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**RESULTS OF AN EXPERIMENTAL INVESTIGATION
TO DETERMINE SEPARATION CHARACTERISTICS
FOR THE ORBITER/747 USING A 0.0125-SCALE
MODEL (48-0 AX1318I-1 747) IN THE AMES
RESEARCH CENTER 14-FOOT WIND TUNNEL
(CA23B)**

**CHRYSLER CORP., NEW ORLEANS, LA. SPACE
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AX1318I-1 747) IN THE AMES RESEARCH CENTER
14-FOOT WIND TUNNEL (CA23B)

by

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Prepared under NASA Contract Number NAS9-13247

by

Data Management Services
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for

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

WIND TUNNEL TEST SPECIFICS:

Test Number: ARC 14-120
NASA Series Number: CA23B
Model Number: 48-0 Orbiter/AX1318I-1 747
Test Dates: June 23 through July 22, 1975
Occupancy Hours: 180

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RESULTS OF AN EXPERIMENTAL INVESTIGATION TO
DETERMINE SEPARATION CHARACTERISTICS FOR THE
ORBITER/747 USING A 0.0125-SCALE MODEL (48-0
AX13181-1 747) IN THE AMES RESEARCH CENTER
14-FOOT WIND TUNNEL (CA23B)

by

V. Esparza
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ABSTRACT

This report documents aerodynamic separation data obtained from a wind tunnel test of an 0.0125-scale SSV Orbiter model of a VC70-000002 Configuration and a 0.0125-scale 747 model built by The Boeing Company.

Separation data were obtained at a Mach number of 0.6 and three incidence angles (i_0) of 4° , 6° , and 8° . The orbiter angle of attack was varied from 0 to 14 degrees.

Longitudinal, lateral and normal separation increments were obtained for fixed 747 angles of attack of 0° , 2° , and 4° while varying orbiter angle of attack. Control surface settings on the 747 carrier included rudder deflections of 0° and 10° and horizontal stabilizer deflections of -1° and $+5^\circ$.

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SCHEDULE OF COEFFICIENTS PLOTTED:

- (A) DCL, DCD, DCLM versus DZ
- (B) CL, CD, CLM versus DZ
- (C) CL, CD, CLM, CY, C_Y, C_Y, C_Y versus DZ
- (D) CY, C_Y, C_Y, DCL, DCD, DCLM versus DZ
- (E) C_L, C_D, C_LM versus ALPHAC
- (F) C_L, C_D, C_LM versus ALPHAO
- (G) C_L, C_D, C_LM versus DX

NOMENCLATURE

General

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
a		speed of sound; m/sec, ft/sec
C_p	CP	pressure coefficient; $(P_i - P_\infty)/q$
M	MACH	Mach number; V/a
p		pressure; N/m ² , psf
q	Q(NSM) Q(PSF)	dynamic pressure; $1/2 \rho V^2$, N/m ² , psf
RN/L	RN/L	unit Reynolds number; per m, per ft
V		velocity; m/sec, ft/sec
α	ALPHAC	747 angle of attack, degrees
α_o	ALPHAO	Orbiter angle of attack, degrees
β	BETA BETAC	747 angle of sideslip, degrees
β_o	BETAO	Orbiter angle of sideslip, degrees
ψ	PSI	angle of yaw, degrees
ϕ	PHIO PHIC	Orbiter angle of roll, degrees 747 angle of roll, degrees
i_o	IORB	Orbiter incidence relative to 747 FRL, degrees
ρ		mass density; kg/m ³ , slugs/ft ³
<u>Reference & C.G. Definitions</u>		
A_b		base area; m ² , ft ²
b	BREF	wing span or reference span; m, ft
c.g.		center of gravity
$\frac{l_{REF}}{\bar{c}}$	LREF	reference length or wing mean aerodynamic chord; m, ft

NOMENCLATURE (Continued)

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
S	SREF	wing area or reference area; m^2, ft^2
MRC	MRP	moment reference point
	XMRP	moment reference point on X axis
	YMRP	moment reference point on Y axis
	ZMRP	moment reference point on Z axis

SUBSCRIPTS

b	base
l	local
s	static conditions
t	total conditions
∞	free stream

Body-Axis System

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
C_N	CN	normal-force coefficient; $\frac{\text{normal force}}{qS}$
C_A	CA	axial-force coefficient; $\frac{\text{axial force}}{qS}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_{A_b}	CAB	base-force coefficient; $\frac{\text{base force}}{qS}$ $-A_b(p_b - p_\infty)/qS$
C_{A_f}	CAF	forebody axial force coefficient; $C_A - C_{A_b}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS^2 l_{REF}}$

NOMENCLATURE (Continued)

Body-Axis System

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
C_n	CLN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qSb}$
C_l	CBL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qSb}$

Stability-Axis System

C_L	CL	lift coefficient; $\frac{\text{lift}}{qS}$
C_D	CD	drag coefficient; $\frac{\text{drag}}{qS}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_{D_b}	CDB	base-drag coefficient; $\frac{\text{base drag}}{qS}$
C_{D_f}	CDF	forebody drag coefficient; $C_D - C_{D_b}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS l_{REF}}$
C_n	CLN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qSb}$
C_l	CSL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qSb}$
L/D	L/D	lift-to-drag ratio; C_L/C_D
L/D _f	L/DF	lift to forebody drag ratio; C_L/C_{D_f}

NOMENCLATURE (Continued)

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
ΔC_L	DCL	incremental lift coefficient
ΔC_D	DCD	incremental drag coefficient
ΔC_m	DCLM	incremental pitching-moment coefficient
ΔC_Y	DCY	incremental side-force coefficient
ΔC_n	DCYN	incremental yawing-moment coefficient
ΔC_l	DCBL	incremental rolling-moment coefficient
	XZCP	longitudinal center of pressure in normal force plane
	XYCP	lateral center of pressure in side force plane
δ_r	RUDDER	747 rudder surface deflection angle, positive deflection trailing edge to the left, degrees
δ_e	ELEVON	Orbiter elevon surface deflection angle, positive deflection trailing edge down, degrees
δ_s	STAB	747 stabilizer surface deflection angle, positive deflection trailing edge down, degrees
<u>ORBITER SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
$C_{P_{co}}$	CPC	Orbiter balance cavity pressure coefficient
$C_{P_{B1}}$	CPB1	Orbiter tail-cone-off base pressure coefficient
$C_{P_{B2}}$	CPB2	Orbiter tail-cone-off base pressure coefficient

NOMENCLATURE (Concluded)

<u>ORBITER SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
C_{PB3}	CPB3	Orbiter tail-cone-off pressure coefficient
C_{PBE}	CPE3	Dummy strut pressure coefficient
C_{PS1}	CPS1	Pressure coefficient on L.H. side of Strut S_1
C_{PS2}	CPS2	Pressure coefficient on R.H. side of Strut S_1

747 SYMBOL

C_{PCC}	CPC	747 sting cavity pressure coefficient
C_{PSB1}	CPSB1	747 sting base exit pressure coefficient
C_{PSB2}	CPSB2	747 sting base exit pressure coefficient

<u>SEPARATION PARAMETERS</u>	<u>PLOT SYMBOL</u>	
ΔX	DX	Longitudinal displacement, ft.
ΔY	DY	Lateral displacement, ft.
ΔZ	DZ	Vertical displacement, ft.

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REMARKS

The nominal orbiter elevon deflections tested were 0° and $+5^\circ$. The actual measured elevon deflections were as follows:

NOMINAL	MEASURED			
	δ_e Left		δ_e Right	
	Outboard	Inboard	Outboard	Inboard
5°	$4^\circ 59'$	$5^\circ 10'$	$4^\circ 55'$	$4^\circ 53'$

The zero elevon deflection was not measured since it faired into the contour of the VC70-000002 orbiter vehicle lines.

The 747 carrier nominal horizontal stabilizer settings used in the test were $\delta_{\mu} = -1^\circ$ and $\delta_{\mu} = 5^\circ$. The actual measured deflections were $\delta_{\mu} = -53'$ and $\delta_{\mu} = +4^\circ 48'$, respectively.

CONFIGURATIONS INVESTIGATED

The Orbiter model was a 0.0125 scale representation of the Rockwell International Space Shuttle Vehicle built to Rockwell lines VC70-000002. The basic orbiter model is of the blended wing-body design utilizing a double delta wing (75°/45°), full span elevons with deflection capability, a centerline vertical tail with rudder deflection capability, a canopy, a body flap and an orbital maneuvering system (OMS) mounted on the aft fuselage sidewalls.

A tail cone fairing used to cover the MPS nozzles and OMS nozzles was tested for a limited number of runs.

The .0125 scale model of the Rockwell International Space Shuttle Vehicle is constructed primarily of 7075-T6 aluminum. The orbiter wing panels are made from 2024-T-851 aluminum while the elevon brackets are made from ARMCO 17-4 PH CRES.

Model Nomenclature

O₁ = B₆₄ C₁₄ F₁₄ E₄₄ M₁₈ N₉₄ N₉₂ R₁₈ V₂₃ W₁₁₆
O₂ = B₆₄ C₁₄ F₁₄ E₄₄ M₁₈ N₉₄ N₉₂ W₁₁₆
O₃ = B₆₄ C₁₄ F₁₄ E₄₄ M₁₈ R₁₈ V₂₃ W₁₁₆ TC₄
O₄ = B₆₄ C₁₄ F₁₄ E₄₄ M₁₈ N₉₂ R₁₈ V₂₃ W₁₁₆

Component

Description

B₆₄

Orbiter fuselage per Rockwell lines
VC70-000002, Model Drawing SS-A01377

CONFIGURATIONS INVESTIGATED - (Continued)

<u>Component</u>	<u>Description</u>
C ₁₄	Orbiter canopy per Rockwell lines VC70-000002, Model Drawing SS-A01377
E ₄₄	Orbiter full span, unswept hingeline, 6-inch gapped elevons per Rockwell lines VC70-000002, Model Drawing SS-A01377
F ₁₄	Orbiter body flap per Rockwell lines VC70-000002, Model Drawing SS-A01377
M ₁₈	Orbiter OMS/RCS pods per Rockwell lines VC70-000002, Model Drawing SS-A01377
N ₉₄	Orbiter main engine nozzles per Rockwell lines VC70-000002, Model Drawing SS-A01377
N ₉₂	Orbiter OMS engine nozzles per Rockwell lines VC70-000002, Model Drawing SS-A01377
R ₁₈	Orbiter rudder per Rockwell lines VC70-000002, Model Drawing SS-A01377
V ₂₃	Orbiter vertical tail per Rockwell lines VC70-000002, Model Drawing SS-A01377
W ₁₁₆	Orbiter double delta wing per Rockwell lines VC70-000002, Model Drawing SS-A01377
TC ₄	Orbiter tail cone fairing which covers the MPS nozzles and the OMS nozzles and base.

The attach hardware utilized in conjunction with separation testing consisted of several configurations. The faired aft attach hardware (AT₉₉) was used throughout the duration of the separation test. Incidence angles of 4°, 6°, and 8° were tested utilizing the faired forward attach hardware AT₉₆, AT₉₇, and AT₉₈.

AT₉₇ was used for $i_o = 6^\circ$, and 8° .

CONFIGURATIONS INVESTIGATED - (Continued)

The 0.0125 scale 747 carrier model, fabricated by The Boeing Company, utilized 200 sq. ft. stabilizer tip fins, flaps at 0 degrees and standard in-flight speed brakes extended. The horizontal tail was capable of deflecting +35° to -11° in two degree increments (FRP).

The following nomenclature was used to designate model components for The Boeing Company 0.0125-scale 747 Carrier Model:

<u>Component</u>	<u>Description</u>
B _{27.8}	Fuselage
W _{44.1}	Wing
V _{9.1}	Basic Vertical Tail
H ₁₅	Horizontal Tail
H _{15.6}	Horizontal Tail with Vertical Fins
M ₂₅	Inboard Nacelle struts
M ₂₆	Outboard Nacelle struts
N ₅₇	Inboard Nacelles
N ₅₈	Outboard Nacelles
S ₁₋₁₂	Spoiler panels
T ₁₄	Flap Track Fairing
S ₁	Orbiter support blade strut, upper entry position

The configurations investigated utilizing the components previously described were as follows:

CONFIGURATIONS INVESTIGATED - (Concluded)

<u>Configuration</u>	<u>Orbiter Incidence (i_o)</u>
747/1 AT ₉₆	4°
747/1 AT ₉₇	6°
747/1 AT ₉₈	8°
747/1 AT ₉₆ O ₂ S ₁	4°
747/1 AT ₉₇ O ₂ S ₁	6°
747/1 AT ₉₈ O ₂ S ₁	8°
747/1 AT ₉₆ O ₃ S ₁	4°
747/1 AT ₉₇ O ₃ S ₁	6°
747/1 AT ₉₈ O ₃ S ₁	8°
O ₂ S ₁	--
O ₃ S ₁	--

INSTRUMENTATION

The orbiter was mounted on the NASA/Ames 1.0 inch Task MK XIV internal force balance and the 747 Carrier was mounted on the NASA/Ames 1.5 inch MK II Internal Force balance.

Pressure instrumentation in the orbiter consisted of a sting cavity pressure tap (P_{CO}) and a pressure tap (P_{S1} , P_{S2}) on each side of strut S_1 . When the tail cone (TC_4) was removed, three (3) base pressures were measured- P_{B1} , P_{B2} , and P_{B3} . See figures 2g and 2i.

Pressure instrumentation in the 747 carrier consisted of sting cavity pressure tap (P_{CC}) and two static pressure taps (P_{SB1} , P_{SB2}). These tap locations are shown in figure 2i.

TEST FACILITY DESCRIPTION

The Ames 14-Foot Transonic Wind Tunnel was created by extensive modification of the former Ames 16-Foot High Speed Wind Tunnel. It has an adjustable, flexible-wall nozzle and the test section is slotted on all four sides to permit transonic testing. The air circuit is closed except for the air exchanger in a low-speed section of the circuit, which is controlled to maintain the air temperature within suitable limits.

The air is driven by a three-stage, axial-flow compressor powered by three electric motors mounted in tandem outside the wind tunnel. The drive system is rated 110,000 horsepower continuously or 132,000 horsepower for one hour. The speed of the motors is continuously variable over the operating range.

Performance:

Mach number	0.6 to 1.2, continuously variable
Pressure, stagnation, atm	1.0
Reynolds number, per ft	2.8×10^6 to 4.2×10^6
Temperature, stagnation	Controllable over limited range by throttling the air exchanger. Generally about 640° R to avoid condensation of moisture in the test section

Dimensions:

Test section height, ft	13.50
Test section width, ft	13.71 at upstream end 13.92 at downstream end
Test section length, ft	33.75

DATA REDUCTION

Model force and moment data were reduced to coefficient form in the body and stability axes systems. Coefficient data were computed separately for each vehicle using its own reference dimensions. Moment data for each vehicle is reduced about its own reference center of gravity.

Relative separation angles and displacements were computed for the orbiter with respect to the 747 carrier. These values are presented in the 747 body axis system and displacement will represent the movement of the orbiter aft attachment point from its base position. The orbiter base position is defined as the orbiter in the mated configuration.

All model positions and attitude data are corrected for support hardware deflections.

Reference Dimensions and Constants

<u>747 Symbol</u>	<u>Definition</u>	<u>Model Scale</u>	<u>Full Scale</u>
S_c	Wing reference area, ft ²	0.859	5500
b_c	Wing span, in.	29.351	2348.04
\bar{c}_c	Wing, MAC, in.	4.097	327.78
$MRCX_c$	Moment Ref. Center 747 M.S.	16.749	1339.90
$MRCZ_c$	Moment Ref. Center 747 W.L.	2.385	190.75
$BMCZ_c$	Balance Moment Center 747 M.S.	16.608	1328.64
$BMCX_c$	Balance Moment Center 747 W.L.	2.896	231.68

DATA REDUCTION (Continued)

<u>Orbiter Symbol</u>	<u>Definition</u>	<u>Model Scale</u>	<u>Full Scale</u>
S_o	Wing reference area, ft ²	0.420	2690
b_o	Wing span, in	11.709	936.68
\bar{c}_o	Wing MAC, in.	5.935	474.81
$MRCX_o$	Moment Ref. Center Orbiter M.S.	13.862	1109
$MRCZ_o$	Moment Ref. Center Orbiter W.L.	4.687	375
$BMCX_o$	Balance Moment Center Orb. M.S.	13.305	1064
$BMCZ_o$	Balance Moment Center Orb. W.L.	5.377	430

Incremental force and moment coefficients were calculated for the orbiter data as follows:

$$\Delta C_{ORB}^{(747)} = C_{ORB}^{(747)} - C_{ORB}^{(ISOL)}$$

where:

$$\Delta C_{ORB}^{(747)} = \text{Proximity increment on orbiter coefficients}$$

$$C_{ORB}^{(747)} = \text{Coefficient of orbiter in presence of carrier}$$

$$C_{ORB}^{(ISOL)} = \text{Isolated orbiter coefficient}$$

Incremental force and moment coefficients were also calculated for the carrier as follows:

$$\Delta C_{747}^{(ORB)} = C_{747}^{(ORB)} - C_{747}^{(ISOL)}$$

where:

$$\Delta C_{747}^{(ORB)} = \text{Proximity increment on carrier coefficients}$$

DATA REDUCTION (Concluded)

$C_{747}^{(ORB)}$ = Coefficient of carrier in presence of orbiter

$C_{747}^{(ISOL)}$ = Isolated carrier coefficient

Refer to Table VI for a detailed summary.

REFERENCES

Reports and Internal Letters

- IL, SAS/WTO/74-172, Addendum #12, "Sting Design and Fabrication Effort Required for Support of Test CA23 Using Model 48-0/747."
- IL, SAS/WTO/74-172, Addendum #13, "Completion of CA23 Sting Hardware Fabrication," dated February 4, 1975.
- IL, SAS/WTO/74-172, Addendum #14, "Orbiter/747 Attach Hardware for CA23," dated February 18, 1975.
- IL, SAS/WTO/74-172, Addendum #15, "Model Requirements for 0.0125-Scale 48-0/747 Models to Support Tests CA23 and AA2."
- IL, SAS/WTO/74-172, Addendum #17, "Additional Model 48-0 Requirements," dated March 4, 1975.
- IL, SAS/WTO/74-172, Addendum #20, "Model Requirements for 48-0 in Support of Test CA21," dated May 2, 1975.
- IL, SAS/WTO/75-101, "Dimensional Verification of Model 48-0 During CA21 MRR and CA23," dated April 2, 1975.
- SD75-SH-0290A, "Pretest Information for a Test of an 0.0125 Scale Model 48-0 Orbiter/747 Flight Test Configuration in the ARC 14 Foot Tunnel CA23B," June, 1975.

Drawings

- VC70-000002, "Design Geometry - Orbiter," dated June 10, 1974.
- SS-A01377, "Orbiter Assembly - #48-0, 0.0125-Scale SSV, Ferry Separation," dated August 9, 1974.
- SS-A01559, "Fwd. & Aft Attach Supports 48-0, .0125-Scale SSV Orbiter," dated March 11, 1975.
- SS-A01499, "Installation-0.0125-Scale SSV Orb/747, Carrier Ferry Sep., Ames 14-Ft WT (#48-0)," dated January 9, 1975.
- W-1132SA, "Sting Assy - 48-0 SSV, Carrier, Ferry/Separation," dated August 9, 1974.

REFERENCES (Concluded)

W-1133SA, "Sting Assy - Orbiter Ferry Separation, #48-0," dated January 13, 1975.

W-1142-SA, "Sting and Sting Adapter-0.0125-Scale SSV Orb., Carrier, Ferry/Separation #48-0," dated January 29, 1975.

W-1048-S, "Sting - (SSV-Delta and Str. Wing), Ames 6X6 SSWT," dated May 6, 1975.

W-1135-A, "Adapter Assy - #48-0 Orbiter/Carrier, Mated," dated August 17, 1974.

The Boeing Company - 747 Carrier

747-MD-461, "General Arrangement - 747 Space Shuttle Orbiter Carrier Aircraft (Piggyback Configuration)," dated July 15, 1974.

747-MD-576, "Structural Arrangement - Orbiter Aft Support, 747 MOD," dated August 1, 1974.

AX 1318I-1, "747 Model Drawings 0.0125 Scale".

TABLE I

TEST : CA23B		DATE : 11/18/75	
TEST CONDITIONS			
MACH NUMBER	REYNOLDS NUMBER (per ft X 10 ⁶)	DYNAMIC PRESSURE (pounds/sq. ft)	STAGNATION TEMPERATURE (degrees Fahrenheit)
.6	3.6	417	92
.5	3.1	315	70
.3	2	126	71

BALANCE UTILIZED: NASA/ARC 1.0 inch Task MK XIV

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF	<u>800 lb.</u>	_____	_____
SF	<u>400 lb.</u>	_____	_____
AF	<u>100 lb.</u>	_____	_____
PM	_____	_____	_____
RM	<u>250 in.-lb.</u>	_____	_____
YM	_____	_____	_____

COMMENTS: **This balance was used to obtain Orbiter separation data.**

BALANCE UTILIZED: NASA/ARC 1.5 inch MK II

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF	<u>1000 lb.</u>	_____	_____
SF	<u>500 lb.</u>	_____	_____
AF	<u>100 lb.</u>	_____	_____
PM	_____	_____	_____
RM	<u>800 in.-lb.</u>	_____	_____
YM	_____	_____	_____

COMMENTS: **This balance was used to obtain 747 Carrier Separation data.**

TABLE II.

TEST: CA23B(ARC 14-120)		DATA SET/RUN NUMBER COLLATION SUMMARY										DATE: 10/11/75 REVISED									
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		ORB.		PARAMETER/VALUES		TEST RUN NUMBER													
		α_c	β_c	δ_c	ϵ_c	ΔZ	M	2	3.5	7.5	10	15	30	45	50	50					
RNH004	747/1 AT1	A	0	-	-	18.5%	130	0.6	41	($\Delta Z = 130$)											
05	Y	A	0	5%	-	18.5%	130	0.6	51	($\Delta Z = 130$)											
08	747/1 AT1 $\phi_2 S_1$	A	0	-1%	5	6%	7		81	82	83	84	85	86	87						
09				-1%		8	6			91	92	93	94	95	96						
10				5%		8	6			101	102	103	104	105	106						
11				-1%		4	6		111	112	113	114	115	116							
12				-1%		6	3		121	122	123										
13		Y		5%		6	7		131	132	133	134	135	136	137						
14		B				6	7		141	142	143	144	145	146	147						
15						8	6			151	152	153	154	155	156						
16						6	7		161	162	163	164	165	166	167						
17						8	6			171	172	173	174	175	176						
18						6	7		181	182	183	184	185	186	187						
19		Y			Y	8	6			191	192	193	194	195	196						
20		A		Y	0	4	6		201	202	203	204	205	206							
21				-1%		4	6		211	212	213	214	215	216							
22				5%		8	6			221	222	223	224	225	226						
Y 23	Y	Y	Y	5%	Y	6	7		231	232	233	234	235	236	237						

COEFFICIENT SCHEDULES ARE INDICATED IN PARENTHESIS (e.g. 58)

α OR β SCHEDULES $\Delta = \alpha_c = 5, 4, 3, 2, 1, 0, 1, 2, 3, 4, 5, 6, 7, 8, 0$

α OR β SCHEDULES $\Delta = \alpha_c = 0, 2, 4, 0$

α OR β SCHEDULES $\Delta = \alpha_c = 2, 4, 0$

α OR β SCHEDULES $\Delta = \alpha_c = 0, 4, 6, 8, 10, 12, 14$

NOTE: AT1 = AT16 OR AT97 OR AT14

$\Delta = \Delta Z = 2, 20, 40$

$\Delta = \Delta X = 0, 5, 10, 15, 20$

TABLE II. - Continued

TEST: CA23B(ARC 14-120)		DATA SET/RUN NUMBER COLLATION SUMMARY												DATE: 10/11/75 REVISED								
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		TEST RUN NUMBERS																		
		AC	OR	747	ORB	PARAMETER/VALUES	ΔZ	M	ΔZ	M	ΔZ	M	ΔZ	M	ΔZ	M	ΔZ	M	ΔZ	M		
RNH024	747/1 AT1 φ ₂ S ₁	A	0	0	-1/0	0	6	0%	7	0.6	241	242	243	244	245	246	247	248	249	250		
25	Y	A	0	0	-1/0	0	8	0%	6			257	252	253	254	255	256					
27	747/1 AT1 φ ₃ S ₁	A			5/0		8	0%	6			261	262	263	264	265	266					
28		B					6	10%	7		281	282	283	284	285	286	287					
29		B					8	10%	6			291	292	293	294	295	296					
30		B					8	20%	6			301	302	303	304	305	306					
31		B					6	20%	6			311	312	313	314	315	316					
32		B					6	0%	7		321	322	323	324	325	326	327					
33		B					8	0%	6			331	332	333	334	335	336					
34		A					6	0%	9		341	343	344	345	346	347	348	349				
35		A			Y		4		6			351	352	353	354	355	356					
36		B			5/0	Y	6		9		361	362	363	364	365	366	367	368	369			
37		A			-1/0	0	6		9		371	372	373	374	375	376	377	378	379			
38	Y	A			5/0	5	6		9		381	382	383	384	385	386	387	388	389			
39	747/1 AT1 φ ₂ S ₁	B			5/0		6		7			391	392	393	394	395	396	397				
40		A			5/0		4		6	Y	401	402	403	404	405	406						
41		B			5/0		4		6	0.5	411	412	413	414	415	416						
42	Y	B			5/0	Y	4	Y	6	0.3	421	422	423	424	425	426						

α OR β SCHEDULES

* NO α = 4°

COEFFICIENTS

7 13 19 25 31 37 43 49 55 61 67 73 79 85 91 97

EXPERIMENTAL

TABLE II. - Concluded.

TEST: CA23B (ARC 14-120)		DATA SET RUN NUMBER COLLATION SUMMARY										DATE: 10/11/75 REVISED									
DATA SET IDENTIFIER	CONFIGURATION	SCHD. 747 ORB. PARAMETER/VALUES										ΔZ					ΔX				
		α ₀	β ₀	δ ₀ /δ _R	δ ₀	δ _R	Δ ₀	Δ _R	ΔZ	M	N	2	20	40	60	0	5	10	15	20	
RNHO 43	φ ₂ S1	Δ	0	5	-	0	0	Δ	60	Δ	0.6	431	432	433							
44	φ ₃ S1			5																441	
45	φ ₃ S1			0			Δ				451	452	453								
46	φ ₂ S1	Y		0		Y	40						461								
47	φ ₂ S1	Δ		0		Δ/0	50					ΔZ=50			471	472	473	474	475		
48	φ ₂ S1	Y		0	Y	Y	3			Y		ΔZ=3			481	482	483	484	485		

TABLE III (MODEL DIMENSIONAL DATA)

a. Orbiter Model

MODEL COMPONENT : BODY - OML - B₄

GENERAL DESCRIPTION : The body is an elongated structure containing the Crew Module and Cargo Bay. Same as IML plus 1" TPS.

MODEL SCALE: 0.0125

DRAWING NUMBER : VC70-000002, SS-A01377

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length ($X_0 = 235$ to 1519), In.	<u>1284.0</u>	<u>16.050</u>
Max Width ($X_0 = 1516.8$), In.	<u>262.718</u>	<u>3.284</u>
Max Depth ($X_0 = 1463.316$), In.	<u>348.575</u>	<u>3.107</u>
Fineness Ratio	<u>5.1365</u>	<u>5.1365</u>
Area - Ft ²	<u> </u>	<u> </u>
Max. Cross-Sectional	<u>340.82</u>	<u>0.053</u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

TABLE III (Cont'd)

a. Orbiter Model

MODEL COMPONENT : CANOPY (OUTER MOLD LINE) - C.

GENERAL DESCRIPTION : The canopy is that part of the forward fuselage which covers the Crew Module. One inch TPS thickness on the canopy.

Configuration 1400.

MODEL SCALE: 0.0125

DRAWING NUMBER: VC70-000002, SS-A01377

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length ($X_0=435.196 - 670.0$), In.	<u>234.80</u>	<u>2.935</u>
Max Width ($X_0 = 594.0$), In.	<u>195.58</u>	<u>2.445</u>
Max Depth	<u> </u>	<u> </u>
Fineness Ratio	<u> </u>	<u> </u>
Area	<u> </u>	<u> </u>
Max. Cross-Sectional	<u> </u>	<u> </u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

WINDSHIELD PLANES:

$$\begin{aligned}
 .7012 X_0 - .2552 Y_0 - .6656 Z_0 - 6.1789 &= 0 \\
 .5710 X_0 - .5641 Y_0 - .5965 Z_0 + 32.7354 &= 0 \\
 .2636 X_0 - .7564 Y_0 - .5965 Z_0 + 189.4099 &= 0
 \end{aligned}$$

TABLE III (Cont'd)

a. Orbiter Model

MODEL COMPONENT : ELEVON - E₄₄

GENERAL DESCRIPTION : 6.0 In. F.S. gaps machined into E₂₄ elevon.

Flipper doors, centerbody pieces, and tipseals are not simulated. (Data are for one side.)

MODEL SCALE: 0.0125

DRAWING NUMBER Not available.

DIMENSIONS :

	FULL SCALE	MODEL SCALE
Area - Ft ²	<u>210.00</u>	<u>0.033</u>
Span (equivalent), In.,	<u>349.2</u>	<u>4.365</u>
Inb'd equivalent chord , In.	<u>118.0</u>	<u>1.475</u>
Outb'd equivalent chord , In.	<u>55.19</u>	<u>0.690</u>
Ratio movable surface chord/ total surface chord	<u> </u>	<u> </u>
At Inb'd equiv. chord	<u>0.2096</u>	<u>0.2096</u>
At Outb'd equiv. chord	<u>0.4004</u>	<u>0.4004</u>
Sweep Back Angles, degrees	<u> </u>	<u> </u>
Leading Edge	<u>0.00</u>	<u>0.00</u>
Trailing Edge	<u>- 10.056</u>	<u>- 10.056</u>
Hingeline	<u>0.00</u>	<u>0.00</u>
(Product of area & \bar{c}) Area Moment (Normalized by chord ³), Ft ³	<u>1587.25</u>	<u>0.003</u>
Mean Aerodynamic Chord, In.	<u>90.7</u>	<u>1.134</u>

TABLE III (Cont'd)

a. Orbiter Model

MODEL COMPONENT: BODY FLAP - F₁₄

GENERAL DESCRIPTION: The body flap is a secondary movable airfoil located at the aft end of the body.

MODEL SCALE: 0.0125

DRAWING NUMBER: VC70-000002

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area - Ft ²	<u>135.75</u>	<u>0.021</u>
Span (equivalent), In.	<u>241.33</u>	<u>3.017</u>
Inb'd equivalent chord, In.	<u>81.0</u>	<u>1.013</u>
Outb'd equivalent chord, In.	<u>81.0</u>	<u>1.013</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.0</u>	<u>0.0</u>
At Outb'd equiv. chord	<u>0.0</u>	<u>0.0</u>
Sweep Back Angles, degrees		
Leading Edge	<u>0.0</u>	<u>0.0</u>
Tailing Edge	<u>0.0</u>	<u>0.0</u>
Hingeline	<u>0.0</u>	<u>0.0</u>
(Product of Area & \bar{c})		
Area Moment (Normal to hingeline), Ft ³	<u>916.31</u>	<u>0.0018</u>
Mean Aerodynamic Chord, In.	<u>81.0</u>	<u>1.013</u>

TABLE III (Cont'd)

a. Orbiter Model

MODEL COMPONENT : OMS PODS (OML) - M₁₈

GENERAL DESCRIPTION : The OMS pods are nacelles housing the maneuvering engines and are located on the fuselage on either side of the vertical tail. Same as IML plus 1/2" TPS.

MODEL SCALE: 0.0125

DRAWING NUMBER : VC70-000002, VL70-843001

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length ($X_0=1311 - 1511$), In.	<u>200.00</u>	<u>2.500</u>
Max Width ($X_0 = 304$), In.	<u>135.75</u>	<u>1.697</u>
Max Depth ($X_0 = 304$), In.	<u>74.5</u>	<u>0.931</u>
Fineness Ratio	<u> </u>	<u> </u>
Area - Ft ²	<u> </u>	<u> </u>
Max. Cross-Sectional	<u>58.169</u>	<u>0.009</u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

TABLE III (Cont'd)

a. Orbiter Model

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: VC70-000C02, VL70-008144; RS009169, RS009107, 13M15000

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
MACH NO.		
Length - In.		
Gimbal Point to Exit Plane	<u>157.00</u>	<u>1.963</u>
Throat to Exit Plane	<u> </u>	<u> </u>
Diameter - In.		
Exit	<u>97.914</u>	<u>1.224</u>
Throat	<u> </u>	<u> </u>
Inlet	<u> </u>	<u> </u>
Area - ft ²		
Exit	<u>52.290</u>	<u>0.008</u>
Throat	<u> </u>	<u> </u>
Gimbal Point (Station) - In.		
Upper Nozzle		
X ₀	<u>1445.0</u>	<u>18.063</u>
Y ₀	<u>0.0</u>	<u>0.0</u>
Z ₀	<u>443.0</u>	<u>5.538</u>
Lower Nozzles		
X ₀	<u>1468.170</u>	<u>18.352</u>
Y ₀	<u>53.00</u>	<u>0.663</u>
Z ₀	<u>342.640</u>	<u>4.283</u>
Null Position - Deg.		
Upper Nozzle		
Pitch	<u>16.0</u>	<u>16.0</u>
Yaw	<u>0.0</u>	<u>0.0</u>
Lower Nozzle		
Pitch	<u>10.0</u>	<u>10.0</u>
Yaw	<u>3.5</u>	<u>3.5</u>

TABLE III (Cont'd)

a. Orbiter Model

MODEL COMPONENT: NOZZLES -- N₉

GENERAL DESCRIPTION: The two orbiter maneuvering system nozzles are level-bell shaped and are located at the aft end of the OMS pods. These dimensions are external and are not to be used for plume tests.

MODEL SCALE: 0.0125

DRAWING NUMBER: MC62100009, VC70-000002, VL70-008401, Aerojet 1181900

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
MACH NO.		
Length - In.		
Gimbal Point to Exit Plane	<u>56.00</u>	<u>0.700</u>
Throat to Exit Plane	<u>56.00</u>	<u>0.700</u>
Diameter - In.		
Exit		
Throat	<u>45.09</u>	<u>0.564</u>
Inlet		
Area - ft ²		
Exit		
Throat	<u>11.09</u>	<u>0.139</u>
Gimbal Point (Station) - In.		
X	<u>1518.0</u>	<u>18.975</u>
Y	<u>88.0</u>	<u>1.100</u>
Z	<u>492.0</u>	<u>6.150</u>
Null Position - Deg.		
Pitch	<u>15.82°</u>	<u>15.82°</u>
Yaw	<u>6.5°</u>	<u>6.5°</u>

TABLE III (Cont'd)

a. Orbiter model

MODEL COMPONENT	<u>RUDDER - R₁₈</u>
GENERAL DESCRIPTION	<u>The rudder is a secondary movable airfoil at the trailing edge of the vertical fin that imparts yaw forces. This dimensional data was calculated from the OML master dimensions 7-19-74.</u>
MODEL SCALE:	<u>0.0125</u>
DRAWING NUMBER	<u></u>

DIMENSIONS	FULL SCALE	MODEL SCALE
Area = Ft ²	<u>97.148</u>	<u>0.015</u>
Span (equivalent) , In.	<u>198.614</u>	<u>2.483</u>
Inb'd equivalent chord, In.	<u>90.07</u>	<u>1.126</u>
Outb'd equivalent chord , In.	<u>50.80</u>	<u>0.635</u>
Ratio movable surface chord/ total surface chord	<u></u>	<u></u>
At Inb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
At Outb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
Sweep Back Angles, degrees	<u></u>	<u></u>
Leading Edge	<u>34.833</u>	<u>34.833</u>
Trailing Edge	<u>26.249</u>	<u>26.249</u>
Hingeline (MAC X AREA, Ft ³)	<u>34.833</u>	<u>34.833</u>
Area Moment (MAC X AREA)	<u>584.99</u>	<u>0.0011</u>
Mean Aerodynamic Chord, In.	<u>72.260</u>	<u>0.903</u>

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TABLE III (Cont'd)

a. Orbiter Model

MODEL COMPONENT: VERTICAL - V 23 (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: 0.0125DRAWING NUMBER: VC70-000002, master dimensions.

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
TOTAL DATA		
Area (Theo) - Ft ²		
Planform	<u>413.253</u>	<u>0.065</u>
Span (Theo) - In.	<u>315.72</u>	<u>3.947</u>
Aspect Ratio	<u>1.675</u>	<u>1.675</u>
Rate of Taper	<u>0.507</u>	<u>0.507</u>
Taper Ratio	<u>0.404</u>	<u>0.404</u>
Sweep-Back Angles, Degrees.		
Leading Edge	<u>45.000</u>	<u>45.000</u>
Trailing Edge	<u>26.25</u>	<u>26.25</u>
0.25 Element Line	<u>41.13</u>	<u>41.13</u>
Chords:		
Root (Theo) WP	<u>268.50</u>	<u>3.356</u>
Tip (Theo) WP	<u>108.47</u>	<u>1.356</u>
MAC	<u>199.81</u>	<u>2.498</u>
Fus. Sta. of .25 MAC	<u>1463.50</u>	<u>18.294</u>
W.P. of .25 MAC	<u>635.52</u>	<u>7.944</u>
B.L. of .25 MAC	<u>0.0</u>	<u>0.0</u>
Airfoil Section		
Leading Wedge Angle - Deg.	<u>10.00</u>	<u>10.00</u>
Trailing Wedge Angle - Deg.	<u>14.92</u>	<u>14.92</u>
Leading Edge Radius	<u>2.00</u>	<u>0.0250</u>
Void Area	<u>13.17</u>	<u>0.002</u>
Blanketed Area	<u>0.0</u>	<u>0.0</u>

TABLE III (Cont'd)

a. Orbiter Model

MODEL COMPONENT: WING-W₁₁₇

GENERAL DESCRIPTION:

NOTE: Identical to W₁₁₇, except airfoil thickness. Dihedral angle is along trailing edge of wing. Geometric twist = 0.

MODEL SCALE: 0.0125

TEST NO.

DMG. NO. WCO-000140A -000200

DIMENSIONS:

FULL-SCALE

MODEL SCALE

TOTAL DATA

Area (Theo.) Ft²

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Planform

2690.00

0.420

Span (Theo) In.

936.68

11.709

Aspect Ratio

2.265

2.265

Rate of Taper

1.177

1.177

Taper Ratio

0.200

0.200

Dihedral Angle, degrees

3.500

3.500

Incidence Angle, degrees

0.500

0.500

Aerodynamic Twist, degrees

Sweep Back Angles, degrees

Leading Edge

45.00

45.00

Trailing Edge

- 10.056

- 10.056

0.25 Element Line

35.209

35.209

Chords:

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

689.24

8.616

Tip, (Theo) B.P.

137.85

1.723

MAC

474.81

5.935

Fus. Sta. of .25 MAC

1136.83

14.210

W.P. of .25 MAC

290.58

3.632

B.L. of .25 MAC

182.13

2.277

EXPOSED DATA

Area (Theo) Ft²

1751.50

0.274

Span, (Theo) In. BP108

720.68

9.009

Aspect Ratio

2.059

2.059

Taper Ratio

0.245

0.245

Chords

Root BP108

562.09

7.026

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

137.85

1.723

MAC

392.83

4.910

Fus. Sta. of .25 MAC

1185.98

14.825

W.P. of .25 MAC

294.30

3.679

B.L. of .25 MAC

251.77

3.147

Airfoil Section (Rockwell Mod NASA)
XXXX-64

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

0.113

0.113

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

0.120

0.120

Data for (1) of (2) Sides

Leading Edge Cuff

Planform Area Ft²

113.18

0.0177

Leading Edge Intersects Fus M. L. @ Sta

500.0

6.250

Leading Edge Intersects Wing @ Sta

100.0

1.250

TABLE III (Cont'd)

a. Orbiter Model

MODEL COMPONENT : ORBITER TAILCONE - TC₁

GENERAL DESCRIPTION : Fairing mounted on orbiter fuselage base for ferry missions configuration.

MODEL SCALE: 0.0125

DRAWING NUMBER : SS-A01452

DIMENSIONS :

	FULL SCALE	MODEL SCALE
Length	<u>435.76</u>	<u>5.447</u>
Max Width	<u>300.80</u>	<u>3.76</u>
Max Depth Height	<u>266.40</u>	<u>3.33</u>
Fineness Ratio	<u></u>	<u></u>
Area - Ft ²	<u></u>	<u></u>
Max. Cross-Sectional	<u>462.37</u>	<u>0.0722</u>
Planform	<u>635.803</u>	<u>0.0993</u>
Wetted	<u></u>	<u></u>
Base	<u></u>	<u></u>

TABLE III (Cont'd)

b. Carrier Model

MODEL COMPONENT: ATTACH STRUCTURE - AT96

GENERAL DESCRIPTION: Forward attach structure between the Orbiter and Carrier, faired struts, $i_0 = 4^\circ$

MODEL SCALE: 0.0125

DRAWING NO.: Boeing Dwg. 747-MD-654, SS-AC1559-4, -18, -35

DIMENSIONS:

		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
i_0 , Incidence angle, deg. (Orbiter FRL to 747 FRL)		4.0	4.0
Fairing chord, right and left, In.		31.0	0.388
Fairing T/C		0.226	0.226
Carrier attach points, In.	BSTA	689.4	8.617
	BWL	372.0	4.650
	BL	66.3	0.829
Orbiter attach points, In.	X_0	388.15	4.852
	Z_0	283.11	3.539
	Y	0.0	0.0
	BSTA	681.52	8.519
	BWL	480.4	6.005

TABLE III (Cont'd)

b. Carrier Model

MODEL COMPONENT: ATTACH STRUCTURE - AT97

GENERAL DESCRIPTION: Forward attach structure between the Orbiter and Carrier, faired struct, $i_0 = 6^\circ$

MODEL SCALE: 0.0125

DRAWING NO.: Boeing Dwg 747-MD-654, SS-A0159-3, -11, -35

DIMENSIONS:

		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
i_0 , Incidence angle, deg. (Orbiter FRL to 747 FRL)		6.0	6.0
Fairing chord, right and left, In.		31.0	0.388
Fairing t/c		0.226	0.226
Carrier attach points, In.	BSTA	689.4	8.617
	BWL	372.0	4.650
	BL	66.3	0.829
Orbiter attach point, In.	X_0	388.15	4.852
	Z_0	283.11	3.539
	Y_0	0.0	0.0
	BSTA	684.88	8.561
	BWL	512.72	6.409

TABLE III (Cont'd)

b. Carrier Model

MODEL COMPONENT: ATTACH STRUCTURE - AT₉₈

GENERAL DESCRIPTION: Forward attach structure between the Orbiter and Carrier, faired struts, $i_0 = 8^\circ$

MODEL SCALE: 0.0125

DRAWING NO.: Boeing Dwg 747-MD-654, SS-A01559-5, -19, -35

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
i_0 , Incidence angle, deg. (Orbiter FRL to 747 FRL)		8.0	8.0
Fairing chord, right and left, In.		31.0	0.388
Fairing t/c		0.226	0.226
Carrier attach points, In.	BSTA	689.4	8.617
	BWL	372.0	4.650
	BL	66.3	0.829
Orbiter attach points, In.	X_0	388.15	4.852
	Z_0	283.11	3.539
	Y_0	0.0	0.0
	BSTA	689.4	8.617
	BWL	544.72	6.809

TABLE III (Cont'd)

b.. Carrier Model

MODEL COMPONENT: ATTACH STRUCTURE - AT₉₉

GENERAL DESCRIPTION: Aft attach structure between orbiter and carrier, same as AT₉₅ with a single fairing covering the main strut and drag strut on each side, and a fairing on the sway brace.

MODEL SCALE: 0.0125

DRAWING NO.: Boeing Dwg 747-MD-658, W-1135A-11, -12, SS-A01559-33, -34, -35

DIMENSIONS:

		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Orbiter attach points, In.	X ₀	1317.0	16.462
	Y ₀	± 96.51	± 1.206
	Z , BL	267.5	3.344
	BSTA	1607.0	20.087
	BWL	400.0	5.000
Main fairing:			
Root chord, In.		250.0	3.125
T/c of root chord		0.09	0.09
Tip chord, In.		120.0	1.500
T/c of tip chord		0.14	0.14
Sway brace:			
Chord, In.		31.0	0.388
T/c		0.226	0.226

TABLE III (Cont'd)

MODEL COMPONENT : BCDY - ^{b.} Carrier Model
B_{27.8}

GENERAL DESCRIPTION : Body 74-7 Project with A.P.V.

MODEL SCALE: 0.0125 MODEL. Dwg: 13181-1

DRAWING NUMBER : 65013609, 1318-54

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length , In.	<u>2702.0</u>	<u>33.78</u>
Max Width , In.	<u>255.3</u>	<u>3.19</u>
Max Depth	<u> </u>	<u> </u>
Fineness Ratio	<u>9.73</u>	<u>9.73</u>
Area - Ft ²	<u> </u>	<u> </u>
Max. Cross-Sectional	<u> </u>	<u> </u>
Planform	<u> </u>	<u> </u>
Wetted	<u>14.093</u>	<u>0.002</u>
Base	<u> </u>	<u> </u>

TABLE III (Cont'd)

b. Carrier Model

MODEL COMPONENT: WING - W_{44.1}

GENERAL DESCRIPTION: Sweet 747 wing

MODEL SCALE: 0.0125

MODEL DWG: 1318I-1

DRAWING NO.: 65013609, 1318-46

DIMENSIONS:

FULL SCALE MODEL SCALE

Total Data:

Area (Theo.), Ft²

Planform

5500.00 0.860

Span (Theo.), In.

2348.0 29.35

Aspect ratio

6.96 6.96

Incidence angle, deg.

7.0 7.0

Chords, In.:

MAC

327.8 4.10

Fus. sta. of 0.25 MAC

1339.87 16.75

W.P. of 0.25 MAC

190.42 2.38

TABLE III (Cont'd)

b. Carrier Model

MODEL COMPONENT: VERTICAL - $V_{9.1}$

GENERAL DESCRIPTION: Swept vertical tail

MODEL SCALE: 0.0125

MODEL DWG: 1318I-1

DRAWING NO.: 65C13609, 1318-8

DIMENSIONS:

FULL SCALE

MODEL SCALE

TOTAL DATA

Area (Theo), Ft^2	630.0	0.098
Span (Theo), In.	386.5	4.830
Sweepback angles, deg., L.E.	50.12	50.12
Aspect ratio	1.25	1.25
Chord:		
Root (Theo), WP, In.	461.67	5.77
Tip (Theo), WP, In.	157.0	1.96
Mean Aerodynamic Chord, In.	334.16	4.20
Fus. Sta. of 0.25 MAC	2529.6	31.62
W.P. of 0.25 MAC	528.0	6.60

TABLE III (Cont'd)
 b. Carrier Model

MODEL COMPONENT: HORIZONTAL TAIL - H₁₅

GENERAL DESCRIPTION: Sweet 747 horizontal stabilizer

MODEL SCALE: 0.0125

MODEL NO.: 1318I-1

DRAWING NO.: 65C13609, 1318-5

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Area (Theo.), ft ²		
Planform	1470.0	0.230
Span (Theo), In.	873.00	10.91
Aspect ratio	3.6	3.6
Chords:		
MAC, In.	271.6	3.40
Fus. Sta. of 0.25 MAC, In.	2563.9	32.05
W.P. of 0.25 MAC, In.	175.0	2.19
Sweepback angle of 0.25 MAC, deg.	37.5	37.5

TABLE III (Cont'd)
 b. Carrier Model

MODEL COMPONENT: HORIZONTAL TAIL - H_{15.6}

GENERAL DESCRIPTION: Horizontal tail, H₁₅, with vertical fins on each
 tip at body B.L. 427.3

MODEL SCALE: 0.0125

MODEL DWG: 1318I-1

DRAWING NO.: 65C13609, 1318-5, 1318-70

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Fin Exposed Data (one side):		
Area = Ft ²	200.0	0.0312
Span, In.	252.0	3.15
Chord, In.	113.6	1.42

TABLE III (Cont'd)
 b. Carrier Model

MODEL COMPONENT: M_{25}

GENERAL DESCRIPTION: Inboard 747, JT9D nacelle strut

MODEL SCALE: 0.0125

MODEL DWG: 1318I-1

DRAWING NO.: 65C13609, 1318-60

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Wing B.L. of nacelle C_L , In.	470.0	5.875
Cant angle deg., inboard	2.0	2.0

TABLE III (Cont'd)

b. Carrier Model

MODEL COMPONENT: M₂₆

GENERAL DESCRIPTION: Outboard 71,7, JT9D

Strut

MODEL SCALE: 0.0125

MODEL DWG: 1318I-1

DRAWING NO.: 65C13609, 1318-60

DIMENSIONS:

	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
W L of C _L , In.	834.0	10.425
Cant angle, deg. inboard	2.0	2.0

TABLE III (Cont'd)

b. Carrier Model

MODEL COMPONENT: N57

GENERAL DESCRIPTION: Inboard fan cowl and primary 747 nacelle, flow-through type.

MODEL SCALE: 0.0125

MODEL DWG: 1318I-1

DRAWING NO.: 65013609, 1318-60

TABLE III (Cont'd)

b. Carrier Model

MODEL COMPONENT: N₅₈

MODEL DESCRIPTION: Outboard fan cowl and primary 747 nacelle, flow-through type.

MODEL SCALE: 0.0125

MODEL DWG: 1318I-1

DRAWING NO.: 65C13609, 1318-60

TABLE III (Cont'd)

b. Carrier Model

MODEL COMPONENT: SPOILERS - S₁₋₁₂

GENERAL DESCRIPTION: Multi-panel flight spoilers. Four outboard and two inboard spoilers per side. Subscript denotes spoiler panel S₁ is the most outboard L.H. panel and S₁₂ is most outboard R.H. panel.

MODEL SCALE: 0.0125

MODEL DWG: 1318I-1

DRAWING NO.: 65C13609, 1318-56

DIMENSIONS: (ONE PANEL)	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Outboard S ₁₋₄ and S ₉₋₁₂ (Ft ²)	21.48	0.0034
Span (equivalent), In.	75.00	0.94
Chord, In.	41.28	0.52
Inboard, S ₅₋₆ and S ₇₋₈ (Ft ²)	35.31	0.0055
Span (equivalent), In.	90.00	1.130
Chord, In.	56.52	0.71

TABLE III. (Continued)

b. Carrier Model

MODEL COMPONENT: T₁₄

GENERAL DESCRIPTION: Flap track fairings, four on each side

MODEL SCALE: 0.0125

DRAWING NO.: 65C13609, 1318-67

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
WBL of Track No. 1, In.	235.3	2.94
2, In.	353.0	4.41
3, In.	585.0	7.31
4, In.	743.6	9.30
Distance from wing Trailing edge to:		
Track trailing edge, In.	44.0	0.55

TABLE III. Concluded.

MODEL COMPONENT : Mounting Strut - S₁
 GENERAL DESCRIPTION : Blade strut attachment to orbiter aft upper fuselage where vertical tail is normally mounted. Strut leading edge and lower trailing edge conform to the vertical tail planform. Airfoil section is blunted diamond. The tip of the strut mounts to a sting.
 MODEL SCALE: 0.0125
 DRAWING NUMBER: Rockwell W-11335H

DIMENSIONS :	MODEL SCALE
Theoretical intersection of L.E. with fuselage ML, in.	
x_0	15.973
z_0	6.250
Leading edge sweep angle, deg.	45.0
Trailing edge sweep angle, deg.	45.0
chord length, in.	2.38
maximum thickness, in.	0.52
distance from L.E. to maximum thickness, in.	1.42
position of sting C_L , in. Z_0	12.835

TABLE IV.
CA23B DATASET DESCRIPTION
(INTERPOLATED/INCREMENTED DATASETS)

DATASET TYPE	DESCRIPTION
RNHXXX	Stability axis coefficient data for 747 carrier.
ANHXXX	Body axis coefficient data for 747 carrier.
BNHXXX	Pressure coefficient data for 747 carrier.
CNHXXX	Stability axis coefficient data for Orbiter.
DNHXXX	Body axis coefficient data for Orbiter.
ENHXXX	Pressure coefficient data for Orbiter.
UNH*XX	Interpolated data for 747 carrier.
VNH*XX	Interpolated data for Orbiter (α_c 2nd indep. var.)
ZNH*XX	Interpolated data for Orbiter (α_0 2nd indep. var.)
PNH*XX	Incremental proximity effects data for 747 carrier.
TNH*XX	Incremental proximity effects for Orbiter. (α_0 2nd indep. var.)
4NH*XX	Incremental proximity effects for Orbiter. (α_c 2nd indep. var.)

* 0 = IORB interpolation

X = IORB and DX interpolation

Y = IORB and DY interpolation

M = MACH interpolation

TABLE V.

CA23B COEFFICIENT SCHEDULE

Dataset Type	Dataset Sequence	1st ID.	2nd ID.	COEFFICIENTS																
				1	2	3	4	5	6	7	8	9	10							
RNHXXX	004-005	DZ	ALPHAC	MACH	CL	CD	CLM	CLM	CY	CYN	CBL									
	008-025,027-042			MACH	ALPHAO	DX	DY	DY	CL	CD	CLM	CY	CYN	CBL						
ANHXXX	004-005			BETAC	PHIC	CA	CN	CN	CSL	CLN										
	008-025,027-042			BETAC	BETAO	PHIC	PHIO	PHIO	CA	CN	CSL	CLN								
BNHXXX	004-005			XZCP	XYCP	CPCC	CPSB1	CPSB1	CPSB2											
	008-025,027-042			XZCP	XYCP	CPCC	CPSB1	CPSB1	CPSB2											
CNHXXX	008-025,027-042			MACH	ALPHAO	DX	DY	DY	CL	CD	CLM	CY	CYN	CBL						
	043-046			MACH	CL	CD	CLM	CLM	CY	CD	CLM	CY	CYN	CBL						
DNHXXX	047-048	DX	ALPHAO	MACH	CL	CD	CLM	CLM	CY	CD	CLM	CY	CYN	CBL						
	008-025,027-042	DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	PHIO	CA	CN	CSL	CLN								
ENHXXX	043-046	DZ	ALPHAO	BETAO	PHIO	CA	CN	CN	CSL	CLN										
	047-048	DX	ALPHAO	BETAO	PHIO	CA	CN	CN	CSL	CLN	DZ									
UNHXXX	008-025,027-042	DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2							
	043-046	DZ	ALPHAO	XZCP	XYCP	CPC	CPB1	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2							
UNHXXX	047-048	DX	ALPHAO	XZCP	XYCP	CPC	CPB1	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2							
	008-011,013	DZ	ALPHAC	IORB	MACH	DX	DY	DY	CL	CD	CLM	CY	CYN	CBL						
UNHXXX	020-025,027																			
	034-035,040																			
UNHXXX	010,013-017																			
	027-031,034																			
UNHXXX	010,013,018-019																			
	027, 032-034																			
UNHXXX	040-042																			

TABLE V.
CA23B COEFFICIENT SCHEDULE (Concluded)

Dataset Type	Dataset Sequence	1st ID.	2nd ID.	COEFFICIENTS															
				1	2	3	4	5	6	7	8	9	10						
TNHOXX	008-011,013	DZ	ALPHAO	DCL	DCD	DCLM	DCY	DCYN	DCBL										
	020-025,027																		
	034-040																		
TNHXXX	010,013-017																		
	027-031,034																		
TNHYXX	010,013,018-019																		
	027,032-034																		
4NH0XX	008-011,013		ALPHAC																
	020-025,027																		
	034-040																		
4NHXXX	010,013-017																		
	027-031,034																		
4NHYXX	010,013,018-019																		
	027,032-034																		

NOTE: IORB = ALPHAO (α_0) - ALPHAC (α_c)

IORB in parameter block is a nominal value.

ID = independent variable.

0 = IORB interpolation

X = IORB and DX interpolation

Y = IORB and DY interpolation

M = Mach interpolation

TABLE VI.

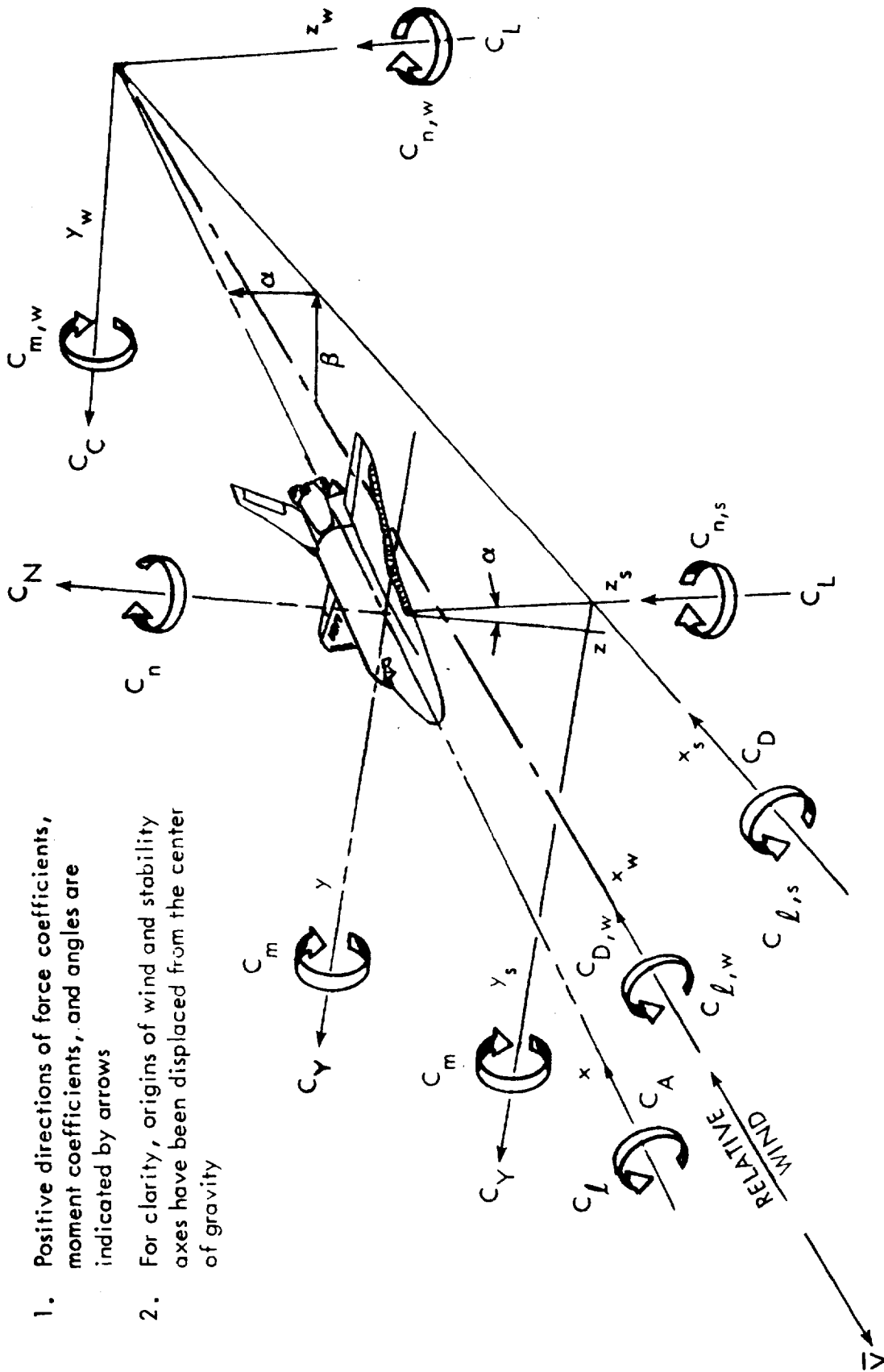
INCREMENTAL DATA SET SUMMARY

(refer to Data Reduction)

$\Delta C_{747}^{(ORB)}$	$C_{747}^{(ORB)}$	$C_{747}^{(ISOL)}$	$\Delta C_{ORB}^{(747)}$	$C_{ORB}^{(747)}$	$C_{ORB}^{(ISOL)}$
PNH008	UNH008	RNH004	TNH008	ZNH008	CNH043
PNH009	UNH009	RNH004	TNH009	ZNH009	CNH043
PNH010	UNH010	RNH005	TNH010	ZNH010	CNH043
PNHX10	UNHX10	RNH005	TNHX10	ZNHX10	CNH043
PNHY10	UNHY10	RNH005	TNHY10	ZNHY10	CNH043
PNH011	UNH011	RNH004	TNH011	ZNH011	CNH043
PNH013	UNH013	RNH005	TNH013	ZNH013	CNH043
PNHX13	UNHX13	RNH005	TNHX13	ZNHX13	CNH043
PNHY13	UNHY13	RNH005	TNHY13	ZNHY13	CNH043
PNHX14	UNHX14	RNH005	TNHX14	ZNHX14	CNH043
PNHX15	UNHX15	RNH005	TNHX15	ZNHX15	CNH043
PNHX16	UNHX16	RNH005	TNHX16	ZNHX16	CNH043
PNHX17	UNHX17	RNH005	TNHX17	ZNHX17	CNH043
PNHY18	UNHY18	RNH005	TNHY18	ZNHY18	CNH043
PNHY19	UNHY19	RNH005	TNHY19	ZNHY19	CNH043
PNH020	UNH020	RNH005	TNH020	ZNH020	CNH046
PNH021	UNH021	RNH004	TNH021	ZNH021	CNH046
PNH022	UNH022	RNH005	TNH022	ZNH022	CNH046
PNH023	UNH023	RNH005	TNH023	ZNH023	CNH046
PNH024	UNH024	RNH004	TNH024	ZNH024	CNH046
PNH025	UNH025	RNH004	TNH025	ZNH025	CNH046
PNH027	UNH027	RNH005	TNH027	ZNH027	CNH045
PNHX27	UNHX27	RNH005	TNHX27	ZNHX27	CNH045
PNHY27	UNHY27	RNH005	TNHY27	ZNHY27	CNH045
PNHX28	UNHX28	RNH005	TNHX28	ZNHX28	CNH045
PNHX29	UNHX29	RNH005	TNHX29	ZNHX29	CNH045
PNHX30	UNHX30	RNH005	TNHX30	ZNHX30	CNH045
PNHX31	UNHX31	RNH005	TNHX31	ZNHX31	CNH045
PNHY32	UNHY32	RNH005	TNHY32	ZNHY32	CNH045
PNHY33	UNHY33	RNH005	TNHY33	ZNHY33	CNH045
PNH034	UNH034	RNH005	TNH034	ZNH034	CNH045
PNHX34	UNHX34	RNH005	TNHX34	ZNHX34	CNH045
PNHY34	UNHY34	RNH005	TNHY34	ZNHY34	CNH045
PNH035	UNH035	RNH005	TNH035	ZNH035	CNH045
PNH036	UNH036	RNH005	TNH036	ZNH036	CNH045
PNH037	UNH037	RNH004	TNH037	ZNH037	CNH045
PNH038	UNH038	RNH005	TNH038	ZNH038	CNH044
PNH039	UNH039	RNH005	TNH039	ZNH039	CNH043
PNH040	UNH040	RNH005	TNH040	ZNH040	CNH043

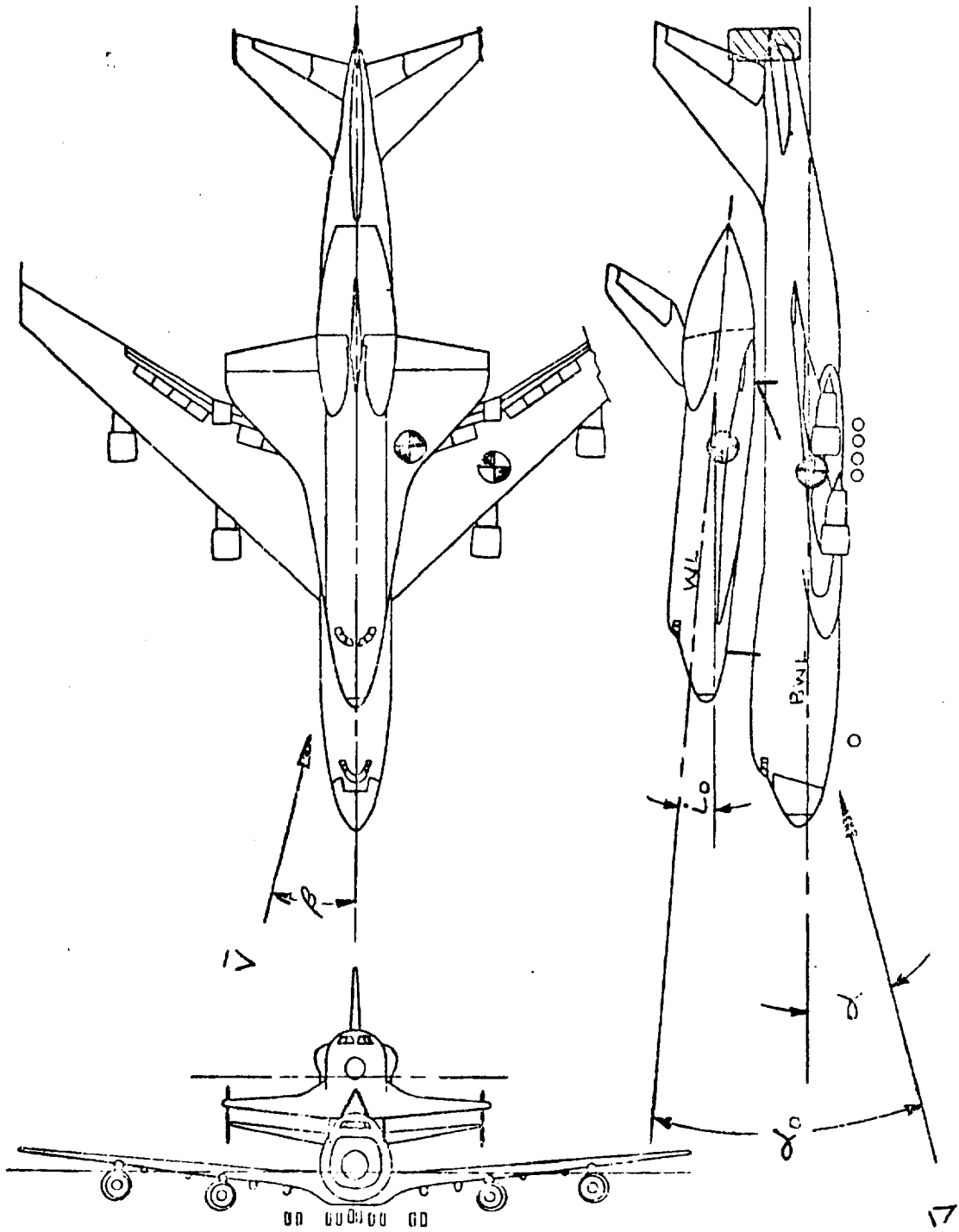
Notes:

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



a. Orbiter

Figure 1. - Axis Systems.



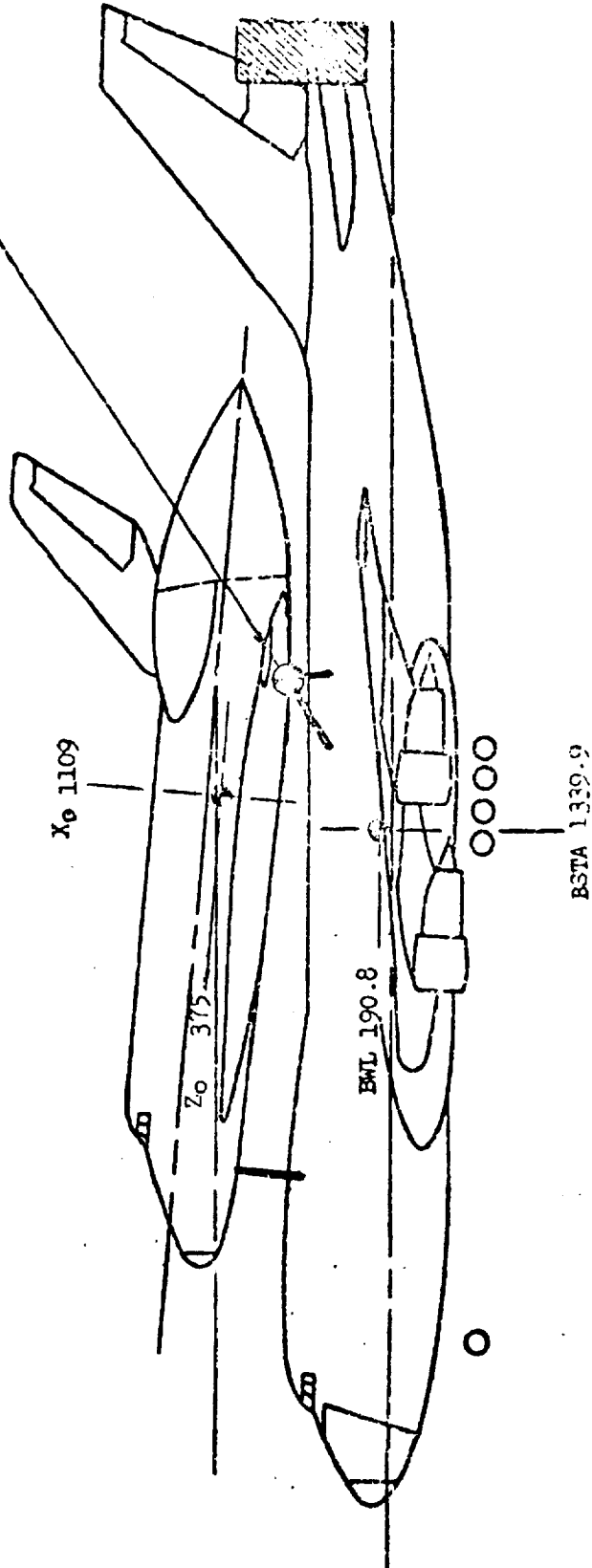
b. Orbiter/747 angular relations

Figure 1. - Concluded.

REFERENCE DIMENSIONS (FS)

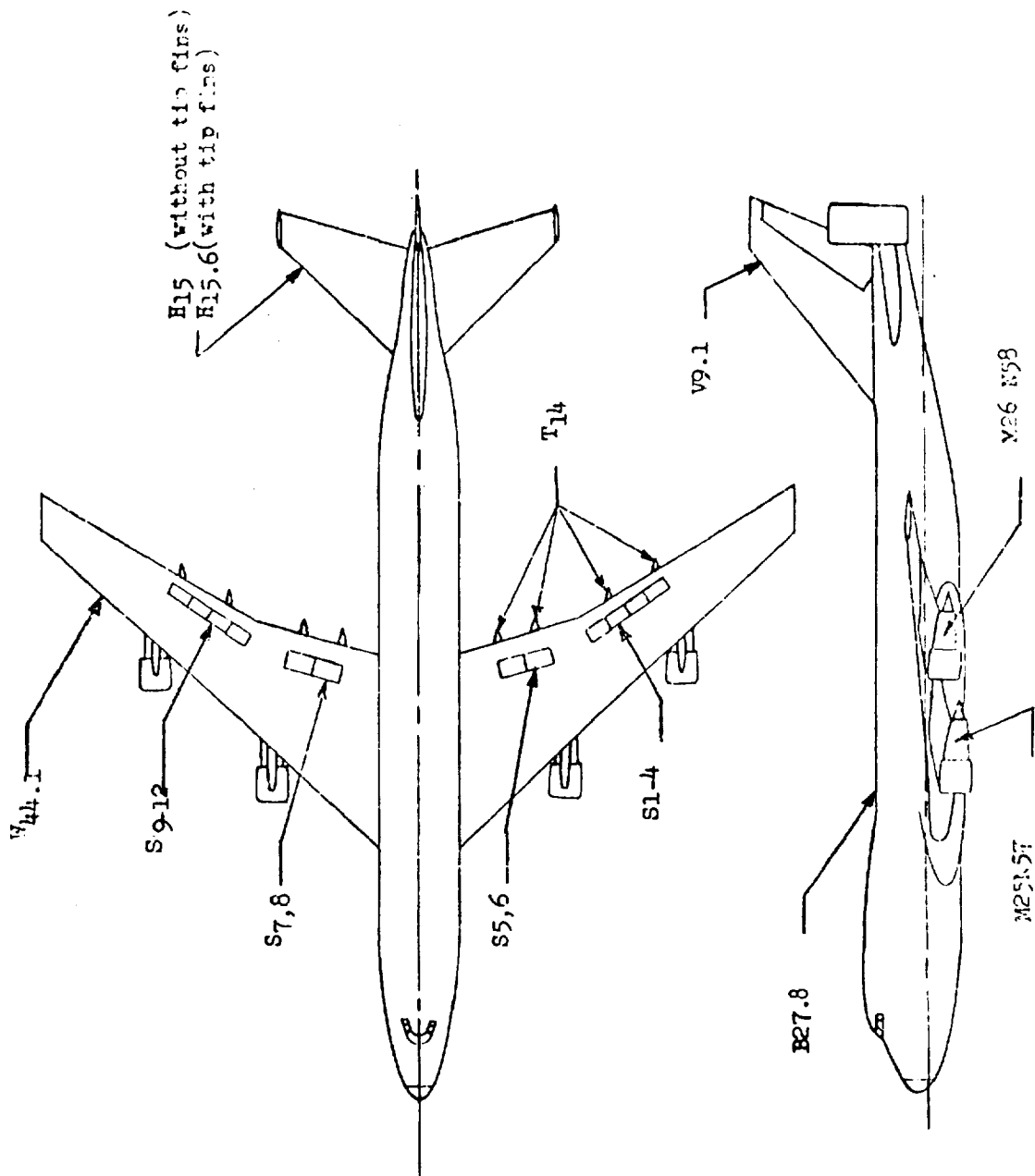
	ORBITER	747 CARRIER
WING AREA ~ Ft ²	2600	5500
MAC (c) ~ INCHES	474.61	327.75
SPAN (b) ~ INCHES	936.68	2348.04
MOMENT REFERENCE CENTER	67.5% LR	25.0 % C
F.S. ~ INCHES	1109.0	1339.9
W.P. ~ INCHES	375.0	190.8

BWL 400
 BSTA 1667
 (X₀ 26 32)
 (Z₀ 267 5)
 (X₀ 131 0)



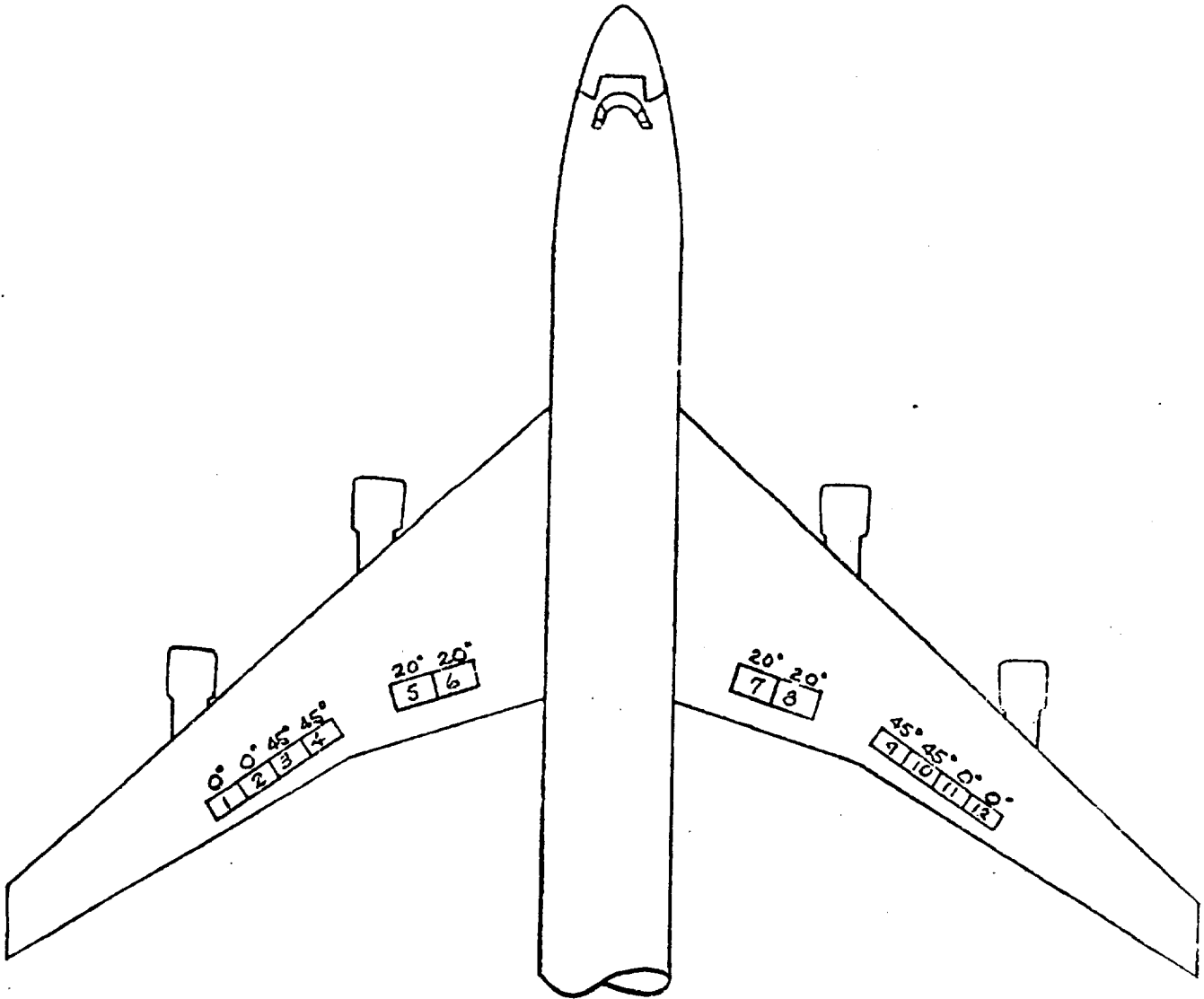
a. Orbiter/747 flight test configuration reference dimensions

Figure 2. - Model Sketches

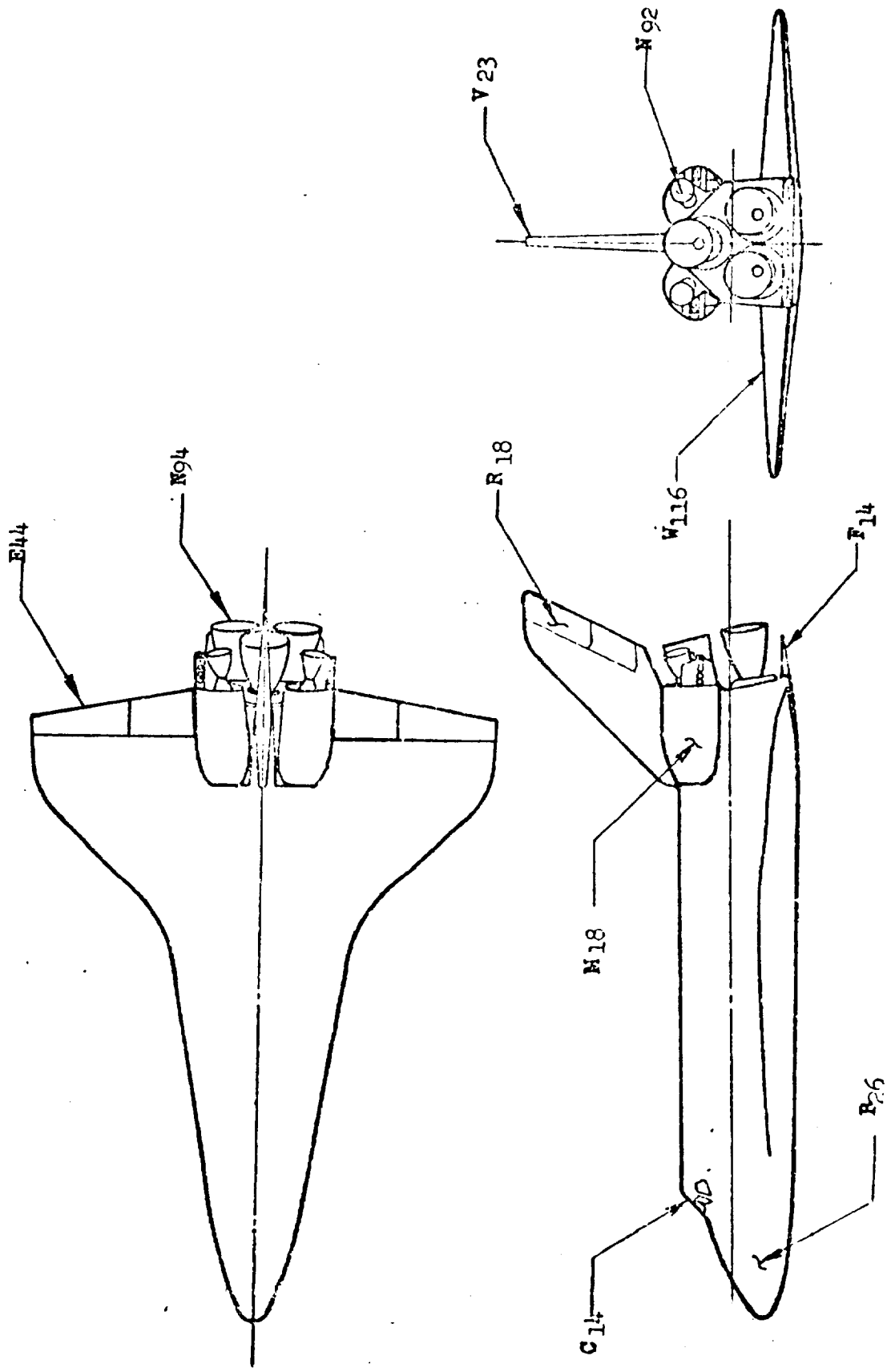


b. 747-100 configuration (Model 1318I-1)

Figure 2. - Continued.

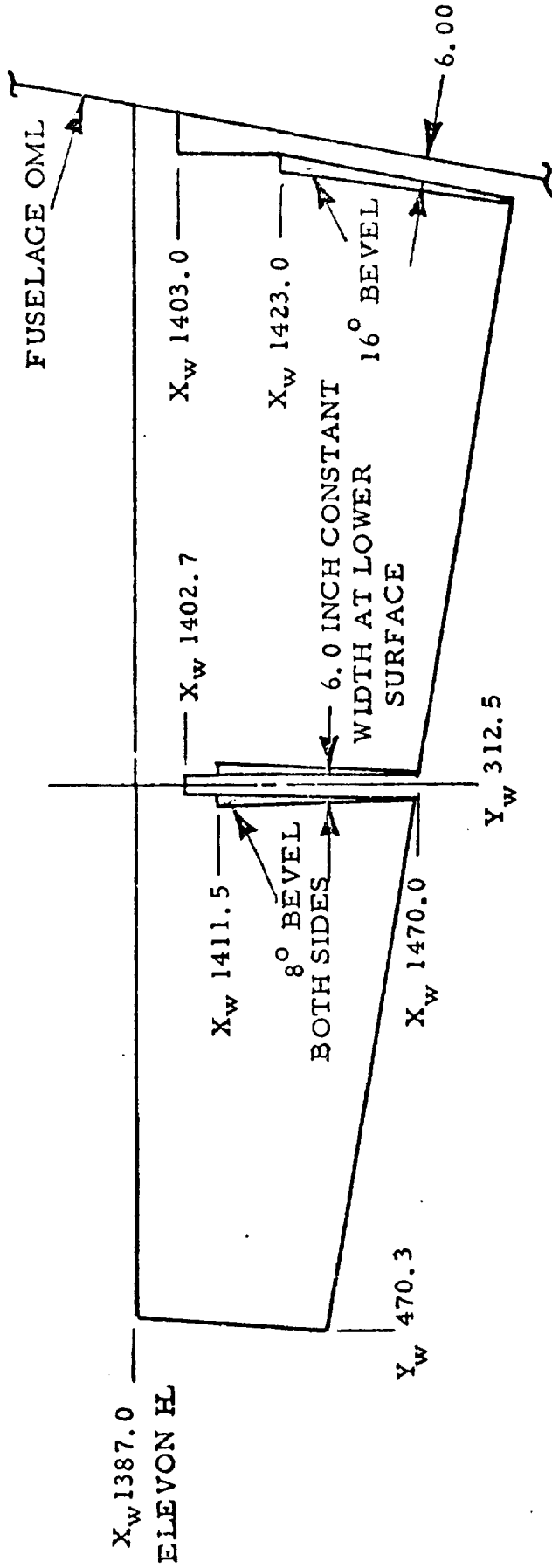


c. In-flight spoiler configuration
 Figure 2. - Continued.



3. SSV Orbiter Configuration (VC70-000002)
 Figure 2. - Continued.

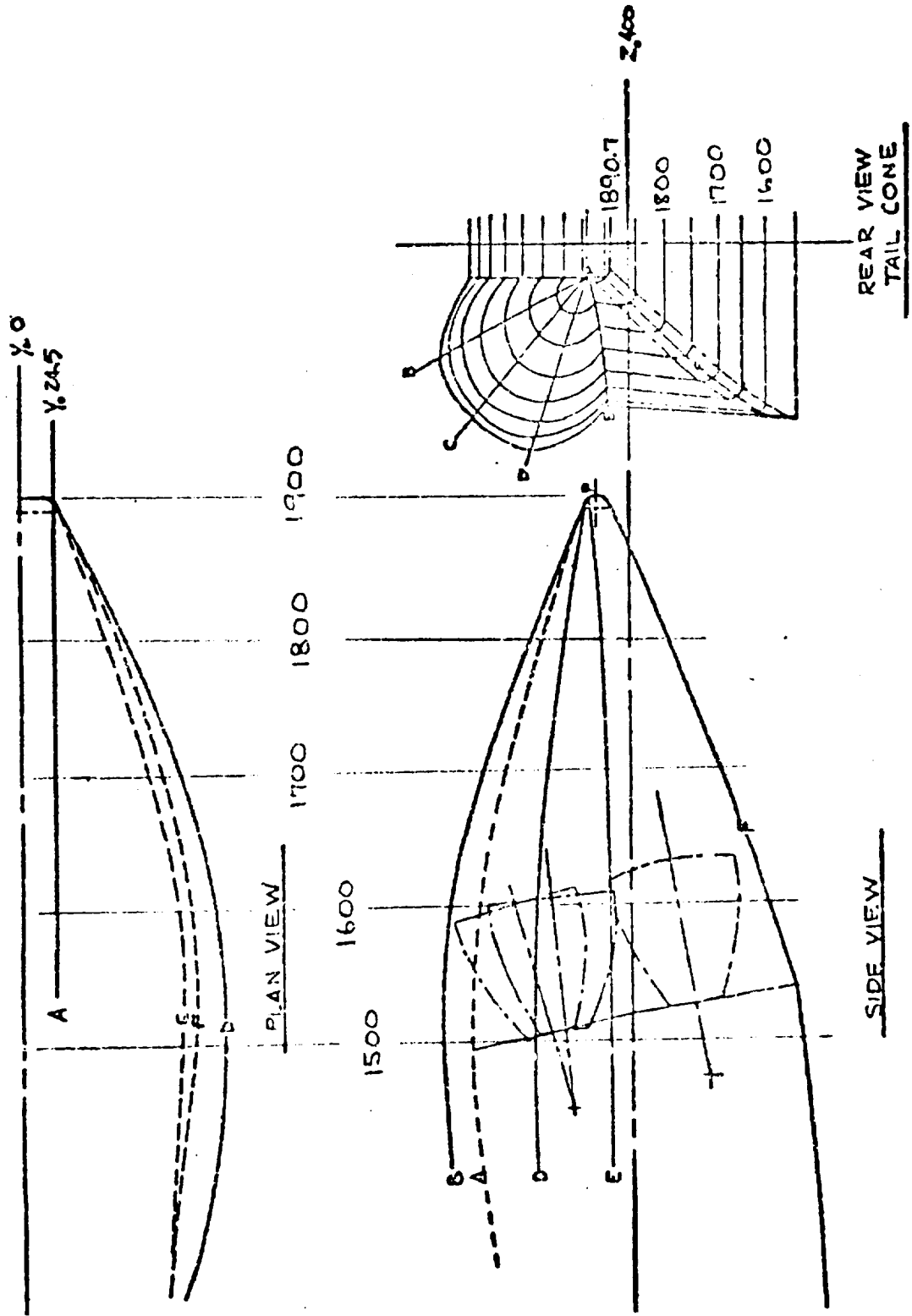
E₄₄ elevon with 6.0 inch gaps installed. Flipper doors, centerbody pieces, and tip seals are not simulated.



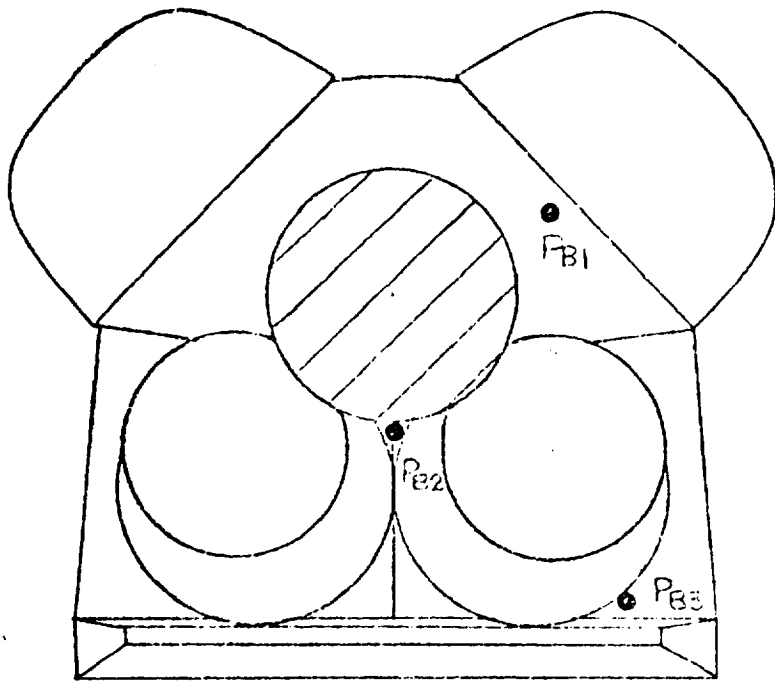
(ALL DIMENSIONS ARE FULL SCALE, INCHES)

(VIEW IS PERPENDICULAR TO WING REFERENCE PLANE)

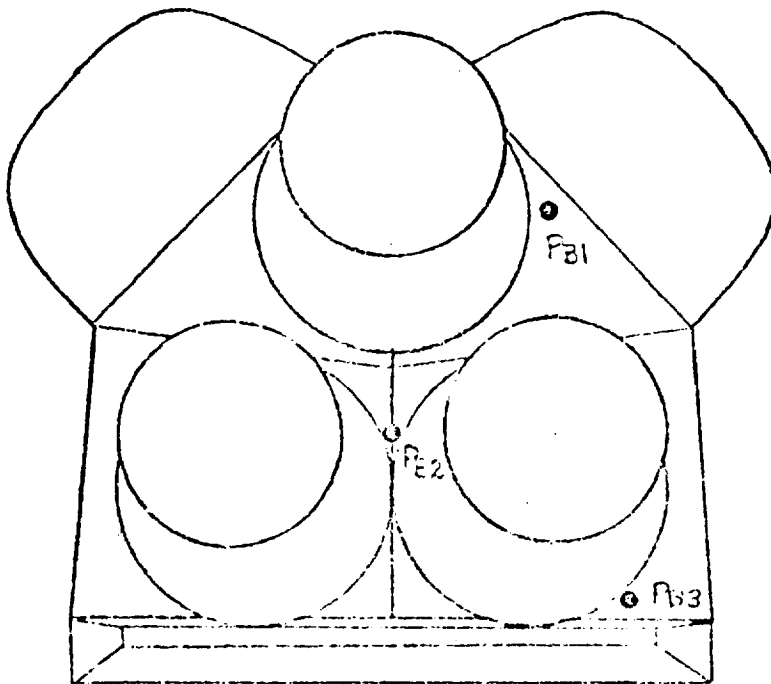
e. Elevon - E₄₄
Figure 2. - Continued.



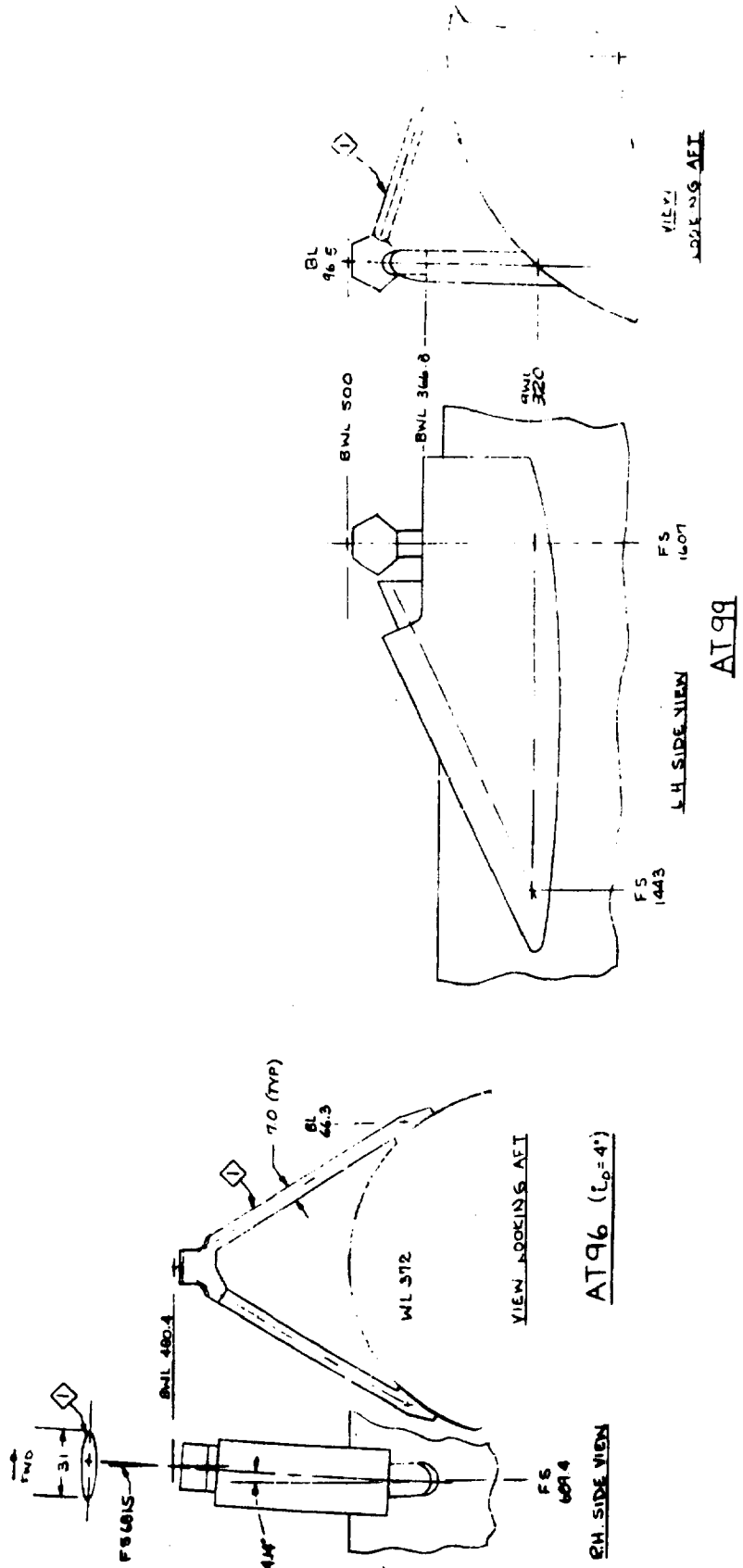
f. Orbiter tail cone TC₄ (X_{3B})
 Figure 2. - Continued.



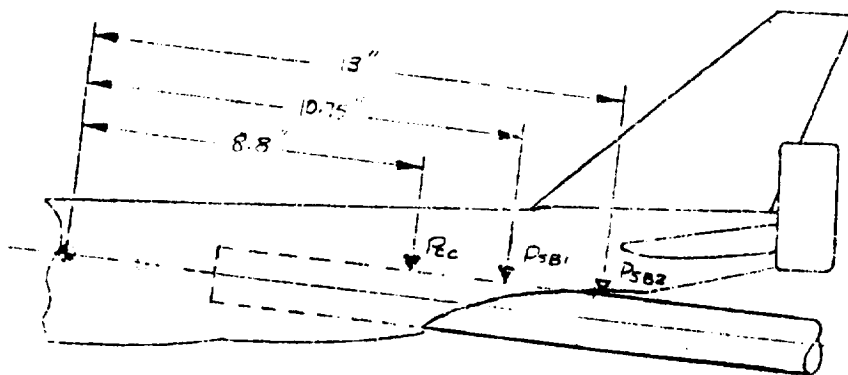
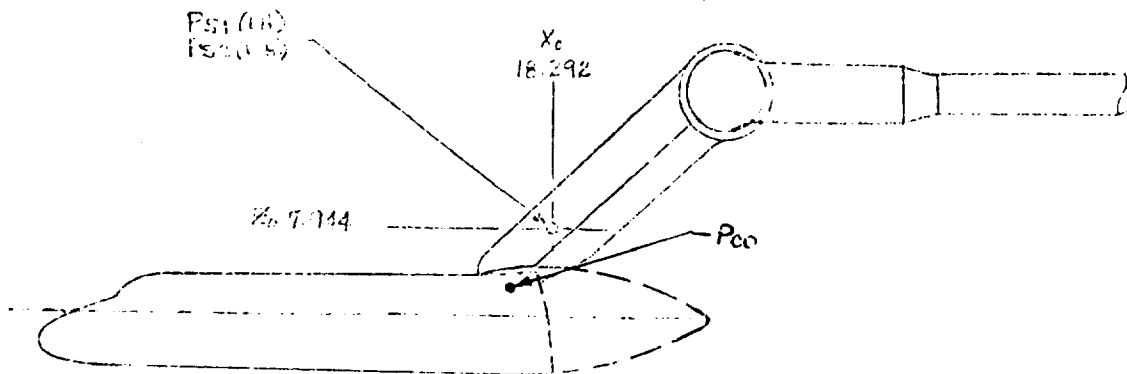
STING MOUNTED



g. Orbiter base pressure tap locations
Figure 2. - Continued.



h. Orbiter/747 attach hardware AT96 and AT99
 Figure 2. - Continued.



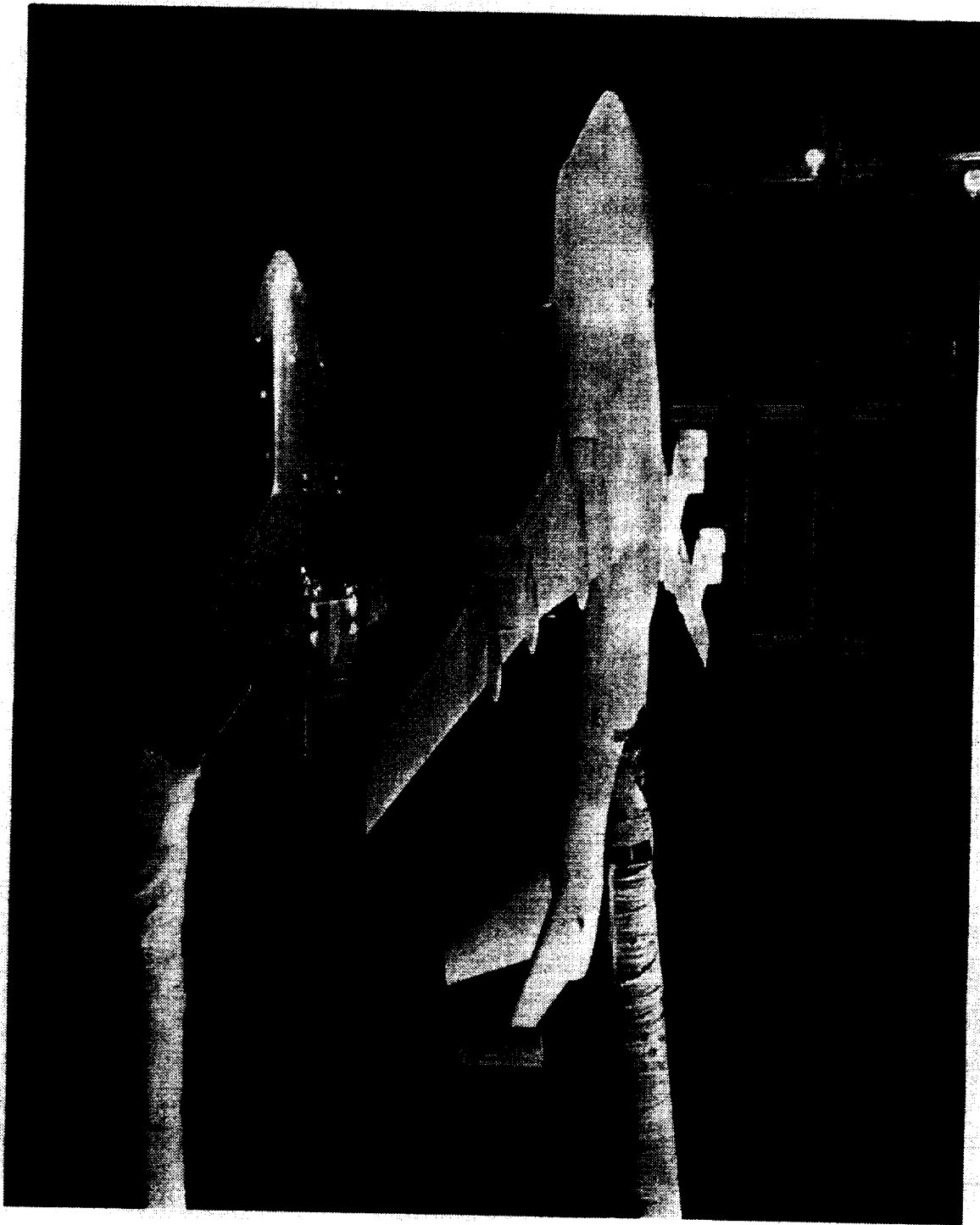
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OF POOR QUALITY

i. 747 sting cavity and orbiter blade strut pressure tap locations
Figure 2. - Concluded.



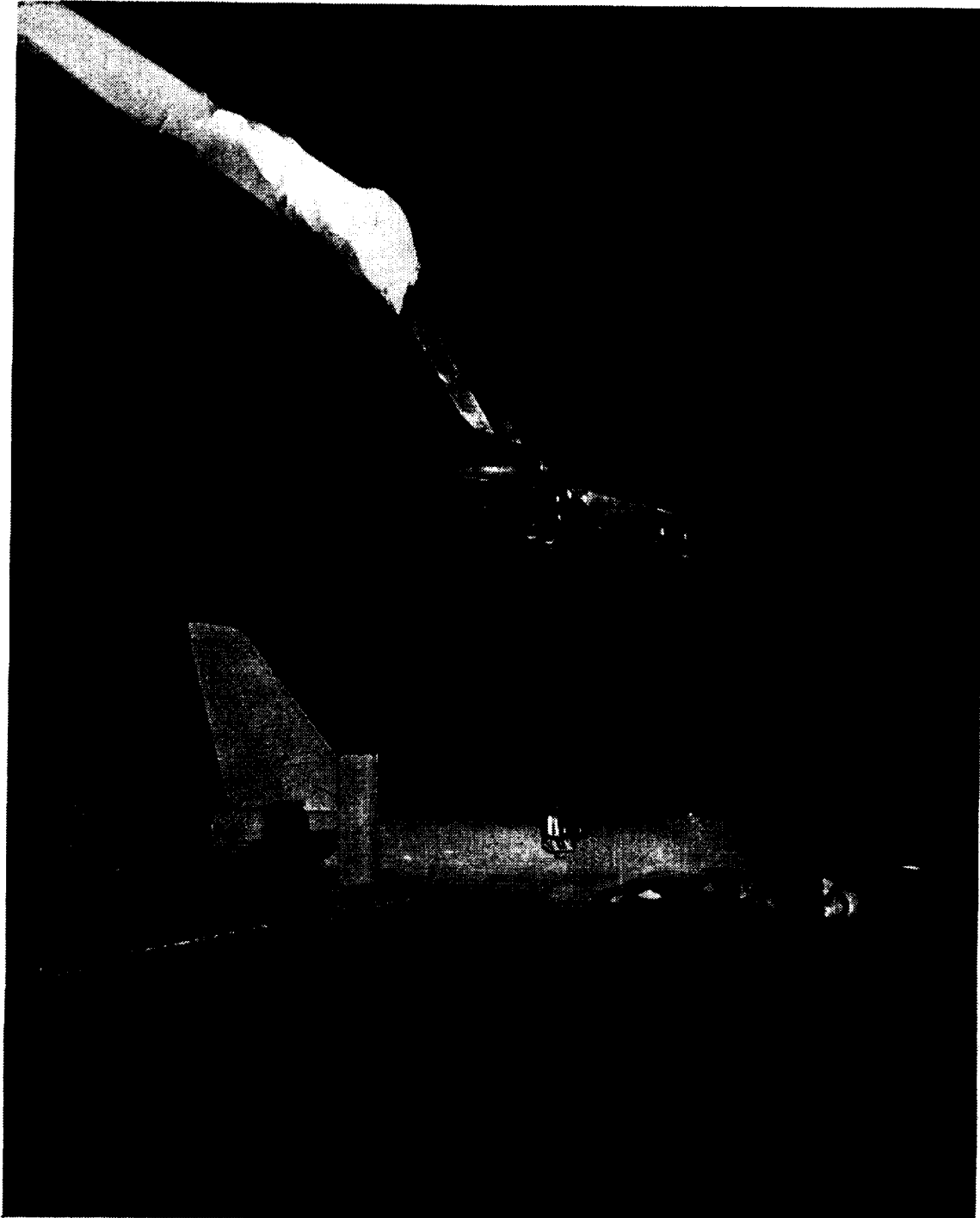
a. Orbiter separation sequence
Figure 3. - Model Installation Photographs.

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b. Separation of Orbiter with TC₄ in proximity to 747 carrier

Figure 3. - Continued.



c. Three-quarter rear view showing aft attach fairings on 747 with Orbiter separated

Figure 3. - Continued.

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d. Orbiter Without TC₄ in proximity to 747 carrier
Figure 3. - Continued.

APPENDIX
TABULATED SOURCE DATA

Tabulated plotted data may be obtained upon
request from Data Management Services.



ARC 14-120(CA23B) 747/1 ATI

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC STAB = -1.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 MACH = .600
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 MACH = .600

RUN NO. 41/ 0 RN/L = 3.40 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	CL	CD	CLM	CY	CYN	CBL
131.927	59363	-.49054	.07664	.25812	.00224	-.00282	.00054	
131.734	59393	-.36247	.06026	.22770	.00350	-.00267	.00015	
131.585	59370	-.27172	.05288	.20400	.00513	-.00249	-.00042	
131.467	59291	-.18543	.04771	.17618	.00692	-.00246	.00058	
131.339	59315	-.09488	.04553	.15059	.00890	-.00231	.00024	
131.218	59328	-.01062	.04518	.12665	.01194	-.00263	.00012	
131.073	59202	.08467	.04543	.10025	.01167	-.00204	.00110	
130.941	59205	.17312	.04714	.07877	.01351	-.00211	.00086	
130.802	59291	.25409	.04987	.05901	.01476	-.00213	.00108	
130.668	59294	.35229	.05364	.03661	.01585	-.00225	.00137	
130.501	59236	.44435	.05928	.01961	.01635	-.00233	.00144	
130.357	59254	.52433	.06623	.00976	.01662	-.00204	.00194	
130.219	59394	.61100	.07792	-.00216	.01722	-.00178	.00216	
130.047	8.200	.69559	.09664	.00206	.01631	-.00103	.00298	
	GRADIENT	-.00016	-.00062	-.02444	.00159	-.00006	.00018	

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ARC 14-120(CA23B) 747/1 AT1

(RNH005) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 MACH = .600

RUN NO. 51/ 0 RN/L = 3.36 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	CL	CD	CLM	CY	CYN	CBL
130.569	-5.190	.59186	-.41372	.07099	-.05660	.00475	-.00349	.00081
130.436	-3.773	.59183	-.29293	.05678	-.09702	.00681	-.00361	.00027
130.276	-2.866	.59045	-.21752	.05099	-.12365	.00881	-.00351	-.00040
130.158	-1.854	.59142	-.11834	.04663	-.15887	.01266	-.00355	-.00058
130.031	-.858	.59094	-.03064	.04511	-.18750	.01209	-.00308	.00018
129.869	-.149	.59225	.06273	.04541	-.21556	.01241	-.00331	.00070
129.728	1.216	.59218	.15824	.04812	-.24076	.01220	-.00300	.00099
129.596	2.190	.59280	.25470	.05205	-.26286	.01330	-.00286	.00069
129.434	3.207	.59133	.34288	.05696	-.28019	.01496	-.00289	.00089
129.329	4.111	.59127	.42312	.06210	-.29188	.01406	-.00261	.00091
129.085	5.180	.59122	.51421	.07014	-.30219	.01534	-.00266	.00123
128.927	6.172	.59136	.59770	.07934	-.30790	.01608	-.00245	.00185
128.889	7.226	.59077	.69803	.09334	-.31335	.01580	-.00198	.00159
128.737	8.205	.59073	.77554	.11185	-.30176	.01682	-.00146	.00276
GRADIENT	.00008	.09147	.00089	.00252	.00081	.00012	.00016	.00016

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(RNH008) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 81/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
4.365	.192	6.79528	-.02554	-.20623	-.12649	.04226	.25234	.00742	-.00206	.00043
2.954	2.364	8.20568	-.05088	.20371	.05473	.04487	.19512	.01177	-.00291	.00116
3.443	4.308	10.25770	-.08104	.23854	.21255	.04968	.15943	.01539	-.00297	.00124
GRADIENT	.00020	.83739	-.02607	.10961	.08238	.00179	-.02264	.00194	-.00022	.00020

DZ	ALPHAC	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
6.994	-.126	6.00552	-.12176	-.34829	-.13659	.04351	.23701	.00740	-.00216	.00046
7.541	2.378	8.29366	.00073	-.32784	.07533	.04605	.17544	.01199	-.00213	.00074
7.335	4.361	10.30330	-.08161	-.49519	.23191	.05166	.14057	.01590	-.00227	.00038
GRADIENT	.00047	.95577	.01067	-.03097	.08222	.00178	-.02162	.00189	-.00002	-.00001

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO.	83 / 0	RN/L =	3.36	GRADIENT INTERVAL =	-5.00 /	5.00	CLM	CY	CYN	CBL
DZ	ALPHA	CL	CD	CLM	CY	CYN	CBL			
9.751	6.01990	-.12587	.04436	.22348	.00694	-.00207	.07025			
9.637	8.28560	.04687	.04687	.16388	.01139	-.00208	.00042			
9.522	10.30680	-.06067	.05234	.13143	-.01452	-.00196	.00093			
	.94128	.02611	.02708	-.02041	.00167	.00002	.00015			

RUN NO.	84 / 0	RN/L =	3.35	GRADIENT INTERVAL =	-5.00 /	5.00	CLM	CY	CYN	CBL
DZ	ALPHA	CL	CD	CLM	CY	CYN	CBL			
14.752	6.14126	-.10545	.04506	.20033	.00772	-.00226	.00006			
15.063	8.39154	.02080	.04785	.14230	.01105	-.00183	.00037			
15.188	10.47500	-.10713	.05365	.11139	.01568	-.00221	.00065			
	.95993	.00147	.08202	-.01987	.00175	.00002	.00017			

RUN NO.	85 / 0	RN/L =	3.35	GRADIENT INTERVAL =	-5.00 /	5.00	CLM	CY	CYN	CBL
DZ	ALPHA	CL	CD	CLM	CY	CYN	CBL			
29.536	6.09616	-.09164	.04521	.17299	.00687	-.00223	.00084			
29.860	8.37419	.00094	.04828	.11921	.01204	-.00221	.00048			
29.902	10.26970	-.13705	.05405	.08575	.01594	-.00248	.00096			
	.96007	-.00776	.08290	-.02021	.00209	-.00005	.00002			

RUN NO.	86 / 0	RN/L =	3.35	GRADIENT INTERVAL =	-5.00 /	5.00	CLM	CY	CYN	CBL
DZ	ALPHA	CL	CD	CLM	CY	CYN	CBL			
44.873	6.08741	-.08155	.04511	.16214	.00804	-.00248	.00067			
44.666	8.38191	-.00515	.04873	.10568	.01275	-.00225	.00075			
45.029	10.32980	-.21858	.05493	.07253	.01453	-.00220	.00094			
	.95852	-.02730	.08660	-.02044	.00150	.00006	.00006			

RUN NO.	87 / 0	RN/L =	3.34	GRADIENT INTERVAL =	-5.00 /	5.00	CLM	CY	CYN	CBL
DZ	ALPHA	CL	CD	CLM	CY	CYN	CBL			
50.039	6.00790	-.05961	.04566	.15837	.00813	-.00246	.00030			
50.412	8.42595	-.20322	.04509	.10373	.01269	-.00231	.00105			
50.166	10.27840	-.19609	.05489	.06761	.01602	-.00241	.00128			
	.95987	-.06045	.08404	-.02020	.00178	.00002	.00022			

ARC 14-120(CA238) 747/1 AT: 02S1 (CARRIER DATA)

(RNH009) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 91/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

	ALPHAC	MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
DZ 8.075	.274	.59107	8.98241	-2.26005	-4.8266	-.13112	.04079	.28083	.00637	-.00257	.00936
7.276	2.380	.59100	10.26110	-.15449	-.50319	.04574	.04325	.23122	.01073	-.00232	.00081
7.800	4.334	.59115	12.33510	-.09343	-.54526	.20057	.04794	.19858	.01342	-.00216	.00051
GRADIENT	.00002	.00002	.62302	.53973	-.01535	.08173	.00175	-.02030	.00124	.00010	.00004

RUN NO. 92/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

	ALPHAC	MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
DZ 9.930	-.015	.59119	8.14574	-.14314	-.47456	-.14129	.04223	.25910	.00598	-.00224	.00067
10.158	2.498	.59200	10.44690	-.03224	-.44624	.05984	.04388	.21521	.01137	-.00255	.00103
9.843	4.339	.59032	12.29420	-.06267	-.55214	.20916	.04917	.18271	.01400	-.00226	.00081
GRADIENT	-.00017	-.00017	.95062	-.01999	-.01611	.08046	.00154	-.01754	.00186	-.00001	.00004

RUN NO. 93/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

	ALPHAC	MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
DZ 14.862	-.101	.59246	8.04677	-.13258	-.38124	-.13335	.04315	.23726	.00559	-.00213	.00049
14.490	2.534	.59206	10.40940	-.00278	-.47713	.07903	.04573	.19003	.01087	-.00235	.00095
15.108	4.322	.59336	12.32420	-.12014	-.54510	.22164	.05083	.15600	.01392	-.00218	.00082
GRADIENT	.00018	.00018	.96159	.00646	-.03699	.08027	.00168	-.01834	.00189	-.00002	.00008

RUN NO. 94/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

	ALPHAC	MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
OZ 29.926	-.027	.59233	8.10042	-.14976	-.52747	-.09066	.04491	.19330	.00679	-.00224	.00054
29.957	2.539	.59264	10.47820	-.09792	-.43116	.11534	.04758	.14450	.01248	-.00262	.00110
29.720	4.365	.59102	12.31910	-.14966	-.56262	.26221	.05347	.11135	.01683	-.00279	.00122
GRADIENT	-.00027	-.00027	.95845	.00134	-.00504	.08035	.00189	-.01868	.00228	-.00013	.00016

RUN NO. 95/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

	ALPHAC	MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
DZ 44.465	-.192	.59190	7.89170	-.04396	-.57621	-.09977	.04486	.18072	.00630	-.00222	.00055
44.798	2.406	.59246	10.32970	-.06445	-.44672	.11981	.04754	.12800	.01117	-.00222	.00111
44.825	4.485	.59147	12.45250	-.18625	-.47087	.29730	.05490	.08593	.01605	-.00250	.00096
GRADIENT	-.00008	-.00008	.97370	-.02950	.02364	.08489	.00210	-.02006	.00208	-.00006	.00009

DATE 22 MAR 76

TABULATED SOURCE DATA - CA23B

PAGE 5

ARC 14-120(CA23B) 747/1 ATI 0251 (CARRIER DATA)

(RNHD09) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SO.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
SCALE = .0125

RUN NO. 96/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.555	.078	.59172	8.07496	-.00083	-.51299	-.07765	.04550	.17100	.00692	-.00261	.00008
50.407	2.550	.59179	10.48780	-.00063	-.48408	.14545	.04846	.11750	.01230	-.00227	.00048
50.452	4.393	.59307	12.38500	-.12157	-.45860	.29897	.05451	.08267	.01629	-.00257	.00100
	GRADIENT	.00028	.96078	-.02516	.01208	.09427	.00196	-.01980	.00162	.00002	.00020

BETA = .000 STAB = -1.000
RUDDER = .000 ELEVON = 5.000
TORB = 8.000 DX = .000
DY = .000 MACH = .600

PARAMETRIC DATA

REFERENCE DATA

SREF = 5500.0000 SO.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
SCALE = .0125

RUN NO. 101/ 0 RN/L = 3.39 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
6.742	.132	.59549	8.00852	-.12109	.03761	-.04427	.04250	-.05073	.01112	-.00328	.00022
7.349	2.303	.59593	10.24330	-.02354	.14223	.12201	.04602	-.08840	.01350	-.00308	.00027
7.463	4.270	.59467	12.22970	-.05880	.11115	.28203	.05313	-.12692	.01505	-.00270	.00094
	GRADIENT	-.00019	1.02022	.01557	.01830	.07881	.00255	-.01839	.00095	-.00014	.00017

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
TORB = 8.000 DX = .000
DY = .000 MACH = .600

PARAMETRIC DATA

DZ 10.009
10.088
10.447

ALPHAC
-.206
2.335
4.346
GRADIENT

MACH .59438
.59797
.59946
.00092

ALPHA0 7.96112
10.27510
12.35190
.96426

DX -.15476
-.02114
-.09557
.01471

DY -.38643
.41237
-.31935
.01366

CL -.07108
.13875
.30214
.08201

CD .04284
.04718
.05528
.00269

CLM -.05625
-.10779
-.14897
-.02036

CY .00995
.01426
.01588
.00132

CYN -.00284
-.00296
-.00252
.00006

CBL .00016
.00068
.00107
.00020

DZ 15.028
14.812
15.043

ALPHAC
-.178
2.367
4.381
GRADIENT

MACH .59684
.59644
.59768
.00017

ALPHA0 7.96002
10.27820
12.35480
.95336

DX -.14715
-.01582
-.09065
.01408

DY -.34488
-.39669
-.41872
-.01637

CL -.04596
.15875
.32213
.08071

CD .04395
.04860
.05727
.00287

CLM -.08538
-.13719
-.17831
-.02038

CY .01045
.01251
.01464
.00091

CYN -.00287
-.00270
-.00237
.00011

CBL .00006
.00047
.00107
.00008

RUN NO. 103/ 0 RN/L = 3.37 GRADIENT INTERVAL = -5.00/ 5.00

ARC 14-120(CA23B) 747/1 ATI 0251 (CARRIER DATA)

(RNHD10) (08 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(RNH010) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 104/ 0 RN/L = 3.36 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.868	ALPHAC	8.00410	ALPHA0	8.00410	DX	-.10253	DY	-.51265	CL	-.00567	CD	.04480	CLM	-.13755	CY	.01041	CYN	-.00283	CBL	.00034
	45.183		10.33170		10.33170		-.08537		-.47228		-.20061		.05083		-.19267		.01335		-.00308		.00033
	45.129		12.42070		12.36740		-.12801		-.46917		.36425		.06049		-.22858		.01470		-.00288		.00070
		GRADIENT	.96574		.96574		-.00522		.00986		.08200		.00344		-.02024		.00096		-.00001		.00008

RUN NO. 105/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.868	ALPHAC	8.01493	ALPHA0	8.01493	DX	-.11246	DY	-.41856	CL	.01647	CD	.04518	CLM	-.16267	CY	.00978	CYN	-.00283	CBL	.00024
	45.183		10.39430		10.39430		-.11112		-.43596		.22835		.05195		-.21833		.01319		-.00296		.00052
	45.129		12.42070		12.42070		-.22071		-.48760		.39143		.06258		-.25078		.01470		-.00274		.00045
		GRADIENT	.96903		.96903		-.02280		-.01485		.08263		.00378		-.01952		.00109		.00002		.00005

RUN NO. 106/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	50.418	ALPHAC	8.06252	ALPHA0	8.06252	DX	-.00328	DY	-.42559	CL	.01985	CD	.04532	CLM	-.16845	CY	.01025	CYN	-.00298	CBL	.00043
	50.480		10.42250		10.42250		-.01726		-.50454		.23712		.05236		-.22520		.01229		-.00286		.00058
	50.477		12.40590		12.40590		-.14625		-.54820		.40064		.06269		-.25671		.01499		-.00286		.00088
		GRADIENT	.96499		.96499		-.03050		-.02749		.08481		.00381		-.01978		.00104		.00003		.00010

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(RNH011) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 111/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	3.151	ALPHAC	4.01104	ALPHA0	4.01104	DX	-.08958	DY	-.18456	CL	-.09014	CD	.04592	CLM	.18409	CY	.00782	CYN	-.00183	CBL	.00027
	3.118		6.13462		6.13462		-.06761		-.22048		.09506		.04760		.13833		.01255		-.00192		.00065
	3.528		8.21639		8.21639		-.08397		-.22023		.25598		.05254		-.10136		.01577		-.00179		.00084
		GRADIENT	.99629		.99629		.00149		-.00861		.08209		.00155		-.01963		.00189		.00001		.00013

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA) (RNH011) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 112/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.547	-1.170	.59381	4.03841	-20703	-12903	-03319	.04576	.18261	.00806	-00196	.00057
7.199	2.385	.59203	6.25137	.12007	-.22900	.12091	.04829	.12728	.01279	-00193	.00052
7.175	4.257	.59299	8.17837	-.04267	-.20347	.25770	.05313	.09110	.01682	-00205	.00080
	GRADIENT	-.00021	.93117	.04249	-.01813	.08166	.00163	-.02073	.00197	-00002	.00005

RUN NO. 113/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.781	-1.120	.59267	4.05269	-16821	-18607	-.08213	.04617	.18008	.00878	-00209	.00019
9.781	2.353	.59142	6.23779	.09256	-.22556	.12287	.04825	.12534	.01303	-00212	.00049
9.491	4.419	.59138	8.30710	-.01048	-.22926	.28506	.05430	.08523	.01694	-00213	.00036
	GRADIENT	-.00029	.93566	.03704	-.00973	.08097	.00176	-.02094	.00180	-00001	.00001

RUN NO. 114/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.874	-.041	.59347	4.15214	-.12322	-.19547	-.07244	.04651	.16826	.01007	-00255	.00006
14.967	2.414	.59386	6.32741	-.01929	-.23114	.13302	.04829	.11641	.01347	-00222	.00122
14.923	4.392	.59566	8.34322	-.17291	-.18094	.29121	.05439	.07844	.01669	-00218	.00092
	GRADIENT	.00048	.94304	-.00909	.00257	.08209	.00173	-.02029	.00149	-00009	.00021

RUN NO. 115/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.907	-1.177	.59500	4.00406	-.12413	-.17462	-.05534	.04588	.15453	.00816	-00224	.00048
29.803	2.432	.59479	6.32040	-.14288	-.23873	.15686	.04869	.10008	.01265	-00199	.00101
29.693	4.435	.59391	8.35884	-.12964	-.21969	.32304	.05525	.06018	.01715	-00231	.00075
	GRADIENT	-.00023	.94143	-.00149	-.01050	.08426	.00199	-.02048	.00194	-00001	.00006

RUN NO. 116/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.786	-1.134	.59320	4.02485	-.06309	-.24970	-.04588	.04576	.14632	.00824	-00219	.00030
45.057	2.347	.59320	6.29147	-.22253	-.27150	.16815	.04813	.09216	.01344	-00211	.00065
44.452	4.450	.59252	8.35115	-.10843	-.18991	.34174	.05547	.05220	.01672	-00226	.00108
	GRADIENT	-.00014	.94267	-.01108	.01242	.08460	.00209	-.02057	.00186	-00001	.00017

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(RNH012) (08 OCT 75)

REFERENCE DATA

SPEF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 121/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.209	.038	5.99659	-.06803	-.28949	-.11855	.04364	.24249	.00761	-.00192	-.00008
3.176	2.411	8.26383	-.05291	-.22924	.07768	.04526	.19210	.01063	-.00200	.00072
3.398	4.319	10.27320	-.08407	-.32241	.22480	.04996	.16229	.01554	-.00231	.00032
	GRADIENT	.99710	-.00334	-.00637	.09029	.00145	-.01883	.00183	-.00009	.00010

RUN NO. 122/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.586	-.026	6.16280	-.20573	-.26645	-.10314	.04431	.23069	.00853	-.00236	.00005
7.752	2.399	8.34562	-.04076	-.30365	.09232	.04628	.17495	.01210	-.00234	.00091
7.261	4.448	10.37730	-.07958	-.41296	.25013	.05166	.14153	.01594	-.00226	.00070
	GRADIENT	.94074	.02940	-.03222	.07901	.00162	-.02002	.00165	-.00002	.00015

RUN NO. 123/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
10.180	-.156	6.05873	-.19455	-.29121	-.11151	.04457	.22108	.00733	-.00233	.00022
9.988	2.439	8.34630	-.02098	-.28681	.10203	.04684	.16346	.01253	-.00234	.00067
10.110	4.458	10.42810	-.10402	-.32093	.26451	.05236	.13011	.01501	-.00217	.00080
	GRADIENT	.94394	.02257	-.00606	.08153	.00165	-.01983	.00189	-.00003	.00013

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(RNH013) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 131/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.093	.127	6.06234	-.01073	-.54464	-.03391	.04450	-.08578	.00644	-.00061	.00004
3.006	2.255	8.09604	-.05380	-.49183	.14021	.04857	-.13502	.01099	-.00099	.00011
3.460	4.338	10.28890	-.06887	-.57379	.30316	.05671	-.16778	.01191	-.00070	.00052
	GRADIENT	1.00357	-.01383	-.00681	.08006	.00290	-.01949	.00130	-.00002	.00011

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA)

(RNH013) (08 OCT 75)

REFERENCE DATA

SPEE = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0000 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 132/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.217	ALPHAC	-.139	ALPHA0	6.01524	DX	-.15708	DY	-.42273	CL	-.04323	CD	.04480	CLM	-.09614	CY	-.00651	CYN	-.00076	CBL	-.00305
	7.234		2.360		8.25183		.04116		-.50229		.15965		.04999		-.15708		.00960		-.00073		.00056
	7.262		4.367		10.29700		-.06766		-.51025		.32276		.05878		-.18934		.01133		-.00059		.00075
		GRADIENT			.94800		.02224		-.01992		.08122		.00306		-.02083		.00108		.00004		.00016

RUN NO. 133/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	10.116	ALPHAC	-.237	ALPHA0	5.97668	DX	-.21796	DY	-.45642	CL	-.04628	CD	.04490	CLM	-.10655	CY	-.00702	CYN	-.00104	CBL	-.00039
	9.960		2.407		8.30916		.00486		-.58665		.17509		.05075		-.16939		.00933		-.00078		.00031
	9.890		4.371		10.31750		-.10588		-.58819		.33177		.05935		-.20064		.01168		-.00074		.00044
		GRADIENT			.93855		.02768		-.02975		.08213		.00308		-.02061		.00100		.00007		.00001

RUN NO. 134/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	15.175	ALPHAC	-.191	ALPHA0	6.02236	DX	-.14580	DY	-.48842	CL	-.02802	CD	.04557	CLM	-.12821	CY	-.00874	CYN	-.00136	CBL	-.00036
	14.756		2.411		8.30132		.10008		-.50023		.18461		.05158		-.18839		.00974		-.00100		.00038
	15.038		4.441		10.40550		-.06533		-.53208		.35196		.06089		-.21945		.01215		-.00093		.00043
		GRADIENT			.94319		.02092		-.00920		.08201		.00326		-.01985		.00072		.00010		.00018

RUN NO. 135/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	30.192	ALPHAC	-.063	ALPHA0	6.12957	DX	-.13999	DY	-.48303	CL	.01384	CD	.04599	CLM	-.16667	CY	-.00984	CYN	-.00219	CBL	-.00012
	29.830		2.435		8.34504		.02612		-.52953		.21809		.05272		-.22062		.01189		-.00210		.00031
	29.948		4.393		10.45230		-.12102		-.48783		.37352		.06235		-.24914		.01466		-.00224		.00078
		GRADIENT			.94505		.00706		-.00187		.08078		.00363		-.01865		.00107		-.00001		.00014

RUN NO. 136/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.708	ALPHAC	-.049	ALPHA0	6.08505	DX	-.03050	DY	-.55682	CL	.02789	CD	.04594	CLM	-.18139	CY	-.00903	CYN	-.00232	CBL	-.00028
	44.452		2.450		8.32281		.06383		-.52600		.23957		.05321		-.23497		.01234		-.00233		.00008
	44.457		4.474		10.41210		-.13420		-.55187		.40090		.06370		-.26404		.01449		-.00239		.00091
		GRADIENT			.95448		-.02059		.00153		.08257		.00389		-.01840		.00121		-.00001		.00013

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(RNH013) (08 OCT 75)

REFERENCE DATA

PARAMETRIC DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 137/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.164	-.057	.59060	6.08766	.02680	-.50309	.02730	.04578	-.18463	.00928	-.00234	.00047
50.275	2.433	.59151	8.35052	-.22483	-.52458	.24287	.05304	-.23973	.01213	-.00235	.00079
50.038	4.464	.59112	10.39360	-.15954	-.56778	.40909	.06376	-.26826	.01498	-.00245	.00103
	GRADIENT	.00012	.95078	-.04344	-.01410	.08452	.00394	-.01863	.00126	-.00002	.00012

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(RNH014) (08 OCT 75)

REFERENCE DATA

PARAMETRIC DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 141/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.324	2.292	.58874	8.14864	9.83387	-.61049	.15300	.04792	-.13516	.00918	.00011	.00029
3.528	4.239	.58797	10.18740	9.90698	-.62378	.31783	.05600	-.16677	.01106	.00014	.00031
	GRADIENT	-.00040	1.04754	.03756	-.00683	.08469	.00415	-.01624	.00097	.00001	.00001

RUN NO. 142/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.340	1.933	.59106	8.03902	9.83965	-.57642	.14170	.04826	-.14767	.00916	-.00005	-.00021
7.097	4.300	.59023	10.18070	9.98195	-.56853	.33603	.05813	-.18984	.01117	.00019	.00028
	GRADIENT	-.00035	.90459	.06010	.00333	.08208	.00417	-.01781	.00085	.00010	.00021

RUN NO. 143/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
10.137	1.946	.58948	8.07874	9.80002	-.65521	.14810	.04901	-.15947	.00722	.00020	-.00004
9.825	4.403	.58978	10.29950	9.94826	-.61097	.35090	.05986	-.20446	.01057	.00018	.00035
	GRADIENT	.00012	.90381	.06033	.01800	.08254	.00442	-.01831	.00136	-.00001	.00016

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 144/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.831	1.968	.58834	8.07216	9.88695	-.56380	.16011	.04983	-.18046	.00912	-.00044	.0026
14.775	4.376	.58834	10.27830	9.98489	-.67370	.36669	.06097	-.22623	.01196	-.00046	.00024
	GRADIENT	.00000	.91632	.04068	-.04564	.08581	.00463	-.01901	.00118	-.00001	-.00001

RUN NO. 145/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
30.007	1.997	.58824	8.10933	9.83759	-.54460	.19732	.05124	-.21949	.01121	-.00200	.00041
29.873	4.392	.59120	10.31920	9.90959	-.67261	.39474	.06297	-.25593	.01368	-.00189	.00075
	GRADIENT	.00124	.92270	.03006	-.05345	.08243	.00490	-.01522	.00103	.00005	.00014

RUN NO. 146/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.854	1.998	.59220	8.09096	9.89672	-.59050	.20786	.05143	-.23415	.01045	-.00227	.00087
44.891	4.430	.59175	10.36500	9.89048	-.62597	.41832	.06410	-.27112	.01368	-.00213	.00054
	GRADIENT	-.00019	.93496	-.00257	-.01458	.08653	.00521	-.01520	.00133	.00006	-.00014

RUN NO. 147/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.387	2.049	.59016	8.14847	9.92864	-.58366	.22266	.05210	-.23840	.01183	-.00235	.00048
50.182	4.431	.59062	10.35190	9.93609	-.63135	.42020	.06420	-.27329	.01395	-.00218	.00115
	GRADIENT	.00019	.92503	.00313	-.02002	.08293	.00508	-.01465	.00089	.00007	.00028

ARC 14-120(CA23B) 747/1 ATI 02S1 (CARRIER DATA)

(RNH015) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 151/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.261	ALPHA	2.410	MACH	.59012	ALPHA0	10.27640	DX	9.87396	DY	-.64955	CL	.15377	CD	.04744	CLM	-.09299	CY	.00918	CYN	-.00029	CBL	.00024
	7.540	GRADIENT	4.362		.58935		12.32900		9.88592		-.65076		.31258		.05498		-.12094		.01223		-.00061		.00015
					-.00039		1.05174		.00613		-.00062		.08137		.00386		-.01432		.00156		-.00016		-.00005

RUN NO. 152/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	9.896	ALPHA	2.043	MACH	.58898	ALPHA0	10.12980	DX	9.84214	DY	-.69514	CL	.13345	CD	.04717	CLM	-.09946	CY	.00909	CYN	-.00046	CBL	.00042
	10.215	GRADIENT	4.489		.58898		12.42930		9.88451		-.62920		.33666		.05710		-.14464		.01171		-.00064		.00031
					-.00000		.94813		.01747		.02719		.08379		.00409		-.01863		.00108		-.00007		-.00004

RUN NO. 153/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	14.806	ALPHA	2.079	MACH	.58834	ALPHA0	10.16290	DX	9.83145	DY	-.73897	CL	.15424	CD	.04878	CLM	-.13141	CY	.01022	CYN	-.00083	CBL	-.00028
	14.750	GRADIENT	4.497		.59019		12.41680		9.90355		-.69922		.35790		.05934		-.17663		.01218		-.00076		.00017
					.00076		.93236		.02983		.01644		.08425		.00437		-.01871		.00081		.00003		.00019

RUN NO. 154/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	30.131	ALPHA	2.049	MACH	.58930	ALPHA0	10.16660	DX	9.85376	DY	-.59362	CL	.18744	CD	.05068	CLM	-.18761	CY	.01114	CYN	-.00231	CBL	.00091
	30.087	GRADIENT	4.493		.59112		12.45850		9.88809		-.66197		.38912		.06220		-.23009		.01450		-.00235		.00104
					.00074		.93764		.01404		-.02796		.08251		.00471		-.01738		.00137		-.00002		.00005

RUN NO. 155/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.833	ALPHA	2.044	MACH	.58992	ALPHA0	10.11530	DX	9.84286	DY	-.70105	CL	.20689	CD	.05133	CLM	-.21452	CY	.01174	CYN	-.00259	CBL	.00056
	45.102	GRADIENT	4.460		.58952		12.43770		9.80066		-.69118		.40532		.06320		-.25323		.01468		-.00252		.00133
					-.00016		.96142		-.01747		.00409		.08215		.00491		-.01602		.00122		.00003		.00032

RUN NO. 156/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	50.292	ALPHA	2.016	MACH	.58875	ALPHA0	10.08650	DX	9.95743	DY	-.71722	CL	.20766	CD	.05132	CLM	-.21964	CY	.01187	CYN	-.00279	CBL	.00069
	50.425	GRADIENT	4.375		.58946		12.34030		9.90189		-.65667		.40762		.06327		-.25720		.01465		-.00260		.00081
					.00030		.95528		-.02354		.02566		.08475		.00506		-.01592		.00118		.00008		.00005

ARC 14-120(CA238) 747/1 AT1 0251 (CARRIER DATA)

(RNH016) (08 OCT 75)

REFERENCE DATA

SQ.FT. = 5500.0000
 IN. XC = 1339.9000
 IN. YC = .0000
 IN. ZC = 190.7500
 IN. XMRP = 19.88670
 IN. YMRP = 19.94590
 IN. ZMRP = 19.94590
 GRADIENT = .0125

BETA = .000
 RUDDER = .000
 LORB = 6.000
 DY = .000
 MACH = 5.000
 ELEVON = 5.000
 DX = 20.000
 MACH = .500

PARAMETRIC DATA

RUN NO. 161/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00
 MACH .58993 ALPHA0 8.27632 DX 19.88670 DY -.85192 CL .04837 CD .00808 CYN .00002 CBL .00027
 3.241 2.461 4.340 10.26730 19.94590 .34375 .05697 -.16141 .01084 -.00030 .00038
 GRADIENT .00013 1.06004 .03152 .06180 .08212 .00458 -.01350 .00147 -.00017 .00006

RUN NO. 162/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00
 MACH .58931 ALPHA0 8.10145 DX 19.88560 DY -.81205 CL .04871 CD .00869 CYN -.00044 CBL .00030
 7.114 2.024 4.482 10.36010 19.98690 .36794 .05976 -.18998 .01153 -.00046 .00044
 GRADIENT .00010 .91870 .04120 .08222 .08269 .00449 -.01706 .00116 -.00001 .00005

RUN NO. 163/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00
 MACH .59022 ALPHA0 8.13025 DX 19.81960 DY -.76563 CL .16379 CD .04952 CLM -.16075 CBL .00025
 9.502 4.485 10.34260 20.00000 .37344 .06078 -.20178 .00151 -.00051 .00038
 GRADIENT .00049 .88639 .07228 -.01871 .08400 .00451 -.01644 .00151 -.00004 .00005

RUN NO. 164/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 MACH .58950 ALPHA0 8.26269 DX 19.89530 DY -.82928 CL .19297 CD .05096 CLM -.18416 CBL .00046
 14.885 2.147 4.296 10.20060 20.01710 .37005 .06109 -.21886 .00472 -.00038 .00001
 GRADIENT .00010 .90195 .05669 .04148 .08242 .00472 -.01615 .00163 -.00005 -.00021

RUN NO. 165/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00
 MACH .59006 ALPHA0 8.11890 DX 19.88350 DY -.80714 CL .20292 CD .05169 CLM -.21782 CBL .00060
 29.970 4.442 10.34740 19.95900 .40436 .06342 -.25344 .00482 -.00221 .00038 .00107
 29.738 4.442 10.34740 19.95900 .40436 .06342 -.25344 .00482 -.00221 .00038 .00107
 GRADIENT .00010 .91480 .03099 -.02205 .08269 .00482 -.01462 .00115 -.00000 .00000 .00019

RUN NO. 166/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 MACH .58963 ALPHA0 8.08105 DX 19.87420 DY -.75225 CL .21887 CD .05215 CLM -.23351 CBL .00066
 44.740 2.001 4.440 10.34770 19.88250 .42343 .06437 -.26762 .00437 -.00251 .00094
 44.620 2.001 4.440 10.34770 19.88250 .42343 .06437 -.26762 .00437 -.00251 .00094
 GRADIENT .00005 .92540 .00340 .00810 .08387 .00501 -.01398 .00145 -.00000 .00000 .00011

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 POOR QUALITY

ARC 14-120(CA238) 747/1 ATI 0251 (CARRIER DATA)

(RNH016) (08 OCT 75)

REFERENCE DATA

PARAMETRIC DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

RUN NO. 167/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.218	1.983	.58890	8.06786	19.98550	-.80823	.21505	.05171	-.23622	.01084	-.00247	.00085
50.509	4.478	.58886	10.43010	19.90790	-.77122	.43139	.06495	-.27124	.01497	-.00255	.00118
	GRADIENT	-.00002	.94658	-.03110	.01483	.08669	.00531	-.01404	.00165	-.00003	.00013

ARC 14-120(CA238) 747/1 ATI 0251 (CARRIER DATA)

(RNH017) (08 OCT 75)

REFERENCE DATA

PARAMETRIC DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

RUN NO. 171/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.409	2.320	.59052	10.20990	19.85050	-.73949	.16107	.04618	-.09480	.01036	-.00113	.00010
7.682	4.409	.58988	12.38070	19.85190	-.88774	.33647	.05435	-.11771	.01458	-.00132	.00038
	GRADIENT	-.00031	1.03942	.00067	-.07099	.08399	.00391	-.01097	.00202	-.00009	.00013

RUN NO. 172/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
10.200	1.989	.59146	10.12200	19.86550	-.83323	.14505	.04622	-.10108	.01056	-.00137	.00041
9.876	4.367	.59089	12.28790	19.96400	-.80872	.33979	.05554	-.13814	.01336	-.00131	.00008
	GRADIENT	-.00024	.91088	.04142	.01030	.08190	.00392	-.01559	.00118	.00003	-.00014

RUN NO. 173/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.980	2.042	.59126	10.15750	19.87800	-.83951	.15711	.04762	-.13116	.01136	-.00168	.00001
14.840	4.390	.59227	12.31590	19.95010	-.82679	.35369	.05752	-.16875	.01312	-.00144	.00049
	GRADIENT	.00043	.91935	.03071	.00542	.08373	.00421	-.01601	.00075	.00010	.00021

RUN NO. 174/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
30.168	1.994	.59111	10.12010	19.85060	-.87986	.18256	.04936	-.18554	.01164	-.00275	.00098
29.810	4.397	.59085	12.32620	19.90240	-.75313	.38748	.06071	-.22418	.01623	-.00292	.00079
	GRADIENT	-.00011	.91819	.02156	.05275	.08529	.00472	-.01608	.00191	-.00007	-.00008

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(RNHO17) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

RUN NO. 175/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.854	2.109	.59147	10.18690	19.84610	-.82726	.21445	.05096	-.21517	.01218	-.00279	.00031
45.244	4.417	.59090	12.41310	19.77770	-.77838	-.0819	.06250	-.24890	.01549	-.00281	.00032
	GRADIENT	-.00025	.96464	-.02964	.02118	.08395	.00500	-.01462	.00144	-.00001	.00000

RUN NO. 176/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.344	2.118	.59046	10.19050	19.95560	-.87380	.21247	.05092	-.21960	.01216	-.00293	.00084
50.595	4.352	.59133	12.33830	19.88730	-.81367	.40279	.06205	-.25303	.01457	-.00270	.00096
	GRADIENT	.00039	.96146	-.03057	.02692	.08520	.00498	-.01497	.00108	-.00010	.00005

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(RNHO18) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

RUN NO. 181/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.378	2.472	.59115	8.33671	-.12064	9.62659	.16901	.04843	-.15673	.00689	-.00742	.00603
3.590	4.405	.59201	10.37400	-.08127	9.59622	.32107	.05666	-.18628	.00499	-.00687	.00722
	GRADIENT	.00045	1.05348	.02036	-.01570	.07863	.00425	-.01528	-.00098	-.00028	.00062

RUN NO. 182/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.711	2.009	.59096	8.13180	-.20008	9.51655	.14685	.04779	-.15966	.00781	-.00657	.00524
7.202	4.378	.58954	10.27110	-.01628	9.62298	.33992	.05797	-.20341	.00549	-.00507	.00624
	GRADIENT	-.00060	.90293	.07757	-.01492	.08149	.00430	-.01847	-.00098	-.00063	.00042

RUN NO. 183/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.911	2.005	.59142	8.10379	-.17612	9.57279	.15419	.04837	-.16891	.00814	-.00595	.00494
10.102	4.475	.59168	10.41380	-.06798	9.48457	.35514	.05964	-.21466	.00464	-.00374	.00502
	GRADIENT	.00011	.93526	.04378	-.03572	.08136	.00456	-.01852	-.00142	-.00089	.00003

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 0251 (CARRIER DATA)

(RNH018) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.973	2.102	.59109	8.20417	-.19876	9.52500	.17475	.04978	-.18504	.00604	-.00417	.00387
14.736	4.362	.59144	10.27250	-.05627	9.52253	.36111	.06015	-.22760	.00349	-.00195	.00446
GRADIENT		.00016	.91486	.06303	-.00109	.08243	.00459	-.01838	-.00112	.00098	.00026

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.716	2.100	.59179	8.16409	-.17495	9.55144	.19643	.05099	-.21737	.00295	.00032	.00175
29.761	4.335	.59187	10.25280	-.11756	9.58290	.38368	.06228	-.25441	.00077	.00207	.00185
GRADIENT		.00004	.93464	.02568	.01408	.08379	.00505	-.01657	-.00097	.00078	.00004

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.733	1.972	.59095	8.04435	-.07776	9.51284	.20329	.05102	-.22894	.00459	.00028	.00070
44.856	4.308	.59177	10.24170	-.08370	9.47621	.40112	.06273	-.26584	.00478	.00113	.00121
GRADIENT		.00035	.94063	-.00254	-.01568	.08469	.00501	-.01580	.00008	.00036	.00022

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
49.952	2.021	.59027	8.06519	-.05049	9.55487	.21121	.05101	-.23164	.00617	-.00029	.00124
50.410	4.396	.59076	10.34680	-.12212	9.63862	.41363	.06371	-.26802	.00670	.00046	.00099
GRADIENT		.00020	.96074	-.03016	.03527	.08524	.00535	-.01532	.00022	.00032	-.00010

ARC 14-120(CA23B) 747/1 ATI 02S1 (CARRIER DATA)

(RNH019) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 8.000 DX = .000
 DY = 10.000 MACH = .600

PARAMETRIC DATA

RUN NO. 191/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.491	ALPHAC	2.405	ALPHA0	10.30160	DX	.19122	DY	9.49085	CL	.14637	CD	.04679	CLM	-.12377	CY	.00441	CYN	-.00552	CBL	.00603
	7.844	GRADIENT	4.380		12.38840		-.09388		9.47890		.30538		.05461		-.15697		.00108		-.00292		.00708
					1.05655		.04929		-.00605		.08051		.00396		-.01681		-.00169		.00132		.00053

RUN NO. 192/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	9.818	ALPHAC	2.116	ALPHA0	10.17870	DX	-.13626	DY	9.42647	CL	.13734	CD	.04639	CLM	-.12364	CY	.00431	CYN	-.00485	CBL	.00562
	9.759	GRADIENT	4.310		12.23590		-.04223		9.43453		.31310		.05511		-.16629		.00071		-.00202		.00649
					.93779		.04286		.00367		.08012		.00398		-.01944		-.00164		.00129		.00040

RUN NO. 193/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	14.864	ALPHAC	1.964	ALPHA0	10.05070	DX	-.15746	DY	9.48663	CL	.13279	CD	.04663	CLM	-.14073	CY	.00351	CYN	-.00333	CBL	.00542
	15.018	GRADIENT	4.414		12.36710		-.07712		9.47787		.33095		.05719		-.18907		-.00027		-.00016		.00548
					.94548		.03279		-.00358		.08088		.00431		-.01973		-.00154		.00129		.00003

RUN NO. 194/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	30.225	ALPHAC	2.014	ALPHA0	10.12240	DX	-.19612	DY	9.39762	CL	.17439	CD	.04950	CLM	-.18838	CY	-.00082	CYN	.00151	CBL	.00218
	30.105	GRADIENT	4.404		12.37380		-.14130		9.41791		.37311		.06132		-.23277		-.00359		.00367		.00211
					.94210		.02294		.00849		.08315		.00495		-.01857		-.00116		.00099		-.00003

RUN NO. 195/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.421	ALPHAC	2.014	ALPHA0	10.02770	DX	-.16199	DY	9.45087	CL	.19987	CD	.05088	CLM	-.21359	CY	.00296	CYN	.00132	CBL	.00064
	45.079	GRADIENT	4.380		12.36580		-.23329		9.39875		.39156		.06213		-.25347		.00400		.00192		.00153
					.98810		-.03013		-.02203		.08101		.00475		-.01685		.00044		.00025		.00037

RUN NO. 196/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	50.290	ALPHAC	2.002	ALPHA0	10.06530	DX	-.10008	DY	9.44892	CL	.20429	CD	.05092	CLM	-.21747	CY	.00376	CYN	.00060	CBL	.00118
	50.279	GRADIENT	4.323		12.27740		-.12280		9.32532		.39280		.06241		-.25644		.00557		.00114		.00131
					.95279		-.00978		-.07090		.08119		.00495		-.01678		.00078		.00023		.00005

ORIGINAL PAGE IS
OF POOR QUALITY.

