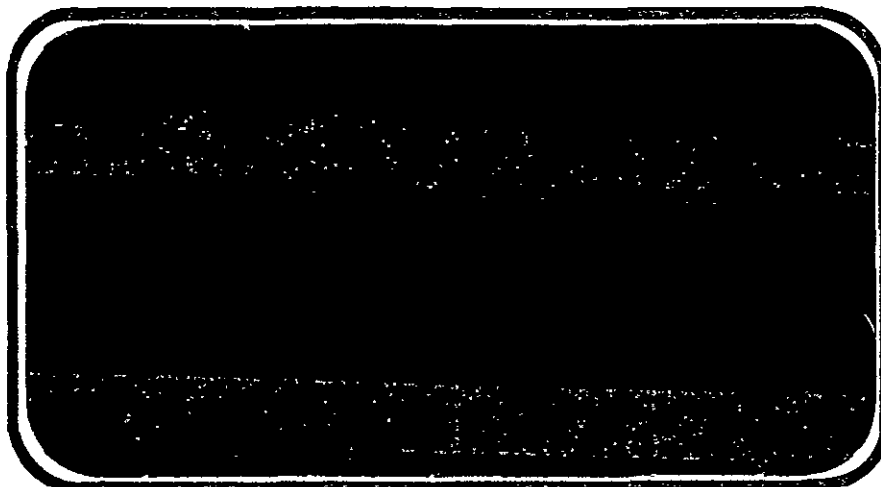


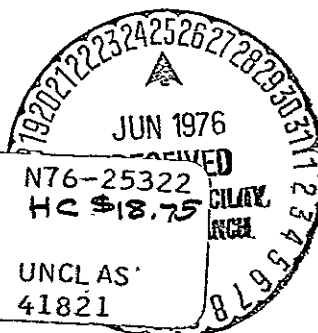


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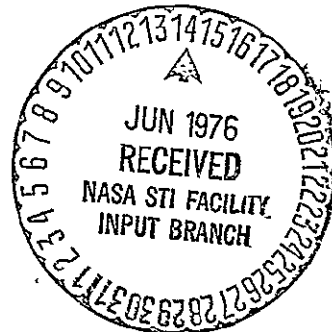
(NASA-CR-144612) RESULTS OF AN AERODYNAMIC INVESTIGATION OF A SPACE SHUTTLE ORBITER/747 CARRIER FLIGHT TEST CONFIGURATION TO DETERMINE SEPARATION CHARACTERISTICS UTILIZING 0.0125-SCALE MODELS (CHRYSLER

G3/18



SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT



JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANAGEMENT services



April, 1976

DMS-DR-2273
NASA CR-144,612
VOLUME 1 OF 5

RESULTS OF AN AERODYNAMIC INVESTIGATION OF A
SPACE SHUTTLE ORBITER/747 CARRIER FLIGHT TEST
CONFIGURATION TO DETERMINE SEPARATION CHARACTERISTICS
UTILIZING 0.0125-SCALE MODELS (48-0/AX1318I-1) IN
THE LTV 4 x 4-FOOT HIGH SPEED WIND TUNNEL (CA26)

by

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Rockwell International Space Division

Prepared Under NASA Contract Number NAS9-13247

by

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Chrysler Corporation Space Division
New Orleans, La. 70189

for

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

WIND TUNNEL TEST SPECIFICS:

Test Number: LTV HSWT 559
NASA Series Number: CA26
Model Number: 48-0 Orbiter/AX1318I-1 747
Test Dates: August 1 through August 15, 1975
Occupancy Hours: 95

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RESULTS OF AN AERODYNAMIC INVESTIGATION OF A
SPACE SHUTTLE ORBITER/747 CARRIER FLIGHT TEST
CONFIGURATION TO DETERMINE SEPARATION CHARACTERISTICS
UTILIZING 0.0125-SCALE MODELS (48-0/AX13181-1) IN THE
LTV 4 x 4-FOOT HIGH SPEED WIND TUNNEL (CA26)

by

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ABSTRACT

This report presents results of tests conducted on a 0.0125-scale model of the VC70-000002 Space Shuttle Orbiter and a 0.0125-scale model of the 747 CAM configuration in the LTV 4 x 4-foot High Speed Wind Tunnel. Force and moment data were obtained for each vehicle separately at a Mach number of 0.6 and for each vehicle in proximity to the other at Mach numbers of 0.3, 0.5, 0.6 and 0.7.

The enclosed data present the proximity effects of each vehicle on the other at separation distances (from the mated configuration) ranging from 1.5 feet to 75 feet; 747 Carrier angles of attack from 0 degrees to 6 degrees and angles of sideslip of 0° and -5° were tested. The Orbiter was tested in proximity to the 747 at incidence angles of 4 degrees, 6 degrees and 8 degrees and angles of sideslip of 0 degrees and ±5 degrees. The Orbiter alone was tested at angles of attack from 0 degrees to 17 degrees at angles of sideslip of 0 degrees and -5 degrees.

ABSTRACT (Concluded)

Model variables include orbiter elevon, aileron and body flap deflections, orbiter tailcone on and off, and 747 stabilizer and rudder deflections. The tests, designated CA26, were conducted from August 1 through August 15, 1975.

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240	LAT-DIRECT AERO VS DELZ. ALPHA747 = 4.0, DELBETA = 5.0	A	BETA0, BETAC	1924-1938

COEFFICIENT SCHEDULE:

- | | |
|---|--|
| <p>(A) CY, CYN, CBL, CPS1, CPS2, CYB, CYNB,
CBLB, DCPSB versus DZ</p> | <p>(E) CN, CLM, CA, CY, CYN; CBL, CL,
CD versus DY</p> |
| <p>(B) CN, CLM, CA, CY, CYN, CBL, CL,
CD versus ALPHAC</p> | <p>(F) CN, CLM, CA, CY, CYN, CBL, CL,
CD versus ALPHAO</p> |
| <p>(C) CN, CLM, CA, CY, CYN, CBL, CL,
CD versus DZ</p> | <p>(G) CN, CLM, CA, CY, CYN, CBL, CL,
CD versus INCID</p> |
| <p>(D) CN, CLM, CA, CY, CYN, CBL, CL,
CD versus DX</p> | |

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; $(p_1 - p_\infty)/q$
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	ALPHA	angle of attack, degrees
β	BETA	angle of sideslip, degrees
ψ	PSI	angle of yaw, degrees
ϕ	PHI	angle of roll; degrees
ρ		mass density; kg/m^3 , slugs/ft ³

Reference & C.G. Definitions

A_b		base area; m^2 , ft^2
b	BREF	wing span or reference span; m, ft
c.g.		center of gravity
$\frac{l}{c}$	LREF	reference length or wing mean aerodynamic chord; m, ft
S	SREF	wing area or reference area; m^2 , ft^2
	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
w	wing

NOMENCLATURE (Continued)

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	CIM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS\ell_{REF}}$
C_n	CYN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qSb}$
C_ℓ	CBL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qSb}$
<u>Stability-Axis System</u>		
C_L	CL	lift coefficient; $\frac{\text{lift}}{qS}$
C_D	CD	drag coefficient; $\frac{\text{drag}}{qS}$
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_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_m	CIM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS\ell_{REF}}$
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>
BSTA		Longitudinal carrier station, in.
BWL		Vertical carrier station, in.
BL		Lateral carrier station, in.
δ_a	AILRON	Orbiter aileron deflection angle, $\delta_a = \frac{\delta_{eL} - \delta_{eR}}{2}$, degrees
δ_{BF}	BDFLAP	Orbiter body flap surface deflection angle, positive deflection trailing edge down, degrees
δ_e	ELEVON	Orbiter elevon surface deflection angle, positive deflection trailing edge down, degrees
δ_r	RUDDER	747 rudder surface deflection angle, positive deflection trailing edge to the left, degrees
δ_s	STAB	747 stabilizer surface deflection angle, positive deflection trailing edge down, degrees
$C_{y\beta}$	CYB	Side force coefficient due to beta
$C_{n\beta}$	CYNB	Yawing moment coefficient due to beta
$C_{l\beta}$	CBLB	Rolling moment coefficient due to beta
$\Delta C_{P_{S\beta}}$	DCPSB	Differential right hand and left hand strut pressure coefficient due to beta

ORBITER

$C_{P_{B1}}$	CPB1	Orbiter (tail cone off) base pressure coefficient, 1
$C_{P_{B2}}$	CPB2	Orbiter (tail cone off) base pressure coefficient, 2
$C_{P_{B3}}$	CPB3	Orbiter (tail cone off) base pressure coefficient, 3

NOMENCLATURE (Concluded)

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
C_{PCO}	CPCO	Orbiter balance cavity pressure coefficient
C_{PS1}	CPS1	Orbiter strut L. H. side pressure coefficient
C_{PS2}	CPS2	Orbiter strut R. H. side pressure coefficient
C_{PCC}	CPCC	747 cavity pressure coefficient
C_{PSB1}	CPSB1	747 upper forward sting cavity pressure coefficient
C_{PSB2}	CPSB2	747 upper center sting cavity pressure coefficient
C_{PSB3}	CPSB3	747 upper aft sting cavity exit pressure coefficient
<u>SEPARATION PARAMETERS</u>		
Δx	DELX	Orbiter longitudinal displacement from mated position, positive aft, feet
Δy	DELY	Orbiter lateral displacement from mated position, positive right, feet
Δz	DELZ	Orbiter vertical displacement from mated position, positive up, feet
$\Delta\phi$	DPHI DELPHI	Incremental roll angle, Orbiter FRP, degrees
i_o	IORB	Orbiter incidence angle, orbiter FRL to 747 FRL ($i_o = \alpha_o - \alpha_c$), degrees
	INCID	Orbiter incidence angle (accounts for tunnel flow angularity variation from tunnel ϕ to tunnel wall) $i_o = \alpha_o - \alpha_c - \Delta Z(-.0059)$, degrees.
α_o	ALPHAO	Orbiter angle of attack (tunnel flow angularity from tunnel ϕ to tunnel wall not applied), degrees
α_c	ALPHAC	Carrier FRL angle of attack, degrees
$\Delta\beta$	DELBETA	Incremental sideslip angle, orbiter to 747 FRL, degrees

REMARKS

The model component surface deflection angles called out in the run summary are nominal values. The actual angles tested are outlined below.

	<u>Nominal</u>	<u>Actual</u>
Orbiter Elevon:	0° +5° +10°	0° +5.0° +9.8°
Orbiter Aileron: ($\delta_e = 5, \delta_a = -5$)	0°/10°	0°/+9.8°
747 Stabilizer:	-1° +3° +5°	-0.75° 3.27° 5.32°
747 Rudder:	+10°	+10.7°

During the early separation Δz sweep runs, it was noted that for Δz in the 0 to 15 foot range, the coefficient polars had different characteristics for Δz decreasing than for Δz increasing. Subsequent pitch/pause data runs demonstrated that there was a proximity hysteresis effect. All runs thereafter were made with pitch/pause points in close proximity and constant sweep beyond 10 feet.

CONFIGURATIONS INVESTIGATED

The orbiter model, 48-0, was an 0.0125-scale representation of the Space Shuttle Orbiter VC70-000002 lines, illustrated in figure 2a. The Orbiter model was tested both with and without a tail cone fairing which covered the MPS nozzles and the OMS pod base as shown in figure 2b. Orbiter alone runs were made with a base sting mount, the sting replacing the upper MPS nozzle, figure 2h. The following orbiter configurations were tested:

$$O_2 = B_{64} C_{14} F_{14} E_{44} M_{18} N_{94} N_{92} W_{116}$$

$$O_4 = B_{64} C_{14} F_{14} E_{44} M_{18} N_{105} N_{92} R_{18} V_{23} W_{116} \text{ (upper MPS nozzle off)}$$

$$O_6 = B_{64} C_{14} F_{14} E_{44} M_{18} W_{116} TC_4$$

where:

<u>Component</u>	<u>Description</u>
B ₆₄	Orbiter fuselage per Rockwell lines VC70-000002, Model drawing SS-A01377
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 ₉₂	Orbiter OMS engine nozzles 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 ₁₀₅	Same as N ₉₄ with upper nozzle removed.

CONFIGURATIONS INVESTIGATED - (Continued)

<u>Component</u>	<u>Description</u>
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

Orbiter elevon, aileron and body flap deflection angles were varied. Configuration O₄ was the sting mounted orbiter configuration, and O₂ and O₆ were blade mounted configurations.

Orbiter-to-carrier attach structure was simulated. These included faired and unfaired strut members as identified below and illustrated in figures 2f and 2g:

$$AT_y = AT_{112} + AT_{113}$$

$$AT_x = AT_{96} + AT_{99}$$

where:

<u>Component</u>	<u>Description</u>
AT ₁₁₂	Fwd: attach structure, short fairing, $i_0 = 4^\circ$
AT ₁₁₃	Aft attach structure, unfaired draglink, other members faired
AT ₉₆	Fwd attach structure, faired, $i_0 = 4^\circ$
AT ₉₉	Aft attach structure, faired

CONFIGURATIONS INVESTIGATED. - (Concluded)

The carrier model, AX1318I-1, was an 0.0125-scale representation of the Boeing 747-100 aircraft with surface contours built to represent the 747 under loads it would experience with a 600,000 pound gross weight flying at Mach 0.86 at an altitude of 5,000 feet. The CAM (Carrier Aircraft Modification) kit tested on the model included 200 square foot tip fins on the horizontal tail panels and simulated orbiter-to-carrier attach structure. In-flight speed brakes were deployed for most runs in the configuration shown in figure 2e. Stabilizer and rudder deflections were varied during the test. The carrier was tested both isolated and in proximity to the orbiter. Configurations investigated were:

747/1 = B27.8 W44.1 V9.1 H15.6 M25 M26 N57 N58 S1-12 T14 AT()

747/4 = Same as 747/1 except no H15.6

where:

<u>Component</u>	<u>Description</u>
B27.8	Fuselage
W44.1	Wing
V9.1	Vertical Tail
H15	Horizontal tail, basic
H15.6	Horizontal tail, with 200 ft. ² tip fins
M25	Inboard nacelle struts
M26	Outboard nacelle struts
N57	Inboard nacelles
N58	Outboard nacelles
S1-12	Spoiler Panels
T14	Flap track fairings

ORIGINAL PAGE IS
OF POOR QUALITY

INSTRUMENTATION

Force instrumentation consisted of a six-component internal force balance mounted in each model. The orbiter balance measured orbiter forces and the carrier balance measured carrier data.

Pressure instrumentation for the orbiter consisted of 3 base pressure orifices (tailcone off only) and 1 balance cavity orifice. Pressure instrumentation for the carrier consisted of 1 balance cavity orifice and 3 sting/boattail cavity pressure orifices as shown below. Also, see figure 2k. All pressures were measured by individual pressure transducers.

	<u>Pressure</u>
Orbiter pressures:	PC ₀
	PB ₁
	PB ₂
	PB ₃
Carrier pressures:	PCC
	PSB1
	PSB2
	PSB3
Strut pressures:	PS1
	PS2
Tailcone pressure:	PTC

TEST FACILITY DESCRIPTION

The Vought Aeronautics Company High Speed Wind Tunnel is a blowdown-to-atmosphere, transonic-supersonic adjustable Mach number facility.

Six tanks with a total of 28,000 cubic feet air storage capacity receive the reheated air until a maximum storage pressure of 600 psia is reached. The compressor discharge is then vented to atmosphere until the tank pressure is reduced below 400 psia. An alumina pebble bed in each tank absorbs heat during pump up and dissipates heat during air discharge to maintain a near constant supply temperature.

The time required to recharge the air storage tanks following a run varies from 15 to 45 minutes depending upon the final tank pressure. A nominal tank pressure increase rate is 9 psi per minute.

Mach number control at the supersonic test section velocities is accomplished with an adjustable contour nozzle. Two flexible stainless steel plates, 3/4-inch thick, 48 inches wide, and 453 inches long, are contoured to produce a uniform test section flow using 28 nozzle jacks on each plate spaced at 10- to 18-inch intervals. During nozzle changes the plates are hydraulically extended to permit positioning of the threaded nozzle jacks. After the nozzle jacks are properly set, the plates are retracted against the nozzle jack stops. Microswitches on the stops indicate plate contact. Strain indicators at each jack position protect the nozzle plate from excessive stresses.

During each run the hydraulic cylinders are charged with high pressure to hold each plate support rigidly against the nozzle jack stops.

TEST FACILITY DESCRIPTION (Concluded)

For transonic operation the supersonic diffuser is removed and the transonic test section and ejector section are set in place. The model cart is relocated downstream approximately 11 feet into the transonic test section. Test section window locations relative to the model cart are the same for either section. Conversion time is nominally 2 hours.

The transonic test section has normal hole perforated walls with 22.5% porosity. Test section size is nominal 4 x 4 feet with each side wall converged 25 minutes. Subsonic Mach number control is accomplished with hydraulic servo-actuated choking flaps downstream of the test section. A control system maintains the preset ratio of static to total pressure during each run by causing small changes in choking area. Above Mach number 0.9, approximately, the choking flaps are fully open and Mach control is switched to a set of plenum chamber bleed control flaps. These hydraulically-actuated, servo-controlled "Mach flaps" remove test section air through the porous walls by ejection pumping of the plenum chamber. A maximum Mach number of 1.15 can be attained with a sonic nozzle. To obtain Mach numbers greater than 1.5, it is necessary to contour the nozzle plates in addition to utilizing plenum pumping. A maximum Mach number of 1.8 is possible in the transonic test section, although the supersonic test section is recommended for Mach numbers of 1.4 and greater.

DATA REDUCTION

Force and moment data were reduced in both body and stability axes using standard data reduction procedures. Coefficient data for each vehicle were computed based on their respective reference dimensions. Separation distances Δx , Δy , and Δz were computed in the carrier body axis system and represent the movement of the orbiter from the base (mated) position.

<u>Symbol</u>	<u>Carrier</u>		<u>Orbiter</u>		<u>Description</u>
	<u>Model Scale</u>	<u>Full Scale</u>	<u>Model Scale</u>	<u>Full Scale</u>	
S	0.859	5500	0.420	2690	reference area, ft. ²
b	29.351	2348.04	11.709	936.68	reference span, in.
\bar{c}	4.097	327.78	5.935	474.81	reference MAC, in.
MRC					moment reference center, in.
X _c or X _o	16.749	1339.90	13.862	1109	
Y _c or Y _o	0.0	0.0	0.0	0.0	
Z _c or Z _o	2.385	190.75	4.687	375	

No base or cavity pressure corrections were applied to the data.

Wind tunnel data were interpolated versus angle of attack, angle of sideslip, orbiter incidence angle and separation distances Δx , Δy and Δz . Both basic and interpolated data are presented in this report.

REFERENCES

- SD75-SH-0054, "Pretest Information for a Test of an 0.0125-scale Model 48-0 orbiter/747 Flight Test Configuration in the LTV 4 x 4-foot High Speed Wind Tunnel (CA23)," February 17, 1975
- VC70-000002, "Design Geometry - Orbiter," June 10, 1974
- SS-A01377, "Orbiter Assembly - #48-0, 0.0125-Scale SSV, Ferry/Separation," August 9, 1974
- SS-A01378, "Model Installation - 0.0125-Scale SSV Orbiter, Ferry/Separation (LAV)"
- SS-A01452, "Tail Cone Assy - 0.0125-Scale SSV Orbiter, #48-0"
- SS-A01559, "Fwd and Aft attach Supports, 48-0, 0.0125-Scale SSV Orbiter, March 11, 1975
- W-11328A, "Sting Assy - 48-0 SSV, Carrier, Ferry/Separation," August 9, 1974
- W-11338A "Sting Assy - Orbiter Ferry Separation, #48-0," January 13, 1975
- The Boeing Company - 747 Carrier
- 747-MD-461, "General Arrangement - 747 Space Shuttle Orbiter Carrier Aircraft (Piggyback Configuration)," July 15, 1974
- 747-MD-654, "Forward Support Structure Instl. -747 CAM"
- 747-MD-658, "Support Structure Instl. -Aft"
- AX 1318I-1, "747 Model Drawings 0.0125-Scale."
- 65013609, "Model Assy AX1318I-1"
- 65-89588, "Body Lines AX1318I-1"

TABLE I.

TEST : CA26		DATE : Post Test																													
TEST CONDITIONS																															
MACH NUMBER	REYNOLDS NUMBER (per unit length)	DYNAMIC PRESSURE PSF	STAGNATION TEMPERATURE (degrees Fahrenheit)																												
0.3	2.6 x 10 ⁶ /ft	200	119																												
0.5	4.0 x 10 ⁶ /ft	445	115																												
0.6	4.3-4.9 x 10 ⁶ /ft	570 - 625	89 - 132																												
0.7	5.1 x 10 ⁶ /ft	720	96																												
<p>BALANCE UTILIZED: Orbiter: Task 1.0-inch MK XIV Carrier: LTV 1.5-inch VB-21</p> <p style="text-align: center;">CAPACITY:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;"></th> <th style="width: 35%;">Orbiter</th> <th style="width: 35%;">Carrier</th> <th style="width: 20%;">Accuracy</th> </tr> </thead> <tbody> <tr> <td>NF</td> <td style="text-align: center;">800 lb.</td> <td style="text-align: center;">1000 lb.</td> <td style="text-align: center;">0.2%</td> </tr> <tr> <td>SF</td> <td style="text-align: center;">400 lb.</td> <td style="text-align: center;">800 lb.</td> <td style="text-align: center;">0.2%</td> </tr> <tr> <td>AF</td> <td style="text-align: center;">100 lb.</td> <td style="text-align: center;">200 lb.</td> <td style="text-align: center;">0.2%</td> </tr> <tr> <td>PM</td> <td style="text-align: center;"> </td> <td style="text-align: center;">1000 in.-lb.</td> <td style="text-align: center;">0.2%</td> </tr> <tr> <td>RM</td> <td style="text-align: center;">250 in.-lb.</td> <td style="text-align: center;">400 in.-lb.</td> <td style="text-align: center;">0.2%</td> </tr> <tr> <td>YM</td> <td style="text-align: center;"> </td> <td style="text-align: center;">1200 in.-lb.</td> <td style="text-align: center;">0.2%</td> </tr> </tbody> </table> <p>COMMENTS:</p>					Orbiter	Carrier	Accuracy	NF	800 lb.	1000 lb.	0.2%	SF	400 lb.	800 lb.	0.2%	AF	100 lb.	200 lb.	0.2%	PM		1000 in.-lb.	0.2%	RM	250 in.-lb.	400 in.-lb.	0.2%	YM		1200 in.-lb.	0.2%
	Orbiter	Carrier	Accuracy																												
NF	800 lb.	1000 lb.	0.2%																												
SF	400 lb.	800 lb.	0.2%																												
AF	100 lb.	200 lb.	0.2%																												
PM		1000 in.-lb.	0.2%																												
RM	250 in.-lb.	400 in.-lb.	0.2%																												
YM		1200 in.-lb.	0.2%																												

TABLE II

TEST: CAZ6		DATA SET/RUN-NUMBER COLLATION SUMMARY											DATE: POST TEST			
DATA SET IDENTIFIER	CONFIGURATION	CARRIER				ORBITER							MACH NUMBERS			
		α	β	δ_A	δ_r	δ_e	δ_{BP}	δ_a	ΔX	ΔY	ΔZ	α_0	β_0	ϕ_0		0.6
AFED001	04*					0	0	0				2	0	0		1
02						0	16.3	0				2	0	0		2
03						5	0	0				2	0	0		4.1
04						5	0	0				2	-5	0		4.2
05	02 S1					5	0	0				2	0	0		7.1
06						5	0	0				2	-5	0		7.2
07						5	0	0			△	8	0	0		8
08						0	0	0				2	0	0		9
09						0	16.3	0				2	0	0		10
10						0	-11.7	0				2	0	0		11
11						0	5	0				2	0	0		12
12	06 S1					0	-11.7	0				2	0	0		14
13						0	-11.7	0				2	-5	0		15
14						5	-11.7	0				2	0	0		16.1
15						5	-11.7	0				2	-5	0		16.2

TEST RUN NUMBERS

38

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

COEFFICIENTS IDVAR(1) IDVAR(2) NDV

2 $\alpha_0 = 0^\circ \text{ to } 16^\circ$
X $Z = 0 \text{ to } 72 \text{ feet}$

α OR β SCHEDULES

SEE PAGE 46 FOR COEFFICIENT SCHEDULE
 * STING MOUNTED

NASA-MSFC-MAF

TABLE II (Continued)

TEST: CA26		DATA SET/RUN NUMBER COLLATION SUMMARY													DATE: POST TEST	
DATA SET IDENTIFIER	CONFIGURATION	CARRIER				ORBITER									MACH NUMBERS	
		α	β	δ_e	δ_r	δ_e	δ_{BF}	δ_a	ΔX	ΔY	ΔZ	α_0	β_0	ϕ_0		0.6
RFE016	747/1 ATY	0	0	5	0											17
17		2	0	5	0											25.1
18		4	0	5	0											24
19		5	0	5	0											29
20		0	0	-1	0											18
21		2	0	-1	0											27
22		4	0	-1	0											23
23		2	-5	5	0											28
24		2	0	5	0					\triangle						25.2
25		2	0	5	0					\triangle						25.3
26	747/1	0	0	-1	0											19
27		0	0	3	0											21
28		0	0	5	0											20
29	747/4	0	0	-	0											22

TEST RUN NUMBERS

39

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

α OR β
SCHEDULES

\triangle Z = 0 to 53 feet
 \triangle X = 0 to 40 feet

COEFFICIENTS

IDVAR(1) IDVAR(2) NDV

TABLE II (Continued)

TEST: CA26		DATA SET/RUN NUMBER COLLATION SUMMARY											DATE: POST TEST					
DATA SET IDENTIFIER	CONFIGURATION	CARRIER					ORBITER						MACH NUMBERS					
		α	β	δ_A	δ_r	δ_e	δ_{DF}	δ_a	ΔX	ΔY	ΔZ	ζ_0	β_0	ϕ_0	0.3	0.5	0.6	0.7
R/AFF030	747/1 ATY D2S1	0	0	5	0	5	-11.7	0	0	0	\triangle^1	4	0	0				30.1
31											\triangle^2	6						30.2
32											\triangle^1	6						30.3
33											\triangle^3	6						34.2
34											\triangle^1	8						31
35		0	0	5	0	5	-11.7	0	0	0	\triangle^1	4	5	0				33.1
36											\triangle^1	6						33.2
37											\triangle^1	8						34.1
38		0	0	-1	0	5	-11.7	0	0	0	\triangle^1	4	0	0				35.1
39											\triangle^1	6						35.2
40											\triangle^1	8						36
41		2	0	-1	0	5	-11.7	0	0	0	\triangle^4	4	0	0				37.1
42											\triangle^3	6						37.2
43	NO DATA AVAILABLE	_____					_____					\triangle^4	8	_____		38.1	_____	
44	NO DATA AVAILABLE	_____					_____					\triangle^3	8	_____		38.2	_____	
45		2	0	5	0	5	-11.7	0	0	0	\triangle^1	4	0	0				39.1
46											\triangle^1	6			44	43	39.2	42
47											\triangle^1	8						40.1

TEST RUN NUMBERS

40

7	13	19	25	31	37	43	49	55	61	67	75	76
α OR β SCHEDULES		COEFFICIENTS \triangle^1 ΔZ increasing, no pauses \triangle^2 ΔZ decreasing, no pauses					IDVAR(1) \triangle^3 ΔZ increasing, with pauses \triangle^4 ΔZ decreasing, with pauses			IDVAR(2) NDV		

\triangle ΔZ increasing or decreasing with pauses

TABLE II (Continued)

TEST: CA26		DATA SET/RUN NUMBER COLLATION SUMMARY													DATE: POST TEST		
DATA SET IDENTIFIER	CONFIGURATION	CARRIER				ORBITER									MACH NUMBERS		
		α	β	δ_e	δ_r	δ_e	δ_{BF}	δ_a	ΔX	ΔY	ΔZ	i_0	β_0	ϕ_0			
R/AFED48	747/1ATY $\phi_2 S_1$	2	0	5	0	5	0	0	0	0	$\triangle 3$	4	5	0		0.6	41.1
49											$\triangle 3$	6					41.2
50											$\triangle 3$	8					40.2
51	747/1ATX $\phi_2 S_1$	2	0	5	0	5	0	0	0	0	$\triangle 3$	4	0	0			45.1
52											$\triangle 3$	6					45.2
53	747/1ATY $\phi_2 S_1$	2	0	5	0	5	0	0	0	$\triangle 4$	0	6	0	0			46.1
54											15						46.2
55											60						46.3
56		2	0	5	0	5	0	0	0	$\triangle 4$	0	6	5	0			47.1
57											15						47.2
58											60						47.3
59		2	0	5	0	5	0	0	10	$\triangle 4$	0	6	0	0			48.1
60											15						48.2
61											60						48.3
62		2	0	5	0	5	0	0	$\triangle 5$	0	0	6	0	0			49.1
63											15						49.2
64											60						49.3

TEST RUN NUMBERS

41

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

α OR β
SCHEDULES

$\triangle 4$ $\Delta Y = -10$ to 10 feet COEFFICIENTS

$\triangle 5$ $\Delta X = 0$ to 20 feet IDVAR(1) IDVAR(2) NDV

TABLE II (Continued)

TEST: CA26		DATA SET/RUN NUMBER COLLATION SUMMARY													DATE: POST TEST		
DATA SET IDENTIFIER	CONFIGURATION	CARRIER					ORBITER							MACH NUMBERS			
		α	β	δ_A	δ_r	δ_e	δ_{BF}	δ_a	ΔX	ΔY	ΔZ	L_0	β_0	ϕ_0			0.6
R/AFED65	747/1 ATY $\phi_2 S_1$	2	0	5	0	5	0	0	$\triangle 5$	0	0	6	5	0			50.1
66											15						50.2
67											60						50.3
68		2	0	5	0	0	16.3	0	0	0	$\triangle 3$	4	0	0			51.1
69											6						51.2
70											8						52
71		2	0	5	0	0	5	0	0	0	$\triangle 3$	4	0	0			53.1
72											6						53.2
73											8						54
74		2	0	5	0	0	0	0	0	0	$\triangle 3$	4	0	0			55.1
75											6						55.2
76											8						56
77		2	0	5	0	10	0	0	0	0	$\triangle 3$	6	0	0			57
78		2	0	5	0	5	0	-5	0	0	$\triangle 3$	6	0	0			58
79		2	0	5	10	5	0	0	0	0	$\triangle 3$	6	0	0			59
80		2	-5	5	0	5	0	0	0	0	$\triangle 3$	4	-5	0			60.1
81											6						60.2
82											8						61

42

TEST RUN NUMBERS

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

COEFFICIENTS

IDVAR(1) IDVAR(2) NDV

α OR β
SCHEDULES

TABLE II (Continued)

TEST: CA26		DATA SET/RUN NUMBER COLLATION SUMMARY													DATE: POST TEST	
DATA SET IDENTIFIER	CONFIGURATION	CARRIER				ORBITER									MACH NUMBERS	
		α	β	δ_L	δ_r	δ_e	δ_{BF}	δ_a	ΔX	ΔY	ΔZ	i_0	β_0	ϕ_0		0.6
R/AFED83	747/1 ATY $\phi_2 S_1$	2	-5	5	0	5	0	0	$\triangle 5$	0	0	6	0	0		62.1
84											15					62.2
85											60					62.3
86		2	-5	5	0	5	0	0	$\triangle 4$	0	6	0	0		63.1	
87											15					63.2
88											60					63.3
89		4	0	5	0	5	0	0	0	0	$\triangle 3$	4	0	0		64.1
90												6				64.2
91												8				65
92		4	0	5	0	5	0	0	0	0	$\triangle 3$	4	5	0		66.1
93												6				66.2
94												8				67
95		4	0	-1	0	5	0	0	0	0	$\triangle 3$	4	0	0		68.1
96												6				68.2
97												8				69
98		4	0	5	0	0	0	0	0	0	$\triangle 3$	4	0	0		70.1
99												6				70.2
100												8				71

TEST RUN NUMBERS

43

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

COEFFICIENTS

IDVAR(1) IDVAR(2) NDV

α OR β
SCHEDULES

TABLE II (Continued)

TEST: CA26		DATA SET/RUN NUMBER COLLATION SUMMARY													DATE: POST TEST	
DATA SET IDENTIFIER	CONFIGURATION	CARRIER				ORBITER									MACH NUMBERS	
		α	β	δ_a	δ_r	δ_e	δ_{SE}	δ_o	ΔX	ΔY	ΔZ	L_0	β_0	ϕ_0		0.6
R/AFE/101	747/1 ATY $\phi_2 S_1$	4	-5	5	0	5	0	0	0	0	$\triangle 3$	4	-5	0		72.1
102												6				72.2
103												8				73
104		55	0	5	0	5	0	0	0	0	$\triangle 3$	6	0	0		74
105		0	-5	5	0	5	0	0	0	0	$\triangle 3$	4	-5	0		75.1
106												6				75.2
107												8				76
108	747/1 ATY $\phi_6 S_1$	2	0	5	0	5	-11.7	0	0	0	$\triangle 3$	6	0	0		77
109		2	0	5	0	0	-11.7	0	0	0	$\triangle 3$	4	0	0		78.1
110												6				78.2
111												8				79
112		2	0	5	0	0	-11.7	0	$\triangle 5$	0	0	6	0	0		81.1
113												15				81.2
114												60				81.3
115		2	0	5	0	0	-11.7	0	0	$\triangle 4$	0	6	0	0		82.1
116												15				82.2
117												60				82.3

44

TEST RUN NUMBERS

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

TABLE II (Continued)

TEST: CA26		DATA SET/RUN NUMBER COLLATION SUMMARY													DATE: POST TEST		
DATA SET IDENTIFIER	CONFIGURATION	CARRIER					ORBITER							MACH NUMBERS			
		α	β	δ_A	δ_r	δ_e	δ_{BF}	δ_d	ΔX	ΔY	ΔZ	i_0	β_0	ϕ_0			
R/AFE118	747/1 ATY $\phi_6 S_1$	2	0	-1	0	0	-11.7	0	0	0	$\triangle 3$	6	0	0		0.6	
119		2	0	5	10	0	-11.7	0	0	0	$\triangle 3$	6	0	0		83	
120		2	-5	5	0	0	-11.7	0	0	0	$\triangle 3$	6	-5	0		84	
121		4	0	5	0	0	-11.7	0	0	0	$\triangle 3$	4	0	0		85	
122												6				86.1	
123												6				86.2	
124		0	0	5	0	0	-11.7	0	0	0	$\triangle 3$	4	0	0		87	
125												6				88.1	
126												6				88.2	
127		2	0	5	0	0	-11.7	0	0	0	$\triangle 3$	6	0	7.5		89	
128	747/1 ATY $\phi_2 S_1$	2	0	5	0	5	0	0	0	0	$\triangle 3$	6	0	7.5		90	
129		2	0	5	0	5	0	0	0	0	$\triangle 3$	6	5	7.5		91	
130		2	0	5	0	5	0	0	0	0	$\triangle 3$	6	0	7.5		92	
AFE 131	$\phi_2 S_1$					5	0	0				$\triangle 2$	5	0		93	
132						5	0	0				$\triangle 2$	0	0		94.1	
133						5	0	0				$\triangle 2$	-5	0		94.2	
134						0	0	0				$\triangle 2$	0	0		94.3	
																13*	

TEST RUN NUMBERS

45

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

* Vertical strut blade/orbiter gap sealed

TABLE II (Continued)

DATA SET 1st CHARACTER IDENTIFIER	DATA SET NUMBER	INDEPENDENT VARIABLE		DEPENDENT VARIABLES
		FIRST	SECOND	
AW	1-6	MACH	ALPHAO	BETAO, CN, CLM, CA, CY, CYN, CBL, CL, CD
AW	7	MACH	DZ	DY, DX, CN, CLM, CA, CY, CYN, CBL, CL, CD
AW	8-13	MACH	ALPHAO	BETAO, CN, CLM, CA, CY, CYN, CBL, CL, CD
AW	14-15	MACH	INCID	CN, CLM, CA, CY, CYN, CBL, CL, CD
AWRY	30-52	MACH	DZ	DY, DX, CN, CLM, CA, CY, CYN, CBL, CL, CD
AWRY	53-61	MACH	DY	DX, DZ, CN, CLM, CA, CY, CYN, CBL, CL, CD
AWRY	62-67	MACH	DX	DY, DZ, CN, CLM, CA, CY, CYN, CBL, CL, CD
AWRY	68-82	MACH	DZ	DY, DX, CN, CLM, CA, CY, CYN, CBL, CL, CD
AWRY	83-85	MACH	DX	DY, DZ, CN, CLM, CA, CY, CYN, CBL, CL, CD
AWRY	86-88	MACH	DY	DX, DZ, CN, CLM, CA, CY, CYN, CBL, CL, CD
AWRY	89-111	MACH	DZ	DY, DX, CN, CLM, CA, CY, CYN, CBL, CL, CD
AWRY	112-114	MACH	DX	DY, DZ, CN, CLM, CA, CY, CYN, CBL, CL, CD
AWRY	115-117	MACH	DY	DX, DZ, CN, CLM, CA, CY, CYN, CBL, CL, CD
AWRY	118-130	MACH	DZ	DY, DX, CN, CLM, CA, CY, CYN, CBL, CL, CD
AW	131-133	MACH	INCID	CN, CLM, CA, CY, CYN, CBL, CL, CD
AW	134	MACH	ALPHAO	BETAO, CN, CLM, CA, CY, CYN, CBL, CL, CD
BX	1-4	MACH	ALPHAO	CPCO, CPB1, CPB2, CPB3
BX	5-6	MACH	ALPHAO	CPCO, CPB1, CPB2, CPB3, CPS1, CPS2
BX	7	MACH	DZ	CPCO, CPB1, CPB2, CPB3, CPS1, CPS2, ALPHAO, BETAO
BX	8-11	MACH	ALPHAO	CPCO, CPB1, CPB2, CPB3, CPS1, CPS2
BX	12-13	MACH	ALPHAO	CPCO, CPS1, CPS2
BX	14-15	MACH	INCID	CPCO, CPS1, CPS2
BX	30-52	MACH	DZ	CPCO, CPB1, CPB2, CPB3, CPS1, CPS2, ALPHAO, BETAO, INCID, ALPHAC
BX	53-61	MACH	DY	CPCO, CPB1, CPB2, CPB3, CPS1, CPS2, ALPHAO, BETAO, INCID, ALPHAC
BX	62-67	MACH	DX	CPCO, CPB1, CPB2, CPB3, CPS1, CPS2, ALPHAO, BETAO INCID, ALPHAC

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TABLE II (Continued)

DATA SET 1st CHARACTER IDENTIFIER	DATA SET NUMBER	INDEPENDENT VARIABLE		DEPENDENT VARIABLES
		FIRST	SECOND	
BX	68-82	MACH	DZ	CPCO, CPB1, CPB2, CPB3, CPS1, CPS2, ALPHAO, BETAO, INCID, ALPHAC
BX	83-85	MACH	DX	CPCO, CPB1, CPB2, CPB3, CPS1, CPS2, ALPHAO, BETAO, INCID, ALPHAC
BX	86-88	MACH	DY	CPCO, CPB1, CPB2, CPB3, CPS1, CPS2, ALPHAO, BETAO, INCID, ALPHAC
BX	89-111	MACH	DZ	CPCO, CPB1, CPB2, CPB3, CPS1, CPS2, ALPHAO, BETAO, INCID, ALPHAC
BX	112-114	MACH	DX	CPCO, CPS1, CPS2, ALPHAO, BETAO, INCID, ALPHAC
BX	115-117	MACH	DY	CPCO, CPS1, CPS2, ALPHAO, BETAO, INCID, ALPHAC
BX	118-130	MACH	DZ	CPCO, CPS1, CPS2, ALPHAO, BETAO, INCID, ALPHAC
BX	131-133	MACH	INCID	CPCO, CPS1, CPS2
BX	134	MACH	ALPHAO	CPCO, CPB1, CPB2, CPB3, CPS1, CPS2
RY	16-23	MACH	ALPHAC	BETAC, CN, CLM, CA, CY, CYN, CBL, CL, CD
RY	24	MACH	DZ	DY, DX, CN, CLM, CA, CY, CYN, CBL, CL, CD
RY	25	MACH	DX	DY, DZ, CN, CLM, CA, CY, CYN, CBL, CL, CD
RY	26-29	MACH	ALPHAC	BETAC, CN, CLM, CA, CY, CYN, CBL, CL, CD
SZ	16-23	MACH	ALPHAC	CPCC, CPSB1, CPSB2, CPSB3, Q(PSF)
SZ	24	MACH	DZ	CPCC, CPSB1, CPSB2, CPSB3, Q(PSF), ALPHAC, BETAC
SZ	25	MACH	DX	CPCC, CPSB1, CPSB2, CPSB3, Q(PSF), ALPHAC, BETAC
SZ	26-29	MACH	ALPHAC	CPCC, CPSB1, CPSB2, CPSB3, Q(PSF)
SZ	30-52	MACH	DZ	CPCC, CPSB1, CPSB2, CPSB3, Q(PSF), ALPHAC, BETAC, ALPHAO, BETAO, INCID
SZ	53-61	MACH	DY	CPCC, CPSB1, CPSB2, CPSB3, Q(PSF), ALPHAC, BETAC, ALPHAO, BETAO, INCID
SZ	62-67	MACH	DX	CPCC, CPSB1, CPSB2, CPSB3, Q(PSF), ALPHAC, BETAC, ALPHAO, BETAO, INCID

TABLE II (Concluded)

DATA SET 1st CHARACTER IDENTIFIER	DATA SET NUMBER	INDEPENDENT VARIABLE		DEPENDENT VARIABLES
		FIRST	SECOND	
SZ	68-82	MACH	DZ	CPCC, CPSB1, CPSB2, CPSB3, Q(PSF), ALPHAC, BETAC, ALPHAO, BETAO, INCID
SZ	83-85	MACH	DX	CPCC, CPSB1, CPSB2, CPSB3, Q(PSF), ALPHAC, BETAC, ALPHAO, BETAO, INCID
SZ	86-88	MACH	DY	CPCC, CPSB1, CPSB2, CPSB3, Q(PSF), ALPHAC, BETAC, ALPHAO, BETAO, INCID
SZ	89-111	MACH	DZ	CPCC, CPSB1, CPSB2, CPSB3, Q(PSF), ALPHAC, BETAC, ALPHAO, BETAO, INCID
SZ	112-114	MACH	DX	CPCC, CPSB1, CPSB2, CPSB3, Q(PSF), ALPHAC, BETAC, ALPHAO, BETAO, INCID
SZ	115-117	MACH	DY	CPCC, CPSB1, CPSB2, CPSB3, Q(PSF), ALPHAC, BETAC, ALPHAO, BETAO, INCID
SZ	118-130	MACH	DZ	CPCC, CPSB1, CPSB2, CPSB3, Q(PSF), ALPHAC, BETAC, ALPHAO, BETAO, INCID

TABLE III (MODEL DIMENSIONAL DATA)

a. Orbiter Model

MODEL COMPONENT BODY -- CML -- B/L

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>248.575</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>

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TABLE III (Cont'd)

a. Orbiter Model

MODEL COMPONENT : CANOPY (OUTER MOLD LINE) - C₂₁

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

Configuration 140C.

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>
Platform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

WINDSHIELD PLANES:

$$.7012 X_0 - .2552 Y_0 - .6656 Z_0 - 6.1789 = 0$$

$$.5710 X_0 - .5641 Y_0 - .5965 Z_0 + 32.7354 = 0$$

$$.2636 X_0 - .7564 Y_0 - .5965 Z_0 + 189.4099 = 0$$

TABLE III (Cont'd)

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a. Orbiter Model

MODEL COMPONENT ELEVON - E₁₁

GENERAL DESCRIPTION 6.0 In. F.S. gaps machined into E₁₁ elevon.

Flinger doors, centerbody pieces, and lipseals 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>
Area Moment (Product of area & c _g) (Nominal chordwise), 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: NOZZLES - N₉₂

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:	FULL SCALE	MODEL SCALE
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	<u>45.09</u>	<u>0.564</u>
Throat	<u> </u>	<u> </u>
Inlet	<u> </u>	<u> </u>
Area - ft ²		
Exit	<u>11.09</u>	<u>0.139</u>
Throat	<u> </u>	<u> </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>
	<u> </u>	<u> </u>
	<u> </u>	<u> </u>
	<u> </u>	<u> </u>
Null Position - Deg.		
Pitch	<u>15.82°</u>	<u>15.82°</u>
Yaw	<u>6.5°</u>	<u>6.5°</u>
	<u> </u>	<u> </u>
	<u> </u>	<u> </u>

TABLE III (Cont'd)

a. Orbiter Model

MODEL COMPONENT: MFG 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: 0:0.125

DRAWING NUMBER: VC70-000002, VL70-008144; RSO09169, RSO09107, 13M15000

DIMENSIONS:	FULL SCALE	MODEL SCALE
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)

MODEL COMPONENT: MP3 NOZZLES - N₁₀₅ a. Orbiter Model

GENERAL DESCRIPTION: Same as N₉₄ except the upper nozzle is removed.

MODEL SCALE: 0.0125

DRAWING NUMBER: VC70-000002, VL70-008144; RS009169, RS009107, 13ML5000

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

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TABLE III (Cont'd)

a. Orbiter model.

MODEL COMPONENT RUDDER - R₁₈

GENERAL DESCRIPTION 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.

MODEL SCALE: 0.0125

DRAWING NUMBER _____

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	<u>34.833</u>	<u>34.833</u>
(MAC X AREA, Ft ³)	<u> </u>	<u> </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>

TABLE III (Cont'd)

a. Orbiter Model

MODEL COMPONENT : ORBITER TAILCONE - TC₄

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)

a. Orbiter Model

MODEL COMPONENT: VERTICAL - V₂₃ (Outer Mold Lines)

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

MODEL SCALE: 0.0125

DRAWING NUMBER: VC70-000002, master dimensions.

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
TOTAL DATA		
Area (Theo) - Ft 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>0.0002</u>
Blanketed Area	<u>0.0</u>	<u>0.0</u>

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TABLE III (Cont'd)

a. Orbiter Model

MODEL COMPONENT: WING-W116

GENERAL DESCRIPTION: _____

NOTE: Identical to W111, except airfoil thickness; Dihedral angle is along trailing edge of wing. Geometric twist = 0.

MODEL SCALE: 0.0125

TEST NO. _____ DWG. NO. VL70-000140A -000200

DIMENSIONS: _____ FULL-SCALE MODEL SCALE

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TOTAL DATA

	FULL-SCALE	MODEL SCALE
Area (Theo.) Ft ²	2690.00	0.420
Planform	936.68	11.709
Span (Theo) In.	2.265	2.265
Aspect Ratio	1.177	1.177
Rate of Taper	0.200	0.200
Taper Ratio	3.500	3.500
Dihedral Angle, degrees	0.500	0.500
Incidence Angle, degrees		
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:0.0:	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

	FULL-SCALE	MODEL SCALE
Area (Theo) Ft ²	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 b	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 ft ²	113.18	0.377
Leading Edge Intersects Fus M. L. @ Sta	500.0	6.250
Leading Edge Intersects Wing @ Sta	1024.0	12.800

TABLE III (MODEL DIMENSIONAL DATA)

a. Orbiter Model (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 III (MODEL DIMENSIONAL DATA)

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-A01559-4, -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	0.0
	BSTA	681.52	8.519
	BWL	480.4	6.005

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 ₀ , 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)

b. Carrier Model

MODEL COMPONENT: ATTACH STRUCTURE - AT₁₁₂

GENERAL DESCRIPTION: Forward attach structure between the Orbiter and Carrier with truncated strut fairings. The Orbiter/strut attach point is covered with a "bathtub" fairing, and the 747/strut attach points are also faired over. Struts are set in the $i_0 = 4^\circ$ position.

MODEL SCALE: 0.0125

DRAWING NO.: Boeing Dwgs. 747-MD-680 (Modified), AX 1319-224

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
i_0 , Incidence angle, deg. (Orbiter FRL to 747 FRL)	4.0	4.0
Strut Fairing		
Chord, In.	18.667	0.233
t/c	0.480	0.480
Length, (Each side), In.	112.0	1.400
Orbiter/Strut "Bathtub" Fairing		
Chord, In.	87.20	1.09
t/c	0.275	0.275
Carrier Attach Points, In.		
BSTA	680.0	8.500
BWL	372.0	4.650
BL	466.3	10.829
Orbiter Attach Point, In.		
X_0	388.15	4.852
Z_0	283.11	3.539
Y_0	0.0	0.0
BSTA	680.0	8.500
BWL	480.4	6.005

TABLE III (Cont'd)

b. Carrier Model

MODEL COMPONENT: ATTACH STRUCTURE - AT₁₁₃

GENERAL DESCRIPTION: Aft attach structure between Orbiter and Carrier, all components except the drag struts are faired. Consists of two faired vertical members, two sway braces, and two drag struts. There are fairing blisters at each end of the sway braces and on the forward end of the drag struts.

MODEL SCALE: 0.0125

DRAWING NO.: Boeing Dwgs. 747-MD-683, AX 1319-213

DIMENSIONS:		<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Orbiter Attach Points, In.			
	X _o	1317.0	16.462
	Y _o	±96.51	±1.206
	Z _o	267.5	3.344
	BSTA	1607.0	20.087
	BWL	400.0	5.000
747 Attach Points, In.			
	BSTA	1607.0	20.087
	BWL	320.0	4.000
	BL	±96.51	±1.206
Main Strut Fairings			
Root chord (BWL 320-358.8), In.		80.0	
t/c, Root chord		0.183	0.183
Tip chord, Theoretical (BWL 398), In.		137.0	1.713
t/c, Tip chord, Theoretical		0.250	0.250
Sway Brace Fairings			
Chord, In.		40.28	0.504
t/c		0.180	0.180
Length (Each side), In.		56.0	0.700
Drag Struts			
Fwd attach points		BSTA, in. 1443	18.038
		BWL, in. 320	4.000
		BL, in. ±96.51	±1.206
Diameter, In.		12.0	0.150

TABLE III (Cont'd)

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

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

MODEL SCALE: 0.0125 MODEL DWG: 1318I-1

DRAWING NUMBER: 65C13609, 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>2.20</u>
Base	<u> </u>	<u> </u>

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 747, 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.: 65C13609, 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 - S_{1-12}

GENERAL DESCRIPTION: Multi-panel flight spoilers. Four outboard and two inboard spoilers per side. Subscript denotes spoiler panel S_1 is the most outboard L.H. panel and S_{12} 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 (Cont'd)

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 SC</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 (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	0.43
Fus. Sta. of 0.25 MAC	2529.6	31.62
W.P. of 0.25 MAC	528.0	6.60

TABLE III (Concluded)

b. Carrier Model

MODEL COMPONENT: WING - W_{44.1}

GENERAL DESCRIPTION: Swept 747 wing

MODEL SCALE: 0.0125

MODEL DWG: 1318I-1

DRAWING NO.: 65C13609, 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

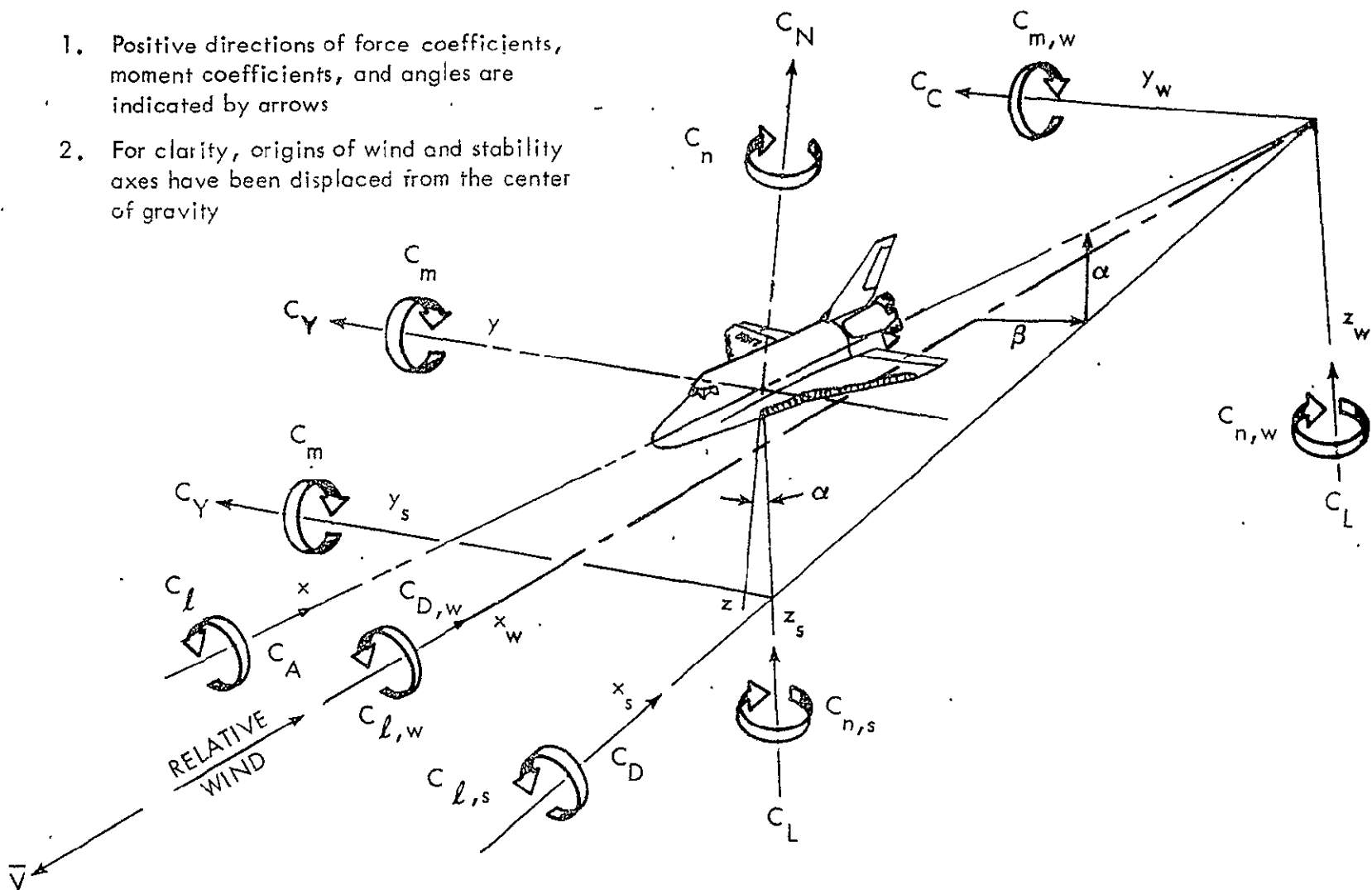
TABLE IV.

CA-26 DATASET DESCRIPTION

Dataset	Type	Description
RFEXXX	YFEXXX	Carrier main balance data. Due to the large amount of data, alternate points were placed in corresponding datasets, e.g., R + S = total. Y and Z contain additional variables supplementary to R and S, respectively.
SFEXXX	ZFEXXX	
AFEXXX	WFEXXX	Orbiter balance data. Data were separated similar to the carrier data where W and X contain the supplementary variables.
BFEXXX	XFEXXX	

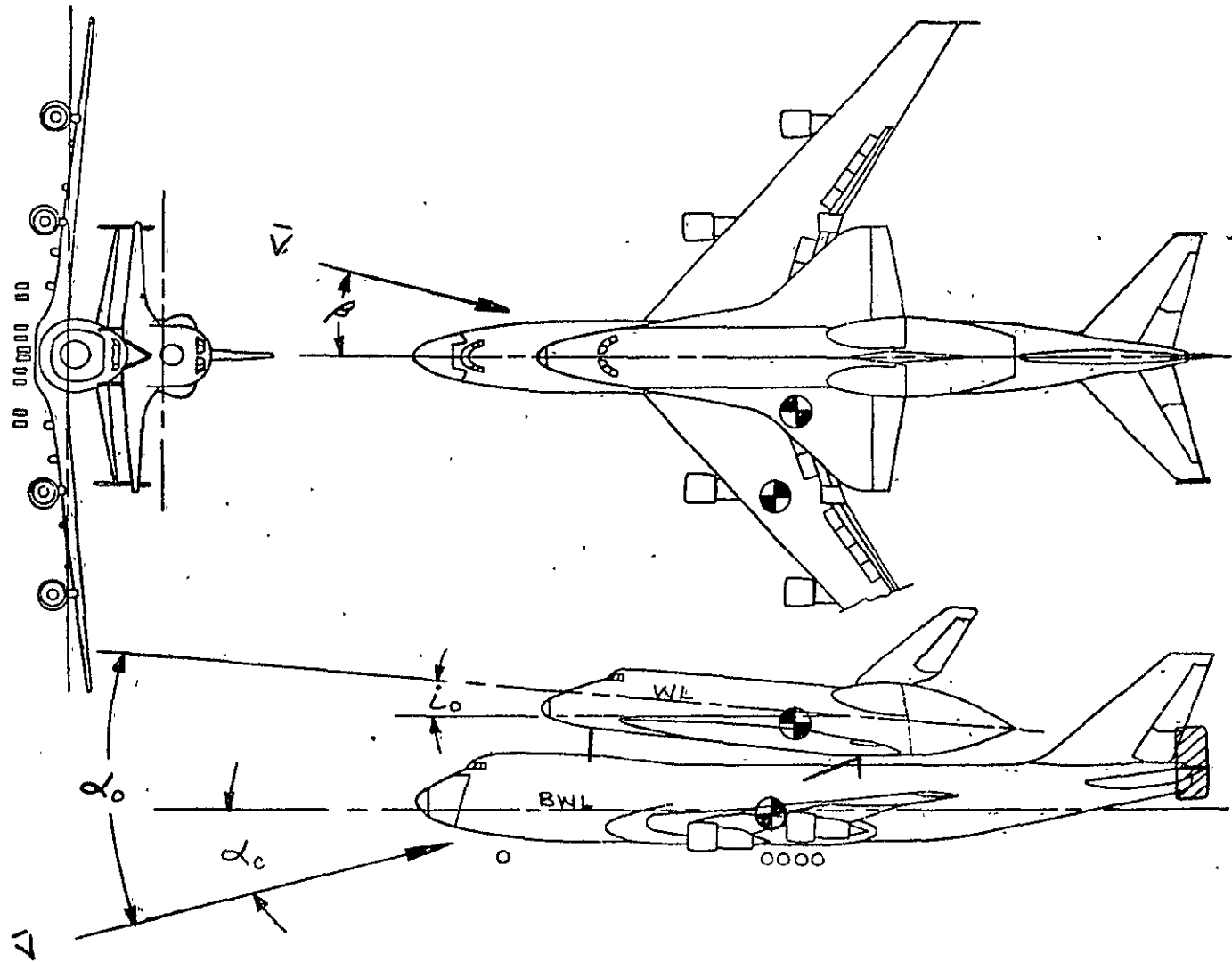
Notes:

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. General

Figure 1. Axis systems.



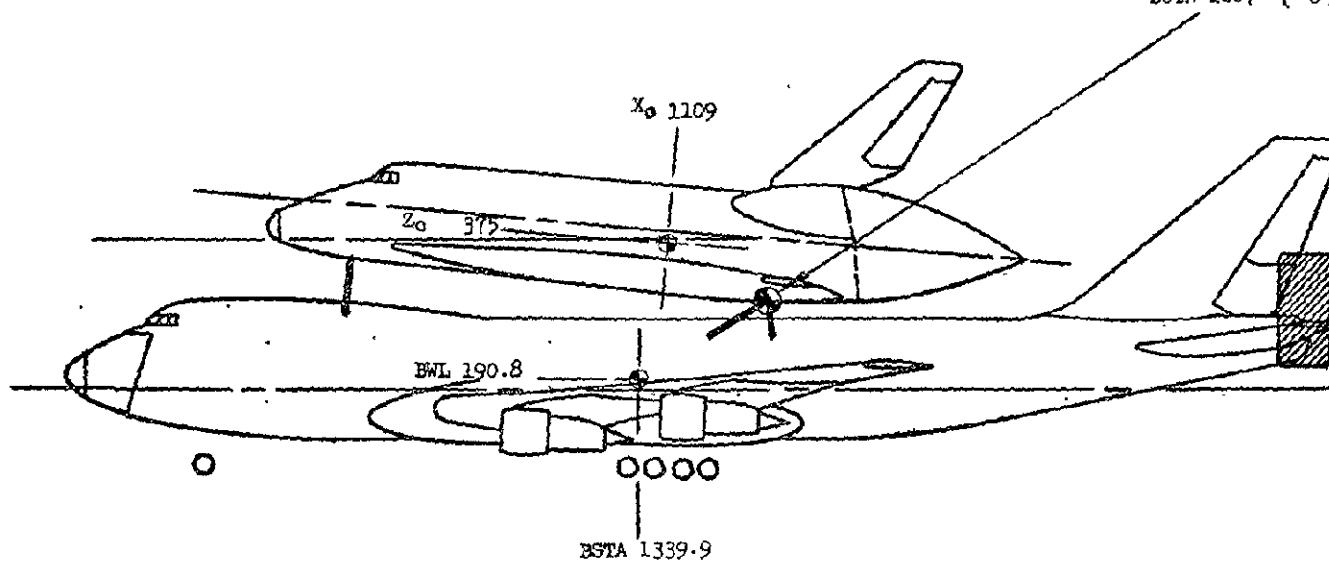
b. Orbiter/747 Angular Relations
Figure 1. Axis systems

REFERENCE DIMENSIONS (PS)

	ORBITER	747 CARRIER
WING AREA ~ Ft ²	2690	5900
MAC (\bar{c}) ~ INCHES	474.81	327.78
SPAN (b) ~ INCHES	936.68	2348.04
MOMENT REFERENCE CENTER	67.5% LB	25.0% \bar{c}
F.S. ~ INCHES	1109.0	1339.9
W.P. ~ INCHES	375.0	190.8

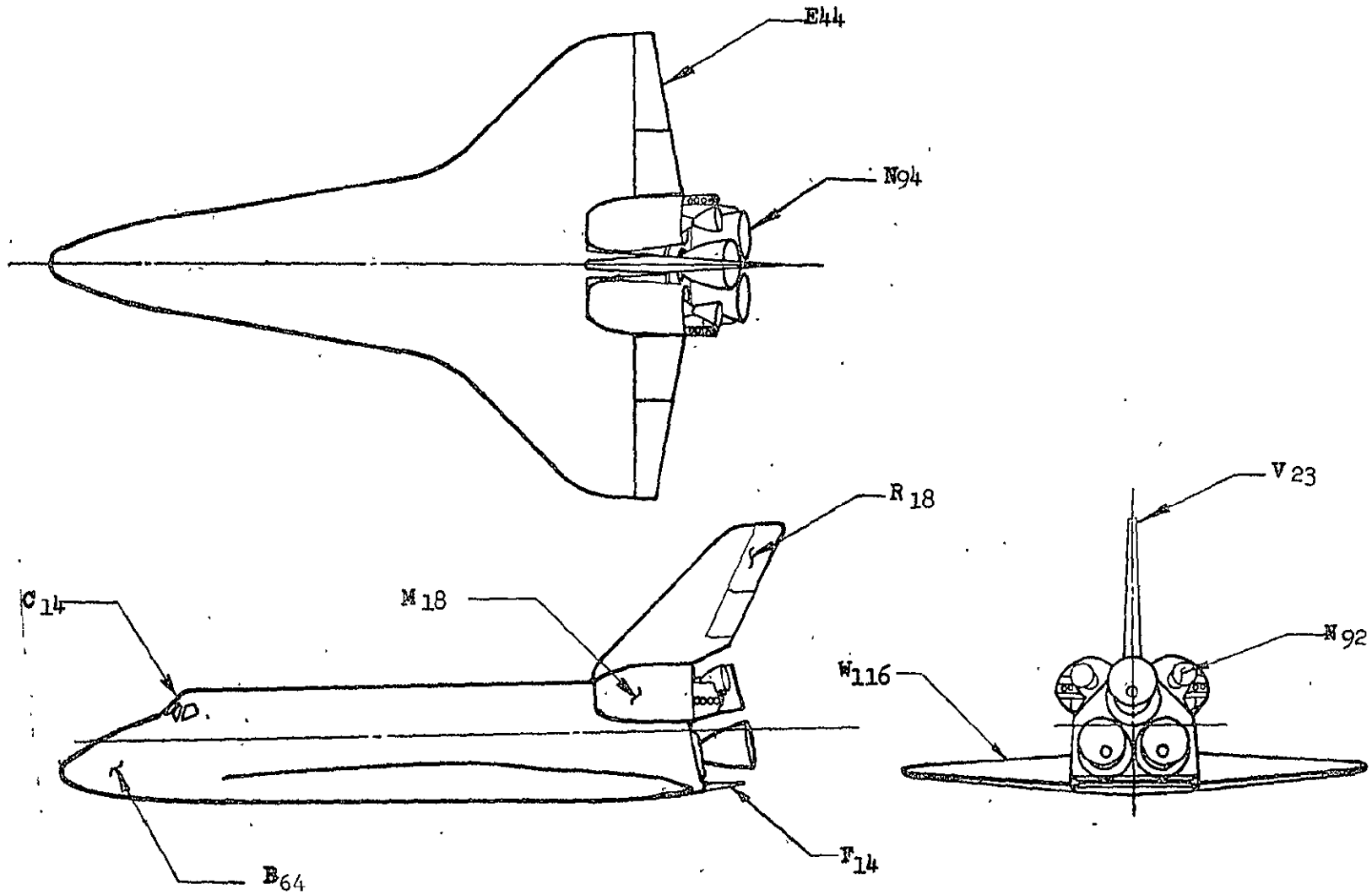
BWL 400 (X₀ 96 51)
 BSTA 1607 (Z₀ 267.5)
 (X₀ 1317)

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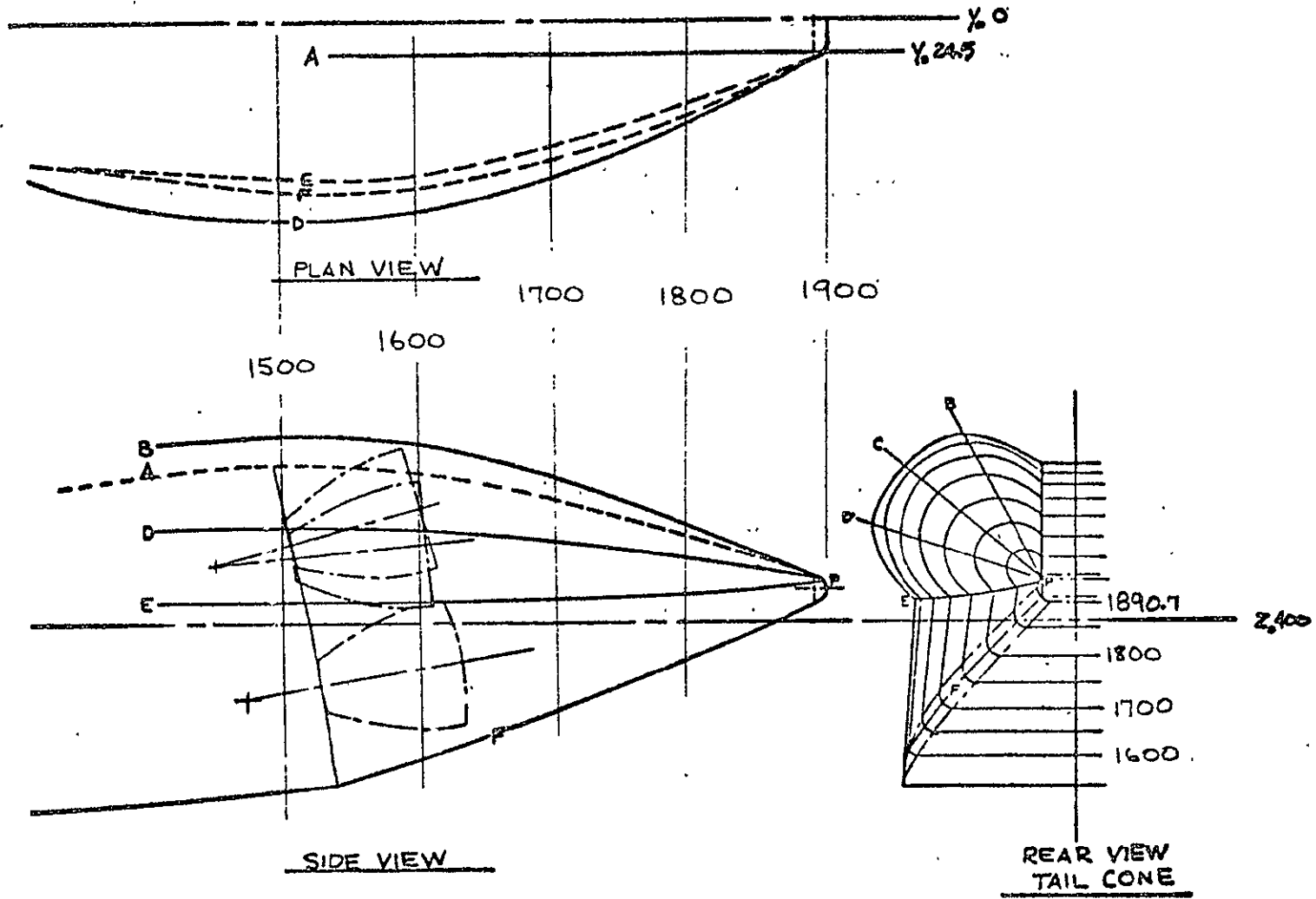


c. Orbiter/747 Flight Test Configuration Reference Dimensions

Figure 1. Axis systems

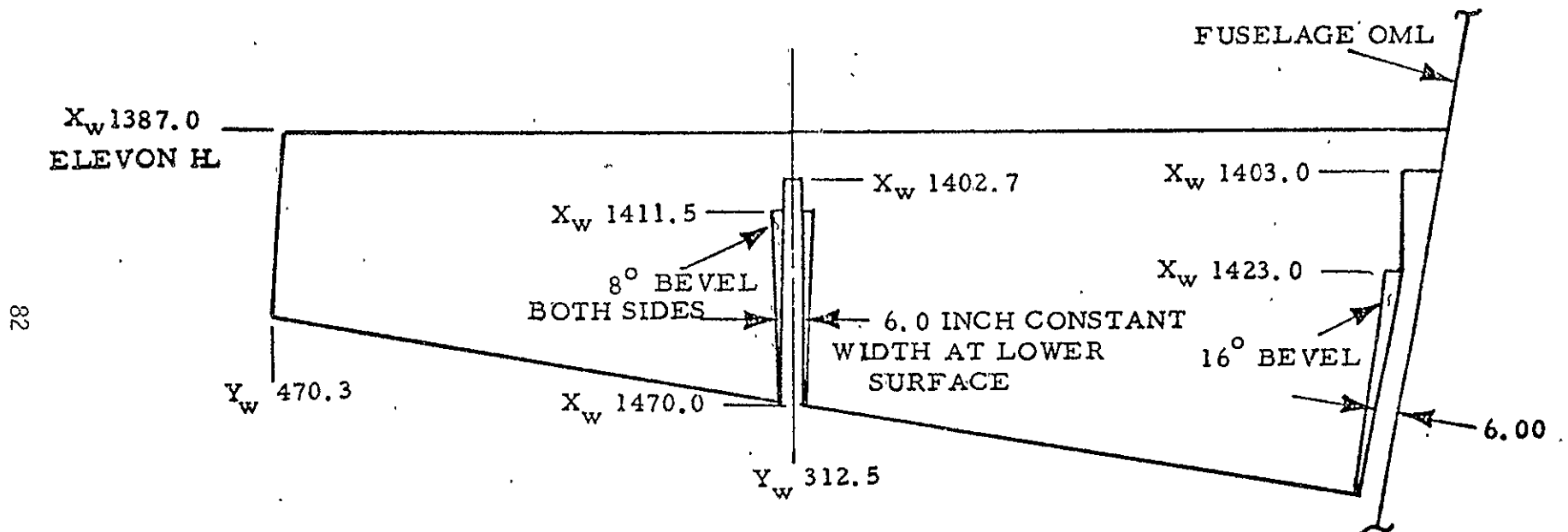


a. SSV Orbiter Configuration (VC70-000002)
Figure 2. Model Instrumentation Sketches



b. Orbiter Tail Cone -- TC₄ (X_{3B})
Figure 2. Model Instrumentation Sketches

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

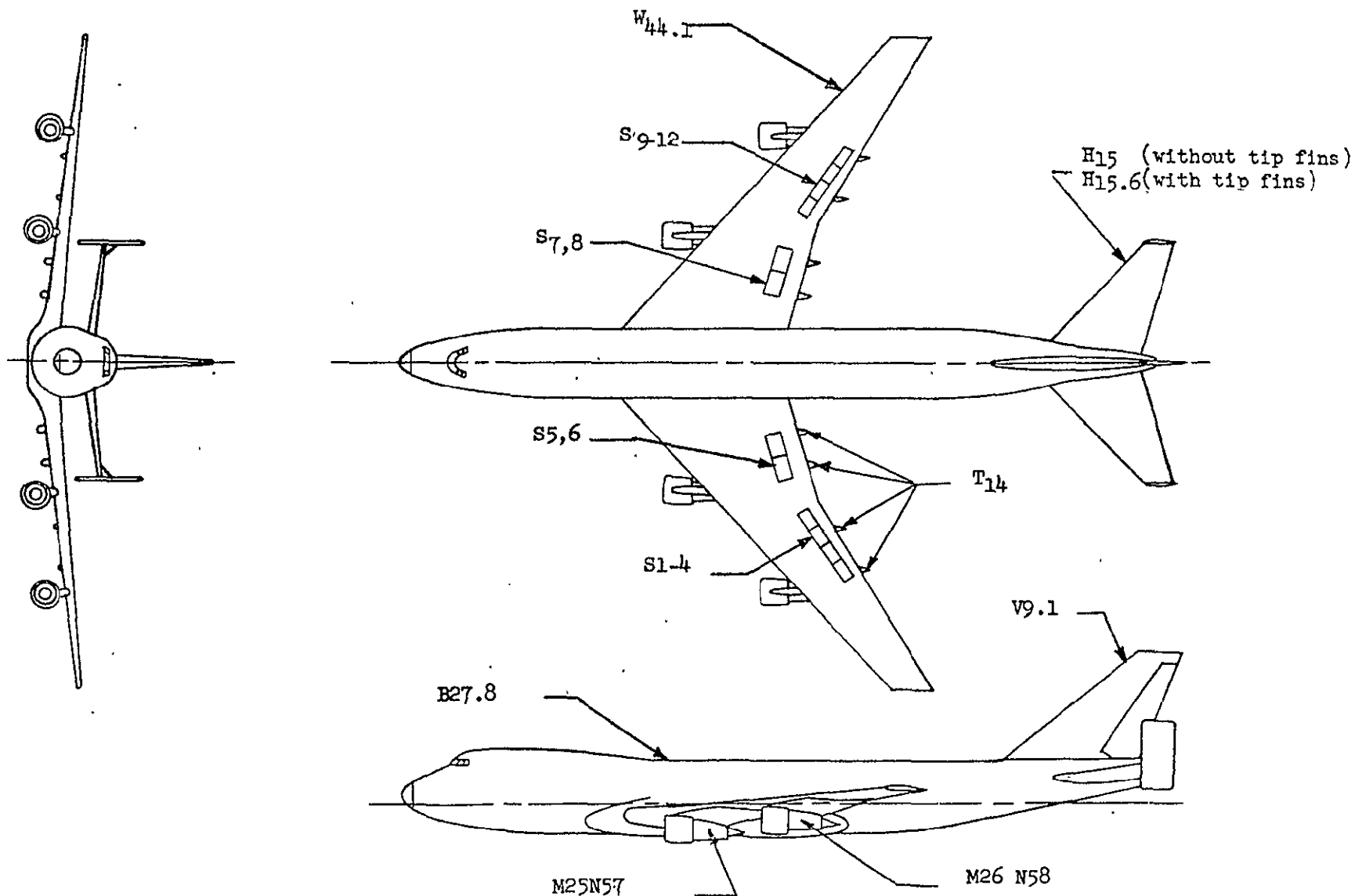


(ALL DIMENSIONS ARE FULL SCALE, INCHES)

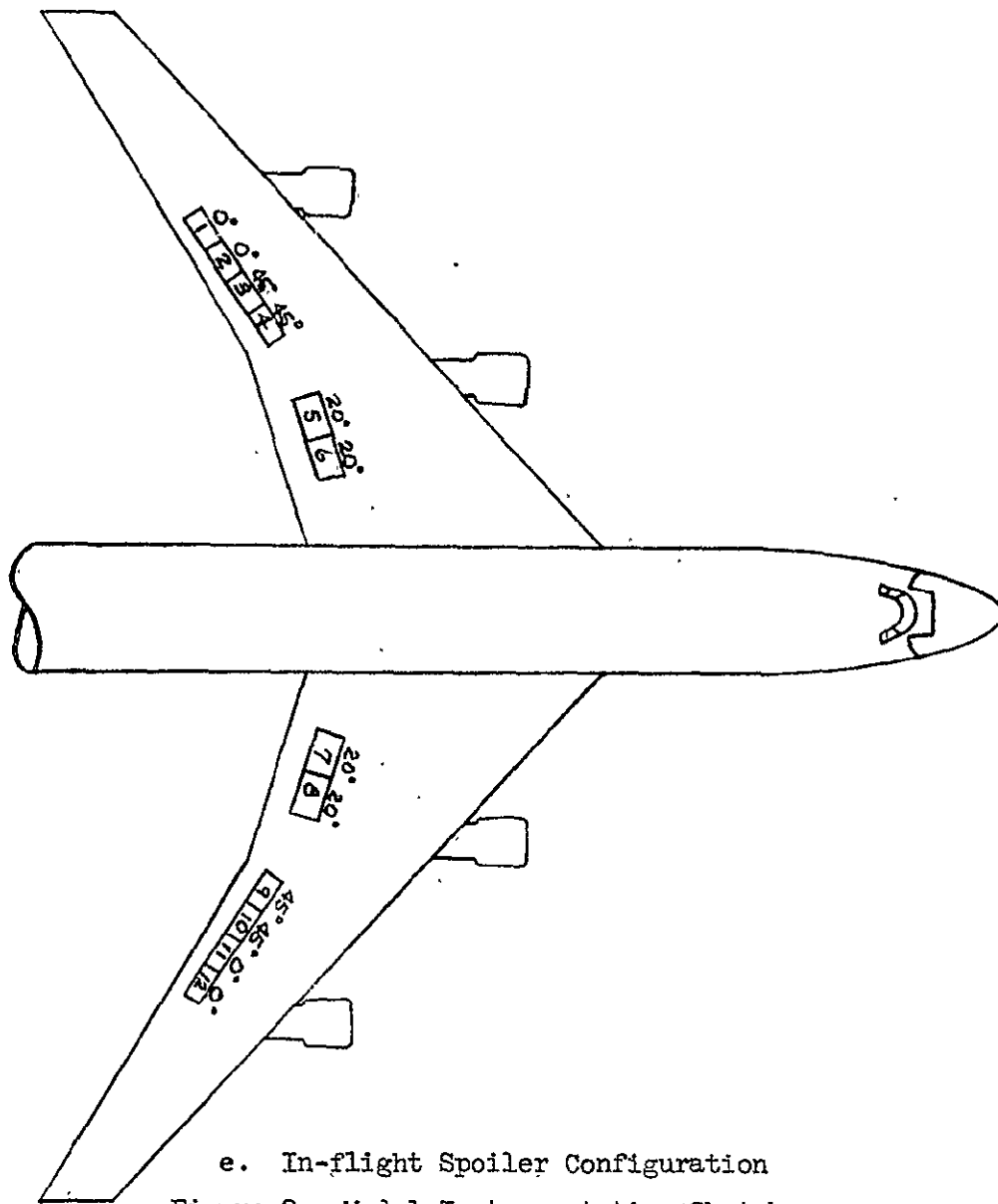
(VIEW IS PERPENDICULAR TO WING
REFERENCE PLANE)

c. Elevon - E₄₄

Figure 2. Model Instrumentation Sketches



d. 747-100 Configuration (Model AX1318I-1)
Figure 2. Model Instrumentation Sketches

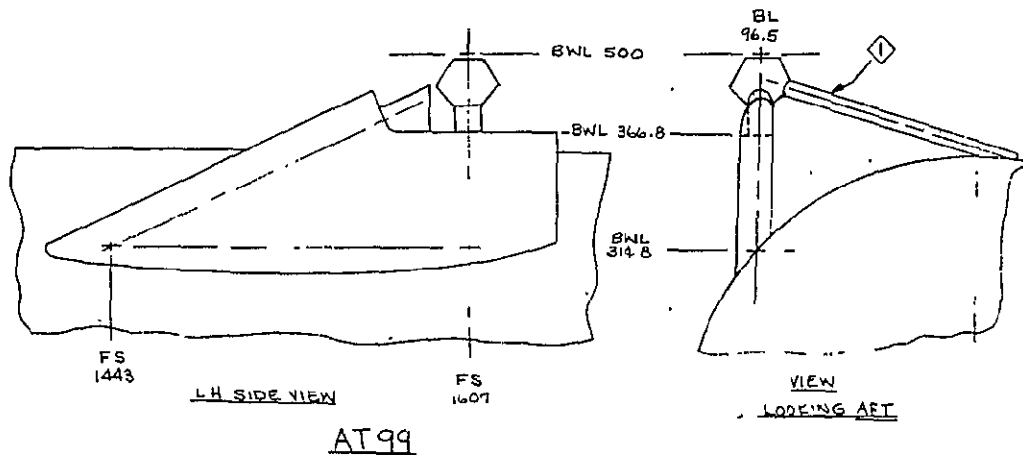
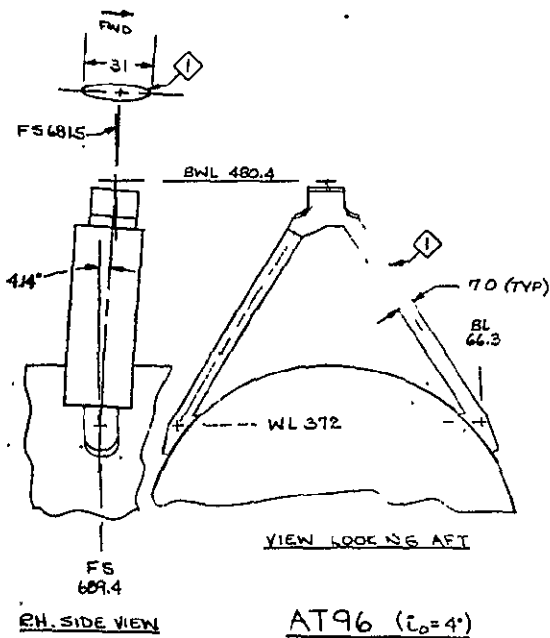


e. In-flight Spoiler Configuration

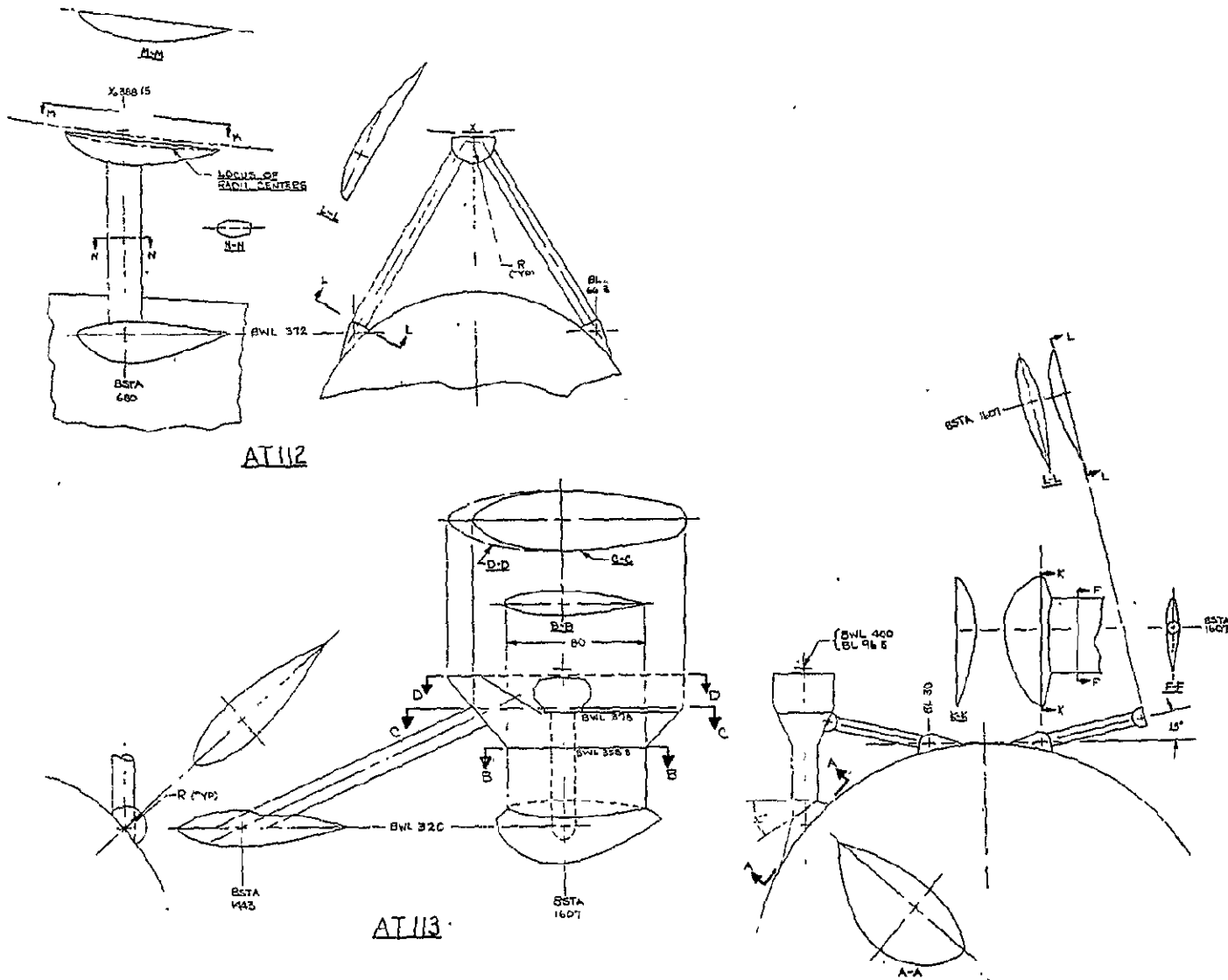
Figure 2. Model Instrumentation Sketches

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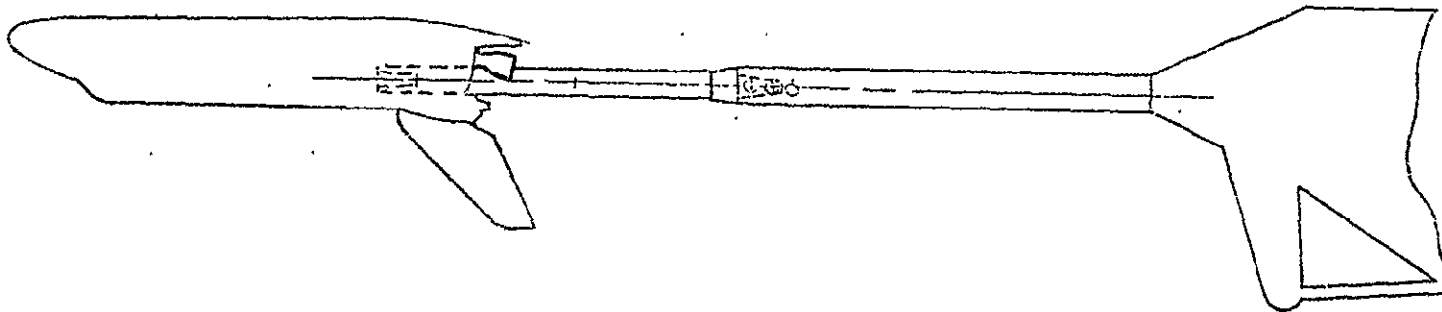
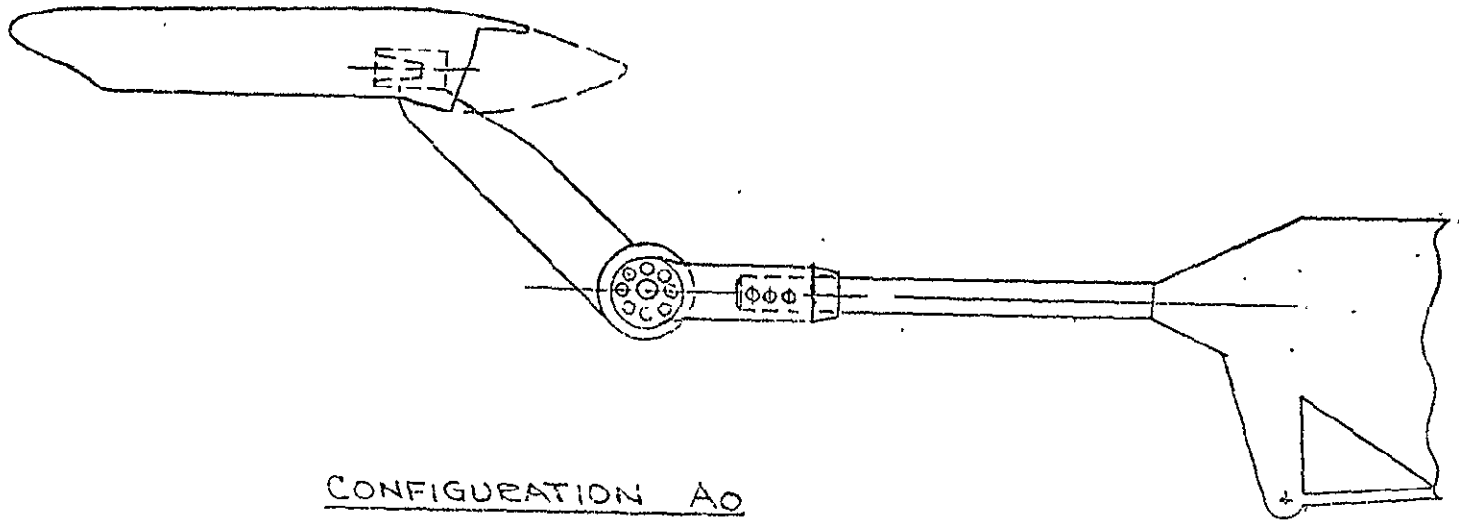
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f. Simulated Attach Structure AT96 and AT99 (AT_x)
Figure 2. Model Instrumentation Sketches

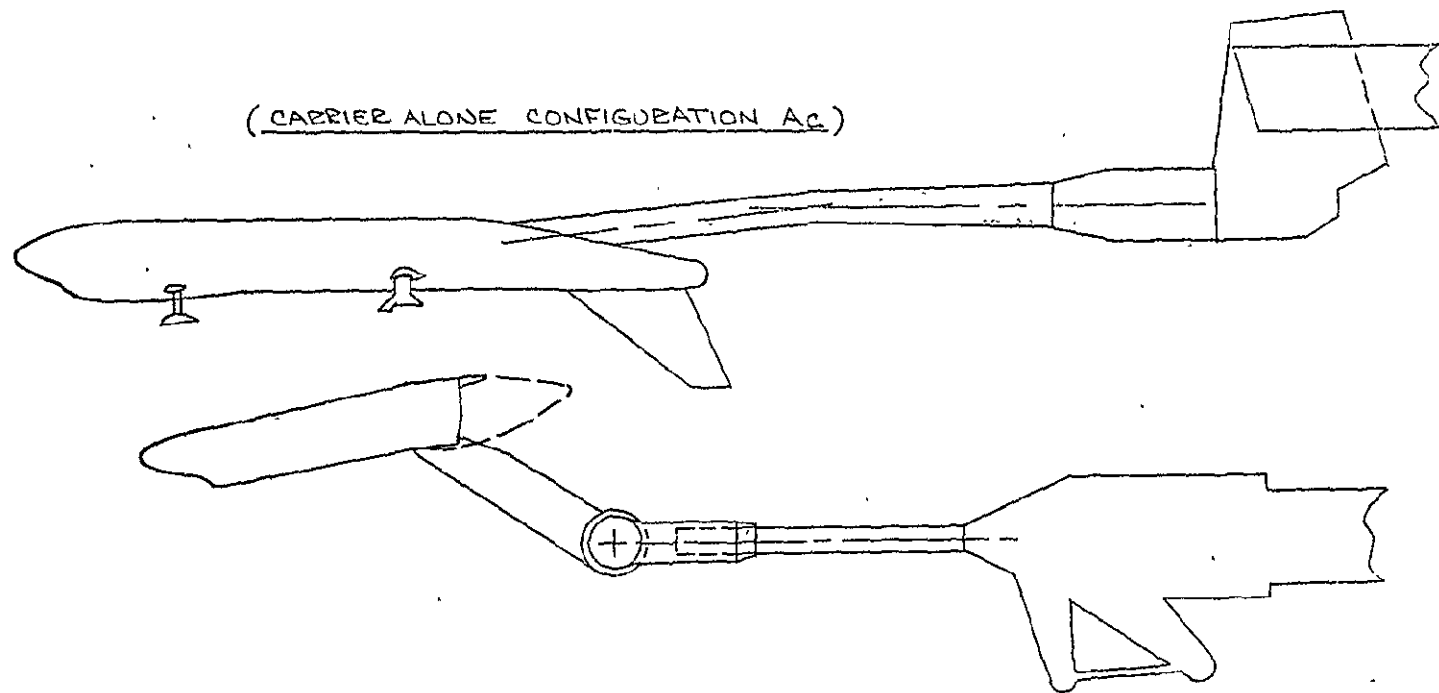


g. Simulated Attach Structure AT112 and AT113 (ATy)
 Figure 2. Model Instrumentation Sketches



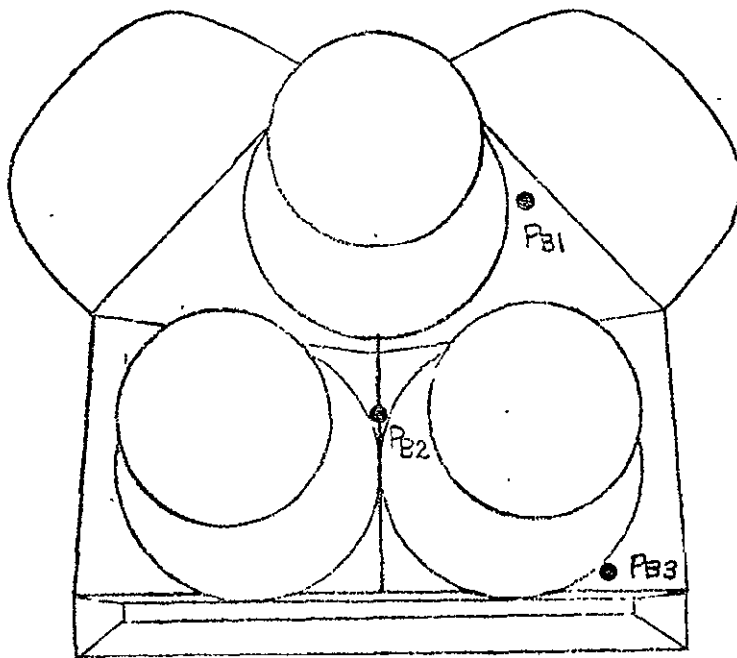
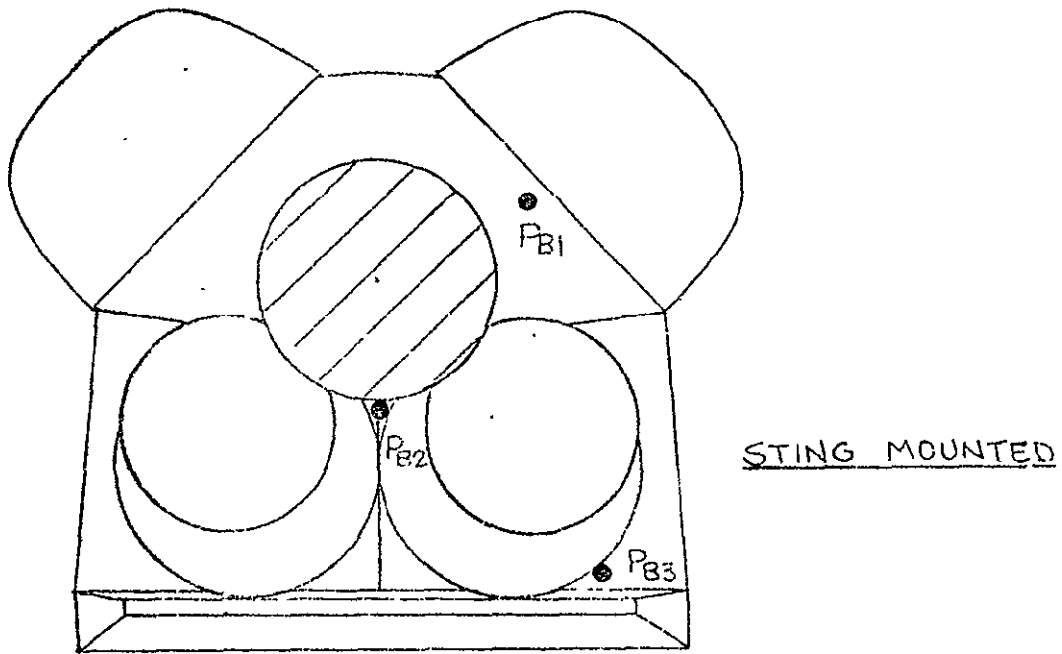
h. Orbiter Alone Installation Sketches

Figure 2. Model Instrumentation Sketches

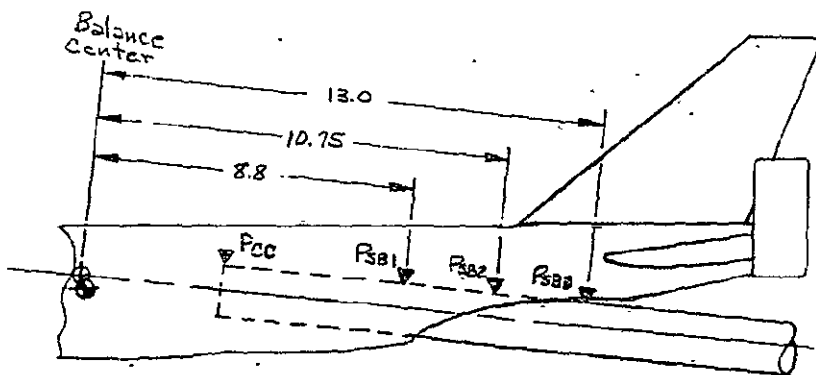
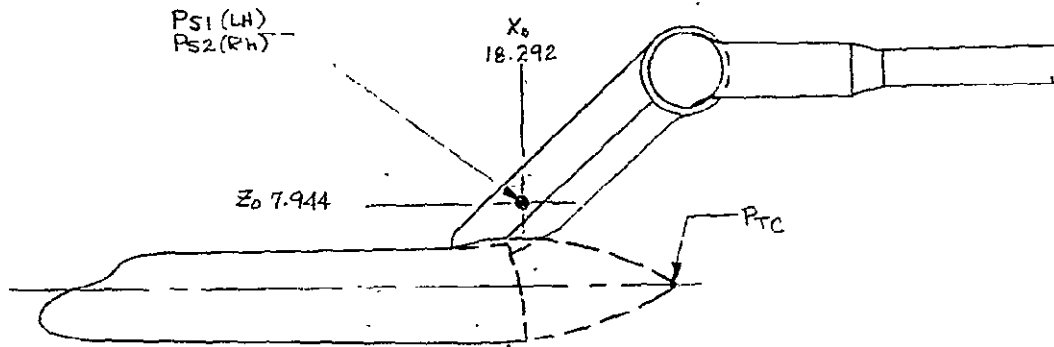


CONFIGURATION A₁

1. Carrier and Separation Installation Sketches . . .
Figure 2. Model Instrumentation Sketches



j. Orbiter Base Pressure Tap Locations
 Figure 2. Model Instrumentation Sketches



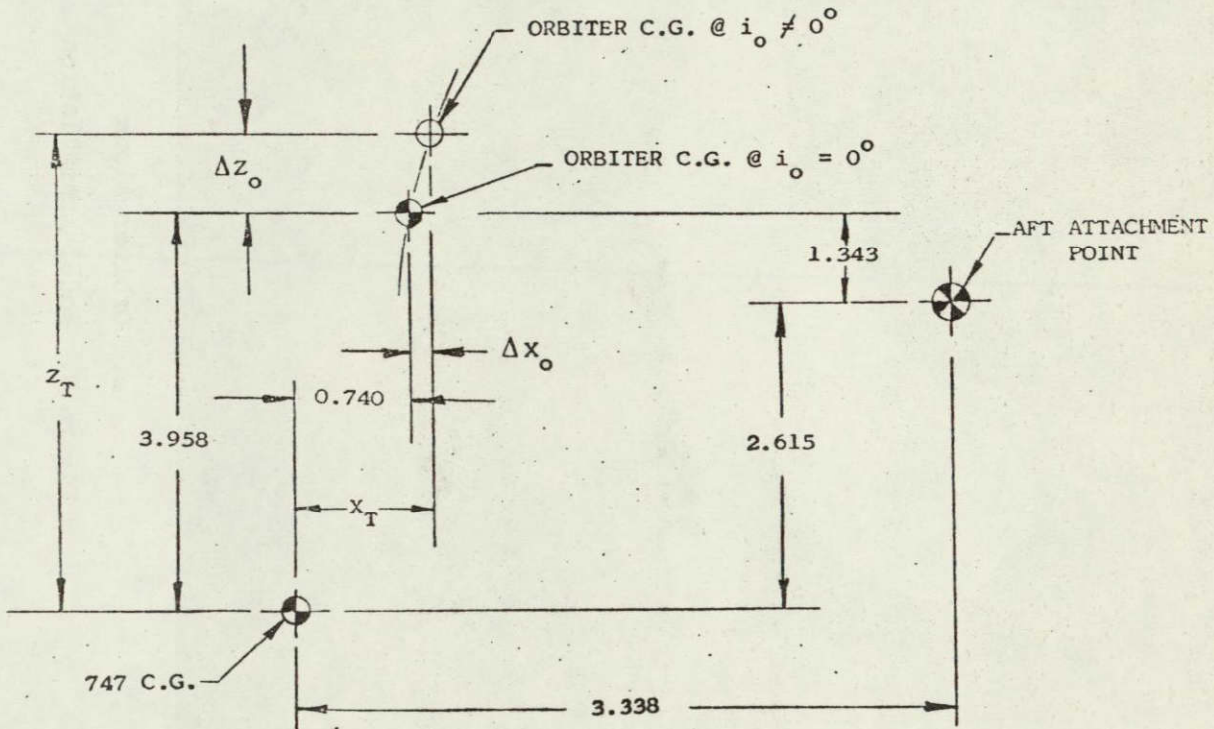
k. Sting and Strut Pressure Tap Locations
 Figure 2. Model Instrumentation Sketches

$$\Delta x_o = 2.925 \cos (i_o + 27.336)$$

$$\Delta z_o = 2.925 \sin (i_o + 27.336) - 1.343$$

$$x_{\text{TRANSFER}} = 0.740 + \Delta x_o$$

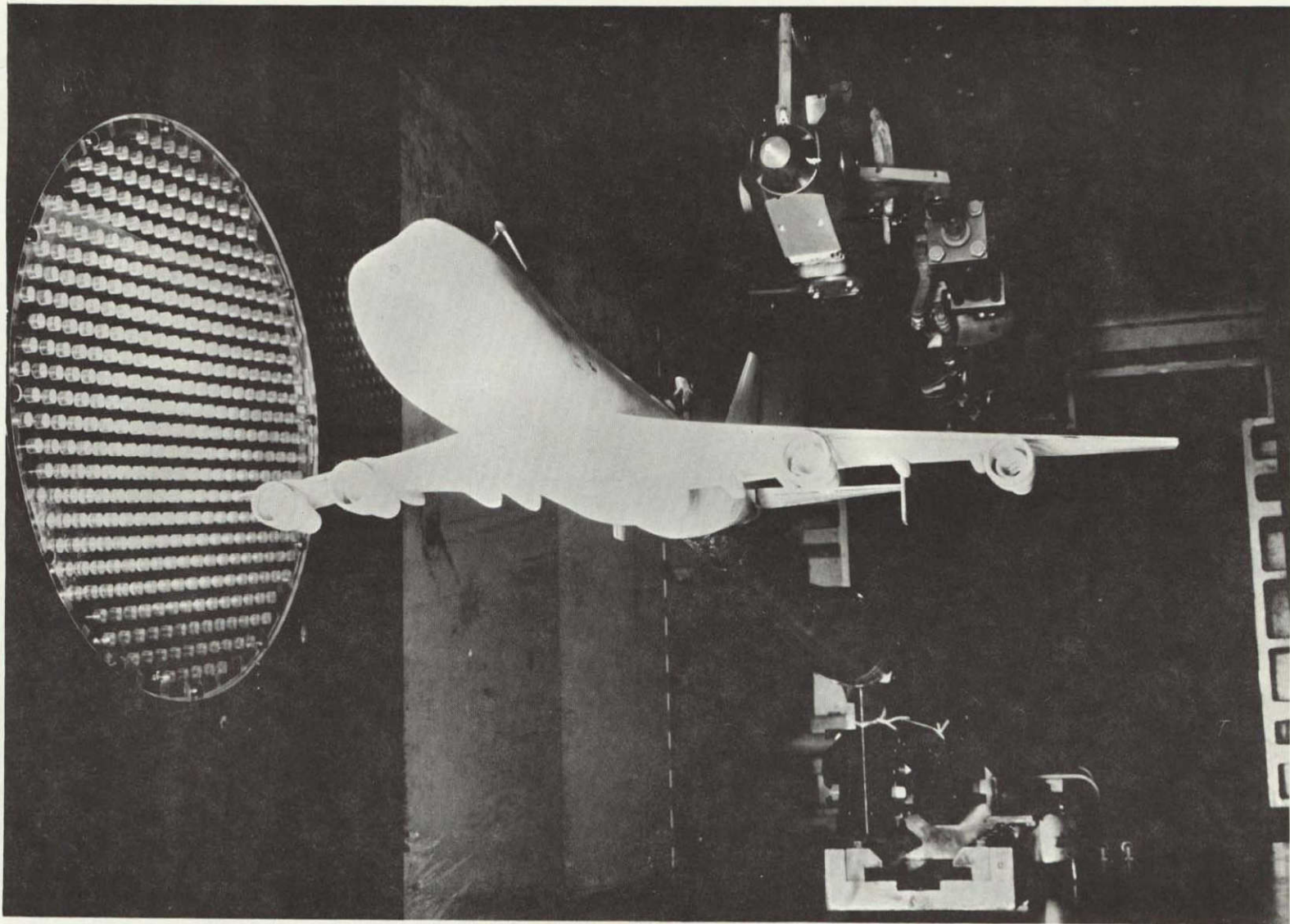
$$z_{\text{TRANSFER}} = 3.958 + \Delta z_o$$



1. Orbiter/747 Moment Transfers (Mated)
 Figure 2. Model Instrumentation Sketches

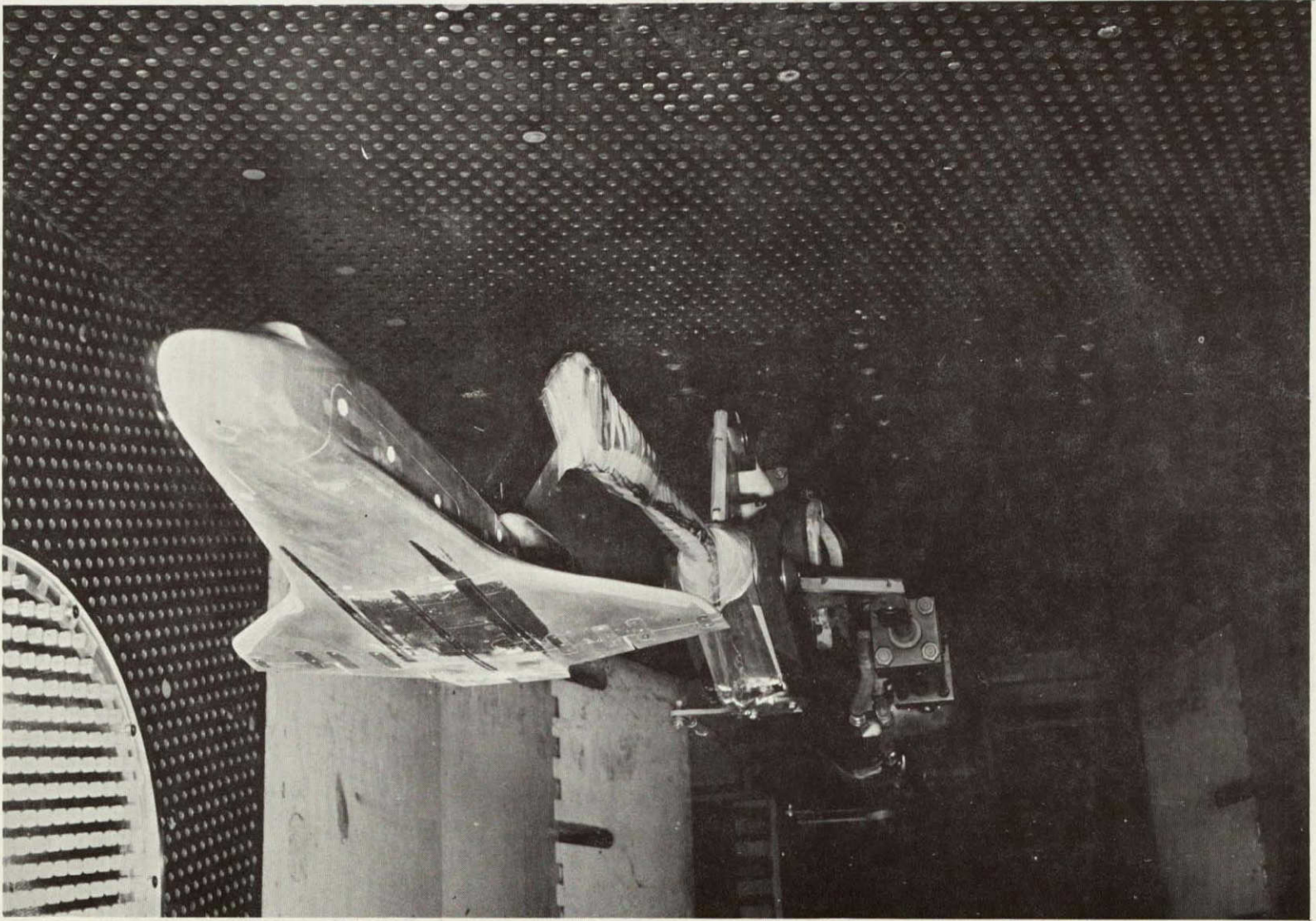
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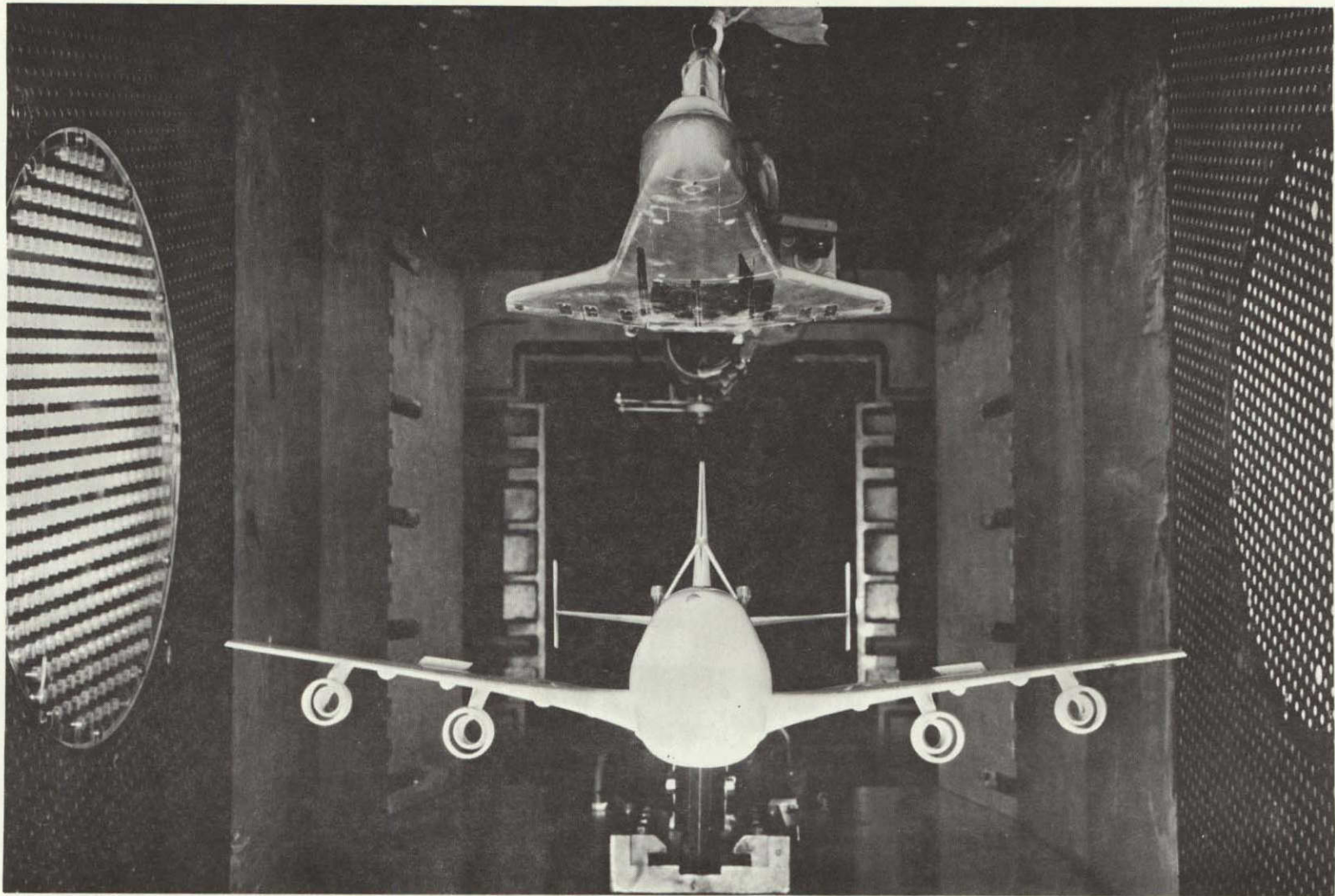
a. Orbiter Alone

Figure 3. Model Installation



b. 747 Alone

Figure 3. - Model Installation



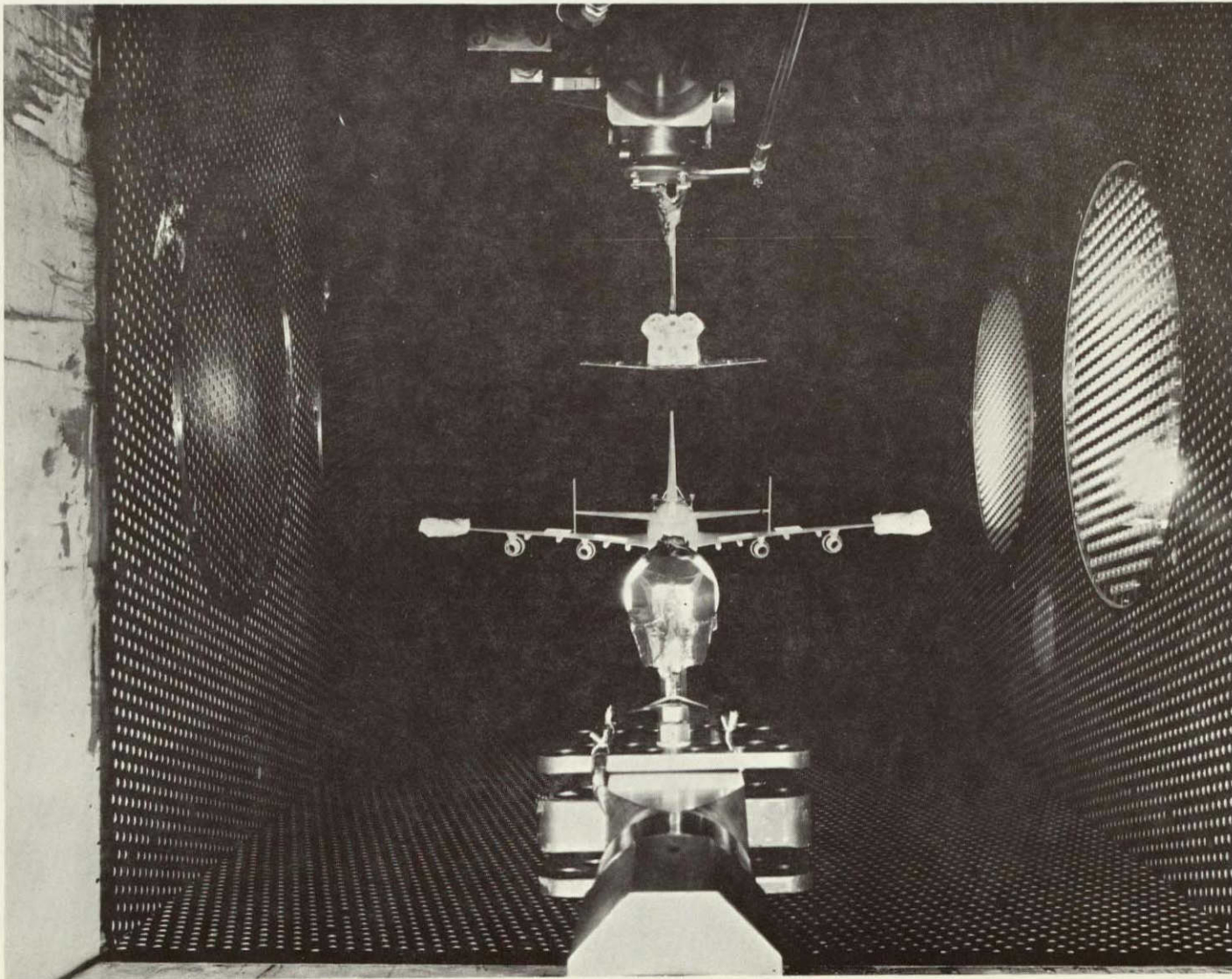
c. Front View, Orbiter Separating From 747

Figure 3. - Model installation

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d. Rear View, Orbiter Separating From 747

Figure 3. Model installation

DATA FIGURES

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(AFE001)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.601	BETA0	.000	ELEVON	.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

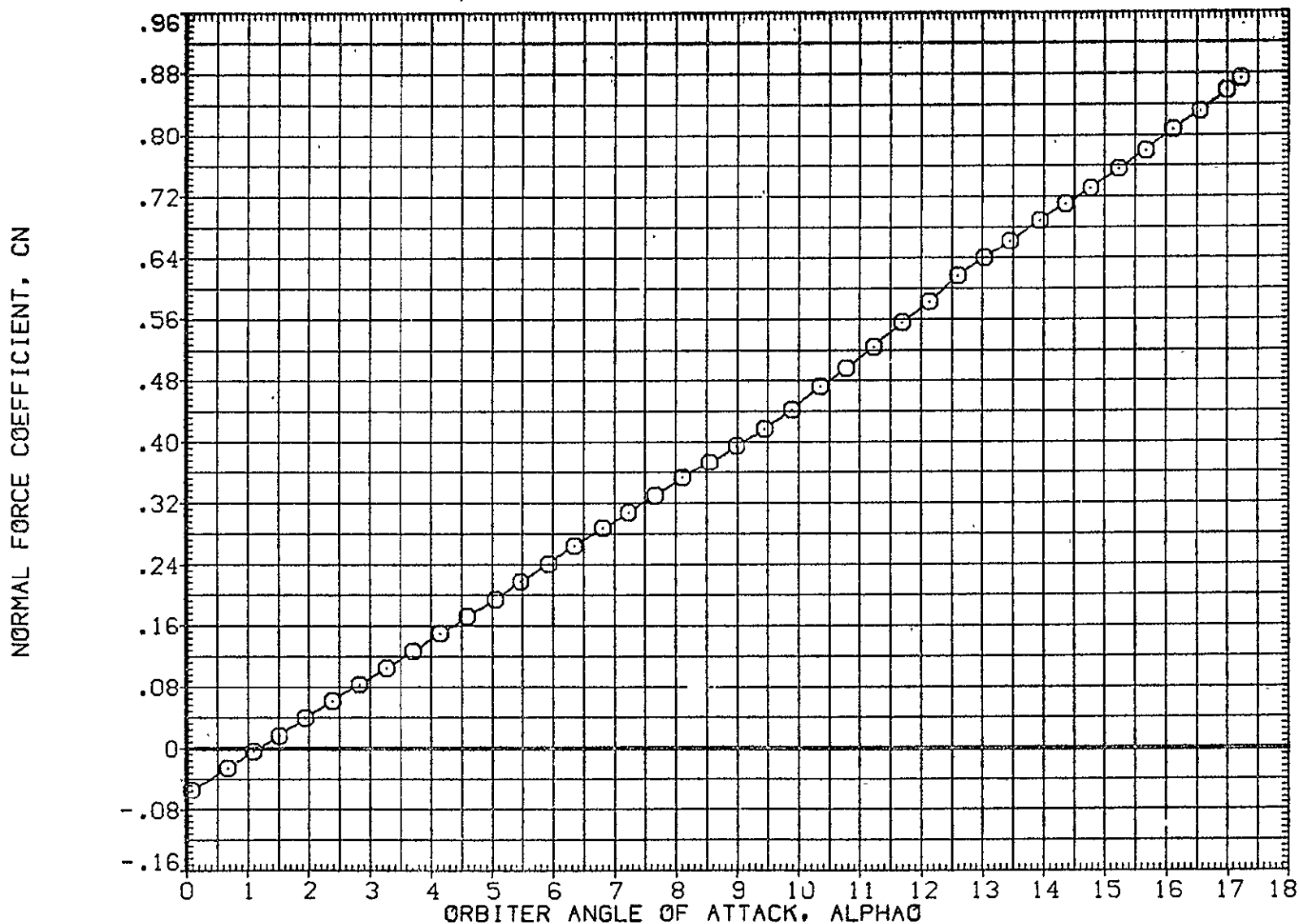


FIG. 4 ORBITER ISOLATED, ALPHA SWEEP, AFE001

SYMBOL	MACH	PARAMETRIC VALUES			
○	.601	BETAQ	.000	ELEVON	.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ. FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XM RP	1109.0000	IN. X ⁰
YM RP	.0000	IN. Y ⁰
ZM RP	375.0000	IN. Z ⁰
SCALE	.0125	

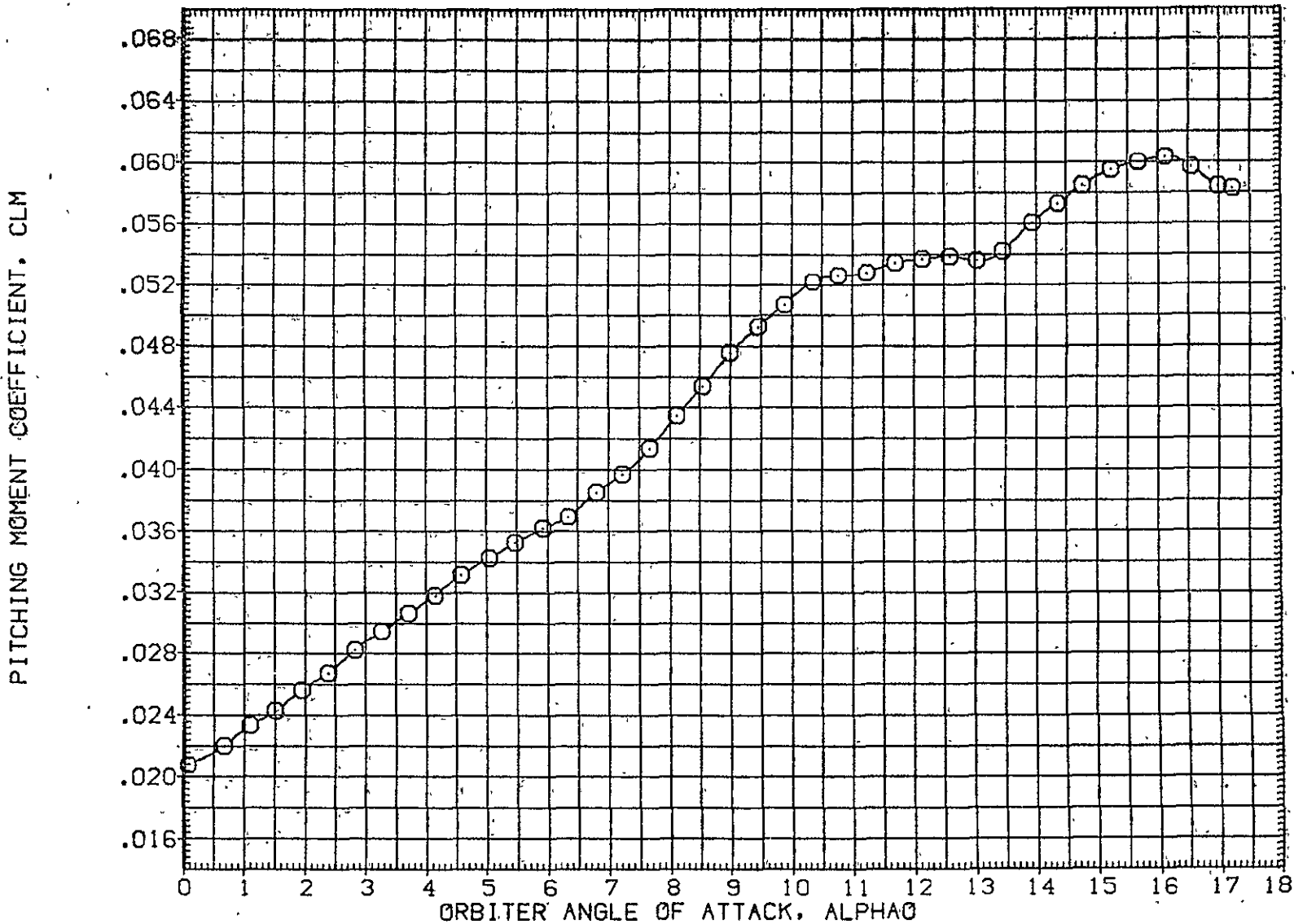


FIG. 4 ORBITER ISOLATED, ALPHA SWEEP, AFE001

LTV44-559(CA26) 04 S

(AFE001)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.601	BETA0	.000	ELEVON	.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

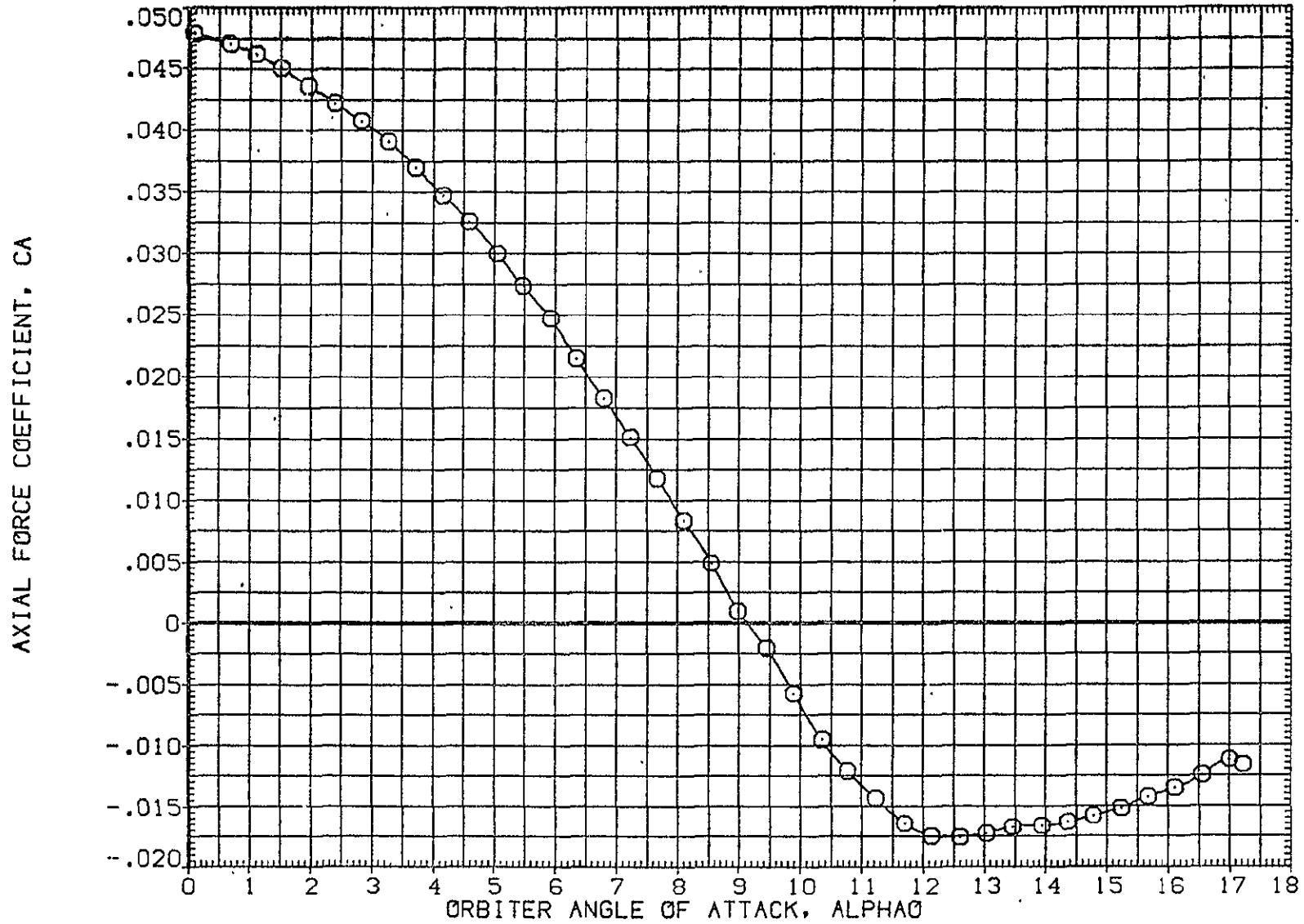


FIG. 4 ORBITER ISOLATED, ALPHA SWEEP, AFE001

SYMBOL	MACH	BETA	BOFLAP	PARAMETRIC VALUES	ELEVON	
○	.601			.000	.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ. FT.
LREF	474.6100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

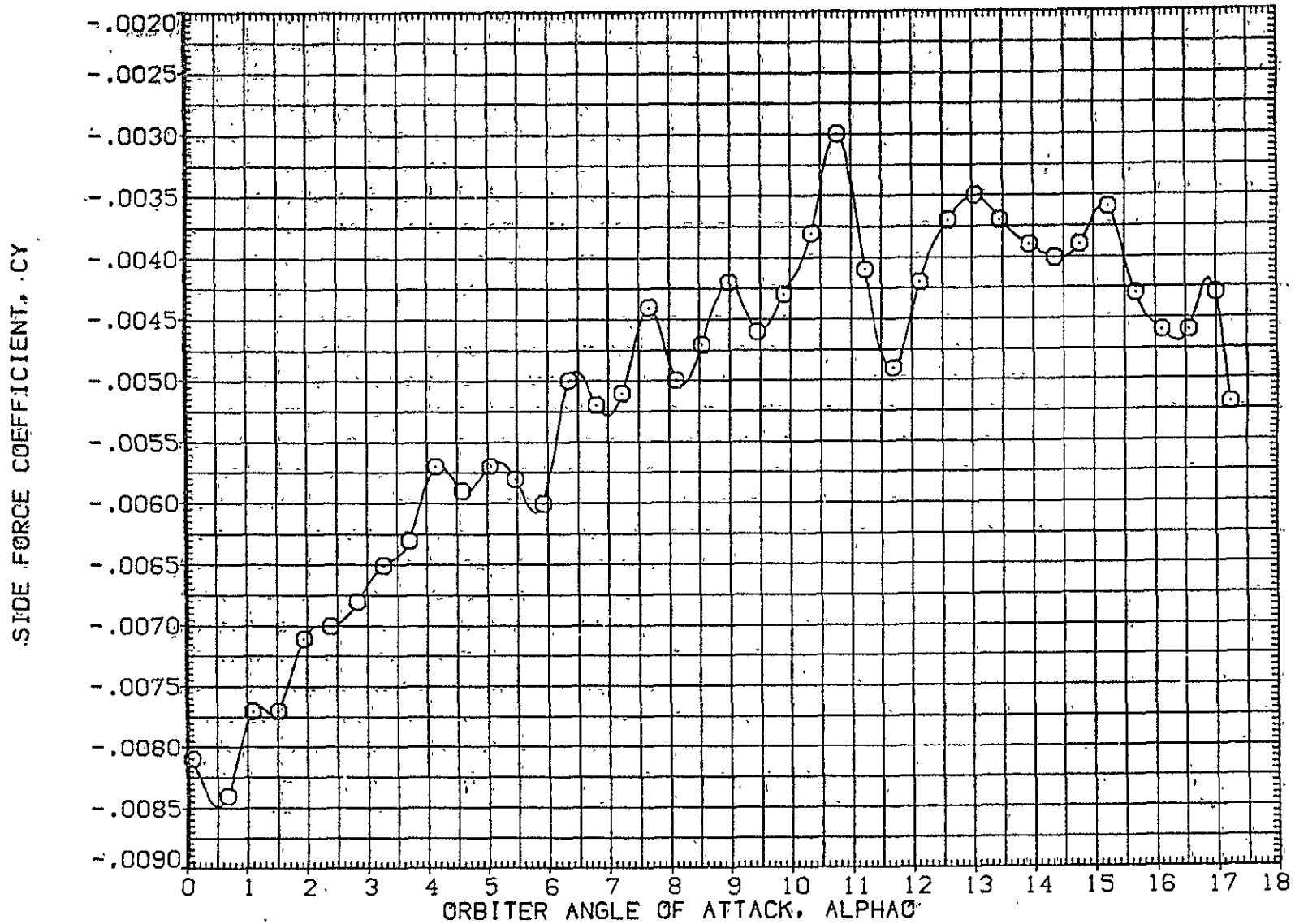


FIG. 4 ORBITER ISOLATED, ALPHA SWEEP, AFE001

SYMBOL: MACH .601
 O BETAO .000 ELEVON .000
 BOFLAP .000

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1109.0000 IN. X0
 YMRP .0000 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .0125

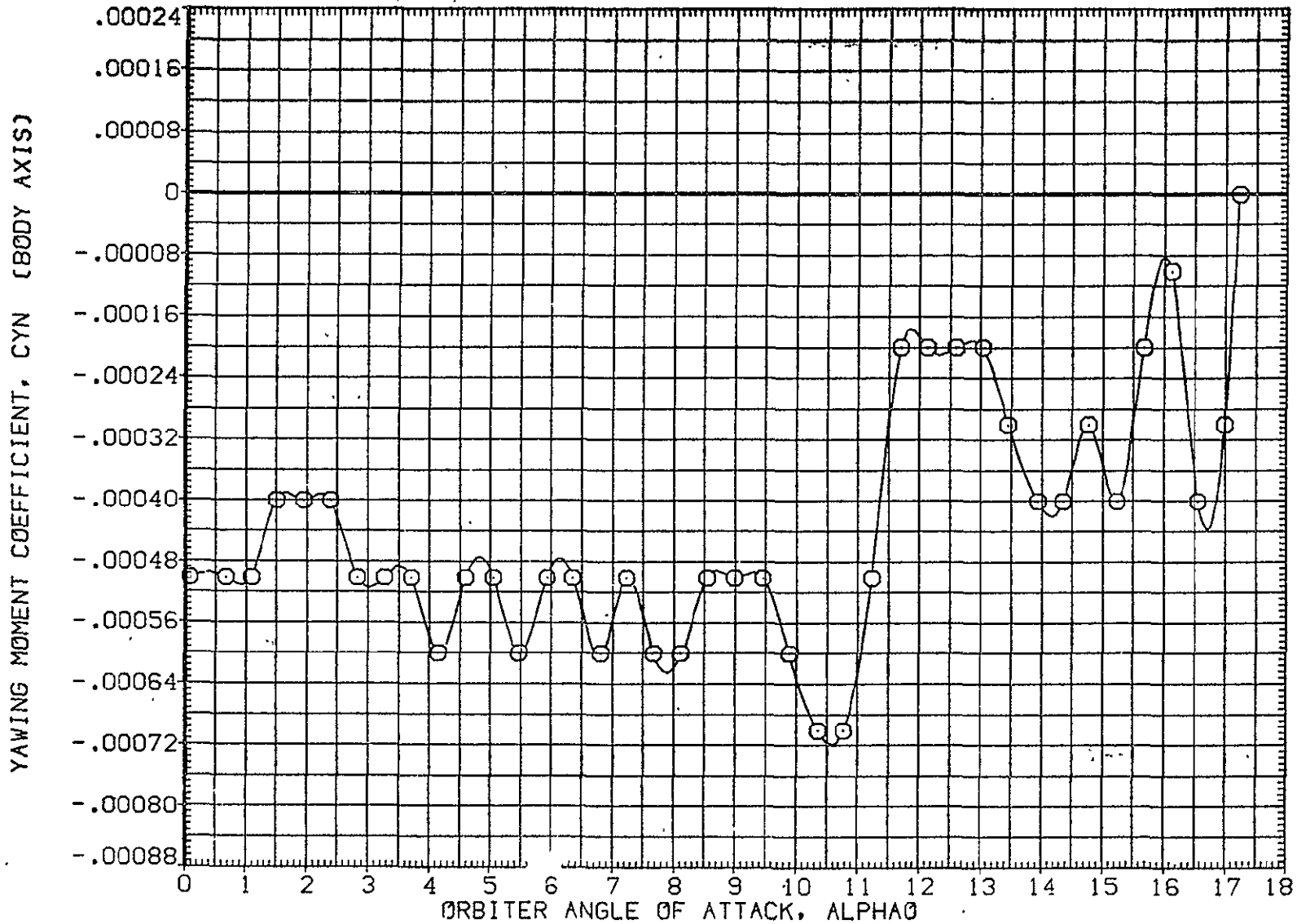


FIG. 4 ORBITER ISOLATED, ALPHA SWEEP, AFE001

SYMBOL	MACH	PARAMETRIC VALUES			
○	.601	BETA0	.000	ELEVON	.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

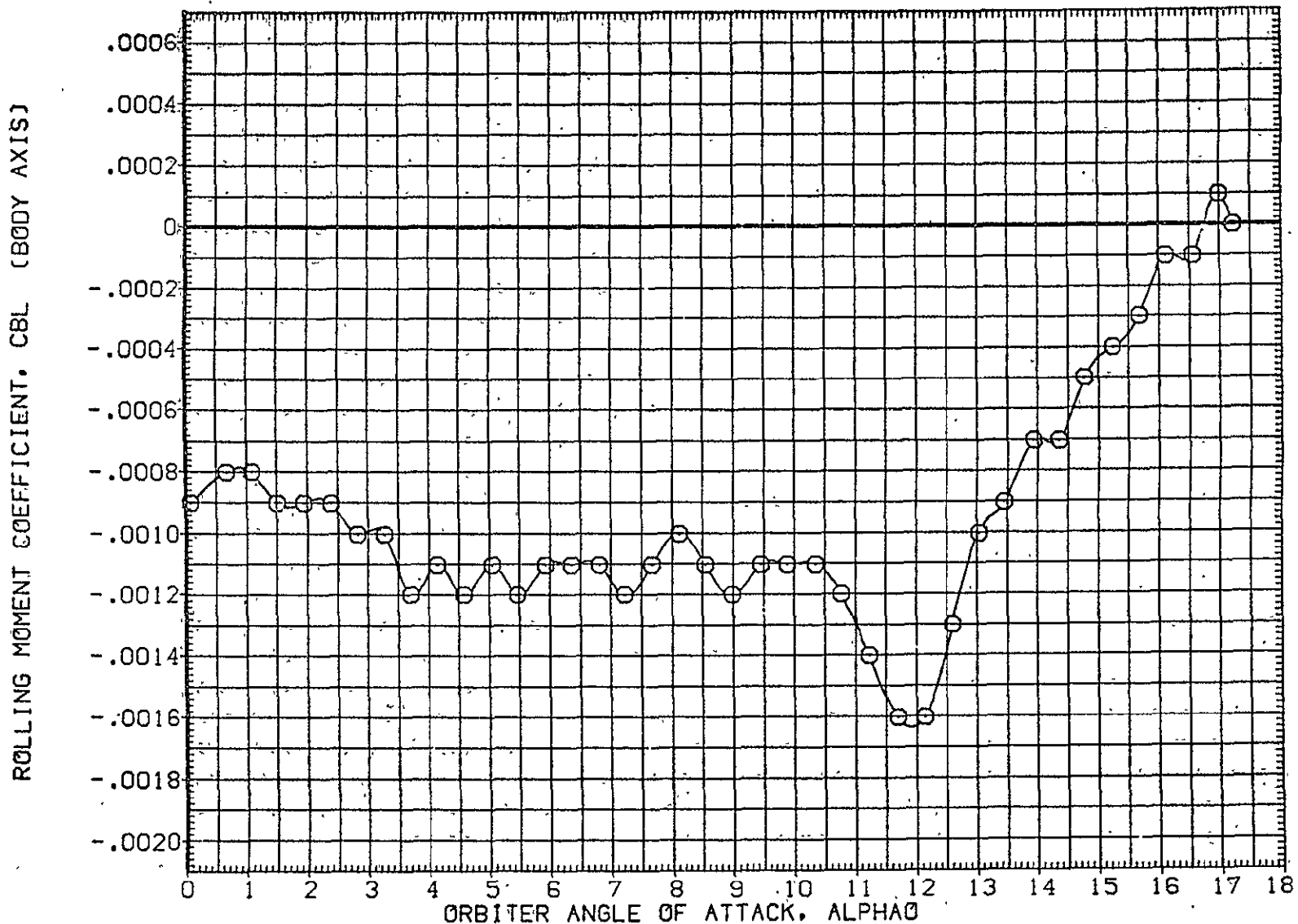


FIG. 4 ORBITER ISOLATED, ALPHA SWEEP, AFE001

SYMBOL	MACH	BETA0	PARAMETRIC VALUES		
○	.601	BDFLAP	.000	ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SG.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

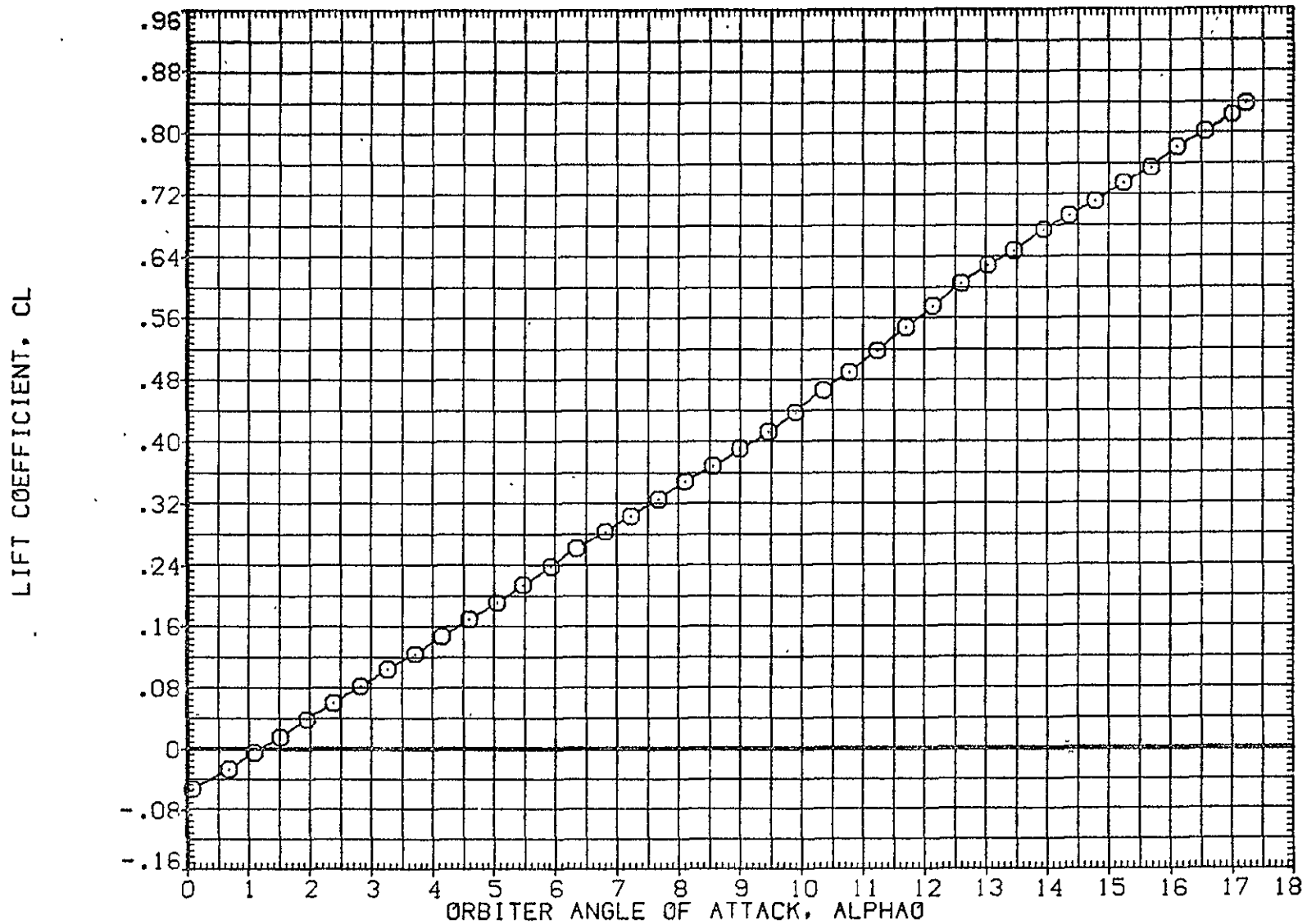


FIG. 4 ORBITER ISOLATED, ALPHA SWEEP, AFE001

SYMBOL: ○ MACH .601 BETA0 .000 ELEVON .000
BOELAP .000

REFERENCE INFORMATION
SREF 2690.0000 SQ. FT.
LREF 474.6100 IN.
BREF 936.6800 IN.
XMRP 1109.0000 IN. X0
YMRP .0000 IN. Y0
ZMRP 375.0000 IN. Z0
SCALE .0125

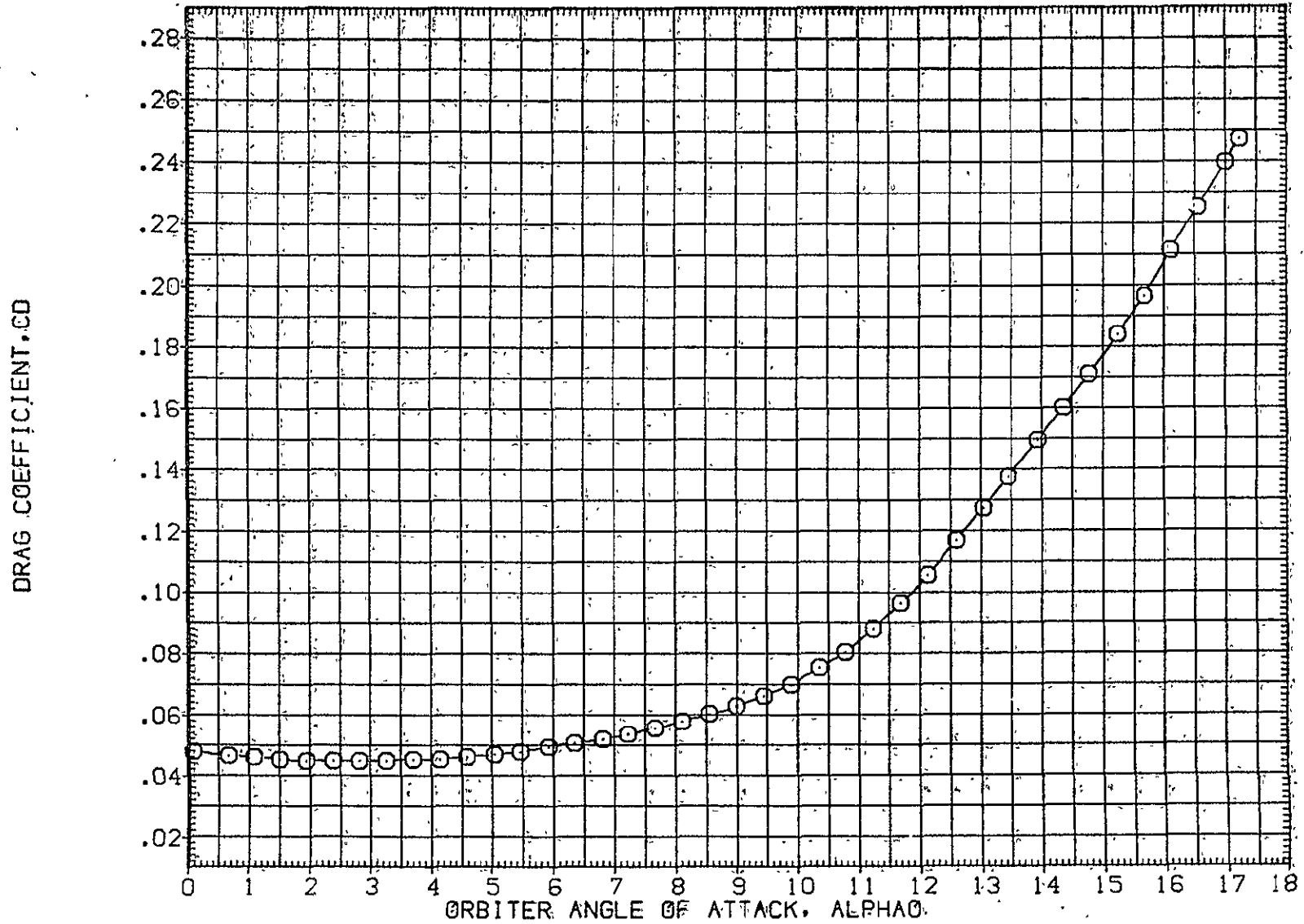


FIG. 4 ORBITER ISOLATED, ALPHA SWEEP, AFE001

LTV44-559(CA26) 04 S

(AFE002)

SYMBOL	MACH	PARAMETRIC VALUES	
○	.597	BETA0	.000
		BDFLAP	16.300
		ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

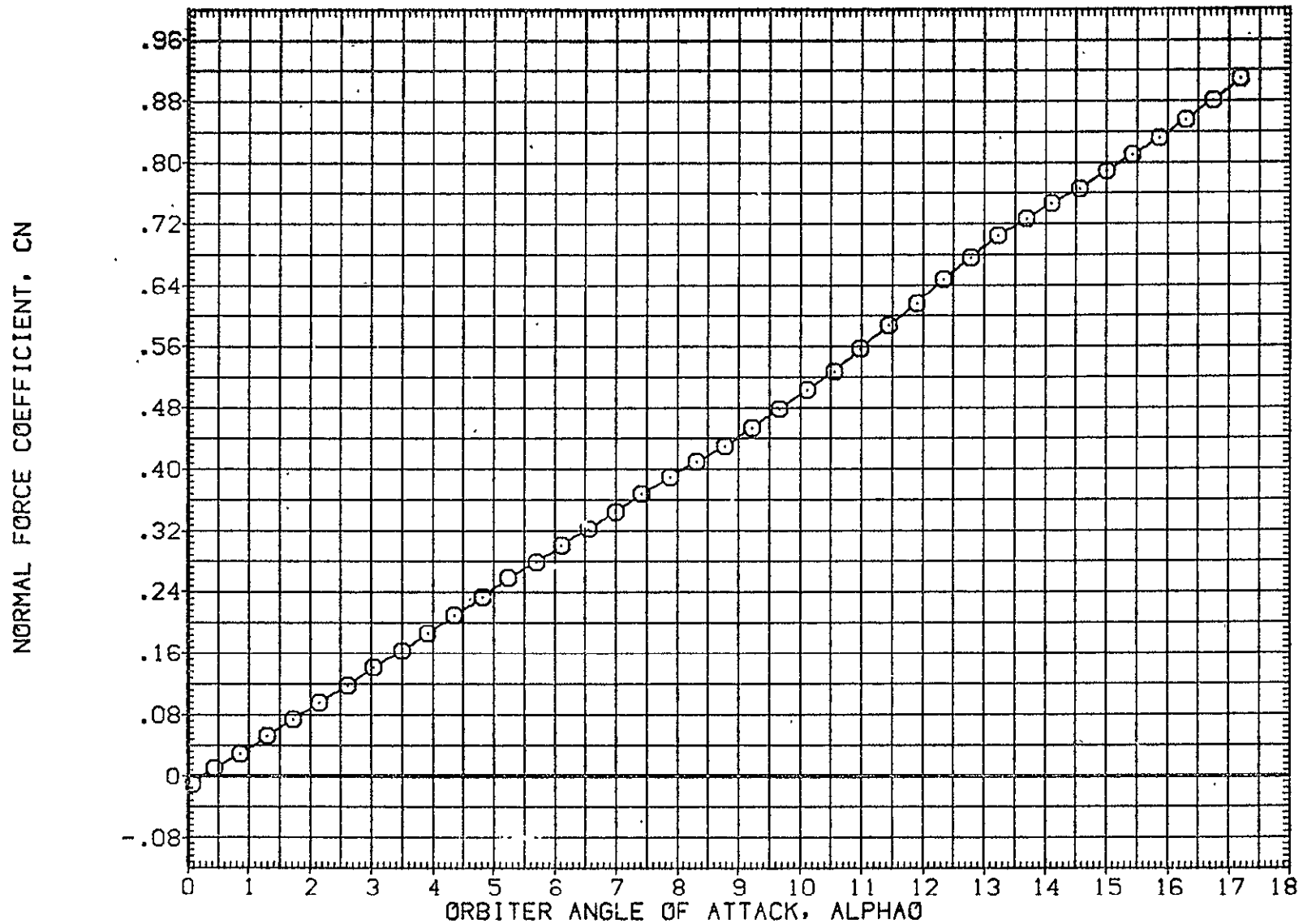


FIG. 5 ORBITER ISOLATED, ALPHA SWEEP, AFE002

SYMBOL	MACH	PARAMETRIC VALUES			
○	.597	BETA0	.000	ELEVON	.000
		BDFLAP	16.300		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

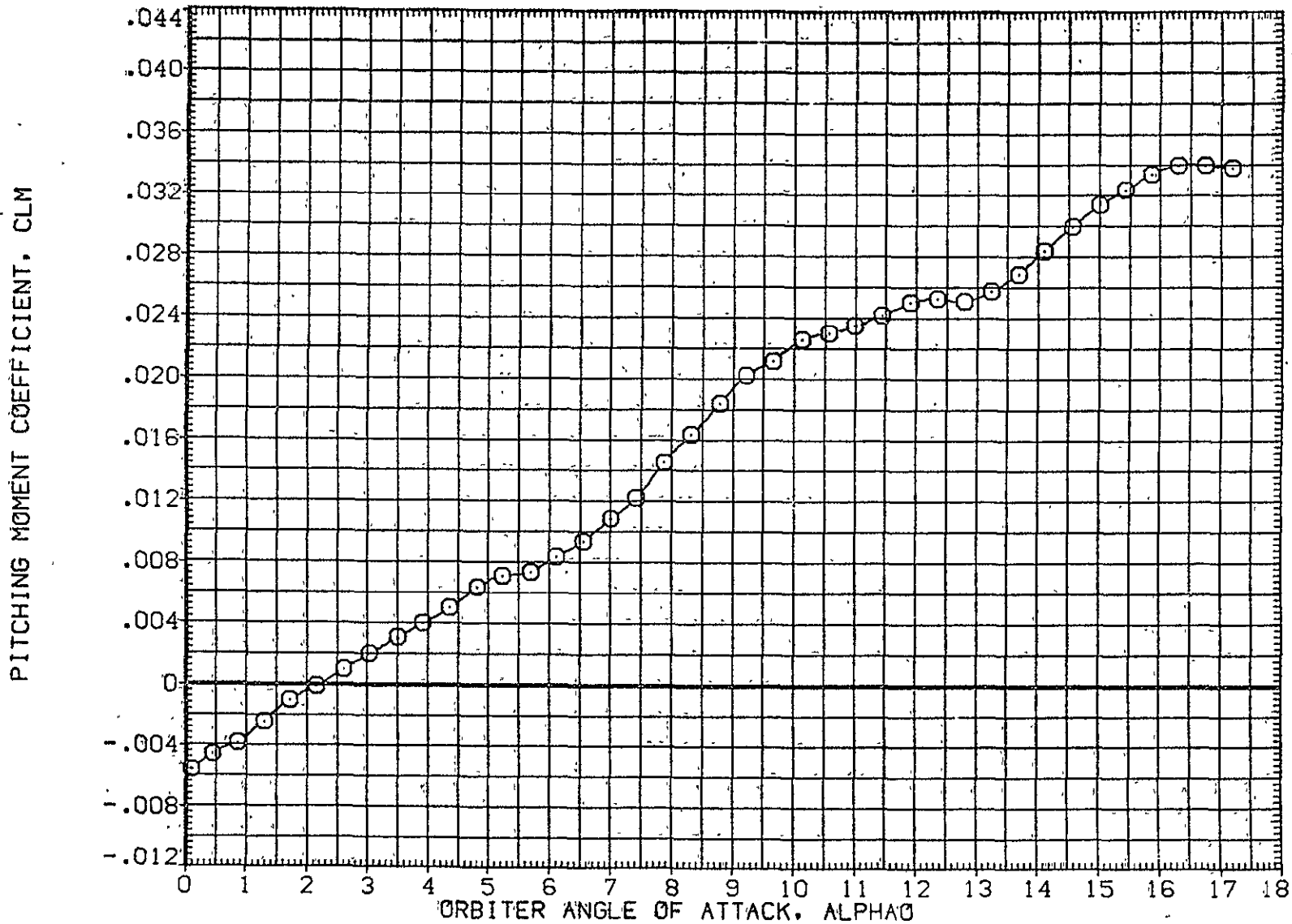


FIG. 5 ORBITER ISOLATED, ALPHA SWEEP, AFE002

SYMBOL	MACH	PARAMETRIC VALUES		
○	.597	BETA0	.000	ELEVON
		BDFLAP	16.300	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

AXIAL FORCE COEFFICIENT, CA

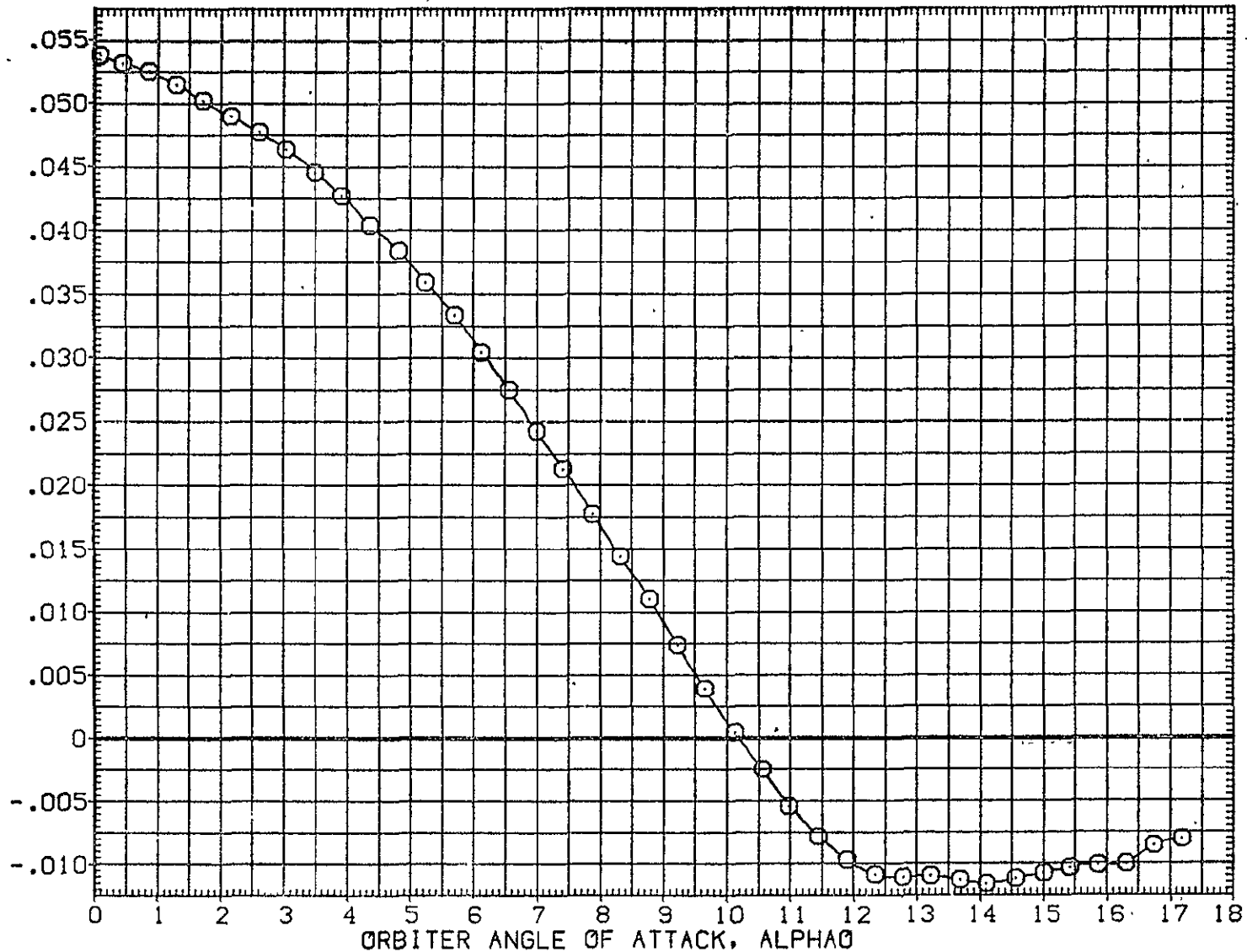


FIG. 5 ORBITER ISOLATED, ALPHA SWEEP, AFE002

SYMBOL	MACH	PARAMETRIC VALUES:			
○	.597	BETA0	.000	ELEVON	.000
		BDFLAP	16.300		

REFERENCE INFORMATION		
SREF	2690.0000	SG, FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN., X0
YMRP	.0000	IN., Y0
ZMRP	375.0000	IN., Z0
SCALE	.0125	

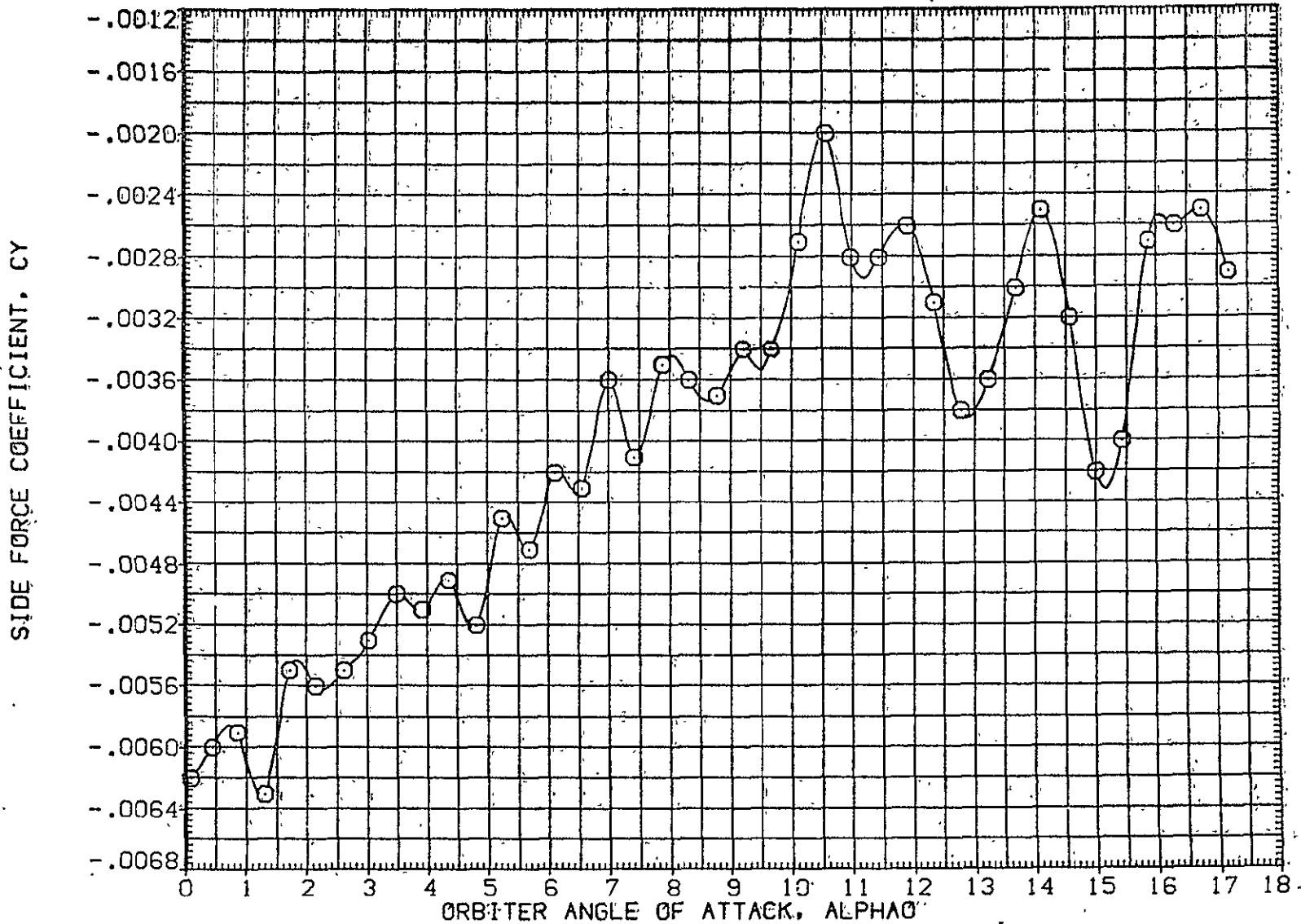


FIG. 5 ORBITER ISOLATED, ALPHA SWEEP, AFE002

LTV44-559(CA26) 04 S

(AFE002)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.597	BETA0	.000	ELEVON	.000
		BDFLAP	16.300		

REFERENCE INFORMATION		
SREF	2690.0000	SG.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	



FIG. 5 ORBITER ISOLATED, ALPHA SWEEP, AFE002

SYMBOL	MACH	PARAMETRIC VALUES			
○	.597	BETA0	.000	ELEVON	.000
		BDFLAP	16.300		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

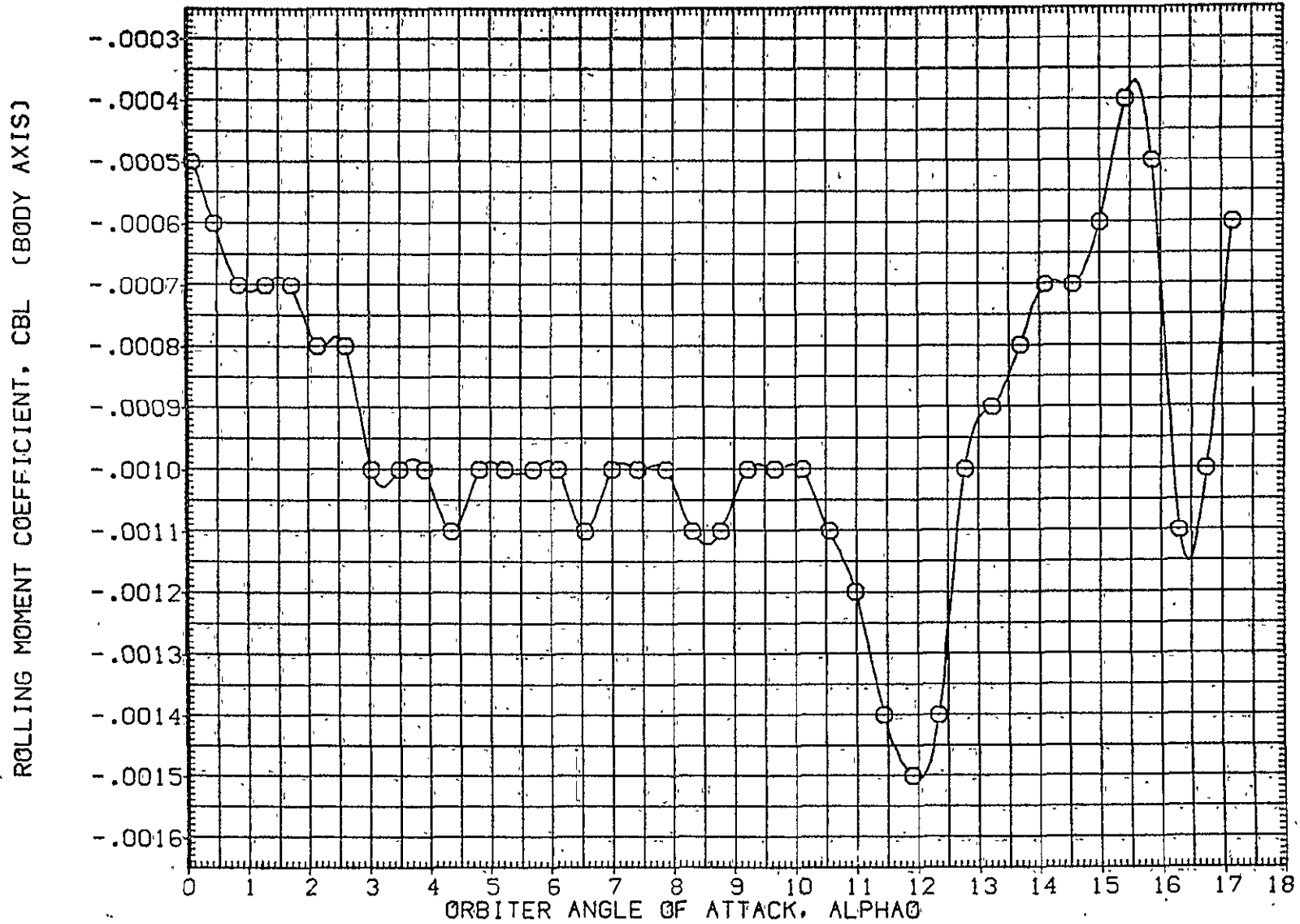


FIG. 5 ORBITER ISOLATED, ALPHA SWEEP, AFE002

LTV44-559(CA26) 04 S

(AFE002)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.597	BETA0	.000	ELEVON	.000
		BDFLAP	16.300		

REFERENCE INFORMATION		
SREF	2690.0000	SG.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

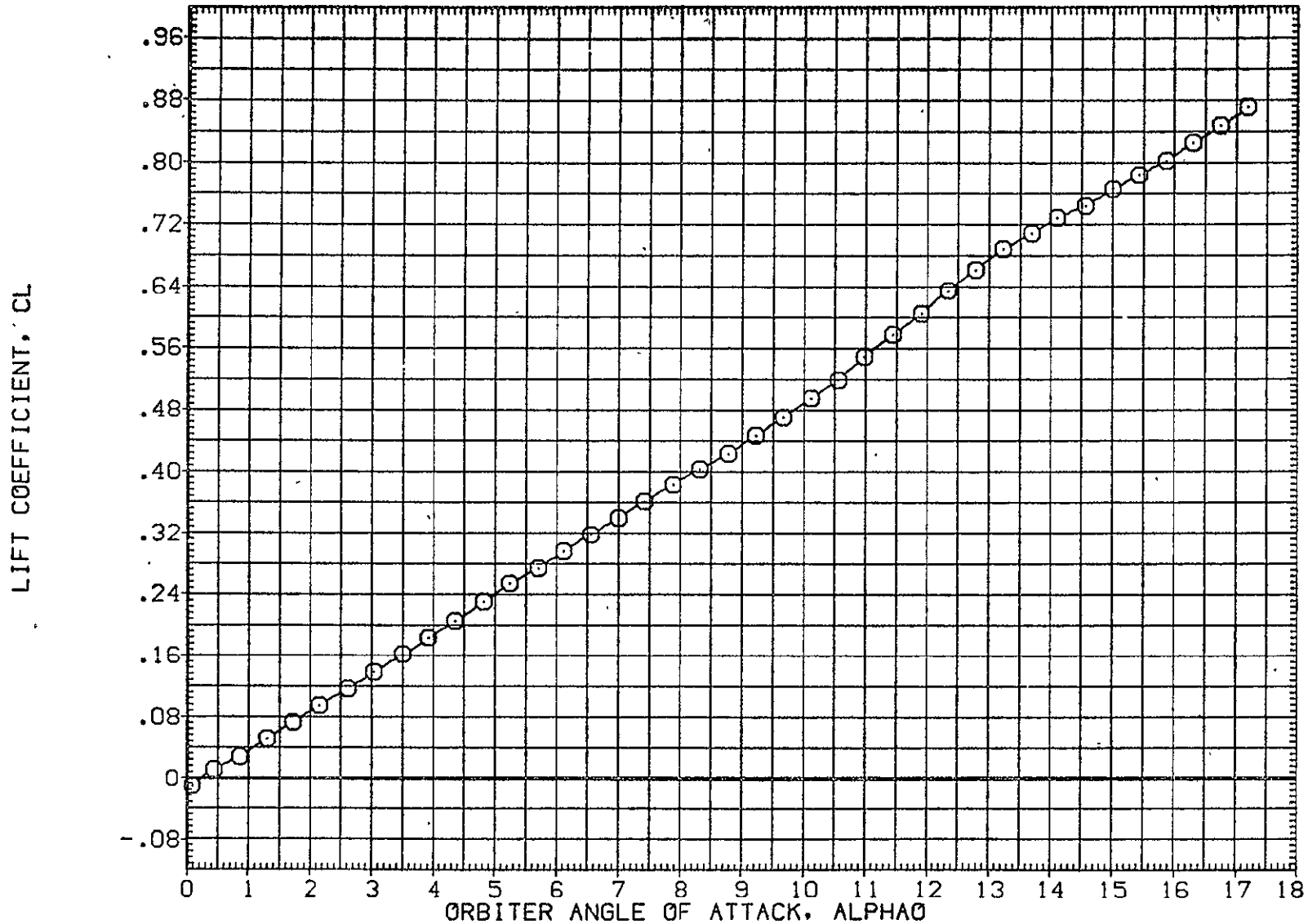


FIG. 5 ORBITER ISOLATED, ALPHA SWEEP, AFE002

SYMBOL	MACH	BETA	PARAMETRIC VALUES	ELEVON	
○	.597	BDFLAP	.000	.000	.000
			16.300		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

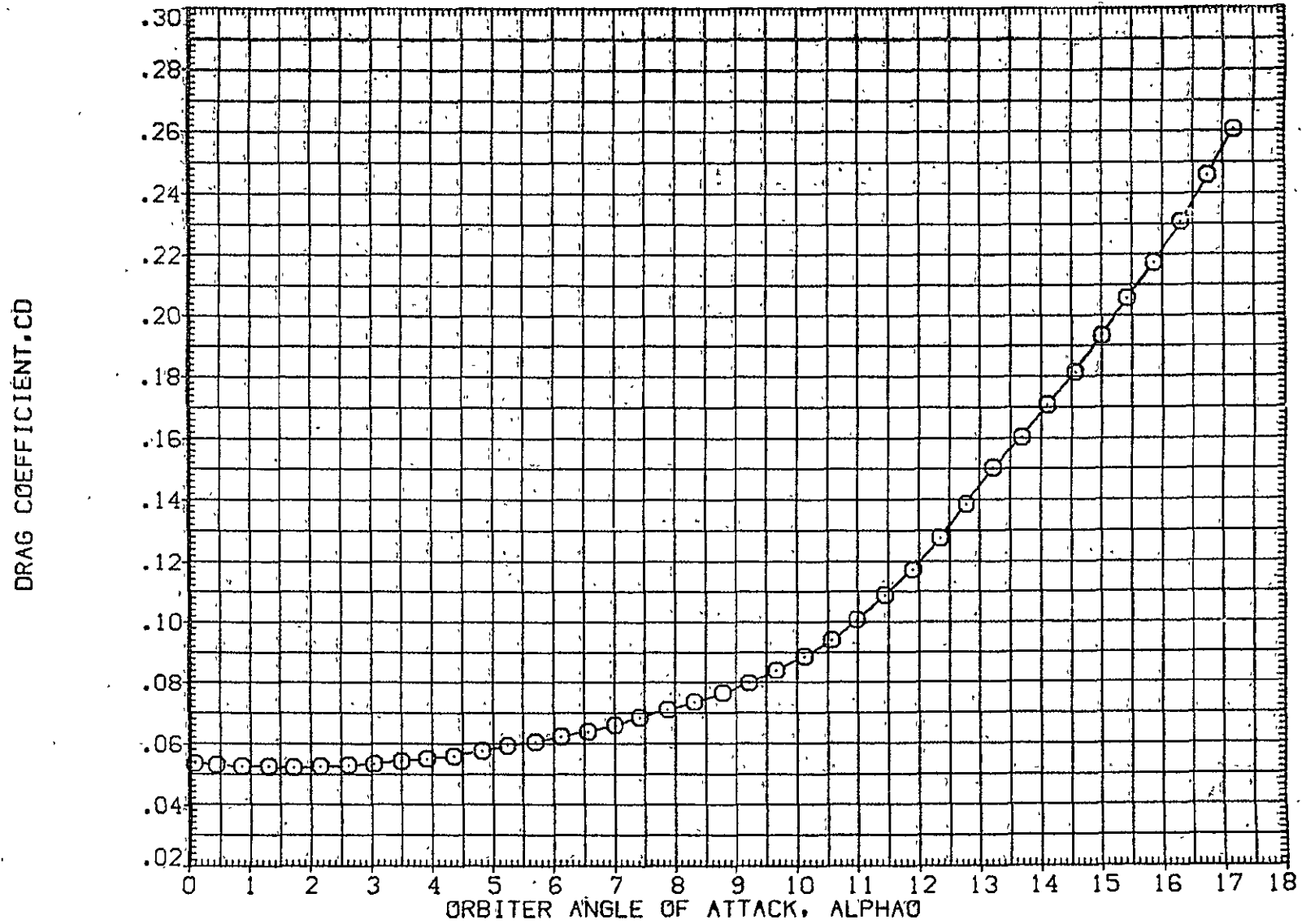


FIG. 5 ORBITER ISOLATED, ALPHA SWEEP, AFE002

SYMBOL	MACH	PARAMETRIC VALUES		
○	.597	BETA0	.000	ELEVON
		BDFLAP	.000	3.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

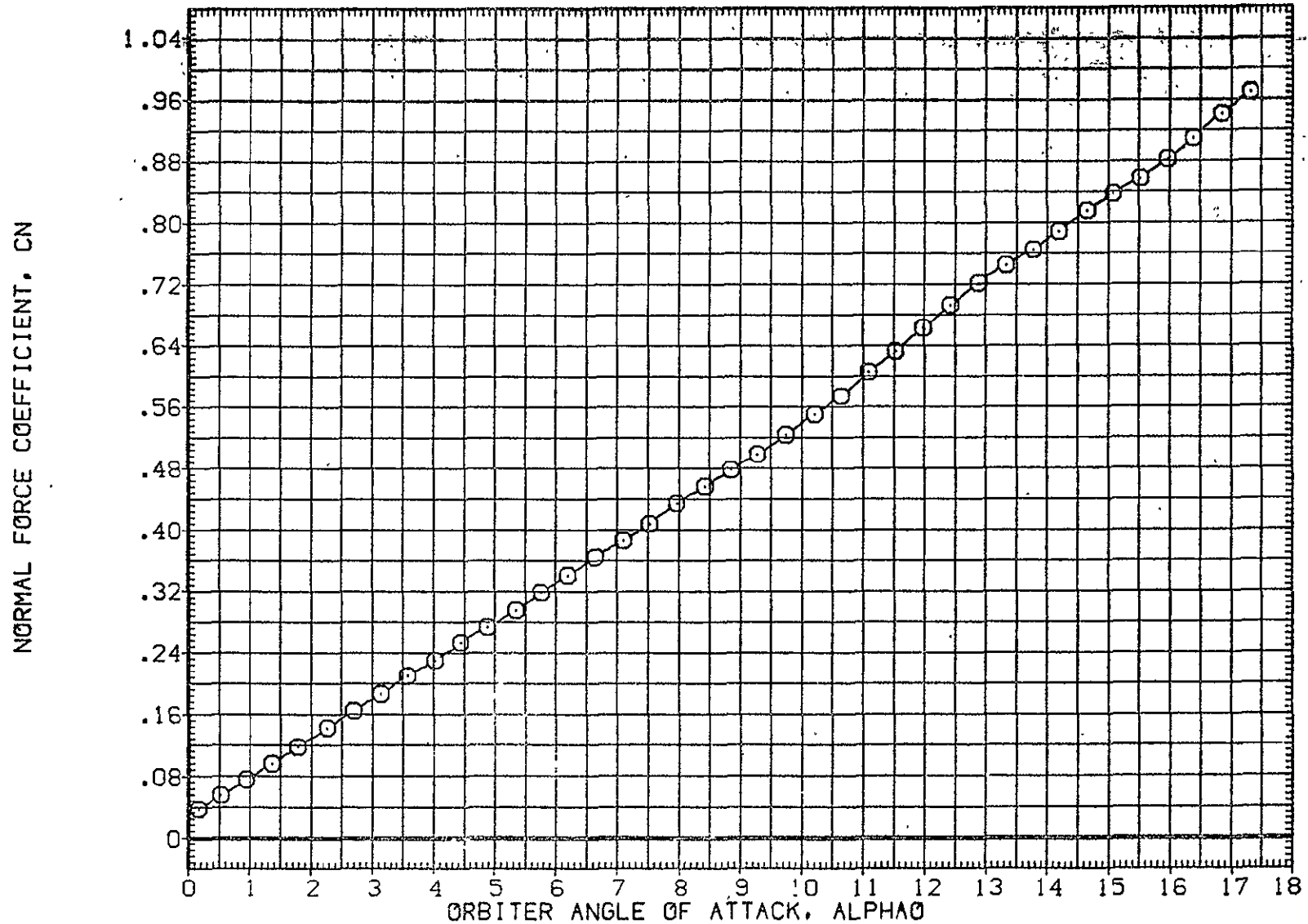


FIG. 6 ORBITER ISOLATED, ALPHA SWEEP, AFE003

SYMBOL	MACH	BETA0	PARAMETRIC VALUES	ELEVON	
○	.597	BDFLAP	.000	.000	3.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

PITCHING MOMENT COEFFICIENT, CLM

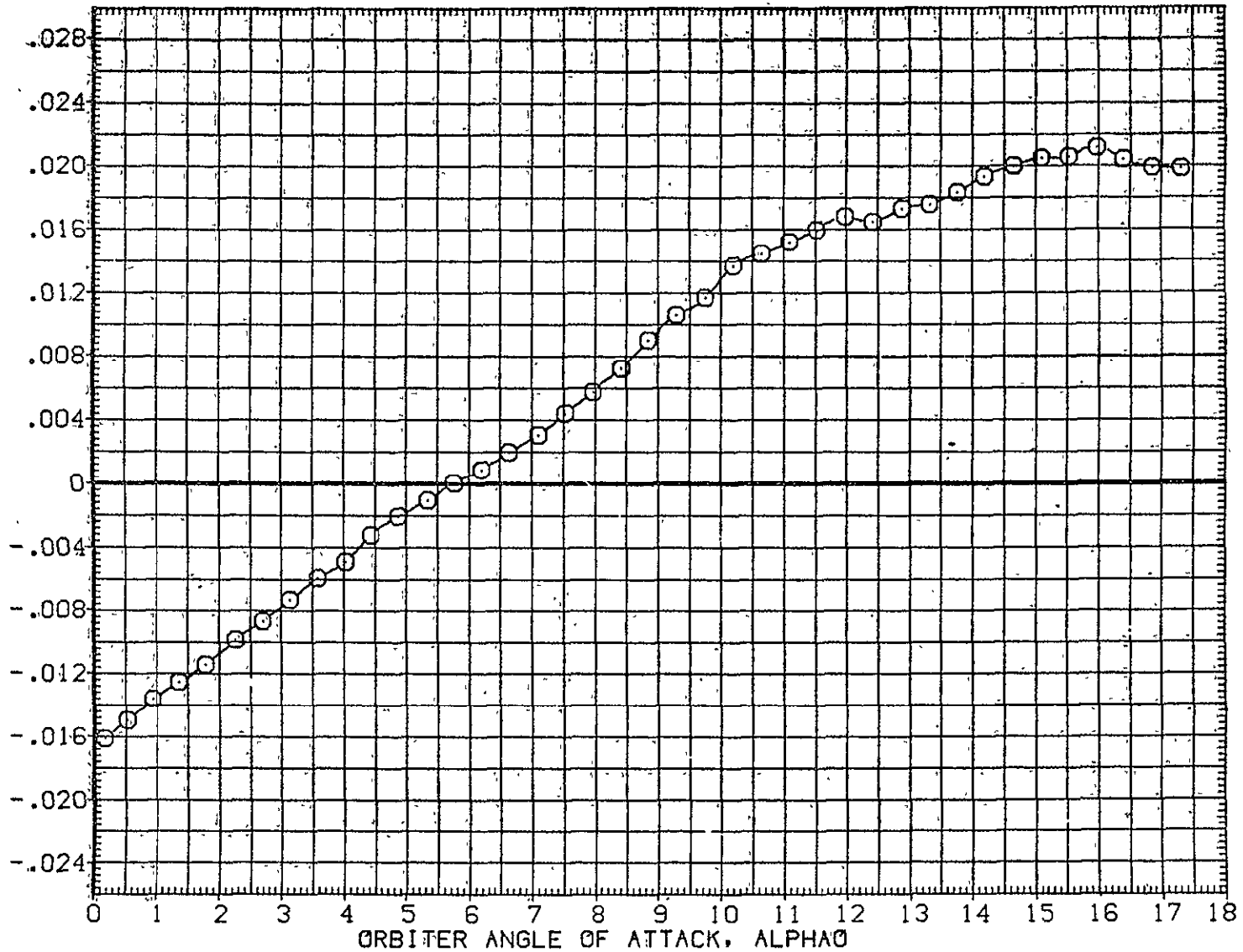


FIG. 6 ORBITER ISOLATED, ALPHA SWEEP, AFE003

SYMBOL ○ MACH .597 BETA0 .000 ELEVON 5.000
 BOFLAP .000

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1109.0000 IN. X0
 YMRP .0000 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .0125

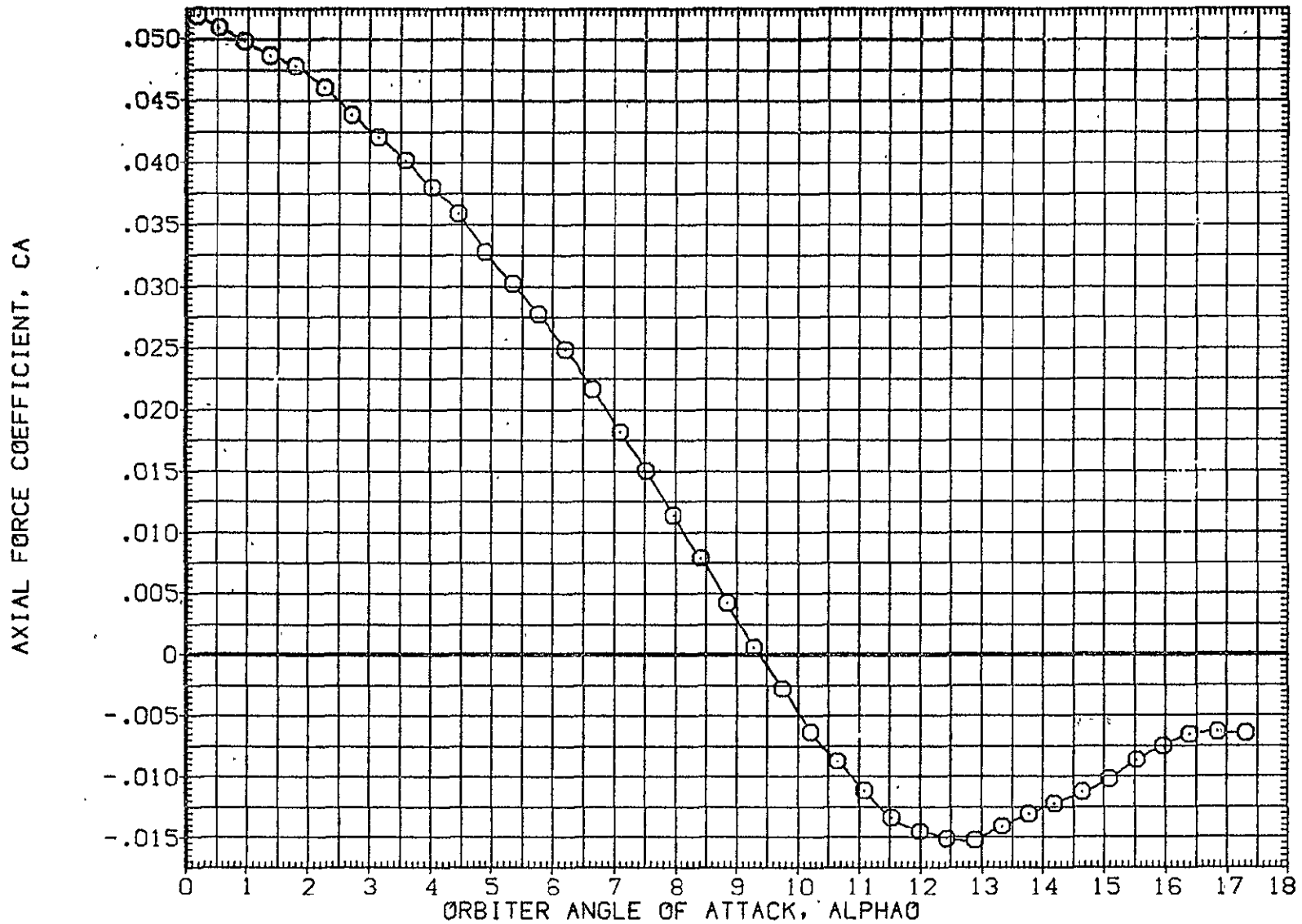


FIG. 6 ORBITER ISOLATED, ALPHA SWEEP, AFE003

SYMBOL	MACH	BETA θ	PARAMETRIC VALUES	
○	.597	.BDFLAP	.000	ELEVON 5.000
			.000	

REFERENCE INFORMATION

SREF	.2690.0000	50.FT.
LREF	.474.8100	IN.
BREF	.936.6800	IN.
XMRP	1.109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	.375.0000	IN. Z0
SCALE	.0125	

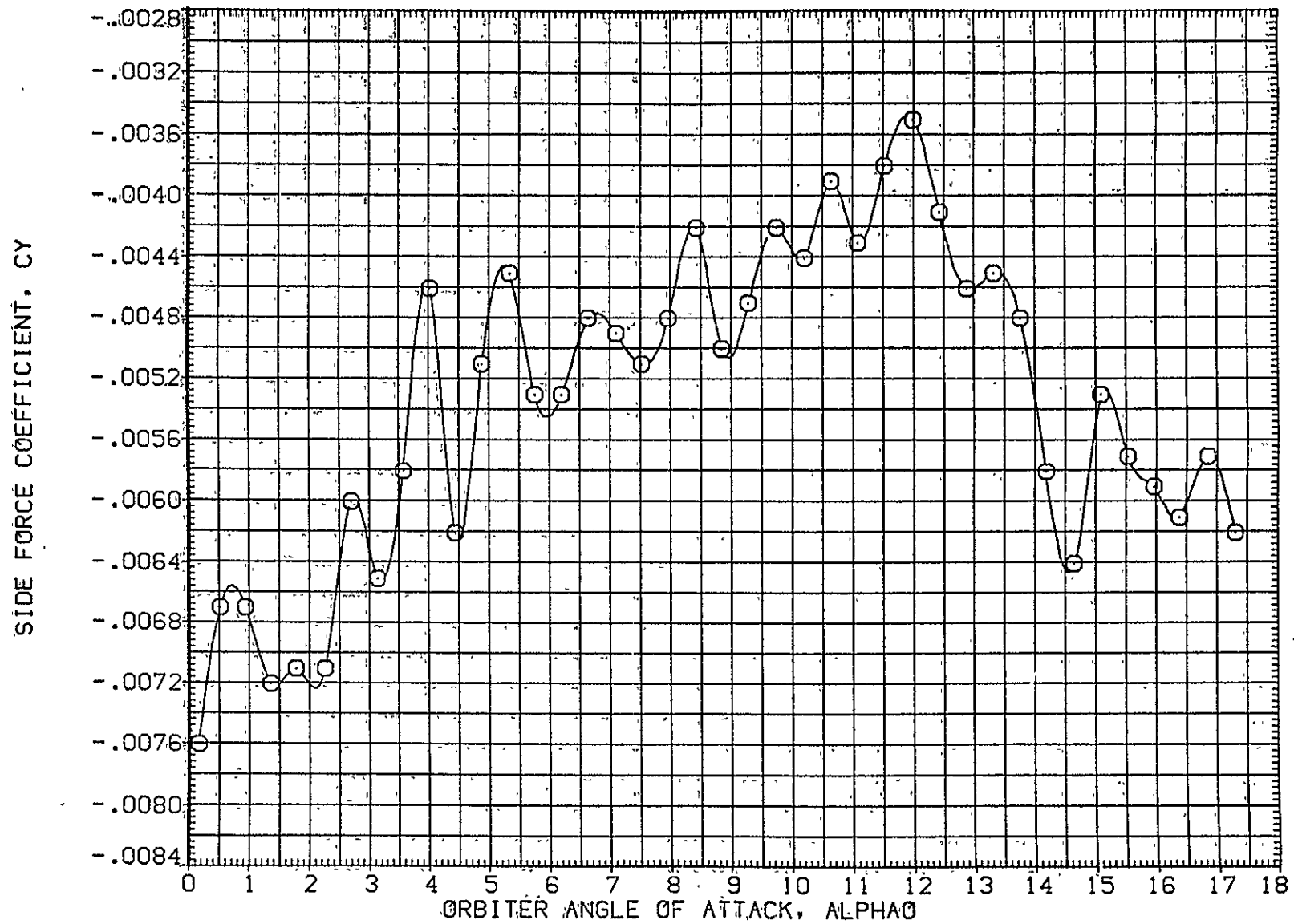


FIG. 6 ORBITER ISOLATED, ALPHA SWEEP, AFE003

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(AFE003)

SYMBOL MACH PARAMETRIC VALUES
O .597 BETA0 .000 ELEV0N 5.000
BDFLAP .000

REFERENCE INFORMATION
SREF 2690.0000 SQ.FT.
LREF 474.8100 IN.
BREF 936.6800 IN.
XMRP 1109.0000 IN. X0
YMRP .0000 IN. Y0
ZMRP 375.0000 IN. Z0
SCALE .0125

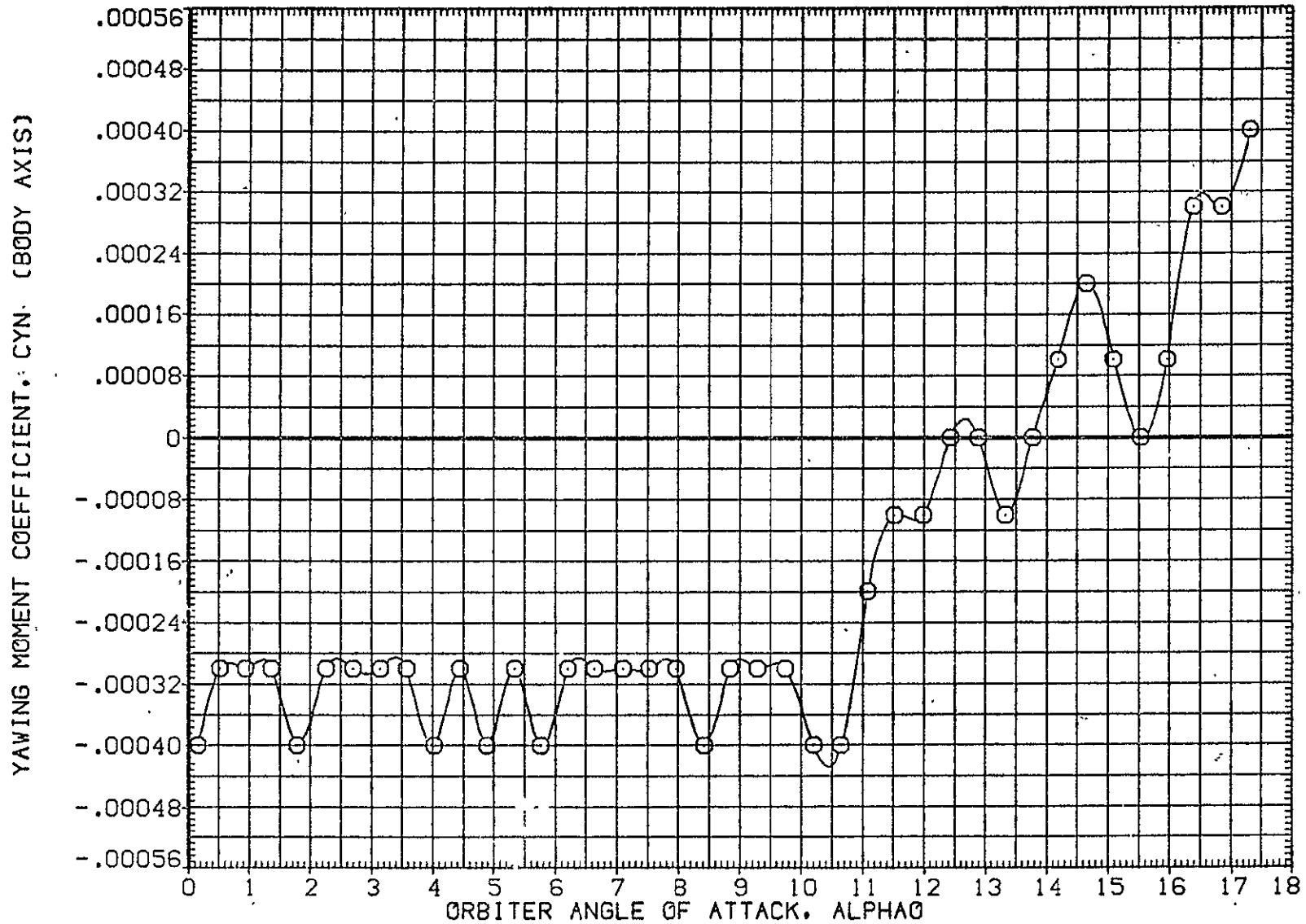


FIG. 6 ORBITER ISOLATED, ALPHA SWEEP, AFE003

SYMBOL	MACH	PARAMETRIC VALUES			
⊙	.597	BETA0	.000	ELEVON	.5.000
		BDELAP	.000		

REFERENCE INFORMATION		
SREF	.2690.0000	50. FT.
LREF	.474.8100	IN.
BREF	.936.6800	IN.
XMRP	.1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	.375.0000	IN. Z0
SCALE	.0125	

