.23275
.031	390.530	400.16000	53.87200	2.99300	.25420	.01171	-.01226	-.00012	-.00012	-.00528	.23358
.018	490.760	400.13000	54.00900	3.00000	.24223	.01371	-.01225	-.00014	.00028	-.00509	.23370
-.017	591.540	400.11000	54.23300	3.00080	.23581	.01545	-.01209	-.00024	.00038	-.00359	.23346
-.022	791.480	400.16000	53.91100	2.99410	.23543	.01546	-.01213	-.00025	.00038	-.00363	.23326
-.004	871.280	400.22000	53.46700	2.99860	.23529	.01544	-.01218	-.00024	.00039	-.00358	.23323
GRADIENT	.00000	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2405/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLIR	CYR	CYNR	CBLR	CAR	HM
4.997	-58.370	400.14000	54.26800	3.00150	.28834	.01535	-.01109	.00330	-.00062	.00749	.23297
5.033	5.632	400.19000	53.19300	2.99790	.29620	.01840	-.01103	.00084	-.00105	-.00001	.23368
5.008	41.032	400.15000	54.36500	3.00350	.29217	.01023	-.01282	.00008	-.00127	-.00305	.23323
5.012	90.783	400.25000	53.80700	2.99340	.27848	.01267	-.01313	.00025	-.00055	-.00425	.23355
5.029	190.530	400.09000	53.64200	2.99340	.27434	.01777	-.01325	.00033	.00006	-.00340	.23332
5.034	290.450	400.19000	53.62400	2.99340	.27171	.01147	-.01202	-.00021	.00054	-.00312	.23347
5.010	390.830	400.19000	53.91000	3.00000	.24339	.01311	-.01185	-.00018	-.00012	-.00561	.23305
4.969	531.450	400.16000	54.02200	2.99360	.23555	.01543	-.01212	-.00026	.00037	-.00342	.23367
GRADIENT	70.80502	9.41189	.52864	.05241	.01467	-.00195	.00015	-.00019	-.00000	-.00000	.04134

V418-D9A (1A22), ORBITER (O4RC1) W/ET SEPARATING

(SVK037) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = 3.000 X = 400.000  
 Y = 54.000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2393/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.022	167.100	.03450	-.00130	2.99910	.01667	.02646	.03875	-.00609	-.00011	-.00085
-4.984	191.260	.03090	-.00100	2.99100	.02025	.02239	.04084	-.00513	-.00048	-.00056
-4.977	240.970	.02350	-.00110	2.99620	.01200	.01478	.04106	-.00522	-.00053	-.00009
-5.010	291.380	.01920	-.00110	2.99570	-.01927	.01160	.04018	-.00461	-.00055	-.00040
-4.968	390.740	.01590	-.00080	2.99020	-.04819	.00944	.03974	-.00394	-.00110	.00092
-4.931	490.690	.01650	-.00070	2.99340	-.03332	.01219	.03631	-.00366	-.00101	-.00030
-4.975	590.890	.01630	-.00060	3.00430	-.03330	.01475	.03914	-.00439	-.00103	.00032
-5.008	691.440	.01630	-.00040	3.00190	-.03325	.01525	.03937	-.00428	-.00114	.00038
-5.042	792.020	.01690	-.00030	2.99910	-.03309	.01526	.03971	-.00413	-.00112	.00038
-4.999	891.260	.01900	-.00050	2.99600	-.03336	.01523	.03977	-.00428	-.00113	.00039
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2399/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.084	13.860	.03339	-.00240	2.99290	-.00598	.04681	.04724	-.00269	.00104	-.00134
.016	40.815	.04301	-.00160	2.99060	-.00712	.04266	.04489	-.00319	.00023	-.00091
.042	90.423	.03740	-.00050	2.99260	-.01396	.03136	.04071	-.00563	-.00080	-.00128
.016	140.900	.02961	-.00100	2.99480	-.01633	.02297	.04030	-.00570	-.00059	-.00052
-.001	191.210	.02432	-.00090	2.99260	-.03222	.01798	.03951	-.00595	-.00062	-.00006
.029	290.620	.01933	-.00050	2.97990	-.04186	.01358	.04202	-.00426	-.00115	-.00049
.031	390.530	.01734	-.00060	2.99500	-.07491	.01252	.03912	-.00497	-.00105	.00034
.018	490.760	.01631	-.00050	3.00000	-.03376	.01453	.03930	-.00496	-.00107	.00033
-.017	591.540	.01533	-.00040	3.00000	-.03316	.01326	.03979	-.00490	-.00116	.00042
-.022	791.480	.01929	-.00040	2.99410	-.09336	.01626	.03974	-.00484	-.00118	.00042
-.004	871.280	.01925	-.00040	2.99260	-.09363	.01625	.03920	-.00489	-.00117	.00043
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2405/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
4.997	-58.370	.04450	-.00400	3.00150	-.00085	.04067	.05090	-.00380	.00237	-.00057
5.033	5.652	.04170	-.00130	2.99790	-.03293	.03721	.04340	-.00373	-.00008	-.00101
5.008	41.032	.03590	-.00060	3.00550	-.03397	.03104	.04035	-.00553	-.00025	-.00123
5.012	90.783	.02640	-.00080	2.99940	-.05078	.02349	.03918	-.00593	-.00068	-.00060
5.029	190.530	.02370	-.00100	2.99340	-.05499	.01859	.04002	-.00596	-.00059	.00010
5.034	290.450	.01790	-.00050	2.99340	-.05755	.01229	.04030	-.00472	-.00114	.00059
5.010	390.830	.01800	-.00050	3.00000	-.02592	.01392	.03791	-.00455	-.00111	-.00008
4.999	531.450	.01900	-.00030	2.99060	-.09352	.01625	.04000	-.00483	-.00119	.00041
	GRADIENT	.00738	-.00023	.52664	-.00593	.00658	.00769	-.00066	-.00001	-.00018

V41B-D9A (IA22), ORBITER(04RC1) W/ET SEPARATING

(TVK037) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = 3.000 X = 400.000  
 Y = 54.000 ELEVON = .000  
 WINGLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2393/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.022	167.100	400.13000	54.02000	.03012	-.02087	434.02000	.00700	.00000	649.55000	.00000	.00000
-4.984	191.260	400.02000	53.79200	.01410	-.03966	434.13000	.00000	.00000	649.78000	.00000	.00000
-4.977	240.970	400.02000	53.78300	.00711	-.05374	434.13000	.00000	.00000	649.66000	.00000	.00000
-5.010	291.380	400.00000	53.95300	.01601	-.05154	434.23000	.00000	.00000	649.69000	.00000	.00000
-4.969	390.740	400.00000	54.10200	.01528	-.06211	434.17000	.00000	.00000	649.77000	.00000	.00000
-4.961	490.630	399.99000	54.02000	.03353	-.01351	434.14000	.00000	.00000	649.72000	.00000	.00000
-4.975	590.890	400.01000	54.24200	.03375	-.02217	434.13000	.00000	.00000	649.78000	.00000	.00000
-5.008	691.440	400.12000	54.14500	.03173	-.02046	434.17000	.00000	.00000	649.77000	.00000	.00000
-5.042	792.020	400.15000	54.27200	.03010	-.01929	434.17000	.00000	.00000	649.77000	.00000	.00000
-4.999	891.290	400.17000	54.09900	.02876	-.01840	434.14000	.00000	.00000	649.73000	.00000	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2399/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-.084	13.860	400.03000	53.75700	.01495	.00869	435.62000	.00000	.00000	651.94000	.00000	.00000
.016	40.815	400.12000	54.05100	.00971	-.00120	435.73000	.00000	.00000	652.18000	.00000	.00000
.042	90.423	400.15000	53.55900	.01214	.00128	435.41000	.00000	.00000	651.63000	.00000	.00000
.016	140.900	400.12000	53.55200	.00431	-.01077	435.52000	.00000	.00000	651.63000	.00000	.00000
-.001	191.210	400.13000	53.90300	-.01033	-.04045	435.52000	.00000	.00000	651.63000	.00000	.00000
.029	220.620	400.11000	53.49300	.00091	-.03937	435.63000	.00000	.00000	652.30000	.00000	.00000
.031	390.530	400.16000	53.87200	.02233	.00335	435.64000	.00000	.00000	651.97000	.00000	.00000
.018	490.750	400.13000	54.00900	.02189	.00356	435.43000	.00000	.00000	651.74000	.00000	.00000
-.017	591.540	400.11000	54.23300	.02166	-.00101	435.45000	.00000	.00000	651.70000	.00000	.00000
-.022	791.480	400.16000	53.91100	.02099	-.00109	435.23000	.00000	.00000	651.35000	.00000	.00000
-.004	871.280	400.22000	53.45700	.02053	-.00133	435.32000	.00000	.00000	651.59000	.00000	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2405/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
4.997	-58.370	400.14000	54.28900	.00448	-.00141	435.74000	.00000	.00000	652.13000	.00000	.00000
5.033	5.652	400.19000	53.19300	.01298	.01094	435.63000	.00000	.00000	652.03000	.00000	.00000
5.008	41.032	400.15000	54.36500	.00658	.00014	435.63000	.00000	.00000	651.65000	.00000	.00000
5.012	90.783	400.23000	53.80700	-.00731	-.02345	435.63000	.00000	.00000	652.20000	.00000	.00000
5.029	190.530	400.05000	53.64200	.00407	-.00777	435.73000	.00000	.00000	652.16000	.00000	.00000
5.034	290.450	400.19000	53.62400	-.00339	-.02321	435.65000	.00000	.00000	652.22000	.00000	.00000
5.010	390.630	400.18000	53.91000	.01756	.01229	435.77000	.00000	.00000	652.15000	.00000	.00000
4.969	531.450	400.18000	54.02200	.01673	.00415	435.63000	.00000	.00000	652.29000	.00000	.00000
GRADIENT	70.80502	9.41189	.00230	.00194	77.03422	.00000	.00000	.00000	115.36270	.00000	.00000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = 3.000 X = 400.000  
 Y = 54.000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2393/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	T81	T82	DT	T
-5.022	167.100	976.37000	976.37000	84.00000	976.37000	976.16000	68.00000	76.00000	.23221	99.76800
-4.984	191.260	976.23000	976.23000	84.00000	976.23000	976.16000	68.00000	76.00000	-.35577	99.76800
-4.977	240.970	976.05000	976.05000	84.00000	976.05000	976.16000	68.00000	76.00000	.10775	99.76800
-5.010	291.380	976.80000	976.80000	84.00000	976.80000	976.16000	68.00000	76.00000	3.35030	99.76800
-4.958	390.740	976.70000	976.70000	84.00000	976.70000	976.16000	68.00000	76.00000	5.55900	99.76800
-4.951	490.690	976.62000	976.62000	84.00000	976.62000	976.16000	68.00000	76.00000	5.12680	99.76800
-4.975	590.890	976.71000	976.71000	84.00000	976.71000	976.16000	68.00000	76.00000	2.63480	99.76800
-5.008	691.440	976.69000	976.69000	84.00000	976.69000	976.16000	68.00000	76.00000	.42257	99.76800
-5.042	792.020	976.69000	976.69000	84.00000	976.69000	976.16000	68.00000	76.00000	-1.60210	99.76800
-4.999	891.230	976.64000	976.64000	84.00000	976.64000	976.16000	68.00000	76.00000	-3.79295	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2399/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	T81	T82	DT	T
-.084	13.860	975.14000	975.14000	81.00000	975.14000	974.92999	65.00000	74.00000	-6.20900	99.76800
.016	40.815	975.50000	975.50000	81.00000	975.50000	974.92999	65.00000	74.00000	-6.60740	99.76800
.042	90.423	975.15000	975.15000	81.00000	975.15000	974.92999	65.00000	74.00000	-7.03490	99.76800
.016	140.900	975.07000	975.07000	81.00000	975.07000	974.92999	65.00000	74.00000	-7.33590	99.76800
-.001	191.210	975.00000	975.00000	81.00000	975.00000	974.92999	65.00000	74.00000	-6.45420	99.76800
.029	290.620	975.19000	975.19000	81.00000	975.19000	974.92999	65.00000	74.00000	-3.94510	99.76800
.031	390.530	975.19000	975.19000	81.00000	975.19000	974.92999	65.00000	74.00000	-2.36520	99.76800
.018	490.760	974.64000	974.64000	81.00000	974.64000	974.92999	65.00000	74.00000	-1.95740	99.76800
-.017	591.540	974.78000	974.78000	81.00000	974.78000	974.92999	65.00000	74.00000	-2.68450	99.76800
-.022	791.480	974.73000	974.73000	81.00000	974.73000	974.92999	65.00000	74.00000	-4.49510	99.76800
-.004	871.280	974.61000	974.61000	81.00000	974.61000	974.92999	65.00000	74.00000	-5.61060	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2405/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	T81	T82	DT	T
4.997	-58.370	973.01000	973.01000	80.00000	973.01000	972.80000	65.00000	74.00000	-8.20490	99.76800
5.033	5.652	973.34000	973.34000	80.00000	973.34000	972.80000	65.00000	74.00000	-8.20390	99.76800
5.008	41.032	973.00000	973.00000	80.00000	973.00000	972.80000	65.00000	74.00000	-8.69350	99.76800
5.012	80.783	973.24000	973.24000	80.00000	973.24000	972.80000	65.00000	74.00000	-8.55320	99.76800
5.029	190.530	973.00000	973.00000	80.00000	973.00000	972.80000	65.00000	74.00000	-7.47970	99.76800
5.034	290.450	973.24000	973.24000	80.00000	973.24000	972.80000	65.00000	74.00000	-6.52100	99.76800
5.010	390.830	973.05000	973.05000	80.00000	973.05000	972.80000	65.00000	74.00000	-5.15720	99.76800
4.969	531.450	973.25000	973.25000	80.00000	973.25000	972.80000	65.00000	74.00000	-5.36920	99.76800
	GRADIENT	172.21161	172.21161	14.15428	172.21161	172.11606	11.50035	13.09271	-1.45150	17.65180

V41B-D9A (IA22), ET SEPARATING FROM ORB (O4RC1)

(AVK037) (04 MAY 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 CBETA = 3.000 X = 400.000  
 Y = 54.000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2393/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-5.022	167.100	400.13000	54.02000	-4.98790	2.99780	-0.17947	-0.02134	-0.04391	-0.0023	.00057	.10207
-4.984	191.260	400.02000	53.79200	-4.95280	2.99000	-0.13487	-0.01355	-0.04355	-0.00953	.00040	.10619
-4.977	240.970	400.02000	53.76800	-4.95310	2.99510	-0.17703	-0.00792	-0.03762	-0.01101	.00051	.10770
-5.010	291.330	400.00000	53.75300	-4.99040	2.99450	-0.14556	-0.01832	-0.03591	-0.01066	.00074	.09323
-4.959	320.740	400.00000	54.10200	-4.95200	2.98250	-0.13548	-0.00259	-0.04119	-0.00900	.00062	.09354
-4.951	490.620	399.92000	54.02000	-4.94410	2.99470	-0.14190	.00030	-0.03936	-0.00737	.00050	.10330
-4.975	590.690	400.01000	54.24200	-4.95350	3.00370	-0.12228	.02050	-0.03257	-0.00923	.00052	.11189
-5.008	691.440	400.12000	54.14500	-4.92910	3.00140	-0.10402	.00930	-0.02970	-0.01085	.00030	.10926
-5.042	792.020	400.15000	54.27200	-5.02270	2.99230	-0.05398	-0.01480	-0.03101	-0.01049	.00031	.08954
-4.999	991.280	400.17000	54.00900	-4.97930	2.99550	-0.02254	-0.01499	-0.03129	-0.01036	.00034	.09239
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2393/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-0.084	13.260	400.03000	53.75700	-0.03035	2.99740	-0.11334	-0.03701	-0.04403	-0.01239	.00081	.10181
.016	40.815	400.12000	54.05100	.06430	2.98200	-0.10534	-0.02704	-0.04731	-0.00992	.00067	.10122
.042	90.423	400.15000	53.55500	.07913	2.99310	-0.10529	-0.00976	-0.04470	-0.00945	.00034	.10152
.016	140.900	400.12000	53.55200	.04606	2.99330	-0.03470	-0.00505	-0.03892	-0.01113	.00036	.09787
-0.001	191.210	400.13000	53.56200	.02351	2.99770	-0.07811	-0.00747	-0.03358	-0.01248	.00059	.09242
.029	290.620	400.11000	53.49500	.04632	2.97940	-0.03930	.00359	-0.03726	-0.00834	.00053	.09244
.031	390.530	400.10000	53.87200	.04009	2.99440	-0.07078	.01067	-0.03471	-0.00854	.00044	.10096
.018	490.760	400.13000	54.00500	.03252	2.98250	-0.03545	.02023	-0.02959	-0.01066	.00042	.10741
-0.017	591.540	400.11000	54.23300	.00318	3.00040	-0.01191	.01522	-0.02227	-0.01130	.00022	.09765
-0.022	791.780	400.16000	53.91100	-0.00239	2.99370	-0.01517	.00109	-0.03028	-0.01071	.00028	.08907
-0.004	871.280	400.22000	53.45700	.01593	2.98320	-0.01520	.00107	-0.03047	-0.01073	.00028	.08941
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2405/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
4.997	-58.370	400.14000	54.28900	5.04150	2.99750	-0.03494	-0.01994	-0.05730	-0.00872	.00074	.10466
5.033	5.652	400.19000	53.19500	5.07500	2.98220	-0.01520	-0.00164	-0.04142	-0.01144	.00038	.09578
5.008	41.032	400.15000	54.36500	5.04380	3.00500	-0.03201	.00252	-0.03599	-0.01353	.00039	.09243
5.012	90.783	400.25000	53.80700	5.03590	2.98230	-0.01875	.00379	-0.03952	-0.01192	.00049	.09025
5.029	190.530	400.08000	53.64200	5.05220	2.98240	-0.02226	.01556	-0.03676	-0.00842	.00050	.09434
5.034	290.450	400.19000	53.62400	5.05220	2.98260	-0.01000	.03121	-0.03136	-0.00976	.00043	.09767
5.010	390.830	400.18000	53.91000	5.02760	2.99550	.01141	.03720	-0.02827	-0.01188	.00031	.10025
4.969	531.450	400.18000	54.02200	4.99370	2.98330	.01253	.02049	-0.02908	-0.01172	.00023	.08646
GRADIENT	70.80502	70.80502	9.41189	.89791	.52841	-0.03810	-0.00029	-0.00733	-0.00202	.00007	.01695

V41B-D9A (1A22), ORBITER (O4RC1) W/ET SEPARATING

(RVK038) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UNCLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2775/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DETA	CNR	CLDR	CYR	CYNR	CELR	CAR	WM
-20.006	624.820	-.05570	.21091	-.00164	.60395	-.01513	-.02822	-.00100	.00058	-.00967	.23341
-19.959	693.460	-.23475	-.00370	-.00439	.50393	-.01333	-.02808	-.00148	-.00051	-.01714	.23344
-19.947	799.420	-.31532	-.25346	-.00091	.46457	-.01340	-.02575	-.00240	.00220	-.02568	.23295
-20.015	999.440	.05374	-.01509	-.00339	.22092	.01339	-.02714	-.00181	.00048	-.02195	.23353
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2779/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DETA	CNR	CLDR	CYR	CYNR	CELR	CAR	WM
-15.018	474.550	.11192	-.02309	-.00345	.52777	-.01000	-.03006	-.00148	.00117	-.01114	.23398
-15.021	499.330	.07712	-.33092	-.00329	.49551	-.01437	-.03024	-.00128	.00124	-.01440	.23374
-14.931	548.830	-.00214	-.12146	-.00309	.47431	-.02711	-.02009	-.00143	.00036	-.01598	.23377
-14.982	599.940	-.00027	-.40221	-.00006	.43236	-.01002	-.02459	-.00239	.00142	-.02233	.23371
-14.971	699.610	-.16000	-.20455	-.00404	.32126	-.01975	-.02831	-.00039	.00214	-.03239	.23406
-15.083	800.230	.22332	-.17978	-.00169	.24147	.01005	-.02090	-.00159	.00026	-.02305	.23403
-15.068	999.920	.32151	-.03317	-.00407	.22176	.01223	-.02749	-.00199	.00051	-.02077	.23411
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	-.00000	.00000	.00000	.00000

RUN NO. 2783/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DETA	CNR	CLDR	CYR	CYNR	CELR	CAR	WM
-10.514	349.510	.05441	.22636	-.00051	.43375	.01042	-.03009	-.00210	.00050	-.01305	.23384
-10.511	399.120	.06323	-.60978	-.01000	.39230	-.01023	-.03028	-.00153	.00075	-.01750	.23293
-10.493	449.960	-.01218	-.16179	-.00335	.35035	-.01016	-.03040	-.00139	.00122	-.02156	.23370
-10.465	499.970	.06003	-.19174	-.00030	.33762	-.01399	-.02026	-.00165	-.00047	-.02176	.23334
-10.484	599.790	-.02372	-.18003	-.00402	.27359	-.01097	-.02040	-.00209	.00117	-.02359	.23324
-10.569	699.940	.23003	-.18312	-.00339	.23035	.01232	-.02712	-.00109	.00032	-.02036	.23354
-10.530	799.640	.23007	-.20033	-.00009	.21033	.01002	-.02744	-.00199	.00053	-.01948	.23437
-10.512	929.170	.21077	-.24007	-.00748	.21979	.01224	-.02726	-.00159	.00052	-.01937	.23343
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

DATE 06 MAY 77

TABULATED SOURCE DATA. IA22, (UEDC V418-D9A)

PAGE 301

V418-D9A (IA22).ORBITER(04RC1) /ET SEPARATING

(RVK038) (20 APR 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DSETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2492/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DSETA	CNR	CLIR	CYR	CYNR	CBLR	CAR	WM
-4.998	174.620	-.00504	.32731	.00053	.35046	.01193	-.03485	-.00074	-.00193	-.00124	.23551
-4.996	199.490	.00397	.47937	-.00046	.34643	.01935	-.03609	-.00190	-.00079	-.00521	.23463
-4.999	249.180	-.02533	.37399	.00352	.32979	.01295	-.03436	-.00058	-.00071	-.01165	.23350
-4.979	299.830	.06394	-.15339	-.00724	.29704	.01655	-.03460	-.00035	-.00031	-.01615	.23473
-4.955	399.820	.00194	.11912	-.00147	.28219	.01379	-.03439	.00015	-.00028	-.01504	.23524
-4.979	499.930	-.03113	.06332	.00028	.27237	-.01123	-.03027	-.00034	.00026	-.01271	.23423
-5.044	599.870	.12034	.37245	.00241	.25206	.01129	-.03029	-.00042	-.00009	-.01554	.23428
-5.021	699.820	.00333	.57716	.00411	.23253	.01624	-.03121	-.00027	.00042	-.01450	.23428
-5.000	799.340	.11325	.23239	-.00120	.22265	.01800	-.03133	-.00025	.00040	-.01444	.23403
-4.998	899.330	.14897	-.03327	-.00334	.22266	.01800	-.03143	-.00024	.00041	-.01443	.23354
GRADIENT	.00000	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2495/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DSETA	CNR	CLIR	CYR	CYNR	CBLR	CAR	WM
-.032	21.373	.06553	1.41490	.04053	.21531	.01473	-.03705	-.00065	-.00039	-.00532	.23516
-.027	50.325	.03304	.24810	-.00428	.24181	.01339	-.03577	-.00033	-.00030	.00007	.23533
-.003	99.646	.03788	-.20325	-.00223	.22397	.01533	-.03440	-.00123	-.00144	-.00017	.23526
.009	149.120	.05318	.63455	.00943	.22373	.01505	-.03241	-.00147	-.00085	-.00920	.23513
.014	199.070	.03251	-.07174	-.00246	.27157	.01639	-.03337	-.00036	-.00034	-.01430	.23438
.023	299.550	.05226	.19002	.00163	.27056	.01035	-.03405	-.00022	-.00035	-.01352	.23462
.015	399.000	.04109	.07000	.00216	.27521	.01228	-.03223	-.00011	-.00028	-.01173	.23419
-.032	499.710	.00483	.24000	-.00093	.25019	.01049	-.03105	-.00047	.00034	-.01483	.23442
-.017	599.480	.12615	.3073	-.00174	.25320	.01315	-.03123	-.00030	.00043	-.01513	.23408
-.014	799.280	.13054	-.03323	-.00449	.22372	.01420	-.03133	-.00025	.00040	-.01458	.23397
-.010	879.270	.13274	.00035	-.00300	.22203	.01431	-.03143	-.00022	.00039	-.01471	.23375
GRADIENT	.00000	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2498/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DSETA	CNR	CLIR	CYR	CYNR	CBLR	CAR	WM
5.028	-51.493	1.16350	1.29170	.03234	.19251	-.01539	-.03456	-.00072	-.00019	-.01587	.23463
4.944	16.122	.00306	.02469	-.00705	.23170	.01031	-.03200	-.00008	-.00075	-.00164	.23541
5.000	49.354	.12055	-.00209	-.00272	.24047	.01173	-.03047	-.00043	-.00140	-.00119	.23447
5.013	99.165	.17285	-.33712	-.00722	.22228	.01033	-.03203	-.00112	-.00033	-.01027	.23444
5.033	159.310	.16342	.26771	.00030	.25757	.01222	-.03431	-.00022	-.00012	-.01467	.23516
4.999	299.970	.13517	-.03223	.00010	.27002	.01031	-.03485	.00013	.00043	-.01453	.23433
4.971	399.450	.03093	.22747	-.00351	.26783	.01091	-.03071	-.00052	.00022	-.01337	.23512
4.986	539.280	.20263	-.13231	-.00342	.24073	.01349	-.03109	-.00029	.00041	-.01533	.23514
GRADIENT	.00023	.00155	-.00044	-.00044	.01437	.01064	-.00247	-.00000	-.00005	-.00010	.01460





DATE 06 MAY 77

TABULATED SOURCE DATA, IA22, (AEDC V41B-D9A)

PAGE 303

V41B-D9A (IA22), ORBITER (O4RC1) W/ET SEPARATING

(SVK038) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2492/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-4.998	174.620	.04000	3.00077	-.00053	.01954	.03280	.04440	-.02763	-.00167	-.00193
-4.996	199.490	.03750	3.00206	-.00046	.01590	.03022	.03838	-.02877	-.00283	-.00074
-4.989	249.180	.03100	3.00028	.00352	-.00098	.02382	.03197	-.02704	-.00131	-.00066
-4.979	298.830	.02360	3.00044	-.00724	-.03403	.01743	.02752	-.02726	-.00158	-.00027
-4.965	398.820	.02040	2.99957	-.00147	-.04912	.01468	.02665	-.02705	-.00078	-.00024
-4.979	498.930	.01540	3.00032	.00059	-.03932	.00966	.03103	-.02292	-.00158	.00101
-5.044	598.870	.01610	3.00009	.00241	-.09359	.01219	.02791	-.02364	-.00136	-.00005
-5.021	698.690	.01220	2.99939	.00411	-.10439	.01514	.02924	-.02366	-.00121	.00047
-5.000	798.340	.01850	2.99990	-.00120	-.10618	.01550	.02931	-.02401	-.00118	.00044
-4.998	898.330	.01650	2.99994	-.00354	-.10620	.01551	.02933	-.02408	-.00117	.00045
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2495/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.052	21.373	.01799	3.00052	.04059	-.11900	.01572	.03777	-.02954	-.00159	-.00034
-.027	50.325	.02694	3.00028	-.00428	-.09316	.02439	.04424	-.03134	-.00127	-.00075
-.003	99.646	.03116	3.00188	-.00928	-.05090	.02633	.04398	-.02698	-.00278	-.00139
.009	149.120	.03149	3.00147	.00943	-.04544	.02694	.03487	-.02600	-.00241	-.00061
.014	198.070	.03111	3.00026	-.00246	-.06259	.02736	.02977	-.02597	-.00130	-.00030
.023	298.550	.02395	2.99997	.00163	-.06460	.01957	.03068	-.02662	-.00116	-.00030
.015	398.000	.01854	2.99974	.00216	-.05954	.01328	.03242	-.02481	-.00105	-.00024
-.032	498.710	.01578	3.00013	-.00093	-.02468	.01149	.02934	-.02363	-.00141	.00059
-.017	598.480	.01752	2.99934	-.00174	-.09035	.01414	.02637	-.02381	-.00125	.00048
-.014	698.280	.01870	2.99939	-.00449	-.10503	.01579	.02957	-.02391	-.00119	.00044
-.010	798.270	.01872	2.99990	-.00300	-.10532	.01583	.02951	-.02400	-.00117	.00044
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2498/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
5.028	-51.493	.00320	3.00036	.03394	-.13760	.00569	.02861	-.02749	-.00167	-.00015
4.944	16.127	.02360	2.99935	-.00705	-.10499	.02137	.04277	-.03234	-.00102	-.00070
5.000	49.384	.02530	3.00032	-.00272	-.08334	.02279	.04323	-.02901	-.00138	-.00135
5.013	99.165	.03080	3.00112	-.00792	-.07649	.02789	.03414	-.02639	-.00207	-.00028
5.033	198.310	.02710	3.00040	.00350	-.07956	.02390	.02979	-.02684	-.00147	-.00008
4.998	298.970	.02230	2.99960	.00010	-.05704	.01788	.02992	-.02738	-.00082	.00047
4.971	398.450	.01690	3.00021	-.00351	-.06879	.01197	.03102	-.02325	-.00147	.00086
4.986	539.280	.01800	2.99992	-.00542	-.09671	.01458	.02918	-.02352	-.00124	.00046
	GRADIENT	.00146	.18608	-.00044	-.00651	.00133	.00265	-.00201	-.00006	-.00004



V41B-D9A (1A22), ORBITER (MRC1) W/ET SEPARATING

(TVK039) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. X1RFP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES Y1RFP = .0000 IN. YO  
 BREF = 1290.3000 INCHES Z1RFP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2492/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-4.998	174.620	-.00504	.32731	-.07728	-.21241	438.83000	.00000	.00000	655.55000	.00000	.00000
-4.996	199.490	.00397	.47937	.10054	.06472	437.83000	.00000	.00000	654.80000	.00000	.00000
-4.989	249.180	-.02533	.37399	-.00479	-.09862	437.83000	.00000	.00000	655.25000	.00000	.00000
-4.979	298.830	.06394	-.15339	.03154	-.03188	438.31000	.00000	.00000	655.95000	.00000	.00000
-4.965	399.820	.00194	.11912	.01821	-.05345	438.55000	.00000	.00000	656.33000	.00000	.00000
-4.979	499.930	-.03113	.06362	.00475	-.07505	438.92000	.00000	.00000	656.83000	.00000	.00000
-5.044	599.870	.12954	.37245	.03553	-.01954	439.13000	.00000	.00000	657.19000	.00000	.00000
-5.021	699.880	.05525	.57716	.03142	-.02318	438.99000	.00000	.00000	656.93000	.00000	.00000
-5.000	799.340	.11385	.23959	.02900	-.02248	439.11000	.00000	.00000	657.17000	.00000	.00000
-4.998	999.330	.14897	-.03327	.02631	-.02060	439.15000	.00000	.00000	657.22000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2495/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-.052	21.373	.06558	1.41490	-.01126	-.06109	442.53000	.00000	.00000	662.28000	.00000	.00000
-.027	50.325	.03594	.24810	.02761	.00755	443.40000	.00000	.00000	663.59000	.00000	.00000
-.003	99.646	.03708	-.20395	.02184	-.00946	443.14000	.00000	.00000	663.20000	.00000	.00000
.009	149.120	.05919	.65455	-.00376	-.04641	442.34000	.00000	.00000	662.00000	.00000	.00000
.014	199.070	.03251	-.07174	.02327	-.00094	442.32000	.00000	.00000	661.97000	.00000	.00000
.023	299.550	.05226	.19002	.01119	-.02121	443.63000	.00000	.00000	663.97000	.00000	.00000
.015	399.000	.04109	.07650	.00040	-.04273	443.10000	.00000	.00000	663.14000	.00000	.00000
-.032	499.710	.00483	.24020	-.00267	-.03936	443.23000	.00000	.00000	663.40000	.00000	.00000
-.017	599.480	.13615	.19973	.02065	-.00489	442.71000	.00000	.00000	662.55000	.00000	.00000
-.014	799.280	.13094	-.28328	.01909	-.00374	443.10000	.00000	.00000	663.14000	.00000	.00000
-.010	879.270	.13874	.05555	.01842	-.00573	443.84000	.00000	.00000	664.24000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2498/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
5.028	-51.493	1.16350	1.29170	.01288	-.00315	446.37000	.00000	.00000	668.04000	.00000	.00000
4.944	16.122	.00366	.02499	.01344	-.00149	445.63000	.00000	.00000	667.00000	.00000	.00000
5.000	49.384	.12935	-.00299	.01398	-.00812	445.77000	.00000	.00000	667.13000	.00000	.00000
5.013	99.185	.17285	-.39712	.01905	.00273	445.73000	.00000	.00000	667.16000	.00000	.00000
5.033	199.310	.16642	.26771	.01625	-.00831	446.25000	.00000	.00000	667.63000	.00000	.00000
4.998	299.970	.13517	-.03228	.00736	-.02464	446.17000	.00000	.00000	667.73000	.00000	.00000
4.971	399.450	.03093	.22747	-.00936	-.04593	445.53000	.00000	.00000	666.85000	.00000	.00000
4.986	539.280	.20263	-.13881	.01757	.00157	446.67000	.00000	.00000	668.49000	.00000	.00000
	GRADIENT	.00023	.00155	.00083	-.00009	27.84421	.00000	.00000	41.37204	.00000	.00000



V41B-D9A (IA22), ORBITER(O4RC1) /ET SEPARATING

(UVK039) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2492/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TBI	TB2	DT	T
-4.898	174.620	976.67000	976.67000	79.00000	976.67000	9'6.46000	65.00000	74.00000	16.16500	99.76800
-4.986	199.490	976.52000	976.52000	79.00000	976.52000	9'6.46000	65.00000	74.00000	19.12500	99.76900
-4.989	249.180	976.21000	976.21000	79.00000	976.21000	9'6.46000	65.00000	74.00000	16.39500	99.76800
-4.979	293.830	976.31000	976.31000	79.00000	976.31000	9'6.46000	65.00000	74.00000	14.39500	99.76300
-4.955	393.820	976.62000	976.62000	79.00000	976.62000	9'6.46000	65.00000	74.00000	13.93200	99.76900
-4.979	499.930	977.19000	977.19000	79.00000	977.19000	9'6.46000	65.00000	74.00000	13.09200	99.76800
-5.044	599.870	977.63000	977.63000	79.00000	977.63000	9'6.46000	65.00000	74.00000	11.91800	99.76900
-5.021	699.680	977.83000	977.83000	79.00000	977.83000	9'6.46000	65.00000	74.00000	10.34400	99.76900
-5.000	799.340	977.62000	977.62000	79.00000	977.62000	9'6.46000	65.00000	74.00000	8.73730	99.76900
-4.998	899.330	977.21000	977.21000	79.00000	977.21000	9'6.46000	65.00000	74.00000	6.76580	99.76900
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2495/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TBI	TB2	DT	T
-0.052	21.373	977.40000	977.40000	79.00000	977.40000	9'7.18000	64.00000	74.00000	-0.42321	99.76800
-0.027	50.325	977.30000	977.30000	79.00000	977.30000	9'7.18000	64.00000	74.00000	-0.14243	99.76800
-0.003	99.646	977.20000	977.20000	79.00000	977.20000	9'7.18000	64.00000	74.00000	-0.14239	99.76300
.009	149.120	976.60000	976.60000	79.00000	976.60000	9'7.18000	64.00000	74.00000	-0.74132	99.76900
.014	199.070	976.60000	976.60000	79.00000	976.60000	9'7.18000	64.00000	74.00000	-0.76241	99.76900
.023	249.530	976.94000	976.94000	79.00000	976.94000	9'7.18000	64.00000	74.00000	-0.51112	99.76300
.015	399.000	976.71000	976.71000	79.00000	976.71000	9'7.18000	64.00000	74.00000	-0.43237	99.76300
-0.032	499.710	976.60000	976.60000	79.00000	976.60000	9'7.18000	64.00000	74.00000	.46653	99.76900
-0.017	599.480	976.33000	976.33000	79.00000	976.33000	9'7.18000	64.00000	74.00000	1.18010	99.76800
-0.014	799.280	976.21000	976.21000	79.00000	976.21000	9'7.18000	64.00000	74.00000	1.23440	99.76800
-0.010	899.270	976.63000	976.63000	79.00000	976.63000	9'7.18000	64.00000	74.00000	.75341	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2493/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TBI	TB2	DT	T
5.029	-51.493	976.51000	976.51000	79.00000	976.51000	9'6.30000	64.00000	74.00000	-1.17470	99.64200
4.944	16.122	976.48000	976.48000	79.00000	976.48000	9'6.30000	64.00000	74.00000	-1.72850	99.64200
5.000	49.384	976.17000	976.17000	79.00000	976.17000	9'6.30000	64.00000	74.00000	-3.20950	99.64200
5.013	99.165	976.22000	976.22000	79.00000	976.22000	9'6.30000	64.00000	74.00000	-3.89040	99.64200
5.033	193.310	976.23000	976.23000	79.00000	976.23000	9'6.30000	64.00000	74.00000	-4.73330	99.64200
4.993	293.970	976.07000	976.07000	79.00000	976.07000	9'6.30000	64.00000	74.00000	-5.47970	99.64200
4.971	393.450	976.77000	976.77000	79.00000	976.77000	9'6.30000	64.00000	74.00000	-4.52430	99.64200
4.986	539.280	977.17000	977.17000	79.00000	977.17000	9'6.30000	64.00000	74.00000	-2.74330	99.64200
	GRADIENT	60.56817	60.56817	4.90014	60.56817	10.55700	3.96973	4.59000	-1.0721	6.18050

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2775/ 0 RN/L = .66 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-20.006	624.820	-.05570	.21091	-19.99800	2.99990	-.41032	-.00753	-.03941	-.00747	.00064	.11477
-19.959	698.460	-.25475	-.05970	-19.99500	2.99530	-.41469	.00894	-.03038	-.00767	.00060	.14017
-19.947	798.420	-.31952	-.23546	-19.99100	2.99590	-.41384	.03964	-.03681	-.00826	.00085	.16776
-20.015	999.440	.05374	-.01589	-19.99800	2.99820	-.31597	-.03665	-.03817	-.00675	.00036	.11809
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2779/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-15.018	474.560	.11192	-.05509	-14.99300	2.99570	-.31250	-.00506	-.04033	-.00653	.00045	.10311
-15.021	499.380	.07712	-.33068	-15.00700	2.99530	-.31133	-.01530	-.03044	-.00753	.00045	.10888
-14.981	548.880	-.08214	-.12146	-14.99000	2.99520	-.31916	-.00509	-.03698	-.00769	.00039	.11730
-14.982	598.940	-.00027	-.46221	-14.98500	2.99210	-.31817	.00949	-.03732	-.00762	.00039	.12804
-14.971	698.610	-.16500	-.20455	-14.97000	2.99550	-.31031	.03003	-.03539	-.00808	.00044	.15054
-15.083	808.230	.22352	.17978	-15.06700	2.99390	-.21542	-.00541	-.03423	-.00839	.00035	.12647
-15.069	999.920	.32151	-.03617	-15.04900	2.99760	-.21954	-.03794	-.03440	-.00819	.00034	.10870
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2783/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-10.514	349.510	.05441	.22656	-10.48900	3.00140	-.24951	-.00330	-.03553	-.00849	.00028	.10463
-10.511	399.120	.06693	-.60978	-10.49500	2.99930	-.22565	-.00939	-.03568	-.00818	.00028	.10015
-10.493	448.560	-.01218	-.17179	-10.48200	2.99540	-.21261	-.00078	-.03542	-.00812	.00023	.10833
-10.485	498.970	.03228	-.19174	-10.47800	2.99440	-.24149	.00950	-.03499	-.00781	.00021	.11667
-10.484	598.790	-.05572	-.16095	-10.47500	2.99770	-.24481	.02331	-.03209	-.00690	.00022	.13295
-10.569	699.940	.23958	-.18312	-10.55200	2.99500	-.18193	-.00819	-.03081	-.00834	.00016	.11138
-10.550	799.840	.25897	-.26363	-10.53100	2.99560	-.14142	-.03103	-.03040	-.00929	.00018	.09993
-10.512	999.170	.21077	-.24007	-10.49300	2.99420	-.13998	-.03033	-.03104	-.00914	.00019	.10242
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

DATE 06 MAY 77

TABULATED SOURCE DATA, IA22, (AEDC V41B-D9A)

PAGE 309

V41B-D9A (IA22), ET SEPARATING FROM ORB (04RC1)

(AVK038) (04 MAY 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2492/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEL	CA
-4.998	174.620	-.00504	.32731	-4.95750	3.00130	-.16392	-.0.046	-.03669	-.00842	.00037	.09755
-4.996	199.490	-.00397	.47937	-4.95680	3.00160	-.16324	-.00035	-.03637	-.00791	.00039	.09661
-4.989	249.180	-.02533	.37399	-4.95800	3.00390	-.14570	-.00081	-.03554	-.00830	.00038	.09409
-4.979	298.630	.06394	-.13339	-4.95600	2.99320	-.14323	.00478	-.03506	-.00818	.00029	.09556
-4.965	398.820	.00194	.11912	-4.94420	2.99210	-.14402	.01660	-.03284	-.00824	.00030	.10839
-4.979	498.930	-.03113	.06362	-4.95330	3.00090	-.13503	.02314	-.02746	-.01018	.00027	.11772
-5.044	599.870	.12534	.37245	-5.02790	3.00250	-.08142	-.00564	-.02760	-.01047	.00014	.09457
-5.021	699.690	.05325	.57716	-5.00280	3.00410	-.05345	-.01544	-.02760	-.01022	.00025	.08917
-5.000	799.340	.11385	.23958	-4.99110	2.99670	-.06433	-.01521	-.02757	-.01008	.00025	.09211
-4.998	999.330	.14897	-.03327	-4.97990	2.99630	-.06387	-.01482	-.02804	-.01003	.00025	.09376
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00100	.00000	.00000	.00000	.00000	.00000

RUN NO. 2495/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEL	CA
-.052	21.373	.06559	1.41490	-.03381	3.04110	-.03130	-.00757	-.03441	-.00856	.00053	.08414
-.027	50.325	.03594	.24810	-.00030	2.99500	-.05333	-.00843	-.03296	-.00742	.00032	.08537
-.003	99.646	.03708	-.20385	.02826	2.99260	-.07351	-.00005	-.02768	-.00704	.00030	.08585
.009	149.120	.05818	.85456	.04072	3.01090	-.07345	.00929	-.03316	-.00750	.00027	.08978
.014	199.070	.03251	-.07174	.04519	2.99780	-.07371	.01718	-.03295	-.00787	.00031	.09593
.023	298.550	.05226	.19002	.04713	3.00160	-.07329	.02881	-.02897	-.00939	.00015	.10572
.015	399.000	.04109	.07650	.03342	3.00190	-.05778	.022.3	-.02564	-.01149	.00000	.10749
-.032	499.710	.00483	.24080	-.01622	2.99220	-.01350	.00554	-.02589	-.01125	.00012	.08908
-.017	599.480	.13615	.19973	.00081	2.99320	-.00350	.00116	-.02662	-.01059	.00019	.08748
-.014	799.280	.13094	-.08358	.00475	2.99540	-.00370	.00083	-.02695	-.01046	.00020	.08881
-.010	879.270	.13874	.05665	.00915	2.99690	-.00349	.00124	-.02673	-.01039	.00018	.08992
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00100	.00000	.00000	.00000	.00000	.00000

RUN NO. 2498/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEL	CA
5.028	-51.493	1.16350	1.29170	5.03590	3.03420	.05356	.00892	-.03416	-.00678	.00038	.08338
4.944	16.122	.00366	.02499	4.95740	2.99290	.00343	.00589	-.03334	-.00531	.00017	.08495
5.000	49.384	.12935	-.00299	5.02530	2.99750	-.00343	.01334	-.03241	-.00594	.00006	.08689
5.013	99.165	.17265	-.39712	5.04360	2.99320	-.01387	.02501	-.02991	-.00668	.00008	.09204
5.033	198.310	.16642	.26771	5.05040	3.00990	-.00387	.03979	-.02541	-.01094	.00006	.09907
4.998	298.970	.13517	-.03228	5.02060	2.99970	.01134	.03762	-.02303	-.01292	-.00009	.10060
4.971	399.450	.03093	.22747	4.99310	2.99670	.04111	.02078	-.02654	-.01149	.00015	.08704
4.986	539.280	.20263	-.13281	5.00390	2.99450	.04356	.01873	-.02832	-.01068	.00018	.08834
GRADIENT	.00023	.00155	.30811	.18564	.00115	.00037	-.00207	-.00033	.00001	.00001	.00527





V41B-D9A (1A22), ORBITER(04RC1) W/ET SEPARATING

(RVK039) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. YO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. /O  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2493/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-5.019	175.230	200.19000	.29997	-.00065	.37251	.01476	-.03494	-.00066	.00025	-.01242	.23396
-5.009	200.100	200.17000	-.17793	-.00638	.35678	.00978	-.03591	-.00029	-.00008	-.01422	.23415
-5.011	250.040	200.12000	.20082	-.00095	.32111	.00567	-.03516	-.00051	-.00045	-.01334	.23470
-5.039	300.430	200.14000	.17364	.00161	.29521	.00472	-.03477	-.00010	-.00016	-.01513	.23528
-5.033	400.450	200.22000	.10045	-.00403	.26505	.00050	-.03185	-.00017	-.00042	-.01158	.23336
-4.995	499.870	200.15000	-.08272	-.01023	.25185	-.00058	-.03098	-.00050	.00073	-.01488	.23359
-4.956	599.010	200.11000	.20734	-.00052	.23429	.00260	-.03120	-.00034	.00046	-.01530	.23507
-4.993	699.520	200.20000	-.20613	-.00467	.22603	.00465	-.03153	-.00025	.00040	-.01458	.23501
-4.998	799.420	200.17000	.01830	-.00495	.22616	.00465	-.03131	-.00025	.00041	-.01444	.23364
-4.996	899.330	200.20000	-.00516	-.00306	.22606	.00464	-.03144	-.00021	.00041	-.01453	.23405
	GRADIENT	.00000	.00000	-.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2496/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-.018	19.597	200.03000	.19045	-.00264	.27311	.02329	-.03545	-.00100	-.00045	.00173	.23535
-.036	50.359	199.52000	.33007	-.00475	.29746	.02711	-.03508	-.00138	-.00118	-.00513	.23381
-.032	100.250	200.07000	.26542	-.00107	.31018	.02148	-.03506	-.00157	-.00020	-.00802	.23453
-.028	150.220	200.01000	.51756	.00089	.29138	.01591	-.03459	-.00022	-.00031	-.01375	.23465
-.046	200.350	200.09000	.09773	-.0.163	.27334	.01039	-.03476	-.00055	-.00030	-.01550	.23453
-.030	300.310	200.07000	.23439	-.00277	.27827	.00553	-.03456	.00021	.00026	-.01404	.23467
.008	399.760	200.01000	.17293	-.00514	.27088	-.00045	-.03092	-.00053	.00099	-.01356	.23477
.037	499.070	200.03000	.19169	.00013	.24150	.00196	-.03095	-.00037	.00002	-.01597	.23514
.001	599.450	200.04000	.03827	-.00199	.23981	.00468	-.03138	-.00024	.00040	-.01458	.23522
-.010	759.270	200.05000	-.04047	-.00422	.22561	.00481	-.03168	-.00020	.00040	-.01471	.23525
-.008	879.270	200.05000	-.05635	-.00406	.23009	.00483	-.03148	-.00023	.00039	-.01472	.23417
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2499/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
5.025	-51.774	200.18000	.00355	-.00024	.22357	.00596	-.03972	-.00089	-.00099	.00127	.23492
4.377	14.827	199.93000	.40458	.00438	.26539	.02149	-.03466	-.00029	-.00113	-.00639	.23514
4.972	50.008	200.02000	.29163	-.00222	.27674	.01693	-.03565	-.00162	.00026	-.00681	.23443
4.933	100.630	200.04000	-.16392	-.01135	.25933	.01772	-.03551	-.00033	.00024	-.01418	.23457
4.962	200.200	200.00000	.07080	-.00723	.25537	.00508	-.03412	-.00023	-.00027	-.01348	.23448
4.994	299.620	200.11000	.23410	-.00241	.27731	.00294	-.03207	-.00009	-.00038	-.01180	.23540
5.011	399.190	200.15000	-.01812	-.00132	.25278	.00129	-.03108	-.00040	.00042	-.01492	.23382
4.987	539.280	200.00000	.18198	.00021	.23535	.00497	-.03123	-.00023	.00038	-.01478	.23460
	GRADIENT	13.48756	.02731	.00030	.01821	.00145	-.00234	-.00006	-.00008	-.00043	.01586