ARC 14-120(CA23B) 74771 AT1 02S1 (CARRIER DATA)

(RNH020) (21 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000
 RUDDER = .000
 TORB = 4.000
 DY = .000
 STAB = 5.000
 ELEVON = .000
 DX = .000
 MACH = .600

PARAMETRIC DATA

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
2.999	.056	4.00251	-.04123	-.23247	.01049	.04772	-.20592	.01062	-.00198	.00006
2.972	2.231	6.08127	-.02004	-4.5838	.18664	.05304	-.24220	.01235	-.00197	.00034
3.376	4.258	8.18834	-.10046	-.24934	.24994	.06230	-.26878	.01533	-.00181	.00035
	GRADIENT	.99573	-.01381	-.00523	.68080	.00346	-.01498	.00112	.00004	.00007

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.356	-.232	3.96105	-.11584	-.45749	-.00665	.04702	-.20200	.01008	-.00202	.00010
7.305	2.422	6.30038	-.05714	-.37696	.20981	.05403	-.25278	.01303	-.00200	.00019
7.176	4.286	8.19710	-.06747	-.36099	.36697	.06327	-.27665	.01547	-.00191	.00002
	GRADIENT	.93375	.01148	.02197	.08262	.00353	-.01670	.00119	.00002	-.00002

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.998	-.190	4.02219	-.11365	-.37733	-.00033	.04716	-.20596	.01132	-.00224	.00020
9.822	2.393	6.27375	-.05987	-.30188	.21788	.05436	-.25538	.01405	-.00211	.00005
9.715	4.416	8.32394	-.08454	-.41242	.37887	.06425	-.28167	.01515	-.00182	.00078
	GRADIENT	.93124	.00698	-.00595	.08243	.00367	-.01656	.00084	.00009	.00021

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.608	-.076	4.08571	-.06537	-.37283	.02484	.04739	-.21199	.01023	-.00204	.00019
14.941	2.433	6.34658	-.07447	-.40100	.22998	.05475	-.25967	.01286	-.00199	.00023
14.567	4.425	8.32952	-.05492	-.38851	.39147	.06510	-.28534	.01447	-.00173	.00070
	GRADIENT	.94105	.00207	-.00381	.08147	.00389	-.01641	.00095	.00007	.00020

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.742	-.160	4.00738	-.10009	-.36988	.02917	.04673	-.26290	.01109	-.00260	.00016
29.812	2.421	6.31895	-.11181	-.40752	.24933	.05443	-.26400	.01260	-.00238	.00046
29.770	4.475	8.40410	-.11226	-.35652	.41677	.06571	-.29104	.01444	-.00220	.00030
	GRADIENT	.94646	-.00271	.00215	.08370	.00405	-.01698	.00072	.00009	.00011

ARC 14-120(CA238) 747/1 ATI 0251 (CARRIER DATA)

(RNH020) (21 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

OZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.518	-.105	.58472	4.02971	.03590	-.35779	.04208	.04615	-.21187	.01047	-.00266	.00042
44.662	2.474	.58704	6.37077	-.16221	-.37945	.26242	.03437	-.26409	.01292	-.00250	.00038
44.473	4.486	.58677	8.39738	-.08498	-.47223	.43421	.06557	-.29191	.01493	-.00242	.00070
	GRADIENT	.00047	.94707	-.02887	-.02190	.08540	.00418	-.01756	.00097	.00005	.00006

PARAMETRIC DATA

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 211 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.110	.173	.59032	4.13765	.05551	-.20611	-.06334	.04682	.11822	.00849	-.00135	.00045
3.078	2.255	.58980	6.12604	.06801	-.21105	.10532	.04879	.08119	.01427	-.00158	.00059
3.099	4.353	.58919	8.25467	-.06491	-.16472	.27168	.05429	.04417	.01723	-.00156	.00054
	GRADIENT	-.03027	.98490	-.02885	.00992	.08014	.00179	-.01771	.00209	-.00005	.00002

PARAMETRIC DATA

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 213 / 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.888	-.253	.58982	3.93747	-.15837	-.11137	-.08627	.04554	.12488	.00853	-.00150	.00024
10.133	2.398	.58989	6.31405	.06954	-.24594	.13476	.04856	.07304	.01447	-.00149	.00114
9.989	4.413	.58553	8.33333	-.07054	-.19440	.29597	.05484	.03731	.01604	-.00134	.00058
	GRADIENT	.00015	.94507	.02227	-.01948	.08199	.00173	-.01881	.00162	.00003	.00009

ARC 14-120(CA238) 747/1 ATI 0251 (CARRIER DATA)

(RNH021) (08 OCT 75)

ARC 14-120(CA238) 747/1 AT1 02S1 (CARRIER DATA)

(RNH021) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT.
 LREF = 327.7800 IN.
 BREF = 2348.0400 IN.
 SCALE = .0125

XMRP = 1339.9000 IN. XC
 YMRP = .0000 IN. YC
 ZMRP = 190.7500 IN ZC

PARAMETRIC DATA

RUN NO. 214/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.808	-.052	.58985	4.11715	-15706	-17204	-.05334	.04658	.11953	.00896	-.00146	-.00019
14.795	2.452	.59025	6.35432	.07017	-23071	.14633	.04884	.07167	.01314	-.00129	.00073
14.946	4.403	.59031	8.36005	-10634	-11922	.30240	.05490	.03621	.01659	-.00130	.00118
	GRADIENT	.00011	.94963	.01505	.01022	.37985	.00182	-.01872	.00171	.00004	.00031

RUN NO. 215/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.743	-.137	.58938	4.01695	-.08435	-19008	-.05161	.04561	.12016	.00888	-.00170	.00051
29.755	2.487	.58988	6.37588	.09984	-25948	.16654	.04843	.06741	.01456	-.00170	.00082
29.747	4.402	.58886	8.33645	-.09113	-25259	.32362	.05473	.03291	.01656	-.00159	.00141
	GRADIENT	-.00010	.94850	.00278	-.01453	.08270	.00195	-.01928	.00172	.00002	.00019

RUN NO. 216/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.609	-.114	.58927	4.02468	-.01984	-25920	-.03842	.04511	.12212	.00772	-.00140	.00080
44.499	2.547	.58928	6.42453	-11469	-27177	.18601	.04819	.06671	.01450	-.00164	.00070
44.744	4.315	.58963	8.26444	-16824	-15241	.32904	.05431	.03397	.01605	-.00158	.00127
	GRADIENT	.00008	.95288	-.03368	.02181	.08308	.00201	-.01998	.00194	-.00005	.00010

REFERENCE DATA

SREF = 5500.0000 SQ.FT.
 LREF = 327.7800 IN.
 BREF = 2348.0400 IN.
 SCALE = .0125

XMRP = 1339.9000 IN. XC
 YMRP = .0000 IN. YC
 ZMRP = 190.7500 IN ZC

PARAMETRIC DATA

RUN NO. 221/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.175	.180	.58751	8.11954	-16244	-11696	-.02845	.04460	-.11142	.00834	-.00090	.00009
7.048	2.374	.58636	10.26950	-.05073	-21394	.14571	.04893	-.14954	.01028	-.00080	.00046
7.827	4.374	.58649	12.37650	-15546	-21015	.30951	.05692	-.18197	.01171	-.00076	.00051
	GRADIENT	-.00025	1.01450	.00246	-.02258	.08057	.00292	-.01683	.00081	-.00003	.00010

ARC 14-120(CA238) 747/1 AT1 02S1 (CARRIER DATA)

(RNH022) (08 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA)

(RNH022) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BRF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 222/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	10.008	ALPHAC	-.095	MACH	.58707	ALPHA0	8.06837	DX	-.20800	DY	-.19570	CL	-.03663	CD	.04477	CLM	-.11814	CY	.00828	CYN	-.00125	CBL	-.00049
	9.794		2.462		.58734		10.38610		-.06785		-.15123		.16424		.05010		-.16828		.01112		-.00123		.00033
	10.168		4.329		.58785		12.32470		-.115342		-.17388		.31496		.05768		-.19643		.01270		-.00088		.00054
		GRADIENT	.00017		.00017		.95815		.01487		.00567		.37941		.00287		-.01781		.00100		.00008		.00001

RUN NO. 223/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	14.875	ALPHAC	-.131	MACH	.58685	ALPHA0	8.01212	DX	-.19848	DY	-.24112	CL	-.02753	CD	.04527	CLM	-.13820	CY	.00709	CYN	-.00080	CBL	-.00015
	15.107		2.479		.58648		10.42410		-.11788		-.18222		.18549		.05115		-.19261		.01074		-.00090		.00040
	14.650		4.467		.58705		12.40420		-.05808		-.21425		.34208		.06023		-.22298		.01339		-.00091		.00041
		GRADIENT	.00003		.00003		.95356		.03055		.00669		.08044		.00320		-.01856		.00137		-.00002		.00013

RUN NO. 224/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	29.663	ALPHAC	-.130	MACH	.58892	ALPHA0	7.98338	DX	-.110589	DY	-.11844	CL	.00288	CD	.04584	CLM	-.17357	CY	.00975	CYN	-.00171	CBL	-.00014
	30.014		2.540		.58798		10.47220		-.08622		-.13268		.22549		.05297		-.23013		.01261		-.00177		.00020
	30.212		4.360		.58896		12.37080		-.18388		-.19792		.37473		.06205		-.25773		.01448		-.00173		.00047
		GRADIENT	.00002		.00002		.97369		-.01553		-.01678		.08285		.00354		-.01892		.00106		-.00001		.00014

RUN NO. 225/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.608	ALPHAC	-.097	MACH	.58819	ALPHA0	8.00014	DX	-.044496	DY	-.19464	CL	.22323	CD	.04572	CLM	-.18928	CY	.00991	CYN	-.00223	CBL	.00044
	44.758		2.520		.58859		10.43710		-.06430		-.22195		.24631		.05313		-.24485		.01282		-.00237		.00102
	44.921		4.300		.58930		12.28420		-.18464		-.16737		.39515		.06240		-.27084		.01547		-.00233		.00090
		GRADIENT	.00024		.00024		.97103		-.02995		.00496		.08463		.00372		-.01875		.00125		-.00002		.00011

RUN NO. 226/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	50.329	ALPHAC	-.122	MACH	.58776	ALPHA0	8.01036	DX	-.00488	DY	-.17679	CL	.02403	CD	.04574	CLM	-.19080	CY	.00994	CYN	-.00235	CBL	.00021
	50.199		2.456		.58928		10.37780		-.00681		-.25490		.23928		.05290		-.24627		.01252		-.00234		.00092
	50.308		4.443		.58798		12.41190		-.14747		-.12834		.40942		.06374		-.27527		.01577		-.00236		.00093
		GRADIENT	.00007		.00007		.96199		-.02976		.00863		.08438		.00389		-.01865		.00126		-.00000		.00016

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(RNH023) (08 OCT 75)

REFERENCE DATA

PARAMETRIC DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BRFP = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 231/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.160	.028	.58722	5.96832	-.09825	-.23409	-.02521	.04613	-.13867	.00897	-.00080	-.00018
3.398	2.478	.58690	8.39557	-.15849	-.28051	.17253	.05185	-.19200	.01061	-.00084	.00029
3.235	4.342	.58675	10.26840	-.07571	-.33921	.32445	.06000	-.22050	.01280	-.00093	.00041
	GRADIENT	-.00011	.99639	.00370	-.02409	.38103	.00317	-.01911	.00088	-.00003	.00014

RUN NO. 232/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.044	-.157	.58689	5.98727	-.15115	-.25234	-.03030	.04621	-.14920	.00824	-.00098	-.00013
7.210	2.438	.58783	8.31873	.02879	-.21173	.18257	.05227	-.21040	.01018	-.00086	.00042
7.208	4.444	.58732	10.35950	-.09076	-.26838	.34468	.06170	-.24099	.01178	-.00072	.00047
	GRADIENT	.00011	.94774	.01582	-.00257	.08152	.00332	-.02012	.00077	.00005	.00013

RUN NO. 233/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.588	-.079	.58710	6.07114	-.10027	-.30779	-.01468	.04640	-.16112	.00822	-.00105	.00004
9.981	2.449	.58742	8.36358	.04293	-.30356	.19149	.05280	-.21851	.01045	-.00088	.00009
9.714	4.418	.58742	10.33770	-.03724	-.32484	.35595	.06217	-.24779	.01185	-.00069	.00048
	GRADIENT	.00007	.94678	.01599	-.00354	.08237	.00346	-.01943	.00081	.00008	.00009

RUN NO. 234/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.480	-.060	.58866	6.07355	-.09631	-.27927	-.00018	.04658	-.17626	.00819	-.00110	.00031
14.703	2.510	.58715	8.40095	.04960	-.33790	.21634	.05369	-.23345	.01005	-.00079	.00024
14.839	4.425	.58701	10.36750	-.09613	-.31874	.36548	.06306	-.25929	.01224	-.00075	.00064
	GRADIENT	-.00038	.95454	.00318	-.00958	.08168	.00363	-.01872	.00089	.00008	.00007

RUN NO. 235/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.767	-.083	.58751	6.07234	-.13999	-.25442	.02087	.04629	-.19402	.00963	-.00212	.00058
29.743	2.454	.58780	8.35515	-.00939	-.21638	.26511	.05355	-.24750	.01166	-.00186	.00059
29.929	4.441	.58780	10.39440	-.17552	-.28857	.39717	.06423	-.27715	.01406	-.00178	.00066
	GRADIENT	.00007	.95279	-.00517	-.00553	.08308	.00391	-.01850	.00097	.00007	.00002

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 236/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.538	-.030	6.08798	.01963	-.30457	.03719	.04640	-.20345	.01053	-.00233	-.00019
44.541	2.408	8.29718	-.12451	-.27163	.24488	.05351	-.25544	.01243	-.00241	.00088
44.965	4.398	10.36730	-.16344	-.27768	.41381	.06421	-.28398	.01499	-.00226	.00083
	GRADIENT	.96437	-.04201	.00635	.08508	.00398	-.01831	.00100	.00001	.00024

RUN NO. 237/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
49.951	-.140	5.98166	.07546	-.38741	.02722	.04599	-.20195	.01059	-.00252	.00043
49.970	2.539	8.41739	-.16393	-.35672	.25555	.05409	-.25964	.01262	-.00240	.00083
50.050	4.426	10.35530	-.17706	-.34245	.41604	.06448	-.28608	.01467	-.00216	.00062
	GRADIENT	.95450	-.05759	.00995	.08515	.00398	-.01863	.00099	.00008	.00005

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 241/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
2.790	.104	5.92147	-.15532	-.03671	-.10177	.04472	.18137	.00694	-.00108	.00033
3.147	2.378	8.27250	-.05770	-.03732	.09081	.04665	.13445	.01264	-.00148	.00018
3.235	4.382	10.30860	-.08859	-.02095	.24911	.05139	.09984	.01544	-.00129	.00076
	GRADIENT	1.02571	.01621	.00360	.08208	.00154	-.01909	.00200	-.00005	.00010

RUN NO. 242/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.214	-.107	6.05432	-.15883	-.13415	-.10083	.04505	.17850	.00757	-.00131	.00003
7.169	2.445	8.32441	-.04069	-.07016	.10612	.04715	.11955	.01178	-.00133	.00067
7.223	4.433	10.35700	-.07466	-.00760	.26581	.05253	.08537	.01579	-.00127	.00082
	GRADIENT	.94519	.02130	.02775	.08079	.00161	-.02064	.00180	.00001	.00018

ORIGINAL PAGE IS
 OF POOR QUALITY

ARC 14-120(CA238) 747/1 AT1 02S1 (CARRIER DATA)

(RNH024) (21 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .500

RUN NO. 243/ 0		RN/L = 3.30		GRADIENT INTERVAL = -5.00/ 5.00						
DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.900	-.036	6.13824	-.18639	-.04378	-.08434	.04510	.16852	.00636	-.00100	.00047
9.833	2.466	8.36642	.00386	-.04115	.11696	.04735	.11195	.01200	-.00119	.00083
9.797	4.354	10.29090	-.10428	-.09073	.26424	.05252	.07969	.01454	-.00111	.00098
	GRADIENT	.94311	.02173	-.01008	.07947	.00165	-.02036	.00188	-.00003	.00012

RUN NO. 244/ 0		RN/L = 3.30		GRADIENT INTERVAL = -5.00/ 5.00						
DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.827	-.163	6.00907	-.12109	-.00497	-.08892	.04520	.16151	.00644	-.00116	.00044
14.725	2.499	8.38433	.06072	-.02456	.13198	.04765	.10173	.01127	-.00097	.00082
14.404	4.287	10.19090	-.02626	.04104	.27390	.05293	.07118	.01484	-.00110	.00068
	GRADIENT	.93614	.02495	.00897	.08165	.00167	-.02047	.00188	.00002	.00005

RUN NO. 245/ 0		RN/L = 3.29		GRADIENT INTERVAL = -5.00/ 5.00						
DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.598	-.049	6.07204	-.10332	-.04473	-.05359	.04539	.14155	.00766	-.00147	.00005
29.697	2.432	8.35352	-.03171	-.01269	.14830	.04770	.09113	.01278	-.00152	.00086
29.731	4.487	10.42190	-.14258	-.06341	.31514	.05433	.05330	.01594	-.00170	.00093
	GRADIENT	.95764	-.00737	-.00354	.08129	.00193	-.01949	.00183	-.00005	.00020

RUN NO. 246/ 0		RN/L = 3.28		GRADIENT INTERVAL = -5.00/ 5.00						
DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.528	-.131	5.98327	.01971	-.05457	-.05172	.04491	.13885	.00776	-.00161	.00041
44.796	2.390	8.30857	-.16445	-.09489	.16258	.04753	.08478	.01432	-.00189	.00054
44.981	4.445	10.42130	-.16873	-.18341	.32867	.05407	.04644	.01680	-.00197	.00111
	GRADIENT	.96813	-.04237	-.02770	.08320	.00197	-.02024	.00200	-.00008	.00015

RUN NO. 247/ 0		RN/L = 3.28		GRADIENT INTERVAL = -5.00/ 5.00						
DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
49.996	-.101	6.01605	.05285	-.02120	-.04505	.04501	.13586	.00856	-.00175	.00010
50.084	2.534	8.42955	-.20397	-.03470	.17791	.04786	.08023	.01444	-.00193	.00047
50.059	4.394	10.32850	-.10617	-.10654	.33087	.05397	.04657	.01610	-.00183	.00098
	GRADIENT	.95645	-.03952	-.01806	.08369	.00193	-.01995	.00171	-.00002	.00019

ARC 14-120(CA238) 747/1 AT1 0251 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.209	.039	.58717	8.00091	-.09563	.11623	-.12186	.04243	.21698	.00714	-.00168	.00064
7.216	2.367	.58827	10.24160	-.08863	.00464	.07079	.04424	.17498	.00992	-.00133	.00126
7.326	4.353	.58735	12.30340	-.05354	-.00023	.22079	.04884	.14784	.01428	-.00159	.00092
GRADIENT		.00005	.99623	.00956	-.02759	.07951	.00146	-.01608	.00164	.00003	.00007

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.339	-.027	.58781	8.05788	-.08374	.10359	-.11125	.04324	.20961	.00617	-.00148	.00041
10.040	2.372	.58810	10.31470	-.03608	.05505	.07158	.04455	.16486	.00941	-.00129	.00102
10.061	4.478	.58756	12.45100	-.07388	.02201	.24542	.05016	.13120	.01546	-.00169	.00076
GRADIENT		-.00005	.97434	.00260	-.01816	.07910	.00151	-.01743	.00205	-.00004	.00008

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.643	-.013	.58691	8.10708	-.11966	.04505	-.09725	.04404	.19053	.00667	-.00140	.00033
15.082	2.543	.58837	10.48700	-.06077	.02168	.10901	.04615	.14051	.01079	-.00131	.00056
14.801	4.374	.58726	12.33140	-.09089	-.03326	.25149	.05071	.11376	.01325	-.00093	.00160
GRADIENT		.00011	.96086	.00761	-.01730	.07957	.00148	-.01763	.00151	.00010	.00028

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.827	-.162	.58717	7.96542	-.13995	.04759	-.08432	.04448	.16487	.00714	-.00146	.00024
30.228	2.450	.58826	10.41380	-.12322	.00837	.12569	.04698	.11408	.01208	-.00147	.00110
30.232	4.437	.58845	12.44160	-.19907	-.04902	.28952	.05252	.07927	.01514	-.00143	.00133
GRADIENT		.00029	.97138	-.01187	-.02070	.08124	.00170	-.01865	.00175	.00001	.00024

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.600	-.132	.58877	7.96473	-.06606	-.01682	-.06768	.04440	.15230	.00798	-.00178	.00032
45.018	2.364	.58815	10.31080	-.11022	.01804	.14415	.04676	.10027	.01370	-.00195	.00080
44.806	4.412	.58767	12.38870	-.19317	-.00796	.30707	.05291	.06419	.01592	-.00186	.00133
GRADIENT		-.00024	.97236	-.02761	.00238	.08256	.00184	-.01944	.00177	-.00002	.00022

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(RNH025) (21 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00 / 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
49.823	-.233	.58747	7.83733	.02097	-.05236	-.07201	.04425	.15222	.00590	-.00144	.00061
50.763	2.449	.58807	10.43110	-.09531	.03018	.15894	.04678	.09627	-.01240	-.00166	.00132
50.761	4.339	.58684	12.37400	-.20688	.07273	.30917	.05282	.06192	.01670	-.00202	.00116
	GRADIENT	-.00011	.99048	-.04939	.02759	.08355	.00181	-.01982	.00237	-.00012	.00013

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 03S1 (CARRIER DATA)

(RNH027) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 261 / 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00 / 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.310	.046	.58593	8.02000	-.10996	.07740	-.03529	.04409	-.09928	.00698	-.00105	.00040
7.309	2.283	.58706	10.17530	-.10062	.09110	.15226	.04904	-.14415	.01072	-.00116	-.00002
7.865	4.688	.58535	12.29900	-.14232	.04415	.31003	.05657	-.17512	.01089	-.00094	.00098
	GRADIENT	.00011	1.00780	-.00740	-.00757	.08145	.00293	-.01792	.00094	.00005	.00013

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 262 / 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00 / 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.835	-.171	.58650	7.97637	-.17277	.10647	-.04409	.04447	-.10462	.00815	-.00126	-.00009
9.901	2.437	.58620	10.34850	-.05317	.03987	.16781	.04981	-.15931	.00936	-.00099	.00090
9.652	4.384	.58597	12.31440	-.08957	.06373	.32133	.05794	-.18979	.01213	-.00094	.00078
	GRADIENT	-.00012	.95000	.01979	-.01027	.08028	.00291	-.01882	.00085	.00007	.00020

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 263 / 0 RN/L = 3.27 GRADIENT INTERVAL = -5.00 / 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.936	-.143	.58646	8.01648	-.19035	.06635	-.02627	.04498	-.12749	.00904	-.00156	-.00020
14.990	2.462	.58598	10.39360	-.08235	.03567	.18739	.05111	-.18452	.01024	-.00156	.00041
15.447	4.479	.58597	12.50860	-.16821	.04642	.34830	.06013	-.21549	.01366	-.00146	.00072
	GRADIENT	-.00009	.96904	.00653	-.00242	.08108	.00323	-.01938	.00097	.00002	.00020

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA)

(RNH027) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 264/ 0 RN/L = 3.27 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.711	-1.161	.58652	7.95935	-1.14677	.03516	.00060	.04518	-.16413	.00993	-.00216	-.00001
29.841	2.529	.58531	10.44460	-1.10279	.05502	.21999	.05230	-.22170	.01176	-.00201	.00085
30.092	4.385	.58590	12.37600	-1.13616	.01473	.37478	.06192	-.25042	.01377	-.00170	.00069
	GRADIENT		.96822	.00334	-.00364	.08226	.00361	-.01916	.00083	.00010	.00017

RUN NO. 265/ 0 RN/L = 3.27 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.673	-1.113	.58533	7.98864	-.08756	.00438	.02800	.04545	-.18314	.01090	-.00267	-.00008
44.791	2.534	.58607	10.45630	-.09962	.06035	.24526	.05270	-.23879	.01335	-.00277	.00084
44.852	4.379	.58533	12.35100	-1.18554	-.02875	.39876	.06244	-.26591	.01420	-.00227	.00094
	GRADIENT		.96849	-.02062	-.00540	.08251	.00371	-.01861	.00075	.00008	.00023

RUN NO. 266/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.205	-1.137	.58469	7.98867	.06098	.04605	.01278	.04467	-.18067	.01027	-.00275	.00012
50.115	2.437	.58577	10.34730	-1.13316	.05734	.23699	.05232	-.24068	.01361	-.00285	.00059
50.310	4.427	.58519	12.39560	-1.16478	.07898	.41124	.06330	-.27014	.01463	-.00238	.00069
	GRADIENT		.96322	-.05071	.00708	.08729	.00403	-.01978	.00097	.00008	.00013

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 237.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 281/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.140	2.460	.58657	8.27095	9.88371	.00383	.18345	.05086	-.18476	.01162	-.00172	.00028
3.154	4.481	.58709	10.38510	9.89607	.14029	.35199	.06019	-.21504	.01322	-.00151	.00061
	GRADIENT		1.03598	.00611	.06751	.08337	.00462	-.01498	.00079	.00010	.00017

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA)

(RNH028) (08 OCT 75)

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-120(CA23B) 747/1 AT1 03S1 (CARRIER DATA)

(RNH028) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BRFE = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = 10.000
 DY = .000 MACH = .500

RUN NO. 282/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.424	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
		2.022	.58775	8.14688	9.89112	.02441	.16054	.04991	-.19071	.01086	-.00147	.00024
	7.204	4.410	.58829	10.23600	10.03350	.03213	.36105	.06078	-.23300	.01285	-.00118	.00031
		GRADIENT	.00023	.90003	.05963	.00324	.08397	.00455	-.01771	.00083	.00012	.00003

RUN NO. 283/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	9.851	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
		2.068	.58638	8.17312	9.90835	-.00656	.17325	.05047	-.20156	.00992	-.00118	.00019
	9.970	4.488	.58659	10.40820	9.98861	.07583	.37085	.06172	-.24152	.01207	-.00090	.00053
		GRADIENT	.00009	.92385	.03317	.03405	.08168	.00465	-.01652	.00089	.00012	.00014

RUN NO. 284/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	14.671	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
		2.026	.58696	8.11471	9.91614	.07964	.18196	.05091	-.21491	.01049	-.00100	.00007
	14.337	4.481	.58697	10.33430	10.04080	.01744	.38011	.06251	-.25353	.01089	-.00059	.00059
		GRADIENT	.00001	.90410	.05078	-.02534	.08071	.00473	-.01573	.00016	.00017	.00021

RUN NO. 285/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	29.878	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
		2.180	.58699	8.28611	9.85463	.05921	.21268	.05182	-.23919	.01166	-.00212	.00075
	29.674	4.515	.58714	10.41500	9.93482	.06578	.40789	.06406	-.27401	.01403	-.00185	.00060
		GRADIENT	.00006	.91162	.03434	.00282	.08359	.00524	-.01491	.00102	.00011	.00007

RUN NO. 286/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.780	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
		2.093	.58656	8.18310	9.89025	-.01014	.21699	.05151	-.24661	.01239	-.00263	.00093
	45.100	4.521	.58637	10.47830	9.85318	.09425	.42038	.06449	-.28080	.01506	-.00245	.00126
		GRADIENT	-.00008	.94521	-.01527	.04299	.08376	.00534	-.01408	.00110	.00008	.00014

RUN NO. 287/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	50.200	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
		2.061	.58636	8.14261	9.95888	.05490	.22147	.05152	-.24914	.01292	-.00272	.00073
	50.258	4.539	.58679	10.46300	9.91845	.01787	.43392	.06458	-.28245	.01469	-.00228	.00117
		GRADIENT	.00018	.93625	-.01631	-.01494	.08572	.00527	-.01344	.00071	.00018	.00018

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA) (RNH029) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 50.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 291/ 0		RN/L = 3.29		GRADIENT INTERVAL = -5.00/ 5.00		CBL	
MACH	ALPHA	DX	DY	CL	CD	CLM	CBL
.58846	10.34390	9.93909	.03727	.17081	.04698	-.14367	.00942
.58807	12.41160	9.89734	.03280	.33408	.05752	-.17046	.00043
.00020	1.04555	-.02111	-.00226	.08256	.00432	-.01355	.00001
RUN NO. 292/ 0		RN/L = 3.28		GRADIENT INTERVAL = -5.00/ 5.00		CBL	
MACH	ALPHA	DX	DY	CL	CD	CLM	CBL
.58779	10.16860	9.84159	-.01357	.14656	.04824	-.14754	.00068
.58837	12.43630	9.91158	.06365	.34631	.05869	-.18727	.00083
.00024	.93338	.02881	.03178	.08221	.00430	-.01635	.00006
RUN NO. 293/ 0		RN/L = 3.28		GRADIENT INTERVAL = -5.00/ 5.00		CBL	
MACH	ALPHA	DX	DY	CL	CD	CLM	CBL
.58818	10.13820	9.83260	.09566	.15828	.04928	-.17107	.00015
.58829	12.34200	9.91415	.05812	.35290	.05951	-.20976	.00063
.00005	.92115	.03409	-.01569	.08135	.00427	-.01617	.00020
RUN NO. 294/ 0		RN/L = 3.29		GRADIENT INTERVAL = -5.00/ 5.00		CBL	
MACH	ALPHA	DX	DY	CL	CD	CLM	CBL
.58847	10.25250	9.79538	.05260	.19833	.05083	-.21457	.00021
.58839	12.45730	9.85045	.04924	.39123	.06250	-.25027	.00064
.00003	.92581	.02312	-.00141	.08100	.00490	-.01499	.00018
RUN NO. 295/ 0		RN/L = 3.28		GRADIENT INTERVAL = -5.00/ 5.00		CBL	
MACH	ALPHA	DX	DY	CL	CD	CLM	CBL
.58898	10.13000	9.88695	.06428	.20947	.05126	-.23173	.00052
.58942	12.41470	9.82664	.13076	.40818	.06297	-.26570	.00073
.00019	.96844	-.02556	.02818	.08423	.00497	-.01440	.00009
RUN NO. 296/ 0		RN/L = 3.28		GRADIENT INTERVAL = -5.00/ 5.00		CBL	
MACH	ALPHA	DX	DY	CL	CD	CLM	CBL
.58684	10.07900	9.89054	.05093	.20709	.05073	-.23355	.00096
.58697	12.54340	9.89004	.07529	.41781	.06352	-.26991	.00152
.00005	.97795	-.03988	.00967	.08362	.00508	-.01443	.00022

ARC 14-120(CA23B) 74771 ATI 03SI (CARRIER DATA)

(RNH030) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BPEF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

RUN NO. 301/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.146	ALPHAC	2.474	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
	7.541		4.355	.58572	10.34670	19.88150	.03398	.18066	.04865	-.14392	.01137	-.00164	.00098
		GRADIENT		.58623	12.31920	19.89100	.03786	.33711	.05663	-.16495	.01354	-.00151	.00113
				.00027	1.04919	.00505	.00206	.08322	.00424	-.01118	.00116	.00007	.00008

RUN NO. 302/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	10.020	ALPHAC	2.172	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
	14.608		4.441	.58701	10.13010	19.84880	.04975	.15720	.04799	-.14904	.01073	-.00150	.00071
		GRADIENT		.58644	12.43730	19.90010	.02053	.35641	.05833	-.18466	.01313	-.00131	.00085
				-.00023	.93258	.02074	-.01181	.08052	.00418	-.01440	.00097	.00008	.00006

RUN NO. 303/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	14.887	ALPHAC	2.172	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
	14.608		4.441	.58581	10.26770	19.84270	.03141	.17727	.04915	-.17486	.01029	-.00125	.00048
		GRADIENT		.58686	12.34570	19.92050	.02009	.36229	.05939	-.20755	.01249	-.00104	.00095
				.00046	.91607	.03430	-.00499	.08157	.00451	-.01441	.00097	.00009	.00020

RUN NO. 304/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	30.123	ALPHAC	1.934	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
	29.781		4.549	.58823	10.05950	19.88270	.04308	.8238	.04920	-.21110	.01024	-.00183	.00063
		GRADIENT		.58519	12.46690	19.93250	.09516	.40260	.06231	-.24934	.01372	-.00169	.00146
				-.00116	.92058	.01904	.01991	.08421	.00501	-.01462	.00133	.00006	.00032

RUN NO. 305/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.889	ALPHAC	2.080	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
	44.724		4.413	.58767	10.16970	19.86300	.06580	.21673	.05114	-.23234	.01213	-.00259	.00053
		GRADIENT		.58708	12.35030	19.85900	.09727	.39819	.06217	-.26376	.01411	-.00233	.00110
				-.00026	.93477	-.00171	.01349	.07779	.00473	-.01347	.00085	.00011	.00025

RUN NO. 306/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	50.425	ALPHAC	2.067	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
	50.408		4.416	.58729	10.115600	19.92850	-.00602	.21223	.05077	-.23614	.01197	-.00271	.00116
		GRADIENT		.58775	12.37800	19.89900	.08025	.41326	.06280	-.26768	.01535	-.00255	.00091
				.00020	.94608	-.01256	.03673	.08559	.00512	-.01343	.00144	.00007	-.00011

TABLATED SOURCE DATA - CA238
ARC 14-120(CA238) 747/1 AT1 03SI (CARRIER DATA)

DATE 22 MAR 76

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = .000
TORB = 6.000 DX = 20.000
DY = .000 MACH = .600

DZ	7.139	ALPHAC	8.31512	ALPHA0	19.87130	DX	.05947	CL	.19329	CD	.05068	CLM	-.20251	CY	.01070	CYN	-.00154	CBL	.00080
	7.034	GRADIENT	4.374	GRADIENT	10.27020	DX	.09448	CL	.36175	CD	.06006	CLM	-.22966		.01211		-.00120		.00049
							.01809		.08708		.00485		-.01404		.00073		.00018		-.00016

DZ	9.707	ALPHAC	10.45100	ALPHA0	19.90690	DX	.06734	CL	.16921	CD	.04952	CLM	-.20084	CY	.01027	CYN	-.00146	CBL	.00053
	9.690	GRADIENT	4.549	GRADIENT	10.45100	DX	.05123	CL	.38573	CD	.06189	CLM	-.24076		.01243		-.00099		.00090
							-.00629		.08457		.00483		-.01559		.00084		.00018		.00014

DZ	14.857	ALPHAC	10.17670	ALPHA0	19.86250	DX	.07407	CL	.17433	CD	.05003	CLM	-.21485	CY	.00993	CYN	-.00117	CBL	.00119
	14.654	GRADIENT	4.262	GRADIENT	10.40250	DX	.01904	CL	.39342	CD	.06279	CLM	-.25393		.01239		-.00085		.00046
							-.02147		.08548		.00498		-.01525		.00096		.00012		-.00028

DZ	29.665	ALPHAC	10.17670	ALPHA0	19.93210	DX	.07184	CL	.19799	CD	.05114	CLM	-.23905	CY	.01222	CYN	-.00235	CBL	.00062
	29.802	GRADIENT	4.262	GRADIENT	10.17670	DX	.06091	CL	.39002	CD	.06242	CLM	-.27215		.01244		-.00172		.00097
							-.00479		.08422		.00495		-.01452		.00010		.00028		.00015

DZ	44.676	ALPHAC	10.28860	ALPHA0	19.92050	DX	.09661	CL	.21303	CD	.05143	CLM	-.24740	CY	.01186	CYN	-.00253	CBL	.00039
	44.732	GRADIENT	4.370	GRADIENT	10.28860	DX	.06355	CL	.41301	CD	.06348	CLM	-.28107		.01612		-.00265		.00102
							-.01378		.08334		.00502		-.01404		.00178		-.00005		.00027

DZ	50.207	ALPHAC	10.27800	ALPHA0	20.01850	DX	.01577	CL	.21472	CD	.05142	CLM	-.24963	CY	.01270	CYN	-.00268	CBL	.00079
	50.098	GRADIENT	4.371	GRADIENT	10.27800	DX	.02241	CL	.41700	CD	.06351	CLM	-.28269		.01485		-.00239		.00115
							.00280		.08541		.00510		-.01396		.00091		.00012		.00015

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(RN4032) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

Run No.	Alpha	Alphac	Mach	Dz	Dx	Dy	CL	CD	CLM	CY	CYN	CBL
321/0	8.24764	2.384	.58661	7.247	-.07736	10.15720	.17002	.05049	-.19755	.00425	-.00524	.00518
322/0	10.25180	4.324	.58746	7.563	-.08334	10.05880	.32833	.05915	-.22798	.00287	-.00486	.00649
323/0	10.31420	4.379	.58718	7.896	-.03860	10.16020	.34877	.06045	-.24257	.00231	-.00241	.00557
324/0	10.19140	4.367	.58733	10.032	-.02661	10.13390	.35111	.06099	-.24753	.00187	-.00153	.00491
325/0	10.14070	4.248	.58735	15.217	-.19638	10.08520	.15782	.04975	-.20628	.00498	-.00330	.00409
326/0	10.08960	4.301	.58772	15.047	-.07071	10.08630	.35662	.06126	-.25667	.00145	-.00002	.00318
327/0	10.08960	4.301	.58772	29.890	-.07071	10.08630	.35662	.06126	-.25667	.00145	-.00002	.00318
328/0	10.08960	4.301	.58772	29.890	-.07071	10.08630	.35662	.06126	-.25667	.00145	-.00002	.00318
329/0	10.08960	4.301	.58772	44.648	-.07071	10.08630	.35662	.06126	-.25667	.00145	-.00002	.00318
330/0	10.08960	4.301	.58772	44.989	-.07071	10.08630	.35662	.06126	-.25667	.00145	-.00002	.00318

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(RNH032) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 327/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
49.978	1.969	8.02344	-.02053	10.13650	.21371	.05131	-.24538	.00866	-.00088	.07081
50.163	4.264	10.19110	-.04478	10.15550	.39983	.05280	-.27995	.00854	-.00011	.00157
	GRADIENT	.94453	-.01056	.00998	.08110	.00501	-.01506	-.00005	.00034	.00033

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 331/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.500	2.446	10.34440	-.06667	10.07820	.16246	.04858	-.16814	.00203	-.00342	.06539
7.613	4.292	12.27760	-.14319	10.09130	.30762	.05619	-.19812	-.00162	-.00125	.00622
	GRADIENT	1.04761	-.04447	.00710	.07866	.00412	-.01608	-.00198	.00118	.00045

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = 10.000 MACH = .600

RUN NO. 332/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
10.263	1.907	10.03580	-.22873	10.09230	.12172	.04699	-.16301	.00210	-.00280	.00548
9.859	4.322	12.24310	-.09624	10.08730	.31936	.05715	-.20631	-.00215	-.00007	.00577
	GRADIENT	.91395	.05486	-.00207	.08184	.00421	-.01793	-.00176	.00113	.00012

RUN NO. 333/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
15.012	1.933	10.03310	-.19577	10.12510	.14139	.04803	-.18188	.00143	-.00119	.00381
14.957	4.327	12.27130	-.10028	10.09060	.33713	.05874	-.22345	-.00354	.00187	.00400
	GRADIENT	.93488	.03905	-.01441	.08176	.00447	-.01736	-.00208	.00128	.00008

RUN NO. 334/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.834	1.968	10.02860	-.19612	10.04890	.17488	.04966	-.21448	.00101	-.00151	.00184
29.957	4.352	12.31310	-.15854	10.07440	.37534	.06162	-.25418	-.00141	.00373	.00004
	GRADIENT	.93488	.03905	-.01441	.08176	.00447	-.01736	-.00208	.00128	.00008

ARC 14-120(CA23B) 747/1 AT1 03S1 (CARRIER DATA)

(RNHO33) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 335/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.819	1.871	.58683	9.93220	-17406	10.09900	.19100	.05048	-.22877	.00515	.00045	.00099
45.000	4.278	.58661	12.24790	-.20324	10.09270	.38752	.06238	-.26698	.00551	.00129	.00168
	GRADIENT	-.00009	.96232	-.01213	-.00262	.08167	.00495	-.01588	.00015	.00035	.00029

RUN NO. 336/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.002	1.913	.58788	9.94862	-110542	10.11940	.19477	.05033	-.23210	.00784	-.00037	.00112
50.443	4.260	.58739	12.23090	-17171	10.08420	.39026	.06201	-.26887	.00739	.00053	.00192
	GRADIENT	-.00021	.97225	-.02824	-.01500	.08328	.00498	-.01566	-.00019	.00038	.00034

ARC 14-120(CA23B) 747/1 AT1 03S1 (CARRIER DATA)

(RNHO34) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 341/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
1.515	-.031	.58648	5.90009	-.06742	.00578	-.04941	.04580	-.12412	.01337	-.00333	-.00008
1.466	2.266	.58717	8.09199	-.04621	.02682	.14793	.05056	-.17441	.01463	-.00299	.00055
1.364	4.259	.58774	10.13540	-.02054	-.00171	.30740	.05895	-.20966	.01637	-.00286	.00063
	GRADIENT	.00029	.98649	.01088	-.00147	.08325	.00304	-.01999	.00069	.00011	.00017

RUN NO. 342/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.218	-.127	.58815	6.34215	-.10713	-.00757	-.04746	.04548	-.12263	.01174	-.00329	.00056
2.877	2.324	.58765	8.16733	-.14690	-.06245	.15886	.05102	-.18404	.01460	-.00306	.00054
3.380	4.353	.58723	10.29310	-.04005	-.00326	.32087	.06000	-.21888	.01611	-.00281	.00047
	GRADIENT	-.00020	.94601	.01801	.00016	.08228	.00321	-.02160	.00098	.00011	-.00002

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = 10.000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1333.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 343/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.400	-.285	.58717	5.90381	-.13205	-.02328	-.04297	.04590	-.14010	.01182	-.00303	-.00020
7.390	2.312	.58697	8.21305	.07014	-.04725	.17326	.05172	-.20141	.01352	-.00264	.00058
7.046	4.212	.58774	10.11280	-.00640	-.04352	.32465	.06015	-.23194	.01445	-.00226	.00071
	GRADIENT	.00012	.93327	.03090	-.00478	.08185	.00311	-.02061	.00059	-.00017	.00021

RUN NO. 344/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.858	-.243	.58774	5.93582	-.13020	-.02468	-.03164	.04592	-.14784	.01123	-.00280	.00021
9.870	2.334	.58683	8.23296	.06279	-.03964	.17916	.05192	-.20917	.01291	-.00248	.00049
9.840	4.253	.58677	10.19170	-.05789	-.06921	.33463	.06093	-.23973	.01393	-.00198	.00069
	GRADIENT	-.00022	.94365	.01935	-.00968	.08150	.00328	-.02063	.00060	-.00018	.00011

RUN NO. 345/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.745	-.254	.58763	5.91142	-.11810	-.04966	-.02562	.04591	-.16048	.01036	-.00233	-.00008
14.663	2.332	.58672	8.21363	.06055	-.05815	.19437	.05245	-.22071	.01283	-.00198	.00014
14.715	4.248	.58738	10.17930	-.07864	-.07945	.34947	.06169	-.24990	.01400	-.00152	.00073
	GRADIENT	-.00007	.94469	.01218	-.00643	.08341	.00345	-.02006	.00082	-.00018	.00017

RUN NO. 346/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.743	-.267	.58604	5.88621	-.08203	-.00339	-.00276	.04594	-.18075	.01248	-.00293	-.00035
29.911	2.360	.58747	8.27416	.02282	-.04821	.22081	.05296	-.24053	.01384	-.00266	.00051
29.627	4.268	.58710	10.18430	-.09565	-.10290	.38015	.06277	-.26954	.01421	-.00195	.00030
	GRADIENT	.00025	.94540	-.00039	-.02165	.08447	.00365	-.01977	.00039	-.00021	.00015

RUN NO. 347/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.607	-.235	.58716	5.90152	-.00966	-.05370	.01604	.04572	-.19234	.01292	-.00323	-.00016
44.784	2.345	.58716	8.25624	-.13594	-.05628	.23662	.05278	-.24862	.01335	-.00297	.00083
44.631	4.291	.58767	10.22080	-.15327	.01683	.39906	.06300	-.27738	.01504	-.00263	.00083
	GRADIENT	.00011	.95215	-.03264	.01471	.08468	.00376	-.01895	.00045	-.00013	.00023

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ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(RNH034) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 348/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
49.960	-.239	.58785	5.88468	.08819	.01479	.01551	.04531	-.19230	.01105	-.00299	.00042
50.084	2.361	.58817	8.25858	-.16437	-.02815	.23899	.05259	-.25094	.01350	-.00286	.00091
50.051	4.269	.58761	10.19200	-.16268	-.05749	.40272	.06265	-.27941	.01518	-.00257	.00142
	GRADIENT	-.00004	.95296	-.05808	-.01606	.08589	.00378	-.01951	.00092	-.00009	.00022

RUN NO. 349/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
61.655	-.279	.58759	5.85348	.11708	-.13288	.01694	.04521	-.19273	.01090	-.00302	.00045
61.629	2.289	.58818	8.18336	-.19266	.00830	.24251	.05242	-.25337	.01360	-.00280	.00049
61.640	4.275	.58756	10.20200	-.16063	-.09148	.40928	.06295	-.28063	.01439	-.00228	.00113
	GRADIENT	.00000	.95272	-.06384	.01129	.08624	.00385	-.01951	.00078	-.00016	.00014

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(RNH035) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 351/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.392	.007	.58697	3.99746	-.07524	.05360	-.00122	.04772	-.19977	.01157	-.00206	.00044
3.273	2.270	.58780	6.14693	-.03598	.12459	.18857	.05341	-.23977	.01177	-.00168	.00037
3.233	4.244	.58795	8.16058	-.04991	.01675	.35002	.06294	-.26866	.01356	-.00131	.00041
	GRADIENT	.00023	.98179	.00625	-.00773	.08292	.00347	-.01630	.00046	-.00018	.00020

RUN NO. 352/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.633	-.212	.58702	4.00651	-.18854	.04314	-.00517	.04732	-.19786	.01145	-.00214	.00042
7.582	2.387	.58736	6.30510	.08734	.06432	.20924	.05383	-.24730	.01271	-.00170	.00033
7.362	4.282	.58712	8.22000	-.03484	.07605	.36135	.06332	-.27411	.01347	-.00125	.00003
	GRADIENT	.00003	.93448	.03851	.00737	.08162	.00350	-.01709	.00045	-.00020	.00011

DATE 22 MAR 76

TABULATED SOURCE DATA - CA238

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ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA)

(RNH035) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA =
 RUDDER =
 LORB =
 DY =

.000 STAB = 5.000
 .000 ELEVON = .000
 4.000 DX = .000
 .000 MACH = .600

RUN NO. 353/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CY	CYN	CBL
9.664	-.213	.58759	3.95156	-.11309	.11144	.00046	.04709	.01087	-.00212	.00220
9.916	2.313	.58803	6.21534	.11618	.06173	.21313	.05356	.01296	-.00165	.00323
9.803	4.259	.58849	8.18827	-.02549	.05580	.36845	.06311	.01375	-.00115	.00011
GRADIENT		.00018	.94488	.02304	-.00428	.08233	.00353	.00065	.00022	-.00002

RUN NO. 354/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CY	CYN	CBL
15.113	-.270	.58842	3.94923	-.19325	.04406	.00240	.04674	.01120	-.00188	-.00025
14.808	2.324	.58932	6.21535	-.05927	.08345	.22277	.05378	.01278	-.00135	-.00033
14.693	4.304	.58828	8.22508	-.07338	.00995	.38158	.06366	.01320	-.00097	.00341
GRADIENT		-.00003	.93174	.02522	-.00631	.08300	.00365	.00045	.00020	.00014

RUN NO. 355/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CY	CYN	CBL
29.891	-.272	.58946	3.91348	-.06585	.08920	.01410	.04607	.01205	-.00274	.00040
29.979	2.346	.58900	6.26241	-.11845	.05612	.24000	.05338	.01442	-.00259	.00073
29.891	4.294	.58907	8.23413	-.17999	.07042	.40636	.05370	.01516	-.00205	.00075
GRADIENT		-.00009	.94363	-.02473	-.00459	.08594	.00380	.00069	.00015	.00008

RUN NO. 356/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CY	CYN	CBL
44.449	-.271	.58792	3.85960	.06793	.04655	.02695	.04590	.01268	-.00304	.00010
44.799	2.322	.58850	6.23703	-.14780	.04817	.24121	.06289	.01394	-.00260	.00338
44.865	4.260	.58630	8.20431	-.19731	.01498	.41150	.06323	.01564	-.00232	.00076
GRADIENT		.00022	.95651	-.05989	-.02012	.08474	.00376	.00064	.00016	.00014

PARAMETRIC DATA

ARC 14-120(CA23B) 747/1 ATI 03S1 (CARRIER DATA)

(RNH036) (21 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

REF	ALPHA	MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
DZ	2.302	3.32	361/ 0	3.32	GRADIENT INTERVAL = -5.00/ 5.00						
1.654	8.14688	.58711	8.14688	-.03672	.15517	.05166	.05166	-.17938	.04019	-.02004	.00347
2.469	10.19950	.58755	10.19950	-.16900	.30568	.05955	.05955	-.21146	.04380	-.02035	.00365
	GRADIENT	.00023	1.08489	-.06991	-.00299	.07955	.00417	-.01695	.00191	-.00017	.00009
DZ	2.012	3.31	362/ 0	3.31	GRADIENT INTERVAL = -5.00/ 5.00						
2.877	8.04539	.58735	8.04539	-.10843	.14006	.05086	.05086	-.17568	.03928	-.02004	.00349
3.365	10.31600	.58653	10.31600	-.07058	.33398	.06100	.06100	-.22127	.04461	-.02032	.00421
	GRADIENT	-.00034	.94906	.01582	.00160	.08105	.00424	-.01906	.00223	-.00012	.00030
DZ	2.013	3.30	363/ 0	3.30	GRADIENT INTERVAL = -5.00/ 5.00						
7.393	8.11744	.58735	8.11744	-.10956	.15692	.05162	.05162	-.19296	.04116	-.02099	.00368
7.226	10.26970	.58622	10.26970	-.01898	.34657	.06214	.06214	-.23484	.04394	-.02090	.00375
	GRADIENT	-.00048	.91080	.05440	-.01729	.08026	.00445	-.01772	.00118	-.00004	.00003
DZ	2.049	3.29	364/ 0	3.29	GRADIENT INTERVAL = -5.00/ 5.00						
9.858	8.14182	.58585	8.14182	-.11920	.16741	.05204	.05204	-.19966	.04150	-.02132	.00395
10.104	10.39920	.58629	10.39920	-.04720	.35828	.06301	.06301	-.24123	.04442	-.02106	.00447
	GRADIENT	.00018	.93734	.02990	-.0716	.07925	.00456	-.01726	.00121	-.00011	.00021
DZ	2.097	3.29	365/ 0	3.29	GRADIENT INTERVAL = -5.00/ 5.00						
14.553	8.15598	.58585	8.15598	-.09596	.18313	.05269	.05269	-.21127	.04188	-.02155	.00425
14.643	10.36750	.58527	10.36750	-.02118	.37808	.06402	.06402	-.25265	.04502	-.02122	.00419
	GRADIENT	-.00025	.93034	.03146	-.03066	.08201	.00476	-.01741	.00132	-.00014	.00003
DZ	2.159	3.29	366/ 0	3.29	GRADIENT INTERVAL = -5.00/ 5.00						
29.819	8.24139	.58550	8.24139	-.17520	.17624	.05323	.05323	-.23181	.04481	-.02338	.00473
29.992	10.35100	.58504	10.35100	-.14877	.40131	.06460	.06460	-.26302	.04751	-.02291	.00463
	GRADIENT	-.00020	.93709	.01174	-.02795	.08223	.00505	-.01608	.00120	-.00021	.00004

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 367/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
45.057	2.052	.58538	8.16577	-.12614	.16956	.21606	.05255	-.23985	.04517	-.02391	.00511
44.937	4.371	.58637	10.31880	-.09769	.15247	.40553	.08456	-.27555	.04937	-.02368	.00466
	GRADIENT	.00043	.92837	.01227	-.03737	.08170	.00518	-.01539	.00181	.00010	-.00019

RUN NO. 368/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.129	2.015	.58474	8.08551	-.04310	.16630	.20586	.05234	-.23787	.04478	-.02399	.00468
50.420	4.439	.58435	10.37690	-.11005	.15838	.42895	.06530	-.27894	.04919	-.02346	.00465
	GRADIENT	-.00016	.94516	-.02761	-.00327	.09202	.00535	-.01694	.00182	.00022	-.00001

RUN NO. 369/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
62.057	2.140	.58502	8.24539	-.02430	.13774	.23842	.05304	-.24642	.04563	-.02365	.00468
61.853	4.416	.58414	10.35040	-.04193	.12725	.42405	.06510	-.28083	.04882	-.02322	.00488
	GRADIENT	-.00039	.92457	-.00774	-.00461	.08153	.00530	-.01511	.00140	.00019	.00009

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 371/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
1.955	.521	.58987	6.33729	-.10766	.09365	-.06065	.04533	.17746	.00858	-.00159	.00065
1.879	2.297	.59007	8.24052	-.10093	.06646	.07983	.04681	.14793	.01110	-.00142	.00041
1.932	4.335	.59089	10.27080	-.12705	.05405	.24186	.05177	.10923	.01463	-.00125	.00064
	GRADIENT	.00027	1.03052	-.00527	-.01028	.07932	.00171	-.01792	.00159	.00009	-.00000

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

ORIGINAL PAGE IS
 OF POOR QUALITY

ARC 14-120(CA23B) 747/1 ATI 0351 (CARRIER DATA)

(RNH037) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = 0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 372/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.611	-.073	.59019	6.14149	-.14594	.16043	-.10922	.04541	.19357	.00868	-.00184	-.00014
3.412	2.415	.59040	8.31124	.11055	.13546	.09485	.04713	.13800	.01034	-.00117	.00061
3.341	4.372	.59036	10.30810	.00163	.12986	.24733	.05210	.10156	.01552	-.00132	.00077
GRADIENT		.00004	.93441	.03630	-.00723	.08029	.00147	-.02077	.00150	.00012	.00021

RUN NO. 373/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.238	-.184	.58959	5.97655	-.08660	.09567	-.10336	.04561	.18477	.00664	-.00121	-.00020
7.611	2.515	.58950	8.43460	.05996	.12690	.11878	.04794	.12241	.01145	-.00111	.00017
7.497	4.363	.58887	10.32400	-.04563	.04585	.26276	.05287	.09073	.01350	-.00087	.00041
GRADIENT		-.00015	.95292	.01233	-.00931	.08066	.00154	-.02066	.00153	.00007	.00013

RUN NO. 374/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
10.003	-.096	.58840	6.09035	-.12387	.09762	-.08912	.04577	.17561	.00712	-.00119	-.00036
9.942	2.401	.58937	8.31062	.06698	.12280	.10834	.04745	.12200	.00927	-.00065	.00079
10.030	4.474	.58839	10.42890	-.06324	.09804	.28119	.05362	.08335	.01346	-.00084	.00042
GRADIENT		.00001	.94747	.01539	.00043	.08098	.00168	-.02023	.00137	.00008	.00018

RUN NO. 375/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.990	.036	.58910	6.22162	-.14126	.13141	-.06674	.04583	.16329	.00671	-.00086	-.00021
14.729	2.374	.58974	8.27672	.05569	.06667	.11574	.04788	.11313	.01026	-.00062	.00008
14.795	4.458	.58844	10.39350	-.06647	.08480	.28800	.05406	.07482	.01220	-.00046	.00025
GRADIENT		-.00014	.94208	.01827	-.01089	.08017	.00184	-.02004	.00125	.00009	.00010

RUN NO. 376/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.795	-.037	.58885	6.11690	-.12939	.12231	-.05277	.04562	.14620	.00729	-.00147	.00014
29.929	2.359	.58821	8.28595	-.02203	.11292	.13528	.04769	.09828	.01198	-.00159	.00052
30.138	4.506	.58919	10.47950	-.18963	.08067	.32081	.05480	.05821	.01383	-.00132	.00078
GRADIENT		.00007	.95931	-.01215	-.00906	.08217	.00200	-.01981	.00145	.00003	.00014

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(RNH037) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 377/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
45.027	-.096	.58823	6.08589	-.04783	.07474	-.06523	.04479	.14423	.00829	-.00194	.00005
44.952	2.497	.58995	8.42205	-.25301	.06594	.17043	.04800	.08536	.01255	-.00182	.00067
44.914	4.260	.58874	10.22770	-.09599	.12210	.32095	.05380	.05192	.01470	-.00190	.00074
	GRADIENT	.00015	.94708	-.01614	.01041	.08883	.00201	-.02130	.00148	.00001	.00016

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 378/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.481	.036	.58791	6.20814	-.01251	.05409	-.03391	.04523	.13587	.00718	-.00168	.00032
50.592	2.316	.58759	8.27754	-.24803	.13582	.15326	.04752	.08905	.01288	-.00193	.00065
50.369	4.524	.58783	10.47610	-.19505	.10327	.34317	.05517	.04613	.01551	-.00200	.00084
	GRADIENT	-.00002	.95062	-.04101	.01109	.08400	.00221	-.01999	.00186	-.00007	.00012

RUN NO. 379/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
61.632	-.013	.58735	6.10612	.14628	.12051	-.03087	.04529	.13462	.00896	-.00195	-.00001
61.965	2.379	.58707	8.32028	-.22930	.09946	.16576	.04752	.08460	.01261	-.00178	.00066
61.651	4.408	.58790	10.33570	-.20140	.09337	.33989	.05448	.04524	.01426	-.00179	.00070
	GRADIENT	.00012	.95573	-.08096	-.00522	.08381	.00204	-.02024	.00121	.00004	.00016

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(RNH038) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 381/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
1.603	.046	.58938	5.98392	-.16713	.08333	-.04880	.04452	-.07078	.01170	-.00290	-.00002
1.569	2.293	.58924	8.13110	.04218	.10096	.14417	.04876	-.12210	.01453	-.00274	-.00007
2.306	4.387	.58902	10.37170	-.12536	.08546	.30672	.05652	-.15668	.01735	-.00301	.00028
	GRADIENT	-.00008	1.01018	.01030	.00058	.08195	.00276	-.01982	.00130	-.00003	.00007

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA)

(RNH038) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

.000 STAB = 5.000
 .000 ELEVON = 5.000
 6.000 DX = .000
 .000 MACH = .600

BETA =
 RUDDER =
 TORB =
 DY =

RUN NO. 382/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	3.468	ALPHAC	.019	ALPHA0	6.20728	DX	-.19716	DY	.10115	CL	-.03665	CD	.04449	CLM	-.07208	CY	.01300	CYN	-.00374	CBL	.00028
	3.699		2.422		8.36194		-.01894		.08959		.15576		.04902		-.13254		.01545		-.00322		.00039
	3.469		4.425		10.37440		-.08950		.31410		.05730		.05730		-.16637		.01744		-.00319		.00048
		GRADIENT			.94428		.02607		-.01062		.07963		.00287		-.02153		.00101		.00013		.00005

RUN NO. 383/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.736	ALPHAC	-.027	ALPHA0	6.18939	DX	-.22961	DY	.06087	CL	-.02844	CD	.04481	CLM	-.09478	CY	.01196	CYN	-.00299	CBL	.00006
	6.902		2.422		8.27053		.07916		.08816		.17202		.04989		-.15187		.01473		-.00292		.00019
	7.339		4.419		10.35840		-.08929		.09323		.33330		.05860		-.18763		.01704		-.00302		.00004
		GRADIENT			.93444		.03510		.00742		.08138		.00306		-.02097		.00114		-.00000		-.00000

RUN NO. 384/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	10.309	ALPHAC	.047	ALPHA0	6.26151	DX	-.23948	DY	.08783	CL	-.01415	CD	.04507	CLM	-.10751	CY	.01265	CYN	-.00287	CBL	-.00010
	9.703		2.409		8.30010		.02282		.05753		.17809		.05047		-.16249		.01406		-.00274		.00020
	10.031		4.489		10.44550		-.12841		.04705		.34572		.05957		-.19899		.01631		-.00284		.00025
		GRADIENT			.94000		.02694		-.00926		.08101		.00324		-.02065		.00082		.00001		.00008

RUN NO. 385/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	15.037	ALPHAC	-.141	ALPHA0	6.06450	DX	-.12720	DY	.01465	CL	-.03639	CD	.04453	CLM	-.11806	CY	.01178	CYN	-.00294	CBL	-.00003
	14.866		2.495		8.39330		.08175		.07175		.19982		.05137		-.18426		.01409		-.00272		.00027
	14.876		4.418		10.36830		-.05165		.07290		.35759		.06021		-.21679		.01501		-.00249		.00061
		GRADIENT			.94052		.02032		.01331		.08662		.00339		-.02187		.00072		.00010		.00014

RUN NO. 386/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	30.004	ALPHAC	-.165	ALPHA0	6.01263	DX	-.11334	DY	.09307	CL	.00938	CD	.04521	CLM	-.16001	CY	.01073	CYN	-.00272	CBL	.00035
	29.816		2.497		8.40355		.03463		.06951		.22883		.05231		-.22075		.01309		-.00268		.00058
	30.280		4.402		10.40330		-.16387		.04147		.37677		.06183		-.24950		.01368		-.00232		.00096
		GRADIENT			.95746		-.00681		-.01114		.08058		.00358		-.01980		.00066		.00008		.00013

(RNH038) (08 OCT 75)

ARC 14-120(CA238) 747/1 AT1 03S1 (CARRIER DATA)

(RNH039) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 387/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.879	.070	.58666	6.21163	-.10694	.06776	.04412	.04576	-.18509	.01134	-.00263	-.00208
44.946	2.481	.58661	8.42103	-.06122	.08432	.24297	.05281	-.23763	.01325	-.00254	.00009
44.926	4.448	.58586	10.41200	-.21870	.40815	.40815	.05319	-.26773	.01521	-.00250	.00064
	GRADIENT	-.00018	.95780	-.02388	-.01029	.08313	.00394	-.01898	.00088	.00003	.00016

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 388/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
49.971	-.037	.58490	6.07965	.11060	.11843	.03769	.04571	-.18564	.01184	-.00283	-.00033
50.192	2.513	.58441	8.42727	-.18012	.08470	.25489	.05310	-.24272	.01342	-.00268	.00026
50.609	4.284	.58442	10.28530	-.17500	.09634	.39538	.06224	-.26915	.01443	-.00238	.00108
	GRADIENT	-.00012	.96964	-.06945	-.00568	.08295	.00376	-.01954	.00060	.00010	.00032

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 391/ 0 RN/L = 3.36 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.148	2.388	.59047	8.22485	-.06687	.05722	.14696	.04944	-.13476	.04310	-.01996	.00312
3.390	4.263	.59098	10.21090	-.04503	-.00654	.29461	.05658	-.16270	.04483	-.01985	.00376
	GRADIENT	.00027	1.05936	.01165	-.03401	.07876	.00381	-.01490	.00092	.00006	.00034

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

ORIGINAL PAGE IS OF POOR QUALITY

REFERENCE DATA
 SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = 10.000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC LOFB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .00011 MACH = .000 MACH = .600

RUN NO. 392/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

	ALPHA	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
DZ	2.139	8.21903	-14187	.10762	.14441	.04967	-14706	.04502	-.02145	.07392
7.376	4.461	10.38090	-.04368	.05150	.33663	.05962	-.19071	.04962	-.02199	.00343
GRADIENT	.00011	.93122	.04230	-.02417	.08280	.00429	-.01880	.00198	-.00023	-.00021

RUN NO. 393/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

	ALPHA	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
DZ	2.001	8.09911	-16160	.06343	.14237	.04987	-15562	.04518	-.02206	.00398
9.885	4.424	10.36610	-.07507	.05245	.32594	.05998	-.19937	.04918	-.02233	.00403
10.083	GRADIENT	.00020	.93579	.03572	.07578	.00417	-.01806	.00165	-.00011	.00002

RUN NO. 394/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

	ALPHA	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
DZ	2.141	8.24803	-19875	.05544	.16878	.05114	-17898	.04656	-.02309	.00454
15.083	4.433	10.35730	-.08338	.06210	.34691	.05131	-.21768	.04945	-.02289	.00441
14.830	GRADIENT	.00015	.92040	.00290	.07773	.00443	-.01689	.00126	.00009	-.00006

RUN NO. 395/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

	ALPHA	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
DZ	2.045	8.11938	-12810	.09299	.18491	.05181	-21114	.04795	-.02428	.00475
29.781	4.494	10.41400	-.07450	.08848	.39098	.06369	-.25297	.05174	-.02423	.00546
29.790	GRADIENT	.00055	.93683	-.00184	.08413	.00485	-.01708	.00155	.00002	.00029

RUN NO. 396/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

	ALPHA	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
DZ	2.160	8.20736	-.08759	.08082	.21588	.05262	-23039	.04853	-.02442	.00481
44.565	4.357	10.31290	-.11783	.05913	.39439	.06379	-.26464	.05081	-.02404	.00453
44.873	GRADIENT	.00074	.95382	-.00983	.08086	.00506	-.01551	.00103	.00018	-.00013

RUN NO. 397/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

	ALPHA	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
DZ	2.123	8.20360	-.01339	.05846	.21430	.05251	-23248	.04771	-.02425	.00476
50.286	4.396	10.36870	-.06019	.05556	.40082	.06399	-.26871	.05090	-.02391	.00479
50.569	GRADIENT	.00003	.95258	-.00128	.08206	.00505	-.01594	.00140	.00015	.00001

PARAMETRIC DATA

ARC 14-120(CA238) 747/1 AT1 02S1 (CARRIER DATA)

(RNH040) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 401/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	3.048	ALPHAC	-.004	ALPHA0	3.94885	DX	-.03013	CL	-.02134	CD	.04628	CLM	-.14542	CY	.01499	CYN	-.00366	CBL	-.00011
	3.021		2.318		.58575		-.00823		.03102		.05195		-.19553		.01655		-.00366		.00003
	3.274		4.401		.58596		-.08030		.34618		.06099		-.23150		.01848		-.00343		.00037
		GRADIENT			.00005		-.01099		.08350		.00332		-.01958		.00079		.00005		.00011

RUN NO. 402/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.066	ALPHAC	-.091	ALPHA0	4.06526	DX	-.06533	CL	-.01306	CD	.04656	CLM	-.15131	CY	.01448	CYN	-.00381	CBL	-.00048
	7.198		2.490		.58717		-.05879		.20176		.05282		-.20919		.01583		-.00362		.00035
	7.335		4.405		.58721		-.06649		.35582		.06163		-.24128		.01853		-.00344		.00045
		GRADIENT			.00033		-.00010		.08210		.00330		-.02015		.00088		.00008		.00022

RUN NO. 403/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	9.793	ALPHAC	.024	ALPHA0	4.20285	DX	-.10758	CL	.00433	CD	.04655	CLM	-.16204	CY	.01509	CYN	-.00396	CBL	.00004
	9.766		2.449		.58614		-.05513		.20296		.05267		-.21512		.01619		-.00367		.00064
	9.745		4.293		.58746		-.10482		.35455		.06151		-.24667		.01816		-.00340		.00029
		GRADIENT			.00031		.00172		.08203		.00345		-.01993		.00071		.00013		.00007

RUN NO. 404/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	14.781	ALPHAC	-.155	ALPHA0	4.02957	DX	-.08900	CL	-.01356	CD	.04590	CLM	-.16643	CY	.01347	CYN	-.00377	CBL	-.00012
	14.685		2.568		.58672		-.05953		.23243		.05365		-.23102		.01639		-.00354		.00038
	14.592		4.303		.58737		-.04039		.36399		.06217		-.25576		.01739		-.00317		.00055
		GRADIENT			.00027		.01090		.08562		.00358		-.02036		.00090		.00013		.00015

RUN NO. 405/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	29.804	ALPHAC	-.120	ALPHA0	4.05111	DX	-.13448	CL	.00956	CD	.04573	CLM	-.18861	CY	.01313	CYN	-.00323	CBL	-.00003
	29.944		2.563		.58585		-.04528		.24855		.05387		-.24916		.01475		-.00291		.00078
	29.835		4.329		.58681		-.13744		.38982		.06313		-.27379		.01509		-.00230		.00072
		GRADIENT			.00026		.00487		.08577		.00384		-.01943		.00045		.00020		.00018

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(RNH040) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 406/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.515	-.091	.58600	4.04059	.03455	.03143	.02220	.04549	-.19570	.01272	-.00298	.00000
44.728	2.446	.58754	6.34838	-.15179	.02644	.24572	.05330	-.25380	.01466	-.00278	.00022
44.671	4.476	.58637	8.39585	-.16754	-.03328	.42194	.06456	-.28489	.01640	-.00233	.00074
	GRADIENT	.00010	.95184	-.04547	-.01367	.08755	.00413	-.01967	.00080	.00014	.00016

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(RNH041) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .500

PARAMETRIC DATA

RUN NO. 411/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.328	2.137	.48953	6.15134	-.08804	-.17940	.15475	.05006	-.18073	.01773	-.00338	.00015
3.325	4.298	.48981	8.23496	-.05681	-.16385	.33576	.05946	-.22458	.01943	-.00329	.00034
	GRADIENT	.00013	.96420	.01445	.00720	.08376	.00435	-.02029	.00079	.00004	.00009

RUN NO. 412/ 0 RN/L = 2.96 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
6.838	2.085	.48840	6.09329	-.09292	-.16145	.17291	.05103	-.19427	.01731	-.00354	-.00006
7.184	4.439	.48857	8.36195	-.05746	-.16305	.35624	.06112	-.23734	.01963	-.00323	.00057
	GRADIENT	.00007	.96379	.01507	-.00068	.07788	.00429	-.01830	.00098	.00013	.00027

RUN NO. 413/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.770	2.218	.48931	6.27786	-.14676	-.13853	.18618	.05107	-.20125	.01641	-.00333	.00079
9.780	4.469	.48962	8.40798	-.05126	-.15367	.35973	.06138	-.24274	.01894	-.00313	.00099
	GRADIENT	.00013	.94601	.04241	-.00672	.07708	.00458	-.01842	.00112	.00009	.00009

DATE 22 MAR 76

TABULATED SOURCE DATA - CA23B

PAGE 47

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(RNH041) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .500

PARAMETRIC DATA

RUN NO. 414/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.789	1.986	.48945	6.05709	-.15807	-.11379	.18004	.05106	-.21001	.01680	-.00343	-.00001
14.819	4.441	.48934	8.37959	-.06484	-.09466	.37562	.06201	-.25452	.01900	-.00301	.00059
	GRADIENT	-.00005	.94620	.03798	.00779	.07968	.00446	-.01813	.00090	.00017	.00024

RUN NO. 415/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.638	2.215	.48943	6.25657	-.07823	-.13076	.21861	.05205	-.23474	.01657	-.00293	.00023
29.826	4.415	.49048	8.35752	-.04135	-.13496	.39591	.06230	-.27120	.01818	-.00263	.00086
	GRADIENT	.00048	.95503	.01676	-.00191	.08060	.00466	-.01657	.00073	.00013	.00029

RUN NO. 416/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.438	2.214	.49039	6.22878	-.07656	-.11385	.23604	.05189	-.24356	.01552	-.00268	.00075
44.694	4.330	.48927	8.27081	-.09178	-.16629	.40657	.06244	-.27825	.01860	-.00254	.00085
	GRADIENT	-.00053	.96531	-.00719	-.02479	.08061	.00499	-.01640	.00145	.00006	.00005

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .300

PARAMETRIC DATA

RUN NO. 421/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.128	2.209	.29686	6.15824	-.00134	-.00631	.18322	.05349	-.18297	.02257	-.00334	.00004
3.123	4.221	.29674	8.14827	.01001	-.02654	.34282	.06167	-.22535	.02455	-.00315	.00022
	GRADIENT	-.00006	.98892	.00564	-.31006	.07931	.00407	-.02106	.00098	.00010	.00009

RUN NO. 422/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.085	2.291	.29723	6.28847	-.07398	-.04136	.20872	.05422	-.19701	.02192	-.00310	.00085
7.303	4.347	.29615	8.32691	-.07285	-.01484	.36025	.06279	-.23811	.02581	-.00341	.00064
	GRADIENT	-.00053	.98450	.00055	.01290	.07370	.00417	-.01999	.00189	-.00015	.00010

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(RNH042) (08 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA)

(RNH042) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 4.000 DX = .000
 DY = .000 MACH = .300

PARAMETRIC DATA

RUN NO. 423/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.285	2.180	6.13881	-0.01604	-0.02059	1.9689	0.05392	-0.20155	0.02342	-0.00334	-0.00013
9.970	4.347	8.34801	-0.10366	-0.04935	0.36485	0.06260	-0.24371	0.02370	-0.00301	-0.00079
GRADIENT		1.01948	-0.04044	-0.01327	0.07751	0.00401	-0.01946	0.00013	0.00015	0.00042

RUN NO. 424/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.488	2.266	6.25676	-0.06213	-0.02430	0.21160	0.05447	-0.21459	0.02297	-0.00318	0.00033
14.575	4.354	8.31217	-0.04284	-0.03813	0.38067	0.06331	-0.25493	0.02526	-0.00305	0.00040
GRADIENT		0.98457	0.00924	-0.00662	0.08099	0.00423	-0.01932	0.00110	0.00006	0.00003

RUN NO. 425/ 0 RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.804	2.191	6.21467	-0.11139	-0.03212	0.22265	0.05431	-0.23292	0.02283	-0.00292	0.00032
29.724	4.292	8.26295	-0.07168	-0.04141	0.39578	0.06370	-0.27246	0.02451	-0.00260	0.00013
GRADIENT		0.97492	0.01890	-0.00442	0.08241	0.00447	-0.01882	0.00080	0.00015	-0.00009

RUN NO. 426/ 0 RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.766	2.202	6.22064	-0.08944	-0.11793	0.23814	0.05401	-0.24326	0.02235	-0.00263	0.00005
44.688	4.265	8.24369	-0.05498	-0.10352	0.39319	0.06189	-0.27772	0.02270	-0.00227	0.00053
GRADIENT		0.98014	0.01670	0.00698	0.07512	0.00381	-0.01670	0.00017	0.00018	0.00023

REFERENCE DATA PARAMETRIC DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = -1.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 MACH = .600
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

RUN NO. 41/ 0 RN/L = 3.40 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	CA	CN	CSL	CLN
131.927	-5.187	-.02094	-.23157	.03198	-.49546	.00079	-.00276
131.734	-3.684	-.02217	-.34513	.03685	-.36559	.00032	-.00266
131.585	-2.684	-.02372	-.50648	.04010	-.27390	-.00030	-.00250
131.467	-1.696	-.02568	-.66784	.04220	-.18676	.00066	-.00244
131.339	-.712	-.02789	-2.24264	.04434	-.09544	.00027	-.00231
131.218	.186	-.03458	10.54370	.04521	-.01047	.00011	-.00263
131.073	1.294	-.02971	1.35772	.04357	.08564	.00105	-.00207
130.941	2.216	-.03296	.85236	.04041	.17481	.00078	-.00214
130.802	3.190	-.03487	.62664	.03566	.25647	.00096	-.00219
130.668	4.233	-.03700	.50119	.02749	.35529	.00120	-.00235
130.501	5.283	-.03802	.41287	.01811	.44793	.00122	-.00246
130.357	6.213	-.03622	.33469	.0909	.52841	.00171	-.00224
130.219	7.193	-.03533	.28218	.00080	.61595	.00192	-.00203
130.047	8.200	-.02880	.20195	-.00356	.70226	.00280	-.00145
	GRADIENT	-.00184	.22054	-.00094	.09104	.00014	.00005

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 OF POOR QUALITY

ARC 14-120(CA23B) 747/1 AT1

(ANH005) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 MACH = .600

RUN NO. 51/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	CA	CN	CSL	CLN
130.569	-5.190	-.02862	-.31637	.03327	-.41844	.00113	-.00340
130.436	-3.773	-.03281	-.49855	.03738	-.29603	.00051	-.00358
170.276	-2.866	-.03543	-.70951	.04005	-.21980	-.00022	-.00352
130.158	-1.854	-.04170	-1.28344	.04278	-.11979	-.00046	-.00357
130.031	-.858	-.03734	-2.49324	.04464	-.03131	.00023	-.00307
129.869	.149	-.03907	14.69840	.04525	.06285	.00069	-.00331
129.728	1.215	-.03656	1.72287	.04476	.15923	.00093	-.00302
129.596	2.190	-.03748	.98042	.04228	.25650	.00058	-.00288
129.434	3.207	-.03981	.71144	.03768	.34553	.00072	-.00294
129.329	4.111	-.03660	.51045	.03161	.42649	.00072	-.00267
129.085	5.180	-.03849	.42628	.02343	.51844	.00098	-.00276
128.927	6.172	-.03782	.35172	.01461	.60277	.00158	-.00264
128.889	7.226	-.03441	.27360	.00480	.70422	.00133	-.00216
128.737	8.205	-.03197	.22398	.00003	.78356	.00252	-.00184
GRADIENT		-.00032	.28308	-.00052	.09229	.00011	.00011

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(ANH008) (08 OCT 75)

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 81/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
4.365	.192	-.02401	7.13931	.91914	.04268	-.12635	.00042	-.00206
2.954	2.364	-.03533	.85653	.69755	.04257	.05653	.00104	-.00296
3.443	4.308	-.04096	.54517	.57102	.03357	.21568	.00102	-.00306
GRADIENT		-.00414	-1.62692	-.08491	-.00217	.08311	.00015	-.00024

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
6.994	-.126	-.02455	-10.98800	.41163	.04320	-.13669	.00046	-.00216
7.541	2.378	-.03096	.74617	.31383	.04288	.07717	.00065	-.00216
7.335	4.361	-.03794	.49892	.14322	.03388	.23517	.00021	-.00229
GRADIENT		-.00297	2.65110	-.05892	-.00199	.08297	-.00005	-.00003

ARC 14-120(CA23B) 747/1 AT1 Q2S1 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = -1.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = 5.000
 BRPREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC TORB = 6.000 DX = .000
 SCALE = .0125 DY = .000 MACH = .600

PARAMETRIC DATA

CLN	CSL	CA	PHIO	PHIC	BETAO	BETAC	BETAO	BETAC	ALPHAC	BETAC	GRADIENT	INTERVAL
.000207	.00025	.04405	.18416	-9.48584	-.01931	-.02355	-.01931	-.02355	-.141	-.02355	3.36	-5.00/ 5.00
-.00209	.00034	.04313	.17685	.71430	-.02549	-.03009	-.02549	-.03009	2.414	-.03009		
-.00203	.00078	.03372	.18465	.42641	-.03304	-.03349	-.03304	-.03349	4.401	-.03349		
.00001	.00011	-.00218	-.00003	2.26917	-.00299	-.00221	-.00299	-.00221	9.522	-.00221		

CLN	CSL	CA	PHIO	PHIC	BETAO	BETAC	BETAO	BETAC	ALPHAC	BETAC	GRADIENT	INTERVAL
.00000	.00013	-.00260	-.01129	14.38136	-.00170	-.00233	-.00170	-.00233	4.492	-.00233	3.35	-5.00/ 5.00
.00005	.00029	.04504	.28004	-62.46180	-.02440	-.02608	-.02440	-.02608	14.752	-.02608		
.00067	.00029	.04331	.28148	.65368	-.04108	-.02807	-.04108	-.02807	15.063	-.02807		
.00000	.00067	.03298	.17167	.47049	-.03121	-.03685	-.03121	-.03685	15.188	-.03685		

CLN	CSL	CA	PHIO	PHIC	BETAO	BETAC	BETAO	BETAC	ALPHAC	BETAC	GRADIENT	INTERVAL
.00000	.00003	-.00263	-.02565	9.85305	-.00032	-.00342	-.00032	-.00342	4.306	-.00342	3.35	-5.00/ 5.00
.00084	.00039	.04517	.29506	-40.44000	-.03133	-.02407	-.03133	-.02407	29.536	-.02407		
.00077	.00039	.04256	.29463	.74080	-.04291	-.03185	-.04291	-.03185	29.860	-.03185		
.00000	.00077	.03337	.17718	.51892	-.03159	-.03897	-.03159	-.03897	29.902	-.03897		

CLN	CSL	CA	PHIO	PHIC	BETAO	BETAC	BETAO	BETAC	ALPHAC	BETAC	GRADIENT	INTERVAL
.00000	.00002	-.00280	-.02622	5.59553	-.00096	-.00175	-.00096	-.00175	4.342	-.00175	3.35	-5.00/ 5.00
.00067	.00067	.04502	.22277	-23.10330	-.02362	-.02757	-.02362	-.02757	44.873	-.02757		
.00077	.00067	.04211	.16083	.76090	-.02345	-.03315	-.02345	-.03315	44.866	-.03315		
.00000	.00077	.03219	.10662	.46448	-.01912	-.03517	-.01912	-.03517	45.029	-.03517		

CLN	CSL	CA	PHIO	PHIC	BETAO	BETAC	BETAO	BETAC	ALPHAC	BETAC	GRADIENT	INTERVAL
.00000	.00002	-.00280	-.02622	3.59220	-.00159	-.00237	-.00159	-.00237	50.039	-.00237	3.34	-5.00/ 5.00
.00031	.00031	.04554	.15753	-14.70380	-.01649	-.02787	-.01649	-.02787	50.412	-.02787		
.00095	.00095	.04218	.14912	.76395	-.02879	-.03319	-.02879	-.03319	50.412	-.03319		
.00109	.00109	.03179	.12637	.50951	-.02255	-.03850	-.02255	-.03850	50.166	-.03850		

CLN	CSL	CA	PHIO	PHIC	BETAO	BETAC	BETAO	BETAC	ALPHAC	BETAC	GRADIENT	INTERVAL
.00000	.00018	-.00298	-.00558	3.59220	-.00159	-.00237	-.00159	-.00237	50.166	-.00237	3.34	-5.00/ 5.00
.00031	.00031	.04554	.15753	-14.70380	-.01649	-.02787	-.01649	-.02787	50.039	-.02787		
.00095	.00095	.04218	.14912	.76395	-.02879	-.03319	-.02879	-.03319	50.412	-.03319		
.00109	.00109	.03179	.12637	.50951	-.02255	-.03850	-.02255	-.03850	50.166	-.03850		

ARC 14-120(CA238) 747/1 AT1 02S1 (CARRIER DATA)

(ANH009) (08 OCT 75)

REFERENCE DATA

PARAMETRIC DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA =
 RUDDER =
 TORR =
 DY =

.000 STAB = -1.000
 .000 ELEVON = 5.000
 8.000 DX = .000
 .000 MACH = .600

RUN NO. 91/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
8.075	.274	-.02879	-.03081	5.99245	.19735	.04142	-.13093	.00034	-.00257
7.276	2.380	-.03042	-.02885	.73241	.16156	.04131	.04750	.00071	-.00235
7.800	4.334	-.03350	-.02166	.44328	.10141	.03264	.20362	.00034	-.00220
	GRADIENT	-.00116	.00224	-1.38154	-.02354	-.00213	.08244	.00000	.00009

RUN NO. 92/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
9.930	-.015	-.02295	-.03073	-57.20780	.21687	.04219	-.14130	.00067	-.00224
10.158	2.498	-.03277	-.03839	.75188	.21172	.04123	.06169	.00092	-.00259
9.843	4.339	-.03474	-.02139	.45919	.10044	.03320	.21228	.00063	-.00232
	GRADIENT	-.00278	.00184	13.82212	-.02529	-.00197	.08118	-.00000	-.00002

RUN NO. 93/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.862	-.101	-.02177	-.03827	-12.10710	.27336	.04292	-.13342	.00050	-.00213
14.490	2.534	-.03046	-.02906	.68879	.16081	.04220	.08098	.00084	-.00239
15.108	4.322	-.03437	-.02133	.45608	.09991	.03398	.22484	.00065	-.00224
	GRADIENT	-.00288	.00380	2.99138	-.03947	-.00189	.08101	.00004	-.00003

RUN NO. 94/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.926	-.027	-.02424	-.02110	-42.27900	.14975	.04487	-.09068	.00054	-.00224
29.957	2.539	-.03487	-.03376	.78716	.18566	.04242	.11734	.00098	-.00267
29.720	4.365	-.04212	-.01885	.55338	.08835	.03336	.26552	.00100	-.00288
	GRADIENT	-.00408	.00016	10.21075	-.01216	-.00251	.08111	.00011	-.00015

RUN NO. 95/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.465	-.192	-.02338	-.01754	-6.94078	.12774	.04452	-.09992	.00056	-.00222
44.798	2.405	-.03033	-.03095	.72242	.17258	.04246	.12170	.00102	-.00226
44.826	4.485	-.07326	-.02844	.50205	.13191	.03148	.30068	.00075	-.00257
	GRADIENT	-.00337	-.00245	1.64707	.00156	-.00271	.04564	.00005	-.00007

ARC 14-12J(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = -1.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC IORB = .000 DX = .000
 SCALE = .0125 GRADIENT = -.00054 5.0+293 -.01095 -.00299 .08503 DY = .000 MACH = .600

RUN NO. 96/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
DZ	-.078	-.02435	-20.97440	.17333	.04539	-.07771	.00008	-.00261
50.555	-.03005	-.02537	.73404	.13939	.04194	.14746	.00038	-.00229
50.407	-.03265	-.02682	.52481	.12503	.03145	.30227	.00080	-.00264
50.452	-.04020	-.00054	5.0+293	-.01095	-.00299	.08503	.00016	.00000
GRADIENT	-.00218	-.00054	5.0+293	-.01095	-.00299	.08503	.00016	.00000

(ANH010) (08 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC IORB = .000 DX = .000
 SCALE = .0125 GRADIENT = -.00037 3.39 GRADIENT INTERVAL = -5.00/ 5.00

RUN NO. 101/ 0 RN/L = 3.39 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
DZ	.132	-.08097	15.98680	.58112	.04260	-.04417	.00021	-.00328
6.742	-.03786	-.08924	.98677	.50184	.04108	.12376	.00015	-.00309
7.349	-.04006	-.08411	.52838	.39704	.03198	.28520	.00074	-.00276
7.463	-.03935	-.00081	-3.79022	-.04435	-.00254	.07955	.00013	.00012
GRADIENT	-.00037	-.00081	-3.79022	-.04435	-.00254	.07955	.00013	.00012

RUN NO. 102/ 0 RN/L = 3.38 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
DZ	-.206	-.03516	-9.14115	.25394	.04258	-.07123	.00017	-.00284
10.009	-.03319	-.03365	.99200	.18864	.04149	.14056	.00055	-.00298
10.088	-.04042	-.04055	.52480	.18940	.03223	.30546	.00088	-.00260
10.447	-.03977	-.00111	2.20373	-.01465	-.00220	.08277	.00016	.00005
GRADIENT	-.00151	-.00111	2.20373	-.01465	-.00220	.08277	.00016	.00005

RUN NO. 103/ 0 RN/L = 2.37 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
DZ	-.178	-.03806	-10.91640	.27412	.04381	-.04610	.00007	-.00287
15.028	-.03442	-.03222	.87350	.18060	.04200	.16062	.00036	-.00272
14.812	-.03607	-.02935	.48698	.13707	.03249	.32557	.00022	-.00239
15.043	-.03720	-.00193	2.59261	-.03034	-.00241	.08149	.00004	.00010
GRADIENT	-.00061	-.00193	2.59261	-.03034	-.00241	.08149	.00004	.00010

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(ANH010) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 104/ 0 RN/L = 3.36 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.734	-1.108	-0.3396	-0.02025	-17.50900	.14541	.04479	-0.00575	.00034	-0.00283
30.254	2.360	-0.3978	-0.02508	.96584	.13985	.04253	.20253	.00020	-0.00309
29.860	4.407	-0.4015	-0.02305	.52247	.10761	.03232	.36782	.00047	-0.00293
GRADIENT	-0.0140	-0.0067	-0.0067	4.11272	-0.00816	-0.00270	.08281	.00003	-0.00002

RUN NO. 105/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.868	-1.111	-0.3296	-0.03145	-16.47020	.22554	.04522	.01639	.00025	-0.00283
45.183	2.422	-0.3866	-0.03268	.91470	.18116	.04226	.23034	.00040	-0.00298
45.129	4.429	-0.3932	-0.02344	.50917	.10897	.03216	.39509	.00023	-0.00277
GRADIENT	-0.0144	-0.0167	-0.0167	3.87374	-0.02532	-0.00280	.08345	-0.00000	.00001

RUN NO. 106/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
50.418	-0.076	-0.3425	-0.03157	-24.19930	.22512	.04534	.01979	.00043	-0.00298
50.480	2.472	-0.3651	-0.02435	.84657	.13458	.04209	.23916	.00045	-0.00288
50.477	4.415	-0.4021	-0.01688	.52230	.07855	.03166	.40428	.00066	-0.00292
GRADIENT	-0.0131	-0.00325	-0.00325	5.72305	-0.03278	-0.00296	.08563	.00005	.00001

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 4.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 111/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
3.151	-0.047	-0.02341	-0.11075	26.60780	1.58291	.04599	-0.09010	.00027	-0.00183
3.118	2.270	-0.3080	-0.10941	.77746	1.02370	.04380	.09687	.00057	-0.00195
3.528	4.264	-0.3447	-0.10860	.46360	.75985	.03336	.25917	.00070	-0.00185
GRADIENT	-0.00264	-0.00051	-0.00051	-6.30222	-0.19622	-0.00296	.08284	.00010	-0.00000

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(ANH011) (08 OCT 75)

DATE 22 MAR 76 TABULATED SOURCE DATA - CA23B (ANH011) (08 OCT 75)

PARAMETRIC DATA

BETA = .000 STAB = -1.000
RUDDER = .000 ELEVON = 5.000
TORB = 4.000 DX = .000
DY = .000 MACH = .600

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
SCALE = .0125

RUN NO. 112/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.547	-.170	-.02451	-.11970	-8.21007	1.59918	.04548	-.09333	.00058	-.00196
7.199	2.385	-.03117	-.10988	.74906	1.00897	.04322	-.12282	.00044	-.00195
7.175	4.257	-.03785	-.11583	.50986	.81416	.03311	.27090	.00065	-.00211
	GRADIENT	-.00299	.00105	2.06044	-.20407	-.00268	.08242	.00001	-.00003

RUN NO. 113/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
9.781	-.120	-.02656	-.11596	-12.50350	1.64035	.04599	-.08222	.00019	-.00209
9.781	2.353	-.03276	-.11241	.79807	1.03445	.04316	-.12474	.00040	-.00214
9.491	4.419	-.03856	-.11246	.50052	.77832	.03217	.28840	.00020	-.00215
	GRADIENT	-.00264	.00079	2.94672	-.19172	-.00298	.08173	.00000	-.00001

RUN NO. 114/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.874	-.041	-.03158	-.11731	-37.75920	1.61977	.04646	-.07247	.00006	-.00255
14.967	2.414	-.03386	-.11444	.80362	1.03828	.04264	-.13493	.00113	-.00227
14.923	4.392	-.03861	-.11849	.50413	.81656	.03193	.29452	.00075	-.00224
	GRADIENT	-.00156	-.00021	8.91129	-.18339	-.00321	.08285	.00017	-.00007

RUN NO. 115/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.907	-.177	-.02656	-.11781	-8.53365	1.68663	.04567	-.06548	.00049	-.00224
29.803	2.432	-.03132	-.10938	.73812	.99348	.04199	-.15878	.00093	-.00203
29.693	4.435	-.04008	-.11499	.51832	.79100	.03011	.32634	.00057	-.00236
	GRADIENT	-.00288	.00074	2.04115	-.19773	-.00328	.08501	.00002	-.00002

RUN NO. 116/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.786	-.134	-.02629	-.10711	-11.09150	1.52576	.04565	-.04599	.00031	-.00219
45.057	2.347	-.03335	-.10582	.81448	.96551	.04120	-.16998	.00056	-.00213
44.452	4.450	-.03276	-.11672	.49958	.80359	.02879	.34501	.00090	-.00234
	GRADIENT	-.00272	-.00202	2.59569	-.15955	-.00362	.08534	.00013	-.00003

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(ANH012) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 121/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
3.209	.038	-.02403	-.11185	32.59070	1.07055	.04372	-.11852	-.00009	-.00192
3.176	2.411	-.02869	-.11753	.68203	.81762	.04195	.07952	.00063	-.00202
3.398	4.319	-.03801	-.10642	.50466	.59669	.03289	.23793	.00015	-.00233
	GRADIENT	-.00321	.00112	-7.73165	-.11051	-.00246	.08102	.00006	-.00009

RUN NO. 122/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.586	-.026	-.02811	-.11292	-47.68780	1.05177	.04426	-.10316	.00005	-.00236
7.752	2.399	-.03271	-.11194	.78115	.77121	.04237	.09418	.00081	-.00237
7.261	4.448	-.03798	-.09920	.48954	.55069	.03210	.25339	.00052	-.00231
	GRADIENT	-.00220	.00299	11.04783	-.11211	-.00266	.07974	.00011	.00001

RUN NO. 123/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
10.180	-.156	-.02594	-.11073	-9.45049	1.04900	.04426	-.11163	.00023	-.00233
9.988	2.439	-.03357	-.11282	.78898	.77720	.04245	.10393	.00057	-.00236
10.110	4.458	-.03737	-.10592	.48077	.58516	.03164	.26778	.00063	-.00223
	GRADIENT	-.00250	.00096	2.23580	-.10073	-.00264	.08227	.00009	.00002

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 131/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
3.093	.127	-.01363	-.10041	6.10814	.95072	.04457	-.03381	.00004	-.00061
3.006	2.255	-.02297	-.10209	.58366	.72488	.04301	.14201	.00008	-.00100
3.460	4.338	-.02211	-.08994	.29224	.50356	.03361	.30658	.00046	-.00074
	GRADIENT	-.00202	.00247	-1.38557	-.10619	-.00260	.08085	.00010	-.00003

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(ANH013) (08 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(ANH013) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 132/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.217	-0.139	-0.1465	-0.10535	-6.02567	1.00523	0.4470	-0.4333	.00005	-0.00076
7.234	2.360	-0.1885	-0.09890	4.5777	.68965	0.4337	.16157	.00053	-0.00075
7.262	4.367	-0.2036	-0.09513	.26739	.53220	0.3403	.32629	.00070	-0.00065
GRADIENT	-0.00129	.00228	1.44473	-1.10584	-0.0229	.08203	.00015	.00002	.00002

RUN NO. 133/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
10.116	-0.237	-0.1706	-0.10377	-4.11140	.99648	0.4470	-0.4647	.00040	-0.00104
9.960	2.407	-0.1882	-0.08719	4.4820	.60332	0.4335	.17707	.00028	-0.00079
9.890	4.371	-0.2200	-0.08783	.28859	.49039	0.3389	.33533	.00038	-0.00077
GRADIENT	-0.00105	.00362	.99792	-1.1200	-0.0224	.08294	.00001	-0.00001	.00006

RUN NO. 134/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
15.175	-0.191	-0.2211	-0.09798	-6.58827	.93377	0.4547	-0.2817	-0.00035	-0.00137
14.756	2.411	-0.2076	-0.09538	4.9354	.66058	0.4376	.18662	.00034	-0.00101
15.038	4.441	-0.2383	-0.09119	.30774	.50485	0.3346	.35562	.00036	-0.00096
GRADIENT	-0.00033	.00144	1.54547	-0.93317	-0.0251	.08284	.00016	.00016	.00009

RUN NO. 135/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
30.192	-0.063	-0.2859	-0.09840	-24.55400	.92147	0.4601	-0.1379	.00013	-0.00219
29.830	2.435	-0.3091	-0.09207	7.2761	.63439	0.4341	.22014	.00022	-0.00211
29.948	4.393	-0.3562	-0.09852	4.6506	.54824	0.3356	.37720	.00061	-0.00230
GRADIENT	-0.00152	.00009	5.81839	-0.09517	-0.0271	.08161	.00010	.00010	-0.00002

RUN NO. 136/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.708	-0.049	-0.2818	-0.08807	-30.15350	.83074	0.4596	-0.2785	.00028	-0.00232
44.452	2.450	-0.3322	-0.09149	7.7706	.63200	0.4292	.24163	.00002	-0.00234
44.667	4.474	-0.3625	-0.09813	4.6476	.48762	0.3324	.40465	.00072	-0.00246
GRADIENT	-0.00179	.00007	6.98692	-0.7602	-0.0296	.08341	.00009	.00009	-0.00003

PARAMETRIC DATA

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(ANH013) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 137/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
50.164	-.057	-.02860	-.09393	-26.61570	.88566	.04580	.02725	.00048	-.00234
50.275	2.433	-.03271	-.09205	.77048	.63379	.04268	.24490	.00069	-.00238
50.038	4.464	-.03731	-.08744	.47934	.48464	.03172	.41281	.00083	-.00252
	GRADIENT	-.00192	.00141	6.17858	-.08916	-.00305	.08536	.00008	-.00004

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(ANH014) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 141/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
3.324	2.292	-.01280	-.06053	.31988	.42703	.04176	.15480	.00029	.00010
3.528	4.239	-.01529	-.05714	.20685	.32308	.03235	.32110	.00032	.00011
	GRADIENT	-.00128	.00174	-.05808	-.05341	-.00483	.08545	.00001	.00001

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 142/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.340	1.933	-.01416	-.06404	.41998	.45795	.04345	.14324	-.00022	-.00005
7.097	4.300	-.01526	-.06314	.20349	.35723	.03277	.33945	.00029	.00016
	GRADIENT	-.00046	.00038	-.03144	-.04254	-.00451	.08287	.00021	.00009

RUN NO. 143/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
10.137	1.946	-.00951	-.05199	.28014	.36992	.04395	.14968	-.00004	.00020
9.825	4.403	-.01435	-.05694	.18696	.31845	.03275	.35446	.00037	.00015
	GRADIENT	-.00197	-.00202	-.03792	-.02095	-.00456	.08334	.00016	-.00002

TABULATED SOURCE DATA - CA23B ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC TORB = 6.000 DX = 10.000
 SCALE = .0125 DY = .000 MACH = .600

REFERENCE DATA PARAMETRIC DATA

RUN NO. 144/ 0		RN/L = 3.31		GRADIENT INTERVAL = -5.00/ 5.00					
		ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
DZ	14.831	1.968	-.01610	.46894	.44604	.04431	.16172	.00024	-.00045
	14.775	4.376	-.02033	.26641	.28556	.03282	.37028	.00020	-.00048
GRADIENT		-.00175	.00485	-.03412	-.06635	-.00477	.08662	-.00002	-.00001

RUN NO. 145/ 0		RN/L = 3.31		GRADIENT INTERVAL = -5.00/ 5.00					
		ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
DZ	30.007	1.997	-.02870	.82332	.45433	.04433	.19899	.00034	-.00201
	29.873	4.392	-.03153	.41164	.27580	.03255	.39840	.00060	-.00194
GRADIENT		-.00118	.00613	-.17189	-.07454	-.00492	.08326	.00011	.00003

RUN NO. 146/ 0		RN/L = 3.30		GRADIENT INTERVAL = -5.00/ 5.00					
		ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
DZ	44.854	1.998	-.02928	.83988	.42896	.04415	.20952	.00079	-.00229
	44.891	4.430	-.03316	.42924	.29070	.03160	.42202	.00037	-.00216
GRADIENT		-.00159	.00332	-.16883	-.05684	-.00516	.08737	-.00017	.00005

RUN NO. 147/ 0		RN/L = 3.30		GRADIENT INTERVAL = -5.00/ 5.00					
		ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
DZ	50.387	2.049	-.03183	.89046	.39158	.04411	.22438	.00040	-.00237
	50.182	4.431	-.03343	.43278	.29200	.03154	.42391	.00098	-.00226
GRADIENT		-.00067	.00128	-.19214	-.04195	-.00527	.08376	.00025	.00005

ORIGINAL PAGE IS
OF POOR QUALITY

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(ANHO15) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 151/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.261	2.410	-.01539	-.05552	.36584	.31121	.04093	.15563	.00023	-.00030
7.540	4.362	-.02184	-.05594	.28710	.26196	.03104	.31585	.00010	-.00062
	GRADIENT	-.00330	-.00021	-.04035	-.02523	-.00506	.08210	-.00007	-.00016

RUN NO. 152/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
9.896	2.043	-.01620	-.05238	.45446	.29782	.04238	.13504	.00040	-.00048
10.215	4.469	-.02110	-.05759	.27085	.26759	.03070	.34009	.00026	-.00066
	GRADIENT	-.00202	-.00215	-.07571	-.01246	-.00482	.08454	-.00006	-.00007

RUN NO. 153/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.806	2.079	-.02047	-.04574	.56414	.25921	.04316	.15591	-.00031	-.00082
14.750	4.497	-.02265	-.04780	.28886	.22228	.03110	.36145	.00011	-.00077
	GRADIENT	-.00090	-.00085	-.11388	-.01528	-.00499	.08502	.00018	.00002

RUN NO. 154/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
30.131	2.049	-.03036	-.05990	.84898	.33936	.04394	.18913	.00083	-.00234
30.087	4.493	-.03550	-.05189	.45306	.24052	.03152	.39280	.00085	-.00242
	GRADIENT	-.00210	.00328	-.6197	-.04044	-.00508	.08332	.00001	-.00003

RUN NO. 155/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.833	2.044	-.03319	-.04639	.93043	.26416	.04392	.20859	.00047	-.00261
45.102	4.460	-.03648	-.04968	.46906	.23069	.03149	.40901	.00113	-.00261
	GRADIENT	-.00136	-.00136	-.19100	-.01386	-.00514	.08297	.00027	-.00000

RUN NO. 156/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
50.292	2.016	-.03450	-.04601	.98066	.26268	.04398	.20933	.00059	-.00282
50.425	4.375	-.03719	-.05004	.48742	.23415	.03199	.41126	.00061	-.00265
	GRADIENT	-.00114	-.00171	-.20906	-.01210	-.00508	.08558	.00001	.00007

(ANH016) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BRP = 2348.0400 IN. ZMRP = 190.7500 IN. ZC IORB = 6.000 DX = 20.000
 SCALE = .0125 GRADIENT = -.00623

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

RUN NO. 161/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CLN
2.997	2.461	-.01182	-.03333	.27527	.23155	.04018	.00027
3.241	4.340	-.01773	-.04504	.23+31	.25269	.03080	.00036
	GRADIENT	-.00315	-.00623	-.02180	.01125	-.00500	.00005
							-.00018

RUN NO. 162/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CLN
7.114	2.024	-.01557	-.03938	.44088	.27945	.04287	.00029
7.110	4.482	-.01969	-.03932	.25198	.21866	.03083	.00041
	GRADIENT	-.00168	.00002	-.07683	-.02473	-.00490	.00005
							-.00049
							-.00002

RUN NO. 163/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CLN
10.110	1.989	-.01433	-.04140	.41286	.29275	.04380	.00024
9.502	4.485	-.02025	-.03759	.25891	.20939	.03139	.00034
	GRADIENT	-.00237	.00153	-.08168	-.03340	-.00497	.00004
							-.00005

RUN NO. 164/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CLN
14.885	2.147	-.01853	-.03531	.49453	.24571	.04369	.00043
14.669	4.296	-.02454	-.04432	.32759	.25025	.03320	.00006
	GRADIENT	-.00280	-.00419	-.07770	.00211	-.00488	.00023
							-.00004

RUN NO. 165/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CLN
29.970	2.006	-.02941	-.03728	.83991	.26398	.04455	.00053
29.738	4.442	-.03310	-.02971	.42727	.16541	.03191	.00090
	GRADIENT	-.00151	.00311	-.16939	-.04046	-.00519	.00015
							-.00002

RUN NO. 166/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CLN
44.740	2.001	-.03180	-.04071	.91065	.28957	.04447	.00058
44.620	4.440	-.03674	-.03905	.47457	.21740	.03140	.00074
	GRADIENT	-.00202	.00068	-.17881	-.02959	-.00536	.00007
							-.00252
							-.00258
							-.00002

DATE 22 MAR 76

TABULATED SOURCE DATA - CA23B

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ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(ANH016) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 167/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
50.218	1.983	-.03094	-.03538	.89420	.25207	.04424	.21671	.00077	-.00250
50.509	4.478	-.03710	-.03895	.47518	.21515	.03108	.43514	.00097	-.00263
	GRADIENT	-.00247	-.00143	-.16791	-.01479	-.00528	.08753	.00008	-.00005

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 20.000
 DY = .000 MACH = 1.600

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(ANH017) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 171/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
7.409	2.320	-.02250	-.05280	.55574	.29786	.03963	.16281	.00006	-.00113
7.682	4.409	-.02964	-.03816	.38562	.17796	.02832	.33966	.00028	-.00134
	GRADIENT	-.00342	.00701	-.08146	-.05741	-.00541	.08468	.00011	-.00010

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = 1.500

RUN NO. 172/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
10.200	1.989	-.02424	-.04476	.65824	.25469	.04116	.14657	.00036	-.00138
9.876	4.367	-.02801	-.04339	.36783	.20389	.02951	.34303	-.00002	-.00131
	GRADIENT	-.00159	.00058	-.13896	-.02136	-.00490	.08262	-.00016	.00003

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = 1.500

RUN NO. 173/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
14.980	2.042	-.02756	-.04430	.77345	.25118	.04199	.15871	-.00007	-.00167
14.840	4.390	-.02838	-.04124	.37080	.19334	.03027	.35705	.00038	-.00148
	GRADIENT	-.00035	.00130	-.17151	-.02464	-.00499	.08448	.00019	.00008

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = 1.500

RUN NO. 174/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
30.168	1.994	-.03417	-.03893	.98158	.22154	.04298	.18417	.00089	-.00279
29.810	4.397	-.04190	-.05055	.54644	.23681	.03082	.39099	.00057	-.00297
	GRADIENT	-.00322	-.00484	-.18111	.00636	-.00506	.08608	-.00013	-.00008

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = 1.500

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC TORB = 8.000 DX = 20.000
 SCALE = .0125 GRADIENT = -.00208 MACH = .600

RUN NO. 175/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CSL	CLN
44.854	2.109	-.03555	-.03866	.95560	.21860	.04303	.00021	-.00280
45.244	4.417	-.04035	-.04473	.52387	.20806	.03088	.00010	-.00283
	GRADIENT	-.00208	-.00263	-.13141	-.00457	-.00526	-.00005	-.00001

RUN NO. 176/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CSL	CLN
50.344	2.118	-.03598	-.03588	.97366	.20281	.04304	.00073	-.00295
50.595	4.352	-.03800	-.04182	.50080	.19570	.03131	.00075	-.00276
	GRADIENT	-.00090	-.00266	-.21167	-.00319	-.00525	.00001	.00009

PARAMETRIC DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC TORB = 6.000 DX = 20.000
 SCALE = .0125 GRADIENT = -.00364 MACH = .600

RUN NO. 181/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CSL	CLN
3.378	2.472	-.05330	-.04653	1.23581	.32090	.04110	.00571	-.00767
3.590	4.405	-.04626	-.03533	.63218	.19618	.03183	.00667	-.00741
	GRADIENT	.00364	.00579	-.32765	-.06449	-.00479	.00050	.00014

RUN NO. 182/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CSL	CLN
7.711	2.009	-.04982	-.03557	1.42106	.25146	.04261	.00501	-.00674
7.202	4.378	-.03609	-.04085	.47278	.22910	.03186	.00584	-.00553
	GRADIENT	.00579	-.00223	-.40024	-.00944	-.00454	.00035	.00051

RUN NO. 183/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CSL	CLN
9.911	2.005	-.04669	-.04412	1.33418	.31295	.04294	.00473	-.00612
10.102	4.475	-.02745	-.02597	.35177	.14366	.03174	.00471	-.00412
	GRADIENT	.00779	.00735	-.39775	-.06854	-.00453	-.00001	.00081

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC TORB = 10.000 DX = 20.000
 SCALE = .0125 GRADIENT = -.00364 MACH = .600

RUN NO. 181/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CSL	CLN
3.378	2.472	-.05330	-.04653	1.23581	.32090	.04110	.00571	-.00767
3.590	4.405	-.04626	-.03533	.63218	.19618	.03183	.00667	-.00741
	GRADIENT	.00364	.00579	-.32765	-.06449	-.00479	.00050	.00014

RUN NO. 182/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CSL	CLN
7.711	2.009	-.04982	-.03557	1.42106	.25146	.04261	.00501	-.00674
7.202	4.378	-.03609	-.04085	.47278	.22910	.03186	.00584	-.00553
	GRADIENT	.00579	-.00223	-.40024	-.00944	-.00454	.00035	.00051

RUN NO. 183/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CSL	CLN
9.911	2.005	-.04669	-.04412	1.33418	.31295	.04294	.00473	-.00612
10.102	4.475	-.02745	-.02597	.35177	.14366	.03174	.00471	-.00412
	GRADIENT	.00779	.00735	-.39775	-.06854	-.00453	-.00001	.00081

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(ANH018) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

RUN NO. 184/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.973	2.102	-0.3302	-0.3984	.90033	.27916	.04334	.17646	.00371	-0.0431
14.736	4.362	-0.1495	-0.3269	.19656	.18330	.03251	.36464	.00430	-0.0229
GRADIENT	.00799	.00316	.00316	-.31129	-.04240	-.00479	.08323	.00026	.00089

RUN NO. 185/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.716	2.100	-0.0154	-0.04508	.04202	.31743	.04376	.19817	.00177	.00026
29.761	4.335	.01266	-0.04340	-.16756	.24384	.03310	.38729	.00200	.00193
GRADIENT	.00636	.00075	.00075	-.09378	-.03293	-.00477	.08463	.00011	.00075

RUN NO. 186/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.733	1.972	-0.0480	-0.04216	.13937	.30126	.04400	.20493	.00071	.00026
44.856	4.308	.00046	-0.03500	-.00608	.19684	.03242	.40470	.00130	.00103
GRADIENT	.00225	.00307	.00307	-.06227	-.04470	-.00495	.08552	.00025	.00033

RUN NO. 187/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
49.952	2.021	-0.01038	-0.04737	.29428	.33755	.04353	.21287	.00123	-0.00033
50.410	4.396	-0.00661	-0.05131	.08622	.28566	.03182	.41729	.00103	.00039
GRADIENT	.00159	.00166	.00166	-.08761	-.02188	-.00493	.08608	-.00009	.00030

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA) (ANH019) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 8.000 DX = .000
 DY = 10.000 MACH = .600

PARAMETRIC DATA

RUN NO. 191/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
2.405	-0.3781	.90077	.17717	.04060	.14820	.00579	-.00577
4.380	-0.1596	.20895	.11826	.03112	.30866	.00683	-.00345
GRADIENT	.01106	-.35027	-.02993	-.00480	.08124	.00053	.00117

RUN NO. 192/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
2.116	-0.3372	.91320	.15535	.04129	.13896	.00544	-.00506
4.310	-0.1013	.13473	.10619	.03143	.31636	.00632	-.00250
GRADIENT	.01076	-.35487	-.02241	-.00450	.08087	.00040	.00117

RUN NO. 193/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
1.964	-0.2325	.67824	.20068	.04205	.13431	.00530	-.00352
4.414	.00227	-.02949	.14293	.03155	.33436	.00546	-.00058
GRADIENT	.01041	-.28887	-.02357	-.00429	.08166	.00006	.00120

RUN NO. 194/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
2.014	.01179	-.33535	.15917	.04334	.17602	.00223	-.00143
4.404	.03046	-.39659	.11458	.03249	.37672	.00240	.00369
GRADIENT	.00781	-.02563	-.01866	-.00454	.08398	.00007	.00095

RUN NO. 195/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
2.014	.00407	-.11587	.20762	.04382	.20153	.00069	.00130
4.380	.00568	-.08750	.14588	.03204	.39516	.00167	.00180
GRADIENT	.00110	.01199	-.02609	-.00498	.08183	.00042	.00021

RUN NO. 196/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
2.002	-.00131	.03751	.23372	.04375	.20595	.00120	.00056
4.323	-.00061	.00815	.09665	.03262	.39639	.00139	.00103
GRADIENT	.00030	-.01264	-.05904	-.00480	.08203	.00008	.00020

ORIGINAL PAGE IS
 OF POOR QUALITY

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(ANH020) (21 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
2.999	.056	-.02828	-.08876	26.67240	1.27147	.04771	.01054	.00005	-.00198
2.972	2.231	-.03056	-.06736	.78482	.63585	.04565	.19056	.00026	-.00198
3.376	4.258	-.03382	-.09060	.45546	.63611	.03615	.35360	.00022	-.00183
	GRADIENT	-.00132	-.00031	-6.30867	-.15293	-.00273	.08166	.00004	.00004

RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.356	-.232	-.02757	-.06478	-6.78415	.93772	.04699	-.00684	.00011	-.00202
7.305	2.422	-.03173	-.07644	.75071	.69653	.04512	.21191	.00010	-.00201
7.176	4.286	-.03467	-.07960	.46391	.58330	.03566	.37068	.00012	-.00191
	GRADIENT	-.00157	-.00336	1.68783	-.08444	-.00238	.08348	-.00005	.00002

RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
9.998	-.190	-.03105	-.07750	-9.30004	1.10478	.04716	-.00049	-.00019	-.00224
9.822	2.393	-.03424	-.08742	.81997	.79993	.04522	.21996	.00015	-.00210
9.715	4.416	-.03357	-.07630	.43602	.52700	.03489	.38269	.00064	-.00187
	GRADIENT	-.00058	.00008	2.19562	-.12512	-.00258	.08330	.00017	.00008

RUN NO. 0 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.608	-.076	-.02818	-.07640	-20.23390	1.07213	.04742	.02478	-.00019	-.00204
14.941	2.433	-.03134	-.07495	.73837	.67795	.04494	.23209	.00014	-.00199
14.567	4.425	-.03172	-.07672	.41119	.52558	.03470	.39533	.00056	-.00178
	GRADIENT	-.00081	-.00004	4.74688	-.12209	-.00275	.08234	.00016	.00006

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.742	-.160	-.03287	-.07696	-11.64240	1.10106	.04681	.02904	-.00015	-.00260
29.812	2.421	-.03327	-.07190	.65328	.65328	.04385	.25141	.00036	-.00240
29.770	4.475	-.03485	-.07954	.44661	.54419	.03299	.42062	.00013	-.00221
	GRADIENT	-.00041	-.00045	2.70131	-.12240	-.00290	.08456	.00007	.00008

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (ANH020) (21 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC IORB = .000 DX = .000
 SCALE = .0125 DY = .000 MACH = .500

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
44.518	-.106	-.03181	-.07540	-16.70720	1.07283	.04623	.04200	.00043	-.00266
44.662	2.474	-.03453	-.07541	.80009	.67953	.04299	.26452	.00028	-.00252
44.473	4.486	-.03660	-.06670	.46794	.45726	.03141	.43801	.00051	-.00246
	GRADIENT	-.00104	.00181	3.38044	-.13490	-.00314	.08624	.00001	-.00004

PARAMETRIC DATA

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (ANH021) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = -1.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC IORB = .000 DX = .000
 SCALE = .0125 DY = .000 MACH = .600

RUN NO. 211/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
3.110	.173	-.02110	-.09381	6.95086	1.29997	.04701	-.06320	.00044	-.00135
3.078	2.255	-.03101	-.09682	.78797	.90716	.04460	.10716	.00053	-.00160
3.099	4.353	-.03504	-.10020	.46166	.69789	.03351	.27502	.00042	-.00159
	GRADIENT	-.00333	-.00153	-1.55055	-.14397	-.00323	.08091	-.00000	-.00006

PARAMETRIC DATA

RUN NO. 212/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
7.673	-.126	-.02421	-.09799	-10.34500	1.37286	.04639	-.08131	.00005	-.00161
7.105	2.399	-.03108	-.10688	.74259	.98064	.04330	.13296	.00071	-.00159
7.181	4.355	-.03397	-.10016	.44740	.69583	.03268	.28949	.00037	-.00154
	GRADIENT	-.00220	-.00063	2.61793	-.15128	-.00297	.08284	.00008	-.00001

PARAMETRIC DATA

RUN NO. 213/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
9.888	-.253	-.02234	-.10311	-5.03962	1.50123	.04616	-.08648	.00025	-.00150
10.133	2.398	-.03044	-.09252	.72762	.84124	.04288	.13668	.00108	-.00154
9.989	4.413	-.03202	-.09419	.41610	.64781	.03190	.29932	.00047	-.00138
	GRADIENT	-.00212	.00202	1.22074	-.18627	-.00296	.08275	.00006	-.00002

PARAMETRIC DATA

ARC 14-120(CA238) 747/1 AT1 02S1 (CARRIER DATA)

(ANH021) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 214/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.808	-.052	-.02282	-.09691	-23.82030	1.34952	.04654	-.05339	-.00019	-.00146
14.795	2.452	-.02740	-.09118	.64047	.82381	.04253	.14828	.00067	-.00132
14.946	4.403	-.03224	-.10412	4.1987	.71611	.03152	.30572	.00107	-.00138
	GRADIENT	-.00210	-.00144	5.6+106	-.14531	-.00329	.08060	.00029	.00002

RUN NO. 215/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.743	-.137	-.02376	-.09264	-9.85063	1.32218	.04549	-.05172	.00051	-.00170
29.755	2.487	-.03203	-.08775	.73818	.79014	.04115	.16849	.00074	-.00174
29.747	4.402	-.03376	-.08901	4.3980	.61393	.02973	.32686	.00129	-.00169
	GRADIENT	-.00226	-.00086	2.37265	-.15883	-.00336	.08344	.00017	-.00000

RUN NO. 216/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.609	-.114	-.01992	-.08265	-9.94199	1.17747	.04503	-.03651	.00080	-.00139
44.499	2.547	-.03157	-.08404	.71032	.75098	.03988	.18797	.00062	-.00167
44.744	4.315	-.03304	-.09687	4.3911	.67385	.02940	.33220	.00115	-.00167
	GRADIENT	-.00308	-.00299	2.47615	-.11742	-.00340	.08381	.00007	-.00007

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 221/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.175	.180	-.01798	-.09385	5.69209	.66443	.04469	-.02831	.00009	-.00090
7.048	2.374	-.01994	-.08436	.48131	.47319	.04286	.14762	.00042	-.00082
7.827	4.374	-.02165	-.08149	.28389	.38018	.03315	.31295	.00045	-.00080
	GRADIENT	-.00088	.00297	-1.30708	-.06800	-.00272	.08135	.00009	.00003

ARC 14-120(CA238) 747/1 AT1 02S1 (CARRIER DATA)

(ANH022) (08 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA)

REFERENCE DATA
 SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC TORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

PARAMETRIC DATA

ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
10.008	-.01987	-.08749	-11.78550	.62331	.04771	-.03671	.00049	-.00125
9.794	-.02395	-.09099	.55746	.50567	.04300	.16624	.00027	-.00124
10.168	-.02393	-.08578	.31698	.40184	.03374	.31842	.00047	-.00092
GRADIENT	-.00096	.00028	2.85990	-.04981	-.00237	.08021	-.00001	.00007

ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.875	-.01561	-.07815	-6.77832	.56064	.04520	-.02763	-.00015	-.00080
15.107	-.02126	-.08579	.49153	.47415	.04308	.18753	.00036	-.00092
14.650	-.02519	-.08632	.32336	.40184	.03340	.34573	.00033	-.00094
GRADIENT	-.00209	-.00184	1.60755	-.03446	-.00248	.08126	.00011	-.00003

ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.663	-.02533	-.09274	-10.98930	.66773	.04584	.00278	-.00014	-.00171
30.014	-.02959	-.09038	.66761	.49726	.04292	.22761	.00012	-.00178
30.212	-.03194	-.08373	.42012	.39081	.03339	.37836	.00033	-.00176
GRADIENT	-.00148	.00192	2.67627	-.06183	-.00265	.08368	.00010	-.00001

ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.608	-.02843	-.08365	-16.30560	.60103	.04576	.02316	.00045	-.00223
44.758	-.03315	-.07930	.75396	.43776	.04225	.24841	.00092	-.00241
44.921	-.03688	-.08637	.49188	.40592	.03260	.39871	.00072	-.00239
GRADIENT	-.00191	-.00045	4.02113	-.04571	-.00287	.08545	.00007	-.00004

ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
50.329	-.02932	-.08725	-13.55440	.62610	.04579	.02394	.00022	-.00235
50.199	-.03269	-.07606	.76282	.42225	.04259	.24133	.00082	-.00238
50.308	-.03733	-.09256	.48180	.43084	.03183	.41313	.00074	-.00242
GRADIENT	-.00173	-.00090	3.19488	-.04458	-.00297	.08521	.00012	-.00001

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(ANH023) (38 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 231/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
3.160	.028	-.01846	-.08306	33.32190	.79878	.04614	-.02519	-.00018	-.00080
3.398	2.478	-.02078	-.07840	.48052	.53695	.17461	.00026	-.00085	-.00085
3.235	4.342	-.02437	-.07307	.32189	.40989	.03526	.00033	-.00095	-.00095
	GRADIENT	-.00135	.00230	-7.94312	-.09099	-.00243	.08186	.00012	-.00004

RUN NO. 232/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.044	-.157	-.01844	-.08117	-6.67827	.77814	.04612	-.03043	-.00012	-.00098
7.210	2.438	-.02027	-.08467	.47652	.58519	.04445	.18462	.00038	-.00088
7.208	4.444	-.02161	-.07606	.27892	.42297	.03481	.34842	.00041	-.00076
	GRADIENT	-.00069	.00099	1.57164	-.07705	-.00237	.08236	.00012	.00005

RUN NO. 233/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
9.588	-.079	-.01877	-.07496	-13.36650	.70875	.04638	-.01474	-.00004	-.00105
9.981	2.449	-.02096	-.07655	.49045	.52627	.04457	.19357	.00005	-.00089
9.714	4.418	-.02148	-.07156	.27883	.39877	.03457	.35968	.00043	-.00072
	GRADIENT	-.00061	.00069	3.14770	-.06908	-.00254	.08322	.00008	.00007

RUN NO. 234/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.480	-.060	-.01899	-.07835	-17.51720	.74045	.04658	-.00023	.00031	-.00110
14.703	2.510	-.01969	-.07020	.44958	.48046	.04417	.21848	.00021	-.00080
14.839	4.425	-.02234	-.07276	.28959	.40432	.03468	.36926	.00058	-.00080
	GRADIENT	-.00072	.00135	4.14699	-.07640	-.00256	.08254	.00005	.00007

RUN NO. 235/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.767	-.083	-.02720	-.07915	-18.05020	.74815	.04632	.02080	.00059	-.00212
29.743	2.454	-.02849	-.08272	.66551	.56922	.04381	.22859	.00051	-.00188
29.929	4.441	-.03141	-.07384	.40567	.40926	.03329	.40095	.00052	-.00183
	GRADIENT	-.00091	.00106	4.22849	-.07471	-.00280	.08393	-.00002	.00006

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

REFERENCE DATA

RUN NO. 236/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

PARAMETRIC DATA

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.538	-.030	-.03016	-.07105	-45.63040	.66987	.04641	.03716	-.00018	-.00233
44.541	2.408	-.03288	-.07398	.78245	.51262	.04317	.24692	.00078	-.00244
44.965	4.398	-.03562	-.07262	.46454	.40355	.03229	.41752	.00065	-.00232
GRADIENT		-.00123	-.00039	10.73182	-.06032	-.00312	.08592	.00020	.00000

REFERENCE DATA

RUN NO. 237/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

PARAMETRIC DATA

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
49.951	-.140	-.03117	-.06300	-12.52690	.60450	.04605	.02711	.00043	-.00252
49.970	2.539	-.03313	-.06581	.74761	.44958	.04271	.25770	.00073	-.00243
50.050	4.426	-.03462	-.06447	.44653	.35867	.03218	.41978	.00046	-.00220
GRADIENT		-.00075	-.00037	2.98358	-.05410	-.00292	.08599	.00001	.00007

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

REFERENCE DATA

RUN NO. 241/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

PARAMETRIC DATA

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
2.790	.104	-.01687	-.10599	9.17543	1.02723	.04491	-.10169	.00033	-.00108
3.147	2.378	-.02780	-.10795	.67006	.75025	.04284	.09267	.00012	-.00149
3.235	4.382	-.03032	-.10588	.39684	.59164	.03220	.25231	.00065	-.00134
GRADIENT		-.00318	.00001	-2.08954	-.10226	-.00292	.08281	.00007	-.00006

REFERENCE DATA

RUN NO. 242/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

PARAMETRIC DATA

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.214	-.107	-.01946	-.09671	-10.32810	.91690	.04487	-.10092	.00003	-.00131
7.169	2.445	-.02538	-.10545	.59509	.72832	.04258	.10804	.00061	-.00136
7.223	4.433	-.03068	-.10967	.39700	.61002	.03183	.26907	.00072	-.00133
GRADIENT		-.00247	-.00288	2.45152	-.06790	-.00278	.08153	.00016	-.00000

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(ANH024) (21 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XHRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 243/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
9.900	-.036	-.01552	-.10373	-23.52540	.96998	.04505	-.08437	.00047	-.00100
9.833	2.466	-.02473	-.10781	.57491	.74093	.04228	.11889	.00077	-.00122
9.797	4.354	-.02779	-.09868	.36604	.55238	.03231	.26747	.00089	-.00118
GRADIENT	-.00284	.00100	5.36359	-.09495	-.00281	.08021	.00010	.00010	-.00004

RUN NO. 244/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.827	-.163	-.01662	-.10882	-5.82977	1.03936	.04495	-.08905	.00044	-.00116
14.725	2.499	-.02233	-.10653	.51199	.73058	.04185	.13393	.00078	-.00100
14.404	4.287	-.02833	-.11433	.37901	.64617	.03231	.27709	.00060	-.00115
GRADIENT	-.00259	.00108	1.47172	-.09050	-.00271	.08240	.00004	.00004	-.00001

RUN NO. 245/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.598	-.049	-.02060	-.10391	-22.87620	.98226	.04535	-.05362	.00005	-.00147
29.897	2.432	-.02789	-.10629	.65724	.73161	.04136	.15020	.00079	-.00156
29.731	4.487	-.03348	-.10341	.42793	.57164	.02951	.31842	.00079	-.00176
GRADIENT	-.00284	.00007	5.28621	-.09089	-.00343	.08203	.00017	.00017	-.00006

RUN NO. 246/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.528	-.131	-.02125	-.09970	-9.19757	.95638	.04479	-.05183	.00041	-.00161
44.796	2.390	-.03248	-.09689	.77909	.67049	.04071	.16442	.00046	-.00191
44.981	4.445	-.03629	-.08862	.46835	.46992	.02844	.33187	.00095	-.00205
GRADIENT	-.00333	.00237	2.18118	-.10237	-.00350	.08393	.00011	.00011	-.00010

RUN NO. 247/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
49.996	-.101	-.02348	-.10355	-13.06200	.98795	.04493	-.04513	.00010	-.00175
50.084	2.534	-.03304	-.10365	.74722	.70703	.03995	.17985	.00038	-.00195
50.059	4.394	-.03447	-.09375	.44997	.52290	.02846	.33403	.00083	-.00190
GRADIENT	-.00253	.00203	3.15515	-.10367	-.00354	.08442	.00016	.00016	-.00004

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA)

(ANH025) (21 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.209	.039	-.02082	-.12031	28.15880	.86433	.04252	-.12183	.00064	-.00168
7.216	2.367	-.02238	-.10603	.54184	.59534	.04128	.07255	.00121	-.00138
7.328	4.353	-.03042	-.10502	.40075	.49282	.03194	.22386	.00080	-.00165
	GRADIENT	-.00218	.00362	-6.58775	-.08593	-.00240	.08022	.00004	.00001

RUN NO. 0 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
9.339	-.027	-.01829	-.11596	-34.19580	.82723	.04319	-.11127	.00041	-.00148
10.040	2.372	-.02145	-.10961	.51828	.61215	.04155	.07336	.00097	-.00133
10.061	4.478	-.03288	-.10799	.42113	.50087	.03084	.24859	.00063	-.00175
	GRADIENT	-.00320	.00179	7.83983	-.07284	-.00269	.07981	.00005	-.00006

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.643	-.013	-.01852	-.11070	-54.03890	.78492	.04401	-.09726	.00033	-.00140
15.082	2.543	-.02390	-.10727	.53864	.58935	.04126	.11095	.00050	-.00133
14.801	4.374	-.02446	-.09836	.32075	.46054	.03139	.25463	.00152	-.00105
	GRADIENT	-.00140	.00272	12.96060	-.07410	-.00276	.08029	.00026	.00008

RUN NO. 0 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.827	-.162	-.01960	-.11035	-6.88413	.79524	.04425	-.08445	.00024	-.00145
30.228	2.450	-.02650	-.10450	.61987	.57313	.04116	.12757	.00104	-.00151
30.232	4.437	-.03055	-.09616	.39488	.44532	.02997	.29272	.00121	-.00153
	GRADIENT	-.00239	.00304	1.64858	-.07646	-.00301	.08196	.00022	-.00002

RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.600	-.132	-.02289	-.10223	-9.85191	.73778	.04424	-.06778	.00033	-.00178
45.018	2.364	-.03204	-.10427	.77675	.58252	.04077	.14596	.00072	-.00198
44.806	4.412	-.03429	-.10011	.44576	.46660	.02913	.31023	.00118	-.00196
	GRADIENT	-.00255	.00042	2.33763	-.05977	-.00326	.09328	.00019	-.00004

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(ANH025) (21 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
49.823	-.233	-.01744	-.09676	-4.27924	.70952	.04396	-.07219	.00061	-.00143
50.763	2.449	-.02803	-.10520	.65573	.58103	.03994	.16079	.00125	-.00172
50.761	4.339	-.03644	-.11097	.48166	.51783	.02927	.31228	.00101	-.00210
	GRADIENT	-.00414	-.00311	1.09482	-.04232	-.00310	.08427	.00010	-.00014

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 03S1 (CARRIER DATA)

(ANH027) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 261 / 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.310	.046	-.01681	-.11653	20.05070	.83516	.04412	-.03535	.00040	-.00105
7.309	2.283	-.02325	-.12102	.58363	.68499	.04294	.15409	-.00006	-.00116
7.865	4.288	-.02083	-.10914	.27863	.51237	.03323	.31339	.00092	-.00091
	GRADIENT	-.00098	.00167	-4.73831	-.07592	-.00253	.08223	.00012	.00003

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 262 / 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
9.835	-.171	-.02014	-.12235	-6.70156	.86163	.04434	-.04423	-.00008	-.00126
9.501	2.437	-.01962	-.11126	.46137	.61936	.04253	.16978	.00085	-.00103
9.652	4.384	-.02335	-.11356	.30547	.53245	.03321	.32481	.00071	-.00100
	GRADIENT	-.00065	.00206	1.60490	-.07798	-.00235	.08107	.00018	.00006

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 263 / 0 RN/L = 3.27 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.936	-.143	-.02337	-.11434	-9.28071	.81984	.04492	-.02638	-.00019	-.00156
14.990	2.462	-.02474	-.11107	.57592	.61564	.04301	.18941	.00035	-.00158
15.447	4.479	-.02882	-.11595	.36907	.53535	.03274	.35193	.00061	-.00151
	GRADIENT	-.00115	-.00027	2.16828	-.06235	-.00254	.08189	.00017	.00001

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 03S1 (CARRIER DATA) (ANH027) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
SCALE = .0125

RUN NO. 264/ 0 RN/L = 3.27 GRADIENT INTERVAL = -5.00/ 5.00

Table with columns: DZ, ALPHAC, BETAC, BETAO, PHIC, PHIO, CA, CN, CSL, CLN, BETA, STAB, ELEVON, DX, MACH. Values range from -0.0000 to 0.0009.

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = .000
TORB = 8.000 DX = .000
DY = .000 MACH = .600

RUN NO. 265/ 0 RN/L = 3.27 GRADIENT INTERVAL = -5.00/ 5.00

Table with columns: DZ, ALPHAC, BETAC, BETAO, PHIC, PHIO, CA, CN, CSL, CLN, BETA, STAB, ELEVON, DX, MACH. Values range from -0.0000 to 0.0009.

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = .000
TORB = 8.000 DX = .000
DY = .000 MACH = .600

RUN NO. 266/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

Table with columns: DZ, ALPHAC, BETAC, BETAO, PHIC, PHIO, CA, CN, CSL, CLN, BETA, STAB, ELEVON, DX, MACH. Values range from -0.0000 to 0.0009.

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = .000
TORB = 8.000 DX = .000
DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 03S1 (CARRIER DATA) (ANH028) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
SCALE = .0125

RUN NO. 281/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

Table with columns: DZ, ALPHAC, BETAC, BETAO, PHIC, PHIO, CA, CN, CSL, CLN, BETA, STAB, ELEVON, DX, MACH. Values range from -0.0000 to 0.0009.

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = .000
TORB = 6.000 DX = 10.000
DY = .000 MACH = .600

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ARC 14-120(CA23B) 747/1 ATI 0351 (CARRIER DATA)

REFERENCE DATA
 SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC TORB = .000 DX = 10.000
 SCALE = .0125 DY = .000 MACH = .600

PARAMETRIC DATA
 RUN NO. 282/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHAC 2.022 BETAC -.02526 BETAO -.11428 PHIC .71587 PHIO .80635 CA .04421 CN .16220
 4.410 -.02631 .11343 .34213 .63461 .03284 .36466
 GRADIENT -.00044 .00035 -.00035 -.07193 -.00476 .08478

RUN NO. 283/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHAC 2.068 BETAC -.02201 BETAO -.10749 PHIC .60933 PHIO .75603 CA .04419 CN .17496
 4.488 -.02315 .11604 .29588 .64226 .03251 .37454
 GRADIENT -.00047 .00033 -.00033 -.04702 -.00482 .08250

RUN NO. 284/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHAC 2.026 BETAC -.02188 BETAO -.11676 PHIC .61866 PHIO .82708 CA .04444 CN .18364
 4.481 -.01949 .10932 .24945 .60938 .03262 .38383
 GRADIENT .00097 .00303 -.00303 -.08868 -.00482 .08154

RUN NO. 285/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHAC 2.180 BETAC -.03009 BETAO -.11357 PHIC .79114 PHIO .78798 CA .04370 CN .21450
 4.515 -.03186 .11495 .40467 .63585 .03175 .41166
 GRADIENT -.00076 .00059 -.00059 -.06514 -.00512 .08443

RUN NO. 286/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHAC 2.093 BETAC -.03422 BETAO -.10437 PHIC .93679 PHIO .73323 CA .04355 CN .21873
 4.521 -.03663 .11710 .46462 .64384 .03115 .42416
 GRADIENT -.00099 .00524 -.00524 -.03681 -.00511 .08460

RUN NO. 287/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHAC 2.061 BETAC -.03561 BETAO -.11216 PHIC .99020 PHIO .79184 CA .04352 CN .22318
 4.539 -.03511 .10756 .44362 .59229 .03004 .43767
 GRADIENT .00020 .00186 -.00186 -.02054 -.08052 .08655

CSL .00018 CLN -.00147
 .00022 -.00120
 .00001 .00011
 CSL .00015 CLN -.00118
 .00046 -.00094
 .00013 .00010
 CSL .00004 CLN -.00100
 .00054 -.00063
 .00020 .00015
 CSL .00067 CLN -.00214
 .00045 -.00189
 -.00010 .00011
 CSL .00083 CLN -.00267
 .00106 -.00254
 .00009 .00005
 CSL .00063 CLN -.00274
 .00099 -.00236
 .00014 .00015

ARC 14-120(CA238) 747/1 AT 0351 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC IORB = 8.000 DX = 10.000
 SCALE = .0125 DY = .600 MACH =

PARAMETRIC DATA

GRADIENT INTERVAL = -5.00/ 5.00	GRADIENT INTERVAL = -5.00/ 5.00	GRADIENT INTERVAL = -5.00/ 5.00	GRADIENT INTERVAL = -5.00/ 5.00
RUN NO. 291/ 0	RUN NO. 292/ 0	RUN NO. 293/ 0	RUN NO. 294/ 0
ALPHAC	ALPHAC	ALPHAC	ALPHAC
2.465	2.057	2.020	2.128
BETAC	BETAC	BETAC	BETAC
-.02502	-.02401	-.01983	-.02803
PHIC	PHIC	PHIC	PHIC
.58170	.66883	.56255	.75465
PHIO	PHIO	PHIO	PHIO
.53429	.60698	.66418	.62962
CA	CA	CA	CA
.04159	.04294	.04367	.04343
CLN	CLN	CLN	CLN
-.00144	-.00144	-.00144	-.00177
CSL	CSL	CSL	CSL
.00036	.00063	.00074	.00012
DX	DX	DX	DX
10.000	10.000	10.000	10.000
ELEVON	ELEVON	ELEVON	ELEVON
.000	.000	.000	.000
STAB	STAB	STAB	STAB
5.000	5.000	5.000	5.000
MACH	MACH	MACH	MACH
.600	.600	.600	.600
ORB	ORB	ORB	ORB
8.000	8.000	8.000	8.000
RUDDER	RUDDER	RUDDER	RUDDER
.000	.000	.000	.000
YMRP	YMRP	YMRP	YMRP
.0000	.0000	.0000	.0000
ZMRP	ZMRP	ZMRP	ZMRP
190.7500	190.7500	190.7500	190.7500
XMRP	XMRP	XMRP	XMRP
1339.9000	1339.9000	1339.9000	1339.9000
XC	XC	XC	XC
.0000	.0000	.0000	.0000
YC	YC	YC	YC
.0000	.0000	.0000	.0000
ZC	ZC	ZC	ZC
190.7500	190.7500	190.7500	190.7500
SCALE	SCALE	SCALE	SCALE
.0125	.0125	.0125	.0125

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(ANH030) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

RUN NO. 301/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.146	2.474	-.02651	-.11428	.61408	.63524	.04081	.18259	.00091	-.00168
7.541	4.355	-.02875	-.11298	.37869	.52950	.03087	.34044	.00101	-.00159
	GRADIENT	-.00119	.00069	-.12521	-.05578	-.00529	.08396	.00006	.00005

RUN NO. 302/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
10.020	2.021	-.02499	-.11534	.70857	.65572	.04241	.15880	.00066	-.00153
10.077	4.495	-.02706	-.10935	.34524	.50770	.03022	.35988	.00074	-.00137
	GRADIENT	-.00084	.00242	-.14686	-.05983	-.00493	.08128	.00004	.00006

RUN NO. 303/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.887	2.172	-.02278	-.11218	.60106	.62932	.04240	.17900	.00043	-.00126
14.608	4.441	-.02442	-.10951	.31542	.51218	.03116	.36581	.00086	-.00111
	GRADIENT	-.00072	.00118	-.12592	-.05164	-.00496	.08235	.00019	.00007

RUN NO. 304/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
30.123	1.934	-.02643	-.11172	.78313	.63959	.04302	.18394	.00056	-.00185
29.781	4.549	-.02982	-.11666	.37597	.54039	.03018	.40628	.00132	-.00180
	GRADIENT	-.00130	-.00189	-.15569	-.03793	-.00491	.08502	.00029	.00002

RUN NO. 305/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.889	2.080	-.03388	-.11196	.93332	.63408	.04324	.21845	.00043	-.00261
44.724	4.413	-.03469	-.11582	.45093	.54147	.03135	.40179	.00092	-.00241
	GRADIENT	-.00035	-.00165	-.20679	-.03970	-.00509	.07860	.00021	.00008

RUN NO. 306/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
50.425	2.067	-.03405	-.10641	.94413	.60343	.04308	.21393	.00106	-.00275
50.408	4.416	-.03800	-.11483	.49362	.53565	.03080	.41687	.00071	-.00261
	GRADIENT	-.00168	-.00358	-.19182	-.02886	-.00523	.08641	-.00015	.00006

REFERENCE DATA
 SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC TORB = 6.000 DX = 20.000
 SCALE = .0125 GRADIENT = -.00002 DY = .000 MACH = .600

PARAMETRIC DATA

ALPHAC	BETAC	PHIC	PHIO	CA	CLN	CSL	CLN
7.139	2.440	-.02506	-.11848	.81921	.19527	.00073	-.00158
7.034	4.374	-.02510	-.12080	.67753	.36527	.00039	-.00123
	GRADIENT	-.00002	-.00120	-.13415	.08788	-.00017	.00018
RUN NO. 311/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00							
ALPHAC	BETAC	PHIC	PHIO	CA	CLN	CSL	CLN
9.707	1.989	-.02412	-.11866	.84432	.17083	.00048	-.00148
9.890	4.549	-.02404	-.11577	.30304	.38943	.00081	-.00106
	GRADIENT	.00003	.00113	-.15301	.08538	.00013	.00016
RUN NO. 312/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00							
ALPHAC	BETAC	PHIC	PHIO	CA	CLN	CSL	CLN
14.857	1.961	-.02152	-.11919	.84748	.17594	.00115	-.00121
14.654	4.524	-.02343	-.11366	.62948	.39715	.00039	-.00089
	GRADIENT	-.00075	.00216	-.12939	.08631	-.00030	.00013
RUN NO. 313/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00							
ALPHAC	BETAC	PHIC	PHIO	CA	CLN	CSL	CLN
29.665	1.982	-.03245	-.11754	.83690	.19954	.00054	-.00237
29.802	4.262	-.02852	-.11253	.38367	.39358	.00084	-.00179
	GRADIENT	.00173	.00220	-.24316	.08506	.00013	.00026
RUN NO. 314/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00							
ALPHAC	BETAC	PHIC	PHIO	CA	CLN	CSL	CLN
44.676	1.970	-.03314	-.11820	.84522	.21468	.00030	-.00254
44.732	4.370	-.03956	-.11536	.64588	.41665	.00082	-.00272
	GRADIENT	-.00267	.00118	-.18536	.08417	.00022	-.00007
RUN NO. 315/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00							
ALPHAC	BETAC	PHIC	PHIO	CA	CLN	CSL	CLN
50.207	2.003	-.03506	-.10948	.77825	.21639	.00070	-.00270
50.098	4.371	-.03608	-.10926	.61233	.42063	.00096	-.00247
	GRADIENT	-.00043	.00009	-.22363	.08624	.00011	.00010
RUN NO. 316/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00							

ORIGINAL PAGE IS
 OF POOR QUALITY

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA)

(ANH032) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

RUN NO. 321/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
3.217	2.384	-.03589	-.08529	.86275	.59455	.04338	.17198	.00496	-.00545
3.310	4.324	-.03078	-.06925	.40825	.38910	.03422	.33186	.00611	-.00534
GRADIENT	.00263	.00827	-.23423	-.10588	-.00472	.08240	.00059	.00059	.00006

RUN NO. 322/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.247	1.999	-.03140	-.08867	.90034	.63058	.04416	.15742	.00398	-.00436
7.563	4.379	-.01534	-.08216	.20086	.45887	.03364	.35237	.00537	-.00283
GRADIENT	.00675	.00274	-.29381	-.07212	-.00442	.08189	.00059	.00059	.00064

RUN NO. 323/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
10.032	1.980	-.02575	-.08306	.74527	.58939	.04427	.15944	.00397	-.00344
9.896	4.367	-.00963	-.07727	.12651	.43300	.03408	.35473	.00478	-.00190
GRADIENT	.00675	.00242	-.25922	-.06552	-.00427	.08181	.00034	.00034	.00065

RUN NO. 324/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
15.217	2.049	-.01481	-.08945	.41438	.62806	.04426	.17860	.00302	-.00182
15.047	4.248	-.00044	-.07449	.00590	.42100	.03468	.36018	.00318	-.00022
GRADIENT	.00654	.00680	-.18569	-.09413	-.00436	.08255	.00007	.00007	.00073

RUN NO. 325/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.998	1.976	-.00706	-.09627	.20473	.68540	.04426	.19673	.00158	-.00007
29.890	4.301	.00614	-.08313	-.08191	.46823	.03341	.39060	.00192	-.00146
GRADIENT	.00568	.00565	-.12326	-.09339	-.00467	.08337	.00015	.00015	.00066

RUN NO. 326/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.648	1.958	-.01315	-.09255	.38496	.66315	.04378	.20813	.00130	-.00058
44.989	4.325	-.00801	-.09105	.10617	.51052	.03265	.40656	.00162	.00021
GRADIENT	.00217	.00063	-.11780	-.06445	-.00470	.08384	.00013	.00013	.00033

(ANH032) (08 OCT 75)

ARC 14-120(CA238) 747/1 ATI 03S1 (CARRIER DATA)

REFERENCE DATA

PARAMETRIC DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .00065 MACH = 10.000

RUN NO. 327/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
49.978	1.969	-0.1805	-0.9477	.52540	.67894	.04393	-.21535	.00078	-.00091
50.163	4.264	-0.01263	-.09327	.16993	.52712	.03290	.40340	.00156	-.00023
	GRADIENT	.00236	.00065	-.15489	-.06615	-.00481	.08194	.00034	.00030

(ANH033) (08 OCT 75)

ARC 14-120(CA238) 747/1 ATI 03S1 (CARRIER DATA)

REFERENCE DATA

PARAMETRIC DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC TORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = .01050 MACH = 10.000

RUN NO. 331/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.500	2.446	-0.02145	-0.7366	.50255	.41024	.04160	.16438	.00524	-.00365
7.613	4.292	-0.00208	-.07009	.02781	.32960	.03301	.31096	.00611	-.00171
	GRADIENT	.01050	.00194	-.25727	-.04370	-.00466	.07943	.00047	.00105

RUN NO. 332/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
10.263	1.907	-0.1773	-0.7840	.53273	.44991	.04291	.12322	.00538	-.00298
9.859	4.322	.00573	-.07059	-.07601	.33288	.03292	.32276	.00575	-.00050
	GRADIENT	.00971	.00323	-.25205	-.04845	-.00414	.08262	.00015	.00103

RUN NO. 333/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
15.012	1.933	-0.0765	-.08521	.22675	.48908	.04324	.14293	.00377	-.00132
14.957	4.327	.01880	-.07346	-.24911	.34564	.03314	.34060	.00413	.00157
	GRADIENT	.01105	.00491	-.19876	-.05992	-.00422	.08257	.00015	.00121

RUN NO. 334/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.834	1.958	-0.0868	-.08245	-.25403	.47344	.04366	.17648	.00189	-.00145
29.957	4.362	.02584	-.07647	-.33975	.35859	.03282	.37993	.00202	.00359
	GRADIENT	.00714	.00249	-.03565	-.04777	-.00451	.08462	.00005	.00089

ARC 14-120(CA23B) 747/1 ATI 0351 (CARRIER DATA)

(ANH033) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = 10.000 MACH = .600

RUN NO. 335/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.819	1.871	-.00446	-.08594	.13655	.48825	.04421	.19255	.00100	-.00042
45.000	4.278	.00050	-.08435	-.30674	.39760	.03330	.39110	.00178	.00110
	GRADIENT	.00206	.00066	-.35955	-.04182	-.00453	.08251	.00032	.00031

RUN NO. 336/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
50.002	1.913	-.01351	-.09054	.40462	.52405	.04380	.19634	.00111	-.00041
50.443	4.260	-.00681	-.08550	.09174	.40359	.03285	.39378	.00196	.00039
	GRADIENT	.00285	.00215	-.13329	-.05132	-.00467	.08411	.00036	.00034

ARC 14-120(CA23B) 747/1 ATI 0351 (CARRIER DATA)

(ANH034) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 341/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
1.515	-.031	-.04077	-.11284	-53.38770	1.09762	.04577	-.04943	-.00008	-.00333
1.466	2.266	-.04009	-.11407	1.31357	.81035	.04467	.14981	.00043	-.00301
1.364	4.259	-.04164	-.10998	.56061	.62495	.03596	.31093	.00041	-.00290
	GRADIENT	-.00019	.00064	12.78561	-.11055	-.00224	.08408	.00012	.00010

RUN NO. 342/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
3.218	-.127	-.03788	-.10795	-16.57080	1.02545	.04538	-.04756	.00057	-.00329
2.877	2.324	-.04051	-.10599	.99894	.74601	.04454	.16080	.00041	-.00308
3.380	4.353	-.04091	-.10964	.53900	.61357	.03547	.32450	.00026	-.00283
	GRADIENT	-.00069	-.00034	3.93383	-.09269	-.00215	.08311	-.00007	.00010

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA)

(AN1034) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2346.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 343 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
DZ 7.400	-.0368	-7.34571	1.04426	.04569	-.04320	-.00018	-.00303
7.390	-.03617	.89645	.72987	.04469	.17520	.00047	-.00266
7.046	-.03508	4.7763	.58785	.03614	.32819	.00054	-.00231
GRADIENT	.00035	1.92472	-.10268	-.00202	.08268	.00017	.00016

RUN NO. 344 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
DZ 9.858	-.03420	-8.02130	1.03142	.04579	-.03184	.00022	-.00280
9.870	-.03433	.84303	.73083	.04458	.18113	.00039	-.00250
9.840	-.03249	4.3814	.56184	.03595	.33823	.00055	-.00203
GRADIENT	.00036	1.96825	-.10513	-.00209	.08234	.00007	.00017

RUN NO. 345 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
DZ 14.745	-.03016	-6.76144	.9812	.04579	-.02583	-.00007	-.00233
14.663	-.03132	.76959	.71547	.04450	.19634	.00005	-.00198
14.715	-.02981	4.0248	.56279	.03564	.35308	.00061	-.00157
GRADIENT	.00005	1.66604	-.09741	-.00216	.08426	.00015	.00017

RUN NO. 346 / 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
DZ 29.743	-.03699	-7.87449	1.05513	.04593	-.00297	-.00034	-.00293
29.911	-.03586	.89504	.72658	.04382	.2281	.00040	-.00268
29.627	-.03291	4.4225	.52895	.03431	.38377	.00015	-.00196
GRADIENT	.00085	1.92536	-.11658	-.00245	.08532	.00012	.00021

RUN NO. 347 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
DZ 44.607	-.03951	-9.54070	.96563	.04579	.01585	-.00015	-.00323
44.784	-.03779	.92333	.69784	.04305	.23859	.00071	-.00300
44.631	-.03806	5.0863	.59033	.03297	.40265	.00064	-.00268
GRADIENT	.00034	2.31764	-.08403	-.00274	.08551	.00018	.00012

ARC 14-120(CA23B) 747/1 ATI 0351 (CARRIER DATA)

(ANH034) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 348/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CLN
49.960	-.239	-.03498	-8.32467	1.04302	-.04538	-.00043
50.084	2.361	-.03742	.90826	.71885	.04270	.00079
50.051	4.269	-.03761	.50325	.56278	.03249	.00122
	GRADIENT	-.00060	2.05183	-.10759	-.00275	.00017

RUN NO. 349/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CLN
61.655	-.279	-.03495	-7.14063	.90528	-.04529	-.00046
61.629	2.289	-.03743	.93720	.74681	.04270	.00037
61.640	4.275	-.03481	.46705	.53658	.03227	.00096
	GRADIENT	-.00002	1.74123	-.08005	-.00277	.00010

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 6.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 ATI 0351 (CARRIER DATA)

(ANH035) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 351/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CLN
3.392	.007	-.03038	76.95740	1.69980	.04772	-.00044
3.273	2.270	-.02773	.70017	1.16320	.04590	.00030
3.233	4.244	-.02798	.37812	.79606	.03646	.00032
	GRADIENT	.00056	-18.45311	-.21364	-.00261	.00018

RUN NO. 352/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CLN
7.633	-.212	-.03062	-8.22679	1.68804	.04730	-.00041
7.582	2.387	-.02923	.70182	1.08391	.04507	.00026
7.362	4.262	-.02756	.36910	.81823	.03617	.00007
	GRADIENT	.00067	2.00402	-.19589	-.00238	.00009

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 4.000 DX = .000
 DY = .000 MACH = .500

ARC 14-120(CA23B) 747/1 AT1 03S1 (CARRIER DATA) (ANH035) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 353/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
9.664	-.213	-.02937	-.12461	-7.85370	1.80764	.04710	.00029	.00021	-.00212
9.916	2.313	-.02941	-.12008	.72877	1.10894	.04491	.21517	.00017	-.00166
9.803	4.259	-.02743	-.12130	36932	.85163	.03557	.37212	.00003	-.00115
	GRADIENT	.00041	.00079	1.91436	-.21682	-.00249	.08324	-.00004	.00021

RUN NO. 354/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
15.113	-.270	-.02868	-.111769	-6.07208	1.70827	.04675	.00218	-.00024	-.00188
14.808	2.324	-.02760	-.11866	.68053	1.09587	.04470	.22477	-.00039	-.00134
14.693	4.304	-.02537	-.11239	.33796	.78558	.03484	.38528	.00034	-.00100
	GRADIENT	.00071	.00108	1.46207	-.20346	-.00251	.08386	.00012	.00019

RUN NO. 355/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.891	-.272	-.03499	-.11983	-7.33018	1.75519	.04614	.01388	.00041	-.00274
29.979	2.346	-.03719	-.11686	.90855	1.07113	.04352	.24198	.00062	-.00262
29.891	4.294	-.03471	-.11535	.46363	.80534	.03309	.40999	.00060	-.00210
	GRADIENT	.00001	.00099	1.78730	-.21102	-.00275	.08678	.00004	.00014

RUN NO. 356/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.449	-.271	-.03778	-.11801	-7.92866	1.75263	.04603	.02673	.00012	-.00304
44.799	2.322	-.03663	-.11132	.90396	1.02451	.04308	.24316	.00028	-.00261
44.865	4.260	-.03708	-.10619	.49913	.74408	.03249	.41506	.00059	-.00237
	GRADIENT	.00017	.00261	1.94455	-.22576	-.00289	.08557	.00010	.00015

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

ORIGINAL PAGE IS
 OF POOR QUALITY

ARC 14-120(CA23B) 747/1 AT1 03S1 (CARRIER DATA)

(ANH036) (21 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 361/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	1.654	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
	2.469	2.302	-1.8193	-1.13030	4.52066	.91938	.04539	.15712	.00266	-.02016
		GRADIENT	-1.8847	-1.2992	2.57555	.73367	.03703	.30922	.00215	-.02057
			-0.00346	.00020	-1.02807	-.09815	-.00442	.08039	-.00027	-.00021

RUN NO. 362/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	2.877	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
	3.365	2.012	-1.8082	-1.12648	5.13611	.90360	.04591	.14175	.00279	-.02015
		GRADIENT	-1.8854	-1.2935	2.45340	.72225	.03517	.33768	.00264	-.02058
			-0.00322	-0.00120	-1.12130	-.07580	-.00449	.08189	-.00006	-.00018

RUN NO. 363/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.393	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
	7.226	2.013	-1.8941	-1.13656	5.37556	.96700	.04608	.15863	.00294	-.02110
		GRADIENT	-1.9125	-1.3052	2.50473	.73206	.03552	.50330	.00214	-.02113
			-0.00078	.00255	-1.21489	-.09942	-.00447	.08111	-.00034	-.00001

RUN NO. 364/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	9.858	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
	10.104	2.049	-1.9109	-1.13563	5.32907	.95756	.04602	.16917	.00319	-.02145
		GRADIENT	-1.9254	-1.2677	2.47594	.70225	.03498	.36209	.00282	-.02134
			-0.00060	.00368	-1.18471	-.10501	-.00458	.08011	-.00015	.00004

RUN NO. 365/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	14.553	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
	14.643	2.097	-1.9291	-1.13410	5.25682	.94518	.04596	.18493	.00346	-.02169
		GRADIENT	-1.9407	-1.2353	2.48618	.68639	.03433	.38192	.00252	-.02149
			-0.00049	.00445	-1.16354	-.10887	-.00489	.08287	-.00039	.00008

RUN NO. 366/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	29.819	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
	29.992	2.159	-2.0804	-1.12862	5.50419	.89724	.04505	.21804	.00384	-.02354
		GRADIENT	-2.0777	-1.12161	2.69968	.67676	.03354	.40509	.00285	-.02320
			.00012	.00312	-1.24576	-.09794	-.00511	.08309	-.00044	.00015

DATE 22 MAR 76

TABULATED SOURCE DATA - CA238

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(ANH036) (21 OCT 75)

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 367/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
45.057	2.052	-2.1159	-1.2790	5.88810	.90037	.04478	.21780	.00425	-.02408
44.937	4.371	-2.21604	-1.2616	2.83211	.70425	.03346	.40927	.00284	-.02397
	GRADIENT	-.00192	.00075	-1.31772	-.08456	-.00488	.08256	-.00061	.00005

RUN NO. 368/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
50.129	2.015	-2.1146	-1.2804	5.99192	.91029	.04507	.20757	.00383	-.02414
50.420	4.439	-2.1307	-1.2437	2.75051	.69045	.03190	.43272	.00282	-.02375
	GRADIENT	-.00066	.00151	-1.33703	-.09068	-.00543	.09287	-.00042	.00016

RUN NO. 369/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
62.057	2.140	-2.1075	-1.2489	5.62690	.87077	.04410	.24024	.00380	-.02381
61.853	4.416	-2.1097	-1.2303	2.73775	.68473	.03225	.42781	.00308	-.02353
	GRADIENT	-.00010	.00082	-1.26898	-.08171	-.00520	.08239	-.00032	.00012

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA)

(ANH037) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 371/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIJ	CA	CN	CSL	CLN
1.955	.521	-.02268	-1.2383	2.49361	1.12166	.04588	-.06024	.00065	-.00159
1.879	2.297	-.02549	-1.1879	.63611	.82874	.04357	.08164	.00035	-.00144
1.932	4.335	-.02949	-1.1948	.39023	.67006	.03334	.24508	.00055	-.00129
	GRADIENT	-.00179	.00110	-.54099	-.11742	-.00333	.08006	-.00002	.00008

PARAMETRIC DATA

BETA = .000 STAB = -1.080
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(ANH037) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 372/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
3.611	-.073	-.02496	-.13684	-18.87120	1.27886	.04527	-.10928	-.00014	-.00184
3.412	2.415	-.02272	-.12938	.53920	.89499	.04309	.09675	.00056	-.00120
3.341	4.372	-.03116	-.13064	4.0870	.73005	.03310	.25059	.00066	-.00137
	GRADIENT	-.00129	.00147	4.49081	-.12483	-.00266	.08104	.00018	.00011

RUN NO. 373/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.238	-.184	-.01792	-.12654	-5.57095	1.21514	.04528	-.10351	-.00019	-.00121
7.611	2.515	-.02420	-.13121	.55136	.89448	.04269	.12077	.00012	-.00112
7.497	4.363	-.02543	-.11746	3.3426	.65536	.03273	.26602	.00034	-.00090
	GRADIENT	-.00170	.00173	1.36990	-.12281	-.00263	.08141	.00012	.00007

RUN NO. 374/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
10.003	-.096	-.01856	-.12574	-10.99320	1.18499	.04562	-.08920	-.00035	-.00119
9.942	2.401	-.01770	-.12665	.42264	.87619	.04287	.11023	.00077	-.00058
10.030	4.474	-.02513	-.12354	3.2219	.68248	.03153	.28451	.00035	-.00087
	GRADIENT	-.00138	.00045	2.54688	-.11044	-.00302	.08172	.00016	.00008

RUN NO. 375/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.990	.036	-.01580	-.12958	23.75730	1.19552	.04587	-.06671	-.00021	-.00086
14.729	2.374	-.01943	-.12262	.46896	.85170	.04305	.11763	.00005	-.00062
14.795	4.458	-.02101	-.11862	2.7023	.65750	.03151	.29133	.00021	-.00048
	GRADIENT	-.00119	.00249	-5.40509	-.12218	-.00321	.08092	.00009	.00009

RUN NO. 376/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.795	-.037	-.02028	-.12696	-29.04110	1.19126	.04558	-.05280	.00014	-.00147
29.929	2.359	-.02769	-.12652	.67263	.87782	.04209	.13713	.00045	-.00161
30.138	4.506	-.02850	-.12061	3.6271	.66310	.02943	.32413	.00067	-.00137
	GRADIENT	-.00183	.00137	6.58687	-.11655	-.00352	.08290	.00012	.00002

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA) (ANH037) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = -1.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC TORB = .000
 SCALE = .0125 GRADIENT INTERVAL = -5.00/ 5.00 DY = .600

RUN NO. 377/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
45.027	-.096	-.02469	-.12014	-14.48000	1.13302	.04468	-.06533	.00006	-.00194
44.952	2.497	-.02998	-.12302	.63807	.83391	.04052	-.17242	.00059	-.00185
44.914	4.260	-.03340	-.12386	.44955	.69755	.02981	.32406	.00060	-.00195
	GRADIENT	-.00200	-.00087	3.50822	-.11094	-.00328	.08956	.00013	.00000

RUN NO. 378/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
50.481	.036	-.02125	-.11717	30.86850	1.08333	.04525	-.03388	.00032	-.00168
50.592	2.316	-.03099	-.12711	.76690	.86282	.04129	-.15505	.00057	-.00195
50.369	4.524	-.03501	-.11877	.44383	.65317	.02793	.34645	.00068	-.00206
	GRADIENT	-.00307	-.00038	-6.81333	-.09579	-.00385	.08472	.00008	-.00008

RUN NO. 379/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
61.632	-.013	-.02570	-.12245	-62.78220	1.15102	.04528	-.03088	-.00001	-.00195
61.965	2.379	-.02957	-.12133	.71238	.83841	.04060	.16759	.00058	-.00180
61.651	4.408	-.03202	-.11829	.41654	.65927	.02819	.34307	.00056	-.00184
	GRADIENT	-.00143	.00093	14.65652	-.11180	-.00381	.08453	.00013	.00003

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA) (ANH038) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC TORB = .000
 SCALE = .0125 GRADIENT INTERVAL = -5.00/ 5.00 DY = .600

RUN NO. 381/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
1.603	.046	-.03585	-.12129	37.71810	1.16331	.04455	-.04877	-.00003	-.00290
1.569	2.293	-.03898	-.12271	.97421	.86754	.04295	.14601	-.00018	-.00274
2.306	4.387	-.04440	-.12060	.58044	.66987	.03290	.31015	.00004	-.00302
	GRADIENT	-.00196	.00015	-8.65058	-.11390	-.00266	.08274	.00002	-.00003

ARC 14-120(CA23B) 747/1 AT1 03S1 (CARRIER DATA)

(ANH03B) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 382/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	3.468	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
		.019	-.04292	-.12442	65.58800	1.15052	.04450	-.03663	.00028	-.00374
	3.699	2.422	-.04300	-.12381	1.01754	.85131	.04239	.15769	.00025	-.00324
	3.469	4.425	-.04540	-.12016	.58844	.66722	.03290	.31758	.00024	-.00321
		GRADIENT	-.00055	.00094	-15.15230	-.11019	-.00258	.08042	-.00001	.00012

RUN NO. 383/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.736	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
		-.027	-.03671	-.11960	-53.27060	1.10916	.04479	-.02846	.00006	-.00299
	6.902	2.422	-.04018	-.12460	.95082	.86612	.04257	.17397	.00007	-.00293
	7.339	4.419	-.04382	-.12334	.56875	.68592	.03275	.33682	-.00019	-.00301
		GRADIENT	-.00159	-.00089	12.48313	-.09535	-.00264	.08218	-.00005	-.00000

RUN NO. 384/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	10.309	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
		.047	-.03699	-.12375	38.45710	1.13445	.04508	-.01411	-.00010	-.00287
	9.703	2.409	-.03787	-.12099	.90067	.83905	.04293	.18006	.00008	-.00274
	10.031	4.489	-.04151	-.11816	.53038	.65168	.03233	.34932	.00002	-.00285
		GRADIENT	-.00100	.00126	-8.70301	-.10905	-.00283	.08181	.00003	.00001

RUN NO. 385/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	15.037	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
		-.141	-.03593	-.11641	-14.34110	1.10172	.04444	-.03650	-.00002	-.00294
	14.866	2.495	-.03772	-.12284	.86659	.84153	.04262	.20187	.00015	-.00373
	14.675	4.418	-.03729	-.12257	.48407	.66098	.03249	.36116	.00041	-.00253
		GRADIENT	-.00032	-.00142	3.40255	-.09268	-.00251	.08743	.00009	.00009

RUN NO. 386/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	30.004	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
		-.165	-.03289	-.12310	-11.30050	1.17505	.04524	.00925	.00036	-.00272
	29.816	2.497	-.03586	-.11997	.82315	.82081	.04279	.23089	.00046	-.00270
	30.280	4.402	-.03419	-.11822	.44541	.65465	.03273	.38041	.00078	-.00339
		GRADIENT	-.00034	.00108	2.69869	-.11518	-.00263	.08140	.00009	.00007

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-120(CA23B) 747/1 AT1 03S1 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC IORB = .000 DX = .000
 SCALE = .0125 GRADIENT INTERVAL = -5.00/ 5.00 DY = .600 MACH = .600

PARAMETRIC DATA

DZ	44.879	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
	44.946	.070	-.03347	-.12025	25.58280	1.11116	.04570	.04418	-.00008	-.00263
	44.926	2.481	-.03546	-.12293	.81918	.83934	.04224	.24503	-.00002	-.00254
		4.448	-.03751	-.11277	.48369	.62394	.03134	4.1182	.00045	-.00254
		GRADIENT	-.00092	.00160	-5.90136	-.11134	-.00321	.08395	.00012	.00002

PARAMETRIC DATA

DZ	49.971	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
	50.192	-.037	-.03541	-.12247	-44.04270	1.15620	.04573	.03765	-.00033	-.00283
	50.609	2.513	-.03630	-.12127	.82787	.82743	.04187	.25697	.00015	-.00269
		4.284	-.03528	-.12302	.47228	.68898	.03253	.39893	.00090	-.00245
		GRADIENT	.00000	-.00009	10.81298	-.10959	-.00295	.08378	.00028	.00009

PARAMETRIC DATA

DZ	61.515	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
	60.520	-.115	-.03365	-.12518	-16.33250	1.19977	.04506	.02070	-.00017	-.00272
		2.529	-.03464	-.12084	.78499	.83717	.04177	.26101	.00028	-.00257
		GRADIENT	-.00038	.00164	6.47423	-.13714	-.00124	.09089	.00017	.00006

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC IORB = .000 DX = .000
 SCALE = .0125 GRADIENT INTERVAL = -5.00/ 5.00 DY = .600 MACH = .600

PARAMETRIC DATA

DZ	3.148	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
	3.390	2.388	-.18785	-.12482	4.49942	.87245	.04328	.14889	.00228	-.02007
		4.263	-.18878	-.11294	2.53815	.63710	.03453	.29800	.00227	-.02008
		GRADIENT	-.00050	.00634	-1.04514	-.12554	-.00466	.07953	-.00001	-.00000

ORIGINAL PAGE IS
 OF POOR QUALITY

ARC 14-120(CA23B) 747/1 AT1 0291 (CARRIER DATA) (ANH039) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = 5.000
 IORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 392/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
7.312	2.139	-1.9944	5.32723	.91607	.0424	.14616	.00311	-.02158
7.376	4.461	-2.0873	2.68162	.68560	.0325	.34024	.00171	-.02219
	GRADIENT	-.00400	-1.13959	-.09928	-.00473	.08360	-.00060	-.00026

RUN NO. 393/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
9.885	2.001	-2.0379	5.81649	.88852	.04486	.14403	.00321	-.02218
10.083	4.424	-2.1043	2.72628	.67971	.03466	.32960	.00230	-.02257
	GRADIENT	-.00274	-1.27561	-.08619	-.00421	.07660	-.00038	-.00016

RUN NO. 394/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
15.083	2.141	-2.1222	5.66248	.85717	.04480	.17058	.00368	-.02324
14.830	4.433	-2.1434	2.77127	.68384	.03431	.35061	.00263	-.02316
	GRADIENT	-.00093	-1.26160	-.07564	-.00458	.07856	-.00046	-.00004

RUN NO. 395/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
29.781	2.045	-2.2127	6.17644	.88750	.04518	.18664	.00389	-.02443
29.790	4.494	-2.2565	2.87720	.68440	.03285	.39477	.00354	-.02458
	GRADIENT	-.00179	-1.34699	-.08292	-.00503	.08497	-.00014	-.00006

RUN NO. 396/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
44.565	2.160	-2.2269	5.88804	.86363	.04445	.21771	.00389	-.02459
44.873	4.367	-2.2366	2.93447	.67831	.03358	.39810	.00269	-.02431
	GRADIENT	-.00044	-1.33798	-.08395	-.00493	.08172	-.00055	-.00013

RUN NO. 397/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
50.286	2.123	-2.2107	5.94619	.84223	.04454	.21610	.00386	-.02441
50.569	4.396	-2.2250	2.90042	.65977	.03308	.40454	.00294	-.02421
	GRADIENT	-.00063	-1.34005	-.08027	-.00504	.08291	-.00040	-.00009

DATE 22 MAR 76

TABLULATED SOURCE DATA - CA23B

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ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA)

(AMMD40) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 401/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
3.048	-.004	-.04526	-84.40830	1.79753	.04628	-.02135	-.00011	-.00366
3.021	2.318	-.04739	1.17152	1.15912	.04459	.18288	-.00012	-.00366
3.274	4.401	-.04833	-.12570	.86840	.03425	.34984	.00011	-.00345
	GRADIENT	-.00070	15.64100	-.21215	-.00269	.08434	.00005	.00005

RUN NO. 402/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
7.066	-.091	-.04561	-26.59500	1.74014	.04654	-.01314	-.00048	-.00381
7.198	2.490	-.04595	1.05741	1.10813	.04401	.20386	.00019	-.00363
7.335	4.405	-.04855	.63211	.82845	.03412	.35950	.00019	-.00347
	GRADIENT	-.00062	6.31765	-.20513	-.00266	.08294	.00015	.00008

RUN NO. 403/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
9.793	.024	-.04725	63.05230	1.71279	.04655	.00435	.00004	-.00396
9.766	2.449	-.04658	1.05000	1.12877	.04395	.20503	.00048	-.00369
9.745	4.293	-.04791	.63994	.83988	.03480	.35816	.00004	-.00341
	GRADIENT	-.00013	-15.17967	-.20634	-.00267	.08287	.00001	.00013

RUN NO. 404/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
14.781	-.155	-.04369	-15.70640	1.70846	.04586	-.01378	-.00011	-.00377
14.685	2.568	-.04618	1.03042	1.03612	.04318	.23460	.00022	-.00355
14.592	4.303	-.04516	.60193	.73139	.03454	.36962	.00031	-.00320
	GRADIENT	-.00038	3.87923	-.20936	-.00240	.08646	.00010	.00012

RUN NO. 405/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
29.804	-.120	-.03979	-18.37600	1.68114	.04575	.00947	-.00003	-.00324
29.944	2.563	-.03976	.88999	1.10861	.04270	.25061	.00065	-.00294
29.835	4.329	-.03620	.47959	.76992	.03353	.39347	.00054	-.00234
	GRADIENT	.00074	4.47929	-.20554	-.00262	.08661	.00014	.00019

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(ANH040) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 406/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
44.515	-.091	-.03758	-.12018	-22.46140	1.70509	.04552	.02212	.00001	-.00298
44.728	2.446	-.03906	-.11965	.91512	1.08198	.04276	.24777	.00010	-.00278
44.671	4.476	-.03830	-.11246	.49076	.77014	.03144	.42570	.00056	-.00239
GRADIENT	-.00018	.00163	.00163	5.19729	-.20639	-.00300	.08839	.00012	.00013

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .500

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(ANH041) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 411/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
3.328	2.137	-.03541	-.09515	.94918	.88790	.04425	.15651	.00002	-.00339
3.325	4.298	-.03664	-.09550	.48885	.66669	.03413	.33927	.00009	-.00331
GRADIENT	-.00077	-.00016	-.00016	-.21302	-.10237	-.00468	.08458	.00003	.00004

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .500

RUN NO. 412/ 0

RN/L = 2.96 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
6.838	2.085	-.03560	-.09548	.97846	.69942	.04470	.17465	-.00019	-.00354
7.184	4.439	-.03628	-.09540	.46870	.65598	.03336	.35990	.00032	-.00326
GRADIENT	-.00029	.00003	.00003	-.21656	-.10342	-.00482	.07870	.00022	.00012

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .500

RUN NO. 413/ 0

RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
9.770	2.218	-.03337	-.09512	.86236	.86976	.04382	.18802	.00066	-.00336
9.780	4.469	-.03503	-.09551	.44953	.65318	.03316	.36342	.00074	-.00319
GRADIENT	-.00074	-.00018	-.00018	-.18334	-.09618	-.00473	.07790	.00004	.00007

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .500

DATE 22 MAR 76

TABULATED SOURCE DATA - CA23B

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ARC 14-120(CA23B) 747/1 ATI 02S1 (CARRIER DATA)

(ANH041) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .500

PARAMETRIC DATA

RUN NO. 414/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.789	1.986	-.03463	-.0972	.9901	.94498	.04479	.18170	-.00013	-.00342
14.819	4.441	-.03469	-.10173	.44801	.69804	.03274	.37930	.00036	-.00305
GRADIENT		-.00003	-.00082	-.22448	-.11060	-.00491	.08050	.00020	.00015

RUN NO. 415/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.638	2.215	-.03194	-.09737	.82645	.89338	.04356	.22046	.00011	-.00293
29.826	4.415	-.03206	-.09720	.41654	.66870	.03164	.39953	.00066	-.00269
GRADIENT		-.00006	.00008	-.18633	-.10214	-.00542	.08140	.00025	.00011

RUN NO. 416/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.438	2.214	-.02950	-.09702	.76327	.89411	.04273	.23787	.00064	-.00270
44.694	4.330	-.03196	-.09264	.42333	.64395	.03157	.41012	.00055	-.00260
GRADIENT		-.00117	.00207	-.16070	-.11826	-.00528	.08143	.00000	.00005

ARC 14-120(CA23B) 747/1 ATI 02S1 (CARRIER DATA)

(ANH042) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .300

PARAMETRIC DATA

RUN NO. 421/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
3.128	2.209	-.01658	-.10574	.43017	.98557	.04639	.18514	-.00008	-.00334
3.123	4.221	-.01698	-.10352	.23072	.73034	.03627	.34643	-.00001	-.00315
GRADIENT		-.00020	.00110	-.09912	-.12683	-.00503	.08015	.00004	.00009

RUN NO. 422/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.085	2.291	-.01571	-.10101	.39307	.92205	.04584	.21072	.00073	-.00313
7.303	4.347	-.01790	-.10423	.23609	.71971	.03530	.36398	.00038	-.00344
GRADIENT		-.00106	-.00157	-.07635	-.09841	-.00512	.07454	-.00017	-.00015

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(ANH042) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .300

RUN NO. 423/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
9.285	2.180	-0.1697	-0.10209	.44607	.95456	.04639	.19880	-0.0025	-0.00334
9.970	4.347	-0.1622	-0.09942	.21396	.68472	.03476	.36855	.00056	-0.00306
	GRADIENT	.00035	.00123	-.10711	-.12452	-.00536	.07833	.00038	.00013

RUN NO. 424/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.488	2.266	-0.1640	-0.10326	.41472	.94742	.04606	.21359	.00020	-0.00319
14.575	4.354	-0.1712	-0.10167	.22551	.70320	.03422	.38437	.00016	-0.00307
	GRADIENT	-.00035	.00077	-.09063	-.11698	-.00567	.08181	-.00002	.00005

RUN NO. 425/ 0 RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.804	2.191	-0.1582	-0.10294	.41379	.95078	.04576	.22456	.00021	-0.00293
29.724	4.292	-0.1592	-0.10150	.21265	.70620	.03389	.39944	-.00007	-0.00260
	GRADIENT	-.00004	.00068	-.09574	-.11641	-.00565	.08324	-.00013	.00015

RUN NO. 426/ 0 RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.766	2.202	-0.1510	-0.09798	.39313	.90420	.04482	.24004	-.00005	-0.00263
44.688	4.266	-0.1442	-0.09990	.19389	.69668	.03247	.39671	.00036	-0.00230
	GRADIENT	.00033	-.00093	-.09653	-.10054	-.00599	.07590	.00020	.00016

ARC 14-120(CA23B) 747/1 ATI

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 MACH = .600

RUN NO. 41 / 0 RN/L = 3.40 GRADIENT INTERVAL = -5.00 / 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
131.927	-5.187	-.52097	-1.25656	-.02663	-.01546	.08562
131.734	-3.684	-.62283	-.76289	-.03132	-.01962	.08387
131.595	-2.684	-.74482	-.48491	-.01759	-.00630	.09591
131.467	-1.696	-.94338	-.35535	-.02858	-.01713	.08374
131.339	-.712	-1.57780	-.25950	-.02820	-.01541	.08057
131.218	.186	-12.09710	-.22046	-.02643	-.00939	.08486
131.073	1.254	1.17060	-.17503	-.03114	-.01270	.08138
130.941	2.216	.45057	-.15610	-.01463	.00024	.09595
130.802	3.190	.23009	-.14431	-.02742	-.01488	.07957
130.668	4.233	.10305	-.14223	-.02842	-.01055	.08388
130.501	5.283	.04378	-.14268	-.03335	-.01304	.08505
130.357	6.213	.01847	-.12300	-.03072	-.01016	.08062
130.219	7.193	-.00350	-.10308	-.02281	-.00170	.09595
130.047	8.200	.00293	-.06339	-.02845	-.00642	.08622
	GRADIENT	.20620	.06740	.00012	.00081	-.00040