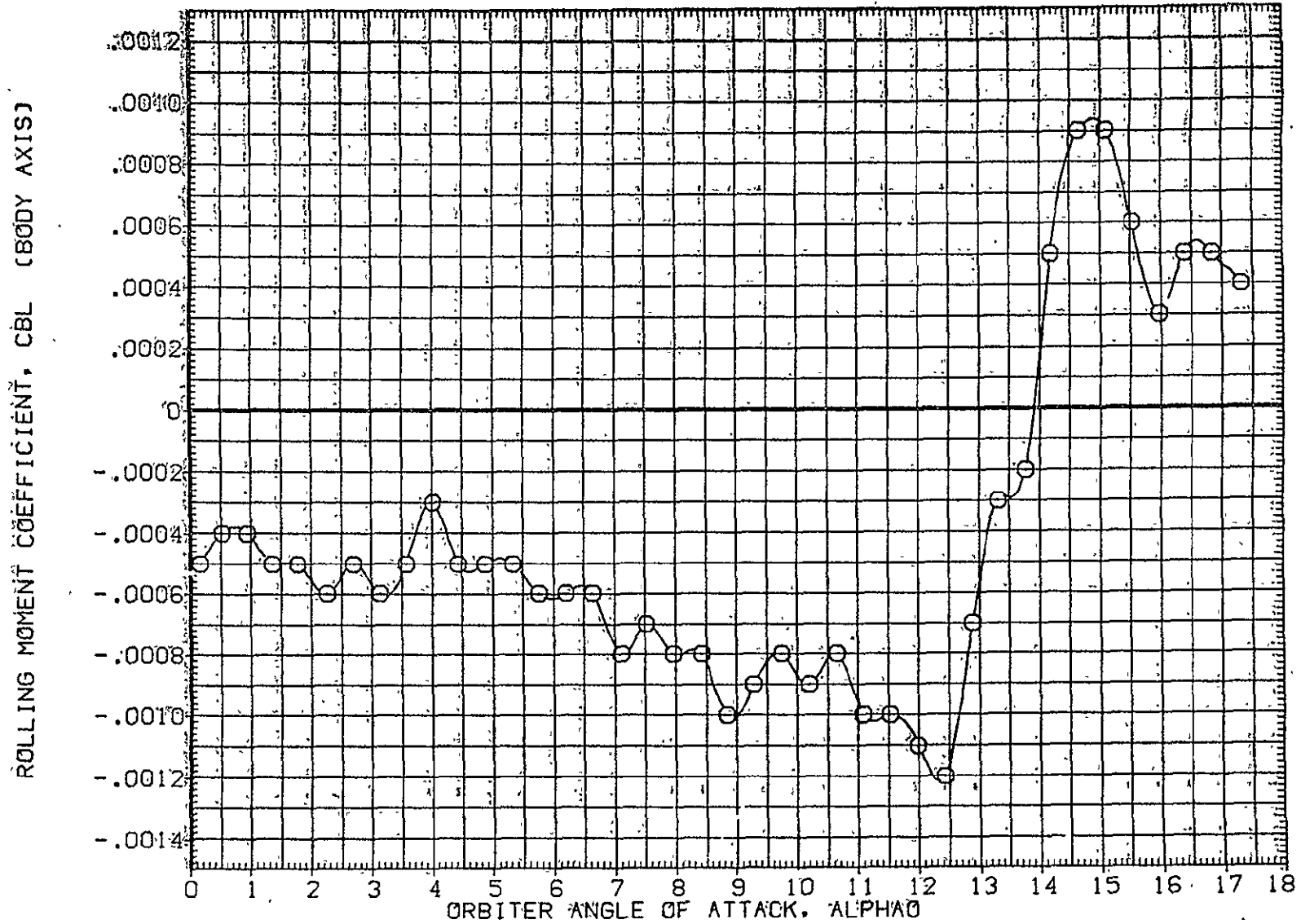


FIG. 6 ORBITER ISOLATED, ALPHA SWEEP, AFE003

SYMBOL	MACH	PARAMETRIC VALUES			
○	.597	BETA0	.000	ELEVON	5.000
		BOFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ. FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

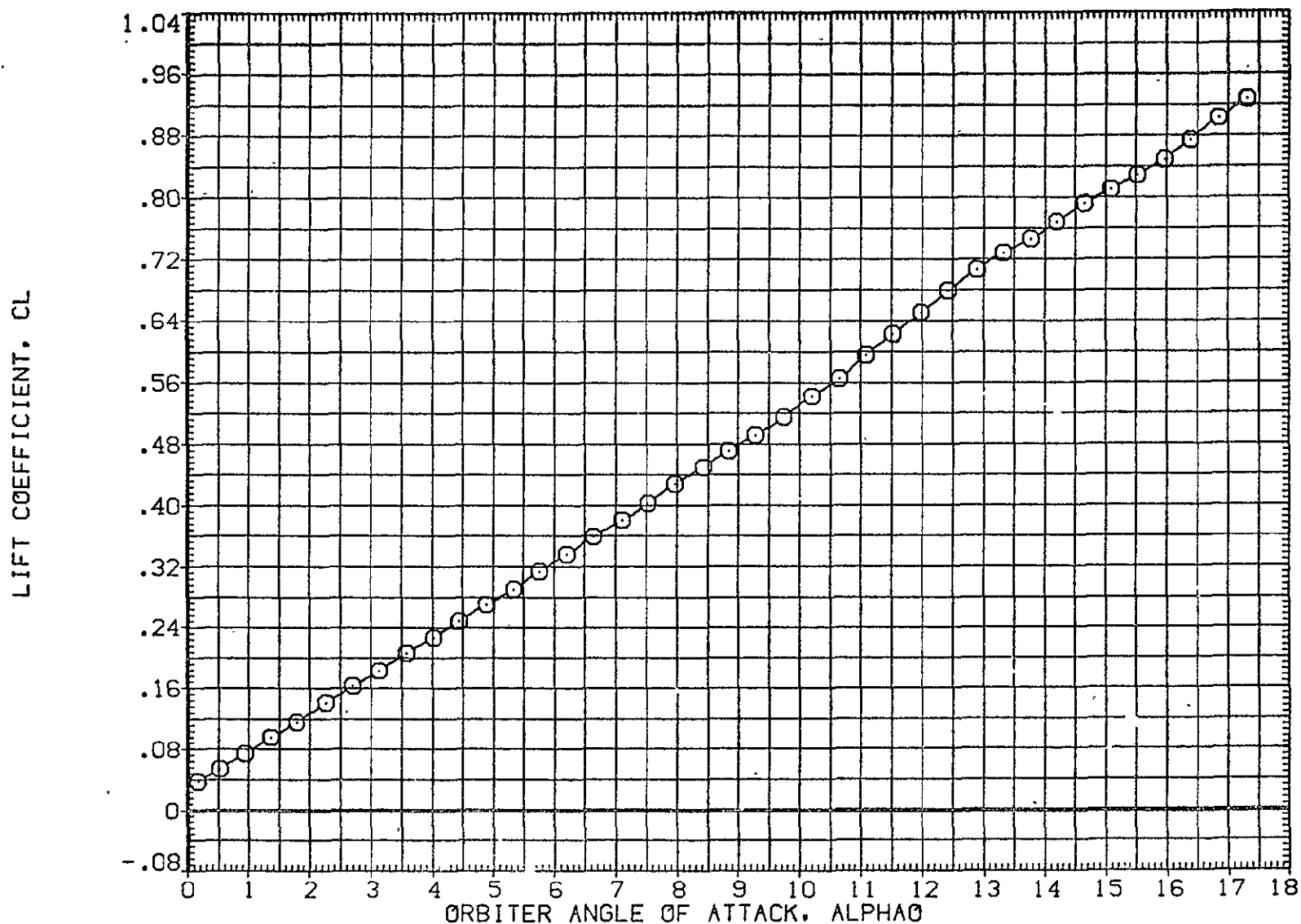


FIG. 6 ORBITER ISOLATED, ALPHA SWEEP, AFE003

SYMBOL	MACH	PARAMETRIC VALUES	
○	.597	BETA0	ELEVON
		BDFLAP	5.000
		.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

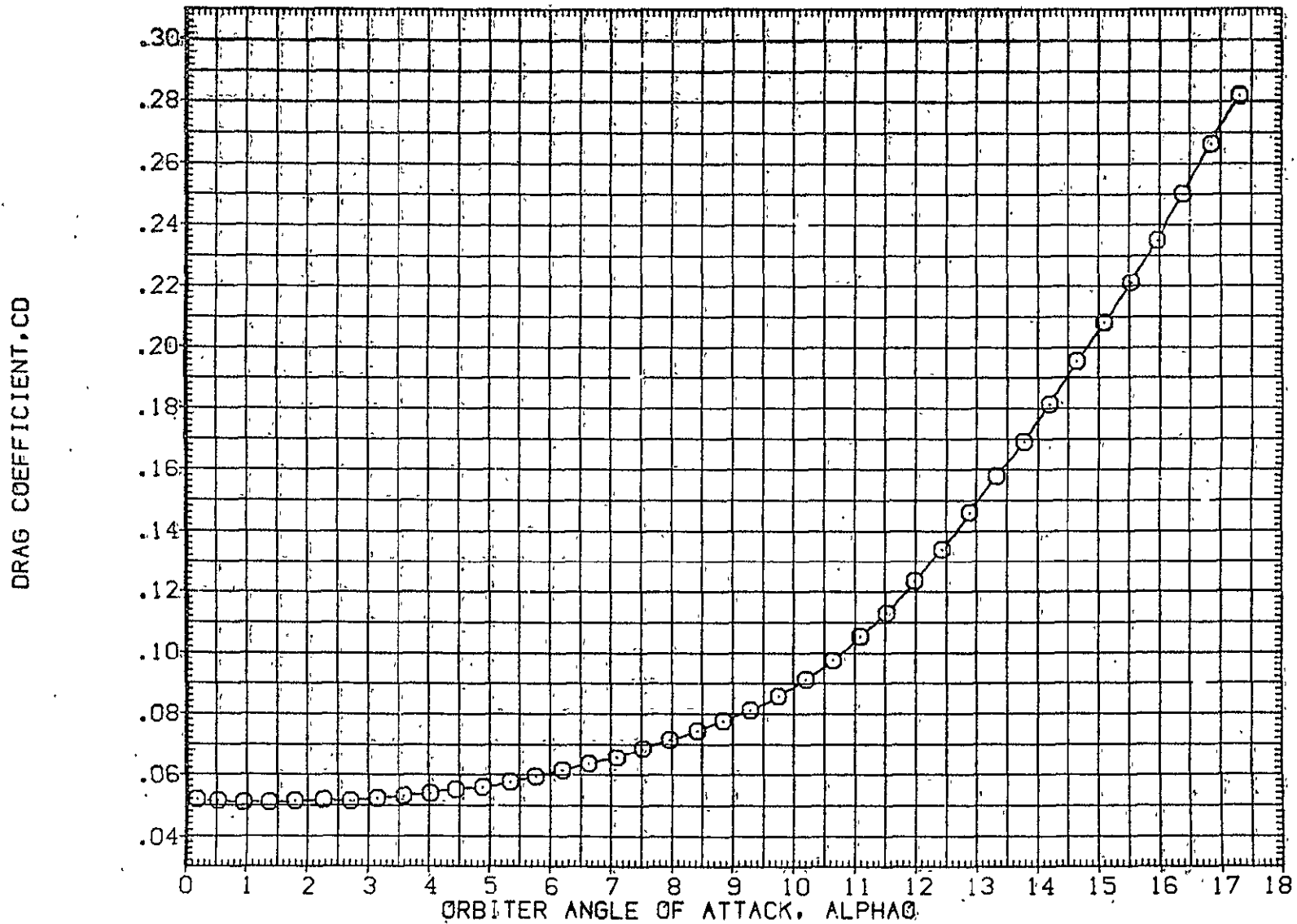


FIG. 6 ORBITER ISOLATED, ALPHA SWEEP, AFE003

LTV44-559(CA26) 04 S

(AFE004)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.595	BETA0	-5.000	ELEV0N	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

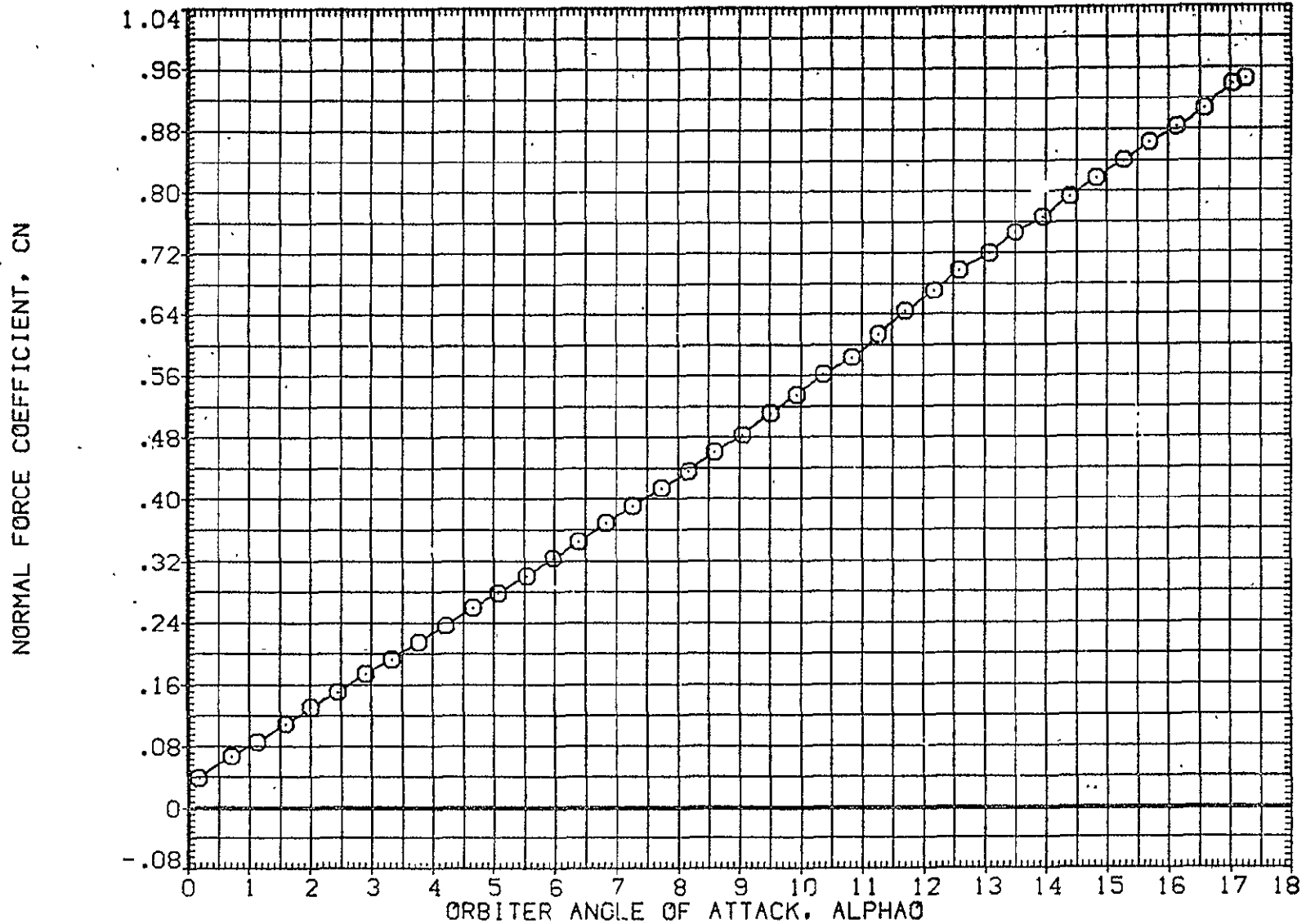


FIG. 7 ORBITER ISOLATED, ALPHA SWEEP, AFE004

SYMBOL	MACH	BETA0	PARAMETRIC VALUES	
○	.595	BDFLAP	-5.000	ELEVON 5.000
			.000	

REFERENCE INFORMATION		
SREF	2690.0000	SG.FT.
LREF	-474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. XC
YMRP	.0000	IN. YO
ZMRP	.375.0000	IN. ZO
SCALE	.0125	

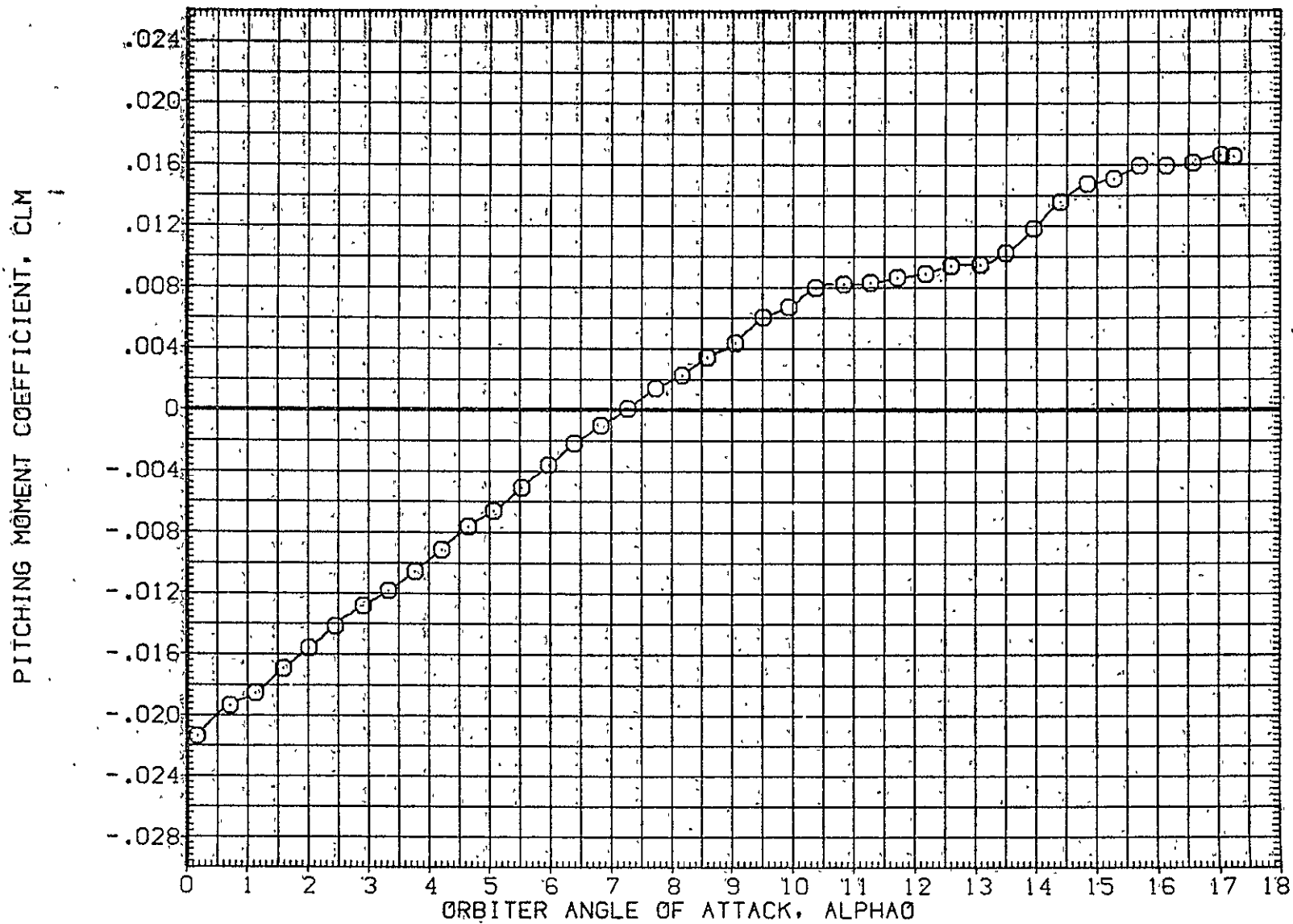


FIG. 7 ORBITER ISOLATED, ALPHA SWEEP, AFE004

LTV44-559(CA26) 04 S

(AFE004)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.595	BETA0	-5.000	ELEVON	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	90.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

AXIAL FORCE COEFFICIENT, CA

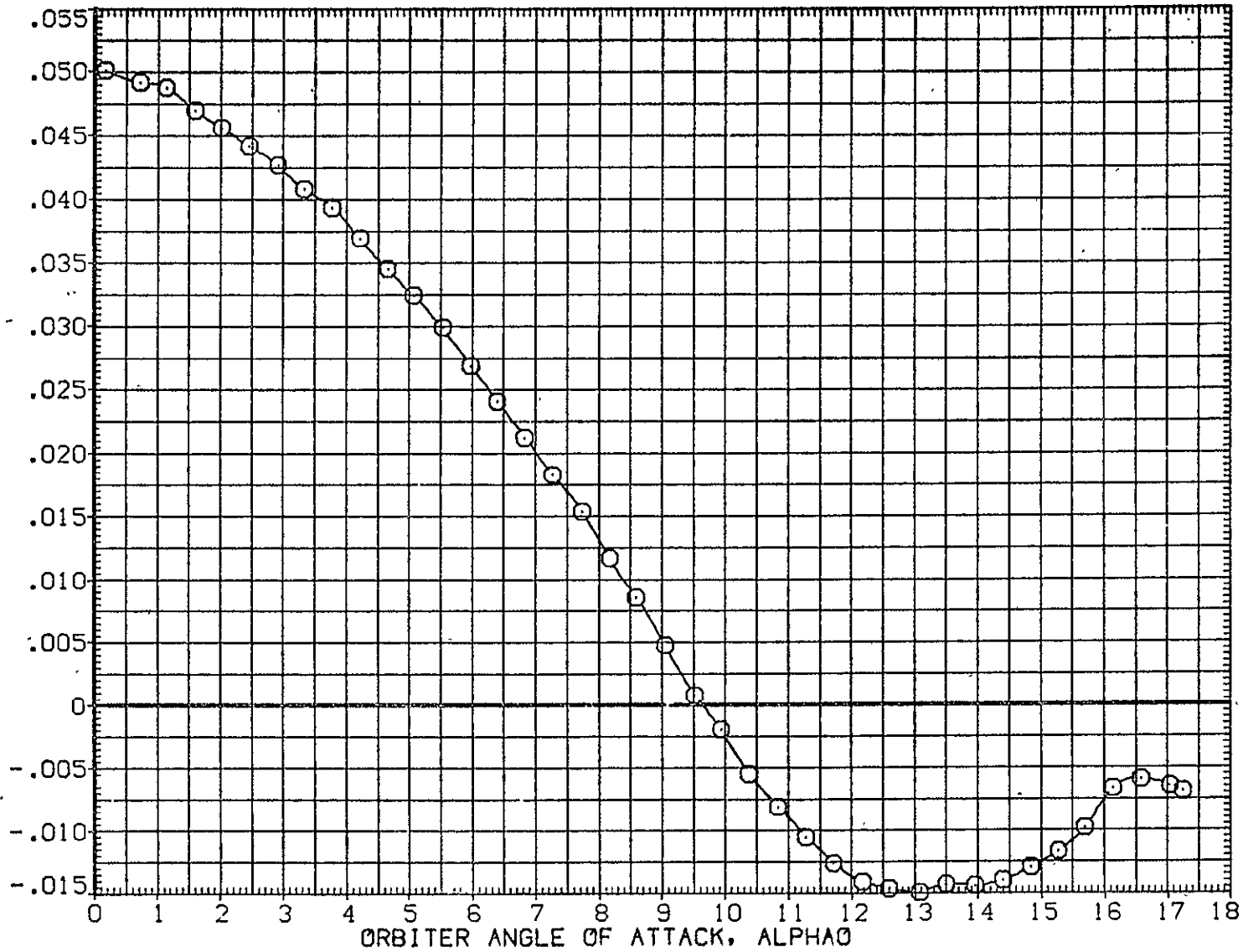


FIG. 7 ORBITER ISOLATED, ALPHA SWEEP, AFE004

SYMBOL	MACH	PARAMETRIC VALUES			
○	.595	.BETAO	=5.000	ELEVON	25.000
		.BDFLAP	.7000		

REFERENCE INFORMATION

SREF	2690.0000	SSQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

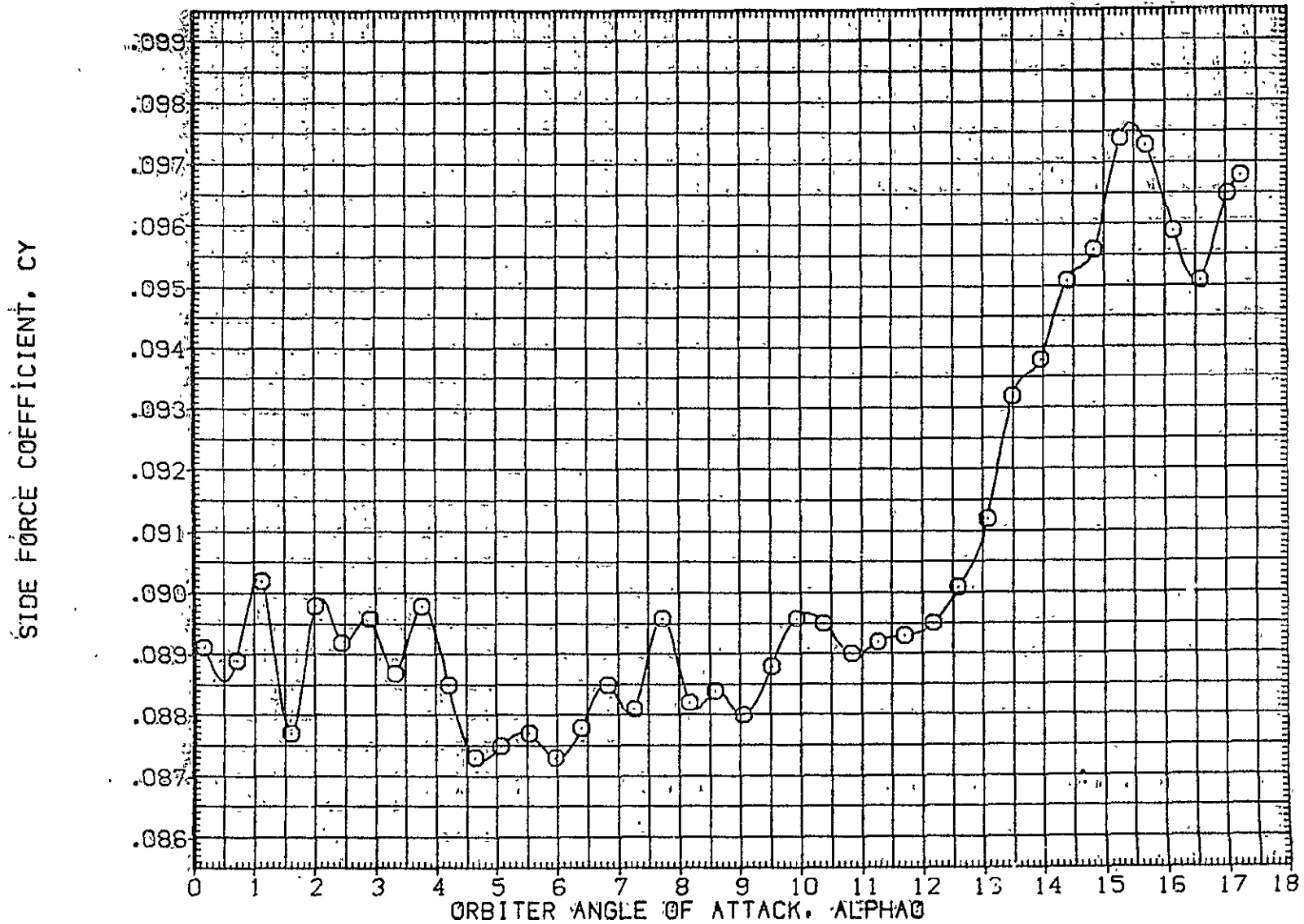


FIG. 7 ORBITER ISOLATED, ALPHA SWEEP, AFE004

LTV44-559(CA26) 04 S

(AFE004)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.595	BETA0	-5.000	ELEVON	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

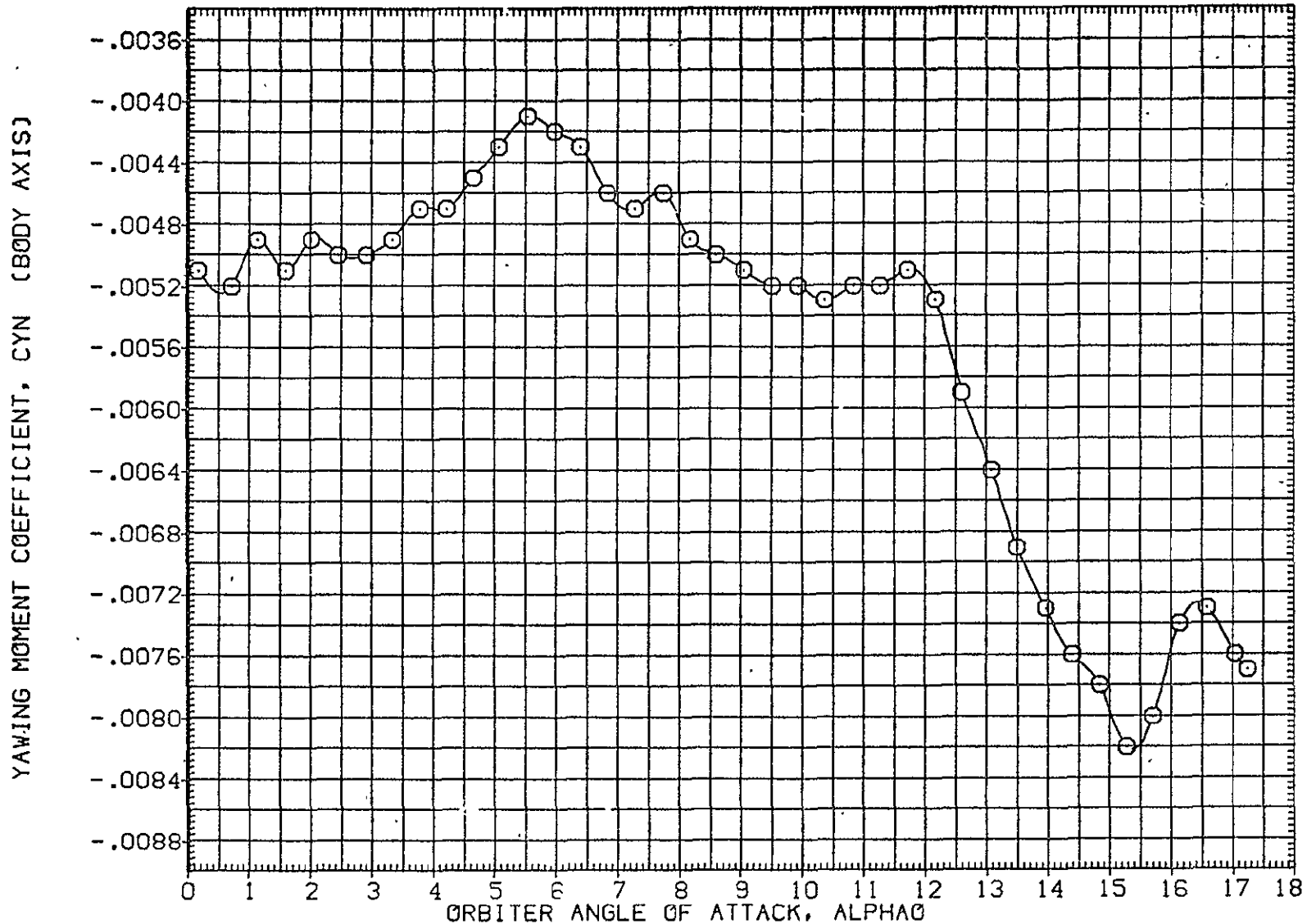


FIG. 7 ORBITER ISOLATED, ALPHA SWEEP, AFE004

SYMBOL	MACH	PARAMETRIC VALUES			
○	.595	BETA0	-5.000	ELEVON	5.000
		BOFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

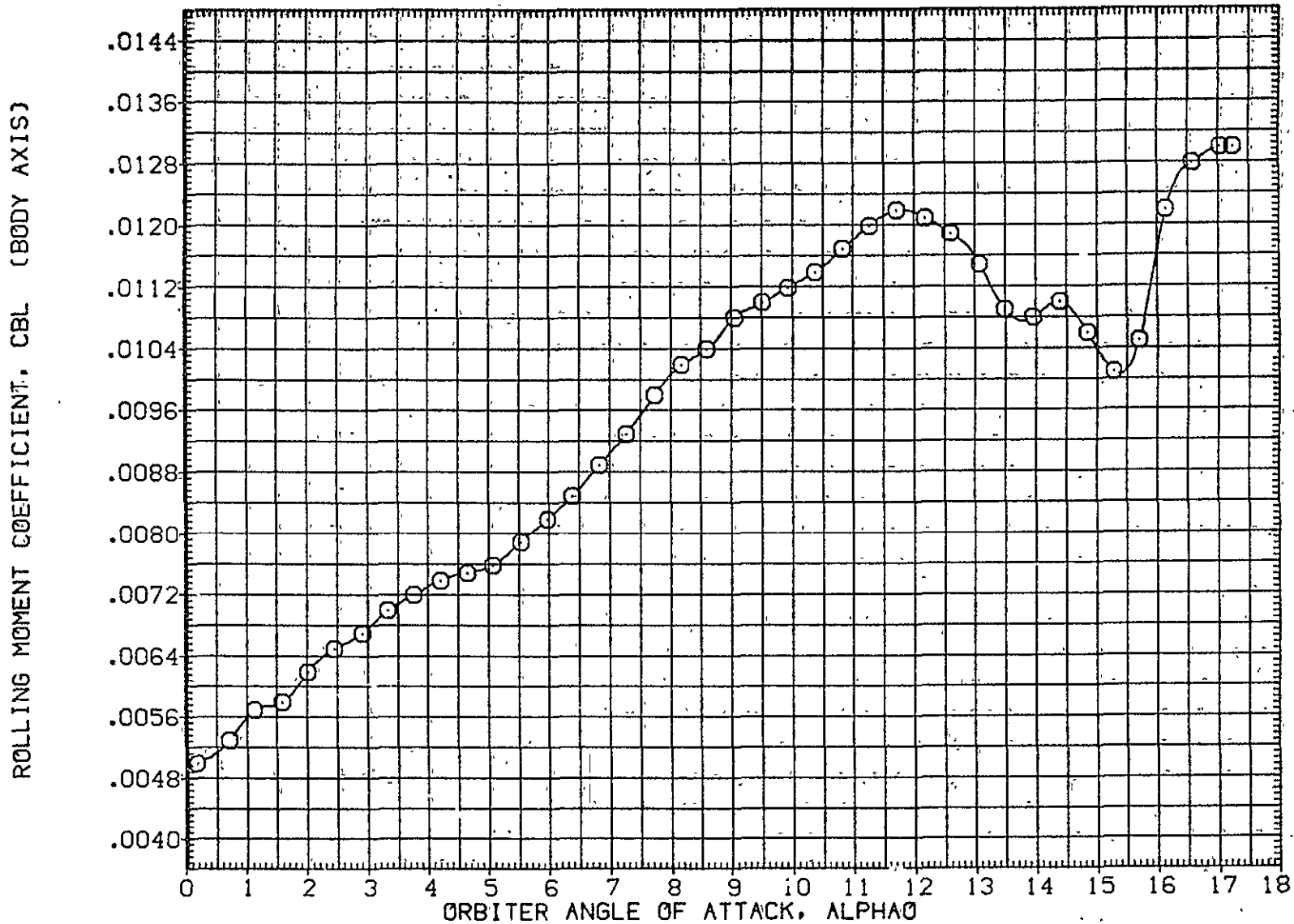


FIG. 7 ORBITER ISOLATED, ALPHA SWEEP, AFE004

LTV44-559(CA26) 04 S

(AFE004)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.595	BETA0	-5.000	ELEV0N	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

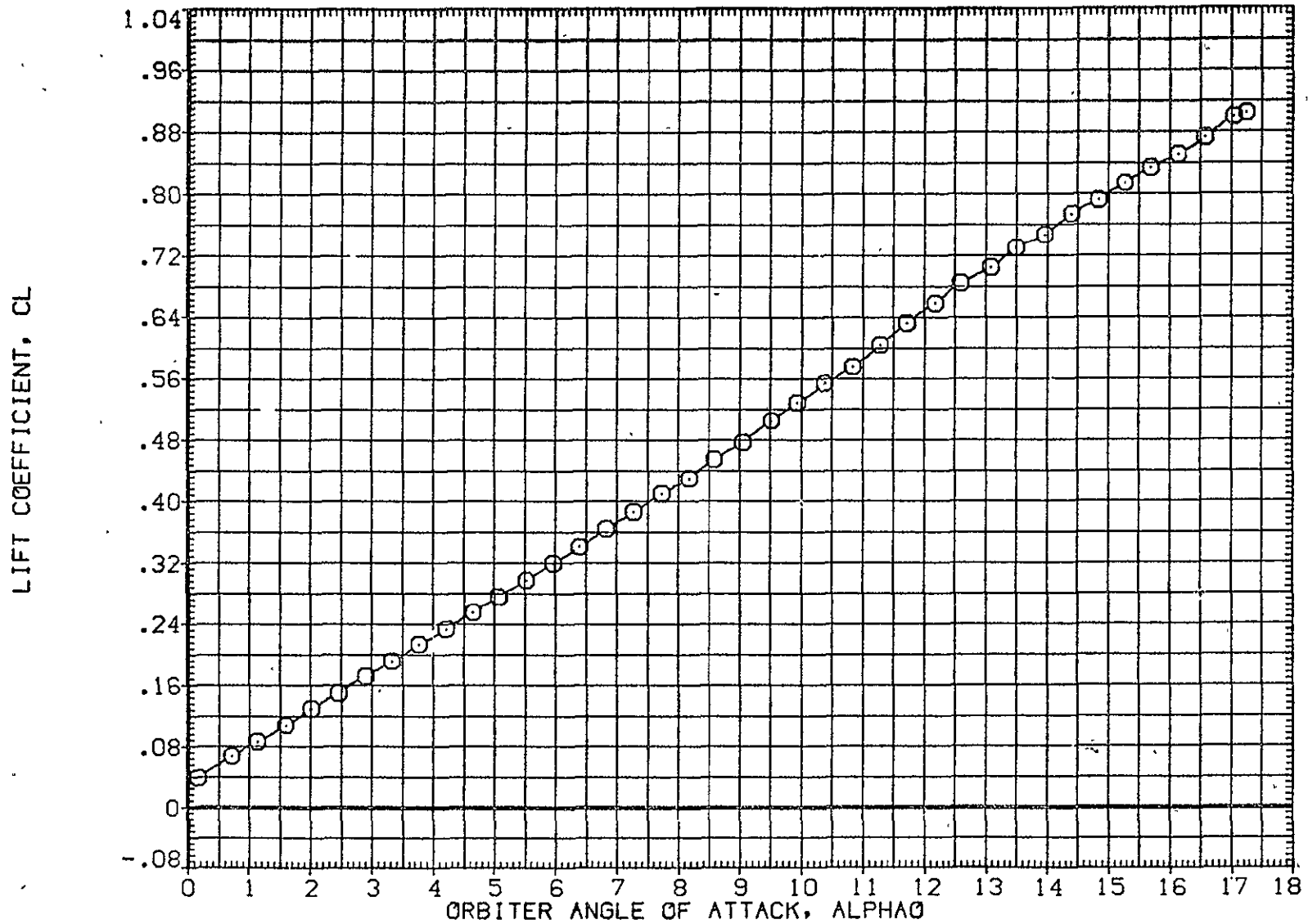


FIG. 7 ORBITER ISOLATED, ALPHA SWEEP, AFE004

SYMBOL	MACH	BETA0	PARAMETRIC VALUES	ELEVON	5.000
○	.595	BDFLAP	-5.000	.000	

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

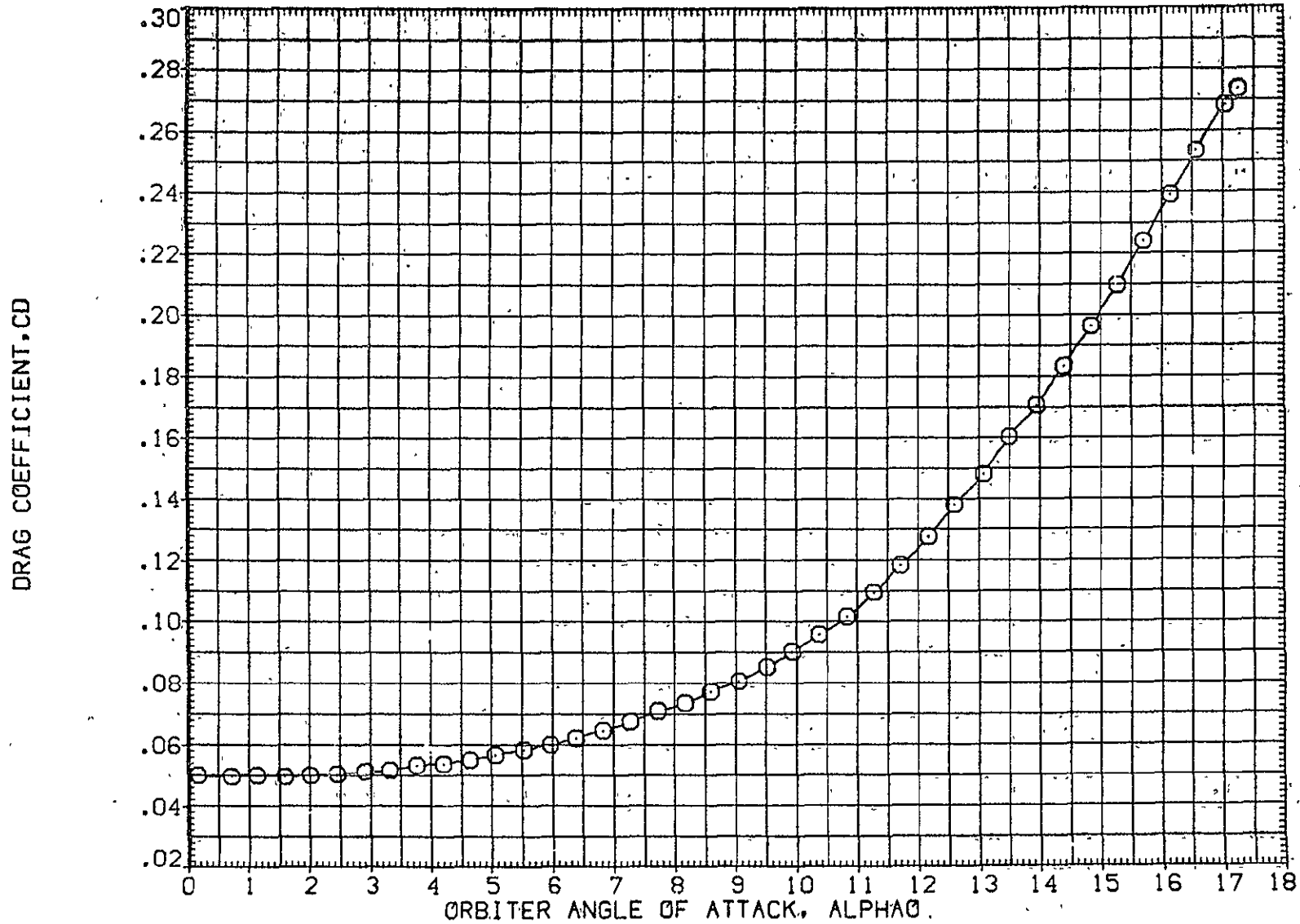


FIG. 7 ORBITER ISOLATED, ALPHA SWEEP, AFE004

LTV44-553(CA26) 02 S1

(AFE005)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.599	BETA0	.000	ELEVON	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

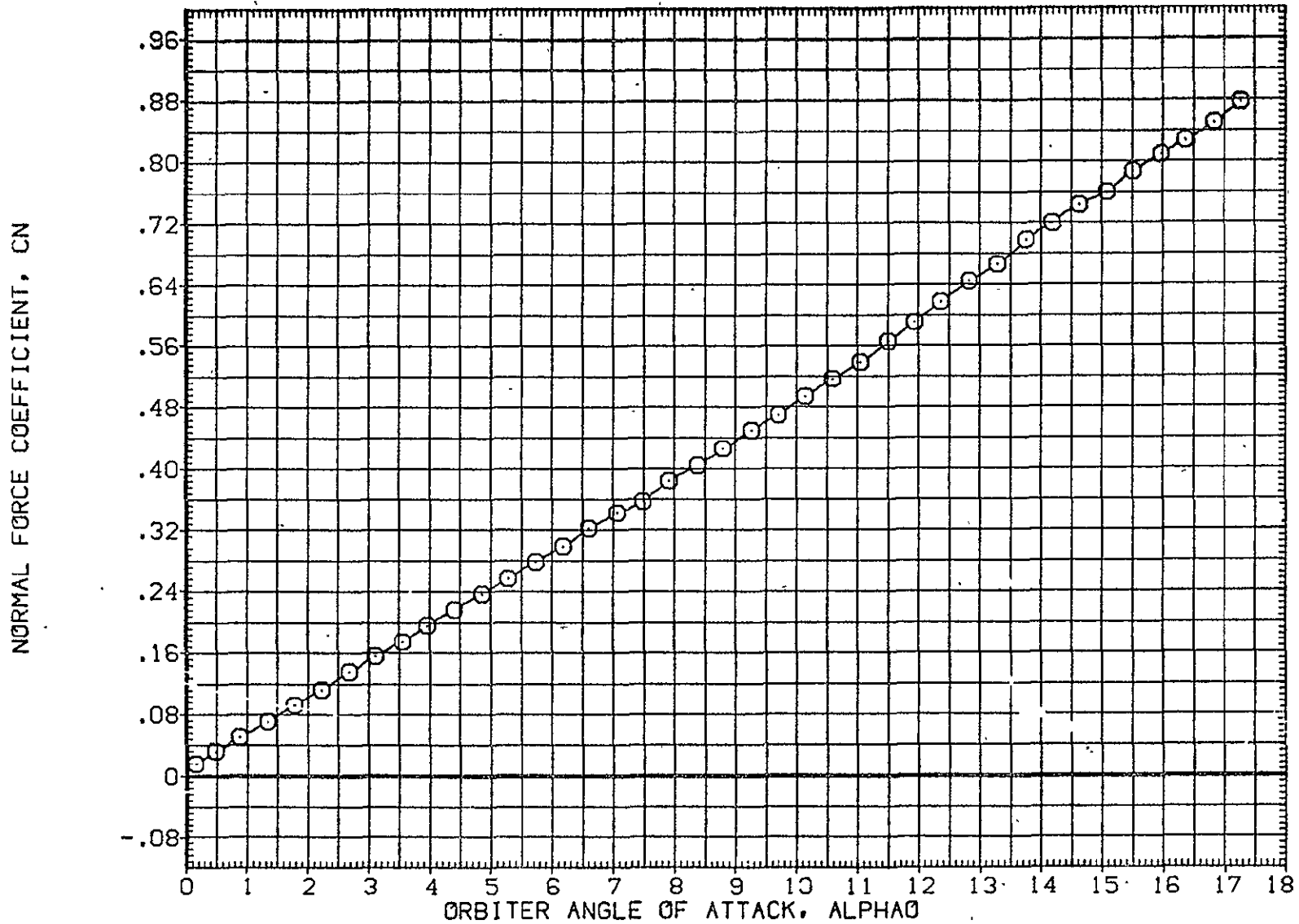


FIG. 8 ORBITER ISOLATED, ALPHA SWEEP, AFE005

SYMBOL	MACH	PARAMETRIC VALUES			
⊙	.599	BETA0	.000	ELEVONc	S:000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

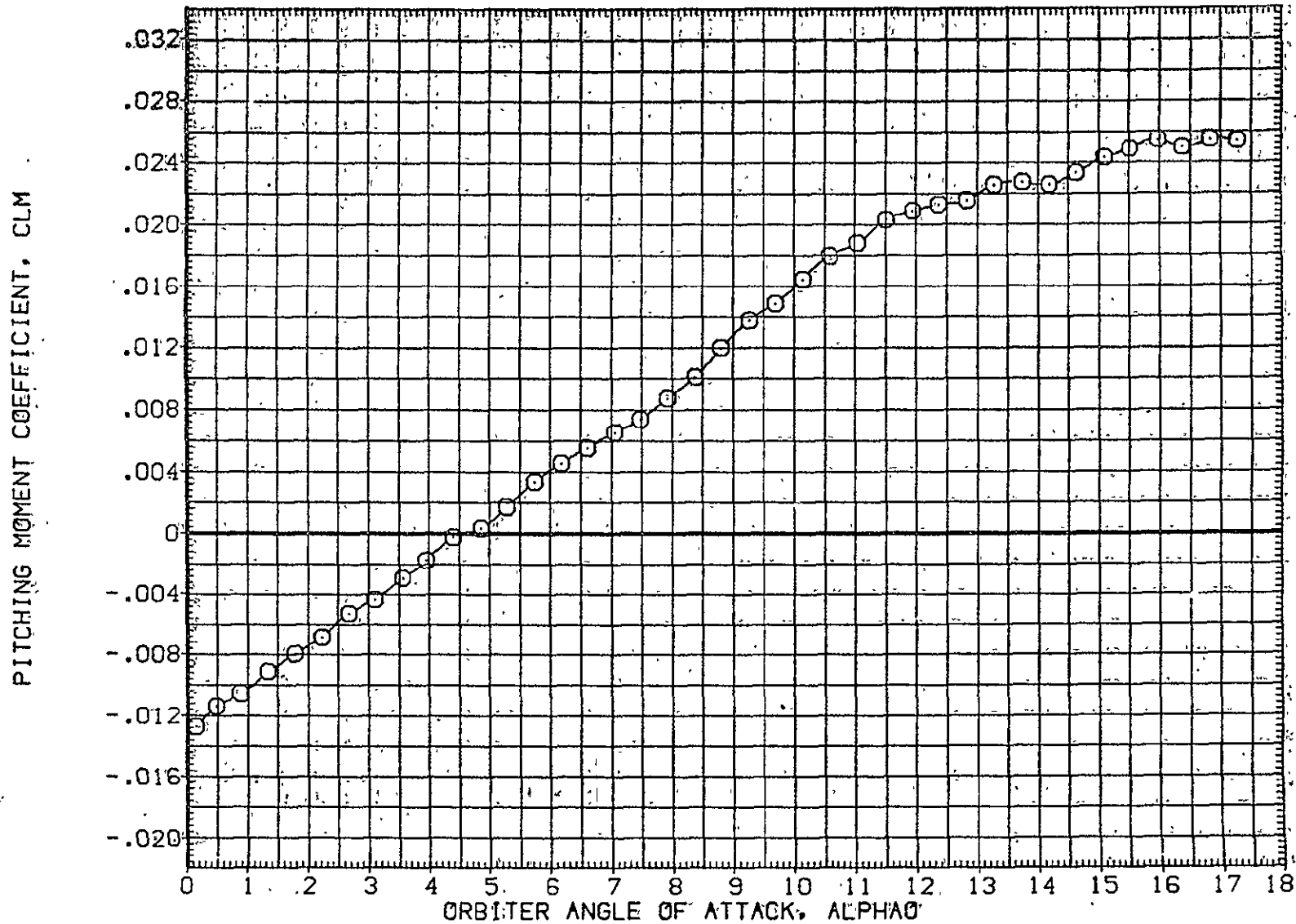


FIG. 8 ORBITER ISOLATED; ALPHA SWEEP, AFE005

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(AFE005)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.599	BETA0	.000	ELEVON	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.9100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

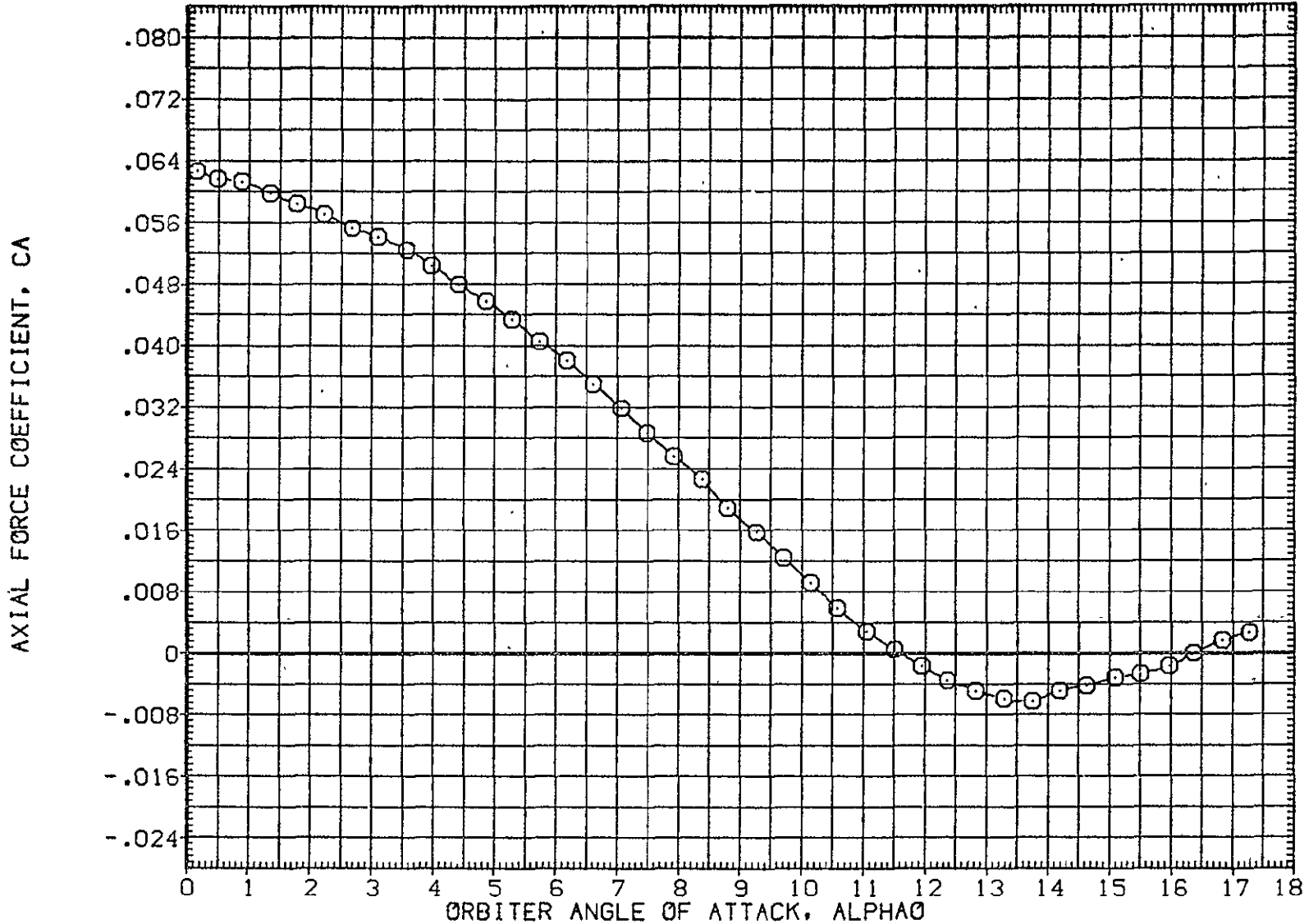


FIG. 8 ORBITER ISOLATED, ALPHA SWEEP, AFE005

SYMBOL	MACH	BETAD	PARAMETRIC VALUES	ELEVON	5.000
○	.599	BDFLAP	.000	.000	

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	938.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

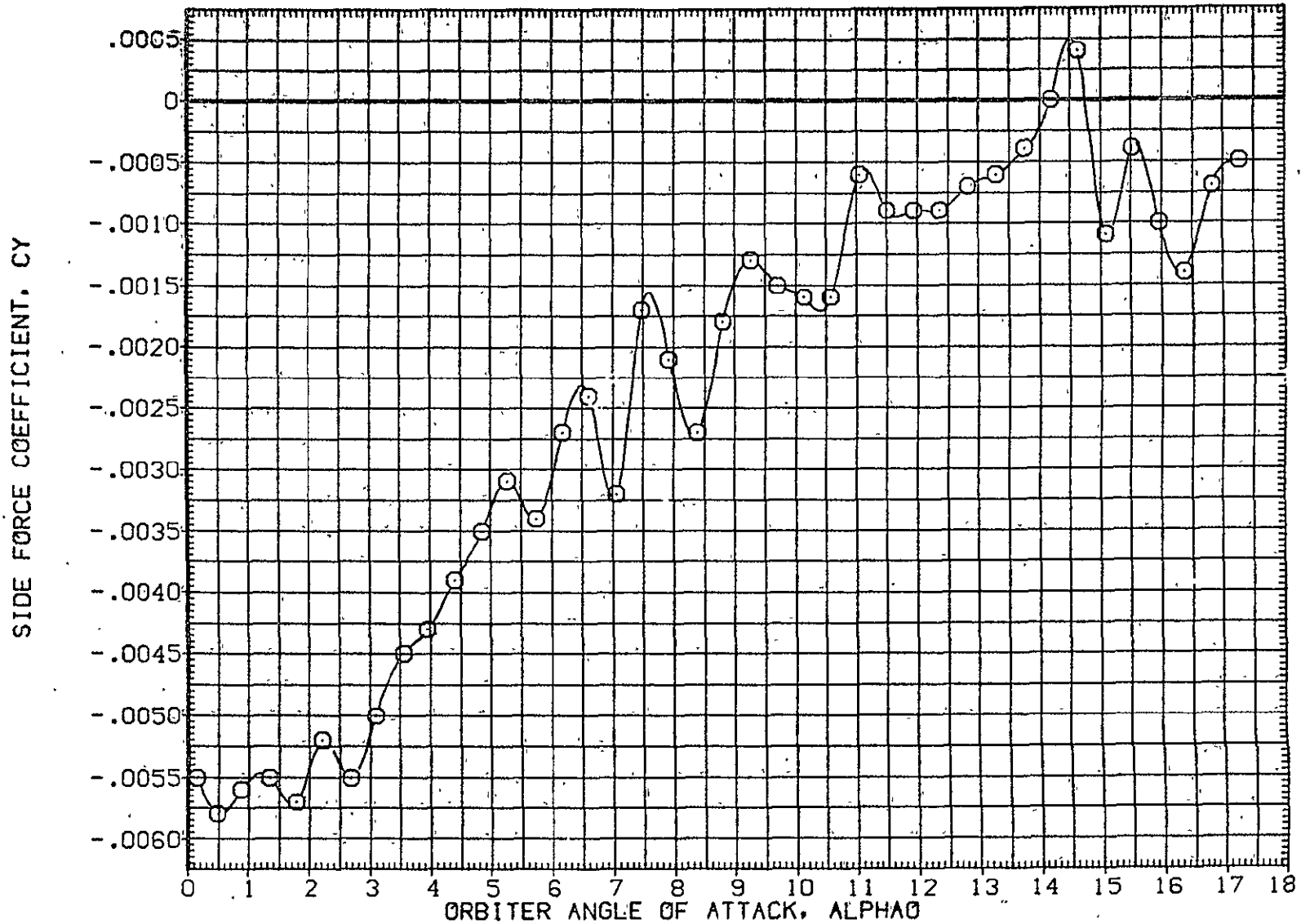


FIG. 8 ORBITER ISOLATED, ALPHA SWEEP, AFE005

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(AFE005)

SYMBOL MACH BETA0 PARAMETRIC VALUES ELEVON 5.000
○ .599 BDFLAP .000 .000

REFERENCE INFORMATION
SREF 2690.0000 50.FT.
LREF 474.8100 IN.
BREF 936.6800 IN.
XMRP 1109.0000 IN. X0
YMRP .0000 IN. Y0
ZMRP 375.0000 IN. Z0
SCALE .0125

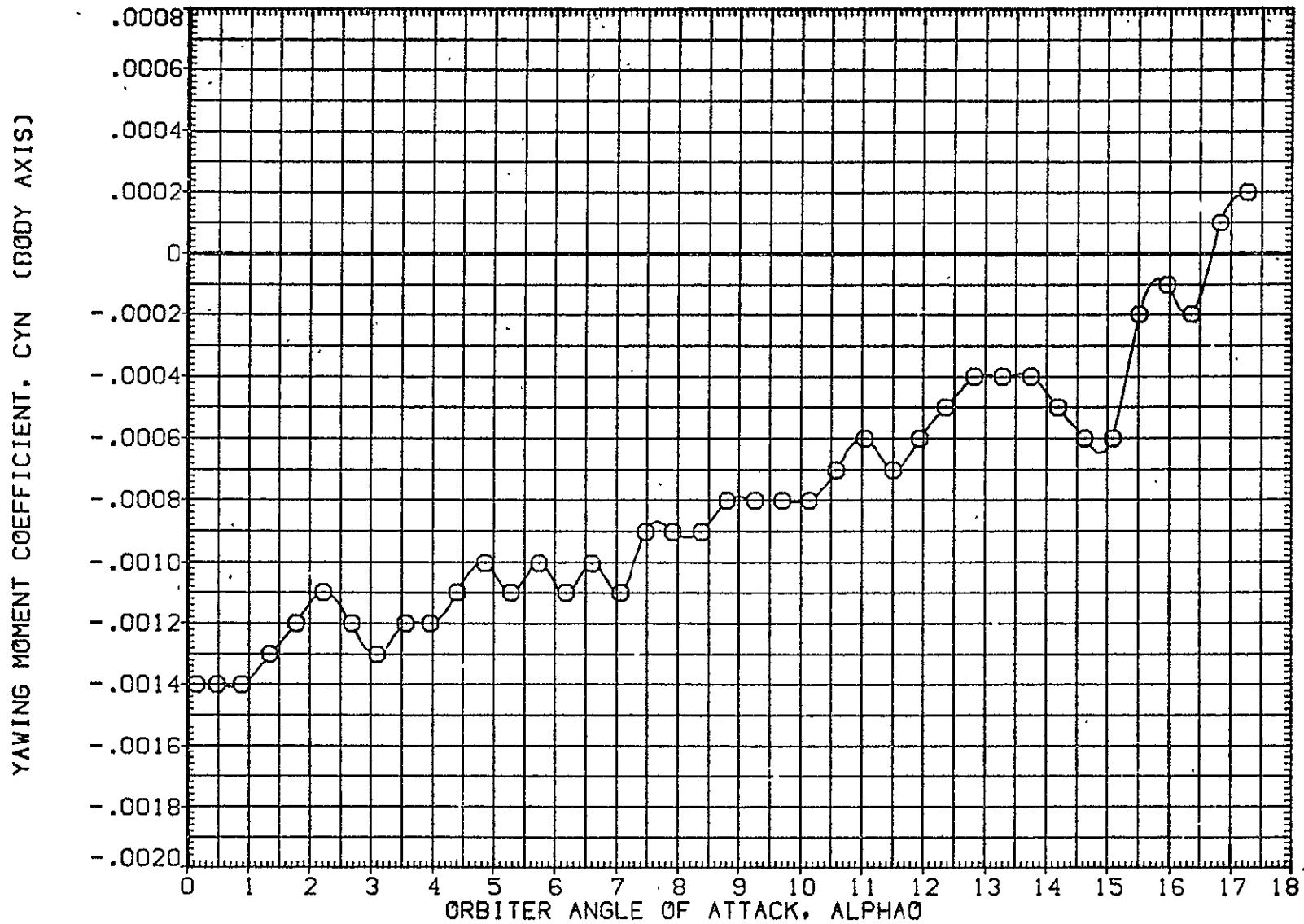


FIG. 8 ORBITER ISOLATED, ALPHA SWEEP, AFE005

SYMBOL	MACH	BETA0	BOFLAP	PARAMETRIC VALUES	ELEVON	5.000
○	.599			.000	.000	

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

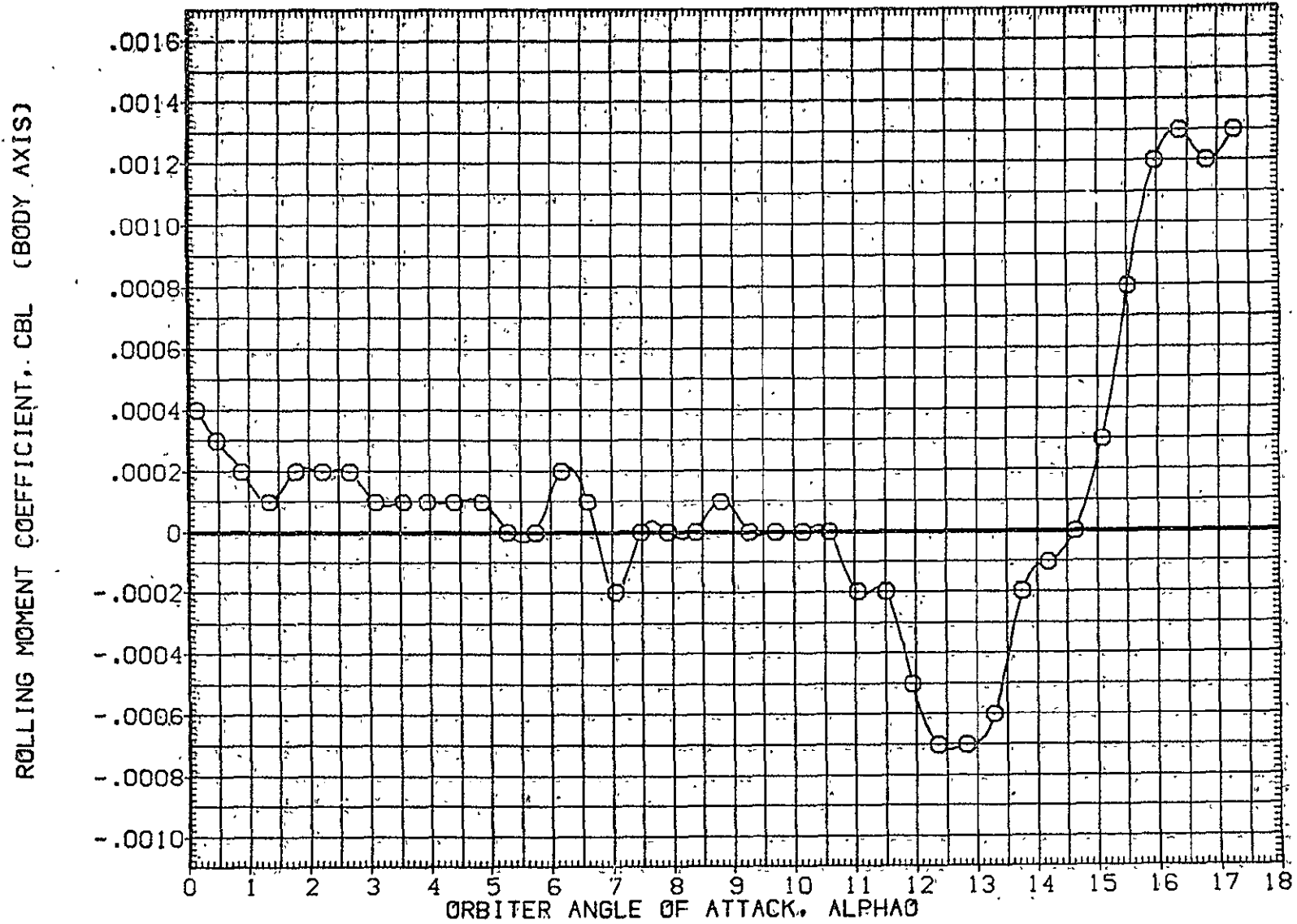


FIG. 8 ORBITER ISOLATED, ALPHA SWEEP, AFE005

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(AFE005)

SYMBOL	MACH	BETA0	PARAMETRIC VALUES	ELEVON	S.000
○	.599	BDFLAP	.000	.000	

REFERENCE INFORMATION		
SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

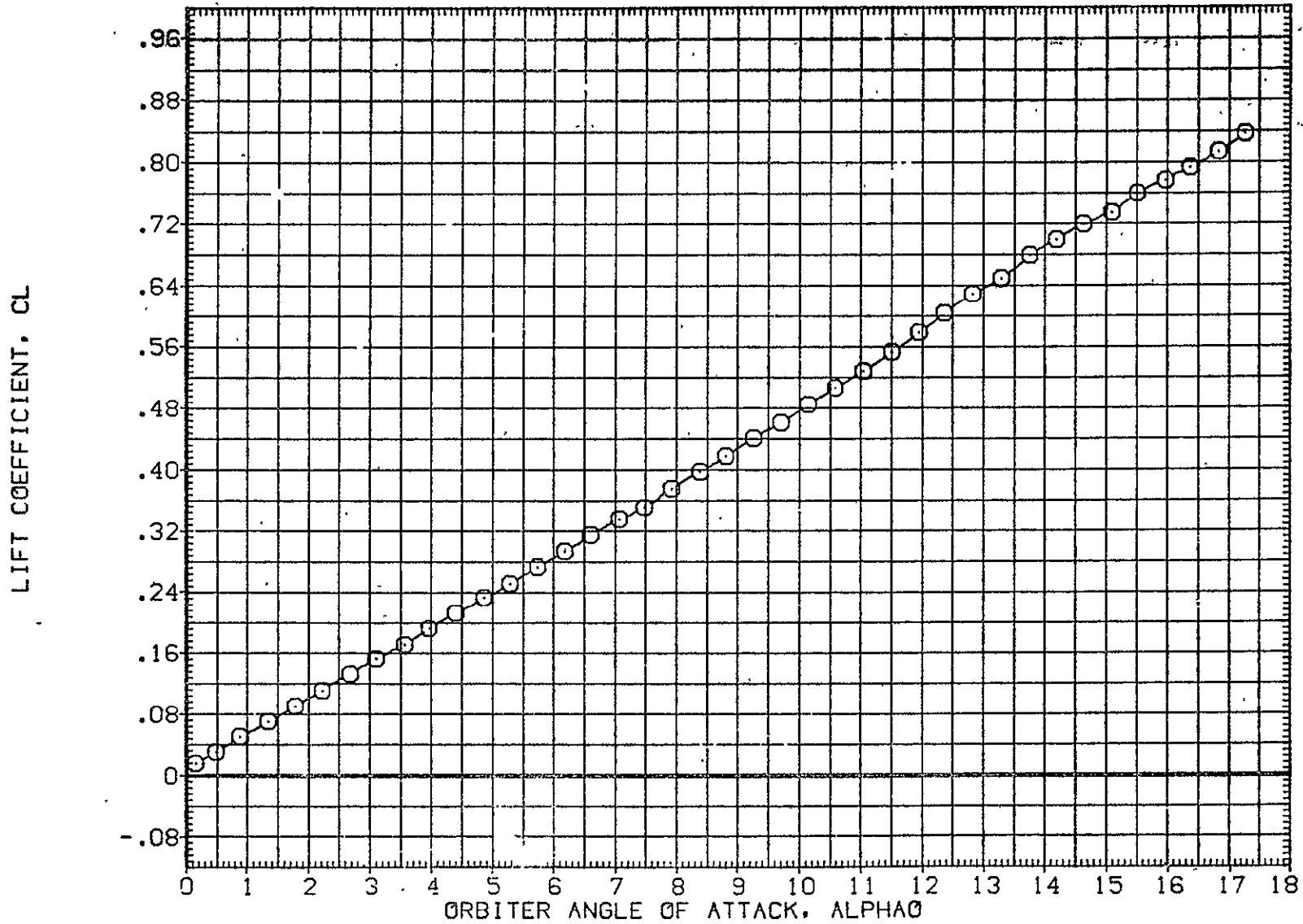


FIG. 8 ORBITER ISOLATED, ALPHA SWEEP, AFE005

SYMBOL	MACH	PARAMETRIC VALUES			
○	.599	BETA0	.000	ELEVON	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMMP	1109.0000	IN. X0
YMMP	.0000	IN. Y0
ZMMP	375.0000	IN. Z0
SCALE	.0125	

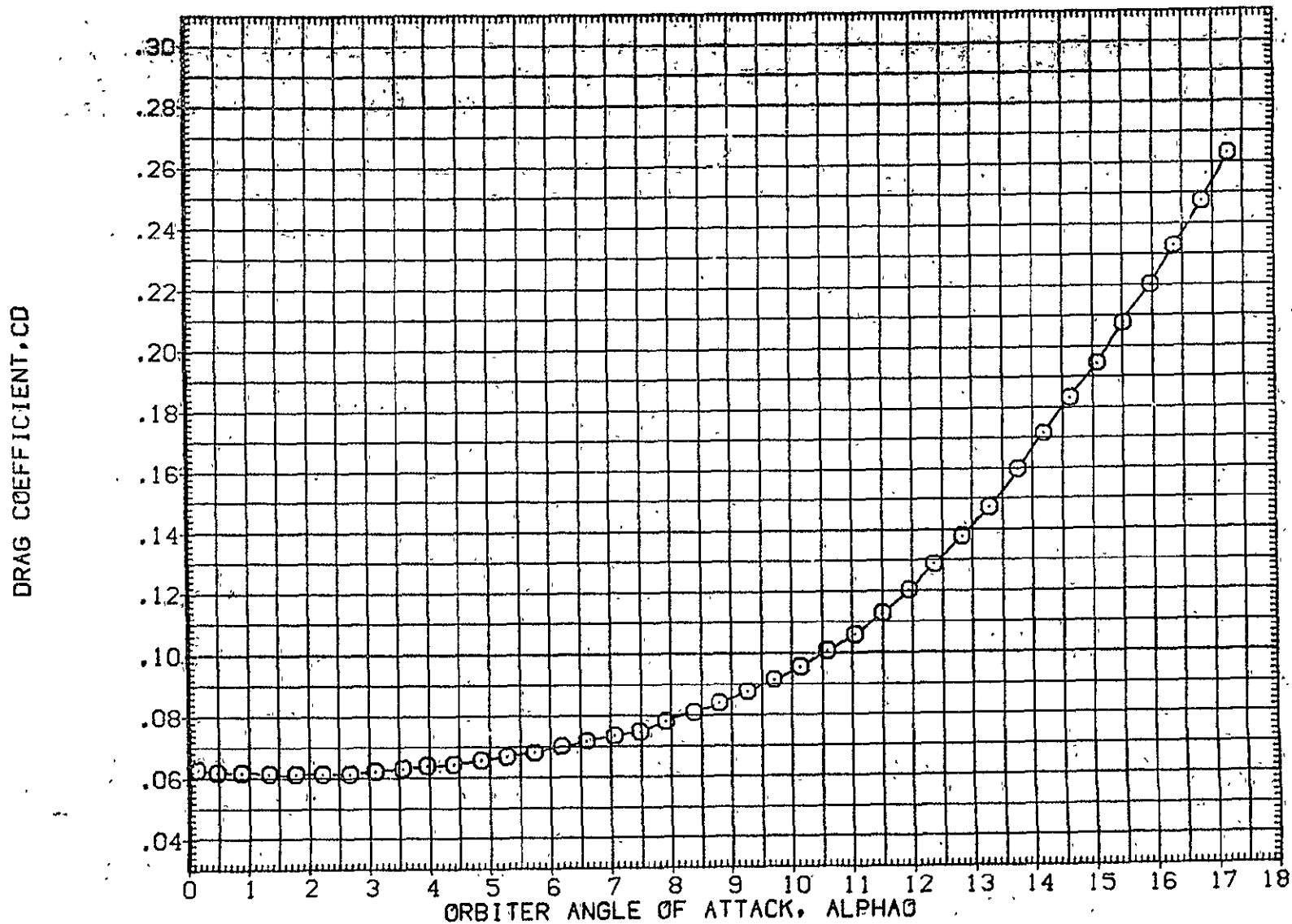


FIG. 8 ORBITER ISOLATED, ALPHA SWEEP, AFE005

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(AFE006)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.592	BETA0	-5.000	ELEV0N	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

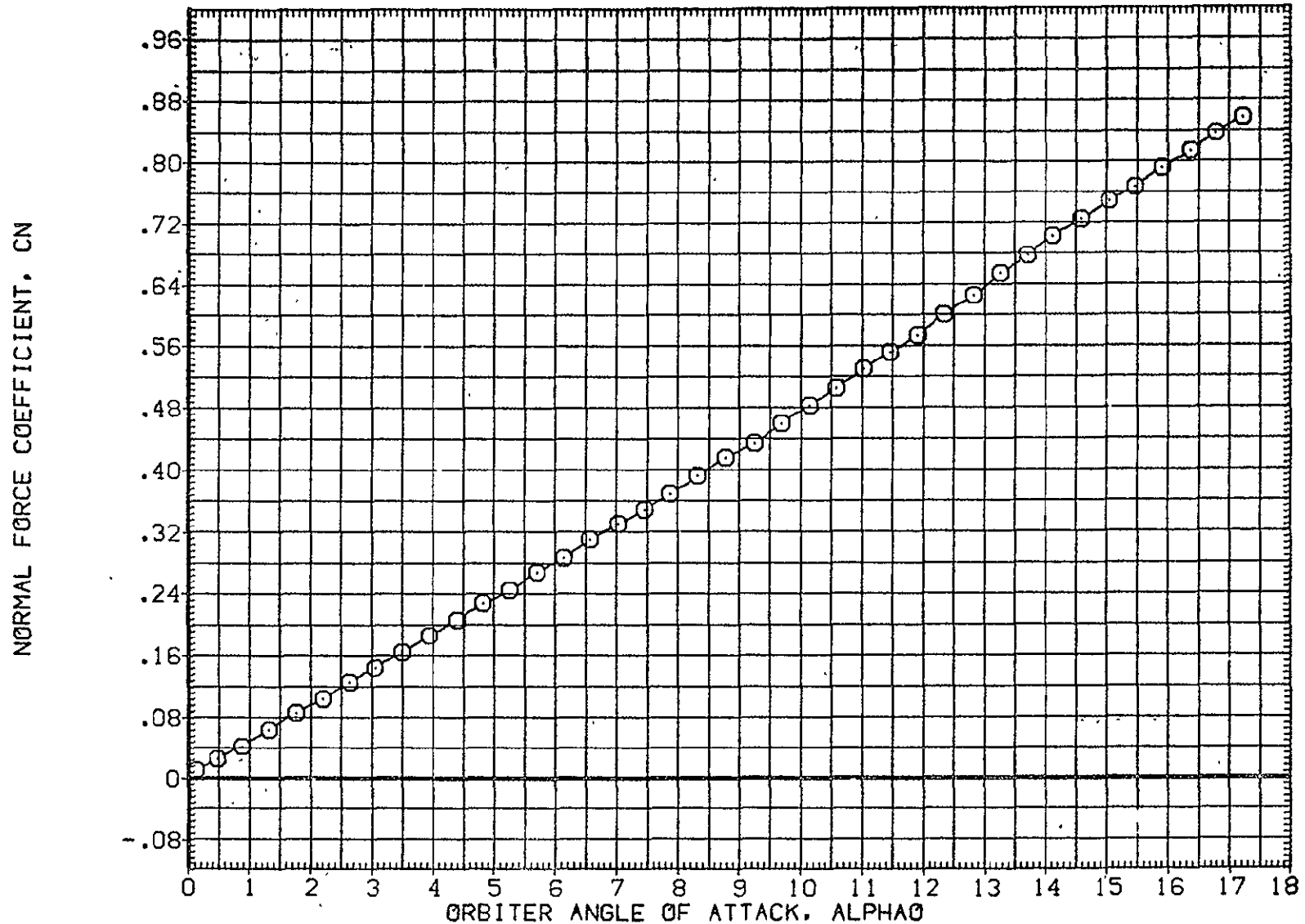


FIG. 9 ORBITER ISOLATED, ALPHA SWEEP, AFE006

SYMBOL	MACH	PARAMETRIC VALUES			
○	.592	BETA0	-5.000	ELEV0N	5.000
		BOFLAP	.000		

REFERENCE INFORMATION		
SREF	.2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

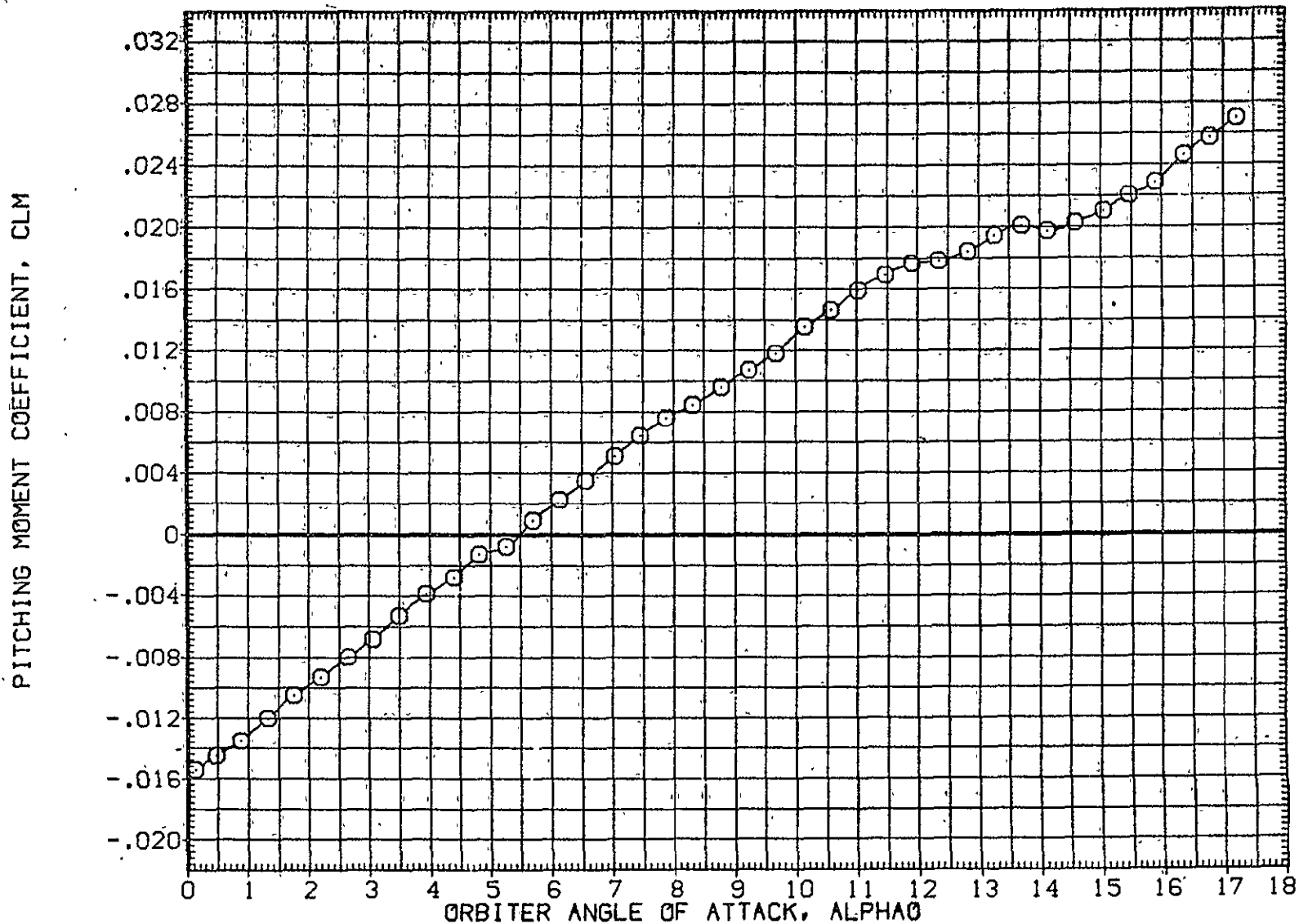


FIG. 9 ORBITER ISOLATED, ALPHA SWEEP, AFE006.

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(AFE006)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.592	BETA0	-5.000	ELEVON	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

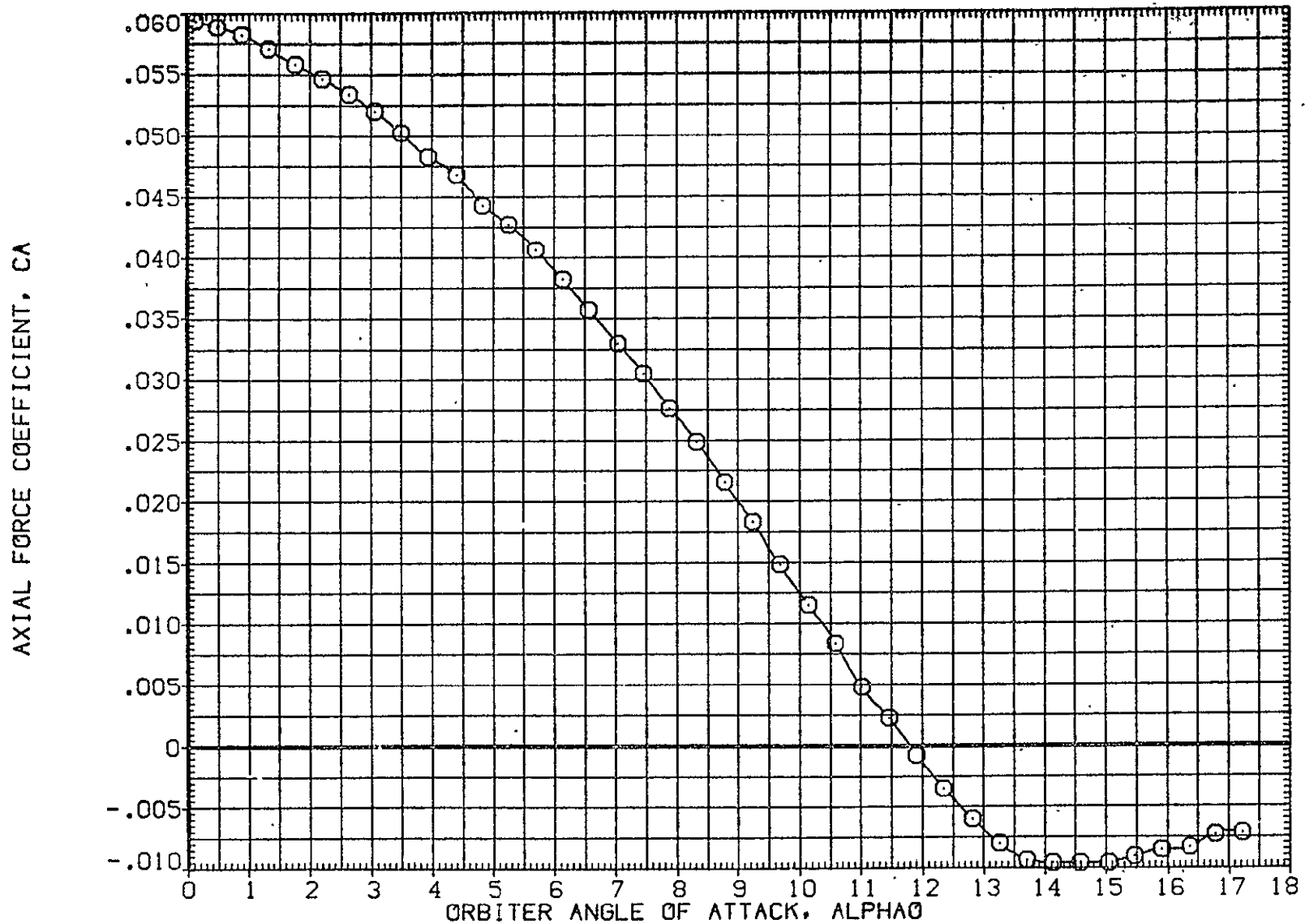


FIG. 9 ORBITER ISOLATED, ALPHA SWEEP, AFE006

SYMBOL	MACH	BETA	PARAMETRIC VALUES	ELEVON	5.000
○	.592	.8DFLAP	-5.000	.000	

REFERENCE INFORMATION

SREF	2690.0000	50. FT.
LREF	474.8100	IN.
BREF	.936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

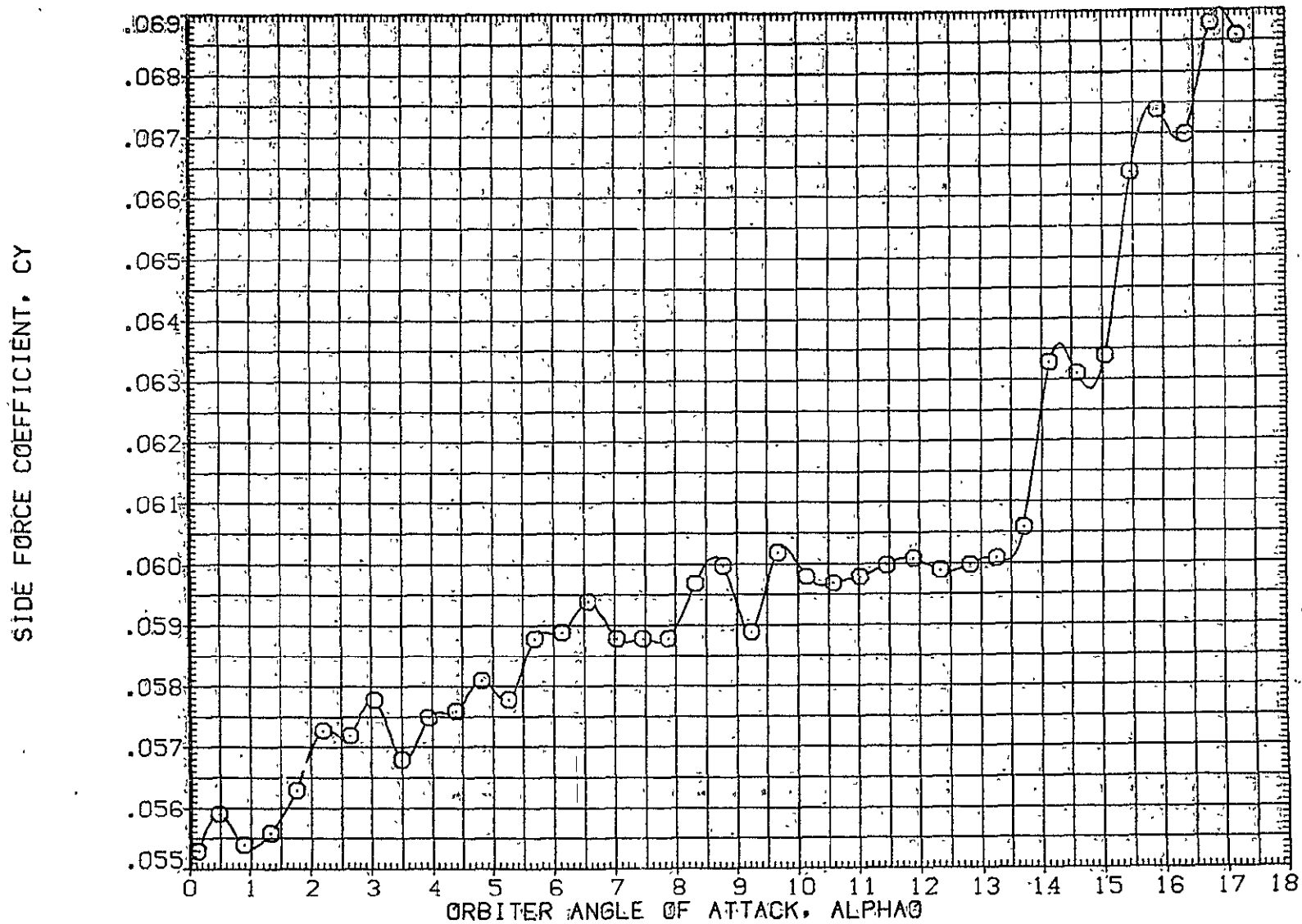


FIG. 9 ORBITER ISOLATED, ALPHA SWEEP, AFE006

SYMBOL MACH PARAMETRIC VALUES
 O .592 BETA0 -5.000 ELEVON 5.000
 BDFLAP .000

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1109.0000 IN. X0
 YMRP .0000 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .0125

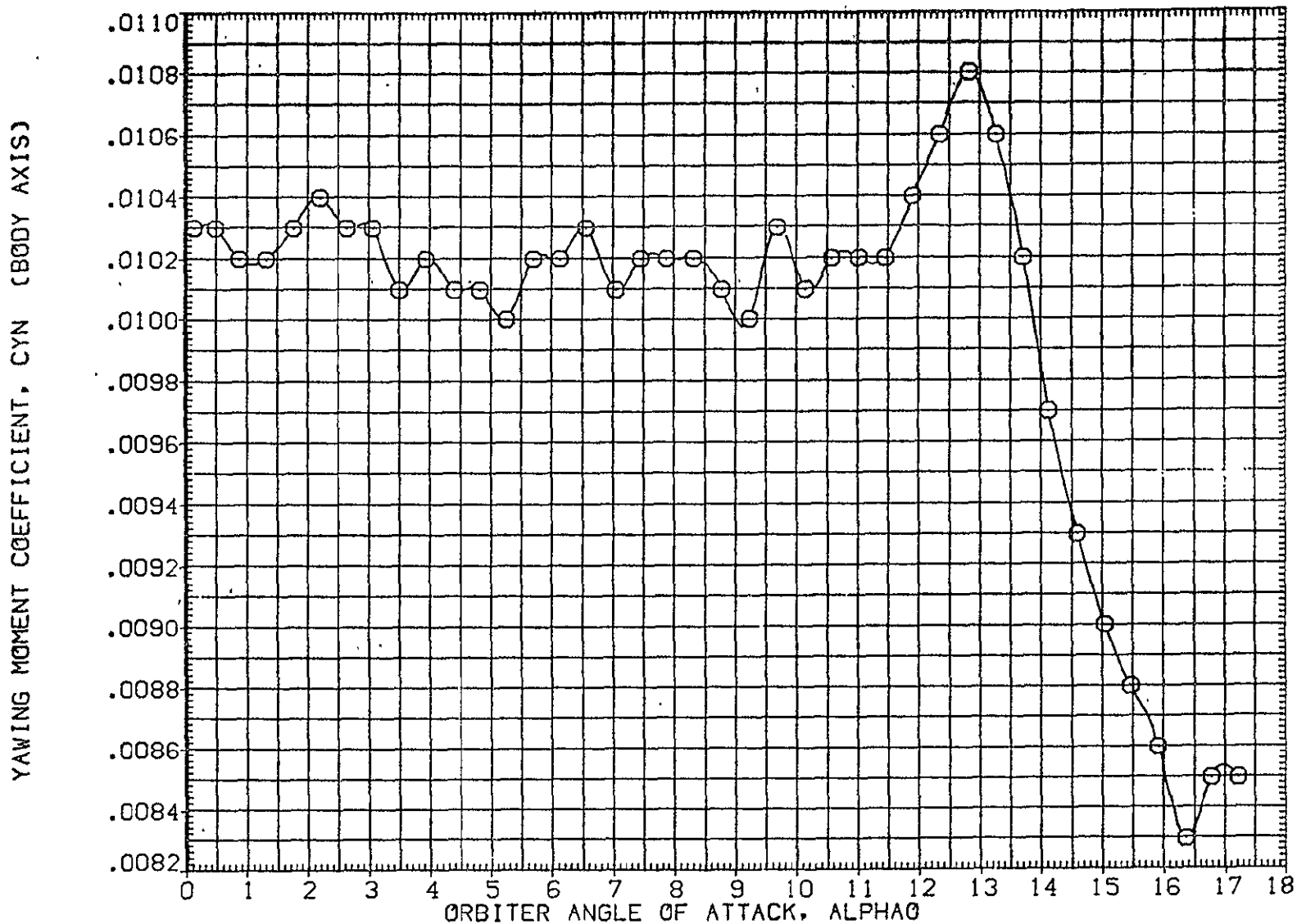


FIG. 9 ORBITER ISOLATED, ALPHA SWEEP, AFE006

SYMBOL	MACH	BETA	PARAMETRIC VALUES		
○	.592	BFLAP	-5.000	ELEVON	5.000
			.000		

REFERENCE INFORMATION		
SREF	2690.0000	60. FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

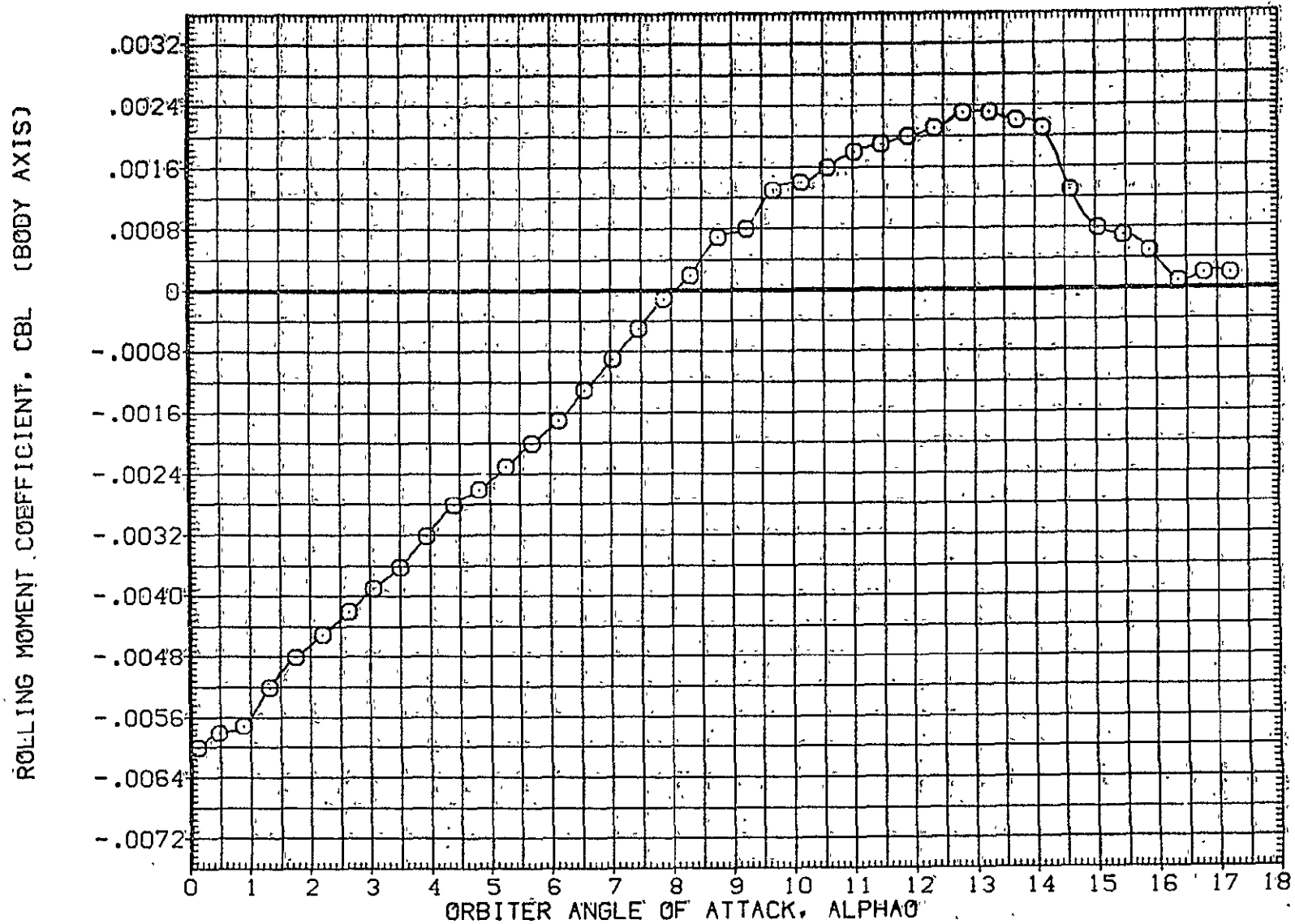


FIG. 9 ORBITER ISOLATED, ALPHA SWEEP, AFE006

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(AFE006)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.592	BETA0	-5.000	ELEV0N	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SG.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

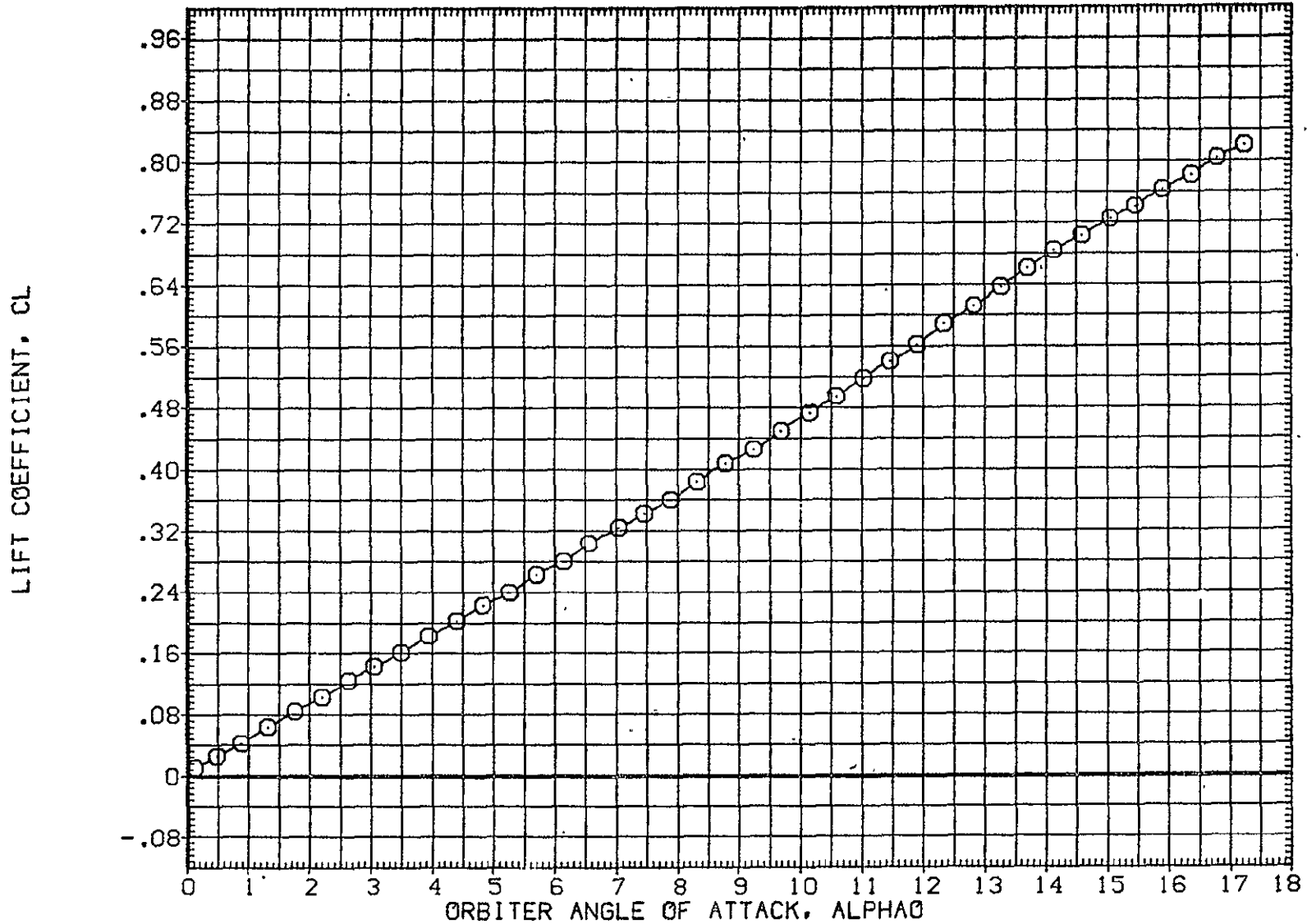


FIG. 9 ORBITER ISOLATED, ALPHA SWEEP, AFE006

SYMBOL	MACH	PARAMETRIC VALUES:			
○	.592	BETA0	-5.000	ELEVON	3.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	.2690.0000	SQ.FT.
LREF	.474.8100	IN.
BREF	.936.6800	IN.
XMRP	1109.0000	IN. X0'
YMRP	.0000	IN. Y0'
ZMRP	375.0000	IN. Z0'
SCALE	.0125	

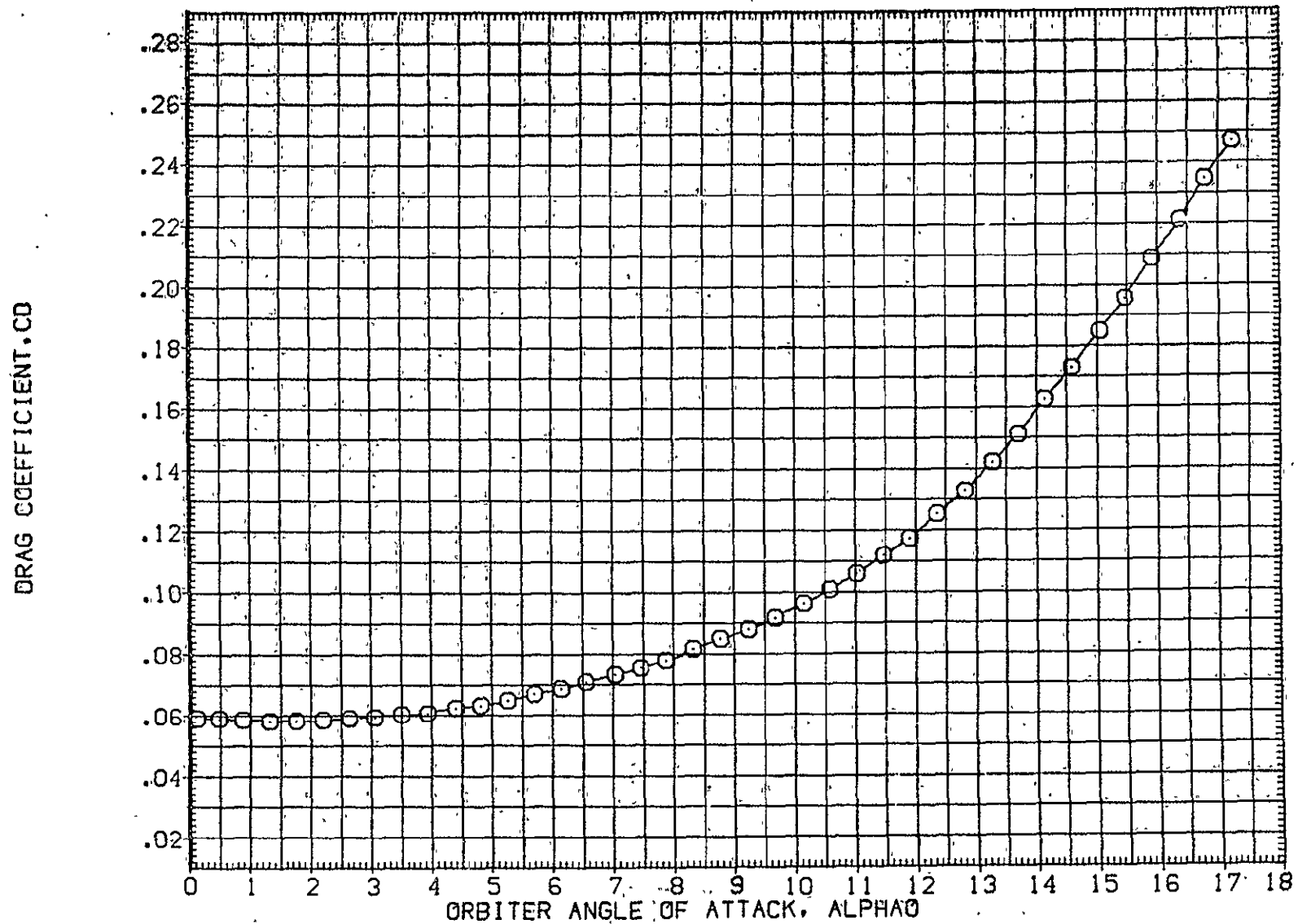


FIG. 9 ORBITER ISOLATED, ALPHA SWEEP, AFE006

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(AFE007)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.590	ALPHA0	8.000	BETA0	.000
		ELEVON	5.000	BOFLAP	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

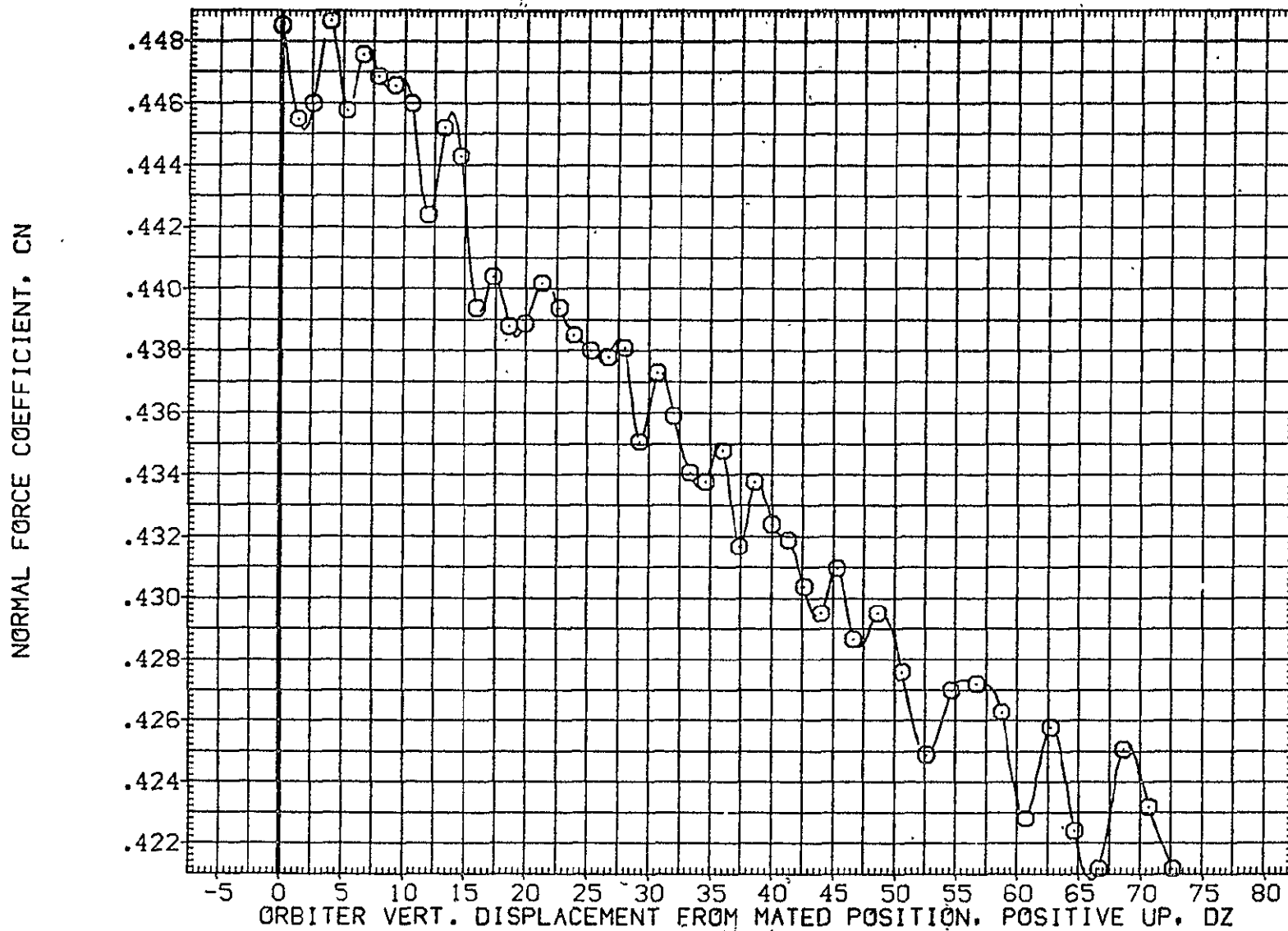


FIG. 10 ORBITER ISOLATED, DELZ SWEEP, AFE007

SYMBOL	MACH	PARAMETRIC VALUES			
○	.590	ALPHAO	8.000	BETA0	.000
		ELEVON	5.000	BOFLAP	.000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

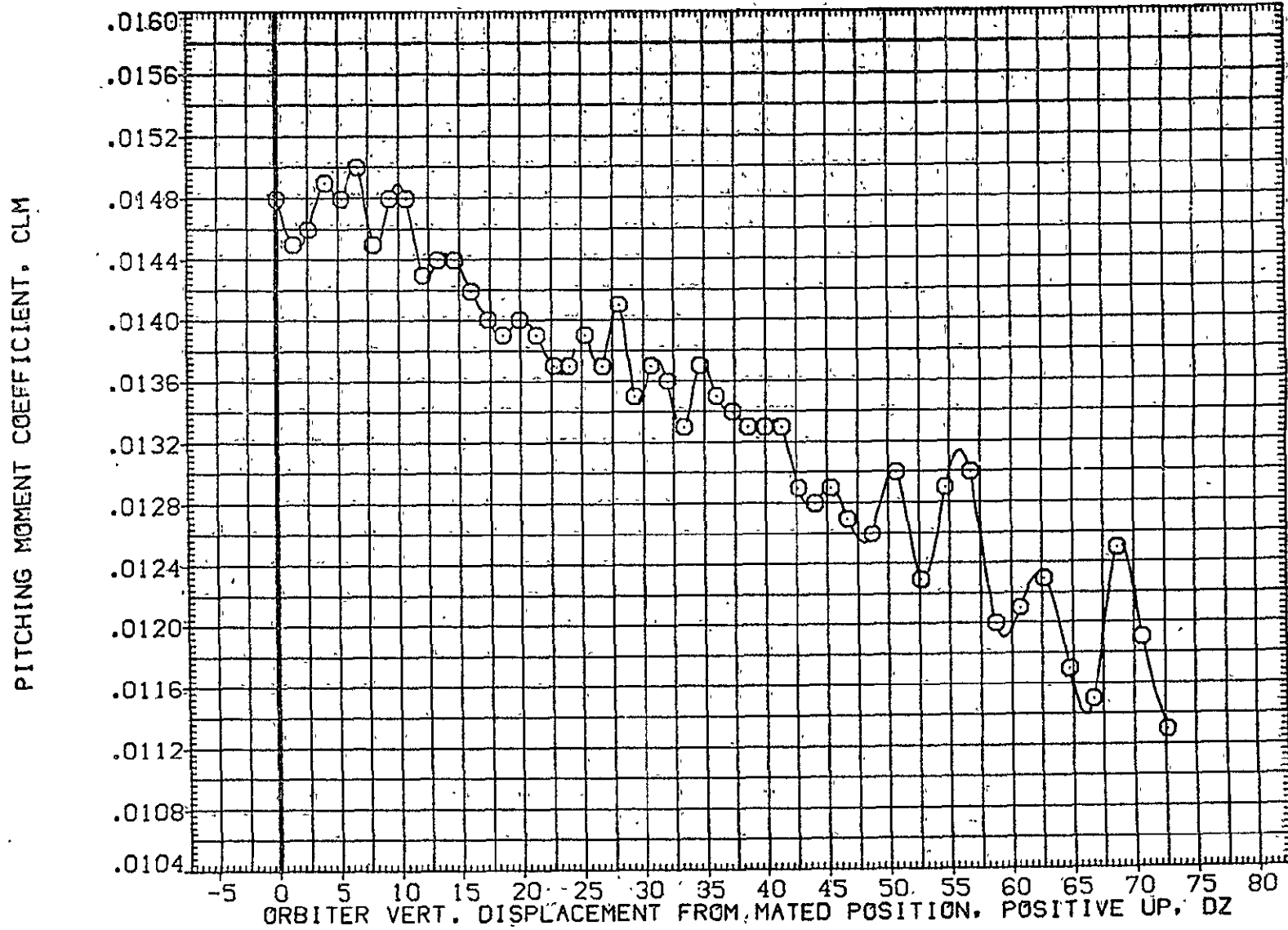


FIG. 10 ORBITER ISOLATED, DELZ SWEEP, AFE007

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(AFE007)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.590	ALPHA0	8.000	BETA0	.000
		ELEVON	5.000	BDFLAP	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0125	

AXIAL FORCE COEFFICIENT, CA

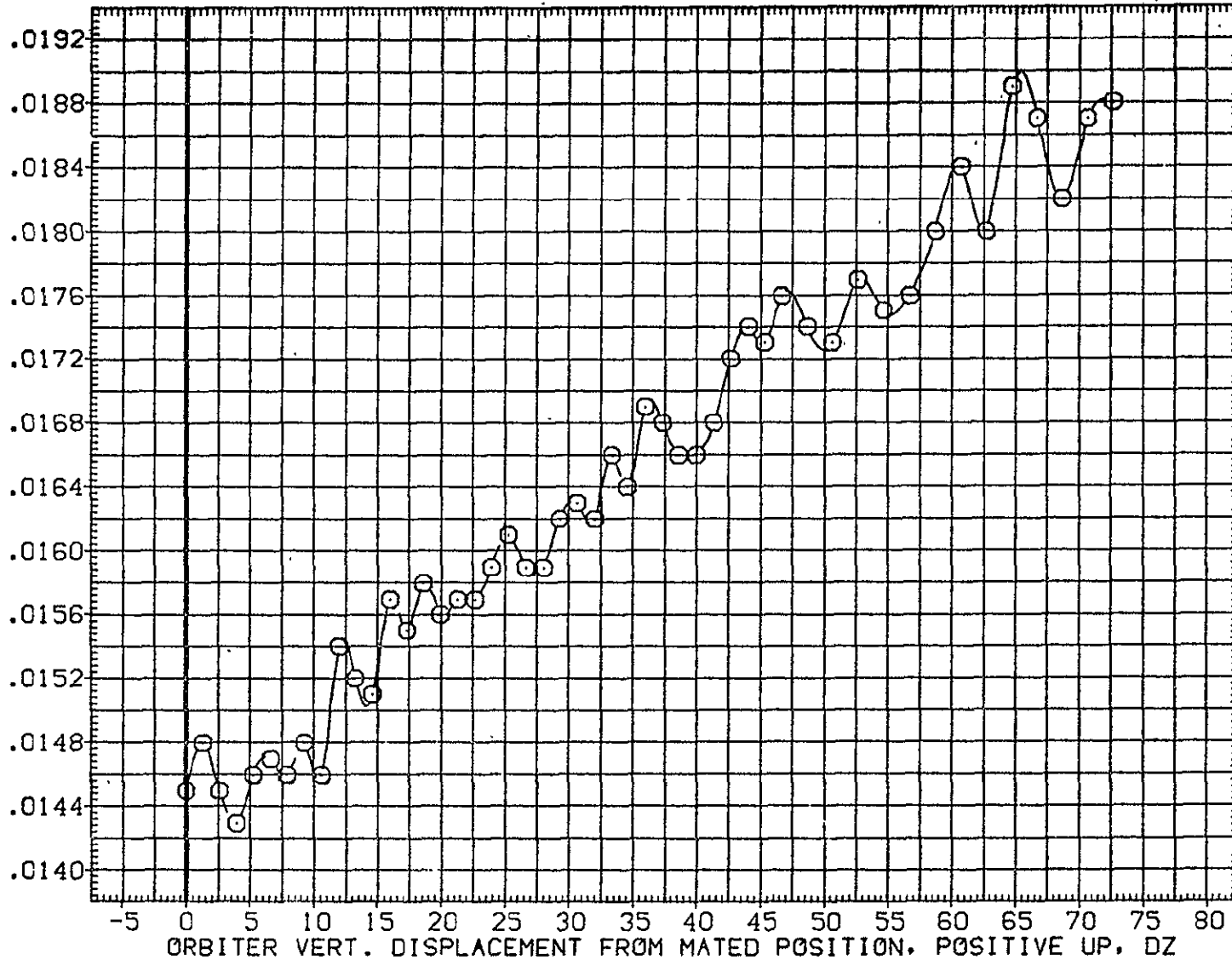


FIG. 10 ORBITER ISOLATED, DELZ SWEEP, AFE007

SYMBOL	MACH	PARAMETRIC VALUES		
		ALPHA0	BETA0	BDFLAP
○	.550	8.000	.000	.000
		ELEVON	5.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	SG.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

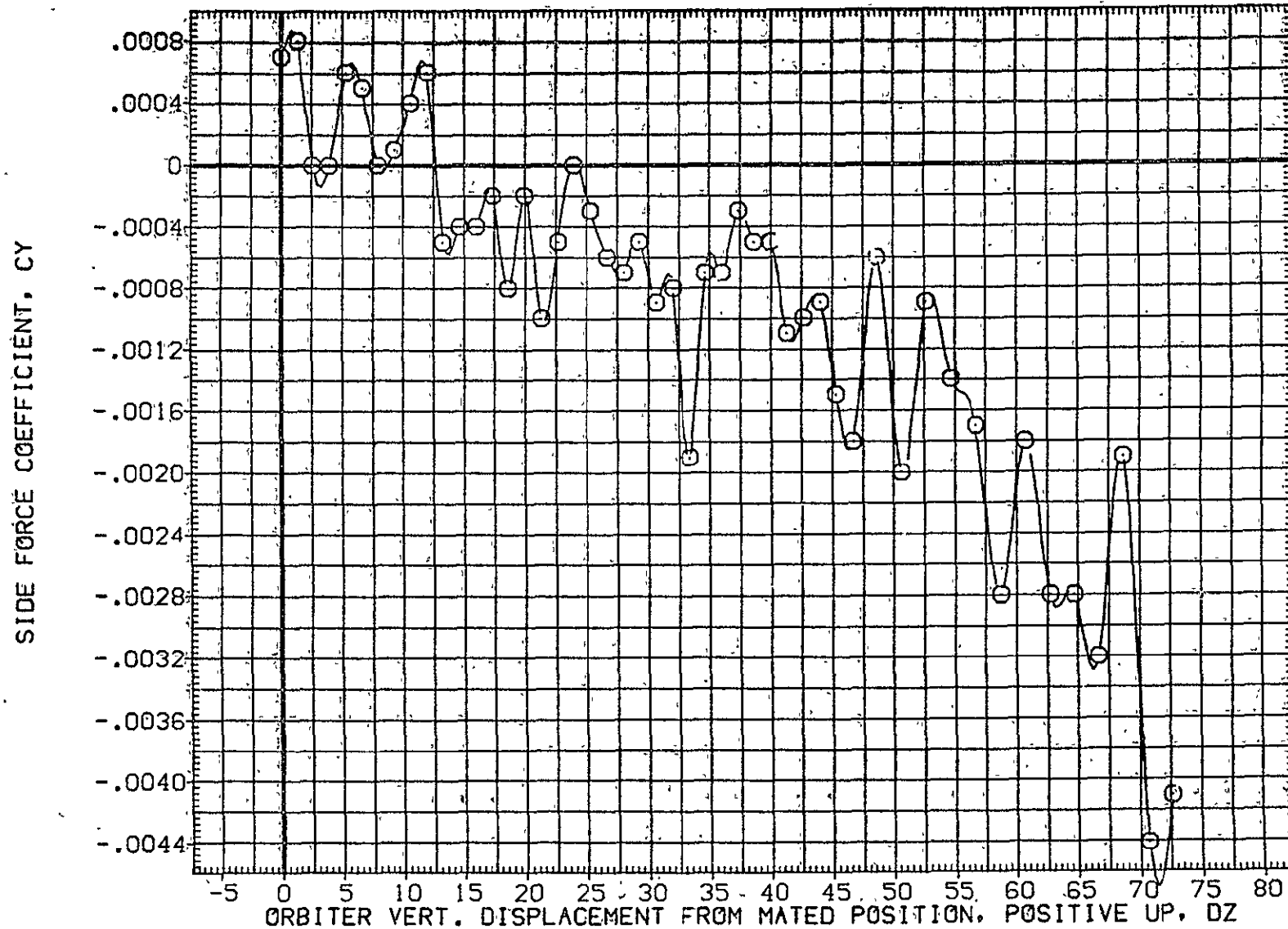


FIG. 10 ORBITER ISOLATED, DELZ SWEEP, AFE007

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(AFE007)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.590	ALPHA0	8.000	BETA0	.000
		ELEV0N	5.000	BDFLAP	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

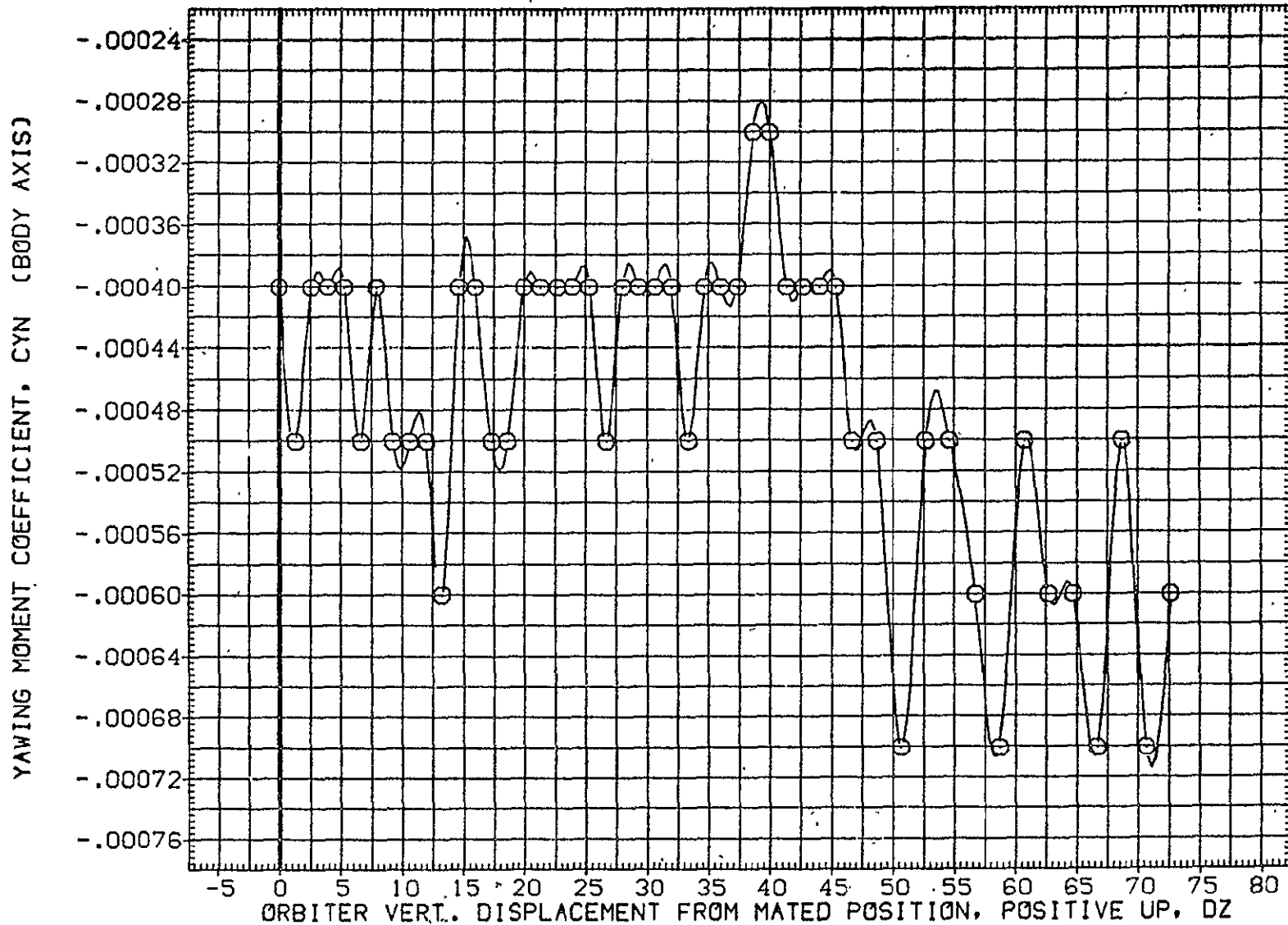


FIG. 10 ORBITER ISOLATED, DELZ SWEEP, AFE007

SYMBOL	MACH	PARAMETRIC VALUES			
○	.590	ALPHA0	8.000	BETA0	.000
		ELEVON	5.000	BDFLAP	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

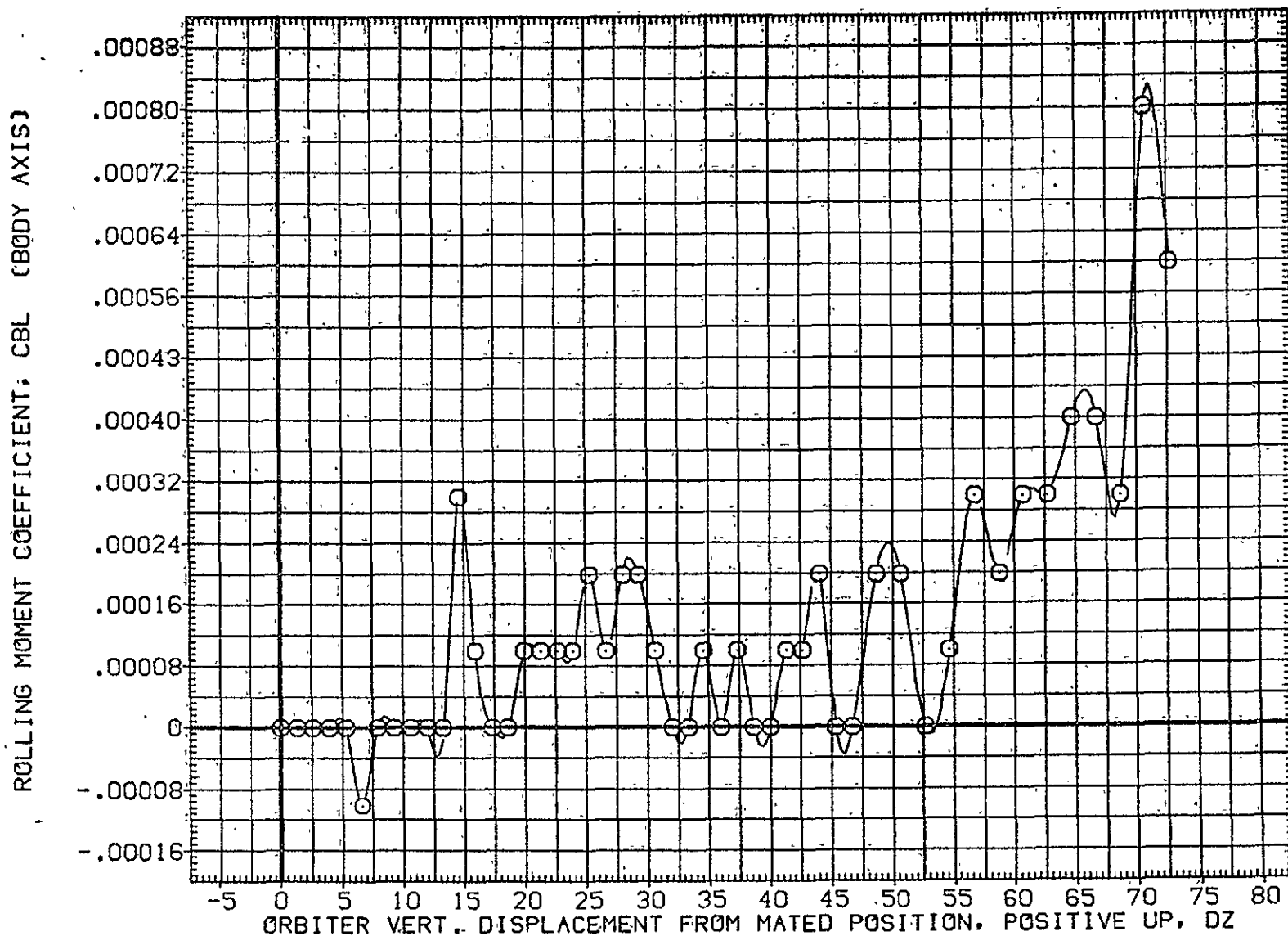


FIG. 10 ORBITER ISOLATED, DELZ SWEEP, AFE007

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(AFE007)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.590	ALPHA0	8.000	BETA0	.000
		ELEV0N	5.000	BDFLAP	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	



FIG. 10 ORBITER ISOLATED, DELZ SWEEP, AFE007

SYMBOL	MACH	PARAMETRIC VALUES			
○	.590	ALPHA0	8.000	BETA0	.000
		ELEVON	5.000	BDFLAP	.000

REFERENCE INFORMATION		
SREF	2690.0000	90.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

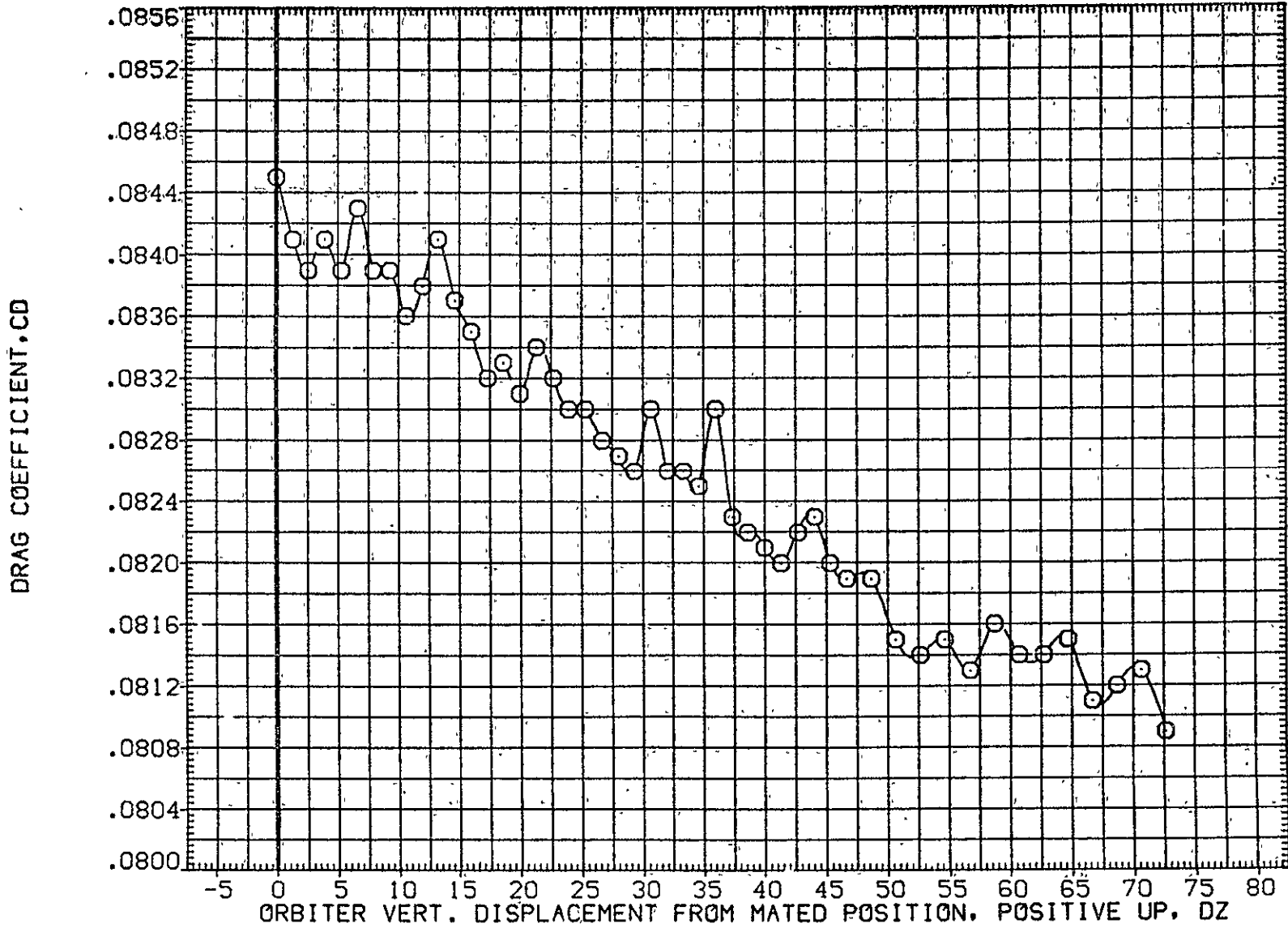


FIG. 10 ORBITER ISOLATED, DELZ SWEEP, AFE007

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(AFE008)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.594	BETA0	.000	ELEVON	.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0125	

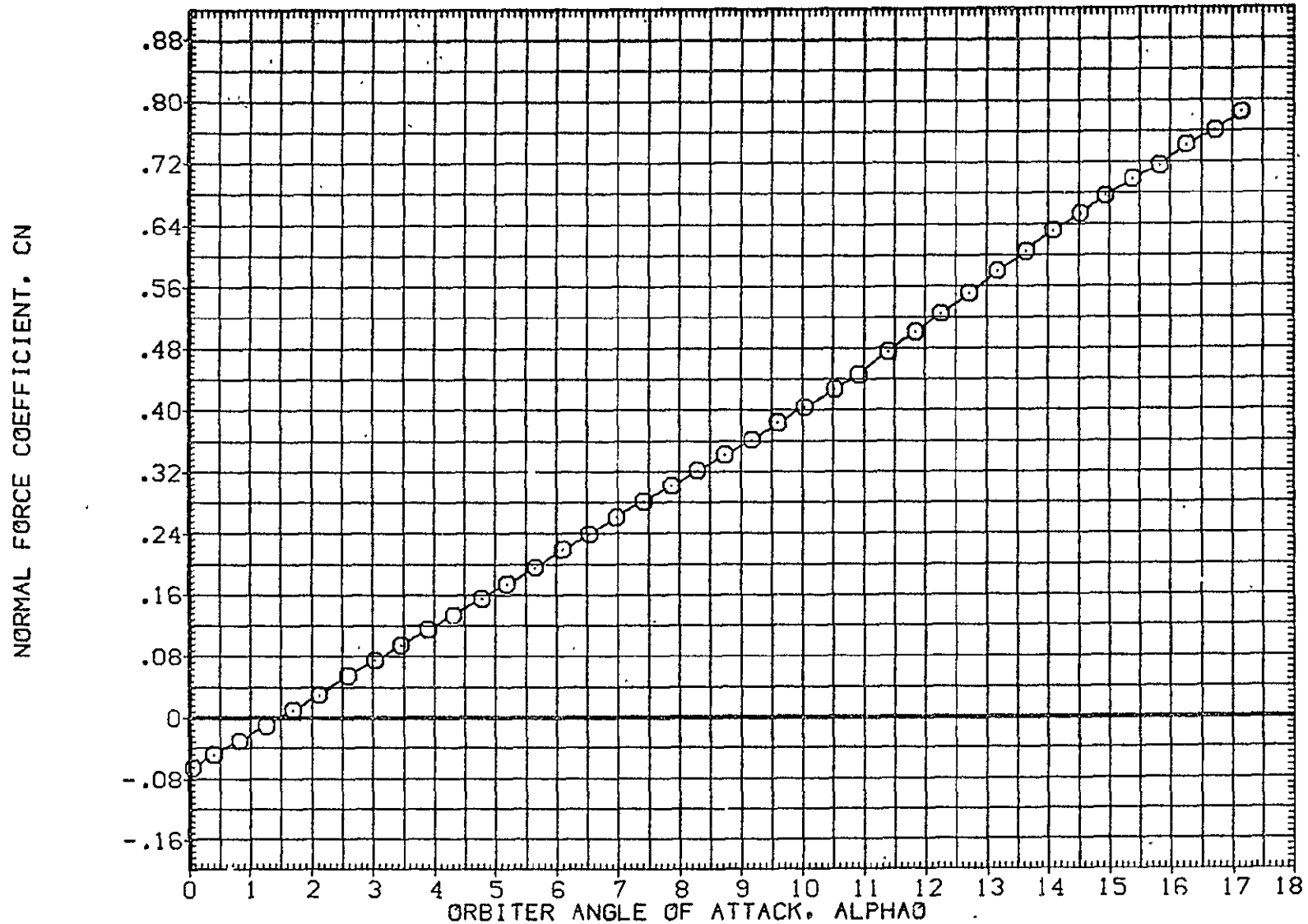


FIG. 11 ORBITER ISOLATED, ALPHA SWEEP, AFE008

SYMBOL	MACH	PARAMETRIC VALUES			
○	.594	BETA0	.000	ELEVON	.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SO.FT.
LREF	-474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

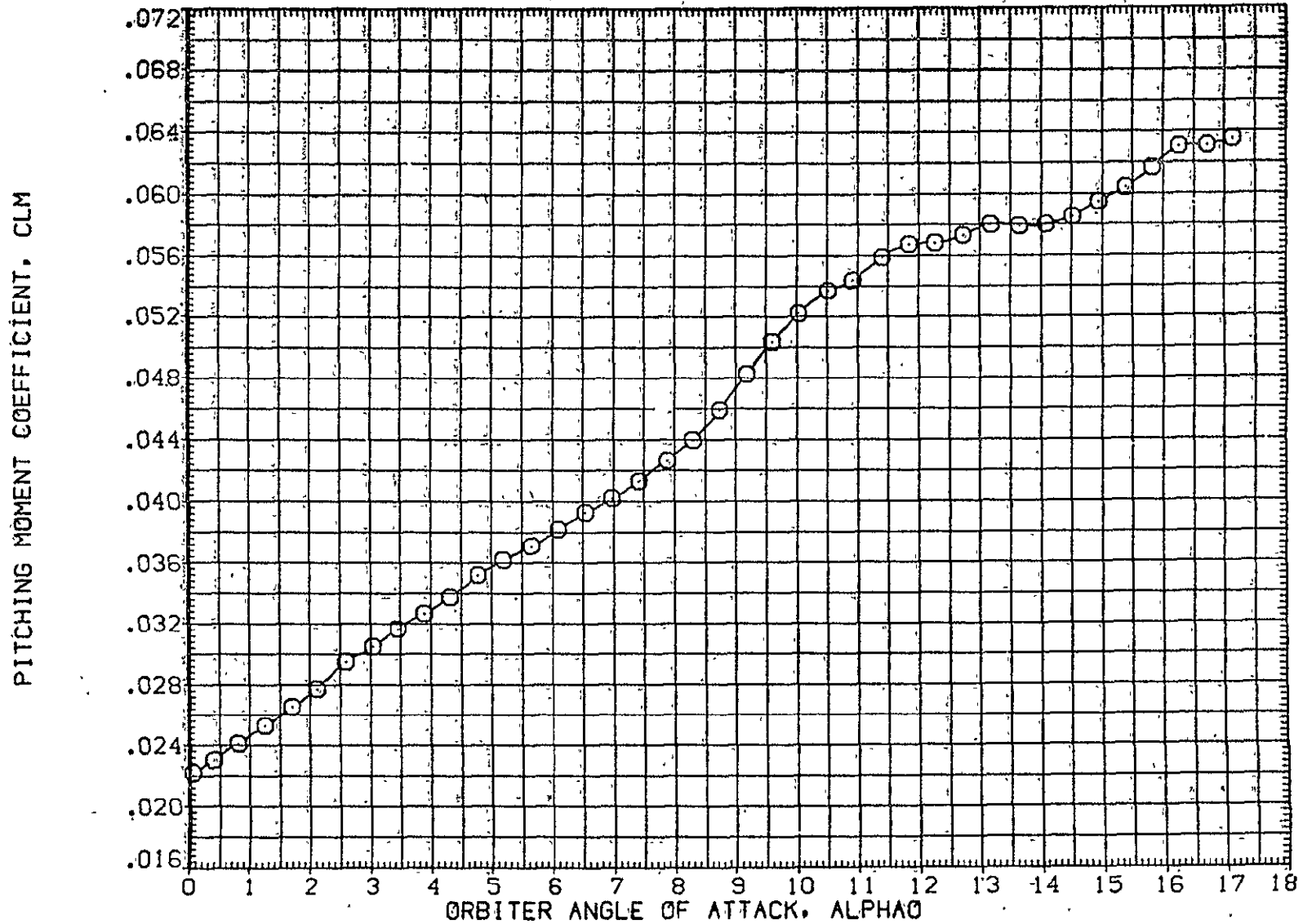


FIG. 11 ORBITER ISOLATED, ALPHA SWEEP, AFE008

SYMBOL	MACH	PARAMETRIC VALUES	
○	.594	BETA0	.000
		BDFLAP	.000
		ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

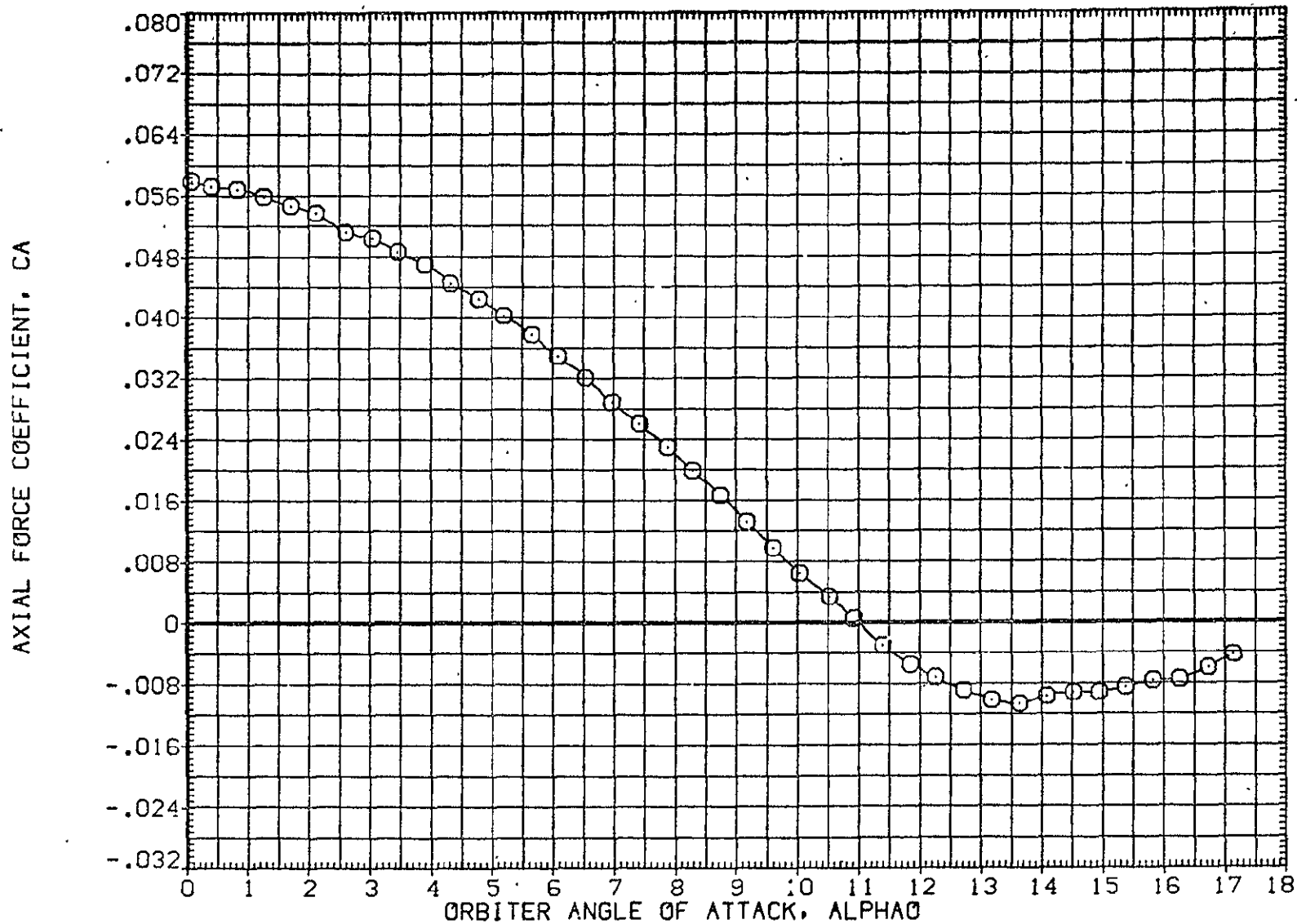


FIG. 11 ORBITER ISOLATED, ALPHA SWEEP, AFE008

SYMBOL	MACH	PARAMETRIC VALUES			
○	.594	BETA0	.000	ELEVON	.000
		BDELAP	.000		

REFERENCE INFORMATION		
SREF	.2690.0000	SO.FT.
LREF	.474.8100	IN.
BREF	.936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	.375.0000	IN. Z0
SCALE	.0125	

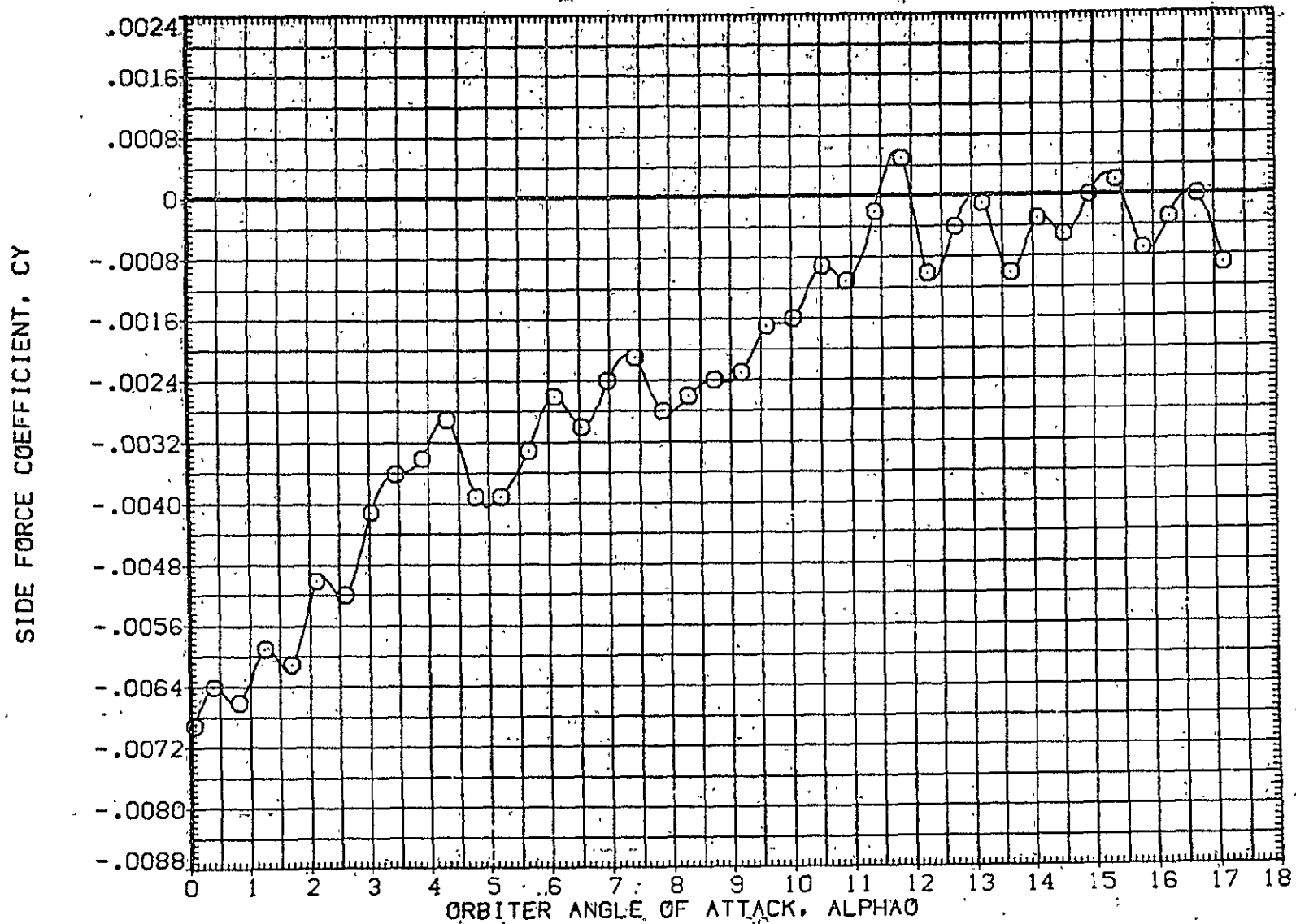


FIG. 11 ORBITER ISOLATED, ALPHA SWEEP, AFE008

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(AFE008)

SYMBOL	MACH	BETA0	PARAMETRIC VALUES	
○	.594		.000	ELEVON .000
		BDFLAP	.000	

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

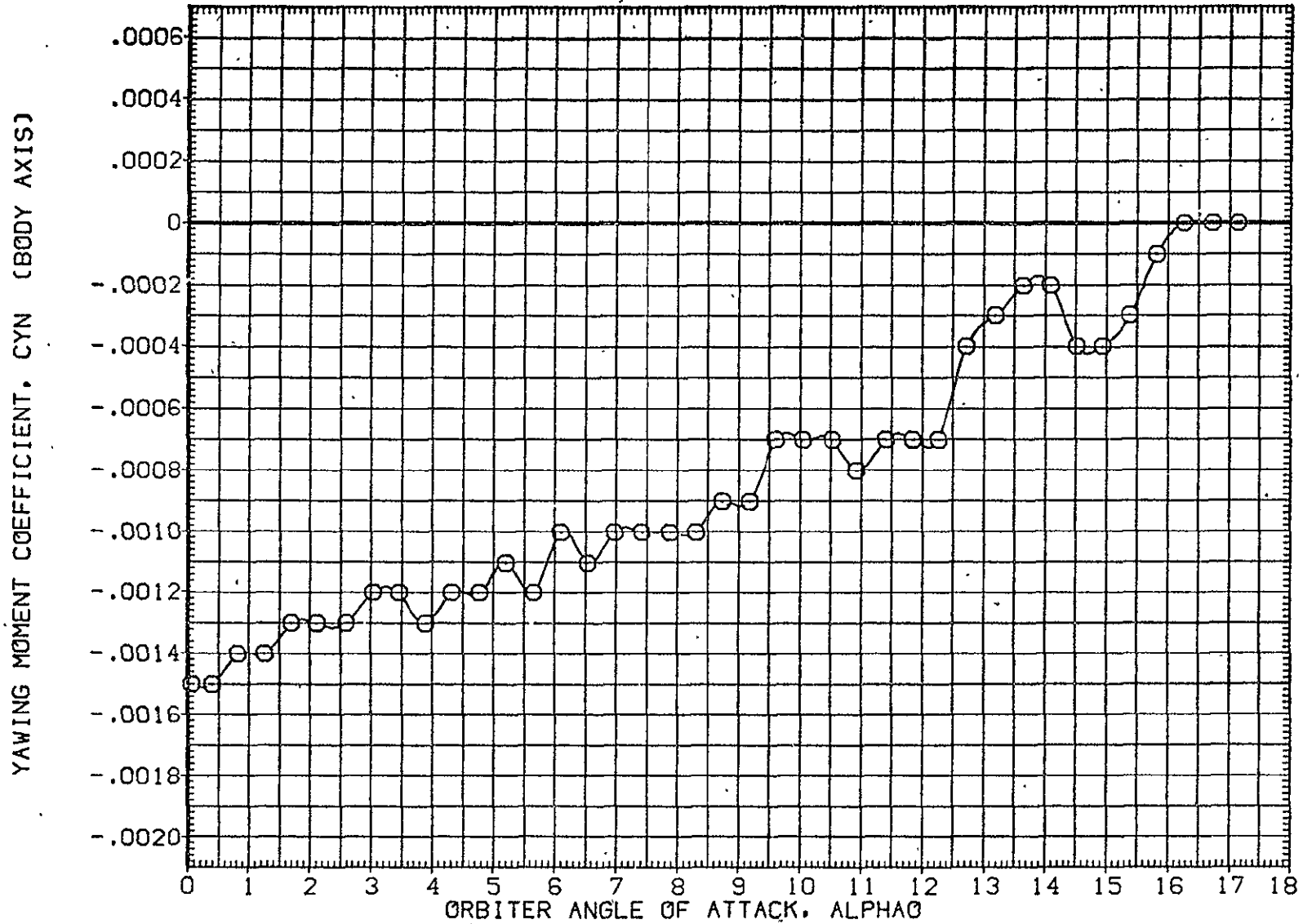


FIG. 11 ORBITER ISOLATED; ALPHA SWEEP, AFE008

SYMBOL	MACH	BETA0	PARAMETRIC VALUES	ELEVON	
○	.594	BDFLAP	.000	.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)

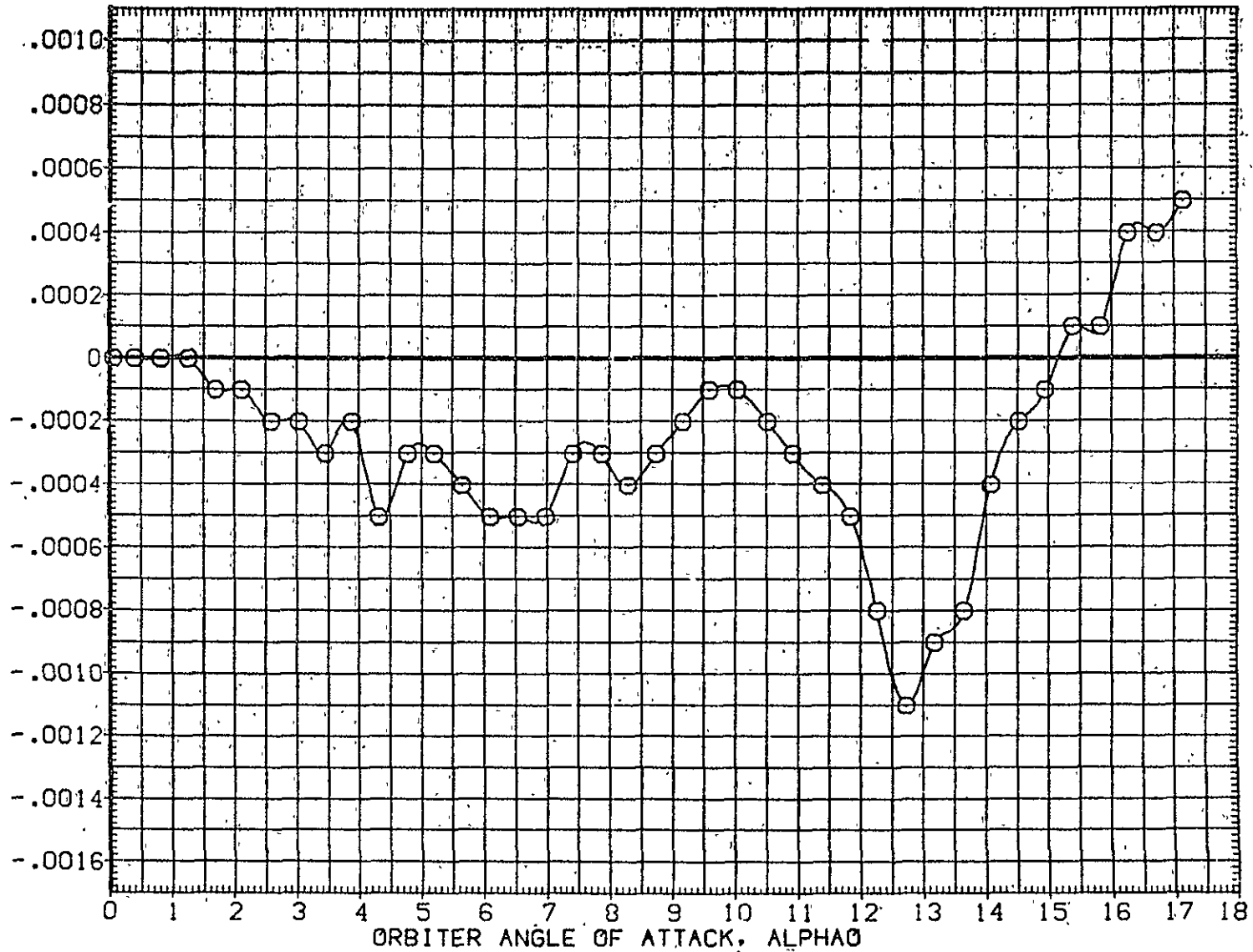


FIG. 11 ORBITER ISOLATED, ALPHA SWEEP, AFE008

SYMBOL	MACH	PARAMETRIC VALUES			
○	.594	BETA0	.000	ELEVON	.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0125	

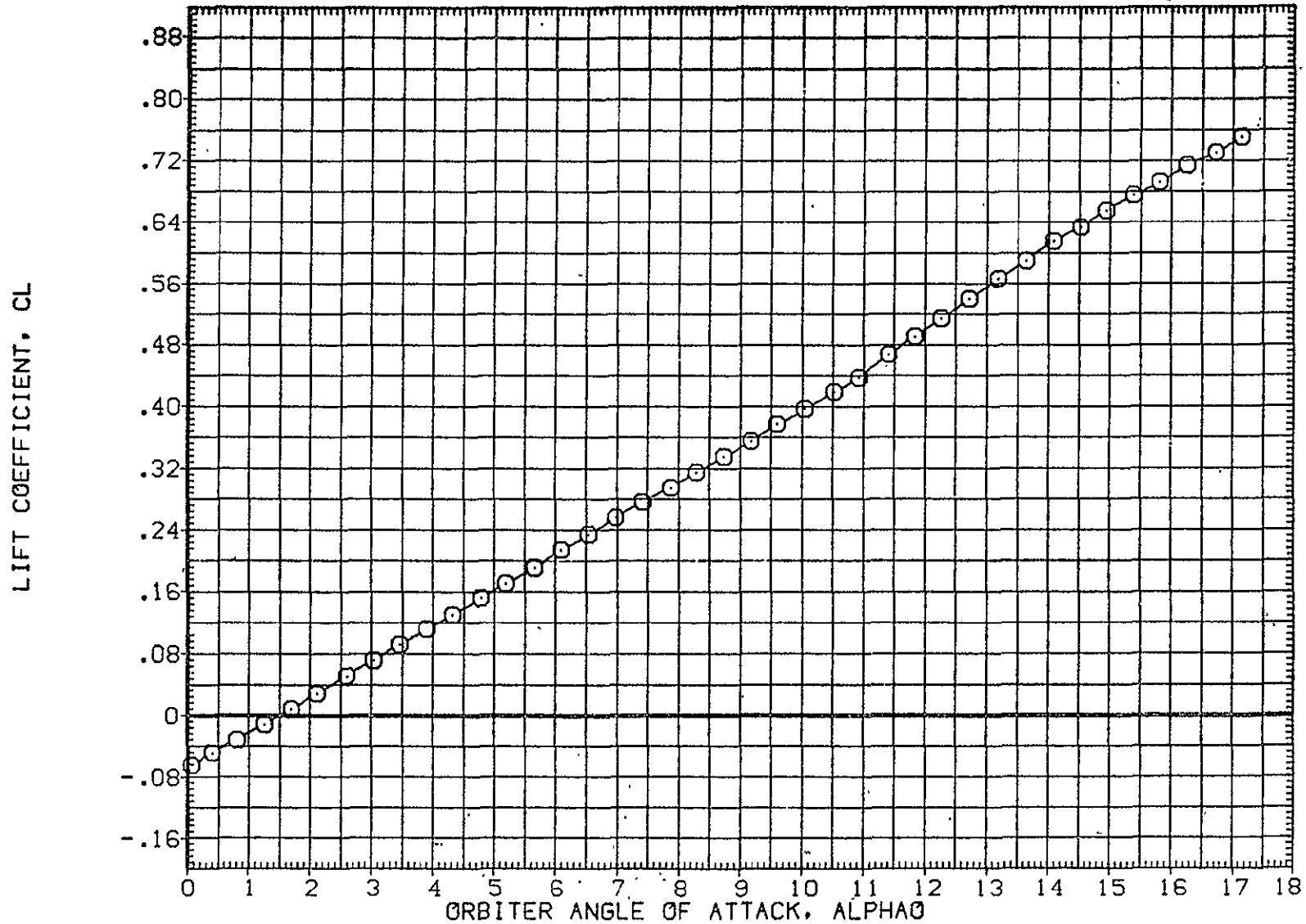


FIG. 11 ORBITER ISOLATED, ALPHA SWEEP, AFE008

SYMBOL	MACH	BETA	PARAMETRIC VALUES	
○	.594	BDFLAP	.000	ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	90.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

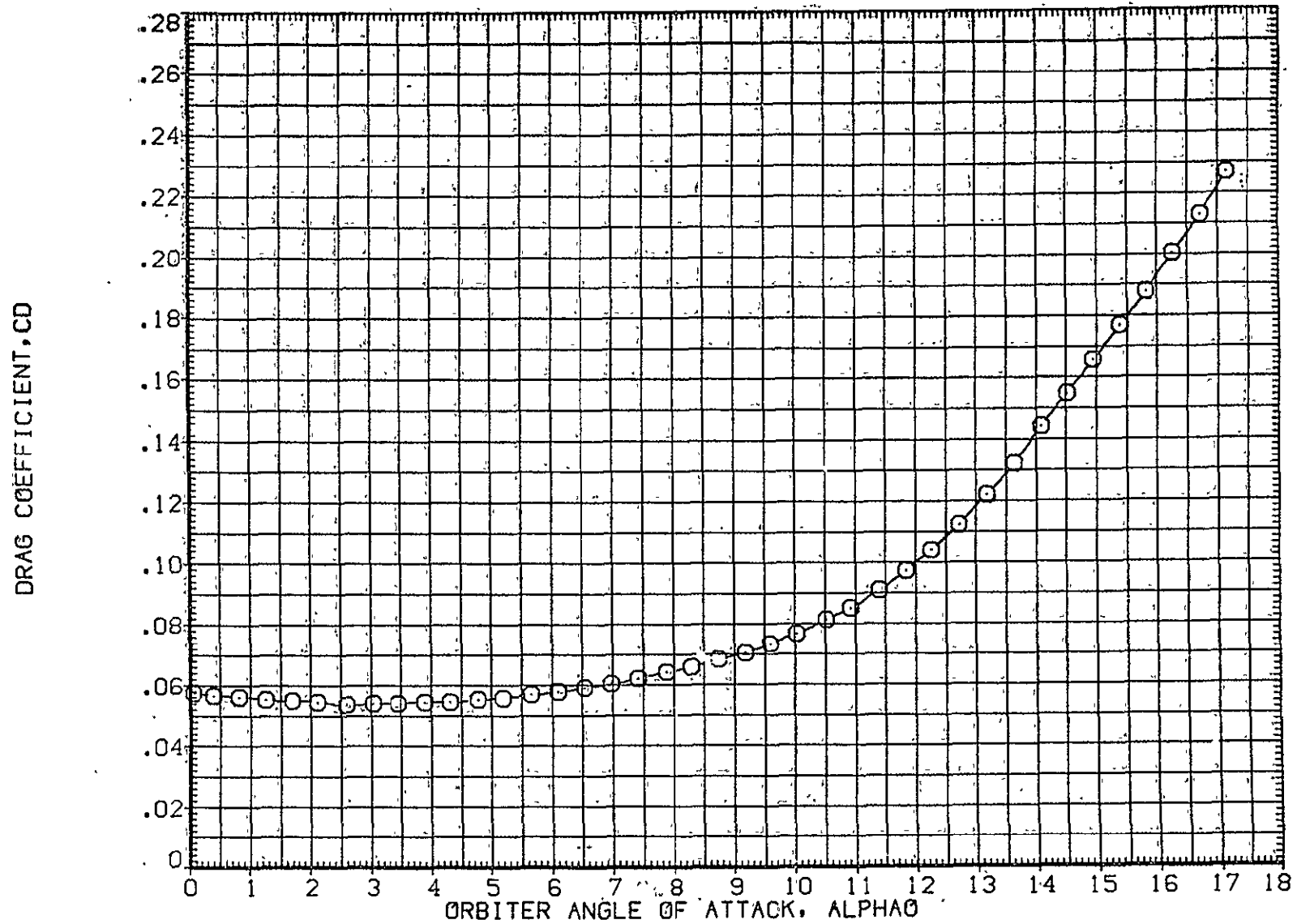


FIG. 11 ORBITER ISOLATED, ALPHA SWEEP, AFE008

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(AFE009)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.591	BETA0	.000	ELEVON	.000
		BDFLAP	16.300		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

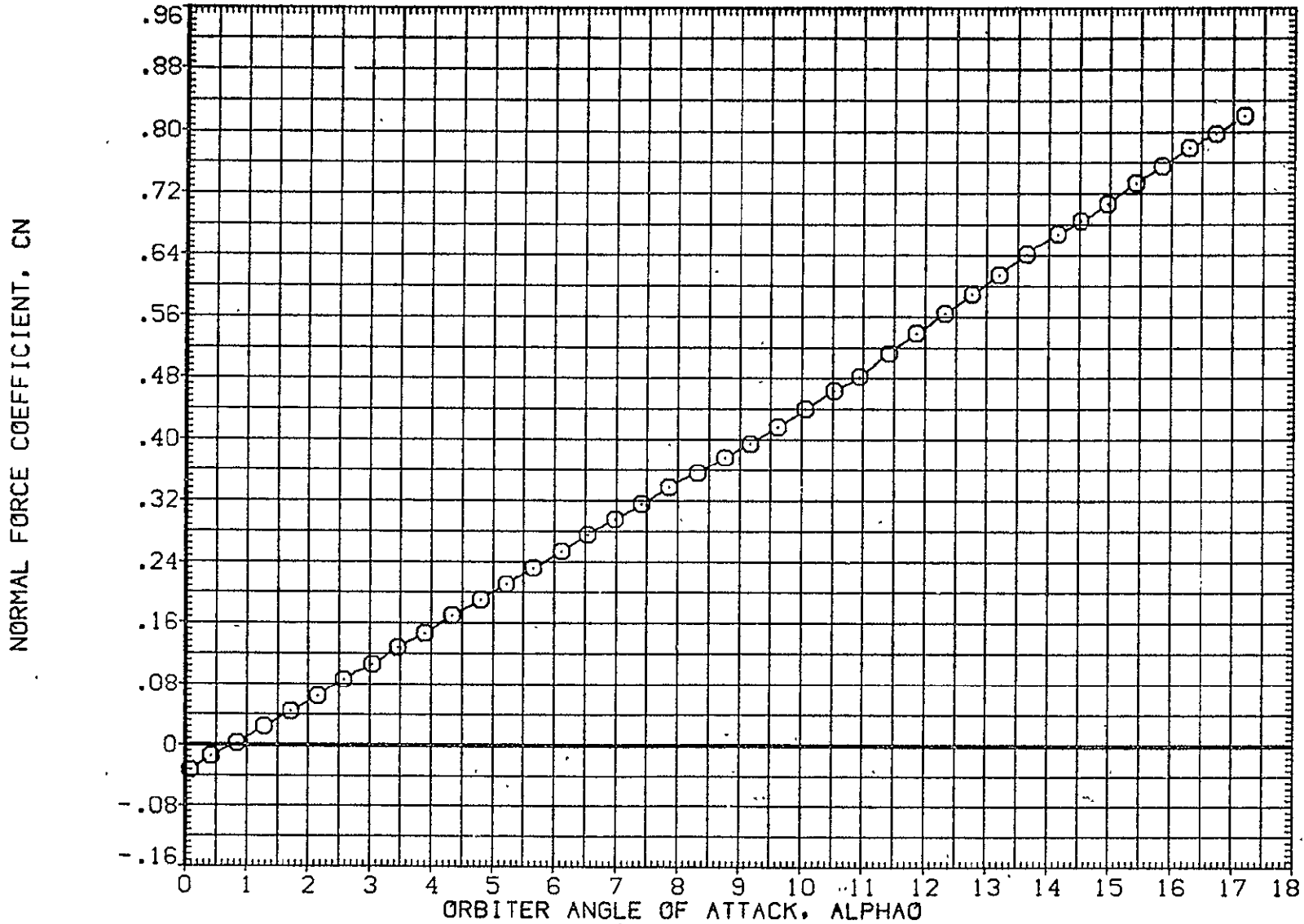


FIG. 12 ORBITER ISOLATED, ALPHA SWEEP, AFE009

SYMBOL	MACH	PARAMETRIC VALUES			
○	.591	BETA0	.000	ELEVON	.000
		BDFLAP	16.300		

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

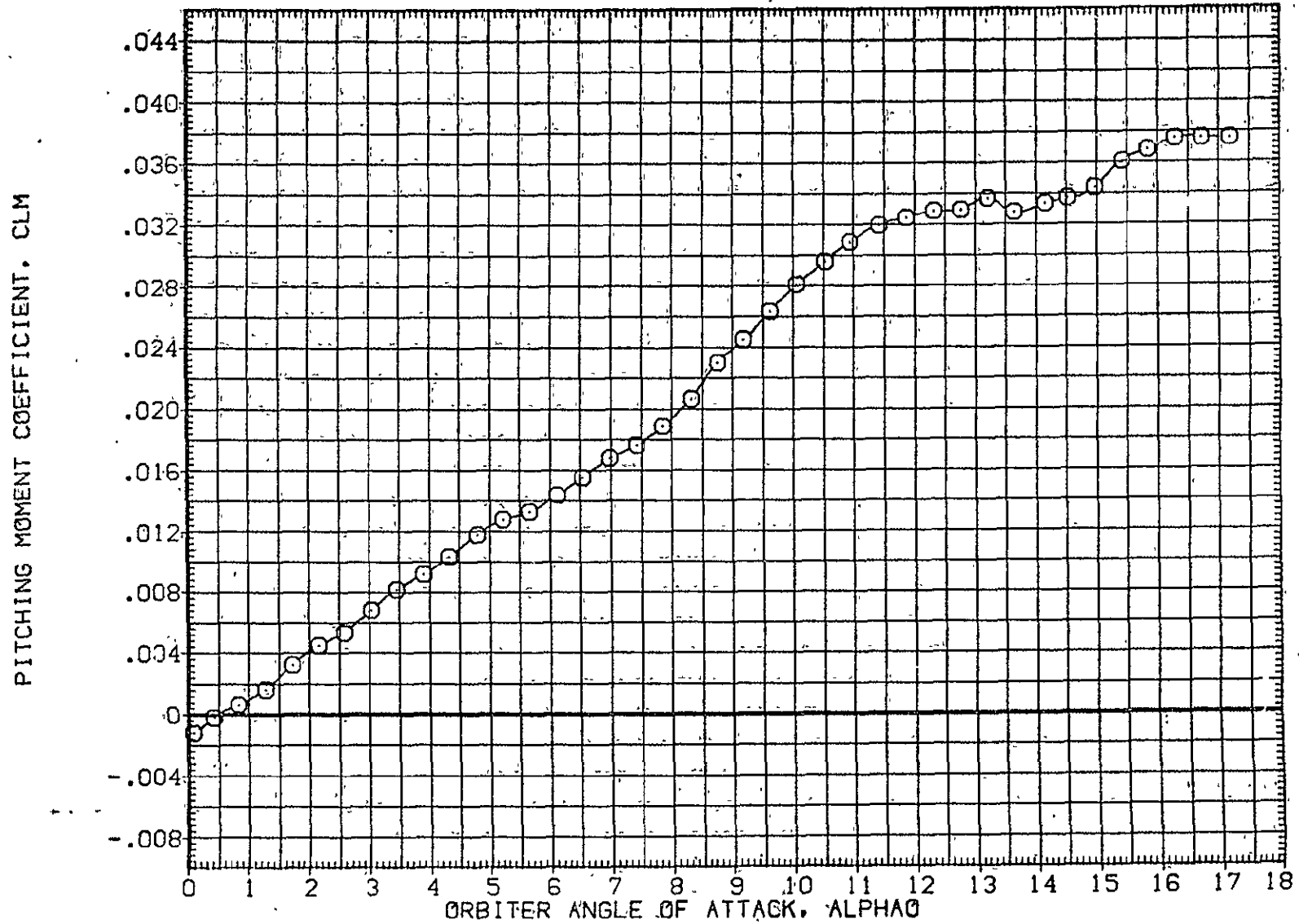


FIG. 12 ORBITER ISOLATED, ALPHA SWEEP, AFE009

SYMBOL	MACH	PARAMETRIC VALUES			
○	.591	BETA0	.000	ELEVON	.000
		BDFLAP	16.300		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

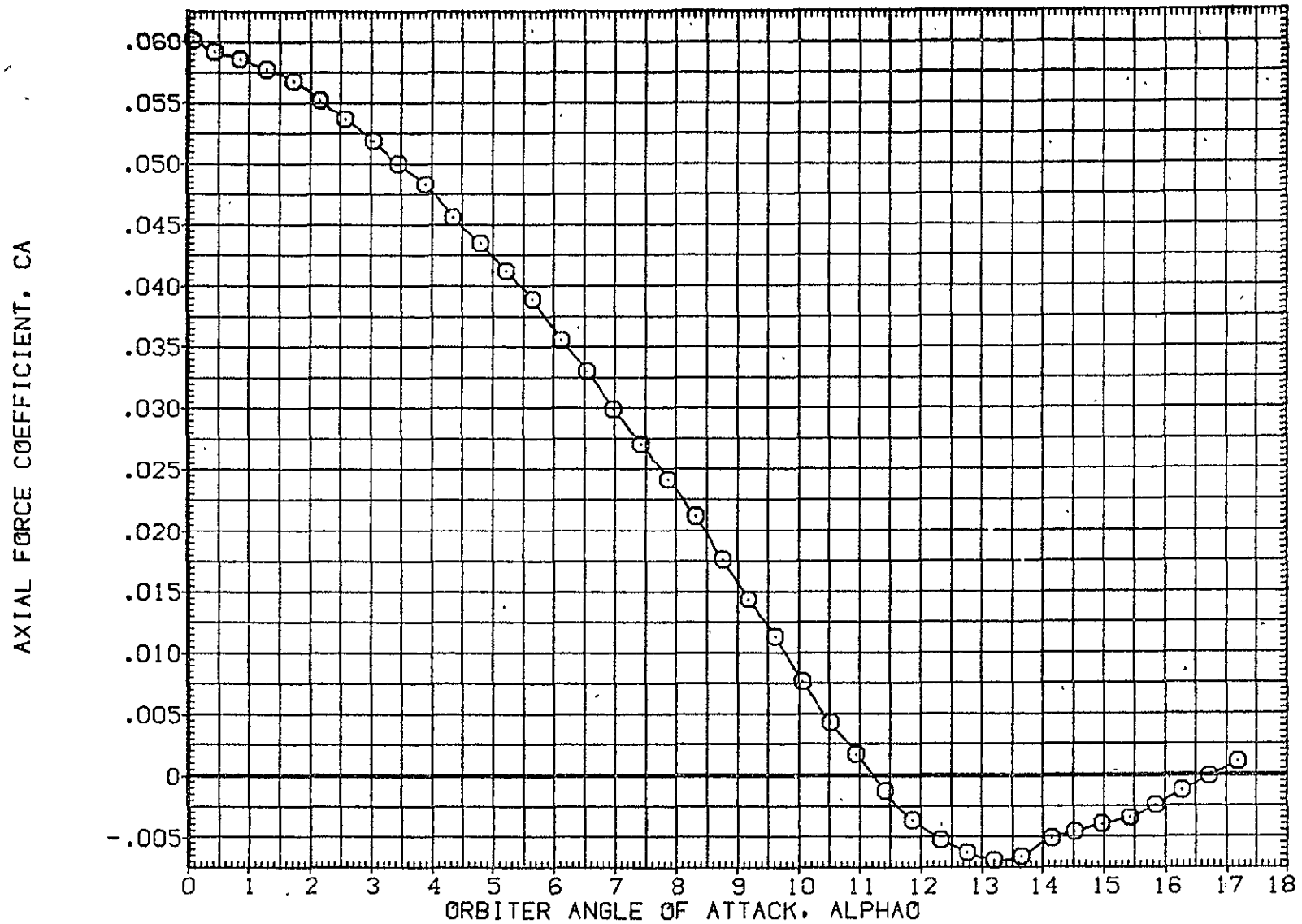


FIG. 12 ORBITER ISOLATED, ALPHA SWEEP, AFE009

SYMBOL	MACH	PARAMETRIC VALUES			
○	.991	BETA0	.000	ELEVON	.000
		BDFLAP	16.300		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

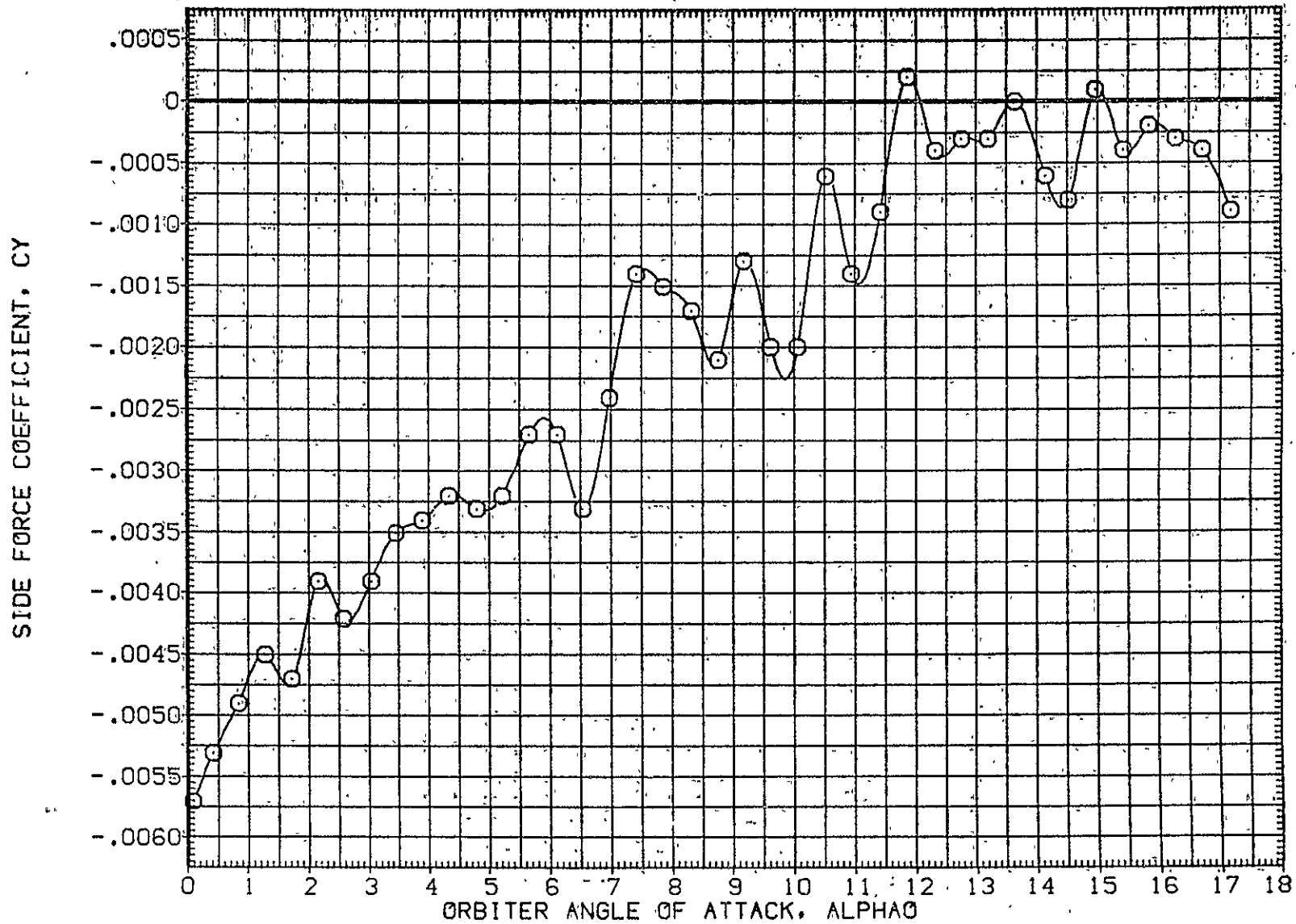


FIG. 12 ORBITER ISOLATED, ALPHA SWEEP, AFE009

SYMBOL	MACH	PARAMETRIC VALUES			
○	.591	BETA0	.000	ELEVON	.000
		BDFLAP	16.300		

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

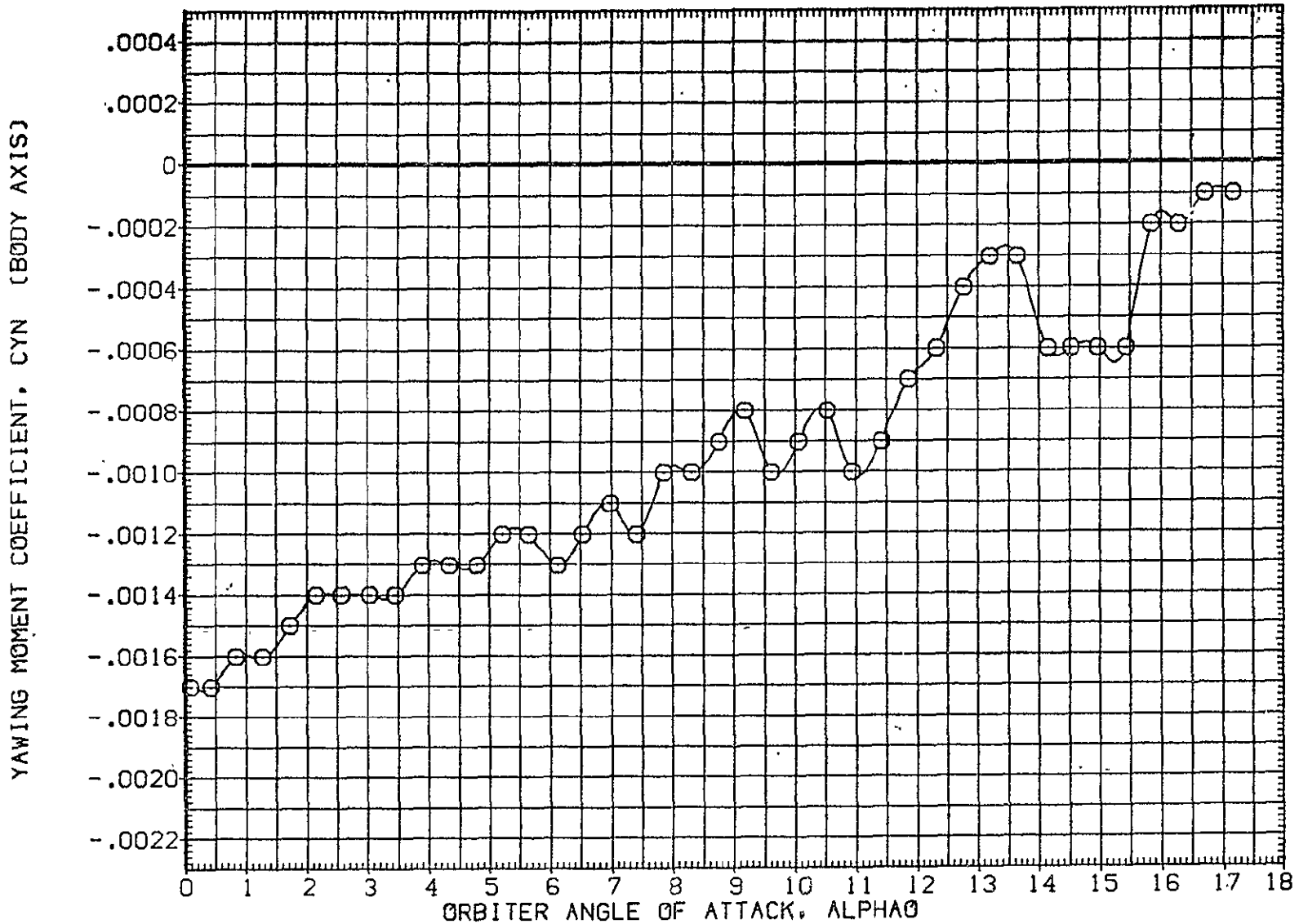


FIG. 12 ORBITER ISOLATED, ALPHA SWEEP, AFE009

SYMBOL	MACH	BETAD	PARAMETRIC VALUES	ELEVON	.000
○	.591	BOFLAP	16.300		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)

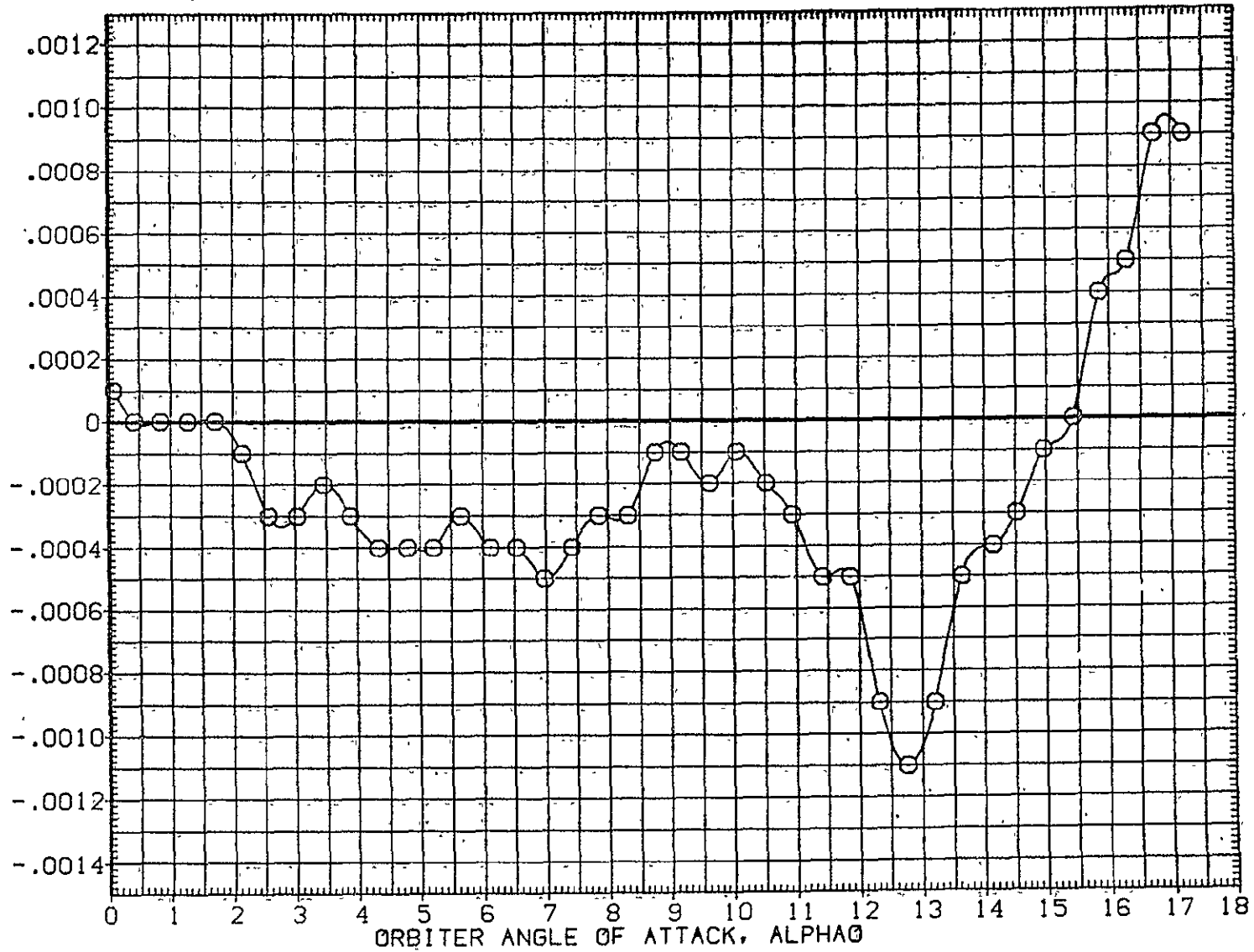


FIG. 12 ORBITER ISOLATED, ALPHA SWEEP, AFE009

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(AFE009)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.591	BETA0	.000	ELEVON	.000
		BDFLAP	16.300		

REFERENCE INFORMATION		
SREF	2690.0003	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

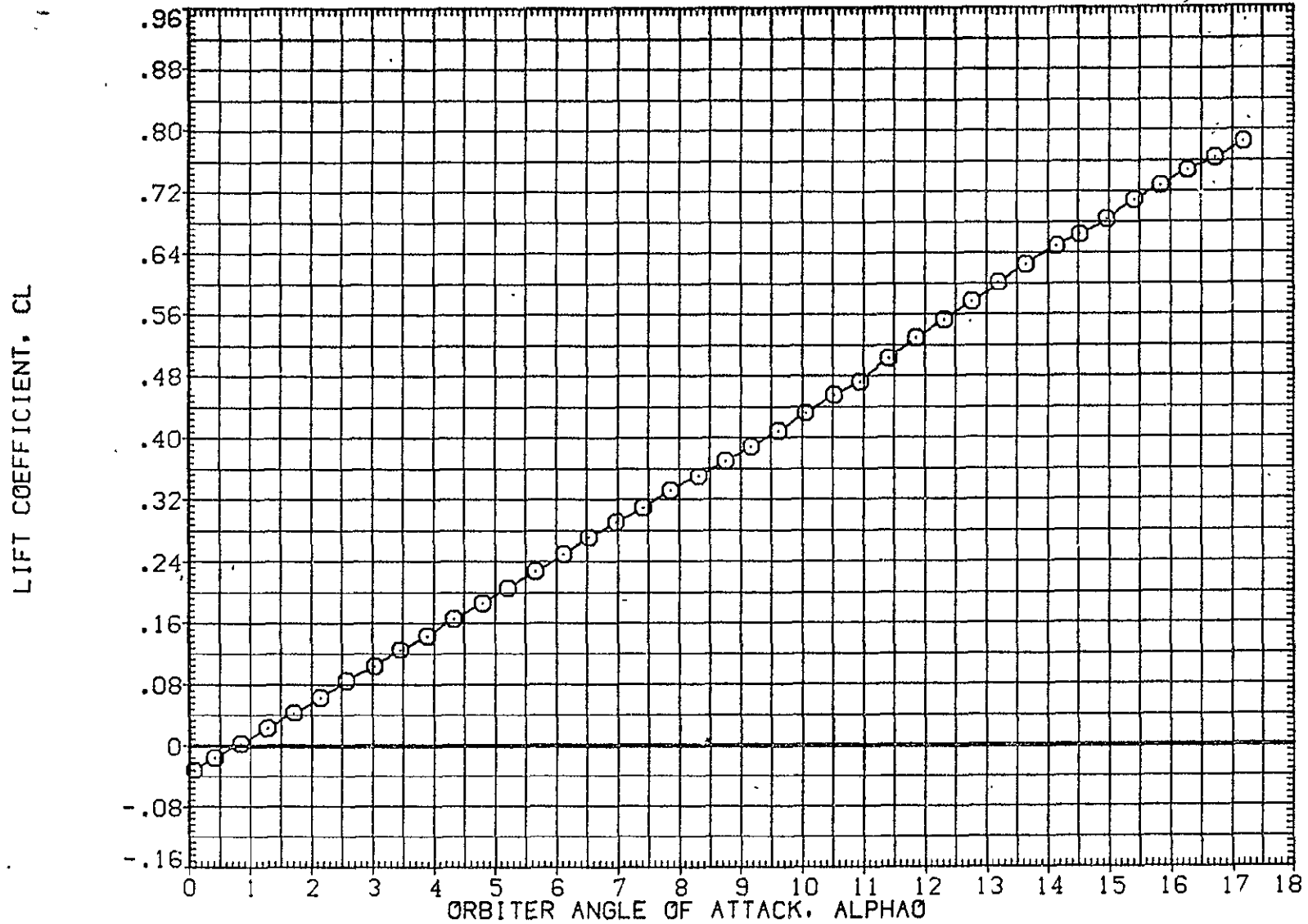


FIG. 12 ORBITER ISOLATED, ALPHA SWEEP, AFE009

SYMBOL	MACH	BETA	PARAMETRIC VALUES	
○	.591	BDFLAP	.000	ELEVON .000
			16.300	

REFERENCE INFORMATION		
SREF	.2690.0000	SQ.FT.
LREF	.474.8100	IN.
BREF	.936.6800	IN.
XMRP	1.109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

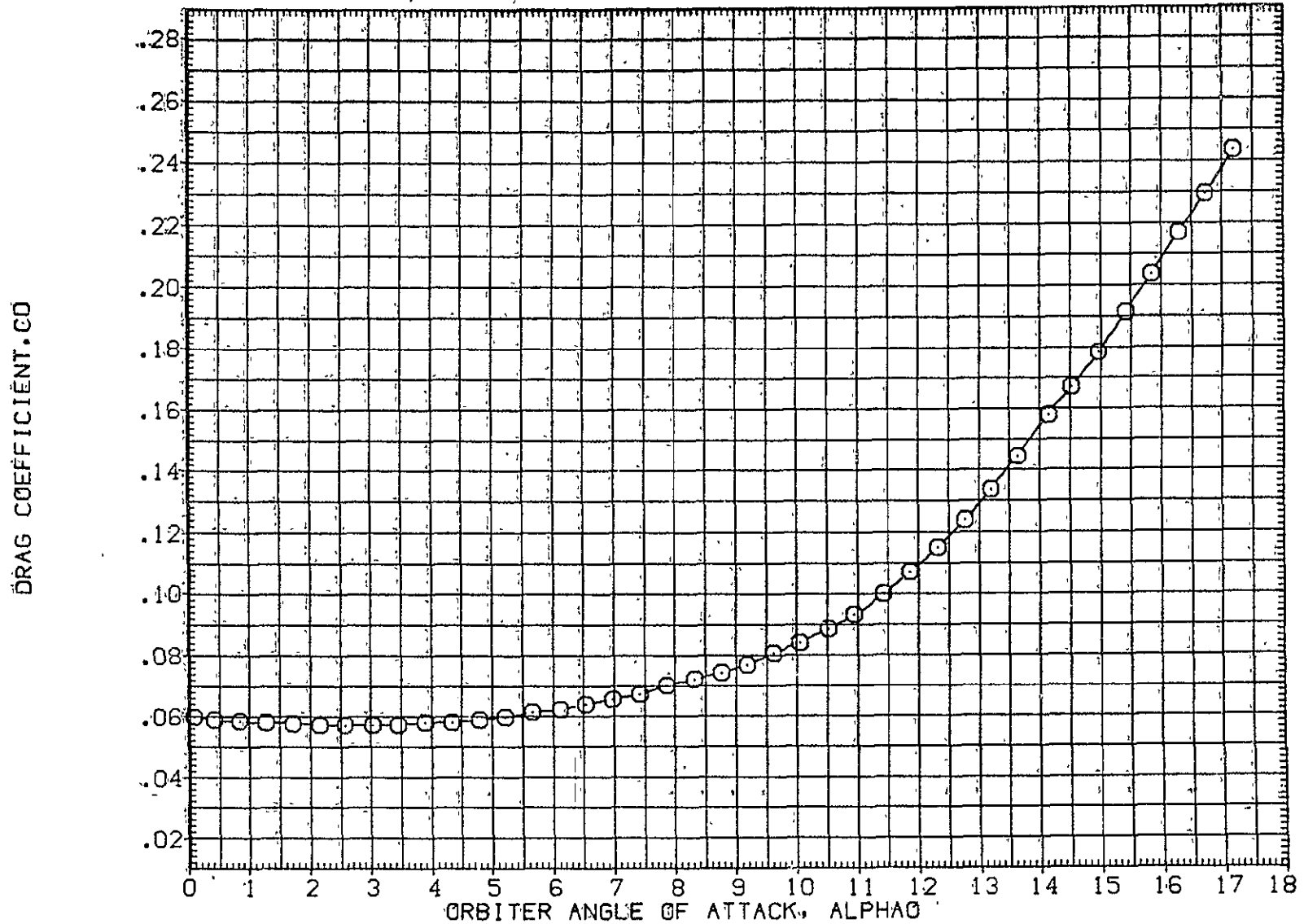


FIG. 12 ORBITER ISOLATED, ALPHA SWEEP, AFE009

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(AFE010).