V41B-D9A (1A22) ORBITER(04RC1) W/ET SEPARATING

(SVK039) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2776/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-20.037	625.620	-.01000	3.00154	-.00814	.21476	-.03284	.02199	-.01810	-.00331	.00159
-20.077	700.730	-.01100	2.99935	-.00015	.02507	-.02665	.00984	-.01877	-.00178	.00285
-19.955	799.350	-.00300	2.99995	-.00145	.01951	-.01502	.00695	-.01634	-.00156	.00081
-19.971	999.950	.01900	3.00159	-.00268	-.11077	.01625	.02295	-.01986	-.00279	.00052
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2780/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-14.983	474.390	-.00400	3.00063	-.00233	.18160	-.02371	.02492	-.02154	-.00227	-.00034
-15.027	499.970	.00000	3.00128	-.00358	.11180	-.01690	.02428	-.01910	-.00284	-.00016
-15.039	550.040	-.00200	3.00042	.00158	.04269	-.01477	.01730	-.01717	-.00205	.00216
-15.053	600.390	.00000	3.00146	.00014	-.01296	-.00935	.01415	-.01874	-.00294	.00191
-15.029	700.090	.01300	3.00167	-.00527	-.02391	.00745	.01950	-.01935	-.00290	.00111
-14.907	799.400	.01800	3.00161	-.00171	-.10463	.01465	.02240	-.02006	-.00281	.00053
-15.016	999.380	.01900	3.00170	-.00210	-.11059	.01618	.02329	-.02012	-.00283	.00056
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2784/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-10.475	349.380	.01100	3.00102	.00178	.09049	-.00273	.02185	-.02417	-.00230	.00078
-10.532	399.890	.01300	3.00093	-.00393	.02269	.00270	.02546	-.02341	-.00212	.00019
-10.536	450.020	.01100	3.00157	-.00177	-.00991	.00280	.02522	-.01997	-.00235	-.00057
-10.556	500.390	.01200	3.00181	-.00420	-.04091	.00445	.02406	-.01912	-.00310	.00148
-10.523	599.980	.01500	3.00159	-.00808	-.09412	.01143	.02255	-.01977	-.00278	-.00034
-10.453	699.100	.01900	3.00166	-.00296	-.10785	.01551	.02412	-.02017	-.00279	.00056
-10.491	799.130	.01900	3.00174	-.00474	-.11005	.01617	.02451	-.02027	-.00233	.00057
-10.516	999.310	.01900	3.00165	-.00465	-.11009	.01614	.02432	-.02016	-.00281	.00056
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REPRODUCIBILITY OF THE  
 ORIGINAL PAGE IS POOR

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2493/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.019	175.230	.03440	3.00065	-.00065	.03941	.02570	.03150	-.02756	-.00160	-.00030
-5.009	200.100	.02620	3.00018	-.00638	.02369	.02073	.02971	-.02652	-.00123	-.00003
-5.011	250.040	.02380	3.00035	-.00095	-.01194	.01662	.03058	-.02778	-.00145	-.00041
-5.039	300.430	.02180	2.99999	.00161	-.03774	.01567	.02878	-.02740	-.00104	-.00011
-5.033	400.450	.01750	2.99983	-.00403	-.04651	.01143	.03228	-.02448	-.00111	-.00037
-4.995	499.870	.01490	3.00013	-.01023	-.08094	.01035	.02000	-.02361	-.00144	.00078
-4.956	599.010	.01710	3.00002	-.00652	-.09301	.01352	.02053	-.02393	-.00128	.00050
-4.993	699.520	.01630	2.99997	-.00467	-.10637	.01557	.02926	-.02417	-.00119	.00045
-4.998	799.420	.01630	2.99995	-.00496	-.10593	.01555	.02935	-.02395	-.00118	.00045
-4.996	899.330	.01650	2.99996	-.00396	-.10329	.01555	.02931	-.02409	-.00114	.00045
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2496/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.018	19.597	.03715	3.00114	-.00264	-.06280	.03432	.04603	-.02900	-.00194	-.00041
-.036	50.359	.04171	3.00155	.00475	-.03937	.03914	.03916	-.02764	-.00233	-.00114
-.032	100.250	.03730	3.00167	-.00107	-.02347	.03251	.03225	-.02762	-.00252	-.00016
-.028	150.220	.03141	3.00011	.00009	-.04489	.02695	.03050	-.02714	-.00117	-.00026
-.046	200.350	.02558	3.00043	-.00163	-.06270	.02144	.02622	-.02731	-.00149	-.00026
-.030	300.310	.02166	2.99947	-.00277	-.05750	.01657	.03025	-.02712	-.00074	.00031
.008	399.760	.01695	3.00014	-.00514	-.06513	.01059	.03076	-.02337	-.00147	.00103
.037	499.070	.01668	3.00007	.00013	-.09439	.01300	.02833	-.02351	-.00131	.00007
.001	599.450	.01634	2.99999	-.00199	-.10474	.01571	.02238	-.02395	-.00118	.00045
-.010	799.270	.01871	2.99992	-.00422	-.10593	.01594	.02235	-.02424	-.00114	.00045
-.008	879.270	.01874	2.99998	-.00408	-.10553	.01593	.02956	-.02404	-.00118	.00043
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2499/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
5.025	-51.774	.01930	3.00074	-.00024	-.11440	.01716	.04585	-.03223	-.00184	-.00095
4.977	14.827	.03530	3.00092	.00439	-.06732	.03257	.03809	-.02718	-.00184	-.00108
4.972	50.008	.03330	3.00172	-.00022	-.05057	.03001	.03569	-.02818	-.00257	-.00031
4.933	100.630	.03200	3.00026	-.01135	-.05759	.02231	.03034	-.02603	-.00129	.00028
4.962	200.200	.02430	2.99998	-.00798	-.05787	.02017	.03106	-.02634	-.00118	-.00023
4.994	299.620	.01910	2.99971	-.00241	-.06035	.01404	.03273	-.02459	-.00104	-.00034
5.011	399.190	.01650	3.00002	-.00132	-.08470	.01238	.02959	-.02360	-.00135	.00047
4.987	539.280	.01900	2.99939	.00021	-.10217	.01606	.02973	-.02375	-.00118	.00043
	GRADIENT	.00238	.20240	.00030	-.00454	.00220	.00257	-.00183	-.00012	-.00007



DATE 06 MAY 77

TABULATED SOURCE DATA, IA22, (AEDC V418-D9A)

PAGE 315

V418-D9A (IA22), ORBITER(04RC1) W/ET SEPARATING

(TVK039) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRF = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRF = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRF = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2493/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CIFD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.019	175.230	200.19000	.29997	.02518	-.02409	440.31000	.00000	.00000	659.87000	.00000	.00000
-5.009	200.100	200.17000	-.17793	.00326	-.07075	440.32000	.00000	.00000	659.83000	.00000	.00000
-5.011	250.040	200.12000	.20002	-.00760	-.07430	440.33000	.00000	.00000	659.79000	.00000	.00000
-5.039	300.430	200.14000	.17334	.01625	-.02310	440.72000	.00000	.00000	659.57000	.00000	.00000
-5.033	400.450	200.22000	.10045	-.00058	-.05453	440.30000	.00000	.00000	658.80000	.00000	.00000
-4.995	499.870	200.15000	-.08272	-.00553	-.05278	440.32000	.00000	.00000	659.07000	.00000	.00000
-4.956	599.010	200.11000	.20734	.02137	-.01144	439.37000	.00000	.00000	658.30000	.00000	.00000
-4.993	699.520	200.20000	-.20513	.02161	-.01504	440.30000	.00000	.00000	658.49000	.00000	.00000
-4.998	799.420	200.17000	.01650	.02246	-.01640	439.33000	.00000	.00000	657.94000	.00000	.00000
-4.996	899.330	200.20000	-.00515	.02384	-.01703	439.33000	.00000	.00000	659.39000	.00000	.00000
	GRADIENT	00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2496/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CIFD	CTFS	CTFU	CTAD	CTAS	CTAU
-.018	19.597	200.03000	.19045	.01602	-.00102	444.34000	.00000	.00000	665.45000	.00000	.00000
-.036	50.359	199.92000	.33007	.01632	.00220	444.33000	.00000	.00000	665.28000	.00000	.00000
-.032	100.250	200.07000	.23542	.01157	-.00734	444.30000	.00000	.00000	664.93000	.00000	.00000
-.028	150.220	200.01000	.51755	-.00726	-.04079	445.30000	.00000	.00000	666.18000	.00000	.00000
-.046	200.350	200.02000	.09773	.01547	.00431	444.32000	.00000	.00000	665.71000	.00000	.00000
-.030	300.310	200.07000	.25439	.00276	-.02337	444.30000	.00000	.00000	665.16000	.00000	.00000
.008	399.750	200.01000	.17235	-.01608	-.05332	444.38000	.00000	.00000	665.62000	.00000	.00000
.037	499.070	200.03000	.19169	.01625	.00254	444.31000	.00000	.00000	665.40000	.00000	.00000
.001	599.450	200.04000	.06997	.01536	-.00180	444.30000	.00000	.00000	664.73000	.00000	.00000
-.010	799.270	200.03000	-.04047	.01630	-.00359	444.32000	.00000	.00000	664.82000	.00000	.00000
-.008	879.270	200.05000	-.05935	.01636	-.00447	444.30000	.00000	.00000	665.03000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2499/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CIFD	CTFS	CTFU	CTAD	CTAS	CTAU
5.025	-51.774	200.18000	.00955	.01204	-.00186	447.37000	.00000	.00000	669.53000	.00000	.00000
4.977	14.827	199.99000	.40498	.01418	.00466	446.40000	.00000	.00000	663.22000	.00000	.00000
4.972	50.008	200.02000	.29153	.00940	-.00357	446.42000	.00000	.00000	663.41000	.00000	.00000
4.933	100.630	200.04000	-.16332	.01758	.00503	446.48000	.00000	.00000	668.64000	.00000	.00000
4.962	200.200	200.00000	.07080	.00599	-.00376	447.46000	.00000	.00000	669.07000	.00000	.00000
4.994	299.620	200.11000	.23410	-.00515	-.02778	446.42000	.00000	.00000	669.94000	.00000	.00000
5.011	399.190	200.15000	-.01812	-.00849	-.02359	446.43000	.00000	.00000	668.53000	.00000	.00000
4.987	539.280	200.00000	.18198	.01513	.00241	446.48000	.00000	.00000	668.64000	.00000	.00000
	GRADIENT	13.48756	.02731	.00096	.00031	30.1398	.00000	.00000	45.06778	.00000	.00000



V41B-D9A (IA22).ORBITER(O4R:1) W/ET SEPARATING

(UVK038) ( 20 APR 77 )

REFERENCE DATA

SREF = 2890.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0900 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UNBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2493/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-5.019	175.230	976.27000	976.27000	79.00000	976.27000	976.80000	64.00000	74.00000	6.43460	99.64200
-5.009	200.100	976.29000	976.29000	79.00000	976.29000	976.80000	64.00000	74.00000	6.47910	99.64200
-5.011	250.040	976.64000	976.64000	79.00000	976.64000	976.80000	64.00000	74.00000	4.68540	99.64200
-5.039	300.430	976.81000	976.81000	79.00000	976.81000	976.80000	64.00000	74.00000	2.12430	99.64200
-5.033	400.450	976.64000	976.64000	79.00000	976.64000	976.80000	64.00000	74.00000	1.58130	99.64200
-4.995	499.870	976.55000	976.55000	79.00000	976.55000	976.80000	64.00000	74.00000	1.49040	99.64200
-4.956	599.010	976.87000	976.87000	79.00000	976.87000	976.80000	64.00000	74.00000	1.79210	99.64200
-4.993	699.520	977.16000	977.16000	79.00000	977.16000	976.80000	64.00000	74.00000	2.30240	99.64200
-4.999	799.420	977.31000	977.31000	79.00000	977.31000	976.80000	64.00000	74.00000	2.94150	99.64200
-4.996	899.330	977.01000	977.01000	79.00000	977.01000	976.80000	64.00000	74.00000	4.05110	99.64200
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2496/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-.018	19.597	976.66000	976.66000	79.00000	976.66000	977.36000	64.00000	74.00000	-.26934	99.76800
-.036	50.359	976.42000	976.42000	79.00000	976.42000	977.36000	64.00000	74.00000	.35221	99.76800
-.032	100.250	976.89000	976.89000	79.00000	976.89000	977.36000	64.00000	74.00000	.31469	99.76800
-.028	150.220	976.75000	976.75000	79.00000	976.75000	977.36000	64.00000	74.00000	-.35687	99.76800
-.046	200.350	977.04000	977.04000	79.00000	977.04000	977.36000	64.00000	74.00000	-.05456	99.76800
-.030	300.310	977.23000	977.23000	79.00000	977.23000	977.36000	64.00000	74.00000	-.78503	99.76800
.009	399.760	977.46000	977.46000	79.00000	977.46000	977.36000	64.00000	74.00000	-.91467	99.76800
.037	499.070	977.57000	977.57000	79.00000	977.57000	977.36000	64.00000	74.00000	-1.31770	99.76800
.001	599.450	977.57000	977.57000	79.00000	977.57000	977.36000	64.00000	74.00000	-1.15770	99.76800
-.010	799.270	977.70000	977.70000	79.00000	977.70000	977.36000	64.00000	74.00000	-.70431	99.76800
-.008	899.270	977.59000	977.59000	79.00000	977.59000	977.36000	64.00000	74.00000	-.33523	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2499/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
5.025	-51.774	976.71000	976.71000	79.00000	976.71000	976.68239	64.00000	74.00000	-2.70880	99.76800
4.977	14.827	977.23000	977.23000	79.00000	977.23000	976.68239	64.00000	74.00000	-2.09970	99.76800
4.972	50.009	976.56000	976.56000	79.00000	976.56000	976.68239	64.00000	74.00000	-1.71320	99.76800
4.933	100.630	976.90000	976.90000	79.00000	976.90000	976.68239	64.00000	74.00000	-1.43970	99.76800
4.962	200.200	977.03000	977.03000	79.00000	977.03000	976.68239	64.00000	74.00000	-.63317	99.76800
4.994	299.620	977.34000	977.34000	79.00000	977.34000	976.68239	64.00000	74.00000	-1.07800	99.76800
5.011	399.190	976.73000	976.73000	79.00000	976.73000	976.68239	64.00000	74.00000	-1.54410	99.76800
4.987	539.280	976.93000	976.93000	79.00000	976.93000	976.68239	64.00000	74.00000	-1.57770	99.76800
	GRADIENT	65.91219	65.91219	5.32312	65.91219	65.87239	4.31645	4.99089	-.14161	6.72981





DATE 06 MAY 77

TABULATED SOURCE DATA, 1A22, (AEDC V418-D9A)

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V418-D9A (1A22), ET SEPARATION FROM ORB (04RC1)

(AVK039) (04 MAY 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2493/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEL	CA
-5.019	175.230	200.19000	.29997	-4.99430	3.00000	-.17190	-.00915	-.03532	-.00943	.00045	.10036
-5.009	200.100	200.17000	-.17793	-4.97950	2.99360	-.16424	-.00623	-.03637	-.00930	.00040	.09857
-5.011	250.040	200.12000	.20082	-4.93670	2.99940	-.14147	-.01114	-.03799	-.00929	.00031	.09272
-5.039	300.430	200.14000	.17354	-5.01720	3.00150	-.13409	-.00842	-.03662	-.00855	.00041	.09263
-5.033	400.450	200.22000	.10045	-5.01590	2.99590	-.14042	.00570	-.03515	-.00756	.00037	.09916
-4.935	469.870	200.15000	-.02272	-4.97970	2.99390	-.14425	.02034	-.03105	-.00905	.00040	.11161
-4.956	599.010	200.11000	.20734	-4.93970	2.99350	-.11657	.01606	-.02550	-.01129	.00023	.11430
-4.993	659.520	200.20000	-.20613	-4.97450	2.99330	-.06920	-.01247	-.02704	-.01054	.00013	.09075
-4.998	799.420	200.17000	.01630	-4.97030	2.99300	-.06348	-.01525	-.02728	-.01013	.00025	.09037
-4.996	999.330	200.20000	-.00516	-4.97740	2.99580	-.06354	-.01482	-.02326	-.01020	.00025	.09398
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2496/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEL	CA
-.018	19.597	200.03000	.19045	.01692	2.99550	-.08282	-.02052	-.02173	-.00980	.00044	.09108
-.036	50.359	199.99000	.33007	.00620	3.00630	-.09381	-.01663	-.02693	-.01040	.00034	.09105
-.032	100.250	200.07000	.26542	.00539	3.00050	-.08277	-.00747	-.03105	-.00250	.00028	.09003
-.028	150.220	200.01000	.51795	.00327	3.00100	-.07164	-.00323	-.03316	-.00795	.00032	.08591
-.046	200.350	200.05000	.09773	-.02010	2.99020	-.07149	.00504	-.03337	-.00697	.00021	.09065
-.030	300.310	200.07000	.23439	-.00843	2.99670	-.07029	.01735	-.03426	-.00805	.00029	.09766
.008	399.760	200.01000	.17295	.02355	2.99500	-.07029	.02661	-.02691	-.01030	.00019	.10653
.037	499.070	200.03000	.19169	.05405	3.00020	-.04451	.02271	-.02379	-.01173	.00009	.10574
.001	599.450	200.04000	.06597	.01927	2.99790	-.00758	.00163	-.02523	-.01079	.00014	.08704
-.010	799.270	200.08000	-.04047	.00977	2.99370	-.00530	.00090	-.02397	-.01039	.00019	.08946
-.008	879.270	200.05000	-.05965	.01112	2.99590	-.09547	.00122	-.02663	-.01039	.00018	.08990
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2499/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEL	CA
5.025	-51.774	200.18000	.00955	5.04400	3.00050	.03038	.00126	-.02802	-.01028	.00038	.08522
4.977	14.827	199.99000	.40493	5.01270	3.00530	-.01049	-.00013	-.03136	-.00848	.00028	.08513
4.972	50.008	200.02000	.28163	5.00490	3.00150	-.01352	.00590	-.03263	-.00749	.00019	.08893
4.933	100.630	200.04000	-.16392	4.98450	2.99320	-.01291	.01458	-.03105	-.00728	.00015	.08905
4.962	200.200	200.00000	.07080	4.99350	2.99200	-.01186	.03061	-.02856	-.00954	.00010	.09676
4.994	299.620	200.11000	.23410	5.01350	2.99730	-.00214	.03051	-.02461	-.01197	.00010	.10024
5.011	399.190	200.15000	-.01812	5.02790	2.99370	.02311	.03122	-.02328	-.01253	-.00001	.09699
4.987	539.280	200.00000	.18198	5.00550	3.00010	.04971	.01839	-.02856	-.01074	.00019	.08793
GRADIENT	13.48755		.02731	.33808	.20269	-.00071	-.00001	-.00212	-.00057	.00002	.00574



REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2494/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CLR	CAR	HM
-5.021	175.190	399.67000	.03993	-.00761	.35152	.01223	-.03969	-.00064	-.00059	-.01340	.23483
-4.993	199.180	400.01000	.49726	.00031	.35940	.00224	-.00259	-.00027	-.00039	-.01195	.23482
-4.995	249.020	399.90000	.09377	.00259	.33265	.00180	-.05335	.00001	-.00043	-.01259	.23420
-5.011	299.440	400.05000	.11552	-.00222	.30209	.00012	-.03425	.00012	-.00041	-.01379	.23466
-4.958	399.700	400.04000	.30078	-.00517	.27295	.00159	-.03054	-.00055	.00111	-.01402	.23390
-4.953	499.830	399.95000	.09054	-.00339	.24132	.00118	-.03074	-.00040	-.00012	-.01637	.23449
-4.975	599.230	400.00000	.26155	.00471	.22284	.00446	-.03123	-.00024	.00041	-.01490	.23466
-5.051	699.490	400.00000	.43476	.00253	.22797	.00459	-.03147	-.00021	.00041	-.01420	.23441
-5.035	799.230	400.25000	-.02023	-.00310	.22048	.00470	-.03120	-.00022	.00040	-.01473	.23371
-4.999	899.350	400.13000	.25157	-.00114	.22791	.00471	-.03135	-.00024	.00041	-.01474	.23357
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2497/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CLR	CAR	HM
-.067	21.277	400.01000	.29397	-.00022	.32522	.03371	-.02550	-.00195	-.00039	-.00658	.23443
.017	48.545	400.16000	.55347	-.00415	.32540	.02340	-.03729	-.00095	-.00022	-.00991	.23426
.042	93.345	400.11000	.21243	.00000	.31500	.01752	-.00225	-.00039	.00000	-.01247	.23507
.016	149.950	400.00000	.20249	.00143	.31253	.00209	-.00254	-.00043	.00005	-.01223	.23449
-.004	199.210	400.12000	.10022	.00246	.20226	.00373	-.03429	-.00014	-.00032	-.01423	.23619
.026	299.710	400.16000	.05372	-.00202	.20322	.00121	-.03124	-.00041	-.00043	-.01156	.23482
.028	399.650	400.11000	-.12203	-.00316	.25335	.00044	-.03113	-.00044	.00046	-.01540	.23459
.018	499.820	400.11000	.35226	.00327	.23548	.00329	-.03127	-.00028	.00040	-.01544	.23436
-.020	599.490	400.14000	.07341	-.00225	.22202	.00209	-.03145	-.00020	.00039	-.01497	.23443
-.022	799.480	400.11000	.30411	-.00187	.23243	.00299	-.03145	-.00021	.00038	-.01493	.23498
-.015	879.310	400.12000	.12228	-.00120	.23238	.00309	-.03139	-.00021	.00039	-.01489	.23466
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2500/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CLR	CAR	HM
4.992	-50.542	400.15000	.19547	-.00062	.29017	.03180	-.03473	-.00221	-.00046	-.00515	.23495
5.042	13.214	400.21000	.21311	.00570	.28046	.02330	-.03591	-.00058	-.00013	-.01105	.23409
5.006	49.019	400.15000	.15408	.00133	.28207	.01763	-.03512	-.00019	.00001	-.01343	.23412
5.002	93.909	400.20000	.51914	.00040	.21303	.01050	-.03425	-.00034	-.00073	-.01330	.23444
5.022	199.540	400.24000	-.00309	-.00209	.27346	.00308	-.03410	.00010	.00019	-.01322	.23365
5.033	299.490	400.22000	.00492	-.00111	.27024	.00357	-.03127	-.00043	.00059	-.01367	.23399
5.009	399.650	400.21000	.49313	.00633	.24676	.00233	-.03100	-.00033	.00009	-.01578	.23468
4.968	539.360	400.20000	.03368	-.00537	.23561	.00333	-.03151	-.00022	.00037	-.01462	.23485
GRADIENT	30.25382	.01613	.00043	.02266	.00181	-.00272	-.00007	-.00001	-.00004	.01772	

V41B-D9A (IA22), ORBITER (O4RC1) W/ET SEPARATING

(SVK040) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UNBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2777/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-20.048	625.490	-.00900	3.00012	.00018	.05545	-.02246	.00815	-.01711	-.00194	.00204
-20.003	699.350	.00600	3.00016	-.00116	-.04077	-.00228	.01145	-.01800	-.00171	.00144
-19.961	798.720	.01400	3.00158	-.00268	-.07745	.00997	.01934	-.01924	-.00297	.00105
-19.949	999.090	.01900	3.00165	.00535	-.11096	.01629	.02253	-.01997	-.00290	.00054
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2781/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-15.034	475.040	-.00300	3.00139	-.00399	.07439	-.01777	.01637	-.01866	-.00297	.00177
-15.061	500.000	.00200	3.00144	-.00244	.01529	-.00892	.01892	-.01884	-.00290	.00204
-15.021	549.460	.00600	3.00150	-.00220	-.04558	-.00113	.01714	-.01969	-.00293	.00126
-14.990	599.250	.01200	3.00152	-.00522	-.07645	.00664	.01835	-.02030	-.00275	-.00011
-14.975	649.600	.01700	3.00170	-.00520	-.10523	.01174	.02232	-.02011	-.00280	.00055
-14.970	799.630	.01900	3.00170	-.00300	-.11020	.01613	.02317	-.02008	-.00279	.00057
-15.094	1000.000	.01200	3.00171	-.00331	-.11051	.01615	.02337	-.01938	-.00283	.00057
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2785/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-10.517	349.970	.00900	3.00062	-.00372	.05592	-.00287	.02430	-.02311	-.00202	.00014
-10.557	399.830	.00900	3.00181	-.00371	.00334	-.00035	.02593	-.01850	-.00315	-.00027
-10.512	449.240	.01000	3.00179	-.00329	-.04226	.00313	.02277	-.01918	-.00303	.00171
-10.495	499.110	.01400	3.00184	-.00854	-.07893	.00276	.02292	-.01986	-.00286	.00077
-10.472	598.620	.01700	3.00166	-.00255	-.10091	.01358	.02333	-.01986	-.00280	.00045
-10.477	698.630	.01900	3.00167	-.00087	-.11022	.01606	.02458	-.02028	-.00282	.00057
-10.525	799.360	.01900	3.00173	.00107	-.11031	.01609	.02463	-.02032	-.00280	.00057
-10.573	999.940	.01900	3.00165	-.00275	-.11043	.01608	.02474	-.02035	-.00280	.00056
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REPRODUCIBILITY OF THE  
 ORIGINAL PAGE IS POOR

V418-D9A (IA22), ORBITER (04RC1) W/ET SEPARATING

(SVK040) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2494/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.021	175.190	.0314	3.00061	-.00761	.01816	.02318	.03057	-.02831	-.00158	-.00054
-4.983	199.180	.02730	3.00009	.00581	.01761	.01918	.03194	-.02691	-.00121	-.00033
-4.985	249.020	.02090	2.99971	.00259	.00069	.01274	.03093	-.02797	-.00093	-.00039
-5.011	299.440	.01750	2.99932	-.00222	-.03091	.01108	.03022	-.02656	-.00082	-.00037
-4.933	359.700	.01470	3.00017	-.00317	-.03658	.00903	.02925	-.02315	-.00149	.00115
-4.933	459.830	.01500	3.00099	-.00389	-.09177	.01213	.02755	-.02336	-.00134	-.00088
-4.975	599.860	.01850	2.99939	.00471	-.10451	.01541	.02906	-.02364	-.00118	.00046
-5.051	699.490	.01830	2.99937	.00263	-.10544	.01564	.02916	-.02408	-.00115	.00045
-5.035	799.830	.01850	2.99999	-.00510	-.10517	.01555	.02928	-.02380	-.00116	.00045
-4.998	999.350	.01850	2.99994	-.00114	-.10519	.01555	.02919	-.02399	-.00118	.00045
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2497/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.067	21.277	.04989	3.00232	-.00022	-.01060	.04474	.03771	-.03105	-.00289	-.00034
.017	48.845	.04404	3.00115	-.00415	-.01267	.03944	.03441	-.02994	-.00190	-.00017
.042	98.345	.03394	3.00040	.00350	-.02059	.02657	.03189	-.02940	-.00133	.00005
.016	148.630	.02327	3.00027	.00143	-.02332	.02014	.03168	-.02809	-.00137	-.00050
-.004	199.210	.02246	2.99994	.00246	-.04130	.01677	.03009	-.02725	-.00108	-.00057
.026	299.710	.01002	3.00002	-.00302	-.02030	.01223	.02922	-.02378	-.00135	-.00039
.023	399.630	.01303	3.00003	-.00316	-.02333	.01150	.02903	-.02306	-.00139	.00050
.018	498.820	.01774	2.99993	.00627	-.09730	.01436	.02933	-.02381	-.00123	.00044
-.020	599.490	.01903	2.99935	-.00225	-.10416	.01616	.02959	-.02398	-.00115	.00043
-.022	799.480	.01902	2.99987	-.00187	-.10411	.01614	.02966	-.02399	-.00116	.00043
-.015	879.310	.01903	2.99990	-.00180	-.10400	.01615	.02952	-.02392	-.00116	.00042
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2500/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
4.992	-50.542	.04540	3.00252	-.00062	-.04703	.04268	.03932	-.02726	-.00316	-.00042
5.042	13.214	.03870	3.00100	.00570	-.03934	.03500	.03351	-.02843	-.00183	-.00009
5.006	49.019	.03300	3.00017	.00133	-.04594	.02935	.03114	-.02663	-.00114	.00005
5.002	98.908	.02600	3.00050	.00040	-.05493	.02160	.03078	-.02716	-.00159	-.00068
5.022	198.540	.02190	2.99939	-.00309	-.02947	.01718	.03135	-.02661	-.00085	.00024
5.033	299.490	.01670	3.00011	-.00111	-.06735	.01167	.03039	-.02378	-.00139	.00073
5.009	399.650	.01730	2.99997	.00593	-.09144	.01354	.02972	-.02351	-.00130	.00014
4.968	539.360	.01930	2.99997	-.00537	-.10240	.01644	.02935	-.02402	-.00118	.00042
	GRADIENT	.00293	.22711	.00043	-.00290	.00265	.00254	-.00215	-.00014	-.00001



DATE 06 MAY 77

TABULATED SOURCE DATA, IA22, (AEDC V41B-D9A)  
 V41B-D9A (IA22), ORBITER(046C1) W/ET SEPARATING

PAGE 325

(TVK040) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UNGLOR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2494/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.021	175.190	399.87000	.03993	.01569	-.03461	411.27000	.00000	.00000	650.40000	.00000	.00000
-4.983	199.180	400.01000	.49786	.00297	-.05783	410.51000	.00000	.00000	659.27000	.00000	.00000
-4.985	249.020	399.93000	.08377	-.00519	-.07332	410.74000	.00000	.00000	659.61000	.00000	.00000
-5.011	299.440	400.05000	.11562	.02336	-.03916	411.71000	.00000	.00000	661.06000	.00000	.00000
-4.959	399.700	400.04000	.30078	-.00415	-.05303	411.33000	.00000	.00000	660.54000	.00000	.00000
-4.953	499.830	399.82000	.09034	.03343	-.01924	410.91000	.00000	.00000	659.63000	.00000	.00000
-4.975	599.630	400.02000	.26155	.02056	-.02163	411.23000	.00000	.00000	660.33000	.00000	.00000
-5.051	699.490	400.09000	.43476	.02924	-.02047	411.21000	.00000	.00000	660.30000	.00000	.00000
-5.035	799.830	400.23000	.02096	.02617	-.01815	411.63000	.00000	.00000	660.93000	.00000	.00000
-4.998	899.350	400.13000	.26157	.02451	-.01705	410.93000	.00000	.00000	659.87000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2497/ 5 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-.067	21.277	400.01000	.28397	.01388	-.00462	414.53000	.00000	.00000	665.28000	.00000	.00000
.017	48.845	400.16000	.53347	.01314	-.00500	414.85000	.00000	.00000	665.77000	.00000	.00000
.042	99.345	400.11000	.21643	.01227	-.01334	415.12000	.00000	.00000	665.15000	.00000	.00000
.016	148.950	400.02000	.20248	-.00631	-.04539	415.05000	.00000	.00000	665.06000	.00000	.00000
-.004	199.210	400.12000	.15022	-.00974	.05239	414.84000	.00000	.00000	665.74000	.00000	.00000
.026	299.710	400.13000	.03572	-.00230	.04729	415.45000	.00000	.00000	665.63000	.00000	.00000
.028	399.630	400.11000	-.10203	-.00187	-.03449	415.92000	.00000	.00000	667.33000	.00000	.00000
.018	499.620	400.11000	.35226	.02025	-.00069	415.80000	.00000	.00000	667.19000	.00000	.00000
-.020	599.490	400.14000	.07341	.01675	-.00202	416.19000	.00000	.00000	667.76000	.00000	.00000
-.022	799.480	400.11000	.30411	.01742	-.00139	415.46000	.00000	.00000	665.70000	.00000	.00000
-.015	879.310	400.18000	.12228	.01662	-.00091	415.65000	.00000	.00000	666.97000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2500/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
4.992	-50.542	400.15000	.16347	.01395	.00311	446.35000	.00000	.00000	668.00000	.00000	.00000
5.042	13.214	400.21000	.21311	.01527	.00135	417.15000	.00000	.00000	669.20000	.00000	.00000
5.006	49.019	400.15000	.19408	.00729	-.01299	417.25000	.00000	.00000	669.41000	.00000	.00000
5.002	98.908	400.20000	.61914	-.01154	-.04395	417.42000	.00000	.00000	669.61000	.00000	.00000
5.022	199.540	400.24000	-.05309	.00413	-.01933	417.32000	.00000	.00000	669.45000	.00000	.00000
5.033	299.490	400.22000	.09492	-.01537	-.02256	417.23000	.00000	.00000	669.33000	.00000	.00000
5.009	398.850	400.21000	.49313	.01693	.00544	417.67000	.00000	.00000	669.93000	.00000	.00000
4.958	539.360	400.20000	.03359	.01495	.00473	417.43000	.00000	.00000	669.61000	.00000	.00000
	GRADIENT	30.28332	.01613	.00116	.00010	13.83911	.00000	.00000	50.64326	.00000	.00000

V41B-D9A (1A22), ORBITER(04R:1) W/ET SEPARATING

(UVK040) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMELDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2777/ 0 RN/L = .86 GRAD ENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-20.048	625.490	979.76000	979.76000	86.00000	979.76000	979.57000	87.00000	76.00000	31.03300	99.64200
-20.003	699.350	979.63000	979.63000	86.00000	979.63000	979.57000	87.00000	76.00000	28.65500	99.64200
-19.961	758.720	979.82000	979.82000	86.00000	979.82000	979.57000	87.00000	76.00000	19.75500	99.64200
-19.949	993.090	979.71000	979.71000	86.00000	979.71000	979.57000	87.00000	76.00000	7.63040	99.64200
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2781/ 0 RN/L = .97 GRAD ENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-15.034	475.040	982.23000	982.23000	85.00000	982.23000	982.03999	86.00000	77.00000	21.15500	99.76800
-15.061	500.000	982.20000	982.20000	85.00000	982.20000	982.03999	86.00000	77.00000	20.87100	99.76900
-15.021	549.460	982.35000	982.35000	85.00000	982.35000	982.03999	86.00000	77.00000	19.72500	99.76900
-14.990	599.250	982.39000	982.39000	85.00000	982.39000	982.03999	86.00000	77.00000	16.91200	99.76800
-14.975	693.600	982.23000	982.23000	85.00000	982.23000	982.03999	86.00000	77.00000	12.90700	99.76800
-14.970	799.630	982.05000	982.05000	85.00000	982.05000	982.03999	86.00000	77.00000	9.30290	99.76800
-15.094	1000.000	982.05000	982.05000	85.00000	982.05000	982.03999	86.00000	77.00000	6.65130	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2785/ 0 RN/L = .87 GRAD ENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-10.517	349.970	981.33000	981.33000	84.00000	981.33000	981.12000	21.00000	77.00000	20.86200	99.64200
-10.557	399.830	981.06000	981.06000	84.00000	981.06000	981.12000	21.00000	77.00000	21.34900	99.64200
-10.512	449.240	981.20000	981.20000	84.00000	981.20000	981.12000	21.00000	77.00000	20.06500	99.64200
-10.495	499.110	981.09000	981.09000	84.00000	981.09000	981.12000	21.00000	77.00000	17.89000	99.64200
-10.472	599.620	981.21000	981.21000	84.00000	981.21000	981.12000	21.00000	77.00000	14.42100	99.64200
-10.477	699.630	981.37000	981.37000	84.00000	981.37000	981.12000	21.00000	77.00000	12.03500	99.64200
-10.525	799.360	981.09000	981.09000	84.00000	981.09000	981.12000	21.00000	77.00000	10.37000	99.64200
-10.573	999.940	981.03000	981.03000	84.00000	981.03000	981.12000	21.00000	77.00000	8.64290	99.64200
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REPRODUCIBILITY OF THE  
 ORIGINAL PAGE IS POOR



DATE 06 MAY 77

TABULATED SOURCE DATA, IA22 (AEDC V41B-D9A)

PAGE 327

V41B-D9A (IA22), ORBITER (O4R1) W/ET SEPARATING

(UVK040) (20 APR 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2494/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	OLPBAL	TB1	TB2	DT	T
-5.021	175.190	976.09000	976.09000	79.00000	976.09000	975.89000	64.00000	74.00000	3.89110	99.76800
-4.983	199.180	975.87000	975.87000	79.00000	975.87000	975.89000	64.00000	74.00000	3.20550	99.76800
-4.985	249.020	975.89000	975.89000	79.00000	975.89000	975.89000	64.00000	74.00000	4.19390	99.76800
-5.011	299.440	976.08000	976.08000	79.00000	976.08000	975.89000	64.00000	74.00000	6.32650	99.76800
-4.968	398.700	975.80000	975.80000	79.00000	975.80000	975.89000	64.00000	74.00000	7.99370	99.76800
-4.963	498.830	975.77000	975.77000	79.00000	975.77000	975.89000	64.00000	74.00000	8.20130	99.76800
-4.975	598.630	975.53000	975.53000	79.00000	975.53000	975.89000	64.00000	74.00000	7.09020	99.76800
-5.051	698.490	975.45000	975.45000	79.00000	975.45000	975.89000	64.00000	74.00000	5.59520	99.76800
-5.035	799.830	975.49000	975.49000	79.00000	975.49000	975.89000	64.00000	74.00000	4.21090	99.76800
-4.998	899.350	974.81000	974.81000	79.00000	974.81000	975.89000	64.00000	74.00000	2.61510	99.76800
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2497/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	OLPBAL	TB1	TB2	DT	T
-.067	21.277	976.41000	976.41000	79.00000	976.41000	976.20000	64.00000	74.00000	-1.98000	99.64200
.017	48.845	976.15000	976.15000	79.00000	976.15000	976.20000	64.00000	74.00000	-2.60170	99.64200
.042	98.345	976.22000	976.22000	79.00000	976.22000	976.20000	64.00000	74.00000	-3.60750	99.64200
.016	148.950	976.09000	976.09000	79.00000	976.09000	976.20000	64.00000	74.00000	-3.86110	99.64200
-.004	199.210	977.09000	977.09000	79.00000	977.09000	976.20000	64.00000	74.00000	-2.31210	99.64200
.026	298.710	977.45000	977.45000	79.00000	977.45000	976.20000	64.00000	74.00000	1.00890	99.64200
.028	398.650	977.50000	977.50000	79.00000	977.50000	976.20000	64.00000	74.00000	2.53780	99.64200
.018	498.620	977.24000	977.24000	79.00000	977.24000	976.20000	64.00000	74.00000	3.07530	99.64200
-.020	598.490	977.09000	977.09000	79.00000	977.09000	976.20000	64.00000	74.00000	2.39570	99.64200
-.022	799.460	977.02000	977.02000	79.00000	977.02000	976.20000	64.00000	74.00000	2.09210	99.64200
-.015	899.310	976.93000	976.93000	79.00000	976.93000	976.20000	64.00000	74.00000	1.37640	99.64200
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2500/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	OLPBAL	TB1	TB2	DT	T
4.992	-50.542	976.46000	976.46000	79.00000	976.46000	976.25000	64.00000	74.00000	-4.30140	99.76800
5.042	13.214	976.24000	976.24000	79.00000	976.24000	976.25000	64.00000	74.00000	-5.04330	99.76800
5.005	49.019	976.54000	976.54000	79.00000	976.54000	976.25000	64.00000	74.00000	-5.94490	99.76800
5.002	98.908	975.64000	975.64000	79.00000	975.64000	976.25000	64.00000	74.00000	-5.83240	99.76800
5.022	198.540	975.10000	975.10000	79.00000	975.10000	976.25000	64.00000	74.00000	-4.36370	99.76800
5.033	298.490	975.93000	975.93000	79.00000	975.93000	976.25000	64.00000	74.00000	-2.64940	99.76800
5.009	398.850	975.89000	975.89000	79.00000	975.89000	976.25000	64.00000	74.00000	-.90975	99.76800
4.968	498.360	975.85000	975.85000	79.00000	975.85000	976.25000	64.00000	74.00000	-.06702	99.76800
GRADIENT		73.87922	73.87922	5.97651	73.87922	73.87938	4.84335	5.60012	-.38166	7.55017



V41B-D9A (A22), ET SEPARATIN) FROM ORG (04RC1)

(AVK040) (04 MAY 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2494/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-5.021	175.190	399.87000	.03993	-4.98980	2.99300	-.18299	-.01656	-.04393	-.00663	.00035	.10462
-4.983	199.180	400.01000	.49785	-4.95310	3.00590	-.16509	-.00950	-.04334	-.00752	.00029	.10743
-4.985	249.020	399.98000	.08377	-4.95440	3.00230	-.16586	-.00886	-.03776	-.00993	.00037	.10350
-5.011	299.440	400.05000	.11562	-4.99280	2.99730	-.13494	-.02030	-.03780	-.01007	.00050	.09151
-4.968	399.700	400.04000	.30078	-4.95290	2.99500	-.13651	-.00612	-.03856	-.00775	.00042	.09592
-4.963	499.830	399.93000	.09054	-4.94730	2.99320	-.14181	-.00930	-.03370	-.00773	.00036	.10370
-4.975	599.630	400.00000	.26155	-4.95330	3.00460	-.13935	.02055	-.02798	-.01010	.00043	.11159
-5.051	699.490	400.09000	.43476	-5.03250	3.00250	-.10016	.00506	-.02630	-.01099	.00018	.10553
-5.035	799.830	400.23000	-.02095	-5.01600	2.99480	-.05400	-.01539	-.02745	-.01023	.00024	.09006
-4.998	999.350	400.13000	.26157	-4.97990	2.99230	-.05371	-.01512	-.02533	-.01016	.00025	.09269
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2497/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-.067	21.277	400.01000	.28397	-.01827	3.00210	-.10976	-.03420	-.03051	-.00911	.00058	.10108
.017	48.845	400.16000	.53347	.05083	2.99700	-.10690	-.02291	-.03765	-.00555	.00048	.09991
.042	98.345	400.11000	.21843	.07512	3.00600	-.10429	-.00610	-.03319	-.00759	.00017	.10118
.016	148.960	400.02000	.20248	.04253	3.00170	-.09144	-.00339	-.03539	-.00665	.00017	.09324
-.004	199.210	400.12000	.15022	.01246	3.00240	-.07118	-.00744	-.03307	-.01078	.00034	.09129
.026	298.710	400.16000	.05572	.04446	2.99100	-.06877	.00533	-.03477	-.00833	.00031	.09353
.028	398.650	400.11000	-.18203	.04367	2.99390	-.07036	.01972	-.03013	-.00872	.00025	.10108
.018	498.820	400.11000	.35226	.03594	3.00520	-.06350	-.02903	-.02394	-.01143	.00023	.10708
-.020	599.490	400.14000	.07341	-.00109	2.99760	-.02339	.01331	-.02442	-.01143	.00014	.09548
-.022	799.480	400.11000	.30411	-.00274	2.99300	-.00574	.00108	-.02552	-.01038	.00018	.08774
-.015	879.310	400.19000	.12228	.00427	2.99910	-.00558	.00119	-.02668	-.01035	.00019	.08957
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2500/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
4.992	-50.542	400.15000	.18547	5.03690	3.00190	-.04739	-.01825	-.03443	-.00707	.00026	.10417
5.042	13.214	400.21000	.21311	5.02050	3.00570	-.04143	.00081	-.02909	-.01030	.00011	.09640
5.006	49.019	400.15000	.15408	5.00340	3.00150	-.02932	.00299	-.02335	-.01157	.00015	.09264
5.002	98.909	400.20000	.61914	5.02720	3.00090	-.01272	.00443	-.03122	-.01015	.00027	.09089
5.022	199.540	400.24000	-.09909	5.04400	2.99150	-.00500	.01655	-.03211	-.00895	.00019	.09348
5.033	298.490	400.22000	.09492	5.04920	2.99300	-.00707	.03195	-.02770	-.01017	.00013	.09850
5.009	398.650	400.21000	.49313	5.02620	3.00280	.00354	.03730	-.02278	-.01233	.00005	.10056
4.968	539.360	400.20000	.03358	4.99710	2.99450	.04447	.02026	-.02616	-.01116	.00015	.08700
	GRADIENT	30.28582	.01613	.38449	.22754	-.00314	.00006	-.00220	-.00078	.00001	.00730



V41B-DSA (IA22),ORRITER(CORC1) W/ET SEPARATING

(SVK041) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = 600.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2778/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
-20.021	625.190	.00600	3.00021	.00439	-.04336	-.00138	.01385	-.01814	-.00176	.00126
-20.048	700.350	.01400	3.00170	-.00030	-.07357	.00958	.02038	-.01957	-.00293	.00101
-20.018	799.570	.01900	3.00160	.00450	-.11339	.01624	.02775	-.02000	-.00278	.00054
-20.006	999.750	.01900	3.00169	-.00618	-.11380	.01622	.02276	-.02000	-.00279	.00054
	GRADIENT	.00000	.00000	.00000	.00100	.00000	.00000	.00000	.00000	.00000

RUN NO. 2782/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
-15.006	474.780	.00500	3.00119	.00001	-.02113	-.00328	.01799	-.01915	-.00258	.00130
-15.011	499.730	.00700	3.00148	-.00028	-.05170	-.00012	.01749	-.02056	-.00278	.00146
-15.019	549.840	.01300	3.00163	-.00373	-.07118	.00777	.02042	-.02013	-.00288	.00087
-15.060	600.510	.01700	3.00165	.00034	-.09154	.01282	.02214	-.02000	-.00279	.00015
-15.065	700.510	.01900	3.00169	-.00799	-.11123	.01616	.02376	-.02021	-.00281	.00055
-15.001	799.630	.01900	3.00167	-.00517	-.11146	.01618	.02378	-.02022	-.00293	.00057
-14.990	999.900	.01900	3.00174	-.00084	-.11154	.01622	.02359	-.02028	-.00282	.00056
	GRADIENT	.00000	.00000	.00000	.00100	.00000	.00000	.00000	.00000	.00000

RUN NO. 2786/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
-10.497	349.760	.00700	3.00182	-.00422	.03127	-.00441	.02730	-.01899	-.00315	.00078
-10.503	399.770	.00900	3.00175	-.00575	-.03128	-.00127	.02277	-.01912	-.00302	.00131
-10.520	449.740	.01200	3.00159	-.00019	-.07134	.00736	.02214	-.02051	-.00277	.00041
-10.554	500.230	.01600	3.00161	.00109	-.09103	.01222	.02312	-.01999	-.00275	-.00030
-10.556	600.360	.01900	3.00167	-.00347	-.10159	.01598	.02499	-.02034	-.00279	.00056
-10.539	700.110	.01900	3.00167	-.00537	-.11132	.01613	.02519	-.02050	-.00281	.00056
-10.439	799.630	.01900	3.00165	-.00435	-.11145	.01612	.02506	-.02032	-.00279	.00057
-10.511	999.290	.01900	3.00171	-.00551	-.11169	.01613	.02506	-.02041	-.00284	.00056
	GRADIENT	.00000	.00000	.00000	.00100	.00000	.00000	.00000	.00000	.00000