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ARC 14-120(CA23B) 747/1 AT1

(BNH005) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 MACH = .600

RUN NO. 51/ 0 RN/L = 3.36 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
130.569	-5.190	.13526	-7.3389	-.01669	-.01828	.11684
130.436	-3.773	.32773	-.52945	-.02098	-.01514	.11182
130.276	-2.866	.56256	-.39776	-.02009	-.01423	.10628
130.158	-1.854	1.32626	-.28072	-.02586	-.00182	.12511
130.031	-.858	5.98906	-.25456	-.02021	-.01462	.10545
129.869	.149	-3.42985	-.26678	-.02388	-.00253	.12173
129.728	1.216	-1.51201	-.24606	-.01391	-.00808	.11018
129.596	2.190	-1.02481	-.21503	-.01337	-.00648	.11439
129.434	3.207	-.81091	-.19323	-.01530	-.00388	.11188
129.329	4.111	-.68437	-.18580	-.01786	-.00668	.11863
129.085	5.180	-.58288	-.17325	-.00181	.01245	.12437
128.927	6.172	-.51082	-.15242	-.00444	.01036	.12713
128.889	7.226	-.44495	-.12511	-.00330	.01267	.10878
128.737	8.205	-.38511	-.08664	.00770	.01525	.11412
	GRADIENT	-.34381	.03538	.00030	.00103	.00045

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(BNH008) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 81/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
4.365	.192	-1.99713	-.27822	-.03588	-.04936	.08524
2.954	2.364	3.45133	-.24733	-.03274	-.03998	.08761
3.443	4.308	.73920	-.19305	-.02390	-.03379	.08521
	GRADIENT	.70049	.02056	.00288	.00379	.00001

RUN NO. 82/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
6.994	-.126	-1.73392	-.29174	-.02428	-.03768	.09844
7.541	2.378	2.27330	-.17758	-.03058	-.03836	.08398
7.335	4.351	.59772	-.14266	-.02042	-.02494	.09409
	GRADIENT	.56606	.03375	.00072	.00270	-.00118

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (BNH008) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = -1.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC GRADIENT = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .55126 .03644 .00182 .00432 .00179 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 83/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
9.751	-.141	-1.77398	-.29851	-.03479	-.04507	.08269
9.637	2.414	1.82848	-.18214	-.02201	-.03185	.09043
9.522	4.401	.53863	-.13505	-.02724	-.02563	.09053
	GRADIENT		.03644	.00182	.00432	.00179

RUN NO. 84/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
14.752	-.014	-1.93432	-.29271	-.02151	-.01592	.09867
15.063	2.461	1.33466	-.16558	-.02312	-.00367	.10052
15.188	4.492	.41399	-.14098	-.02148	-.01320	.09446
	GRADIENT	.54990	.03431	-.00002	.00076	-.00087

RUN NO. 85/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
29.536	-.028	-2.03844	-.32426	-.01885	-.02365	.09741
29.860	2.464	.88985	-.18362	-.02555	-.02368	.09307
29.902	4.306	.30993	-.15538	-.01776	-.01217	.09652
	GRADIENT	.57791	.03996	.00008	.00250	-.00029

RUN NO. 86/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
44.873	-.065	-1.97441	-.30838	-.03907	-.03487	.08358
44.666	2.496	.69134	-.17669	-.01881	-.01775	.09517
45.029	4.342	.24050	-.15162	-.02049	-.01437	.09433
	GRADIENT	.53617	.03656	.00445	.00478	.00257

RUN NO. 87/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
50.039	-.106	-2.27263	-.30290	-.02771	-.02928	.08998
50.412	2.490	.69563	-.18225	-.02134	-.02001	.10023
50.166	4.334	.22023	-.15036	-.02937	-.02568	.08084
	GRADIENT	.59955	.03515	-.00019	.00099	-.00166

ARC 14-120(CA23B) 747/1 ATI 0251 (CARRIER DATA) (BNH009) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 91/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
8.075	.274	-2.14495	-.30703	-.03238	-.03344	.08585
7.276	2.380	4.86789	-.21619	-.03387	-.03334	.08029
7.800	4.334	.97526	-.16127	-.02261	-.01913	.09256
	GRADIENT	.80175	.03600	.00237	.00348	.00160

RUN NO. 92/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
9.930	-.015	-1.83377	-.37537	-.02838	-.03339	.08788
10.158	2.498	3.48849	-.22391	-.02302	-.02488	.09456
9.843	4.339	.86073	-.16163	-.01970	-.02077	.08784
	GRADIENT	.70700	.04975	.00200	.00293	.00015

RUN NO. 93/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
14.862	-.101	-1.77825	-.38069	-.01836	-.02049	.10032
14.490	2.534	2.34671	-.21978	-.02456	-.02376	.09358
15.108	4.322	.69382	-.15664	-.01516	-.01277	.09423
	GRADIENT	.63447	.05143	.00049	.00152	-.00147

RUN NO. 94/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
29.926	-.027	-2.13156	-.32952	-.03467	-.03362	.08435
29.957	2.539	1.23148	-.20988	-.02544	-.02092	.09638
29.720	4.365	.41937	-.16592	-.01927	-.01419	.09390
	GRADIENT	.62834	.03786	.00351	.00446	.00234

RUN NO. 95/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
44.465	-.192	-1.80863	-.35302	-.03025	-.02998	.08796
44.798	2.406	1.05177	-.19860	-.03450	-.03213	.08653
44.825	4.485	.28910	-.15570	-.01892	-.01200	.09827
	GRADIENT	.47527	.04290	.00226	.00365	.00209

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = -1.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC IORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = .003091 DY = .000 MACH = .600

RUN NO. 96/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
50.555	-.078	-2.20041	-.29261	-.03413	-.03097	.08209
50.407	2.550	.79682	-.18452	-.02271	-.01659	.09574
50.452	4.393	.27351	-.15773	-.01395	-.00864	.09807
	GRADIENT	.59322	.03091	.00450	.00503	.00368

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (BNH010) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC IORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = .02791 DY = .000 MACH = .600

RUN NO. 101/ 0 RN/L = 3.39 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
6.742	.132	1.14846	-.29482	.06228	.04405	.19015
7.349	2.303	-.71427	-.22808	.01503	.00540	.13437
7.463	4.270	-.44501	-.17954	.01041	.00101	.13099
	GRADIENT	-.39322	.02791	-.01269	-.01053	-.01449

RUN NO. 102/ 0 RN/L = 3.38 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
10.009	-.206	.78970	-.28557	.00114	-.00979	.12879
10.088	2.335	-.76688	-.20748	.00466	-.00698	.12422
10.447	4.346	-.48769	-.15890	.00678	-.00325	1.08143
	GRADIENT	-.29492	.02795	.00125	.00142	.20015

RUN NO. 103/ 0 RN/L = 3.37 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
15.028	-.178	1.85197	-.27493	-.00885	-.01907	.11246
14.812	2.367	-.85413	-.21615	.00438	-.00756	.12005
15.043	4.381	-.54768	-.16188	.00329	-.00147	.12224
	GRADIENT	-.54938	.02472	.00277	.00389	.00218

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (BNH010) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
LORB = 8.000 DX = .000
DY = .000 MACH = .600

RUN NO. 104/ 0 RN/L = 3.36 GRADIENT INTERVAL = -5.00/ 5.00

DZ 29.734 ALPHA-C XZCP XYCP CPCC CPSB1 CPSB2
.108 23.92230 .27220 .00685 -.00083 .12387
30.254 2.360 -.95131 -.23043 .00404 -.00153 .12317
29.860 4.407 -.62146 -.19607 .00729 .00384 .12658
GRADIENT -5.59431 .01687 .00006 .00099 .00057

RUN NO. 105/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ 44.868 ALPHA-C XZCP XYCP CPCC CPSB1 CPSB2
.111 -9.92696 .28951 -.00905 -.01560 .11276
45.183 2.422 -.94784 -.22429 .00915 .00490 .13221
45.129 4.429 -.63474 -.18552 .00678 .00066 .12428
GRADIENT 2.11090 .02282 .00365 .00378 .00276

RUN NO. 106/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ 50.418 ALPHA-C XZCP XYCP CPCC CPSB1 CPSB2
.076 -8.51375 .29068 -.01210 -.01711 .10782
50.480 2.472 -.94165 -.23280 .00917 .00385 .12849
50.477 4.415 -.63497 -.19101 .00569 .00409 .12372
GRADIENT 1.81580 .02222 .00418 .00490 .00377

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
SCALE = .0125

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (BNH011) (08 OCT 75)

PARAMETRIC DATA

BETA = .000 STAB = -1.000
RUDDER = .000 ELEVON = 5.000
LORB = 4.000 DX = .000
DY = .000 MACH = .600

RUN NO. 111/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ 3.151 ALPHA-C XZCP XYCP CPCC CPSB1 CPSB2
.047 -2.04310 .23420 .01019 -.02531 .11837
3.118 2.270 1.42806 -.15318 -.03813 -.04870 .08733
3.528 4.264 .39107 -.11360 -.02662 -.03599 .09383
GRADIENT .59592 .02875 -.00406 -.00258 -.00597

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = -1.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC TORB = 4.000 DX = .000
 SCALE = .0125 GRADIENT = .55652 DY = .00045 MACH = .600

PARAMETRIC DATA

RUN NO. 112/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
7.547	-1.170	-1.95675	-24365	-02580	-02926	11209
7.199	2.385	1.03632	-15072	-02744	-03413	09675
7.175	4.257	.33629	-12202	-02656	-03084	09746
	GRADIENT	.55652	.02800	-00020	-00045	-00346

RUN NO. 113/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
9.751	-1.120	-2.19015	-23829	-03218	-04117	09891
9.781	2.353	1.00476	-16284	-02432	-03075	09885
9.491	4.419	.29553	-12562	-02498	-02632	09666
	GRADIENT	.57180	.02501	.00164	.00330	-00048

RUN NO. 114/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
14.874	-0.41	-2.32167	-25371	-02620	-03314	10061
14.967	2.414	.86275	-16462	-02768	-03141	09520
14.923	4.392	.26633	-13040	-03169	-03038	08747
	GRADIENT	.61202	.02815	-00121	.00062	-00293

RUN NO. 115/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
29.907	-1.177	-2.35984	-27423	-02513	-02142	10838
29.803	2.432	.63031	-15731	-02372	-01900	10192
29.693	4.435	.18441	-13475	-02395	-01703	09506
	GRADIENT	.58096	.03096	.00029	.00095	-00287

RUN NO. 116/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
44.786	-1.134	-3.18191	-26560	-01910	-01697	10062
45.057	2.347	.54219	-15687	-01702	-02021	09936
44.452	4.450	.15130	-13512	-02062	-01394	09970
	GRADIENT	.75002	.02892	-00030	.00060	-00021

ARC 14-120(CA238) 747/1 AT1 02S1 (CARRIER DATA) (BNH012) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 121/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
3.209	.038	-2.04595	-.25195	-.02539	-.02751	.10808
3.176	2.411	2.41587	-.18771	-.03188	-.03560	.08812
3.398	4.319	.71203	-.14874	-.02194	-.02074	.09674
	GRADIENT	.69351	.02422	.00076	.00138	-.00288

RUN NO. 122/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
7.586	-.026	-2.23629	-.27652	-.03645	-.04117	.09088
7.752	2.399	1.85761	-.19307	-.01860	-.02333	.09803
7.261	4.448	.55857	-.14172	-.02267	-.02080	.09319
	GRADIENT	.65693	.03026	.00321	.00465	.00059

RUN NO. 123/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
10.180	-.156	-1.98039	-.31724	-.01981	-.02674	.10498
9.988	2.439	1.57283	-.18664	-.02211	-.02530	.09840
10.110	4.458	.48588	-.13552	-.01512	-.01699	.09544
	GRADIENT	.57332	.03989	.00093	.00204	-.00209

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 131/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
3.093	.127	2.53679	-.09399	-.00015	-.01746	.12234
3.006	2.255	-.95078	-.09033	-.00761	-.02145	.11135
3.460	4.338	-.54726	-.05917	-.00433	-.01928	.09898
	GRADIENT	-.73568	.00825	-.00100	-.00044	-.00555

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 6.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 02S1 (CARRIER DATA) (BNH013) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RUN NO. 131/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
3.093	.127	2.53679	-.09399	-.00015	-.01746	.12234
3.006	2.255	-.95078	-.09033	-.00761	-.02145	.11135
3.460	4.338	-.54726	-.05917	-.00433	-.01928	.09898
	GRADIENT	-.73568	.00825	-.00100	-.00044	-.00555

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 6.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA) (BNH013) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .64746 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 132/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
7.217	-0.139	2.21846	-0.11608	-0.01656	-0.02835	0.10594
7.234	2.360	-0.97219	-0.07588	-0.0215	-0.01379	0.11776
7.262	4.367	-0.58027	-0.05220	-0.00160	-0.01460	0.10886
	GRADIENT	-0.64746	0.01425	0.00342	0.00316	0.00081

RUN NO. 133/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
10.116	-0.237	2.29280	-0.14767	-0.01184	-0.02228	0.10866
9.960	2.407	-0.95664	-0.08322	-0.0105	-0.01386	0.11485
9.890	4.371	-0.59834	-0.06337	0.00533	-0.00395	0.11751
	GRADIENT	-0.66109	0.01864	0.00399	0.00393	0.00194

RUN NO. 134/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
15.175	-0.191	4.55151	-0.15620	-0.00860	-0.02172	0.10953
14.756	2.411	-1.00949	-0.10235	-0.0246	-0.01494	0.11419
15.038	4.441	-0.61710	-0.07660	0.00556	-0.00584	0.11554
	GRADIENT	-1.16282	0.01735	0.00303	0.00339	0.00132

RUN NO. 135/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
30.192	-0.063	-12.08780	-0.22882	-0.00084	-0.00382	0.12270
29.830	2.435	-1.00218	-0.17646	0.00099	-0.00934	0.11788
29.948	4.393	-0.66050	-0.15307	-0.00307	-0.01193	0.10621
	GRADIENT	2.64919	0.01579	-0.00045	-0.00184	-0.00362

RUN NO. 136/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
44.708	-0.049	-6.51391	-0.25732	0.00356	-0.00486	0.11923
44.452	2.450	-0.97243	-0.18922	0.00211	-0.00576	0.11819
44.667	4.474	-0.65251	-0.16514	0.00643	-0.00129	0.12050
	GRADIENT	1.33168	0.02065	0.00059	0.00129	0.00026

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (BNH013) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

RUN NO. 137/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
50.164	-.057	-6.77468	-.25222	.00043	-.00744	.11979
50.275	2.433	-.97888	-.19360	.01011	-.00315	.11946
50.038	4.464	-.64985	-.16352	.00594	-.00463	.11679
	GRADIENT	1.39079	.01976	.00132	.00066	-.00065

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (BNH014) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

RUN NO. 141/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
3.324	2.292	-.87316	.01211	-.01522	-.01522	.01387
3.528	4.239	-.51937	.01242	-.01821	-.01332	.01516
	GRADIENT	.18178	.00016	-.00154	.00097	.00067

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 142/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
7.340	1.933	-1.03089	-.00588	-.02696	-.02963	.00723
7.097	4.300	-.55926	.01666	-.00475	.00209	.03271
	GRADIENT	.19920	.00952	.00938	.01340	.01076

RUN NO. 143/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
10.137	1.946	-1.06536	.02818	-.03092	-.02851	.00712
9.825	4.403	-.57681	.01674	-.01126	-.00593	.02610
	GRADIENT	.19883	-.00466	.00796	.00919	.00773

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC LORB = 6.000 DX = 10.000
 SCALE = .0125 GRADIENT = .20969 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO.	144/ 0	RN/L = 3.31	GRADIENT INTERVAL = -5.00/ 5.00	BETA	STAB
DZ	ALPHAC	XZCP	XYCP	CPSB1	CPSB2
14.831	1.968	-1.11585	-0.04841	-0.01770	0.02502
14.775	4.376	-0.51099	-0.03870	-0.00921	0.02801
	GRADIENT	.20969	.00404	.00251	.00124
RUN NO. 145/ 0	RN/L = 3.31	GRADIENT INTERVAL = -5.00/ 5.00			
DZ	ALPHAC	XZCP	XYCP	CPSB1	CPSB2
30.007	1.997	-1.10304	-0.17800	-0.01142	0.03076
29.873	4.392	-0.64240	-0.13780	-0.00706	0.03068
	GRADIENT	.19233	.01679	.00182	-.00003
RUN NO. 146/ 0	RN/L = 3.30	GRADIENT INTERVAL = -5.00/ 5.00			
DZ	ALPHAC	XZCP	XYCP	CPSB1	CPSB2
44.854	1.998	-1.11751	-0.21692	-0.01639	0.02486
44.891	4.430	-0.64242	-0.15564	-0.00224	0.03899
	GRADIENT	.19533	.02520	.00582	.00581
RUN NO. 147/ 0	RN/L = 3.30	GRADIENT INTERVAL = -5.00/ 5.00			
DZ	ALPHAC	XZCP	XYCP	CPSB1	CPSB2
50.387	2.049	-1.06248	-0.19865	-0.02406	0.01771
50.182	4.431	-0.64469	-0.15595	-0.00649	0.02997
	GRADIENT	.17539	.01793	.00738	.00515

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ARC 14-120(CA23B) 747/1 ATI 0251 (CARRIER DATA)

(BNH015) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 151/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ 7.261
 7.540
 ALPHAAC 2.410
 XZCP -.59750
 XYCP -.03198
 CPCC -.00794
 CPSB1 -.00984
 CPSB2 .02509
 GRADIENT 4.362
 .38290
 -.00855
 -.00312
 .03375
 .10996
 -.00929
 -.00031
 .00344
 .00444

RUN NO. 152/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ 9.896
 10.215
 ALPHAAC 2.043
 XZCP -.73653
 XYCP -.05109
 CPCC -.00477
 CPSB1 -.00233
 CPSB2 .02998
 GRADIENT 4.469
 .42530
 -.00698
 -.00644
 .03318
 .12833
 -.00138
 -.00091
 -.00170
 .00132

RUN NO. 153/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ 14.806
 14.750
 ALPHAAC 2.079
 XZCP -.84287
 XYCP -.08147
 CPCC -.02230
 CPSB1 -.02123
 CPSB2 .03037
 GRADIENT 4.497
 .48869
 -.06213
 -.00555
 -.00338
 .05245
 .14651
 .00800
 .00693
 .00738
 .00913

RUN NO. 154/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ 30.131
 30.087
 ALPHAAC 2.049
 XZCP -.99197
 XYCP -.20731
 CPCC -.02001
 CPSB1 -.02216
 CPSB2 .03496
 GRADIENT 4.493
 .58576
 -.16204
 -.00559
 .00089
 .05382
 .16618
 .01852
 .00590
 .00943
 .00772

RUN NO. 155/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ 44.833
 45.102
 ALPHAAC 2.044
 XZCP -1.02843
 XYCP -.22047
 CPCC -.00915
 CPSB1 -.00400
 CPSB2 .04747
 GRADIENT 4.460
 .61912
 -.17140
 -.00131
 .00086
 .05698
 .16944
 .02032
 .00324
 .00201
 .00394

RUN NO. 156/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ 50.292
 50.425
 ALPHAAC 2.016
 XZCP -1.04921
 XYCP -.23542
 CPCC -.02298
 CPSB1 -.01735
 CPSB2 .03849
 GRADIENT 4.375
 .62540
 -.17724
 -.01558
 -.01237
 .03879
 .17963
 .02466
 .00314
 .00211
 .00013

(BNH016) (08 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC TORB = 6.000 DX = 20.000
 SCALE = .0125 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 161/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
2.997	2.461	-7.1073	.00238	-.01885	-.00152	.03045
3.241	4.340	-.46504	-.02723	-.01516	.00001	.03386
	GRADIENT	.13081	-.01576	.00197	.00081	.00182

RUN NO. 162/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
7.114	2.024	-.89037	-.05094	-.03042	-.01513	.01919
7.110	4.482	-.51140	-.03987	-.01344	.00310	.03972
	GRADIENT	.15415	.00450	.00690	.00742	.00835

RUN NO. 163/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
10.110	1.989	-.97179	-.05213	-.01821	.00019	.03890
9.502	4.485	-.53515	-.04348	-.01421	.00370	.04279
	GRADIENT	.17494	.00347	.00160	.00141	.00156

RUN NO. 164/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
14.885	2.147	-.94564	-.09765	-.02711	-.01318	.02270
14.669	4.296	-.58585	-.07905	-.01380	-.00269	.04477
	GRADIENT	.16746	.00866	.00619	.00489	.01027

RUN NO. 165/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
29.970	2.006	-1.06458	-.20607	-.02184	-.01167	.04000
29.738	4.442	-.62109	-.16292	-.00550	.00398	.05894
	GRADIENT	.18205	.01771	.00671	.00642	.00777

RUN NO. 166/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
44.740	2.001	-1.05872	-.22344	-.02060	-.00320	.03429
44.620	4.440	-.62653	-.17061	-.00553	.00936	.05080
	GRADIENT	.17721	.02166	.00618	.00515	.00677

ARC 14-120(CA238) 747/1 ATI 0251 (CARRIER DATA)

(BNH016) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

RUN NO. 167/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
50.218	1.383	-1.09003	-.22816	-.01322	-.00046	.04000
50.509	4.478	-.62335	-.17023	-.00348	.01526	.04540
	GRADIENT	.18701	.02321	.00390	.00630	.00216

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 ATI 0251 (CARRIER DATA)

(BNH017) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

RUN NO. 171/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
7.409	2.320	-.58230	-.10898	-.01577	-.01116	.08509
7.682	4.409	-.34657	-.09025	-.01124	-.00852	.08658
	GRADIENT	.11288	.00897	.00217	.00125	.00071

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

RUN NO. 172/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
10.200	1.989	-.68963	-.12983	-.02208	-.02074	.07747
9.876	4.367	-.40271	-.09796	-.00890	-.00268	.09450
	GRADIENT	.12066	.01341	.00554	.00760	.00716

RUN NO. 173/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
14.980	2.042	-.82644	-.14750	-.02605	-.02258	.08008
14.840	4.390	-.47262	-.10990	-.01551	-.01151	.08437
	GRADIENT	.15071	.01601	.00449	.00471	.00183

RUN NO. 174/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
30.168	1.994	-1.00745	-.23644	-.02132	-.01891	.08785
29.810	4.397	-.57336	-.18003	-.00434	-.00867	.09877
	GRADIENT	.18067	.02348	.00707	.00426	.00454

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA) PARAMETRIC DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC GRADIENT = .000 DX = 20.000
 SCALE = .0125 DY = .000 MACH = .600

REFERENCE DATA

RUN NO.	DZ	ALPHAC	XZCP	XYZP	CPCP	CPSB1	CPSB2	GRADIENT INTERVAL	BETA	STAB
175/ 0								-5.00/ 5.00		
	44.854	2.109	-.99533	-.22912	-.01048	-.00994	.09738			
	45.244	4.417	-.60444	-.18141	-.00897	-.00572	.09861			
		GRADIENT	.16938	.02067	.00065	.00183	.00053			
176/ 0								-5.00/ 5.00		
	50.344	2.118	-1.02516	-.24060	-.01703	-.01054	.09855			
	50.595	4.352	-.62271	-.18506	-.00713	-.00172	.10212			
		GRADIENT	.18016	.02486	.00443	.00395	.00160			

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA) PARAMETRIC DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC GRADIENT = .000 DX = 20.000
 SCALE = .0125 DY = .000 MACH = .600

REFERENCE DATA

RUN NO.	DZ	ALPHAC	XZCP	XYZP	CPCP	CPSB1	CPSB2	GRADIENT INTERVAL	BETA	STAB
181/ 0								-5.00/ 5.00		
	3.378	2.472	-.91683	-1.07678	-.00319	-.01158	.09318			
	3.590	4.405	-.57410	-1.37601	-.00519	-.00734	.08657			
		GRADIENT	.17722	-.15473	-.00103	.00219	-.00342			
182/ 0								-5.00/ 5.00		
	7.711	2.009	-1.07566	-.84023	-.02383	-.02330	.08017			
	7.202	4.378	-.59244	-.92407	-.00976	-.00786	.08802			
		GRADIENT	.20395	-.03539	.00594	.00652	.00331			
183/ 0								-5.00/ 5.00		
	9.911	2.005	-1.08423	-.73073	-.02371	-.01838	.08223			
	10.102	4.475	-.59844	-.80676	-.00806	-.00833	.08902			
		GRADIENT	.19668	-.03078	.00634	.00407	.00275			

ARC 14-120(CA238) 747/1 AT1 02S1 (CARRIER DATA)

(BNH018) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

RUN NO. 184/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
14.973	2.102	-1.05427	-.69112	-.02530	-.02503	.08165
14.736	4.362	-.62419	-.55952	-.00724	-.00481	.09257
	GRADIENT	.19023	.05821	.00799	.00894	.00483

RUN NO. 185/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
29.716	2.100	-1.09690	.10844	-.02053	-.01893	.08692
29.761	4.335	-.65690	2.68843	-.00266	.00031	.09993
	GRADIENT	.19689	1.15448	.00800	.00861	.00582

RUN NO. 186/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
44.733	1.972	-1.11721	.06150	-.01375	-.00996	.09235
44.656	4.308	-.65689	.23533	-.00314	.00172	.10189
	GRADIENT	.19705	.07441	.00454	.00500	.00408

RUN NO. 187/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
49.952	2.021	-1.08815	-.04628	-.00146	.00369	.10001
50.410	4.396	-.64227	.06918	-.00712	-.00062	.09625
	GRADIENT	.18775	.04862	-.00238	-.00182	-.00158

ARC 14-120(CA238) 747/1 AT1 0251 (CARRIER DATA) (BNH019) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT.
 LREF = 327.7800 IN.
 BREF = 2348.0400 IN.
 SCALE = .0125

XMRP = 1339.9000 IN. XC
 YMRP = .0000 IN. YC
 ZMRP = 190.7500 IN. ZC

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 10RB = 8.000 DX = .000
 DY = 10.000 MACH = .600

RUN NO. 191/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.491	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
	7.844	2.405	-.83511	-1.25239	-.00855	-.00774	.09425
		4.380	-.50856	-2.70113	-.00541	-.00135	.08817
		GRADIENT	.16533	-.73350	.00159	.00324	-.00308

RUN NO. 192/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	9.818	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
	9.759	2.116	-.88973	-1.12523	-.02108	-.01814	.07901
		4.310	-.52565	-2.84687	-.00556	-.00286	.08953
		GRADIENT	.16597	-.78482	.00707	.00696	.00479

RUN NO. 193/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	14.864	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
	15.018	1.964	-1.04783	-.95070	-.01471	-.00271	.08367
		4.414	-.56545	.60897	-.00723	.00439	.09136
		GRADIENT	.19689	.63661	.00305	.00290	.00314

RUN NO. 194/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	30.225	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
	30.125	2.014	-1.07022	-1.85045	-.01578	-.01712	.08338
		4.404	-.61789	-1.07730	.00034	-.00209	.09349
		GRADIENT	.18928	.32352	.00675	.00629	.00423

RUN NO. 195/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.421	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
	45.079	2.014	-1.05983	.44562	-.01453	-.01267	.08635
		4.380	-.64145	.48005	-.00825	-.00585	.09034
		GRADIENT	.17681	.01459	.00265	.00288	.00168

RUN NO. 196/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	50.290	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
	50.279	2.002	-1.05597	.16031	-.00264	-.00345	.09681
		4.323	-.64695	.20398	-.00184	.00302	.09797
		GRADIENT	.17617	.01881	.00035	.00279	.00050

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C-3

ARC 14-120(CA238) 747/1 AT1 02S1 (CARRIER DATA)

(BNH020) (21 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BRP = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
2.999	.056	-19.53650	-.18658	-.01469	-.01766	.09625
2.972	2.231	-1.27100	-.15924	-.03064	-.03038	.06764
3.376	4.258	-.76012	-.11799	-.00844	-.01978	.07771
	GRADIENT	4.51668	.01628	.00138	-.00057	-.00452

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
7.356	-.232	29.51460	-.20024	-.02115	-.01845	.09708
7.305	2.422	-1.19287	-.15367	-.01375	-.01186	.08537
7.176	4.286	-.74633	-.12345	-.01226	-.01659	.07668
	GRADIENT	-7.02760	.01703	.00202	.00055	-.00451

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
9.998	-.190	424.47900	-.19768	-.03292	-.03398	.07897
9.822	2.393	-1.16102	-.15013	-.01387	-.01709	.08753
9.715	4.416	-.73602	-.12012	-.01398	-.01023	.08176
	GRADIENT	-95.60566	.01691	.00426	.00522	.00082

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
14.608	-.076	-8.55418	-.19928	-.01558	-.01100	.09652
14.941	2.433	-1.11882	-.15441	-.01651	-.01327	.09307
14.567	4.425	-.72178	-.11973	-.00343	-.00370	.08947
	GRADIENT	1.79206	.01768	.00257	.00151	-.00156

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
29.742	-.160	-7.33200	-.23432	-.02978	-.02366	.08292
29.812	2.421	-1.05010	-.18907	-.01565	-.00757	.09597
29.770	4.475	-.69194	-.15206	-.01159	-.01051	.08779
	GRADIENT	1.47485	.01774	.00399	.00298	.00122

(BNH020) (21 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC GRADIENT INTERVAL = -5.00/ 5.00
 SCALE = .0125

PARAMETRIC DATA

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCS	CPSB1	CPSB2
44.518	-.106	-5.04471	-.25422	-.03040	-.02020	.08019
44.662	2.474	-.98835	-.19360	-.00771	.00092	.09697
44.473	4.486	-.86643	-.16197	-.00559	-.00018	.09771
	GRADIENT	.98177	.02025	.00556	.00454	.00394

(BNH021) (08 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = -1.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC GRADIENT INTERVAL = -5.00/ 5.00
 SCALE = .0125

PARAMETRIC DATA

RUN NO. 211 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCS	CPSB1	CPSB2
3.110	.173	-1.87063	-.15904	-.02533	-.02347	.08738
3.078	2.255	-.75764	-.11077	-.02997	-.02997	.07465
3.099	4.353	.16061	-.09026	-.04100	-.03808	.05235
	GRADIENT	.48493	.01645	-.00375	-.00350	-.00838

(BNH022) (08 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC GRADIENT INTERVAL = -5.00/ 5.00
 SCALE = .0125

PARAMETRIC DATA

RUN NO. 212 / 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCS	CPSB1	CPSB2
7.673	-.126	-1.53443	-.17240	-.03216	-.02465	.08256
7.105	2.399	.54906	-.10796	-.02652	-.02759	.07643
7.181	4.355	.13664	-.09103	-.02837	-.02543	.06975
	GRADIENT	.39433	.01851	.00091	-.00022	-.00284

(BNH023) (08 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC GRADIENT INTERVAL = -5.00/ 5.00
 SCALE = .0125

PARAMETRIC DATA

RUN NO. 213 / 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCS	CPSB1	CPSB2
9.888	-.253	-1.44412	-.17348	-.04185	-.03310	.07051
10.133	2.398	.53437	-.10304	-.03890	-.03864	.06113
9.989	4.413	.12464	-.08345	-.03730	-.03016	.05626
	GRADIENT	.35721	.01967	.00098	.00049	-.00308

ARC 14-120(CA238) 747/1 ATI 02S1 (CARRIER DATA)

(BNH021) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 214/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
14.808	-.052	-2.23886	-.16265	-.03690	-.02473	.07239
14.795	2.452	.48330	-.09790	-.02962	-.01439	.08285
14.946	4.403	.11845	-.07820	-.02192	-.01471	.07530
	GRADIENT	.55492	.01928	.00334	.00233	.00082

RUN NO. 215/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
29.743	-.137	-2.32324	-.19136	-.03722	-.02184	.06935
29.755	2.487	.40010	-.11689	-.02828	-.01438	.07735
29.747	4.402	.10068	-.09604	-.02538	-.00901	.07254
	GRADIENT	.56409	.02144	.00266	.00283	.00084

RUN NO. 216/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
44.609	-.114	-3.17111	-.18086	-.03496	-.01799	.06584
44.499	2.547	.35489	-.11347	-.02368	-.00839	.07552
44.744	4.315	.10226	-.09823	-.02237	-.00174	.07569
	GRADIENT	.78578	.01919	.00296	.00366	.00234

ARC 14-120(CA238) 747/1 ATI 02S1 (CARRIER DATA)

(BNH022) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 221/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
7.175	.180	3.93532	-.10786	-.01035	-.00414	.09710
7.048	2.374	-1.01301	-.07809	-.01230	-.00770	.08811
7.827	4.374	-.58146	-.06478	-.00678	-.00407	.08877
	GRADIENT	-1.09602	.01033	.00082	-.00001	-.00202

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA)

(8NH022) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 222/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
10.008	-.095	3.21821	-.15102	-.00950	.00050	.09343
9.794	2.462	-1.01232	-.11077	-.00734	.00372	.09225
10.168	4.329	-.61690	-.06919	-.00700	.00487	.08825
	GRADIENT	-.91371	.01833	.00058	.00100	-.00113

RUN NO. 223/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
14.875	-.131	5.00195	-.11280	-.02103	-.01515	.07445
15.107	2.479	-1.02708	-.08417	-.02550	-.01720	.06640
14.650	4.467	-.64495	-.06799	-.00624	-.00516	.09288
	GRADIENT	-1.28309	.00981	.00296	.00202	.00365

RUN NO. 224/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
29.663	-.130	-62.50340	-.17571	-.02369	-.01227	.07804
30.014	2.540	-1.01105	-.14065	-.01043	-.01016	.08669
30.212	4.360	-.68118	-.11961	-.00882	-.00048	.08909
	GRADIENT	14.45494	.01254	.00343	.00249	.00252

RUN NO. 225/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
44.608	-.097	-8.17365	-.22545	-.01080	-.01215	.09184
44.758	2.520	-.98567	-.18461	-.00996	-.00700	.09602
44.921	4.300	-.67928	-.15080	-.00001	.00026	.10687
	GRADIENT	1.78201	.01687	.00230	.00276	.00328

RUN NO. 226/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
50.329	-.122	-7.97086	-.23660	-.00933	-.01068	.09458
50.199	2.456	-1.02047	-.18702	-.01587	-.01322	.08625
50.308	4.443	-.66630	-.14936	-.00381	-.00381	.09752
	GRADIENT	1.65324	.01912	.00103	.00138	.00046

ARC 14-120(CA238) 747/1 AT1 02S1 (CARRIER DATA)

(BNH023) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 231/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
3.160	.028	5.50461	-.08901	-.01945	-.01702	.09443
3.398	2.478	-1.09957	-.07922	-.01633	-.01120	.08360
3.235	4.342	-.67214	-.07230	-.01476	-.01179	.07872
	GRADIENT	-1.49628	.00388	.00110	.00127	-.00368

RUN NO. 232/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
7.044	-.157	4.90354	-.11877	-.02953	-.02712	.07923
7.210	2.438	-1.13960	-.08470	-.02281	-.02148	.07248
7.208	4.444	-.69168	-.06153	-.01648	-.01243	.08576
	GRADIENT	-1.26930	.01247	.00282	.00314	.00123

RUN NO. 233/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
9.588	-.079	10.92820	-.12775	-.01959	-.01455	.09205
9.981	2.449	-1.12885	-.08455	-.02179	-.02019	.07897
9.714	4.418	-.68891	-.05790	-.00986	-.00959	.08532
	GRADIENT	-2.68460	.01561	.00205	.00095	-.00167

RUN NO. 234/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
14.480	-.060	756.97800	-.13452	-.02243	-.02163	.08628
14.703	2.510	-1.06852	-.07906	-.01807	-.01105	.09291
14.839	4.425	-.70219	-.06118	-.01242	-.01000	.08660
	GRADIENT	-175.92086	.01664	.00220	.00268	.00021

RUN NO. 235/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
29.767	-.083	-9.32822	-.21972	-.01074	-.01290	.09535
29.743	2.454	-1.08270	-.15928	-.01825	-.01905	.08333
29.929	4.441	-.69123	-.12691	-.01043	-.00234	.09417
	GRADIENT	1.96970	.02066	-.00007	.00212	-.00046

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (BNH023) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 236/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
44.538	-.030	-5.47442	-.22124	-.01462	-.01165	.09273
44.541	2.408	-1.03454	-.19355	-.00822	-.00472	.10132
44.965	4.398	-.68017	-.15102	-.00589	.00058	.10096
	GRADIENT	1.111030	.01570	.00200	.00277	.00192

RUN NO. 237/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
49.951	-.140	-7.44901	-.23807	-.02499	-.02472	.08227
49.970	2.539	-1.00752	-.18973	-.00796	.00551	.09549
50.050	4.426	-.68152	-.14695	-.01690	-.00173	.07836
	GRADIENT	1.54403	.01982	.00208	.00546	-.00047

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (BNH024) (21 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 IORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 241/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
2.790	.104	-1.78359	-.15532	-.03304	-.02520	.07880
3.147	2.378	1.45082	-.11700	-.02431	-.01487	.07709
3.235	4.382	.39573	-.08353	-.02060	-.01225	.07176
	GRADIENT	.52970	.01678	.00293	.00306	-.00163

RUN NO. 242/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
7.214	-.107	-1.76884	-.17317	-.02419	-.02069	.08474
7.169	2.445	1.10658	-.11292	-.02199	-.01444	.07915
7.223	4.433	.31729	-.08027	-.02412	-.01603	.07398
	GRADIENT	.49046	.02061	.00006	.00109	-.00236

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ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(BNH024) (21 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 243/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 DZ 9.900 ALPHAC XZCP CPSB2 CPSB1
 -0.036 -1.99741 -0.15772 -0.3522 -0.3282 .07315
 9.833 2.466 .94164 -.09887 -.02160 -.01809 .08048
 9.797 4.354 .29796 -.07629 -.02169 -.01199 .08072
 GRADIENT .55726 .01881 .00321 .00481 .00179

RUN NO. 244/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 DZ 14.827 ALPHAC XZCP CPSB2 CPSB1
 -.163 -1.81369 -.17957 -.02371 -.01751 .08815
 14.725 2.499 .75956 -.08593 -.02295 1.08076 .08089
 14.404 4.287 .25688 -.07395 -.01771 .07738
 GRADIENT .50412 .02462 .00026 .03188 -.00244

RUN NO. 245/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00
 DZ 29.598 ALPHAC XZCP CPSB2 CPSB1
 -.049 -2.63965 -.19255 -.03045 -.02459 .07439
 29.897 2.432 .60676 -.11895 -.02158 -.01484 .08643
 29.731 4.487 .16738 -.10638 -.01734 -.01222 .08342
 GRADIENT .64241 .01936 .00291 .00277 .00209

RUN NO. 246/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00
 DZ 44.528 ALPHAC XZCP CPSB2 CPSB1
 -.131 -2.67912 -.20751 -.03385 -.02769 .06538
 44.796 2.390 .51563 -.13211 -.03345 -.02382 .07277
 44.981 4.445 .13994 -.11737 -.01759 -.00951 .08485
 GRADIENT .64035 .02008 .00343 .00368 .00421

RUN NO. 247/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00
 DZ 49.996 ALPHAC XZCP CPSB2 CPSB1
 -.101 -3.01015 -.20432 -.02199 -.01550 .08465
 50.084 2.534 .44612 -.13383 -.02088 -.01223 .08500
 50.059 4.394 .13942 -.11363 -.01725 -.00621 .09135
 GRADIENT .74147 .02061 .00101 .00201 .00140

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA) (BNH025) (21 OC1 75)

REFERENCE DATA

SREF = 5500.0000 SQ. FT.
 LREF = 327.7800 IN.
 BREF = 2348.0400 IN.
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
7.209	.039	-1.78105	-.23600	-.03005	-.02819	.07595
7.216	2.367	2.41183	-.13423	-.02821	-.02396	.07223
7.326	4.353	.66042	-.11131	-.01379	-.01002	.08261
	GRADIENT	.60093	.02932	.00368	.00414	.00145

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
9.339	-.027	-1.88371	-.24066	-.02724	-.02591	.07939
10.040	2.372	2.24724	-.13669	-.02486	-.02274	.07260
10.061	4.478	.52776	-.10937	-.01280	-.00660	.08335
	GRADIENT	.56255	.02947	.00315	.00422	.00079

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
14.643	-.013	-1.95889	-.20999	-.02337	-.01474	.09074
15.082	2.543	1.26649	-.12110	-.01317	-.00646	.09072
14.801	4.374	.44678	-.07008	-.02446	-.01594	.07887
	GRADIENT	.59373	.03208	.00002	-.00005	-.00253

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
29.827	-.162	-1.95231	-.20395	-.03064	-.02451	.07568
30.228	2.450	.89424	-.12157	-.02501	-.01917	.07826
30.232	4.437	.27080	-.09429	-.00867	-.00141	.09318
	GRADIENT	.51436	.02424	.00464	.00487	.00366

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
44.600	-.132	-2.24688	-.22274	-.02218	-.01554	.07997
45.018	2.364	.68702	-.14246	-.01074	-.00617	.08639
44.806	4.412	.20692	-.11712	-.01346	-.00082	.09249
	GRADIENT	.56279	.02356	.00201	.00326	.00275

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (BNH025) (21 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
RUDDER = .000 ELEVON = .000
TORB = 8.000 DX = .000
DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ 49.823
50.763
50.761
ALPHAC -233
2.449
4.339
GRADIENT .53840
XZCP -2.10859
.59874
.19829
XYCP -.24351
-.13423
-.12098
.02773
CPCC -.03150
-.01778
-.01509
.00369
CPSB1 -.02564
-.00729
-.00269
.00514
CPSB2 .07466
.09412
.09115
.00385

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = .000
TORB = 8.000 DX = .000
DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 03S1 (CARRIER DATA) (BNH027) (08 OCT 75)

RUN NO. 261/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ 7.310
7.309
7.865
ALPHAC .046
2.283
4.288
GRADIENT -.81250
XZCP 2.81625
-.93545
-.55880
XYCP -.15101
-.10833
-.07727
.01741
CPCC .00550
-.00233
.01148
.00131
CPSB1 -.00467
-.00557
.00792
.00290
CPSB2 .12094
.10265
.11388
-.00179

RUN NO. 262/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ 9.835
9.901
9.652
ALPHAC -.171
2.437
4.384
GRADIENT -.68173
XZCP 2.36552
-.93834
-.58432
XYCP -.15464
-.10613
-.07749
.01703
CPCC .00031
.00993
.01147
.00252
CPSB1 -.00916
.01130
.01010
.00443
CPSB2 .11100
.11735
.11599
.00117

RUN NO. 263/ 0 RN/L = 3.27 GRADIENT INTERVAL = -5.00/ 5.00

DZ 14.936
14.980
15.447
ALPHAC -.143
2.462
4.479
GRADIENT -1.22854
XZCP 4.83274
-.97420
-.61514
XYCP -.17269
-.15223
-.10669
.01397
CPCC .00294
.01366
.01589
.00286
CPSB1 -.00762
.00929
.01342
.00464
CPSB2 .11475
.12011
.11491
.00013

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA) (BNH027) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 264/ 0 RN/L = 3.27 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
29.711	-.161	-346.52800	-.21795	-.00255	-.00201	.11073
29.841	2.529	-.99826	-.17136	.00990	.01210	.11742
30.092	4.385	-.66176	-.12362	.01479	.01507	.11653
	GRADIENT	79.83991	.02051	.00397	.00386	.00136

RUN NO. 265/ 0 RN/L = 3.27 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
44.673	-.113	-6.56277	-.24445	.00703	.01335	.11614
44.791	2.534	-.96538	-.20722	.01021	.01624	.12292
44.852	4.379	-.66088	-.15996	.01128	.01100	.11793
	GRADIENT	1.36951	.01848	.00096	-.00041	.00055

RUN NO. 266/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
50.205	-.137	-14.25580	-.26803	-.00489	-.00544	.10803
50.115	2.437	-1.00704	-.20977	.00974	.01166	.12035
50.310	4.427	-.65110	-.16288	.01254	.02024	.11980
	GRADIENT	3.08444	.02302	.00391	.00568	.00269

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA) (BNH028) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 281/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
3.140	2.460	-.99617	-.14768	-.00121	-.00997	.10383
3.154	4.481	-.60471	-.11417	.00052	-.00385	.09972
	GRADIENT	.19365	.01658	.00086	.00302	-.00204

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA) (8NH028) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORR = 6.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 282/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
7.424	2.022	-1.17575	-0.13505	-0.0866	-0.1244	0.09194
7.204	4.410	-0.63895	-0.09219	0.0777	0.0122	0.10767
	GRADIENT	.22481	.01795	.00688	.00572	.00658

RUN NO. 283/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
9.851	2.068	-1.15202	-0.11862	-0.0910	-0.1695	0.09128
9.970	4.488	-0.64484	-0.07425	-0.0016	-0.00564	0.10230
	GRADIENT	.20964	.01834	.00370	.00467	.00455

RUN NO. 284/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
14.671	2.026	-1.17026	-0.09561	-0.1184	-0.1562	0.09874
14.337	4.481	-0.66051	-0.05374	0.0625	0.0269	0.10751
	GRADIENT	.20764	.01705	.00737	.00746	.00358

RUN NO. 285/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
29.878	2.180	-1.11512	-0.18153	-0.0712	-0.0658	0.10059
29.674	4.515	-0.65562	-0.13171	0.1052	0.01462	0.11875
	GRADIENT	.19248	.02134	.00755	.00908	.00760

RUN NO. 286/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
44.780	2.093	-1.12746	-0.21252	-0.0726	0.0140	0.10340
45.100	4.521	-0.66202	-0.16250	0.0603	0.0987	0.11074
	GRADIENT	.19168	.02060	.00547	.00349	.00302

RUN NO. 287/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
50.200	2.061	-1.11633	-0.21048	-0.0843	0.0160	0.10382
50.258	4.539	-0.64534	-0.15507	0.1036	0.01420	0.11355
	GRADIENT	.19004	.02236	.00758	.00508	.00393

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 291/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.274	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
	7.616	2.465	-.83163	-.13090	.00471	.00307	-.11391
		4.442	-.50502	-.09961	.00666	.00502	.10945
		GRADIENT	.16515	.01582	.00099	.00099	-.00226

RUN NO. 292/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	10.037	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
	10.105	2.057	-.99557	-.13625	.00106	-.00167	.10720
		4.486	-.53530	-.08615	.01053	.01135	.11276
		GRADIENT	.18945	.02062	.00390	.00536	.00229

RUN NO. 293/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	15.073	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
	14.864	2.020	-1.06976	-.10094	-.00562	-.00670	.10437
		4.412	-.58850	-.06392	.00900	.00955	.11265
		GRADIENT	.20116	.01547	.00611	.00679	.00346

RUN NO. 294/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	30.231	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
	29.953	2.128	-1.07242	-.15430	-.00183	.00168	.10526
		4.510	-.63370	-.11757	.01000	.01572	.11908
		GRADIENT	.18422	.01543	.00497	.00590	.00580

RUN NO. 295/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.559	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
	45.001	2.087	-1.09723	-.20739	-.00088	.00478	.10707
		4.446	-.64516	-.16162	.01577	.01659	.12086
		GRADIENT	.19162	.01940	.00706	.00501	.00584

RUN NO. 296/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	50.108	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
	50.709	2.027	-1.11875	-.21725	-.00261	.00659	.10831
		4.547	-.64030	-.15564	.01296	.01871	.12081
		GRADIENT	.18986	.02445	.00618	.00481	.00495

ARC 14-120(CA23B) 747/1 ATI 0351 (CARRIER DATA) (BNH030) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

RUN NO. 301/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
7.146	2.474	-.78822	-.14444	-.00773	-.00828	.09771
7.541	4.355	-.48451	-.11168	-.00014	.00700	.10630
	GRADIENT	.16155	.01743	.00404	.00813	.00457

RUN NO. 302/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
10.020	2.021	-.93859	-.13993	-.01060	-.0655	.09346
10.077	4.495	-.51312	-.09978	.00269	.00790	.10735
	GRADIENT	.17198	.01623	.00537	.00584	.00561

RUN NO. 303/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
14.887	2.172	-.97686	-.12097	-.01607	-.00605	.09578
14.608	4.441	-.56737	-.08291	.00635	.01511	.11175
	GRADIENT	.18052	.01678	.00989	.00933	.00704

RUN NO. 304/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
30.123	1.934	-1.14764	-.17881	-.00644	.00221	.10464
29.781	4.549	-.61373	-.12295	.00438	.01455	.11080
	GRADIENT	.20416	.02136	.00414	.00472	.00236

RUN NO. 305/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
44.889	2.080	-1.06362	-.21347	-.01036	-.00254	.10527
44.724	4.413	-.65646	-.16513	-.00401	.00436	.10431
	GRADIENT	.17454	.02072	.00272	.00296	-.00041

RUN NO. 306/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
50.425	2.667	-1.10385	-.22676	-.00560	.00304	.10730
50.408	4.416	-.64212	-.16605	.01181	.01809	.12507
	GRADIENT	.19659	.02585	.00741	.00641	.00756

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA)

(BNH031) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT.
 LREF = 327.7800 IN.
 BREF = 2348.0400 IN.
 SCALE = .0125

XMRP = 1339.9000 IN. XC
 YMRP = .0000 IN. YC
 ZMRP = 190.7500 IN. ZC

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

RUN NO. 311/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.139	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
	7.034	2.440	-1.03707	-.14435	-.01910	-.02262	.08518
		4.374	-.62873	-.09866	-.00444	-.00198	.09964
		GRADIENT	.21109	.02362	.00758	.01067	.00747

RUN NO. 312/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	9.707	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
	9.890	1.989	-1.17571	-.14199	-.00350	-.00322	.10381
		4.549	-.61824	-.08005	.00022	.00076	.10297
		GRADIENT	.21773	.02419	.00145	.00156	-.00033

RUN NO. 313/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	14.857	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
	14.654	1.961	-1.22118	-.11827	-.01508	-.01373	.09113
		4.524	-.63939	-.06896	.00146	.00584	.10324
		GRADIENT	.22700	.01924	.00645	.00763	.00472

RUN NO. 314/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	29.665	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
	29.802	1.982	-1.19739	-.19239	-.00558	-.01105	.11423
		4.262	-.69146	-.13820	.00303	.01014	.11318
		GRADIENT	.22189	.02376	-.00112	-.00040	-.00046

RUN NO. 315/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.676	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
	44.732	1.970	-1.15241	-.21325	-.00899	-.00116	.10041
		4.370	-.67461	-.16413	.01297	.01680	.11883
		GRADIENT	.19912	.02047	.00915	.00748	.00768

RUN NO. 316/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	50.207	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
	50.098	2.003	-1.15364	-.21083	.00181	.00646	.11778
		4.371	-.67208	-.16084	.01105	.01734	.11681
		GRADIENT	.20333	.02111	.00390	.00459	-.00041

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA) (BNH032) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORR = 6.000 DX = .000
 DY = 10.000 MACH = .600

RUN NO. 321/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
3.217	2.384	-1.14867	-1.23298	.00513	-.00145	.10601
3.310	4.324	-.68697	-1.69440	.01128	-.00046	1.38689
	GRADIENT	.23794	-.23779	.00317	.00051	.66010

RUN NO. 322/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
7.247	1.999	-1.26345	-.83811	.00915	.00013	.11220
7.563	4.379	-.68840	-1.04181	.00679	-.00333	.10255
	GRADIENT	.24154	-.08556	-.00099	-.00145	-.00405

RUN NO. 323/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
10.032	1.980	-1.29376	-.66350	.00523	-.00241	.11576
9.896	4.367	-.69781	-.82049	-.00167	-.00868	.09308
	GRADIENT	.24967	-.06577	-.00289	-.00263	-.00950

RUN NO. 324/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
15.217	2.049	-1.23106	-.43953	.00861	.00396	.11296
15.047	4.348	-.71261	.01407	.00978	.01087	.10964
	GRADIENT	.23568	.20621	.00053	.00314	-.00151

RUN NO. 325/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
29.998	1.976	-1.19367	-.00277	-.00707	-.00194	.10230
29.890	4.301	-.69939	.52606	.00697	.01025	.10990
	GRADIENT	.21255	.22741	.00604	.00524	.00327

RUN NO. 326/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
44.648	1.958	-1.16598	-.07546	.00476	.00722	.11426
44.989	4.325	-.68504	.04575	.00804	.00995	.11238
	GRADIENT	.20321	.05121	.00138	.00115	-.00079

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA) (BNH032) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .19411 .03868 .00347 .00171 .00105 .00105 DY = 10.000 MACH = .600

RUN NO. 327/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ 49.978 50.163
 ALPHA XZCP YZCP CPCC CPSB1 CPSB2
 1.369 -1.13946 -1.0200 -0.0072 .10182
 4.264 -69398 -.01323 .00024 .10423
 GRADIENT .19411 .03868 .00347 .00171 .00105

PARAMETRIC DATA

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA) (BNH033) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC TORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = .21000 1.32878 -.00108 .00231 -.00439 .00231 DY = 10.000 MACH = .600

RUN NO. 331/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ 7.500 7.613
 ALPHA XZCP YZCP CPCC CPSB1 CPSB2
 2.446 -1.02465 -1.68195 .00762 .11092
 4.292 -63712 .77010 .01024 .10282
 GRADIENT .21000 1.32878 -.00108 .00231 -.00439

PARAMETRIC DATA

RUN NO. 332/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ 10.263 9.859
 ALPHA XZCP YZCP CPCC CPSB1 CPSB2
 1.907 -1.32293 -1.33179 .00960 .11619
 4.322 -63921 .03190 .00733 .10494
 GRADIENT .28310 .56465 -.00116 -.00015 -.00466

RUN NO. 333/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ 15.012 14.957
 ALPHA XZCP YZCP CPCC CPSB1 CPSB2
 1.933 -1.27251 -.83282 -.00531 .10220
 4.327 -.65605 -.52952 -.00501 .09826
 GRADIENT .25749 .12669 .00013 .00159 -.00165

RUN NO. 334/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ 29.834 29.957
 ALPHA XZCP YZCP CPCC CPSB1 CPSB2
 1.958 -1.21535 1.50091 .00637 .11410
 4.362 -.66902 -2.65233 .01197 .11389
 GRADIENT .22723 -1.72740 .00233 .00278 -.00008

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA)

(BNH033) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

RUN NO. 335/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
44.819	1.871	-1.18809	.08823	-.00839	-.00190	.10303
45.000	4.278	-.68263	.23419	.01013	.01287	.11475
	GRADIENT	.21005	.06066	.00769	.00614	.00487

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = 10.000 MACH = .600

PARAMETRIC DATA

RUN NO. 336/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
50.002	1.913	-1.18214	-.04751	.00887	.01460	.12130
50.443	4.260	-.68277	.07171	.01012	.01559	.11725
	GRADIENT	.21273	.05079	.00053	.00042	-.00173

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA)

(BNH034) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

RUN NO. 341/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
1.515	-.031	2.51092	-.24921	.00664	-.00541	.11953
1.466	2.266	-1.16419	-.20461	.00293	-.00527	.10428
1.364	4.259	-.67431	-.17471	-.00394	-.00987	.08881
	GRADIENT	-.76421	.01742	-.00245	-.00101	-.00715

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 342/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
3.218	-.127	2.57828	-.28033	.01082	-.00472	.12153
2.877	2.324	-1.14453	-.20975	.01292	.00036	.11170
3.380	4.353	-.67451	-.17420	.00804	-.00234	.09629
	GRADIENT	-.75323	.02386	-.00057	.00058	-.00558

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

REFERENCE DATA
 SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

PARAMETRIC DATA
 BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 343/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
7.400	-.285	3.24316	-.25600	-.00809	-.01539	.10858
7.390	2.312	-1.14957	-.19509	.00827	-.00376	.11081
7.046	4.212	-.70670	-.15669	.00757	.00294	.10712
	GRADIENT	-.92654	.02217	.00365	.00410	-.00025

RUN NO. 344/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
9.858	-.243	4.64369	-.24912	-.00412	-.01032	.10815
9.870	2.334	-1.15481	-.19217	.00837	-.00502	.10866
9.840	4.253	-.70876	-.14218	.00707	.00079	.10591
	GRADIENT	-1.24944	.02369	.00262	.00245	-.00046

RUN NO. 345/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
14.745	-.254	6.21326	-.22494	-.00658	-.00685	.10771
14.663	2.332	-1.12412	-.15431	.00523	-.00216	.11275
14.715	4.248	-.70779	-.10864	.00719	.00064	.10659
	GRADIENT	-1.61091	.02592	.00314	.00167	-.00012

RUN NO. 346/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
29.743	-.267	60.85520	-.23485	.00107	.00135	.11895
29.911	2.360	-1.07952	-.19217	.00630	.00767	.11603
29.627	4.268	-.70237	-.13699	.00693	.00665	.11312
	GRADIENT	-14.18202	.02125	.00133	.00124	-.00127

RUN NO. 347/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
44.607	-.235	-12.13530	-.25015	.00263	.00591	.11561
44.784	2.345	-1.04204	-.22226	.00944	.01218	.12210
44.631	4.291	-.68888	-.17463	-.00537	-.00051	.10437
	GRADIENT	2.62290	.01637	-.00153	-.00122	-.00222

(BNH034) (08 OCT 75)

ARC 14-120(CA238) 747/1 ATI 0351 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 348/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
49.960	-.239	-12.55280	-.27066	.01302	.01329	.11854
50.084	2.361	-1.04145	-.21149	.00920	.01247	.11818
50.051	4.269	-.68776	-.16914	.00929	.01148	.11269
	GRADIENT	2.73696	.02253	-.00086	-.00040	-.00123

RUN NO. 349/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
61.655	-.279	-11.52990	-.27732	.00846	.01228	.12087
61.629	2.289	-1.03663	-.20577	.00830	.01157	.11773
61.640	4.275	-.67977	-.15842	.01006	.01060	.11566
	GRADIENT	2.46424	.02620	.00033	-.00036	-.00115

ARC 14-120(CA238) 747/1 ATI 0351 (CARRIER DATA)

(BNH035) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 351/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
3.392	.007	164.01700	-.17766	-.01203	-.01908	.09228
3.273	2.270	-1.25836	-.14253	-.01701	-.02208	.07109
3.233	4.244	-.75960	-.09689	-.01876	-.02170	.06451
	GRADIENT	-39.71856	.01898	-.00160	-.00064	-.00662

RUN NO. 352/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
7.633	-.212	37.00720	-.18709	-.01995	-.03253	.08664
7.582	2.387	-1.17041	-.13338	-.00581	-.01257	.08779
7.362	4.282	-.75083	-.09257	-.00383	-.01060	.08167
	GRADIENT	-8.77880	.02101	.00370	.00505	-.00101

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TABULATED SOURCE DATA - CA23B

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ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA) (BNH035) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 353/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
9.664	-.213	-700.68500	-.19502	-.00364	-.01147	.10635
9.916	2.313	-1.16429	-.12729	-.00290	-.01234	.09669
9.803	4.259	-74429	-.08342	.00056	-.00457	.08777
	GRADIENT	162.35378	.02505	.00091	.00145	-.00414

RUN NO. 354/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
15.113	-.270	-92.81610	-.16820	-.01907	-.02627	.09531
14.808	2.324	-1.12704	-.10567	-.00963	-.01476	.09485
14.693	4.304	-72841	-.07369	-.01748	-.02388	.07237
	GRADIENT	20.90085	.02084	.00051	.00072	-.00477

RUN NO. 355/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
29.891	-.272	-14.91500	-.22740	-.01575	-.02133	.08892
29.979	2.346	-1.07645	-.17974	-.00324	-.00729	.10399
29.891	4.294	-70249	-.13502	-.00128	-.00451	.09869
	GRADIENT	3.23404	.02012	.00326	.00378	.00234

RUN NO. 356/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
44.449	-.271	-7.84328	-.23974	-.02416	-.02309	.08812
44.799	2.322	-1.07270	-.18637	-.01029	-.00921	.09855
44.865	4.260	-69762	-.14837	.00265	-.00140	.09939
	GRADIENT	1.63355	.02019	.00588	.00482	.00257

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(BNH036) (21 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SO.FT.
 LREF = 327.7800 IN.
 BREF = 2348.0400 IN.
 SCALE = .0125

XMRP = 1339.9000 IN. XC
 YMRP = .0000 IN. YC
 ZMRP = 190.7500 IN. ZC

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 361/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
1.654	2.302	-1.14169	-4.9859	-.02087	-.03101	.06905
2.469	4.194	-.68385	-4.6469	-.06608	-.01337	.08001
	GRADIENT	.24199	.01792	.00782	.00932	.00579

RUN NO. 362/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
2.877	2.012	-1.23931	-.51020	-.01401	-.02496	.07860
3.365	4.405	-.65527	-.45550	-.00456	-.01674	.08091
	GRADIENT	.24411	.02286	.00395	.00344	.00097

RUN NO. 363/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
7.393	2.013	-1.21638	-.50989	-.01897	-.02698	.08163
7.226	4.376	-.67040	-.47570	-.00814	-.01653	.07960
	GRADIENT	.23105	.01447	.00459	.00442	-.00086

RUN NO. 364/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
9.858	2.049	-1.18023	-.51373	-.01709	-.02727	.08365
10.104	4.457	-.66621	-.47412	-.00247	-.01141	.08745
	GRADIENT	.21344	.01645	.00607	.00659	.00158

RUN NO. 365/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
14.553	2.097	-1.14245	-.51440	-.01816	-.03074	.08360
14.643	4.474	-.66153	-.47149	-.01627	-.02163	.07586
	GRADIENT	.20231	.01805	.00079	.00383	-.00326

RUN NO. 366/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
29.819	2.159	-1.06316	-.52173	-.01907	-.02443	.08631
29.992	4.411	-.66163	-.48221	-.00091	-.00770	.09280
	GRADIENT	.17836	.01756	.00806	.00743	.00288

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA) (BNH036) (21 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT.
 LREF = 327.7800 IN.
 BREF = 2348.0400 IN.
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 367/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
45.057	2.052	-1.10125	-52932	-01712	-02303	.08681
44.937	4.371	-.67327	-47958	.00013	-.00880	.10027
	GRADIENT	.18454	.02145	.00744	.00614	.00580

RUN NO. 368/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
50.129	2.015	-1.14599	-.53569	-.01688	-.02279	.08757
50.420	4.439	-.64462	-.47697	-.00296	-.00705	.10050
	GRADIENT	.20681	.02422	.00574	.00649	.00534

RUN NO. 369/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
62.057	2.140	-1.02573	-.51827	-.01557	-.00215	.07892
61.853	4.416	-.65643	-.47569	-.01056	.00116	.10003
	GRADIENT	.16220	.01870	.00220	.00145	.00927

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA) (BNH037) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT.
 LREF = 327.7800 IN.
 BREF = 2348.0400 IN.
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 371/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
1.955	.521	-2.94599	-.18508	-.02881	-.04126	.06207
1.879	2.297	1.81194	-.12834	-.02718	-.04308	.05788
1.932	4.335	.44568	-.08540	-.01551	-.02727	.06653
	GRADIENT	.85121	.02601	.00354	.00377	.00124

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(BNH037) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 LORR = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 372/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
3.611	-.073	-1.77135	-.21197	-.02868	-.03980	.06797
3.412	2.415	1.42633	-.11326	-.01431	-.02875	.07073
3.341	4.372	.40531	-.08503	-.01766	-.02596	.06423
	GRADIENT	.52495	.02905	.00262	.00317	-.00076

RUN NO. 373/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
7.238	-.184	-1.78509	-.18236	-.02480	-.03460	.07010
7.611	2.515	1.01363	-.09699	-.01353	-.02559	.07308
7.497	4.363	.34106	-.06457	-.01364	-.02464	.06741
	GRADIENT	.50936	.02633	.00258	.00227	-.00047

RUN NO. 374/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
10.003	-.096	-1.96877	-.16776	-.02205	-.02555	.08926
9.942	2.401	1.10677	-.07022	-.03157	-.03502	.06840
10.030	4.474	.29295	-.06214	-.02035	-.02869	.06975
	GRADIENT	.51976	.02365	.00023	-.00079	-.00441

RUN NO. 375/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
14.990	.036	-2.44757	-.12781	-.03110	-.03083	.07957
14.729	2.374	.96177	-.06054	-.03181	-.03154	.06681
14.795	4.458	.25681	-.03783	-.01901	-.01955	.07398
	GRADIENT	.62865	.02052	.00267	.00249	-.00135

RUN NO. 376/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
29.795	-.037	-2.76896	-.20160	-.03354	-.03195	.07599
29.929	2.359	.71669	-.13270	-.03219	-.03192	.06961
30.138	4.506	.17341	-.09510	-.01187	-.01670	.08207
	GRADIENT	.66325	.02355	.00469	.00329	.00126

ARC 14-120(CA238) 747/1 AT1 03S1 (CARRIER DATA) (BNH037) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = -1.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC IORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .58084 DY = .000 MACH = .600

RUN NO. 377/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
45.027	-.096	-2.20770	-.23377	-.02966	-.02727	.07512
44.952	2.497	.49506	-.14491	-.01138	-.01191	.08931
44.914	4.260	.16022	-.12923	-.01603	-.01818	.08561
	GRADIENT	.58084	.02477	.00342	.00237	.00264

RUN NO. 378/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
50.481	.036	-4.00969	-.23368	-.03096	-.02990	.07363
50.592	2.316	.57429	-.14974	-.02074	-.01658	.08709
50.369	4.524	.13316	-.12874	-.01618	-.01915	.08278
	GRADIENT	.92891	.02345	.00330	.00241	.00206

RUN NO. 379/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
61.632	-.013	-4.35894	-.21753	-.03237	-.02998	.07182
61.965	2.379	.50479	-.14095	-.01648	-.01837	.08410
61.651	4.408	.13185	-.12582	-.02613	-.02480	.06966
	GRADIENT	1.04582	.02108	.00157	.00128	-.00032

ARC 14-120(CA238) 747/1 AT1 03S1 (CARRIER DATA) (BNH038) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC IORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = -.45766 DY = .000 MACH = .600

RUN NO. 381/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
1.603	.046	1.45142	-.24748	-.02193	-.02086	.10438
1.569	2.293	-.83623	-.18893	-.01769	-.01742	.09272
2.306	4.387	-.50517	-.17348	-.01149	-.01633	.09220
	GRADIENT	-.45766	.01716	.00240	.00105	-.00284

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ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA)

(BNH038) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 50.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 382/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
3.468	.019	1.96777	-.28775	-.02966	-.02781	.09199
3.699	2.422	-.84050	-.20870	-.01751	-.02154	.09279
3.469	4.425	-.52386	-.18270	-.01441	-.01172	.09483
	GRADIENT	-.58539	.02414	.00352	.00362	.00063

RUN NO. 383/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
7.736	-.027	3.32970	-.25028	-.03118	-.03118	.08877
6.902	2.422	-.87295	-.19849	-.01621	-.01810	.09745
7.339	4.419	-.55707	-.17718	-.01781	-.01998	.08710
	GRADIENT	-.90556	.01662	.00312	.00262	-.00023

RUN NO. 384/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
10.309	.047	7.61963	-.22687	-.03486	-.02901	.09322
9.703	2.409	-.90244	-.19481	-.01708	-.01816	.09632
10.031	4.489	-.56966	-.17389	-.01489	-.01651	.09090
	GRADIENT	-1.88313	.01196	.00457	.00285	-.00048

RUN NO. 385/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
15.037	-.141	3.23423	-.24969	-.03255	-.03122	.08754
14.856	2.495	-.91278	-.19340	-.01889	-.01619	.09661
14.876	4.418	-.60026	-.16619	-.01414	-.01279	.09433
	GRADIENT	-.88490	.01850	.00411	.00414	.00161

RUN NO. 386/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
30.304	-.165	-17.29290	-.25363	-.03054	-.02787	.08977
29.816	2.497	-.95607	-.20443	-.01630	-.01279	.09886
30.280	4.402	-.65588	-.16985	-.02100	-.02473	.08509
	GRADIENT	3.80243	.01836	.00230	.00101	-.00074

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TABULATED SOURCE DATA - CA23B

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(BNH039) (08 OCT 75)

ARC 14-120(CA23B). 747/1 AT1 03S1 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT.
 LREF = 327.7800 IN.
 BREF = 2348.0400 IN.
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 387/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
44.879	.070	-4.18970	-.23216	-.02715	-.03089	.09703
44.946	2.481	-.96982	-.19139	-.01762	-.01681	.10451
44.926	4.448	-.65011	-.16409	-.01390	-.01390	.10272
	GRADIENT	.82805	.01560	.00306	.00395	.00137

RUN NO. 388/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
49.971	-.037	-4.92873	-.23924	-.03211	-.03050	.08593
50.192	2.513	-.94454	-.19994	-.01885	-.01722	.10315
50.609	4.284	-.67468	-.16467	-.00969	-.01241	.10350
	GRADIENT	1.02499	.01713	.00519	.00426	.00425

RUN NO. 389/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
61.515	-.115	-9.00624	-.24393	-.03020	-.03235	.08493
60.520	2.529	-.95206	-.19812	-.02079	-.02025	.09444
	GRADIENT	3.04628	.01733	.00356	.00458	.00360

(BNH039) (08 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT.
 LREF = 327.7800 IN.
 BREF = 2348.0400 IN.
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 391/ 0 RN/L = 3.36 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
3.148	2.388	-.90506	-.46302	-.01866	-.03392	.07800
3.390	4.263	-.54587	-.44281	-.01043	-.02592	.07452
	GRADIENT	.19154	.01078	.00439	.00427	-.00186

ARC 14-120(CA238) 747/1 AT1 02S1 (CARRIER DATA)

(BNH039) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 50.FT.
LREF = 327.7800 IN.
BREF = 2348.0400 IN.
SCALE = .0125

XMRP = 1339.9000 IN. XC
YMRP = .0000 IN. YC
ZMRP = 190.7500 IN. ZC

BETA = .000 STAB = 5.000
RUDDER = 10.000 ELEVON = 5.000
LORB = 6.000 DX = .000
DY = .000 MACH = .500

PARAMETRIC DATA

RUN NO. 392/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ 7.312
7.376
ALPHAC 2.139
XZCP -1.00618
XYCP -4.7651
CPCCP -.02831
CPSB1 -.04393
CPSB2 .06831
GRADIENT 4.461
-.56051
.19197
CPCCP -.01575
CPSB1 -.02888
CPSB2 .07565
GRADIENT .01439
.00541
.00648
CPCCP .00316

RUN NO. 393/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ 9.885
10.083
ALPHAC 2.001
XZCP -1.08046
XYCP -4.8829
CPCCP -.01557
CPSB1 -.02548
CPSB2 .08615
GRADIENT 4.424
-.60489
.19631
CPCCP -.01888
CPSB1 -.03235
CPSB2 .06963
GRADIENT .01416
-.09172
-.00284
CPCCP -.00682

RUN NO. 394/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ 15.083
14.830
ALPHAC 2.141
XZCP -1.04924
XYCP -4.9591
CPCCP -.01511
CPSB1 -.03007
CPSB2 .08666
GRADIENT 4.433
-.82086
.18693
CPCCP -.02424
CPSB1 -.03557
CPSB2 .07223
GRADIENT .01445
-.00398
-.00240
CPCCP -.00630

RUN NO. 395/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ 29.781
29.790
ALPHAC 2.045
XZCP -1.13126
XYCP -5.0631
CPCCP -.01575
CPSB1 -.02137
CPSB2 .08774
GRADIENT 4.494
-.64080
.20024
CPCCP -.00454
CPSB1 -.01254
CPSB2 .09125
GRADIENT .01551
.00458
.00360
CPCCP .00143

RUN NO. 396/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ 44.565
44.873
ALPHAC 2.160
XZCP -1.05824
XYCP -5.0327
CPCCP -.02924
CPSB1 -.03003
CPSB2 .07652
GRADIENT 4.367
-.66476
.17825
CPCCP -.01751
CPSB1 -.02305
CPSB2 2.10101
GRADIENT .01369
.00531
.00316
CPCCP .91710

RUN NO. 397/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ 50.286
50.569
ALPHAC 2.123
XZCP -1.07578
XYCP -5.0835
CPCCP -.02461
CPSB1 -.02672
CPSB2 .08169
GRADIENT 4.396
-.66422
.18107
CPCCP -.01722
CPSB1 -.02118
CPSB2 .08042
GRADIENT .01695
.00325
.00244
CPCCP -.00056

(BNH040) (08 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 4.000 DX = .000
 DY = .000 MACH = .500

RUN NO. 401/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
3.048	-.004	6.81192	-.24448	-.02201	-.02878	.08545
3.021	2.318	-1.06919	-.22140	-.03423	-.03984	.06213
3.274	4.401	-.66173	-.18574	-.02026	-.02270	.07670
	GRADIENT	-1.72913	.01327	.00029	.00126	-.00214

RUN NO. 402/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
7.066	-.091	11.51960	-.26316	-.02063	-.02361	.09525
7.198	2.490	-1.02612	-.22881	-.01943	-.02132	.08412
7.335	4.405	-.67117	-.18566	-.03059	-.03299	.06193
	GRADIENT	-2.83228	.01702	-.00206	-.00192	-.00723

RUN NO. 403/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
9.793	.024	-37.22160	-.26275	-.02441	-.03036	.08871
9.766	2.449	-1.04920	-.22665	-.01913	-.01994	.08110
9.745	4.293	-.68871	-.18728	-.01704	-.02512	.07591
	GRADIENT	8.88333	.01754	.00175	.00138	-.00301

RUN NO. 404/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
14.781	-.155	12.07500	-.27966	-.03276	-.03730	.07418
14.685	2.568	-.98470	-.21586	-.01788	-.02031	.08235
14.592	4.303	-.69195	-.18237	-.02525	-.02845	.06636
	GRADIENT	-3.03545	.02197	.00202	.00236	-.00133

RUN NO. 405/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
29.804	-.120	-19.91820	-.24631	-.02548	-.02791	.08652
29.944	2.563	-.99420	-.19702	-.01662	-.01769	.08626
29.835	4.329	-.69584	-.15210	-.01706	-.01598	.08230
	GRADIENT	4.54461	.02095	.00201	.00277	-.00088

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ARC 14-120(CA238) 747/1 AT1 02S1 (CARRIER DATA)

(BNH040) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 406/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
44.515	-.091	-8.84545	-.23410	-.02950	-.03297	.07282
44.728	2.446	-1.02431	-.18946	-.01366	-.01609	.08558
44.671	4.476	-.66923	-.14233	-.01948	-.01651	.07945
	GRADIENT	1.84325	.01999	.00236	.00373	.00160

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .500

PARAMETRIC DATA

ARC 14-120(CA238) 747/1 AT1 02S1 (CARRIER DATA)

(BNH041) (08 OCT 75)

RUN NO. 411/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
3.328	2.137	-1.15480	-.19080	-.02879	-.02734	.07289
3.325	4.298	-.66194	-.16938	-.02555	-.03350	.06335
	GRADIENT	.22807	.00991	.00150	-.00285	-.00442

RUN NO. 412/ 0 RN/L = 2.96 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
6.838	2.085	-1.11233	-.20468	-.02770	-.02806	.07342
7.184	4.439	-.65947	-.16439	-.02638	-.03111	.06382
	GRADIENT	.19239	.01712	.00056	-.00129	-.00408

RUN NO. 413/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
9.770	2.218	-1.07042	-.20276	-.02620	-.02438	.07686
9.780	4.469	-.66793	-.16504	-.02721	-.02649	.07125
	GRADIENT	.17875	.01675	-.00045	-.00093	-.00249

(BNH041) (08 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .500

RUN NO. 414/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
14.789	1.386	-1.15883	-0.20394	-0.4863	-0.43398	.04939
14.819	4.441	-6.7103	-1.5856	-0.4174	-0.3852	.04893
	GRADIENT	.19751	.01849	.00281	.00223	-.00019

RUN NO. 415/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
29.638	2.215	-1.06478	-1.7656	-0.3094	-0.2405	.07164
29.826	4.415	-6.67879	-1.4474	-0.2294	-0.1932	.07061
	GRADIENT	.17546	.01447	.00364	.00215	-.00047

RUN NO. 416/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
44.438	2.214	-1.02392	-1.7245	-0.4145	-0.3645	.05670
44.694	4.330	-6.67845	-1.3659	-0.4718	-0.4037	.04492
	GRADIENT	.16331	.01695	-.00271	-.00185	-.00557

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA)

(BNH042) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .300

RUN NO. 421/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
3.128	2.209	-.98826	-1.4807	-1.15411	-1.14534	-.05938
3.123	4.221	-6.5050	-1.2816	-.08272	-.08095	.00423
	GRADIENT	.16785	.00990	.03548	.03200	.03161

RUN NO. 422/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPCC	CPSB1	CPSB2
7.085	2.291	-.93493	-1.4143	-.08087	-.07733	.01636
7.303	4.347	-6.5417	-1.3197	-.08046	-.07334	.01294
	GRADIENT	.13655	.00460	.00020	.00194	-.00166

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(BNH042) (08 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .300

RUN NO. 423/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
9.285	2.180	-1.01386	-.14275	-.14445	-.14007	-.04983
9.970	4.347	-.66128	-.12707	-.08184	-.07297	.00774
	GRADIENT	.16270	.00724	.02889	.03096	.02657

RUN NO. 424/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
14.488	2.266	-1.00470	-.13829	-.15348	-.15697	-.06088
14.575	4.354	-.66324	-.12075	-.14908	-.14296	-.04861
	GRADIENT	.16356	.00840	.00211	.00671	.00588

RUN NO. 425/ 0 RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
29.804	2.191	-1.03721	-.12777	-.14265	-.14002	-.04365
29.724	4.292	-.68210	-.10617	-.06659	-.07547	.00980
	GRADIENT	.16902	.01028	.03620	.03072	.02544

RUN NO. 426/ 0 RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPSB1	CPSB2
44.766	2.202	-1.01339	-.11757	-.08289	-.07403	.01637
44.688	4.266	-.70006	-.09983	-.07506	-.07152	.01347
	GRADIENT	.15181	.00859	.00379	.00122	-.00140

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = -1.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = .000
 SCALE = .0125

PARAMETRIC DATA

STAB = .000 DX = .000
 ELEVON = 5.000
 MACH = .600

RUN NO.	81/ 0	RN/L = 3.35	GRADIENT INTERVAL = -5.00/ 5.00	CLM	CY	CYN	CBL
DZ	4.365	ALPHA0	CL	CLM	CY	CYN	CBL
	4.365	6.79528	.32322	.01796	.00383	.00119	-.00061
	2.954	8.20568	.34335	.02524	.00394	.00098	-.00080
	3.443	10.25770	.23854	.09462	.00373	.00072	-.00083
		.83739	.10961	.00484	-.00002	-.00011	-.00005

RUN NO.	82/ 0	RN/L = 3.35	GRADIENT INTERVAL = -5.00/ 5.00	CLM	CY	CYN	CBL
DZ	6.994	ALPHA0	CL	CLM	CY	CYN	CBL
	6.994	6.00552	.29147	.01310	.00320	.00117	-.00062
	7.541	8.29366	.32784	.02247	.00327	.00104	-.00083
	7.335	10.30330	.42281	.02950	.00349	.00070	-.00079
		.95577	.02906	.00366	.00006	-.00010	-.00004

RUN NO.	83/ 0	RN/L = 3.36	GRADIENT INTERVAL = -5.00/ 5.00	CLM	CY	CYN	CBL
DZ	9.751	ALPHA0	CL	CLM	CY	CYN	CBL
	9.751	6.01990	.29271	.01168	.00254	.00102	-.00082
	9.637	8.26560	.35522	.02208	.00154	.00070	-.00114
	9.522	10.30680	.42173	.02830	.00337	.00071	-.00096
		.94128	.02708	.00368	.00016	-.00007	-.00004

RUN NO.	84/ 0	RN/L = 3.35	GRADIENT INTERVAL = -5.00/ 5.00	CLM	CY	CYN	CBL
DZ	14.752	ALPHA0	CL	CLM	CY	CYN	CBL
	14.752	6.14126	.29345	.01060	.00262	.00099	-.00090
	15.063	8.39154	.36068	.02063	.00277	.00088	-.00112
	15.188	10.47500	.43824	.02723	.00347	.00059	-.00094
		.95993	.03195	.00370	.00018	-.00009	-.00001

RUN NO.	85/ 0	RN/L = 3.35	GRADIENT INTERVAL = -5.00/ 5.00	CLM	CY	CYN	CBL
DZ	29.536	ALPHA0	CL	CLM	CY	CYN	CBL
	29.536	6.09616	.29030	.00807	.00228	.00099	-.00096
	29.860	8.37419	.37193	.01850	.00237	.00082	-.00120
	29.902	10.26970	.44641	.02378	.00317	.00044	-.00118
		.96007	.03583	.00366	.00020	-.00012	-.00005

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(CNH008) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 86/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.873	-.065	.59219	6.08741	-.08155	-.48477	.28755	.07578	.0651	.00179	.00091	-.00087
44.666	2.496	.59329	8.78191	-.00515	-.48370	.37755	.08855	.01673	.00183	.00071	-.00113
45.029	4.342	.59219	10.32980	-.21858	-.52900	.46497	.10787	.02206	.00287	.00038	-.00113
	GRADIENT	.00003	.95852	-.02730	-.00939	.03394	.00714	.00356	.00023	-.00012	-.00006

RUN NO. 87/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.039	-.106	.59335	6.00790	.05961	-.54456	.28716	.07559	.06005	.00155	.00084	-.00092
50.412	2.490	.59218	8.42595	-.20322	-.44509	.38105	.08955	.01637	.00194	.00079	-.00089
50.166	4.334	.59202	10.27840	-.19609	-.49766	.46418	.10770	.02127	.00270	.00036	-.00091
	GRADIENT	-.00031	.95987	-.06045	.01238	.03963	.00711	.00346	.00025	-.00010	-.00000

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(CNH009) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 91/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
8.075	.274	.59107	8.98241	-2.26005	-.48266	.44169	.09300	.02196	.00436	.00072	-.00080
7.276	2.380	.59100	10.26110	-.15449	-.50319	.46721	.10281	.02713	.00456	.00059	-.00050
7.800	4.334	.59115	12.33510	-.09343	-.54526	.54411	.12890	.03283	.00565	-.00023	-.00070
	GRADIENT	.00002	.82302	.53973	-.01535	.02506	.00879	.00268	.00032	-.00023	-.00003

RUN NO. 92/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.930	-.015	.59119	8.14574	-.14314	-.47456	.39464	.08505	.01955	.00358	.00089	-.00101
10.158	2.498	.59200	10.44690	-.03224	-.44624	.47117	.10506	.00618	.00507	.00064	-.00073
9.843	4.339	.59032	12.29420	-.06267	-.55214	.54829	.12987	.03168	.00581	-.00026	-.00067
	GRADIENT	-.00017	.95062	.01999	-.01611	.03500	.01016	.00278	.00052	-.00025	-.00008

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = -1.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO LORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = .00646 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO.	93/ 0	RN/L = 3.35	GRADIENT INTERVAL = -5.00/ 5.00	CL	CLM	CY	CYN	CBL		
DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.862	-.101	8.04677	-.13258	-.38124	.38716	.08490	.01778	.00241	.00067	-.00103
14.490	2.534	10.40940	.00278	-.47713	.47076	.10540	.02488	.00373	.00035	-.00096
15.108	4.322	12.32420	-.12014	-.54510	.55332	.13221	.02962	.00584	-.00036	-.00074
	GRADIENT	.96159	.00646	-.03699	.03712	.01048	.00268	.00075	-.00022	.00006

RUN NO.	94/ 0	RN/L = 3.35	GRADIENT INTERVAL = -5.00/ 5.00	CL	CLM	CY	CYN	CBL		
DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.926	-.027	8.10042	-.14976	-.52747	.39182	.08726	.01596	.00251	.00066	-.00127
29.957	2.539	10.47820	-.09792	-.43116	.48686	.11019	.02256	.00418	.00020	-.00103
29.720	4.365	12.31910	-.14966	-.56262	.57788	.13909	.02682	.00608	-.00048	-.00055
	GRADIENT	-.00027	.00134	-.00504	.04202	.01162	.00248	.00080	-.00026	.00016

RUN NO.	95/ 0	RN/L = 3.34	GRADIENT INTERVAL = -5.00/ 5.00	CL	CLM	CY	CYN	CBL		
DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN <td>CBL</td>	CBL
44.465	-.192	7.89170	-.04396	-.57621	.37731	.08671	.01335	.00261	.00077	-.00118
44.798	2.406	10.32970	-.06445	-.44672	.48328	.10999	.02038	.00351	.00018	-.00094
44.826	4.485	12.45260	-.18625	-.47087	.59809	.14554	.02436	.00547	-.00043	-.00076
	GRADIENT	-.00008	-.02950	.02364	.04695	.01243	.00237	.00060	-.00026	.00009

RUN NO.	96/ 0	RN/L = 3.35	GRADIENT INTERVAL = -5.00/ 5.00	CL	CLM	CY	CYN	CBL		
DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN <td>CBL</td>	CBL
50.555	-.078	8.07496	-.00083	-.51299	.38959	.08864	.01410	.00297	.00072	-.00122
50.407	2.550	10.48780	-.00053	-.48408	.49504	.11279	.02015	.00354	.00004	-.00104
50.452	4.393	12.38500	-.12157	-.45860	.59731	.14506	.02332	.00481	-.00052	-.00062
	GRADIENT	.00028	-.02516	.01208	.04505	.01239	.00208	.00040	-.00030	.00013

ORIGINAL PAGE IS
 OF POOR QUALITY

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITTER DATA)

(CNH010) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA =
 RUDDER =
 TORB =
 DY =

PARAMETRIC DATA

.000 STAB = 5.000
 .000 ELEVON = 5.000
 8.000 DX = .000
 .000 MACH = .600

RUN NO. 101/ 0 RN/L = 3.39 GRADIENT INTERVAL = -5.00/ 5.00

DZ	6.742	ALPHAC	.132	MACH	.59549	ALPHA0	8.00852	DX	-.12109	DY	.03761	CL	.39792	CD	.08455	CLM	.02173	CY	.00359	CYN	.00089	CBL	-.00112
	7.349		2.303		.59593		10.24330		-.02354		.14223		.47605		.10446		.02713		.00393		.00035		-.00102
	7.463		4.270		.59467		12.22970		-.05880		.11115		.55401		.13110		.03225		.00528		-.00035		-.00069
		GRADIENT			-.00019		1.02022		.01557		.01830		.03769		.01121		.00254		.00040		-.00030		.00010

RUN NO. 102/ 0 RN/L = 3.38 GRADIENT INTERVAL = -5.00/ 5.00

DZ	10.009	ALPHAC	-.206	MACH	.59438	ALPHA0	7.96112	DX	-.15476	DY	-.38643	CL	.39677	CD	.08500	CLM	.01936	CY	.00292	CYN	.00086	CBL	-.00107
	10.088		2.335		.59797		10.27510		-.02114		-.41237		.48054		.10575		.02591		.00408		.00045		-.00069
	10.447		4.346		.59846		12.36190		-.09557		-.31935		.56640		.13557		.03095		.00559		-.00052		-.00045
		GRADIENT			.00092		.96426		.01471		.01366		.03707		.01098		.00252		.00058		-.00030		.00014

RUN NO. 103/ 0 RN/L = 3.37 GRADIENT INTERVAL = -5.00/ 5.00

DZ	15.028	ALPHAC	-.178	MACH	.59684	ALPHA0	7.98002	DX	-.14715	DY	-.34488	CL	.39903	CD	.08571	CLM	.01831	CY	.00244	CYN	.00073	CBL	-.00124
	14.812		2.367		.59644		10.27820		-.01582		-.39669		.48078		.10654		.02454		.00340		.00027		-.00099
	15.043		4.381		.59768		12.36480		-.09065		-.41872		.57061		.13713		.02939		.00522		-.00052		-.00085
		GRADIENT			.00017		.95906		.01408		-.01637		.03739		.01114		.00243		.00060		-.00027		.00009

RUN NO. 104/ 0 RN/L = 3.36 GRADIENT INTERVAL = -5.00/ 5.00

DZ	29.734	ALPHAC	-.108	MACH	.59714	ALPHA0	8.00410	DX	-.10253	DY	-.51265	CL	.39952	CD	.08753	CLM	.01619	CY	.00170	CYN	.00065	CBL	-.00129
	30.254		2.360		.59646		10.33170		-.08537		-.47228		.49701		.11075		.02228		.00329		.00006		-.00099
	29.860		4.407		.59578		12.36740		-.12801		-.46917		.59331		.14282		.02652		.00410		-.00055		-.00068
		GRADIENT			-.00030		.96574		-.00522		.00985		.04217		.01215		.00229		.00054		-.00026		.00014

RUN NO. 105/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.868	ALPHAC	-.111	MACH	.59615	ALPHA0	8.01493	DX	-.11246	DY	-.41856	CL	.39915	CD	.08840	CLM	.01515	CY	.00162	CYN	.00064	CBL	-.00131
	45.183		2.422		.59623		10.39430		-.11112		-.43596		.50907		.11364		.02097		.00368		.00009		-.00075
	45.129		4.429		.59500		12.42070		-.22071		-.48760		.60374		.14740		.02436		.00374		-.00049		-.00094
		GRADIENT			-.00024		.96903		-.02280		-.01485		.04540		.01286		.00204		.00048		-.00025		.00009

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 106/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

ALPHA	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
MACH	8.06252	-.00328	-.42559	.39865	.08915	.01455	.00156	.00068	-.00117
50.418	59354	-.01726	-.50454	.50677	.11388	.02014	.00371	.00009	-.00062
50.480	59459	-.14625	-.54820	.61095	.14839	.02383	.00392	-.00050	-.00072
50.477	59433	.96499	-.02749	.04702	.01301	.00207	.00054	-.00026	.00010
GRADIENT	.00019	-.03050							

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORR = 8.000 DX = .000
 DY = .000 MACH = .600

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 111/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

ALPHA	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
MACH	4.01104	-.08958	-.18456	.18355	.06131	.01139	.00273	.00103	-.00071
3.118	59320	-.06761	-.22048	.24220	.06651	.01752	.00305	.00111	-.00055
3.528	59295	-.02397	-.22023	.30306	.07512	.02486	.00262	.00092	-.00069
GRADIENT	.59212	.00149	-.00861	.02830	.00326	.00319	-.00002	-.00002	.00000

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 LORR = 4.000 DX = .000
 DY = .000 MACH = .600

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 112/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

ALPHA	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
MACH	4.03941	-.20703	-.12903	.19545	.06224	.00826	.00284	.00119	-.00068
7.547	59381	-.12007	-.22900	.25253	.06797	.01520	.00290	.00106	-.00082
7.199	59203	-.04267	-.20347	.30360	.07603	.02238	.00368	.00114	-.00084
7.175	59299	.93117	-.01813	.02537	.00306	.00316	.00018	-.00001	-.00004
GRADIENT	-.00021	.04249							

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORR = 4.000 DX = .000
 DY = .000 MACH = .600

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 113/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

ALPHA	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
MACH	4.05269	-.16821	-.18607	.19573	.06261	.00697	.00327	.00122	-.00081
9.781	59267	-.09256	-.22556	.25535	.06862	.01381	.00317	.00115	-.00080
9.781	59142	-.01048	-.22926	.31451	.07706	.02198	.00324	.00103	-.00095
9.491	59138	.93566	-.00973	.02611	.00316	.00329	-.00001	-.00004	-.00003
GRADIENT	-.00029	.03704							

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORR = 8.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 ATI 0251 (ORBITER DATA)

(CNH011) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 114/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	14.874	ALPHAC	ALPHAO	DX	CL	CO	CLM	CY	CYN	CBL
	14.967	-.041	4.15214	-.12322	.19487	.06411	.00529	.00357	.00131	-.00091
	14.923	2.414	6.32741	-.01929	.23114	.07015	.01263	.00340	.00129	-.00081
		4.392	8.34322	-.17291	.32567	.07916	.02140	.00318	.00107	-.00097
		GRADIENT	.94304	-.00909	.02817	.00336	.00361	-.00009	-.00005	-.00001

RUN NO. 115/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	29.907	ALPHAC	ALPHAO	DX	CL	CO	CLM	CY	CYN	CBL
	29.803	-.177	4.00406	-.12413	.19487	.06522	.00217	.00283	.00120	-.00106
	29.693	2.432	6.32040	-.14288	.27269	.07318	.01051	.00218	.00101	-.00098
		4.435	8.35864	-.12964	.34705	.08319	.01999	.00315	.00104	-.00117
		GRADIENT	.94143	-.00149	.03284	.00386	.00383	.00005	-.00004	-.00002

RUN NO. 116/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.786	ALPHAC	ALPHAO	DX	CL	CO	CLM	CY	CYN	CBL
	45.057	-.134	4.02465	-.06309	.19449	.06665	.00065	.00215	.00107	-.00100
	44.452	2.347	6.29147	-.22253	.28463	.07483	.00925	.00213	.00101	-.00092
		4.450	8.35115	-.10643	.36513	.08620	.01858	.00279	.00096	-.00110
		GRADIENT	.94287	-.01108	.03719	.00424	.00390	.00013	-.00002	-.00002

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

ARC 14-120(CA238) 747/1 ATI 0251 (ORBITER DATA)

(CNH012) (08 OCT 75)

RUN NO. 121/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	3.209	ALPHAC	ALPHAO	DX	CL	CO	CLM	CY	CYN	CBL
	3.176	-.038	5.99659	-.06803	.29210	.06961	.01664	.00433	.00120	-.00062
	3.398	2.411	8.26383	-.05291	.34938	.07925	.02634	.00410	.00104	-.00069
		4.319	10.27320	-.08407	.41676	.09481	.03311	.00440	.00075	-.00070
		GRADIENT	.99710	-.00334	.02892	.00581	.00386	.00001	-.00010	-.00002

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (CNH012) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 122/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.586	-.026	.59403	6.16280	-.20573	-.26645	.30505	.07102	.01434	.00402	.00123	-.00082
7.752	2.399	.59281	8.34562	-.04076	-.30365	.36180	.08137	.02393	.00482	.00121	-.00102
7.261	4.448	.59334	10.37730	-.07958	-.41296	.42709	.09177	.03053	.00475	.00085	-.00112
	GRADIENT	-.00016	.94074	.02940	-.03222	.02716	.00580	.00363	.00017	-.00008	-.00007

RUN NO. 123/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
10.180	-.156	.59296	6.05873	-.19455	-.29121	.30080	.07119	.01271	.00414	.00121	-.00109
9.988	2.439	.59362	8.34630	.02098	-.28681	.35950	.08155	.02265	.00449	.00113	-.00104
10.110	4.458	.59257	10.42810	-.10402	-.32093	.43751	.09921	.02971	.00429	.00063	-.00116
	GRADIENT	-.00007	.94394	.02257	-.00606	.02930	.00598	.00369	.00004	-.00012	-.00001

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (CNH013) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 131/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.093	.127	.59355	6.06234	-.01073	-.54464	.29869	.07136	.01782	.00195	.00101	-.00043
3.006	2.255	.59495	8.09604	-.05380	-.49183	.34394	.08007	.02619	.00302	.00108	-.00040
3.460	4.338	.59342	10.26890	-.06887	-.57379	.42077	.09640	.03339	.00255	.00077	-.00047
	GRADIENT	-.00003	1.00357	-.01383	-.00681	.02397	.00594	.00370	.00014	-.00006	-.00001

RUN NO. 132/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.217	-.139	.59173	6.01524	-.15708	-.42273	.29924	.07180	.01398	.00197	.00108	-.00044
7.234	2.360	.59269	8.25183	.04116	-.50229	.35760	.08178	.02363	.00244	.00104	-.00058
7.262	4.367	.59204	10.29700	-.06766	-.51025	.42833	.09774	.03051	.00225	.00075	-.00055
	GRADIENT	0.00008	.94800	.02224	-.01992	.02843	.00569	.00368	.00007	-.00007	-.00003

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 6.000 DX = .000
 DY = .000 MACH = .600

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(CNH013) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

DZ	10.116	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
	9.960	-.237	.59189	5.97668	-.21796	-.45642	.29924	.07209	.01266	.00244	.00123	-.00060
	9.890	2.407	.59154	8.30916	.00486	-.58665	.36120	.08236	.02314	.00186	.00091	-.00070
		4.371	.59196	10.31750	-.10588	-.58819	.43175	.09849	.02966	.00261	.00073	-.00072
		GRADIENT	.00001	.93856	.02768	-.02975	.02846	.00563	.00370	.00002	-.00011	-.00003

DZ	15.175	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
	14.756	-.191	.59168	6.02236	-.14580	-.48842	.29907	.07274	.01157	.00194	.00103	-.00067
	15.038	2.411	.59073	8.30132	.10008	-.50023	.36298	.08364	.02146	.00187	.00090	-.00073
		4.441	.59089	10.40650	-.06533	-.53208	.43963	.10085	.02823	.00233	.00058	-.00089
		GRADIENT	-.00018	.94319	.02092	-.00920	.03008	.00598	.00361	.00008	-.00009	-.00005

DZ	30.192	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
	29.830	-.063	.59060	6.12957	-.13999	-.48303	.30273	.07456	.00999	.00205	.00099	-.00100
	29.948	2.435	.59017	8.34504	.02612	-.52953	.37641	.08638	.01984	.00195	.00083	-.00096
		4.393	.59049	10.35230	-.12102	-.48783	.45628	.10440	.02574	.00331	.00063	-.00098
		GRADIENT	-.00003	.94505	.00706	-.00187	.03424	.00661	.00355	.00027	-.00008	-.00001

DZ	44.708	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
	44.452	-.049	.59048	6.08505	-.03050	-.55682	.29870	.07513	.00898	.00123	.00096	-.00067
	44.667	2.450	.59053	8.32281	.06383	-.52600	.37968	.08733	.01851	.00153	.00083	-.00090
		4.474	.59092	10.41210	-.13420	-.55187	.46929	.10755	.02404	.00227	.00044	-.00076
		GRADIENT	.00009	.95448	-.02059	.00153	.03752	.00708	.00335	.00023	-.00011	-.00002

DZ	50.164	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
	50.275	-.057	.59060	6.08766	.02680	-.50309	.29697	.07585	.00813	.00127	.00097	-.00064
	50.038	2.433	.59151	8.35052	-.22483	-.52458	.38359	.08893	.01765	.00143	.00087	-.00064
		4.464	.59112	10.39360	-.15954	-.56778	.47523	.10877	.02322	.00239	.00046	-.00053
		GRADIENT	.00012	.95078	-.04344	-.01410	.03926	.00720	.00336	.00024	-.00011	-.00002

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(CMH014) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = .000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 141/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	3.324	ALPHA	8.14864	ALPHA0	8.14864	DX	9.83387	CL	.35035	CD	.08094	CLM	.02242	CY	.00205	CYN	.00117	CBL	-.00021
	3.528	GRADIENT	4.239		10.18740		9.90698		.40963		-.62378		.02775		.00184		.00091		-.00044
					1.04754		.03756		.03046		.00743		.00274		-.00011		-.00013		-.00012

RUN NO. 142/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.340	ALPHA	8.03902	ALPHA0	8.03902	DX	9.83965	CL	.35830	CD	.08128	CLM	.01997	CY	.00212	CYN	.00111	CBL	-.00049
	7.097	GRADIENT	4.300		10.18070		9.98195		.41837		.09642		.02518		.00201		.00086		-.00054
					.90459		.06010		.02537		.00840		.00220		-.00004		-.00010		-.00002

RUN NO. 143/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	10.137	ALPHA	8.07874	ALPHA0	8.07874	DX	9.80002	CL	.35981	CD	.08197	CLM	.01872	CY	.00108	CYN	.00097	CBL	-.00063
	9.825	GRADIENT	4.403		10.29950		9.94826		.42415		.09808		.02447		.00145		.00080		-.00057
					.90381		.06033		.02619		.00656		.00234		.00015		-.00007		-.00003

RUN NO. 144/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	14.831	ALPHA	8.07216	ALPHA0	8.07216	DX	9.88695	CL	.36106	CD	.08296	CLM	.01753	CY	.00130	CYN	.00101	CBL	-.00051
	14.775	GRADIENT	4.376		10.27830		9.98489		.43154		.09987		.02328		.00173		.00075		-.00073
					.91632		.04068		.02927		.00702		.00239		.00018		-.00011		-.00009

RUN NO. 145/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	30.007	ALPHA	8.10933	ALPHA0	8.10933	DX	9.83759	CL	.37372	CD	.08552	CLM	.01637	CY	.00126	CYN	.00092	CBL	-.00082
	29.873	GRADIENT	4.257		10.31920		9.90959		.45572		.10431		.02239		.00143		.00053		-.00099
					.92270		.03006		.03424		.00785		.00251		.00007		-.00016		-.00007

RUN NO. 146/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.854	ALPHA	8.09096	ALPHA0	8.09096	DX	9.89672	CL	.37508	CD	.08629	CLM	.01541	CY	.00140	CYN	.00102	CBL	-.00071
	44.891	GRADIENT	4.430		10.36500		9.89048		.47522		.10792		.02161		.00114		.00038		-.00079
					.93496		-.00257		.04117		.00889		.00255		-.00011		-.00026		-.00003

ARC 14-120(CA23B) 74771 ATI 02S1 (ORBITER DATA)

(CNH014) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BRFF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 147/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.387	2.049	.59016	8.14847	9.92864	-.58366	.38305	.08763	.01580	-.00104	.00069	-.00068
50.182	4.431	.59062	10.35190	9.93609	-.63135	.47280	.10773	.02132	.00127	.00046	-.00060
	GRADIENT	.00019	.92503	.00313	-.02002	.03768	.00844	.00232	.00059	-.00010	.00003

ARC 14-120(CA23B) 74771 ATI 02S1 (ORBITER DATA)

(CNH015) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BRFF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 151/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.261	2.410	.59012	10.27640	9.87396	-.64955	.46732	.10364	.02450	.00279	.00066	-.00049
7.540	4.362	.58935	12.32900	9.88592	-.65076	.54361	.12866	.02917	.00483	.00001	-.00016
	GRADIENT	-.00039	1.05174	.00613	-.00062	.03909	.01282	.00239	.00105	-.00033	.00017

RUN NO. 152/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.896	2.043	.58898	10.12980	9.84214	-.69514	.47149	.10320	.02354	.00322	.00071	-.00054
10.215	4.469	.58898	12.42930	9.88451	-.62920	.55680	.13246	.02845	.00498	-.00012	-.00043
	GRADIENT	-.00000	.94813	.01747	.02719	.03518	.01206	.00202	.00072	-.00034	.00004

RUN NO. 153/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.806	2.079	.58834	10.16290	9.83145	-.73897	.47632	.10483	.02243	.00282	.00051	-.00075
14.750	4.497	.59019	12.41680	9.90355	-.69922	.56613	.13512	.02707	.00451	-.00037	-.00024
	GRADIENT	.00076	.93236	.02983	.01644	.03715	.01253	.00192	.00070	-.00036	.00021

RUN NO. 154/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
30.131	2.049	.58930	10.16660	9.85376	-.59362	.49289	.10874	.02076	.00310	.00038	-.00076
30.087	4.493	.59112	12.45850	9.88809	-.66197	.59235	.14258	.02493	.00459	-.00038	-.00023
	GRADIENT	.00074	.93764	.01404	-.02796	.04069	.01385	.00170	.00061	-.00031	.00022

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 155/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.833	2.044	10.11530	9.84286	-.70105	.49116	.10874	.01962	.00244	.00020	-.00093
45.102	4.460	12.43770	9.80066	-.69118	.60459	.14565	.02362	.00449	-.00025	-.00035
	GRADIENT	.96142	-.01747	.00409	.04696	.01528	.00166	.00085	-.00019	.00024

RUN NO. 156/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.292	2.016	10.08650	9.95743	-.71722	.49414	.10914	.01936	.00273	.00025	-.00067
50.425	4.375	12.34030	9.90189	-.85667	.60587	.14524	.02314	.00354	-.00045	-.00016
	GRADIENT	.95528	-.02354	.02566	.04736	.01530	.00160	.00035	-.00029	.00022

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 161/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
2.997	2.461	8.27632	19.88670	-.85192	.35256	.08452	.01793	.00288	.00108	-.00039
3.241	4.340	10.26730	19.94590	-.73584	.41163	.09864	.02208	.00320	.00089	-.00055
	GRADIENT	1.06004	.03152	.06180	.03145	.00752	.00221	.00017	-.00010	-.00009

RUN NO. 162/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.114	2.024	8.10145	19.88560	-.81205	.35885	.08383	.01503	.00338	.00121	-.00066
7.110	4.482	10.36010	19.98690	-.80660	.42292	.10007	.01946	.00365	.00096	-.00080
	GRADIENT	.91870	.04120	.00222	.02606	.00661	.00180	.00011	-.00010	-.00006

RUN NO. 163/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
10.110	1.989	8.13025	19.81960	-.76563	.36144	.08427	.01420	.00277	.00105	-.00072
9.502	4.485	10.34260	20.00000	-.81234	.42304	.10027	.01867	.00346	.00085	-.00082
	GRADIENT	.88639	.07228	-.01871	.02468	.00641	.00179	.00028	-.00008	-.00004

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORR = 8.000 DX = 10.000
 CY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORR = 6.000 DX = 20.000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORR = 6.000 DX = 20.000
 DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 02S1 (ORBITER DATA) (CNH016) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 6.000 DX = -20.000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 164/ 0		RN/L = 3.30		GRADIENT INTERVAL = -5.00/ 5.00		CY		CYN		CBL		
DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CLM	CY	CYN	CBL
14.885	2.147	.58950	8.26269	19.89530	-.82928	.36955	.08553	.01408	.01408	.00291	.00101	-.00081
14.669	4.296	.58971	10.20060	20.01710	-.74015	.42908	.10025	.01823	.01823	.00347	.00072	-.00102
	GRADIENT	.00010	.90195	.05669	.04148	.02771	.00685	.00193	.00193	.00026	-.00014	-.00010
RUN NO. 165/ 0		RN/L = 3.31		GRADIENT INTERVAL = -5.00/ 5.00		CY		CYN		CBL		
DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CLM	CY	CYN	CBL
29.970	2.006	.59006	8.11890	19.88350	-.30714	.37392	.08589	.01379	.01379	.00286	.00094	-.00112
29.738	4.442	.59030	10.34740	19.95900	-.36086	.45395	.10496	.01904	.01904	.00278	.00061	-.00092
	GRADIENT	.00010	.91480	.03099	-.02205	.03285	.00783	.00216	.00216	-.00003	-.00013	.00008
RUN NO. 166/ 0		RN/L = 3.30		GRADIENT INTERVAL = -5.00/ 5.00		CY		CYN		CBL		
DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CLM	CY	CYN	CBL
44.740	2.001	.58963	8.08105	19.87420	-.75225	.37675	.08659	.01384	.01384	.00215	.00087	-.00089
44.620	4.440	.58976	10.34770	19.88250	-.77199	.46952	.10736	.01946	.01946	.00306	.00047	-.00108
	GRADIENT	.00005	.92940	.00340	-.00810	.03804	.00852	.00231	.00231	.00037	-.00016	-.00007
RUN NO. 167/ 0		RN/L = 3.30		GRADIENT INTERVAL = -5.00/ 5.00		CY		CYN		CBL		
DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CLM	CY	CYN	CBL
50.218	1.983	.58890	8.06786	19.98550	-.80823	.37603	.08697	.01368	.01368	.00217	.00092	-.00085
50.509	4.478	.58886	10.43010	19.90790	-.77122	.47511	.10909	.01948	.01948	.00324	.00042	-.00097
	GRADIENT	-.00002	.94658	-.03110	.01483	.03970	.00887	.00233	.00233	.00043	-.00020	-.00005

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITTER DATA)

(CNH017) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

DZ	ALPHA	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.409	2.320	.59052	10.20990	19.85050	-.73949	.46268	.10417	.02117	.00380	.00062	-.00090
7.682	4.409	.58988	12.38070	19.85190	-.88774	.54214	.12999	.02461	.00590	-.00011	-.00031
	GRADIENT	-.00031	1.03942	.00067	-.07099	.03805	.01236	.00165	.00101	-.00035	.00028

DZ	ALPHA	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
10.200	1.989	.59146	10.12200	19.86550	-.83323	.46354	.10444	.02029	.00444	.00067	-.00084
9.876	4.367	.59089	12.26790	19.96400	-.80872	.54341	.13000	.02350	.00510	-.00021	-.00057
	GRADIENT	-.00024	.91088	.04142	.01030	.03107	.01075	.00135	.00028	-.00037	.00011

DZ	ALPHA	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.980	2.042	.59126	10.15750	19.87800	-.83951	.47141	.10518	.01925	.00464	.00055	-.00120
14.840	4.390	.59227	12.31590	19.95010	-.82679	.55127	.13200	.02242	.00524	-.00027	-.00066
	GRADIENT	.00043	.91935	.03071	.00542	.03401	.01143	.00135	.00025	-.00035	.00023

DZ	ALPHA	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
30.168	1.994	.59111	10.12010	19.85060	-.87986	.48149	.10731	.01832	.00438	.00050	-.00101
29.810	4.397	.59085	12.32620	19.90240	-.75313	.57931	.13886	.02203	.00624	-.00041	-.00079
	GRADIENT	-.00011	.91819	.02156	.05275	.04071	.01313	.00154	.00077	-.00038	.00009

DZ	ALPHA	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.854	2.109	.59147	10.18690	19.84610	-.82726	.49282	.10942	.01842	.00332	.00012	-.00088
45.244	4.417	.59090	12.41310	19.77770	-.77838	.59969	.14446	.02183	.00516	-.00043	-.00087
	GRADIENT	-.00025	.96464	-.02964	.02118	.04631	.01519	.00148	.00080	-.00024	.00000

DZ	ALPHA	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.344	2.118	.59046	10.19050	19.95560	-.87380	.49087	.10974	.01816	.00362	.00028	-.00088
50.595	4.352	.59133	12.33830	19.88730	-.81367	.59769	.14366	.02146	.00529	-.00040	-.00074
	GRADIENT	.00039	.96146	-.03057	.02692	.04782	.01518	.00148	.00075	-.00031	.00006

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITER DATA)

(CNH018) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

PARAMETRIC DATA

RUN NO. 181/ 0		RN/L = 3.32		GRADIENT INTERVAL = -5.00/ 5.00							
DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.378	2.472	.59115	8.33671	-.12064	9.62659	.36398	.08162	.02639	.00301	-.00040	-.00391
3.590	4.405	.59201	10.37400	-.08127	9.59622	.42915	.09697	.03430	.00146	-.00099	-.00654
	GRADIENT	.00045	1.05348	.02036	-.01570	.03370	.00794	.00409	-.00080	-.00030	-.00136
RUN NO. 182/ 0		RN/L = 3.31		GRADIENT INTERVAL = -5.00/ 5.00							
DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.711	2.009	.59096	8.13180	-.20008	9.51655	.36982	.08232	.02261	.00200	-.00013	-.00296
7.202	4.378	.59354	10.27110	-.01628	9.52298	.43373	.09791	.03028	.00130	-.00067	-.00523
	GRADIENT	-.00060	.90293	.07757	.04492	.02740	.00658	.00324	-.00029	-.00023	-.00096
RUN NO. 183/ 0		RN/L = 3.31		GRADIENT INTERVAL = -5.00/ 5.00							
DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.911	2.005	.59142	8.10379	-.17612	9.57279	.36763	.08245	.02174	.00248	.00007	-.00297
10.102	4.475	.59168	10.41380	-.06798	9.48457	.44477	.10067	.02961	.00114	-.00075	-.00478
	GRADIENT	.00011	.93526	.04378	-.03572	.03123	.00738	.00319	-.00054	-.00033	-.00073
RUN NO. 184/ 0		RN/L = 3.33		GRADIENT INTERVAL = -5.00/ 5.00							
DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.973	2.102	.59109	8.20417	-.19876	9.52500	.37273	.08407	.02085	.00229	.00022	-.00286
14.736	4.362	.59144	10.27250	-.05627	9.52253	.44470	.10075	.02800	.00119	-.00043	-.00394
	GRADIENT	.00016	.91486	.06303	-.00109	.03183	.00738	.00316	-.00049	-.00029	-.00048
RUN NO. 185/ 0		RN/L = 3.33		GRADIENT INTERVAL = -5.00/ 5.00							
DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.716	2.100	.59179	8.16409	-.17495	9.55144	.37583	.08607	.01815	.00214	.00055	-.00211
29.761	4.335	.59187	10.25280	-.11756	9.58290	.45944	.10471	.02466	.00169	-.00006	-.00276
	GRADIENT	.00004	.93464	.02568	.011408	.03697	.00834	.00291	-.00020	-.00027	-.00029
RUN NO. 186/ 0		RN/L = 3.32		GRADIENT INTERVAL = -5.00/ 5.00							
DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.733	1.972	.59095	8.04435	-.07776	9.51284	.37850	.08701	.01643	.00198	.00069	-.00164
44.856	4.308	.59177	10.24170	-.08370	9.47621	.47175	.10751	.02290	.00217	.00012	-.00197
	GRADIENT	.00035	.94063	-.00254	-.01568	.03992	.00877	.00277	.00008	-.00025	-.00014

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO 10RB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .96074 .03527 .04296 .00919 .00282
 RUN NO. 187/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00
 MACH ALPHA CLM DY CD CBL
 DZ 49.952 2.021 8.06519 9.55487 .37761 .08749 .01579 .00074 -.00140
 50.410 4.396 10.34680 9.63862 .47963 .10931 .02249 .00006 -.00175
 GRADIENT .00020 .96074 .03527 .04296 .00919 .00282

PARAMETRIC DATA
 CY CYN CBL
 .00216 .00074 -.00140
 -.00002 -.00029 -.00015

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO 10RB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = .94929 .04183 .00274
 RUN NO. 191/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00
 MACH ALPHA CLM DY CD CBL
 DZ 7.491 2.405 10.30160 9.49085 .48240 .10492 .02815 .00282 -.00386
 7.844 4.380 12.38840 9.47890 .56503 .13297 .03356 .00162 -.00549
 GRADIENT .00031 1.05655 .04929 .04183 .00274

PARAMETRIC DATA
 CY CYN CBL
 .00282 .00067 -.00386
 -.00104 -.00549 -.00082
 -.00061 -.00019 -.00082

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO 10RB = 10.000 DX = .000
 SCALE = .0125 GRADIENT = .94548 .03279 .00358 .03879 .00246
 RUN NO. 193/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00
 MACH ALPHA CLM DY CD CBL
 DZ 14.864 1.964 10.05070 9.48663 .47579 .10407 .02448 .00243 -.00253
 15.018 4.414 12.36710 9.47787 .57081 .13585 .03050 .00300 -.00361
 GRADIENT .00030 .94548 .03279 .00358 .03879 .00246

PARAMETRIC DATA
 CY CYN CBL
 .00243 .00014 -.00253
 .00300 .00082 -.00361
 .00023 .00028 -.00044

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO 10RB = 10.000 DX = .000
 SCALE = .0125 GRADIENT = .94210 .02294 .00849 .04470 .00206
 RUN NO. 194/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00
 MACH ALPHA CLM DY CD CBL
 DZ 30.225 2.014 10.12240 9.39762 .48645 .10757 .02239 .00264 -.00179
 30.105 4.404 12.37380 9.41791 .59328 .14262 .02730 .00235 -.00207
 GRADIENT .00014 .94210 .02294 .00849 .04470 .00206

PARAMETRIC DATA
 CY CYN CBL
 .00264 .00005 -.00179
 .00235 .00069 -.00207
 -.00012 -.00031 -.00012

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(CNH019) (08 OCT 75)

REFERENCE DATA

SREF = 2690.000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 8.000 DX = .000
 DY = 10.000 MACH = .600

RUN NO. 195/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.421	2.014	.59170	10.02770	-1.16199	9.45087	.48929	.10806	.02098	.00296	.00008	-.00155
44.079	4.380	.59194	12.36580	-.23329	9.39875	.60659	.14609	.02543	.00422	-.00032	-.00155
	GRADIENT	.00010	.98810	-.03013	-.02203	.04957	.01507	.00188	.00053	-.00017	.00000

RUN NO. 196/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.290	2.002	.59172	10.06530	-1.10008	9.48992	.49297	.10901	.02060	.00292	.00016	-.00113
50.279	4.323	.59165	12.27740	-.12280	9.32532	.60466	.14522	.02454	.00331	-.00054	-.00136
	GRADIENT	-.00003	.95279	-.00978	-.07090	.04811	.01560	.00169	.00017	-.00030	-.00010

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(CNH020) (21 OCT 75)

REFERENCE DATA

SREF = 2690.000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
2.999	.056	.58831	4.00251	-.04123	-.23247	.11196	.05481	.04604	.00287	.00075	-.00108
2.972	2.231	.58905	6.08127	-.02004	-.45838	.16998	.05692	.05121	.00322	.00079	-.00125
3.376	4.258	.58842	8.18834	-.10046	-.24934	.22952	.06265	.05845	.00359	.00085	-.00098
	GRADIENT	.00003	.99573	-.01381	-.00523	.02797	.00186	.00294	.00017	.00002	.00002

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.356	-.232	.58699	3.96105	-.11584	-.45749	.11644	.05530	.04273	.00249	.00074	-.00119
7.305	2.422	.58730	6.30038	-.05714	-.37696	.17558	.05808	.04874	.00338	.00084	-.00119
7.176	4.286	.58692	8.19710	-.06747	-.36099	.23487	.06336	.05684	.00396	.00082	-.00119
	GRADIENT	-.00001	.93375	-.01148	.02197	.02595	.00173	.00306	.00032	.00002	-.00000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.998	-.190	.58793	4.02219	-.11365	-.37733	.11783	.05584	.04137	.00354	.00091	-.00141
9.822	2.393	.58937	6.27375	-.05987	-.30188	.18199	.05862	.04801	.00391	.00090	-.00142
9.715	4.416	.59040	8.32394	-.08454	-.41242	.23935	.06440	.05621	.00405	.00096	-.00109
GRADIENT		.00054	.93124	.00698	-.00595	.02632	.00182	.00319	.00011	.00001	.00007

RUN NO. 0 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.608	-.076	.58772	4.08571	-.06537	-.37283	.12129	.05627	.03985	.00310	.00080	-.00155
14.941	2.433	.58701	6.34658	-.07447	-.40100	.18745	.05988	.04647	.00323	.00083	-.00136
14.567	4.425	.58680	8.32952	-.05492	-.38851	.24878	.06607	.05566	.00330	.00076	-.00116
GRADIENT		-.00021	.94105	.00207	-.00381	.02824	.00215	.00348	.00004	-.00001	.00009

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.742	-.160	.58720	4.00738	-.10009	-.36988	.11649	.05774	.03660	.00269	.00073	-.00165
29.812	2.421	.58738	6.31885	-.11181	-.40752	.19767	.06231	.04446	.00224	.00062	-.00146
29.770	4.475	.58798	8.40410	-.11226	-.35652	.26885	.06963	.05453	.00302	.00062	-.00152
GRADIENT		.00016	.94646	-.00271	.00215	.03282	.00253	.00383	.00006	-.00003	.00003

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.518	-.106	.58472	4.02971	-.03690	-.36779	.11609	.05835	.03527	.00222	.00070	-.00147
44.662	2.474	.58704	6.37977	-.16221	-.37945	.20682	.06370	.04328	.00234	.00065	-.00155
44.473	4.486	.58677	8.38738	-.08498	-.47223	.28382	.07175	.05370	.00278	.00055	-.00145
GRADIENT		.00047	.94767	-.02887	-.02190	.03647	.00288	.00397	.00012	-.00003	.00000

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITTER DATA)

(CNH021) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.110	.173	.59032	4.13765	.0551	-.20611	.11084	.05294	.04741	.00321	.00081	-.00106
3.078	2.255	.58980	6.12604	.06801	-.21105	.16378	.05504	.05197	.00382	.00087	-.00112
3.099	4.353	.58919	8.25467	-.06491	-.16472	.22732	.06108	.05029	.00348	.00074	-.00101
	GRADIENT	-.00027	.98490	-.02885	.00992	.02787	.00195	.00308	.00006	-.00002	.00001

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.673	-.126	.58936	4.09240	-.18828	-.18525	.11534	.05380	.04404	.00371	.00091	-.00131
7.105	2.399	.59041	6.25655	.15853	-.09697	.16995	.05606	.04986	.00332	.00082	-.00113
7.181	4.355	.59012	8.27549	-.01836	-.15793	.23263	.06189	.05809	.00335	.00072	-.00117
	GRADIENT	.00018	.92981	.04263	.00747	.02596	.00176	.00310	-.00008	-.00004	.00003

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.888	-.253	.58982	3.93747	-.15837	-.11137	.10882	.05397	.04222	.00315	.00079	-.00132
10.133	2.398	.58989	6.31405	.06994	-.24594	.17686	.05687	.04878	.00352	.00052	-.00122
9.989	4.413	.59053	8.35993	-.07054	-.19440	.23951	.06307	.05762	.00292	.00060	-.00121
	GRADIENT	.00015	.94507	.02227	-.01948	.02789	.00191	.00326	-.00004	-.00004	.00003

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.808	-.052	.58985	4.11715	-.15706	-.17204	.11956	.05483	.04118	.00316	.00076	-.00163
14.795	2.452	.59025	6.35472	.07017	-.23071	.18293	.05817	.04764	.00286	.00073	-.00133
14.946	4.403	.59031	8.36005	-.10634	-.11922	.24702	.05469	.05658	.00331	.00069	-.00116
	GRADIENT	.00011	.94963	.01505	.01022	.02846	.00217	.00341	.00003	-.00002	.00011

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.743	-.137	.58938	4.01695	-.08435	-.19008	.11721	.05644	.03793	.00241	.00071	-.00144
29.755	2.487	.58988	6.37588	.09984	-.25948	.19605	.06090	.04539	.00258	.00068	-.00158
29.747	4.402	.58886	8.33645	-.09113	-.25259	.26473	.06819	.05481	.00289	.00065	-.00127
	GRADIENT	-.00010	.94850	.00278	-.01453	.03235	.00253	.00367	.00010	-.00001	.00003

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(CNH021) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

RUN NO. 216/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.609	-.114	4.02468	-.01984	-.25920	.11722	.05765	.03645	.00143	.00061	-.00130
44.499	2.547	6.42453	-.11469	-.27177	.21113	.06283	.04454	.00189	.00060	-.00154
44.744	4.315	8.25444	-.16824	-.15241	.27695	.07013	.05358	.00186	.00064	-.00112
	GRADIENT	.95288	-.03368	.02181	.03601	.00275	.00380	.00010	.00001	.00003

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(CNH022) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

RUN NO. 221/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.175	.180	8.11954	-.16244	-.11696	.32022	.05966	.05895	.00279	.00059	-.00131
7.048	2.374	10.26950	-.05073	-.21394	.39060	.08444	.05896	.00341	.00042	-.00119
7.827	4.374	12.37650	-.15546	-.21015	.47504	.10919	.07284	.00430	-.00038	-.00083
	GRADIENT	1.01450	.00246	-.02258	.03684	.00938	.00332	.00036	-.00023	.00011

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 222/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
10.008	-.095	8.06837	-.20800	-.19570	.32555	.07076	.05723	.00338	.00067	-.00141
9.794	2.462	10.36610	-.06785	-.15123	.39462	.08654	.06573	.00380	.00034	-.00150
10.168	4.329	12.32470	-.15342	-.17388	.47846	.11014	.07118	.00472	-.00045	-.00107
	GRADIENT	.95815	.01487	.00567	.03411	.00874	.00316	.00030	-.00024	.00007

RUN NO. 223/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.875	-.131	8.01212	-.19848	-.24112	.31830	.07055	.05534	.00215	.00044	-.00149
15.107	2.479	10.42410	-.11788	-.18222	.40138	.08780	.06525	.00311	.00023	-.00133
14.650	4.467	12.40420	-.05808	-.21425	.48539	.11280	.07012	.00606	-.00023	-.00112
	GRADIENT	.95356	.03055	.00869	.03611	.00906	.00324	.00083	-.00014	.00008

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA) (CNH022) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BRF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 224/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.663	-.130	.58892	7.98338	-.10589	-.11844	.31787	.07174	.05342	.00254	.00051	-.00151
30.014	2.540	.58798	10.47220	-.08622	-.13268	.41218	.09086	.06292	.00305	.00014	-.00174
30.212	4.360	.58896	12.37080	-.18388	-.19792	.50728	.11872	.06715	.00468	-.00040	-.00116
	GRADIENT	-.00002	.97369	-.01553	-.01678	.04167	.01021	.00310	.00046	-.00020	.00007

RUN NO. 225/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.608	-.097	.58776	8.01036	-.04496	-.19464	.31483	.07255	.05170	.00209	.00048	-.00153
44.758	2.520	.58859	10.43710	-.06430	-.22195	.41711	.09205	.06112	.00240	.00010	-.00144
44.921	4.300	.58930	12.28420	-.18464	-.16737	.51553	.12035	.06465	.00428	-.00035	-.00113
	GRADIENT	.00024	.97103	-.02995	.00496	.04515	.01062	.00299	.00047	-.00019	.00009

RUN NO. 226/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.329	-.122	.58776	8.01036	-.00488	-.17679	.31404	.07275	.05120	.00237	.00063	-.00145
50.199	2.456	.58928	10.37780	-.00681	-.25490	.41323	.09168	.06030	.00239	.00013	-.00142
50.308	4.443	.58796	12.41190	-.14747	-.12834	.52194	.12285	.06379	.00481	-.00025	-.00118
	GRADIENT	.00007	.96199	-.02976	.00863	.04520	.01080	.00280	.00051	-.00019	.00006

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BRF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 231/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.160	.028	.58722	5.96832	-.09825	-.23409	.22048	.05934	.05058	.00317	.00077	-.00087
3.398	2.478	.58690	8.39557	-.15849	-.28051	.28263	.06722	.06179	.00326	.00067	-.00106
3.235	4.342	.58675	10.26840	-.07571	-.33921	.07781	.07102	.00378	.00378	.00056	-.00132
	GRADIENT	-.00011	.99639	.00370	-.02409	.02755	.00423	.00473	.00014	-.00005	-.00010

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA) (CNH023) (08 OCT 75)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

(CM1023) (08 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 232/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.044	ALPHAC	-.157	ALPHA0	5.98727	DX	-.15115	DY	-.25234	CL	.22450	CD	.05999	CLM	.04828	CY	.00305	CYN	.00075	CBL	-.00116
	7.210		2.438		8.31873		.02879		-.21173		.28278		.06705		.05945		.00300		.00063		-.00111
	7.208		4.444		10.35950		-.09076		-.26838		.34392		.07907		.06857		.00294		.00034		-.00151
		GRADIENT	.00011		.94774		.01582		-.00257		.02979		.00408		.00440		-.00002		-.00009		-.00007

RUN NO. 233/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	9.588	ALPHAC	-.079	ALPHA0	6.07114	DX	-.10027	DY	-.30779	CL	.22535	CD	.06049	CLM	.04747	CY	.00282	CYN	.00072	CBL	-.00116
	9.981		2.449		8.36328		.04293		-.30356		.28386		.06774		.05848		.00337		.00063		-.00132
	9.714		4.418		10.33770		-.03724		-.32484		.34973		.07972		.06806		.00308		.00038		-.00148
		GRADIENT	.00007		.94678		.01599		-.00354		.02745		.00421		.00457		.00006		-.00007		-.00007

RUN NO. 234/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	14.480	ALPHAC	-.060	ALPHA0	6.07355	DX	-.09631	DY	-.27927	CL	.22328	CD	.06097	CLM	.04599	CY	.00280	CYN	.00078	CBL	-.00113
	14.703		2.510		8.40095		.04960		-.33790		.29233		.06886		.05861		.00281		.00049		-.00142
	14.839		4.425		10.36750		-.09613		-.31874		.35230		.08122		.06641		.00326		.00040		-.00145
		GRADIENT	-.00038		.95454		.00318		-.00958		.02866		.00443		.00457		.00010		-.00008		-.00007

RUN NO. 235/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	29.767	ALPHAC	-.083	ALPHA0	6.07234	DX	-.13999	DY	-.25442	CL	.22294	CD	.06225	CLM	.04360	CY	.00242	CYN	.00070	CBL	-.00133
	29.743		2.454		8.35515		-.00939		-.21638		.29434		.07087		.05531		.00272		.00058		-.00139
	29.929		4.441		10.39440		-.17552		-.28857		.37769		.08587		.06476		.00297		.00021		-.00159
		GRADIENT	.00007		.95279		-.00517		-.00653		.03393		.00514		.00468		.00012		-.00011		-.00006

RUN NO. 236/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.538	ALPHAC	-.030	ALPHA0	6.08798	DX	.01963	DY	-.30457	CL	.22169	CD	.06317	CLM	.04238	CY	.00183	CYN	.00058	CBL	-.00143
	44.541		2.408		8.29718		-.12451		-.27163		.30012		.07212		.05370		.00194		.00042		-.00128
	44.965		4.398		10.36730		-.16344		-.27769		.39000		.08828		.06270		.00244		.00012		-.00138
		GRADIENT	.00032		.96437		-.04201		.00635		.03780		.00560		.00459		.00013		-.00010		-.00001

ORIGINAL PAGE IS
OF GOOD QUALITY

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(CNH023) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 237/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CO	CLM	CY	CYN	CBL
49.951	-.140	.58726	5.98166	.07546	-.38741	.21572	.06328	.04147	.00190	.00062	-.00126
49.970	2.539	.58814	8.41739	-.16393	-.35672	.30726	.07338	.05418	.00219	.00048	-.00136
50.050	4.426	.58821	10.35530	-.17706	-.34245	.39120	.08888	.06216	.00197	.00015	-.00120
	GRADIENT	.00022	.95450	-.05759	.00995	.03814	.00548	.00454	.00002	-.00010	.00001

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(CNH024) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 241/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CO	CLM	CY	CYN	CBL
2.790	.104	.58652	5.92147	-.15532	-.03671	.21137	.05803	.05095	.00309	.00073	-.00118
3.147	2.378	.58700	8.27250	-.05770	-.03732	.27816	.06517	.06208	.00379	.00067	-.00114
3.235	4.362	.58753	10.30860	-.08859	-.02095	.33817	.07668	.07124	.00296	.00034	-.00142
	GRADIENT	.00024	1.02571	.01621	.00360	.02963	.00433	.00474	-.00002	-.00009	-.00005

RUN NO. 242/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CO	CLM	CY	CYN	CBL
7.214	-.107	.58739	6.05432	-.15883	-.13415	.22446	.05906	.04878	.00334	.00077	-.00125
7.169	2.445	.58740	8.32441	-.04069	-.07016	.28003	.06615	.05961	.00388	.00075	-.00117
7.223	4.433	.58743	10.35700	-.07466	-.00760	.34450	.07819	.06931	.00366	.00043	-.00155
	GRADIENT	.00001	.94519	.02130	.02775	.02623	.00415	.00451	.00008	-.00007	-.00006

RUN NO. 243/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CO	CLM	CY	CYN	CBL
9.900	-.036	.58773	6.13824	-.18639	-.04378	.22669	.05967	.04809	.00260	.00072	-.00114
9.833	2.466	.58745	8.36642	-.00386	-.04115	.28339	.06676	.05933	.00365	.00070	-.00123
9.797	4.354	.58776	10.29090	-.10428	-.09073	.34274	.07828	.06786	.00299	.00034	-.00159
	GRADIENT	.00000	.94311	.02173	-.01008	.02624	.00416	.00450	.00011	-.00008	-.00010

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(CNH025) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA =
 RUDDER =
 TORB =
 DY =

PARAMETRIC DATA

.000 STAB = -1.000
 .000 ELEVON = .000
 8.000 DX = .000
 .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.209	.039	.58717	8.00091	-.09563	.11623	.31259	.06763	.05772	.00389	.00075	-.00124
7.216	2.367	.58827	10.24160	-.08863	.00464	.38355	.08245	.06638	.00350	.00040	-.00126
7.326	4.353	.58735	12.30340	-.05354	-.00023	.45958	.10451	.07264	.00479	-.00008	-.00134
GRADIENT		.00005	.99623	.00956	-.02759	.03397	.00849	.00347	.00020	-.00019	-.00002

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.339	-.027	.58781	8.05788	-.08374	.10359	.31706	.06821	.05714	.00321	.00060	-.00149
10.040	2.372	.58810	10.31470	-.03608	.05505	.38198	.08332	.06494	.00307	.00029	-.00134
10.061	4.478	.58756	12.45100	-.07388	.02201	.47699	.10938	.07199	.00550	-.00029	-.00112
GRADIENT		-.00005	.97434	.00260	-.01816	.03530	.00907	.00329	.00050	-.00020	.00008

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.643	-.013	.58691	8.10708	-.11966	.04505	.31718	.06914	.05606	.00371	.00062	-.00168
15.082	2.543	.58837	10.48700	-.06077	.02168	.39605	.08603	.06515	.00366	.00029	-.00176
14.801	4.374	.58726	12.33140	-.09089	-.03326	.47466	.10890	.07034	.00426	-.00038	-.00113
GRADIENT		.00011	.96086	.00761	-.01730	.03558	.00891	.00328	.00012	-.00022	.00012

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.827	-.162	.58717	7.96542	-.13995	.04759	.31289	.07023	.05293	.00300	.00056	-.00163
30.228	2.450	.58826	10.41380	-.12322	.00837	.40182	.08858	.06247	.00318	.00026	-.00141
30.232	4.437	.58845	12.44160	-.19907	-.04902	.50327	.11728	.06721	.00428	-.00040	-.00097
GRADIENT		.00029	.97138	-.01187	-.02070	.04102	.01007	.00313	.00027	-.00020	.00014

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.600	-.132	.58877	7.96473	-.06606	-.01682	.31097	.07126	.05116	.00281	.00056	-.00154
45.018	2.364	.58815	10.31080	-.11022	.01804	.40676	.08949	.06040	.00284	.00020	-.00155
44.806	4.412	.58767	12.38870	-.19317	-.00796	.51655	.12037	.06474	.00385	-.00038	-.00082
GRADIENT		-.00024	.97236	-.02761	.00238	.04500	.01068	.00302	.00022	-.00021	.00015

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = -1.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO LORB = .000 DX = .000
 SCALE = .0125 GRADIENT = -.00011 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
49.823	.58747	7.83733	.02097	-.05236	.30597	.07094	.04989	.00223	.00058	-.00125
50.763	.58807	10.43110	-.09531	.03018	.41685	.09176	.06038	.00283	.00016	-.00142
50.761	.58684	12.37400	-.20688	.07273	.51974	1.2110	.06395	.00437	-.00027	-.00105
	GRADIENT	.99048	-.04939	.02759	.04639	.01075	.00313	.00045	-.00018	.00004

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00 (CNH027) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO LORB = .000 DX = .000
 SCALE = .0125 GRADIENT = -.00011 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.310	.58593	8.02000	-.10995	.07740	.31854	.05219	.04290	.00701	-.00011	-.00224
7.309	.58706	10.17530	-.10062	.09110	.39025	.06615	.05179	.00828	-.00014	-.00236
7.865	.58635	12.29900	-.14232	.04415	.47588	.08957	.05619	.00877	-.00114	-.00220
	GRADIENT	1.00780	-.00740	-.00757	.03599	.00876	.00315	.00042	-.00024	.00001

RUN NO. 261/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00 (CNH027) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO LORB = .000 DX = .000
 SCALE = .0125 GRADIENT = -.00011 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.835	.58550	7.97637	-.17277	.10647	.32135	.05242	.04049	.00776	.00005	-.00232
9.901	.58520	10.34950	-.05317	.03987	.39715	.06798	.05003	.00726	-.00035	-.00208
9.652	.58597	12.31440	-.08957	.06373	.47653	.09008	.05384	.00931	-.00097	-.00237
	GRADIENT	.95000	.01979	-.01027	.03379	.00814	.00297	.00031	-.00022	-.00001

RUN NO. 263/ 0 RN/L = 3.27 GRADIENT INTERVAL = -5.00/ 5.00 (CNH027) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO LORB = .000 DX = .000
 SCALE = .0125 GRADIENT = -.00011 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

ORIGINAL PAGE IS
 OF POOR QUALITY

ARC 14-120(CA238) 747/1 AT1 03S1 (ORBITER DATA) (CNH027) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 264/ 0 RN/L = 3.27 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CO	CLM	CY	CYN	CBL
29.711	-161	.5852	7.95935	-.14677	.03516	.32016	.05364	.03492	.00830	-.00034	-.00275
29.841	2.529	.58531	10.44460	-.10279	.05502	.41319	.07212	.04535	.00839	-.00076	-.00240
30.092	4.385	.58590	12.37600	-.13616	.01473	.51046	.09894	.04861	.01053	-.00134	-.00229
	GRADIENT	-.00016	.96822	-.00334	-.00364	.04134	.00974	.00307	.00046	-.00022	.00010

RUN NO. 265/ 0 RN/L = 3.27 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CO	CLM	CY	CYN	CBL
44.673	-113	.58533	7.98864	-.08756	.00438	.32317	.05480	.03411	.00772	-.00050	-.00262
44.791	2.534	.58507	10.45630	-.09962	.06035	.42241	.07422	.04462	.00840	-.00074	-.00263
44.852	4.379	.58533	12.35100	-.18554	-.02875	.52283	.10182	.04645	.00963	-.00133	-.00215
	GRADIENT	.00002	.96849	-.02062	-.00540	.04397	.01025	.00263	.00045	-.00018	.00010

RUN NO. 266/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CO	CLM	CY	CYN	CBL
50.205	-137	.58469	7.98867	.06098	.04605	.31625	.05492	.03224	.00816	-.00029	-.00264
50.115	2.437	.58577	10.34730	-.13316	.05734	.41737	.07334	.04331	.00844	-.00073	-.00254
50.310	4.427	.58519	12.39560	-.16478	.07898	.52972	.10381	.04611	.00964	-.00136	-.00206
	GRADIENT	.00012	.96322	-.05071	.00708	.04641	.01054	.00310	.00031	-.00023	.00012

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 281/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CO	CLM	CY	CYN	CBL
3.140	2.460	.58657	8.29095	9.88371	.00383	.27650	.04962	.04146	.00829	.00018	-.00187
3.154	4.481	.58709	10.38510	9.89607	.14029	.33345	.05046	.05055	.00826	.00008	-.00228
	GRADIENT	.00026	1.03598	.00611	.06751	.02817	.00535	.00450	-.00002	-.00005	-.00020

ARC 14-120(CA238) 747/1 AT1 03S1 (ORBITER DATA) (CNH028) (21 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITTER DATA)

(CMH028) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 282/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.424	ALPHAC	2.022	ALPHA0	8.14688	DX	9.89112	DY	.02441	CL	.28633	CD	.04991	CLM	.03720	CY	.00814	CYN	.00014	CBL	-.01212
	7.204	GRADIENT	4.410		10.29600		10.03350		.03213		.34279		.06083		.04606		.00801		-.00005		-.00249
					.00023		.05963		.00324		.02364		.00457		.00371		-.00005		-.00008		-.00016

RUN NO. 283/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	9.851	ALPHAC	2.068	ALPHA0	8.17312	DX	9.90835	DY	-.00656	CL	.28964	CD	.05022	CLM	.03572	CY	.00753	CYN	-.00008	CBL	-.00218
	9.970	GRADIENT	4.488		10.40820		9.98861		.07583		.35024		.05224		.04501		.00767		-.00023		-.00245
					.00009		.03317		.03405		.02505		.00497		.00384		.00006		-.00006		-.00011

RUN NO. 284/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	14.671	ALPHAC	2.026	ALPHA0	8.11471	DX	9.91614	DY	.07964	CL	.29105	CD	.05050	CLM	.03377	CY	.00748	CYN	-.00010	CBL	-.00232
	14.337	GRADIENT	4.481		10.33430		10.04080		.01744		.34995		.06249		.04297		.00735		-.00023		-.00259
					.00001		.05078		-.02534		.02399		.00488		.00375		-.00005		-.00005		-.00011

RUN NO. 285/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	29.878	ALPHAC	2.180	ALPHA0	8.28611	DX	9.85463	DY	.05921	CL	.30400	CD	.05358	CLM	.03368	CY	.00735	CYN	-.00025	CBL	-.00237
	29.674	GRADIENT	4.515		10.41500		9.93482		.06578		.37830		.06765		.04372		.00788		-.00041		-.00273
					.00006		.03434		.00282		.03181		.00603		.00430		.00022		-.00007		-.00016

RUN NO. 286/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.780	ALPHAC	2.093	ALPHA0	8.18310	DX	9.89025	DY	-.01014	CL	.30245	CD	.05435	CLM	.03263	CY	.00703	CYN	-.00036	CBL	-.00230
	45.100	GRADIENT	4.521		10.47830		9.85318		.09425		.39338		.07086		.04307		.00768		-.00048		-.00224
					.00008		.04521		.04299		.03745		.00680		.00430		.00026		-.00005		-.00003

RUN NO. 287/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	50.200	ALPHAC	2.061	ALPHA0	8.14261	DX	9.95868	DY	.05490	CL	.30621	CD	.05452	CLM	.03265	CY	.00712	CYN	-.00028	CBL	-.00237
	50.258	GRADIENT	4.539		10.46300		9.91845		.01787		.39960		.07135		.04334		.00759		-.00057		-.00239
					.00018		-.01631		-.01494		.03768		.00679		.00431		.00019		-.00012		-.00000

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 291/ 0		RN/L = 3.29		GRADIENT INTERVAL = -5.00/ 5.00							
DZ	7.274	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
	7.616	.58846	10.34390	9.93909	.03727	.38697	.06659	.04835	.00813	-.00024	-.00235
		.58807	12.41160	9.89734	.03280	.46421	.08765	.05271	.00938	-.00066	-.00289
		-.00020	1.04555	-.02111	-.00226	.03905	.01065	.00220	.00063	-.00022	-.00027
RUN NO. 292/ 0		RN/L = 3.28		GRADIENT INTERVAL = -5.00/ 5.00							
DZ	10.037	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
	10.105	.58779	10.16860	9.84159	-.01357	.38881	.06613	.04625	.00789	-.00026	-.00215
		.58837	12.43630	9.91158	.06365	.47236	.08942	.05036	.00913	-.00087	-.00265
		.00024	.93338	.02881	.03178	.03439	.00959	.00169	.00051	-.00025	-.00021
RUN NO. 293/ 0		RN/L = 3.28		GRADIENT INTERVAL = -5.00/ 5.00							
DZ	15.073	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
	14.864	.58818	10.13820	9.83260	.09566	.39230	.06660	.04412	.00763	-.00049	-.00228
		.58829	12.34200	9.91415	.05812	.47393	.08973	.04807	.00864	-.00113	-.00244
		.00005	.92115	.03409	-.01569	.03412	.00967	.00165	.00042	-.00026	-.00007
RUN NO. 294/ 0		RN/L = 3.29		GRADIENT INTERVAL = -5.00/ 5.00							
DZ	30.231	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
	29.953	.58847	10.25250	9.79538	.05260	.40908	.07047	.04290	.00769	-.00065	-.00242
		.58839	12.45730	9.85045	.04924	.50740	.09868	.04566	.00971	-.00138	-.00219
		-.00003	.92581	.02312	-.00141	.04129	.01185	.00116	.00085	-.00031	-.00010
RUN NO. 295/ 0		RN/L = 3.28		GRADIENT INTERVAL = -5.00/ 5.00							
DZ	44.559	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
	45.001	.58898	10.13000	9.88695	.06428	.40655	.07092	.04194	.00769	-.00063	-.00258
		.58942	12.41470	9.82664	.13076	.52122	.10218	.04497	.00939	-.00131	-.00200
		.00019	.96844	-.02556	.02818	.04861	.01325	.00128	.00072	-.00029	.00025
RUN NO. 296/ 0		RN/L = 3.28		GRADIENT INTERVAL = -5.00/ 5.00							
DZ	50.108	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
	50.709	.58684	10.07900	9.99054	.05093	.40652	.07061	.04152	.00755	-.00045	-.00212
		.58697	12.54340	9.89004	.07529	.53118	.10498	.04488	.00935	-.00108	-.00211
		.00005	.97795	-.03988	.00967	.04947	.01364	.00133	.00072	-.00025	.00000

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA)

(CNH031) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.139	2.440	.58609	8.31512	19.87130	.05947	.28708	.05164	.03113	.00712	.00015	.00192
7.034	4.374	.58715	10.27020	19.92830	.09448	.34350	.06194	.03918	.00707	.00006	.00243
	GRADIENT	.00054	1.01066	.02947	.01809	.02916	.00532	.00416	-.00002	-.00011	-.00026

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.707	1.989	.58702	8.07854	19.90690	.06734	.28961	.05097	.02975	.00716	.00007	.00202
9.890	4.549	.58632	10.45100	19.96030	.05123	.35390	.06390	.03910	.00713	.00010	.00245
	GRADIENT	-.00027	.92663	.02086	-.00629	.02511	.00505	.00365	-.00001	-.00007	-.00017

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.857	1.961	.58709	8.08432	19.86250	.07407	.29248	.05155	.02932	.00709	.00006	.00194
14.654	4.524	.58711	10.40250	19.96860	.01904	.35787	.06419	.03843	.00743	.00002	.00267
	GRADIENT	.00001	.90449	.04140	-.02147	.02551	.00493	.00355	.00013	-.00003	-.00028

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.665	1.982	.58708	8.07297	19.93210	.07184	.29951	.05319	.03059	.00727	.00017	.00226
29.802	4.262	.58717	10.17670	19.97520	.06091	.36914	.06586	.03958	.00652	.00048	.00225
	GRADIENT	.00004	.92264	.01890	-.00479	.03054	.00555	.00394	-.00033	-.00014	-.00001

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.676	1.970	.58721	8.03821	19.92050	.09661	.30088	.05368	.03081	.00671	.00024	.00211
44.732	4.370	.58687	10.28860	19.89040	.06355	.38621	.06895	.04134	.00733	.00046	.00253
	GRADIENT	-.00014	.93786	-.01254	-.01378	.03556	.00636	.00439	.00026	-.00009	-.00017

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.207	2.003	.58699	8.08618	20.01850	.01577	.30402	.05432	.03109	.00647	.00025	.00218
50.098	4.371	.58709	10.27800	19.99160	.02241	.38617	.06821	.04137	.00691	.00056	.00245
	GRADIENT	.00004	.92546	-.01136	.00280	.03469	.00629	.00434	.00018	-.00013	-.00011

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA)

(CNH032) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

PARAMETRIC DATA

RUN NO. 321/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.217	2.384	8.24764	-.07736	10.15720	.28568	.04784	.04600	.00677	-.00184	-.00421
3.310	4.324	10.25180	-.08334	10.05880	.34156	.05765	.05663	.00695	-.00274	-.00691
	GRADIENT		.00044	-.00308	.02880	.00506	.00548	.00009	-.00046	-.00139

RUN NO. 322/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.247	1.999	8.08363	-.11409	10.15740	.29165	.04850	.04087	.00613	-.00132	-.00389
7.563	4.379	10.31420	-.03860	10.16020	.35310	.05995	.05134	.00557	-.00210	-.00586
	GRADIENT		-.00005	.03171	.02581	.00481	.00440	-.00024	-.00033	-.00082

RUN NO. 323/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
10.032	1.980	8.10072	-.16247	10.08520	.29022	.04926	.03983	.00647	-.00113	-.00361
9.896	4.367	10.27970	-.02661	10.13390	.35042	.06013	.05030	.00523	-.00225	-.00560
	GRADIENT		-.00003	.05691	.02522	.00455	.00439	-.00052	-.00047	-.00083

RUN NO. 324/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
15.217	2.049	8.18816	-.19638	10.14070	.29550	.05037	.03911	.00642	-.00108	-.00362
15.047	4.248	10.19140	-.07071	10.08630	.35670	.06120	.04911	.00549	-.00206	-.00526
	GRADIENT		.00021	.05713	.02782	.00492	.00454	-.00042	-.00044	-.00075

RUN NO. 325/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.998	1.976	8.07435	-.18575	10.15200	.29942	.05230	.03635	.00679	-.00063	-.00302
29.890	4.301	10.22550	-.12371	10.08960	.37419	.06587	.04723	.00638	-.00128	-.00407
	GRADIENT		.00011	.02668	.03216	.00584	.00468	-.00018	-.00028	-.00045

RUN NO. 326/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.648	1.958	8.02243	-.07292	10.12630	.30031	.05321	.03447	.00634	-.00068	-.00261
44.989	4.325	10.27170	-.12245	10.14780	.38565	.06868	.04550	.00622	-.00112	-.00329
	GRADIENT		.00026	.02093	.03606	.00654	.00466	-.00005	-.00018	-.00029

DATE 22 MAR 76

TABULATED SOURCE DATA - CA23B

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(CNH032)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

RUN NO. 327/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	CL	CD	CLM	CY	CYN	CBL
49.978	1.969	.58820	8.02344	-.02053	.30169	.05377	.03416	.00663	-.00060	-.00273
50.163	4.264	.58920	10.19110	-.04478	.38846	.06896	.04503	.00631	-.00101	-.00306
	GRADIENT	.00044	.94453	-.01056	.03781	.00662	.00474	-.00014	-.00018	-.00015

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(CNH033) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 8.000 DX = .000
 DY = 10.000 MACH = .600

RUN NO. 331/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	CL	CD	CLM	CY	CYN	CBL
7.500	2.446	.58922	10.34440	-.06667	.39497	.06551	.05164	.00569	-.00180	-.00518
7.613	4.292	.58876	12.27760	-.14319	.46999	.08568	.05690	.00540	-.00238	-.00741
	GRADIENT	-.00025	1.04761	-.04147	.04065	.01093	.00285	-.00016	-.00032	-.00121

RUN NO. 332/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	CL	CD	CLM	CY	CYN	CBL
10.263	1.907	.58952	10.03580	-.22873	.38869	.06413	.04940	.00614	-.00147	-.00427
9.859	4.322	.58910	12.24310	-.09624	.47119	.08655	.05540	.00577	-.00230	-.00652
	GRADIENT	-.00017	.91395	.05486	.03416	.00928	.00248	-.00015	-.00034	-.00093

RUN NO. 333/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	CL	CD	CLM	CY	CYN	CBL
15.012	1.933	.58891	10.03310	-.19577	.38793	.06455	.04784	.00675	-.00133	-.00412
14.957	4.327	.58912	12.27130	-.10228	.47925	.08911	.05349	.00640	-.00224	-.00568
	GRADIENT	.00009	.93488	.03905	.03814	.01026	.00236	-.00015	-.00038	-.00065

RUN NO. 334/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	CL	CD	CLM	CY	CYN	CBL
29.834	1.958	.58943	10.02860	-.19612	.39764	.06733	.04610	.00732	-.00092	-.00322
29.957	4.362	.58888	12.31310	-.15654	.45101	.09724	.05047	.00757	-.00217	-.00339
	GRADIENT	-.00023	.95016	.01563	.01061	.01244	.00182	.00010	-.00052	-.00007

ARC 14-120(CA238) 747/1 ATI 0351 (ORBITTER DATA)

(CNH033) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 335/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
.58683	9.93220	-.17406	10.09900	.39959	.06814	.04451	.00704	-.00111	-.01285
.58661	12.24790	-.20324	10.09270	.51609	.09902	.04840	.00844	-.00176	-.00316
-.00009	.96232	-.01213	-.00262	.04841	.01283	.00162	.00058	-.00027	-.00013

RUN NO. 336/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
.58788	9.94862	-.10542	10.11940	.39899	.06824	.04386	.00730	-.00093	-.00275
.58739	12.23090	-.17171	10.08420	.51696	.09911	.04743	.00865	-.00153	-.00296
-.00021	.97225	-.02824	-.01500	.05025	.01315	.00152	.00058	-.00026	-.00009

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 341/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
.58648	5.90009	-.06742	.00578	.21432	.04057	.03953	.01030	-.00053	-.00184
.58717	8.09199	-.04621	.02682	.27220	.04671	.05106	.00987	-.00058	-.00187
.58774	10.13540	-.02054	-.00171	.32834	.05691	.06112	.00978	-.00070	-.00226
.00029	.98649	.01088	-.00147	.02655	.00378	.00503	-.00012	-.00004	-.00009

RUN NO. 342/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
.58815	6.04215	-.10713	-.00757	.22552	.04092	.03872	.00874	-.00050	-.00196
.58765	8.16733	-.06245	-.06245	.27436	.04690	.04957	.00940	-.00031	-.00209
.58723	10.29310	-.04005	-.00326	.33442	.05802	.05982	.00910	-.00057	-.00268
-.00020	.94601	.01901	.00016	.02416	.00377	.00470	.00009	-.00001	-.00016

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 8.000 DX = .000
 DY = 10.000 MACH = .600

(CNH034) (21 OCT 75)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA)

(CNH034) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 343/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.400	-.285	.58717	5.90381	-.13205	-.02328	.22384	.04106	.03297	.00905	-.00047	-.00227
7.390	2.312	.58697	8.21305	-.07014	-.04725	.28297	.04809	.04467	.00862	-.00052	-.00229
7.046	4.212	.58774	10.11280	-.00640	-.04352	.33660	.05792	.05466	.00855	-.00062	-.00270
	GRADIENT	.00012	.93327	.03090	-.00478	.02494	.00369	.00480	-.00011	-.00003	-.00009

RUN NO. 344/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.858	-.243	.58774	5.93582	-.13020	-.02468	.22465	.04095	.03071	.00873	-.00043	-.00244
9.870	2.334	.58683	8.23296	-.06279	-.03964	.28357	.04865	.04267	.00859	-.00052	-.00234
9.840	4.253	.58677	10.19170	-.05789	-.06921	.34570	.05941	.05312	.00845	-.00072	-.00284
	GRADIENT	-.00022	.94365	.01935	-.00968	.02670	.00404	.00497	-.00006	-.00006	-.00008

RUN NO. 345/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.745	-.254	.58763	5.91142	-.11810	-.04966	.22241	.04154	.02715	.00858	-.00056	-.00239
14.663	2.332	.58572	8.21363	-.06055	-.05815	.28671	.04917	.03965	.00860	-.00060	-.00246
14.715	4.248	.58738	10.17930	-.07864	-.07945	.35060	.06058	.05015	.00854	-.00062	-.00273
	GRADIENT	-.00007	.94469	.01218	-.00643	.02827	.00416	.00509	-.00001	-.00001	-.00007

RUN NO. 346/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.743	-.267	.58604	5.88621	-.08203	-.00339	.22355	.04316	.02395	.00880	-.00056	-.00273
29.911	2.360	.58747	8.27416	-.02282	-.04821	.30197	.05229	.03866	.00378	-.00049	-.00261
29.627	4.268	.58710	10.18430	-.09565	-.10290	.37140	.06469	.04759	.00821	-.00102	-.00283
	GRADIENT	.00025	.94540	-.00039	-.02165	.03243	.00467	.00524	-.00012	-.00009	-.00002

RUN NO. 347/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.607	-.235	.58716	5.90152	-.00966	-.05370	.22227	.04348	.02276	.00784	-.00080	-.00269
44.784	2.345	.58716	8.25624	-.13594	-.05628	.30628	.05372	.03694	.00807	-.00071	-.00263
44.631	4.291	.58757	10.22080	-.15327	-.01683	.38674	.06765	.04643	.00782	-.00102	-.00245
	GRADIENT	.00011	.95215	-.03264	.01471	.03614	.00527	.00525	.00000	-.00004	.00005

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO IORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = -.000004 .95296 .03755 .00531 .00533 DY = .000 MACH = .600

RUN NO. 348/ 0		RN/L = 3.30		GRADIENT INTERVAL = -5.00/ 5.00	
DZ	ALPHAC	ALPHAO	DX	DY	CLM
49.960	-.239	5.88468	.08819	.01479	.0213
50.084	2.361	8.25858	-.16437	-.30921	.03673
50.051	4.269	10.19200	-.16268	-.38849	.04610
	GRADIENT	.95296	-.05808	-.01606	.00533
RUN NO. 349/ 0		RN/L = 3.31		GRADIENT INTERVAL = -5.00/ 5.00	
DZ	ALPHAC	ALPHAO	DX	DY	CLM
61.655	-.279	5.85348	.11728	-.13288	.02170
61.629	2.289	8.18336	-.12256	.00830	.03605
61.640	4.275	10.20200	-.15863	-.09148	.04490
	GRADIENT	.95272	-.05384	.01129	.00512

PARAMETRIC DATA
 CY .00780 CYN -.00065 CBL -.00233
 .00797 -.00060 -.00259
 .00830 -.00086 -.00268
 .00011 -.00004 -.00008

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO IORB = 4.000 DX = .000
 SCALE = .0125 GRADIENT = -.000004 .93448 .00625 .002841 .00365 DY = .000 MACH = .600

RUN NO. 351/ 0		RN/L = 3.30		GRADIENT INTERVAL = -5.00/ 5.00	
DZ	ALPHAC	ALPHAO	DX	DY	CLM
3.392	.007	3.99746	-.07524	.05360	.02793
3.273	2.270	6.14693	-.03598	.12459	.03472
3.233	4.244	8.16058	-.04991	.01675	.04348
	GRADIENT	.98179	.00625	-.00773	.00365
RUN NO. 352/ 0		RN/L = 3.29		GRADIENT INTERVAL = -5.00/ 5.00	
DZ	ALPHAC	ALPHAO	DX	DY	CLM
7.633	-.212	4.00651	-.18854	.04314	.02283
7.582	2.387	6.30510	-.09734	.06432	.03020
7.362	4.282	8.22000	-.03484	.07605	.03886
	GRADIENT	.93448	.03651	.00737	.00352

PARAMETRIC DATA
 CY .00754 CYN -.00010 CBL -.00204
 .00704 -.00012 -.00193
 .00675 -.00016 -.00197
 -.00019 -.00001 -.00002

ARC 14-120(CA23B) 747/1 ATI 0351 (ORBITER DATA)

(CNH035) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LOFB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 353/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.664	-.213	.58769	3.95156	-.11309	.11144	.12407	.03675	.02065	.00723	.00004	-.00212
9.916	2.313	.58803	6.21534	.11618	.06173	.19182	.04006	.02823	.00690	.00010	-.00215
9.803	4.259	.58849	8.18827	-.02549	.09580	.25062	.04658	.03780	.00648	-.00009	-.00222
	GRADIENT	.00018	-.94488	.02304	-.0042E	.02823	.00215	.00379	-.00017	-.00003	-.00002

RUN NO. 354/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
15.113	-.270	.58842	3.94923	-.18325	.04406	.12746	.03750	.01758	.00728	-.00002	-.00239
14.808	2.324	.58832	6.21535	-.05927	.08345	.19579	.04118	.02599	.00653	-.00026	-.00231
14.693	4.304	.58828	8.22508	-.07338	.00995	.25789	.04797	.03594	.00643	-.00009	-.00214
	GRADIENT	-.00003	.93174	.02522	-.00631	.02841	.00225	.00397	-.00019	-.00002	.00005

RUN NO. 355/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.891	-.272	.58946	3.91348	-.06585	.08920	.12538	.03875	.01416	.00668	-.00016	-.00236
29.979	2.346	.58900	6.26241	-.11845	.05612	.20908	.04387	.02378	.00645	-.00013	-.00230
29.891	4.294	.58907	8.23413	-.17999	.07042	.27759	.05163	.03522	.00587	-.00037	-.00226
	GRADIENT	-.00009	.94363	.02473	-.00459	.03326	.00277	.00456	-.00017	-.00004	.00002

RUN NO. 356/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.449	-.271	.58792	3.85960	.06793	.09655	.12679	.03949	.01315	.00609	-.00037	-.00226
44.799	2.322	.58850	6.23703	-.14780	.04817	.21326	.04542	.02268	.00543	-.00044	-.00230
44.865	4.260	.58890	8.20431	-.19731	.00498	.28953	.05371	.03397	.00548	-.00058	-.00246
	GRADIENT	.00022	.95651	-.05989	-.02012	.03577	.00309	.00454	-.00014	-.00004	.00004

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

DZ	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
1.654	2.302	8.14588	-.03672	.21706	.04845	.04960	.00937	-.00065	-.00221	-.00263
2.469	4.194	10.19350	-.16900	.33466	.05925	.05892	.00906	-.00060	-.00024	-.00024
	GRADIENT	1.09483	-.06991	-.00299	.03090	.00493	-.00016	.00003		
RUN NO.	361/ 0	RN/L =	3.32	GRADIENT INTERVAL =	-5.00/	5.00				
DZ <th>ALPHAC</th> <th>ALPHA0</th> <th>DX</th> <th>DY</th> <th>CL</th> <th>CD</th> <th>CLM</th> <th>CY</th> <th>CYN</th> <th>CBL</th>	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
2.877	2.012	8.04539	-.10843	.16706	.04654	.04786	.00873	-.00055	-.00221	-.00263
3.365	4.405	10.31600	-.07058	.34033	.05014	.05813	.00924	-.00044	-.00018	-.00018
	GRADIENT	.94905	.01582	.00160	.00485	.00430	.00022	.00004		
RUN NO.	362/ 0	RN/L =	3.31	GRADIENT INTERVAL =	-5.00/	5.00				
DZ <th>ALPHAC</th> <th>ALPHA0</th> <th>DX</th> <th>DY</th> <th>CL</th> <th>CD</th> <th>CLM</th> <th>CY</th> <th>CYN</th> <th>CBL</th>	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.393	2.013	8.11744	-.10956	.22780	.04963	.04322	.00927	-.00020	-.00247	-.00247
7.226	4.376	10.26970	.01898	.34881	.06111	.05316	.00915	-.00047	-.00294	-.00294
	GRADIENT	.91080	.05440	-.01729	.00486	.00421	-.00005	-.00011	-.00020	-.00020
RUN NO.	363/ 0	RN/L =	3.30	GRADIENT INTERVAL =	-5.00/	5.00				
DZ <th>ALPHAC</th> <th>ALPHA0</th> <th>DX</th> <th>DY</th> <th>CL</th> <th>CD</th> <th>CLM</th> <th>CY</th> <th>CYN</th> <th>CBL</th>	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.858	2.049	8.14182	-.11920	.21021	.05015	.04064	.00932	-.00007	-.00241	-.00241
10.104	4.457	10.39220	-.04720	.35762	.06287	.05139	.00854	-.00057	-.00279	-.00279
	GRADIENT	.93734	.02990	-.01716	.00528	.00447	-.00032	-.00021	-.00016	-.00016
RUN NO.	354/ 0	RN/L =	3.30	GRADIENT INTERVAL =	-5.00/	5.00				
DZ <th>ALPHAC</th> <th>ALPHA0</th> <th>DX</th> <th>DY</th> <th>CL</th> <th>CD</th> <th>CLM</th> <th>CY</th> <th>CYN</th> <th>CBL</th>	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.553	2.097	8.15599	-.09596	.20236	.05119	.03858	.00915	-.00021	-.00238	-.00238
14.643	4.474	10.35753	-.02118	.36470	.06411	.04933	.00877	-.00053	-.00288	-.00288
	GRADIENT	.93034	.03146	-.03066	.00544	.00452	-.00016	-.00014	-.00021	-.00021
RUN NO.	355/ 0	RN/L =	3.29	GRADIENT INTERVAL =	-5.00/	5.00				
DZ <th>ALPHAC</th> <th>ALPHA0</th> <th>DX</th> <th>DY</th> <th>CL</th> <th>CD</th> <th>CLM</th> <th>CY</th> <th>CYN</th> <th>CBL</th>	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.819	2.159	8.24139	-.17520	.17624	.05390	.03685	.00854	-.00041	-.00264	-.00264
29.992	4.411	10.35100	-.14877	.11332	.06953	.04638	.00884	-.00063	-.00300	-.00300
	GRADIENT	.93709	.01174	-.02795	.00650	.00423	.00014	-.00010	-.00016	-.00016
RUN NO.	356/ 0	RN/L =	3.29	GRADIENT INTERVAL =	-5.00/	5.00				