SYMBOL	MACH	PARAMETRIC VALUES		
○	.593	BETA0	.000	ELEVON
		BDFLAP	-11.700	.000

REFERENCE INFORMATION		
SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

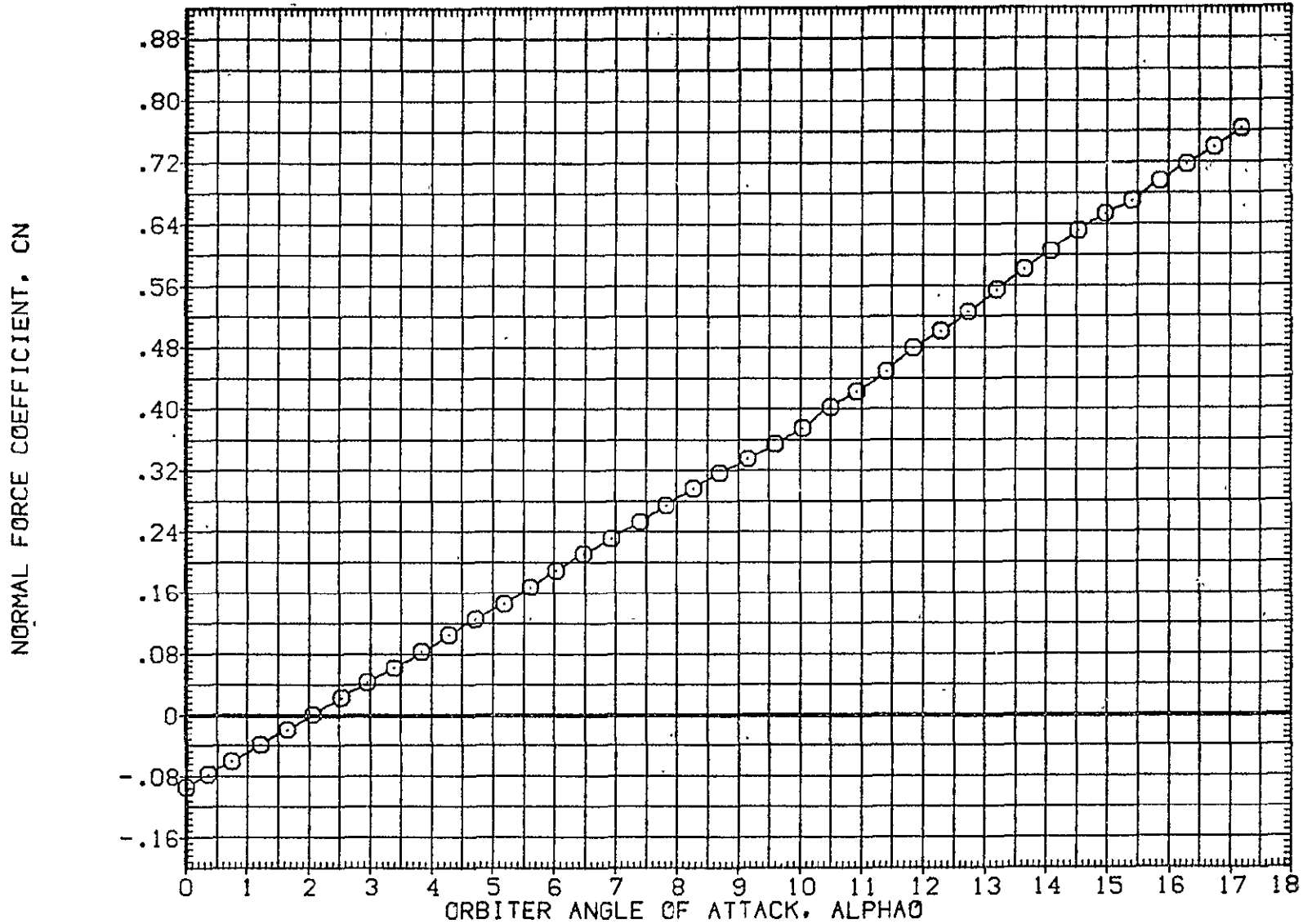


FIG. 13 ORBITER ISOLATED, ALPHA SWEEP, AFE010

SYMBOL	MACH	BETA	PARAMETRIC VALUES	
○	.593	BDFLAP	.000	ELEVON .000
			-11.700	

REFERENCE INFORMATION		
SREF	.2690	.0000 SO.FT.
LREF	.474	.8100 IN.
BREF	.936	.6800 IN.
XMRP	1109	.0000 IN. X0
YMRP	.0000	IN. Y0
ZMRP	.375	.0000 IN. Z0
SCALE	.0125	

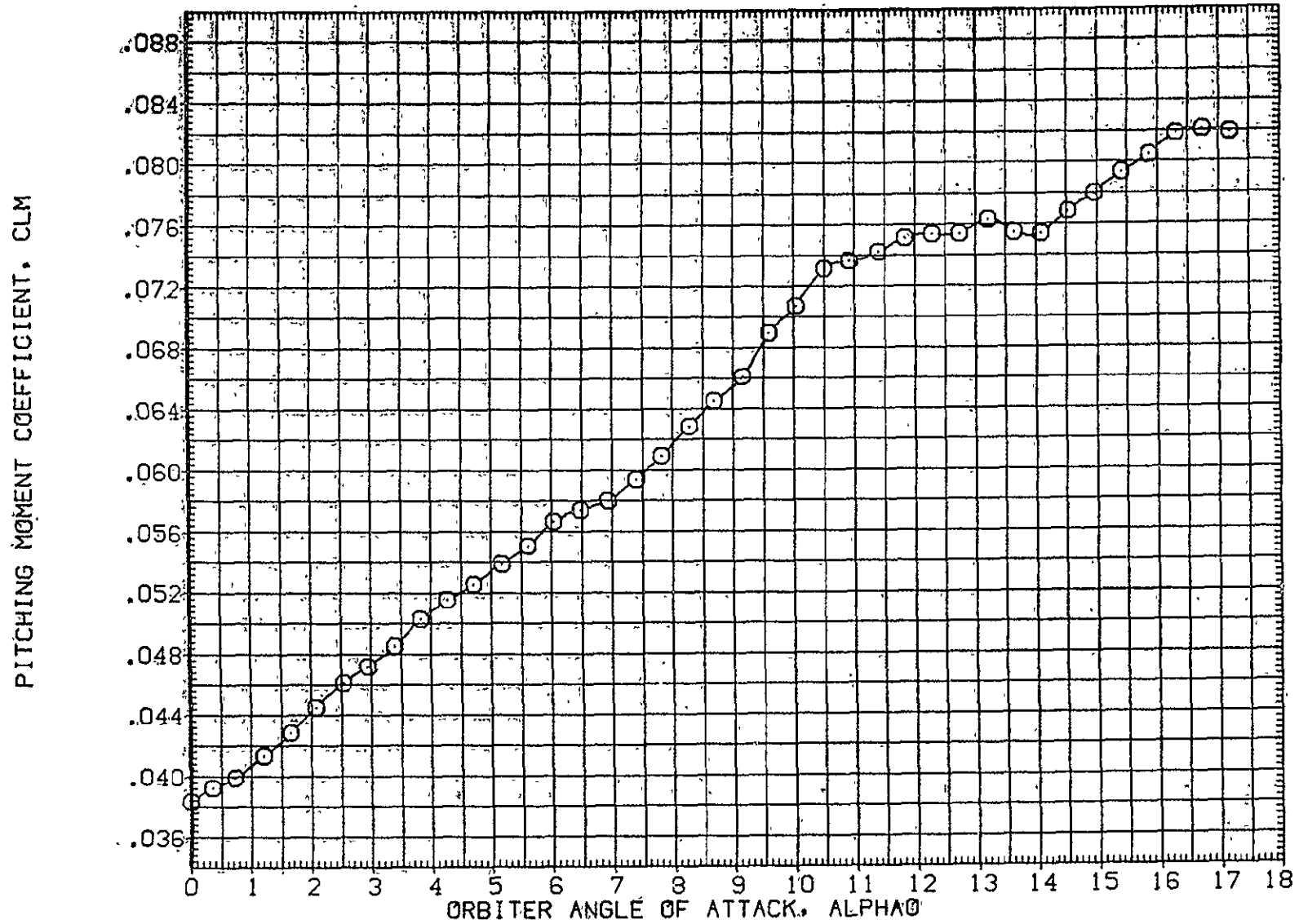


FIG. 13 ORBITER ISOLATED, ALPHA SWEEP, AFE010

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(AFE010)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.593	BETA0	.000	ELEVON	.000
		BDFLAP	-11.700		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

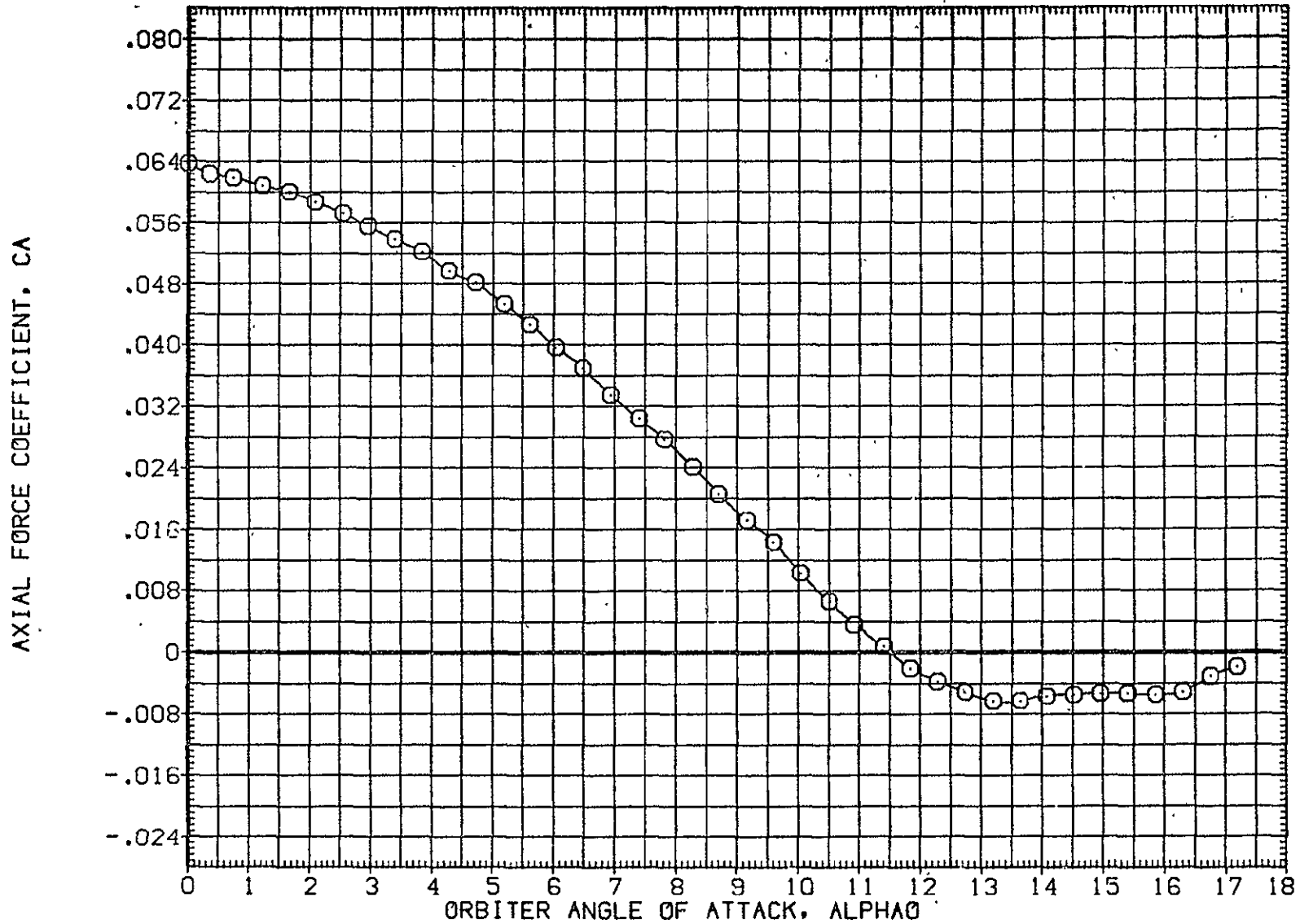


FIG. 13 ORBITER ISOLATED, ALPHA SWEEP, AFE010

SYMBOL	MACH	BETA0	PARAMETRIC VALUES	
○	.593		.000	ELEVON .000
		BDFLAP	-11.700	

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

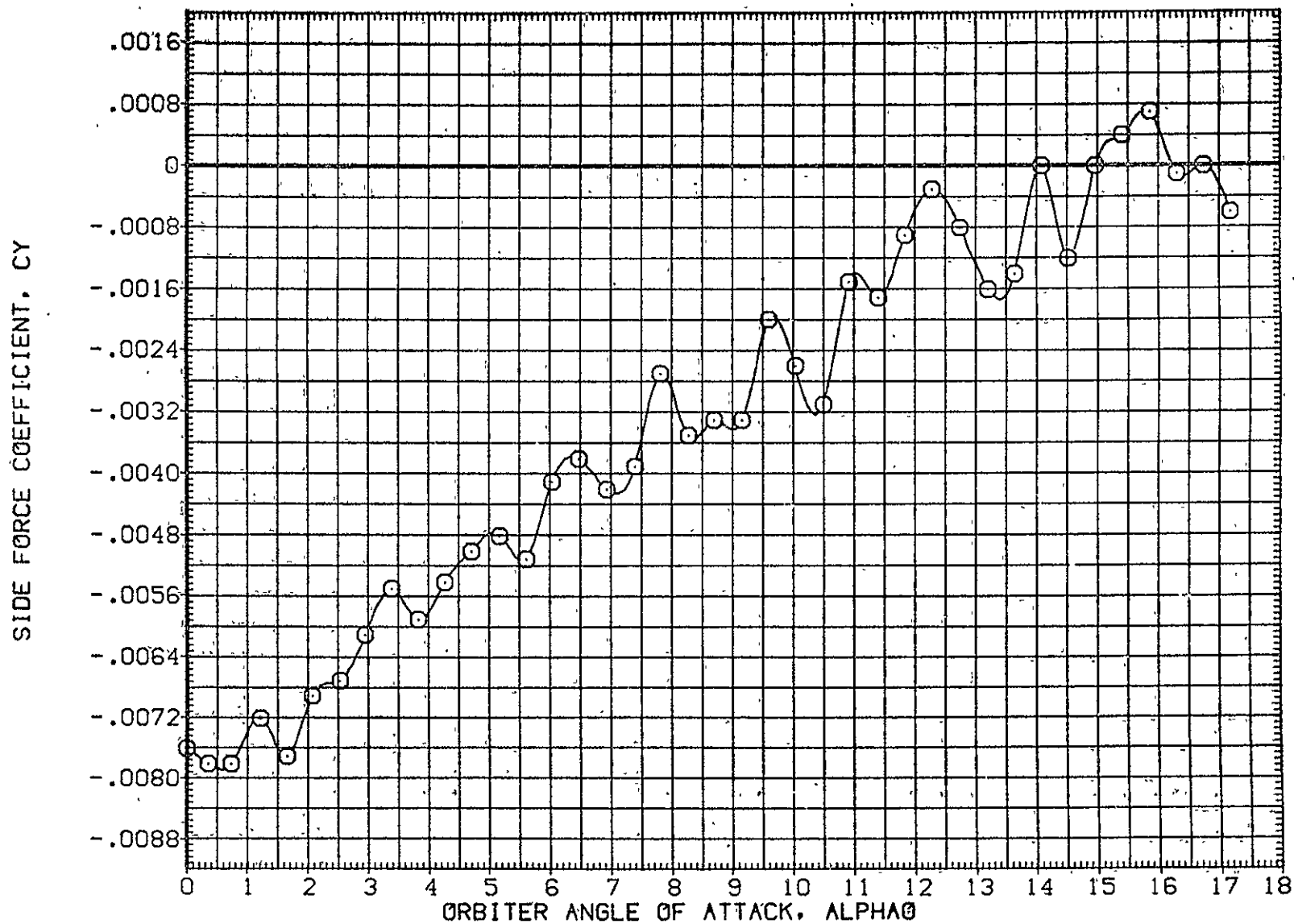


FIG. 13 ORBITER ISOLATED, ALPHA SWEEP, AFE010

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(AFE010)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.593	BETA0	.000	ELEVON	.000
		BDFLAP	-11.700		

REFERENCE INFORMATION		
SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

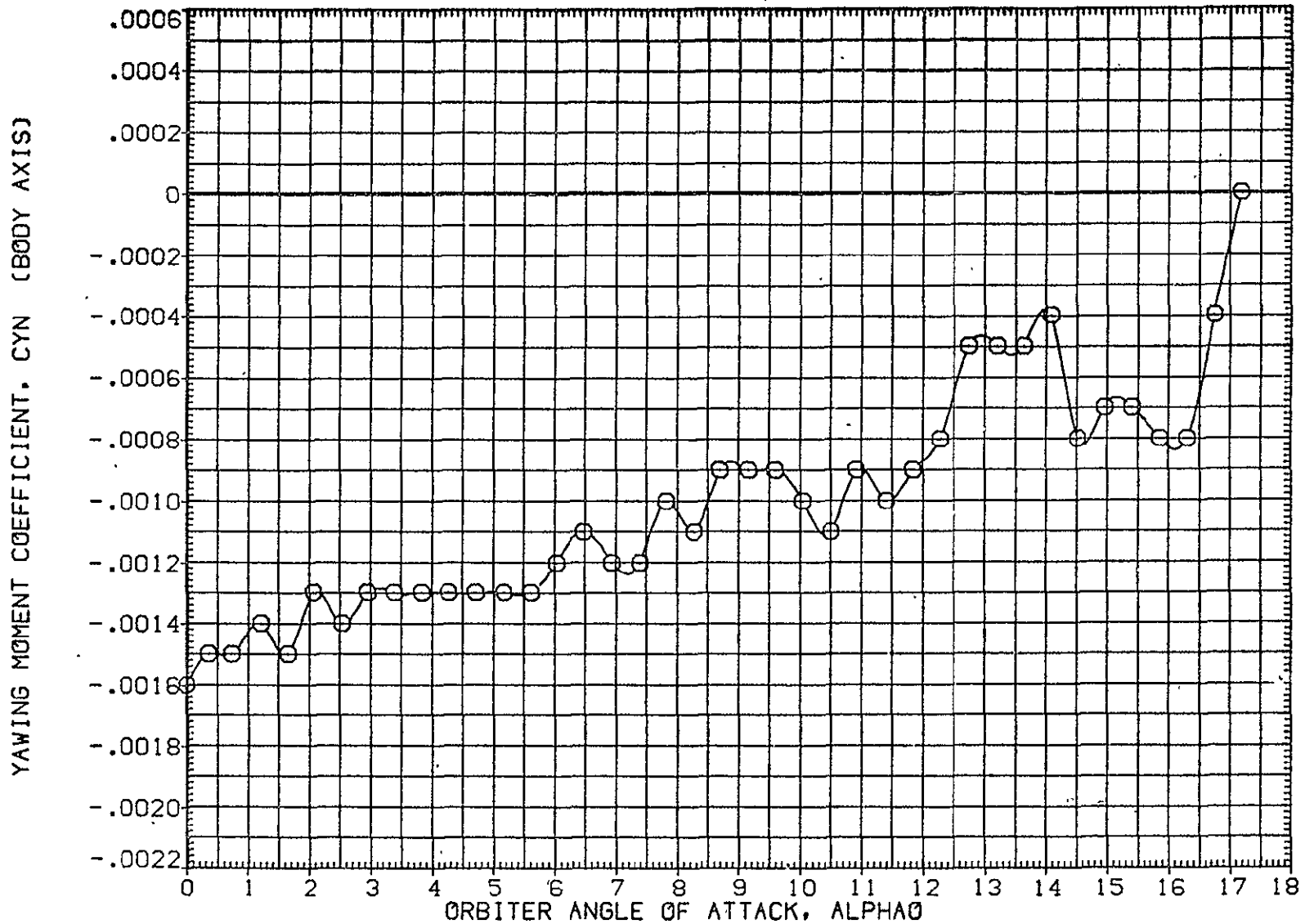


FIG. 13 ORBITER ISOLATED, ALPHA SWEEP, AFE010

SYMBOL: ○ MACH .593 BETA0 .000 ELEVON: .000
 BDFLAP -11.700

REFERENCE INFORMATION
 SREF: 2690.0000 SQ.FT.
 LREF: 474.8100 IN.
 BREF: 936.6800 IN.
 XMRP: 1109.0000 IN. X0:
 YMRP: .0000 IN. Y0:
 ZMRP: 375.0000 IN. Z0:
 SCALE .0125

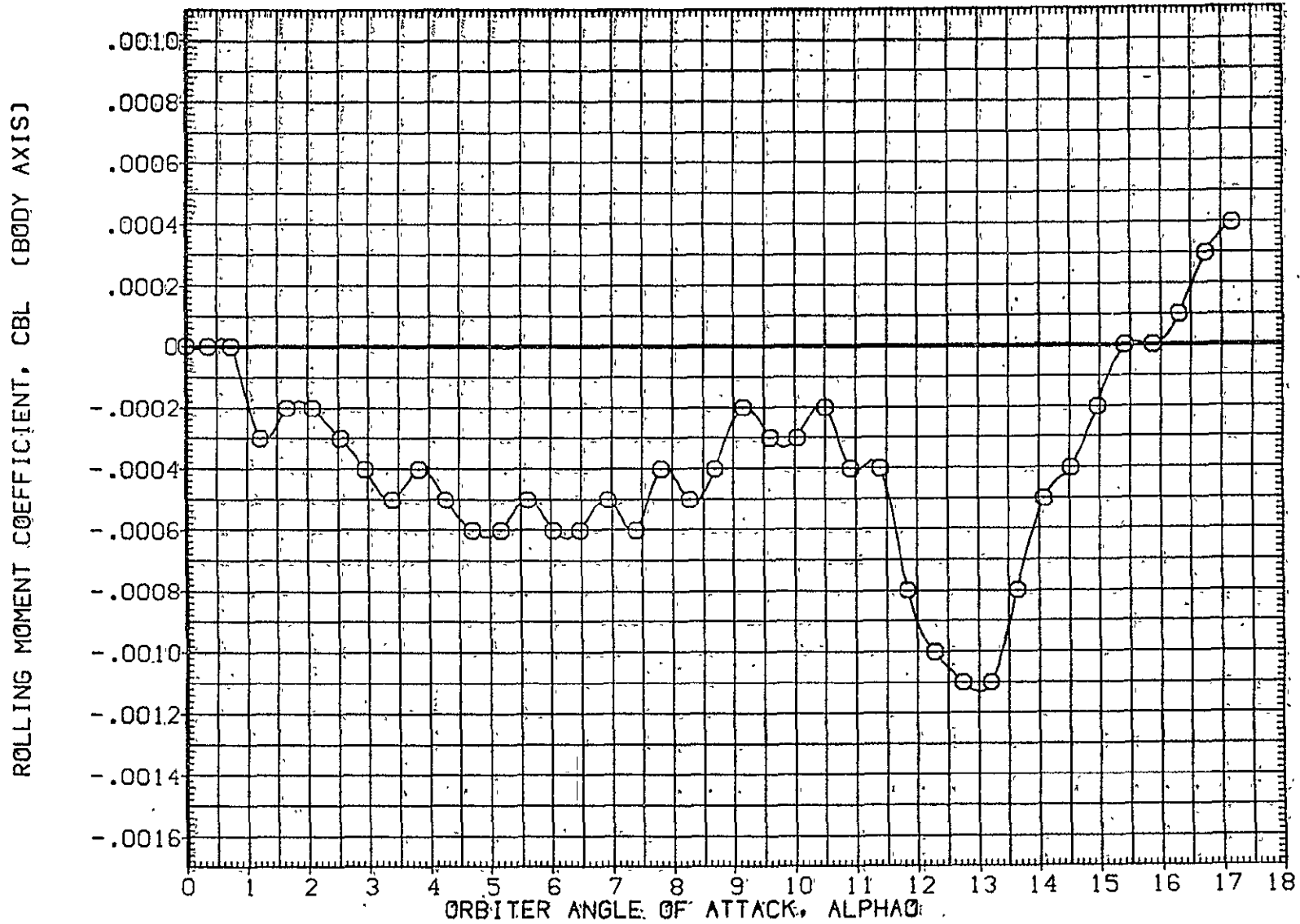


FIG. 13 ORBITER ISOLATED, ALPHA SWEEP, AFE010

SYMBOL	MACH	PARAMETRIC VALUES			
○	.593	BETA0	.000	ELEVON	.000
		BDFLAP	-11.700		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

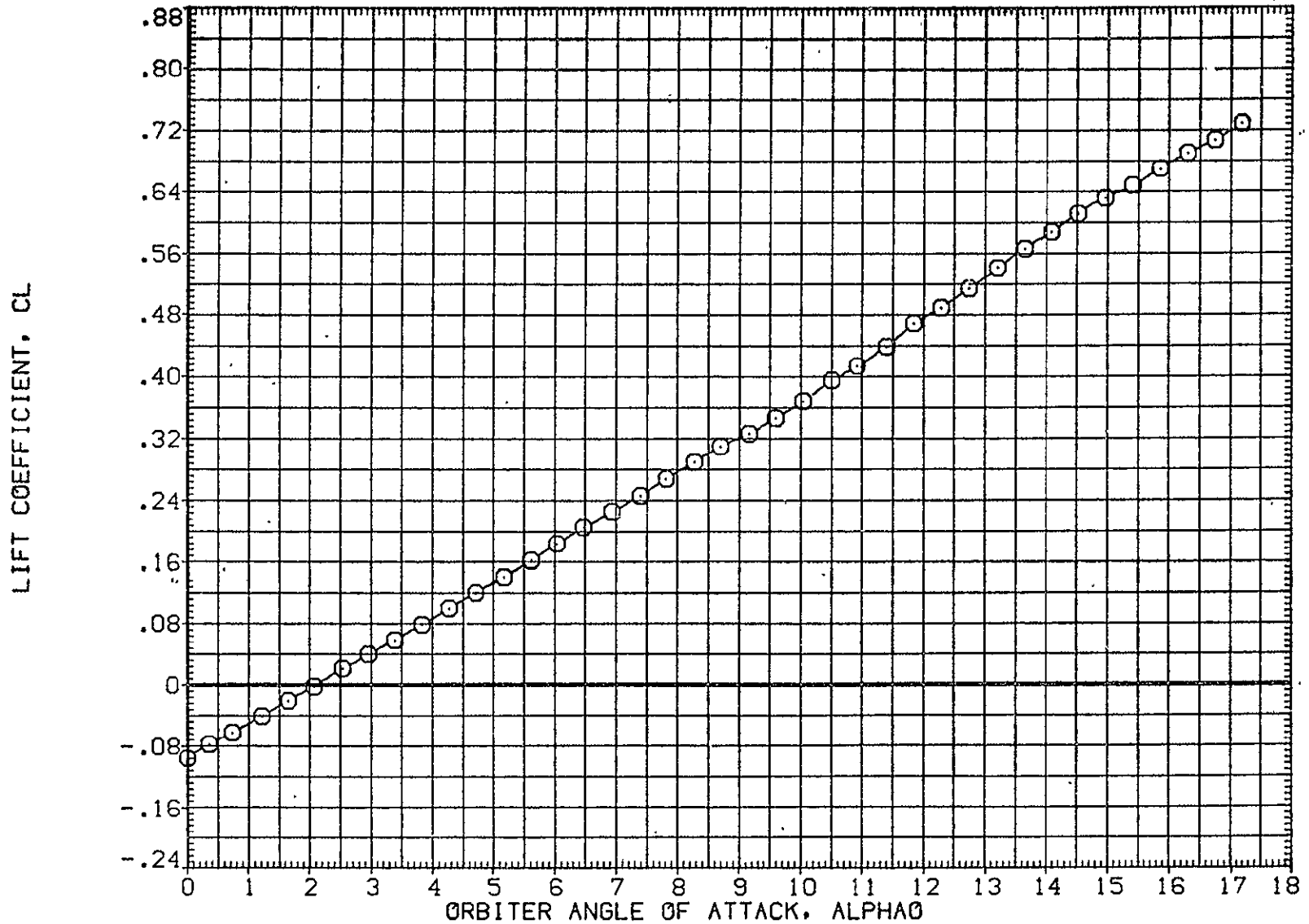


FIG. 13 ORBITER ISOLATED, ALPHA SWEEP, AFE010

SYMBOL	MACH	PARAMETRIC VALUES			
⊙	.593	BETA0	1000	ELEVON	..000
		BDFLAP	-11.700		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

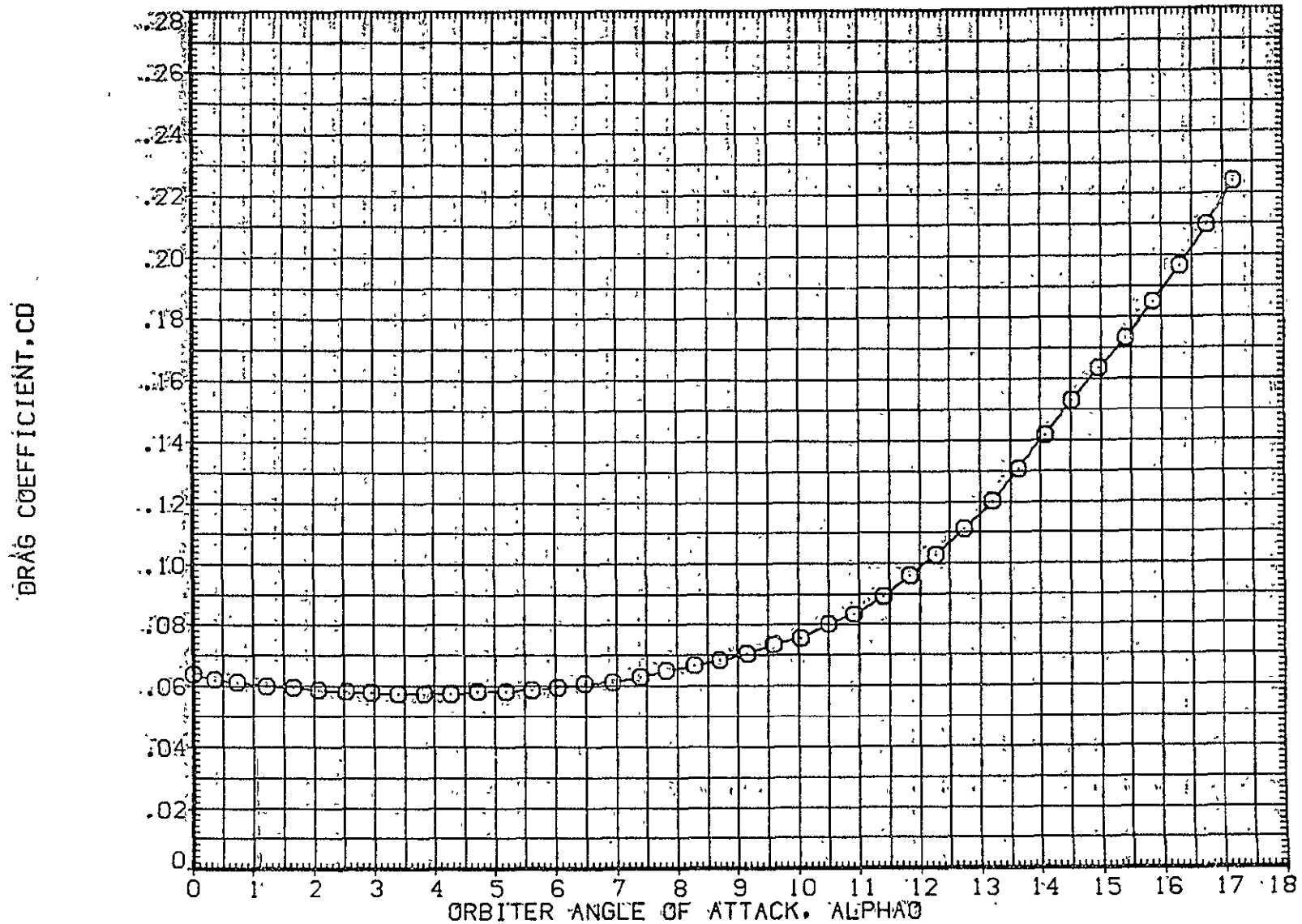


FIG. 13 ORBITER ISOLATED, ALPHA SWEEP, AFE010

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(AFE011)

SYMBOL	MACH	BETA0	BOFLAP	PARAMETRIC VALUES	ELEVON	
○	.593			.000	.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	SG.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

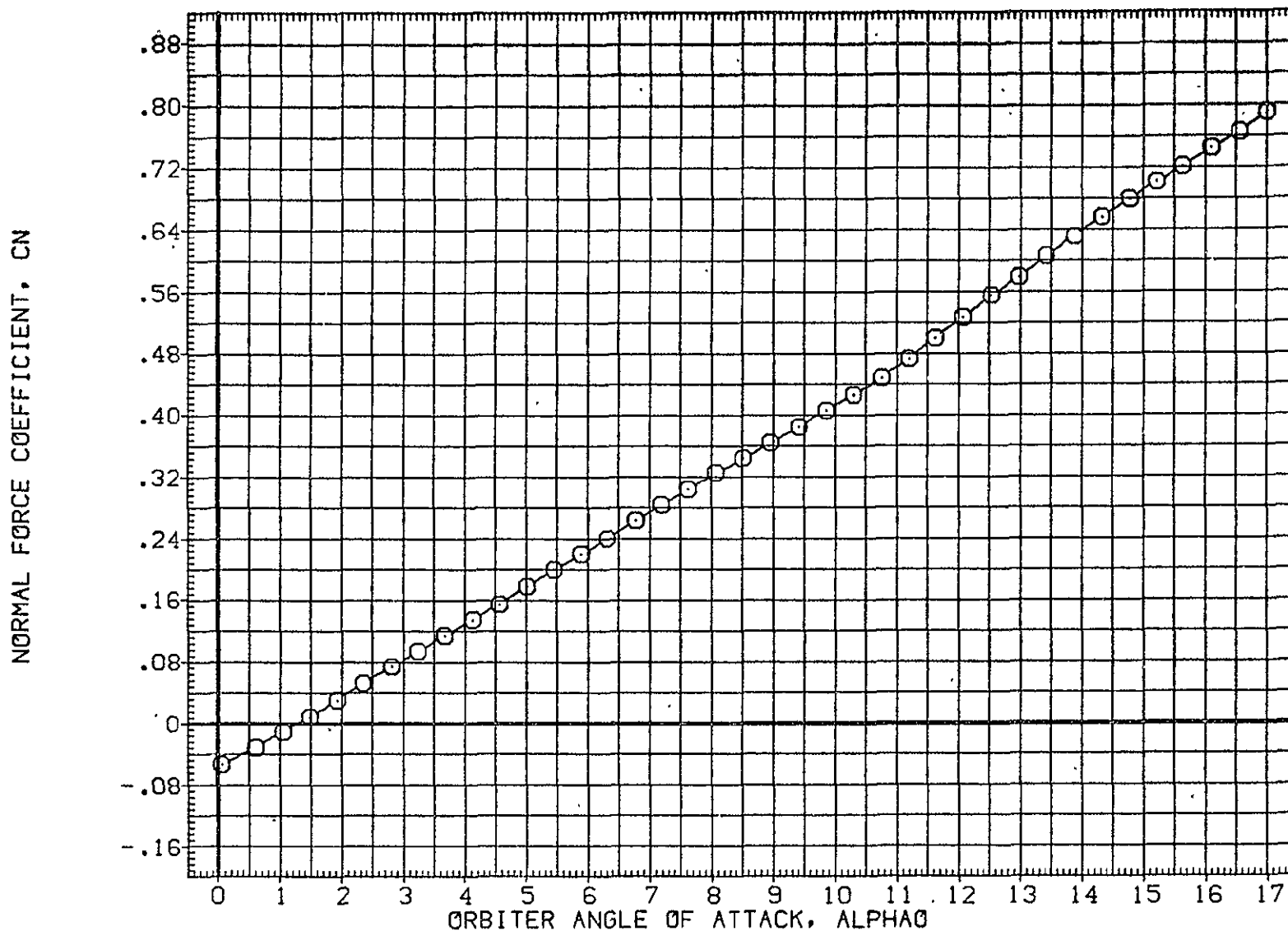


FIG. 14 ORBITER ISOLATED, ALPHA SWEEP, AFE011

SYMBOL	MACH	BETA0	PARAMETRIC VALUES	
○	.593		.000	ELEVON .000
		BOFLAP	5.000	

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	.375.0000	IN. Z0
SCALE	.0125	

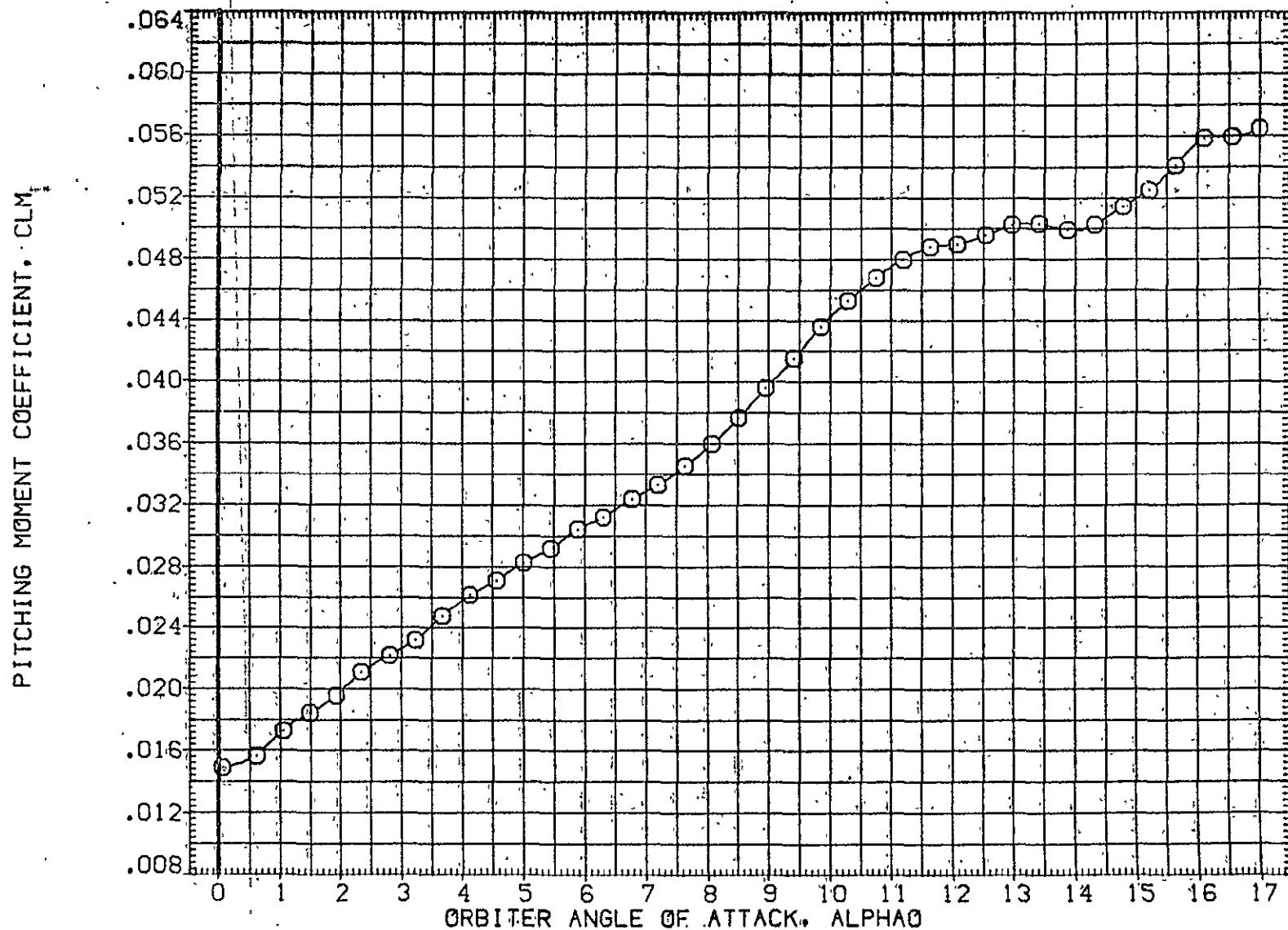


FIG. 14 ORBITER ISOLATED; ALPHA SWEEP, AFE011

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(AFE011)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.593	BETA0	.000	ELEVON	.000
		BDFLAP	5.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ. FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

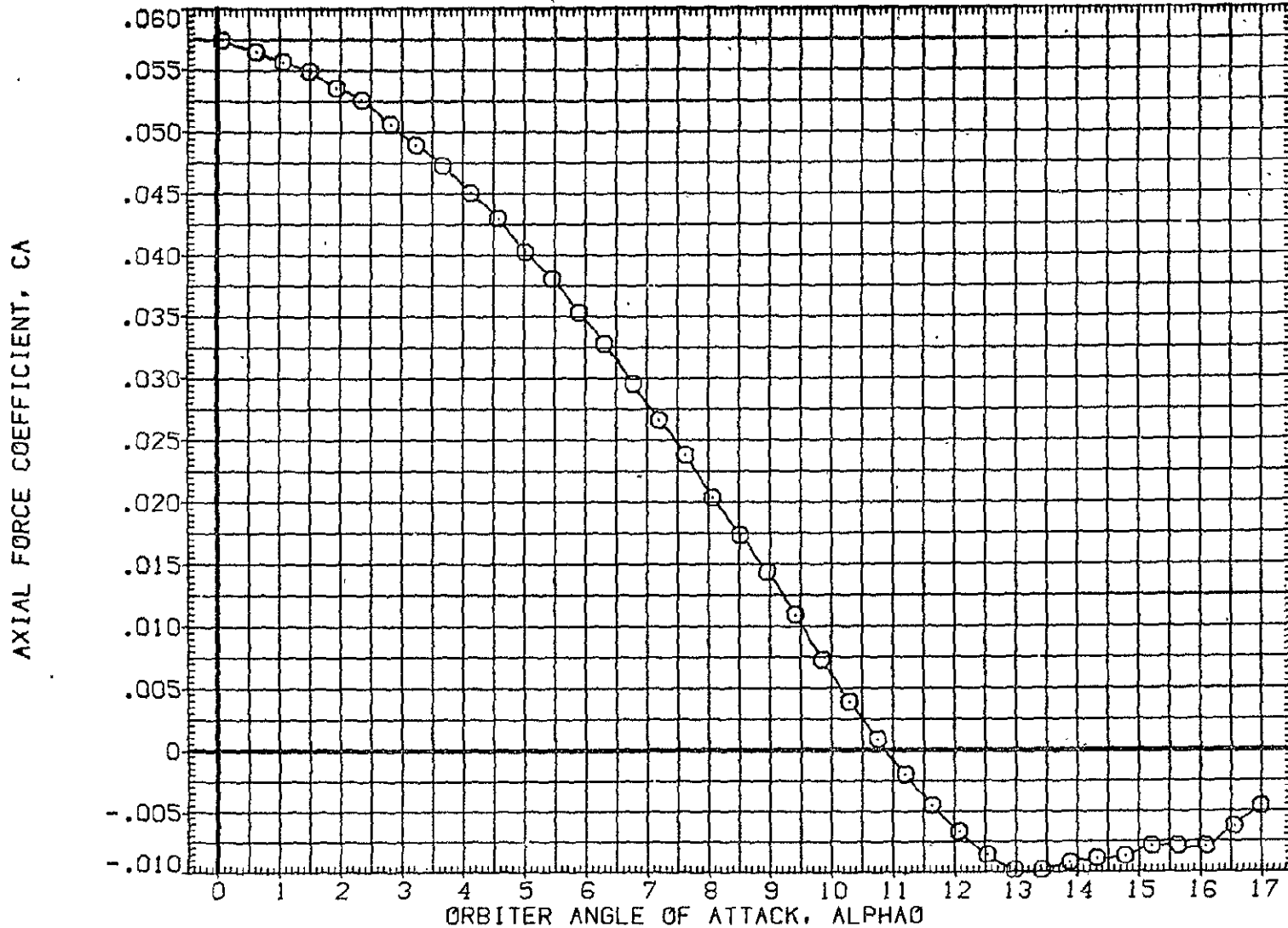


FIG. 14 ORBITER ISOLATED, ALPHA SWEEP, AFE011

SYMBOL	MACH	PARAMETRIC VALUES			
○	.593	BETA0	.000	ELEVON	.000
		BDFLAP	5.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.8800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

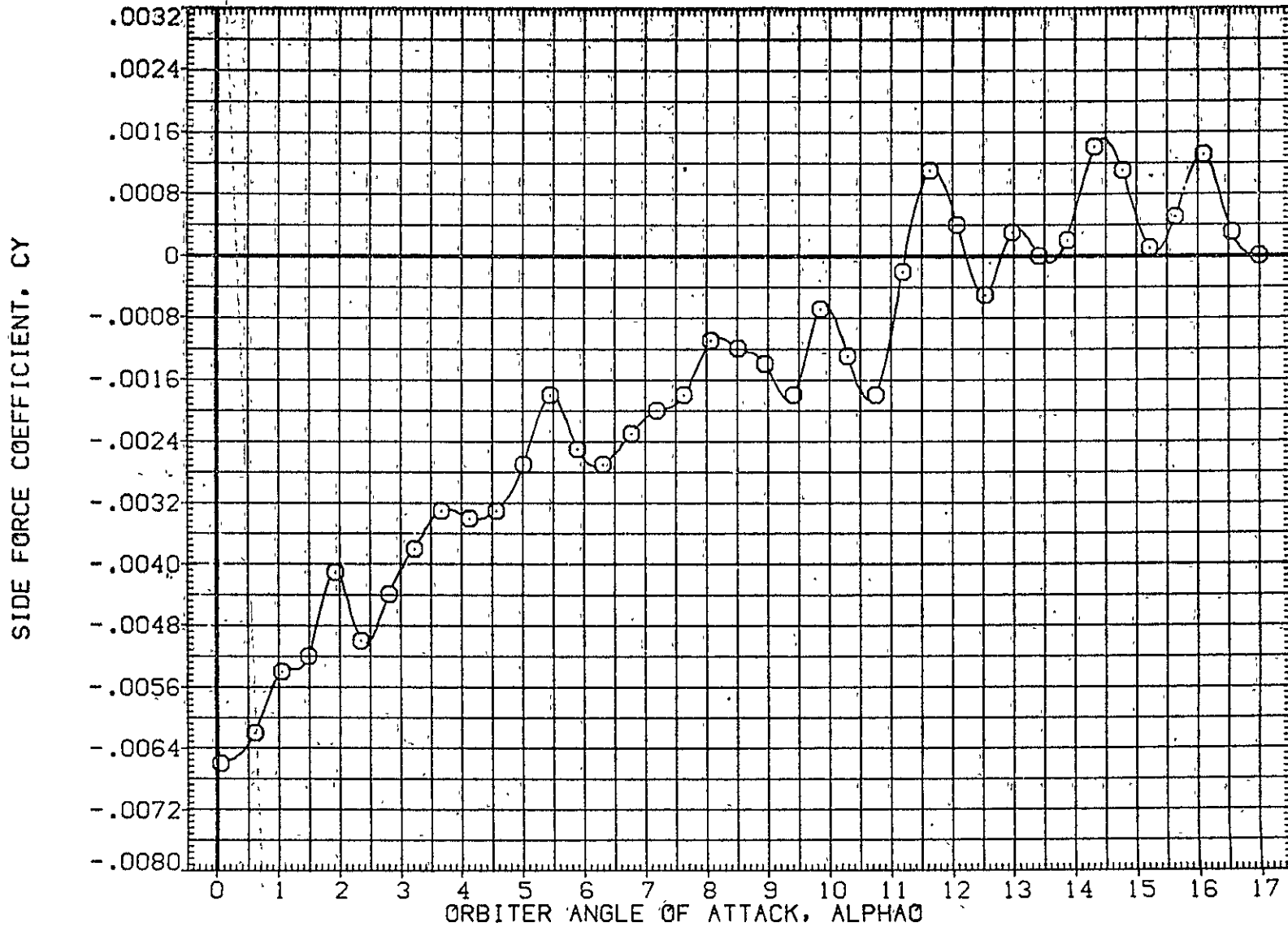


FIG. 14 ORBITER ISOLATED, ALPHA SWEEP, AFE011

SYMBOL	MACH	BETA0	PARAMETRIC VALUES	ELEVON	
○	.593	BDFLAP	.000	.000	.000
			5.000		

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

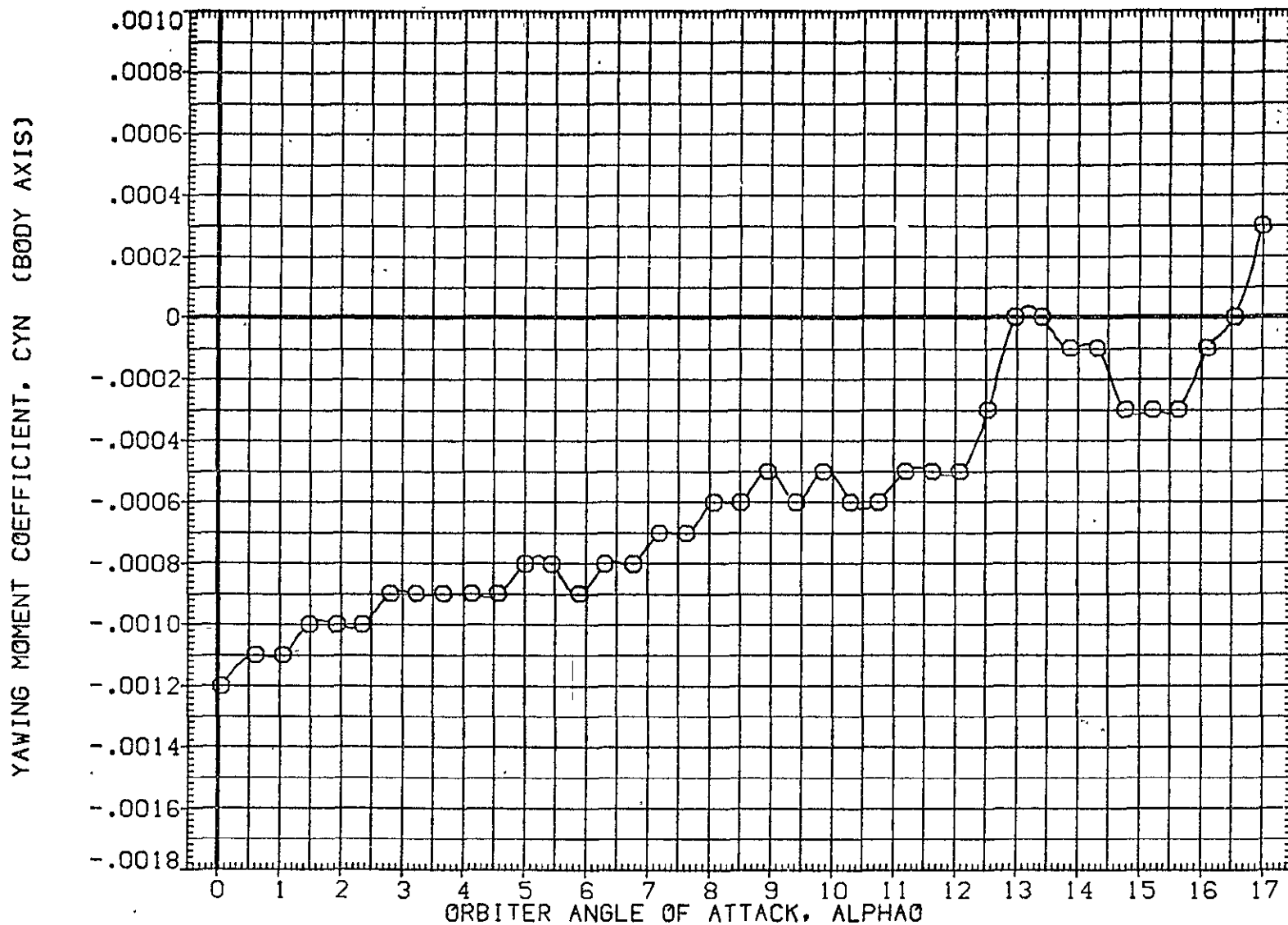


FIG. 14 ORBITER ISOLATED, ALPHA SWEEP, AFE011

SYMBOL	MACH	PARAMETRIC VALUES		
O	.593	BETA0	.000	ELEVON
		BDFLAP	5.000	.0.00

REFERENCE INFORMATION		
SREF	2690.0000	SQ. FT.
LREF	474.8100	IN.
BREF	996.6800	IN.
XMRP	11.092.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0.25	

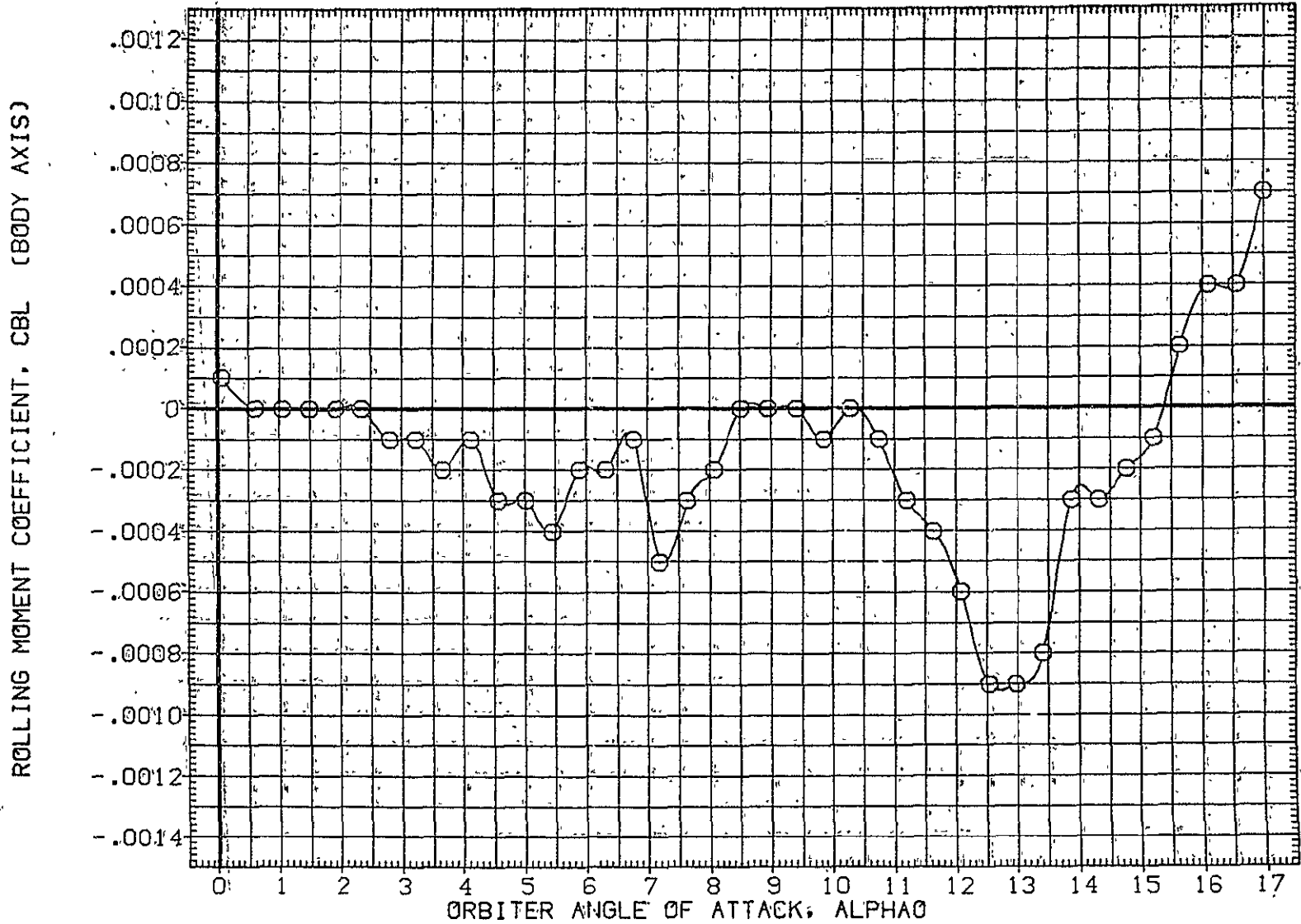


FIG. 14 ORBITER ISOLATED, ALPHA SWEEP, AFE011

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(AFE011)

SYMBOL	MACH	BETA0	PARAMETRIC VALUES	ELEVON	
○	.593	BDFLAP	.000	5.000	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

LIFT COEFFICIENT, CL

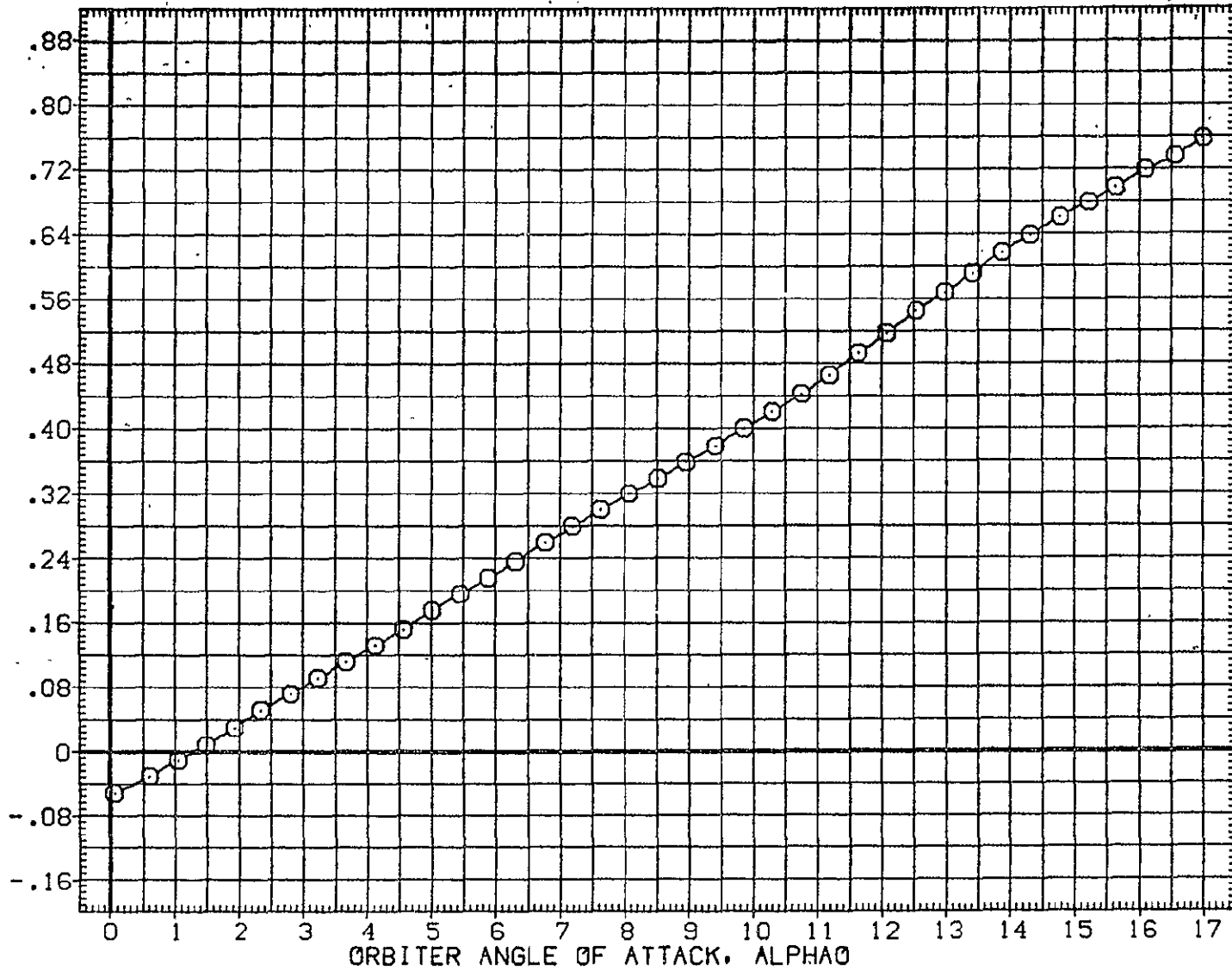


FIG. 14 ORBITER ISOLATED, ALPHA SWEEP, AFE011

SYMBOL	MACH	PARAMETRIC VALUES			
○	.593	BETA0	.000	ELEVON	.000
		BDFLAP	5.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

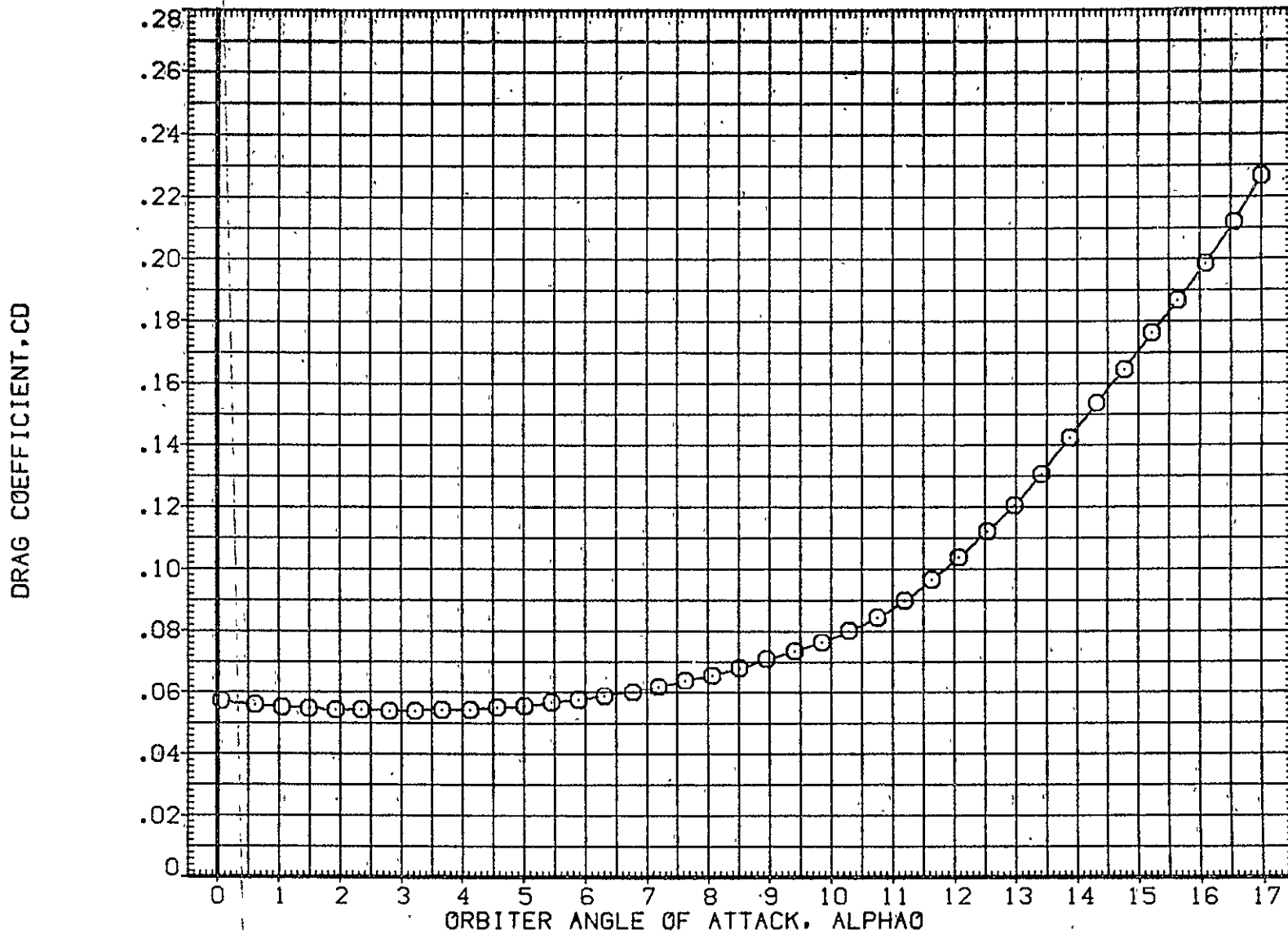


FIG. 14 ORBITER ISOLATED, ALPHA SWEEP, AFE011.

SYMBOL	MACH	BETA0	PARAMETRIC VALUES	
○	.591		.000	ELEVON .000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

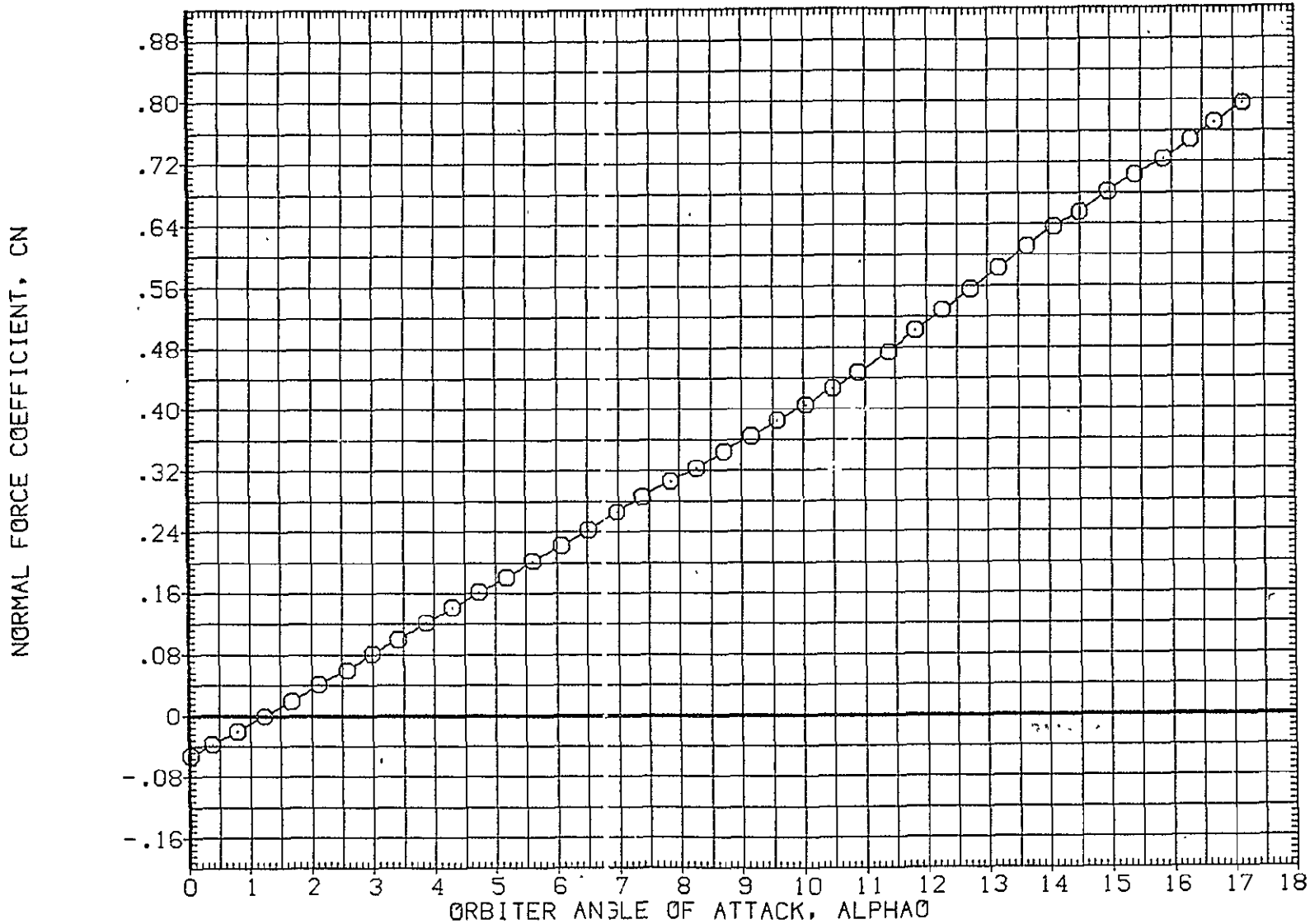


FIG. 15 ORBITER ISOLATED, ALPHA SWEEP, AFE012

SYMBOL MACH PARAMETRIC VALUES
 O .591 BETA0 .000 ELEVON .000

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1109.0000 IN. X0
 YMRP .0000 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .0125

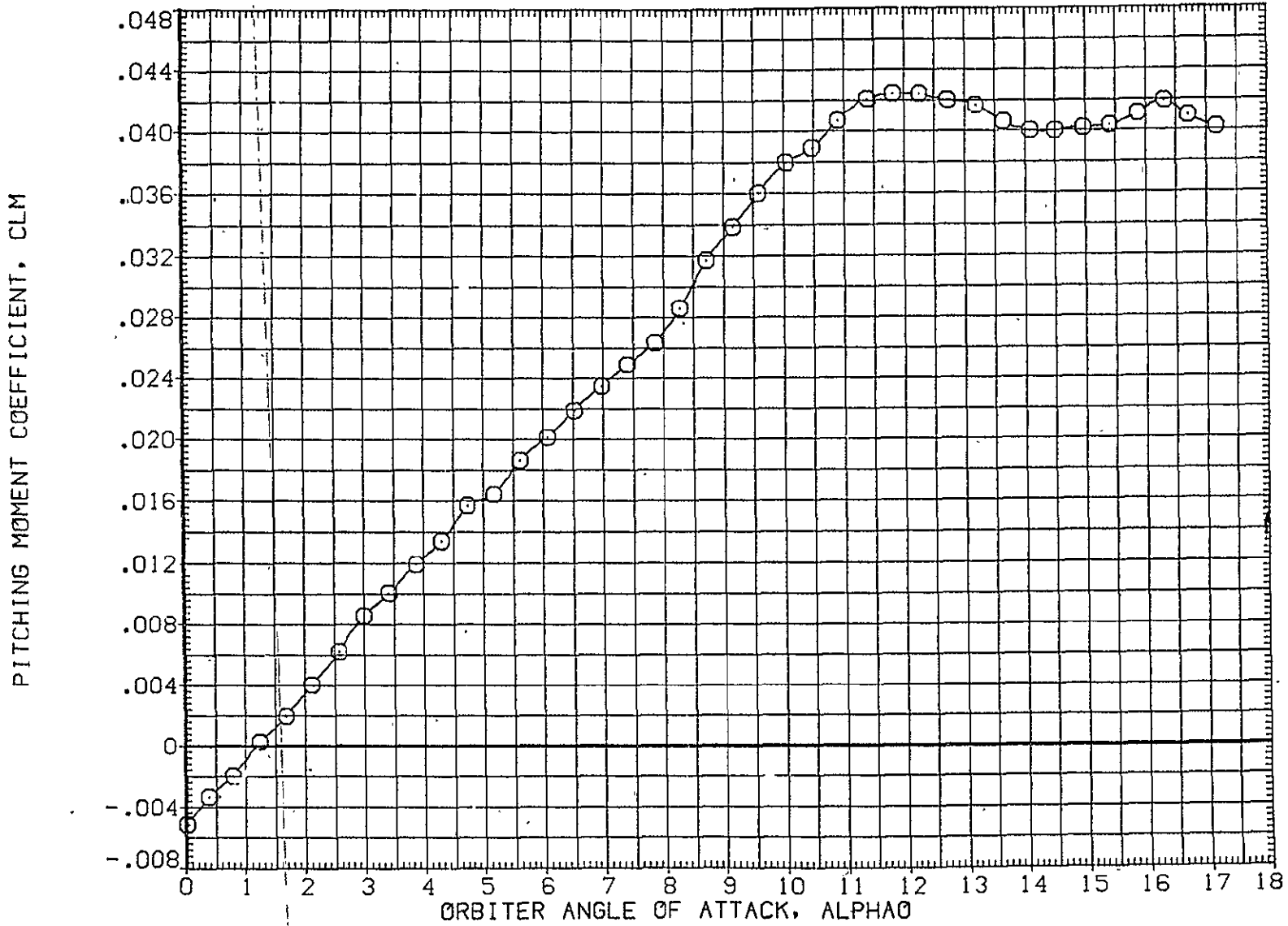


FIG. 15 ORBITER ISOLATED, ALPHA SWEEP, AFE012

SYMBOL MACH BETAO PARAMETRIC VALUES
 ○ .591 .000 ELEVON .000

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1109.0000 IN. X0
 YMRP .0000 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .0125

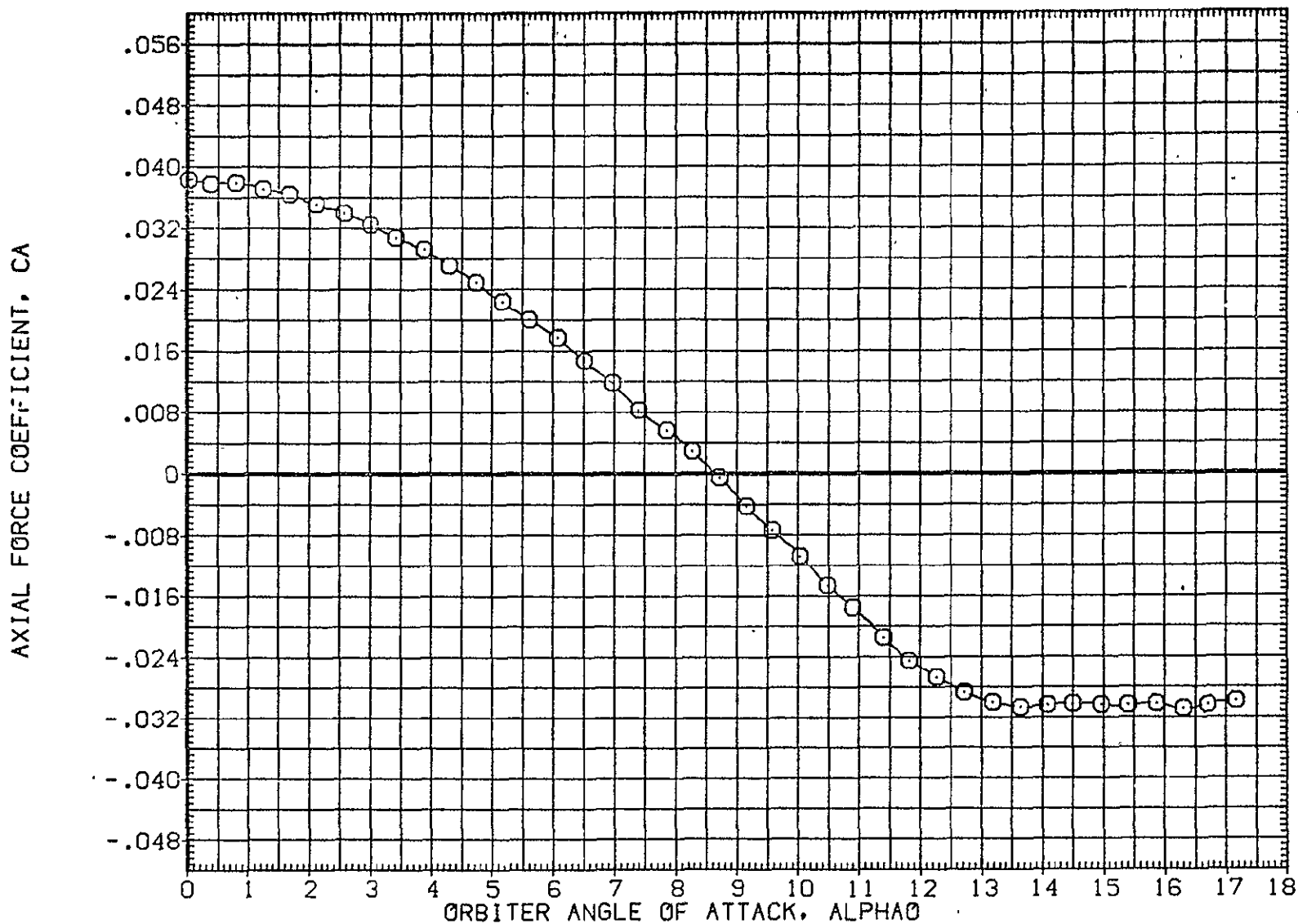


FIG. 15 ORBITER ISOLATED, ALPHA SWEEP, AFE012

SYMBOL	MACH	BETA	PARAMETRIC VALUES		
○	.591		.000	ELEVON	.000

REFERENCE INFORMATION

SREF	2690.0000	SO.FT
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125.	

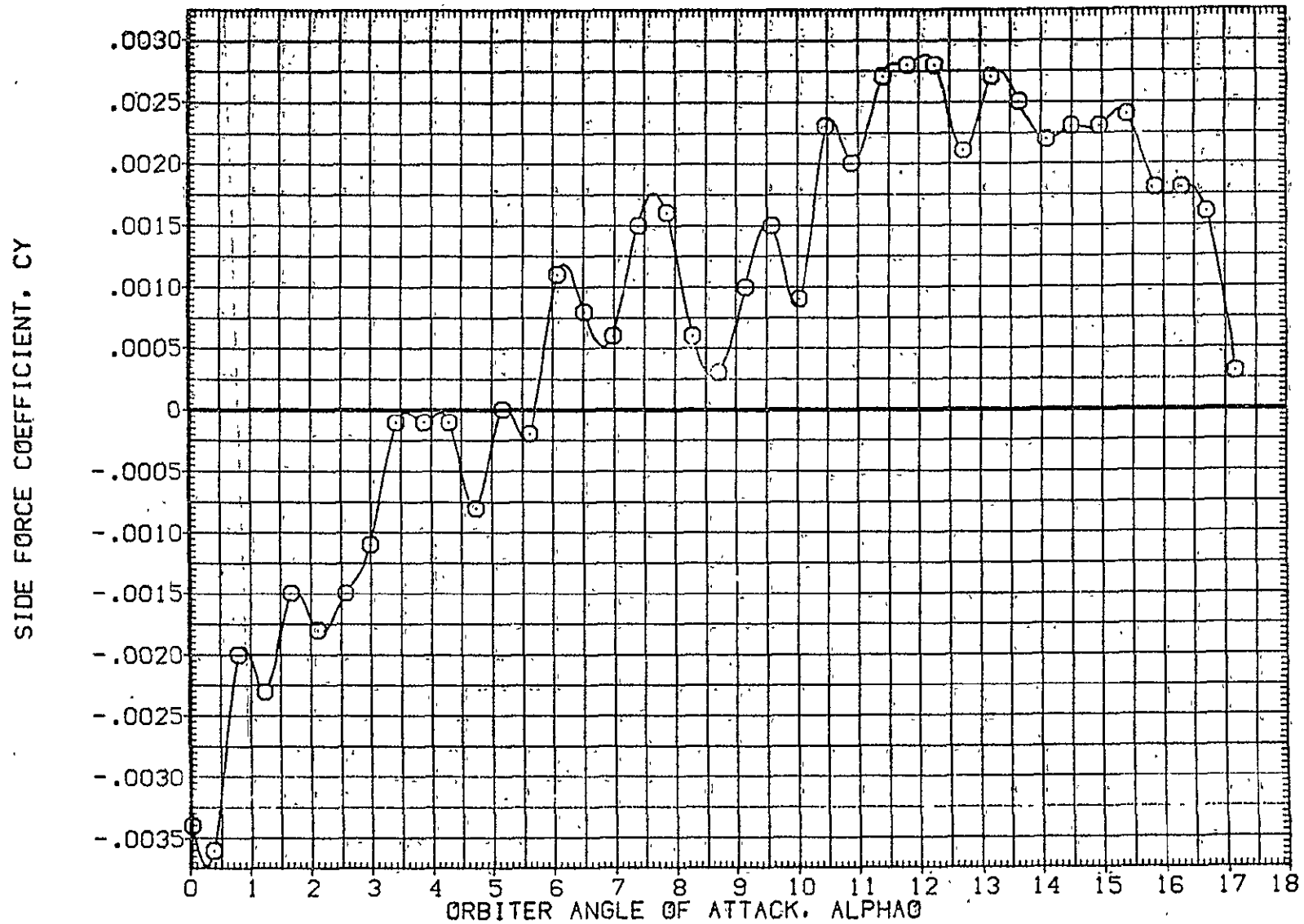


FIG. 15 ORBITER ISOLATED, ALPHA SWEEP, AFE012

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(AFE012)

SYMBOL MACH PARAMETRIC VALUES
 O .591 BETA0 .000 ELEVON .000

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1109.0000 IN. X0
 YMRP .0000 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .0125

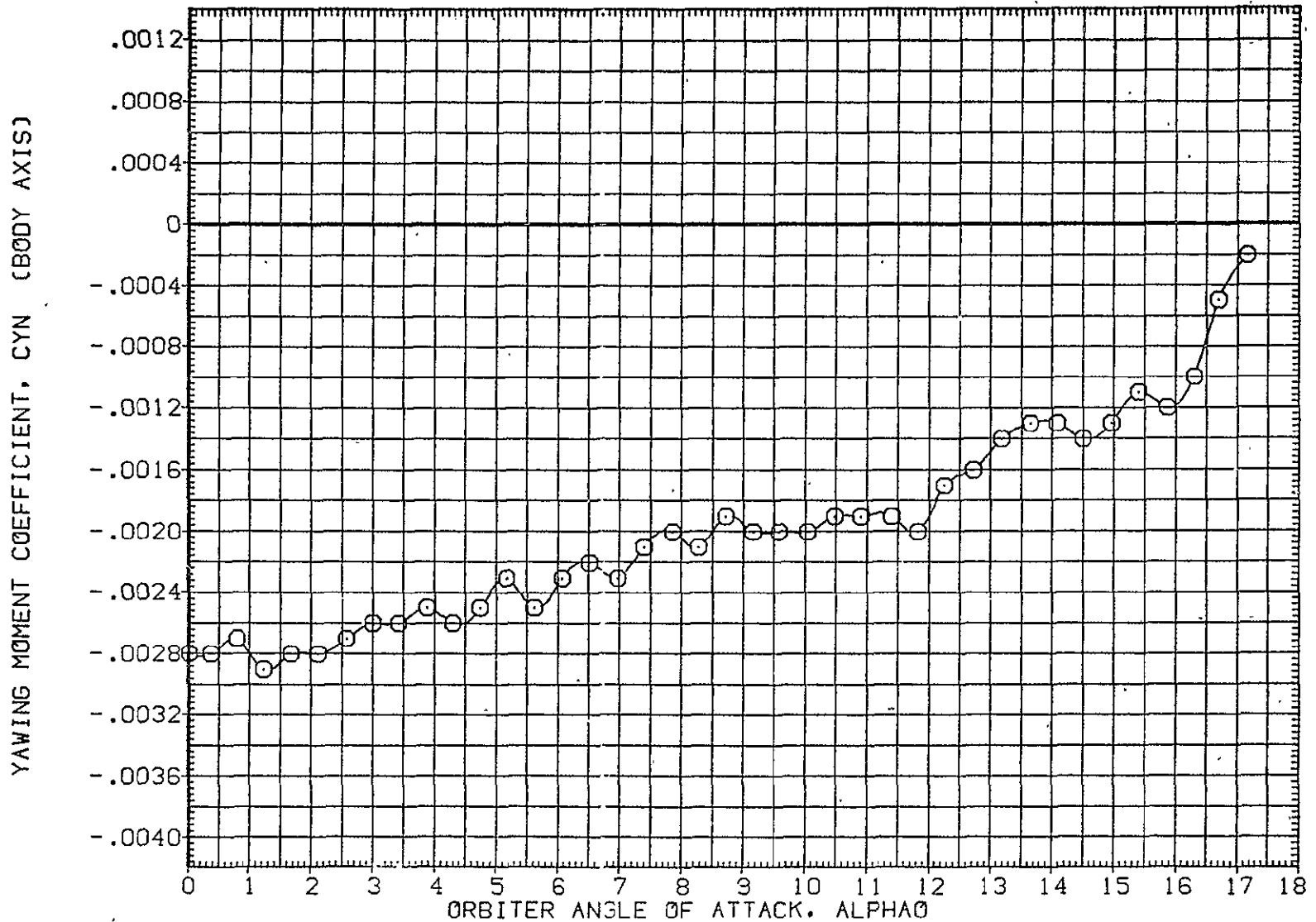


FIG. 15 ORBITER ISOLATED, ALPHA SWEEP, AFE012

SYMBOL MACH .591 BETAO PARAMETRIC VALUES .000 ELEVON .000

REFERENCE INFORMATION

SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)

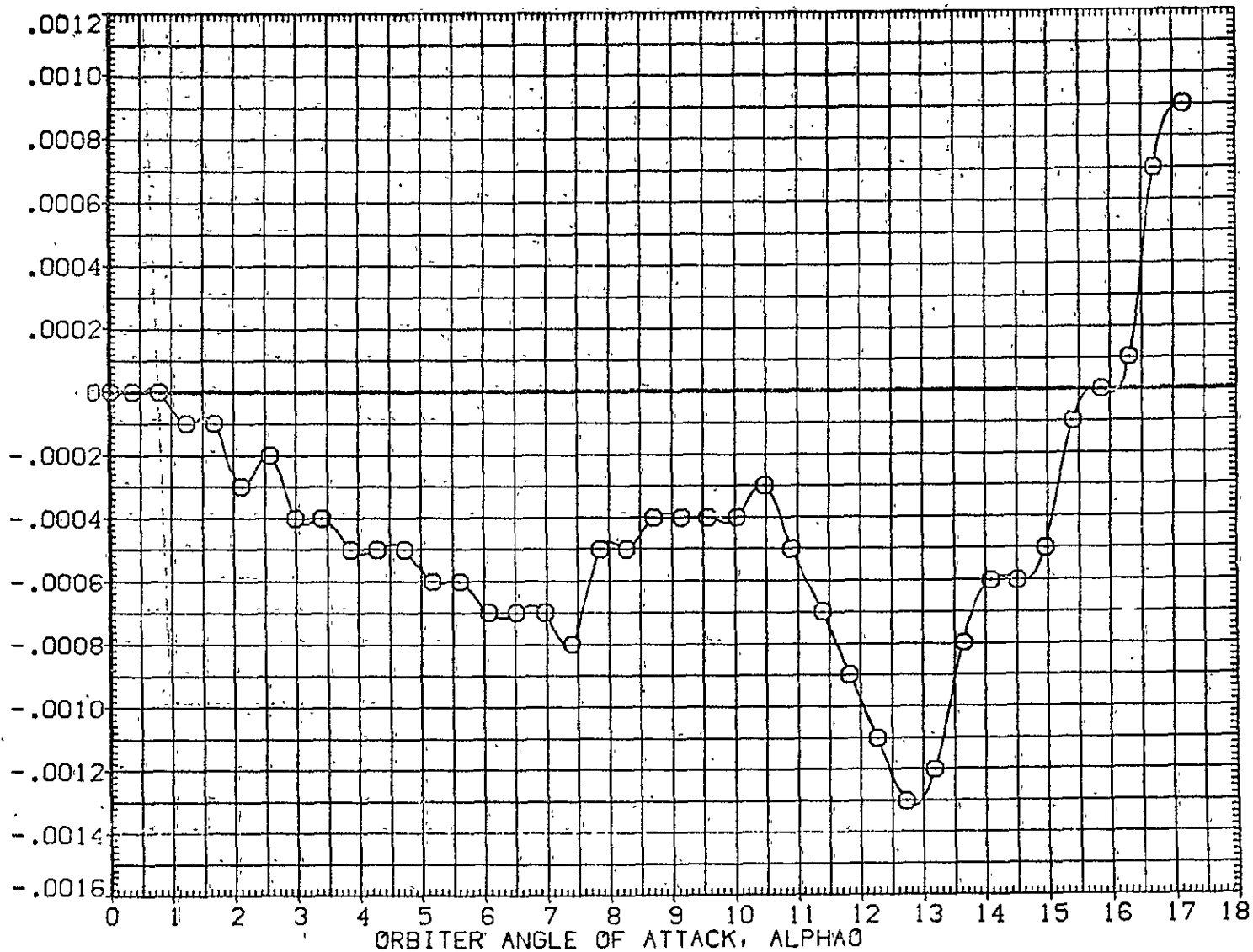


FIG. 15 ORBITER ISOLATED, ALPHA SWEEP, AFE012

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(AFE012)

SYMBOL MACH BETA0 PARAMETRIC VALUES
O .591 .000 ELEVON .000

REFERENCE INFORMATION
SREF 2690.0000 SQ.FT.
LREF 474.8100 IN.
BREF 936.6800 IN.
XMRP 1109.0000 IN. X0
YMRP .0000 IN. Y0
ZMRP 375.0000 IN. Z0
SCALE .0125

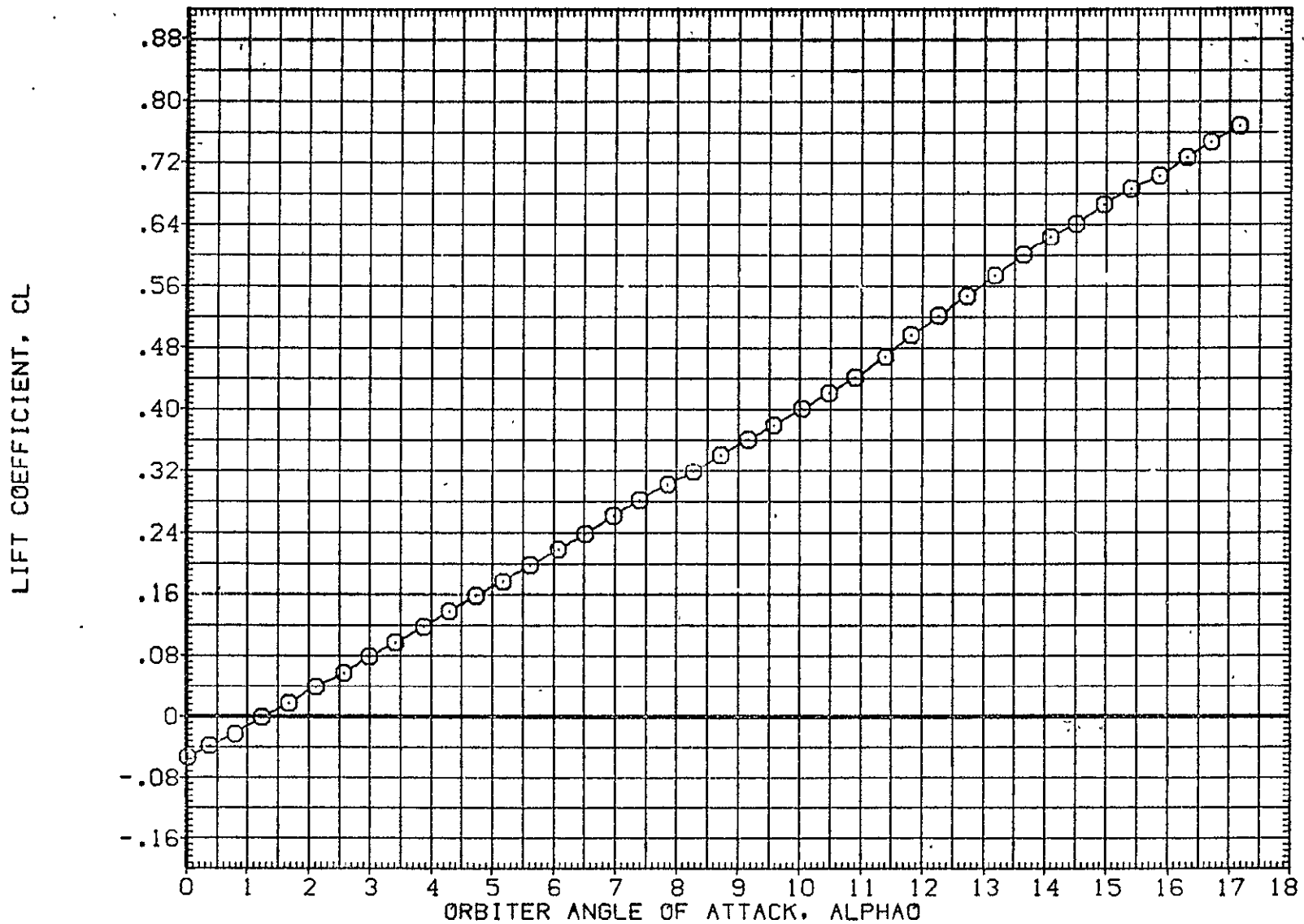


FIG. 15 ORBITER ISOLATED, ALPHA SWEEP, AFE012

SYMBOL	MACH	PARAMETRIC VALUES		
		BETA0	ELEVON	.000
○	.591			

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	.375.0000	IN. Z0
SCALE	.0125	

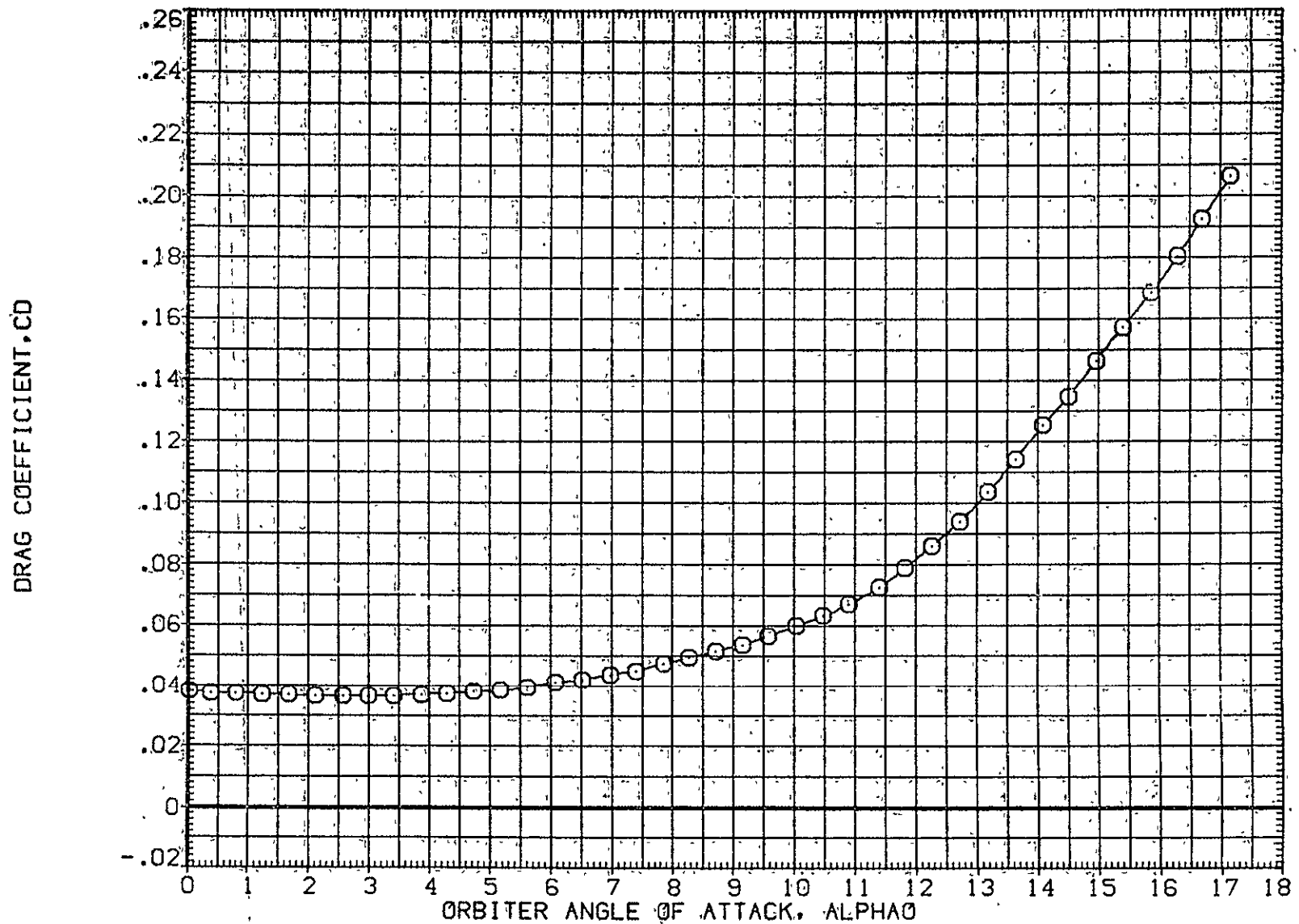


FIG. 15 ORBITER ISOLATED, ALPHA SWEEP, AFE012

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(AFE013)

SYMBOL MACH BETA0 PARAMETRIC VALUES ELEVON .000

REFERENCE INFORMATION
SREF 2690.0000 SQ.FT.
LREF 474.8100 IN.
BREF 936.6800 IN.
XMRP 1109.0000 IN. X0
YMRP .0000 IN. Y0
ZMRP 375.0000 IN. Z0
SCALE .0125

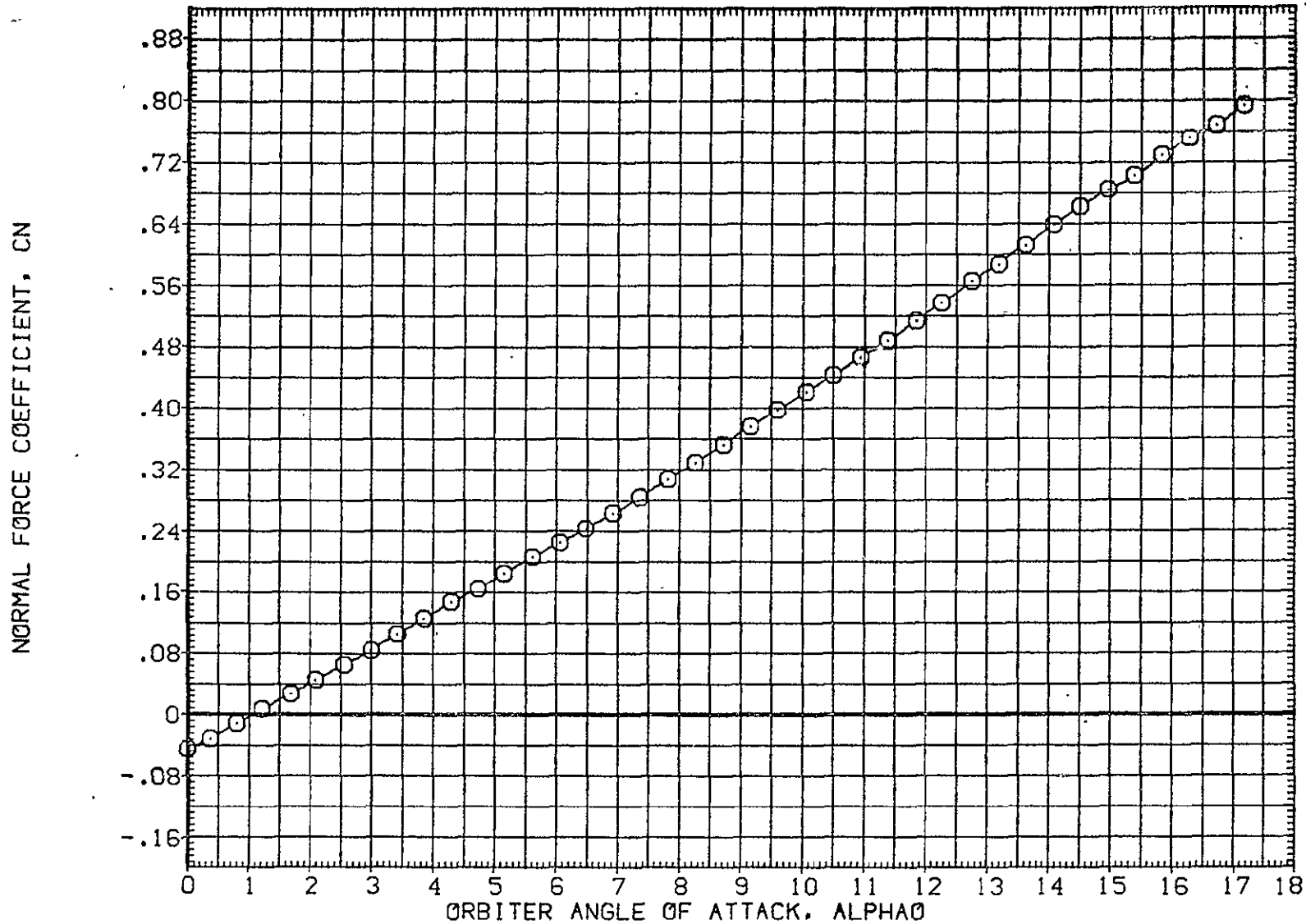


FIG. 16 ORBITER ISOLATED, ALPHA SWEEP, AFE013

SYMBOL	MACH	BETA0	PARAMETRIC VALUES	
○	.593		-5.000	ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

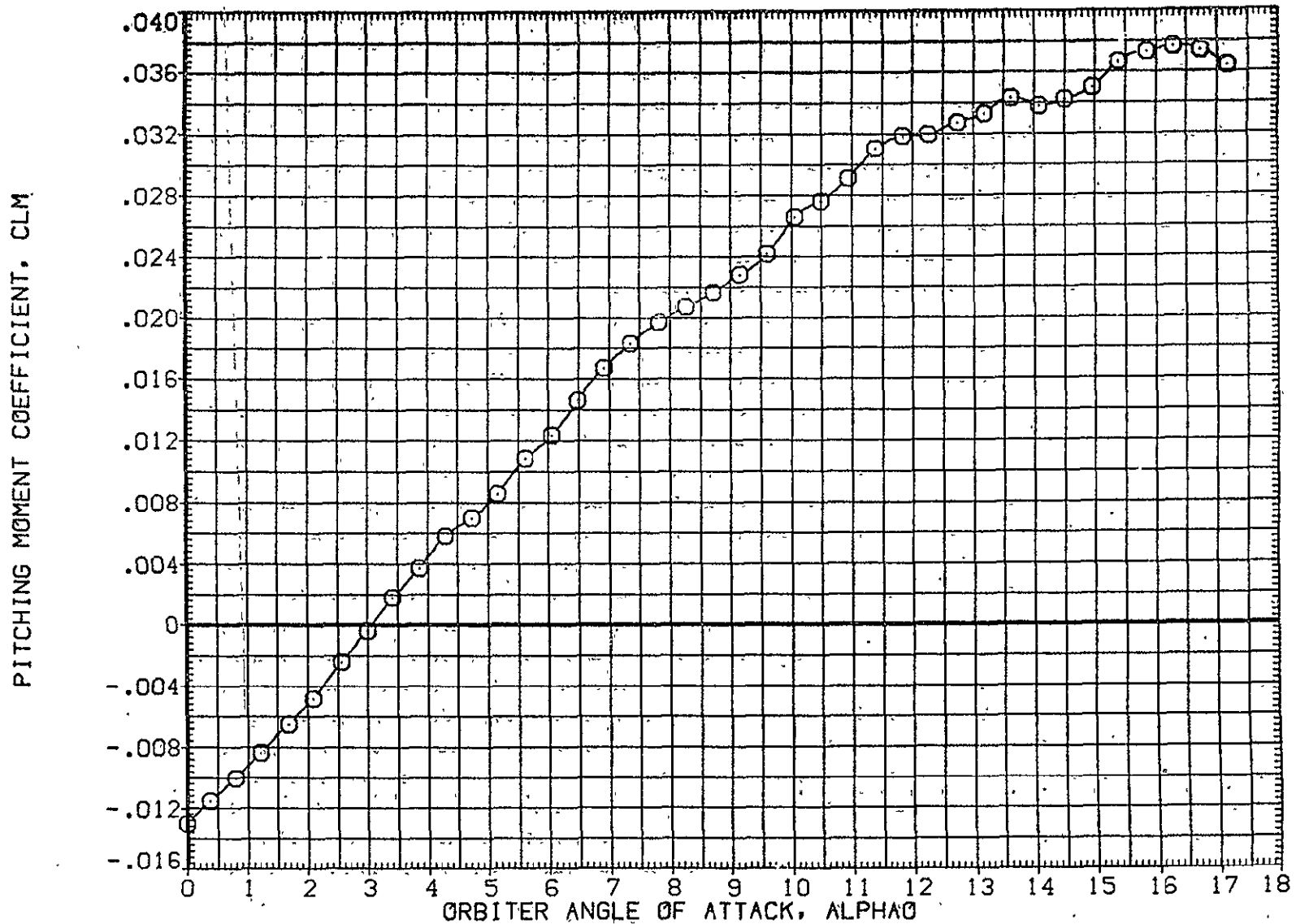


FIG. 16 ORBITER ISOLATED, ALPHA SWEEP, AFE013

SYMBOL MACH BETA0 PARAMETRIC VALUES
 O .593 -5.000 ELEVON .000

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6600 IN.
 XMRP 1109.0000 IN. X0
 YMRP .0000 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .0125

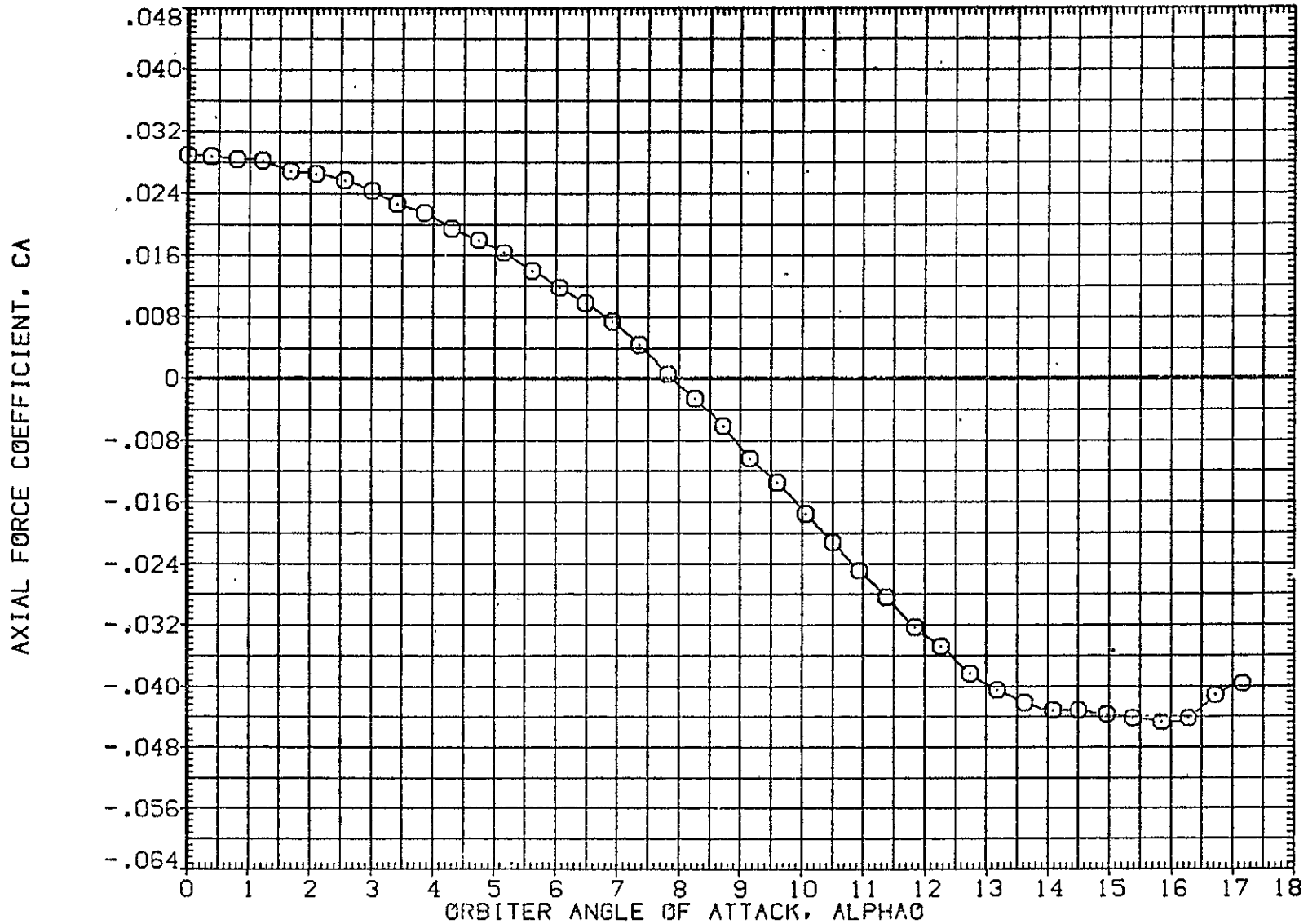


FIG. 16 ORBITER ISOLATED, ALPHA SWEEP, AFE013

SYMBOL MACH PARAMETRIC VALUES
 ○ .593 BETA0 -5.000 ELEVON .000

REFERENCE INFORMATION
 SREF 2690.0000 SQ. FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1109.0000 IN. X0
 YMRP .0000 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .0125

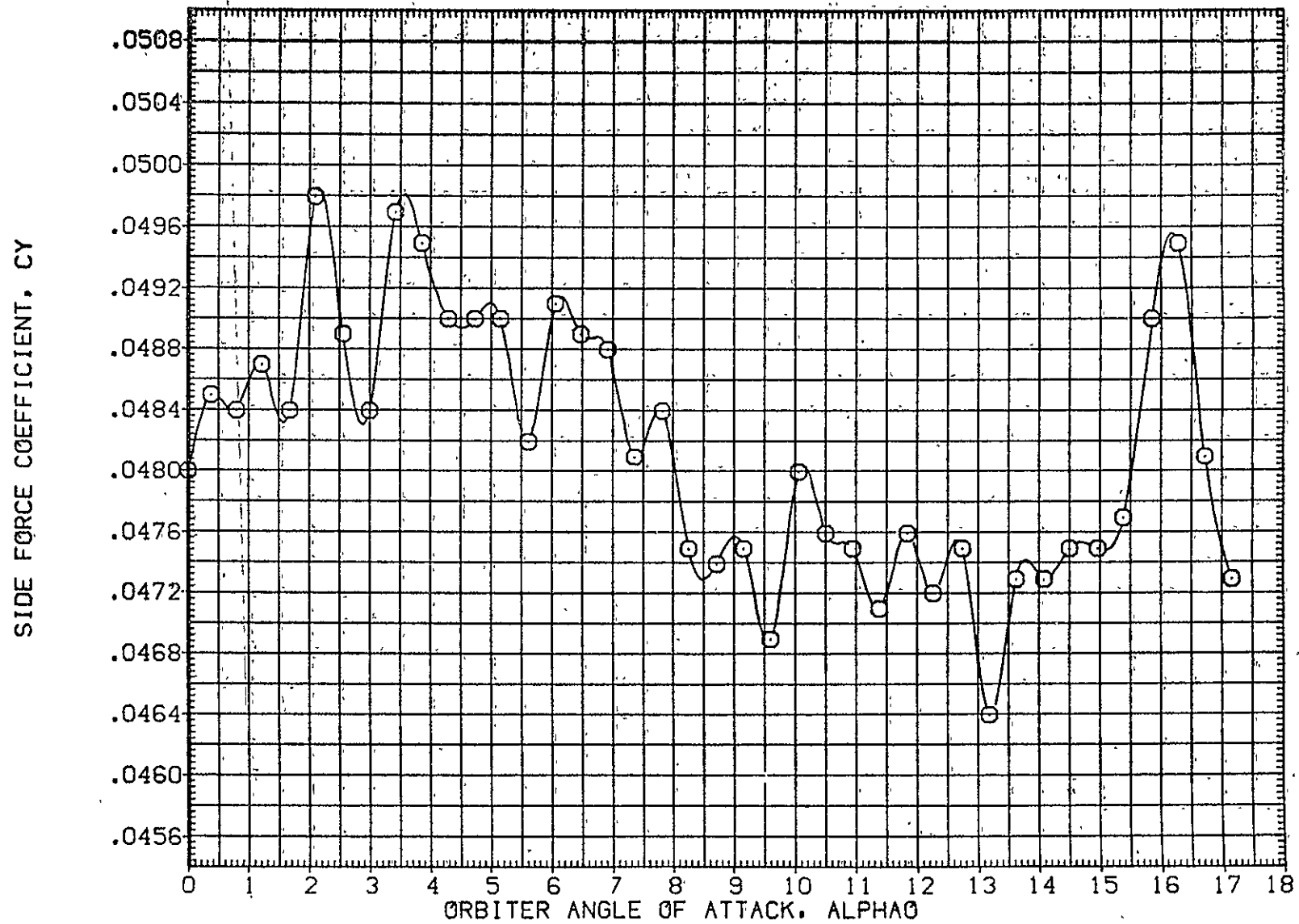


FIG. 16 ORBITER ISOLATED, ALPHA SWEEP, AFE013

SYMBOL MACH BETA0 PARAMETRIC VALUES ELEVON .000

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1109.0000 IN. X0
 YMRP .0000 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .0125

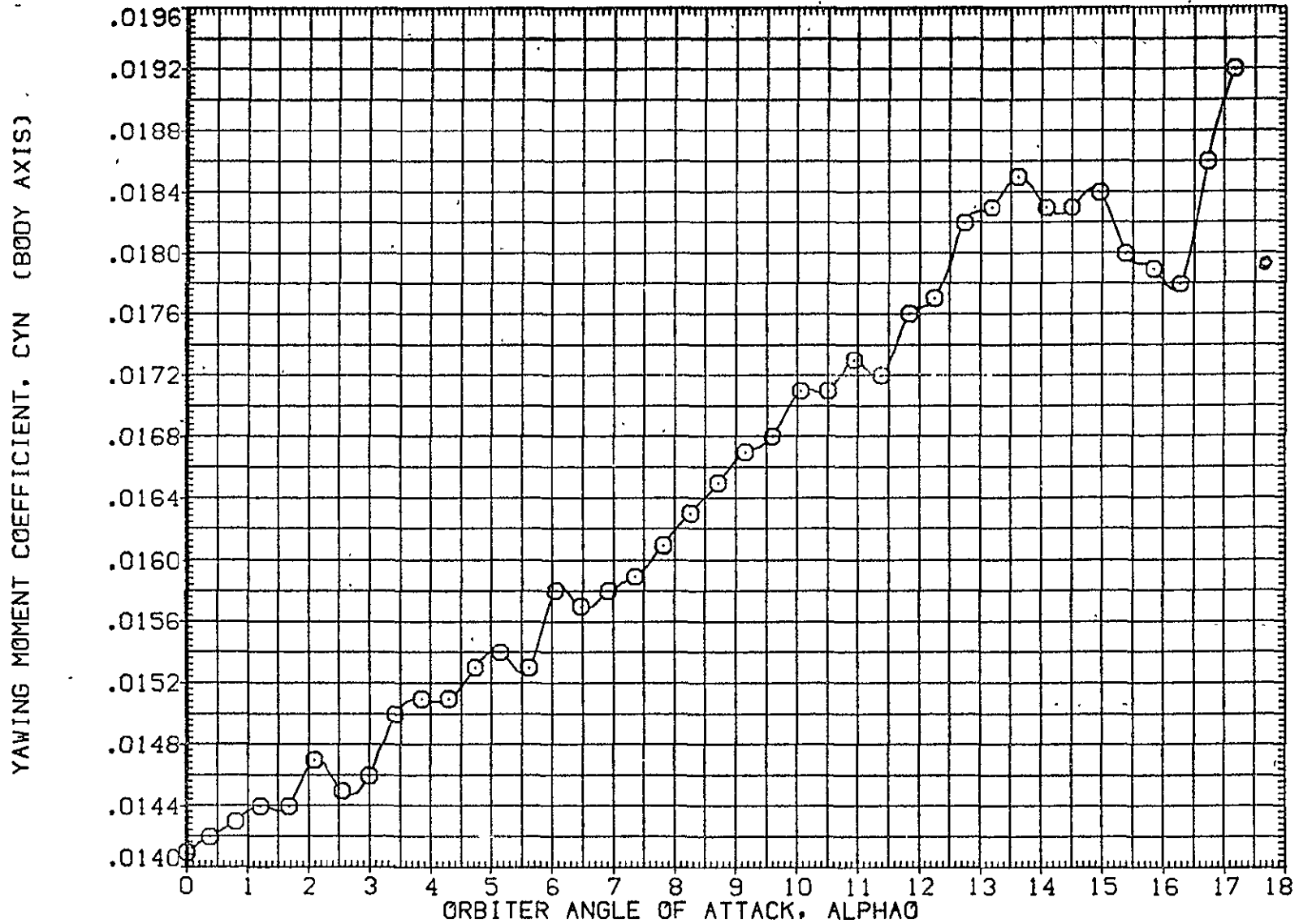


FIG. 16 ORBITER ISOLATED, ALPHA SWEEP, AFE013

SYMBOL MACH BETA0 PARAMETRIC VALUES
 O .593 -5.000 ELEVON .000

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1109.0000 IN. X0
 YMRP .0000 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .0125

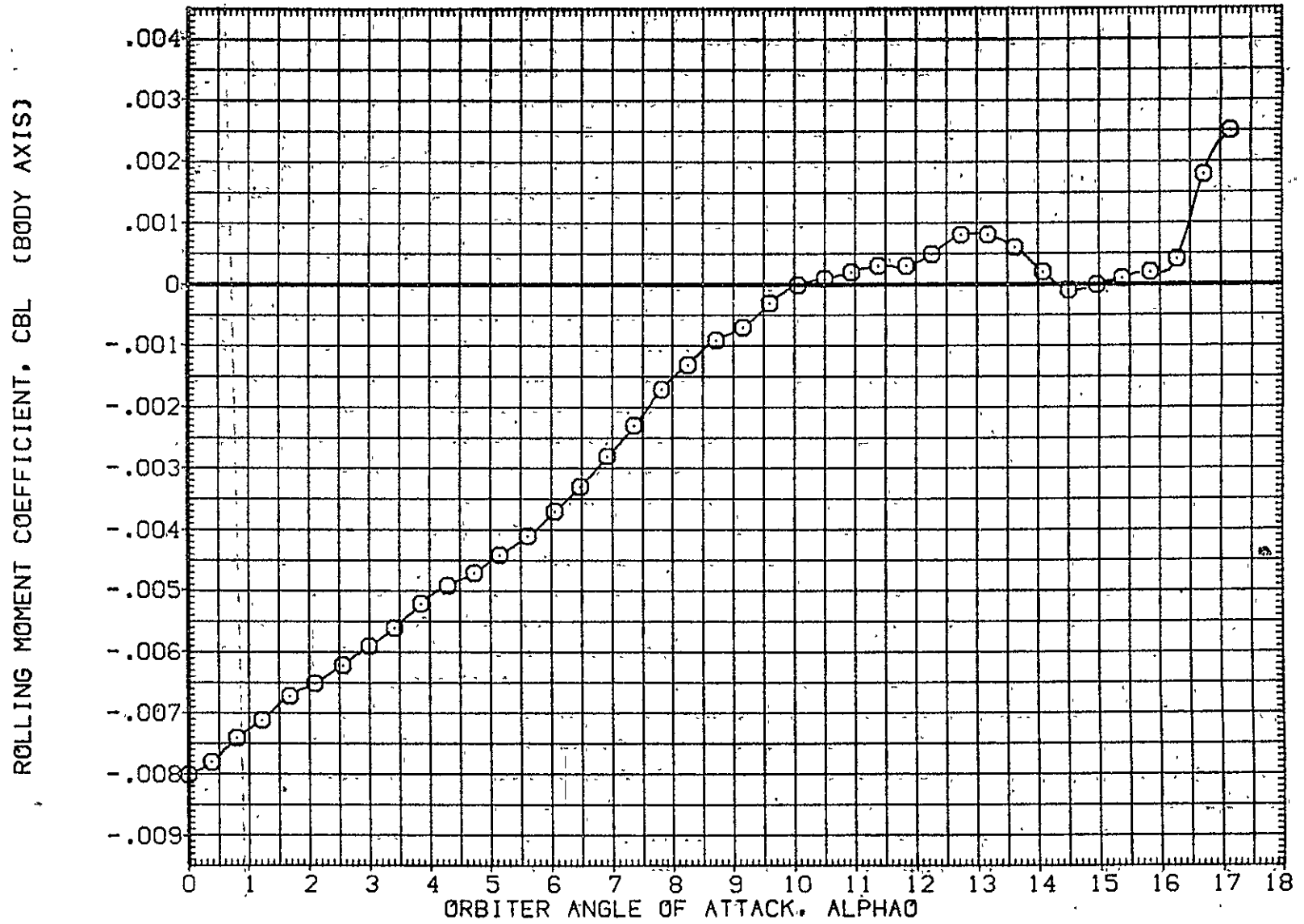


FIG. 16 ORBITER ISOLATED, ALPHA SWEEP, AFE013

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(AFE013)

SYMBOL MACH BETA0 PARAMETRIC VALUES ELEVON .000
○ .593

REFERENCE INFORMATION
SREF 2690.0000 SQ.FT.
LREF 474.8100 IN.
BREF 936.6800 IN.
XMRP 1109.0000 IN. X0
YMRP .0000 IN. Y0
ZMRP 375.0000 IN. Z0
SCALE .0125

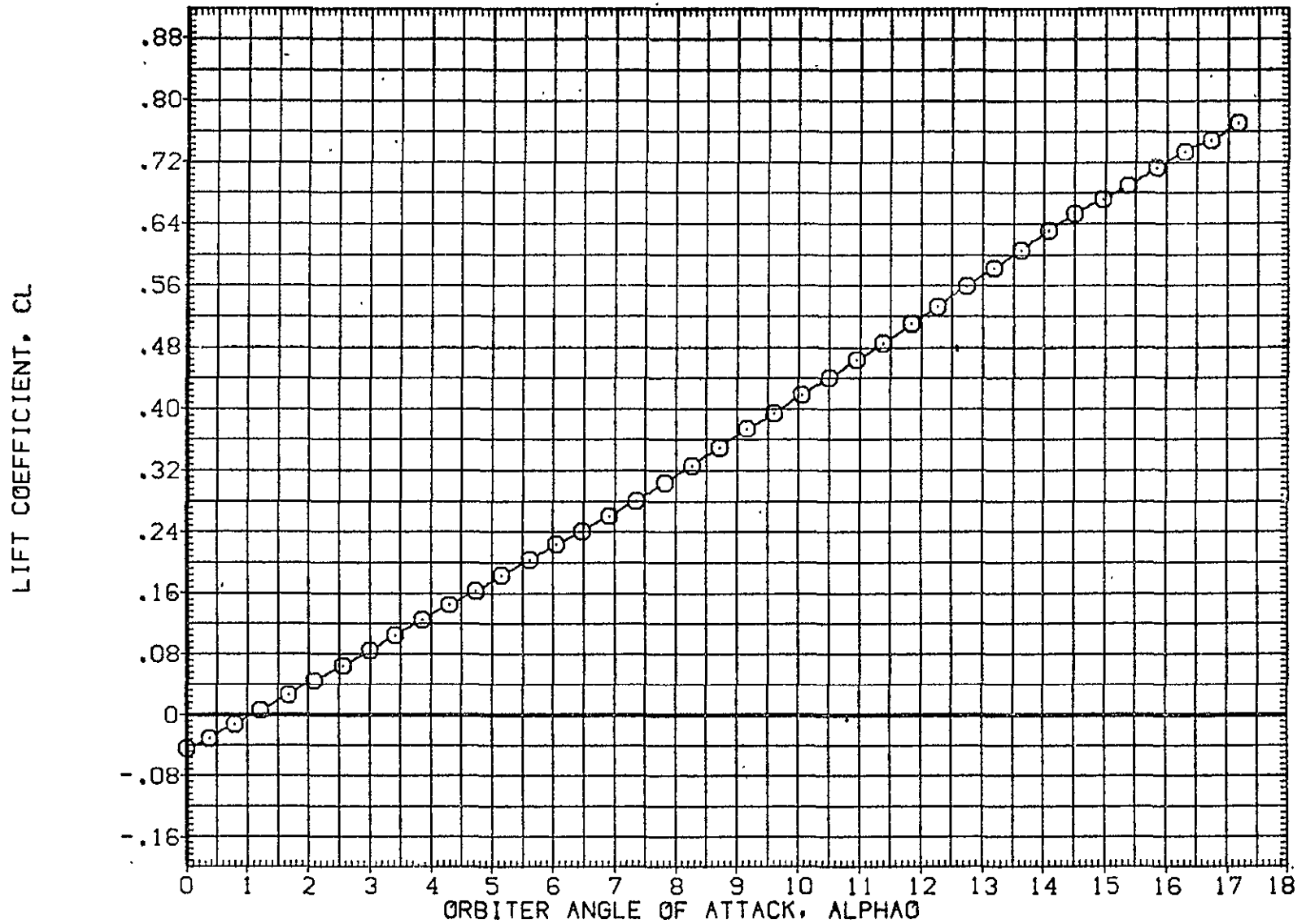


FIG. 16 ORBITER ISOLATED, ALPHA SWEEP, AFE013

SYMBOL	MACH	PARAMETRIC VALUES		
○	.593	BETA0	-5.000	ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000.	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800.	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

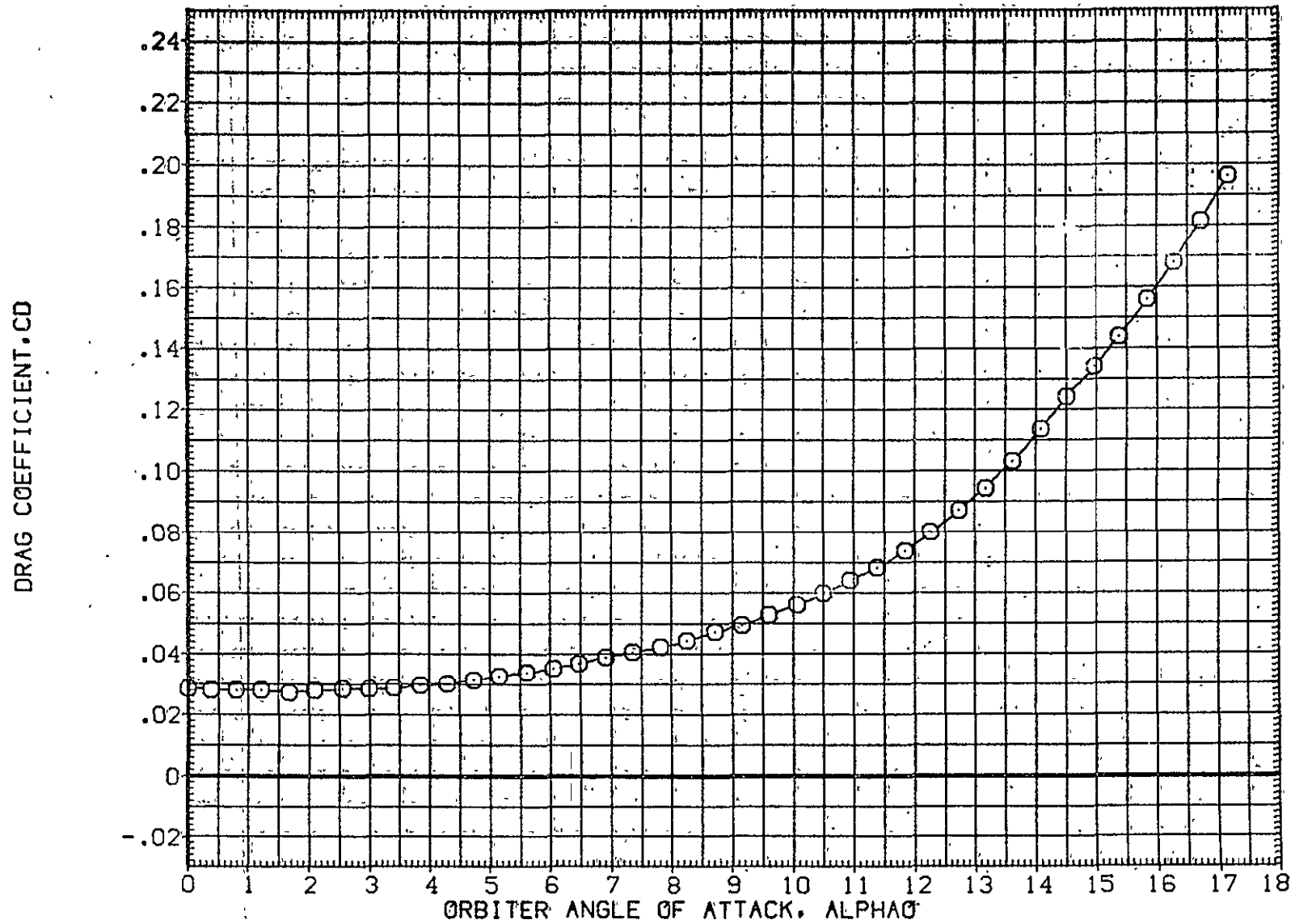


FIG. 16 ORBITER ISOLATED, ALPHA SWEEP, AFE013

LTV44-559(CA26) 06 S1

(AFE014)

SYMBOL MACH BETA0 PARAMETRIC VALUES
O .593 .000 ELEVON 5.000

REFERENCE INFORMATION
SREF 2690.0000 SQ.FT.
LREF 474.8100 IN.
BREF 936.6800 IN.
XMRP 1109.0000 IN. X0
YMRP .0000 IN. Y0
ZMRP 375.0000 IN. Z0
SCALE .0125

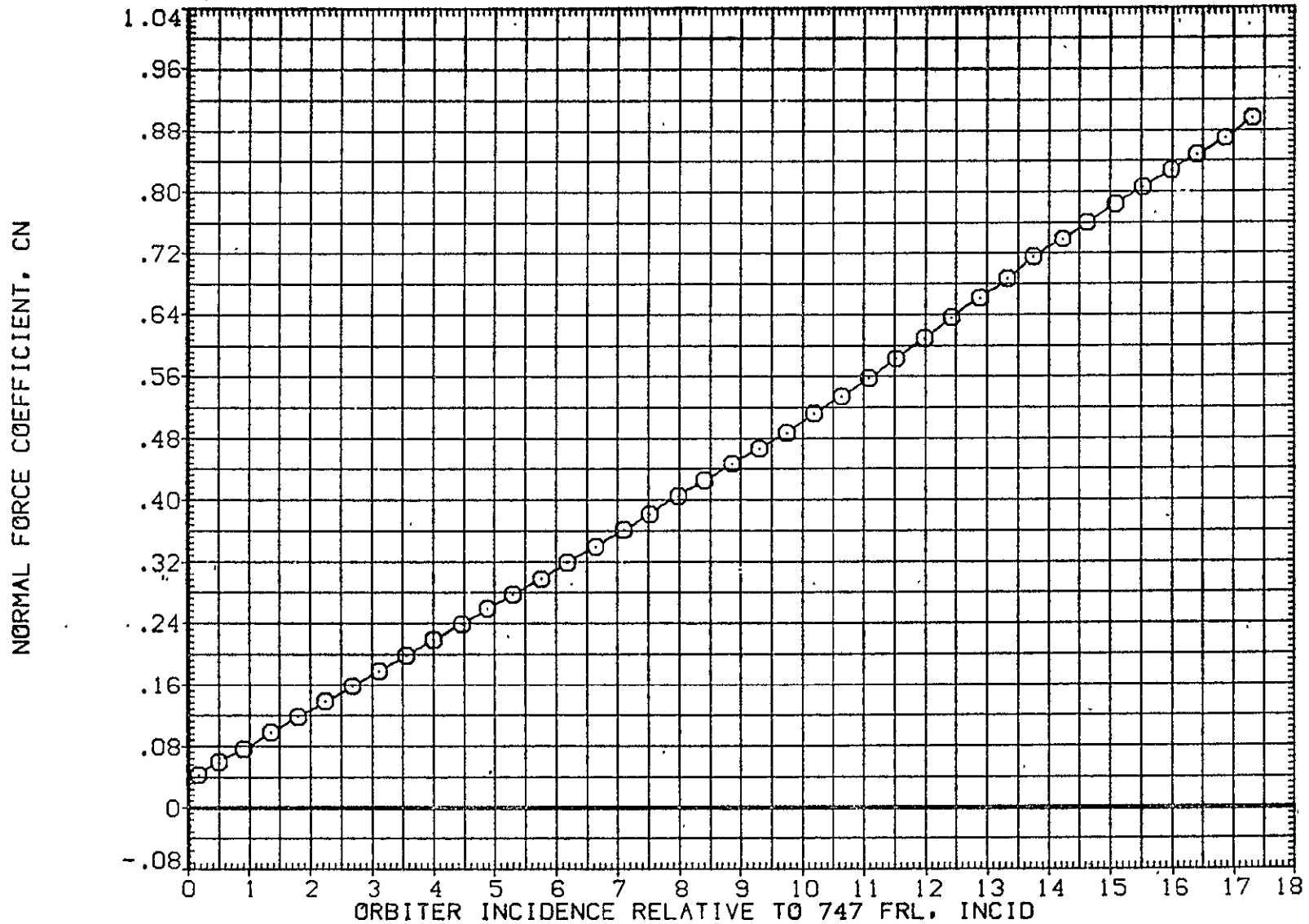


FIG. 17 ORBITER ISOLATED, ALPHA SWEEP, AFE014

SYMBOL	MACH	BETA	PARAMETRIC VALUES	ELEVON	5.000
O	.593		.000		

REFERENCE INFORMATION		
SREF	2690.0000	SO. FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

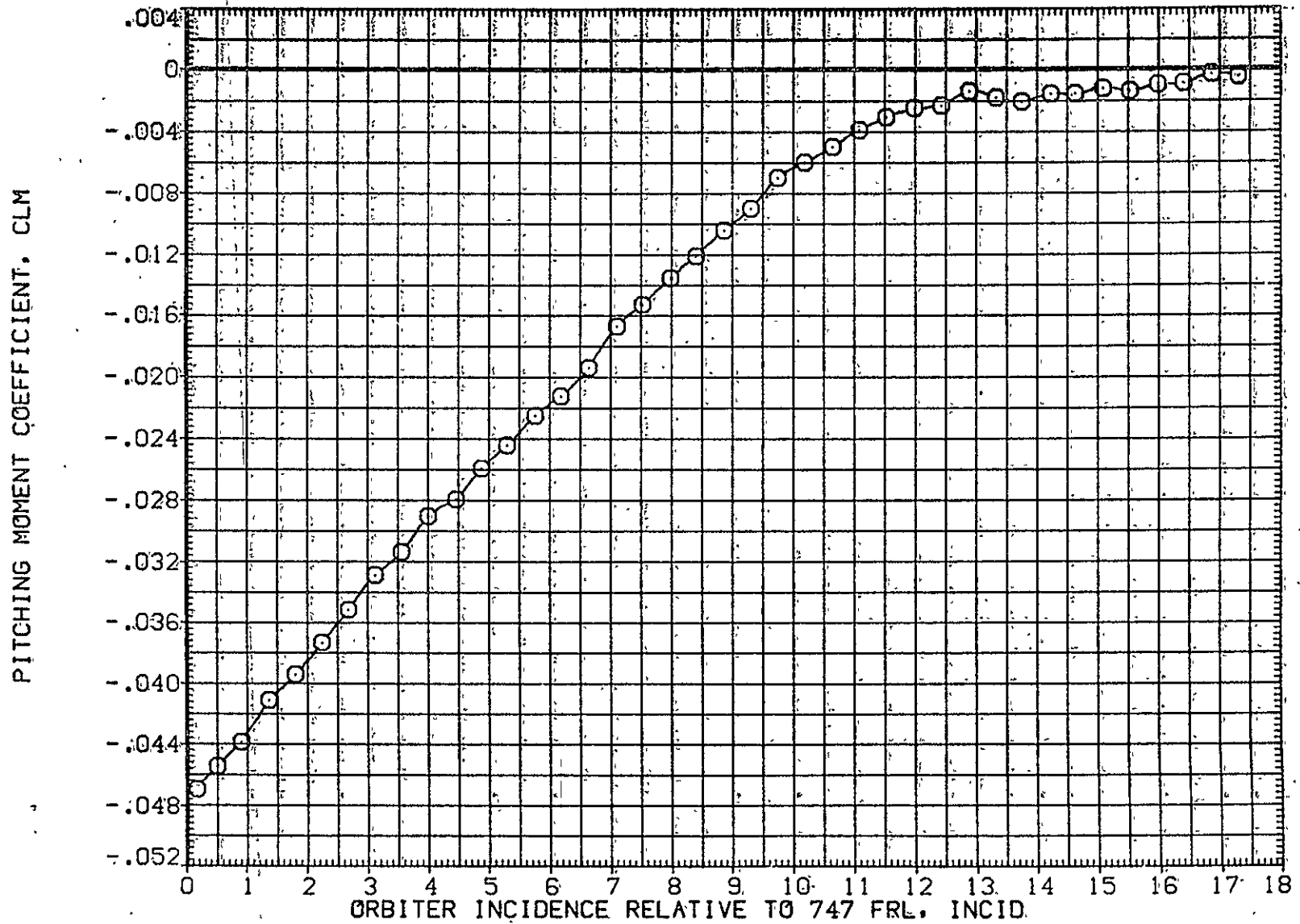


FIG. 17 ORBITER ISOLATED, ALPHA SWEEP, AFE014

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(AFE014)

SYMBOL MACH PARAMETRIC VALUES
○ .593 BETA0 .000 ELEVON 5.000

REFERENCE INFORMATION
SREF 2690.0000 SQ.FT.
LREF 474.8100 IN.
BREF 936.6800 IN.
XMRP 1109.0000 IN. X0
YMRP .0000 IN. Y0
ZMRP 375.0000 IN. Z0
SCALE .0125

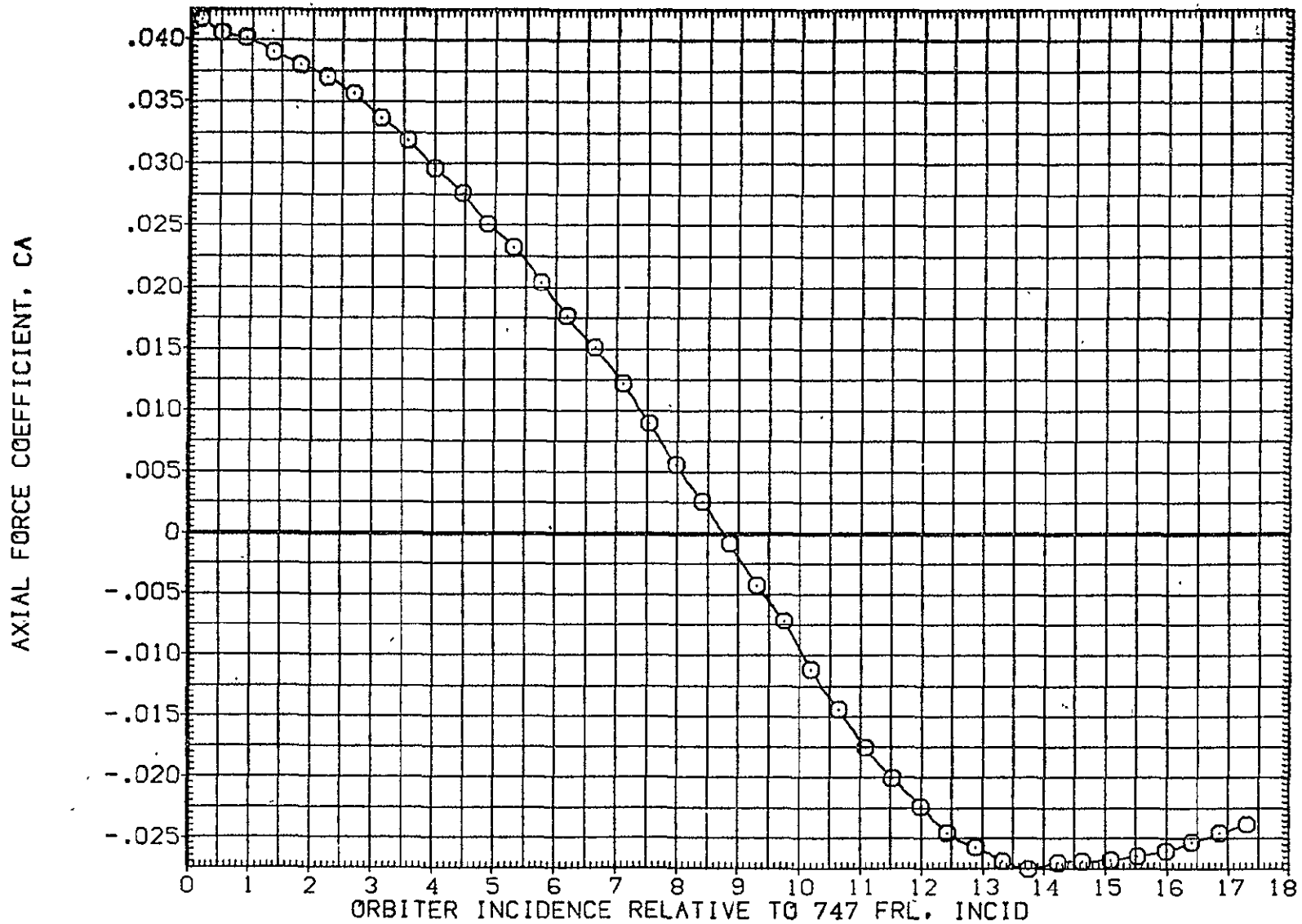


FIG. 17 ORBITER ISOLATED, ALPHA SWEEP, AFE014

SYMBOL MACH PARAMETRIC VALUES
 ○ .593 BETA0 .000 ELEVON 5.000

REFERENCE INFORMATION
 SREF 2680.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1109.0000 IN. X0
 YMRP .0000 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .0125

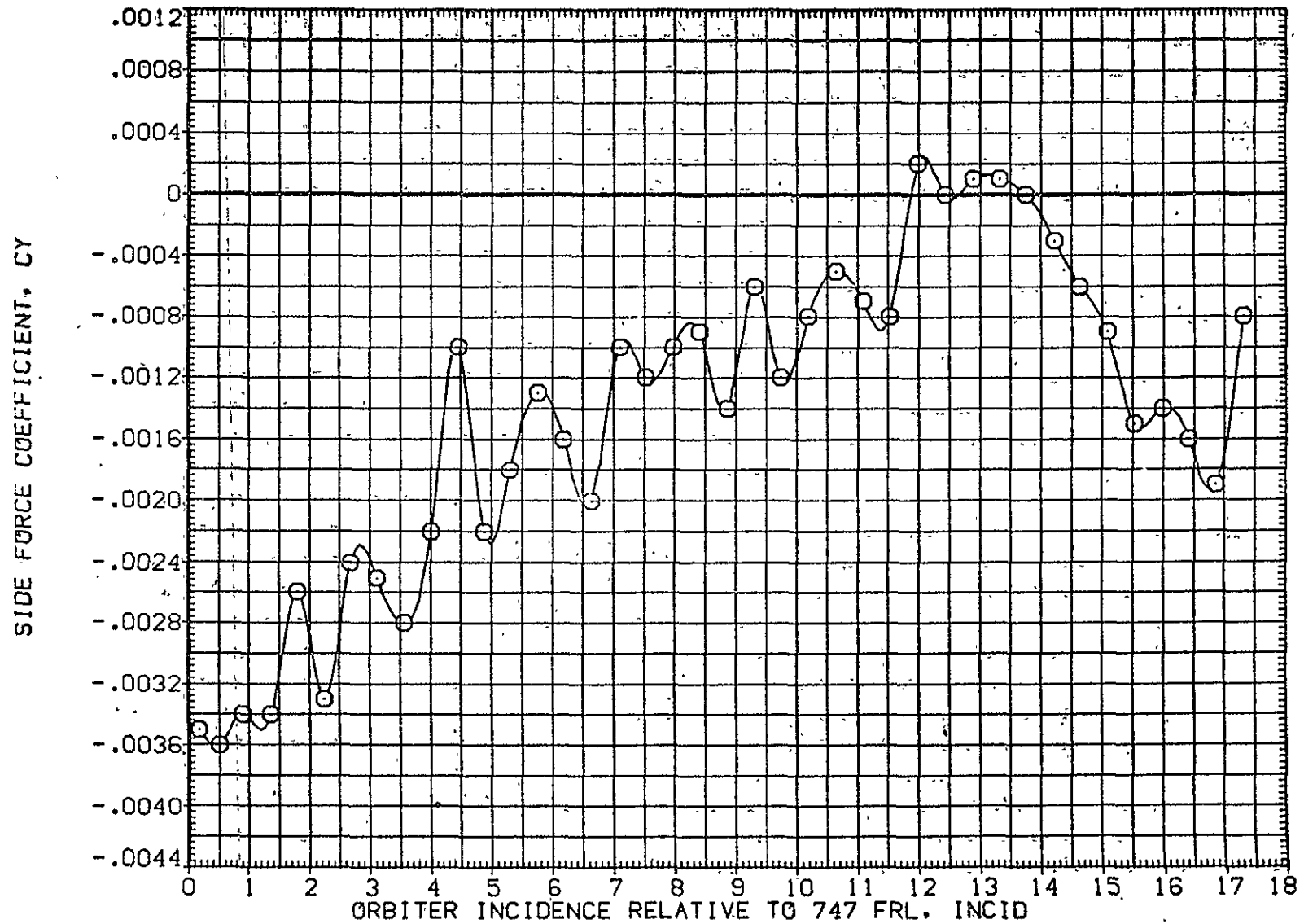


FIG. 17 ORBITER ISOLATED, ALPHA SWEEP, AFE014

SYMBOL MACH PARAMETRIC VALUES
 O .593 BETA0 .000 ELEVON 5.000

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1109.0000 IN. X0
 YMRP .0000 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .0125

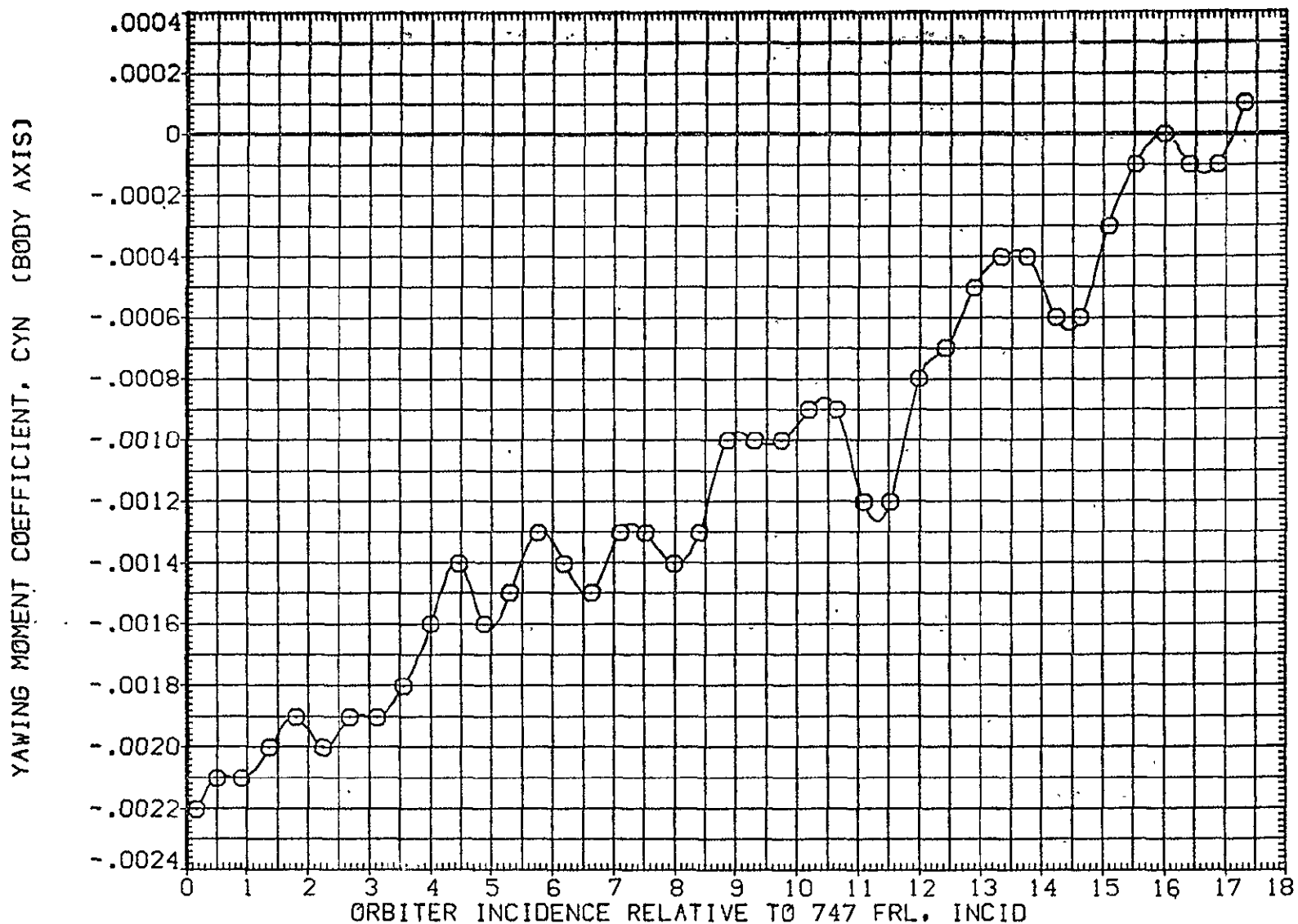


FIG. 17 ORBITER ISOLATED, ALPHA SWEEP, AFE014

SYMBOL MACH PARAMETRIC VALUES
 ○ .593 BETA0 .000 ELEVON 5.000

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1109.0000 IN. X0
 YMRP .0000 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .0125

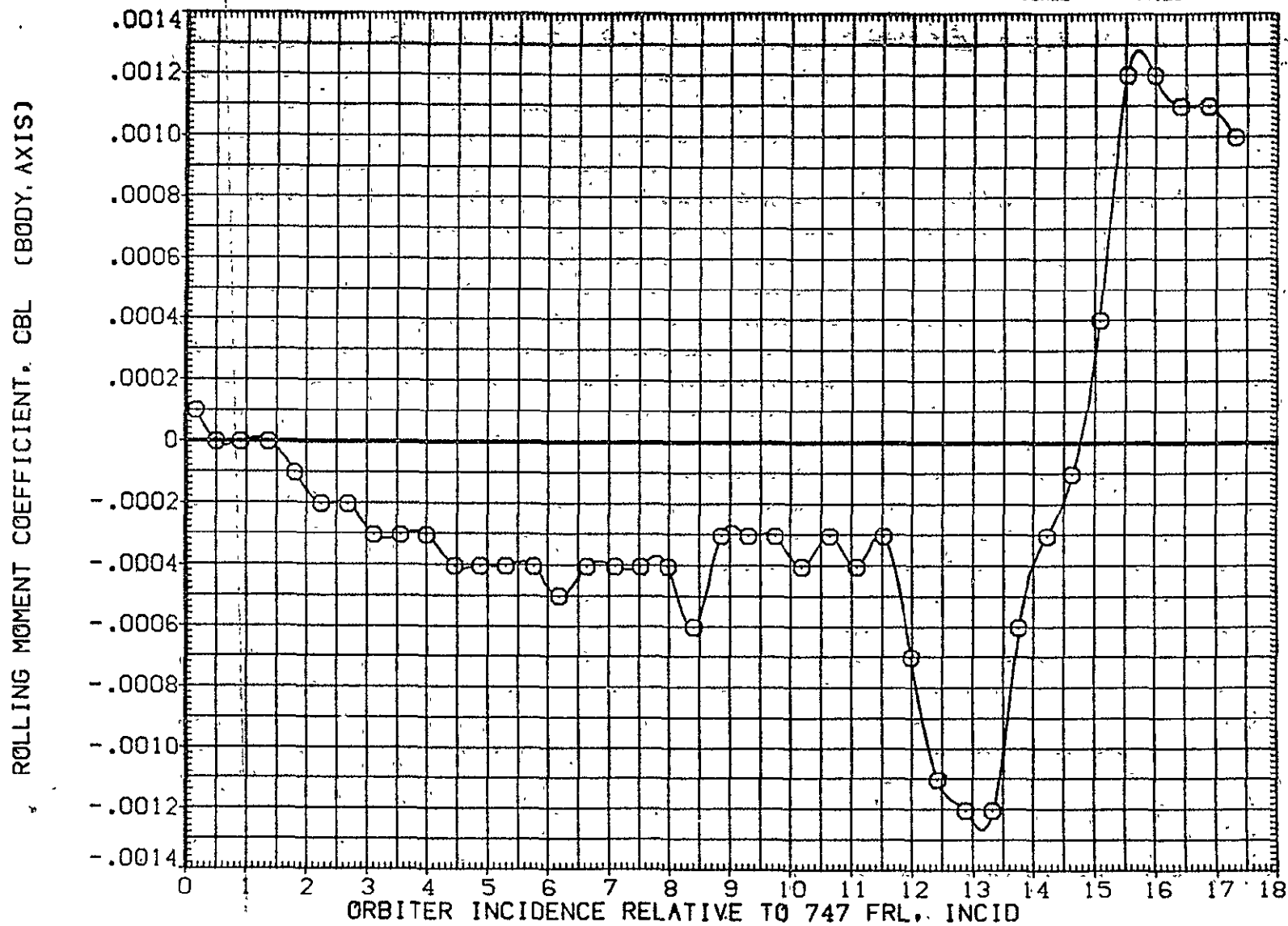


FIG. 17 ORBITER ISOLATED, ALPHA SWEEP, AFE014

SYMBOL MACH BETA0 PARAMETRIC VALUES
 O .593 .000 ELEVON 5.000

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1109.0000 IN. X0
 YMRP .0000 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .0125

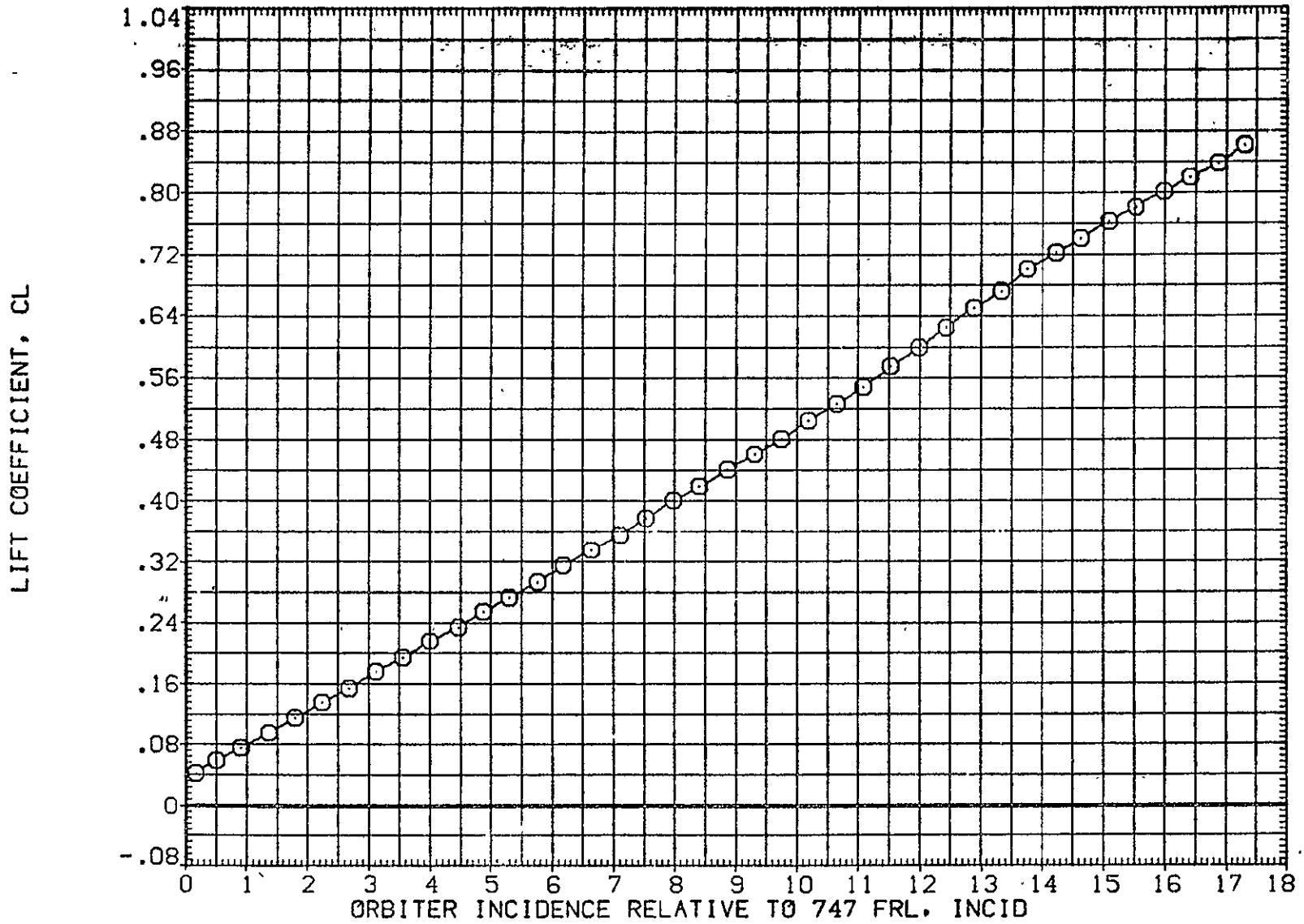


FIG. 17 ORBITER ISOLATED, ALPHA SWEEP, AFE014

SYMBOL MACH PARAMETRIC VALUES
 ○ .593 BETA .000 ELEVON 5.000

REFERENCE INFORMATION
 SREF 2690.0000 50.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1109.0000 IN. XO
 YMRP .0000 IN. YO
 ZMRP 375.0000 IN. ZO
 SCALE :0125

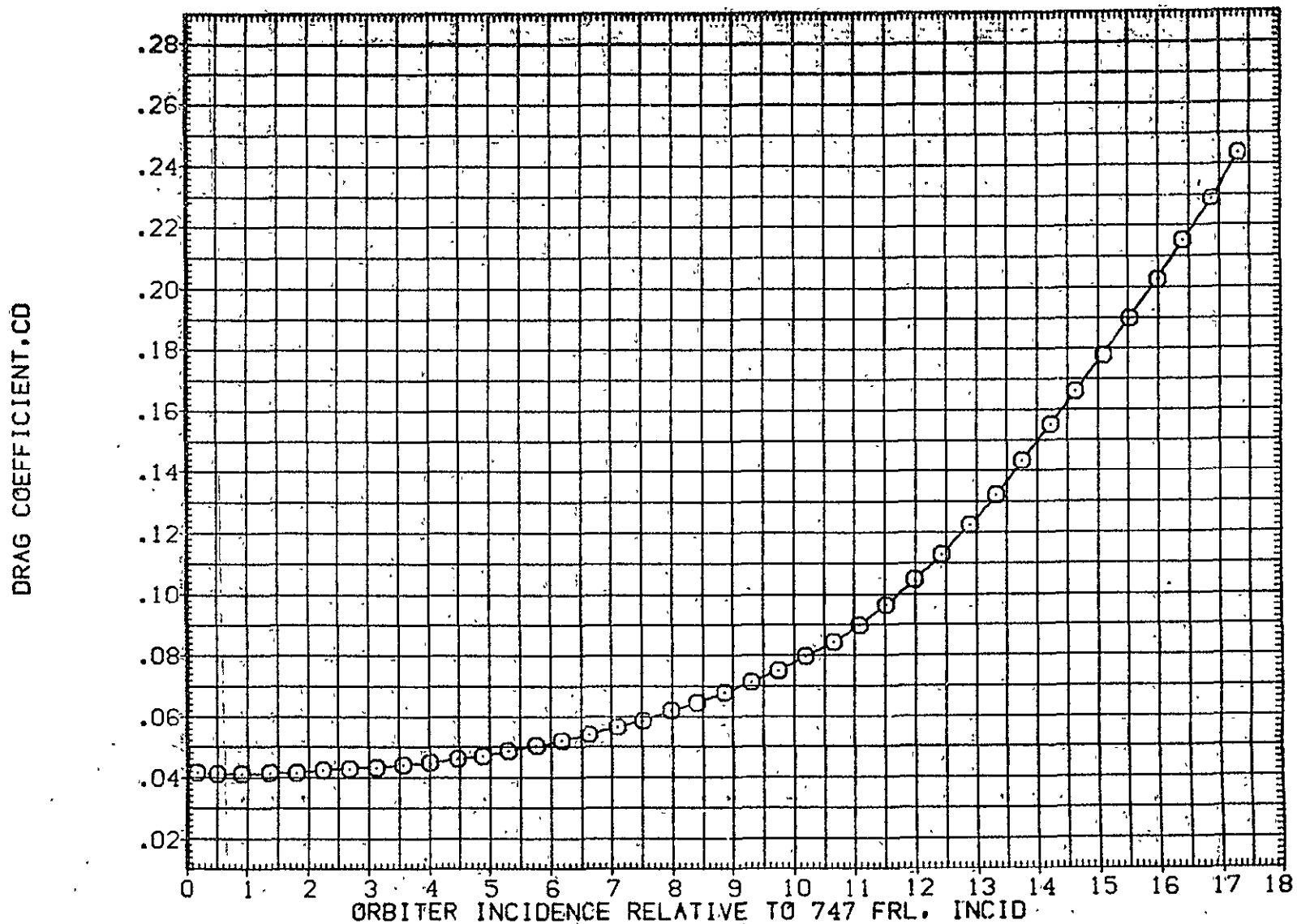


FIG. 17 ORBITER ISOLATED, ALPHA SWEEP, AFE014

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(AFE015)

SYMBOL MACH BETA0 PARAMETRIC VALUES
O .596 BETA0 -5.000 ELEVON 5.000

REFERENCE INFORMATION
SREF 2690.0000 SQ.FT.
LREF 474.8100 IN.
BREF 936.6800 IN.
XMRP 1109.0000 IN. X0
YMRP .0000 IN. Y0
ZMRP 375.0000 IN. Z0
SCALE .0125

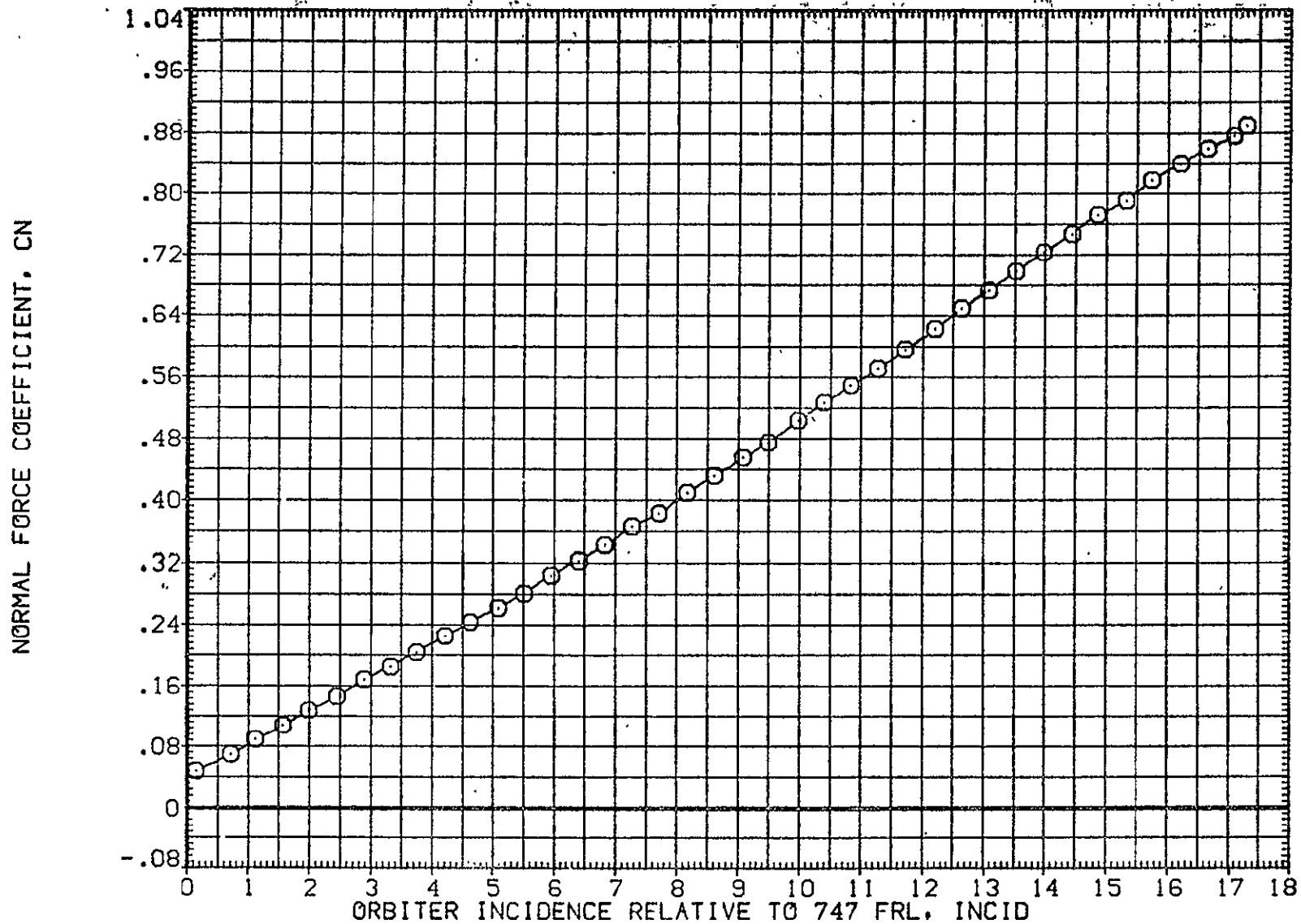


FIG. 18 ORBITER ISOLATED, ALPHA SWEEP, AFE015

SYMBOL MACH PARAMETRIC VALUES
 ○ .596 BETA0 -5.000 'ELEVON' 5.000

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1109.0000 IN. X0
 YMRP .0000 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .0125

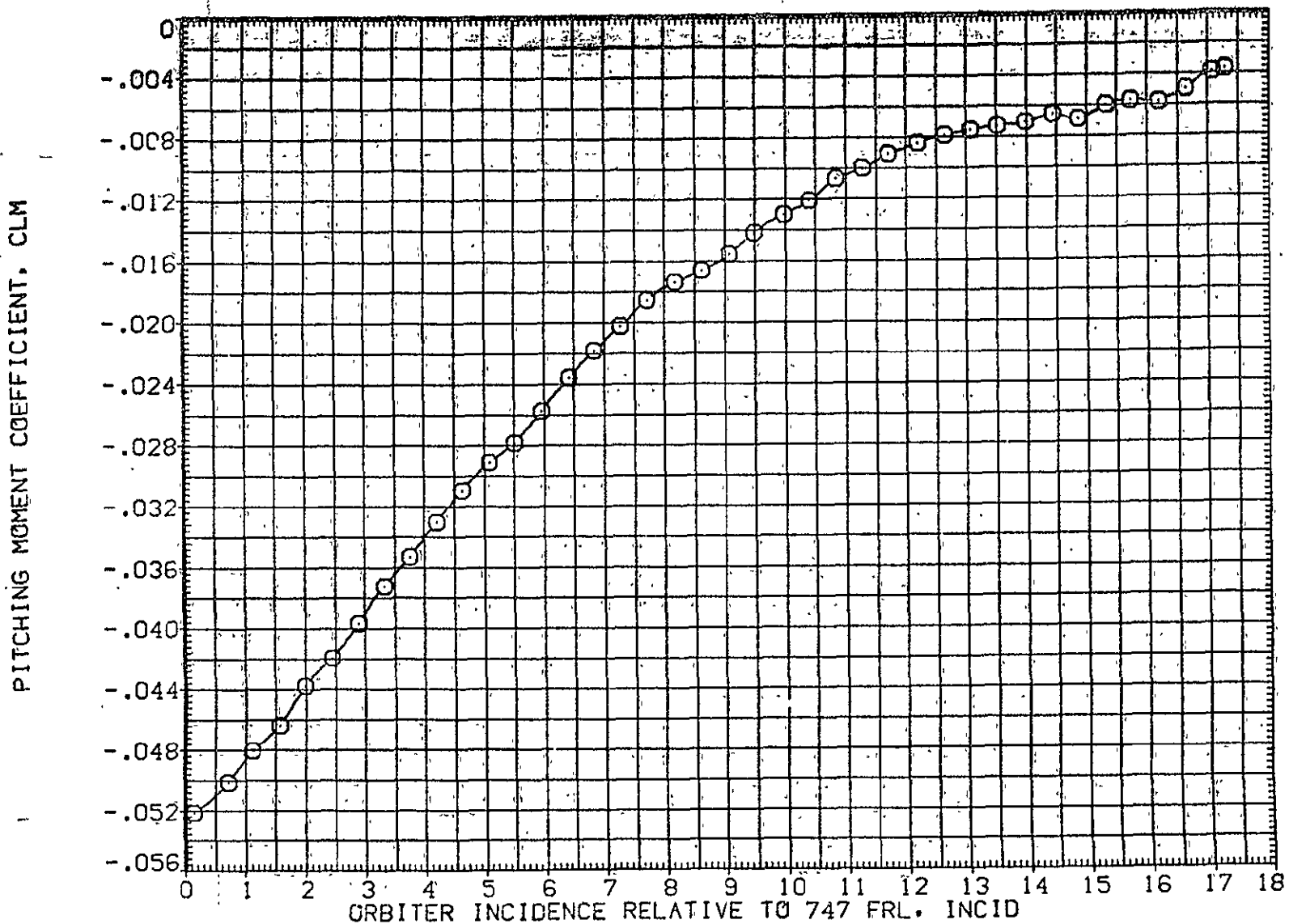


FIG. 18 ORBITER ISOLATED, ALPHA SWEEP, AFE015

LTV44-559(CA26) 06 S1

(AFE015)

SYMBOL MACH PARAMETRIC VALUES
O .596 BETA0 -5.000 ELEVON 5.000

REFERENCE INFORMATION
SREF 2690.0000 SQ.FT.
LREF 474.8100 IN.
BREF 936.6800 IN.
XMRP 1109.0000 IN. X0
YMRP .0000 IN. Y0
ZMRP 375.0000 IN. Z0
SCALE .0125

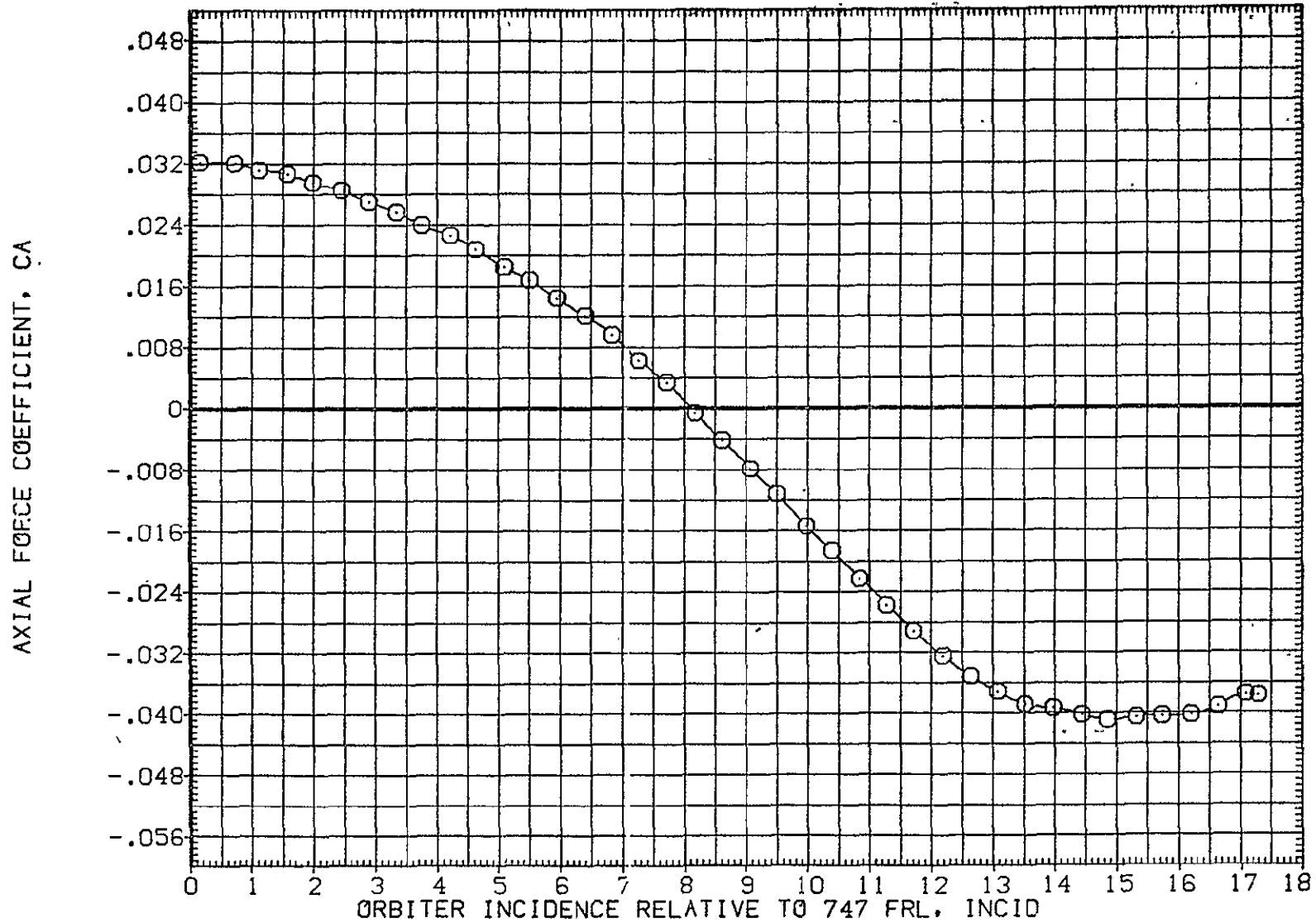


FIG. 18 ORBITER ISOLATED, ALPHA SWEEP, AFE015

SYMBOL MACH PARAMETRIC VALUES
 O .596 BETA0 -5.000 ELEVON 5.000

REFERENCE INFORMATION
 SREF 2690.0000 SQ. FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1.109.0000 IN. X0
 YMRP .0000 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .0125

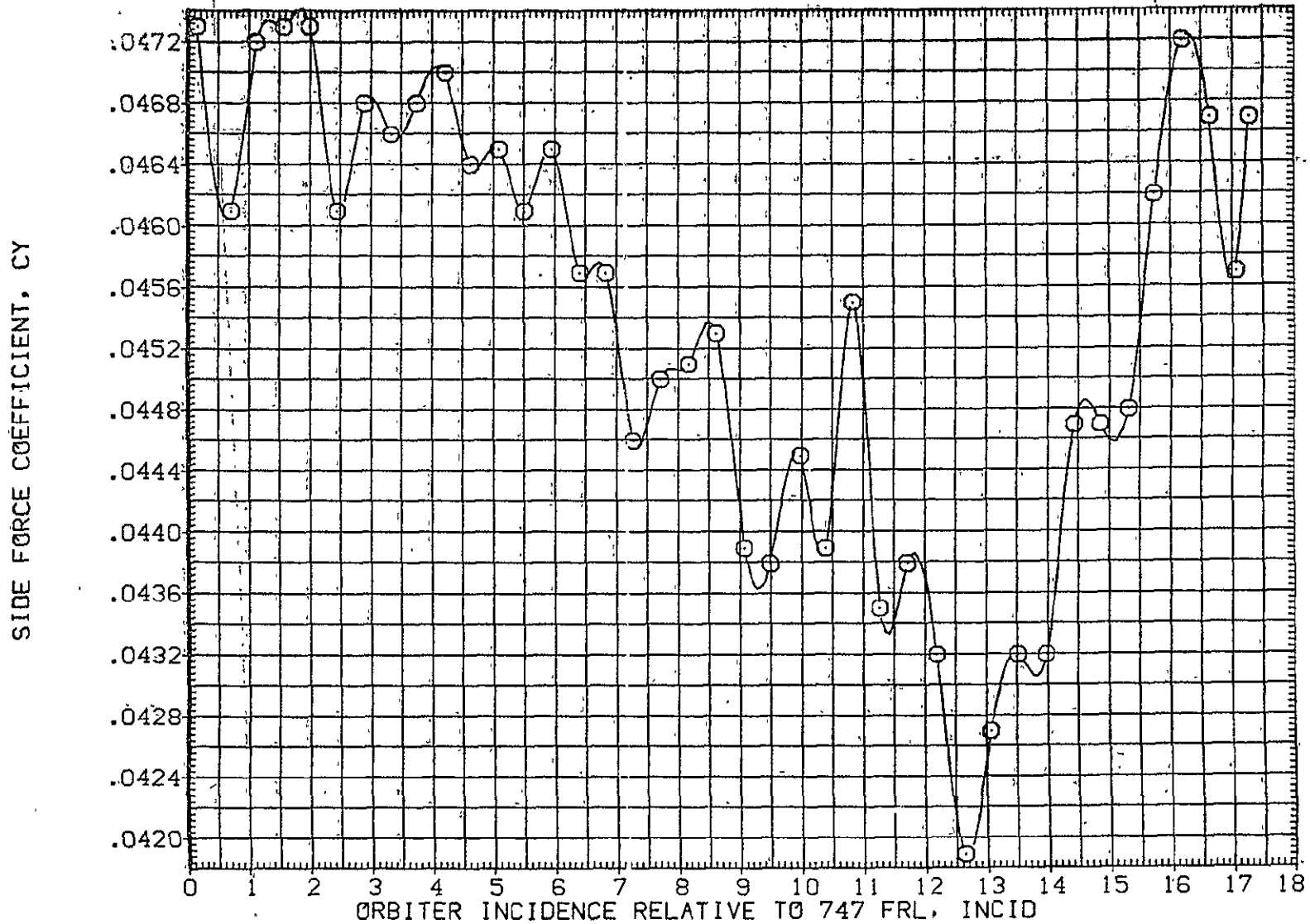


FIG. 18 ORBITER ISOLATED, ALPHA SWEEP, AFE015

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(AFE015)

SYMBOL MACH BETA0 PARAMETRIC VALUES
 ○ .596 -5.000 ELEVON 5.000

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6600 IN.
 XMRP 1109.0000 IN. X0
 YMRP .0000 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .0125

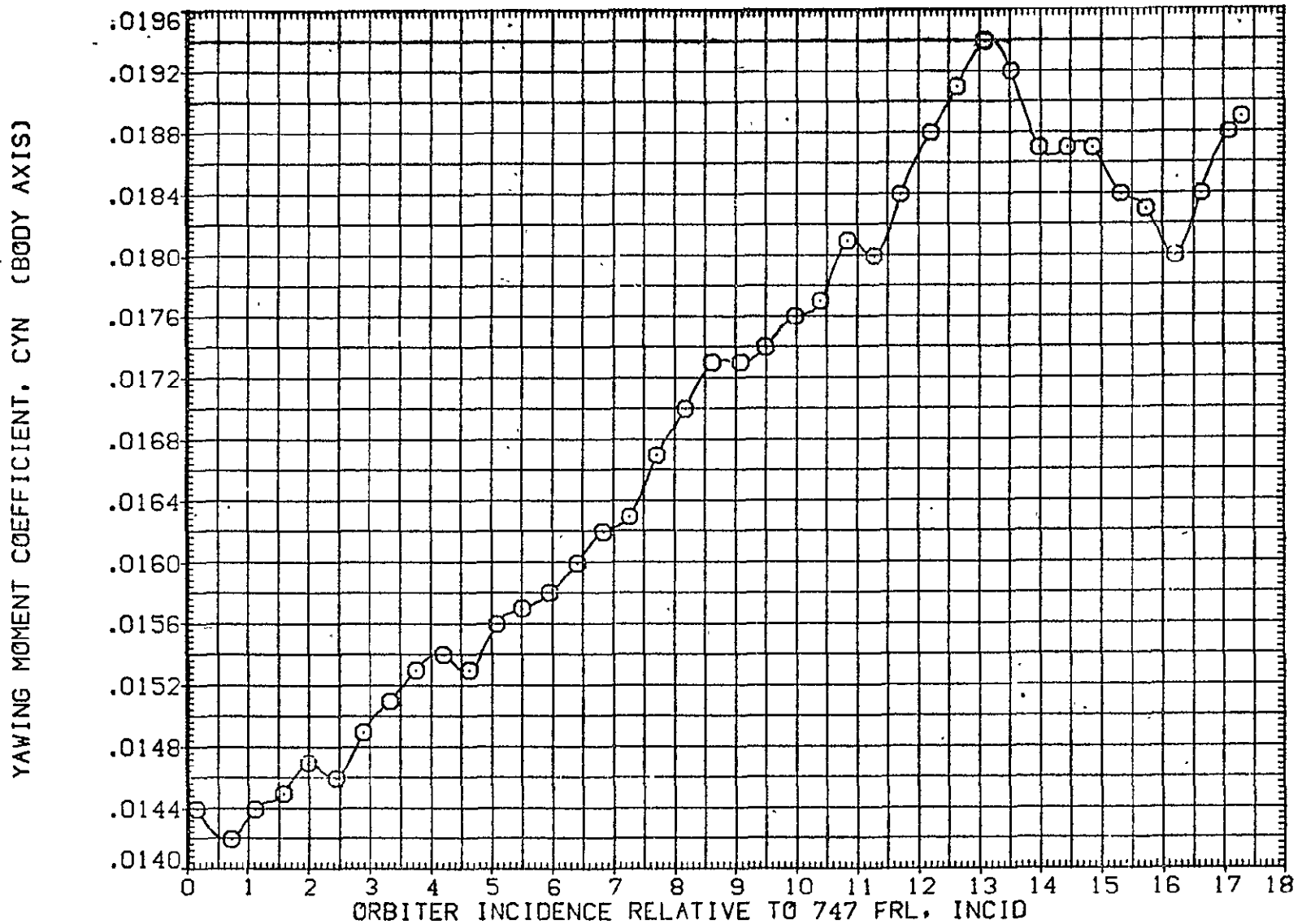


FIG. 18 ORBITER ISOLATED, ALPHA SWEEP, AFE015

SYMBOL ○ MACH .596 BETA0 -5.000 ELEVON 5.000

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1109.0000 IN. X0
 YMRP .0000 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .0125

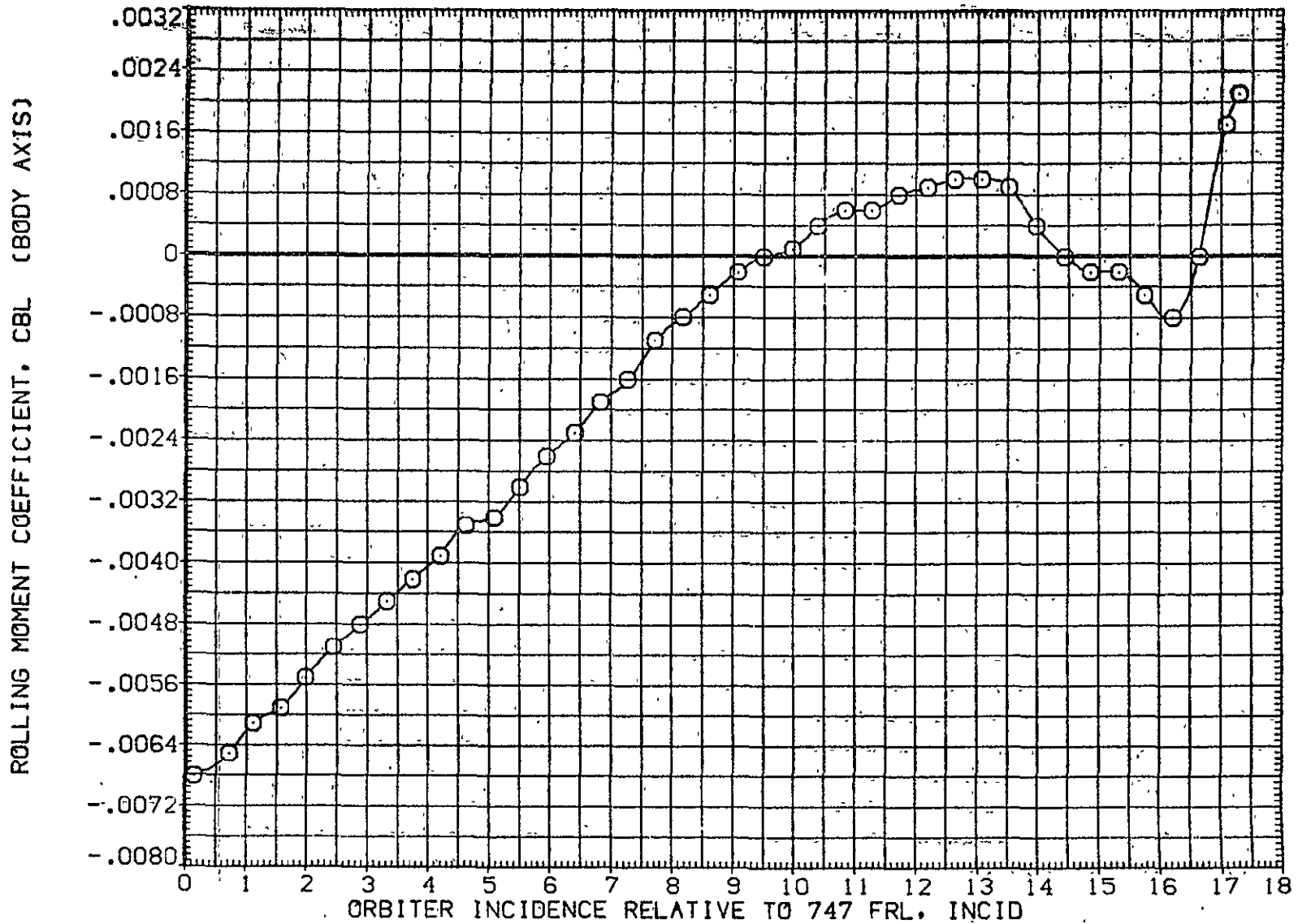


FIG. 18 ORBITER ISOLATED, ALPHA SWEEP, AFE015

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(AFE015)

SYMBOL MACH BETAO PARAMETRIC VALUES ELEVON 5.000
○

REFERENCE INFORMATION
SREF 2690.0000 SQ.FT.
LREF 474.8100 IN.
BREF 936.6800 IN.
XMRP 1109.0000 IN. X0
YMRP .0000 IN. Y0
ZMRP 375.0000 IN. Z0
SCALE .0125

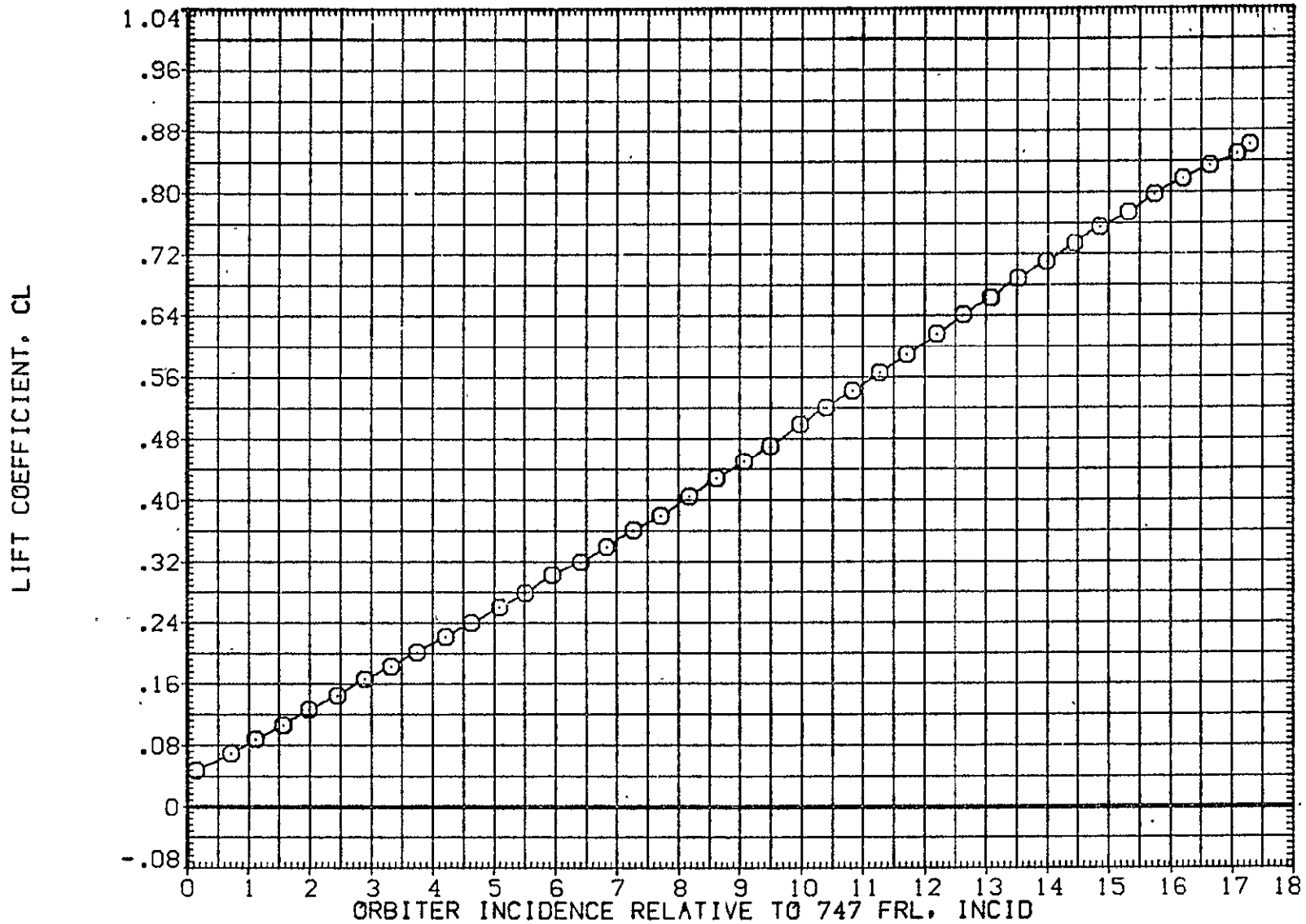


FIG. 18 ORBITER ISOLATED, ALPHA SWEEP, AFE015

SYMBOL MACH BETA0 -PARAMETRIC VALUES
 O .596 .000 -5.000 ELEVON 5.000

REFERENCE INFORMATION
 SREF 2690.0000 SQ.F
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1109.0000 IN.
 YMRP .0000 IN.
 ZMRP 375.0000 IN.
 SCALE .0125

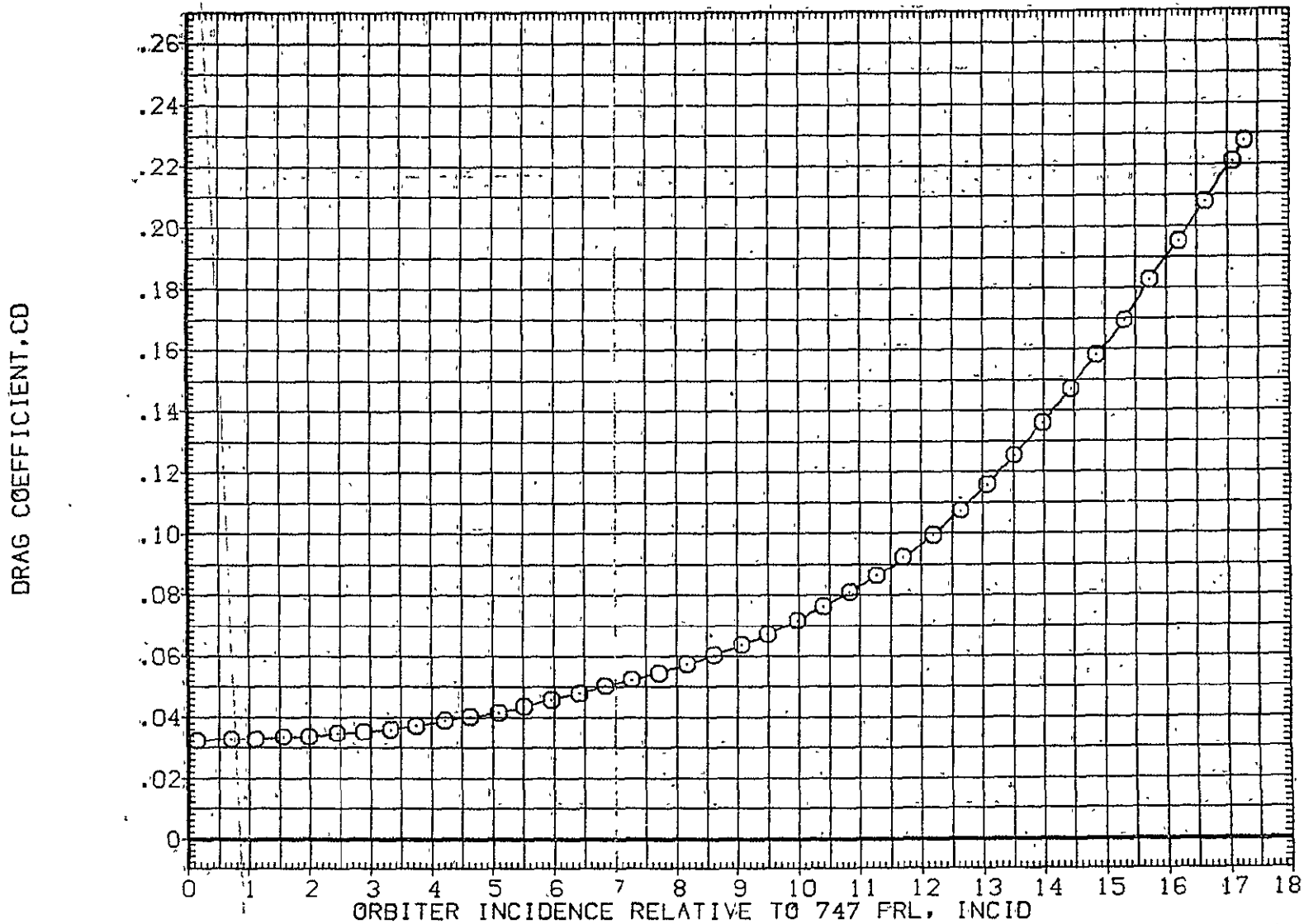


FIG. 18 ORBITER ISOLATED, ALPHA SWEEP, AFE015

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(AFE131)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.598	BETA0	5.000	ELEVON	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