V41B-D9A (IA22), ORBITER(04FC2) W/ET SEPARATING

(SVK042) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2835/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
-20.007	624.980	.01600	-.02780	2.99240	.26917	-.00734	.02790	-.02994	.00057	.00133
-19.954	699.370	-.00200	-.02770	3.00480	.21417	-.02435	.01959	-.02400	.00010	.00103
-19.950	798.410	-.00400	-.02720	2.98990	.11816	-.02212	.01093	-.02858	-.00040	.00359
-20.006	899.500	.01700	-.02350	3.00670	-.10312	.01195	.01554	-.02443	-.00059	.00013
	GRADIENT	.00000	.00000	.00000	.00010	.00000	.00000	.00000	.00000	.00000

RUN NO. 2839/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
-15.004	474.500	.02000	-.02820	2.99300	.18518	.00037	.02335	-.03357	.00073	.00304
-15.019	499.410	.01300	-.02790	2.99750	.15412	-.00527	.02095	-.03229	.00041	.00286
-14.977	548.830	.00100	-.02750	2.99250	.13446	-.01732	.01677	-.02783	-.00017	.00225
-14.992	599.000	-.00300	-.02640	2.99250	.08228	-.01938	.00744	-.02407	-.00128	.00319
	GRADIENT	.00000	.00000	.00000	.00010	.00000	.00000	.00000	.00000	.00000

RUN NO. 2843/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
-10.512	349.510	.02500	-.02750	2.99470	.100E9	.01063	.02040	-.03253	.00024	.00205
-10.506	399.200	.01700	-.02300	2.99590	.049E9	.00468	.01643	-.03371	.00056	.00282
-10.485	448.930	.01100	-.02810	2.99390	.01940	-.00026	.01241	-.03230	.00060	.00248
	GRADIENT	.00000	.00000	.00000	.00010	.00000	.00010	.00000	.00000	.00000















DATE 06 MAY 77

TABLATED SOURCE DATA, IA22, (AEDC V41B-D9A)

PAGE 343

V41B-D9A (IA22), ORBITER (04RC2) W/ET SEPARATING

(UVK043) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2836/ 0 RN/L = .89 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLFBAL	TB1	TB2	DT	T
-20.040	625.690	972.54000	972.54000	84.00000	972.54100	972.10999	85.00000	75.00000	23.03400	99.76800
-20.075	700.750	972.12000	972.12000	84.00000	972.12100	972.10999	85.00000	75.00000	17.19900	99.76800
-19.944	799.270	972.49000	972.49000	84.00000	972.49100	972.10999	85.00000	75.00000	15.44700	99.76800
-19.969	999.060	972.30000	972.30000	84.00000	972.30100	972.10999	85.00000	75.00000	19.96300	99.76800
-20.007	999.460	976.02000	976.02000	82.00000	976.02100	975.82000	83.00000	76.00000	6.02470	99.76800
	GRADIENT	.00000	.00000	.00000	.00100	.00000	.00000	.00000	.00000	.00000

RUN NO. 2840/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLFBAL	TB1	TB2	DT	T
-14.978	474.370	974.51000	974.51000	81.00000	974.51100	974.48000	82.00000	76.00000	21.44300	99.76800
-15.024	499.990	974.31000	974.31000	81.00000	974.31100	974.48000	82.00000	76.00000	21.27100	99.76800
-15.043	550.090	974.09000	974.09000	81.00000	974.09100	974.48000	82.00000	76.00000	23.13700	99.76800
-15.055	600.240	974.67000	974.67000	81.00000	974.67100	974.48000	82.00000	76.00000	23.91400	99.76800
	GRADIENT	.00000	.00000	.00000	.00100	.00000	.00000	.00000	.00000	.00000

RUN NO. 2844/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLFBAL	TB1	TB2	DT	T
-10.482	349.470	974.09000	974.09000	83.00000	974.09100	973.96999	84.00000	76.00000	18.23500	99.76800
-10.528	399.900	973.85000	973.85000	83.00000	973.85100	973.96999	84.00000	76.00000	16.96400	99.76800
-10.541	450.220	974.16000	974.16000	83.00000	974.16100	973.96999	84.00000	76.00000	16.97100	99.76800
	GRADIENT	.00000	.00000	.00000	.00100	.00000	.00000	.00000	.00000	.00000

















DATE 06 MAY 77

TABULATED SOURCE DATA, 1A22, (AEDC V41B-D9A)

PAGE 351

V41B-D9A (1A22), ORBITER (04RC2) W/ET SEPARATING

(SVK045) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DSETA = .000 X = 600.000  
 Y = .000 ELEVON = .000  
 UNBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2838/ 0 RN/L = .89 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEL
-20.620	625.290	.00000	-.02330	3.00100	-.04207	-.00337	.00315	-.02416	.00052	-.00027
-20.044	700.320	.01300	-.02330	2.99320	-.07222	.00339	.01232	-.02439	-.00061	-.00013
-20.015	799.620	.01200	-.02330	2.99457	-.10977	.01355	.01512	-.02436	-.00049	.00016
-19.999	909.740	.01800	-.02330	2.99420	-.10970	.01357	.01522	-.02438	-.00051	.00016
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2842/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEL
-15.004	474.770	.00400	-.02700	2.99330	-.03170	-.00403	.00335	-.02712	.00021	.00194
-15.008	493.780	.00700	-.02740	2.99300	-.03226	-.00192	.00377	-.02754	-.00007	.00107
-15.017	549.630	.01200	-.02390	2.99319	-.03370	.00457	.00924	-.02454	-.00030	-.00036
-15.042	600.190	.01600	-.02390	2.99330	-.03351	.01014	.01182	-.02433	-.00046	-.00054
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2846/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEL
-10.497	349.750	.00700	-.02230	2.99370	.02730	-.00035	.01467	-.02495	-.00074	.00123
-10.505	399.780	.00000	-.02720	2.99400	-.03037	-.00123	.01029	-.02317	-.00033	.00167
-10.526	449.930	.01100	-.02700	2.99310	-.07222	.00481	.01031	-.02499	-.00040	-.00082
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REPRODUCIBILITY OF THE  
 ORIGINAL PAGE IS POOR

V41B-D9A (IA22), ORBITER (04RC2) 1/ET SEPARATING

(TVK045) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. Z0  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = 600.000  
 Y = .000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2838/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CT'D	CTFS	CTFU	CTAD	CTAS	CTAU
-20.020	625.290	600.18000	.04854	.03871	-.04055	428.90000	.00000	.00000	641.92000	212.78000	.00000
-20.044	700.380	600.38000	-.06224	.04234	-.03683	427.90000	.00000	.00000	640.42000	212.28000	.00000
-20.015	799.620	600.11000	-.18361	.04347	-.03441	428.20000	.00000	.00000	640.95000	212.46000	.00000
-19.999	999.740	600.14000	-.01424	.04799	-.04303	427.70000	.00000	.00000	640.18000	212.21000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2842/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CT'D	CTFS	CTFU	CTAD	CTAS	CTAU
-15.004	474.770	600.12000	.15166	.07320	-.01122	433.30000	.00000	.00000	648.47000	214.95000	.00000
-15.008	499.750	600.23000	-.02234	.05140	-.04219	431.50000	.00000	.00000	646.51000	214.30000	.00000
-15.017	549.850	600.19000	.15398	.05051	-.04810	432.90000	.00000	.00000	647.95000	214.78000	.00000
-15.042	600.190	600.21000	.04648	.05425	-.04559	432.80000	.00000	.00000	647.73000	214.71000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2846/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CT'D	CTFS	CTFU	CTAD	CTAS	CTAU
-10.497	349.750	600.07000	-.05919	-.00404	-.13160	436.30000	.00000	.00000	653.03000	216.46000	.00000
-10.505	399.780	600.22000	-.03783	.04743	-.03155	437.00000	.00000	.00000	654.11000	216.82000	.00000
-10.526	449.990	600.20000	.02692	.04046	-.03981	437.00000	.00000	.00000	654.04000	216.80000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000



REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = 3.000  
 DBETA = .000 X = 600.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2838/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-20.020	625.290	600.18000	.04254	-20.01500	2.97270	-.41822	-.03790	-.03812	-.00840	.00080	.11706
-20.044	700.380	600.38000	-.08224	-20.03100	2.97010	-.41193	-.02953	-.03953	-.00699	.00076	.12257
-20.015	799.620	600.11000	-.18551	-19.99700	2.99760	-.41489	-.01369	-.03796	-.00682	.00090	.12742
-19.999	999.740	600.14000	-.01424	-19.99100	2.95740	-.41931	.03716	-.03484	-.00294	.00099	.16630
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2842/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-15.004	474.770	600.12000	.15165	-15.00000	2.93930	-.31558	-.02879	-.03799	-.00826	.00041	.11314
-15.008	499.750	600.23000	-.02234	-15.00100	2.97240	-.31632	-.03464	-.03773	-.00832	.00047	.10805
-15.017	549.850	600.19000	.15339	-15.00500	2.90020	-.31799	-.03738	-.04101	-.00674	.00052	.10869
-15.042	600.190	600.21000	.04848	-15.02300	2.97260	-.31161	-.03476	-.03320	-.00826	.00057	.10863
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2846/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-10.497	349.750	600.07000	-.05919	-10.49300	2.93890	-.31753	-.01177	-.04564	-.00596	.00044	.12352
-10.505	399.780	600.22000	-.03783	-10.49700	2.95530	-.28731	-.02524	-.04260	-.00666	.00030	.10762
-10.526	449.990	600.20000	.02092	-10.51500	2.90910	-.21135	-.03402	-.03548	-.00782	.00048	.09988
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR



V41B-D9A (1A22), ORBITER (O4RC3) W/ET SEPARATING

(RVK046) (20 APR 77)

## REFERENCE DATA

SREF \* 2690.0000 SQ.FT. XMRP \* 1089.6000 IN. XO  
 LREF \* 1290.3000 INCHES YMRP \* .0000 IN. YO  
 BREF \* 1290.3000 INCHES ZMRP \* 375.0000 IN. ZO  
 SCALE \* .0125

## PARAMETRIC DATA

ALPHA \* .000 BETA \* .000  
 OSETA \* .000 X \* .000  
 Y \* .000 ELEVON \* .000  
 UNBLDR \* .000 RCS \* 1.000  
 GAS \* 1.000

RUN NO. 2463/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	BETA	CNR	CLM1	CYR	CYNR	CSLR	CAR	WM
-5.051	169.950	-.69364	-.09905	-.00332	.30368	-.01139	-.01214	-.00025	.00047	.00906	.18576
-5.007	191.640	.00537	.12317	-.00303	.30366	-.01139	-.01109	-.00032	.00049	.00416	.18595
-4.990	241.160	.00722	-.50324	-.00332	.20305	-.01131	-.01164	-.00011	-.00004	-.00458	.18599
-4.979	291.020	-.00379	-.01724	-.00333	.20331	-.02133	-.01103	-.00004	.00023	-.00902	.18599
-4.977	331.020	-.01523	-.02372	-.00346	.20331	-.02133	-.01147	-.00015	.00016	-.00709	.18427
-5.012	491.370	.00376	-.07321	-.00314	.20323	-.02133	-.01079	-.00033	.00003	-.00719	.18339
-5.034	591.670	.12323	-.01327	-.01024	.17423	-.02133	-.01030	-.00034	.00003	-.00207	.18335
-5.001	631.510	.12321	-.01320	-.00472	.18245	-.02133	-.01034	-.00033	.00029	-.00709	.18730
-5.001	791.440	.13320	.12329	-.00367	.10339	-.02133	-.01034	-.00034	.00039	-.00721	.19000
-4.998	991.330	.12328	-.47116	-.01026	.18334	-.02102	-.01102	-.00034	.00038	-.00739	.19485
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2469/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	BETA	CNR	CLM1	CYR	CYNR	CSLR	CAR	WM
-.021	12.445	.07165	1.32320	.01341	.18320	-.02133	-.01033	-.00035	.00359	-.00354	.18902
-.028	41.849	.00373	1.23320	.01403	.10340	-.02133	-.01176	-.00039	.00035	-.00130	.18921
-.001	91.455	-.00318	-.02324	-.00183	.21471	-.01133	-.01195	-.00028	.00040	-.00503	.18937
.004	141.240	-.00120	-.20323	-.00339	.22027	-.01130	-.01136	-.00002	-.00030	-.00310	.18946
.016	191.130	.01078	-.17323	-.00484	.21023	-.01373	-.01127	-.00015	-.00013	-.00756	.18939
.024	230.830	.04320	-.02430	-.00229	.21719	-.02115	-.01214	.00003	.00000	-.00776	.18907
-.013	391.370	.12322	.00379	-.00472	.22021	-.02133	-.01112	-.00027	.00012	-.00345	.18339
-.011	491.400	-.00323	-.01324	-.00433	.18121	-.02133	-.01025	-.00033	.00004	-.00231	.18911
-.000	591.420	.12320	.12317	-.00311	.17423	-.02174	-.01070	-.00029	.00023	-.00333	.18914
.000	791.310	.03324	-.00321	-.00307	.17331	-.02133	-.01105	-.00035	.00037	-.00726	.18921
.002	871.250	.10143	-.00329	-.00373	.17322	-.02134	-.01020	-.00034	.00056	-.00609	.18930
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2471/ 0 RN/L = .84 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	BETA	CNR	CLM1	CYR	CYNR	CSLR	CAR	WM
5.032	-60.134	1.12320	-.40321	-.00723	.14434	-.02133	-.01155	.00010	.00017	-.01223	.18959
4.971	7.500	-.05119	.12323	-.00323	.17133	-.02133	-.01167	-.00009	.00044	-.00332	.18938
4.999	41.420	.00319	-.42324	-.00791	.18144	-.02133	-.01223	-.00011	.00057	-.00339	.18934
5.004	91.207	.00322	.02322	-.00110	.20404	-.01133	-.01125	-.00003	-.00005	-.00508	.18938
5.019	190.650	.00321	.00322	-.00011	.20323	-.02133	-.01195	-.00009	.00005	-.00348	.18939
4.975	291.420	-.00344	.20323	-.00120	.21639	-.02133	-.01171	-.00023	.00041	-.00916	.18907
4.939	391.260	.00327	.17320	-.00141	.20304	-.02133	-.01104	-.00032	.00011	-.00559	.18921
4.988	531.350	.10322	-.07315	-.00310	.18135	-.02133	-.01102	-.00034	.00026	-.01107	.18939
GRADIENT	.00000	-.00323	.01623	-.00052	.02225	-.00346	-.00155	-.00001	.00006	-.00044	.02525



V41B-D9A (IA22), ORBITER (O4RC3) W/ET SEPARATING

(SVK046) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2465/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEL
-5.051	169.950	.00440	-.00064	-.00332	.02856	.02651	.04225	-.00344	-.00041	.00073
-5.007	191.640	.00370	-.00059	-.00402	.0285F	.02556	.03731	-.00241	-.00048	.00075
-4.990	241.160	-.00170	-.00087	-.00832	-.0065	.02167	.02843	-.00297	-.00027	.00022
-4.979	291.020	-.00770	-.00103	-.00253	-.02775	.01598	.02402	-.00319	-.00020	.00055
-4.977	391.090	-.01030	-.00094	-.00346	-.04672	.01443	.02611	-.00277	-.00031	.00042
-5.012	491.370	-.01670	-.00084	-.00514	-.06553	.00869	.02607	-.00208	-.00050	.00034
-5.024	591.670	-.01570	-.00090	-.01044	-.09338	.01120	.02415	-.00179	-.00051	.00034
-5.001	691.510	-.01400	-.00077	-.00472	-.10611	.01337	.02614	-.00213	-.00051	.00033
-5.001	791.440	-.01390	-.00077	-.00087	-.10595	.01355	.02610	-.00222	-.00050	.00084
-4.996	891.330	-.01330	-.00077	-.01026	-.10706	.01362	.02599	-.00233	-.00051	.00084
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2468/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEL
-.021	12.445	-.01269	-.00054	.01541	-.11397	.01550	.03033	-.00145	-.00072	.00085
-.028	41.949	-.00718	-.00095	.01488	-.09549	.02082	.03257	-.00289	-.00025	.00061
-.001	91.456	-.00427	-.00071	-.00193	-.06528	.02231	.03391	-.00307	-.00044	.00067
.004	141.240	-.00159	-.00097	-.00599	-.05032	.02448	.03090	-.00248	-.00019	.00003
.016	191.130	-.00120	-.00082	-.00464	-.05323	.02555	.02634	-.00238	-.00031	.00013
.024	290.860	-.00700	-.00108	-.00239	-.06313	.01915	.02616	-.00325	-.00014	.00027
-.013	391.370	-.01394	-.00068	-.00472	-.06004	.01135	.02648	-.00223	-.00043	.00038
-.011	491.400	-.01563	-.00093	-.00433	-.09908	.01149	.02450	-.00194	-.00050	.00030
-.000	591.420	-.01400	-.00075	-.00011	-.10668	.01369	.02410	-.00178	-.00055	.00055
.000	791.310	-.01393	-.00078	-.00307	-.10910	.01390	.02609	-.00213	-.0005	.00083
.002	871.250	-.01394	-.00079	-.00373	-.10734	.01394	.02597	-.00197	-.00050	.00083
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2471/ 0 RN/L = .84 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEL
5.052	-60.134	-.02100	-.00134	-.00793	-.14341	.00775	.02224	-.00283	-.00007	.00044
4.971	7.500	-.01130	-.00101	-.00368	-.11652	.01750	.03153	-.00253	-.00026	.00071
4.999	41.420	-.00970	-.00094	-.00791	-.10578	.01991	.03450	-.00342	-.00028	.00084
5.004	91.207	-.00330	-.00097	-.00110	-.08468	.02499	.02305	-.00271	-.00020	.00022
5.019	190.650	-.00490	-.00093	-.00011	-.08231	.02303	.02643	-.00220	-.00026	.00033
4.975	291.420	-.00260	-.00095	-.00120	-.07239	.01711	.02579	-.00255	-.00040	.00068
4.989	391.260	-.01520	-.00086	-.00141	-.08574	.01150	.02535	-.00188	-.00049	.00039
4.988	531.350	-.01390	-.00081	-.00510	-.10779	.01414	.02392	-.00185	-.00051	.00053
	GRADIENT	-.00151	-.00013	-.00052	-.01555	.00233	.00420	-.00034	-.00004	.00009





## V41B-D9A (1A22), ORBITER (04HC3) W/ET SEPARATING

(TVK046) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2465/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.051	169.950	-.66354	-.09905	-.05555	-.13947	217.35000	.00000	.00000	642.04000	.00000	.00000
-5.007	191.640	.00997	.15517	.00038	.06827	217.11000	.00000	.00000	641.32000	.00000	.00000
-4.990	241.160	.00702	-.50594	.00326	-.07591	216.76000	.00000	.00000	640.28000	.00000	.00000
-4.979	291.020	-.06579	-.01704	.03228	-.01502	216.35000	.00000	.00000	639.05000	.00000	.00000
-4.977	391.090	-.01539	-.03672	.01045	-.05723	217.35000	.00000	.00000	642.05000	.00000	.00000
-5.012	491.370	.09976	-.07301	.01431	-.04416	217.80000	.00000	.00000	643.37000	.00000	.00000
-5.024	591.670	.15238	-.52337	.03027	-.01359	217.52000	.00000	.00000	642.52000	.00000	.00000
-5.001	691.510	.13691	-.09320	.02334	-.01561	217.54000	.00000	.00000	642.60000	.00000	.00000
-5.001	791.440	.13030	-.18239	.02693	-.01446	218.09000	.00000	.00000	644.20000	.00000	.00000
-4.995	991.330	.12323	-.47116	.02377	-.01433	218.61000	.00000	.00000	645.75000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2468/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-.021	12.445	.07165	1.38390	-.01055	-.06444	221.75000	.00000	.00000	655.04000	.00000	.00000
-.028	41.949	.03973	1.23250	.02647	-.00220	221.77000	.00000	.00000	655.09000	.00000	.00000
-.001	91.456	-.00318	-.02494	.02702	-.00332	221.82000	.00000	.00000	655.31000	.00000	.00000
.004	141.240	-.00160	-.20459	.06235	-.02745	222.06000	.00000	.00000	655.77000	.00000	.00000
.016	191.130	.01078	-.17768	.02239	-.00303	222.01000	.00000	.00000	655.72000	.00000	.00000
.024	290.860	.04330	-.05438	.01074	-.02730	222.11000	.00000	.00000	656.07000	.00000	.00000
-.013	391.370	.18192	.00379	.00385	-.04315	222.21000	.00000	.00000	656.33000	.00000	.00000
-.011	491.400	-.00909	-.06954	.02147	-.00749	222.62000	.00000	.00000	657.67000	.00000	.00000
-.000	591.420	.13370	.18317	.02378	-.01355	222.72000	.00000	.00000	658.05000	.00000	.00000
.000	791.310	.05274	-.06231	.02250	-.00978	222.97000	.00000	.00000	658.64000	.00000	.00000
.002	871.250	.10143	-.09359	.02180	-.00348	223.02000	.00000	.00000	658.76000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2471/ 0 RN/L = .84 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
5.052	-60.134	1.12420	-.43051	.01465	.00012	223.00000	.00000	.00000	673.48000	.00000	.00000
4.971	7.500	-.05119	.12733	.01649	-.00509	223.20000	.00000	.00000	674.07000	.00000	.00000
4.999	41.420	.02919	-.42434	.01493	-.01503	223.37000	.00000	.00000	674.59000	.00000	.00000
5.004	91.207	.05022	.03432	.01614	.00233	223.77000	.00000	.00000	675.75000	.00000	.00000
5.019	190.660	.06231	.02202	.01402	-.00122	223.64000	.00000	.00000	675.36000	.00000	.00000
4.975	291.420	-.03244	.24556	-.00041	-.03334	223.81000	.00000	.00000	675.89000	.00000	.00000
4.999	391.260	.05997	.17300	.00511	-.02359	223.81000	.00000	.00000	675.63000	.00000	.00000
4.988	531.350	.10532	-.07615	.01949	-.00878	223.03000	.00000	.00000	676.72000	.00000	.00000
	GRADIENT	-.00693	.01698	.00220	-.00068	30.42586	.00000	.00000	89.87360	.00000	.00000



V41B-D9A (IA22), ORBITER (O4FC3) W/ET SEPARATING

(UJVK046) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.8000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLOR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2465/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-5.051	169.950	967.92000	967.92000	81.00000	957.92000	967.70000	67.00000	74.00000	-.03344	99.76800
-5.007	191.640	955.37000	955.37000	81.00000	955.37000	957.70000	67.00000	74.00000	12.07800	99.76900
-4.990	241.160	954.82000	954.82000	81.00000	954.82000	957.70000	67.00000	74.00000	11.53500	99.76900
-4.979	291.020	963.01000	963.01000	81.00000	953.01000	957.70000	67.00000	74.00000	8.64550	99.76900
-4.977	391.050	967.47000	967.47000	81.00000	957.47000	957.70000	67.00000	74.00000	4.94590	99.76900
-5.012	491.370	959.92000	959.92000	81.00000	959.92000	957.70000	67.00000	74.00000	3.50900	99.76900
-5.024	591.670	958.65000	958.65000	81.00000	958.65000	957.70000	67.00000	74.00000	2.76630	99.76900
-5.001	691.510	968.77000	968.77000	81.00000	968.77000	957.70000	67.00000	74.00000	.77942	99.76800
-5.001	791.440	971.18000	971.18000	81.00000	971.18000	967.70000	67.00000	74.00000	-.93524	99.76900
-4.996	991.330	973.51000	973.51000	81.00000	973.51000	957.70000	67.00000	74.00000	-2.67310	99.76900
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2468/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	FRC	FRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-.021	12.445	973.92000	973.92000	80.00000	973.92000	973.75000	66.00000	74.00000	-5.93540	99.76800
-.028	41.949	974.04000	974.04000	80.00000	974.04000	973.75000	66.00000	74.00000	-6.05890	99.76900
-.001	91.456	974.37000	974.37000	80.00000	974.37000	973.75000	66.00000	74.00000	-5.87640	99.76900
.004	141.240	974.02000	974.02000	80.00000	974.02000	973.75000	66.00000	74.00000	-5.01300	99.76900
.016	191.130	974.10000	974.10000	80.00000	974.10000	973.75000	66.00000	74.00000	-4.52360	99.76900
.024	250.630	974.02000	974.02000	80.00000	974.02000	973.75000	66.00000	74.00000	-5.53000	99.76900
-.013	391.370	974.03000	974.03000	80.00000	974.03000	973.75000	66.00000	74.00000	-6.22230	99.76900
-.011	491.400	973.92000	973.92000	80.00000	973.92000	973.75000	66.00000	74.00000	-5.55310	99.76800
-.000	591.420	974.11000	974.11000	80.00000	974.11000	973.75000	66.00000	74.00000	-5.81050	99.76900
.000	791.310	973.97000	973.97000	80.00000	973.97000	973.75000	66.00000	74.00000	-6.19550	99.76900
.002	971.250	974.15000	974.15000	80.00000	974.15000	973.75000	66.00000	74.00000	-6.79320	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2471/ 0 RN/L = .84 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
5.052	-60.134	973.02000	973.02000	79.00000	973.02000	972.81000	66.00000	74.00000	-8.29720	99.64200
4.971	7.500	973.38000	973.38000	79.00000	973.38000	972.81000	66.00000	74.00000	-8.82530	99.64200
4.999	41.420	973.63000	973.63000	79.00000	973.63000	972.81000	66.00000	74.00000	-9.95620	99.64200
5.004	91.207	973.80000	973.80000	79.00000	973.80000	972.81000	66.00000	74.00000	-9.46520	99.64200
5.019	130.650	973.75000	973.75000	79.00000	973.75000	972.81000	66.00000	74.00000	-9.10500	99.64200
4.975	291.420	973.51000	973.51000	79.00000	973.51000	972.81000	66.00000	74.00000	-10.52000	99.64200
4.999	391.260	973.51000	973.51000	79.00000	973.51000	972.81000	66.00000	74.00000	-10.05700	99.64200
4.988	531.350	973.70000	973.70000	79.00000	973.70000	972.81000	66.00000	74.00000	-9.32200	99.64200
	GRADIENT	129.78054	129.78054	10.53305	129.78054	129.70454	8.79977	9.86540	-1.17668	13.28525



V418-D9A (IA22), ET SEPARATING FROM ORB (O4RC3)

(AVK048) (04 MAY 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DSETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2455/ 0 RN/L = .87 GRAD ENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-5.051	169.950	-.00354	-.00905	-5.00000	-.00306	-.16170	.00335	.00755	-.00107	.00042	.10139
-5.007	191.640	.00007	.15917	-5.00000	-.00461	-.14570	.00265	.00461	.00029	.00023	.09298
-4.990	241.160	.00702	-.00004	-4.00000	-.00019	-.12913	.00136	.00333	.00017	.00014	.09429
-4.979	291.020	-.00373	-.01704	-4.00000	-.00365	-.12424	.00314	.00332	-.00030	.00005	.09737
-4.977	331.000	-.01000	-.00072	-4.00000	-.00410	-.12100	.01219	.00371	-.00033	.00012	.10534
-5.012	431.370	.00000	-.00000	-5.00000	-.00000	-.00000	-.00100	.00000	.00000	.00013	.00000
-5.024	531.670	.00000	-.00000	-5.00000	-.01124	-.00000	-.01371	.00000	.00000	-.00007	.00000
-5.001	631.510	.00000	-.00000	-5.01000	-.00000	-.00000	-.01000	.00000	.00000	-.00007	.00000
-5.001	731.440	.00000	-.00000	-5.01000	-.00000	-.00000	-.01000	.00000	.00000	-.00007	.00000
-4.995	931.330	.00000	-.00000	-5.00000	-.01103	-.00000	-.01519	.00000	.00000	-.00007	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2463/ 0 RN/L = .63 GRAD ENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-.021	12.445	.07185	1.30000	-.00013	.01407	-.03100	-.00733	.00363	.00057	.00016	.00331
-.029	41.949	.00073	1.20000	-.00001	.01373	-.04770	-.00314	.00469	.00073	.00017	.00353
-.001	91.455	-.00019	-.02434	-.00000	-.00000	-.00270	-.00000	.00000	.00000	.00000	.00000
.004	141.240	-.00000	-.00000	.00000	-.00000	-.00000	-.00000	.00000	.00000	.00000	.00000
.016	191.130	.01073	-.17700	.01433	-.00000	-.00142	.01004	.00446	.00000	.00003	.00000
.024	250.630	.00000	-.00000	.01000	-.00000	-.00000	-.00000	.00000	-.00000	.00000	.00000
-.013	391.370	.00000	-.00000	-.00000	-.00000	-.00000	.00000	.00000	-.00000	.00000	.00000
-.011	491.400	-.00000	-.00000	-.00000	-.00000	-.00000	.00000	.00000	-.00000	-.00000	.00000
-.000	591.420	.00000	.00000	-.00000	-.00000	-.00000	.00000	.00000	.00000	-.00000	.00000
.000	731.310	.00000	-.00000	-.00000	-.00000	-.00000	.00000	.00000	.00000	-.00000	.00000
.002	871.250	.00000	-.00000	-.00000	-.00000	-.00000	.00000	.00000	.00000	-.00000	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2471/ 0 RN/L = .64 GRAD ENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
5.052	-60.134	1.12420	-.43051	5.03110	-.00322	.05165	.00301	.01263	-.00078	-.00004	.08314
4.971	7.500	-.05119	.12733	4.90000	-.00409	.00379	.01157	.00313	.00051	.00005	.08535
4.939	41.420	.00019	-.42434	4.90000	-.00000	.00109	.01734	.00000	.00000	.00000	.08739
5.004	91.207	.00000	.03432	5.00110	-.00000	-.00000	.00000	.00000	-.00000	-.00000	.09000
5.019	150.630	.00000	.00000	5.01410	-.00104	.01037	.00000	.00000	-.00141	-.00004	.10106
4.975	291.420	-.00244	.24000	4.90000	-.00000	-.00000	.00000	.00000	-.00000	-.00000	.09000
4.939	391.260	.00000	.17300	4.97400	-.00000	.04000	.01767	.00352	.00010	-.00010	.08758
4.988	531.350	.00000	-.07515	4.97420	-.00000	.04917	.01746	.00349	.00000	-.00010	.08307
GRADIENT	.00000	-.00000	.01000	.63126	-.00000	.00000	.00154	.00000	.00000	.00001	.01138



V41B-D9A (1A22), ORBITER (04RC3) W/ET SEPARATING

(RVK047) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UNBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2466/ 0 RN/L = .89 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	C.MR	CYR	CYNR	CLLR	CAR	WM
-5.018	167.190	200.16000	.43997	.00345	.31954	-.31962	-.01115	-.00015	.00049	-.00484	.18923
-4.986	192.020	200.12000	-.11314	-.00334	.30227	-.32567	-.01178	-.00004	.00040	-.00680	.18972
-5.010	241.950	200.10000	-.27727	-.00573	.25332	-.32411	-.01206	-.00004	.00004	-.00095	.18919
-5.027	292.360	200.13000	-.02116	-.00413	.23794	-.32509	-.01213	.00005	-.00017	-.00800	.18931
-5.017	392.260	200.03000	-.07339	-.00512	.23115	-.33242	-.01062	-.00031	.00005	-.00434	.18959
-4.966	491.240	200.09000	-.05209	-.00159	.18173	-.33139	-.01047	-.00035	.00003	-.00647	.18934
-4.992	591.450	200.18000	.00407	-.00287	.17035	-.32052	-.01078	-.00035	.00020	-.00917	.18857
-4.999	691.530	200.16000	-.02339	-.00378	.16202	-.32794	-.01101	-.00034	.00059	-.00703	.18348
-5.000	791.470	200.21000	-.26379	-.00652	.16226	-.32797	-.01084	-.00036	.00059	-.00701	.18931
-4.996	891.320	200.09000	.03490	-.00307	.16033	-.32200	-.01095	-.00037	.00059	-.00699	.18793
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2469/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	C.MR	CYR	CYNR	CLLR	CAR	WM
-.022	11.797	200.03000	-.14697	-.00386	.20633	-.31395	-.01173	-.00050	.00022	.00433	.18910
-.025	42.930	200.03000	.18301	.00107	.23724	-.31215	-.01132	-.00020	-.00016	.00213	.18949
-.037	92.219	200.03000	2.38020	.03033	.25077	-.31258	-.01169	-.00020	-.00005	-.00189	.18870
-.025	142.110	200.10000	-.30036	-.00717	.22605	-.31744	-.01147	-.00003	-.00010	-.00744	.18914
-.027	192.170	200.11000	.06337	-.00303	.22000	-.32092	-.01189	-.00004	.00006	-.00644	.18872
-.012	292.060	200.05000	.63221	.00379	.22315	-.32339	-.01160	-.00024	.00035	-.00786	.18835
.026	391.350	200.11000	-.47431	-.00236	.20420	-.32273	-.01100	-.00031	.00011	-.00350	.18336
.006	491.420	200.05000	-.26337	-.00345	.18139	-.33039	-.01085	-.00029	.00014	-.01033	.18933
.001	591.450	200.01000	-.18426	-.00517	.17460	-.32038	-.01110	-.00032	.00055	-.00815	.18947
.001	791.410	200.05000	-.29426	-.00230	.17401	-.32031	-.01086	-.00034	.00055	-.00802	.18836
.001	871.340	200.00000	-.16489	-.00506	.17371	-.32260	-.01101	-.00033	.00055	-.00816	.18993
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2472/ 0 RN/L = .84 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	C.MR	CYR	CYNR	CLLR	CAR	WM
5.006	-58.981	200.09000	-.10514	-.00414	.6502	-.32606	-.01274	-.00061	.00030	-.00435	.18924
4.983	6.622	200.04000	.29537	.00334	.20579	-.31690	-.01204	-.00015	.00009	-.00032	.18899
4.960	42.136	200.01000	-.22630	-.00355	.21724	-.31464	-.01162	-.00017	-.00016	-.00459	.18920
4.954	92.318	200.03000	2.62070	.03463	.21056	-.31704	-.01144	-.00018	-.00011	-.00870	.18836
4.976	191.940	200.02000	.23048	-.00039	.21035	-.32037	-.01213	.00032	.00007	-.00335	.18895
5.009	291.320	200.10000	.20927	.00656	.22344	-.33147	-.01125	-.00026	.00012	-.00741	.18927
4.993	391.450	200.13000	.02462	-.00118	.16774	-.33133	-.01101	-.00035	.00008	-.01095	.18910
4.992	531.330	200.15000	-.30823	-.00517	.16018	-.32935	-.01093	-.00033	.00053	-.00914	.18917
GRADIENT	30.20931	.04461	.00050	.00050	.03108	-.10255	-.00182	-.00002	.00001	-.00005	.02854





V41B-D9A (1A22), ORBITER (O4RC3) W/ET SEPARATING

(SVK047) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2466/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.018	167.190	.00090	-.00083	.00345	.04396	.02197	.02851	-.00242	-.00032	.00075
-4.996	192.020	-.00550	-.00104	-.00364	.02671	.01591	.02654	-.00304	-.00020	.00066
-5.010	241.950	-.00640	-.00101	-.00573	-.02230	.01748	.02640	-.00332	-.00021	.00030
-5.027	292.350	-.00200	-.00113	-.00413	-.03750	.01647	.02533	-.00340	-.00012	.00009
-5.017	392.260	-.01510	-.00006	-.00512	-.04409	.00911	.02597	-.00209	-.00047	.00031
-4.966	491.240	-.01640	-.00021	-.00158	-.09357	.01016	.02464	-.00174	-.00051	.00029
-4.992	591.450	-.01440	-.00078	-.00287	-.10461	.01259	.02410	-.00206	-.00051	.00046
-4.999	691.530	-.01400	-.00077	-.00378	-.10725	.01359	.02628	-.00228	-.00051	.00084
-5.000	791.470	-.01390	-.00075	-.00632	-.10693	.01356	.02628	-.00211	-.00053	.00084
-4.996	891.320	-.01400	-.00074	-.00307	-.10664	.01353	.02631	-.00212	-.00053	.00084
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2469/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.022	11.797	.00093	-.00040	-.00386	-.07532	.02890	.03859	-.00272	-.00067	.00049
-.025	42.030	.00356	-.00071	.00107	-.04650	.03057	.03547	-.00232	-.00036	.00011
-.037	92.219	-.00411	-.00039	.03033	-.03265	.03022	.03243	-.00270	-.00037	.00022
-.025	142.110	-.00136	-.00095	-.00717	-.05728	.02532	.02655	-.00249	-.00020	.00017
-.027	192.170	-.00476	-.00098	-.00095	-.05319	.02182	.02562	-.00290	-.00021	.00033
-.012	292.060	-.00232	-.00035	-.00579	-.05950	.01597	.02634	-.00264	-.00041	.00052
.026	391.500	-.01612	-.00005	-.00136	-.07542	.00932	.02630	-.00204	-.00048	.00037
.006	491.420	-.01533	-.00097	-.00345	-.10116	.01195	.02326	-.00169	-.00046	.00041
.001	591.450	-.01309	-.00080	-.00517	-.10782	.01392	.02501	-.00215	-.00049	.00082
.001	791.410	-.01385	-.00079	-.00660	-.10811	.01396	.02612	-.00191	-.00051	.00082
.001	871.340	-.01385	-.00080	-.00506	-.10823	.01397	.02597	-.00207	-.00050	.00083
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2472/ 0 RN/L = .84 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
5.006	-59.981	-.01150	-.00044	-.00414	-.12391	.01769	.03073	-.00355	-.00079	.00059
4.983	6.622	-.00170	-.00081	.00334	-.03399	.02683	.03474	-.00285	-.00033	.00036
4.960	42.136	.00050	-.00078	-.00553	-.07254	.02089	.03047	-.00243	-.00034	.00012
4.964	92.318	-.00160	-.00079	.03463	-.07912	.02009	.02637	-.00226	-.00035	.00016
4.976	191.940	-.00700	-.00109	-.00059	-.07141	.02006	.02611	-.00234	-.00015	.00034
5.009	291.320	-.01370	-.00099	-.00095	-.05503	.01222	.02762	-.00207	-.00044	.00039
4.993	391.450	-.01520	-.00031	-.00118	-.10146	.01231	.02404	-.00184	-.00052	.00035
4.992	531.330	-.01390	-.00081	-.00617	-.10906	.01430	.02526	-.00180	-.00050	.00081
	GRADIENT	-.00026	-.00012	.00050	-.01268	.00405	.00525	-.00043	-.00005	.00005

REPRODUCIBILITY OF THE  
 ORIGINAL PAGE IS POOR



V41B-D9A (1A22), ORBITER (04RC3) W/ET SEPARATING

(TVK047) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2465/ 0 RN/L = .68 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHSD	CNSD	CT'D	CTFS	CTFU	CTAD	CTAS	CTAU
-5.018	167.190	200.16000	.43997	.01203	-.04359	218.35000	.00000	.00000	644.99000	.00000	.00000
-4.996	192.020	200.12000	-.11314	-.00049	-.07145	218.31000	.00000	.00000	644.94000	.00000	.00000
-5.010	241.950	200.10000	-.27727	-.00976	-.07705	218.32000	.00000	.00000	645.10000	.00000	.00000
-5.027	292.350	200.13000	-.02116	-.00027	-.05931	218.21000	.00000	.00000	644.65000	.00000	.00000
-5.017	392.260	200.00000	-.07359	-.00365	-.05330	218.03000	.00000	.00000	644.20000	.00000	.00000
-4.955	491.240	200.00000	-.02009	.01841	-.01516	218.13000	.00000	.00000	644.34000	.00000	.00000
-4.992	591.450	200.10000	.00407	.02333	-.01710	217.00000	.00000	.00000	643.50000	.00000	.00000
-4.999	691.530	200.10000	-.00023	.02309	-.01397	218.11000	.00000	.00000	644.25000	.00000	.00000
-5.000	791.470	200.21000	-.22379	.02340	-.01375	218.01000	.00000	.00000	644.07000	.00000	.00000
-4.996	891.320	200.05000	.03490	.02406	-.01339	218.03000	.00000	.00000	644.02000	.00000	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.07000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2469/ 0 RN/L = .66 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHSD	CNSD	CT'D	CTFS	CTFU	CTAD	CTAS	CTAU
-.022	11.797	200.03000	-.14237	.01547	.00150	224.21000	.00000	.00000	664.50000	.00000	.00000
-.025	42.030	200.03000	.18301	.02069	.00534	224.21000	.00000	.00000	664.05000	.00000	.00000
-.037	92.219	200.03000	2.30020	.01532	-.00375	224.71000	.00000	.00000	663.81000	.00000	.00000
-.025	142.110	200.10000	-.30033	.01053	-.02123	224.41000	.00000	.00000	663.12000	.00000	.00000
-.027	192.170	200.11000	.06397	.01972	-.00234	224.21000	.00000	.00000	662.00000	.00000	.00000
-.012	292.030	200.00000	.02221	-.00333	-.04043	223.01000	.00000	.00000	661.54000	.00000	.00000
.026	391.330	200.11000	-.47461	.00349	-.03343	223.01000	.00000	.00000	661.40000	.00000	.00000
.005	491.420	200.00000	-.20037	.02034	-.00243	223.01000	.00000	.00000	661.23000	.00000	.00000
.001	591.450	200.01000	-.16423	.01973	-.00003	223.71000	.00000	.00000	660.77000	.00000	.00000
.001	791.410	200.02000	-.25423	.02007	-.00357	223.51000	.00000	.00000	660.30000	.00000	.00000
.001	871.340	200.00000	-.16423	.02072	-.00344	223.41000	.00000	.00000	660.12000	.00000	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2472/ 0 RN/L = .64 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHSD	CNSD	CT'D	CTFS	CTFU	CTAD	CTAS	CTAU
5.006	-58.931	200.00000	-.10314	.01441	-.00323	229.71000	.00000	.00000	678.50000	.00000	.00000
4.933	6.622	200.04000	.22537	.01461	.00572	229.01000	.00000	.00000	678.23000	.00000	.00000
4.960	42.135	200.01000	-.22300	.01273	.00031	229.01000	.00000	.00000	678.23000	.00000	.00000
4.964	92.318	200.03000	2.62070	.01808	.00110	229.61000	.00000	.00000	678.21000	.00000	.00000
4.976	191.940	200.03000	.25548	.00970	-.01522	229.51000	.00000	.00000	678.16000	.00000	.00000
5.009	291.320	200.10000	.20327	.00035	-.03169	229.31000	.00000	.00000	677.51000	.00000	.00000
4.993	391.450	200.13000	.02462	.01620	.00113	229.11000	.00000	.00000	676.87000	.00000	.00000
4.992	531.330	200.15000	-.30023	.01905	-.00441	229.11000	.00000	.00000	676.93000	.00000	.00000
GRADIENT	30.20931		.04461	.00221	.00055	34.67485	.00000	.00000	102.42391	.00000	.00000



V418-D9A (IA22), ORBITER (O4RC3) I/ET SEPARATING

(UVK047) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2466/ 0 RN/L = .89 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-5.018	167.190	973.80000	973.80000	81.00000	973.80000	971.17000	67.00000	74.00000	-1.90324	99.76800
-4.996	192.020	973.72000	973.72000	81.00000	973.72000	971.17000	67.00000	74.00000	-1.43120	99.76800
-5.010	241.950	973.48000	973.48000	81.00000	973.48000	971.17000	67.00000	74.00000	-3.95550	99.76800
-5.027	292.360	973.28000	973.28000	81.00000	973.28000	971.17000	67.00000	74.00000	-6.26850	99.76800
-5.017	392.260	973.08000	973.08000	81.00000	973.08000	971.17000	67.00000	74.00000	-6.26670	99.76800
-4.966	491.240	972.82000	972.82000	81.00000	972.82000	971.17000	67.00000	74.00000	-6.76000	99.76800
-4.992	591.450	972.08000	972.08000	81.00000	972.08000	971.17000	67.00000	74.00000	-7.47830	99.76800
-4.999	691.530	971.72000	971.72000	81.00000	971.72000	971.17000	67.00000	74.00000	-6.75250	99.76800
-5.000	791.470	971.48000	971.48000	81.00000	971.48000	971.17000	67.00000	74.00000	-6.00450	99.76800
-4.996	891.320	971.38000	971.38000	81.00000	971.38000	971.17000	67.00000	74.00000	-5.06250	99.76800
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2469/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-.022	11.797	973.92000	973.92000	80.00000	973.92000	973.99000	66.00000	74.00000	-6.07500	99.64200
-.025	42.030	973.80000	973.80000	80.00000	973.80000	973.99000	66.00000	74.00000	-5.74210	99.64200
-.037	92.219	973.75000	973.76000	80.00000	973.75000	973.99000	66.00000	74.00000	-5.65910	99.64200
-.025	142.110	973.74000	973.74000	80.00000	973.74000	973.99000	66.00000	74.00000	-6.53270	99.64200
-.027	192.170	973.75000	973.76000	80.00000	973.76000	973.99000	66.00000	74.00000	-7.35540	99.64200
-.012	292.060	973.83000	973.83000	80.00000	973.83000	973.99000	66.00000	74.00000	-8.43400	99.64200
.026	391.360	973.77000	973.77000	80.00000	973.77000	973.99000	66.00000	74.00000	-8.48770	99.64200
.006	491.420	973.93000	973.96000	80.00000	973.93000	973.99000	66.00000	74.00000	-8.65930	99.64200
.001	591.450	974.19000	974.19000	80.00000	974.19000	973.99000	66.00000	74.00000	-8.64130	99.64200
.001	791.410	973.98000	973.98000	80.00000	973.98000	973.99000	66.00000	74.00000	-8.17650	99.64200
.001	871.340	974.20000	974.20000	80.00000	974.20000	973.99000	66.00000	74.00000	-7.85520	99.64200
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2472/ 0 RN/L = .84 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
5.006	-58.981	973.38000	973.38000	79.00000	973.38000	973.37000	65.00000	74.00000	-7.40810	99.64200
4.923	6.622	973.37000	973.37000	79.00000	973.37000	973.37000	65.00000	74.00000	-6.49950	99.64200
4.950	42.136	973.37000	973.37000	79.00000	973.37000	973.37000	65.00000	74.00000	-6.51320	99.64200
4.984	92.318	973.34000	973.34000	79.00000	973.34000	973.37000	65.00000	74.00000	-7.03540	99.64200
4.976	191.940	973.30000	973.30000	79.00000	973.30000	973.37000	65.00000	74.00000	-7.83320	99.64200
5.009	291.320	973.34000	973.34000	79.00000	973.34000	973.37000	65.00000	74.00000	-8.31290	99.64200
4.993	391.450	973.42000	973.42000	79.00000	973.42000	973.37000	65.00000	74.00000	-8.71630	99.64200
4.992	531.330	973.58000	973.58000	79.00000	973.58000	973.37000	65.00000	74.00000	-9.05420	99.64200
GRADIENT		146.99477	146.99477	11.93029	146.99477	146.99477	9.81666	11.17521	-.98153	15.04757

DATE 06 MAY 77

TABULATED SOURCE DATA, 1A22, (AEDC V41B-D9A)

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V41B-D9A (1A22), ET SEPARATING FROM ORB (04RC3)