ARC 14-120(CA23B) 747/1 ATI 0351 (ORBITER DATA)

(CNH036) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 367/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
45.057	2.052	.58578	8.16577	-.12614	.16956	.30926	.05542	.03415	.00843	-.00043	-.00250
44.937	4.371	.58637	10.31880	-.09769	.15247	.39619	.07086	.04493	.00887	-.00064	-.00272
	GRADIENT	.00043	.92837	.01227	-.00737	.03749	.00666	.00465	.00019	-.00009	-.00009

RUN NO. 368/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.129	2.015	.58474	8.08551	-.04310	.16630	.30470	.05523	.03278	.00836	-.00028	-.00237
50.420	4.439	.58435	10.37690	-.11005	.15838	.40637	.07266	.04452	.00860	-.00090	-.00270
	GRADIENT	-.00016	.94516	-.02761	-.00327	.04194	.00719	.00484	.00010	-.00025	-.00013

RUN NO. 369/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
62.057	2.140	.58502	8.24539	-.02430	.13774	.32048	.05677	.03427	.00811	-.00026	-.00253
61.853	4.416	.58414	10.35040	-.04193	.12725	.40517	.07308	.04310	.00858	-.00062	-.00262
	GRADIENT	-.00039	.92457	-.00774	-.00461	.03720	.00716	.00388	.00021	-.00016	-.00004

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 ATI 0351 (ORBITER DATA)

(CNH037) (21 OCT 75)

RUN NO. 371/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
1.955	.521	.58987	6.33729	-.10766	.09365	.22703	.04173	.04124	.00794	-.00023	-.00185
1.879	2.297	.59307	8.24052	-.10093	.06646	.27758	.04797	.05128	.00763	-.00047	-.00214
1.932	4.335	.59089	10.27080	-.12705	.05405	.33353	.05826	.06093	.00826	-.00054	-.00229
	GRADIENT	.00027	1.03052	-.00527	-.01028	.02791	.00435	.00515	.00009	-.00008	-.00011

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 372/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.611	-.073	.59019	6.14149	-.14594	.16043	.22934	.04190	.03841	.00940	.00015	-.07208
3.412	2.415	.59040	8.31124	.11055	.13546	.27806	.04811	.04954	.00844	-.00028	-.00215
3.341	4.372	.59036	10.30810	.00163	.12886	.33584	.05856	.05926	.00881	-.00025	-.00240
	GRADIENT	.00004	.93441	.03630	-.00723	.02376	.00369	.00468	-.00014	-.00009	-.00007

RUN NO. 373/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.238	-.184	.58959	5.97655	-.08660	.09567	.22502	.04143	.03204	.00884	.00011	-.00226
7.611	2.515	.58950	8.43460	.05996	.12690	.28920	.04933	.04527	.00893	-.00008	-.00246
7.497	4.363	.58887	10.32400	-.04563	.04585	.34817	.06017	.05482	.00803	-.00056	-.00289
	GRADIENT	-.00015	.95292	.01233	-.00931	.02685	.00403	.00500	-.00016	-.00009	-.00013

RUN NO. 374/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
10.003	-.096	.58840	6.09035	-.12387	.09762	.23080	.04199	.03035	.00867	.00020	-.00222
9.942	2.401	.58937	8.31062	.06698	.12280	.28432	.04898	.04239	.00781	-.00024	-.00232
10.030	4.474	.58833	10.42890	-.06324	.09804	.35570	.06166	.05323	.00816	-.00050	-.00290
	GRADIENT	.00001	.94747	.01539	.00043	.02714	.00425	.00500	-.00012	-.00006	-.00015

RUN NO. 375/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.990	.036	.58910	6.22162	-.14126	.13141	.23588	.04289	.02813	.00855	.00012	-.00232
14.729	2.374	.58974	8.27672	.05569	.06667	.28601	.04977	.03923	.00843	-.00024	-.00246
14.795	4.458	.58844	10.39350	-.06647	.08480	.35913	.06260	.05029	.00759	-.00077	-.00274
	GRADIENT	-.00014	.94208	.01827	-.01089	.02774	.00443	.00501	.00021	-.00014	-.00009

RUN NO. 376/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.795	-.037	.58885	6.11690	-.12939	.12231	.23327	.04415	.02418	.00813	.00023	-.00247
29.929	2.359	.58821	8.28595	-.02203	.11292	.29883	.05265	.03693	.00810	-.00027	-.00247
30.138	4.506	.58919	10.47950	-.18963	.08067	.38686	.06831	.04836	.00815	-.00066	-.00257
	GRADIENT	.00007	.95931	-.01215	-.00906	.03369	.00529	.00532	.00001	-.00009	-.00002

ARC 14-120(CA238) 747/1 AT1 0351 (ORBITER DATA)

(CNH037) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STA3 = -1.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 377/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
45.027	.096	.58823	6.08589	-.04783	.07474	.22242	.04476	.02145	.00787	-.00041	-.00255
44.952	2.497	.58995	8.42205	-.25301	.08694	.31475	.05521	.03737	.00811	-.00039	-.00261
44.914	4.260	.58874	10.22770	-.09599	.12210	.39070	.06887	.04535	.00803	-.00078	-.00256
	GRADIENT	.00016	.94708	-.01614	.01041	.03840	.00542	.00554	.00004	-.00008	-.00000

RUN NO. 378/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.481	.036	.58791	6.20814	-.01251	.05409	.23819	.04564	.02270	.00758	-.00037	-.00244
50.592	2.316	.58759	8.27754	-.24803	.13582	.30917	.05496	.03533	.00776	-.00042	-.00235
50.369	4.524	.58783	10.47610	-.19505	.10327	.40389	.07197	.04578	.00745	-.00101	-.00236
	GRADIENT	-.00002	.95062	-.04101	.01109	.03688	.00586	.00514	-.00003	-.00014	-.00002

RUN NO. 379/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
61.632	-.013	.58735	6.10612	.14628	.12051	.23266	.04580	.02153	.00734	-.00059	-.00241
61.965	2.379	.58707	8.32028	-.22930	.09946	.31321	.05588	.03454	.00730	-.00052	-.00247
61.651	4.408	.58790	10.33570	-.20140	.09337	.40256	.07175	.04442	.00731	-.00086	-.00239
	GRADIENT	.00012	.95573	-.08096	-.00622	.03824	.00582	.00519	-.00001	-.00006	-.00000

ARC 14-120(CA238) 747/1 AT1 0351 (ORBITER DATA)

(CNH038) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 381/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
1.603	.046	.58938	5.98392	-.16713	.08333	.31166	.05265	-.00114	.00478	.00083	-.00087
1.569	2.293	.58924	8.13110	.04218	.10096	.37096	.06214	.00948	.00478	.00070	-.00098
2.306	4.387	.58902	10.37170	-.12686	.08546	.43733	.07787	.01799	.00452	.00068	-.00151
	GRADIENT	-.00008	1.01018	.01030	.00058	.02892	.00579	.00441	-.00006	-.00004	-.00015

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITTER DATA)

(CNH038) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .000

RUN NO. 382/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.468	.019	.58937	6.20728	-.19716	.10115	.32795	.05241	-.00189	.00470	.00100	-.00094
3.699	2.422	.58831	8.36194	-.01894	.08953	.37921	.06271	.00720	.00473	.00101	-.00112
3.469	4.425	.58815	10.37440	-.08950	.05348	.44108	.07812	.01573	.00002	.00098	-.00152
	GRADIENT	-.00028	.94428	.02607	-.01062	.02554	.00579	.00399	.00000	-.00000	-.00013

RUN NO. 383/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.736	-.027	.58823	6.18939	-.22961	.06087	.33115	.05315	-.00849	.00424	.00107	-.00112
6.902	2.422	.58845	8.27053	.07916	.08816	.38272	.06297	.00202	.00446	.00122	-.00137
7.339	4.419	.58629	10.35840	-.08920	.03323	.45524	.07976	.01009	.00415	.00107	-.00184
	GRADIENT	-.00042	.93444	.03510	.00742	.02766	.00591	.00418	-.00001	.00000	-.00016

RUN NO. 384/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
10.309	.047	.58749	6.26151	-.23948	.08783	.33349	.05408	-.01114	.00429	.00122	-.00123
9.703	2.409	.58687	8.30010	.02282	.05753	.38797	.06426	-.00068	.00434	.00126	-.00146
10.031	4.489	.58640	10.44550	-.12841	.04705	.45945	.08115	.00774	.00399	.00113	-.00174
	GRADIENT	-.00025	.94000	.02694	-.00926	.02823	.00605	.00425	-.00007	-.00002	-.00011

RUN NO. 385/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
15.037	-.141	.58573	6.06450	-.12720	.01465	.32158	.05365	-.01488	.00460	.00122	-.00132
14.866	2.495	.58615	8.39330	.08175	.07175	.39532	.06578	-.00247	.00436	.00130	-.00156
14.876	4.418	.58601	10.36830	-.05165	.07290	.46563	.08237	.00570	.00418	.00128	-.00174
	GRADIENT	.00007	.94052	.02032	.01331	.03138	.00620	.00453	-.00009	.00001	-.00009

RUN NO. 386/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
30.004	-.165	.58574	6.01263	-.11334	.09307	.32803	.05482	-.01562	.00426	.00115	-.00144
29.816	2.497	.58734	8.40355	.03463	.06951	.40780	.06858	-.00464	.00382	.00113	-.00152
30.280	4.402	.58719	10.40330	-.16387	.04147	.48254	.08693	.00295	.00404	.00122	-.00174
	GRADIENT	.00011	.95746	-.00681	-.01114	.03359	.00691	.00430	-.00006	.00001	-.00006

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA) (CNH038) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 387/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CO	CLM	CY	CYN	CBL
44.879	.070	.58566	6.21183	-.10694	.06776	.33181	.05680	-.01682	.00410	.00111	-.00138
44.946	2.481	.58561	8.42103	-.06122	.08432	.41042	.07035	-.00588	.00410	.00123	-.00158
44.926	4.448	.58586	10.41200	-.21870	.01982	.49727	.08958	.00149	.00329	.00092	-.00170
	GRADIENT	-.00018	.95780	-.02388	-.01029	.03760	.00742	.00420	-.00018	-.00004	-.00007

RUN NO. 388/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CO	CLM	CY	CYN	CBL
49.971	-.037	.58490	6.07965	.11060	.11843	.32644	.05625	-.01774	.00365	.00084	-.00157
50.192	2.513	.58441	8.42727	-.18012	.08470	.41671	.07082	-.00607	.00377	.00108	-.00164
50.609	4.284	.58442	10.28530	-.17500	.09634	.49599	.08929	.00060	.00395	.00109	-.00170
	GRADIENT	-.00012	.96964	-.06945	-.00568	.03897	.00751	.00427	.00007	.00005	-.00003

RUN NO. 389/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CO	CLM	CY	CYN	CBL
61.515	-.115	.58473	5.98804	.12903	.11916	.31440	.05623	-.01948	.00415	.00106	-.00155
60.520	2.529	.58435	8.29901	-.09098	.07553	.41051	.07023	-.00750	.00373	.00115	-.00161
	GRADIENT	-.00014	.87406	-.08321	-.01650	.03635	.00530	.00453	-.00016	.00003	-.00002

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 391/ 0 RN/L = 3.36 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHAO	DX	DY	CL	CO	CLM	CY	CYN	CBL
3.148	2.388	.59047	8.22485	-.06687	.05722	.36247	.08054	.02639	.00491	.00116	-.00074
3.390	4.263	.59098	10.21090	-.04503	-.00654	.42507	.09540	.03359	.00384	.00075	-.00111
	GRADIENT	.00027	1.05936	.01165	-.03401	.03339	.00793	.00384	-.00057	-.00022	-.00019

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (CNH039) (08 OCT 75)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = 10.000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO LORB = 6.000 DX = .000
 SCALE = .0125 DY = .600 MACH = .600

PARAMETRIC DATA

Run No.	MACH	ALPHAC	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.312	.58972	2.139	8.21903	-.14187	.10762	.37260	.08188	.02330	.00500	.00124	-.00095
7.376	.58997	4.461	10.38090	-.04368	.05150	.44364	.09870	.03152	.00522	.00084	-.00164
	.00011	GRADIENT	.93122	.04230	-.02417	.03060	.00724	.00354	.00009	-.00017	-.00029
RUN NO.	392/ 0	RN/L =	3.34	GRADIENT INTERVAL =	-5.00/	5.00					
9.885	.59034	2.001	8.09911	-.16160	.06343	.37205	.08175	.02198	.00459	.00116	-.00102
10.083	.59082	4.424	10.36610	-.07507	.05245	.43796	.09876	.02962	.00452	.00084	-.00137
	.00020	GRADIENT	.93579	.03572	-.00453	.02721	.00702	.00315	-.00003	-.00013	-.00015
RUN NO.	393/ 0	RN/L =	3.34	GRADIENT INTERVAL =	-5.00/	5.00					
15.083	.59086	2.141	8.24803	-.19875	.05544	.37881	.08371	.02112	.00422	.00111	-.00102
14.830	.59122	4.433	10.35730	-.08338	.06210	.44568	.10027	.02874	.00451	.00085	-.00146
	.00015	GRADIENT	.92040	.05034	.00290	.02918	.00723	.00332	.00013	-.00011	-.00019
RUN NO.	394/ 0	RN/L =	3.34	GRADIENT INTERVAL =	-5.00/	5.00					
29.781	.59148	2.045	8.11938	-.12810	.09299	.38078	.08524	.01843	.00378	.00101	-.00121
29.790	.59155	4.494	10.41400	-.07450	.08848	.47572	.10606	.02715	.00402	.00068	-.00158
	.00055	GRADIENT	.93683	.02188	-.00184	.03876	.00850	.00356	.00010	-.00013	-.00015
RUN NO.	395/ 0	RN/L =	3.33	GRADIENT INTERVAL =	-5.00/	5.00					
44.565	.58975	2.160	8.20736	-.08759	.08082	.39120	.08750	.01751	.00369	.00094	-.00134
44.873	.59139	4.367	10.31290	-.11783	.05913	.47703	.10699	.02419	.00435	.00072	-.00162
	.00074	GRADIENT	.95382	-.01370	-.00983	.03888	.00883	.00302	.00030	-.00010	-.00013
RUN NO.	396/ 0	RN/L =	3.33	GRADIENT INTERVAL =	-5.00/	5.00					
50.286	.59078	2.123	8.20360	-.01339	.05846	.39125	.08776	.01682	.00345	.00094	-.00122
50.569	.59084	4.396	10.36870	-.06019	.05556	.48273	.10839	.02338	.00363	.00061	-.00142
	.00003	GRADIENT	.95258	-.02059	-.00128	.04025	.00908	.00289	.00008	-.00014	-.00009
RUN NO.	397/ 0	RN/L =	3.33	GRADIENT INTERVAL =	-5.00/	5.00					

ARC 14-120(CA238) 747/1 ATI 0251 (ORBITER DATA)

(CMH040) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = .000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 401/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.048	-.004	.58575	3.94885	-.03013	.02300	.19222	.06234	.01055	.00391	.09135	-.00058
3.021	2.318	.58650	6.16485	-.00823	.03102	.25564	.06763	.01730	.00403	.00120	-.00060
3.274	4.401	.58596	8.32227	-.08030	.03823	.31652	.07662	.02529	.00434	.00119	-.00067
	GRADIENT	.00005	.99210	-.01099	.00345	.02820	.00322	.00334	.00010	-.00004	-.00002

RUN NO. 402/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.066	-.091	.58578	4.06526	-.06533	.03074	.20452	.06362	.00754	.00381	.00122	-.00088
7.198	2.490	.58717	6.36184	-.05879	.03128	.26376	.06944	.01423	.00365	.00116	-.00072
7.335	4.405	.58721	8.33848	-.06649	.00535	.32169	.07766	.02245	.00372	.00110	-.00072
	GRADIENT	.00033	.94695	-.00010	-.00532	.02588	.00308	.00327	-.00002	-.00003	-.00004

RUN NO. 403/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.793	.024	.58614	4.20285	-.10758	.02801	.21029	.06432	.00651	.00446	.00137	-.00093
9.766	2.449	.58677	6.34048	-.05513	.03665	.26860	.07001	.01356	.00399	.00125	-.00082
9.745	4.293	.58746	8.21470	-.10482	.00220	.32267	.07789	.02110	.00385	.00112	-.00087
	GRADIENT	.00031	.93678	.00172	-.00556	.02621	.00314	.00339	-.00015	-.00006	-.00001

RUN NO. 404/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
14.781	-.155	.58614	4.02957	-.08900	.00993	.20015	.06452	.00358	.00345	.00124	-.00113
14.685	2.568	.58672	6.43765	-.05953	-.02169	.27665	.07135	.01272	.00345	.00111	-.00080
14.592	4.303	.58737	8.22819	-.04039	-.03747	.33145	.07943	.02040	.00313	.00101	-.00078
	GRADIENT	.00027	.93666	.01090	-.01073	.02933	.00327	.00373	-.00006	-.00005	-.00008

RUN NO. 405/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
29.804	-.120	.58585	4.05111	-.13448	.00963	.20108	.06614	.00120	.00321	.00118	-.00135
29.944	2.563	.58784	6.47107	-.04528	.04981	.28989	.07428	.01096	.00370	.00116	-.00112
29.835	4.329	.58681	8.27311	-.13744	-.04093	.34801	.08344	.01819	.00257	.00098	-.00091
	GRADIENT	.00026	.94525	.00487	-.00921	.03304	.00382	.00380	-.00012	-.00004	-.00010

DATE 22 MAR 76

TABULATED SOURCE DATA - CA23B

PAGE 189

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

(CNH040) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 406/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
44.515	-.091	.58600	4.04059	.03455	.03143	.20113	.06711	.00023	.00297	.00117	-.00123
44.728	2.446	.58754	6.34838	-.15179	.02644	.28973	.07549	.00905	.00306	.00106	-.00103
44.671	4.476	.58637	8.39585	-.16764	-.03328	.37129	.08681	.01819	.00294	.00098	-.00108
	GRADIENT	.00010	.95184	-.04547	-.01357	.03716	.00427	.00391	-.00001	-.00004	.00003

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .500

RUN NO. 411/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.328	2.137	.48953	6.15134	-.08804	-.17940	.24904	.06741	.01613	.00399	.00121	-.00052
3.325	4.298	.48981	8.23496	-.05681	-.16385	.30889	.07573	.02348	.00374	.00106	-.00052
	GRADIENT	.00013	.96420	.01445	.00720	.02770	.00385	.00340	-.00012	-.00007	-.00000

RUN NO. 412/ 0 RN/L = 2.96 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
6.838	2.085	.48940	6.09329	-.09292	-.16145	.25617	.06852	.01371	.00363	.00108	-.00085
7.184	4.439	.48957	8.36195	-.05746	-.16305	.31771	.07770	.02117	.00358	.00102	-.00063
	GRADIENT	.00007	.96379	.01507	-.00068	.02615	.00390	.00317	-.00002	-.00002	.00009

RUN NO. 413/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
9.770	2.218	.48931	6.27786	-.14676	-.13953	.26222	.06960	.01260	.00261	.00099	-.00057
9.780	4.469	.48962	8.40798	-.05126	-.15367	.32312	.07875	.02039	.00341	.00102	-.00069
	GRADIENT	.00013	.94601	.04241	-.00672	.02704	.00406	.00346	.00036	.00001	-.00005

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(CNH041) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 4.000 DX = .000
 DY = .000 MACH = .500

RUN NO. 414/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	14.789	ALPHAC	1.986	MACH	48945	ALPHA0	6.05709	DX	-1.5807	DY	-1.1379	CL	.26298	CD	.07001	CLM	.01070	CY	.00359	CYN	.00104	CBL	-.00101
	14.819	GRADIENT	4.441		48934		8.37959		-0.06484		-0.09466		.33277		.08023		.01950		.00354		.00096		-.00093
			.0125		-.00005		.94620		.03798		.00779		.02844		.00416		.00950		-.00002		-.00003		.00003

RUN NO. 415/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	29.638	ALPHAC	2.215	MACH	49039	ALPHA0	6.25657	DX	-0.7823	DY	-1.13076	CL	.28104	CD	.07336	CLM	.00971	CY	.00339	CYN	.00101	CBL	-.00105
	29.626	GRADIENT	4.415		49048		8.35752		-0.04136		-0.13496		.35226		.08339		.01848		.00337		.00097		-.00102
			.0125		-.00048		.95503		.01676		-.00191		.03237		.00456		.00399		-.00001		-.00002		.00001

RUN NO. 416/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.438	ALPHAC	2.214	MACH	49039	ALPHA0	6.22878	DX	-0.7656	DY	-1.1385	CL	.28802	CD	.07453	CLM	.00874	CY	.00265	CYN	.00092	CBL	-.00103
	44.694	GRADIENT	4.330		48927		8.27081		-0.09178		-0.16629		.36453		.08539		.01705		.00310		.00091		-.00089
			.0125		-.00053		.96531		-.00719		-.02479		.03617		.00513		.00393		.00021		-.00000		.00007

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(CNH042) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 4.000 DX = .000
 DY = .000 MACH = .300

RUN NO. 421/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	3.128	ALPHAC	2.209	MACH	29586	ALPHA0	6.15824	DX	-0.0134	DY	-0.0631	CL	.25205	CD	.06927	CLM	.01660	CY	.00328	CYN	.00072	CBL	-.00043
	3.123	GRADIENT	4.521		29674		8.14827		.01001		-0.02654		.31146		.07798		.02362		.00309		.00066		-.00048
			.0125		-.00006		.98892		.00564		-.01006		.02952		.00433		.00349		-.00009		-.00003		-.00003

RUN NO. 422/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.085	ALPHAC	2.291	MACH	29723	ALPHA0	6.28847	DX	-0.07398	DY	-0.04136	CL	.26796	CD	.07109	CLM	.01468	CY	.00224	CYN	.00055	CBL	-.00040
	7.303	GRADIENT	4.377		29615		8.32691		-0.07285		-0.01484		.32793		.08041		.02120		.00285		.00077		-.00040
			.0125		-.00053		.99140		.00055		.01290		.02917		.00453		.00317		.00029		.00010		-.00000

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = .000 DX = .000
 SCALE = .0125 DY = .000 MACH = .300

PARAMETRIC DATA
 RUN NO. 423/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00
 MACH ALPHA0 DX DY CL CD CLM CYN CBL
 9.285 2.180 4.347 2.9680 6.13881 -.01604 -.02059 .26123 .07080 .01300
 9.970 4.354 4.347 2.9657 8.34801 -.10366 -.04935 .33184 .08153 .02035
 GRADIENT - .00010 1.01948 -.04044 -.01327 .03258 .00495 .00339

RUN NO. 424/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00
 MACH ALPHA0 DX DY CL CD CLM CYN CBL
 14.488 2.266 4.354 2.9699 6.25676 -.06213 -.02430 .27183 .07285 .01183
 14.575 4.354 4.354 2.9707 8.31217 -.04284 -.03813 .34189 .08258 .01958
 GRADIENT - .00004 .98457 .00924 -.00662 .03356 .00466 .00371

RUN NO. 425/ 0 RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00
 MACH ALPHA0 DX DY CL CD CLM CYN CBL
 29.804 2.191 4.292 2.9669 6.21467 -.11139 -.03212 .28162 .07523 .01001
 29.724 4.292 4.292 2.9648 8.26295 -.07168 -.04141 .35957 .05573 .01829
 GRADIENT - .00010 .97492 .01890 -.00442 .03711 .00500 .00394

RUN NO. 426/ 0 RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00
 MACH ALPHA0 DX DY CL CD CLM CYN CBL
 44.766 2.202 4.266 2.9674 6.22064 -.08944 -.11793 .28835 .07647 .00910
 44.688 4.266 4.266 2.9673 8.24369 -.05498 -.10352 .36586 .08579 .01658
 GRADIENT - .00000 .98014 .01670 .00698 .03755 .00500 .00363

ARC 14-120(CA238) 0251

(CNH043) (09 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 ELEVON = 5.000

RUN NO. 431/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAO	MACH	CL	CD	CLM	CY	CYN	CBL
2.284	4.518	.59425	.24162	.07023	.00017	.00154	.00091	-.00167
2.235	6.328	.59503	.33066	.07845	.00604	.00164	.00087	-.00165
1.862	8.269	.59509	.42465	.09145	.01312	.00171	.00078	-.00166
2.534	10.303	.59415	.53958	.11588	.01634	.00260	.00067	-.00189
2.332	12.406	.59442	.65671	.15794	.01792	.00292	.00020	-.00115
2.211	14.397	.59365	.75391	.21248	.02112	.00267	.00022	-.00270
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 432/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAO	MACH	CL	CD	CLM	CY	CYN	CBL
17.824	-.729	.59205	-.01077	.06239	-.01801	.00253	.00110	-.00161
20.582	4.597	.59217	.24231	.07051	-.00030	.00218	.00112	-.00137
20.432	6.440	.59209	.33123	.07907	.00568	.00245	.00107	-.00140
20.388	8.441	.59311	.43222	.09298	.01329	.00256	.00088	-.00156
20.672	10.411	.59177	.54431	.11739	.01615	.00249	.00053	-.00184
20.407	12.376	.59195	.65892	.15713	.01805	.00371	.00046	-.00119
20.474	14.347	.59171	.75186	.21092	.02111	.00256	.00028	-.00251
	GRADIENT	.00002	.04752	.00153	.00333	-.00007	.00000	.00005

RUN NO. 433/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAO	MACH	CL	CD	CLM	CY	CYN	CBL
37.645	-.608	.58927	-.00791	.06242	-.01823	.00233	.00110	-.00139
40.709	4.480	.58917	.23122	.07016	-.00111	.00206	.00112	-.00120
40.387	6.499	.58939	.32986	.07943	.00540	.00201	.00104	-.00124
40.324	8.438	.58979	.42386	.09289	.01263	.00182	.00084	-.00139
40.462	10.448	.58959	.53990	.11703	.01604	.00199	.00063	-.00144
40.577	12.427	.58736	.65484	.15594	.01815	.00264	.00046	-.00089
40.395	14.433	.58674	.74957	.21125	.02058	.00256	.00025	-.00245
	GRADIENT	-.00002	.04700	.00152	.00337	-.00005	.00000	.00004

PARAMETRIC DATA

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 ELEVON = 5.000

ARC 14-120(CA23B) 03S1

GRADIENT INTERVAL = -5.00/ 5.00

ALPHA	MACH	CL	CD	CLM	CY	CYN	CBL
6.381	.59485	.33887	.05984	-.01955	.00245	.00106	-.00120
8.325	.59469	.43070	.07332	-.01087	.00192	.00098	-.00155
10.419	.59356	.55181	.09788	-.00571	.00132	.00103	-.00142
12.411	.59481	.66763	.13666	-.00462	.00259	.00093	-.00082
14.003	.59270	.74137	.17870	-.00250	.00132	.00115	-.00162
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 ELEVON = .000

ARC 14-120(CA23B) 03S1

GRADIENT INTERVAL = -5.00/ 5.00

ALPHA	MACH	CL	CD	CLM	CY	CYN	CBL
4.557	.59437	.16397	.04124	.01406	.00530	-.00048	-.00251
6.357	.59364	.25547	.04733	.02102	.00535	-.00043	-.00253
8.320	.59253	.34308	.05761	.03255	.00552	-.00046	-.00231
10.373	.59341	.45153	.07643	.03942	.00544	-.00106	-.00284
12.477	.59345	.57837	.11649	.03669	.00588	-.00091	-.00258
14.400	.59228	.67445	.16243	.03688	.00528	-.00070	-.00242
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 ELEVON = .000

ARC 14-120(CA23B) 03S1

GRADIENT INTERVAL = -5.00/ 5.00

ALPHA	MACH	CL	CD	CLM	CY	CYN	CBL
4.792	.59296	-.08601	.03744	-.00963	.00655	-.00062	-.00239
6.401	.59380	.15640	.04089	.01308	.00648	-.00030	-.00254
8.464	.59514	.26188	.04820	.02120	.00620	-.00010	-.00213
10.508	.59521	.35598	.05877	.03393	.00555	-.00058	-.00234
12.532	.59488	.46175	.07880	.03847	.00619	-.00075	-.00279
14.332	.59398	.57464	.11421	.03651	.00605	-.00080	-.00223
GRADIENT	.00016	.04707	.00066	.00437	-.00001	.00006	-.00003

ORIGINAL PAGE IS
 OF POOR QUALITY

ARC 14-120(CA23B) 0351

(CNH045) (09 OCT 75)

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 ELEVON = .000

RUN NO. 453/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAO	MACH	CL	CD	CLM	CY	CYN	CBL
37.990	-.738	.59769	-.08823	.03733	-.01019	.00754	-.00042	-.00242
40.220	4.411	.59951	.15284	.04108	.01277	.00631	-.00038	-.00243
39.923	6.397	.59907	.25326	.04836	.02321	.00615	-.00033	-.00210
40.358	8.474	.60003	.34645	.05893	.03318	.00600	-.00048	-.00206
40.425	10.464	.59917	.45227	.07779	.03302	.00617	-.00082	-.00267
40.404	12.438	.59793	.57301	.11601	.03546	.00682	-.00132	-.00247
40.396	14.487	.59904	.67378	.16462	.03643	.00534	-.00083	-.00213
GRADIENT		.00035	.04681	.00073	.00446	-.00024	.00001	-.00000

ARC 14-120(CA23B) 0251

(CNH046) (09 OCT 75)

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 ELEVON = .000

RUN NO. 461/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAO	MACH	CL	CD	CLM	CY	CYN	CBL
38.822	-.234	.59460	-.08044	.05797	.02042	.00324	.00082	-.00193
40.088	2.253	.59537	.03556	.05636	.02739	.00324	.00083	-.00177
40.254	4.484	.59568	.14633	.05963	.03396	.00319	.00084	-.00164
40.159	6.430	.59712	.24368	.06592	.03348	.00351	.00074	-.00187
40.206	8.402	.59658	.33568	.07592	.04327	.00336	.00060	-.00151
40.248	10.328	.59706	.43288	.09364	.05414	.00334	.00026	-.00165
40.591	12.418	.59705	.56002	.13350	.05411	.00376	.00004	-.00155
39.934	14.328	.59593	.65151	.18065	.05771	.00286	.00008	-.00213
GRADIENT		.00023	.04804	.00033	.00287	-.00001	.00000	.00000

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 ELEVON = .000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO DZ = 50.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA
 RUN NO. 471/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHA0 MACH CL CD CLM CY CYN DZ
 6.055 .59522 .22276 .06445 .03805 .00315 .00088 49.63740
 10.519 .59562 .44810 .09661 .05454 .00309 .00019 50.29570
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 472/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHA0 MACH CL CD CLM CY CYN DZ
 5.995 .59612 .22272 .06423 .03805 .00205 .00059 48.86470
 10.412 .59578 .43519 .09447 .05406 .00318 .00020 50.29140
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 473/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHA0 MACH CL CD CLM CY CYN DZ
 5.974 .59634 .22044 .06417 .03798 .00306 .00079 49.00850
 10.420 .59508 .43279 .09432 .05428 .00393 .00033 50.75890
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 474/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHA0 MACH CL CD CLM CY CYN DZ
 5.891 .59647 .21019 .06353 .03758 .00282 .00069 48.93470
 10.503 .59516 .44259 .09595 .05420 .00359 .00023 50.66530
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 475/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHA0 MACH CL CD CLM CY CYN DZ
 5.884 .59557 .21037 .06360 .03735 .00329 .00080 49.39420
 10.481 .59415 .44320 .09549 .05454 .00322 .00015 51.00510
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1103.0000 IN. XO BETA = .000 STAB = -1.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = .000 DX = .000
 SCALE = .0125 GRADIENT = .00414 .00177 -1.62692 -.08491 -.00381 -.02195 DY = .600

PARAMETRIC DATA

CLN	CSL	CA	PHIO	PHIC	BETAO	BETAC	ALPHAC	GRADIENT
.00047	.00047	.03572	.91914	7.13931	-1.0876	-.02401	.192	.32977
.00125	.00065	.03008	.69755	.85653	-.09956	-.03533	2.364	.35124
.00108	.00069	.01995	.57102	.54517	-.10169	-.04096	4.308	.42111
.00085	.00005	-.00381	-.08491	-1.62692	.00177	-.00414	GRADIENT	-.02195

CLN	CSL	CA	PHIO	PHIC	BETAO	BETAC	ALPHAC	GRADIENT
.00049	.00049	.04027	.41163	-10.98800	-.04307	-.02455	.126	.29732
.00123	.00068	.02981	.31383	.74617	-.04527	-.03096	2.378	.36065
.00115	.00066	.01999	.14322	.49892	-.02562	-.03794	4.361	.43337
.00083	.00004	-.00451	-.05892	2.65110	.00368	-.00297	GRADIENT	-.03010

CLN	CSL	CA	PHIO	PHIC	BETAO	BETAC	ALPHAC	GRADIENT
.00070	.00070	.04073	.18416	-9.48584	-.01931	-.02355	.141	.29863
.00110	.00102	.02980	.17686	.71430	-.02549	-.03009	2.414	.36331
.00086	.00081	.02073	.18466	.43641	-.03304	-.03349	4.401	.43228
.00087	.00003	-.00440	-.00003	2.26917	-.00299	-.00221	GRADIENT	-.02924

CLN	CSL	CA	PHIO	PHIC	BETAO	BETAC	ALPHAC	GRADIENT
.00079	.00079	.04130	.22804	-62.46180	-.02440	-.02608	.014	.29959
.00108	.00097	.03037	.28148	.65368	-.04108	-.02807	2.461	.36906
.00104	.00082	.02036	.17167	.47049	-.03121	-.03685	4.492	.44943
.00076	.00001	-.00464	-.01129	14.38136	-.00170	-.00233	GRADIENT	-.03307

CLN	CSL	CA	PHIO	PHIC	BETAO	BETAC	ALPHAC	GRADIENT
.00085	.00085	.04332	.29506	-40.44000	-.03133	-.02407	.028	.29558
.00109	.00107	.03154	.29463	.74080	-.04291	-.03165	2.464	.38058
.00098	.00108	.02249	.17718	.51892	-.03159	-.03897	4.206	.45776
.00064	.00006	-.00480	-.02565	9.85305	-.00032	-.00342	GRADIENT	-.03699

ARC 14-120(CA238) 747/1 ATI 0251 (ORBITER DATA)

(DNH008) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 86/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
44.873	-.065	-.02757	-23.10330	.22277	.04486	.29396	-.00076	.00100
44.666	2.496	-.03315	.76090	.16089	.03257	.38642	-.00101	.00086
45.029	4.342	-.03517	.46448	.10662	.02274	.47677	-.00104	.00057
	GRADIENT	-.00175	5.59553	-.02622	-.00500	.04115	-.00006	-.00009

RUN NO. 87/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
50.039	-.106	-.02787	-14.70380	.15753	.04512	.29349	-.00083	.00094
50.412	2.490	-.03319	.76395	.19650	.03274	.39006	-.00076	.00091
50.166	4.334	-.03850	.50951	.12637	.02314	.47594	-.00083	.00051
	GRADIENT	-.00237	3.59220	-.00558	-.00494	.04084	.00000	-.00009

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

ARC 14-120(CA238) 747/1 ATI 0251 (ORBITER DATA)

(DNH009) (08 OCT 75)

RUN NO. 91/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
8.075	.274	-.02879	5.99245	.19735	.02290	.45079	-.00068	.00084
7.276	2.380	-.03042	.73241	.16196	.01793	.47805	-.00039	.00067
7.800	4.334	-.03350	.44328	.10141	.00968	.55909	-.00073	-.00007
	GRADIENT	-.00116	-1.38154	-.02354	-.00324	.02650	-.00001	-.00022

RUN NO. 92/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
9.930	-.015	-.02295	-57.20780	.21687	.02827	.40271	-.00087	.00102
10.158	2.498	-.03277	.75188	.21172	.01788	.48241	-.00060	.00076
9.843	4.339	-.03474	.45919	.10044	.01014	.56336	-.00071	-.00011
	GRADIENT	-.00278	13.82212	-.02529	-.00416	.03659	.00004	-.00025

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.002
 RUDDER = .000 ELEVON = 5.002
 TORB = 8.000 DX = .002
 DY = .000 MACH = .603

RUN NO. 93/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.862	-.027	-.02177	-.03827	-12.10710	.27336	.02986	.39523	-.00093	.00081
14.490	2.534	-.03046	-.02906	.68879	.16081	.01861	.48206	-.00088	.00052
15.108	4.322	-.03437	-.02133	.45608	.09991	.01106	.56879	-.00080	-.00019
GRADIENT	-.00288	.00380	2.99138	-.03947	-.00425	.03876	.00003	-.00022	

RUN NO. 94/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.926	-.027	-.02424	-.02110	-42.27900	.14975	.03117	.40021	-.00116	-.00084
29.957	2.539	-.03487	-.03376	.78716	.18566	.01981	.49878	-.00097	.00038
29.720	4.365	-.04212	-.01885	.55338	.08835	.01260	.59425	-.00064	-.00035
GRADIENT	-.00408	.00016	10.21075	-.01216	-.00424	.04381	.00012	-.00026	

RUN NO. 95/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.465	-.192	-.02338	-.01754	-6.94078	.12774	.03408	.38564	-.00107	.00092
44.798	2.406	-.03033	-.03095	.72242	.17258	.02155	.49517	-.00089	.00034
44.826	4.485	-.03926	-.02844	.50205	.13191	.01315	.61541	-.00083	-.00026
GRADIENT	-.00337	-.00245	1.64707	.00156	-.00449	.04884	.00005	-.00025	

RUN NO. 96/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
50.555	-.078	-.03005	-.02435	-20.97440	.17333	.03303	.39818	-.00111	.00089
50.407	2.550	-.03265	-.02537	.73404	.13939	.02062	.50829	-.00102	.00023
50.452	4.393	-.04020	-.02682	.52481	.12503	.01357	.61452	-.00074	-.00047
GRADIENT	-.00218	-.00054	5.04293	-.01095	-.00438	.04794	.00008	-.00030	

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ARC 14-120(CA238) 747/1 AT1 0251 (ORBITER DATA)

(DNH010) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 101/ 0 RN/L = 3.39 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
6.742	.132	-.03786	-.08097	15.98680	.58112	.02829	.40582	-.00099	.00103
7.349	2.303	-.04006	-.08924	.99677	.50184	.01814	.48704	-.00094	.00053
7.463	4.270	-.03935	-.08411	.52838	.39704	.01076	.56921	-.00075	-.00020
	GRADIENT	-.00037	-.00081	-3.79022	-.04435	-.00424	.03945	.00006	-.00030

RUN NO. 102/ 0 RN/L = 3.38 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
10.009	-.206	-.03319	-.03516	-9.14115	.25384	.02923	.40472	-.00095	.00100
10.088	2.335	-.04042	-.03365	.99200	.18864	.01834	.49169	-.00060	.00056
10.447	4.346	-.03977	-.04055	.52480	.18940	.01117	.58229	-.00055	-.00041
	GRADIENT	-.00151	-.00111	2.20373	-.01465	-.00398	.03880	.00009	-.00030

RUN NO. 103/ 0 RN/L = 3.37 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
15.028	-.178	-.03442	-.03806	-10.91640	.27412	.02949	.40706	-.00112	.00089
14.812	2.367	-.03607	-.03222	.87350	.18060	.01914	.49209	-.00092	.00044
15.043	4.381	-.03720	-.02935	.48698	.13707	.01176	.58673	-.00094	-.00033
	GRADIENT	-.00061	-.00193	2.59261	-.03034	-.00390	.03914	.00004	-.00026

RUN NO. 104/ 0 RN/L = 3.36 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.734	-.108	-.03396	-.02025	-17.50900	.14541	.03104	.40782	-.00119	.00082
30.254	2.360	-.03978	-.02508	.96584	.13985	.01981	.50881	-.00096	.00024
29.860	4.407	-.04015	-.02305	.52247	.10761	.01308	.60720	-.00078	-.00039
	GRADIENT	-.00140	-.00067	4.11272	-.00816	-.00400	.04405	.00009	-.00027

RUN NO. 105/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.868	-.111	-.03296	-.03145	-16.47020	.22554	.03188	.40758	-.00120	.00082
45.183	2.422	-.03866	-.03268	.91470	.18116	.01993	.52122	-.00072	.00022
45.129	4.429	-.03932	-.02344	.50917	.10897	.01367	.62324	-.00102	-.00027
	GRADIENT	-.00144	-.00167	3.87374	-.02532	-.00404	.04739	.00005	-.00024

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO IORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = -.000 MACH = .600

RUN NO. 106/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHA AC BETA AC PH10 CA CN CSL CLN
 DZ .076 .03425 .03157 -24.19930 .22512 .40721 .00107 .00084
 50.418 -.076 -.03425 .03157 -24.19930 .22512 .40721 .00107 .00084
 50.480 2.472 -.03651 .04657 .13458 .51901 .00079 .00024
 50.477 4.415 -.04021 .01688 .52230 .62856 .00081 .00033
 GRADIENT -.00131 .00325 5.72305 -.03278 -.00419 .04901 .00006 -.00026

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = -1.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO IORB = 4.000 DX = .000
 SCALE = .0125 GRADIENT = -.000 MACH = .600

RUN NO. 111/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHA AC BETA AC PH10 CA CN CSL CLN
 DZ .047 .02341 .11075 26.60780 1.58291 .18739 .00063 .00108
 3.118 2.270 .03080 .77746 1.02370 .24792 .00043 .00116
 3.528 4.264 .03447 .10860 .46360 .31069 .00055 .00101
 GRADIENT -.00264 .00051 -6.30222 -.19622 -.00409 .02920 .00002 -.00001

RUN NO. 112/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHA AC BETA AC PH10 CA CN CSL CLN
 DZ .170 .02451 .11970 -8.21007 1.69918 .19935 .00060 .00123
 7.199 2.385 .03117 .10988 .74906 .25843 .00070 .00115
 7.175 4.257 .03785 .50986 .81416 .31628 .00066 .00125
 GRADIENT -.00299 .00105 2.06044 -.20407 -.00380 .02622 .00002 .00000

RUN NO. 113/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHA AC BETA AC PH10 CA CN CSL CLN
 DZ .120 .02656 .11596 -12.50350 1.64035 .19967 .00072 .00128
 9.781 2.353 .03276 .79807 1.03445 .26129 .00067 .00123
 9.491 4.419 .03856 .50052 .77832 .32235 .00079 .00116
 GRADIENT -.00264 .00073 2.94672 -.19172 -.00390 .02686 .00001 -.00003

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(DNH011) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 114/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.874	-.041	-.03158	-.11731	-37.75920	1.61977	.04944	.20441	-.00081	.00137
14.967	2.414	-.03386	-.11444	.80362	1.03828	.04077	.26890	-.00067	.00137
14.923	4.392	-.03861	-.11849	.50413	.81656	.03107	.33371	-.00080	.00120
GRADIENT		-.00156	-.00021	8.91129	-.18339	-.00412	.02905	.00000	-.00004

RUN NO. 115/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.907	-.177	-.02656	-.11781	-8.53365	1.68668	.05145	.19895	-.00098	.00127
29.803	2.432	-.03132	-.10938	.73812	.99348	.04271	.27909	-.00086	.00111
29.693	4.435	-.04008	-.11499	.51832	.79100	.03186	.35546	-.00101	.00120
GRADIENT		-.00288	.00074	2.04115	-.19773	-.00420	.03378	-.00000	-.00002

RUN NO. 116/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.786	-.134	-.02629	-.10711	-11.09150	1.52576	.05283	.19869	-.00093	.00114
45.057	2.347	-.03335	-.10582	.81448	.96551	.04318	.29112	-.00081	.00111
44.452	4.450	-.03876	-.11672	.49958	.80359	.03225	.37378	-.00095	.00111
GRADIENT		-.00272	-.00202	2.59569	-.15955	-.00447	.03816	-.00000	-.00001

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 6.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(DNH012) (08 OCT 75)

RUN NO. 121/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
3.209	.038	-.02403	-.11185	32.59070	1.07055	.03871	.29777	-.00049	.00125
3.176	2.411	-.02869	-.11753	.68203	.81762	.02821	.35714	-.00053	.00113
3.398	4.319	-.03801	-.10642	.50466	.59669	.01896	.42699	-.00056	.00086
GRADIENT		-.00321	.00112	-7.73165	-.11051	-.00461	.02997	-.00002	-.00009

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 122/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
DZ 7.586	-02811	-11292	-47.68789	1.05177	.03786	.31091	-00069	.00131
7.752	-03271	-11194	.78115	.77121	.02799	.36978	-00083	.00135
7.261	-03798	-09920	.48964	.55069	.01865	.43761	-00095	.00104
GRADIENT	-00220	.00299	11.04783	-1.1211	-.00429	.02820	-00006	-.00006

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (DNH013) (08 OCT 75)

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 131/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
DZ 3.093	-01363	-10041	6.10814	.95072	.03942	.30455	-00033	.00106
3.006	-02297	-10209	.58365	.72488	.02998	.35773	-00024	.00113
3.460	-02211	-08994	.29224	.50356	.01970	.43122	-00033	.00084
GRADIENT	-00202	.00247	-1.38557	-1.10619	-.00468	.03006	-00000	-.00005

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

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ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(DNH013) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 133/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
10.116	-.237	-.01706	-.10377	-4.11140	.98648	.04054	.30512	-.00047	.00128
9.960	2.407	-.01882	-.08719	.44820	.60332	.02930	.36931	-.00056	.00101
9.890	4.371	-.02200	-.08783	.28959	.49039	.01957	.44241	-.00058	.00085
	GRADIENT	-.00105	.00362	.99792	-.11200	-.00453	.02948	-.00003	-.00010

RUN NO. 134/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
15.175	-.191	-.02211	-.09798	-6.58827	.93377	.04096	.30505	-.00056	.00110
14.756	2.411	-.02076	-.09538	.49354	.66058	.03035	.37125	-.00059	.00099
15.038	4.441	-.02383	-.09119	.30774	.50485	.01978	.45062	-.00077	.00073
	GRADIENT	-.00033	.00144	1.54547	-.09317	-.00455	.03115	-.00004	-.00008

RUN NO. 135/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
30.192	-.063	-.02869	-.09840	-24.55400	.92147	.04181	.30896	-.00089	.00109
29.830	2.435	-.03091	-.09207	.72761	.63439	.03084	.38496	-.00083	.00096
29.948	4.393	-.03562	-.09852	.46506	.54824	.02070	.46762	-.00085	.00080
	GRADIENT	-.00152	.00009	5.81839	-.08517	-.00472	.03538	.00001	-.00007

RUN NO. 136/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.708	-.049	-.02818	-.08807	-30.15350	.83074	.04304	.30498	-.00057	.00103
44.452	2.450	-.03322	-.09149	.77706	.63200	.03145	.38833	-.00077	.00095
44.667	4.474	-.03625	-.08813	.46476	.48762	.02096	.48100	-.00067	.00057
	GRADIENT	-.00179	-.00007	6.98692	-.07602	-.00487	.03871	-.00003	-.00010

RUN NO. 137/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
50.164	-.057	-.02860	-.09393	-26.61570	.88566	.04393	.30334	-.00053	.00103
50.275	2.433	-.03271	-.09205	.77048	.63379	.03227	.39244	-.00051	.00095
50.038	4.464	-.03731	-.08744	.47934	.48464	.02125	.48705	-.00044	.00055
	GRADIENT	-.00192	.00141	6.17858	-.08916	-.00500	.04045	.00002	-.00010

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(DNH014) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 141/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
3.324	2.292	-.01280	-.06053	.31988	.42703	.03046	.35828	-.00004	.00119
3.528	4.239	-.01529	-.05714	.20685	.32308	.02145	.42005	-.00027	.00098
	GRADIENT	-.00128	.00174	-.05808	-.05341	-.00463	.03174	-.00012	-.00011

RUN NO. 142/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.340	1.933	-.01416	-.06404	.41998	.45795	.03037	.36614	-.00033	.00117
7.097	4.300	-.01526	-.06314	.20349	.35723	.02096	.42883	-.00038	.00094
	GRADIENT	-.00046	.00038	-.09144	-.04254	-.00398	.02648	-.00002	-.00009

RUN NO. 143/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
10.137	1.946	-.00951	-.05199	.28014	.36992	.03059	.36776	-.00049	.00105
9.825	4.403	-.01435	-.05694	.18696	.31845	.02066	.43485	-.00041	.00089
	GRADIENT	-.00197	-.00202	-.03792	-.02095	-.00404	.02731	.00003	-.00006

RUN NO. 144/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.831	1.968	-.01610	-.06263	.46894	.44604	.03144	.36913	-.00036	.00107
14.775	4.376	-.02033	-.05095	.26641	.28556	.02127	.44243	-.00058	.00086
	GRADIENT	-.00175	.00485	-.08412	-.06665	-.00423	.03045	-.00009	-.00009

RUN NO. 145/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
30.007	1.997	-.02870	-.06409	.82332	.45433	.03195	.38204	-.00069	.00103
29.873	4.392	-.03153	-.04940	.41164	.27580	.02099	.46704	-.00088	.00070
	GRADIENT	-.00118	.00613	-.17169	-.07454	-.00458	.03549	-.00008	-.00014

RUN NO. 146/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.854	1.998	-.02928	-.06037	.83988	.42896	.03264	.38349	-.00056	.00111
44.891	4.430	-.03316	-.05230	.42924	.29070	.02066	.48689	-.00071	.00051
	GRADIENT	-.00159	.00332	-.16883	-.05684	-.00492	.04251	-.00006	-.00024

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(DNH014) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 147/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
50.387	2.049	-0.3183	-0.0552	.89046	.39168	.03246	.39160	-0.00057	.00078
50.182	4.431	-0.03343	-0.05247	.43278	.29200	.02102	.48446	-0.00051	.00056
	GRADIENT	-0.00067	.00128	-.19214	-.04185	-.00480	.03698	.00003	-.00009

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(DNH015) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 151/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.261	2.410	-0.01539	-0.0552	.36584	.31121	.01860	.47831	-0.00036	.00074
7.540	4.362	-0.02184	-0.05594	.28710	.26196	.00962	.55854	-0.00015	.00004
	GRADIENT	-0.00330	-0.00021	-.04035	-.02523	-.00461	.04111	.00011	-.00036

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 152/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
9.896	2.043	-0.01620	-0.05238	.45446	.29782	.01867	.48229	-0.00041	.00079
10.215	4.469	-0.02110	-0.05759	.27085	.26759	.00951	.57226	-0.00045	-.00003
	GRADIENT	-0.00202	-0.00215	-.07571	-.01246	-.00378	.03710	-.00002	-.00034

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 153/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.806	2.079	-0.02047	-0.04574	.56414	.25921	.01914	.48734	-0.00065	.00063
14.750	4.497	-0.02265	-0.04780	.28886	.22228	.01023	.58194	-0.00032	-.00030
	GRADIENT	-0.00090	-0.00085	-.11388	-.01528	-.00368	.03913	.00014	-.00039

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 154/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
30.131	2.049	-0.03036	-0.05990	.84898	.33936	.02003	.50434	-0.00068	.00051
30.087	4.493	-0.03550	-0.05189	.45306	.24052	.01143	.60916	-0.00031	-.00032
	GRADIENT	-0.00210	-0.00328	-.16197	-.04044	-.00352	.04288	.00015	-.00034

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO IORB = 8.000 DX = 10.000
 SCALE = .0125 GRADIENT = -.00136

RUN NO. 155/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
2.044	-.03319	.93043	.26416	.02079	.50263	-.00088	.00037
44.833	-.03648	.46906	.23069	.01201	.62177	-.00039	-.00017
45.102	-.00136	-.19100	-.01386	-.00363	.04932	.00020	-.00022

RUN NO. 156/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
2.016	-.03450	.98066	.26268	.02091	.50562	-.00062	.00036
4.375	-.03719	.48742	.23415	.01240	.62291	-.00026	-.00040
50.292	-.00114	-.20906	-.01210	-.00361	.04972	.00015	-.00032

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO IORB = 6.000 DX = 20.000
 SCALE = .0125 GRADIENT = -.00623

RUN NO. 161/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
2.461	-.01182	.27527	.23156	.03289	.36105	-.00023	.00113
4.340	-.01773	.23431	.25269	.02369	.42262	-.00038	.00098
3.241	-.00315	-.02180	.01125	-.00490	.03278	-.00008	-.00008

RUN NO. 162/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
2.024	-.01557	.44088	.27945	.03242	.36709	-.00048	.00129
4.482	-.01969	.25198	.21856	.02239	.43402	-.00061	.00109
7.110	-.00168	-.07683	-.02473	-.00408	.02722	-.00005	-.00008

RUN NO. 163/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
1.989	-.01433	.41286	.29275	.03231	.36972	-.00056	.00114
4.485	-.02025	.25891	.20939	.02269	.43416	-.00065	.00099
9.502	-.00237	-.06168	-.03340	-.00385	.02582	-.00004	-.00006

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITER DATA)

(DNH016) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

RUN NO. 154/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.885	2.147	-0.1853	-0.3531	.49453	.24571	.03153	.37800	-0.00066	.00112
14.669	4.296	-0.02454	-0.04432	.32759	.25025	.02268	.44005	-0.00088	.00088
	GRADIENT	-0.00280	-0.00419	-0.07770	.00211	-0.00412	.02888	-0.00010	-0.00011

RUN NO. 155/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.970	2.006	-0.02941	-0.03728	.83991	.26398	.03222	.38230	-0.00098	.00109
29.738	4.442	-0.03310	-0.02971	.42727	.16541	.02171	.46542	-0.00079	.00077
	GRADIENT	-0.00151	.00311	-0.16939	-0.04046	-0.00431	.03412	.00008	-0.00013

RUN NO. 156/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.740	2.001	-0.03180	-0.04071	.91065	.28957	.03277	.38518	-0.00076	.00099
44.620	4.440	-0.03674	-0.03905	.47457	.21740	.02127	.48116	-0.00097	.00066
	GRADIENT	-0.00202	.00068	-0.17881	-0.02959	-0.00471	.03936	-0.00009	-0.00014

RUN NO. 167/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
50.218	1.983	-0.03094	-0.03538	.89420	.25207	.03334	.38451	-0.00071	.00103
50.509	4.478	-0.03710	-0.03895	.47518	.21516	.02128	.48701	-0.00088	.00059
	GRADIENT	-0.00247	-0.00143	-0.16791	-0.01479	-0.00483	.04107	-0.00007	-0.00018

(DNH017) (08 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

RUN NO. 171/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
7.409	2.320	-.02250	.55574	.29786	.02051	.47382	-.00078	.00077
7.682	4.409	-.02964	.38562	.17796	.01073	.55741	-.00033	-.00004
	GRADIENT	-.00342	-.08146	-.05741	-.00468	.04002	.00022	-.00039

RUN NO. 172/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
10.200	1.989	-.02424	.69824	.25469	.02029	.48058	-.00071	.00081
9.876	4.367	-.02801	.36783	.20389	.01137	.58663	-.00061	-.00008
	GRADIENT	-.00159	-.13896	-.02136	-.00375	.03282	.00004	-.00037

RUN NO. 173/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
14.980	2.042	-.02756	.77345	.25118	.02039	.48257	-.00109	.00075
14.840	4.390	-.02838	.37080	.19334	.01138	.56674	-.00070	-.00012
	GRADIENT	-.00035	-.17151	-.02464	-.00384	.03585	.00016	-.00037

RUN NO. 174/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
30.168	1.994	-.03417	.98158	.22154	.02104	.49286	-.00091	.00067
29.810	4.397	-.04190	.54644	.23681	.01199	.59560	-.00086	-.00023
	GRADIENT	-.00322	-.18111	.00636	-.00376	.04276	.00002	-.00038

RUN NO. 175/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
44.854	2.109	-.03555	.96560	.21860	.02053	.50440	-.00085	.00028
45.244	4.417	-.04035	.52387	.20806	.01218	.61672	-.00095	-.00023
	GRADIENT	-.00208	-.19141	-.00457	-.00362	.04867	-.00004	-.00022

RUN NO. 176/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
50.344	2.118	-.03598	.97366	.20281	.02116	.50254	-.00082	.00044
50.595	4.352	-.03800	.50080	.19570	.01263	.61458	-.00081	-.00023
	GRADIENT	-.00090	-.21167	-.00319	-.00382	.05016	.00000	-.00030

REPRODUCED FROM ORIGINAL DATA

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

(DNH018) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LOFB = 6.000 DX = .000
 DY = 10.000 MACH = .600

RUN NO. 181/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
3.378	2.472	-.05330	-0.4653	1.23581	.32090	.02798	.37197	-.00392	.00017
3.590	4.405	-0.4626	-0.3533	.60218	.19618	.01811	.43960	-.00661	.00021
	GRADIENT	.00364	.00579	-.32765	-.06449	-.00511	.03497	-.00139	.00002

RUN NO. 182/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
7.711	2.009	-0.4982	-0.3557	1.42106	.25146	.02932	.37676	-.00295	.00029
7.202	4.378	-0.3609	-0.4085	.47278	.22910	.01901	.44424	-.00526	.00027
	GRADIENT	.00579	.00223	-.40024	-.00944	-.00435	.02848	-.00098	-.00001

RUN NO. 183/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
9.911	2.005	-0.4669	-0.4412	1.33418	.31295	.02980	.37558	-.00293	.00049
10.102	4.475	-0.2745	-0.2597	.35177	.14366	.01862	.45564	-.00484	.00012
	GRADIENT	.00779	.00735	-.39775	-.06854	-.00453	.03241	-.00077	-.00015

RUN NO. 184/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
14.973	2.102	-0.3302	-0.3984	.90033	.27916	.03002	.38091	-.00280	.00063
14.736	4.362	-0.1495	-0.3269	.19656	.18330	.01983	.45554	-.00396	.00028
	GRADIENT	.00799	.00316	-.31129	-.04240	-.00451	.03301	-.00051	-.00015

RUN NO. 185/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
29.716	2.100	-0.0154	-0.4508	.04202	.31743	.03183	.38424	-.00201	.00084
29.761	4.335	-0.1266	-0.4340	-.16756	.24384	.02144	.46976	-.00273	.00043
	GRADIENT	.00636	.00075	-.09378	-.03293	-.00465	.03827	-.00032	-.00018

RUN NO. 186/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
44.733	1.972	-0.0480	-0.4216	.13937	.30126	.03319	.38695	-.00153	.00091
44.856	4.308	-0.0046	-0.3500	-.00608	.19684	.02192	.48335	-.00192	.00047
	GRADIENT	.00225	.00307	-.06227	-.04470	-.00482	.04127	-.00017	-.00019

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .00159 -.00166 -.00189 -.002189 .04435 MACH = 10.000 DY = .600

RUN NO. 187/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC 2.021 ALPHAC 2.021
 BETAC -.01038 BETAC -.01038
 BETAO -.04737 BETAO -.04737
 PHIC .29428 PHIC .29428
 PHIO .33765 PHIO .33765
 CA .02139 CA .02139
 CLN .00093 CLN .00093
 CSL -.00128 CSL -.00128
 CSCL -.00171 CSCL -.00171
 GRADIENT .00159 .00166 .00189 .002189 .04435

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .00159 -.00166 -.00189 -.002189 .04435 MACH = 10.000 DY = .600

RUN NO. 191/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC 2.405 ALPHAC 2.405
 BETAC -.03781 BETAC -.03781
 BETAO -.03168 BETAO -.03168
 PHIC .90077 PHIC .90077
 PHIO .17717 PHIO .17717
 CA .01696 CA .01696
 CLN .49339 CLN .49339
 CSL -.00392 CSL -.00392
 CSCL -.00558 CSCL -.00558
 GRADIENT .01106 .00320 .00320 .00320 .04405

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .00159 -.00166 -.00189 -.002189 .04435 MACH = 10.000 DY = .600

RUN NO. 192/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC 2.116 ALPHAC 2.116
 BETAC -.03372 BETAC -.03372
 BETAO -.02745 BETAO -.02745
 PHIC .91320 PHIC .91320
 PHIO .15535 PHIO .15535
 CA .01732 CA .01732
 CLN .49501 CLN .49501
 CSL -.00339 CSL -.00339
 CSCL -.00479 CSCL -.00479
 GRADIENT .01076 .00226 .00226 .00226 .03642

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .00159 -.00166 -.00189 -.002189 .04435 MACH = 10.000 DY = .600

RUN NO. 194/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC 2.014 ALPHAC 2.014
 BETAC .01179 BETAC .01179
 BETAO -.02737 BETAO -.02737
 PHIC -.33535 PHIC -.33535
 PHIO .15917 PHIO .15917
 CA .02040 CA .02040
 CLN .49778 CLN .49778
 CSL -.00175 CSL -.00175
 CSCL -.00217 CSCL -.00217
 GRADIENT .00781 .00143 .00143 .00143 .04698

ORIGINAL PAGE IS
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ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(DNH019) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 195/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ 44.421
 45.079
 ALPHAC 2.014
 4.380
 GRADIENT .00668
 .00110
 BETAC .00407
 .00668
 .00110
 BETA0 -.03615
 -.03124
 .00208
 PHIC -.11587
 .20762
 .14588
 .01199
 PHIO .02121
 .01280
 -.00355
 CA .02121
 .01280
 -.00355
 CN .50064
 .62381
 .05205

RUN NO. 196/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ 50.290
 50.279
 ALPHAC 2.002
 4.323
 GRADIENT .00131
 .00061
 .00030
 BETAC -.00131
 -.00061
 .00030
 BETA0 -.04085
 -.02055
 .00874
 PHIC .03751
 .00815
 -.01264
 PHIO .23372
 .09665
 -.05904
 CA .02118
 .01332
 -.00338
 CN .50443
 .62171
 .05051

PARAMETRIC DATA

BETA = .000
 RUDDER = .000
 LORB = 8.000
 DY = 10.000
 STAB = 5.000
 ELEVON = 5.000
 DX = .000
 MACH = .600

CSL .000152
 -.00158
 -.00003
 -.00014
 CLN .00035
 .00002
 -.00014

CSL .00109
 -.00145
 -.00016
 -.00026
 CLN .00035
 -.00024
 -.00026

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(DNH020) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ 2.999
 2.972
 3.376
 ALPHAC .056
 2.231
 4.258
 GRADIENT .02828
 -.03056
 -.03382
 -.00132
 BETAC -.02828
 -.03056
 -.03382
 -.00132
 BETA0 -.08876
 -.06736
 -.09060
 .00031
 PHIC 26.67240
 .78482
 .45546
 -6.30867
 PHIO 1.27147
 .63585
 .63611
 -.15293
 CA .04686
 .03850
 .02932
 -.00417
 CN .11551
 .17505
 .23611
 .02869

PARAMETRIC DATA

BETA = .000
 RUDDER = .000
 LORB = 4.000
 DY = .000
 STAB = 5.000
 ELEVON = .000
 DX = .000
 MACH = .600

CSL -.00102
 -.00115
 -.00085
 .00004
 .00004
 CLN .00082
 .00092
 .00098
 .00004

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ 7.356
 7.305
 7.176
 ALPHAC -.232
 2.422
 4.286
 GRADIENT -.02757
 -.03173
 -.03467
 -.00157
 BETAC -.02757
 -.03173
 -.03467
 -.00157
 BETA0 -.06478
 -.07644
 -.07960
 .00336
 PHIC -6.78415
 .75071
 .46391
 1.68783
 PHIO .93772
 .69653
 .55830
 -.08444
 CA .04713
 .03946
 .02923
 -.00392
 CN .11998
 .18089
 .24151
 .02663

CSL -.00113
 -.00109
 -.00106
 .00002
 .00002
 CLN .00082
 .00097
 .00098
 .00004

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORR = 4.000 DX = .000
 DY = .000 MACH = .600

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
9.998	-.190	-.03105	-.07750	-9.30004	1.10478	.04744	.12146	-.00134	.00101
9.822	2.393	-.03424	-.08742	.81997	.79993	.03838	.18730	-.00132	.00105
9.715	4.416	-.03357	-.07630	.43602	.52700	.02907	.24615	-.00094	.00110
	GRADIENT	-.00058	.00008	2.19562	-.12512	-.00397	.02700	.00008	.00002

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.608	-.076	-.02818	-.07640	-20.23330	1.07213	.04749	.12499	-.00149	.00090
14.941	2.433	-.03134	-.07495	.73837	.67795	.03879	.19292	-.00126	.00097
14.567	4.425	-.03172	-.07672	.41119	.52958	.02933	.25573	-.00103	.00092
	GRADIENT	-.00081	-.00004	4.74688	-.12209	-.00401	.02896	.00010	.00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.742	-.160	-.03287	-.07696	-11.64240	1.10106	.04946	.12024	-.00160	.00085
29.812	2.421	-.03327	-.07190	.78744	.65328	.04017	.20333	-.00138	.00078
29.770	4.475	-.03485	-.07954	.44661	.54419	.02959	.27614	-.00142	.00083
	GRADIENT	-.00041	-.00045	2.70131	-.12240	-.00426	.03358	.00004	-.00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.518	-.106	-.03181	-.07540	-16.70720	1.07283	.05005	.11990	-.00142	.00081
44.662	2.474	-.03453	-.07541	.80009	.67953	.04036	.21261	-.00147	.00081
44.473	4.486	-.03660	-.06670	.46734	.45726	.02958	.29126	-.00135	.00076
	GRADIENT	-.00104	.00181	3.88044	-.13490	-.00443	.03725	.00001	-.00001

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITER DATA)

(DNH021) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 IORB = 4.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 211/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
3.110	.173	-.02110	-.09381	6.95086	1.29997	.04480	.11437	-.00100	.00088
3.078	2.255	-.03101	-.09682	.78797	.90716	.03725	.18872	-.00102	.00098
3.099	4.353	-.03504	-.10020	.46166	.69789	.02781	.23373	-.00090	.00088
GRADIENT	-.00333	-.00153	-.00153	-1.55055	-.14397	-.00407	.02856	.00002	-.00000

RUN NO. 212/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.673	-.126	-.02421	-.09799	-10.84500	1.37286	.04544	.11889	-.00124	.00101
7.105	2.399	-.03109	-.10688	.74259	.98064	.03721	.17505	-.00103	.00094
7.181	4.356	-.03397	-.10016	.44740	.69583	.02776	.23911	-.00106	.00088
GRADIENT	-.00220	-.00063	-.00063	2.61793	-.15128	-.00391	.02661	.00004	-.00003

RUN NO. 213/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
9.888	-.253	-.02234	-.10311	-5.03962	1.50123	.04637	.11227	-.00127	.00088
10.133	2.398	-.03044	-.09252	.72762	.84124	.03707	.18204	-.00111	.00105
9.989	4.413	-.03202	-.09419	.41610	.64781	.02758	.24614	-.00111	.00077
GRADIENT	-.00212	-.00202	.00202	1.22074	-.18627	-.00400	.02857	.00004	-.00002

RUN NO. 214/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.808	-.052	-.02282	-.09691	-23.82030	1.34952	.04610	.12319	-.00157	.00088
14.795	2.452	-.02740	-.09118	.64047	.82381	.03756	.18825	-.00124	.00088
14.846	4.403	-.03224	-.10412	.41987	.71611	.02809	.25380	-.00105	.00085
GRADIENT	-.00210	-.00144	-.00144	5.64106	-.14531	-.00401	.02916	.00012	-.00001

RUN NO. 215/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.743	-.137	-.02376	-.09264	-9.85063	1.32218	.04809	.12087	-.00139	.00081
29.755	2.487	-.03203	-.08775	.73818	.79014	.03875	.20160	-.00149	.00086
29.747	4.402	-.03376	-.08901	.43980	.61393	.02909	.27182	-.00117	.00082
GRADIENT	-.00226	-.00086	.00086	2.37265	-.15883	-.00415	.03311	.00004	-.00000

DATE 22 MAR 76

TABULATED SOURCE DATA - CA23B

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ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA)

(DNH021) (08 OCT 75)

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = -1.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO IORB = .000 DX = .000
 SCALE = .0125 GRADIENT = .000 MACH = .600

RUN NO. 216/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.609	-1.14	-0.1992	-0.8265	-9.94199	1.17747	.04928	.12097	-0.0126	.00070
44.499	2.547	-0.3157	-0.08404	.71032	.75098	.03882	.21684	-0.0146	.00076
44.744	4.315	-0.33304	-0.09687	.43911	.67385	.02960	.28416	-0.0102	.00080
GRADIENT		-0.00308	-0.00299	2.476.5	-1.1742	-0.00440	.03678	.00004	.00002

ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA)

(DNH022) (08 OCT 75)

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO IORB = .000 DX = .000
 SCALE = .0125 GRADIENT = .000 MACH = .600

RUN NO. 221/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.175	.180	-0.1798	-0.09385	5.69209	.66443	.02374	.32685	-0.0121	.00077
7.048	2.374	-0.1994	-0.08436	.48131	.47319	.01345	.39939	-0.0109	.00062
7.827	4.374	-0.2165	-0.08149	.28389	.38018	.00483	.48740	-0.0090	-0.0019
GRADIENT		-0.00088	.00297	-1.30708	-0.6809	-0.00451	.03820	.00008	-0.00023

RUN NO. 222/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
10.008	-0.095	-0.1987	-0.08749	-11.78550	.62331	.02437	.33226	-0.0131	.00086
9.794	2.462	-0.2395	-0.09099	.55746	.50567	.01412	.40375	-0.0141	.00061
10.168	4.329	-0.2393	-0.08578	.31698	.40184	.00547	.49095	-0.0114	-0.00021
GRADIENT		-0.00096	.00028	2.85990	-.04981	-0.00425	.03539	.00003	-0.00023

RUN NO. 223/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.875	-0.131	-0.1561	-0.07815	-6.77832	.56064	.02549	.32502	-0.0141	.00065
15.107	2.479	-0.2126	-0.08579	.49153	.47415	.01372	.41064	-0.0127	.00046
14.650	4.467	-0.2519	-0.08632	.32336	.40184	.00590	.49829	-0.0114	.00002
GRADIENT		-0.00209	-0.00184	1.60755	-.03446	-0.00427	.03743	.00006	-0.00013

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITER DATA)

(DNH022) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 224/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.663	-1.130	-0.02533	-0.09274	-10.98930	.66773	.02690	.32475	-.00143	.00071
30.014	2.540	-0.02959	-0.09038	.66761	.49726	.01443	.42183	-.00169	.00045
30.212	4.360	-0.03194	-0.08373	.42012	.39081	.00728	.52093	-.00122	-.00014
GRADIENT	-.00148	.00192	2.67627	-.06183	-.00439	.04314	-.00004	-.00006	-.00018

RUN NO. 225/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.608	-.097	-0.02843	-0.08365	-16.30560	.60103	.02803	.32186	-.00145	.00069
44.758	2.520	-0.03315	-0.07930	.75396	.43776	.01497	.42688	-.00140	.00036
44.921	4.300	-0.03688	-0.08637	.49188	.40592	.00791	.52934	-.00117	-.00010
GRADIENT	-.00191	.00045	4.02113	-.04571	-.00460	.04666	-.00006	-.00006	-.00018

RUN NO. 226/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
50.329	-.122	-0.02932	-0.08725	-13.55440	.62610	.02823	.32111	-.00134	.00082
50.199	2.456	-0.03269	-0.07606	.76282	.42225	.01575	.42298	-.00137	.00038
50.308	4.443	-0.03733	-0.09256	.48180	.43064	.00779	.53614	-.00121	.00001
GRADIENT	-.00173	.00090	3.19488	-.04458	-.00451	.04674	-.00003	-.00003	-.00018

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITER DATA)

(DNH023) (08 OCT 75)

RUN NO. 231/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
3.160	.028	-0.01846	-0.08306	33.32190	.79878	.03609	.25445	-.00078	.00085
3.398	2.478	-0.02078	-0.07840	.48052	.53695	.02523	.28941	-.00095	.00082
3.235	4.342	-0.02437	-0.07307	.32189	.40989	.01598	.34827	-.00120	.00079
GRADIENT	-.00135	.00230	-7.94312	-.09099	-.00465	.02835	-.00010	-.00010	-.00002

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITER DATA)

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA
 BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
DZ	7.044	-.01844	-6.67827	.77814	.03625	.22953	-.00108	.00087
9.588	2.438	-.02027	.47652	.58519	.02543	.28950	-.00101	.00078
9.981	4.444	-.02161	.27892	.42297	.01594	.35254	-.00142	.00061
9.714	GRADIENT	-.00069	1.57164	-.07705	-.00440	.02656	-.00007	-.00006

ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
DZ	9.588	-.01877	-13.36650	.70875	.03631	.23048	-.00108	.00084
9.981	2.449	-.02096	.49045	.52627	.02573	.29069	-.00121	.00082
9.714	4.418	-.02148	.27883	.39877	.01567	.35836	-.00139	.00064
GRADIENT	-.00061	.00069	3.14770	-.06908	-.00457	.02822	-.00007	-.00004

ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
DZ	14.480	-.01899	-17.55720	.74045	.03701	.22847	-.00105	.00089
14.703	2.510	-.01969	.44958	.48046	.02541	.29925	-.00134	.00069
14.839	4.425	-.02234	.28959	.40432	.01649	.36117	-.00135	.00066
GRADIENT	-.00072	.00135	4.14699	-.07640	-.00457	.02947	-.00007	-.00005

ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
DZ	29.767	-.02720	-18.05020	.74815	.03832	.22828	-.00125	.00084
29.743	2.454	-.02849	.66551	.56922	.02735	.30152	-.00129	.00078
29.929	4.441	-.03141	.40567	.40926	.01631	.38699	-.00153	.00050
GRADIENT	-.00091	.00106	4.22849	-.07471	-.00484	.03480	-.00006	-.00007

ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
DZ	44.538	-.03016	-45.63040	.66987	.03930	.22714	-.00136	.00073
44.541	2.408	-.03288	.78245	.51262	.02806	.30739	-.00121	.00060
44.965	4.398	-.03562	.46454	.40355	.01666	.39952	-.00134	.00036
GRADIENT	-.00123	-.00039	10.73182	-.06032	-.00510	.03871	-.00001	-.00008

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(DNH023) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 D1 = .000 MACH = .600

RUN NO. 237/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ
 49.951
 49.970
 50.050

ALPHAC
 .140
 2.539
 4.426
 GRADIENT

BETAC
 -.03117
 -.03313
 -.03462
 -.00075

BETAO
 -.06300
 -.06581
 -.06447
 -.00037

PHIC
 -12.56690
 .74761
 .44853
 2.98358

PHIO
 .60450
 .44958
 .35867
 -.05410

CA
 .04046
 .02761
 .01711
 -.00509

CN
 .22115
 .31469
 .40081
 .03905

CSL
 -.00119
 -.00127
 -.00115
 .00001

CLN
 .00075
 .00068
 .00036
 -.00008

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(DNH024) (21 OCT 75)

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 241/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ
 2.790
 3.147
 3.235

ALPHAC
 .104
 2.378
 4.382
 GRADIENT

BETAC
 -.01687
 -.02780
 -.03032
 -.00318

BETAO
 -.10599
 -.10795
 -.10588
 .00001

PHIC
 9.17543
 .67006
 .39684
 -2.08954

PHIO
 1.02723
 .75025
 .59164
 -.10226

CA
 .03591
 .02447
 .01492
 -.00491

CN
 .21623
 .28464
 .34644
 .03043

CSL
 -.00110
 -.00103
 -.00133
 -.00005

CLN
 .00095
 .00083
 .00059
 -.00006

RUN NO. 242/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ
 7.214
 7.169
 7.223

ALPHAC
 .107
 2.445
 4.433
 GRADIENT

BETAC
 -.01946
 -.02538
 -.03068
 -.00247

BETAO
 -.09671
 -.10545
 -.10967
 -.00288

PHIC
 -10.32810
 .59539
 .39700
 2.45132

PHIO
 .91690
 .72832
 .61002
 -.06790

CA
 .03506
 .02491
 .01498
 -.00440

CN
 .29344
 .28666
 .35295
 .02699

CSL
 -.00116
 -.00105
 -.00145
 -.00006

CLN
 .00090
 .00092
 .00071
 -.00004

RUN NO. 243/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ
 9.900
 9.833
 9.797

ALPHAC
 .036
 2.466
 4.354
 GRADIENT

BETAC
 -.01552
 -.02473
 -.02779
 -.00284

BETAO
 -.10373
 -.10781
 -.09668
 .00100

PHIC
 -23.52540
 .57491
 .36604
 5.66359

PHIO
 .96998
 .74093
 .55238
 -.09495

CA
 .03509
 .02482
 .01579
 -.00438

CN
 .23178
 .29008
 .35121
 .02700

CSL
 -.00106
 -.00112
 -.00150
 -.00010

CLN
 .00083
 .00088
 .00062
 -.00004

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(DNH025) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 LORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CSL	CLN
7.209	-.039	-.02082	-.12031	28.15880	.86433	.02346	-.00112	.00091
7.216	2.367	-.02238	-.10603	.54194	.59634	.01295	-.00117	.00062
7.326	4.353	-.03042	-.10502	.40075	.49282	.00418	-.00133	.00021
GRADIENT		-.00218	.00362	-6.58775	-.08693	-.00447	-.00005	-.00016

RUN NO. 0 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CSL	CLN
9.339	-.027	-.01829	-.11596	-34.19580	.82723	.02310	-.00139	.00081
10.040	2.372	-.02145	-.10961	.51828	.61215	.01358	-.00127	.00053
10.061	4.478	-.03288	-.10799	.42113	.50087	.00397	-.00116	-.00005
GRADIENT		-.00320	.00179	7.83983	-.07284	-.00424	.00005	-.00019

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CSL	CLN
14.643	-.013	-.01852	-.11070	-54.03890	.78492	.02372	-.00158	.00085
15.082	2.543	-.02390	-.10727	.53864	.58935	.01251	-.00168	.00061
14.801	4.374	-.02446	-.09836	.32075	.46054	.00501	-.00119	-.00013
GRADIENT		-.00140	.00272	12.96060	-.07410	-.00427	.00008	-.00022

RUN NO. 0 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CSL	CLN
29.827	-.162	-.01960	-.11035	-6.88413	.79624	.02619	-.00154	.00078
30.228	2.450	-.02650	-.10450	.61987	.57813	.01449	-.00134	.00051
30.232	4.437	-.03055	-.09616	.39488	.44632	.00609	-.00103	-.00018
GRADIENT		-.00239	.00304	1.64858	-.07646	-.00438	.00011	-.00020

RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CSL	CLN
44.600	-.132	-.02289	-.10223	-9.85191	.73778	.02748	-.00145	.00077
45.018	2.364	-.03204	-.10427	.77675	.58252	.01524	-.00149	.00048
44.806	4.412	-.03429	-.10011	.44576	.46660	.00674	-.00088	-.00020
GRADIENT		-.00255	.00042	2.33763	-.05977	-.00458	.00012	-.00021

(DNH025) (21 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = -1.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = -.00414 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
49.623	-.253	-.01744	-.09676	-4.27924	.70952	.02856	.31279	-.00116	.00074
50.763	2.449	-.02803	-.10520	.65573	.58103	.01477	.42657	-.00136	.00042
50.761	4.339	-.03644	-.11097	.48166	.51783	.00691	.53362	-.00109	-.00004
	GRADIENT	-.00414	-.00311	1.09482	-.04232	-.00476	.04790	.00001	-.00017

PARAMETRIC DATA

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = -.00098 RN/L = 3.26 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.310	.046	-.01681	-.11653	20.05070	.83516	.00723	.32271	-.00223	.00021
7.309	2.283	-.02325	-.12102	.58363	.68499	-.00383	.39580	-.00235	.00028
7.865	4.288	-.02083	-.10914	.27863	.51237	-.01385	.48404	-.00239	-.00064
	GRADIENT	-.00098	.00167	-4.73831	-.07592	-.00497	.03793	-.00004	-.00020

PARAMETRIC DATA

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = -.00065 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
9.835	-.171	-.02014	-.12235	-6.70156	.88163	.00732	.32552	-.00229	.00037
9.901	2.437	-.01962	-.11126	.46137	.61936	-.00447	.40290	-.00210	.00003
9.652	4.384	-.02335	-.11356	.30547	.53245	-.01363	.48477	-.00252	-.00044
	GRADIENT	-.00065	.00206	1.60490	-.07798	-.00459	.03467	-.00004	-.00017

PARAMETRIC DATA

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = -.00115 RN/L = 3.27 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.936	-.143	-.02337	-.11434	-9.28071	.81984	.00667	.32434	-.00260	-.00008
14.990	2.462	-.02474	-.11107	.57592	.61564	-.00511	.40662	-.00257	-.00035
15.447	4.479	-.02882	-.11595	.36907	.53535	-.01453	.50475	-.00242	-.00088
	GRADIENT	-.00115	-.00027	2.16828	-.06235	-.00458	.03868	.00004	-.00017

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-120(CA238) 747/1 AT1 03S1 (ORBITER DATA)

(DNH027) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORP = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 264/ 0 RN/L = 3.27 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.711	-.161	-.02834	-.11546	-9.99059	.83374	.00879	.32450	-.00277	.00005
29.841	2.529	-.02940	-.11449	.66612	.63153	-.00398	.41942	-.00250	-.00031
30.092	4.385	-.03050	-.11120	.39889	.51881	-.01277	.51981	-.00253	-.00082
	GRADIENT	-.00047	.00090	2.40570	-.06971	-.00474	.04242	.00006	-.00019

RUN NO. 265/ 0 RN/L = 3.27 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.673	-.113	-.03278	-.10878	-16.17440	.78267	.00935	.32765	-.00267	-.00013
44.791	2.534	-.03643	-.11525	.82395	.63500	-.00367	.42886	-.00272	-.00025
44.852	4.379	-.03440	-.10459	.45049	.48893	-.01237	.53251	-.00239	-.00084
	GRADIENT	-.00043	.00070	3.89001	-.06473	-.00484	.04510	.00005	-.00015

RUN NO. 266/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
50.205	-.137	-.03225	-.11579	-13.25630	.83308	.01043	.32082	-.00265	.00008
50.115	2.437	-.03746	-.11531	.88102	.64198	-.00282	.42376	-.00263	-.00026
50.310	4.427	-.03580	-.11520	.46373	.53666	-.01232	.53965	-.00230	-.00088
	GRADIENT	-.00084	.00013	3.12501	-.06539	-.00499	.04757	.00007	-.00021

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORP = 6.000 DX = 10.000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 281/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
3.140	2.450	-.02782	-.11208	.64808	.77724	.00923	.28077	-.00183	.00045
3.154	4.481	-.02861	-.12642	.36616	.70129	-.00064	.33888	-.00223	.00049
	GRADIENT	-.00039	-.00709	-.13947	-.03757	-.00488	.02875	-.00020	.00002

ARC 14-120(CA238) 747/1 AT1 03S1 (ORBITER DATA)

(DNH028) (21 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 935.6800 IN. ZMRP = 375.0000 IN. ZO TORB = .000 DX = 10.000
 SCALE = .0125 DY = .000 MACH = .600

PARAMETRIC DATA

Run No.	282/ 0	RM/L = 3.28	GRADIENT INTERVAL = -5.00/ 5.00	CA	CN	CSL	CLN
DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CLN
7.424	2.022	-.02526	.71587	.80635	.00883	.29052	.00044
7.204	4.410	-.02631	.34213	.63461	-.00142	.34814	.00039
	GRADIENT	-.00044	-.15652	-.07193	-.00429	.02413	-.00002
DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CLN
9.851	2.068	-.02201	.60993	.75603	.00853	.29383	.00023
9.970	4.488	-.02315	.29588	.64226	-.00206	.35572	.00022
	GRADIENT	-.00047	-.12981	-.04702	-.00438	.02558	-.00000
DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CLN
14.671	2.026	-.02188	.61866	.82708	.00892	.29526	.00023
14.337	4.481	-.01949	.24945	.60938	-.00131	.35548	.00024
	GRADIENT	.00097	-.15039	-.08868	-.00416	.02453	.00001
DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CLN
29.878	2.180	-.03009	.79114	.78798	.00921	.30855	.00010
29.674	4.515	-.03186	.40467	.63585	-.00185	.38429	.00009
	GRADIENT	-.00076	-.16549	-.06514	-.00473	.03243	-.00000
DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CLN
44.780	2.093	-.03422	.93679	.73323	.01075	.30711	.00003
45.100	4.521	-.03563	.46462	.64384	-.00186	.39971	-.00006
	GRADIENT	-.00099	-.19445	-.03681	-.00519	.03813	-.00001
DZ	ALPHAC	BETAC	PHIC	PHIO	CA	CN	CLN
50.200	2.061	-.03561	.99020	.79184	.01060	.31085	.00006
50.258	4.539	-.03511	.44362	.59229	-.00240	.40591	-.00013
	GRADIENT	.00020	-.22054	-.08052	-.00524	.03836	-.00008

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA)

(DNH029) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 291/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00
 DZ 7.274
 7.616
 ALPHAC 2.465
 BETAC -.02502
 BETAO -.11389
 PHIC .58170
 PHIO .63429
 CA -.00397
 CN .39264
 4.442
 -.02878
 -.11296
 .37160
 .52553
 -.01417
 4.7220
 GRADIENT -.00190
 .00047
 -.10624
 -.05500
 -.00516
 .04023
 CSL -.00235
 -.00296
 -.00031
 CLN .00019
 -.00003
 -.00011

RUN NO. 292/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00
 DZ 10.037
 10.105
 ALPHAC 2.057
 BETAC -.02401
 BETAO -.10716
 PHIC .66883
 PHIO .60698
 CA -.00355
 CN .39438
 4.486
 -.02501
 -.11457
 .31970
 .53198
 -.01440
 .48053
 GRADIENT -.00041
 -.00305
 -.14370
 -.03087
 -.00446
 .03546
 CSL -.00216
 -.00277
 -.00025
 CLN .00012
 -.00028
 -.00016

RUN NO. 293/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00
 DZ 15.073
 14.864
 ALPHAC 2.020
 BETAC -.01983
 BETAO -.11692
 PHIC .56255
 PHIO .66418
 CA -.00349
 CN .39790
 4.412
 -.02121
 -.11088
 .27569
 .51875
 -.01364
 .48215
 GRADIENT -.00058
 .00252
 -.11990
 -.06079
 -.00424
 .03522
 CSL -.00233
 -.00262
 -.00012
 CLN -.00009
 -.00058
 -.00021

RUN NO. 294/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00
 DZ 30.231
 29.953
 ALPHAC 2.128
 BETAC -.02803
 BETAO -.11207
 PHIC .75465
 PHIO .62962
 CA -.00347
 CN .41509
 4.510
 -.02957
 -.11126
 .37609
 .51576
 -.01309
 .51674
 GRADIENT -.00065
 .00034
 -.15896
 -.04781
 -.00404
 .04268
 CSL -.00250
 -.00243
 .00003
 CLN -.00021
 -.00087
 -.00028

RUN NO. 295/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00
 DZ 44.559
 45.001
 ALPHAC 2.087
 BETAC -.03479
 BETAO -.11354
 PHIC .95549
 PHIO .64550
 CA -.00169
 CN .41269
 4.446
 -.03809
 -.12021
 .49137
 .55913
 -.01227
 .53100
 GRADIENT -.00140
 -.00283
 -.19673
 -.03661
 -.00448
 .05015
 CSL -.00265
 -.00224
 .00018
 CLN -.00016
 -.00085
 -.00029

RUN NO. 296/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00
 DZ 50.108
 50.709
 ALPHAC 2.027
 BETAC -.03444
 BETAO -.11315
 PHIC .97390
 PHIO .64654
 CA -.00162
 CN .41260
 4.547
 -.03375
 -.11536
 .42574
 .53117
 -.01289
 .54130
 GRADIENT .00028
 -.00088
 -.21753
 -.04578
 -.00447
 .05107
 CSL -.00216
 -.00229
 -.00005
 CLN -.00007
 -.00060
 -.00021

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(DNH030) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

RUN NO. 301/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.146	2.474	-.02651	-.11428	.61408	.63624	-.00321	.39110	-.00221	.00041
7.541	4.355	-.02875	-.11298	.37869	.52950	-.01311	.46246	-.00253	.00011
	GRADIENT	-.00119	.00069	-.12521	-.05678	-.00526	.03796	-.00017	-.00016

RUN NO. 302/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
10.020	2.021	-.02499	-.11534	.70857	.65572	-.00313	.39403	-.00229	.00033
10.077	4.495	-.02706	-.10935	.34524	.50770	-.01404	.47316	-.00288	-.00001
	GRADIENT	-.00084	.00242	-.14686	-.05983	-.00441	.03199	-.00024	-.00014

RUN NO. 303/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.987	2.172	-.02278	-.11218	.60106	.62932	-.00344	.39892	-.00223	.00021
14.608	4.441	-.02442	-.10951	.31542	.51216	-.01353	.47637	-.00295	-.00001
	GRADIENT	-.00072	.00118	-.12592	-.05164	-.00445	.03414	-.00032	-.00010

RUN NO. 304/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
30.123	1.934	-.02643	-.11172	.78313	.63959	-.00186	.40107	-.00243	.00002
29.781	4.549	-.02982	-.11666	.37597	.54039	-.01379	.51341	-.00233	-.00063
	GRADIENT	-.00130	.00189	-.15569	-.03793	-.00456	.04296	.00004	-.00025

RUN NO. 305/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.889	2.080	-.03388	-.11196	.93332	.63408	-.00250	.41581	-.00246	-.00024
44.724	4.413	-.03469	-.11582	.45093	.54147	-.01205	.51412	-.00245	-.00066
	GRADIENT	-.00035	.00165	-.20679	-.03970	-.00409	.04214	.00001	-.00018

RUN NO. 306/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
50.425	2.067	-.03405	-.110641	.94413	.60343	-.00201	.41492	-.00240	-.00006
50.408	4.416	-.03600	-.11483	.49362	.53565	-.01284	.53282	-.00237	-.00075
	GRADIENT	-.00168	.00358	-.19182	-.02886	-.00461	.05020	.00001	-.00029

ARC 14-120(CA23B) 747/1 AT1 03SI (ORBITER DATA)

(DNH031) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

RUN NO. 311/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.139	2.440	-.02506	-.11848	.58862	.81921	.00959	.29153	-.00188	.00042
7.034	4.374	-.02510	-.12080	.32910	.67753	-.00029	.34904	-.00240	.00037
	GRADIENT	-.00002	-.00120	-.13415	-.07324	-.00511	.02973	-.00027	-.00002

RUN NO. 312/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
9.707	1.989	-.02412	-.11866	.69479	.84432	.00976	.29390	-.00199	.00036
9.890	4.549	-.02404	-.11577	.30304	.63820	-.00135	.35962	-.00242	.00035
	GRADIENT	.00003	.00113	-.15301	-.08051	-.00434	.02567	-.00017	-.00000

RUN NO. 313/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.857	1.961	-.02152	-.11919	.62868	.84748	.00991	.29682	-.00192	.00034
14.654	4.524	-.02343	-.11366	.29706	.62948	-.00148	.36353	-.00263	.00047
	GRADIENT	-.00075	.00216	-.12939	-.08506	-.00444	.02605	-.00028	.00005

RUN NO. 314/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.665	1.982	-.03245	-.11754	.93809	.83690	.01061	.30401	-.00226	.00015
29.802	4.262	-.02852	-.11253	.38367	.63688	-.00040	.37497	-.00230	-.00007
	GRADIENT	.00173	.00220	-.24316	-.08772	-.00483	.03112	-.00001	-.00010

RUN NO. 315/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.676	1.970	-.03314	-.11820	.96397	.84522	.01108	.30543	-.00213	.00006
44.732	4.370	-.03956	-.11536	.51921	.64588	-.00114	.39231	-.00257	.00000
	GRADIENT	-.00267	.00118	-.18536	-.08307	-.00509	.03621	-.00018	-.00002

RUN NO. 316/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
50.207	2.003	-.03506	-.10948	1.00299	.77825	.01101	.30864	-.00220	.00005
50.098	4.371	-.03608	-.10926	.47336	.61233	-.00080	.39233	-.00251	-.00012
	GRADIENT	-.00043	.00009	-.22363	-.07006	-.00499	.03534	-.00013	-.00007

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XHRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YHRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6300 IN. ZHRP = 375.0000 IN. ZO GRADIENT INTERVAL = -5.00/ 5.00 TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT INTERVAL = -5.00/ 5.00 DY = 10.000 MACH = .600

PARAMETRIC DATA

RUN NO.	321/ 0	RN/L = 3.30	GRADIENT INTERVAL = -5.00/ 5.00	PHIO	PHIC	BETAO	BETAC	ALPHAC	BETAO	BETAC	PHIO	PHIC	CA	CN	CSL	CLN
DZ	3.217			.59455	.86275	-.08529	-.03589	2.384	-.08529	-.03589	.59455	.86275	.00636	.28959	-.00443	-.00121
	3.310			-.10588	-.23423	.00827	.00263	4.324	.00827	.00263	-.10588	-.23423	-.00537	.34637	-.00729	-.00146
								GRADIENT						.02926	-.00148	-.00013

RUN NO.	322/ 0	RN/L = 3.30	GRADIENT INTERVAL = -5.00/ 5.00	PHIO	PHIC	BETAO	BETAC	ALPHAC	BETAO	BETAC	PHIO	PHIC	CA	CN	CSL	CLN
DZ	7.247			.63058	.90034	-.08867	-.03140	1.999	-.08867	-.03140	.63058	.90034	.00701	.29558	-.00404	-.00076
	7.563			-.00424	-.20086	-.08216	-.01534	4.379	-.08216	-.01534	-.00424	-.20086	-.00424	.35813	-.00614	-.00102
								GRADIENT						.02627	-.00088	-.00011

RUN NO.	323/ 0	RN/L = 3.30	GRADIENT INTERVAL = -5.00/ 5.00	PHIO	PHIC	BETAO	BETAC	ALPHAC	BETAO	BETAC	PHIO	PHIC	CA	CN	CSL	CLN
DZ	10.032			.58939	.74527	-.08306	-.02575	1.980	-.08306	-.02575	.58939	.74527	.00787	.29427	-.00373	-.00061
	9.896			-.00336	-.12651	-.07727	-.00963	4.367	-.07727	-.00963	-.00336	-.12651	-.00336	.35553	-.00591	-.00122
								GRADIENT						.02566	-.00091	-.00025

RUN NO.	324/ 0	RN/L = 3.30	GRADIENT INTERVAL = -5.00/ 5.00	PHIO	PHIC	BETAO	BETAC	ALPHAC	BETAO	BETAC	PHIO	PHIC	CA	CN	CSL	CLN
DZ	15.217			.62806	.41438	-.06945	-.01481	2.049	-.06945	-.01481	.62806	.41438	.00777	.29366	-.00373	-.00056
	15.047			-.00288	-.00590	-.07449	-.00044	4.248	-.07449	-.00044	-.00288	-.00590	-.00288	.36190	-.00554	-.00110
								GRADIENT						.02829	-.00082	-.00025

RUN NO.	325/ 0	RN/L = 3.30	GRADIENT INTERVAL = -5.00/ 5.00	PHIO	PHIC	BETAO	BETAC	ALPHAC	BETAO	BETAC	PHIO	PHIC	CA	CN	CSL	CLN
DZ	29.998			.68540	.20473	-.09627	-.00706	1.976	-.09627	-.00706	.68540	.20473	.00973	.30380	-.00308	-.00020
	29.890			-.00161	-.08191	-.08313	.00614	4.301	-.08313	.00614	-.08191	-.08313	-.00161	.37995	-.00423	-.00054
								GRADIENT						.03275	-.00049	-.00014

RUN NO.	326/ 0	RN/L = 3.30	GRADIENT INTERVAL = -5.00/ 5.00	PHIO	PHIC	BETAO	BETAC	ALPHAC	BETAO	BETAC	PHIO	PHIC	CA	CN	CSL	CLN
DZ	44.648			.66315	.38496	-.01315	-.01315	1.958	-.01315	-.01315	.66315	.38496	.01078	.30480	-.00268	-.00031
	44.989			-.00119	-.10617	-.09105	-.00801	4.325	-.09105	-.00801	-.00119	-.10617	-.00119	.39172	-.00344	-.00052
								GRADIENT						.03673	-.00032	-.00009

ARC 14-120(CA23B) 747/1 ATI 03S1 (ORBITER DATA)

(DNH032) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 327/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
49.978	1.969	-0.1805	-0.09477	.52540	.67894	.01114	.30625	-0.00278	-0.00021
50.163	4.264	-0.01263	-0.09327	.16993	.52712	-0.00086	.39453	-0.00320	-0.00046
	GRADIENT	.00236	.00065	-.15489	-.06615	-.00523	.03847	-0.00018	-0.00011

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

ARC 14-120(CA23B) 747/1 ATI 03S1 (ORBITER DATA)

(DNH033) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 331/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.500	2.446	-0.02145	-0.07366	.50255	.41024	-0.0649	.40031	-0.00542	-0.00084
7.613	4.292	-0.00208	-0.07009	.32960	.47746	-0.01622	.47746	-0.00775	-0.00075
	GRADIENT	.01050	.00194	-.25727	-.04370	-.00528	.04181	-0.00126	.00005

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = 10.000 MACH = .600

RUN NO. 332/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
10.263	1.907	-0.01773	-0.07840	.53273	.44991	-0.00459	.39392	-0.00446	-0.00071
9.859	4.322	-0.00573	-0.07059	.33288	.47883	-0.01534	.47883	-0.00686	-0.00087
	GRADIENT	.00971	.00323	-.25205	-.04845	-.00445	.03516	-0.00099	-0.00007

RUN NO. 333/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
15.012	1.933	-0.00765	-0.08521	.52675	.48908	-0.00402	.39324	-0.00429	-0.00059
14.957	4.327	.01880	-0.07346	.34564	.48724	-0.01479	.48724	-0.00603	-0.00098
	GRADIENT	.01105	.00491	-.19876	-.05992	-.00450	.03926	-0.00073	-0.00016

RUN NO. 334/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.834	1.958	-0.00868	-0.08245	-.25403	.47344	-0.00294	.40329	-0.00333	-0.00035
29.957	4.362	.02584	-0.07647	-.33975	.35859	-0.01376	.51902	-0.00378	-0.00140
	GRADIENT	.00714	.00249	-.03565	-.04777	-.00450	.04813	-0.00019	-0.00044

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA) (DNH034) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 343/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.400	-.285	-.03668	-.10742	-7.34571	1.04426	.01782	.22687	-.00231	-.00024
7.390	2.312	-.03617	-.10413	.89645	.72887	.00717	.28693	-.00234	-.00019
7.046	4.212	-.03508	-.10322	1.47763	.58785	-.00208	-.34154	-.00277	-.00014
	GRADIENT	.00035	.00095	1.82472	-.10268	-.00441	.02536	-.00010	.00002

RUN NO. 344/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
9.858	-.243	-.03420	-.10667	-8.02130	1.03142	.01750	.22769	-.00247	-.00017
9.870	2.334	-.03433	-.10466	.84303	.73083	.00754	.28761	-.00239	-.00018
9.840	4.253	-.03249	-.09942	1.43814	.56184	-.00270	.35076	-.00292	-.00021
	GRADIENT	.00036	.00157	1.96825	-.10513	-.00446	.02715	-.00009	-.00001

RUN NO. 345/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.745	-.254	-.03016	-.10281	-6.76144	.99812	.01841	.22551	-.00244	-.00031
14.663	2.332	-.03132	-.10222	.76959	.71547	.00771	.29080	-.00252	-.00024
14.715	4.248	-.02981	-.09946	1.40248	.56279	-.00233	.35578	-.00280	-.00013
	GRADIENT	.00005	.00071	1.66604	-.09741	-.00458	.02873	-.00008	.00004

RUN NO. 346/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.743	-.267	-.03699	-.10922	-7.87449	1.05513	.02001	.22680	-.00277	-.00027
29.911	2.360	-.03686	-.10457	.89504	.72658	.00829	.30635	-.00265	-.00011
29.627	4.268	-.03291	-.09353	1.44225	.52895	-.00200	.37699	-.00297	-.00050
	GRADIENT	.00085	.00313	1.92536	-.11658	-.00483	.03294	-.00004	-.00004

RUN NO. 347/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.607	-.235	-.03951	-.09929	-9.54070	.95563	.02039	.22556	-.00276	-.00052
44.784	2.345	-.03779	-.10021	.92333	.69784	.00919	.31082	-.00271	-.00032
44.631	4.291	-.03806	-.10475	1.50863	.59033	-.00204	.39261	-.00259	-.00057
	GRADIENT	.00034	.00116	2.31784	-.08403	-.00493	.03670	-.00004	-.00000

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .000 MACH = .600

RUN NO. 348/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	ETAO	PHIC	PHIO	CA	CN	CSL	CLN
DZ								
49.960	-0.3498	-1.0695	-8.32467	1.04302	.02123	.22182	-0.0238	-0.00040
50.084	-0.3742	-1.10326	.90826	.71885	.00898	.31376	-0.0265	-0.00022
50.051	-0.3761	-0.99959	.50525	.56278	-0.0162	.39443	-0.0279	-0.00037
GRADIENT	-0.00050	.00162	2.05183	-1.10759	-0.00505	.03812	-0.00009	.00001

RUN NO. 349/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	ETAO	PHIC	PHIO	CA	CN	CSL	CLN
DZ								
61.655	-0.3495	-0.9233	-7.14063	.90528	.02167	.22058	-0.0230	-0.00032
61.629	-0.3743	-1.0631	.93720	.74681	.00947	.31625	-0.0256	-0.00034
61.640	-0.3481	-0.99504	.46705	.53658	-0.0155	.40185	-0.0225	-0.00044
GRADIENT	-0.00002	-0.00083	1.74123	-0.08005	-0.00508	.03969	.00000	-0.00002

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 4.000 DX = .000
 SCALE = .0125 GRADIENT = .000 MACH = .600

RUN NO. 351/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	ETAO	PHIC	PHIO	CA	CN	CSL	CLN
DZ								
3.392	-0.3028	-1.1846	76.95740	1.69880	.02791	.11669	-0.0205	.00004
3.273	-0.2773	-1.2457	.70017	1.16320	.01995	.17736	-0.0193	.00008
3.233	-0.2798	-1.1301	.37812	.79606	.01092	.23903	-0.0197	.00012
GRADIENT	.00056	.00119	-18.45311	-.21364	-.00400	.02882	.00002	.00002

RUN NO. 352/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	ETAO	PHIC	PHIO	CA	CN	CSL	CLN
DZ								
7.633	-0.3062	-1.1798	-8.22679	1.68804	.02803	.12585	-0.0217	.00013
7.582	-0.2923	-1.1905	.70182	1.08391	.01905	.18918	-0.0200	.00021
7.362	-0.2756	-1.1699	.36910	.81823	.01080	.24729	-0.0208	.00006
GRADIENT	.00067	.00018	2.00402	-.19589	-.00381	.02687	.00002	-0.00001

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ARC 14-120(CA238) 747/1 AT1 0351 (ORBITTER DATA)

(DNH035) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 4.000 DX = .000
 CY = .000 MACH = .600

RUN NO. 353/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
9.664	-.213	-.02937	-.12461	-7.85370	1.80764	.02812	.12631	-.00211	.00018
9.916	2.313	-.02941	-.12008	.72877	1.10894	.01906	.19503	-.00213	.00033
9.803	4.259	-.02743	-.12130	.36932	.85163	.01041	.25470	-.00221	.00023
GRADIENT	.00041	.00079	1.91436	-.21682	-.00394	.02864	.02864	-.00002	.00001

RUN NO. 354/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
15.113	-.270	-.02868	-.11769	-6.07208	1.70827	.02863	.12974	-.00239	.00014
14.808	2.324	-.02760	-.11866	.68053	1.09587	.01974	.19909	-.00232	-.00001
14.693	4.304	-.02537	-.11239	.33796	.78558	.01058	.26210	-.00213	.00022
GRADIENT	.00071	.00108	1.46207	-.20345	-.00392	.02883	.02883	.00006	.00001

RUN NO. 355/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.891	-.272	-.03499	-.11983	-7.33018	1.75519	.03010	.12774	-.00236	.00000
29.979	2.346	-.03719	-.11686	.90855	1.07113	.02080	.21261	-.00230	.00012
29.891	4.294	-.03471	-.11535	.46363	.80534	.01135	.28212	-.00229	-.00005
GRADIENT	.00001	.00099	1.78730	-.21102	-.00408	.03374	.03374	.00002	-.00001

RUN NO. 356/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
44.449	-.271	-.03778	-.11801	-7.92866	1.75263	.03086	.12916	-.00228	.00022
44.799	2.322	-.03663	-.11132	.90396	1.02451	.02199	.21693	-.00233	-.00018
44.865	4.260	-.03708	-.10619	.49913	.74408	.01184	.29423	-.00251	-.00022
GRADIENT	.00017	.00261	1.94455	-.22576	-.00416	.03629	.03629	-.00005	-.00000

(DNH036) (21 OCT 75)

ARC 14-120(CA23B) 74771 AT1 03S1 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = .000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .500

RUN NO. 361/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
1.654	2.302	-.18193	-.13030	4.52066	.91938	.00882	.28028	-.00230	-.00033
2.469	4.194	-.18847	-.12982	2.57555	.73367	-.00094	.33987	-.00275	-.00011
	GRADIENT	-.00346	.00020	-1.02807	-.09815	-.00516	.03150	-.00024	.00011

RUN NO. 362/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
2.877	2.012	-.18082	-.12648	5.13611	.90360	.00901	.28306	-.00227	-.00023
3.365	4.405	-.18854	-.12935	2.45340	.72225	-.00177	.34559	-.00267	-.00004
	GRADIENT	-.00322	-.00120	-1.12130	-.07580	-.00451	.02614	-.00017	.00011

RUN NO. 363/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.393	2.013	-.18941	-.13656	5.37556	.96700	.00806	.29499	-.00248	.00015
7.226	4.376	-.19125	-.13052	2.50473	.73206	-.00205	.35412	-.00297	-.00006
	GRADIENT	-.00078	.00255	-1.21489	-.09942	-.00428	.02502	-.00021	-.00004

RUN NO. 364/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
9.858	2.049	-.19109	-.13563	5.32907	.95756	.00840	.29541	-.00240	.00027
10.104	4.457	-.19254	-.12677	2.47594	.70225	-.00272	.36310	-.00285	-.00006
	GRADIENT	-.00060	.00368	-1.18471	-.10601	-.00462	.02810	-.00019	-.00014

RUN NO. 365/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.553	2.097	-.19291	-.13410	5.25682	.94518	.00883	.29921	-.00239	.00013
14.643	4.474	-.19407	-.12353	2.48618	.68639	-.00257	.37029	-.00293	-.00000
	GRADIENT	-.00049	.00445	-1.16554	-.10887	-.00479	.02990	-.00023	-.00006

RUN NO. 366/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.819	2.159	-.20804	-.12852	5.50419	.89724	.00878	.31541	-.00268	-.00003
29.992	4.411	-.20777	-.12151	2.69968	.67676	-.00197	.39221	-.00306	-.00008
	GRADIENT	.00012	.00312	-1.24576	-.09794	-.00478	.03411	-.00017	-.00002

ARC 14-120(CA238) 747/1 AT1 03S1 (ORBITTER DATA)

(DNH036) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8000 IN. YMRP = .0000 IN. YO
 BREF = 936.6000 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 367/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
45.057	2.052	-2.1159	-1.2790	5.88810	.90037	.01093	.31399	-.00254	-.00007
44.937	4.371	-2.1604	-1.2616	2.83211	.70425	-.00126	.40248	-.00279	-.00014
	GRADIENT	-.00192	.00075	-1.31772	-.08456	-.00526	.03815	-.00011	-.00003

RUN NO. 368/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
50.129	2.015	-2.1146	-1.2804	5.99192	.91029	.01182	.30944	-.00239	.00005
50.420	4.439	-2.1307	-1.2437	2.75051	.69045	-.00173	.41281	-.00281	-.00040
	GRADIENT	-.00066	.00151	-1.33703	-.09068	-.00559	.04264	-.00018	-.00019

RUN NO. 369/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
62.057	2.140	-2.1075	-1.2489	5.62690	.87077	.01022	.32531	-.00254	.00010
61.853	4.416	-2.1097	-1.2303	2.73775	.68473	-.00091	.41171	-.00268	-.00014
	GRADIENT	-.00010	.00082	-1.26898	-.08171	-.00489	.03795	-.00006	-.00011

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8000 IN. YMRP = .0000 IN. YO
 BREF = 936.6000 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 371/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
1.955	.521	-.02268	-1.2383	2.49361	1.12166	.01641	.23025	-.00187	-.00002
1.879	2.297	-.02549	-1.1879	.63611	.82874	.00769	.28159	-.00218	-.00016
1.932	4.335	-.02949	-1.11948	.39023	.67006	-.00214	.33857	-.00235	-.00012
	GRADIENT	-.00179	.00110	-1.54099	-.11742	-.00486	.02839	-.00013	-.00002

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 03S1 (ORBITTER DATA)

(DNH037) (21 OCT 75)

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 03S1 (ORBITER DATA)

(DNH037) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

BETA =
 RUDDER =
 TORB =
 DY =

STAB =
 ELEVON =
 DX =
 MACH =

CLN =
 CSL =

RUN NO. 372/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
3.611	-.073	-.02496	-.13684	-18.87120	1.27886	.01712	.23251	-.00205	.00037
3.412	2.415	-.02272	-.12938	.53920	.89499	.00741	.28209	-.00217	.00003
3.341	4.372	-.03116	-.13064	.40870	.73005	-.00248	.34090	-.00240	.00019
GRADIENT		-.00129	.00147	4.49081	-.12483	-.00439	.02419	-.00008	-.00004

RUN NO. 373/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.238	-.184	-.01792	-.12654	-5.57095	1.21514	.01778	.22811	-.00226	.00012
7.611	2.515	-.02420	-.13121	.55136	.89448	.00637	.29331	-.00244	.00028
7.497	4.363	-.02543	-.11746	.33426	.65536	-.00320	.35332	-.00295	-.00003
GRADIENT		-.00170	.00173	1.36990	-.12281	-.00459	.02729	-.00015	-.00003

RUN NO. 374/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
10.003	-.096	-.01856	-.12574	-10.99320	1.18499	.01726	.23395	-.00223	.00003
9.942	2.401	-.01770	-.12665	.42264	.87619	.00737	.28841	-.00233	.00010
10.030	4.474	-.02513	-.12354	.32219	.68248	-.00375	.36099	-.00294	.00003
GRADIENT		-.00138	.00045	2.54688	-.11044	-.00458	.02760	-.00015	.00000

RUN NO. 375/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
14.990	.036	-.01580	-.12958	23.75730	1.19552	.01707	.23914	-.00232	.00013
14.729	2.374	-.01943	-.12262	.46896	.85170	.00808	.29019	-.00247	.00011
14.795	4.458	-.02101	-.11862	.27023	.65750	-.00322	.36453	-.00283	-.00026
GRADIENT		-.00119	.00249	-5.40509	-.12218	-.00457	.02822	-.00011	-.00009

RUN NO. 376/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
29.795	-.037	-.02028	-.12596	-29.04110	1.19126	.01904	.23664	-.00248	.00003
29.929	2.359	-.02769	-.12652	.67263	.87782	.00903	.30330	-.00249	.00009
30.138	4.506	-.02850	-.12061	.36271	.66310	-.00319	.39284	-.00265	-.00018
GRADIENT		-.00183	.00137	6.58687	-.11655	-.00488	.03426	-.00004	-.00005

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-00 (CA238) 747/1 AT1 0351 (ORBITER DATA)

(DNH037) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORR = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 377/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
45.027	-.096	-.02459	-.12014	-14.48000	1.13302	.02092	.22591	-.00258	-.00014
44.952	2.497	-.02998	-.12302	.68807	.83991	.00852	.31944	-.00264	.00000
44.914	4.260	-.03340	-.12386	.44955	.69755	-.00160	.39672	-.00266	-.00031
	GRADIENT	-.00200	-.00087	3.60822	-.10094	-.00514	.03898	-.00002	-.00003

RUN NO. 378/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
50.481	-.036	-.02125	-.11717	30.86850	1.08333	.01961	.24173	-.00247	-.00011
50.592	2.316	-.03099	-.12711	.76690	.88282	.00988	.31386	-.00239	-.00008
50.369	4.524	-.03501	-.11877	.44383	.65317	-.00267	.41024	-.00250	-.00056
	GRADIENT	-.00307	-.00038	-6.81333	-.09579	-.00496	.03751	-.00001	-.00010

RUN NO. 379/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
61.632	-.013	-.02570	-.12245	-62.78220	1.15102	.02077	.23641	-.00246	-.00033
61.965	2.379	-.02957	-.12133	.71238	.83841	.00997	.31800	-.00252	-.00016
61.651	4.408	-.03202	-.11829	.41654	.65927	-.00164	.40891	-.00250	-.00042
	GRADIENT	-.00143	.00093	14.65652	-.11180	-.00505	.03887	-.00001	-.00002

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORR = 6.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 0351 (ORBITER DATA)

(DNH038) (21 OCT 75)

RUN NO. 381/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
1.603	-.046	-.03585	-.12129	37.71810	1.11331	.01987	.31545	-.00078	.00092
1.569	2.293	-.03898	-.12271	.97421	.86754	.00905	.37602	-.00087	.00083
2.306	4.387	-.04440	-.12060	.58044	.66987	-.00213	.44420	-.00136	.00094
	GRADIENT	-.00196	.00015	-8.65058	-.11390	-.00507	.02963	-.00013	.00000

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA)

(DNH038) (21 OCT 75)

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .00094 MACH = .600

RUN NO. 382/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
3.468	.019	-.04292	-.12442	65.58800	1.15052	.01664	.33169	-.00082	.00109
3.699	2.422	-.04300	-.12381	1.01754	.85131	.00689	.38430	-.00096	.00116
3.469	4.425	-.04540	-.12016	.58844	.66722	-.00258	.44793	-.00132	.00123
GRADIENT	-.00055	.00094	-.15.15230	-.11019	-.00435	.02624	.02624	-.00011	.00003

RUN NO. 383/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
7.736	-.027	-.03671	-.11960	-53.27060	1.10916	.01714	.33495	-.00100	.00119
6.902	2.422	-.04018	-.12460	.95082	.86612	.00726	.38780	-.00118	.00141
7.339	4.419	-.04382	-.12334	.56875	.68592	-.00340	.46216	-.00162	.00138
GRADIENT	-.00159	-.00089	12.48313	-.09535	-.00460	.02835	.02835	-.00014	.00005

RUN NO. 384/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
10.309	.047	-.03699	-.12375	38.45710	1.13445	.01738	.33740	-.00109	.00134
9.703	2.409	-.03787	-.12099	.90067	.83805	.00758	.39319	-.00126	.00146
10.031	4.489	-.04151	-.11816	.53038	.65168	-.00349	.46655	-.00150	.00142
GRADIENT	-.00100	-.00126	-8.70301	-.10905	-.00469	.02895	.02895	-.00009	.00002

RUN NO. 385/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
15.037	-.141	-.03593	-.11641	-14.34110	1.10172	.01938	.32545	-.00119	.00135
14.866	2.495	-.03772	-.12284	.86659	.84153	.00737	.40069	-.00136	.00152
14.876	4.418	-.03729	-.12257	.48407	.68098	-.00278	.47285	-.00148	.00157
GRADIENT	-.00032	-.00142	3.40255	-.09268	-.00484	.03211	.03211	-.00006	.00005

RUN NO. 386/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
30.004	-.165	-.03289	-.12310	-11.30050	1.17505	.02016	.33197	-.00131	.00129
29.816	2.497	-.03586	-.11997	.82315	.82081	.00824	.41344	-.00134	.00134
30.280	4.402	-.03419	-.11822	.44541	.65465	-.00163	.49030	-.00149	.00152
GRADIENT	-.00034	-.00108	2.69869	-.11518	-.00475	.03441	.03441	-.00004	.00005

ARC 14-120(CA238) 747/1 AT1 0351 (ORBITER DATA)

(DNH038) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 387/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
44.879	.070	-.03347	-.12025	25.58280	1.11116	.02056	.33601	-.00125	.00126
44.946	2.481	-.03546	-.12293	.81918	.83934	.00949	4.1630	-.00138	.00145
44.926	4.448	-.03751	-.11277	4.8369	.62394	-.00176	.50528	-.00150	.00121
GRADIENT		-.00092	.00160	-5.90136	-.11134	-.00508	.03847	-.00006	-.00001

RUN NO. 388/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
49.971	-.037	-.03541	-.12247	-44.04270	1.15620	.02136	.33056	-.00147	.00100
50.192	2.513	-.03630	-.12127	.82787	.82743	.00899	4.2260	-.00146	.00131
50.609	4.284	-.03528	-.12302	4.7228	.68898	-.00071	.50396	-.00147	.00138
GRADIENT		.00000	-.00009	10.81298	-.10959	-.00509	.03985	-.00000	.00009

RUN NO. 389/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
61.515	-.115	-.03365	-.12518	-16.33250	1.19977	.02313	.31855	-.00143	.00122
60.520	2.529	-.03464	-.12084	.78499	.83717	.01025	4.1635	-.00143	.00137
GRADIENT		-.00038	.00164	6.47423	-.13714	-.00487	.03699	-.00000	.00006

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITER DATA)

(DNH039) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 391/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	BETAC	BETA0	PHIC	PHIO	CA	CN	CSL	CLN
3.148	2.388	-.18785	-.12482	4.49942	.87245	.02786	.37026	-.00057	.00125
3.390	4.263	-.18878	-.11294	2.53815	.63710	.01854	4.3525	-.00096	.00094
GRADIENT		-.00050	.00634	-1.04614	-.12554	-.00497	.03467	-.00021	-.00017

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

DATE 22 MAR 76 TABULATED SOURCE DATA - CA23B ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITTER DATA) (DNH039) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
LREF = 474.8100 IN. YMRP = .0000 IN. YO
BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = 10.000 ELEVON = 5.000
TORB = 6.000 DX = .000
DY = .000 MACH = .600

RUN NO. 392/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00
ALPHAC BETAC PHIC PHIO CA CN
7.312 2.139 -1.19944 -1.13097 -1.1607 38048
7.376 4.461 -2.20873 -1.12354 -1.1714 45416
GRADIENT -1.13959 -1.13928 -1.13928 -1.13928 -1.13928 0.3174

RUN NO. 393/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00
ALPHAC BETAC PHIC PHIO CA CN
9.885 2.001 -2.20379 -1.12519 -1.1652 37986
10.083 4.424 -2.21043 -1.12231 -1.1834 44859
GRADIENT -1.127561 -1.127561 -1.127561 -1.127561 -1.127561 0.2837

RUN NO. 394/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00
ALPHAC BETAC PHIC PHIO CA CN
15.083 2.141 -2.21222 -1.12298 -1.1851 38690
14.830 4.433 -2.21434 -1.12295 -1.1851 45644
GRADIENT -1.126160 -1.126160 -1.126160 -1.126160 -1.126160 0.3034

RUN NO. 395/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00
ALPHAC BETAC PHIC PHIO CA CN
29.781 2.045 -2.2127 -1.12536 -1.1851 38901
29.790 4.494 -2.2555 -1.12372 -1.1832 48706
GRADIENT -1.134699 -1.134699 -1.134699 -1.134699 -1.134699 0.4003

RUN NO. 396/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00
ALPHAC BETAC PHIC PHIO CA CN
44.565 2.160 -2.2269 -1.12330 -1.1832 39969
44.873 4.367 -2.2366 -1.12144 -1.1987 48848
GRADIENT -1.133798 -1.133798 -1.133798 -1.133798 -1.133798 0.4022

RUN NO. 397/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00
ALPHAC BETAC PHIC PHIO CA CN
50.286 2.123 -2.2107 -1.12019 -1.1832 39377
50.569 4.396 -2.2250 -1.11875 -1.1974 49435
GRADIENT -1.134005 -1.134005 -1.134005 -1.134005 -1.134005 0.4161

CSL CLN
-0.0077 -0.0136
-0.00146 -0.0112
-0.00030 -0.00010
CSL CLN
-0.00084 -0.0129
-0.0120 -0.0108
-0.00015 -0.00009
CSL CLN
-0.00085 -0.0124
-0.00129 -0.0110
-0.00019 -0.00006
CSL CLN
-0.00105 -0.0117
-0.00143 -0.0096
-0.00015 -0.00009
CSL CLN
-0.00119 -0.0113
-0.00146 -0.0100
-0.00012 -0.00006
CSL CLN
-0.00108 -0.0110
-0.00129 -0.0086
-0.00009 -0.00011

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITTER DATA)

(DNH040) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. YMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 PUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 401/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	3.048	ALPHAC	-0.004	BETAC	-0.04526	BETAO	-0.12383	PHIC	-84.40830	PHIO	1.79753	CA	0.4895	CN	0.19606	CSL	-0.00048	CLN	0.0139
	3.021		2.318		-0.04739		-0.12449		1.17152		1.15912		0.3978		0.26142		-0.00047		0.0126
	3.274		4.401		-0.04833		-0.12570		0.62992		0.86840		0.3000		0.32427		-0.00049		0.0128
		GRADIENT			-0.00070		-0.00042		19.64100		-0.21215		-0.00429		0.02909		-0.00000		-0.00003

RUN NO. 402/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.066	ALPHAC	-0.091	BETAC	-0.04561	BETAO	-0.12340	PHIC	-26.59500	PHIO	1.74014	CA	0.4896	CN	0.20851	CSL	-0.00079	CLN	0.0128
	7.198		2.490		-0.04595		-0.12280		1.05741		1.10813		0.3979		0.26983		-0.00358		0.0123
	7.335		4.405		-0.04855		-0.12015		0.63211		0.82845		0.3019		0.32955		-0.00055		0.0119
		GRADIENT			-0.00062		-0.00070		6.31765		-0.20513		-0.00414		0.02674		-0.00006		-0.00002

RUN NO. 403/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	9.793	ALPHAC	0.024	BETAC	-0.04725	BETAO	-0.12556	PHIC	63.05230	PHIO	1.71279	CA	0.4873	CN	0.21444	CSL	-0.00082	CLN	0.0143
	9.766		2.449		-0.04658		-0.12467		1.09000		1.12877		0.3992		0.27469		-0.00068		0.0133
	9.745		4.293		-0.04791		-0.12001		0.63994		0.83988		0.3098		0.33049		-0.00070		0.0123
		GRADIENT			-0.00013		-0.00125		-15.17967		-0.20634		-0.00413		0.02706		-0.00003		-0.00005

RUN NO. 404/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	14.781	ALPHAC	-0.155	BETAC	-0.04369	BETAO	-0.12009	PHIC	-15.70640	PHIO	1.70846	CA	0.5030	CN	0.20418	CSL	-0.00104	CLN	0.0132
	14.685		2.568		-0.04618		-0.11619		1.03042		1.03612		0.3988		0.28291		-0.00067		0.0119
	14.592		4.303		-0.04516		-0.11327		0.60193		0.79139		0.3118		0.33940		-0.00063		0.0111
		GRADIENT			-0.00038		-0.00152		3.87923		-0.20936		-0.00425		0.03020		-0.00010		-0.00005

RUN NO. 405/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	29.804	ALPHAC	-0.120	BETAC	-0.03979	BETAO	-0.11880	PHIC	-18.37600	PHIO	1.68114	CA	0.5177	CN	0.20525	CSL	-0.00126	CLN	0.0128
	29.944		2.563		-0.03976		-0.12496		0.88899		1.10861		0.4114		0.29642		-0.00098		0.0128
	29.835		4.329		-0.03620		-0.11079		0.47959		0.76992		0.3249		0.35640		-0.00076		0.0110
		GRADIENT			0.00074		-0.00147		4.47929		-0.20554		-0.00430		0.03398		-0.00011		-0.00004

(DNH040) (08 OCT 75)

DATE 22 MAR 76

TABULATED SOURCE DATA - CA23B

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 406/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN
44.515	-.03758	-.12018	-22.46140	1.70509	.05277	.20535
44.728	-.03906	-.11965	-.91512	1.08198	.04299	.29631
44.671	-.03830	-.11246	.49076	.77014	.03167	.37999
GRADIENT	-.00018	.00163	5.19729	-.20639	-.00459	.03814

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

CSL
 -.00114
 -.00091
 -.00092
 .00005
 CLN
 .00125
 .00117
 .00112
 -.00003

(DNH041) (08 OCT 75)

DATE 22 MAR 76

TABULATED SOURCE DATA - CA23B

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 411/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN
3.328	-.03541	-.09515	.94918	.88790	.04034	.25483
3.325	-.03664	-.09550	.48865	.65669	.03070	.31656
GRADIENT	-.00057	-.00016	-.21302	-.10237	-.00446	.02896

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .500

CSL
 -.00038
 -.00036
 .00001
 CLN
 .00126
 .00113
 -.00006

(DNH042) (08 OCT 75)

DATE 22 MAR 76

TABULATED SOURCE DATA - CA23B

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 413/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN
9.770	-.03337	-.09512	.85236	.86976	.04051	.26826
9.780	-.03503	-.09551	.44953	.65318	.03065	.31116
GRADIENT	-.00074	-.00018	-.18334	-.09618	-.00438	.02793

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

CSL
 -.00046
 -.00054
 -.00003
 CLN
 .00104
 .00111
 .00003

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-120(CA238) 747/1 AT1 02S1 (ORBITER DATA)

(DNH041) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .500

PARAMETRIC DATA

RUN NO. 414/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	14.789	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
	14.819	1.986	-.03463	-.09972	.99901	.94498	.04187	.26890	-.00090	.00114
		4.441	-.03469	-.10173	.44801	.69804	.03088	.34091	-.00078	.00109
		GRADIENT	-.00003	-.00082	-.22448	-.10060	-.00448	.02934	.00005	-.00002

RUN NO. 415/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	29.638	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
	29.826	2.215	-.03194	-.09737	.82645	.89338	.04230	.28736	-.00093	.00112
		4.415	-.03206	-.09720	.41654	.66870	.03130	.36064	-.00086	.00110
		GRADIENT	-.00006	.00008	-.18633	-.10214	-.00500	.03331	.00003	-.00001

RUN NO. 416/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.438	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
	44.694	2.214	-.02950	-.09702	.76327	.89411	.04284	.29440	-.00092	.00102
		4.330	-.03196	-.09264	.42333	.64395	.03206	.37302	-.00075	.00103
		GRADIENT	-.00117	.00207	-.16070	-.11826	-.00509	.03716	.00008	.00001

ARC 14-120(CA238) 747/1 AT1 02S1 (ORBITER DATA)

(DNH042) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .300

PARAMETRIC DATA

RUN NO. 421/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	3.128	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
	3.123	2.209	-.01658	-.10574	.43017	.98557	.04183	.25803	-.00035	.00077
		4.221	-.01698	-.10352	.23072	.73034	.03305	.31937	-.00038	.00072
		GRADIENT	-.00020	.00110	-.09912	-.12683	-.00436	.03049	-.00002	-.00002

RUN NO. 422/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.085	ALPHAC	BETAC	BETAO	PHIC	PHIO	CA	CN	CSL	CLN
	7.303	2.291	-.01571	-.10101	.39307	.92205	.04131	.27414	-.00033	.00059
		4.347	-.01790	-.10423	.23609	.71971	.03207	.33612	-.00028	.00082
		GRADIENT	-.00106	-.00157	-.07635	-.09841	-.00449	.03015	.00002	.00011

REFERENCE DATA PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 4.000 DX = .000
 SCALE = .0125 DY = .000 MACH = .300

RUN NO. 423/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
2.180	-0.1697	.44607	.95456	.04246	.26730	-.00071	.00045
4.347	-0.1622	.21396	.68472	.03248	.34016	-.00034	.00049
GRADIENT	.00035	-.10711	-.12452	-.00460	.03362	.00017	.00002

RUN NO. 424/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
2.266	-0.1640	.41472	.94742	.04279	.27815	-.00051	.00061
4.354	-0.1712	.22551	.70320	.03228	.35024	-.00075	.00064
GRADIENT	-.00035	-.09063	-.11698	-.00503	.03453	-.00012	.00002

RUN NO. 425/ 0 RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
2.191	-0.1582	.41379	.95078	.04430	.28810	-.00089	.00062
4.292	-0.1592	.21265	.70620	.03316	.36816	-.00074	.00053
GRADIENT	-.00004	-.09574	-.11641	-.00530	.03810	.00007	-.00004

RUN NO. 426/ 0 RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	BETAC	PHIC	PHIO	CA	CN	CSL	CLN
2.202	-0.1510	.39313	.90420	.04478	.29494	-.00065	.00058
4.266	-0.1442	.19389	.69668	.03343	.37452	-.00042	.00044
GRADIENT	.00033	-.09653	-.10054	-.00550	.03856	.00011	-.00007

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 ELEVON = 5.000

RUN NO. 431/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	BETA	PHIO	CA	CN	CSL	CLN
2.284	4.518	.00619	-.07861	.05098	.24640	-.00160	.00104
2.235	6.328	-.00108	.00976	.04153	.33729	-.00155	.00105
1.862	8.269	.00449	-.03124	.02942	.43339	-.00153	.00101
2.534	10.303	.00597	-.03339	.01751	.55160	-.00174	.00099
2.332	12.406	.00721	-.03358	.01316	.67531	-.00108	.00044
2.211	14.397	-.00092	.00371	.01836	.78307	-.00256	.00088
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 432/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	BETA	PHIO	CA	CN	CSL	CLN
17.824	-.729	-.00485	-.38120	.06225	-.01156	-.00163	.00108
20.582	4.597	-.00360	.04497	.05087	.24719	-.00127	.00122
20.432	6.440	-.00396	.03532	.04142	.33800	-.00127	.00110
20.388	8.441	-.00271	.01845	.02853	.44119	-.00142	.00096
20.672	10.411	.00160	-.00883	.01709	.56656	-.00169	.00071
20.407	12.376	-.00326	.01521	.01226	.67729	-.00106	.00089
20.474	14.347	.00380	-.01533	.01804	.78068	-.00236	.00003
	GRADIENT	.00023	.08003	-.00214	.04859	.00007	.00003

RUN NO. 433/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	BETA	PHIO	CA	CN	CSL	CLN
37.645	-.608	-.00168	-.15813	.06233	-.00857	-.00140	.00109
40.709	4.480	-.00898	.11499	.05188	.23600	-.00111	.00121
40.387	6.499	-.00326	.02882	.04159	.33673	-.00112	.00118
40.324	8.438	-.00031	.00213	.02969	.43290	-.00125	.00104
40.462	10.448	.00269	-.01482	.01719	.55217	-.00130	.00088
40.577	12.427	-.00046	.00214	.01137	.67306	-.00077	.00064
40.395	14.433	.00067	-.00269	.01776	.77856	-.00231	.00085
	GRADIENT	-.00144	.05368	-.00205	.04807	.00006	.00002

ARC 14-120(CA23B) 03S1

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 441/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	BETA	PHIO	CA	CN	CSL	CLN
60.484	6.381	-.00679	.06106	.02180	.34342	-.00108	.00119
60.085	8.325	-.00701	.04841	.01019	.43677	-.00139	.00119
60.673	10.419	.00014	-.00076	-.00352	.56041	-.00121	.00127
60.708	12.411	-.00654	.03043	-.01002	.68140	-.00061	.00108
57.099	14.003	-.00452	.01867	-.00600	.76258	-.00129	.00151
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000

BETA = .000 ELEVON = 5.000

PARAMETRIC DATA

ARC 14-120(CA23B) 03S1

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 451/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	BETA	PHIO	CA	CN	CSL	CLN
2.231	4.557	.03857	-.48542	.02808	.16673	-.00254	-.00028
2.483	6.357	.03400	-.30705	.01875	.25913	-.00257	-.00014
2.239	8.320	.03805	-.26297	.00735	.34780	-.00235	-.00013
1.921	10.373	.04111	-.22831	-.00612	.45791	-.00299	-.00053
2.551	12.477	.03678	-.17021	-.01122	.58988	-.00271	-.00033
2.114	14.400	.03692	-.14844	-.01041	.69366	-.00252	-.00008
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000

BETA = .000 ELEVON = .000

PARAMETRIC DATA

ARC 14-120(CA23B) 03S1

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 452/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	BETA	PHIO	CA	CN	CSL	CLN
17.573	-.792	.03262	2.35875	.03625	-.08652	-.00238	-.00065
20.373	4.401	.02005	-.26128	.02862	.16107	-.00256	-.00011
20.172	6.464	.01588	-.14105	.01841	.26564	-.00213	.00014
20.312	8.466	.03221	-.20523	.00572	.36075	-.00240	-.00023
20.516	10.508	.03387	-.18572	-.00674	.46837	-.00288	-.00023
20.115	12.332	.03109	-.14556	-.01115	.58577	-.00235	-.00031
	GRADIENT	-.00242	-.50456	-.00147	.04768	-.00004	.00011

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ARC 14-120(CA23B) 03S1

(DNH045) (09 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 ELEVON = .000

PARAMETRIC DATA

RUN NO. 453 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00 / 5.00

DZ	ALPHAO	BETAO	PHIO	CA	CN	CSL	CLN
37.990	-.738	.02004	1.55562	.03619	-.08870	-.00241	-.00045
40.220	4.411	.02127	-.27658	.02920	.15554	-.00245	-.00019
39.923	6.397	.02454	-.22022	.01954	.25704	-.00213	-.00010
40.358	8.474	.02362	-.16026	.00723	.35135	-.00211	-.00017
40.425	10.464	.02610	-.14372	-.00564	.45887	-.00277	-.00032
40.404	12.438	.03064	-.14228	-.01013	.58455	-.00370	-.00075
40.396	14.487	.02059	-.08231	-.00916	.69354	-.00227	-.00027
	GRADIENT	.00024	-.35581	-.00136	.04743	-.00001	-.00005

ARC 14-120(CA23B) 02S1

(DNH046) (09 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 ELEVON = .000

PARAMETRIC DATA

RUN NO. 461 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00 / 5.00

DZ	ALPHAO	BETAO	PHIO	CA	CN	CSL	CLN
38.822	-.234	-.08008	-18.92550	.05764	-.08068	-.00193	-.00082
40.088	2.253	-.08379	2.13035	.05492	.03775	-.00173	-.00090
40.254	4.484	-.08304	1.06202	.04801	.15055	-.00157	-.00097
40.159	6.430	-.08576	.76578	.03822	.24953	-.00178	-.00094
40.206	8.402	-.07712	.52783	.02606	.34318	-.00140	-.00082
40.248	10.328	-.07454	.41575	.01452	.44266	-.00158	-.00056
40.591	12.418	-.07771	.36136	.00995	.57563	-.00151	-.00038
39.934	14.328	-.07098	.28683	.01380	.67595	-.00204	-.00060
	GRADIENT	-.00064	4.31743	-.00202	.04899	.00008	.00003

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 ELLVON = .000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO DZ = 50.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

DX	ALPHA	BETA0	PHI0	CA	CN	CSL	CLN	DZ
-.046	6.055	-.09231	.87503	.04059	.22831	-.00130	.00102	49.63740
.212	10.519	-.08057	.44132	.01318	.45821	-.00172	.00051	50.29570
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000
	RUN NO. 471/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00							
4.734	5.995	-.07507	.71879	.04062	.22821	-.00144	.00075	48.86470
5.194	10.412	-.07687	.42532	.01426	.44510	-.00192	.00056	50.29140
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000
	RUN NO. 472/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00							
9.687	5.974	-.08606	.82679	.04087	.22592	-.00144	.00094	49.00850
10.187	10.420	-.08502	.47009	.01449	.44271	-.00157	.00063	50.75890
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000
	RUN NO. 473/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00							
14.701	5.891	-.08252	.80403	.04162	.21560	-.00167	.00086	48.93470
15.158	10.503	-.07754	.42535	.01367	.45266	-.00185	.00057	50.66530
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000
	RUN NO. 474/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00							
19.661	5.884	-.08604	.83920	.04169	.21578	-.00164	.00097	49.39420
20.118	10.481	-.07504	.41249	.01327	.45317	-.00153	.00043	51.00510
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000
	RUN NO. 475/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00							

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA) (ENH008) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = -1.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 935.6800 IN. ZMRP = 375.0000 IN. ZO LORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = -.0027 .00129 .00246 .00135 .000156 -.00079 MACH = .600

PARAMETRIC DATA

Run No.	81/0	RN/L = 3.35	GRADIENT INTERVAL = -5.00/ 5.00	CPS1	CPS2
DZ	4.365				
ALPHAC	.192				
XZCP	.05446				
XYCP	.30972				
CPC	-.05783				
CPB1	-.24690				
CPB2	-.27890				
CPB3	-.26726				
CPE3	-.16942				
CPB1	-.24396				
CPB2	-.27398				
CPB3	-.26299				
CPE3	-.16194				
CPB1	-.24586				
CPB2	-.27367				
CPB3	-.25709				
CPE3	-.16403				
CPB1	-.00027				
CPB2	.00129				
CPB3	.00246				
CPE3	.00135				

Run No.	82/0	RN/L = 3.35	GRADIENT INTERVAL = -5.00/ 5.00	CPS1	CPS2
DZ	6.994				
ALPHAC	-.126				
XZCP	.04407				
XYCP	.36613				
CPC	-.04732				
CPB1	-.24239				
CPB2	-.27615				
CPB3	-.25874				
CPE3	-.16013				
CPB1	-.24761				
CPB2	-.28463				
CPB3	-.26290				
CPE3	-.16498				
CPB1	.19336				
CPB2	-.27606				
CPB3	-.25742				
CPE3	-.15916				
CPB1	-.00343				
CPB2	-.00013				
CPB3	.00021				
CPE3	.00012				

Run No.	83/0	RN/L = 3.36	GRADIENT INTERVAL = -5.00/ 5.00	CPS1	CPS2
DZ	9.751				
ALPHAC	-.141				
XZCP	.03911				
XYCP	.40309				
CPC	-.05639				
CPB1	-.24684				
CPB2	-.28083				
CPB3	-.27082				
CPE3	-.14490				
CPB1	.45510				
CPB2	-.27162				
CPB3	-.26019				
CPE3	-.13658				
CPB1	.21189				
CPB2	-.28178				
CPB3	-.26920				
CPE3	-.12975				
CPB1	-.03919				
CPB2	-.00003				
CPB3	.00053				
CPE3	.00333				

Run No.	84/0	RN/L = 3.35	GRADIENT INTERVAL = -5.00/ 5.00	CPS1	CPS2
DZ	14.752				
ALPHAC	-.014				
XZCP	.03539				
XYCP	.37674				
CPC	-.04544				
CPB1	-.23527				
CPB2	-.27569				
CPB3	-.25973				
CPE3	-.12254				
CPB1	.31875				
CPB2	-.28105				
CPB3	-.26586				
CPE3	-.12730				
CPB1	.17157				
CPB2	-.28221				
CPB3	-.26938				
CPE3	-.11097				
CPB1	-.04474				
CPB2	-.00147				
CPB3	.00215				
CPE3	.00241				

Run No.	85/0	RN/L = 3.35	GRADIENT INTERVAL = -5.00/ 5.00	CPS1	CPS2
DZ	29.536				
ALPHAC	-.028				
XZCP	.02722				
XYCP	.43476				
CPC	-.05191				
CPB1	-.24389				
CPB2	-.28095				
CPB3	-.26255				
CPE3	-.12070				
CPB1	.34404				
CPB2	-.28279				
CPB3	-.26600				
CPE3	-.12178				
CPB1	.13888				
CPB2	-.28495				
CPB3	-.27269				
CPE3	-.10780				
CPB1	-.06544				
CPB2	-.00091				
CPB3	.00232				
CPE3	.00228				

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (ENH008) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = -1.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .00564 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

PARAMETRIC DATA

ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
44.873	.02216	.50328	-.06166	-.25602	-.28701	-.27309	-.16619	-.19719	-.24367
44.666	.04330	.38713	-.05433	-.28150	-.28150	-.27408	-.14552	-.19297	-.24492
45.029	.04626	.13138	-.06407	-.25304	-.28732	-.27404	-.13955	-.21025	-.25330
	.00564	-.08314	-.00033	.00085	.00007	-.00023	.00617	-.00268	-.00206

ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
50.039	-.106	.54553	-.05549	-.25313	-.28982	-.27619	-.16401	-.19258	-.24395
50.412	2.490	.40675	-.05911	-.25144	-.28682	-.27166	-.15036	-.19930	-.24798
50.166	4.334	.13242	-.07619	-.26425	-.29844	-.28503	-.14957	-.20875	-.26083
	GRADIENT	-.09046	-.00445	-.00230	-.00174	-.00175	.00338	-.00357	-.00365

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (ENH009) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = -1.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = .00249 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

PARAMETRIC DATA

ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
8.075	.274	.16540	-.06801	-.25064	-.27756	-.26542	-.12528	-.20578	-.24431
7.276	2.380	.12947	-.07263	-.24849	-.27681	-.26615	-.13169	-.20947	-.25482
7.800	4.334	-.03980	-.06990	-.25347	-.28179	-.26709	-.12254	-.20671	-.24652
	GRADIENT	-.05011	-.00049	-.00067	-.00104	-.00041	.00063	-.00025	-.00060

ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
9.930	-.015	.24790	-.06344	-.24561	-.27118	-.26117	-.12197	-.19763	-.24324
10.158	2.498	.12649	-.06061	-.24458	-.27285	-.25632	-.11580	-.19579	-.24352
9.843	4.339	-.04508	-.06651	-.25431	-.28668	-.26848	-.12965	-.20723	-.25752
	GRADIENT	-.00180	-.00060	-.00186	-.00339	-.00147	-.00152	-.00203	-.00309

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0 BETA = .000 STAB = -1.000
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0 RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0 TORB = 9.000 DX = .000
 SCALE = .0125 GRADIENT = .00167 RY = .00357 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO.	93/ 0	RN/L = 3.35	GRADIENT INTERVAL = -5.00/ 5.00	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2	
DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
14.862	-.101	.04499	.27244	-.05002	-.23708	-.26582	-.25517	-.11122	-.18200	-.22590
14.490	2.534	.05160	.09345	-.06288	-.24887	-.28293	-.26909	-.12674	-.20816	-.25020
15.108	4.322	.05208	-.06079	-.08534	-.24615	-.28119	-.26580	-.12269	-.20022	-.24615
	GRADIENT	.00167	-.07572	-.00357	-.00223	-.00370	-.00262	-.00284	-.00455	-.00493
RUN NO.	94/ 0	RN/L = 3.35	GRADIENT INTERVAL = -5.00/ 5.00	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2	
DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
29.926	-.027	.03987	.26449	-.06462	-.24853	-.28374	-.27559	-.13503	-.20255	-.24722
29.957	2.539	.04522	.04725	-.06401	-.24940	-.28318	-.27042	-.13024	-.20445	-.25499
29.720	4.365	.04513	-.07894	-.07558	-.26215	-.29524	-.28110	-.13724	-.20930	-.25921
	GRADIENT	.00126	-.07862	-.00232	-.00292	-.00244	-.00104	-.00035	-.00148	-.00275
RUN NO.	95/ 0	RN/L = 3.34	GRADIENT INTERVAL = -5.00/ 5.00	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2	
DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3 <td>CPS1</td> <td>CPS2</td>	CPS1	CPS2
44.465	-.192	.03462	.29437	-.06500	-.25349	-.28350	-.27297	-.13449	-.19873	-.24480
44.798	2.406	.04115	.05014	-.07212	-.25736	-.29709	-.28261	-.14211	-.21342	-.26130
44.826	4.485	.03959	-.07877	-.07512	-.26369	-.30204	-.28286	-.13531	-.21255	-.26262
	GRADIENT	.00112	-.08037	-.00219	-.00215	-.00402	-.00218	-.00029	-.00307	-.00391
RUN NO.	96/ 0	HN/L = 3.35	GRADIENT INTERVAL = -5.00/ 5.00	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2	
DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3 <td>CPS1</td> <td>CPS2</td>	CPS1	CPS2
50.555	-.078	.03541	.24386	-.06365	-.25050	-.28160	-.27159	-.13006	-.20122	-.24602
50.407	2.550	.03964	.01257	-.06210	-.24949	-.28357	-.27106	-.12838	-.20611	-.24923
50.452	4.393	.03795	-.12941	-.06996	-.25736	-.29134	-.28099	-.12597	-.21144	-.25657
	GRADIENT	.00064	-.08379	-.00127	-.00140	-.00208	-.00195	-.00090	-.00226	-.00228

(ENH010) (08 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITTER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

SETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .000

RUN NO. 101/ 0 RN/L = 3.39 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
6.742	.132	.05354	.24686	.01292	-.21478	-.24805	-.20019	-.05073	-.13514	-.18281
7.349	2.303	.05571	.08905	-.03956	-.22526	-.26324	-.24399	-.09575	-.17977	-.22392
7.463	4.270	.05666	-.06532	-.04921	-.24015	-.26914	-.25706	-.09406	-.19315	-.23236
GRADIENT		.00076	-.07563	-.01517	-.01409	-.00356	-.01385	-.01065	-.01413	-.01209

RUN NO. 102/ 0 RN/L = 3.38 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
10.009	-.206	.04784	.29277	-.03644	-.22779	-.26324	-.24805	-.08575	-.17316	-.22433
10.088	2.335	.05270	.10363	-.04640	-.23607	-.26914	-.25538	-.09597	-.18687	-.23078
10.447	4.346	.05297	-.09256	-.05311	-.24493	-.27422	-.26234	-.09876	-.19638	-.23913
GRADIENT		.00116	-.08410	-.00367	-.00374	-.00241	-.00313	-.00297	-.00511	-.00322

RUN NO. 103/ 0 RN/L = 3.37 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
15.028	-.178	.04499	.29737	-.04920	-.23444	-.27112	-.25959	-.09898	-.18571	-.22789
14.812	2.367	.04988	.07999	-.04815	-.23571	-.27365	-.25694	-.10015	-.18716	-.23545
15.043	4.381	.05010	-.09991	-.05407	-.24412	-.28298	-.26633	-.09715	-.19575	-.24544
GRADIENT		.00115	-.08705	-.00100	-.00205	-.00253	-.00137	.00036	-.00213	-.00381

RUN NO. 104/ 0 RN/L = 3.36 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
29.734	-.108	.03970	.38200	-.03895	-.23142	-.26001	-.24466	-.09322	-.17265	-.22374
30.254	2.360	.04378	.01953	-.05221	-.24696	-.28172	-.25996	-.11164	-.19230	-.23767
29.860	4.407	.04367	-.13450	-.06072	-.25201	-.28921	-.27327	-.11200	-.19781	-.24856
GRADIENT		.00091	-.11551	-.00484	-.00462	-.00655	-.00633	-.00427	-.00566	-.00550

RUN NO. 105/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
44.868	-.111	.03717	.38880	-.05018	-.23382	-.26918	-.26080	-.12065	-.18667	-.23591
45.183	2.422	.04024	.02428	-.04788	-.23778	-.27253	-.25873	-.11100	-.18155	-.23195
45.129	4.429	.03909	-.13004	-.05862	-.24949	-.28831	-.27555	-.13305	-.19925	-.25082
GRADIENT		.00046	-.11782	-.00174	-.00337	-.00409	-.00307	-.00245	-.00257	-.00308

ARC 14-120(CA238) 747/1 ATI 02S1 (ORBITER DATA) (ENH010) (08 OCT 75)

REFERENCE DATA

SREF = 2690.000 SQ.FT. XMRP = 1109.0000 IN. XO STAB = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO ELEVON = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO GRADIENT = .0125 GRADIENT = .000 DX = .000 DX = .000
 SCALE = .0125 GRADIENT = .00052 GRADIENT = .00101 GRADIENT INTERVAL = -5.00/ 5.00 DY = .600 MACH = .600

RUN NO. 106/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
50.418	-.076	.03573	.43543	-.05251	-.24532	-.27781	-.26672	-.13571	-.19012	-.24215
50.480	2.472	.03881	.02533	-.05049	-.24092	-.27741	-.26196	-.12906	-.18632	-.23719
50.477	4.415	.03791	-.12711	-.05746	-.25330	-.28394	-.27408	-.13340	-.20294	-.24451
	GRADIENT	.00052	-.12705	-.00101	-.00160	-.00129	-.00146	.00062	-.00263	-.00040

ARC 14-120(CA238) 747/1 ATI 02S1 (ORBITER DATA) (ENH011) (08 OCT 75)

REFERENCE DATA

SREF = 2690.000 SQ.FT. XMRP = 1109.0000 IN. XO STAB = .000 STAB = -1.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO ELEVON = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO GRADIENT = .0125 GRADIENT = .000 DX = .000 DX = .000
 SCALE = .0125 GRADIENT = .00456 GRADIENT = .00884 GRADIENT INTERVAL = -5.00/ 5.00 DY = .600 MACH = .600

RUN NO. 111/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
3.151	.047	.06078	.37785	-.02504	-.22815	-.26704	-.24651	-.17467	-.16630	-.21789
3.118	2.270	.07068	.36497	-.06217	-.25314	-.28536	-.27057	-.19133	-.19265	-.24284
3.528	4.264	.08002	.35221	-.06169	-.24879	-.27743	-.26726	-.18696	-.20462	-.24852
	GRADIENT	.00456	-.00607	-.00884	-.00502	-.00257	-.00503	-.00300	-.00914	-.00734

RUN NO. 112/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
7.547	-.170	.04146	.41714	-.03591	-.24061	-.27653	-.26324	-.18338	-.17726	-.23343
7.199	2.385	.05883	.36679	-.05340	-.24932	-.28064	-.26966	-.19151	-.19499	-.23701
7.175	4.427	.07075	.30977	-.05944	-.24495	-.27729	-.26714	-.18695	-.20111	-.24281
	GRADIENT	.00663	-.02399	-.00541	-.00112	-.00025	-.00098	-.00095	-.00548	-.00208

RUN NO. 113/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
9.781	-.120	.03490	.37357	-.04804	-.24916	-.28326	-.26872	-.19287	-.18547	-.23912
9.781	2.353	.05283	.36283	-.05779	-.25112	-.28351	-.26932	-.18792	-.19542	-.24094
9.491	4.419	.06817	.31726	-.06303	-.25247	-.27712	-.26712	-.18897	-.19566	-.24363
	GRADIENT	.00733	-.01215	-.00332	-.00073	.00130	.00026	.00090	-.00230	-.00098

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITER DATA) (ENH011) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 LORR = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 114/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
14.874	-.041	.02590	.36570	-.04195	-.24857	-.28754	-.27046	-.17542	-.17809	-.23309
14.967	2.414	.04697	.37900	-.05428	-.24979	-.28303	-.26601	-.17717	-.19473	-.23888
14.923	4.392	.06414	.33706	-.06914	-.25560	-.28365	-.27472	-.18882	-.20244	-.25299
	GRADIENT	.00862	-.00599	-.00609	-.00154	-.00138	-.00085	-.00293	-.00554	-.00440

RUN NO. 115/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
29.907	-.177	.01090	.42504	-.03708	-.24863	-.28499	-.27278	-.17272	-.17033	-.23138
29.803	2.432	.03766	.46214	-.05142	-.25021	-.28236	-.26828	-.16703	-.19068	-.23878
29.693	4.435	.05623	.33114	-.06203	-.25346	-.28488	-.27396	-.18184	-.20766	-.24840
	GRADIENT	.00985	-.01866	-.00541	-.00103	.00007	-.00016	-.00177	-.00808	-.00365

RUN NO. 116/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
44.786	-.134	.00329	.50046	-.03803	-.24893	-.28893	-.27320	-.17481	-.17454	-.23560
45.057	2.347	.03178	.47353	-.05084	-.25031	-.28360	-.27535	-.17654	-.19439	-.23540
44.452	4.450	.04970	.34545	-.05966	-.25592	-.28560	-.27010	-.17945	-.19817	-.25058
	GRADIENT	.01016	-.03313	-.00473	-.00150	.00077	.00063	-.00100	-.00524	-.00317

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 LORR = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 121/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
3.209	.038	.05588	.27582	-.04476	-.23527	-.27003	-.25969	-.17478	-.18672	-.22811
3.176	2.411	.07376	.25475	-.06509	-.23995	-.26971	-.25770	-.17575	-.19898	-.24465
3.398	4.319	.07754	.16974	-.06806	-.24615	-.27247	-.25625	-.15790	-.20788	-.24589
	GRADIENT	.00516	-.02414	-.00557	-.00054	.00054	.00080	.00377	-.00495	-.00426

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITER DATA) (ENH012) (08 OCT 75)

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = -1.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .00024 DY = .600

RUN NO. 122/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYZP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
7.586	-.026	.04612	.30310	-.06270	-.24569	-.26564	-.26039	-.07058	-.19160	-.24122
7.752	2.399	.06472	.25116	-.05996	-.24464	-.27400	-.25852	-.04715	-.19767	-.23584
7.261	4.448	.06978	.17945	-.06395	-.24772	-.27355	-.26156	-.02693	-.19525	-.24505
	GRADIENT	.00536	-.02814	-.00024	-.00043	-.00182	-.00023	.00975	-.00087	-.00076

RUN NO. 123/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYZP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
10.180	-.156	.04146	.29185	-.04994	-.24086	-.27125	-.25285	-.00888	-.18193	-.22939
9.988	2.1439	.06163	.25185	-.05856	-.24133	-.27032	-.25569	-.01945	-.19370	-.23946
10.110	4.458	.06629	.14480	-.06265	-.24424	-.27842	-.26320	-.00524	-.20472	-.23890
	GRADIENT	.00549	-.03044	-.00278	-.00071	-.00146	-.00219	.00056	-.00492	-.00215

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .00741 DY = .600

RUN NO. 131/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYZP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
3.093	.127	.05851	.52140	-.03639	-.23082	-.26651	-.25380	.50742	-.16403	-.21351
3.006	2.255	.07320	.35723	-.05312	-.23701	-.26123	-.25324	.51825	-.18032	-.23062
3.460	4.338	.07743	.30161	-.06760	-.24405	-.27609	-.26141	.52664	-.19013	-.24459
	GRADIENT	.00450	-.05229	-.00741	-.00314	-.00226	-.00180	.00457	-.00620	-.00738

RUN NO. 132/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYZP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
7.217	-.139	.04581	.54870	-.04765	-.24226	-.27111	-.26263	.49033	-.17283	-.23315
7.234	2.360	.06452	.42839	-.05033	-.23519	-.26767	-.25557	.46827	-.17646	-.22870
7.262	4.367	.06551	.33586	-.05981	-.23580	-.27262	-.25502	.35226	-.18815	-.24121
	GRADIENT	.00535	-.04725	-.00263	.00149	.00111	.00172	-.02976	-.00332	-.00165

ORIGINAL PAGE IS
 OF POOR QUALITY

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITER DATA)

(ENH013) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 50.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO IORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = -.04595 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 133/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	10.116	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
	9.960		.04150	.50194	-.05174	-.24239	-.27560	-.26328	.28218	-.17759	-.23088
	9.890		.06266	.49044	-.05315	-.23714	-.27317	-.25664	.26388	-.17021	-.22575
		GRADIENT	.06704	.27880	-.06022	-.23957	-.27203	-.25358	.25358	-.17519	-.23389
			.00568	-.04595	-.00177	.00069	.00078	.00095	-.00624	.00065	-.00051

RUN NO. 134/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	15.175	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
	14.756		.03793	.53098	-.04449	-.23254	-.26943	-.25691	.28873	-.17307	-.22986
	15.038		.05782	.48094	-.05455	-.23984	-.26996	-.25775	.27398	-.17202	-.23170
		GRADIENT	.06266	.24904	-.05798	-.23773	-.26950	-.25755	.24750	-.18152	-.24289
			.00544	-.05895	-.00295	-.00120	-.00025	-.00015	-.00875	-.00172	-.00272

RUN NO. 135/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	30.192	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
	29.830		.03234	.48356	-.04075	-.23352	-.27045	-.25497	.27882	-.16591	-.22320
	29.948		.05153	.42690	-.05094	-.23715	-.27140	-.25427	.26767	-.17109	-.23633
		GRADIENT	.05504	.19079	-.06885	-.24955	-.28204	-.27022	.24368	-.19182	-.24901
			.00521	-.06378	-.00621	-.00350	-.00250	-.00326	-.00773	-.00565	-.00577

RUN NO. 136/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.708	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
	44.452		.02944	.78431	-.03500	-.23131	-.27095	-.25927	.27725	-.16343	-.22099
	44.667		.04766	.54199	-.05160	-.23522	-.27264	-.26396	.24946	-.17595	-.23874
		GRADIENT	.04998	.19343	-.05913	-.24202	-.27724	-.26288	.23836	-.17808	-.24392
			.00465	-.12936	-.00539	-.00234	-.00136	-.00084	-.00870	-.00330	-.00515

RUN NO. 137/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	50.164	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
	50.275		.02681	.76044	-.03782	-.23586	-.27303	-.26164	.25517	-.16940	-.23261
	50.038		.04497	.60538	-.04754	-.23537	-.26757	-.25837	.21716	-.17258	-.22941
		GRADIENT	.04768	.19169	-.05828	-.24230	-.28214	-.26290	.22844	-.18837	-.24555
			.00471	-.12344	-.00450	-.00136	-.00186	-.00022	-.00626	-.00409	-.00271

ARC 14-120(CA239) 747/1 AT1 02S1 (ORBITER DATA)

(ENH014) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORR = 6.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 147/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ 50.387
 50.182

ALPHAC 2.049
 4.431
 GRADIENT

XZCP .04035 XYCP -4.97051 CPC -.06984
 .04400 .35938 -.06725
 .00153 2.23755 .00109

CPB3 -.27065 CPE3 -.20907 CPS1 -.18524 CPS2 -.25191
 -.24792 -.20336 -.18689 -.24738
 .00257 .00172 .00099 -.00069 .00190

ARC 14-120(CA239) 747/1 AT1 02S1 (ORBITER DATA)

(ENH015) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORR = 8.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 151/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ 7.261
 7.540

ALPHAC 2.410
 4.362
 GRADIENT

XZCP .05123 XYCP .23611 CPC -.05261
 .05223 .00176 -.06359
 .00052 -.12008 -.00562

CPB3 -.25268 CPE3 -.15955 CPS1 -.17769 CPS2 -.23264
 -.23928 -.27291 -.25881 -.24471
 -.00382 -.00357 -.00182 -.19888 -.00618

RUN NO. 152/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ 3.896
 10.215

ALPHAC 2.043
 4.469
 GRADIENT

XZCP .04882 XYCP .22087 CPC -.05175
 .04971 .02485 -.06914
 .00037 -.10131 -.00717

CPB3 -.24832 CPE3 -.14406 CPS1 -.18262 CPS2 -.23801
 -.24636 -.27947 -.26129 -.19398
 -.00702 -.00534 -.00268 -.19398 -.24554
 -.00468 -.00311

RUN NO. 153/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ 14.806
 14.750

ALPHAC 2.079
 4.497
 GRADIENT

XZCP .04602 XYCP .17976 CPC -.07202
 .04652 .08111 -.06735
 .00020 -.10791 .00193

CPB3 -.26525 CPE3 -.15264 CPS1 -.19618 CPS2 -.24751
 -.26439 -.28282 -.26129 -.19691
 .00035 .00658 -.00030 -.19691 -.25030
 -.00115

RUN NO. 154/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ 30.131
 30.087

ALPHAC 2.049
 4.493
 GRADIENT

XZCP .04117 XYCP .12344 CPC -.07606
 .04092 .03316 -.07122
 -.00010 -.08452 .00198

CPB3 -.27154 CPE3 -.13317 CPS1 -.20021 CPS2 -.25009
 -.27244 -.12713 -.19762 -.20021
 .00037 .00247 .00106 -.19762 -.25002
 .00003

(ENH015) (08 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO STAB = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO ELEVON = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO GRADIENT = .0125
 SCALE = .0125

RUN NO. 155/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
44.833	2.044	.03903	.08383	-.06332	-.24753	-.27314	-.26595	-.08283	-.19254	-.24780
45.102	4.460	.03799	-.05499	-.07235	-.25346	-.29305	-.27705	-.09512	-.19815	-.24967
	GRADIENT	-.00043	-.05747	-.00374	-.00245	-.00517	-.00459	-.00509	-.00232	-.00077

RUN NO. 156/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
50.292	2.016	.03830	.09035	-.07667	-.25652	-.28765	-.27450	-.11049	-.19585	-.25705
50.425	4.375	.03715	-.12664	-.08066	-.26091	-.30028	-.28555	-.12083	-.20707	-.25984
	GRADIENT	-.00048	-.09197	-.00169	-.00186	-.00535	-.00468	-.00438	-.00476	-.00118

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(ENH016) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO STAB = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO ELEVON = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO GRADIENT = .0125
 SCALE = .0125

RUN NO. 161/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
2.997	2.461	.04965	.37596	-.04947	-.22882	-.26918	-.26187	-.12749	-.18249	-.23451
3.241	4.340	.05225	.27865	-.05742	-.23700	-.27998	-.26381	-.13245	-.18960	-.23781
	GRADIENT	.00139	-.05181	-.00423	-.00436	-.00522	-.00104	-.00264	-.00378	-.00176

RUN NO. 162/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
7.114	2.024	.04095	.35777	-.06689	-.24789	-.28382	-.26934	-.15323	-.19346	-.25084
7.110	4.482	.04484	.26349	-.06010	-.23912	-.27601	-.26082	-.13849	-.18650	-.24075
	GRADIENT	.00158	-.03835	.00276	.00357	.00318	.00347	.00600	.00283	.00410

RUN NO. 163/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
10.110	1.989	.03841	.37909	-.05123	-.23447	-.27452	-.25855	-.13892	-.17925	-.24150
9.502	4.485	.04300	.24667	-.05818	-.23759	-.27668	-.26446	-.14232	-.18358	-.24438
	GRADIENT	.00184	-.05305	-.00278	-.00125	-.00086	-.00237	-.00136	-.00173	-.00115

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITTER DATA) (ENH016) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

RUN NO. 164/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
14.885	2.147	.03724	.3469F	-.07049	-.25124	-.28471	-.27132	-.15778	-.19741	-.24401
14.669	4.296	.04142	.20645	-.06505	-.24347	-.27899	-.26923	-.14911	-.19032	-.24672
	GRADIENT	.00195	-.06539	.00253	.00361	.00266	.00097	.00404	.00330	-.00127

RUN NO. 165/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
29.970	2.006	.03606	.32948	-.06254	-.24353	-.27833	-.26548	-.15303	-.18409	-.24112
29.738	4.442	.04091	.22143	-.06019	-.24160	-.27978	-.26624	-.14819	-.18880	-.24350
	GRADIENT	.00199	-.04435	.00096	.00079	-.00059	-.00031	.00199	-.00194	-.00098

RUN NO. 166/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
44.740	2.001	.03593	.40757	-.07121	-.25301	-.28273	-.26988	-.15903	-.18848	-.25060
44.620	4.440	.04045	.15458	-.06431	-.24036	-.27692	-.26473	-.15017	-.19025	-.24713
	GRADIENT	.00185	-.10373	.00283	.00519	.00238	.00211	.00363	-.00073	.00142