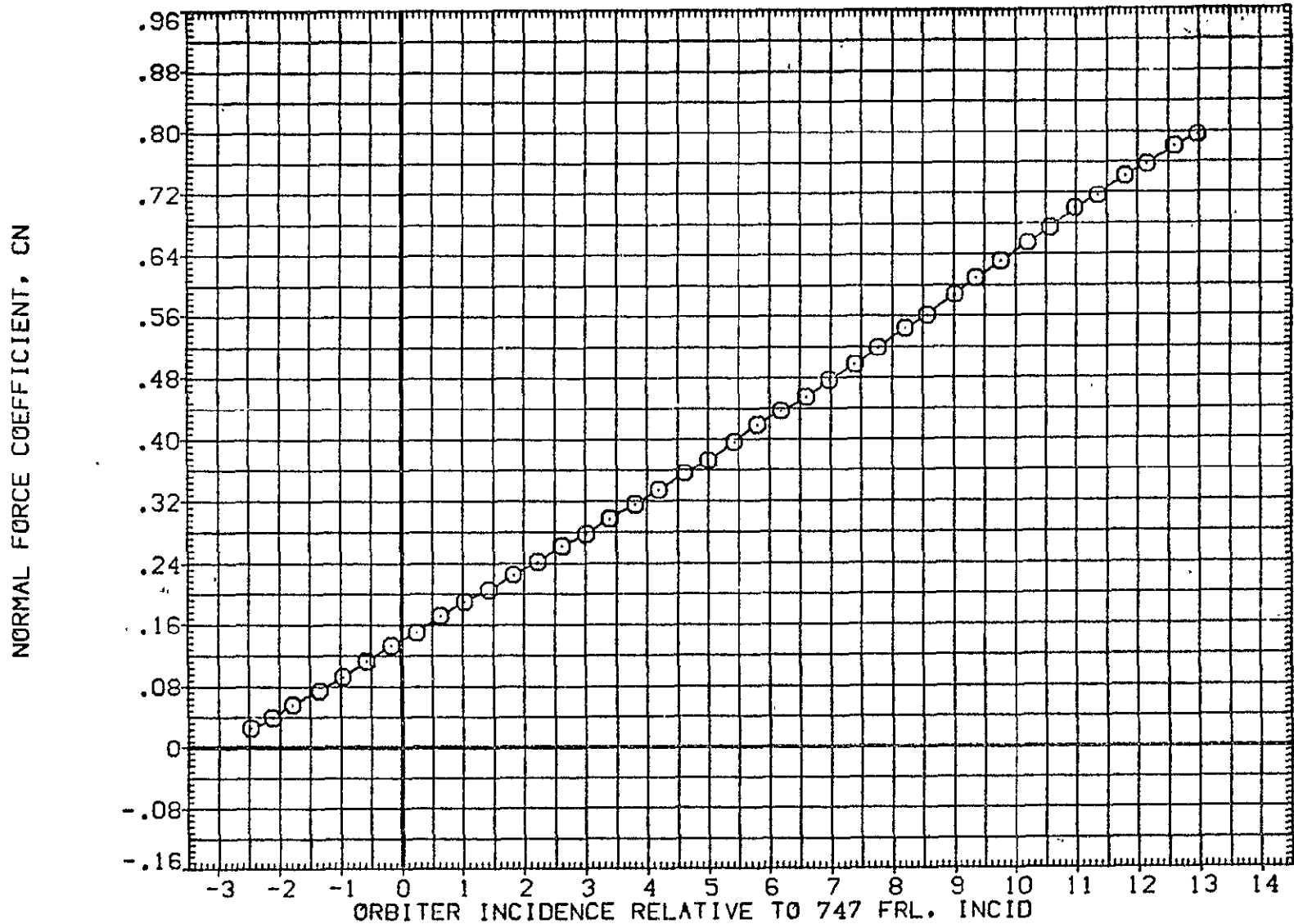


FIG. 19 ORBITER ISOLATED, ALPHA SWEEP, AFE131

SYMBOL	MACH	BETA0	PARAMETRIC VALUES	
○	.598	BDFLAP	5.000	ELEVON 5.000
			.000	

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

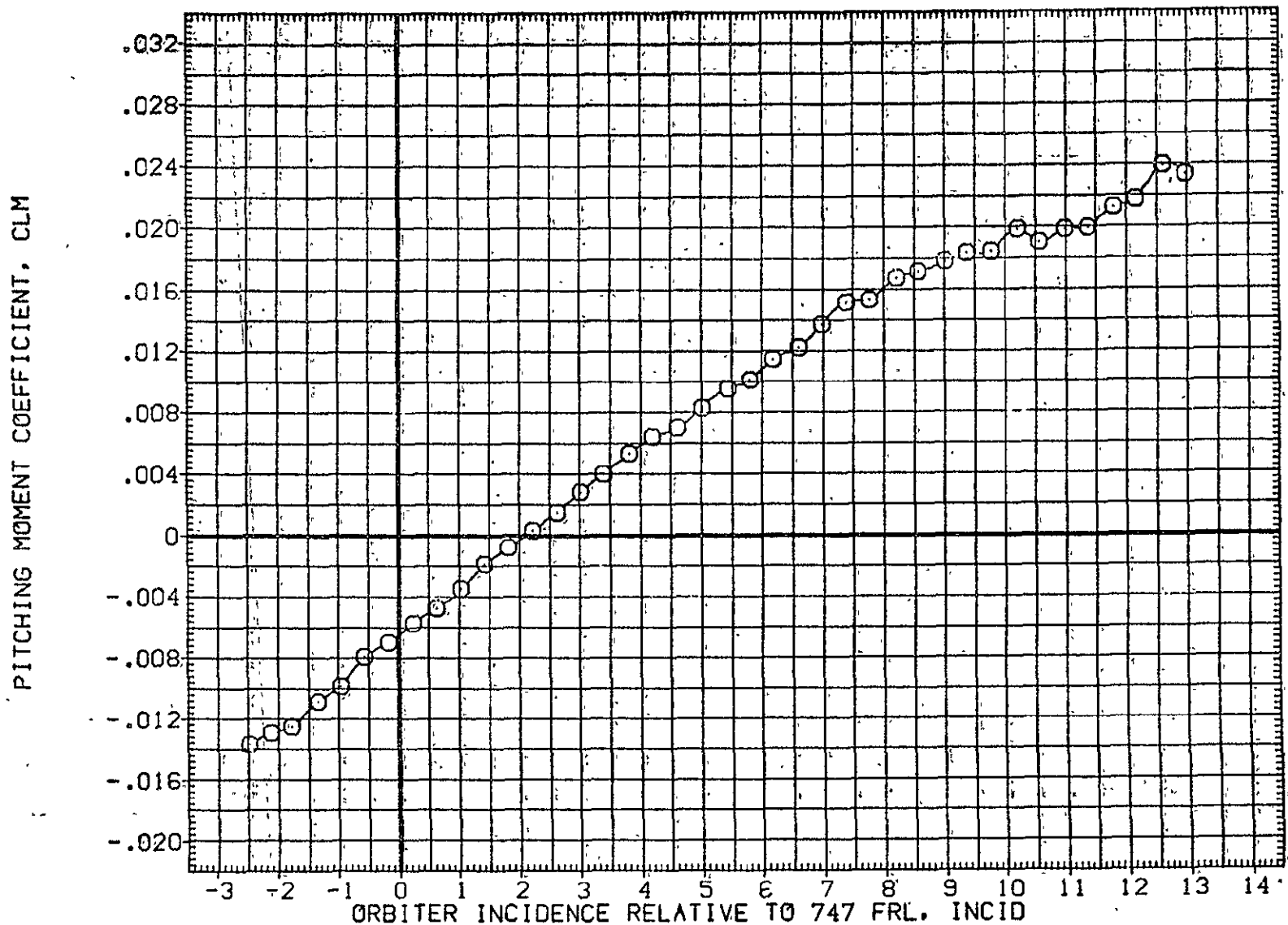


FIG. 19 ORBITER ISOLATED, ALPHA SWEEP, AFE131

SYMBOL	MACH	PARAMETRIC VALUES			
○	.598	BETA0	5.000	ELEVON	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

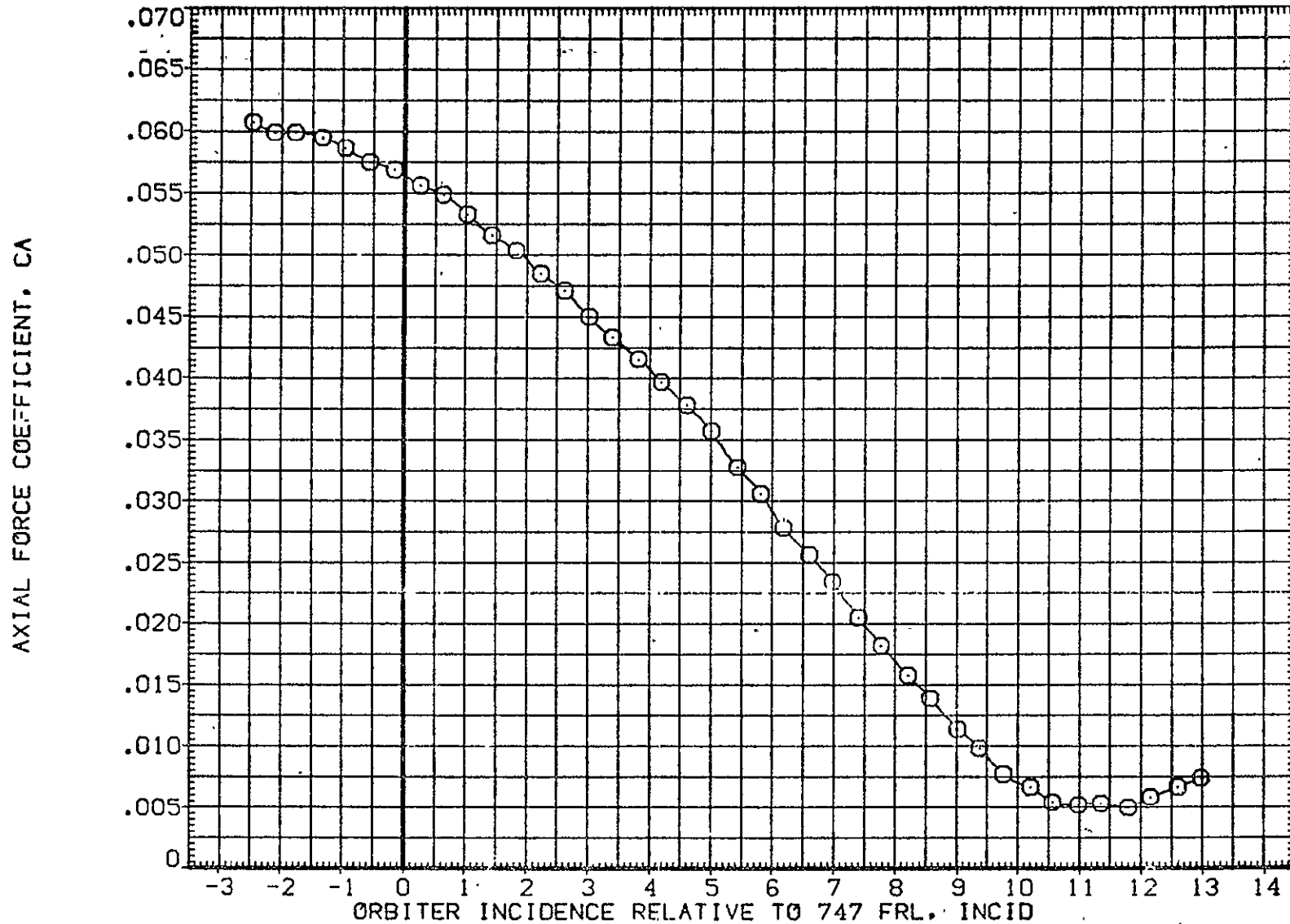


FIG. 19 ORBITER ISOLATED, ALPHA SWEEP, AFE131

SYMBOL	MACH	BETA0	PARAMETRIC VALUES	
○	.598	80FLAP	5.000	ELEVON 5.000
			.000	

REFERENCE INFORMATION

SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

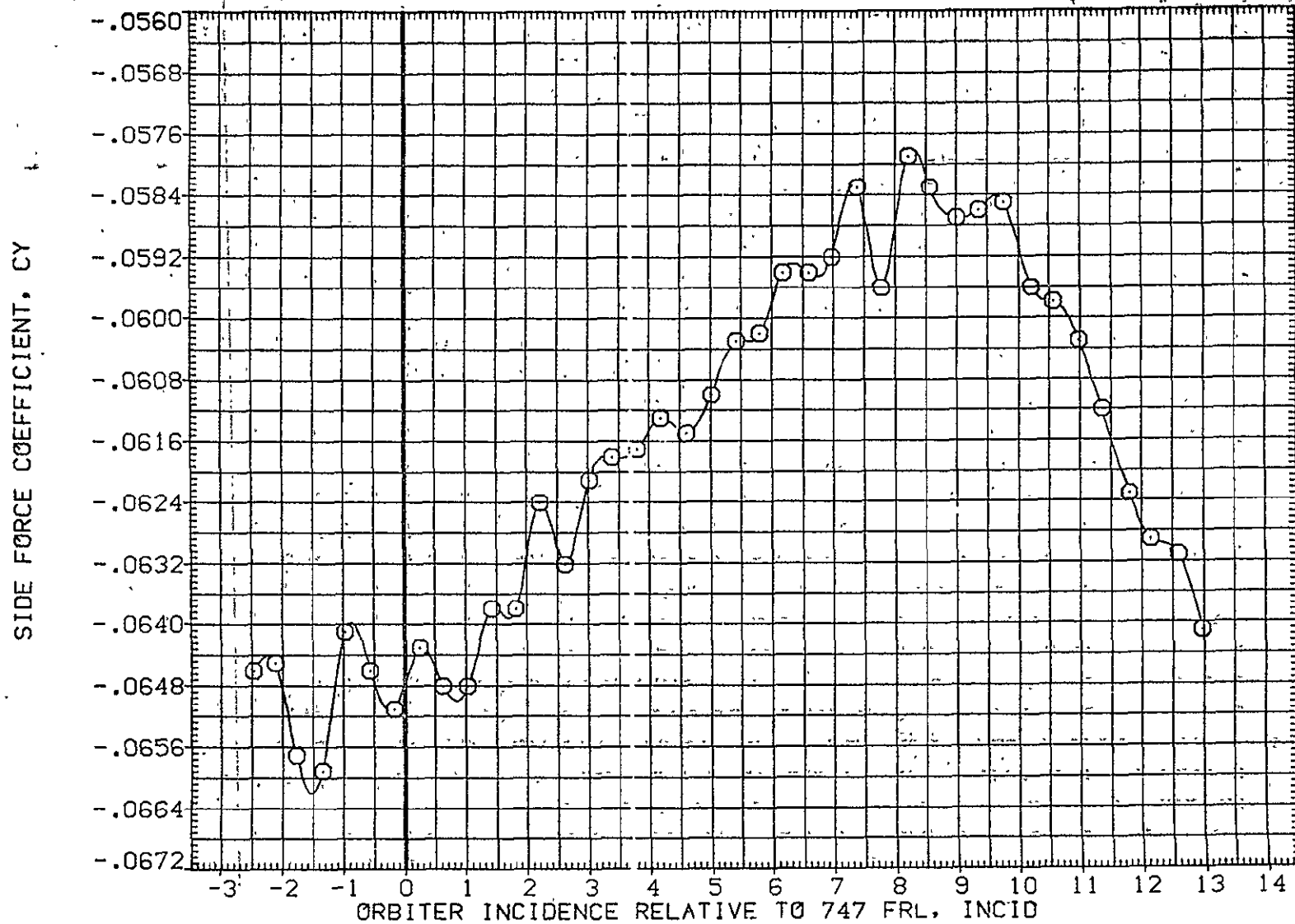


FIG. 19 ORBITER ISOLATED, ALPHA SWEEP, AFE131

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(AFE131)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.598	BETAO	5.000	CLEVON	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

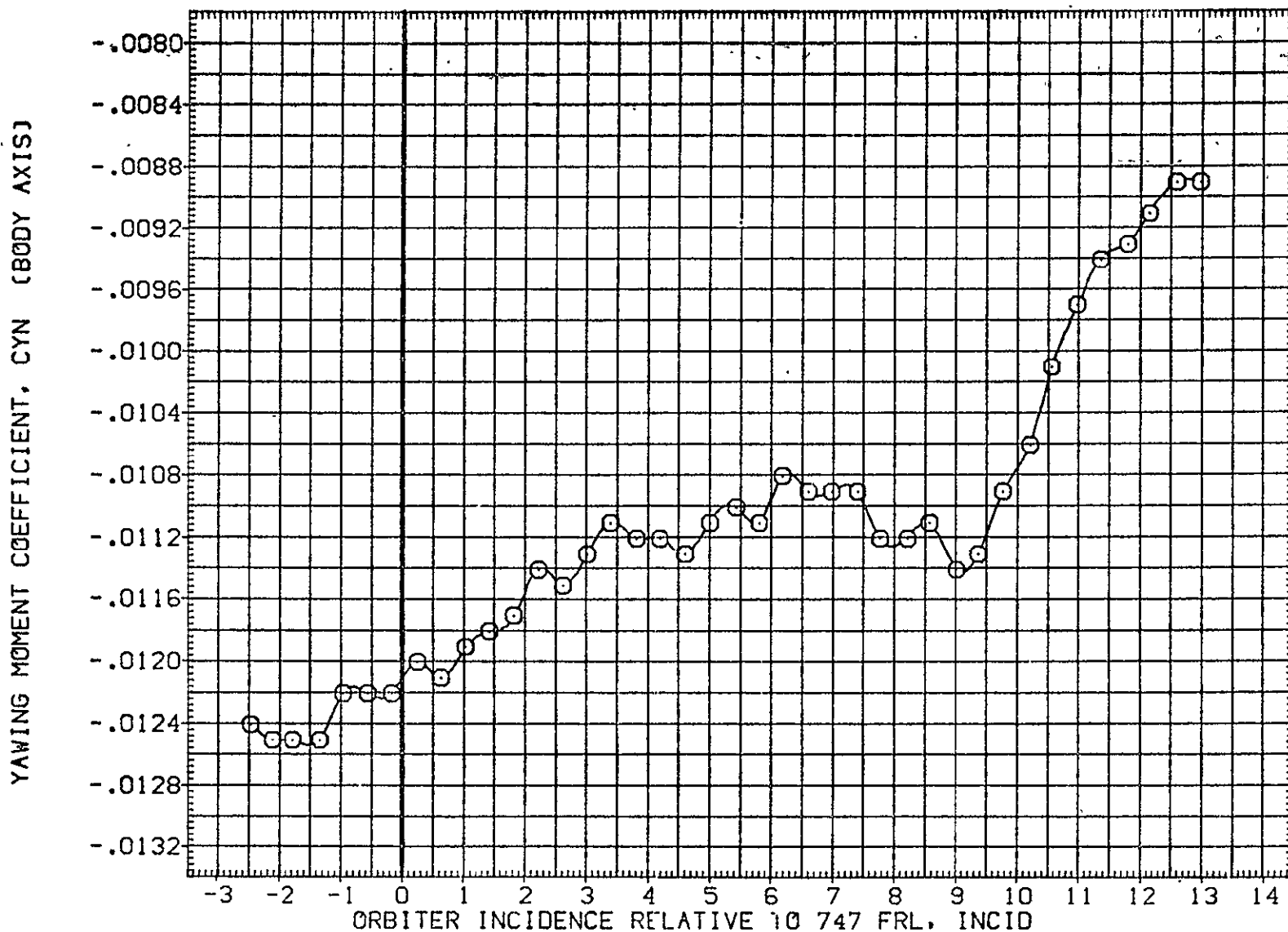


FIG. 19 ORBITER ISOLATED, ALPHA SWEEP, AFE131

SYMBOL	MACH	PARAMETRIC VALUES			
○	.598	BETA0	5.000	ELEVON	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

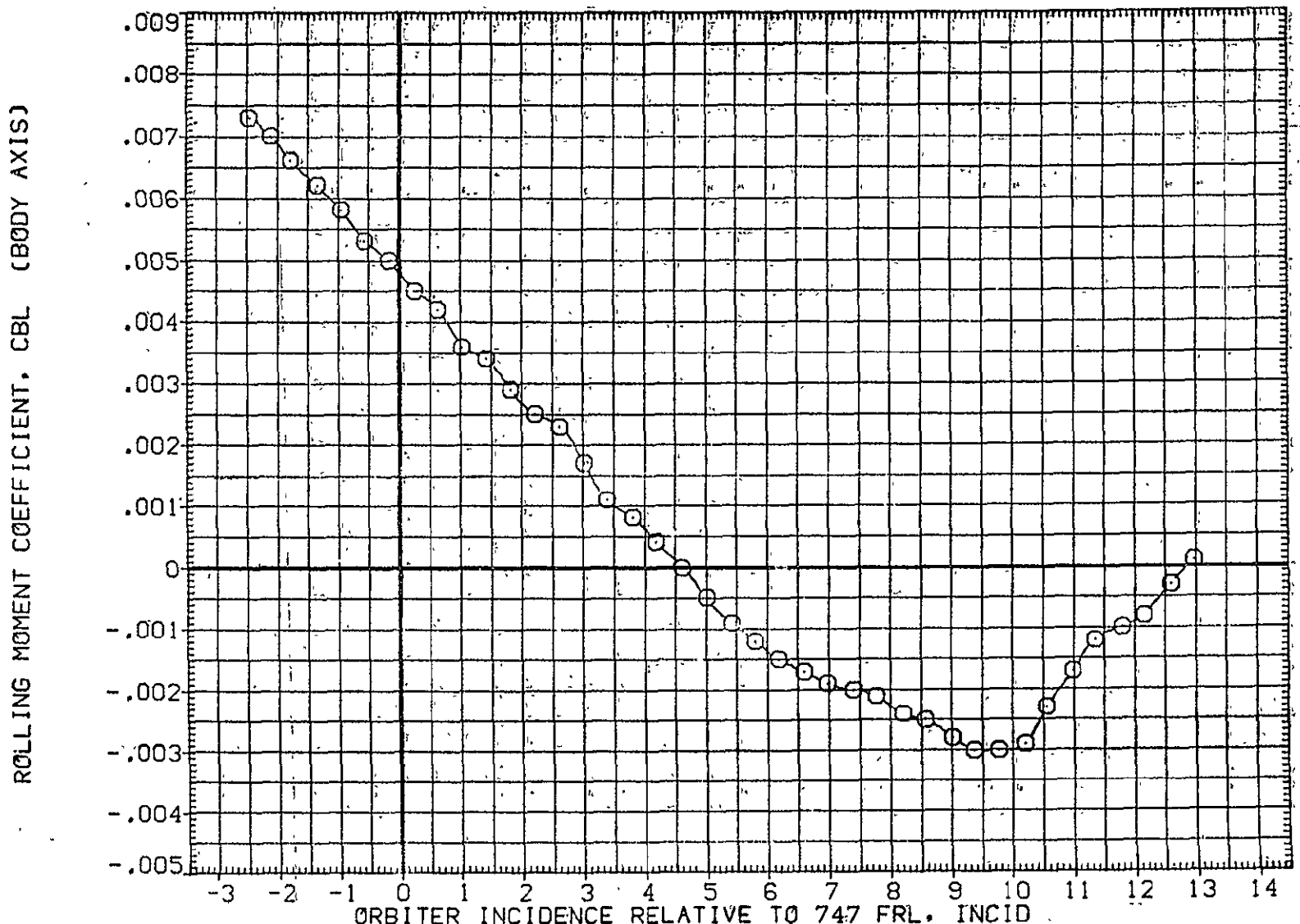


FIG. 19 ORBITER ISOLATED, ALPHA SWEEP, AFE131

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(AFE131)

) JOL	MACH	PARAMETRIC VALUES			
	.598	BETA0	5.000	ELEVON	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

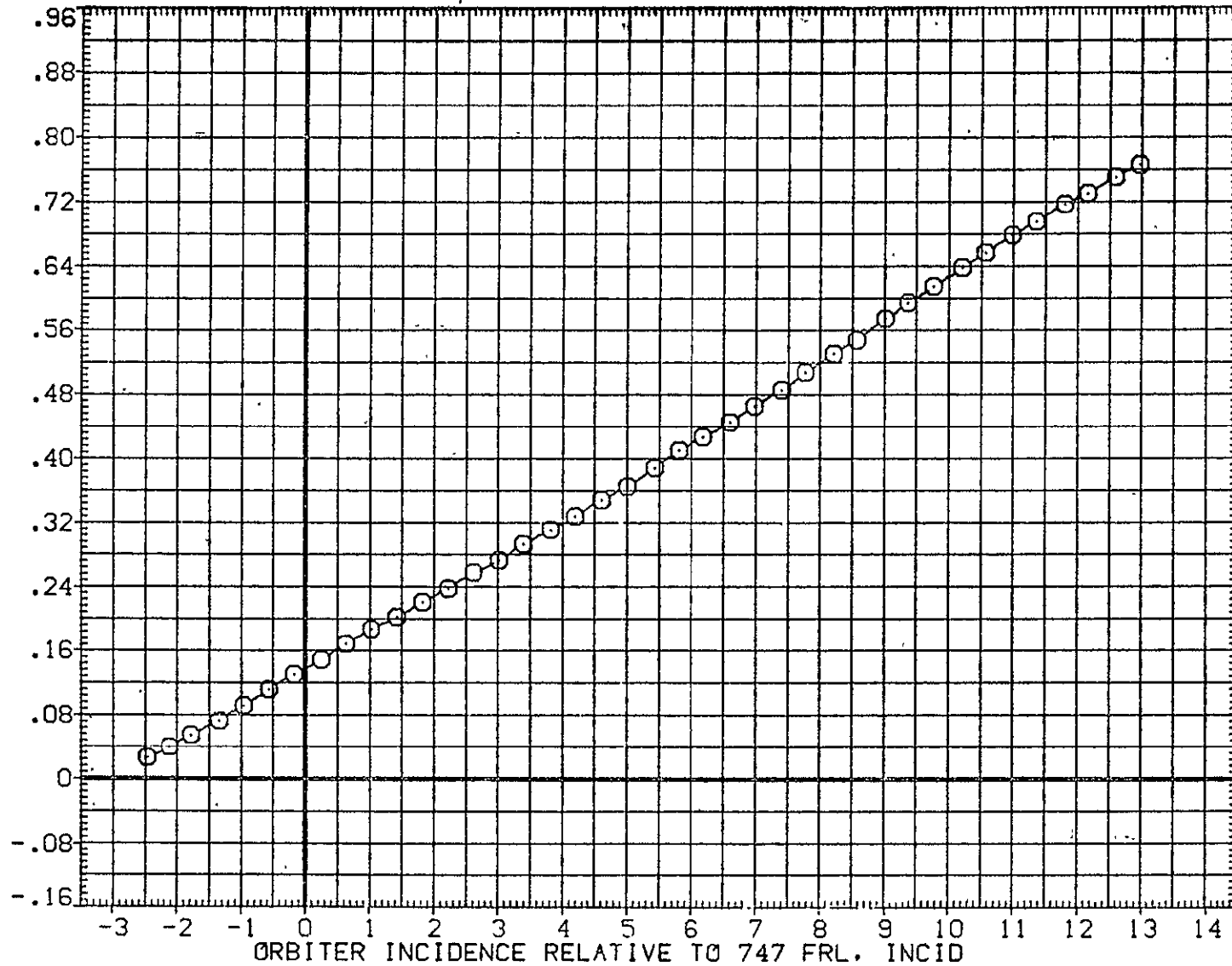


FIG. 19 ORBITER ISOLATED, ALPHA SWEEP, AFE131

SYMBOL	MACH	PARAMETRIC VALUES			
○	.598	BETA0	5.000	ELEVON	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

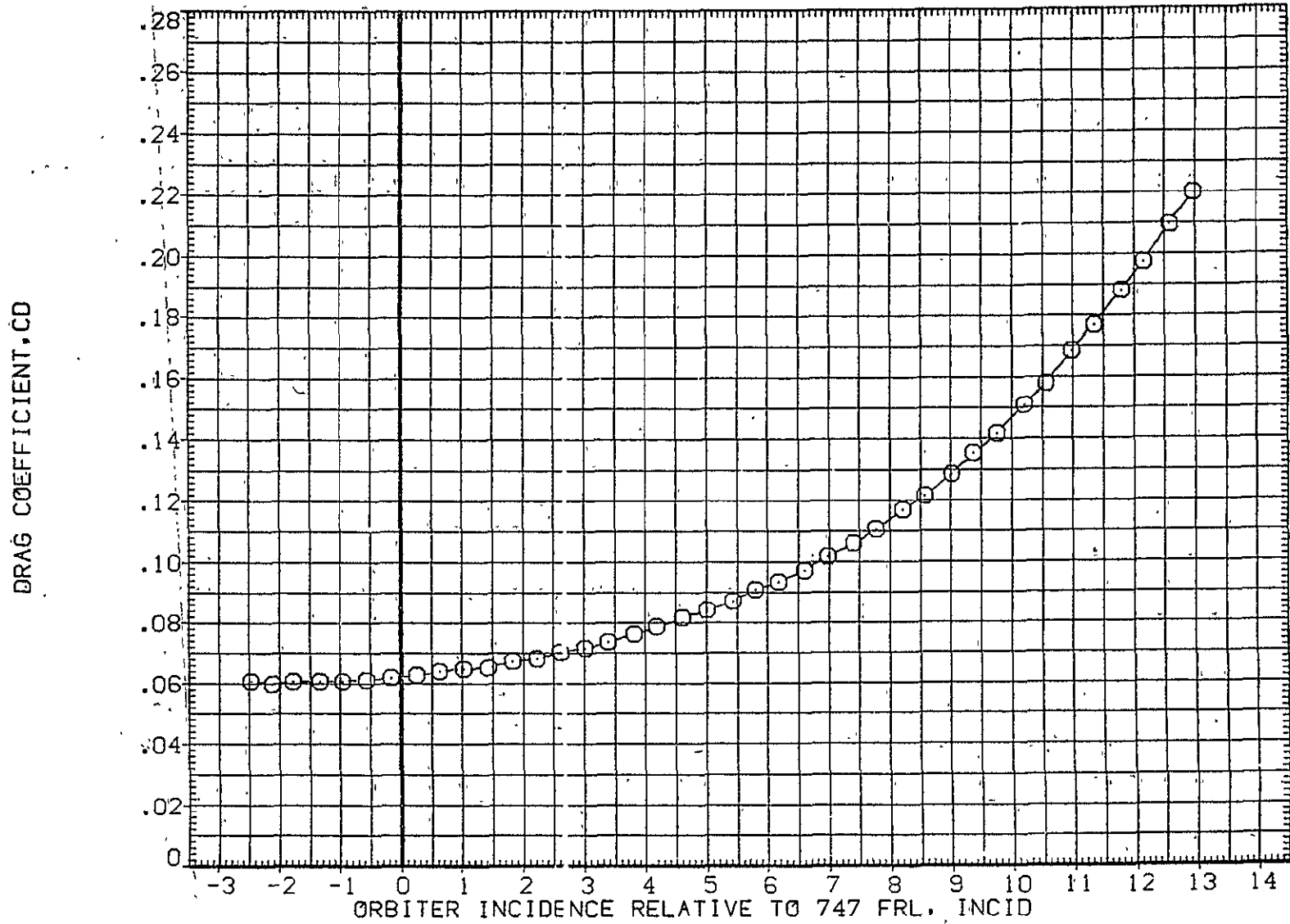


FIG. 19 ORBITER ISOLATED, ALPHA SWEEP; AFE131

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(AFE132)

SYMBOL	MACH	BETA	PARAMETRIC VALUES	ELEVON	5.000
○	.601	BOFLAP	.000	.000	

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0125	

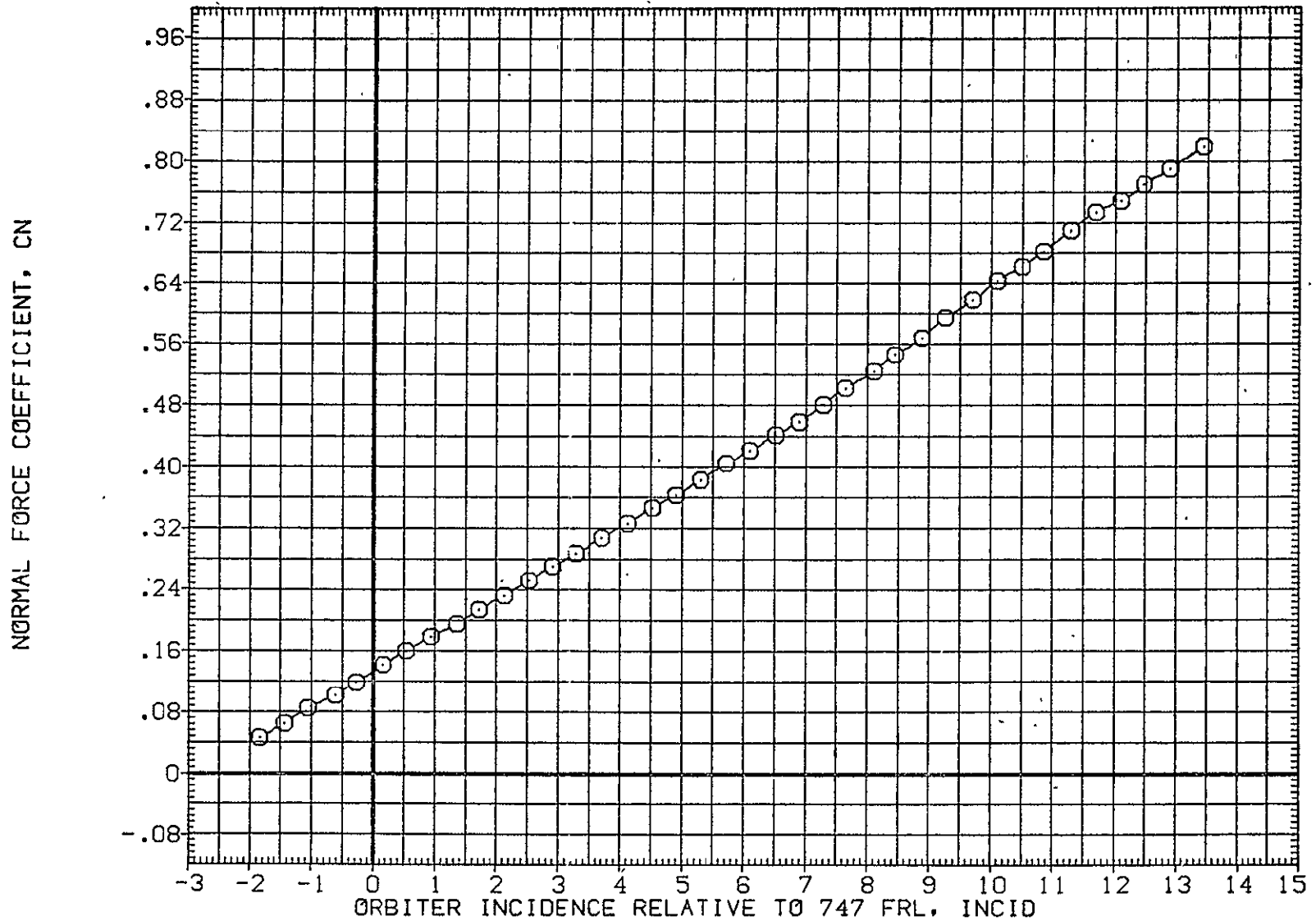


FIG. 20 ORBITER ISOLATED, ALPHA SWEEP, AFE132

SYMBOL	MACH	PARAMETRIC VALUES			
○	.601	BETA0	.000	ELEVON	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
L'REF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

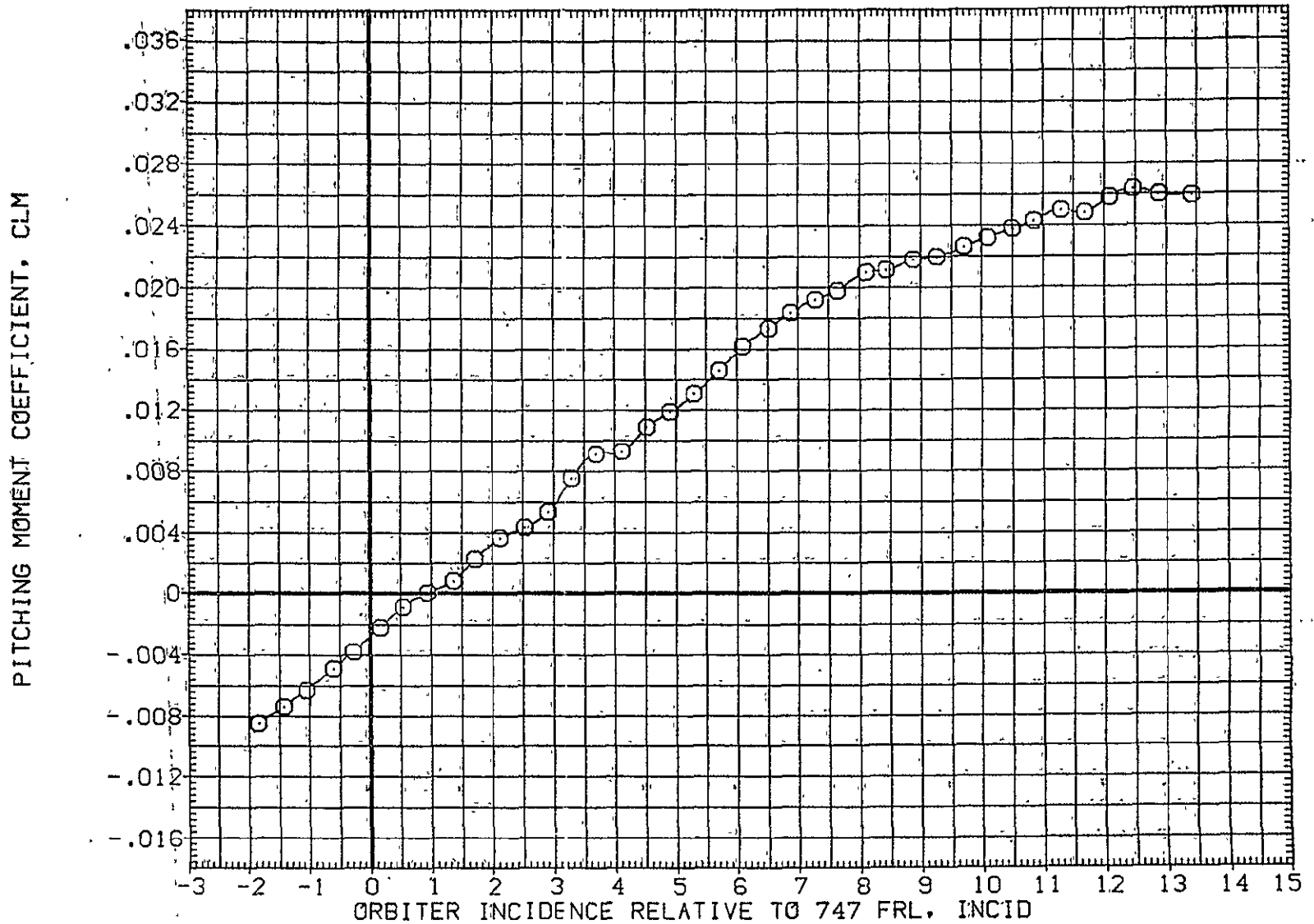


FIG. 20 ORBITER ISOLATED, ALPHA SWEEP; AFE132

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(AFE132)

SYMBOL	MACH	BETA0	PARAMETRIC VALUES	ELEVON
○	.601	BOFLAP	.000	5.000
			.000	

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. XC
YMRP	.0000	IN. YC
ZMRP	375.0000	IN. ZC
SCALE	.0125	

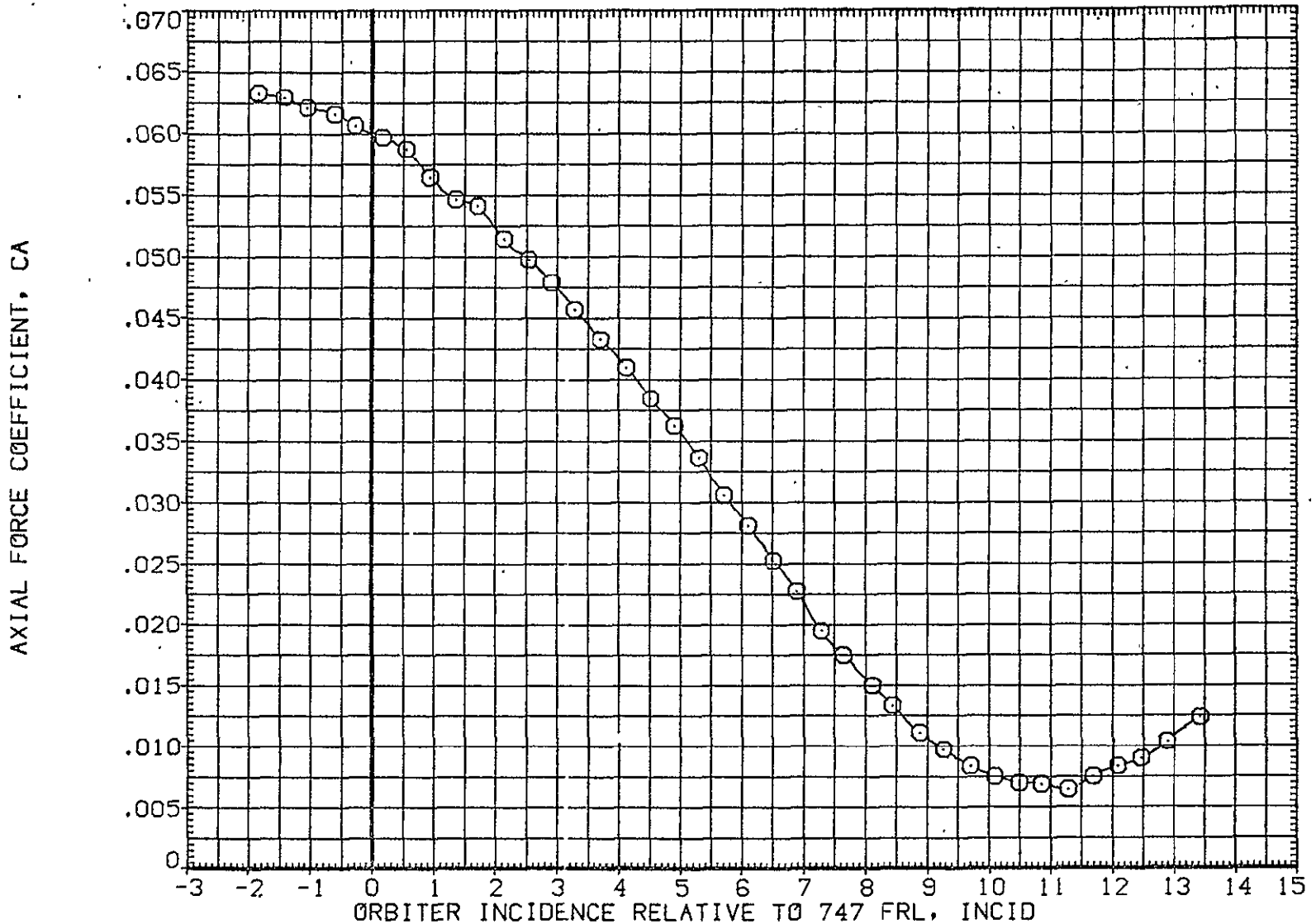


FIG. 20 ORBITER ISOLATED, ALPHA SWEEP, AFE132

SYMBOL	MACH	BETA0	PARAMETRIC VALUES	ELEVON	5.000
○	.601	BDFLAP	.000	.000	

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.8800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

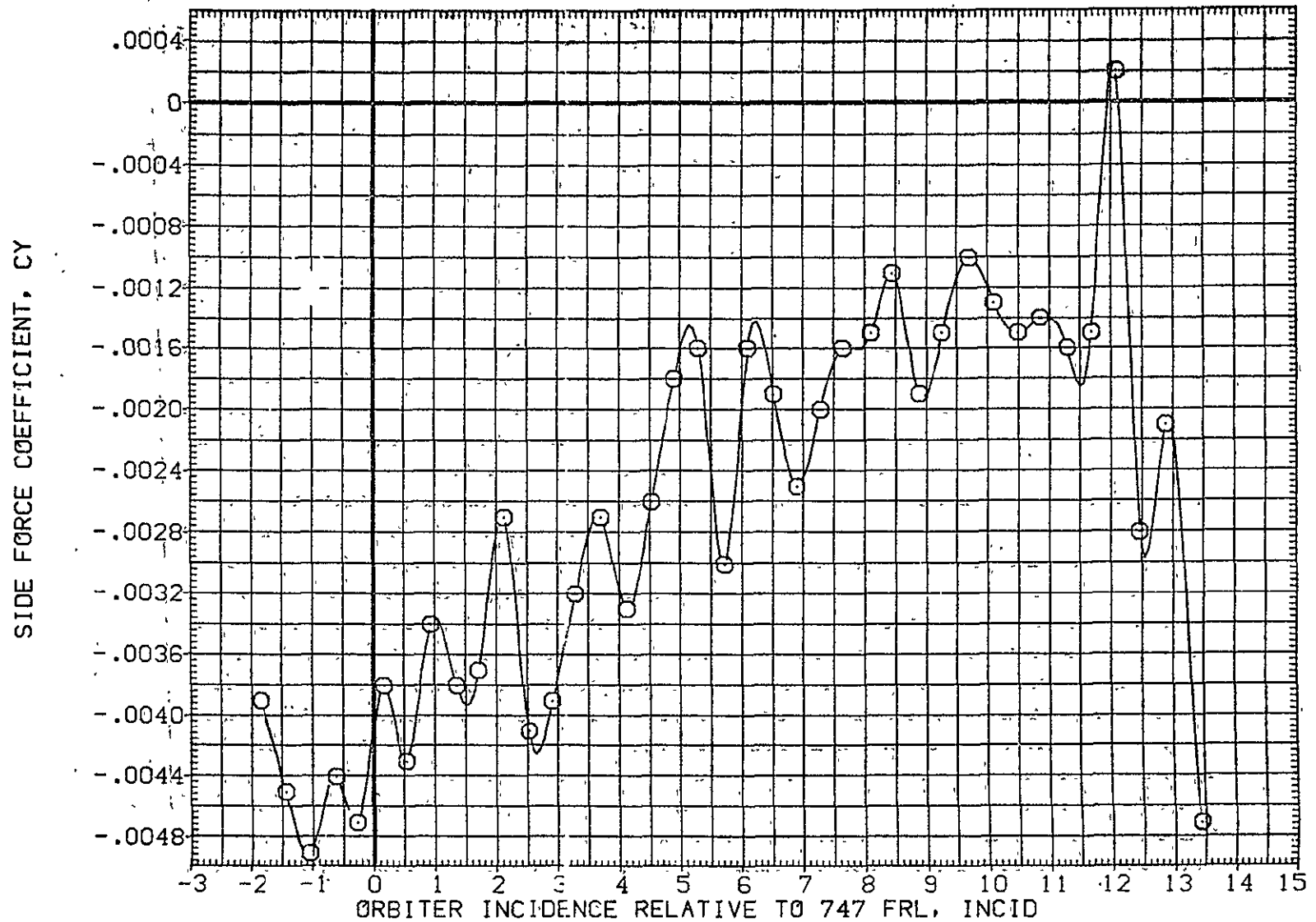


FIG. 20 ORBITER ISOLATED, ALPHA SWEEP, AFE132

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(AFE132)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.601	BETA0	.000	ELEVON	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

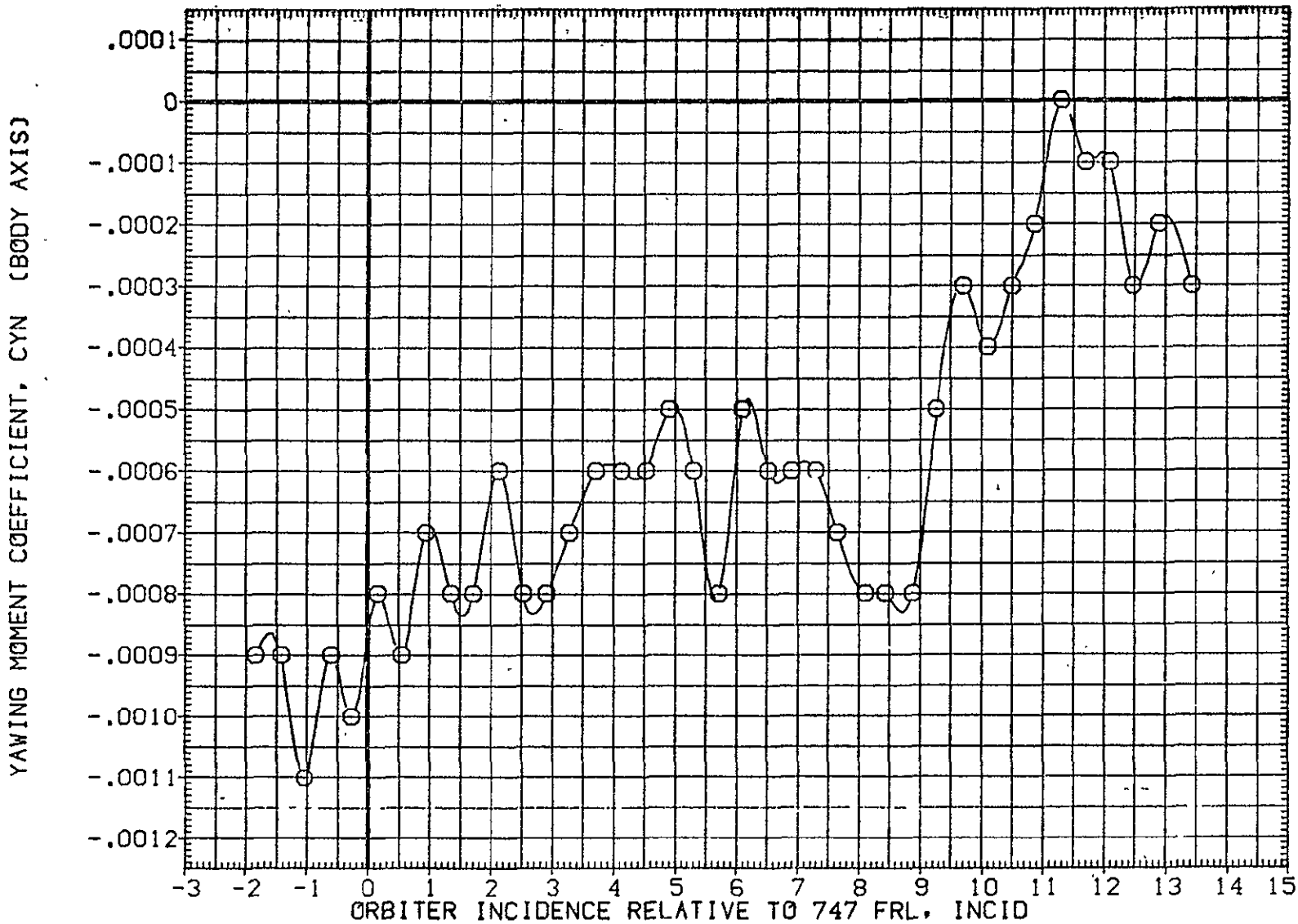


FIG. 20 ORBITER ISOLATED, ALPHA SWEEP, AFE132

SYMBOL	MACH	PARAMETRIC VALUES			
○	.601	BETA0	.000	ELEVON	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ:FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

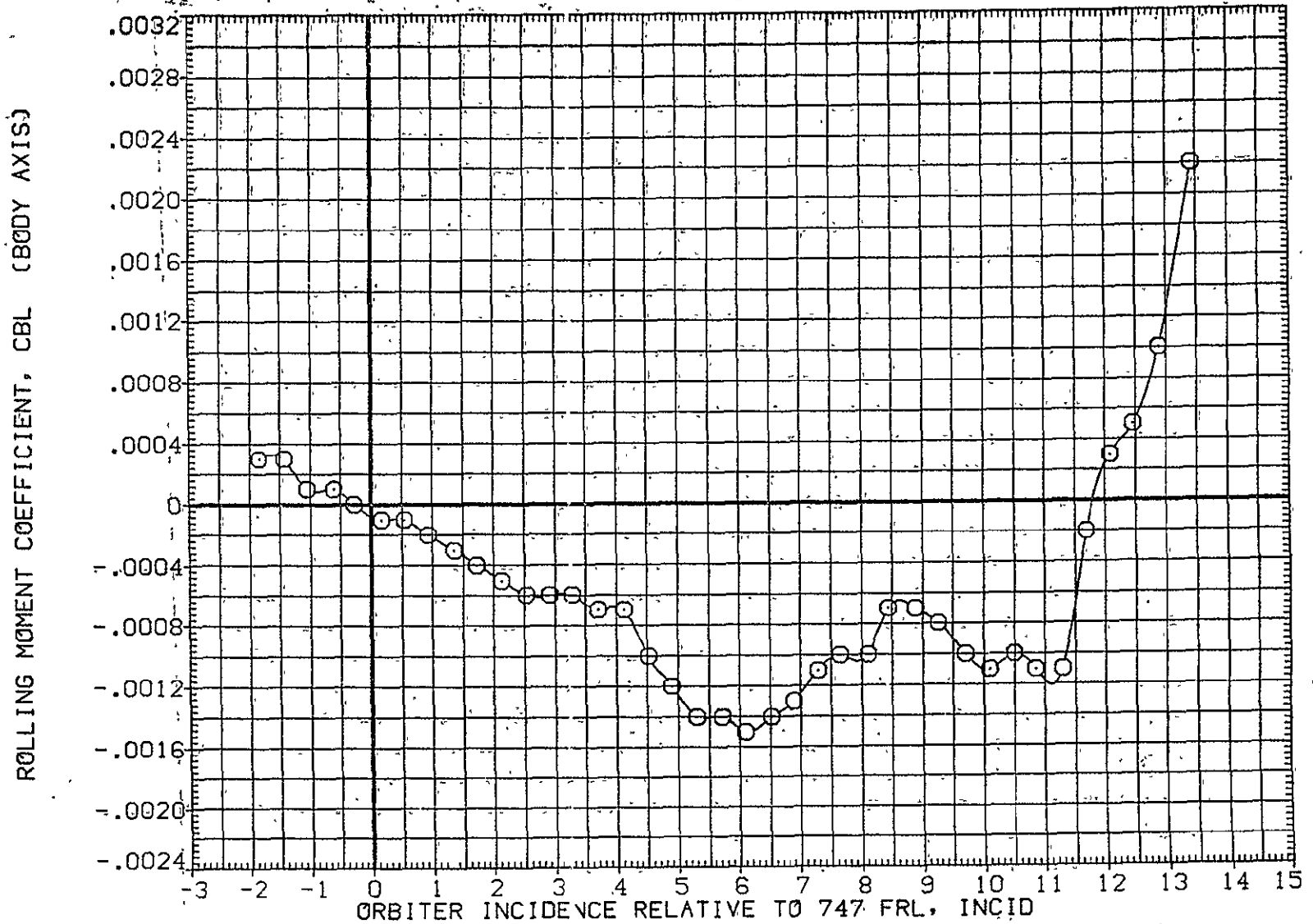


FIG. 20 ORBITER ISOLATED, ALPHA SWEEP, AFE132

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(AFE132)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.601	BETA0	.000	ELEVON	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

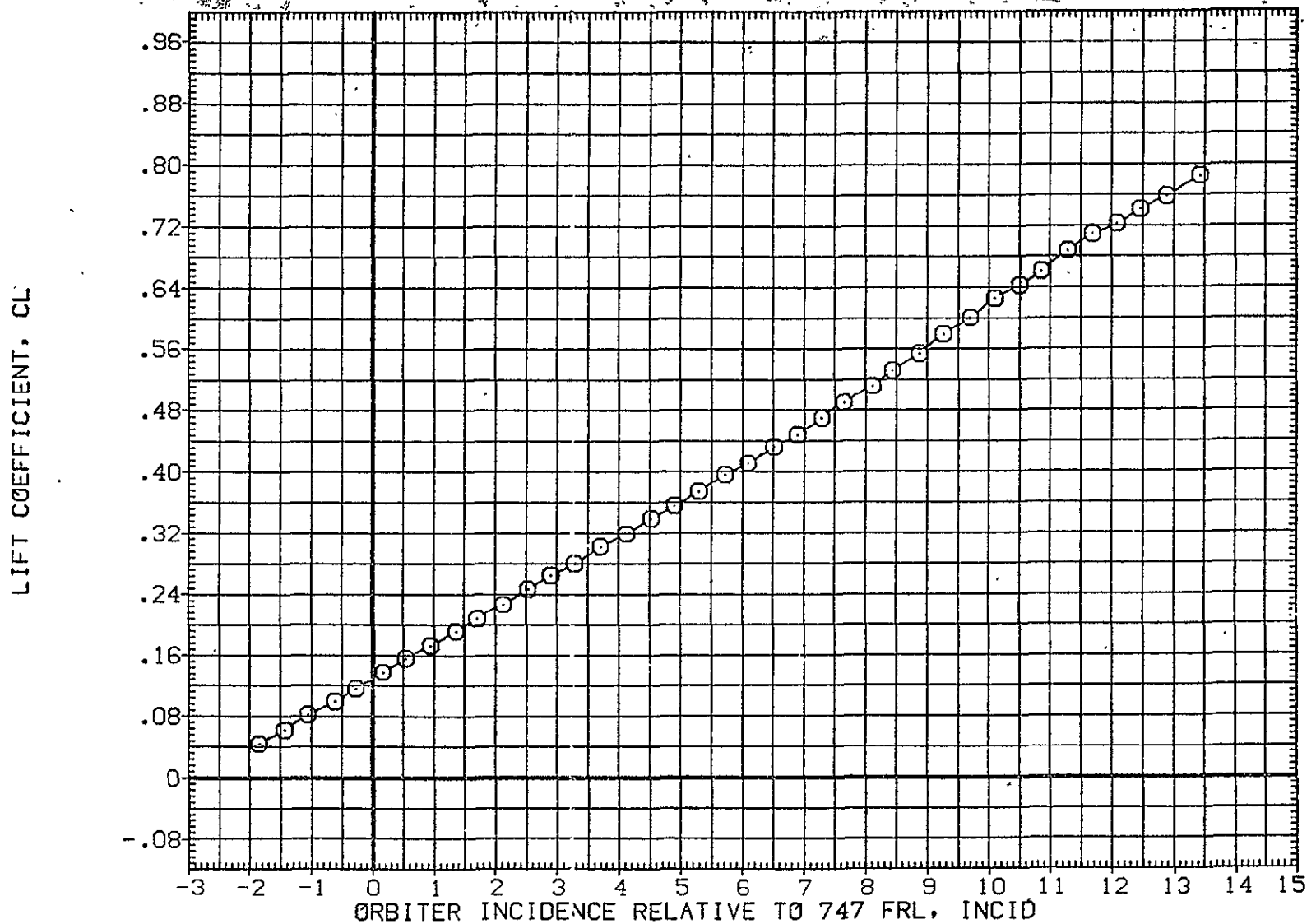


FIG. 20 ORBITER ISOLATED, ALPHA SWEEP, AFE132

SYMBOL	MACH	PARAMETRIC VALUES		
○	.601	BETA0	.000	ELEVON
		BDFLAP	.000	5.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	0.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

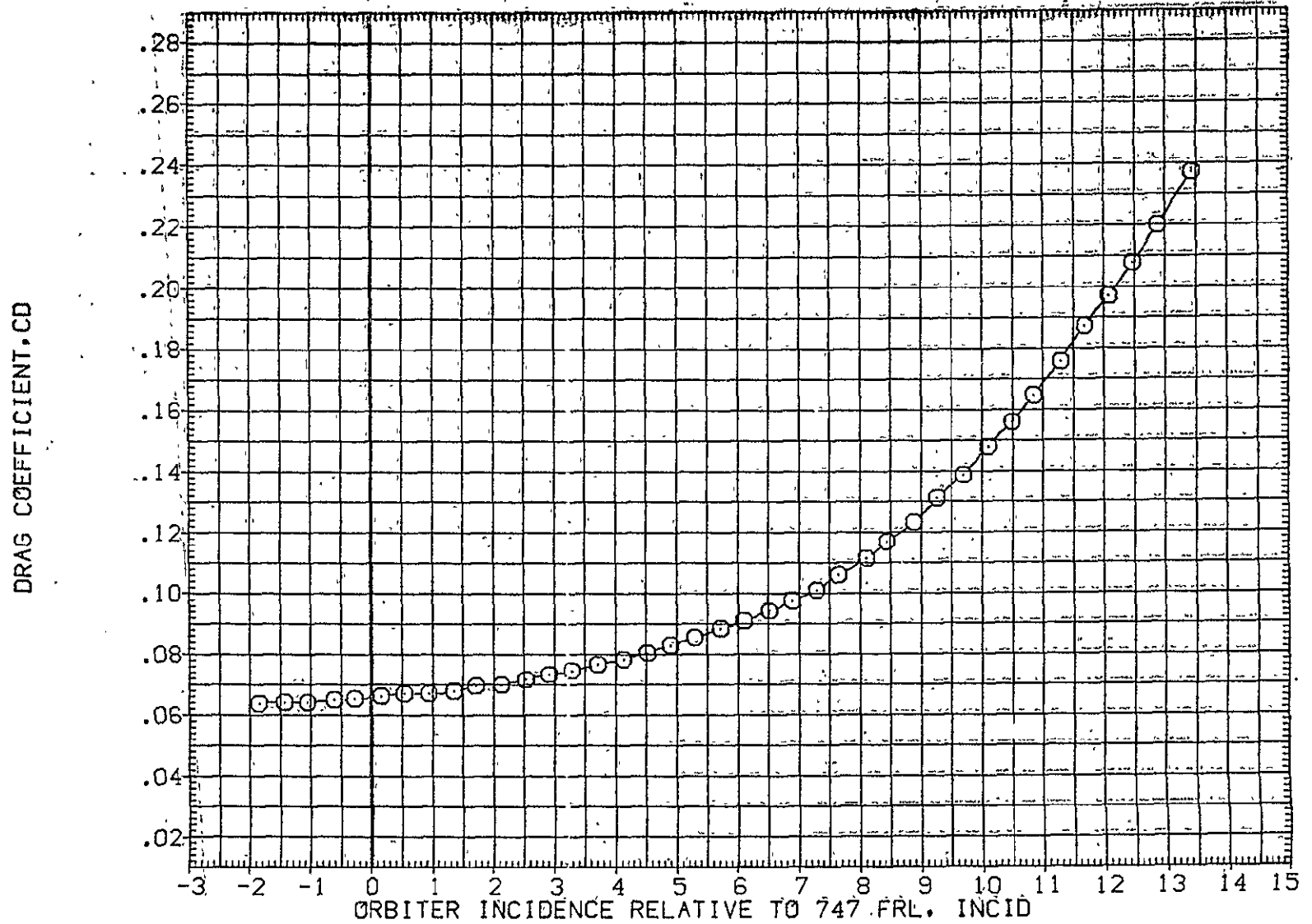


FIG. 20 ORBITER ISOLATED, ALPHA SWEEP, AFE132

LTV44-559(CA26) 02 S1

(AFE133)

SYMBOL	MACH	BETA	PARAMETRIC VALUES	ELEVON	5.000
○	.599	BDFLAP	-5.000	.000	

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

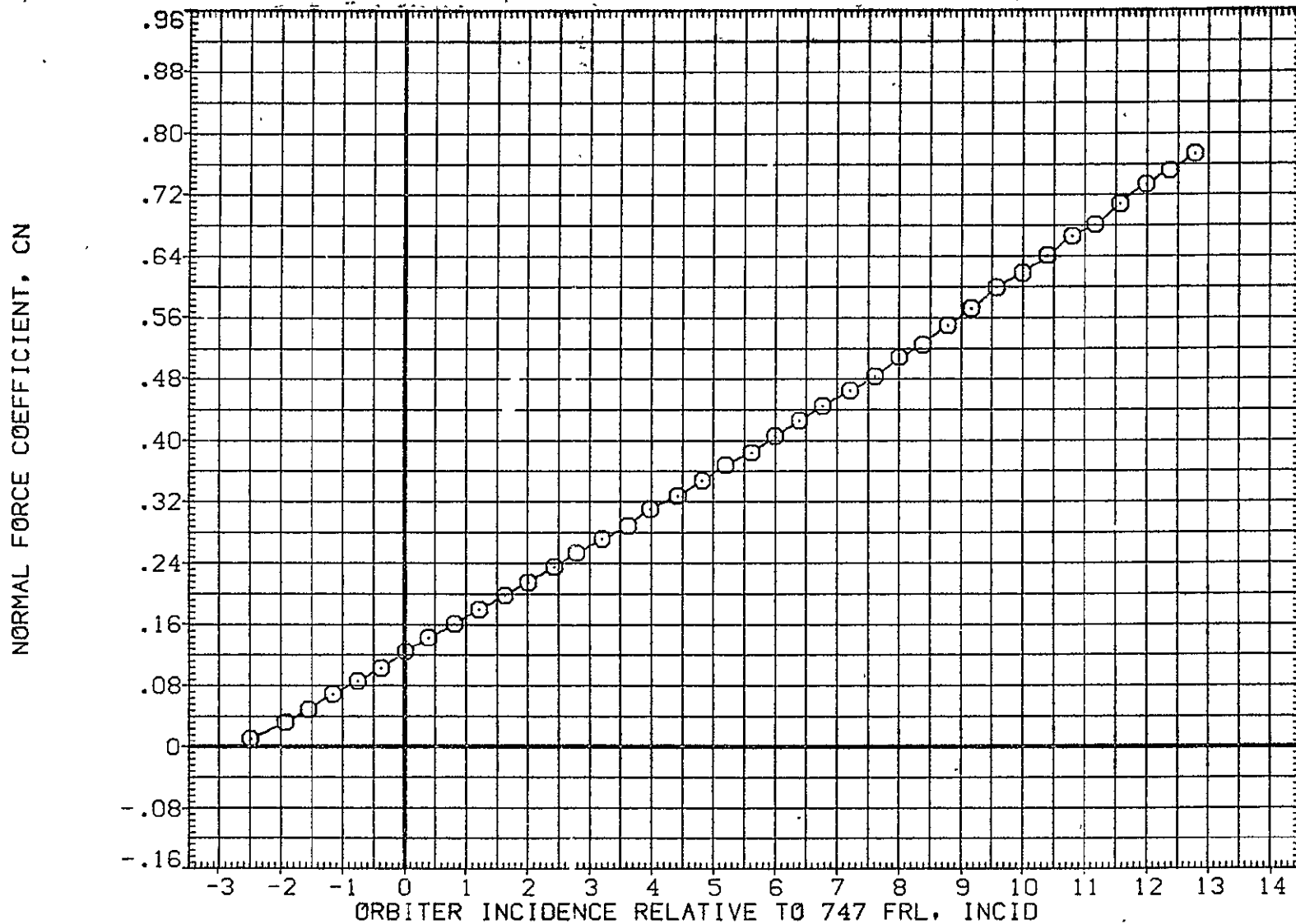


FIG. 21 ORBITER ISOLATED, ALPHA SWEEP, AFE133

SYMBOL	MACH	BETA0	PARAMETRIC VALUES		
○	.599	BDFLAP	-5.000	ELEVON	5.000
			.000		

REFERENCE INFORMATION		
SREF	2690.0000	SD, FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

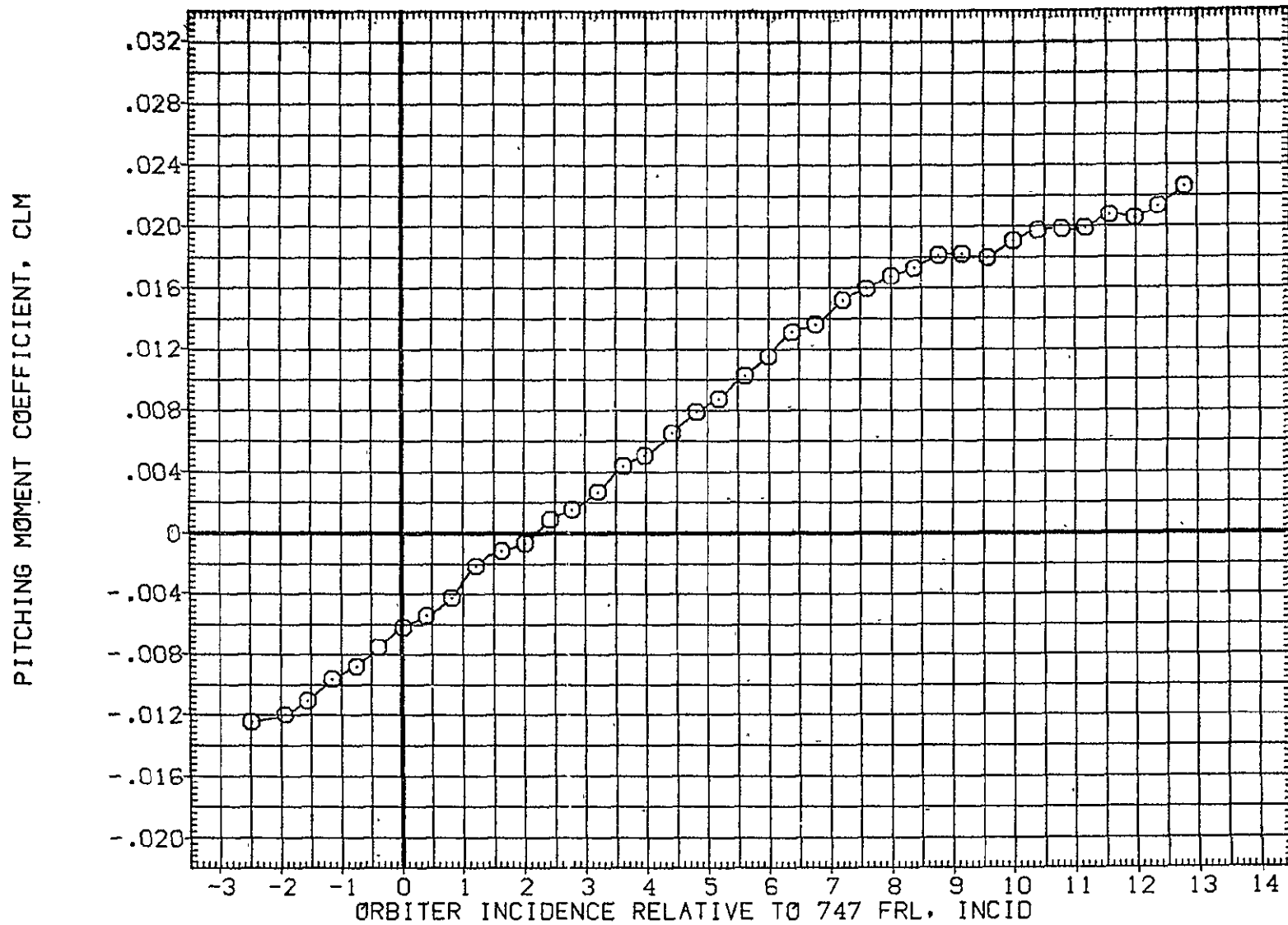


FIG. 21 ORBITER ISOLATED, ALPHA SWEEP, AFE133

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(AFE133)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.599	BETA0	-5.000	ELEV0N	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

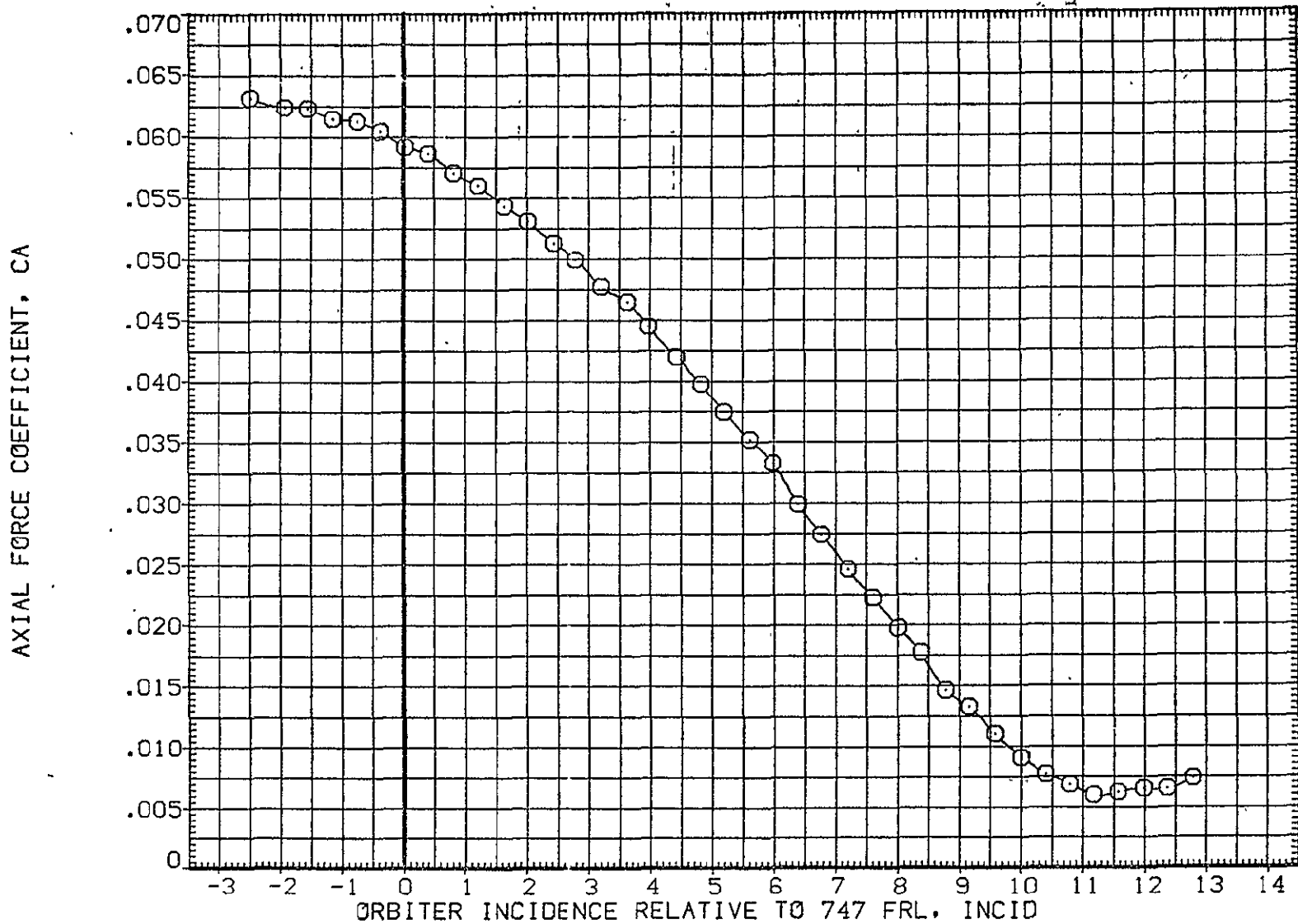


FIG. 21 ORBITER ISOLATED, ALPHA SWEEP, AFE133

SYMBOL	MACH	PARAMETRIC VALUES			
○	.599	BETA0	-5.000	ELEVON	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

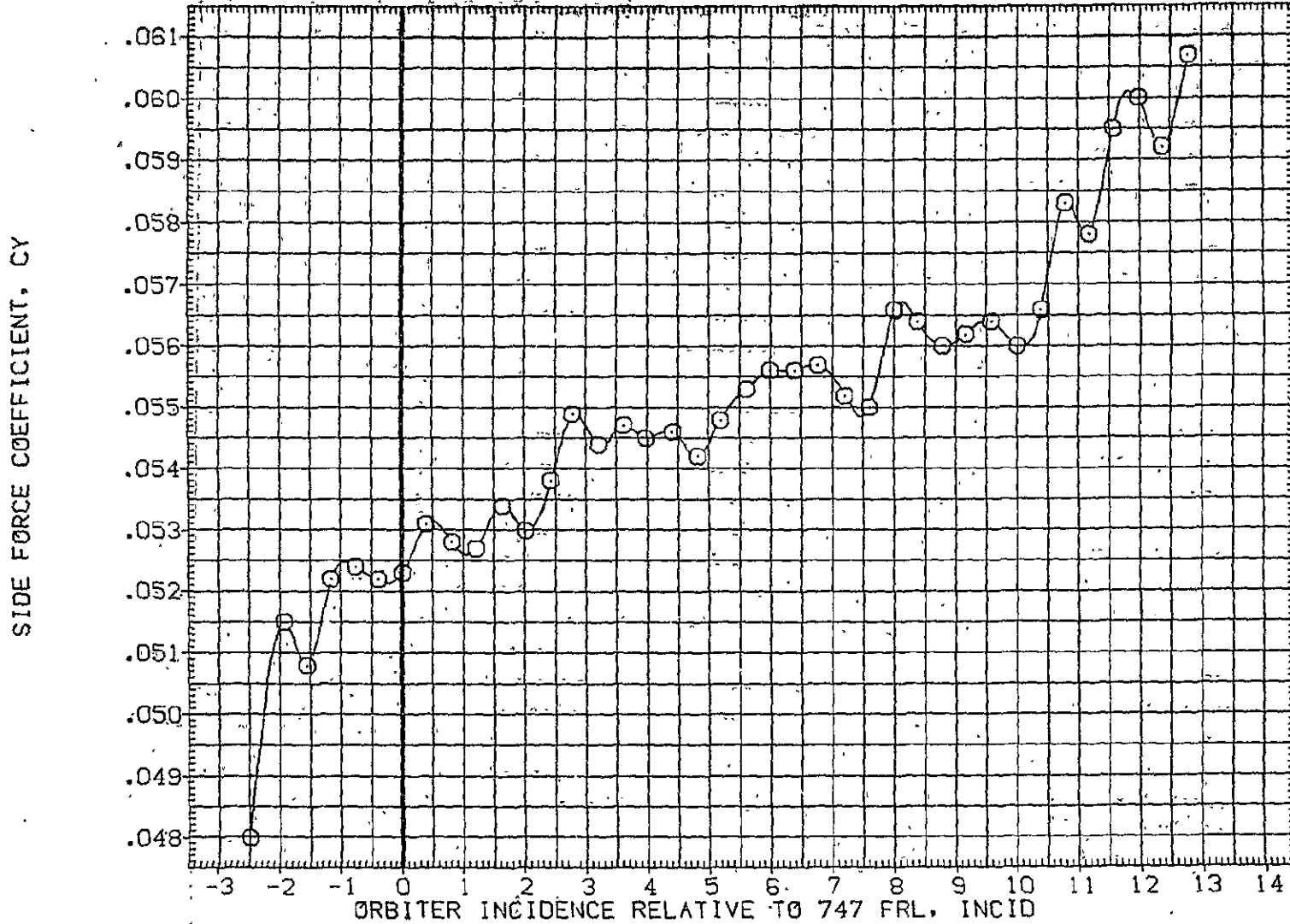


FIG. 21 ORBITER ISOLATED, ALPHA SWEEP, AFE133

SYMBOL	MACH	PARAMETRIC VALUES			
○	.599	BETA0	-5.000	ELEVON	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

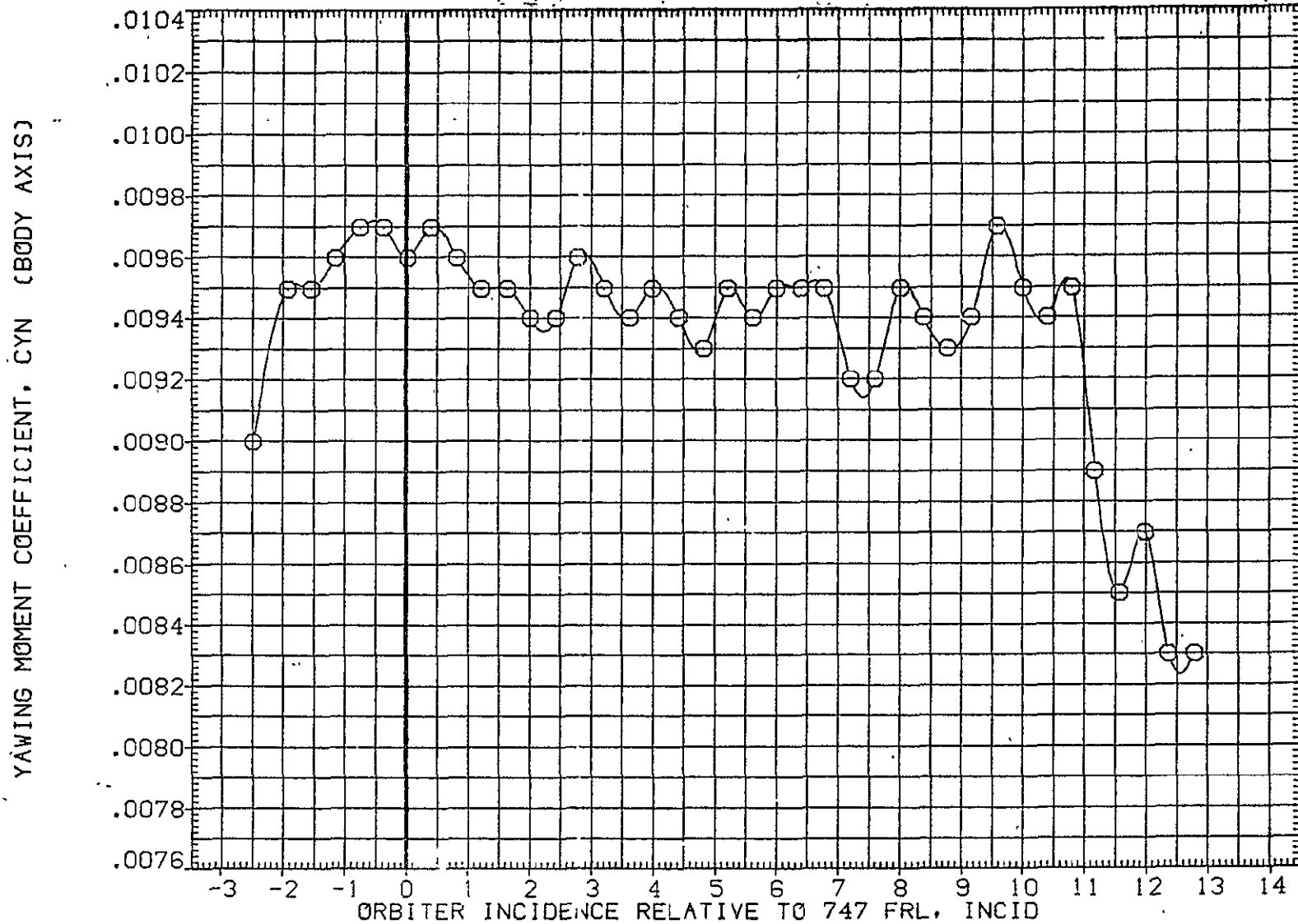


FIG. 21 ORBITER ISOLATED, ALPHA SWEEP, AFE133

SYMBOL: MACH: PARAMETRIC VALUES
 O .599: BETA0: -5.000 ELEVON: 5.000
 BDFLAP: .000:

REFERENCE INFORMATION:
 SREF: 2690.0000" SQ: FT.
 LREF: 474.8100 IN.
 BREF: 936.6800 IN.
 XMRP: 1109.0000 IN. X0
 YMRP: .0000 IN. Y0
 ZMRP: 375.0000 IN. Z0
 SCALE: .0125

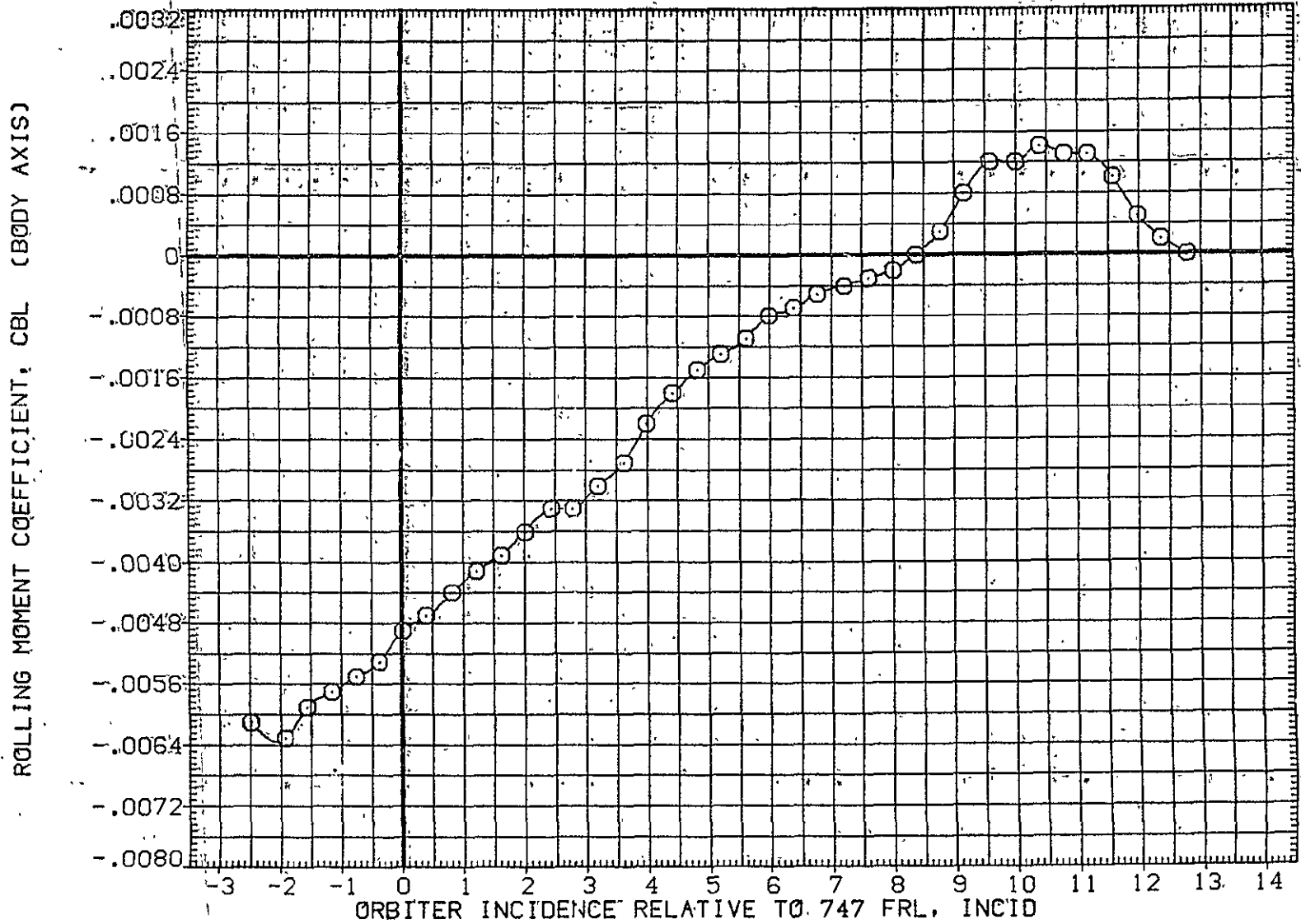


FIG. 21 ORBITER ISOLATED, ALPHA SWEEP, AFE133

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(AFE133)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.599	BETA0	-5.000	ELEVON	5.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

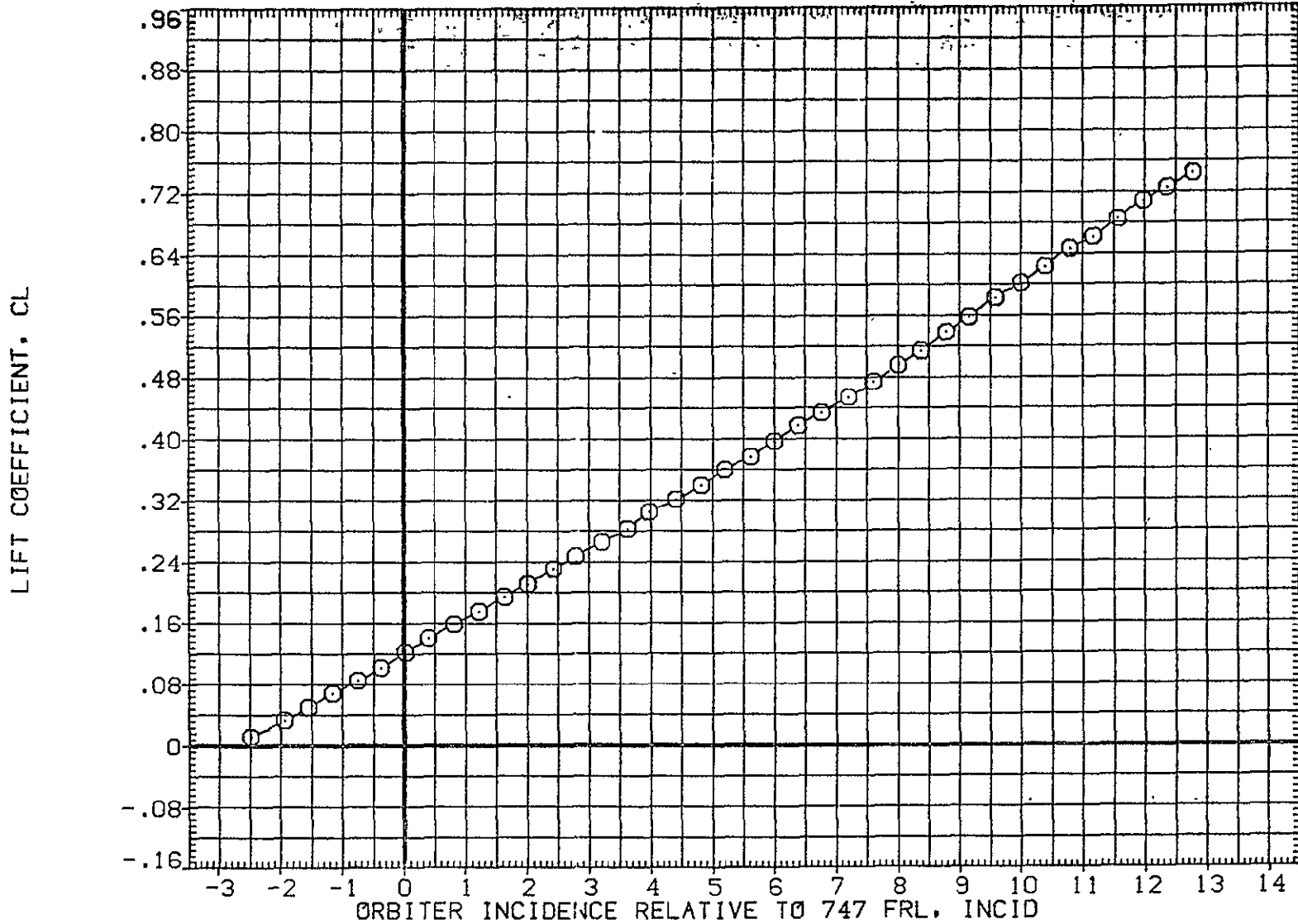


FIG. 21 ORBITER ISOLATED, ALPHA SWEEP, AFE133

SYMBOL	MACH	PARAMETRIC VALUES			
○	5.99	BETA0	-5.000	ELEVON	5.000
		BOFLAP	.000		

REFERENCE INFORMATION		
SREF	2590.0000	50. FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	.375.0000	IN. Z0
SCALE	.0125	

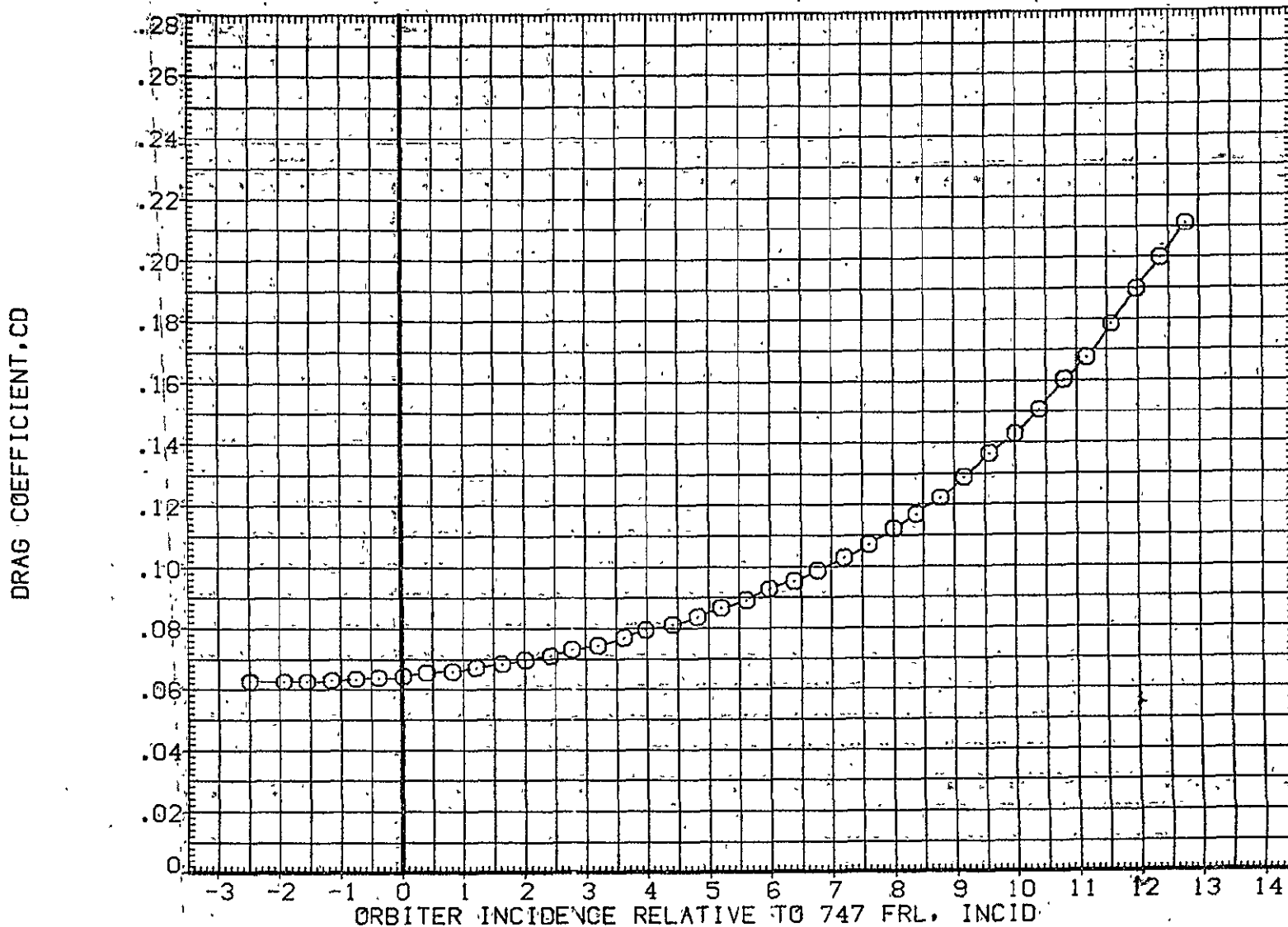


FIG. 21 ORBITER ISOLATED, ALPHA SWEEP, AFE133

LTV44-559(CA26) 02 S1

(AFE134)

SYMBOL	MACH	PARAMETRIC VALUES	
○	.592	BETA0	.000
		BDFLAP	.000
		ELEVON	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

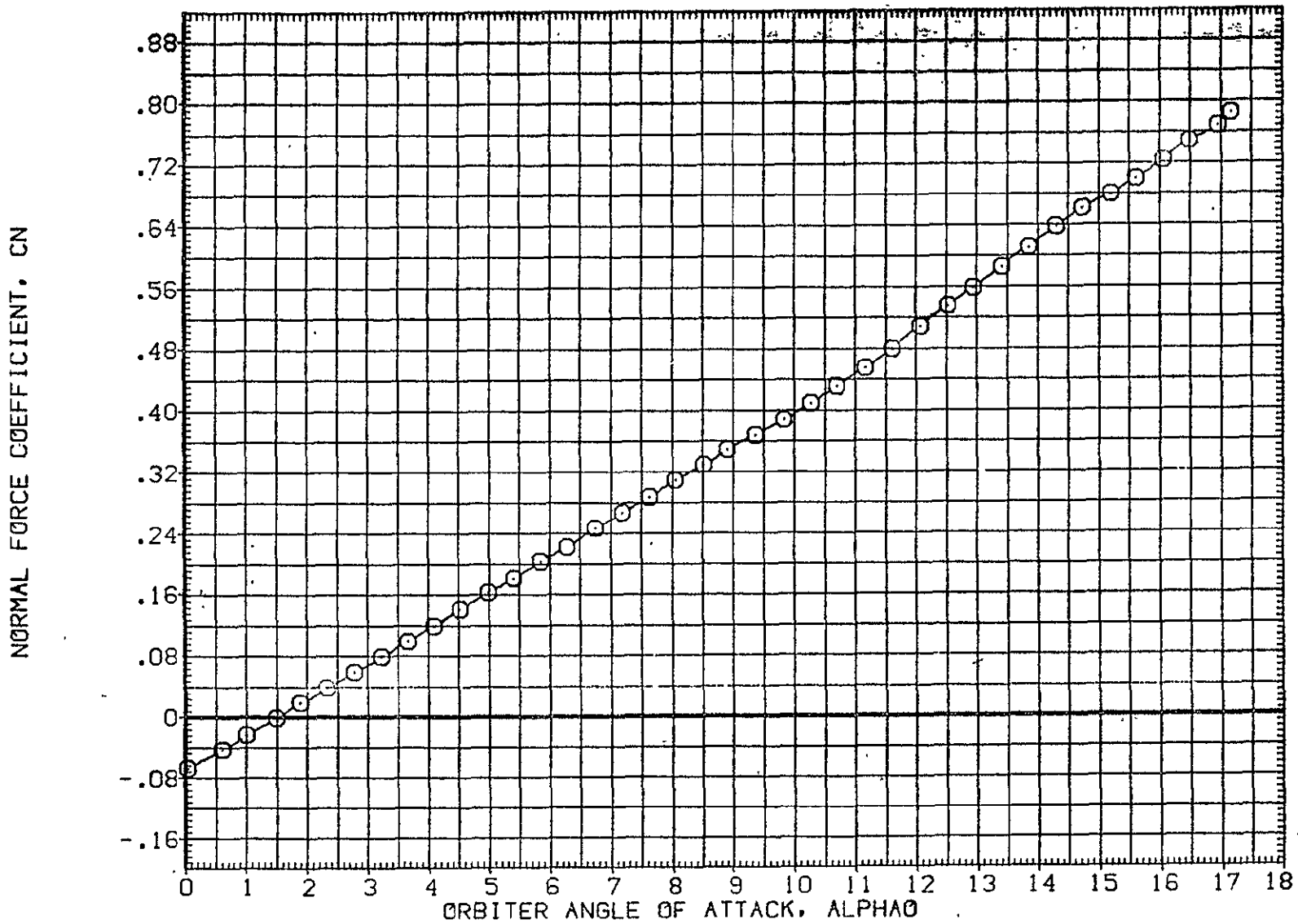


FIG. 22 ORBITER ISOLATED, ALPHA SWEEP, AFE134

SYMBOL	MACH	PARAMETRIC VALUES			
○	.592	BETA0	.000	ELEVON	.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0125	

PITCHING MOMENT COEFFICIENT, CLM

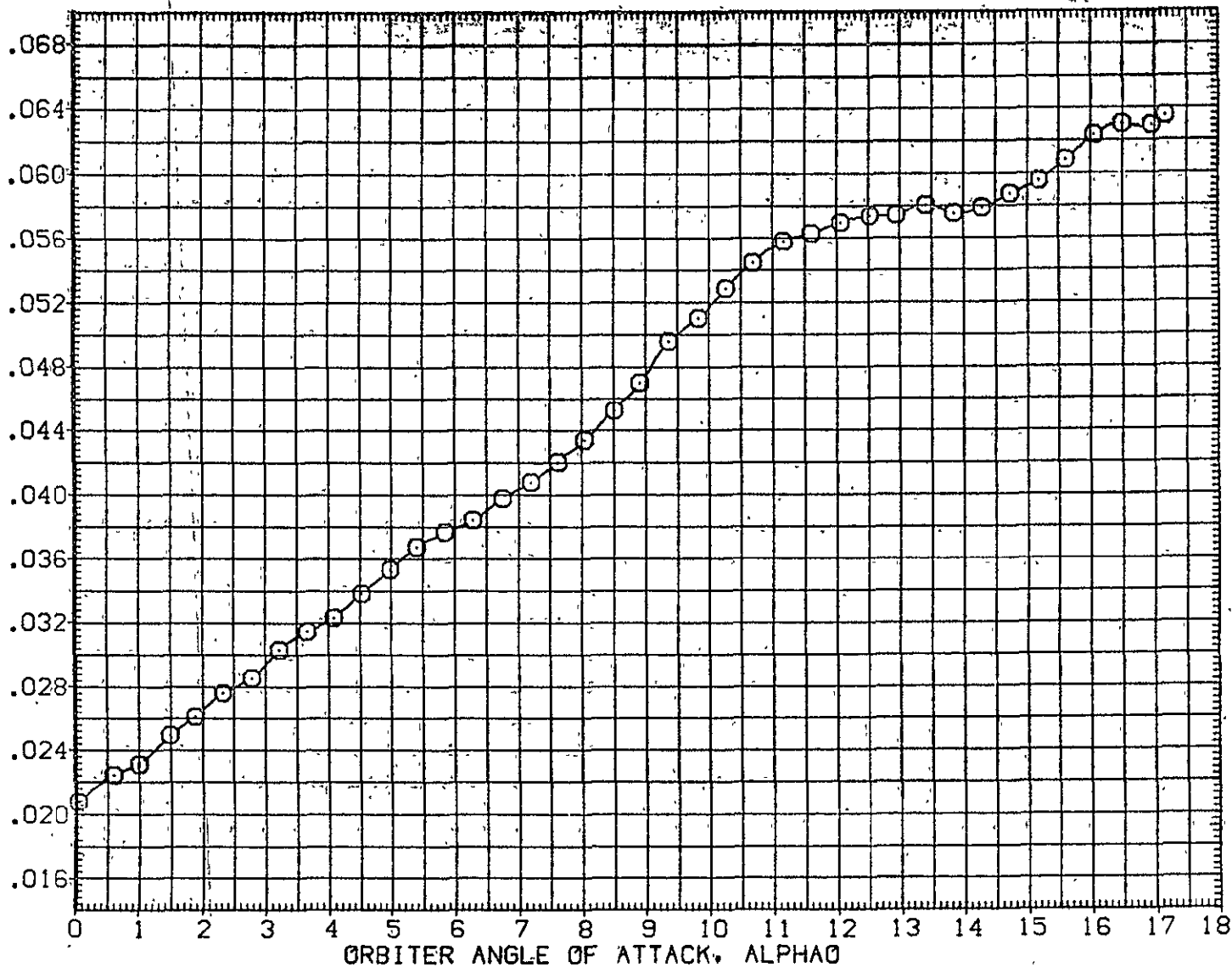


FIG. 22 ORBITER ISOLATED, ALPHA SWEEP, AFE134

LTV44-559(CA26) 02 S1

(AFE134)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.592	BETA0	.000	ELEVON	.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

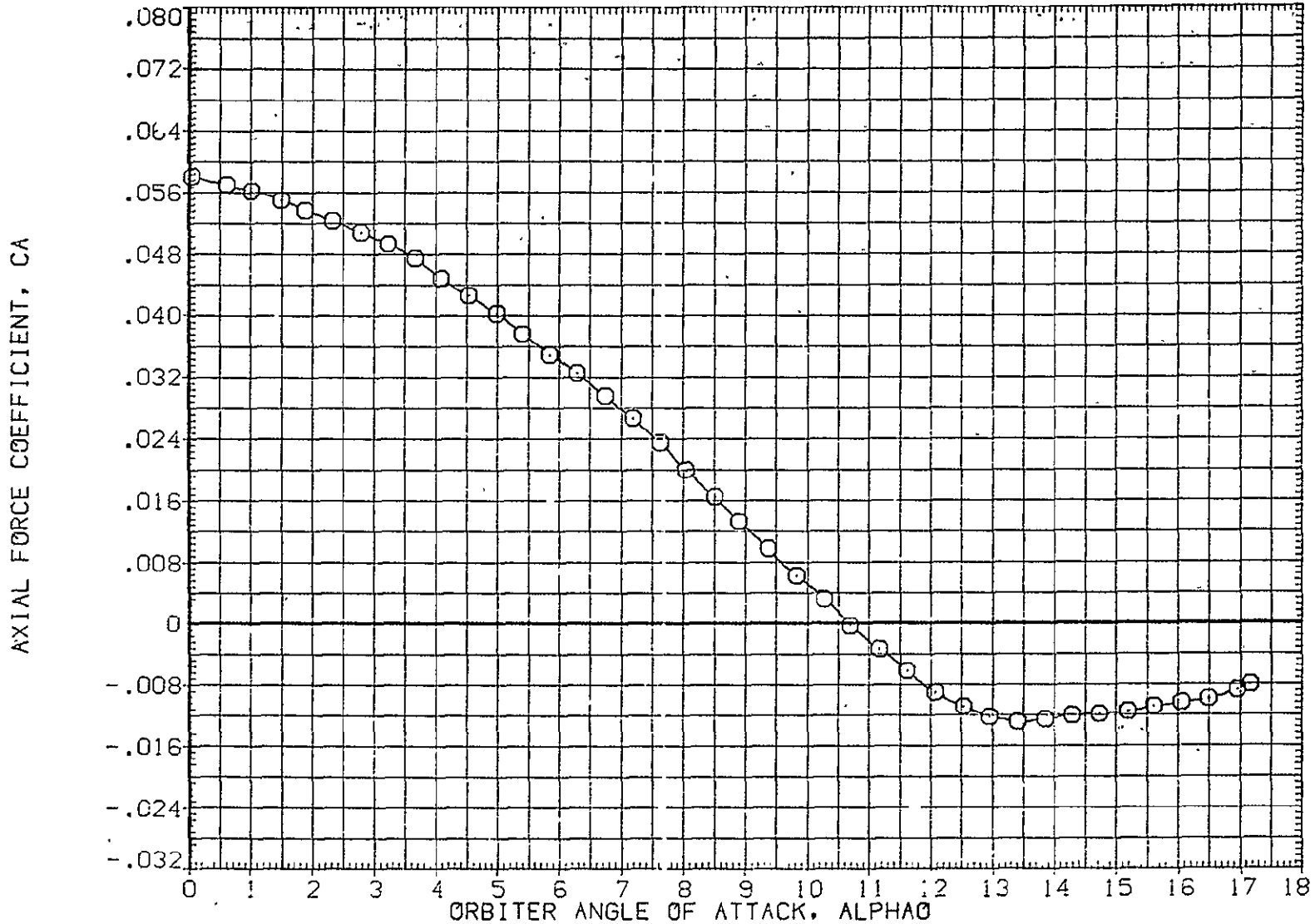


FIG. 22 ORBITER ISOLATED, ALPHA SWEEP, AFE134

SYMBOL	MACH	BETA	PARAMETRIC VALUES	
○	.592	BDFLAP	.000	ELEVON .000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

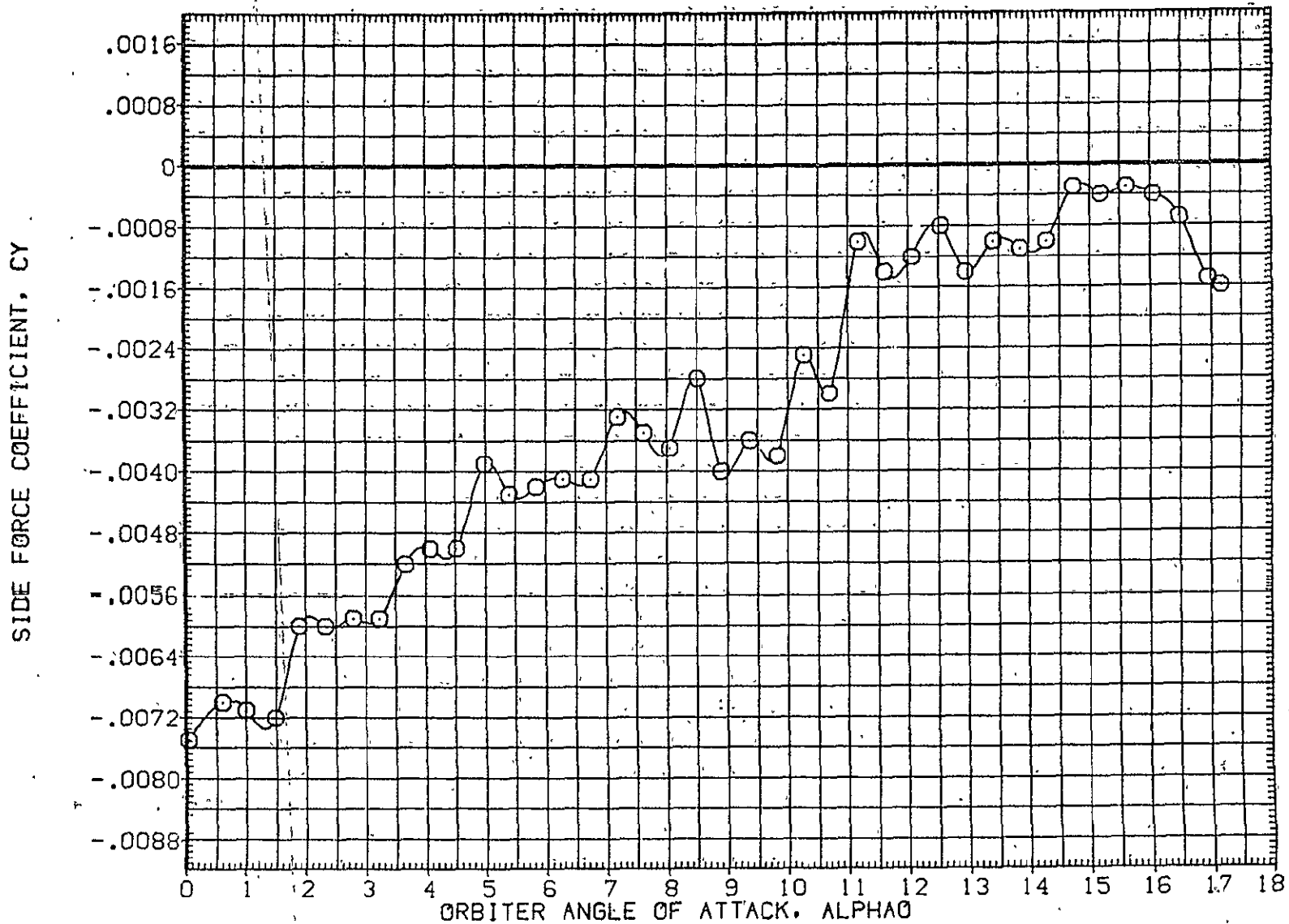


FIG. 22 ORBITER ISOLATED, ALPHA SWEEP, AFE134

LTV44-559(CA26) 02 S1

(AFE134)

SYMBOL	MACH	BETA0	PARAMETRIC VALUES	ELEVON	
○	.592		.000	.000	.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

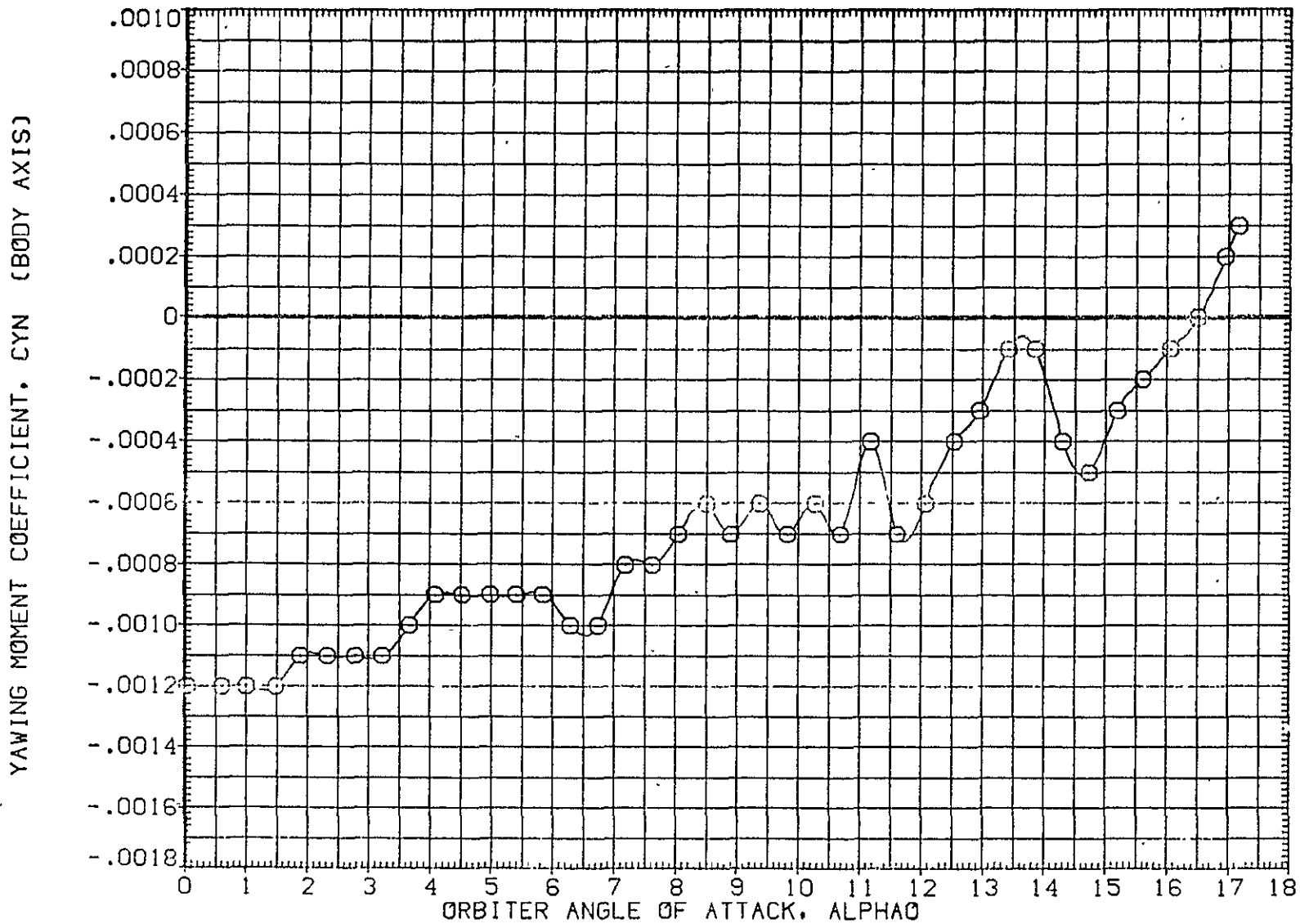


FIG. 22 ORBITER ISOLATED, ALPHA SWEEP, AFE134

SYMBOL	MACH	PARAMETRIC VALUES			
○	.592	BETA0	.000	ELEVON	.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ. FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0125	

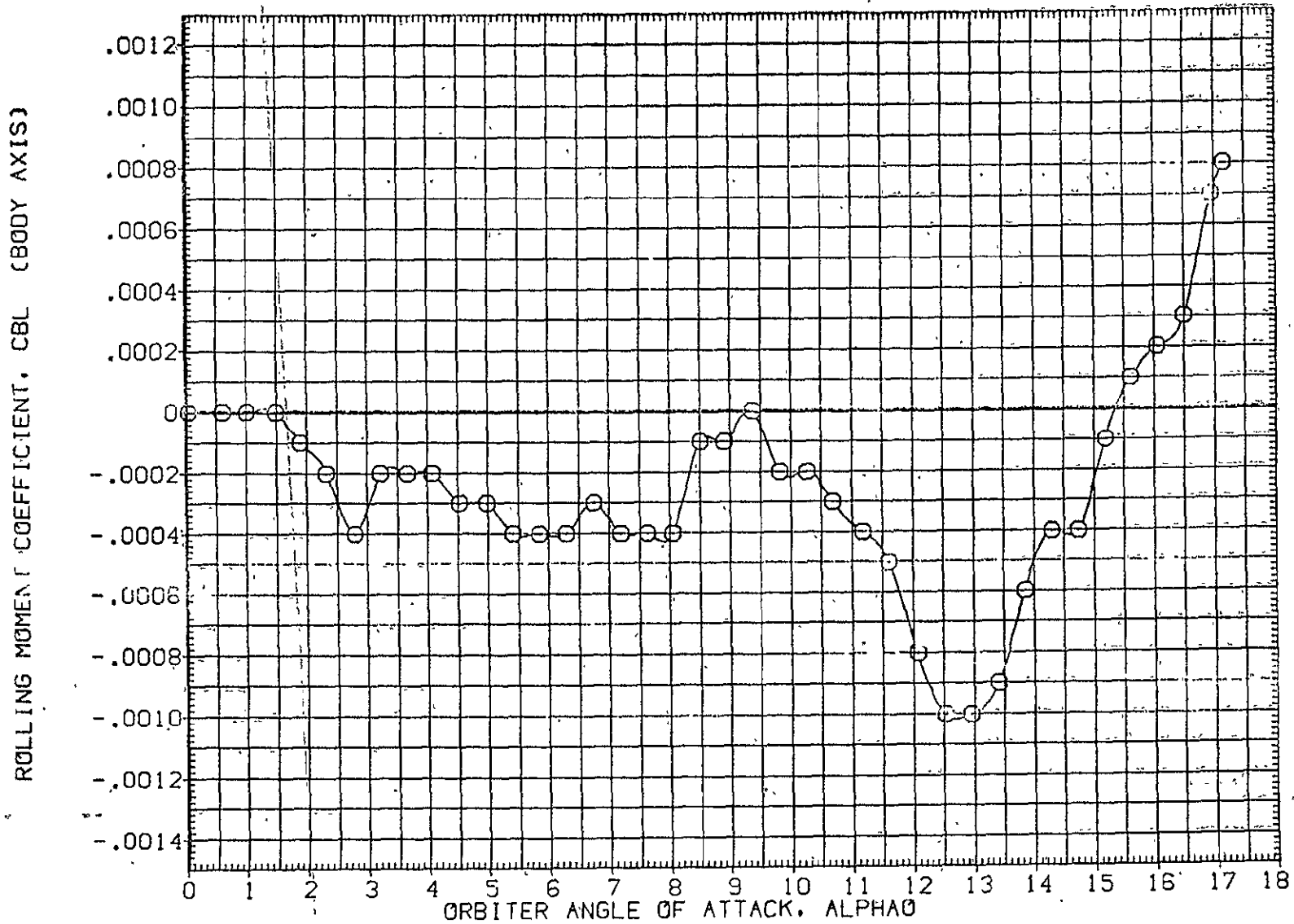


FIG. 22 ORBITER ISOLATED, ALPHA SWEEP, AFE134

LTV44-559(CA26) 02 S1

(AFE134)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.592	BETA0	.000	ELEVON	.000
		BDFLAP	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

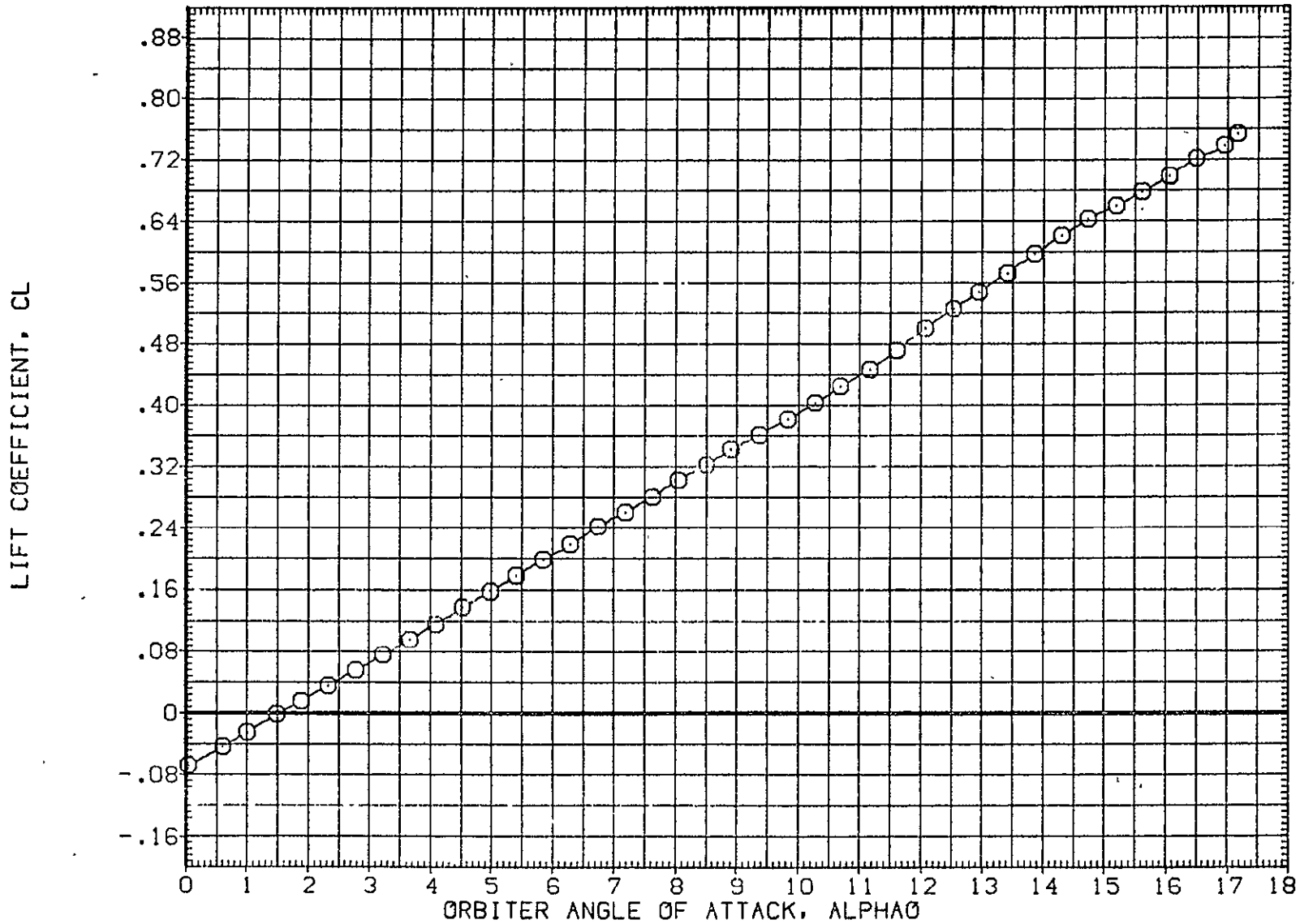


FIG. 22 ORBITER ISOLATED, ALPHA SWEEP, AFE134

SYMBOL	MACH	BETA ₀	PARAMETRIC VALUES		
○	.592	BDFLAP	.000	ELEVON	.000
			.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X ₀
YMRP	.0000	IN. Y ₀
ZMRP	375.0000	IN. Z ₀
SCALE	.0125	

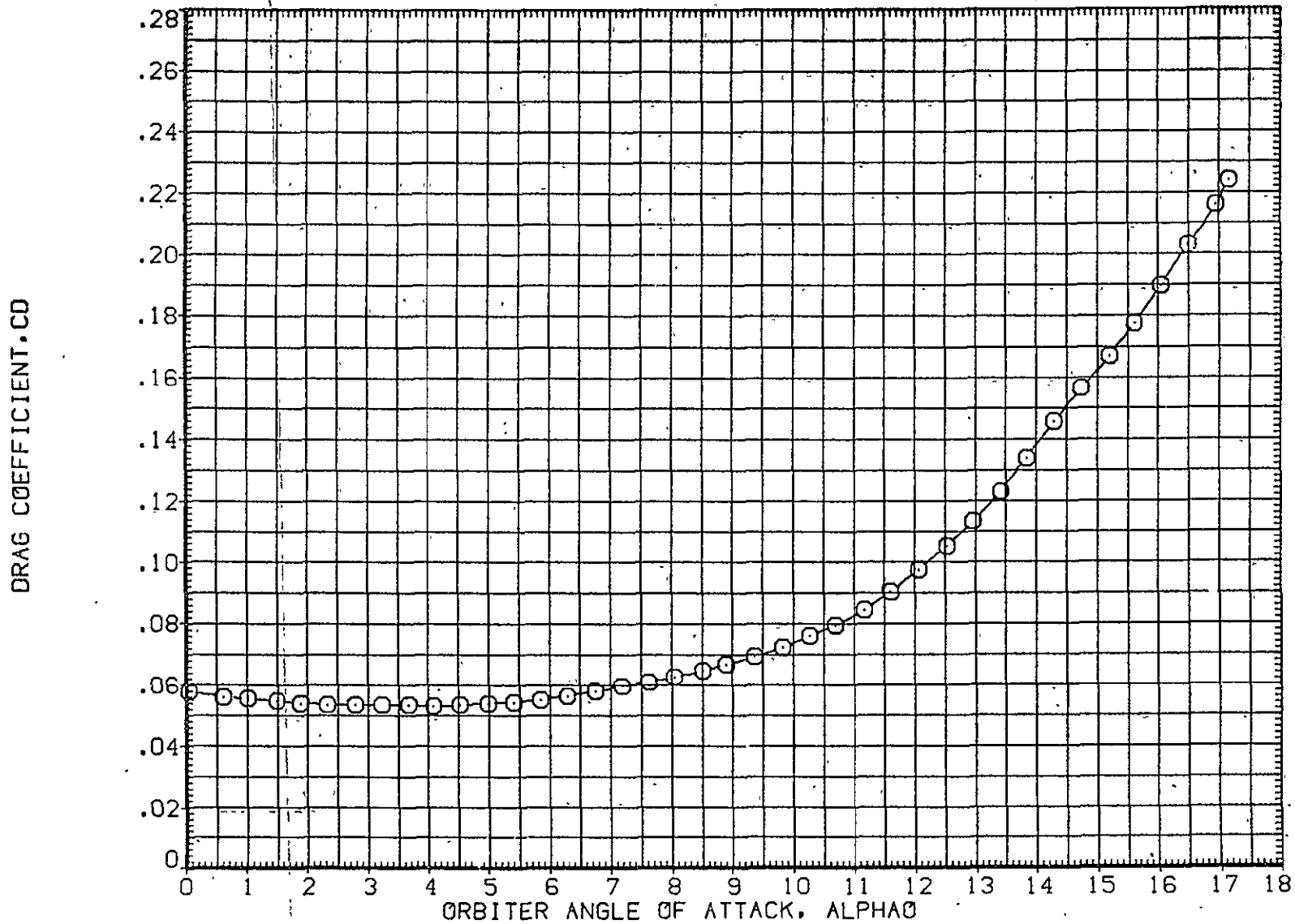


FIG. 22 ORBITER ISOLATED, ALPHA SWEEP, AFE134

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE030)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.627	ALPHAC	.000	BETAC	.000	SREF	2690.0000	50.1
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		RUDDER	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN.
		BETA0	.000	DPHI	.000	YMRP	.0000	IN.
						ZMRP	375.0000	IN.
						SCALE	.0125	

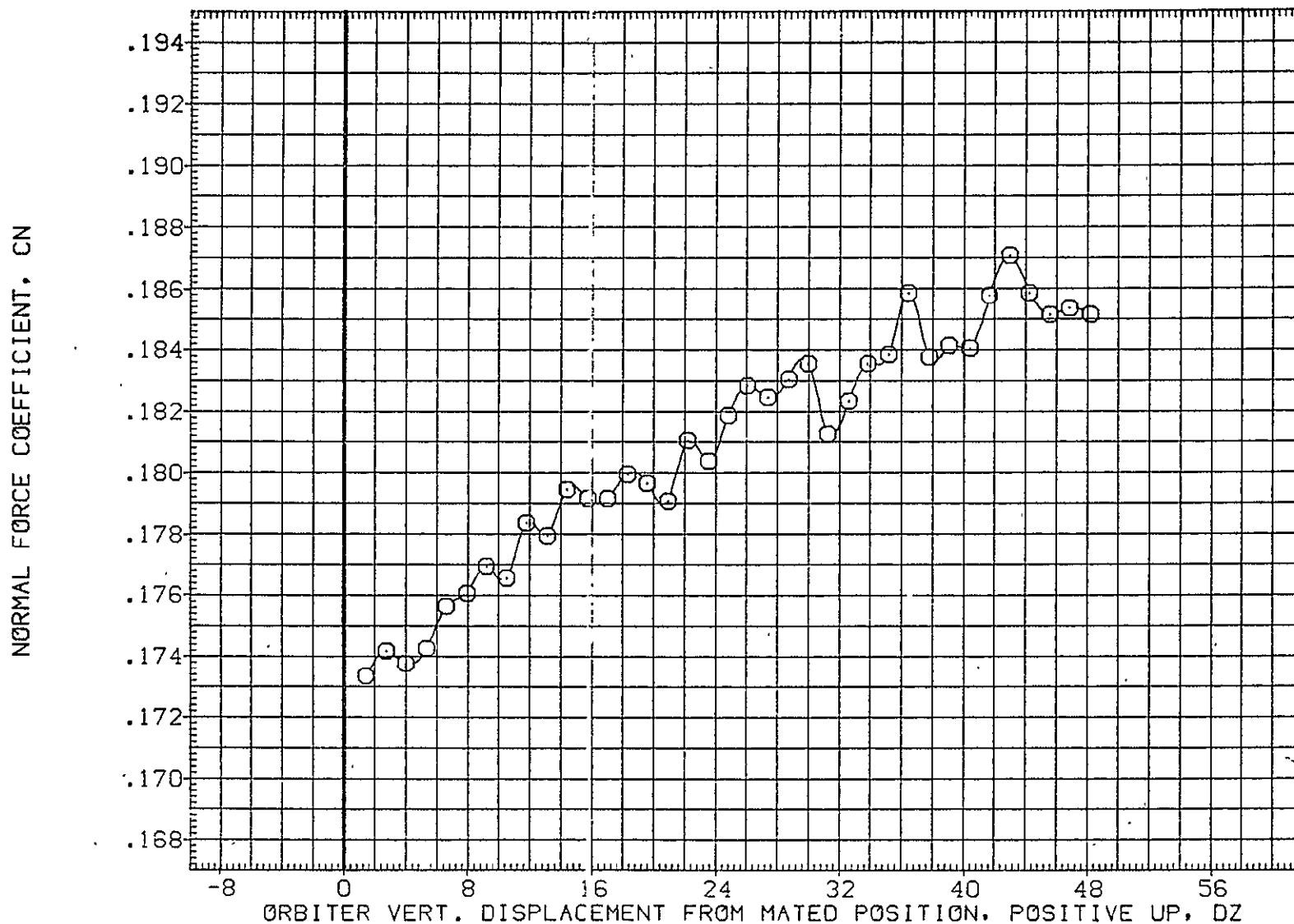


FIG. 23 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=4, BETAC=0, BETA0=0, AFE030

SYMBOL
○

MACH	PARAMETRIC VALUES			
.627	ALPHAC	.000	BETAC	.000
	STAB	5.000	ELEVON	5.000
	RUDDER	.000	DX	.000
	DY	.000	IORB	4.000
	BETA0	.000	DRHI	.000

REFERENCE INFORMATION		
SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

PITCHING MOMENT COEFFICIENT, CLM

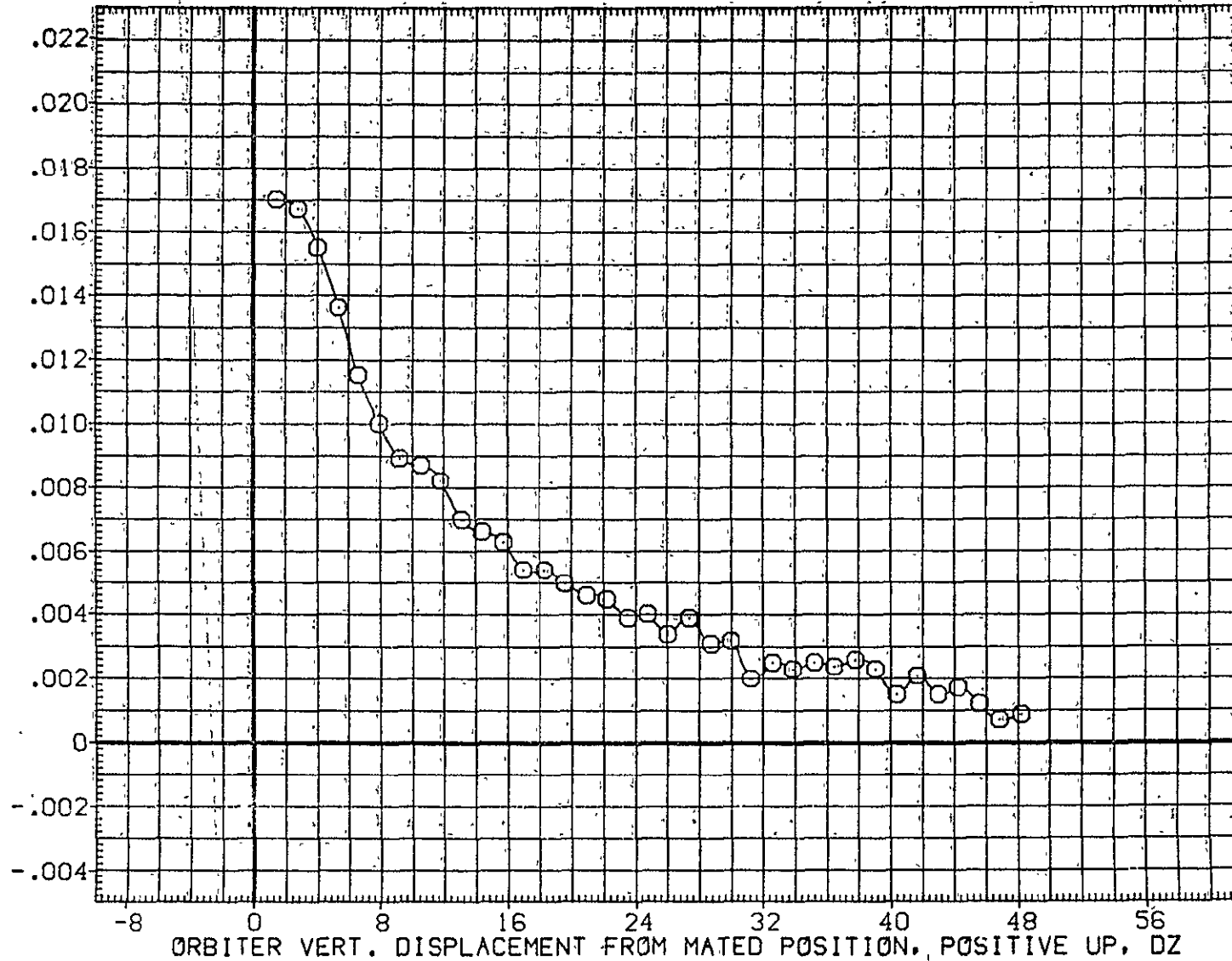


FIG. 23 ORB. DATA, CARRIER PROXIMITY, ALPHAC=C, IORB=4, BETAC=0, BETA0=0, AFE030

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE030)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.627	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		RUDDER	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

AXIAL FORCE COEFFICIENT, CA

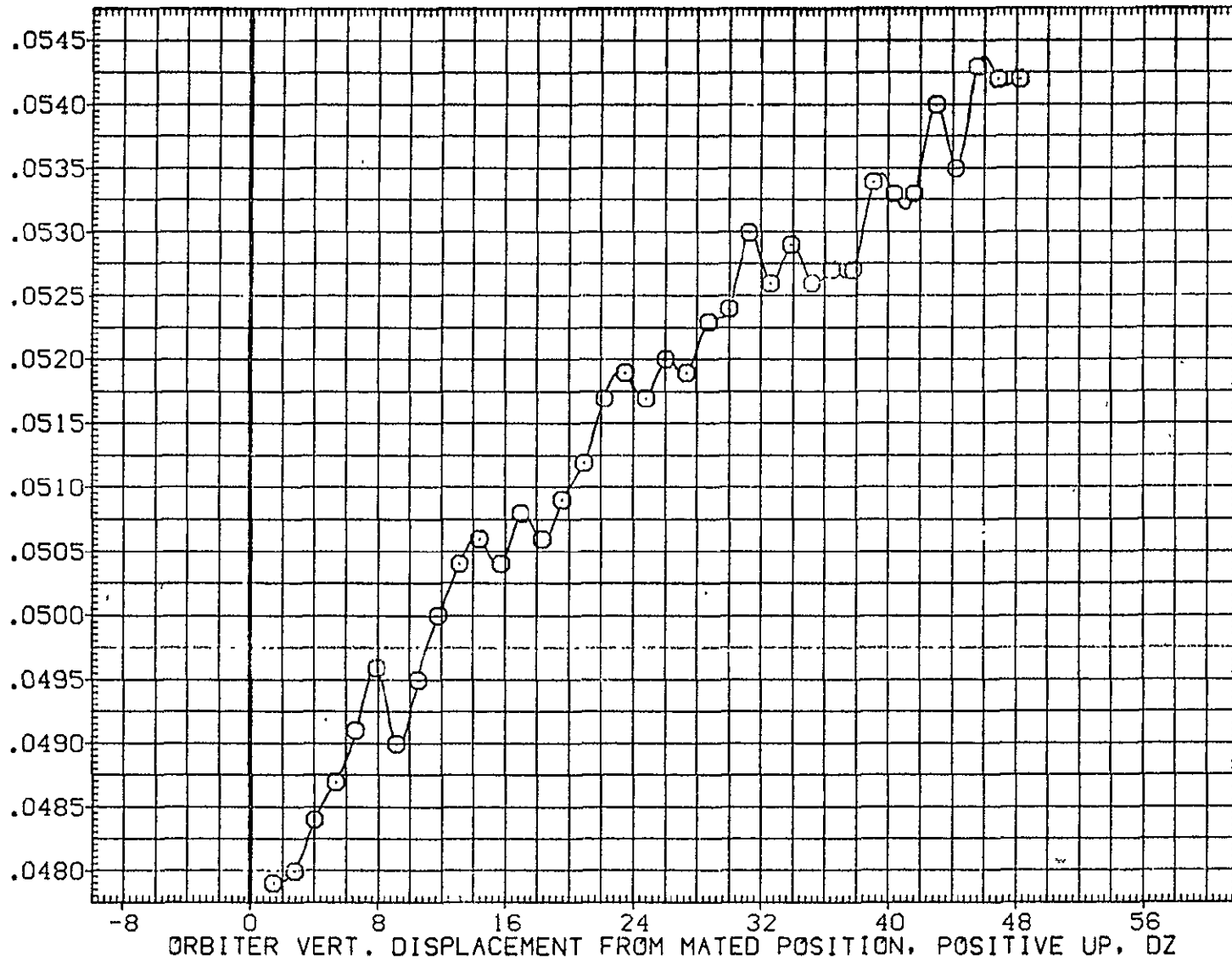


FIG. 23 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=4, BETAC=0, BETA0=0, AFE030

SYMBOL	MACH	PARAMETRIC VALUES			
○	.627	ALPHAC	.000	BETAC	.000
		STAB	5.000	ELEVON	5.000
		RUDDER	.000	DX	.000
		DY	.000	IORB	4.000
		BETA0	.000	DPHJ	.000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

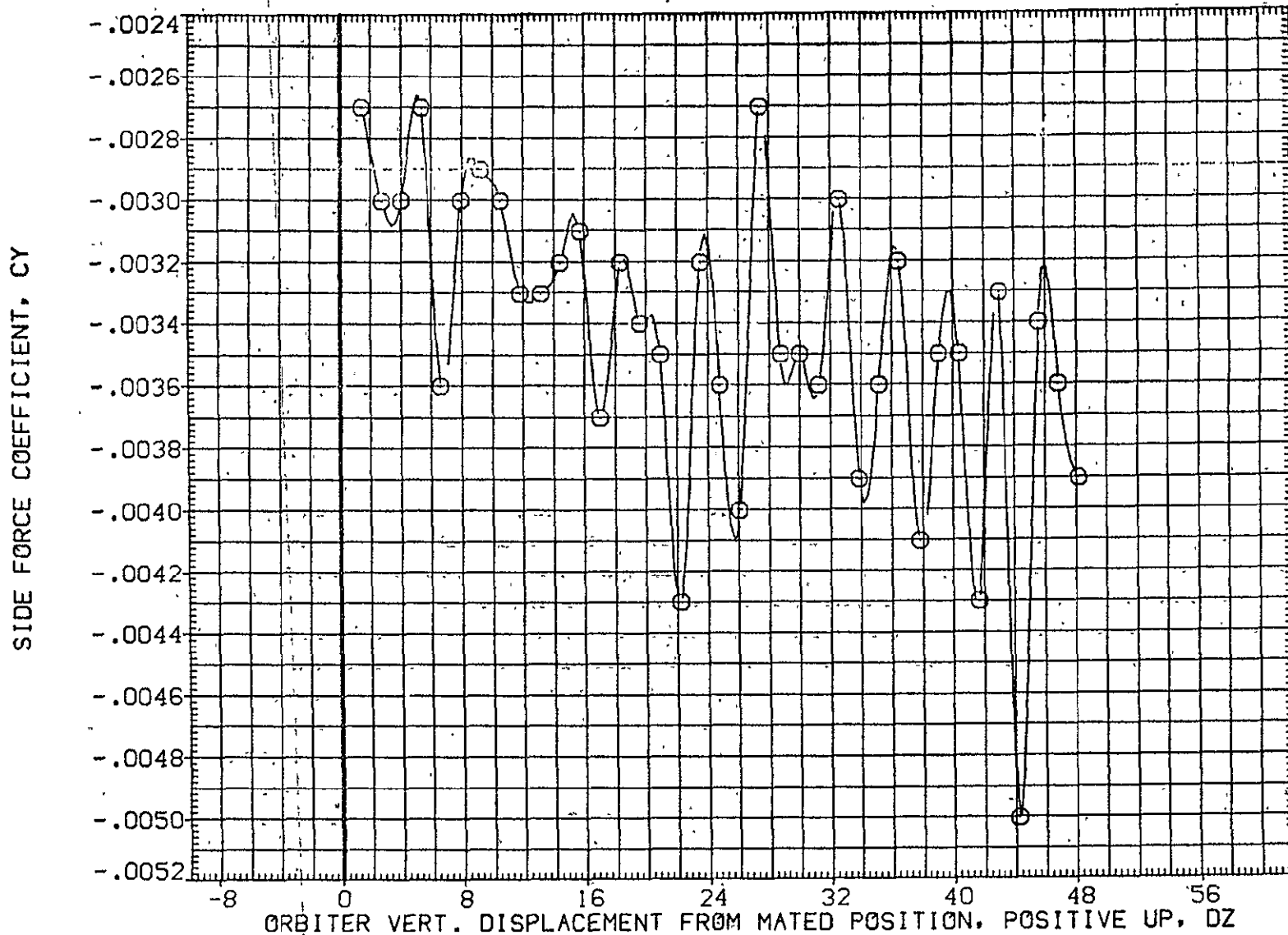


FIG. 23 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=4, BETAC=0, BETA0=0, AFE030

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE030)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.627	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		RUDDER	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

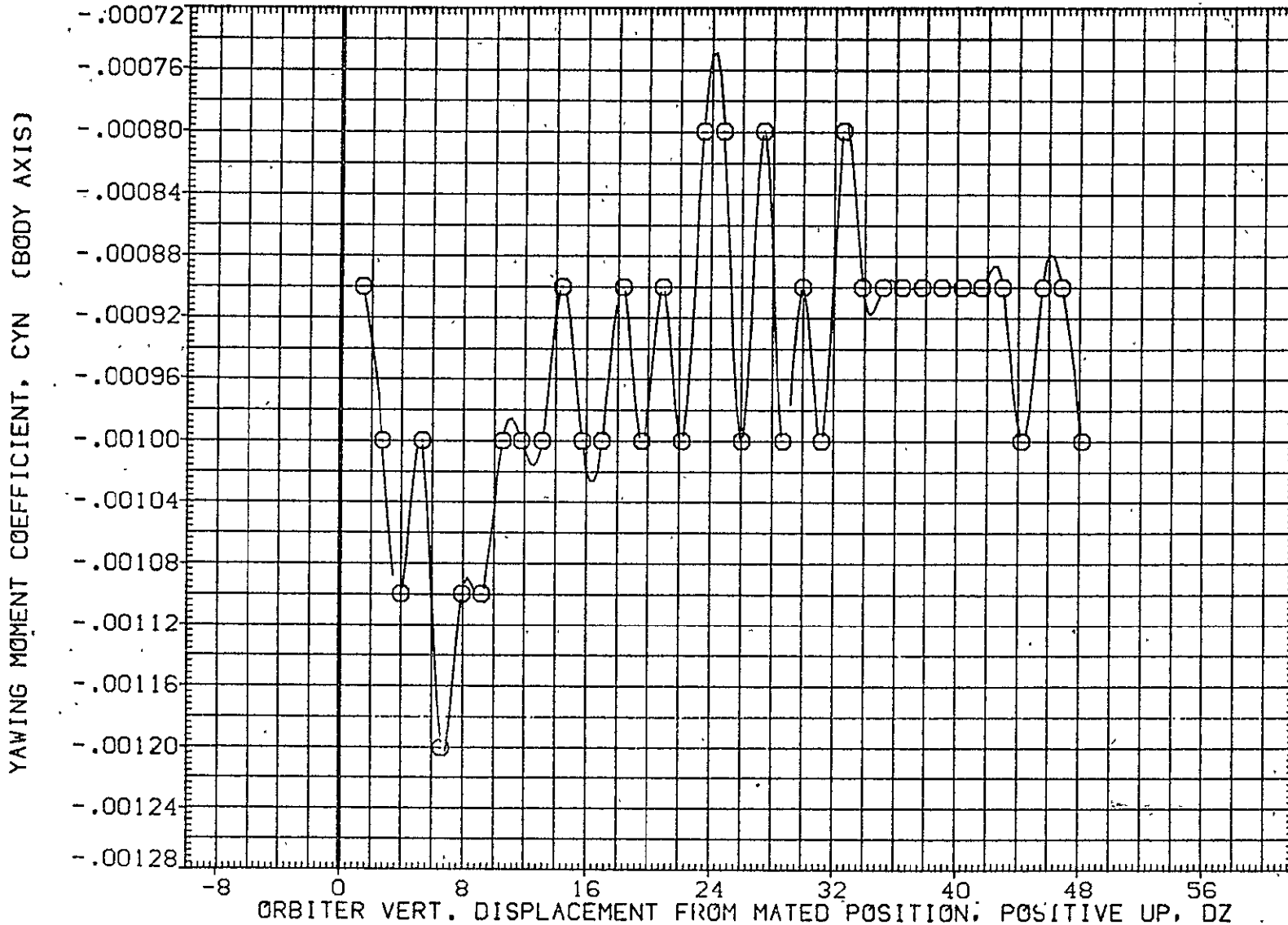


FIG. 23 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=4, BETAC=0, BETA0=0, AFE030

SYMBOL MACH
 ○ .627

PARAMETRIC VALUES			
ALPHAC	.000	BETAC	.000
STAB	5.000	ELEVON	5.000
RUDDER	.000	DX	.000
DY	.000	IORB	4.000
BETA0	.000	DPHI	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0125	

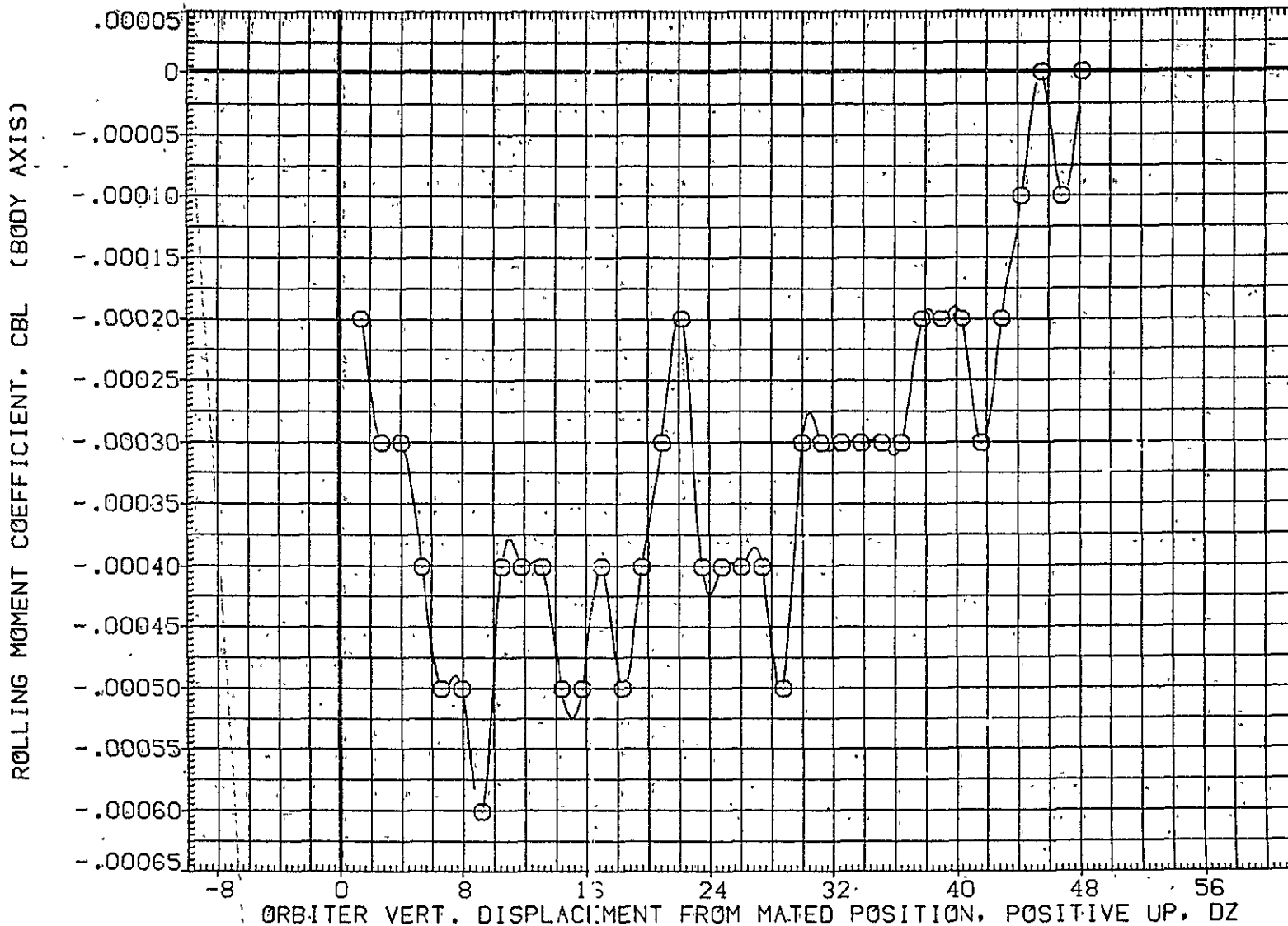


FIG. 23 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=4, BETAC=0, BETA0=0, AFE030

LTV44-559(CA26) 747/1 ATY 32 S1 (ORBITER DATA) (AFE030)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.627	ALPHAC	.000	BETAC	.0110	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.0110	LREF	474.8100	IN.
		RUDDER	.000	DX	.0110	BREF	936.6800	IN.
		DY	.000	ICRB	4.0110	XMRP	1109.0000	IN. X0
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

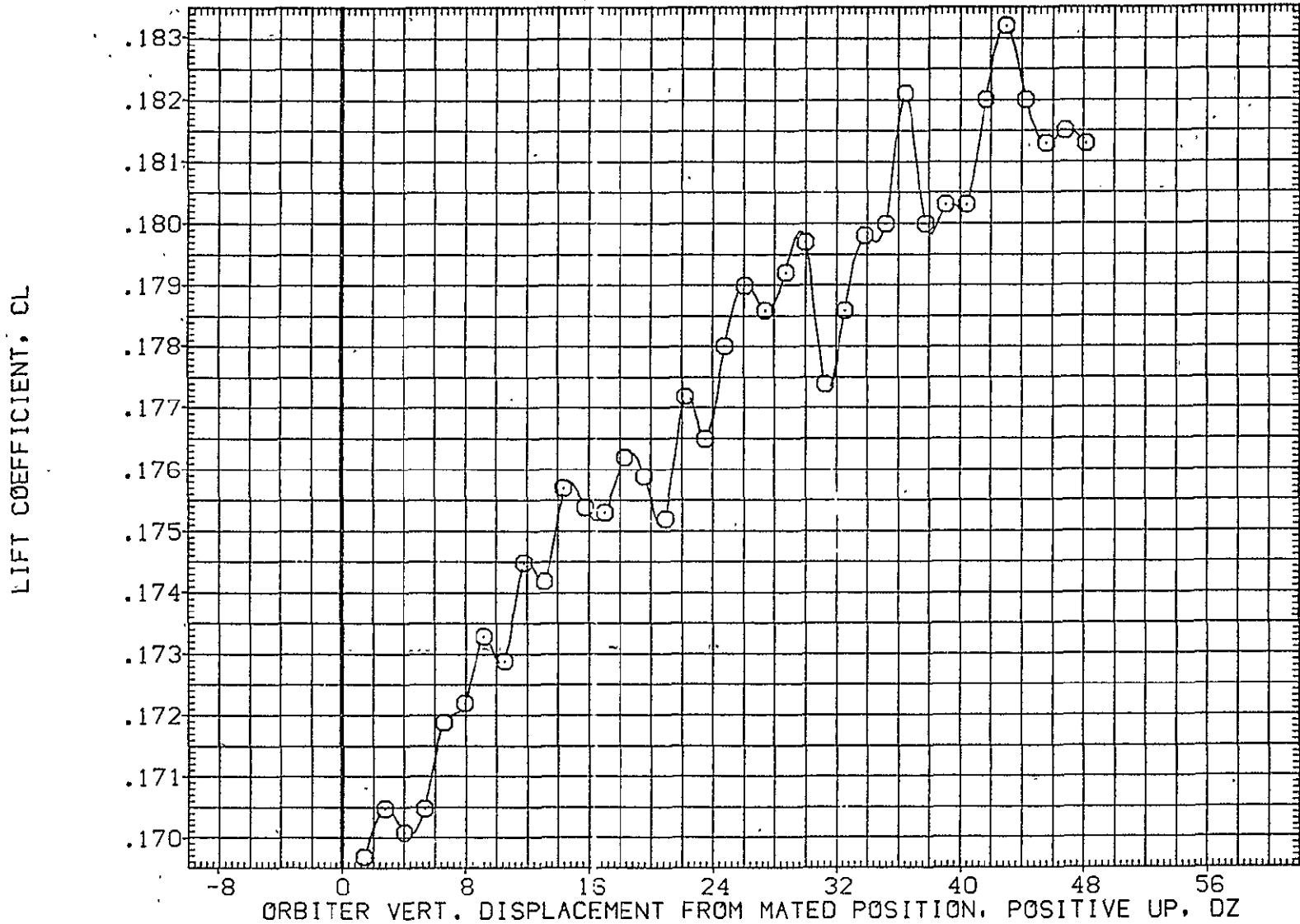


FIG. 23 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, ICRB=4, BETAC=0, BETA0=0, AFE030

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	IN.	IN.
○	.627	.000	.000	5.000	.000	2690.0000	59.0000	59.0000
		STAB	ELEVON	5.000	5.000	LREF	474.8100	IN.
		RUDDER	DX	.000	.000	BREF	936.6800	IN.
		DY	IORB	.000	4.000	XMRP	1109.0000	IN. X
		BETA0	DPHI	.000	.000	YMRP	.0000	IN. Y
						ZMRP	375.0000	IN. Z
						SCALE	.0125	

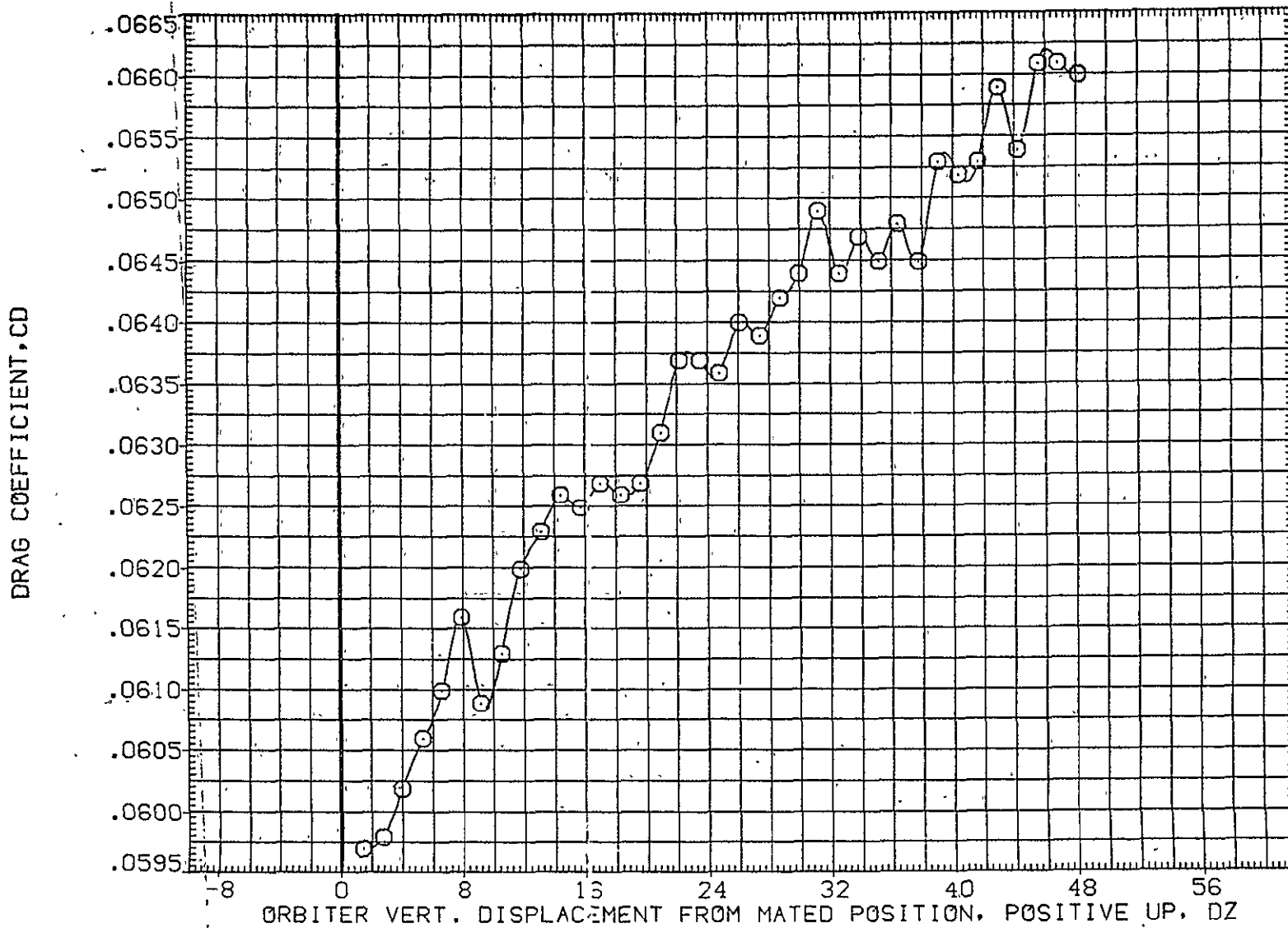


FIG. 23 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=4, BETAC=0, BETA0=0, AFE030

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE031)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	IN.	SQ.FT
○	.622	.000	.000	5.000	.000	2690.0000	474.8100	IN.
		.000	.000	.000	.000	936.6800	1109.0000	IN. X
		.000	.000	.000	.000	.0000	375.0000	IN. Y
		.000	.000	.000	.000	.0125		IN. Z

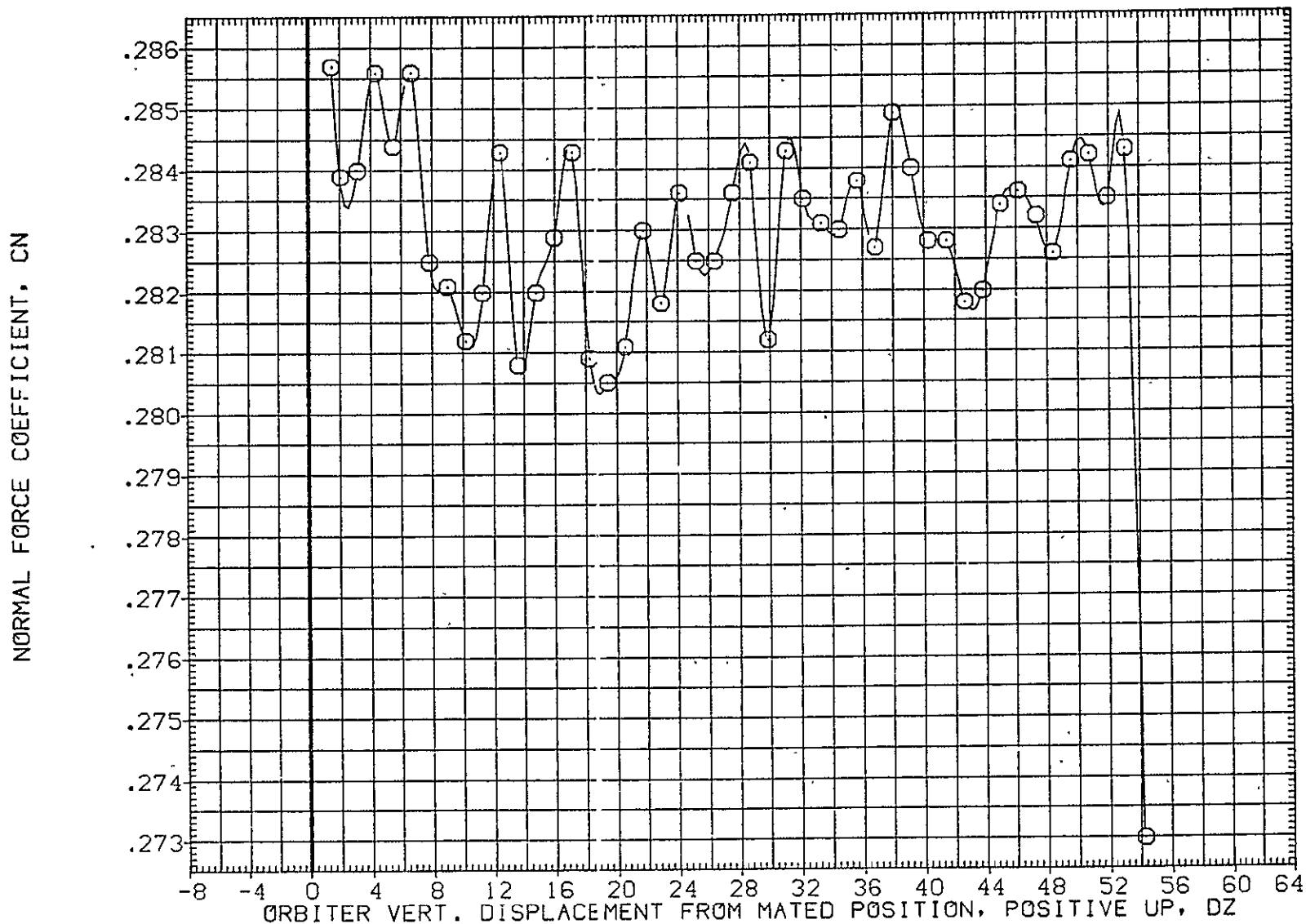


FIG. 24 ORB. DATA, CARRIER PROXIM.TY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE031

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.622	ALPHAC	.000	BETAC	.000	SREF	.2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		RUDDER	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

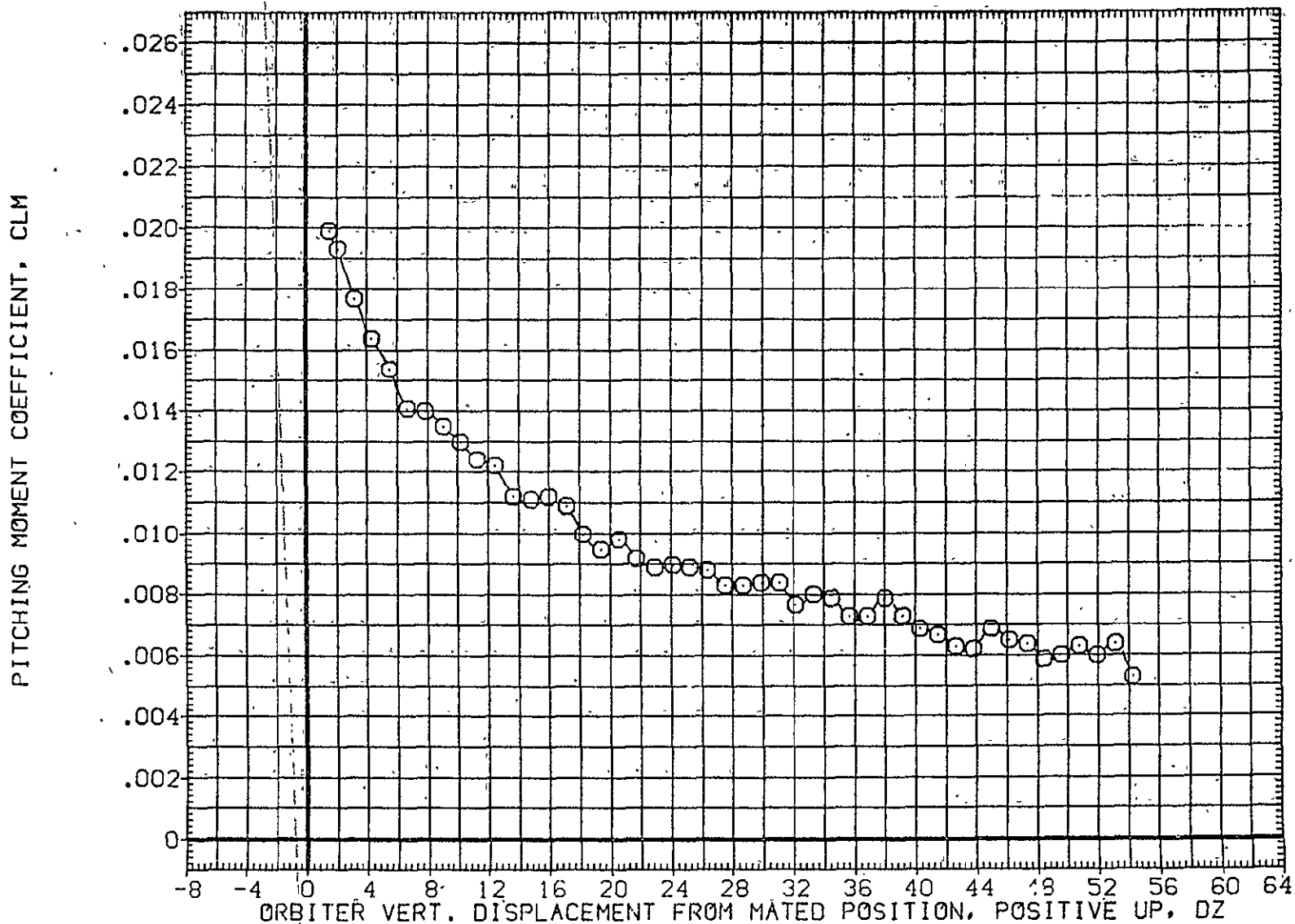


FIG. 24 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE031

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE031)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.622	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SO.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		RUDDER	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

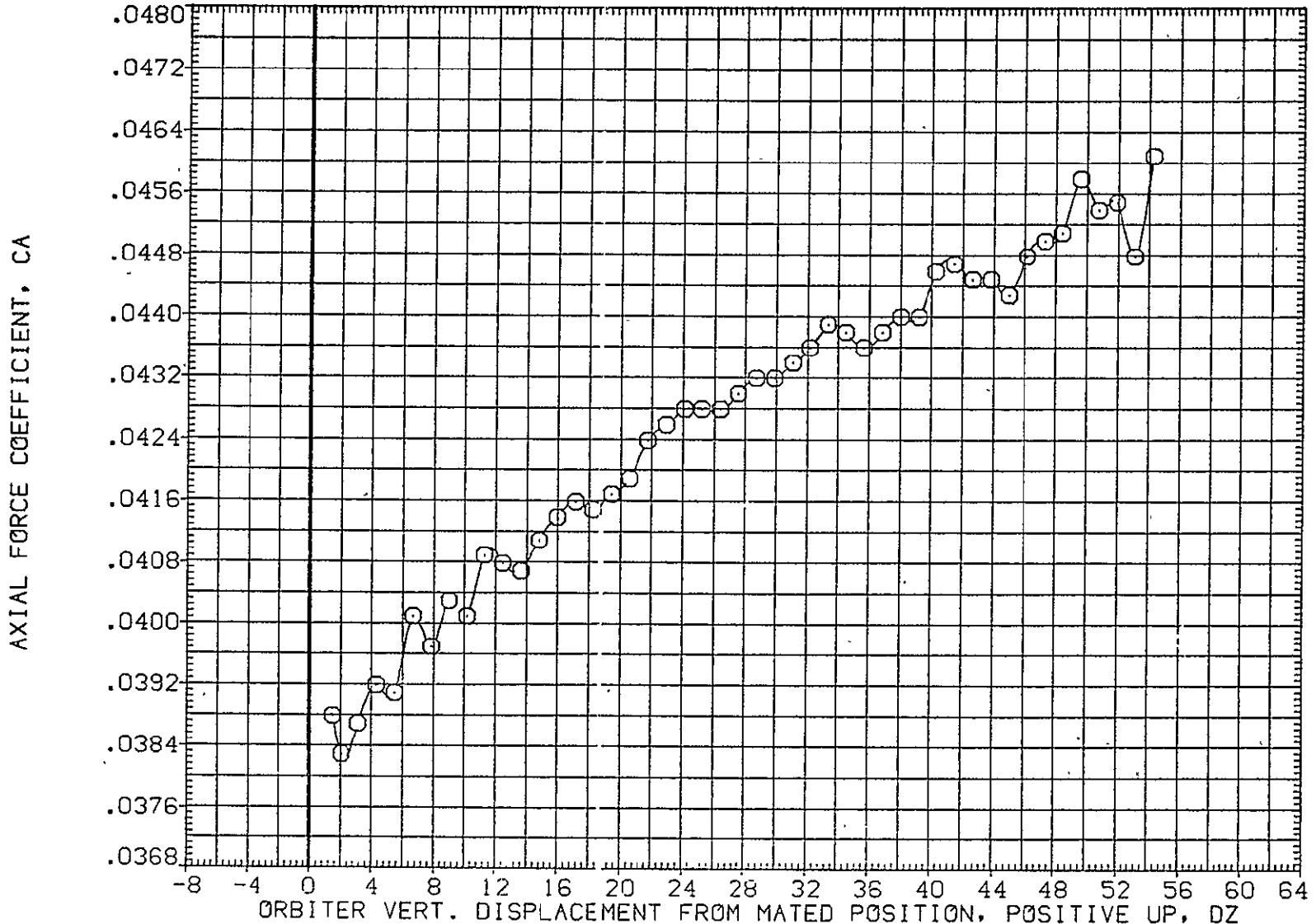


FIG. 24 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE031

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.622	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		RUDDER	.000	DX	.000	BREF	996.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. XC
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. YC
						ZMRP	375.0000	IN. ZC
						SCALE	.0125	

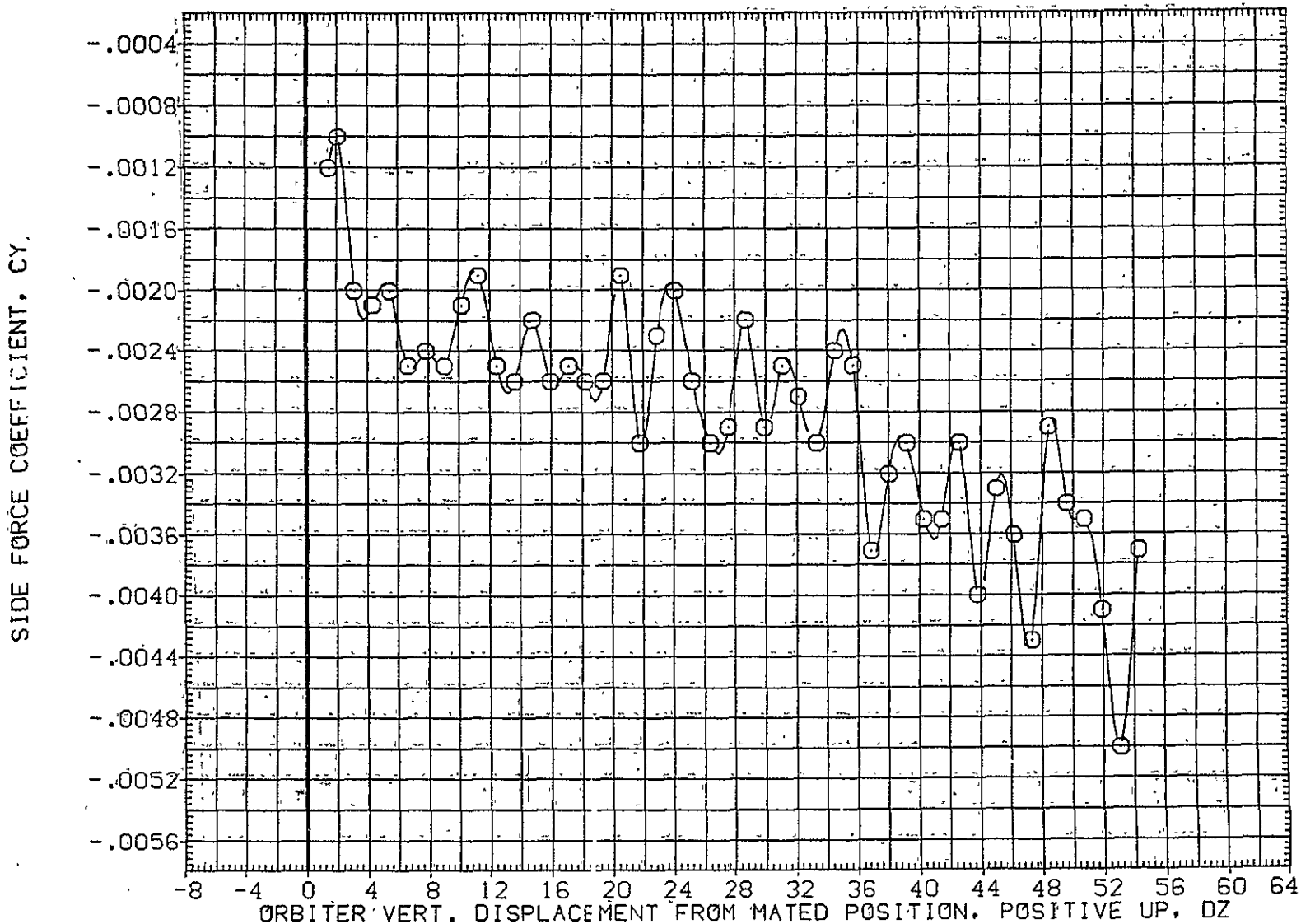


FIG. 24 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE031

LTV44-559(CA26) 747/1 ATY (12 S1 (ORBITER DATA) (AFE031)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.622	ALPHAC	.000	BETAC	.000	SREF	2890.0000	50.1
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		RUDDER	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN.
		BETA0	.000	DPHI	.000	YMRP	.0000	IN.
						ZMRP	375.0000	IN.
						SCALE	.0125	

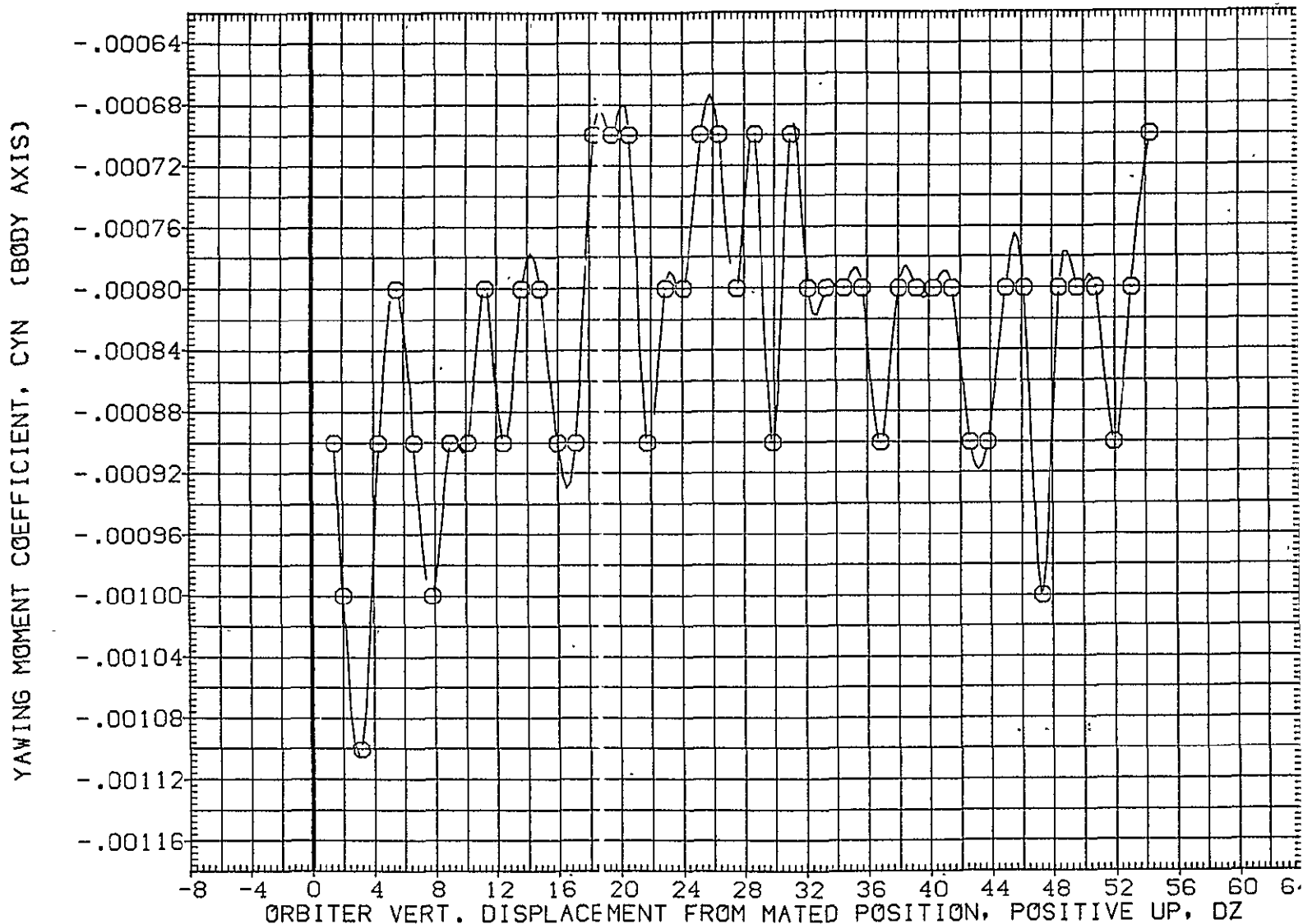


FIG. 24 ORB. DATA, CARRIER PROXIM.TY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE031

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.622	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		RUDDER	.000	OX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

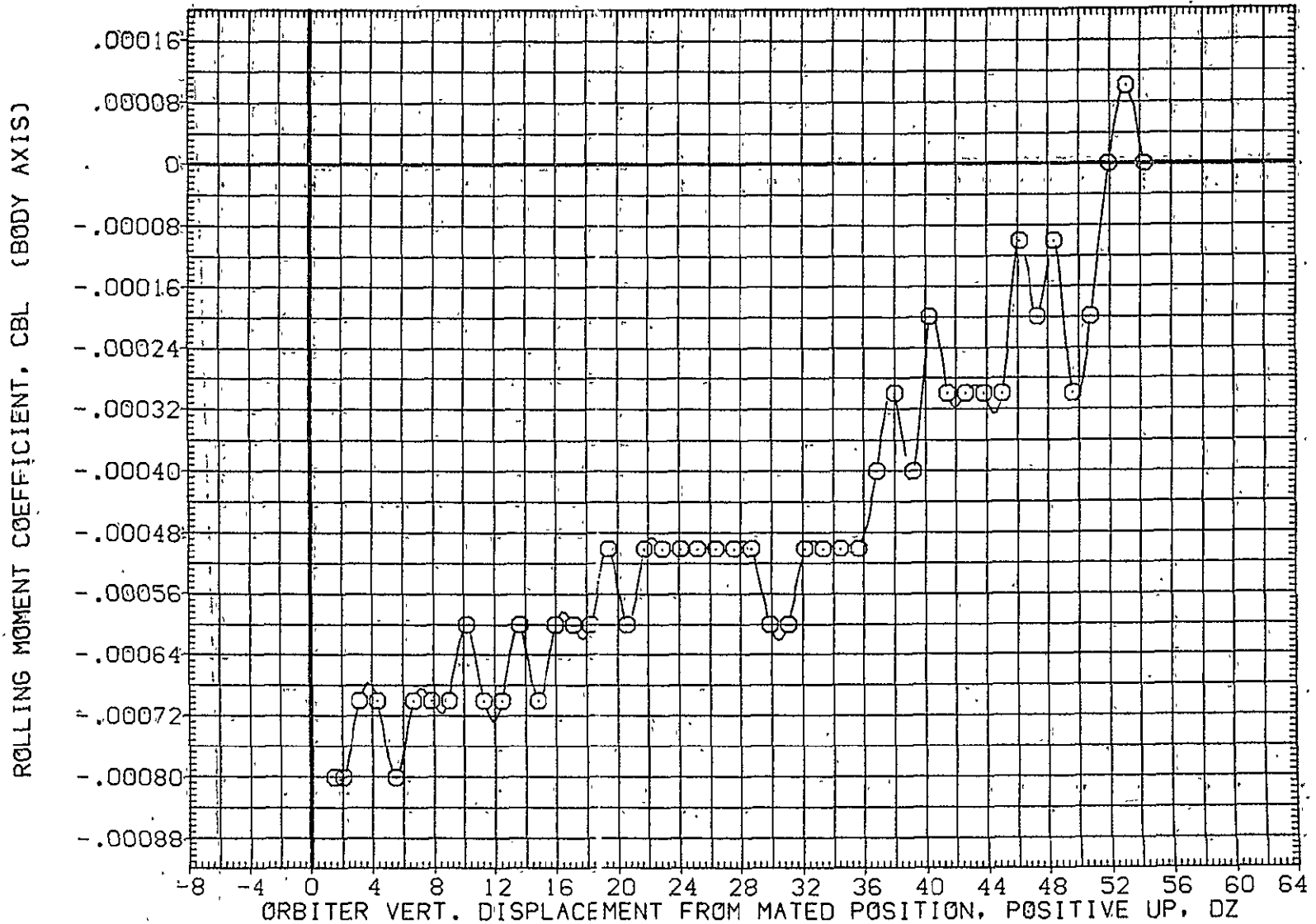


FIG. 24 ORB. DATA, CARRIER PROXIM. TY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE031

LTV44-559(CA26) 747/1 ATY (02 S1 (ORBITER DATA) (AFE031)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.622	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SO.FT
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		RUDDER	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. Y
						ZMRP	375.0000	IN. Z
						SCALE	.0125	

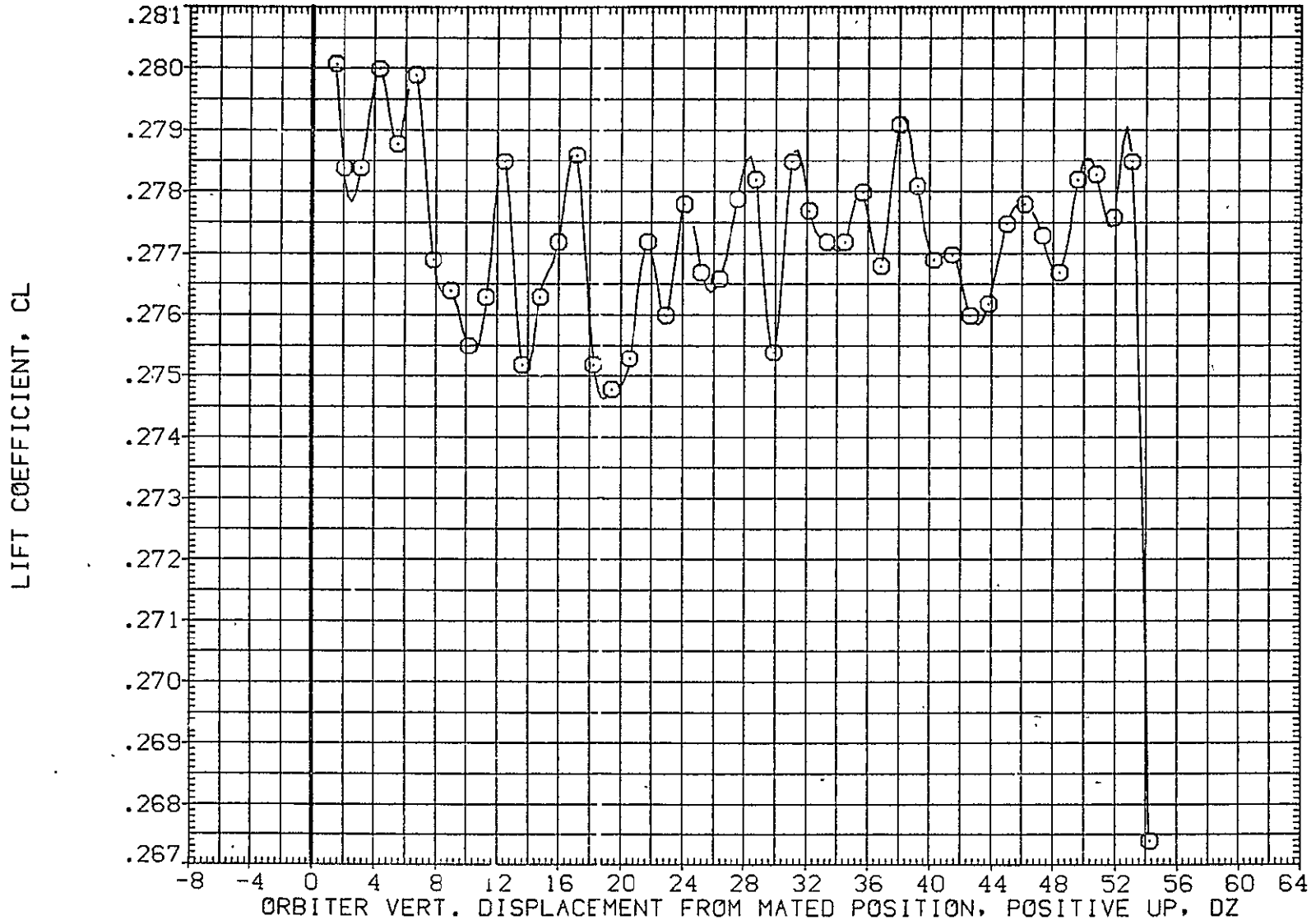


FIG. 24 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE031

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	LREF	BREF
○	.622	.000	.000	5.000	.000	2690.0000	474.8100	936.6800
		STAB			5.000			
		RUDDER			.000			
		DY		IORB	6.000	1109.0000	.0000	.0000
		BETA0		DPHI	.000	ZMRP	375.0000	
						SCALE	.0125	

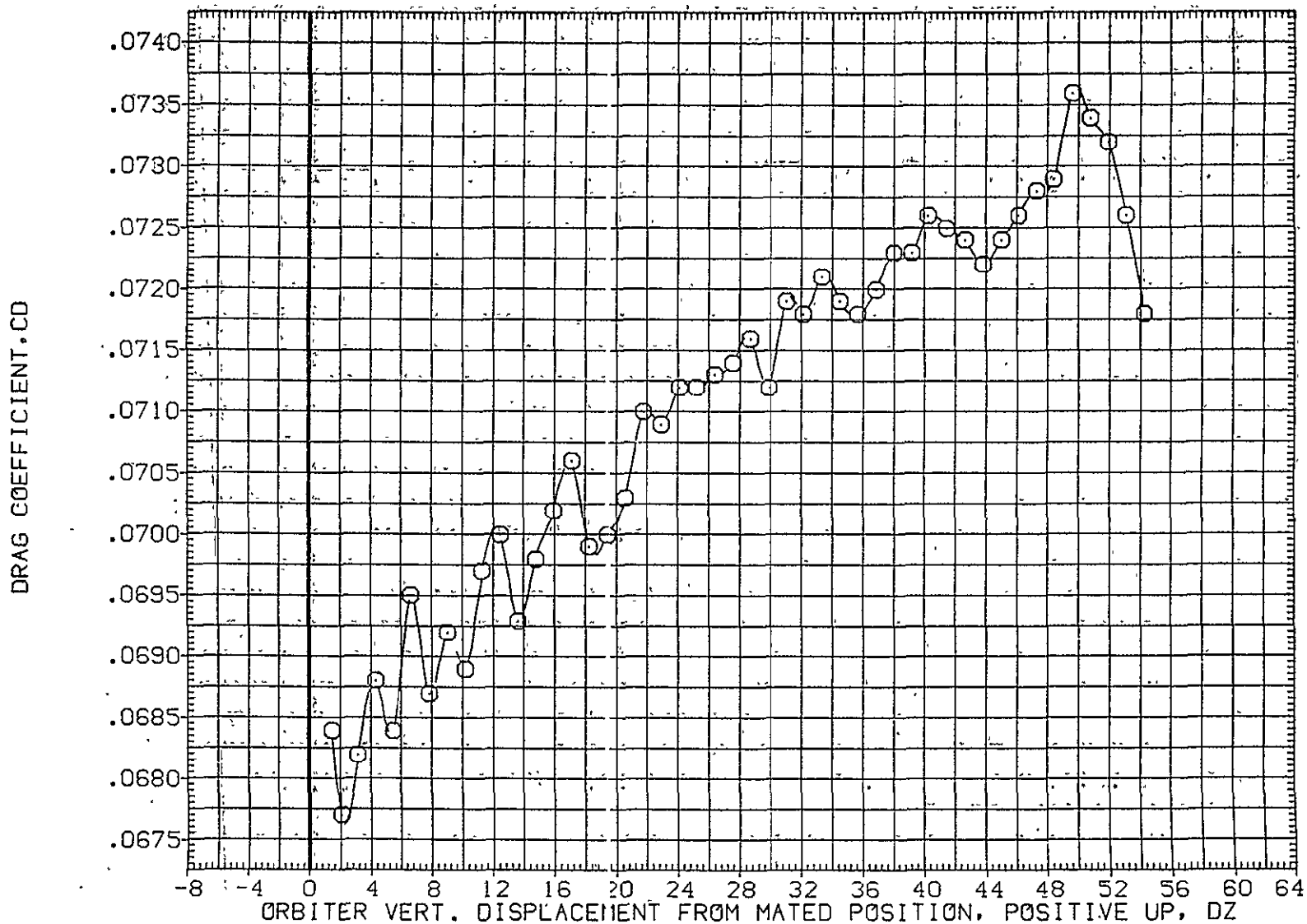


FIG. 24 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE031

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE032)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.622	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		RUDDER	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. XI
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. YI
						ZMRP	375.0000	IN. ZI
						SCALE	.0125	

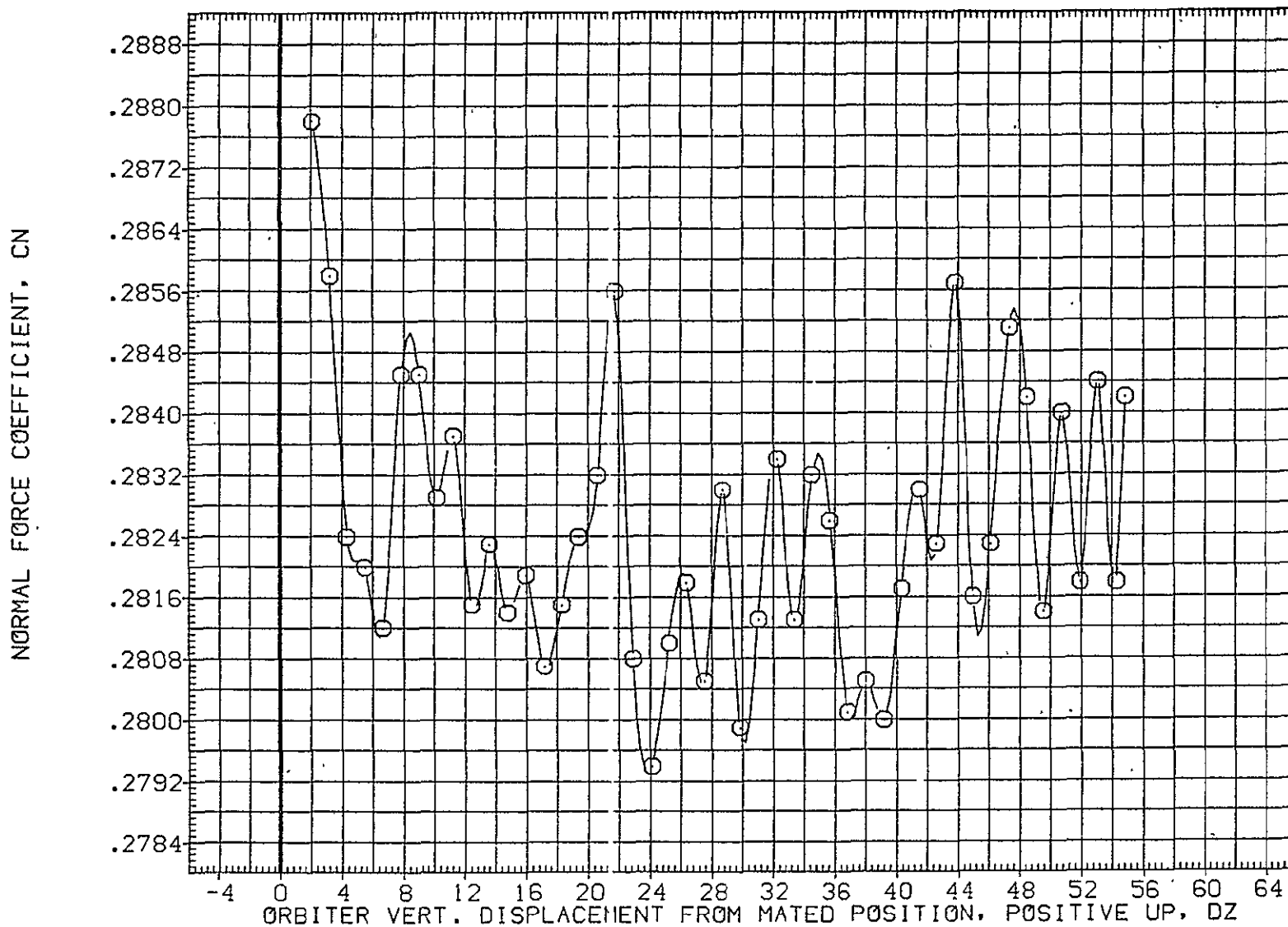


FIG. 25 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE032

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.622	ALPHAC	.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		RUDDER	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

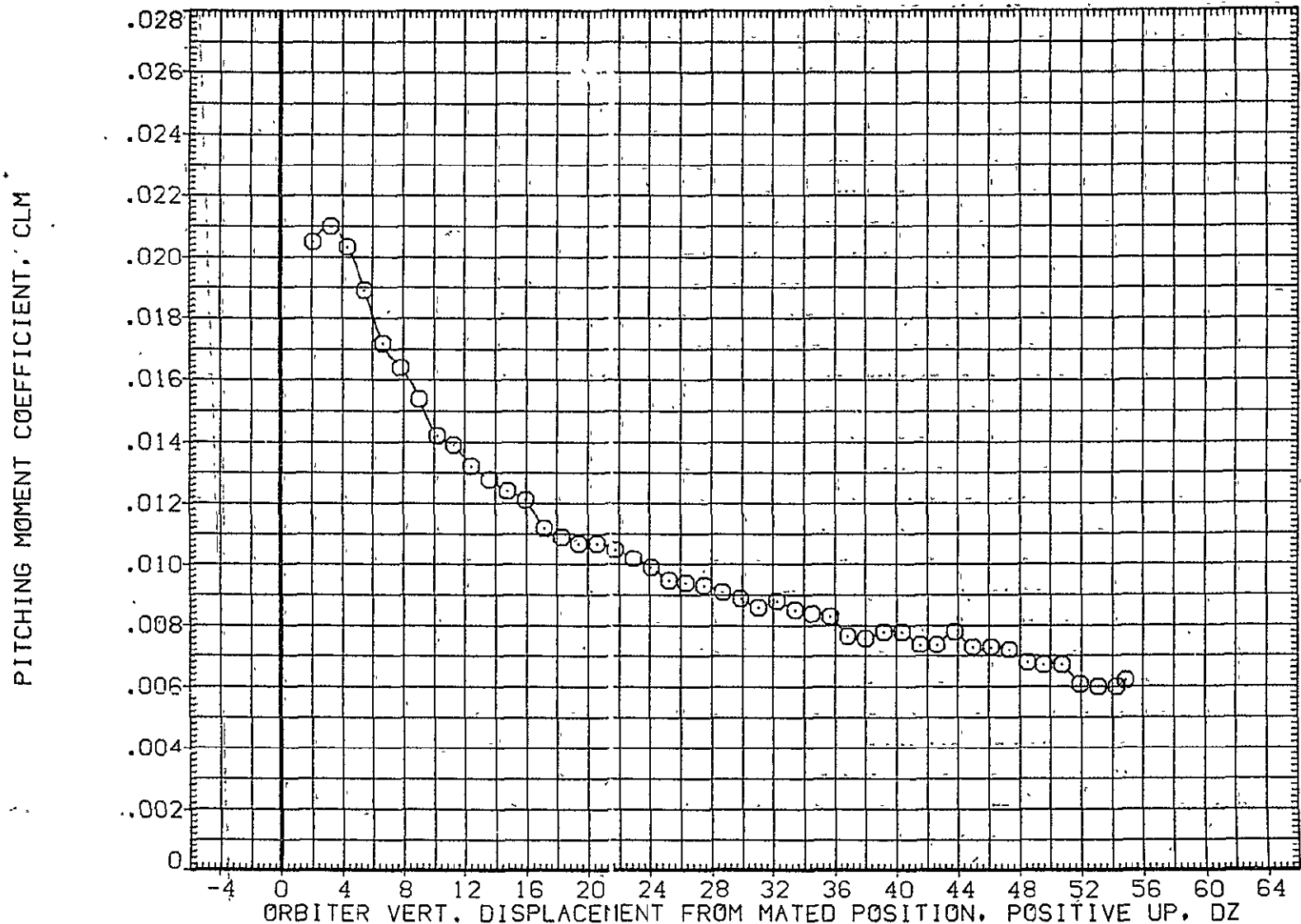


FIG. 25 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE032

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE032)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.622	ALPHAC	.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		RUDDER	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

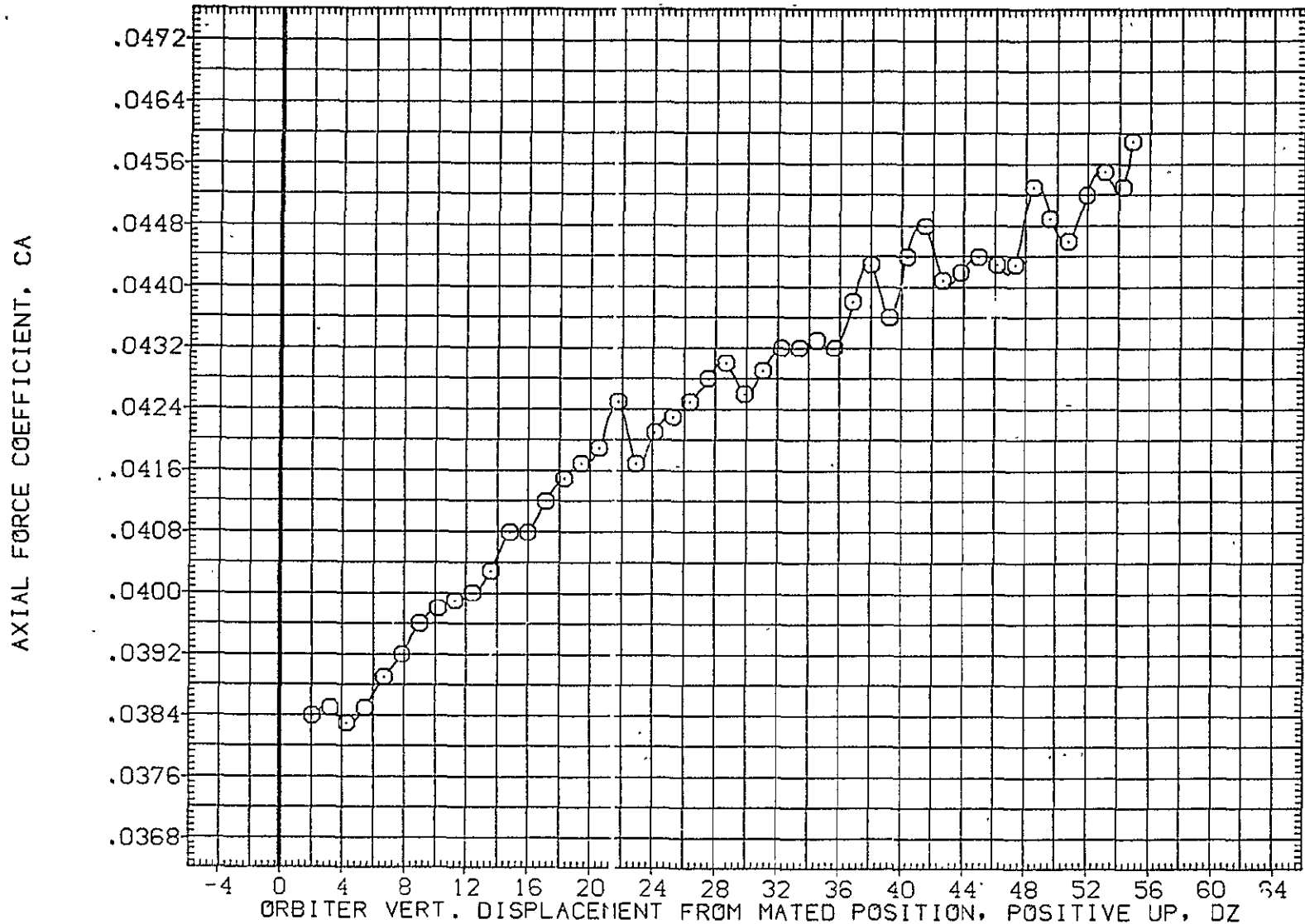


FIG. 25 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE032

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.622	ALPHAC	.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		RUDDER	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

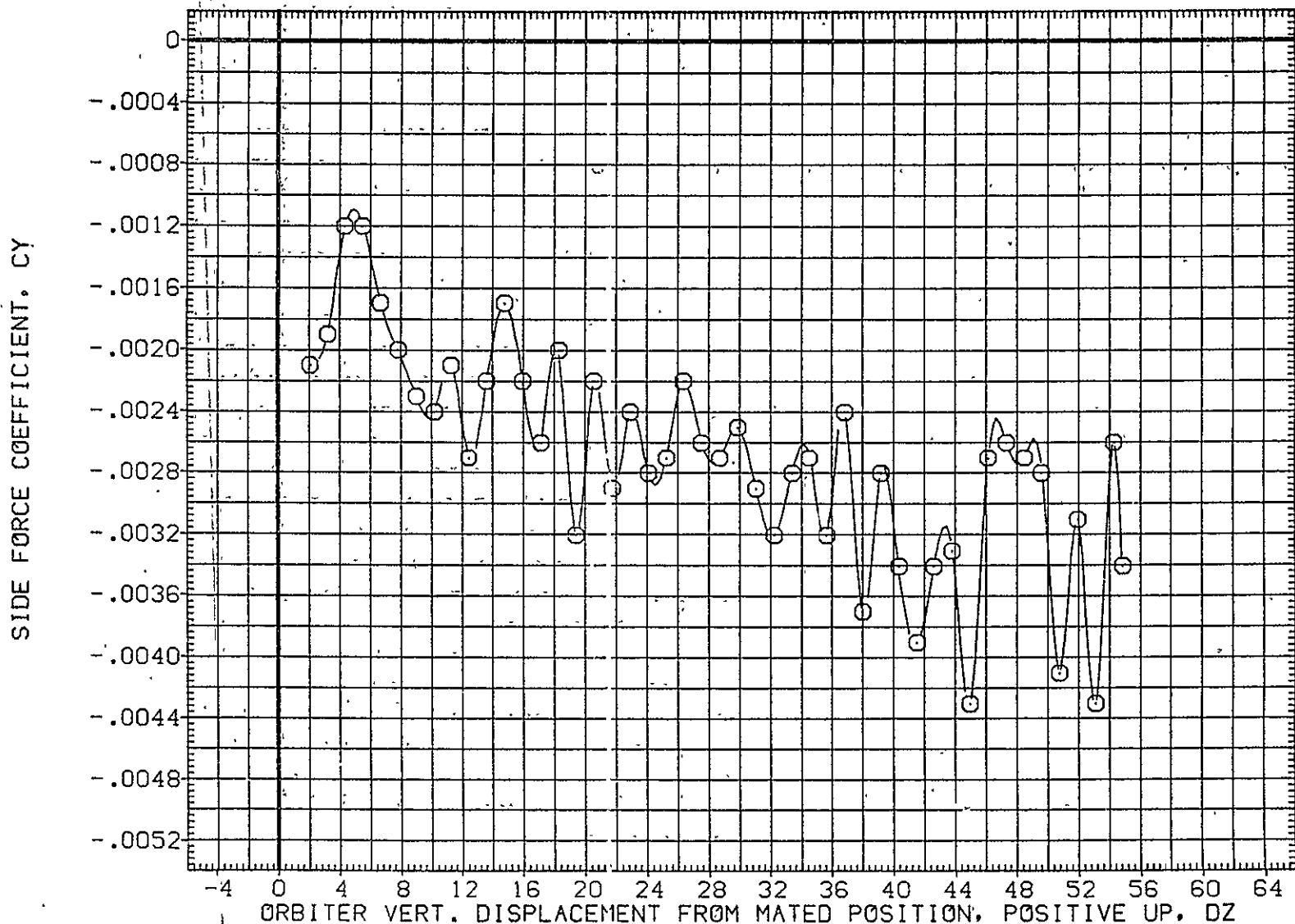


FIG. 25 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE032

LTV44-559(CA26) 747/1 ATY 0? S1 (ORBITER DATA) (AFE032)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.622	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SD.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		RUDDER	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	



FIG. 25 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE032

SYMBOL	MACH	PARAMETRIC VALUES			
○	.622	ALPHAC	.000	BETAC	.000
		STAB	5.000	ELEVON	5.000
		RUDDER	.000	OX	.000
		DY	.000	IORB	6.000
		BETA0	.000	DPHI	.000

REFERENCE INFORMATION		
SREF	2690.0000	IN. SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

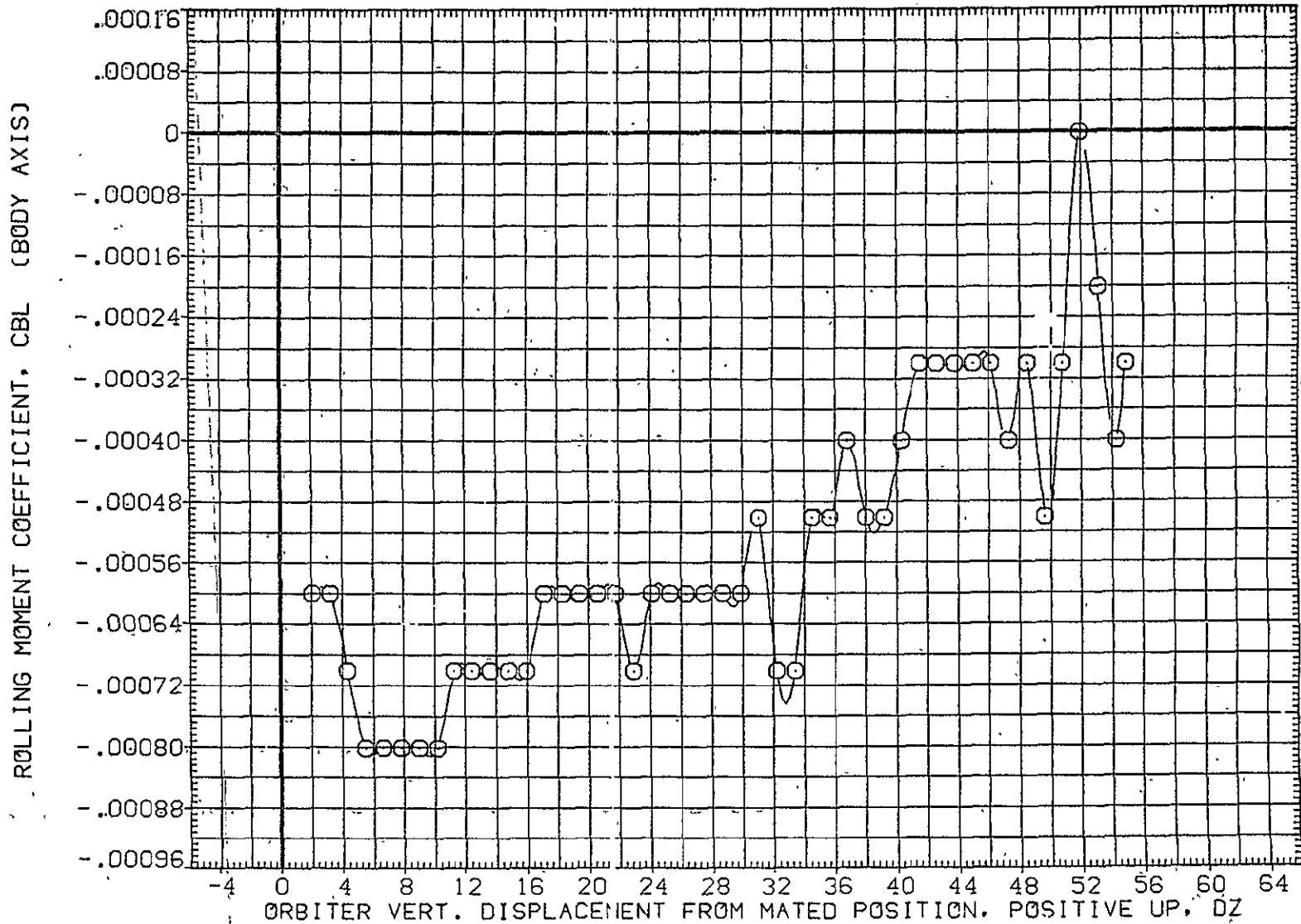


FIG. 25 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0; AFE032

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE032)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.622	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		RUDDER	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

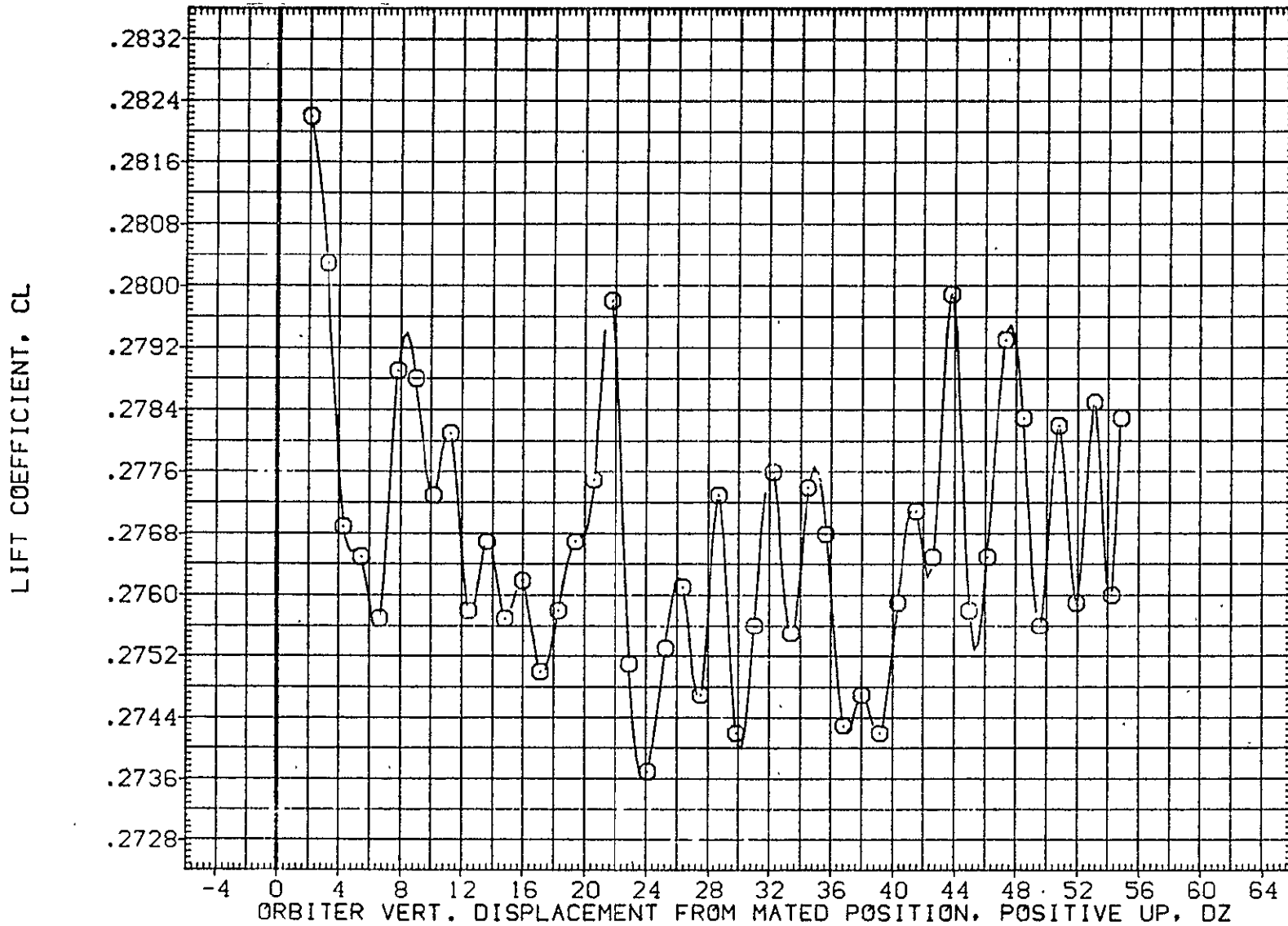


FIG. 25 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE032

SYMBOL
○

MACH
.622

PARAMETRIC. VALUES			
ALPHAC	.000	BETAG	.000
STAB	5.000	ELEVON	5.000
RUDDER	.000	DX	.000
DY	.000	IORB	6.000
BETA0	.000	DPHI	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

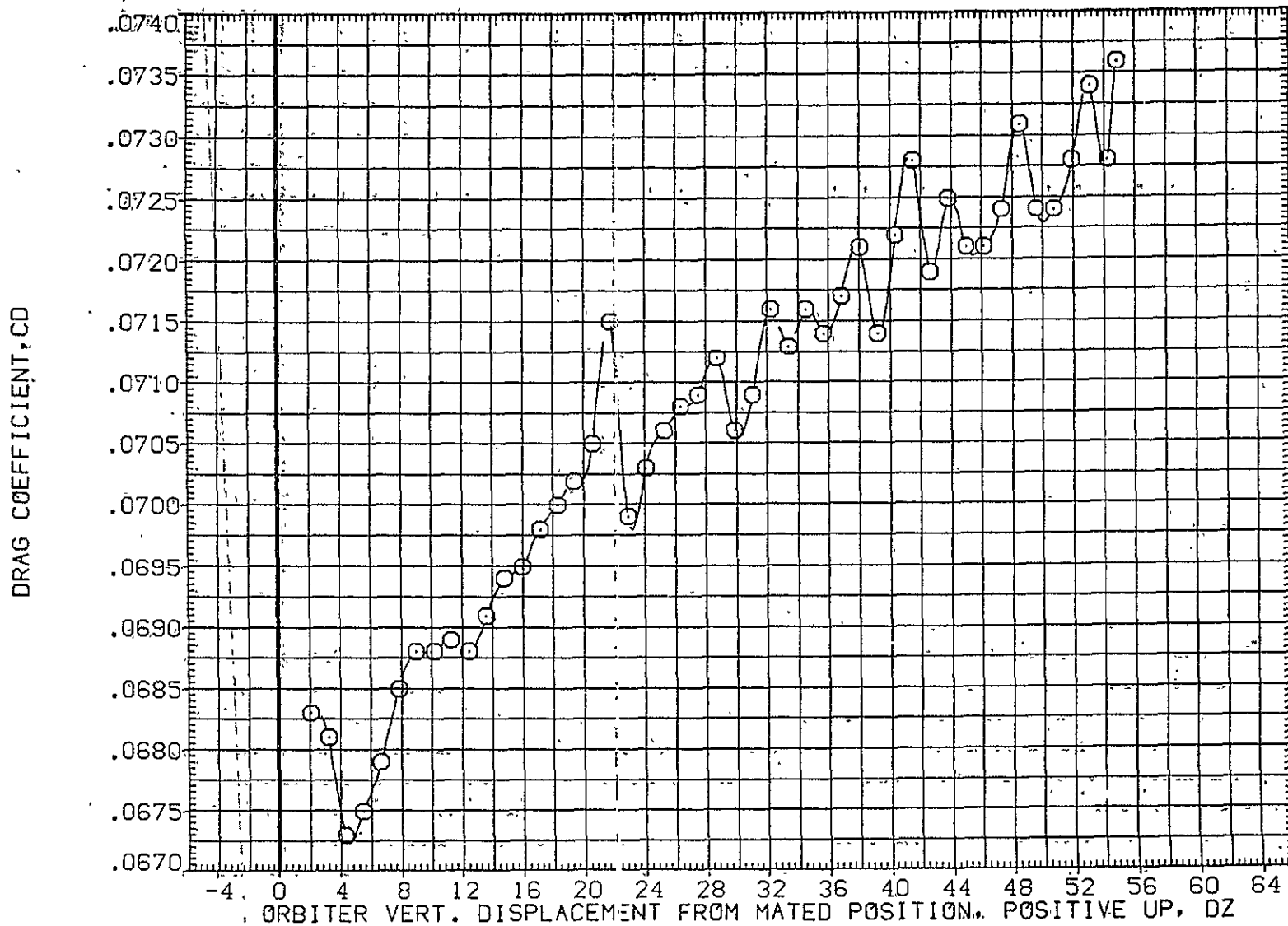


FIG. 25 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAG=0, BETA0=0, AFE032

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE033)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.617	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BOFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

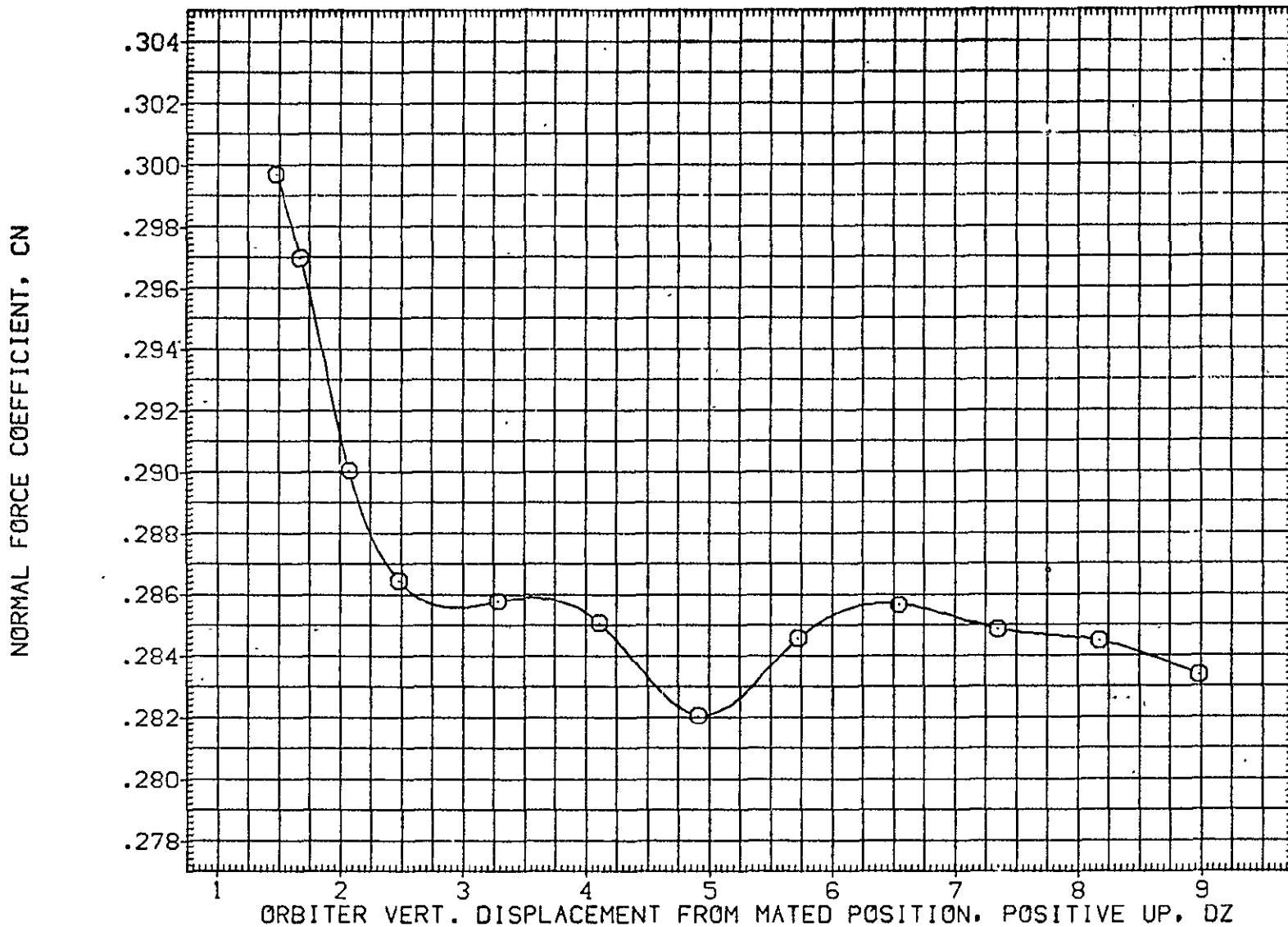


FIG. 26 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE033

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION									
		ALPHAC	BETAC	ELEVON	DX	SREF	LREF	BREF	XMRP	YMRP	ZMRP	SCALE	SO.FT.		
○	.617	.000	.000	5.000	.000	.000	.000	2690.0000	474.8100	936.6800	1109.0000	.0000	375.0000	.0125	IN.
		.000	.000	6.000	.000	.000	.000								IN.
		.000	.000		.000	.000	.000								IN.
		.000	.000		.000	.000	.000								IN.
		.000	.000		.000	.000	.000								IN.