(AVK047) (04 MAY 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2824/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	(N	CLM	CY	CYN	CBL	CA
-20.041	625.750	200.20000	-.21663	-20.09000	-.00466	- 41788	-.01661	.01692	.00035	.00036	.11478
-20.056	700.520	200.39000	.23138	-20.10100	.00116	- 43304	-.00024	.01730	-.00091	.00043	.13503
-20.013	799.780	200.06000	.11562	-20.05200	.00238	- 45155	.02395	.01805	-.00264	.00067	.16097
-20.014	999.530	199.93000	.24194	-20.02800	.00403	- 22356	-.04179	.01279	.00074	.00011	.12068
	GRADIENT	.00000	.00000	.00000	.00000	00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2828/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	(N	CLM	CY	CYN	CBL	CA
-14.983	474.450	200.07000	.06282	-15.02400	.00112	- 32758	-.00545	.01291	.00071	.00037	.11305
-15.036	500.070	200.15000	-.02573	-15.07200	-.00137	- 23459	-.02161	.01249	.00068	.00016	.10740
-15.032	549.970	200.14000	-.42212	-15.03300	-.00371	- 23397	-.01535	.01329	.00006	.00015	.11436
-15.036	600.150	200.23000	.03031	-15.05700	-.00245	- 30333	-.09247	.01275	-.00015	.00017	.12314
-14.935	699.870	199.92000	.32203	-14.97500	.00503	- 31267	.01197	.01364	-.00144	.00032	.14193
-14.939	799.190	200.04000	-.11301	-15.00400	.00048	- 25997	-.02025	.01019	.00055	-.00000	.11656
-15.016	999.370	200.03000	-.07504	-15.03000	-.00012	- 21705	-.03694	.00931	.00126	-.00003	.10899
	GRADIENT	.00000	.00000	.00000	.00000	00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2832/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	(N	CLM	CY	CYN	CBL	CA
-10.487	349.530	200.07000	.02193	-10.51000	.00215	- 24435	-.00026	.01025	.00006	.00001	.11461
-10.524	309.030	200.10000	-.42313	-10.54400	-.00235	- 21125	-.01530	.00975	.00958	-.00007	.10292
-10.530	449.930	200.09000	.27730	-10.55300	.00433	- 20934	-.01134	.01067	.00015	-.00003	.10588
-10.540	500.090	200.15000	-.15573	-10.56100	-.00181	- 21530	-.00245	.01123	-.00000	-.00005	.11180
-10.466	599.950	200.08000	-.23609	-10.48400	.00089	- 21352	.00792	.01111	-.00053	.00005	.12534
-10.495	699.130	200.04000	-.20546	-10.51000	-.00157	- 16019	-.01907	.00852	.00094	-.00014	.10499
-10.510	799.450	200.03000	.16231	-10.52500	.00349	- 13209	-.03114	.00776	.00122	-.00021	.09997
-10.510	999.300	199.97000	.25919	-10.52400	.00469	- 13790	-.03099	.00770	.00128	-.00021	.10219
	GRADIENT	.00000	.00000	.00000	.00000	00000	.00000	.00000	.00000	.00000	.00000

V41B-D9A (1A22), ET SEPARATING FROM ORB (04RC3)

(AVK047) (04 MAY 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UELDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2466/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-5.018	167.190	200.16000	.43997	-5.01690	.00262	-.16081	-.00141	.00744	-.00018	.00033	.10110
-4.956	192.020	200.12000	-.11314	-5.00130	-.00488	-.15500	.00236	.00597	-.00010	.00027	.10373
-5.010	241.950	200.10000	-.27727	-5.01670	-.00575	-.12534	-.00519	.00324	.00034	.00000	.09510
-5.027	292.350	200.13000	-.02116	-5.03460	-.00526	-.12113	-.00353	.00392	.00054	.00002	.09478
-5.017	392.260	200.08000	-.07339	-5.03240	-.00563	-.12012	.00498	.00503	-.00014	.00005	.09249
-4.956	491.240	200.06000	-.05209	-4.92250	-.00239	-.11341	.01085	.00590	-.00050	.00011	.10740
-4.992	591.450	200.18000	.00407	-5.00640	-.00365	-.07241	-.00598	.00471	.00059	.00002	.09226
-4.999	691.530	200.18000	-.02339	-5.01340	-.00455	-.05151	-.01544	.00438	.00079	-.00007	.09379
-5.000	791.470	200.21000	-.23379	-5.01300	-.00737	-.06163	-.01539	.00462	.00080	-.00008	.09171
-4.996	991.320	200.09000	.03490	-5.01040	-.00331	-.06143	-.01537	.00456	.00079	-.00007	.09309
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2469/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-.022	11.797	200.03000	-.14697	-.02141	-.00426	-.06346	-.01516	.00652	-.00032	.00018	.09125
-.025	42.030	200.03000	.18301	-.02036	.00037	-.07215	-.00776	.00764	-.00020	.00017	.09442
-.037	92.219	200.05000	2.35320	-.03319	.02233	-.06339	-.00241	.00555	.00057	.00002	.09274
-.025	142.110	200.10000	-.30033	-.02623	-.00212	-.06028	.00212	.00617	.00009	.00002	.09319
-.027	192.170	200.11000	.05337	-.03141	-.00194	-.05452	.00912	.00412	.00005	-.00003	.09339
-.012	292.050	200.05000	.60221	-.02230	.00494	-.05418	.01776	.00392	.00044	-.00001	.09235
.026	391.350	200.11000	-.47461	.01035	-.00942	-.04318	.01971	.00591	-.00025	.00005	.10363
.006	491.420	200.05000	-.26357	-.00508	-.00732	-.01151	.00350	.00493	.00032	-.00010	.08958
.001	591.450	200.01000	-.18426	-.01332	-.00597	-.00539	.00087	.00396	.00042	-.00008	.09362
.001	791.410	200.05000	-.29483	-.01329	-.00739	-.00520	.00082	.00399	.00044	-.00008	.09036
.001	871.340	200.06000	-.16462	-.01320	-.00336	-.00500	.00056	.00393	.00049	-.00008	.09109
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2472/ 0 RN/L = .84 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
5.006	-58.981	200.09000	-.10514	4.99420	-.00458	.02157	.00378	.00863	-.00052	-.00005	.08476
4.993	6.622	200.04000	.29537	4.99020	.00252	.00293	.00523	.00564	-.00005	-.00000	.08612
4.960	42.135	200.01000	-.22290	4.99070	-.00733	-.00030	.01054	.00544	.00045	.00002	.08527
4.954	92.318	200.03000	2.62070	4.99240	.03173	-.00093	.02127	.00500	.00006	-.00003	.09209
4.976	191.540	200.00000	.25048	4.99130	-.00207	.00697	.02249	.00534	-.00079	-.00007	.09309
5.009	291.320	200.10000	.20027	4.99310	.00005	.01971	.02249	.00536	-.00123	-.00001	.10627
4.993	391.450	200.13000	.02462	4.97810	-.00200	.04484	.01599	.00371	-.00018	-.00010	.08928
4.992	531.330	200.15000	-.30623	4.97650	-.00699	.04942	.01759	.00320	.00017	-.00010	.08599
GRADIENT		30.20931	.04461	.75220	.00038	.00044	.00079	.00085	-.00001	-.00000	.01301



DATE 06 MAY 77

TABULATED SOURCE DATA, 1A22, (AEDC V41B-D9A)

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V41B-D9A (1A22).ORBITER(04RC3) W/ET SEPARATING

(RVK048) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1069.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2825/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	C.MR	CYR	CYNR	CBLR	CAR	WM
-20.047	625.430	400.14000	.05071	.00176	.29245	-.36598	.00036	-.00042	.00091	-.03624	.18933
-19.993	699.310	399.83000	.20058	.00653	.21372	-.34247	-.00149	-.00057	.00019	-.02691	.18905
-19.969	798.810	399.73000	-.05338	.00419	.17774	-.33415	-.00266	-.00038	.00026	-.02191	.19109
-20.064	999.830	400.21000	.19134	.00047	.15632	-.32827	-.00259	-.00050	.00058	-.01977	.19082
	GRADIENT	.00000	.00000	.00000	.00000	.30000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2829/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	C.MR	CYR	CYNR	CBLR	CAR	WM
-15.058	475.170	400.15000	.37810	.00779	.27930	-.35339	-.00153	-.00048	.00061	-.02329	.18596
-15.027	499.730	400.13000	-.51975	-.00578	.24148	-.34875	-.00120	-.00065	.00045	-.02117	.18555
-15.007	549.410	400.03000	.83088	.01498	.18710	-.33690	-.00224	-.00055	.00030	-.02116	.18562
-14.990	599.260	399.93000	.16943	.00475	.17097	-.33412	-.00211	-.00053	.00010	-.01914	.18597
-14.973	693.650	399.82000	.25319	.00557	.15339	-.32325	-.00254	-.00047	.00060	-.01796	.18691
-15.018	793.330	400.00000	.05092	.00222	.15215	-.32774	-.00297	-.00048	.00061	-.01760	.18639
-15.060	1000.000	400.30000	.12844	.00029	.15245	-.32773	-.00295	-.00050	.00069	-.01767	.18909
	GRADIENT	.00000	.00000	.00000	.00000	.30000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2833/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	C.MR	CYR	CYNR	CBLR	CAR	WM
-10.508	349.650	399.96000	.22104	.00055	.29553	-.34518	-.00179	-.00063	.00028	-.01536	.18802
-10.557	399.860	400.04000	.16593	-.00226	.24632	-.34272	-.00144	-.00072	.00065	-.01669	.18765
-10.509	449.300	400.15000	-.11631	.00093	.20188	-.33731	-.00212	-.00063	.00057	-.01746	.18795
-10.492	499.080	400.03000	.35702	.00352	.17351	-.33420	-.00232	-.00061	.00033	-.01859	.18730
-10.482	599.830	399.92000	-.07391	.00198	.16068	-.32930	-.00277	-.00049	.00049	-.01832	.18718
-10.514	699.130	399.99000	.70377	.01217	.15539	-.32810	-.00279	-.00054	.00057	-.01757	.18739
-10.550	799.660	400.16000	-.10479	-.00212	.15558	-.32820	-.00294	-.00053	.00058	-.01772	.18750
-10.519	999.290	400.07000	-.03118	.00100	.15570	-.32816	-.00268	-.00055	.00058	-.01768	.18762
	GRADIENT	.00000	.00000	.00000	.00000	.30000	.00000	.00000	.00000	.00000	.00000

V41B-D9A (1A22), ORBITER (04RC3) W/ET SEPARATING

(RVK04B) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2467/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CMR	CYR	CYNR	CBLR	CAR	HM
-5.004	167.080	400.05000	.22510	-.00234	.29151	-.11922	-.01262	.00004	.00029	-.00510	.18939
-4.980	191.120	400.04000	1.82620	.02536	.28550	-.12225	-.01253	.00002	.00022	-.00522	.18979
-4.922	241.050	400.04000	-.13747	-.00289	.25919	-.12760	-.01193	-.00002	-.00005	-.00682	.18948
-5.006	291.470	400.09000	.10023	-.00265	.24333	-.13093	-.01115	-.00020	-.00003	-.00533	.18940
-4.978	390.920	400.11000	-.13021	-.00657	.20512	-.13337	-.01093	-.00032	.00011	-.00763	.18955
-4.973	490.920	400.05000	-.39750	-.00510	.17846	-.13065	-.01072	-.00032	.00006	-.00666	.18965
-4.995	591.330	400.19000	1.78400	.02293	.17061	-.12332	-.01101	-.00034	.00057	-.00763	.18972
-5.026	691.800	400.13000	.70353	.00559	.17100	-.12324	-.01105	-.00035	.00057	-.00765	.18905
-5.008	791.420	400.15000	.25019	.00030	.17093	-.12324	-.01089	-.00034	.00057	-.00770	.18944
-5.002	891.330	400.13000	.00229	-.00327	.17137	-.12832	-.01098	-.00034	.00059	-.00764	.18930
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2470/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CMR	CYR	CYNR	CBLR	CAR	HM
-.065	13.334	400.04000	-.28959	-.00905	.26387	-.10175	-.01191	-.00045	.00008	.00028	.18931
.031	40.678	400.03000	-.87922	-.01274	.26492	-.10500	-.01179	-.00012	-.00013	-.00336	.18903
.041	90.433	400.06000	-.13553	-.00424	.26503	-.10164	-.01221	.00002	.00006	-.00659	.18880
.009	141.030	400.04000	-.40005	-.00600	.24428	-.10200	-.01169	-.00002	-.00011	-.00729	.18903
-.006	191.230	400.08000	-.01482	-.00277	.23262	-.10282	-.01213	.00004	.00000	-.00949	.18927
.016	290.630	400.10000	.00348	-.00503	.22955	-.10324	-.01099	-.00031	.00015	-.00667	.18920
.024	390.930	400.14000	-.12291	-.00516	.18630	-.10315	-.01064	-.00035	.00005	-.01040	.18934
.003	491.230	400.11000	-.18355	-.00502	.17928	-.10293	-.01084	-.00035	.00037	-.01011	.18692
-.015	591.590	400.21000	-.29785	-.00652	.17673	-.10293	-.01100	-.00034	.00055	-.00946	.18699
.006	791.200	400.10000	-.26231	-.00674	.17718	-.10289	-.01103	-.00033	.00056	-.00854	.18909
.002	871.320	400.19000	-.46821	-.00939	.17700	-.10288	-.01080	-.00034	.00055	-.00851	.18913
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2473/ 0 RN/L = .83 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CMR	CYR	CYNR	CBLR	CAR	HM
4.913	-56.004	399.93000	.69418	.00470	.23354	-.10467	-.01125	-.00025	.00013	-.00154	.18952
5.043	5.172	400.27000	-2.04060	-.02308	.23974	-.10150	-.01193	-.00009	-.00017	-.00510	.18882
5.004	41.058	400.18000	.09125	-.00156	.23058	-.10174	-.01173	-.00004	-.00016	-.00812	.18941
4.998	91.017	400.10000	-.24442	-.00720	.22007	-.10217	-.01169	-.00008	-.00018	-.00944	.18906
5.025	190.610	400.21000	1.15610	.01332	.22406	-.10293	-.01142	-.00029	.00030	-.00281	.18934
5.014	290.610	400.21000	.33209	.00277	.20555	-.10303	-.01130	-.00028	.00012	-.00993	.18948
4.925	391.350	400.10000	-.02473	-.00309	.18359	-.10385	-.01100	-.00028	.00014	-.01021	.18934
4.978	531.350	400.16000	.10787	-.00206	.17458	-.10272	-.01094	-.00034	.00057	-.00731	.18934
GRADIENT	77.39322		-.39456	-.00562	.04635	-.10222	-.00231	-.00002	-.00003	-.00099	.03651



V418-D9A (1A22), ORBITER (04RC3) W/ET SEPARATING

(SVK048) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2467/ 0 RN/L = .89 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
-5.004	167.080	-.00010	-.00102	-.00234	.01578	.02239	.02826	-.00387	-.00013	.00055
-4.980	191.120	-.00320	-.00104	.02536	.00957	.01937	.02815	-.00378	-.00015	.00048
-4.982	241.050	-.00930	-.00109	-.00288	-.01657	.01401	.02655	-.00319	-.00018	.00021
-5.006	291.470	-.01310	-.00094	-.00265	-.03222	.01056	.02801	-.00241	-.00037	.00023
-4.978	390.920	-.01740	-.00097	-.00257	-.07077	.00907	.02576	-.00208	-.00048	.00037
-4.973	490.920	-.01600	-.00084	-.00510	-.09842	.01092	.02354	-.00194	-.00048	.00032
-4.995	591.330	-.01400	-.00078	.02293	-.10595	.01357	.02596	-.00221	-.00051	.00083
-5.026	691.800	-.01350	-.00076	.00559	-.10745	.01378	.02504	-.00222	-.00052	.00064
-5.008	791.420	-.01390	-.00078	.00090	-.10754	.01377	.02599	-.00207	-.00050	.00084
-5.002	891.330	-.01390	-.00078	-.00327	-.10742	.01376	.02510	-.00214	-.00050	.00084
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2470/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
-.055	13.334	.01752	-.00023	-.00205	-.01999	.04459	.03462	-.00291	-.00062	.00035
.031	40.678	.01154	-.00067	-.01274	-.01693	.03793	.03099	-.00279	-.00029	.00013
.041	90.433	.00098	-.00098	-.00424	-.02690	.02642	.02778	-.00321	-.00014	.00033
.009	141.030	-.00450	-.00102	-.00600	-.03944	.02092	.02704	-.00289	-.00019	.00015
-.006	191.280	-.00764	-.00112	-.00277	-.05144	.01804	.02489	-.00312	-.00013	.00027
.016	290.630	-.01459	-.00035	-.00503	-.05459	.01044	.02771	-.00188	-.00048	.00042
.024	390.930	-.01570	-.00022	-.00516	-.09379	.01146	.02410	-.00160	-.00052	.00032
.003	491.230	-.01405	-.00079	-.00502	-.10508	.01389	.02442	-.00179	-.00052	.00064
-.015	591.580	-.01370	-.00079	-.00632	-.10849	.01421	.02606	-.00195	-.00051	.00092
.006	791.200	-.01372	-.00000	-.00674	-.10839	.01420	.02301	-.00198	-.00050	.00083
.002	871.320	-.01372	-.00079	-.00939	-.10631	.01421	.02604	-.00175	-.00051	.00082
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2473/ 0 RN/L = .83 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
4.913	-58.004	.01020	.00008	.00470	-.05372	.03215	.03359	-.00204	-.00103	.00041
5.043	5.172	.00450	-.00091	-.02909	-.05009	.03236	.03007	-.00271	-.00026	.00010
5.004	41.058	-.00130	-.00094	-.00156	-.06218	.03614	.02706	-.00231	-.00022	.00011
4.993	91.017	-.00620	-.00095	-.00720	-.06959	.02216	.02576	-.00226	-.00025	.00009
5.025	190.610	-.00930	-.00081	.01332	-.06641	.01703	.02644	-.00218	-.00046	.00059
5.014	290.610	-.01560	-.00089	.00277	-.08448	.01104	.02539	-.00207	-.00046	.00040
4.985	391.350	-.01510	-.00089	-.00339	-.10228	.01239	.02447	-.00192	-.00045	.00041
4.978	531.350	-.01390	-.00079	-.00256	-.10905	.01408	.02701	-.00195	-.00051	.00083
GRADIENT		.00087	-.00016	-.00362	-.00934	.00626	.00591	-.00052	-.00005	.00002

REPRODUCIBILITY OF THE  
 ORIGINAL PAGE IS POOR



V41B-D9A (1A22),ORBITER(04RC:1) W/ET SEPARATING

(TVK048) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 400.030  
 Y = .000 ELEVON = .000  
 UNBLDR = .000 RCL = 1.000  
 GAS = 1.000

RUN NO. 2467/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.004	167.080	400.05000	.22510	.00542	-.04581	211.47000	.00000	.00000	645.34000	.00000	.00000
-4.990	191.120	400.04000	1.82620	.00102	-.06398	211.55000	.00000	.00000	645.57000	.00000	.00000
-4.982	241.050	400.04000	-.13747	-.01146	-.10486	211.50000	.00000	.00000	645.43000	.00000	.00000
-5.006	291.470	400.09000	.10023	.01326	-.06391	211.33000	.00000	.00000	644.92000	.00000	.00000
-4.978	390.920	400.11000	-.13021	.01719	-.05446	211.60000	.00000	.00000	645.72000	.00000	.00000
-4.973	490.920	400.05000	-.39750	.03342	-.02079	219.36000	.00000	.00000	648.03000	.00000	.00000
-4.955	591.330	400.15000	1.78400	.03142	-.02156	211.92000	.00000	.00000	649.63000	.00000	.00000
-5.026	691.600	400.13000	.70353	.02375	-.01522	221.63000	.00000	.00000	651.72000	.00000	.00000
-5.008	791.420	400.15000	-.5019	.02307	-.01645	221.56000	.00000	.00000	651.51000	.00000	.00000
-5.002	991.330	400.13000	.00228	.02347	-.01653	221.63000	.00000	.00000	652.50000	.00000	.00000
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2470/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-.065	13.334	400.04000	-.22859	.01198	-.00443	221.91000	.00000	.00000	664.35000	.00000	.00000
.031	40.678	400.03000	-.87222	.00230	-.01535	221.91000	.00000	.00000	664.35000	.00000	.00000
.041	90.433	400.02000	-.13353	.00235	-.02035	221.97000	.00000	.00000	664.54000	.00000	.00000
.009	141.030	400.04000	-.40003	-.00390	-.04437	221.80000	.00000	.00000	664.04000	.00000	.00000
-.006	191.280	400.06000	-.01482	.01533	-.01373	221.07000	.00000	.00000	664.84000	.00000	.00000
.016	290.690	400.10000	.00348	-.00023	-.04546	221.13000	.00000	.00000	665.00000	.00000	.00000
.024	390.930	400.14000	-.12291	.02370	.00520	221.50000	.00000	.00000	667.27000	.00000	.00000
.003	491.230	400.11000	-.18226	.02180	-.00336	221.11000	.00000	.00000	667.90000	.00000	.00000
-.015	591.530	400.21000	-.29785	.02070	-.00506	221.00000	.00000	.00000	667.55000	.00000	.00000
.006	791.200	400.10000	-.26231	.01533	-.00529	221.25000	.00000	.00000	668.34000	.00000	.00000
.002	871.320	400.19000	-.46221	.01875	-.00516	221.23000	.00000	.00000	668.25000	.00000	.00000
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2473/ 0 RN/L = .83 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
4.913	-56.004	399.93000	.69418	-.00124	-.01761	231.07000	.00000	.00000	679.59000	.00000	.00000
5.043	5.172	400.27000	-2.04060	.01577	.00108	231.23000	.00000	.00000	680.22000	.00000	.00000
5.004	41.053	400.12000	.03125	.01201	-.00576	231.32000	.00000	.00000	680.53000	.00000	.00000
4.923	91.017	400.10000	-.24442	.00469	-.01741	231.47000	.00000	.00000	680.77000	.00000	.00000
5.025	190.610	400.21000	1.15510	-.00049	-.03349	231.75000	.00000	.00000	681.74000	.00000	.00000
5.014	290.610	400.21000	.33209	.00302	-.02225	231.60000	.00000	.00000	681.17000	.00000	.00000
4.985	391.350	400.10000	-.02473	.01933	-.00441	221.62000	.00000	.00000	670.70000	.00000	.00000
4.978	531.360	400.16000	.10787	.01885	-.00364	221.73000	.00000	.00000	663.83000	.00000	.00000
GRADIENT		77.39322	-.35456	.00305	.00021	41.52522	.00000	.00000	131.52226	.00000	.00000



V418-D9A (IA22), ORBITER (04RC3) W/ET SEPARATING

(UVK048) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .070  
 UMBLDR = .000 RCS = 1.000  
 GAS = .000

RUN NO. 2467/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-5.004	157.080	974.32000	974.32000	81.00000	974.32000	974.10000	67.00000	74.00000	-1.22330	99.76800
-4.980	191.120	974.19000	974.19000	81.00000	974.19000	974.10000	67.00000	74.00000	-1.53990	99.73800
-4.982	241.050	974.46000	974.46000	81.00000	974.46000	974.10000	67.00000	74.00000	.14579	99.76900
-5.006	291.470	973.69000	973.69000	81.00000	973.69000	974.10000	67.00000	74.00000	2.95570	99.76800
-4.978	390.920	973.46000	973.46000	81.00000	973.46000	974.10000	67.00000	74.00000	2.87070	99.76800
-4.973	490.920	973.60000	973.60000	81.00000	973.60000	974.10000	67.00000	74.00000	2.06930	99.76800
-4.995	591.330	973.60000	973.60000	81.00000	973.60000	974.10000	67.00000	74.00000	-.13730	99.76800
-5.026	691.800	973.64000	973.64000	81.00000	973.64000	974.10000	67.00000	74.00000	-1.95040	99.76800
-5.008	791.420	974.02000	974.02000	81.00000	974.02000	974.10000	67.00000	74.00000	-3.35510	99.76800
-5.002	891.330	974.04000	974.04000	81.00000	974.04000	974.10000	67.00000	74.00000	-5.05070	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2470/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-.065	13.334	973.59000	973.59000	80.00000	973.59000	973.30000	66.00000	74.00000	-7.19860	99.64200
.031	40.678	973.50000	973.50000	80.00000	973.50000	973.30000	66.00000	74.00000	-8.05980	99.64200
.041	90.433	973.30000	973.30000	80.00000	973.30000	973.30000	66.00000	74.00000	-8.90570	99.64200
.009	141.030	973.12000	973.12000	80.00000	973.12000	973.30000	66.00000	74.00000	-9.05020	99.64200
-.005	191.230	973.31000	973.31000	80.00000	973.31000	973.30000	66.00000	74.00000	-8.21570	99.64200
-.016	290.680	973.03000	973.03000	80.00000	973.03000	973.30000	66.00000	74.00000	-6.93060	99.64200
.024	390.930	972.93000	972.93000	80.00000	972.93000	973.30000	66.00000	74.00000	-5.20220	99.64200
.003	491.230	972.65000	972.65000	80.00000	972.65000	973.38000	66.00000	74.00000	-5.23430	99.64200
-.015	591.580	972.66000	972.66000	80.00000	972.66000	973.39000	66.00000	74.00000	-5.55390	99.64200
.006	791.200	973.01000	973.01000	80.00000	973.01000	973.38000	66.00000	74.00000	-6.16590	99.64200
.002	871.320	972.87000	972.87000	80.00000	972.87000	973.38000	66.00000	74.00000	-6.70680	99.64200
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2473/ 0 RN/L = .83 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
4.913	-55.004	973.32000	973.32000	79.00000	973.32000	973.10999	65.00000	74.00000	-8.06360	99.64200
5.043	5.172	973.21000	973.21000	79.00000	973.21000	973.10999	65.00000	74.00000	-8.20180	99.64200
5.004	41.058	973.16000	973.16000	79.00000	973.16000	973.10999	65.00000	74.00000	-8.78000	99.64200
4.982	91.017	973.00000	973.00000	79.00000	973.00000	973.10999	65.00000	74.00000	-9.03710	99.64200
5.025	190.610	973.37000	973.37000	79.00000	973.37000	973.10999	65.00000	74.00000	-9.73170	99.64200
5.014	290.610	973.00000	973.00000	79.00000	973.00000	973.10999	65.00000	74.00000	-8.87570	99.64200
4.985	391.350	972.97000	972.97000	79.00000	972.97000	973.10999	65.00000	74.00000	-7.63550	99.64200
4.978	531.350	973.31000	973.31000	79.00000	973.31000	973.10999	65.00000	74.00000	-7.42820	99.64200
	GRADIENT	188.17262	188.17262	15.27485	188.17262	188.15329	12.56792	14.30809	-1.59594	19.26503



DATE 06 MAY 77

TABULATED SOURCE DATA, 1A22, (AEDC V41B-D9A)

PAGE 383

V41B-D9A (1A22), ET SEPARATING FROM ORB (04RC3)

(AVK048) (04 MAY 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 400.003  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2825/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	UN	CLM	CY	CYN	CBL	CA
-20.047	625.430	400.14000	.05071	-20.03000	.00035	-40465	-.03194	.01544	.00101	.00051	.11808
-19.993	699.310	399.93000	.20058	-20.01800	.00573	-42653	-.01106	.01593	-.00000	.00035	.12638
-19.999	798.810	399.73000	.05338	-19.99300	.00322	-43667	.01086	.01701	-.00142	.00038	.14871
-20.064	999.830	400.21000	.19134	-20.07900	-.00029	-35951	-.02284	.01199	.00070	.00003	.12596
	GRADIENT	.00000	.00000	.00000	.00000	00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2829/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	UN	CLM	CY	CYN	CBL	CA
-15.058	475.170	400.15000	.37810	-15.09000	.00259	-31406	-.01947	.01236	.00026	.00043	.11538
-15.027	499.730	400.13000	-.51975	-15.05700	-.00664	-29059	-.03102	.01206	.00124	.00015	.10433
-15.007	549.410	400.03000	.83009	-15.03000	.01414	-26005	-.02717	.01228	.00059	.00020	.10568
-14.990	599.260	399.93000	.16943	-15.01000	.00794	-29926	-.01528	.01270	.00004	.00014	.11688
-14.973	699.650	399.82000	.25319	-14.99300	.00420	-31058	.00543	.01286	-.00076	.00014	.13257
-15.018	799.330	400.00000	.06332	-15.03300	.00207	-26388	.00056	.01277	-.00095	.00027	.13227
-15.080	1000.000	400.30000	.12344	-15.09500	-.00047	-21708	-.03906	.00930	.00111	-.00002	.10807
	GRADIENT	.00000	.00000	.00000	.00000	00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2833/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	UN	CLM	CY	CYN	CBL	CA
-10.508	349.650	399.95000	.22104	-10.53200	.00763	-26891	.00554	.01451	-.00249	.00048	.12392
-10.557	399.860	400.04000	.18593	-10.50000	-.00235	-21104	-.02292	.01017	.00094	.00008	.09992
-10.509	449.300	400.18000	-.11691	-10.53000	.00024	-20059	-.02225	.01073	.00077	-.00002	.10167
-10.492	499.030	400.03000	.35702	-10.51100	.00780	-20932	-.01293	.01072	.00029	-.00003	.10647
-10.482	559.830	399.92000	-.07391	-10.49000	.00119	-21465	.00248	.01074	-.00031	-.00005	.11731
-10.514	699.130	399.93000	.70377	-10.52000	.01146	-19322	-.00029	.01114	-.00053	.00009	.12018
-10.550	799.650	400.18000	-.10479	-10.53500	-.00294	-14570	-.02811	.00222	.00116	-.00016	.09755
-10.519	999.290	400.07000	-.03118	-10.53400	.00030	-13936	-.03099	.00797	.00133	-.00021	.10064
	GRADIENT	.00000	.00000	.00000	.00000	00000	.00000	.00000	.00000	.00000	.00000

V418-D9A (IA22), ET SEPARATING FROM ORG (04RC3)

(AVK048) (04 MAY 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 CSETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2457/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-5.004	167.080	400.05000	.22510	-5.00440	-.00356	-.16899	-.00773	.00349	.00129	.00011	.10492
-4.980	191.120	400.04000	1.22620	-4.98220	.02432	-.16332	-.00119	.00392	.00032	.00010	.10773
-4.982	241.050	400.03000	-.13747	-4.98130	-.00397	-.15305	.00045	.00357	-.00041	.00012	.10411
-5.003	291.470	400.02000	.10333	-5.01930	-.01530	-.12320	-.00379	.00353	-.00032	.00017	.09397
-4.978	320.920	400.11000	-.13021	-4.97720	-.00734	-.11740	-.00323	.00435	.00045	.00005	.09339
-4.973	400.920	400.00000	-.30780	-4.97720	-.00004	-.11753	.00742	.00231	-.00023	.00010	.10422
-4.995	591.330	400.12000	1.73400	-5.00350	.02215	-.02031	.00423	.00334	-.00029	.00013	.10505
-5.026	691.800	400.13000	.70233	-5.03000	.00403	-.03429	-.01403	.00463	.00064	-.00004	.09339
-5.008	791.420	400.13000	.23019	-5.02230	.00011	-.03173	-.01548	.00429	.00055	-.00007	.09377
-5.002	991.330	400.13000	.00223	-5.01640	-.00405	-.03204	-.01534	.00430	.00071	-.00008	.09341
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2470/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-.065	13.334	400.04000	-.20039	-.04755	-.00229	-.00254	-.00233	.00516	.00081	.00034	.09945
.031	40.678	400.03000	-.87022	-.04233	-.01342	-.00004	-.01412	.00345	.00034	.00015	.10097
.041	90.433	400.02000	-.13053	-.04230	-.00022	-.00145	.00305	.00349	.00039	-.00002	.10069
.059	141.030	400.04000	-.40005	-.00423	-.00701	-.07045	.00322	.00351	-.00003	-.00005	.09313
-.005	191.230	400.03000	-.01402	-.01405	-.00003	-.00004	.00109	.00708	-.00007	.00004	.09113
.016	220.200	400.10000	.00049	.00163	-.00003	-.04003	.00003	.00423	.00018	-.00003	.09305
.034	320.930	400.14000	-.12201	.00004	-.00007	-.00032	.01709	.00479	.00018	.00005	.09335
.003	491.230	400.11000	-.10003	-.01103	-.00001	-.00004	.01402	.00350	.00008	-.00004	.09336
-.015	591.530	400.21000	-.23723	-.00005	-.00731	-.00329	.00075	.00434	.00032	-.00008	.09321
.006	791.200	400.10000	-.20231	-.00814	-.00754	-.00472	.00111	.00332	.00035	-.00008	.09358
.002	871.320	400.15000	-.40321	-.01218	-.01018	-.00518	.00103	.00431	.00034	-.00008	.09352
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2473/ 0 RN/L = .83 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
4.913	-56.004	399.93000	.63418	4.92270	.00478	-.02794	-.01154	.00503	.00101	.00003	.09729
5.043	5.172	400.27000	-2.04050	5.04730	-.02009	-.03214	.01237	.00519	-.00067	-.00017	.09398
5.004	41.058	400.19000	.09125	5.00200	-.00250	-.02194	.01422	.00504	-.00091	-.00013	.09143
4.998	91.017	400.10000	-.24442	4.99330	-.00315	.00043	.01259	.00481	-.00042	-.00003	.08709
5.025	190.610	400.21000	1.15310	5.01500	.01251	.00469	.02410	.00347	-.00016	-.00002	.09183
5.014	290.610	400.21000	.33209	4.97720	.00187	.00239	.03207	.00494	-.00055	-.00010	.09355
4.985	391.350	400.10000	-.02473	4.97030	-.00473	.03077	.02532	.00295	-.00050	-.00006	.09350
4.978	531.350	400.16000	.10737	4.93390	-.00305	.04093	.01748	.00276	-.00003	-.00009	.08722
GRADIENT	77.39322		-.39456	.97500	-.00578	-.00621	.00239	.00120	-.00013	-.00003	.01817

DATE 06 MAY 77

TABULATED SOURCE DATA. :A22. (AEDC V41B-D9A)

PAGE 385

V41B-D9A (A22).ORBITER(04RC3) W/ET SEPARATING

(RVK049) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 600.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2826/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	C.MR	CYR	CYNR	CBLR	CAR	WM
-20.014	625.200	600.13000	.15584	.00826	.19928	-.34042	-.00183	-.33061	.00011	-.02385	.18009
-20.049	700.410	600.41000	.06943	.00183	.16515	-.33114	-.00295	-.00044	.00045	-.02011	.18923
-20.024	800.340	600.35000	.01775	.00164	.15570	-.32309	-.00222	-.00052	.00057	-.01950	.18331
-19.982	999.160	599.63000	.25452	.00811	.15194	-.32771	-.00259	-.00050	.00060	-.01796	.17816
	GRADIENT	.00000	.00000	.00000	.00000	.30000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2830/ 0 RN/L = .89 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	C.MR	CYR	CYNR	CBLR	CAR	WM
-15.000	474.620	600.13000	.37657	.00597	.20266	-.34833	-.00232	-.00062	.00030	-.02216	.18824
-15.023	499.800	600.19000	.79372	.01150	.18493	-.33903	-.00195	-.00058	-.00012	-.02150	.18339
-15.021	549.790	600.19000	.15557	.00601	.17219	-.33378	-.00228	-.00053	.00016	-.01862	.18858
-15.055	600.450	600.32000	-.22373	-.00151	.15949	-.32233	-.00301	-.00045	.00052	-.01799	.16362
-15.042	700.240	600.34000	.26903	.00465	.15108	-.32750	-.00292	-.00052	.00061	-.01667	.17911
-14.940	799.730	599.94000	-.02050	.00524	.15319	-.32780	-.00289	-.00051	.00059	-.01761	.18833
-15.009	999.410	600.04000	-.36147	-.00230	.15239	-.32767	-.00289	-.00053	.00050	-.01745	.18873
	GRADIENT	.00000	.00000	.00000	.00000	.30000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2834/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	C.MR	CYR	CYNR	CBLR	CAR	WM
-10.487	349.590	600.05000	-.43436	-.00322	.26009	-.34632	-.00130	-.00080	.00069	-.01768	.18778
-10.504	399.730	600.13000	.17835	.00226	.20444	-.33922	-.00211	-.00057	.00056	-.01895	.18804
-10.517	449.700	600.15000	.61046	.01175	.17170	-.33269	-.00213	-.00054	.00012	-.01650	.18797
-10.546	500.150	600.30000	-.04731	.00146	.17000	-.33245	-.00255	-.00051	.00032	-.01818	.18304
-10.536	600.090	600.32000	-.72348	-.00322	.15651	-.32024	-.00228	-.00055	.00057	-.01750	.18778
-10.485	699.280	600.05000	.01822	.00377	.16998	-.32312	-.00277	-.00055	.00059	-.01743	.18769
-10.478	799.080	600.03000	.01753	.00321	.16734	-.32009	-.00264	-.00055	.00059	-.01739	.18785
-10.516	999.340	600.11000	.21231	.00501	.15360	-.32812	-.00285	-.00054	.00059	-.01731	.18769
	GRADIENT	.00000	.00000	.00000	.00000	.30000	.00000	.00000	.00000	.00000	.00000









V418-D9A (1A22), ORBITER (O4RC1) W/ET SEPARATING

(RVK050) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2743/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-20.015	624.620	-.04824	.09895	.00273	.67258	-.00916	.00225	-.00082	.00241	-.02480	.23280
-19.964	699.550	-.13640	-.04350	.00353	.64653	-.02852	.00173	-.00077	.00244	-.03216	.23266
-20.012	758.930	-.00213	.19225	.00457	.49004	-.02725	.00201	-.00099	.00147	-.04462	.23277
-20.001	939.390	-.01249	-1.49820	-.01934	.29138	.01144	-.00005	-.00058	.00028	-.03654	.23277
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2747/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-15.512	499.620	-.04260	.03199	.00261	.57891	-.00402	.00202	-.00114	.00290	-.02743	.23391
-15.494	548.890	-.02207	-.01167	.00371	.54824	-.01225	.00259	-.00128	.00223	-.03190	.23357
-15.495	593.130	-.04228	.16390	.00407	.51814	-.01813	.00172	-.00111	.00182	-.03337	.23409
-15.512	698.920	-.10905	.16167	.00490	.40824	-.01195	.00120	-.00094	.00049	-.04291	.23397
-15.590	800.610	.27875	.09005	-.00193	.30357	.00632	.00012	-.00070	.00043	-.04170	.23394
-15.521	999.480	.23675	-.06122	.00059	.28925	.01192	-.00036	-.00061	.00032	-.03897	.23379
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2423/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-9.998	317.060	.00983	.09339	.00282	.54459	.02101	-.00950	-.00059	.00104	.00376	.23442
-10.027	342.080	.11240	.10937	.00100	.50632	.01803	-.00923	-.00031	.00116	-.00047	.23419
-9.983	390.850	-.04552	.09785	.00361	.45703	.00643	-.00899	-.00034	.00061	-.01082	.23493
-9.996	441.170	-.10121	.15552	.00426	.41929	.00691	-.00856	-.00045	.00036	-.01615	.23470
-9.985	491.240	-.06131	-.05910	.00206	.40792	.00509	-.00846	-.00044	.00006	-.01553	.23406
-10.002	591.310	-.04749	.16027	.00492	.37351	.00711	-.00905	-.00035	-.00003	-.01376	.23236
-10.045	691.970	.05333	.51473	.00461	.33729	.00595	-.00827	-.00033	.00004	-.01656	.23420
-10.006	791.620	.02047	.03310	.00290	.30319	.01121	-.00859	-.00034	-.00032	-.01808	.23439
-10.004	991.530	.00072	.03359	.00299	.25308	.01341	-.00897	-.00034	-.00023	-.01625	.23384
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REPRODUCIBILITY OF THE  
 ORIGINAL PAGE IS POOR



V418-D9A (A22), ORBITER (O4RC1) W/ET SEPARATING

(RVK050) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1009.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UNELDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2429/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CLBLR	CAR	HM
-5.080	170.000	-.00147	-.17810	-.00397	.34507	.02509	-.01002	-.00014	-.00012	-.00110	.23252
-4.990	191.280	.05502	.26970	.00061	.37466	.02779	-.01038	-.00022	-.00015	-.00180	.23360
-4.997	241.340	-.01051	-.24378	-.00147	.40015	.02449	-.01036	-.00059	-.00031	-.00553	.23356
-4.981	290.890	-.01430	-.04204	.00295	.39082	.02019	-.00636	-.00049	-.00025	-.01260	.23341
-4.977	390.590	-.05026	-.06795	.00227	.38596	.01605	-.00930	-.00040	-.00013	-.01621	.23396
-4.939	491.260	-.05000	.01218	.00203	.30357	.01205	-.00026	-.00035	-.00003	-.01505	.23293
-5.031	591.790	.00470	-.00409	.00120	.38205	.00049	-.00044	-.00033	-.00008	-.01635	.23236
-5.014	691.450	-.04021	.02045	.00031	.30020	.01005	-.00010	-.00037	-.00022	-.01972	.23169
-5.005	791.420	.00275	-.17418	.00016	.20009	.01350	-.00053	-.00029	-.00023	-.01806	.23145
-5.009	891.390	.05025	-.05023	.00074	.28005	.01353	-.00034	-.00030	-.00024	-.01763	.23069
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2435/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CLBLR	CAR	HM
.012	40.944	.77012	-.20645	-.00315	.24749	.00171	-.01039	-.00046	-.00036	-.01409	.23449
-.048	93.120	.01375	-.19041	-.00051	.20092	.01723	-.01033	-.00000	-.00020	-.00363	.23391
-.000	141.630	.00373	.57400	.01103	.32113	.02413	-.01033	-.00003	-.00010	-.00226	.23481
.013	191.190	.05000	.04816	.00405	.34184	.02021	-.01126	-.00031	-.00054	-.00864	.23414
.036	290.230	.07004	-.07057	.00375	.33131	.02375	-.00031	-.00034	-.00023	-.01511	.23449
-.006	391.090	.10343	.02362	.00539	.34059	.01637	-.00004	-.00033	-.00007	-.01406	.23453
-.030	491.470	.12023	-.22075	-.00346	.35147	.00954	-.00039	-.00040	-.00011	-.01591	.23408
-.008	591.300	.04049	.33765	.00221	.32514	.00053	-.00040	-.00039	-.00016	-.01850	.23452
-.014	791.260	.02326	.22033	.00495	.28037	.01359	-.00042	-.00037	-.00024	-.01807	.23400
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2441/ 0 RN/L = .89 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CLBLR	CAR	HM
5.089	-53.615	2.20770	-.35187	-.00173	.23950	-.00151	-.00051	-.00012	-.00024	-.02959	.23544
4.954	15.659	-.03310	-.45358	-.00782	.24058	.00425	-.01072	-.00077	-.00008	-.00760	.23438
4.655	50.579	-.03001	-.05085	-.00123	.27339	.01009	-.01116	.00005	-.00025	-.00400	.23517
5.019	99.005	.13025	-.14020	.00002	.25732	.02322	-.01006	-.00057	-.00008	-.00292	.23333
5.019	193.530	.13122	.03379	.00777	.30031	.02432	-.00005	-.00005	-.00025	-.01120	.23355
4.991	293.530	.02664	.07063	.00202	.30226	.01903	-.00029	-.00046	-.00016	-.01310	.23367
4.956	399.110	.14491	.21940	.00464	.33014	.01174	-.00046	-.00037	-.00002	-.01351	.23377
4.990	479.170	.03499	.20893	.00055	.33309	.00782	-.00055	-.00038	-.00014	-.01483	.23357
GRADIENT		-.00224	-.02897	-.00049	.01536	.00027	-.00069	-.00005	-.00001	-.00049	.01497



REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMELDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2429/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
-5.080	170.000	5.04655	-.00017	-.00397	.01004	.04092	.04539	-.00257	-.00109	.00016
-4.990	191.220	5.04594	-.00010	.00081	.03954	.03891	.04600	-.00296	-.00117	-.00010
-4.997	241.340	5.04415	.00026	-.00147	.03477	.03551	.03370	-.00293	-.00154	-.00057
-4.981	290.890	5.03933	.00005	.00295	.05518	.03122	.03167	-.00112	-.00143	-.00021
-4.977	390.590	5.03542	-.00006	.00227	.01999	.02909	.02810	-.00166	-.00135	-.00008
-4.999	491.260	5.03134	-.00019	.00203	.02785	.02309	.02922	-.00182	-.00130	-.00008
-5.031	591.790	5.02591	-.00028	.00120	.01748	.01749	.02735	-.00202	-.00127	-.00003
-5.014	691.450	5.02773	-.00020	.00261	-.02311	.02194	.02439	-.00170	-.00131	-.00017
-5.005	791.420	5.02933	-.00025	.00016	-.03506	.02427	.02598	-.00193	-.00123	-.00019
-5.009	991.390	5.02538	-.00024	.00074	-.03541	.02459	.02635	-.00155	-.00124	-.00020
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2435/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
.012	40.944	5.01676	-.00022	-.00315	-.08933	.01278	.03033	-.00292	-.00141	-.00031
-.048	93.120	5.03232	-.00049	-.00051	-.04636	.02330	.04057	-.00316	-.00095	-.00015
-.000	141.670	5.04021	-.00031	.01125	-.01574	.03320	.04217	-.00287	-.00103	-.00006
.013	191.190	5.04301	.00031	.00485	.00323	.03727	.03576	-.00390	-.00156	-.00059
.035	290.230	5.04035	-.00005	.00375	-.00929	.03493	.02935	-.00243	-.00129	-.00019
-.006	391.090	5.03494	-.00014	.00339	.00876	.02304	.03035	-.00239	-.00128	-.00002
-.030	491.470	5.02874	-.00017	-.00346	.01773	.02061	.02930	-.00223	-.00134	-.00007
-.008	591.300	5.02953	-.00022	.00921	-.01138	.01959	.02578	-.00194	-.00133	-.00011
-.014	791.260	.75	-.00016	.00495	-.03367	.02473	.02628	-.00197	-.00132	-.00021
	GRADIENT	.00	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2441/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CEB
5.089	-53.615	5.01420	-.00063	-.00173	-.08535	.00920	.01328	-.00239	-.00104	-.00020
4.954	15.658	5.01920	.00019	-.00762	-.08350	.01499	.03542	-.00349	-.00169	-.00003
4.965	50.579	5.03120	-.00055	-.00123	-.05275	.02629	.03901	-.00393	-.00097	-.00021
5.019	99.005	5.03310	.00024	.00232	-.02935	.03403	.04097	-.00344	-.00149	-.00004
5.019	198.530	5.04210	.00000	.00777	.00007	.03322	.03175	-.00214	-.00128	-.00021
4.991	299.950	5.03990	.00004	.00202	-.00294	.02973	.02933	-.00208	-.00137	-.00012
4.996	399.110	5.03110	-.00015	.00454	.01378	.02243	.02340	-.00225	-.00129	-.00002
4.990	479.170	5.02630	-.00019	.00565	.00829	.01650	.02900	-.00246	-.00129	-.00010
	GRADIENT	.32055	.00001	-.00049	-.00547	.00096	.00226	-.00022	-.00011	-.00000



V418-D9A (IA22), ORBITER (04R:1) W/ET SEPARATING

(TVK050) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2429/ 0 RN/L = .85 GRAD ENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.080	170.000	-.00147	-.17810	-.06550	-.22014	414.53000	.00000	.00000	655.28000	.00000	.00000
-4.990	191.280	.05502	-.26970	.01258	-.06525	413.60000	.00000	.00000	653.63000	.00000	.00000
-4.997	241.340	.01061	-.24378	.02142	-.05555	413.94000	.00000	.00000	654.40000	.00000	.00000
-4.981	290.890	-.01430	-.04294	.02169	-.04843	414.22000	.00000	.00000	654.91000	.00000	.00000
-4.977	390.590	-.05526	-.06753	.02018	-.03202	414.74000	.00000	.00000	655.50000	.00000	.00000
-4.999	491.260	-.00090	.01219	.01505	-.04513	414.40000	.00000	.00000	655.00000	.00000	.00000
-5.031	591.790	.00470	-.00459	.00491	-.05535	415.53000	.00000	.00000	653.78000	.00000	.00000
-5.014	691.450	-.04021	.02045	.02718	-.02005	412.53000	.00000	.00000	652.29000	.00000	.00000
-5.005	791.420	.06275	-.17419	.02340	-.01639	412.05000	.00000	.00000	651.57000	.00000	.00000
-5.009	991.390	.02596	-.05323	.02277	-.01359	411.41000	.00000	.00000	650.61000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2435/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
.012	40.944	.77012	-.20645	.00554	.00698	415.63000	.00000	.00000	667.26000	.00000	.00000
-.048	93.120	.01375	-.18341	.01249	.01839	416.05000	.00000	.00000	667.57000	.00000	.00000
-.000	141.630	.03373	.57420	.00344	.01047	415.92000	.00000	.00000	657.35000	.00000	.00000
.013	191.190	.65000	.04916	.01018	.02417	415.57000	.00000	.00000	655.83000	.00000	.00000
.036	290.230	.07034	-.07637	.00702	.01876	416.34000	.00000	.00000	667.90000	.00000	.00000
-.006	391.090	.10343	.02222	-.00435	.00232	415.93000	.00000	.00000	657.23000	.00000	.00000
-.030	491.470	.12509	-.22375	-.01158	-.01974	415.75000	.00000	.00000	657.10000	.00000	.00000
-.008	591.300	.04649	.33785	.00229	.00511	415.46000	.00000	.00000	655.65000	.00000	.00000
-.014	791.260	.08526	.26933	.00351	.01241	415.07000	.00000	.00000	655.09000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2441/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
5.089	-53.615	2.20770	-.35187	-.01639	.04423	431.32000	.00000	.00000	645.51000	.00000	.00000
4.954	15.658	-.03510	-.45359	-.02332	.03434	431.77000	.00000	.00000	646.17000	.00000	.00000
4.965	50.579	-.03001	-.09085	-.01695	.04397	431.62000	.00000	.00000	646.04000	.00000	.00000
5.019	99.005	.13355	-.14020	-.01648	.05035	431.46000	.00000	.00000	645.75000	.00000	.00000
5.019	190.530	.13122	.08378	-.01931	.04736	431.16000	.00000	.00000	645.30000	.00000	.00000
4.991	290.530	.06094	.07067	-.02714	.03054	430.03000	.00000	.00000	644.81000	.00000	.00000
4.926	399.110	.14461	.21840	-.03539	.02108	430.67000	.00000	.00000	644.53000	.00000	.00000
4.990	479.170	.03429	.20993	-.04226	.00317	429.54000	.00000	.00000	643.44000	.00000	.00000
	GRADIENT	-.00224	-.02897	-.00149	.00219	27.57504	.00000	.00000	41.25772	.00000	.00000