RUN NO. 167/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
50.218	1.983	.03557	.42657	-.06048	-.24270	-.27529	-.26524	-.15715	-.18078	-.24840
50.509	4.478	.04000	.12951	-.06513	-.24928	-.28159	-.26883	-.15395	-.18789	-.25172
	GRADIENT	.00178	-.11904	-.00187	-.00264	-.00253	-.00144	.00129	-.00285	-.00133

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITTER DATA)

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO IORB = 8.000 DX = 20.000
 SCALE = .0125 GRADIENT = -.00025 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

PARAMETRIC DATA

Run No.	171/ 0	RN/L = 3.31	GRADIENT INTERVAL = -5.00/ 5.00							
DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
7.409	2.320	.04467	.16299	-.05833	-.23103	-.27279	-.25896	-.20691	-.19606	-.24188
7.682	4.409	.04414	-.01823	-.06477	-.24601	-.28595	-.27101	-.21394	-.20199	-.24873
	GRADIENT	-.00025	-.08677	-.00308	-.00717	-.00630	-.00577	-.00337	-.00284	-.00328

Run No.	172/ 0	RN/L = 3.32	GRADIENT INTERVAL = -5.00/ 5.00							
DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
10.200	1.989	.04223	.15163	-.05998	-.24498	-.28330	-.26638	-.20725	-.20136	-.24926
9.876	4.367	.04206	-.04356	-.07035	-.24954	-.28852	-.27011	-.20488	-.20434	-.24819
	GRADIENT	-.00007	-.08082	-.00016	-.00192	-.00346	-.00157	.00100	-.00125	.00045

Run No.	173/ 0	RN/L = 3.33	GRADIENT INTERVAL = -5.00/ 5.00							
DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
14.980	2.042	.03989	.11914	-.07471	-.25462	-.29018	-.27333	-.20864	-.21238	-.25703
14.840	4.390	.03957	-.05068	-.08023	-.25523	-.29491	-.27760	-.20702	-.20702	-.25416
	GRADIENT	-.00014	-.07233	-.00235	-.00026	-.00202	-.00182	.00069	.00229	.00122

Run No.	174/ 0	RN/L = 3.32	GRADIENT INTERVAL = -5.00/ 5.00							
DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
30.168	1.994	.03718	.11374	-.07403	-.25794	-.29129	-.28005	-.21075	-.20487	-.25972
29.810	4.397	.03699	-.06613	-.07443	-.26007	-.29768	-.28226	-.20838	-.21054	-.25763
	GRADIENT	-.00008	-.07487	-.00017	-.00126	-.00366	-.00092	.00099	-.00236	.00087

Run No.	175/ 0	RN/L = 3.32	GRADIENT INTERVAL = -5.00/ 5.00							
DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
44.854	2.109	.03651	.03714	-.06373	-.24997	-.28808	-.26943	-.20483	-.20213	-.24997
45.244	4.417	.03540	-.08333	-.07590	-.26259	-.29755	-.27939	-.20867	-.20813	-.25717
	GRADIENT	-.00048	-.05220	-.00527	-.00547	-.00410	-.00431	-.00166	-.00260	-.00312

Run No.	176/ 0	RN/L = 3.32	GRADIENT INTERVAL = -5.00/ 5.00							
DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
50.344	2.118	.03514	.07841	-.06847	-.24766	-.28177	-.27013	-.20093	-.19867	-.25334
50.595	4.352	.03491	-.07524	-.07068	-.25755	-.29541	-.27756	-.20861	-.20482	-.26053
	GRADIENT	-.00055	-.06878	-.00099	-.00443	-.00611	-.00333	-.00348	-.00275	-.00322

ORIGINAL SOURCE DATA
 OF POOR QUALITY

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(ENH018) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

PARAMETRIC DATA

RUN NO. 181/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
3.378	2.472	.07096	-.13422	-.06464	-.24736	-.27253	-.26441	-.18726	-.19024	-.24952
3.590	4.405	.07803	-.67489	-.06726	-.24807	-.27937	-.26588	-.18519	-.19490	-.25265
	GRADIENT	.00366	-.27958	-.00135	-.00037	-.00354	-.00076	.00107	-.00241	-.00162

RUN NO. 182/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
7.711	2.009	.05000	-.05661	-.07757	-.25456	-.28825	-.27675	-.20163	-.20350	-.25857
7.202	4.378	.06815	-.51759	-.07549	-.25422	-.28627	-.27568	-.19582	-.20071	-.26400
	GRADIENT	.00344	-.19035	.00088	.00014	.00083	.00045	.00245	.00118	-.00229

RUN NO. 183/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
9.911	2.005	.05788	.02737	-.07815	-.25641	-.28443	-.27216	-.19797	-.20064	-.25828
10.102	4.475	.06498	-.66327	-.07170	-.25077	-.28771	-.27180	-.19117	-.20061	-.26074
	GRADIENT	.00287	-.27962	.00261	.00229	-.00133	.00014	.00275	.00001	-.00100

RUN NO. 184/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
14.973	2.102	.05474	.09579	-.07556	-.26004	-.29587	-.28250	-.19882	-.20764	-.26379
14.736	4.362	.06146	-.36029	-.07386	-.25431	-.28398	-.27319	-.18877	-.20414	-.26241
	GRADIENT	.00297	-.20173	.00075	.00253	.00526	.00412	.00444	.00155	.00061

RUN NO. 185/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
29.716	2.100	.04723	.25636	-.07440	-.25998	-.28957	-.28397	-.19785	-.20745	-.26238
29.761	4.335	.05249	-.03519	-.07016	-.25617	-.28857	-.27615	-.19138	-.20002	-.25482
	GRADIENT	.00235	-.13046	.00190	.00170	.00045	.00350	.00290	.00332	.00338

RUN NO. 186/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
44.733	1.972	.04246	.34928	-.06436	-.25112	-.28522	-.27304	-.18941	-.19807	-.25491
44.856	4.308	.04737	.05391	-.06632	-.24991	-.28177	-.26981	-.18592	-.20428	-.25693
	GRADIENT	.00210	-.12644	-.00084	.00052	.00148	.00181	.00149	-.00266	-.00087

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (ENH018) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO LORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = -.13154 -.00151 .00155 -.00058 -.00459 -.00217 -.00604 -.00815

RUN NO. 187/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
49.952	2.021	.04088	.34071	-.06794	-.25759	-.29069	-.27115	-.19097	-.19301	-.24457
50.410	4.396	.04577	.0283	-.07152	-.25391	-.29207	-.28206	-.19573	-.20737	-.26392

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (ENH019) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO LORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = -.20402 -.00319 -.00412 -.00398 -.00330 -.00167 -.00208 -.00344

RUN NO. 191/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
7.491	2.405	.05706	-.23786	-.06455	-.24878	-.27692	-.26610	-.16492	-.19711	-.24797
7.844	4.380	.05782	-.64083	-.07085	-.25693	-.28478	-.27261	-.16822	-.20121	-.25476

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (ENH019) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO LORB = 10.000 DX = .000
 SCALE = .0125 GRADIENT = -.08764 .00052 -.00088 -.00325 -.00361 .00353 -.00016 -.00187

RUN NO. 193/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
14.864	1.964	.05030	-.05855	-.07683	-.25386	-.28532	-.27012	-.17201	-.20374	-.25466
15.018	4.414	.05199	-.27326	-.07557	-.25600	-.29328	-.27896	-.16335	-.20414	-.25925

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (ENH019) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO LORB = 10.000 DX = .000
 SCALE = .0125 GRADIENT = -.01707 -.07603 -.07688 -.00314 -.00167 .00145 -.00072 -.00177

RUN NO. 194/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
30.225	2.014	.04498	.01707	-.07603	-.25810	-.29089	-.27916	-.18133	-.20772	-.25597
30.105	4.404	.04476	-.29380	-.07688	-.26561	-.29855	-.28316	-.17786	-.20945	-.26021

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(ENH019) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 195/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ
 44.421
 45.079

XZCP
 .04190
 .04077
 -.00048

XYCP CPC
 .02346
 -.07806
 -.26248

CPB1 CPB2 CPB3 CPB4
 -.27285
 -.31148
 -.29318
 -.27876

CPE3 CPS1 CPS2
 -.18535
 -.21524
 -.18535

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 8.000 DX = .000
 DY = 10.000 MACH = .600

PARAMETRIC DATA

RUN NO. 196/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ
 50.290
 50.279

XZCP
 .04085
 .03947
 -.00059

XYCP CPC
 .05374
 -.06750
 -.25046

CPB1 CPB2 CPB3 CPB4
 -.16453
 -.07574
 -.28398
 -.26830

CPE3 CPS1 CPS2
 -.09401
 -.00355
 -.17750

(ENH020) (21 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ
 2.999
 2.972
 3.376

XZCP
 .39863
 .29254
 .24754

XYCP CPC
 .26105
 .24623
 .23566

CPB1 CPB2 CPB3 CPB4
 -.00605
 -.00417
 -.26895
 -.28299

CPE3 CPS1 CPS2
 -.03439
 -.06544
 -.05138

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ
 7.356
 7.305
 7.176

XZCP
 .35614
 .26945
 .23535

XYCP CPC
 .29853
 .24864
 .20830

CPB1 CPB2 CPB3 CPB4
 -.01989
 -.00616
 -.27678
 -.26787

CPE3 CPS1 CPS2
 -.03357
 -.04939
 -.06147

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO IORB = 4.000 DX = .000
 SCALE = .0125 GRADIENT = -.02476 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00 DY = .600

PARAMETRIC DATA

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYZP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
9.998	-.190	.34066	.25702	-.05580	-.25375	-.29127	-.27877	-.20985	-.18564	-.24577
9.822	2.393	.25630	.22934	-.05492	-.24458	-.27489	-.25879	-.19441	-.18368	-.23385
9.715	4.416	.22834	.23567	-.06131	-.24450	-.27526	-.26483	-.19904	-.19690	-.24584
	GRADIENT	-.02476	-.00491	-.00113	.00208	.00361	.00324	.00251	-.00230	.00019

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYZP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
14.608	-.076	.31885	.25658	-.04064	-.24353	-.27829	-.26104	-.20473	-.17644	-.22683
14.941	2.433	.24089	.25604	-.04728	-.23836	-.27102	-.25941	-.19877	-.18708	-.24288
14.567	4.425	.21767	.23029	-.06068	-.24189	-.27132	-.26268	-.19814	-.18923	-.23784
	GRADIENT	-.02284	-.00560	-.00438	.00044	.00161	-.00032	.00149	-.00290	-.00261

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYZP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
29.742	-.160	.30440	.27306	-.05510	-.25147	-.29251	-.27519	-.21524	-.18246	-.24561
29.812	2.421	.21868	.27933	-.05340	-.24348	-.27880	-.26909	-.19880	-.18551	-.23458
29.770	4.475	.19747	.20422	-.06195	-.24859	-.28199	-.26583	-.19985	-.19635	-.24536
	GRADIENT	-.02350	-.01413	-.00139	.00073	.00240	.00203	.00343	-.00292	.00023

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYZP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
44.518	-.106	.29416	.31731	-.05053	-.25239	-.29748	-.27655	-.22555	-.18313	-.24165
44.662	2.474	.20358	.27619	-.04737	-.24135	-.26968	-.25187	-.19333	-.17822	-.23137
44.473	4.486	.18437	.19851	-.05562	-.23680	-.26980	-.26050	-.19489	-.18596	-.24113
	GRADIENT	-.02442	-.02541	-.00100	.00343	.00525	.00375	.00694	-.00050	.00029

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(ENH021) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT.
 LREF = 474.8100 IN.
 BREF = 936.6800 IN.
 SCALE = .0125

XMRP = 1109.0000 IN. X0
 YMRP = .0000 IN. Y0
 ZMRP = 375.0000 IN. Z0

PARAMETRIC DATA

BETA = .000 STAB = -.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 211/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	3.110	ALPHAC	.173	XZCP	.41452	XYCP	.25224	CPC	-.03869	CPB1	-.23315	CPB2	-.27188	CPB3	-.25425	CPE3	-.21792	CPS1	-.17465	CPS2	-.22513
	3.078		2.255		.30802		.22748		-.05057		-.23413		-.26517		-.25313		-.21700		-.18570		-.23573
	3.099	GRADIENT	4.353		.25796		.21353		-.06938		-.24387		-.27569		-.26455		-.23140		-.20595		-.25713
				GRADIENT	-.03743		-.00926		-.00734		-.00257		-.00092		-.00247		-.00323		-.00749		-.00766

RUN NO. 212/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.673	ALPHAC	-.126	XZCP	.37046	XYCP	.24630	CPC	-.04127	CPB1	-.23371	CPB2	-.27311	CPB3	-.26346	CPE3	-.21897	CPS1	-.18064	CPS2	-.22057
	7.105		2.399		.28484		.24770		-.05513		-.24072		-.27120		-.25970		-.22333		-.18991		-.23109
	7.181	GRADIENT	4.355		.24296		.21351		-.05831		-.24065		-.26311		-.24921		-.21659		-.19413		-.23905
				GRADIENT	-.02871		-.00694		-.00388		-.00161		-.00216		-.00263		-.00042		-.00304		-.00412

RUN NO. 213/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	9.888	ALPHAC	-.253	XZCP	.37602	XYCP	.25118	CPC	-.05351	CPB1	-.24854	CPB2	-.28352	CPB3	-.27160	CPE3	-.23291	CPS1	-.18998	CPS2	-.23688
	10.133		2.398		.26795		.26065		-.06193		-.24162		-.26835		-.25670		-.22918		-.20033		-.24479
	9.989	GRADIENT	4.413		.23410		.20391		-.06689		-.24687		-.27065		-.26008		-.22995		-.20247		-.25057
				GRADIENT	-.03094		-.00943		-.00288		-.00047		-.00291		-.00263		-.00067		-.00274		-.00294

RUN NO. 214/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	14.808	ALPHAC	-.052	XZCP	.33433	XYCP	.24131	CPC	-.05092	CPB1	-.24013	CPB2	-.27956	CPB3	-.26474	CPE3	-.22161	CPS1	-.18959	CPS2	-.23537
	14.795		2.452		.25309		.25639		-.05233		-.24122		-.27195		-.25832		-.22065		-.18699		-.23588
	14.946	GRADIENT	4.403		.22292		.20783		-.05692		-.23454		-.26686		-.25350		-.22573		-.19447		-.24042
				GRADIENT	-.02535		-.00689		-.00131		-.00118		-.00286		-.00252		-.00086		-.00100		-.00109

RUN NO. 215/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	29.743	ALPHAC	-.137	XZCP	.31380	XYCP	.29584	CPC	-.05021	CPB1	-.24849	CPB2	-.28296	CPB3	-.26652	CPE3	-.22755	CPS1	-.18010	CPS2	-.23763
	29.755		2.487		.22515		.26577		-.05262		-.24142		-.27191		-.25559		-.22743		-.18740		-.23661
	29.747	GRADIENT	4.402		.20165		.22420		-.06133		-.24349		-.27595		-.26254		-.23088		-.20030		-.24832
				GRADIENT	-.02525		-.01553		-.00236		-.00120		-.00170		-.00107		-.00057		-.00435		-.00219

ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA) (ENH021) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = -1.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO IORB = 4.000 DX = .000
 SCALE = .0125 GRADIENT = -.02630 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

PARAMETRIC DATA

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
44.609	-.114	.30130	.42326	-.05274	-.24956	-.28723	-.27344	-.22940	-.17184	-.24054
44.499	2.547	.20540	.31655	-.05451	-.24433	-.27516	-.26041	-.22905	-.17998	-.24352
44.744	4.315	.18855	.34632	-.05559	-.23912	-.26725	-.25412	-.22411	-.18553	-.23697
	GRADIENT	-.02630	-.02061	-.00065	.00233	.00451	.00440	.00111	-.00309	.00065

ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA) (ENH022) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO IORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = -.07089 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

PARAMETRIC DATA

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
7.175	180	.18036	.21105	-.04032	-.21690	-.23985	-.23013	-.23661	-.16776	-.22203
7.048	2.374	.16764	.12198	-.05100	-.22475	-.25641	-.24450	-.26399	-.18117	-.23016
7.827	4.374	.14944	-.08835	-.05929	-.23090	-.26717	-.25255	-.21628	-.18678	-.24010
	GRADIENT	-.00735	-.07089	-.00453	-.00334	-.00653	-.00537	.00457	-.00456	-.00430

ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA) (ENH023) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO IORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = -.05228 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

PARAMETRIC DATA

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
10.008	-.095	.17224	.19754	-.04516	-.22589	-.25074	-.23939	-.18698	-.17078	-.22048
9.794	2.462	.16279	.09055	-.05619	-.22622	-.25618	-.24484	-.19195	-.18574	-.23567
10.168	4.329	.14498	-.09443	-.05854	-.23474	-.26712	-.25417	-.19778	-.19265	-.23555
	GRADIENT	-.00601	-.05455	-.00310	-.00189	-.00361	-.00327	-.00241	-.00500	-.00356

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(ENH022) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT.
 LREF = 474.8100 IN.
 BREF = 936.6800 IN.
 SCALE = .0125

XMRP = 1109.0000 IN. XO
 YMRP = .0000 IN. YO
 ZMRP = 375.0000 IN. ZO

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 224/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	29.663	ALPHAC	.130	XZCP	.16450	XYCP	.20057	CPC	-.05583	CPB1	-.23379	CPB2	-.26328	CPB3	-.24282	CPE3	-.18757	CPS1	-.18146	CPS2	-.23512
	30.014		2.540		.14917		.04527		-.06088		-.24111		-.26458		-.25460		-.19443		-.18391		-.24246
	30.212		4.360		.12891		-.08563		-.06557		-.24766		-.27670		-.26648		-.19844		-.19951		-.24281
		GRADIENT			-.00776		-.06332		-.00215		-.00305		-.00280		-.00520		-.00243		-.00379		-.00179

RUN NO. 225/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.608	ALPHAC	-.097	XZCP	.16064	XYCP	.23099	CPC	-.04637	CPB1	-.22687	CPB2	-.25058	CPB3	-.23980	CPE3	-.18215	CPS1	-.17676	CPS2	-.23657
	44.758		2.520		.14318		.04319		-.05407		-.23509		-.26710		-.25338		-.19313		-.18963		-.23913
	44.921		4.300		.12214		-.08100		-.06097		-.23982		-.27366		-.25992		-.19121		-.18880		-.23284
		GRADIENT			-.00860		-.07101		-.00329		-.00296		-.00533		-.00463		-.00222		-.00290		-.00071

RUN NO. 226/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	50.329	ALPHAC	-.122	XZCP	.15944	XYCP	.26417	CPC	-.04415	CPB1	-.22660	CPB2	-.25872	CPB3	-.24495	CPE3	-.18530	CPS1	-.17910	CPS2	-.23038
	50.199		2.456		.14255		.05436		-.06230		-.23923		-.26629		-.25329		-.18909		-.18512		-.23949
	50.308		4.443		.11898		-.05109		-.06660		-.24688		-.27491		-.26548		-.19784		-.19692		-.24581
		GRADIENT			-.00875		-.06966		-.00502		-.00447		-.00352		-.00444		-.00268		-.00424		-.00339

REFERENCE DATA

SREF = 2690.0000 SQ.FT.
 LREF = 474.8100 IN.
 BREF = 936.6800 IN.
 SCALE = .0125

XMRP = 1109.0000 IN. XO
 YMRP = .0000 IN. YO
 ZMRP = 375.0000 IN. ZO

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 231/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	3.150	ALPHAC	.028	XZCP	.22436	XYCP	.24228	CPC	-.04239	CPB1	-.22103	CPB2	-.25396	CPB3	-.23804	CPE3	-.16301	CPS1	-.16760	CPS2	-.22184
	3.398		2.478		.21351		.20479		-.05171		-.22321		-.25292		-.24373		-.17054		-.17864		-.23563
	3.235		4.342		.20391		.14862		-.05232		-.22686		-.25928		-.24739		-.16850		-.18525		-.23172
		GRADIENT			-.00472		-.02138		-.00238		-.00133		-.00115		-.00218		-.00136		-.00411		-.00246

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(ENH023) (08 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 OES1 (ORBITER DATA) (ENH023) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = -.02745 -.00168 .00099 .00176 .25953 .25970 .25464 .17168 .17863 .18730 .18993 .23552 .00145

PARAMETRIC DATA

ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
DZ 7.044	.21035	.24586	-.05224	-.23474	-.26734	-.25532	-.17168	-.17863	-.24196
7.210	.20535	.20969	-.06034	-.23282	-.25970	-.25464	-.17373	-.18730	-.23574
7.208	.19451	.11642	-.05964	-.23013	-.25953	-.24766	-.16862	-.18993	-.23552
GRADIENT	-.00337	-.02745	-.00168	.00099	.00176	.00160	.00060	-.00250	.00145

ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
DZ 9.588	.20594	.25571	-.04458	-.23046	-.25643	-.24588	-.16552	-.17093	-.22938
9.981	.20118	.18845	-.06178	-.23265	-.26677	-.25211	-.17534	-.18867	-.23825
9.714	.18993	.12368	-.05704	-.23284	-.25872	-.24578	-.17190	-.18700	-.24147
GRADIENT	-.00348	-.02923	-.00296	.00055	.00068	.00009	.00153	-.00373	-.00273

ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
DZ 14.480	.20130	.27704	-.04662	-.23107	-.26111	-.24808	-.17234	-.17552	-.23187
14.703	.19587	.17268	-.05236	-.22895	-.25757	-.24137	-.16415	-.17684	-.23219
14.839	.18386	.12421	-.05533	-.23125	-.26390	-.25445	-.17270	-.18889	-.23826
GRADIENT	-.00379	-.03444	-.00196	.00001	.00051	.00120	.00010	-.00284	-.00135

ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
DZ 29.767	.19098	.29006	-.04422	-.22941	-.26397	-.24912	-.16894	-.17488	-.23103
29.743	.18344	.21383	-.05904	-.22739	-.27178	-.25659	-.17661	-.18434	-.24192
29.929	.16734	.07192	-.05842	-.23528	-.26386	-.25469	-.17327	-.19053	-.24526
GRADIENT	-.00512	-.04739	-.00326	-.00138	-.00012	-.00131	-.00105	-.00347	-.00320

ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
DZ 44.538	.18657	.31682	-.04167	-.23042	-.26774	-.25476	-.16714	-.17336	-.22528
44.541	.17470	.21749	-.04321	-.22569	-.25476	-.24534	-.16137	-.17294	-.23107
44.965	.15695	.04730	-.05824	-.23390	-.26655	-.25630	-.16482	-.18425	-.23579
GRADIENT	-.00662	-.06013	-.00363	-.00069	-.00046	-.00019	.00059	-.00236	-.00237

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(ENH023) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 237/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
49.951	-.140	.18753	.32385	-.05060	-.23764	-.27259	-.26246	-.17361	-.18428	-.23978
49.970	2.539	.17216	.21996	-.04999	-.23021	-.25715	-.25068	-.16475	-.17660	-.23829
50.050	4.426	.15509	.07569	-.06427	-.24309	-.27662	-.25879	-.17124	-.18907	-.24841
	GRADIENT	-.00701	-.05330	-.00278	-.00093	-.03043	.00104	.00071	-.00079	-.00173

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(ENH024) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 241/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
2.790	.104	.23564	.23745	-.04870	-.22835	-.25618	-.24726	-.16541	-.17864	-.22133
3.147	2.378	.21811	.17780	-.04750	-.22360	-.24734	-.23817	-.16347	-.17857	-.22684
3.235	4.382	.20563	.11533	-.05669	-.22903	-.25515	-.24088	-.15713	-.18756	-.22930
	GRADIENT	-.00703	-.02849	-.00181	-.00011	.00032	.00155	.00191	-.00204	-.00188

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 242/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
7.214	-.107	.21260	.23060	-.03794	-.22103	-.25392	-.24368	-.16359	-.17384	-.22426
7.169	2.445	.20794	.19529	-.05058	-.22428	-.24532	-.23480	-.16225	-.18032	-.22374
7.223	4.433	.19637	.11872	-.05888	-.23243	-.25642	-.24240	-.15994	-.18743	-.23270
	GRADIENT	-.00349	-.02415	-.00463	-.00246	-.00037	.00043	.00079	-.00297	-.00176

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 243/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
9.900	-.036	.20747	.27553	-.05146	-.23119	-.26047	-.24822	-.17767	-.18379	-.23811
9.833	2.466	.20454	.19268	-.05338	-.22871	-.25268	-.23652	-.16245	-.18696	-.22655
9.797	4.354	.19323	.11468	-.05376	-.22166	-.25158	-.24295	-.16803	-.18770	-.23621
	GRADIENT	-.00313	-.03646	-.00054	.00211	.00208	.00138	.00240	-.00091	-.00065

PARAMETRIC DATA

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITTER DATA) (ENR024) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = -1.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = -.02973 -.00429 -.00324 -.00185 -.00804 -.00504 MACH = .600

PARAMETRIC DATA

Run No.	244/0	0	RN/L = 3.30	GRADIENT INTERVAL = -5.00/ 5.00	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
DZ	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2	
14.827	.20372	.26196	-.04015	-.21858	-.24930	-.23313	-.16629	-.16332	-.21750	
14.725	.19826	.19336	-.04796	-.22496	-.24917	-.23841	-.16955	-.18542	-.22900	
14.404	.18705	.12736	-.05973	-.22996	-.26094	-.24801	-.17474	-.19898	-.24020	
	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	
	-.00362	-.02973	-.00429	-.00255	-.00241	-.00324	-.00185	-.00804	-.00504	
Run No.	245/0	0	RN/L = 3.29	GRADIENT INTERVAL = -5.00/ 5.00	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
DZ	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2	
29.598	.19163	.26215	-.05094	-.23454	-.26620	-.25050	-.18025	-.17972	-.23374	
29.897	.18310	.17927	-.05147	-.22574	-.25429	-.24621	-.17403	-.18211	-.23329	
29.731	.10832	.08177	-.05829	-.23313	-.26115	-.25065	-.17306	-.19218	-.23825	
	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	
	-.00508	-.03955	-.00157	-.00042	-.00124	-.00003	-.00162	-.00269	-.00096	
Run No.	246/0	0	RN/L = 3.28	GRADIENT INTERVAL = -5.00/ 5.00	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
DZ	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2	
44.528	.18776	.32597	-.05337	-.24299	-.27536	-.26145	-.19967	-.18736	-.23604	
44.796	.17395	.17986	-.06342	-.23974	-.26650	-.25526	-.19265	-.19934	-.24616	
44.981	.15623	.09304	-.06153	-.24027	-.26955	-.25240	-.17799	-.19417	-.24053	
	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	
	-.00684	-.05117	-.00187	-.00062	-.00133	-.00200	-.00466	-.00161	-.00110	
Run No.	247/0	0	RN/L = 3.28	GRADIENT INTERVAL = -5.00/ 5.00	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
DZ	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2	
49.996	.18441	.27787	-.03985	-.22498	-.26450	-.24826	-.18926	-.17681	-.22580	
50.084	.17052	.18151	-.05140	-.22993	-.25883	-.24613	-.17564	-.17666	-.23749	
50.059	.15453	.08569	-.05471	-.23014	-.26464	-.24739	-.16574	-.18784	-.23877	
	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	
	-.00655	-.04234	-.00338	-.00120	-.00012	-.00023	-.00523	-.00244	-.00299	

ARC 14-120(CA23B) 74771 AT1 02S1 (ORBITER DATA)

(ENH025) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 LORB = 8.000 DX = .000
 DY = .000 MACH = .600

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
7.209	.039	.18097	.19263	-.04976	-.21516	-.24419	-.23700	-.21676	-.18613	-.22981
7.216	2.367	.16929	.11427	-.06063	-.22855	-.25513	-.24290	-.21128	-.18498	-.22855
7.326	4.353	.15413	-.01664	-.05876	-.22841	-.26180	-.24402	-.20767	-.19502	-.23029
	GRADIENT	-.00618	-.04808	-.00216	-.00315	-.00410	-.00165	.00211	-.00199	-.00009

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
9.339	-.027	.17665	.18809	-.05489	-.22188	-.24873	-.23677	-.21709	-.18120	-.22799
10.040	2.372	.16620	.09575	-.06337	-.22483	-.25218	-.24183	-.21421	-.19429	-.23519
10.061	4.478	.14712	-.05353	-.05831	-.23013	-.25894	-.24494	-.20966	-.18515	-.22905
	GRADIENT	-.00650	-.05328	-.00082	-.00182	-.00225	-.00182	.00164	-.00098	-.00030

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
14.643	-.013	.17315	.16798	-.04441	-.22111	-.24674	-.23325	-.21302	-.17174	-.21626
15.082	2.543	.16083	.07948	-.05129	-.22122	-.24565	-.23223	-.21021	-.18068	-.22417
14.801	4.374	.14445	-.08867	-.06787	-.23804	-.26626	-.24975	-.21966	-.20182	-.23564
	GRADIENT	-.00643	-.05698	-.00518	-.00361	-.00414	-.00350	-.00135	-.00664	-.00433

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
29.827	-.162	.16562	.18782	-.05542	-.23288	-.25659	-.24513	-.23208	-.18012	-.23101
30.228	2.450	.15191	.08232	-.06457	-.23155	-.26287	-.25199	-.22703	-.19491	-.23898
30.232	4.437	.13007	-.09253	-.06295	-.23924	-.26880	-.25751	-.22419	-.19651	-.23574
	GRADIENT	-.00760	-.05990	-.00173	-.00129	-.00264	-.00269	.00173	-.00367	-.00113

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
44.600	-.132	.16096	.20088	-.05136	-.22648	-.25619	-.24505	-.22727	-.17049	-.22276
44.018	2.364	.14511	.07147	-.05245	-.22788	-.25829	-.24160	-.21524	-.18671	-.23138
44.806	4.412	.12208	-.09910	-.06159	-.24041	-.27188	-.25547	-.21863	-.19362	-.23208
	GRADIENT	-.00848	-.06551	-.00219	-.00298	-.00336	-.00216	.00201	-.00514	-.00210

(ENH025) (21 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = -1.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO LORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = -.07062 -.00223 -.00290 -.00236 .00215 .00289 .00145

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
49.823	-.233	.15949	.26013	-.05784	-.23477	-.26137	-.24860	-.23610	-.18555	-.23796
50.763	2.449	.14154	-.05792	-.05140	-.22759	-.25906	-.24185	-.22194	-.18240	-.23324
50.761	4.339	.11985	-.06113	-.06956	-.24646	-.27585	-.26102	-.22731	-.20008	-.24565
	GRADIENT	-.00854	-.07062	-.00223	-.00221	-.00290	-.00236	.00215	-.00289	-.00145

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(ENH027) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO LORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = -.02650 -.00335 .00222 .00323 .00415 .00334 .00167

RUN NO. 261/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
7.310	.046	.13294	-.01531	-.00879	.00908	.00440	-.00384	-.24489	-.16628	-.21988
7.309	2.283	.13085	-.01665	-.02316	-.00665	-.00909	-.01883	-.24420	-.17413	-.23013
7.865	4.288	.11609	-.12989	-.02274	-.00139	-.00905	-.01289	-.22699	-.18044	-.22671
	GRADIENT	-.00391	-.02650	-.00335	-.00255	-.00323	-.00222	.00415	-.00334	-.00167

RUN NO. 262/ 0 RN/L = 3.28 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
9.835	-.171	.12435	.00582	-.01647	-.00223	-.00240	-.00781	-.21944	-.17533	-.22350
9.901	2.437	.12418	-.04792	-.00980	-.00417	-.01198	-.00569	-.21451	-.17505	-.22191
9.652	4.384	.11107	-.10371	-.02474	-.00664	-.01020	-.01816	-.18166	-.18001	-.22802
	GRADIENT	-.00276	-.02386	-.00158	-.00124	-.00153	-.00210	.00794	-.00097	-.00090

RUN NO. 263/ 0 RN/L = 3.27 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
14.936	-.143	.12131	-.05493	-.01223	.00348	.00158	-.00627	.77182	-.16357	-.20959
14.990	2.462	.12002	-.09548	-.00850	-.01148	-.00330	-.00330	.79351	-.16447	-.20798
15.447	4.479	.10350	-.12241	-.02251	-.00221	-.00496	-.01373	.72712	-.17227	-.21863
	GRADIENT	-.00369	-.01464	-.00205	-.00103	-.00134	-.00148	-.00682	-.00181	-.00183

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 264/ 0 RN/L = 3.27

GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
29.711	-.161	.10760	-.04040	-.01634	.00070	-.00174	-.00498	.70498	-.16936	-.21938
29.841	2.529	.10811	-.09044	-.01512	.00441	-.00109	-.01044	.71135	-.17158	-.22107
30.092	4.385	.09352	-.12761	-.02140	-.00111	-.00385	-.01235	.69650	-.18127	-.22405
	GRADIENT	-.00286	-.01914	-.00100	-.00027	-.00041	-.00165	-.00156	-.00249	-.00100

RUN NO. 265/ 0 RN/L = 3.27

GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
44.673	-.113	.10410	-.06477	-.00918	.00676	.01621	-.00203	.64763	-.16967	-.21447
44.791	2.534	.10403	-.08831	-.01338	.00335	-.00335	-.00625	.63245	-.16915	-.21440
44.852	4.379	.08724	-.13571	-.02335	-.00851	-.00851	-.01758	.62424	-.18058	-.23033
	GRADIENT	-.00350	-.01531	-.00305	-.00325	-.00313	-.00333	-.00524	-.00225	-.00329

RUN NO. 266/ 0 RN/L = 3.28

GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
50.205	-.137	.10048	-.03505	-.02095	-.00380	-.00489	-.01333	.57874	-.17305	-.22202
50.115	2.437	.10221	-.08641	-.01057	.00617	-.00068	-.01030	.59986	-.16977	-.21698
50.310	4.427	.08544	-.14077	-.02294	-.00423	-.00616	-.01634	.60276	-.17888	-.22151
	GRADIENT	-.00311	-.02301	-.00022	-.00010	-.00016	-.00057	.00540	-.00116	.00020

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 281/ 0 RN/L = 3.28

GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
3.140	2.460	.14765	.02195	-.00832	.01219	.00809	-.00285	.51581	-.16617	-.21541
3.154	4.481	.14917	.00936	-.01396	.00462	.00134	-.00604	.51346	-.16427	-.21947
	GRADIENT	.00075	-.00623	-.00279	-.00375	-.00334	-.00158	-.00116	.00094	-.00201

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORR = 8.000 DX = .000
 DY = .000 MACH = .600

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 281/ 0 RN/L = 3.28

GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
3.140	2.460	.14765	.02195	-.00832	.01219	.00809	-.00285	.51581	-.16617	-.21541
3.154	4.481	.14917	.00936	-.01396	.00462	.00134	-.00604	.51346	-.16427	-.21947
	GRADIENT	.00075	-.00623	-.00279	-.00375	-.00334	-.00158	-.00116	.00094	-.00201

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORR = 6.000 DX = 10.000
 DY = .000 MACH = .600

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XU BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO 10FRB = 6.000 DX = 10.000
 SCALE = .0125 .00982 .00362 .00381 .00413 .00410 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO.	282/ 0	RN/L = 3.28	GRADIENT INTERVAL = -5.00/ 5.00	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2	
DZ	ALPHAC	XZCP	XYCP	CPC	CPB1 <td>CPB2 <td>CPB3 <td>CPE3 <td>CPS1 <td>CPS2</td> </td></td></td></td>	CPB2 <td>CPB3 <td>CPE3 <td>CPS1 <td>CPS2</td> </td></td></td>	CPB3 <td>CPE3 <td>CPS1 <td>CPS2</td> </td></td>	CPE3 <td>CPS1 <td>CPS2</td> </td>	CPS1 <td>CPS2</td>	CPS2
7.424	2.022	.12803	.01673	-.02080	-.00516	-.01109	-.01622	.47872	-.17400	-.23361
7.204	4.410	.13229	-.00672	-.01215	.00395	-.00123	-.00642	.49550	-.16145	-.21822
	GRADIENT	.00178	-.00982	.00362	.00381	.00413	.00410	.00703	.00526	.00845

RUN NO.	283/ 0	RN/L = 3.28	GRADIENT INTERVAL = -5.00/ 5.00	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2	
DZ	ALPHAC	XZCP	XYCP	CPC	CPB1 <td>CPB2 <td>CPB3 <td>CPE3 <td>CPS1 <td>CPS2</td> </td></td></td></td>	CPB2 <td>CPB3 <td>CPE3 <td>CPS1 <td>CPS2</td> </td></td></td>	CPB3 <td>CPE3 <td>CPS1 <td>CPS2</td> </td></td>	CPE3 <td>CPS1 <td>CPS2</td> </td>	CPS1 <td>CPS2</td>	CPS2
9.851	2.068	.12155	-.01071	-.02534	-.00910	-.01452	-.01993	.45875	-.17714	-.22395
9.970	4.488	.12652	-.02953	-.01605	.00093	-.01277	-.01277	.48640	-.17632	-.22728
	GRADIENT	.00205	-.00778	.00384	.00415	.00355	.00296	.01143	.00034	-.00138

RUN NO.	284/ 0	RN/L = 3.28	GRADIENT INTERVAL = -5.00/ 5.00	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2	
DZ	ALPHAC	XZCP	XYCP	CPC	CPB1 <td>CPB2 <td>CPB3 <td>CPE3 <td>CPS1 <td>CPS2</td> </td></td></td></td>	CPB2 <td>CPB3 <td>CPE3 <td>CPS1 <td>CPS2</td> </td></td></td>	CPB3 <td>CPE3 <td>CPS1 <td>CPS2</td> </td></td>	CPE3 <td>CPS1 <td>CPS2</td> </td>	CPS1 <td>CPS2</td>	CPS2
14.671	2.026	.11436	-.01348	-.02211	-.00616	-.01184	-.01643	.45397	-.17783	-.23487
14.337	4.481	.12089	-.03099	-.01428	.00077	-.00580	-.01045	.48521	-.17193	-.22147
	GRADIENT	.00266	-.00713	.00319	.00282	.00246	.00244	.01273	.00240	.00546

RUN NO.	285/ 0	RN/L = 3.29	GRADIENT INTERVAL = -5.00/ 5.00	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2	
DZ	ALPHAC	XZCP	XYCP	CPC	CPB1 <td>CPB2 <td>CPB3 <td>CPE3 <td>CPS1 <td>CPS2</td> </td></td></td></td>	CPB2 <td>CPB3 <td>CPE3 <td>CPS1 <td>CPS2</td> </td></td></td>	CPB3 <td>CPE3 <td>CPS1 <td>CPS2</td> </td></td>	CPE3 <td>CPS1 <td>CPS2</td> </td>	CPS1 <td>CPS2</td>	CPS2
29.878	2.180	.10916	-.03385	-.02739	-.00928	-.01334	-.02036	.45991	-.17496	-.22793
29.674	4.515	.11376	-.05228	-.01107	.00205	-.00260	-.00971	.49235	-.17560	-.22097
	GRADIENT	.00197	-.00763	.00699	.00485	.00460	.00456	.01389	-.00027	.00298

RUN NO.	286/ 0	RN/L = 3.29	GRADIENT INTERVAL = -5.00/ 5.00	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2	
DZ	ALPHAC	XZCP	XYCP	CPC	CPB1 <td>CPB2 <td>CPB3 <td>CPE3 <td>CPS1 <td>CPS2</td> </td></td></td></td>	CPB2 <td>CPB3 <td>CPE3 <td>CPS1 <td>CPS2</td> </td></td></td>	CPB3 <td>CPE3 <td>CPS1 <td>CPS2</td> </td></td>	CPE3 <td>CPS1 <td>CPS2</td> </td>	CPS1 <td>CPS2</td>	CPS2
44.780	2.093	.10626	-.05110	-.02484	-.01186	-.01402	-.01916	.46432	-.17852	-.23209
45.100	4.521	.10777	-.06221	-.01781	-.00027	-.00548	-.01397	.48432	-.18090	-.22639
	GRADIENT	.00062	-.00457	.00290	.00477	.00352	.00214	.00824	-.00098	.00235

RUN NO.	287/ 0	RN/L = 3.29	GRADIENT INTERVAL = -5.00/ 5.00	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2	
DZ	ALPHAC	XZCP	XYCP	CPC	CPB1 <td>CPB2 <td>CPB3 <td>CPE3 <td>CPS1 <td>CPS2</td> </td></td></td></td>	CPB2 <td>CPB3 <td>CPE3 <td>CPS1 <td>CPS2</td> </td></td></td>	CPB3 <td>CPE3 <td>CPS1 <td>CPS2</td> </td></td>	CPE3 <td>CPS1 <td>CPS2</td> </td>	CPS1 <td>CPS2</td>	CPS2
50.200	2.061	.10505	-.03977	-.02579	-.00436	-.01060	-.02226	.46364	-.17627	-.23240
50.258	4.539	.10677	-.07546	-.01837	-.00277	-.01235	-.00469	.49071	-.17794	-.22858
	GRADIENT	.00069	-.01440	.00299	.00064	.00239	.00400	.01092	-.00067	.00154

ARC 14-120(CA238) 747/1 AT1 0351 (ORBITER DATA)

(ENH029) (21 00 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORR = 8.000 DX = 10.000
 DY = .000 MACH = .600

PARAMETRIC DATA

DZ 7.274
 7.616

ALPHAC 2.465
 4.442
 GRADIENT

XZCP .12314
 .11163
 -.03582

XYCP -.02321
 -.07077
 -.02101

CPC -.00428
 -.01270
 -.00426

RN/L = 3.29

GRADIENT INTERVAL = -5.00/ 5.00

CPB1 .00852
 -.00016
 -.00439

CPB2 .00253
 -.00179
 -.00218

CPB3 -.00239
 -.00370
 -.00057

CPE3 .51832
 .52196
 .00184

CPS1 -.15706
 -.17056
 -.00663

CPS2 -.20935
 -.21654
 -.00465

DZ 10.037
 10.105

ALPHAC 2.057
 4.486
 GRADIENT

XZCP .11726
 .10479
 -.00513

XYCP -.03352
 -.09527
 -.02542

CPC -.01204
 -.01482
 -.00115

RN/L = 3.28

GRADIENT INTERVAL = -5.00/ 5.00

CPB1 .00406
 .00126
 -.00115

CPB2 .00161
 -.00228
 -.00160

CPB3 -.00395
 -.00774
 -.00160

CPE3 .51619
 .52168
 .00226

CPS1 -.16456
 -.16803
 -.00143

CPS2 -.21721
 -.21737
 -.00007

DZ 15.073
 14.864

ALPHAC 2.020
 4.412
 GRADIENT

XZCP .11089
 .09969
 -.00468

XYCP -.06465
 -.13034
 -.02746

CPC -.01991
 -.01527
 -.00194

RN/L = 3.28

GRADIENT INTERVAL = -5.00/ 5.00

CPB1 -.00158
 -.00245
 -.00037

CPB2 -.00455
 -.00355
 .00042

CPB3 -.01263
 -.01036
 .00095

CPE3 .50092
 .51578
 .00621

CPS1 -.17465
 -.17129
 .00140

CPS2 -.22398
 -.22120
 .00116

DZ 30.231
 29.953

ALPHAC 2.128
 4.510
 GRADIENT

XZCP .10335
 .08836
 -.00630

XYCP -.08440
 -.14181
 -.02410

CPC -.02098
 -.02382
 -.00119

RN/L = 3.29

GRADIENT INTERVAL = -5.00/ 5.00

CPB1 -.00614
 -.00364
 .00105

CPB2 -.01019
 -.00473
 .00229

CPB3 -.02422
 -.01482
 .00395

CPE3 .49745
 .51423
 .00704

CPS1 -.18201
 -.17817
 .00161

CPS2 -.22895
 -.22698
 .00082

DZ 44.559
 45.001

ALPHAC 2.087
 4.446
 GRADIENT

XZCP .10152
 .08468
 -.00718

XYCP -.08143
 -.13930
 -.02453

CPC -.02322
 -.02098
 .00095

RN/L = 3.28

GRADIENT INTERVAL = -5.00/ 5.00

CPB1 -.00518
 .00135
 .00277

CPB2 -.01084
 -.03791
 .00124

CPB3 -.01757
 -.01172
 .00248

CPE3 .50090
 .51559
 .00623

CPS1 -.17693
 -.17452
 .00102

CPS2 -.22538
 -.22651
 -.00048

DZ 50.108
 50.709

ALPHAC 2.027
 4.547
 GRADIENT

XZCP .10064
 .08291
 -.00703

XYCP -.05923
 -.11585
 -.02247

CPC -.02290
 -.02372
 -.00033

RN/L = 3.28

GRADIENT INTERVAL = -5.00/ 5.00

CPB1 -.00802
 -.00811
 -.00004

CPB2 -.01262
 -.00894
 .00146

CPB3 -.01957
 -.01587
 .00067

CPE3 .49083
 .51115
 .00806

CPS1 -.17953
 -.18084
 -.00052

CPS2 -.22958
 -.22354
 .00240

DATE 22 MAR 75 TABULATED SOURCE DATA - CA238
ARC 14-120(CA238) 747/1 AT1 0351 (ORBITTER DATA)

(ENH030) (21 OCT 75)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = .000
LORB = 8.000 DX = 20.000
DY = .000 MACH = .600

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
LREF = 474.8100 IN. YMRP = .0000 IN. YO
BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
SCALE = .0125

ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
DZ 7.146	.10962	.00071	-.01570	.00050	.00133	-.00444	.49915	-.16727	-.22026
7.541	.09929	-.05336	-.01111	.00480	-.00315	-.00754	.50432	-.16884	-.21410
GRADIENT	-.00549	-.02876	.00244	.00229	-.00238	-.00165	.00275	-.00084	.00328

ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
DZ 10.020	.10567	-.00953	-.01844	-.00276	-.00709	-.01331	.48539	-.17332	-.22279
10.077	.09514	-.07767	-.01511	.00352	.00105	-.00772	.50623	-.17291	-.21839
GRADIENT	-.00426	-.02754	.00134	.00254	.00329	.00226	.00842	.00016	.00178

ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
DZ 14.887	.10061	-.02578	-.02040	-.00767	-.01201	-.01725	.48550	-.18046	-.22840
14.608	.09238	-.07888	-.01719	.00060	-.00268	-.00761	.50540	-.17542	-.21785
GRADIENT	-.00363	-.02341	.00142	.00365	.00411	-.44411	.00877	.00222	.00465

ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
DZ 30.123	.09989	-.05480	-.02130	-.00536	-.00941	-.01725	.48735	-.17779	-.22968
29.781	.08430	-.12193	-.02340	-.00992	-.01322	-.02230	.50240	-.18317	-.23130
GRADIENT	-.00596	-.02567	-.00080	-.00175	-.00146	-.00193	.00576	-.00206	-.00062

ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
DZ 44.889	.09841	-.09409	-.02599	-.00605	-.01521	-.02033	.48584	-.17747	-.23110
44.724	.08448	-.13007	-.03670	-.01590	-.02022	-.02292	.48384	-.18608	-.23227
GRADIENT	-.00597	-.01942	-.00459	-.00422	-.00215	-.00111	-.00086	-.00369	-.00050

ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
DZ 50.425	.09893	-.06433	-.02127	-.01046	-.01343	-.01965	.49112	-.18009	-.22925
50.408	.08145	-.13563	-.01493	-.00117	-.00456	-.01057	.50632	-.17431	-.22234
GRADIENT	-.00744	-.03055	.00270	.00495	.00378	.00387	.00647	.00246	.00294

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-120(CA238) 747/1 AT1 0351 (ORBITER DATA)

(ENH031) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

RUN NO. 311/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
7.139	2.440	.10679	.02051	-.02777	-.00881	-.01829	-.02343	.49203	-.18405	-.23201
7.034	4.374	.11226	-.00839	-.01018	.00212	-.00253	-.00881	.51594	-.17025	-.21942
	GRADIENT	.00283	-.01494	.00909	.00565	.00815	.00756	.01236	.00714	.00651

RUN NO. 312/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
9.707	1.989	.10124	.01033	-.01363	.00170	.00061	-.00651	.51664	-.17022	-.22031
9.890	4.549	.10873	-.01352	-.01677	.00241	-.00307	-.01102	.52437	-.17487	-.22254
	GRADIENT	.00293	-.00932	-.00123	.00028	-.00144	-.00176	.00302	-.00182	-.00087

RUN NO. 313/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
14.857	1.961	.09879	.00899	-.01967	-.00886	1.13782	-.02156	.50489	-.18209	-.23317
14.654	4.524	.10571	-.00215	-.01605	-.00073	-.00291	-.01304	.52923	-.17309	-.22316
	GRADIENT	.00270	-.00434	.00141	.00317	-.44508	.00333	.00950	.00351	.00391

RUN NO. 314/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
29.665	1.982	.10062	-.02280	-.01057	.00229	.00010	-.01002	.53188	-.16931	-.22186
29.602	4.262	.10556	-.07327	-.01938	-.00216	-.00325	-.01282	.54395	-.17381	-.22109
	GRADIENT	.00217	-.02213	-.00386	-.00195	-.00147	-.00123	.00529	-.00197	.00034

RUN NO. 315/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
44.676	1.970	.10089	-.03558	-.02007	-.00305	-.01250	-.02007	.54531	-.17647	-.23103
44.732	4.370	.10538	-.06215	-.01657	-.00016	-.00426	-.00727	.57868	-.17195	-.22064
	GRADIENT	.00187	-.01107	.00146	.00120	.00343	.00533	.01391	.00188	.00433

RUN NO. 316/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
50.207	2.003	.10073	-.03911	-.01761	-.00174	-.00147	-.00831	.66614	-.16721	-.22355
50.098	4.371	.10544	-.08155	-.01655	-.00313	-.00234	-.00971	.69475	-.16984	-.22395
	GRADIENT	.00199	-.01792	.00045	.00206	-.00037	-.00059	.01208	-.00111	-.00017

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(ENH032) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

RUN NO. 321/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
3.217	2.384	.15884	-.27113	-.02064	.00047	-.00255	-.01022	.69567	-.16894	-.22624
3.310	GRADIENT	.16349	-.39356	-.01848	-.00401	-.00592	-.01684	.68434	-.16947	-.23391
		.00240	-.06309	.00111	-.00231	-.00174	-.00341	-.00584	-.00027	-.00395

RUN NO. 322/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
7.247	1.999	.13827	-.21501	-.01572	.00341	-.00233	-.00725	.64737	-.16714	-.22181
7.563	GRADIENT	.14337	-.37722	-.02549	-.00935	-.01564	-.01920	.65715	-.17160	-.22550
		.00214	-.06813	-.00410	-.00536	-.00559	-.00502	.00411	-.00187	-.00155

RUN NO. 323/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
10.032	1.980	.13536	-.17505	-.01769	.00387	-.00186	-.00814	.64763	-.16642	-.22564
9.896	GRADIENT	.14149	-.43025	-.03540	-.01759	-.02164	-.02812	.63642	-.18386	-.24270
		.00257	-.10692	-.00742	-.00899	-.00828	-.00837	-.00470	-.00731	-.00715

RUN NO. 324/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
15.217	2.049	.13053	-.16867	-.01543	.00396	-.00068	-.00833	.65000	-.16840	-.22522
15.047	GRADIENT	.13569	-.37539	-.02378	-.00495	-.00905	-.01696	.65698	-.17085	-.22869
		.00235	-.09397	-.00360	-.00405	-.00380	-.00392	.00317	-.00111	-.00158

RUN NO. 325/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
29.998	1.976	.11964	-.09348	-.02517	-.01247	-.01599	-.02247	.62539	-.18342	-.23635
29.890	GRADIENT	.12430	-.20132	-.02306	-.00531	-.00750	-.01487	.66110	-.17649	-.23000
		.00201	-.04637	.00091	.00308	.00365	.00327	.01536	.00298	.00273

RUN NO. 326/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
44.648	1.958	.11307	-.10778	-.01299	.00203	-.00206	-.00725	.64727	-.16699	-.22078
44.989	GRADIENT	.11617	-.18028	-.02275	-.00395	-.00694	-.01539	.65317	-.17749	-.22735
		.00131	-.03063	-.00412	-.00253	-.00206	-.00344	.00249	-.00444	-.00277

ARC 14-120(CA23B) 747/1 ATI 03S1 (ORBITTER DATA)

(ENH032) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

RUN NO. 327/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
49.978	1.953	.11155	-.09072	-.02791	-.00907	-.01283	-.02172	.61912	-.17594	-.23165
50.163	4.264	.11414	-.16074	-.03013	-.01320	-.01696	-.02744	.62663	-.18249	-.23381
	GRADIENT	.00113	-.03051	-.00097	-.00180	-.00180	-.00249	.00327	-.00286	-.00094

PARAMETRIC DATA

ARC 14-120(CA23B) 747/1 ATI 03S1 (ORBITTER DATA)

(ENH033) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 8.000 DX = .000
 DY = 10.000 MACH = .600

RUN NO. 331/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
7.500	2.446	.12901	-.31596	-.01358	.00463	-.00108	-.00842	.71335	-.16636	-.21720
7.613	4.292	.11918	-.44126	-.01671	.00289	-.00419	-.01290	.71598	-.16701	-.22391
	GRADIENT	-.00533	-.06790	-.00170	-.00094	-.00168	-.00243	.00143	-.00035	-.00364

PARAMETRIC DATA

RUN NO. 332/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
10.263	1.907	.12541	-.24002	-.01297	.00443	-.00210	-.00400	.70765	-.16199	-.21393
9.859	4.322	.11570	-.39906	-.01931	-.00518	-.00953	-.00871	.71427	-.17158	-.22269
	GRADIENT	-.00402	-.06585	-.00262	-.00398	-.00308	-.00195	.00274	-.00397	-.00363

PARAMETRIC DATA

RUN NO. 333/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
15.012	1.933	.12165	-.19725	-.02331	-.00772	-.00907	-.01552	.68596	-.16872	-.22301
14.957	4.337	.10978	-.35072	-.03217	-.01496	-.02007	-.02840	.69286	-.18062	-.23655
	GRADIENT	-.00495	-.06410	-.00370	-.00302	-.00459	-.00538	.00288	-.00497	-.00566

PARAMETRIC DATA

RUN NO. 334/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
29.834	1.958	.11430	-.12596	-.00963	.00556	.00040	-.00828	.70209	-.16783	-.21395
29.957	4.362	.09725	-.28700	-.02337	-.00244	-.00815	-.01087	.70889	-.17260	-.22669
	GRADIENT	-.00709	-.06698	-.00571	-.00333	-.00356	-.00108	.00283	-.00198	-.00530

PARAMETRIC DATA

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO LORB = 8.000 DX = .000
 SCALE = .0125 DY = 10.000 MACH = .600

RUN NO. 335/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
44.819	1.871	.10980	-.15746	-.02786	-.00866	-.01353	-.01623	.68229	-.17849	-.22230
45.000	4.278	.09213	-.20815	-.02027	-.00384	-.00439	-.01233	.70769	-.17502	-.22048
	GRADIENT	-.00734	-.02106	.00315	.00200	.00380	.00162	.01056	.00144	.00076

RUN NO. 336/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
50.002	1.913	.10835	-.12714	-.00969	.00314	.00150	-.00805	.70147	-.16496	-.21627
50.443	4.260	.09014	-.17695	-.02295	-.00518	-.00846	-.01311	.70455	-.17544	-.22245
	GRADIENT	-.00776	-.02122	-.00565	-.00354	-.00424	-.00215	.00131	-.00446	-.00263

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA) (ENH034) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO LORB = 6.000 DX = .000
 SCALE = .0125 DY = 10.000 MACH = .600

RUN NO. 341/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
1.515	-.031	.19185	-.05120	-.00048	.01212	.01185	.00007	.02336	-.16405	-.20076
1.466	2.266	.18497	-.05838	-.00745	-.01003	.00593	-.00281	.03107	-.16426	-.20142
1.364	4.253	.18342	-.07181	-.02443	-.00771	-.00960	-.02119	.02707	-.18214	-.21907
	GRADIENT	.00039	-.00476	-.00552	-.00453	-.00494	-.00486	.00093	-.00411	-.00417

RUN NO. 342/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
3.218	-.127	.16942	-.05713	.00100	.01546	.01300	.00482	.05282	-.15198	-.19534
2.877	2.324	.17815	-.03246	-.00619	.00746	.00719	.00364	.04675	-.16173	-.19938
3.380	4.353	.17626	-.05313	-.01491	.00504	.00176	-.00698	.04602	-.17365	-.20862
	GRADIENT	.00160	-.00095	-.00353	-.00236	-.00250	-.00256	-.00155	-.00481	-.00292

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 03S1 (ORBITTER DATA)

(ENH034) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 343/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.400	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
	7.390	-.285	.14533	-.05239	-.02025	-.00242	-.00512	-.00647	.04943	-.17338	-.20687
	7.046	2.312	.15567	-.06065	-.01224	.00116	.00034	-.00677	.05831	-.16947	-.21048
		4.212	.16003	-.07278	-.01425	.00185	.00021	-.00688	.04985	-.17462	-.21198
		GRADIENT	.00331	-.00446	.00144	.00097	.00124	-.00009	.00029	-.00017	-.00115

RUN NO. 344/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	9.858	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
	9.870	-.243	.13489	-.04912	-.01005	.00314	-.00062	-.00682	.05592	-.17079	-.21117
	9.840	2.334	.14836	-.06056	-.00966	.00564	-.00228	-.00748	.05756	-.16925	-.20887
		4.253	.15145	-.08566	-.01778	-.00085	-.00457	-.01150	.04857	-.18052	-.21547
		GRADIENT	.00377	-.00792	-.00162	-.00079	-.00089	-.00100	-.00151	-.00201	-.00085

RUN NO. 345/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	14.745	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
	14.663	-.254	.12039	-.06512	-.01305	-.00038	-.00092	-.00604	.05946	-.17073	-.21062
	14.715	2.332	.13633	-.06986	-.01119	.00222	-.00106	-.00790	.05584	-.17725	-.21254
		4.248	.14095	-.07251	-.01493	.00173	-.00482	-.01028	.05416	-.17849	-.21699
		GRADIENT	.00466	-.00165	-.00035	.00050	-.00082	-.00093	-.00119	-.00177	-.00138

RUN NO. 346/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	29.743	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
	29.911	-.267	.10561	-.06330	-.00605	.00738	.00601	-.00386	.06960	-.16641	-.20616
	29.627	2.360	.12620	-.05607	-.01089	.00558	-.00025	-.00734	.06362	-.16866	-.21124
		4.269	.12623	-.12378	-.01634	.00200	-.00375	-.00857	.06221	-.17809	-.21996
		GRADIENT	.00475	-.01236	-.00224	-.00113	-.00217	-.00108	-.00167	-.00247	-.00298

RUN NO. 347/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.607	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
	44.784	-.235	.10088	-.10242	-.00941	.01002	.00400	-.00065	.06555	-.16506	-.20199
	44.631	2.345	.11885	-.08751	-.01107	.00452	-.00233	-.00669	.06741	-.16775	-.21314
		4.291	.11827	-.12987	-.02478	-.00941	-.01130	-.01885	.05018	-.18790	-.23077
		GRADIENT	.00401	-.00544	-.00325	-.00418	-.00323	-.00393	-.00318	-.00483	-.00625

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO = .600
 SCALE = .0125

PARAMETRIC DATA
 BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO.	348/ 0	RN/L = 3.30	GRADIENT INTERVAL = -5.00/ 5.00							
DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
49.960	-.239	.09978	-.08283	-.00607	.00511	.00783	-.00171	.06155	-.16504	-.20131
50.084	2.361	.11706	-.07557	-.00796	.00457	.00648	-.00115	.06642	-.17169	-.20575
50.051	4.269	.11689	-.10339	-.01990	.00111	-.00325	-.00980	.06304	-.17349	-.21932
	GRADIENT	.00396	-.00413	-.00293	-.00085	-.00235	-.00168	.00042	-.00191	-.00386

RUN NO.	349/ 0	RN/L = 3.31	GRADIENT INTERVAL = -5.00/ 5.00							
DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
61.655	-.279	.09838	-.07170	-.00764	.00846	.03491	-.00218	.06085	-.15689	-.20300
61.629	2.289	.11400	-.08961	-.00993	.00694	.00231	-.00041	.06138	-.16754	-.20565
61.640	4.275	.11172	-.10658	-.01696	.00051	-.00304	-.00577	.05836	-.17877	-.21998
	GRADIENT	.00308	-.00763	-.00199	-.00169	-.00171	-.00072	-.00051	-.00477	-.00360

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO = .600
 SCALE = .0125

RUN NO.	351/ 0	RN/L = 3.30	GRADIENT INTERVAL = -5.00/ 5.00							
DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
3.392	.007	.23936	-.01376	-.02233	-.00743	-.00607	-.01447	-.21333	-.17893	-.22363
3.273	2.270	.19574	-.01746	-.03863	-.02368	-.02848	-.03142	-.22016	-.19613	-.24632
3.233	4.244	.18192	-.02353	-.04198	-.02517	-.03211	-.03798	-.21974	-.19812	-.24963
	GRADIENT	-.01369	-.00229	-.00470	-.00426	-.03624	-.00560	-.00155	-.00460	-.00623

RUN NO.	352/ 0	RN/L = 3.29	GRADIENT INTERVAL = -5.00/ 5.00							
DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
7.633	-.212	.18137	-.00348	-.03012	-.01620	-.01513	-.02289	-.22349	-.18438	-.23580
7.582	2.387	.15964	-.00204	-.02853	-.01149	-.01690	-.02258	-.21382	-.18542	-.23601
7.362	4.282	.15714	-.03925	-.04009	-.01871	-.02061	-.02954	-.21976	-.19595	-.24195
	GRADIENT	-.00557	-.00745	-.00205	-.00042	-.00119	-.00138	.00100	-.00244	-.00129

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA)

(ENH035) (21)

REFERENCE DATA

SREF = 2690.0000 SO. FT.
 LREF = 474.8100 IN.
 BREF = 936.6800 IN.
 SCALE = .0125

XMPP = 1109.0000 IN. XO
 YMRP = .0000 IN. YO
 ZMRP = 375.0000 IN. ZO

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 353/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	9.664	ALPHAC	-2.13	XZCP	.16352	XYCP	.00535	CPC	-.02364	CPB1	-.00634	CPB2	-.00418	CPB3	-.01283	CPE3	-.21038	CPS1	-.17335	CPS2	-.22119
	9.916		2.313		.14473		-.01447		-.03015		-.01477		-.01880		-.02422		-.21880		-.18452		-.23121
	9.803		4.259		.14843		-.01354		-.03534		-.01348		-.01968		-.02643		-.21597		-.19653		-.24432
		GRADIENT			-.00357		-.00384		-.00262		-.00168		-.00358		-.00311		-.00135		-.00515		-.00511

RUN NO. 354/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	15.113	ALPHAC	-.270	XZCP	.13553	XYCP	-.00320	CPC	-.02787	CPB1	-.01694	CPB2	-.01534	CPB3	-.02173	CPE3	-.22277	CPS1	-.18917	CPS2	-.23397
	14.808		2.324		.13056		-.03946		-.03150		-.01260		-.01638		-.02259		-.21939		-.19294		-.23829
	14.693		4.304		.13713		-.01397		-.04681		-.03055		-.03401		-.03508		-.22732		-.20039		-.25371
		GRADIENT			.00023		-.00294		-.00400		-.00274		-.00390		-.00279		-.00088		-.00240		-.00418

RUN NO. 355/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	29.891	ALPHAC	-.272	XZCP	.11088	XYCP	-.02424	CPC	-.02823	CPB1	-.01734	CPB2	-.01575	CPB3	-.02452	CPE3	-.22774	CPS1	-.18019	CPS2	-.23065
	29.979		2.346		.11185		-.02067		-.03234		-.01240		-.01779		-.02426		-.22095		-.18916		-.23739
	29.891		4.294		.12485		-.06359		-.03550		-.01934		-.02580		-.03227		2.21721		-.19287		-.24838
		GRADIENT			.00291		-.00806		-.00159		-.00031		-.00212		-.00160		.50584		-.00281		-.00381

RUN NO. 356/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.449	ALPHAC	-.271	XZCP	.10183	XYCP	-.06093	CPC	-.02470	CPB1	-.01160	CPB2	-.01587	CPB3	-.02363	CPE3	-.22546	CPS1	-.18349	CPS2	-.23348
	44.799		2.322		.10410		-.08030		-.02942		-.01190		-.01810		-.02457		-.22528		-.19376		-.24279
	44.865		4.260		.11545		-.10573		-.03239		-.01406		-.01622		-.01891		-.21995		-.19112		-.23801
		GRADIENT			.00289		-.00975		-.00170		-.00052		-.00012		.00096		.00115		-.00181		-.00114

PARAMETRIC DATA

(ENH036) (21 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = 10.000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO DY = .000 MACH = .600
 SCALE = .0125

RUN NO. 361/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYZP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
1.654	2.302	.17695	-.06318	-.04248	-.02300	-.02620	-.03368	-.20178	-.19457	-.23406
2.469	4.194	.17335	-.05584	-.03415	-.01661	-.02335	-.03037	-.20227	-.19499	-.23142
	GRADIENT	-.00190	.00177	.00440	.00338	.00151	.00175	-.00026	-.00022	.00140

RUN NO. 362/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYZP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
2.877	2.012	.16907	-.06262	-.03937	-.02255	-.02496	-.03296	-.20831	-.19069	-.23580
3.365	4.405	.16821	-.04781	-.03756	-.02133	-.02323	-.03351	-.20581	-.19283	-.23313
	GRADIENT	-.00036	.00519	.00075	.00051	.00072	-.00023	.00104	-.00089	.00111

RUN NO. 363/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYZP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
7.393	2.013	.14649	-.02173	-.03739	-.02218	-.02805	-.03072	-.20790	-.18869	-.24046
7.226	4.376	.15013	-.05107	-.03711	-.02168	-.02411	-.03088	-.20906	-.19534	-.23587
	GRADIENT	.00154	-.01241	.00012	.00021	.00166	-.00007	-.00049	-.00324	.00194

RUN NO. 364/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYZP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
9.858	2.049	.13756	-.00731	-.03986	-.02298	-.03129	-.03745	-.21589	-.19981	-.24562
10.104	4.457	.14154	-.06563	-.03416	-.01953	-.02360	-.03145	-.21076	-.19857	-.23730
	GRADIENT	.00165	-.02463	.00237	.00143	.00319	.00249	.00213	.00052	.00346

RUN NO. 365/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYZP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
14.553	2.097	.12892	-.02256	-.04065	-.01923	-.02110	-.03208	-.21363	-.20426	-.24095
14.643	4.474	.13321	-.06033	-.05109	-.03475	-.03529	-.04252	-.21822	-.20563	-.24955
	GRADIENT	.00180	-.01589	-.00439	-.00653	-.00597	-.00439	-.00193	-.00058	-.00362

RUN NO. 366/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYZP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
29.819	2.159	.11685	-.04814	-.04159	-.02764	-.02845	-.03998	-.21614	-.19951	-.24348
29.992	4.411	.11826	-.07156	-.03785	-.01956	-.02427	-.03079	-.20545	-.19621	-.24347
	GRADIENT	.00053	-.01040	.00166	.00355	.00186	.00408	.00475	.00147	.00000

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA) (ENH036) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT.
 LREF = 474.8100 IN.
 BREF = 936.6800 IN.
 SCALE = .0125

XMRP = 1109.0000 IN. XO
 YMRP = .0000 IN. YO
 ZMRP = 375.0000 IN. ZO

PARAMETRIC DATA

BETA = .000
 RUDDER = 10.000
 LORB = 6.000
 DY = .000

RUN NO. 367/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
45.057	2.052	.10875	-.05044	-.04049	-.02760	-.03243	-.03619	-.18874	-.20002	-.24352
44.937	4.371	.11163	-.07170	-.03370	-.01367	-.01719	-.02693	-.16091	-.19149	-.23804
	GRADIENT	.00124	-.00917	.00293	.00600	.00657	.00399	.01200	.00368	.00236

RUN NO. 368/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
50.129	2.015	.10592	-.03370	-.04266	-.02360	-.02870	-.03568	-.15248	-.19571	-.24055
50.420	4.439	.10784	-.10445	-.03373	-.01739	-.02447	-.02910	-.13937	-.19682	-.24229
	GRADIENT	.00079	-.02918	.00368	.00256	.00174	.00271	.00541	-.00046	-.00072

RUN NO. 369/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
62.057	2.140	.10533	-.03261	-.04483	-.02496	-.02953	-.03490	-.13583	-.19568	-.24749
61.853	4.416	.10468	-.07242	-.03452	-.01900	-.02227	-.02554	-.12359	-.19576	-.24315
	GRADIENT	-.00029	-.01748	.00453	.00262	.00319	.00411	.00538	-.00003	.00191

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA) (ENH037) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT.
 LREF = 474.8100 IN.
 BREF = 936.6800 IN.
 SCALE = .0125

XMRP = 1109.0000 IN. XO
 YMRP = .0000 IN. YO
 ZMRP = 375.0000 IN. ZO

PARAMETRIC DATA

BETA = .000
 RUDDER = .000
 LORB = 6.000
 DY = .000

RUN NO. 371/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
1.955	.521	.17910	-.02908	-.03464	-.01927	-.02112	-.02669	-.05689	-.18380	-.22592
1.879	2.297	.18212	-.06215	-.03645	-.02029	-.02599	-.03380	-.05791	-.19040	-.23518
1.932	4.335	.17997	-.06523	-.02968	-.01391	-.01979	-.02701	-.04651	-.18868	-.23224
	GRADIENT	.00020	-.00928	.00135	.00145	.00041	.00000	.00279	-.00123	-.00158

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITTER DATA) (ENH037) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = -1.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .00204 -.01019 -.00005 .00071 .00055 .00030 .00239 -.00027 -.00295
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 372/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYZP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
3.611	-.073	.16521	.01345	-.03239	-.01703	-.01968	-.02762	-.05490	-.18677	-.22172
3.412	2.415	.17561	-.03342	-.02902	-.00816	-.01618	-.02421	-.04373	-.18199	-.23398
3.341	4.372	.17384	-.02790	-.03292	-.01445	-.01740	-.02650	-.04469	-.18841	-.23524
	GRADIENT	.00204	-.01019	-.00005	.00071	.00055	.00030	.00239	-.00027	-.00295

RUN NO. 373/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYZP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
7.238	-.184	.14046	-.01276	-.03460	-.01870	-.01790	-.02586	-.05873	-.18808	-.22069
7.611	2.515	.15435	-.00908	-.03095	-.01460	-.01648	-.02452	-.04490	-.18700	-.22855
7.497	4.363	.15516	-.06922	-.03350	-.01632	-.02196	-.03323	-.04880	-.19346	-.23641
	GRADIENT	.00337	-.01141	.00032	.00060	-.00079	-.00147	.00240	-.00107	-.00342

RUN NO. 374/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYZP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
10.003	-.096	.12974	-.02340	-.02743	-.00726	-.00915	-.01829	-.04759	-.17584	-.22289
9.942	2.401	.14696	-.03078	-.04218	-.02441	-.02388	-.03131	-.05623	-.19413	-.23709
10.030	4.474	.14746	-.06148	-.04026	-.01739	-.02365	-.02708	-.04725	-.19275	-.23794
	GRADIENT	.00398	-.00815	-.00291	-.00237	-.00331	-.00203	-.00004	-.00382	-.00337

RUN NO. 375/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYZP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
14.990	.036	.11763	-.01408	-.03375	-.02128	-.02260	-.03056	-.06427	-.19032	-.23597
14.729	2.374	.13520	-.02907	-.03976	-.02200	-.02650	-.03578	-.05964	-.19510	-.23566
14.795	4.458	.13796	-.10096	-.03379	-.01578	-.01793	-.02653	-.04938	-.19129	-.23510
	GRADIENT	.00466	-.01938	-.00006	.00121	.00100	.00085	.00334	-.00025	.00020

RUN NO. 376/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYZP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
29.795	-.037	.10216	-.02822	-.03832	-.02453	-.02612	-.03381	-.06537	-.19347	-.23564
29.929	2.359	.12177	-.03354	-.04601	-.02634	-.02820	-.03112	-.05770	-.19060	-.23498
30.138	4.506	.12310	-.08135	-.03737	-.02153	-.02019	-.02771	-.05321	-.19627	-.23412
	GRADIENT	.00468	-.01152	.00014	.00063	.00126	.00134	.00269	-.00058	.00033

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(ENH037) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 377/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
45.027	-.096	.09493	-.05207	-.03737	-.02222	-.02487	-.03259	-.06769	-.18897	-.22700
44.952	2.497	.11698	-.04751	-.02611	-.00950	-.00575	-.01566	-.05235	-.18330	-.22320
44.914	4.260	.11431	-.09743	-.03458	-.01603	-.01899	-.03055	-.05502	-.19162	-.23545
	GRADIENT	.00475	-.00951	.00092	.00168	.00180	.00092	.00313	-.00040	-.00168

RUN NO. 378/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
50.481	.036	.09390	-.04897	-.03682	-.02032	-.02404	-.02910	-.07088	-.18584	-.23348
50.592	2.316	.11257	-.05467	-.03314	-.01697	-.02047	-.02883	-.05875	-.18977	-.23533
50.369	4.524	.11160	-.13541	-.03587	-.01888	-.02185	-.02778	-.06014	-.19901	-.24323
	GRADIENT	.00397	-.01917	.00022	.00033	.00050	.00229	.00241	-.00293	-.00217

RUN NO. 379/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
61.632	-.013	.09106	-.08061	-.04170	-.02305	-.02411	-.03237	-.07501	-.19413	-.23054
61.965	2.379	.10863	-.07173	-.02970	-.01271	-.02026	-.02511	-.05639	-.18313	-.22528
61.651	4.408	.10863	-.11748	-.04635	-.02799	-.03385	-.04023	-.06844	-.19455	-.24697
	GRADIENT	.00407	-.00798	-.00087	-.00096	-.00209	-.00163	.00167	.00004	-.00353

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(ENH038) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 381/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
1.603	.046	-.00363	.17448	-.04339	-.03078	-.03373	-.04446	-.05733	-.20054	-.25149
1.569	2.293	.02522	.14641	-.04939	-.03461	-.03461	-.04455	-.05046	-.20386	-.25436
2.306	4.387	.04051	.15066	-.05313	-.03325	-.03943	-.05151	-.01821	-.20597	-.25674
	GRADIENT	.01020	-.00557	-.00225	-.00055	-.00130	-.00161	.00894	-.00125	-.00121

ARC 14-120(CA23B) 747/1 AT: 0351 (ORBITER DATA) (ENH038) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .00003 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 382/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
3.468	.019	-.00569	.21179	-.05166	-.03762	-.03947	-.04742	-.02516	-.20141	-.25336
3.699	2.422	.01873	.21371	-.04925	-.03499	-.03472	-.04817	-.01858	-.20365	-.24858
3.469	4.425	.03512	.20435	-.05558	-.03297	-.03889	-.04750	-.02006	-.20706	-.25664
	GRADIENT	.00929	-.00161	-.00083	.00105	.00019	-.00003	.00121	-.00127	-.00070

RUN NO. 383/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
7.736	-.027	-.02534	.25328	-.05963	-.03809	-.04660	-.05511	-.03756	-.20272	-.24820
6.902	2.422	.00520	.27408	-.05061	-.02938	-.03798	-.04765	-.02831	-.20189	-.24864
7.339	4.419	.02182	.25770	-.06405	-.04404	-.04810	-.05945	-.04107	-.21682	-.26577
	GRADIENT	.01068	.00127	-.00082	-.00116	-.00019	-.00083	-.00062	-.00304	-.00381

RUN NO. 384/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
10.309	.047	-.03302	.28360	-.05936	-.04152	-.04738	-.05803	-.05697	-.21354	-.25828
9.703	2.409	-.00174	.29107	-.05542	-.02923	-.04165	-.04651	-.04219	-.21120	-.25871
10.031	4.489	.01660	.28229	-.05763	-.04248	-.04952	-.05736	-.04708	-.21185	-.25812
	GRADIENT	.01121	-.00022	.00042	-.00009	-.00042	.00026	.00232	.00039	.00003

RUN NO. 385/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
15.037	-.141	-.04571	.26560	-.06331	-.04379	-.04619	-.05716	-.05930	-.21309	-.26498
14.866	2.495	-.00616	.29899	-.05432	-.03485	1.52493	-.04729	-.04269	-.20525	-.25719
14.876	4.418	.01206	.30657	-.05985	-.04092	-.04335	-.05552	-.04173	-.20862	-.26110
	GRADIENT	.01281	.00321	.00092	.00079	.03618	.00056	.00400	.00110	.00098

RUN NO. 386/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
30.004	-.165	-.05007	.26354	-.05829	-.04175	-.04441	-.05802	-.06336	-.21035	-.25650
29.816	2.497	-.01123	.29600	-.05217	-.03383	-.03760	-.04543	-.04839	-.20671	-.25202
30.280	4.402	.00602	.30282	-.06578	-.04473	-.05496	-.06419	-.05459	-.21399	-.26757
	GRADIENT	.01243	.00746	-.00139	-.00042	-.00198	-.00096	.00216	-.00066	-.00216

ARC 14-120(CA238) 747/1 AT1 0351 (ORBITER DATA)

(ENH038) (21 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 387/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	44.879	ALPHAC	.070	XZCP	.05005	XYCP	.27151	CPC	.05732	CPB1	-.04184	CPB2	-.04290	CPB3	-.05038	CPE3	-.05786	CPS1	-.20340	CPS2	-.25521
	44.946		2.481		-.01414		.29936		-.05328		-.03383		-.04166		-.04842		-.04626		-.20730		-.26134
	44.926		4.448		.00295		.27974		-.06179		-.03960		-.04718		-.05394		-.05340		-.21682		-.26661
		GRADIENT			.01221		.00224		-.00092		.00061		-.00092		-.00075		.00116		-.00301		-.00260

RUN NO. 388/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	49.971	ALPHAC	-.037	XZCP	-.05368	XYCP	.23012	CPC	-.05759	CPB1	-.04177	CPB2	-.05116	CPB3	-.05786	CPE3	-.06350	CPS1	-.21426	CPS2	-.26470
	50.192		2.513		-.01436		.28641		-.05417		-.03732		-.04058		-.04738		-.05091		-.21502		-.26501
	50.609		4.284		.00119		.27640		-.05649		-.03336		-.03990		-.05350		-.04915		-.20996		-.26574
		GRADIENT			.01289		.01151		.00033		.00193		.00271		.00123		.00343		.00091		-.00023

RUN NO. 389/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	61.515	ALPHAC	-.115	XZCP	-.06116	XYCP	.25528	CPC	-.06214	CPB1	-.04738	CPB2	-.04845	CPB3	-.05865	CPE3	-.06536	CPS1	-.21243	CPS2	-.26939
	60.520		2.529		-.01802		.30859		-.05639		-.03791		-.04199		-.05204		-.05313		-.20885		-.26593
		GRADIENT			.01632		.02016		.00217		.00358		.00244		.00250		.00462		.00135		-.00247

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITER DATA)

(ENH039) (08 OCT 75)

RUN NO. 391/ 0 RN/L = 3.36 GRADIENT INTERVAL = -5.00/ 5.00

DZ	3.148	ALPHAC	2.388	XZCP	.07128	XYCP	.23558	CPC	-.07837	CPB1	-.25026	CPB2	-.28052	CPB3	-.26713	CPE3	-.02937	CPS1	-.20742	CPS2	-.26070
	3.390		4.263		.07717		.19623		-.08282		-.25646		-.28558		-.26929		-.03474		-.20811		-.25780
		GRADIENT			.00314		-.02099		-.00238		-.00331		-.00270		-.00115		-.00286		-.00037		-.00155

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (ENH039) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XC BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = 10.000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO 10RB = 6.000 DX = .000
 SCALE = .0125 .03756 .00351 .00488 .00290 .00277 .00021 MACH = .600

PARAMETRIC DATA

Run No.	392/0	C	RN/L	=	3.34	Gradient Interval	=	-5.00/	5.00	CPS1	CPS2
DZ	7.312	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPB1	CPB2
7.376	2.139	2.139	.06124	.24728	-.09449	-.26840	-.29658	-.28058	-.04843	-.21837	-.26602
	4.461	4.461	.06940	.16008	-.08651	-.25429	-.28725	-.27385	-.03773	-.21194	-.26554
	GRADIENT	GRADIENT	.00351	-.03756	.00344	.00608	.00488	.00290	.00461	.00277	.00021

Run No.	393/0	RN/L	=	3.34	Gradient Interval	=	-5.00/	5.00	CPS1	CPS2	
DZ	9.885	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPB1	CPB2
10.083	2.001	2.001	.05786	.25164	-.07714	-.25141	-.28112	-.26961	-.03511	-.20456	-.25703
	4.424	4.424	.06602	.18650	-.09391	-.26407	-.29234	-.27913	-.04530	-.21994	-.26882
	GRADIENT	GRADIENT	.00337	-.02689	-.00692	-.00522	-.00463	-.00393	-.00420	-.00635	-.00487

Run No.	394/0	RN/L	=	3.34	Gradient Interval	=	-5.00/	5.00	CPS1	CPS2	
DZ	15.083	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPB1	CPB2
14.830	2.141	2.141	.05459	.26252	-.07548	-.25257	-.27208	-.27208	-.03968	-.20930	-.26086
	4.433	4.433	.06296	.18829	-.10068	-.26700	-.29705	-.28149	-.05139	-.22983	-.27280
	GRADIENT	GRADIENT	.00355	-.03239	-.01100	-.00629	-.00600	-.00411	-.00511	-.00896	-.00521

Run No.	395/0	RN/L	=	3.33	Gradient Interval	=	-5.00/	5.00	CPS1	CPS2	
DZ	29.781	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPB1	CPB2
29.790	2.045	2.045	.04738	.23670	-.08127	-.25911	-.29201	-.27596	-.04758	-.20777	-.26045
	4.494	4.494	.05575	.16946	-.08432	-.25882	-.29083	-.27749	-.04536	-.20919	-.25882
	GRADIENT	GRADIENT	.00341	-.03970	-.00124	.00012	.00048	-.00062	.00090	-.00058	.00067

Run No.	396/0	RN/L	=	3.33	Gradient Interval	=	-5.00/	5.00	CPS1	CPS2	
DZ	44.565	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPB1	CPB2
44.873	2.160	2.160	.04381	.25610	-.08794	-.26853	-.29894	-.28519	-.05991	-.21882	-.27778
	4.367	4.367	.04951	.16636	-.09106	-.26638	-.29670	-.28536	-.05442	-.21418	-.26796
	GRADIENT	GRADIENT	.00258	-.04065	-.00142	.00097	.00102	-.00008	.00249	.00210	.00445

Run No.	397/0	RN/L	=	3.33	Gradient Interval	=	-5.00/	5.00	CPS1	CPS2	
DZ	50.286	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPB1	CPB2
50.569	2.123	2.123	.04207	.23250	-.08976	-.26754	-.29999	-.28231	-.05732	-.21004	-.26701
	4.396	4.396	.04730	.16902	-.09612	-.27161	-.30222	-.28718	-.06261	-.21936	-.26633
	GRADIENT	GRADIENT	.00230	-.04553	-.00280	-.00179	-.00098	-.00214	-.00233	-.00410	.00030

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-120(CA238) 747/1 ATI 0251 (ORBITTER DATA) (ENH040) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 401/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
3.048	-.004	.05382	.34507	-.06424	-.25833	-.29974	-.28350	-.04096	-.18957	-.24019
3.021	2.318	.06617	.29788	-.08468	-.26191	-.28874	-.28220	-.05051	-.21680	-.26271
3.274	4.401	.07799	.27463	-.08417	-.25885	-.29162	-.27510	-.04409	-.21064	-.26616
	GRADIENT	.00548	-.01607	-.00461	-.00015	.00182	.00188	-.00078	-.00492	-.00597

RUN NO. 402/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
7.066	-.091	.03617	.31988	-.06747	-.26188	-.29978	-.28462	-.04392	-.19581	-.24915
7.198	2.490	.05275	.31778	-.07174	-.28316	-.29415	-.27440	-.04560	-.20391	-.24714
7.335	4.405	.06812	.29641	-.08298	-.26922	-.29855	-.28469	-.05645	-.21989	-.27349
	GRADIENT	.00707	-.00497	-.00545	-.00128	.00062	.00021	-.00262	-.00516	-.00523

RUN NO. 403/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
9.793	.024	.03037	.30737	-.06743	-.25767	-.29799	-.28365	-.04687	-.19787	-.24631
9.766	2.449	.04937	.31274	-.07694	-.26011	-.29415	-.27740	-.04560	-.20391	-.24714
9.745	4.293	.06386	.29125	-.08412	-.26435	-.29318	-.27944	-.04586	-.21047	-.26705
	GRADIENT	.00784	-.00347	-.00391	-.00154	.00115	.00107	-.00025	-.00293	-.00463

RUN NO. 404/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
14.781	-.155	.01754	.36126	-.07660	-.26640	-.30650	-.29233	-.05788	-.20331	-.25250
14.685	2.568	.04498	.32227	-.07866	-.26426	-.29803	-.27884	-.04894	-.20239	-.25777
14.592	4.303	.06009	.32217	-.09903	-.26974	-.29530	-.28465	-.05508	-.22286	-.27053
	GRADIENT	.00959	-.00926	-.00465	-.00061	.00256	.00201	-.00086	-.00397	-.00386

RUN NO. 405/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
29.804	-.120	.00586	.36879	-.07038	-.26326	-.30600	-.28842	-.05442	-.19698	-.25082
29.844	2.563	.03698	.31469	-.07721	-.25926	-.29965	-.27730	-.04328	-.19759	-.25441
29.835	4.329	.05104	.36205	-.0827	-.26737	-.29545	-.28249	-.05135	-.21526	-.26899
	GRADIENT	.01027	.00109	-.00369	-.00073	.00237	.00156	-.00097	-.00379	-.00386

DATE 22 MAR 76

TABULATED SOURCE DATA - CA23B

PAGE 293

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(ENH040) (08 OCT 75)

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 4.000 DX = .000
 SCALE = .0125 DY = .000 MACH = .600

RUN NO. 406/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
44.515	-.091	.00113	.39356	-.07678	-.27314	-.30948	-.29692	-.06824	-.20609	-.25685
44.728	2.446	.03055	.34526	-.07649	-.25529	-.29250	-.28010	-.04899	-.20594	-.25205
44.671	4.476	.04788	.33269	-.08462	-.26652	-.29706	-.28517	-.05435	-.21273	-.26571
	GRADIENT	.01029	-.01356	-.00164	.00168	.00288	.00274	.00323	-.00139	-.00178

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 4.000 DX = .000
 SCALE = .0125 DY = .000 MACH = .500

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(ENH041) (08 OCT 75)

RUN NO. 411/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
3.328	2.137	.06328	.30419	-.08777	-.26327	-.29910	-.28064	-.07149	-.20356	-.24518
3.325	4.298	.07417	.28506	-.09240	-.26079	-.29475	-.28391	-.07866	-.21381	-.26693
	GRADIENT	.00504	-.00214	.00115	.00201	.00201	-.00151	-.00332	-.00474	-.01006

RUN NO. 412/ 0 RN/L = 2.96 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
6.838	2.085	.05231	.29661	-.09281	-.27141	-.30815	-.29032	-.07753	-.21139	-.25977
7.184	4.439	.06501	.28545	-.09949	-.27007	-.30426	-.28971	-.08239	-.21406	-.26425
	GRADIENT	.00539	-.00474	-.00284	.00057	.00165	.00026	-.00207	-.00113	-.00191

RUN NO. 413/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
9.770	2.418	.04697	.37786	-.09042	-.25569	-.29344	-.28746	-.08099	-.20690	-.25335
9.780	4.469	.06158	.29847	-.09816	-.26549	-.30378	-.29111	-.08042	-.21545	-.26251
	GRADIENT	.00649	-.03526	-.00334	-.00036	-.00193	-.00162	.00025	-.00380	-.00407

ARC 14-120(CA238) 747/1 AT1 02S1 (ORBITER DATA)

(ENH041) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .500

RUN NO. 414/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
14.789	1.986	.03978	.28362	-.11052	-.28546	-.32839	-.30907	-.10265	-.22357	-.27401
14.819	4.441	.05719	.27186	-.11987	-.28832	-.32273	-.30732	-.10267	-.23671	-.27721
	GRADIENT	.00710	-.00683	-.00381	-.00117	.00230	.00071	-.00001	-.00536	-.00131

RUN NO. 415/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
29.638	2.215	.03379	.29887	-.09328	-.27306	-.31148	-.29299	-.08168	-.20854	-.26508
29.826	4.415	.05125	.28708	-.09842	-.27288	-.30611	-.29130	-.08253	-.21364	-.26674
	GRADIENT	.00794	-.00536	-.00234	.00008	.00244	.00077	-.00039	-.00232	-.00075

RUN NO. 416/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
44.438	2.214	.02968	.34549	-.10640	-.28414	-.32269	-.30698	-.09998	-.21954	-.27272
44.694	4.330	.04570	.29554	-.12065	-.28908	-.32240	-.31165	-.10810	1.14666	-.29230
	GRADIENT	.00757	-.02361	-.00673	-.00233	.00013	-.00221	-.00384	.64583	-.00926

ARC 14-120(CA238) 747/1 AT1 02S1 (ORBITER DATA)

(ENH042) (08 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .300

RUN NO. 421/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
3.128	2.209	.06434	.22071	-.22779	-.39445	-.43129	-.41726	-.20762	-.32603	-.37252
3.123	4.221	.07396	.21372	-.17766	-.33116	-.36665	-.35334	-.15015	-.27437	-.31341
	GRADIENT	.00478	-.00348	.02491	.03145	.03212	.03176	.02855	.02567	.02937

RUN NO. 422/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
7.085	2.291	.05355	.24617	-.16130	-.31599	-.35195	-.35046	-.14274	-.26826	-.30007
7.303	4.347	.05308	.26880	-.17208	-.33041	-.37044	-.35443	-.14273	-.27170	-.31262
	GRADIENT	.00464	.01101	-.00524	-.00702	-.00413	-.00193	.00001	-.00168	-.00610

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = 0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .300

RUN NO. 423/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
9.285	2.180	.04863	.43002	-.22329	-.38712	-.42741	-.41603	-.20227	-.32667	-.37222
9.970	4.347	.05984	.28081	-.17673	-.33194	-.36741	-.35322	-.15101	-.26808	-.32218
	GRADIENT	.00517	-.06885	.02149	.02546	.02769	.02898	.02365	.02704	.02309

RUN NO. 424/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
14.488	2.266	.04253	.24752	-.23384	-.40157	-.44262	-.42253	-.21113	-.33081	-.39283
14.575	4.354	.05591	.22186	-.24255	-.39542	-.42949	-.41814	-.21285	-.33602	-.39280
	GRADIENT	.00641	-.01229	-.00417	.00294	.00629	.00210	-.00082	-.00250	.00001

RUN NO. 425/ 0 RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
29.804	2.191	.03475	.20992	-.22763	-.38707	-.43612	-.41948	-.20923	-.32487	-.38532
29.724	4.292	.04968	.22412	-.17407	-.33662	-.36771	-.35350	-.14209	-.27266	-.31530
	GRADIENT	.00711	.00676	.02549	.02401	.03256	.03141	.03196	.02485	.03332

RUN NO. 426/ 0 RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
44.766	2.202	.03084	.26827	-.16353	-.33279	-.37356	-.35938	-.14404	-.26456	-.31950
44.698	4.266	.04427	.36444	-.15890	-.33002	-.37074	-.35835	-.13880	-.27425	-.32294
	GRADIENT	.00550	.04660	-.00260	.00134	.00137	.00050	.00254	-.00469	-.00166

ARC 14-120(CA238) 0251

(ENH043) (09 OCT 75)

REFERENCE DATA

SREF = 2690.000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 ELEVON = 5.000

DZ	ALPHAO	XZCP	XYZP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
2.284	4.518	.00067	.58343	-.05364	-.25147	-.28623	-.26537	-.14775	-.18945	-.24639
2.235	6.328	.01790	.53109	-.05609	-.23994	-.27836	-.26449	-.14708	-.18497	-.24608
1.862	8.269	.03028	.45293	-.05611	-.23811	-.27036	-.25863	-.14645	-.18322	-.25410
2.534	10.303	.02963	.25637	-.07094	-.24343	-.27894	-.26212	-.15104	-.19216	-.25624
2.332	12.406	.02653	.06893	-.07556	-.25110	-.28605	-.26231	-.15426	-.19962	-.25777
2.211	14.397	.02697	.08178	-.08466	-.26284	-.30137	-.28799	-.16091	-.20425	-.26873
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 431/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAO	XZCP	XYZP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
17.824	-.729	1.55828	.43386	-.01711	-.25338	-.29902	-.28990	-.15807	-.16317	-.23083
20.582	4.597	-.00122	.51144	-.04904	-.24447	-.28957	-.27642	-.15212	-.17870	-.24850
20.432	6.440	.01680	.43889	-.05688	-.23708	-.27978	-.26528	-.15518	-.18176	-.25078
20.388	8.441	.03012	.34424	-.06055	-.23892	-.26918	-.25900	-.15241	-.18589	-.24990
20.672	10.411	.02902	.25447	-.06966	-.24563	-.27845	-.26231	-.15549	-.19101	-.25505
20.407	12.376	.02665	.12517	-.07402	-.25160	-.28599	-.27202	-.16402	-.19330	-.26154
20.474	14.347	.02705	.10777	-.08329	-.26005	-.29900	-.28100	-.16576	-.19800	-.25656
	GRADIENT	-.29284	.01457	-.00600	.00167	.00177	.00253	.00112	.00292	-.00332

RUN NO. 432/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAO	XZCP	XYZP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
37.645	-.608	2.12768	.47241	-.03217	-.27009	-.31183	-.30140	-.17535	-.16946	-.24654
40.709	4.480	-.00470	.54379	-.06232	-.25769	-.29890	-.28659	-.16643	-.18917	-.25662
40.387	6.499	.01605	.51826	-.05876	-.24099	-.28025	-.25994	-.15082	-.17113	-.25019
40.324	8.438	.02917	.46346	-.05963	-.23982	-.27278	-.25792	-.15526	-.18012	-.24982
40.462	10.448	.02905	.31610	-.06612	-.23446	-.27229	-.26122	-.15259	-.19204	-.25176
40.577	12.427	.02697	.17547	-.07674	-.25585	1.11279	-.27354	-.16575	-.19760	-.26374
40.395	14.433	.02643	.09633	-.08933	-.26983	-.31529	-.29405	-.17999	-.20748	-.26847
	GRADIENT	-.41911	.01403	-.00593	.00244	.00254	.00291	.00175	-.00387	-.00198

RUN NO. 433/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DATE 22 MAR 76

TABULATED SOURCE DATA - CA23B

PAGE 297

ARC 14-120(CA23B) 03S1

REFERENCE DATA

(ENH044) (09 OCT 75)

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 ELEVON = 5.000

RUN NO. 441/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
60.484	6.381	-.05693	.47153	-.02927	-.01694	-.01748	-.01989	-.16890	-.18149	-.25117
60.085	8.325	-.02488	.51159	-.03875	-.02376	-.02162	-.02322	-.16804	-.19132	-.26038
60.673	10.419	-.01019	.77805	-.04332	-.02639	-.03069	-.03176	-.16885	-.19223	-.26265
60.708	12.411	-.00679	.35734	-.05723	-.03582	-.04084	-.04295	-.18097	-.20662	-.27087
57.099	14.003	-.00328	.87467	-.06476	-.04536	-.04775	-.05174	-.18988	-.21591	-.28206
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC 14-120(CA23B) 03S1

REFERENCE DATA

(ENH045) (09 OCT 75)

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 ELEVON = .000

RUN NO. 451/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
2.231	4.557	.08431	-.09005	-.01663	-.00629	-.00894	-.01133	-.15363	-.16927	-.22333
2.483	6.357	.08111	-.07983	-.02336	-.00929	-.01380	-.01062	-.15364	-.17806	-.23882
2.239	8.320	.09360	-.08408	-.03597	-.02281	-.02913	-.02860	-.16288	-.19157	-.25186
1.921	10.373	.08610	-.19476	-.02540	-.00974	-.01796	-.01982	-.15307	-.18200	-.25314
2.551	12.477	.06220	-.15388	-.02788	-.01301	-.01805	-.01991	-.15568	-.18916	-.25319
2.114	14.400	.05317	-.13322	-.04219	-.02304	-.03022	-.03288	-.17355	-.20014	-.25811
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 452/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
17.573	-.792	.11128	-.09456	-.00386	-.00571	-.00823	-.01139	-.17189	-.16637	-.23474
20.373	4.401	.08120	-.04674	-.02256	-.00903	-.00824	-.00877	-.15651	-.17746	-.23608
20.172	6.464	.07980	-.01557	-.02427	-.01052	-.01343	-.01501	-.15887	-.17553	-.24217
20.312	8.466	.09405	-.10524	-.02704	-.01014	-.01094	-.01622	-.15298	-.17437	-.24064
20.516	10.508	.08214	-.12173	-.02657	-.01148	-.01545	-.01545	-.15869	-.18305	-.24580
20.115	12.332	.06233	-.13282	-.03351	-.01836	-.01809	-.02128	-.16748	-.18849	-.25441
	GRADIENT	-.00579	.00321	-.00360	-.00064	-.00317	-.00388	-.00296	-.00214	-.00026

ORIGINAL PAGE IS OF POOR QUALITY

DATE 22 MAR 76

TABULATED SOURCE DATA - CA238

FILE 238

ARC 14-120(CA238) 0351

(ENH045) (09 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1.109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 ELEVON = .000

PARAMETRIC DATA

RUN NO. 453/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

OZ	ALPHA	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
37.990	-7.38	.11488	-.05613	.00025	.00155	.01220	.01220	-.17514	-.16370	-.23204
40.220	4.411	.08207	-.05982	-.01563	-.00648	-.00569	.00700	-.16156	-.17620	-.23557
39.923	6.397	.07862	-.05426	-.03215	-.02026	-.02181	-.02621	-.16658	-.19140	-.24956
40.358	8.474	.09158	-.07923	-.02539	-.00947	-.01312	-.01364	-.15854	-.18309	-.24470
40.425	10.464	.08286	-.13229	-.02734	-.01058	-.01582	-.01661	-.15540	-.18080	-.25151
40.404	12.438	.06067	-.19287	-.03850	-.02248	-.02221	-.02952	-.16313	-.19272	-.25103
40.396	14.497	.05253	-.15461	-.04310	-.02632	-.02397	-.02737	-.16369	-.18939	-.25781
	GRADIENT	-.00537	-.00072	-.00308	-.00155	-.00347	-.00373	.00264	-.00243	-.00069

ARC 14-120(CA238) 0251

(ENH046) (09 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1.109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 ELEVON = .000

PARAMETRIC DATA

RUN NO. 461/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

OZ	ALPHA	XZCP	XYCP	CPC	CPB1	CPB2	CPB3	CPE3	CPS1	CPS2
38.822	-2.34	-.25307	.25407	-.01245	-.23977	-.28402	-.27077	-.16241	-.15578	-.23024
40.088	2.253	.72559	.25578	-.02828	-.24150	-.28145	-.26187	-.15843	-.16452	-.23621
40.254	4.464	.22559	.26453	-.05432	-.23912	-.28199	-.26971	-.17142	-.17717	-.24461
40.159	6.430	.15820	.21086	-.05481	-.23229	-.26468	-.25151	-.16488	-.17963	-.24124
40.206	8.402	.14357	.17894	-.05380	-.23202	-.26317	-.24997	-.15941	-.18212	-.24786
40.248	10.328	.12230	.07883	-.06219	-.23324	-.26166	-.25113	-.15982	-.18403	-.24745
40.591	12.418	.09400	.01145	-.06283	-.24190	-.26166	-.25796	-.16579	-.19028	-.24321
39.934	14.328	.08538	.02665	-.07428	-.25391	-.26715	-.26974	-.17056	-.19166	-.25206
	GRADIENT	.10702	.00219	-.00883	.00012	.00044	.00029	-.00184	-.00451	-.00304

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (UNH009) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVEN = 5.000
 IORB = 8.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBI
ALPHAC	.58981	-2.01103	-.46973	-.15009	.04136	.27560	.00823	-.00251	.00025
ORB	8.00000	-.37391	-.49652	.01433	.04260	.23922	.01027	-.00238	.00080
ALPHAC	.59113	-.02504	-.53884	.17324	.04686	.20636	.01282	-.00217	.00057
ORB	8.00000	.49650	-.01728	.08083	.00137	-.01731	.00115	.00008	.00008
GRADIENT	.00034								

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
ALPHAC	.59127	-.07935	-.48612	-.13803	.04244	.25524	.00603	-.00222	.00065
ORB	8.00000	-.05658	-.43816	.01892	.04301	.22558	.01046	-.00255	.00102
ALPHAC	.59204	-.05430	-.53020	.18116	.04799	.18959	.01359	-.00235	.00087
ORB	8.00000	.00626	-.01102	.07980	.00139	-.01641	.00189	-.00003	.00006
GRADIENT	.00013								

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
ALPHAC	.59244	-.18171	-.39780	-.12336	.04334	.23252	.00598	-.00215	.00046
ORB	8.00000	-.01052	-.46944	.03663	.04485	.20017	.00958	-.00236	.00094
ALPHAC	.59188	-.09143	-.53470	.19560	.04976	.16279	.01332	-.00222	.00086
ORB	8.00000	.02257	-.03422	.07974	.00160	-.01743	.00184	-.00002	.00010
GRADIENT	.00018								

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
ALPHAC	.59222	-.13688	-.52196	-.08845	.04494	.19136	.00682	-.00224	.00058
ORB	8.00000	-.10129	-.42881	.07165	.04651	.15507	.01125	-.00256	.00103
ALPHAC	.59285	-.13779	-.53052	.23292	.05213	.11825	.01600	-.00278	.00122
ORB	8.00000	-.00021	-.00023	.08034	.00180	-.01828	.00229	-.00013	.00016
GRADIENT	.00000								

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
ALPHAC	.59197	-.04829	-.55849	-.08292	.04496	.17571	.00684	-.00225	.00058
ORB	8.00000	-.05417	-.45491	.08516	.04666	.13653	.01028	-.00219	.00107
ALPHAC	.59243	-.15068	-.45507	.25582	.05291	.09671	.01489	-.00242	.00102
ORB	8.00000	-.02560	.02586	.08468	.00199	-.01975	.00201	-.00004	.00011
GRADIENT	.00000								

ARC 14-120(CA238) 747/1 AT1 02S1 (CARRIER DATA)

(UNH009) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = .000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC	TORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	8.00000	.59188	-.00194	-.52363	-.07192	.04549	.16922	.00871	-.00255	.00016
2.000	8.00000	.59167	-.01316	-.48819	.09602	.04728	.12927	.01129	-.00226	.00041
4.000	8.00000	.59268	-.09422	-.46192	.26545	.05304	.09073	.01531	-.00247	.00088
GRADIENT	.00000	.00020	-.02307	.01543	.08434	.00189	-.01962	.00165	.00002	.00018

ARC 14-120(CA238) 747/1 AT1 02S1 (CARRIER DATA)

(UNH010) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = .000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC	TORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	8.00000	.59528	-.14459	.39993	-.06378	.04118	-.02598	.01246	-.00417	.00031
2.000	8.00000	.59463	-.03459	.71214	.07974	.04386	-.05547	.01326	-.00346	-.00012
4.000	8.00000	.59120	-.02236	.67475	.23994	.04969	-.09160	.01450	-.00308	.00079
GRADIENT	.00000	-.00102	.03056	.06870	.07593	.00213	-.01640	.00051	.00027	.00012

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500

ALPHAC	TORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	8.00000	.59524	-.13105	-.08072	-.05254	.04245	-.04964	.01097	-.00327	.00022
2.000	8.00000	.59624	-.03201	.11391	.09615	.04523	-.08196	.01350	-.00323	.00025
4.000	8.00000	.59500	-.05084	.13091	.25924	.05194	-.12041	.01501	-.00283	.00084
GRADIENT	.00000	-.00006	.02005	.05291	.07869	.00237	-.01769	.00101	.00011	.00015

PARAMETRIC DATA

PARAMETRIC DATA

PARAMETRIC DATA

PARAMETRIC DATA

DATE 22 MAR 76

TABULATED SOURCE DATA - CA23B

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ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA)

(UNH010) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 8.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBI
	.000	8.00000	.59458	-.14457	-.40700	-.05202	.04323	-.06417	.00993	-.00265	.00022
	2.000	8.00000	.59782	-.02622	-.40185	.11025	.04615	-.09904	.01402	-.00307	.00062
	4.000	8.00000	.59922	-.07409	-.29551	.27228	.05350	-.13906	.01567	-.00265	.00101
	GRADIENT	.00000	.00091	.01762	.02787	.08107	.00257	-.01872	.00144	-.00000	.00020

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	8.00000	.59642	-.13299	-.36917	-.03026	.04430	-.09211	.01034	-.00269	.00006
	2.000	8.00000	.59651	-.02739	-.37159	.12909	.04746	-.12875	.01228	-.00284	.00044
	4.000	8.00000	.59752	-.07079	-.40978	.29072	.05536	-.16972	.01431	-.00249	.00043
	GRADIENT	.00000	.00027	.01555	-.01015	.08025	.00276	-.01940	.00099	-.00005	.00009

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	8.00000	.59671	-.10394	-.51761	.00478	.04508	-.14215	.01046	-.00279	.00032
	2.000	8.00000	.59659	-.08286	-.47056	.17045	.04956	-.18458	.01298	-.00308	.00030
	4.000	8.00000	.59605	-.11834	-.46531	.33194	.05833	-.22148	.01449	-.00296	.00051
	GRADIENT	.00000	-.00017	-.00360	.01307	.08179	.00331	-.01983	.00101	-.00004	.00007

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	8.00000	.59578	-.10371	-.43686	.02641	.04546	-.16648	.00984	-.00280	.00027
	2.000	8.00000	.59641	-.10516	-.42721	.19229	.05034	-.20981	.01276	-.00297	.00051
	4.000	8.00000	.59539	-.19518	-.47170	.35651	.06005	-.24408	.01445	-.00281	.00047
	GRADIENT	.00000	-.00010	-.02287	-.00871	.08252	.00365	-.01940	.00115	-.00000	.00005

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	8.00000	.59362	-.01092	-.44117	.02692	.04551	-.17103	.01014	-.00290	.00043
	2.000	8.00000	.59473	-.00946	-.48167	.19668	.05052	-.21515	.01190	-.00289	.00052
	4.000	8.00000	.59456	-.12097	-.53064	.36493	.06024	-.24492	.01437	-.00286	.00077
	GRADIENT	.00000	.00023	-.02751	-.02237	.08450	.00368	-.01970	.00106	-.00001	.00008

QUALITY

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (UNH011) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBI
= 45.000	.000	4.00000	.59326	-.07470	-.23397	-.03035	.04584	.14192	.00856	-.00215	.00028
	2.000	4.00000	.59326	-.21255	-.28003	.13812	.04743	.09964	.01277	-.00211	.00059
	4.000	4.00000	.59271	-.14676	-.22929	.30356	.05365	.06114	.01596	-.00221	.00099
	GRADIENT	.00000	-.00014	-.01801	.00117	.08348	.00195	-.02019	.00185	-.00002	.00018

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

DZ = 50.000

DZ	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
= 50.000	.000	4.00000	.59237	-.06283	-.25594	-.02678	.04580	.13949	.00895	-.00224	.00018
	2.000	4.00000	.59276	-.24187	-.29421	.14387	.04723	.09646	.01333	-.00218	.00054
	4.000	4.00000	.59289	-.17550	-.20810	.30852	.05355	.05875	.01601	-.00222	.00121
	GRADIENT	.00000	.00013	-.02817	.01196	.08383	.00194	-.02018	.00176	-.00001	.00026

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (UNH013) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
= 3.500	.000	6.00000	.59330	-.02265	-.52888	-.04350	.04435	-.08317	.00615	-.00059	.00003
	2.000	6.00000	.59492	-.03416	-.45886	.11796	.04773	-.12749	.01033	-.00094	.00016
	4.000	6.00000	.59380	-.06456	-.53850	.27616	.05512	-.16135	.01180	-.00076	.00047
	GRADIENT	.00000	.00013	-.01048	-.00240	.07992	.00269	-.01955	.00141	-.00004	.00011

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(UNH013) (17 OC: 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	6.00000	.59143	-.14594	-.42355	-.02942	.04519	-.10496	.00688	-.00081	.00009
	2.000	6.00000	.59273	.03204	-.49989	.13008	.04880	-.14824	.00913	-.00073	.00050
	4.000	6.00000	.59233	-.03940	-.51321	.29248	.05690	-.18280	.01098	-.00062	.00071
	GRADIENT	.00000	.00022	.02663	-.02242	.08047	.00293	-.01946	.00103	.00005	.00016

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	6.00000	.59144	-.18620	-.44808	-.02384	.04541	-.11678	.00745	-.00107	.00037
	2.000	6.00000	.59173	-.00376	-.58353	.14075	.04936	-.15923	.00889	-.00079	.00030
	4.000	6.00000	.59203	-.07451	-.59846	.30175	.05746	-.19389	.01119	-.00073	.00041
	GRADIENT	.00000	.00015	.02792	-.03759	.08140	.00301	-.01928	.00093	.00008	.00001

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	6.00000	.59111	-.11818	-.47005	-.01132	.04596	-.13630	.00890	-.00138	-.00027
	2.000	6.00000	.59100	.09841	-.49785	.15003	.05016	-.17914	.00941	-.00104	.00032
	4.000	6.00000	.59097	-.01302	-.52853	.31481	.05858	-.21226	.01151	-.00093	.00044
	GRADIENT	.00000	-.00004	.02629	-.01462	.08153	.00316	-.01899	.00065	.00011	.00018

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	6.00000	.59008	-.13369	-.45772	.01950	.04617	-.17026	.01003	-.00221	.00010
	2.000	6.00000	.59033	.02128	-.53834	.18280	.05111	-.21182	.01142	-.00210	.00023
	4.000	6.00000	.59054	-.08049	-.50667	.34221	.06020	-.24339	.01406	-.00222	.00067
	GRADIENT	.00000	.00012	.01330	-.01224	.08068	.00351	-.01828	.00101	-.00000	.00014

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	6.00000	.59017	-.01960	-.53810	.03225	.04605	-.18376	.00921	-.00233	.00027
	2.000	6.00000	.59079	.05543	-.53705	.20242	.05144	-.22619	.01174	-.00233	.00008
	4.000	6.00000	.59103	-.08046	-.55385	.36367	.06099	-.25752	.01399	-.00239	.00068
	GRADIENT	.00000	.00021	.01522	-.00394	.08286	.00374	-.01844	.00120	-.00001	.00010

(UNH013) (17 OCT 75)

ARC 14-120(CA23B) 747/1 ATI 02S1 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBI
	.000	6.00000	.59036	.02183	-.48797	.03247	.04591	-.18689	.00942	-.00234	.00046
	2.000	6.00000	.59152	-.18551	-.52602	.20588	.05134	-.23087	.01157	-.00234	.00071
	4.000	6.00000	.59141	-.18359	-.56621	.37698	.06104	-.26183	.01426	-.00243	.00097
	GRADIENT	.00000	.00026	-.05135	-.01956	.08463	.00378	-.01873	.00121	-.00002	.00013

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 1ORB = 6.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 ATI 02S1 (CARRIER DATA)

(UNH020) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	4.00000	.58802	-.05223	-.26345	.06661	.04758	-.20503	.01045	-.00197	.00008
	2.000	4.00000	.58859	-.02453	-.45158	.16992	.05226	-.23967	.01206	-.00197	.00033
	4.000	4.00000	.58835	-.08535	-.29278	.33031	.06103	-.26602	.01492	-.00184	.00032
	GRADIENT	.00000	.00008	-.00828	-.00733	.08092	.00336	-.01525	.00112	.00003	.00006

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 1ORB = 4.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	4.00000	.58707	-.10972	-.44775	.01224	.04748	-.20700	.01038	-.00203	.00011
	2.000	4.00000	.58741	-.06173	-.37930	.17549	.05250	-.24616	.01260	-.00202	.00018
	4.000	4.00000	.58730	-.06510	-.36577	.34323	.06176	-.27383	.01508	-.00193	.00010
	GRADIENT	.00000	.00006	.01116	.02049	.08275	.00357	-.01671	.00118	.00003	-.00000

ARC 14-120(CA238) 747/1 AT1 QBS1 (CARRIER DATA)

(UNH020) (175)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000	ALPHAC	TORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBI
	.000	4.00000	.58804	-.10786	-.36690	.01599	.04758	-.20993	.01155	-.00223	-.00021
	2.000	4.00000	.58923	-.06237	-.29638	.18610	.05293	-.24907	.01376	-.00215	-.00016
	4.000	4.00000	.59037	-.07726	-.38358	.34660	.06207	-.27708	.01494	-.00188	.00062
	GRADIENT	.00000	.00058	.00765	-.00417	.08265	.00362	-.01679	.00095	.00009	.00021

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000	ALPHAC	TORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	4.00000	.58762	-.06338	-.37890	.03226	.04755	-.21377	.01018	-.00202	-.00016
	2.000	4.00000	.58706	-.07556	-.40109	.19479	.05307	-.25259	.01243	-.00201	.00015
	4.000	4.00000	.58649	-.05904	-.39269	.35786	.06273	-.28058	.01410	-.00179	.00057
	GRADIENT	.00000	-.00028	.00108	-.00345	.08140	.00379	-.01670	.00098	.00006	.00018

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000	ALPHAC	TORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	4.00000	.58719	-.10103	-.37297	.04295	.04708	-.21634	.01120	-.00260	-.00011
	2.000	4.00000	.58734	-.11109	-.40675	.21427	.05271	-.25687	.01232	-.00243	.00042
	4.000	4.00000	.58789	-.11348	-.37248	.37862	.06284	-.28548	.01399	-.00225	.00037
	GRADIENT	.00000	.00017	-.00311	.00012	.08392	.00394	-.01729	.00070	.00009	.00012

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000	ALPHAC	TORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	4.00000	.58474	.03140	-.36765	.05153	.04640	-.21412	.01051	-.00265	.00044
	2.000	4.00000	.58677	-.14937	-.36932	.22207	.05238	-.25572	.01245	-.00252	.00036
	4.000	4.00000	.58682	-.11437	-.44889	.39319	.06262	-.28582	.01445	-.00244	.00061
	GRADIENT	.00000	.00052	-.03644	-.02031	.08542	.00406	-.01792	.00099	.00005	.00004

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000	ALPHAC	TORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	4.00000	.58364	.09589	-.37556	.05573	.04615	-.21319	.00983	-.00256	.00069
	2.000	4.00000	.58607	-.16317	-.37271	.22342	.05227	-.25504	.01226	-.00249	.00037
	4.000	4.00000	.58546	-.10503	-.48330	.39816	.06258	-.28565	.01455	-.00246	.00069
	GRADIENT	.00000	.00046	-.05023	-.02694	.08561	.00411	-.01812	.00118	.00002	-.00000

PARAMETRIC DATA

ARC 14-120(CA23B) 747/1 ATI 0251 (CARRIER DATA)

(UNH021) (7 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 IORB = 4.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	4.00000	.58957	-.02796	-.28104	-.02759	.04516	.11873	.0801	-.00138	.00080
	2.000	4.00000	.58996	-.10961	-.27460	.14072	.04700	.07839	.01345	-.00163	.00060
	4.000	4.00000	.58944	-.16285	-.17509	.30366	.05306	.04018	.01590	-.00161	.00113
	GRADIENT	.00000	-.00003	-.03372	.02649	.08281	.00198	-.01964	.00197	-.00006	.00008

DZ = 50.000 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	4.00000	.58947	-.03023	-.32597	-.02178	.04504	.12016	.00738	-.00120	.00074
2.000	4.00000	.58885	-.18927	-.26854	.14572	.04695	.07897	.01300	-.00153	.00043
4.000	4.00000	.58978	-.21103	-.11324	.30746	.05305	.04030	.01571	-.00155	.00109
GRADIENT	.00000	.00008	-.04520	.05318	.08231	.00200	-.01997	.00208	-.00009	.00009

ARC 14-120(CA23B) 747/1 ATI 0251 (CARRIER DATA)

(UNH022) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 8.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	8.00000	.58837	-.16255	.01217	-.06177	.04336	-.08610	.00825	-.00073	.00016
	2.000	8.00000	.58607	-.01185	-.22915	.09882	.04677	-.11945	.00963	-.00058	.00049
	4.000	8.00000	.58491	-.13636	-.26636	.26241	.05363	-.14996	.01013	-.00054	.00056
	GRADIENT	.00000	-.00086	.00655	-.06963	.08105	.00257	-.01596	.00047	.00005	.00018

PARAMETRIC DATA

PARAMETRIC DATA

(UNH022) (17 OCT 75)

TABULATED SOURCE DATA - CA238
ARC 14-120(CA238) 747/1 AT1 02S1 (CARRIER DATA)

DATE 22 MAR 76

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = .000
LORR = 8.000 DX = .000
DY = .000 MACH = .600

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
SCALE = .0125

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBI
	.000	8.00000	.58758	-.18018	-.11484	-.04150	.04437	-.10877	.00822	-.00096	.00011
	.000	8.00000	.58758	-.18018	-.11484	-.04150	.04437	-.10877	.00822	-.00096	.00011
	2.000	8.00000	.58659	-.19164	-.19164	.11624	.04792	-.14344	.01015	-.00092	.00040
	4.000	8.00000	.58630	-.12718	-.21764	.27772	.05515	-.17436	.01139	-.00075	.00052
	GRADIENT	.00000	-.00032	.01325	-.02575	.07981	.00269	-.01640	.00079	.00005	.00010

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	8.00000	.58709	-.19173	-.20231	-.02753	.04504	-.12347	.00839	-.00124	.00044
	.000	8.00000	.58728	-.07957	-.14578	.12739	.04870	-.15948	.01070	-.00130	.00033
	2.000	8.00000	.58773	-.13358	-.16640	.28739	.05612	-.19049	.01242	-.00095	.00049
	4.000	8.00000	.00016	.01451	.00898	.07873	.00277	-.01676	.00101	.00007	.00001
	GRADIENT	.00000									

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	8.00000	.58694	-.18748	-.23899	-.01506	.04556	-.14394	.00732	-.00082	.00010
	.000	8.00000	.58647	-.13443	-.18170	.14608	.04955	-.18260	.01011	-.00091	.00034
	2.000	8.00000	.58681	-.07010	-.20146	.30536	.05784	-.21600	.01281	-.00091	.00042
	4.000	8.00000	-.00003	.02934	.00938	.08010	.00307	-.01802	.00137	-.00002	.00013
	GRADIENT	.00000									

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	8.00000	.58879	-.10260	-.12441	.01507	.04612	-.17801	.00993	-.00177	.00007
	.000	8.00000	.58798	-.07780	-.12012	.18062	.05097	-.21960	.01207	-.00177	.00012
	2.000	8.00000	.58857	-.15887	-.18301	.34482	.06008	-.25235	.01410	-.00173	.00041
	4.000	8.00000	-.00003	-.01407	-.01465	.08244	.00349	-.01859	.00104	.00001	.00012
	GRADIENT	.00000									

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	8.00000	.58810	-.03873	-.20232	.03215	.04595	-.19229	.01002	-.00225	.00044
	.000	8.00000	.58849	-.04281	-.22615	.20215	.05110	-.23501	.01215	-.00235	.00098
	2.000	8.00000	.58917	-.15924	-.17723	.37005	.06069	-.26671	.01501	-.00234	.00094
	4.000	8.00000	.00027	-.03030	.00627	.08448	.00368	-.01861	.00125	-.00002	.00013
	GRADIENT	.00000									

DATE 22 MAR 76

TABLATED SOURCE DATA - CA238

PAGE 315

ARC 14-120(CA238) 747/1 AT1 0251 (CARRIER DATA)

(UNH023) (17 OCT 75)

REFERENCE DATA

PARAMETRIC DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 6.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	.000	6.00000	.58720	-.08080	-.32093	-.00541	.04667	-.16757	.00828	-.00104	.00003
2.000	.000	6.00000	.58738	.03240	-.29826	.15378	.05117	-.20838	.01010	-.00093	.00005
4.000	.000	6.00000	.58743	-.01548	-.31715	.32021	.05986	-.24053	.01162	-.00074	.00038
GRADIENT	.00000	.00000	.00006	.01633	.00094	.08141	.00330	-.01824	.00083	.00007	.00009

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	.000	6.00000	.58887	-.08769	-.27717	.00749	.04679	-.18128	.00830	-.00113	.00036
2.000	.000	6.00000	.58732	.04181	-.32458	.17470	.05176	-.22303	.00958	-.00084	.00023
4.000	.000	6.00000	.58698	-.05553	-.31952	.33217	.06071	-.25324	.01177	-.00076	.00053
GRADIENT	.00000	.00000	-.00047	.00804	-.01059	.08117	.00348	-.01799	.00087	.00009	.00004

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	.000	6.00000	.58737	-.13357	-.26229	.02878	.04650	-.19748	.00970	-.00215	.00062
2.000	.000	6.00000	.58778	-.01156	-.20880	.18870	.05174	-.23850	.01129	-.00191	.00057
4.000	.000	6.00000	.58784	-.12743	-.26464	.35861	.06158	-.27058	.01353	-.00180	.00064
GRADIENT	.00000	.00000	.00012	.00154	-.00059	.08246	.00377	-.01827	.00096	.00009	.00000

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	.000	6.00000	.58641	.02545	-.31603	.04021	.04648	-.20498	.01059	-.00235	.00017
2.000	.000	6.00000	.58821	-.10675	-.27867	.20998	.05186	-.24754	.01203	-.00241	.00080
4.000	.000	6.00000	.58801	-.15959	-.27362	.37983	.06182	-.27858	.01445	-.00230	.00088
GRADIENT	.00000	.00000	.00040	-.04626	.01060	.08490	.00384	-.01840	.00096	.00001	.00026

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	.000	6.00000	.58729	.06326	-.39692	.03944	.04632	-.20590	.01072	-.00253	.00048
2.000	.000	6.00000	.58609	-.12785	-.35762	.20918	.05185	-.24915	.01213	-.00243	.00081
4.000	.000	6.00000	.58823	-.17777	-.33684	.37943	.06189	-.28021	.01422	-.00222	.00071
GRADIENT	.00000	.00000	.00023	-.05026	.01502	.08500	.00389	-.01858	.00088	.00008	.00006

DATE 22 MAR 76

TABULATED SOURCE DATA - CA23B

PAGE 013

ARC 14-120(CA23B) 747/1 ATI 0251 (CARRIER DATA)

(UNH024) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 IORB = 6.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CYN	CBL
	.000	6.00000	.58656	-.15710	-.05439	-.10988	.04460	.18606	-.00116	.00026
	2.000	6.00000	.58694	-.05661	-.04203	.05906	.04526	.14362	-.00144	.00023
	4.000	6.00000	.58738	-.07286	-.01917	.21895	.05029	.10759	-.00135	.00063
	GRADIENT	.00000	.00021	.02106	.00880	.08221	.00142	-.01962	-.00005	.00009

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CYN	CBL
	.000	6.00000	.58752	-.15273	-.13760	-.08878	.04526	.17120	-.00129	.00007
	2.000	6.00000	.58737	-.02438	-.07570	.07001	.04635	.13007	-.00131	.00063
	4.000	6.00000	.58739	-.04263	-.02463	.23028	.05110	.09394	-.00127	.00083
	GRADIENT	.00000	-.00003	.02757	.02824	.07977	.00146	-.01932	.00000	.00019

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CYN	CBL
	.000	6.00000	.58782	-.18388	-.04983	-.07944	.04524	.16365	-.00100	.00049
	2.000	6.00000	.58743	-.00854	-.02874	.07941	.04651	.12266	-.00116	.00078
	4.000	6.00000	.58764	-.07576	-.07593	.23618	.05135	.08672	-.00113	.00096
	GRADIENT	.00000	-.00004	.02703	-.00652	.07890	.00153	-.01923	-.00003	.00012

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CYN	CBL
	.000	6.00000	.58804	-.10235	-.01767	-.07332	.04535	.15465	-.00115	.00044
	2.000	6.00000	.58810	.05297	-.02567	.09074	.04669	.11295	-.00097	.00079
	4.000	6.00000	.58742	.00257	.04641	.25163	.05193	.07695	-.00107	.00070
	GRADIENT	.00000	-.00016	.02623	.01602	.08124	.00164	-.01942	.00002	.00006

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CYN	CBL
	.000	6.00000	.58757	-.09908	-.05168	-.04820	.04543	.13901	-.00148	.00008
	2.000	6.00000	.58751	-.03402	-.00815	.11278	.04686	.10019	-.00150	.00077
	4.000	6.00000	.58750	-.11321	-.04740	.27511	.05248	.06283	-.00165	.00095
	GRADIENT	.00000	-.00002	-.00353	.00107	.08083	.00176	-.01905	-.00004	.00022

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (UNH024) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBI
.000	.000	6.00000	.58586	.01170	-.06028	-.03946	.04499	.13502	.00819	-.00163	.00040
2.000	2.000	6.00000	.58569	-.14933	-.07757	.12987	.04675	.09308	.01354	-.00187	.00048
4.000	4.000	6.00000	.58577	-.17441	-.15908	.29287	.05244	.05481	.01639	-.00196	.00096
GRADIENT	GRADIENT	.00000	.00023	-.04653	-.02470	.08308	.00186	-.02005	.00205	-.00008	.00014

DZ = 50.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	.000	6.00000	.58618	.03737	-.02820	-.03565	.04507	.13293	.00885	-.00175	.00011
2.000	2.000	6.00000	.58665	-.18265	-.01953	.13267	.04676	.09141	.01352	-.00193	.00038
4.000	4.000	6.00000	.58739	-.13851	-.08646	.29806	.05247	.05405	.01587	-.00187	.00086
GRADIENT	GRADIENT	.00000	.00030	-.04397	-.01457	.08343	.00185	-.01972	.00175	-.00003	.00019

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (UNH025) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	.000	8.00000	.58688	-.08582	.17360	-.14796	.04104	.23602	.00792	-.00201	.00092
2.000	2.000	8.00000	.58653	-.14166	-.01841	.03207	.04278	.20057	.00934	-.00137	.00181
4.000	4.000	8.00000	.58754	-.05494	-.02214	.17814	.04675	.17362	.01319	-.00164	.00106
GRADIENT	GRADIENT	.00000	.00016	.00772	-.04893	.08153	.00143	-.01560	.00132	-.00009	.00003

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 IORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 IORB = 8.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 02S1 (CARRIER DATA)

(UNH025) (7 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBI
ALPHAC	.58726	-.09264	.11948	-.12312	.04251	.21692	.00695	-.00167	.00060
.000	.58832	-.09157	.02817	.03961	.04357	.18305	.00914	-.00134	.00125
2.000	.58763	-.06110	.00034	.19416	.04784	.15341	.01343	-.00154	.00100
4.000	.00009	.00788	-.02978	.07932	.00133	-.01588	.00162	.00003	.00010
GRADIENT	.00000								

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
ALPHAC	.58784	-.09040	.08861	-.10433	.04353	.20450	.00606	-.00140	.00038
.000	.58815	-.03781	.06364	.04136	.04396	.17248	.00862	-.00128	.00099
2.000	.58774	-.06054	.03091	.20425	.04857	.14015	.01393	-.00159	.00086
4.000	-.00003	.00746	-.01443	.07715	.00126	-.01609	.00197	-.00005	.00012
GRADIENT	.00000								

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
ALPHAC	.58688	-.11995	.04068	-.09466	.04413	.18738	.00673	-.00138	.00036
.000	.58833	-.06631	.03239	.06508	.04529	.15095	.00996	-.00137	.00040
2.000	.58759	-.08560	-.02535	.22219	.04961	.11959	.01270	-.00100	.00139
4.000	.00018	.00859	-.01651	.07921	.00137	-.01695	.00149	.00009	.00026
GRADIENT	.00000								

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
ALPHAC	.58726	-.13458	.04159	-.06970	.04457	.16028	.00747	-.00146	.00028
.000	.58815	-.11840	.01715	.08866	.04578	.12291	.01127	-.00147	.00099
2.000	.58844	-.17807	-.03594	.25281	.05100	.08722	.01445	-.00142	.00131
4.000	.00029	-.01087	-.01938	.08063	.00161	-.01827	.00174	.00001	.00026
GRADIENT	.00000								

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
ALPHAC	.58850	-.05870	-.01594	-.05526	.04446	.14871	.00824	-.00177	.00036
.000	.58832	-.09865	.01874	.11377	.04607	.10765	.01304	-.00194	.00072
2.000	.58778	-.17449	.00419	.27458	.05147	.07138	.01556	-.00189	.00122
4.000	-.00018	-.02895	.00503	.08246	.00175	-.01933	.00183	-.00003	.00022
GRADIENT	.00000								

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = -1.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC TORB = .000 DX = .000
 SCALE = .0125 GRADIENT = .000000 DY = .000 MACH = .600

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBI
.000	.000	8.00000	.58749	.01451	-.04207	-.05097	.04434	.14674	.00654	-.00146	.00067
2.000	8.00000	8.00000	.58818	-.07501	.01766	.12066	.04592	.10544	.01156	-.00165	.00120
4.000	8.00000	8.00000	.58720	-.18335	.05471	.28172	.05157	.06820	.01588	-.00194	.00121
GRADIENT	.00000	.00000	-.00007	-.04946	.02419	.08317	.00181	-.01963	.00233	-.00012	.00014

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC TORB = .000 DX = .000
 SCALE = .0125 GRADIENT = .000000 DY = .000 MACH = .600

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	.000	8.00000	.58488	-.04747	.07762	-.05430	.04284	-.07760	.00449	-.00042	.00091
2.000	8.00000	8.00000	.58749	-.16311	.16832	.12048	.04748	-.11636	.01135	-.00096	-.00086
4.000	8.00000	8.00000	.58723	-.20081	.04725	.27824	.05396	-.14700	.01014	-.00082	.00075
GRADIENT	.00000	.00000	.00059	-.03834	-.00759	.08314	.00278	-.01735	.00141	-.00010	-.00004

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC TORB = .000 DX = .000
 SCALE = .0125 GRADIENT = .000000 DY = .000 MACH = .600

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	.000	8.00000	.58594	-.11490	.07994	-.03863	.04405	-.09876	.00695	-.00105	.00039
2.000	8.00000	8.00000	.58694	-.10494	.09838	.12853	.04811	-.13696	.01008	-.00104	.00001
4.000	8.00000	8.00000	.58659	-.14418	.05239	.28725	.05527	-.16904	.01089	-.00090	.00079
GRADIENT	.00000	.00000	.00016	-.00732	-.00689	.08147	.00281	-.01757	.00098	-.00004	.00010

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(UNH027) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 8.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBI
	.000	8.00000	.58659	-.15926	.08776	-.02851	.04487	-.11208	.00851	-.00139	.00000
	2.000	8.00000	.58622	-.06494	.04699	.13242	.04844	-.14976	.00879	-.00095	.00084
	4.000	8.00000	.58595	-.07448	.06433	.29109	.05611	-.18363	.01146	-.00089	.00085
	GRADIENT	.00000	-.00016	.02119	-.00586	.07990	.00281	-.01789	.00074	.00012	.00021

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	8.00000	.58657	-.17151	.04284	-.01384	.04532	-.13360	.00918	-.00164	.00015
	2.000	8.00000	.58706	-.09136	.04109	.14975	.04957	-.17477	.00972	-.00156	.00032
	4.000	8.00000	.58624	-.13410	.04469	.30902	.05768	-.20811	.01266	-.00145	.00067
	GRADIENT	.00000	-.00008	.00935	.00046	.08071	.00309	-.01663	.00087	.00005	.00021

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	8.00000	.58635	-.13749	.03346	.01446	.04556	-.16926	.01022	-.00222	.00003
	2.000	8.00000	.58528	-.10994	.06309	.17631	.05027	-.21123	.01122	-.00204	.00080
	4.000	8.00000	.58570	-.12824	.02846	.34228	.05971	-.24451	.01331	-.00177	.00077
	GRADIENT	.00000	-.00016	.00231	-.00125	.08196	.00354	-.01881	.00077	.00011	.00018

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	8.00000	.58545	-.07774	.00509	.03667	.04568	-.18626	.01111	-.00272	.00002
	2.000	8.00000	.58604	-.08693	.07027	.20104	.05063	-.22874	.01297	-.00281	.00071
	4.000	8.00000	.58548	-.16555	-.00382	.36724	.06023	-.26065	.01406	-.00239	.00094
	GRADIENT	.00000	.00001	-.02195	-.00223	.08264	.00364	-.01860	.00074	.00008	.00024

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
	.000	8.00000	.58502	.04402	.04160	.02575	.04505	-.18498	.01053	-.00278	.00018
	2.000	8.00000	.58562	-.10936	.05879	.19856	.05052	-.23158	.01319	-.00288	.00052
	4.000	8.00000	.57532	-.16369	.07356	.37337	.06068	-.26409	.01444	-.00250	.00067
	GRADIENT	.00000	.00007	-.05193	.00799	.08691	.00391	-.01978	.00098	.00007	.00012

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA) (UNH034) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .000027 .02458 - .00074 .06137 .00306 DY = .000 MACH = .600

PARAMETRIC DATA

DZ = 3.500 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	6.00000	.58336	-.09135	-.01652	-.03268	.04592	-.13213	.01209	-.00335	-.00054
2.000	6.00000	.58780	.17907	-.08260	.13357	.04994	-.17659	.01418	-.00306	.00051
4.000	6.00000	.58729	.00698	-.01949	.29278	.05817	-.21189	.01574	-.00282	.00049
GRADIENT	.00000	-.00027	.02458	-.00074	.06137	.00306	-.01994	.00091	.00013	-.00001

REFERENCE DATA

OZ = 7.500 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	6.00000	.58714	-.10221	-.02782	-.01674	.04650	-.15176	.01218	-.00302	-.00012
2.000	6.00000	.58690	.05748	-.04403	.14699	.05062	-.19335	.01327	-.00267	.00051
4.000	6.00000	.58754	-.00159	-.04800	.30774	.05903	-.22759	.01416	-.00225	.00073
GRADIENT	.00000	.00010	.02516	-.00505	.08112	.00313	-.01896	.00049	.00019	.00021

REFERENCE DATA

DZ = 10.000 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	6.00000	.58771	-.09950	-.02445	-.00959	.04641	-.15794	.01144	-.00279	.00026
2.000	6.00000	.58687	.05662	-.03676	.15111	.05070	-.20081	.01260	-.00252	.00046
4.000	6.00000	.58669	-.03795	-.06593	.31357	.05955	-.23488	.01375	-.00203	.00068
GRADIENT	.00000	-.00026	.01539	-.01037	.08079	.00328	-.01923	.00058	.00019	.00010

REFERENCE DATA

DZ = 15.000 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	6.00000	.58751	-.08943	-.05005	-.00199	.04646	-.17012	.01069	-.00229	-.00012
2.000	6.00000	.58668	.05800	-.05788	.16662	.05121	-.21307	.01251	-.00202	.00007
4.000	6.00000	.58727	-.05445	-.07621	.32957	.06033	-.24570	.01387	-.00157	.00065
GRADIENT	.00000	-.00005	.00875	-.00654	.08289	.00347	-.01889	.00080	.00018	.00019

REFERENCE DATA

OZ = 30.000 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	6.00000	.58634	-.06173	-.00569	.02124	.04650	-.18901	.01274	-.00295	-.00021
2.000	6.00000	.58733	.02490	-.04001	.18996	.05156	-.23293	.01365	-.00274	.00047
4.000	6.00000	.58711	-.07390	-.09332	.35743	.06122	-.26527	.01415	-.00208	.00035
GRADIENT	.00000	.00013	-.00304	-.02191	.08405	.00368	-.01906	.00035	.00022	.00014

ARC 14-120(CA23B) 747/1 AT1 03S1 (CARRIER DATA)

(UNH034) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC

.000
 2.000
 4.000
 GRADIENT

TORB

6.00000
 6.00000
 6.00000
 .00000

MACH

.58727
 .58711
 .58752
 .00006

DY

-.05004
 -.06051
 .00100
 .01276

CL

.03668
 .20726
 .37482
 .08453

CD

.04619
 .05140
 .06128
 .00377

CLM

-.19882
 -.24180
 -.27317
 -.01859

CY

.01285
 .01316
 .01473
 .00047

CYN

-.00321
 -.00301
 -.00268
 .00013

CBI

-.00001
 .00077
 .00089
 .00023

DZ = 50.000

ALPHAC

.000
 2.000
 4.000
 GRADIENT

TORB

6.00000
 6.00000
 6.00000
 .00000

MACH

.58796
 .58812
 .58765
 -.00008

DY

.01188
 -.02287
 -.05059
 -.01562

CL

.03675
 .20765
 .37926
 .08563

CD

.04585
 .05115
 .06107
 .00381

CLM

-.19898
 -.24355
 -.27534
 -.01909

CY

.01133
 .01317
 .01493
 .00090

CYN

-.00299
 -.00290
 -.00262
 .00009

CBL

.00045
 .00084
 .00134
 .00022

ARC 14-120(CA23B) 747/1 AT1 03S1 (CARRIER DATA)

(UNH035) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC

.000
 2.000
 4.000
 GRADIENT

TORB

4.00000
 4.00000
 4.00000
 .00000

MACH

.58696
 .58770
 .58780
 .00021

DY

.05157
 .10413
 .03346
 -.00453

CL

-.00147
 .16456
 .32868
 .08254

CD

.04771
 .05234
 .06121
 .00337

CLM

-.19862
 -.23248
 -.26341
 -.01595

CY

.01159
 .01191
 .01348
 .00047

CYN

-.00206
 -.00185
 -.00146
 .00015

CBL

-.00045
 .00034
 .00040
 .00021

ARC 14-120(CA238) 747/1 AT1 03S1 (CARRIER DATA) (UNH035) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = 2000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	.000	4.00000	.58699	-.16588	.05294	.01516	.04781	-.20725	.01140	-.00196	-.00038
2.000	.000	4.00000	.58732	.07436	.05716	.17637	.05237	-.23935	.01258	-.00182	.00031
4.000	.000	4.00000	.58723	-.00439	.06897	.33802	.06168	-.26922	.01344	-.00137	.00012
GRADIENT	.00000	.00000	.00006	.04037	.00401	.08071	.00347	-.01549	.00051	.00015	.00012

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	.000	4.00000	.58779	-.07609	.12369	.02157	.04754	-.20867	.01095	-.00200	.00025
2.000	.000	4.00000	.58794	.10970	.05689	.18617	.05236	-.24368	.01280	-.00177	.00024
4.000	.000	4.00000	.58841	.00020	.07970	.34709	.06164	-.27260	.01370	-.00126	.00016
GRADIENT	.00000	.00000	.00016	.01907	-.01100	.08138	.00352	-.01598	.00069	.00018	-.00002

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	.000	4.00000	.58849	-.17434	.06725	.02856	.04738	-.21150	.01143	-.00176	-.00029
2.000	.000	4.00000	.58824	-.06427	.07796	.19468	.05251	-.24642	.01266	-.00145	-.00038
4.000	.000	4.00000	.58819	-.07067	.01371	.35654	.06196	-.27566	.01318	-.00106	.00030
GRADIENT	.00000	.00000	-.00007	.02592	-.01339	.08199	.00365	-.01604	.00044	.00018	.00015

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	.000	4.00000	.58969	-.07086	.09440	.03922	.04663	-.21515	.01226	-.00272	.00051
2.000	.000	4.00000	.58998	-.10285	.05238	.20961	.05201	-.25376	.01419	-.00266	.00069
4.000	.000	4.00000	.58998	-.16552	.05946	.38056	.06197	-.28366	.01506	-.00215	.00074
GRADIENT	.00000	.00000	-.00018	.02367	-.00873	.08534	.00383	-.01713	.00070	.00014	.00006

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	.000	4.00000	.58793	.04568	.10000	.05016	.04644	-.21639	.01278	-.00297	.00009
2.000	.000	4.00000	.58837	-.13136	.04855	.21359	.05162	-.25473	.01368	-.00266	.00034
4.000	.000	4.00000	.58880	-.19234	.00955	.38790	.06169	-.28557	.01536	-.00237	.00071
GRADIENT	.00000	.00000	.00022	-.05951	-.02261	.08443	.00381	-.01729	.00065	.00015	.00015

ARC 14-120(CA23B) 747/1 AT1 03S1 (CARRIER DATA)

(UNH035) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC

4.00000
 4.00000
 4.00000
 4.00000
 GRADIENT .00000

LORB

4.00000
 4.00000
 4.00000
 4.00000
 GRADIENT .00000

MACH

.58712
 .58810
 .58850
 .00035

DX

.05959
 -.16166
 -.20141
 -.06525

DY

.08025
 .05529
 -.03100
 -.02781

CL

.05400
 .21377
 .38875
 .08369

CD

.04644
 .05152
 .06161
 .00379

CLM

-.21679
 -.25435
 -.28565
 -.01722

CY

.01307
 .01329
 .01518
 .00053

CYN

-.00295
 -.00248
 -.00231
 .00016

CBI

-.00031
 -.00000
 .00068
 .00025

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(UNH040) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC

4.00000
 4.00000
 4.00000
 4.00000
 GRADIENT .00000

LORB

4.00000
 4.00000
 4.00000
 4.00000
 GRADIENT .00000

MACH

.58585
 .58731
 .58671
 .00022

DX

-.03191
 -.01566
 -.06186
 -.00749

DY

.01407
 -.03599
 -.01604
 -.00753

CL

-.01942
 .15274
 .31372
 .08329

CD

.04635
 .05076
 .05894
 .00315

CLM

-.14557
 -.18646
 -.22270
 -.01928

CY

.01474
 .01557
 .01765
 .00073

CYN

-.00362
 -.00338
 -.00329
 .00008

CBL

-.00019
 .00003
 .00032
 .00013

DZ = 7.500

ALPHAC

4.00000
 4.00000
 4.00000
 4.00000
 GRADIENT .00000

LORB

4.00000
 4.00000
 4.00000
 4.00000
 GRADIENT .00000

MACH

.58538
 .58728
 .58751
 .00053

DX

-.06427
 -.05303
 -.06491
 -.00016

DY

.08346
 -.00542
 -.02533
 -.02720

CL

-.00171
 .16051
 .32261
 .08108

CD

.04682
 .05108
 .05953
 .00318

CLM

-.15883
 -.19795
 -.23335
 -.01863

CY

.01544
 .01498
 .01745
 .00050

CYN

-.00418
 -.00346
 -.00329
 .00022

CBL

-.00044
 .00031
 .00046
 .00023

TABULATED SOURCE DATA - CA238

DATE 22 MAR 76

(UNH040) (17 OCT 75)

ARC 14-120(CA238) 747/1 AT1 02S1 (CARRIER DATA)

PARAMETRIC DATA

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
10.000	.000	4.00000	.58556	-.10309	.08607	.00535	.04658	-.16653	.01607	-.00436	.00002
2.000	.000	4.00000	.58679	-.05271	.00618	.16581	.05106	-.20515	.01551	-.00356	.00060
4.000	.000	4.00000	.58753	-.09386	-.02923	.32991	.05991	-.24058	.01737	-.00327	.00036
GRADIENT		.00000	.00049	.00156	-.02883	.08114	.00333	-.01851	.00033	.00027	.00009

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
15.000	.000	4.00000	.58574	-.08259	.05888	.00184	.04624	-.17375	.01409	-.00401	-.00008
2.000	.000	4.00000	.58678	-.05371	-.00111	.18348	.05151	-.21870	.01544	-.00342	.00027
4.000	.000	4.00000	.58737	-.03650	-.06713	.34296	.06053	-.25088	.01683	-.00307	.00054
GRADIENT		.00000	.00041	.01152	-.03150	.08528	.00357	-.01928	.00068	.00024	.00015

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
30.000	.000	4.00000	.58568	-.11834	.06133	.02073	.04598	-.19353	.01357	-.00334	.00001
2.000	.000	4.00000	.58780	.04836	.03333	.19987	.05162	-.23772	.01437	-.00298	.00067
4.000	.000	4.00000	.58718	-.09299	-.04051	.36336	.06124	-.26893	.01500	-.00240	.00075
GRADIENT		.00000	.00038	.00634	-.02546	.08566	.00382	-.01885	.00036	.00023	.00018

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
45.000	.000	4.00000	.58585	.03619	.07788	.03011	.04566	-.19892	.01303	-.00302	-.00002
2.000	.000	4.00000	.58757	-.12600	.00303	.20670	.05147	-.24439	.01417	-.00281	.00012
4.000	.000	4.00000	.58694	-.16483	-.04890	.38019	.06165	-.27747	.01589	-.00245	.00061
GRADIENT		.00000	.00027	-.05025	-.03169	.08752	.00400	-.01964	.00072	.00014	.00016

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.000	.000	4.00000	.58550	.11191	.07140	.03124	.04555	-.19949	.01255	-.00292	-.00012
2.000	.000	4.00000	.58745	-.22841	-.02607	.20972	.05146	-.24641	.01417	-.00277	-.00017
4.000	.000	4.00000	.58688	-.18856	-.05982	.38609	.06179	-.27987	.01643	-.00253	.00057
GRADIENT		.00000	.00025	-.07512	-.03280	.08871	.00406	-.02010	.00097	.00010	.00017

ARC 14-120(CA23B) 747/1 ATI 0251 (CARRIER DATA)

(UNHX10) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC 2.000
 4.000
 GRADIENT .00000

IORB 8.00000
 8.00000
 GRADIENT .00000

DX .00000
 .00000
 .00000

DY .69102
 .65567
 -.01768

MACH .59470
 .59129
 -.00171

CL .07986
 .23997
 .09006

CD .04387
 .04971
 .00292

CLM -.05559
 -.09165
 -.01803

CY .01316
 .01442
 .00063

CYN -.00339
 -.00303
 .00018

CBL -.00011
 .00079
 .00045

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC 2.000
 4.000
 GRADIENT .00000

IORB 8.00000
 8.00000
 GRADIENT .00000

DX .00000
 .00000
 .00000

DY .10196
 .12026
 .00915

MACH .59623
 .59497
 -.00063

CL .03823
 .25938
 .08057

CD .04524
 .05196
 .00336

CLM -.08210
 -.12044
 -.01917

CY .01339
 .01493
 .00077

CYN -.00317
 -.00279
 .00019

CBL .00025
 .00083
 .00029

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC 2.000
 4.000
 GRADIENT .00000

IORB 8.00000
 8.00000
 GRADIENT .00000

DX .00000
 .00000
 .00000

DY -.40753
 -.29938
 .05407

MACH .59778
 .59813
 .00017

CL .11034
 .27248
 .08107

CD .04616
 .05352
 .00368

CLM -.09913
 -.13902
 -.01995

CY .01393
 .01562
 .00085

CYN -.00303
 -.00262
 .00020

CBL .00061
 .00100
 .00020

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC 2.000
 4.000
 GRADIENT .00000

IORB 8.00000
 8.00000
 GRADIENT .00000

DX .00000
 .00000
 .00000

DY -.37808
 -.41522
 -.01857

MACH .59647
 .59743
 .00048

CL .12903
 .29092
 .08095

CD .04747
 .05538
 .00395

CLM -.12887
 -.16973
 -.02043

CY .01219
 .01424
 .00103

CYN -.00280
 -.00246
 .00017

CBL .00043
 .00043
 -.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC 2.000
 4.000
 GRADIENT .00000

IORB 8.00000
 8.00000
 GRADIENT .00000

DX .00000
 .00000
 .00000

DY -.47262
 -.47028
 .00117

MACH .59650
 .59596
 -.00027

CL .17058
 .33210
 .08076

CD .04958
 .05636
 .00439

CLM -.18462
 -.22147
 -.01842

CY .01295
 .01447
 .00076

CYN -.00306
 -.00294
 .00006

CBL .00030
 .00061
 .00016

ARC 14-120(CA238) 747/1 ATI 0251 (CARRIER DATA)

(UNHX10) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	8.00000	.00000	.59632	-.43160	.19343	.05035	-.20987	.01274	-.00297	.00051
	4.000	8.00000	.00000	.59524	-.47800	.35672	.05008	-.24412	.01443	-.00280	.00049
	GRADIENT	.00000	.00000	-.00054	-.02320	.08165	.00486	-.01713	.00084	.00008	-.00001

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 1ORB = 8.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	8.00000	.00000	.59473	-.49407	.19671	.05053	-.21516	.01189	-.00289	.00053
	4.000	8.00000	.00000	.59448	-.53399	.36506	.06026	-.24982	.01436	-.00285	.00077
	GRADIENT	.00000	.00000	-.00013	-.02496	.08417	.00487	-.01733	.00124	.00002	.00012

ARC 14-120(CA238) 747/1 ATI 0251 (CARRIER DATA)

(UNHX13) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	5.00000	.00000	.59463	-.40468	.11786	.04770	-.12704	.01061	-.00111	.00015
	4.000	6.00000	.00000	.59358	-.50809	.27632	.05509	-.16120	.01194	-.00084	.00047
	GRADIENT	.00000	.00000	-.00052	-.05171	.07923	.00369	-.01708	.00067	.00013	.00016

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 1ORB = 6.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	6.00000	.00000	.59270	-.47674	.12999	.04878	-.14788	.00934	-.00085	.00049
	4.000	6.00000	.00000	.59228	-.49008	.29249	.05685	-.18256	.01120	-.00071	.00071
	GRADIENT	.00000	.00000	-.00021	-.00667	.08125	.00403	-.01734	.00093	.00007	.00011

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 1ORB = 6.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 0251 (CARRIER DATA)

(UNHX13) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000	ALPHAC	2.000	DX	.00000	MACH	.59175	DY	-.56964	CL	.14066	CD	.04934	CLM	-.15898	CY	.00910	CYN	-.00088	CBL	.00031
	ALPHAC	4.000	DX	.00000	MACH	.59204	DY	-.58322	CL	.30184	CD	.05744	CLM	-.19377	CY	.01136	CYN	-.00080	CBL	.00042
	GRADIENT	.00000	DX	.00000	MACH	.00014	DY	-.00679	CL	.08059	CD	.00405	CLM	-.01740	CY	.00113	CYN	.00004	CBL	.00005

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000	ALPHAC	2.000	DX	.00000	MACH	.59106	DY	-.48587	CL	.15017	CD	.05013	CLM	-.17885	CY	.00960	CYN	-.00113	CBL	.00033
	ALPHAC	4.000	DX	.00000	MACH	.59101	DY	-.51963	CL	.31490	CD	.05857	CLM	-.21221	CY	.01164	CYN	-.00099	CBL	.00045
	GRADIENT	.00000	DX	.00000	MACH	-.00003	DY	-.01688	CL	.08236	CD	.00422	CLM	-.01668	CY	.00102	CYN	.00007	CBL	.00006

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000	ALPHAC	2.000	DX	.00000	MACH	.59039	DY	-.52819	CL	.18284	CD	.05109	CLM	-.21177	CY	.01149	CYN	-.00213	CBL	.00024
	ALPHAC	4.000	DX	.00000	MACH	.59057	DY	-.50028	CL	.34257	CD	.06019	CLM	-.24351	CY	.01407	CYN	-.00223	CBL	.00067
	GRADIENT	.00000	DX	.00000	MACH	.00009	DY	.01395	CL	.07986	CD	.00455	CLM	-.01587	CY	.00129	CYN	-.00005	CBL	.00021

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000	ALPHAC	2.000	DX	.00000	MACH	.59084	DY	-.52069	CL	.20228	CD	.05141	CLM	-.22618	CY	.01184	CYN	-.00236	CBL	.00009
	ALPHAC	4.000	DX	.00000	MACH	.59105	DY	-.54159	CL	.36404	CD	.06099	CLM	-.25773	CY	.01403	CYN	-.00239	CBL	.00068
	GRADIENT	.00000	DX	.00000	MACH	.00011	DY	-.01045	CL	.08088	CD	.00479	CLM	-.01578	CY	.00110	CYN	-.00002	CBL	.00029

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000	ALPHAC	2.000	DX	.00000	MACH	.59149	DY	-.51807	CL	.20609	CD	.05134	CLM	-.23104	CY	.01162	CYN	-.00235	CBL	.00069
	ALPHAC	4.000	DX	.00000	MACH	.59137	DY	-.55625	CL	.37143	CD	.06106	CLM	-.26206	CY	.01428	CYN	-.00243	CBL	.00096
	GRADIENT	.00000	DX	.00000	MACH	-.00006	DY	-.01909	CL	.08267	CD	.00486	CLM	-.01551	CY	.00133	CYN	-.00004	CBL	.00014

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC TORB = 6.000 DX = 10.000
 SCALE = .0125 DY = .000 MACH = .600

PARAMETRIC DATA

DZ = 3.500 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
6.00000	10.00000	.58921	-.60672	.12788	.04660	-.12633	.00885	.00010	.00026
6.00000	10.00000	.58810	-.62422	.29670	.05489	-.16041	.01086	.00012	.00030
GRADIENT	.00000	-.00056	-.00875	.08441	.00414	-.01704	.00100	.00001	.00002

DZ = 7.500 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
6.00000	10.00000	.59102	-.57802	.14955	.04875	-.15325	.00915	-.00002	-.00023
6.00000	10.00000	.59031	-.57576	.31117	.05691	-.18328	.01084	.00013	.00022
GRADIENT	.00000	-.00035	.00063	.08081	.00408	-.01501	.00085	.00008	.00023

DZ = 10.000 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
6.00000	10.00000	.58959	-.65106	.15406	.04937	-.16392	.00722	.00025	-.00008
6.00000	10.00000	.58965	-.62205	.31742	.05804	-.19568	.01004	.00015	.00029
GRADIENT	.00000	.00003	.01450	.08168	.00433	-.01588	.00141	-.00005	.00018

DZ = 15.000 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
6.00000	10.00000	.58831	-.55427	.16422	.05008	-.18437	.00922	-.00045	.00029
6.00000	10.00000	.58836	-.65905	.33464	.05921	-.21827	.01162	-.00050	.00023
GRADIENT	.00000	.00002	-.05293	.08521	.00456	-.01695	.00120	-.00002	-.00003

DZ = 30.000 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
6.00000	10.00000	.58818	-.54427	.19849	.05130	-.22142	.01122	-.00198	.00039
6.00000	10.00000	.59074	-.65315	.36235	.06104	-.24949	.01328	-.00192	.00070
GRADIENT	.00000	.00128	-.05444	.08193	.00487	-.01403	.00103	.00003	.00016

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(UNHX14) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHA
 2.000
 4.000
 GRADIENT

10RB 6.00000
 6.00000
 6.00000
 .00000

DX 10.00000
 10.00000
 .00000

MACH .59228
 .59176
 -.00026

DY -.58631
 -.62227
 -.01798

CL .20857
 .38107
 .09625

CD .05147
 .06185
 .00519

CLM -.23527
 -.26432
 -.01452

CY .01041
 .01313
 .00136

CYN -.00225
 -.00216
 .00005

CBI .00088
 .00061
 -.00013

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHA
 2.000
 4.000
 GRADIENT

10RB 6.00000
 6.00000
 6.00000
 .00000

DX 10.00000
 10.00000
 .00000

MACH .59041
 .59056
 .00008

DY -.57745
 -.62433
 -.02344

CL .21844
 .38423
 .08290

CD .05185
 .06199
 .00507

CLM -.23842
 -.26654
 -.01406

CY .01167
 .01356
 .00095

CYN -.00232
 -.00221
 .00006

CBL .00049
 .00101
 .00026

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(UNHX15) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHA
 2.000
 4.000
 GRADIENT

10RB 8.00000
 8.00000
 8.00000
 .00000

DX 10.00000
 10.00000
 .00000

MACH .59219
 .58993
 -.00113

DY -.59402
 -.65242
 -.02920

CL .13248
 .26165
 .07959

CD .04391
 .05117
 .00363

CLM -.05484
 -.08262
 -.01389

CY .00750
 .01211
 .00231

CYN .00008
 -.00049
 -.00029

CBL .00037
 .00004
 -.00017

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHA
 2.000
 4.000
 GRADIENT

10RB 8.00000
 8.00000
 8.00000
 .00000

DX 10.00000
 10.00000
 .00000

MACH .59002
 .58944
 -.00029

DY -.66536
 -.65825
 .00356

CL .11980
 .28269
 .08144

CD .04580
 .05350
 .00385

CLM -.08403
 -.11400
 -.01498

CY .00853
 .01168
 .00157

CYN -.00026
 -.00056
 -.00015

CBL .00033
 .00016
 -.00008

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 10RB = 6.000 DX = 10.000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 10RB = 8.000 DX = 10.000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 10RB = 8.000 DX = 10.000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 ATI 0251 (CARRIER DATA) (UNHX15) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHA
 2.000
 4.000
 GRADIENT

IORB 8.00000 10.00000
 8.00000 10.00000
 .00000 .00000
 MACH .58891 .69918
 .58894 .64470
 .00001 .02724
 DX 10.00000
 CL .13157
 .29669
 .09256
 DY -.69918
 -.64470
 .02724
 CD .04714
 .05508
 .00397
 CLM -.10219
 -.13423
 -.01602
 CYN -.00042
 -.00060
 -.00009
 CBI .00039
 .00033
 -.00003

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHA
 2.000
 4.000
 GRADIENT

IORB 8.00000 10.00000
 8.00000 10.00000
 .00000 .00000
 MACH .58823 .73661
 .58988 .71417
 .00082 .01122
 DX 10.00000
 CL .14907
 .31657
 .08375
 DY -.73661
 -.71417
 .01122
 CD .04855
 .05721
 .00433
 CLM -.13334
 -.16749
 -.01707
 CYN -.00083
 -.00079
 .00002
 CBL -.00030
 .00006
 .00018

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHA
 2.000
 4.000
 GRADIENT

IORB 8.00000 10.00000
 8.00000 10.00000
 .00000 .00000
 MACH .58915 .59283
 .59073 .65031
 .00079 .02874
 DX 10.00000
 CL .18411
 .34837
 .08213
 DY -.59283
 -.65031
 .02874
 CD .05048
 .05987
 .00469
 CLM -.18845
 -.22122
 -.01639
 CYN -.00228
 -.00234
 -.00003
 CBL .00087
 .00101
 .00007

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHA
 2.000
 4.000
 GRADIENT

IORB 8.00000 10.00000
 8.00000 10.00000
 .00000 .00000
 MACH .58995 .70121
 .58956 .69625
 -.00020 .00248
 DX 10.00000
 CL .20365
 .35760
 .03198
 DY -.70121
 -.69625
 .00248
 CD .05113
 .06094
 .00490
 CLM -.21479
 -.24574
 -.01548
 CYN -.00258
 -.00253
 .00033
 CBL .00056
 .00118
 .00031

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHA
 2.000
 4.000
 GRADIENT

IORB 8.00000 10.00000
 8.00000 10.00000
 .00000 .00000
 MACH .58887 .71338
 .58933 .67087
 .00023 .02125
 DX 10.00000
 CL .20659
 .37512
 .08426
 DY -.71338
 -.67087
 .02125
 CD .05125
 .06133
 .00504
 CLM -.21978
 -.25069
 -.01546
 CYN -.00277
 -.00262
 .00007
 CBL .00067
 .00082
 .00008

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(UNHX16) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	6.00000	20.00000	.58974	-.85011	.15085	.04630	-.12689	.00776	-.00008	.00022
	4.000	6.00000	20.00000	.59003	-.76988	.31987	.05538	-.15537	.01061	-.00031	.00038
	GRADIENT	.00000	.00000	.00015	.04011	.08251	.00454	-.01424	.00143	-.00011	.00008

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	6.00000	20.00000	.58931	-.81185	.16466	.04897	-.15231	.00855	-.00042	.00032
	4.000	6.00000	20.00000	.58946	-.81231	.32781	.05757	-.18086	.01110	-.00050	.00041
	GRADIENT	.00000	.00000	.00008	-.00023	.08158	.00430	-.01428	.00127	-.00004	.00005

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	6.00000	20.00000	.59013	-.76413	.16611	.04979	-.16466	.00782	-.00037	.00025
	4.000	6.00000	20.00000	.58931	-.80148	.33252	.05852	-.19278	.01108	-.00054	.00033
	GRADIENT	.00000	.00000	-.00041	-.01867	.08320	.00437	-.01406	.00163	-.00009	.00004

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	6.00000	20.00000	.58937	-.84082	.18321	.05046	-.18553	.00857	-.00083	.00053
	4.000	6.00000	20.00000	.58980	-.75321	.34561	.05962	-.21346	.01207	-.00102	.00008
	GRADIENT	.00000	.00000	.00022	.04380	.08120	.00458	-.01397	.00175	-.00009	-.00023

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	.00	6.00000	20.00000	.59004	-.80629	.20357	.05179	-.21954	.01067	-.00219	.00058
	4.000	6.00000	20.00000	.59027	-.85063	.36766	.06124	-.24640	.01311	-.00224	.00099
	GRADIENT	.00000	.00000	.00011	-.02217	.08204	.00472	-.01343	.00122	-.00003	.00020

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBI
	2.000	6.00000	20.00000	.58948	-.75331	.21949	.05221	-.23442	.01117	-.00249	.00068
	4.000	6.00000	20.00000	.58970	-.77027	.28645	.06213	-.26107	.01414	-.00253	.00088
	GRADIENT	.00000	.00000	.00011	-.00848	.08348	.00496	-.01332	.00149	-.00002	.00010

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	6.00000	20.00000	.58887	-.80299	.21729	.05188	-.23714	.01084	-.00246	.00085
	4.000	6.00000	20.00000	.58896	-.77864	.39954	.06237	-.26406	.01419	-.00254	.00109
	GRADIENT	.00000	.00000	.00005	.01218	.08613	.00525	-.01346	.00168	-.00004	.00012

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	8.00000	20.00000	.58981	-.53583	.11412	.04261	-.06286	.00893	-.00097	-.00027
	4.000	8.00000	20.00000	.58835	-.91880	.28990	.05042	-.07928	.01512	-.00127	.00056
	GRADIENT	.00000	.00000	-.00073	-.19148	.09789	.00390	-.00821	.00309	-.00015	.00041

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	8.00000	20.00000	.59078	-.71654	.13327	.04475	-.08828	.00987	-.00118	.00007
	4.000	8.00000	20.00000	.58999	-.86405	.30140	.05254	-.11053	.01392	-.00132	.00035
	GRADIENT	.00000	.00000	-.00039	-.07376	.08407	.00389	-.01112	.00203	-.00007	.00014

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(UNHX17) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORR = 8.000 DX = 20.000
 DY = .000 MACH = .600

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC 2.000
 4.000
 GRADIENT .00000

IORB 8.00000
 8.00000
 .00000

UX 20.00000
 20.00000
 .00000

MACH .59142
 .59107
 -.00017

DY -.82520
 -.81252
 .00634

CL .14666
 .30947
 .09141

CD .04637
 .05403
 .00383

CLM -.10403
 -.13156
 -.01377

CY .01040
 .01296
 .00128

CYN -.00132
 -.00134
 -.00001

CBI .00039
 .00012
 -.00013

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC 2.000
 4.000
 GRADIENT .00000