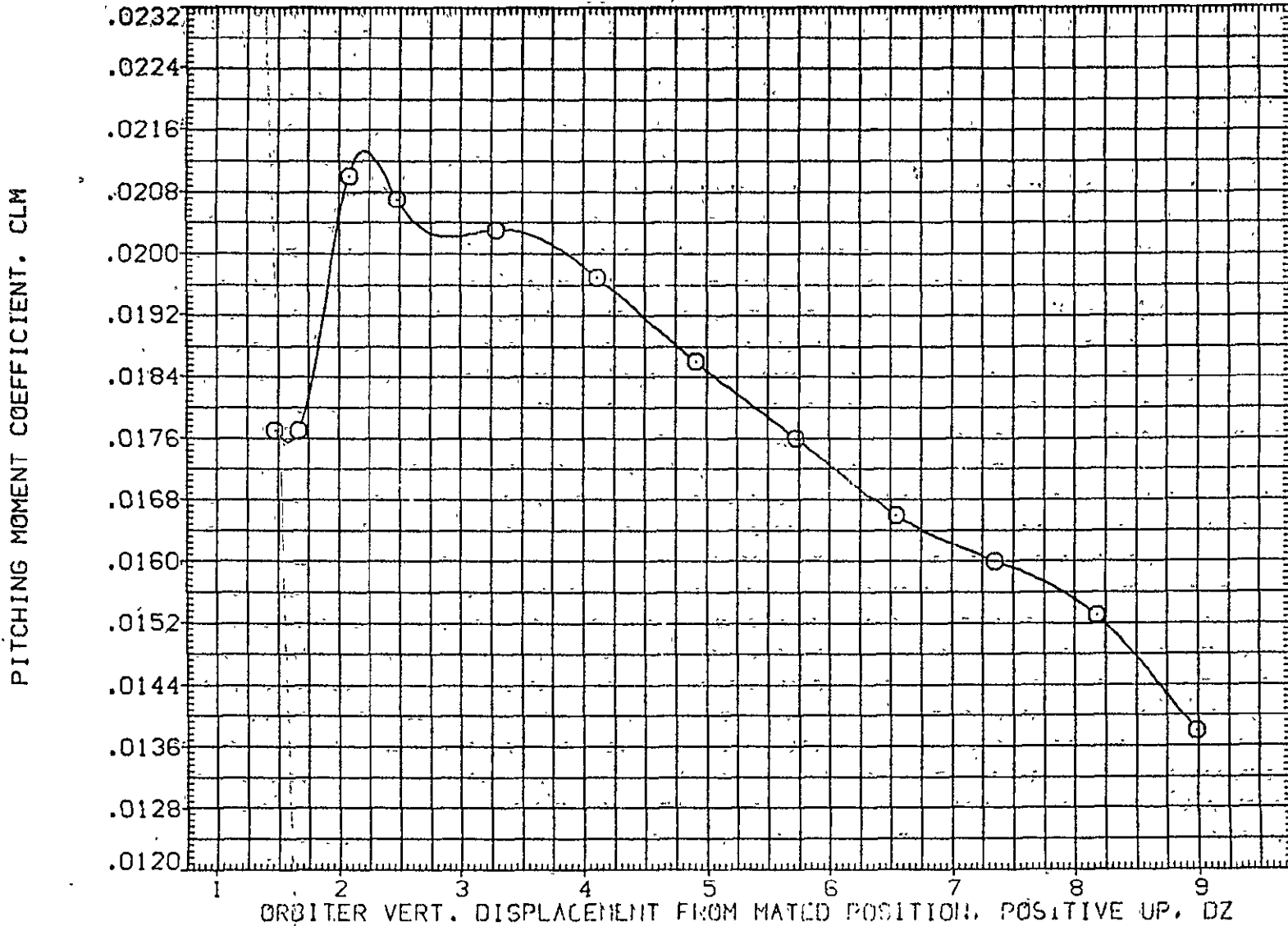


FIG. 26 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE033

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE033)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.617	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		OY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

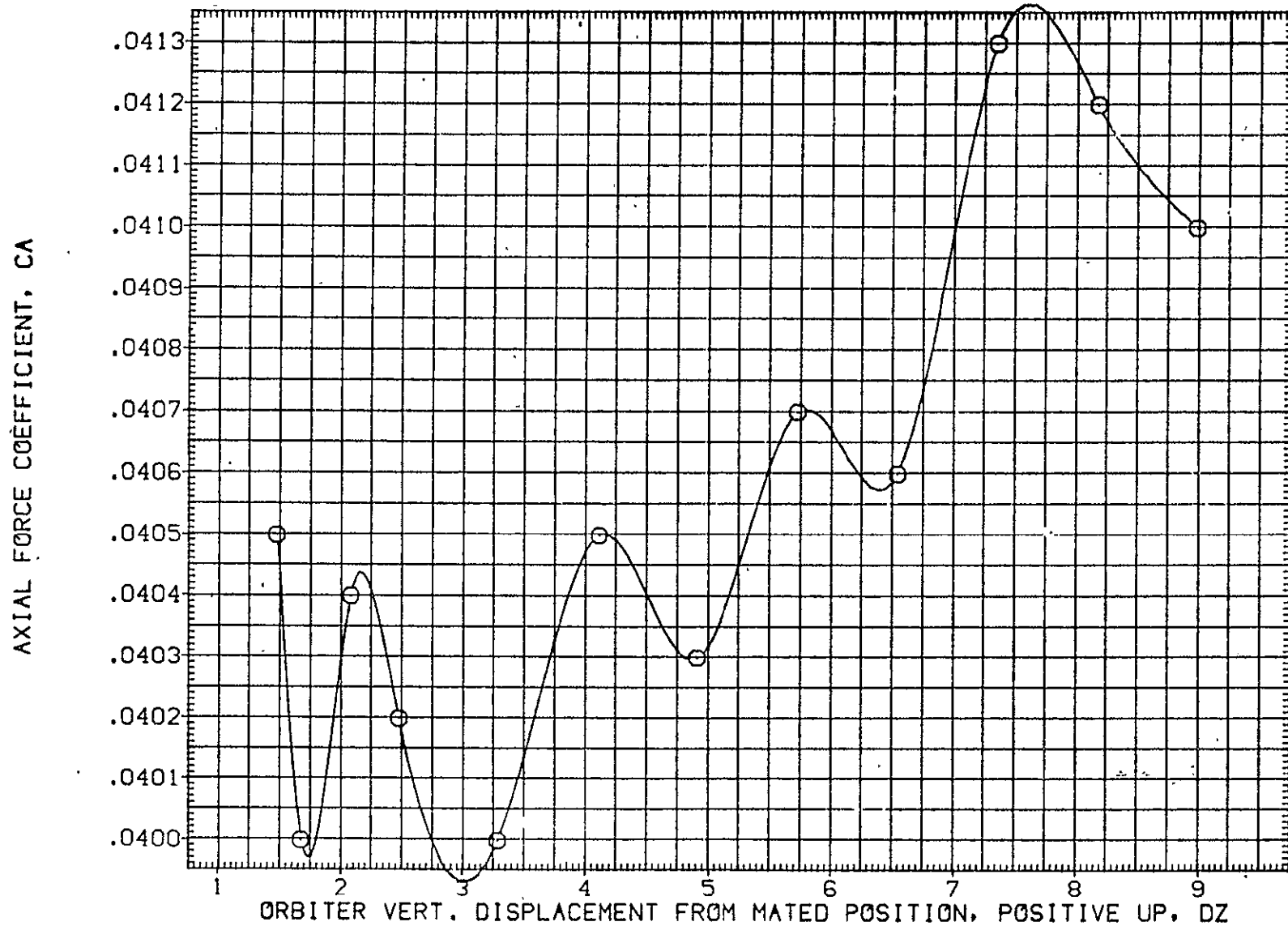


FIG. 26 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE033

SYMBOL MACH
 ○ .617

PARAMETRIC VALUES			
ALPHAC	.000	BETAC	.000
STAB	5.000	ELEVON	5.000
BDFLAP	.000	DX	.000
DY	.000	IORB	6.000
BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

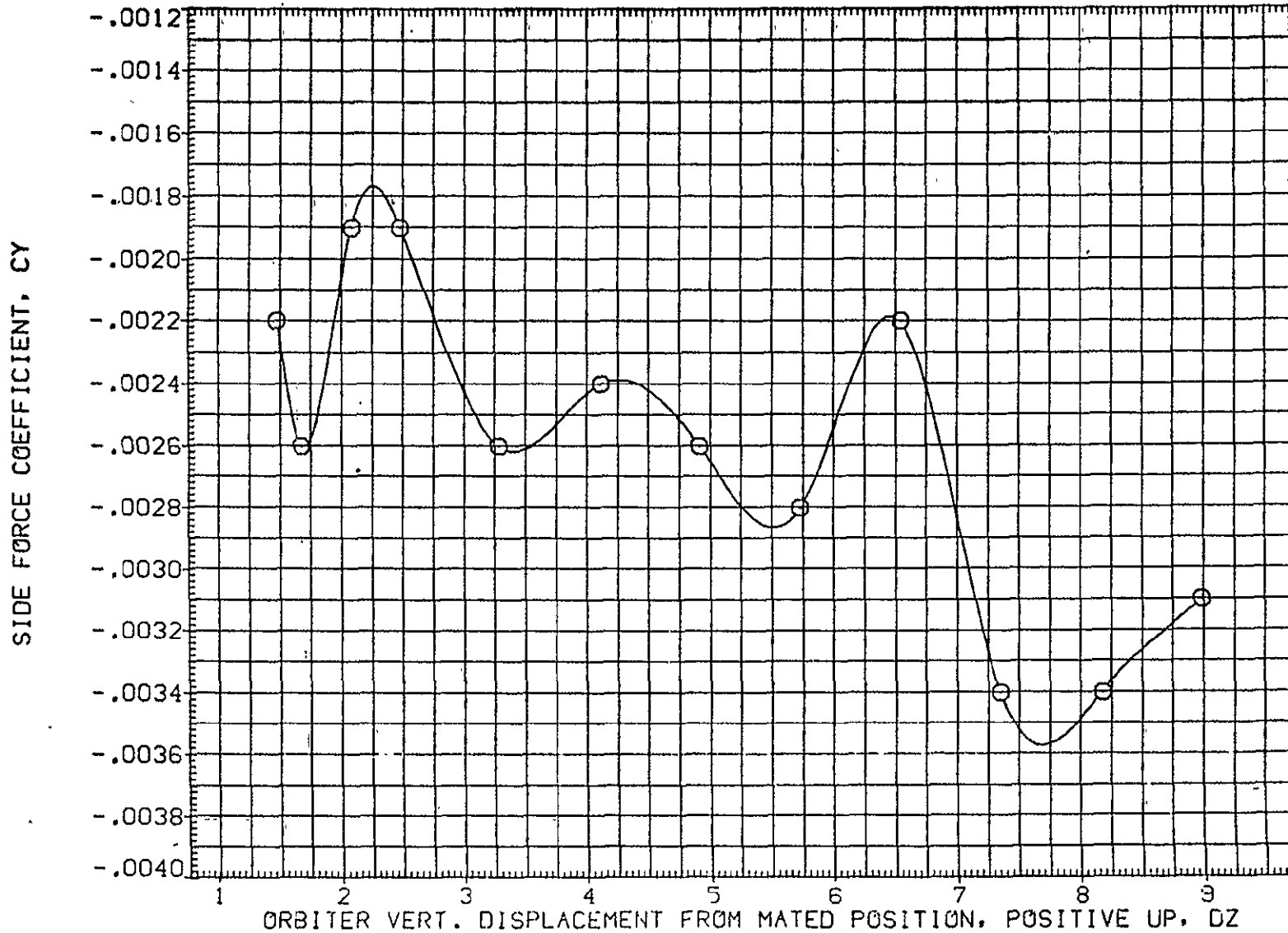


FIG. 26 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE033

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE033)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.617	ALPHAC	.000	BETAC	.000
		STAB	5.000	ELEVON	5.000
		BDFLAP	.000	DX	.000
		DY	.000	IORB	6.000
		BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

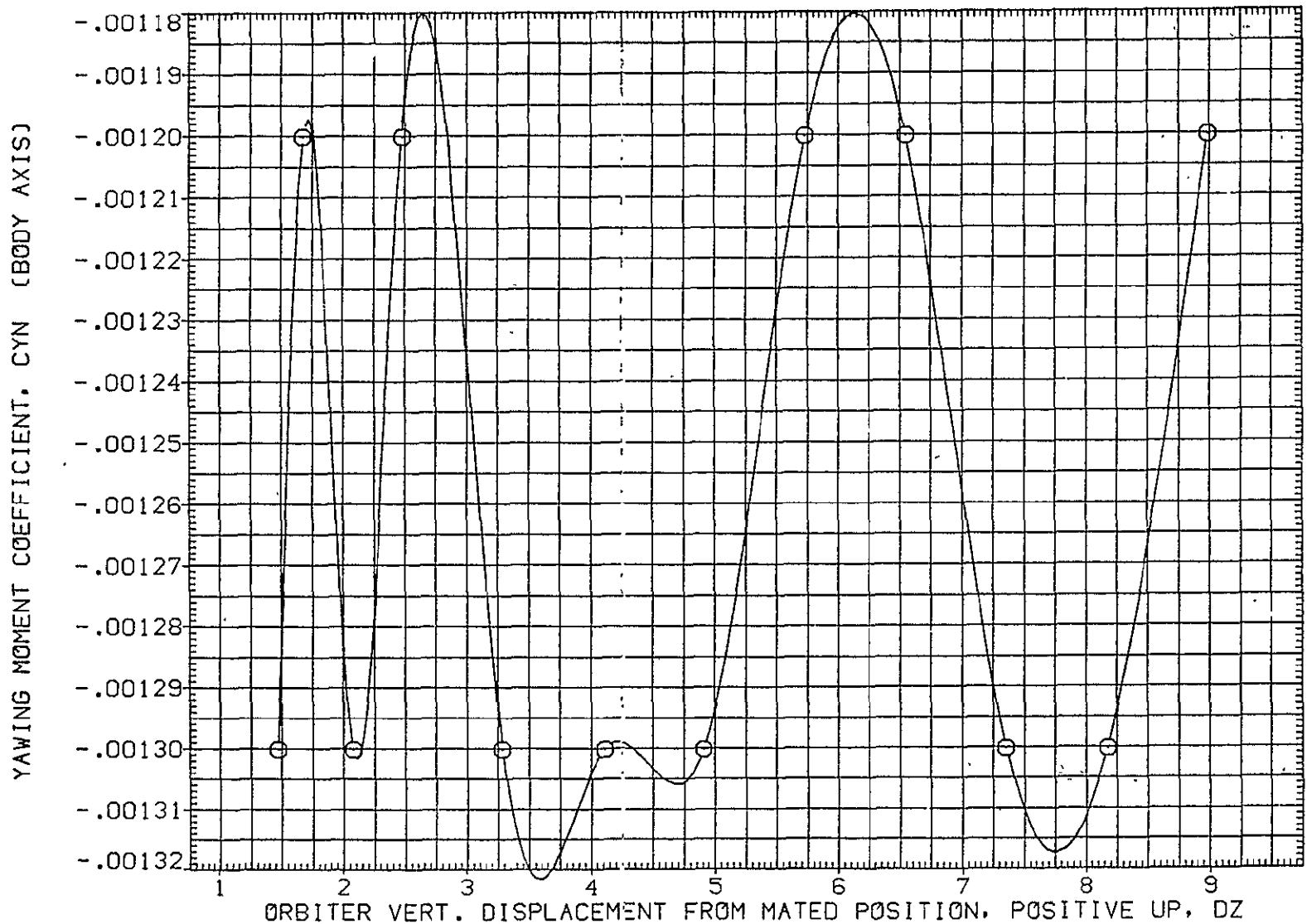


FIG. 26 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE033

SYMBOL	MACH	PARAMETRIC VALUES			
○	.617	ALPHAC	.000	BETAC	.000
		STAB	5.000	ELEVON	5.000
		BDFLAP	.000	DX	.000
		DY	.000	IORB	6.000
		BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SO, FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

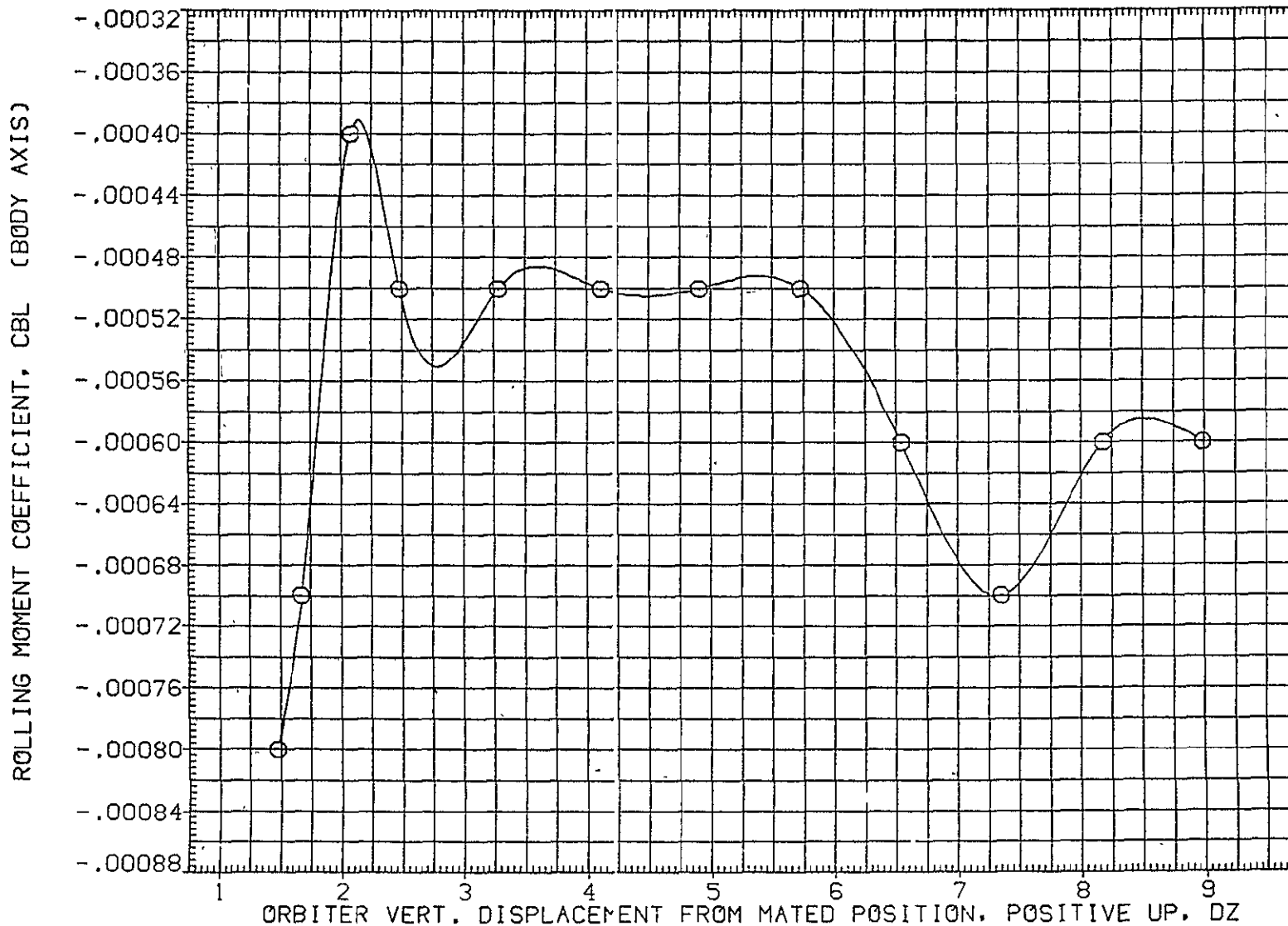


FIG. 26 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE033

LTV44-559(CA26) 747/1 ATY 02: S1 (ORBITER DATA) (AFE033)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.617	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

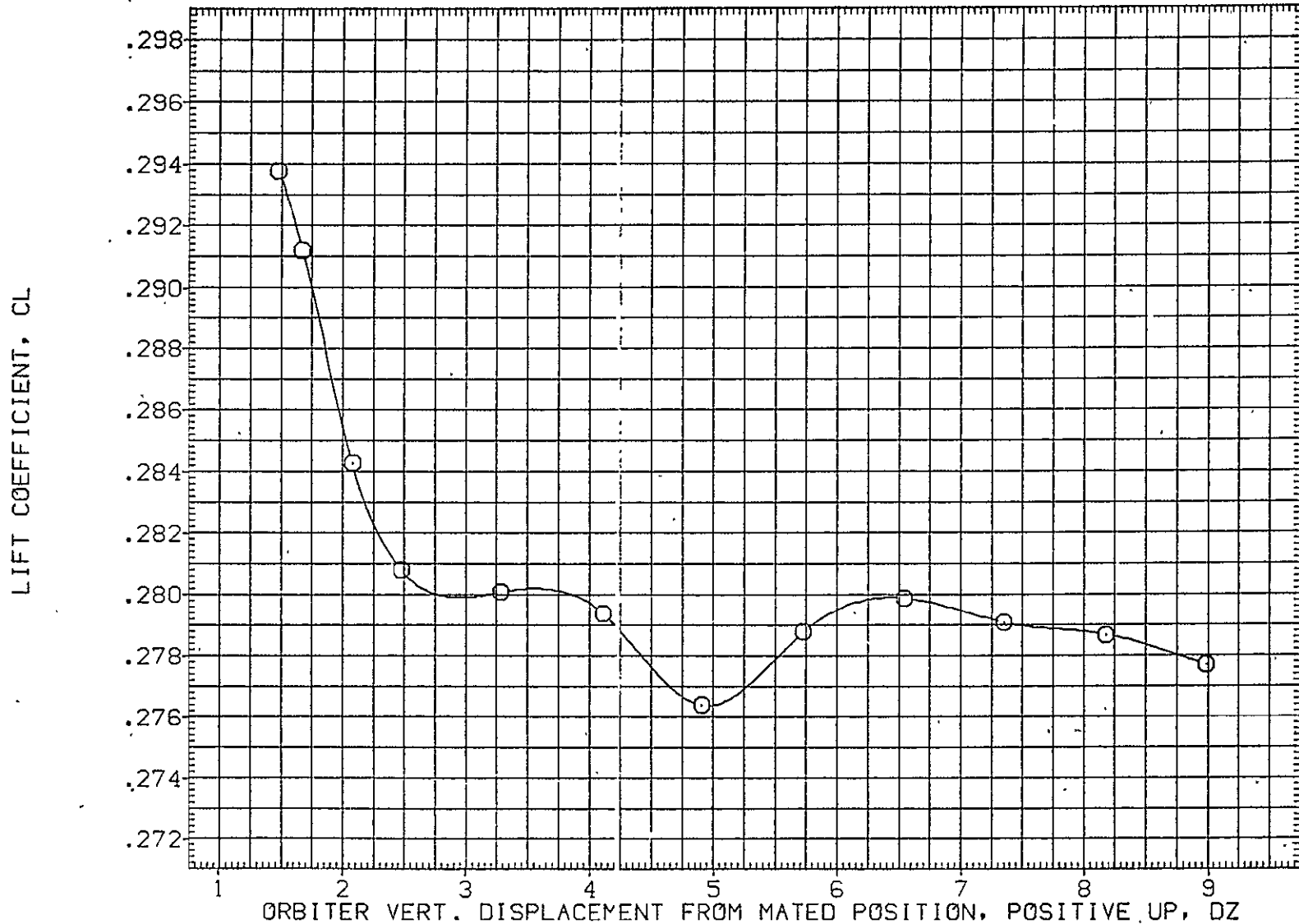


FIG. 26 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE033

SYMBOL	MACH	PARAMETRIC VALUES			
○	.617	ALPHAC	.000	BETAC	.000
		STAB	5.000	ELEVON	5.000
		BOFLAP	.000	DX	.000
		DY	.000	IORB	6.000
		BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

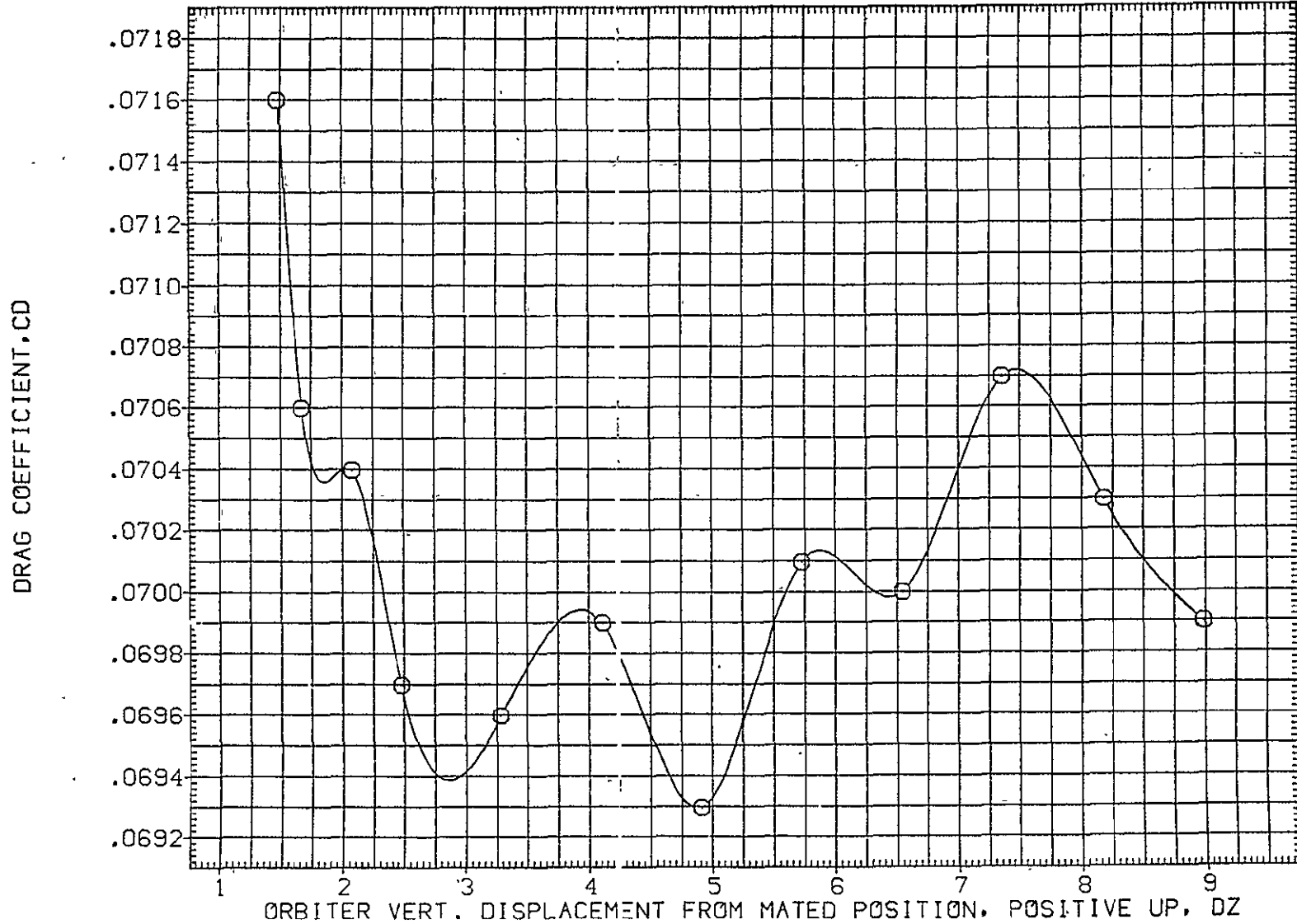


FIG. 26 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE033

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE034)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.624	ALPHAC	.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

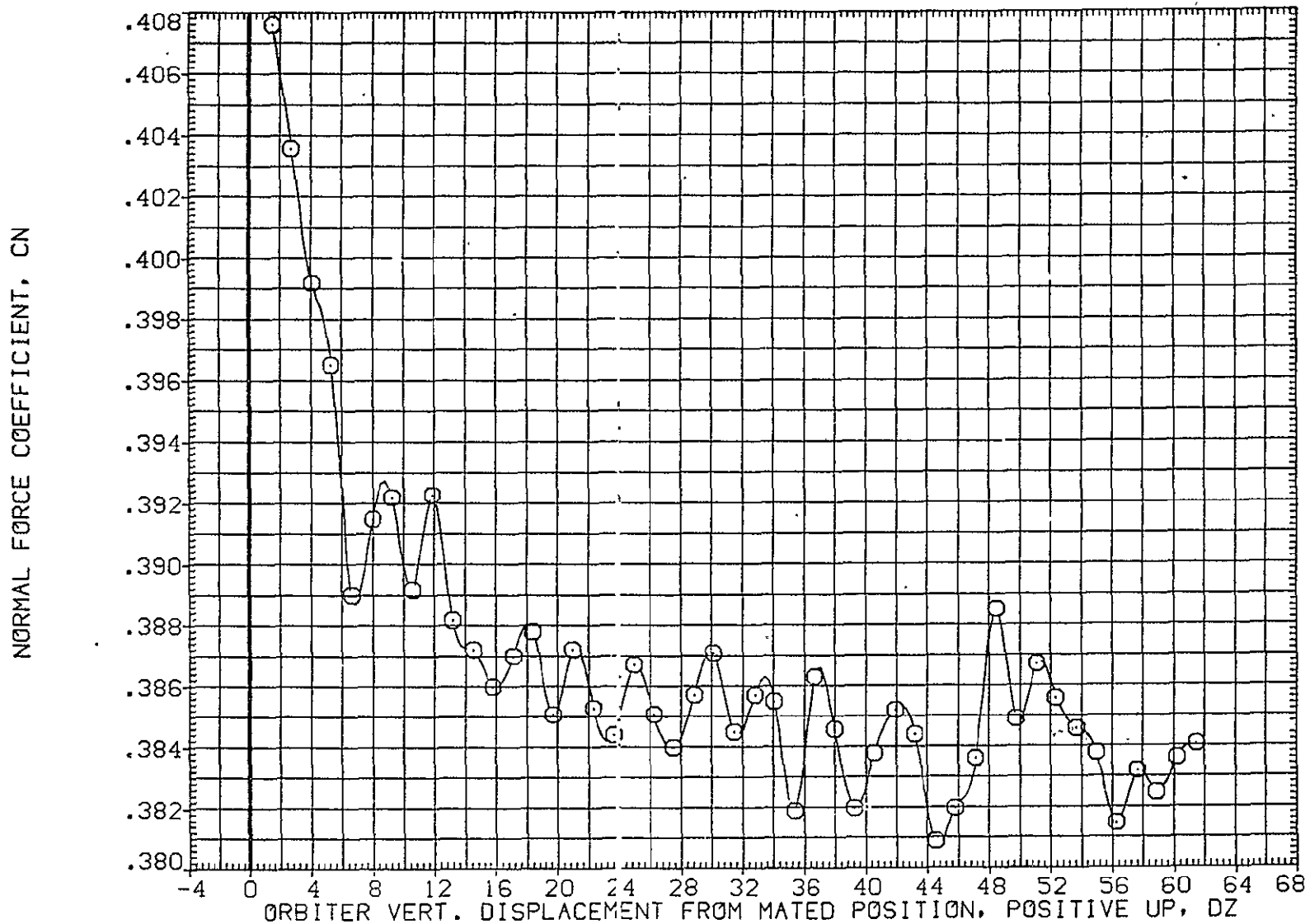


FIG. 27 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=0, AFE034

SYMBOL	MACH	PARAMETRIC VALUES			
○	.624	ALPHAC	.000	BETAC	.000
		STAB	5.000	ELEVON	5.000
		BOFLAP	.000	DX	.000
		DY	.000	IORB	8.000
		BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

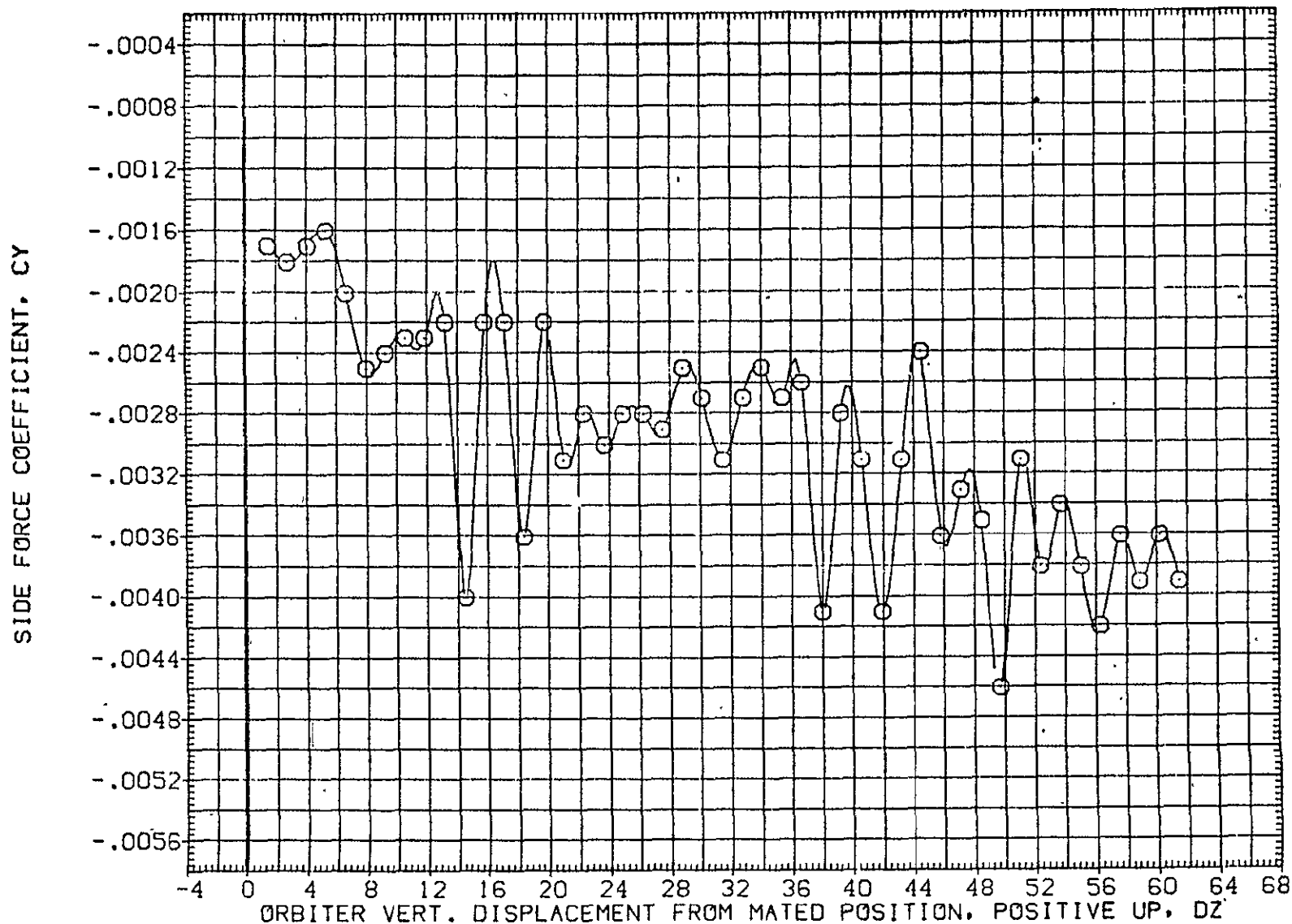


FIG. 27 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=0, AFE034

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE034)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.624	ALPHAC	.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		OY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

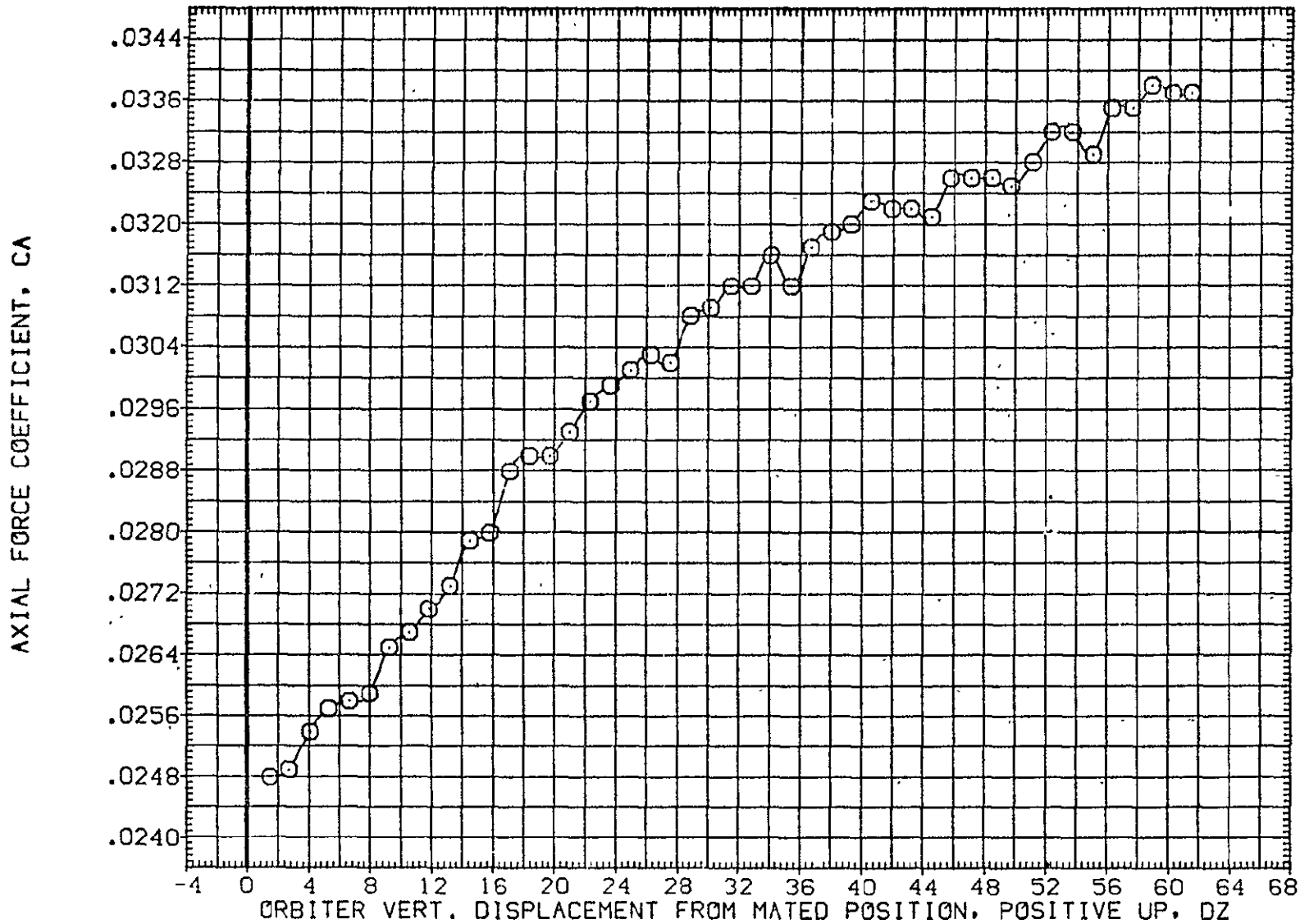


FIG. 27 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=0, AFE034

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.624	ALPHAC	.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BOFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

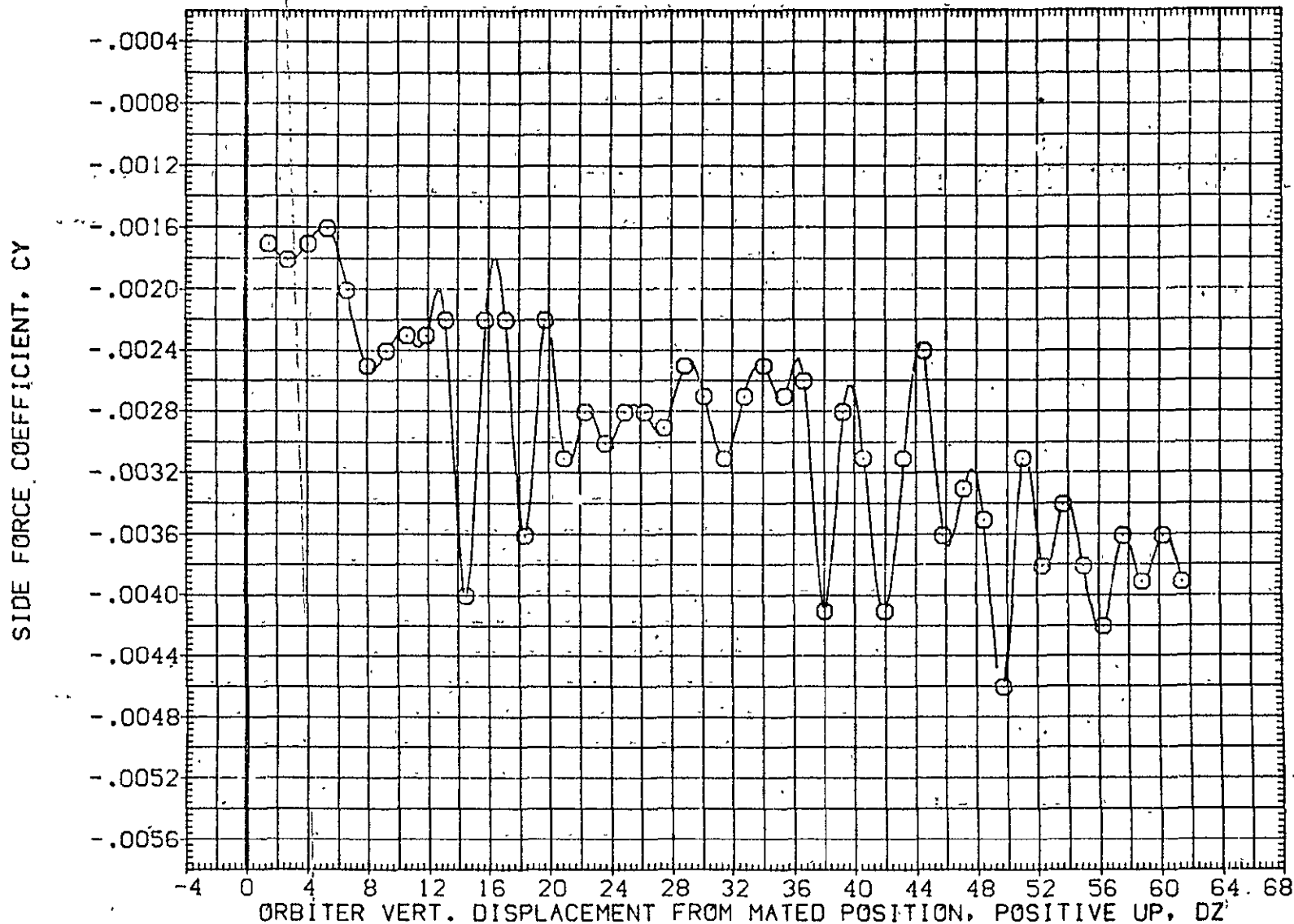


FIG. 27 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=0, AFE034

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE034)

SYMBOL	MACH	PARAMETRIC VALUES						REFERENCE INFORMATION		
○	.624	ALPHAC	.000	BETAC	.000	SREF	2690.0000	50.FT.		
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.		
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.		
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. XO		
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO		
						ZMRP	375.0000	IN. ZO		
						SCALE	.0125			

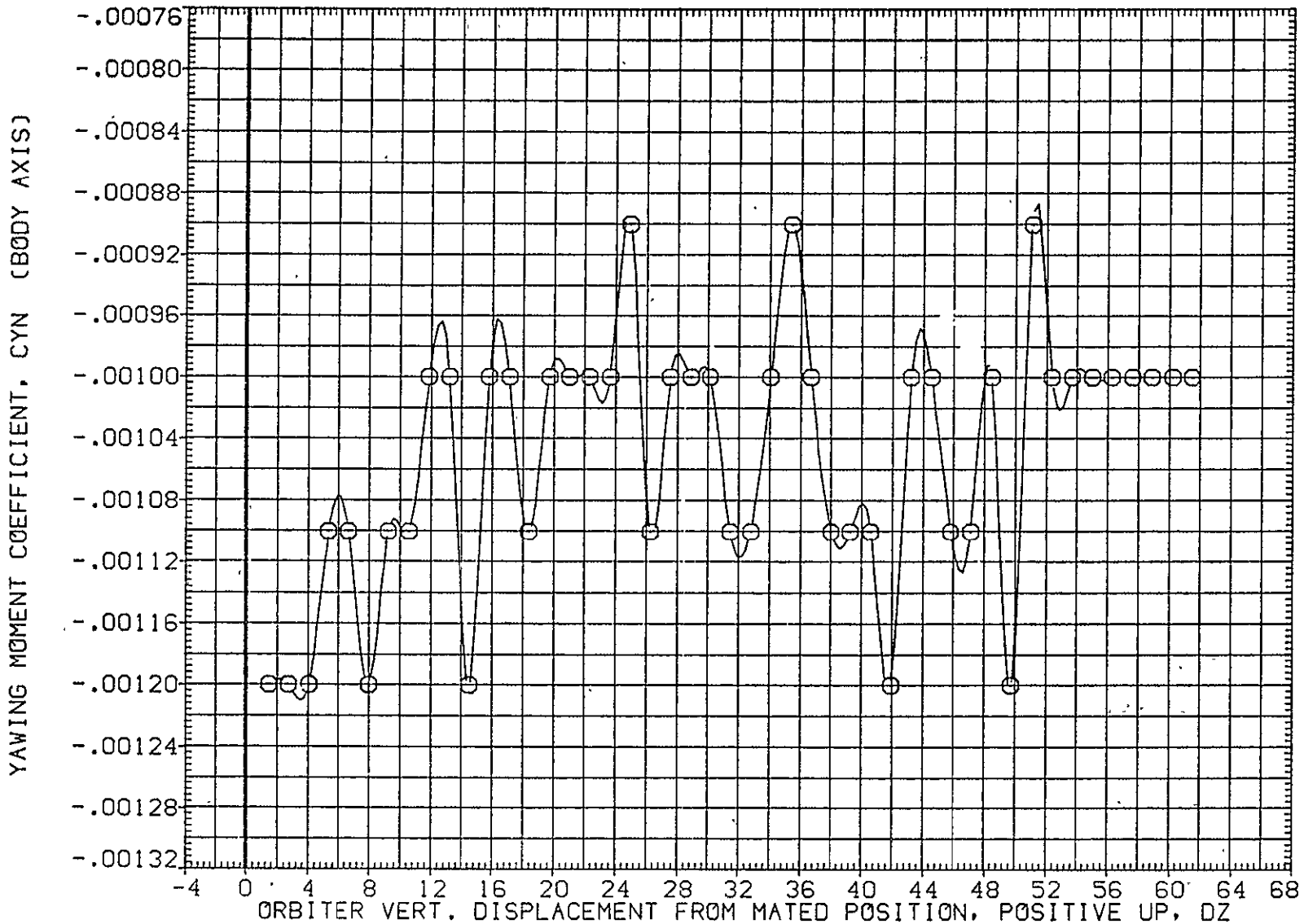


FIG. 27 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=0, AFE034

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.624	ALPHAC	.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BRCF	936.6800	IN.
		OY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

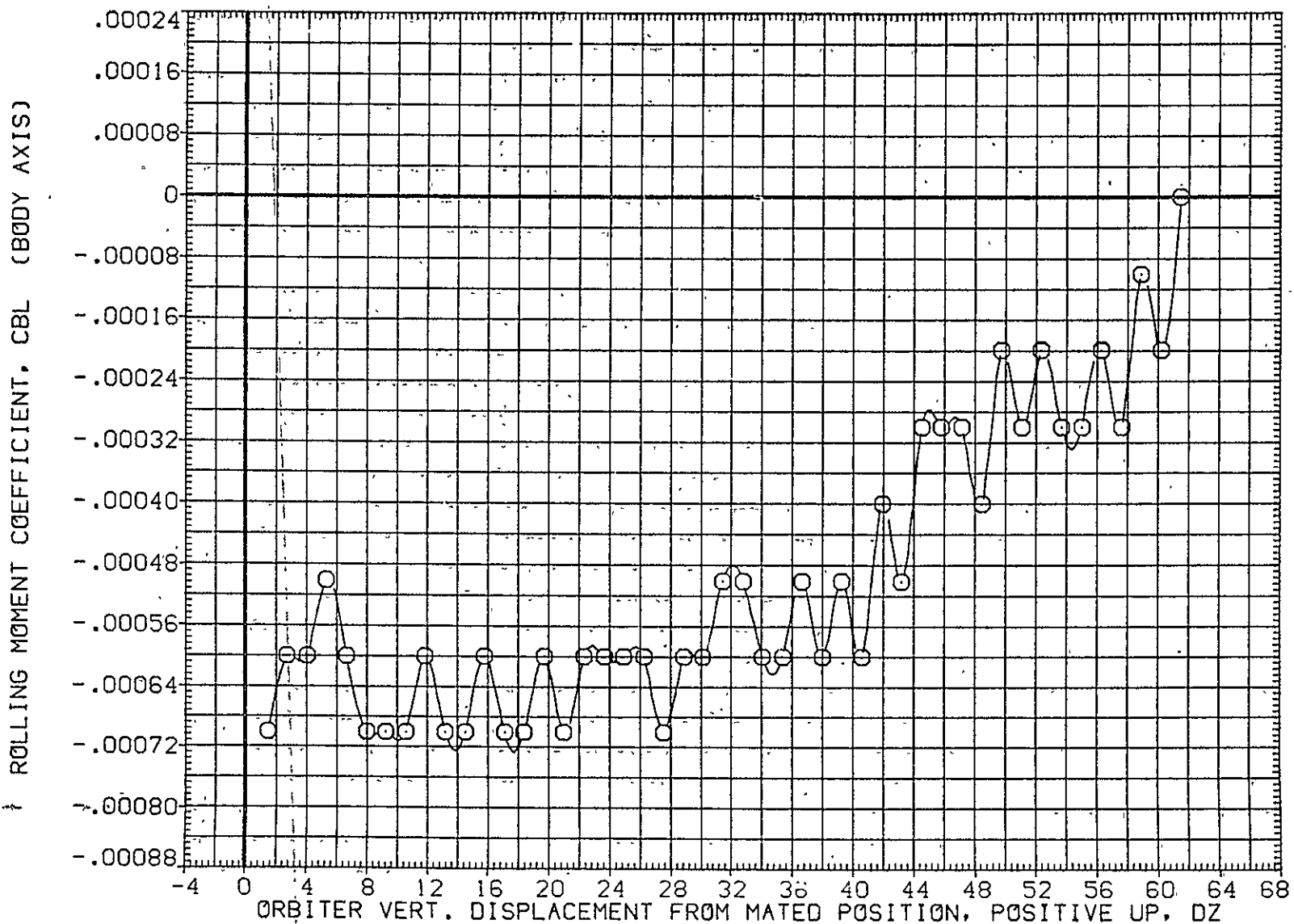


FIG. 27 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=0, AFE034

4.7

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE034)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.624	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	.XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

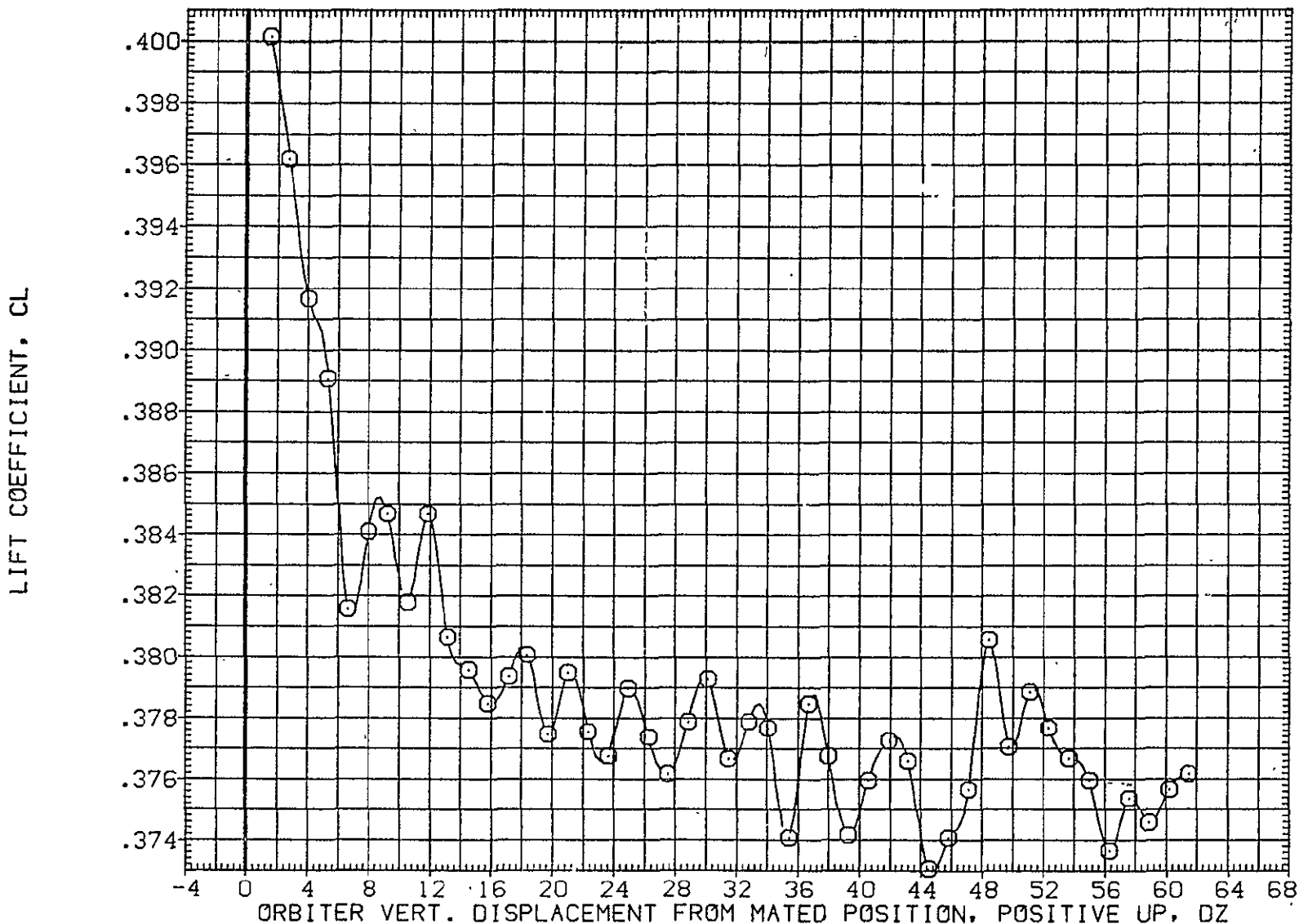


FIG. 27 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=0, AFE034

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION			
		ALPHAC	BETAC	ELEVON	DX	SREF	LREF	BREF	SO.FT.
○	.624	.000	.000	5.000	5.000	2690.0000	474.8100	936.6800	IN.
		.000	.000	10RB	8.000	1109.0000	.0000	.0000	IN. X0
		.000	.000	RUDDER	.000	ZMRP	375.0000	.0125	IN. Y0
									IN. Z0

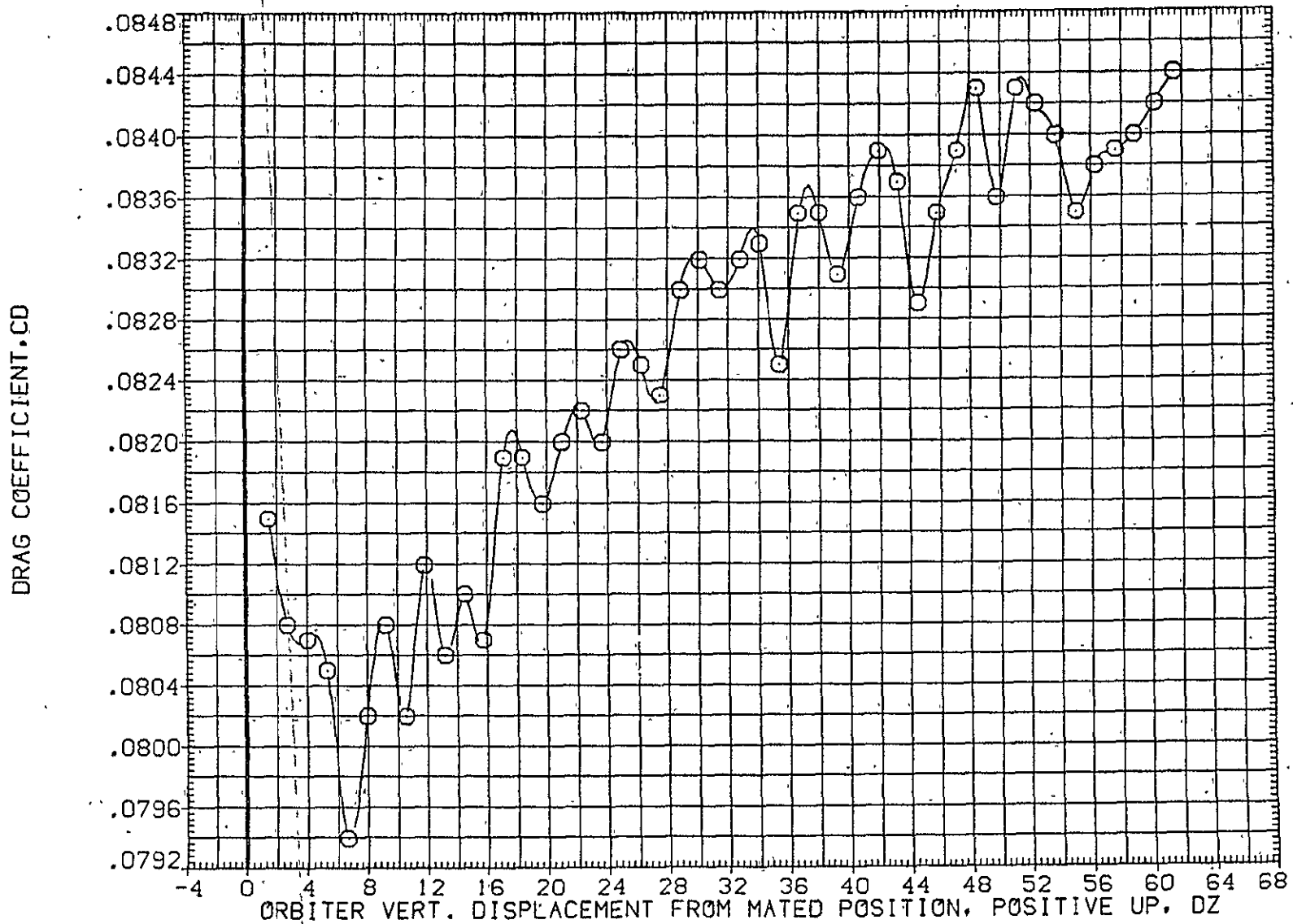


FIG. 27 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, 10RB=8, BETAC=0, BETA0=0, AFE034

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE035)

SYMBOL
○

MACH
.628

PARAMETRIC VALUES			
ALPHAC	.000	BETAC	.000
STAB	5.000	ELEVON	5.000
BDFLAP	.000	DX	.000
DY	.000	IORB	4.000
BETA0	5.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

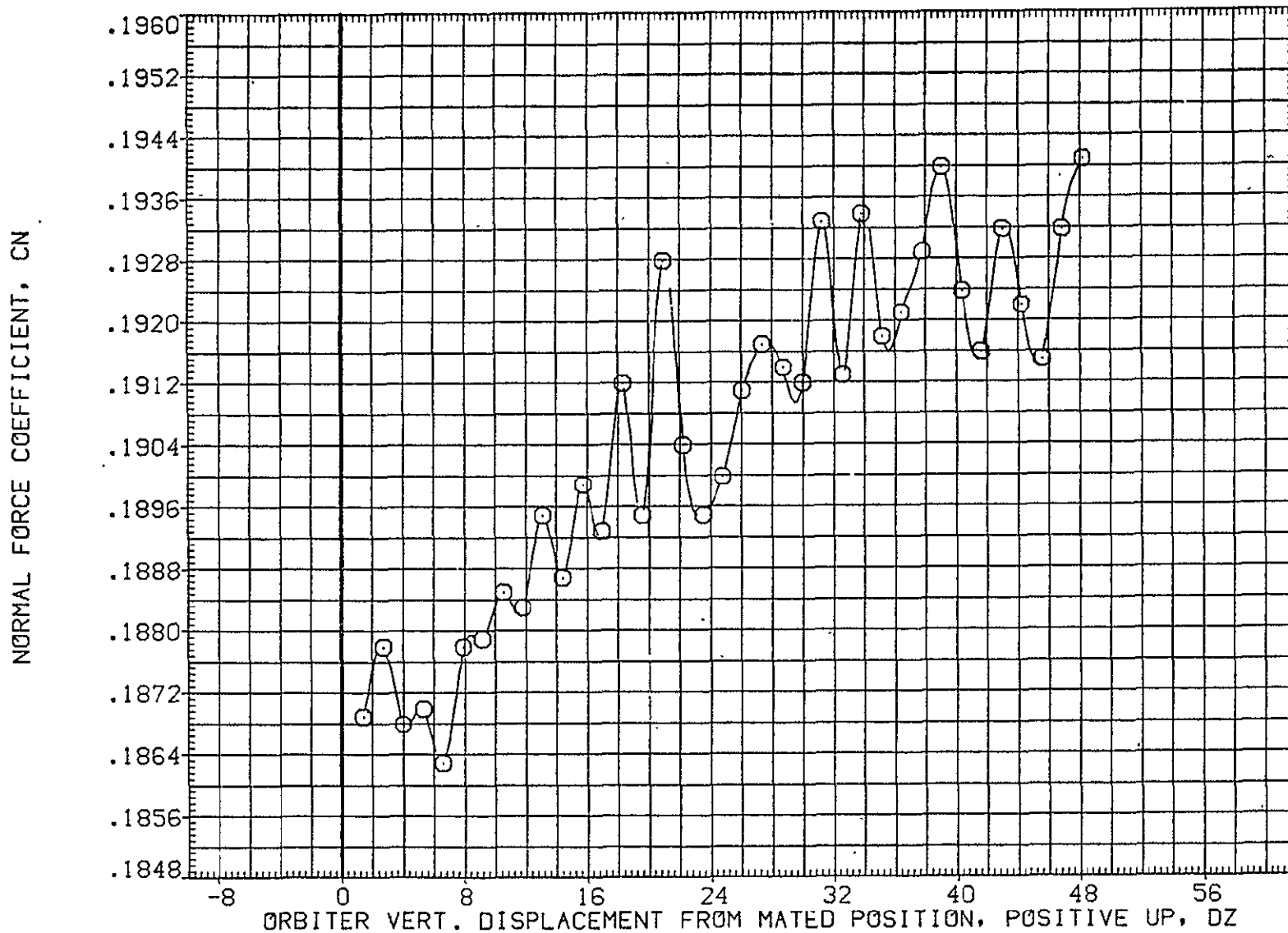


FIG. 28 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=4, BETAC=0, BETA0=5, AFE035

SYMBOL

○

MACH

.628

ALPHAC

PARAMETRIC VALUES

.000

BETAC

.000

STAB

5.000

ELEVON

5.000

BDELAR

.000

DX

.000

DY

.000

IORB

4.000

BETA0

5.000

RUDDER

.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

PITCHING MOMENT COEFFICIENT, CLM

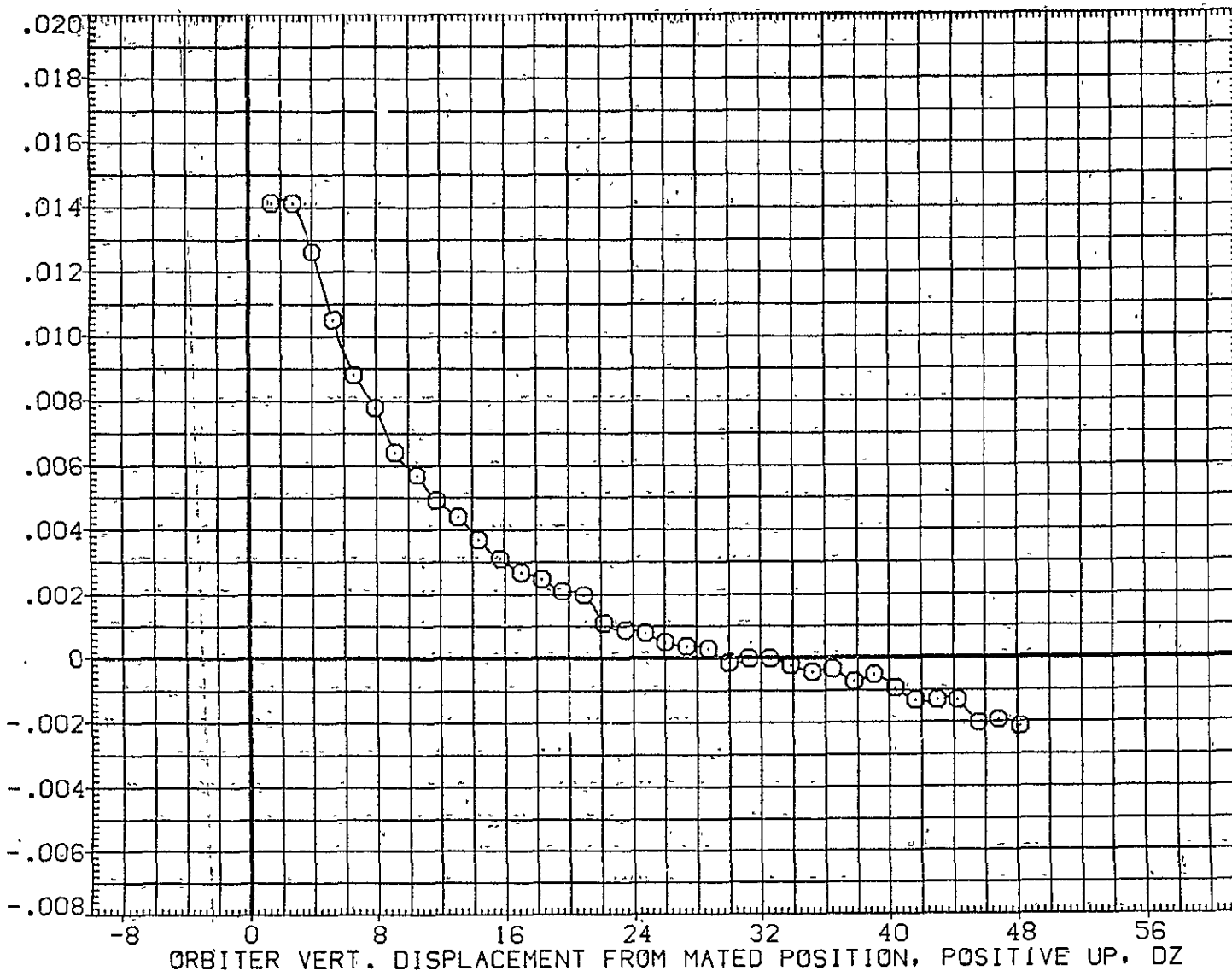


FIG. 28 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=4, BETAC=0, BETA0=5, AFE035

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE035)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.628	ALPHAC	.000	BETAC	.000	SREF	2690.0000	50, FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

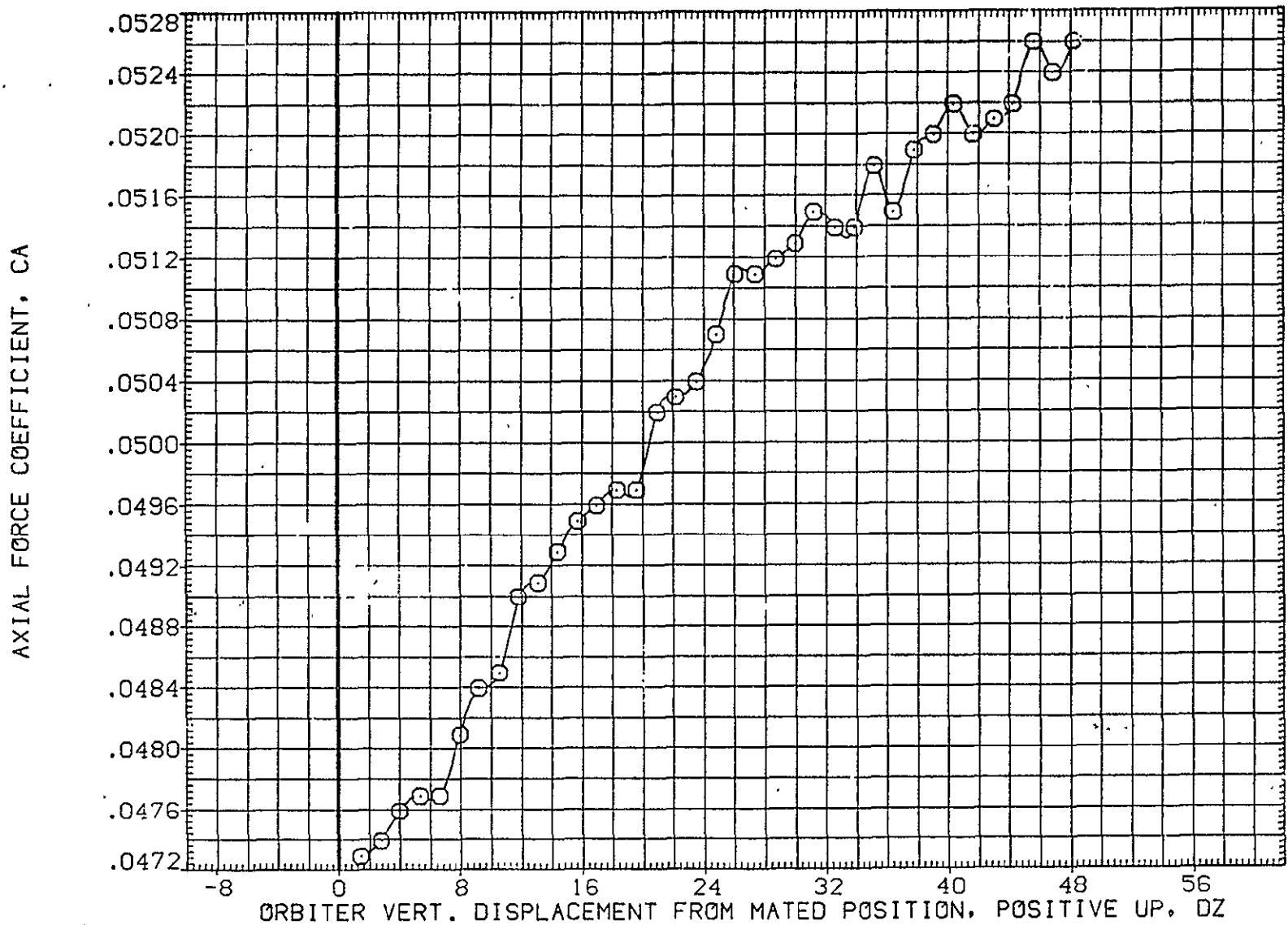


FIG. 28 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=4, BETAC=0, BETA0=5, AFE035

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.628	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

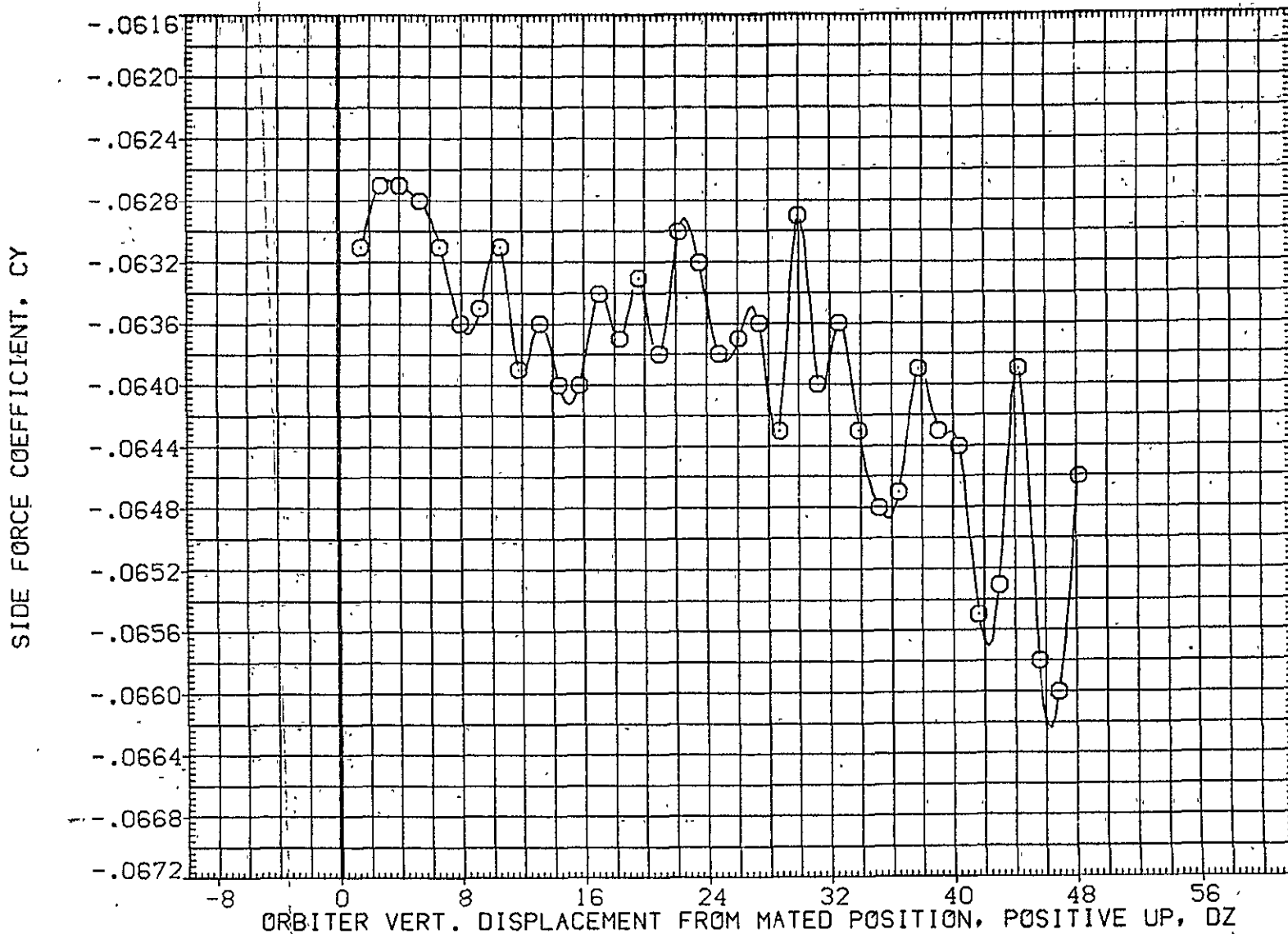


FIG. 28 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=4, BETAC=0, BETA0=5, AFE035

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE035)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.628	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

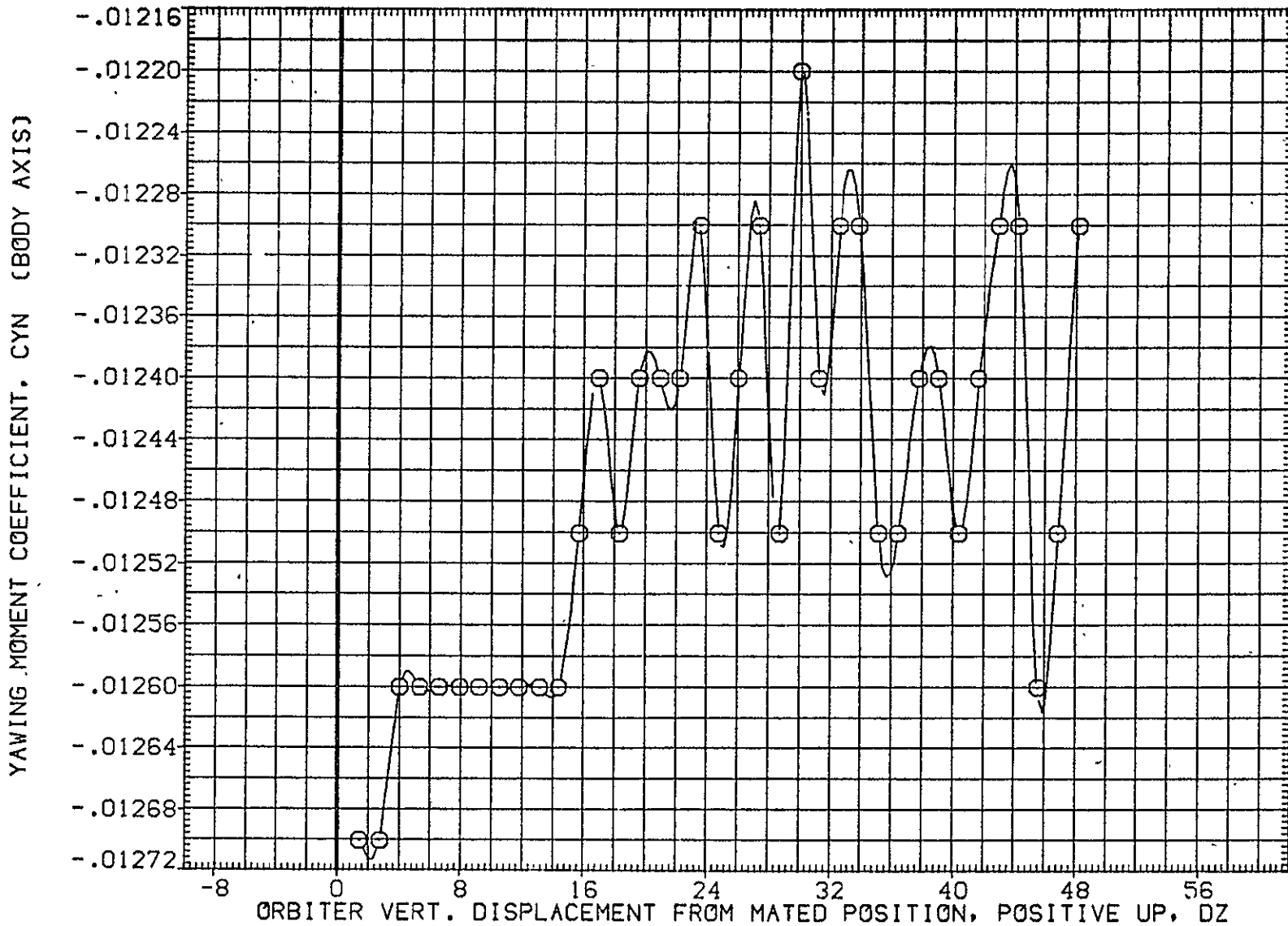


FIG. 28 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=4, BETAC=0, BETA0=5, AFE035

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.628	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.8800	IN.
		DY1	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

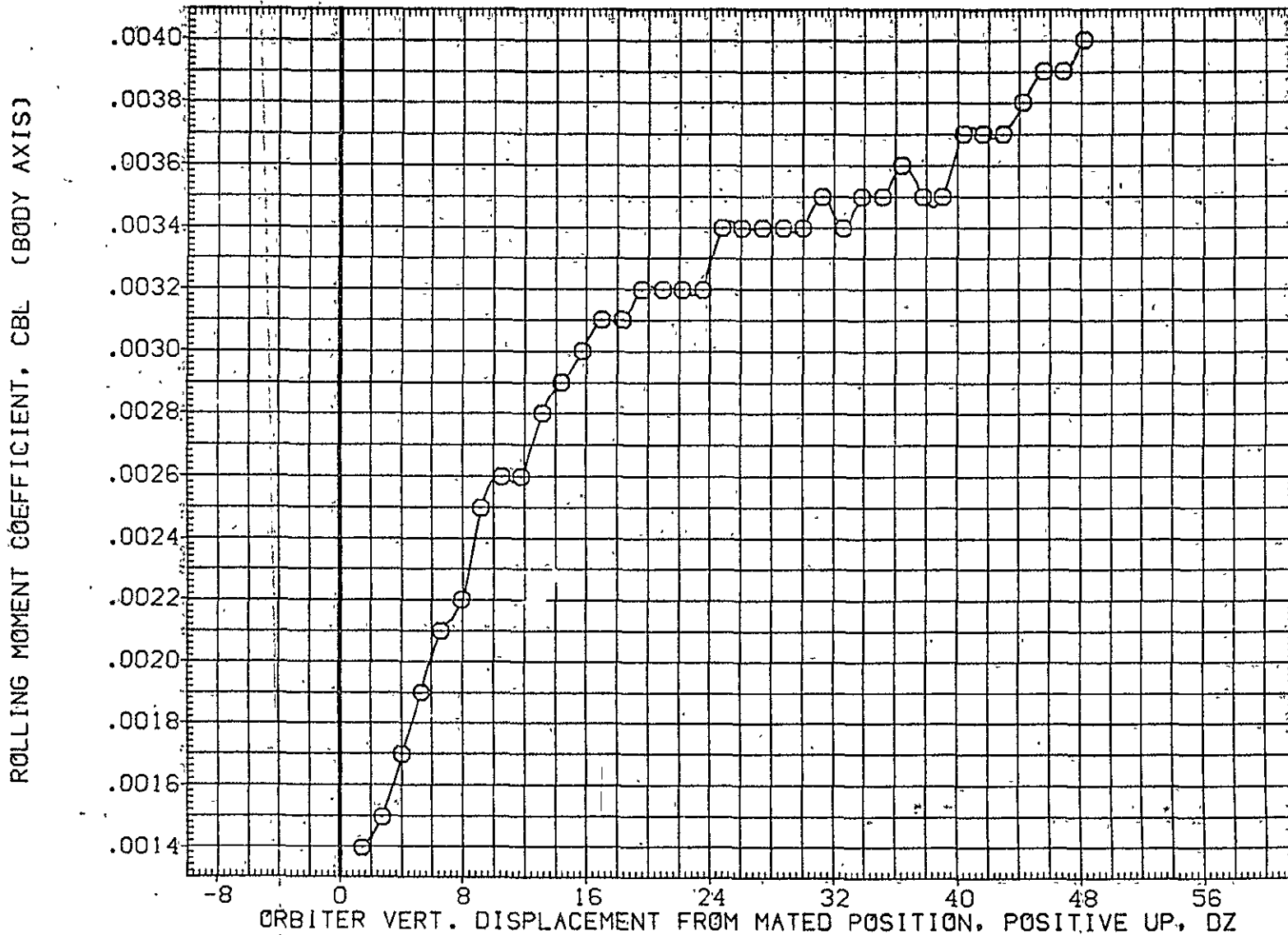


FIG. 28 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=4, BETAC=0, BETA0=5, AFE035

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE035)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.628	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

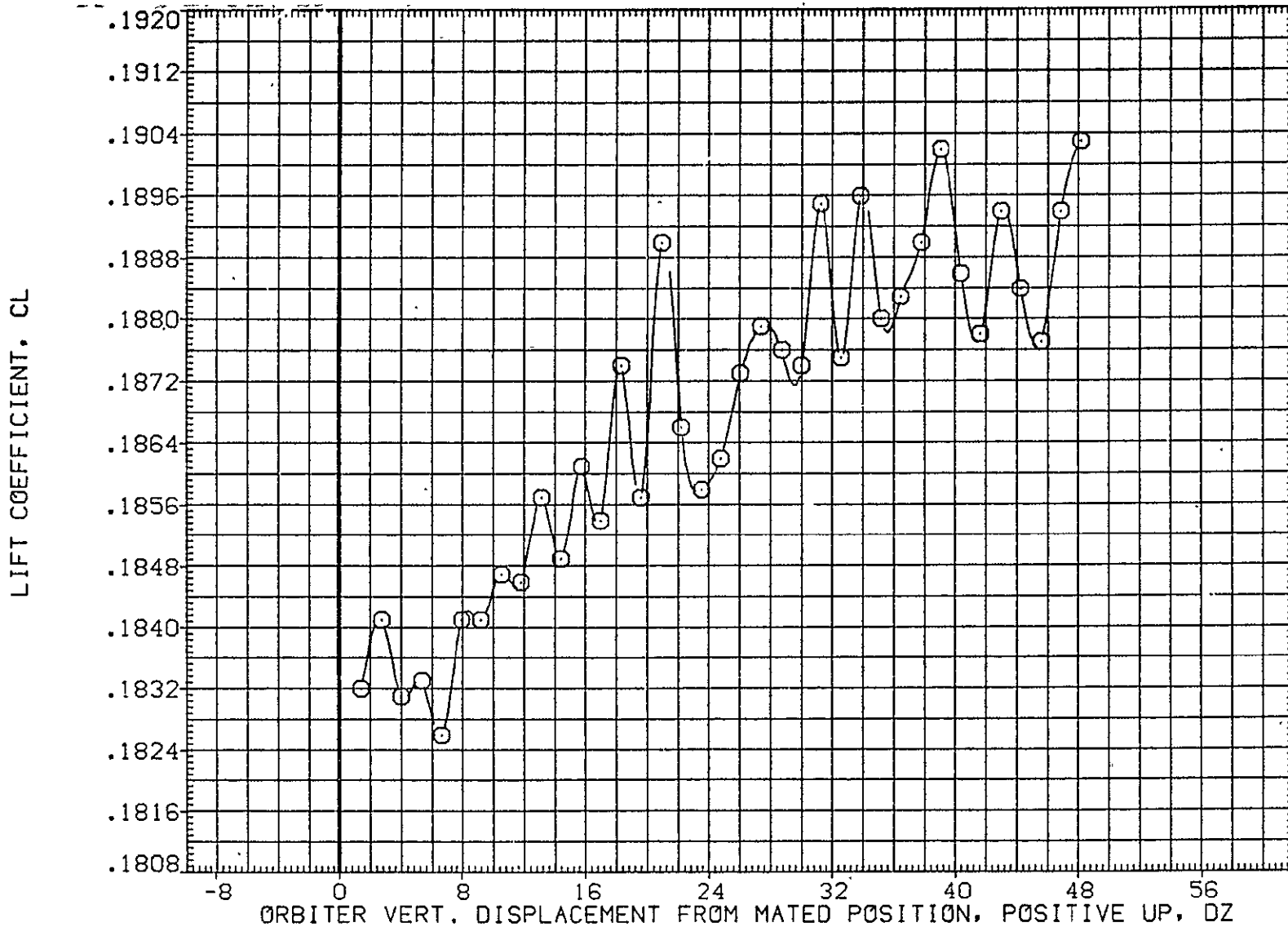


FIG. 28 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=4, BETAC=0, BETA0=5, AFE035

SYMBOL
○

MACH
.628

PARAMETRIC VALUES			
ALPHAC	.000	BETAC	.000
STAB	5.000	ELEVON	5.000
BDFLAP	.000	DX	.000
DY	.000	IORB	4.000
BETA0	5.000	RUDDER	.000

REFERENCE INFORMATION

SREF	2690.0000	SG.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

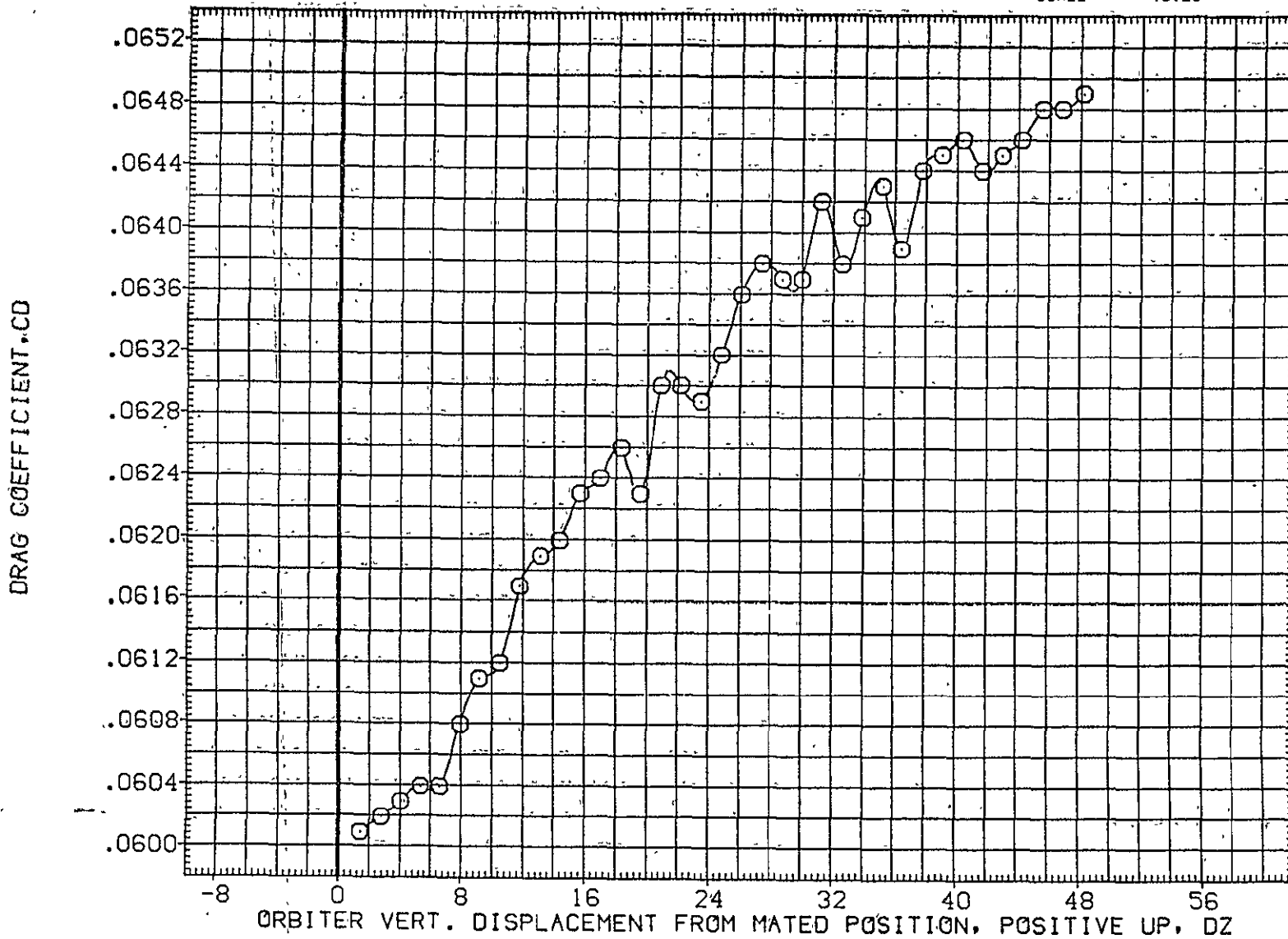


FIG. 28 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=4, BETAC=0, BETA0=5, AFE035

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE036)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.628	ALPHAC	.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BOFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

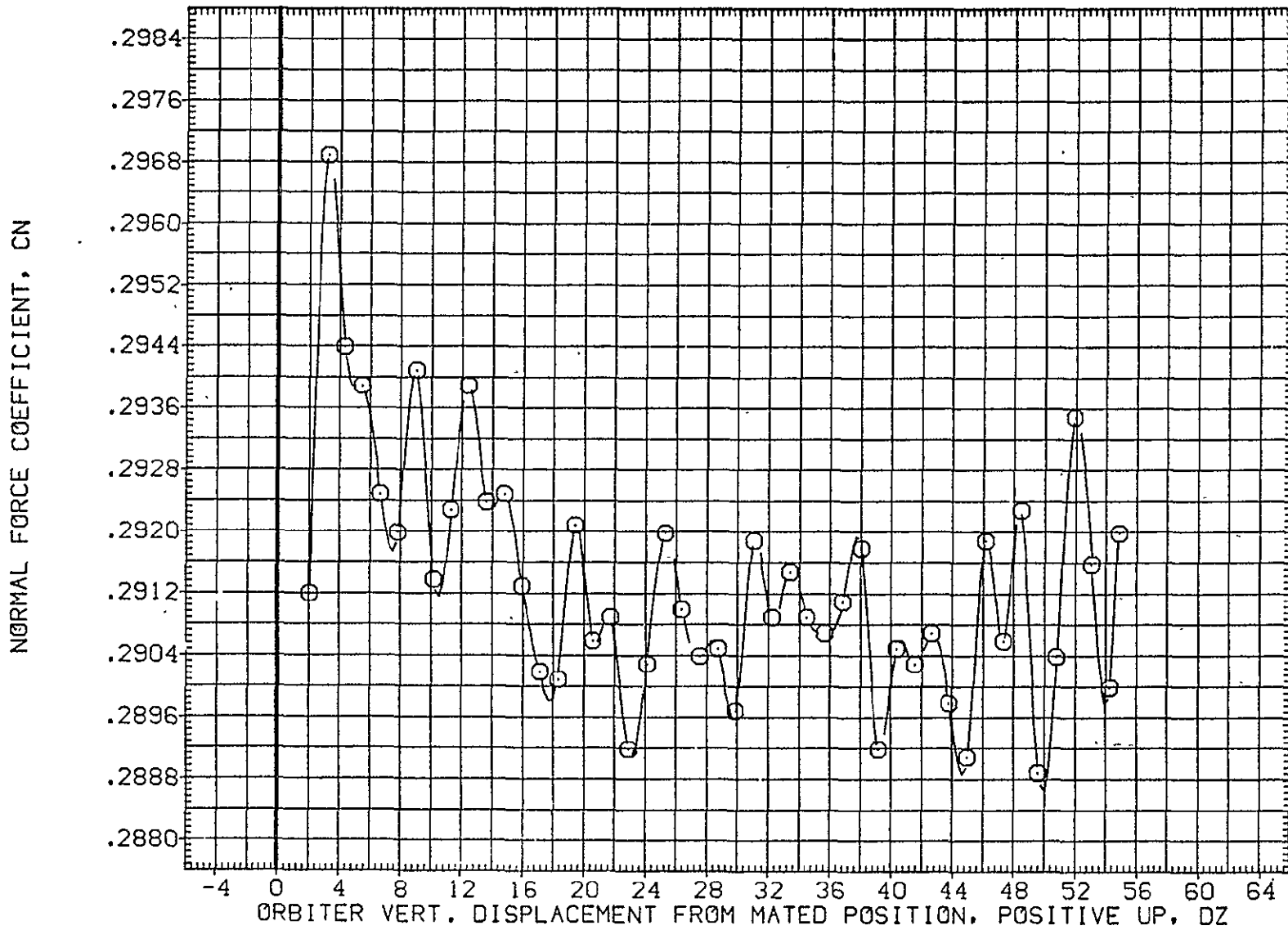


FIG. 29 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=5, AFE036

SYMBOL
○

MACH	PARAMETRIC VALUES			
.628	ALPHAC	.000	BETAC	.000
	STAB	5.000	ELEVON	5.000
	BDFLAP	.000	DX	.000
	DY	.000	IORB	6.000
	BETA0	5.000	RUDDER	.000

REFERENCE INFORMATION

SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

PITCHING MOMENT COEFFICIENT, CLM

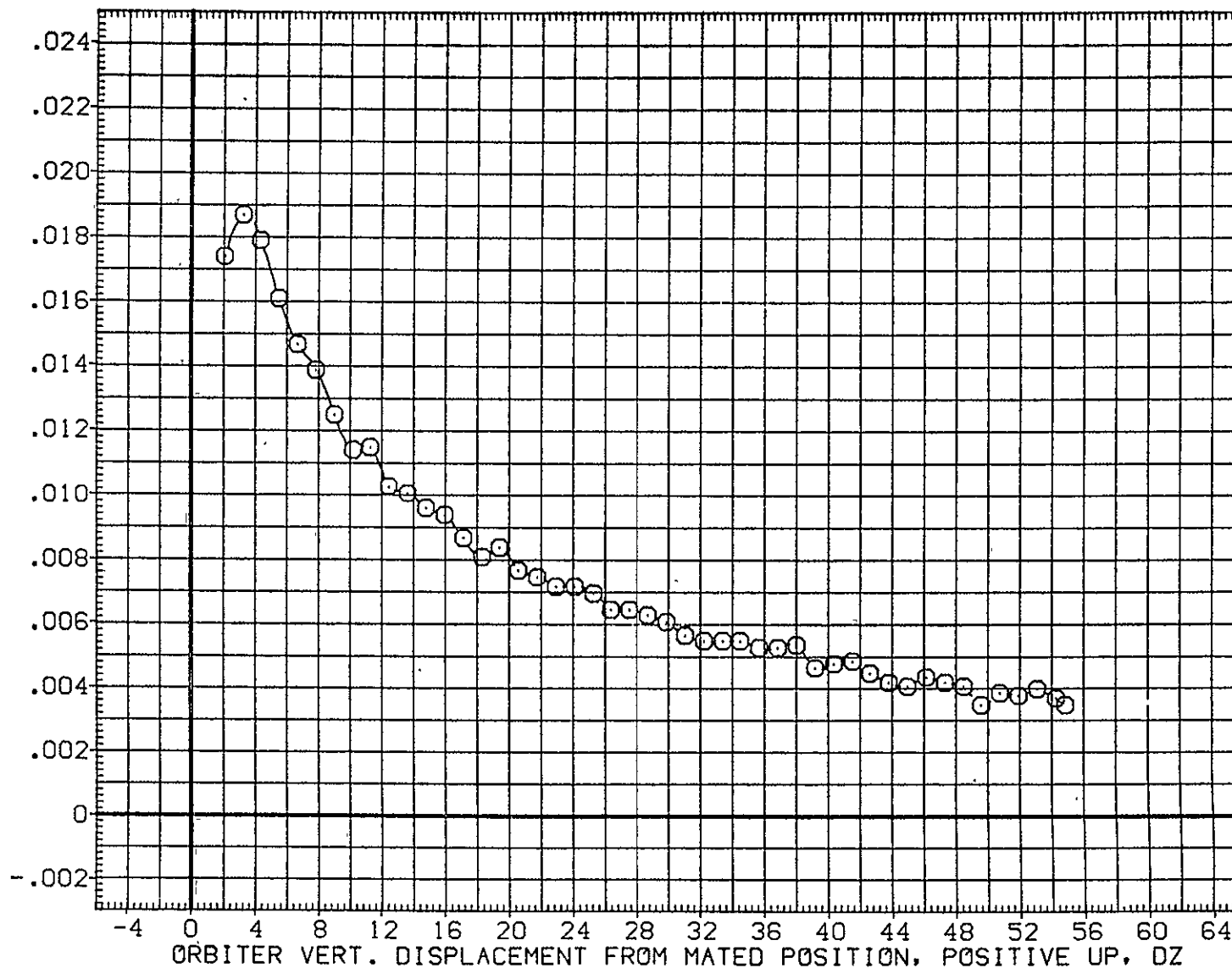


FIG. 29 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=5, AFE036

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE036)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	SO.FT.	
○	.628	.000	.000	5.000	.000	2690.0000	50.FT.	
		STAB	BETAC	ELEVON	5.000	474.8100	IN.	
		BDFLAP	DX		.000	936.6800	IN.	
		DY	IORB		6.000	1109.0000	IN. X0	
		BETA0	RUDDER		.000	YMRP	IN. Y0	
						ZMRP	IN. Z0	
						SCALE	.0125	

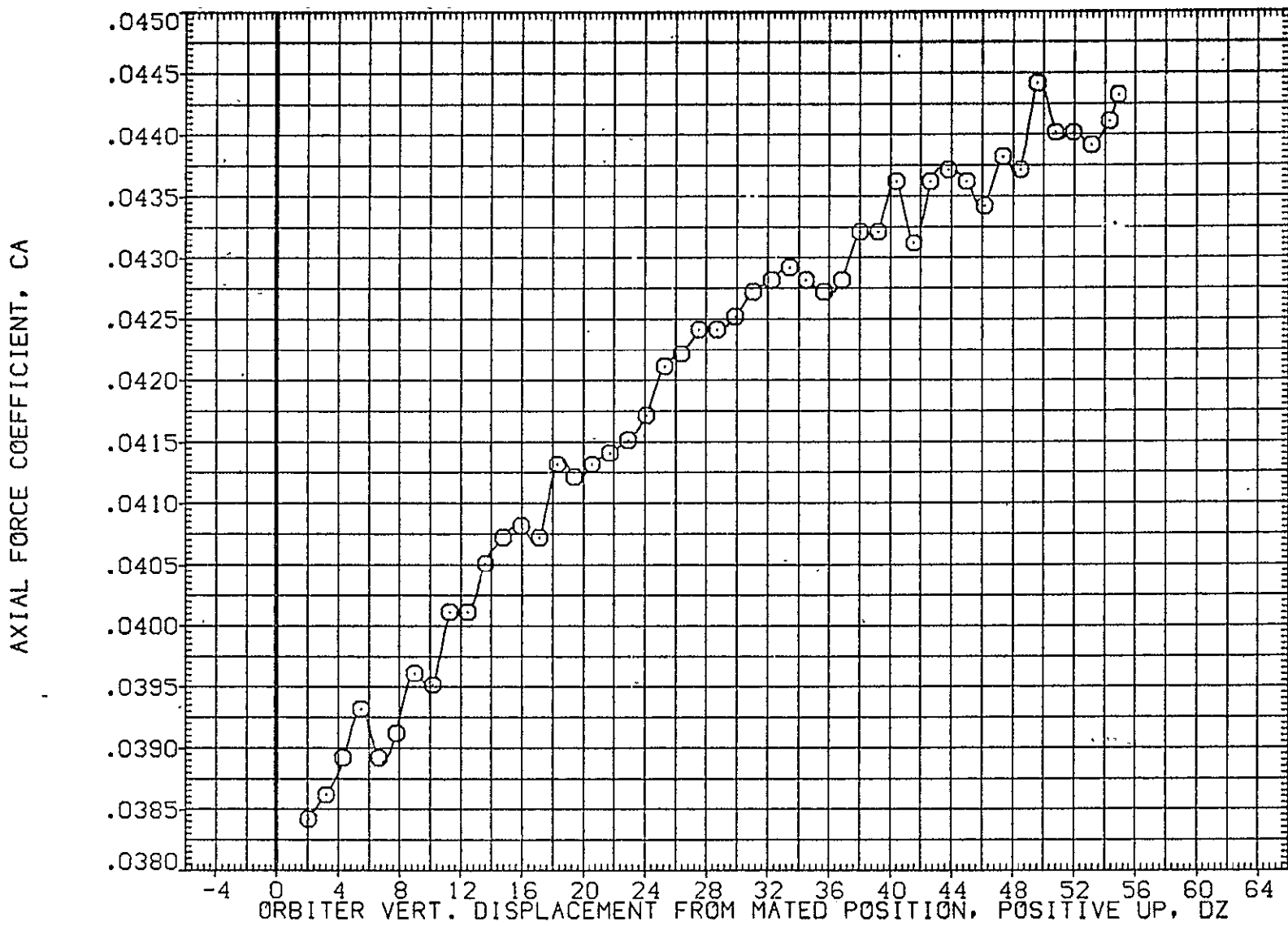


FIG. 29 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=5, AFE036

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.628	ALPHAC	.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

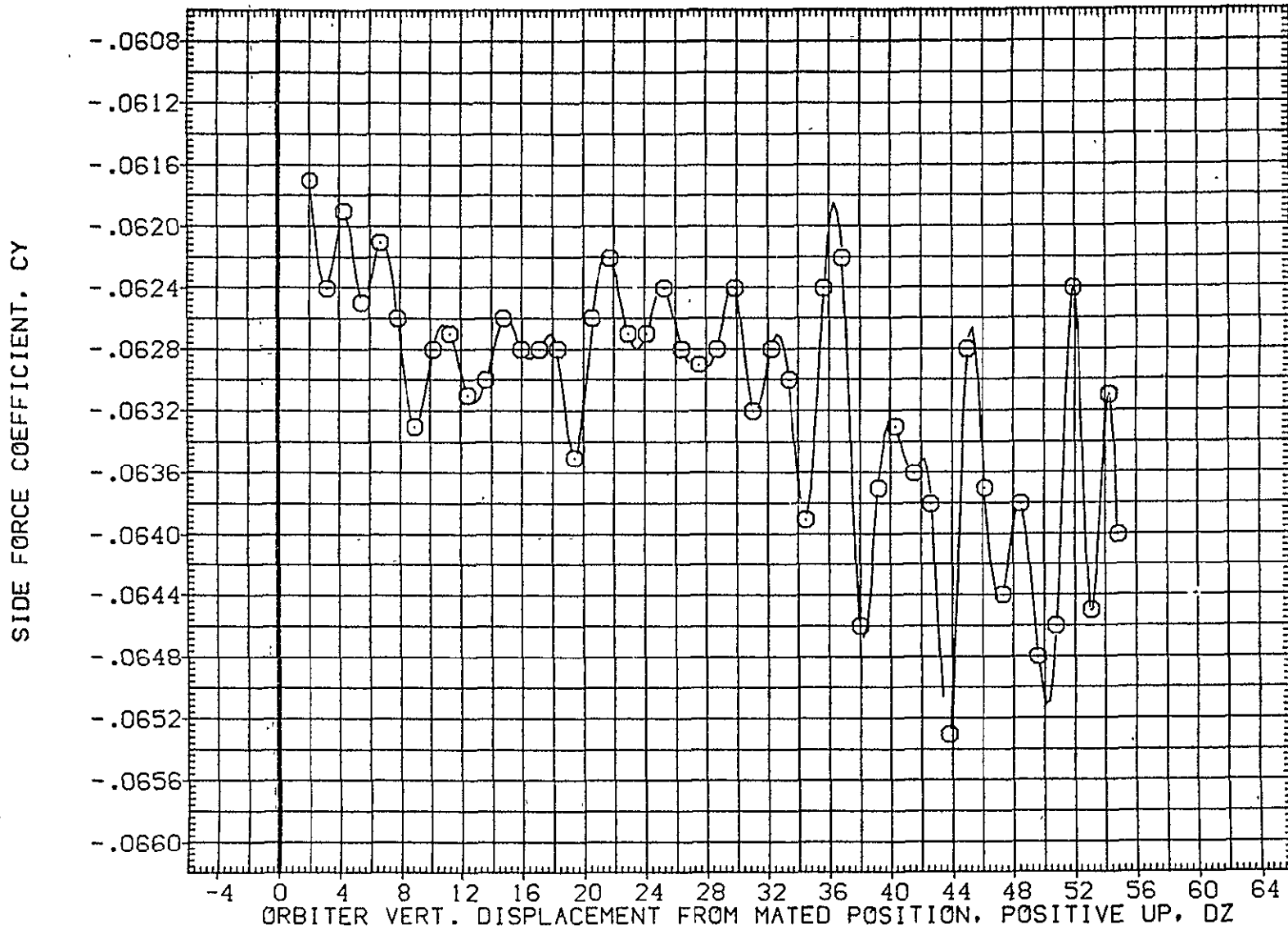


FIG. 29 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=5, AFE036

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE036)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.628	ALPHAC	.000	BETAC	.000	SREF	2690.0000	56.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

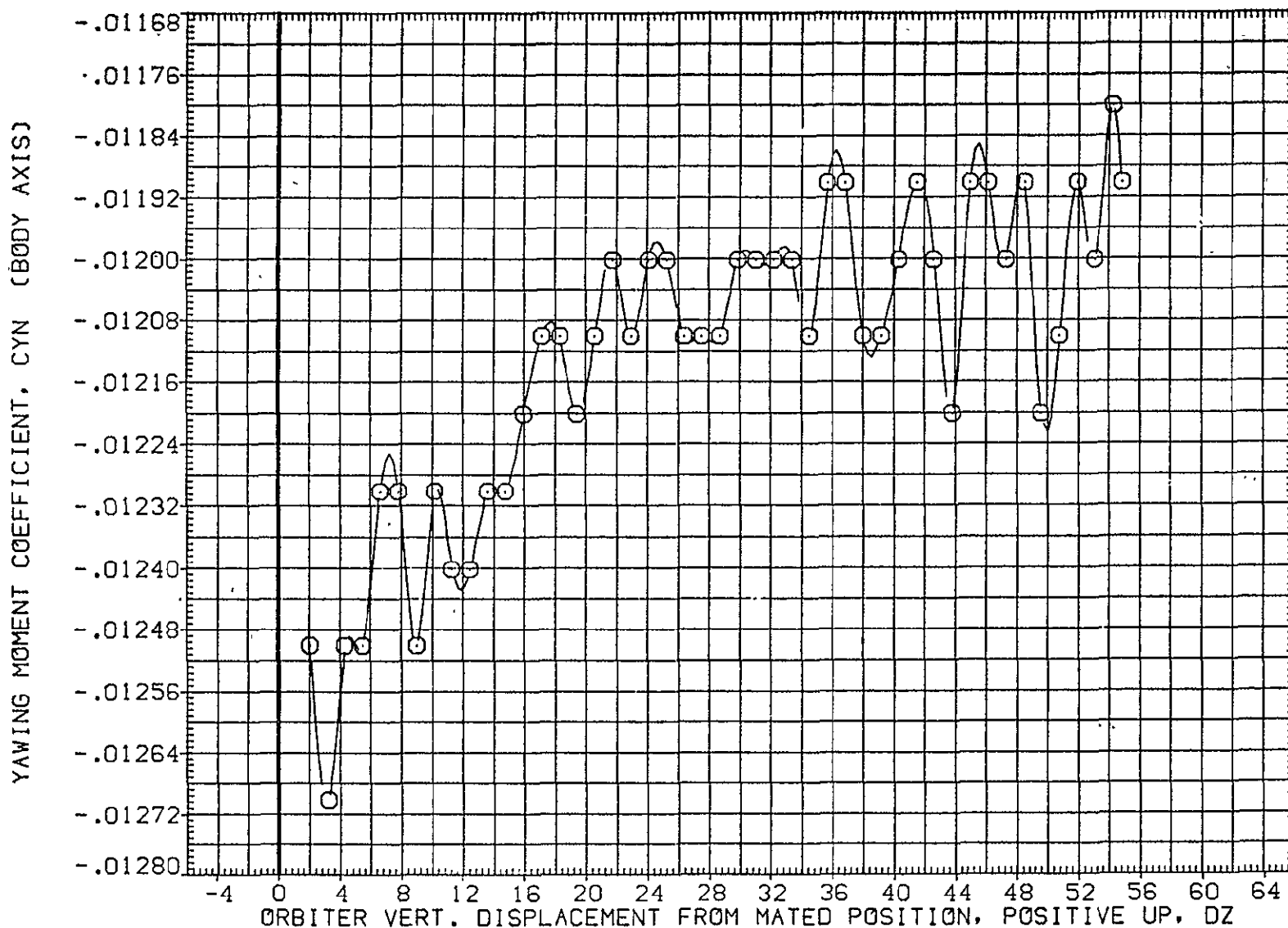


FIG. 29 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=5, AFE036

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.628	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

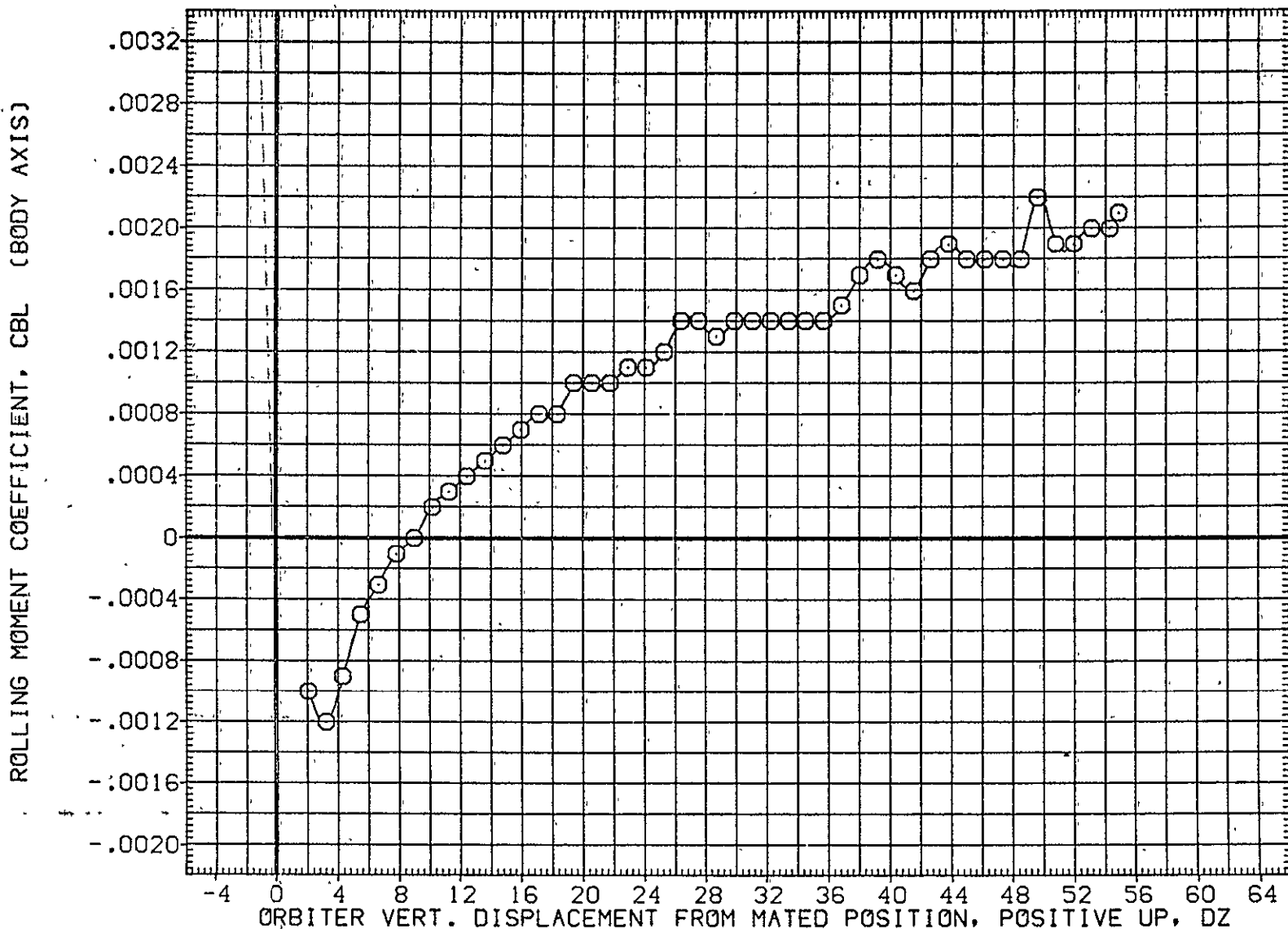


FIG. 29 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=5, AFE036

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE036)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.628	ALPHAC	.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

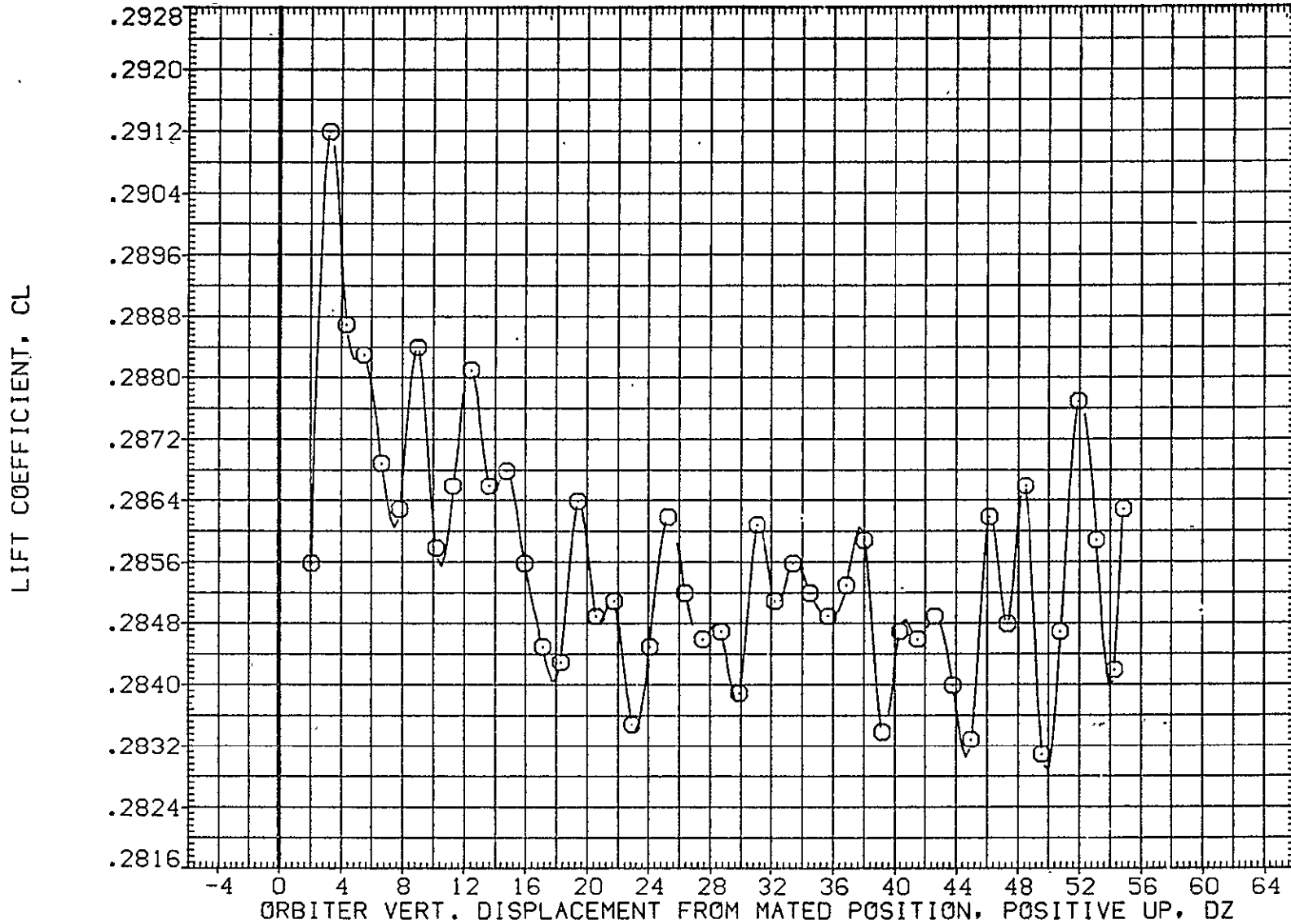


FIG. 29 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=5, AFE036

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.628	ALPHAC	.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

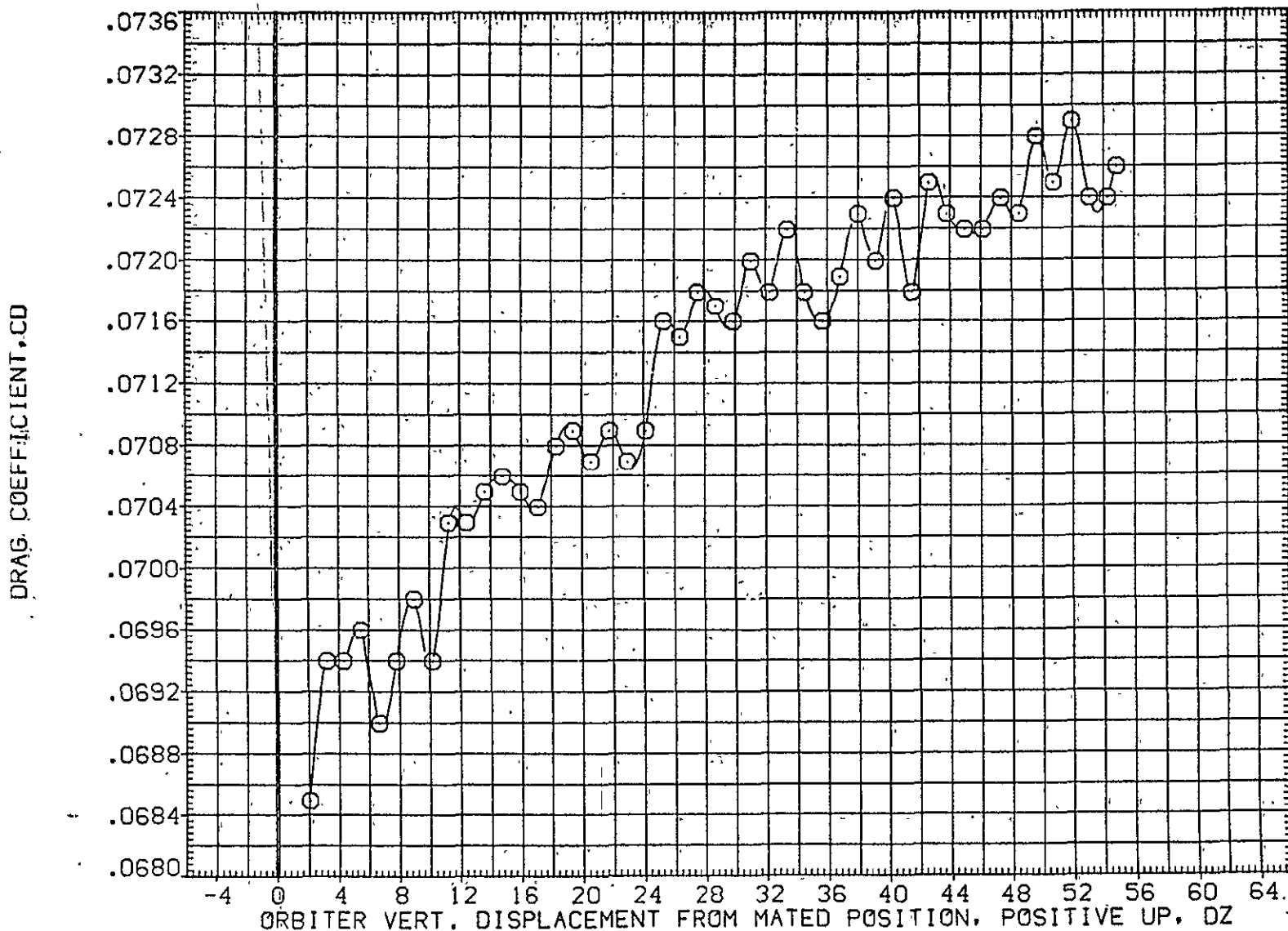


FIG. 29 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=5, AFE036

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE037)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.617	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. XO
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

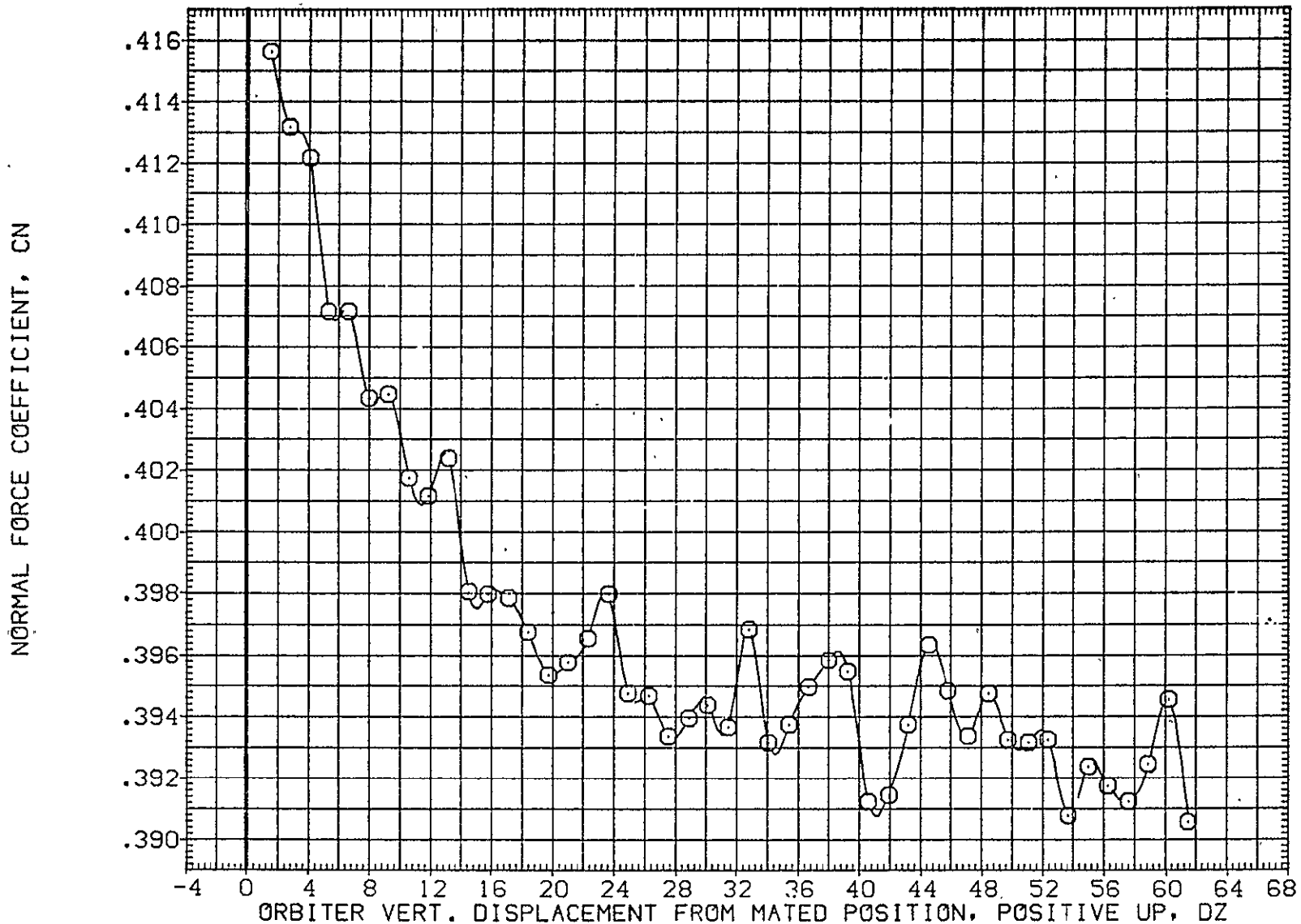


FIG. 30 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=5, AFE037

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.617	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDCLAP	.000	IDX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

PITCHING MOMENT COEFFICIENT, CLM

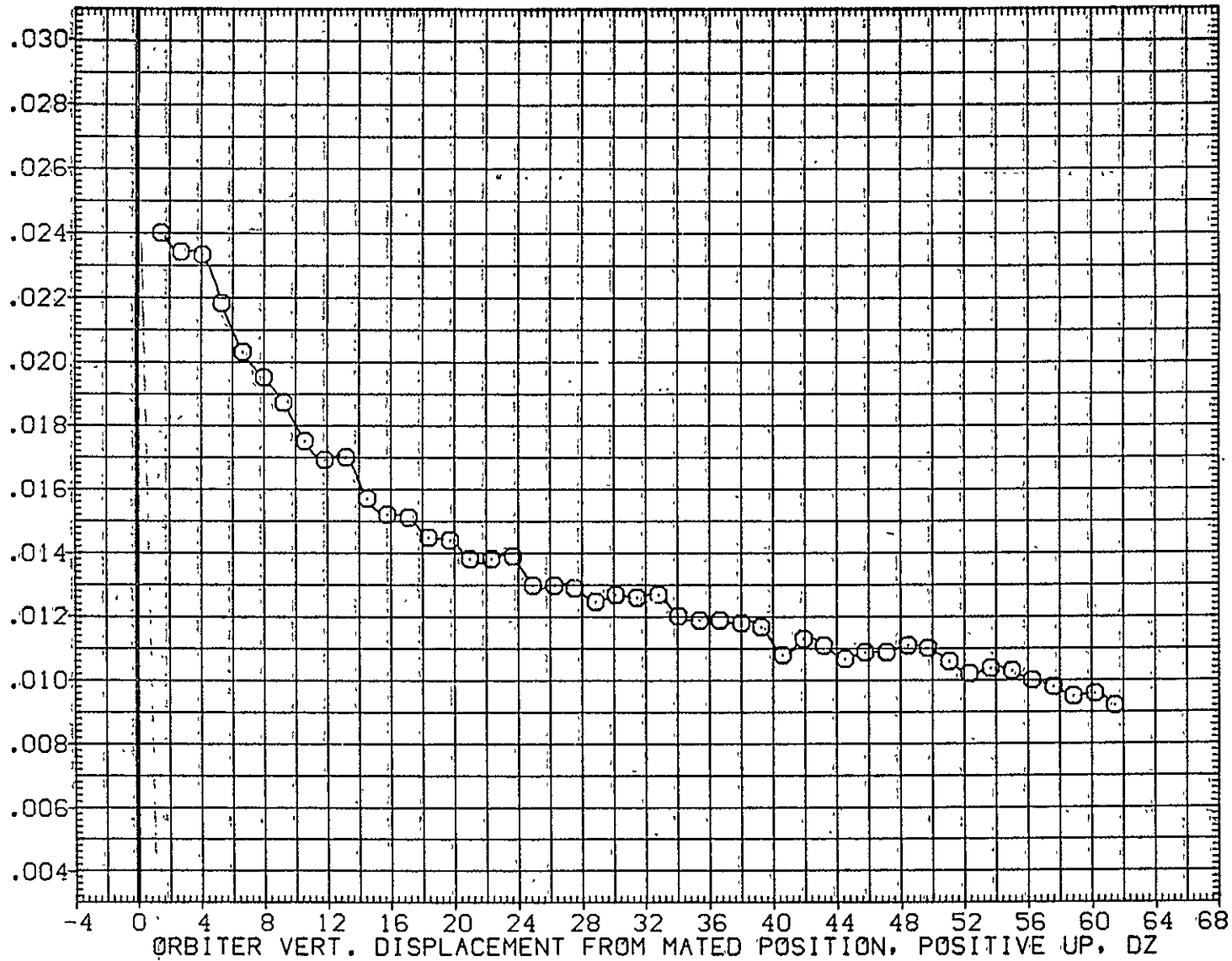


FIG. 30 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=5, AFE037

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE037)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.617	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

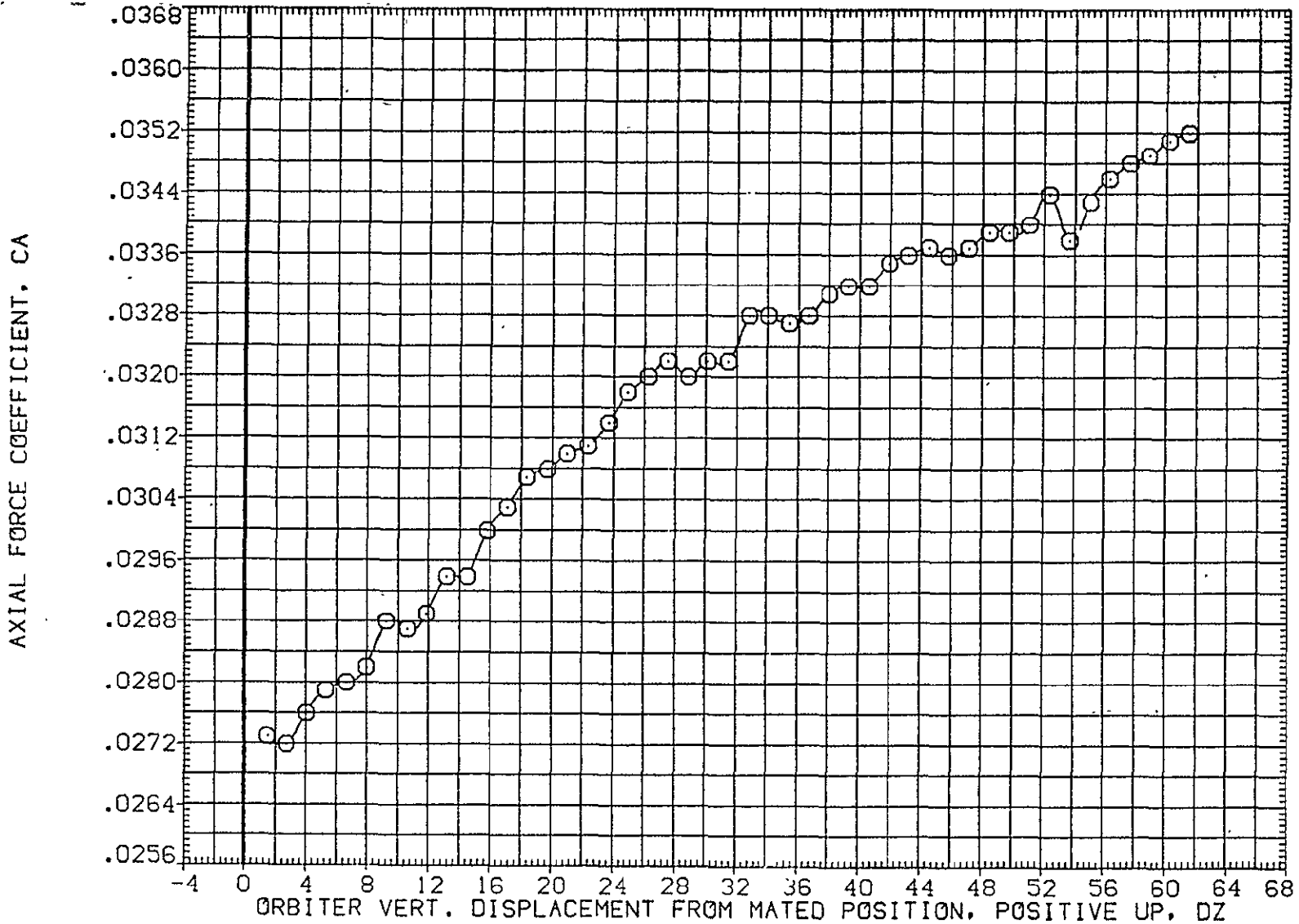


FIG. 30 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=5, AFE037

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.617	ALPHAC	.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

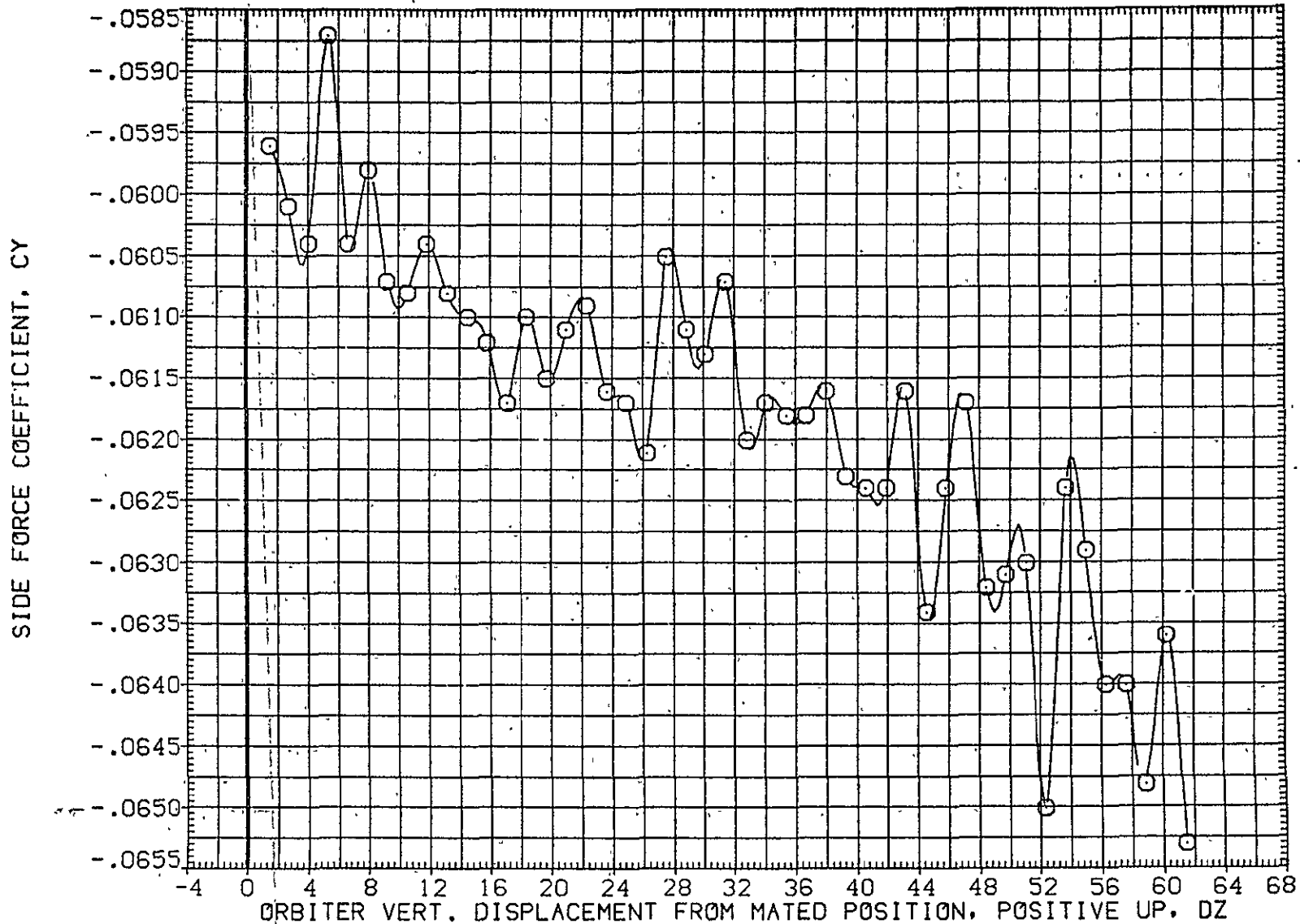


FIG. 30 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=5, AFE037

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE037)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.617	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

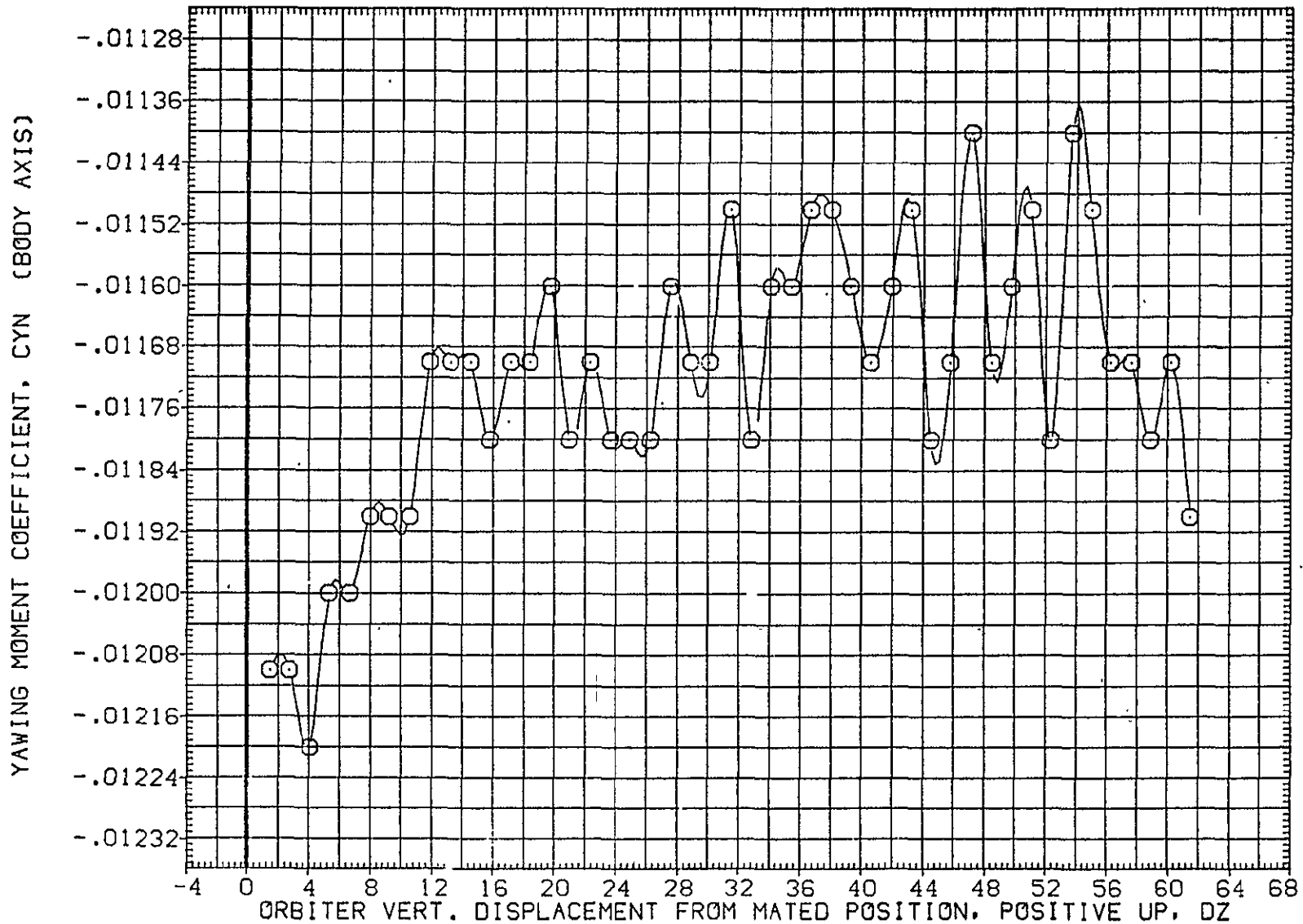


FIG. 30 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=5, AFE037

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.617	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SG, FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)

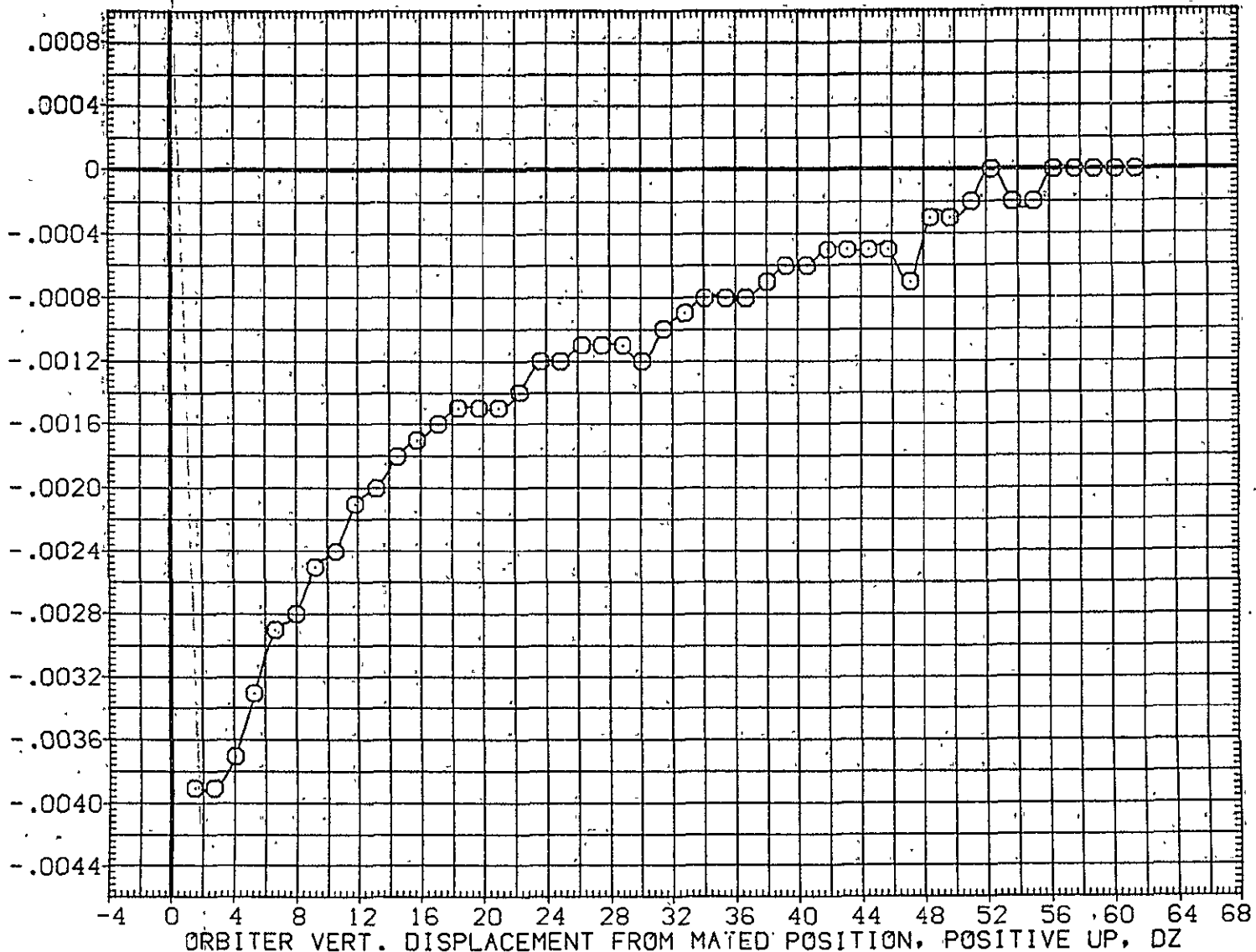


FIG. 30 ORB. DATA; CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=5, AFE037

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE037)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.617	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SG.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

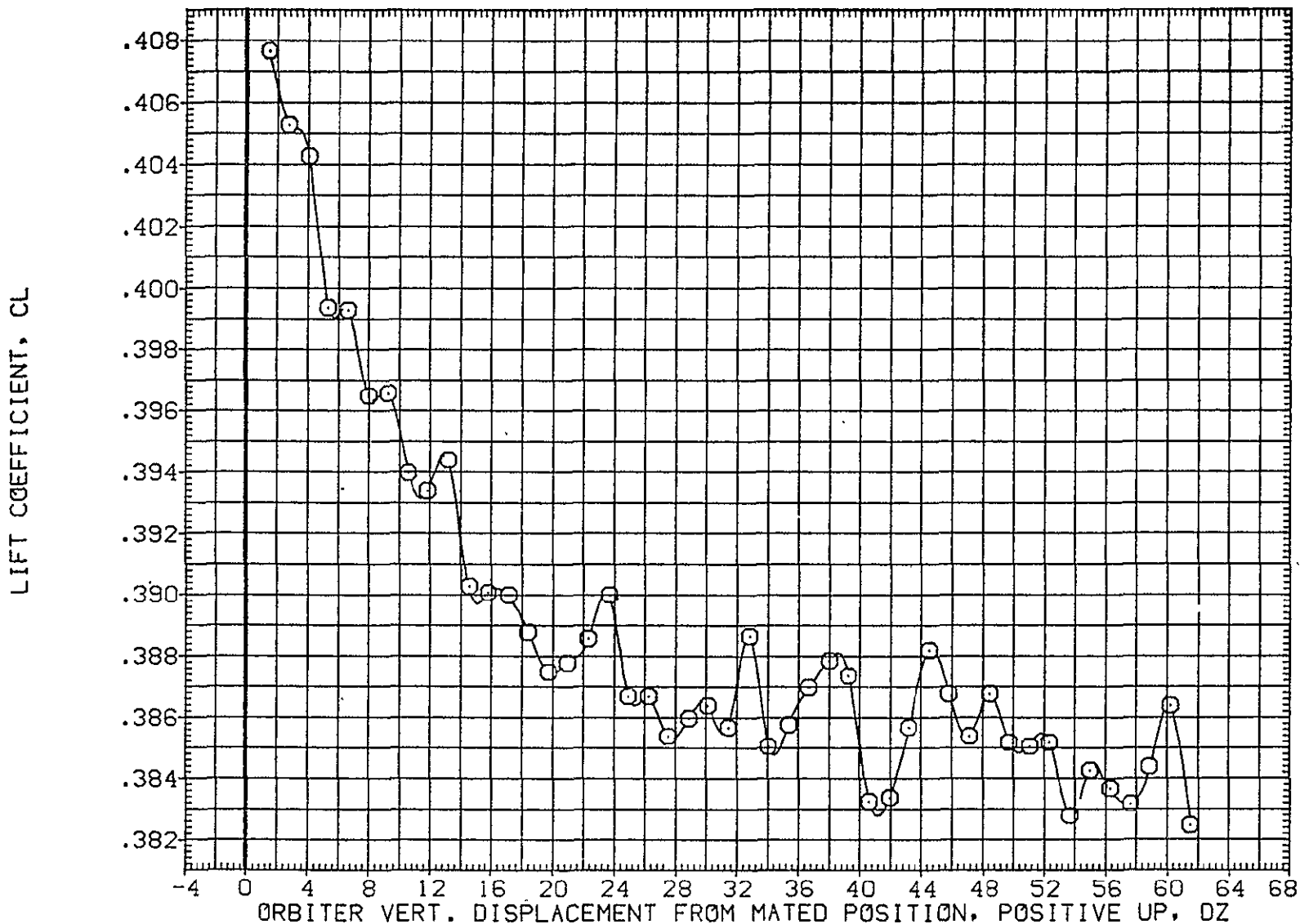


FIG. 30 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=5, AFE037

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.617	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SO.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

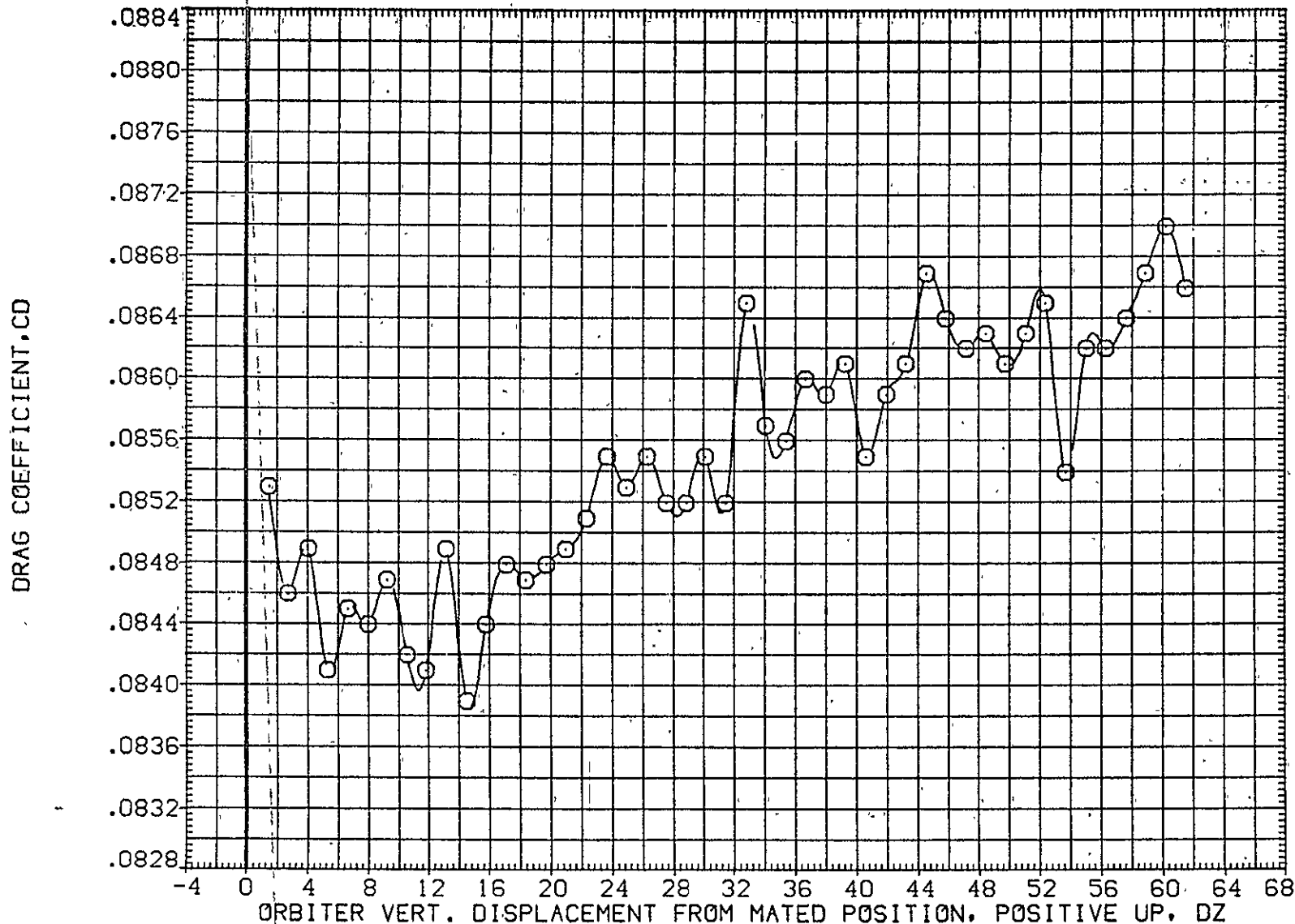


FIG. 30 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=5, AFE037

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE038)

SYMBOL
○

MACH	PARAMETRIC VALUES			
.625	ALPHAC	.000	BETAC	.000
	STAB	-1.000	ELEVON	5.000
	BDFLAP	.000	DX	.000
	DY	.000	IORB	4.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

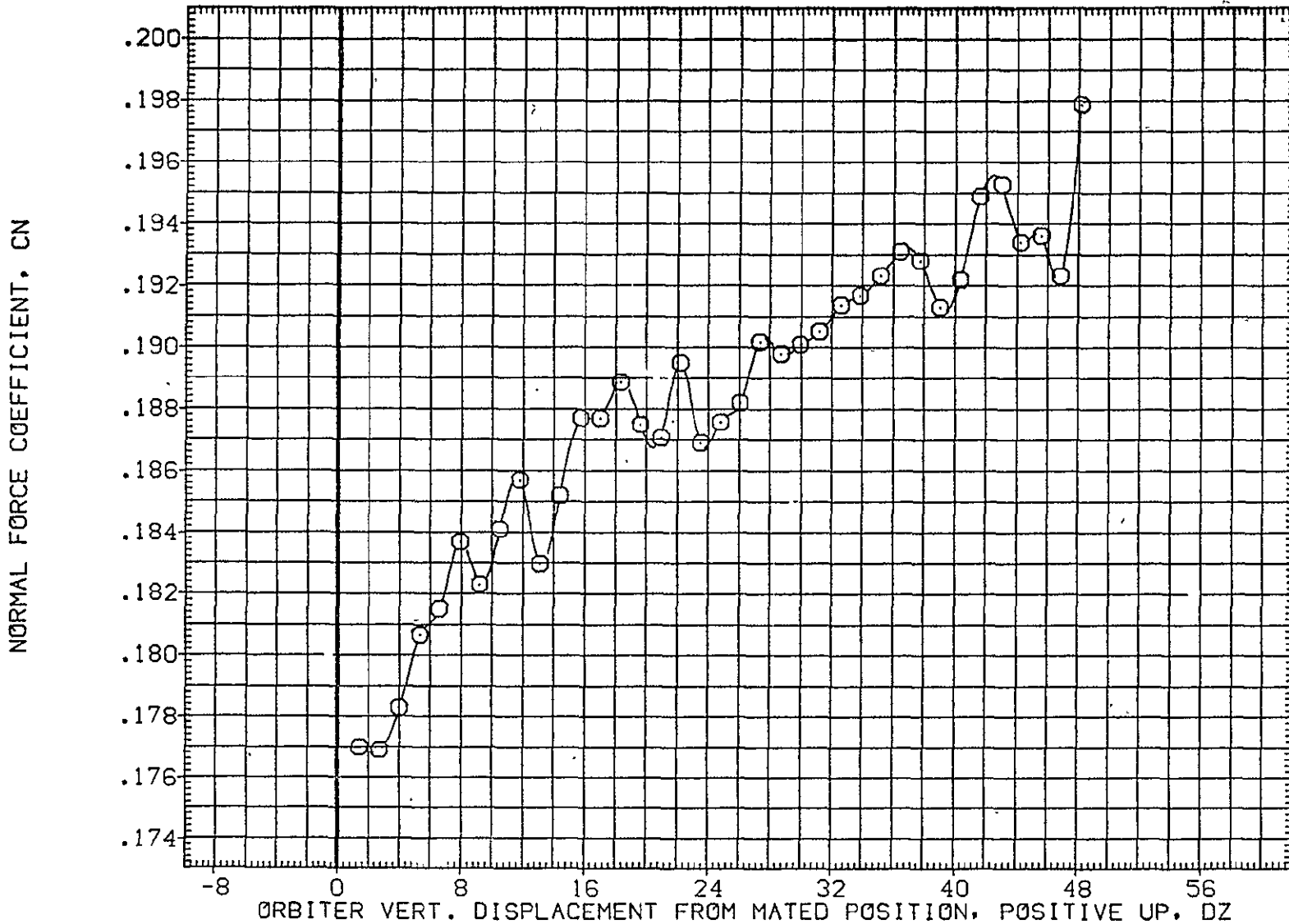


FIG. 31 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=4, BETAC=0, BETA0=0, AFE038

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.625	ALPHAC	.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

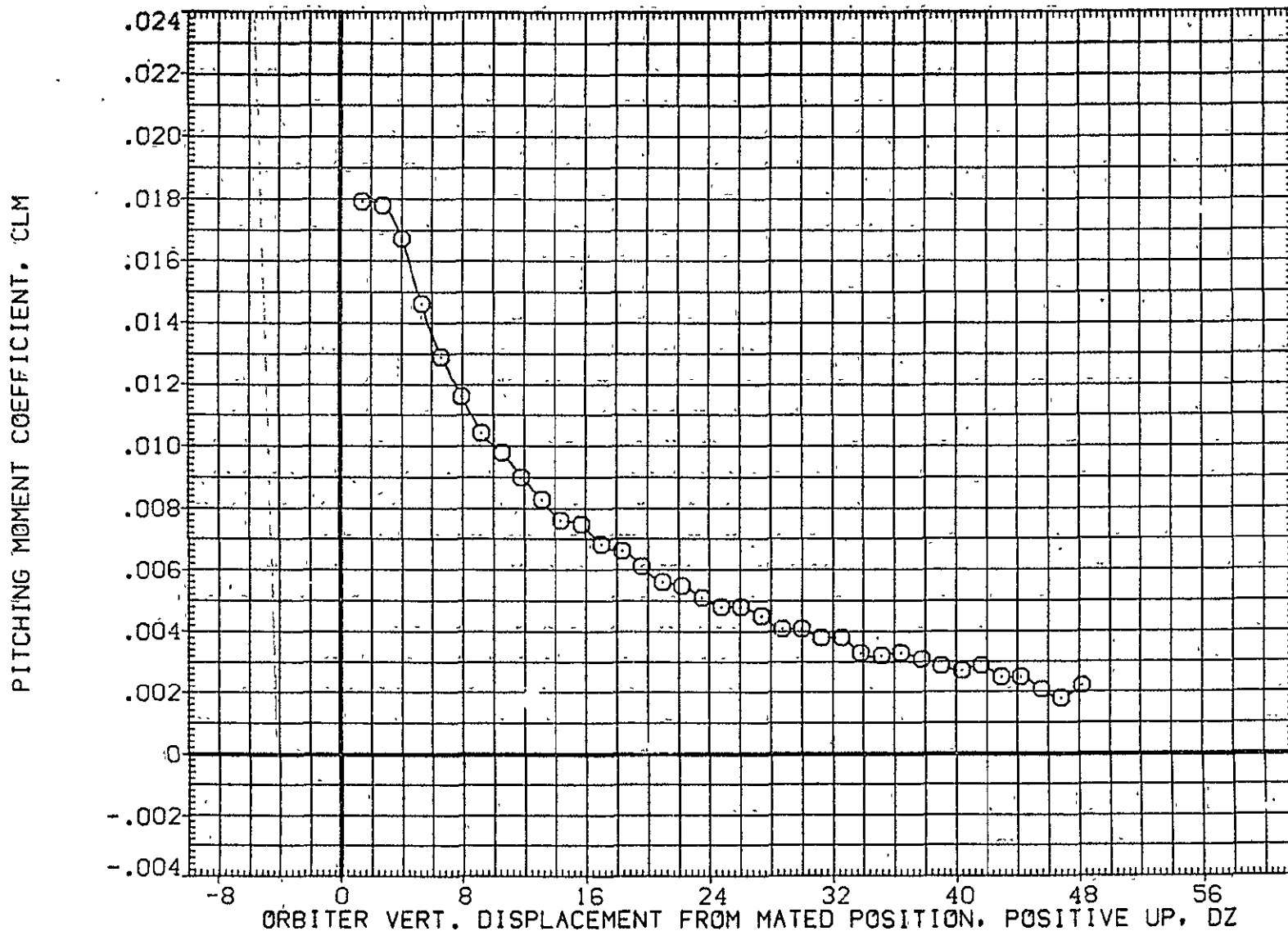


FIG. 31 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=4, BETAC=0, BETA0=0, AFE038

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE038)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.625	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

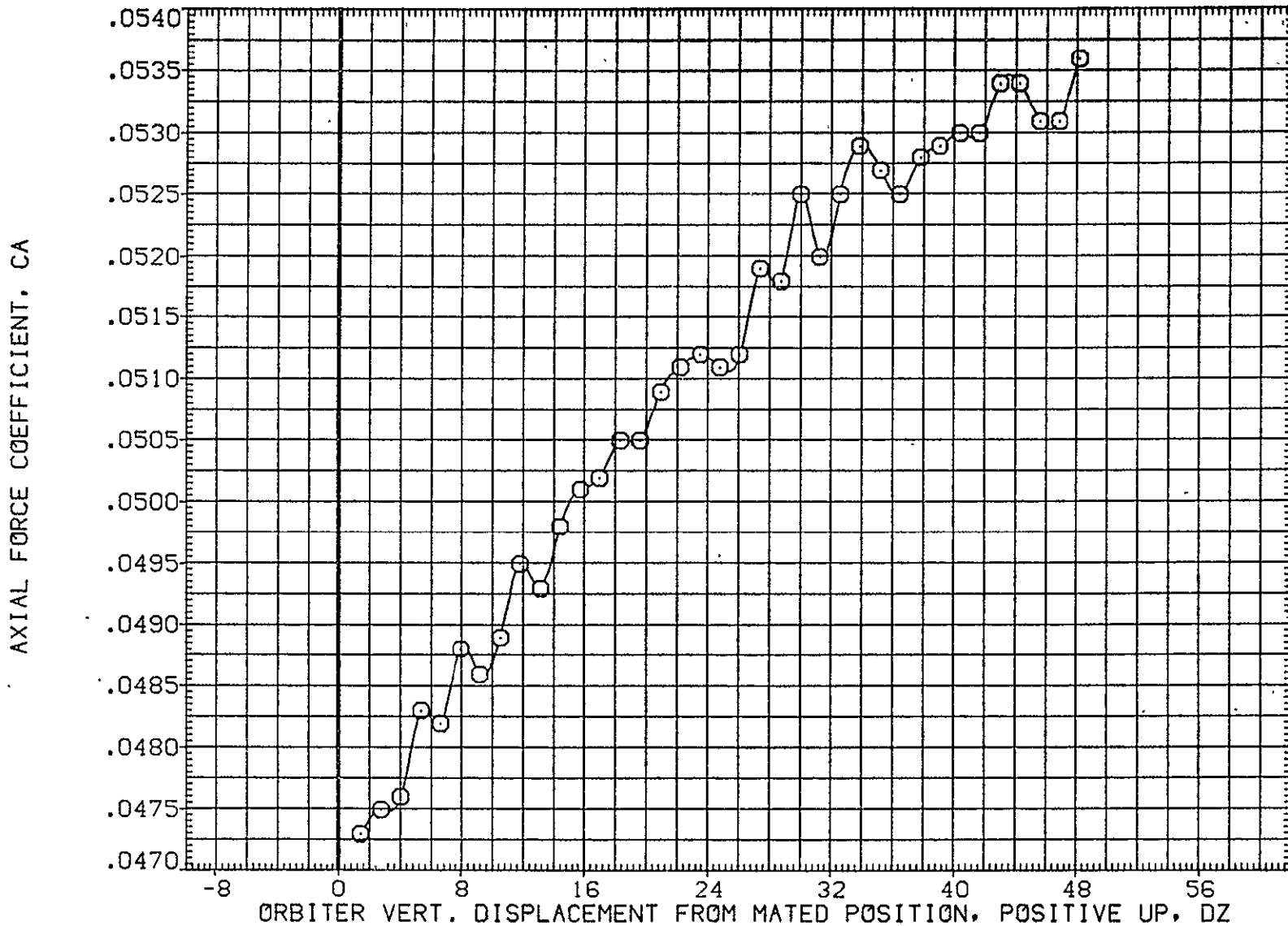


FIG. 31 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=4, BETAC=0, BETA0=0, AFE038

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.625	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	



FIG. 31 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=4, BETAC=0, BETA0=0, AFE038

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE038)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.625	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SG
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN
		BDFLAP	.000	DX	.000	BREF	936.6800	IN
		DY	.000	IORB	4.000	XMRP	1109.0000	IN
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN
						ZMRP	375.0000	IN
						SCALE	.0125	

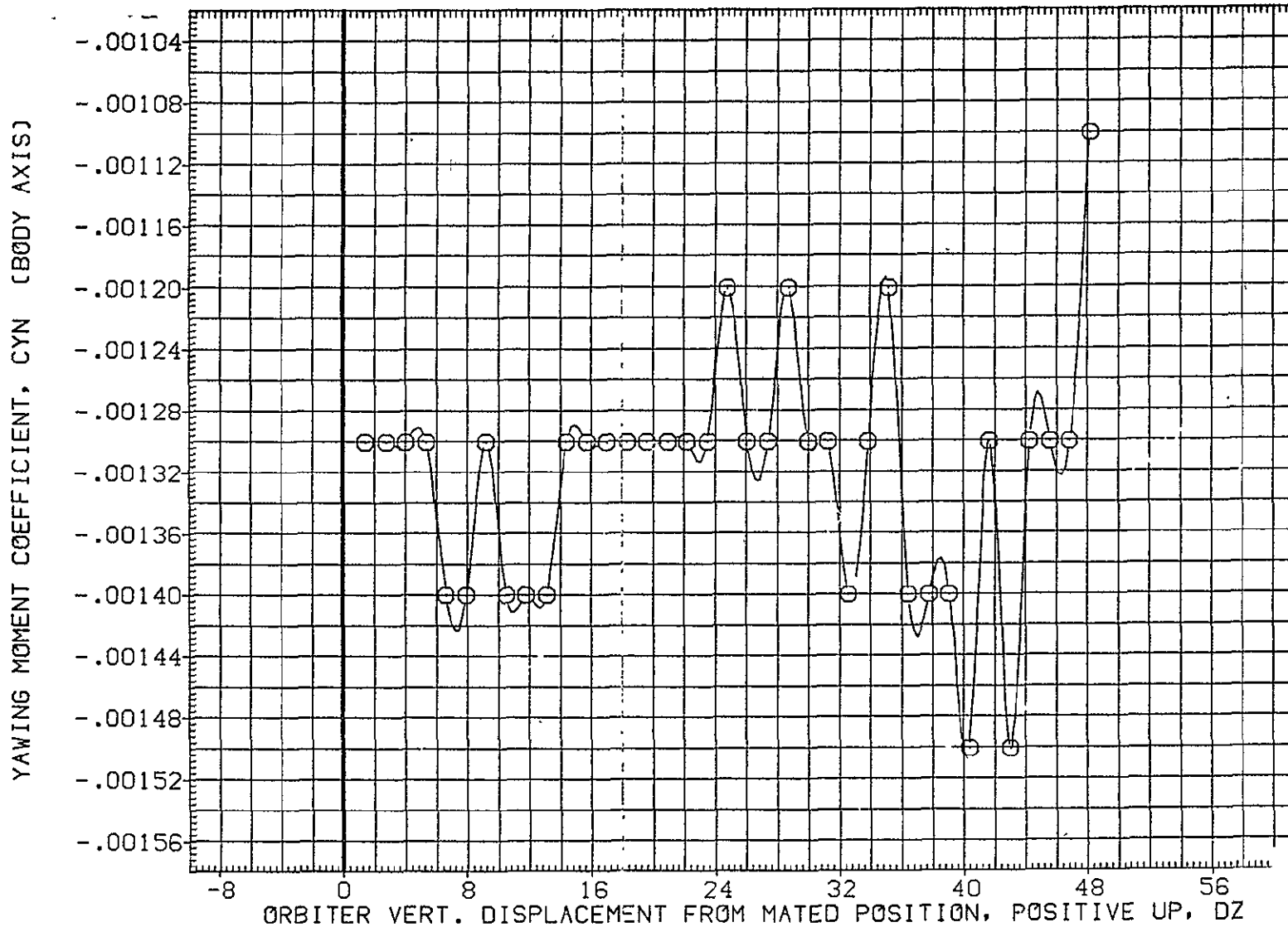


FIG. 31 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=4, BETAC=0, BETA0=0, AFE038

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.625	ALPHAC	.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BDRLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB'	4.000	XMRP	1109.0000	IN. X0
		BETAD	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

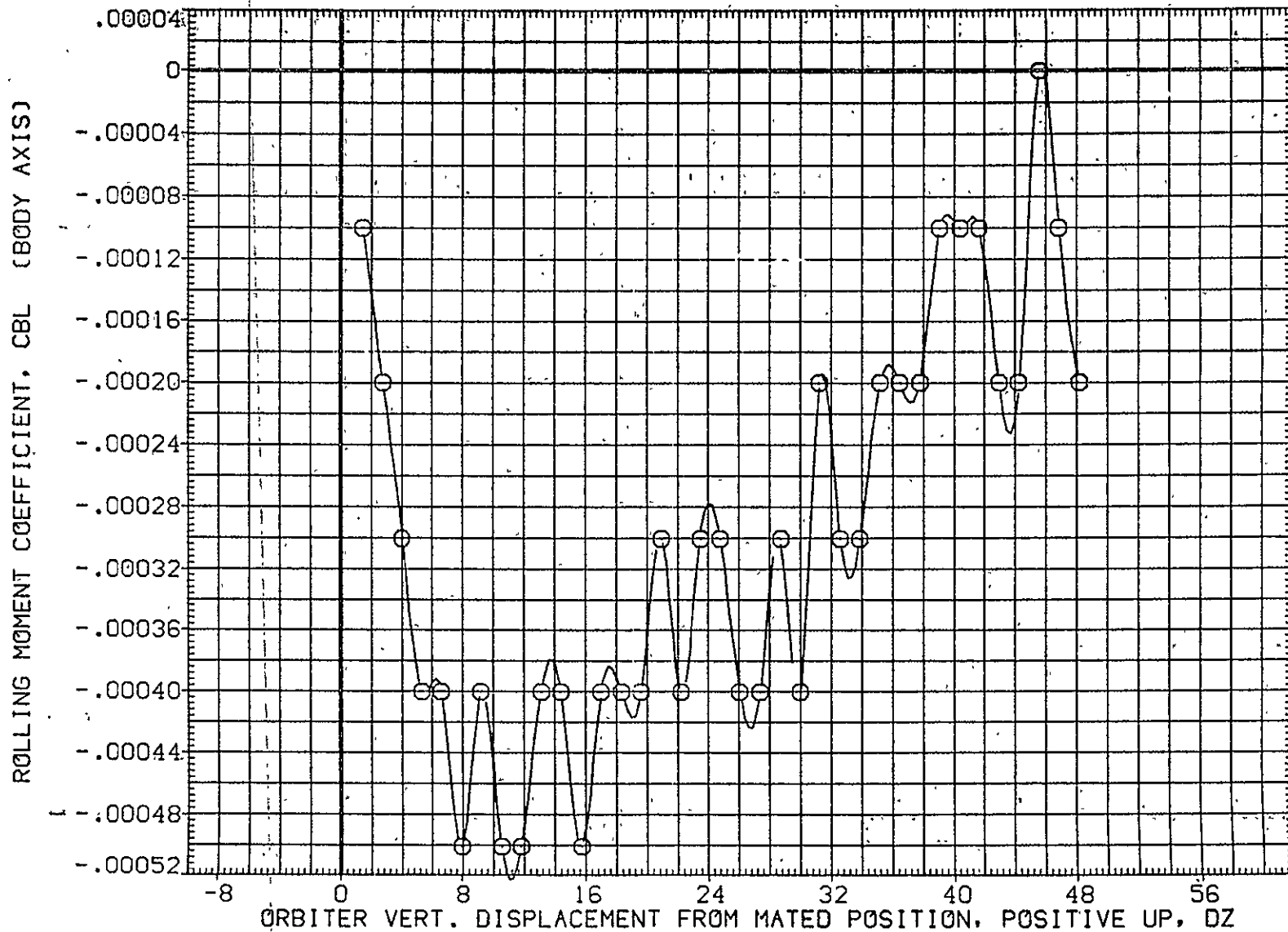


FIG. 31 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=4, BETAC=0, BETAD=0, AFEO38

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE038)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.625	ALPHAC	.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		OY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

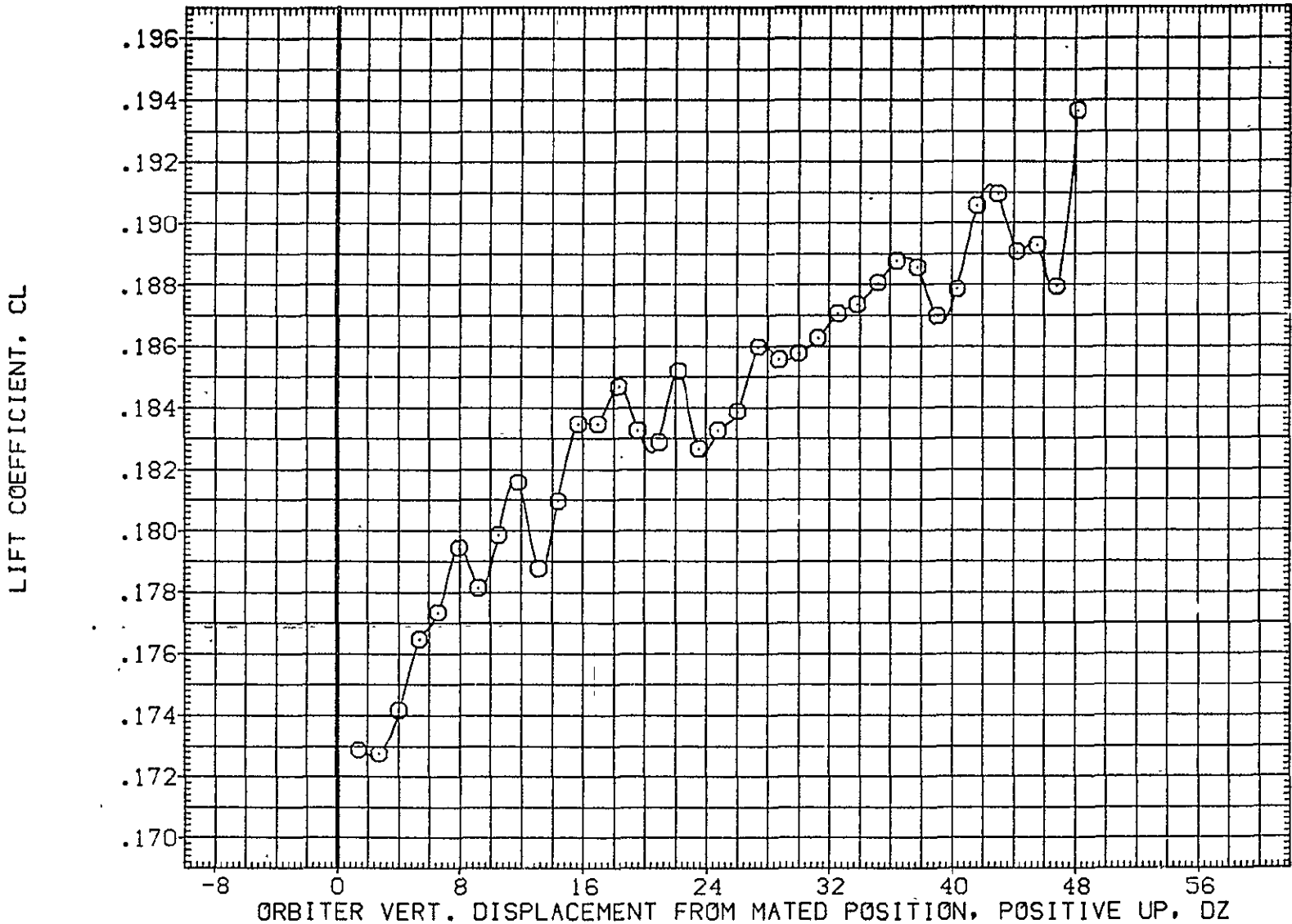


FIG. 31 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=4, BETAC=0, BETA0=0, AFE038

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.625	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	986.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETAC	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

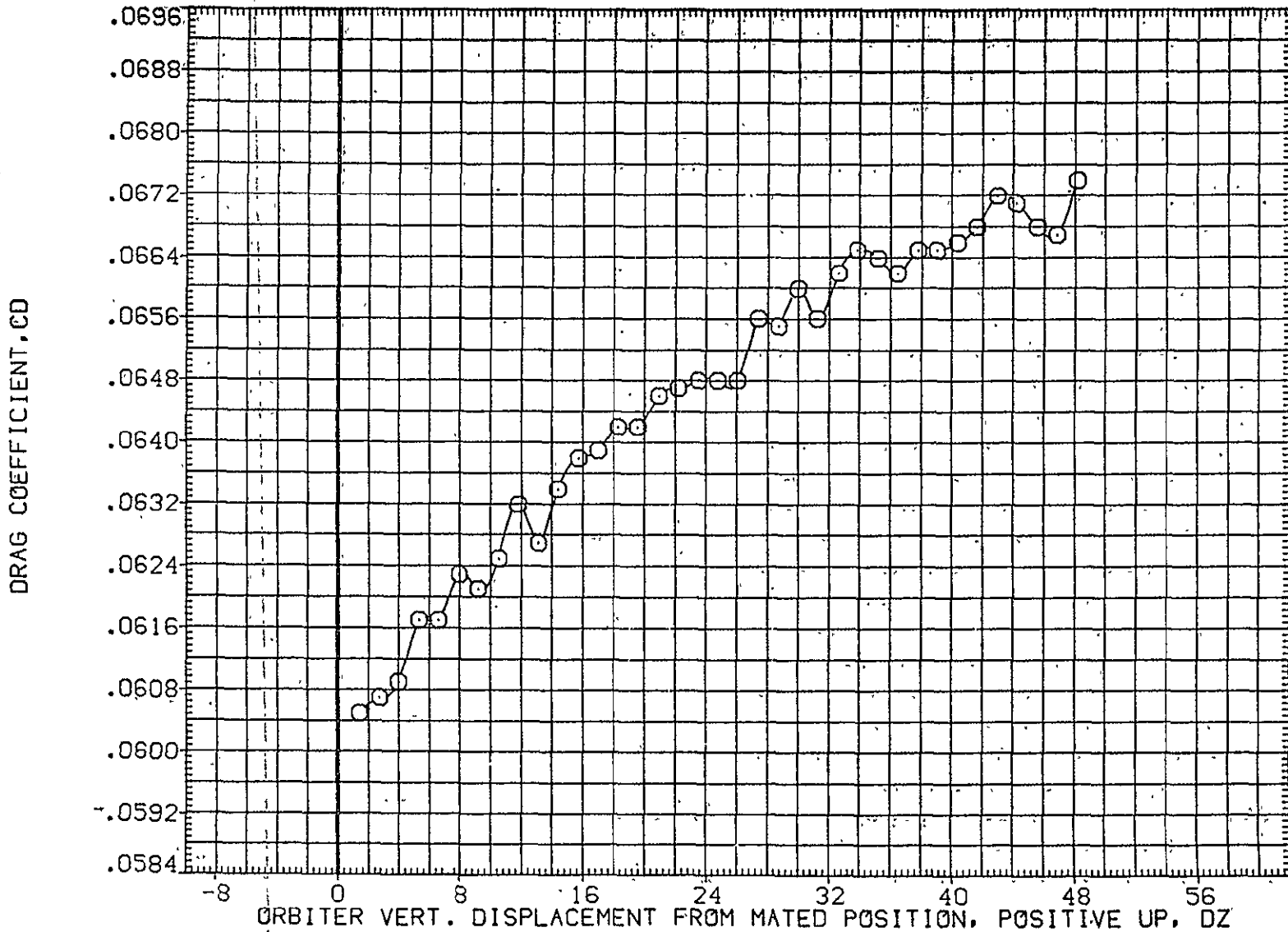


FIG. 31 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=4, BETAC=0, BETAC=0, AFE038

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE039)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.627	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SO.FT.
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