Y41B-D9A (1A22), ORBITER (O4RC1) W/ET SEPARATING

(UVK050) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2743/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-20.015	624.620	976.50000	976.50000	91.00000	976.59000	976.39000	12.00000	76.00000	22.91800	99.51600
-19.964	698.550	976.65000	976.65000	91.00000	976.65000	976.39000	12.00000	76.00000	24.24800	99.51600
-20.012	798.930	976.42000	976.42000	91.00000	976.42000	976.39000	12.00000	76.00000	27.43900	99.51600
-20.001	999.390	976.34000	976.34000	91.00000	976.34000	976.39000	12.00000	76.00000	20.35300	99.51500
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2747/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-15.512	499.620	979.51000	979.51000	89.00000	979.51000	979.32000	8.00000	78.00000	25.79900	99.64200
-15.494	548.890	979.43000	979.43000	89.00000	979.43000	979.32000	8.00000	78.00000	26.10900	99.64200
-15.495	599.130	979.67000	979.67000	89.00000	979.67000	979.32000	8.00000	78.00000	27.98400	99.64200
-15.512	698.920	979.78000	979.78000	89.00000	979.78000	979.32000	8.00000	78.00000	25.15900	99.64200
-15.590	800.610	990.11000	990.11000	89.00000	990.11000	979.32000	8.00000	78.00000	21.06300	99.64200
-15.521	999.480	979.97000	979.97000	89.00000	979.97000	979.32000	8.00000	78.00000	14.55300	99.64200
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2423/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-9.998	317.060	990.54000	990.54000	81.00000	990.54000	990.32999	66.00000	72.00000	39.98400	99.76800
-10.027	342.080	990.76000	990.76000	81.00000	990.76000	990.32999	66.00000	72.00000	41.65300	99.76800
-9.993	390.650	990.45000	990.45000	81.00000	990.45000	990.32999	66.00000	72.00000	39.87700	99.76800
-9.986	441.170	979.80000	979.80000	81.00000	979.80000	990.32999	66.00000	72.00000	33.05400	99.76800
-9.965	491.240	979.80000	979.80000	81.00000	979.80000	990.32999	66.00000	72.00000	27.60800	99.76800
-10.002	591.310	978.73000	978.73000	81.00000	978.73000	990.32999	66.00000	72.00000	22.79400	99.76800
-10.045	691.970	978.61000	978.61000	81.00000	978.61000	990.32999	66.00000	72.00000	19.83500	99.76800
-10.006	791.620	977.80000	977.80000	81.00000	977.80000	990.32999	66.00000	72.00000	17.09100	99.76800
-10.004	991.530	977.20000	977.20000	81.00000	977.20000	990.32999	66.00000	72.00000	12.61900	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

C-6

V41B-DSA (1.22), ORBITER (04RC1) W/ET SEPARATING

(UWK050) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2429/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPSAL	TB1	TB2	DT	T
-5.080	170.000	976.42000	976.42000	79.00000	976.42000	976.21000	64.00000	73.00000	-.26276	99.76800
-4.990	191.280	974.85000	974.85000	79.00000	974.85000	976.21000	64.00000	73.00000	6.77750	99.76800
-4.997	241.340	974.14000	974.14000	79.00000	974.14000	976.21000	64.00000	73.00000	7.14910	99.76800
-4.981	290.890	974.39000	974.39000	79.00000	974.39000	976.21000	64.00000	73.00000	5.37450	99.76800
-4.977	390.590	975.63000	975.63000	79.00000	975.63000	976.21000	64.00000	73.00000	4.64510	99.76800
-4.999	491.230	974.15000	974.15000	79.00000	974.15000	976.21000	64.00000	73.00000	3.75090	99.76800
-5.031	591.790	972.74000	972.74000	79.00000	972.74000	976.21000	64.00000	73.00000	3.71170	99.76800
-5.014	691.450	971.04000	971.04000	79.00000	971.04000	976.21000	64.00000	73.00000	4.16730	99.76800
-5.005	791.420	969.02000	969.02000	79.00000	969.02000	976.21000	64.00000	73.00000	2.91970	99.76800
-5.009	991.390	967.13000	967.13000	79.00000	967.13000	976.21000	64.00000	73.00000	.88607	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2435/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPSAL	TB1	TB2	DT	T
.012	40.944	977.83000	977.83000	79.00000	977.83000	977.64000	65.00000	72.00000	-3.43980	99.76800
-.048	93.120	977.81000	977.81000	79.00000	977.81000	977.64000	65.00000	72.00000	-3.16940	99.76800
-.000	141.630	977.99000	977.99000	79.00000	977.99000	977.64000	65.00000	72.00000	-3.31470	99.76800
.013	191.190	977.71000	977.71000	79.00000	977.71000	977.64000	65.00000	72.00000	-3.44430	99.76800
.035	290.230	977.92000	977.92000	79.00000	977.92000	977.64000	65.00000	72.00000	-3.10330	99.76800
-.006	391.090	977.64000	977.64000	79.00000	977.64000	977.64000	65.00000	72.00000	-2.59330	99.76300
-.030	491.470	977.61000	977.61000	79.00000	977.61000	977.64000	65.00000	72.00000	-.55268	99.76900
-.008	591.300	977.49000	977.49000	79.00000	977.49000	977.64000	65.00000	72.00000	3.92600	99.76800
-.014	791.260	977.60000	977.60000	79.00000	977.60000	977.64000	65.00000	72.00000	3.12200	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2441/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPSAL	TB1	TB2	DT	T
5.089	-53.615	976.02000	976.02000	78.00000	976.02000	975.81000	64.00000	73.00000	-7.25390	99.76800
4.954	15.659	976.54000	976.54000	78.00000	976.54000	975.81000	64.00000	73.00000	-7.63030	99.76900
4.965	50.579	977.30000	977.30000	78.00000	977.30000	975.81000	64.00000	73.00000	-8.43180	99.76900
5.019	99.005	976.63000	976.63000	78.00000	976.63000	975.81000	64.00000	73.00000	-8.87310	99.76900
5.019	198.530	976.18000	976.18000	78.00000	976.18000	975.81000	64.00000	73.00000	-8.93350	99.76800
4.991	298.550	975.91000	975.91000	78.00000	975.91000	975.81000	64.00000	73.00000	-8.71910	99.75500
4.996	399.110	975.49000	975.49000	78.00000	975.49000	975.81000	64.00000	73.00000	-7.93420	99.76800
4.990	499.170	974.79000	974.79000	78.00000	974.79000	975.81000	64.00000	73.00000	-6.11120	99.76800
	GRADIENT	62.36684	62.36684	4.98148	62.36684	62.32022	4.08737	4.66215	-.50328	6.37169





V418-D9A (IA22), ET SEPARATING FROM ORB (04RC1)

(AVK050) (04 MAY 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2429/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHA	BETAT	CN	CLM	CY	CYN	CSL	CA
-5.080	170.000	-.00147	-.17810	-.03335	-.00414	-.09719	.00449	.00326	.00120	.00031	.08431
-4.990	191.280	.05602	-.26870	.05504	.00072	-.09545	.01073	.00499	.00045	.00020	.08993
-4.997	241.340	.01061	-.24378	.04725	-.00120	-.09041	.01323	.00362	.00066	.00019	.08797
-4.991	290.890	-.01430	-.04294	.05913	.00300	-.08864	.02261	.00388	.00011	.00018	.09347
-4.977	390.590	-.09526	-.06755	.05922	.00221	-.07608	.03258	.00567	-.00074	.00014	.10289
-4.999	491.260	-.08090	.01218	.03224	.00184	-.04762	.02513	.00546	-.00062	.00014	.10388
-5.031	591.790	.00470	-.00459	-.00459	.00092	-.00740	.00203	.00420	-.00001	-.00004	.05539
-5.014	691.450	-.04021	.02045	.01363	.00242	-.00613	.00113	.00436	.00018	-.00006	.08800
-5.005	791.420	.06275	-.17418	.02443	-.00009	-.00553	.00136	.00423	.00026	-.00007	.05931
-5.009	991.390	.02006	-.05323	.02059	-.00050	-.00534	.00094	.00427	.00028	-.00006	.09048
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2435/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHA	BETAT	CN	CLM	CY	CYN	CSL	CA
.012	40.944	.77012	-.20645	5.02910	-.00337	.05535	.00568	.00527	.00070	.00004	.07965
-.048	93.120	.01375	-.18341	4.82450	-.00101	.00335	.00433	.00611	.00101	.00011	.08116
-.000	141.630	.03373	.57480	5.03930	.01153	-.02146	.01595	.00600	.00058	.00012	.08294
.013	191.190	.05000	.04916	5.03620	.00516	-.03034	.02793	.00783	-.00030	.00021	.08354
.036	290.230	.07654	-.07267	5.07630	.00370	-.01691	.04368	.00562	-.00139	.00001	.05961
-.006	391.090	.10343	.02262	5.02870	.00355	.01358	.03631	.00531	-.00177	.00003	.09559
-.030	491.470	.12599	-.25675	4.99940	-.00353	.04766	.01977	.00269	-.00036	-.00007	.08692
-.008	591.300	.04849	.39785	5.01820	.00799	.04654	.01833	.00325	-.00039	-.00008	.06652
-.014	791.260	.06526	.26293	5.01520	.00479	.04998	.01833	.00346	-.00003	-.00008	.08970
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2441/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHA	BETAT	CN	CLM	CY	CYN	CSL	CA
5.089	-53.615	2.20770	-.35187	10.10300	-.00235	.13609	.02398	.00593	-.00149	-.00015	.08137
4.954	15.658	-.03510	-.45368	9.97280	-.00743	.10136	.01771	.01368	-.00091	-.00000	.08444
4.955	50.579	-.03001	-.09065	9.92220	-.00178	.04008	.02313	.00535	.00055	.00008	.08628
5.019	99.005	.12005	-.14020	10.00000	.00276	.03139	.04159	.00393	-.00041	-.00015	.09352
5.019	193.530	.13122	.02378	10.03100	.00777	.04225	.05442	.00332	-.00243	.00016	.10038
4.991	293.550	.03094	.07063	10.02000	.00206	.03426	.04439	.00421	-.00155	.00002	.09259
4.986	399.110	.14481	.21640	10.01700	.00449	.11355	.03490	.00249	-.00078	-.00007	.09079
4.990	479.170	.03498	.20893	10.01700	.00546	.11388	.03450	.00208	-.00066	-.00008	.09078
GRADIENT		-.00224	-.02897	.63691	-.00047	.00647	.00113	.00087	-.00006	-.00000	.00539













V41B-D9A (IA22), ORBITER(O4RC) W/ET SEPARATING

(RVK052) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2436/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-.016	12.783	200.12000	.91899	.01340	.33492	.02660	-.01122	-.00035	-.00008	-.00268	.23470
-.003	41.253	200.14000	-.29314	.00109	.30324	.02634	-.01095	-.00030	-.00008	-.00164	.23426
-.036	92.229	200.05000	-.43530	-.00326	.35434	.03366	-.01093	-.00006	-.00055	-.00395	.23406
-.035	142.200	200.09000	-.07947	.00009	.35377	.02794	-.00223	-.00069	-.00012	-.00839	.23454
-.056	192.650	200.05000	-.23149	-.00339	.35027	.02404	-.00390	-.00027	.00017	-.01410	.23470
-.031	292.310	200.12000	-.08424	.00049	.34219	.01693	-.00327	-.00045	-.00014	-.01453	.23470
.013	391.310	200.03000	.07352	.00402	.35757	.01107	-.00553	-.00040	-.00003	-.01529	.23417
.006	491.290	200.10000	-.22403	.00073	.34027	.00659	-.00543	-.00039	-.00012	-.01767	.23429
-.006	591.330	200.07000	-.06592	.00067	.30511	.01166	-.00545	-.00041	-.00037	-.01995	.23455
-.010	791.340	200.07000	.01787	.00234	.25302	.01336	-.00941	-.00036	-.00024	-.01790	.23441
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2442/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
5.069	-53.371	200.18000	.00351	.00333	.25663	.00123	-.01183	-.00016	-.00050	-.01359	.23469
4.974	14.868	200.00000	.14139	.00305	.30567	.02675	-.01375	-.00192	-.00017	-.00115	.23429
4.995	50.183	200.05000	-.49455	-.00502	.32064	.02740	-.01090	.00001	-.00054	-.00608	.23434
4.937	100.870	199.92000	-.17817	-.00203	.32539	.02333	-.00358	-.00045	-.00017	-.00957	.23427
4.939	200.180	199.93000	-.13765	-.00191	.32043	.02055	-.00932	-.00041	-.00014	-.01373	.23424
4.936	299.540	200.16000	.02472	.00572	.33395	.01406	-.00931	-.00023	-.00003	-.01243	.23332
4.991	399.450	200.04000	-.32557	-.00155	.33759	.00779	-.00930	-.00035	-.00014	-.01416	.23370
4.987	479.380	199.95000	.35909	.00371	.30948	.00906	-.00946	-.00036	-.00012	-.01678	.23354
	GRADIENT	13.45171	.00951	.00021	.02083	.00180	-.00092	-.00013	-.00001	-.00008	.01576

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR





REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = .375.0000 IN. Z0  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UNSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2430/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.021	167.090	5.04766	.00030	.00351	.09114	.03791	.03945	-.00245	-.00151	.00015
-5.024	192.240	5.04426	.00018	.00399	.09121	.03391	.03671	-.00102	-.00147	.00002
-5.031	242.270	5.03902	-.00021	.00002	.08197	.02993	.03257	-.00230	-.00115	.00037
-5.039	292.460	5.03347	-.00017	-.00071	.03187	.02059	.02978	-.00168	-.00121	-.00005
-5.021	392.290	5.03233	-.00021	.00231	.03139	.02191	.03071	-.00175	-.00123	.00001
-4.978	491.320	5.03353	-.00027	.00321	.02132	.01782	.02905	-.00192	-.00126	-.00007
-4.988	591.320	5.02591	-.00029	.00069	-.01129	.01922	.02534	-.00173	-.00125	-.00001
-5.010	691.540	5.02049	-.00024	.00314	-.03000	.02303	.02569	-.00173	-.00124	-.00021
-5.009	791.460	5.02657	-.00023	.00189	-.03124	.02447	.02569	-.00166	-.00124	-.00018
-5.009	991.330	5.02959	-.00024	.00422	-.03137	.02451	.02654	-.00169	-.00123	-.00018
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2436/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.016	12.783	5.04500	.00005	.01340	-.00105	.03951	.04150	-.00380	-.00130	-.00004
-.003	41.253	5.04148	-.00004	.00108	-.03137	.03737	.04262	-.00352	-.00124	-.00003
-.036	92.229	5.04546	-.00020	-.00326	.01130	.04359	.04033	-.00351	-.00101	-.00050
-.036	142.200	5.04542	.00027	.00093	.0209	.03397	.03338	-.00179	-.00153	-.00008
-.056	192.650	5.04163	-.00011	-.00339	.0155	.03507	.03017	-.00246	-.00122	.00021
-.031	292.310	5.03657	-.00000	.00049	.00147	.02356	.02974	-.00183	-.00139	-.00009
.013	391.310	5.03025	-.00014	.00402	.02157	.02111	.02973	-.00219	-.00135	.00001
.006	491.290	5.02391	-.00021	.00073	.0031	.01803	.02354	-.00169	-.00134	-.00007
-.006	591.330	5.02541	-.00014	.00007	-.03105	.02270	.02439	-.00200	-.00136	-.00053
-.010	791.340	5.02397	-.00017	.00294	-.03167	.02469	.02637	-.00197	-.00131	-.00019
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2442/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
5.069	-53.371	5.01680	-.00051	.00333	-.07158	.01209	.02997	-.00451	-.00109	-.00046
4.974	14.858	5.04320	.00182	.00305	-.02120	.03759	.04236	-.00644	-.00295	-.00013
4.996	50.183	5.04400	-.00035	-.00502	-.00162	.03319	.03724	-.00362	-.00091	-.00049
4.937	100.870	5.04400	.00014	-.00203	-.00130	.03755	.03351	-.00234	-.00137	-.00013
4.969	200.180	5.03850	.00000	-.00191	-.00143	.03125	.02325	-.00210	-.00133	-.00010
4.996	299.540	5.03290	-.00013	.00672	.01128	.02471	.03030	-.00213	-.00128	.00001
4.991	399.450	5.02730	-.00022	-.00155	.01154	.01644	.02337	-.00242	-.00127	-.00010
4.987	479.330	5.02700	-.00020	.00871	-.01185	.01971	.02500	-.00227	-.00128	-.00008
	GRADIENT	.33920	.00012	.00021	-.00136	.00253	.00265	-.00043	-.00019	-.00001



V41B-D9A (IA22), ORBITER (04RC1) W/ET SEPARATING

(TVK052) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DGBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2430/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHFD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.021	167.090	200.09000	.00548	.01483	-.03092	434.12000	.00000	.00000	649.69000	.00000	.00000
-5.024	162.240	200.02000	.11578	.01378	-.03542	435.03000	.00000	.00000	651.05000	.00000	.00000
-5.031	242.270	200.07000	-.12266	.00316	-.04762	436.10000	.00000	.00000	652.65000	.00000	.00000
-5.039	292.460	200.05000	-.11958	.04429	.03378	437.25000	.00000	.00000	654.42000	.00000	.00000
-5.021	392.230	200.00000	.19277	.00316	-.02708	437.53000	.00000	.00000	654.81000	.00000	.00000
-4.978	491.320	199.50000	.15717	-.00338	-.04701	437.50000	.00000	.00000	655.33000	.00000	.00000
-4.988	591.320	200.00000	-.20552	.03037	.02129	439.50000	.00000	.00000	656.25000	.00000	.00000
-5.010	691.540	200.04000	.02031	.01432	-.00222	439.50000	.00000	.00000	656.40000	.00000	.00000
-5.009	791.460	200.05000	-.05315	.01854	-.00702	439.67000	.00000	.00000	656.00000	.00000	.00000
-5.009	891.330	199.90000	.16755	.01535	-.00027	440.33000	.00000	.00000	659.07000	.00000	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2436/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHFD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-.016	12.783	200.12000	.91899	.01103	.01157	443.40000	.00000	.00000	663.55000	.00000	.00000
-.003	41.253	200.14000	-.25314	.01700	.01354	444.25000	.00000	.00000	664.65000	.00000	.00000
-.035	52.229	200.00000	-.43550	.01650	.01997	444.42000	.00000	.00000	665.11000	.00000	.00000
-.035	142.200	200.00000	-.07947	.00423	-.00077	444.35000	.00000	.00000	665.00000	.00000	.00000
-.056	192.650	200.05000	-.23149	.02135	.02843	444.37000	.00000	.00000	665.04000	.00000	.00000
-.031	292.310	200.12000	-.03424	.00092	.00047	444.40000	.00000	.00000	665.02000	.00000	.00000
.013	391.310	200.03000	.07332	-.00154	-.01975	444.75000	.00000	.00000	665.62000	.00000	.00000
.006	491.250	200.10000	-.22403	-.01053	-.05297	444.71000	.00000	.00000	665.52000	.00000	.00000
-.006	591.330	200.07000	-.00052	.00539	.00710	444.82000	.00000	.00000	665.53000	.00000	.00000
-.010	791.340	200.07000	.01737	.00732	.01057	444.30000	.00000	.00000	665.50000	.00000	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2442/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHFD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
5.069	-53.371	200.10000	.00351	-.01308	.04622	437.23000	.00000	.00000	654.35000	.00000	.00000
4.974	14.258	200.00000	.14138	-.01244	.04704	437.25000	.00000	.00000	653.49000	.00000	.00000
4.935	50.183	200.05000	-.42455	-.01307	.04303	434.75000	.00000	.00000	650.62000	.00000	.00000
4.937	100.870	199.50000	-.17817	-.01007	.04357	432.43000	.00000	.00000	647.17000	.00000	.00000
4.969	200.160	199.50000	-.13765	-.01623	.04012	431.33000	.00000	.00000	645.22000	.00000	.00000
4.996	299.540	200.16000	.05472	-.02435	.02153	428.84000	.00000	.00000	641.80000	.00000	.00000
4.991	399.450	200.04000	-.32937	-.03226	-.00232	428.93000	.00000	.00000	641.93000	.00000	.00000
4.987	479.380	199.50000	.35909	-.00573	.05534	429.31000	.00000	.00000	642.50000	.00000	.00000
GRADIENT	13.45171	.00951	-.00024	.00316	.29.36844	.00000	.00000	.00000	43.95278	.00000	.00000



V41B-D9A (1A22), ORBITER(041C1) W/ET SEPARATING

(UVK052) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1250.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 OSETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UNBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2430/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	T81	T82	DT	T
-5.021	167.090	959.34000	959.34000	79.00000	959.34000	933.67009	64.00000	73.00000	2.06300	99.76800
-5.024	192.240	957.40000	957.40000	79.00000	957.40000	933.67009	64.00000	73.00000	1.60910	99.76200
-5.031	242.279	959.40000	959.40000	79.00000	959.40000	933.67009	64.00000	73.00000	.07401	99.76900
-5.039	292.469	959.14000	959.14000	79.00000	959.14000	933.67009	64.00000	73.00000	-1.21810	99.76800
-5.021	322.290	959.60000	959.60000	79.00000	959.60000	933.67009	64.00000	73.00000	-1.53450	99.76500
-4.978	491.320	957.90000	957.90000	79.00000	957.90000	933.67009	64.00000	73.00000	-3.08720	99.76800
-4.939	591.320	959.20000	959.20000	79.00000	959.20000	933.67009	64.00000	73.00000	-4.32550	99.76200
-5.010	691.540	959.00000	959.00000	79.00000	959.00000	933.67009	64.00000	73.00000	-3.92250	99.76600
-5.009	791.490	959.30000	959.30000	79.00000	959.30000	933.67009	64.00000	73.00000	-3.02020	99.76900
-5.009	991.320	959.00000	959.00000	79.00000	959.00000	933.67009	64.00000	73.00000	-2.05310	99.76200
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2436/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	T81	T82	DT	T
-0.016	12.783	977.37000	977.37000	79.00000	977.37000	977.30000	64.00000	72.00000	-2.74620	99.76900
-0.003	41.253	977.20000	977.20000	79.00000	977.20000	977.30000	64.00000	72.00000	-1.94610	99.76300
-0.026	92.229	977.16000	977.16000	79.00000	977.16000	977.30000	64.00000	72.00000	-.32922	99.76900
-0.036	142.200	977.40000	977.40000	79.00000	977.40000	977.30000	64.00000	72.00000	.50526	99.76200
-0.056	192.030	977.54000	977.54000	79.00000	977.54000	977.30000	64.00000	72.00000	1.12250	99.76900
-0.031	252.310	977.10000	977.10000	79.00000	977.10000	977.30000	64.00000	72.00000	2.51310	99.76800
.013	391.310	977.41000	977.41000	79.00000	977.41000	977.30000	64.00000	72.00000	2.06410	99.76800
.006	491.290	977.30000	977.30000	79.00000	977.30000	977.30000	64.00000	72.00000	-.80845	99.76300
-0.006	591.330	977.42000	977.42000	79.00000	977.42000	977.30000	64.00000	72.00000	-3.14510	99.76200
-0.010	791.340	977.51000	977.51000	79.00000	977.51000	977.30000	64.00000	72.00000	-1.13290	99.76600
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2442/ 0 RN/L = .83 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	T81	T82	DT	T
5.069	-53.371	977.30000	977.30000	78.00000	977.30000	974.10000	64.00000	72.00000	-2.97450	99.89400
4.974	14.269	977.46000	977.46000	78.00000	977.46000	974.10000	64.00000	72.00000	-1.74590	99.89400
4.933	50.183	977.60000	977.60000	78.00000	977.60000	974.10000	64.00000	72.00000	-.66798	99.89400
4.937	100.870	979.04000	979.04000	78.00000	979.04000	974.10000	64.00000	72.00000	.42014	99.89400
4.939	200.160	979.00000	979.00000	78.00000	979.00000	974.10000	64.00000	72.00000	1.21220	99.89400
4.936	299.540	974.20000	974.20000	78.00000	974.20000	974.10000	64.00000	72.00000	1.40330	99.89400
4.991	399.450	974.40000	974.40000	78.00000	974.40000	974.10000	64.00000	72.00000	.51691	99.89400
4.987	479.320	974.31000	974.31000	78.00000	974.31000	974.10000	64.00000	72.00000	-.48231	99.89400
	GRADIENT	65.74253	65.74253	5.24617	65.74253	65.51654	4.30455	4.84262	-.11743	6.71872



V41B-D9A (IA22), ET SEPARATI(O FROM ORB (O4RC1)

(AVK052) ( 04 MAY 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DSETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UNCLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2430/ 0 RN/L = .85 GRAD ENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEL	CA
-5.021	167.090	200.03000	-.00548	.02316	.00322	-.11052	.00463	.00532	.00013	.00043	.09531
-5.024	192.240	200.03000	-.11578	.02037	.00406	-.11636	.00344	.00576	.00054	.00033	.09422
-5.031	242.270	200.07000	-.12203	.00042	-.00019	-.00333	.00970	.00000	.00057	.00014	.09738
-5.039	292.460	200.03000	-.11939	-.00213	-.00003	-.00333	.01416	.00446	.00010	.00007	.09308
-5.021	332.290	200.03000	-.19277	.01143	.00240	-.07403	.00448	.00443	-.00023	.00007	.09349
-4.978	491.330	199.00000	-.16717	.04055	.00494	-.00303	.03102	.00003	-.00031	.00013	.10207
-4.929	591.320	200.00000	-.20032	.03731	.00042	-.02332	.01043	.00312	-.00024	-.00007	.09557
-5.010	691.540	200.04000	-.08251	.01939	.00200	-.00005	.00034	.00492	.00010	-.00009	.09310
-5.009	791.460	200.05000	-.06315	.02057	.00165	-.00333	.00122	.00459	.00029	-.00007	.09334
-5.009	991.330	199.00000	-.16723	.03079	.00009	-.00491	.00110	.00440	.00027	-.00007	.09228
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2436/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEL	CA
-.016	12.783	200.12000	.91829	5.00000	.01346	-.02009	-.00320	.00259	.00034	.00002	.06516
-.003	41.253	200.14000	-.20314	5.00000	.00103	-.01269	-.00273	.00578	-.00116	.00009	.06224
-.035	92.229	200.00000	-.45330	5.01310	-.00346	-.03462	.00305	.00333	.00031	.00003	.06326
-.035	142.200	200.00000	-.07547	5.00000	.00165	-.00003	.01143	.00333	.00029	.00006	.06345
-.035	192.039	200.00000	-.23149	4.00000	-.00000	-.00003	.00004	.00001	.00008	.00010	.06336
-.031	232.310	200.12000	-.00454	5.00000	.00049	-.01779	.00315	.00735	-.00105	.00012	.06372
-.013	391.310	200.00000	.07502	5.04330	.00009	-.00007	.01003	.00371	-.00159	.00000	.10222
.005	491.230	200.10000	-.22403	5.03100	.00351	.00007	.00005	.00300	-.00005	-.00006	.06221
-.006	591.330	200.07000	-.00022	5.02220	.00072	.04819	.01809	.00321	-.00035	-.00009	.06339
-.010	791.340	200.07000	.01787	5.02000	.00277	.04645	.01752	.00333	-.00011	-.00009	.06313
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2442/ 0 RN/L = .89 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEL	CA
5.029	-53.371	200.10000	.00351	10.00000	.00333	.11134	.02402	.00323	-.00013	-.00013	.09443
4.974	14.828	200.00000	.14139	10.01700	.00407	.02939	.01433	.00429	.00002	.00009	.09535
4.923	50.183	200.00000	-.48455	10.04000	-.00337	.03403	.01934	.00497	.00011	.00000	.09449
4.937	100.870	199.00000	-.17817	9.99110	-.00129	.03203	.03203	.00459	-.00040	-.00005	.09374
4.939	200.180	199.00000	-.13755	10.00700	-.00190	.04759	.04045	.00300	-.00132	-.00004	.09352
4.925	299.540	200.15000	.05472	10.02300	.00359	.06249	.05140	.00337	-.00208	.00010	.09271
4.991	399.450	200.04000	-.32937	10.01800	-.00177	.16449	.03300	.00328	-.00023	-.00008	.09207
4.987	499.330	199.00000	.35909	10.01400	.00351	.11411	.03454	.00207	-.00072	-.00009	.09210
GRADIENT	13.45171		.00351	.67373	.00033	.00220	.00097	.00029	.00000	.00001	.00574

REPRODUCIBILITY OF THE ORIGINAL PAGE IS PERMITTED



V41B-D9A (1A22), ORBITER (O4RC1) W/ET SEPARATING

(RVK053) (-20 APR 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DSETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMELCR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2416/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CL 4R	CYR	CYNR	CBLR	CAR	WM
-9.976	317.090	199.93000	-.08366	.00306	.54049	-.01453	-.00742	-.00073	.00082	-.01711	.23218
-9.980	342.150	200.08000	.04624	.00305	.48159	-.01056	-.00665	-.00046	.00037	-.01538	.23174
-10.006	391.870	200.03000	-.17739	-.00050	.41767	.01356	-.00898	-.00032	-.00004	-.01441	.23189
-10.011	442.760	200.12000	-.33485	-.00235	.32448	.01939	-.00527	-.00032	-.00001	-.01408	.22933
-10.024	492.450	200.13000	.09377	.00174	.38417	.01794	-.00934	-.00039	.00003	-.01472	.23123
-9.962	591.410	199.92000	.26605	.00780	.35912	.01433	-.00956	-.00038	.00003	-.01692	.23449
-9.977	691.230	200.01000	-.29775	-.00135	.30546	.01091	-.00939	-.00037	-.00033	-.01957	.23414
-10.006	791.600	200.03000	-.27572	-.00166	.26035	.01341	-.00957	-.00034	-.00022	-.01742	.23351
-10.099	994.670	193.18000	.10404	.00224	.25039	.01359	-.00935	-.00034	-.00023	-.01745	.23333
GRADIENT		.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2421/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CL 4R	CYR	CYNR	CBLR	CAR	WM
-5.005	167.100	200.15000	.15544	.00529	.42717	.01760	-.00992	-.00057	.00010	-.00486	.23449
-5.026	192.240	200.06000	.39233	.00390	.43357	.01357	-.00663	-.00057	-.00005	-.00912	.23478
-5.026	242.210	200.08000	.62310	.01102	.40549	.01929	-.00972	-.00028	.00039	-.01237	.23452
-5.040	292.490	200.14000	.14924	.00256	.37071	.01228	-.00920	-.00036	-.00008	-.01547	.23475
-5.023	392.260	200.10000	-.24640	-.00170	.32233	.01435	-.00946	-.00035	-.00004	-.01466	.23423
-4.992	491.420	200.00000	-.15163	.00123	.35233	.01749	-.00935	-.00039	-.00012	-.01642	.23516
-4.991	591.240	200.09000	-.02917	.00265	.32570	.01662	-.00944	-.00038	-.00008	-.02005	.23405
-5.012	691.520	200.11000	.02037	.00312	.30725	.01233	-.00935	-.00037	-.00027	-.01952	.23506
-5.012	791.450	200.01000	.00400	.00226	.30204	.01374	-.00934	-.00037	-.00024	-.01817	.23476
-5.013	991.310	199.97000	-.02995	.00213	.29984	.01362	-.00943	-.00035	-.00024	-.01773	.23421
GRADIENT		.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000





V418-D9A (IA22), ORBITER (O4RC) W/ET SEPARATING

(UVK053) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2416/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	OT	T
-9.976	317.090	967.05000	967.05000	79.00000	967.05000	174.53999	64.00000	72.00000	16.60100	99.76800
-9.930	342.150	967.07000	967.07000	79.00000	967.07000	174.53999	64.00000	72.00000	8.82390	99.76800
-10.006	391.870	967.07000	967.07000	79.00000	967.07000	174.53999	64.00000	72.00000	3.63470	99.76800
-10.011	442.060	967.23000	967.23000	79.00000	967.23000	174.53999	64.00000	72.00000	.42219	99.76800
-10.024	492.450	974.13000	974.13000	79.00000	974.13000	174.53999	64.00000	72.00000	-1.12800	99.76800
-9.952	591.410	975.29000	975.29000	79.00000	975.29000	174.53999	64.00000	72.00000	-3.29370	99.76800
-9.977	691.230	975.33000	975.33000	79.00000	975.33000	174.53999	64.00000	72.00000	-4.64260	99.76900
-10.006	791.600	974.55000	974.55000	79.00000	974.55000	174.53999	64.00000	72.00000	-4.34450	99.76800
-10.099	894.670	974.75000	974.75000	79.00000	974.75000	174.53999	64.00000	72.00000	-4.26010	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2421/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	OT	T
-5.005	167.100	977.26000	977.26000	78.00000	977.26000	176.32000	79.00000	72.00000	2.40190	99.76800
-5.026	192.240	977.35000	977.35000	78.00000	977.35000	176.32000	79.00000	72.00000	2.11000	99.76800
-5.026	242.210	977.20000	977.20000	78.00000	977.20000	176.32000	79.00000	72.00000	.40102	99.76900
-5.040	292.490	977.01000	977.01000	78.00000	977.01000	176.32000	79.00000	72.00000	-1.05540	99.76900
-5.023	392.250	977.02000	977.02000	78.00000	977.02000	176.32000	79.00000	72.00000	-1.65100	99.76900
-4.992	491.420	977.20000	977.20000	78.00000	977.20000	176.32000	79.00000	72.00000	-3.45490	99.76900
-4.991	591.240	976.72000	976.72000	78.00000	976.72000	176.32000	79.00000	72.00000	-5.09080	99.76900
-5.012	691.520	976.95000	976.95000	78.00000	976.95000	176.32000	79.00000	72.00000	-5.09370	99.76900
-5.012	791.450	976.62000	976.62000	78.00000	976.62000	176.32000	79.00000	72.00000	-4.76310	99.76900
-5.013	891.310	976.53000	976.53000	78.00000	976.53000	176.32000	79.00000	72.00000	-4.55450	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR



V41B-D9A (IA22), ORBITER(ORC1) W/ET SEPARATING

(RVK054) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2745/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-20.042	624.980	400.17000	.18209	.00177	.45703	-.12027	.00221	-.00093	.00112	-.05122	.23327
-20.007	699.300	399.80000	-.01317	.00546	.33045	-.00156	.00009	-.00052	.00069	-.05037	.23405
-19.967	799.650	399.62000	.13370	.00519	.30197	.00795	.00029	-.00064	.00018	-.04216	.23433
-20.083	999.950	400.18000	.09370	-.00110	.28970	.11196	-.00023	-.00059	.00028	-.03906	.23375
	GRADIENT	.00000	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2749/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-15.535	500.060	400.11000	-.24620	-.00143	.43600	-.11159	.00059	-.00070	.00052	-.04108	.23425
-15.530	549.560	400.02000	.13425	.00454	.36941	-.10724	.00028	-.00069	.00071	-.03986	.23374
-15.497	589.190	399.94000	-.41651	-.00340	.33721	.00081	-.00005	-.00064	.00076	-.03978	.23397
-15.475	693.680	399.82000	.26005	.00340	.29722	.00638	.00011	-.00075	.00003	-.03553	.23436
-15.515	799.180	400.03000	-.21218	-.00031	.28700	.11169	-.00037	-.00058	.00031	-.03734	.23427
-15.591	1000.000	400.25000	-.04032	-.00234	.28757	.11193	-.00054	-.00058	.00031	-.03716	.23430
	GRADIENT	.00000	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2425/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-10.033	317.720	400.13000	-.14652	-.00477	.47801	.10082	-.00234	-.00053	.00053	-.01812	.23323
-9.933	341.420	400.00000	-1.75870	-.01933	.45235	-.10123	-.00246	-.00055	.00021	-.01939	.23311
-10.040	391.940	400.06000	.09038	-.00041	.40425	.10524	-.00549	-.00048	.00011	-.01665	.23315
-9.999	441.300	399.97000	-.26007	.00019	.38788	.10511	-.00937	-.00033	-.00005	-.01644	.23400
-9.983	491.120	399.98000	.21171	.00564	.37285	.10333	-.00926	-.00031	.00000	-.01676	.23354
-9.971	590.650	399.90000	.45529	.00845	.31616	-.10874	-.00908	-.00036	.00001	-.02029	.23417
-9.997	691.330	400.01000	.09055	.00332	.25534	.11217	-.00289	-.00030	-.00022	-.01784	.23423
-10.042	791.930	400.16000	.80553	.01101	.29029	.11305	-.00696	-.00030	-.00021	-.01575	.23352
-10.006	991.530	400.11000	.01327	.00194	.28789	.11297	-.00897	-.00030	-.00021	-.01533	.23422
	GRADIENT	.00000	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000

DATE 06 MAY 77

TABULATED SOURCE DATA, 1A22, (AEDC V41B-D9A)

PAGE 421

V41B-D9A (1A22), ORBITER (04RC1) W/ET SEPARATING

(RVK094) (20 APR 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2431/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	C.MR	CYR	CYNR	CBLR	CAR	WM
-5.026	167.120	399.92000	.14244	.00400	.41526	.12480	-.00932	-.00032	.00013	-.00982	.23322
-4.993	191.190	400.00000	.04026	.00376	.40926	.12135	-.00943	-.00030	.00018	-.01125	.23380
-4.982	240.760	399.97000	.06514	.00352	.39334	.11479	-.00916	-.00031	.00027	-.01177	.23397
-5.015	291.340	400.00000	.26924	.00277	.37338	.11228	-.00907	-.00035	-.00006	-.01347	.23437
-4.958	390.610	400.02000	-.10571	.00259	.36718	.10920	-.00940	-.00033	-.00006	-.01421	.23504
-4.978	490.730	399.97000	-.14540	-.00090	.35443	.10602	-.00944	-.00033	-.00003	-.01421	.23504
-5.001	591.220	400.00000	-.12639	.00139	.33443	.10602	-.00944	-.00033	-.00003	-.01765	.23470
-5.036	691.810	400.00000	-.01375	.00052	.30322	.11114	-.00917	-.00034	-.00033	-.01911	.23500
-5.005	791.370	400.13000	.05310	.00052	.28542	.11352	-.00923	-.00030	-.00023	-.01724	.23546
-5.009	991.250	400.12000	.10227	.00273	.28350	.11352	-.00935	-.00030	-.00022	-.01722	.23497
GRADIENT	.00000	.00000	.00000	.00295	.28242	.11351	-.00929	-.00030	-.00023	-.01727	.23571
				.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2437/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	C.MR	CYR	CYNR	CBLR	CAR	WM
-.023	41.618	400.09000	-.41736	-.00346	.37844	.13971	-.00958	-.00055	-.00018	-.00517	.23418
.039	90.339	400.04000	.02363	.00720	.39321	.13108	-.00926	-.00026	.00002	-.00954	.23377
.023	140.520	400.11000	.31517	.01633	.37212	.12234	-.00935	-.00035	-.00008	-.01213	.23324
.001	191.070	400.14000	-.16536	-.01119	.35919	.11754	-.00918	-.00043	-.00000	-.01401	.23355
.030	290.450	400.10000	.06224	.00295	.35037	.11318	-.00927	-.00038	.00000	-.01413	.23397
.034	390.360	400.13000	.01018	.00434	.35403	.10679	-.00932	-.00038	-.00010	-.01626	.23412
-.015	491.200	400.05000	-.02360	.00057	.30901	.11060	-.00930	-.00038	-.00016	-.01919	.23442
-.035	591.650	400.04000	.02593	.00055	.30052	.11314	-.00936	-.00036	-.00024	-.01795	.23436
-.010	791.270	400.12000	.25453	.00559	.28281	.11371	-.00927	-.00036	-.00025	-.01763	.23448
GRADIENT	.00000	.00000	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2443/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	C.MR	CYR	CYNR	CBLR	CAR	WM
4.937	-50.663	400.11000	-.28275	-.00319	.32341	.13193	-.01112	-.00033	-.00039	-.00206	.23388
5.021	13.935	400.11000	.01234	.00655	.34913	.13153	-.00934	-.00052	-.00021	-.00747	.23464
5.012	68.945	400.17000	-.60334	-.00918	.35239	.12037	-.00936	-.00029	-.00013	-.01132	.23464
5.013	68.617	400.00000	-.30332	-.00247	.33424	.12215	-.00946	-.00043	-.00010	-.01324	.23464
5.026	152.220	400.20000	-.50059	-.00504	.34014	.11529	-.00934	-.00035	-.00003	-.01376	.23429
5.026	253.410	400.12000	.00397	.00337	.35033	.10035	-.00930	-.00035	-.00014	-.01524	.23412
4.930	393.700	400.11000	.13262	.00403	.32126	.10647	-.00937	-.00038	-.00014	-.01805	.23423
4.972	475.360	400.09000	-.05210	-.00014	.30354	.11167	-.00945	-.00039	-.00033	-.01929	.23437
GRADIENT	28.71259	.00089	.00089	.00047	.02505	.10226	-.00069	-.00004	-.00002	-.00054	.01684





REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

DATE 06 MAY 77

TABULATED SOURCE DATA, 1A22, (AEDC V41B-D9A)

PAGE 423

V41B-D9A (1A22), ORBITER (049C1) W/ET SEPARATING

(SVK054) (20 APR 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMLDR = .000 RCS = 1.900  
 GAS = 1.000

RUN NO. 2431/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.026	167.120	5.04545	-.00003	.00400	.08678	.03559	.03350	-.00204	-.00124	.00018
-4.993	191.190	5.04216	-.00009	.00376	.08013	.03217	.03216	-.00213	-.00123	.00023
-4.932	240.760	5.03550	-.00018	.00352	.06552	.02533	.03173	-.00185	-.00124	.00031
-5.015	291.340	5.03302	-.00017	.00277	.04372	.02322	.03004	-.00176	-.00128	-.00002
-4.958	390.610	5.02337	-.00025	.00239	.03000	.01905	.02335	-.00208	-.00126	-.00001
-4.978	490.730	5.02495	-.00029	-.00080	.00361	.01689	.02358	-.00211	-.00126	.00008
-5.001	591.280	5.02312	-.00022	.00138	-.02910	.02205	.02467	-.00181	-.00128	-.00029
-5.036	691.810	5.02397	-.00023	.00032	-.03536	.02443	.02552	-.00193	-.00124	-.00019
-5.006	791.370	5.02333	-.00023	.00273	-.03339	.02443	.02359	-.00193	-.00124	-.00018
-5.009	991.260	5.03002	-.00023	.00235	-.03530	.02441	.02350	-.00194	-.00124	-.00018
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2437/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.023	41.618	5.05632	.00040	-.00346	.04224	.05076	.03917	-.00213	-.00150	-.00013
.039	90.339	5.04925	-.00003	.00720	.04677	.04214	.03454	-.00221	-.00121	.00006
.023	140.530	5.04102	-.00035	.00353	.03501	.03339	.03219	-.00211	-.00130	-.00004
.001	191.070	5.03334	-.00003	-.00119	.02200	.02333	.03033	-.00173	-.00138	.00004
.030	290.450	5.03324	-.00014	.00335	.02303	.02422	.03018	-.00163	-.00133	.00005
.034	390.350	5.02323	-.00022	.00434	.01227	.01722	.02302	-.00209	-.00133	-.00006
-.015	491.200	5.02765	-.00019	.00657	-.02353	.02163	.02507	-.00165	-.00133	-.00011
-.035	591.650	5.02357	-.00018	.00653	-.03508	.02417	.02631	-.00192	-.00131	-.00019
-.010	791.270	5.02993	-.00017	.00558	-.03675	.02472	.02359	-.00184	-.00130	-.00020
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2443/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
4.997	-50.663	5.04240	.00009	-.00319	-.00784	.04281	.04163	-.00378	-.00126	-.00035
5.021	12.935	5.04030	.00036	-.00355	.01750	.04243	.03326	-.00229	-.00145	-.00016
5.012	48.945	5.04510	-.00005	-.00318	.02047	.03728	.03245	-.00221	-.00122	-.00008
5.013	98.617	5.03970	.00004	-.00247	.00201	.03306	.02328	-.00210	-.00137	-.00005
5.036	198.280	5.03520	-.00010	-.00354	.00771	.02761	.03008	-.00247	-.00130	.00001
5.026	293.410	5.03340	-.00020	.00337	.01761	.02689	.02334	-.00242	-.00130	-.00009
4.930	393.000	5.02350	-.00020	.00403	-.01146	.01941	.02333	-.00250	-.00132	-.00010
4.972	479.350	5.02370	-.00016	-.00014	-.02333	.02263	.02489	-.00207	-.00133	-.00028
	GRADIENT	.36230	.00002	.00047	.00126	.00304	.00260	-.00016	-.00010	-.00001



**REPRODUCIBILITY OF THE  
ORIGINAL PAGE IS POOR**

DATE 06 MAY 77

TABULATED SOURCE DATA, IA22, (AEDC V41B-D9A)

PAGE 425

V41B-D9A (IA22), ORBITER (O4RC1) W/ET SEPARATING

(TVK054) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2431/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CPRD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-5.026	167.120	399.92000	.14244	.03000	.00374	434.62000	.00000	.00000	650.74000	.00000	.00000
-4.993	191.150	400.00000	.04033	.01235	-.02716	435.60000	.00000	.00000	652.00000	.00000	.00000
-4.932	240.720	323.97000	.00314	.00231	-.05346	435.57000	.00000	.00000	653.37000	.00000	.00000
-5.015	291.340	400.00000	.20224	.01162	-.04404	435.77000	.00000	.00000	653.62000	.00000	.00000
-4.933	330.610	400.00000	-.16371	.00304	-.05703	437.10000	.00000	.00000	654.22000	.00000	.00000
-4.978	489.730	303.07000	-.14040	.01222	-.04941	437.00000	.00000	.00000	655.30000	.00000	.00000
-5.001	591.200	400.00000	-.12033	.00325	-.02313	439.30000	.00000	.00000	657.54000	.00000	.00000
-5.036	691.610	400.00000	-.01375	.02143	-.01007	439.27000	.00000	.00000	657.40000	.00000	.00000
-5.006	791.370	400.13000	.03310	.02218	-.01045	439.71000	.00000	.00000	658.07000	.00000	.00000
-5.009	991.200	400.12000	.10337	.02029	-.01563	439.37000	.00000	.00000	657.53000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2437/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CPRD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-.023	41.618	400.00000	-.41733	.01221	.01203	443.07000	.00000	.00000	653.03000	.00000	.00000
-.039	90.339	400.04000	.02303	.00353	.01122	443.50000	.00000	.00000	653.50000	.00000	.00000
.023	140.500	400.11000	.31517	.00193	.03473	444.01000	.00000	.00000	653.90000	.00000	.00000
.001	191.070	400.14000	-.12333	-.01111	-.02313	443.60000	.00000	.00000	653.01000	.00000	.00000
.030	239.400	400.13000	.02324	-.00375	-.00303	444.00000	.00000	.00000	655.51000	.00000	.00000
.034	309.300	400.13000	.01018	-.01314	-.02347	444.40000	.00000	.00000	655.10000	.00000	.00000
-.015	431.200	400.00000	-.02300	.01273	.01203	444.60000	.00000	.00000	654.70000	.00000	.00000
-.035	591.630	400.00000	.02323	.00303	.00703	444.20000	.00000	.00000	654.00000	.00000	.00000
-.010	731.270	400.12000	.20103	.00003	.00375	443.80000	.00000	.00000	654.20000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2443/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CPRD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
4.937	-50.633	400.11000	-.20275	-.01005	.03162	423.47000	.00000	.00000	653.21000	.00000	.00000
5.021	13.933	400.11000	.01204	-.01009	.03072	423.00000	.00000	.00000	653.60000	.00000	.00000
5.012	48.545	400.17000	-.01004	-.02225	.04007	423.20000	.00000	.00000	657.54000	.00000	.00000
5.013	93.617	400.00000	-.00022	-.02003	.04071	423.70000	.00000	.00000	653.17000	.00000	.00000
5.033	153.200	400.20000	-.50009	-.02317	.04793	440.00000	.00000	.00000	653.54000	.00000	.00000
5.026	233.410	400.12000	.00007	-.04116	.00002	440.41000	.00000	.00000	653.12000	.00000	.00000
4.920	333.000	400.11000	.13002	-.03023	.04331	440.42000	.00000	.00000	659.13000	.00000	.00000
4.972	479.300	400.00000	-.02210	-.02145	.04043	441.44000	.00000	.00000	660.62000	.00000	.00000
	GRADIENT	20.71233	.00069	-.00114	.00333	31.50359	.00000	.00000	47.14604	.00000	.00000