IORB 8.00000
 8.00000
 .00000

DX 20.00000
 20.00000
 .00000

MACH .59121
 .59220
 .00050

DY -.83998
 -.83206
 .00396

CL .15527
 .32078
 .08275

CD .04760
 .05581
 .00411

CLM -.13366
 -.16206
 -.01420

CY .01119
 .01288
 .00084

CYN -.00165
 -.00151
 .00007

CBL .00002
 .00043
 .00021

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC 2.000
 4.000
 GRADIENT .00000

IORB 8.00000
 8.00000
 .00000

DX 20.00000
 20.00000
 .00000

MACH .59109
 .59091
 -.00009

DY -.87982
 -.77306
 .05338

CL .18382
 .35363
 .08491

CD .04949
 .05879
 .00465

CLM -.18722
 -.21752
 -.01515

CY .01161
 .01556
 .00197

CYN -.00273
 -.00292
 -.00010

CBL .00096
 .00081
 -.00007

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC 2.000
 4.000
 GRADIENT .00000

IORB 8.00000
 8.00000
 .00000

DX 20.00000
 20.00000
 .00000

MACH .59145
 .59106
 -.00020

DY -.82857
 -.78742
 .02058

CL .20581
 .37328
 .03373

CD .05047
 .06041
 .00497

CLM -.21453
 -.24264
 -.01405

CY .01200
 .01493
 .00147

CYN -.00278
 -.00282
 -.00002

CBL .00033
 .00028
 -.00002

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC 2.000
 4.000
 GRADIENT .00000

IORB 8.00000
 8.00000
 .00000

DX 20.00000
 20.00000
 .00000

MACH .59044
 .59121
 .00039

DY -.87139
 -.82092
 .02523

CL .20322
 .37291
 .08485

CD .05040
 .06030
 .00495

CLM -.21834
 -.24725
 -.01445

CY .01199
 .01427
 .00114

CYN -.00291
 -.00274
 .00008

CBL .00079
 .00086
 .00004

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC TORB = .000 DX = .000
 SCALE = .0125 .000000 MACH = 3.31 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

PARAMETRIC DATA

DZ = 3.500
 ALPHAC
 2.000
 4.000
 GRADIENT

DX	.00000	MACH	.58756	DY	.15855	CL	.12000	CD	.04743	CLM	-.11635	CY	.01142	CYN	-.00103	CBL	-.00082
1ORB	8.00000		.58727		.34730		.27853		.05395		-.14668		.01018		-.00081		.00073
GRADIENT	.00000		-.00014		-.05562		.07926		.00326		-.01516		-.00062		.00011		.00077

REFERENCE DATA

DZ = 7.500
 ALPHAC
 2.000
 4.000
 GRADIENT

DX	.00000	MACH	.58696	DY	.09435	CL	.12840	CD	.04810	CLM	-.13706	CY	.01013	CYN	-.00108	CBL	.00002
1ORB	8.00000		.58662		.95201		.28738		.05528		-.16894		.01094		-.00091		.00078
GRADIENT	.00000		-.00017		-.02117		.07949		.00359		-.01594		.00041		.00009		.00038

REFERENCE DATA

DZ = 10.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DX	.00000	MACH	.58623	DY	.04488	CL	.13235	CD	.04844	CLM	-.14983	CY	.00884	CYN	-.00098	CBL	.00084
1ORB	8.00000		.58597		.06129		.29109		.05613		-.18372		.01149		-.00091		.00085
GRADIENT	.00000		-.00013		.00820		.07937		.00385		-.01695		.00133		.00003		.00000

REFERENCE DATA

DZ = 15.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DX	.00000	MACH	.58706	DY	.04020	CL	.14975	CD	.04957	CLM	-.17478	CY	.00973	CYN	-.00156	CBL	.00031
1ORB	8.00000		.58628		.04479		.30915		.05768		-.20803		.01264		-.00144		.00067
GRADIENT	.00000		-.00039		.00230		.07970		.00406		-.01653		.00145		.00006		.00018

REFERENCE DATA

DZ = 30.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DX	.00000	MACH	.58533	DY	.06130	CL	.17642	CD	.05028	CLM	-.21128	CY	.01124	CYN	-.00205	CBL	.00079
1ORB	8.00000		.58575		.02755		.34235		.05972		-.24449		.01331		-.00177		.00076
GRADIENT	.00000		.00021		-.01687		.08296		.00472		-.01661		.00104		.00014		-.00002

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(UNHX27) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BRFP = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC
 2.000
 4.000
 GRADIENT

IORB
 8.00000
 8.00000
 .00000

DX
 .00000
 .00000
 .00000

DY
 .06827
 -.00121
 -.03474

CL
 .20103
 .36729
 .08313

CD
 .05064
 .06025
 .00481

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

CY
 .01297
 .01408
 .00056

CYN
 -.00281
 -.00240
 .00021

CBI
 .00071
 .00093
 .00011

DZ = 50.000

ALPHAC
 2.000
 4.000
 GRADIENT

IORB
 8.00000
 8.00000
 .00000

DX
 .00000
 .00000
 .00000

DY
 .05736
 .07269
 .00767

CL
 .19667
 .37330
 .08731

CD
 .05053
 .06068
 .00508

CY
 .01317
 .01443
 .00063

CYN
 -.00289
 -.00250
 .00019

CBL
 .00054
 .00070
 .00008

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(UNHX28) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BRFP = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC
 2.000
 4.000
 GRADIENT

IORB
 6.00000
 6.00000
 .00000

DX
 10.00000
 10.00000
 .00000

DY
 -.01230
 .09360
 .05295

CL
 .14405
 .31189
 .08392

CD
 .04857
 .05784
 .00464

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

PARAMETRIC DATA

CY
 .01118
 .01292
 .00087

CYN
 -.00173
 -.00154
 .00009

CBL
 .00022
 .00048
 .00013

DZ = 7.500

ALPHAC
 2.000
 4.000
 GRADIENT

IORB
 6.00000
 6.00000
 .00000

DX
 10.00000
 10.00000
 .00000

DY
 .02369
 .03178
 .00404

CL
 .16089
 .32618
 .08264

CD
 .05001
 .05885
 .00442

CY
 .01083
 .01246
 .00082

CYN
 -.00146
 -.00121
 .00012

CBL
 .00022
 .00048
 .00013

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(UNHX28) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 JORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
10.000	2.000	6.00000	10.00000	.58624	-.00874	.16971	.05029	-.20397	.00979	-.00115	.00015
	4.000	6.00000	10.00000	.58656	.05953	.33064	.05940	-.23247	.01163	-.00095	.00047
	GRADIENT	.00000	.00000	.00016	.03414	.08046	.00456	-.01425	.00092	.00010	.00016

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
15.000	2.000	6.00000	10.00000	.58701	.08814	.18158	.05089	-.21727	.01062	-.00101	.00007
	4.000	6.00000	10.00000	.58720	.02589	.34148	.06019	-.24514	.01080	-.00067	.00048
	GRADIENT	.00000	.00000	.00010	-.03113	.07995	.00465	-.01393	.00009	.00017	.00021

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
30.000	2.000	6.00000	10.00000	.58688	.05832	.19842	.05092	-.23814	.01148	-.00217	.00081
	4.000	6.00000	10.00000	.58711	.06636	.36468	.06133	-.26590	.01354	-.00193	.00064
	GRADIENT	.00000	.00000	.00012	.00402	.08313	.00521	-.01388	.00103	.00012	-.00008

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
45.000	2.000	6.00000	10.00000	.58645	-.01492	.20986	.05104	-.24617	.01230	-.00264	.00093
	4.000	6.00000	10.00000	.58643	.07284	.27668	.06170	-.27337	.01450	-.00249	.00118
	GRADIENT	.00000	.00000	-.00001	.04398	.08341	.00533	-.01360	.00110	.00008	.00013

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
50.000	2.000	6.00000	10.00000	.58633	.05297	.21651	.05122	-.24889	.01287	-.00273	.00072
	4.000	6.00000	10.00000	.58669	.02953	.38688	.06172	-.27487	.01430	-.00238	.00109
	GRADIENT	.00000	.00000	.00018	-.01172	.08519	.00525	-.01299	.00071	.00017	.00019

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(UNHX29) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	8.00000	10.00000	.58965	.07085	.11519	.04512	-.11175	.01026	-.00156	.00235
	4.000	8.00000	10.00000	.58806	.00873	.28321	.05402	-.13869	.01470	-.00178	.00004
	GRADIENT	.00000	.00000	-.00080	-.03105	.08401	.00445	-.01347	.00222	-.00011	-.00016

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	8.00000	10.00000	.58849	.03020	.13195	.04691	-.13503	.01023	-.00145	.00047
	4.000	8.00000	10.00000	.58815	.03353	.29675	.05550	-.16259	.01319	-.00140	.00043
	GRADIENT	.00000	.00000	-.00017	.00167	.08240	.00430	-.01378	.00148	.00002	-.00002

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	8.00000	10.00000	.58770	-.01491	.14345	.04810	-.14957	.01033	-.00141	.00064
	4.000	8.00000	10.00000	.58827	.04742	.30592	.05654	-.17827	.01218	-.00116	.00079
	GRADIENT	.00000	.00000	.00028	.03117	.08123	.00422	-.01435	.00093	.00013	.00008

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	8.00000	10.00000	.58809	.09362	.15801	.04928	-.17308	.00942	-.00095	.00015
	4.000	8.00000	10.00000	.58829	.06535	.31924	.05772	-.20266	.01105	-.00076	.00054
	GRADIENT	.00000	.00000	.00010	-.01414	.08062	.00422	-.01479	.00081	.00010	.00019

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	8.00000	10.00000	.58839	.05480	.18838	.05023	-.21388	.01129	-.00178	.00022
	4.000	8.00000	10.00000	.58842	.05027	.34993	.05999	-.24241	.01305	-.00162	.00055
	GRADIENT	.00000	.00000	.00001	-.00226	.08078	.00488	-.01427	.00088	.00008	.00017

TABULATED SOURCE DATA - CA238

DATE 22 MAR 76

(UNHX29) (17 OCT 75)

ARC 14-120(CA238) 747/1 AT1 03S1 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	8.00000	10.00000	.58880	.05013	.20265	.05083	-.23114	.01247	-.00262	.00054
	4.000	8.00000	10.00000	.58936	.11899	.37063	.06075	-.25919	.01490	-.00252	.00070
	GRADIENT	.00000	.00000	.00028	.02943	.08399	.00496	-.01403	.00122	.00005	.00008

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	8.00000	10.00000	.58687	.05102	.20513	.05061	-.23353	.01233	-.00268	.00094
	4.000	8.00000	10.00000	.58724	.07609	.37211	.06075	-.26181	.01391	-.00234	.00132
	GRADIENT	.00000	.00000	.00019	.01254	.08349	.00507	-.01414	.00079	.00017	.00019

ARC 14-120(CA238) 747/1 AT1 03S1 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	8.00000	20.00000	.58488	.02299	.12627	.04521	-.11313	.01115	-.00188	.00125
	4.000	8.00000	20.00000	.58554	.04884	.29472	.05344	-.13389	.01389	-.00183	.00146
	GRADIENT	.00000	.00000	.00033	.01293	.08422	.00411	-.01038	.00137	.00002	.00011

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	8.00000	20.00000	.59582	.03582	.14310	.04676	-.13710	.01084	-.00165	.00091
	4.000	8.00000	20.00000	.58609	.03591	.30726	.05505	-.15953	.01315	-.00154	.00112
	GRADIENT	.00000	.00000	.00013	.00004	.08208	.00414	-.01122	.00116	.00006	.00010

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 ATI 03S1 (CARRIER DATA)

(UNHX30) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	8.00000	20.00000	.58700	.05242	.15653	.04799	-.15160	.01069	-.00150	.00070
	4.000	8.00000	20.00000	.58651	.02600	.31620	.05620	-.17647	.01268	-.00136	.00083
	GRADIENT	.00000	.00000	-.00024	-.01321	.07983	.00410	-.01243	.00099	.00007	.00006

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	8.00000	20.00000	.58572	.03261	.16416	.04846	-.17519	.01012	-.00126	.00049
	4.000	8.00000	20.00000	.58660	.02195	.32639	.05737	-.20131	.01206	-.00108	.00088
	GRADIENT	.00000	.00000	.00044	-.00533	.08111	.00446	-.01306	.00097	.00009	.00020

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	8.00000	20.00000	.58806	.04541	.18839	.04961	-.21351	.01042	-.00185	.00065
	4.000	8.00000	20.00000	.58578	.08552	.35635	.05953	-.24102	.01301	-.00173	.00130
	GRADIENT	.00000	.00000	-.00114	.02006	.08398	.00496	-.01376	.00130	.00006	.00032

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	8.00000	20.00000	.58763	.06524	.21087	.05079	-.23214	.01205	-.00260	.00051
	4.000	8.00000	20.00000	.58716	.09032	.36611	.06020	-.25807	.01374	-.00238	.00101
	GRADIENT	.00000	.00000	-.00024	.01254	.07762	.00470	-.01297	.00085	.00011	.00025

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000	ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	8.00000	20.00000	.58729	-.00144	.20731	.05050	-.23566	.01193	-.00271	.00109
	4.000	8.00000	20.00000	.58764	.06742	.37673	.06062	-.26171	.01468	-.00257	.00095
	GRADIENT	.00000	.00000	.00017	.03443	.08471	.00506	-.01303	.00137	.00007	.00007

ARC 14-120(CA23B) 747/1 ATI 0351 (CARRIER DATA)

(UNHX31) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
2.000	6.00000	20.00000	.58719	.09486	.21576	.05161	-.24849	.01193	-.00253	.00040
4.000	6.00000	20.00000	.58694	.06728	.38199	.06158	-.27549	.01541	-.00262	.00093
GRADIENT	.00000	.00000	-.00012	-.01379	.08311	.00499	-.01350	.00174	-.00004	.00026

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

DZ = 50.000

ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
2.000	6.00000	20.00000	.58699	.02027	.21487	.05146	-.25013	.01270	-.00267	.00076
4.000	6.00000	20.00000	.58709	.02391	.38497	.06159	-.27699	.01455	-.00244	.00108
GRADIENT	.00000	.00000	.00005	.00182	.08505	.00507	-.01343	.00093	.00011	.00016

ARC 14-120(CA23B) 747/1 ATI 0351 (CARRIER DATA)

(UNHX34) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
2.000	6.00000	.00000	.58780	-.07105	.13385	.04996	-.17653	.01409	-.00299	.00048
4.000	6.00000	.00000	.58730	-.01686	.29325	.05814	-.21160	.01557	-.00275	.00049
GRADIENT	.00000	.00000	-.00025	.02710	.07970	.00409	-.01753	.00074	.00012	.00001

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 6.000 DX = .000
 DY = .000 MACH = .600

DZ = 7.500

ALPHAC	1ORB	DX	MACH	DY	CL	CD	CLM	CY	CYN	CBL
2.000	6.00000	.00000	.58691	-.03982	.14710	.05060	-.19315	.01321	-.00263	.00050
4.000	6.00000	.00000	.58751	-.04258	.30800	.05900	-.22717	.01406	-.00219	.00072
GRADIENT	.00000	.00000	.00030	-.00138	.08045	.00420	-.01701	.00042	.00022	.00011

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 6.000 DX = .000
 DY = .000 MACH = .600

DATE 22 MAR 76

TABLATED SOURCE DATA - CA23B

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ARC 14-120(CA23B) 747/1 AT1 03S1 (CARRIER DATA)

(UNHX34) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 2.000
 4.000
 GRADIENT

1ORB
 6.00000
 6.00000
 6.00000
 .00000

DX
 .00000
 .00000
 .00000
 .00000

MACH
 .58688
 .58670
 .00009

DY
 -.03324
 -.06070
 -.01373

CL
 .15132
 .31383
 .08126

CD
 .05069
 .05952
 .00442

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 2.000
 4.000
 GRADIENT

1ORB
 6.00000
 6.00000
 6.00000
 .00000

DX
 .00000
 .00000
 .00000
 .00000

MACH
 .58673
 .58727
 .00027

DY
 -.05303
 -.07127
 -.00912

CL
 .16680
 .32977
 .08149

CD
 .05121
 .06031
 .00455

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 2.000
 4.000
 GRADIENT

1ORB
 6.00000
 6.00000
 6.00000
 .00000

DX
 .00000
 .00000
 .00000
 .00000

MACH
 .58733
 .58712
 .00010

DY
 -.03707
 -.08604
 -.02449

CL
 .19004
 .35766
 .08381

CD
 .05154
 .06121
 .00483

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC
 2.000
 4.000
 GRADIENT

1ORB
 6.00000
 6.00000
 6.00000
 .00000

DX
 .00000
 .00000
 .00000
 .00000

MACH
 .58710
 .58749
 .00019

DY
 -.05594
 .00247
 .02921

CL
 .20728
 .57494
 .08383

CD
 .05139
 .06127
 .00494

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC
 2.000
 4.000
 GRADIENT

1ORB
 6.00000
 6.00000
 6.00000
 .00000

DX
 .00000
 .00000
 .00000
 .00000

MACH
 .58804
 .58759
 -.00022

DY
 -.01817
 -.04602
 -.01392

CL
 .20776
 .37950
 .08587

CD
 .05114
 .06109
 .00497

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 1ORB = 6.000 DX = .000
 DY = .000 MACH = .600

CY
 .01255
 .01370
 .00058

CY
 -.00248
 -.00200
 .00024

CBL
 .00047
 .00067
 .00010

CLM
 -.20062
 -.23464
 -.01701

CY
 .01246
 .01381
 .00068

CY
 -.00200
 -.00155
 .00022

CBL
 .00007
 .00064
 .00029

CLM
 -.21292
 -.24554
 -.01631

CY
 .01363
 .01414
 .00026

CY
 -.00273
 -.00207
 .00033

CBL
 .00048
 .00037
 -.00006

CLM
 -.23290
 -.26522
 -.01616

CY
 .01315
 .01472
 .00079

CY
 -.00300
 -.00267
 .00017

CBL
 .00076
 .00090
 .00007

CLM
 -.24186
 -.27316
 -.01565

CY
 .01317
 .01491
 .00087

CY
 -.00289
 -.00261
 .00014

CBL
 .00081
 .00130
 .00025

CLM
 -.24362
 -.27530
 -.01584

ARC 14-120(CA238) 747/1 AT1 02S1 (CARRIER DATA)

(UNHY10) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .500

PARAMETRIC DATA

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500	ALPHAC	1ORB	DY	MACH	DX	CL	CD	CLM	CY	CYN	CBL
2.000	8.00000	.00000	.00000	.59503	-.01267	.07905	.04389	-.05220	.01377	-.00307	-.00061
4.000	8.00000	.00000	.00000	.59130	-.01020	.23900	.04956	-.08870	.01529	-.00286	.00027
GRADIENT	.00000	.00000	.00000	-.00187	.00124	.07998	.00284	-.01825	.00076	.00011	.00044

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500	ALPHAC	1ORB	DY	MACH	DX	CL	CD	CLM	CY	CYN	CBL
2.000	8.00000	.00000	.00000	.59631	-.02880	.09800	.04524	-.08173	.01351	-.00315	.00019
4.000	8.00000	.00000	.00000	.59506	-.04969	.25908	.05194	-.12009	.01513	-.00279	.00076
GRADIENT	.00000	.00000	.00000	-.00063	-.01044	.08054	.00335	-.01918	.00081	.00018	.00028

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000	ALPHAC	1ORB	DY	MACH	DX	CL	CD	CLM	CY	CYN	CBL
2.000	8.00000	.00000	.00000	.59752	-.03048	.11109	.04616	-.10014	.01356	-.00312	.00082
4.000	8.00000	.00000	.00000	.59802	-.07336	.27278	.05352	-.13970	.01522	-.00263	.00117
GRADIENT	.00000	.00000	.00000	.00025	-.02144	.08084	.00368	-.01978	.00083	.00024	.00018

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000	ALPHAC	1ORB	DY	MACH	DX	CL	CD	CLM	CY	CYN	CBL
2.000	8.00000	.00000	.00000	.59633	-.02992	.12928	.04745	-.12943	.01187	-.00282	.00062
4.000	8.00000	.00000	.00000	.59726	-.07123	.29097	.05536	-.17018	.01368	-.00240	.00064
GRADIENT	.00000	.00000	.00000	.00046	-.02066	.08084	.00396	-.02038	.00091	.00021	.00001

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000	ALPHAC	1ORB	DY	MACH	DX	CL	CD	CLM	CY	CYN	CBL
2.000	8.00000	.00000	.00000	.59637	-.08807	.17058	.04956	-.18480	.01233	-.00286	.00039
4.000	8.00000	.00000	.00000	.59584	-.11959	.33222	.05838	-.22163	.01365	-.00265	.00068
GRADIENT	.00000	.00000	.00000	-.00026	-.01576	.08082	.00441	-.01841	.00066	.00011	.00015

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (UNHY10) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000	ALPHAC	10RB	DY	MACH	DX	CL	CD	CLM	CY	CYN	CBI
	2.000	8.00000	.00000	.59620	-.10677	.19356	.05036	-.20999	.01234	-.00279	.00051
	4.000	8.00000	.00000	.59522	-.19602	.35669	.06006	-.24421	.01393	-.00258	.00051
	GRADIENT	.00000	.00000	-.00049	-.04463	.08156	.00485	-.01711	.00080	.00010	-.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 10RB = 8.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000	ALPHAC	10RB	DY	MACH	DX	CL	CD	CLM	CY	CYN	CBL
	2.000	8.00000	.00000	.59459	-.01444	.19706	.05054	-.21528	.01150	-.00272	.00056
	4.000	8.00000	.00000	.59441	-.12143	.36496	.06027	-.24984	.01388	-.00264	.00080
	GRADIENT	.00000	.00000	-.00009	-.05349	.08395	.00486	-.01728	.00119	.00004	.00012

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (UNHY13) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500	ALPHAC	10RB	DY	MACH	DX	CL	CD	CLM	CY	CYN	CBL
	2.000	6.00000	.00000	.59450	-.03811	.11831	.04765	-.12782	.01048	-.00137	.00037
	4.000	6.00000	.00000	.59354	-.06523	.27678	.05508	-.16208	.01162	-.00116	.00080
	GRADIENT	.00000	.00000	-.00048	-.01356	.07923	.00371	-.01713	.00057	.00011	.00021

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 10RB = 6.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500	ALPHAC	10RB	DY	MACH	DX	CL	CD	CLM	CY	CYN	CBL
	2.000	6.00000	.00000	.59261	-.01798	.13088	.04873	-.14855	.00927	-.00112	.00071
	4.000	6.00000	.00000	.59217	-.04063	.29320	.05682	-.18319	.01093	-.00093	.00397
	GRADIENT	.00000	.00000	-.00022	-.02931	.08116	.00404	-.01732	.00083	.00009	.00013

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(UNHY13) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000	ALPHAC	IORB	DY	MACH	DX	CL	CD	CLM	CY	CYN	CBL
	2.000	6.00000	.00000	.59174	-.01436	.14148	.04929	-.15968	.00905	-.00117	.00057
	4.000	6.00000	.00000	.59204	-.07557	.30254	.05743	-.19440	.01102	-.00101	.00069
	GRADIENT	.00000	.00000	.00015	-.03061	.08053	.00407	-.01736	.00098	.00008	.00006

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000	ALPHAC	IORB	DY	MACH	DX	CL	CD	CLM	CY	CYN	CBL
	2.000	6.00000	.00000	.59103	.07807	.15116	.05010	-.17929	.00943	-.00128	.00049
	4.000	6.00000	.00000	.59103	-.01760	.31570	.05856	-.21262	.01123	-.00105	.00065
	GRADIENT	.00000	.00000	.00000	-.04784	.08227	.00423	-.01667	.00090	.00012	.00008

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000	ALPHAC	IORB	DY	MACH	DX	CL	CD	CLM	CY	CYN	CBL
	2.000	6.00000	.00000	.59046	.00985	.18320	.05106	-.21208	.01105	-.00201	.00032
	4.000	6.00000	.00000	.59064	-.08351	.34302	.06020	-.24369	.01343	-.00203	.00073
	GRADIENT	.00000	.00000	.00009	-.04668	.07991	.00457	-.01581	.00119	-.00001	.00020

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000	ALPHAC	IORB	DY	MACH	DX	CL	CD	CLM	CY	CYN	CBL
	2.000	6.00000	.00000	.59085	.04067	.20250	.05140	-.22643	.01146	-.00223	.00013
	4.000	6.00000	.00000	.59107	-.08489	.36447	.06099	-.25782	.01354	-.00221	.00070
	GRADIENT	.00000	.00000	.00011	-.06278	.08098	.00480	-.01569	.00104	.00001	.00029

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000	ALPHAC	IORB	DY	MACH	DX	CL	CD	CLM	CY	CYN	CBL
	2.000	6.00000	.00000	.59144	-.17655	.20599	.05131	-.23091	.01134	-.00225	.00072
	4.000	6.00000	.00000	.59135	-.17839	.37161	.06107	-.26194	.01387	-.00228	.00097
	GRADIENT	.00000	.00000	-.00004	-.00092	.08281	.00488	-.01551	.00127	-.00002	.00012

ARC 14-120(CA238) 747/1 ATI 02S1 (CARRIER DATA)

(UNHY18) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

DZ = 45.000
 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	2.000	ALPHAC	2.000	CL	.20623	CL	.20623	CD	.05115	CLM	-.23024	CY	.00438	CYN	.00036	CBL	.00076
GRADIENT	4.000	GRADIENT	4.000	DX	-.07926	DX	-.07926	CO	.06119	RUDDER	-.26085	CLM	.00431	CLM	.00119	CLM	.00117
				MACH	.59090	MACH	.59090		.00502	TORB	-.01531	CLM	-.00003	CLM	.00042	CLM	.00021
				DY	.00000	DY	.00000			DY							
				10RB	.00000	10RB	.00000										
				10RB	.00000	10RB	.00000										
				10RB	.00000	10RB	.00000										

PARAMETRIC DATA

BETA = .000
 RUDDER = .000
 TORB = 6.000
 DY = 10.000
 STAB = 5.000
 ELEVON = 5.000
 DX = .000
 MACH = .600

DZ = 50.000
 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	2.000	ALPHAC	2.000	CL	.20971	CL	.20971	CD	.05087	CLM	-.23167	CY	.00600	CYN	-.00023	CBL	.00128
GRADIENT	4.000	GRADIENT	4.000	DX	-.04244	DX	-.04244	CO	.06157	RUDDER	-.26171	CLM	.00618	CLM	.00050	CLM	.00105
				MACH	.59073	MACH	.59073		.00535	TORB	-.01502	CLM	.00009	CLM	.00036	CLM	-.00011
				DY	.00000	DY	.00000										
				10RB	.00000	10RB	.00000										
				10RB	.00000	10RB	.00000										
				10RB	.00000	10RB	.00000										

ARC 14-120(CA238) 747/1 ATI 02S1 (CARRIER DATA)

(UNHY19) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

DZ = 3.500
 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	2.000	ALPHAC	2.000	CL	.08946	CL	.08946	CD	.04368	CLM	-.10092	CY	.00531	CYN	-.00790	CBL	.00649
GRADIENT	4.000	GRADIENT	4.000	DX	-.32979	DX	-.32979	CO	.05171	RUDDER	-.13380	CLM	.00212	CLM	-.00553	CLM	.00819
				MACH	.59118	MACH	.59118		.00402	TORB	-.01644	CLM	-.00160	CLM	.00119	CLM	.00085
				DY	.00000	DY	.00000										
				10RB	.00000	10RB	.00000										
				10RB	.00000	10RB	.00000										
				10RB	.00000	10RB	.00000										

PARAMETRIC DATA

BETA = .000
 RUDDER = .000
 TORB = 8.000
 DY = 10.000
 STAB = 5.000
 ELEVON = 5.000
 DX = .000
 MACH = .600

DZ = 7.500
 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	2.000	ALPHAC	2.000	CL	.11295	CL	.11295	CD	.04503	CLM	-.11601	CY	.00443	CYN	-.00613	CBL	.00615
GRADIENT	4.000	GRADIENT	4.000	DX	-.21857	DX	-.21857	CO	.05303	RUDDER	-.15061	CLM	.00107	CLM	-.00361	CLM	.00728
				MACH	.59062	MACH	.59062		.00400	TORB	-.01730	CLM	-.00168	CLM	.00126	CLM	.00057
				DY	.00000	DY	.00000										
				10RB	.00000	10RB	.00000										
				10RB	.00000	10RB	.00000										
				10RB	.00000	10RB	.00000										

PARAMETRIC DATA

BETA = .000
 RUDDER = .000
 TORB = 8.000
 DY = 10.000
 STAB = 5.000
 ELEVON = 5.000
 DX = .000
 MACH = .600

ARC 14-120(CA238) 747/1 AT1 03S1 (CARRIER DATA)

(UNHY27) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500	ALPHAC	2.000	4.000	GRADIENT	1ORB	8.00000	DY	.00000	MACH	.58746	DX	-.15845	CL	.12018	CO	.04751	CLM	-.11598	CY	.01157	CYN	-.00095	CBL	-.00093
						8.00000		.00000		.58723		-.20371		.27851		.05395		-.14669		.01010		-.00077		.00072
						.00000		.00000		-.00012		-.02263		.07916		.00322		-.01536		-.00073		.00009		.00083

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500	ALPHAC	2.000	4.000	GRADIENT	1ORB	8.00000	DY	.00000	MACH	.58691	DX	-.10359	CL	.12841	CO	.04813	CLM	-.13689	CY	.01020	CYN	-.00104	CBL	-.00003
						8.00000		.00000		.58658		-.14421		.28726		.05527		-.16892		.01096		-.00089		.00076
						.00000		.00000		-.00017		-.02031		.07943		.00357		-.01602		.00038		.00008		.00039

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000	ALPHAC	2.000	4.000	GRADIENT	1ORB	8.00000	DY	.00000	MACH	.58620	DX	-.06370	CL	.13229	CO	.04845	CLM	-.14976	CY	.00885	CYN	-.00097	CBL	.00082
						8.00000		.00000		.58592		-.07425		.29096		.05613		-.18367		.01157		-.00092		.00082
						.00000		.00000		-.00014		-.00527		.07934		.00384		-.01696		.00136		.00003		-.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000	ALPHAC	2.000	4.000	GRADIENT	1ORB	8.00000	DY	.00000	MACH	.58704	DX	-.08906	CL	.14963	CO	.04958	CLM	-.17477	CY	.00977	CYN	-.00157	CBL	.00030
						8.00000		.00000		.58623		-.13400		.30900		.05769		-.20808		.01273		-.00147		.00055
						.00000		.00000		-.00041		-.02247		.07966		.00405		-.01666		.00148		.00005		.00018

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000	ALPHAC	2.000	4.000	GRADIENT	1ORB	8.00000	DY	.00000	MACH	.58526	DX	-.10707	CL	.17624	CO	.05028	CLM	-.21121	CY	.01129	CYN	-.00207	CBL	.00079
						8.00000		.00000		.58569		-.12752		.34224		.05971		-.24451		.01335		-.00178		.00076
						.00000		.00000		.00021		-.01023		.08300		.00471		-.01665		.00103		.00014		-.00002

TABULATED SOURCE DATA - CA238

DATE 22 MAR 76

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA)

(UNHY27) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHA
 2.000
 4.000
 GRADIENT

10RB
 8.00000
 8.00000
 8.00000
 .00000

DY
 .00000
 .00000
 .00000
 .00000

MACH
 .58603
 .58548
 -.00027

DX
 -.08663
 -.16527
 -.03932

CL
 .20103
 .36720
 .08309

CD
 .05063
 .06024
 .00480

CLM
 -.22873
 -.26065
 -.01596

CY
 .01302
 .01405
 .00052

CYN
 -.00284
 -.00239
 .00022

CBI
 .00071
 .00094
 .00011

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHA
 2.000
 4.000
 GRADIENT

10RB
 8.00000
 8.00000
 8.00000
 .00000

DY
 .00000
 .00000
 .00000
 .00000

MACH
 .58563
 .58531
 -.00016

DX
 -.10954
 -.16345
 -.02695

CL
 .19857
 .37338
 .08740

CD
 .05052
 .06068
 .00508

CLM
 -.23158
 -.26410
 -.01626

CY
 .01321
 .01450
 .00064

CYN
 -.00290
 -.00252
 .00019

CBI
 .00053
 .00067
 .00007

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA)

(UNHY32) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHA
 2.000
 4.000
 GRADIENT

10RB
 6.00000
 6.00000
 6.00000
 .00000

DY
 10.00000
 10.00000
 .00000
 .00000

MACH
 .58674
 .58735
 .00030

DX
 -.05386
 -.08359
 -.01187

CL
 .13882
 .30150
 .08134

CD
 .04866
 .05759
 .00447

CLM
 -.18897
 -.22181
 -.01642

CY
 .00469
 .00307
 -.00081

CYN
 -.00523
 -.00474
 .00024

CBI
 .00480
 .00621
 .00070

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHA
 2.000
 4.000
 GRADIENT

10RB
 6.00000
 6.00000
 6.00000
 .00000

DY
 10.00000
 10.00000
 .00000
 .00000

MACH
 .58723
 .58724
 .00001

DX
 -.11877
 -.05162
 .03358

CL
 .15775
 .31716
 .07970

CD
 .04982
 .05865
 .00442

CLM
 -.20139
 -.23460
 -.01660

CY
 .00527
 .00285
 -.00121

CYN
 -.00412
 -.00267
 .00072

CBI
 .00401
 .00529
 .00064

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 10RB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 10RB = 6.000 DX = .000
 DY = 10.000 MACH = .600

ARC 14-120(CA23B) 74771 AT1 0351 (CARRIER DATA)

(UNHY32) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.6400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

PARAMETRIC DATA

DZ = 10.000
 ALPHA = 2.000
 GRADIENT = 4.000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

IORB 6.00000
 6.00000
 .00000

DY 10.00000
 10.00000
 .00000

MACH .58727
 .58739
 .00006

DX -.15591
 -.04941
 .05325

CL .16112
 .32064
 .07976

CD .05000
 .05919
 .00459

CLM -.20900
 -.24018
 -.01559

CY .00520
 .00236
 -.00142

CYN -.00332
 -.00174
 .00079

CBI .00398
 .00474
 .00038

DZ = 15.000
 ALPHA = 2.000
 GRADIENT = 4.000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

IORB 6.00000
 6.00000
 .00000

DY 10.00000
 10.00000
 .00000

MACH .58721
 .58776
 .00027

DX -.19551
 -.08464
 .05543

CL .17405
 .33561
 .08078

CD .05052
 .06001
 .00475

CLM -.22111
 -.25172
 -.01530

CY .00429
 .00176
 -.00126

CYN -.00185
 -.00018
 .00084

CBL .00304
 .00318
 .00007

DZ = 30.000
 ALPHA = 2.000
 GRADIENT = 4.000

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

IORB 6.00000
 6.00000
 .00000

DY 10.00000
 10.00000
 .00000

MACH .58737
 .58771
 .00017

DX -.18137
 -.13226
 .02455

CL .19787
 .36178
 .08196

CD .05120
 .06108
 .00494

CLM -.23615
 -.26772
 -.01578

CY .00547
 .00332
 -.00107

CYN -.00011
 .00140
 .00076

CBL .00156
 .00176
 .00010

DZ = 45.000
 ALPHA = 2.000
 GRADIENT = 4.000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

IORB 6.00000
 6.00000
 .00000

DY 10.00000
 10.00000
 .00000

MACH .58761
 .58806
 .00022

DX -.06798
 -.11714
 -.02458

CL .21062
 .37582
 .08260

CD .05110
 .06151
 .00521

CLM -.24385
 -.27342
 -.01478

CY .00726
 .00735
 .00004

CYN -.00060
 .00019
 .00039

CBL .00130
 .00155
 .00012

DZ = 50.000
 ALPHA = 2.000
 GRADIENT = 4.000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

IORB 6.00000
 6.00000
 .00000

DY 10.00000
 10.00000
 .00000

MACH .58823
 .58899
 .00038

DX -.02004
 -.04956
 -.01476

CL .21650
 .37813
 .08080

CD .05148
 .06146
 .00499

CLM -.24615
 -.27558
 -.01471

CY .00875
 .00858
 -.00008

CYN -.00092
 -.00021
 .00035

CBL .00081
 .00149
 .00034

ARC 14-120(CA23B) 747/1 ATI 03SI (CARRIER DATA)

(UNHY33) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500	1ORB	DY	MACH	DX	CL	CD	CLM	CY	CYN	CBL
ALPHAC	8.00000	10.00000	.58990	.18113	.11731	.04519	-.14517	.00403	-.00571	.00531
2.000	8.00000	10.00000	.58844	-.15384	.27005	.05360	-.17998	.00006	-.00350	.00691
4.000	.00000	.00000	-.00073	-.16749	.07637	.00420	-.01741	-.00199	.00111	.00080
GRADIENT	.00000	.00000								

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500	1ORB	DY	MACH	DX	CL	CD	CLM	CY	CYN	CBL
ALPHAC	8.00000	10.00000	.58945	-.04610	.12541	.04656	-.15855	.00282	-.00390	.00523
2.000	8.00000	10.00000	.58882	-.13309	.28391	.05490	-.19237	-.00097	-.00162	.00606
4.000	.00000	.00000	-.00031	-.04349	.07925	.00417	-.01691	-.00189	.00114	.00042
GRADIENT	.00000	.00000								

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000	1ORB	DY	MACH	DX	CL	CD	CLM	CY	CYN	CBL
ALPHAC	8.00000	10.00000	.58936	-.20967	.13053	.04747	-.16626	.00223	-.00281	.00539
2.000	8.00000	10.00000	.58918	-.11484	.29256	.05573	-.19963	-.00159	-.00036	.00569
4.000	.00000	.00000	-.00009	.04741	.08101	.00413	-.01668	-.00191	.00122	.00015
GRADIENT	.00000	.00000								

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000	1ORB	DY	MACH	DX	CL	CD	CLM	CY	CYN	CBL
ALPHAC	8.00000	10.00000	.58882	-.19234	.14811	.04845	-.18463	.00153	-.00115	.00375
2.000	8.00000	10.00000	.58908	-.11584	.31006	.05725	-.21721	-.00280	.00147	.00394
4.000	.00000	.00000	.00013	.03825	.08098	.00440	-.01629	-.00216	.00131	.00010
GRADIENT	.00000	.00000								

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000	1ORB	DY	MACH	DX	CL	CD	CLM	CY	CYN	CBL
ALPHAC	8.00000	10.00000	.58932	-.19577	.17931	.04993	-.21605	.00118	.00148	.00181
2.000	8.00000	10.00000	.58981	-.16472	.34583	.05981	-.24795	-.00099	.00339	.00174
4.000	.00000	.00000	-.00018	.01552	.08326	.00494	-.01595	-.00108	.00095	-.00004
GRADIENT	.00000	.00000								

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORR = 8.000 DX = .000
 DY = 10.000 MACH = .600

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-120(CA238) 747/1 ATI 0351 (CARRIER DATA)

(UNHY33) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 8.000 DX = .000
 DY = 10.000 MACH = .600

PARAMETRIC DATA

CY .00538 CYN .00041 CBI .00103
 .00554 .00117 .00160
 .00008 .00038 .00028

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

CLM -.23124
 CL -.20183 CD .05110
 DX -.17007 CL .20183
 MACH .58684 CD .05110
 .58661 .36477 .06099
 -.00012 .08147 .00495

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

CLM -.23364
 CL .20223 CD .05077
 DX -.10670 CL .20223
 MACH .58784 CD .05077
 .58733 .16871 .06073
 -.00025 .08302 .00498

ARC 14-120(CA238) 747/1 ATI 0351 (CARRIER DATA)

(UNHY34) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

CY .00789 CYN -.00037 CBI .00114
 .00735 .00046 .00181
 -.00027 .00042 .00033

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

CLM -.17655
 CL .13412 CD .04993
 DX .16221 CL .13412
 MACH .58779 CD .04993
 .58730 .29326 .05814
 -.00024 .07957 .00411

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

CLM -.19319
 CL .14724 CD .05060
 DX .65405 CL .14724
 MACH .58691 CD .05060
 .58751 .30803 .05900
 .00030 .08039 .00420

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

CLM -.21161
 CL .29326 CD .05814
 DX .08049 CL .29326
 MACH .58730 CD .05814
 .58751 .07957 .00411

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

CLM -.22720
 CL .30803 CD .05900
 DX .02971 CL .30803
 MACH .58751 CD .05900
 .00030 .08039 .00420

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

CY .01317 CYN -.00263 CBI .00051
 .01401 -.00219 .00074
 .00042 .00022 .00011

(UNHY34) (17 OCT 75)

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC STAB = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC IORB = .000 DX = .000
 SCALE = .0125 GRADIENT = .000000 MACH = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

PARAMETRIC DATA

DZ = 10.000
 ALPHAC 2.000
 4.000
 GRADIENT .000000
 IORB 6.000000
 6.000000
 6.000000
 GRADIENT .000000
 DY .000000
 DX .05454
 MACH .58688
 .58671
 -.04627
 CLM -.20068
 .15147
 .31380
 .08116
 CD .05068
 .05952
 .00442
 CY .01250
 .01364
 .00057
 CYN -.00247
 -.00200
 .00024
 CBL .00047
 .00069
 .00011

DZ = 15.000
 ALPHAC 2.000
 4.000
 GRADIENT .000000
 IORB 6.000000
 6.000000
 6.000000
 GRADIENT .000000
 DY .000000
 DX .05004
 MACH .58673
 .58727
 -.05659
 .00027
 CLM -.21299
 .16694
 .32974
 .08140
 CD .05120
 .06030
 .00455
 CY .01241
 .01375
 .00067
 CYN -.00199
 -.00155
 .00022
 CBL .00008
 .00066
 .00029

DZ = 30.000
 ALPHAC 2.000
 4.000
 GRADIENT .000000
 IORB 6.000000
 6.000000
 6.000000
 GRADIENT .000000
 DY .000000
 DX .01989
 MACH .58732
 .58712
 -.07747
 -.04868
 CLM -.23293
 .19009
 .35764
 .08378
 CD .05154
 .06120
 .00483
 CY .01359
 .01405
 .00023
 CYN -.00271
 -.00204
 .00034
 CBL .00048
 .00038
 -.00005

DZ = 45.000
 ALPHAC 2.000
 4.000
 GRADIENT .000000
 IORB 6.000000
 6.000000
 6.000000
 GRADIENT .000000
 DY .000000
 DX .12500
 MACH .58712
 .58751
 .00019
 CLM -.24181
 .20728
 .37492
 .08382
 CD .05139
 .06127
 .00494
 CY .01313
 .01473
 .00080
 CYN -.00299
 -.00267
 .00016
 CBL .00076
 .00089
 .00006

DZ = 50.000
 ALPHAC 2.000
 4.000
 GRADIENT .000000
 IORB 6.000000
 6.000000
 6.000000
 GRADIENT .000000
 DY .000000
 DX .14372
 MACH .58807
 .58762
 -.00022
 CLM -.24353
 .20761
 .37933
 .08586
 CD .05114
 .06108
 .00497
 CY .01317
 .01490
 .00087
 CYN -.00289
 -.00260
 .00014
 CBL .00081
 .00131
 .00025

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(UNHM40) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SO.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .600

RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 MACH .60000 IORB 3.82899 DX .00100 DY .06542 CL 15716 CD .05123
 .60000 .60000 .06036 .06946 .31648 .05929
 .00000 .00000 .02968 .00202 .07966 .00403
 CLM -.19230
 CY .01594 -CYN -.00371 CBL -.00001
 .01794 -.00352 .00031
 .00100 .00010

RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 MACH .60000 IORB 3.88061 DX .05171 DY .06605 CL 16132 CD .05130
 .60000 .60000 .06693 .03934 .32432 .05969
 .00000 .00000 .00761 .01336 .08150 .00420
 CLM -.20111
 CY .01524 CYN -.00369 CBL .00033
 .01776 -.00351 .00044
 .00126 .00009 .00006

RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 MACH .60000 IORB 3.89369 DX .03693 DY .06764 CL 16643 CD .05132
 .60000 .60000 .09867 .03278 .33244 .06014
 .00000 .00000 .00324 .03087 .08301 .00441
 CLM -.20933
 CY .01596 CYN -.00380 CBL .00058
 .01776 -.00348 .00028
 .00090 .00016 .00015

RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 MACH .60000 IORB 3.86868 DX .05021 DY .00233 CL 18609 CD .05164
 .60000 .60000 .03167 .02863 .34492 .06070
 .00000 .00000 .00927 .01315 .07942 .00453
 CLM -.22213
 CY .01578 CYN -.00363 CBL .00033
 .01703 -.00324 .00055
 .00062 .00019 .00011

RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 MACH .60000 IORB 3.91759 DX .06702 DY .08608 CL 20035 CD .05174
 .60000 .60000 .10134 .00038 .36455 .06143
 .00000 .00000 .00400 .08418 .08210 .00485
 CLM -.23956
 CY .01431 CYN -.00304 CBL .00076
 .01468 -.00238 .00074
 .00019 .00033 .00001

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (UNHM40) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000	MACH	1ORB	DX	DY	CL	CD	CLM	CY	CYN	CBI
ALPHAC	.6000	3.90866	-.14608	.05138	.20494	.05158	-.24581	.01424	-.00286	.00002
2.000	.60000	3.89777	-.18392	.00599	.38112	.06182	-.27937	.01573	-.00244	.00056
4.000	.00000	-.00544	-.01692	-.02269	.08809	.00512	-.01678	.00074	.00021	.00027
GRADIENT										

RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000	MACH	1ORB	DX	DY	CL	CD	CLM	CY	CYN	CBL
ALPHAC	.6000	3.89561	-.25222	.01755	.20733	.05155	-.24769	.01431	-.00282	-.00039
2.000	.60000	3.88339	-.19897	-.00239	.38679	.06194	-.28172	.01634	-.00253	.00051
4.000	.00000	-.00611	.02662	-.00997	.08973	.00519	-.01702	.00102	.00014	.00045
GRADIENT										

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (UNHM41) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500	MACH	1ORB	DX	DY	CL	CD	CLM	CY	CYN	CBL
ALPHAC	.5000	4.00537	-.08435	-.15589	.14508	.04961	-.17970	.01743	-.00343	.00009
2.000	.50000	3.94275	-.06208	-.15274	.31153	.05826	-.21954	.01905	-.00332	.00031
4.000	.00000	-.03131	.01114	.00658	.08322	.00432	-.01992	.00081	.00005	.00011
GRADIENT										

RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500	MACH	1ORB	DX	DY	CL	CD	CLM	CY	CYN	CBL
ALPHAC	.5000	4.01282	-.10309	-.14206	.16710	.05060	-.19469	.01678	-.00354	.00009
2.000	.50000	3.93805	-.06481	-.14979	.32231	.05925	-.23050	.01890	-.00329	.00051
4.000	.00000	-.03739	.01914	-.00386	.07761	.00433	-.01791	.00106	.00013	.00021
GRADIENT										

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 1ORB = 4.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 1ORB = 4.000 DX = .000
 DY = .000 MACH = .500

ARC 14-120(CA23B) 74771 ATI 02S1 (CARRIER DATA)

(UNHM41) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 4.000 DX = .000
 DY = .000 MACH = .500

PARAMETRIC DATA

DZ = 10.000 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	IORB	DX	DY	CL	CD	CLM	CY	CYN	CBI
.50000	4.06528	-.15398	-.12361	.16919	.05008	-.19831	.01599	-.00337	.00081
.50000	3.96079	-.07332	-.13841	.32421	.05927	-.23511	.01825	-.00318	.00092
.00000	-.05224	.04033	-.00740	.07751	.00459	-.01840	.00113	.00009	.00006

DZ = 15.000 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	IORB	DX	DY	CL	CD	CLM	CY	CYN	CBL
.50000	4.05645	-.15015	-.10725	.18186	.05118	-.21161	.01669	-.00345	-.00004
.50000	3.95781	-.07892	-.09299	.34126	.06009	-.24739	.01841	-.00310	.00047
.00000	-.04932	.03561	.00713	.07970	.00446	-.01789	.00086	.00018	.00025

DZ = 30.000 RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	IORB	DX	DY	CL	CD	CLM	CY	CYN	CBL
.50000	4.04280	-.07040	-.11765	.20146	.05102	-.23202	.01613	-.00295	.00024
.50000	3.95916	-.05100	-.12827	.36262	.06040	-.26480	.01757	-.00266	.00076
.00000	-.04182	.00970	-.00531	.08058	.00469	-.01639	.00072	.00014	.00026

DZ = 45.000 RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	IORB	DX	DY	CL	CD	CLM	CY	CYN	CBL
.50000	4.01317	-.07934	-.09718	.21859	.05084	-.24070	.01501	-.00270	.00071
.50000	3.94777	-.09778	-.14783	.38063	.06088	-.27346	.01790	-.00256	.00081
.00000	-.03270	-.00922	-.02532	.08102	.00502	-.01638	.00144	.00007	.00005

DZ = 50.000 RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	IORB	DX	DY	CL	CD	CLM	CY	CYN	CBL
.50000	3.99721	-.08686	-.08635	.22516	.05098	-.24355	.01476	-.00268	.00072
.50000	3.94057	-.12072	-.14681	.38783	.06116	-.27638	.01821	-.00256	.00071
.00000	-.02832	-.01693	-.03023	.08133	.00509	-.01642	.00172	.00006	-.00000

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA) (UN***42) (17 OCT 75)

REFERENCE DATA
 SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC 10RB = 4.000 DX = .000
 SCALE = .0125 MACH = .000 MACH = .300

DZ = 3.500 MACH 10RB = 3.96366 DX = -.01826 DY = -.01679 CL = .16892 CD = .05259 CBL = .00020
 ALPHA = 2.000 GRADIENT = .00000 3.93590 -.00129 -.02787 .32590 .06078 -.22155 -.00321
 ALPHA = 4.000 GRADIENT = .00000 .01388 .00849 -.00554 .07849 .00409 -.02097 .00119 .00005

DZ = 7.500 MACH 10RB = 3.99447 DX = -.06493 DY = -.04520 CL = .18667 CD = .05300 CBL = .00069
 ALPHA = 2.000 GRADIENT = .00000 3.98402 -.07572 -.02685 .33465 .06128 -.23160 -.00333
 ALPHA = 4.000 GRADIENT = .00000 .00522 -.00539 .00917 .07399 .00414 -.01949 .00164 -.00011

DZ = 10.000 MACH 10RB = 3.95201 DX = -.00117 DY = -.01635 CL = .18180 CD = .05316 CBL = .00040
 ALPHA = 2.000 GRADIENT = .00000 3.99449 -.08873 -.04987 .33783 .06115 -.23713 -.00305
 ALPHA = 4.000 GRADIENT = .00000 .02124 -.04378 -.01676 .07802 .00400 -.01856 .00019 .00053

DZ = 15.000 MACH 10RB = 4.00542 DX = -.07846 DY = -.02784 CL = .19109 CD = .05330 CBL = .00044
 ALPHA = 2.000 GRADIENT = .00000 3.96126 -.04327 -.03544 .35308 .06184 -.24895 -.00308
 ALPHA = 4.000 GRADIENT = .00000 .02208 .01759 -.00380 .08100 .00427 -.01935 .00130 .00003

DZ = 30.000 MACH 10RB = 4.02939 DX = -.11489 DY = -.03594 CL = .20689 CD = .05340 CBL = .00032
 ALPHA = 2.000 GRADIENT = .00000 3.97963 -.07696 -.04474 .37151 .06232 -.26699 -.00264
 ALPHA = 4.000 GRADIENT = .00000 .02538 .01896 -.00440 .08231 .00446 -.01877 .00015 .00007

PARAMETRIC DATA
 RY/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00
 RY/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00
 RY/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00
 RY/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

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ARC 14-120(CA23B) 747/1 ATI 0251 (CARRIER DATA)

(UNH**42) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHA
 2.000
 4.000
 GRADIENT

MACH
 .30000
 .30030
 .00000
 GRADIENT

1ORB
 4.02411
 3.98272
 -.02069

DX
 -.09171
 -.05811
 .01680

DY
 -.12238
 -.10952
 .00643

CL
 .22333
 .37339
 .07503

CD
 .05318
 .06082
 .00382

BETA
 RUDDER =
 1ORB =
 DY =

CLM
 -.23998
 -.27331
 -.01667

CY
 .02214
 .02256
 .00021

CYN
 -.00266
 -.00232
 .00017

CBL
 .00003
 .00049
 .00023

RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHA
 2.000
 4.000
 GRADIENT

MACH
 .30000
 .30000
 .00000
 GRADIENT

1ORB
 4.02982
 3.97770
 -.02606

DX
 -.09355
 -.04004
 .02676

DY
 -.16157
 -.13170
 .01493

CL
 .23008
 .37383
 .07188

CD
 .05308
 .06025
 .00358

BETA
 RUDDER =
 1ORB =
 DY =

CLM
 -.24300
 -.27504
 -.01602

CY
 .02160
 .02231
 .00035

CYN
 -.00250
 -.00226
 .00012

CBL
 .00012
 .00061
 .00024

ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITTER DATA)

(VNH008) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHA
 .000
 2.000
 4.000
 GRADIENT

MACH
 .59057
 .58914
 .59028
 -.00007

DX
 .67175
 -.05416
 -.07544
 -.18680

DY
 -.18918
 .10106
 .18983
 .09475

CL
 .28470
 .34150
 .40441
 .02993

CD
 .06975
 .07909
 .09319
 .00586

BETA
 RUDDER =
 1ORB =
 DY =

CLM
 .01668
 .02385
 .03130
 .00365

CY
 .00356
 .00395
 .00381
 .00006

CYN
 .00123
 .00105
 .00074
 -.00012

CBL
 -.00062
 -.00075
 -.00082
 -.00005

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHA
 .000
 2.000
 4.000
 GRADIENT

MACH
 .58987
 .58902
 .59118
 .00033

DX
 -.09481
 -.01120
 -.05854
 .00907

DY
 -.36797
 -.31915
 -.46731
 -.02484

CL
 .28831
 .34513
 .41323
 .03123

CD
 .07097
 .07989
 .09493
 .00599

BETA
 RUDDER =
 1ORB =
 DY =

CLM
 .01297
 .02130
 .02836
 .00385

CY
 .00303
 .00328
 .00345
 .00011

CYN
 .00115
 .00108
 .00074
 -.00010

CBL
 -.00066
 -.00081
 -.00081
 -.00004

PARAMETRIC DATA

BETA = .000
 RUDDER = .000
 1ORB = .000
 DY = .000

STAB = .000
 ELEVON = .000
 DX = .000
 MACH = .600

PARAMETRIC DATA

BETA = .000
 RUDDER = .000
 1ORB = .000
 DY = .000

STAB = .000
 ELEVON = .000
 DX = .000
 MACH = .600

PARAMETRIC DATA

BETA = .000
 RUDDER = .000
 1ORB = .000
 DY = .000

STAB = .000
 ELEVON = .000
 DX = .000
 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 Q2S1 (ORBITER DATA)

(VNH009) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 8.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	.000	8.00000	.58956	-1.54849	-.28840	.39564	.08390	.02127	.00468	.00105	-.00057
2.000	2.000	8.00000	.59001	-.75094	-.55882	.46578	.09996	.02781	.00455	.00064	-.00021
4.000	4.000	8.00000	.59111	.01750	-.58163	.52598	.12278	.03390	.00519	-.00004	-.00057
GRADIENT	GRADIENT	.00000	.00039	.39150	-.07331	.03258	.00972	.00316	.00013	-.00027	-.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	.000	8.00000	.58981	-2.01103	-.46973	.39569	.08553	.01856	.00396	.00087	-.00073
2.000	2.000	8.00000	.59113	-.37391	-.49652	.46036	.10016	.02612	.00452	.00067	-.00053
4.000	4.000	8.00000	.59117	-.02504	-.53884	.53183	.12455	.03199	.00548	-.00008	-.00064
GRADIENT	GRADIENT	.00000	.00034	.49650	-.01728	.03403	.00976	.00336	.00038	-.00024	-.00002

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	.000	8.00000	.59127	-.07935	-.48612	.38692	.08400	.01898	.00344	.00090	-.00100
2.000	2.000	8.00000	.59204	-.05658	-.43816	.45528	.10023	.02491	.00489	.00078	-.00074
4.000	4.000	8.00000	.59073	-.05430	-.53020	.53670	.12580	.03068	.00579	-.00009	-.00066
GRADIENT	GRADIENT	.00000	-.00013	.00626	-.01102	.03745	.01045	.00292	.00059	-.00025	-.00008

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	.000	8.00000	.59244	-.18171	-.39780	.38362	.08468	.01744	.00243	.00068	-.00102
2.000	2.000	8.00000	.59188	-.01052	-.46944	.45715	.10084	.02354	.00316	.00040	-.00101
4.000	4.000	8.00000	.59315	-.09143	-.53470	.53951	.12745	.02880	.00546	-.00023	-.00078
GRADIENT	GRADIENT	.00000	.00018	.02257	-.03422	.03897	.01069	.00284	.00076	-.00023	-.00006

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	.000	8.00000	.59222	-.13688	-.52196	.38623	.08659	.01550	.00249	.00068	-.00124
2.000	2.000	8.00000	.59285	-.10129	-.42881	.46621	.10428	.02129	.00378	.00033	-.00111
4.000	4.000	8.00000	.59137	-.13779	-.53052	.56267	.13387	.02602	.00577	-.00035	-.00063
GRADIENT	GRADIENT	.00000	-.00021	-.00023	-.00214	.04411	.01182	.00263	.00082	-.00026	-.00015

DATE 23 MAR 76

TABLULATED SOURCE DATA - CA238

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ARC 14-120(CA238) 747/1 ATI 0251 (ORBITER DATA)

(VNH009) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000	ALPHAC	1ORB	MACH	DX	DY	CL	CO	CLM	CY	CYN	CBL
	.000	8.00000	.59197	-.04829	-.55849	.38116	.08760	.01363	-.00262	.00073	-.00115
	2.000	8.00000	.59243	-.05417	-.45491	.46793	.10566	.01951	.00333	.00026	-.00097
	4.000	8.00000	.59178	-.15068	-.45507	.57321	.13736	.02353	.00502	-.00031	-.00079
	GRADIENT	.00000	-.00005	-.02560	.02586	.04801	.01244	.00248	.00060	-.00026	.00009

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 1ORB = 8.000 DX = .000
 DY = .000 MACH = .600

DZ = 50.000

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000	ALPHAC	1ORB	MACH	DX	DY	CL	CO	CLM	CY	CYN	CBL
	.000	8.00000	.59188	-.00194	-.52363	.38467	.08811	.01369	-.00281	.00072	-.00119
	2.000	8.00000	.59167	.01316	-.48819	.47247	.10625	.01912	.00334	.00020	-.00111
	4.000	8.00000	.59268	-.09422	-.46192	.57618	.13600	.02278	.00457	-.00047	-.00073
	GRADIENT	.00000	.00020	-.02307	.01543	.04788	.01247	.00227	.00044	-.00030	.00012

ARC 14-120(CA238) 747/1 ATI 0251 (ORBITER DATA)

(VNH010) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500	ALPHAC	1ORB	MACH	DX	DY	CL	CO	CLM	CY	CYN	CBL
	.000	8.00000	.59528	-.14459	.39993	.40170	.08360	.02338	.00454	.00101	-.00125
	2.000	8.00000	.59463	-.03459	.71214	.46638	.10105	.02802	.00401	.00035	-.00132
	4.000	8.00000	.59120	-.02236	.67475	.53935	.12530	.03345	.00502	-.00020	-.00095
	GRADIENT	.00000	-.00102	.03056	.06870	.03441	.01043	.00252	.00012	-.00030	.00008

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 1ORB = 8.000 DX = .000
 DY = .000 MACH = .600

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

DZ = 7.500
 ALPHAC = .000
 2.000
 4.000
 GRADIENT = .00000

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

IORB	8.00000	MACH	.59524	DX	-.13105	DY	-.08072	CL	.39869	CD	.08465	CLM	.02119	CY	.00349	CYN	.00069	CBL	-.00112
	8.00000		.59624		-.03201		.11391		.46891		.10196		.02634		.00390		.00043		-.00104
	8.00000		.59500		-.05084		.13091		.54590		.12793		.03153		.00515		-.00027		-.00074
	.00000		-.00006		.02005		.05291		.03680		.01082		.00259		.00041		-.00029		.00009

DZ = 10.000
 ALPHAC = .000
 2.000
 4.000
 GRADIENT = .00000

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

IORB	8.00000	MACH	.59458	DX	-.14457	DY	-.40700	CL	.39577	CD	.08523	CLM	.01947	CY	.00291	CYN	.00087	CBL	-.00100
	8.00000		.59782		-.02622		-.40185		.47103		.10259		.02514		.00396		.00054		-.00074
	8.00000		.59822		-.07409		-.29551		.56078		.12984		.03018		.00532		-.00033		-.00050
	.00000		.00091		.01762		.02787		.03875		.01115		.00268		.00060		-.00030		.00013

DZ = 15.000
 ALPHAC = .000
 2.000
 4.000
 GRADIENT = .00000

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

IORB	8.00000	MACH	.59642	DX	-.13299	DY	-.36917	CL	.39708	CD	.08581	CLM	.01834	CY	.00241	CYN	.00073	CBL	-.00116
	8.00000		.59651		-.02739		-.37159		.47153		.10340		.02370		.00322		.00034		-.00105
	8.00000		.59752		-.07079		-.40978		.55541		.13157		.02848		.00490		-.00038		-.00087
	.00000		.00027		.01555		-.01015		.03958		.01144		.00253		.00062		-.00028		.00007

DZ = 30.000
 ALPHAC = .000
 2.000
 4.000
 GRADIENT = .00000

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

IORB	8.00000	MACH	.59671	DX	-.10394	DY	-.51761	CL	.39814	CD	.08756	CLM	.01613	CY	.00178	CYN	.00065	CBL	-.00126
	8.00000		.59659		-.08286		-.47056		.48257		.10653		.02148		.00310		.00015		-.00105
	8.00000		.59605		-.11834		-.46531		.57413		.13672		.02569		.00399		-.00045		-.00074
	.00000		-.00017		-.00360		.01307		.04400		.01229		.00239		.00055		-.00027		.00013

DZ = 45.000
 ALPHAC = .000
 2.000
 4.000
 GRADIENT = .00000

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

IORB	8.00000	MACH	.59578	DX	-.10371	DY	-.43686	CL	.39755	CD	.08839	CLM	.01507	CY	.00167	CYN	.00064	CBL	-.00122
	8.00000		.59641		-.10516		-.42721		.49091		.10640		.02014		.00350		.00019		-.00078
	8.00000		.59539		-.19518		-.47170		.58585		.13991		.02371		.00382		-.00037		-.00067
	.00000		-.00010		-.02287		-.00871		.04708		.01288		.00216		.00054		-.00025		.00009

ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA)

(VNH010) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 8.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC	ORB	MACH	DX	DY	CL	CL	CD	CLM	CY	CYN	CBL
.000	8.00000	.59362	-.01092	-.44117	.39498	.08871	.01439	.01439	.00159	.00068	-.00112
2.000	8.00000	.59473	-.00946	-.48167	.48703	.10815	.01928	.01928	.00351	.00020	-.00087
4.000	8.00000	.59456	-.12097	-.53064	.58921	.14076	.02312	.02312	.00395	-.00038	-.00075
GRADIENT	.00000	.00023	-.02751	-.02237	.04856	.01301	.00218	.00218	.00059	-.00026	.00009

ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA)

(VNH011) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 4.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC	ORB	MACH	DX	DY	CL	CL	CD	CLM	CY	CYN	CBL
.000	4.00000	.59330	-.09487	-.17585	.18458	.06138	.01110	.01110	.00271	.00104	-.00070
2.000	4.00000	.59263	-.03266	-.18204	.24155	.06543	.01691	.01691	.00307	.00111	-.00061
4.000	4.00000	.59218	-.08058	-.19776	.29814	.07438	.02408	.02408	.00274	.00095	-.00068
GRADIENT	.00000	-.00028	-.00357	-.00548	.02839	.00325	.00325	.00325	.00001	-.00002	.00001

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500

ALPHAC	ORB	MACH	DX	DY	CL	CL	CD	CLM	CY	CYN	CBL
.000	4.00000	.59408	-.21947	-.11285	.19032	.06179	.00828	.00828	.00282	.00117	-.00070
2.000	4.00000	.59178	.10724	-.22680	.24803	.06739	.01423	.01423	.00286	.00108	-.00081
4.000	4.00000	.59253	-.00587	-.22635	.30591	.07568	.02153	.02153	.00351	.00111	-.00085
GRADIENT	.00000	-.00039	.05340	-.02837	.02890	.00347	.00331	.00331	.00017	-.00002	-.00004

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

DZ = 10.000 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	4.00000	.59257	-.14626	-.15718	.19093	.06223	.00680	.00341	.00124	-.00082
2.000	4.00000	.59162	.07409	-.23642	.25074	.06803	.01297	.00305	.00114	-.00081
4.000	4.00000	.59123	.01922	-.24334	.30882	.07631	.02055	.00310	.00103	-.00093
GRADIENT	.00000	-.00033	.04137	-.02154	.02947	.00352	.00344	-.00008	-.00005	-.00003

DZ = 15.000 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	4.00000	.59363	-.12417	-.15853	.19260	.06344	.00492	.00367	.00134	-.00091
2.000	4.00000	.59363	-.01486	-.23552	.25400	.06910	.01140	.00340	.00130	-.00082
4.000	4.00000	.59510	-.13120	-.20103	.31615	.07779	.01977	.00321	.00111	-.00093
GRADIENT	.00000	.00037	-.00176	-.01063	.03089	.00359	.00371	-.00012	-.00006	-.00000

DZ = 30.000 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	4.00000	.59535	-.13025	-.16001	.19275	.06502	.00226	.00280	.00120	-.00107
2.000	4.00000	.59466	-.13397	-.23880	.26263	.07195	.00921	.00213	.00102	-.00098
4.000	4.00000	.59389	-.12946	-.23698	.33510	.08167	.01803	.00284	.00100	-.00113
GRADIENT	.00000	-.00036	.00020	-.01924	.03559	.00416	.00394	.00001	-.00005	-.00002

DZ = 45.000 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	4.00000	.59326	-.07470	-.23397	.19290	.06644	.00068	.00218	.00108	-.00101
2.000	4.00000	.59295	-.21245	-.27003	.27317	.07374	.00895	.00207	.00101	-.00101
4.000	4.00000	.59271	-.14676	-.24929	.35252	.08441	.01670	.00259	.00095	-.00105
GRADIENT	.00000	-.00014	-.01801	.00117	.03990	.00449	.00401	.00010	-.00003	-.00001

DZ = 50.000 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	1ORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
.000	4.00000	.59237	-.06283	-.25594	.19283	.06700	.00016	.00203	.00106	-.00096
2.000	4.00000	.59276	-.24187	-.29421	.27704	.07396	.00772	.00221	.00106	-.00088
4.000	4.00000	.59289	-.17550	-.20810	.35823	.08522	.01632	.00257	.00095	-.00099
GRADIENT	.00000	.00013	-.02817	.01196	.04135	.00456	.00404	.00014	-.00002	-.00001

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 1ORB = 4.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(VNH013) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
• 3.500	.000	6.00000	.59330	-.02265	-.52888	.29838	.07128	.01711	.00186	.00101	-.00044
	2.000	6.00000	.59492	-.03416	-.45886	.35121	.08002	.02524	.00293	.00106	-.00044
	4.000	6.00000	.59380	-.06456	-.53850	.41304	.09443	.03232	.00268	.00081	-.00046
	GRADIENT	.00000	.00013	-.01048	-.00240	.02866	.00579	.00380	.00020	-.00005	-.00001

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
• 7.500	.000	6.00000	.59143	-.14594	-.42355	.29525	.07151	.01390	.00206	.00111	-.00046
	2.000	6.00000	.59273	-.03204	-.49988	.35221	.08048	.02250	.00237	.00104	-.00059
	4.000	6.00000	.59233	-.03940	-.51321	.41977	.09567	.02940	.00234	.00078	-.00057
	GRADIENT	.00000	.00022	-.02663	-.02242	.03113	.00604	.00388	.00007	-.00008	-.00003

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
• 10.000	.000	6.00000	.59144	-.18620	-.44808	.29537	.07176	.01306	.00243	.00122	-.00061
	2.000	6.00000	.59173	-.00336	-.58353	.35337	.08063	.02188	.00184	.00094	-.00059
	4.000	6.00000	.59203	-.07451	-.59846	.42175	.09609	.02863	.00246	.00073	-.00072
	GRADIENT	.00000	.00015	.02792	-.03759	.03160	.00608	.00389	.00001	-.00012	-.00003

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
• 15.000	.000	6.00000	.59111	-.11818	-.47005	.29399	.07232	.01167	.00199	.00106	-.00067
	2.000	6.00000	.59100	.09841	-.49785	.35515	.08195	.02019	.00184	.00092	-.00071
	4.000	6.00000	.59097	-.01302	-.52853	.42557	.09760	.02694	.00224	.00064	-.00085
	GRADIENT	.00000	-.00004	.02629	-.01462	.03290	.00632	.00382	.00006	-.00010	-.00004

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	IORB	MACH	DX	DY	CL	CD	CLM	CY	CYN	CBL
• 30.000	.000	6.00000	.59008	-.13369	-.45772	.29519	.07378	.00957	.00211	.00101	-.00101
	2.000	6.00000	.59033	.02128	-.53834	.36502	.08407	.01849	.00182	.00085	-.00096
	4.000	6.00000	.59054	-.08049	-.50667	.44301	.10127	.02476	.00299	.00065	-.00097
	GRADIENT	.00000	.00012	.01330	-.01224	.03695	.00687	.00380	.00022	-.00009	-.00001

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(VNHM41) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

DZ = 45.000
 RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	MACH	IORB	DX	DY	CL	CD	CLM	CY	CYN	CBL
2.000	.50000	4.01317	-.07934	-.09718	.28000	.07345	.00782	.00263	.00093	-.00105
4.000	.50000	3.94777	-.09778	-.14783	.35279	.08373	.01574	.00305	.00093	-.00092
GRADIENT	.00000	-.03270	-.00922	-.02532	.03640	.00514	.00396	.00021	-.00000	.00006

DZ = 50.000
 RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	MACH	IORB	DX	DY	CL	CD	CLM	CY	CYN	CBL
2.000	.50000	3.99721	-.08686	-.08635	.28209	.07378	.00757	.00254	.00090	-.00114
4.000	.50000	3.94057	-.12072	-.14681	.35752	.08446	.01537	.00300	.00090	-.00091
GRADIENT	.00000	-.02832	-.01693	-.03023	.03772	.00534	.00390	.00023	.00000	.00011

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(VNHM42) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

DZ = 3.500
 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	MACH	IORB	DX	DY	CL	CD	CLM	CY	CYN	CBL
2.000	.30000	3.96366	-.01826	-.01679	.24783	.06851	.01568	.00326	.00073	-.00040
4.000	.30000	3.93590	-.00129	-.02787	.30620	.07713	.02255	.00315	.00070	-.00047
GRADIENT	.00000	-.01388	.00849	-.00554	.02919	.00431	.00343	-.00006	-.00001	-.00003

DZ = 7.500
 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	MACH	IORB	DX	DY	CL	CD	CLM	CY	CYN	CBL
2.000	.30000	3.99447	-.06493	-.04520	.25897	.06979	.01347	.00189	.00050	-.00048
4.000	.30000	3.98402	-.07572	-.02685	.31786	.07887	.01997	.00266	.00071	-.00041
GRADIENT	.00000	-.00522	-.00539	.00917	.02944	.00454	.00325	.00038	.00011	.00003

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 4.000 DX = .000
 DY = .000 MACH = .500

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 4.000 DX = .000
 DY = .000 MACH = .300

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 4.000 DX = .000
 DY = .000 MACH = .300

ORIGINAL PART 3
REVISED 10/1/75

DATE 23 MAR 76

TABULATED SOURCE DATA - CA23B

PAGE 421

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA) (ZNH008) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
45.000	6.000	.59230	.00000	-.07540	-.47401	.28293	.07525	.00632	.00176	.00092	-.00087
45.000	8.000	.59324	2.00000	.00616	-.48236	.36228	.08573	.01523	.00174	.00075	-.00109
45.000	10.000	.59245	4.00000	-.16925	-.52115	.45028	.10447	.02121	.00266	.00043	-.00113
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.000	6.000	.59329	.00000	.04229	-.53060	.28567	.07547	.00616	.00154	.00086	-.00091
50.000	8.000	.59239	2.00000	-.15757	-.45502	.36357	.08629	.01485	.00182	.00083	-.00091
50.000	10.000	.59204	4.00000	-.20162	-.48963	.45185	.10491	.02060	.00258	.00043	-.00091
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.500	8.000	.59256	.00000	-1.54549	-.28840	.39564	.08390	.02127	.00468	.00105	-.00057
3.500	10.000	.59001	2.00000	-.75094	-.55882	.46578	.09996	.02781	.00455	.00064	-.00021
3.500	12.000	.59111	4.00000	.01750	-.58163	.52598	.12278	.03390	.00519	-.00004	-.00057
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	MACH	ALPHA	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.500	8.000	.58981	.00000	-2.01103	-.46973	.39563	.08553	.01855	.00396	.00087	-.00073
7.500	10.000	.59113	2.00000	-.37391	-.49652	.46036	.10016	.02612	.00452	.00067	-.00053
7.500	12.000	.59117	4.00000	-.02504	-.53884	.53183	.12455	.03199	.00548	-.00008	-.00064
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA) (ZNH009) (17 OCT 75)

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

(ZNH009) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6900 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 LORR = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

OZ	ALPHAO	MACH	RUN NO.	0 / 0	RN/L =	3.35	GRADIENT INTERVAL =	-5.00 /	5.00	CLM	CYN	CBL
10.000	8.000	.59127								.00344	.00090	-.00100
10.000	10.000	.59204								.00469	.00078	-.00074
10.000	12.000	.59373								.00579	-.00009	-.00066
	GRADIENT	.00000								.00000	.00000	.00000

DZ	ALPHAO	MACH	RUN NO.	0 / 0	RN/L =	3.35	GRADIENT INTERVAL =	-5.00 /	5.00	CLM	CYN	CBL
15.000	8.000	.59244								.00243	.00068	-.00102
15.000	10.000	.59188								.00316	.00040	-.00101
15.000	12.000	.59315								.00546	-.00023	-.00078
	GRADIENT	.00000								.00000	.00000	.00000

DZ	ALPHAO	MACH	RUN NO.	0 / 0	RN/L =	3.35	GRADIENT INTERVAL =	-5.00 /	5.00	CLM	CYN	CBL
30.000	8.000	.59222								.00249	.00068	-.00124
30.000	10.000	.59285								.00378	.00033	-.00111
30.000	12.000	.59137								.00577	-.00035	-.00063
	GRADIENT	.00000								.00000	.00000	.00000

DZ	ALPHAO	MACH	RUN NO.	0 / 0	RN/L =	3.34	GRADIENT INTERVAL =	-5.00 /	5.00	CLM	CYN	CBL
45.000	8.000	.59197								.00262	.00073	-.00115
45.000	10.000	.59343								.00333	.00026	-.00097
45.000	12.000	.59378								.00502	-.00031	-.00079
	GRADIENT	.00000								.00000	.00000	.00000

DZ	ALPHAO	MACH	RUN NO.	0 / 0	RN/L =	3.33	GRADIENT INTERVAL =	-5.00 /	5.00	CLM	CYN	CBL
50.000	8.000	.59198								.00281	.00072	-.00119
50.000	10.000	.59167								.00334	.00020	-.00111
50.000	12.000	.59268								.00457	-.00047	-.00073
	GRADIENT	.00000								.00000	.00000	.00000

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(ZNH010) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0 / 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
45.000	8.000	.59362	.00000	-1.0371	-4.3686	.31755	.08839	.01507	.00167	.00054	-.00122
45.000	10.000	.59473	2.00000	-1.10516	-4.3091	.48703	.10815	.02014	.00350	.00019	-.00078
45.000	12.000	.59539	4.00000	-1.19518	-4.7170	.58585	.13991	.02371	.00382	-.00037	-.00087
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.000	8.000	.59362	.00000	-1.0192	-4.4117	.39498	.08871	.01439	.00159	.00068	-.00112
50.000	10.000	.59473	2.00000	-1.00946	-4.8167	.48703	.10815	.01928	.00351	.00020	-.00087
50.000	12.000	.59456	4.00000	-1.12097	-5.3064	.58921	.14076	.02312	.00395	-.00038	-.00075
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(ZNH011) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.500	4.000	.59330	.00000	-.09497	-.17585	.18458	.06138	.01110	.00271	.00104	-.00070
3.500	6.000	.59263	2.00000	-.03266	-.18204	.24155	.06643	.01691	.00307	.00111	-.00061
3.500	8.000	.59218	4.00000	-.08058	-.19776	.29814	.07438	.02408	.00274	.00096	-.00068
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.500	4.000	.59408	.00000	-.21947	-.11285	.19032	.06179	.00828	.00282	.00117	-.00070
7.500	6.000	.59178	2.00000	-.10724	-.22680	.24803	.06739	.01423	.00286	.00108	-.00081
7.500	8.000	.59253	4.00000	-.00587	-.22635	.30591	.07568	.02153	.00351	.00111	-.00095
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

PARAMETRIC DATA

**ORIGINAL PAGE IS
OF POOR QUALITY**

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6900 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 IORB = .000 DX = .000
 DY = .600 MACH = .000

PARAMETRIC DATA

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
10.000	4.000	.59257	.00000	-.14626	-.15718	.19093	.06223	.06580	.00341	.00124	-.00023
10.000	6.000	.59162	2.00000	.07409	-.23642	.25074	.06803	.01297	.00305	.00114	-.00081
10.000	8.000	.59123	4.00000	.01922	-.24334	.30882	.07631	.02055	.00310	.00103	-.00093
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
15.000	4.000	.59363	.00000	-.12417	-.15353	.19260	.06344	.00492	.00367	.00134	-.00091
15.000	6.000	.59363	2.00000	-.01466	-.23552	.25400	.06910	.01140	.00340	.00130	-.00082
15.000	8.000	.59510	4.00000	-.13120	-.20103	.31615	.07779	.01977	.00321	.00111	-.00093
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
30.000	4.000	.59326	.00000	-.13025	-.16001	.19275	.06502	.00226	.00280	.00120	-.00107
30.000	6.000	.59468	2.00000	-.13397	-.23880	.26263	.07195	.00921	.00213	.00102	-.00098
30.000	8.000	.59389	4.00000	-.12946	-.23698	.33510	.08167	.01803	.00284	.00100	-.00113
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
45.000	4.000	.59326	.00000	-.07470	-.23397	.19290	.06644	.00068	.00218	.00108	-.00101
45.000	6.000	.59326	2.00000	-.21255	-.28003	.27317	.07354	.00805	.00207	.00101	-.00092
45.000	8.000	.59271	4.00000	-.14676	-.22929	.35252	.08441	.01670	.00259	.00095	-.00105
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.000	4.000	.59237	.00000	-.06793	-.25594	.19283	.06700	.00016	.00203	.00106	-.00096
50.000	6.000	.59276	2.00000	-.24187	-.29421	.27704	.07396	.00772	.00221	.00106	-.00088
50.000	8.000	.59289	4.00000	-.17552	-.20810	.35623	.08522	.01632	.00257	.00096	-.00099
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (ZNH013) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
LREF = 474.8100 IN. YMRP = .0000 IN. Y0
BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
SCALE = .0125

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
TORB = 6.000 DX = .000
DY = .000 MACH = 1.600

PARAMETRIC DATA

ALPHAO	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.500	.59330	.00000	-.02265	-.42688	.29838	.07128	.01711	.00186	.00101	-.00044
3.500	.59492	2.00000	-.03416	-.45886	.35121	.08002	.02524	.00293	.00106	-.00044
3.500	.59390	4.00000	-.06456	-.53850	.41304	.09443	.03232	.00268	.00081	-.00046
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00										
ALPHAO	MACH	ALPHAC	DX	DY	CL <td>CD <td>CLM <td>CY <td>CYN <td>CBL </td></td></td></td></td>	CD <td>CLM <td>CY <td>CYN <td>CBL </td></td></td></td>	CLM <td>CY <td>CYN <td>CBL </td></td></td>	CY <td>CYN <td>CBL </td></td>	CYN <td>CBL </td>	CBL
7.500	.59143	.00000	-.14594	-.42355	.29525	.07151	.01390	.00206	.00111	-.00046
7.500	.59273	2.00000	-.03204	-.49888	.35221	.08048	.02250	.00237	.00104	-.00059
7.500	.59203	4.00000	-.03940	-.51321	.41977	.09567	.02940	.00234	.00078	-.00057
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00										
ALPHAO	MACH	ALPHAC	DX	DY	CL <td>CD <td>CLM <td>CY <td>CYN <td>CBL </td></td></td></td></td>	CD <td>CLM <td>CY <td>CYN <td>CBL </td></td></td></td>	CLM <td>CY <td>CYN <td>CBL </td></td></td>	CY <td>CYN <td>CBL </td></td>	CYN <td>CBL </td>	CBL
10.000	.59144	.00000	-.18620	-.44808	.29537	.07176	.01306	.00243	.00122	-.00061
10.000	.59173	2.00000	-.00336	-.58353	.35337	.08063	.02188	.00184	.00094	-.00069
10.000	.59203	4.00000	-.07451	-.59846	.42175	.09609	.02863	.00246	.00073	-.00072
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00										
ALPHAO	MACH	ALPHAC	DX	DY	CL <td>CD <td>CLM <td>CY <td>CYN <td>CBL </td></td></td></td></td>	CD <td>CLM <td>CY <td>CYN <td>CBL </td></td></td></td>	CLM <td>CY <td>CYN <td>CBL </td></td></td>	CY <td>CYN <td>CBL </td></td>	CYN <td>CBL </td>	CBL
15.000	.59111	.00000	-.11818	-.47005	.29399	.07232	.01167	.00199	.00106	-.00067
15.000	.59100	2.00000	-.09841	-.49785	.35515	.08195	.02019	.00184	.00092	-.00071
15.000	.59097	4.00000	-.01302	-.52853	.42557	.09760	.02694	.00224	.00064	-.00085
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00										
ALPHAO	MACH	ALPHAC	DX	DY	CL <td>CD <td>CLM <td>CY <td>CYN <td>CBL </td></td></td></td></td>	CD <td>CLM <td>CY <td>CYN <td>CBL </td></td></td></td>	CLM <td>CY <td>CYN <td>CBL </td></td></td>	CY <td>CYN <td>CBL </td></td>	CYN <td>CBL </td>	CBL
30.000	.59008	.00000	-.13369	-.45772	.29519	.07378	.00957	.00211	.00101	-.00101
30.000	.59033	2.00000	-.02128	-.53834	.36502	.08407	.01849	.00182	.00085	-.00096
30.000	.59054	4.00000	-.08049	-.50667	.44301	.10127	.02476	.00299	.00065	-.00097
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00										

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(ZNH023) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 930.5800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORR = 6.000 DX = .000
 DY = .000 MACH = .600

DZ	ALPHA	MACH	ALPHAO	0/0	RN/L	3.31	GRADIENT	INTERVAL	-5.00/	5.00	CY	CYN	CBL
3.500	6.000	.58722	.00000	DX	-10448	-.22757	CL	.22257	CD	.05052	.05053	.00076	.00091
3.500	8.000	.58596	2.00000	DY	-14791	-.26402	CL	.27397	CD	.06581	.05978	.00068	.00101
3.500	10.000	.58675	4.00000	DX	-.09563	-.31779	CL	.33357	CD	.07670	.06929	.00054	.00125
	GRADIENT	.00000	.00000	DY	.00000	.00000	CL	.00000	CD	.00000	.00000	.00000	.00000

DZ	ALPHA	MACH	ALPHAO	0/0	RN/L	3.31	GRADIENT	INTERVAL	-5.00/	5.00	CY	CYN	CBL
7.500	6.000	.58592	.00000	DX	-12617	-.26758	CL	.22148	CD	.05974	.04807	.00075	.00115
7.500	8.000	.58772	2.00000	DY	-.21541	-.27644	CL	.27644	CD	.06605	.05775	.00066	.00111
7.500	10.000	.58744	4.00000	DX	-.05141	-.25423	CL	.33642	CD	.07755	.06670	.00038	.00138
	GRADIENT	.00000	.00000	DY	.00000	.00000	CL	.00000	CD	.00000	.00000	.00000	.00000

DZ	ALPHA	MACH	ALPHAO	0/0	RN/L	3.31	GRADIENT	INTERVAL	-5.00/	5.00	CY	CYN	CBL
10.000	6.000	.58720	.00000	DX	-.08080	-.32093	CL	.21968	CD	.05996	.04695	.00073	.00115
10.000	8.000	.58738	2.00000	DY	-.29826	-.27487	CL	.27487	CD	.06637	.05666	.00066	.00130
10.000	10.000	.58743	4.00000	DX	-.01548	-.31715	CL	.34068	CD	.07819	.06614	.00041	.00144
	GRADIENT	.00000	.00000	DY	.00000	.00000	CL	.00000	CD	.00000	.00000	.00000	.00000

DZ	ALPHA	MACH	ALPHAO	0/0	RN/L	3.31	GRADIENT	INTERVAL	-5.00/	5.00	CY	CYN	CBL
15.000	6.000	.58887	.00000	DX	-.08769	-.27717	CL	.21864	CD	.06052	.04558	.00080	.00112
15.000	8.000	.58732	2.00000	DY	-.32458	-.28273	CL	.28273	CD	.06735	.05661	.00051	.00139
15.000	10.000	.58698	4.00000	DX	-.05553	-.31952	CL	.34368	CD	.07934	.06487	.00039	.00144
	GRADIENT	.00000	.00000	DY	.00000	.00000	CL	.00000	CD	.00000	.00000	.00000	.00000

DZ	ALPHA	MACH	ALPHAO	0/0	RN/L	3.31	GRADIENT	INTERVAL	-5.00/	5.00	CY	CYN	CBL
30.000	6.000	.58737	.00000	DX	-.13357	-.26229	CL	.21781	CD	.06172	.04322	.00071	.00132
30.000	8.000	.58778	2.00000	DY	-.01156	-.20880	CL	.28312	CD	.06920	.05344	.00062	.00138
30.000	10.000	.58784	4.00000	DX	-.12743	-.26464	CL	.36246	CD	.08321	.06277	.00029	.00153
	GRADIENT	.00000	.00000	DY	.00000	.00000	CL	.00000	CD	.00000	.00000	.00000	.00000

DATE 23 MAR 76

TABULATED SOURCE DATA - CA23B

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ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

(ZNH023) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = .000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
45.000	6.000	.58641	.00000	.02545	-.31603	.21689	.06271	.04193	.00182	.00059	-.00141
45.000	8.000	.58821	2.00000	-.10675	-.27867	.29012	.07069	.05219	.00191	.00045	-.00130
45.000	10.000	.58801	4.00000	-.15959	-.27362	.37463	.08556	.06099	.00236	.00017	-.00135
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.000	6.000	.58729	.00000	.06326	-.39592	.21499	.06313	.04166	.00191	.00062	-.00126
50.000	8.000	.58809	2.00000	-.12785	-.35762	.29169	.07114	.05209	.00219	.00052	-.00137
50.000	10.000	.58823	4.00000	-.17777	-.33684	.37701	.08636	.06053	.00214	.00022	-.00125
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 LORB = .000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.500	6.000	.58556	.00000	-.15710	-.05439	.21814	.05847	.05061	.00322	.00075	-.00121
3.500	8.000	.58534	2.00000	-.05661	-.04203	.27322	.06437	.06040	.00380	.00071	-.00112
3.500	10.000	.58738	4.00000	-.07286	-.01917	.33132	.07510	.06962	.00327	.00042	-.00137
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0 / 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.500	6.000	.58752	.00000	-.15273	-.13760	.21899	.05878	.04859	.00330	.00078	-.00123
7.500	8.000	.58737	2.00000	-.02438	-.07570	.27358	.06494	.05790	.00383	.00078	-.00115
7.500	10.000	.58739	4.00000	-.04246	-.02463	.33503	.07630	.06737	.00373	.00049	-.00146
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

(ZNH024) (17 OCT 75)

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 LORB = .000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 LORB = .000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITTER DATA)

(ZNH025) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA =
 RUDDER =
 TORB =
 DY =

RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00 / 5.00

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
45.000	8.000	.58850	.00000	-.05870	-.01594	.31148	.07153	.05122	.00272	.00055	-.00154
45.000	10.000	.58832	2.00000	-.09865	.01874	.39258	.08597	.05944	.00277	.00027	-.00160
45.000	12.000	.58778	4.00000	-.17449	.00419	.49548	.11407	.06403	.00363	-.00026	-.00099
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00 / 5.00

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.000	8.000	.58749	.00000	.01451	-.04207	.31205	.07193	.05064	.00233	.00055	-.00129
50.000	10.000	.58818	2.00000	-.07501	.01766	.39601	.08674	.05912	.00263	.00025	-.00146
50.000	12.000	.58720	4.00000	-.18335	.05471	.49858	.11484	.06351	.00396	-.00019	-.00112
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITTER DATA)

(ZNH027) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA =
 RUDDER =
 TORB =
 DY =

RUN NO. 0 / 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00 / 5.00

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.500	8.000	.58488	.00000	-.04747	.07762	.31755	.05216	.04502	.00585	-.00006	-.00211
3.500	10.000	.58749	2.00000	-.16311	.16832	.38604	.06477	.05354	.00880	.00027	-.00255
3.500	12.000	.58723	4.00000	-.20081	.04725	.45945	.08486	.06000	.00823	-.00105	-.00216
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0 / 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00 / 5.00

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.500	8.000	.58594	.00000	-.11490	.07994	.31843	.05214	.04262	.00702	-.00009	-.00224
7.500	10.000	.58694	2.00000	-.10494	.09838	.38576	.06480	.05100	.00798	-.00005	-.00233
7.500	12.000	.58659	4.00000	-.14418	.05239	.46349	.08597	.05605	.00872	-.00099	-.00222
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

.000 STAB =
 .000 ELEVON =
 8.000 DX =
 .000 MACH =

PARAMETRIC DATA

.000 STAB =
 .000 ELEVON =
 8.000 DX =
 .000 MACH =

PARAMETRIC DATA

.000 STAB =
 .000 ELEVON =
 8.000 DX =
 .000 MACH =

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TABULATED SOURCE DATA - CA23B ARC 14-120(CA23B) 747/1 ATI 0351 (ORBITER DATA)

REFERENCE DATA

SREF = 2590.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO DX = 8.000
 SCALE = .0125 RN/L = 0/0 RN/L = 3.29 RN/L = 3.29 RN/L = 3.30 RN/L = 5.00/ 5.00

ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
10.000	.58559	.00000	-1.15926	.08776	.31963	.05231	.04051	.00781	-.00002	-.00231
10.000	.58522	2.00000	-.06494	.04699	.38599	.06500	.04892	.00702	-.00024	-.00206
10.000	.58595	4.00000	-.07448	.06433	.46553	.08665	.05287	.00885	-.00083	-.00227
	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
15.000	.58657	.00000	-1.17151	.04284	.31725	.05162	.03908	.00810	-.00048	-.00255
15.000	.58706	2.00000	-.09136	.04109	.38632	.06454	.04773	.00816	-.00072	-.00251
15.000	.58624	4.00000	-1.13410	.04469	.47178	.08809	.05162	.01046	-.00121	-.00225
	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
30.000	.58635	.00000	-1.13749	.03346	.32024	.05382	.03508	.00830	-.00036	-.00273
30.000	.58528	2.00000	-.10994	.06309	.39464	.06747	.04392	.00805	-.00064	-.00244
30.000	.58570	4.00000	-1.12824	.02846	.49110	.09335	.04808	.01003	-.00121	-.00230
	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
45.000	.58545	.00000	-.07774	.00599	.32204	.05479	.03409	.00778	-.00052	-.00264
45.000	.58604	2.00000	-.08593	.07027	.40193	.06919	.04334	.00814	-.00064	-.00269
45.000	.58548	4.00000	-1.16555	-.00382	.50403	.09638	.04625	.00952	-.00120	-.00226
	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.000	.58502	.00000	-.04402	.04160	.31601	.05489	.03250	.00815	-.00034	-.00262
50.000	.58532	2.00000	-.10336	.05879	.40083	.06938	.04220	.00829	-.00063	-.00260
50.000	.58532	4.00000	-1.16359	.07356	.50748	.09742	.04573	.00937	-.00122	-.00217
	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(ZNH036) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 935.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 367/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	45.000	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
	45.000	.58535	2.00000	-.12773	.16996	.37734	.05507	.03392	.00842	-.00042	-.00250
		.58520	4.00000	-.10214	.15528	.33232	.06840	.04319	.00880	-.00060	-.00269
		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 368/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	50.000	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
	50.000	.58475	2.00000	-.04440	.16550	.30410	.05512	.03272	.00836	-.00028	-.00237
		.58452	4.00000	-.09832	.15991	.38762	.06943	.04244	.00857	-.00078	-.00264
		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 369/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	60.000	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
	60.000	.58490	2.00000	-.01489	.14432	.31216	.05561	.03331	.00814	-.00023	-.00247
		.58408	4.00000	-.05197	.13629	.39004	.07011	.04158	.00848	-.00063	-.00260
		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 935.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 371/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	2.000	MACH	ALPHAO	DX	DY	CL	CD	CLM	CY	CYN	CBL
	2.000	.58985	2.00000	-.11180	.10330	.21229	.04009	.03820	.00809	-.00014	-.00176
	2.000	.59004	4.00000	-.08329	.07589	.26910	.04675	.04954	.00770	-.00043	-.00210
		.59071	4.00000	-.11084	.06050	.32436	.05643	.05931	.00816	-.00052	-.00228
		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(ZNH037) (17 OCT 75)

ARC 14-120(CA23B) 747/1 ATI 0351 (ORBITER DATA)

(ZNH038) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. X*RP = 1109.0000 IN. XO
 LREF = 474.8100 IN. Y*RP = .0000 IN. YO
 BREF = 936.6800 IN. Z*RP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 387/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
45.000	6.149	.58561	.0000	-.10562	.06736	.32970	.05648	-.01716	.00408	.00110	-.00138
45.000	7.962	.58667	2.0000	-.05353	.08859	.32558	.06095	-.00792	.00418	.00124	-.00155
45.000	9.950	.58695	4.0000	-.17347	.03891	.47649	.08483	-.00012	.00352	.00101	-.00167
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 388/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.000	6.112	.58469	.0000	.15610	.11797	.32762	.05641	-.01757	.00365	.00084	-.00157
50.000	7.928	.58451	2.0000	-.14575	.08722	.39648	.06587	-.00623	.00374	.00105	-.00162
50.000	9.904	.58453	4.0000	-.18128	.08393	.48261	.08610	-.00040	.00389	.00109	-.00169
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 389/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
60.000	6.088	.58455	.0000	.14152	.12373	.31994	.05675	-.01876	.00400	.00100	-.00158
60.000	7.843	.58431	2.0000	-.06113	.08440	.39198	.06738	-.00976	.00378	.00112	-.00161
60.000	9.593	.58414	4.0000	-.21350	.05094	.46389	.07798	-.00084	.00350	.00120	-.00165
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA)

(ZNH039) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. X*RP = 1109.0000 IN. XO
 LREF = 474.8100 IN. Y*RP = .0000 IN. YO
 BREF = 936.6800 IN. Z*RP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 391/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.500	7.848	.59035	2.0000	-.08042	.07823	.35168	.07785	.02468	.00514	.00125	-.00069
3.500	9.933	.59085	4.0000	-.04830	.00540	.41699	.09341	.03248	.00406	.00081	-.00108
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000
 RUDDER = .000
 LORR = 6.000
 DY = .000
 STAB = 5.000
 ELEVON = 5.000
 DX = .000
 MACH = .600

PARAMETRIC DATA

BETA = .000
 RUDDER = 10.000
 LORR = 6.000
 DY = .000
 STAB = 5.000
 ELEVON = 5.000
 DX = .000
 MACH = .600

(ZNH040) (17 OCT 75)

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00 / 5.00

MACH .58595
 ALPHA 4.000
 ALPHAO 4.000
 ALPHA1 6.000
 ALPHA2 8.000
 GRADIENT .00000

CLM -.00007
 CL .19818
 CL1 .07788
 CL2 .00303
 CL3 -.12600
 CL4 -.16483
 CL5 .00000

CD .06699
 CL .19818
 CL1 .07788
 CL2 .00303
 CL3 -.12600
 CL4 -.16483
 CL5 .00000

CY .00308
 CYN .00117
 CBL -.00125
 CY1 .00294
 CYN1 .00107
 CBL1 -.00103
 CY2 .00290
 CYN2 .00098
 CBL2 -.00104
 CY3 .00000
 CYN3 .00000
 CBL3 .00000

RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00 / 5.00

MACH .58592
 ALPHA 4.000
 ALPHAO 4.000
 ALPHA1 6.000
 ALPHA2 8.000
 GRADIENT .00000

CLM -.00040
 CL .19802
 CL1 .07140
 CL2 -.02607
 CL3 -.22841
 CL4 -.18856
 CL5 .00000

CD .06727
 CL .19802
 CL1 .07140
 CL2 -.02607
 CL3 -.22841
 CL4 -.18856
 CL5 .00000

CY .00273
 CYN .00113
 CBL -.00119
 CY1 .00248
 CYN1 .00099
 CBL1 -.00092
 CY2 .00288
 CYN2 .00095
 CBL2 -.00102
 CY3 .00000
 CYN3 .00000
 CBL3 .00000

(ZNHX10) (17 OCT 75)

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00 / 5.00

MACH .58570
 ALPHA 10.000
 ALPHAO 2.00000
 ALPHA1 4.00000
 ALPHA2 4.00000
 GRADIENT .00000

CLM .02806
 CL .46615
 CL1 .69102
 CL2 .65567
 CL3 .53309
 CL4 .00300
 CL5 .00000

CD .10095
 CL .46615
 CL1 .69102
 CL2 .65567
 CL3 .53309
 CL4 .00300
 CL5 .00000

CY .00398
 CYN .00036
 CBL -.00131
 CY1 .00498
 CYN1 -.00019
 CBL1 -.00094
 CY2 .00000
 CYN2 .00000
 CBL2 .00000

RUN NO. 0 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00 / 5.00

MACH .58523
 ALPHA 10.000
 ALPHAO 2.00000
 ALPHA1 4.00000
 ALPHA2 4.00000
 GRADIENT .00000

CLM .02638
 CL .46871
 CL1 .10196
 CL2 .12026
 CL3 .54571
 CL4 .00000
 CL5 .00000

CD .10188
 CL .46871
 CL1 .10196
 CL2 .12026
 CL3 .54571
 CL4 .00000
 CL5 .00000

CY .00387
 CYN .00043
 CBL -.00103
 CY1 .00512
 CYN1 -.00027
 CBL1 -.00074
 CY2 .00000
 CYN2 .00000
 CBL2 .00000

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(ZNHX13) (17 OCT 75)

REFERENCE DATA

DZ = 2690.0000 SO.FT. XMRP = 1109.0000 IN. X0
 YMRP = 474.8100 IN. Y0
 ZMRP = 936.6800 IN. Z0
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00
 MACH ALPHA DX DY CL CD CLM CBL
 50.000 8.000 2.00000 .51807 -.37026 .08642 .0136 .00089
 50.000 10.000 4.00000 .59137 -.45859 .10522 .00217 .00053
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

CY CYN CBL
 .00136 .00089 -.00067
 .00217 .00053 -.00057
 .00000 .00000 .00000

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(ZNHX14) (17 OCT 75)

REFERENCE DATA

DZ = 2690.0000 SO.FT. XMRP = 1109.0000 IN. X0
 YMRP = 474.8100 IN. Y0
 ZMRP = 936.6800 IN. Z0
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00
 MACH ALPHA DX DY CL CD CLM CBL
 3.500 8.000 2.00000 .58231 -.34591 .08019 .00208 .00118
 3.500 10.000 4.00000 .58310 .40591 .09450 .00195 .00093
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

CY CYN CBL
 .00208 .00118 -.00022
 .00195 .00093 -.00040
 .00000 .00000 .00000

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(ZNHX15) (17 OCT 75)

REFERENCE DATA

DZ = 2690.0000 SO.FT. XMRP = 1109.0000 IN. X0
 YMRP = 474.8100 IN. Y0
 ZMRP = 936.6800 IN. Z0
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00
 MACH ALPHA DX DY CL CD CLM CBL
 10.000 8.000 2.00000 .56959 -.35415 .08099 .00100 .00098
 10.000 10.000 4.00000 .56965 .41762 .09646 .00148 .00080
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

CY CYN CBL
 .00205 .00111 -.00050
 .00207 .00085 -.00053
 .00000 .00000 .00000

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(ZNHX16) (17 OCT 75)

REFERENCE DATA

DZ = 2690.0000 SO.FT. XMRP = 1109.0000 IN. X0
 YMRP = 474.8100 IN. Y0
 ZMRP = 936.6800 IN. Z0
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00
 MACH ALPHA DX DY CL CD CLM CBL
 15.000 8.000 2.00000 .58831 -.35646 .08218 .00126 .00104
 15.000 10.000 4.00000 .58836 .42507 .09835 .00177 .00075
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

CY CYN CBL
 .00126 .00104 -.00050
 .00177 .00075 -.00069
 .00000 .00000 .00000

**ORIGINAL PAGE IS
OF POOR QUALITY**

DATE 23 MAR 76 TABULATED SOURCE DATA - CA23B PAGE 453
 ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA) (ZNHX14) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0 BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0 RUDDER = .000 ELEVON = 5.000
 BRP = 936.6800 IN. ZMRP = 375.0000 IN. Z0 TORB = .000 DX = 10.000
 SCALE = .0125

PARAMETRIC DATA

RUN NO.	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
30.000	8.000	.58818	2.00000	10.00000	-.54427	.36731	.08429	.01610	.00117	.00095	-.00083
30.000	10.000	.59074	4.00000	10.00000	-.55315	.44515	.10198	.02142	.00146	.00057	-.00095
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REFERENCE DATA

RUN NO.	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
45.000	8.000	.59228	2.00000	10.00000	-.58631	.36993	.08531	.01521	.00132	.00105	-.00070
45.000	10.000	.59176	4.00000	10.00000	-.62227	.45985	.10474	.02053	.00124	.00048	-.00077
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

RUN NO.	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.000	8.000	.59041	2.00000	10.00000	-.57745	.37487	.08602	.01545	-.00018	.00074	-.00068
50.000	10.000	.59056	4.00000	10.00000	-.62433	.45962	.10491	.02036	.00108	.00048	-.00061
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0 BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0 RUDDER = .000 ELEVON = 5.000
 BRP = 936.6800 IN. ZMRP = 375.0000 IN. Z0 TORB = .000 DX = 10.000
 SCALE = .0125

PARAMETRIC DATA

RUN NO.	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.500	10.000	.59219	2.00000	10.00000	-.59402	.45294	.09745	.02438	.00167	.00085	-.00057
3.500	12.000	.58993	4.00000	10.00000	-.65242	.52051	.12159	.02860	.00448	.00026	.00004
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

RUN NO.	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.500	10.000	.59002	2.00000	10.00000	-.66536	.46011	.10012	.02373	.00250	.00077	-.00055
7.500	12.000	.58944	4.00000	10.00000	-.65825	.53240	.12476	.02835	.00452	.00011	-.00021
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA) (ZNHX15) (17 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(ZNMX15) (17 OCT 75)

REFERENCE DATA

SPEF = 2590.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 -REF = 474.8100 IN. YMRP = .0000 IN. YO
 SREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

DZ	ALPHA0	MACH	ALPHAC	0/0	RN/L =	3.35	GRADIENT INTERVAL =	-5.00/	5.00	CLM	CYN	CBL
10.000	10.000	.58891	2.00000	DX	10.00000	.46512	CL	.10181	.02318	.00310	.00073	-.00055
10.000	12.000	.58894	4.00000	DY	10.00000	.54071	CD	.12690	.02753	.00466	.00004	-.00045
GRADIENT	GRADIENT	.00000	.00000		.00000	.00000		.00000	.00000	.00000	.00000	.00000

RUN NO.	0/0	RN/L =	3.35	GRADIENT INTERVAL =	-5.00/	5.00	CLM	CYN	CBL
15.000	ALPHA0	MACH	ALPHAC	0/0	RN/L =	3.35	GRADIENT INTERVAL =	-5.00/	5.00
15.000	10.000	.58823	2.00000	DX	10.00000	.46843	CL	.10294	.02199
GRADIENT	GRADIENT	.58938	4.00000	DY	10.00000	.71417	CD	.12972	.02611
		.00000	.00000		.00000	.00000		.00000	.00000

RUN NO.	0/0	RN/L =	3.35	GRADIENT INTERVAL =	-5.00/	5.00	CLM	CYN	CBL
30.000	ALPHA0	MACH	ALPHAC	0/0	RN/L =	3.35	GRADIENT INTERVAL =	-5.00/	5.00
30.000	10.000	.58915	2.00000	DX	10.00000	.48374	CL	.10668	.02040
GRADIENT	GRADIENT	.59073	4.00000	DY	10.00000	.57239	CD	.13578	.02408
		.00000	.00000		.00000	.00000		.00000	.00000

RUN NO.	0/0	RN/L =	3.35	GRADIENT INTERVAL =	-5.00/	5.00	CLM	CYN	CBL
45.000	ALPHA0	MACH	ALPHAC	0/0	RN/L =	3.35	GRADIENT INTERVAL =	-5.00/	5.00
45.000	10.000	.58995	2.00000	DX	10.00000	.48493	CL	.10727	.01937
GRADIENT	GRADIENT	.58955	4.00000	DY	10.00000	.56316	CD	.13667	.02284
		.00000	.00000		.00000	.00000		.00000	.00000

RUN NO.	0/0	RN/L =	3.35	GRADIENT INTERVAL =	-5.00/	5.00	CLM	CYN	CBL
50.000	ALPHA0	MACH	ALPHAC	0/0	RN/L =	3.35	GRADIENT INTERVAL =	-5.00/	5.00
50.000	10.000	.58887	2.00000	DX	10.00000	.48903	CL	.10805	.01921
GRADIENT	GRADIENT	.58933	4.00000	DY	10.00000	.58875	CD	.13971	.02257
		.00000	.00000		.00000	.00000		.00000	.00000

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

(ZNHX16) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.000	8.000	.58887	2.00000	20.00000	-.80299	.37213	.08622	.01354	.00212	.00094	.00085
50.000	10.000	.58896	4.00000	20.00000	-.77864	.45747	.10518	.01839	.00307	.00051	.00096
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

(ZNHX17) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.500	10.000	.58981	2.00000	20.00000	-.53583	.44996	.09892	.02216	.00239	.00074	.00121
3.500	12.000	.58835	4.00000	20.00000	-.91880	.52070	.12380	.02540	.00624	.00017	.00015
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

(ZNHX17) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.500	10.000	.58978	2.00000	20.00000	-.71654	.45714	.10149	.02093	.00356	.00070	.00101
7.500	12.000	.58999	4.00000	20.00000	-.86406	.52373	.12550	.02404	.00559	.00002	.00042
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

(ZNHX17) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
15.000	10.000	.59121	2.00000	20.00000	-.83998	.46368	.10350	.01893	.00455	.00059	.00120
15.000	12.000	.59220	4.00000	20.00000	-.83206	.54052	.12819	.02194	.00520	.00015	.00075
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 A1: 0251 (ORBITER DATA)

(ZNHX17) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
30.000	10.000	2.00000	20.00000	-.87982	.47466	.10600	.01801	.00433	.00053	-.00103
30.000	12.000	4.00000	20.00000	-.77306	.56162	.13429	.02145	.00601	-.00028	-.00084
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
45.000	10.000	2.00000	20.00000	-.82857	.48320	.10690	.01805	.00321	.00018	-.00088
45.000	12.000	4.00000	20.00000	-.78742	.57957	.13792	.02117	.00484	-.00033	-.00089
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.000	10.000	2.00000	20.00000	-.87139	.48115	.10712	.01783	.00346	.00033	-.00089
50.000	12.000	4.00000	20.00000	-.82022	.58066	.13827	.02094	.00502	-.00029	-.00078
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC 14-120(CA23B) 747/1 A1: 0351 (ORBITER DATA)

(ZNHX27) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.500	10.000	2.00000	20.00000	-.15855	.38555	.05449	.05366	.00893	.00026	-.00254
3.500	12.000	4.00000	20.00000	-.04730	.45935	.08454	.05978	.00824	-.00104	-.00218
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.500	10.000	2.00000	20.00000	-.00435	.38557	.06466	.05126	.00801	-.00007	-.00233
7.500	12.000	4.00000	20.00000	-.01201	.46326	.09592	.06400	.00973	-.00098	-.00223
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00900	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LCRB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LCRB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LCRB = 8.000 DX = .000
 DY = .000 MACH = .600

(ZNHX28) (17 OCT 75)

ARC 14-120(CA238) 747/1 AT1 0351 (ORBITTER DATA)

REFERENCE DATA

SREF = 2592.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 935.6600 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	3.500	ALPHA0	0.0000	DX	10.0000	CL	.27315	CD	.04835	CLM	.03994	CY	.00827	CYN	.00020	CBL	-.00185
	3.500	MACH	2.00000	DY	-.01230	DY	.02369	CD	.05921	CLM	.04830	CY	.00831	CYN	.00008	CBL	-.00226
		GRADIENT	4.00000	DZ	.00000	DZ	.32742	CD	.00000	CLM	.00000	CY	.00000	CYN	.00000	CBL	.00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.500	ALPHA0	0.0000	DX	10.0000	CL	.27979	CD	.04834	CLM	.03625	CY	.00814	CYN	.00016	CBL	-.00211
	7.500	MACH	2.00000	DY	.02369	DY	.33752	CD	.05386	CLM	.04462	CY	.00804	CYN	-.00006	CBL	-.00244
		GRADIENT	4.00000	DZ	.00000	DZ	.00000	CD	.00000	CLM	.00000	CY	.00000	CYN	.00000	CBL	.00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	10.000	ALPHA0	0.0000	DX	10.0000	CL	.28269	CD	.04905	CLM	.03473	CY	.00747	CYN	-.00009	CBL	-.00217
	10.000	MACH	2.00000	DY	-.00974	DY	.34052	CD	.06035	CLM	.04222	CY	.00766	CYN	-.00021	CBL	-.00240
		GRADIENT	4.00000	DZ	.00000	DZ	.00000	CD	.00000	CLM	.00000	CY	.00000	CYN	.00000	CBL	.00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	15.000	ALPHA0	0.0000	DX	10.0000	CL	.28610	CD	.04972	CLM	.03309	CY	.00749	CYN	-.00007	CBL	-.00232
	15.000	MACH	2.00000	DY	.08914	DY	.34435	CD	.06153	CLM	.04133	CY	.00743	CYN	-.00024	CBL	-.00255
		GRADIENT	4.00000	DZ	.00000	DZ	.00000	CD	.00000	CLM	.00000	CY	.00000	CYN	.00000	CBL	.00000

RUN NO. 0/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	30.000	ALPHA0	0.0000	DX	10.0000	CL	.29191	CD	.05152	CLM	.03226	CY	.00728	CYN	-.00021	CBL	-.00233
	30.000	MACH	2.00000	DY	.05832	DY	.36548	CD	.06536	CLM	.04158	CY	.00780	CYN	-.00040	CBL	-.00263
		GRADIENT	4.00000	DZ	.00000	DZ	.00000	CD	.00000	CLM	.00000	CY	.00000	CYN	.00000	CBL	.00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	45.000	ALPHA0	0.0000	DX	10.0000	CL	.29492	CD	.05296	CLM	.03175	CY	.00698	CYN	-.00034	CBL	-.00229
	45.000	MACH	2.00000	DY	-.01492	DY	.37471	CD	.06753	CLM	.04082	CY	.00755	CYN	-.00045	CBL	-.00225
		GRADIENT	4.00000	DZ	.00000	DZ	.00000	CD	.00000	CLM	.00000	CY	.00000	CYN	.00000	CBL	.00000

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA)

(ZNHX28) (17 OCT 75)

REFERENCE DATA

DZ = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 .REF = 474.8100 IN. YMRP = .0000 IN. YO
 .REF = 936.5800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0/0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
.58533	2.00000	10.00000	.05297	.29927	.05338	.03197	.00708	-.00027	-.00238
.58669	4.00000	10.00000	.02953	.38144	.06826	.04104	.00752	-.00051	-.00236
.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA)

(ZNHX29) (17 OCT 75)

REFERENCE DATA

DZ = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 .REF = 474.8100 IN. YMRP = .0000 IN. YO
 .REF = 936.5800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0/0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
.58965	2.00000	10.00000	.07085	.36973	.06018	.05095	.00779	-.00001	-.00235
.58806	4.00000	10.00000	.00873	.44062	.08157	.05506	.00953	-.00031	-.00309
.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

DZ 7.500

MACH .58849
 .REF .58815
 .REF .00000

RUN NO. 0/0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
.58770	2.00000	10.00000	-.01491	.38109	.06466	.04549	.00784	-.00024	-.00214
.58827	4.00000	10.00000	.04742	.45639	.08492	.04961	.00889	-.00075	-.00256
.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = .000 DX = 10.000
 DY = .000 MACH = .600

DZ 10.000

MACH .58827
 .REF .58815
 .REF .00000

RUN NO. 0/0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
.58770	2.00000	10.00000	-.01491	.38109	.06466	.04549	.00784	-.00024	-.00214
.58827	4.00000	10.00000	.04742	.45639	.08492	.04961	.00889	-.00075	-.00256
.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = .000 DX = 10.000
 DY = .000 MACH = .600

DZ 15.000

MACH .58909
 .REF .58823
 .REF .00000

RUN NO. 0/0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
.58909	2.00000	10.00000	.09362	.38557	.06547	.04342	.00761	-.00046	-.00227
.58823	4.00000	10.00000	.06535	.46210	.08622	.04743	.00847	-.00103	-.00241
.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = .000 DX = 10.000
 DY = .000 MACH = .600

REFERENCE DATA
 GREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0 BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0 RUDDER = .000 ELEVON = .000
 HREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0 TORB = 8.000 DX = 10.000
 SCALE = .0125 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	MACH	ALPHAC	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
30.000	10.000	.58839	2.00000	2.00000	10.00000	.05480	.39664	.06782	.04206	.00755	-.00058	-.00242	
30.000	12.000	.58832	4.00000	4.00000	10.00000	.05027	.48717	.04505	.00927	-.00122	-.00223		
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	

DZ	ALPHA	MACH	ALPHAC	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
45.000	10.000	.58880	2.00000	2.00000	10.00000	.06013	.40006	.06943	.04156	.00760	-.00059	-.00257	
45.000	12.000	.58936	4.00000	4.00000	10.00000	.11899	.50056	.09551	.04440	.00907	-.00118	-.00211	
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	

DZ	ALPHA	MACH	ALPHAC	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.000	10.000	.59627	2.00000	2.00000	10.00000	.05102	.40242	.06981	.04125	.00752	-.00044	-.00213	
50.000	12.000	.59724	4.00000	4.00000	10.00000	.07609	.50328	.09730	.04416	.00896	-.00097	-.00211	
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	

REFERENCE DATA
 GREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0 BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0 RUDDER = .000 ELEVON = .000
 HREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0 TORB = 8.000 DX = 10.000
 SCALE = .0125 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	MACH	ALPHAC	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.500	10.000	.58228	2.00000	2.00000	20.00000	.02299	.36934	.06168	.04544	.00757	.00028	-.00221	
3.500	12.000	.58554	4.00000	4.00000	20.00000	.04884	.43558	.08135	.04694	.00815	-.00017	-.00212	
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	

DZ	ALPHA	MACH	ALPHAC	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.500	10.000	.58522	2.00000	2.00000	20.00000	.03582	.37643	.06374	.04264	.00762	.00008	-.00223	
7.500	12.000	.58623	4.00000	4.00000	20.00000	.03591	.44438	.08291	.04545	.00808	-.00036	-.00245	
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	

ARC 14-120(CA238) 747/1 AT1 03S1 (ORBITER DATA) (ZNHX30) (17 OCT 75)
 PARAMETRIC DATA
 BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 03S1 (ORBITER DATA) (ZNHX30) (17 OCT 75)
 PARAMETRIC DATA
 BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA)

(ZNHX30) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA =
 RUDDER =
 LORB =
 DY =

.000 STAB = 5.000
 .000 ELEVON = .000
 8.000 DX = 20.000
 .000 MACH = .500

PARAMETRIC DATA

RUN NO. 0/0		RN/L = 3.30		GRADIENT INTERVAL = -5.00/ 5.00	
MACH	ALPHAO	DX	DY	CL	CD
10.000	10.000	20.00000	.05242	.38247	.06522
10.000	12.000	20.00000	.02600	.45086	.08404
	GRADIENT	.00000	.00000	.00000	.00000
RUN NO. 0/0		RN/L = 3.30		GRADIENT INTERVAL = -5.00/ 5.00	
MACH	ALPHAO	DX	DY	CL	CD
15.000	10.000	20.00000	.03261	.38214	.06533
15.000	12.000	20.00000	.02195	.45718	.08533
	GRADIENT	.00000	.00000	.00000	.00000
RUN NO. 0/0		RN/L = 3.29		GRADIENT INTERVAL = -5.00/ 5.00	
MACH	ALPHAO	DX	DY	CL	CD
30.000	10.000	20.00000	.04541	.39200	.06801
30.000	12.000	20.00000	.08552	.48377	.09179
	GRADIENT	.00000	.00000	.00000	.00000
RUN NO. 0/0		RN/L = 3.30		GRADIENT INTERVAL = -5.00/ 5.00	
MACH	ALPHAO	DX	DY	CL	CD
45.000	10.000	20.00000	.06524	.40161	.06927
45.000	12.000	20.00000	.09032	.49026	.09388
	GRADIENT	.00000	.00000	.00000	.00000
RUN NO. 0/0		RN/L = 3.30		GRADIENT INTERVAL = -5.00/ 5.00	
MACH	ALPHAO	DX	DY	CL	CD
50.000	10.000	20.00000	.00144	.40091	.06955
50.000	12.000	20.00000	.06742	.50275	.09626
	GRADIENT	.00000	.00000	.00000	.00000

CY	CYN	CBL
.00771	-.00006	-.00230
.00802	-.00052	-.00271
.00000	.00000	.00000
CY	CYN	CBL
.00745	-.00014	-.00217
.00808	-.00057	-.00276
.00000	.00000	.00000
CY	CYN	CBL
.00737	-.00040	-.00238
.00882	-.00098	-.00219
.00000	.00000	.00000
CY	CYN	CBL
.00707	-.00064	-.00237
.00867	-.00109	-.00227
.00000	.00000	.00000
CY	CYN	CBL
.00735	-.00047	-.00236
.00883	-.00111	-.00220
.00000	.00000	.00000

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DATE 23 MAR 76 TABULATED SOURCE DATA - CA238 (ZNHX34) (17 OCT 75) PAGE 465

ARC 14-120(CA238) 747/1 AT1 0351 (ORBITTER DATA)

REFERENCE DATA

SREF = 2630.0000 SQ.FT. XMRP = 1109.0000 IN. XO
LREF = 474.8100 IN. YMRP = .0000 IN. YO
BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = .000
TORB = 6.000 DX = .000
DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	30.000	ALPHA0	8.000	ALPHAC	2.00000	CL	.29352	CD	.05110	CLM	.03705	CY	.00880	CYN	-.00046	CBL	-.00260
		ALPHA0	10.000	ALPHAC	4.00000	CL	.36715	CD	.06416	CLM	.04641	CY	.00836	CYN	-.00094	CBL	-.00277
		GRADIENT		ALPHAC	.00000	DY	.00000	CD	.00000	CLM	.00000	CY	.00000	CYN	.00000	CBL	.00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	45.000	ALPHA0	8.000	ALPHAC	2.00000	CL	.29754	CD	.05248	CLM	.03537	CY	.00805	CYN	-.00068	CBL	-.00265
		ALPHA0	10.000	ALPHAC	4.00000	CL	.37919	CD	.06661	CLM	.04500	CY	.00795	CYN	-.00095	CBL	-.00248
		GRADIENT		ALPHAC	.00000	DY	.00000	CD	.00000	CLM	.00000	CY	.00000	CYN	.00000	CBL	.00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	50.000	ALPHA0	8.000	ALPHAC	2.00000	CL	.29988	CD	.05269	CLM	.03508	CY	.00794	CYN	-.00058	CBL	-.00256
		ALPHA0	10.000	ALPHAC	4.00000	CL	.38230	CD	.06730	CLM	.04479	CY	.00828	CYN	-.00082	CBL	-.00265
		GRADIENT		ALPHAC	.00000	DY	.00000	CD	.00000	CLM	.00000	CY	.00000	CYN	.00000	CBL	.00000

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	3.500	ALPHA0	10.000	ALPHAC	2.00000	CL	.46595	CD	.10124	CLM	.02801	CY	.00406	CYN	.00046	CBL	-.00109
		ALPHA0	12.000	ALPHAC	4.00000	CL	.53870	CD	.12511	CLM	.03341	CY	.00528	CYN	-.00013	CBL	-.00053
		GRADIENT		ALPHAC	.00000	DY	.00000	CD	.00000	CLM	.00000	CY	.00000	CYN	.00000	CBL	.00000

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.500	ALPHA0	10.000	ALPHAC	2.00000	CL	.46870	CD	.10190	CLM	.02638	CY	.00389	CYN	.00044	CBL	-.00101
		ALPHA0	12.000	ALPHAC	4.00000	CL	.54574	CD	.12787	CLM	.03155	CY	.00517	CYN	-.00026	CBL	-.00068
		GRADIENT		ALPHAC	.00000	DY	.00000	CD	.00000	CLM	.00000	CY	.00000	CYN	.00000	CBL	.00000

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	30.000	ALPHA0	8.000	ALPHAC	2.00000	CL	.29352	CD	.05110	CLM	.03705	CY	.00880	CYN	-.00046	CBL	-.00260
		ALPHA0	10.000	ALPHAC	4.00000	CL	.36715	CD	.06416	CLM	.04641	CY	.00836	CYN	-.00094	CBL	-.00277
		GRADIENT		ALPHAC	.00000	DY	.00000	CD	.00000	CLM	.00000	CY	.00000	CYN	.00000	CBL	.00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	45.000	ALPHA0	8.000	ALPHAC	2.00000	CL	.29754	CD	.05248	CLM	.03537	CY	.00805	CYN	-.00068	CBL	-.00265
		ALPHA0	10.000	ALPHAC	4.00000	CL	.37919	CD	.06661	CLM	.04500	CY	.00795	CYN	-.00095	CBL	-.00248
		GRADIENT		ALPHAC	.00000	DY	.00000	CD	.00000	CLM	.00000	CY	.00000	CYN	.00000	CBL	.00000

REFERENCE DATA

SREF = 2630.0000 SQ.FT. XMRP = 1109.0000 IN. XO
LREF = 474.8100 IN. YMRP = .0000 IN. YO
BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
TORB = 8.000 DX = .000
DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITTER DATA)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
TORB = 8.000 DX = .000
DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITTER DATA)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
TORB = 8.000 DX = .000
DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITTER DATA)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
TORB = 8.000 DX = .000
DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITTER DATA)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
TORB = 8.000 DX = .000
DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITTER DATA)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
TORB = 8.000 DX = .000
DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITTER DATA)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
TORB = 8.000 DX = .000
DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITTER DATA)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
TORB = 8.000 DX = .000
DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITTER DATA)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
TORB = 8.000 DX = .000
DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITTER DATA)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
TORB = 8.000 DX = .000
DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITTER DATA)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
TORB = 8.000 DX = .000
DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITTER DATA)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
TORB = 8.000 DX = .000
DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITTER DATA)

PARAMETRIC DATA

SREF = 2590.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 930.5800 IN. ZMRP = 375.0000 IN. ZO TORB = .000 DX = .000
 SCALE = .0125 DY = .000 MACH = .600

RUN NO. 0 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00 / 5.00
 MACH ALPHA ALPHAC DX DY CL CD CLM CBL
 3.500 8.000 2.00000 -.03811 .00000 .35204 .08028 .02502 -.00059
 7.500 10.000 4.00000 -.06423 .00000 .41371 .09464 .03221 -.00071
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 0 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00 / 5.00
 MACH ALPHA ALPHAC DX DY CL CD CLM CBL
 7.500 8.000 2.00000 .01798 .00000 .35307 .08069 .02238 -.00071
 7.500 10.000 4.00000 -.04063 .00000 .42057 .09597 .02926 -.00079
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00 / 5.00
 MACH ALPHA ALPHAC DX DY CL CD CLM CBL
 10.000 8.000 2.00000 -.01436 .00000 .35427 .08084 .02175 -.00082
 10.000 10.000 4.00000 -.07557 .00000 .42275 .09642 .02849 -.00094
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00 / 5.00
 MACH ALPHA ALPHAC DX DY CL CD CLM CBL
 15.000 8.000 2.00000 .07807 .00000 .35606 .08214 .02008 -.00082
 15.000 10.000 4.00000 -.01760 .00000 .42661 .09790 .02685 -.00100
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00 / 5.00
 MACH ALPHA ALPHAC DX DY CL CD CLM CBL
 30.000 8.000 2.00000 .02985 .00000 .35560 .08426 .01835 -.00102
 30.000 10.000 4.00000 -.08251 .00000 .44476 .10159 .02451 -.00105
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00 / 5.00
 MACH ALPHA ALPHAC DX DY CL CD CLM CBL
 45.000 8.000 2.00000 .04067 .00000 .35973 .08554 .01704 -.00091
 45.000 10.000 4.00000 -.05439 .00000 .44437 .10411 .02373 -.00086
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

(VNHM41) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

DZ = 45.000
 RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH .50000
 ALPHAAC 2.000
 4.000
 GRADIENT .50000
 .00000
 .00000

IORB 4.01317
 DX -.07934
 DY -.09718
 CD .28000
 CL .35279
 CLM .01574
 CBL -.00105

CLM .00782
 CYN .00093
 CY .00263
 .00305
 .00021
 -.00000

BETA = .000
 RUDDER = .000
 IORB = 4.000
 DY = .000
 MACH = 5.000
 ELEVON = 5.000
 DX = .000
 MACH = .500

DZ = 50.000
 RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH .50000
 ALPHAAC 2.000
 4.000
 GRADIENT .50000
 .00000
 .00000

IORB 3.99721
 DX -.08686
 DY -.08635
 CD .28209
 CL .35752
 CLM .01537
 CBL -.00091

CLM .00757
 CYN .00090
 CY .00254
 .00300
 .00023
 .00000

BETA = .000
 RUDDER = .000
 IORB = 4.000
 DY = .000
 MACH = 5.000
 ELEVON = 5.000
 DX = .000
 MACH = .300

DZ = 50.000
 RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH .50000
 ALPHAAC 2.000
 4.000
 GRADIENT .50000
 .00000
 .00000

IORB 3.94057
 DX -.12072
 DY -.14681
 CD .08446
 CL .37772
 CLM .01537
 CBL -.00091

CLM .00757
 CYN .00090
 CY .00254
 .00300
 .00023
 .00000

BETA = .000
 RUDDER = .000
 IORB = 4.000
 DY = .000
 MACH = 5.000
 ELEVON = 5.000
 DX = .000
 MACH = .300

DZ = 50.000
 RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH .50000
 ALPHAAC 2.000
 4.000
 GRADIENT .50000
 .00000
 .00000

IORB 3.93590
 DX -.00129
 DY -.02787
 CD .30620
 CL .30291
 CLM .02255
 CBL -.00047

CLM .01568
 CYN .00073
 CY .00326
 .00315
 -.00006
 -.00001

BETA = .000
 RUDDER = .000
 IORB = 4.000
 DY = .000
 MACH = 5.000
 ELEVON = 5.000
 DX = .000
 MACH = .300

DZ = 3.500
 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH .30000
 ALPHAAC 2.000
 4.000
 GRADIENT .30000
 .00000
 .00000

IORB 3.96366
 DX -.01626
 DY -.01679
 CD .24783
 CL .30620
 CLM .02255
 CBL -.00047

CLM .01568
 CYN .00073
 CY .00326
 .00315
 -.00006
 -.00001

BETA = .000
 RUDDER = .000
 IORB = 4.000
 DY = .000
 MACH = 5.000
 ELEVON = 5.000
 DX = .000
 MACH = .300

DZ = 7.500
 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH .30000
 ALPHAAC 2.000
 4.000
 GRADIENT .30000
 .00000
 .00000

IORB 3.99447
 DX -.06493
 DY -.04520
 CD .25897
 CL .31786
 CLM .01997
 CBL -.00048

CLM .01347
 CYN .00050
 CY .00189
 .00266
 .00038
 .00011

BETA = .000
 RUDDER = .000
 IORB = 4.000
 DY = .000
 MACH = 5.000
 ELEVON = 5.000
 DX = .000
 MACH = .300

(VNM42) (17 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITTER DATA)

PARAMETRIC DATA

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 932.6900 IN. ZMRP = 375.0000 IN. ZO 1ORB = .000 DX = .000
 SCALE = .0125 GRADIENT = .000000 DY = .000 MACH = .300

RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000 MACH .30000 1ORB 3.95201 DX -.00117 DY -.01635 CL .25472 CD .07000 CBL
 ALPHA 2.000 3.99449 -.08873 -.04987 .32044 .07979 .01200 .00063 CYN .00035
 4.000 .02124 -.04378 -.01676 .03286 .00489 .01912 .00144 .00043
 GRADIENT .000000 .000000 .000000 .000000 .000000 .000000 .00356 .00040 .00004 .00019

RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000 MACH .30000 1ORB 4.00542 DX -.07846 DY -.02784 CL .26416 CD .07178 CBL
 ALPHA 2.000 3.96126 -.04327 -.03544 .33075 .08097 .01076 .00246 CYN .00059
 4.000 -.02208 .01759 -.00380 .03330 .00460 .01819 .00252 .00056 .00016
 GRADIENT .000000 .000000 .000000 .000000 .000000 .000000 .00371 .00003 .00001 .00016

RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000 MACH .30000 1ORB 4.02939 DX -.11489 DY -.03594 CL .27456 CD .07425 CBL
 ALPHA 2.000 3.97863 -.07696 -.04474 .34867 .08424 .00924 .00250 CYN .00053
 4.000 -.02538 .01896 -.00440 .03705 .00500 .01711 .00195 .00044 .00007
 GRADIENT .000000 .000000 .000000 .000000 .000000 .000000 .00394 .00027 .00005 .00007

RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000 MACH .30000 1ORB 4.02411 DX -.09171 DY -.12238 CL .28098 CD .07544 CBL
 ALPHA 2.000 3.98272 -.05811 -.10952 .35594 .08543 .00835 .00198 CYN .00053
 4.000 -.02069 .01680 .00643 .03748 .00500 .01558 .00119 .00041 .00051
 GRADIENT .000000 .000000 .000000 .000000 .000000 .000000 .00362 .00040 .00006 .00011

RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000 MACH .30000 1ORB 4.02982 DX -.09355 DY -.16157 CL .28410 CD .07587 CBL
 ALPHA 2.000 3.97770 -.04024 -.13170 .35813 .08564 .00809 .00209 CYN .00057
 4.000 -.02606 .02676 .01493 .03702 .00488 .01499 .00117 .00045 .00004
 GRADIENT .000000 .000000 .000000 .000000 .000000 .000000 .00345 .00046 .00006 .00004

ARC 14-120(CA238) 747/1 ATI 02S1 (ORBITER DATA)

(ZNH013) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAO	MACH	ALPHAO	ALPHAC	DX	DY	CL	CLM	CD	CY	CYN	CBL
45.000	6.000	.59017	.00000	.00000	-.01960	-.53810	.29372	.07465	.00866	.00127	.00098	-.00068
45.000	8.000	.59079	2.00000	.05543	.053705	.36866	.08519	.01724	.00086	.00143	.00086	-.00087
45.000	10.000	.59103	4.00000	.08046	-.55385	.45269	.10364	.02296	.00051	.00209	.00051	-.00079
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAO	MACH	ALPHAO	ALPHAC	DX	DY	CL	CLM	CD	CY	CYN	CBL
50.000	6.000	.59036	.00000	.00000	.02183	-.48797	.29206	.07532	.00789	.00131	.00098	-.00064
50.000	8.000	.59152	2.00000	.052602	-.18551	.36978	.08628	.01642	.00090	.00135	.00090	-.00066
50.000	10.000	.59141	4.00000	.08359	-.56621	.45785	.10490	.02222	.00054	.00215	.00054	-.00056
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC 14-120(CA238) 747/1 ATI 02S1 (ORBITER DATA)

(ZNH020) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAO	MACH	ALPHAO	ALPHAC	DX	DY	CL	CLM	CD	CY	CYN	CBL
3.500	4.000	.58802	.00000	.00000	-.05223	-.26345	.11198	.05485	.04559	.00274	.00074	-.00107
3.500	6.000	.58859	2.00000	.02453	-.02453	-.45158	.16309	.05660	.05006	.00314	.00079	-.00122
3.500	8.000	.58835	4.00000	.08535	-.08535	-.29278	.22196	.06184	.05735	.00355	.00083	-.00104
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAO	MACH	ALPHAO	ALPHAC	DX	DY	CL	CLM	CD	CY	CYN	CBL
7.500	4.000	.58707	.00000	.00000	-.10972	-.44775	.12113	.05545	.04303	.00262	.00076	-.00120
7.500	6.000	.58741	2.00000	.06173	-.06173	-.37930	.16475	.05733	.04732	.00328	.00084	-.00121
7.500	8.000	.58730	4.00000	.06510	-.06510	-.36577	.22543	.06251	.05533	.00390	.00084	-.00119
GRADIENT		.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(ZNH021) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

DZ 45.000 ALPHA0 4.000 MACH .58957 ALPHAAC .00000 DX -.02796 DY -.28104 CL .11495 CD .05757 CLM .03640 CBL -.00131
 45.000 4.000 58957 .00000 10861 -.10861 -.27460 .19654 .06166 .04288 .00061
 45.000 8.000 58944 .00000 16285 -.16285 -.17509 .26895 .06917 .05218 .00058
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

OZ 50.000 ALPHA0 4.000 MACH .58947 ALPHAAC .00000 DX -.03023 DY -.32597 CL .11588 CD .05797 CLM .03604 CBL -.00131
 50.000 4.000 58885 .00000 18927 -.18927 -.26854 .20065 .06219 .04259 .00058
 50.000 8.000 58978 .00000 21103 -.21103 -.11324 .27355 .06981 .05191 .00051
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

DZ 3.500 ALPHA0 8.000 MACH .58837 ALPHAAC .00000 DX -.16255 DY .01217 CL .31589 CD .06744 CLM .06048 CBL -.00124
 3.500 8.000 58507 .00000 01165 -.01165 -.22915 .38219 .08089 .06746 .00056
 3.500 12.000 58431 .00000 13636 -.13636 .45310 .10211 .07406 .07406 .00056
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

OZ 7.500 ALPHA0 8.000 MACH .58758 ALPHAAC .00000 DX -.18018 DY -.11484 CL .31793 CD .06915 CLM .05834 CBL -.00133
 7.500 8.000 58659 .00000 06165 -.06165 -.19164 .38278 .08217 .06582 .00048
 7.500 12.000 58530 .00000 12718 -.12718 .45956 .10429 .07196 .07196 .00048
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(ZNH022) (17 OCT 75)

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DATE 23 MAR 76

TABULATED SOURCE DATA - CA238

PAGE 433

ARC 14-120(CA238) 747/1 AT1 02S1 (ORBITER DATA)

(ZNH023) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
LREF = 474.8100 IN. YMRP = .0000 IN. Y0
BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
SCALE = .0125

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = .000
TORB = 6.000 DX = .000
DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
45.000	6.000	.58641	.00000	.02545	-.31603	.21689	.06271	.04193	.00182	.00059	-.00141
45.000	8.000	.58821	2.00000	-.10675	-.27867	.29012	.07069	.05219	.00191	.00045	-.00130
45.000	10.000	.58801	4.00000	-.15959	-.27362	.37463	.08556	.06099	.00236	.00017	-.00135
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.000	6.000	.58729	.00000	.06336	-.39692	.21499	.06313	.04166	.00191	.00062	-.00126
50.000	8.000	.58809	2.00000	-.12785	-.35762	.29169	.07114	.05209	.00219	.00052	-.00137
50.000	10.000	.58823	4.00000	-.17777	-.33684	.37701	.08636	.06053	.00214	.00022	-.00125
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
LREF = 474.8100 IN. YMRP = .0000 IN. Y0
BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
SCALE = .0125

BETA = .000 STAB = -1.000
RUDDER = .000 ELEVON = .000
TORB = 6.000 DX = .000
DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.500	6.000	.58556	.00000	-.15710	-.05439	.21814	.05847	.05061	.00322	.00075	-.00121
3.500	8.000	.58534	2.00000	-.05661	-.04203	.27322	.06437	.06440	.00380	.00071	-.00112
3.500	10.000	.58738	4.00000	-.07286	-.01917	.33132	.07510	.06962	.00327	.00042	-.00137
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.500	6.000	.58752	.00000	-.15273	-.13760	.21899	.05878	.04859	.00330	.00078	-.00123
7.500	8.000	.58737	2.00000	-.02438	-.07570	.27358	.06494	.05790	.00383	.00078	-.00115
7.500	10.000	.58739	4.00000	-.04246	-.02463	.33503	.07630	.06737	.00373	.00049	-.00146
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC 14-120(CA238) 747/1 AT1 02S1 (ORBITER DATA)

(ZNH024) (17 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (ZNH024) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XC
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 938.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA =
 RUDDER =
 TORB =
 DY =

PARAMETRIC DATA

.000 STAB =
 .000 ELEVON =
 6.000 DX =
 .000 MACH =

ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
10.000	.58782	.00000	-.18388	-.04983	.21860	.05915	.04761	.00261	.00073	-.00113
10.000	.58743	2.00000	-.00854	-.02874	.27490	.06527	.05750	.00357	.00073	-.00119
10.000	.58754	4.00000	-.07576	-.07593	.33555	.07673	.06649	.00318	.00040	-.00152
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
15.000	.58804	.00000	-.10235	-.01767	.21528	.05977	.04584	.00289	.00076	-.00135
15.000	.58810	2.00000	-.05297	-.02567	.27530	.06595	.05588	.00275	.00059	-.00137
15.000	.58742	4.00000	.00257	.04641	.34261	.07805	.06523	.00354	.00046	-.00171
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
30.000	.58757	.00000	-.09908	-.05168	.21878	.06145	.04353	.00258	.00069	-.00153
30.000	.58751	2.00000	-.03402	-.00815	.28555	.06859	.05389	.00249	.00049	-.00156
30.000	.58750	4.00000	-.11321	-.04740	.36139	.08238	.06301	.00348	.00033	-.00171
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
45.000	.58595	.00000	.01170	-.06028	.21643	.06260	.04202	.00179	.00057	-.00150
45.000	.58569	2.00000	-.14933	-.07757	.29153	.07037	.05242	.00223	.00044	-.00170
45.000	.58677	4.00000	-.17441	-.15908	.37290	.08486	.06077	.00275	.00029	-.00157
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.000	.58618	.00000	.03737	-.02820	.21827	.06291	.04173	.00195	.00054	-.00166
50.000	.58655	2.00000	-.18265	-.01953	.29405	.07071	.05211	.00244	.00048	-.00166
50.000	.58739	4.00000	-.13851	-.08646	.37530	.08530	.06016	.00218	.00022	-.00150
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0 BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0 RUDDER = 10.000 ELEVON = .000
 BREF = 935.6800 IN. ZMRP = 375.0000 IN. Z0 LORB = .0000 DX = .000
 SCALE = .0125 RUN NO. 361/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00 DY = .600 MACH =

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
2.000	7.903	.58715	2.00000	-.05230	.19679	.27133	.04740	.04804	.00914	-.00062	-.00217
2.000	10.016	.58790	4.00000	-.19095	.23177	.32816	.05814	.05865	.00906	-.00067	-.00269
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.500	8.096	.58749	2.00000	-.13248	.15931	.28277	.04901	.04746	.00858	-.00050	-.00225
3.500	9.922	.58652	4.00000	-.06137	.16359	.33033	.05820	.05604	.00917	-.00043	-.00256
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.500	8.104	.58730	2.00000	-.110972	.22874	.29056	.04957	.04302	.00929	-.00019	-.00247
7.500	9.932	.58642	4.00000	-.00644	.19517	.34017	.05939	.05135	.00914	-.00043	-.00287
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
15.000	8.096	.58578	2.00000	-.12131	.20959	.28988	.04932	.04029	.00933	-.00005	-.00240
15.000	9.970	.58622	4.00000	-.05314	.17741	.31493	.06043	.04939	.00870	-.00047	-.00272
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
15.000	8.062	.58596	2.00000	-.09552	.20626	.29245	.05072	.03803	.00915	-.00021	-.00236
15.000	9.922	.58533	4.00000	-.03320	.14240	.35126	.06161	.04706	.00888	-.00046	-.00280
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

DZ	ALPHA	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
30.000	8.093	.58552	2.00000	-.17938	.18027	.30570	.05290	.03616	.00851	-.00040	-.00262
30.000	9.965	.58513	4.00000	-.15382	.12485	.37249	.06587	.04464	.00879	-.00059	-.00293
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = .000
 LORB = .000 DX = .000
 DY = .600 MACH =

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(ZNH037) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 372/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	3.500	ALPHA	6.184	ALPHAC	.00000	DX	-.13532	DY	.15768	CL	.28978	CD	.04194	CLM	.03876	CY	.00931	CYN	.00012	CBL	-.00206
	3.500	MACH	.59018	ALPHAC	.00000	DX	-.13532	DY	.15768	CL	.28978	CD	.04194	CLM	.03876	CY	.00931	CYN	.00012	CBL	-.00206
	3.500	MACH	.59038	ALPHAC	2.00000	DX	.10993	DY	.14028	CL	.26819	CD	.04657	CLM	.04751	CY	.00853	CYN	-.00024	CBL	-.00212
	3.500	MACH	.59033	ALPHAC	4.00000	DX	.04999	DY	.13338	CL	.37421	CD	.05676	CLM	.05718	CY	.00873	CYN	-.00025	CBL	-.00235
		GRADIENT	.00000	ALPHAC	.00000	DX	.00000	DY	.00000	CL	.00000	CD	.00000	CLM	.00000	CY	.00000	CYN	.00000	CBL	.00000

RUN NO. 373/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.500	ALPHA	6.130	ALPHAC	.00000	DX	-.07039	DY	.09754	CL	.28874	CD	.04178	CLM	.03262	CY	.00882	CYN	-.00012	CBL	-.00226
	7.500	MACH	.58960	ALPHAC	.00000	DX	-.07039	DY	.09754	CL	.28874	CD	.04178	CLM	.03262	CY	.00882	CYN	-.00012	CBL	-.00226
	7.500	MACH	.58960	ALPHAC	2.00000	DX	.05838	DY	.13412	CL	.27509	CD	.04715	CLM	.04278	CY	.00906	CYN	-.00002	CBL	-.00239
	7.500	MACH	.58902	ALPHAC	4.00000	DX	-.01620	DY	.06583	CL	.32595	CD	.05782	CLM	.05296	CY	.00825	CYN	-.00044	CBL	-.00280
		GRADIENT	.00000	ALPHAC	.00000	DX	.00000	DY	.00000	CL	.00000	CD	.00000	CLM	.00000	CY	.00000	CYN	.00000	CBL	.00000

RUN NO. 374/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	10.000	ALPHA	6.172	ALPHAC	.00000	DX	-.11295	DY	.09917	CL	.23251	CD	.04217	CLM	.03080	CY	.00862	CYN	-.00020	CBL	-.00221
	10.000	MACH	.58846	ALPHAC	.00000	DX	-.11295	DY	.09917	CL	.23251	CD	.04217	CLM	.03080	CY	.00862	CYN	-.00020	CBL	-.00221
	10.000	MACH	.58936	ALPHAC	2.00000	DX	.06036	DY	.12215	CL	.27349	CD	.04730	CLM	.04033	CY	.00784	CYN	-.00022	CBL	-.00226
	10.000	MACH	.58870	ALPHAC	4.00000	DX	-.01932	DY	.10589	CL	.33806	CD	.05842	CLM	.05071	CY	.00803	CYN	-.00043	CBL	-.00274
		GRADIENT	.00000	ALPHAC	.00000	DX	.00000	DY	.00000	CL	.00000	CD	.00000	CLM	.00000	CY	.00000	CYN	.00000	CBL	.00000

RUN NO. 375/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	15.000	ALPHA	6.191	ALPHAC	.00000	DX	-.14564	DY	.13277	CL	.27524	CD	.04281	CLM	.02796	CY	.00855	CYN	-.00012	CBL	-.00232
	15.000	MACH	.58908	ALPHAC	.00000	DX	-.14564	DY	.13277	CL	.27524	CD	.04281	CLM	.02796	CY	.00855	CYN	-.00012	CBL	-.00232
	15.000	MACH	.58978	ALPHAC	2.00000	DX	.04444	DY	.06929	CL	.27616	CD	.04824	CLM	.03726	CY	.00857	CYN	-.00019	CBL	-.00244
	15.000	MACH	.58882	ALPHAC	4.00000	DX	-.02656	DY	.07398	CL	.34191	CD	.05951	CLM	.04770	CY	.00780	CYN	-.00064	CBL	-.00267
		GRADIENT	.00000	ALPHAC	.00000	DX	.00000	DY	.00000	CL	.00000	CD	.00000	CLM	.00000	CY	.00000	CYN	.00000	CBL	.00000

RUN NO. 376/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	30.000	ALPHA	6.149	ALPHAC	.00000	DX	-.12512	DY	.12170	CL	.23396	CD	.04426	CLM	.02433	CY	.00812	CYN	-.00023	CBL	-.00247
	30.000	MACH	.58881	ALPHAC	.00000	DX	-.12512	DY	.12170	CL	.23396	CD	.04426	CLM	.02433	CY	.00812	CYN	-.00023	CBL	-.00247
	30.000	MACH	.58820	ALPHAC	2.00000	DX	.02104	DY	.11609	CL	.28703	CD	.05083	CLM	.03502	CY	.00809	CYN	-.00024	CBL	-.00255
	30.000	MACH	.58887	ALPHAC	4.00000	DX	-.13625	DY	.08909	CL	.36445	CD	.06418	CLM	.04567	CY	.00813	CYN	-.00055	CBL	-.00255
		GRADIENT	.00000	ALPHAC	.00000	DX	.00000	DY	.00000	CL	.00000	CD	.00000	CLM	.00000	CY	.00000	CYN	.00000	CBL	.00000

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

(ZNH040) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

RUN NO. 0/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
45.000	4.000	.52585	.00000	.03619	.07788	.19818	.06699	-.00007	.00308	.00117	-.00126
45.000	6.000	.58757	2.00000	-.12600	.00303	.27535	.07392	.00771	.00294	.00107	-.00103
45.000	8.000	.58594	4.00000	-.16483	-.04890	.36505	.08464	.01633	.00290	.00098	-.00104
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.000	4.000	.52593	.00000	.11191	.07140	.19802	.06727	-.00040	.00273	.00113	-.00119
50.000	6.000	.58745	2.00000	-.22841	-.02607	.27643	.07444	.00714	.00248	.00099	-.00092
50.000	8.000	.58588	4.00000	-.18856	-.05982	.36162	.08546	.01615	.00288	.00095	-.00102
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

(ZNHX10) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.500	10.000	.53470	2.00000	.00000	.69102	.46515	.10095	.02806	.00398	.00036	-.00131
3.500	12.000	.53429	4.00000	.00000	.65567	.53309	.12518	.03351	.00498	-.00019	-.00094
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
7.500	10.000	.53623	2.00000	.00000	.10196	.46871	.10188	.02638	.00387	.00043	-.00103
7.500	12.000	.53587	4.00000	.00000	.12026	.54571	.12784	.03155	.00512	-.00027	-.00074
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

**ORIGINAL PAGE IS
OF POOR QUALITY**

DATE 23 MAR 76 TABULATED SOURCE DATA - CA23B PAGE 453
ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (ZNHX14) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
LREF = 474.8100 IN. YMRP = .0000 IN. Y0
BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00
ALPHAO MACH ALPHAO DX CL CLM CBL
30.000 8.000 2.00000 10.00000 .36731 .08429 .01610
30.000 10.000 4.00000 10.00000 .44515 .10198 .02142
GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00
ALPHAO MACH ALPHAO DX CL CLM CBL
45.000 8.000 2.00000 10.00000 .36993 .08531 .01521
45.000 10.000 4.00000 10.00000 .45985 .10474 .02053
GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00
ALPHAO MACH ALPHAO DX CL CLM CBL
50.000 8.000 2.00000 10.00000 .37487 .08602 .01545
50.000 10.000 4.00000 10.00000 .45962 .10491 .02036
GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
LREF = 474.8100 IN. YMRP = .0000 IN. Y0
BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00
ALPHAO MACH ALPHAO DX CL CLM CBL
3.500 8.000 2.00000 10.00000 .45294 .09745 .02438
3.500 10.000 4.00000 10.00000 .52051 .12159 .02350
GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 0 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00
ALPHAO MACH ALPHAO DX CL CLM CBL
7.500 8.000 2.00000 10.00000 .46011 .10012 .02373
7.500 10.000 4.00000 10.00000 .55825 .12476 .02335
GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
TORB = 6.000 DX = 10.000
DY = .000 MACH = .600

CY .00117 CYN .00095 CBL -.00083
.00146 .00057 -.00095
.00000 .00000 .00000

CY .00132 CYN .00105 CBL -.00070
.00124 .00048 -.00077
.00000 .00000 .00000

CY -.00018 CYN .00074 CBL -.00068
.00108 .00048 -.00061
.00000 .00000 .00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
TORB = 9.000 DX = 10.000
DY = .000 MACH = .600

CY .00167 CYN .00085 CBL -.00057
.00448 .00026 -.00004
.00000 .00000 .00000

CY .00250 CYN .00077 CBL -.00055
.00452 .00011 -.00021
.00000 .00000 .00000

(ZNHX15) (17 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITTER DATA)

(ZNHX16) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XHRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YHRP = .0000 IN. YO
 BREF = 936.6800 IN. ZHRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.000	8.000	.58987	2.00000	20.00000	-.80299	.37213	.08622	.01354	.00212	.00094	-.00085
50.000	10.000	.58896	4.00000	20.00000	-.77864	.45747	.10518	.01839	.00307	.00051	-.00096
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITTER DATA)

(ZNHX17) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XHRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YHRP = .0000 IN. YO
 BREF = 936.6800 IN. ZHRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
3.500	10.000	.58981	2.00000	20.00000	-.53583	.44996	.09892	.02216	.00239	.00074	-.00121
3.500	12.000	.58835	4.00000	20.00000	-.91880	.52070	.12380	.02540	.00624	.00017	-.00015
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XHRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YHRP = .0000 IN. YO
 BREF = 936.6800 IN. ZHRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
10.000	10.000	.59142	2.00000	20.00000	-.82520	.46244	.10316	.01592	.00432	.00070	-.00084
10.000	12.000	.59107	4.00000	20.00000	-.81252	.53488	.12675	.02307	.00503	-.00010	-.00062
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XHRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YHRP = .0000 IN. YO
 BREF = 936.6800 IN. ZHRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	CLM	CY	CYN	CBL
15.000	10.000	.59121	2.00000	20.00000	-.83998	.46368	.10350	.01893	.00455	.00059	-.00120
15.000	12.000	.59220	4.00000	20.00000	-.83205	.54052	.12819	.02194	.00520	-.00015	-.00075
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

(ZNHX17) (17 OCT 75)

TABULATED SOURCE DATA - CA23B
ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

DATE 23 MAR 76

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
1CRB = 8.000 DX = 20.000
DY = .000 MACH = .600

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
LREF = 474.8100 IN. YMRP = .0000 IN. Y0
BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ 30.000 ALPHA0 10.000 MACH .59109
30.000 10.000 10.000 ALPHAAC 2.00000
30.000 12.000 12.000 4.00000
GRADIENT .00000 .00000 .00000
CL .47466
CD .10600
CLM .01801
CY .00433
CYN .00053
CBL -.00103
DY -.87982
DX 20.00000
DY -.77306
CD .13429
CLM .02145
CY .00601
CYN -.00028
CBL -.00084
DY .00000
CD .00000
CLM .00000
CY .00000
CYN .00000
CBL .00000

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ 45.000 ALPHA0 10.000 MACH .59145
45.000 10.000 10.000 ALPHAAC 2.00000
45.000 12.000 12.000 4.00000
GRADIENT .00000 .00000 .00000
CL .48320
CD .10690
CLM .01805
CY .00321
CYN .00018
CBL -.00088
DY -.82857
DX 20.00000
DY -.78742
CD .13792
CLM .02117
CY .00484
CYN -.00033
CBL -.00089
DY .00000
CD .00000
CLM .00000
CY .00000
CYN .00000
CBL .00000

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ 50.000 ALPHA0 10.000 MACH .59044
50.000 10.000 10.000 ALPHAAC 2.00000
50.000 12.000 12.000 4.00000
GRADIENT .00000 .00000 .00000
CL .48115
CD .10712
CLM .01733
CY .00346
CYN .00033
CBL -.00089
DY -.82032
DX 20.00000
DY .00000
CD .00000
CLM .00000
CY .00502
CYN -.00029
CBL -.00078
DY .00000
CD .00000
CLM .00000
CY .00000
CYN .00000
CBL .00000

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(ZNHX27) (17 OCT 75)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = .000
1CRB = 8.000 DX = .000
DY = .000 MACH = .600

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
LREF = 474.8100 IN. YMRP = .0000 IN. Y0
BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ 3.500 ALPHA0 10.000 MACH .58756
3.500 10.000 10.000 ALPHAAC 2.00000
3.500 12.000 12.000 4.00000
GRADIENT .00000 .00000 .00000
CL .38555
CD .06449
CLM .05366
CY .00883
CYN .00026
CBL -.00254
DY .15855
DX 20.00000
DY .04730
CD .08454
CLM .05978
CY .00824
CYN -.00104
CBL -.00218
DY .00000
CD .00000
CLM .00000
CY .00000
CYN .00000
CBL .00000

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ 7.500 ALPHA0 10.000 MACH .58562
7.500 10.000 10.000 ALPHAAC 2.00000
7.500 12.000 12.000 4.00000
GRADIENT .00000 .00000 .00000
CL .38557
CD .06456
CLM .05106
CY .00801
CYN -.00007
CBL -.00233
DY .00435
DX 20.00000
DY .00000
CD .09592
CLM .07400
CY .00873
CYN -.00098
CBL -.00223
DY .00000
CD .00000
CLM .00000
CY .00000
CYN .00000
CBL .00000

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA)

REFERENCE DATA

DZ = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 .REF = 474.8100 IN. YMRP = .0000 IN. YO
 .REF = 936.5800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHAO	ALPHAC	DX	DY	CL	CD	CLM	CYN	CBL
50.000	8.000	2.00000	10.00000	.05297	.29927	.05338	.03197	-.00027	-.00238
50.000	10.000	4.00000	10.00000	.02953	.38144	.06826	.04104	-.00051	-.00236
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA)

REFERENCE DATA

DZ = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 .REF = 474.8100 IN. YMRP = .0000 IN. YO
 .REF = 936.5800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHAO	ALPHAC	DX	DY	CL	CD	CLM	CYN	CBL
3.500	10.000	2.00000	10.00000	.07085	.36973	.06018	.05095	-.00001	-.00235
3.500	12.000	4.00000	10.00000	.00873	.44062	.08157	.05506	-.00031	-.00309
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

DZ 7.500

MACH 58770
 .REF 58815
 .REF 58827
 .REF 58800

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHAO	ALPHAC	DX	DY	CL	CD	CLM	CYN	CBL
7.500	10.000	2.00000	10.00000	.03020	.37631	.06290	.04780	-.00017	-.00221
7.500	12.000	4.00000	10.00000	.03353	.44957	.08351	.05191	-.00058	-.00278
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

DZ 10.000

MACH 58770
 .REF 58815
 .REF 58827
 .REF 58800

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHAO	ALPHAC	DX	DY	CL	CD	CLM	CYN	CBL
10.000	10.000	2.00000	10.00000	-.01491	.38109	.06466	.04549	-.00024	-.00214
10.000	12.000	4.00000	10.00000	.04742	.45639	.08492	.04961	-.00075	-.00256
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

DZ 15.000

MACH 58770
 .REF 58815
 .REF 58827
 .REF 58800

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHAO	ALPHAC	DX	DY	CL	CD	CLM	CYN	CBL
15.000	10.000	2.00000	10.00000	.09362	.38557	.06547	.04342	-.00046	-.00227
15.000	12.000	4.00000	10.00000	.06535	.46210	.08622	.04743	-.00103	-.00241
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

TABULATED SOURCE DATA - CA238 (ZNHX29) (17 OCT 75)

REFERENCE DATA

DZ = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0 BETA = .000 STAB = 5.000
LREF = 474.8100 IN. YMRP = .0000 IN. Y0 RUDDER = .000 ELEVON = .000
PREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0 TORB = .000 DX = 10.000
SCALE = .0125 DY = .000 MACH = .600

RUN NO. 0 / 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00
MACH .58839 ALPHA0 2.00000 ALPHAC 2.00000 CLM .04206 CBL .00242
.58842 ALPHA12 10.00000 CLM .06782 .04206 CBL .00242
.58845 ALPHA24 10.00000 CLM .09262 .04206 CBL .00242
GRADIENT .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
MACH .58880 ALPHA0 2.00000 ALPHAC 2.00000 CLM .04156 CBL .00257
.58883 ALPHA12 10.00000 CLM .06943 .04156 CBL .00257
.58886 ALPHA24 10.00000 CLM .09651 .04156 CBL .00257
GRADIENT .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
MACH .58927 ALPHA0 2.00000 ALPHAC 2.00000 CLM .04125 CBL .00213
.58930 ALPHA12 10.00000 CLM .09730 .04125 CBL .00213
.58933 ALPHA24 10.00000 CLM .09730 .04125 CBL .00213
GRADIENT .00000 .00000 .00000 .00000 .00000 .00000

PARAMETRIC DATA

DZ = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0 BETA = .000 STAB = 5.000
LREF = 474.8100 IN. YMRP = .0000 IN. Y0 RUDDER = .000 ELEVON = .000
PREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0 TORB = .000 DX = 10.000
SCALE = .0125 DY = .000 MACH = .600

RUN NO. 0 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00
MACH .58954 ALPHA0 2.00000 ALPHAC 2.00000 CLM .04544 CBL .00221
.58957 ALPHA12 10.00000 CLM .08135 .04544 CBL .00221
.58960 ALPHA24 10.00000 CLM .08135 .04544 CBL .00221
GRADIENT .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
MACH .58983 ALPHA0 2.00000 ALPHAC 2.00000 CLM .04264 CBL .00223
.58986 ALPHA12 10.00000 CLM .06374 .04264 CBL .00223
.58989 ALPHA24 10.00000 CLM .08291 .04264 CBL .00223
GRADIENT .00000 .00000 .00000 .00000 .00000 .00000

REFERENCE DATA

DZ = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0 BETA = .000 STAB = 5.000
LREF = 474.8100 IN. YMRP = .0000 IN. Y0 RUDDER = .000 ELEVON = .000
PREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0 TORB = .000 DX = 10.000
SCALE = .0125 DY = .000 MACH = .600

RUN NO. 0 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00
MACH .58983 ALPHA0 2.00000 ALPHAC 2.00000 CLM .04264 CBL .00223
.58986 ALPHA12 10.00000 CLM .06374 .04264 CBL .00223
.58989 ALPHA24 10.00000 CLM .08291 .04264 CBL .00223
GRADIENT .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
MACH .58983 ALPHA0 2.00000 ALPHAC 2.00000 CLM .04264 CBL .00223
.58986 ALPHA12 10.00000 CLM .06374 .04264 CBL .00223
.58989 ALPHA24 10.00000 CLM .08291 .04264 CBL .00223
GRADIENT .00000 .00000 .00000 .00000 .00000 .00000

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(ZNHX31) (17 OCT 75)

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO LORB = .000 DX = 20.000
 SCALE = .0125 GRADIENT = .00000 .00000 .00000 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 DZ ALPHA MACH ALPHA DX CLM CBL
 50.000 8.000 .5899 2.00000 20.00000 .02027 .29534 .05362 .03066 .00645 -.00024
 50.000 10.000 .58709 4.00000 20.00000 .02391 .37739 .06780 .03986 .00591 -.00053
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(ZNHX34) (17 OCT 75)

REFERENCE DATA

PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO LORB = .000 DX = .000
 SCALE = .0125 GRADIENT = .00000 .00000 .00000 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00
 DZ ALPHA MACH ALPHA DX CLM CBL
 3.500 8.000 .58780 2.00000 .00000 .07105 .27468 .04685 .04780 .00917 -.00023
 3.500 10.000 .58730 4.00000 .00000 .01586 .32933 .05713 .05782 .00908 -.00052
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 DZ ALPHA MACH ALPHA DX CLM CBL
 7.500 8.000 .58621 2.00000 .00000 .03982 .27938 .04758 .04342 .00862 -.00226
 7.500 10.000 .58751 4.00000 .00000 .04258 .33730 .05828 .05330 .00853 -.00264
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 DZ ALPHA MACH ALPHA DX CLM CBL
 10.000 8.000 .58588 2.00000 .00000 .03324 .27895 .04797 .04126 .00856 -.00229
 10.000 10.000 .58670 4.00000 .00000 .06070 .34172 .05890 .05163 .00848 -.00274
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 DZ ALPHA MACH ALPHA DX CLM CBL
 15.000 8.000 .58673 2.00000 .00000 .05303 .28282 .04859 .03831 .00859 -.00244
 15.000 10.000 .58727 4.00000 .00000 .07127 .34730 .06018 .04868 .00863 -.00267
 GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(ZMHY10) (17 OCT 75)

REFERENCE DATA

S REF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 L REF = 474.8100 IN. YMRP = .0000 IN. Y0
 B REF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0/ 0		RN/L = 3.33		GRADIENT INTERVAL = -5.00/ 5.00	
MACH	ALPHA	DX	DY	CL	CD
.59752	2.00000	-.03048	.00000	.47119	.10252
.59802	4.00000	-.07336	.00000	.55061	.12978
.00000	.00000	.00000	.00000	.00000	.00000
RUN NO. 0/ 0		RN/L = 3.35		GRADIENT INTERVAL = -5.00/ 5.00	
MACH	ALPHA	DX	DY	CL	CD
.59633	2.00000	-.02992	.00000	.47133	.10333
.59726	4.00000	-.07123	.00000	.55529	.13146
.00000	.00000	.00000	.00000	.00000	.00000
RUN NO. 0/ 0		RN/L = 3.35		GRADIENT INTERVAL = -5.00/ 5.00	
MACH	ALPHA	DX	DY	CL	CD
.59637	2.00000	-.08807	.00000	.48237	.10649
.59584	4.00000	-.11959	.00000	.57435	.13664
.00000	.00000	.00000	.00000	.00000	.00000
RUN NO. 0/ 0		RN/L = 3.35		GRADIENT INTERVAL = -5.00/ 5.00	
MACH	ALPHA	DX	DY	CL	CD
.59620	2.00000	-.10677	.00000	.49074	.10835
.59522	4.00000	-.19602	.00000	.58589	.13989
.00000	.00000	.00000	.00000	.00000	.00000
RUN NO. 0/ 0		RN/L = 3.35		GRADIENT INTERVAL = -5.00/ 5.00	
MACH	ALPHA	DX	DY	CL	CD
.59459	2.00000	-.01444	.00000	.48705	.10811
.59441	4.00000	-.12143	.00000	.58919	.14070
.00000	.00000	.00000	.00000	.00000	.00000