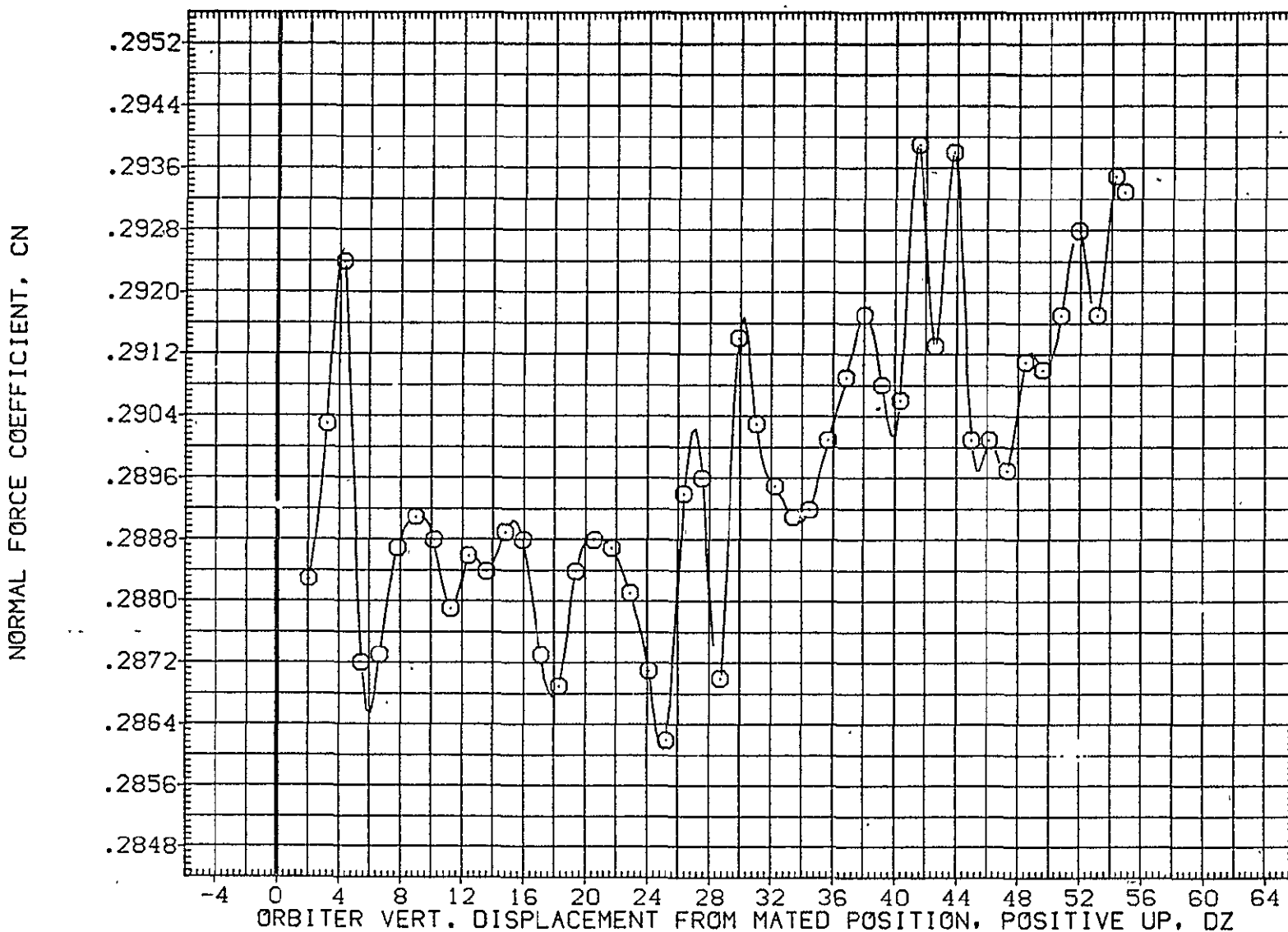


FIG. 32 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE039

SYMBOL
○

MACH	PARAMETRIC VALUES			
.627	ALPHAC	.000	BETAC	.000
	STAB	-1.000	ELEVON	5.000
	BDFLAP	.000	DX	.000
	OY	.000	IORB	6.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

PITCHING MOMENT COEFFICIENT, CLM

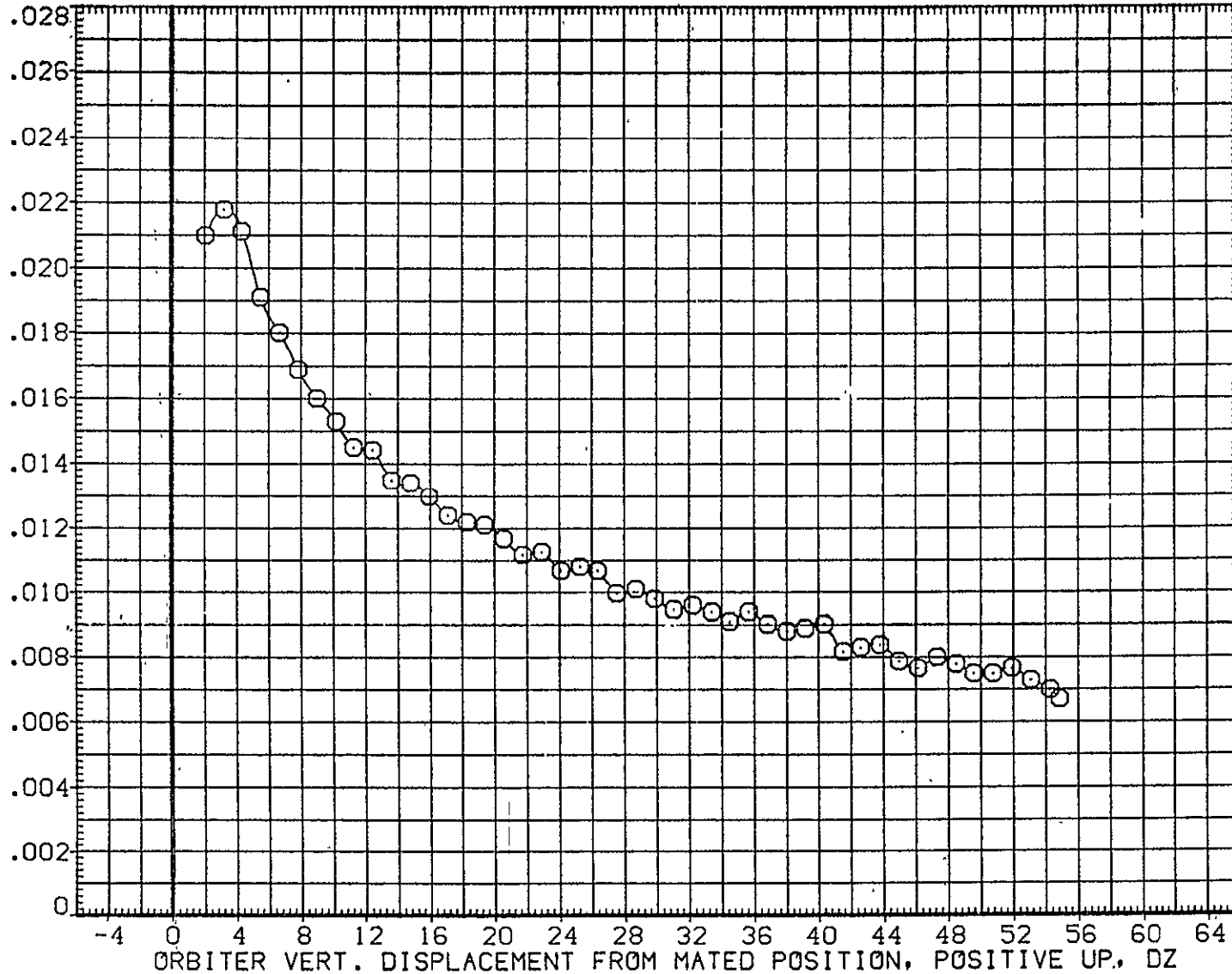


FIG. 32 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE039

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE039)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.627	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

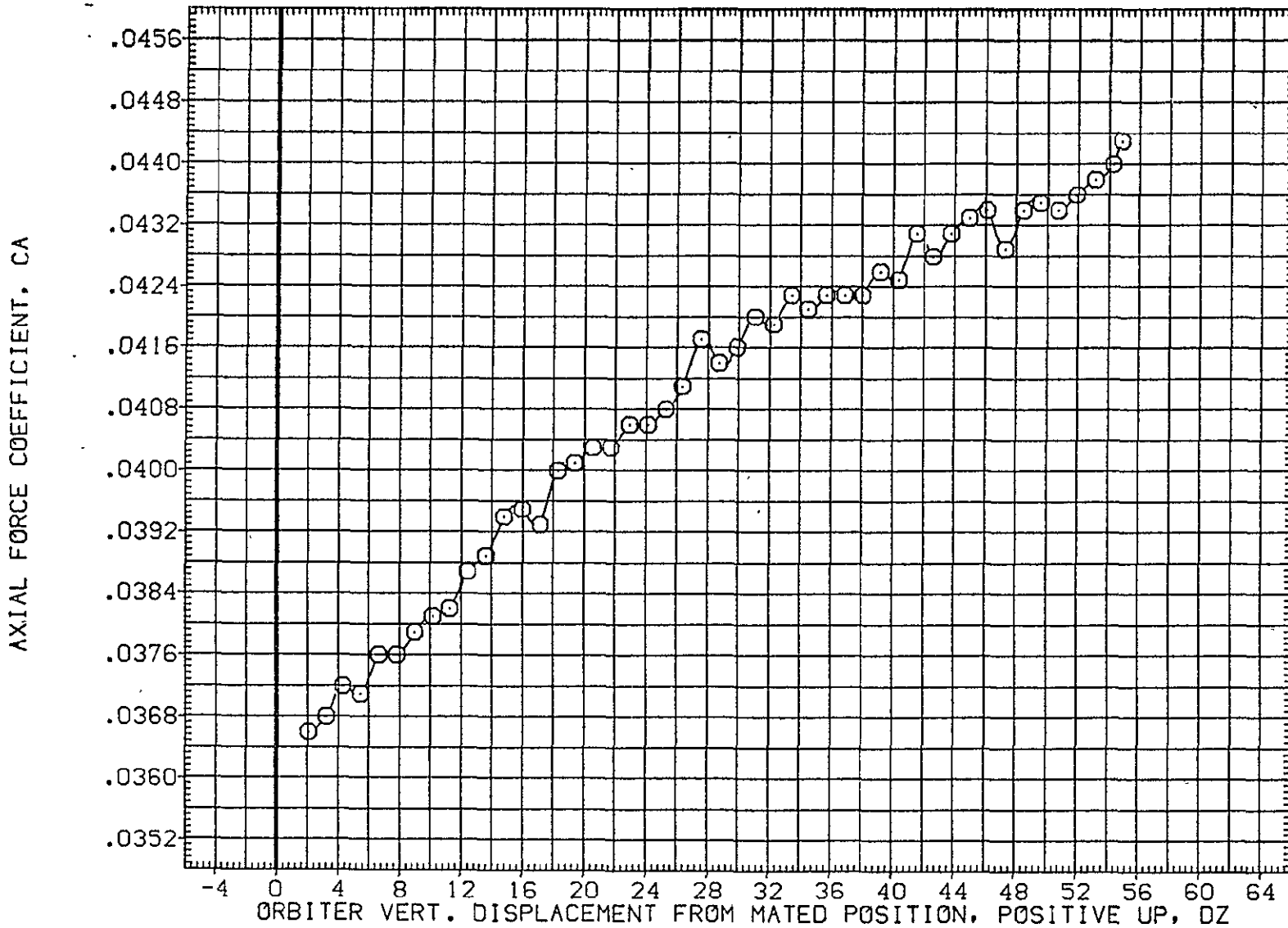


FIG. 32 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE039

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.627	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SG.FT.
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BOFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	YMRF	1109.0000	IN. X0'
		BETA0	.000	RUDDER	.000	YMRF	.0000	IN. Y0'
						ZMRF	375.0000	IN. Z0'
						SCALE	.0125	

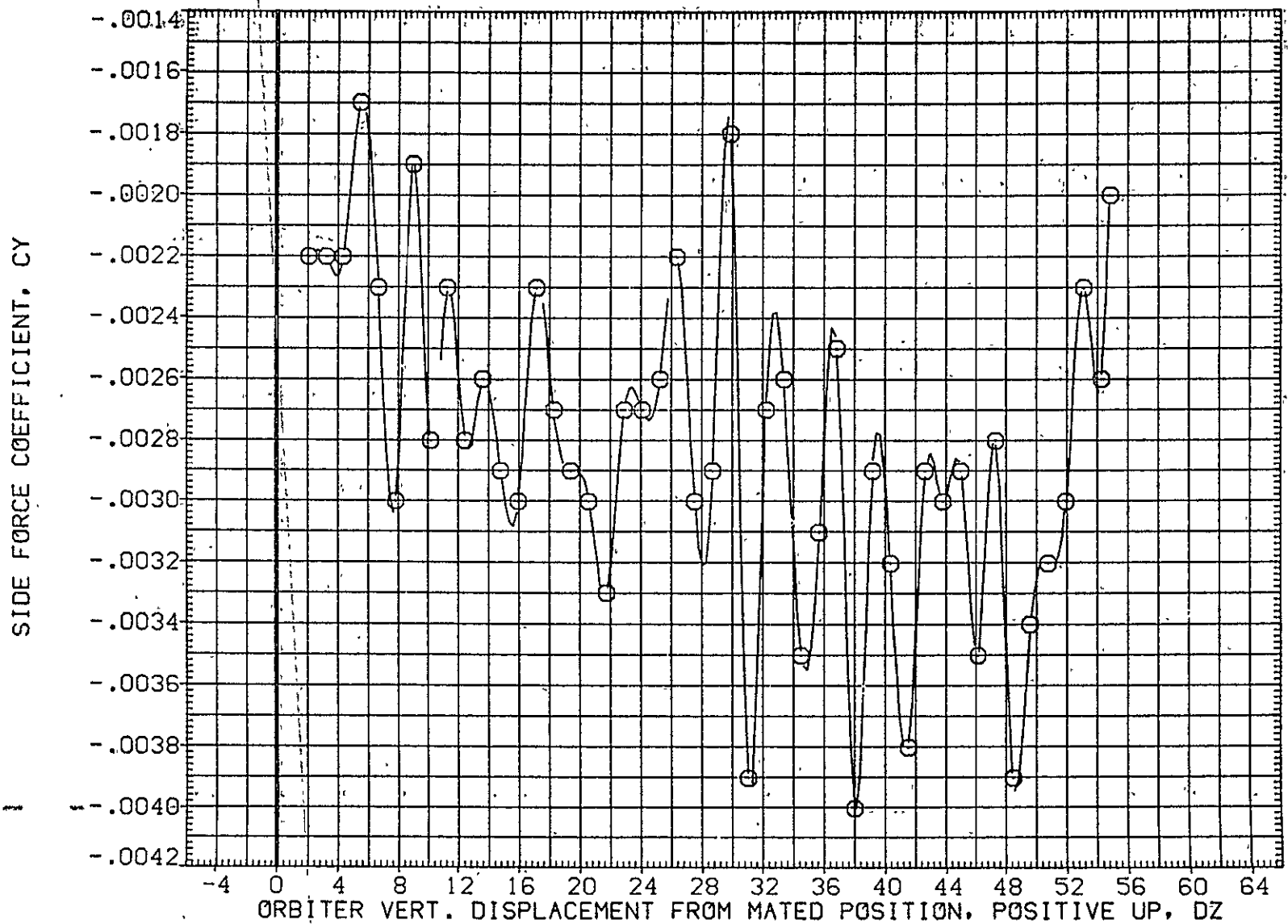


FIG. 32 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE039

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE039)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.627	ALPHAC	.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETAD	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

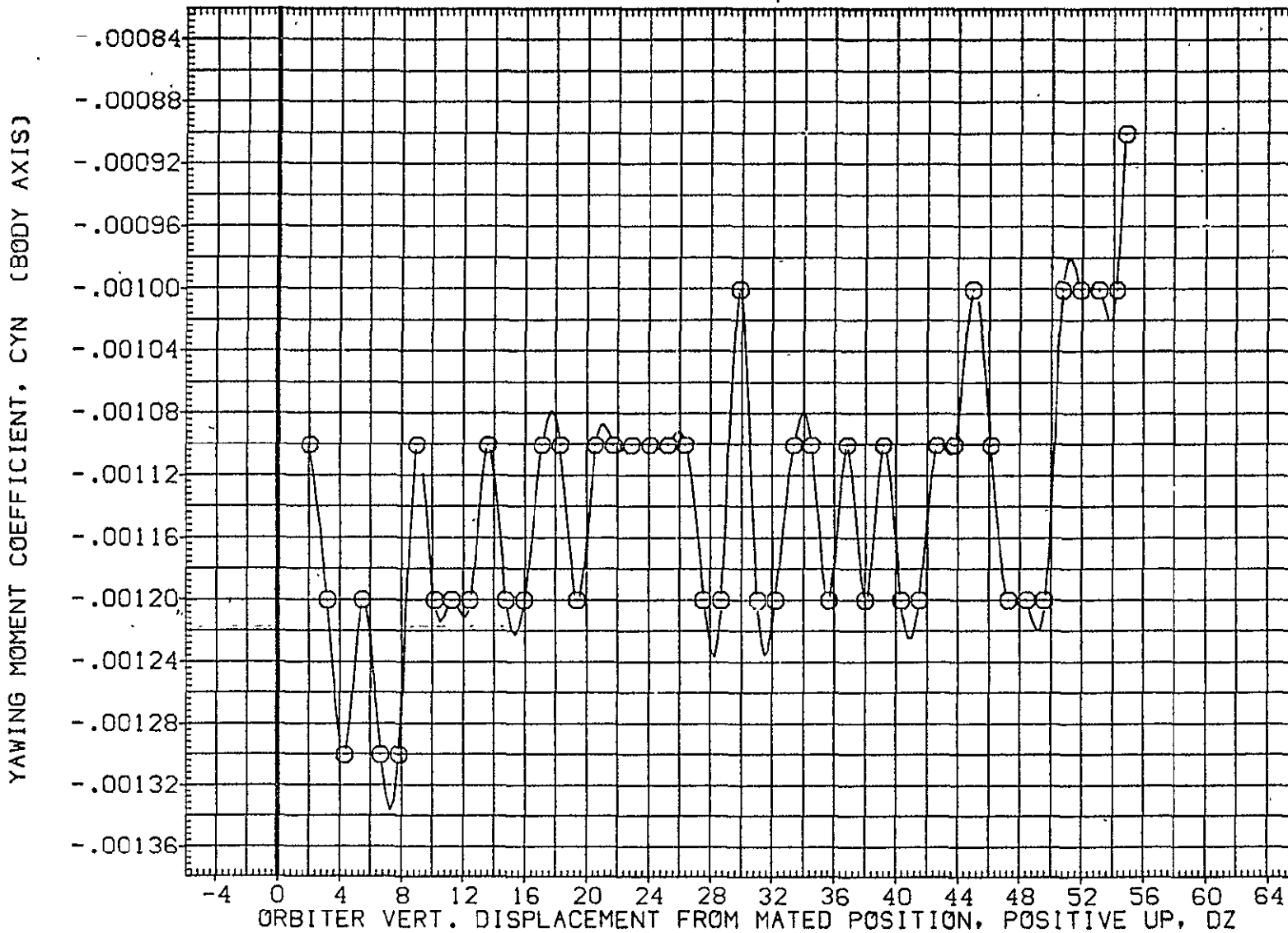


FIG. 32 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETAD=0, AFE039

SYMBOL	MACH	PARAMETRIC VALUES			
○	.627	ALPHAC	.000	BETAC	.000
		STAB	-1.000	ELEVON	5.000
		BDFLAP	.000	DX	.000
		DY	.000	IORB	6.000
		BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

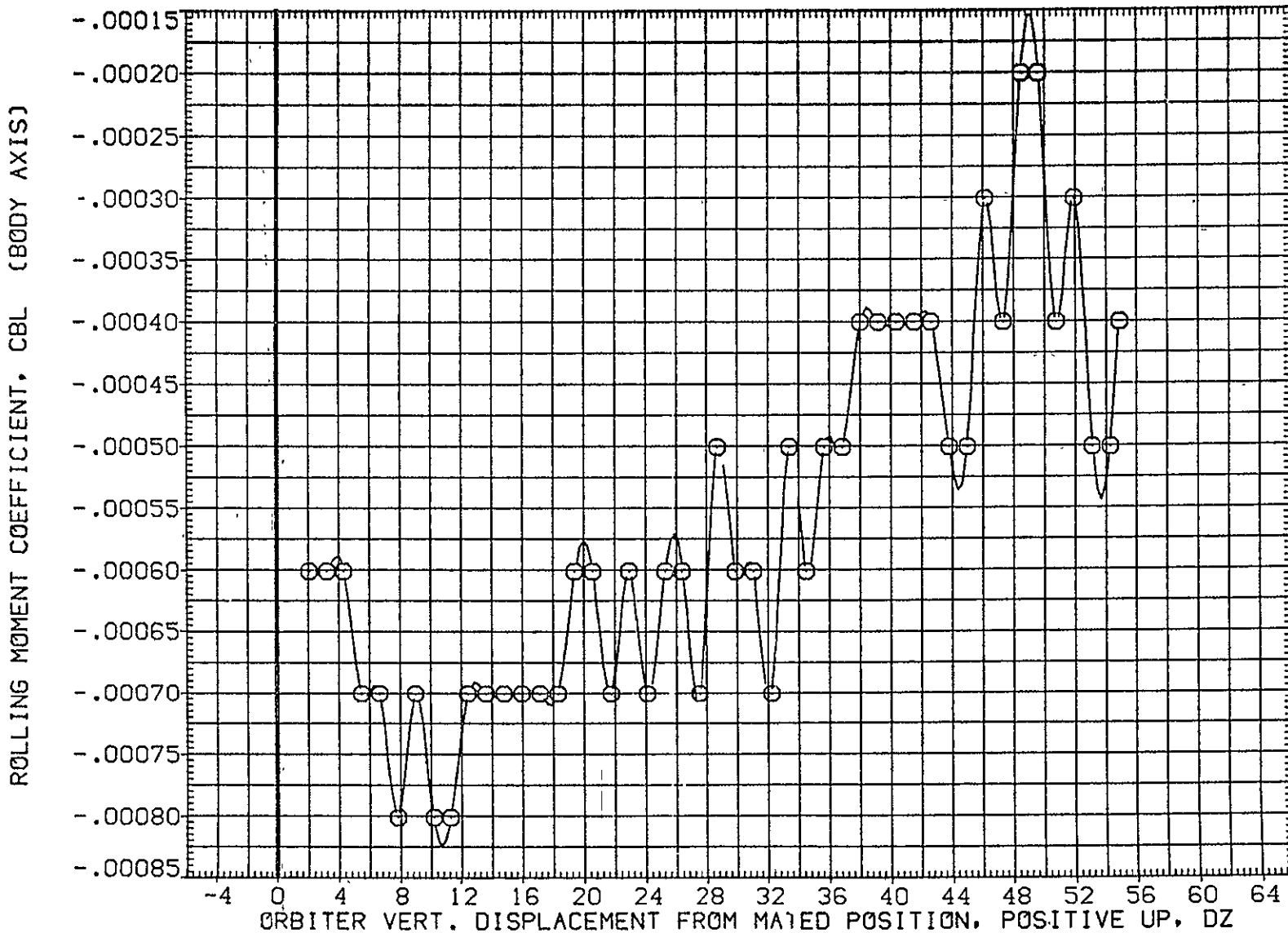


FIG. 32 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE039

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE039)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.627	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

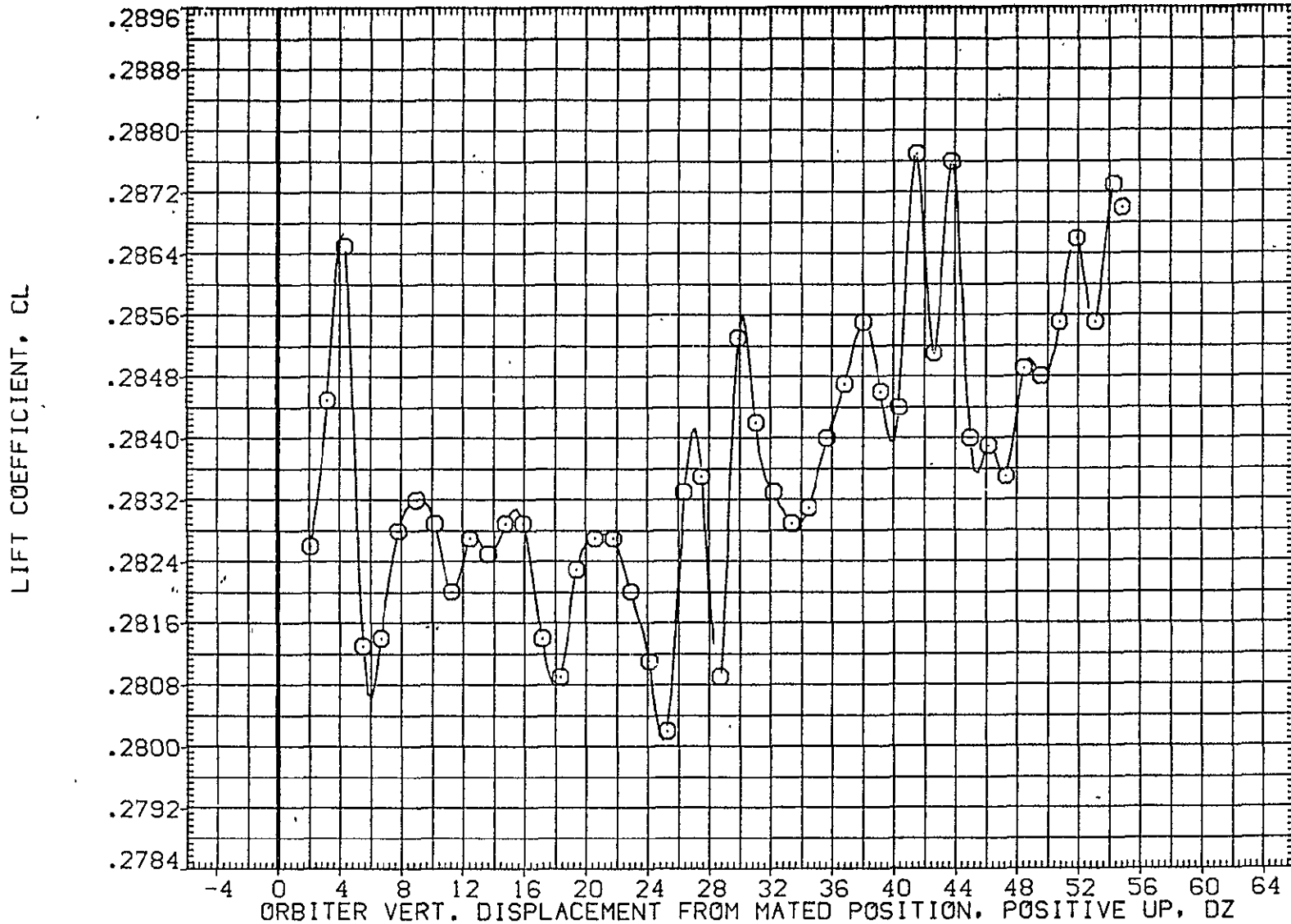


FIG. 32 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE039

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.627	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		SITAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

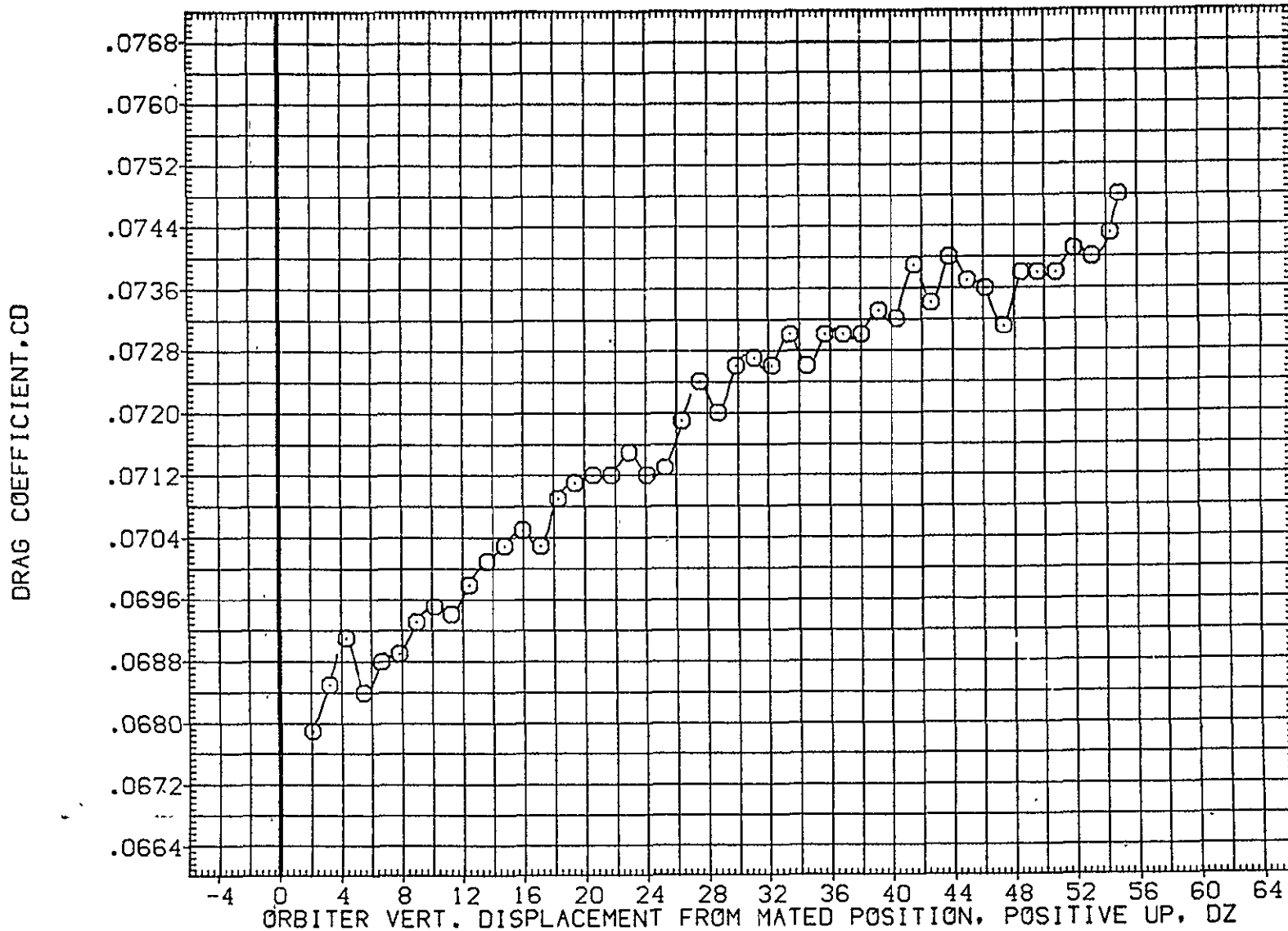


FIG. 32 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=6, BETAC=0, BETA0=0, AFE039

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE040)

SYMBOL
○

MACH
.622

PARAMETRIC VALUES			
ALPHAC	.000	BETAC	.000
STAB	-1.000	ELEVON	5.000
BDFLAP	.000	DX	.000
DY	.000	IORB	8.000
BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

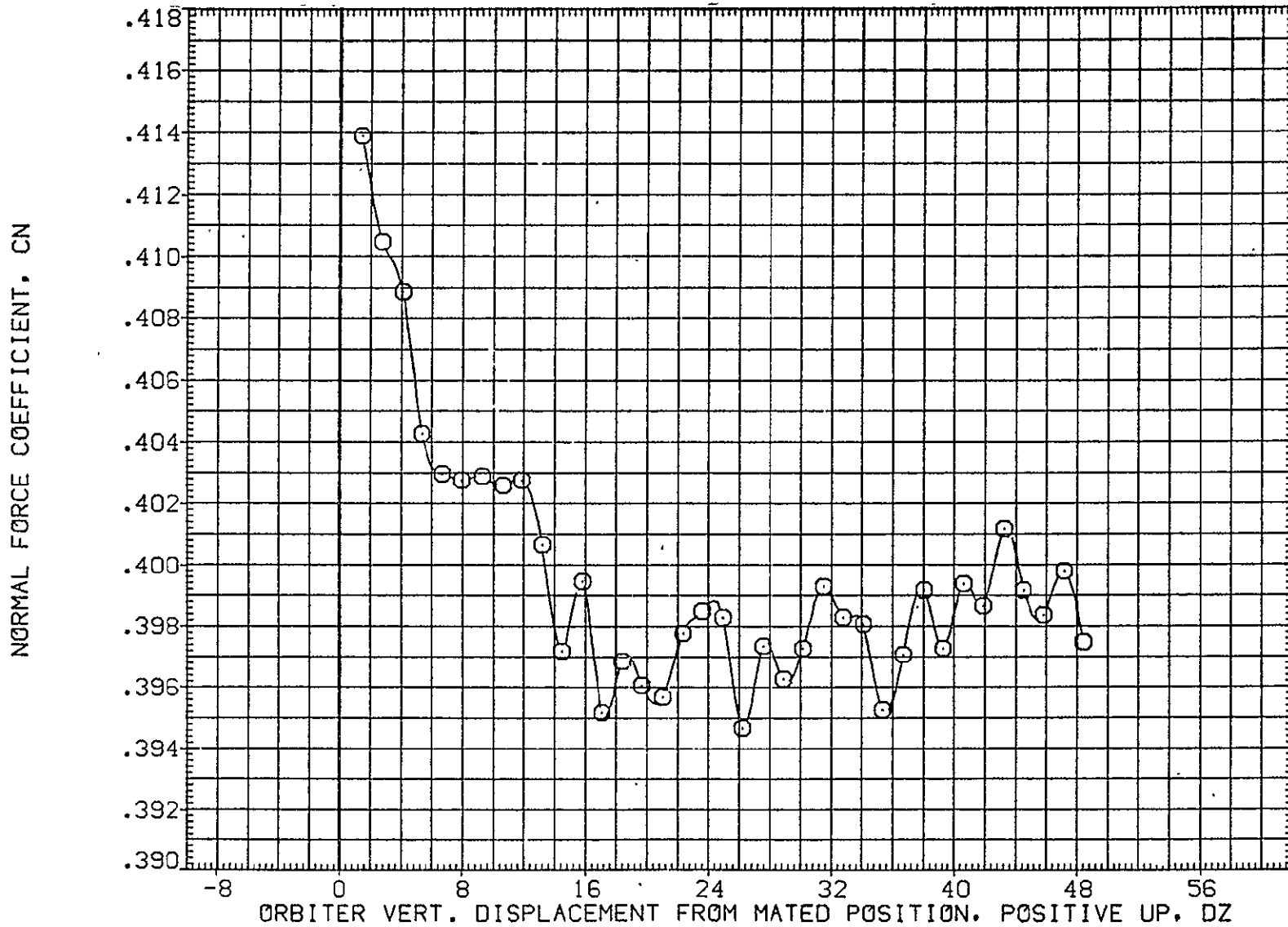


FIG. 33 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=0, AFE040

SYMBOL
○

MACH	PARAMETRIC VALUES			
.622	ALPHAC	.000	BETAC	.000
	STAB	-1.000	ELEVON	5.000
	BDFLAP	.000	DX	.000
	DY	.000	IORB	8.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X00
YMRP	.0000	IN. Y00
ZMRP	375.0000	IN. Z00
SCALE	.0125	

PITCHING MOMENT COEFFICIENT, CLM

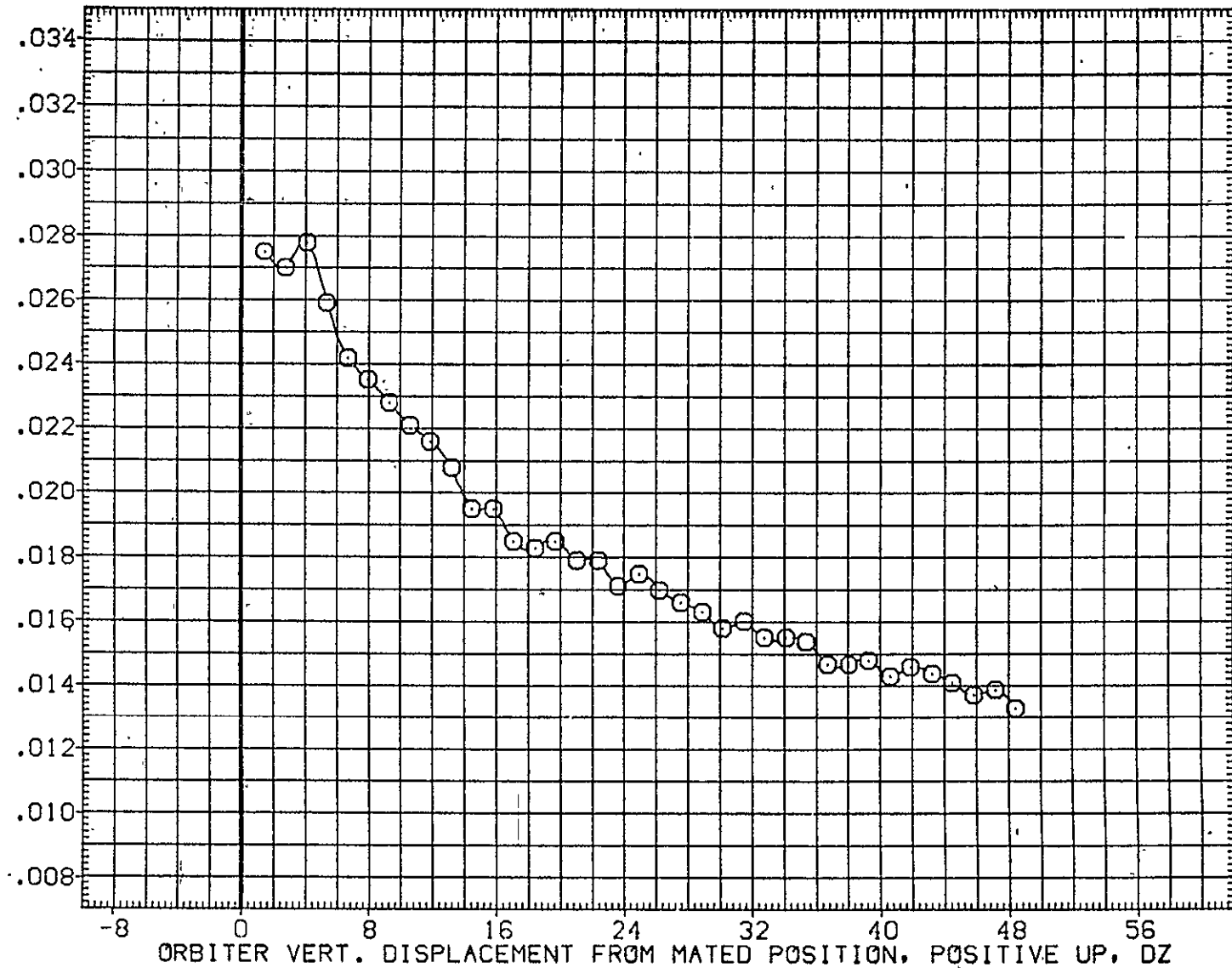


FIG. 33 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=0, AFE040

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE040)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.622	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

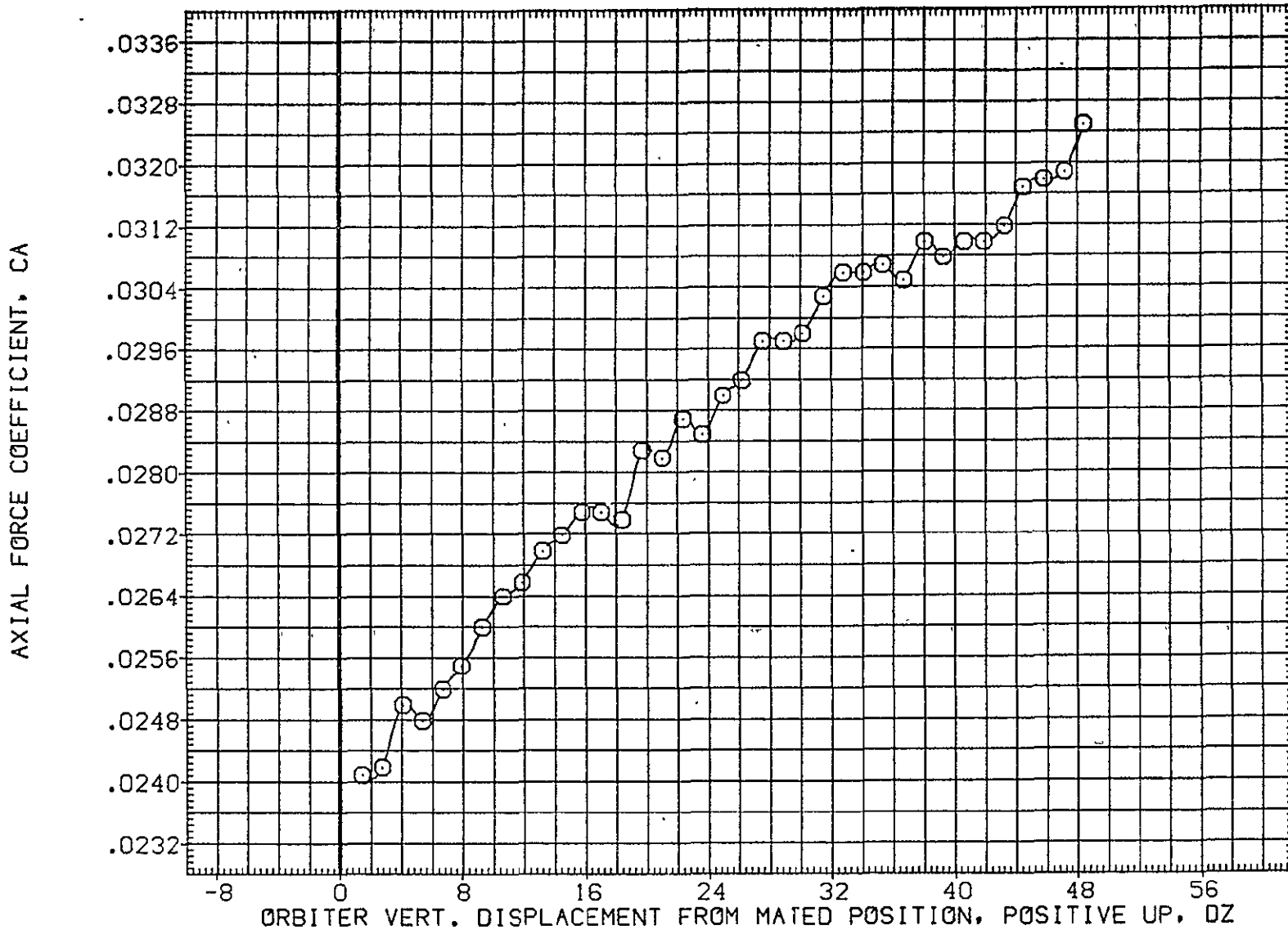


FIG. 33 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=0, AFE040

SYMBOL	MACH	PARAMETRIC VALUES			
○	.622	ALPHAC	.000	BETAC	.000
		STAB	-1.000	ELEVON	5.000
		BDFLAP	.000	DX	.000
		DY	.000	IORB	8.000
		BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

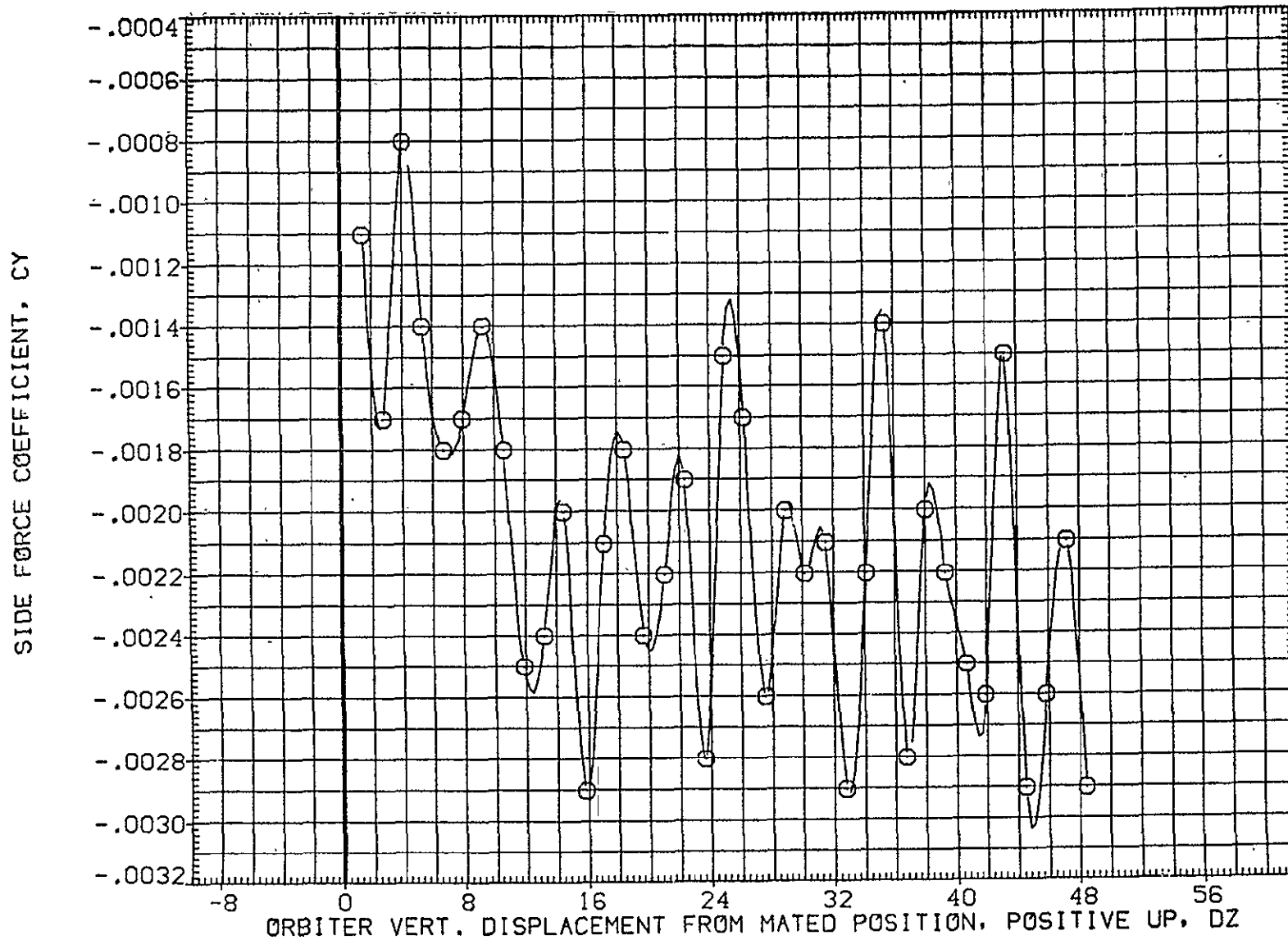


FIG. 33 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=0, AFE040

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE040)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.622	ALPHAC	.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	OX	.000	BREF	936.6800	IN.
		OY	.000	IORB	8.000	XMRP	1109.0000	IN. XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

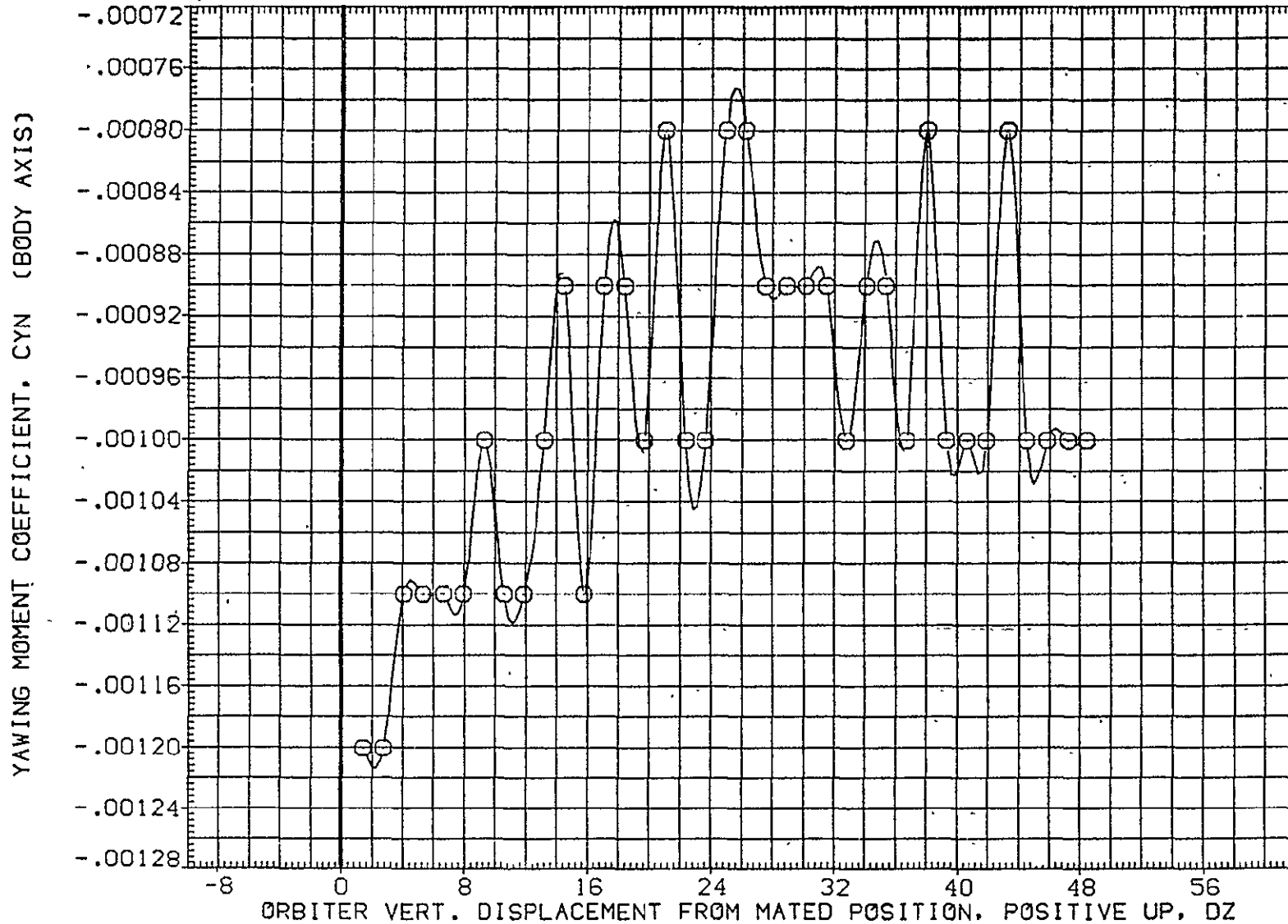


FIG. 33 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=0, AFE040

SYMBOL	MACH	PARAMETRIC VALUES			
○	.622	ALPHAC	.000	BETAC	.000
		STAB	-1.000	ELEVON	5.000
		BDFLAP	.000	DX	.000
		DY	.000	IORB	8.000
		BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

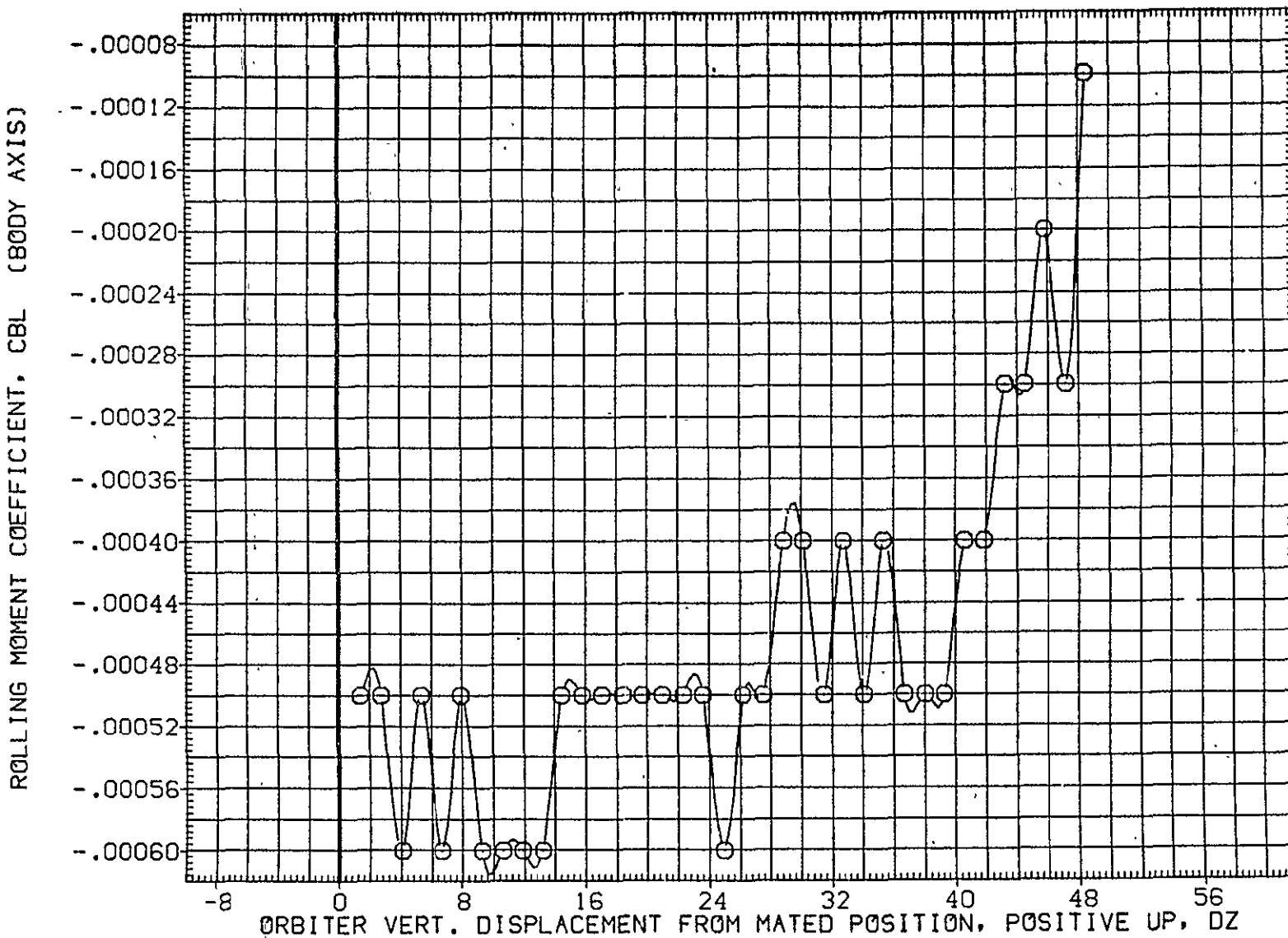


FIG. 33 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=0, AFE040

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE040)

SYMBOL
○

MACH
.622

PARAMETRIC VALUES			
ALPHAC	.000	BETAC	.000
STAB	-1.000	ELEVON	5.000
BDFLAP	.000	DX	.000
DY	.000	IORB	8.000
BETA0	.000	RUDDER	.000

REFERENCE INFORMATION

SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

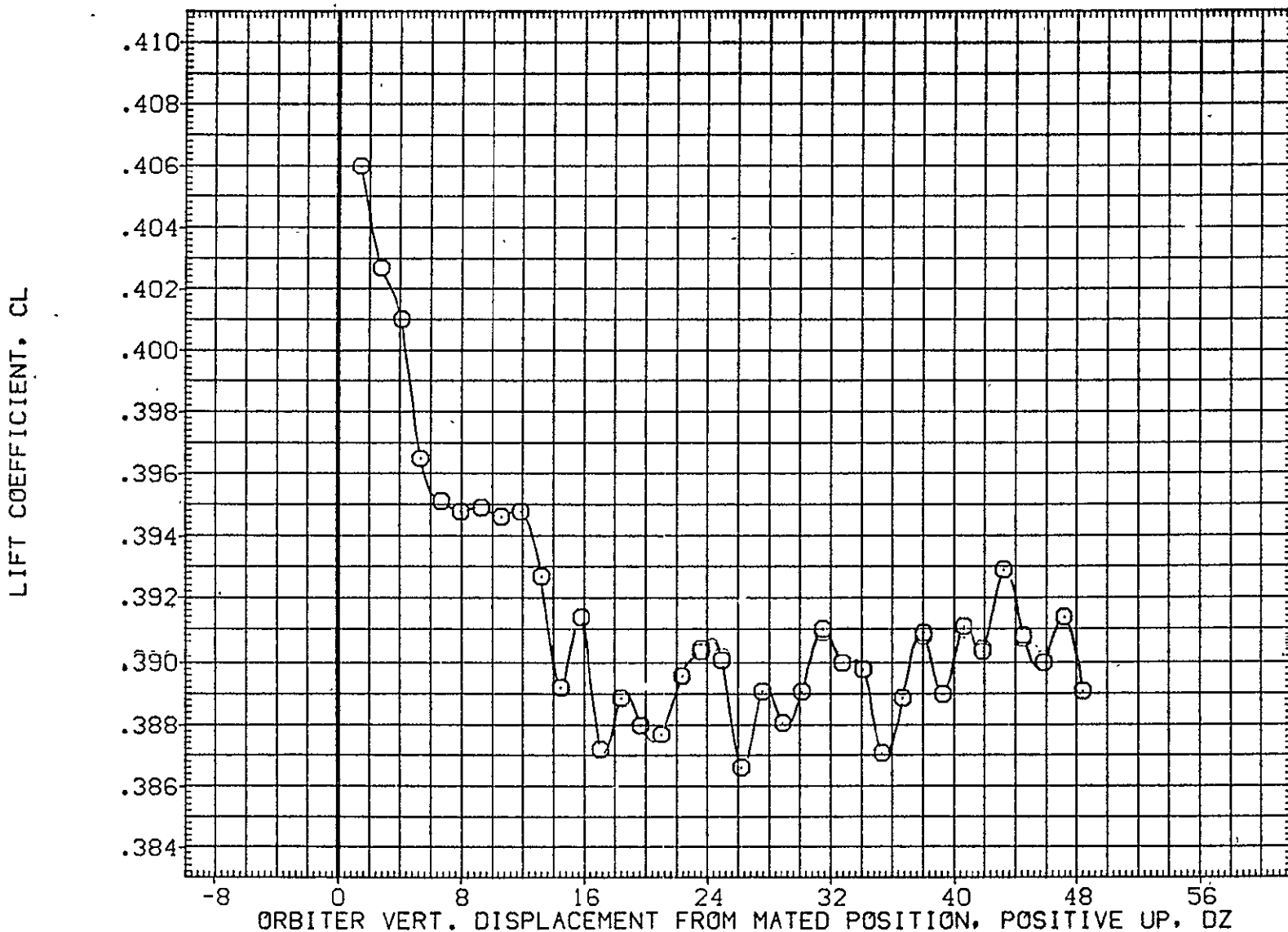


FIG. 33 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=0, AFE040

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.622	ALPHAC	.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

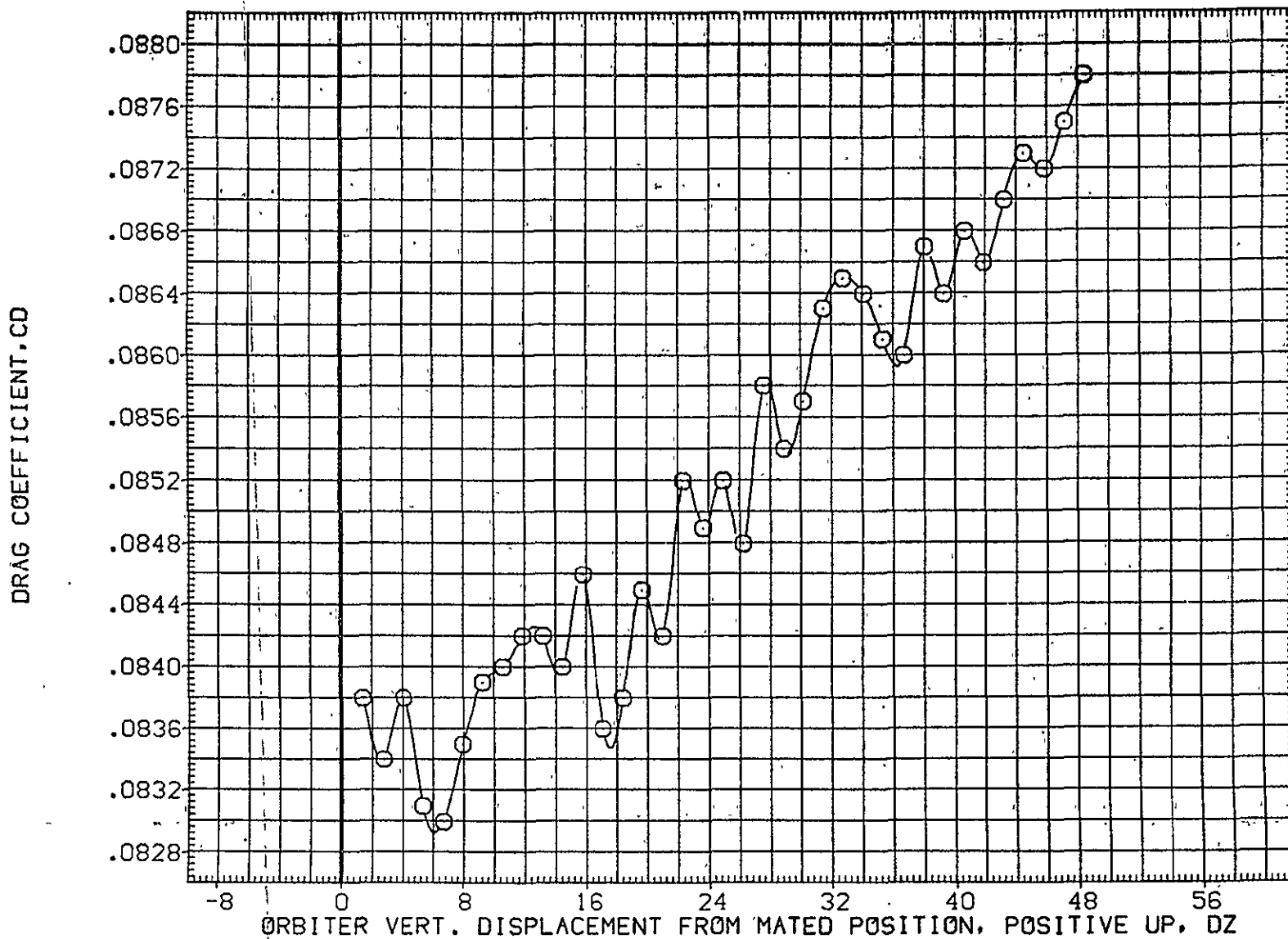


FIG. 33 ORB. DATA, CARRIER PROXIMITY, ALPHAC=0, IORB=8, BETAC=0, BETA0=0, AFE040

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE041)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.595	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SG.F
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BOFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN.
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN.
						ZMRP	375.0000	IN.
						SCALE	.0125	

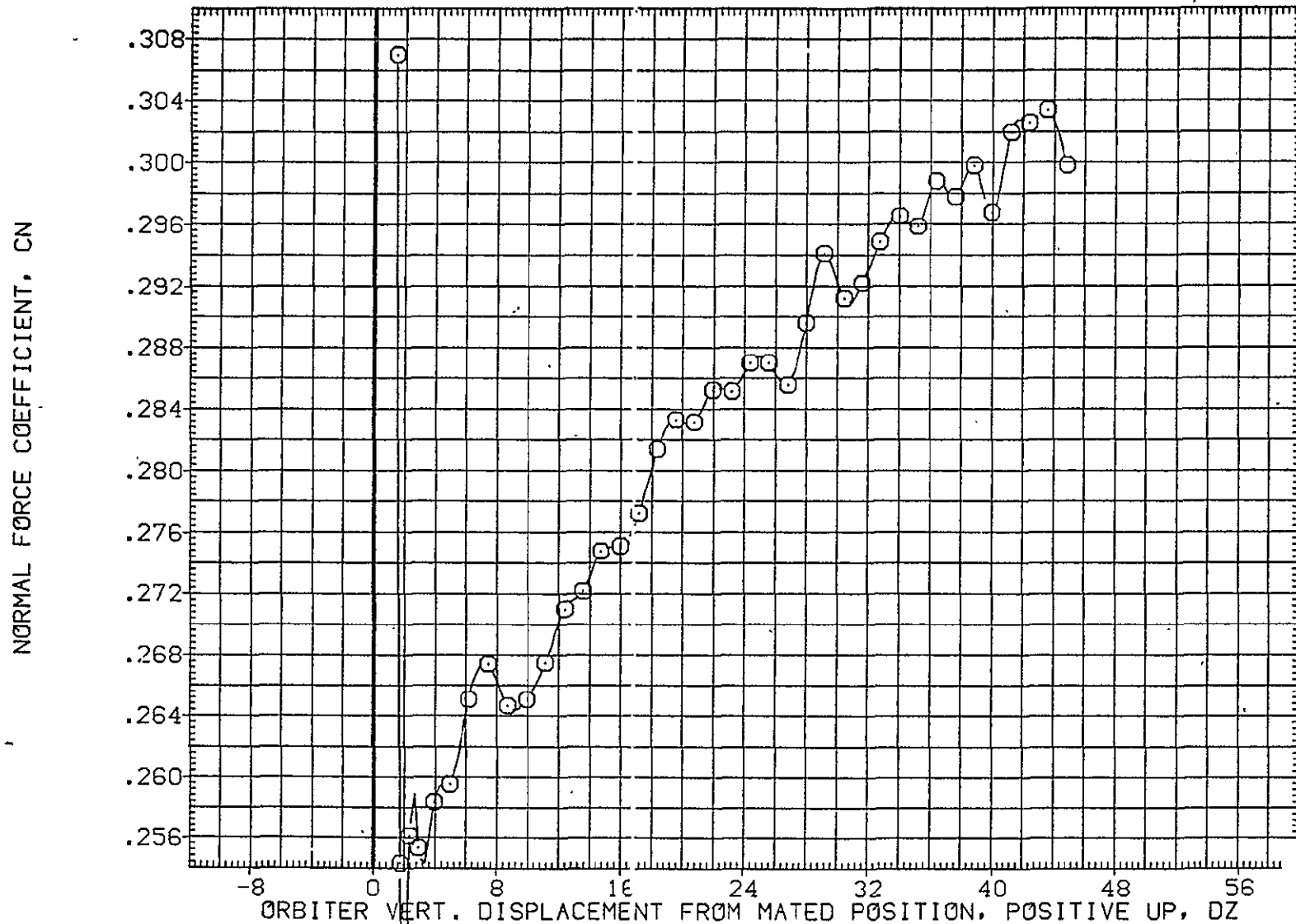


FIG. 34 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE041

SYMBOL
○

MACH	PARAMETRIC VALUES			
.595	ALPHAC	2.000	BETAC	.000
	STAB	-1.000	ELEVON	5.000
	BDFLAP	.000	DX	.000
	DY	.000	IORB	4.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

PITCHING MOMENT COEFFICIENT, CLM

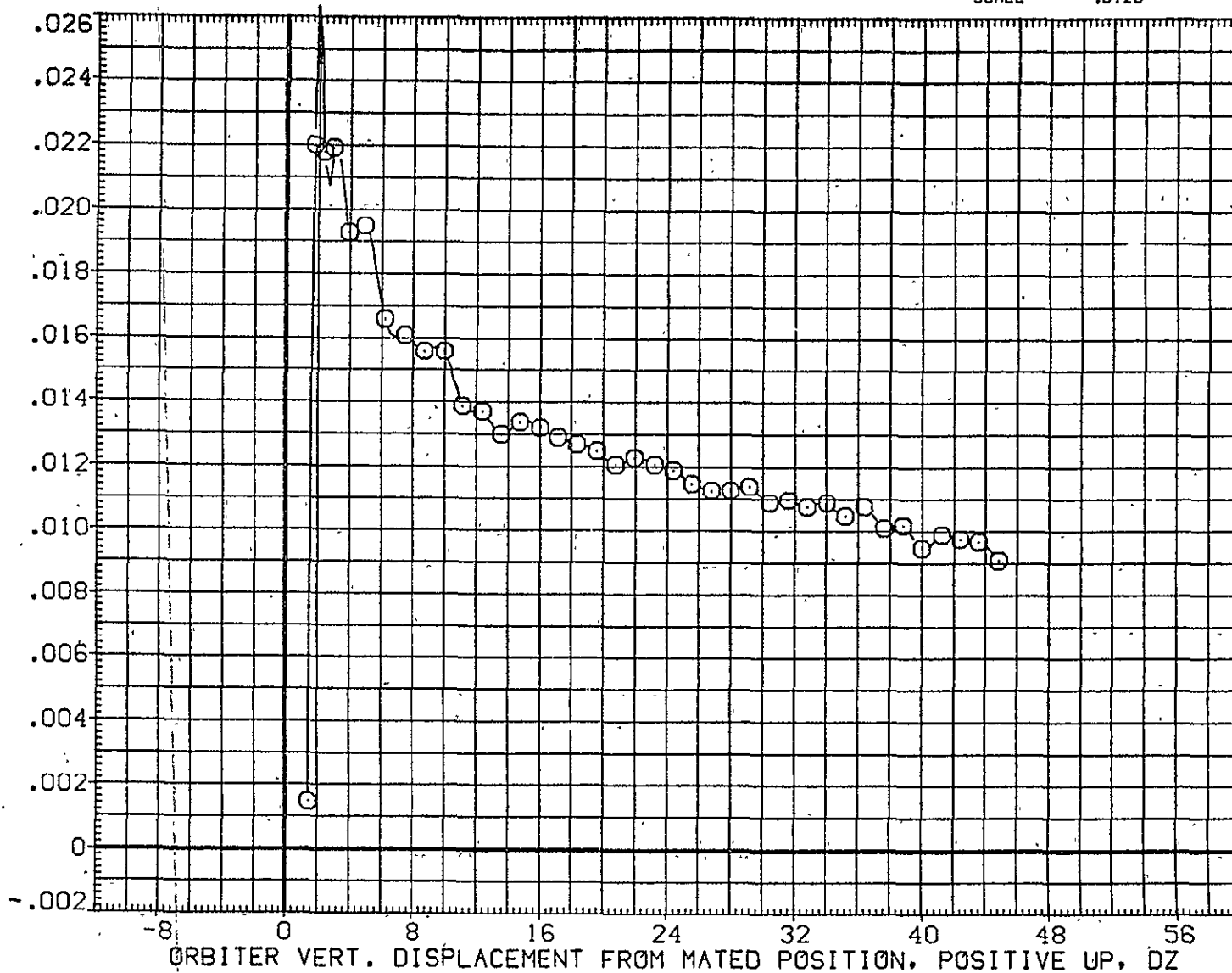


FIG. 34 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE041

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE041)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.595	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

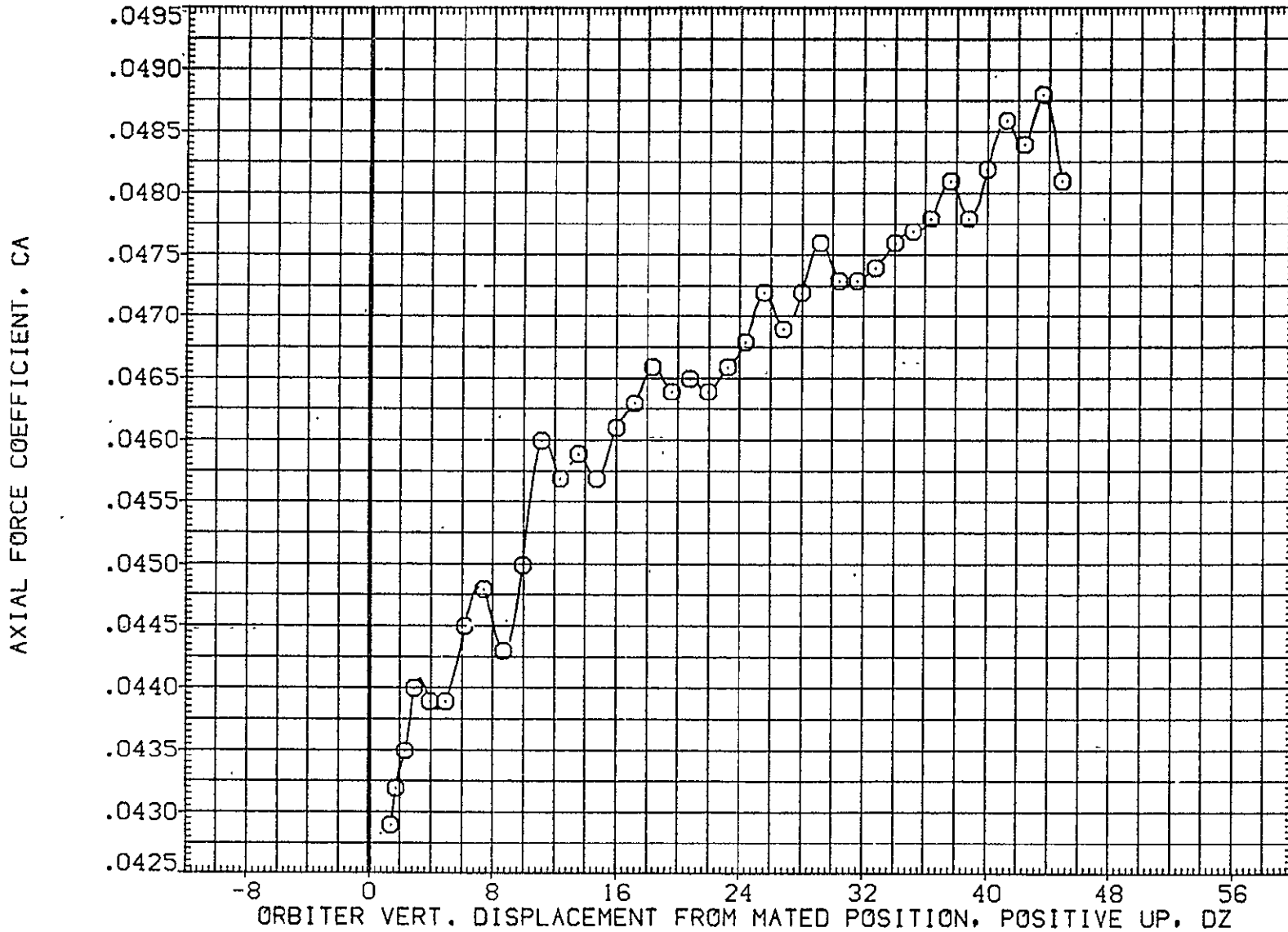


FIG. 34 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE041

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.595	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	OX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

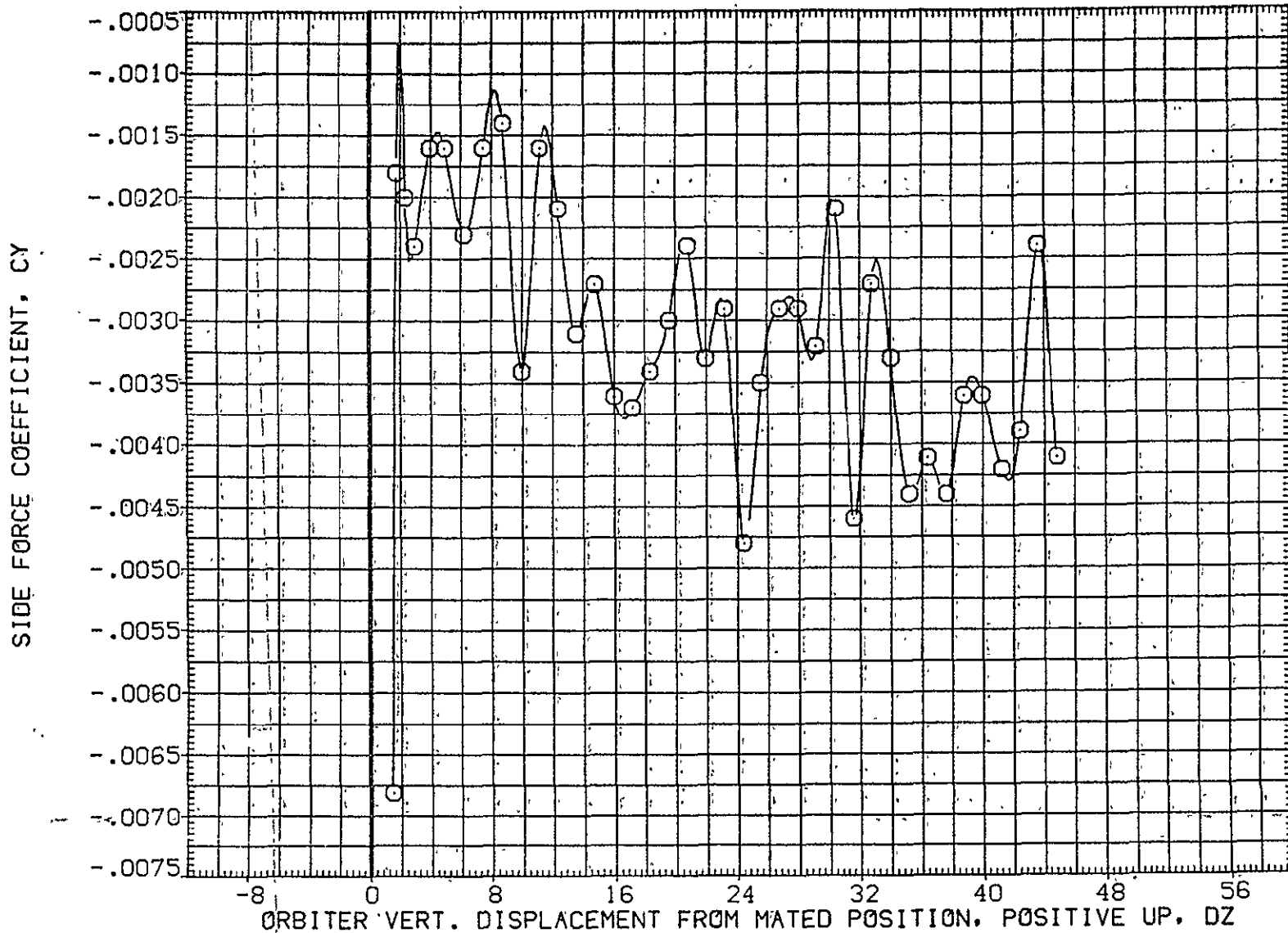


FIG. 34 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE041

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE041)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.595	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	-1.000	ELEVON	5.000	LREF	474.9100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

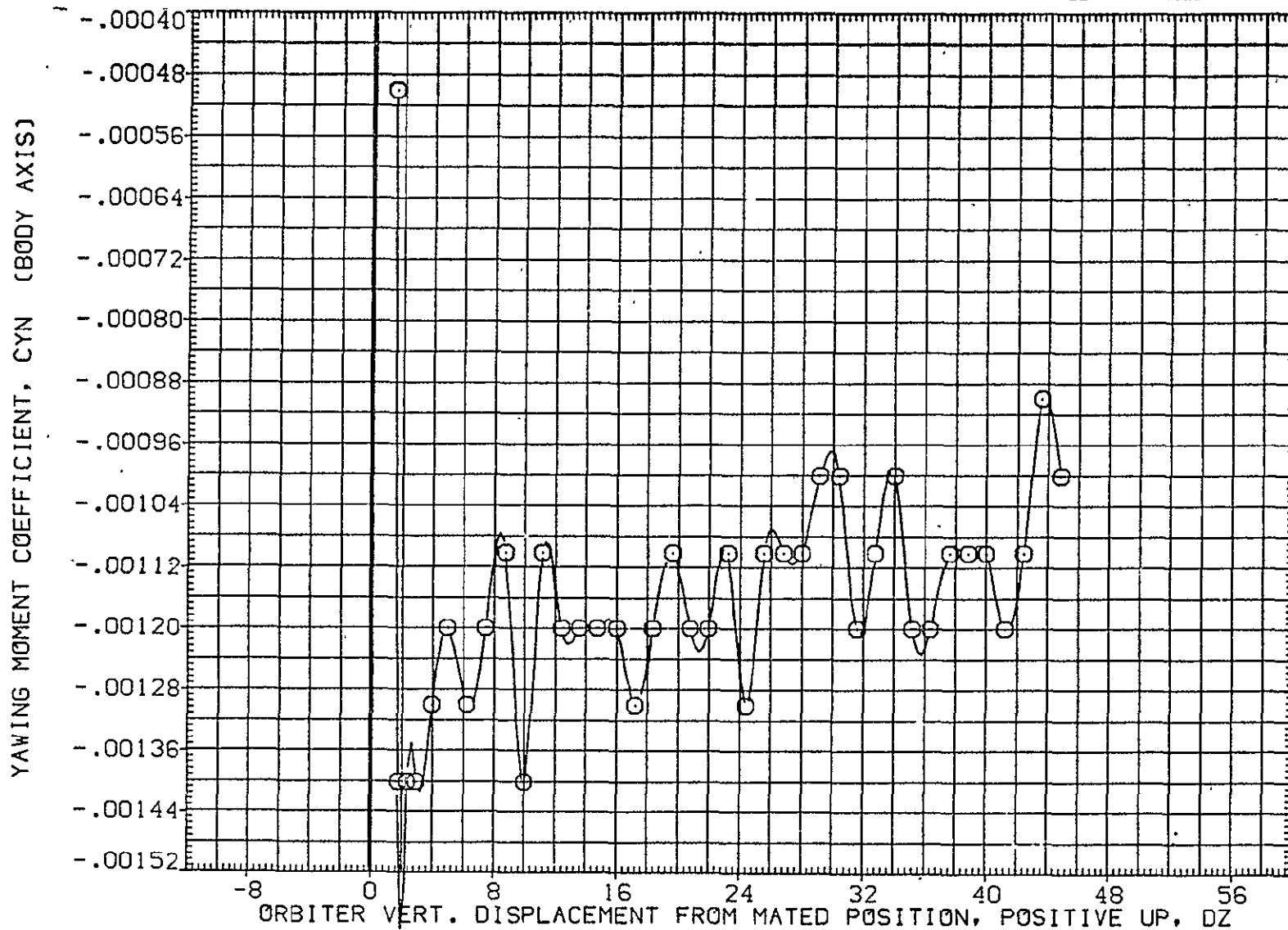


FIG. 34 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE041

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.595	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BOFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

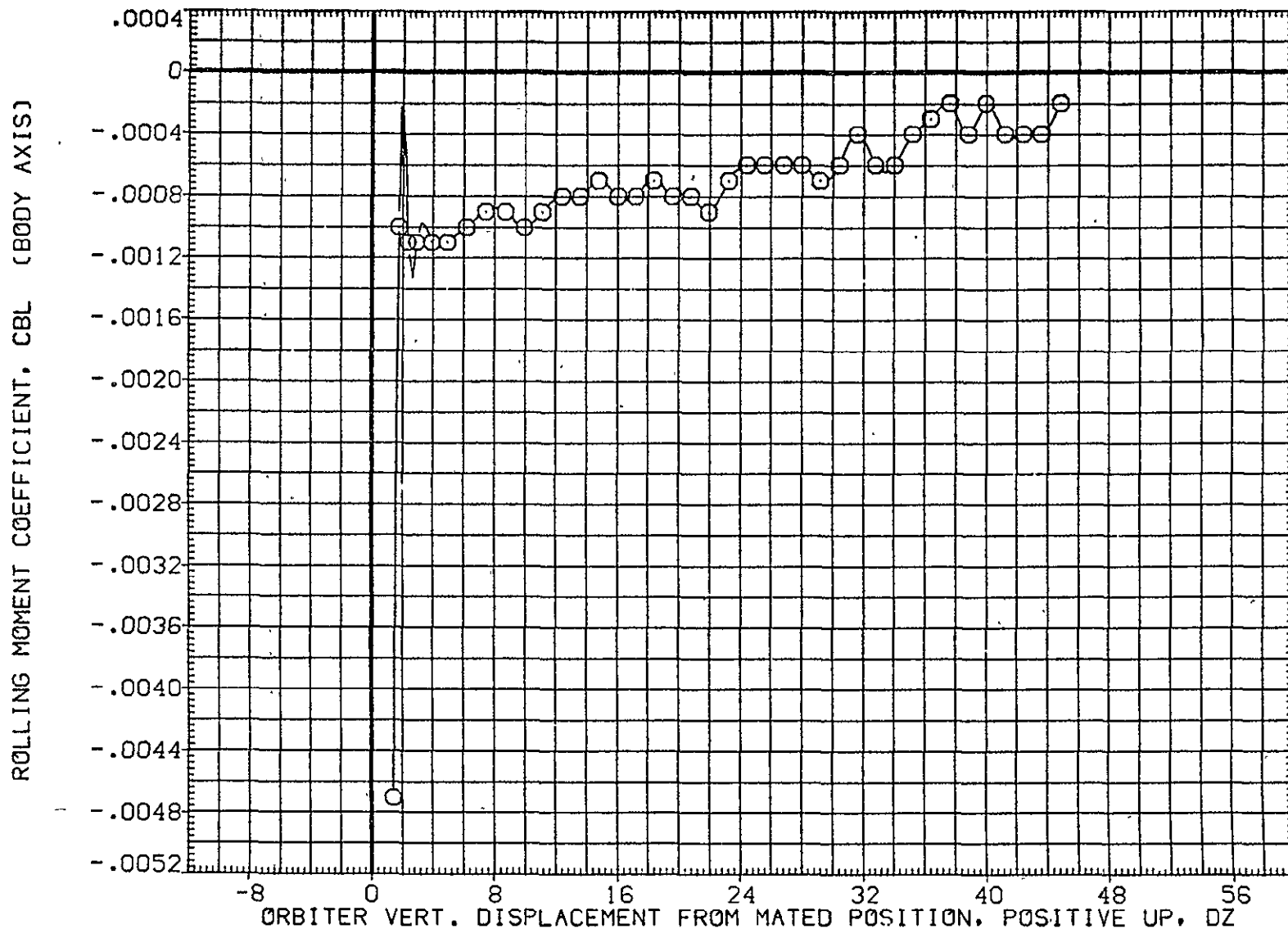


FIG. 34 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE041

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE041)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	SQ.F	
○	.595	2.000	.000	5.000	.000	2690.0000	IN.	
		-1.000	4.000	.000	.000	474.8100	IN.	
		.000	.000	.000	.000	936.6800	IN.	
		.000	4.000	.000	.000	1109.0000	IN.	
		.000	.000	.000	.000	375.0000	IN.	
		.000	.000	.000	.000	SCALE	.0125	

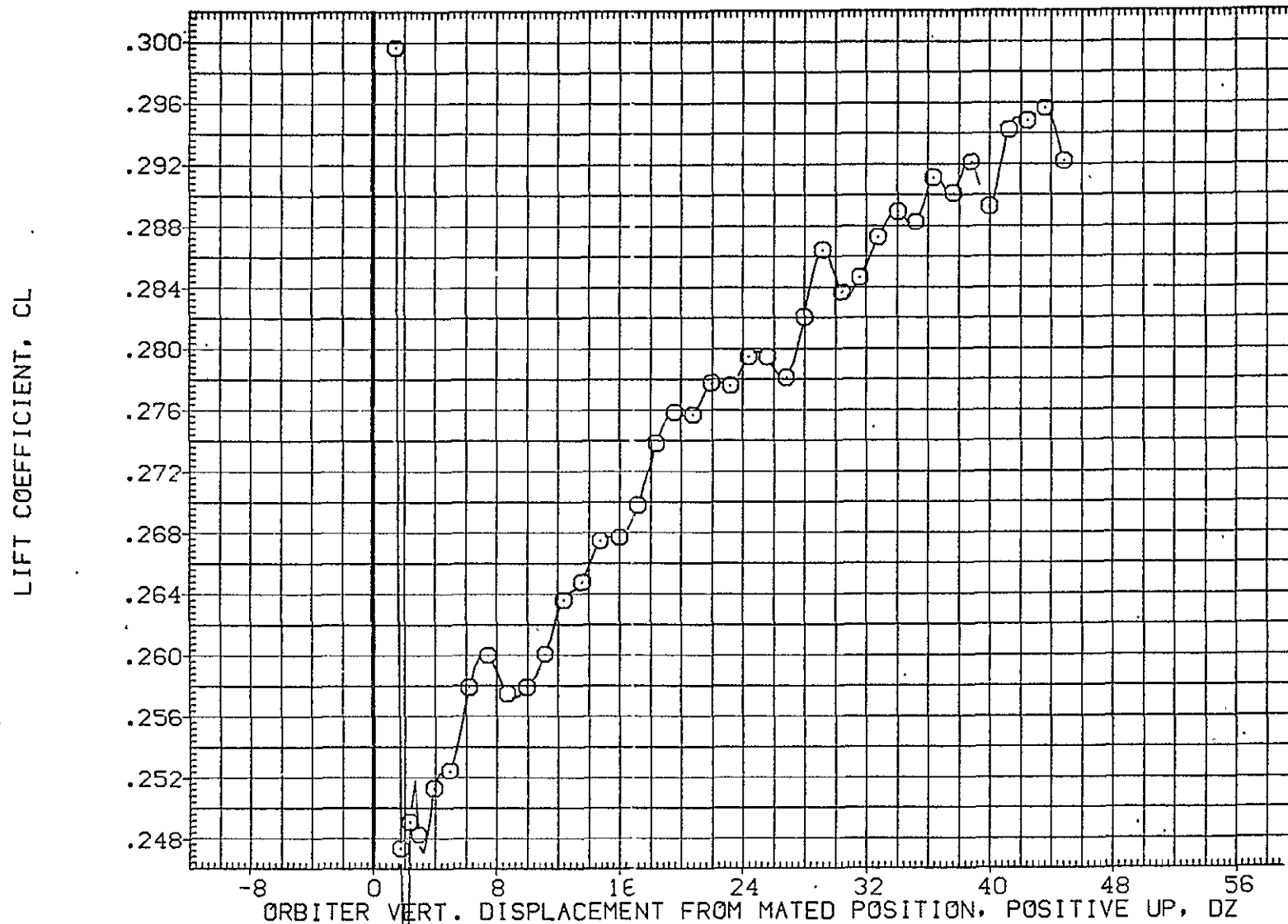


FIG. 34 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE041

SYMBOL
○

MACH	PARAMETRIC VALUES			
.595	ALPHAC	2.000	BETAC	.000
	STAB	-1.000	ELEVON	5.000
	BOFLAP	.000	DX	.000
	DY	.000	IORB	4.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION

SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

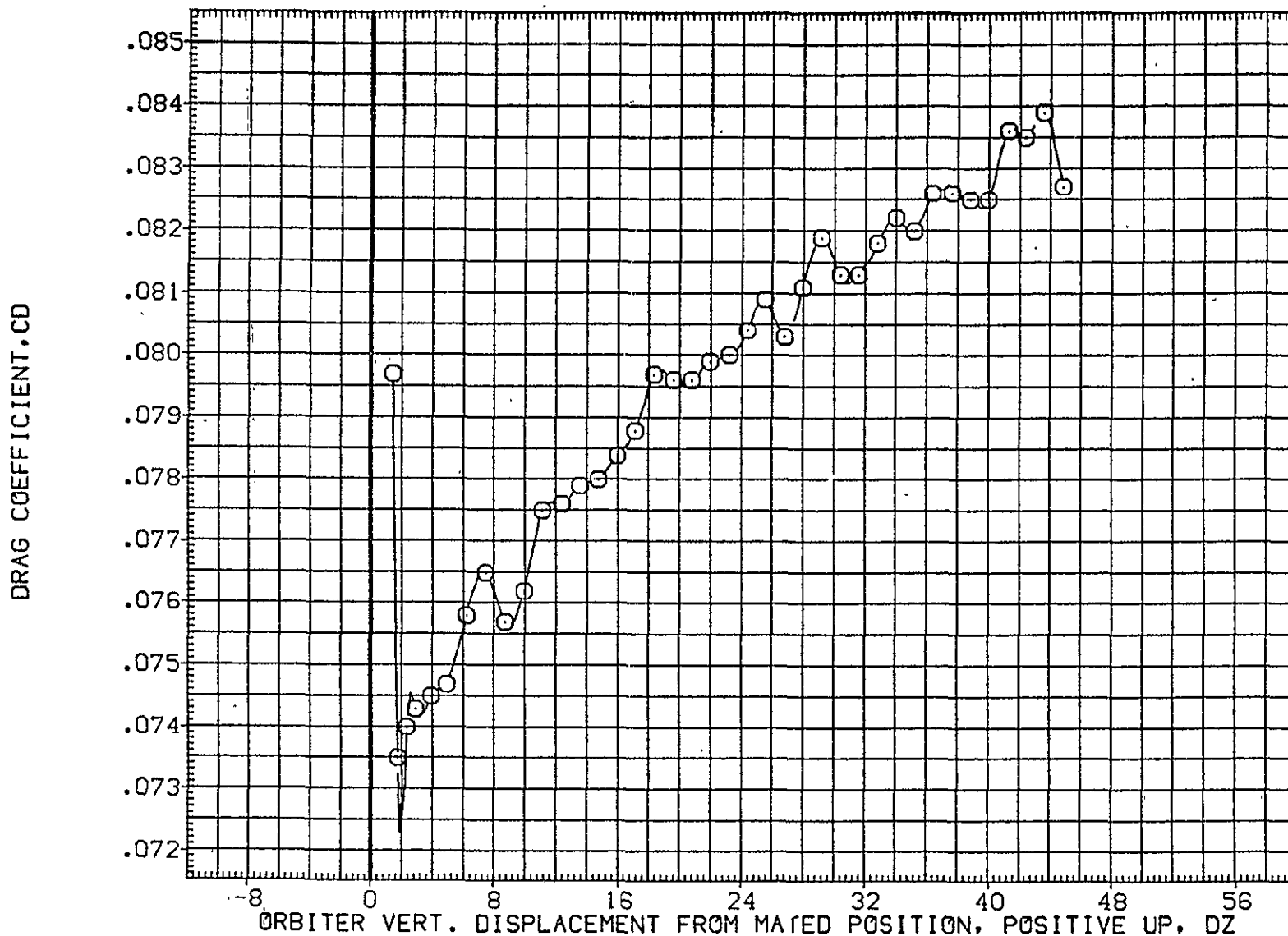


FIG. 34 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE041

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE042)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.592	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X(
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y(
						ZMRP	375.0000	IN. Z(
						SCALE	.0125	

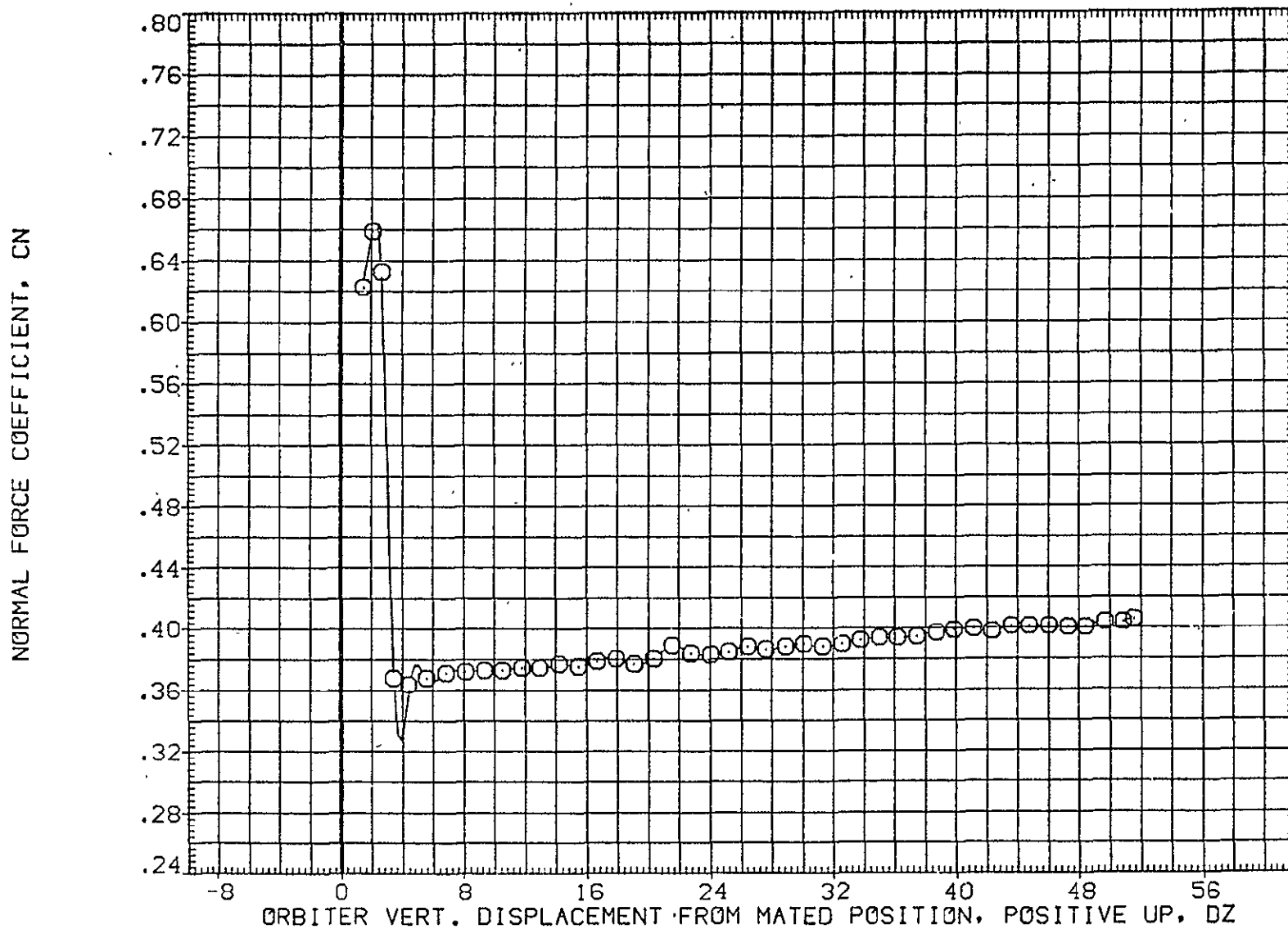


FIG. 35 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE042

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.592	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	OX	.000	BREF	936.6800	IN.
		OY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

PITCHING MOMENT COEFFICIENT, CLM

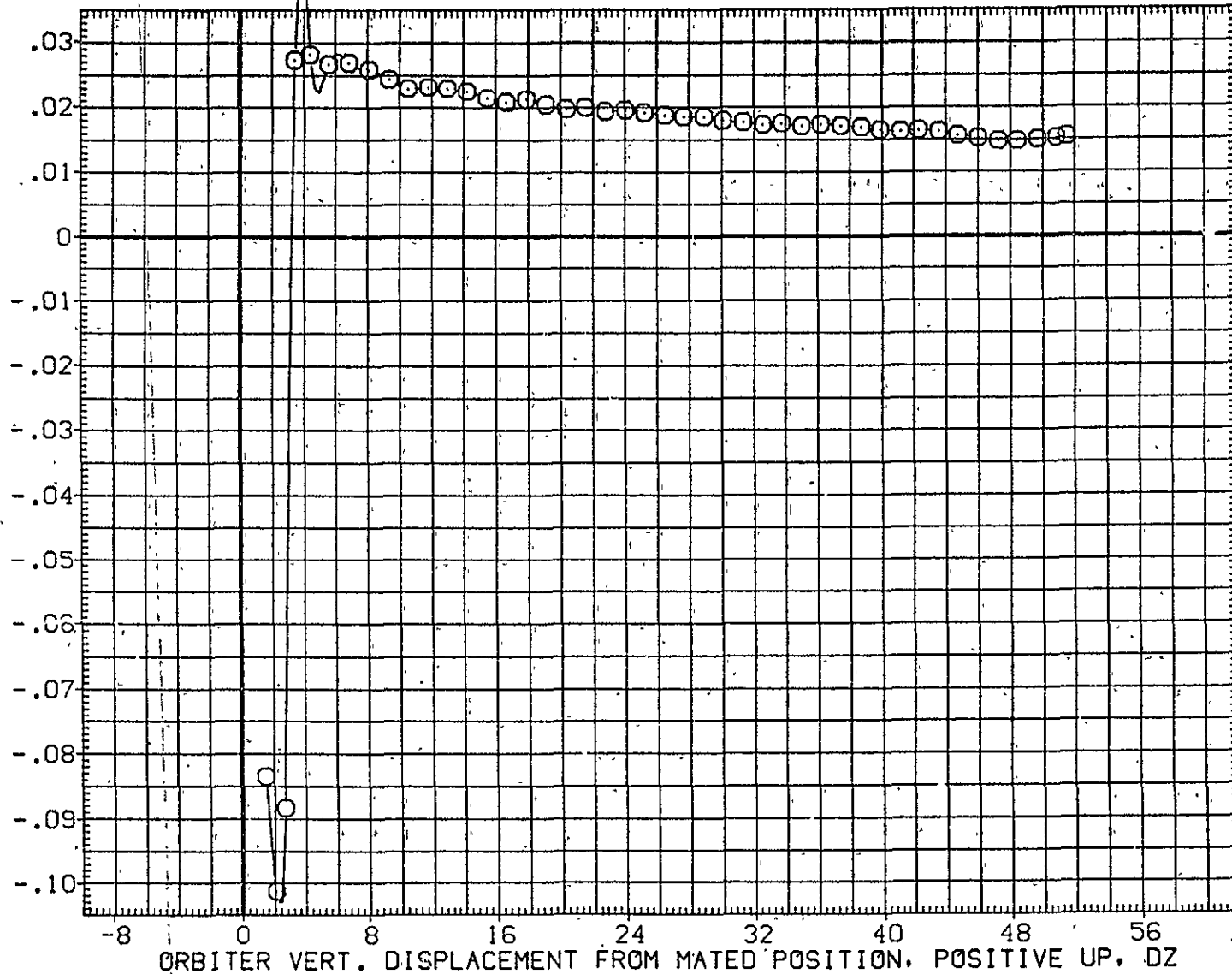


FIG. 35 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE042

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE042)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.592	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	-1.000	ELEVON	5.000	LREF	474.9100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

AXIAL FORCE COEFFICIENT, CA

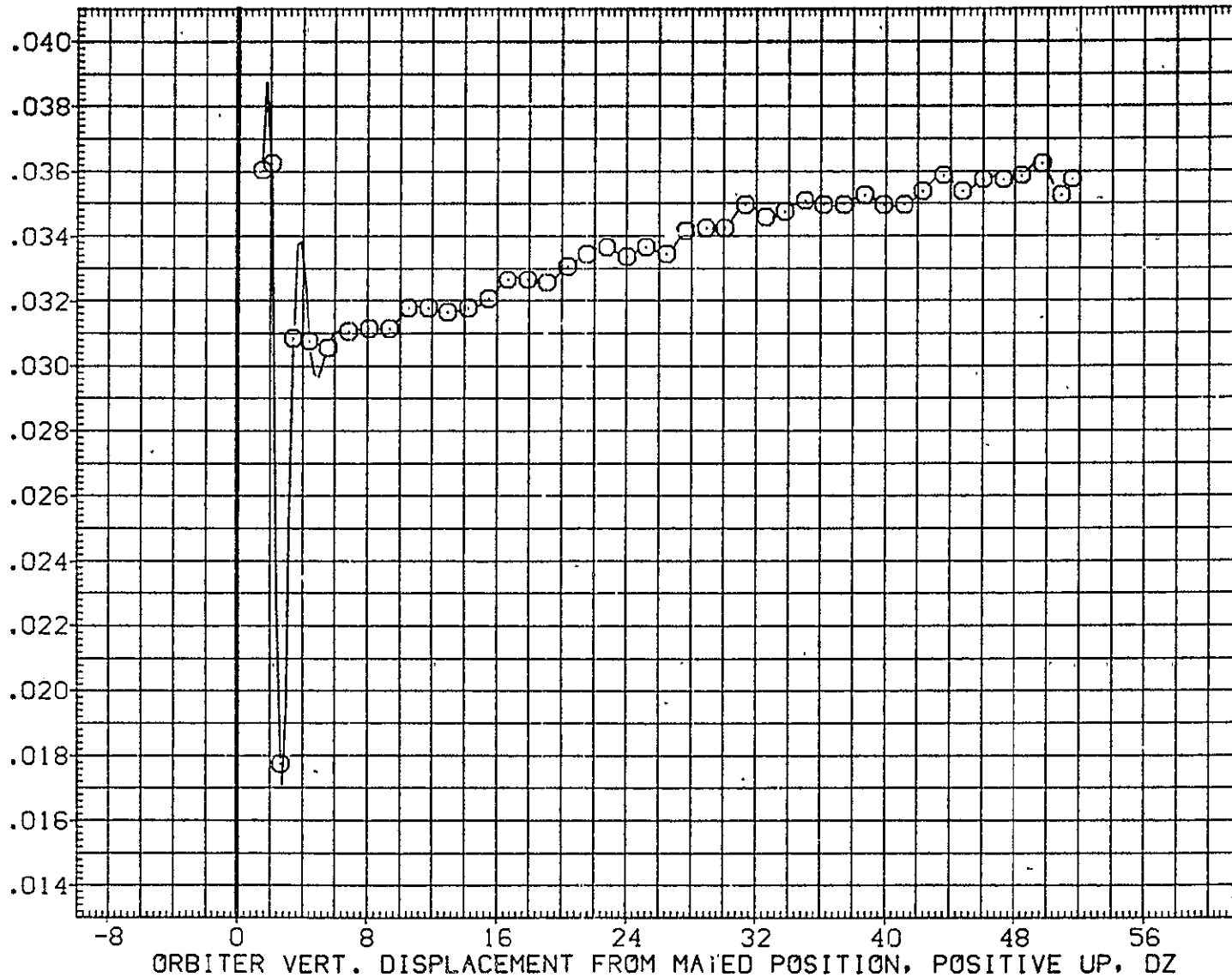


FIG. 35 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE042

SYMBOL
○

MACH
.592

PARAMETRIC VALUES			
ALPHAC	2.000	BETAC	.000
STAB	-1.000	ELEVON	5.000
BDFLAP	.000	DX	.000
DY	.000	IORB	6.000
BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

SIDE FORCE COEFFICIENT, CY

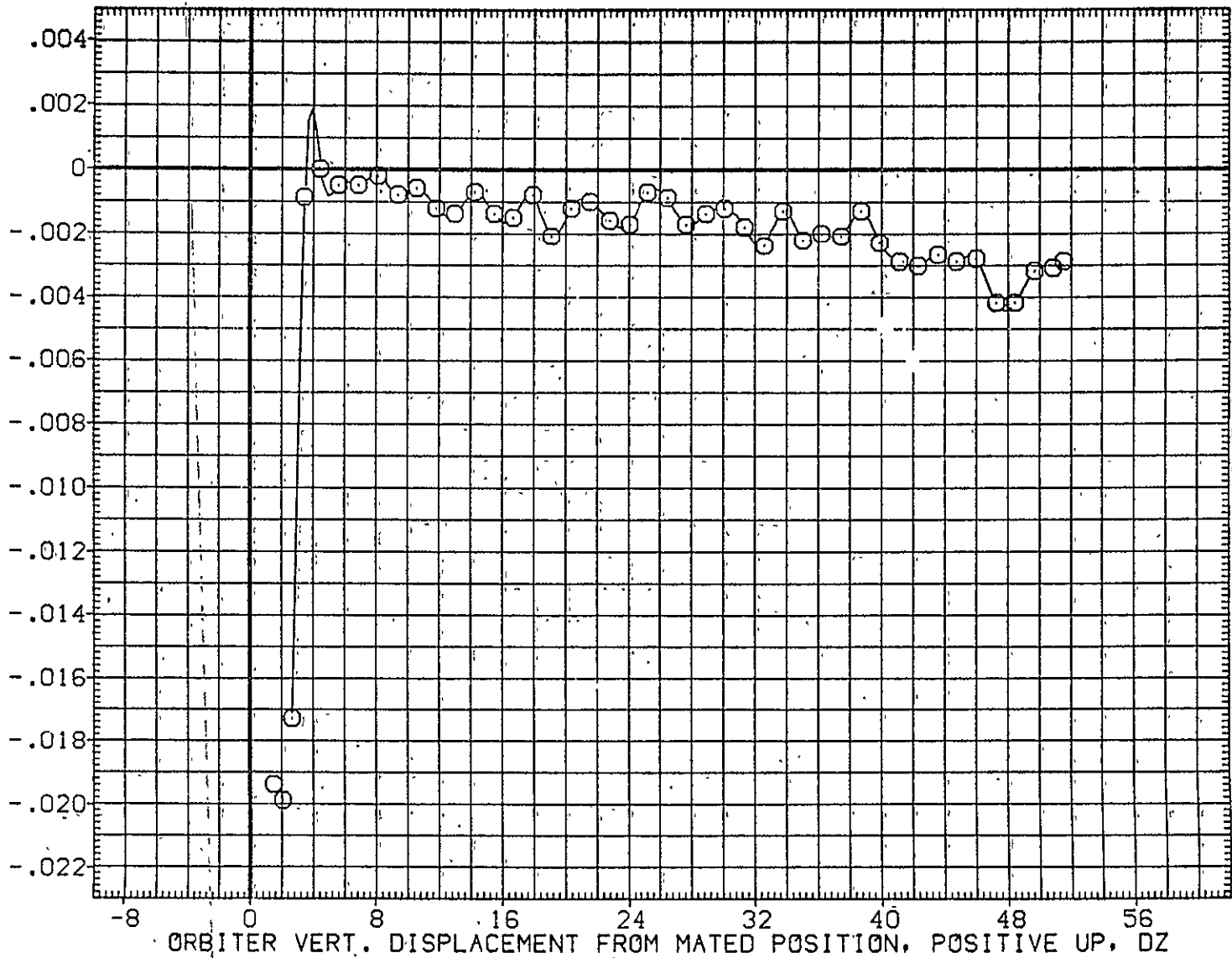


FIG. 35 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE042

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFF042)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.592	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

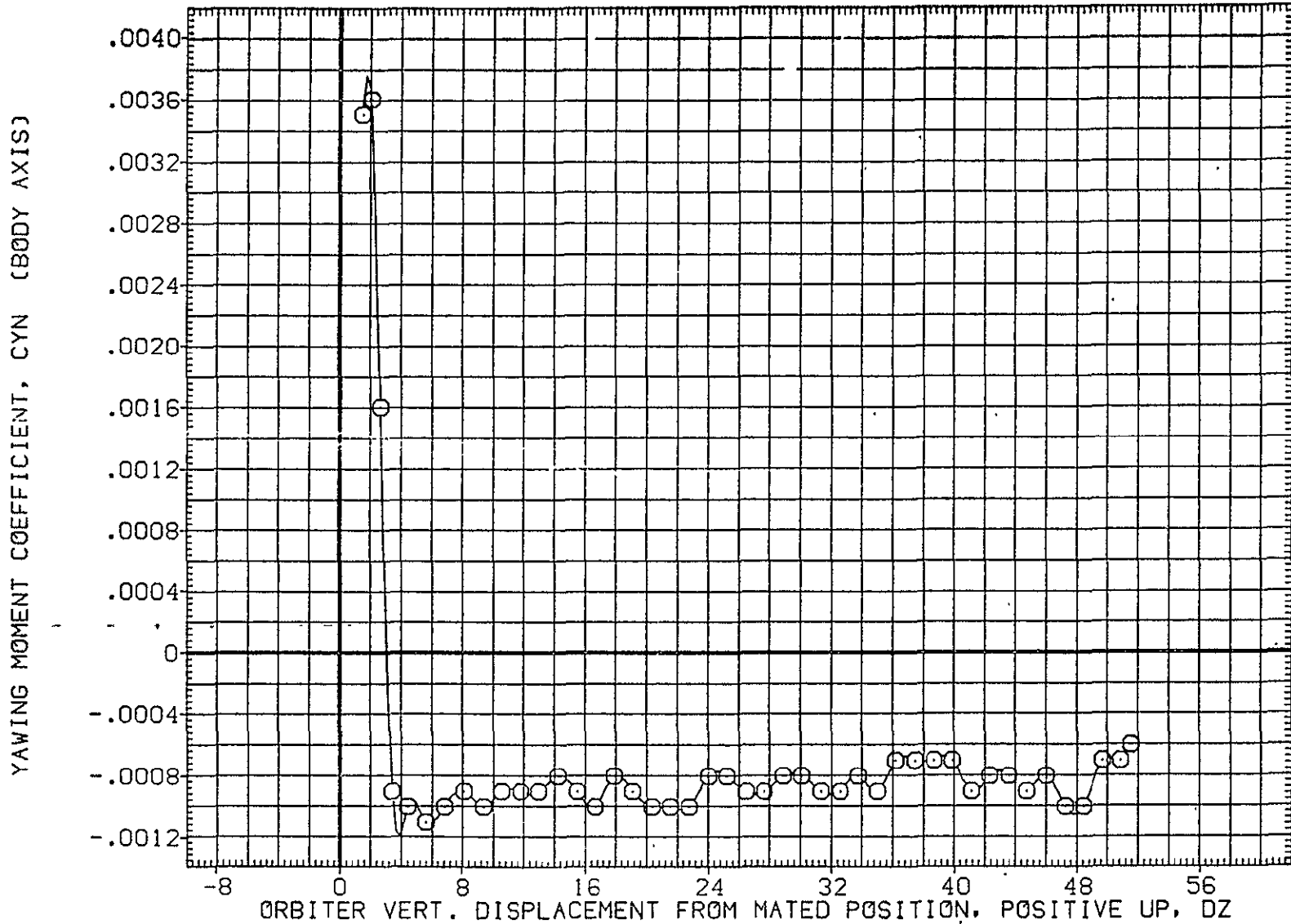


FIG. 35 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFF042

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	IN.	SO, FT.
○	.592	2.000	.000	5.000	.000	2690.0000	IN.	50. FT.
		-1.000		.000		474.8100	IN.	
		.000		.000		936.6800	IN.	
		.000	1.000	6.000		1109.0000	IN.	X0
		.000		.000		.0000	IN.	Y0
		.000	RUDDER	.000		375.0000	IN.	Z0
						.0125	SCALE	

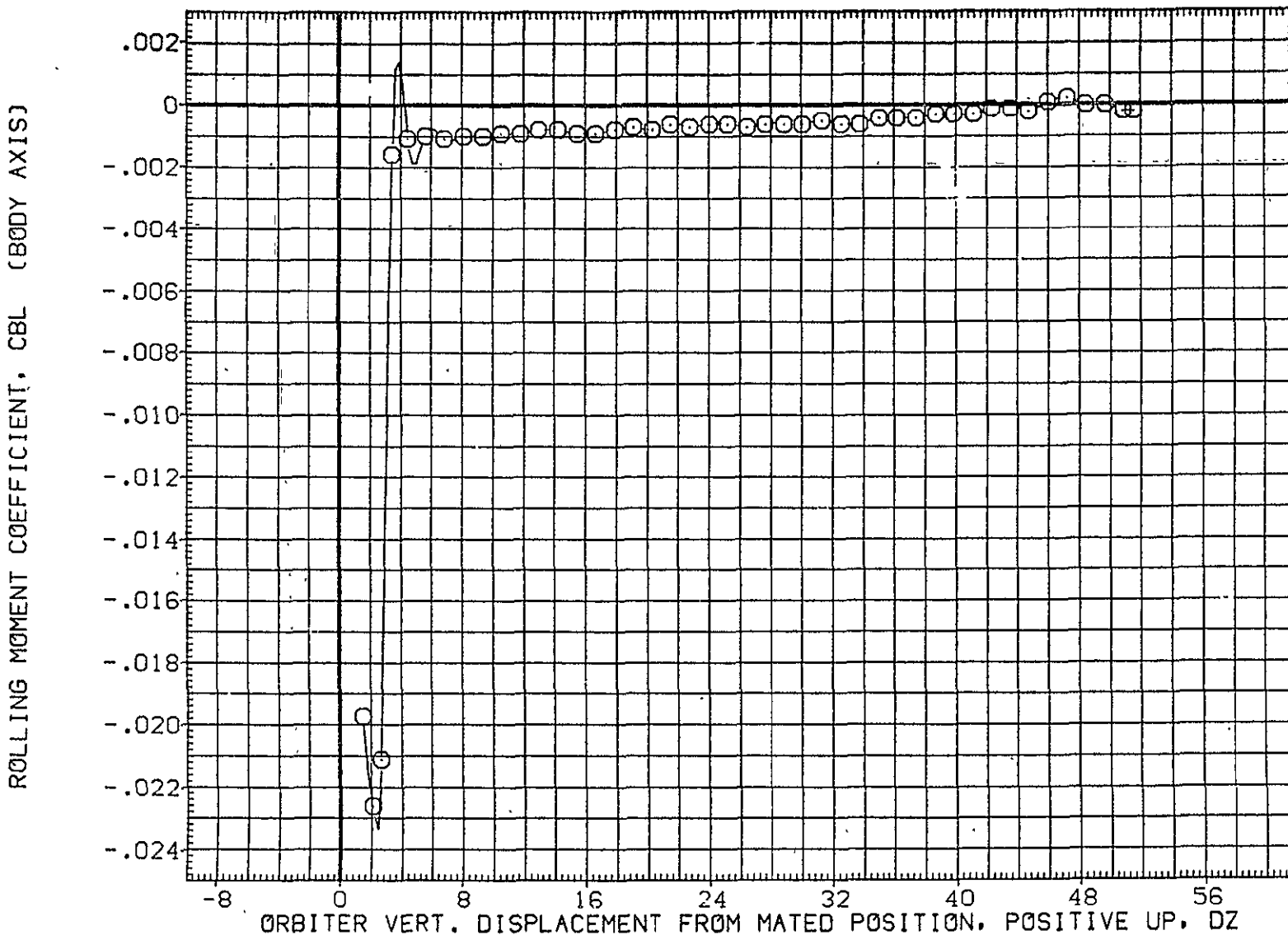
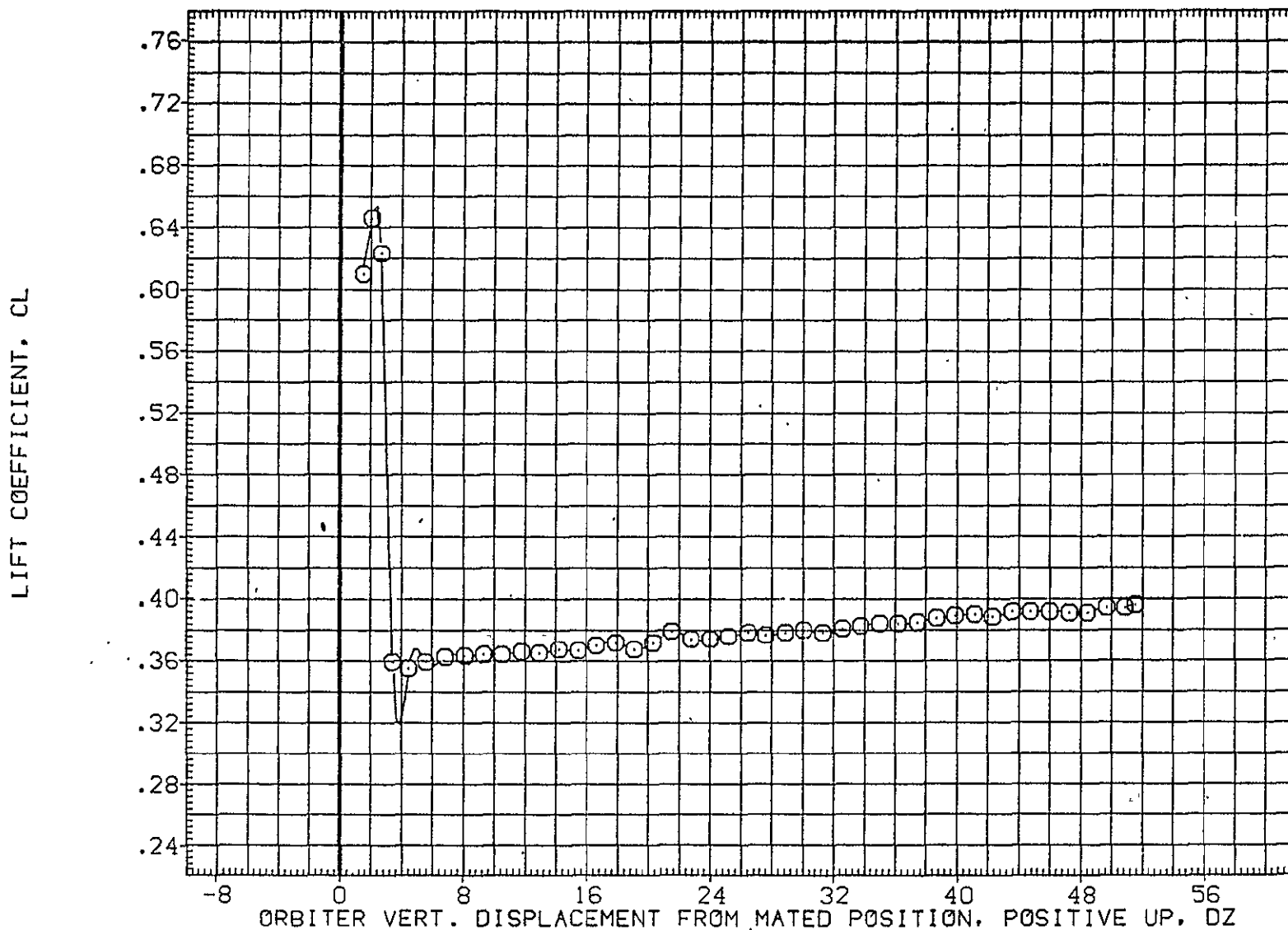


FIG. 35 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE042

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE042)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.592	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	-1.000	ELEVON	5.000	LREF	474.8100	IN.
		BOFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	



IG. 35 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE042

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION							
		ALPHAC	BETAC	ELEVON	DX	SREF	LREF	BREF	XMRP	YMRP	ZMRP	SCALE	SO.FT.
○	.592	2.000	.000	5.000	.000	2690.0000	474.8100	936.6800	1109.0000	.0000	375.0000	.0125	IN.
		-1.000	.000	.000	.000								IN. X0
		BDFLAP	.000	10RB	6.000								IN. Y0
		DY	.000	RUDDER	.000								IN. Z0
		BETA0	.000										

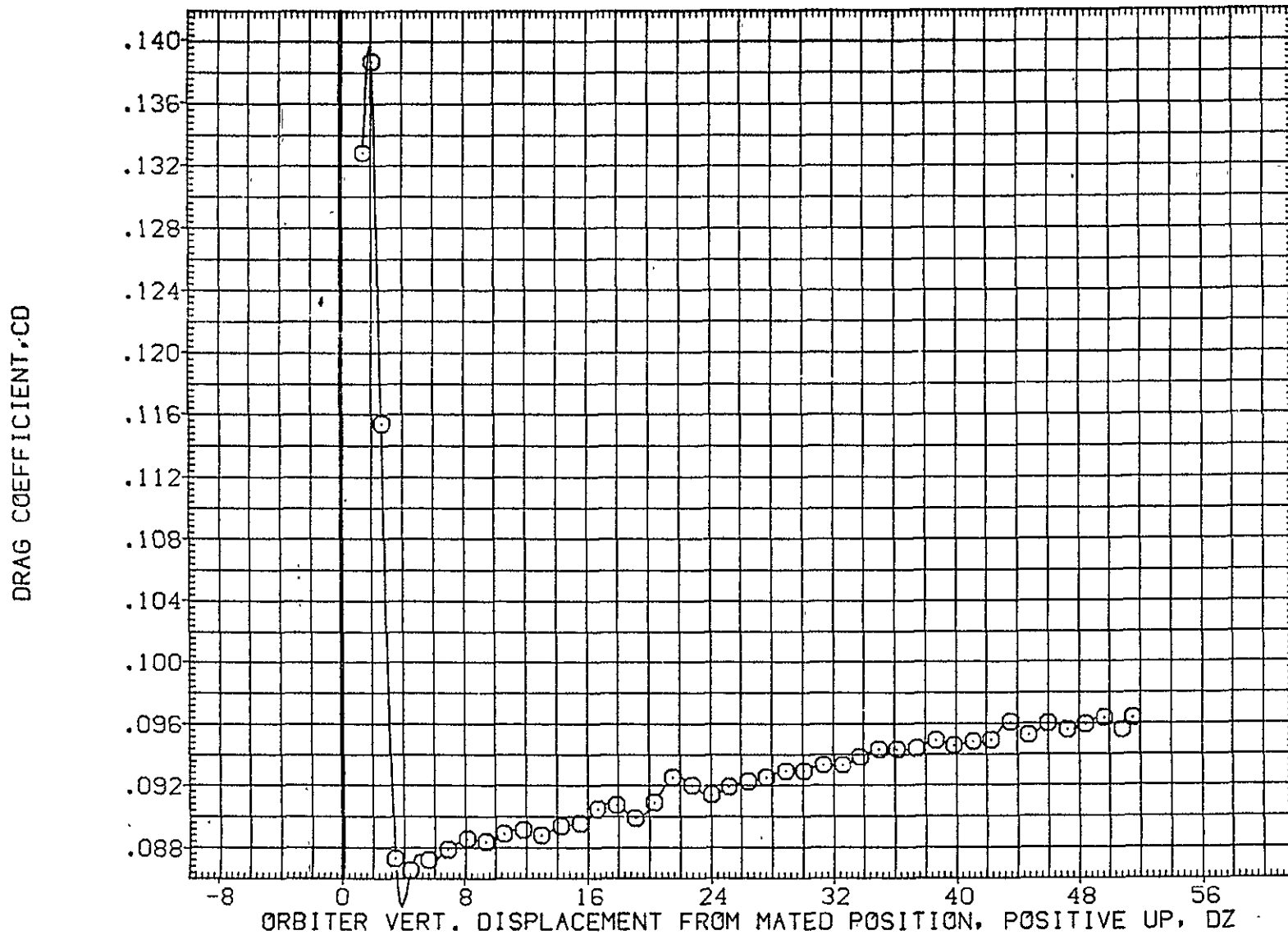


FIG. 35 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, 10RB=6, BETAC=0, BETA0=0, AFE042

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE045)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.600	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

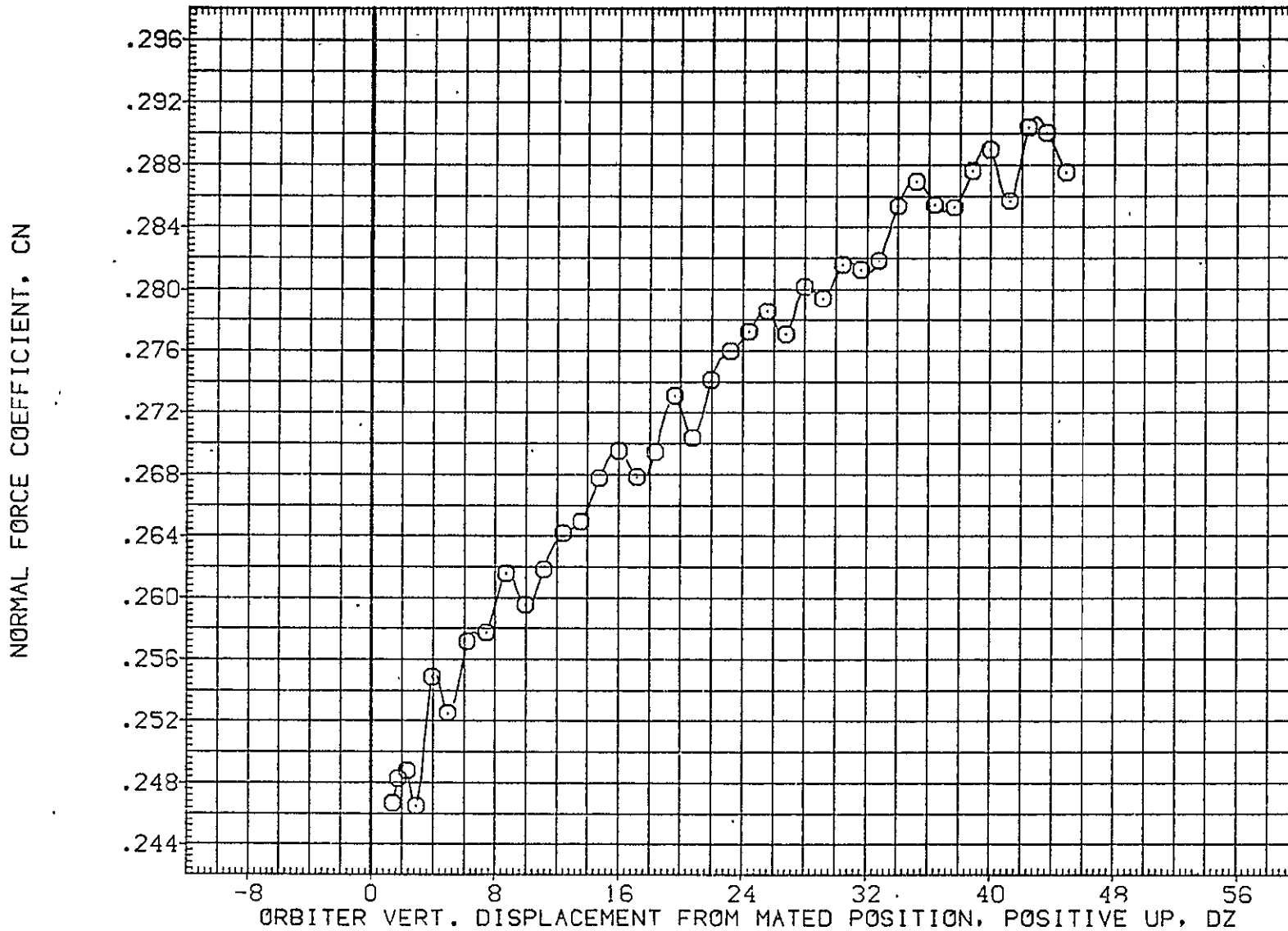


FIG. 36 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE045

SYMBOL
○

MACH	PARAMETRIC VALUES			
.600	ALPHAC	2.000	BETAC	.000
	STAB	5.000	ELEVON	5.000
	BDFLAP	.000	DX	.000
	DY	.000	IORB	4.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

PITCHING MOMENT COEFFICIENT, CLM

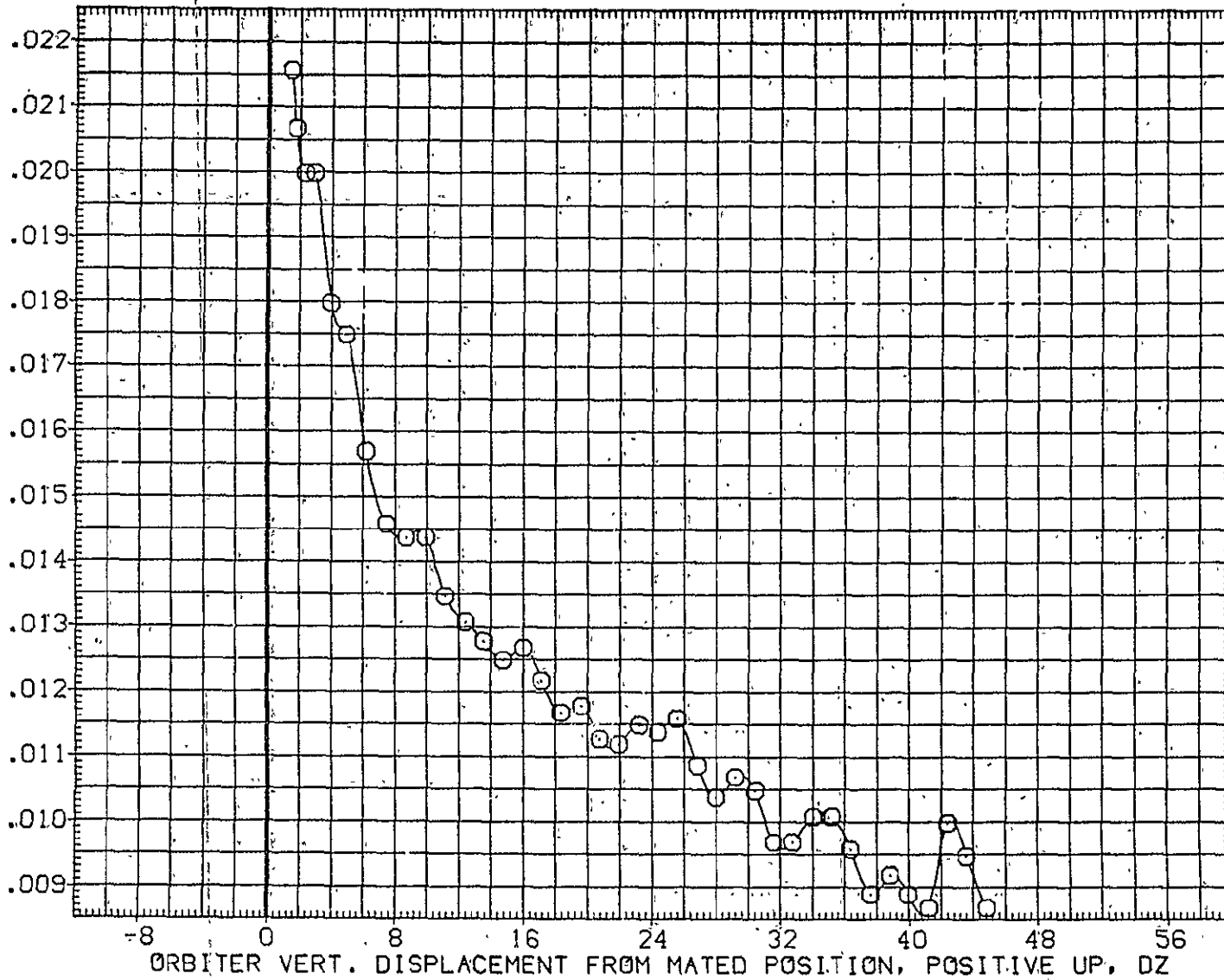


FIG. 36 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE045

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE045)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.600	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SG,FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BOFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

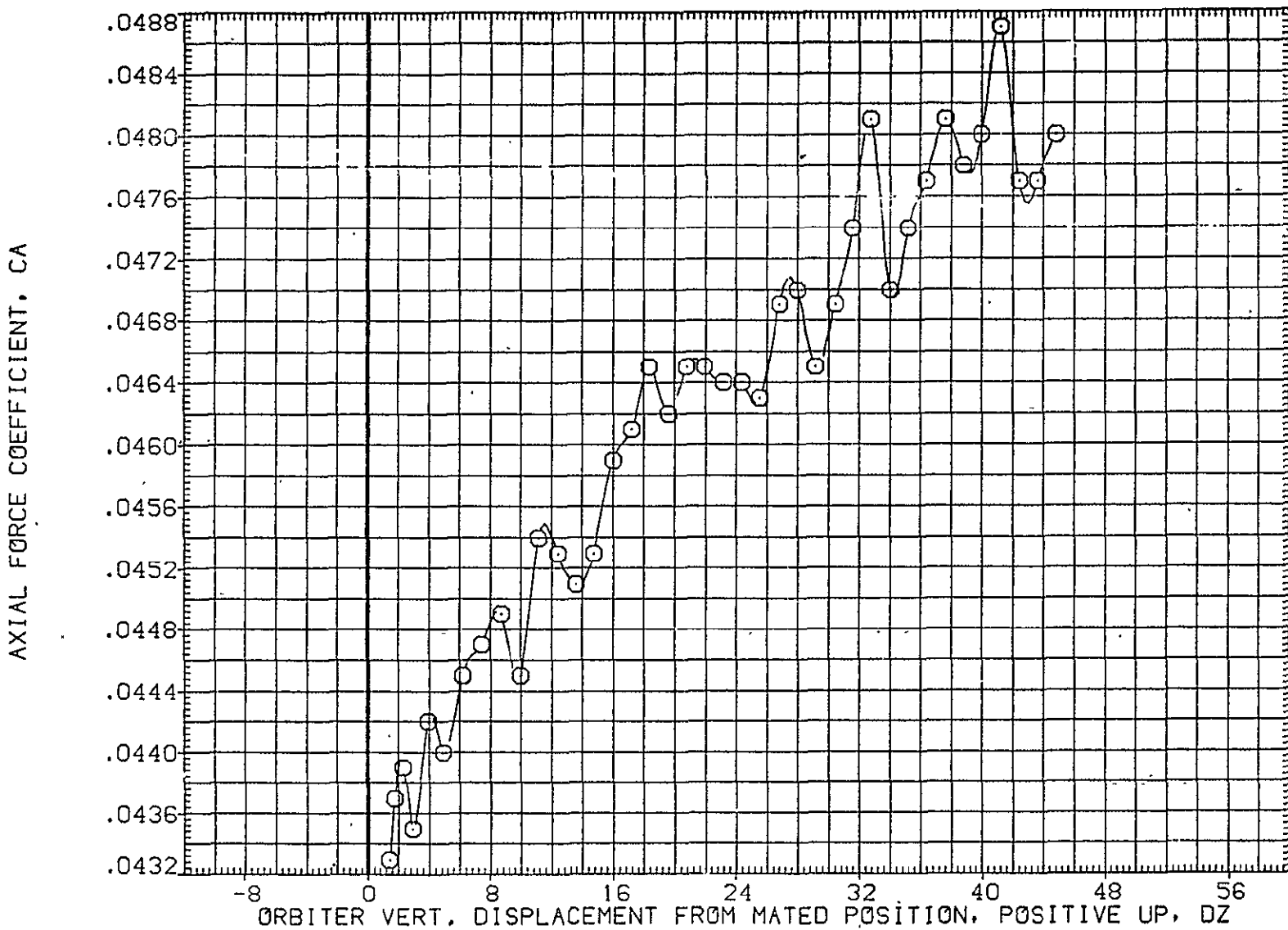


FIG. 36 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE045

SYMBOL	MACH	PARAMETRIC VALUES			
○	.600	ALPHAC	2.000	BETAC	.000
		STAB	5.000	ELEVON	5.000
		BDFLAP	.000	DX	.000
		DY	.000	IORB	4.000
		BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

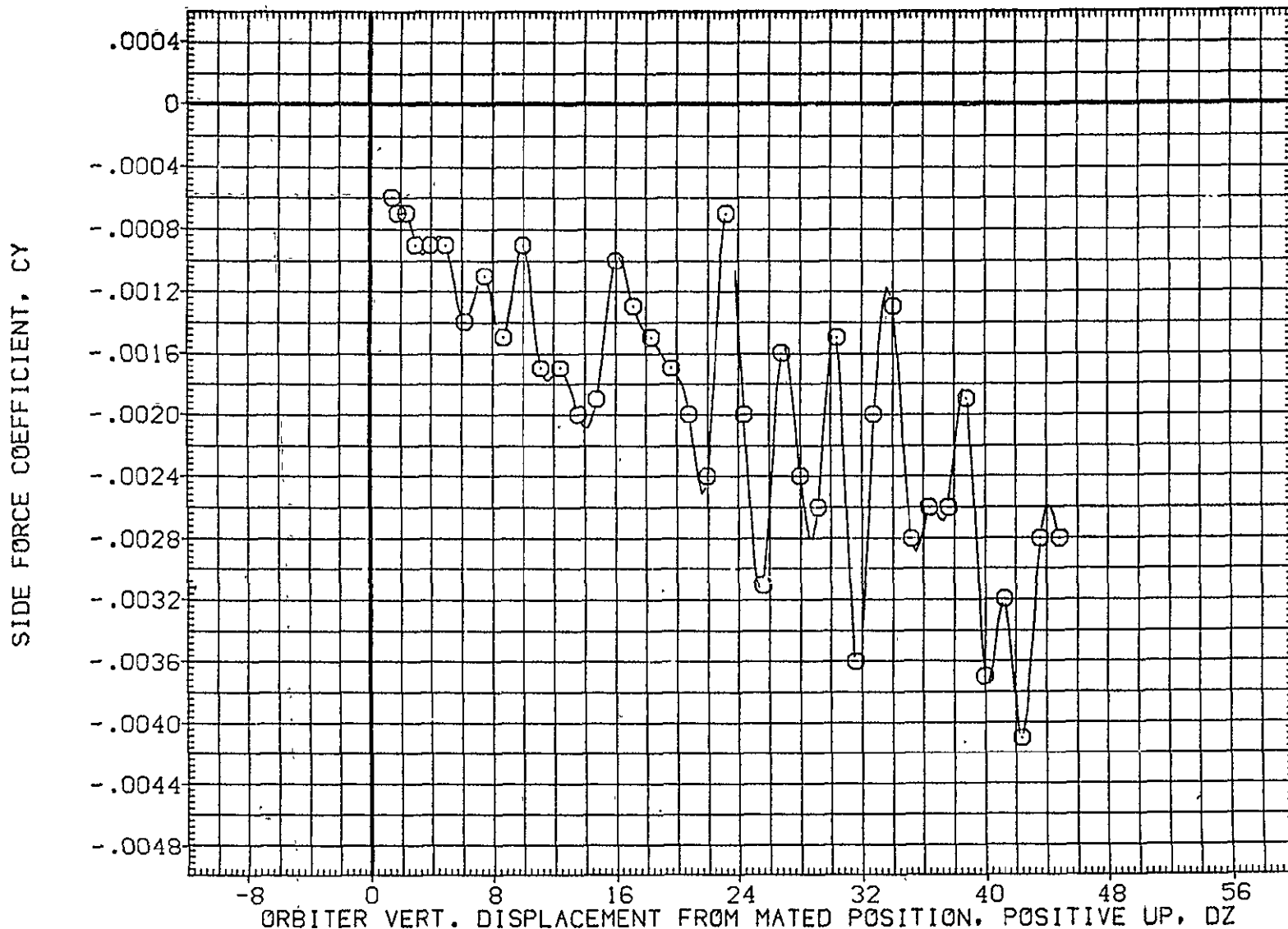


FIG. 36 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE045

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE045)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.600	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

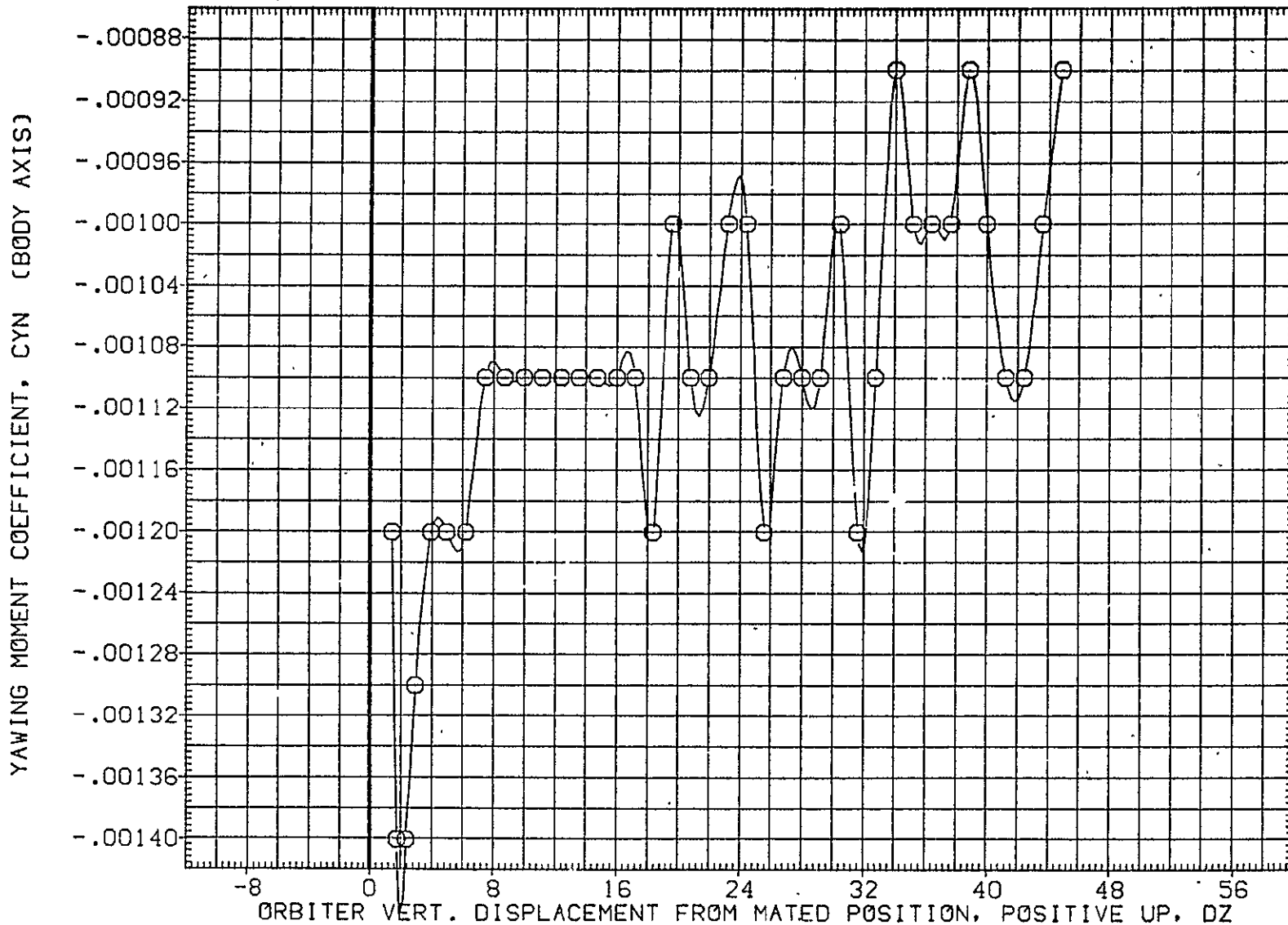


FIG. 36 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE045

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.600	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

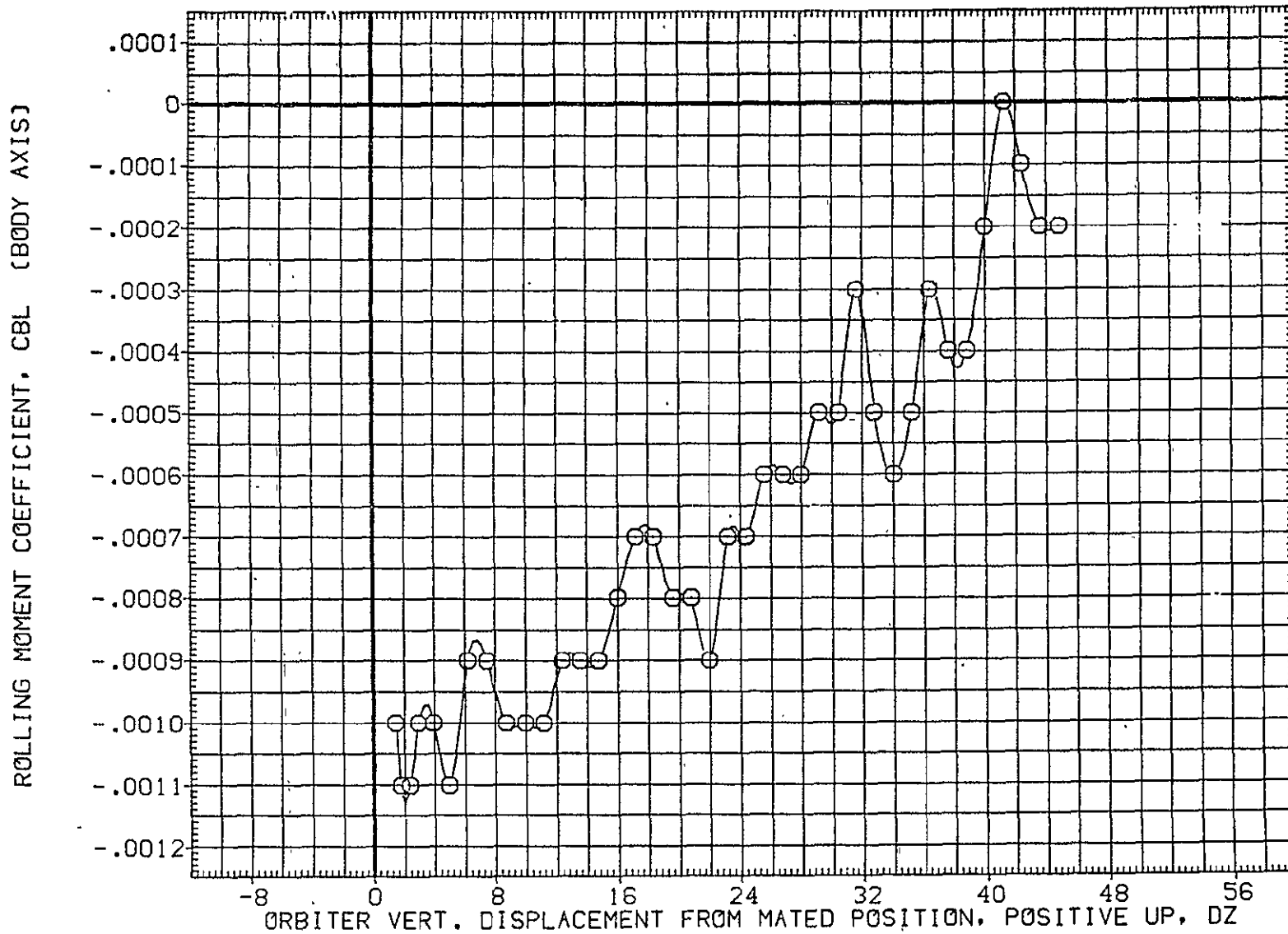


FIG. 36 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE045

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE045)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.600	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

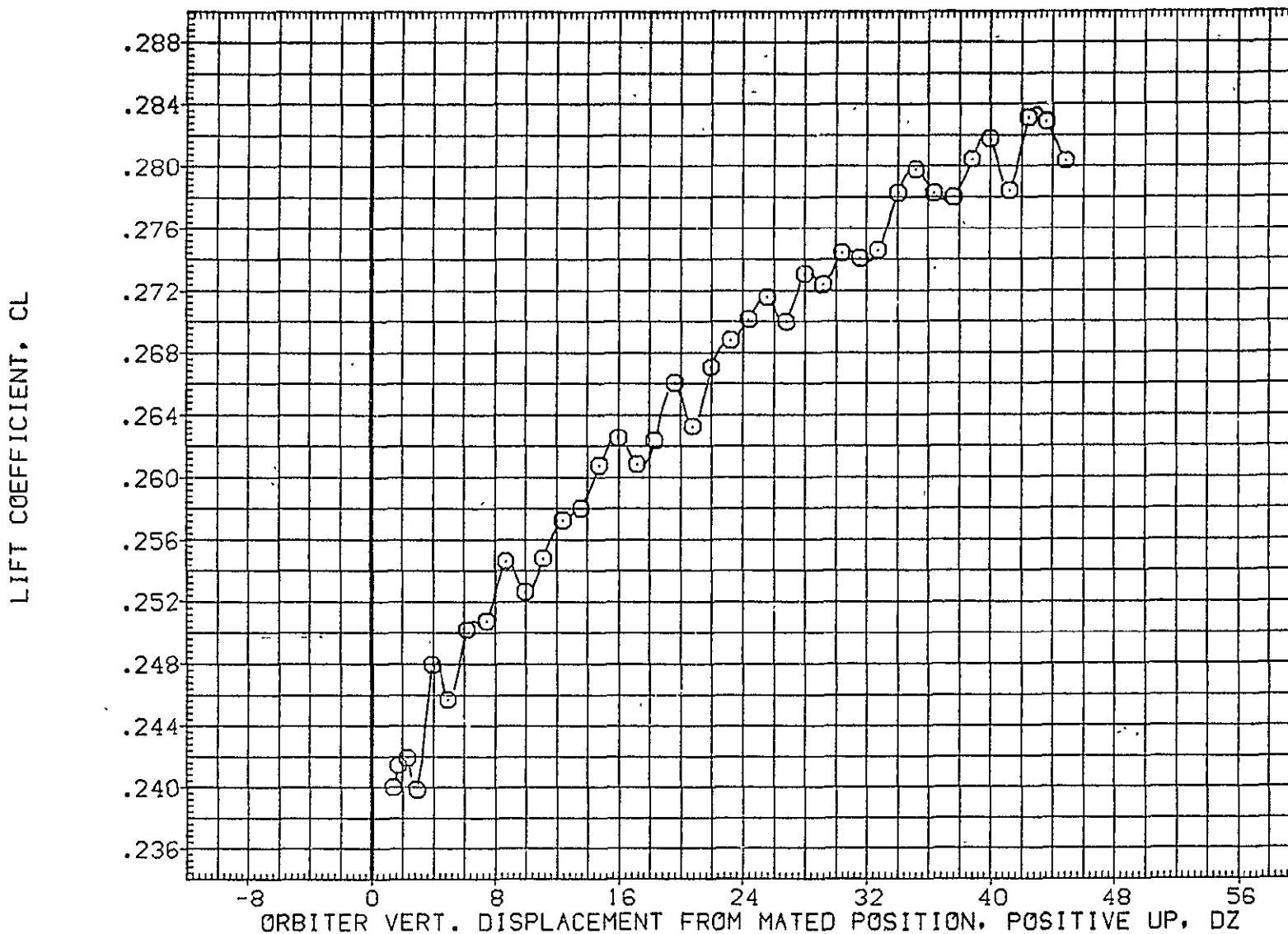


FIG. 36 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE045

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	IN.	SQ.FT.
○	.600	2.000	.000	5.000	.000	2690.0000	474.8100	IN.
		5.000	.000	.000	.000	936.6800	1109.0000	IN.
		BDFLAP	.000	10RB	4.000	YMRP	375.0000	IN. Y0
		DY	.000	RUDDER	.000	ZMRP	.0125	IN. Z0
		BETA0	.000			SCALE		

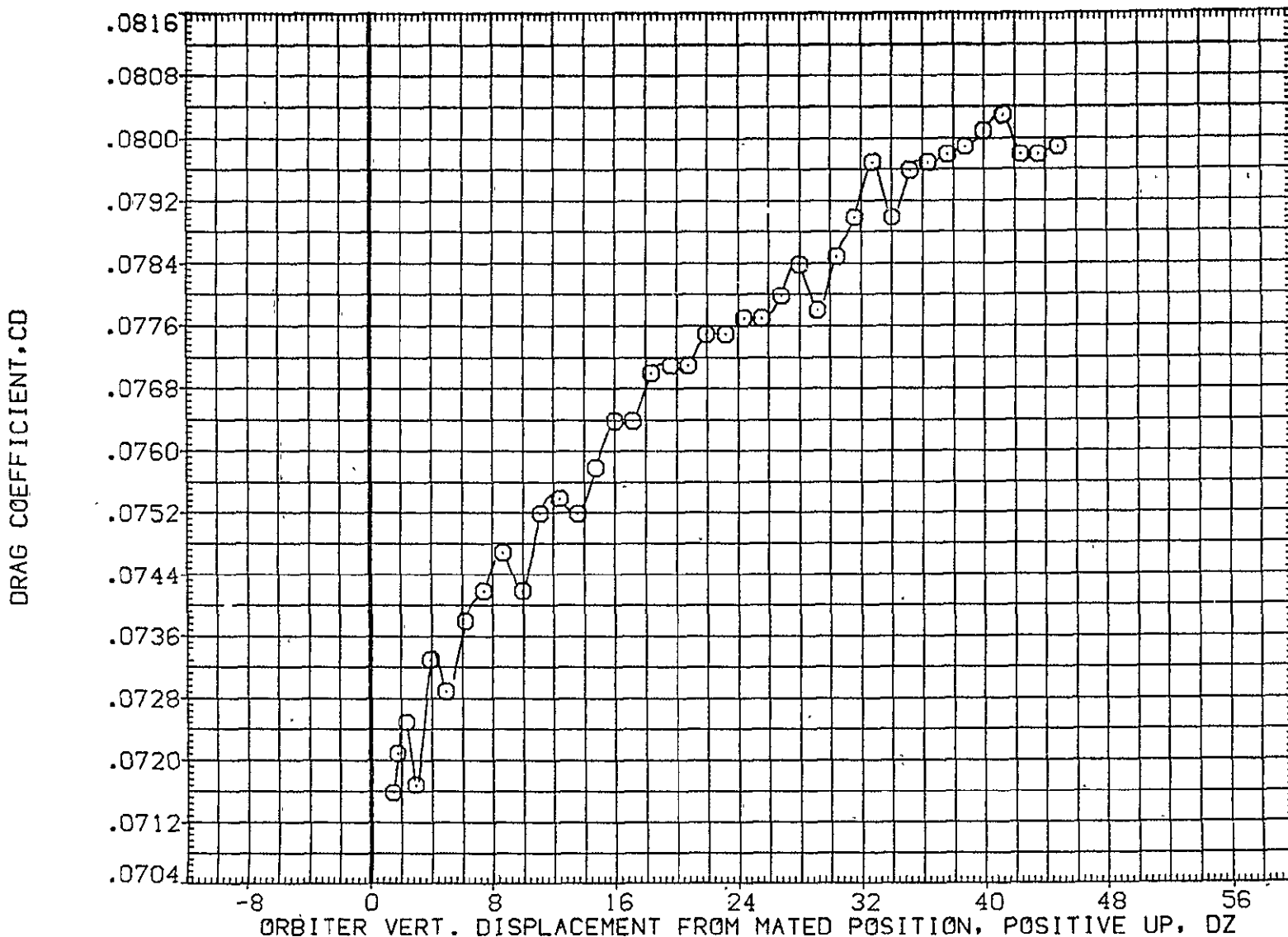


FIG. 36 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, 10RB=4, BETAC=0, BETA0=0, AFE045

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE046)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	IN.	SO.FT.
○	.329	2.000	.000	5.000	.000	2690.0000	IN.	SO.FT.
□	.501	5.000	.000	.000	.000	474.8100	IN.	
◇	.604	.000	.000	.000	.000	936.6800	IN.	
△	.698	.000	.000	6.000	.000	1109.0000	IN.	X0
		BETA0	.000	RUDDER	.000	YMRP	IN.	Y0
						ZMRP	IN.	Z0
						SCALE		

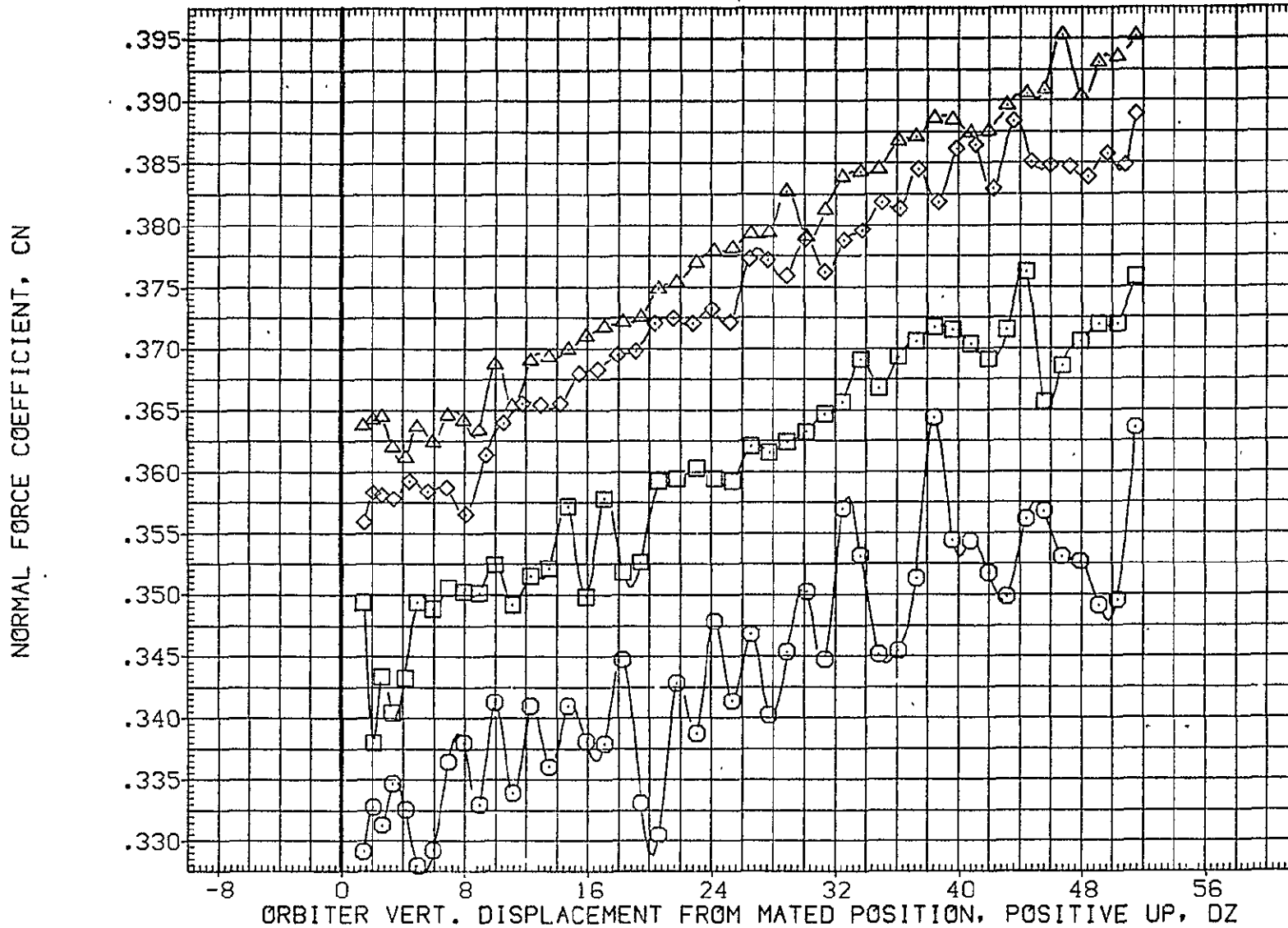


FIG. 37 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE046

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	SO.FT.	
○	.329	2.000	.000	5.000	.000	2690.0000	50. FT.	
□	.501	5.000	.000	5.000	.000	474.8100	IN.	
◇	.604	.000	.000	.000	.000	936.6800	IN.	
△	.698	.000	.000	6.000	.000	1109.0000	IN. X0	
		BETA0	.000	RUDDER	.000	YMRP	IN. Y0	
						ZMRP	IN. Z0	
						SCALE	.0125	

PITCHING MOMENT COEFFICIENT, CLM

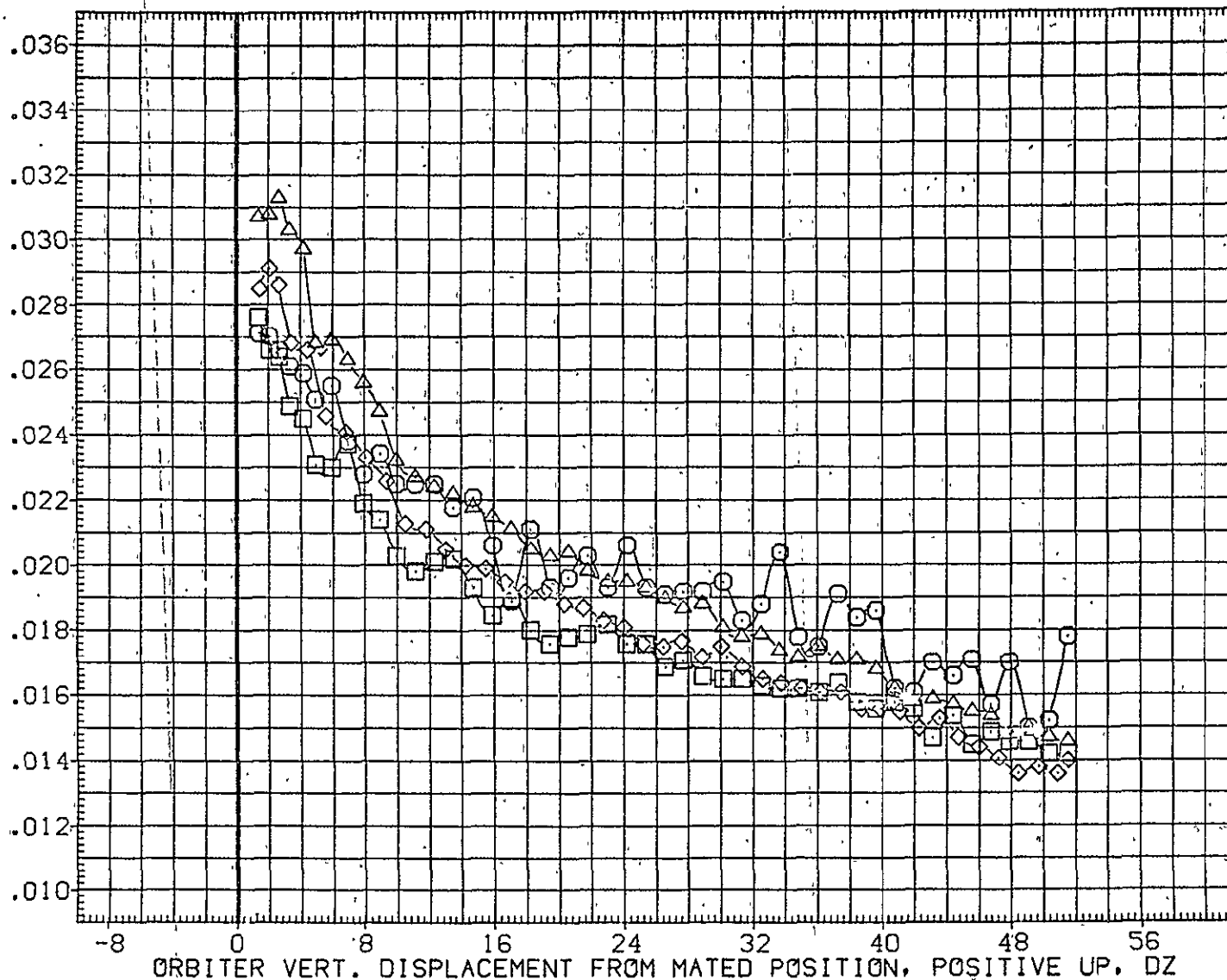


FIG. 37 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE046

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE046)

SYMBOL
 ○
 □
 ◇
 △

MACH	PARAMETRIC VALUES			
.329	ALPHAC	2.000	BETAC	.000
.501	STAB	5.000	ELEVON	5.000
.604	BDFLAP	.000	DX	.000
.698	DY	.000	IORB	6.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

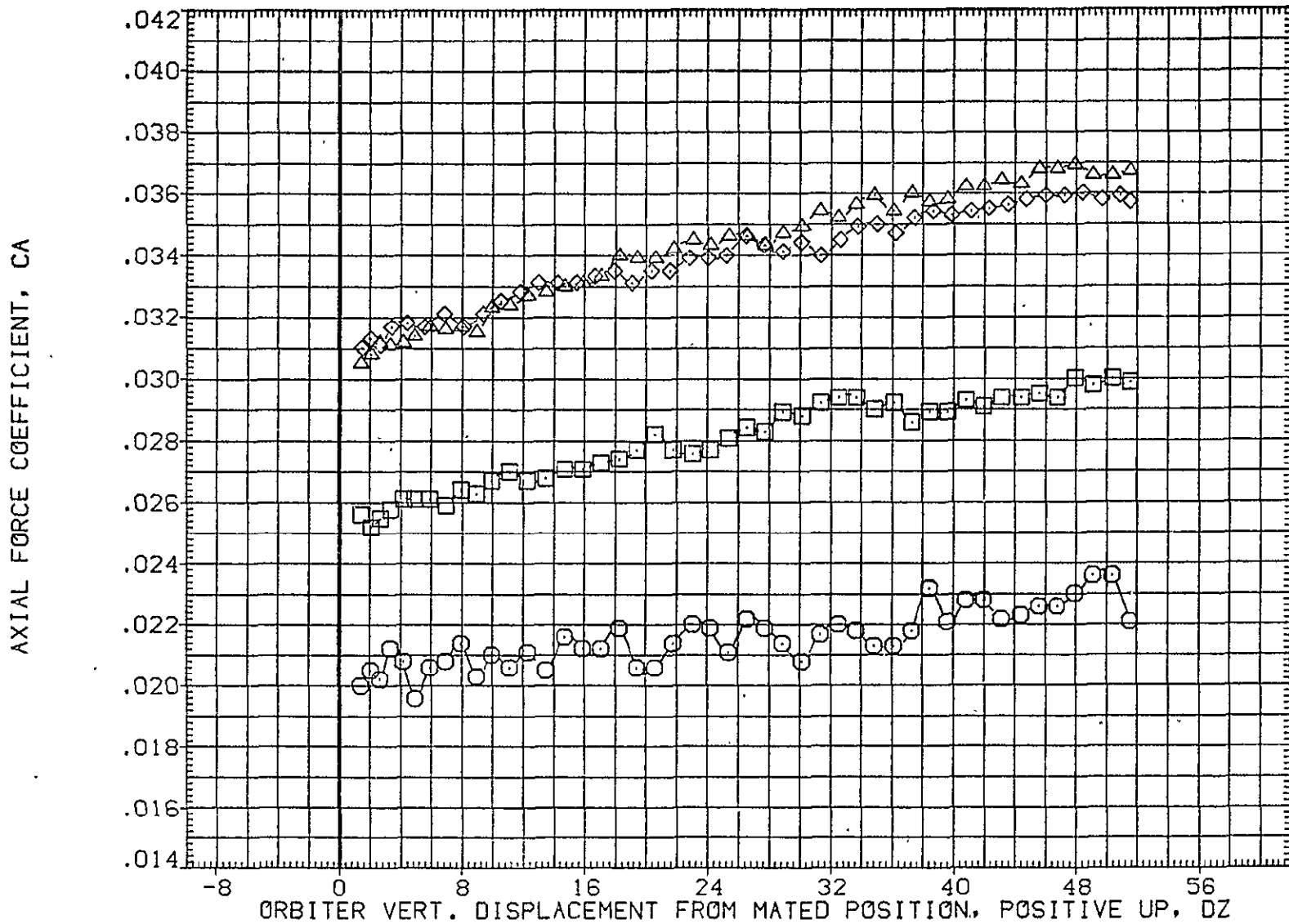


FIG. 37 ORB. DATA, CARRIER PROXIMITY, ALPHAC=?, IORB=6, BETAC=0, BETA0=0, AFE046

SYMBOL	MACH	PARAMETRIC VALUES			
○	.329	ALPHAC	2.000	BETAC	.000
□	.501	STAB	5.000	ELEVON	5.000
◇	.604	BDFLAP	.000	DX	.000
△	.698	DY	.000	IORB	6.000
		BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

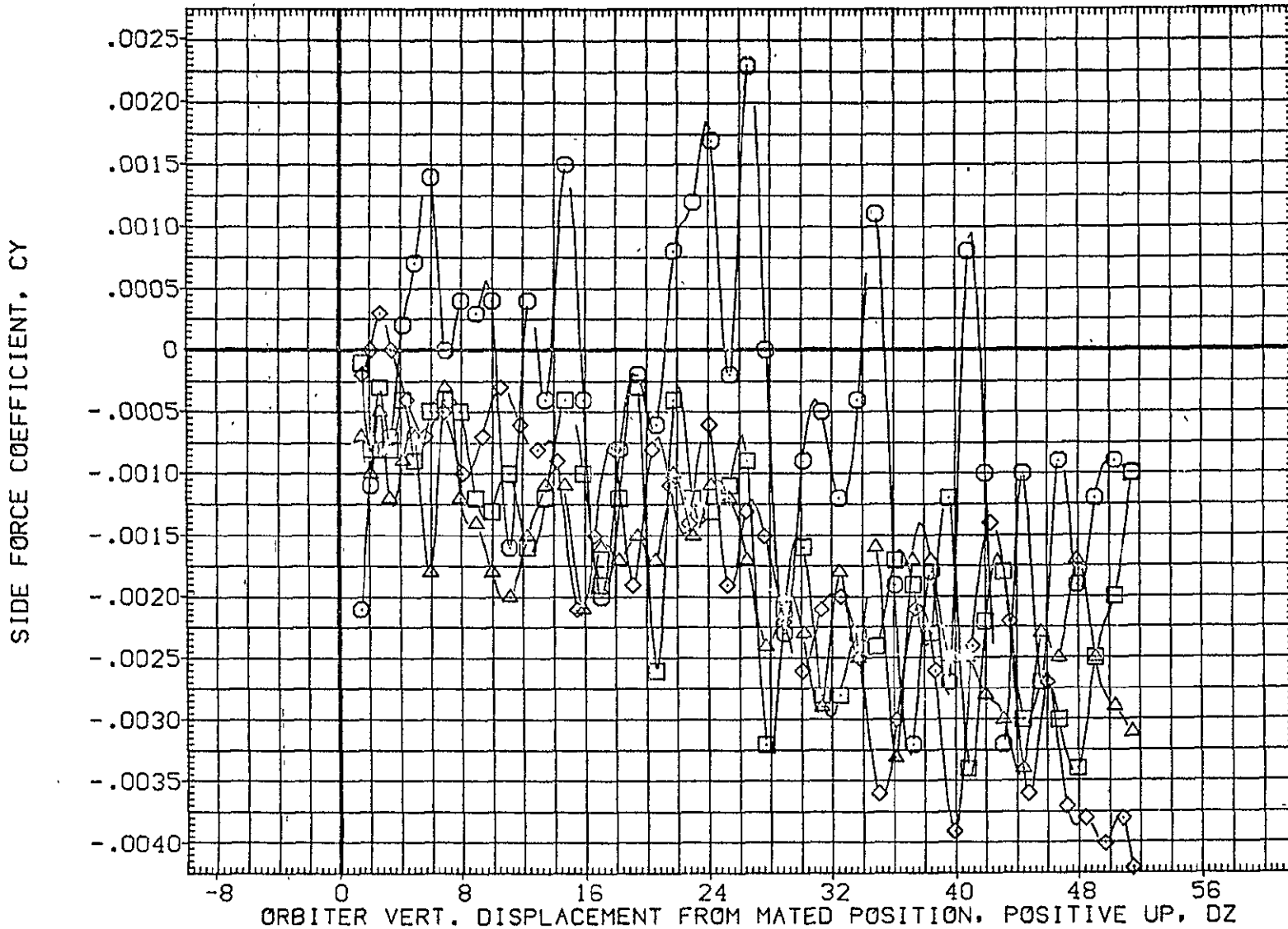


FIG. 37 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFEO46

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE046)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.329	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
□	.501	STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
◇	.604	BDFLAP	.000	DX	.000	BREF	936.6800	IN.
△	.698	DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

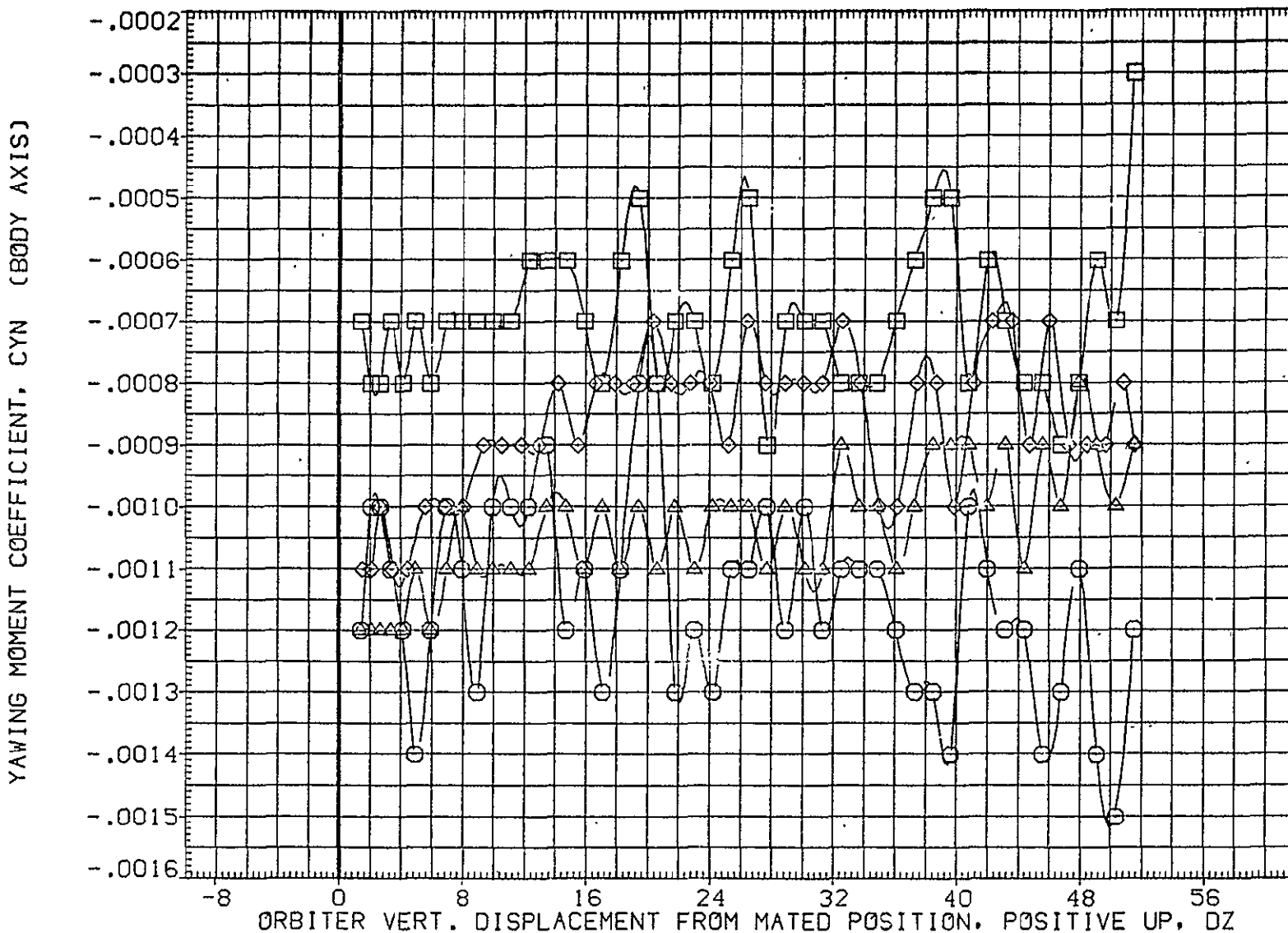


FIG. 37 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE046

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.329	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
□	.501	STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
◇	.604	BOFLAP	.000	DX	.000	BREF	936.6800	IN.
△	.698	.000	IORB	6.000	XMRP	1109.0000	IN. X0	
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

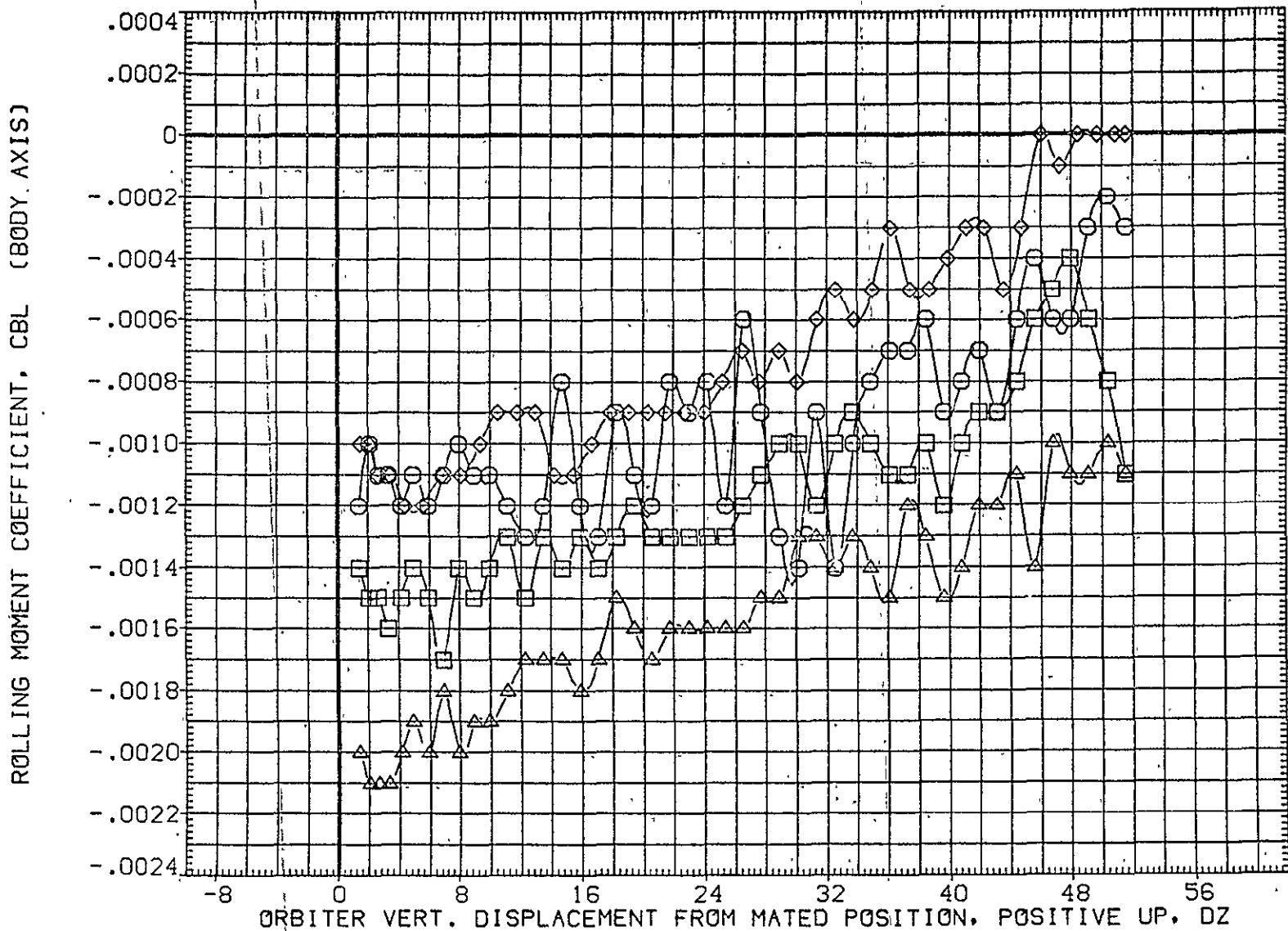


FIG. 37 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE046

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE046)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.329	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
□	.501	STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
◇	.604	BDFLAP	.000	DX	.000	BREF	936.6800	IN.
△	.698	DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

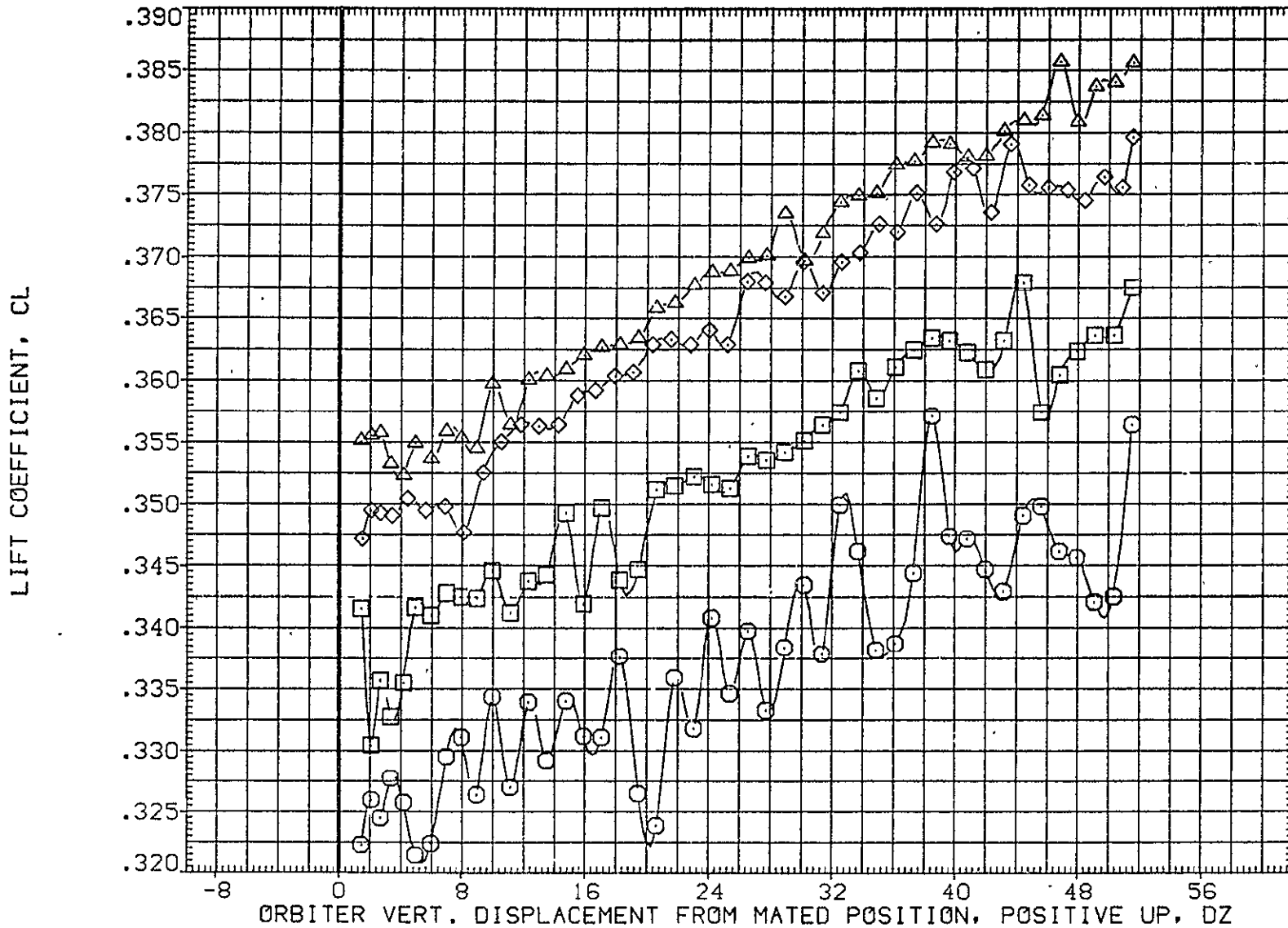


FIG. 37 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE046

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.329	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
□	.501	STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
◇	.604	BDFLAP	.000	DX	.000	BREF	936.6800	IN.
△	.698	DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

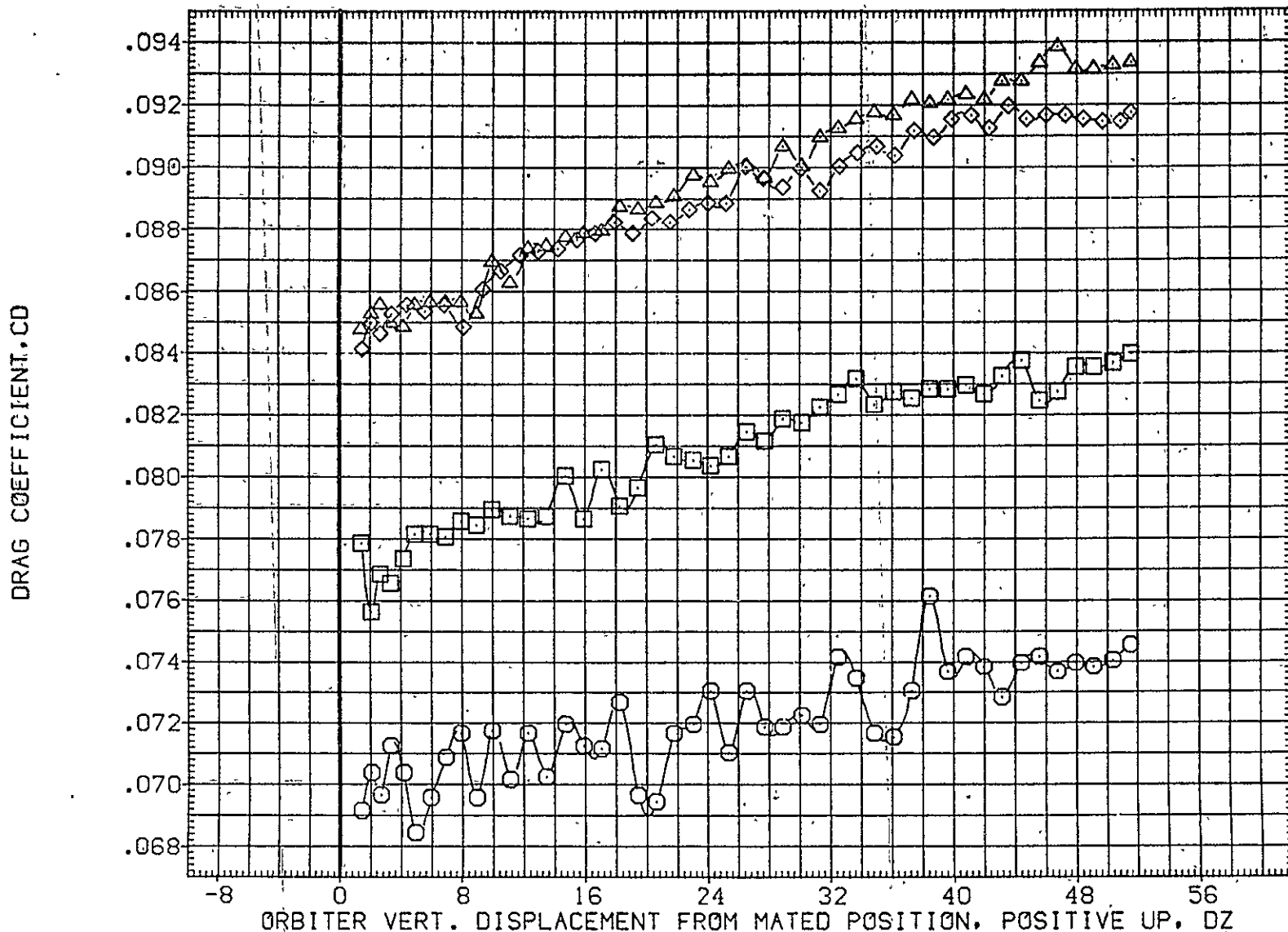


FIG. 37 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE046

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE047)

SYMBOL
○

MACH	PARAMETRIC VALUES			
.599	ALPHAC	2.000	BETAC	.000
	STAB	5.000	ELEVON	5.000
	BDFLAP	.000	DX	.000
	DY	.000	IORB	8.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

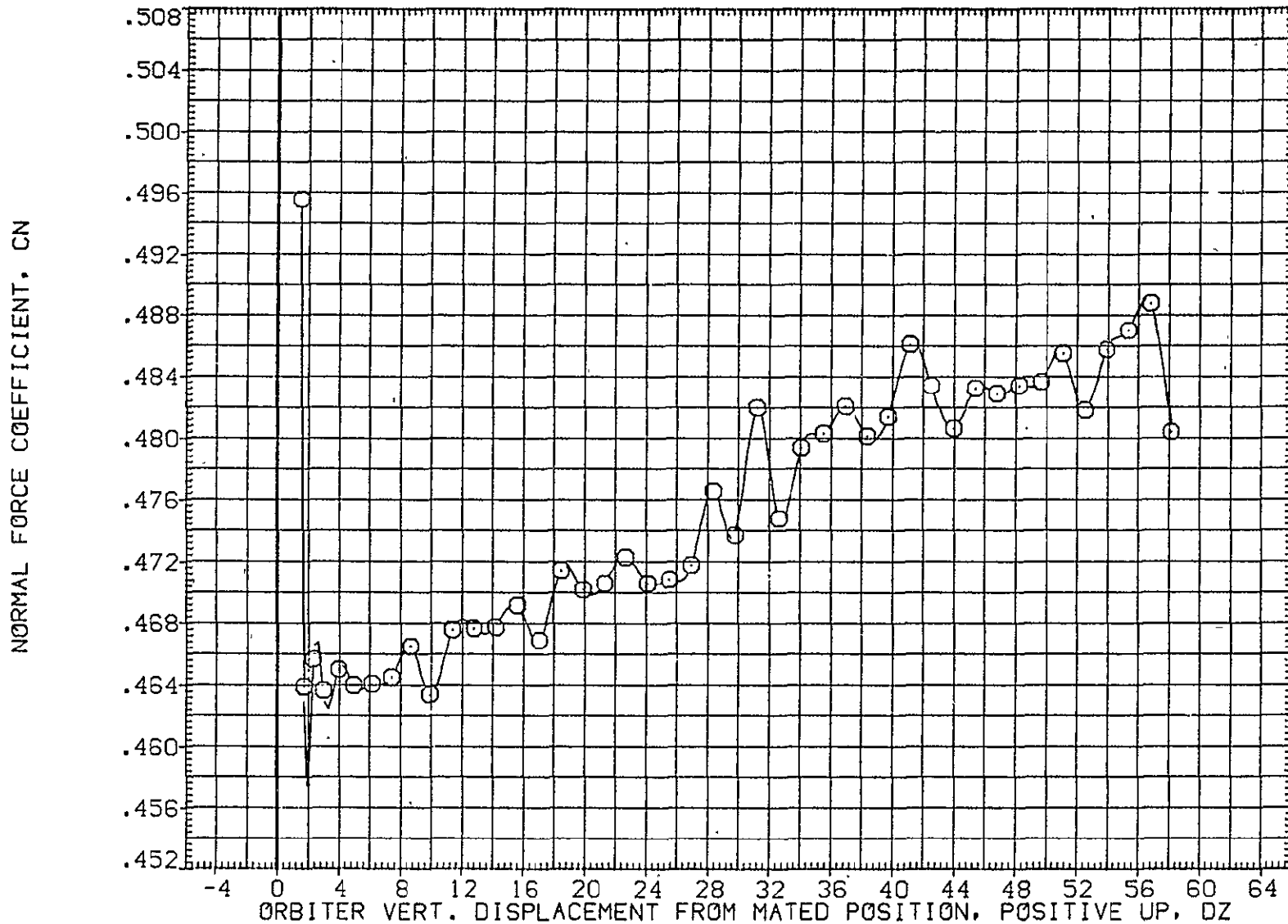


FIG. 38 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE047

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	



FIG. 38 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE047

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE047)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	OX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

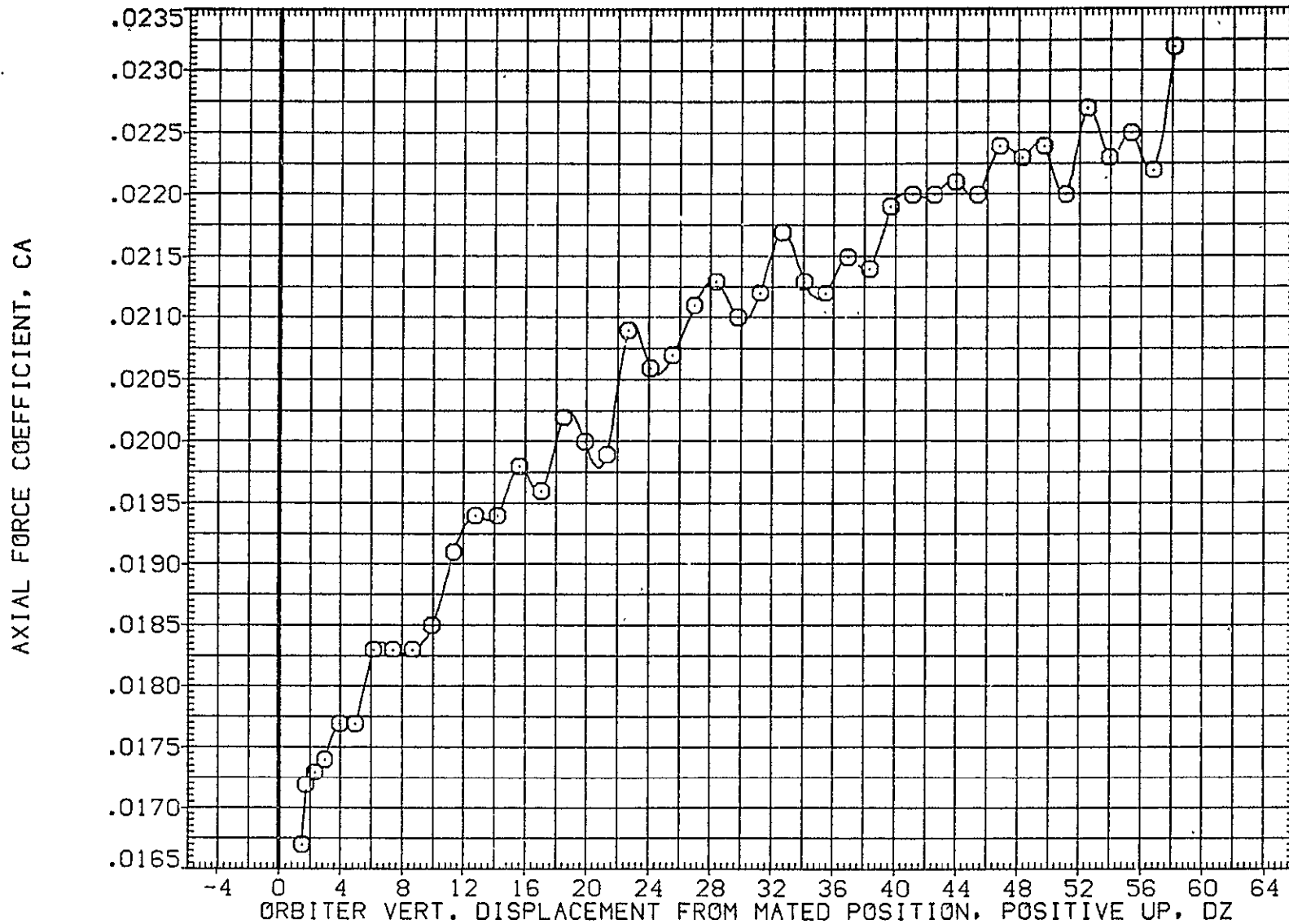


FIG. 38 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE047

SYMBOL	MACH	PARAMETRIC VALUES			
○	.599	ALPHAC	2.000	BETAC	.000
		STAB	5.000	ELEVON	5.000
		BDFLAP	.000	DX	.000
		DY	.000	IORB	8.000
		BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0125	

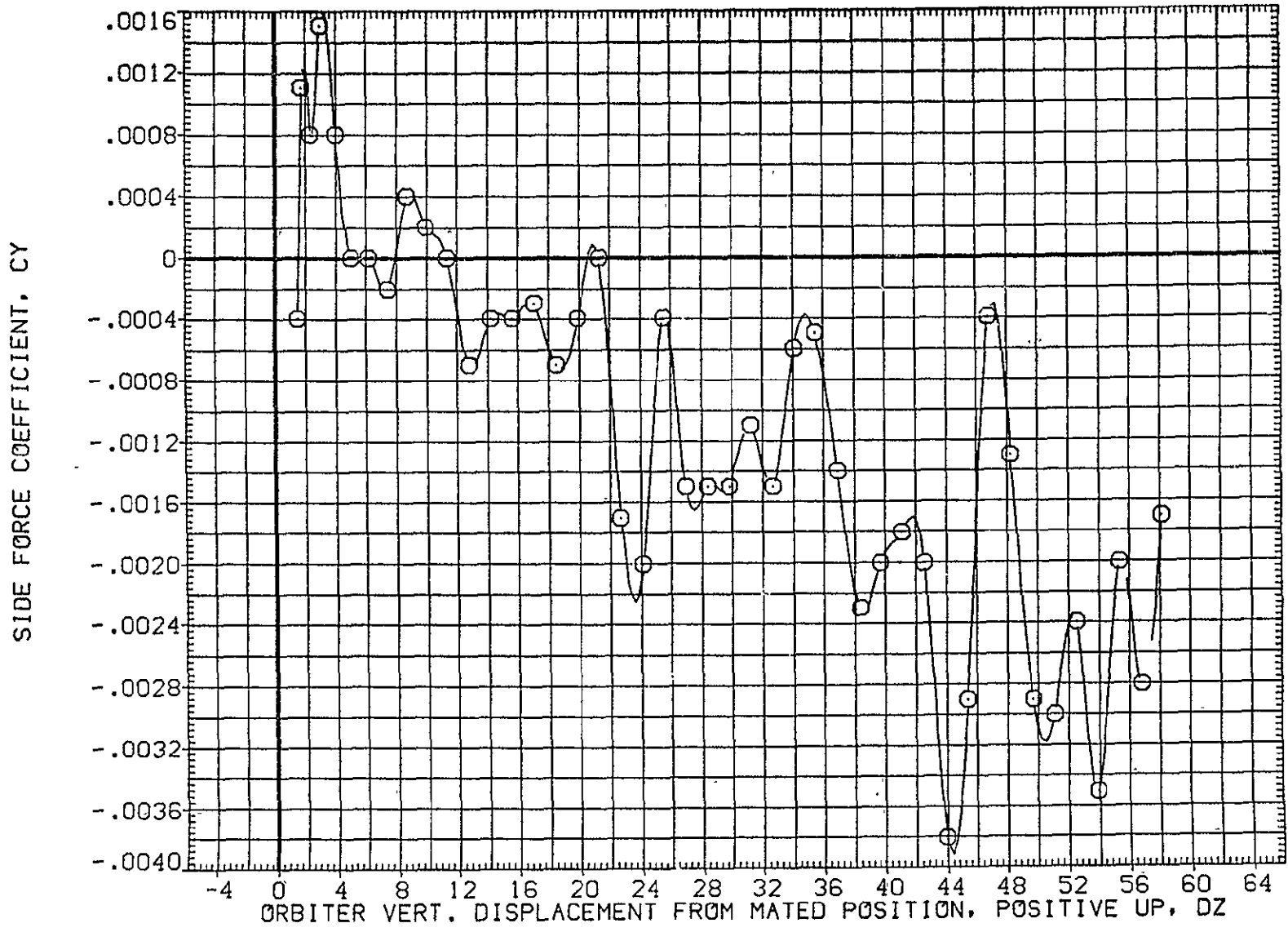


FIG. 38 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE047

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE047)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETAC	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