V41B-D9A (IA22),ORBITER(O4RC1) I/ET SEPARATING

(UWK054) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. X0  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. Y0  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. Z0  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMELDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2431/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	FRC	FRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-5.026	137.120	953.25000	953.25000	79.00000	953.25000	9 3.03999	64.00000	73.00000	.87801	99.76900
-4.993	191.190	955.60000	955.60000	79.00000	955.60000	9 3.03999	64.00000	73.00000	.02630	99.76800
-4.982	240.760	957.63000	957.63000	79.00000	957.63000	9 3.03999	64.00000	73.00000	.28757	99.76800
-5.015	291.340	959.50000	959.50000	79.00000	959.50000	9 3.03999	64.00000	73.00000	2.11280	99.76900
-4.929	320.610	971.40000	971.40000	79.00000	971.40000	9 3.03999	64.00000	73.00000	2.87950	99.76900
-4.978	490.730	972.99000	972.99000	79.00000	972.99000	9 3.03999	64.00000	73.00000	4.34210	99.76900
-5.001	591.200	974.77000	974.77000	79.00000	974.77000	9 3.03999	64.00000	73.00000	4.62020	99.76900
-5.035	691.810	976.02000	976.02000	79.00000	976.02000	9 3.03999	64.00000	73.00000	2.92410	99.76900
-5.006	791.370	977.01000	977.01000	79.00000	977.01000	9 3.03999	64.00000	73.00000	.99163	99.76900
-5.009	991.260	978.19000	978.19000	79.00000	978.19000	9 3.03999	64.00000	73.00000	-1.02970	99.76900
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2437/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	FRC	FRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
-.023	41.618	977.02000	977.02000	79.00000	977.02000	9 6.81000	64.00000	72.00000	-4.42760	99.76900
.039	90.339	977.22000	977.22000	79.00000	977.22000	9 6.81000	64.00000	72.00000	-4.81280	99.76900
.023	140.580	976.76000	976.76000	79.00000	976.76000	9 6.81000	64.00000	72.00000	-5.05120	99.76900
.001	191.070	977.00000	977.00000	79.00000	977.00000	9 6.81000	64.00000	72.00000	-3.90020	99.76900
.030	290.450	976.75000	976.75000	79.00000	976.75000	9 6.81000	64.00000	72.00000	-.04148	99.76900
.034	390.360	976.72000	976.72000	79.00000	976.72000	9 6.81000	64.00000	72.00000	3.22410	99.76900
-.015	491.200	976.65000	976.65000	79.00000	976.65000	9 6.81000	64.00000	72.00000	5.92670	99.76900
-.035	591.650	976.69000	976.69000	79.00000	976.69000	9 6.81000	64.00000	72.00000	4.11770	99.76900
-.010	791.270	976.54000	976.54000	79.00000	976.54000	9 6.81000	64.00000	72.00000	.65468	99.76900
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2443/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	FRC	FRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
4.997	-50.663	977.17000	977.17000	78.00000	977.17000	9 6.93000	64.00000	72.00000	-5.73240	99.89400
5.021	13.933	977.34000	977.34000	78.00000	977.34000	9 6.93000	64.00000	72.00000	-6.44650	99.89400
5.012	40.945	977.20000	977.20000	78.00000	977.20000	9 6.93000	64.00000	72.00000	-7.20190	99.89400
5.013	98.617	977.16000	977.16000	78.00000	977.16000	9 6.93000	64.00000	72.00000	-7.54240	99.89400
5.036	198.280	976.74000	976.74000	78.00000	976.74000	9 6.93000	64.00000	72.00000	-6.62290	99.89400
5.026	298.410	977.11000	977.11000	78.00000	977.11000	9 6.93000	64.00000	72.00000	-5.91050	99.89400
4.990	399.000	977.13000	977.13000	78.00000	977.13000	9 6.93000	64.00000	72.00000	-3.39940	99.89400
4.972	479.360	976.95000	976.95000	78.00000	976.95000	9 6.93000	64.00000	72.00000	-1.61450	99.89400
	GRADIENT	70.13563	70.13563	5.59742	70.13563	0.10836	4.59275	5.16685	-.46261	7.16657

V41B-D9A (IA22), ET SEPARATING FROM ORB (04RC1)

(AVK054) (04 MAY 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2745/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-20.042	624.980	400.17000	.18209	-15.04200	.00149	-.35823	-.01353	.01213	.00082	.00039	.10757
-20.007	699.300	399.80000	-.01317	-14.99800	.00510	-.35899	-.00248	.01435	-.00068	.00030	.11977
-19.967	799.650	399.62000	.13370	-14.94200	.00508	-.35375	.02294	.01462	-.00153	.00024	.14044
-20.083	999.950	400.18000	.09370	-15.05400	-.00121	-.25367	-.02654	.00638	.00117	-.00008	.10672
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2749/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-15.535	500.060	400.11000	-.24620	-10.52100	-.00171	-.25324	-.00197	.01079	-.00002	.00043	.10914
-15.530	549.560	400.02000	.13425	-10.51400	.00431	-.25574	-.01194	.01129	-.00012	.00015	.10207
-15.497	599.190	399.94000	-.41851	-10.47700	-.00359	-.25122	-.00234	.01204	-.00050	.00010	.10945
-15.475	699.680	399.65000	.22005	-10.45000	.00243	-.25323	.01624	.01206	-.00037	.00002	.12332
-15.515	799.180	400.03000	-.21218	-10.48700	-.00042	-.25150	.01209	.01212	-.00122	.00026	.12709
-15.581	1000.000	400.25000	-.04032	-10.55300	-.00294	-.15158	-.03128	.00762	.00119	-.00017	.09949
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2425/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-10.033	317.720	400.13000	-.14652	-5.00000	-.00490	-.25345	.02334	.00433	.00026	.00082	.11584
-9.993	341.420	400.00000	-1.75370	-4.99000	-.02013	-.25326	.02354	.00717	-.00115	.00103	.12371
-10.040	391.940	400.06000	.03039	-5.01250	-.00054	-.16090	-.00002	.00492	.00053	.00033	.09547
-9.999	441.300	399.97000	-.26007	-4.97270	-.00010	-.15148	-.00227	.00428	.00047	.00019	.09392
-9.983	491.120	399.99000	.21171	-4.95940	.00530	-.15251	.00488	.00551	-.00011	.00016	.09768
-9.971	590.850	399.90000	.49529	-4.94450	.00821	-.15426	.01837	.00699	-.00061	.00012	.10942
-9.997	691.330	400.01000	.09095	-4.96840	.00357	-.15200	.01543	.00773	-.00092	.00026	.11028
-10.042	791.990	400.18000	.80553	-5.01220	.01079	-.01875	-.01236	.00463	.00037	.00000	.08868
-10.006	991.530	400.11000	.01327	-4.97640	.00171	-.06193	-.01533	.00442	.00053	-.00005	.09189
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

V418-D9A (1A22), ET SEPARATING FROM ORG (04RC1)

(AVK054) (04 MAY 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2431/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-5.026	167.120	399.92000	.14244	.01935	.00397	-.17294	.00093	.00413	.00028	.00006	.10394
-4.993	191.190	400.00000	.04086	.04936	.00367	-.17098	.00733	.00608	-.00018	-.00004	.10507
-4.982	240.760	399.97000	.06514	.05340	.00334	-.1736	.01260	.00746	-.00021	.00009	.10232
-5.015	291.340	400.00000	.25924	.01652	.00261	-.01014	.00381	.00580	.00023	.00021	.08931
-4.958	390.610	400.02000	-.10571	.06017	.00244	-.07100	.01588	.00530	-.00043	.00004	.09515
-4.978	490.730	399.97000	-.14540	.04665	-.00108	-.01929	.02715	.00480	-.00012	.00001	.10374
-5.001	591.280	400.00000	-.12639	.02713	.00116	-.04872	.02348	.00610	-.00054	.00005	.10553
-5.036	691.810	400.02000	-.01375	-.00523	.00009	-.01976	.00185	.00485	.00026	-.00005	.08735
-5.006	791.370	400.13000	.05310	.02363	.00260	-.01636	.00102	.00450	.00034	-.00007	.08903
-5.009	991.260	400.12000	.10957	.02102	.00273	-.01506	.00121	.00437	.00039	-.00007	.09013
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2437/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-.023	41.618	400.09000	-.41736	5.03430	-.00306	-.01357	-.01022	.00576	.00147	.00009	.10085
.039	90.339	400.04000	.02363	5.06320	.00717	-.01533	.00956	.00726	-.00063	-.00004	.09815
.023	140.590	400.11000	.31517	5.06360	.00558	-.01837	.01550	.00724	-.00110	-.00009	.09230
.001	191.070	400.14000	-.16368	5.03320	-.00122	-.01331	.01294	.00531	-.00049	.00004	.08735
.030	290.450	400.16000	.06224	5.06230	.00281	-.01446	.02670	.00514	-.00043	.00005	.08931
.034	390.360	400.13000	.01018	5.06010	.00411	-.01695	.00390	.00577	-.00133	-.00003	.09930
-.015	491.200	400.05000	-.09230	5.01250	.00039	.01478	.03542	.00522	-.00159	.00004	.10180
-.035	591.650	400.04000	.02593	4.99410	.00039	.01557	.01693	.00330	-.00042	-.00008	.06554
-.010	791.270	400.12000	.29453	5.02010	.00540	.01915	.01799	.00349	.00004	-.00009	.08897
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2443/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
4.997	-50.663	400.11000	-.28275	10.04500	-.00310	.00190	.00074	.00489	.00041	.00003	.10369
5.021	13.935	400.11000	.01234	10.07000	.00691	.00231	.01639	.00560	-.00147	-.00012	.09310
5.012	48.945	400.17000	-.66234	10.05700	-.00523	.0153	.02188	.00559	-.00102	-.00006	.08854
5.013	98.617	400.03000	-.30322	10.05300	-.00243	.00459	.02553	.00526	-.00065	-.00005	.08687
5.036	198.290	400.20000	-.55039	10.07100	-.00504	.01658	.04030	.00462	-.00063	-.00008	.08955
5.028	298.410	400.12000	.00397	10.05500	.00317	.01034	.05131	.00475	-.00139	-.00008	.09559
4.990	399.000	400.11000	.13382	10.01700	.00333	.01738	.04462	.00452	-.00145	.00002	.09685
4.972	479.360	400.09000	-.06210	10.00100	-.00031	.11833	.03568	.00279	-.00073	-.00007	.09289
	GRADIENT	28.71259	.00089	.72254	.00049	.01017	.00136	.00047	-.00011	-.00001	.00668

V41B-D9A (1A22), ORBITER (04RC1) 11/ET SEPARATING

(RVK055) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UNBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2417/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLIR	CYR	CYNR	CBLR	CAR	WM
-10.030	317.740	400.17000	.41240	.00343	.47742	.01035	-.00861	-.00057	.00053	-.01772	.23186
-9.988	341.500	399.95000	1.48820	.02715	.45986	-.01135	-.00832	-.00060	.00024	-.01853	.23201
-10.063	391.910	400.08000	-1.01410	-.01615	.40235	.01506	-.00581	-.00050	.00011	-.01564	.23184
-9.998	441.340	400.02000	.01134	.00304	.38539	.01468	-.00918	-.00039	-.00003	-.01509	.23213
-9.983	491.200	399.94000	.15059	.00429	.36377	.01347	-.00941	-.00034	.00003	-.01504	.23225
-9.957	590.930	399.85000	-.00002	.00100	.31190	.01844	-.00925	-.00041	.00004	-.01653	.23242
-9.995	691.270	400.06000	.10993	.00390	.29752	.0209	-.00907	-.00035	-.00022	-.01712	.23242
-10.040	791.930	400.20000	.03570	.00025	.25509	.0341	-.00930	-.00034	-.00022	-.01718	.23310
-10.004	991.420	400.10000	-.14790	.00047	.30039	.0355	-.00915	-.00035	-.00022	-.01814	.23486
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2422/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLIR	CYR	CYNR	CBLR	CAR	WM
-5.019	167.140	399.97000	-.12449	.00360	.42080	.02502	-.00354	-.00037	.00013	-.01044	.23469
-4.996	191.090	400.10000	-.31730	-.00196	.41467	.02145	-.00553	-.00035	.00018	-.01162	.23489
-4.980	240.770	399.93000	-.49200	-.00336	.40050	.0492	-.00942	-.00036	.00025	-.01192	.23480
-5.013	291.330	400.06000	.04406	.00127	.37752	.0309	-.00927	-.00039	-.00008	-.01364	.23518
-4.974	390.630	400.05000	.01735	.00351	.37037	.01833	-.00361	-.00038	-.00006	-.01429	.23483
-4.930	490.680	400.06000	.30545	.00353	.33775	.01606	-.00646	-.00036	-.00000	-.01753	.23462
-4.999	591.240	400.05000	-.13290	.00154	.30625	.0115	-.00943	-.00039	-.00034	-.01985	.23538
-5.036	691.850	400.12000	-.00350	.00094	.28917	.0355	-.00937	-.00035	-.00023	-.01696	.23497
-5.014	791.390	400.07000	.04854	.00275	.29933	.0355	-.00930	-.00037	-.00024	-.01684	.23474
-5.004	991.230	400.20000	.33354	.00632	.29835	.0356	-.00928	-.00035	-.00023	-.01684	.23538
	GRADIENT	.00000	.00000	.00000	.00000	.01000	.00000	.00000	.00000	.00000	.00000









V41B-D9A (1A22), ET SEPARATING FROM ORG (04RC1)

(AVK055) (04 MAY 77)

## REFERENCE DATA

SREF = 2590.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2417/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CI1	CLM	CY	CYN	CBL	CA
-10.030	317.740	400.17000	.41240	-5.00420	.00335	-.13390	.02414	.00489	.00010	.00085	.11723
-9.998	341.500	399.95000	1.48820	-4.99450	.02707	-.12574	.02959	.00805	-.00129	.00103	.12382
-10.063	391.910	400.00000	-1.01410	-5.03630	-.01625	-.6061	.00014	.00518	.00055	.00033	.09591
-9.998	441.340	400.02000	.01134	-4.97190	.00280	-.4038	-.00203	.00484	.00041	.00018	.09421
-9.983	491.200	399.94000	.15069	-4.95900	.00458	-.4144	.00500	.00565	-.00017	.00015	.09815
-9.967	590.930	399.85000	-.02282	-4.94150	.00083	-.4354	.01825	.00755	-.00068	.00012	.10960
-9.995	691.270	400.06000	.10083	-4.92510	.00371	-.2157	.01533	.00907	-.00088	.00025	.11106
-10.040	791.930	400.20000	.03570	-5.01010	.00006	-.16348	-.01182	.00588	.00049	.00000	.09011
-10.004	991.420	400.10000	-.14790	-4.97460	.00028	-.16152	-.01538	.00511	.00062	-.00005	.09249
	GRADIENT	.00000	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2422/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CI1	CLM	CY	CYN	CBL	CA
-5.019	167.140	399.97000	.12449	.02657	.00363	-.3408	.00018	.00426	.00038	.00007	.10429
-4.996	191.090	400.10000	-.31730	.05500	-.00201	-.3156	.00702	.00553	-.00014	-.00003	.10575
-4.930	240.770	399.93000	-.49200	.05540	-.00349	-.1821	.01342	.00754	-.00066	.00009	.10247
-5.013	291.330	400.06000	.04406	.01558	.00114	-.18031	.00340	.00536	.00019	.00020	.08896
-4.974	390.630	400.05000	.01735	.05400	.00341	-.07233	.01550	.00549	-.00034	.00005	.09480
-4.980	490.680	400.06000	.30545	.04504	.00537	-.07025	.00721	.00457	-.00017	.00001	.10378
-4.999	591.240	400.05000	-.13290	.02894	.00136	-.14967	.02380	.00614	-.00061	.00008	.10539
-5.036	691.850	400.12000	-.00350	-.00614	.00085	-.11011	.00197	.00426	.00028	-.00006	.08673
-5.014	791.390	400.07000	.04564	.01604	.00258	-.10586	.00080	.00444	.00028	-.00007	.08569
-5.004	991.230	400.20000	.33354	.02557	.00613	-.10487	.00113	.00424	.00034	-.00006	.09021
	GRADIENT	.00000	.00000	.00000	.00000	.10000	.00000	.00000	.00000	.00000	.00000











DATE 06 MAY 77

TABULATED SOURCE DATA, IA22, (AEDC V418-D9A)

PAGE 438

V418-D9A (IA22), ORBITER (O4RC1) W/ET SEPARATING

(RVK057) (20 APR 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

ALPHA = 5.000 BETA = .000  
 DBETA = 3.000 X = .000  
 Y = 54.000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

PARAMETRIC DATA

RUN NO. 2432/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	C_MR	CYR	CYNR	CELR	CAR	WM
-5.076	169.890	.02616	54.52100	3.02470	.35050	.02913	-.01226	.00051	-.00247	.00176	.23562
-5.001	191.310	.08310	53.42600	2.93740	.37367	.02816	-.00996	.00194	-.00260	.00119	.23485
-5.001	241.350	.05371	53.77300	2.92370	.40215	.02505	-.01391	.00003	-.00221	-.00550	.23463
-4.953	290.900	-.01240	54.16300	2.92200	.39338	.02038	-.01093	.00046	-.00119	-.01221	.23345
-4.975	390.590	-.00534	54.23100	3.00250	.33785	.01806	-.01002	-.00009	-.00036	-.01610	.23550
-4.998	491.280	.03482	53.63400	2.92420	.35452	.01207	-.00537	-.00030	-.00016	-.01497	.23492
-5.031	591.730	.00703	53.43800	2.92530	.35463	.00657	-.00930	-.00036	.00006	-.01790	.23475
-5.008	691.410	.05035	53.61200	2.92990	.30993	.01102	-.00928	-.00039	-.00010	-.02002	.23513
-5.010	791.440	.10691	54.20900	2.92370	.30070	.01334	-.00934	-.00031	-.00025	-.01822	.23504
-5.009	891.360	.02134	54.19100	2.92350	.29690	.01358	-.00941	-.00033	-.00025	-.01762	.23473
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2438/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	C_MR	CYR	CYNR	CELR	CAR	WM
.020	18.827	.87433	55.17900	3.03250	.25234	.00024	-.01406	-.00116	-.00053	-.02057	.23321
-.029	50.195	.15350	54.22000	2.93710	.25937	.00666	-.01214	-.00080	-.00094	-.01055	.23344
-.040	100.760	.05126	53.63200	2.92350	.30299	.02142	-.01220	.00071	-.00097	-.00398	.23262
.008	149.250	.01471	53.81100	2.92310	.33209	.02431	-.01055	.00135	-.00191	-.00663	.23301
.016	199.060	.02270	53.93000	2.93740	.34756	.02491	-.01198	-.00033	-.00135	-.01053	.23356
.029	299.460	.06937	54.00000	3.00930	.33025	.02259	-.01042	-.00011	-.00072	-.01605	.23374
-.021	399.270	-.01770	54.02500	2.93730	.34720	.01558	-.00839	-.00020	-.00043	-.01496	.23374
-.020	499.360	.06951	53.65200	2.93000	.35109	.00856	-.00971	-.00027	-.00022	-.01694	.23339
-.008	599.200	.04102	53.63100	2.93370	.31653	.00909	-.00935	-.00034	-.00011	-.01998	.23345
-.014	799.380	.03655	53.70700	2.99150	.25617	.01357	-.00937	-.00029	-.00023	-.01897	.23389
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2444/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	C_MR	CYR	CYNR	CELR	CAR	WM
5.083	-53.307	2.11420	54.69500	3.02330	.25332	-.00100	-.01360	-.00072	.00012	-.03307	.23412
4.955	15.612	-.07489	54.40400	2.92320	.25195	.00432	-.01166	-.00032	-.00093	-.00958	.23394
4.965	50.367	-.01395	53.75700	2.92530	.28390	.01668	-.01123	.00069	-.00059	-.00599	.23438
5.010	99.127	.09139	53.93400	3.00160	.30575	.02451	-.01143	.00052	-.00074	-.00553	.23406
5.024	199.550	.02257	54.12000	3.00020	.33441	.02515	-.01004	-.00009	-.00041	-.01342	.23436
4.994	299.070	.14703	54.20400	3.00000	.33143	.01970	-.01027	-.00031	-.00061	-.01555	.23427
4.926	399.200	.13537	54.19200	2.92440	.34820	.01234	-.00839	-.00035	-.00028	-.01579	.23401
4.990	479.180	.04662	54.27700	3.00040	.34405	.00839	-.00934	-.00040	-.00018	-.01746	.23468
GRADIENT		-.00480	3.48476	.19211	.01614	.00028	-.00076	-.00002	-.00006	-.00061	.01498





V41B-D9A (IA22), ORBITER (O4RC): W/ET SEPARATING

(TVK057) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = 3.000 X = .000  
 Y = 54.000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2432/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	(TFD)	CTFS	CTFU	CTAD	CTAS	CTAU
-5.076	169.890	.02616	54.52100	-.05355	-.15773	443.74000	.00000	.00000	664.10000	.00000	.00000
-5.001	191.310	.06810	53.42600	-.00262	-.10356	444.64000	.00000	.00000	665.44000	.00000	.00000
-5.001	241.350	.05371	53.77300	.02303	-.05732	445.04000	.00000	.00000	665.04000	.00000	.00000
-4.995	290.900	-.01240	54.16900	.02053	-.04739	445.55000	.00000	.00000	665.80000	.00000	.00000
-4.975	390.590	-.09354	54.23100	.01522	-.04367	446.25000	.00000	.00000	667.91000	.00000	.00000
-4.999	491.280	.03492	53.63400	.01180	-.04414	446.11000	.00000	.00000	667.65000	.00000	.00000
-5.031	591.730	.00703	53.43800	.00217	-.06397	446.39000	.00000	.00000	669.07000	.00000	.00000
-5.008	691.410	.05035	53.61200	.02587	-.01552	446.41000	.00000	.00000	669.09000	.00000	.00000
-5.010	791.440	.10591	54.20900	.02324	-.01500	444.93000	.00000	.00000	665.87000	.00000	.00000
-5.009	891.390	.02134	54.19100	.02051	-.01199	443.92000	.00000	.00000	664.35000	.00000	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2438/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	(TFD)	CTFS	CTFU	CTAD	CTAS	CTAU
.020	18.827	.07433	55.17900	-.03482	.03783	443.47000	.00000	.00000	663.69000	.00000	.00000
-.029	50.195	.15350	54.22000	-.03093	.05282	443.40000	.00000	.00000	663.59000	.00000	.00000
-.040	100.760	.05126	53.63200	-.02166	.05333	443.09000	.00000	.00000	663.11000	.00000	.00000
.008	149.250	.01471	53.91100	-.02997	.04330	442.81000	.00000	.00000	662.71000	.00000	.00000
.016	199.050	.03270	53.95000	-.02045	.07154	442.12000	.00000	.00000	661.67000	.00000	.00000
.029	258.480	.00537	54.00000	-.03032	.05009	441.60000	.00000	.00000	660.00000	.00000	.00000
-.021	359.270	-.01770	54.02000	-.04112	.04357	441.28000	.00000	.00000	660.30000	.00000	.00000
-.020	499.360	.06951	53.65200	-.04707	.01972	440.90000	.00000	.00000	659.85000	.00000	.00000
-.008	599.280	.04102	53.63100	-.01204	.07365	440.49000	.00000	.00000	659.23000	.00000	.00000
-.014	799.390	.03235	53.70700	-.02432	.06379	440.01000	.00000	.00000	658.51000	.00000	.00000
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2444/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	(TFD)	CTFS	CTFU	CTAD	CTAS	CTAU
5.083	-53.307	2.11420	54.69300	-.01654	.03349	444.42000	.00000	.00000	665.11000	.00000	.00000
4.955	15.612	-.07489	54.40400	-.03511	.01870	445.09000	.00000	.00000	665.93000	.00000	.00000
4.955	50.357	-.01395	53.75700	-.02234	.04305	445.12000	.00000	.00000	665.25000	.00000	.00000
5.010	99.127	.03139	53.95400	-.01731	.04008	445.93000	.00000	.00000	665.82000	.00000	.00000
5.024	193.060	.12157	54.12000	-.02109	.04509	445.77000	.00000	.00000	667.14000	.00000	.00000
4.994	293.970	.14703	54.20400	-.02009	.04001	446.47000	.00000	.00000	669.19000	.00000	.00000
4.993	359.200	.13337	54.19500	-.03945	.02542	446.09000	.00000	.00000	669.95000	.00000	.00000
4.990	479.180	.04852	54.27700	-.04536	.00457	447.14000	.00000	.00000	669.18000	.00000	.00000
GRADIENT	-.00480	3.48476	-.00231	.00120	28.50372	.00000	.00000	.00000	42.65985	.00000	.00000



REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = 54.000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2444/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	TB1	TB2	DT	T
5.083	-53.307	976.65000	976.65000	79.00000	976.65000	976.43999	64.00000	72.00000	-5.27520	99.89400
4.955	15.612	976.63000	976.63000	79.00000	976.63000	976.43999	64.00000	72.00000	-5.76530	99.89400
4.935	50.357	976.63000	976.63000	79.00000	976.63000	976.43999	64.00000	72.00000	-6.09320	99.89400
5.010	99.127	976.71000	976.71000	79.00000	976.71000	976.43999	64.00000	72.00000	-6.23430	99.89400
5.024	193.560	976.63000	976.63000	79.00000	976.63000	976.43999	64.00000	72.00000	-6.32260	99.89400
4.994	299.870	976.72000	976.72000	79.00000	976.72000	976.43999	64.00000	72.00000	-6.23190	99.89400
4.936	399.200	976.63000	976.63000	79.00000	976.63000	976.43999	64.00000	72.00000	-5.62330	99.89400
4.990	479.160	976.70000	976.70000	79.00000	976.70000	976.43999	64.00000	72.00000	-4.06060	99.89400
	GRADIENT	62.57750	62.57750	5.06021	62.57750	62.54420	4.09941	4.61184	-.36929	6.39854

V41B-D9A (IA22), ET SEPARATING FROM ORB (O4RC1)

(AVK057) ( 04 MAY 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = 3.000 X = .000  
 Y = 54.000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2426/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	IN	CLM	CY	CYN	CBL	CA
-9.979	317.140	-.07997	54.02600	-4.92900	2.99510	-22568	.03913	-.03384	-.00984	.00086	.10896
-10.024	342.060	.01752	54.26200	-4.97910	2.99510	-18333	.01864	-.03535	-.00843	.00051	.09789
-9.984	390.910	-.15225	53.98500	-4.95080	2.99450	-15559	.01506	-.03513	-.00804	.00045	.09733
-9.984	441.090	-.03308	54.33400	-4.95430	3.00070	-14602	.01783	-.03445	-.00830	.00045	.10027
-9.994	491.240	-.02439	53.95100	-4.95320	2.99210	-14648	.02399	-.03151	-.00924	.00051	.10878
-10.005	591.320	-.05637	54.00000	-4.97730	3.00000	-11978	.01777	-.02029	-.01194	.00038	.11341
-10.051	692.050	.13461	53.91100	-5.02220	2.99270	-05703	-.01303	-.02322	-.01082	.00021	.06956
-10.003	791.660	.10100	53.93200	-4.97500	2.99430	-06251	-.01543	-.02548	-.01043	.00030	.09075
-10.003	991.550	.03621	54.07600	-4.97300	2.99760	-05352	-.01530	-.02965	-.01036	.00031	.09319
	GRADIENT	.00000	.00000	.00000	.00000	00000	.00000	.00000	.00000	.00000	.00000

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

DATE 06 MAY 77

TABULATED SOURCE DATA, IA22, (AEDC V418-D9A)

PAGE 445

V418-D9A (IA22), ET SEPARATING FROM ORB (04RC1)

(AVK057) (04 MAY 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = 3.000 X = .000  
 Y = 54.000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2432/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	IN	CLM	CY	CYN	CBL	CA
-5.076	169.990	.02616	54.52100	-.02941	3.02360	- 10150	.00857	-.03147	-.00722	.00052	.08748
-5.001	191.310	.08810	53.42600	.04537	2.98500	- 09305	.01239	-.03373	-.00551	.00044	.08970
-5.001	241.350	.05371	53.77300	.04386	2.93530	- 09169	.01412	-.03133	-.00787	.00066	.08995
-4.995	290.900	-.01240	54.16300	.04565	2.99780	- 09045	.02203	-.03146	-.00921	.00061	.09252
-4.975	390.590	-.02354	54.23100	.05106	3.00230	- 07848	.03275	-.02747	-.01071	.00038	.10449
-4.998	491.280	.03492	53.63400	.03309	2.93390	- 04854	.02553	-.02678	-.01219	.00020	.10572
-5.031	591.730	.00703	53.43500	-.00522	2.93310	- 00788	.00186	-.02815	-.01132	.00020	.08555
-5.008	691.410	.05035	53.61200	.01593	2.93330	- 00530	.00102	-.02543	-.01076	.00024	.08695
-5.010	791.440	.10291	54.20500	.01973	2.99330	- 00546	.00122	-.02799	-.01030	.00023	.06775
-5.009	991.390	.02134	54.19100	.02137	2.99340	- 00597	.00034	-.02305	-.01050	.00024	.09028
GRADIENT		.00000	.00000	.00000	.00000	00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2439/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	IN	CLM	CY	CYN	CBL	CA
.020	18.827	.87433	55.17900	5.03620	3.04010	04959	.01017	-.03551	-.00916	.00036	.08111
-.029	50.195	.15550	54.22000	4.99300	2.99740	03533	.00535	-.04392	-.00799	.00031	.08236
-.040	100.760	.05126	53.63200	4.99750	2.99430	- 01000	.00333	-.03439	-.00556	.00042	.08286
-.008	149.230	.01471	53.61100	5.04940	2.99430	- 02113	.02012	-.03246	-.00528	.00018	.08733
.016	199.060	.06270	53.53000	5.03310	2.99740	- 02737	.03194	-.02635	-.00771	.00057	.09220
.029	299.460	.00937	54.06300	5.05920	3.00200	- 00340	.04267	-.02410	-.01245	.00021	.10152
-.021	399.270	-.01770	54.02600	5.01310	2.99700	02537	.03000	-.02454	-.01273	.00014	.09392
-.020	499.360	.03531	53.63200	5.00330	2.99370	04902	.01900	-.02335	-.01159	.00024	.08725
-.008	599.280	.04102	53.65100	5.01830	2.99340	04097	.01877	-.02599	-.01123	.00024	.08368
-.014	799.390	.02335	53.70700	5.01530	2.99120	04971	.01829	-.03001	-.01094	.00024	.09115
GRADIENT		.00000	.00000	.00000	.00000	00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2444/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	IN	CLM	CY	CYN	CBL	CA
5.083	-53.307	2.11420	54.69500	10.05300	3.03900	11910	.02756	-.02394	-.00854	.00017	.08168
4.955	15.612	-.07488	54.40400	9.97430	2.99330	02333	.01945	-.05394	-.00588	.00035	.08306
4.955	50.367	-.01395	53.75700	9.99730	2.99330	03435	.02274	-.03917	-.00493	.00031	.08540
5.010	99.127	.09139	53.93400	10.05900	3.00350	03533	.02053	-.02641	-.00546	.00016	.08224
5.024	199.530	.12037	54.12000	10.06300	3.00790	04905	.05275	-.02317	-.01345	.00010	.09942
4.994	299.870	.14703	54.20400	10.03100	2.99330	00310	.04434	-.02723	-.01369	-.00004	.09540
4.986	399.200	.13537	54.15500	10.01700	2.99420	11290	.03524	-.03426	-.01125	.00030	.09940
4.990	479.180	.04662	54.27700	10.01700	3.00020	11378	.03442	-.03443	-.01123	.00031	.09115
GRADIENT		-.00480	3.48476	.63929	.19209	.00574	.00125	-.00346	-.00038	.00002	.00545







V41B-D9A (IA22), ORBITER (O4RC) W/ET SEPARATING

(SVK058) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = 3.000 X = 200.000  
 Y = 54.000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2433/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CSL
-5.030	167.220	5.04988	-.00090	2.99130	.02929	.03934	.03923	-.00457	-.00048	-.00220
-5.018	192.220	5.04453	-.00120	3.00220	.09332	.03291	.03518	-.00348	-.00013	-.00194
-5.027	242.260	5.03948	-.00060	2.99220	.06761	.02939	.03208	-.00383	-.00074	-.00111
-5.041	292.510	5.03723	-.00070	3.00030	.03095	.02927	.02946	-.00293	-.00077	-.00092
-5.026	392.300	5.03343	-.00020	2.99030	.02097	.02519	.03018	-.00178	-.00123	-.00031
-4.976	491.410	5.02702	-.00020	2.99330	.02235	.01806	.02977	-.00176	-.00130	-.00007
-4.991	591.310	5.02532	-.00020	3.00100	-.01404	.01943	.02521	-.00188	-.00134	.00036
-5.009	691.520	5.02223	-.00020	2.99220	-.03189	.02326	.02529	-.00142	-.00129	-.00023
-5.012	791.420	5.02553	-.00020	3.00110	-.02132	.02467	.02522	-.00191	-.00127	-.00020
-5.010	891.390	5.03000	-.00020	2.99240	-.03222	.02404	.02353	-.00193	-.00125	-.00020
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2439/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CSL
.019	18.645	5.03303	-.00140	2.99340	-.04135	.03016	.04223	-.00642	-.00002	.00004
-.023	49.825	5.04757	.00310	3.00230	-.00273	.04208	.04189	-.00947	-.00389	-.00126
-.035	100.230	5.04814	-.00020	3.00250	.02197	.04143	.03764	-.00566	-.00092	-.00175
-.030	150.370	5.04507	-.00070	2.99760	.02359	.03795	.03357	-.00225	-.00064	-.00129
-.041	200.590	5.04030	-.00030	2.99550	.00771	.03404	.02639	-.00330	-.00104	-.00054
-.028	300.260	5.03624	-.00030	2.99040	.00568	.02900	.02690	-.00249	-.00113	-.00053
.016	399.440	5.02951	-.00020	2.99350	.02400	.02083	.02777	-.00214	-.00124	-.00021
-.001	499.400	5.02575	-.00030	3.00020	-.00035	.01797	.02495	-.00207	-.00127	.00033
-.005	599.410	5.02339	-.00020	2.99790	-.02379	.02241	.02341	-.00185	-.00130	-.00034
-.010	799.330	5.02994	-.00020	2.99340	-.03359	.02441	.02501	-.00204	-.00124	-.00018
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2445/ 0 RN/L = .84 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CSL
5.054	-52.713	5.01840	-.00110	3.01890	-.07824	.01376	.03100	-.00343	-.00057	-.00040
4.965	14.529	5.04170	.00340	2.99460	-.02302	.03817	.04206	-.00937	-.00439	-.00136
4.952	50.155	5.04440	-.00100	3.00720	-.00579	.03375	.03711	-.00532	-.00021	-.00161
4.940	100.630	5.04420	-.00040	2.99570	-.00473	.03057	.03223	-.00319	-.00093	-.00139
4.972	200.180	5.03770	-.00020	2.99470	-.00690	.03230	.02729	-.00326	-.00114	-.00060
4.999	299.490	5.03330	-.00020	2.99420	.00544	.02602	.03319	-.00241	-.00129	-.00039
4.993	399.390	5.02780	-.00020	2.99330	.01129	.02551	.02755	-.00216	-.00135	-.00022
4.988	479.390	5.02710	-.00020	2.99310	-.01932	.02067	.02503	-.00209	-.00139	-.00007
	GRADIENT	.34703	.00023	.20513	-.00159	.00263	.00290	-.00068	-.00030	-.00009



V41B-D9A (IA22), ORBITER(O4RC1) W/ET SEPARATING

(TVK059) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMPF = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMPF = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMPF = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = 3.000 X = 200.000  
 Y = 54.000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2445/ 0 RN/L = .84 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
5.054	-52.713	200.18000	54.74800	-.01471	.04844	449.10000	.00000	.00000	672.11000	.00000	.00000
4.985	14.528	200.08000	53.87600	-.01498	.04739	449.11000	.00000	.00000	672.14000	.00000	.00000
4.952	50.155	200.05000	54.71000	-.01400	.05212	449.10000	.00000	.00000	672.11000	.00000	.00000
4.940	100.680	199.97000	53.92000	-.01339	.05231	448.37000	.00000	.00000	671.93000	.00000	.00000
4.972	200.180	200.07000	53.92000	-.01842	.04409	449.30000	.00000	.00000	671.65000	.00000	.00000
4.999	299.490	200.03000	53.56500	-.02781	.02597	448.37000	.00000	.00000	671.47000	.00000	.00000
4.993	399.390	200.13000	53.88400	-.03910	.00003	447.31000	.00000	.00000	670.18000	.00000	.00000
4.988	479.390	200.02000	53.93000	-.01019	.06032	447.72000	.00000	.00000	670.14000	.00000	.00000
GRADIENT	13.77203	3.70843	-.00103	.00326	30.31341	.00000	.00000	.00000	46.26514	.00000	.00000

V41B-D9A (IA22), ORBITER(O4RC1) W/ET SEPARATING

(UVK058) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMPF = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMPF = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMPF = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = 3.000 X = 200.000  
 Y = 54.000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2427/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	T81	T82	DT	T
-9.979	317.080	978.24000	978.24000	80.00000	978.24000	377.75000	65.00000	73.00000	12.88900	99.76800
-9.993	342.150	978.80000	978.80000	80.00000	978.80000	377.75000	65.00000	73.00000	6.24850	99.76800
-10.003	391.930	978.80000	978.80000	80.00000	978.80000	377.75000	65.00000	73.00000	2.17700	99.76800
-10.019	442.070	978.93000	978.93000	80.00000	978.93000	377.75000	65.00000	73.00000	.04091	99.76800
-10.025	492.450	978.54000	978.54000	80.00000	978.54000	377.75000	65.00000	73.00000	-.81622	99.76900
-9.955	591.340	978.14000	978.14000	80.00000	978.14000	377.75000	65.00000	73.00000	-1.91550	99.76800
-9.972	691.210	978.25000	978.25000	80.00000	978.25000	377.75000	65.00000	73.00000	-2.20460	99.76800
-10.005	791.600	977.83000	977.83000	80.00000	977.83000	377.75000	65.00000	73.00000	-.52691	99.76800
-10.003	991.480	977.95000	977.95000	80.00000	977.95000	377.75000	65.00000	73.00000	1.78330	99.76800
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REPRODUCIBILITY OF THE  
 ORIGINAL PAGE IS POOR

DATE 06 MAY 77

TABULATED SOURCE DATA. IA22. (AEDC V41B-D9A)  
V41B-D9A (IA22), ORBITER (04RC1) W/ET SEPARATING

(UVK058) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0009 SQ.FT. XMRP = 1099.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
SCALE = .0125

PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
DBETA = 3.000 X = 200.000  
Y = 54.000 ELEVON = .000  
UMBLDR = .000 RCS = 1.000  
GAS = 1.000

RUN NO. 2433/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	T81	T82	DT	T
-5.030	167.220	974.60000	974.60000	79.00000	974.60000	976.73000	64.00000	73.00000	1.82140	99.76800
-5.018	192.220	975.31000	975.31000	79.00000	975.31000	976.73000	64.00000	73.00000	1.79300	99.76800
-5.027	242.260	976.00000	976.00000	79.00000	976.00000	976.73000	64.00000	73.00000	.25582	99.76800
-5.041	292.510	976.73000	976.73000	79.00000	976.73000	976.73000	64.00000	73.00000	-1.07780	99.76900
-5.026	392.300	977.33000	977.33000	79.00000	977.33000	976.73000	64.00000	73.00000	-1.62770	99.76800
-4.976	491.410	977.47000	977.47000	79.00000	977.47000	976.73000	64.00000	73.00000	-3.04770	99.76900
-4.991	591.310	977.45000	977.45000	79.00000	977.45000	976.73000	64.00000	75.00000	-4.26320	99.76900
-5.008	691.500	977.40000	977.40000	79.00000	977.40000	976.73000	64.00000	73.00000	-3.74900	99.76900
-5.012	791.420	977.40000	977.40000	79.00000	977.40000	976.73000	64.00000	73.00000	-2.77410	99.76900
-5.010	991.320	976.54000	976.54000	79.00000	976.54000	976.73000	64.00000	73.00000	-1.62670	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2439/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	T81	T82	DT	T
.019	18.645	992.00000	992.00000	79.00000	992.00000	974.00000	64.00000	72.00000	-2.53540	99.76800
-0.023	49.825	991.41000	991.41000	79.00000	991.41000	974.00000	64.00000	72.00000	-1.53730	99.76800
-0.036	100.230	990.83000	990.83000	79.00000	990.83000	974.00000	64.00000	72.00000	-0.50799	99.76900
-0.030	150.370	979.45000	979.45000	79.00000	979.45000	974.00000	64.00000	72.00000	.05732	99.76800
-0.041	200.590	978.54000	978.54000	79.00000	978.54000	974.00000	64.00000	72.00000	.69543	99.76800
-0.028	300.250	976.30000	976.30000	79.00000	976.30000	974.00000	64.00000	72.00000	1.66720	99.76800
.016	399.440	975.51000	975.51000	79.00000	975.51000	974.00000	64.00000	72.00000	.85355	99.76800
-0.001	499.400	975.03000	975.03000	79.00000	975.03000	974.00000	64.00000	72.00000	-2.06340	99.76800
-0.005	599.410	975.03000	975.03000	79.00000	975.03000	974.00000	64.00000	72.00000	-3.59210	99.76800
-0.010	799.330	975.03000	975.03000	79.00000	975.03000	974.00000	64.00000	72.00000	-1.46920	99.76800
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2445/ 0 RN/L = .84 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLPBAL	T81	T82	DT	T
5.054	-52.713	976.51000	976.51000	79.00000	976.51000	976.39000	64.00000	72.00000	-1.74630	99.89400
4.985	14.528	976.55000	976.55000	79.00000	976.55000	976.39000	64.00000	72.00000	-.30659	99.89400
4.952	50.155	976.51000	976.51000	79.00000	976.51000	976.39000	64.00000	72.00000	.94827	99.89400
4.940	100.620	976.74000	976.74000	79.00000	976.74000	976.39000	64.00000	72.00000	2.02220	99.89400
4.972	200.180	976.55000	976.55000	79.00000	976.55000	976.39000	64.00000	72.00000	2.78300	99.89400
4.999	299.490	976.57000	976.57000	79.00000	976.57000	976.39000	64.00000	72.00000	2.98770	99.89400
4.993	399.390	976.63000	976.63000	79.00000	976.63000	976.39000	64.00000	72.00000	2.24200	99.89400
4.988	479.350	976.62000	976.62000	79.00000	976.62000	976.39000	64.00000	72.00000	1.25060	99.89400
	GRADIENT	67.21847	67.21847	5.43778	67.21847	67.20815	4.40329	4.55595	-.02111	6.87596

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = 3.000 X = 200.000  
 Y = 54.000 ELEVON = .000  
 UMBLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2427/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	IN	CLM	CY	CYN	CEL	CA
-9.979	317.080	200.06000	53.98900	-4.95260	2.99510	- 22340	.03196	-.03679	-.00993	.00091	.11345
-9.983	342.150	200.11000	53.70200	-4.95330	2.99400	- 16529	.01687	-.03724	-.00909	.00049	.10494
-10.003	391.930	200.03000	54.03000	-4.97390	2.99390	- 15032	.00524	-.03920	-.00800	.00051	.09770
-10.019	442.070	200.03000	54.27000	-4.99200	3.00030	- 14365	.00700	-.03309	-.00774	.00050	.09763
-10.026	492.450	200.16000	54.17000	-4.98740	2.99210	- 14463	.01437	-.03329	-.00321	.00044	.10211
-9.955	591.340	199.53000	54.13100	-4.94100	2.99780	- 14226	.02475	-.02992	-.01113	.00057	.11550
-9.972	691.210	199.53000	54.15800	-4.94440	2.99300	- 09049	.00072	-.02892	-.01103	.00028	.10211
-10.006	791.600	200.00000	54.19300	-4.97630	2.99350	- 06251	-.01592	-.02959	-.01050	.00031	.09040
-10.003	891.480	200.11000	54.05900	-4.97280	2.99650	- 06298	-.01525	-.02982	-.01032	.00031	.09157
GRADIENT	.00000	.00000	.00000	.00000	.00000	00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2433/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	IN	CLM	CY	CYN	CEL	CA
-5.030	167.220	199.95000	53.70400	.01878	2.99050	- 12277	.00570	-.03382	-.00952	.00086	.09466
-5.018	192.220	200.10000	54.26300	.02616	3.00100	- 12040	.01139	-.03137	-.00909	.00070	.09806
-5.027	242.260	200.05000	54.18200	.01248	2.99760	- 09566	.00943	-.03297	-.00820	.00048	.09066
-5.041	292.510	200.05000	54.35300	-.00427	2.99360	- 08456	.01465	-.03400	-.00805	.00049	.09263
-5.026	392.300	200.07000	54.04000	.00393	2.99010	- 07522	.02483	-.03190	-.00904	.00045	.09359
-4.976	491.410	199.97000	53.82000	.03132	2.99310	- 05378	.03185	-.02737	-.01200	.00032	.10974
-4.991	591.310	200.10000	54.13200	.03372	3.00090	- 02328	.01062	-.02771	-.01199	.00022	.09567
-5.003	691.500	200.00000	54.16200	.02125	2.99370	- 00303	.00062	-.02376	-.01093	.00024	.08913
-5.012	791.420	200.10000	54.35000	.01220	3.00090	- 00335	.00097	-.02223	-.01069	.00024	.08777
-5.010	891.390	200.02000	54.17600	.02030	2.99220	- 00538	.00095	-.02830	-.01059	.00023	.08943
GRADIENT	.00000	.00000	.00000	.00000	.00000	00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2439/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	IN	CLM	CY	CYN	CEL	CA
.019	18.645	200.10000	53.47400	5.05230	2.99290	00272	.00115	-.04714	-.01083	.00051	.08566
-.023	49.825	200.04000	54.33500	5.02430	3.00600	- 02625	.00073	-.04310	-.01021	.00056	.08846
-.036	100.230	200.11000	54.10200	5.01200	3.00230	- 03028	.00557	-.03213	-.00904	.00053	.08550
-.030	150.370	200.03000	54.09900	5.01470	2.99390	- 02801	.01552	-.03200	-.00708	.00045	.08544
-.041	200.590	200.03000	53.82500	5.00010	2.99320	- 02355	.02490	-.03105	-.00764	.00041	.08743
-.028	300.260	200.00000	53.90290	5.00030	2.99010	- 01225	.03767	-.02716	-.01054	.00034	.09538
.016	399.440	200.01000	53.71700	5.04520	2.99340	00752	.03979	-.02547	-.01297	.00012	.10237
-.001	499.400	200.10000	54.11000	5.03440	2.99030	04189	.02224	-.02755	-.01249	.00019	.08392
-.005	599.410	200.00000	53.90200	5.02320	2.99770	04236	.01836	-.03031	-.01132	.00024	.08916
-.010	799.330	199.94000	54.17200	5.01950	2.99220	04935	.01830	-.02938	-.01071	.00023	.08901
GRADIENT	.00000	.00000	.00000	.00000	.00000	00000	.00000	.00000	.00000	.00000	.00000