CY CYN CBL
 .00390 .00050 -.00085
 .00522 -.00034 -.00061
 .00000 .00000 .00000

CY CYN CBL
 .00316 .00032 -.00110
 .00480 -.00039 -.00098
 .00000 .00000 .00000

CY CYN CBL
 .00307 .00015 -.00108
 .00391 -.00045 -.00080
 .00000 .00000 .00000

CY CYN CBL
 .00347 .00018 -.00081
 .00382 -.00036 -.00090
 .00000 .00000 .00000

CY CYN CBL
 .00347 .00020 -.00088
 .00391 -.00038 -.00078
 .00000 .00000 .00000

DATE 23 MAR 76 TABULATED SOURCE DATA - CA23B ARC 14-120(CA23B) 747/1 AT1 0251 (OPBITER DATA) (ZNYH13) (17 OCT 75)

PARAMETRIC DATA

SREF = 2590.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
BREF = 936.5800 IN. ZMRP = 375.0000 IN. ZO DY = .000 DY = .000 DX = .000 MACH = .600
SCALE = .0125

REFERENCE DATA

RUN NO. 0 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00
MACH .59450 ALPHA0 2.00000 ALPHAC 2.00000 CLM .02502 CBL -.00059
.59354 8.000 .03811 .35204 .08028 .00301 .00099
.59204 10.000 -.05223 .41371 .09464 .00270 .00071
.00000 .00000 .00000 .00000 .00000 .00000 .00000

REFERENCE DATA

RUN NO. 0 / 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00
MACH .59261 ALPHA0 2.00000 ALPHAC 2.00000 CLM .02238 CBL -.00071
.59174 8.000 .01798 .35307 .08069 .00240 .00098
.59004 10.000 -.04063 .42057 .09597 .00237 .00070
.00000 .00000 .00000 .00000 .00000 .00000 .00000

REFERENCE DATA

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00
MACH .59174 ALPHA0 2.00000 ALPHAC 2.00000 CLM .02175 CBL -.00082
.59004 8.000 -.01435 .35427 .08084 .00195 .00090
.58804 10.000 .07607 .42275 .09542 .00247 .00065
.00000 .00000 .00000 .00000 .00000 .00000 .00000

REFERENCE DATA

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00
MACH .59103 ALPHA0 2.00000 ALPHAC 2.00000 CLM .02008 CBL -.00082
.59004 8.000 .07607 .35606 .08214 .00192 .00088
.58804 10.000 -.01760 .42661 .09790 .00224 .00058
.00000 .00000 .00000 .00000 .00000 .00000 .00000

REFERENCE DATA

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00
MACH .59095 ALPHA0 2.00000 ALPHAC 2.00000 CLM .01835 CBL -.00102
.59004 8.000 .04067 .36973 .08554 .00188 .00083
.58907 10.000 -.05439 .44437 .10411 .00294 .00061
.00000 .00000 .00000 .00000 .00000 .00000 .00000

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(ZNHY13) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	BETA	STAB	CBL
50.000	8.000	.59144	2.00000	-.17655	.00000	.37034	.08645	.00144	.00088	.00071
50.000	10.000	.59135	4.00000	-.17839	.00000	.45889	.10528	.00220	.00051	.00064
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

.000 STAB = 5.000
 .000 ELEVON = 5.000
 6.000 DX = .000
 .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(ZNHY18) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	BETA	STAB	CBL
3.500	8.000	.59076	2.00000	-.15123	10.00000	.35752	.07938	.00330	.00036	.00341
3.500	10.000	.59178	4.00000	-.09423	10.00000	.41893	.09457	.00173	.00094	.00624
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

.000 STAB = 5.000
 .000 ELEVON = 5.000
 6.000 DX = .000
 10.000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	BETA	STAB	CBL
7.500	8.000	.59084	2.00000	-.21204	10.00000	.36204	.08102	.00189	.00017	.00303
7.500	10.000	.59380	4.00000	-.05023	10.00000	.42836	.09664	.00138	.00065	.00501
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

.000 STAB = 5.000
 .000 ELEVON = 5.000
 6.000 DX = .000
 10.000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	BETA	STAB	CBL
10.000	8.000	.59145	2.00000	-.18453	10.00000	.36214	.08140	.00249	.00007	.00304
10.000	10.000	.59157	4.00000	-.08798	10.00000	.43217	.09767	.00136	.00067	.00463
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

.000 STAB = 5.000
 .000 ELEVON = 5.000
 6.000 DX = .000
 10.000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	BETA	STAB	CBL
15.000	8.000	.59100	2.00000	-.22222	10.00000	.36381	.08212	.00235	.00024	.00203
15.000	10.000	.59135	4.00000	-.08119	10.00000	.43741	.09913	.00137	.00037	.00387
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

.000 STAB = 5.000
 .000 ELEVON = 5.000
 6.000 DX = .000
 10.000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA) (ZMHY18) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

MACH ALPHA0 ALPHAC DX DY CL CD CLM CBL
 .59185 2.00000 2.00000 -1.18323 10.00000 .36819 .08453 .01764 .00059
 .59194 4.00000 4.00000 -1.12907 10.00000 .45034 .10305 .02369 -.00001
 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

MACH ALPHA0 ALPHAC DX DY CL CD CLM CBL
 .59090 2.00000 2.00000 -0.7926 10.00000 .37593 .08658 .01628 .00070
 .59168 4.00000 4.00000 -0.6855 10.00000 .46304 .10574 .02205 .00017
 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

MACH ALPHA0 ALPHAC DX DY CL CD CLM CBL
 .59017 2.00000 2.00000 -0.4244 10.00000 .37428 .08683 .01558 .00075
 .59073 4.00000 4.00000 -1.0545 10.00000 .46487 .10526 .02144 .00015
 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

MACH ALPHA0 ALPHAC DX DY CL CD CLM CBL
 .59043 2.00000 2.00000 -1.32373 10.00000 .45972 .09740 .02900 .00308
 .59118 4.00000 4.00000 -1.20066 10.00000 .54545 .12638 .04499 .00076
 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

MACH ALPHA0 ALPHAC DX DY CL CD CLM CBL
 .59092 2.00000 2.00000 -1.21857 10.00000 .47285 .10040 .02737 .00310
 .59132 4.00000 4.00000 -1.12611 10.00000 .54977 .12770 .03278 .00160
 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

CY CYN CBL
 .00216 .00059 -.00213
 .00174 -.00001 -.00270
 .00000 .00000 .00000

CY CYN CBL
 .00197 .00070 -.00168
 .00219 .00017 -.00197
 .00000 .00000 .00000

CY CYN CBL
 .00218 .00075 -.00143
 .00214 .00015 -.00174
 .00000 .00000 .00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 8.000 DX = .000
 DY = 10.000 MACH = .600

CY CYN CBL
 .00308 .00102 -.00428
 .00076 .00112 -.00677
 .00000 .00000 .00000

CY CYN CBL
 .00310 .00068 -.00370
 .00160 .00101 -.00552
 .00000 .00000 .00000

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA) (ZMHY19) (17 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(ZMHY19) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0090 IN. YO
 BREF = 936.6900 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHA0	DX	DY	CL	CD	CLM	BETA
10.000	10.000	.59041	2.00000	-.14628	10.00000	.47658	.10247	.02625	RUDDER =
10.000	12.000	.59147	4.00000	-.04328	10.00000	.55278	.12833	.03122	10RB =
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	DY =

DZ	ALPHA0	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
15.000	10.000	.59203	2.00000	-.16675	10.00000	.47248	.10366	.02439	.00308	-.00046	-.00341
15.000	12.000	.59136	4.00000	-.09205	10.00000	.55626	.13084	.02957	.00223	-.00097	-.00465
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
30.000	10.000	.59188	2.00000	-.20224	10.00000	.47936	.10512	.02217	.00257	.00007	-.00185
30.000	12.000	.59160	4.00000	-.15182	10.00000	.57558	.13678	.02655	.00230	-.00058	-.00210
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
45.000	10.000	.59144	2.00000	-.15693	10.00000	.48783	.10771	.02091	.00291	.00009	-.00156
45.000	12.000	.59169	4.00000	-.12395	10.00000	.58854	.14017	.02478	.00404	-.00025	-.00159
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHA0	DX	DY	CL	CD	CLM	CY	CYN	CBL
50.000	10.000	.59182	2.00000	-.10655	10.00000	.48927	.10538	.02953	.00287	.00017	-.00118
50.000	12.000	.59150	4.00000	-.117570	10.00000	.56102	.14038	.02413	.00328	-.00045	-.00138
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

.000 STAB = 5.000
 .000 ELEVON = 5.000
 8.000 DX = .000
 10.000 MACH = .600

DATE 23 MAR 76

TABULATED SOURCE DATA - CA238

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APC 14-120(CA238) 747/1 ATI 0351 (ORBITER DATA)

(ZNY27) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 335.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0 / 0		RN/L = 3.31		GRADIENT INTERVAL = -5.00 / 5.00		CY		CYN		CBL	
DZ	3.500	ALPHA	DX	CL	CD	CLM					
	3.500	ALPHAC	DY	CL	CD	CLM	.00891	.00030	.00250		
		MACH	DX	CL	CD	CLM	.00821	-.00105	-.00212		
		MACH	DY	CL	CD	CLM	.00000	.00000	.00000		
		GRADIENT	DX	CL	CD	CLM					
		GRADIENT	DY	CL	CD	CLM					
RUN NO. 0 / 0		RN/L = 3.30		GRADIENT INTERVAL = -5.00 / 5.00		CY		CYN		CBL	
DZ	7.500	ALPHA	DX	CL	CD	CLM	.00803	-.00005	-.00231		
	7.500	ALPHAC	DY	CL	CD	CLM	.00873	-.00098	-.00219		
		MACH	DX	CL	CD	CLM	.00000	.00000	.00000		
		MACH	DY	CL	CD	CLM					
		GRADIENT	DX	CL	CD	CLM					
		GRADIENT	DY	CL	CD	CLM					
RUN NO. 0 / 0		RN/L = 3.30		GRADIENT INTERVAL = -5.00 / 5.00		CY		CYN		CBL	
DZ	10.000	ALPHA	DX	CL	CD	CLM	.00705	-.00024	-.00205		
	10.000	ALPHAC	DY	CL	CD	CLM	.00888	-.00082	-.00226		
		MACH	DX	CL	CD	CLM	.00000	.00000	.00000		
		MACH	DY	CL	CD	CLM					
		GRADIENT	DX	CL	CD	CLM					
		GRADIENT	DY	CL	CD	CLM					
RUN NO. 0 / 0		RN/L = 3.29		GRADIENT INTERVAL = -5.00 / 5.00		CY		CYN		CBL	
DZ	15.000	ALPHA	DX	CL	CD	CLM	.00818	-.00072	-.00251		
	15.000	ALPHAC	DY	CL	CD	CLM	.01047	-.00121	-.00224		
		MACH	DX	CL	CD	CLM	.00000	.00000	.00000		
		MACH	DY	CL	CD	CLM					
		GRADIENT	DX	CL	CD	CLM					
		GRADIENT	DY	CL	CD	CLM					
RUN NO. 0 / 0		RN/L = 3.30		GRADIENT INTERVAL = -5.00 / 5.00		CY		CYN		CBL	
DZ	30.000	ALPHA	DX	CL	CD	CLM	.00808	-.00064	-.00244		
	30.000	ALPHAC	DY	CL	CD	CLM	.01004	-.00121	-.00230		
		MACH	DX	CL	CD	CLM	.00000	.00000	.00000		
		MACH	DY	CL	CD	CLM					
		GRADIENT	DX	CL	CD	CLM					
		GRADIENT	DY	CL	CD	CLM					
RUN NO. 0 / 0		RN/L = 3.30		GRADIENT INTERVAL = -5.00 / 5.00		CY		CYN		CBL	
DZ	45.000	ALPHA	DX	CL	CD	CLM	.00816	-.00064	-.00269		
	45.000	ALPHAC	DY	CL	CD	CLM	.00953	-.00120	-.00226		
		MACH	DX	CL	CD	CLM	.00000	.00000	.00000		
		MACH	DY	CL	CD	CLM					
		GRADIENT	DX	CL	CD	CLM					
		GRADIENT	DY	CL	CD	CLM					

ARC 14-120(CA23B) 747/1 ATI 0351 (ORBITER DATA)

(ZNYH32) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6300 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

.000 STAB = 5.000
 .000 ELEVON = .000
 6.000 DX = .000
 10.000 MACH = .500

BETA =
 RUDDER =
 TORB =
 DY =

RUN NO. 0/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

MACH ALPHAO
 30.000 8.000
 30.000 10.000
 GRADIENT 10.0000
 .00000

CL CLM
 .29529 .03600
 .35787 .04591
 .00000 .00000

CY CYN CBL
 .00679 -.00062
 .00848 -.00121
 .00000 .00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH ALPHAO
 45.000 8.000
 45.000 10.000
 GRADIENT 10.0000
 .00000

CL CLM
 .29865 .03434
 .37639 .04407
 .00000 .00000

CY CYN CBL
 .00635 -.00067
 .00630 -.00107
 .00000 .00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH ALPHAO
 50.000 8.000
 50.000 10.000
 GRADIENT 10.0000
 .00000

CL CLM
 .30019 .03407
 .38190 .04289
 .00000 .00000

CY CYN CBL
 .00662 -.00060
 .00643 -.00098
 .00000 .00000

ARC 14-120(CA23B) 747/1 ATI 0351 (ORBITER DATA)

(ZNYH33) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6300 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

.000 STAB = 5.000
 .000 ELEVON = .000
 8.000 DX = .000
 10.000 MACH = .500

BETA =
 RUDDER =
 TORB =
 DY =

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

MACH ALPHAO
 3.500 8.000
 3.500 10.000
 GRADIENT 10.0000
 .00000

CL CLM
 .37945 .05822
 .45430 .05842
 .00000 .00000

CY CYN CBL
 .00492 -.00189
 .00485 -.00242
 .00000 .00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH ALPHAO
 7.500 8.000
 7.500 10.000
 GRADIENT 10.0000
 .00000

CL CLM
 .49275 .05162
 .45361 .05280
 .00000 .00000

CY CYN CBL
 .00575 -.00167
 .00546 -.00229
 .00000 .00000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6900 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA =
 RUDDER =
 TORR =
 DY =

PARAMETRIC DATA

.000 STAB = 5.000
 .000 ELEVON = .000
 8.000 DX = .000
 10.000 MACH = .600

CY .00612 CYN -.00149 CBL -.00432
 .00587 -.00218 -.00619
 .00000 .00000 .00000

RUN NO. 0/0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH ALPHA0 ALPHAC DX DY CL CD CLM
 .58936 2.00000 -2.0067 10.00000 .38563 .06391 .04918
 .58918 4.00000 -1.11484 10.00000 .46337 .08427 .05469
 .00000 .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 0/0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH ALPHA0 ALPHAC DX DY CL CD CLM
 .58882 2.00000 -1.19234 10.00000 .38575 .06450 .04755
 .58908 4.00000 -1.11584 10.00000 .46886 .08623 .05278
 .00000 .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 0/0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

MACH ALPHA0 ALPHAC DX DY CL CD CLM
 .58932 2.00000 -1.19577 10.00000 .39629 .06736 .04581
 .58895 4.00000 -1.16472 10.00000 .49512 .09320 .04985
 .00000 .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 0/0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH ALPHA0 ALPHAC DX DY CL CD CLM
 .58584 2.00000 -1.17007 10.00000 .40287 .06933 .04440
 .58661 4.00000 -2.0028 10.00000 .50389 .09574 .04797
 .00000 .00000 .00000 .00000 .00000 .00000 .00000

RUN NO. 0/0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH ALPHA0 ALPHAC DX DY CL CD CLM
 .58784 2.00000 -1.10670 10.00000 .40168 .06913 .04381
 .58733 4.00000 -1.16871 10.00000 .50515 .09539 .04713
 .00000 .00000 .00000 .00000 .00000 .00000 .00000

CY .00674 CYN -.00133 CBL -.00412
 .00650 -.00211 -.00544
 .00000 .00000 .00000

CY .00731 CYN -.00093 CBL -.00320
 .00757 -.00199 -.00335
 .00000 .00000 .00000

CY .00711 CYN -.00112 CBL -.00286
 .00831 -.00168 -.00312
 .00000 .00000 .00000

CY .00734 CYN -.00094 CBL -.00275
 .00852 -.00148 -.00295
 .00000 .00000 .00000

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITTER DATA)

(ZMHY34) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA =
 RUDDER =
 IORB =
 DY =

.000 STAB = 5.000
 .000 ELEVON = .000
 6.000 DX = .000
 .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	3.500	ALPHA	8.000	ALPHAC	2.00000	DX	.16221	DY	.00000	CL	.27470	CD	.04687	CLM	.04766	CY	.00914	CYN	-.00023	CBL	-.00215
	3.500	GRADIENT	10.000		4.00000		.00123		.00000		.32934		.05713		.05781		.00908		-.00053		-.00257
					.00000		.00000		.00000		.00000		.00000		.00000		.00000		.00000		.00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.500	ALPHA	8.000	ALPHAC	2.00000	DX	.05405	DY	.00000	CL	.27942	CD	.04759	CLM	.04337	CY	.00861	CYN	-.00050	CBL	-.00227
	7.500	GRADIENT	10.000		4.00000		-.00538		.00000		.33784		.05828		.05329		.00852		-.00065		-.00265
					.00000		.00000		.00000		.00000		.00000		.00000		.00000		.00000		.00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	10.000	ALPHA	8.000	ALPHAC	2.00000	DX	.05454	DY	.00000	CL	.27899	CD	.04798	CLM	.04122	CY	.00854	CYN	-.00049	CBL	-.00230
	10.000	GRADIENT	10.000		4.00000		-.03900		.00000		.34175		.05890		.05164		.00847		-.00071		-.00276
					.00000		.00000		.00000		.00000		.00000		.00000		.00000		.00000		.00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	15.000	ALPHA	8.000	ALPHAC	2.00000	DX	.05004	DY	.00000	CL	.28286	CD	.04860	CLM	.03829	CY	.00857	CYN	-.00061	CBL	-.00245
	15.000	GRADIENT	10.000		4.00000		-.05659		.00000		.34735		.06018		.04872		.00861		-.00065		-.00269
					.00000		.00000		.00000		.00000		.00000		.00000		.00000		.00000		.00000

RUN NO. 0/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	30.000	ALPHA	8.000	ALPHAC	2.00000	DX	.01989	DY	.00000	CL	.29362	CD	.05110	CLM	.03703	CY	.00879	CYN	-.00046	CBL	-.00260
	30.000	GRADIENT	10.000		4.00000		-.07747		.00000		.36717		.06415		.04644		.00835		-.00095		-.00278
					.00000		.00000		.00000		.00000		.00000		.00000		.00000		.00000		.00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	45.000	ALPHA	8.000	ALPHAC	2.00000	DX	-.12500	DY	.00000	CL	.29761	CD	.05248	CLM	.03541	CY	.00806	CYN	-.00068	CBL	-.00265
	45.000	GRADIENT	10.000		4.00000		-.15488		.00000		.37329		.06659		.04508		.00796		-.00096		-.00248
					.00000		.00000		.00000		.00000		.00000		.00000		.00000		.00000		.00000

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-120(CA23B) 747/1 ATI 0351 (ORBITER DATA)

(ZNH40) (17 OCT 75

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BRP = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	BETA	CY	CYN	CBL
50.000	8.000	.58807	2.00000	-1.14372	.00000	.29889	.05268	RUCREF =	.00795	-.00059	.000
50.000	10.000	.58762	4.00000	-1.16752	.00000	.38229	.05728	STAB =	.00828	-.00083	.000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	ELEVON =	.00000	.00000	.000
								TORB =	.00000	.00000	.000
								DY =	.00000	.00000	.600

PARAMETRIC DATA

ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA)

(ZNH40) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BRP = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	BETA	CY	CYN	CBL
3.500	5.829	.60000	2.00000	-0.01100	.06542	.24719	.06678	RUCREF =	.00389	.00119	.000
3.500	7.893	.60000	4.00000	-0.06036	.30555	.30555	.07483	STAB =	.00427	.00119	.000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	ELEVON =	.00000	.00000	.000
								TORB =	.00000	.00000	.600
								DY =	.00000	.00000	.000

PARAMETRIC DATA

RUN NO. 0/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	BETA	CY	CYN	CBL
7.500	5.881	.60000	2.00000	-0.05171	.06605	.25127	.06798	RUCREF =	.00373	.00120	.000
7.500	7.904	.60000	4.00000	-0.06693	.03934	.30965	.07580	STAB =	.00372	.00113	.000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	ELEVON =	.00000	.00000	.000
								TORB =	.00000	.00000	.000
								DY =	.00000	.00000	.000

PARAMETRIC DATA

RUN NO. 0/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	BETA	CY	CYN	CBL
10.000	5.894	.60000	2.00000	-0.03693	.06764	.25729	.06864	RUCREF =	.00430	.00132	.000
10.000	7.900	.60000	4.00000	-0.06667	.03278	.31489	.07658	STAB =	.00394	.00116	.000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	ELEVON =	.00000	.00000	.000
								TORB =	.00000	.00000	.000
								DY =	.00000	.00000	.000

PARAMETRIC DATA

RUN NO. 0/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	MACH	ALPHAC	DX	DY	CL	CD	BETA	CY	CYN	CBL
15.000	5.869	.60000	2.00000	-0.05021	.06233	.25929	.06934	RUCREF =	.00340	.00114	.000
15.000	7.899	.60000	4.00000	-0.03167	.02863	.32256	.07796	STAB =	.00305	.00102	.000
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	ELEVON =	.00000	.00000	.000
								TORB =	.00000	.00000	.000
								DY =	.00000	.00000	.000

PARAMETRIC DATA

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITTER DATA) (ZNMH42) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAR = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = .000 DX = .000
 DY = .000 MACH = .300

PARAMETRIC DATA

ALPHA	MACH	ALPHAC	UX	DY	CL	CO	CLM	CY	CYN	CBL
DZ 3.500	3.0000	2.00000	-.01826	-.01679	.24783	.05851	.01568	.00326	.00073	-.00040
3.500	3.0000	4.00000	-.00129	-.02787	.30620	.07713	.02255	.00315	.00070	-.00047
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
RUN NO.	0/0	0/0	RN/L = 1.98	GRADIENT INTERVAL = -5.00/ 5.00						
DZ 7.500	3.0000	2.00000	-.06493	-.04520	.25897	.06979	.01347	.00189	.00050	-.00048
7.500	3.0000	4.00000	-.07572	-.02685	.31786	.07887	.01997	.00266	.00071	-.00041
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
RUN NO.	0/0	0/0	RN/L = 1.98	GRADIENT INTERVAL = -5.00/ 5.00						
DZ 10.000	3.0000	2.00000	-.00117	-.01635	.25472	.07000	.01200	.00063	.00033	-.00084
10.000	3.0000	4.00000	-.08973	-.04987	.32044	.07979	.01912	.00144	.00043	-.00047
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
RUN NO.	0/0	0/0	RN/L = 1.98	GRADIENT INTERVAL = -5.00/ 5.00						
DZ 15.000	3.0000	2.00000	-.07846	-.02784	.26416	.07178	.01076	.00246	.00059	-.00051
15.000	3.0000	4.00000	-.04327	-.05544	.33075	.09097	.01819	.00252	.00056	-.00083
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
RUN NO.	0/0	0/0	RN/L = 1.98	GRADIENT INTERVAL = -5.00/ 5.00						
DZ 30.000	3.0000	2.00000	-.11489	-.03594	.27456	.07425	.00924	.00250	.00053	-.00097
30.000	3.0000	4.00000	-.07696	-.04474	.34867	.08424	.01711	.00195	.00044	-.00083
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
RUN NO.	0/0	0/0	RN/L = 1.97	GRADIENT INTERVAL = -5.00/ 5.00						
DZ 45.000	3.0000	2.00000	-.09171	-.12238	.28098	.07544	.00835	.00198	.00053	-.00073
45.000	3.0000	4.00000	-.05811	-.10952	.35594	.09543	.01558	.00119	.00041	-.00051
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
RUN NO.	0/0	0/0	RN/L = 1.97	GRADIENT INTERVAL = -5.00/ 5.00						

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (ZNMH42) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
LREF = 474.8100 IN. YMRP = .0000 IN. YO
BREF = 936.6900 IN. ZMRP = 375.0000 IN. ZO
SCALE = .0125

RUN NO. 0/ 0 RN/L = 1.97 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000 ALPHA0 MACH ALPHA AC DX DY CL CLM CD CBL
50.000 6.030 .30000 2.00000 -.09355 -.16157 .28410 .07587 .00809
50.000 7.978 .30000 4.00000 -.04004 -.13170 .35813 .08564 .01499
GRADIENT .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000 .00000
BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
TORB = 4.000 DX = .000
DY = .000 MACH = .300

PARAMETRIC DATA

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (FRH008) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500 ALPHA AC DX DY CLM DCY DCYN DCBL
.000 .10555 -.00234 -.00133 .11015 -.00504 .00097
2.000 .12877 -.00242 -.00137 .12074 -.00192 -.00067
4.000 .14336 -.00331 -.00204 .12508 -.00082 -.00074
GRADIENT -.01013 .00186 .00515 .00056 -.00035 .00004
BETA = .000 STAB = -1.000
RUDDER = .000 ELEVON = 5.000
TORB = 6.000 DX = .000
DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500 ALPHA AC DX DY CLM DCY DCYN DCBL
.000 .09388 -.00133 -.00133 .09383 -.00391 .00047
2.000 .11009 -.00137 -.00177 .10202 -.00177 .00006
4.000 .12736 -.00204 -.00257 .10645 -.00057 .00001
GRADIENT -.00905 .00203 .00383 .00034 -.00007 .00016
BETA = .000 STAB = -1.000
RUDDER = .000 ELEVON = 5.000
TORB = 6.000 DX = .000
DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000 ALPHA AC DX DY CLM DCY DCYN DCBL
.000 .08268 -.00057 -.00057 .08426 -.00423 .00017
2.000 .10229 -.00051 .00070 .09070 -.00245 .00002
4.000 .12044 -.00161 .09688 -.12044 .00025 .00004
GRADIENT -.01012 .00199 .00458 .00007 .00003 .00000

PARAMETRIC DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = -1.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = -.00871 .00214 .00465 .00009 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
.000	-.07210	.00001	.06500	-.00358	.00033	.00001
2.000	-.08796	.00031	.06520	-.00280	.00022	-.00064
4.000	-.10421	-.00046	.07791	-.00126	.00014	-.00061
GRADIENT	-.00871	.00214	.00465	.00009	.00000	.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
.000	-.05319	.00005	.03908	-.00455	.00039	.00081
2.000	-.06087	.00067	.04587	-.00194	-.00013	-.00046
4.000	-.08023	.00028	.05020	-.00036	-.00021	-.00047
GRADIENT	-.00744	.00231	.00420	.00055	-.00010	-.00016

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
.000	-.04614	.00001	.02776	-.00327	.00014	.00061
2.000	-.04717	.00097	.03310	-.00106	-.00025	-.00019
4.000	-.05893	.00097	.03729	-.00138	.00000	-.00043
GRADIENT	-.00388	.00249	.00381	-.00002	.00001	-.00010

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
.000	-.03210	.00052	.02380	-.00320	.00017	.00030
2.000	-.04836	.00095	.03091	-.00121	-.00025	-.00001
4.000	-.05571	.00093	.03328	-.00029	-.00016	-.00011
GRADIENT	-.00658	.00236	.00379	.00023	-.00003	.00005

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REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL
 -.13655
 -.14898
 -.16919
 -.00884

DCD
 -.00523
 -.00496
 -.00751
 .00168

DCY
 -.00372
 -.00269
 -.00355
 -.00045

DCBL
 .00004
 -.00035
 -.00117
 -.00014

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL
 -.12240
 -.13962
 -.15697
 -.00932

DCD
 -.00384
 -.00404
 -.00581
 .00176

DCY
 -.00329
 -.00275
 -.00282
 -.00028

DCBL
 .00021
 -.00013
 -.00077
 -.00009

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL
 -.11033
 -.13503
 -.14905
 -.01036

DCD
 -.00276
 -.00363
 -.00468
 .00177

DCY
 -.00549
 -.00246
 -.00205
 .00037

DCBL
 .00060
 .00009
 -.00047
 -.00011

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL
 -.09567
 -.11732
 -.13451
 -.01041

DCD
 -.00186
 -.00179
 -.00292
 .00199

DCY
 -.00554
 -.00344
 -.00231
 .00031

DCBL
 .00042
 .00001
 -.00048
 -.00006

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL
 -.06075
 -.08230
 -.09729
 -.00981

DCD
 -.00026
 -.00013
 -.00054
 .00218

DCY
 -.00470
 -.00177
 .00036
 .00077

DCBL
 .00053
 .00010
 -.00012
 -.00000

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(PNH009) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SO.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
.000	-.05523	-.00024	.04414	-.00468	.00036	.00054
2.000	-.06879	.00002	.05318	-.00274	-.00012	.00014
4.000	-.07439	.00023	.05527	-.00075	-.00021	-.00031
GRADIENT	-.00547	.00237	.00421	.00049	-.00009	-.00006

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
.000	-.04423	.00029	.03765	-.00281	.00006	.00012
2.000	-.05593	.00054	.04592	-.00173	-.00020	-.00052
4.000	-.06476	.00036	.04929	-.00032	-.00026	-.00045
GRADIENT	-.00581	.00227	.00433	-.00013	-.00003	-.00002

REFERENCE DATA

SREF = 5500.0000 SO.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(PNH010) (17 OCT 75)

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
.000	-.11286	-.00405	.18564	.00011	-.00088	-.00032
2.000	-.15663	-.00735	.20337	.00032	-.00060	-.00085
4.000	-.17329	-.01171	.19996	.00038	-.00044	-.00012
GRADIENT	-.01506	.00078	.00757	-.00029	.00016	-.00003

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (PNH010) (17 OCT 75)

REFERENCE DATA

SPEF = 5500.0000 50.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2349.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC
 .000 DCL -.10162 DCD -.00278 DCLM .16198 DCY -.00139 DCYN .00002 DCBL -.00041
 2.000 DCL -.13822 DCD -.00598 DCLM .17688 DCY .00055 DCYN -.00037 DCBL -.00048
 4.000 DCL -.15399 DCD -.00946 DCLM .17015 DCY .00089 DCYN -.00019 DCBL -.00008
 GRADIENT -.01229 DCD .00103 DCLM .00628 DCY .00021 DCYN -.00001 DCBL .00000

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 .000 DCL -.10110 DCD -.00200 DCLM .14745 DCY -.00243 DCYN .00064 DCBL -.00041
 2.000 DCL -.12613 DCD -.00506 DCLM .15980 DCY .00107 DCYN -.00021 DCBL -.00012
 4.000 DCL -.14095 DCD -.00789 DCLM .15151 DCY .00155 DCYN -.00001 DCBL .00010
 GRADIENT -.00991 DCD .00122 DCLM .00525 DCY .00064 DCYN -.00012 DCBL .00005

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 .000 DCL -.07934 DCD -.00093 DCLM .11951 DCY -.00201 DCYN .00059 DCBL -.00057
 2.000 DCL -.10728 DCD -.00375 DCLM .13009 DCY .00066 DCYN -.00002 DCBL -.00030
 4.000 DCL -.12250 DCD -.00604 DCLM .12085 DCY .00019 DCYN .00014 DCBL -.00048
 GRADIENT -.01074 DCD .00142 DCLM .00457 DCY .00019 DCYN -.00007 DCBL -.00006

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 .000 DCL -.04430 DCD -.00016 DCLM .06947 DCY -.00190 DCYN .00050 DCBL -.00032
 2.000 DCL -.06592 DCD -.00165 DCLM .07426 DCY .00004 DCYN -.00022 DCBL -.00043
 4.000 DCL -.08129 DCD -.00307 DCLM .06908 DCY .00037 DCYN -.00032 DCBL -.00031
 GRADIENT -.00920 DCD .00197 DCLM .00414 DCY .00021 DCYN -.00016 DCBL -.00008

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC
 .000 DCL -.02266 DCD .00022 DCLM .04514 DCY -.00251 DCYN .00049 DCBL -.00037
 2.000 DCL -.04308 DCD -.00087 DCLM .04903 DCY .00018 DCYN -.00012 DCBL -.00023
 4.000 DCL -.05672 DCD -.00135 DCLM .04648 DCY .00032 DCYN -.00017 DCBL -.00045
 GRADIENT -.00846 DCD .00230 DCLM .00457 DCY .00035 DCYN -.00012 DCBL -.00010

DATE 23 MAR 76

TABULATED SOURCE DATA - CA23B

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ARC 14-1201CA23B) 747/1 AT1 0251 (CARRIER DATA)

(PNH010) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SO.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC DCL DCLM DCD DCY DCYN DCBL
 .000 -.02216 .04028 -.00221 .00038
 2.000 -.03970 -.00069 -.00104 -.00004
 4.000 -.04830 -.00116 .04075 -.00022
 GRADIENT -.00649 .00234 .00428 .00026 -.00010

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 8.000 DX = .000
 DY = .000 MACH = .600

ARC 14-1201CA23B) 747/1 AT1 0251 (CARRIER DATA)

(PNH011) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SO.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC DCL DCLM DCD DCY DCYN DCBL
 .000 -.06531 .05315 -.00377 .00078
 2.000 -.08273 .06314 -.00107 .00008
 4.000 -.09594 .06641 -.00025 .00034
 GRADIENT -.00859 .00184 .00474 .00039 -.00006

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC DCL DCLM DCD DCY DCYN DCBL
 .000 -.04655 .04231 -.00306 .00067
 2.000 -.06634 .05405 -.00101 .00012
 4.000 -.08388 .05634 .00058 .00016
 GRADIENT -.01001 .00197 .00493 .00042 -.00008

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 8.000 DX = .000
 DY = .000 MACH = .600

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .500

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC .000 DCL .04049 DCD .00116 DCLM .04231 DCY .00232 DCBL .00014
 2.000 .05122 .00094 .05075 .00070 .00006 .00049
 4.000 .07970 .00018 .04573 .00028 .00005 .00014
 GRADIENT .01048 .00201 .00089 .00013 .00005 .00007

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC .000 DCL .03786 DCD .00145 DCLM .03255 DCY .00114 DCBL .00007
 2.000 .05596 .00093 .04209 .00026 .00017 .00017
 4.000 .07111 .00029 .04527 .00033 .00005 .00031
 GRADIENT .00899 .00197 .00460 .00013 .00005 .00007

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC .000 DCL .01930 DCD .00082 DCLM .01749 DCY .00294 DCBL .00046
 2.000 .03442 .00115 .02622 .00126 .00008 .00001
 4.000 .04457 .00094 .02810 .00043 .00001 .00052
 GRADIENT .00700 .00228 .00408 .00035 .00006 .00009

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC .000 DCL .00266 DCD .00065 DCLM .01036 DCY .00046 DCBL .00024
 2.000 .01583 .00079 .01629 .00025 .00004 .00034
 4.000 .02664 .00098 .01970 .00032 .00000 .00035
 GRADIENT .00667 .00234 .00376 .00032 .00007 .00001

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC .000 DCL .00091 DCD .00060 DCLM .00792 DCY .00037 DCBL .00013
 2.000 .01008 .00059 .01311 .00030 .00012 .00039
 4.000 .02158 .00088 .01731 .00037 .00000 .00013
 GRADIENT .00633 .00232 .00377 .00024 .00004 .00009

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (PH013) (17 OCT 75)

REFERENCE DATA

SPEF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BRFE = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC
 .000 DCL .09258 DCD .00088 DCLM .12845 DCY .00620 DCBL
 2.000 -.11841 -.00348 -.00348 .13134 -.00261 .00269
 4.000 -.13707 -.00628 .12921 -.00232 .00187
 GRADIENT -.01107 .00135 .00443 .00061 -.00016

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC
 .000 DCL -.07850 DCD -.00004 DCLM .10666 DCY .00547 DCBL
 2.000 -.10629 -.00241 .11059 -.00382 .00212
 4.000 -.12075 -.00450 .10776 -.00314 .00202
 GRADIENT -.01051 .00158 .00452 .00023 -.00007

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 .000 DCL -.07292 DCD .00018 DCLM .03484 DCY .00490 DCBL
 2.000 -.09562 -.00185 .09961 -.00406 .00221
 4.000 -.11148 -.00393 .09667 -.00293 .00190
 GRADIENT -.00959 .00167 .00470 .00013 -.00003

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 .000 DCL -.06040 DCD .00073 DCLM .07532 DCY .00346 DCBL
 2.000 -.08634 -.00105 .07970 -.00353 .00190
 4.000 -.09842 -.00281 .07831 -.00261 .00182
 GRADIENT -.00945 .00181 .00499 .00015 -.00000

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 .000 DCL -.02958 DCD .00093 DCLM .04136 DCY .00232 DCBL
 2.000 -.05327 -.00010 .04702 -.00153 .00108
 4.000 -.07101 -.00120 .04717 -.00024 .00075
 GRADIENT -.01031 .00216 .00569 .00021 -.00012

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA)

(PNH013) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL
 -.01683
 -.03395
 -.04956
 -.00813

DCD
 .00082
 .00023
 -.00041
 .00239

DCLM
 .02786
 .03265
 .03305
 .00554

DCY
 -.00315
 -.00120
 -.00013
 .00040

DCBL
 -.00037
 -.00065
 -.00023
 -.00005

DCYN
 .00095
 .00052
 .00025
 -.00013

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL
 -.01661
 -.03049
 -.04225
 -.00636

DCD
 .00068
 .00013
 -.00035
 .00244

DCLM
 .02473
 .02797
 .02873
 .00524

DCY
 -.00294
 -.00138
 .00014
 .00041

DCBL
 -.00018
 -.00002
 .00006
 -.00002

DCYN
 .00094
 .00052
 .00021
 -.00014

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA)

(PNH020) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL
 -.04246
 -.06645
 -.08292
 -.01006

DCD
 .00235
 .00105
 -.00036
 .00202

DCLM
 .00659
 .01917
 .02454
 .00873

DCY
 -.00190
 -.00089
 .00080
 .00032

DCBL
 -.00056
 -.00040
 -.00059
 -.00009

DCYN
 .00131
 .00089
 .00080
 -.00008

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC STAB = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC ELEVON = .000 ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC GRADIENT = -.00071 DX = .000 DX = .000
 SCALE = .0125 GRADIENT = -.00082 MACH = .000 MACH = .600

PARAMETRIC DATA

DZ = 7.500 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHA DCL DCLM DCD DCY DCYN DCBL
 .000 -.03684 .00462 -.00197 .00125
 2.000 -.05088 .01267 -.00034 .00084
 4.000 -.06999 .01673 .00096 .00071
 GRADIENT -.00824 .00223 .0027 .00037 -.00009

PARAMETRIC DATA

DZ = 10.000 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHA DCL DCLM DCD DCY DCYN DCBL
 .000 -.03309 .00235 -.00080 .00105
 2.000 -.05028 .00977 .00082 .00071
 4.000 -.06563 .01348 .00082 .00075
 GRADIENT -.00833 .00228 .00719 .00005 -.00003

PARAMETRIC DATA

DZ = 15.000 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHA DCL DCLM DCD DCY DCYN DCBL
 .000 -.01681 .00232 -.00218 .00126
 2.000 -.04158 .00186 .00524 -.00051 .00084
 4.000 -.05537 .00133 .00998 -.00002 .00084
 GRADIENT -.00959 .00245 .00727 .00018 -.00006

PARAMETRIC DATA

DZ = 30.000 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHA DCL DCLM DCD DCY DCYN DCBL
 .000 -.00613 .00185 -.00472 .00069
 2.000 -.02210 .00150 .00197 .00063 .00043
 4.000 -.03460 .00145 .00508 .00013 .00039
 GRADIENT -.00707 .00260 .00669 .00010 -.00003

PARAMETRIC DATA

DZ = 45.000 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHA DCL DCLM DCD DCY DCYN DCBL
 .000 .00245 .00116 -.00250 .00064
 2.000 -.01430 .00117 .00312 .00049 .00037
 4.000 -.02004 .00123 .00475 .00033 .00020
 GRADIENT -.00557 .00271 .00605 .00019 -.00006

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (PNH020) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
SCALE = .0125

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 50.000

ALPHAC DCL DCO DCLM DCY DCYN DCBL
.000 .00665 .00092 -.00156 -.00252 .00073 .00005
2.000 -.01295 .00106 .00380 -.00068 .00037 -.00036
4.000 -.01506 .00119 .00491 .00043 .00018 -.00023
GRADIENT -.00538 .00276 .00586 .00038 -.00009 -.00015

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = .000
TORB = 4.000 DX = .000
DY = .000 MACH = .600

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 3.500

ALPHAC DCL DCO DCLM DCY DCYN DCBL
.000 -.04918 .00153 -.01013 -.00335 .00125 .00033
2.000 -.06906 .00159 .00511 .00057 .00051 -.00040
4.000 -.08586 .00042 .01119 .00107 .00066 -.00078
GRADIENT -.00985 .00198 .00575 .00051 -.00010 -.00012

PARAMETRIC DATA

BETA = .000 STAB = -1.000
RUDDER = .000 ELEVON = .000
TORB = 4.000 DX = .000
DY = .000 MACH = .600

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
SCALE = .0125

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 7.500

ALPHAC DCL DCO DCLM DCY DCYN DCBL
.000 -.04135 .00153 -.01487 -.00166 .00095 .00006
2.000 -.05641 .00136 -.00041 .00054 .00052 -.00017
4.000 -.07228 .00061 .00587 .00052 .00073 .00074
GRADIENT -.00891 .00202 .00661 .00065 .00001 -.00004

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = .000
TORB = 4.000 DX = .000
DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (PNH021) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 50.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2349.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 10.000 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC .000 DCL -.03591 DCD .00147 DCLM -.01563 DCY -.00197 DCYN .00106 DCBL .00032
 .000 .00147 -.01563 -.00197 .00057 .00017
 2.000 -.05249 .00118 -.00162 .00075 .00085
 4.000 -.06790 .00062 .00435 .00013 .00056
 GRADIENT -.00867 .00204 .00642 .00003 .00000 .00007

RN/L = 15.000 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC .000 DCL -.01873 DCD .00151 DCLM -.01636 DCY -.00223 DCYN .00112 DCBL .00030
 .000 .00151 -.01636 -.00223 .00081 .00079
 2.000 -.04401 .00075 .00211 -.00081 .00093
 4.000 -.06046 .00075 .00299 .00018 .00026
 GRADIENT -.01111 .00206 .00626 .00011 .00000 .00017

RN/L = 30.000 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC .000 DCL -.01209 DCD .00046 DCLM -.01583 DCY -.00219 DCYN .00089 DCBL .00054
 .000 .00046 -.01583 -.00219 .00067 .00036 .00020
 2.000 -.02790 .00077 .00563 .00058 .00055 .00059
 4.000 -.03976 .00053 .00053 .00055 .00055 .00009
 GRADIENT -.00760 .00227 .00523 .00019 .00003 .00000

RN/L = 45.000 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC .000 DCL .00011 DCD -.00004 DCLM -.01283 DCY -.00351 DCYN .00123 DCBL .00076
 .000 .00011 -.01283 -.00351 .00044 .00043 .00033
 2.000 -.01323 .00036 .00496 .00043 .00060 .00020
 4.000 -.02654 .00039 .00125 .00025 .00060 .00020
 GRADIENT -.00734 .00236 .00432 .00045 .00011 .00008

RN/L = 50.000 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC .000 DCL .00591 DCD -.00015 DCLM -.01140 DCY -.00414 DCYN .00141 DCBL .00070
 .000 .00591 -.01140 -.00414 .00031 .00054 .00050
 2.000 -.00823 .00031 .00438 .00002 .00066 .00025
 4.000 -.02275 .00037 .00114 .00007 .00066 .00025
 GRADIENT -.00754 .00239 .00399 .00056 .00014 .00008

(PNH022) (17 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 ICRB = 8.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC .000 DCL -.11035 DCO -.00187 DCLM .12552 DCY -.00410 DCBL -.00080
 2.000 -.13755 -.00444 .13939 -.00331 -.00228 .00256
 4.000 -.15081 -.00777 .14060 -.00400 .00210 .00228
 GRADIENT -.00994 .00122 .00801 -.00033 -.00007 .00035 .00003

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC .000 DCL -.09058 DCO -.00086 DCLM .10285 DCY -.00414 DCBL -.00052
 2.000 -.12013 -.00330 .11539 -.00280 .00194 .00233
 4.000 -.13551 -.00625 .11620 -.00273 .00188 .00233
 GRADIENT -.01118 .00135 .00758 -.00001 -.00006 .00188 .00006

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC .000 DCL -.07660 DCO -.00020 DCLM .08815 DCY -.00396 DCBL -.00019
 2.000 -.10898 -.00251 .09936 -.00225 .00156 .00204
 4.000 -.12583 -.00527 .10007 -.00170 .00168 .00204
 GRADIENT -.01226 .00143 .00722 .00021 .00004 .00168 .00004

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC .000 DCL -.06414 DCO .00033 DCLM .06768 DCY -.00503 DCBL -.00074
 2.000 -.09029 -.00166 .07624 -.00284 .00195 .00247
 4.000 -.10787 -.00356 .07456 -.00131 .00172 .00247
 GRADIENT -.01088 .00173 .00596 .00057 .00014 .00172 .00002

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC .000 DCL -.03403 DCO .00088 DCLM .03361 DCY -.00242 DCBL -.00071
 2.000 -.05575 -.00024 .03923 -.00087 .00108 .00242
 4.000 -.06841 -.00132 .03821 -.00002 .00090 .00242
 GRADIENT -.00855 .00215 .00539 .00024 .00011 .00090 .00003

ARC 14-120(CA23B) 747/1 ATI 02S1 (CARRIER DATA)

(PNH022) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC	DCL	DCD	DCYM	DCBL
.000	-.01693	.00072	-.00233	-.00020
2.000	-.03422	-.00011	-.00050	.00025
4.000	-.04318	-.00071	.00029	.00003
GRADIENT	-.00651	.00234	-.00014	-.00002

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC	DCL	DCD	DCYM	DCBL
.000	-.01478	.00077	-.00228	-.00036
2.000	-.03575	-.00012	-.00100	.00012
4.000	-.04217	-.00036	.00089	.00005
GRADIENT	-.00680	.00241	-.00012	-.00002

ARC 14-120(CA23B) 747/1 ATI 02S1 (CARRIER DATA)

(PNH023) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE = .0125

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC	DCL	DCD	DCYM	DCBL
.000	-.07645	.00084	-.00347	-.00081
2.000	-.10357	-.00100	-.00279	-.00049
4.000	-.11748	-.00316	-.00191	-.00050
GRADIENT	-.01021	.00170	-.00003	-.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 ICRB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 ICRB = 6.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (PNH023) (17 OCT 75)

REFERENCE DATA

SPEF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2342.0400 IN. ZMRP = 190.7500 IN. ZC
SCALE = .0125

PARAMETRIC DATA

BCIA = .000 STAB = 5.000
RUDDER = .000 ELEVON = .000
TORB = 6.000 DX = .000
DY = .000 MACH = .600

RN/L = 7.500 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
ALPHAC .000 DCL .06310 DCD .00141 DCLM .05333 DCY .00402 DCYN .00229 DCBL .00072
2.000 .09007 .00050 .05878 .00307 .00196 .00039
4.000 .10463 .00214 .05758 .00271 .00188 .00044
GRADIENT .01033 .00181 .00530 .00003 .00006 .00001

RN/L = 10.000 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
ALPHAC .000 DCL .05449 DCD .00144 DCLM .04405 DCY .00407 DCYN .00225 DCBL .00061
2.000 .08259 .00004 .05046 .00284 .00193 .00068
4.000 .03302 .00153 .05003 .00250 .00190 .00053
GRADIENT .00958 .00195 .00573 .00003 .00004 .00006

RN/L = 15.000 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
ALPHAC .000 DCL .04159 DCD .00156 DCLM .03035 DCY .00405 DCYN .00216 DCBL .00027
2.000 .06168 .00055 .03581 .00336 .00202 .00050
4.000 .09106 .00069 .03733 .00235 .00187 .00038
GRADIENT .00992 .00214 .00593 .00007 .00002 .00011

RN/L = 30.000 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
ALPHAC .000 DCL .02030 DCD .00127 DCLM .01414 DCY .00266 DCYN .00114 DCBL .00002
2.000 .04768 .00053 .02034 .00166 .00095 .00016
4.000 .05462 .00018 .01999 .00059 .00083 .00038
GRADIENT .00853 .00243 .00570 .00016 .00003 .00015

RN/L = 45.000 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
ALPHAC .000 DCL .00887 DCD .00125 DCLM .00664 DCY .00176 DCYN .00094 DCBL .00081
2.000 .02639 .00065 .01130 .00091 .00045 .00007
4.000 .03340 .00043 .01198 .00033 .00033 .00004
GRADIENT .00608 .00249 .00558 .00016 .00010 .00011

ARC 14-120(CA23B) 747/1 ATI 02S1 (CARRIER DATA) (PNH023) (17 OCT 75)

ARC 14-120(CA23B) 747/1 ATI 02S1 (CARRIER DATA) (PNH024) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 50.000
 ALPHAC DCL DCD DCY DCLM DCYN DCBL
 .000 -.00964 .00109 .00572 -.00164 .00076 -.00016
 2.000 -.02719 .00064 .00968 -.00081 .00042 .00008
 4.000 -.03380 .00049 .01035 .00010 .00041 .00021
 GRADIENT -.00599 .00255 .00540 .00008 -.00004 -.00009

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORR = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 3.500
 ALPHAC DCL DCD DCY DCLM DCYN DCBL
 .000 -.08219 -.00060 .05450 .00145 .00145 .00021
 2.000 -.09489 -.00067 .06027 -.00140 .00063 -.00070
 4.000 -.11125 -.00238 .06615 -.00068 .00086 -.00070
 GRADIENT -.00794 .00181 .00434 .00046 -.00010 -.00007

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 LORR = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 7.500
 ALPHAC DCL DCD DCY DCLM DCYN DCBL
 .000 -.06109 .00006 .03964 .00377 .00132 .00003
 2.000 -.08394 -.00029 .04672 .00215 .00075 .00030
 4.000 -.09993 -.00158 .05250 .00089 .00094 .00051
 GRADIENT -.01033 .00185 .00464 .00023 .00005 .00003

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORR = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA)

(PNH024) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
.000	-.05175	.00005	.03209	-.00496	.00161	.00045
2.000	-.07454	-.00013	.03931	-.00199	.00091	-.00016
4.000	-.09403	-.00133	.04528	-.00159	.00109	-.00038
GRADIENT	-.01125	.00191	.00472	.00035	-.00008	-.00005

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
.000	-.04562	.00015	.02309	-.00466	.00146	.00040
2.000	-.06321	.00006	.02960	-.00278	.00110	-.00014
4.000	-.07857	-.00074	.03551	-.00140	.00115	-.00064
GRADIENT	-.00892	.00203	.00453	.00032	-.00003	-.00010

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
.000	-.02051	.00023	.00745	-.00370	.00113	.00004
2.000	-.04117	.00023	.01683	-.0105	.00056	-.00016
4.000	-.05510	-.00020	.02139	-.00040	.00056	-.00039
GRADIENT	-.00933	.00215	.00491	.00033	-.00009	.00005

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
.000	-.01176	-.00021	.00346	-.00333	.00098	.00036
2.000	-.02408	.00011	.00973	.00052	.00020	-.00045
4.000	-.03734	-.00024	.01337	.00076	.00025	-.00037
GRADIENT	-.00707	.00225	.00390	.00053	-.00014	-.00002

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
.000	-.00796	-.00013	.00136	-.00267	.00086	.00007
2.000	-.02128	.00012	.00806	.00050	.00014	-.00055
4.000	-.03215	-.00020	.01261	.00023	.00034	-.00048
GRADIENT	-.00673	.00224	.00423	.00023	-.00008	.00002

ARC 14-120(CA23B) 74771 AT1 02S1 (CARRIER DATA) (PNH025) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SO.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

OZ	3.500	DCL	DCO	DCLM	DCY	DCYN	DCBL
ALPHAC	.000	-.12027	.10446	-.00360	.00060	.00088	.00088
2.000	-.12188	-.00386	.11722	-.00368	.00069	.00088	.00088
4.000	-.15207	-.00592	.13218	-.00245	.00057	-.00028	-.00028
GRADIENT	-.09863	.00181	.00835	-.00021	.00004	-.00013	-.00013

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

OZ	7.500	DCL	DCO	DCLM	DCY	DCYN	DCBL
ALPHAC	.000	-.09543	.08536	-.00457	.00095	.00056	.00056
2.000	-.11434	-.00307	.09970	-.00388	.00073	.00032	.00032
4.000	-.13605	-.00483	.11197	-.00220	.00057	-.00033	-.00033
GRADIENT	-.01083	.00172	.00808	-.00010	-.00002	-.00006	-.00006

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

OZ	10.000	DCL	DCO	DCLM	DCY	DCYN	DCBL
ALPHAC	.000	-.07664	.07293	-.00546	.00121	.00034	.00034
2.000	-.11259	-.00268	.08912	-.00441	.00079	.00006	.00006
4.000	-.12595	-.00410	.09871	-.00171	.00063	-.00048	-.00048
GRADIENT	-.01301	.00165	.00737	-.00044	-.00010	-.00005	-.00005

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

OZ	15.000	DCL	DCO	DCLM	DCY	DCYN	DCBL
ALPHAC	.000	-.06696	.05582	-.00479	.00123	.00031	.00031
2.000	-.08887	-.00135	.06760	-.00307	.00069	-.00053	-.00053
4.000	-.10802	-.00306	.07815	-.00294	.00121	.00005	.00005
GRADIENT	-.01094	.00176	.00701	-.00003	.00004	.00009	.00009

RN/L = 3.3+ GRADIENT INTERVAL = -5.00/ 5.00

OZ	30.000	DCL	DCO	DCLM	DCY	DCYN	DCBL
ALPHAC	.000	-.04201	.02872	-.00405	.00115	.00024	.00024
2.000	-.06529	-.00086	.03956	-.00175	.00060	.00006	.00006
4.000	-.07740	-.00167	.04578	-.00119	.00079	-.00003	-.00003
GRADIENT	-.00952	.00199	.00559	.00022	-.00004	.00009	.00009

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA)

(PNH025) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BRPF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL
 -.02757
 -.04018
 -.05563
 -.00769

DCD
 -.00073
 -.00057
 -.00120
 .00214

DCLM
 .01714
 .02430
 .02994
 .00462

DCY
 -.00328
 .00002
 -.00007
 .00031

DCYN
 .00084
 .00012
 .00032
 -.00008

DCBL
 .00032
 -.00021
 -.00011
 .00005

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

DZ = 50.000

ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL
 -.02328
 -.03329
 -.04848
 -.00698

DCD
 -.00086
 -.00072
 -.00110
 .00219

DCLM
 .01517
 .02209
 .02677
 .00432

DCY
 -.00497
 -.00146
 .00024
 .00081

DCYN
 .00115
 .00041
 .00027
 -.00017

DCBL
 .00063
 .00027
 -.00012
 -.00003

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(PNH027) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BRPF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL
 -.10338
 -.11590
 -.13498
 -.00795

DCD
 -.00239
 -.00374
 -.00744
 .00144

DCLM
 .13402
 .14247
 .14357
 .00663

DCY
 -.00787
 -.00159
 -.00398
 .00061

DCYN
 .00286
 .00190
 .00182
 -.00022

DCBL
 .00028
 -.00160
 -.00016
 -.00019

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA) (PNH027) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC DCL DCD DCLM DCY DCYN DCBL
 .000 -.08771 -.00118 .11286 -.00540 .00224 -.00025
 2.000 -.10785 -.00310 .12188 -.00287 .00182 -.00072
 4.000 -.12598 -.00512 .12152 -.00323 .00174 -.00013
 GRADIENT -.00952 .00146 .00641 .00018 -.00008 -.00005

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC DCL DCD DCLM DCY DCYN DCBL
 .000 -.07759 -.00337 .09354 -.00385 .00190 -.00063
 2.000 -.10396 -.00277 .10908 -.00415 .00190 -.00011
 4.000 -.12214 -.00528 .10694 -.00266 .00174 -.00007
 GRADIENT -.01109 .00147 .00609 .00006 .00001 .00005

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC DCL DCD DCLM DCY DCYN DCBL
 .000 -.06292 .00009 .07802 -.00317 .00165 -.00079
 2.000 -.08562 -.00164 .08407 -.00323 .00130 -.00042
 4.000 -.10421 -.00371 .08245 -.00146 .00118 -.00024
 GRADIENT -.01027 .00175 .00535 .00007 .00007 .00006

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC DCL DCD DCLM DCY DCYN DCBL
 .000 -.03462 .00033 .04236 -.00213 .00106 -.00060
 2.000 -.06006 -.00094 .04761 -.00173 .00081 -.00007
 4.000 -.07095 -.00169 .04605 -.00091 .00087 -.00015
 GRADIENT -.00903 .00219 .00516 .00003 .00000 .00003

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC DCL DCD DCLM DCY DCYN DCBL
 .000 -.01241 .00044 .02536 -.00124 .00057 -.00066
 2.000 -.03534 -.00058 .03009 .00003 .00005 -.00002
 4.000 -.04593 -.00116 .02991 -.00026 .00024 .00003
 GRADIENT -.00235 .00230 .00538 .00006 .00003 .00009

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ARC 14-120(CA23B) 747/1 ATI 03S1 (CARRIER DATA) (PNH027) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
SCALE = .0125

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC .000 DCL .02333 DCO .00018 DCCLM .02664 DCY -.00182 DCBL -.00046
.000 -.03781 -.00069 .02725 .00024 -.00003
4.000 -.03986 -.00071 .02647 .00032 .00014 -.00024
GRADIENT -.00408 .00256 .00420 .00018 .00005 -.00002

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = .000
TORB = 8.000 DX = .000
DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 ATI 03S1 (CARRIER DATA) (PNH034) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
SCALE = .0125

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC .000 DCL .09176 DCO .00069 DCCLM .07949 DCY -.00027 DCBL -.00009
.000 -.10280 -.00127 .08225 .00123 -.00020
4.000 -.12045 -.00323 .07867 .00152 -.00019 -.00042
GRADIENT -.00562 .00172 .00404 .00011 .00002 -.00016

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = .000
TORB = 6.000 DX = .000
DY = .000 MACH = .600

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500

ALPHAC .000 DCL .06582 DCO .00127 DCCLM .05986 DCY -.00017 DCBL -.00076
.000 -.08938 -.00060 .06549 .00033 .00019 -.00022
4.000 -.10548 -.00237 .06298 .00004 .00039 .00018
GRADIENT -.00587 .00179 .00502 .00031 .00008 .00006

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = .000
TORB = 8.000 DX = .000
DY = .000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA)

(PNH034) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SO.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC DCL DCLM DCD DCY DCBL
 .000 -.05867 .00118 .05368 -.00091 .00050
 2.000 -.08526 -.00051 .05303 -.00034 .00034
 4.000 -.09966 -.00185 .05568 -.00037 .00060
 GRADIENT -.01020 .00194 .00474 -.00022 .00007

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC DCL DCLM DCD DCY DCBL
 .000 -.05107 .00123 .04150 -.00166 .00099
 2.000 -.06975 .00000 .04577 -.00043 .00084
 4.000 -.08365 -.00107 .04486 -.00025 .00106
 GRADIENT -.00810 .00212 .00508 -.00000 .00006

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC DCL DCLM DCD DCY DCBL
 .000 -.02784 .00127 .02261 .00039 .00043
 2.000 -.04641 .00034 .02591 .00071 .00012
 4.000 -.05579 .00018 .02529 .00003 .00056
 GRADIENT -.00694 .00234 .00491 -.00045 .00010

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC DCL DCLM DCD DCY DCBL
 .000 -.01240 .00096 .01280 .00050 .00008
 2.000 -.02912 .00019 .01704 .00022 .00015
 4.000 -.03841 .00012 .01739 .00061 .00002
 GRADIENT -.00645 .00243 .00539 .00033 .00001

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC DCL DCLM DCD DCY DCBL
 .000 -.01233 .00062 .01264 .00102 .00019
 2.000 -.02872 .00006 .01529 .00023 .00004
 4.000 -.03597 .00032 .01522 .00081 .00042
 GRADIENT -.00536 .00246 .00499 .00010 .00007

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(+NH035) (17 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC .000 DCL -.05055 DCD .00248 DCYM .01200 DCY -.00077 DCBL -.00108
 2.000 -.07181 .00113 .02636 .00103 .00100
 4.000 -.08455 .00019 .02715 .00064 .00117
 GRADIENT -.00845 .00203 .00803 .00033 .00003

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC .000 DCL -.03392 DCD .00258 DCYM .00436 DCY -.00096 DCBL -.00101
 2.000 -.06000 .00116 .01949 .00037 .00104
 4.000 -.07521 .00029 .02134 .00068 .00127
 GRADIENT -.01027 .00212 .00849 .00029 .00003

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC .000 DCL -.02751 DCD .00231 DCYM .00129 DCY -.00140 DCBL -.00039
 2.000 -.05020 .00115 .01516 .00015 .00109
 4.000 -.06614 .00024 .01796 .00042 .00137
 GRADIENT -.00961 .00218 .00799 .00011 .00007

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC .000 DCL -.02052 DCD .00214 DCYM .00152 DCY -.00092 DCBL -.00093
 2.000 -.04170 .00130 .01242 .00028 .00141
 4.000 -.05669 .00056 .01491 .00094 .00157
 GRADIENT -.00899 .00230 .00794 .00036 .00006

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC .000 DCL -.00986 DCD .00140 DCYM .00057 DCY -.00009 DCBL -.00012
 2.000 -.02676 .00080 .00508 .00125 .00020
 4.000 -.03267 .00057 .00690 .00094 .00049
 GRADIENT -.00565 .00249 .00685 .00010 .00003

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA) (PNH035) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAAC DCL DCD DCLM DCY DCYN DCBL
 .000 .00108 .00121 -.00477 .00043 .00032 -.00054
 2.000 -.02278 .00041 .00074 .00074 .00020 -.00040
 4.000 -.02533 .00029 .00499 .00124 .00027 -.00020
 GRADIENT -.00655 .00247 .00668 -.00015 .00003 .00001

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAAC DCL DCD DCLM DCY DCYN DCBL
 .000 .00492 .00121 -.00517 .00071 .00033 -.00094
 2.000 -.02260 .00031 .00449 .00034 .00038 -.00074
 4.000 -.02448 .00022 .00491 .00106 .00033 -.00024
 GRADIENT -.00730 .00245 .00676 -.00027 .00004 .00010

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA) (PNH036) (18 MAR 76)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAAC DCL DCD DCLM DCY DCYN DCBL
 .000 .09419 .00025 .08192 .02635 .01726 .00277
 2.000 -.10389 .00200 .07581 .02962 .01764 .00324
 4.000 -.01041 .00288 .00505 .00142 .00020 .00018
 GRADIENT

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAAC DCL DCD DCLM DCY DCYN DCBL
 .000 .08320 .00036 .06576 .02823 .01815 .00296
 2.000 -.09558 .00089 .06187 .02938 .01832 .00284
 4.000 .01375 .00312 .00617 .00036 .00009 .00012
 GRADIENT

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 74/71 ATI 0351 (CARRIER DATA)

(PNH036) (18 MAR 76)

REFERENCE DATA

SREF = 5500.0000 SQ.FT.
 LREF = 327.7800 IN.
 BREF = 2348.0400 IN.
 SCALE = .0125

XMRP = 1339.9000 IN. XC
 YMRP = .0000 IN. YC
 ZMRP = 190.7500 IN. ZC

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 2.000 DCL -.07242 DCLM .05972 DCY .02850 DCBL .00323
 4.000 DCD -.00048 DCLM .05734 .02973 .00344
 GRADIENT -.01204 .00320 .00693 .00041 .00005

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 2.000 DCL -.06024 DCLM .04830 DCY .02887 DCBL .00354
 4.000 DCD .00105 DCLM .04530 .03031 .00325
 GRADIENT -.00876 .00343 .00661 .00051 .00020

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 2.000 DCL -.03298 DCLM .02941 DCY .03170 DCBL .00401
 4.000 DCD .00121 DCLM .02913 .03291 .00374
 GRADIENT -.00891 .00371 .00797 .00039 .00020

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC
 2.000 DCL -.02449 DCLM .01978 DCY .03214 DCBL .00439
 4.000 DCD .00107 DCLM .02071 .03458 .00382
 GRADIENT -.00928 .00383 .00858 .00101 .00002

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC
 2.000 DCL -.03181 DCLM .02120 DCY .03181 DCBL .00395
 4.000 DCD .00154 DCLM .01916 .03429 .00374
 GRADIENT .00061 .00399 .00709 .00103 .00016

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA)

(PNH037) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT.
 LREF = 327.7800 IN.
 YMRP = 2348.0400 IN.
 ZMRP = 100.7500 IN ZC
 SCALE = .0125

BETA = .000
 RUDDER = .000
 IORB = 6.000
 DY = .000
 STAB = -1.000
 ELEVON = .000
 DX = .000
 MACH = .600

PARAMETRIC DATA

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 3.500
 ALPHAC DCL DCLM DCD DCY DCYN DCBL
 .000 -.07554 .00021 .06014 -.00285 .00080
 2.000 -.09217 -.00011 .06301 -.00332 .00085
 4.000 -.11111 -.00164 .06608 -.00125 .00096
 GRADIENT .00957 .00179 .00291 -.00010 .00009 .00004

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 7.500
 ALPHAC DCL DCLM DCD DCY DCYN DCBL
 .000 -.05948 .00048 .04779 -.00458 .00143
 2.000 -.07667 .00046 .04979 -.00231 .00091
 4.000 -.09551 -.00090 .05515 -.00248 .00129
 GRADIENT .00959 .00191 .00326 .00003 .00001 .00003

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 10.000
 ALPHAC DCL DCLM DCD DCY DCYN DCBL
 .000 -.05398 .00058 .04192 -.00435 .00145
 2.000 -.07804 .00014 .04670 -.00433 .00139
 4.000 -.08896 -.00070 .05046 -.00325 .00145
 GRADIENT .00942 .00194 .00355 .00022 .00005 .00005

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 15.000
 ALPHAC DCL DCLM DCD DCY DCYN DCBL
 .000 -.04179 .00062 .03251 -.00487 .00175
 2.000 -.06741 .00063 .03683 -.00310 .00139
 4.000 -.08017 -.00016 .04108 -.00381 .00173
 GRADIENT .01027 .00206 .00357 .00023 .00004 .00006

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 30.000
 ALPHAC DCL DCLM DCD DCY DCYN DCBL
 .000 -.02242 .00042 .01381 -.00411 .00112
 2.000 -.04793 .00038 .02198 -.00158 .00046
 4.000 -.05420 .00018 .02471 -.00213 .00082
 GRADIENT .00802 .00220 .00415 .00000 .00003 .00002

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(PNH037) (17 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT.
 LREF = 327.7800 IN.
 BREF = 23+8.0+00 IN.
 SCALE = .0125

XMRP = 1339.9000 IN. XC
 YMRP = .0000 IN. YC
 ZMRP = 190.7500 IN ZC

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
.000	-.02878	-.00035	.01040	-.00306	.00068	.00004
2.000	-.02746	.00030	.01248	-.00120	.00024	-.00034
4.000	-.03119	.00017	.01521	-.00123	.00033	-.00059
GRADIENT	-.00128	.00238	.00263	-.00004	-.00004	.00000

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
.000	-.01066	-.00001	.00546	-.00436	.00092	.00025
2.000	-.02716	.00025	.01208	-.00080	.00017	-.00033
4.000	-.03250	.00037	.01478	-.00063	.00023	-.00054
GRADIENT	-.00614	.00235	.00375	.00044	-.00013	-.00004

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(PNH038) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT.
 LREF = 327.7800 IN.
 BREF = 23+8.0+00 IN.
 SCALE = .0125

XMRP = 1339.9000 IN. XC
 YMRP = .0000 IN. YC
 ZMRP = 190.7500 IN ZC

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
.000	-.08708	-.00077	.13998	.00063	-.00047	-.00035
2.000	-.11473	-.00339	.13637	.00205	-.00040	-.00038
4.000	-.13275	-.00607	.13084	.00289	-.00054	-.00045
GRADIENT	-.01137	.00137	.00195	.00021	.00003	-.00011

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL
 -.07588
 -.09462
 -.11251
 -.00911

DCD
 -.00041
 -.00246
 -.00474
 .00161

DCLM
 .11742
 .11315
 .10832
 .00204

DCY
 -.00034
 .00114
 .00245
 .00031

DCYN
 .00024
 .00000
 -.00033
 -.00010

DCBL
 -.00056
 -.00057
 -.00084
 -.00015

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL
 -.06771
 -.09095
 -.10664
 -.00968

DCD
 -.00024
 -.00199
 -.00417
 .00171

DCLM
 .10640
 .10403
 .09920
 .00244

DCY
 .00020
 .00077
 .00158
 -.00001

DCYN
 .00042
 .00012
 -.00016
 -.00010

DCBL
 -.00073
 -.00057
 -.00066
 -.00006

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL
 -.07253
 -.07698
 -.08483
 -.00402

DCD
 -.00042
 -.00154
 -.00325
 .00199

DCLM
 .08978
 .09484
 .07967
 .00171

DCY
 -.00043
 .00080
 .00071
 -.00007

DCYN
 .00035
 .00008
 .00009
 -.00002

DCBL
 -.00065
 -.00053
 -.00038
 -.00001

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL
 -.02582
 -.04724
 -.06749
 -.01037

DCD
 .00031
 -.00072
 -.00177
 .00218

DCLM
 .04744
 .04744
 .04674
 .00407

DCY
 -.00145
 -.00018
 -.00053
 -.00013

DCYN
 .00056
 .00014
 .00023
 -.00004

DCBL
 -.00028
 -.00022
 -.00004
 -.00002

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL
 -.01004
 -.03323
 -.04379
 -.00798

DCD
 .00037
 -.00026
 -.00079
 .00241

DCLM
 .07808
 .03038
 .02902
 .00447

DCY
 -.00105
 -.00210
 .00062
 .00306

DCYN
 .00054
 .00030
 .00013
 -.00008

DCBL
 -.00072
 -.00071
 -.00041
 -.00000

ARC 14-120(CA23B) 747/1 ATI 0351 (CARRIER DATA)

(PNH038) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
.000	-.00820	.00056	.03507	-.00048	.00045	-.00096
2.000	-.02403	-.00010	.02605	.00017	.00012	-.00064
4.000	-.04047	-.00070	.02577	.00020	.00020	-.00001
GRADIENT	-.00802	.00238	.00441	-.00019	-.00002	.00016

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 ATI 0251 (CARRIER DATA)

(PNH039) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
2.000	-.11837	-.00315	.12847	.03043	-.01727	.00238
4.000	-.13802	-.00572	.13084	.03067	-.01732	.00274
GRADIENT	-.01239	.00246	.00930	.00011	-.00003	.00012

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
2.000	-.10278	-.00208	.11360	.03185	-.01852	.00323
4.000	-.11473	-.00371	.10793	.03403	-.01928	.00263
GRADIENT	-.00853	.00293	.00528	.00118	-.00034	-.00036

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
2.000	-.09368	-.00132	.10274	.03225	-.01223	.00325
4.000	-.11934	-.00319	.09901	.03437	-.01964	.00310
GRADIENT	-.01539	.00281	.00625	.00085	-.00021	-.00013

PARAMETRIC DATA

APC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (PNH039) (17 OCT 75)

REFERENCE DATA

SPEF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 2.000
 4.000
 GRADIENT

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 2.000
 4.000
 GRADIENT

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC
 2.000
 4.000
 GRADIENT

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC
 2.000
 4.000
 GRADIENT

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = 5.000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .500

DCY = .0341 DCBL = .00381
 DCLM = .08259 DCYN = -.02023
 DCD = -.00070 DCX = .03481
 DCL = -.09926 DCY = .03481
 DCLM = -.01280 DCLN = .00049
 DCD = .00311 DCBL = -.00020

DCY = .03495 DCBL = .00401
 DCLM = .04813 DCYN = -.02143
 DCD = -.00039 DCX = .03686
 DCL = -.06364 DCY = -.02161
 DCLM = -.00692 DCLN = .00014
 DCD = .00351 DCBL = .00440

DCY = .03538 DCBL = .00410
 DCLM = .03064 DCYN = -.02159
 DCD = .00061 DCX = .03631
 DCL = -.04841 DCY = -.02146
 DCLM = -.01019 DCLN = .00005
 DCD = .00372 DCBL = -.00028

DCY = .03454 DCBL = .00403
 DCLM = .02842 DCYN = -.02142
 DCD = .00067 DCX = .03622
 DCL = -.04520 DCY = -.02135
 DCLM = -.00907 DCLN = .00003
 DCD = .00371 DCBL = -.00015

ARC 14-120(CA23B) 747/1 ATI 02S1 (CARRIER DATA)

(PNH040) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVGN = 5.000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
.000	-.06850	.00111	.06606	.00239	-.00034	-.001083
2.000	-.08363	-.00045	.07238	.00262	-.00053	-.00071
4.000	-.09951	-.00245	.06787	.00353	-.00066	-.00059
GRADIENT	-.00770	.00181	.00469	-.00007	-.00003	-.00002

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
.000	-.05079	.00159	.05280	.00309	-.00090	-.00108
2.000	-.07586	-.00013	.06089	.00204	-.00050	-.00043
4.000	-.09062	-.00187	.05721	.00333	-.00066	-.00045
GRADIENT	-.00991	.00183	.00534	-.00030	.00011	.00008

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
.000	-.04373	.00134	.04509	.00372	-.00107	-.00062
2.000	-.07057	-.00015	.05368	.00257	-.00071	-.00013
4.000	-.08332	-.00148	.04398	.00325	-.00063	-.00055
GRADIENT	-.00985	.00199	.00546	-.00047	.00016	-.00006

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
.000	-.04724	.00100	.03787	.00174	-.00073	-.00072
2.000	-.05289	.00030	.04014	.00249	-.00056	-.00046
4.000	-.07027	-.00087	.03968	.00271	-.00044	-.00038
GRADIENT	-.00571	.00223	.00469	-.00012	.00012	.00000

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
.000	-.02835	.00075	.01809	.00121	-.00005	-.00062
2.000	-.03651	.00041	.02112	.00143	-.00013	-.00006
4.000	-.04987	-.00016	.02163	.00088	.00023	-.00017
GRADIENT	-.00533	.00247	.00513	-.00044	.00012	.00003

REFERENCE DATA
 SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC LORB = 4.000 DX = .000
 SCALE = .0125 DY = .000 MACH = .600

DZ = 45.000 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHAC DCL DCD DCLM DCY DCBL
 .000 -.01897 .00043 .01270 .00068 -.00066
 2.000 -.02967 .00026 .01445 .00005 -.00061
 4.000 -.03304 .00026 .01310 .00019 -.00031
 GRADIENT -.00347 .00266 .00434 -.00009 .00003 .00001

DZ = 50.000 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHAC DCL DCD DCLM DCY DCBL
 .000 -.01784 .00032 .01213 .00020 -.00075
 2.000 -.02665 .00025 .01243 .00122 -.00090
 4.000 -.02714 .00039 .01069 .00231 -.00034
 GRADIENT -.00227 .00272 .00388 .00017 -.00002 .00002

REFERENCE DATA
 SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC BETA = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC RUDDER = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC LORB = 8.000 DX = .000
 SCALE = .0125 DY = .000 MACH = .600

DZ = 3.500 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHAC DCL DCD DCLM DCY DCBL
 2.000 -.15651 .00734 .03325 .00021 -.00084
 4.000 -.17325 -.01169 .00030 .00030 -.00013
 GRADIENT -.01093 .00157 .00594 -.00017 .00007 .00030

DZ = 7.500 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00
 ALPHAC DCL DCD DCLM DCY DCBL
 2.000 -.13814 .00597 .017674 .00045 -.00048
 4.000 -.15385 .00944 .017012 .00081 -.00008
 GRADIENT -.01042 .00201 .00480 -.00003 .00008 .00014

PARAMETRIC DATA

ARC 14-120(CA23B) 747/ AT1 0251 (CARRIER DATA)

(PNHX10) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 8.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000

ALPHAC
 2.000 DCL -1.12603 DCD -.00505 DCYM .00098 DCBL -.00012
 4.000 DCLM .15970 DCY .00098 DCYN -.00017
 GRADIENT -1.14075 DCLM .15154 DCY .00150 DCYN .00001
 GRADIENT -.00992 DCLM .00403 DCY .00005 DCYN .00009

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000

ALPHAC
 2.000 DCL -1.10734 DCD -.00374 DCYM .00075 DCBL -.00030
 4.000 DCLM .12997 DCY -.00075 DCYN .00006
 GRADIENT -1.12231 DCLM .12083 DCY .00012 DCYN .00018
 GRADIENT -.01004 DCLM .00355 DCY .00023 DCYN .00005

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000

ALPHAC
 2.000 DCL -.06579 DCD -.00163 DCYM .00001 DCBL -.00043
 4.000 DCLM .07421 DCY .00001 DCYN -.00021
 GRADIENT -.08112 DCLM .06909 DCY .00035 DCYN .00031
 GRADIENT -.01023 DCLM .00555 DCY -.00004 DCYN -.00006

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC
 2.000 DCL -.04234 DCD -.00086 DCYM .00020 DCBL -.00022
 4.000 DCLM .04897 DCY -.00020 DCYN -.00011
 GRADIENT -.05551 DCLM .04544 DCY .00031 DCYN -.00016
 GRADIENT -.00934 DCLM .00595 DCY .00004 DCYN -.00003

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC
 2.000 DCL -.03966 DCD -.00069 DCYM .00105 DCBL -.00021
 4.000 DCLM .04817 DCY -.00114 DCYN -.00003
 GRADIENT -.00681 DCLM .00654 DCY .00044 DCYN -.00010
 GRADIENT .00352 DCY .00044 DCYN -.00015
 GRADIENT .00044 DCY .00044 DCYN -.00003

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA)

(PNHX13) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 23*8.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC DCL DCD DCLM DCY DCBL
 2.000 -1.1851 -.00351 .13180 -.00233
 4.000 -1.1691 -.00631 .12936 -.00218
 GRADIENT -.01176 .00235 .00639 -.00013 .00002

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC DCL DCD DCLM DCY DCBL
 2.000 -1.1038 -.00243 .11096 -.00361
 4.000 -1.2074 -.02455 .10800 -.00292
 GRADIENT -.00974 .00269 .00663 .00013 -.00005

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC DCL DCD DCLM DCY DCBL
 2.000 -0.9571 -.00188 .03986 -.00385
 4.000 -1.1139 -.03395 .09679 -.00276
 GRADIENT -.01040 .00271 .00658 .00033 -.00008

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC DCL DCD DCLM DCY DCBL
 2.000 -0.8620 -.00108 .07999 -.00335
 4.000 -0.9833 -.00283 .07835 -.00248
 GRADIENT -.00862 .00287 .00730 .00022 -.00004

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC DCL DCD DCLM DCY DCBL
 2.000 -0.5353 -.00012 .04707 -.00145
 4.000 -0.7056 -.00120 .04705 -.00305
 GRADIENT -.01113 .00321 .00811 .00049 -.00016

DCBL
 -.00058
 -.00044
 .00001

DCBL
 -.00024
 -.00021
 -.00004

DCBL
 -.00042
 -.00050
 -.00010

DCBL
 -.00041
 -.00047
 -.00009

DCBL
 -.00049
 -.00024
 .00037

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA) (PNHX13) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
SCALE = .0125

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 45.000

ALPHAC 2.000 DCL -.03409 DCD .00020 DCYM .00050 DCBL -.00064
4.000 DCLM .03266 DCY -.00111 DCYN .00050
GRADIENT -.04918 -.00040 -.00009 .00024
-.01010 .00344 .00030 -.00013

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 50.000

ALPHAC 2.000 DCL -.03028 DCD .00013 DCYM .00050 DCBL -.00004
4.000 DCLM .02780 DCY -.00133 DCYN .00050
GRADIENT -.04180 -.02850 .00016 .00020
-.00832 .00351 .00053 -.00001

ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA) (PNHX14) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 3.500

ALPHAC 2.000 DCL -.10849 DCD -.00461 DCYM .00295 DCBL -.00047
4.000 DCLM .13250 DCY -.00409 DCYN .00295
GRADIENT -.11652 -.00651 -.00326 .00275
-.00657 .00280 .00020 -.00011

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 7.500

ALPHAC 2.000 DCL -.09683 DCD -.00246 DCYM .00384 DCBL -.00096
4.000 DCLM .10206 DCY -.00379 DCYN .00384
GRADIENT -.10206 -.00449 .00328 .00277
-.01018 .00273 .00005 -.00004

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
TORB = 6.000 DX = .000
DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
TORB = 6.000 DX = 10.000
DY = .000 MACH = .600

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC STAB = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC ELEVON = .000 ELEVON = 5.000
 BREF = 2342.0400 IN. ZMRP = 190.7500 IN. ZC GRADIENT = .0125
 SCALE = .0125

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC DCL DCD DCLM DCY DCYN DCBL
 2.000 -.08231 -.00184 .09492 -.00572 .00310
 4.000 -.09480 -.00336 .09488 -.00408 .00279
 GRADIENT -.00931 .00299 .00810 .00061 -.00016 .00004

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC DCL DCD DCLM DCY DCYN DCBL
 2.000 -.07215 -.00113 .07447 -.00372 .00240
 4.000 -.07459 -.00219 .07230 -.00250 .00213
 GRADIENT -.00578 .00322 .00703 .00040 -.00014 .00018

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC DCL DCD DCLM DCY DCYN DCRL
 2.000 -.05788 .00009 .03742 -.00172 .00088
 4.000 -.05088 -.00036 .04107 -.00084 .00072
 GRADIENT -.00903 .00352 .00994 .00023 -.00008 .00001

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC DCL DCD DCLM DCY DCYN DCBL
 2.000 -.02780 .00025 .02357 -.00253 .00050
 4.000 -.03216 .00046 .02624 -.00039 .00047
 GRADIENT -.00474 .00385 .00945 .00056 -.00007 .00028

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC DCL DCD DCLM DCY DCYN DCBL
 2.000 -.01774 .00064 .02041 -.00128 .00053
 4.000 -.02300 .00060 .02402 -.00056 .00042
 GRADIENT -.00809 .00373 .00932 .00015 -.00006 .00011

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 10.000
 CY = .000 MACH = .600

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 FOR QUALITY

ARC 14-120(CA23B) 747/1 ATI 02S1 (CARRIER DATA)

(P)HX15) (17 OCT '5

REFERENCE DATA

SPEF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 SPEF = 23.8.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 8.000 DX = 10.000
 D. = .000 MACH = .500

DZ = 3.500 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
2.000	-.13389	-.00730	.20400	-.00545	.00294	-.00036
4.000	-.15157	-.01023	.20794	-.00201	.00215	-.00088
GRADIENT	-.01140	.00229	.01008	.00151	-.00040	-.00032

DZ = 7.500 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
2.000	-.11657	-.00541	.17481	-.00441	.00260	-.00040
4.000	-.13054	-.00789	.17656	-.00244	.00207	-.00075
GRADIENT	-.00954	.00251	.00899	.00077	-.00027	-.00023

DZ = 10.000 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
2.000	-.10480	-.00407	.15664	-.00399	.00243	-.00034
4.000	-.11654	-.00632	.15633	-.00291	.00204	-.00059
GRADIENT	-.00843	.00262	.00796	.00033	-.00020	-.00018

DZ = 15.000 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
2.000	-.08730	-.00266	.12550	-.00280	.00203	-.00103
4.000	-.09666	-.00419	.12307	-.00229	.00185	-.00085
GRADIENT	-.00724	.00298	.00690	.00004	-.00010	.00003

DZ = 30.000 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
2.000	-.05226	-.00073	.07033	-.00187	.00058	.00014
4.000	-.06486	-.00153	.06934	-.00030	.00030	.00009
GRADIENT	-.00886	.00335	.00759	.00057	-.00014	-.00008

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

(PNHX15) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC DCL DCD DCLM DCY DCYN DCBL
 2.000 -.03273 -.00008 .04405 -.00130 .00028 -.00017
 4.000 -.04563 -.00045 .04482 .00000 .00011 .00027
 GRADIENT -.00901 .00356 .00850 .00044 -.00009 .00016

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC DCL DCD DCLM DCY DCYN DCBL
 2.000 -.02978 .00004 .03906 -.00110 .00009 -.00007
 4.000 -.03811 -.00007 .03987 .00008 .00011 .00009
 GRADIENT -.00673 .00369 .00852 .00038 -.00004 .00007

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC DCL DCD DCLM DCY DCYN DCBL
 2.000 -.08552 -.00491 .13195 -.00519 .00278 -.00051
 4.000 -.05736 -.00602 .13519 -.00351 .00233 -.00053
 GRADIENT -.00848 .00319 .00973 .00063 -.00023 .00007

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500

ALPHAC DCL DCD DCLM DCY DCYN DCBL
 2.000 -.07171 -.00224 .10653 -.00440 .00243 -.00041
 4.000 -.08542 -.00383 .10970 -.00302 .00214 -.00050
 GRADIENT -.00941 .00296 .00970 .00047 -.00015 .00010

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

PNHX16) 17 OCT 75

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2343.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 2.000 -.07026 DCL DCD DCLM DCY DCYN DCBL
 4.000 -.08071 -.00143 .09418 -.00512 .00249
 GRADIENT -.00778 -.00288 .09778 -.00304 -.00209
 .00991 .00083 .00021

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 2.000 -.05316 DCL DCD DCLM DCY DCYN DCBL
 4.000 -.06762 -.00075 .07331 -.00438 .00202
 GRADIENT -.00979 .00324 .01001 .00095 .00161
 -.00021

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 2.000 -.03280 DCL DCD DCLM DCY DCYN DCBL
 4.000 -.04557 -.00016 .04416 -.00228 .00067
 GRADIENT -.00894 .00338 .01055 .00042 .00040
 -.00014

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC
 2.000 -.01689 DCL DCD DCLM DCY DCYN DCBL
 4.000 -.02678 .00074 .02949 -.00177 .00036
 GRADIENT -.00750 .00362 .01065 .00069 .00011
 -.00013

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC
 2.000 -.01908 DCL DCD DCLM DCY DCYN DCBL
 4.000 -.02358 .00067 .02170 -.00211 .00040
 GRADIENT -.00486 .00390 .01051 .00088 .00010
 -.00016

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

DCBL
 -.00048
 -.00059
 -.00011

DCBL
 -.00020
 -.00084
 -.00038

DCBL
 -.00015
 .00008
 .00005

DCBL
 -.00005
 -.00003
 -.00005

DCBL
 .00012
 .00018
 -.00003

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA) (PNHX17) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC STAB = .000 STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC ELEVON = .000 ELEVON = 5.000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC TORB = 8.000 DX = 20.000
 SCALE = .0125 GRADIENT = .00310 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

PARAMETRIC DATA

DZ	ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
3.500	ALPHAC	.12225	.00860	.19598	-.00401	.00189	-.00100
	2.000	-.12333	-.01098	.21128	.00100	.00137	-.00036
	4.000	-.00310	.00256	.01576	.00229	-.00027	.00026
GRADIENT = .00310 GRADIENT INTERVAL = -5.00/ 5.00							
7.500	ALPHAC	.10310	.00646	.17056	-.00308	.00168	-.00067
	2.000	-.11183	-.00886	.18003	-.00020	.00132	-.00057
	4.000	-.00692	.00255	.01285	.00123	-.00018	-.00001
GRADIENT = .00692 GRADIENT INTERVAL = -5.00/ 5.00							
10.000	ALPHAC	.09972	.00484	.15481	-.00254	.00154	-.00034
	2.000	-.10376	-.00737	.15900	-.00116	.00129	-.00079
	4.000	-.00958	.00248	.01021	.00048	-.00013	-.00028
GRADIENT = .00958 GRADIENT INTERVAL = -5.00/ 5.00							
15.000	ALPHAC	.08110	.00361	.12518	-.00175	.00121	-.00072
	2.000	-.09245	-.00558	.12850	-.00125	.00113	-.00048
	4.000	-.00823	.00276	.00977	.00004	-.00004	.00006
GRADIENT = .00823 GRADIENT INTERVAL = -5.00/ 5.00							
30.000	ALPHAC	.05256	.00172	.07162	-.00133	.00013	-.00022
	2.000	-.05960	-.00261	.07305	.00143	-.00029	-.00010
	4.000	-.00609	.00330	.00683	.00117	-.00022	-.00022
GRADIENT = .00609 GRADIENT INTERVAL = -5.00/ 5.00							

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ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA) (PNHX17) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC
 2.000
 4.000
 GRADIENT

DCL
 -.03056
 -.00074
 -.00099
 .00363

DCO
 -.00074
 .04431
 .04792
 .00992

DCY
 -.00094
 .00081
 .00067

DCYN
 .00007
 -.00018
 -.00013

DCBL
 -.00040
 -.00063
 -.00017

DZ = 50.000

ALPHAC
 2.000
 4.000
 GRADIENT

DCL
 -.03315
 -.04031
 -.00614

DCO
 -.00082
 -.00109
 .00361

DCY
 -.00095
 .00014
 .00034

DCYN
 -.00005
 -.00010
 -.00003

DCBL
 .00006
 .00005
 -.00011

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA) (PNHX27) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC
 2.000
 4.000
 GRADIENT

DCL
 -.11637
 -.13470
 -.01173

DCO
 -.00378
 -.00744
 .00192

DCY
 -.00152
 -.00395
 -.00142

DCYN
 .00183
 .00183
 -.00001

DCBL
 -.00155
 -.00018
 .00062

DZ = 7.500

ALPHAC
 2.000
 4.000
 GRADIENT

DCL
 -.10797
 -.12585
 -.01150

DCO
 -.00311
 -.00612
 .00224

DCY
 -.00282
 -.00318
 -.00040

DCYN
 .00178
 .00173
 -.00003

DCBL
 -.00071
 -.00014
 .00023

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 03S1 (CARRIER DATA) (PNHX27) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC STAB = 5.000
 LREF = 327.7800 IN. YMRP = .0000 IN. YC ELEVON = .000
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC GRADIENT = 8.000 DX = .000
 SCALE = .0125 GRADIENT = .01162 .00250 .00703 .00053 .00008 MACH = .600

PARAMETRIC DATA

BCTA =
 RUDDER =
 TORB =
 DY =

PN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAAC
 2.000 DCL .10403 DCD -.00277 DCLM .10901 DCY -.00411 DCBL .00011
 4.000 DCL .12214 DCD -.00526 DCLM .10684 DCY -.00263 DCBL -.00006
 GRADIENT -.01162 .00250 .00703 .00053 .00008

PN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAAC
 2.000 DCL -.08562 DCD -.00164 DCLM .08405 DCY -.00321 DCBL -.00042
 4.000 DCL .10408 DCD -.00371 DCLM .08253 DCY -.00149 DCBL -.00025
 GRADIENT -.01129 .00271 .00735 .00065 .00003

PN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAAC
 2.000 DCL -.05995 DCD -.00093 DCLM .04756 DCY -.00171 DCBL .00006
 4.000 DCL .07088 DCD -.00168 DCLM .04607 DCY -.00081 DCBL -.00016
 GRADIENT -.00803 .00337 .00737 .00024 .00002

PN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAAC
 2.000 DCL -.03534 DCD -.00057 DCLM .03007 DCY -.00002 DCBL .00004
 4.000 DCL .04553 DCD -.00114 DCLM .02994 DCY -.00004 DCBL .00002
 GRADIENT -.00786 .00346 .00805 .00024 .00009

PN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAAC
 2.000 DCL -.03770 DCD -.00059 DCLM .02752 DCY .00023 DCBL -.00020
 4.000 DCL .03993 DCD -.00071 DCLM .02551 DCY .00031 DCBL -.00022
 GRADIENT -.00368 .00373 .00776 .00017 .00008

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .5000 IN. YC
 BRFF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 ICRB = 6.000 DX = 10.000
 DY = .000 MACH = .600

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY
 -.09232 -.00265 .08474 -.00176
 -.10134 -.00356 .08475 -.00120
 -.00707 .00329 .00812 .00007

DCYN DCBL
 .00113
 .00109
 -.00002
 -.00002

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY
 -.07548 -.00120 .06440 -.00211
 -.08705 -.00254 .06609 -.00166
 -.00834 .00308 .00896 .00001

DCYN DCBL
 .00140
 .00142
 .00001
 .00010

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY
 -.06667 -.00092 .05486 -.00316
 -.08259 -.00199 .05810 -.00249
 -.01052 .00321 .00973 .00012

DCYN DCBL
 .00171
 .00168
 -.00002
 .00001

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY
 -.09479 -.00032 .04157 -.00233
 -.07175 -.00120 .04543 -.00332
 -.01104 .00331 .01004 -.00071

DCYN DCBL
 .00184
 .00197
 .00006
 .00006

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY
 -.03735 -.00029 .02070 -.00147
 -.04855 -.00006 .02466 -.00058
 -.00786 .00386 .01009 .00023

DCYN DCBL
 .00059
 .00071
 .00003
 .00023

ARC 14-120(CA23B) 747/1 ATI 03S1 (CARRIER DATA) (PNHX28) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 DZ = 45.000
 ALPHAC DCL DCLM DCD DCY DCYN DCBL
 2.000 -.02651 -.00018 .01267 -.00065 .00021 .00019
 4.000 -.03655 .00030 .01720 .00038 .00015 .00027
 GRADIENT -.00758 .00399 .01038 .00030 -.00004 -.00002

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 DZ = 50.000
 ALPHAC DCL DCLM DCD DCY DCYN DCBL
 2.000 -.01987 .00001 .00995 -.00007 .00013 .00001
 4.000 -.02635 .00033 .01569 .00018 .00026 .00018
 GRADIENT -.00580 .00391 .01098 .00009 .00006 .00004

ARC 14-120(CA23B) 747/1 ATI 03S1 (CARRIER DATA) (PNHX29) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 DZ = 3.500
 ALPHAC DCL DCLM DCD DCY DCYN DCBL
 2.000 -.12118 -.00609 .14709 -.00268 .00130 .00038
 4.000 -.13002 -.00738 .15187 .00057 .00086 .00087
 GRADIENT -.00698 .00310 .01050 .00142 -.00023 -.00030

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 DZ = 7.500
 ALPHAC DCL DCLM DCD DCY DCYN DCBL
 2.000 -.10442 -.00430 .12381 .00271 .00141 .00026
 4.000 -.11547 -.00589 .12797 .00093 .00124 .00049
 GRADIENT -.00958 .00295 .01019 .00068 .00009 .00017

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ARC 14-120(CA23B) 747/1 AT1 03SI (CARRIER DATA)

(PNHX29) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT.
 LREF = 327.7800 IN.
 BREF = 2348.0400 IN.
 SCALE = .0125

XMRP = 1339.9000 IN. XC
 YMRP = .0000 IN. YC
 ZMRP = 190.7500 IN. ZC

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LCRB = 8.000 DX = 10.000
 DY = .000 MACH = .600

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.00311
 -.00485
 .00288

DCY
 -.00262
 -.00194
 .00113

DCLM
 .10927
 .11230
 .00963

DCYN
 .00144
 .00147
 .00101

DCBL
 -.00009
 -.00012
 -.00007

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.00194
 -.00368
 .00288

DCY
 -.00353
 -.00307
 .00001

DCLM
 .08576
 .08790
 .00918

DCYN
 .00190
 .00187
 -.00002

DCBL
 -.00058
 -.00038
 .00004

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.00098
 -.00140
 .00354

DCY
 -.00165
 -.00107
 .00008

DCLM
 .04496
 .04815
 .00971

DCYN
 .00109
 .00101
 -.00004

DCBL
 -.00051
 -.00036
 .00002

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.00039
 -.00064
 .00362

DCY
 -.00048
 .00078
 .00042

DCLM
 .02770
 .03137
 .00995

DCYN
 .00223
 .00012
 -.00006

DCBL
 -.00019
 -.00022
 -.00007

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.00060
 -.00064
 .00373

DCY
 -.00061
 -.00021
 -.00001

DCLM
 .02531
 .02875
 .00984

DCYN
 .00017
 .00030
 .00006

DCBL
 .00020
 .00040
 .00004

(PNHX30) (17 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL	DCD	DCYM	DCY	DCBL
-.11010	-.00600	.14571	-.00179	.00052
-.11851	-.00796	.15667	-.00023	.00055
-.00676	.00277	.01359	-.00009	-.00004

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL	DCD	DCYM	DCY	DCBL
-.09327	-.00445	.12174	-.00210	.00018
-.10597	-.00635	.13103	-.00097	.00020
-.00891	.00280	.01276	-.00005	-.00005

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL	DCD	DCYM	DCY	DCBL
-.07984	-.00322	.10723	-.00225	.00003
-.09707	-.00520	.11410	-.00145	-.00009
-.01115	.00276	.01154	-.00004	-.00009

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL	DCD	DCYM	DCY	DCBL
-.07221	-.00275	.08365	-.00282	.00024
-.08684	-.00402	.08925	-.00156	-.00003
-.00987	.00311	.01091	-.00002	.00005

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL	DCD	DCYM	DCY	DCBL
-.04798	-.00160	.04533	-.00252	.00008
-.05688	-.00186	.04954	-.00111	.00038
-.00701	.00362	.01022	-.00005	.00017

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(PNHX31) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT.
 LREF = 327.7800 IN.
 BREF = 2348.0400 IN.
 SCALE = .0125

XMRP = 1339.9000 IN. XC
 YMRP = .0000 IN. YC
 ZMRP = 190.7500 IN. ZC

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC
 2.000 -.02950 DCL DCD DCLM DCY DCYN DCBL
 4.000 -.04712 -.00042 -.02669 -.00099 -.00026
 GRADIENT -.01337 .00336 .01101 .03249 -.00038 .00026
 .00005 .00010

DZ = 50.000
 ALPHAC
 2.000 -.02906 DCL DCD DCLM DCY DCYN DCBL
 4.000 -.03650 -.00071 -.02318 -.00101 -.00015
 GRADIENT -.00628 .00372 .02885 .00056 .00007 .00003
 .01095 .00057 -.00022

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(PNHX31) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT.
 LREF = 327.7800 IN.
 BREF = 2348.0400 IN.
 SCALE = .0125

XMRP = 1339.9000 IN. XC
 YMRP = .0000 IN. YC
 ZMRP = 190.7500 IN. ZC

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC
 2.000 -.09896 DCL DCD DCLM DCY DCYN DCBL
 4.000 -.09629 -.00410 .08139 -.00226 .00097
 GRADIENT -.00122 .00356 .00822 -.00222 .00115 .00009
 .00019

DZ = 7.500
 ALPHAC
 2.000 -.07260 DCL DCD DCLM DCY DCYN DCBL
 4.000 -.08345 -.00262 .06470 -.00255 .00125
 GRADIENT -.00433 .00349 .00979 -.00003 .00138 .00006
 .00028

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(PNHX31) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHA = .06421 DCL .05440 DCD .00146 DCY .00269 DCBL .00142
 2.000 -.06421 DCLM .05949 -.00220 .00154
 4.000 -.07412 DCD .00338 .00007 .00006
 GRADIENT

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHA = .05793 DCL .04045 DCD .00088 DCY .00298 DCBL .00053
 2.000 -.05793 DCLM .04546 -.00128 .00171
 4.000 -.06497 DCD .00355 .00017 .00001
 GRADIENT

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHA = .03574 DCL .01802 DCD .00011 DCY .00060 DCBL .00014
 2.000 -.03574 DCLM .02292 -.00031 .00165
 4.000 -.04542 DCD .00353 .00074 .00083
 GRADIENT

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHA = .02061 DCL .01035 DCD .00040 DCY .00032 DCBL .00033
 2.000 -.02061 DCLM .01507 .00129 .00002
 4.000 -.03124 DCD .00364 .00094 .00016
 GRADIENT

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHA = .02100 DCL .00871 DCD .00025 DCY .00019 DCBL .00003
 2.000 -.02100 DCLM .01358 .00043 .00017
 4.000 -.02826 DCD .00372 .00013 .00001
 GRADIENT

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA)

(PNHX34) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 387.7800 IN. YMRP = 6000 IN. YC
 RREF = 2548.0000 IN. ZMRP = 100.0000 IN. ZC
 SCALE = 10168

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORQ = 5.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC
 2.000 .10352 DCL .08231 DCY
 4.000 .11998 .07896 .00145
 GRADIENT -.01129 .00644 -.00006

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC
 2.000 .08927 DCL .06569 DCY
 4.000 .10523 .06340 .00027
 GRADIENT -.01054 .00696 -.00038

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 2.000 .08506 DCL .05821 DCY
 4.000 .09940 .05592 .00040
 GRADIENT -.00973 .00697 -.00042

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 2.000 .06957 DCL .04592 DCY
 4.000 .08346 .04502 .00048
 GRADIENT -.00950 .00321 -.00031

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 2.000 .04633 DCL .02593 DCY
 4.000 .05556 .02534 .00069
 GRADIENT -.00717 .00349 .00082

DCBL
 -.00025
 -.00042
 -.00014

DCYN
 .00013
 -.00011
 .00001

DCBL
 -.00023
 -.00019
 -.00004

DCYN
 .00023
 .00044
 .00010

DCBL
 -.00027
 -.00025
 -.00005

DCYN
 .00038
 .00064
 .00013

DCBL
 -.00067
 -.00028
 .00014

DCYN
 .00086
 .00108
 .00011

DCBL
 -.00026
 -.00055
 -.00021

DCYN
 .00013
 .00056
 .00021

ARC 14-120(CA23B) 747/1 AT1 03S1 (CARRIER DATA)

(PNHX34) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC
 2.000 .02309 DCL DCD DCLM DCY DCYN DCBL
 4.000 -.03829 -.00017 .01698 .00021 -.00014 .00003
 GRADIENT -.00716 -.00012 .01740 .00060 -.00003 -.00002
 .00360 .00832 -.00001 .00005 -.00008

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC
 2.000 -.02862 DCL DCD DCLM DCY DCYN DCBL
 4.000 -.03373 -.00007 .01522 .00023 -.00003 .00008
 GRADIENT -.00512 .00363 .00813 .00007 .00003 .00003 .00010

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

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REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC
 2.000 -.15732 DCL DCD DCLM DCY DCYN DCBL
 4.000 -.17423 -.00732 .20664 .00083 -.00021 .00134
 GRADIENT -.01101 .00149 .00573 -.00004 -.00022 -.00065
 .00029

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC
 2.000 -.13937 DCL DCD DCLM DCY DCYN DCBL
 4.000 -.15415 -.00597 .17710 .00056 -.00030 .00054
 GRADIENT -.01045 .00200 .00480 .00101 -.00016 -.00016 .00013

ARC 14-120(CA238) 747/1 AT1 02S1 (CARRIER DATA)

(PNHY10) (17 OCT 75)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAE = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 10.000
 ALPHAC = 2.000 DCL = .12528 DCD = -.00505 DCYM = .00061 DCBL = .00008
 4.000 DCLM = .15870 DCY = .00109 DCYN = -.00026
 GRADIENT = -.01014 DCLM = .15086 DCY = .00109 DCYN = .00000
 GRADIENT = .00234 DCLM = .00419 DCY = .00003 DCYN = .00013

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 15.000
 ALPHAC = 2.000 DCL = -.10709 DCD = -.00376 DCYM = .00004 DCBL = .00011
 4.000 DCLM = .12226 DCY = -.00044 DCYN = .00024
 GRADIENT = -.01014 DCLM = .00360 DCY = .00011 DCYN = .00010

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 30.000
 ALPHAC = 2.000 DCL = -.06579 DCD = -.00165 DCYM = .00062 DCBL = .00034
 4.000 DCLM = .08101 DCY = -.00047 DCYN = -.00001
 GRADIENT = -.01017 DCLM = .00556 DCY = -.00014 DCYN = -.00001

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 45.000
 ALPHAC = 2.000 DCL = -.04281 DCD = -.00085 DCYM = .00007 DCBL = .00022
 4.000 DCLM = .05654 DCY = -.00019 DCYN = .00005
 GRADIENT = -.00943 DCLM = .00687 DCY = -.00000 DCYN = -.00001

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 50.000
 ALPHAC = 2.000 DCL = -.03972 DCD = -.00067 DCYM = .00014 DCBL = .00018
 4.000 DCLM = .04827 DCY = -.00025 DCYN = -.00001
 GRADIENT = -.00704 DCLM = .00669 DCY = .00039 DCYN = -.00008

DATE 23 MAR 76 TABULATED SOURCE DATA - CA23B (PNHY13) (17 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 02S1 (CARRIER DATA)

REFERENCE DATA

SREF = 5500.0000 SO.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500 DCL DCD DCY DCYD DCBL
ALPHAC -.11806 -.00355 .13101 -.00246 .00149
2.000 -.13645 -.00632 .12848 -.00250 .00148
4.000 -.01176 .00237 .00685 -.00023 -.00001
GRADIENT

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500 DCL DCD DCY DCYD DCBL
ALPHAC -.10549 -.00248 .11028 -.00367 .00174
2.000 -.12003 -.00457 .10737 -.00319 .00170
4.000 -.00983 .00270 .00666 .00003 -.00002
GRADIENT

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000 DCL DCD DCY DCYD DCBL
ALPHAC -.09490 -.00192 .09916 -.00389 .00169
2.000 -.11068 -.00396 .09616 -.00310 .00163
4.000 -.01045 .00273 .00661 .00018 -.00009
GRADIENT

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000 DCL DCD DCY DCYD DCBL
ALPHAC -.08521 -.00111 .07955 -.00351 .00158
2.000 -.09753 -.00284 .07794 -.00289 .00159
4.000 -.00872 .00289 .00731 .00010 -.00000
GRADIENT

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000 DCL DCD DCY DCYD DCBL
ALPHAC -.05318 -.00015 .04676 -.00189 .00085
2.000 -.07021 -.00119 .04687 -.00069 .00061
4.000 -.01107 .00323 .00817 .00039 -.00013
GRADIENT

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
TORB = 6.000 DX = .000
DY = .000 MACH = .500

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DATE 23 MAR 76

TABULATED SOURCE DATA - CA238

832

ARC 14-120(CA238) 747/1 ATI 0251 (CARRIER DATA)

(PNHY13) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
SCALE = .0125

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC
2.000
4.000
GRADIENT

DCL
-.03387
-.04876
-.01000

DCD
.00019
-.00040
.00345

DCY
-.00149
-.00058
.00024

DCBL
-.00061
-.00021
.00014

DZ = 50.000

ALPHAC
2.000
4.000
GRADIENT

DCL
-.03038
-.04162
-.00818

DCD
.00010
-.00033
.00354

DCY
-.00161
-.00025
.00047

DCBL
-.00001
.00005
-.00003

ARC 14-120(CA238) 747/1 ATI 0251 (CARRIER DATA)

(PNHY18) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC
2.000
4.000
GRADIENT

DCL
-.10637
-.12478
-.01176

DCD
-.00497
-.00657
.00295

DCY
-.00582
-.00907
-.00184

DCBL
.00523
.00635
.00050

DZ = 7.500

ALPHAC
2.000
4.000
GRADIENT

DCL
-.08798
-.10392
-.01053

DCD
-.00340
-.00509
.00290

DCY
-.00504
-.00863
-.00201

DCBL
.00472
.00533
.00025

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
TORB = 6.000 DX = .000
DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
TORB = 6.000 DX = .000
DY = 10.000 MACH = .600

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LPEF = 327.7800 IN. YMRP = .0000 IN. YC
 BPEF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000

ALPHAC	DCL	DCO	DCLM	DCY	DCYN	DCBL
2.000	-.08047	-.00276	.08681	-.00465	-.00333	.00435
4.000	-.09664	-.00401	.08506	-.00916	-.00169	.00436
GRADIENT	-.01064	.00313	.00724	-.00246	.00081	-.00005

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000

ALPHAC	DCL	DCO	DCLM	DCY	DCYN	DCBL
2.000	-.06738	-.00179	.07188	-.00680	-.00162	.00318
4.000	-.08158	-.00298	.06979	-.01077	.00040	.00365
GRADIENT	-.00966	.00315	.00707	-.00219	.00100	.00018

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000

ALPHAC	DCL	DCO	DCLM	DCY	DCYN	DCBL
2.000	-.04714	-.00069	.04147	-.01014	.00321	.00103
4.000	-.05723	-.00081	.04189	-.01370	.00469	.00095
GRADIENT	-.00761	.00369	.00833	-.00199	.00073	-.00010

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC	DCL	DCO	DCLM	DCY	DCYN	DCBL
2.000	-.03009	-.00006	.02860	-.00856	.00321	.00002
4.000	-.03782	-.00021	.02971	-.00981	.00383	.00026
GRADIENT	-.00642	.00367	.00867	-.00083	.00030	.00006

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC	DCL	DCO	DCLM	DCY	DCYN	DCBL
2.000	-.02666	-.00034	.02717	-.00695	.00263	.00055
4.000	-.03355	.00017	.02885	-.00794	.00314	.00014
GRADIENT	-.00600	.00400	.00896	-.00071	.00025	-.00026

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ARC 14-120(CA23B) 747/1 AT1 0251 (CARRIER DATA)

(PNHY19)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 8.000 DX = .000
 DY = 10.000 MACH = .600

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC
 2.000 DCL .14691 DCLM .15791 DCY .00763 DCYN .00504 DCBL .00575
 4.000 DCL .16013 DCLM .15676 DCLM .13935 DCY .01200 DCYN .00289 DCBL .00728
 GRADIENT .009917 GRADIENT .00267 GRADIENT .00668 GRADIENT .00248 GRADIENT .00115 DCBL .00070

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC
 2.000 DCL .12342 DCLM .14283 DCY .00852 DCYN .00328 DCBL .00541
 4.000 DCL .13993 DCLM .13935 DCY .01305 DCYN .00097 DCBL .00637
 GRADIENT .01082 GRADIENT .00266 GRADIENT .00668 GRADIENT .00248 GRADIENT .00115 DCBL .00042

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 2.000 DCL .10544 DCLM .13367 DCY .00887 DCYN .00222 DCBL .00509
 4.000 DCL .12361 DCLM .12928 DCY .01393 DCYN .00040 DCBL .00576
 GRADIENT .01164 GRADIENT .00256 GRADIENT .00592 GRADIENT .00274 GRADIENT .00131 DCBL .00027

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 2.000 DCL .09888 DCLM .11427 DCY .00986 DCYN .00045 DCBL .00487
 4.000 DCL .11583 DCLM .10955 DCY .01453 DCYN .00205 DCBL .00484
 GRADIENT .01104 GRADIENT .00290 GRADIENT .00575 GRADIENT .00254 GRADIENT .00125 DCBL .00007

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 2.000 DCL .06277 DCLM .06944 DCY .01435 DCYN .00452 DCBL .00159
 4.000 DCL .07369 DCLM .06545 DCY .01832 DCYN .00648 DCBL .00132
 GRADIENT .00802 GRADIENT .00361 GRADIENT .00612 GRADIENT .00219 GRADIENT .00097 DCBL .00019

DATE 23 MAR 76 TABULATED SOURCE DATA - CA238 (PNHY19) (17 OCT 75)

ARC 14-120(CA238) 747/1 AT1 0251 (CARRIER DATA) REFERENCE DATA SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC

LN/L = 45.000 DZ = 45.000 ALPHAC = 2.000 DCL = -.03664 DCLM = .04457 DCY = -.01038 DCBL = -.00006

DCD = -.00035 DCDL = .04337 DCY = .00474 DCBL = .00053

GRADIENT = -.01037 GRADIENT INTERVAL = -5.00/ 5.00 RN/L = 3.35

DCY = .00020 DCBL = .00023 BETA = .000 STAB = 5.000

RUDDER = .000 ELEVON = 5.000 TORB = .00474 DY = .00020

DCY = .00365 DCBL = .00045

DCY = .00401 DCBL = .00042

DATE 23 MAR 76 TABULATED SOURCE DATA - CA238 (PNHY27) (17 OCT 75)

ARC 14-120(CA238) 747/1 AT1 0351 (CARRIER DATA) REFERENCE DATA SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC

LN/L = 50.000 DZ = 50.000 ALPHAC = 2.000 DCL = -.03192 DCLM = .04100 DCY = -.00955 DCBL = .00045

DCD = -.00029 DCDL = .03984 DCY = .00401 DCBL = .00042

GRADIENT = -.01016 GRADIENT INTERVAL = -5.00/ 5.00 RN/L = 3.35

DCY = .00017 DCBL = .00007 BETA = .000 STAB = 5.000

RUDDER = .000 ELEVON = 5.000 TORB = .00017 DY = .00017

DCY = .00186 DCBL = .00058

DCY = .00003 DCBL = .00058

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(PNHY27) (17)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LPEF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2349.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 3.000
 RUDDER = .000 ELE. ON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = 1.600

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
2.000	-.10499	-.00278	.10908	-.00409	.00189	.00009
4.000	-.12227	-.00526	.10689	-.00256	.00172	-.00009
GRADIENT	-.01165	.00250	.00702	.00056	-.00009	-.00015

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
2.000	-.08560	-.00163	.08407	-.00318	.00129	.00043
4.000	-.10423	-.00371	.08248	-.00139	.00117	-.00026
GRADIENT	-.01133	.00271	.00732	.00068	-.00007	-.00003

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
2.000	-.06013	-.00093	.04763	-.00165	.00078	.00006
4.000	-.07099	-.00169	.04605	-.00077	.00085	-.00015
GRADIENT	-.00799	.00337	.00732	.00023	-.00003	-.00017

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
2.000	-.03534	-.00058	.03011	.00008	.00002	-.00002
4.000	-.04602	-.00116	.02991	-.00007	.00024	.00003
GRADIENT	-.00790	.00346	.00801	-.00028	.00011	-.00004

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
2.000	-.03730	-.00069	.02726	.00027	-.00005	-.00020
4.000	-.03985	-.00072	.02646	.00038	.00011	-.00024
GRADIENT	-.00358	.00373	.00772	-.00016	.00007	-.00008

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(PNHY32) (17 OCT 75)

REFERENCE DATA

SPEF * 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF * 327.7800 IN. YMRP = .0000 IN. YC
 BREF * 2348.0400 IN. ZMRP = 190.7500 IN ZC
 SCALE * .0125

BETA * .000 STAB * 5.000
 RUDDER * .000 ELEVON * .000
 TORB * 6.000 DX * .000
 DY * 10.000 MACH * .600

PARAMETRIC DATA

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ * 3.500
 ALPHAC
 2.000 DCL -.09755 DCD -.00255 DCLM .06986 DCY -.00825 DCYN .00407 DCBL .00407
 4.000 DCL -.11172 DCD -.00330 DCLM .06875 DCY -.01105 DCYN -.00211 DCBL .00529
 GRADIENT -.00965 DCL -.00312 DCD .00307 DCLM .00756 DCY -.00161 DCYN .00013 DCBL .00055

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ * 7.500
 ALPHAC
 2.000 DCL -.07862 DCD -.00139 DCLM .05745 DCY -.00767 DCYN .00126 DCBL .00329
 4.000 DCL -.09607 DCD -.00274 DCLM .05597 DCY -.01127 DCYN -.00004 DCBL .00438
 GRADIENT -.01128 DCL -.01128 DCD .00307 DCLM .00737 DCY -.00201 DCYN .00061 DCBL .00049

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ * 10.000
 ALPHAC
 2.000 DCL -.07525 DCD -.00121 DCLM .04984 DCY -.00775 DCYN -.00047 DCBL .00325
 4.000 DCL -.09259 DCD -.00221 DCLM .05038 DCY -.01176 DCYN .00090 DCBL .00382
 GRADIENT -.01123 DCL -.01123 DCD .00325 DCLM .00838 DCY -.00222 DCYN .00068 DCBL .00023

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ * 15.000
 ALPHAC
 2.000 DCL -.06232 DCD -.00070 DCLM .03773 DCY -.00866 DCYN .00100 DCBL .00231
 4.000 DCL -.07762 DCD -.00139 DCLM .03884 DCY -.01236 DCYN .00246 DCBL .00227
 GRADIENT -.01020 DCL -.01020 DCD .00340 DCLM .00867 DCY -.00206 DCYN .00072 DCBL .00008

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ * 30.000
 ALPHAC
 2.000 DCL -.03850 DCD -.00001 DCLM .02659 DCY -.00748 DCYN .00274 DCBL .00082
 4.000 DCL -.05144 DCD -.00032 DCLM .02284 DCY -.01080 DCYN .00404 DCBL .00085
 GRADIENT -.00903 DCL -.00903 DCD .00359 DCLM .00819 DCY -.00187 DCYN .00064 DCBL .00005

DATE 23 MAR 76

TABULATED SOURCE DATA - CA23B

ARC 14-120(CA23B) 747/1 ATI 0351 (CARRIER DATA)

(PNHY32)

(17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BRREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC
 2.000
 4.000
 GRADIENT

DCL
 -.02575
 -.03741
 -.00838

DCD
 -.00011
 .00012
 .00386

DCLM
 .01499
 .01714
 .00919

DCY
 -.00569
 -.00577
 -.00076

DCBL
 .00057
 .00064
 -.00003

DCYN
 .00226
 .00282
 .00028

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

DZ = 50.000

ALPHAC
 2.000
 4.000
 GRADIENT

DCL
 -.01987
 -.03513
 -.01019

DCD
 .00027
 .00006
 .00364

DCLM
 .01269
 .01498
 .00926

DCY
 -.00419
 -.00554
 -.00089

DCBL
 .00008
 .00058
 .00019

DCYN
 .00194
 .00243
 .00024

ARC 14-120(CA23B) 747/1 ATI 0351 (CARRIER DATA)

(PNHY33)

(17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BRREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC
 2.000
 4.000
 GRADIENT

DCL
 -.11906
 -.14318
 -.01462

DCD
 -.00602
 -.00780
 .00286

DCLM
 .11367
 .11058
 .00657

DCY
 -.00891
 -.01406
 -.00279

DCBL
 .00458
 .00600
 .00065

DCYN
 -.00296
 -.00086
 .00099

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = 10.000 MACH = .600

DZ = 7.500

ALPHAC
 2.000
 4.000
 GRADIENT

DCL
 -.11096
 -.12932
 -.01174

DCD
 -.00465
 -.00649
 .00283

DCLM
 .10029
 .09819
 .00706

DCY
 -.01013
 -.01509
 -.00259

DCBL
 .00450
 .00515
 .00027

DCYN
 -.00104
 .00102
 .00102

ARC 14-120(CA23B) 747/1 AT1 03S1 (CARRIER DATA)

(PNHY33) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7803 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = 10.000 MACH = .600

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
2.000	-.10584	-.00374	.09258	-.01072	.00005	.00466
4.000	-.12067	-.00566	.09093	-.01572	.00227	.00478
GRADIENT	-.00998	.00279	.00729	-.00271	.00111	-.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
2.000	-.08826	-.00276	.07421	-.01141	.00171	.00301
4.000	-.10317	-.00415	.07335	-.01692	.00410	.00303
GRADIENT	-.01001	.00306	.00768	-.00296	.00119	-.00005

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
2.000	-.05706	-.00128	.04279	-.01176	.00434	.00108
4.000	-.06740	-.00159	.04261	-.01511	.00603	.00083
GRADIENT	-.00773	.00359	.00802	-.00188	.00084	-.00019

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
2.000	-.03455	-.00011	.02760	-.00756	.00327	.00030
4.000	-.04846	-.00040	.02811	-.00858	.00380	.00069
GRADIENT	-.00952	.00360	.00837	-.00072	.00326	.00014

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL
2.000	-.03414	-.00044	.02520	-.00506	.00248	.00041
4.000	-.04496	-.00066	.02603	-.00677	.00310	.00089
GRADIENT	-.00797	.00364	.00853	-.00107	.00030	.00018

ARC 14-120(CA23B) 747/1 AT1 0351 (CARRIER DATA)

(PNHY34) (17 3)

REFERENCE DATA

SREF = 5500.0000 SQ.FT. XMRP = 1339.9000 IN. XC
 LREF = 327.7800 IN. YMRP = .0000 IN. YC
 BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC DCL DCD DCLM DCY DCYN DCBL
 2.000 -.10225 -.00128 -.08229 .00102 -.00012
 4.000 -.11996 -.00325 -.07895 .00143 -.00012
 GRADIENT -.01142 .00276 .00644 -.00001 -.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC DCL DCD DCLM DCY DCYN DCBL
 2.000 -.08913 -.00061 -.06565 .00022 .00023
 4.000 -.10520 -.00240 .06336 -.00011 .00044
 GRADIENT -.01060 .00286 .00697 -.00038 .00010

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC DCL DCD DCLM DCY DCYN DCBL
 2.000 -.08490 -.00053 -.05816 -.00044 .00039
 4.000 -.09943 -.00187 .05588 -.00048 .00064
 GRADIENT -.00982 .00308 .00697 -.00023 .00012

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC DCL DCD DCLM DCY DCYN DCBL
 2.000 -.06944 -.00001 .04585 .00054 .00087
 4.000 -.08349 -.00109 .04497 .00037 .00108
 GRADIENT -.00959 .00321 .00767 -.00013 .00010

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC DCL DCD DCLM DCY DCYN DCBL
 2.000 -.04628 .00033 .02591 .00065 .00014
 4.000 -.05559 -.00019 .02532 -.00007 .00059
 GRADIENT -.00721 .00349 .00782 -.00057 .00022

DZ = 30.000
 ALPHAC DCL DCD DCLM DCY DCYN DCBL
 2.000 -.04628 .00033 .02591 .00065 .00014
 4.000 -.05559 -.00019 .02532 -.00007 .00059
 GRADIENT -.00721 .00349 .00782 -.00057 .00022

DATE 23 MAR 76

TABULATED SOURCE DATA - CA238

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ARC 14-120(CA238) 747/1 ATI 0351 (CARRIER DATA)

(PNHY34) (17 OCT 75)

REFERENCE DATA

SREF = 5500.0000 SC.FT. XMRP = 1339.9000 IN. XC
LREF = 327.7800 IN. YMRP = .0000 IN. YC
BREF = 2348.0400 IN. ZMRP = 190.7500 IN. ZC
SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = .000
ICRB = 6.000 DX = .000
DY = .000 MACH = .600

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC DCL DCD DCLM DCY DCYN DCBL
2.000 -.02910 .00018 .01703 .00019 -.00013
4.000 -.03831 -.00013 .01740 .00061 -.00003
GRADIENT -.00716 .00359 -.00830 -.00000 -.00004

DCBL
.00003
-.00002
-.00009

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC DCL DCD DCLM DCY DCYN DCBL
2.000 -.02876 -.00007 .01531 .00022 -.00003
4.000 -.03390 -.00032 .01524 .00078 .00040
GRADIENT -.00513 .00362 .00808 .00007 .00003

DCBL
.00008
.00040
.00010

ARC 14-120(CA238) 747/1 ATI 0351 (ORBITER DATA)

(TNH008) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SC.FT. XMRP = 1109.0000 IN. XO
LREF = 474.8100 IN. YMRP = .0000 IN. YO
BREF = 926.6800 IN. ZMRP = 375.0000 IN. ZO
SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
RUDDER = .000 ELEVON = 5.000
ICRB = 6.000 DX = .000
DY = .000 MACH = .600

RUN NO. 0/0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ
3.500 ALPHAO DCL DCD DCLM DCY DCYN DCBL
6.000 -.02984 -.00705 .01187 .00186 .00033
3.500 8.000 -.06931 -.01009 .01158 .00217 .00086
10.000 -.11750 -.01813 .01522 .00134 .00003
GRADIENT -.04451 -.00679 -.00468 .00014 .00009

DCBL
.00103
.00086
.00111
-.00014

RUN NO. 0/0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ
7.500 ALPHAO DCL DCD DCLM DCY DCYN DCBL
6.000 -.02505 -.00582 .00835 .00111 .00019
7.500 8.000 -.05552 -.00930 .00911 .00123 .00077
7.500 10.000 -.12545 -.01636 .01235 .00098 .00112
GRADIENT -.04552 -.00507 -.00425 .00012 .00006

DCBL
.00092
.00077
.00112
-.00011

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITEF DATA)

REFERENCE DATA

SREF = 2690.0000 50.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 LORR = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0/0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
10.000	6.000	-.02369	-.00527	.00726	.00035	.00001	.00069
10.000	8.000	-.06125	-.00880	.00867	-.00087	-.00018	.00041
10.000	10.000	-.10749	-.01557	.01126	.00043	-.00004	.00090
	GRADIENT	-.04611	-.00407	-.00400	.00011	.00004	-.00009

RUN NO. 0/0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
15.000	6.000	-.02494	-.00437	.00582	.00045	-.00003	.00057
15.000	8.000	-.06138	-.00776	.00704	.00022	.00000	.00042
15.000	10.000	-.10059	-.01381	.00994	.00083	-.00003	.00091
	GRADIENT	-.04711	-.00234	-.00357	.00009	.00001	-.00006

RUN NO. 0/0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
30.000	6.000	-.02255	-.00268	.00391	-.00006	.00010	.00034
30.000	8.000	-.04687	-.00511	.00544	-.00012	-.00008	.00023
30.000	10.000	-.08042	-.00954	.00740	.00086	-.00018	.00055
	GRADIENT	-.04785	-.00066	-.00317	.00006	-.00002	-.00002

RUN NO. 0/0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
45.000	6.000	-.02209	-.00154	.00277	-.00014	.00014	.00033
45.000	8.000	-.03717	-.00349	.00418	.00016	-.00012	.00022
45.000	10.000	-.06073	-.00583	.00573	.00091	-.00024	.00029
	GRADIENT	-.04649	-.00225	-.00359	.00004	.00001	-.00004

RUN NO. 0/0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
50.000	6.000	-.01841	-.00133	.00271	-.00025	.00019	.00024
50.000	8.000	-.03302	-.00292	.00398	.00048	-.00003	.00036
50.000	10.000	-.05322	-.00422	.00519	.00096	-.00024	.00041
	GRADIENT	-.04612	-.00265	-.00370	.00004	.00001	-.00005

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA) (TNH009) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0 / 0 PIVL = 3.34 GRADIENT INTERVAL = -5.00 / 5.00
 DZ ALPHAO 0 / 0
 3.500 8.000 DCL -.01518 DCD -.00528 DCLM .00900 DCY .00291 DCYN .00025 DCBL .00104
 3.500 10.000 DCL -.05613 DCD -.01136 DCLM .01174 DCDY .00207 DCDY -.00006 DCYN .00173
 3.500 12.000 DCL -.10957 DCD -.02560 DCLM .01638 DCDY .00220 DCDY -.00033 DCYN .00061
 GRADIENT -.04451 DCD -.00679 DCLM -.00468 DCDY .00014 DCDY .00009 DCYN -.00014

RUN NO. 0 / 0 PIVL = 3.35 GRADIENT INTERVAL = -5.00 / 5.00
 DZ ALPHAO 0 / 0
 7.500 8.000 DCL -.01496 DCD -.00366 DCLM .00636 DCY .00190 DCYN .00003 DCBL .00086
 7.500 10.000 DCL -.06133 DCD -.01113 DCLM .01011 DCDY .00205 DCDY -.00003 DCYN .00141
 7.500 12.000 DCL -.10467 DCD -.02390 DCLM .01445 DCDY .00226 DCDY -.00043 DCYN .00057
 GRADIENT -.04552 DCD -.00507 DCLM -.00425 DCDY .00012 DCDY .00006 DCYN -.00011

RUN NO. 0 / 0 PIVL = 3.35 GRADIENT INTERVAL = -5.00 / 5.00
 DZ ALPHAO 0 / 0
 10.000 8.000 DCL -.02358 DCD -.00520 DCLM .00685 DCY .00123 DCYN .00003 DCBL .00056
 10.000 10.000 DCL -.06623 DCD -.01105 DCLM .00894 DCDY .00243 DCDY .00008 DCYN .00119
 10.000 12.000 DCL -.10063 DCD -.02268 DCLM .01313 DCDY .00245 DCDY -.00048 DCYN .00056
 GRADIENT -.04611 DCD -.00407 DCLM -.00400 DCDY .00011 DCDY .00004 DCYN -.00009

RUN NO. 0 / 0 PIVL = 3.35 GRADIENT INTERVAL = -5.00 / 5.00
 DZ ALPHAO 0 / 0
 15.000 8.000 DCL -.02637 DCD -.00453 DCLM .00542 DCY .00003 DCYN .00023 DCBL .00051
 15.000 10.000 DCL -.06382 DCD -.01038 DCLM .00764 DCDY .00072 DCDY -.00029 DCYN .00091
 15.000 12.000 DCL -.09871 DCD -.02099 DCLM .01122 DCDY .00194 DCDY -.00067 DCYN .00045
 GRADIENT -.04711 DCD -.00234 DCLM -.00357 DCDY .00009 DCDY .00001 DCYN -.00006

RUN NO. 0 / 0 PIVL = 3.35 GRADIENT INTERVAL = -5.00 / 5.00
 DZ ALPHAO 0 / 0
 30.000 8.000 DCL -.01968 DCD -.00363 DCLM .00392 DCY .00009 DCYN .00025 DCBL .00017
 30.000 10.000 DCL -.05025 DCD -.00658 DCLM .00551 DCDY .00160 DCDY -.00035 DCYN .00062
 30.000 12.000 DCL -.07346 DCD -.01353 DCLM .00838 DCDY .00252 DCDY -.00088 DCYN .00047
 GRADIENT -.04785 DCD -.00066 DCLM -.00317 DCDY .00006 DCDY -.00002 DCYN -.00002

ARC 14-120(CA23B) 747/1 AT: 0251 (ORBITER DATA)

(TNH009)

75

REFERENCE DATA

SPEF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
45.000	8.000	-.01829	-.00162	.00258	.00103	-.00014	.00016
45.000	10.000	-.04308	-.00465	.00404	.00157	-.00041	.00045
45.000	12.000	-.05644	-.00810	.00584	.00279	-.00080	.00001
	GRADIENT	-.04649	-.00225	-.00359	.00004	.00001	-.00004

RUN NO. 0/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
50.000	8.000	-.01271	-.00111	.00281	.00147	-.00014	.00008
50.000	10.000	-.03660	-.00388	.00371	.00172	-.00047	.00021
50.000	12.000	-.05147	-.00685	.00506	.00266	-.00095	-.00002
	GRADIENT	-.04612	-.00265	-.00370	.00004	.00001	-.00005

ARC 14-120(CA23B) 747/1 AT: 0251 (ORBITER DATA)

(TNH010)

75

REFERENCE DATA

SPEF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
3.500	8.000	-.00912	-.00558	.01110	.00276	.00020	.00036
3.500	10.000	-.05553	-.01027	.01195	.00153	-.00036	.00062
3.500	12.000	-.08620	-.02308	.01593	.00203	-.00049	.00024
	GRADIENT	-.04451	-.00679	-.00468	.00014	.00009	-.00014

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
7.500	8.000	-.01195	-.00454	.00900	.00144	.00005	.00046
7.500	10.000	-.05278	-.00933	.01033	.00143	-.00027	.00089
7.500	12.000	-.09380	-.02051	.01399	.00193	-.00062	.00047
	GRADIENT	-.04552	-.00507	-.00425	.00012	.00006	-.00011

DATE 23 MAR 76 TABULATED SOURCE DATA - CA23B
ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(TNH010) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
LREF = 474.8100 IN. YMRP = .0000 IN. YO
BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
SCALE = .0125

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
LORB = 8.000 DX = .000
DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00
DZ ALPHA0 0 / 0
10.000 8.000 DCL -.01473 DCD -.00397 DCLM .00734 DCY .00070 DCYN .00000 DCBL .00057
10.000 10.000 DCL -.05048 DCD -.00869 DCLM .00916 DCY .00149 DCYN -.00016 DCBL .00119
10.000 12.000 DCL -.08654 DCD -.01853 DCLM .01263 DCY .00198 DCYN -.00071 DCBL .00073
GRADIENT -.04611 DCD -.00407 DCLM -.00400 DCY .00011 DCYN .00004 DCBL -.00009

RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00
DZ ALPHA0 0 / 0
15.000 8.000 DCL -.01291 DCD -.00340 DCLM .00632 DCY .00005 DCYN -.00018 DCBL .00036
15.000 10.000 DCL -.04344 DCD -.00782 DCLM .00780 DCY .00078 DCYN -.00035 DCBL .00087
15.000 12.000 DCL -.08281 DCD -.01688 DCLM .01090 DCY .00138 DCYN -.00082 DCBL .00036
GRADIENT -.04711 DCD -.00234 DCLM -.00357 DCY .00009 DCYN .00001 DCBL -.00006

RUN NO. 0 / 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00
DZ ALPHA0 0 / 0
30.000 8.000 DCL -.00777 DCD -.00166 DCLM .00455 DCY -.00062 DCYN -.00029 DCBL .00016
30.000 10.000 DCL -.03449 DCD -.00433 DCLM .00580 DCY .00092 DCYN -.00052 DCBL .00069
30.000 12.000 DCL -.06201 DCD -.01068 DCLM .00805 DCY .00073 DCYN -.00097 DCBL .00036
GRADIENT -.04785 DCD -.00066 DCLM -.00317 DCY .00006 DCYN -.00002 DCBL -.00002

RUN NO. 0 / 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00
DZ ALPHA0 0 / 0
45.000 8.000 DCL -.02190 DCD -.00083 DCLM .00402 DCY .00008 DCYN -.00023 DCBL .00009
45.000 10.000 DCL -.02209 DCD -.00191 DCLM .00467 DCY .00174 DCYN -.00048 DCBL .00064
45.000 12.000 DCL -.04379 DCD -.00554 DCLM .00601 DCY .00159 DCYN -.00085 DCBL -.00007
GRADIENT -.04649 DCD -.00225 DCLM -.00359 DCY .00004 DCYN .00001 DCBL -.00004

RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00
DZ ALPHA0 0 / 0
50.000 8.000 DCL -.02241 DCD -.00051 DCLM .00351 DCY .00025 DCYN -.00017 DCBL .00015
50.000 10.000 DCL -.02204 DCD -.00198 DCLM .00387 DCY .00188 DCYN -.00047 DCBL .00046
50.000 12.000 DCL -.03844 DCD -.00409 DCLM .00541 DCY .00204 DCYN -.00086 DCBL -.00005
GRADIENT -.04612 DCD -.00255 DCLM -.00370 DCY .00004 DCYN .00001 DCBL -.00005

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REFERENCE DATA

SREF = 2690.0000 SQ.FT. XHRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YHRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZHRP = 375.0000 IN. Z0
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = .000
 RUDDER = .000 ELEVON = .000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00 / 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
3.500	4.000	-.03110	-.00668	-.01256	.00115	.00011	.00094
3.500	6.000	-.07298	-.01038	-.01210	.00136	.00021	.00104
3.500	8.000	-.11267	-.01480	-.01181	.00097	.00015	.00094
	GRADIENT	-.04451	-.00679	-.00468	.00014	.00009	-.00014

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00 / 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
7.500	4.000	-.02509	-.00641	.00992	.00109	.00018	.00088
7.500	6.000	-.06533	-.00940	.00961	.00094	.00012	.00077
7.500	8.000	-.10474	-.01352	.00934	.00145	.00027	.00073
	GRADIENT	-.04552	-.00507	-.00425	.00012	.00006	-.00011

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00 / 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
10.000	4.000	-.02427	-.00605	.00855	.00158	.00023	.00071
10.000	6.000	-.05189	-.00874	.00846	.00101	.00015	.00073
10.000	8.000	-.10168	-.01289	.00841	.00089	.00016	.00063
	GRADIENT	-.04611	-.00407	-.00400	.00011	.00004	-.00009

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00 / 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
15.000	4.000	-.02206	-.00498	.00687	.00167	.00027	.00053
15.000	6.000	-.05725	-.00765	.00711	.00116	.00025	.00064
15.000	8.000	-.09384	-.01142	.00775	.00075	.00021	.00059
	GRADIENT	-.04711	-.00234	-.00357	.00009	.00001	-.00006

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00 / 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
30.000	4.000	-.01858	-.00359	.00465	.00062	.00006	.00021
30.000	6.000	-.04517	-.00479	.00537	-.00019	-.00009	.00031
30.000	8.000	-.07081	-.00756	.00645	-.00044	-.00007	.00028
	GRADIENT	-.04785	-.00366	-.00317	.00006	-.00002	-.00002

DATE 23 MAR 76

TABULATED SOURCE DATA - CA23B

ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA)

(TNH011) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6900 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAO	DCL	DCD	DCLM	DCY	DCYN
4.000	-.01353	-.00214	.00336	.00017	-.00003
6.000	-.03185	-.00325	.00450	.00016	-.00004
8.000	-.04693	-.00481	.00565	.00100	.00008
GRADIENT		-.00225	-.00359	.00004	.00001

RUN NO. 0/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAO	DCL	DCD	DCLM	DCY	DCYN
4.000	-.01203	-.00158	.00294	.00007	-.00005
6.000	-.02703	-.00284	.00427	.00042	.00001
8.000	-.03915	-.00399	.00544	.00123	.00011
GRADIENT		-.00265	-.00370	.00004	.00001

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6900 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAO	DCL	DCD	DCLM	DCY	DCYN
6.000	-.01616	-.00553	.01230	.00016	.00010
8.000	-.05860	-.00916	.01296	.00115	.00026
10.000	-.10887	-.01689	.01624	.00201	.00010
GRADIENT		-.00679	-.00468	.00014	.00009

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAO	DCL	DCD	DCLM	DCY	DCYN
6.000	-.01810	-.00528	.00929	.00014	.00015
8.000	-.05844	-.00872	.01031	.00031	.00020
10.000	-.10192	-.01562	.01339	-.00013	.00008
GRADIENT		-.00507	-.00425	.00012	.00006

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .600

DCBL
 .00017
 .00027
 .00025
 -.00004

DCBL
 .00018
 .00028
 .00029
 -.00005

(TNH013) (17 OCT 75)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

DCBL
 .00121
 .00117
 .00147
 -.00014

DCBL
 .00112
 .00100
 .00136
 -.00011

REFERENCE DATA

SPEF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

BETA = .000 STAB = 5.000
 TORR = .000 ELEVON = 5.000
 DY = .000 UX = .000
 MACH = .600

PARAMETRIC DATA

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
10.000	6.000	-.01727	-.00502	.00856	-.00038	.00023	.00093
10.000	8.000	-.05713	-.00858	.00974	-.00037	.00008	.00087
10.000	10.000	-.09976	-.01519	.01266	-.00001	.00004	.03121
GRADIENT		-.04611	-.00407	-.00400	.00011	.00004	-.00009

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
15.000	6.000	-.01726	-.00443	.00738	-.00026	.00001	.00079
15.000	8.000	-.05484	-.00726	.00916	-.00052	.00001	.00081
15.000	10.000	-.09540	-.01362	.01104	-.00020	-.00005	.00107
GRADIENT		-.04711	-.00234	-.00357	.00009	.00001	-.00006

RUN NO. 0/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
30.000	6.000	-.01261	-.00297	.00574	-.00021	-.00010	.00029
30.000	8.000	-.04090	-.00516	.00691	-.00058	-.00009	.00045
30.000	10.000	-.07405	-.00959	.00907	.00081	-.00002	.00076
GRADIENT		-.04785	-.00066	-.00317	.00006	-.00002	-.00002

RUN NO. 0/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
45.000	6.000	-.01131	-.00214	.00511	-.00064	-.00008	.00052
45.000	8.000	-.03079	-.00403	.00619	-.00016	-.00001	.00044
45.000	10.000	-.05832	-.00566	.00748	.00033	-.00016	.00063
GRADIENT		-.04649	-.00225	-.00359	.00004	.00001	-.00004

RUN NO. 0/ 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
50.000	6.000	-.01202	-.00148	.00444	-.00048	-.00006	.00052
50.000	8.000	-.02761	-.00294	.00554	.00001	.00004	.00061
50.000	10.000	-.05121	-.00522	.00681	.00053	-.00013	.00076
GRADIENT		-.04612	-.00265	-.00370	.00004	.00001	-.00005

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITTER DATA) (TNH020) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0/0 PN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
3.500	4.000	-.00990	-.00368	.01292	-.00042	-.00011	.00055
7.500	6.000	-.05860	-.00767	.01215	-.00032	.00003	.00065
3.500	8.000	-.09517	-.01167	.01000	.00014	.00019	.00052
GRADIENT		-.04790	-.00021	-.00290	.00002	-.00001	-.00007

RUN NO. 0/0 PN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
7.500	4.000	-.00074	-.00308	.01037	-.00054	-.00009	.00042
7.500	6.000	-.05794	-.00693	.00941	-.00017	.00007	.00066
7.500	8.000	-.03170	-.01100	.00797	.00048	.00020	.00037
GRADIENT		-.04790	-.00021	-.00290	.00002	-.00001	-.00007

RUN NO. 0/0 PN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
10.000	4.000	.00048	-.00258	.00911	.00042	.00006	.00020
10.000	6.000	-.05070	-.00634	.00880	.00043	.00013	.00040
10.000	8.000	-.08358	-.01038	.00695	.00061	.00030	.00039
GRADIENT		-.04790	-.00021	-.00290	.00002	-.00001	-.00007

RUN NO. 0/0 PN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
15.000	4.000	.00138	-.00216	.00723	-.00014	-.00007	.00007
15.000	6.000	-.04746	-.00530	.00705	-.00026	.00006	.00047
15.000	8.000	-.08126	-.00881	.00614	-.00019	.00012	.00035
GRADIENT		-.04790	-.00021	-.00290	.00002	-.00001	-.00007

RUN NO. 0/0 PN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
30.000	4.000	-.00055	-.00057	.00431	-.00052	-.00012	.00001
30.000	6.000	-.03872	-.00301	.00493	-.00124	-.00013	.00039
30.000	8.000	-.06488	-.00572	.00464	-.00053	-.00003	.00006
GRADIENT		-.04790	-.00021	-.00290	.00002	-.00001	-.00007

DATE 23 MAR 76

TABULATED SOURCE DATA - CA23B

560

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITTER DATA)

(TNH020) (17 OCT 75)

REFERENCE DATA

SREF = 2590.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
45.000	4.000	-.00219	-.00001	.00283	-.00097	-.00015	.00015
45.000	6.000	-.03306	-.00190	.00346	-.00117	-.00010	.00032
45.000	8.000	-.05180	-.00384	.00359	-.00077	-.00007	.00009
GRADIENT		-.04790	-.00021	-.00290	.00002	-.00001	-.00007

RUN NO. 0 / 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
50.000	4.000	-.00255	.00006	.00238	-.00126	-.00018	.00023
50.000	6.000	-.03184	-.00161	.00289	-.00117	-.00008	.00032
50.000	8.000	-.04729	-.00326	.00328	-.00089	-.00010	.00012
GRADIENT		-.04790	-.00021	-.00290	.00002	-.00001	-.00007

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITTER DATA)

(TNH021) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
3.500	4.000	-.01390	-.00559	.01421	.00007	-.00003	.00054
3.500	6.000	-.05994	-.00915	.01362	.00027	.00009	.00074
3.500	8.000	-.09467	-.01290	.01180	.00011	.00011	.00049
GRADIENT		-.04790	-.00021	-.00290	.00002	-.00001	-.00007

RUN NO. 0 / 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
7.500	4.000	-.01539	-.00517	.01133	.00060	.00008	.00032
7.500	6.000	-.05556	-.00844	.01105	-.00005	.00003	.00072
7.500	8.000	-.09067	-.01213	.00958	-.00019	.00008	.00038
GRADIENT		-.04790	-.00021	-.00290	.00002	-.00001	-.00007

TABLATED SOURCE DATA - CA23B

DATE 23 MAR 76

(TNH02:1) (17 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

REFERENCE DATA

SREF = 2590.0000 50.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6200 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0 / 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
10.000	4.000	-.01598	-.00479	.00965	.00011	-.00003	.00028
10.000	6.000	-.05370	-.00758	.00994	.00009	.00016	.00064
10.000	8.000	-.08742	-.01149	.00872	-.00034	.00003	.00034
	GRADIENT	-.04790	-.00021	-.00290	.00002	-.00001	-.00007

RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
15.000	4.000	-.00925	-.00400	.00827	.00004	-.00009	-.00005
15.000	6.000	-.04865	-.00678	.00852	-.00066	-.00004	.00048
15.000	8.000	-.08049	-.00994	.00758	-.00021	.00005	.00034
	GRADIENT	-.04790	-.00021	-.00290	.00002	-.00001	-.00007

RUN NO. 0 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
30.000	4.000	-.00309	-.00221	.00520	-.00077	-.00014	.00018
30.000	6.000	-.03787	-.00431	.00611	-.00094	-.00008	.00027
30.000	8.000	-.06251	-.00648	.00579	-.00059	-.00000	.00018
	GRADIENT	-.04790	-.00021	-.00290	.00002	-.00001	-.00007

RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
45.000	4.000	-.00693	-.00095	.00373	-.00174	-.00024	.00031
45.000	6.000	-.02615	-.00260	.00498	-.00164	-.00019	.00030
45.000	8.000	-.04818	-.00434	.00483	-.00153	-.00002	.00033
	GRADIENT	-.04790	-.00021	-.00290	.00002	-.00001	-.00007

RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
50.000	4.000	-.07600	-.00357	.00306	-.00027	-.00032	.00032
50.000	6.000	-.02205	-.00468	.00468	-.00198	-.00025	.00032
50.000	8.000	-.04358	-.00370	.00455	-.00187	-.00002	.00041
	GRADIENT	-.04790	-.00021	-.00290	.00002	-.00001	-.00007

DATE 23 MAR 76

TABULATED SOURCE DATA - CA238

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITER DATA)

(14022)

REFERENCE DATA

SREF = 2690.0000 50.FT. YMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	3.500	ALPHA0	8.000	DCL	-.00124	DCD	-.00607	DCLM	.01312	DCY	-.00096	DCYN	-.00008	DCBL	.00032
	3.500		10.000		-.03231		-.00857		-.01364		.00001		-.00024		.00057
	3.500	GRADIENT	12.000		-.08264		-.02199		.02009		-.00036		-.00021		.00096
			GRADIENT	-.04790		-.00021	-.00021		-.00290		.00002		-.00001		-.00007

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	7.500	ALPHA0	8.000	DCL	.00080	DCD	-.00436	DCLM	.01098	DCY	-.00057	DCYN	-.00005	DCBL	.00023
	7.500		10.000		-.03173		-.00729		-.01200		.00010		.00016		.00033
	7.500	GRADIENT	12.000		-.07618		-.01982		.01798		.00035		-.00027		.00065
			GRADIENT	-.04790		-.00021	-.00021		-.00290		.00002		-.00001		-.00007

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	10.000	ALPHA0	8.000	DCL	.00298	DCD	-.00312	DCLM	.00946	DCY	-.00007	DCYN	.00002	DCBL	.00016
	10.000		10.000		-.03160		-.00634		.01068		.00038		.00013		.00008
	10.000	GRADIENT	12.000		-.07148		-.01818		.01637		.00079		-.00036		.00039
			GRADIENT	-.04790		-.00021	-.00021		-.00290		.00002		-.00001		-.00007

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	15.000	ALPHA0	8.000	DCL	-.00150	DCD	-.00296	DCLM	.00788	DCY	-.00125	DCYN	-.00019	DCBL	.00010
	15.000		10.000		-.02886		-.00577		.01001		-.00056		-.00003		.00026
	15.000	GRADIENT	12.000		-.06665		-.01675		.01524		.00160		-.00018		.00038
			GRADIENT	-.04790		-.00021	-.00021		-.00290		.00002		-.00001		-.00007

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	30.000	ALPHA0	8.000	DCL	-.00022	DCD	-.00162	DCLM	.00603	DCY	-.00086	DCYN	-.00013	DCBL	.00003
	30.000		10.000		-.02218		-.00388		.00769		-.00051		-.00008		.00017
	30.000	GRADIENT	12.000		-.04790		-.01135		.01248		.00058		-.00035		.00024
			GRADIENT	-.04790		-.00021	-.00021		-.00290		.00002		-.00001		-.00007

ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA) (TNH022) (17 OCT 75)

REFERENCE DATA

SREF = 2590.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 935.6800 IN. ZMRP = 375.0000 IN. ZO ICRB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = -.04790 MACH = .600

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
45.000	8.000	-.00334	-.00090	-.00428	-.00135	-.00016	-.00004
45.000	10.000	-.01757	-.00258	.00603	-.00116	-.00013	.00014
45.000	12.000	-.03554	-.00851	.01021	.00018	-.00033	.00036
	GRADIENT	-.04790	-.00021	-.00290	.00002	-.00001	-.00007

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
50.000	8.000	-.00467	-.00074	.00380	-.00113	-.00005	.00012
50.000	10.000	-.01871	-.00226	.00546	-.00115	-.00012	.00018
50.000	12.000	-.03532	-.00823	.00932	.00044	-.00024	.00030
	GRADIENT	-.04790	-.00021	-.00290	.00002	-.00001	-.00007

ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA) (TNH023) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 935.6800 IN. ZMRP = 375.0000 IN. ZO ICRB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = -.04790 MACH = .600

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
3.500	6.000	-.00012	-.00474	.01262	-.00030	-.00000	.00096
3.500	8.000	-.04316	-.00770	.01243	-.00023	.00004	.00055
3.500	10.000	-.08094	-.01276	.01548	.00031	.00022	.00038
	GRADIENT	-.04790	-.00021	-.00290	.00002	-.00001	-.00007

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
7.500	6.000	-.00121	-.00453	.01017	-.00043	-.00001	.00071
7.500	8.000	-.04369	-.00746	.01039	-.00036	.00001	.00045
7.500	10.000	-.08108	-.01191	.01288	-.00028	.00005	.00025
	GRADIENT	-.04790	-.00021	-.00290	.00002	-.00001	-.00007

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITTER DATA)

(TINH023) (17 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 938.6200 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORR = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
10.000	6.000	-.00301	-.00431	.00905	-.00067	-.00004	.00072
10.000	8.000	-.04226	-.00714	.00931	-.00007	.00002	.00026
10.000	10.000	-.07382	-.01127	.01232	-.00005	.00009	.00020
GRADIENT		-.04790	-.00021	-.00290	.00002	-.00001	-.00007

RUN NO. 0 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
15.000	6.000	-.00405	-.00374	.00768	-.00061	.00003	.00074
15.000	8.000	-.03440	-.00616	.00925	-.00071	-.00014	.00017
15.000	10.000	-.07083	-.01012	.01106	-.00008	.00007	.00019
GRADIENT		-.04790	-.00021	-.00290	.00002	-.00001	-.00007

RUN NO. 0 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
30.000	6.000	-.00488	-.00254	.00531	-.00105	-.00005	.00055
30.000	8.000	-.03401	-.00431	.00608	-.00074	-.00003	.00019
30.000	10.000	-.05205	-.00625	.00895	-.00034	-.00004	.00010
GRADIENT		-.04790	-.00021	-.00290	.00002	-.00001	-.00007

RUN NO. 0 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
45.000	6.000	-.00580	-.00155	.00403	-.00164	-.00018	.00045
45.000	8.000	-.02701	-.00282	.00483	-.00151	-.00019	.00026
45.000	10.000	-.03988	-.00390	.00718	-.00093	-.00015	.00029
GRADIENT		-.04790	-.00021	-.00290	.00002	-.00001	-.00007

RUN NO. 0 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
50.000	6.000	-.00771	-.00113	.00376	-.00155	-.00015	.00060
50.000	8.000	-.02544	-.00237	.00473	-.00123	-.00012	.00019
50.000	10.000	-.03749	-.00310	.00671	-.00116	-.00011	.00039
GRADIENT		-.04790	-.00021	-.00290	.00002	-.00001	-.00007

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCBL
45.000	6.000	-.00627	-.00167	.00412	-.00167	.00037
45.000	8.000	-.02560	-.00314	.00506	-.00119	-.00013
45.000	10.000	-.04161	-.00461	.00695	-.00021	-.00006
	GRADIENT	-.04790	-.00021	-.00290	-.00002	-.00007

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 LORR = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

(TNH024) (17 OCT 75)

RUN NO. 0 / 0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCBL
50.000	6.000	-.00442	-.00135	.00382	-.00150	.00021
50.000	8.000	-.02308	-.00280	.00476	-.00098	-.00010
50.000	10.000	-.03920	-.00417	.00635	-.00112	-.00013
	GRADIENT	-.04790	-.00021	-.00290	-.00002	-.00007

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCBL
3.500	6.000	-.00409	-.00649	-.01166	-.00112	.00066
3.500	10.000	-.03293	-.00925	.01319	.00041	.00063
3.500	12.000	-.09379	-.02540	.01907	.00069	.00010
	GRADIENT	-.04790	-.00021	-.00290	.00002	-.00007

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 LORR = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

(TNH025) (17 OCT 75)

RUN NO. 0 / 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCBL
7.500	6.000	-.00389	-.00586	.01026	.00038	.00029
7.500	10.000	-.03787	-.00904	.01152	.00003	.00036
7.500	12.000	-.09575	-.02277	.01760	.00081	.00024
	GRADIENT	-.04790	-.00021	-.00290	.00002	-.00007

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (TNH025) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BRP = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0/ 0 PN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
10.000	8.000	-.00316	-.00549	.00922	-.00034	-.00006	.00005
10.000	10.000	-.04320	-.00903	.01002	-.00041	.00003	.00025
10.000	12.000	-.07980	-.02072	.01649	.00111	-.00022	.00037
	GRADIENT	-.04790	-.00021	-.00290	.00002	-.00001	-.00007

RUN NO. 0/ 0 PN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
15.000	8.000	-.00537	-.00486	.00804	.00028	-.00001	-.00009
15.000	10.000	-.03619	-.00804	.00959	.00030	.00009	-.00020
15.000	12.000	-.07485	-.01956	.01541	.00035	-.00031	.00027
	GRADIENT	-.04790	-.00021	-.00290	.00002	-.00001	-.00007

RUN NO. 0/ 0 PN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
30.000	8.000	-.00463	-.00305	.00561	-.00046	-.00008	-.00006
30.000	10.000	-.03011	-.00529	.00737	-.00021	.00003	.00015
30.000	12.000	-.05592	-.01372	.01236	.00024	-.00030	.00046
	GRADIENT	-.04790	-.00021	-.00290	.00002	-.00001	-.00007

RUN NO. 0/ 0 PN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
45.000	8.000	-.00564	-.00198	.00386	-.00070	-.00009	.00002
45.000	10.000	-.02192	-.00349	.00562	-.00052	-.00005	.00003
45.000	12.000	-.04026	-.01004	.01005	-.00013	-.00032	.00055
	GRADIENT	-.04790	-.00021	-.00290	.00002	-.00001	-.00007

RUN NO. 0/ 0 PN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
50.000	8.000	-.00508	-.00158	.00328	-.00119	-.00010	.00027
50.000	10.000	-.01849	-.00272	.00530	-.00057	-.00007	.00017
50.000	12.000	-.03715	-.00927	.00953	.00021	-.00026	.00042
	GRADIENT	-.04790	-.00021	-.00290	.00002	-.00001	-.00007

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(TNH027) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 471.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	DCL	DCD	DCLM	DCY	DCYN	DCBL
3.500	8.000	-.01151	-.00350	.01424	.00033	.00036	.00018
3.500	10.000	-.04437	-.00693	.01458	.00332	.00123	.00022
3.500	12.000	-.09157	-.02118	.02260	.00238	-.00009	.00049
GRADIENT		-.03891	-.00547	-.00748	-.00023	-.00011	-.00038

RUN NO. 0/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	DCL	DCD	DCLM	DCY	DCYN	DCBL
7.500	8.000	-.01254	-.00359	.01161	.00150	.00034	.00005
7.500	10.000	-.04592	-.00699	.01222	.00234	.00084	.00045
7.500	12.000	-.08851	-.02041	.01871	.00282	-.00010	.00034
GRADIENT		-.04155	-.00392	-.00648	-.00015	-.00009	-.00025

RUN NO. 0/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	DCL	DCD	DCLM	DCY	DCYN	DCBL
10.000	8.000	-.01240	-.00346	.00938	.00228	.00042	-.00003
10.000	10.000	-.04638	-.00684	.01024	.00129	.00062	.00072
10.000	12.000	-.08702	-.01993	.01558	.00292	.00002	.00024
GRADIENT		-.04310	-.00302	-.00589	-.00010	-.00009	-.00017

RUN NO. 0/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	DCL	DCD	DCLM	DCY	DCYN	DCBL
15.000	8.000	-.01634	-.00422	.00780	.00254	-.00002	-.00029
15.000	10.000	-.04700	-.00739	.00925	.00226	.00007	.00026
15.000	12.000	-.08152	-.01880	.01443	.00445	-.00041	.00017
GRADIENT		-.04577	-.00146	-.00488	-.00002	-.00007	-.00004

RUN NO. 0/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA0	DCL	DCD	DCLM	DCY	DCYN	DCBL
30.000	8.000	-.01080	-.00218	.00443	.00252	.00009	-.00060
30.000	10.000	-.03596	-.00447	.00598	.00196	.00006	.00024
30.000	12.000	-.05027	-.01355	.01147	.00362	-.00026	.00012
GRADIENT		-.04833	.00005	-.00394	.00017	-.00003	.00008

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 935.6900 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCBL
45.000	8.000	-.00026	-.00129	.00511	.00162	-.00072
45.000	10.000	-.02078	-.00254	.00587	.00212	-.00018
45.000	12.000	-.04148	-.00962	.01044	.00255	.00037
	GRADIENT	-.04582	-.00141	-.00493	.00028	-.00006

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCBL
50.000	8.000	-.00294	-.00122	.00403	.00187	-.00076
50.000	10.000	-.01945	-.00228	.00490	.00228	-.00014
50.000	12.000	-.03623	-.00832	.01019	.00222	.00052
	GRADIENT	-.04517	-.00179	-.00519	.00032	-.00009

ARC 14-120(CA23B) 747/1 ATI 03SI (ORBITER DATA) (TNH034) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 935.6900 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0 / 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCBL
3.500	6.000	-.01786	-.00546	.01903	.00332	.00056
3.500	8.000	-.05470	-.00908	.01713	.00371	.00016
3.500	10.000	-.10183	-.01492	.01916	.00357	.00018
	GRADIENT	-.03891	-.00547	-.00748	-.00023	-.00038

RUN NO. 0 / 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCBL
7.500	6.000	-.01641	-.00498	.01416	.00332	.00018
7.500	8.000	-.05169	-.00932	.01250	.00314	.00008
7.500	10.000	-.09455	-.01389	.01484	.00294	.00012
	GRADIENT	-.04153	-.00392	-.00648	-.00015	-.00025

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ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(TNH034) (17 OCT 76)

REFERENCE DATA

SREF = 2690.0000 SQ. FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00
 DZ 10.000 ALPHA 0/ 0 DCL -.01663 DCLM .01181 DCY .00282 DCBL
 10.000 6.000 DCD -.00514 DCLM .00851 DCY .00243 DCBL
 10.000 8.000 DCD -.00797 DCLM .00710 DCY .00309 DCBL
 10.000 10.000 DCD -.01320 DCLM .01048 DCY .00274 DCBL
 GRADIENT -.04310 DCD -.00302 DCLM .00589 DCY .00010 DCBL
 GRADIENT -.00017

RUN NO. 0/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00
 DZ 15.000 ALPHA 0/ 0 DCL -.01736 DCLM .00851 DCY .00243 DCBL
 15.000 8.000 DCD -.00746 DCLM .00710 DCY .00309 DCBL
 15.000 10.000 DCD -.08662 DCLM .01048 DCY .00274 DCBL
 GRADIENT -.04577 DCD -.00146 DCLM .00488 DCY .00002 DCBL
 GRADIENT -.00004

RUN NO. 0/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00
 DZ 30.000 ALPHA 0/ 0 DCL -.01202 DCLM .00625 DCY .00237 DCBL
 30.000 6.000 DCD -.00293 DCLM .00520 DCY .00176 DCBL
 30.000 8.000 DCD -.03756 DCLM .00655 DCY .00196 DCBL
 30.000 10.000 DCD -.05403 DCLM .00784 DCY .00196 DCBL
 GRADIENT -.04833 DCD .00005 DCLM .00394 DCY .00028 DCBL
 GRADIENT -.00003

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 DZ 45.000 ALPHA 0/ 0 DCL -.00847 DCLM .00520 DCY .00176 DCBL
 45.000 6.000 DCD -.00262 DCLM .00655 DCY .00196 DCBL
 45.000 8.000 DCD -.02439 DCLM .00784 DCY .00196 DCBL
 45.000 10.000 DCD -.04397 DCLM .00493 DCY .00028 DCBL
 GRADIENT -.04582 DCD .00141 DCLM .00493 DCY .00028 DCBL
 GRADIENT -.00006

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 DZ 50.000 ALPHA 0/ 0 DCL -.00897 DCLM .00489 DCY .00178 DCBL
 50.000 6.000 DCD -.00227 DCLM .00681 DCY .00173 DCBL
 50.000 8.000 DCD -.01920 DCLM .00781 DCY .00234 DCBL
 50.000 10.000 DCD -.03858 DCLM .00781 DCY .00234 DCBL
 GRADIENT -.04517 DCD .00179 DCLM .00519 DCY .00032 DCBL
 GRADIENT -.00002

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA) (TNH035) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
3.500	4.000	-.02033	-.00358	.01564	.00214	.00037	.00043
3.500	6.000	-.06597	-.00737	.01506	.00184	.00028	.00059
3.500	8.000	-.09756	-.01132	.01203	.00136	.00024	.00029
	GRADIENT	-.03891	-.00547	-.00748	-.00023	-.00011	-.00038

RUN NO. 0/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
7.500	4.000	-.01822	-.00313	.01038	.00156	.00048	.00039
7.500	6.000	-.06073	-.00700	.01018	.00141	.00028	.00041
7.500	8.000	-.09203	-.01043	.00709	.00087	.00022	.00020
	GRADIENT	-.04155	-.00392	-.00648	-.00015	-.00009	-.00025

RUN NO. 0/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
10.000	4.000	-.01384	-.00299	.00824	.00111	.00052	.00046
10.000	6.000	-.05231	-.00647	.00647	.00120	.00032	.00022
10.000	8.000	-.09542	-.00979	.00600	.00112	.00036	.00003
	GRADIENT	-.04310	-.00302	-.00589	-.00010	-.00009	-.00017