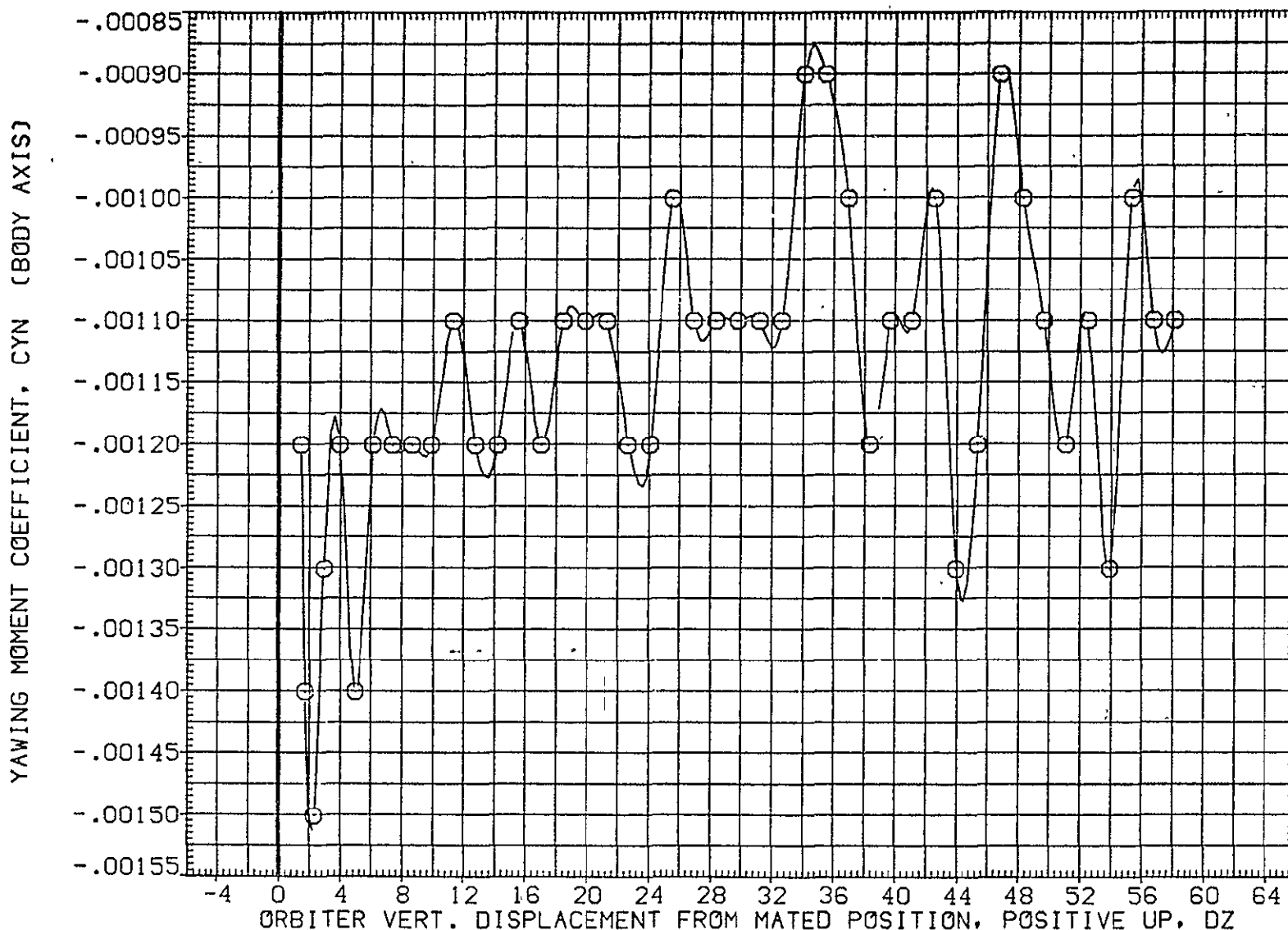


FIG. 38 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETAC=0, AFE047

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

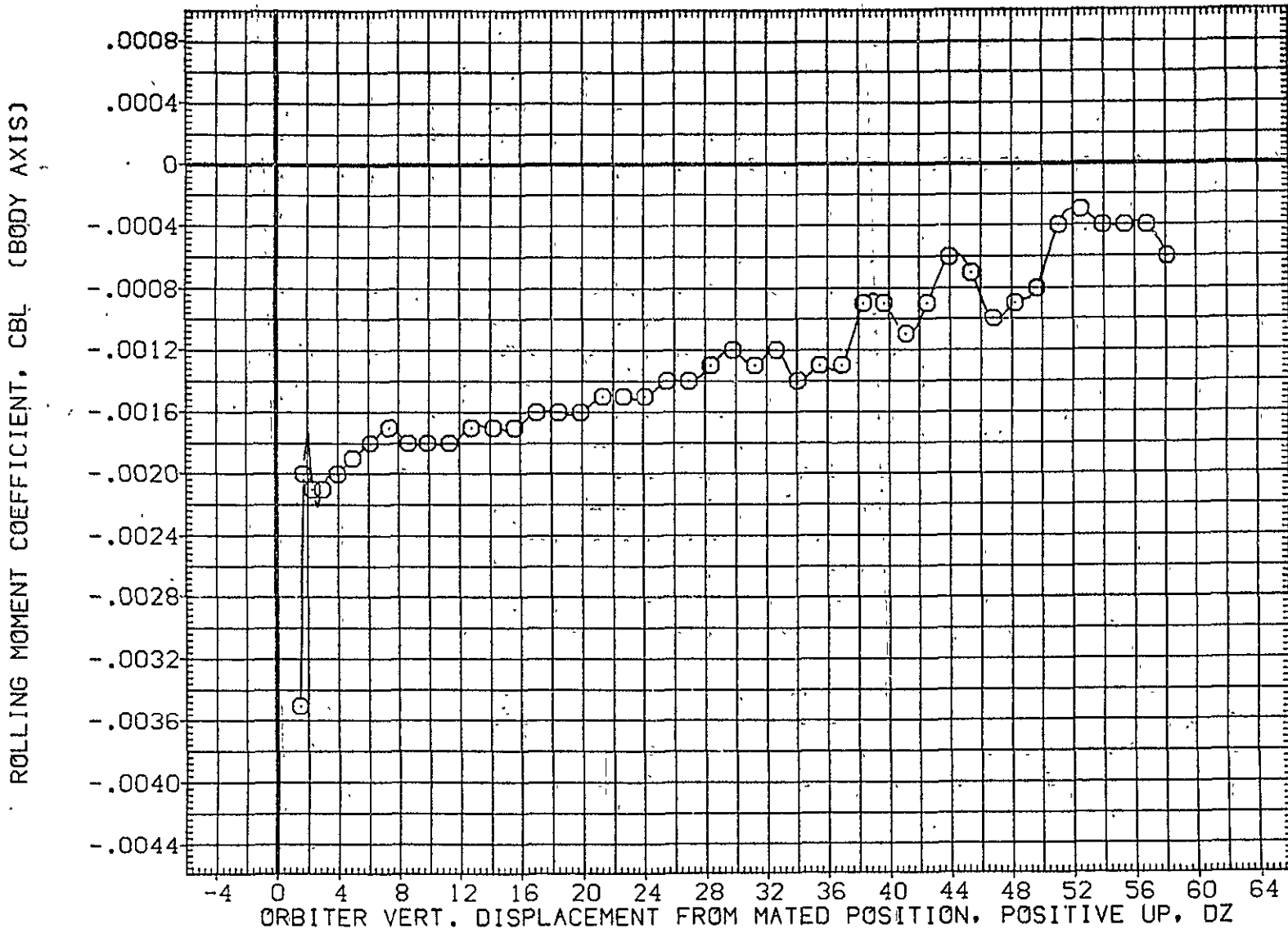


FIG. 38 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE047

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE047)

SYMBOL
○

MACH	PARAMETRIC VALUES			
.599	ALPHAC	2.000	BETAC	.000
	STAB	5.000	ELEVON	5.000
	BDFLAP	.000	DX	.000
	DY	.000	IORB	8.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

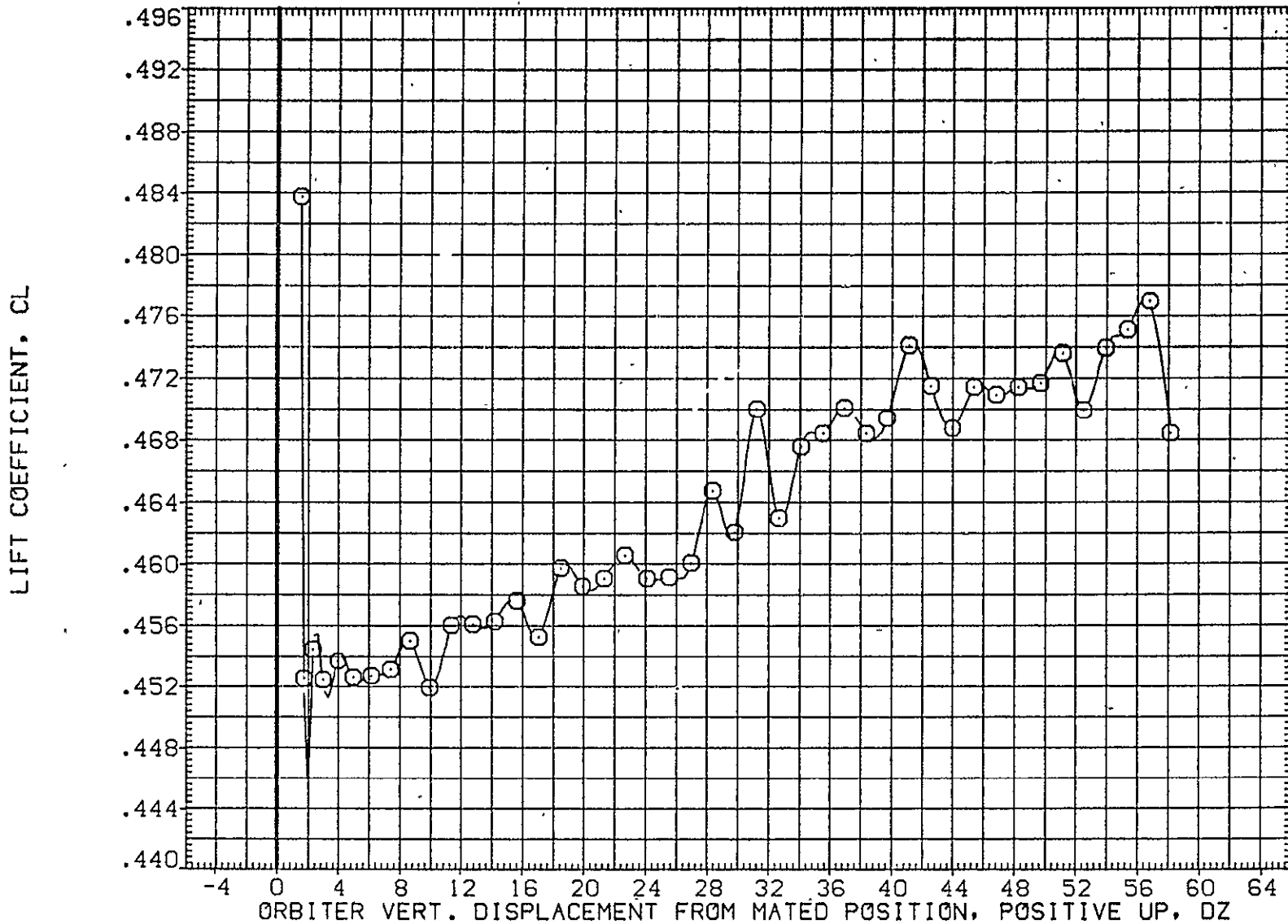


FIG. 38 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE047

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

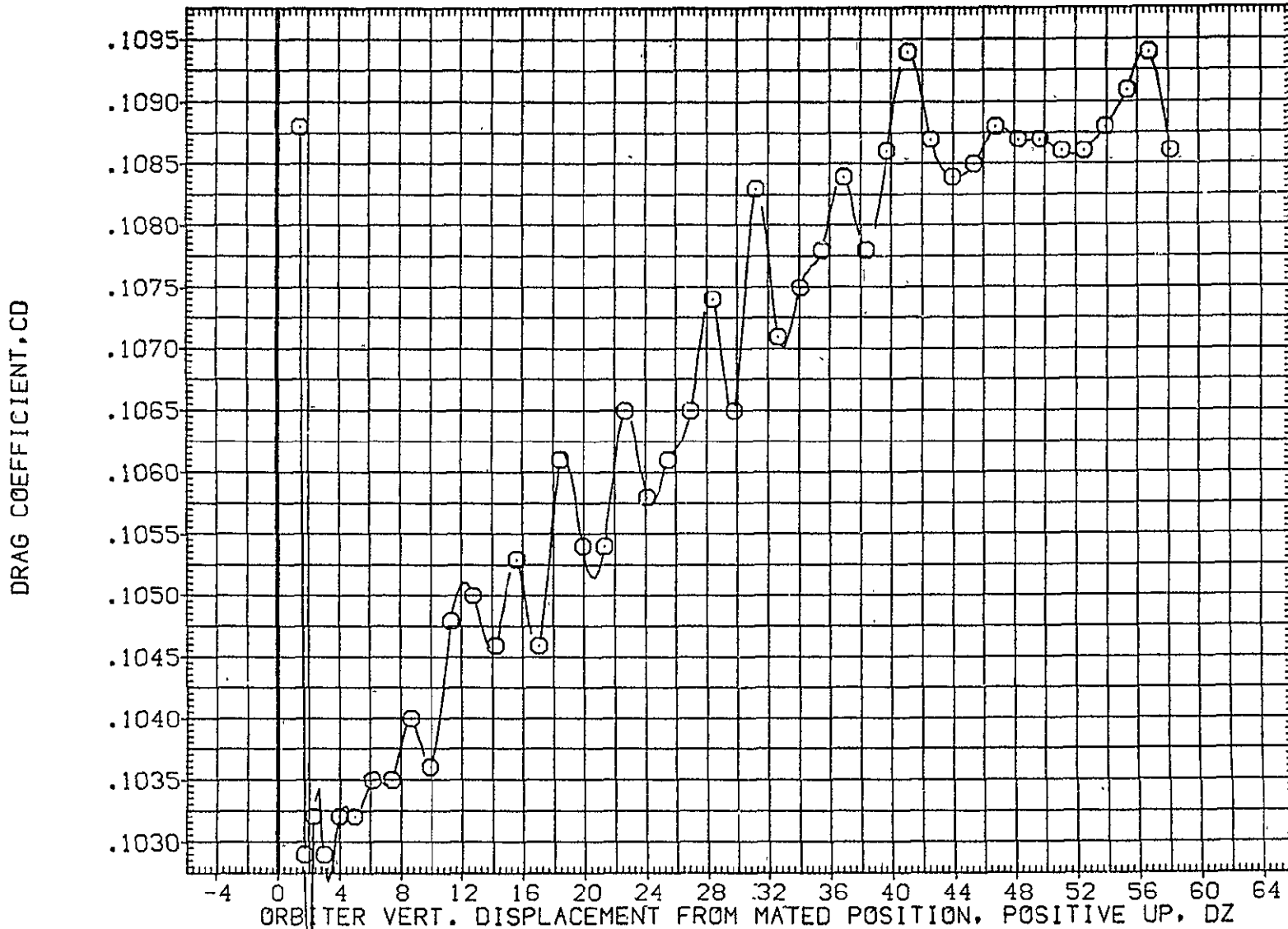


FIG. 38 ORB. DATA, CARRIER PROXIMITY, ALPHAC=?, IORB=8, BETAC=0, BETA0=0, AFE047

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE048)

SYMBOL
O

MACH	PARAMETRIC VALUES			
.603	ALPHAC	2.000	BETAC	.000
	STAB	5.000	ELEVON	5.000
	BDFLAP	.000	DX	.000
	DY	.000	IORB	4.000
	BETA0	5.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

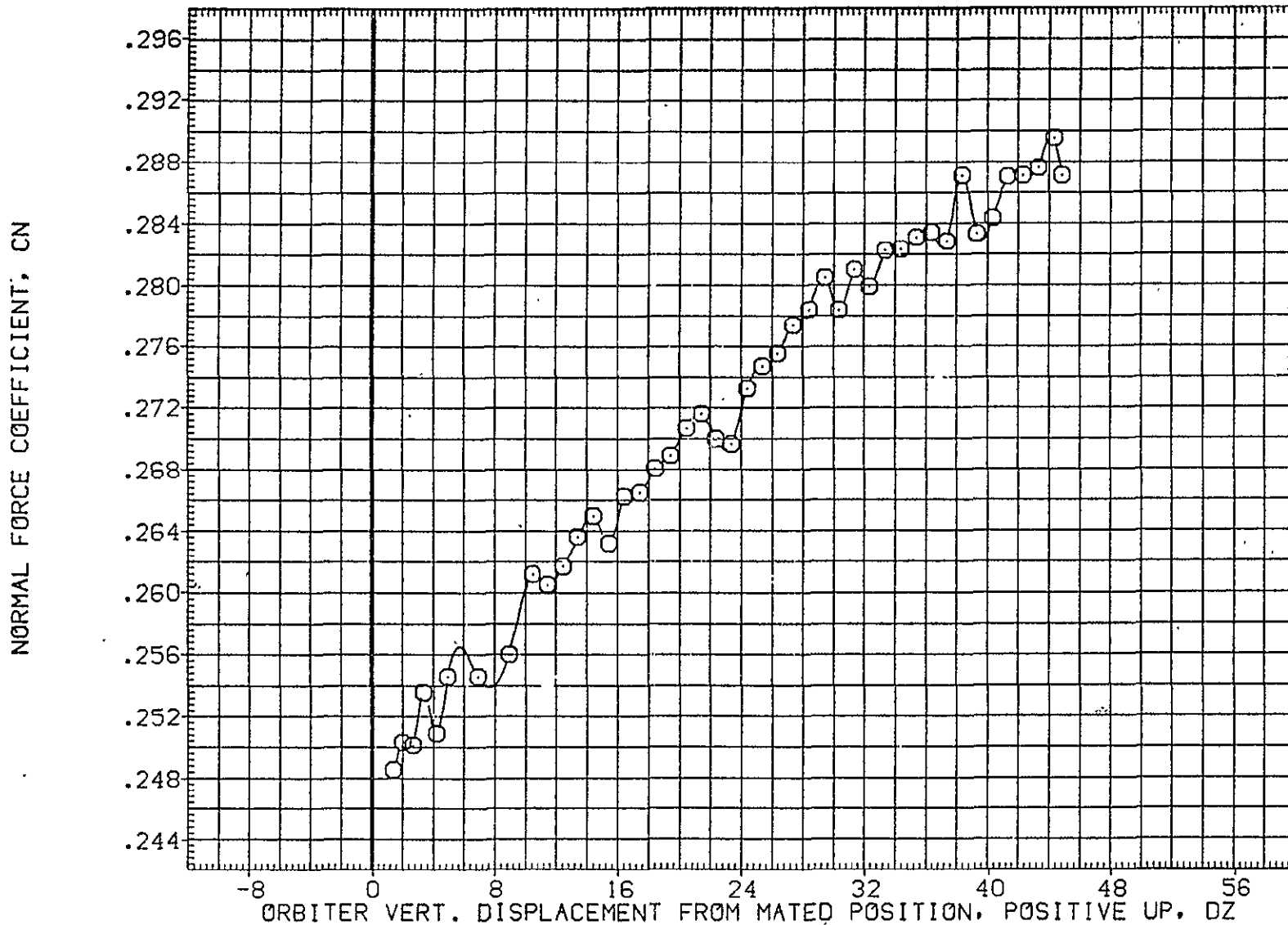


FIG. 39 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=5, AFE048

SYMBOL
○

MACH	PARAMETRIC VALUES			
.603	ALPHAC	2.000	BETAC	.000
	STAB	5.000	ELEVON	5.000
	BDFLAP	.000	DX	.000
	DY	.000	IORB	4.000
	BETA0	5.000	RUDDER	.000

REFERENCE INFORMATION

SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

PITCHING MOMENT COEFFICIENT, CLM

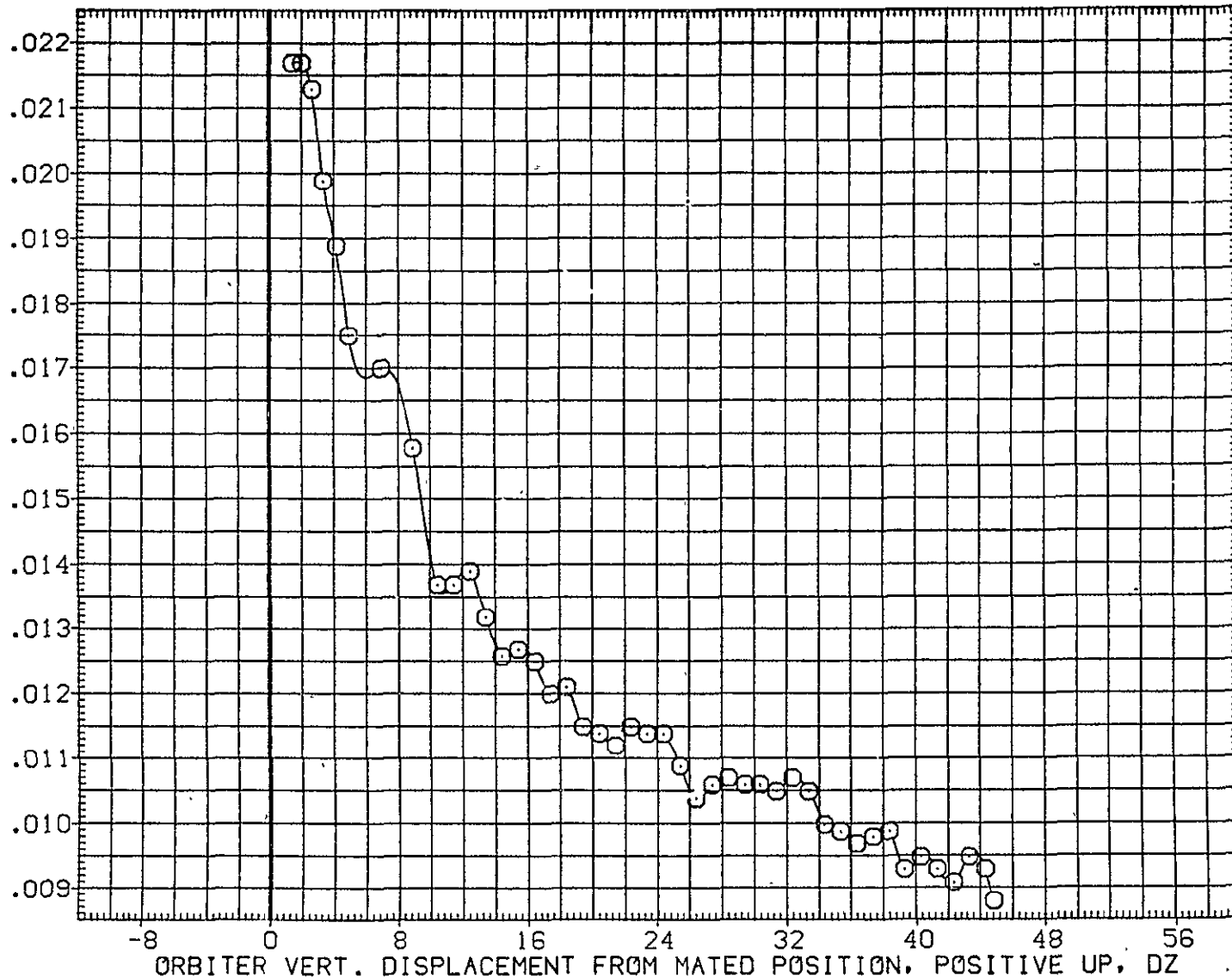


FIG. 39 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=5, AFE048

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE048)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

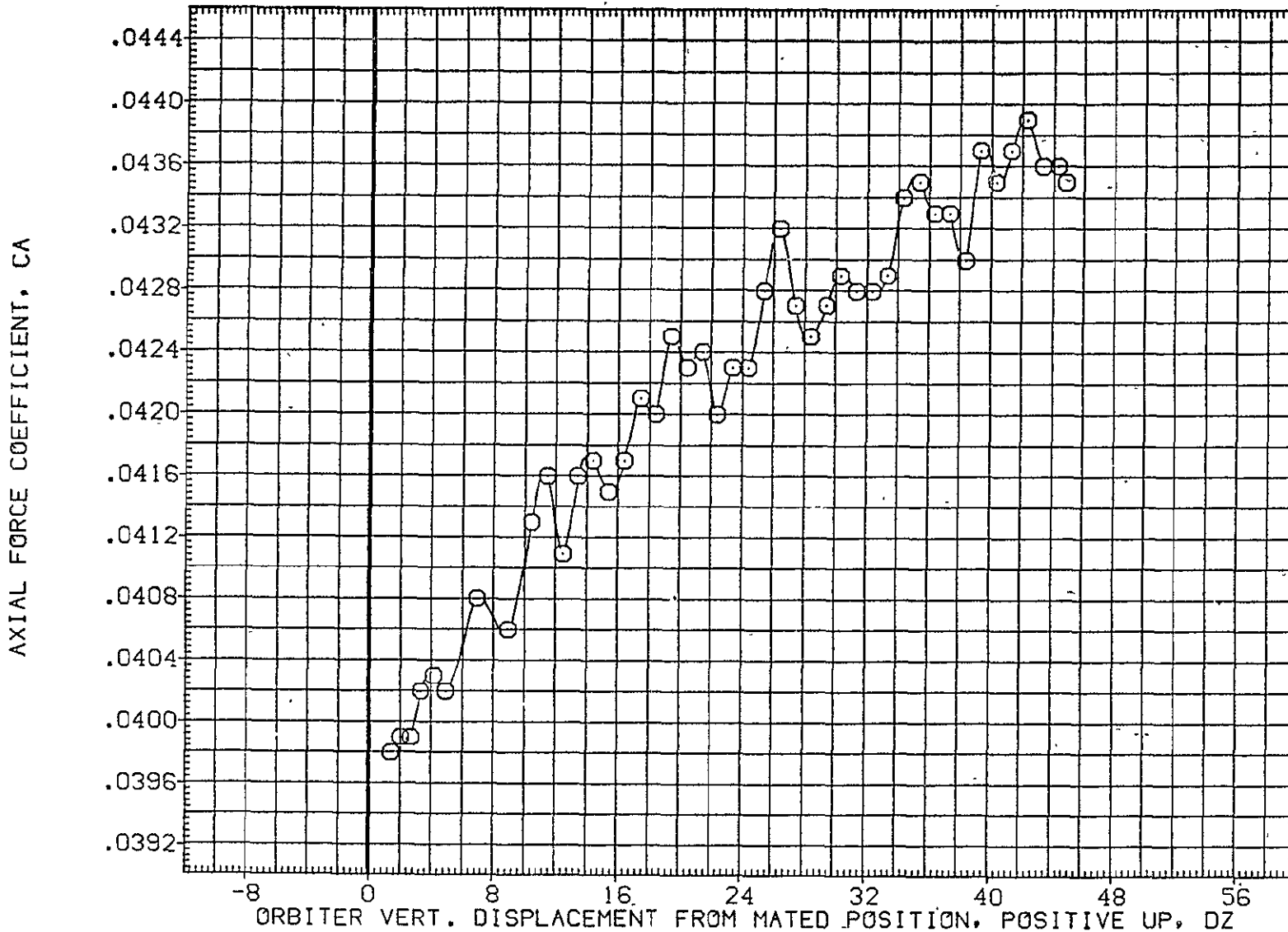


FIG. 39 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=5, AFE048

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION			
		ALPHAC	BETAC	BETAO	RUDDER	SREF	LREF	BREF	ZO
○	.603	2.000	.000	5.000	.000	2690.0000	474.8100	936.6800	SO.FT.
		STAB	5.000	ELEVON	5.000				IN.
		BDFLAP	.000	OX	.000				IN. XO
		DY	.000	IORB	4.000				IN. YO
		BETA0	5.000	RUDDER	.000				IN. ZO
						ZMRP	375.0000		
						SCALE	.0125		

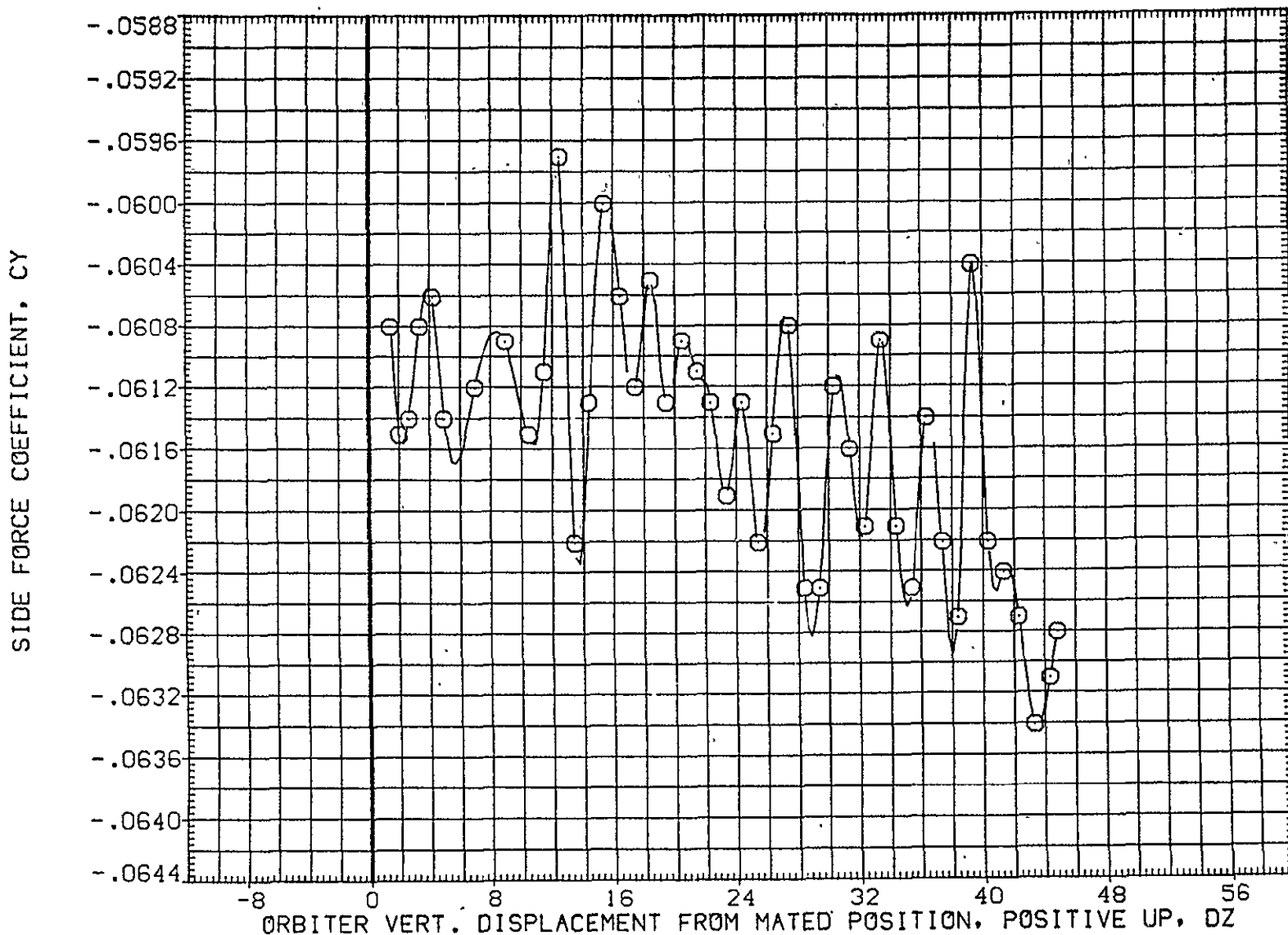


FIG. 39 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=5, AFE048

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE048)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	S
		STAB	5.000	ELEVON	5.000	LREF	474.8100	I
		BDFLAP	.000	DX	.000	BREF	936.6800	I
		DY	.000	IORB	4.000	XMRP	1109.0000	I
		BETA0	5.000	RUDDER	.000	YMRP	.0000	I
						ZMRP	375.0000	I
						SCALE	.0125	

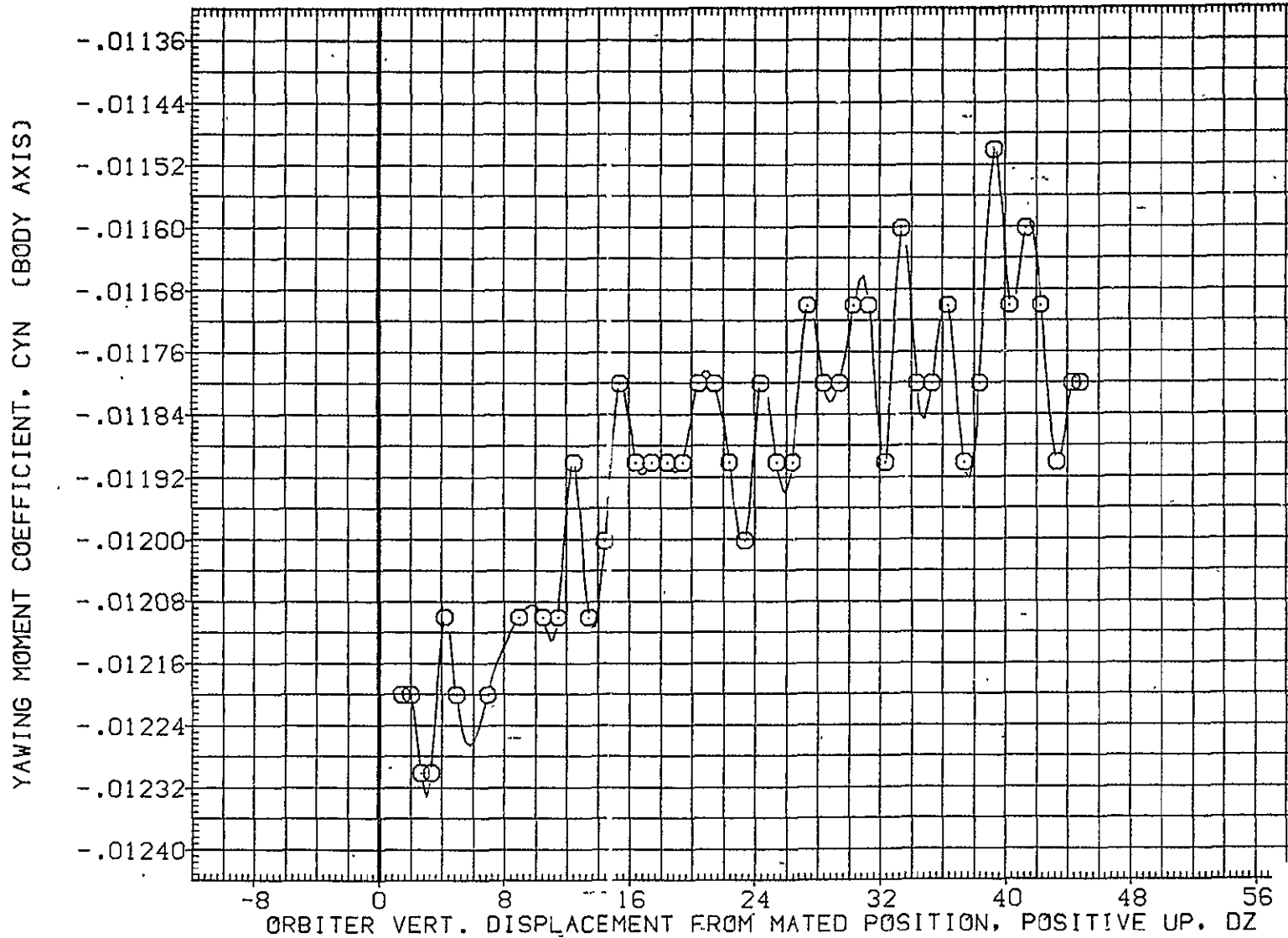


FIG. 39 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=5, AFE04

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

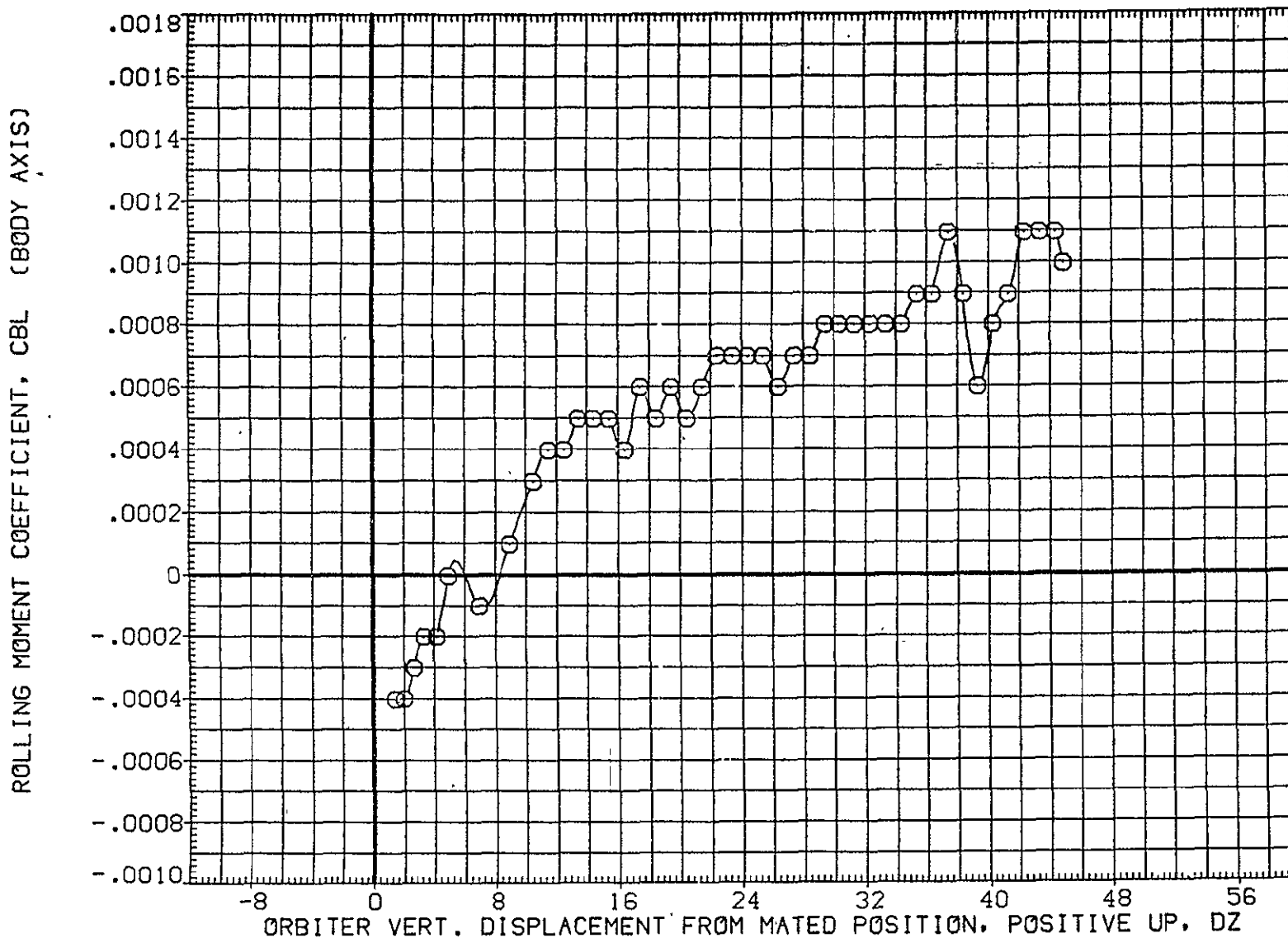


FIG. 39 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=5, AFE048

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE048)

SYMBOL
○

MACH
.603

PARAMETRIC VALUES	
ALPHAC	2.000
BETAC	.000
STAB	5.000
ELEVON	5.000
BDFLAP	.000
DX	.000
DY	.000
IORB	4.000
BETA0	5.000
RUDDER	.000

REFERENCE INFORMATION

SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

LIFT COEFFICIENT, CL

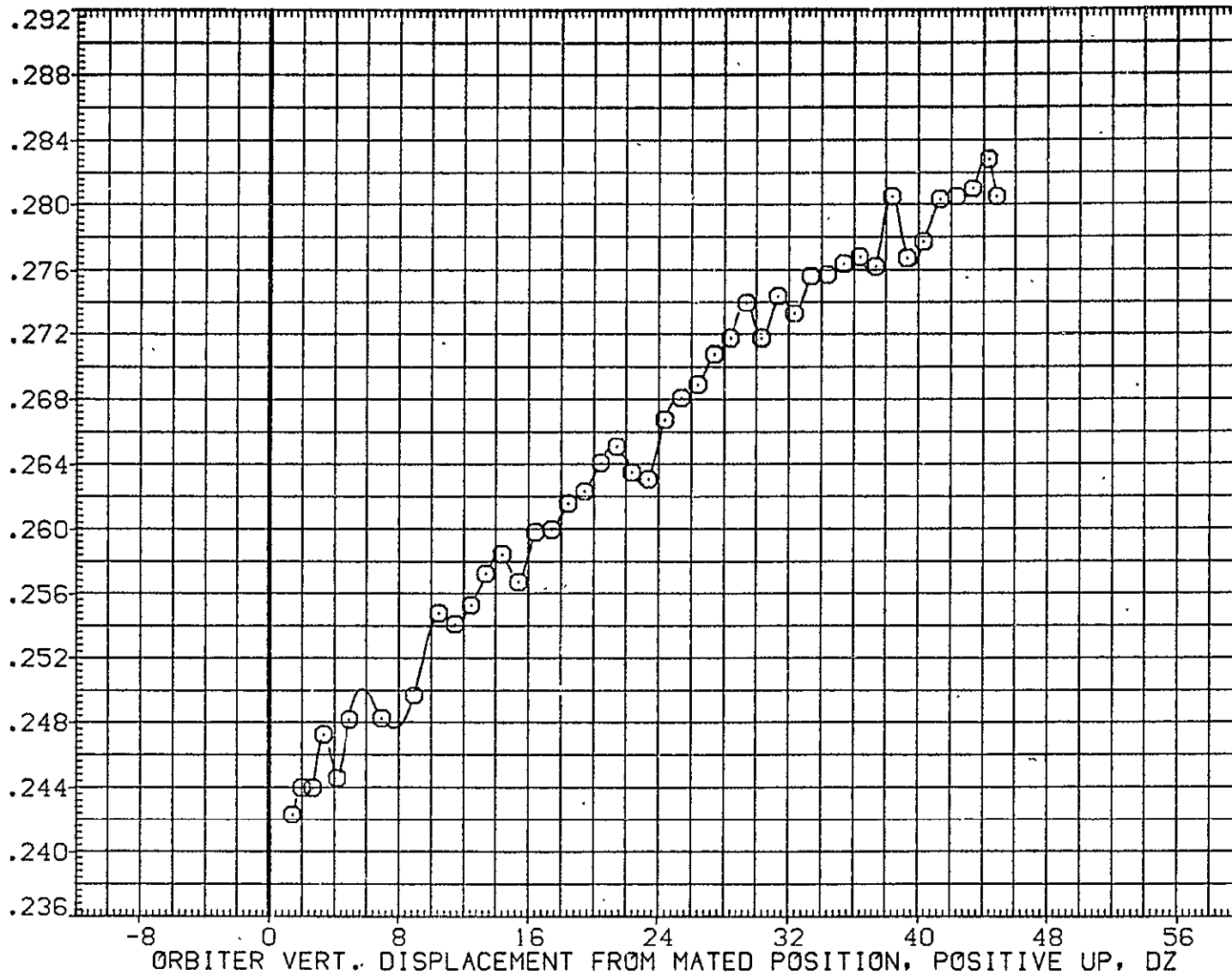


FIG. 39 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=5, AFE048

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	SO.FT.	
○	.603	2.000	.000	5.000	.000	2690.0000	IN.	
		5.000	.000	4.000	.000	474.8100	IN.	
		.000	.000	5.000	.000	936.6800	IN.	
		.000	.000	4.000	.000	1109.0000	IN. X0	
		5.000	.000	5.000	.000	YMRP	IN. Y0	
						375.0000	IN. Z0	
						SCALE	.0125	

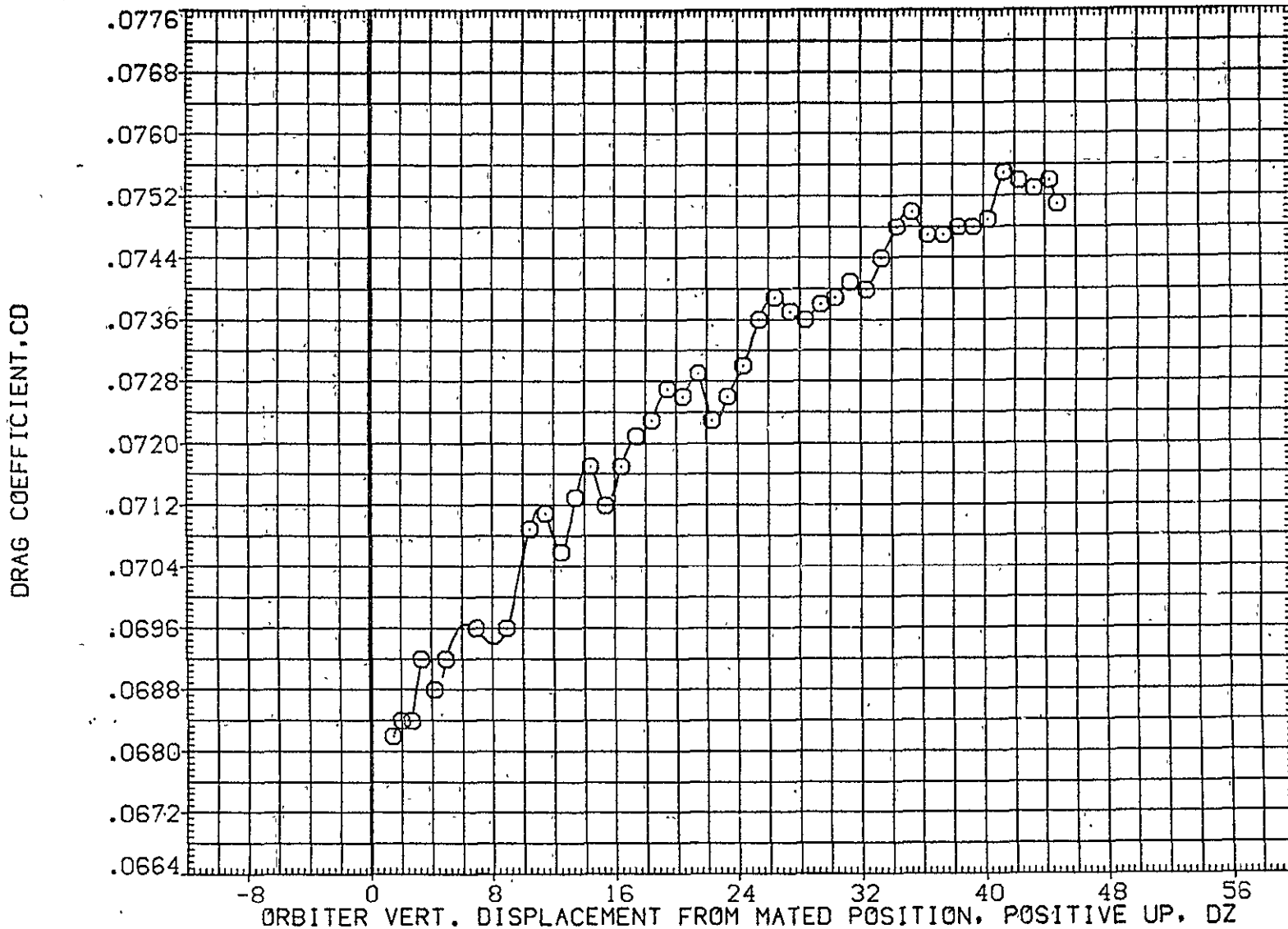


FIG. 39 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2; IORB=4, BETAC=0, BETA0=5, AFE048

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE049)

SYMBOL
○

MACH	PARAMETRIC VALUES			
.602	ALPHAC	2.000	BETAC	.000
	STAB	5.000	ELEVON	5.000
	BDFLAP	.000	DX	.000
	DY	.000	IORB	6.000
	BETA0	5.000	RUDDER	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

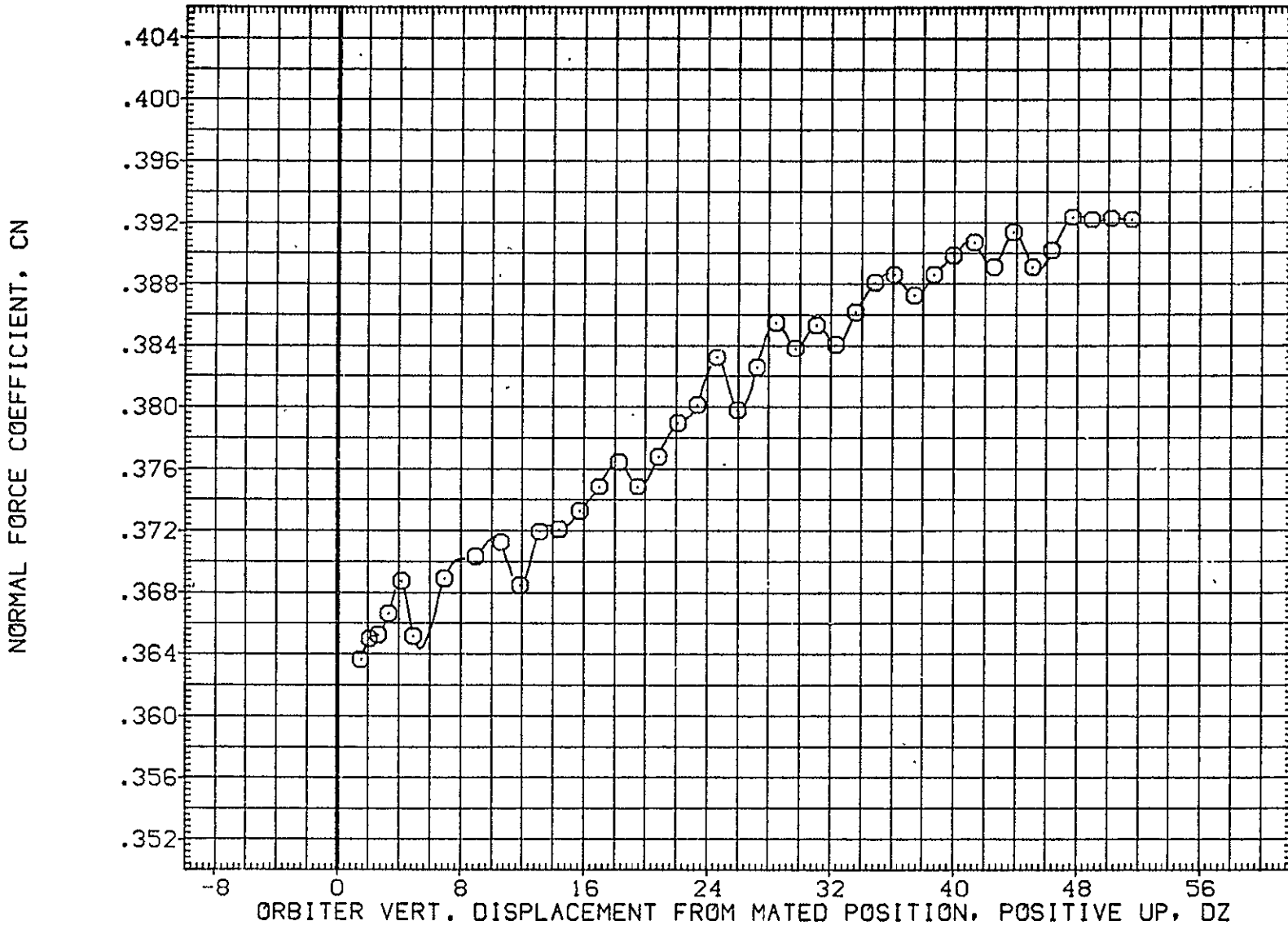


FIG. 40 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE049

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50. FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

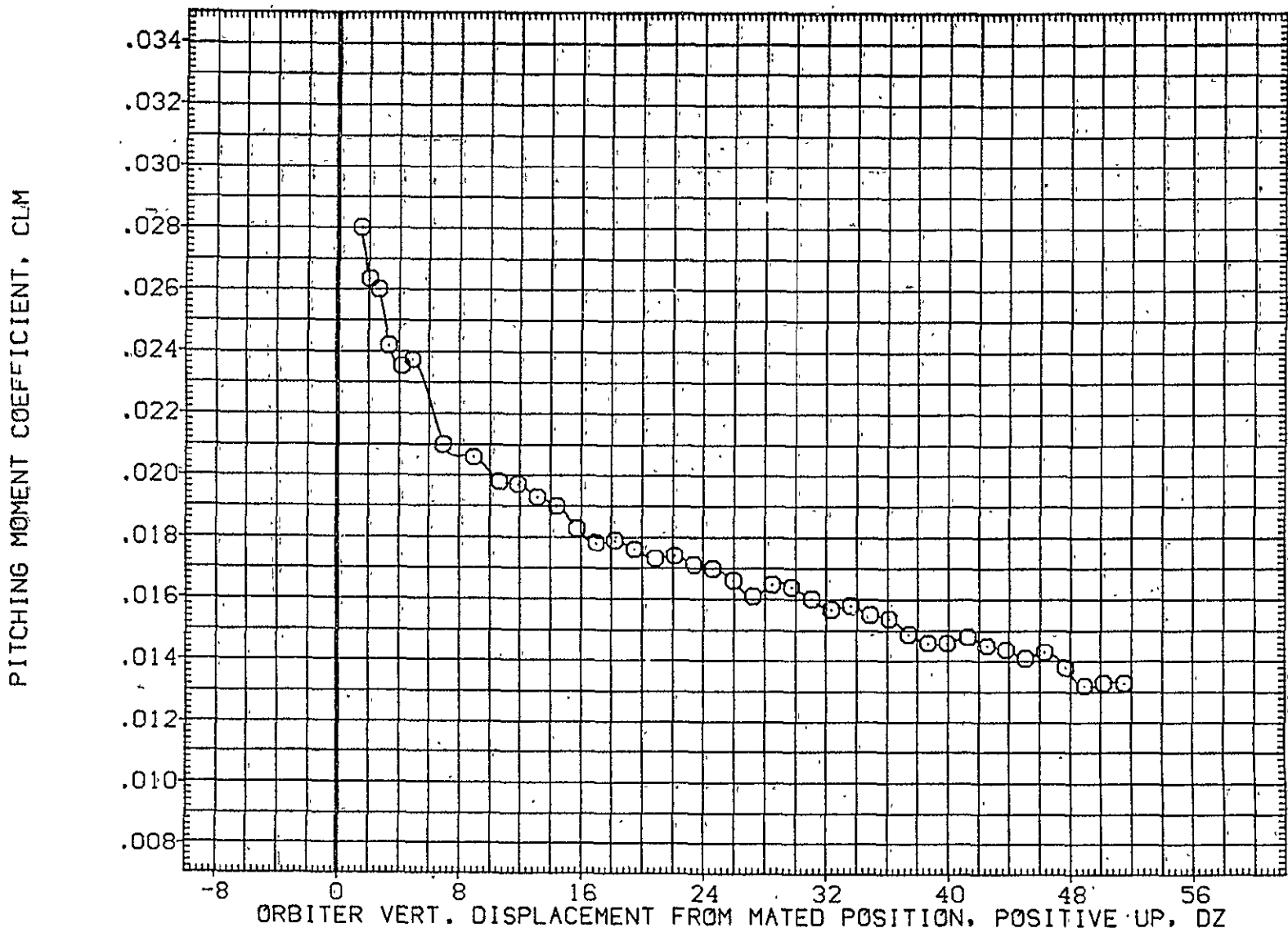


FIG. 40 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE049

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE049)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		OY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

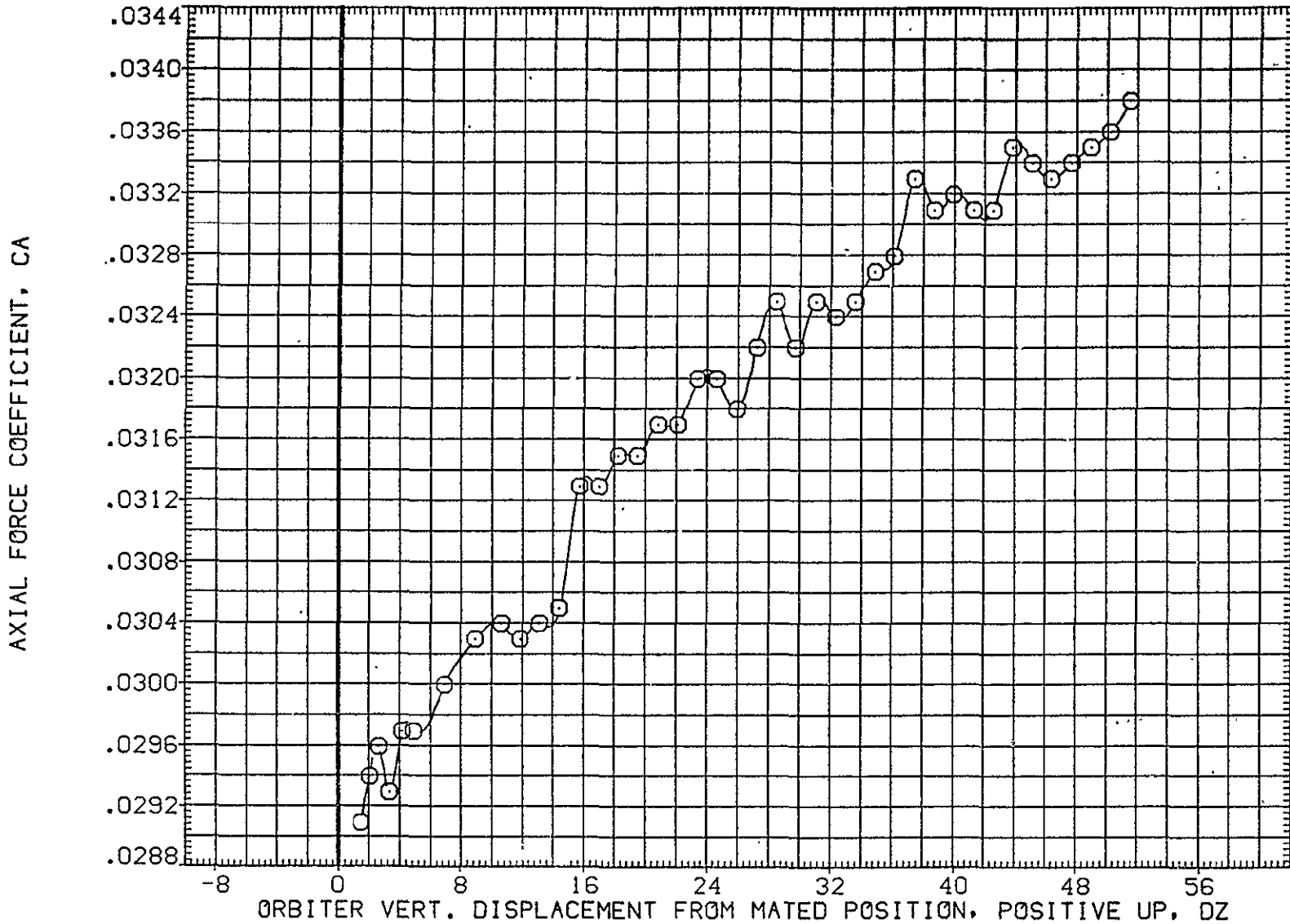


FIG. 40 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE049

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

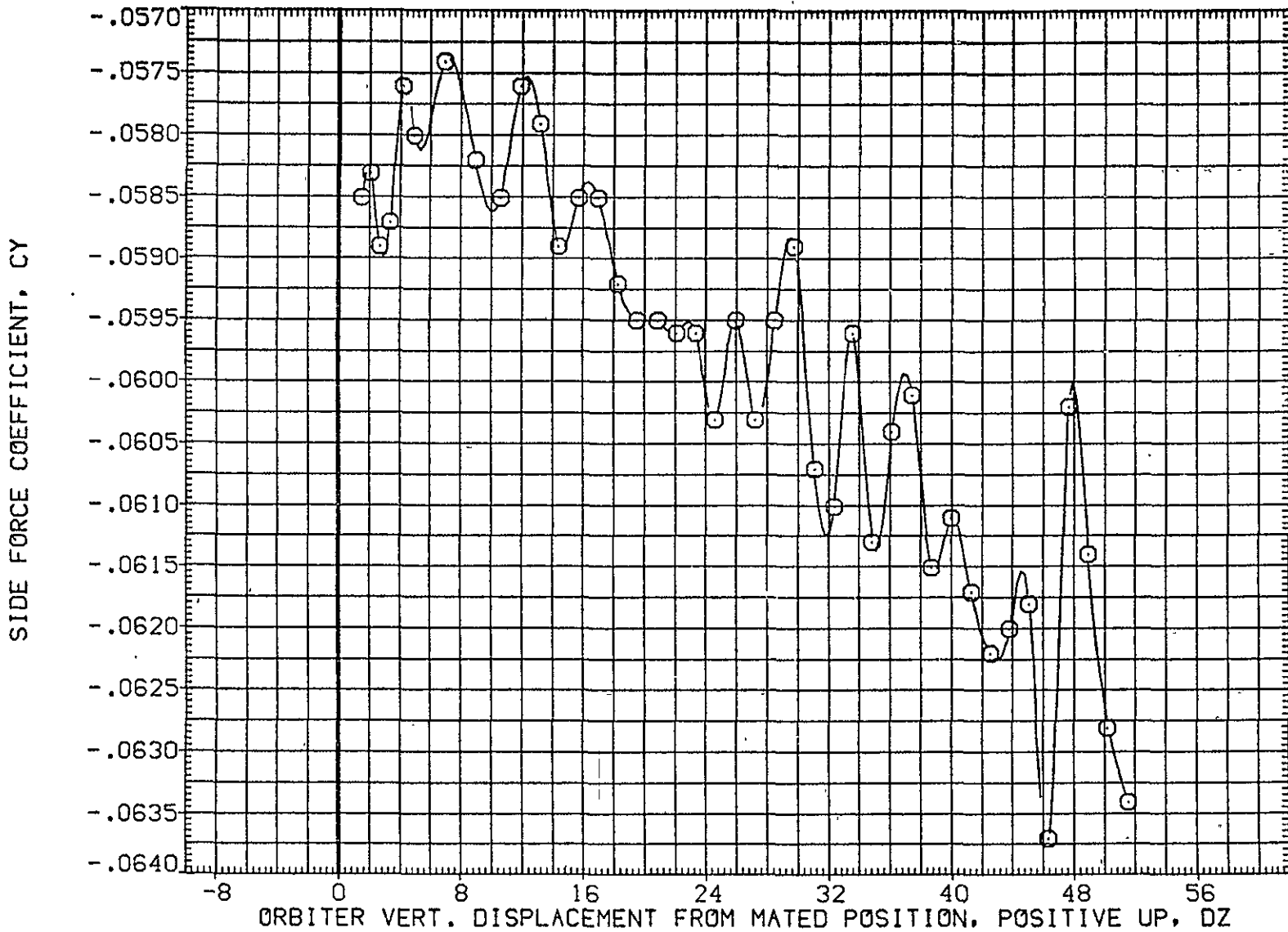


FIG. 40 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE049

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE049)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	LREF	BREF
○	.602	2.000	5.000	5.000	.000	2690.0000	474.8100	936.6800
		BDFLAP	DX	IORB	.000	1109.0000	.0000	375.0000
		DY	IORB	RUDDER	.000	.0000	.0000	.0125
		BETA0	RUDDER		.000			

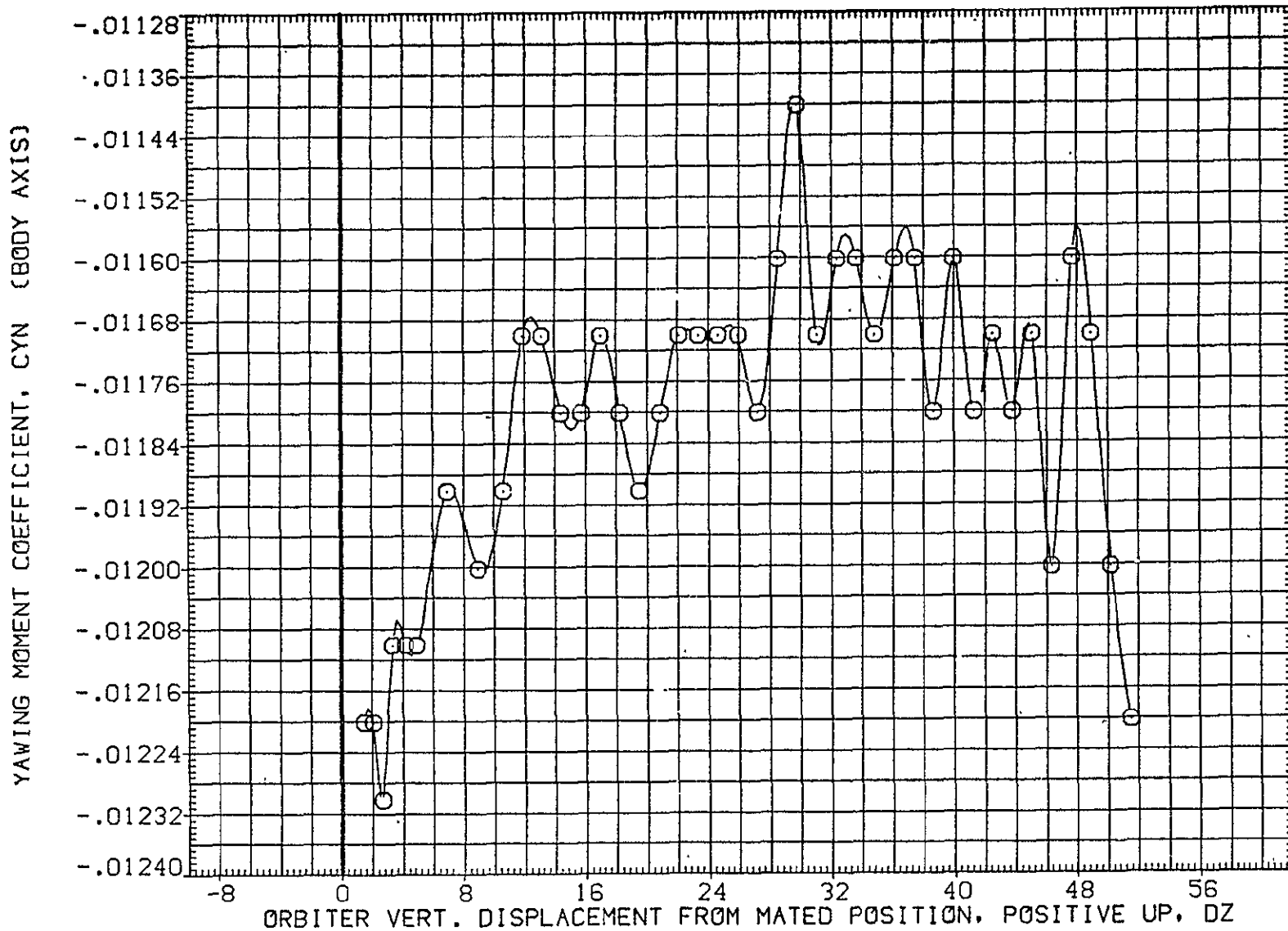


FIG. 40 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE049

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	BETA0	BETA1	SREF	LREF	BREF
○	.602	2.000	.000	5.000	5.000	2690.0000	474.8100	936.6800
		BDFLAP	DX	IORB	RUDDER	XMRP	YMRP	ZMRP
		.000	.000	6.000	.000	1109.0000	.0000	375.0000
		DY				SCALE		
		.000				.0125		
		BETA0						
		5.000						

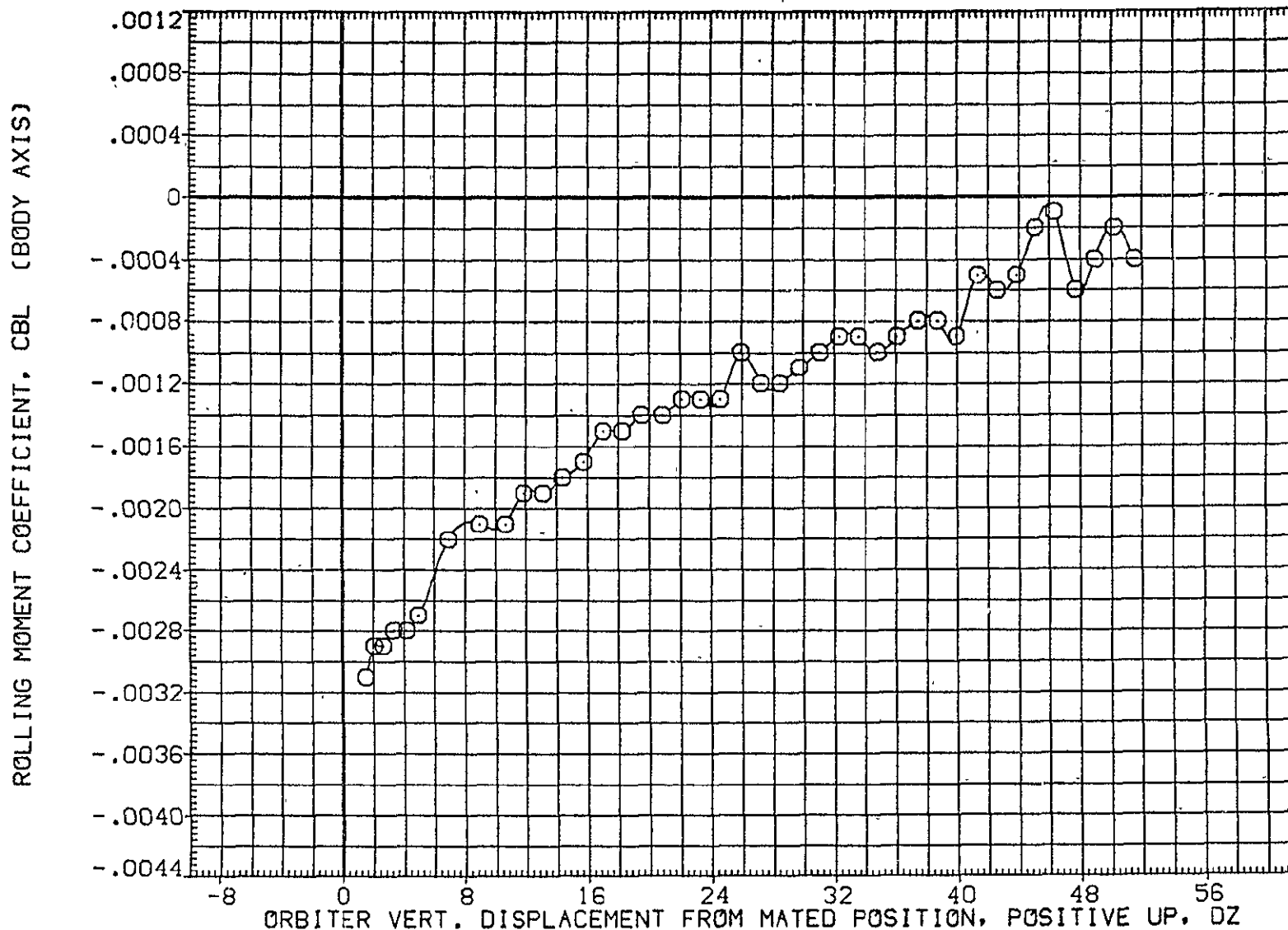


FIG. 40 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE049

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE049)

SYMBOL
○

MACH	PARAMETRIC VALUES			
.602	ALPHAC	2.000	BETAC	.000
	STAB	5.000	ELEVON	5.000
	BDFLAP	.000	DX	.000
	DY	.000	IORB	6.000
	BETA0	5.000	RUDDER	.000

REFERENCE INFORMATION

SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

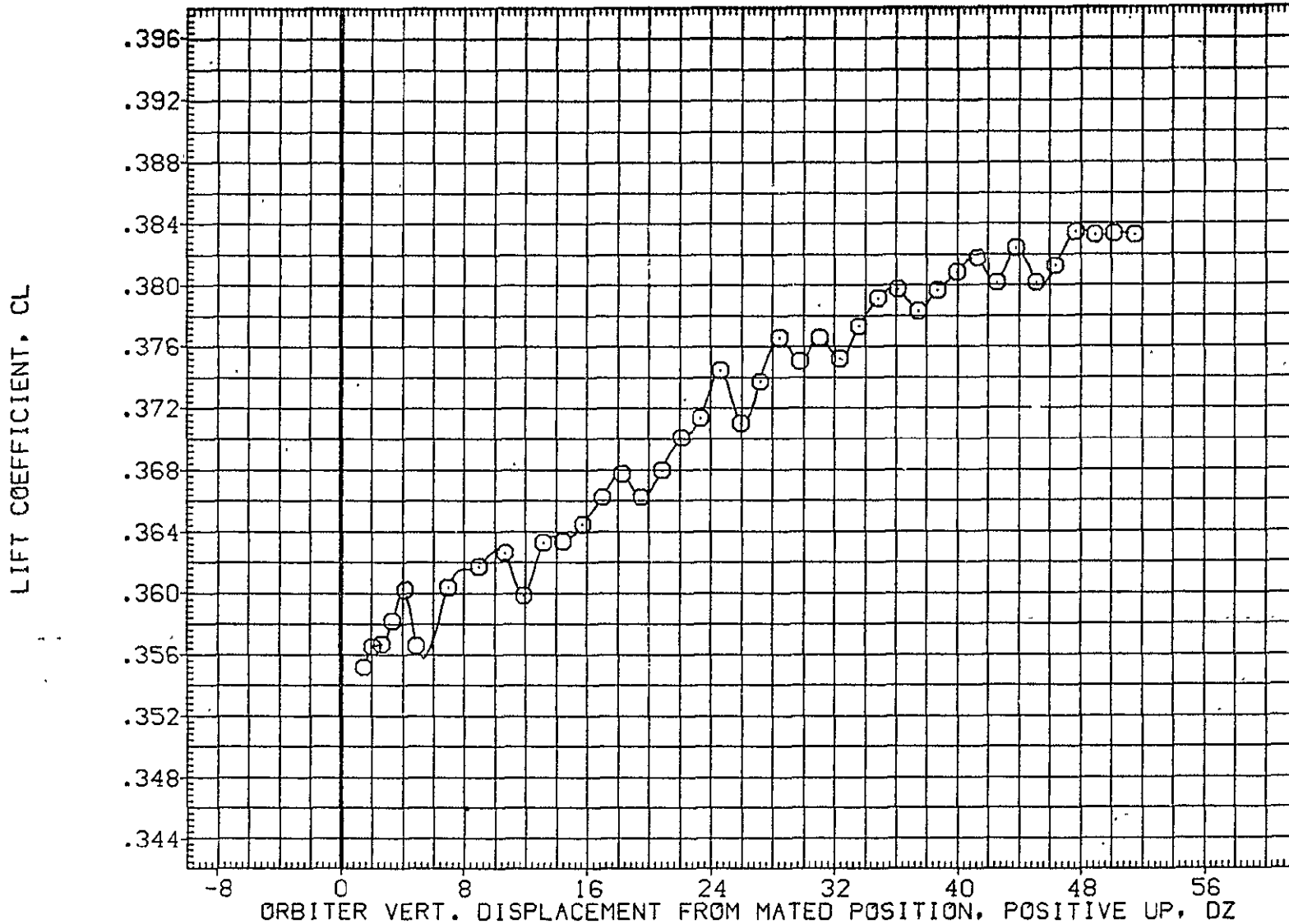


FIG. 40 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE049

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BOFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

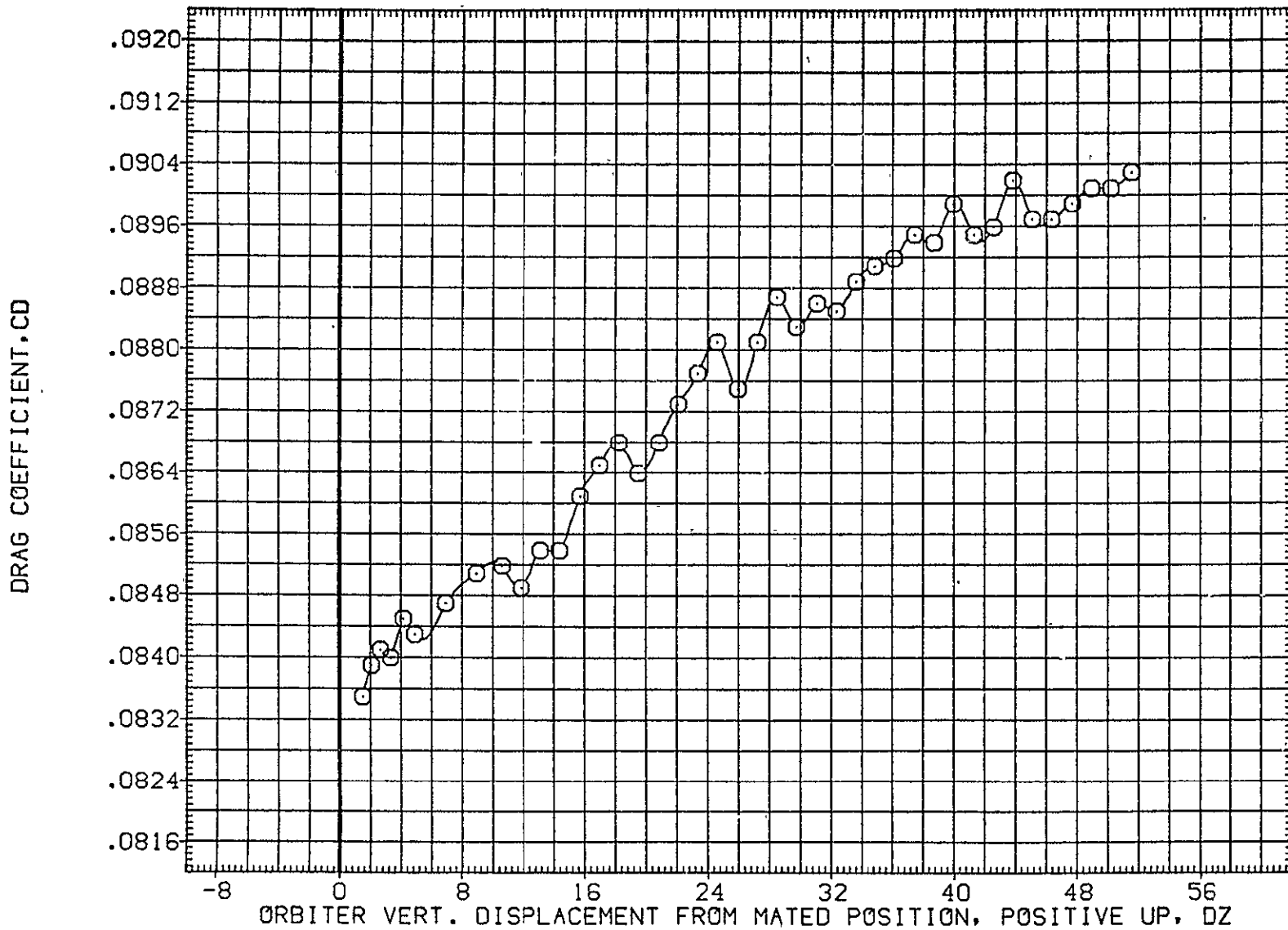


FIG. 40 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE049

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE050)

SYMBOL
○

MACH	PARAMETRIC VALUES					
.600	ALPHAC	2.000	BETAC	.000		
	AB	5.000	ELEVON	5.000		
	BDFLAP	.000	DX	.000		
	DY	.000	IORB	8.000		
	BETA0	5.000	RUDDER	.000		

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

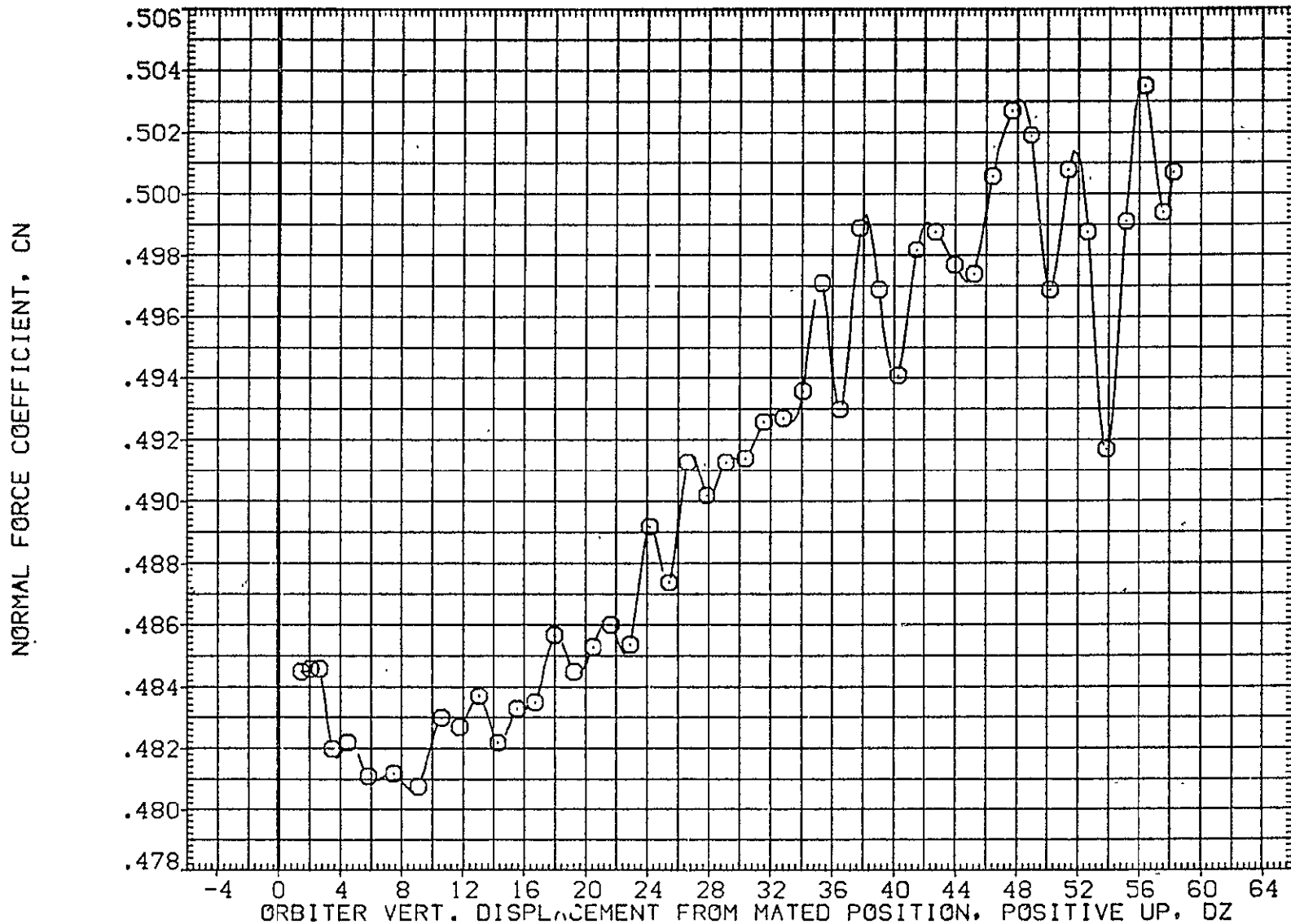


FIG. 41 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=5, AFE050

SYMBOL
○

MACH	PARAMETRIC VALUES					
.600	ALPHAC	2.000	BETAC	.000		
	STAB	5.000	ELEVON	5.000		
	BDFLAP	.000	DX	.000		
	DY	.000	IORB	8.000		
	BETA0	5.000	RUDDER	.000		

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

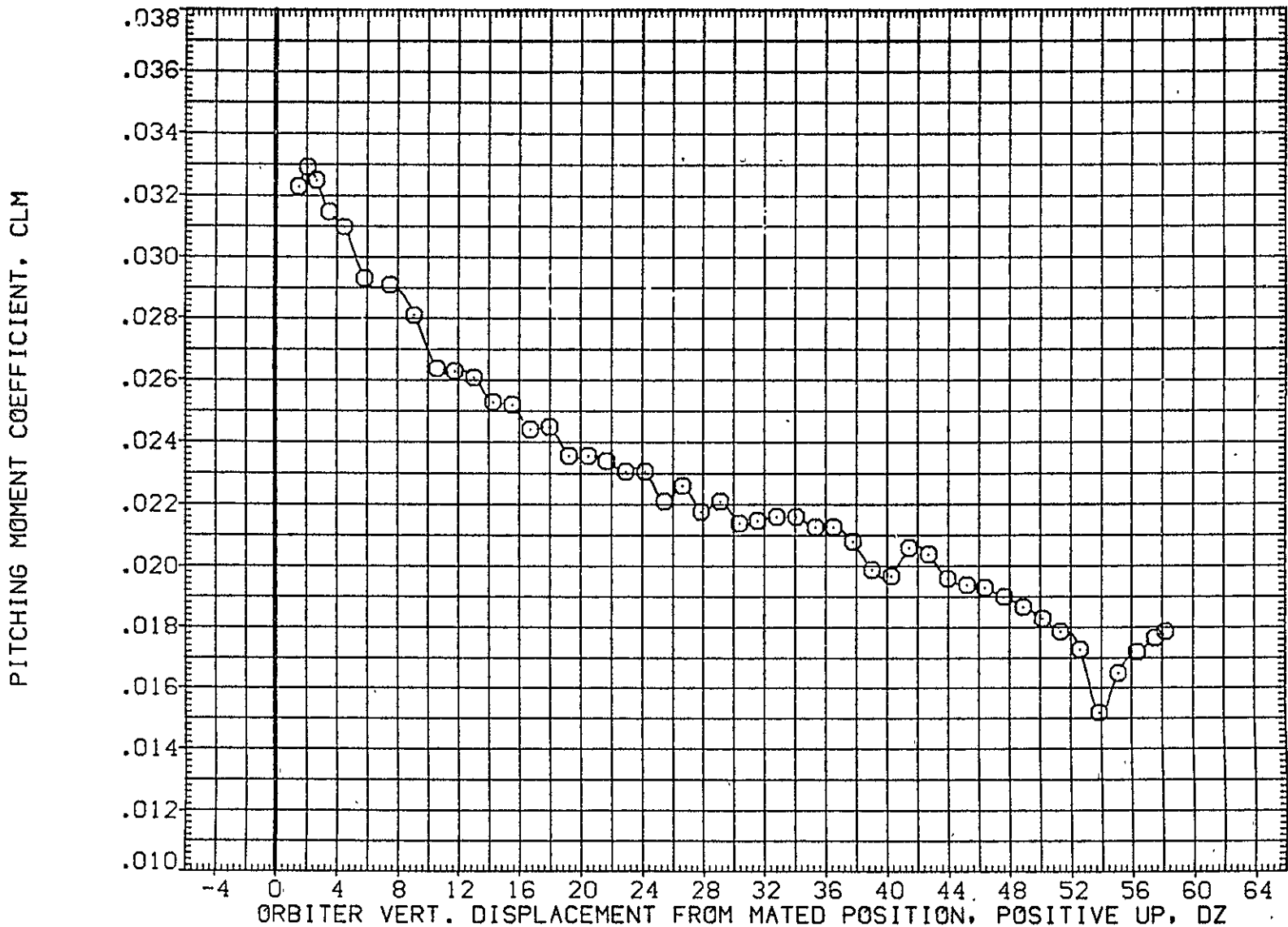


FIG. 41 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=5, AFE050

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE050)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.600	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

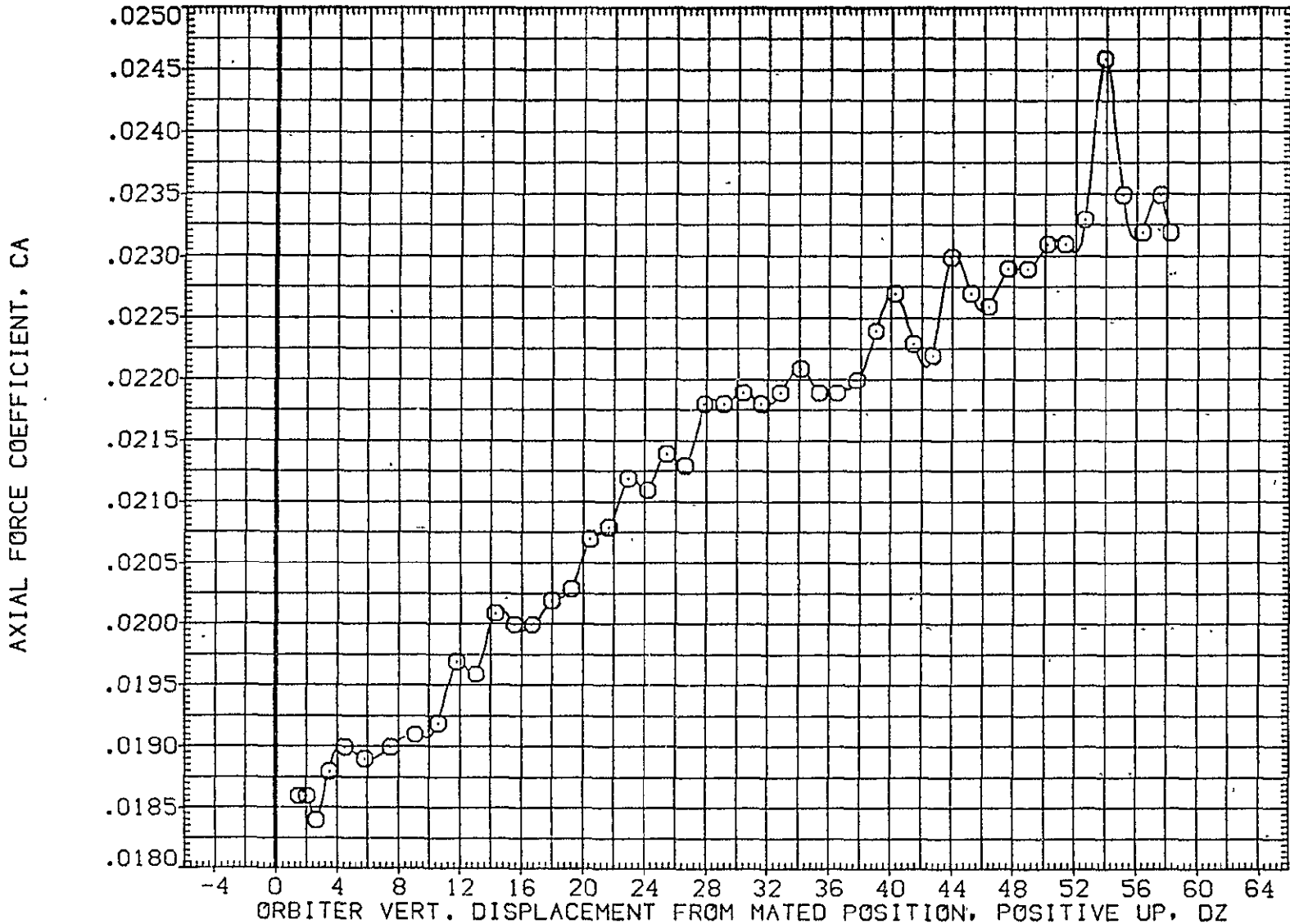


FIG. 41 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=5, AFE050

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.600	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

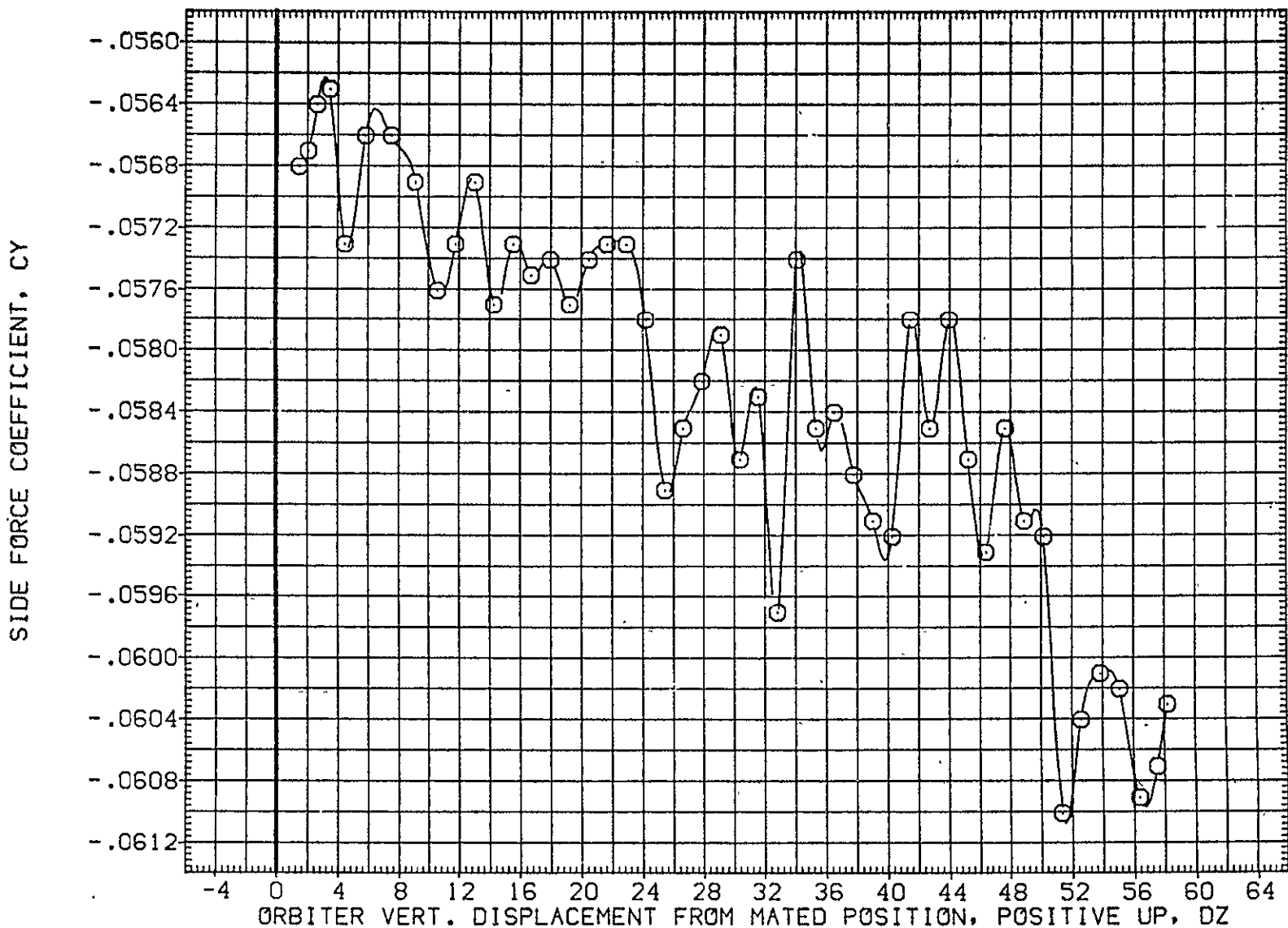


FIG. 41 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=5, AFE050

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE050)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.600	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

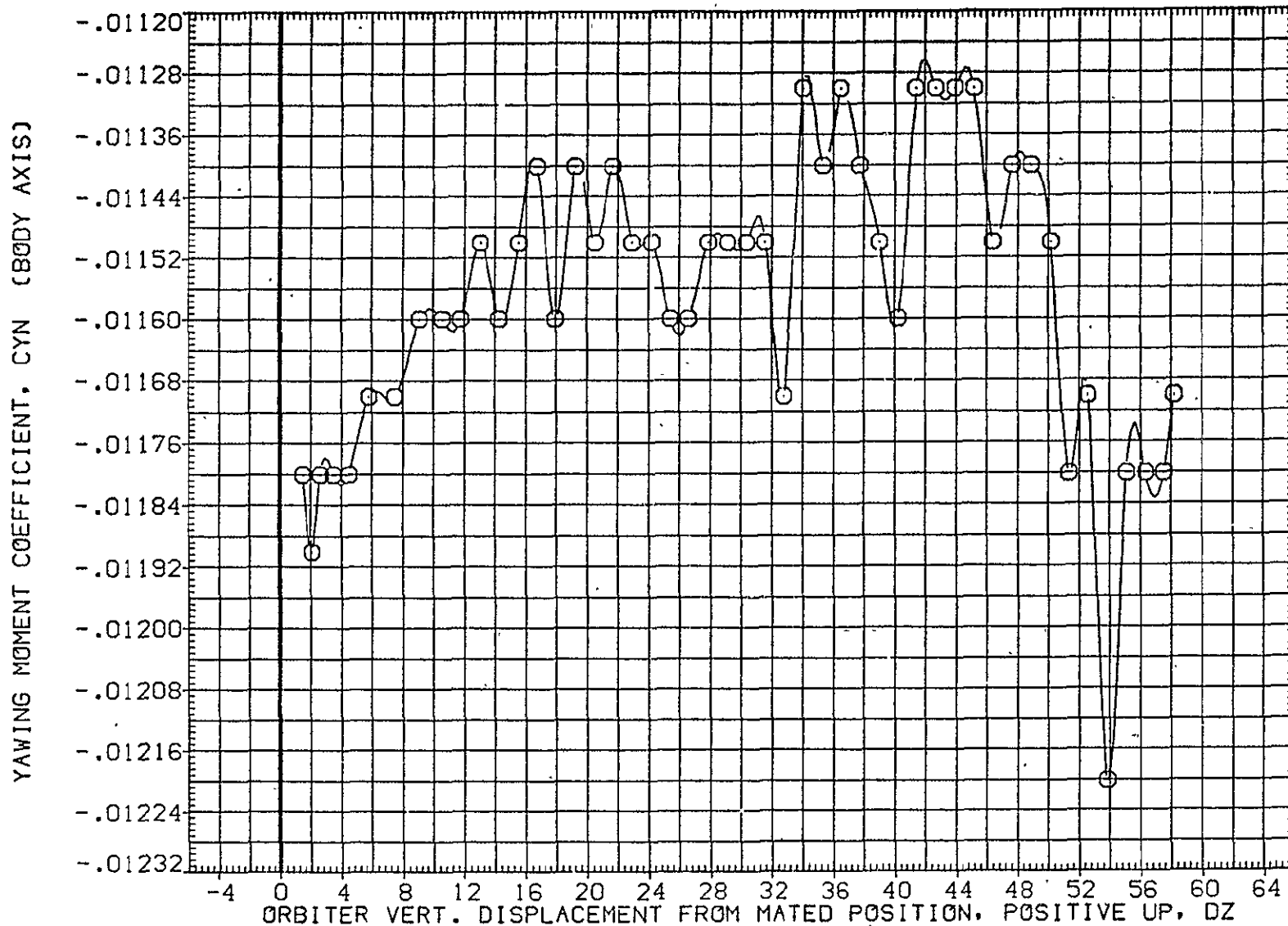


FIG. 41 ORB. DATA, CARRIER PROXIMITY, ALPHAC=?, IORB=8, BETAC=0, BETA0=5, AFE050

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	IN.	SQ.FT.
○	.600	2.000	.000	5.000	.000	2690.0000	474.8100	936.6800
		BDFLAP	0.000	10RB	8.000	XMRP	1109.0000	375.0000
		DY	.000	RUDDER	.000	YMRP	.0000	.0125
		BETA0	5.000			ZMRP		

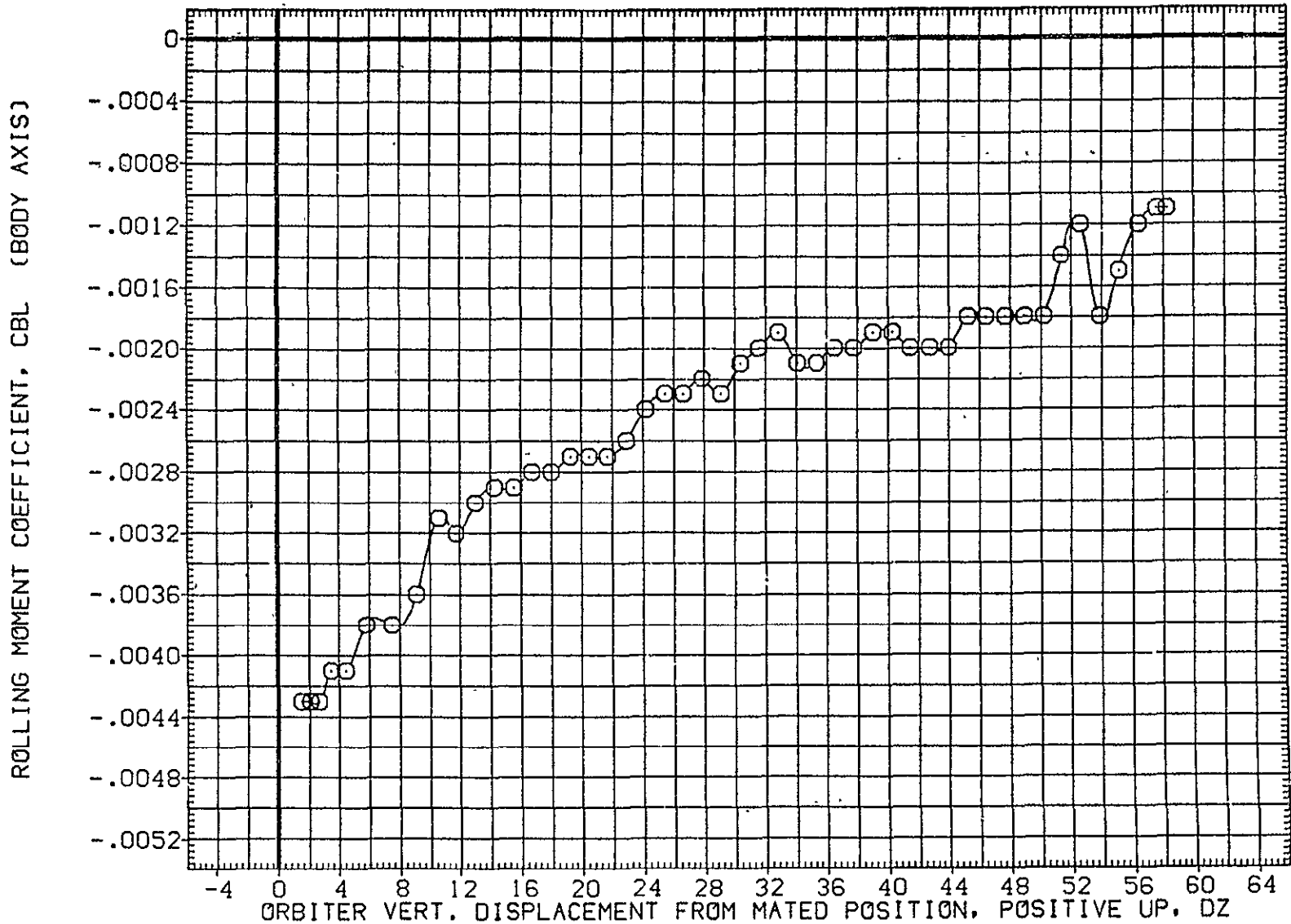


FIG. 41 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, 10RB=8, BETAC=0, BETA0=5, AFE050

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE050)

SYMBOL
○

MACH	PARAMETRIC VALUES			
.600	ALPHAC	2.000	BETAC	.000
	STAB	5.000	ELEVON	5.000
	BOFLAP	.000	DX	.000
	DY	.000	IORB	8.000
	BETA0	5.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

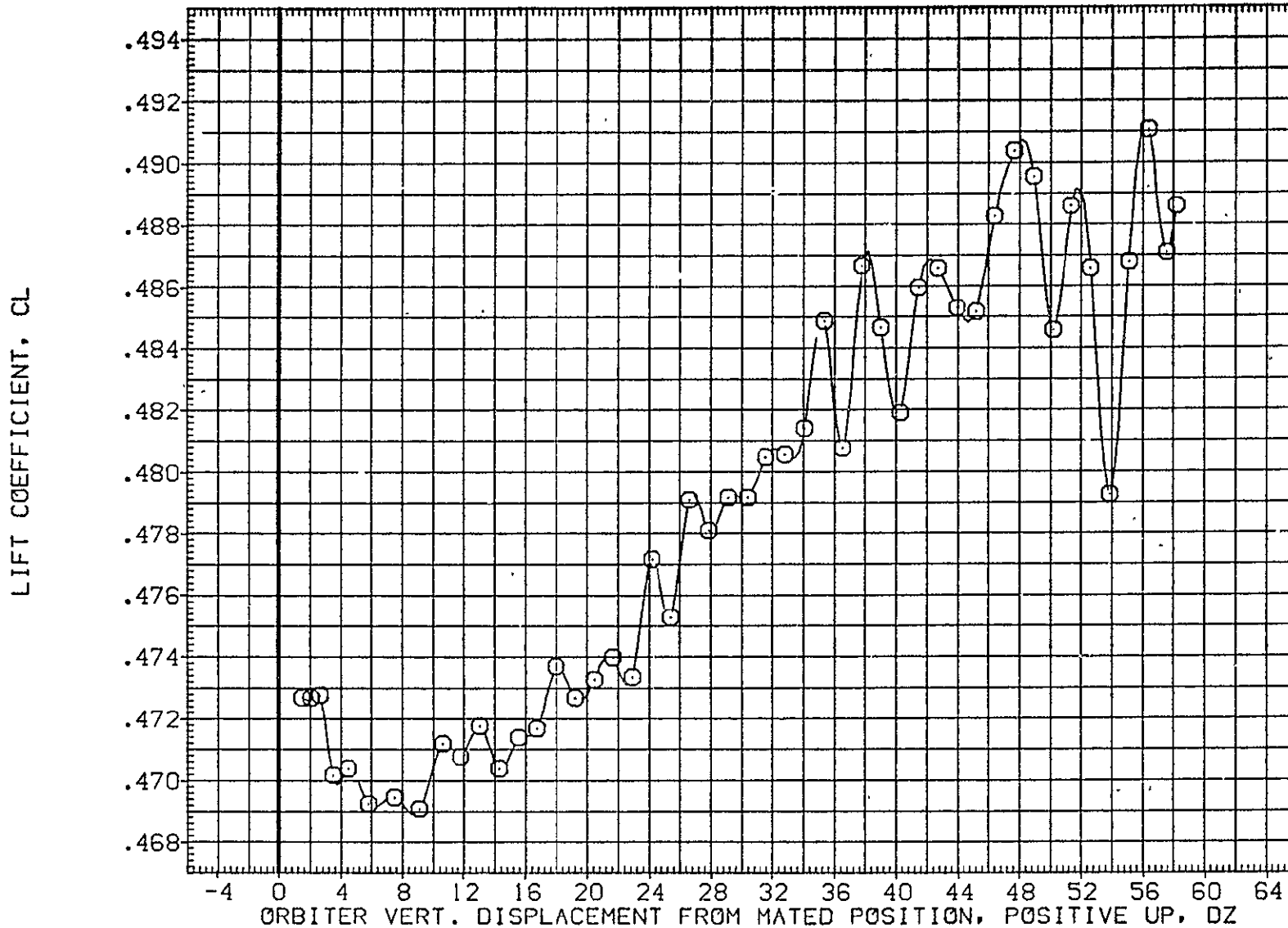


FIG. 41 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=5, AFE050

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.600	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SG, FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000.	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0.
						SCALE	.0125	

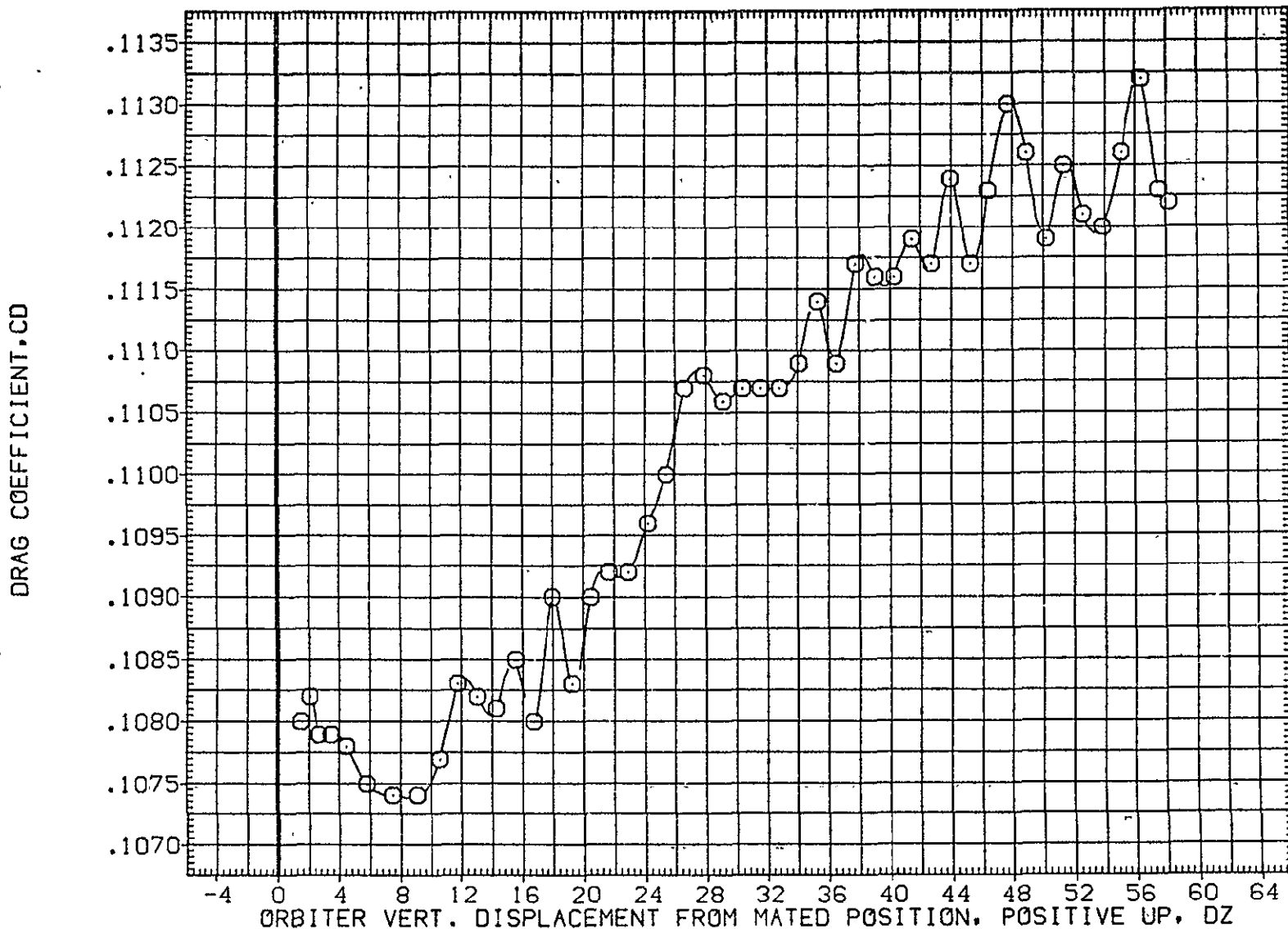


FIG. 41 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=5, AFE050

LTV44-559(CA26) 747/1 ATX 02 S1 (ORBITER DATA) (AFE051)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

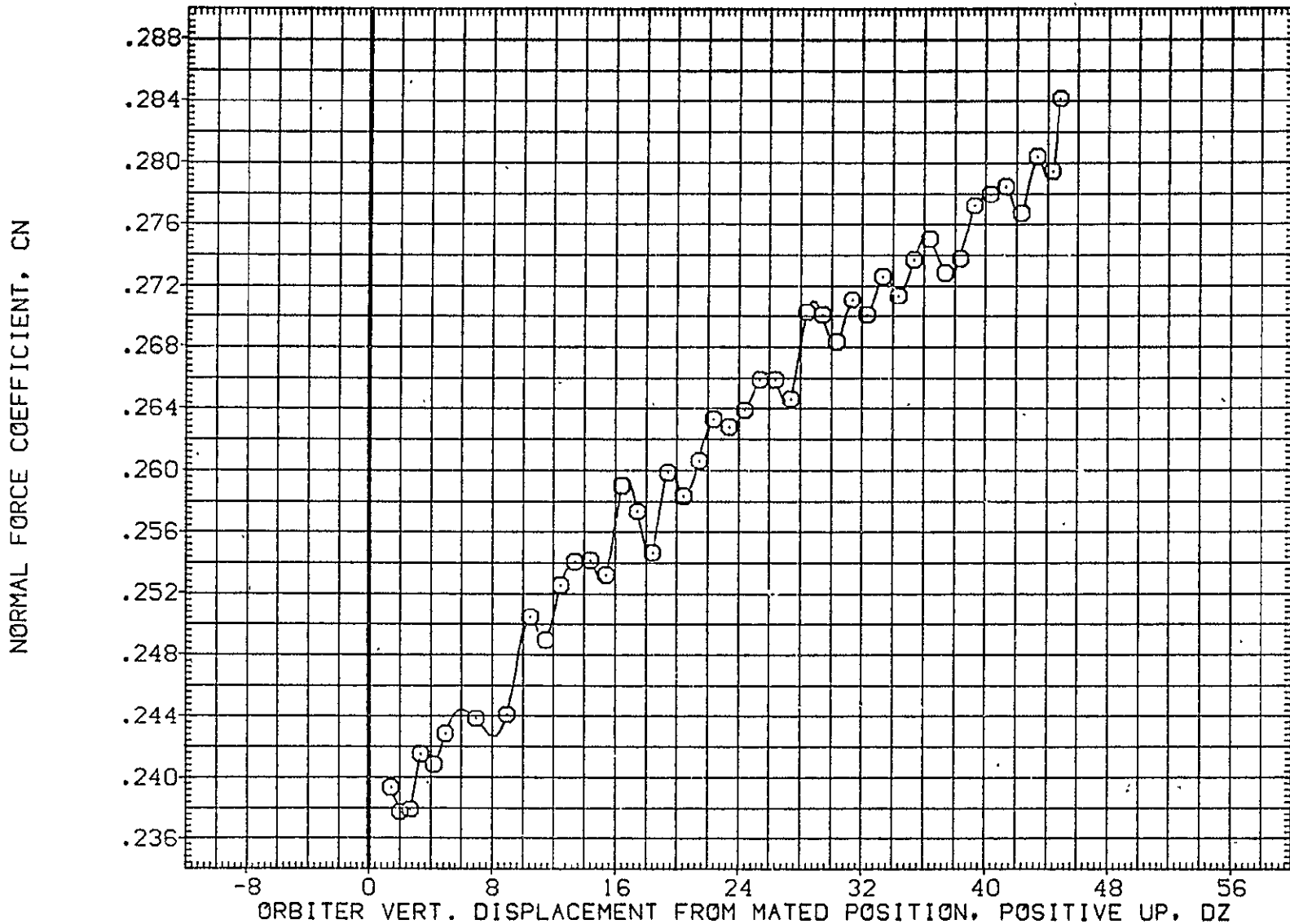


FIG. 42 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE051

SYMBOL
○

MACH	PARAMETRIC VALUES			
.603	ALPHAC	2.000	BETAC	.000
	STAB	5.000	ELEVON	5.000
	BDFLAP	.000	DX	.000
	DY	.000	IORB	4.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

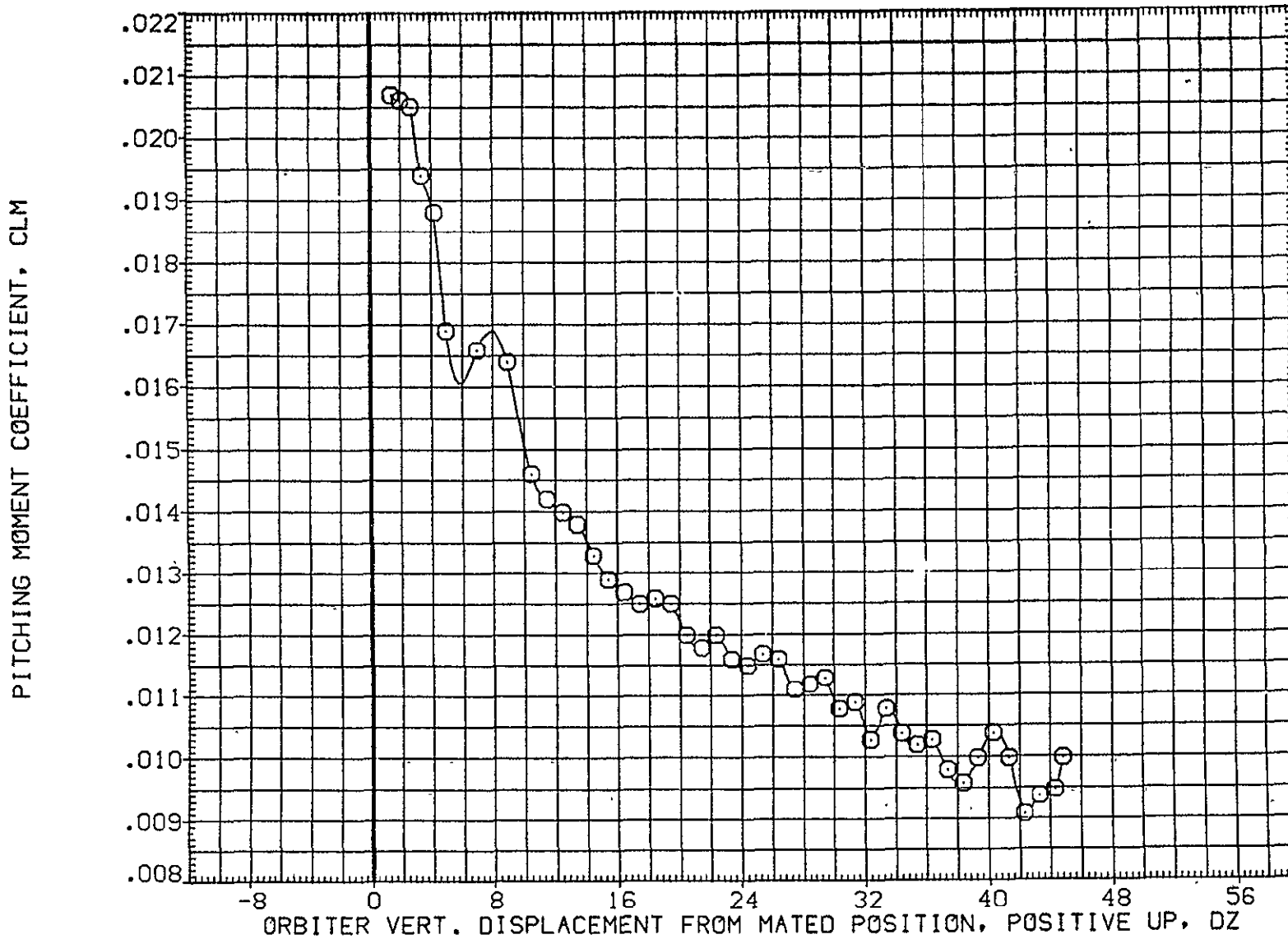


FIG. 42 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE051

LTV44-559(CA26) 747/1 ATX 02 S1 (ORBITER DATA) (AFE051)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SG.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

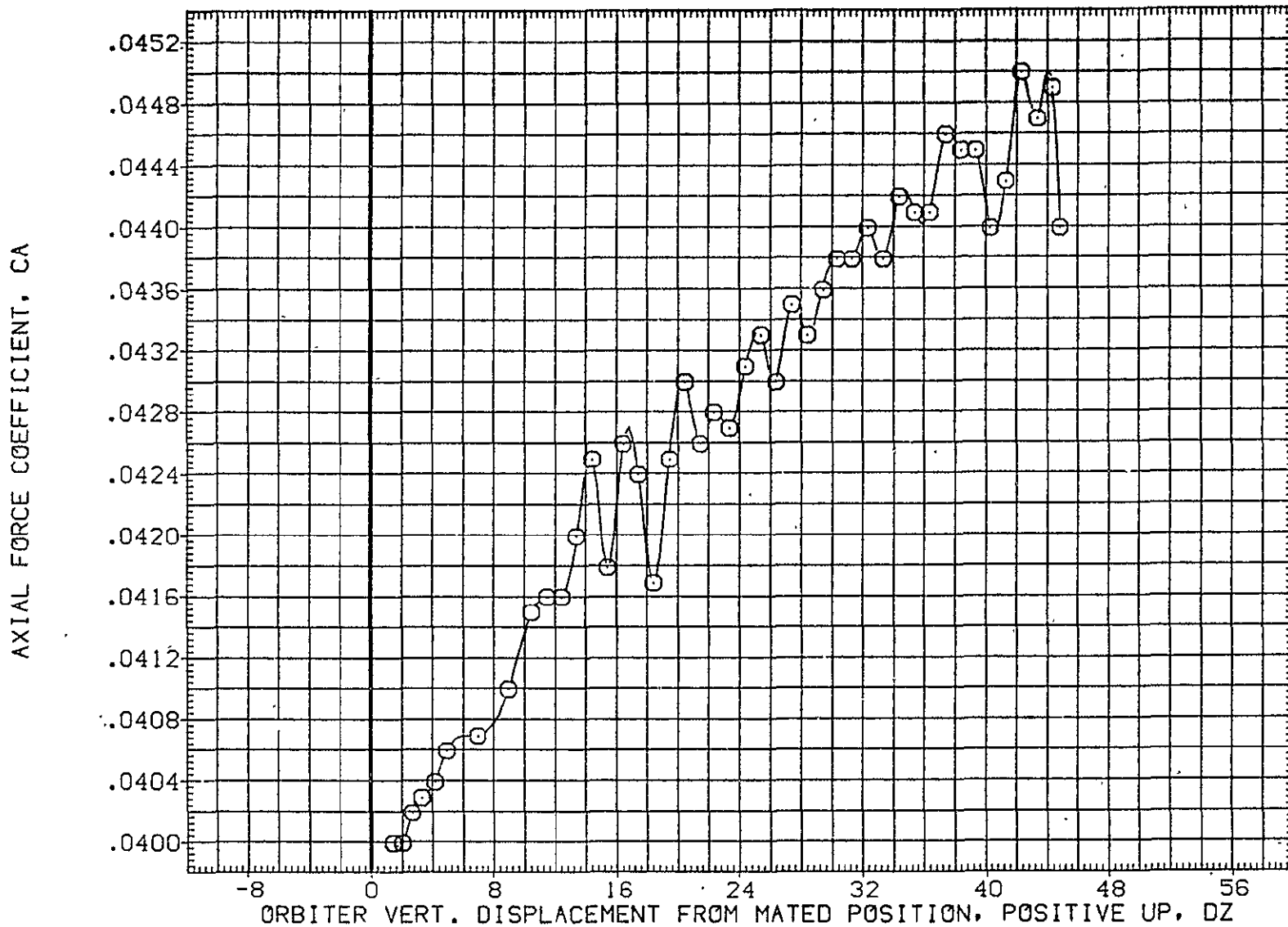


FIG. 42 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE051

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION			
		ALPHAC	BETAC	DX	IORB	SREF	LREF	BREF	SO.FT.
○	.603	2.000	.000	.000	4.000	2690.0000	474.8100	936.6800	IN.
		5.000	.000	.000	.000	1109.0000			IN. X0
		STAB	5.000	ELEVON	5.000	YMRP	.0000		IN. Y0
		BDFLAP	.000	DX	.000	ZMRP	375.0000		IN. Z0
		DY	.000	IORB	4.000	SCALE	.0125		
		BETA0	.000	RUDDER	.000				

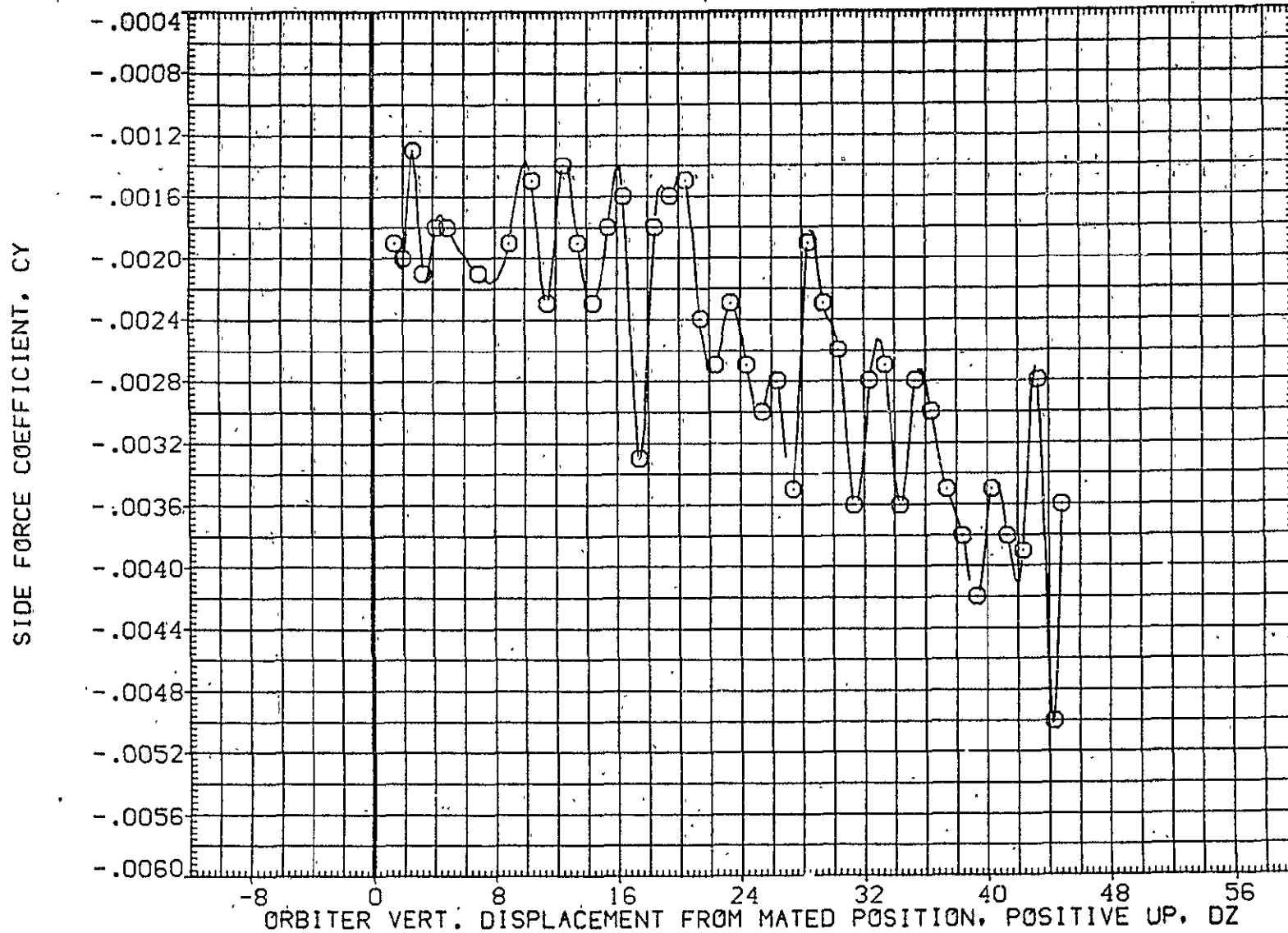


FIG. 42 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE051

LTV44-559(CA26) 747/1 ATX 02 S1 (ORBITER DATA) (AFE051)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

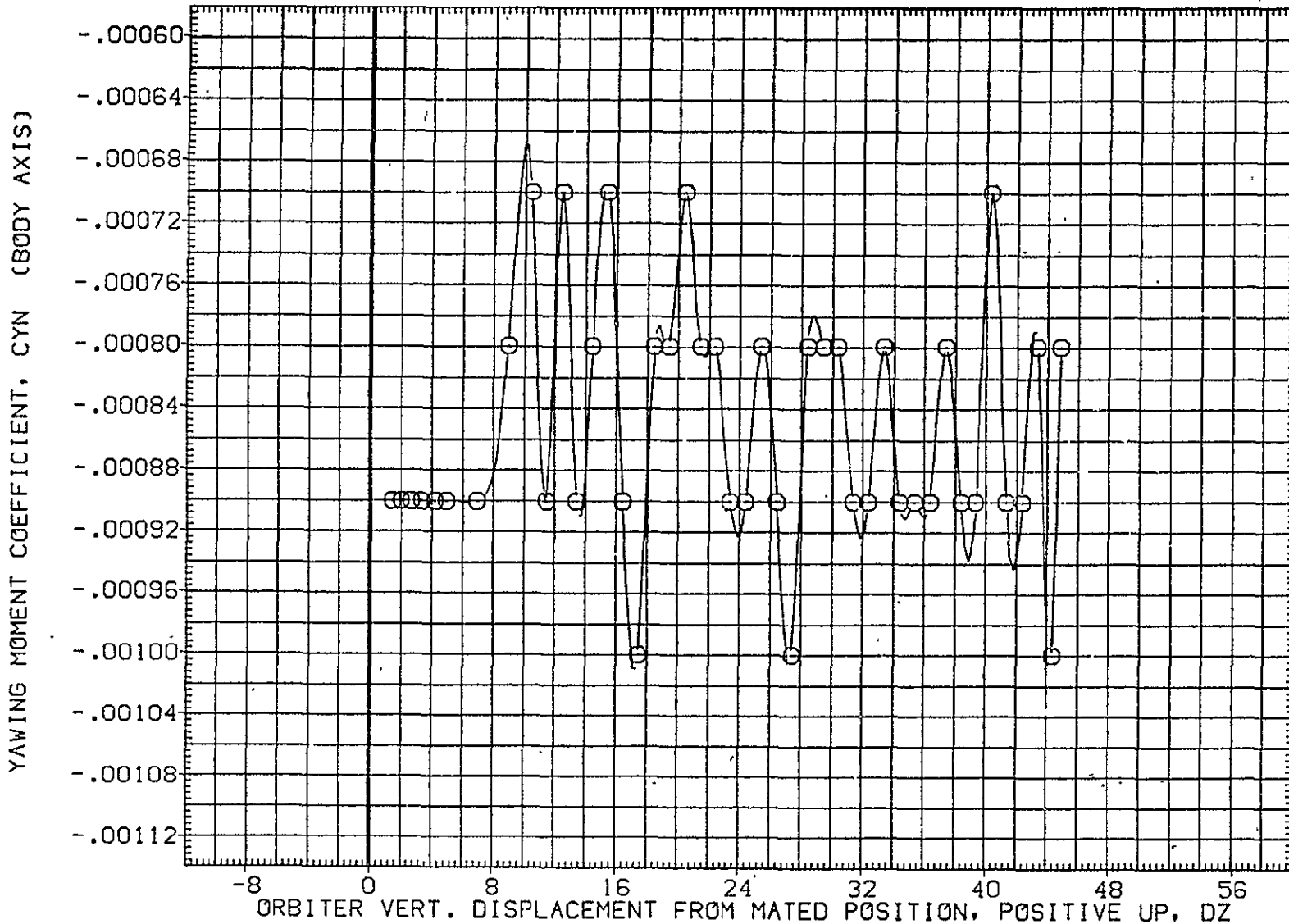


FIG. 42 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE051

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

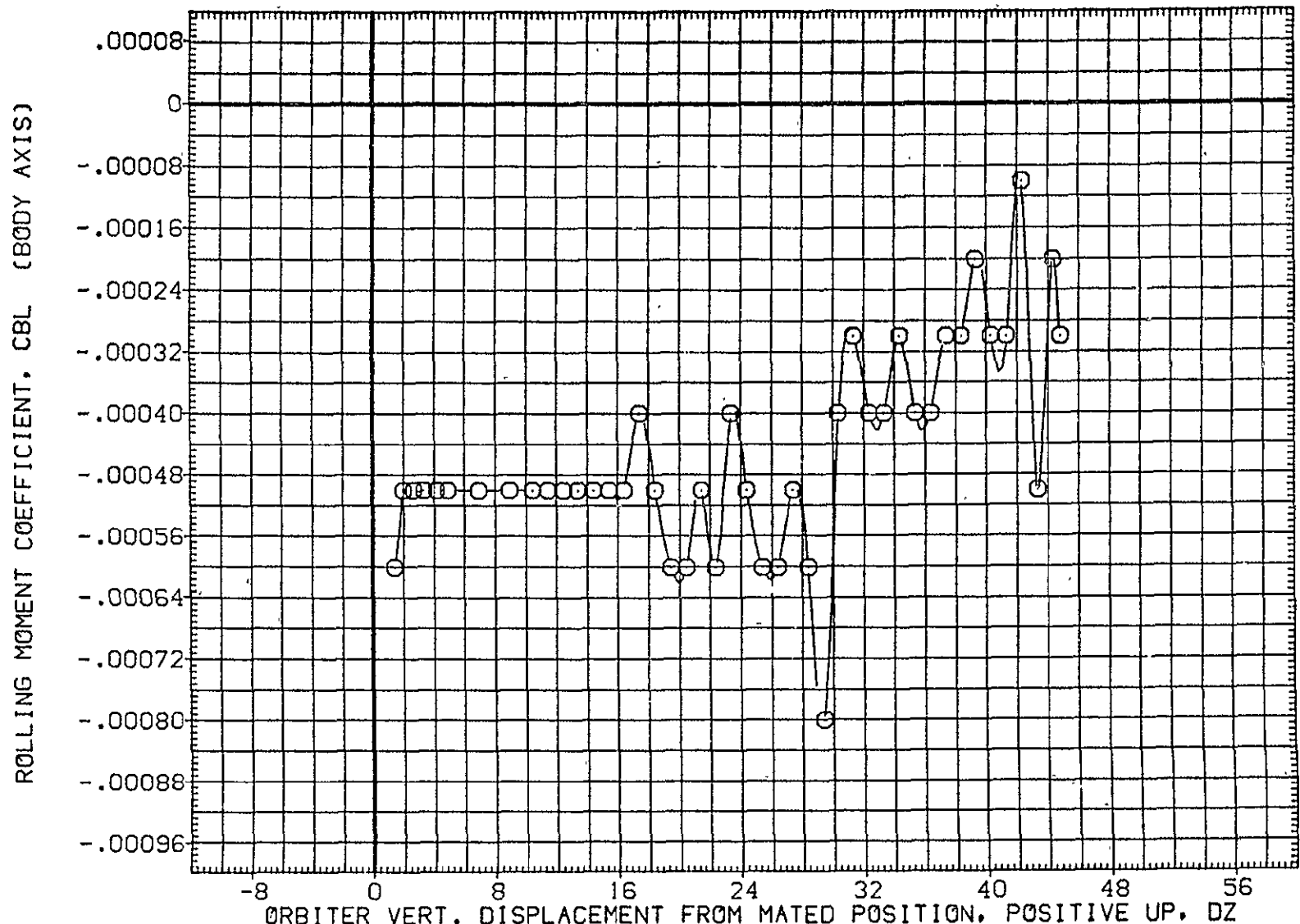


FIG. 42 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE051

LTV44-559(CA26) 747/1 ATX 02 S1 (ORBITER DATA) (AFE051)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

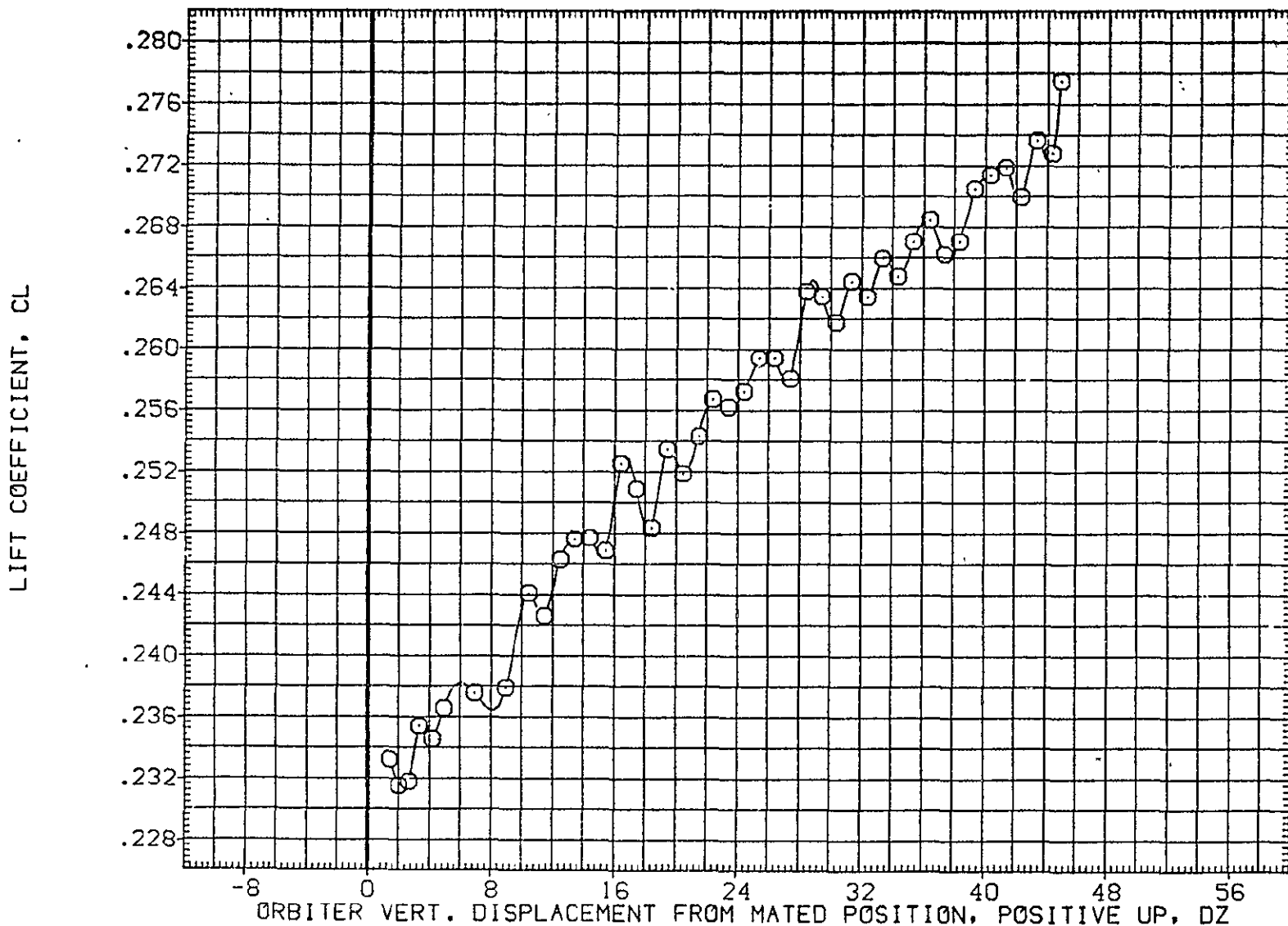


FIG. 42 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE051

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	IN.	SQ.FT.
○	.603	2.000	.000	5.000	.000	2690.0000	474.8100	IN.
		5.000	.000	.000	.000	936.6800	1109.0000	IN. X0
		.000	.000	4.000	.000	375.0000	.0125	IN. Y0
		.000	.000	.000	.000			IN. Z0

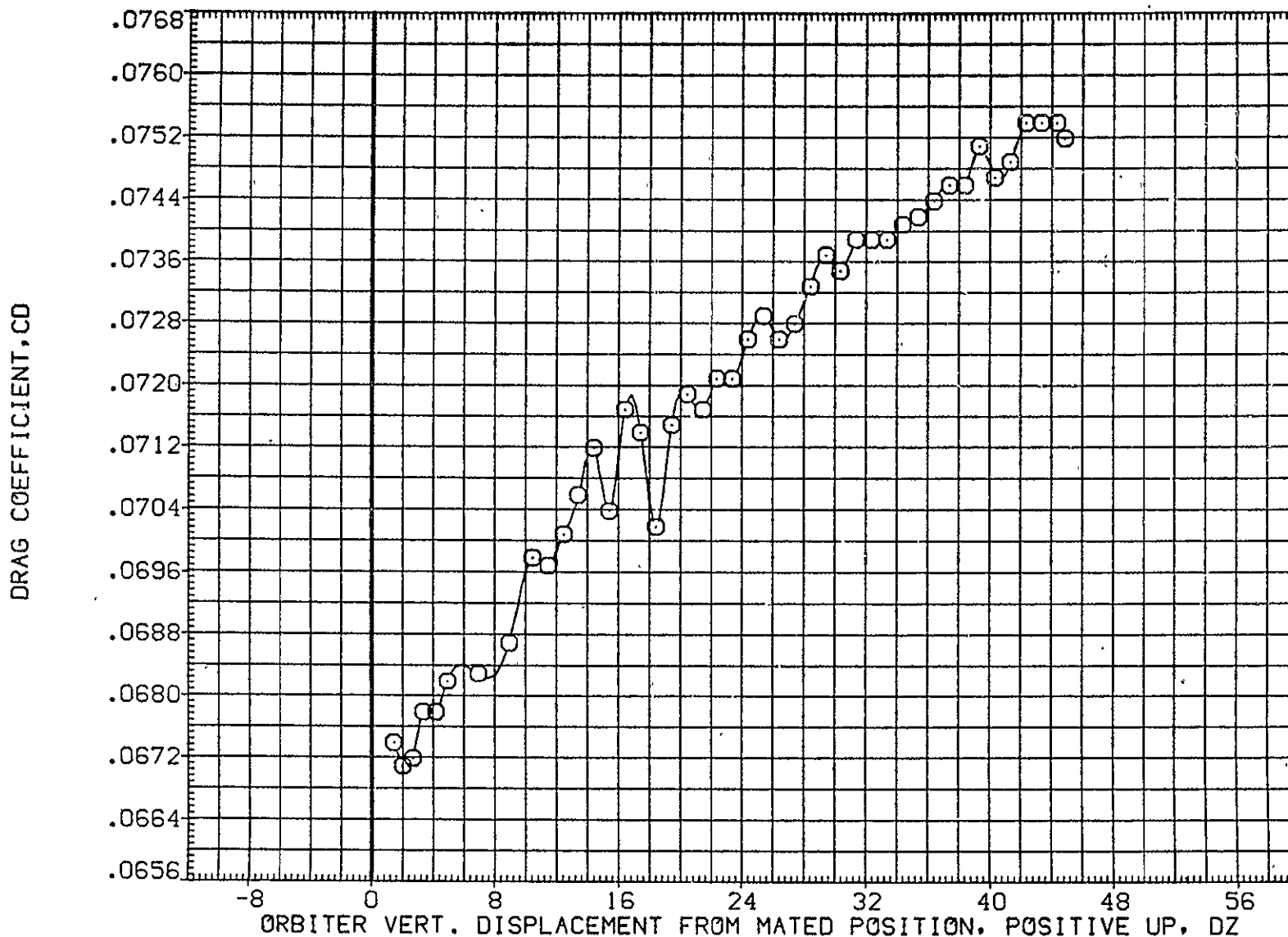


FIG. 42 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE051

LTV44-559(CA26) 747/1 ATX 02 S1 (ORBITER DATA) (AFE052)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.604	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

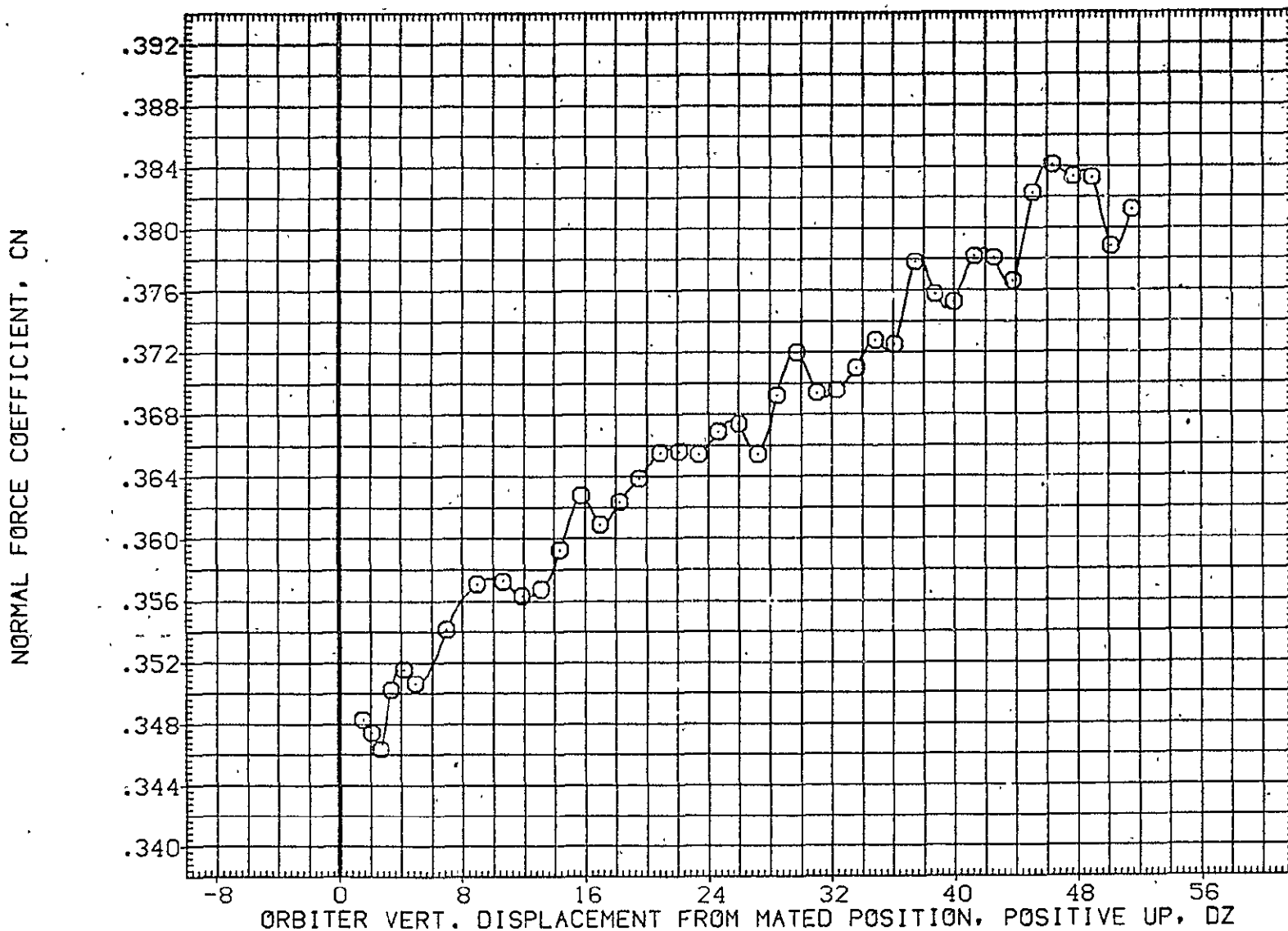


FIG. 43 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE052

SYMBOL
○

MACH	PARAMETRIC VALUES			
.604	ALPHAC	2.000	BETAC	.000
	STAB	5.000	ELEVON	5.000
	BDFLAP	.000	DX	.000
	OY	.000	IORB	6.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION

SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

PITCHING MOMENT COEFFICIENT, CLM

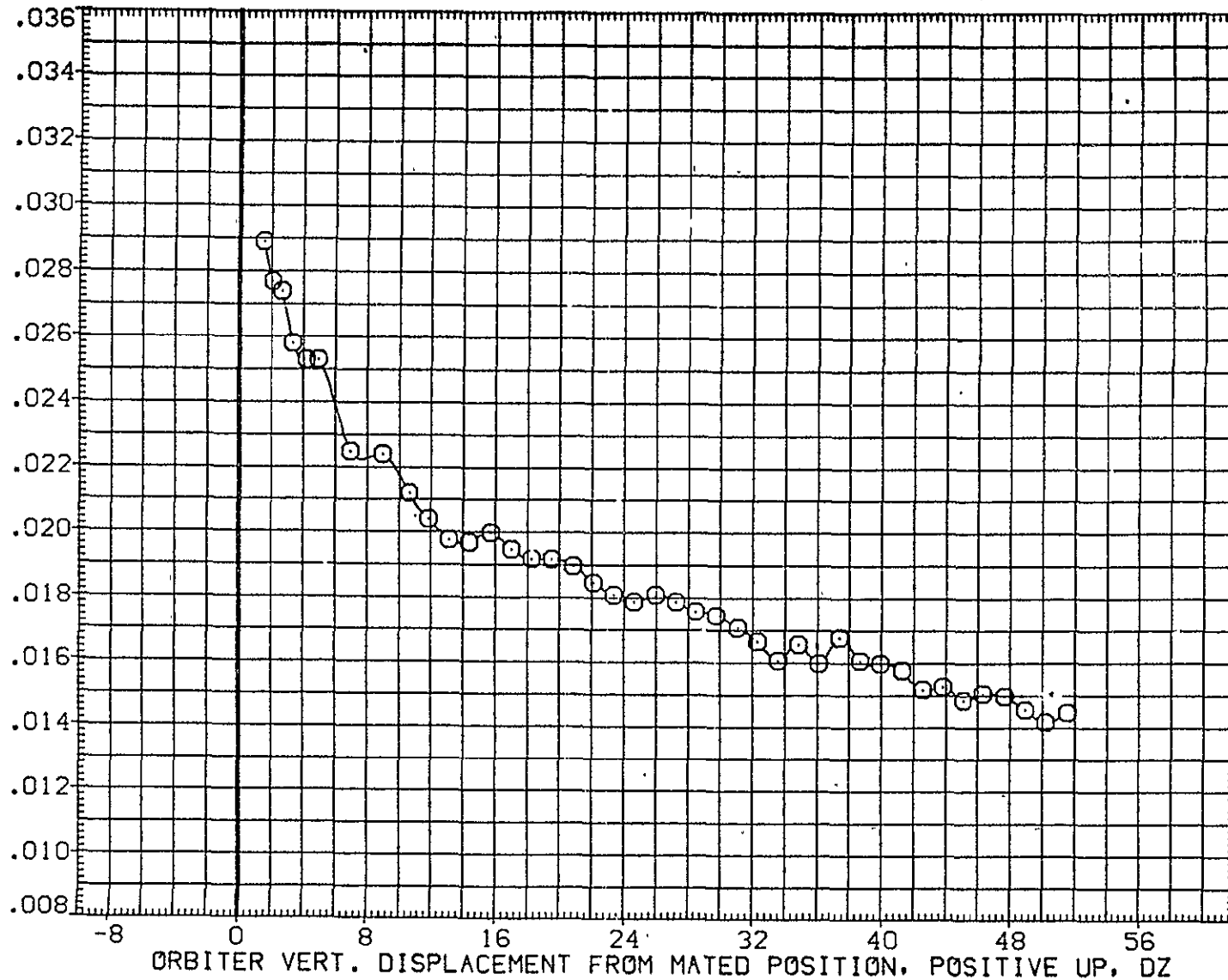


FIG. 43 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE052

LTV44-559(CA26) 747/1 ATX 02 S1 (ORBITER DATA) (AFE052)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.604	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

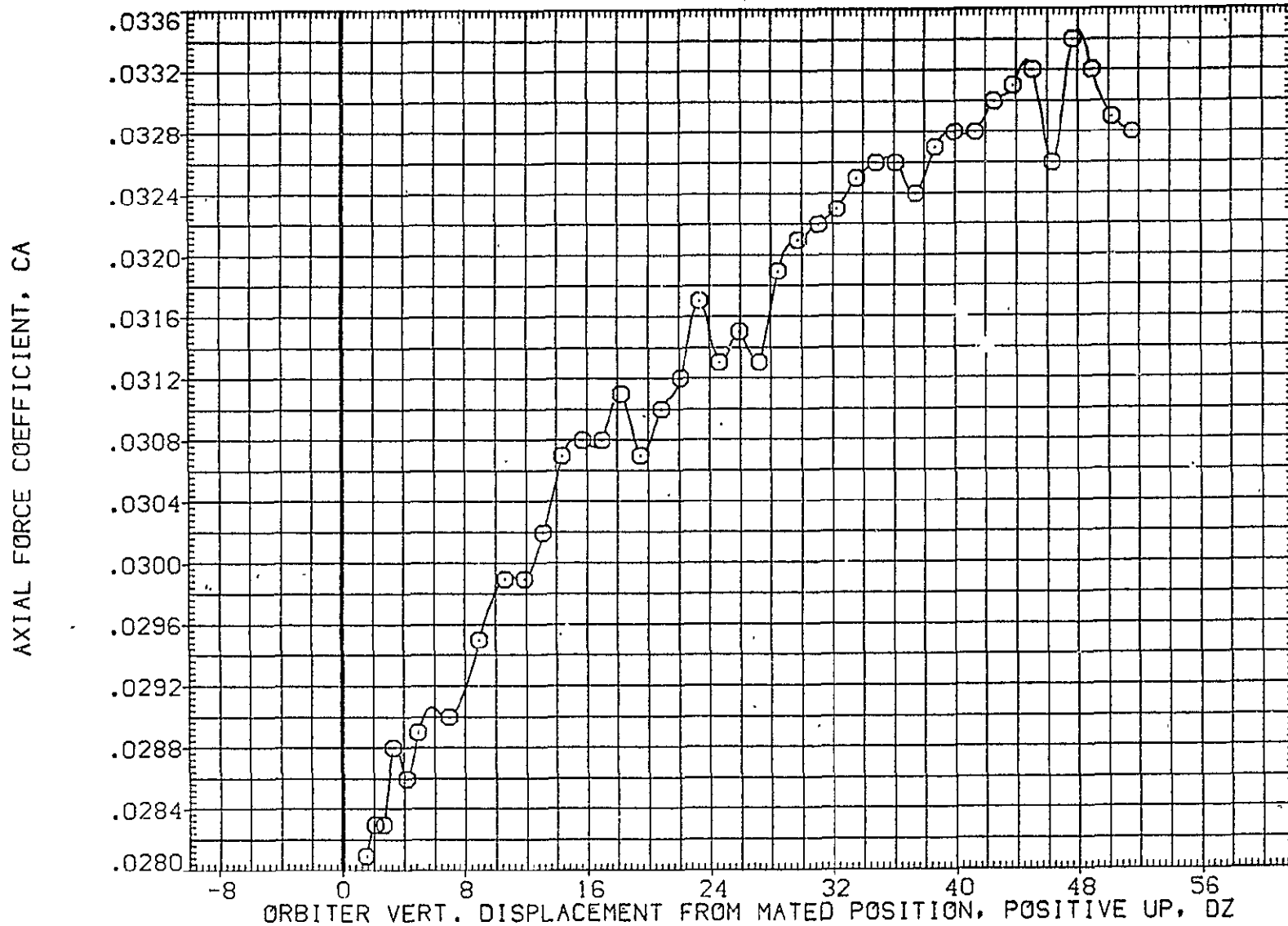


FIG. 43 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE052

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION	
○	.604	ALPHAC	2.000	BETAC	.000	SREF	2690.0000
		STAB	5.000	ELEVON	5.000	LREF	474.8100
		BDFLAP	.000	DX	.000	BREF	936.6800
		DY	.000	IORB	6.000	XMRP	1109.0000
		BETA0	.000	RUDDER	.000	YMRP	.0000
						ZMRP	375.0000
						SCALE	.0125

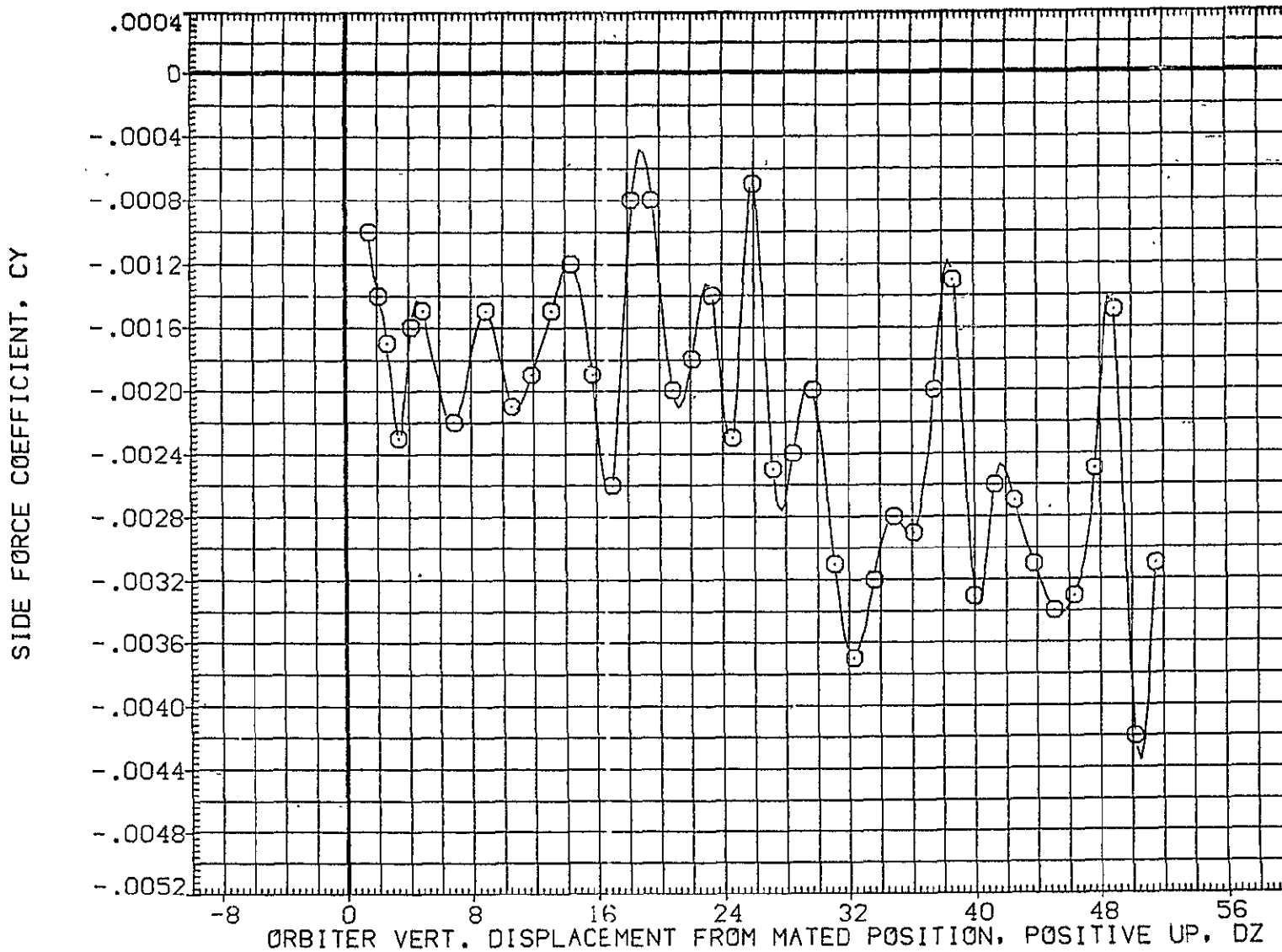


FIG. 43 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFEO

LTV44-559(CA26) 747/1 ATX 02 S1 (ORBITER DATA) (AFE052)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	LREF	BREF
O	.604	2.000	.000	5.000	.000	2690.0000	474.8100	936.6800
		.000	.000	.000	.000	1109.0000	.0000	375.0000
		.000	.000	10RB	6.000			
		.000	.000	RUDDER	.000			
						SCALE	.0125	

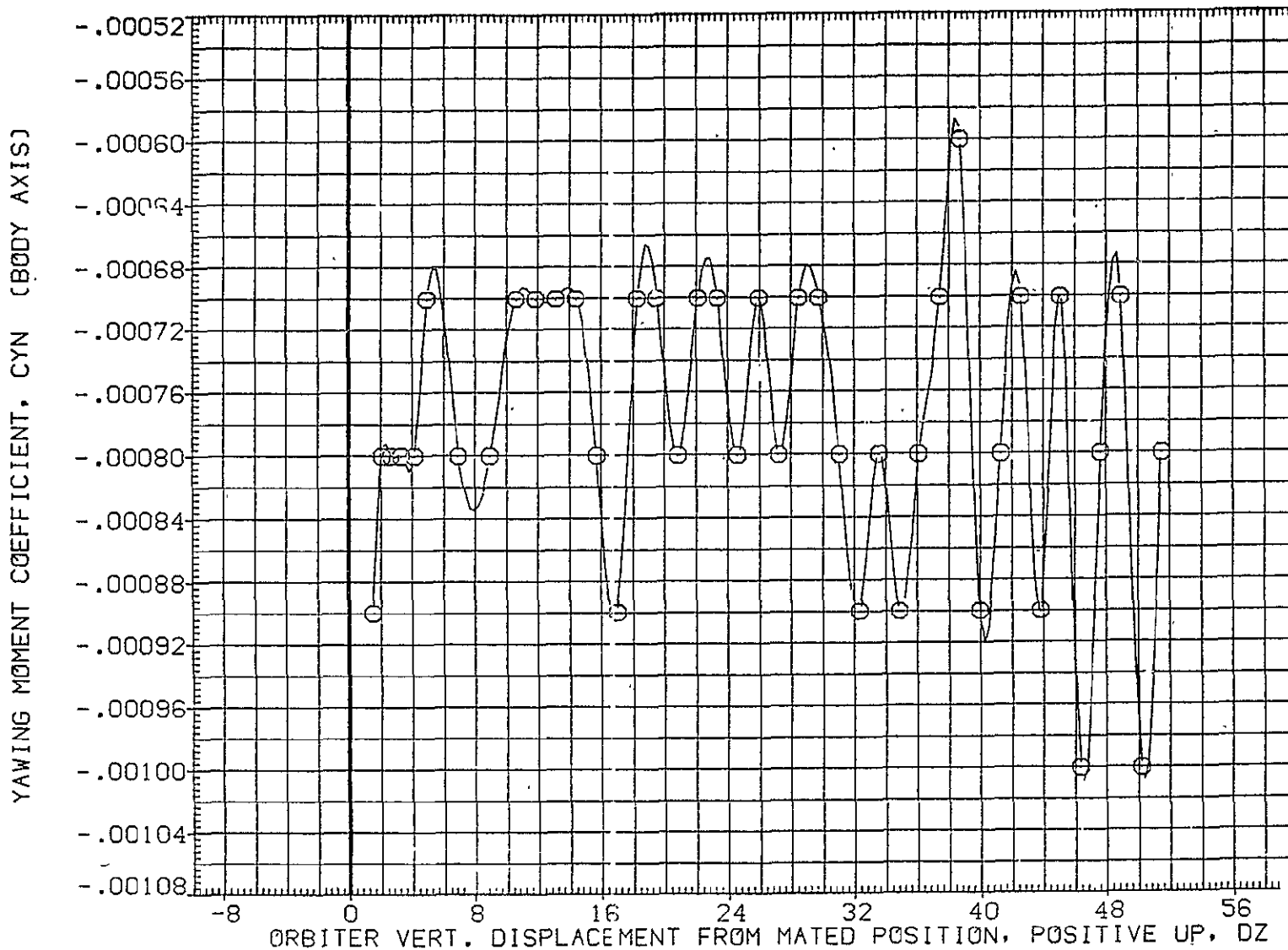


FIG. 43 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, 10RB=6, BETAC=0, BETA0=0, AFE05

SYMBOL	MACH	PARAMETRIC VALUES			
○	.604	ALPHAC	2.000	BETAC	.000
		STAB	5.000	ELEVON	5.000
		BDFLAP	.000	DX	.000
		DY	.000	IORB	6.000
		BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

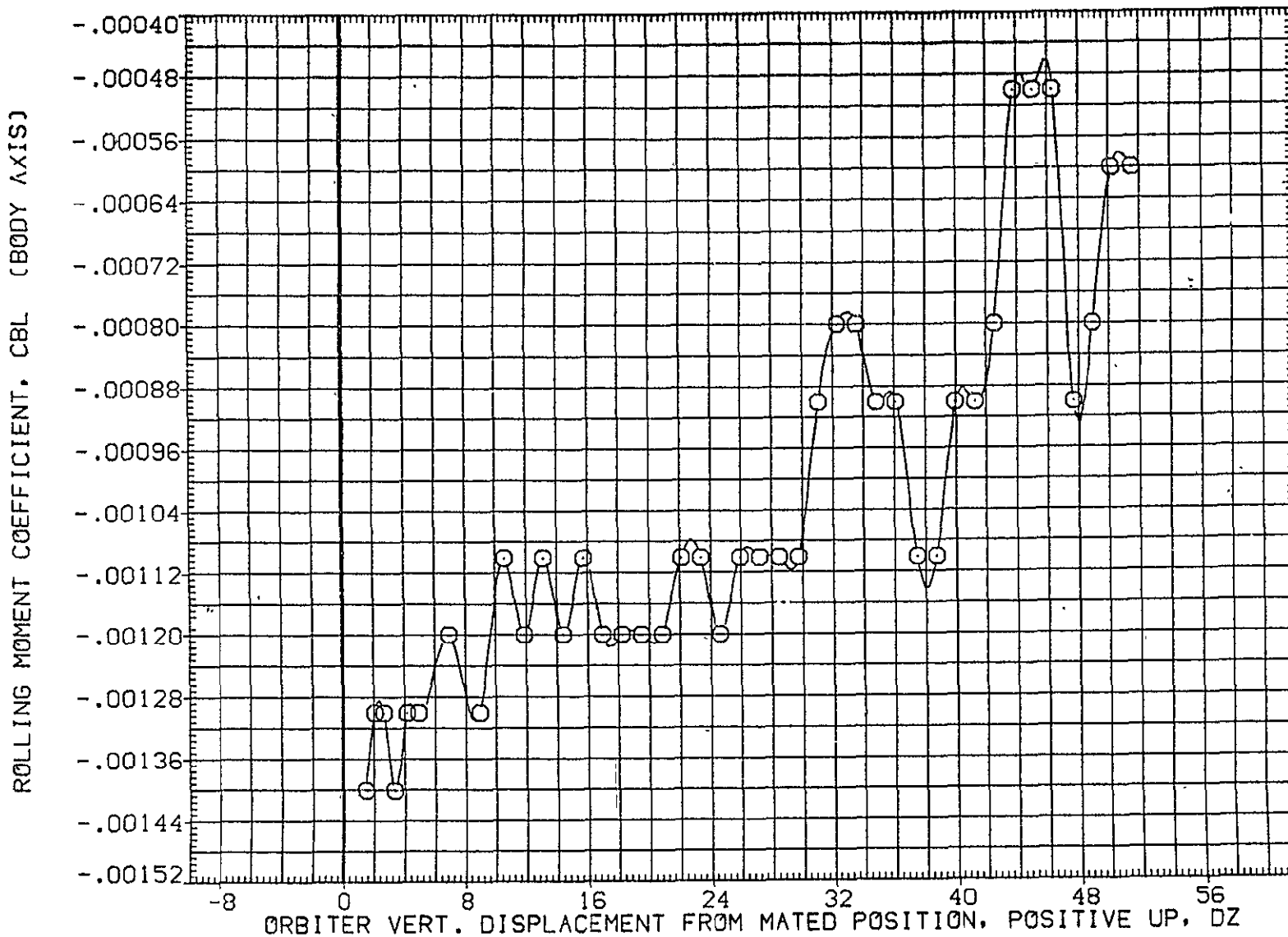


FIG. 43 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE052

LTV44-559(CA26) 747/1 ATX 02 S1 (ORBITER DATA) (AFE052)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.604	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

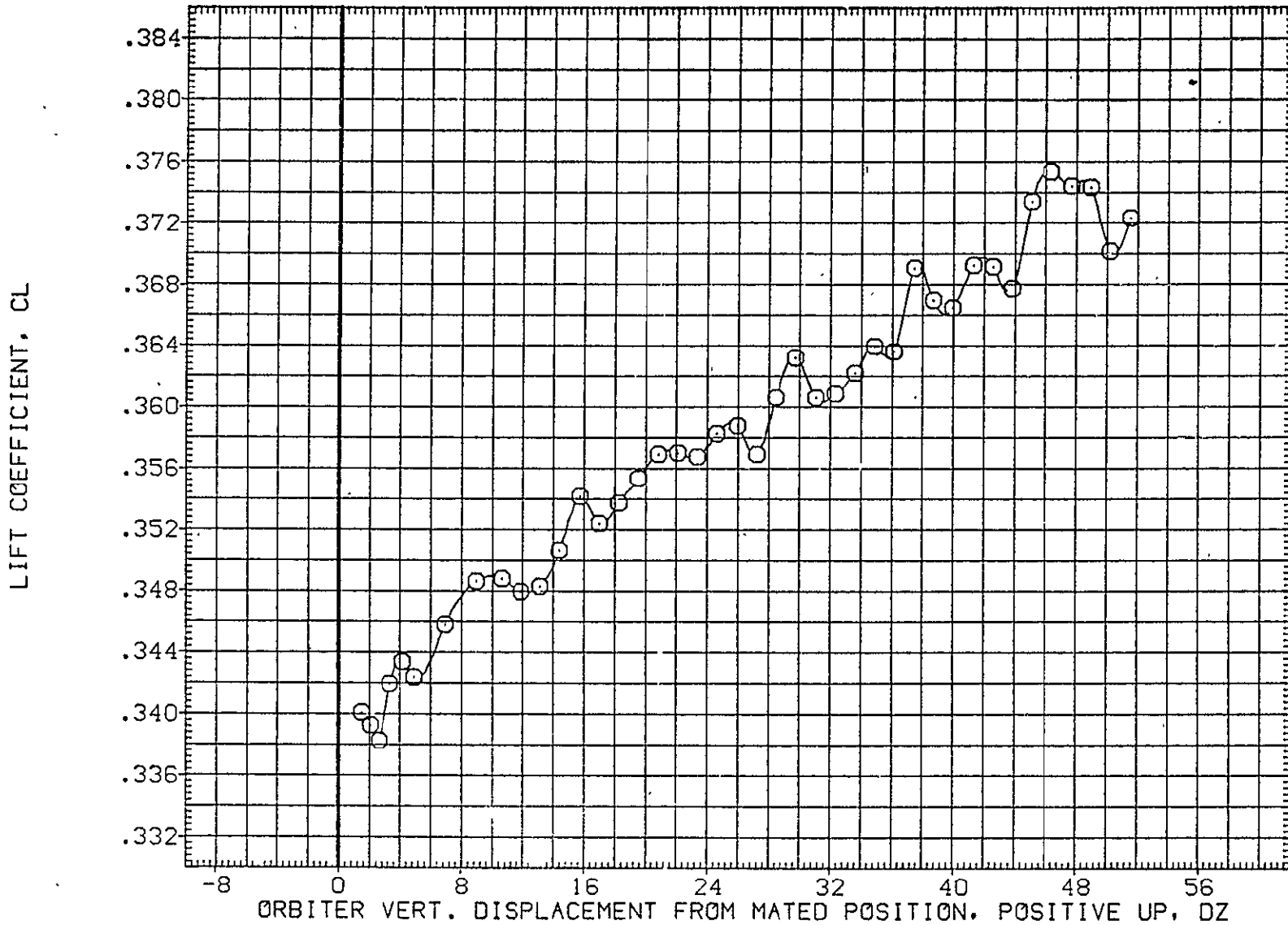


FIG. 43 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE052

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.604	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

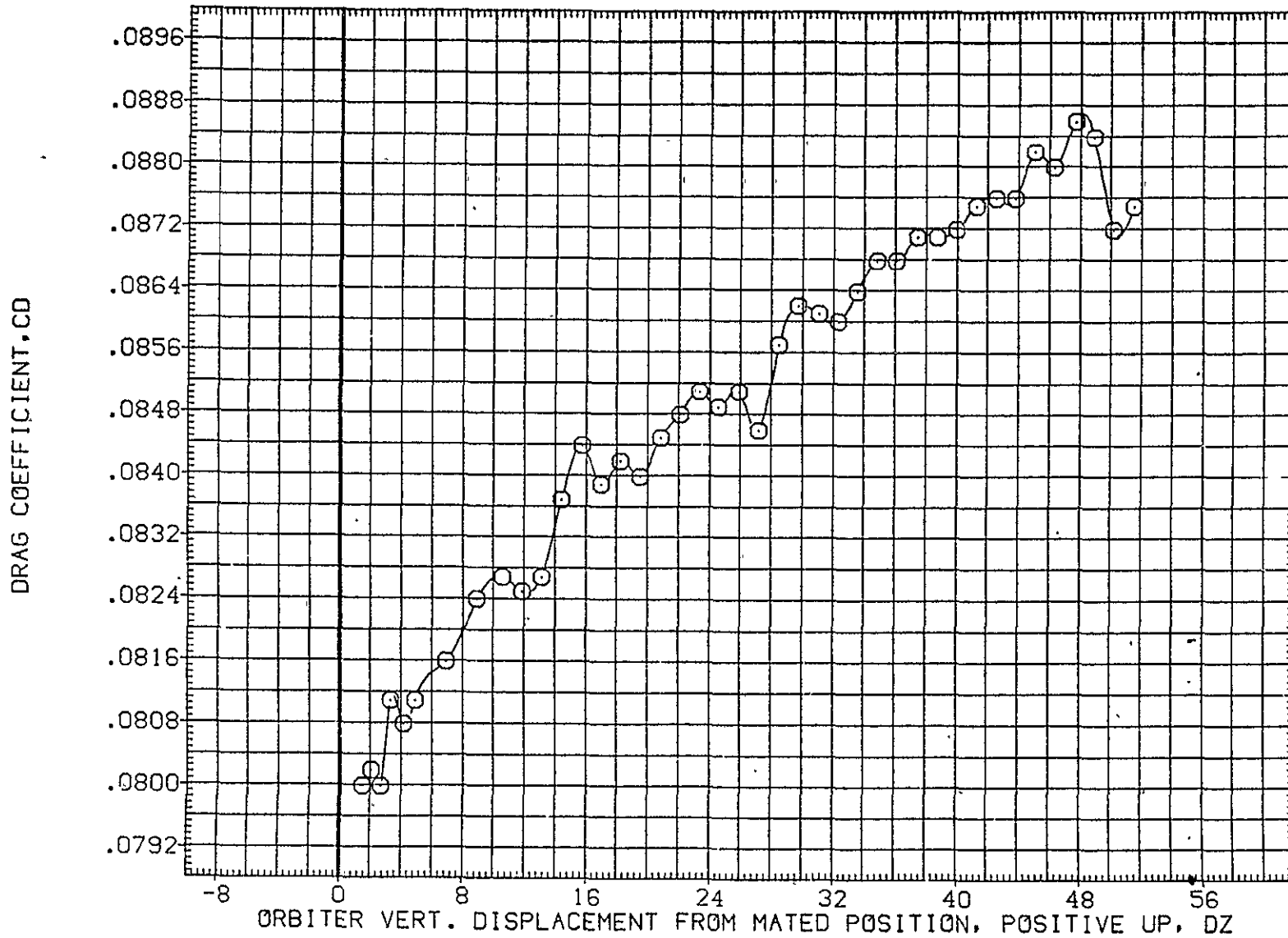


FIG. 43 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE052

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE053)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.598	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAS	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6900	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. XC
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

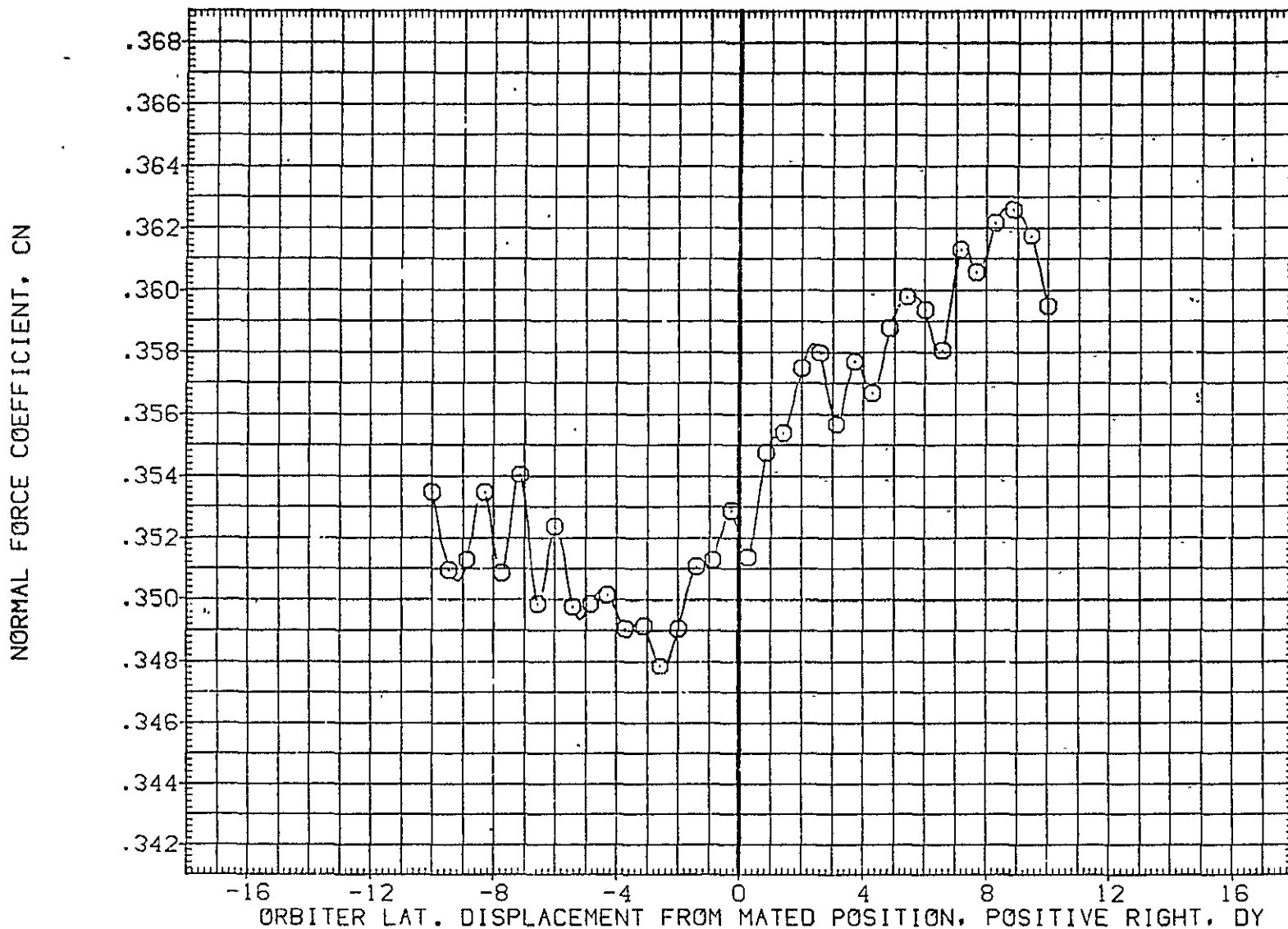


FIG. 44 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE053

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.598	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

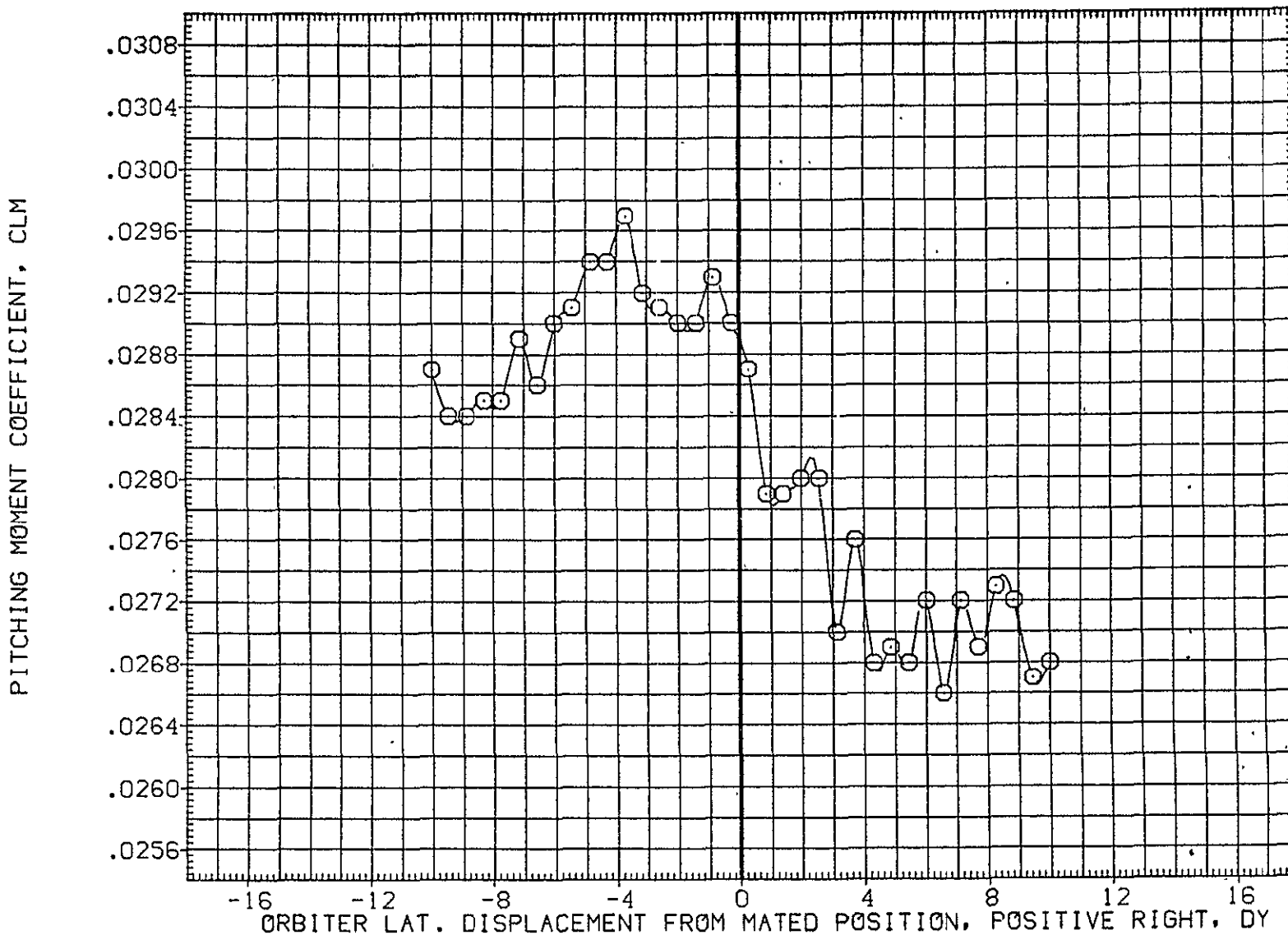


FIG. 44 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE053

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE053)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.598	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

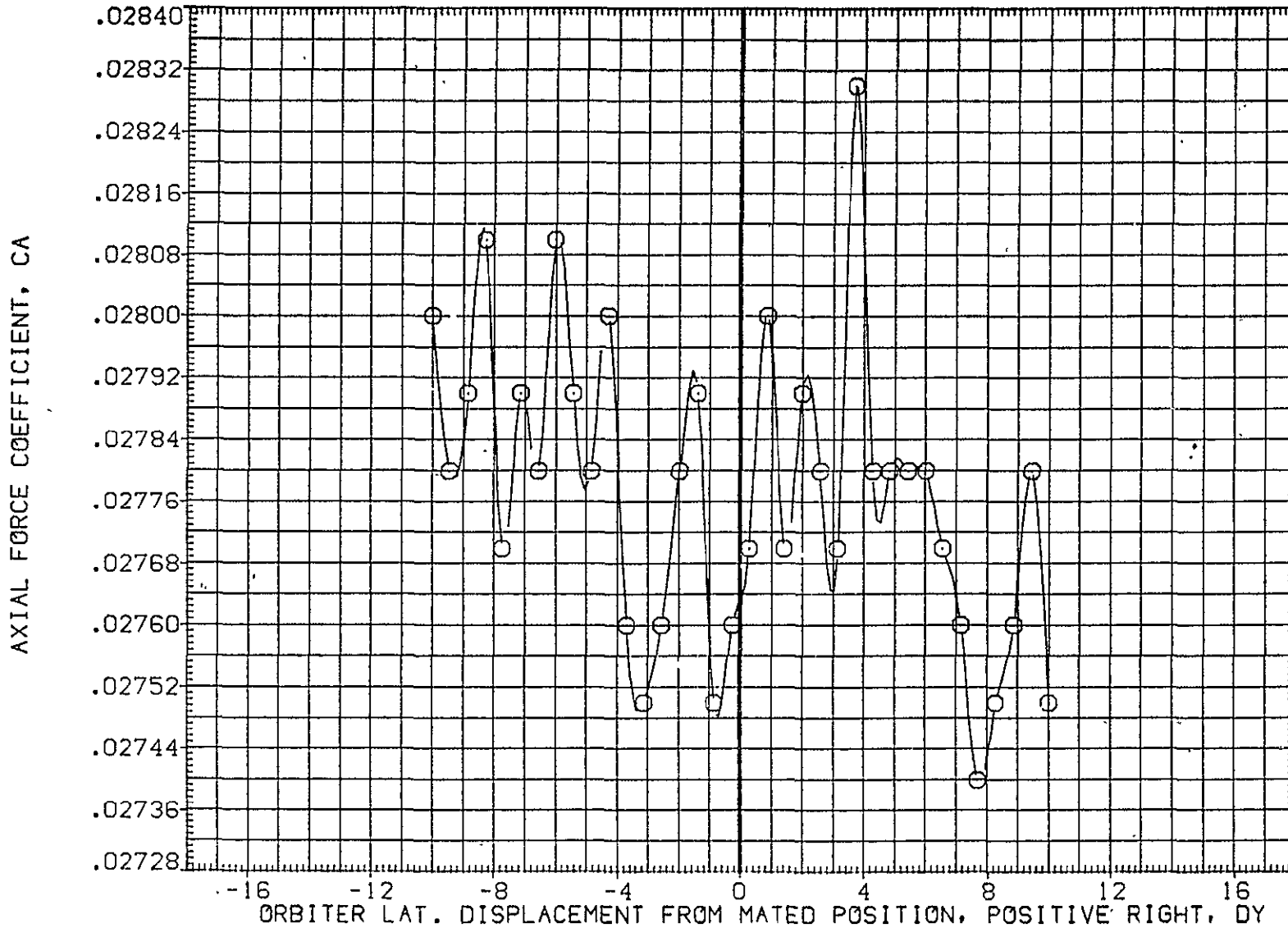


FIG. 44 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE053

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	OX	SREF	IN.	SO.FT.
○	.598	2.000	.000	5.000	.000	2690.0000	474.8100	IN.
		BDFLAP	.000	10RB	6.000	936.6800	1109.0000	IN.
		DZ	.000	RUDDER	.000	YMRP	.0000	IN. X0
		BETA0	.000			ZMRP	375.0000	IN. Y0
						SCALE	.0125	IN. Z0

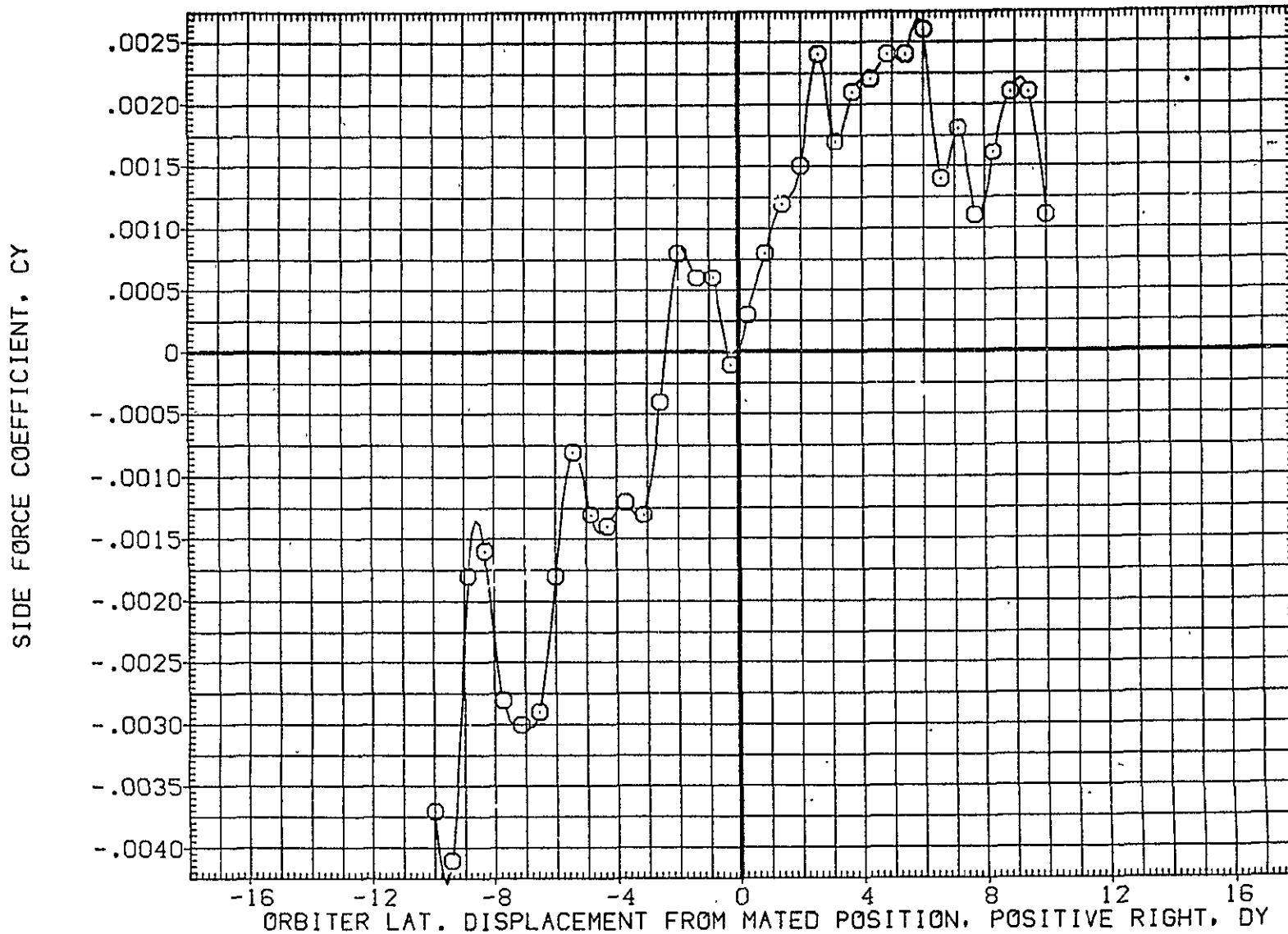


FIG. 44 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, 10RB=6, BETAC=0, BETA0=0, AFE053

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE053)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.598	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

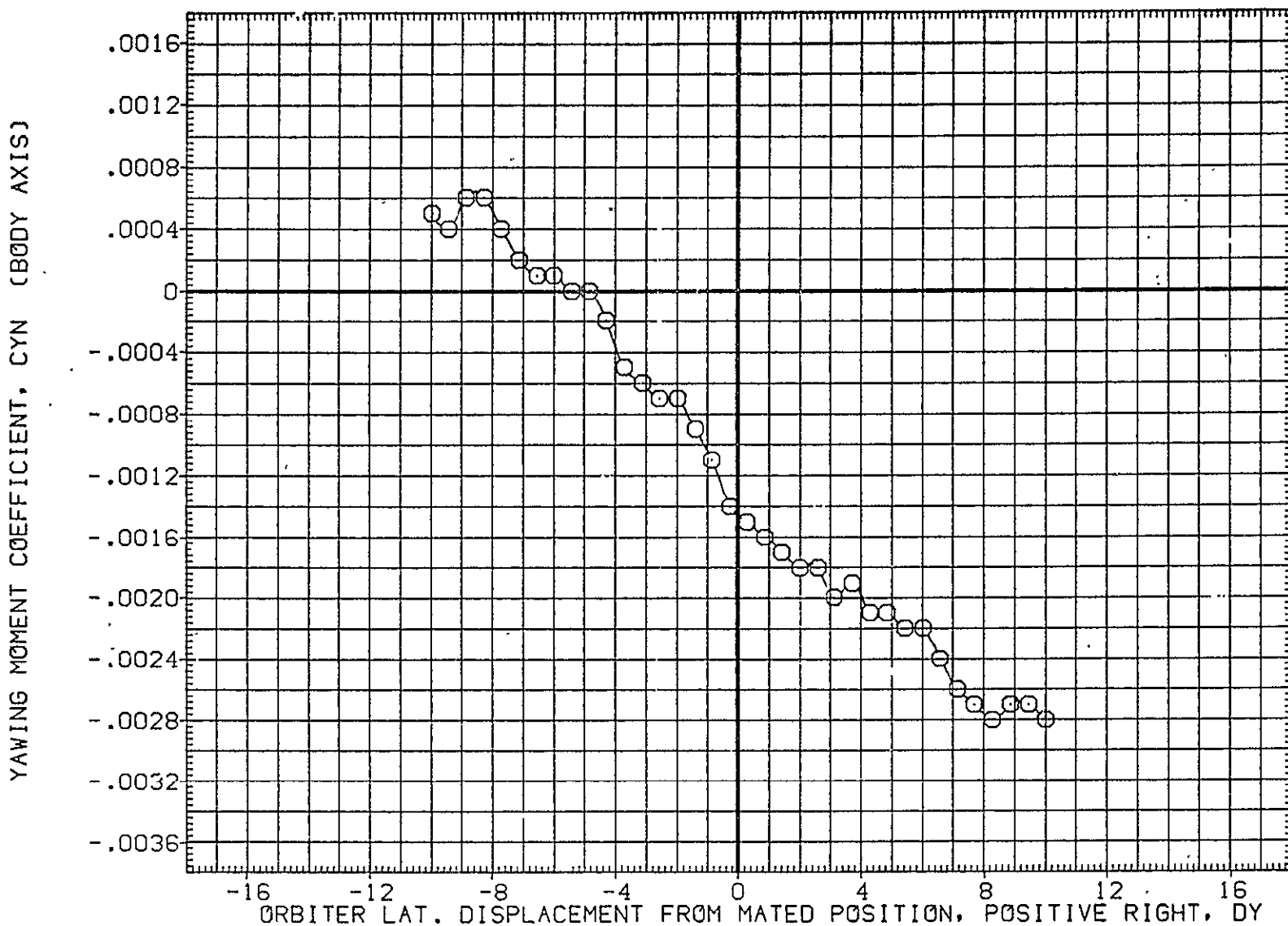


FIG. 44 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE053

SYMBOL	MACH	PARAMETRIC VALUES			
○	.598	ALPHAC	2.000	BETAC	.000
		STAB	5.000	ELEVON	5.000
		BDFLAP	.000	DX	.000
		DZ	.000	IORB	6.000
		BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XM RP	1109.0000	IN. X0
YM RP	.0000	IN. Y0
ZM RP	375.0000	IN. Z0
SCALE	.0125	

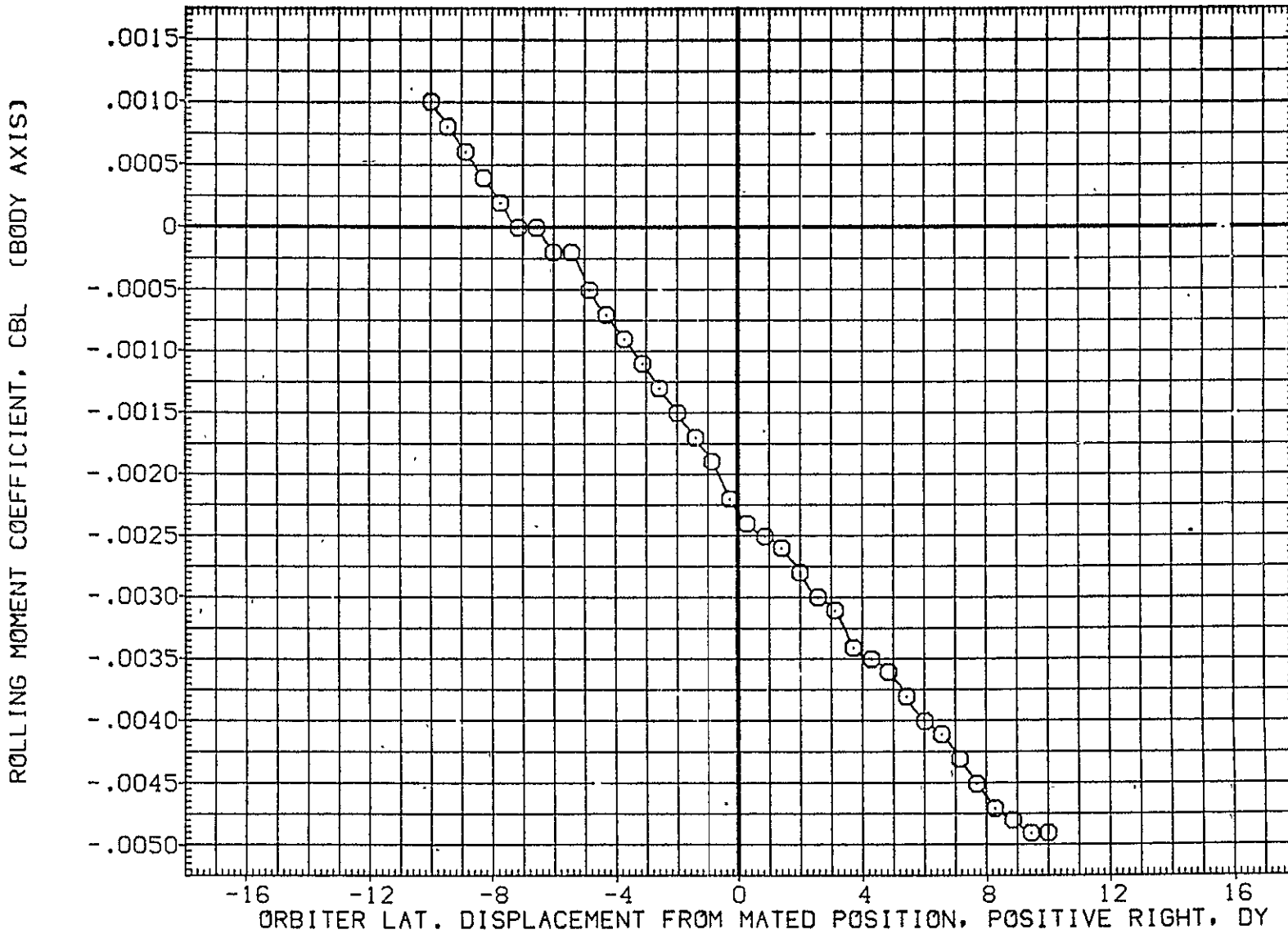


FIG. 44 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE053

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE053)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.598	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SG
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN
		BDFLAP	.000	DX	.000	BREF	936.6800	IN
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN
						ZMRP	375.0000	IN
						SCALE	.0125	