V41B-D9A (IA22), ORBITER (04RC1) W/ET SEPARATING

(SVK060) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0070 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = 3.000 X = 400.000  
 Y = 54.000 ELEVON = .000  
 UMSLDR = .000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2434/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.021	166.970	5.04594	-.00070	2.99400	.06441	.03523	.03307	-.00303	-.00067	-.00172
-4.990	191.150	5.04239	-.00070	2.99340	.07901	.03259	.03202	-.00285	-.00064	-.00126
-4.980	240.740	5.03339	-.00070	2.99340	.06701	.02557	.03172	-.00251	-.00079	-.00089
-5.009	291.250	5.03337	-.00030	2.99310	.04241	.02402	.02991	-.00126	-.00117	-.00042
-4.974	390.610	5.02320	-.00030	3.00090	.03341	.01907	.02225	-.00172	-.00125	-.00010
-4.975	490.730	5.02486	-.00020	2.99220	.00297	.01700	.02590	-.00187	-.00135	.00065
-5.000	591.290	5.02799	-.00020	3.00070	-.02305	.02208	.02460	-.00164	-.00132	-.00029
-5.036	691.640	5.02977	-.00020	2.99420	-.03541	.02441	.02645	-.00170	-.00127	-.00019
-5.007	791.370	5.02233	-.00020	2.99000	-.03329	.02451	.02623	-.00206	-.00127	-.00019
-5.009	891.400	5.02232	-.00020	2.99340	-.03310	.02454	.02627	-.00197	-.00127	-.00019
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2440/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
.005	19.599	5.02954	-.00140	2.99400	.04076	.05286	.03930	-.00344	.00022	-.00181
.023	48.736	5.05597	-.00120	2.99740	.04312	.04076	.03550	-.00255	-.00004	-.00170
.042	98.332	5.04730	-.00050	2.99330	.04816	.03034	.03309	-.00254	-.00075	-.00165
.013	148.790	5.03239	-.00060	2.99310	.03448	.03118	.03022	-.00335	-.00080	-.00073
-.000	198.060	5.03348	-.00040	2.99320	.01746	.02371	.02379	-.00278	-.00101	-.00047
.033	299.440	5.03151	-.00020	2.99300	.02632	.02272	.02307	-.00213	-.00124	-.00025
.026	399.490	5.02290	-.00020	3.00230	.01474	.01702	.02677	-.00211	-.00133	.00033
-.019	499.320	5.02205	-.00010	2.99750	-.02239	.02180	.02395	-.00215	-.00134	-.00026
-.029	599.630	5.02997	-.00010	2.99000	-.03455	.02399	.02600	-.00207	-.00126	-.00017
-.006	799.180	5.03002	-.00020	2.99370	-.03499	.02414	.02608	-.00209	-.00126	-.00017
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2446/ 0 RN/L = .84 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
4.987	-50.492	5.04680	-.00200	2.99350	-.00616	.04250	.04224	-.00444	.00062	-.00144
5.007	13.977	5.04900	-.00090	2.99970	.01593	.04365	.03577	-.00384	-.00041	-.00170
5.009	48.943	5.04420	-.00050	2.99360	.02018	.03872	.03243	-.00411	-.00074	-.00160
5.007	98.606	5.03020	-.00040	2.99180	.00144	.03373	.02956	-.00399	-.00098	-.00104
5.023	198.240	5.03490	-.00010	2.99060	.00639	.02331	.02231	-.00263	-.00127	-.00059
5.026	299.440	5.02250	-.00020	3.00150	.01604	.02116	.02316	-.00253	-.00132	-.00033
4.939	399.050	5.02370	-.00020	2.99320	-.01225	.01091	.02333	-.00247	-.00137	.00015
4.981	479.330	5.02690	-.00010	2.99100	-.03112	.02297	.02446	-.00215	-.00139	-.00039
	GRADIENT	.36124	-.00006	.21462	.00.13	.00312	.00256	-.00027	-.00003	-.00012





DATE 06 MAY 77

TABULATED SOURCE DATA, IA22, (AEDC V418-D9A)  
V418-D9A (IA22), ORBITER (O4RC1) W/ET SEPARATING

PAGE 481

(UVK060) (20 APR 77)

REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1089.6000 IN. XO  
LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
SCALE = .0125

PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
DBETA = 3.000 X = 400.000  
Y = 54.000 ELEVON = .000  
UNELDR = .000 RCS = 1.000  
GAS = 1.000

RUN NO. 2434/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLP2AL	T81	T82	DT	T
-5.021	166.970	972.50000	972.50000	80.00000	972.50000	972.70000	64.00000	73.00000	.04124	99.76800
-4.990	191.150	972.50000	972.50000	80.00000	972.50000	972.70000	64.00000	73.00000	-.53278	99.76900
-4.960	240.740	972.00000	972.00000	80.00000	972.00000	972.70000	64.00000	73.00000	-.13155	99.76900
-5.009	291.250	971.37000	971.37000	80.00000	971.37000	972.70000	64.00000	73.00000	1.70050	99.76800
-4.974	390.610	970.00000	970.00000	80.00000	970.00000	972.70000	64.00000	73.00000	2.72470	99.76800
-4.975	490.730	970.40000	970.40000	80.00000	970.40000	972.70000	64.00000	73.00000	4.32290	99.76900
-5.000	591.290	969.71000	969.71000	80.00000	969.71000	972.70000	64.00000	73.00000	4.74420	99.76800
-5.036	691.640	969.61000	969.61000	80.00000	969.61000	972.70000	64.00000	73.00000	3.09400	99.76900
-5.007	791.370	974.01000	974.01000	80.00000	974.01000	972.70000	64.00000	73.00000	1.05400	99.76900
-5.009	931.400	975.10000	975.10000	80.00000	975.10000	972.70000	64.00000	73.00000	-.94450	99.76800
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2440/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	F53	DLP2AL	T81	T82	DT	T
.005	19.599	977.20000	977.20000	78.00000	977.20000	976.90000	64.00000	72.00000	-5.47950	99.76800
.023	48.736	977.50000	977.50000	78.00000	977.50000	976.90000	64.00000	72.00000	-6.00240	99.76900
.042	93.332	977.80000	977.80000	78.00000	977.80000	976.90000	64.00000	72.00000	-6.60220	99.76900
.013	142.700	978.00000	978.00000	78.00000	978.00000	976.90000	64.00000	72.00000	-6.87310	99.76900
-.000	193.630	977.30000	977.30000	78.00000	977.30000	976.90000	64.00000	72.00000	-5.97000	99.76900
-.033	243.440	978.40000	978.40000	78.00000	978.40000	976.90000	64.00000	72.00000	-2.82710	99.76900
-.026	293.450	978.74000	978.74000	78.00000	978.74000	976.90000	64.00000	72.00000	1.27020	99.76900
-.019	343.320	977.17000	977.17000	78.00000	977.17000	976.90000	64.00000	72.00000	3.04510	99.76800
-.029	393.630	976.80000	976.80000	78.00000	976.80000	976.90000	64.00000	72.00000	.63231	99.76800
-.006	443.180	977.41000	977.41000	78.00000	977.41000	976.90000	64.00000	72.00000	-2.62470	99.76900
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2446/ 0 RN/L = .84 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	PRC	PRC2	TGAS	PS3	DLP2AL	T81	T82	DT	T
4.987	-50.492	976.41000	976.41000	79.00000	976.41000	976.20000	64.00000	72.00000	-4.50930	99.76900
5.007	13.977	976.43000	976.43000	79.00000	976.43000	976.20000	64.00000	72.00000	-5.21590	99.76900
5.009	48.943	976.00000	976.00000	79.00000	976.00000	976.20000	64.00000	72.00000	-5.91430	99.76900
5.007	93.603	976.40000	976.40000	79.00000	976.40000	976.20000	64.00000	72.00000	-6.20030	99.76900
5.029	143.240	976.40000	976.40000	79.00000	976.40000	976.20000	64.00000	72.00000	-5.71420	99.76900
5.026	193.440	976.00000	976.00000	79.00000	976.00000	976.20000	64.00000	72.00000	-4.60170	99.76900
4.989	243.020	976.80000	976.80000	79.00000	976.80000	976.20000	64.00000	72.00000	-2.40020	99.76900
4.981	293.330	976.67000	976.67000	79.00000	976.67000	976.20000	64.00000	72.00000	-.57734	99.76900
GRADIENT		69.65977	69.65977	5.85214	69.65977	69.84331	4.57695	5.15132	-.37317	7.13901

















REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = .000  
 GAS = 1.000

RUN NO. 2729/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.567	202.740	-5.00790	.00276	-.00540	.08418	-.01299	.08573	-.00547	-.00265	.00078
-5.530	249.310	-5.01560	.00282	.00081	-.00028	-.01750	.07937	-.00486	-.00278	.00038
-5.514	299.290	-5.01870	.00288	.00231	-.03379	-.01931	.07744	-.00447	-.00287	.00031
-5.514	399.200	-5.02210	.00286	.00401	-.10665	-.01938	.07341	-.00473	-.00297	.00032
-5.525	499.460	-5.02050	.00259	.00111	-.14284	-.01571	.07462	-.00522	-.00258	.00030
-5.513	599.320	-5.01970	.00263	.00267	-.14746	-.01445	.07567	-.00515	-.00261	.00028
-5.513	699.360	-5.02020	.00264	.00578	-.14727	-.01438	.07573	-.00523	-.00260	.00028
-5.515	799.140	-5.01950	.00235	.00546	-.14742	-.01446	.07726	-.00557	-.00234	.00025
-5.516	819.200	-5.01940	.00264	.00634	-.14774	-.01439	.07585	-.00511	-.00261	.00029
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2382/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.051	25.693	-5.01224	.00045	-.00117	-.06894	-.00976	.09162	-.00602	-.00048	.00049
-.003	41.659	-5.01194	.00039	.00365	-.06823	-.00942	.09416	-.00643	-.00041	.00048
.000	91.559	-5.00798	.00038	.00439	-.05691	-.00558	.09599	-.00594	-.00037	.00010
.007	141.460	-5.00603	.00038	.00487	-.05623	-.00351	.08723	-.00573	-.00034	.00028
.009	191.360	-5.01003	.00020	.00095	-.05743	-.00790	.08963	-.00625	-.00023	.00013
.006	291.220	-5.01807	.00030	.00513	-.07971	-.01577	.08388	-.00626	-.00042	.00038
.001	391.430	-5.02043	.00029	.00105	-.11730	-.01648	.08245	-.00632	-.00042	.00016
-.000	491.380	-5.01855	.00030	.00188	-.13177	-.01369	.08308	-.00622	-.00040	.00014
.004	591.410	-5.01864	.00030	.00038	-.13192	-.01373	.08343	-.00643	-.00040	.00014
.001	791.330	-5.01869	.00031	.00286	-.13179	-.01373	.08353	-.00650	-.00041	.00014
-.000	931.300	-5.01857	.00032	-.00017	-.13159	-.01373	.08364	-.00640	-.00042	.00014
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2385/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
5.010	-59.758	-5.02052	.00038	-.00004	-.11619	-.01662	.08391	-.00698	-.00050	.00028
5.004	6.531	-5.01540	.00028	-.00070	-.10722	-.01124	.09535	-.00722	-.00034	.00018
5.001	41.580	-5.01029	.00038	.00078	-.09510	-.00621	.09815	-.00692	-.00036	.00005
5.007	91.467	-5.00742	.00039	.00226	-.07644	-.00404	.09131	-.00595	-.00037	.00021
5.006	191.240	-5.01515	.00050	.00081	-.06869	-.01301	.09125	-.00558	-.00057	.00023
5.009	291.230	-5.02001	.00031	.00174	-.10640	-.01650	.08598	-.00625	-.00044	.00017
5.005	391.410	-5.01920	.00029	.00179	-.12891	-.01443	.08562	-.00642	-.00040	.00016
5.006	591.250	-5.01868	.00031	.00283	-.13161	-.01373	.08619	-.00644	-.00041	.00014
	GRADIENT	-.76794	.00004	-.00011	-.01642	-.00172	.01460	-.00111	-.00005	.00003





V41B-D9A (IA22), ET SEPARATING FROM ORB (O4RC1)

(AVK064) (04 MAY 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = .000  
 GAS = 1.000

RUN NO. 2729/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-5.567	202.740	-1.19940	-.50641	-10.57500	-.00264	-.21825	.00178	.01124	-.00046	.00001	.12350
-5.530	249.310	.18065	-.03579	-10.54600	.00363	-.17161	-.01762	.01036	.00014	-.00008	.10873
-5.514	299.290	.18632	.03902	-10.53300	.00519	-.15967	-.02263	.00913	.00086	-.00010	.10513
-5.514	399.200	.16269	.09423	-10.53600	.00697	-.15189	-.02485	.00874	.00074	-.00011	.10678
-5.525	499.460	.15872	.07197	-10.54500	.00370	-.14030	-.03092	.00776	.00134	-.00018	.10110
-5.513	599.320	.18647	.06952	-10.53300	.00530	-.13985	-.03105	.00754	.00140	-.00017	.10152
-5.513	699.360	.23976	.29902	-10.53300	.00842	-.13962	-.03093	.00768	.00144	-.00018	.10147
-5.515	799.140	.20352	.24807	-10.53400	.00781	-.13885	-.03125	.00793	.00139	-.00018	.10223
-5.516	819.200	.37446	.30503	-10.53500	.00998	-.13849	-.03124	.00741	.00129	-.00018	.09971
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2382/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-.051	25.693	-.60890	-.12092	-5.06310	-.00073	-.09010	-.01298	.00332	.00036	.00020	.09951
-.003	41.659	.11438	.13033	-5.01460	.00403	-.08678	-.01477	.00277	.00052	.00011	.09659
.000	91.559	.13708	.09029	-5.00750	.00477	-.08492	-.01293	.00303	.00023	.00004	.09911
.007	141.460	.10023	.15231	-4.99900	.00525	-.08438	-.00896	.00399	.00007	.00007	.09884
.009	191.360	.05951	-.08616	-5.00130	.00115	-.07791	-.00939	.00368	.00030	.00004	.09761
.006	291.220	.09360	.23331	-5.01170	.00543	-.06812	-.01274	.00332	.00039	.00002	.09447
.001	391.430	.11884	-.07496	-5.01920	.00134	-.06402	-.01526	.00304	.00058	-.00001	.09339
-.000	491.390	.13919	.12567	-5.01900	.00218	-.06340	-.01516	.00304	.00052	-.00002	.09297
.004	591.410	.22354	-.15099	-5.01470	.00068	-.06220	-.01509	.00276	.00045	-.00002	.09364
.001	791.330	.14086	.06891	-5.01800	.00316	-.06310	-.01505	.00244	.00045	-.00002	.09475
-.000	931.300	.10378	-.12567	-5.01890	.00048	-.06373	-.01531	.00304	.00048	-.00002	.09359
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2385/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
5.010	-58.758	.26473	-.07851	-.01102	-.00034	-.01479	-.00084	.00240	.00031	.00003	.09576
5.004	6.531	.14866	-.24905	-.01160	-.00042	-.01825	.00126	.00290	.00009	.00002	.09642
5.001	41.580	.11947	-.14115	-.00929	.00116	-.02149	.00284	.00314	.00008	-.00002	.09631
5.007	91.467	.14564	-.06888	-.00032	.00265	-.02267	.00563	.00359	-.00012	.00001	.09611
5.006	131.240	.25918	-.11000	-.00945	.00130	-.00987	.00216	.00331	.00005	-.00003	.09182
5.009	291.230	.20026	-.00584	-.01081	.00205	-.00741	.00114	.00318	.00026	-.00005	.09087
5.005	391.410	.24714	-.04935	-.01420	.00208	-.00735	.00082	.00281	.00021	-.00003	.09047
5.006	591.250	.14519	.06645	-.01298	.00314	-.00634	.00115	.00308	.00030	-.00003	.09114
	GRADIENT	.02276	-.03813	-.00178	-.00006	-.00279	.00019	.00044	.00001	.00000	.01476



V41B-D9A (IA22),ORBITER(04RC) W/ET SEPARATING

(SVK065) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = .000  
 GAS = 1.000

RUN NO. 2730/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.509	199.720	-5.01700	.00354	-.00129	.01891	-.01964	.07455	-.00303	-.00350	.00092
-5.507	249.650	-5.01750	.00353	.01036	-.02643	-.01743	.07496	-.00358	-.00347	.00061
-5.520	299.910	-5.01910	.00350	.00265	-.06623	-.01820	.07189	-.00331	-.00347	.00061
-5.503	399.490	-5.02330	.00349	.00280	-.12455	-.01880	.07001	-.00370	-.00345	.00042
-5.511	499.430	-5.02000	.00305	.00268	-.14838	-.01429	.07306	-.00438	-.00300	.00034
-5.515	599.450	-5.02020	.00312	.00241	-.14812	-.01419	.07330	-.00433	-.00307	.00034
-5.511	699.360	-5.01960	.00308	.00271	-.14833	-.01422	.07364	-.00435	-.00303	.00034
-5.520	799.440	-5.02010	.00304	.00224	-.14766	-.01422	.07365	-.00451	-.00298	.00033
-5.517	819.320	-5.01970	.00301	-.00038	-.14823	-.01424	.07404	-.00454	-.00296	.00033
	GRADIENT	.07000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2383/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.002	23.794	-5.00121	.00060	-.00177	-.04359	.00127	.09939	-.00599	-.00049	.00021
-.017	42.232	-4.99972	.00075	.00028	-.03032	.00224	.09545	-.00523	-.00062	.00031
-.012	92.041	-5.00377	.00033	.00534	-.04384	-.00166	.08772	-.00590	-.00027	.00033
-.003	141.800	-5.00819	.00020	.00838	-.05172	-.00608	.09097	-.00619	-.00020	.00014
-.010	191.950	-5.01379	.00053	-.00237	-.04751	-.01261	.09106	-.00569	-.00059	.00016
.008	291.590	-5.01966	.00027	.00278	-.09293	-.01684	.08434	-.00619	-.00041	.00020
.003	391.460	-5.01984	.00029	.00302	-.12480	-.01540	.08327	-.00648	-.00041	.00017
.002	491.530	-5.01868	.00029	.00278	-.13163	-.01372	.08409	-.00646	-.00039	.00014
.002	591.500	-5.01861	.00031	.00312	-.13134	-.01369	.08393	-.00641	-.00041	.00014
.001	791.410	-5.01858	.00032	.00369	-.13179	-.01370	.08393	-.00636	-.00042	.00014
.002	931.350	-5.01860	.00030	.00526	-.13170	-.01371	.08378	-.00642	-.00040	.00014
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2386/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
4.996	-58.605	-5.01408	.00041	-.00049	-.10552	-.00991	.09177	-.00702	-.00044	.00018
4.987	6.872	-5.00502	.00058	.00196	-.07068	-.00164	.09515	-.00572	-.00051	.00013
4.992	41.849	-5.00572	.00037	.00290	-.07482	-.00215	.09074	-.00615	-.00032	.00021
4.998	91.916	-5.00894	.00023	.00258	-.07011	-.00602	.09301	-.00604	-.00024	.00011
5.007	191.590	-5.01704	.00034	.00266	-.07852	-.01468	.08804	-.00617	-.00044	.00039
5.006	291.510	-5.02051	.00031	.00159	-.11525	-.01662	.08584	-.00628	-.00044	.00016
5.005	391.510	-5.01866	.00033	.00089	-.13161	-.01370	.08601	-.00640	-.00043	.00013
5.006	591.370	-5.01870	.00031	.00188	-.13183	-.01373	.08632	-.00647	-.00041	.00014
	GRADIENT	-.72834	.00008	.00029	-.01029	-.00024	.01385	-.00083	-.00007	.00002



V41B-D9A (1A22) ET SEPARATING FROM ORB (04RC1)

(AVK065) (04 MAY 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMELDR = .000 RCS = .000  
 GAS = 1.000

RUN NO. 2730/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-5.509	199.720	200.12000	-.19759	-10.52600	.00225	-.19090	-.01365	.00959	.00037	-.00015	.11372
-5.507	249.650	200.11000	.51269	-10.52400	.01389	-.17002	-.02049	.00948	.00037	-.00007	.10953
-5.520	299.910	200.12000	.04767	-10.53900	.00515	-.15919	-.02528	.00886	.00087	-.00015	.10427
-5.593	399.490	200.24000	.05684	-10.52600	.00628	-.15594	-.02314	.00845	.00086	-.00015	.10526
-5.511	499.430	200.18000	.04808	-10.53100	.00573	-.14500	-.02834	.00785	.00112	-.00014	.10202
-5.515	599.450	200.29000	.05936	-10.53500	.00554	-.13913	-.03096	.00775	.00127	-.00017	.10106
-5.511	699.360	200.20000	.05967	-10.53100	.00579	-.13928	-.03100	.00708	.00123	-.00018	.10086
-5.520	799.440	200.28000	.03151	-10.54000	.00528	-.13978	-.03139	.00723	.00126	-.00017	.10146
-5.517	819.320	200.16000	-.15044	-10.53700	.00262	-.13938	-.03137	.00732	.00131	-.00018	.10100
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2383/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-.002	23.794	200.11000	-.33825	-5.00330	-.00117	-.09261	-.02244	.00570	-.00010	.00020	.10077
-.017	42.232	200.17000	-.15093	-5.01700	.00103	-.09519	-.01967	.00596	.00010	.00025	.10153
-.012	92.041	200.10000	.27293	-5.01620	.00567	-.08683	-.01466	.00330	.00046	.00009	.09941
-.003	141.800	200.17000	.30769	-5.01070	.00958	-.08514	-.01011	.00374	.00017	.00001	.09891
-.010	191.950	200.19000	-.25419	-5.02420	-.00185	-.07706	-.01206	.00342	.00057	.00006	.09535
.008	291.590	200.17000	.05555	-5.01180	.00305	-.07370	-.01048	.00332	.00050	.00001	.09679
.003	391.460	200.16000	.05451	-5.01640	.00330	-.06554	-.01475	.00363	.00050	.00000	.09237
.002	491.530	200.23000	.05845	-5.01650	.00307	-.06348	-.01518	.00306	.00050	-.00002	.09381
.002	591.500	200.27000	.06744	-5.01630	.00343	-.06300	-.01518	.00289	.00051	-.00002	.09387
.001	791.410	200.24000	.12958	-5.01730	.00401	-.06311	-.01520	.00284	.00055	-.00002	.09397
.002	931.350	200.17000	.25766	-5.01650	.00556	-.06387	-.01543	.00301	.00046	-.00002	.09393
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2386/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
4.996	-58.605	200.20000	-.23006	-.01768	-.00008	-.01535	-.00604	.00294	-.00024	-.00002	.09408
4.997	6.872	200.14000	-.05508	-.01802	.00254	-.02181	-.00261	.00336	.00023	.00009	.09763
4.992	41.849	200.15000	.09167	-.01412	.00328	-.02160	.00121	.00265	.00034	.00002	.09628
4.998	91.916	200.24000	-.04157	-.01114	.00281	-.02157	.00480	.00335	.00009	.00001	.09505
5.007	191.590	200.25000	.00915	-.01044	.00300	-.01548	.00398	.00332	-.00002	-.00007	.09355
5.006	291.510	200.25000	-.05167	-.01501	.00190	-.00751	.00094	.00271	.00017	-.00003	.08979
5.005	391.510	200.24000	-.09921	-.01406	.00123	-.00708	.00097	.00270	.00022	-.00003	.09104
5.006	591.370	200.22000	-.06008	-.01320	.00219	-.00594	.00127	.00250	.00015	-.00003	.09128
	GRADIENT	29.12483	-.00802	-.00262	.00037	-.00317	-.00038	.00049	.00003	.00001	.01421



V41B-D9A (IA22).ORBITER(04RC1) W/ET SEPARATING

(SVK066) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLOR = .000 RCS = .000  
 GAS = 1.000

RUN NO. 2731/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.529	199.880	-5.01570	.00274	-.00034	-.00519	-.01693	.07960	-.00497	-.00270	.00065
-5.510	249.240	-5.02020	.00281	.00306	-.05122	-.01934	.07588	-.00459	-.00282	.00063
-5.518	299.410	-5.02160	.00277	-.00458	-.08866	-.01759	.07438	-.00477	-.00279	.00042
-5.507	399.220	-5.02210	.00268	.00438	-.13574	-.01703	.07406	-.00506	-.00268	.00033
-5.511	499.280	-5.02020	.00269	.00276	-.14764	-.01431	.07524	-.00505	-.00265	.00029
-5.524	599.520	-5.02000	.00280	.00106	-.14756	-.01435	.07488	-.00484	-.00277	.00030
-5.519	699.400	-5.02020	.00298	.00255	-.14804	-.01422	.07436	-.00457	-.00273	.00032
-5.513	799.340	-5.02000	.00307	.00265	-.14843	-.01424	.07395	-.00443	-.00302	.00034
-5.516	819.300	-5.01990	.00306	.00328	-.14775	-.01421	.07374	-.00480	-.00300	.00033
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2384/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.022	24.023	-4.99544	.00033	.00080	-.01613	.00623	.08886	-.00597	-.00016	.00031
.016	41.328	-4.99842	.00026	.00346	-.01950	.00310	.08893	-.00621	-.00014	.00036
.030	90.926	-5.00591	.00014	.00452	-.03282	-.00451	.09220	-.00601	-.00013	.00011
.021	141.230	-5.01228	.00057	.00012	-.03490	-.01154	.09153	-.00541	-.00062	.00037
.004	191.340	-5.01615	.00036	.00173	-.05759	-.01477	.08720	-.00607	-.00046	.00057
.011	291.170	-5.02109	.00028	.00033	-.10443	-.01789	.08451	-.00638	-.00043	.00019
.001	391.430	-5.01901	.00031	.00530	-.13064	-.01416	.08460	-.00646	-.00041	.00014
-.003	491.580	-5.01856	.00030	.00231	-.13161	-.01372	.08533	-.00642	-.00040	.00013
.002	591.360	-5.01864	.00031	.00303	-.13174	-.01373	.08548	-.00642	-.00041	.00014
-.002	791.410	-5.01866	.00030	.00228	-.13199	-.01372	.08546	-.00662	-.00040	.00014
.001	931.390	-5.01668	.00030	.00171	-.13168	-.01374	.08558	-.00639	-.00040	.00014
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2387/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
4.941	-57.081	-4.99509	.00067	.00080	-.05358	.00907	.09337	-.00588	-.00046	.00011
5.039	5.609	-5.00368	.00024	-.00014	-.06076	-.00064	.09026	-.00682	-.00016	.00022
5.004	41.181	-5.00584	.00026	-.00314	-.06232	-.00413	.09332	-.00632	-.00024	.00011
5.006	91.251	-5.01202	.00062	.00625	-.05568	-.01019	.09307	-.00582	-.00065	.00028
5.015	191.140	-5.01892	.00032	.00117	-.09050	-.01613	.08731	-.00636	-.00044	.00024
5.003	291.350	-5.02002	.00034	.00431	-.12278	-.01571	.08563	-.00654	-.00045	.00017
5.002	391.350	-5.01858	.00035	.00008	-.13177	-.01369	.08660	-.00663	-.00045	.00015
5.003	591.210	-5.01866	.00036	.00282	-.13197	-.01373	.08688	-.00646	-.00045	.00014
	GRADIENT	-.02213	.00004	-.00002	-.01083	-.00011	.01622	-.00122	-.00003	.00004





V41B-L9A (IA22), ET SEPARATING FROM ORB (04RC1)

(AVK066) (04 MAY 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = .000  
 GAS = 1.000

RUN NO. 2731/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-5.529	199.880	400.04000	-.11267	-10.54500	.00240	-.18678	-.02016	.00846	.00095	-.00006	.11193
-5.510	249.240	400.14000	.06131	-10.53000	.00588	-.17099	-.02368	.00866	.00100	-.00002	.10925
-5.518	299.410	400.15000	-.53205	-10.54000	-.00181	-.15642	-.02929	.00785	.00109	-.00014	.10329
-5.507	399.220	400.09000	.12614	-10.52900	.00706	-.15440	-.02602	.00825	.00087	-.00013	.10358
-5.511	499.280	400.15000	-.00049	-10.53100	.00545	-.15291	-.02385	.00814	.00073	-.00012	.10595
-5.524	599.520	400.12000	.01373	-10.54400	.00387	-.14011	-.03051	.00718	.00118	-.00016	.09937
-5.519	699.400	400.23000	.05103	-10.53900	.00553	-.13908	-.03096	.00743	.00126	-.00016	.10086
-5.513	799.340	400.22000	.07062	-10.53300	.00573	-.14008	-.03127	.00736	.00127	-.00018	.10231
-5.516	819.300	400.24000	.10294	-10.53600	.00634	-.14008	-.03131	.00706	.00121	-.00017	.10156
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2384/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-.022	24.023	400.04000	-.16597	-5.01730	.00113	-.09202	-.02809	.00432	.00015	.00013	.09712
.016	41.328	400.09000	.02207	-4.98270	.00372	-.09301	-.02379	.00415	.00023	.00012	.09849
.030	90.926	400.17000	.16536	-4.97610	.00467	-.09009	-.01560	.00387	.00017	.00007	.10043
.021	141.230	400.12000	-.13215	-4.99110	.00069	-.08534	-.01255	.00345	.00062	.00005	.09800
.004	191.340	400.15000	-.04835	-5.01260	.00209	-.07666	-.01446	.00327	.00063	.00002	.09473
.011	291.170	400.16000	-.19597	-5.00990	.00060	-.07401	-.01234	.00352	.00047	.00003	.09509
.001	391.430	400.21000	.26589	-5.01760	.00561	-.07007	-.01190	.00367	.00038	.00001	.09532
-.003	491.580	400.17000	.01294	-5.02200	.00260	-.06351	-.01522	.00327	.00057	-.00002	.09302
.002	591.360	400.14000	-.00411	-5.01660	.00334	-.06269	-.01495	.00308	.00051	-.00003	.09325
-.002	791.410	400.31000	.05327	-5.02030	.00258	-.06325	-.01531	.00274	.00049	-.00002	.09477
.001	931.380	400.21000	-.01853	-5.01770	.00201	-.06322	-.01533	.00348	.00051	-.00003	.09402
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2387/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
4.941	57.081	399.98000	-.11619	-.05399	.00147	-.02418	-.01770	.00366	-.00027	.00009	.09633
5.039	5.609	400.23000	-.14371	.03552	.00010	-.02261	-.00398	.00222	.00018	.00002	.09873
5.004	41.181	400.20000	-.38917	-.00244	-.00287	-.02118	-.00032	.00252	.00009	-.00002	.09746
5.007	91.251	400.23000	.26016	-.00582	.00687	-.02107	.00255	.00328	.00031	-.00002	.09522
5.015	191.140	400.17000	-.07896	-.00352	.00149	-.01707	.00383	.00289	.00026	-.00008	.09445
5.003	291.350	400.15000	.07156	-.01652	.00464	-.01103	.00290	.00343	-.00008	-.00004	.09256
5.002	391.350	400.15000	-.16991	-.01699	.00044	-.00695	.00098	.00306	.00026	-.00004	.09104
5.003	591.210	400.15000	.02187	-.01536	.00318	-.00612	.00153	.00266	.00024	-.00003	.09073
	GRADIENT	71.35878	-.02562	.00633	.00002	-.00403	-.00071	.00040	.00003	.00000	.01760





V41B-D9A (IA22), ET SEPARATING FROM ORB (04RC1)

(AVK057) (04 MAY 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 600.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = .000  
 GAS = 1.000

RUN NO. 2724/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-15.012	474.700	600.20000	.56540	-20.03800	.01214	-.31794	-.05473	.01165	.00143	.00010	.11398
-15.017	499.850	600.17000	-.13735	-20.04100	.00177	-.32003	-.05276	.01175	.00129	.00008	.11535
-15.022	549.820	600.20000	.25210	-20.04300	.00793	-.33032	-.04630	.01229	.00083	.00010	.11793
-15.030	599.970	600.21000	.24754	-20.05000	.00694	-.33859	-.03980	.01271	.00054	.00011	.12215
-15.013	699.750	600.23000	-.11762	-20.03300	.01043	-.34816	-.03049	.01281	.00012	.00014	.12894
-14.994	799.300	600.12000	-.18643	-20.01300	.00420	-.34365	-.02996	.01407	-.00077	.00029	.13366
-15.012	999.430	600.26000	-.02028	-20.03200	.00459	-.32393	-.04209	.01195	.00060	.00016	.12303
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2728/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-10.010	324.660	600.08000	.47651	-15.03700	.01230	-.24001	-.03908	.00846	.00171	-.00003	.11277
-10.012	349.720	600.12000	-.27121	-15.03900	-.00026	-.22889	-.04368	.00843	.00176	-.00002	.10775
-10.020	399.760	600.12000	.10225	-15.04300	.00586	-.22234	-.04474	.00856	.00146	-.00003	.10529
-10.025	449.700	600.13000	.09503	-15.04600	.00517	-.22782	-.04000	.00947	.00107	-.00004	.10829
-10.024	499.810	600.24000	.03837	-15.04400	.00455	-.23185	-.03575	.00948	.00084	-.00003	.10978
-10.012	599.600	600.07000	-.01679	-15.03200	.00436	-.23537	-.02956	.00957	.00074	.00000	.11355
-10.004	699.400	600.16000	.08513	-15.02300	.00734	-.22859	-.03167	.00973	.00043	.00003	.11608
-10.017	799.390	600.29000	.05042	-15.03700	.00563	-.21755	-.03903	.00884	.00108	-.00000	.10988
-10.013	999.390	600.23000	.04235	-15.03300	.00588	-.21802	-.03911	.00834	.00114	.00001	.10972
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2732/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-5.521	200.010	600.15000	.05981	-10.54100	.00527	-.17681	-.03138	.00794	.00139	-.00001	.10599
-5.517	249.790	600.23000	-.27361	-10.53900	.00833	-.16029	-.03196	.00761	.00140	-.00008	.10543
-5.525	299.750	600.18000	.07322	-10.54900	.00552	-.15082	-.03392	.00681	.00146	-.00019	.10139
-5.525	399.680	600.27000	-.21674	-10.54600	.00223	-.15218	-.02915	.00799	.00094	-.00013	.10185
-5.511	499.490	600.17000	-.08737	-10.53100	.00438	-.15352	-.02454	.00794	.00086	-.00014	.10465
-5.507	599.370	600.14000	-.27611	-10.52700	.00212	-.14602	-.02684	.00746	.00091	-.00012	.10283
-5.516	699.320	600.18000	.01610	-10.53600	.00540	-.13950	-.03100	.00741	.00120	-.00017	.10135
-5.512	799.300	600.31000	.18021	-10.53200	.00747	-.14013	-.03127	.00685	.00119	-.00017	.10197
-5.512	819.290	600.18000	-.02689	-10.53200	.00528	-.14021	-.03136	.00692	.00119	-.00017	.10200
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REPRODUCIBILITY OF THE  
 ORIGINAL PAGE IS POOR





















V41B-D9A (IA22),ORBITER(O4RC1) W/ET SEPARATING

(SVK072) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UBLDR = .000 RCS = .000  
 GAS = 1.000

RUN NO. 2406/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.039	168.880	.00010	.00059	-.00027	.07312	-.00335	.09662	-.00432	-.00049	.00068
-4.992	191.620	.00190	.00050	.00448	.08707	-.00192	.09256	-.00424	-.00039	.00048
-5.003	241.340	-.00140	.00041	-.00559	.05853	-.00425	.08539	-.00382	-.00035	.00010
-5.003	291.540	-.00270	.00049	.00655	.04812	-.00510	.08737	-.00355	-.00045	-.00006
-5.006	391.540	-.01320	.00035	-.00075	.05383	-.01715	.06210	-.00303	-.00047	.00011
-5.000	491.380	-.01530	.00031	.00138	-.01410	-.01606	.07616	-.00345	-.00042	.00016
-4.999	591.490	-.01350	.00035	.00138	-.04526	-.01246	.07656	-.00326	-.00044	.00009
-5.000	691.480	-.01300	.00036	.00176	-.04820	-.01165	.07774	-.00338	-.00043	.00009
-5.001	791.370	-.01300	.00035	.00141	-.04847	-.01162	.07798	-.00343	-.00042	.00009
-4.999	991.320	-.01300	.00035	.00174	-.04780	-.01165	.07808	-.00328	-.00042	.00009
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2409/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
.005	11.707	-.01240	.00033	.00241	-.02779	-.01218	.08001	-.00374	-.00039	.00015
.001	41.611	-.01154	.00049	.00181	-.03225	-.01084	.08677	-.00336	-.00053	.00017
.000	91.689	-.00626	.00055	.00282	-.02214	-.00542	.09388	-.00432	-.00050	.00013
.002	141.560	.00128	.00035	.00345	-.01173	.00237	.09076	-.00476	-.00021	-.00011
.007	191.410	.00069	.00031	.00322	.00477	.00087	.08976	-.00462	-.00019	-.00007
-.002	291.450	-.00905	.00036	.00498	.03624	-.01143	.08981	-.00356	-.00040	.00001
.008	391.310	-.01517	.00031	.00015	.00547	-.01657	.08061	-.00334	-.00043	.00017
.003	491.390	-.01472	.00033	.00162	-.03681	-.01377	.07923	-.00342	-.00042	.00009
.002	591.480	-.01328	.00033	.00133	-.04833	-.01170	.08046	-.00358	-.00039	.00009
.006	791.260	-.01330	.00033	.00244	-.04815	-.01170	.08072	-.00343	-.00039	.00009
.005	871.280	-.01329	.00034	.00188	-.04788	-.01169	.08085	-.00333	-.00041	.00009
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2412/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
5.065	-60.482	-.01630	.00023	.00029	-.05478	-.01499	.07121	-.00383	-.00034	.00006
4.993	6.373	-.01430	.00030	.00185	-.06158	-.01228	.08619	-.00441	-.00037	.00010
4.987	41.592	-.00880	.00045	.00416	-.05428	-.00667	.09189	-.00416	-.00044	-.00007
4.989	91.585	-.00090	.00051	.00226	-.03354	.00110	.09265	-.00470	-.00039	-.00007
4.996	191.420	-.00480	.00040	-.00172	.01010	-.00550	.09096	-.00383	-.00037	.00002
4.995	291.210	-.01280	.00029	.00363	.02396	-.01512	.08403	-.00351	-.00039	.00003
4.991	391.300	-.01480	.00033	.00261	-.02651	-.01477	.07994	-.00340	-.00044	.00010
4.987	531.390	-.01290	.00036	.00136	-.04804	-.01159	.08088	-.00362	-.00042	.00009
	GRADIENT	-.00224	.00005	.00029	-.00966	-.00193	.01352	-.00069	-.00006	.00001

V418-D9A (1A22), ET SEPARATING FROM ORB (04RC1)

(AVK072) (04 MAY 77)

REFERENCE DATA

SREF = 2690.000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = .000  
 GAS = 1.000

RUN NO. 2763/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-20.013	624.970	-.05825	-.39661	-20.03700	-.00243	-.39364	-.00499	.01646	-.00144	.00059	.13923
-20.029	699.420	.10376	-.09670	-20.06300	-.00037	-.36692	-.02128	.01325	.00016	.00014	.13056
-20.050	799.750	.13168	.21201	-20.07600	.00625	-.32875	-.04096	.01342	.00049	.00015	.12160
-20.027	999.650	.05135	.30229	-20.04000	.00850	-.32639	-.04104	.01288	.00066	.00014	.12172
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2767/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-15.006	474.530	-.01216	.51102	-15.02700	.01180	-.28972	-.00265	.01039	-.00009	-.00016	.11820
-15.037	499.660	.04258	-1.12850	-15.05200	-.01239	-.26068	-.01812	.01102	.00008	.00008	.11905
-15.017	549.360	.19490	.19239	-15.04800	.00782	-.24772	-.02474	.01067	.00027	-.00002	.11626
-15.032	599.750	.20029	.12133	-15.05800	.00524	-.23073	-.03386	.00999	.00104	-.00002	.10994
-15.032	699.610	.18202	.03766	-15.04700	.00524	-.22104	-.03867	.00989	.00115	-.00000	.10798
-15.018	799.490	.04848	.21904	-15.03100	.00773	-.21954	-.03876	.00976	.00117	-.00001	.10834
-15.015	999.390	.14007	1.30110	-15.02700	.02346	-.21843	-.03861	.00966	.00127	-.00000	.10846
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2771/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-10.507	352.290	-1.33850	-.14151	-10.51200	.00523	-.27030	.03823	.01486	-.00329	.00097	.15279
-10.590	400.050	.32078	-.31705	-10.60500	-.00677	-.17096	-.01761	.00884	.00021	-.00009	.10706
-10.515	449.430	.11394	.13832	-10.53300	.00847	-.15614	-.02354	.00918	.00028	-.00011	.10549
-10.521	499.510	.06426	.19809	-10.53700	.00640	-.14770	-.02929	.00784	.00108	-.00014	.09979
-10.515	599.390	.13256	-.26312	-10.53100	.00143	-.14224	-.03118	.00780	.00119	-.00017	.09935
-10.515	699.450	.15596	.05920	-10.52700	.00524	-.14168	-.03112	.00763	.00129	-.00018	.10069
-10.513	799.350	.06490	-.21221	-10.52500	.00095	-.14060	-.03087	.00778	.00130	-.00018	.10006
-10.512	999.290	.17510	.10758	-10.52500	.00608	-.13959	-.03105	.00776	.00133	-.00019	.10023
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

V41B-D9A (IA22), ET SEPARATING FROM ORB (04RC1)

(AVK072) ( 04 MAY 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 OBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = .000  
 GAS = 1.000

RUN NO. 2406/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-5.039	168.880	-.82291	-.19102	-5.03850	.00031	-.12190	.00576	.00477	-.00014	.00015	.10061
-4.992	191.620	-.05894	.14252	-4.99050	.00497	-.12241	.00752	.00426	-.00034	-.00003	.10612
-5.003	241.340	-.02593	-.61614	-5.00470	-.00517	-.09867	.00131	.00499	-.00060	.00008	.10196
-5.003	291.540	.02197	.44086	-5.00530	.00704	-.08458	-.00403	.00370	-.00009	.00003	.09855
-5.006	391.540	.03737	-.20606	-5.01950	-.00040	-.06744	-.01458	.00399	.00024	-.00001	.09217
-5.000	491.380	.02646	-.01450	-5.01540	.00169	-.06553	-.01491	.00411	.00052	-.00003	.09272
-4.999	591.490	.09317	-.03712	-5.01270	.00174	-.06492	-.01487	.00344	.00049	-.00003	.09265
-5.000	691.480	.10966	-.00248	-5.01290	.00212	-.06517	-.01504	.00382	.00042	-.00003	.09282
-5.001	791.370	.08063	-.00952	-5.01360	.00176	-.06472	-.01511	.00385	.00053	-.00004	.09220
-4.999	991.320	.11063	.00119	-5.01240	.00209	-.06424	-.01486	.00358	.00046	-.00004	.09240
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2409/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
.005	11.707	.02727	.01692	-.00782	.00274	-.03157	.00359	.00402	.00009	.00008	.09469
.001	41.611	.02209	-.01372	-.01007	.00230	-.02889	.00373	.00411	.00015	.00001	.09420
.000	91.689	-.00415	.00646	-.00616	.00337	-.02700	.00518	.00380	-.00016	-.00004	.09570
.002	141.560	.06893	.01247	.00286	.00379	-.02883	.00905	.00419	-.00038	.00001	.09667
.007	191.410	.07241	.04120	.00790	.00353	-.02444	.01051	.00418	-.00058	-.00004	.09740
-.002	291.450	.15800	.29163	-.01122	.00533	-.00834	.00154	.00307	-.00019	-.00004	.09079
.008	391.310	.02961	-.17094	-.00761	.00046	-.00895	.00106	.00340	-.00002	-.00004	.09113
.003	491.390	.11506	-.04151	-.01222	.00195	-.00794	.00138	.00335	.00015	-.00005	.09066
.002	591.480	.17268	-.04915	-.01109	.00166	-.00820	.00129	.00350	.00022	-.00005	.09029
.006	791.260	.03988	.00932	-.00725	.00277	-.00765	.00099	.00323	.00012	-.00004	.08949
.005	871.280	.09700	-.01582	-.00808	.00223	-.00625	.00119	.00310	.00020	-.00004	.09110
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2412/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
5.065	-60.482	1.12290	-.19307	5.04900	.00052	.03266	.01908	.00362	-.00039	-.00002	.09417
4.993	6.373	.04133	-.02284	4.97880	.00216	.03133	.02186	.00299	-.00041	-.00009	.09431
4.987	41.592	.09862	.06856	4.97820	.00462	.03067	.02314	.00294	-.00051	-.00010	.09386
4.989	91.585	.07765	-.14644	4.98850	.00277	.03298	.02547	.00375	-.00107	-.00005	.09531
4.986	191.420	.07584	-.27609	4.98120	-.00131	.04836	.01889	.00211	-.00056	-.00005	.08916
4.995	291.210	.07042	.15253	4.98180	.00332	.04785	.01826	.00226	-.00043	-.00006	.09065
4.991	391.300	.09289	-.03629	4.97620	.00295	.04672	.01784	.00252	-.00032	-.00006	.09074
4.987	531.390	.11784	-.08352	4.97390	.00171	.04678	.01774	.00197	-.00026	-.00006	.08902
	GRADIENT	.00649	-.00358	.78127	.00034	.00492	.00343	.00047	-.00006	-.00001	.01480





V41B-D9A (IA22).ORPITER(O4RC1) W/ET SEPARATING

(SVK073) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.5000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 CBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = .000  
 GAS = 1.000