RUN NO. 0/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
15.000	4.000	-.01238	-.00241	.00569	.00077	.00039	.00020
15.000	6.000	-.04890	-.00548	.00626	.00056	.00015	-.00006
15.000	8.000	-.08142	-.00859	.00371	.00096	.00030	.00007
	GRADIENT	-.04577	-.00146	-.00488	-.00002	-.00007	-.00004

RUN NO. 0/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
30.000	4.000	-.00989	-.00117	.00271	-.00011	.00025	.00026
30.000	6.000	-.03666	-.00329	.00408	.00024	.00002	-.00017
30.000	8.000	-.06077	-.00534	.00328	.00027	.00010	-.00017
	GRADIENT	-.04833	.00005	-.00334	.00017	-.00003	.00008

DATE 23 MAR 76

TABULATED SOURCE DATA - CA23B

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA)

(TNH035) (17

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = .000
 RUDDER = .000 ELEVON = .000
 IORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
45.000	4.000	.00098	-.00026	.00223	-.00039	.00005	.00020
45.000	6.000	-.02753	-.00184	.00334	-.00049	-.00001	-.00011
45.000	8.000	-.03984	-.00328	.00393	-.00062	-.00016	-.00051
	GRADIENT	-.04582	-.00141	-.00493	.00028	.00000	-.00006

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
50.000	4.000	.00466	.00001	.00214	-.00051	-.00006	.00013
50.000	6.000	-.02542	-.00141	.00314	-.00086	-.00011	-.00011
50.000	8.000	-.03415	-.00270	.00379	-.00091	-.00026	-.00062
	GRADIENT	-.04517	-.00179	-.00519	.00032	.00002	-.00009

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA)

(TNH035) (23 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = .000
 RUDDER = 10.000 ELEVON = .000
 IORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
	3.500						
	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
	8.000	-.04879	-.00713	.01623	.00304	-.00008	.00006
	10.000	-.09803	-.01311	.01746	.00372	.00053	.00021
	GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
	7.500						
	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
	8.000	-.04323	-.00672	.01155	.00377	.00026	.00016
	10.000	-.08968	-.01204	.01268	.00349	.00045	-.00010
	GRADIENT	-.03891	-.00547	-.00748	-.00023	-.00011	-.00038

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA) (TNH036) (23 OCT 75)

REFERENCE DATA

SREF = 2630.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000

ALPHAO	DCL	DCO	DCLM	DCY	DCYN	DCBL
8.000	.04496	-.00639	.00870	.00384	.00041	-.00010
10.000	-.08657	-.01124	.01085	.00295	.00038	.00005
GRADIENT	-.04195	-.00392	-.00648	-.00015	-.00009	-.00025

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000

ALPHAO	DCL	DCO	DCLM	DCY	DCYN	DCBL
8.000	-.04311	-.00549	.00644	.00360	.00025	-.00008
10.000	-.07959	-.00385	.00836	.00297	.00032	-.00004
GRADIENT	-.04310	-.00302	-.00589	-.00010	-.00009	-.00017

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000

ALPHAO	DCL	DCO	DCLM	DCY	DCYN	DCBL
8.000	-.02866	-.00374	.00510	.00271	.00007	-.00047
10.000	-.05692	-.00583	.00596	.00270	.00011	-.00026
GRADIENT	-.04577	-.00146	-.00488	-.00002	-.00007	-.00004

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAO	DCL	DCO	DCLM	DCY	DCYN	DCBL
8.000	-.01920	-.00185	.00435	.00225	.00000	-.00056
10.000	-.03935	-.00314	.00386	.00279	.00010	-.00018
GRADIENT	-.04833	.00005	-.00394	.00017	-.00003	.00008

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAO	DCL	DCO	DCLM	DCY	DCYN	DCBL
8.000	-.01803	-.00153	.00389	.00207	.00014	-.00050
10.000	-.03699	-.00194	.00533	.00259	-.00009	-.00019
GRADIENT	-.04682	-.00141	-.00493	.00228	.00000	-.00006

DATE 23 MAR 76

TABULATED SOURCE DATA - CA23B

FILE NO 564

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(TNH037) (23)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHA0	DCL	DCO	DCLM	DCY	DCYN	DCBL
6.000	-.01248	-.00441	-.01853	.00401	.00058	.00048
8.000	-.05834	-.00880	.01711	.00299	.00017	.00017
10.000	-.10367	-.01488	.01863	.00327	.00071	.00041
GRADIENT	.00000	.00000	.00000	.00000	.00000	.00000

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500

ALPHA0	DCL	DCO	DCLM	DCY	DCYN	DCBL
6.000	-.01332	-.00456	.01268	.00311	.00017	.00018
8.000	-.03422	-.00833	.01209	.00353	.00041	-.00011
10.000	-.09400	-.01364	.01445	.00258	.00044	-.00003
GRADIENT	-.03891	-.00347	-.00748	-.00023	-.00011	-.00038

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000

ALPHA0	DCL	DCO	DCLM	DCY	DCYN	DCBL
6.000	-.01025	-.00431	.01074	.00287	.00004	.00016
8.000	-.05564	-.00818	.00957	.00230	.00022	.00001
10.000	-.09193	-.01299	.01239	.00231	.00042	.00002
GRADIENT	-.04155	-.00392	-.00548	-.00015	-.00009	-.00025

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000

ALPHA0	DCL	DCO	DCLM	DCY	DCYN	DCBL
6.000	-.00819	-.00384	.00794	.00239	.00002	.00003
8.000	-.05537	-.00729	.00637	.00300	.00026	-.00018
10.000	-.04834	-.01187	.00967	.00195	.00013	.00010
GRADIENT	-.04310	-.00302	-.00589	-.00010	-.00009	-.00017

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000

ALPHA0	DCL	DCO	DCLM	DCY	DCYN	DCBL
6.000	-.00732	-.00253	.00480	.00175	-.00009	-.00032
8.000	-.04208	-.00488	.00470	.00231	.00021	-.00034
10.000	-.05407	-.00738	.00799	.00204	.00014	.00013
GRADIENT	-.04577	-.00146	-.00498	-.00002	-.00007	-.00004

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BRF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
6.000	-.01336	-.00198	.00251	.00180	-.00002	-.00036
8.000	-.02421	-.00337	.00599	.00194	.00007	-.00068
10.000	-.04157	-.00469	.00697	.00203	-.00002	-.00006
GRADIENT	-.04833	.00005	-.00394	.00017	-.00003	.00008

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
6.000	-.00025	-.00160	.00313	.00160	.00014	-.00027
8.000	-.02044	-.00284	.00545	.00153	.00002	-.00052
10.000	-.03793	-.00378	.00641	.00158	-.00015	-.00009
GRADIENT	-.04582	-.00141	-.00493	.00028	.00000	-.00006

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BRF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
6.000	.00191	-.00591	.01854	.00218	-.00009	.00019
8.000	-.04490	-.01010	.01811	.00268	.00001	.00045
10.000	-.09743	-.01677	.02049	.00352	-.00005	.00010
GRADIENT	.00050	.00000	.00000	.00000	.00000	.00000

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

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ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(TNH03B) (23 75)

REFERENCE DATA

SPEF = 2630.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 471.8100 IN. YMRP = .0000 IN. YO
 BREF = 935.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = .000
 RUDDER = .000 ELEVON = 5.000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 7.500

ALPHA0	DCL	DCD	DCLM	DCY	DCYN	DCBL
6.000	.00514	-.00517	.01237	.00170	-.00005	.00004
8.000	-.03850	-.00917	.01224	.00238	.00026	.00015
10.000	-.08369	-.01503	.01475	.00294	.00007	-.00023
GRADIENT	-.07267	-.01500	-.00115	.00191	-.00031	.00009

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 10.000

ALPHA0	DCL	DCD	DCLM	DCY	DCYN	DCBL
6.000	.00526	-.00456	.00919	.00173	.00009	-.00006
8.000	-.03481	-.00822	.00988	.00231	.00029	.00007
10.000	-.08228	-.01438	.01234	.00284	.00013	-.00014
GRADIENT	-.07267	-.01500	-.00115	.00191	-.00031	.00009

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 15.000

ALPHA0	DCL	DCD	DCLM	DCY	DCYN	DCBL
6.000	-.00215	-.00413	.00616	.00208	.00013	-.00019
8.000	-.03194	-.00752	.00777	.00234	.00032	-.00002
10.000	-.07386	-.01269	.01053	.00298	.00026	-.00018
GRADIENT	-.07267	-.01500	-.00115	.00191	-.00031	.00009

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 30.000

ALPHA0	DCL	DCD	DCLM	DCY	DCYN	DCBL
6.000	.00582	-.00276	.00471	.00175	.00006	.00032
8.000	-.02052	-.00504	.00569	.00179	.00014	.00001
10.000	-.05927	-.00883	.00782	.00274	.00017	-.00016
GRADIENT	-.07267	-.01500	-.00115	.00191	-.00031	.00009

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 45.000

ALPHA0	DCL	DCD	DCLM	DCY	DCYN	DCBL
6.000	.00301	-.00175	.00343	.00154	-.00001	.00024
8.000	-.02908	-.00352	.00439	.00212	.00026	-.00004
10.000	-.04768	-.00648	.00636	.00225	-.00003	-.00014
GRADIENT	-.07267	-.01500	-.00115	.00191	-.00031	.00009

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TABULATED SOURCE DATA - CA23B

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ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA) (TNH038) (23 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
LREF = 474.8100 IN. YMRP = .0000 IN. YO
BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
LORB = 6.000 DX = .000
DY = .000 MACH = .600

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAO DCL DCD DCLM DCY DCBL
6.000 .00170 -.00164 .00321 .00112 -.00044
8.000 -.01478 -.00325 .00423 .00170 -.00012
10.000 -.04308 -.00553 .00595 .00265 -.00015
GRADIENT -.07267 -.01500 -.00115 .00191 -.00031 .00009

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA) (TNH039) (23 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
LREF = 474.8100 IN. YMRP = .0000 IN. YO
BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = 10.000 ELEVON = 5.000
LORB = 6.000 DX = .000
DY = .000 MACH = .600

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAO DCL DCD DCLM DCY DCBL
8.000 -.05438 -.01020 .01298 .00328 .00041
10.000 -.10282 .01741 .01666 .00155 .00009
GRADIENT -.04451 -.00679 -.00468 .00014 .00009 -.00014

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500

ALPHAO DCL DCD DCLM DCY DCBL
8.000 -.04489 -.00895 .01019 .00290 .00043
10.000 -.09059 .01553 .01396 .00270 .00021
GRADIENT -.04552 -.00507 -.00425 .00012 .00006 -.00011

DZ = 10.000

ALPHAO DCL DCD DCLM DCY DCBL
8.000 -.04123 -.00817 .00948 .00237 .00030
10.000 -.09414 .01527 .01243 .00208 .00020
GRADIENT -.04611 -.00407 -.00400 .00011 .00004 -.00009

DATE 23 MAR 76

TABULATED SOURCE DATA - CA23B

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ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA)

(TNH039) (, 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT.
 LREF = 474.9100 IN.
 BREF = 936.6800 IN.
 SCALE = .0125

XMRP = 1109.0000 IN. X0
 YMRP = .0000 IN. Y0
 ZMRP = 375.0000 IN. Z0

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = 5.000
 LORR = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000

ALPHA	DCL	DCD	DCLM	DCY	DCBL
8.000	-.03908	-.00747	.00823	.00173	.00056
10.000	-.09631	-.01371	.01154	.00203	.00052
GRADIENT	-.04711	-.00234	-.00357	.00009	-.00006

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000

ALPHA	DCL	DCD	DCLM	DCY	DCBL
8.000	-.02994	-.00503	.00638	.00137	.00009
10.000	-.05831	-.00851	.00986	.00180	.00007
GRADIENT	-.04785	-.00066	-.00317	.00006	-.00002

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHA	DCL	DCD	DCLM	DCY	DCBL
8.000	-.01664	-.00362	.00575	.00203	.00000
10.000	-.04666	-.00619	.00769	.00248	-.00015
GRADIENT	-.04649	-.00225	-.00359	.00004	-.00004

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHA	DCL	DCD	DCLM	DCY	DCBL
8.000	-.01470	-.00341	.00535	.00210	.00006
10.000	-.04220	-.00532	.00694	.00205	-.00009
GRADIENT	-.04612	-.00265	-.00370	.00004	-.00005

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO IORB = .000 DX = .000
 SCALE = .0125 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO.	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
3.500	4.000	-.02039	-.00545	.01175	.00226	.00038	.00103
3.500	6.000	-.06091	-.00930	.01167	.00210	.00030	.00107
3.500	8.000	-.10117	-.01364	.01166	.00231	.00037	.00097
GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT
7.500	4.000	-.01524	-.00487	.00862	.00238	.00026	.00063
7.500	6.000	-.05715	-.00831	.00842	.00168	.00022	.00085
7.500	8.000	-.09689	-.01268	.00876	.00154	.00027	.00087
GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT
10.000	4.000	-.01397	-.00462	.00741	.00291	.00037	.00055
10.000	6.000	-.05200	-.00778	.00793	.00190	.00027	.00072
10.000	8.000	-.09185	-.01194	.00812	.00154	.00027	.00070
GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT
15.000	4.000	-.01824	-.00414	.00522	.00154	.00017	.00028
15.000	6.000	-.04705	-.00684	.00673	.00109	.00008	.00064
15.000	8.000	-.08360	-.01053	.00734	.00058	.00010	.00076
GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT
30.000	4.000	-.01359	-.00269	.00330	.00121	.00006	.00010
30.000	6.000	-.03375	-.00439	.00533	.00138	.00008	.00013
30.000	8.000	-.06529	-.00709	.00555	.00044	.00008	.00046
GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT	GRADIENT

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TABULATED SOURCE DATA - CA23B

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ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(TNH040) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LPEF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREP = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 4.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0/0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
45.000	4.000	-.00796	-.00159	.00261	.00108	.00006	-.00008
45.000	6.000	-.02867	-.00287	.00416	.00104	.00001	-.00016
45.000	8.000	-.04340	-.00458	.00528	.00132	.00011	.00027
	GRADIENT	-.04649	-.00225	-.00359	.00004	.00001	-.00004

RUN NO. 0/0 RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
50.000	4.000	-.00684	-.00131	.00238	.00077	.00002	-.00005
50.000	6.000	-.02764	-.00237	.00369	.00069	-.00005	.00024
50.000	8.000	-.03577	-.00375	.00527	.00154	.00009	.00026
	GRADIENT	-.04612	-.00265	-.00370	.00004	.00001	-.00005

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(TNHX10) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LPEF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREP = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0/0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
3.500	10.000	-.03575	-.01037	.01199	.00150	-.00035	.00063
3.500	12.000	-.09646	-.02320	.01598	.00199	-.00048	.00024
	GRADIENT	-.04451	-.00679	-.00468	.00014	.00009	-.00014

RUN NO. 0/0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
7.500	10.000	-.05298	-.00942	.01037	.00140	-.00027	.00090
7.500	12.000	-.09099	-.02060	.01401	.00191	-.00062	.00047
	GRADIENT	-.04552	-.00507	-.00425	.00012	.00006	-.00011

ARC 14-1201(CA23B) 747/1 A11 0251 (ORBITER DATA) (TNHX10) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.5900 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORR = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00
 DZ ALPHA 10.000 DCL DCD DCLM DCY DCYN DCBL
 10.000 -.05066 -.00876 .00920 .00146 -.00016
 12.000 -.08665 -.01867 .01262 .00197 -.00071
 GRADIENT -.04611 -.00407 -.00400 .00011 .00004 -.00009

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00
 DZ ALPHA 10.000 DCL DCD DCLM DCY DCYN DCBL
 10.000 -.04969 -.00791 .00785 .00075 -.00035
 12.000 -.08298 -.01697 .01092 .00135 -.00082
 GRADIENT -.04711 -.00234 -.00357 .00009 .00001 -.00006

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00
 DZ ALPHA 10.000 DCL DCD DCLM DCY DCYN DCBL
 10.000 -.03451 -.00435 .00581 .00091 -.00052
 12.000 -.06216 -.01078 .00807 .00073 -.00096
 GRADIENT -.04785 -.00066 -.00317 .00006 -.00002 -.00002

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00
 DZ ALPHA 10.000 DCL DCD DCLM DCY DCYN DCBL
 10.000 -.02022 -.00194 .00467 .00172 -.00048
 12.000 -.04393 -.00561 .00601 .00159 -.00085
 GRADIENT -.04649 -.00225 -.00359 .00004 .00001 -.00004

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00
 DZ ALPHA 10.000 DCL DCD DCLM DCY DCYN DCBL
 10.000 -.02212 -.00202 .00389 .00187 -.00047
 12.000 -.04954 -.00515 .00542 .00202 -.00086
 GRADIENT -.04412 -.00265 -.00370 .00004 .00001 -.00005

ARC 14-120(CA23B) 747/1 AT1 025 (ORBITER DATA)

(TNHX13) (1 0 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORR = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
3.500	8.000	-.05901	-.00887	.01275	.00122	.00024	.00114
3.500	10.000	-.10852	-.01668	.01608	.00027	.00009	.00146
	GRADIENT	-.04451	-.00679	-.00468	.00014	.00009	-.00014

RUN NO. 0 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
7.500	8.000	-.05802	-.00852	.01020	.00037	.00019	.00098
7.500	10.000	-.10152	-.01536	.01324	-.00005	.00007	.00136
	GRADIENT	-.04552	-.00507	-.00425	.00012	.00006	-.00011

RUN NO. 0 / 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
10.000	8.000	-.05668	-.00839	.00963	-.00029	.00008	.00087
10.000	10.000	-.09935	-.01493	.01250	.00005	.00003	.00122
	GRADIENT	-.04611	-.00407	-.00400	.00011	.00004	-.00009

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
15.000	8.000	-.05432	-.00707	.00807	-.00055	.00001	.00080
15.000	10.000	-.09492	-.01339	.01094	-.00015	-.00006	.00107
	GRADIENT	-.04711	-.00234	-.00357	.00009	.00001	-.00006

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
30.000	8.000	-.04048	-.00498	.00681	-.00053	.00009	.00045
30.000	10.000	-.07360	-.00934	.00895	.00080	.00003	.00076
	GRADIENT	-.04785	-.00066	-.00317	.00006	-.00002	-.00002

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
45.000	8.000	-.03005	-.00373	.00603	-.00007	.00003	.00044
45.000	10.000	-.05745	-.00628	.00734	.00037	-.00017	.00062
	GRADIENT	-.04643	-.00225	-.00359	.00004	.00001	-.00004

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (TNHX13) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
50.000	8.000	-.02713	-.00280	.00543	.00001	.00003	.00060
50.000	10.000	-.05048	-.00491	.00667	.00054	-.00014	.00075
	GRADIENT	-.04612	-.00255	-.00370	.00004	.00001	-.00005

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORR = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
3.500	8.000	-.06091	-.00899	.00940	.00030	.00038	.00139
3.500	10.000	-.11599	-.01682	.01105	-.00053	.00022	.00154
	GRADIENT	-.04451	-.00679	-.00468	.00014	.00009	-.00014

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORR = 6.000 DX = 10.000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
7.500	8.000	-.05585	-.00942	.00759	-.00000	.00027	.00108
7.500	10.000	-.10527	-.01539	.00648	-.00040	.00015	.00141
	GRADIENT	-.04552	-.00507	-.00425	.00012	.00006	-.00011

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORR = 6.000 DX = 10.000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
10.000	8.000	-.05535	-.00821	.00538	-.00121	.00012	.00093
10.000	10.000	-.10389	-.01481	.00761	-.00099	.00010	.00136
	GRADIENT	-.04611	-.00407	-.00460	.00011	.00004	-.00009

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORR = 6.000 DX = 10.000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
15.000	8.000	-.05353	-.00703	.00528	-.00120	.00013	.00103
15.000	10.000	-.09590	-.01287	.00555	-.00057	.00007	.00123
	GRADIENT	-.04711	-.00234	-.00220	.00009	.00001	-.00006

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORR = 6.000 DX = 10.000
 DY = .000 MACH = .600

PARAMETRIC DATA

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(TNHX14) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ 30.000 ALPHA 8.000 DCL -.03860 DCD -.00494 DCLM .00452 DCY .00001 DCBL .00059
 30.000 10.000 -.07191 -.00888 .00574 -.00072 -.00010 .00078
 GRADIENT -.04785 -.00056 -.00317 .00006 -.00002 -.00002

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ 45.000 ALPHA 8.000 DCL -.02952 DCD -.00391 DCLM .00415 DCY .00018 DCBL .00061
 45.000 10.000 -.05116 -.00556 .00505 -.00052 -.00019 .00065
 GRADIENT -.04649 -.00225 -.00359 .00004 .00001 -.00004

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ 50.000 ALPHA 8.000 DCL -.02251 DCD -.00320 DCLM .00458 DCY .00011 DCBL .00059
 50.000 10.000 -.04945 -.00522 .00495 -.00054 -.00019 .00071
 GRADIENT -.04612 -.00265 -.00370 .00004 .00001 -.00005

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(TNHX15) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ 3.500 ALPHA 10.000 DCL -.05896 DCD -.01387 DCLM .00831 DCY .00015 DCBL .00137
 3.500 12.000 -.11503 -.02678 .01207 .00149 -.00003 .00122
 GRADIENT -.04451 -.00579 -.00468 .00014 .00009 -.00014

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ 7.500 ALPHA 10.000 DCL -.06158 DCD -.01118 DCLM .00772 DCY .00007 DCBL .00138
 7.500 12.000 -.10429 -.02369 .01082 .00131 -.00024 .00100
 GRADIENT -.04552 -.00507 -.00425 .00012 .00005 -.00011

DATE 23 MAR 76

TABULATED SOURCE DATA - CA23B

F. 'S

ARC 14-120(CA23B) 74771 AT1 0251 (ORBITER DATA)

(TNHX16) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 ICRB = 6.000 DX = 20.000
 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
3.500	8.000	-.06113	-.00634	.00471	.00114	.00032	.00115
	10.000	-.11479	-.01393	.00516	.00087	.00020	.00141
	GRADIENT	-.04451	-.00679	-.00468	.00014	.00009	-.00014

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
7.500	8.000	-.05638	-.00622	.00229	.00129	.00038	.00093
	10.000	-.10634	-.01320	.00261	.00119	.00026	.00117
	GRADIENT	-.04552	-.00507	-.00425	.00012	.00006	-.00011

RUN NO. 0/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
10.000	8.000	-.05640	-.00624	.00158	.00052	.00022	.00085
	10.000	-.10500	-.01282	.00197	.00091	.00014	.00114
	GRADIENT	-.04611	-.00407	-.00400	.00011	.00004	-.00009

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
15.000	8.000	-.05120	-.00599	.00137	.00033	.00016	.00075
	10.000	-.09568	-.01193	.00191	.00102	.00004	.00093
	GRADIENT	-.04711	-.00234	-.00357	.00009	.00001	-.00006

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
30.000	8.000	-.03825	-.00459	.00190	.00039	.00003	.00028
	10.000	-.07393	-.00841	.00249	.00070	-.00003	.00078
	GRADIENT	-.04785	-.00066	-.00317	.00006	-.00002	-.00002

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
45.000	8.000	-.02714	-.00346	.00259	.00053	.00003	.00041
	10.000	-.05439	-.00564	.00302	.00123	-.00015	.00038
	GRADIENT	-.04649	-.00225	-.00359	.00004	.00001	-.00004

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (TNHX16) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00 / 5.00

DZ	ALPHA0	DCL	DCD	DCLM	DCY	DCYN	DCBL
50.000	8.000	-.02526	-.00300	.00266	.00078	.00009	.00043
50.000	10.000	-.05160	-.00494	.00298	.00145	-.00016	.00037
	GRADIENT	-.04612	-.00265	-.00370	.00004	.00001	-.00005

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

PARAMETRIC DATA

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00 / 5.00

DZ	ALPHA0	DCL	DCD	DCLM	DCY	DCYN	DCBL
3.500	10.000	-.07194	-.01240	.00603	-.00009	.00004	.00072
3.500	12.000	-.11485	-.02458	.00788	.00325	-.00012	.00103
	GRADIENT	-.04451	-.00679	-.00468	.00014	.00009	-.00014

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00 / 5.00

DZ	ALPHA0	DCL	DCD	DCLM	DCY	DCYN	DCBL
7.500	10.000	-.06455	-.00980	.00492	.00109	-.00000	.00092
7.500	12.000	-.10756	-.02295	.00649	.00238	-.00033	.00079
	GRADIENT	-.04552	-.00507	-.00425	.00012	.00006	-.00011

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0 / 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00 / 5.00

DZ	ALPHA0	DCL	DCD	DCLM	DCY	DCYN	DCBL
10.000	10.000	-.05907	-.00811	.00395	.00186	.00000	.00109
10.000	12.000	-.10245	-.02173	.00552	.00170	-.00048	.00060
	GRADIENT	-.04511	-.00407	-.00400	.00011	.00004	-.00009

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

PARAMETRIC DATA

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00 / 5.00

DZ	ALPHA0	DCL	DCD	DCLM	DCY	DCYN	DCBL
15.000	10.000	-.05730	-.00772	.00293	.00212	-.00009	.00072
15.000	12.000	-.10079	-.02025	.00436	.00168	-.00049	.00048
	GRADIENT	-.04711	-.00234	-.00357	.00009	.00001	-.00006

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

PARAMETRIC DATA

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(TNHX17) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 !ORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
30.000	10.000	-.04240	-.00486	.00233	.00215	-.00015	.00070
30.000	12.000	-.07051	-.01311	.00381	.00276	-.00080	.00026
	GRADIENT	-.04785	-.00066	-.00317	.00006	-.00002	-.00002

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
45.000	10.000	-.02781	-.00341	.00257	.00145	-.00049	.00054
45.000	12.000	-.05007	-.00754	.00347	.00261	-.00082	-.00009
	GRADIENT	-.04649	-.00225	-.00359	.00004	.00001	-.00004

RUN NO. 0 / 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
50.000	10.000	-.02792	-.00301	.00242	.00184	-.00034	.00043
50.000	12.000	-.04699	-.00657	.00323	.00311	-.00078	-.00008
	GRADIENT	-.04612	-.00265	-.00370	.00004	.00001	-.00005

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA)

(TNHX27) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 !ORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
3.500	10.000	-.04486	-.00721	.01470	.00335	.00121	.00023
3.500	12.000	-.09157	-.02110	.02238	.00239	-.00008	.00047
	GRADIENT	-.03631	-.00547	-.00748	-.00023	-.00011	-.00038

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
7.500	10.000	-.04611	-.00713	.01227	.00237	.00083	.00045
7.500	12.000	-.06975	-.02045	.01666	.00283	-.00039	.00033
	GRADIENT	-.04155	-.00392	-.00648	-.00015	-.00009	-.00025

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA) (TNHX27) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 DZ ALPHA DCL DCLM DCD DCY DCBL
 10.000 10.000 -.04655 -.01027 .00132 .00061 .00072
 10.000 12.000 -.08741 -.02011 .00294 .00002 .00023
 GRADIENT -.04310 -.00302 -.00589 -.00010 -.00009 -.00017

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 DZ ALPHA DCL DCLM DCD DCY DCBL
 15.000 10.000 -.04708 -.00743 .00227 .00007 .00027
 15.000 12.000 -.08172 -.01440 .00441 -.00041 .00017
 GRADIENT -.04577 -.00146 -.00488 -.00002 -.00007 -.00004

RUN NO. 0 / 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00
 DZ ALPHA DCL DCLM DCD DCY DCBL
 30.000 10.000 -.03599 -.00454 .00198 .00006 .00024
 30.000 12.000 -.06044 -.01352 .00361 -.00026 .00011
 GRADIENT -.04833 -.00005 -.00394 .00017 -.00003 .00008

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 DZ ALPHA DCL DCLM DCD DCY DCBL
 45.000 10.000 -.02090 -.00261 .00214 .00006 .00018
 45.000 12.000 -.04167 -.00970 .00255 .00021 .00037
 GRADIENT -.04582 -.00141 -.00493 .00028 .00000 -.00006

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 DZ ALPHA DCL DCLM DCD DCY DCBL
 50.000 10.000 -.01949 -.00236 .00231 .00007 .00014
 50.000 12.000 -.03651 -.00843 .00224 .00033 .00052
 GRADIENT -.04517 -.00179 -.00519 .00032 .00002 -.00009

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA) (TNHX28) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 50.FT. XMRP = 1109.0000 IN. XO
LREF = 474.8100 IN. YMRP = .0000 IN. YO
BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = .000
I0RB = 6.000 DX = 10.000
DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ ALPHA DCL DCD DCLM DCY DCBL
3.500 8.000 -.05591 -.00731 -.0917 .00275 .00045
3.500 10.000 -.10299 -.01249 .00935 .00283 .00051
GRADIENT -.03891 -.00547 -.00748 -.00023 -.00011 -.00038

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ ALPHA DCL DCD DCLM DCY DCBL
7.500 8.000 -.05119 -.00679 .00524 .00261 .00059
7.500 10.000 -.09406 -.01194 .00584 .00240 .00084
GRADIENT -.04155 -.00392 -.00648 -.00015 -.00009 -.00025

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ ALPHA DCL DCD DCLM DCY DCBL
10.000 8.000 -.04934 -.00672 .00360 .00194 .00037
10.000 10.000 -.03185 -.01149 .00454 .00192 .00065
GRADIENT -.04310 -.00302 -.00589 -.00010 -.00009 -.00017

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ ALPHA DCL DCD DCLM DCY DCBL
15.000 8.000 -.04749 -.00613 .00181 .00193 .00039
15.000 10.000 -.08837 -.01039 .00286 .00153 .00055
GRADIENT -.04577 -.00146 -.00488 -.00002 -.00007 -.00004

RUN NO. 0/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ ALPHA DCL DCD DCLM DCY DCBL
30.000 8.000 -.03913 -.00447 .00161 .00150 .00024
30.000 10.000 -.00512 -.00058 .00364 .00170 .00030
GRADIENT -.04833 .00005 -.00334 .00017 -.00003 .00008

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ ALPHA DCL DCD DCLM DCY DCBL
45.000 8.000 -.02768 -.00311 .00276 .00082 .00008
45.000 10.000 -.04800 -.00420 .00336 .00153 .00025
GRADIENT -.04582 -.00141 -.00493 .00028 .00000 .00006

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA) (TNHX28) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO DY = .000 DX = 10.000
 SCALE = .0125 MACH = .600

RUN NO. 0/0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCBL
50.000	8.000	-.01967	-.00272	.00351	.00081	-.00052
50.000	10.000	-.03884	-.00374	.00374	.00018	-.00009
	GRADIENT	-.04517	-.00179	-.00032	.00002	-.00009

PARAMETRIC DATA

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA) (TNHX29) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO DY = .000 DX = 10.000
 SCALE = .0125 MACH = .600

RUN NO. 0/0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCBL
3.500	10.000	.06068	-.01152	.01200	.00231	-.00043
3.500	12.000	-.11040	-.02446	.01766	.00368	-.00044
	GRADIENT	-.03891	-.00547	-.00748	-.00023	-.00038

PARAMETRIC DATA

RUN NO. 0/0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCBL
7.500	10.000	-.05537	-.00889	.00902	.00218	.00057
7.500	12.000	-.10244	-.02287	.01457	.00323	-.00022
	GRADIENT	-.04155	-.00392	-.00648	-.00015	-.00025

PARAMETRIC DATA

RUN NO. 0/0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCBL
10.000	10.000	-.05129	-.00718	.00591	.00211	.00064
10.000	12.000	-.09616	-.02165	.01232	.00296	-.00005
	GRADIENT	-.04310	-.00302	-.00589	-.00010	-.00017

PARAMETRIC DATA

RUN NO. 0/0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCBL
15.000	10.000	-.04775	-.00645	.00494	.00172	.00050
15.000	12.000	-.09121	-.02068	.01025	.00246	-.00002
	GRADIENT	-.04577	-.00146	-.00088	-.00002	-.00004

PARAMETRIC DATA

ARC 14-120(CA238) 747/1 AT1 0351 (ORBITER DATA)

(TNHX29) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ 30.000 ALPHA 10.000 DCL -.03396 DCD -.00411 DCLM .00412 DCY .00146 DCYN .00012
 30.000 12.000 -.06420 -.01407 .00844 .00286 .00027
 GRADIENT -.04833 .00005 .00017 .00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ 45.000 ALPHA 10.000 DCL -.02266 DCD -.00230 DCLM .00409 DCY .00159 DCYN .00012
 45.000 12.000 -.04496 -.00349 .00839 .00210 .00023
 GRADIENT -.04582 .00141 .00028 .00000

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ 50.000 ALPHA 10.000 DCL -.01786 DCD -.00196 DCLM .00394 DCY .00153 DCYN .00026
 50.000 12.000 -.04044 -.00843 .00861 .00181 .00058
 GRADIENT -.04517 .00173 .00032 .00002

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

ARC 14-120(CA238) 747/1 AT1 0351 (ORBITER DATA)

(TNHX30) (17 OCT 75)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ 3.500 ALPHA 10.000 DCL -.06107 DCD -.01003 DCLM .00649 DCY .00209 DCYN .00124
 3.500 12.000 -.11544 -.02468 .00954 .00230 .00079
 GRADIENT -.03691 .00547 .00748 .00023

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ 7.500 ALPHA 10.000 DCL -.05525 DCD -.00806 DCLM .00385 DCY .00198 DCYN .00098
 7.500 12.000 -.10753 -.02347 .00811 .00218 .00053
 GRADIENT -.04155 .00332 .00648 .00015

DCBL .00056
 .00052
 .00038

DCBL .00055
 .00011
 .00025

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

RUN NO. 0/0 PN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCBL
10.000	10.000	-0.0990	-0.0662	.00222	.00197	.00048
10.000	12.000	-0.10169	-0.02254	.00709	.00033	-0.00020
GRADIENT	GRADIENT	-0.04310	-0.00302	-0.00589	-0.00010	-0.00017

RUN NO. 0/0 PN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCBL
15.000	10.000	-0.05118	-0.0659	.00070	.00155	.00061
15.000	12.000	-0.03612	-0.02157	.00618	.00207	-0.00033
GRADIENT	GRADIENT	-0.04577	-0.00146	-0.00488	-0.00002	-0.00004

RUN NO. 0/0 PN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCBL
30.000	10.000	-0.03860	-0.0392	.00161	.00127	.00030
30.000	12.000	-0.05750	-0.01511	.00606	.00241	-0.00022
GRADIENT	GRADIENT	-0.04833	.00011	-0.00394	.00017	-0.00008

RUN NO. 0/0 PN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCBL
45.000	10.000	-0.02111	-0.00246	.00289	.00105	.00014
45.000	12.000	-0.05526	-0.01212	.00722	.00170	.00036
GRADIENT	GRADIENT	-0.04582	-0.00141	-0.00493	.00028	-0.00006

RUN NO. 0/0 PN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCBL
50.000	10.000	-0.01937	-0.00211	.00321	.00135	.00010
50.000	12.000	-0.04036	-0.00947	.00745	.00168	.00049
GRADIENT	GRADIENT	-0.04517	-0.00179	-0.00519	.00032	-0.00009

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DATE 23 MAR 76

TABULATED SOURCE DATA - CA23B

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ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(TNHX31) (17 OCT 76)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
3.500	8.000	-.03396	-.00506	-.00109	.00165	.00071	.00058
3.500	10.000	-.09749	-.01129	-.00024	.00153	.00093	.00053
	GRADIENT	-.03891	-.00547	-.00748	-.00023	-.00011	-.00038

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
7.500	8.000	-.04975	-.00550	-.00109	.00162	.00060	.00043
7.500	10.000	-.09256	-.01055	-.00092	.00148	.00085	.00044
	GRADIENT	-.04155	-.00392	-.00648	-.00015	-.00009	-.00025

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
10.000	8.000	-.04600	-.00538	-.00197	.00160	.00052	.00026
10.000	10.000	-.08892	-.01004	-.00143	.00143	.00079	.00041
	GRADIENT	-.04310	-.00302	-.00589	-.00010	-.00009	-.00017

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
15.000	8.000	-.04572	-.00493	-.00250	.00151	.00054	.00033
15.000	10.000	-.08462	-.00946	-.00169	.00150	.00078	.00024
	GRADIENT	-.04577	-.00146	-.00488	-.00032	-.00007	-.00004

RUN NO. 0/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
30.000	8.000	-.03508	-.00335	-.00038	.00148	.00029	.00013
30.000	10.000	-.06537	-.00663	-.00076	.00058	.00024	.00044
	GRADIENT	-.04833	.00005	-.00394	.00017	-.00003	.00008

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
45.000	8.000	-.02315	-.00271	.00164	.00354	.00019	.00019
45.000	10.000	-.04623	-.00434	.00235	.00125	.00026	.00005
	GRADIENT	-.04582	-.00141	-.00493	.00028	.00000	-.00006

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO LORB = .000 DX = 20.000
 SCALE = .0125 GRADIENT = -.04517 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
50.000	8.000	-.01931	-.00248	.00220	.00017	.00016	-.00032
50.000	10.000	-.04289	-.00386	.00255	.00092	.00017	.00005
	GRADIENT	-.04517	-.00179	-.00519	.00032	.00002	-.00009

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO LORB = .000 DX = .000
 SCALE = .0125 GRADIENT = -.03891 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
3.500	8.000	-.05438	-.00882	.01703	.00356	.00019	.00015
3.500	10.000	-.10108	-.01458	.01886	.00360	.00043	.00021
	GRADIENT	-.03891	-.00547	-.00748	-.00023	-.00011	-.00038

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO LORB = .000 DX = .000
 SCALE = .0125 GRADIENT = -.09398 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
7.500	8.000	-.05159	-.00815	.01242	.00310	-.00007	.00003
7.500	10.000	-.09398	-.01351	.01451	.00299	.00025	.00014
	GRADIENT	-.04155	-.00392	-.00648	-.00015	-.00009	-.00025

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO LORB = .000 DX = .000
 SCALE = .0125 GRADIENT = -.06573 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
15.000	8.000	-.06076	-.00726	.00703	.00303	-.00016	-.00018
15.000	10.000	-.06573	-.01174	.01020	.00275	.00016	.00011
	GRADIENT	-.04577	-.00146	-.00498	-.00002	-.00007	-.00004

DATE 23 MAR 76

TABULATED SOURCE DATA - CA23B

ARC 14-120(CA23B) 747/1 ATI 0351 (ORBITER DATA)

(TNHX34) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0 / 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
30.000	8.000	-.03742	-.00490	.00641	.00302	-.00000	-.00046
30.000	10.000	-.06345	-.00777	.00847	.00226	-.00024	-.00008
	GRADIENT	-.04833	.00005	-.07394	.00017	-.00003	.00008

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
45.000	8.000	-.02424	-.00359	.00639	.00190	-.00026	-.00072
45.000	10.000	-.04352	-.00512	.00754	.00194	-.00025	-.00004
	GRADIENT	-.04582	-.00141	-.00493	.00028	.00000	-.00006

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
50.000	8.000	-.01907	-.00341	.00662	.00166	-.00018	-.00071
50.000	10.000	-.03799	-.00437	.00749	.00228	-.00013	-.00019
	GRADIENT	-.04517	-.00179	-.00519	.00032	.00002	-.00009

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 IORB = 8.000 DX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA)

(TNHY10) (17 OCT 75)

RUN NO. 0 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
3.500	10.000	-.05596	-.01008	.01194	.00158	-.00025	.00085
3.500	12.000	-.09685	-.02327	.01589	.00229	-.00042	.00065
	GRADIENT	-.04451	-.00679	-.00468	.00014	.00009	-.00014

RUN NO. 0 / 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
7.500	10.000	-.05299	-.00939	.01037	.00142	-.00026	.00093
7.500	12.000	-.03095	-.02058	.01401	.00196	-.00061	.00053
	GRADIENT	-.04552	-.00507	-.00425	.00012	.00006	-.00011

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TABLATED SOURCE DATA - CA238

ARC 14-120(CA238) 747/1 ATI 0251 (ORBITER DATA)

(TMY10) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	10.000	DCL	.05042	DCD	.00875	DCLM	.00924	DCY	.00143	DCYN	-.00020	DCBL	.00109
	10.000		-.08551		-.01869		.01266		.00189		-.00073		.00061
	10.000	GRADIENT	-.04611		-.00407		-.00400		.00011		-.00004		-.00009

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	15.000	DCL	-.04364	DCD	-.00790	DCLM	.00788	DCY	.00073	DCYN	-.00036	DCBL	.00082
	15.000		-.08292		-.01698		.01097		.00128		-.00084		.00025
	15.000	GRADIENT	-.04711		-.00234		-.00357		.00009		.00001		-.00006

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	30.000	DCL	-.03469	DCD	-.00437	DCLM	.00585	DCY	.00089	DCYN	-.00053	DCBL	.00065
	30.000		-.06209		-.01076		.00812		.00065		-.00097		.00030
	30.000	GRADIENT	-.04785		-.00066		-.00317		.00006		-.00002		-.00002

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	45.000	DCL	-.02027	DCD	-.00196	DCLM	.00471	DCY	.00171	DCYN	-.00049	DCBL	.00061
	45.000		-.04376		-.00557		.00607		.00160		-.00085		-.00011
	45.000	GRADIENT	-.04649		-.00225		-.00359		.00004		-.00001		-.00004

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	50.000	DCL	-.02202	DCD	-.00201	DCLM	.00395	DCY	.00184	DCYN	-.00047	DCBL	.00044
	50.000		-.03846		-.00414		.00547		.00200		-.00086		-.00008
	50.000	GRADIENT	-.04612		-.00265		-.00370		.00004		-.00001		-.00005

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(TNHY13) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XHRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YHRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZHRP = 375.0000 IN. Z0
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
3.500	8.000	-.05878	-.00890	.01274	.00123	.00019	.00102
3.500	10.000	-.10819	-.01668	.01614	.00023	.00001	.00118
	GRADIENT	-.04451	-.00679	-.00468	.00014	.00009	-.000014

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
7.500	8.000	-.05758	-.00650	.01019	.00035	.00013	.00087
7.500	10.000	-.10112	-.01532	.01325	-.00010	.00000	.00115
	GRADIENT	-.04552	-.00507	-.00425	.00012	.00006	-.00011

RUN NO. 0/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
10.000	8.000	-.05623	-.00836	.00962	-.00026	.00003	.00074
10.000	10.000	-.09876	-.01485	.01252	.00000	-.00005	.00100
	GRADIENT	-.04611	-.00407	-.00400	.00011	.00004	-.00009

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
15.000	8.000	-.05394	-.00707	.00806	-.00054	-.00002	.00070
15.000	10.000	-.09436	-.01332	.01095	-.00019	-.00011	.00092
	GRADIENT	-.04711	-.00234	-.00357	.00009	.00001	-.00006

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
30.000	8.000	-.04032	-.00497	.00677	-.00052	-.00010	.00039
30.000	10.000	-.07330	-.00927	.00893	.00076	-.00006	.00068
	GRADIENT	-.04785	-.00066	-.00317	.00006	-.00002	-.00002

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
45.000	8.000	-.02973	-.00368	.00599	-.00004	-.00003	.00040
45.000	10.000	-.05703	-.00620	.00732	.00039	-.00019	.00056
	GRADIENT	-.04649	-.00225	-.00359	.00004	.00001	-.00004

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

(TNHY13) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
50.000	8.000	-.02705	-.00277	.00541	.00010	.00003	.00057
50.000	10.000	-.05018	-.00484	.00667	.00058	-.00016	.00069
	GRADIENT	-.04612	-.00265	-.00370	.00004	.00001	-.00005

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

(TNHY18) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
3.500	8.000	-.05330	-.00980	.01241	.00152	-.00116	-.00180
3.500	10.000	-.10297	-.01675	.01670	-.00074	-.00165	-.00430
	GRADIENT	-.04451	-.00679	-.00468	.00014	.00009	-.00014

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

PARAMETRIC DATA

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
7.500	8.000	-.04861	-.00818	.01018	-.00016	-.00102	-.00144
7.500	10.000	-.09333	-.01465	.01303	-.00109	-.00135	-.00307
	GRADIENT	-.04552	-.00507	-.00425	.00012	.00006	-.00011

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

PARAMETRIC DATA

RUN NO. 0/ 0 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
10.000	8.000	-.04836	-.00780	.00931	.00028	-.00080	-.00148
10.000	10.000	-.08934	-.01360	.01216	-.00111	-.00136	-.00269
	GRADIENT	-.04611	-.00407	-.00400	.00011	.00004	-.00009

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

PARAMETRIC DATA

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
15.000	8.000	-.04619	-.00709	.00829	-.00011	-.00067	-.00140
15.000	10.000	-.08357	-.01209	.01098	-.00107	-.00105	-.00195
	GRADIENT	-.04711	-.00234	-.00357	.00009	.00001	-.00006

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

PARAMETRIC DATA

DATE 23 MAR 76

TABULATED SOURCE DATA - CA23B

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ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(TNHY18) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ ALPHA DCL DCLM DCD DCY DCYN DCBL
 30.000 8.000 -.03742 -.00470 .00605 -.00024 -.00034
 30.000 10.000 -.06673 -.00781 .00801 -.00045 -.00068
 GRADIENT -.04785 -.00066 -.00317 .00006 -.00002

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ ALPHA DCL DCLM DCD DCY DCYN DCBL
 45.000 8.000 -.02352 -.00264 .00522 .00039 -.00017
 45.000 10.000 -.04797 -.00456 .00657 .00044 -.00051
 GRADIENT -.04649 -.00225 -.00359 .00004 .00001

RUN NO. 0/ 0 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ ALPHA DCL DCLM DCD DCY DCYN DCBL
 50.000 8.000 -.02311 -.00239 .00470 .00084 -.00010
 50.000 10.000 -.04420 -.00387 .00603 .00052 -.00052
 GRADIENT -.04612 -.00265 -.00370 .00004 .00001

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(TNHY19) (17 OCT 75)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = 10.000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ ALPHA DCL DCLM DCD DCY DCYN DCBL
 3.500 10.000 -.05218 -.01392 .01293 .00060 -.00173
 3.500 12.000 -.09010 -.02199 .01747 -.00223 -.00141
 GRADIENT -.04451 -.00679 -.00468 .00014 .00009

RUN NO. 0/ 0 RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ ALPHA DCL DCLM DCD DCY DCYN DCBL
 7.500 10.000 -.04684 -.01090 .01136 .00063 -.00138
 7.500 12.000 -.08693 -.02074 .01524 .00161 -.00136
 GRADIENT -.04552 -.00507 -.00425 .00012 .00006

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1.09.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO IORB = .000 DX = .000
 SCALE = .0125 GRADIENT = .000 MACH = .600

PARAMETRIC DATA

RUN NO.	ALPHA	DCL	DCD	DCLM	DCY	DCYD	DCBL
10.000	10.000	-.04493	-.00880	.01028	.00052	-.00116	-.00147
10.000	12.000	-.08455	-.02014	.01367	-.00110	-.00135	-.00343
10.000	GRADIENT	-.04611	-.00407	-.00400	.00011	.00004	-.00009

RUN NO.	ALPHA	DCL	DCD	DCLM	DCY	DCYD	DCBL
15.000	10.000	-.04849	-.00757	.00849	-.00005	-.00084	-.00070
15.000	12.000	-.08195	-.01761	.01199	-.00070	-.00118	-.00233
15.000	GRADIENT	-.04711	-.00234	-.00357	.00009	.00001	-.00006

RUN NO.	ALPHA	DCL	DCD	DCLM	DCY	DCYD	DCBL
30.000	10.000	-.03771	-.00473	.00649	.00039	-.00060	-.00011
30.000	12.000	-.06056	-.01062	.00891	-.00095	-.00110	-.00100
30.000	GRADIENT	-.04785	-.00066	-.00317	.00006	-.00002	-.00002

RUN NO.	ALPHA	DCL	DCD	DCLM	DCY	DCYD	DCBL
45.000	10.000	-.02317	-.00259	.00543	.00115	-.00058	-.00014
45.000	12.000	-.04111	-.00528	.00709	.00182	-.00074	-.00079
45.000	GRADIENT	-.04649	-.00225	-.00359	.00004	.00001	-.00004

RUN NO.	ALPHA	DCL	DCD	DCLM	DCY	DCYD	DCBL
50.000	10.000	-.01980	-.00185	.00512	.00125	-.00050	-.00015
50.000	12.000	-.03663	-.00416	.00641	.00138	-.00093	-.00067
50.000	GRADIENT	-.04612	-.00265	-.00370	.00004	.00001	-.00005

ORIGINAL PAGE IS OF POOR QUALITY

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(TNHY27) (17 OCT 75

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. YO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 8.000 DX = .000
 DY = .000 MACH = .600

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ ALPHA DCL DCD DCLM DCY DCBL
 3.500 10.000 -.04445 -.00702 .01474 .00343 .00027
 7.500 12.000 -.09119 -.02099 .02246 .00236 .00053
 3.500 GRADIENT -.03891 -.00547 -.00748 -.00023 -.00011 -.00038

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ ALPHA DCL DCD DCLM DCY DCBL
 7.500 10.000 -.04596 -.00708 .01230 .00239 .00047
 7.500 12.000 -.08850 -.02040 .01871 .00283 .00037
 7.500 GRADIENT -.04155 -.00392 -.00648 -.00015 -.00009 -.00025

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ ALPHA DCL DCD DCLM DCY DCBL
 10.000 10.000 -.04651 -.00691 .01029 .00132 .00073
 10.000 12.000 -.08733 -.02008 .01571 .00295 .00025
 10.000 GRADIENT -.04310 -.00302 -.00589 -.00010 -.00009 -.00017

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ ALPHA DCL DCD DCLM DCY DCBL
 15.000 10.000 -.04708 -.00745 .00288 .00228 .00027
 15.000 12.000 -.08157 -.01882 .01445 .00446 .00018
 15.000 GRADIENT -.04577 -.00146 -.00468 -.00002 -.00007 -.00004

RUN NO. 0/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ ALPHA DCL DCD DCLM DCY DCBL
 30.000 10.000 -.03604 -.00454 .00604 .00199 .00024
 30.000 12.000 -.06040 -.01361 .01151 .00363 .00012
 30.000 GRADIENT -.04833 .00005 -.00394 .00017 -.00003 .00008

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ ALPHA DCL DCD DCLM DCY DCBL
 45.000 10.000 -.02089 -.00261 .00591 .00215 .00018
 45.000 12.000 -.04165 -.00972 .01051 .00256 .00021
 45.000 GRADIENT -.04582 -.00141 -.00493 .00028 .00000 .00006

ARC 14-120(CA238) 747/1 AT1 0351 (ORBITER DATA)

(TNHY27) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ 50.000 ALPHA0 DCL DCD DCLM DCY DCYN DCBL
 10.000 .01952 -.00237 .00495 .00232 .00007 -.00014
 50.000 12.000 -.00843 .01026 .00224 .00033 .00053
 GRADIENT -.04517 -.00179 -.00519 .00032 .00002 -.00009

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 8.000 DX = .000
 DY = .000 MACH = .600

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ 3.500 ALPHA0 DCL DCD DCLM DCY DCYN DCBL
 7.500 8.000 -.04669 .00883 .01349 .00108 .00120
 3.500 10.000 -.03279 .01462 .01577 .00131 .00157
 GRADIENT -.03891 -.00547 -.00748 -.00023 -.00011

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 0351 (ORBITER DATA)

(TNHY32) (17 OCT 75)

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ 7.500 ALPHA0 DCL DCD DCLM DCY DCYN DCBL
 10.000 8.000 -.06774 .00735 .00923 .00068 .00083
 7.500 10.000 -.08615 .01317 .01109 .00006 .00107
 GRADIENT -.04155 -.00352 -.00648 -.00015 -.00009

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ 10.000 ALPHA0 DCL DCD DCLM DCY DCYN DCBL
 10.000 8.000 -.04733 .00735 .00923 .00096 .00129
 10.000 10.000 -.08795 .01267 .01019 .00027 .00250
 GRADIENT -.04310 -.00302 -.00589 -.00010 -.00009

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ 15.000 ALPHA0 DCL DCD DCLM DCY DCYN DCBL
 15.000 8.000 -.04682 .00685 .00699 .00090 .00125
 15.000 10.000 -.09155 .01152 .00260 .00027 .00229
 GRADIENT -.04477 -.00146 -.00488 -.00002 -.00007

DCBL
 -.00129
 -.00275
 -.00017
 -.00029
 -.00029
 -.00004

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA) (TNHY32) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6900 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
30.000	8.000	-.03575	-.00432	.00536	.00101	-.00017	-.00089
30.000	10.000	-.06274	-.00707	.00797	.00038	-.00051	-.00122
	GRADIENT	-.04833	.00005	-.00394	.00017	-.00003	-.00008

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
45.000	8.000	-.02312	-.00307	.00536	.00019	-.00026	-.00069
45.000	10.000	-.04632	-.00464	.00561	.00028	-.00037	-.00067
	GRADIENT	-.04582	-.00141	-.00493	.00028	.00000	-.00006

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
50.000	8.000	-.01875	-.00254	.00560	.00035	-.00020	-.00087
50.000	10.000	-.03839	-.00368	.00559	.00044	-.00028	-.00056
	GRADIENT	-.04517	-.00179	-.00519	.00032	.00002	-.00009

REFERENCE DATA

SREF = 2699.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6900 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
3.500	10.000	-.05096	-.01369	.01431	-.00056	-.00093	-.00249
3.500	12.000	-.09671	-.02532	.02102	-.00100	-.00146	-.00560
	GRADIENT	-.03831	-.00547	-.00748	-.00023	-.00011	-.00038

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
7.500	10.000	-.04894	-.01028	.01223	.00011	-.00077	-.00190
7.500	12.000	-.09240	-.02358	.01888	-.00044	-.00140	-.00452
	GRADIENT	-.04155	-.00392	-.00648	-.00015	-.00009	-.00025

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORR = 6.000 DX = .000
 DY = 10.000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA) (TNHY33) (17 OCT 75)

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORR = 8.000 DX = .000
 DY = 10.000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA) (TNHY33) (17 OCT 75)

REFERENCE DATA

SPEF = 2630.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LPFF = 474.8100 IN. YMRP = .0000 IN. Y0
 BFEF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = 10.000 MACH = .600

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
10.000	10.000	-.04674	-.00793	.01050	.00039	-.00063	-.00154
10.000	12.000	-.08918	-.02231	.01740	-.00006	-.00133	-.00368
	GRADIENT	-.04310	-.00302	-.00589	-.00010	-.00009	-.00017

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
15.000	10.000	-.04757	-.00742	.00908	.00084	-.00054	-.00134
15.000	12.000	-.08444	-.02067	.01559	.00049	-.00132	-.00302
	GRADIENT	-.04577	-.00146	-.00488	-.00002	-.00007	-.00004

RUN NO. 0 / 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
30.000	10.000	-.03432	-.00457	.00787	.00121	-.00023	-.00052
30.000	12.000	-.05625	-.01370	.01324	.00116	-.00104	-.00093
	GRADIENT	-.04833	.00005	-.00294	.00017	-.00003	.00008

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
45.000	10.000	-.01984	-.00240	.00694	.00109	-.00042	-.00034
45.000	12.000	-.04163	-.01026	.01217	.00134	-.00027	-.00049
	GRADIENT	-.04582	-.00141	-.00493	.00028	.00000	-.00006

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
50.000	10.000	-.01861	-.00253	.00651	.00135	-.00024	-.00030
50.000	12.000	-.03056	-.00975	.01158	.00137	-.00006	-.00026
	GRADIENT	-.04517	-.00179	-.00519	.00032	.00002	-.00009

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ARC 14-120(CA23B) 747/1 ATI 03SI (ORBITER DATA)

(TNHY34) (17 OCT 75)

REFERENCE DATA

SPEF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LPEF = 474.8100 IN. YMPP = .0000 IN. Y0
 BREF = 935.6000 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = 1.600

RUN NO. 0/ 0 RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
3.500	8.000	-.05437	-.00879	.01688	.00363	.00019	.00015
3.500	10.000	-.10107	-.01458	.01986	.00350	.00043	.00020
	GRADIENT	-.03891	-.00547	-.00748	-.00023	-.00011	-.00038

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
7.500	8.000	-.05156	-.00814	.01236	.00309	-.00007	.00002
7.500	10.000	-.09385	-.01351	.01450	-.00288	.00024	.00013
	GRADIENT	-.04155	-.00392	-.00648	-.00015	-.00009	-.00025

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
10.000	8.000	-.05304	-.00779	.01009	.00301	-.00004	.00002
10.000	10.000	-.09063	-.01294	.01297	.00273	.00015	.00002
	GRADIENT	-.04310	-.00302	-.00589	-.00010	-.00009	-.00017

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
15.000	8.000	-.05072	-.00725	.00700	.00301	-.00015	.00018
15.000	10.000	-.09597	-.01175	.01025	.00271	.00015	.00009
	GRADIENT	-.04577	-.00146	-.00488	-.00002	-.00007	-.00004

RUN NO. 0/ 0 RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
30.000	8.000	-.03742	-.00489	.00639	.00301	-.00000	.00047
30.000	10.000	-.06343	-.00778	.00850	.00225	-.00025	.00009
	GRADIENT	-.04833	.00005	-.00394	.00017	-.00003	.00008

RUN NO. 0/ 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHA	DCL	DCD	DCLM	DCY	DCYN	DCBL
45.000	8.000	-.02417	-.00360	.00643	.00190	-.00027	.00073
45.000	10.000	-.04343	-.00513	.00762	.00194	-.00026	.00003
	GRADIENT	-.04582	-.00141	-.00493	.00028	.00000	-.00006

TABULATED SOURCE DATA - CA23B

DATE 23 MAR 76

(TNHY34) (17 OCT 75)

ARC 14-1201CA23B) 747/1 AT1 03S1 (ORBITER DATA)

REFERENCE DATA

SPEF = 2630.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RUN NO. 0 / 0 RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAO	DCL	DCD	DCLM	DCY	DCYN	DCBL
50.000	8.000	-.01905	-.00342	.00567	.00167	-.00019	-.00071
50.000	10.000	-.03799	-.00439	.00756	-.00229	-.00013	-.00019
	GRADIENT	-.04517	-.00179	-.00519	.00032	.00002	-.00009

PARAMETRIC DATA

BETA	STAB	ALPHAO
RUDDER	ELEVON	5.000
10RB	DX	.000
DY	MACH	.600

(4NH09B) (17 OCT 75)

ARC 14-1201CA23B) 747/1 AT1 02S1 (ORBITER DATA)

REFERENCE DATA

SPEF = 2090.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
3.500	.000	-.02984	-.00705	.01187	.00185	.00033	.00103	6.00000
	2.000	-.05931	-.01009	.01158	.00217	.00025	.00085	8.00000
	4.000	-.11750	-.01813	.01522	.00134	.00003	.00111	10.00000
	GRADIENT	-.02191	-.00277	.00084	-.00013	-.00007	.00002	1.00000

PARAMETRIC DATA

BETA	STAB	ALPHAC
RUDDER	ELEVON	-1.000
10RB	DX	5.000
DY	MACH	.600

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
7.500	.000	-.02505	-.00582	.00835	.00111	.00019	.00092	6.00000
	2.000	-.05952	-.00930	.00911	.00123	.00023	.00077	8.00000
	4.000	-.10846	-.01636	.01275	.00098	.00004	.00112	10.00000
	GRADIENT	-.02095	-.00264	.00100	-.00003	-.00004	.00005	1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
10.000	.000	-.02359	-.00527	.00736	.00035	.00001	.00069	6.00000
	2.000	-.05125	-.00960	.00667	-.00087	-.00018	.00041	8.00000
	4.000	-.10749	-.01557	.00643	-.00004	-.00004	.00090	10.00000
	GRADIENT	-.02095	-.00258	.00100	.00002	-.00001	.00005	1.00000

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(4NH008) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 15.000

ALPHAC	DCD	DCY	DCYN	DCBL	ALPHA0
.000	-.02434	.00437	.00582	.00577	6.00000
2.000	-.06138	-.00776	.00704	.00022	8.00000
4.000	-.10059	-.01381	.00934	.00091	10.00000
GRADIENT	-.01891	-.00236	.00103	.00010	1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 30.000

ALPHAC	DCD	DCY	DCYN	DCBL	ALPHA0
.000	-.02255	-.00256	.00391	.00034	6.00000
2.000	-.04687	-.00511	.00544	.00023	8.00000
4.000	-.08342	-.00954	.00740	.00055	10.00000
GRADIENT	-.01447	-.00171	.00087	.00005	1.00000

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 45.000

ALPHAC	DCD	DCY	DCYN	DCBL	ALPHA0
.000	-.02209	-.00154	.00277	.00014	6.00000
2.000	-.03717	-.00349	.00418	.00016	8.00000
4.000	-.06073	-.00583	.00573	.00031	10.00000
GRADIENT	-.00956	-.00107	.00074	.00026	1.00000

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 50.000

ALPHAC	DCD	DCY	DCYN	DCBL	ALPHA0
.000	-.01841	-.00133	.00271	.00025	6.00000
2.000	-.03392	-.00292	.00398	.00048	8.00000
4.000	-.05722	-.00522	.00519	.00095	10.00000
GRADIENT	-.00970	-.00097	.00062	.00030	1.00000

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TABLATED SOURCE DATA - CA23B

ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA)

(MNH009) (17 OCT 75)

PARAMETRIC DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.5800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

BETA = .000 STAB = -1.000
 RUCDER = .000 ELEVON = 5.000
 ICRB = 8.000 DX = .000
 DY = .000 MACH = .600

REFERENCE DATA

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
.000	-.01518	-.00528	.00900	.00291	.00025	.00104	8.00000
2.000	-.05613	-.01136	.01174	.00207	-.00006	.00173	10.00000
4.000	-.10957	-.02560	.01638	.00220	-.00033	.00061	12.00000
GRADIENT	-.02360	-.00508	.00185	-.00018	-.00014	-.00011	1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
.000	-.01496	-.00366	.00636	.00190	.00003	.00086	8.00000
2.000	-.05133	-.01011	.01011	.00205	-.00003	.00141	10.00000
4.000	-.10487	-.02390	.01445	.00226	-.00043	.00057	12.00000
GRADIENT	-.02248	-.00506	.00202	.00009	-.00012	-.00007	1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
.000	-.02359	-.00520	.00685	.00123	.00003	.00056	8.00000
2.000	-.05623	-.01105	.00894	.00243	-.00008	.00119	10.00000
4.000	-.10263	-.02268	.01313	.00245	-.00048	.00056	12.00000
GRADIENT	-.01896	-.00437	.00157	.00030	-.00013	-.00000	1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
.000	-.02637	-.00453	.00542	-.00003	-.00023	.00051	8.00000
2.000	-.06382	-.01038	.00764	.00072	-.00028	.00091	10.00000
4.000	-.09871	-.02099	.01122	.00194	-.00067	.00045	12.00000
GRADIENT	-.01809	-.00411	.00145	.00049	-.00011	-.00001	1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
.000	-.01949	-.00263	.00492	.00029	-.00025	.00017	8.00000
2.000	-.05095	-.00558	.00561	.00160	-.00035	.00062	10.00000
4.000	-.07346	-.01353	.00638	.00252	-.00058	.00047	12.00000
GRADIENT	-.01346	-.00272	.00111	.00061	-.00016	-.00007	1.00000

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BPEF = 936.6800 IN. ZMRP = 375.0000 IN. ZO LORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = -.01971 MACH = .600

PARAMETRIC DATA

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500	ALPHAC	DCO	DCLM	DCY	DCYN	DCBL	ALPHA0
.000	-.01196	-.00454	.00900	.00144	.00005	.00046	8.00000
2.000	-.05278	-.00933	.01033	.00143	-.00027	.00089	10.00000
4.000	-.03080	-.02051	.01399	.00193	-.00062	.00047	12.00000
GRADIENT	-.01971	-.00399	.00125	.00012	-.00017	.00000	1.00000

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000	ALPHAC	DCO	DCLM	DCY	DCYN	DCBL	ALPHA0
.000	-.01473	-.00397	.00734	.00070	.00000	.00057	8.00000
2.000	-.05048	-.00869	.00916	.00149	-.00016	.00119	10.00000
4.000	-.08654	-.01863	.01263	.00198	-.00071	.00073	12.00000
GRADIENT	-.01795	-.00366	.00132	.00032	-.00018	.00004	1.00000

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000	ALPHAC	DCO	DCLM	DCY	DCYN	DCBL	ALPHA0
.000	-.01291	-.00340	.00532	.00005	-.00018	.00036	8.00000
2.000	-.04914	-.00782	.00780	.00078	-.00035	.00087	10.00000
4.000	-.08281	-.01688	.01090	.00138	-.00082	.00036	12.00000
GRADIENT	-.01747	-.00337	.00115	.00036	-.00015	-.00000	1.00000

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000	ALPHAC	DCO	DCLM	DCY	DCYN	DCBL	ALPHA0
.000	-.00777	-.00166	.00455	-.00062	-.00029	.00016	8.00000
2.000	-.03449	-.00433	.00580	.00092	-.00052	.00069	10.00000
4.000	-.06201	-.01068	.00805	.00071	-.00037	.00036	12.00000
GRADIENT	-.01356	-.00226	.00088	.00034	-.00017	.00005	1.00000

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000	ALPHAC	DCO	DCLM	DCY	DCYN	DCBL	ALPHA0
.000	-.00190	-.00083	.00402	.00008	-.00023	.00009	8.00000
2.000	-.02059	-.00191	.00467	.00174	-.00048	.00064	10.00000
4.000	-.04373	-.00554	.00601	.00159	-.00086	-.00007	12.00000
GRADIENT	-.01047	-.00118	.00050	.00038	-.00016	-.00004	1.00000

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TABLATED SOURCE DATA - CA23B

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ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (4NH010) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 8.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL .00241 DCO .00051 DCY .00025 DCYN .00017 DCBL .00015 ALPHAO 8.00000
 .02204 .00198 .00188 .00047 .00046 10.00000
 .03844 .00409 .00204 .00086 .00005 12.00000
 .00901 .00089 .00047 .00017 .00005 1.00000

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (4NH011) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 4.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL .03110 DCO .00668 DCY .00115 DCYN .00011 DCBL .00094 ALPHAO 4.00000
 .07298 .01038 .01210 .00021 .00104 6.00000
 .11267 .01480 .01181 .00097 .00094 8.00000
 .02039 .00203 .00019 .00005 .00001 1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL .02509 DCO .00641 DCY .00109 DCYN .00018 DCBL .00088 ALPHAO 4.00000
 .06533 .00940 .00094 .00012 .00077 6.00000
 .10474 .01352 .00934 .00027 .00073 8.00000
 .01991 .00178 .00015 .00002 .00004 1.00000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = -1.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = .000 DX = .000
 SCALE = .0125 GRADIENT = -.01935 -.00171 -.00003 -.001017 -.00002 -.00002

DZ = 10.000 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
.000	-.02427	-.00605	.00855	.00158	.00023	.00071	4.00000
2.000	-.06189	-.00874	.00846	.00101	.00015	.00073	6.00000
4.000	-.10168	-.01283	.00841	.00089	.00015	.00063	8.00000
GRADIENT	-.01935	-.00171	-.00003	-.001017	-.00002	-.00002	1.00000

DZ = 15.000 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
.000	-.02206	-.00498	.00687	.00167	.00027	.00053	4.00000
2.000	-.05725	-.00765	.00711	.00116	.00025	.00064	6.00000
4.000	-.09394	-.01142	.00775	.00075	.00021	.00059	8.00000
GRADIENT	-.01795	-.00161	.00022	-.00023	-.00001	.00002	1.00000

DZ = 30.000 RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
.000	-.01858	-.00359	.00465	.00062	.00006	.00021	4.00000
2.000	-.04517	-.00479	.00537	-.00019	-.00009	.00031	6.00000
4.000	-.07081	-.00755	.00545	.00044	.00007	.00028	8.00000
GRADIENT	-.01306	-.00099	.00045	-.00004	.00000	.00002	1.00000

DZ = 45.000 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
.000	-.01353	-.00214	.00336	.00017	-.00003	.00017	4.00000
2.000	-.03186	-.00325	.00450	.00016	-.00004	.00027	6.00000
4.000	-.04693	-.00481	.00565	.00100	.00008	.00025	8.00000
GRADIENT	-.00835	-.00067	.00057	.00021	.00003	.00002	1.00000

DZ = 50.000 RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
.000	-.01203	-.00158	.00294	.00007	-.00005	.00018	4.00000
2.000	-.02703	-.00294	.00427	.00042	.00001	.00028	6.00000
4.000	-.03915	-.00399	.00544	.00123	.00011	.00029	8.00000
GRADIENT	-.00678	-.00060	.00063	.00029	.00004	.00003	1.00000

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = 5.000
 TORB = .000 DX = .000
 DY = .000 MACH = .600

TABLATED SOURCE DATA - CA23B

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

(4NH013) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = 1.600

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC	.000	DCL	-.01616	DCD	-.00553	DCLM	.01230	DCY	.00016	DCYN	.00010	DCBL	.00121	ALPHAQ	6.00000
	2.000		-.05960		-.00916		.01296		.00115		.00025		.00117		8.00000
	4.000		-.10887		-.01689		.01624		.00021		.00010		.00147		10.00000
GRADIENT			-.02318		-.00284		.00099		.00001		-.00000		.00007		1.00000

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500

ALPHAC	.000	DCL	-.01810	DCD	-.00528	DCLM	.00929	DCY	.00014	DCYN	.00015	DCBL	.00112	ALPHAQ	6.00000
	2.000		-.05844		-.00872		.01031		.00031		.00020		.00100		8.00000
	4.000		-.10192		-.01562		.01339		-.00013		.00008		.00136		10.00000
GRADIENT			-.02095		-.00259		.00103		-.00007		-.00002		.00006		1.00000

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000

ALPHAC	.000	DCL	-.01727	DCD	-.00502	DCLM	.00255	DCY	.00039	DCYN	.00023	DCBL	.00093	ALPHAQ	6.00000
	2.000		-.05713		-.00858		.00974		-.00037		.00008		.00087		8.00000
	4.000		-.09976		-.01519		.01266		-.00001		.00004		.00121		10.00000
GRADIENT			-.02062		-.00254		.00102		-.00010		-.00005		.00007		1.00000

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000

ALPHAC	.000	DCL	-.01726	DCD	-.00443	DCLM	.00739	DCY	.00026	DCYN	.00001	DCBL	.00079	ALPHAQ	6.00000
	2.000		-.05484		-.00726		.00816		-.00062		.00001		.00081		8.00000
	4.000		-.09540		-.01362		.01104		-.00020		.00005		.00107		10.00000
GRADIENT			-.01954		-.00230		.00092		.00001		-.00001		.00007		1.00000

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000

ALPHAC	.000	DCL	-.01261	DCD	-.00297	DCLM	.00574	DCY	.00021	DCYN	.00010	DCBL	.00029	ALPHAQ	6.00000
	2.000		-.04090		-.00516		.00691		-.00058		.00008		.00045		8.00000
	4.000		-.07405		-.00959		.00907		-.00081		.00002		.00076		10.00000
GRADIENT			-.01536		-.00165		.00083		.00026		.00002		.00012		1.00000

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .000 MACH = .600

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

PARAMETRIC DATA

DZ = 45.000	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA
ALPHAC	.01131	-.00214	.00511	-.00064	-.00008	.00052	6.00000
.000	-.03079	-.00403	.00619	-.00016	-.00001	.00044	8.00000
2.000	-.03032	-.00566	.00748	.00033	-.00016	.00063	10.00000
4.000	-.01175	-.00113	.00059	.00024	-.00002	.00003	1.00000
GRADIENT							

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

PARAMETRIC DATA

DZ = 50.000	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA
ALPHAC	.01202	-.00148	.00444	-.00048	-.00005	.00052	6.00000
.000	-.02761	-.00294	.00554	.00001	-.00004	.00061	8.00000
2.000	-.05121	-.00522	.00681	.00053	-.00013	.00076	10.00000
4.000	-.00980	-.00094	.00059	.00025	-.00002	.00006	1.00000
GRADIENT							

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 4.000 DX = .000
 SCALE = .0125 GRADIENT = .000 MACH = .600

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

PARAMETRIC DATA

DZ = 3.500	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA
ALPHAC	.00990	-.00368	.01292	-.00042	-.00011	.00055	4.00000
.000	-.05960	-.00767	.01215	-.00032	-.00003	.00065	6.00000
2.000	-.02517	-.01167	.01000	.00014	.00019	.00052	8.00000
4.000	-.02132	-.00200	-.00073	.00014	.00008	-.00001	1.00000
GRADIENT							

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ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(4NH020) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 50.FT. YMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 935.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 ICRB = 4.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500

ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.00074 -.00308 .01037 -.00054 -.00009 .00042
 -.05794 -.00693 .00941 -.00017 .00007 .00042
 -.09170 -.01100 .00737 .00248 .00020 .00037
 -.02274 -.00198 -.00060 .00326 .00007 -.00001

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000

ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 .00048 -.00258 .00911 .00042 .00006 .00020
 -.05070 -.00634 .00880 .00043 .00013 .00040
 -.00758 -.01038 .00695 .00061 .00030 .00039
 -.02251 -.00195 -.00054 .00005 .00005 .00005

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000

ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 .00138 -.00216 .00723 .00014 .00007 .00007
 -.04746 -.00530 .00705 .00026 .00006 .00047
 -.09125 -.01581 .00514 .00013 .00012 .00035
 -.02060 -.00166 -.00077 .00001 .00005 .00007

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000

ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.00055 -.00057 .00431 .00052 .00012 .00001
 -.03872 -.00301 .00493 .00124 .00013 .00039
 -.06489 -.00572 .00464 .00263 .00023 .00045
 -.01608 -.00129 .00008 .00003 .00002 .00002

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.00219 -.00001 .00283 .00097 .00015 .00015
 -.03326 -.00190 .00346 .00117 .00010 .00032
 -.05120 -.00384 .00373 .00177 .00007 .00029
 -.01240 -.00096 .00019 .00005 .00002 .00002

TABULATED SOURCE DATA - CA23B

DATE 23 MAR 76

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(4NH020) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 50.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 4.000 DX = .000
 DY = .000 MACH = .600

DCBL ALPHAO
 .00023 4.00000
 .00032 6.00000
 .00012 8.00000
 -.00003 1.00000

DCY DCYN
 -.00126 -.00018
 -.00117 -.00008
 -.00089 -.00010
 .00009 .00002

DCL DCO DCLM
 -.00255 .00006 .00238
 -.03194 -.00161 .00289
 -.04729 -.00326 .00328
 -.01119 -.00083 .00023

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(4NH021) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 3.500
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 IORB = 4.000 DX = .000
 DY = .000 MACH = .600

DCBL ALPHAO
 .00054 4.00000
 .00074 6.00000
 .00049 8.00000
 -.00001 1.00000

DCY DCYN
 .00007 -.00003
 .00027 .00009
 .00011 .00011
 .00001 .00003

DCL DCO DCLM
 -.01390 .00559 .01421
 -.05894 -.00915 .01362
 -.03467 -.01290 .01180
 -.02219 -.00183 -.00060

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 7.500
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCBL ALPHAO
 .00032 4.00000
 .00072 6.00000
 .00038 8.00000
 .00002 1.00000

DCY DCYN
 .00060 .00008
 -.00005 .00009
 -.00010 .00008
 -.00018 -.00000

APC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

(4NH021) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
LREF = 474.8100 IN. YMRP = .0000 IN. Y0
BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
RUDDER = .000 ELEVON = .000
TORB = 4.000 DX = .000
DY = .000 MACH = .600

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000

ALPHAC
.000
2.000
4.000
GRADIENT

DCL
-.01598
-.05370
-.08742
-.01786

DCD
-.00479
-.00798
-.01149
-.00168

DCLM
.00965
.00994
.00872
-.00023

DCY
.00011
.00009
-.00034
-.00011

DCYN
-.00003
.00016
.00003
.00001

DCBL
.00028
.00064
.00034
.00001

ALPHA0
4.00000
6.00000
8.00000
1.00000

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000

ALPHAC
.000
2.000
4.000
GRADIENT

DCL
-.00925
-.04865
-.08049
-.01781

DCD
-.00400
-.00678
-.00994
-.00149

DCLM
.00827
.00652
.00758
-.00017

DCY
.00004
-.00066
-.00021
-.00006

DCYN
-.00009
-.00004
.00005
.00004

DCBL
-.00005
.00048
.00034
.00010

ALPHA0
4.00000
6.00000
8.00000
1.00000

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000

ALPHAC
.000
2.000
4.000
GRADIENT

DCL
-.00809
-.03787
-.06281
-.01363

DCD
-.00221
-.00431
-.00648
-.00107

DCLM
.00520
.00511
.00579
.00015

DCY
-.00077
-.00094
-.00059
.00005

DCYN
-.00014
-.00008
-.00000
.00003

DCBL
.00018
.00027
.00018
.00000

ALPHA0
4.00000
6.00000
8.00000
1.00000

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC
.000
2.000
4.000
GRADIENT

DCL
-.00693
-.02615
-.04818
-.01031

DCD
-.00096
-.00260
-.00434
-.00085

DCLM
.00373
.00498
.00483
.00027

DCY
-.00174
-.00164
-.00153
.00005

DCYN
-.00024
-.00019
-.00002
.00005

DCBL
.00031
.00030
.00033
.00000

ALPHA0
4.00000
6.00000
8.00000
1.00000

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC
.000
2.000
4.000
GRADIENT

DCL
-.00600
-.02205
-.04358
-.00940

DCD
-.00056
-.00208
-.00370
-.00079

DCLM
.00337
.00468
.00455
.00029

DCY
-.00206
-.00198
-.00187
.00005

DCYN
-.00027
-.00025
-.00002
.00006

DCBL
.00032
.00032
.00041
.00002

ALPHA0
4.00000
6.00000
8.00000
1.00000

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(4NH022) (17 OCT 75)

REFERENCE DATA

SPREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
-.00334	-.00090	.00428	-.00135	-.00016	.00004	8.00000
-.01757	-.00258	.00503	-.00116	-.00013	.00014	10.00000
-.03564	-.00851	.01021	.00018	-.00033	.00036	12.00000
-.00808	-.00190	.00148	-.00038	-.00004	.00008	1.00000

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
-.00467	-.00074	.00380	-.00113	-.00005	.00012	8.00000
-.01871	-.00226	.00546	-.00115	-.00012	.00018	10.00000
-.03632	-.00823	.00932	.00044	-.00024	.00030	12.00000
-.00791	-.00187	.00138	.00039	-.00005	.00005	1.00000

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(4NH023) (17 OCT 75)

REFERENCE DATA

SPREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
-.00012	-.00474	.01262	-.00030	-.00000	.00096	6.00000
-.04316	-.00770	.01243	-.00023	.00004	.00055	8.00000
-.08094	-.01276	.01548	.00031	.00022	.00038	10.00000
-.02020	-.00201	.00071	.00015	.00006	-.00015	1.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO DY = .000 DX = .000
 SCALE = .0125 GRADIENT = -.01922 -.01191 -.01288 -.00028 -.00006 -.00002

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
7.500	.000	-.00121	-.00453	.01017	-.00043	-.00001	.00071	6.00000
	.000	-.04069	-.00746	.01039	-.00036	.00001	.00045	8.00000
	2.000	-.07808	-.01191	.01288	-.00028	.00006	.00025	10.00000
	4.000	-.01922	-.00185	.00068	.00004	.00002	-.00012	1.00000

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
10.000	.000	-.00301	-.00431	.00905	-.00067	-.00004	.00072	6.00000
	.000	-.04226	-.00714	.00931	-.00007	.00002	.00026	8.00000
	2.000	-.07382	-.01127	.01232	-.00005	.00009	.00020	10.00000
	4.000	-.01770	-.00174	.00082	.00015	.00003	-.00013	1.00000

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
15.000	.000	-.00405	-.00374	.00768	-.00061	.00003	.00074	6.00000
	.000	-.03440	-.00616	.00925	-.00071	-.00014	.00017	8.00000
	2.000	-.07083	-.01012	.01106	-.00008	.00007	.00019	10.00000
	4.000	-.01669	-.00159	.00065	.00013	.00001	-.00014	1.00000

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
30.000	.000	-.00488	-.00254	.00531	-.00105	-.00005	.00055	6.00000
	.000	-.03401	-.00431	.00608	-.00074	-.00003	.00019	8.00000
	2.000	-.06205	-.00625	.00895	-.00034	-.00004	.00010	10.00000
	4.000	-.01179	-.00093	.00091	.00018	.00000	-.00011	1.00000

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
45.000	.000	-.00580	-.00155	.00403	-.00164	-.00018	.00045	6.00000
	.000	-.02701	-.00282	.00483	-.00151	-.00019	.00026	8.00000
	2.000	-.03988	-.00390	.00718	-.00093	-.00015	.00029	10.00000
	4.000	-.00952	-.00059	.00079	.00018	.00001	-.00004	1.00000

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ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA) (4NH023) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.00771 -.00113 -.00376 -.00155 -.00015 .00060
 -.02544 -.00237 -.00473 -.00123 -.00012 .00019
 -.03749 -.00310 .00571 -.00116 -.00011 .00039
 -.00745 -.00049 .00074 .00010 .00001 -.00005

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.00455 -.00580 .01270 -.00023 -.00002 .00066
 -.04391 -.00914 .01304 .00032 .00006 .00044
 -.08318 -.01436 .01580 -.00002 .00010 .00026
 -.01966 -.00214 .00077 .00005 .00003 -.00010

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.00370 -.00549 .01069 -.00015 .00001 .00063
 -.04355 -.00857 .01054 .00042 .00013 .00041
 -.07948 -.01316 .01355 .00043 .00017 .00017
 -.01894 -.00192 .00072 .00015 .00004 -.00012

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITTER DATA) (4NH024) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 IORB = 6.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
.000	-.00409	-.00511	.00970	-.00085	-.00004	.00073	6.00000
2.000	-.04223	-.00824	.01015	.00016	.00008	.00037	8.00000
4.000	-.07895	-.01273	.01267	-.00012	.00008	.00011	10.00000
GRADIENT	-.01872	-.00190	.00074	.00018	.00003	-.00016	1.00000

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
.000	-.00741	-.00450	.00793	-.00057	-.00001	.00052	6.00000
2.000	-.04183	-.00756	.00853	-.00066	-.00005	.00019	8.00000
4.000	-.07190	-.01141	.01141	.00024	.00014	-.00008	10.00000
GRADIENT	-.01612	-.00173	.00087	.00020	.00004	-.00015	1.00000

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
.000	-.00391	-.00281	.00563	-.00088	-.00008	.00034	6.00000
2.000	-.03158	-.00492	.00654	-.00092	-.00015	.00000	8.00000
4.000	-.05311	-.00709	.00919	.00018	.00000	-.00008	10.00000
GRADIENT	-.01230	-.00107	.00089	.00027	.00002	-.00010	1.00000

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
.000	-.00627	-.00167	.00412	-.00167	-.00019	.00037	6.00000
2.000	-.02560	-.00314	.00506	-.00119	-.00021	-.00013	8.00000
4.000	-.04161	-.00461	.00695	-.00054	-.00003	.00006	10.00000
GRADIENT	-.00884	-.00074	.00071	.00028	.00004	-.00008	1.00000

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
.000	-.00442	-.00135	.00382	-.00150	-.00022	.00021	6.00000
2.000	-.02308	-.00280	.00476	-.00098	-.00017	-.00010	8.00000
4.000	-.03220	-.00417	.00635	-.00112	-.00010	.00013	10.00000
GRADIENT	-.00878	-.00070	.00063	.00010	.00003	-.00002	1.00000

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITTER DATA)

(4NH025) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL DCD DCYM DCY DCYN DCBL ALPHAO
 -.00409 -.00649 .01166 .00112 .00027 .00066 8.00000
 -.03293 -.00925 .01319 .00041 .00021 .00063 10.00000
 -.09379 -.02540 .01907 .00069 .00011 .00010 12.00000
 -.02242 -.00473 .00185 -.00011 -.00004 -.00014 1.00000

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL DCD DCYM DCY DCYN DCBL ALPHAO
 -.00389 -.00586 .01026 .00038 .00008 .00029 8.00000
 -.03787 -.00904 .01152 .00003 .00011 .00036 10.00000
 -.09575 -.02277 .01760 .00081 -.00008 .00024 12.00000
 -.02047 -.00423 .00183 .00011 -.00004 -.00001 1.00000

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL DCD DCYM DCY DCYN DCBL ALPHAO
 -.00316 -.00549 .00922 .00034 -.00006 .00005 8.00000
 -.04327 -.00903 .01002 -.00041 .00003 .00025 10.00000
 -.07980 -.02072 .01649 .00111 -.00022 .00037 12.00000
 -.01916 -.00381 .00182 .00036 -.00004 .00008 1.00000

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL DCD DCYM DCY DCYN DCBL ALPHAO
 -.00537 -.00486 .00804 .00028 -.00001 .00009 8.00000
 -.03619 -.00804 .00969 .00030 .00009 .00020 10.00000
 -.07486 -.01956 .01541 .00035 -.00031 .00027 12.00000
 -.01737 -.00368 .00184 .00002 -.00007 .00009 1.00000

RN/L = 3.3% GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL DCD DCYM DCY DCYN DCBL ALPHAO
 -.00463 -.00305 .00561 .00046 -.00008 .00006 8.00000
 -.03011 -.00329 .00737 .00021 .00003 .00015 10.00000
 -.05592 -.01372 .01236 .00024 -.00030 .00046 12.00000
 -.01282 -.00267 .00169 .00018 -.00005 .00013 1.00000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = -1.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = .000 MACH = .600

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000 ALPHAAC DCBL ALPHA0
 .000 .00002 8.00000
 2.000 .00003 10.00000
 4.000 .00055 12.00000
 GRADIENT .00013 1.00000

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000 ALPHAAC DCBL ALPHA0
 .000 .00027 8.00000
 2.000 .00017 10.00000
 4.000 .00042 12.00000
 GRADIENT .00004 1.00000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = .000 MACH = .600

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500 ALPHAAC DCBL ALPHA0
 .000 .00018 8.00000
 2.000 .00022 10.00000
 4.000 .00049 12.00000
 GRADIENT .00008 1.00000

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DATE 23 MAR 76

TABULATED SOURCE DATA - CA23B

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ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA)

(4NH027) (7 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT.
 LREF = 474.8100 IN.
 BREF = 935.6800 IN.
 SCALE = .0125

XMRP = 1109.0000 IN. XO
 YMRP = .0000 IN. YO
 ZMRP = 375.0000 IN. ZO

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 OX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL -.01254 DCD -.00359 DCLM .01161 DCY .00150 DCYN .00034 DCBL .00005 ALPHAO 8.00000
 -.04592 -.00699 .01222 .00234 .00084 .00045 10.00000
 -.08851 -.02041 .01871 .00282 -.00010 .00034 12.00000
 -.01899 -.00421 .00177 .00033 -.00011 .00007 1.00000

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL -.01240 DCD -.00346 DCLM .00938 DCY .00228 DCYN .00042 DCBL .00003 ALPHAO 8.00000
 -.04638 -.00684 .01024 .00129 .00062 .00072 10.00000
 -.08702 -.01993 .01558 .00292 .00002 .00024 12.00000
 -.01866 -.00412 .00155 .00016 .00010 .00007 1.00000

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL -.01634 DCD -.00422 DCLM .00780 DCY .00254 DCYN .00002 DCBL .00029 ALPHAO 8.00000
 -.04700 -.00739 .00925 .00226 .00007 .00026 10.00000
 -.08152 -.01880 .01443 .00445 .00041 .00017 12.00000
 -.01630 -.00365 .00166 .00048 .00010 .00011 1.00000

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL -.01080 DCD -.00218 DCLM .00443 DCY .00252 DCYN .00009 DCBL .00050 ALPHAO 8.00000
 -.03596 -.00447 .00598 .00196 .00006 .00024 10.00000
 -.06027 -.01355 .01147 .00362 .00026 .00012 12.00000
 -.01237 -.00284 .00176 .00027 .00009 .00018 1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL .00026 DCD -.00129 DCLM .00511 DCY .00162 DCYN .00010 DCBL .00072 ALPHAO 8.00000
 -.02078 -.00254 .00587 .00212 .00006 .00018 10.00000
 -.04148 -.00962 .01044 .00255 .00021 .00037 12.00000
 -.01044 -.00208 .00133 .00023 .00008 .00027 1.00000

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = .000 MACH = .600

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00
 DZ = 50.000
 ALPHAC = 50.000
 DCL = -.00294 DCD = .00403 DCY = .00187 DCYN = .00007 DCBL = -.00076 ALPHAO = 8.00000
 DCLM = .00122 DCLM = .00490 DCLM = .00229 DCLM = .00007 DCLM = -.00014 ALPHAO = 10.00000
 DCLM = -.01945 DCLM = -.00228 DCLM = .00222 DCLM = .00033 DCLM = .00052 ALPHAO = 12.00000
 DCLM = -.03623 DCLM = -.00832 DCLM = .01019 DCLM = .00007 DCLM = .00032 ALPHAO = 1.00000
 DCLM = -.00632 DCLM = -.00178 DCLM = .00154 DCLM = .00007 DCLM = .00032 ALPHAO = 1.00000

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA) (4NH034) (17 OCT 75)

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = .000 MACH = .600

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00
 DZ = 3.500
 ALPHAC = 3.500
 DCL = -.0178E DCD = -.00546 DCY = .00332 DCYN = -.00007 DCBL = .00056 ALPHAO = 6.00000
 DCLM = -.05470 DCLM = .01903 DCLM = .00371 DCLM = .00018 ALPHAO = 8.00000
 DCLM = -.10183 DCLM = .01916 DCLM = .00367 DCLM = .00044 ALPHAO = 10.00000
 DCLM = -.02099 DCLM = .00003 DCLM = .00009 DCLM = .00013 ALPHAO = 1.00000

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00
 DZ = 7.500
 ALPHAC = 7.500
 DCL = -.01541 DCD = -.00498 DCY = .00332 DCYN = -.00017 DCBL = .00018 ALPHAO = 6.00000
 DCLM = -.05459 DCLM = .01250 DCLM = .00314 DCLM = .00008 ALPHAO = 8.00000
 DCLM = -.09455 DCLM = .01484 DCLM = .00294 DCLM = .00025 ALPHAO = 10.00000
 DCLM = -.01553 DCLM = .00017 DCLM = .00009 DCLM = .00010 ALPHAO = 1.00000

PARAMETRIC DATA

PARAMETRIC DATA

PARAMETRIC DATA

ARC 14-120(CA23B) 747/1 ATI 03SI (ORBITER DATA)

(4NH034) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6300 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCD
 -.00514
 -.00797
 -.01320
 -.00201

DCL
 -.01663
 -.05337
 -.09114
 -.01863

DCLM
 .01181
 .01022
 .01322
 .00035

DCY
 .00282
 .00308
 .00278
 -.00001

DCYN
 -.00019
 -.00006
 .00015
 .00008

DCBL
 -.00002
 -.00002
 .00002
 .00001

ALPHA
 6.00000
 8.00000
 10.00000
 1.00000

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCD
 -.00449
 -.00746
 -.01206
 -.00189

DCL
 -.01736
 -.05103
 -.08662
 -.01731

DCLM
 .00851
 .00710
 .01048
 .00049

DCY
 .00243
 .00309
 .00274
 .00008

DCYN
 -.00042
 -.00016
 .00016
 .00014

DCBL
 -.00011
 -.00018
 .00009
 .00005

ALPHA
 6.00000
 8.00000
 10.00000
 1.00000

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCD
 -.00293
 -.00503
 -.00813
 -.00130

DCL
 -.01202
 -.03756
 -.06403
 -.01130

DCLM
 .00625
 .00652
 .00875
 .00063

DCY
 .00237
 .00307
 .00268
 -.00002

DCYN
 -.00038
 -.00000
 -.00025
 .00003

DCBL
 -.00055
 -.00047
 -.00011
 .00011

ALPHA
 6.00000
 8.00000
 10.00000
 1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCD
 -.00262
 -.00376
 -.00545
 -.00071

DCL
 -.00847
 -.02439
 -.04397
 -.00887

DCLM
 .00520
 .00655
 .00784
 .00066

DCY
 .00176
 .00196
 .00195
 .00005

DCYN
 -.00033
 -.00028
 -.00026
 .00002

DCBL
 -.00047
 -.00073
 .00003
 .00012

ALPHA
 6.00000
 8.00000
 10.00000
 1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCD
 -.00227
 -.00361
 -.00474
 -.00062

DCL
 -.00897
 -.01320
 -.03658
 -.00740

DCLM
 .00489
 .00681
 .00781
 .00073

DCY
 .00178
 .00173
 .00234
 .00014

DCYN
 -.00011
 -.00018
 -.00013
 -.00000

DCBL
 -.00015
 -.00071
 .00021
 -.00001

ALPHA
 6.00000
 8.00000
 10.00000
 1.00000

REFERENCE DATA PARAMETRIC DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0 BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0 RUDDER = .000 ELEVON = .000
 BREF = 935.6800 IN. ZMRP = 375.0000 IN. Z0 IORB = .000 DX = .000
 SCALE = .0125 DY = .000 MACH = .600

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
3.500	.000	-.02033	-.00358	.01564	.00214	.00037	.00043	4.00000
2.000	2.000	-.06597	-.00737	-.01506	-.00184	.00028	.00059	6.00000
4.000	4.000	-.09756	-.01132	-.01203	.00024	.00024	.00029	8.00000
GRADIENT		-.01931	-.00194	-.00090	-.00019	-.00003	-.00004	1.00000

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
7.500	.000	-.01822	-.00313	.01038	.00156	.00048	.00039	4.00000
2.000	2.000	-.06073	-.00700	.01018	.00141	.00028	.00041	6.00000
4.000	4.000	-.09303	-.01043	.00709	.00087	.00022	.00020	8.00000
GRADIENT		-.01870	-.00183	-.00082	-.00017	-.00007	-.00005	1.00000

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
10.000	.000	-.01384	-.00299	.00824	.00111	.00052	.00046	4.00000
2.000	2.000	-.05231	-.00647	.00847	.00120	.00032	.00022	6.00000
4.000	4.000	-.08542	-.00979	.00600	.00112	.00036	.00003	8.00000
GRADIENT		-.01790	-.00170	-.00056	.00000	-.00004	-.00011	1.00000

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
15.000	.000	-.01238	-.00241	.00569	.00077	.00039	.00020	4.00000
2.000	2.000	-.04890	-.00548	.00626	.00056	-.00015	-.00006	6.00000
4.000	4.000	-.08142	-.00859	.00371	.00096	.00030	.00007	8.00000
GRADIENT		-.01726	-.00155	-.00050	.00005	-.00002	-.00003	1.00000

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
30.000	.000	-.00989	-.00117	.00271	-.00011	.00025	.00026	4.00000
2.000	2.000	-.03666	-.00329	.00408	.00024	.00002	-.00017	6.00000
4.000	4.000	-.06077	-.00534	.00328	.00027	.00010	-.00017	8.00000
GRADIENT		-.01272	-.00104	.00014	.00059	-.00004	-.00011	1.00000

ARC 14-120(CA23B) 747/1 ATI 0351 (ORBITTER DATA)

(4NH035) 17 OCT 75

REFERENCE DATA

SREF = 2690.0000 SQ.FT.
 LREF = 474.8100 IN.
 BREF = 936.6800 IN.
 SCALE = .0125

XMRP = 1109.0000 IN. XO
 YMRP = .0000 IN. YO
 ZMRP = 375.0000 IN. ZO

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCD
 .00026
 -.00184
 -.00328
 -.00075

DCLM
 .00223
 -.00334
 .00383
 .00040

DCY
 -.00039
 -.00049
 -.00062
 -.00006

DCYN
 .00005
 -.00001
 -.00016
 -.00005

DCBL
 .00020
 -.00011
 -.00051
 -.00018

ALPHA
 4.00000
 6.00000
 8.00000
 1.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 4.000 OX = .000
 DY = .000 MACH = .600

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCD
 .00001
 -.00141
 -.00270
 -.00068

DCLM
 .00214
 -.00314
 .00379
 .00041

DCY
 -.00051
 -.00086
 -.00091
 -.00010

DCYN
 -.00005
 -.00011
 -.00026
 -.00005

DCBL
 .00013
 -.00011
 -.00062
 -.00019

ALPHA
 4.00000
 6.00000
 8.00000
 1.00000

REFERENCE DATA

SREF = 2690.0000 SQ.FT.
 LREF = 474.8100 IN.
 BREF = 936.6800 IN.
 SCALE = .0125

XMRP = 1109.0000 IN. XO
 YMRP = .0000 IN. YO
 ZMRP = 375.0000 IN. ZO

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.04879
 -.09803
 -.02462

DCLM
 .01623
 .01746
 .00061

DCY
 .00304
 .00372
 .00034

DCYN
 -.00008
 .00053
 .00030

DCBL
 .00006
 .00021
 .00007

ALPHA
 8.00000
 10.00000
 1.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = .000
 TORB = 6.000 OX = .000
 DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 ATI 0351 (ORBITTER DATA)

(4NH036) 23 OCT 75

REFERENCE DATA

SREF = 2690.0000 SQ.FT.
 LREF = 474.8100 IN.
 BREF = 936.6800 IN.
 SCALE = .0125

XMRP = 1109.0000 IN. XO
 YMRP = .0000 IN. YO
 ZMRP = 375.0000 IN. ZO

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500

ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.04323
 -.08968
 -.02322

DCLM
 .01155
 .01288
 .00067

DCY
 .00377
 .00349
 -.00014

DCYN
 .00026
 .00045
 .00010

DCBL
 -.00016
 -.00010
 .00003

ALPHA
 8.00000
 10.00000
 1.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = .000
 TORB = 6.000 OX = .000
 DY = .000 MACH = .600

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = 10.000 ELEVON = .000
 BREF = 935.6900 IN. ZMRP = 375.0000 IN. ZO TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = 3.30 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

PARAMETRIC DATA

DZ = 10.000 ALPHA DCBL ALPHAO
 ALPHAC 2.000 .00010 8.00000
 4.000 .00384 .00041 8.00000
 GRADIENT .01085 .00295 .00038 10.00000
 .02080 .00243 .00044 .00002 1.00000

DZ = 15.000 ALPHA DCBL ALPHAO
 ALPHAC 2.000 .00360 .00025 8.00000
 4.000 .00297 .00032 8.00000
 GRADIENT .01824 .00218 .00032 .00002 1.00000

DZ = 30.000 ALPHA DCBL ALPHAO
 ALPHAC 2.000 .00271 .00007 8.00000
 4.000 .00270 .00011 10.00000
 GRADIENT .01413 .00104 .00002 1.00000

DZ = 45.000 ALPHA DCBL ALPHAO
 ALPHAC 2.000 .00225 .00000 8.00000
 4.000 .00279 .00010 10.00000
 GRADIENT .01007 .00027 .00005 1.00000

DZ = 50.000 ALPHA DCBL ALPHAO
 ALPHAC 2.000 .00207 .00014 8.00000
 4.000 .00258 .00003 10.00000
 GRADIENT .00648 .00021 .00016 1.00000

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ARC 14-120(CA23B) 747/1 ATI 0351 (ORBITER DATA)

(4NH037) (23 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .500

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 3.500

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
.000	-.01248	-.00441	.01853	.00401	.00058	.00048	6.00000
2.000	-.05894	-.00880	.01711	.00299	.00017	.00017	8.00000
4.000	-.10367	-.01488	.01863	.00327	.00071	.00041	10.00000
GRADIENT	-.02280	-.00262	.00003	-.00019	.00003	-.00002	1.00000

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 7.500

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
.000	-.01332	-.00456	.01268	.00311	.00017	.00018	6.00000
2.000	-.05422	-.00833	.01209	.00353	.00041	-.00011	8.00000
4.000	-.09400	-.01364	.01445	.00358	.00044	-.00003	10.00000
GRADIENT	-.02017	-.00227	.00044	-.00013	.00007	-.00005	1.00000

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 10.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
.000	-.01025	-.00431	.01074	.00287	.00004	.00016	6.00000
2.000	-.05664	-.00818	.00957	.00230	.00022	.00001	8.00000
4.000	-.09193	-.01299	.01239	.00231	.00042	.00002	10.00000
GRADIENT	-.02042	-.00217	.00041	-.00014	.00010	-.00004	1.00000

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 15.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
.000	-.00819	-.00384	.00794	.00239	.00002	.00003	6.00000
2.000	-.05537	-.00729	.00637	.00300	.00026	-.00018	8.00000
4.000	-.08634	-.01187	.00967	.00186	.00013	.00010	10.00000
GRADIENT	-.02004	-.00201	.00043	-.00013	.00003	.00003	1.00000

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 30.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
.000	-.00732	-.00253	.00480	.00175	-.00009	.00032	6.00000
2.000	-.04208	-.00488	.00470	.00231	.00021	-.00034	8.00000
4.000	-.06407	-.00738	.00799	.00204	.00014	.00013	10.00000
GRADIENT	-.01419	-.00121	.00080	.00007	.00006	.00011	1.00000

(4NH037) (23 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6900 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC = .000
 2.000
 4.000
 GRADIENT

DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
-.01336	-.00198	.00251	.00180	.00002	-.00336	6.00000
-.02421	-.00337	.00599	.00194	.00007	-.00068	8.00000
-.04167	-.00469	.00697	.00233	-.00002	-.00006	10.00000
-.00708	-.00068	.00111	.00036	-.00001	.00008	1.00000

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC = .000
 2.000
 4.000
 GRADIENT

DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
-.00026	-.00160	.00313	.00160	.00014	-.00027	6.00000
-.02044	-.00284	.00545	.00153	.00002	-.00052	8.00000
-.03793	-.00378	.00641	.00158	-.00015	.00009	10.00000
-.00942	-.00055	.00082	-.00000	-.00007	.00009	1.00000

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6900 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC = .000
 2.000
 4.000
 GRADIENT

DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
.00191	-.00591	.01854	.00218	-.00009	.00019	6.00000
-.04490	-.01010	.01811	.00268	.00001	.00045	8.00000
-.09743	-.01677	.02049	.00352	-.00005	.00010	10.00000
-.02483	-.00272	.00049	.00034	.00001	-.00002	1.00000

PARAMETRIC DATA

BETA = .000 STAB = -1.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

(4NH038) (23 OCT 75)

ARC 14-120(CA23B) 747/1 ATI 0351 (ORBITER DATA)

(4NH038) (23 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 ICRB = 6.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
.000	.00514	-.00517	.01237	.00170	-.00005	.00004	6.00000
2.000	-.03850	-.00917	.01224	.00238	.00026	.00015	8.00000
4.000	-.08369	-.01503	.01475	.00294	.00007	-.00023	10.00000
GRADIENT	-.02221	-.00246	.00060	.00031	.00003	-.00007	1.00000

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
.000	.00526	-.00456	.00919	.00173	.00009	-.00006	6.00000
2.000	-.03481	-.00822	.00988	.00231	.00029	.00007	8.00000
4.000	-.08228	-.01438	.01234	.00284	.00013	-.00014	10.00000
GRADIENT	-.02198	-.00246	.00079	.00028	.00001	-.00002	1.00000

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
.000	-.00215	-.00413	.00616	.00208	.00013	-.00019	6.00000
2.000	-.03194	-.00752	.00777	.00234	.00032	-.00002	8.00000
4.000	-.07395	-.01269	.01053	.00298	.00026	-.00018	10.00000
GRADIENT	-.01793	-.00214	.00109	.00022	.00003	.00000	1.00000

PN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
.000	.00582	-.00276	.00471	.00175	.00006	-.00032	6.00000
2.000	-.02352	-.00504	.00569	.00179	.00014	.00001	8.00000
4.000	-.05927	-.00883	.00782	.00274	.00017	-.00016	10.00000
GRADIENT	-.01227	-.00152	.00078	.00025	.00003	.00004	1.00000

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
.000	.00301	-.00175	.00343	.00154	-.00001	-.00024	6.00000
2.000	-.02008	-.00352	.00439	.00212	.00026	-.00004	8.00000
4.000	-.04758	-.00648	.00636	.00225	.00003	-.00014	10.00000
GRADIENT	-.01267	-.00118	.00073	.00018	-.00001	-.00002	1.00000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO STAB = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO ELEVON = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO DX = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .000000 MACH = .600

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	DCD	DCY	DCYN	DCBL	ALPHA
50.000	.00170	-.00164	.00112	-.00026	-.00044	6.00000
	.000	.00321	.00170	.00002	-.00012	8.00000
	2.000	-.00325	.00265	.00005	-.00015	10.00000
	4.000	-.00308	.00069	.00008	.00007	1.00000
	GRADIENT	-.01119	-.00097			

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA) (4NH039) (23 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO STAB = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO ELEVON = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO DX = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .000000 MACH = .600

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	DCD	DCY	DCYN	DCBL	ALPHA
3.500	-.05438	-.01020	.00328	.00041	.00089	8.00000
	2.000	.01298	.00155	.00029	.00084	10.00000
	4.000	-.10292	.00184	-.00087	-.00003	1.00000
	GRADIENT	-.02422	-.00360			

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	DCD	DCY	DCYN	DCBL	ALPHA
7.500	-.04489	-.00895	.00290	.00043	.00069	8.00000
	2.000	-.01553	.00270	.00021	.00042	10.00000
	4.000	-.02255	.00189	-.00010	-.00013	1.00000
	GRADIENT	-.00329				

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ	ALPHAC	DCD	DCY	DCYN	DCBL	ALPHA
10.000	-.04123	-.00817	.00237	.00030	.00056	8.00000
	2.000	-.03414	.00208	.00020	.00051	10.00000
	4.000	-.03546	.00148	-.00015	.00003	1.00000
	GRADIENT	-.00355				

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ARC 14-120(CA23B) 747/1 ATI 0251 (ORBITER DATA)

(4NH039) (23 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000

ALPHAC
 2.000
 4.000
 GRADIENT

DCL
 -.03908
 -.08631
 -.02362

DCD
 -.00747
 -.01371
 -.00312

DCLM
 .00823
 .01154
 .00166

DCY
 .00173
 .00203
 .00015

DCYN
 .00023
 .00021
 -.00001

DCBL
 .00056
 .00052
 -.00002

ALPHA0
 8.00000
 10.00000
 1.00000

BETA = .000 STAB = 5.000
 RUDDER = 10.000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000

ALPHAC
 2.000
 4.000
 GRADIENT

DCL
 -.02994
 -.05831
 -.01418

DCD
 -.00503
 -.00851
 -.00174

DCLM
 .00638
 .00986
 .00174

DCY
 .00137
 .00180
 .00021

DCYN
 .00009
 .00007
 -.00001

DCBL
 .00022
 .00022
 -.00000

ALPHA0
 8.00000
 10.00000
 1.00000

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC
 2.000
 4.000
 GRADIENT

DCL
 -.01654
 -.04666
 -.01501

DCD
 -.00362
 -.00619
 -.00128

DCLM
 .00575
 .00769
 .00097

DCY
 .00203
 .00248
 .00023

DCYN
 .00009
 .00008
 -.00001

DCBL
 .00000
 -.00015
 -.00008

ALPHA0
 8.00000
 10.00000
 1.00000

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC
 2.000
 4.000
 GRADIENT

DCL
 -.01470
 -.04220
 -.01375

DCD
 -.00341
 -.00532
 -.00096

DCLM
 .00335
 .00394
 .00079

DCY
 .00210
 .00205
 -.00003

DCYN
 .00011
 .00001
 -.00005

DCBL
 .00006
 -.00009
 -.00007

ALPHA0
 8.00000
 10.00000
 1.00000

DATE 23 MAR 76

TABLULATED SOURCE DATA - CA23B

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(4NH040) (17 OCT 75)

REFERENCE DATA

SPEF = 2630.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BRFF = 936.6800 IN. ZMRP = 375.0000 IN. ZO ICFB = 4.000 DX = .000
 SCALE = .0125 GRADIENT = 3.33 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

PARAMETRIC DATA

OZ = 3.500 ALPHAC DCL DCD DCLM DCY DCYN DCBL ALPHAO
 .000 .000 -.02039 -.00545 .01175 .00226 .00038 .00103 4.00000
 2.000 .000 -.06091 -.00930 .01167 .00210 .00030 .00107 6.00000
 4.000 .000 -.10117 -.01364 .01166 .00231 .00037 .00097 8.00000
 GRADIENT .000 -.02020 -.00205 -.00002 .00001 -.00000 -.00001 1.00000

OZ = 7.500 ALPHAC DCL DCD DCLM DCY DCYN DCBL ALPHAO
 .000 .000 -.01524 -.00487 .00862 .00238 .00026 .00063 4.00000
 2.000 .000 -.05715 -.00831 .00842 .00168 .00022 .00085 6.00000
 4.000 .000 -.09689 -.01268 .00876 .00154 .00027 .00087 8.00000
 GRADIENT .000 -.02041 -.00195 .00003 -.00021 .00000 .00006 1.00000

OZ = 10.000 ALPHAC DCL DCD DCLM DCY DCYN DCBL ALPHAO
 .000 .000 -.01397 -.00462 .00741 .00291 .00037 .00055 4.00000
 2.000 .000 -.05220 -.00778 .00793 .00190 .00027 .00072 6.00000
 4.000 .000 -.09185 -.01194 .00812 .00154 .00027 .00070 8.00000
 GRADIENT .000 -.01947 -.00183 .00018 -.00034 -.00003 .00004 1.00000

OZ = 15.000 ALPHAC DCL DCD DCLM DCY DCYN DCBL ALPHAO
 .000 .000 -.01824 -.00414 .00522 .00154 .00017 .00028 4.00000
 2.000 .000 -.04705 -.00684 .00673 .00109 .00008 .00064 6.00000
 4.000 .000 -.09350 -.01053 .00734 .00058 .00010 .00076 8.00000
 GRADIENT .000 -.01634 -.00160 .00053 -.00024 -.00002 .00012 1.00000

OZ = 30.000 ALPHAC DCL DCD DCLM DCY DCYN DCBL ALPHAO
 .000 .000 -.01359 -.00269 .00330 .00121 .00005 .00010 4.00000
 2.000 .000 -.03375 -.00439 .00533 .00138 .00008 .00013 6.00000
 4.000 .000 -.06503 -.00709 .00555 .00044 .00008 .00046 8.00000
 GRADIENT .000 -.01250 -.00110 .00056 -.00019 .00001 .00014 1.00000

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

(4NH040) (17 OCT 75

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.00796 -.00159 .00261 .00108 .00006
 -.02857 -.00287 .00416 .00104 .00001
 -.04340 -.00458 .00528 .00132 .00011
 -.00886 -.00075 .00067 .00006 .00001

BETA = .000 STAB = 5.000
 RUDDER = .070 ELEVON = 5.000
 TORB = 4.000 DX = .008
 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.00684 -.00131 .00238 .00077 .00002
 -.02764 -.00369 .00369 .00069 .00005
 -.03577 -.00375 .00527 .00154 .00009
 -.00723 -.00351 .00072 .00019 .00002

ARC 14-120(CA23B) 747/1 ATI 02S1 (ORBITER DATA)

(4NHX10) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 35.000
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.05575 -.01037 .01199 .00150 .00035
 -.05646 -.02320 .01598 .00199 .00048
 -.02935 -.00642 .00200 .00024 .00007

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC
 .000
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.05298 -.00942 .01037 .00140 .00027
 -.05099 -.02050 .01401 .00191 .00062
 -.01900 -.00559 .00182 .00025 .00017

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 SREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 8.000 DX = .000
 SCALE = .0125 DY MACH = .600

PARAMETRIC DATA

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000 ALPHAC DCL DCD DCLM DCY DCYN DCBL ALPHAO
 ALPHAC 2.000 -.05066 -.00876 .00920 .00146 -.00016 .00119 10.00000
 4.000 -.08665 -.01867 .01262 .00197 -.00071 .00073 .00073 12.00000
 GRADIENT -.01800 -.00496 .00171 .00025 -.00028 -.00023 1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000 ALPHAC DCL DCD DCLM DCY DCYN DCBL ALPHAO
 ALPHAC 2.000 -.04969 -.00791 .00785 .00075 -.00035 .00087 10.00000
 4.000 -.08298 -.01697 .01092 .00135 -.00082 .00037 .00037 12.00000
 GRADIENT -.01665 -.00453 .00153 .00030 -.00024 -.00025 1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000 ALPHAC DCL DCD DCLM DCY DCYN DCBL ALPHAO
 ALPHAC 2.000 -.03451 -.00435 .00581 .00091 -.00052 .00069 10.00000
 4.000 -.06216 -.01078 .00807 .00073 -.00096 .00037 .00037 12.00000
 GRADIENT -.01382 -.00322 .00113 -.00009 -.00022 -.00016 1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000 ALPHAC DCL DCD DCLM DCY DCYN DCBL ALPHAO
 ALPHAC 2.000 -.02022 -.00194 .00467 .00172 -.00048 .00064 10.00000
 4.000 -.04393 -.00561 .00601 .00159 -.00085 .00006 .00006 12.00000
 GRADIENT -.01185 -.00183 .00067 -.00006 -.00018 -.00035 1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000 ALPHAC DCL DCD DCLM DCY DCYN DCBL ALPHAO
 ALPHAC 2.000 -.02212 -.00202 .00389 .00187 -.00047 .00046 10.00000
 4.000 -.03854 -.00415 .00542 .00202 -.00086 .00004 .00004 12.00000
 GRADIENT -.00921 -.00106 .00076 .00008 -.00020 -.00025 1.00000

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ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(4NHX13) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 SPREF = 935.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.05901 -.00887 .01275 .00122 .00024 .00114 8.00000
 -.10852 -.01668 .00027 .00027 .00009 .00146 10.00000
 -.02476 -.00391 .00167 -.00047 -.00008 .00016 1.00000

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.05802 -.00852 .01020 .00037 .00019 .00098 8.00000
 -.10152 -.01536 .01324 -.00005 .00007 .00136 10.00000
 -.02175 -.00342 .00152 -.00021 -.00006 .00019 1.00000

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.05668 -.00839 .00963 -.00029 .00008 .00087 8.00000
 -.09935 -.01493 .01250 .00005 .00003 .00122 10.00000
 -.02133 -.00327 .00144 .00017 -.00002 .00017 1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.05432 -.00707 .00807 -.00055 .00001 .00080 8.00000
 -.03492 -.01339 .01094 -.00015 -.00006 .00107 10.00000
 -.02030 -.00316 .00144 .00020 -.00003 .00014 1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.04248 -.00498 .00681 -.00053 -.00009 .00045 8.00000
 -.07350 -.00334 .00895 -.00080 -.00003 .00076 10.00000
 -.01656 -.00218 .00107 .00067 .00003 .00016 1.00000

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(4NHX13) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 3.5000 IN. ZO
 SCALE = .0125

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.03005 -.00373 .00603 -.00007 -.00003 .00044
 -.05745 -.00528 .00734 .00037 -.00017 .00062
 -.01370 -.00127 .07065 .00022 -.00007 .00009

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.02713 -.00280 .00543 .00001 .00003 .00060
 -.05048 -.00491 .00667 .00054 .00014 .00075
 -.01168 -.00105 .00062 .00026 -.00009 .00007

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(4NHX14) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 3.5000 IN. ZO
 SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.06091 -.00899 .00940 .00030 .00039 .00139
 -.01599 -.01682 .01105 -.00053 .00022 .00154
 -.02754 -.00391 .00083 -.00042 -.00008 .00007

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.05585 -.00842 .00759 -.00000 .00027 .00108
 -.03527 -.01539 .00848 -.00040 .00015 .00141
 -.02471 -.00349 .00045 -.00020 -.00006 .00016

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

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ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(4NHX14) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.05635
 -.10389
 -.02377
 -.00821
 -.01481
 -.00330
 DCY
 -.00121
 -.00099
 .00011
 DCYN
 .00012
 .00010
 -.00001
 DCBL
 .00093
 .00136
 .00021
 ALPHAO
 8.00000
 10.00000
 1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.05353
 -.09590
 -.02118
 -.00703
 -.01287
 -.00292
 DCY
 -.00120
 -.00067
 .00026
 DCYN
 .00013
 .00007
 -.00003
 DCBL
 .00103
 .00123
 .00010
 ALPHAO
 8.00000
 10.00000
 1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.03860
 -.07191
 -.01555
 -.00494
 -.00888
 -.00197
 DCY
 -.00123
 -.00072
 .00025
 DCYN
 .00001
 -.00010
 -.00006
 DCBL
 .00059
 .00078
 .00010
 ALPHAO
 8.00000
 10.00000
 1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.02952
 -.05116
 -.01082
 -.00391
 -.00505
 -.00082
 DCY
 .00025
 -.00032
 -.00013
 DCYN
 .00018
 -.00019
 -.00019
 DCBL
 .00061
 .00065
 .00002
 ALPHAO
 8.00000
 10.00000
 1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.02251
 -.04945
 -.01347
 -.00320
 -.00522
 -.00101
 DCY
 -.00152
 -.00054
 .00049
 DCYN
 -.00011
 -.00019
 -.00004
 DCBL
 .00059
 .00071
 .00006
 ALPHAO
 8.00000
 10.00000
 1.00000

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (4NHX15) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6900 IN. ZMRP = 375.0000 IN. ZO GRADIENT = .02304 DCLM = .00831 DCY = -.00080 DCBL = .00137 ALPHA0 = 10.00000
 SCALE = .0125 GRADIENT = .02304 DCL = .06896 DCD = -.01387 DCLM = .01207 DCY = .00149 DCBL = .00122 ALPHA0 = 12.00000
 GRADIENT = .02304 DCL = .02304 DCD = -.00646 DCLM = .00188 DCY = .00115 DCBL = -.00007 ALPHA0 = 1.00000

PARAMETRIC DATA

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500 ALPHA0 = 10.000 DCBL = .00137 ALPHA0 = 10.00000
 ALPHA0 = 2.000 DCY = .00003 DCBL = .00122 ALPHA0 = 12.00000
 ALPHA0 = 4.000 DCY = -.00009 DCBL = -.00007 ALPHA0 = 1.00000
 GRADIENT = .00009 DCBL = -.00007 ALPHA0 = 1.00000

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500 ALPHA0 = 10.000 DCBL = .00137 ALPHA0 = 10.00000
 ALPHA0 = 2.000 DCY = .00003 DCBL = .00122 ALPHA0 = 12.00000
 ALPHA0 = 4.000 DCY = -.00024 DCBL = .00100 ALPHA0 = 1.00000
 GRADIENT = .00024 DCBL = -.00019 ALPHA0 = 1.00000

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000 ALPHA0 = 10.000 DCBL = .00137 ALPHA0 = 10.00000
 ALPHA0 = 2.000 DCY = .00004 DCBL = .00139 ALPHA0 = 12.00000
 ALPHA0 = 4.000 DCY = -.00035 DCBL = .00078 ALPHA0 = 1.00000
 GRADIENT = .00035 DCBL = -.00030 ALPHA0 = 1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000 ALPHA0 = 10.000 DCBL = .00137 ALPHA0 = 10.00000
 ALPHA0 = 2.000 DCY = .00013 DCBL = .00115 ALPHA0 = 12.00000
 ALPHA0 = 4.000 DCY = -.00067 DCBL = .00091 ALPHA0 = 1.00000
 GRADIENT = .00067 DCBL = -.00012 ALPHA0 = 1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000 ALPHA0 = 10.000 DCBL = .00137 ALPHA0 = 10.00000
 ALPHA0 = 2.000 DCY = .00079 DCBL = .00096 ALPHA0 = 12.00000
 ALPHA0 = 4.000 DCY = -.00075 DCBL = .00076 ALPHA0 = 1.00000
 GRADIENT = .00075 DCBL = -.00010 ALPHA0 = 1.00000

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(4NHX15) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.02608 -.00303 .00389 .00061 -.00043 .00049 10.00000
 -.04649 -.00679 .00515 .00190 -.00065 .00034 12.00000
 -.01020 -.00188 .00063 .00064 -.00011 -.00008 1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.02004 -.00208 .00380 .00098 -.00041 .00063 10.00000
 -.03890 -.00513 .00486 .00159 -.00081 .00044 12.00000
 -.00943 -.00153 .00053 .00031 -.00020 -.00009 1.00000

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

(4NHX16) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.06113 -.00634 .00471 .00114 .00032 .00115 8.00000
 -.11479 -.01393 .00516 .00087 .00020 .00141 10.00000
 -.02683 -.00379 .00023 -.00013 -.00005 .00013 1.00000

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500

ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.05638 -.00622 .00229 .00129 .00038 .00093 8.00000
 -.10534 -.01320 .00261 .00119 .00025 .00117 10.00000
 -.02738 -.00349 .00016 -.00005 -.00006 .00012 1.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BRP = 936.6800 IN. ZMRP = 375.0000 IN. ZO GRADIENT = .000 DX = 20.000
 SCALE = .0125 GRADIENT INTERVAL = -5.00/ 5.00 DY = .000 MACH = .600

PARAMETRIC DATA

DZ = 10.000
 ALPHAAC 2.000 DCBL .00085 ALPHAO 8.00000
 4.000 .00158 .00022 10.00000
 GRADIENT -1.0500 .00091 .00014 1.00000
 -1.02430 .00020 .00004

DZ = 15.000
 ALPHAAC 2.000 DCBL .00075 ALPHAO 8.00000
 4.000 -0.05120 .00137 .00016 10.00000
 GRADIENT -0.09558 .00191 .00004 .00093 1.00000
 -0.02224 .00027 .00006 .00009

DZ = 30.000
 ALPHAAC 2.000 DCBL .00028 ALPHAO 8.00000
 4.000 -0.03825 .00190 .00039 .00028 10.00000
 GRADIENT -0.07393 .00249 .00070 .00078 1.00000
 -0.01784 .00029 .00015 .00025

DZ = 45.000
 ALPHAAC 2.000 DCBL .00041 ALPHAO 8.00000
 4.000 -0.02714 .00259 .00053 .00041 10.00000
 GRADIENT -0.05439 .00302 .00123 .00038 1.00000
 -0.01353 .00022 .00035 .00002

DZ = 50.000
 ALPHAAC 2.000 DCBL .00043 ALPHAO 8.00000
 4.000 -0.02526 .00266 .00078 .00043 10.00000
 GRADIENT -0.02150 .00298 .00145 .00037 1.00000
 -0.01317 .00016 .00033 .00003

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITER DATA)

(4NHX17) (17 OCT 75

REFERENCE DATA

SREF = 2690.0000 50.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 938.5900 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.01240
 -.02458
 -.00609
 GRADIENT

DCLM
 .00609
 .00788
 .00090

DCY
 -.00009
 .00325
 .00167

DCY
 -.00004
 -.00012
 -.00008

DCBL
 .00072
 .00103
 .00015

ALPHAO
 10.00000
 12.00000
 1.00000

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.00980
 -.02295
 -.00657
 GRADIENT

DCLM
 .00492
 .00649
 .00079

DCY
 .00109
 .00238
 .00064

DCY
 -.00000
 -.00033
 -.00016

DCBL
 .00092
 .00079
 -.00006

ALPHAO
 10.00000
 12.00000
 1.00000

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.00811
 -.02173
 -.00681
 GRADIENT

DCLM
 .00395
 .00552
 .00078

DCY
 .00186
 .00170
 -.00008

DCY
 .00000
 -.00048
 -.00024

DCBL
 .00109
 .00060
 -.00024

ALPHAO
 10.00000
 12.00000
 1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.00772
 -.02025
 -.00627
 GRADIENT

DCLM
 .00293
 .00436
 .00072

DCY
 .00212
 .00168
 -.00022

DCY
 -.00009
 -.00059
 -.00025

DCBL
 .00072
 .00048
 -.00012

ALPHAO
 10.00000
 12.00000
 1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.00486
 -.01311
 -.00413
 GRADIENT

DCLM
 .00233
 .00381
 .00074

DCY
 .00215
 .00276
 .00030

DCY
 -.00015
 -.00080
 -.00033

DCBL
 .00070
 .00026
 -.00022

ALPHAO
 10.00000
 12.00000
 1.00000

DATE 23 MAR 76

TABLATED SOURCE DATA - CA23B

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO STAB = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO ELEVON = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO DX = 8.000 DX = 20.000
 SCALE = .0125 GRADIENT = .000 MACH = .000 MACH = .600

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC = 2.000
 GRADIENT = 4.000

DCL	DCD	DCY	DCYN	DCBL	ALPHA0
-.02781	-.00341	.00145	-.00049	.00054	10.00000
-.05007	-.00754	.00261	-.00082	-.00009	12.00000
-.01113	-.00207	.00058	-.00017	-.00032	1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC = 2.000
 GRADIENT = 4.000

DCL	DCD	DCY	DCYN	DCBL	ALPHA0
-.02792	-.00301	.00184	-.00034	.00043	10.00000
-.04699	-.00657	.00311	-.00078	-.00008	12.00000
-.00954	-.00173	.00064	-.00022	-.00026	1.00000

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO STAB = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO ELEVON = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO DX = 8.000 DX = .000
 SCALE = .0125 GRADIENT = .000 MACH = .000 MACH = .600

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC = 2.000
 GRADIENT = 4.000

DCL	DCD	DCY	DCYN	DCBL	ALPHA0
-.04486	-.00721	.00335	.00121	.00023	10.00000
-.09167	-.02110	.00239	-.00008	.00047	12.00000
-.02340	-.00694	-.00048	-.00065	.00012	1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC = 2.000
 GRADIENT = 4.000

DCL	DCD	DCY	DCYN	DCBL	ALPHA0
-.04611	-.00713	.00237	.00083	.00045	10.00000
-.05875	-.02045	.00283	-.00039	.00033	12.00000
-.02132	-.00666	.00023	-.00056	-.00006	1.00000

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ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(4NHX27) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.04655
 -.08741
 -.02043
 GRADIENT

DCLM
 .01027
 .01570
 .00272
 GRADIENT

DCY
 .00132
 .00294
 .00081
 GRADIENT

DCBL
 .00072
 .00023
 -.00025
 GRADIENT

ALPHA0
 10.00000
 12.00000
 1.00000
 GRADIENT

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.04708
 -.08172
 -.01732
 GRADIENT

DCLM
 .00924
 .01440
 .00258
 GRADIENT

DCY
 .00227
 .00441
 .00107
 GRADIENT

DCBL
 .00027
 .00017
 -.00005
 GRADIENT

ALPHA0
 10.00000
 12.00000
 1.00000
 GRADIENT

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.03599
 -.05044
 -.01222
 GRADIENT

DCLM
 .00603
 .01148
 .00272
 GRADIENT

DCY
 .00198
 .00361
 .00082
 GRADIENT

DCBL
 .00024
 .00011
 -.00006
 GRADIENT

ALPHA0
 10.00000
 12.00000
 1.00000
 GRADIENT

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.02090
 -.04167
 -.01039
 GRADIENT

DCLM
 .00590
 .01047
 .00228
 GRADIENT

DCY
 .00214
 .00255
 .00020
 GRADIENT

DCBL
 -.00018
 .00037
 .00027
 GRADIENT

ALPHA0
 10.00000
 12.00000
 1.00000
 GRADIENT

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.01949
 -.03651
 -.00851
 GRADIENT

DCLM
 .00495
 .01024
 .00264
 GRADIENT

DCY
 .00231
 .00222
 -.00004
 GRADIENT

DCBL
 -.00014
 .00052
 .00033
 GRADIENT

ALPHA0
 10.00000
 12.00000
 1.00000
 GRADIENT

DATE 23 MAR 75

TABULATED SOURCE DATA - CA238

ARC 14-120(CA238) 747/1 AT1 0351 (ORBITER DATA)

(4NHX28) (17 OCT 75)

REFERENCE DATA

SPEF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LPEF = 474.8100 IN. YMRP = .0000 IN. YO
 BPEF = 930.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
-.05591	-.00731	.00917	.00275	.00062	.00045	8.00000
-.10299	-.01249	.00935	.00283	.00103	.00051	10.00000
-.02354	-.00259	.00009	.00004	.00021	.00003	1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
-.05119	-.00679	.00524	.00261	.00059	.00018	8.00000
-.09406	-.01194	.00584	.00240	.00084	.00033	10.00000
-.02144	-.00257	.00030	-.00011	.00012	.00008	1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
-.04934	-.00672	.00360	.00194	.00037	.00011	8.00000
-.09185	-.01149	.00454	.00192	.00065	.00038	10.00000
-.02126	-.00238	.00047	-.00001	.00014	.00014	1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
-.04749	-.00613	.00181	.00193	.00039	-.00006	8.00000
-.08837	-.01039	.00286	.00153	.00055	.00022	10.00000
-.02044	-.00213	.00052	-.00020	.00008	.00014	1.00000

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
-.03913	-.00447	.00161	.00150	.00024	-.00020	8.00000
-.06512	-.00658	.00364	.00170	.00030	.00005	10.00000
-.01300	-.00105	.00101	.00010	.00003	.00012	1.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

DATE 23 MAR 76

TABLATED SOURCE DATA - CA23B

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ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(4NHX28) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC
 2.000
 4.000
 GRADIENT

CCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.02768 -.00311 .00276 .0082 .0008 -.00037 8.00000
 -.04800 -.00420 .00336 .00153 .0025 .00026 10.00000
 -.01016 -.00054 .00030 .00036 .0009 .00032 1.00000

DZ = 50.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.01967 -.00272 .00351 .0081 .0013 -.00052 8.00000
 -.03884 -.00341 .00374 .00152 .0018 .00009 10.00000
 -.00958 -.00034 .00012 .00036 .00003 .00031 1.00000

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(4NHX29) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.06068 -.01152 .01200 .00231 .00094 .00043 10.00000
 -.11040 -.02446 .01766 .00368 .00066 -.00044 12.00000
 -.02486 -.00647 .00283 .00059 -.00014 -.00044 1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.05537 -.00889 .00902 .00218 .00073 .00057 10.00000
 -.16244 -.02287 .01457 .00323 .00031 -.00022 12.00000
 -.02353 -.00699 .00278 .00053 -.00021 -.00039 1.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 6.000 DX = 10.000
 DY = .000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 LORB = 8.000 DX = 10.000
 DY = .000 MACH = .600

REFERENCE DATA PARAMETRIC DATA

SREF = 2690.0000 SQ.FT.	XMRP = 1109.0000 IN. X0	BETA = .000 STAB = 5.000
LREF = 474.8100 IN.	YMRP = .0000 IN. Y0	RUDDER = .000 ELEVON = .000
BREF = 936.6800 IN.	ZMRP = 375.0000 IN. Z0	IORB = 8.000 DX = 10.000
SCALE = .0125		DY = .000 MACH = .600

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000

ALPHAC	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
2.000	-.05129	.00681	.00211	.00362	.00064	10.00000
4.000	-.09616	.01232	.00296	.00010	-.00005	12.00000
GRADIENT	-.02244	.00275	.00043	-.00026	-.00034	1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000

ALPHAC	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
2.000	-.04775	.00494	.00172	.00034	.00050	10.00000
4.000	-.09121	.01025	.00246	-.00024	.00002	12.00000
GRADIENT	-.02173	.00266	.00037	-.00029	-.00024	1.00000

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000

ALPHAC	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
2.000	-.03396	.00412	.00146	.00012	.00026	10.00000
4.000	-.06420	.00844	.00286	-.00027	.00018	12.00000
GRADIENT	-.01512	.00216	.00070	-.00019	-.00004	1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
2.000	-.02266	.00419	.00159	.00012	-.00005	10.00000
4.000	-.04436	.00839	.00210	.00023	.00052	12.00000
GRADIENT	-.01115	.00225	.00026	.00005	.00029	1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
2.000	-.01786	.00394	.00153	.00026	.00033	10.00000
4.000	-.04044	.00861	.00181	.00058	.00058	12.00000
GRADIENT	-.01129	.00233	.00014	.00016	.00013	1.00000

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITTER DATA)

(4NHX30) (17 DEC 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT.
 LREF = 474.8100 IN.
 BREF = 936.6800 IN.
 SCALE = .0125

XMRP = 1109.0000 IN. XO
 YMRP = .0000 IN. YO
 ZMRP = 375.0000 IN. ZO

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 8.000 DX = 20.000
 DY = .000 MACH = .600

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC	DCD	DCY	DCYN	DCBL	ALPHA0
2.000	-.06107	.00649	.00124	.00056	10.00000
4.000	-.11544	.00954	.00079	.00052	12.00000
GRADIENT	-.02719	.00153	-.00022	-.00002	1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500

ALPHAC	DCD	DCY	DCYN	DCBL	ALPHA0
2.000	-.05525	.00385	.00098	.00055	10.00000
4.000	-.10763	.00811	.00053	.00011	12.00000
GRADIENT	-.02619	.00213	-.00023	-.00022	1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000

ALPHAC	DCD	DCY	DCYN	DCBL	ALPHA0
2.000	-.04990	.00222	.00080	.00048	10.00000
4.000	-.10169	.00709	.00033	-.00020	12.00000
GRADIENT	-.02589	.00244	-.00023	-.00034	1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000

ALPHAC	DCD	DCY	DCYN	DCBL	ALPHA0
2.000	-.05118	.00070	.00065	.00061	10.00000
4.000	-.09612	.00518	.00023	-.00033	12.00000
GRADIENT	-.02247	.00274	-.00021	-.00047	1.00000

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000

ALPHAC	DCD	DCY	DCYN	DCBL	ALPHA0
2.000	-.03860	.00161	.00030	.00030	10.00000
4.000	-.06760	.00511	-.00002	.00022	12.00000
GRADIENT	-.01450	.00223	-.00016	-.00004	1.00000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO = .000 DX = 20.000
 SCALE = .0125 GRADIENT = .000 MACH = .600

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC = 2.000
 GRADIENT = 4.000

DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
-.02111	-.00246	.00289	.00105	.00007	.00014	10.00000
-.05526	-.01212	.00722	.00170	.00032	.00036	12.00000
-.01708	-.00483	.00216	.00032	.00013	.00011	1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC = 2.000
 GRADIENT = 4.000

DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
-.01937	-.00211	.00321	.00135	.00023	.00010	10.00000
-.04096	-.00947	.00745	.00158	.00044	.00049	12.00000
-.01080	-.00368	.00212	.00016	.00010	.00019	1.00000

ARC 14-120(CA23B) 7477/1 ATI 03S1 (ORBITER DATA) (4NHX31) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO = .000 DX = 20.000
 SCALE = .0125 GRADIENT = .000 MACH = .600

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC = 2.000
 GRADIENT = 4.000

DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
-.05396	-.00606	.00042	.00165	.00071	.00059	8.00000
-.09749	-.01129	.00024	.00153	.00093	.00053	10.00000
-.02176	-.00262	-.00033	-.00006	.00011	-.00002	1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC = 2.000
 GRADIENT = 4.000

DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
-.04975	-.00550	-.00109	.00162	.00060	.00043	8.00000
-.09256	-.01055	-.00092	.00149	.00085	.00044	10.00000
-.02140	-.00252	.00009	-.00007	.00012	.00000	1.00000

PARAMETRIC DATA

PARAMETRIC DATA

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(4NHX31) (17 OCT 5)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
2.000	-04600	-00538	-00197	.00160	.00052	.00026	8.00000
4.000	-09892	-01004	-00143	.00143	.00079	.00041	10.00000
GRADIENT	-02146	-00233	.00027	-.00008	.00014	.00007	1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
2.000	-04572	-00493	-00250	.00151	.00054	.00033	8.00000
4.000	-08462	-00946	-00169	.00150	.00078	.00024	10.00000
GRADIENT	-01945	-00226	.00040	-.00001	.00012	-.00005	1.00000

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
2.000	-03508	-00335	-00038	.00148	.00029	-.00013	8.00000
4.000	-06537	-00663	.00076	.00058	.00024	.00044	10.00000
GRADIENT	-01514	-00164	.00057	-.00045	-.00003	.00028	1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
2.000	-02315	-00271	.00164	.00054	.00019	-.00019	8.00000
4.000	-04623	-00434	.00235	.00125	.00026	.00005	10.00000
GRADIENT	-01154	-00082	.00036	.00036	.00004	.00012	1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
2.000	-01931	-00248	.00220	.00017	.00016	-.00032	8.00000
4.000	-04289	-00386	.00255	.00092	.00017	.00005	10.00000
GRADIENT	-01179	-00069	.00018	.00037	.00000	.00018	1.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = 20.000
 DY = .000 MACH = .600

REFERENCE DATA
 SREF = 2690.0000 SQ.FT. XMRP = 1.09.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

DZ * 3.500
 ALPHAAC
 2.000
 4.000
 GRADIENT

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
-.05438	-.00882	.01703	.00366	.00019	.00015	8.00000
-.10108	-.01458	.01886	.00350	.00043	.00021	10.00000
-.02335	-.00288	.00092	-.00003	.00012	.00003	1.00000

DZ * 7.500
 ALPHAAC
 2.000
 4.000
 GRADIENT

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
-.05159	-.00815	.01242	.00310	-.00007	.00003	8.00000
-.09388	-.01351	.01451	.00289	.00025	.00014	10.00000
-.02114	-.00268	.00105	-.00010	.00016	.00006	1.00000

DZ * 10.000
 ALPHAAC
 2.000
 4.000
 GRADIENT

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
-.05308	-.00780	.01014	.00303	-.00005	-.00001	8.00000
-.09065	-.01294	.01295	.00275	.00016	.00004	10.00000
-.01878	-.00257	.00141	-.00014	.00010	.00003	1.00000

DZ * 15.000
 ALPHAAC
 2.000
 4.000
 GRADIENT

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
-.05076	-.00726	.00703	.00303	-.00016	-.00018	8.00000
-.08602	-.01174	.01020	.00273	.00016	.00011	10.00000
-.01763	-.00224	.00159	-.00015	.00016	.00014	1.00000

DZ * 30.000
 ALPHAAC
 2.000
 4.000
 GRADIENT

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHA0
-.03742	-.00490	.00641	.00302	-.00000	-.00046	8.00000
-.06345	-.00777	.00847	.00226	-.00024	-.00008	10.00000
-.01302	-.00144	.00103	-.00038	-.00012	.00019	1.00000

PARAMETRIC DATA
 BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

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ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA)

(4NHX34) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC
 2.000
 4.000
 GRADIENT

DCL
 -.02424
 -.04352
 -.00964

DCD
 -.00359
 -.00512
 -.00076

DCLM
 .00639
 .00754
 .00058

DCY
 .00190
 .00194
 .00002

DCYN
 -.00026
 -.00025
 .00001

DCBL
 -.00072
 .00004
 .00038

ALPHAO
 8.00000
 10.00000
 1.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

DZ = 50.000

ALPHAC
 2.000
 4.000
 GRADIENT

DCL
 -.01907
 -.03799
 -.00946

DCD
 -.00341
 -.00437
 -.00048

DCLM
 .00662
 .00749
 .00044

DCY
 .00166
 .00228
 .00031

DCYN
 -.00018
 -.00013
 .00003

DCBL
 -.00071
 -.00019
 .00026

ALPHAO
 8.00000
 10.00000
 1.00000

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC
 2.000
 4.000
 GRADIENT

DCL
 -.05596
 -.09685
 -.02045

DCD
 -.01008
 -.02327
 -.00659

DCLM
 .01144
 .01569
 .00198

DCY
 .00158
 .00229
 .00036

DCYN
 -.00025
 -.00042
 -.00008

DCBL
 .00085
 .00065
 -.00010

ALPHAO
 10.00000
 12.00000
 1.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

DZ = 7.500

ALPHAC
 2.000
 4.000
 GRADIENT

DCL
 -.05299
 -.09096
 -.01898

DCD
 -.00939
 -.02958
 -.00559

DCLM
 .01037
 .01401
 .00182

DCY
 .00142
 .00196
 .00027

DCYN
 -.00026
 -.00061
 -.00018

DCBL
 .00093
 .00053
 -.00020

ALPHAO
 10.00000
 12.00000
 1.00000

ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA) (4NHY10) (17 OCT 75)

REFERENCE DATA

SREF = 2590.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 938.5900 IN. ZMRP = 375.0000 IN. ZO TORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = .01805 -.00497 .00171 .00023 .00027 -.00024 ALPHAO = 10.00000
 2.000 -.05042 -.00875 .00143 DCYN DCBL .00109
 4.000 -.08651 -.01869 .00189 .00073 .00061
 GRADIENT .001805 -.00497 .00171 .00023 .00027 -.00024 ALPHAO = 12.00000
 1.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000

ALPHAC	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
2.000	-0.00875	0.00924	0.00143	-0.00020	0.00109	10.00000
4.000	-0.01869	0.01266	0.00189	-0.00073	0.00061	12.00000
GRADIENT	0.01805	0.00171	0.00023	-0.00027	-0.00024	1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000

ALPHAC	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
2.000	-0.00790	0.00788	0.00073	-0.00036	0.00082	10.00000
4.000	-0.01698	0.01097	0.00128	-0.00084	0.00025	12.00000
GRADIENT	0.01664	0.00155	0.00028	-0.00024	-0.00028	1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000

ALPHAC	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
2.000	-0.03469	0.00585	0.00089	-0.00053	0.00065	10.00000
4.000	-0.06209	0.00812	0.00055	-0.00097	0.00030	12.00000
GRADIENT	0.01370	0.00114	0.00012	-0.00022	-0.00018	1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000

ALPHAC	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
2.000	-0.02027	0.00471	0.00171	-0.00049	0.00061	10.00000
4.000	-0.04376	0.00607	0.00085	-0.00085	0.00011	12.00000
GRADIENT	0.01174	0.00068	0.00006	-0.00018	-0.00036	1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
2.000	-0.02202	0.00395	0.00184	-0.00047	0.00044	10.00000
4.000	-0.03846	0.00547	0.00200	-0.00066	-0.00008	12.00000
GRADIENT	0.00822	0.00076	0.00008	-0.00020	-0.00026	1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000

ALPHAC	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
2.000	-0.02202	0.00395	0.00184	-0.00047	0.00044	10.00000
4.000	-0.03846	0.00547	0.00200	-0.00066	-0.00008	12.00000
GRADIENT	0.00822	0.00076	0.00008	-0.00020	-0.00026	1.00000

ORIGINAL PAGE IS
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ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(UNRAY13) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = .000 MACH = 1.500

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500

ALPHAC 2.000 ALPHA
 4.000
 GRADIENT

DCD -.00890 DCY .00123 DCYN .00019
 DCL -.05878 DCLM .01274 DCLN .00019
 -.10819 -.01614 .00023 .00001
 -.02471 -.00389 .00173 -.00050 -.00009

DCBL .00102 ALPHA
 .00087 8.00000
 .00115 10.00000
 .00014 1.00000

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500

ALPHAC 2.000 ALPHA
 4.000
 GRADIENT

DCD -.00850 DCY .00035 DCYN .00013
 DCL -.05758 DCLM .01019 DCLN .00013
 -.10112 -.01325 .00010 .00000
 -.02177 -.00341 .00153 -.00022 -.00007

DCBL .00087 ALPHA
 .00115 8.00000
 .00014 10.00000
 .00014 1.00000

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000

ALPHAC 2.000 ALPHA
 4.000
 GRADIENT

DCD -.00836 DCY .00026 DCYN .00003
 DCL -.09876 DCLM .0252 DCLN .00003
 -.02126 -.00325 .00145 .00013 -.00004

DCBL .00074 ALPHA
 .00100 8.00000
 .00013 10.00000
 .00013 1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000

ALPHAC 2.000 ALPHA
 4.000
 GRADIENT

DCD -.00707 DCY .00054 DCYN .00002
 DCL -.05394 DCLM .00805 DCLN .00002
 -.09436 -.01332 .01095 .00019 -.00011
 -.02021 -.00313 .00145 .00017 -.00004

DCBL .00070 ALPHA
 .00092 8.00000
 .00011 10.00000
 .00011 1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000

ALPHAC 2.000 ALPHA
 4.000
 GRADIENT

DCD -.00497 DCY .00052 DCYN .00010
 DCL -.04032 DCLM .00577 DCLN .00010
 -.07330 -.00927 .00893 .00076 -.00006
 -.01649 -.00215 .00108 .00064 .00002

DCBL .00039 ALPHA
 .00068 8.00000
 .00015 10.00000
 .00015 1.00000

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (4NHY13) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .0125

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC = 2.000
 4.000
 GRADIENT

DCL DCD DCY DCLM DCYN DCBL ALPHAO
 -.02973 -.00368 -.00004 -.00599 -.00003 .00040 8.00000
 -.05703 -.00620 .00039 .00732 -.00018 .00056 10.00000
 -.01365 -.00126 .00022 .00066 -.00008 .00008 1.00000

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC = 2.000
 4.000
 GRADIENT

DCL DCD DCY DCLM DCYN DCBL ALPHAO
 -.02705 -.00277 .00041 .00010 .00003 .00057 8.00000
 -.05018 -.00484 .00058 .00667 -.00016 .00069 10.00000
 -.01157 -.00104 .00024 .00063 -.00009 .00006 1.00000

ARC 14-120(CA23B) 747/1 AT1 02S1 (ORBITER DATA) (4NHY18) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO TORB = 6.000 DX = .000
 SCALE = .0125 GRADIENT = .0125

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC = 2.000
 4.000
 GRADIENT

DCL DCD DCY DCLM DCYN DCBL ALPHAO
 -.05330 -.00980 .00152 -.01241 -.00116 .00180 8.00000
 -.10297 -.01675 -.00074 .01670 -.00165 .00430 10.00000
 -.02484 -.00348 .00215 -.00113 -.00024 .00125 1.00000

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC = 2.000
 4.000
 GRADIENT

DCL DCD DCY DCLM DCYN DCBL ALPHAO
 -.04861 -.00818 .00016 .01018 -.00102 .00144 8.00000
 -.09333 -.01465 .00109 .01303 -.00135 .00307 10.00000
 -.02236 -.00324 .00143 .00143 -.00047 .00081 1.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 TORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

ARC 14-120(CA238) 747/1 AT1 0251 (ORBITER DATA)

(4NNHY18) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. X0
 LREF = 474.8100 IN. YMRP = .0000 IN. Y0
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = 5.000
 LORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCD
 -.04836
 -.08934
 -.02049
 GRADIENT

DCY
 .00028
 -.00111
 -.00059
 GRADIENT

DCLM
 .00931
 .01216
 .0143
 GRADIENT

DCO
 -.00780
 -.01360
 -.00290
 GRADIENT

DCL
 -.04836
 -.08934
 -.02049
 GRADIENT

DCBL
 -.00148
 -.00269
 -.00061
 GRADIENT

ALPHAO
 8.00000
 10.00000
 1.00000
 GRADIENT

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCO
 -.00709
 -.01209
 -.00250
 GRADIENT

DCL
 -.04619
 -.08357
 -.01869
 GRADIENT

DCBL
 -.00140
 -.00195
 -.00028
 GRADIENT

ALPHAO
 8.00000
 10.00000
 1.00000
 GRADIENT

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCO
 -.00470
 -.00781
 -.00155
 GRADIENT

DCL
 -.03742
 -.06673
 -.01465
 GRADIENT

DCBL
 -.00071
 -.00097
 -.00013
 GRADIENT

ALPHAO
 8.00000
 10.00000
 1.00000
 GRADIENT

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCO
 -.00264
 -.00456
 -.00096
 GRADIENT

DCL
 -.02352
 -.04797
 -.01222
 GRADIENT

DCBL
 -.00037
 -.00055
 -.00009
 GRADIENT

ALPHAO
 8.00000
 10.00000
 1.00000
 GRADIENT

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCO
 -.00239
 -.00387
 -.00074
 GRADIENT

DCL
 -.02311
 -.04420
 -.01055
 GRADIENT

DCBL
 -.00016
 -.00042
 -.00013
 GRADIENT

ALPHAO
 8.00000
 10.00000
 1.00000
 GRADIENT

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = 5.000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO LORB = 8.000 DX = .000
 SCALE = .0125 GRADIENT = -.01896 -.00404 .00227 -.00142 .00016 .00016 DY = 10.000 MACH = .600

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
ALPHAC	-.05218	-.01392	.01293	.00060	-.00173	-.00235	10.00000
2.000	-.09010	-.02199	.01747	-.00223	-.00141	-.00558	12.00000
4.000	-.01896	-.00404	.00227	-.00142	.00016	-.00162	1.00000
GRADIENT							

RN/L = 3.34 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
ALPHAC	-.04884	-.01090	.01136	.00063	-.00138	-.00176	10.00000
2.000	-.08693	-.02074	.01524	-.00161	-.00136	-.00431	12.00000
4.000	-.01905	-.00492	.00194	-.00112	.00001	-.00127	1.00000
GRADIENT							

RN/L = 3.33 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
ALPHAC	-.04493	-.00680	.01028	.00062	-.00116	-.00147	10.00000
2.000	-.08455	-.02014	.01367	-.00110	-.00135	-.00343	12.00000
4.000	-.01981	-.00567	.00170	-.00066	-.00010	-.00098	1.00000
GRADIENT							

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
ALPHAC	-.04849	-.00757	.00849	-.00006	-.00084	-.00070	10.00000
2.000	-.08195	-.01761	.01159	-.00070	-.00118	-.00233	12.00000
4.000	-.01673	-.00502	.00175	-.00032	-.00017	-.00081	1.00000
GRADIENT							

RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000	DCL	DCD	DCLM	DCY	DCYN	DCBL	ALPHAO
ALPHAC	-.03771	-.00473	.00649	.00039	-.00260	-.00011	10.00000
2.000	-.05256	-.01052	.00891	-.00095	-.00110	-.00100	12.00000
4.000	-.01143	-.00294	.00121	-.00067	-.00025	-.00045	1.00000
GRADIENT							

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ARC 14-120(CA23B) 747/1 AT1 0251 (ORBITER DATA)

(4NHY19) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
LREF = 474.8100 IN. YMRP = .0000 IN. YO
BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
SCALE = .0125

DZ = 45.000
RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC
2.000
4.000
GRADIENT

DCD
-.02317
-.04111
-.00897
GRADIENT

DCLM
.00543
.00709
.00083
GRADIENT

DCY
.00115
.00182
.00033
GRADIENT

DCYN
-.00058
-.00074
-.00008
GRADIENT

DCBL
-.00014
-.00079
-.00033
GRADIENT

ALPHA0
10.00000
12.00000
1.00000
GRADIENT

ALPHAC
2.000
4.000
GRADIENT

DZ = 50.000
RN/L = 3.35 GRADIENT INTERVAL = -5.00/ 5.00

DCD
-.01980
-.03653
-.00842
GRADIENT

DCLM
.00512
.00641
.00065
GRADIENT

DCY
.00125
.00138
.00006
GRADIENT

DCYN
-.00050
-.00093
-.00022
GRADIENT

DCBL
-.00015
-.00067
-.00041
GRADIENT

ALPHA0
10.00000
12.00000
1.00000
GRADIENT

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
LREF = 474.8100 IN. YMRP = .0000 IN. YO
BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
SCALE = .0125

DZ = 3.500
RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

ALPHAC
2.000
4.000
GRADIENT

DCD
-.04445
-.09119
-.02337
GRADIENT

DCLM
.01474
.02245
.00385
GRADIENT

DCY
.00343
.00236
-.00053
GRADIENT

DCYN
.00125
-.00009
-.00067
GRADIENT

DCBL
.00027
.00053
.00013
GRADIENT

ALPHA0
10.00000
12.00000
1.00000
GRADIENT

ALPHAC
2.000
4.000
GRADIENT

DCD
-.04596
-.08850
-.02127
GRADIENT

DCLM
.01230
.01871
.00350
GRADIENT

DCY
.00239
.00283
.00022
GRADIENT

DCYN
.00085
-.00009
-.00047
GRADIENT

DCBL
.00047
.00037
-.00005
GRADIENT

ALPHA0
10.00000
12.00000
1.00000
GRADIENT

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = 5.000
LORB = 8.000 DX = .000
DY = 10.000 MACH = .600

PARAMETRIC DATA

BETA = .000 STAB = 5.000
RUDDER = .000 ELEVON = .000
LORB = 8.000 DX = .000
DY = .000 MACH = .600

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(4NHY27) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.04651 -.00691 .01029 .00132 .00062 .00073
 -.08733 -.02008 .01571 .00235 .00003 .00025
 -.02041 -.00658 .00271 .00082 -.00029 -.00024

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.04708 -.00745 .00928 .00228 .00007 .00027
 -.08157 -.01882 .01445 .00446 -.00041 .00018
 -.01725 -.00359 .00259 .00109 -.00024 -.00004

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.03604 -.00454 .00604 .00199 .00006 .00024
 -.06040 -.01351 .01151 .00363 -.00026 .00012
 -.01218 -.00454 .00274 .00082 -.00016 -.00006

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.02089 -.00261 .00591 .00215 .00007 .00018
 -.04165 -.00972 .0105 .00256 .00021 .00037
 -.01038 -.00355 .00230 .00020 .00007 .00027

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCLM DCY DCYN DCBL ALPHAO
 -.01952 -.00237 .00495 .00232 .00007 .00014
 -.03641 -.00843 .01026 .00224 .00033 .00053
 -.00845 -.00303 .00265 .00004 .00013 .00033

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = .000 MACH = .600

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ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

(4NHV32) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 IORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC
 2.000
 4.000
 GRADIENT

DCBL
 -.00148
 -.00368
 -.00110
 ALPHA0
 8.00000
 10.00000
 1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500
 ALPHAC
 2.000
 4.000
 GRADIENT

DCBL
 -.00153
 -.00275
 -.00061
 ALPHA0
 8.00000
 10.00000
 1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCBL
 -.00129
 -.00250
 -.00061
 ALPHA0
 8.00000
 10.00000
 1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCBL
 -.00125
 -.00229
 -.00052
 ALPHA0
 8.00000
 10.00000
 1.00000

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCBL
 -.00089
 -.00122
 -.00017
 ALPHA0
 8.00000
 10.00000
 1.00000

ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA) (4NH32) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCY DCYM DCBL ALPHAO
 -.02312 -.00307 .00019 -.00026
 -.04632 -.00434 .00028 -.00037
 -.01160 -.00078 .00005 -.00005

DZ = 50.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCY DCYM DCBL ALPHAO
 -.01875 -.00254 .00035 -.00020
 -.03838 -.00368 .00044 -.00028
 -.00981 -.00057 .00004 -.00004

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCY DCYM DCBL ALPHAO
 -.05096 -.01369 .00056 -.00093
 -.09671 -.02532 .00100 -.00146
 -.02288 -.00582 .00022 -.00026

DZ = 7.500
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL DCD DCY DCYM DCBL ALPHAO
 -.04894 -.01028 .00011 -.00077
 -.03240 -.02358 .00044 -.00140
 -.02173 -.00665 .00333 -.00031

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = 10.000 MACH = .600

DCBL ALPHAO
 -.00069 8.00000
 -.00067 10.00000
 .00001 1.00000

DCBL ALPHAO
 -.00087 8.00000
 -.00056 10.00000
 .00015 1.00000

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 8.000 DX = .000
 DY = 10.000 MACH = .600

DCBL ALPHAO
 -.00249 10.00000
 -.00560 12.00000
 -.00155 1.00000

DCBL ALPHAO
 -.00190 10.00000
 -.00452 12.00000
 -.00131 1.00000

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ARC 14-120(CA23B) 747/1 AT1 03S1 (ORBITER DATA)

(4NHY33) (17 OCT)

REFERENCE DATA

SREF = 2690.0000 SQ.FT.
 LREF = 474.8100 IN.
 BREF = 936.6800 IN.
 SCALE = .0125

XMRP = 1109.0000 IN. XO
 YMRP = .0000 IN. YO
 ZMRP = 375.0000 IN. ZO

PARAMETRIC DATA

BETA = .000 STAB =
 RUDDER = .000 ELEVON =
 IORB = 8.000 DX =
 DY = 10.000 MACH =

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL = -0.4674 DCO = -0.0793 DCLM = .01050 DCY = .00039 DCYN = -0.0063 DCBL = -0.0154 ALPHAO = 10.00000
 DCL = -0.08918 DCO = -0.02231 DCLM = .01740 DCY = -0.00006 DCYN = -0.0133 DCBL = -0.00368 ALPHAO = 12.00000
 DCL = -0.02122 DCO = -0.00719 DCLM = .00345 DCY = -0.00022 DCYN = -0.00035 DCBL = -0.00107 ALPHAO = 1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL = -0.4757 DCO = -0.0742 DCLM = .00908 DCY = .00084 DCYN = -0.00054 DCBL = -0.0134 ALPHAO = 10.00000
 DCL = -0.08444 DCO = -0.02067 DCLM = .01559 DCY = .00049 DCYN = -0.0132 DCBL = -0.00302 ALPHAO = 12.00000
 DCL = -0.01844 DCO = -0.00662 DCLM = .00326 DCY = -0.00018 DCYN = -0.00039 DCBL = -0.00084 ALPHAO = 1.00000

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL = -0.3432 DCO = -0.0457 DCLM = .00787 DCY = .00121 DCYN = -0.00023 DCBL = -0.00052 ALPHAO = 10.00000
 DCL = -0.05625 DCO = -0.01370 DCLM = .01324 DCY = .00116 DCYN = -0.0104 DCBL = -0.00093 ALPHAO = 12.00000
 DCL = -0.01037 DCO = -0.00456 DCLM = .00269 DCY = -0.00003 DCYN = -0.00040 DCBL = -0.00021 ALPHAO = 1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 45.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL = -0.1984 DCO = -0.0240 DCLM = .00694 DCY = .00109 DCYN = -0.00042 DCBL = -0.00034 ALPHAO = 10.00000
 DCL = -0.04163 DCO = -0.01026 DCLM = .01217 DCY = .00134 DCYN = -0.00027 DCBL = -0.00049 ALPHAO = 12.00000
 DCL = -0.01090 DCO = -0.00393 DCLM = .00261 DCY = .00012 DCYN = -0.00007 DCBL = -0.00007 ALPHAO = 1.00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 50.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL = -0.1861 DCO = -0.00293 DCLM = .00651 DCY = .00135 DCYN = -0.00024 DCBL = -0.00030 ALPHAO = 10.00000
 DCL = -0.03856 DCO = -0.00975 DCLM = .01158 DCY = .00137 DCYN = -0.00006 DCBL = -0.00026 ALPHAO = 12.00000
 DCL = -0.00998 DCO = -0.00361 DCLM = .00254 DCY = .00001 DCYN = -0.00015 DCBL = -0.00002 ALPHAO = 1.00000

(4NHV34) (17 OCT 75)

ARC 14-120(CA23B) 747/1 AT1 0351 (ORBITER DATA)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1109.0000 IN. XO BETA = .000 STAB = 5.000
 LREF = 474.8100 IN. YMRP = .0000 IN. YO RUDDER = .000 ELEVON = .000
 BREF = 936.6800 IN. ZMRP = 375.0000 IN. ZO DY = .000 DX = .000
 SCALE = .0125 GRADIENT = -.00289 .00099 MACH = .600

PARAMETRIC DATA

RN/L = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 3.500 ALPHAAC = 2.000
 DCL = -.05437 DCD = -.09879 DCLM = .01688 DCY = .00363 DCYN = .00019 DCBL = .00015 ALPHAO = 8.00000
 GRADIENT = -.02335 .00099 .00012 .00001 .00000 .00020 .00003
 4.000 .00288 .00010 .00000 .00000 .00002 .00003
 10.00000 .00000 .00000 .00000 .00000 .00000 .00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 7.500 ALPHAAC = 2.000
 DCL = -.05156 DCD = -.0814 DCLM = .01236 DCY = .00309 DCYN = .00007 DCBL = .00002 ALPHAO = 8.00000
 GRADIENT = -.09385 .00268 .00107 .00010 .00000 .00024 .00013
 4.000 .00268 .00107 .00010 .00000 .00002 .00002
 10.00000 .00000 .00000 .00000 .00000 .00000 .00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 10.000 ALPHAAC = 2.000
 DCL = -.05304 DCD = -.00779 DCLM = .01009 DCY = .00301 DCYN = .00004 DCBL = .00002 ALPHAO = 8.00000
 GRADIENT = -.09063 .00257 .00144 .00014 .00010 .00015 .00002
 4.000 .00257 .00144 .00014 .00010 .00015 .00002
 10.00000 .00000 .00000 .00000 .00000 .00000 .00000

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 15.000 ALPHAAC = 2.000
 DCL = -.05072 DCD = -.00725 DCLM = .00720 DCY = .00301 DCYN = .00015 DCBL = .00018 ALPHAO = 8.00000
 GRADIENT = -.08597 .00175 .01025 .00271 .00015 .00015 .00009
 4.000 .00175 .01025 .00271 .00015 .00015 .00009
 10.00000 .00000 .00000 .00000 .00000 .00000 .00000

RN/L = 3.29 GRADIENT INTERVAL = -5.00/ 5.00

DZ = 30.000 ALPHAAC = 2.000
 DCL = -.03742 DCD = -.00489 DCLM = .00539 DCY = .00301 DCYN = .00000 DCBL = .00047 ALPHAO = 8.00000
 GRADIENT = -.06343 .00778 .00950 .00225 .00025 .00025 .00009
 4.000 .00778 .00950 .00225 .00025 .00025 .00009
 10.00000 .00000 .00000 .00000 .00000 .00000 .00000

ARC 14-120(CA23B) 747/1 AT 0351 (ORBITTER DATA)

(4NH334) (17 OCT 75)

REFERENCE DATA

SREF = 2690.0000 SO.FT. XMRP = 1109.0000 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BRF = 936.6800 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0125

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 45.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL
 -.02417
 -.04343
 -.00963

DCD
 -.00360
 -.00513
 -.00077

DCLM
 .00643
 .00762
 .00059

DCY
 .00190
 .00194
 .00002

DCYN
 -.00027
 -.00026
 .00001

DCBL
 -.00073
 .00003
 .00038

ALPHAO
 8.00000
 10.00000
 1.00000

BETA
 .000
 .000
 6.000
 DY

STAB
 =
 ELEVON
 =
 DX
 =
 MACH
 =

ALPHAO
 8.00000
 10.00000
 1.00000

DCBL
 -.00071
 -.00019
 .00003

DCYN
 -.00019
 -.00013
 .00003

DCBL
 -.00071
 -.00019
 .00003

PARAMETRIC DATA

BETA = .000 STAB = 5.000
 RUDDER = .000 ELEVON = .000
 TORB = 6.000 DX = .000
 DY = .000 MACH = .600

RN/L = 3.30 GRADIENT INTERVAL = -5.00/ 5.00

OZ = 50.000
 ALPHAC
 2.000
 4.000
 GRADIENT

DCL
 -.01906
 -.03799
 -.00947

DCD
 -.00342
 -.00439
 -.00048

DCLM
 .00667
 .00756
 .00045

DCY
 .00167
 .00229
 .00031

DCYN
 -.00019
 -.00013
 .00003

DCBL
 -.00071
 -.00019
 .00003

ALPHAO
 8.00000
 10.00000
 1.00000

BETA
 .000
 .000
 6.000
 DY

STAB
 =
 ELEVON
 =
 DX
 =
 MACH
 =

ALPHAO
 8.00000
 10.00000
 1.00000

DCBL
 -.00071
 -.00019
 .00003

DCYN
 -.00019
 -.00013
 .00003

DCBL
 -.00071
 -.00019
 .00003