RUN NO. 2407/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-4.992	166.670	-.00460	.00032	.00178	.10216	-.01000	.08450	-.00372	-.00033	.00087
-5.006	192.020	-.00290	.00025	.00475	.07329	-.00662	.08558	-.00417	-.00023	.00016
-4.991	241.720	-.00310	.00058	.00409	.06027	-.00620	.09713	-.00310	-.00055	-.00008
-4.994	291.800	-.00820	.00063	.00279	.06191	-.01198	.08972	-.00258	-.00067	.00001
-4.994	391.700	-.01550	.00028	.00246	.01950	-.01790	.07859	-.00363	-.00041	.00024
-4.999	491.590	-.01490	.00033	.00174	-.03497	-.01447	.07698	-.00341	-.00043	.00009
-5.000	591.590	-.01290	.00034	.00155	-.04799	-.01163	.07824	-.00323	-.00041	.00009
-5.000	691.560	-.01290	.00033	.00185	-.04803	-.01162	.07855	-.00345	-.00040	.00009
-4.999	791.440	-.01290	.00035	.00184	-.04774	-.01163	.07843	-.00341	-.00042	.00009
-4.999	991.360	-.01300	.00036	.00145	-.04802	-.01165	.07834	-.00345	-.00043	.00009
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2410/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.010	11.545	-.00282	.00066	-.00071	-.01957	-.00163	.09190	-.00399	-.00054	.00014
-.025	42.051	.00252	.00064	-.00095	-.00399	.00326	.09450	-.00415	-.00046	.00010
-.016	92.037	.00320	.00048	.00348	.00581	.00348	.08904	-.00432	-.00031	.00005
-.002	141.800	.00140	.00031	.00117	.01215	.00123	.08944	-.00436	-.00018	-.00009
.006	191.790	-.00339	.00066	.00095	.03338	-.00499	.09050	-.00307	-.00058	-.00014
.004	291.610	-.01337	.00031	.00407	.03776	-.01596	.08343	-.00322	-.00041	.00019
.007	391.550	-.01580	.00032	.00261	-.02009	-.01564	.07959	-.00357	-.00042	.00014
.005	491.500	-.01394	.00035	.00241	-.04628	-.01220	.07973	-.00339	-.00041	.00009
.001	591.450	-.01341	.00034	.00257	-.04857	-.01168	.08084	-.00360	-.00040	.00010
.004	791.400	-.01341	.00036	.00196	-.04837	-.01173	.08102	-.00355	-.00042	.00009
.003	871.330	-.01339	.00034	.00228	-.04822	-.01173	.08087	-.00367	-.00040	.00010
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2413/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
4.994	-58.656	-.01250	.00045	.00361	-.06051	-.01066	.08393	-.00446	-.00048	.00006
4.984	6.685	-.00220	.00053	.00060	-.03339	-.00041	.09358	-.00452	-.00043	.00004
4.975	41.855	.00040	.00043	-.00128	-.02500	.00213	.09069	-.00520	-.00029	-.00004
4.986	91.671	-.00040	.00035	.00571	-.00543	.00020	.09017	-.00443	-.00025	-.00003
4.984	191.700	-.00890	.00034	.00122	.02769	-.01110	.09005	-.00373	-.00038	-.00003
4.987	291.360	-.01460	.00030	-.00316	-.00065	-.01592	.08081	-.00338	-.00042	.00009
4.992	531.370	-.01290	.00035	-.00028	-.04836	-.01161	.08107	-.00352	-.00042	.00009
	GRADIENT	-.00033	.00008	.00009	-.00500	-.00006	.01400	-.00068	-.00006	.00001

REPRODUCIBILITY OF THE  
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V41B-D9A (1A22), ET SEPARATING FROM ORB (04RC1)

(AVK073) (04 MAY 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMLDR = .000 RCS = .000  
 GAS = 1.000

RUN NO. 2407/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEL	CA
-4.992	166.670	200.09000	-.11863	-4.99620	.00210	-.13007	.00672	.00601	-.00123	.00021	.11188
-5.006	192.020	200.12000	.04339	-5.00930	.00500	-.11161	.00211	.00455	-.00068	.00002	.10510
-4.991	241.720	200.08000	.06924	-4.99390	.00467	-.10496	.00434	.00422	-.00045	.00006	.10581
-4.994	291.800	200.06000	.01204	-5.00230	.00341	-.08593	-.00461	.00409	-.00008	.00005	.09911
-4.994	391.700	200.15000	.00746	-5.00970	.00274	-.07056	-.01249	.00398	.00019	.00000	.09434
-4.999	491.590	200.11000	-.00327	-5.01430	.00207	-.06529	-.01510	.00385	.00043	-.00003	.09205
-5.000	591.590	200.19000	-.01820	-5.01270	.00189	-.06462	-.01512	.00353	.00048	-.00004	.09226
-5.000	691.560	200.18000	.00166	-5.01270	.00218	-.06416	-.01492	.00367	.00042	-.00003	.09222
-4.999	791.440	200.22000	.00234	-5.01240	.00219	-.06373	-.01499	.00360	.00043	-.00004	.09264
-4.999	991.360	200.05000	-.02001	-5.01170	.00181	-.06310	-.01479	.00348	.00051	-.00003	.09235
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2410/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEL	CA
-.010	11.545	200.15000	-.13492	-.01262	.00138	-.03095	-.00464	.00376	-.00009	.00009	.09507
-.025	42.051	200.11000	-.22436	-.02225	-.00031	-.03569	-.00173	.00428	.00003	.00017	.09682
-.016	92.037	200.08000	.14887	-.01252	.00397	-.03069	.00360	.00394	-.00005	.00003	.09450
-.002	141.800	200.12000	-.15112	-.00100	.00147	-.03186	.01059	.00433	-.00062	-.00001	.09835
.006	191.790	200.05000	-.11287	.00218	.00161	-.02623	.01076	.00372	-.00043	-.00003	.09753
.004	291.610	200.10000	.05013	-.00906	.00438	-.01156	.00310	.00349	-.00039	-.00005	.09309
.007	391.550	200.07000	.00587	-.00919	.00293	-.00898	.00082	.00355	.00002	-.00006	.09075
.005	491.500	200.03000	-.00452	-.00866	.00276	-.00846	.00108	.00297	.00010	-.00005	.09062
.001	591.450	200.05000	.01349	-.01223	.00292	-.00836	.00110	.00307	.00009	-.00005	.09089
.004	791.400	200.01000	-.04837	-.00959	.00232	-.00680	.00124	.00308	.00012	-.00005	.09027
.003	871.330	200.04000	-.00965	-.01062	.00262	-.00679	.00135	.00312	.00012	-.00005	.09129
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2413/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEL	CA
4.994	-58.656	200.00000	.03741	4.98140	.00405	.03160	.01407	.00214	-.00025	-.00005	.09244
4.984	6.685	200.02000	-.11973	4.98180	.00113	.02674	.01711	.00336	-.00014	.00002	.09435
4.975	41.855	200.07000	-.17297	4.97550	-.00084	.02753	.02136	.00354	-.00032	-.00000	.09394
4.986	91.671	200.10000	.16621	4.98540	.00606	.03163	.02571	.00387	-.00108	-.00007	.09569
4.984	191.700	200.07000	-.17300	4.97550	.00155	.04550	.01983	.00213	-.00057	-.00005	.08918
4.997	291.360	200.14000	-.41494	4.97190	-.00286	.04752	.01830	.00201	-.00047	-.00006	.09038
4.992	531.370	200.12000	-.20010	4.97940	.00007	.04782	.01784	.00220	-.00009	-.00007	.08872
GRADIENT		29.92072	-.01791	.74522	.00017	.00400	.00256	.00050	-.00002	.00000	.01411



V41B-D9A (IA22), ORBITER(04RC1) W/ET SEPARATING

(SVK074) ( 20 APR 77 )

## REFERENCE DATA

SP 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 L 1290.3000 INCHES YMRP = .0000 IN. YO  
 F 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = .000  
 GAS = 1.000

RUN NO. 2408/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.025	167.100	-.00100	.00014	.00361	.07900	-.00485	.08649	-.00413	-.00011	-.00015
-4.994	191.340	-.00320	.00064	.00394	.07137	-.00692	.08795	-.00321	-.00061	-.00008
-4.976	241.080	-.00640	.00069	.00391	.07252	-.01265	.09009	-.00241	-.00074	-.00003
-4.994	291.500	-.01360	.00026	-.01390	.05514	-.01782	.08153	-.00327	-.00039	.00033
-5.033	391.450	-.01550	.00031	-.00091	-.01090	-.01644	.07799	-.00315	-.00044	.00018
-5.007	491.590	-.01350	.00054	.00188	-.04543	-.01244	.07826	-.00337	-.00042	.00010
-5.001	591.530	-.01290	.00034	.00201	-.04792	-.01164	.07954	-.00348	-.00041	.00009
-5.002	691.440	-.01290	.00034	.00209	-.04778	-.01164	.07959	-.00331	-.00041	.00009
-5.001	791.360	-.01290	.00035	.00235	-.04805	-.01161	.07965	-.00350	-.00042	.00009
-5.002	991.400	-.01280	.00033	.00170	-.04785	-.01165	.07975	-.00348	-.00040	.00009
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2411/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.043	12.619	.01125	.00052	.00242	.02995	.01095	.06997	-.00402	-.00035	-.00009
.008	41.064	.00731	.00051	.00222	.03791	.00630	.06795	-.00395	-.00031	-.00016
.021	90.868	.00157	.00031	.00270	.03119	.00045	.06789	-.00430	-.00019	-.00020
.014	141.110	-.00277	.00075	.00300	.03867	-.00458	.06907	-.00327	-.00067	-.00006
.010	191.290	-.00650	.00054	.00221	.05073	-.01175	.09087	-.00290	-.00057	-.00004
.002	291.300	-.01540	.00032	.00059	.00872	-.01677	.08090	-.00356	-.00043	.00024
-.005	391.550	-.01513	.00037	.00041	-.03701	-.01414	.07913	-.00335	-.00045	.00009
.003	491.420	-.01324	.00034	.00254	-.04834	-.01161	.08052	-.00352	-.00040	.00009
.003	591.450	-.01319	.00034	.00252	-.04825	-.01154	.08029	-.00357	-.00040	.00009
.005	791.290	-.01314	.00037	.00269	-.04829	-.01162	.08034	-.00349	-.00043	.00009
.002	871.310	-.01311	.00035	.00247	-.04823	-.01162	.08091	-.00356	-.00041	.00009
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2414/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
4.940	-57.088	.00630	.00094	.00255	-.02145	.00856	.09115	-.00463	-.00061	-.00008
5.034	5.720	.00200	.00041	.00320	.00135	.00250	.08835	-.00430	-.00028	-.00010
5.007	41.161	.00050	.00023	.00015	.00490	.00049	.08919	-.00471	-.00013	-.00016
5.017	91.090	-.00350	.00078	.00434	.02023	-.00457	.08975	-.00256	-.00072	-.00006
4.992	191.240	-.01240	.00029	-.00108	.02793	-.01507	.09303	-.00361	-.00039	.00013
4.937	291.340	-.01490	.00033	-.00149	-.02246	-.01523	.07995	-.00347	-.00044	.00011
4.993	391.400	-.01320	.00036	.00064	-.04707	-.01269	.08024	-.00349	-.00043	.00009
4.933	531.250	-.01260	.00033	-.00215	-.04841	-.01151	.08115	-.00354	-.00040	.00009
	GRADIENT	.00035	.00007	.00056	.00024	.00044	.01545	-.00075	-.00005	-.00002



V41B-D9A (IA22), ET SEPARATING FROM ORB (04RC1)

(AVK074) ( 04 MAY 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = .000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = .000  
 GAS = 1.000

RUN NO. 240R/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-5.025	167.100	400.00000	.27696	-5.02650	.00375	-.11660	-.00370	.00445	-.00017	.00009	.10301
-4.994	191.340	400.02000	.11029	-4.99720	.00458	-.11211	-.00167	.00467	-.00027	.00011	.10326
-4.976	241.080	400.10000	.02987	-4.96450	.00460	-.11213	.00532	.00444	-.00056	.00003	.10850
-4.994	291.500	400.11000	-1.12640	-5.00790	-.01365	-.09042	-.00489	.00397	-.00004	.00003	.09814
-5.003	391.450	399.99000	-.20740	-5.01880	-.00060	-.07661	-.01027	.00408	.00022	-.00000	.09509
-5.007	491.590	400.04000	-.01655	-5.02060	.00222	-.06639	-.01517	.00383	.00034	-.00002	.09190
-5.001	591.530	400.11000	.00540	-5.01430	.00235	-.06492	-.01519	.00363	.00038	-.00003	.09199
-5.002	691.440	400.17000	.00720	-5.01450	.00242	-.06441	-.01507	.00362	.00036	-.00004	.09237
-5.931	791.330	400.16000	.01944	-5.01340	.00270	-.06416	-.01490	.00312	.00034	-.00003	.09211
-5.002	991.400	400.15000	.00005	-5.01520	.00203	-.06393	-.01508	.00361	.00049	-.00004	.09242
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2411/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-.043	12.619	400.10000	-.00461	-.03206	.00304	-.03726	-.01237	.00605	-.00021	.00010	.09422
.008	41.054	400.09000	.10485	.01553	.00344	-.03786	-.00483	.00403	.00017	.00009	.09518
.021	90.868	400.07000	-.01524	.02256	.00301	-.03371	.00373	.00396	-.00011	.00003	.09592
.014	141.110	400.17000	.01181	.01164	.00375	-.03652	.01107	.00359	-.00029	.00001	.09759
.010	191.290	400.01000	-.05707	.00109	.00275	-.02950	.01050	.00389	-.00044	.00003	.09742
.002	291.300	400.05000	-.17729	-.01319	.00091	-.01593	.00495	.00427	-.00042	-.00007	.09400
-.005	391.550	400.09000	-.09453	-.02030	.00078	-.00948	.00059	.00311	.00003	-.00004	.09034
.003	491.420	400.07000	.02679	-.01045	.00288	-.00854	.00092	.00330	.00013	-.00005	.08967
.003	591.450	400.14000	-.00134	-.01026	.00286	-.00818	.00108	.00293	.00008	-.00004	.08977
.005	791.290	400.14000	.01834	-.00203	.00305	-.00711	.00141	.00294	.00007	-.00004	.08957
.002	871.310	400.16000	.00007	-.01074	.00282	-.00674	.00133	.00278	.00007	-.00004	.08943
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2414/ 0 RN/L = .85 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
4.940	-57.088	400.14000	.05816	4.94630	.00339	.02460	-.00228	-.00354	.00006	.00006	.09333
5.034	5.720	400.15000	.01908	5.03630	.00351	.02423	.01635	.00285	-.00022	.00001	.09641
5.007	41.161	400.13000	-.20149	5.00740	.00038	.02742	.02120	.00282	-.00039	-.00000	.09539
5.017	91.090	400.18000	.05988	5.01330	.00511	.02790	.02739	.00369	-.00102	-.00005	.09228
4.992	191.240	400.12000	-.21455	4.97930	-.00078	.04291	.02051	.00227	-.00070	-.00006	.09136
4.987	291.340	400.12000	-.16915	4.97160	-.00116	.04682	.01811	.00234	-.00047	-.00006	.09040
4.983	391.400	400.19000	-.17509	4.97020	.00100	.04660	.01743	.00171	-.00032	-.00006	.08942
4.993	531.260	400.19000	-.31462	4.97990	-.00182	.04801	.01787	.00212	-.00028	-.00006	.08879
GRADIENT		69.95629	.00334	.88047	.00063	.00424	.00285	.00050	-.00004	.00000	.01685









V41B-D9A (1A22), ORBITER(O4RC1) W/ET SEPARATING

(SVK076) (20 APR 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = .000  
 GAS = 1.000

RUN NO. 2450/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-4.988	175.050	5.00266	.00078	.00106	.09793	-.00177	.02467	-.00334	-.00062	.00064
-5.001	199.780	5.00517	.00081	.00111	.09511	.00113	.08311	-.00330	-.00061	.00026
-4.994	249.430	5.00857	.00069	.00121	.09554	.00467	.07737	-.00375	-.00046	-.00005
-5.001	299.560	5.01063	.00074	-.00006	.10023	.00695	.07925	-.00335	-.00048	-.00010
-5.007	399.590	5.00187	.00045	-.00199	.14164	-.00482	.08382	-.00342	-.00035	-.00031
-4.994	499.250	4.99214	.00035	.00193	.15295	-.01622	.07602	-.00326	-.00040	.00006
-4.998	599.330	4.99156	.00038	.00232	.07955	-.01310	.07093	-.00306	-.00041	.00006
-5.001	699.480	4.99412	.00041	.00079	.04428	-.00840	.07144	-.00301	-.00038	-.00003
-5.001	799.350	4.99466	.00044	.00115	.04172	-.00746	.07333	-.00319	-.00040	-.00002
-5.002	999.420	4.99489	.00044	.00205	.04170	-.00743	.07347	-.00317	-.00040	-.00002
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2453/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
.067	17.747	4.99141	.00046	-.00010	.02335	-.01044	.05468	-.00266	-.00046	.00010
-.007	49.465	4.99040	.00057	-.00248	.02965	-.01184	.06958	-.00269	-.00058	.00017
-.013	99.583	4.99413	.00077	-.00476	.02621	-.00747	.07656	-.00293	-.00071	.00009
-.017	149.790	5.00427	.00072	.00182	.03746	.00314	.06030	-.00370	-.00052	-.00016
-.014	199.550	5.00932	.00074	.00783	.05485	.00781	.07886	-.00368	-.00048	-.00017
-.021	299.500	5.00617	.00054	.00071	.10099	.00197	.08257	-.00369	-.00035	-.00022
.001	399.190	4.99607	.00041	.00187	.14299	-.01138	.08337	-.00359	-.00039	-.00019
-.008	499.200	4.99095	.00035	.00157	.10349	-.01497	.07317	-.00326	-.00040	.00006
-.014	599.350	4.99300	.00041	.00520	.05133	-.01003	.07224	-.00304	-.00041	-.00002
-.009	799.310	4.99492	.00044	.00165	.04169	-.00743	.07408	-.00322	-.00040	-.00002
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2456/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
4.983	-50.363	4.99900	.00039	-.00532	-.00199	-.01316	.05922	-.00278	-.00044	-.00006
4.994	14.353	4.99950	.00072	-.00253	-.00379	-.01204	.06997	-.00198	-.00074	-.00016
4.994	49.601	4.99310	.00091	-.00106	.00282	-.00756	.07602	-.00264	-.00076	.00014
4.991	99.595	5.00170	.00084	.00270	.01809	.00132	.08047	-.00363	-.00066	-.00007
4.974	199.670	5.00800	.00084	.00365	.06363	.00593	.08027	-.00307	-.00060	-.00002
4.996	299.190	5.00100	.00048	.00198	.11190	-.00430	.08342	-.00352	-.00037	-.00019
4.999	399.030	4.99270	.00037	.00174	.12925	-.01439	.07658	-.00341	-.00039	-.00015
4.986	479.160	4.99160	.00038	.00555	.07792	-.01275	.07248	-.00319	-.00040	-.00003
	GRADIENT	.34756	.00005	-.00018	-.00026	-.00084	.00489	-.00014	-.00005	.00001



V41B-D9A (IA22), ET SEPARATING FROM ORB (O4RC1)

(AVK076) (04 MAY 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = .000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = .000  
 GAS = 1.000

RUN NO. 2450/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEL	CA
-4.988	175.050	-.22713	.05207	.01446	.00184	-.05512	.01732	.00585	-.00009	-.00001	.09754
-5.001	199.780	.00914	-.07920	.00397	.00192	-.04458	.01405	.00563	-.00033	-.00005	.09855
-4.994	249.430	-.05827	-.06626	.01447	.00190	-.04062	.01609	.00596	-.00029	-.00001	.09916
-5.001	299.560	.07664	-.23687	.00993	.00067	-.02916	.01288	.00564	-.00037	-.00004	.09727
-5.007	399.590	.11188	-.27168	-.00563	-.00155	-.00613	.00143	.00439	.00005	-.00008	.08866
-4.994	499.250	.07659	-.02812	-.00236	.00229	-.00666	.00147	.00427	-.00009	-.00008	.09064
-4.993	599.330	.05262	.02805	-.00534	.00270	-.00753	.00134	.00450	-.00004	-.00007	.09132
-5.001	699.480	-.02949	-.03844	-.00668	.00120	-.00744	.00119	.00483	.00028	-.00008	.09073
-5.001	799.360	-.03556	-.12793	-.00594	.00159	-.00700	.00143	.00451	.00025	-.00008	.09013
-5.002	999.420	.12105	-.05714	-.00711	.00249	-.00576	.00089	.00426	.00027	-.00008	.08940
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2453/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEL	CA
.067	17.747	.72664	-.06586	5.05850	.00036	.02017	.02458	.00627	-.00028	.00002	.09374
-.007	49.489	.00518	-.00546	4.99350	.00305	.01764	.02713	.00532	-.00054	.00002	.09564
-.013	99.583	-.02909	-.15339	4.98060	.00554	.02463	.02518	.00507	-.00059	-.00005	.09357
-.017	149.790	.04686	-.05708	4.98730	.00254	.02424	.02715	.00440	-.00056	-.00012	.09534
-.014	199.550	.00152	.34348	4.99500	.00858	.03150	.02629	.00466	-.00102	-.00003	.09496
-.021	299.500	.08289	-.02946	4.99550	.00125	.04971	.01803	.00333	-.00033	-.00009	.08703
.001	399.190	.07361	-.07317	4.99590	.00227	.04921	.01836	.00318	-.00042	-.00008	.08837
-.008	499.200	.11921	.02267	4.98340	.00193	.04955	.01864	.00327	-.00032	-.00009	.09024
-.014	599.350	.20941	.25911	4.97930	.00562	.04853	.01815	.00307	-.00041	-.00008	.08975
-.009	799.310	.17255	.07416	4.98570	.00209	.04966	.01814	.00432	-.00011	-.00009	.09045
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2456/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CEL	CA
4.983	-50.363	-.01909	-.46752	9.97110	-.00493	.09286	.03697	.00354	-.00063	-.00008	.09506
4.994	14.353	.01698	-.29320	9.99230	-.00181	.09640	.03838	.00385	-.00095	-.00007	.09441
4.984	49.601	.04384	-.27654	9.97710	-.00025	.09714	.03658	.00424	-.00118	-.00002	.09521
4.991	99.595	.04815	-.01771	9.99230	.00354	.09949	.03953	.00430	-.00130	-.00002	.09508
4.974	199.670	.04548	.21814	9.98190	.00450	.11366	.03343	.00281	-.00071	-.00008	.09109
4.996	299.190	.04177	-.01786	9.99720	.00246	.11375	.03370	.00231	-.00063	-.00008	.09178
4.999	399.030	.13781	-.02122	9.99140	.00211	.11432	.03419	.00233	-.00063	-.00009	.09353
4.986	479.160	.17019	.24648	9.97790	.00603	.11389	.03439	.00226	-.00070	-.00009	.09281
	GRADIENT	.00118	-.02043	.69549	-.00013	.00672	.00267	.00027	-.00007	-.00000	.00658



V41B-D9A (IA22), ORBITER(04RC1) W/ET SEPARATING

(SVK077) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 R/S = .000  
 GAS = 1.000

RUN NO. 2451/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.000	174.780	5.00647	.00069	.00053	.12805	.00087	.07704	-.00352	-.00050	.00021
-5.004	199.930	5.00801	.00069	-.00097	.11636	.00312	.07680	-.00321	-.00048	-.00002
-5.001	249.800	5.01027	.00072	.00127	.11139	.00591	.07948	-.00316	-.00047	-.00011
-4.986	299.590	5.00599	.00048	-.00179	.13435	.00004	.09328	-.00337	-.00032	-.00030
-5.001	359.030	4.99435	.00042	.00529	.16905	-.01445	.09138	-.00265	-.00045	-.00018
-4.996	499.530	4.99062	.00031	.00109	.10359	-.01530	.07197	-.00331	-.00036	.00008
-5.000	599.450	4.99306	.00040	.00476	.05027	-.00995	.07150	-.00317	-.00039	-.00004
-5.002	699.530	4.99491	.00043	.00171	.04170	-.00739	.07314	-.00303	-.00039	-.00001
-5.002	799.530	4.99498	.00044	.00268	.04210	-.00742	.07361	-.00300	-.00040	-.00002
-5.001	999.310	4.99486	.00044	.00212	.04157	-.00742	.07353	-.00318	-.00040	-.00002
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2454/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.001	19.504	4.99542	.00092	-.00315	.02934	-.00298	.07740	-.00285	-.00080	-.00007
-.018	49.794	5.00378	.00022	.00477	.04053	.00237	.08079	-.00350	-.00062	-.00002
-.024	99.998	5.00591	.00085	-.00037	.05318	.00747	.07993	-.00371	-.00058	.00007
-.006	149.730	5.01072	.00080	-.00068	.06386	.00869	.07860	-.00347	-.00051	-.00015
-.009	199.580	5.00939	.00067	-.00107	.08724	.00617	.08165	-.00331	-.00043	-.00019
-.018	299.780	4.99941	.00043	.00200	.14086	-.00748	.09482	-.00336	-.00037	-.00034
-.008	399.480	4.99139	.00036	-.00055	.12754	-.01576	.07442	-.00320	-.00040	.00006
-.006	499.380	4.99219	.00040	.00443	.06452	-.01167	.07190	-.00305	-.00041	.00000
-.008	599.380	4.99470	.00044	.00105	.04222	-.00768	.07287	-.00327	-.00040	-.00002
-.011	799.380	4.99498	.00045	.00531	.04156	-.00740	.07402	-.00317	-.00040	-.00002
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2457/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
4.993	-50.684	4.99930	.00095	.00185	-.00160	-.01149	.06877	-.00233	-.00094	.00006
4.985	14.583	5.00060	.00089	-.00044	-.01677	.00010	.07971	-.00329	-.00071	-.00004
4.983	49.672	5.00600	.00086	.00011	.02998	.00537	.07958	-.00403	-.00061	.00001
4.993	99.530	5.00830	.00088	-.00074	.04791	.00730	.07839	-.00331	-.00061	-.00005
4.975	199.710	5.00430	.00049	.00042	.10022	-.00008	.08277	-.00372	-.00032	-.00022
4.993	299.530	4.99480	.00042	.00268	.13904	-.01257	.09172	-.00339	-.00042	-.00022
4.986	399.360	4.99150	.00035	.00539	.08814	-.01361	.07257	-.00310	-.00039	-.00002
4.985	479.330	4.99310	.00042	.00007	.05130	-.00994	.07242	-.00311	-.00041	-.00002
	GRADIENT	.34291	.00006	-.00003	.00115	.00001	.00547	-.00023	-.00005	-.00000





V41B-D9A (IA22), ET SEPARATING FROM ORB (04RC1)

(AVK077) (04 MAY 77)

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = .000  
 GAS = 1.000

RUN NO. 2451/ 0 RN/L = .87 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-5.000	174.780	200.00000	-.18710	.00657	-.00122	-.06170	.01790	.00658	-.00042	.00001	-.10276
-5.004	199.930	200.05000	-.24851	.00421	-.00028	-.05494	.01739	.00550	-.00037	-.00006	-.10153
-5.001	249.800	200.05000	-.02946	.00967	.00199	-.05159	.02163	.00594	-.00024	.00002	-.10239
-4.986	299.590	199.99000	-.31501	.01978	-.00131	-.03487	.01726	.00545	-.00032	-.00003	-.10095
-5.001	399.830	199.95000	.21943	-.00653	.00572	-.00584	.00154	.00422	-.00012	-.00007	-.08936
-4.996	499.530	200.07000	-.09349	-.00548	.00139	-.00647	.00151	.00428	-.00013	-.00008	-.09169
-5.000	599.450	200.06000	.17428	-.00734	.00516	-.00761	.00093	.00450	.00002	-.00008	-.09123
-5.002	699.530	200.13000	-.07611	-.00759	.00214	-.00779	.00087	.00511	.00020	-.00008	-.09034
-5.002	799.530	200.10000	-.00184	-.00662	.00312	-.00726	.00119	.00472	.00026	-.00009	-.09002
-5.001	999.310	199.93000	-.03002	-.00624	.00256	-.00675	.00097	.00476	.00038	-.00008	-.09058
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2454/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-.001	19.504	200.07000	-.38004	4.99760	-.00223	.01865	.01610	.00443	-.00002	.00008	-.09347
-.018	49.794	200.04000	.22734	4.99540	.00559	.01568	.01786	.00555	-.00003	.00007	-.09482
-.024	99.908	200.05000	-.03442	4.99470	.00048	.01915	.02223	.00571	-.00011	.00004	-.09293
-.006	149.730	200.05000	-.21050	5.00520	.00012	.01818	.02925	.00497	-.00068	-.00010	-.09648
-.009	199.580	200.03000	-.28903	5.00060	-.00040	.02773	.02824	.00531	-.00110	-.00004	-.09698
-.018	259.780	200.07000	.00502	4.99160	.00243	.04909	.01839	.00371	-.00044	-.00009	-.08829
-.008	399.480	200.10000	-.14977	4.98340	-.00020	.04943	.01857	.00319	-.00045	-.00009	-.08954
-.006	499.380	200.05000	.10902	4.98620	.00482	.04662	.01834	.00321	-.00044	-.00009	-.09060
-.008	599.380	200.21000	-.12301	4.98700	.00150	.04754	.01776	.00347	-.00021	-.00009	-.09020
-.011	799.380	200.02000	.23567	4.99430	.00576	.04875	.01731	.00354	-.00004	-.00009	-.08957
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2457/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
4.993	-50.684	199.99000	-.02628	9.98220	.00281	.08725	.03353	.00182	-.00043	-.00008	-.09473
4.995	14.583	200.11000	-.12664	9.98510	.00044	.08595	.03537	.00362	-.00064	-.00002	-.09592
4.983	49.672	200.04000	-.01484	9.98830	.00096	.08660	.03857	.00339	-.00074	-.00006	-.09553
4.993	99.530	200.09000	-.31545	10.00100	.00013	.09368	.04100	.00482	-.00146	-.00001	-.09682
4.975	199.710	200.05000	-.14942	9.97950	.00099	.11309	.03378	.00268	-.00072	-.00008	-.09151
4.983	299.530	200.08000	-.03084	9.97760	.00310	.11428	.03433	.00187	-.00088	-.00008	-.09223
4.986	399.360	200.05000	.11739	9.97710	.00575	.11400	.03443	.00179	-.00086	-.00008	-.09354
4.985	479.330	199.98000	-.13139	9.97780	.00048	.11373	.03426	.00245	-.00071	-.00009	-.09278
	GRADIENT	13.72214	-.00868	.68478	.00003	.00583	.00243	.00025	-.00004	-.00000	-.00657



V41B-D9A (1A22).ORBITER(04RC1) W/ET SEPARATING

(SVK078) ( 20 APR 77 )

## REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

## PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = .000  
 GAS = 1.000

RUN NO. 2452/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-5.010	174.960	5.00956	.00065	-.00010	.13076	.00409	.08015	-.00291	-.00043	-.00011
-4.994	199.290	5.00873	.00053	-.00151	.12971	.00327	.08123	-.00335	-.00033	-.00029
-4.973	249.070	5.00397	.00049	.00086	.15396	-.00319	.08428	-.00358	-.00036	-.00038
-4.996	299.370	4.99775	.00033	.00333	.17257	-.01097	.08391	-.00327	-.00035	-.00017
-5.020	399.510	4.99027	.00031	.00490	.12842	-.01702	.07341	-.00319	-.00037	.00006
-5.005	499.440	4.99177	.00038	.00474	.06237	-.01195	.07127	-.00320	-.00039	-.00000
-5.003	599.620	4.99497	.00042	-.00690	.04203	-.00749	.07276	-.00314	-.00038	-.00001
-5.003	699.420	4.99500	.00042	-.00176	.04236	-.00743	.07372	-.00296	-.00039	-.00002
-5.002	799.400	4.99492	.00042	.00133	.04154	-.00742	.07391	-.00320	-.00038	-.00002
-5.001	899.320	4.99495	.00042	.00173	.04183	-.00740	.07392	-.00297	-.00038	-.00002
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2455/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
-.048	20.739	5.01516	.00093	.00432	.07269	.01337	.07910	-.00358	-.00058	-.00007
.010	49.203	5.01391	.00089	.00228	.02514	.01127	.07959	-.00368	-.00056	-.00002
.019	98.862	5.01057	.00079	.00021	.08321	.00783	.07935	-.00348	-.00052	-.00006
.015	149.130	5.00877	.00062	.00320	.10139	.00479	.08270	-.00384	-.00039	-.00023
-.004	199.270	5.00346	.00057	.00236	.13298	-.00261	.08492	-.00342	-.00044	-.00034
-.015	299.450	4.99328	.00037	.00698	.14891	-.01471	.07681	-.00316	-.00041	-.00000
-.006	399.290	4.99177	.00039	.00161	.08266	-.01310	.07213	-.00315	-.00041	.00000
-.012	499.410	4.99393	.00045	.00037	.04613	-.00877	.07248	-.00304	-.00042	-.00004
-.016	599.450	4.99494	.00043	.00104	.04162	-.00742	.07405	-.00325	-.00039	-.00002
-.007	799.270	4.99498	.00044	.00004	.04166	-.00742	.07421	-.00329	-.00040	-.00002
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2458/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	ALPHA	BETA	DBETA	CN	CLM	CA	CY	CYN	CBL
4.949	-49.238	5.00770	.00095	-.00224	.02821	.00736	.07934	-.00382	-.00068	-.00006
5.009	13.896	5.00910	.00076	.00312	.05370	.00720	.07789	-.00365	-.00050	-.00009
5.004	49.130	5.00920	.00062	.00524	.05942	.00744	.07906	-.00442	-.00036	-.00017
5.002	99.127	5.00720	.00063	.00209	.08326	.00432	.08185	-.00362	-.00041	-.00019
4.993	199.130	4.99910	.00047	.00036	.13812	-.00680	.08352	-.00352	-.00042	-.00027
4.996	299.150	4.99130	.00037	.00145	.11027	-.01490	.07362	-.00332	-.00041	-.00001
4.984	399.370	4.99250	.00041	-.00619	.05569	-.01077	.07232	-.00326	-.00041	-.00001
4.985	479.350	4.99470	.00043	.00549	.04231	-.00769	.07317	-.00309	-.00040	-.00002
	GRADIENT	.36047	.00005	.00022	.00386	.00052	.00560	-.00026	-.00004	-.00001



V418-D9A (IA22), ET SEPARATING FROM ORB (04RC1)

(AVK078) (04 MAY 77)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = 5.000 BETA = .000  
 DBETA = .000 X = 400.000  
 Y = .000 ELEVON = .000  
 UMBLDR = .000 RCS = .000  
 GAS = 1.000

RUN NO. 2452/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-5.010	174.960	399.87000	-.13936	-.00044	.00055	-.06410	.01525	.00717	-.00028	-.01001	.10073
-4.994	199.290	400.03000	-.31127	.01473	-.00099	-.06151	.01851	.00680	-.00050	-.00006	.10238
-4.973	249.070	400.04000	-.16253	.03099	.00134	-.06323	.02709	.00652	-.00057	-.00001	.10625
-4.996	299.370	400.00000	.11777	.00175	.00371	-.04492	.02271	.00542	-.00046	.00001	.10341
-5.020	399.510	400.15000	.24959	-.02943	.00521	-.00956	.00353	.00515	-.00032	-.00007	.08990
-5.005	499.440	400.14000	.25950	-.01283	.00512	-.00591	.00131	.00444	-.00012	-.00007	.09044
-5.003	599.620	400.06000	-.53297	-.00843	-.00559	-.00878	.00069	.00474	.00018	-.00008	.09070
-5.003	699.420	400.09000	-.24274	-.00800	-.00134	-.00814	.00075	.00522	.00029	-.00008	.09076
-5.002	799.400	400.07000	-.09706	-.00708	-.00176	-.00753	.00106	.00492	.00030	-.00009	.08873
-5.001	999.320	400.11000	-.02044	-.00525	.00215	-.00642	.00120	.00480	.00035	-.00007	.09000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2455/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-.048	20.739	400.12000	.20463	4.96740	.00525	.01206	.00717	.00429	.00013	.00004	.09413
.010	49.203	400.07000	-.04511	5.02360	.00317	.01074	.01425	.00509	-.00001	.00009	.09720
.019	98.852	400.10000	-.09199	5.02340	.00100	.01570	.02299	.00578	-.00002	-.00001	.09495
.015	149.130	400.14000	-.04762	5.02350	.00382	.01165	.03254	.00540	-.00072	-.00005	.09796
-.004	199.270	399.92000	-.05063	4.99990	.00293	.02015	.03230	.00574	-.00113	-.00001	.09993
-.015	299.450	400.10000	.46438	4.97820	.00735	.04725	.01972	.00352	-.00052	-.00008	.08740
-.006	399.290	400.14000	-.05989	4.98500	.00200	.04932	.01876	.00323	-.00045	-.00009	.09066
-.012	499.410	400.11000	-.11445	4.98200	.00082	.04839	.01824	.00327	-.00045	-.00009	.09053
-.016	599.450	400.13000	.01293	4.97870	.00147	.04765	.01764	.00334	-.00018	-.00009	.08993
-.007	799.270	400.17000	-.21220	4.98910	.00048	.04912	.01799	.00369	.00003	-.00010	.08894
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2459/ 0 RN/L = .86 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
4.949	-49.238	400.00000	-.26427	9.95690	-.00129	.07844	.02329	.00058	.00041	-.00003	.09532
5.009	13.896	400.15000	-.02915	10.01800	.00388	.07913	.03483	.00317	-.00044	-.00001	.09794
5.004	49.130	400.22000	.23330	10.01300	.00696	.08114	.04059	.00356	-.00064	-.00009	.09881
5.002	99.127	400.13000	-.06928	10.00900	.00272	.08807	.04313	.00496	-.00146	.00001	.09767
4.993	199.130	400.05000	-.01777	9.99100	.00093	.11209	.03530	.00275	-.00072	-.00007	.09206
4.996	299.150	400.14000	-.15439	9.98730	.00182	.11503	.03479	.00216	-.00095	-.00009	.09132
4.984	399.370	400.00000	-.54339	9.97520	-.00578	.11346	.03431	.00193	-.00077	-.00008	.09328
4.985	479.350	399.98000	.23989	9.97980	.00593	.11319	.03404	.00252	-.00065	-.00008	.09294
	GRADIENT	28.79606	-.00210	.72093	.00028	.00569	.00251	.00023	-.00003	-.00000	.00705

















V41B-D9A (IA22), ORBITER(O4RC1) W/ET SEPARATING

(RVK091) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = 90.000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2588/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
-4.994	239.600	200.05000	-.27096	-.00312	.26183	.00203	-.00698	.00103	.00036	-.00300	.00000
-4.998	249.620	200.10000	.02305	.00221	.25745	.00066	-.00697	.00104	.00022	-.00285	.00000
-4.986	299.190	200.14000	-.02402	.00124	.23155	-.00443	-.00594	.00095	.00014	-.00259	.00000
-4.959	398.750	200.05000	.04623	.00468	.18320	-.00482	-.00504	.00084	.00008	-.00376	.00000
-4.951	498.720	200.04000	.03327	.00490	.15530	-.00110	-.00511	.00083	.00005	-.00610	.00000
-4.955	598.690	200.02000	.19859	.00568	.14164	.00175	-.00508	.00085	.00015	-.00511	.00000
-5.014	698.480	200.13000	.03785	.00177	.13662	.00226	-.00597	.00089	.00012	-.00477	.00000
-5.051	800.110	200.25000	.14529	.00072	.13882	.00225	-.00588	.00087	.00012	-.00485	.00000
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2590/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
.002	99.523	200.13000	.44749	.00746	.23572	.02072	-.00651	.00062	.00066	-.00011	.00000
.023	148.640	200.19000	-.07843	.00155	.21336	.00881	-.00693	.00093	.00036	-.00360	.00000
.023	199.060	200.15000	.00556	.00185	.19743	.00448	-.00700	.00102	-.00005	-.00451	.00000
.042	298.530	200.14000	.00879	.00345	.18593	-.00091	-.00586	.00085	.00019	-.00175	.00000
.037	398.640	200.10000	.02041	.00427	.15708	-.00181	-.00514	.00085	.00004	-.00485	.00000
.021	498.930	200.09000	.85161	.01472	.14453	.00116	-.00595	.00085	.00019	-.00517	.00000
-.020	598.490	200.21000	.07680	.00192	.13704	.00238	-.00618	.00088	.00014	-.00455	.00000
-.029	698.790	200.24000	.19715	.00254	.13753	.00239	-.00593	.00087	.00013	-.00473	.00000
-.001	798.310	200.21000	.22803	.00518	.13711	.00239	-.00620	.00088	.00013	-.00470	.00000
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2592/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	DBETA	CNR	CLMR	CYR	CYNR	CBLR	CAR	WM
4.995	-50.544	200.20000	.26588	.00627	.16670	.01213	-.00704	.00003	.00062	.01121	.00000
4.983	15.121	200.08000	-.10605	-.00023	.20593	.02069	-.00600	.00039	.00016	.00656	.00000
5.005	48.975	200.17000	.16885	.00491	.20555	.01650	-.00544	.00064	.00051	.00201	.00000
5.020	98.809	200.17000	-.15005	.00184	.18239	.00978	-.00593	.00092	.00014	-.00382	.00000
5.058	198.570	200.12000	-.82294	-.01005	.17886	.00429	-.00602	.00100	-.00006	-.00191	.00000
5.029	298.550	200.25000	-.06703	-.00001	.16500	-.00160	-.00510	.00091	.00012	-.00353	.00000
5.022	398.820	200.32000	.08556	.00489	.14797	.00016	-.00516	.00092	.00019	-.00508	.00000
4.958	598.650	200.27000	.26233	.00530	.13667	.00242	-.00620	.00092	.00014	-.00410	.00000
GRADIENT		13.23193	-.00701	-.00002	.01368	.00137	-.00040	.00003	.00001	.00043	.00000







V41B-D9A (IA22), ORBITER(O4RC1) W/ET SEPARATING

(TVK081) ( 20 APR 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1089.6000 IN. XO  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YO  
 BREF = 1290.3000 INCHES ZMRP = 375.0000 IN. ZO  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = 90.000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2588/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
-4.994	239.600	200.05000	-.27096	-.14423	.02547	435.87000	.00000	.00000	652.32000	.00000	.00000
-4.998	249.620	200.10000	.02305	-.14753	.02602	435.48000	.00000	.00000	651.73000	.00000	.00000
-4.986	299.190	200.14000	-.02402	-.11811	.05128	435.72000	.00000	.00000	652.10000	.00000	.00000
-4.959	398.750	200.05000	.04623	-.07456	.10973	435.94000	.00000	.00000	652.42000	.00000	.00000
-4.951	498.720	200.04000	.03327	-.09357	.07060	435.03000	.00000	.00000	652.56000	.00000	.00000
-4.955	598.890	200.02000	.19369	-.07768	.06812	435.90000	.00000	.00000	652.36000	.00000	.00000
-5.014	699.480	200.13000	.03785	-.03351	.07352	435.71000	.00000	.00000	652.08000	.00000	.00000
-5.051	800.110	200.25000	.14529	-.06499	.07120	435.69000	.00000	.00000	652.03000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2590/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
.002	99.523	200.13000	.44749	-.09159	.06261	434.32000	.00000	.00000	650.00000	.00000	.00000
.023	148.840	200.19000	-.07843	-.10767	.04032	434.76000	.00000	.00000	650.69000	.00000	.00000
.023	199.060	200.15000	.00556	-.11551	.05388	433.64000	.00000	.00000	648.99000	.00000	.00000
.042	298.530	200.14000	.00879	-.07447	.09003	432.82000	.00000	.00000	647.76000	.00000	.00000
.037	398.640	200.10000	.02041	-.06232	.10389	433.48000	.00000	.00000	648.74000	.00000	.00000
.021	498.930	200.09000	.85161	-.07880	.05935	433.43000	.00000	.00000	648.66000	.00000	.00000
-.020	598.490	200.21000	.07690	-.06454	.06853	432.32000	.00000	.00000	647.00000	.00000	.00000
-.029	698.790	200.24000	.19715	-.06105	.06614	433.50000	.00000	.00000	648.77000	.00000	.00000
-.001	798.310	200.21000	.22303	-.05914	.06335	433.43000	.00000	.00000	648.67000	.00000	.00000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2592/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	CHMD	CNFD	CTFD	CTFS	CTFU	CTAD	CTAS	CTAU
4.985	-50.544	200.20000	.28588	-.07875	.06910	432.54000	.00000	.00000	647.33000	.00000	.00000
4.983	15.121	200.08000	-.10605	-.06794	.07516	432.19000	.00000	.00000	646.80000	.00000	.00000
5.005	48.975	200.17000	.16586	-.07072	.07024	432.67000	.00000	.00000	647.53000	.00000	.00000
5.020	98.809	200.17000	-.15005	-.07291	.06534	431.27000	.00000	.00000	645.44000	.00000	.00000
5.058	198.570	200.12000	-.82294	-.06280	.06139	432.47000	.00000	.00000	647.22000	.00000	.00000
5.029	298.550	200.25000	-.06703	-.05463	.09295	431.89000	.00000	.00000	646.36000	.00000	.00000
5.022	398.820	200.32000	.08556	-.07028	.05761	431.59000	.00000	.00000	645.90000	.00000	.00000
4.958	598.650	200.27000	.26233	-.05799	.06529	432.04000	.00000	.00000	646.58000	.00000	.00000
	GRADIENT	13.23193	-.00701	-.00449	.00497	28.58210	.00000	.00000	42.77495	.00000	.00000





V41B-D9A (IA22).ET SEPARATING FROM ORB (O4RC1)

(AVK081) ( 04 MAY 77 )

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1328.7200 IN. XT  
 LREF = 1290.3000 INCHES YMRP = .0000 IN. YT  
 BREF = 1290.3000 INCHES ZMRP = 416.4000 IN. ZT  
 SCALE = .0125

PARAMETRIC DATA

ALPHA = -5.000 BETA = .000  
 DBETA = .000 X = 200.000  
 Y = .000 ELEVON = .000  
 UMBLDR = 90.000 RCS = 1.000  
 GAS = 1.000

RUN NO. 2588/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
-4.994	239.600	200.05000	-.27096	-9.97560	-.00509	-.20797	-.03324	.00619	.00098	.00047	.09759
-4.998	249.620	200.10000	.02305	-9.98170	.00020	-.20703	-.03449	.00792	.00080	.00046	.09697
-4.996	299.190	200.14000	-.02402	-9.97520	-.00955	-.19584	-.03348	.00333	.00131	.00044	.09629
-4.959	398.750	200.05000	.04623	-9.95120	.00279	-.21031	-.01555	.00637	.00029	.00044	.10071
-4.961	498.720	200.04000	.03327	-9.95080	.00296	-.22165	.00355	.00944	-.00051	.00038	.11214
-4.965	598.890	200.02000	.19369	-9.95320	.00406	-.22492	.01816	.00770	-.00117	.00035	.12225
-5.014	699.480	200.13000	.03785	-10.00100	-.00009	-.18555	.00378	.00738	-.00080	.00047	.11746
-5.051	800.110	200.25000	.14529	-10.03800	-.00113	-.13305	-.02697	.00432	.00077	.00017	.09595
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2590/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
.002	99.523	200.13000	.44749	-4.96390	.00617	-.14206	-.02764	.00695	.00096	.00019	.09747
.023	148.840	200.19000	-.07843	-4.95530	-.00022	-.12488	-.02646	.00228	.00158	.00027	.09133
.023	199.060	200.15000	.00555	-4.95950	-.00010	-.12732	-.02013	.00377	.00132	.00029	.09083
.042	299.530	200.14000	.00879	-4.94620	.00159	-.13217	-.00361	.00350	.00097	.00025	.09791
.037	398.640	200.10000	.02041	-4.95350	.00240	-.13818	.01146	.00481	.00016	.00020	.10524
.021	498.930	200.09000	.85151	-4.96700	.01298	-.13275	.01998	.00623	-.00048	.00027	.11177
-.020	599.490	200.21000	.07680	-5.00790	.00007	-.09342	.00426	.00439	.00002	.00028	.10458
-.029	699.790	200.24000	.19715	-5.01630	.00070	-.05992	-.01531	.00373	.00065	.00002	.08991
-.001	799.310	200.21000	.22803	-4.98800	.00334	-.05898	-.01535	.00393	.00078	.00001	.09200
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 2592/ 0 RN/L = .88 GRADIENT INTERVAL = -5.00/ 5.00

DALPHA	Z	X	Y	ALPHAT	BETAT	CN	CLM	CY	CYN	CBL	CA
4.995	-50.544	200.20000	.28588	.00776	.00552	-.04968	-.02193	.00479	.00039	.00016	.08819
4.983	15.121	200.08000	-.10605	.01524	-.00128	-.07224	-.01878	.00533	.00082	.00014	.09237
5.005	48.975	200.17000	.16586	.03344	.00353	-.06575	-.01433	.00588	.00097	.00017	.09331
5.020	98.809	200.17000	-.15005	.04106	.00007	-.06055	-.00726	.00436	.00075	.00015	.09151
5.058	198.570	200.12000	-.82294	.07480	-.01199	-.06687	.00873	.00345	.00064	.00013	.09526
5.029	298.550	200.25000	-.06703	.03963	-.00195	-.06716	.02132	.00355	.00052	.00012	.10228
5.022	398.820	200.32000	.02556	.03333	.00296	-.05992	.02831	.00493	-.00029	.00022	.10635
4.958	599.650	200.27000	.26233	-.02913	.00341	-.00265	.00111	.00336	.00036	.00002	.08877
	GRADIENT	13.23193	-.00701	.00101	-.00008	-.00478	-.00124	.00035	.00005	.00001	.00611