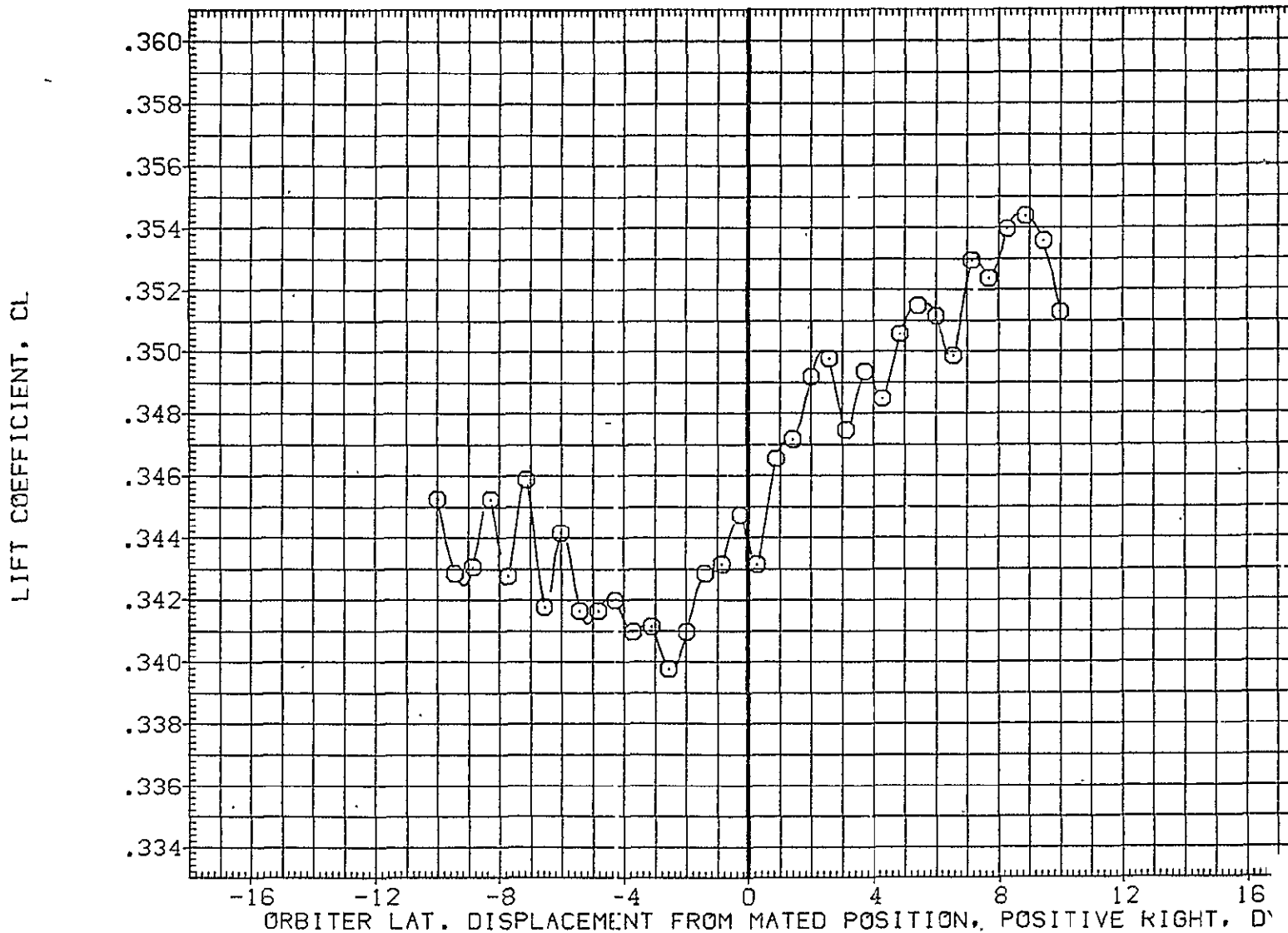


FIG. 44 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=C, BETA0=0, AFE05

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	LREF	BREF
○	.598	2.000	.000	5.000	.000	2690.0000	474.8100	936.6800
		BDFLAP	.000	10RB	6.000	1109.0000	.0000	.0000
		DZ	.000	RUDDER	.000	375.0000	.0125	
		BETA0	.000					

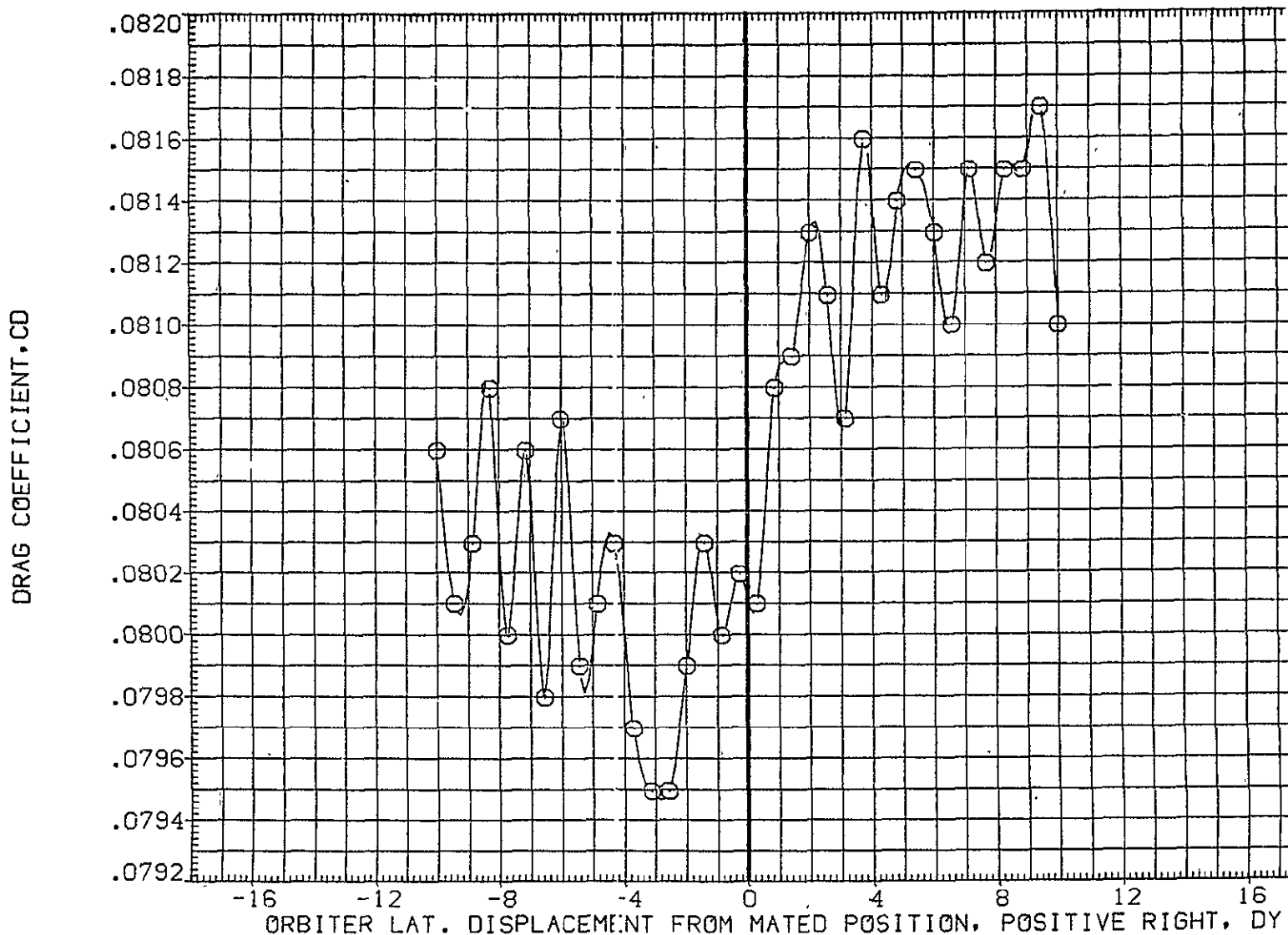


FIG. 44 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, 10RB=6, BETAC=0, BETA0=0, AFE05

LTV44-559(CA26) 747/1 ATY (12 S1 (ORBITER DATA) (AFE054)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	S
		STAB	5.000	ELEVON	5.000	LREF	474.8100	I
		BDFLAP	.000	DX	.000	BREF	936.6800	I
		OZ	15.000	IORB	6.000	XMRP	1109.0000	I
		BETA0	.000	RUDDER	.000	YMRP	.0000	I
						ZMRP	375.0000	I
						SCALE	.0125	

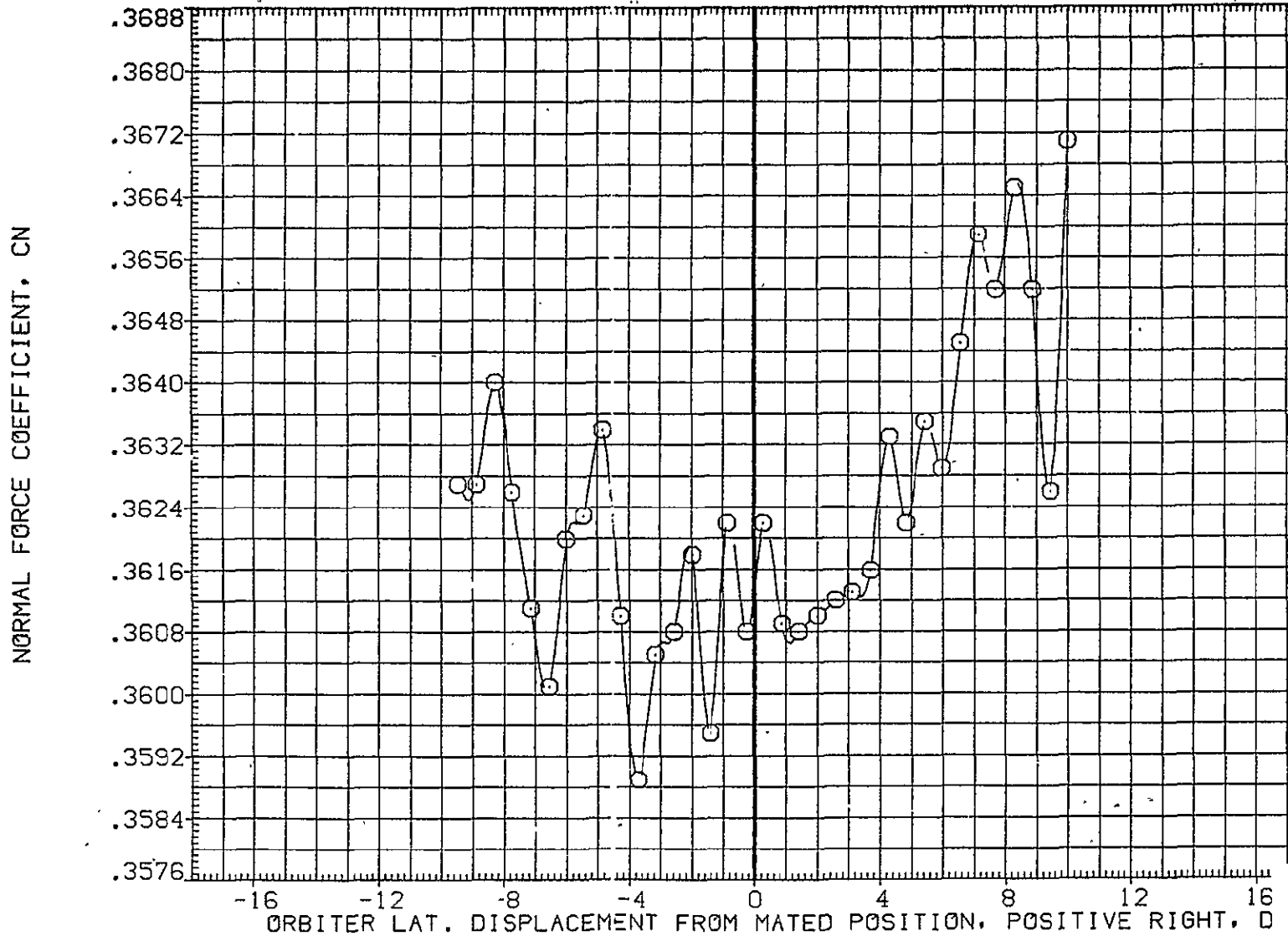


FIG. 45 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE054

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SC
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN
		BDFLAP	.000	DX	.000	BREF	936.6800	IN
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN
						ZMRP	375.0000	IN
						SCALE	.0125	

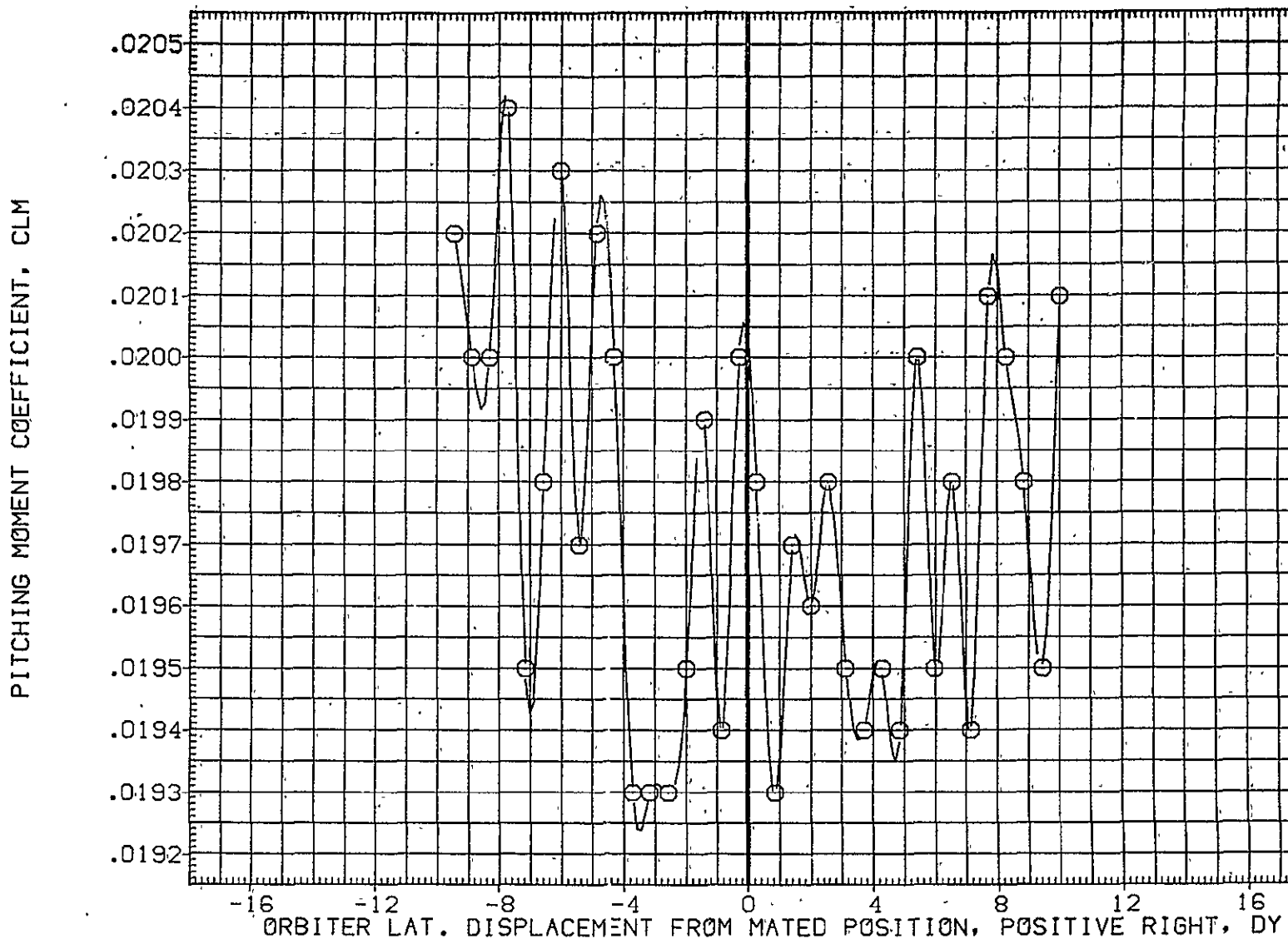


FIG. 45 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE054

LTV44-559(CA26) 747/1 ATY (2 S1 (ORBITER DATA) (AFE054)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SG
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN
		BDFLAP	.000	DX	.000	BREF	936.6800	IN
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN
						ZMRP	375.0000	IN
						SCALE	.0125	

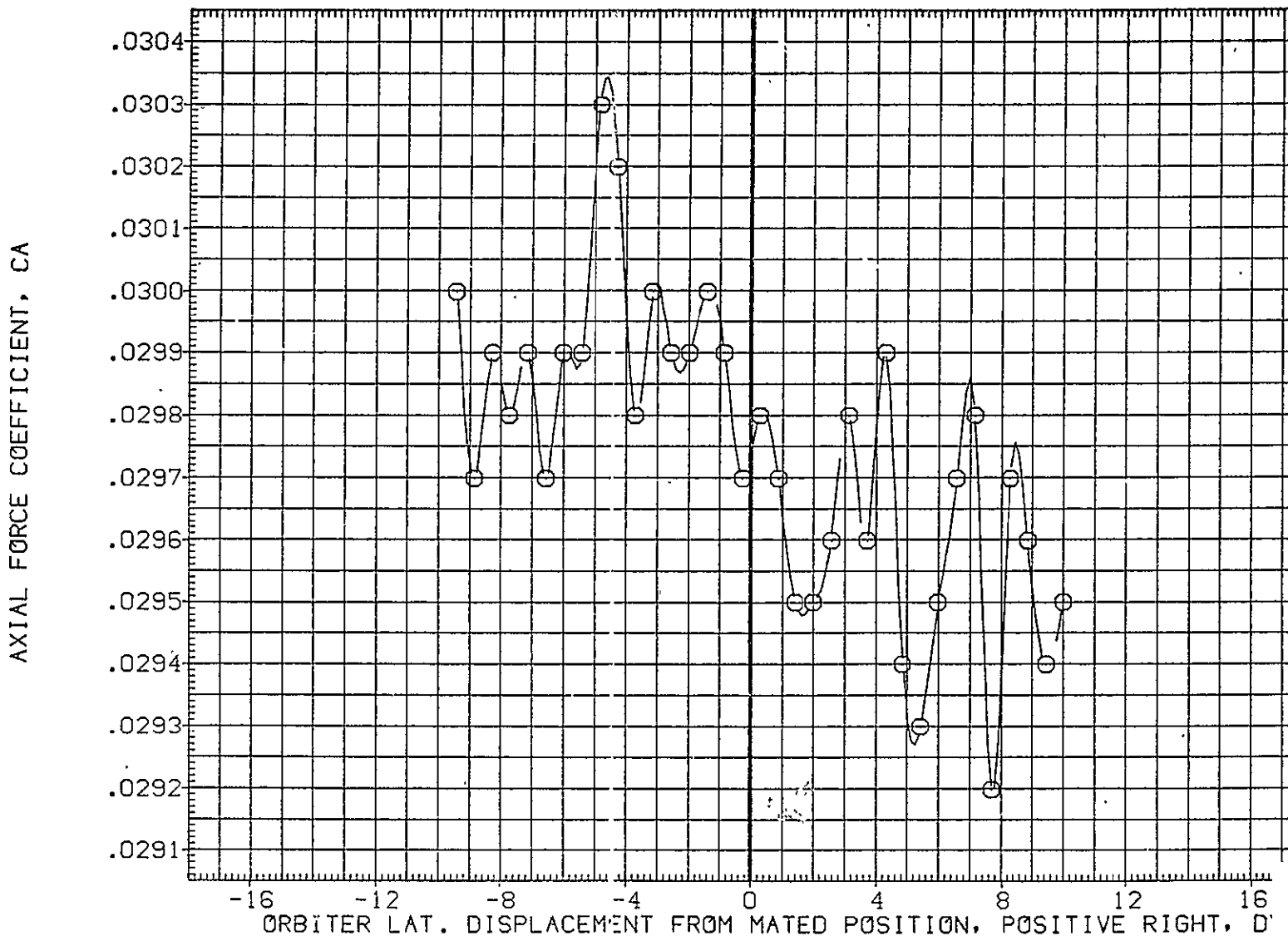


FIG. 45 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE054

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		OZ	15.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

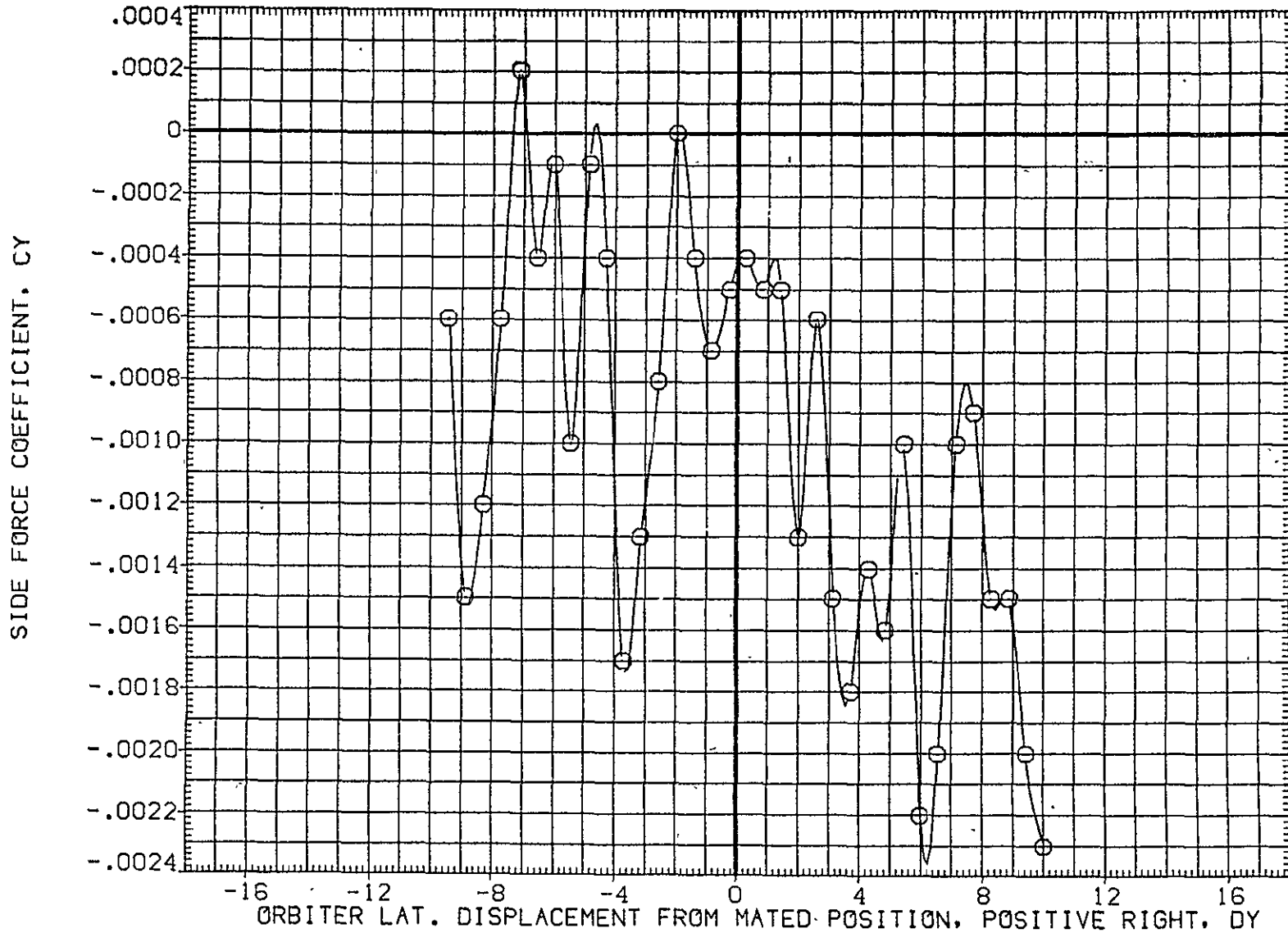


FIG. 45 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE054

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE054)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	OX	.000	BREF	936.6800	IN.
		OZ	15.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

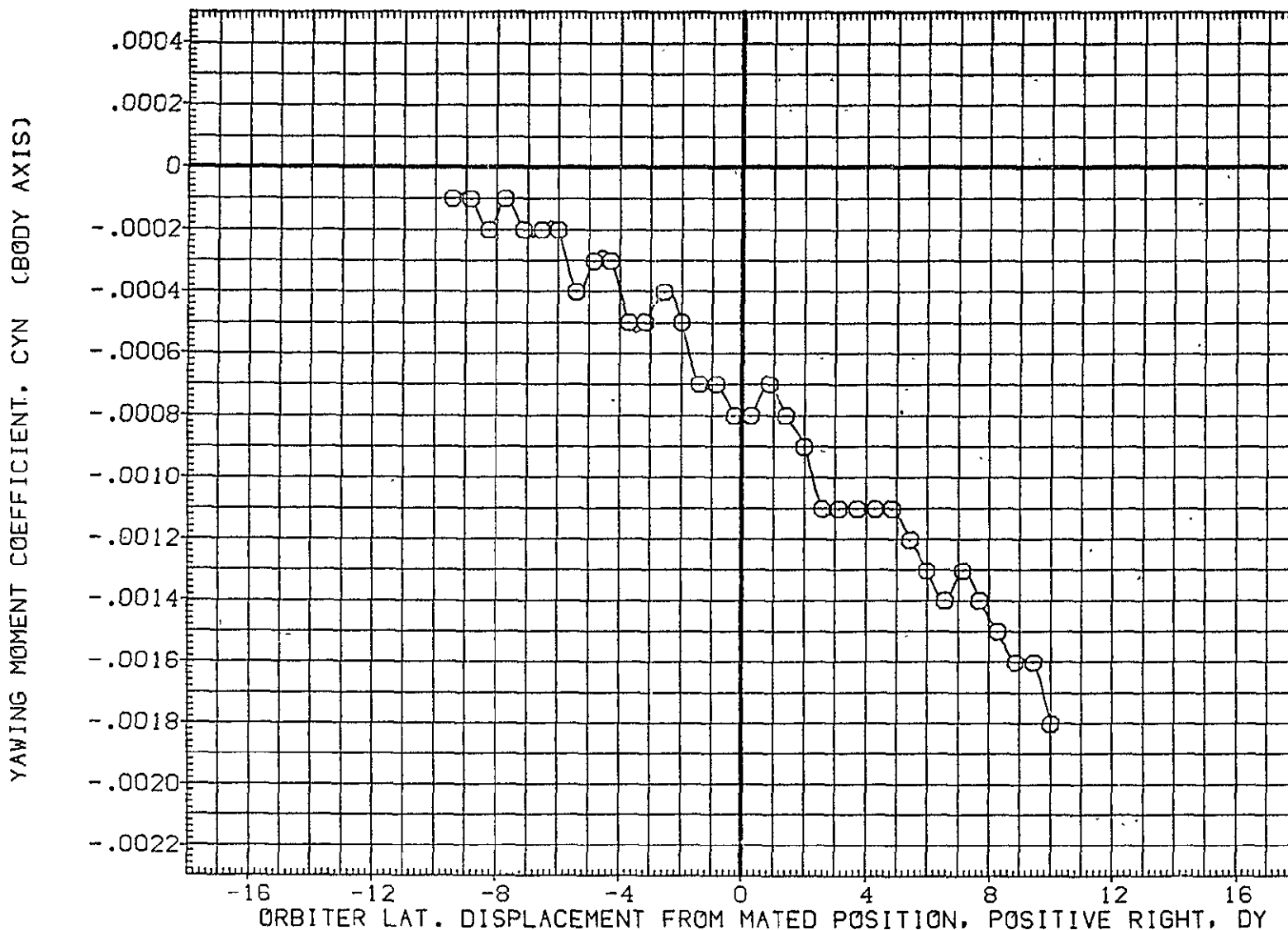


FIG. 45 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE054

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		OZ	15.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

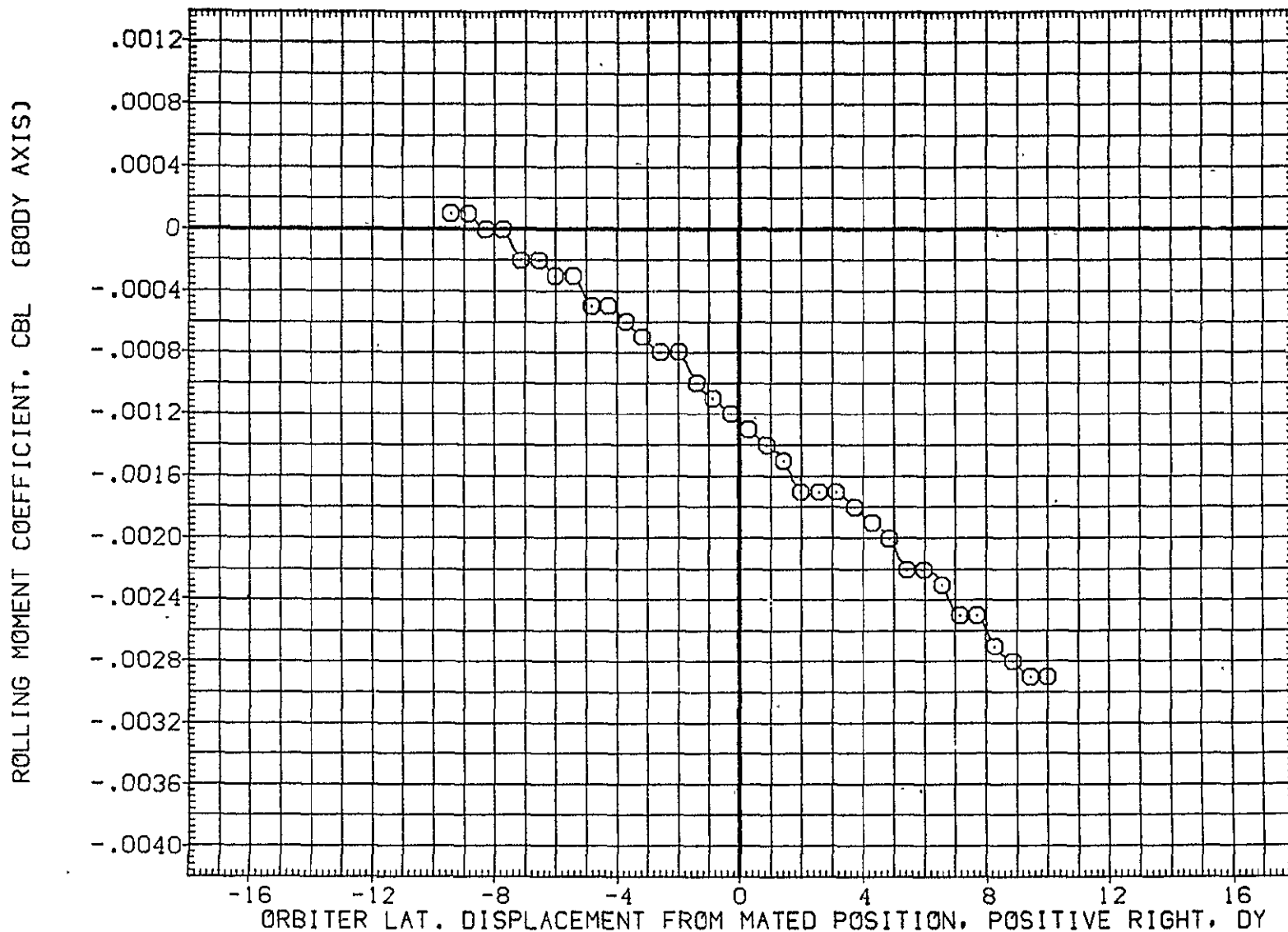


FIG. 45 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE054

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE054)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

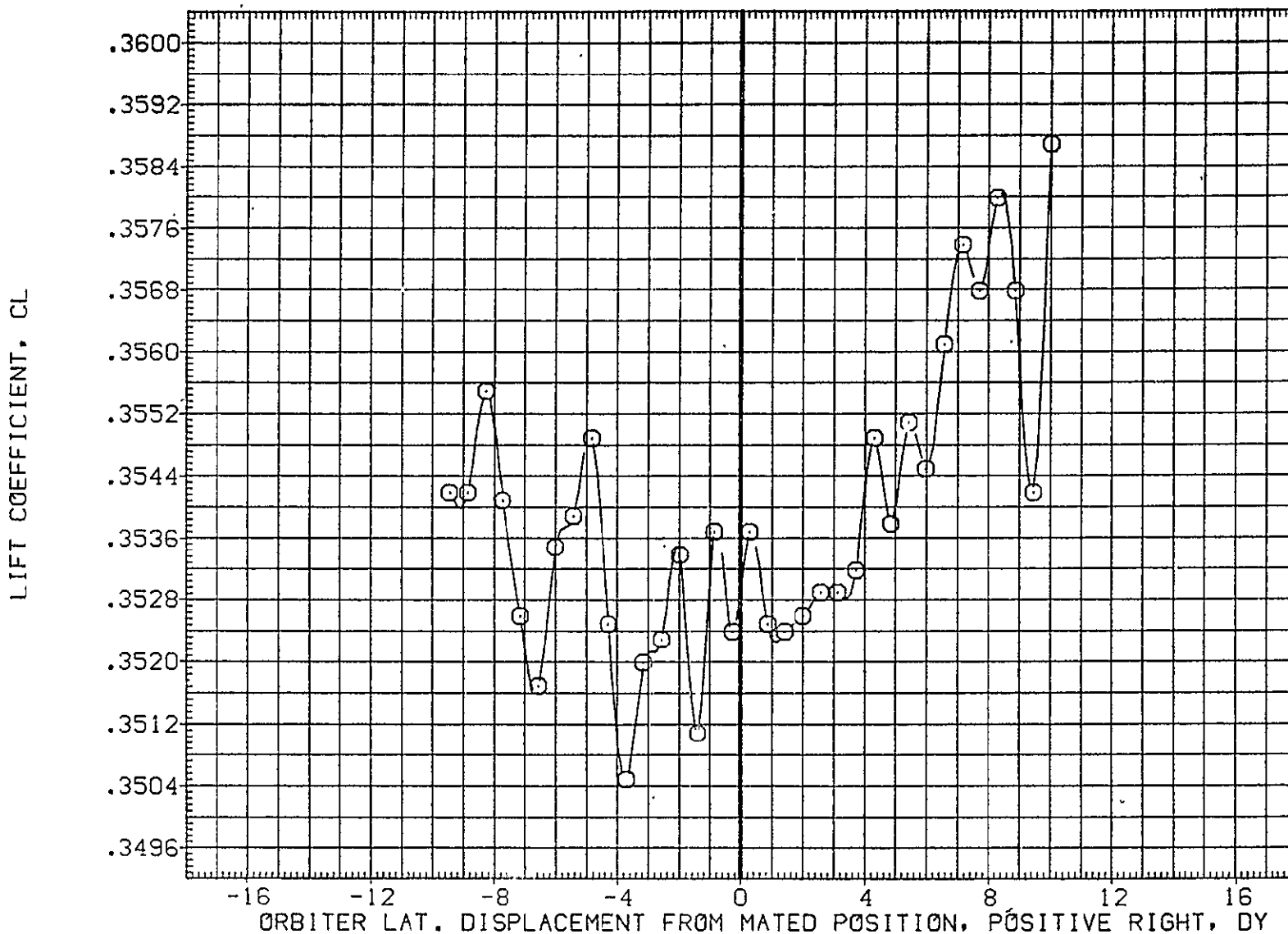


FIG. 45 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE054

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

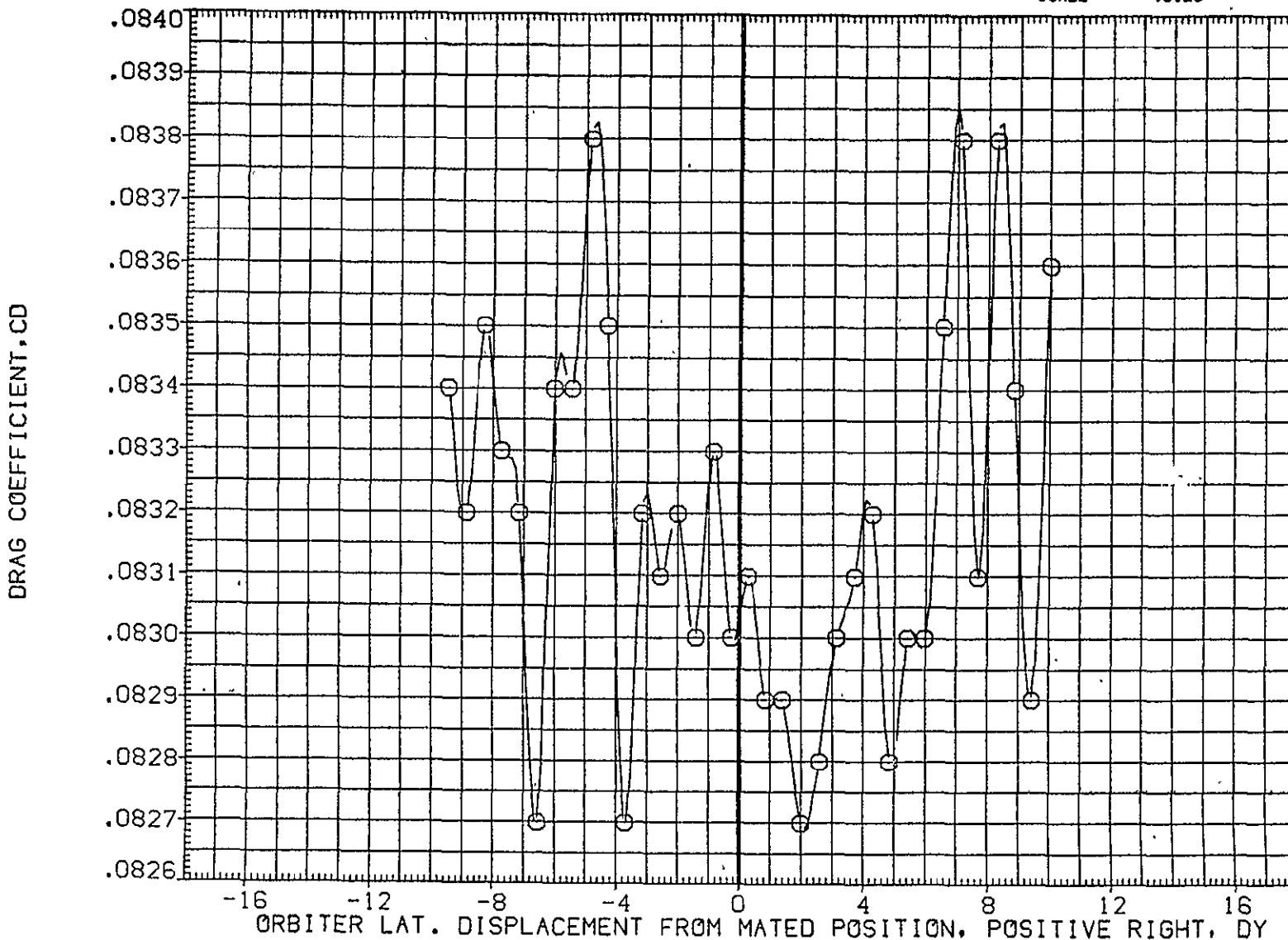


FIG. 45 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE054

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE055)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SG.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	OX	.000	BREF	936.6800	IN.
		OZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

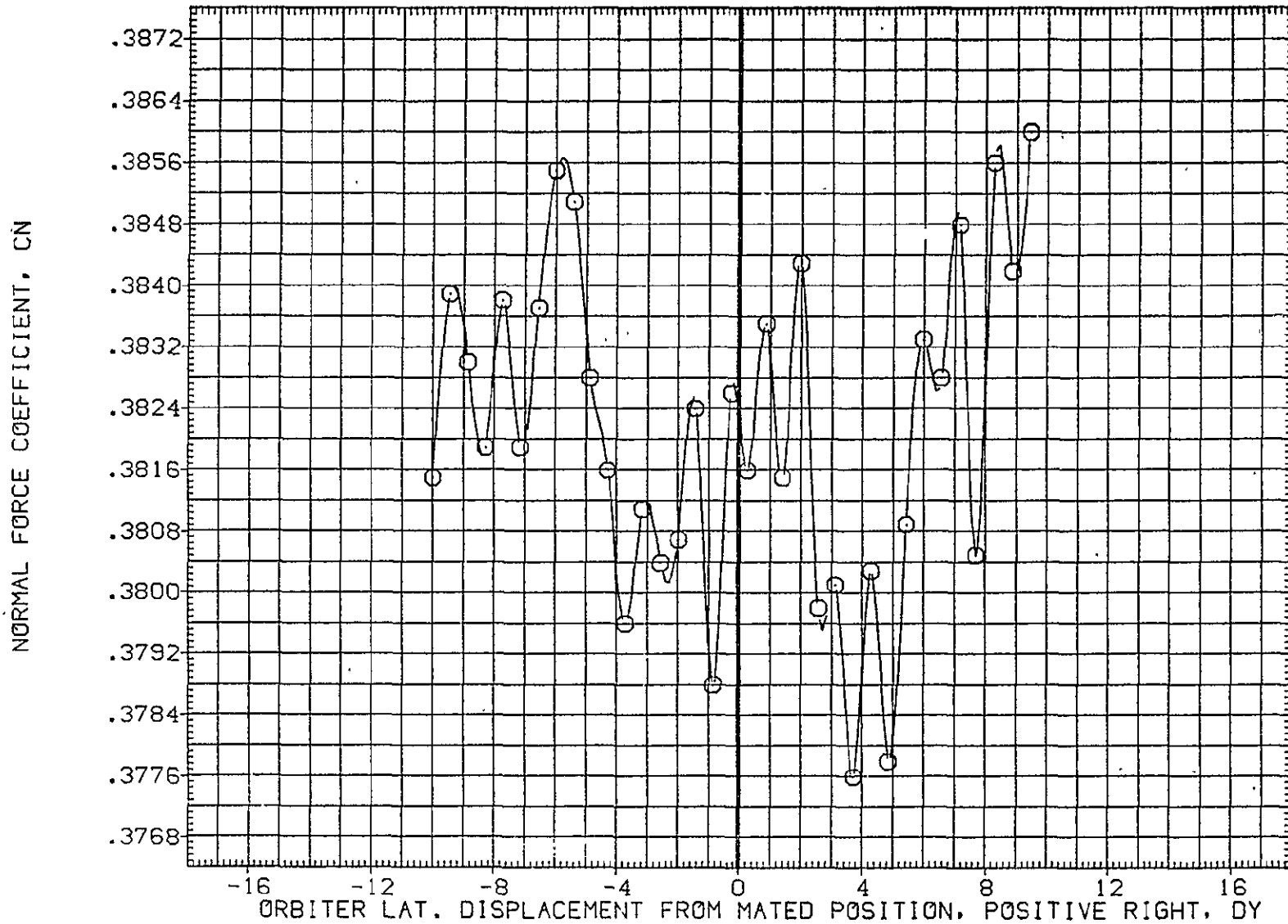


FIG. 46 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE055

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	IN.	SO, FT.
○	.599	2.000	.000	5.000	.000	.2690.0000	474.8100	IN.
		5.000	5.000	.000	.000	936.6800	1109.0000	IN. X0
		BDFLAP	60.000	10RB	6.000	YMRP	375.0000	IN. Y0
		BETA0	.000	RUDDER	.000	ZMRP	.0125	IN. Z0

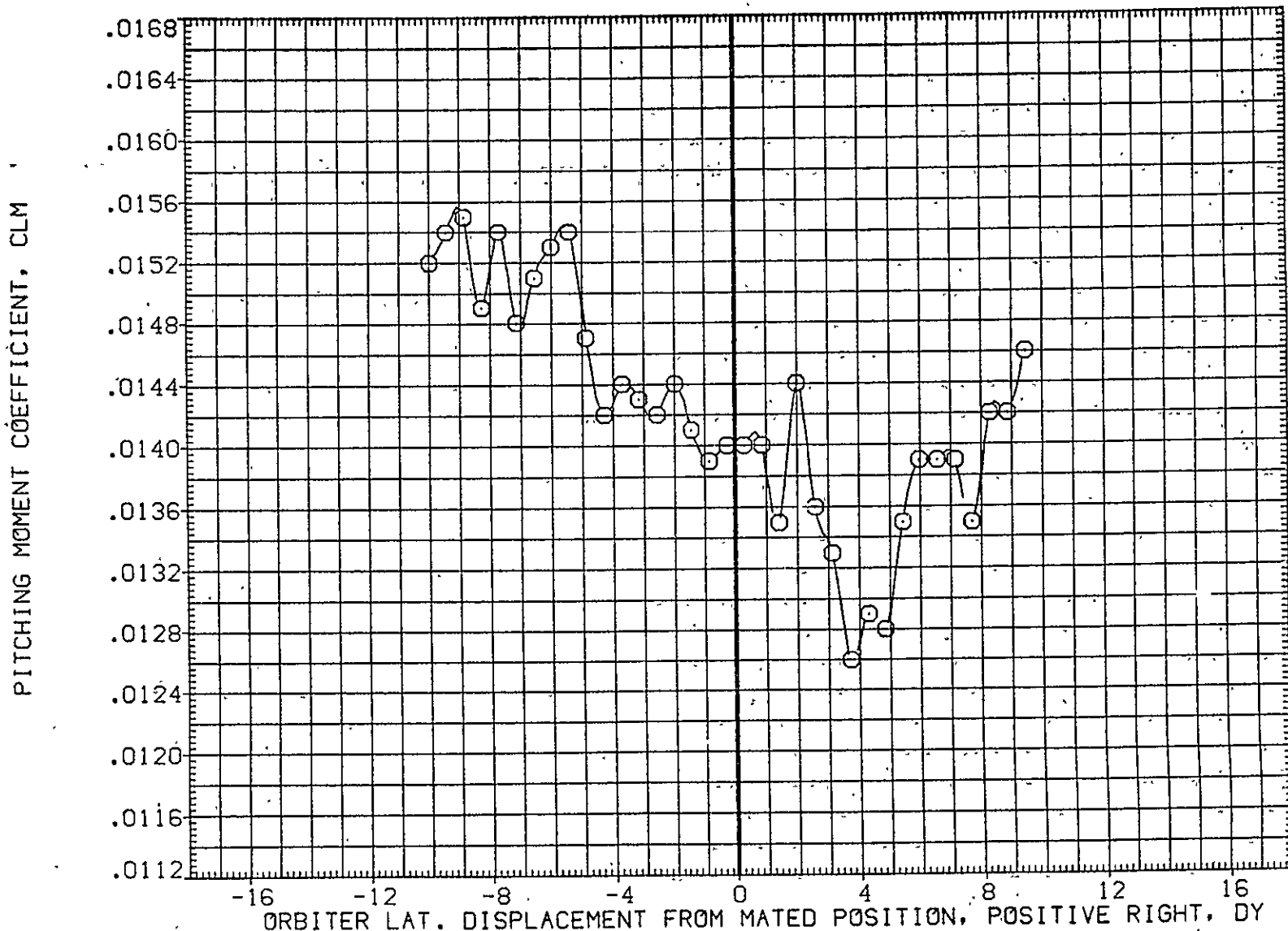


FIG. 46 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, 10RB=6, BETAC=0, BETA0=0, AFE055

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE055)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

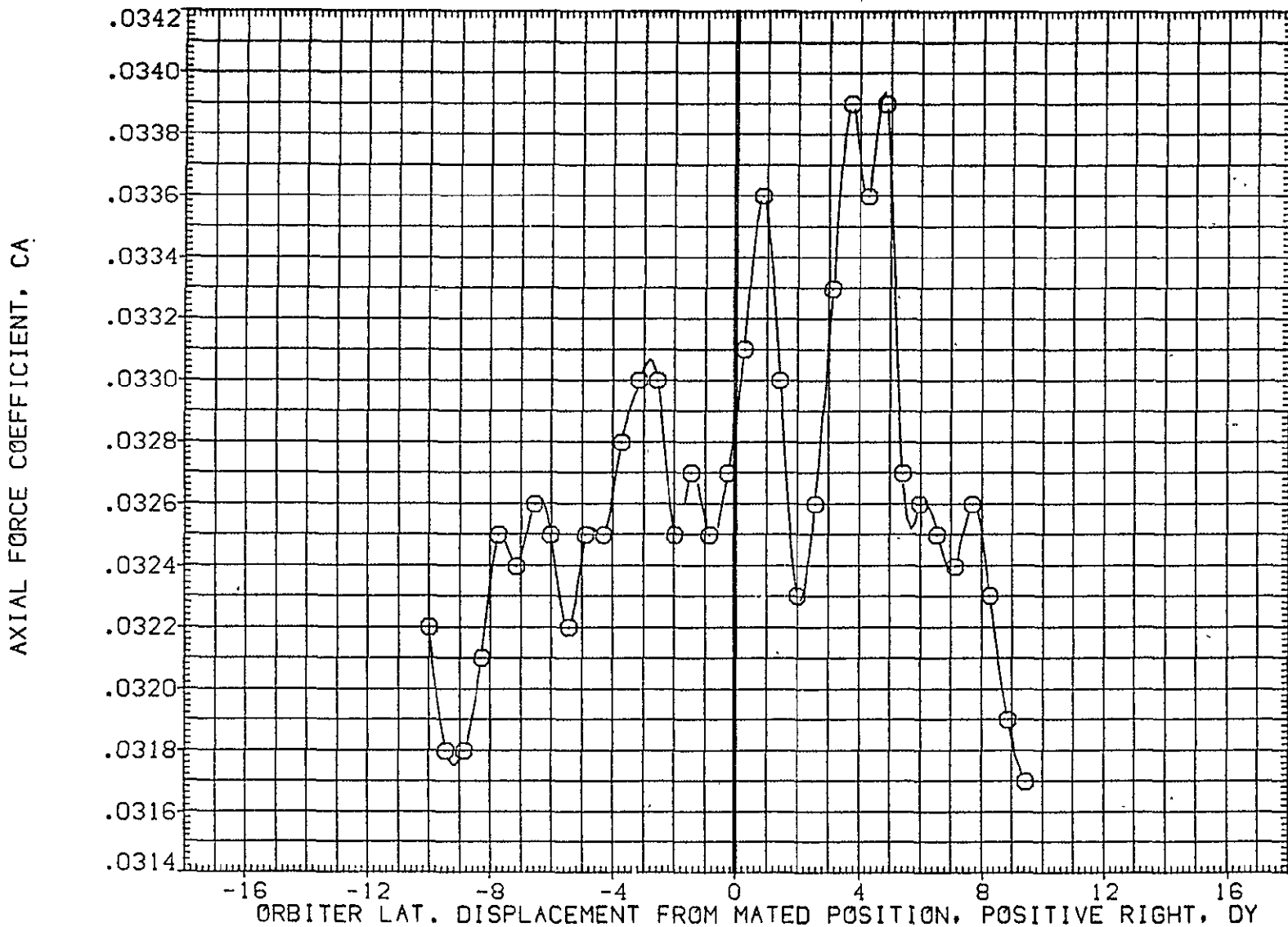


FIG. 46 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE055

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SO.F.F.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	OX	.000	BREF	936.6800	IN.
		OZ	60.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

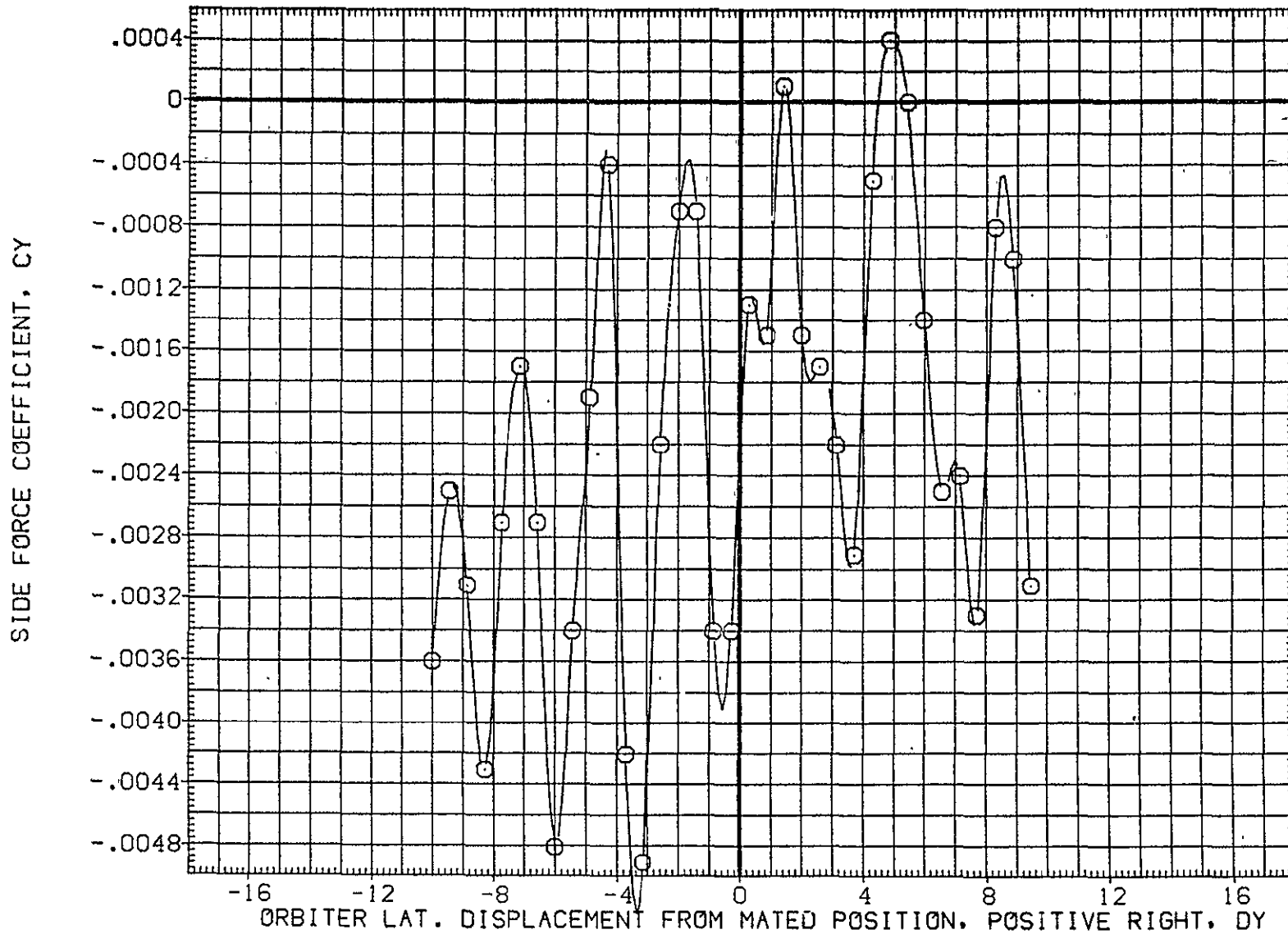


FIG. 46 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE055

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE055)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

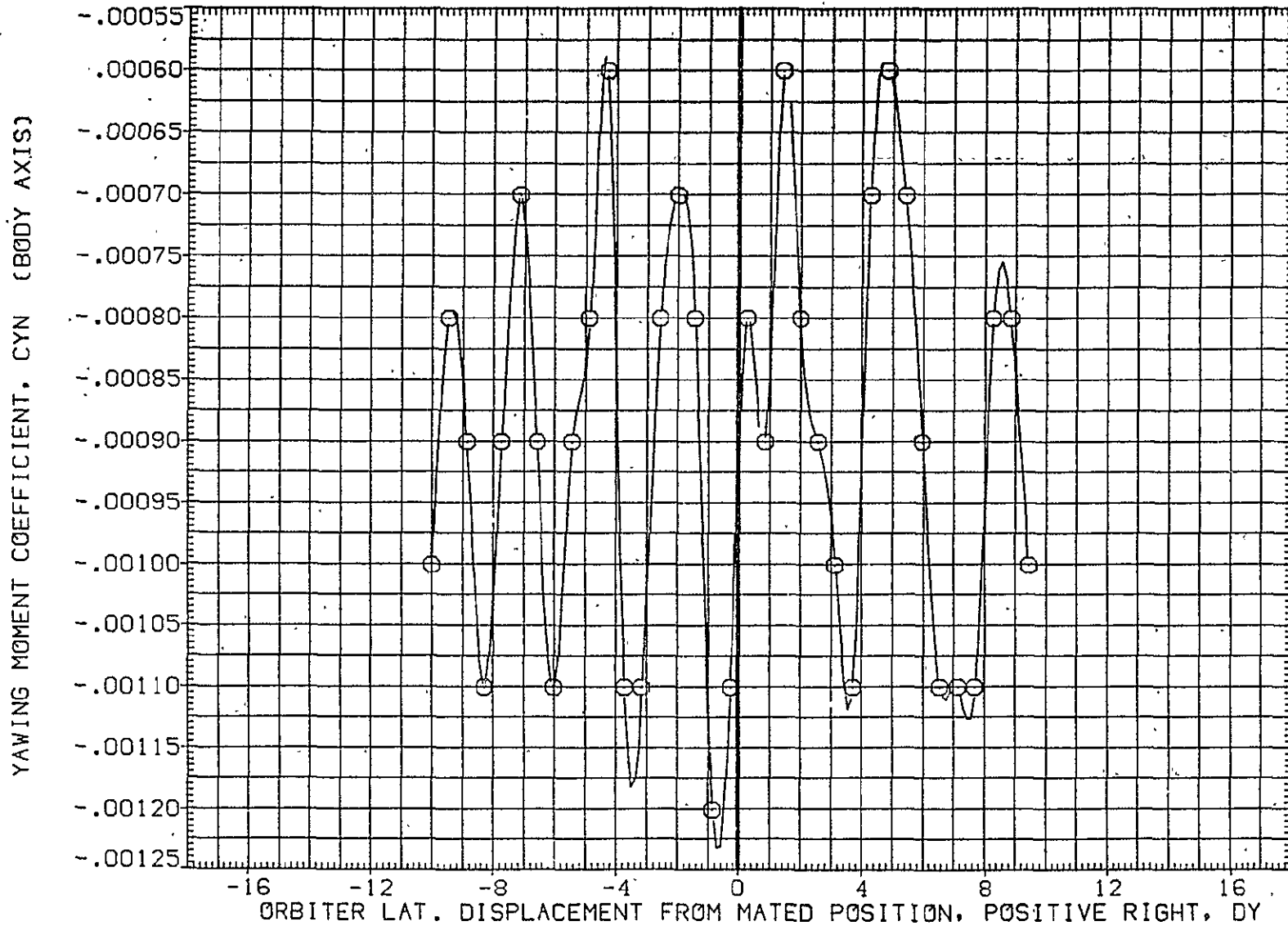


FIG. 46 ORR. DATA, CARRIER PROXIMITY; ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE055

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

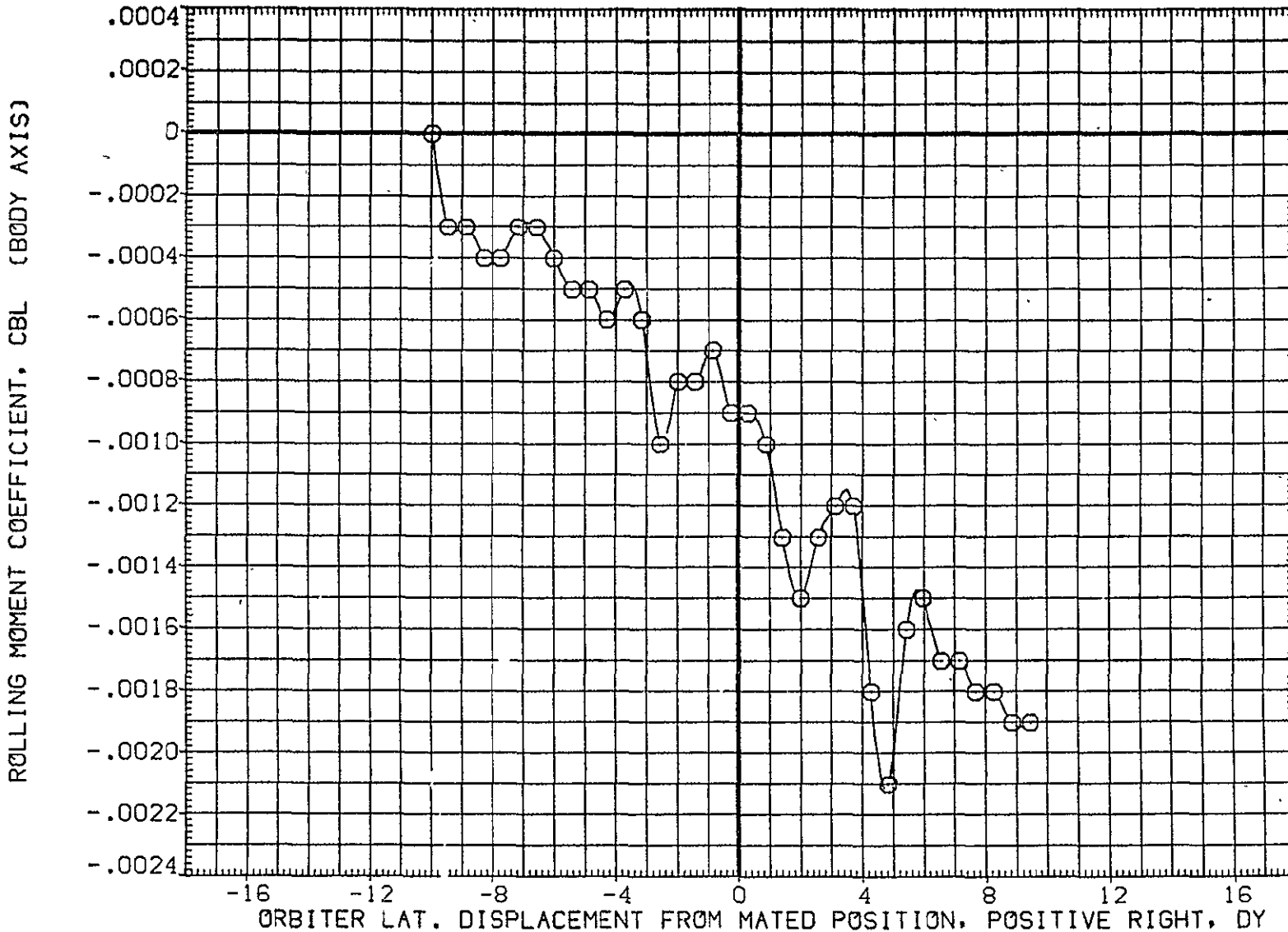


FIG. 46 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE055

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE055)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETAO	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

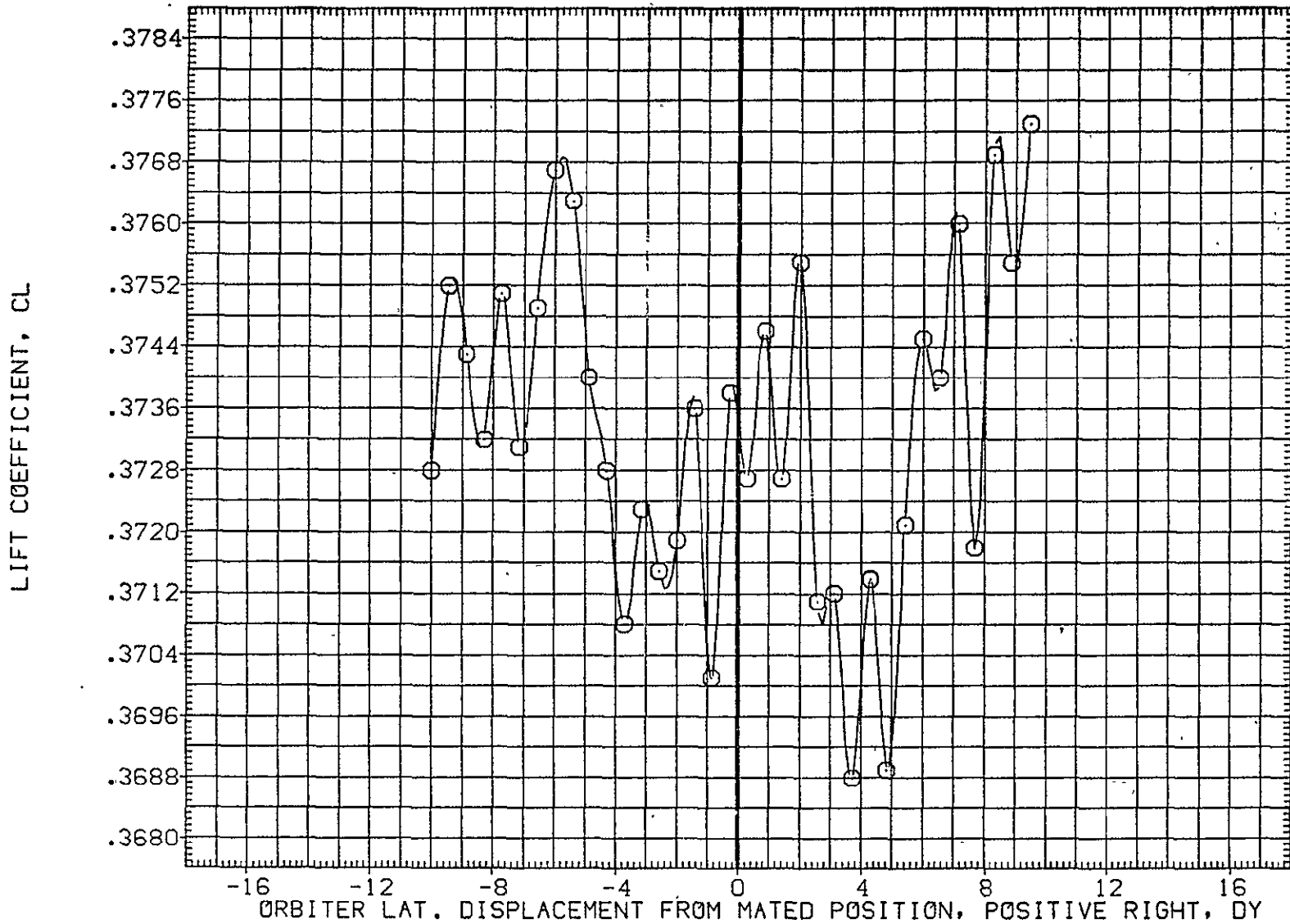


FIG. 46 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE055

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

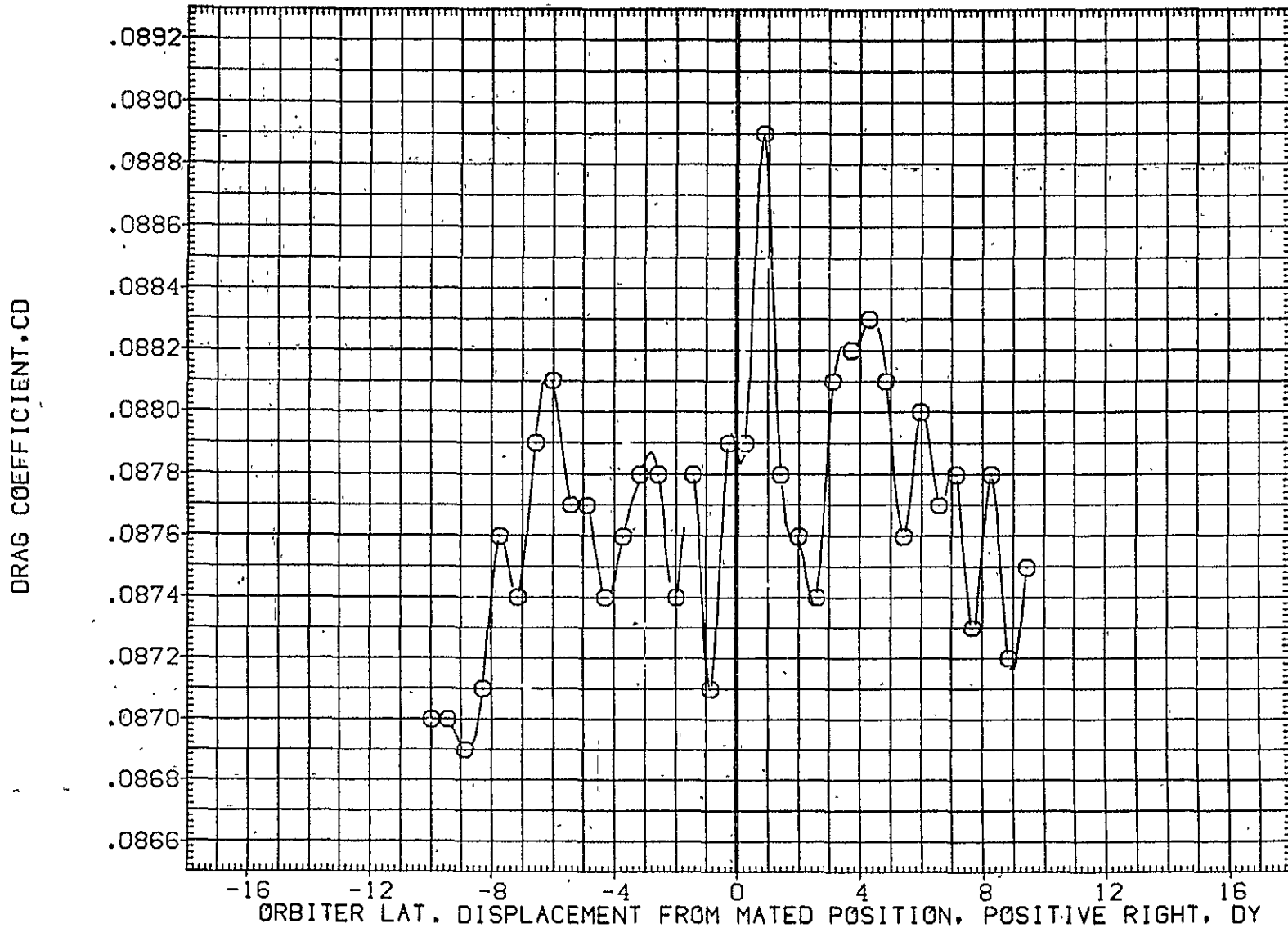


FIG. 46 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE055

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE056)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.611	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

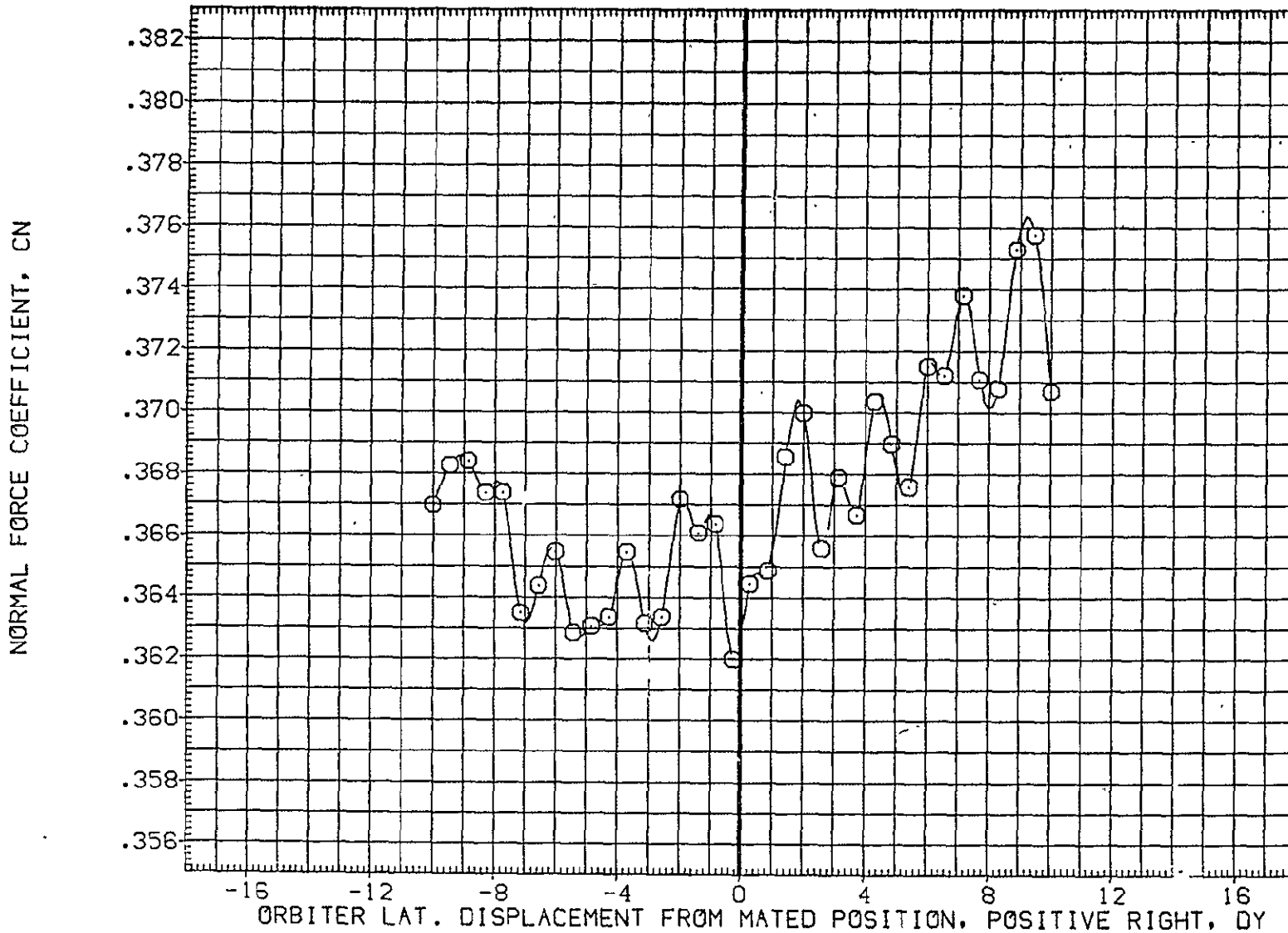


FIG. 47 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE056

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	LREF	BREF
○	.611	2.000	.000	5.000	.000	2690.0000	474.8100	936.6800
		BDFLAP	10RB	RUDDER	.000	XMRP	1109.0000	YMRP
		DZ			6.000	ZMRP	375.0000	
		BETA0			.000	SCALE	.0125	
								SO.FT.
								IN.
								IN.
								IN. X0
								IN. Y0
								IN. Z0

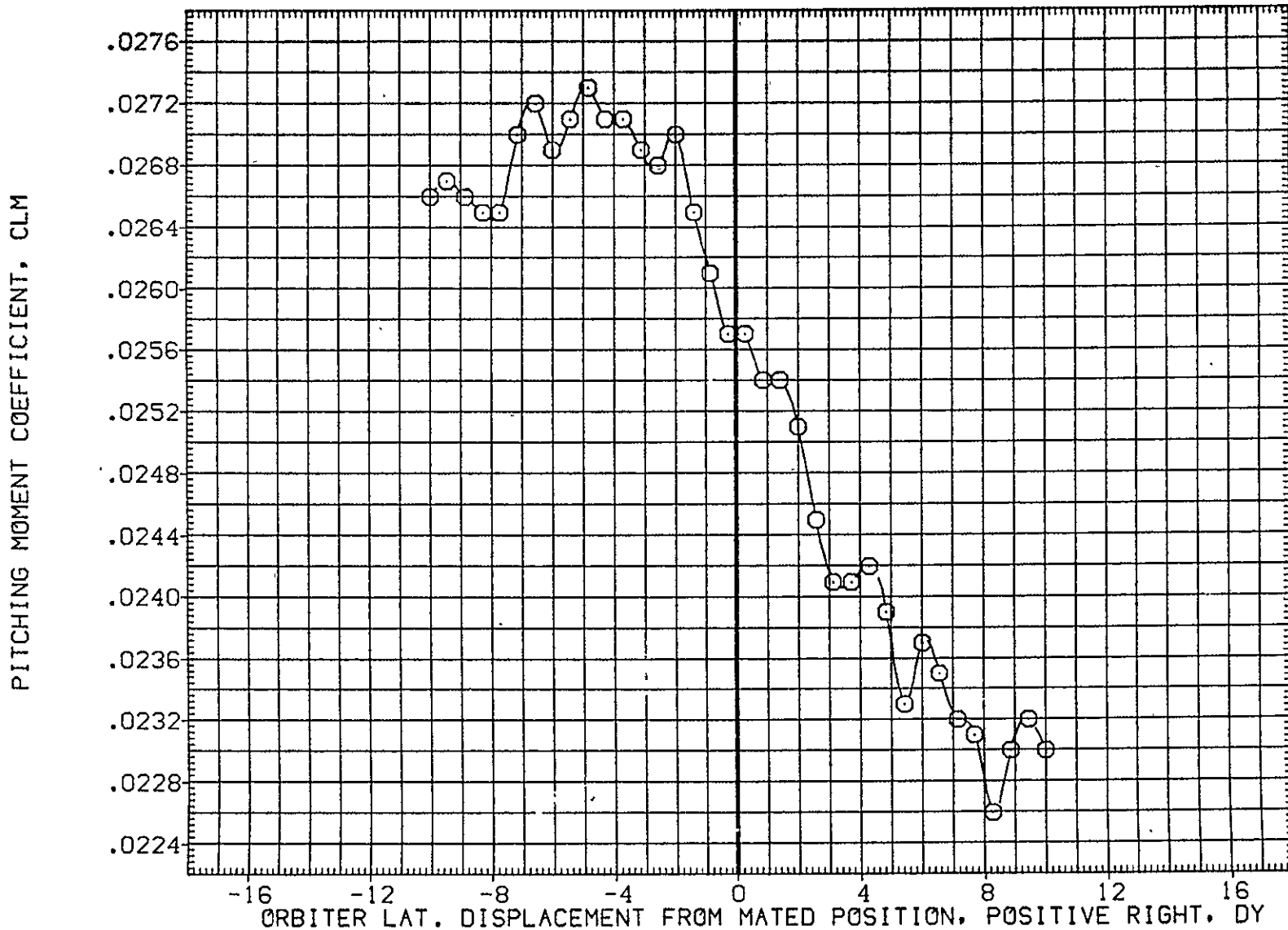


FIG. 47 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, 10RB=6, BETAC=0, BETA0=5, AFE056

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE056)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.611	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50. FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

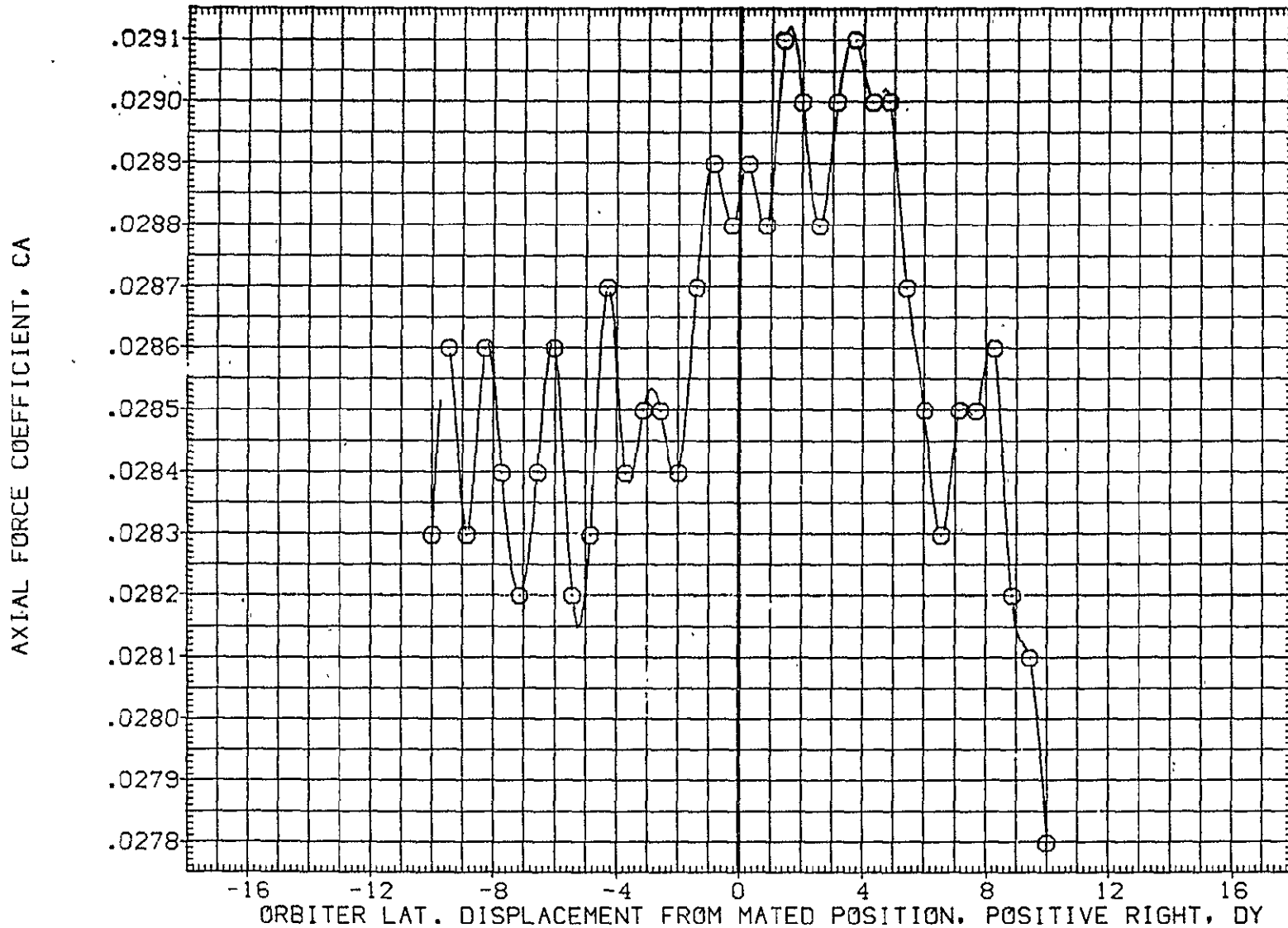


FIG. 47 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE056

SYMBOL	MACH	PARAMETRIC VALUES			
○	.611	ALPHAC	2.000	BETAC	.000
		STAB	5.000	ELEVON	5.000
		BDFLAP	.000	DX	.000
		DZ	.000	IORB	6.000
		BETA0	5.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

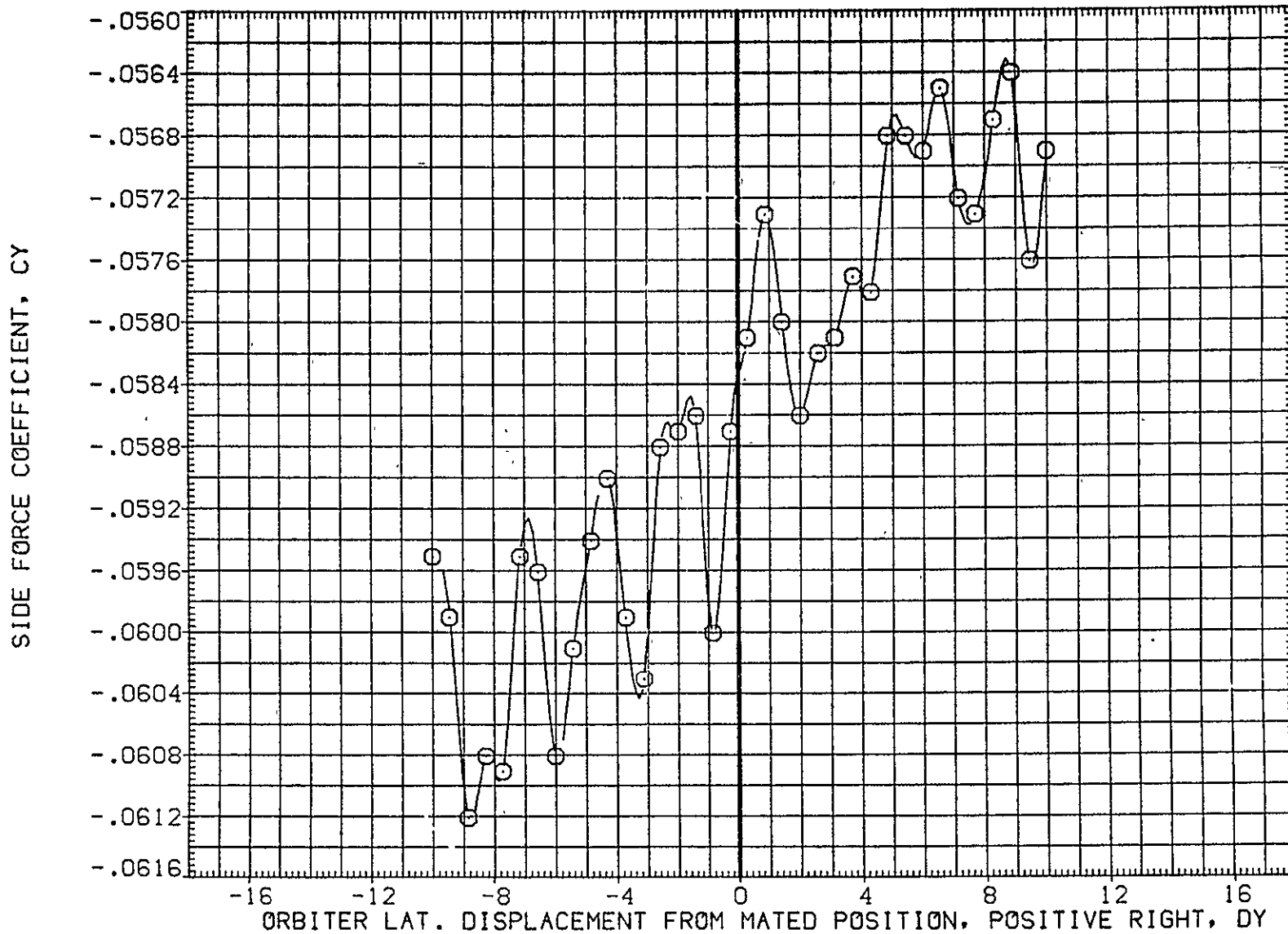


FIG. 47 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE056

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE056)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION	
○	.611	ALPHAC	2.000	BETAC	.000	SREF	2690.0000 SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100 IN.
		BOFLAP	.000	OX	.000	BREF	936.6600 IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000 IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000 IN. Y0
						ZMRP	375.0000 IN. Z0
						SCALE	.0125

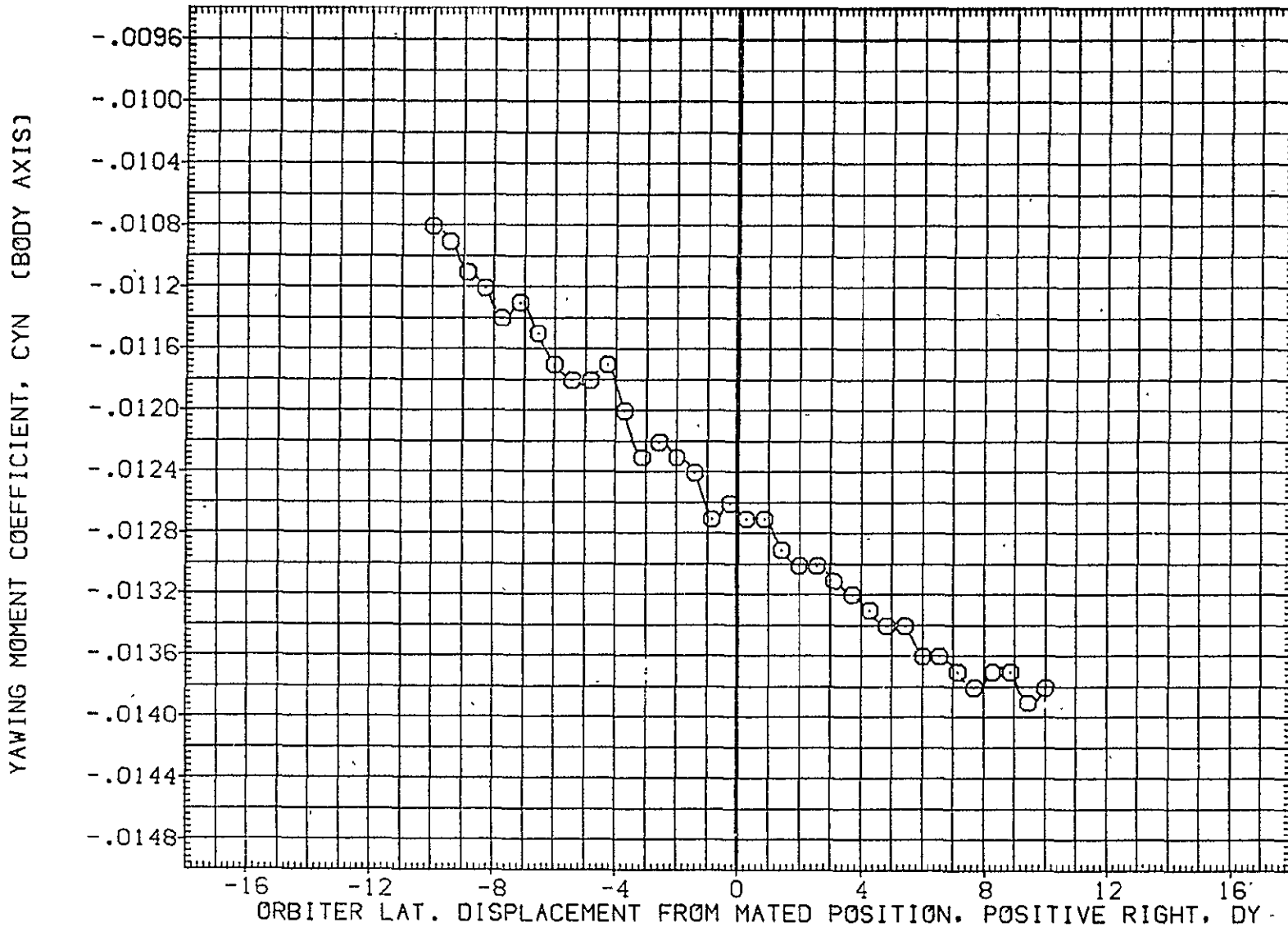


FIG. 47 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE056

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.611	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

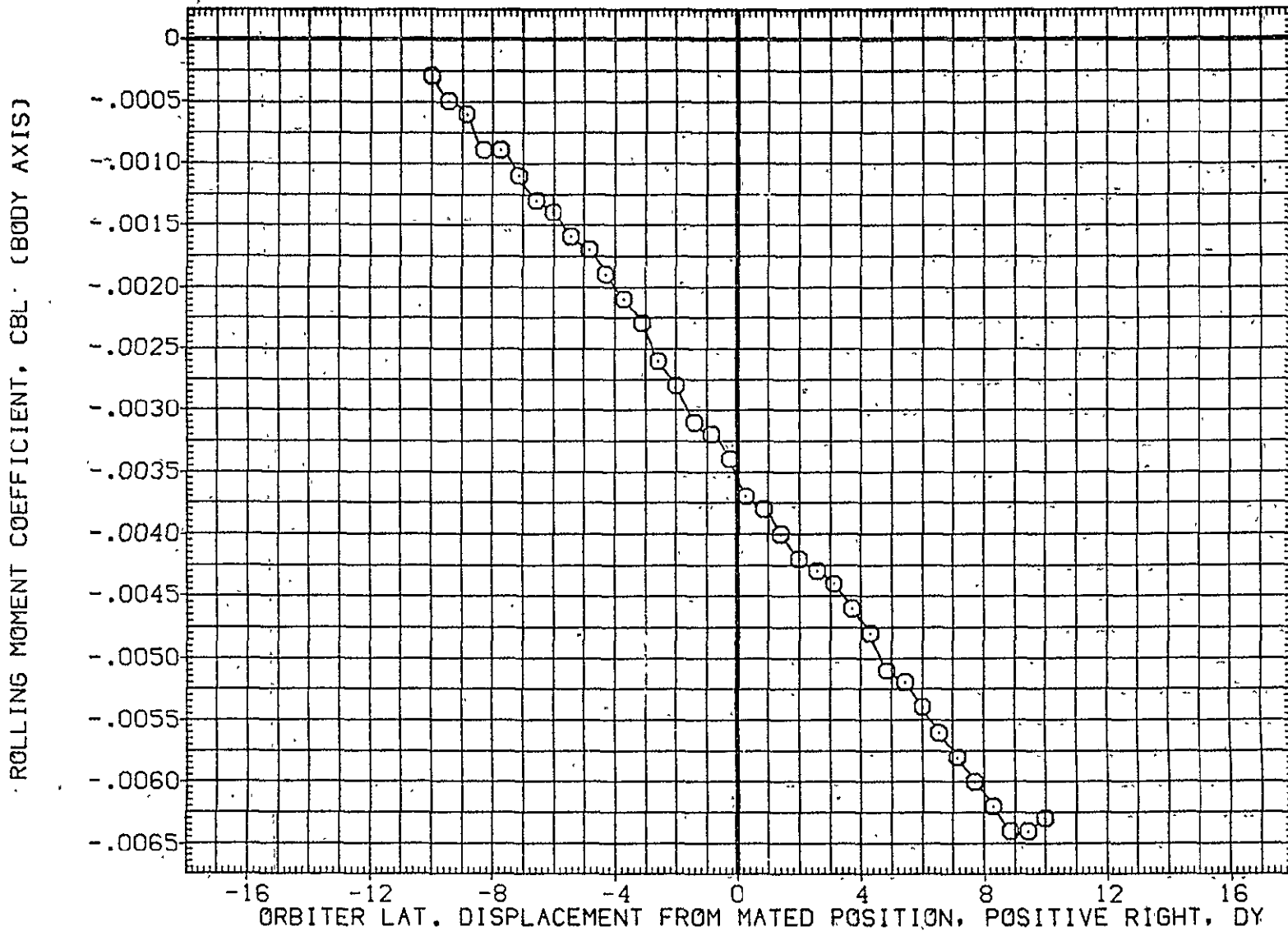


FIG. 47 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE056

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE056)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.611	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

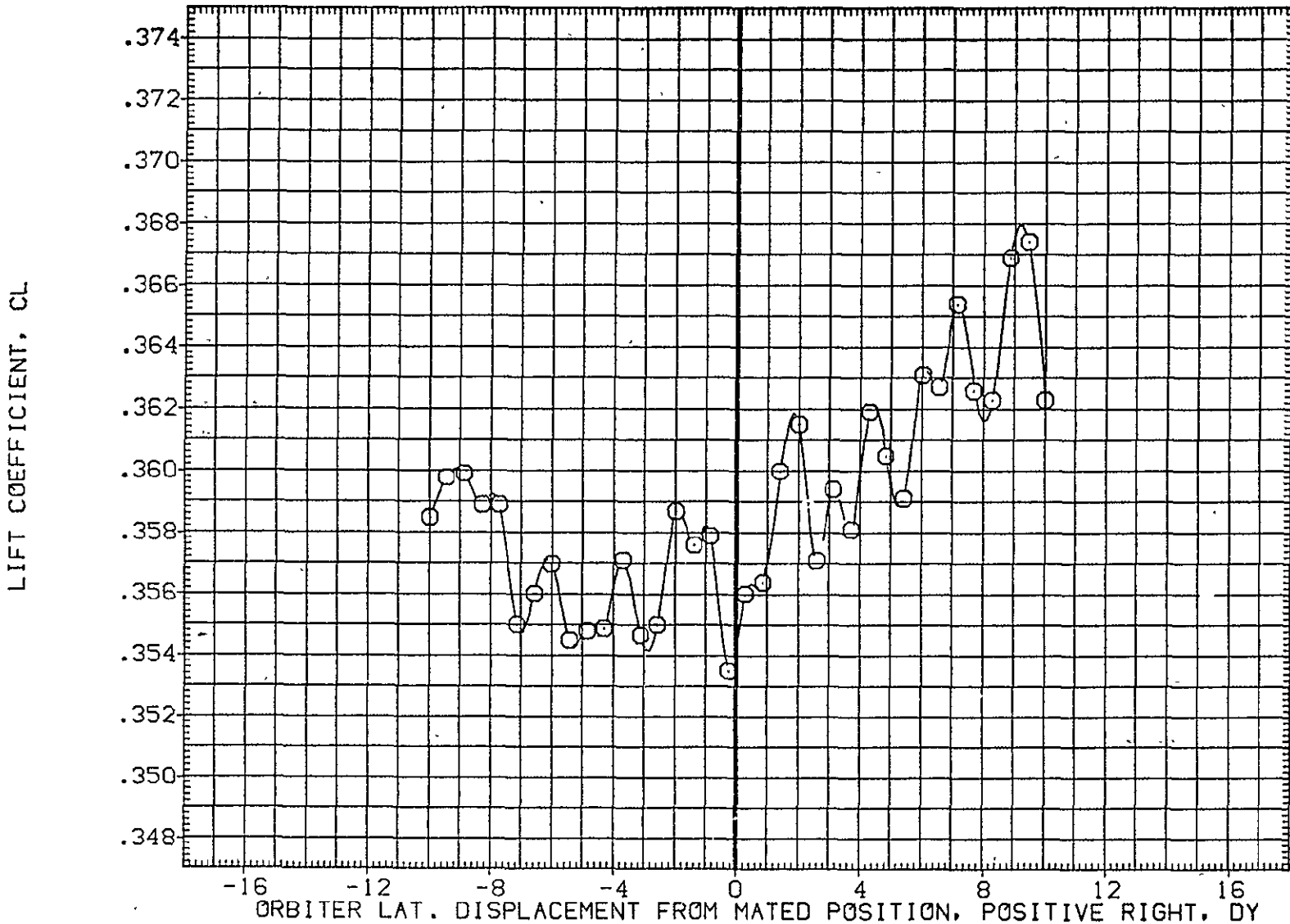


FIG. 47 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE056

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	IN.	SO.FT.
○	.611	2.000	.000	5.000	.000	2690.0000	474.8100	16
		5.000	6.000	.000	.000	936.6800	1109.0000	IN. X0
		.000	6.000	.000	.000	.0000	375.0000	IN. Y0
		5.000	.000	.000	.000	.0125		IN. Z0

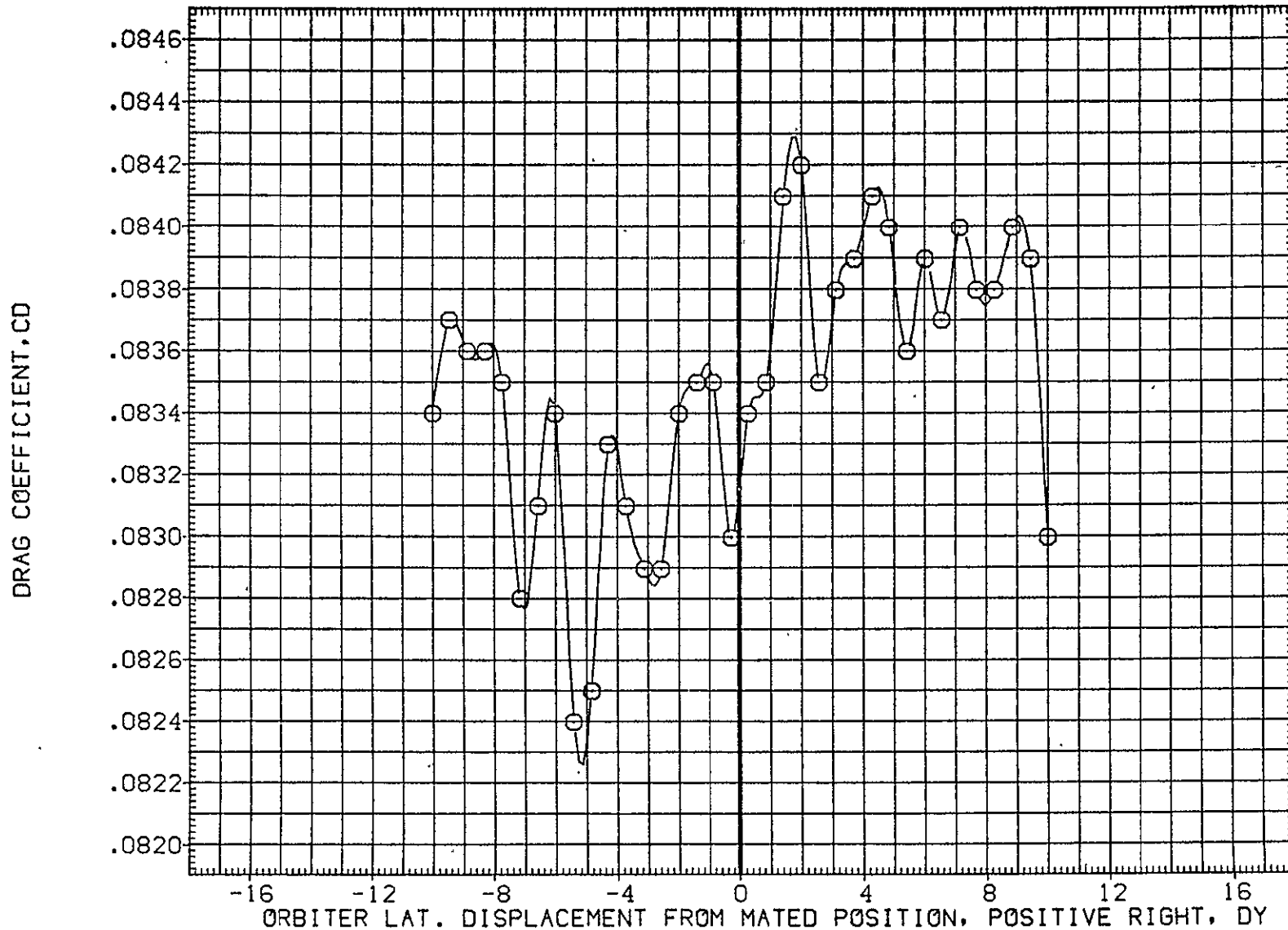


FIG. 47 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE056

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE057)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		OZ	15.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

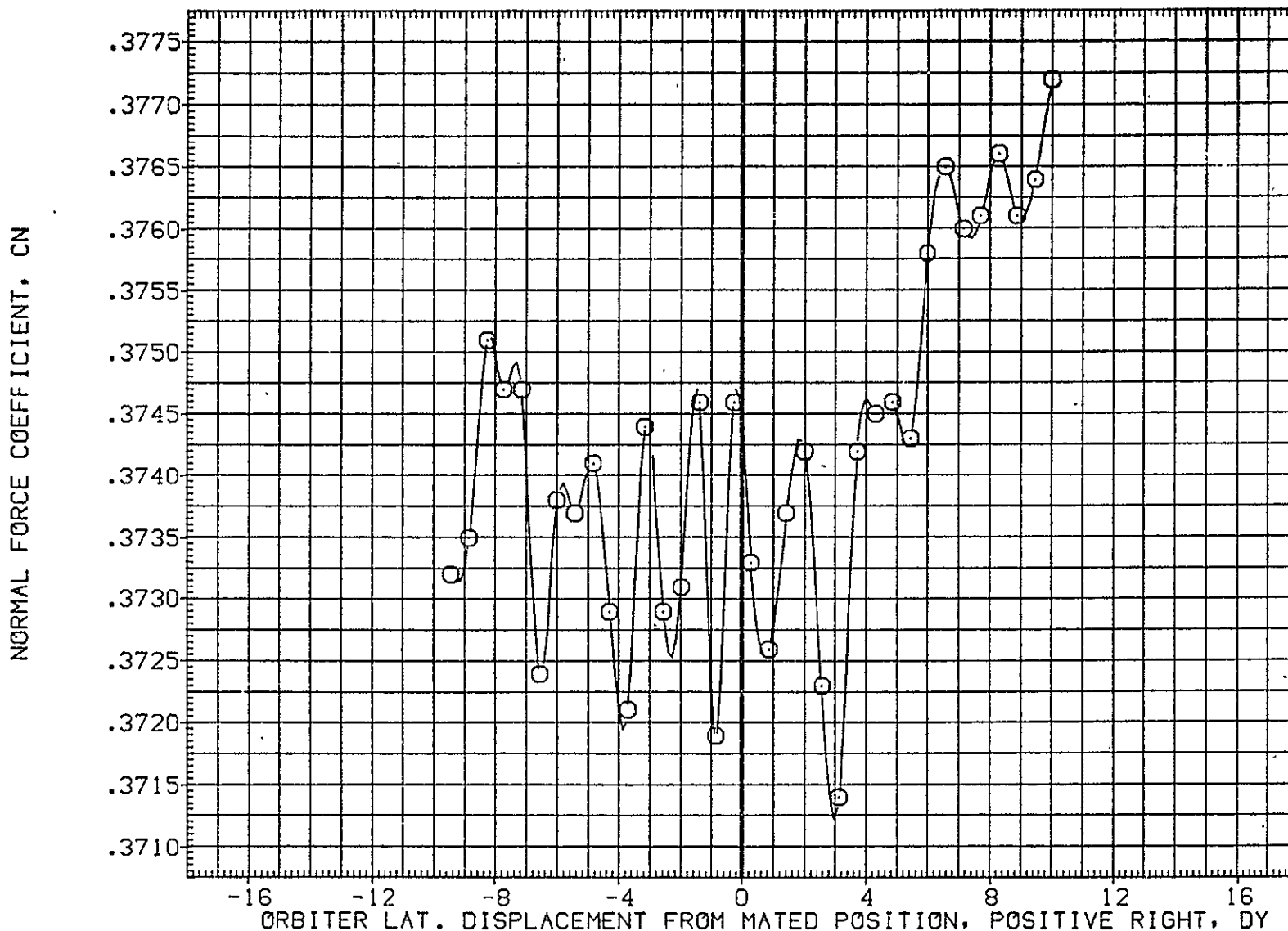


FIG. 48 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE057

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SO, FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

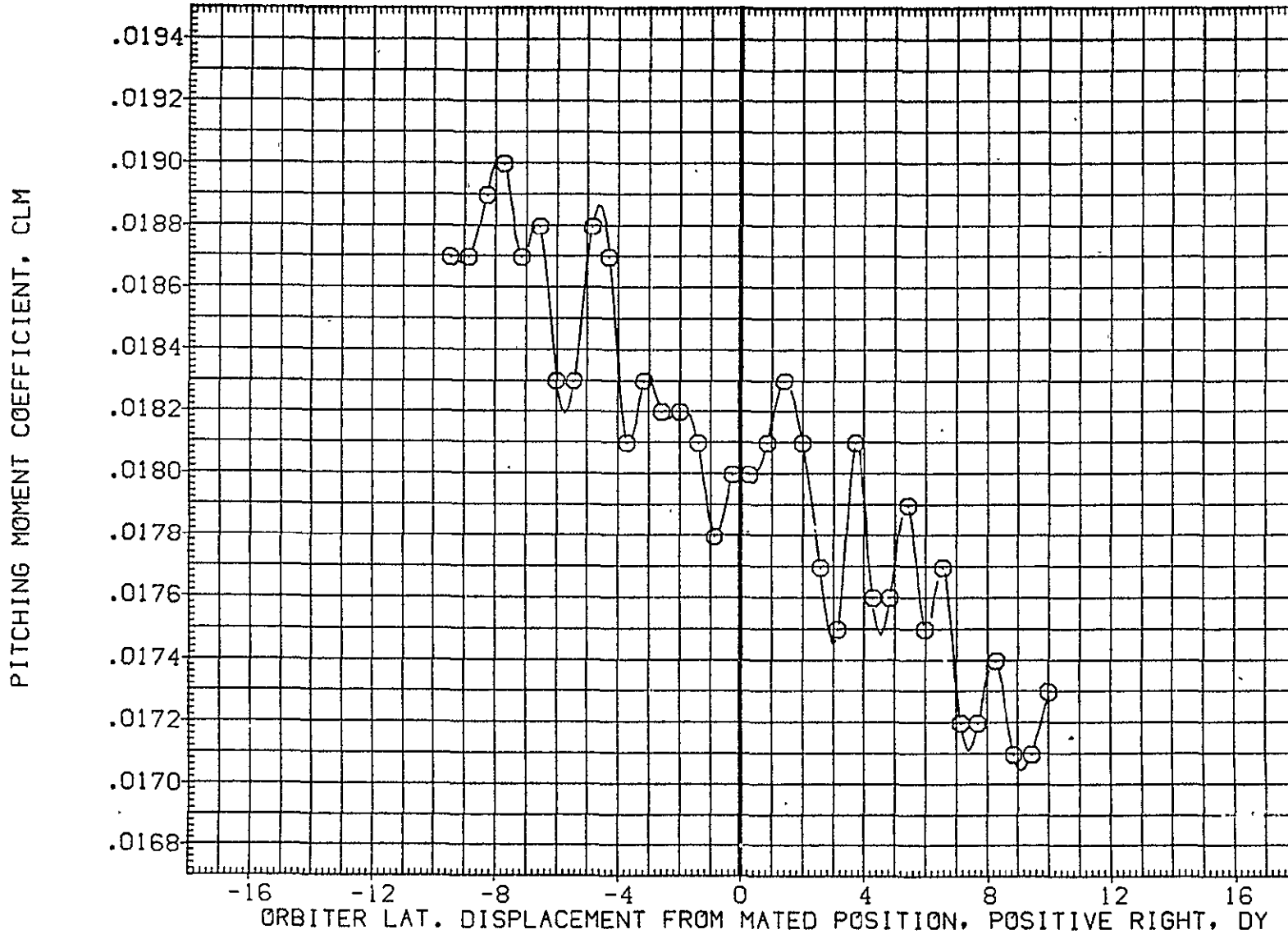


FIG. 48 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE057

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE057)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETAG	5.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

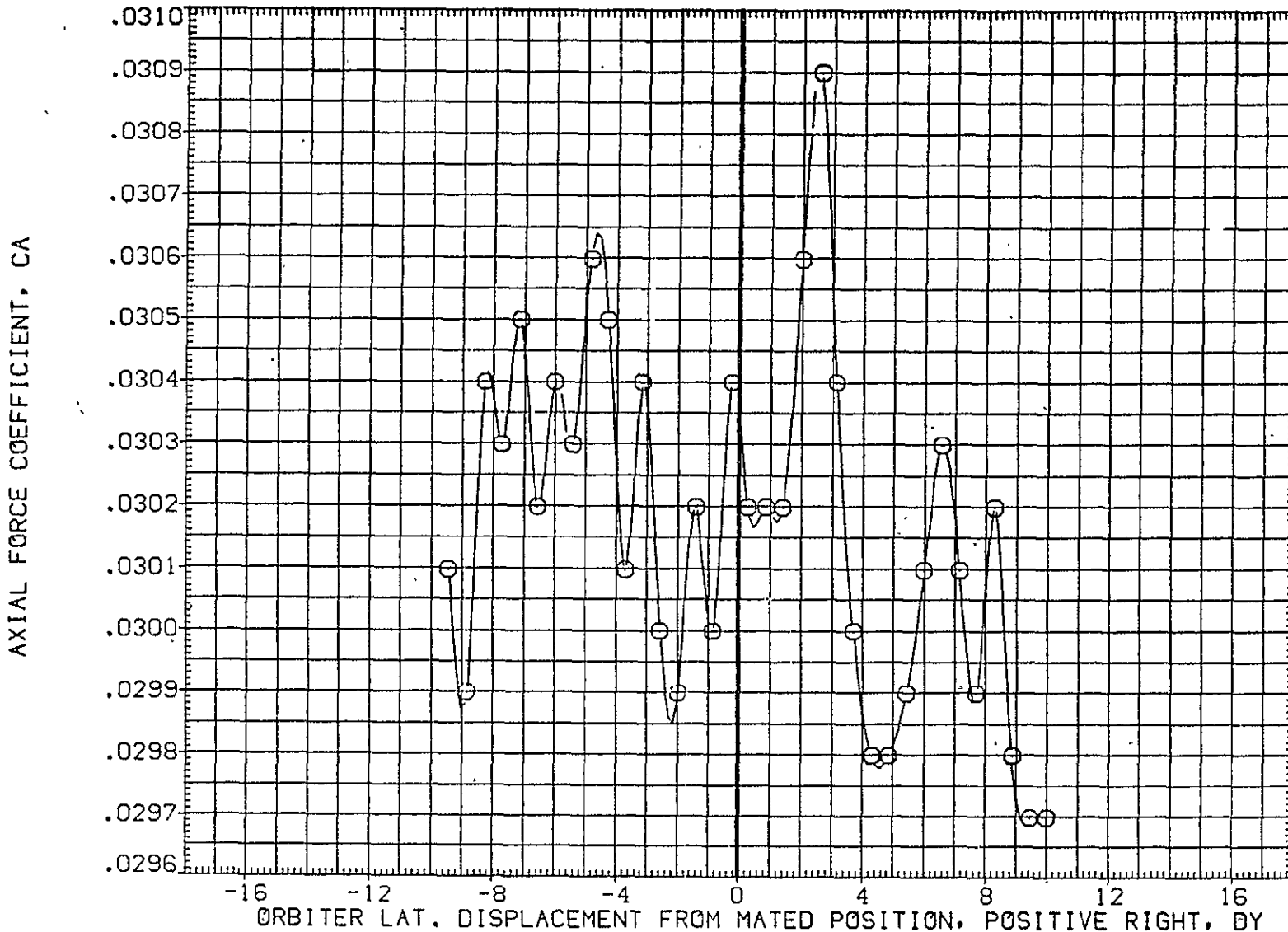


FIG. 48 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE057

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50 .FT..
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		OZ	15.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

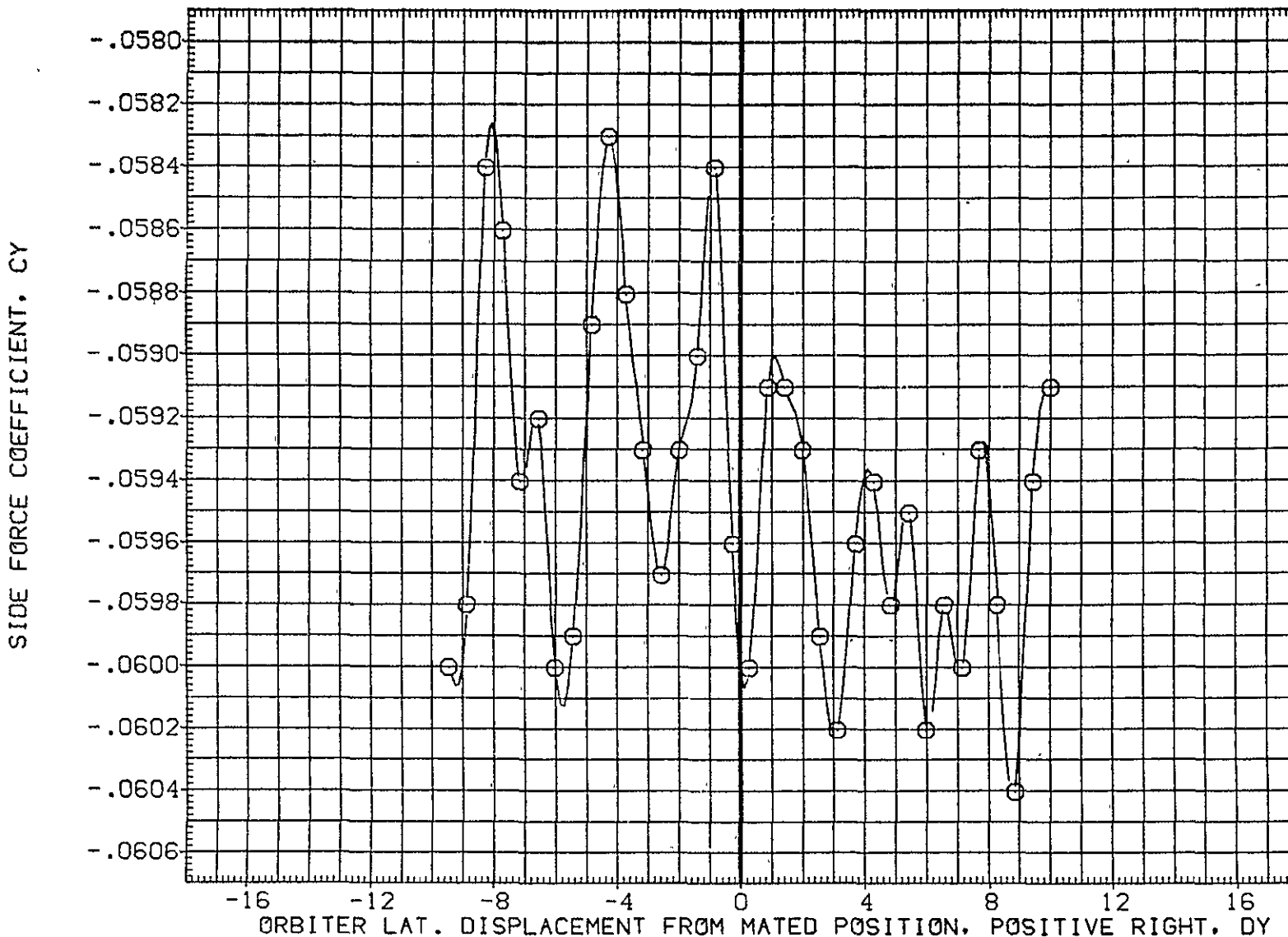


FIG. 48 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE057

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE057)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.609	ALPHAC	2.000	BETAC	.000
		STAB	5.000	ELEVON	5.000
		BDFLAP	.000	DX	.000
		OZ	15.000	IORB	6.000
		BETA0	5.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

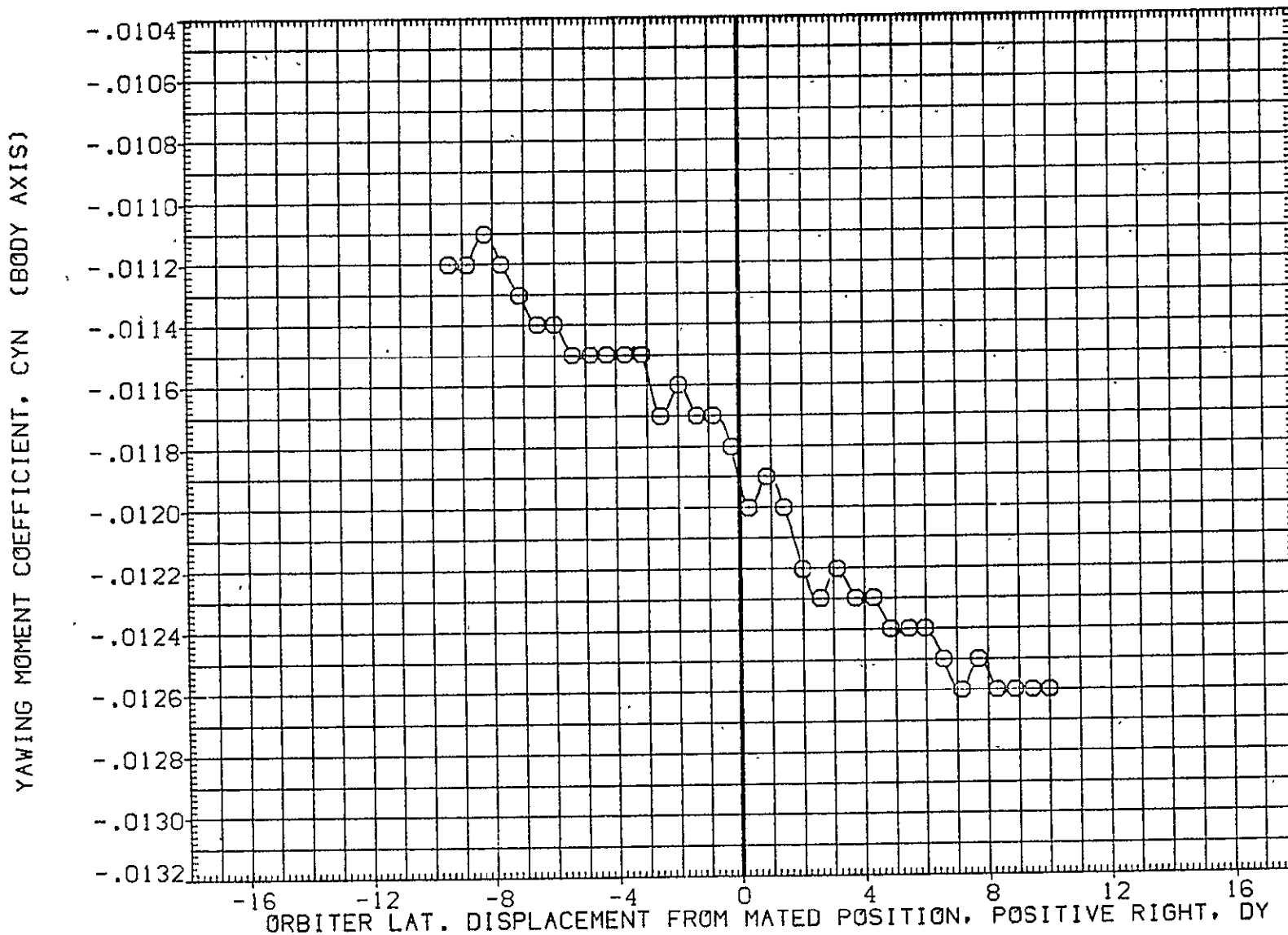


FIG. 48 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE057

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	.BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BOFLAP	.000	DX	.000	BREF	936.6800	IN.
		.DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

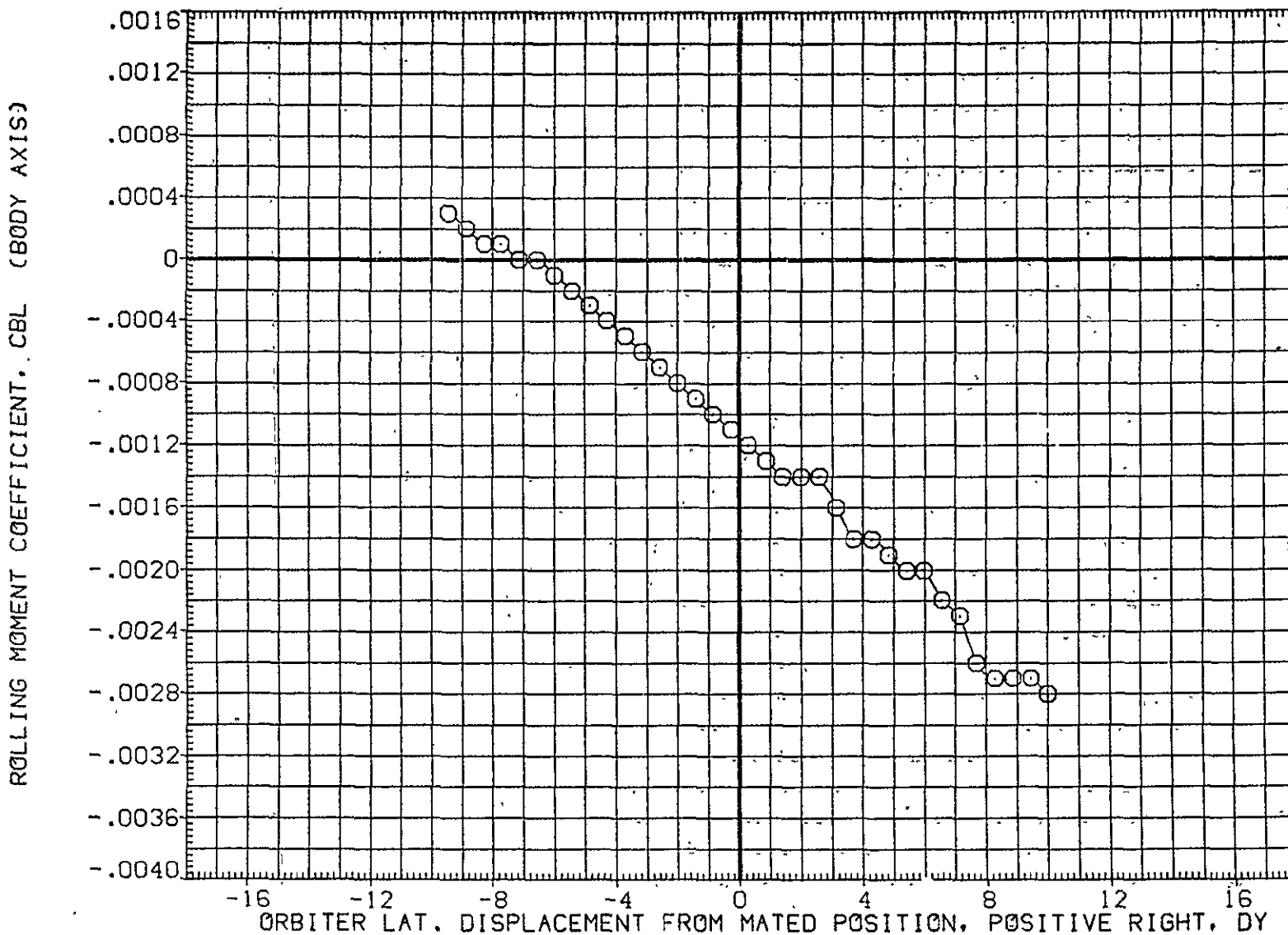


FIG. 48 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE057

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE057)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

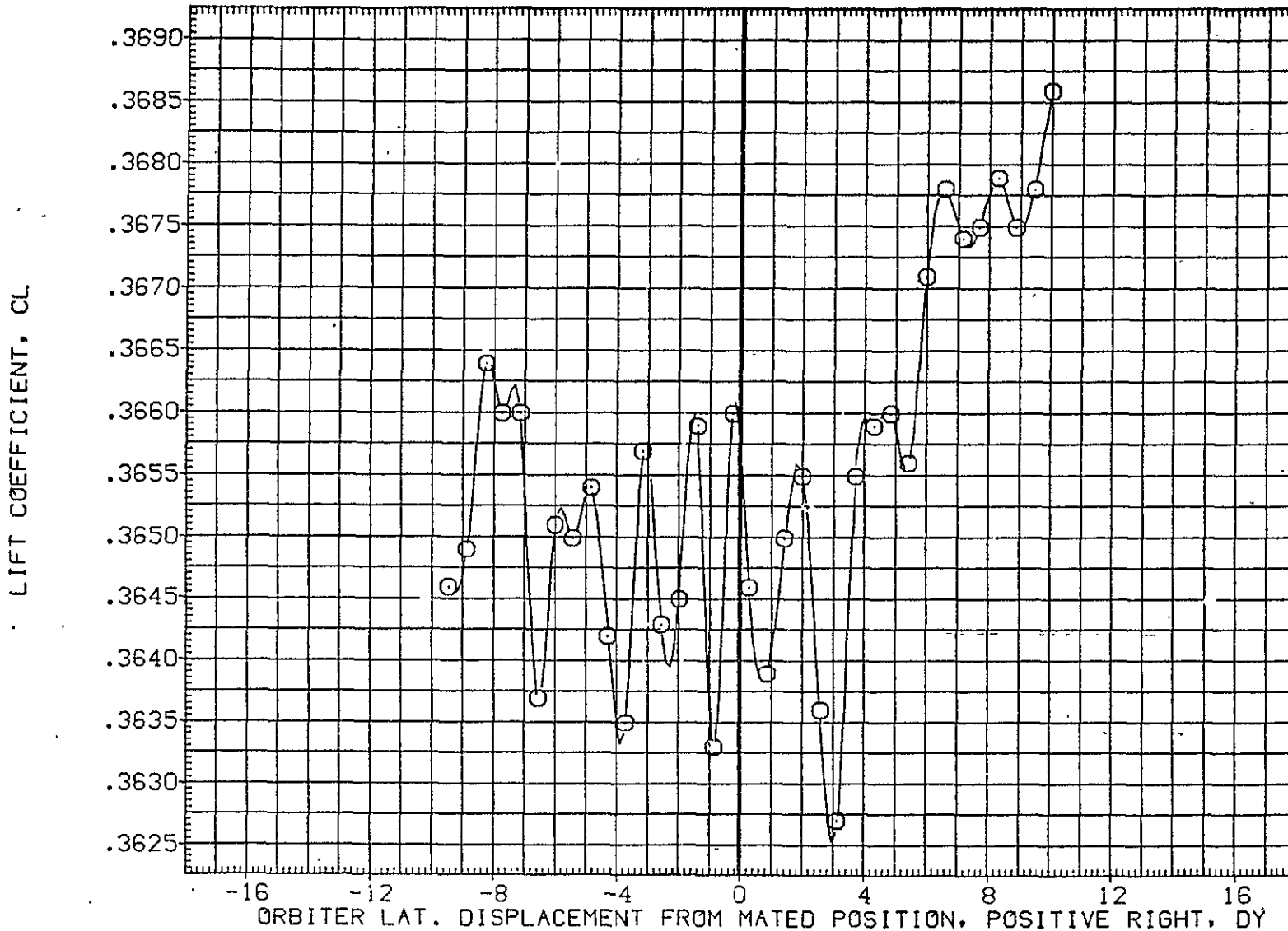


FIG. 48 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE057

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		TAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BOFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

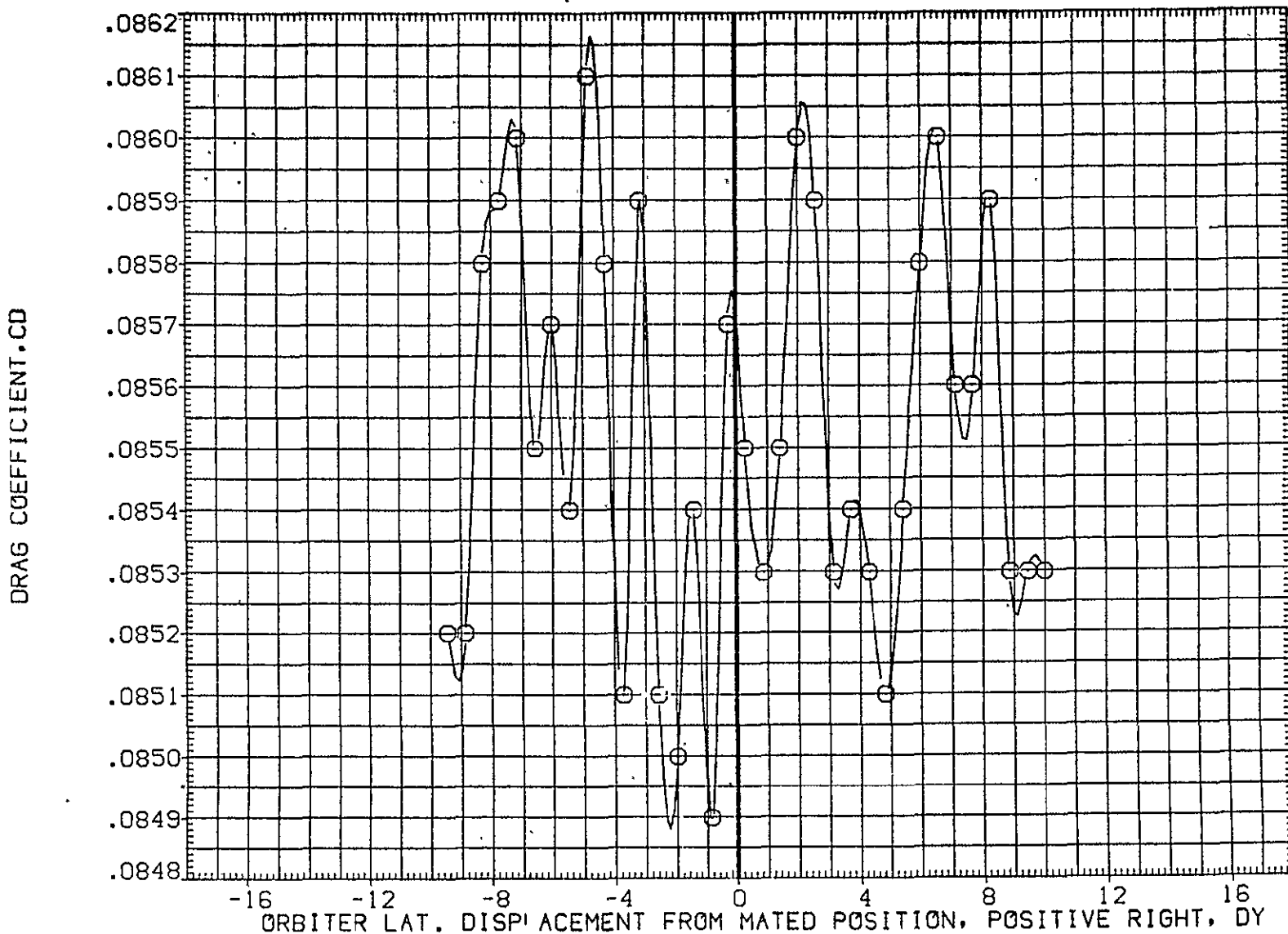


FIG. 48 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE057

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE058)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.607	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

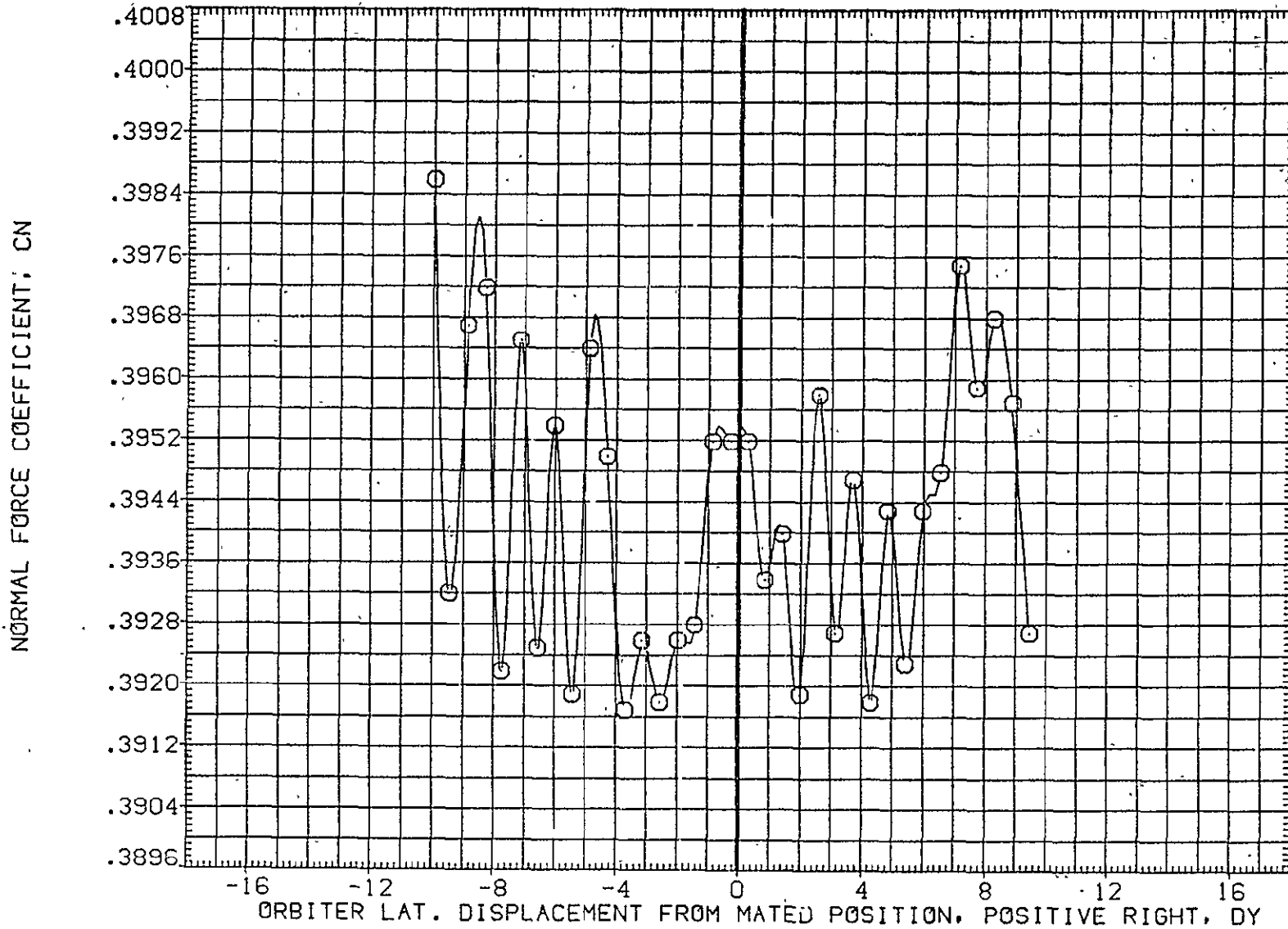


FIG. 49 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE058

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.607	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	OX	.000	BREF	936.6800	IN.
		OZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

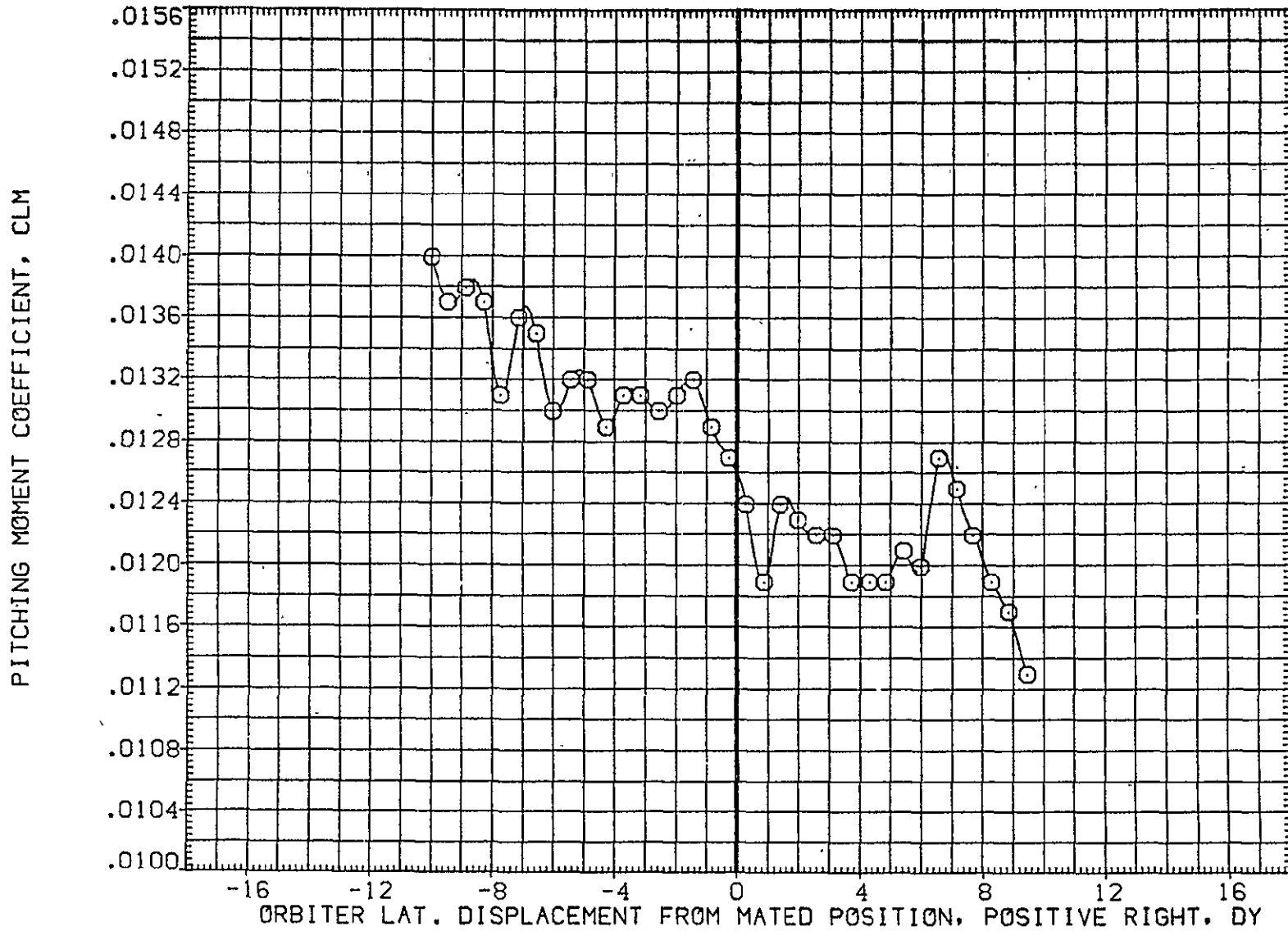


FIG. 49 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE058

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE058)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.607	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN
		BDFLAP	.000	DX	.000	BREF	936.6800	IN
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN
						ZMRP	375.0000	IN
						SCALE	.0125	

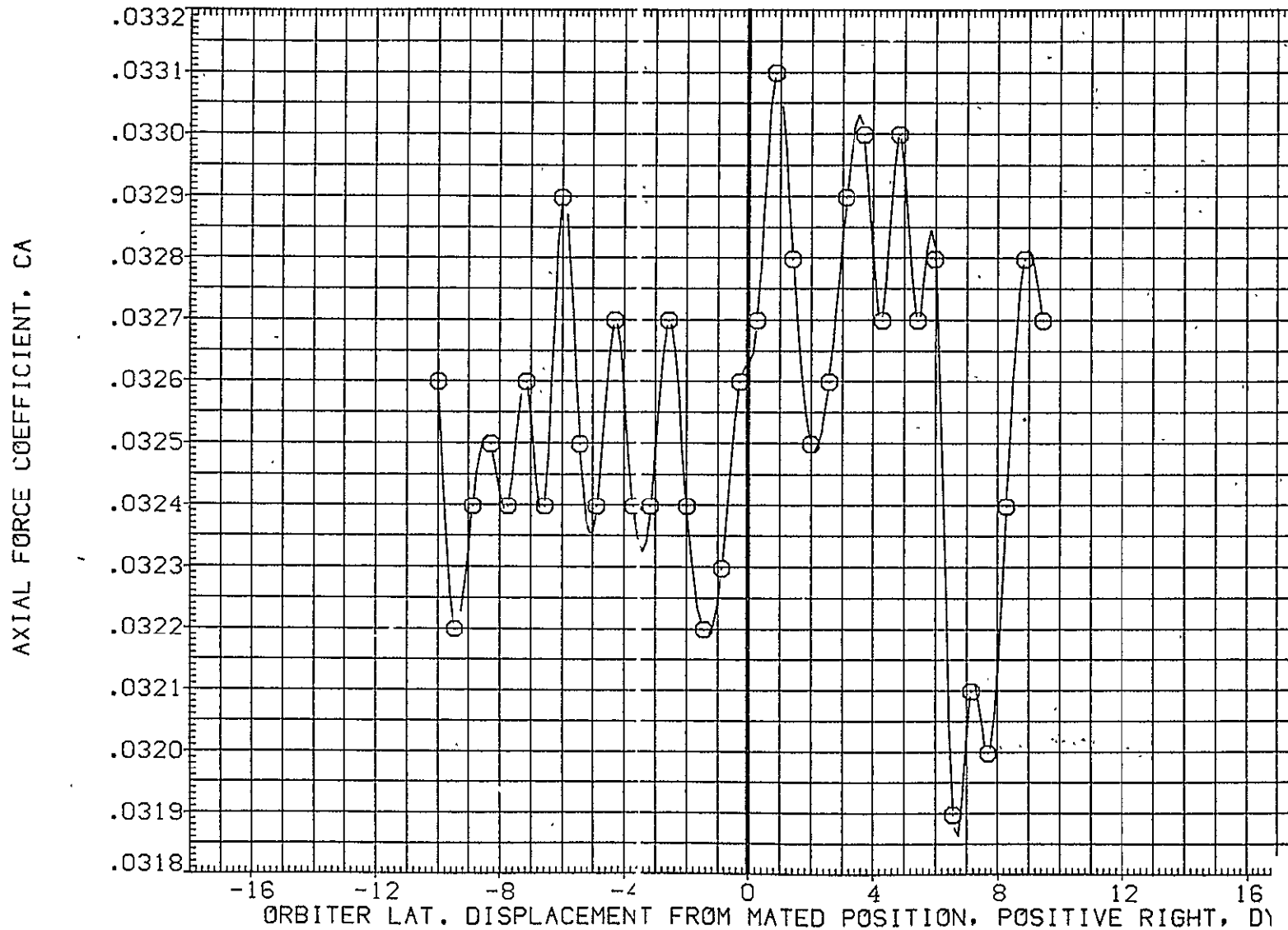


FIG. 49 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE058

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.607	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

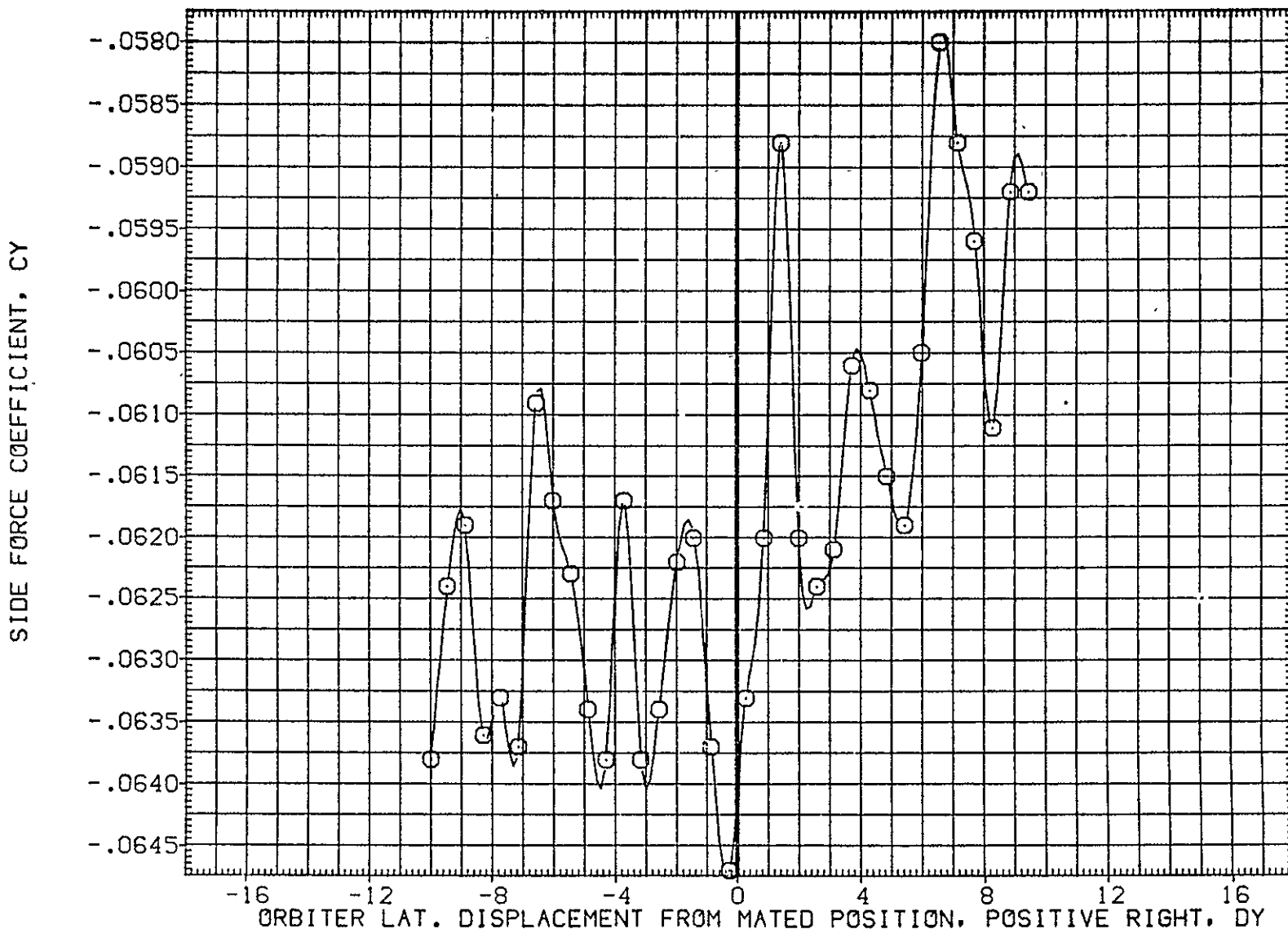


FIG. 49 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE058

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE058)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.607	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	OX	.000	BREF	936.6800	IN.
		OZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

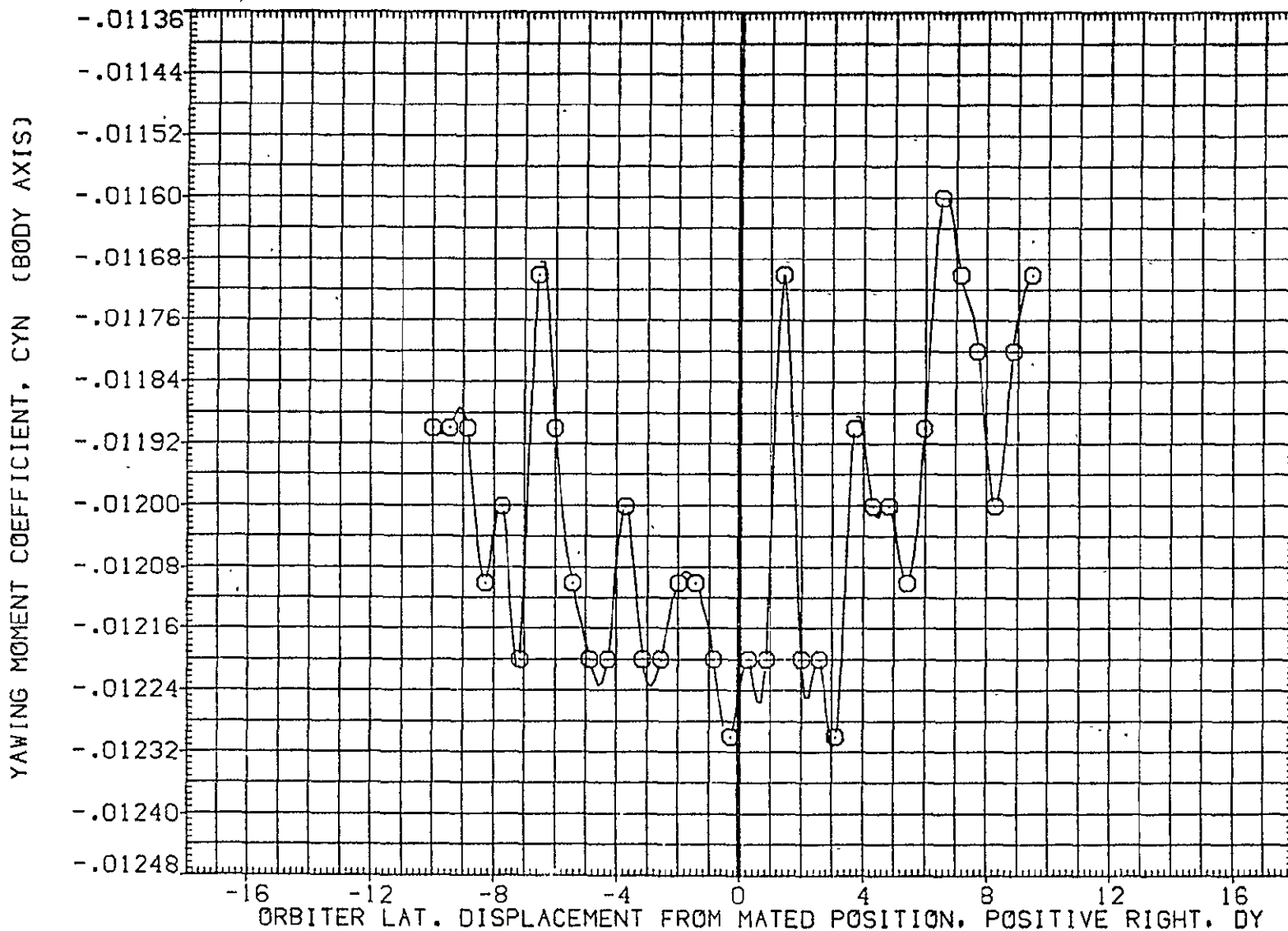


FIG. 49 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE058

SYMBOL	MACH	PARAMETRIC VALUES			
○	.607	ALPHAC	2.000	BETAC	.000
		STAB	5.000	ELEVON	5.000
		BDFLAP	.000	DX	.000
		OZ	60.000	IORB	6.000
		BETA0	5.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

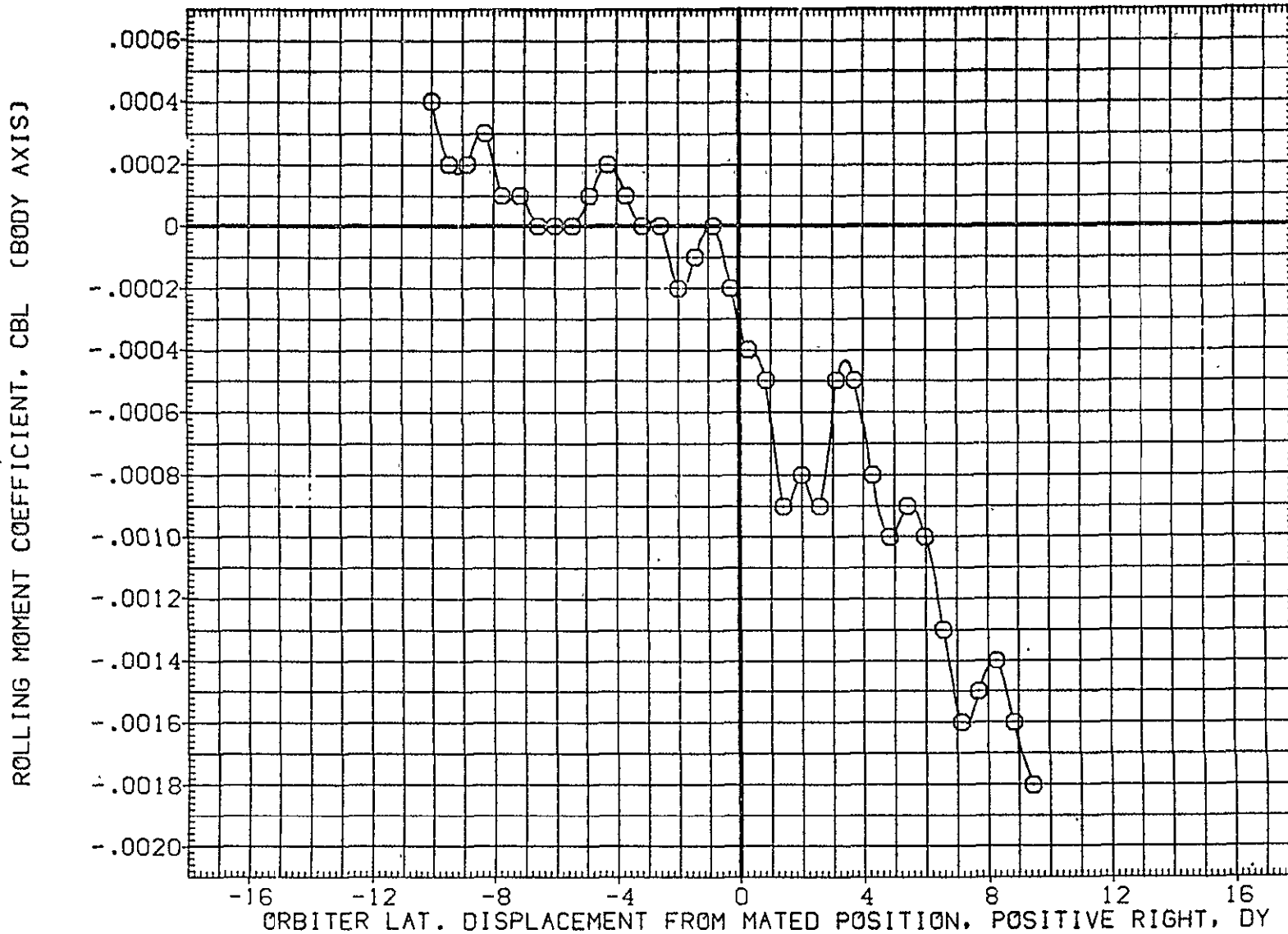


FIG. 49 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE058

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE058)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.607	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	60.000	IGRB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

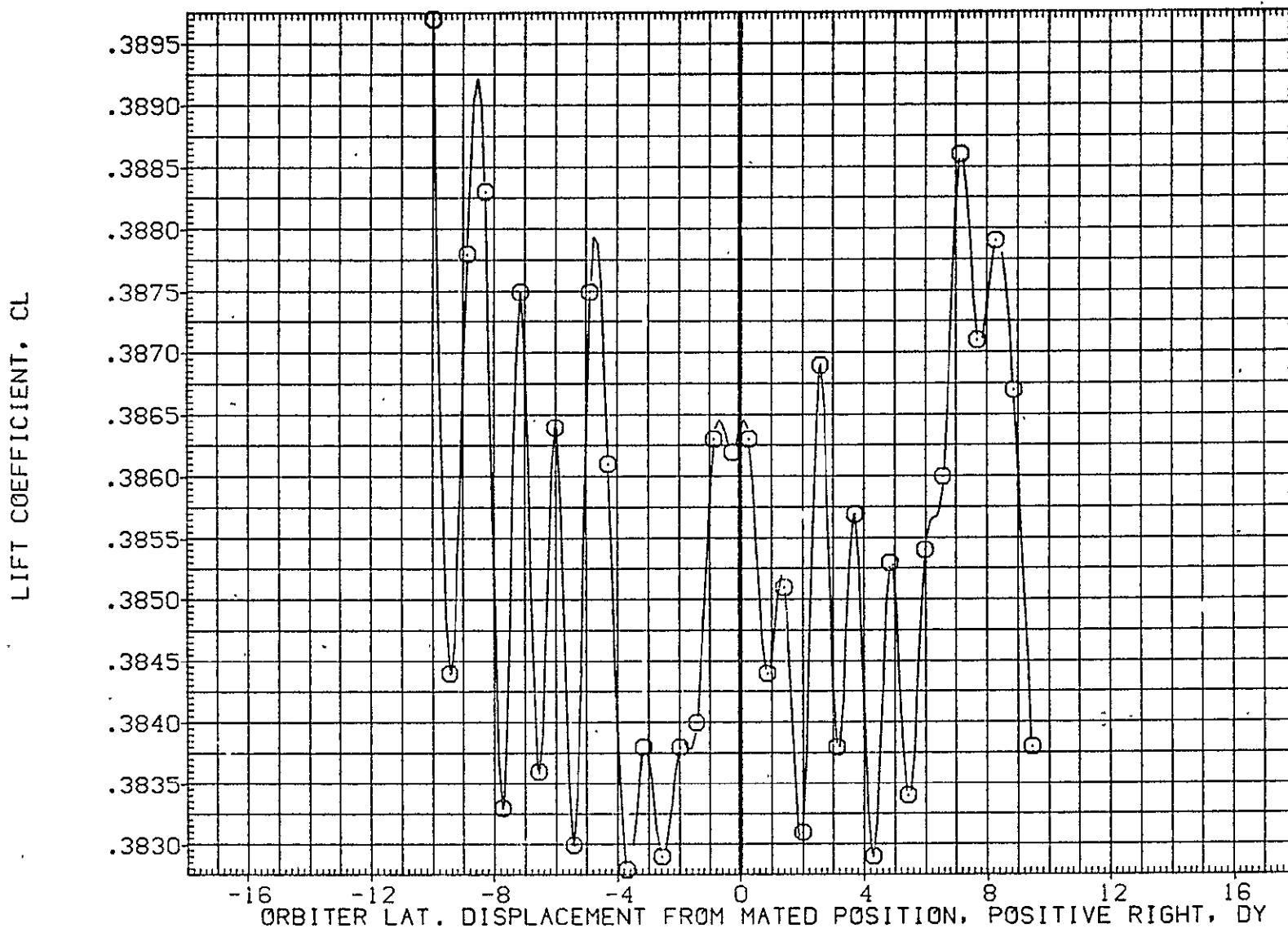


FIG. 49 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IGRB=6, BETAC=0, BETA0=5, AFE058

SYMBOL
○

MACH
.607

PARAMETRIC VALUES			
ALPHAC	2.000	BETAC	.000
STAB	5.000	ELEVON	5.000
BDFLAP	.000	DX	.000
DZ	60.000	IORB	6.000
BETA0	5.000	RUDDER	.000

REFERENCE INFORMATION

SREF	2690.0000	SO:FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0125	

DRAG COEFFICIENT, CD

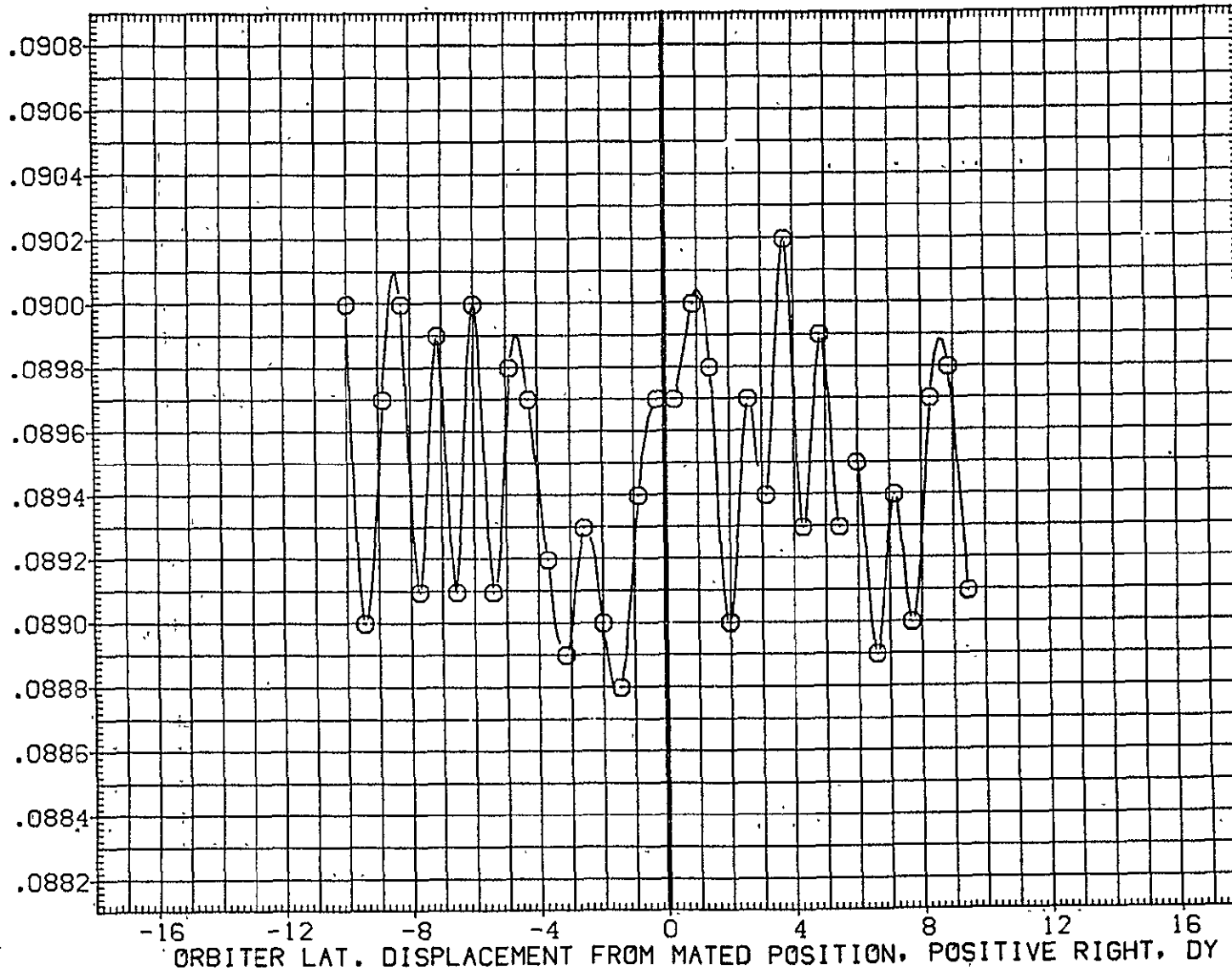


FIG. 49 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE058

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE059)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BOFLAP	.000	DX	10.000	BREF	936.6800	IN.
		D7	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

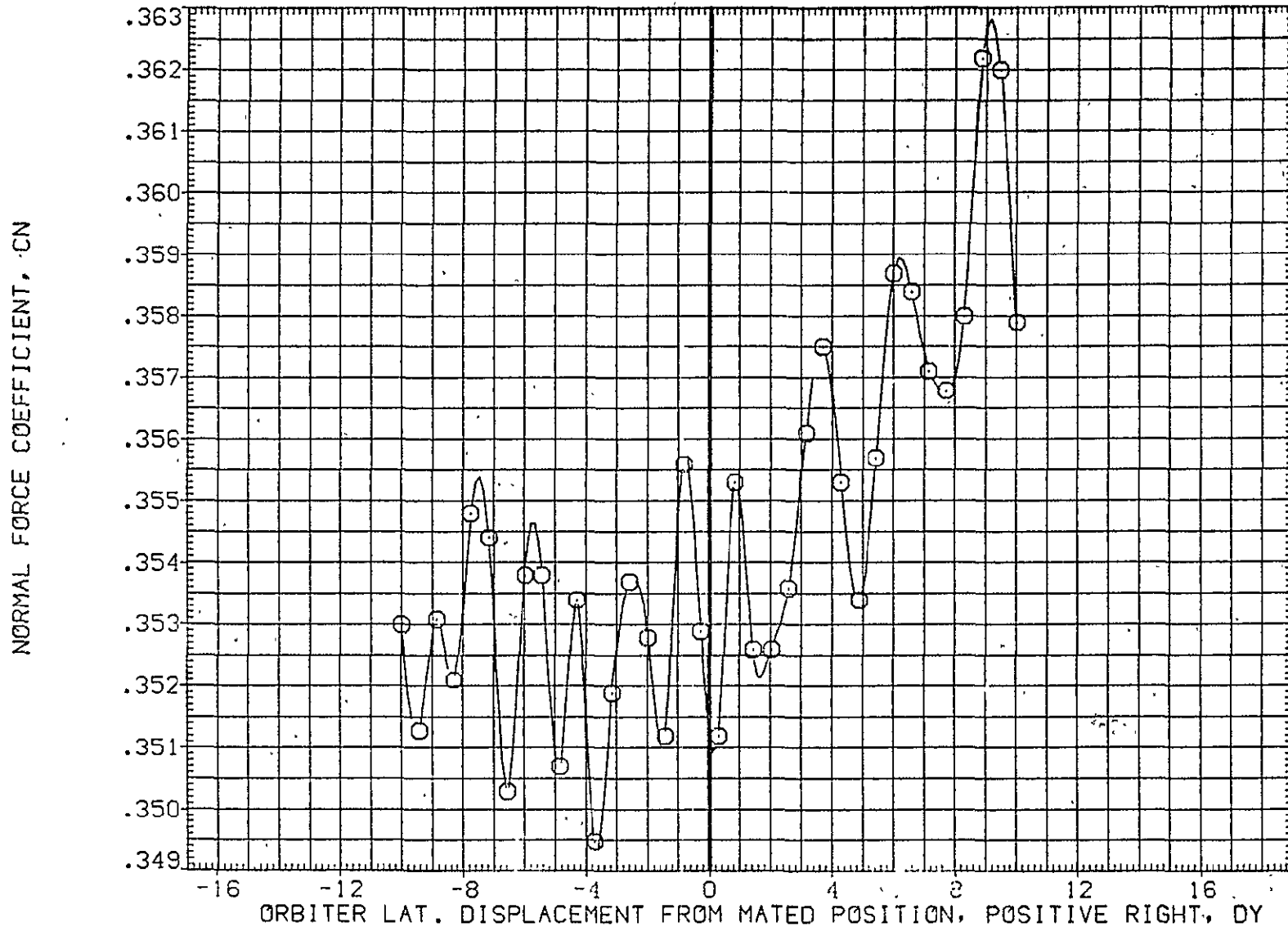


FIG. 50 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE059

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	10.000	BREF	936.6800	IN.
		OZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

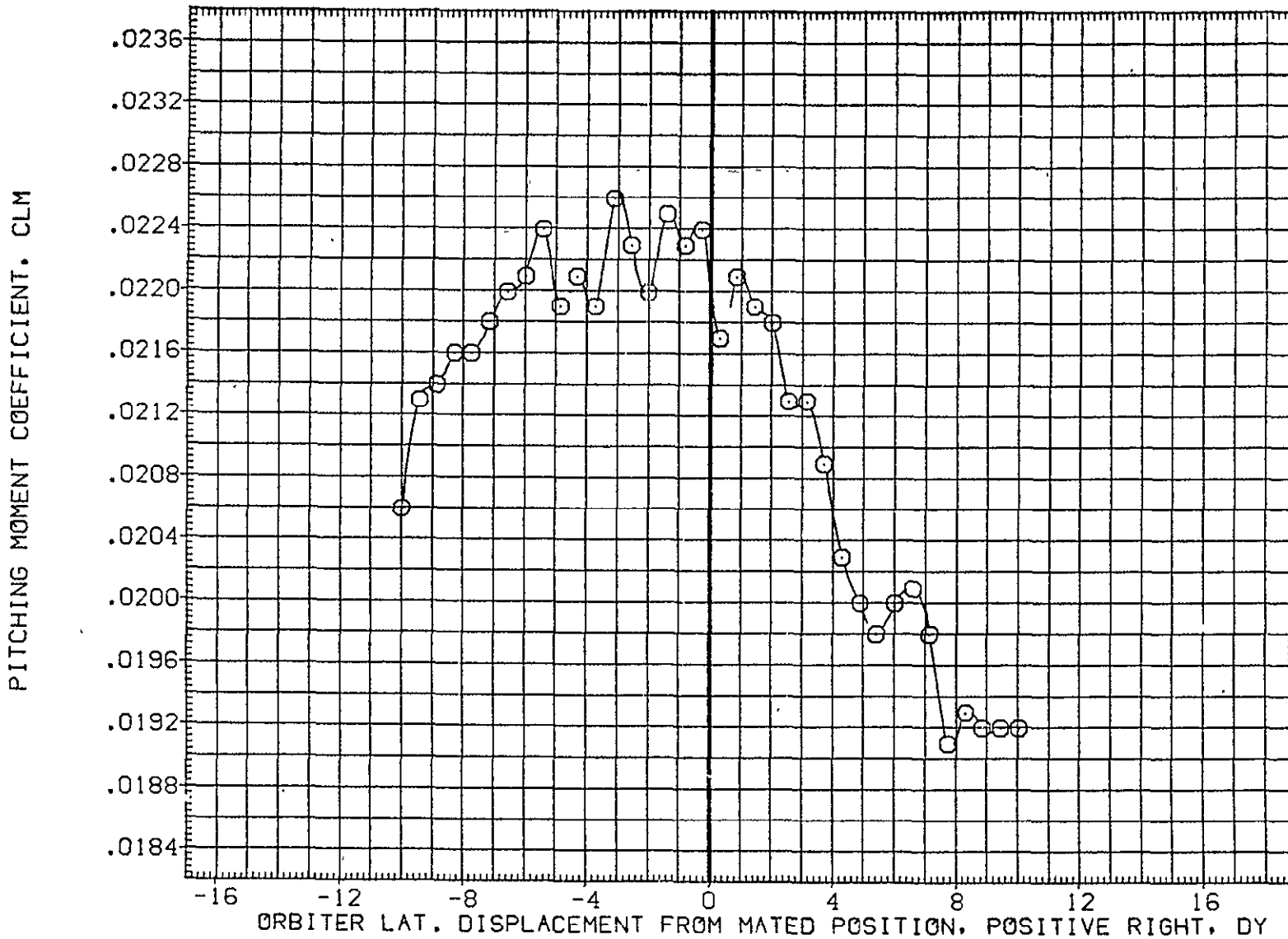


FIG. 50 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE059

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE059)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	10.000	BREF	936.6800	IN.
		OZ	.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

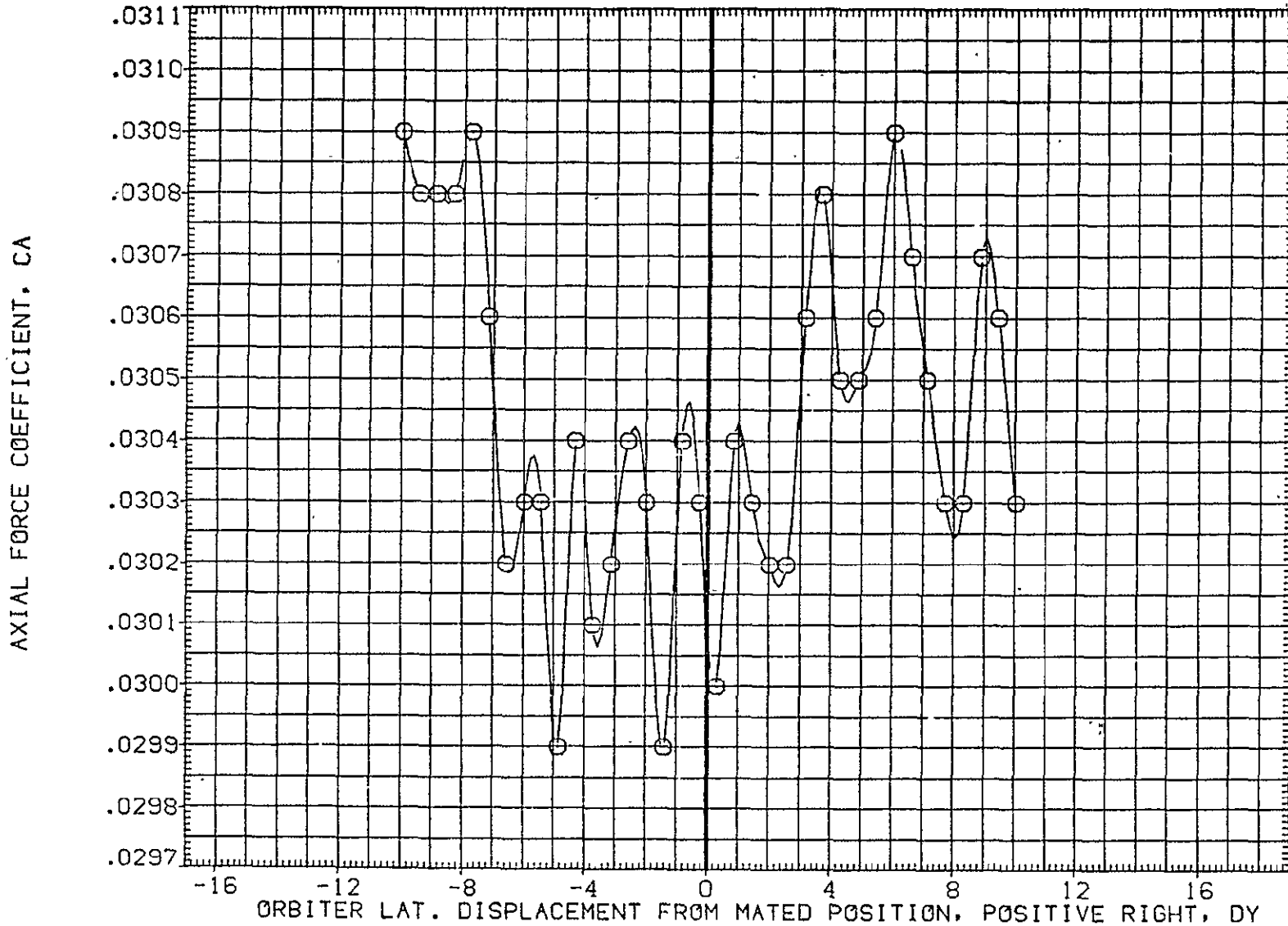


FIG. 50 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE059

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	IN.	SO.FT.
○	.603	2.000	.000	5.000	10.000	2690.0000	IN.	--
		BDFLAP	0Z	IORB	RUDDER	LREF	IN.	
		.000	.000	6.000	.000	474.8100	IN.	
		BETA0	.000	.000		936.6800	IN.	
						1109.0000	IN.	X0
						YMRP	IN.	Y0
						ZMRP	IN.	Z0
						SCALE		
						.0125		

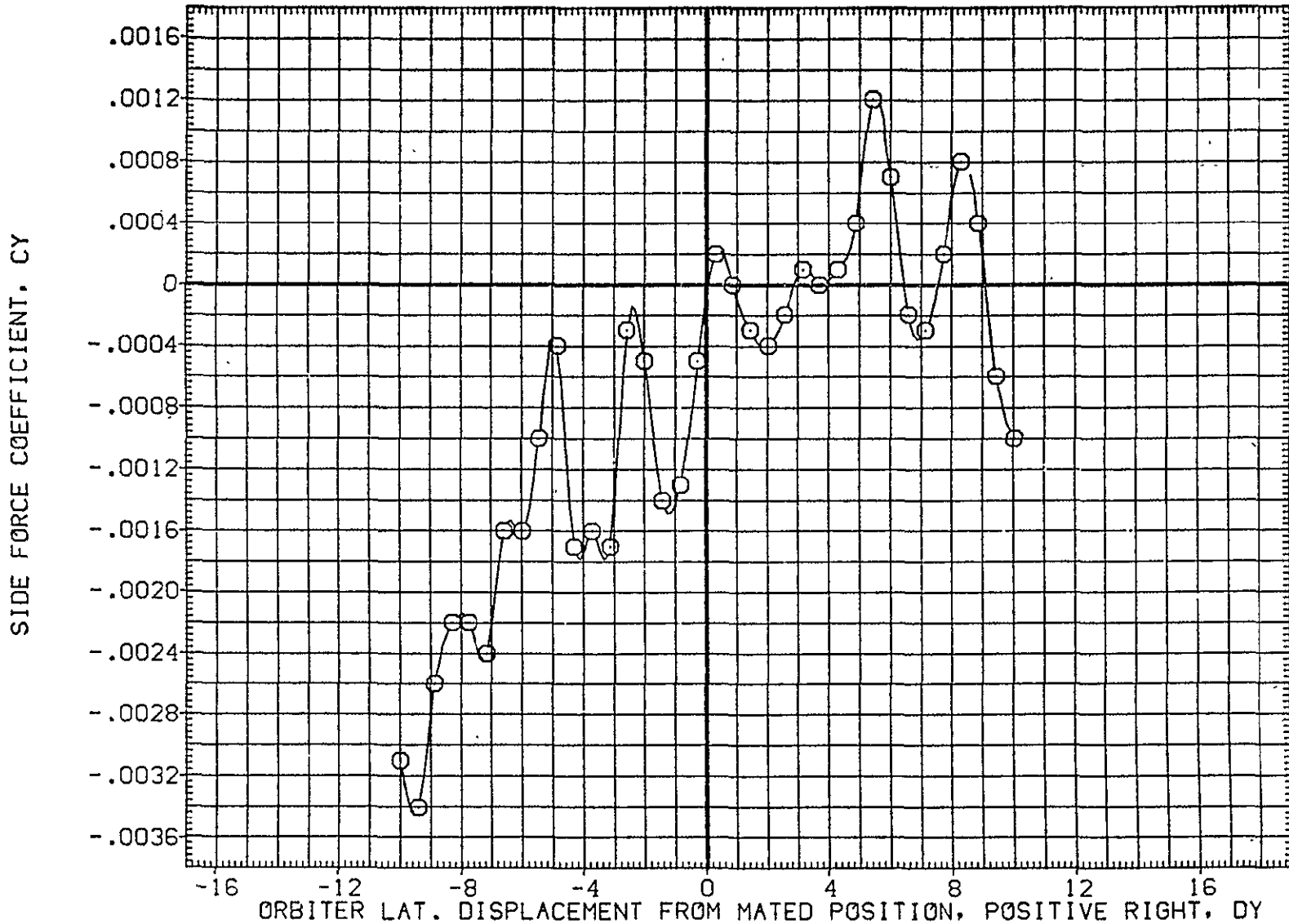


FIG. 50 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE059

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE059)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	10.000	BREF	936.6900	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

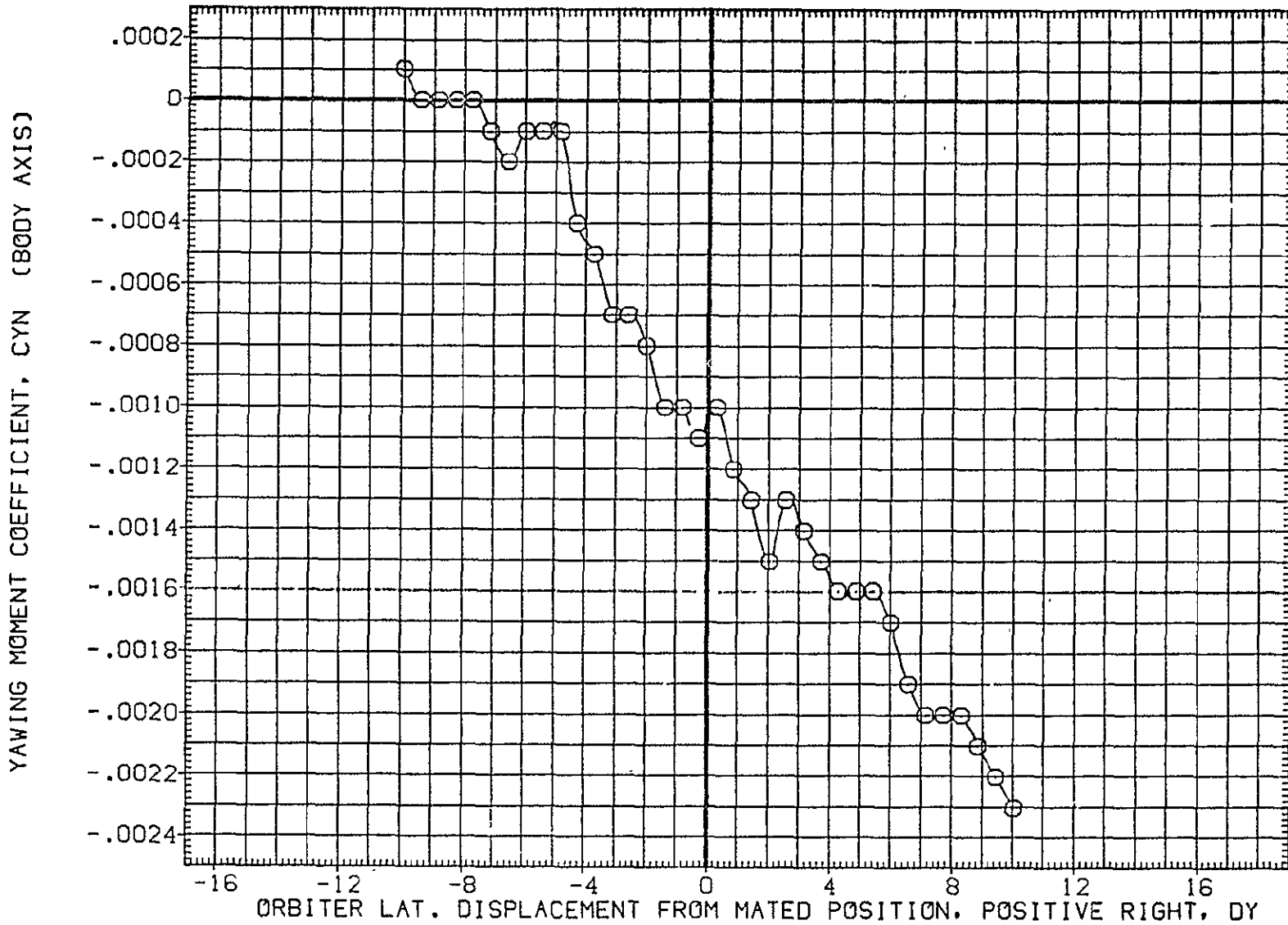


FIG. 50 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE059

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	10.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

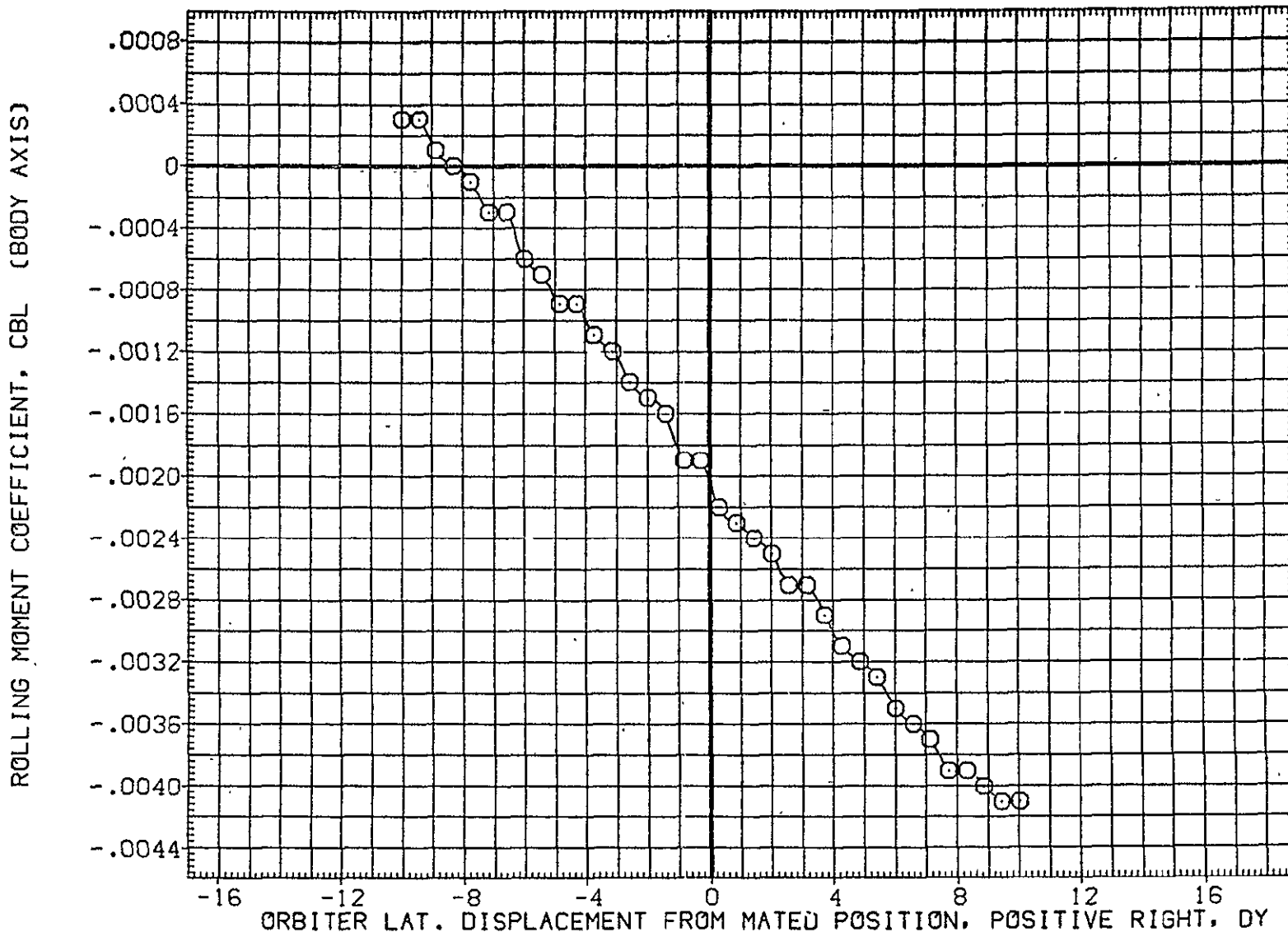


FIG. 50 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE059

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE059)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BOFLAP	.000	DX	10.000	BREF	936.6800	IN.
		OZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

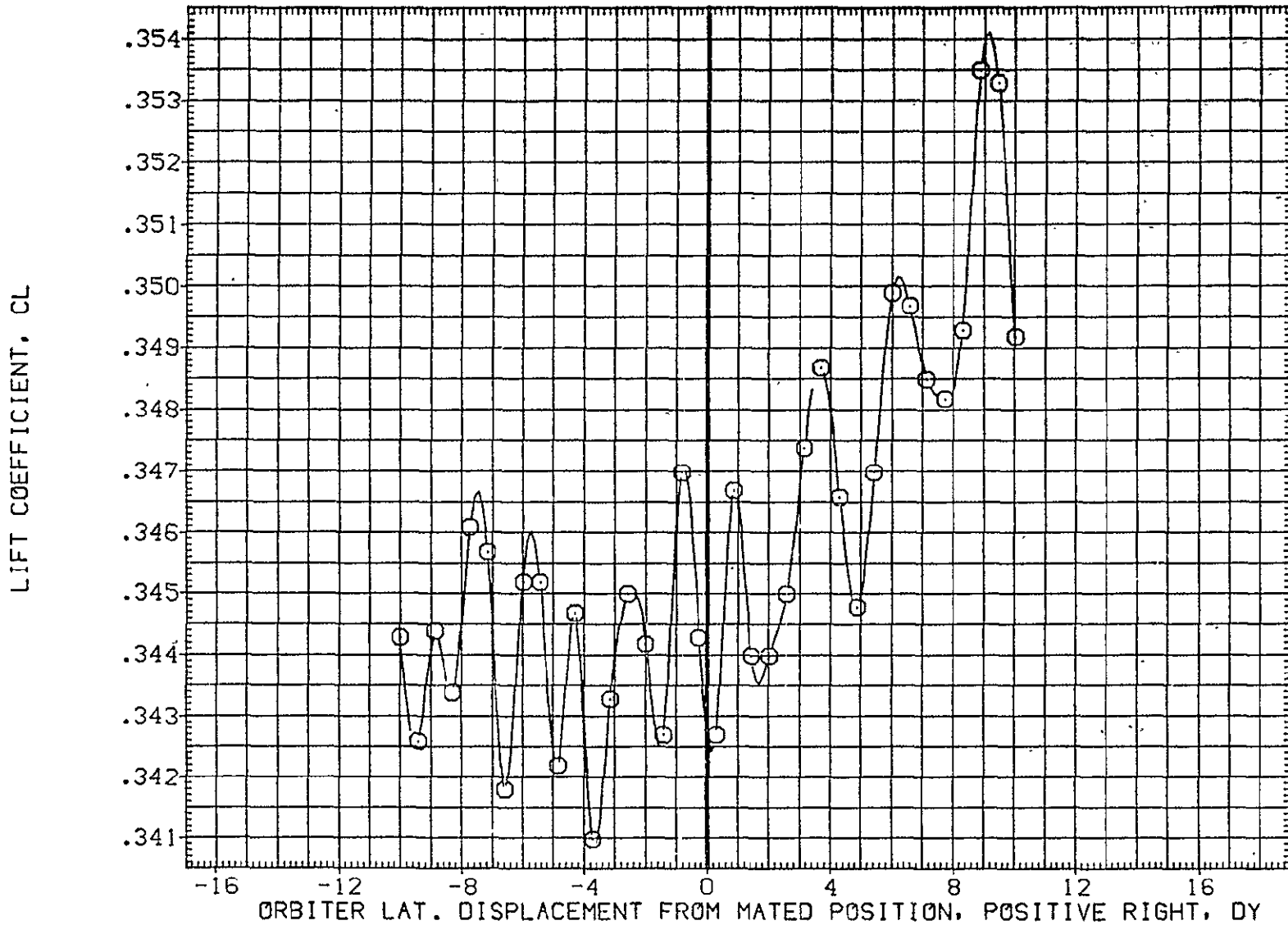


FIG. 50 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE059

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	10.000	BREF	936.6800	IN.
		OZ	.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETAC	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

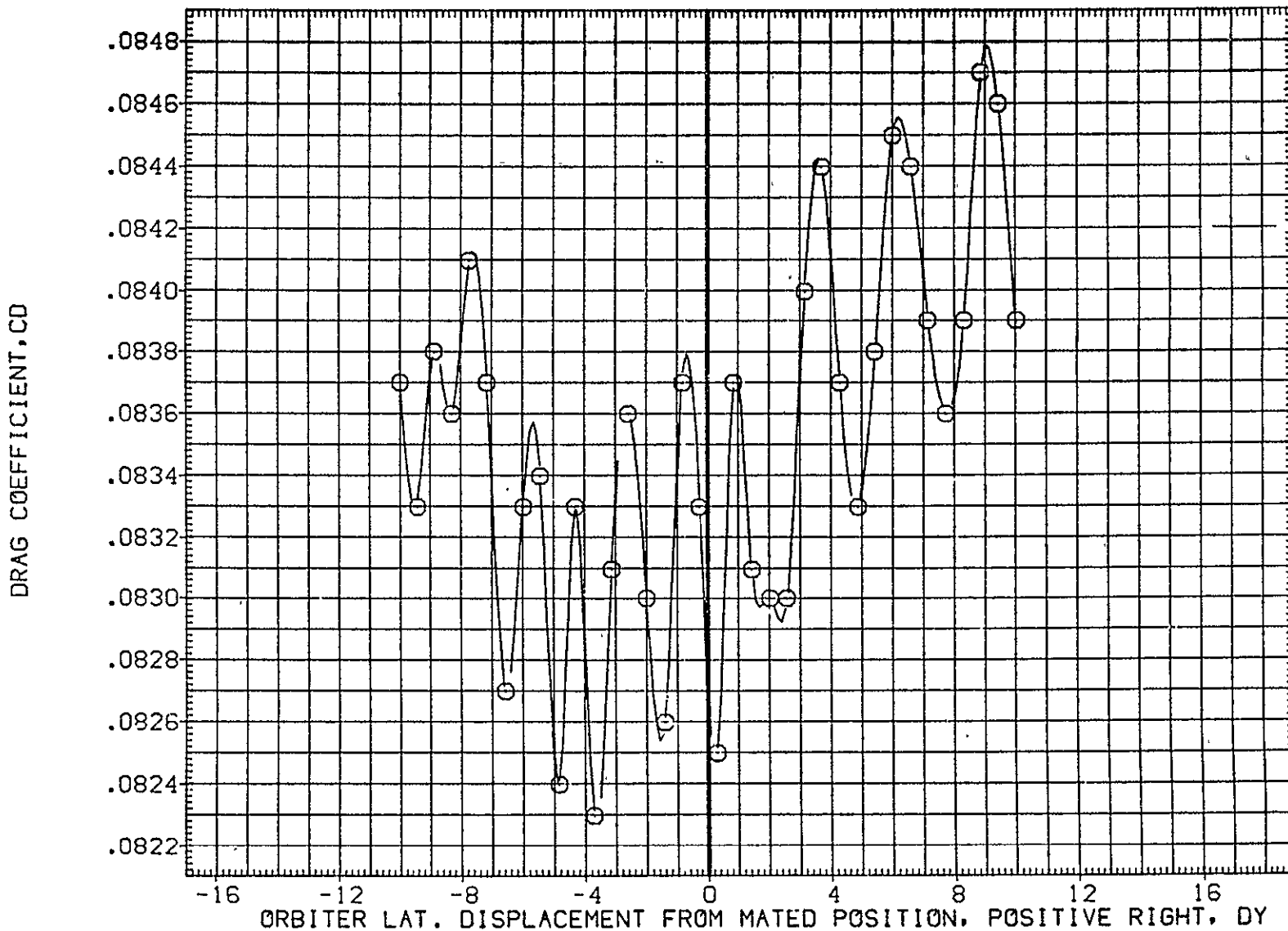


FIG. 50 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE059

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE060)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.608	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	10.000	BREF	936.6800	IN.
		DZ	15.000	ICRB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

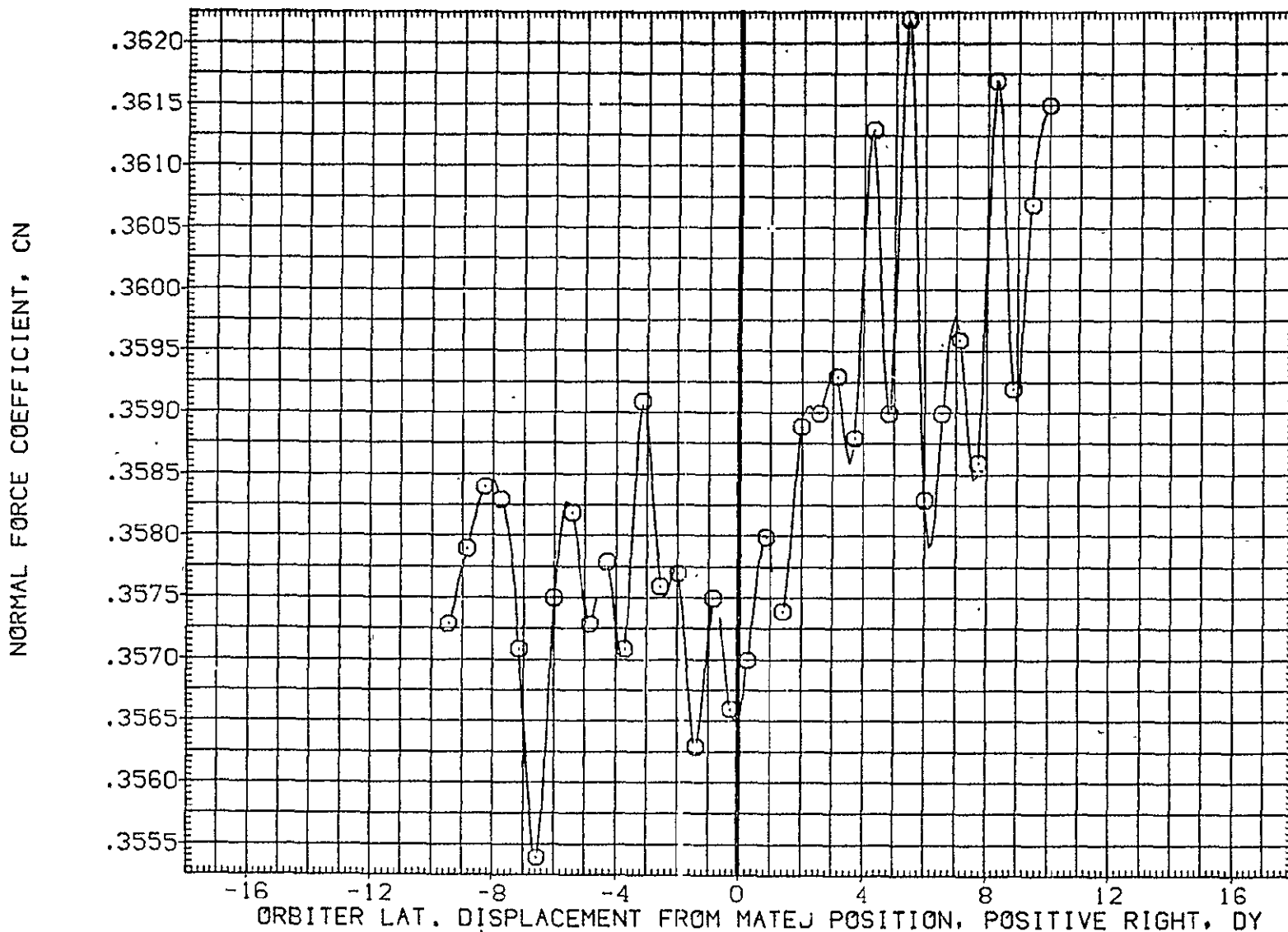


FIG. 51 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, ICRB=6, BETAC=0, BETA0=0, AFE060

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.608	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	10.000	BREF	936.6800	IN.
		OZ	15.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

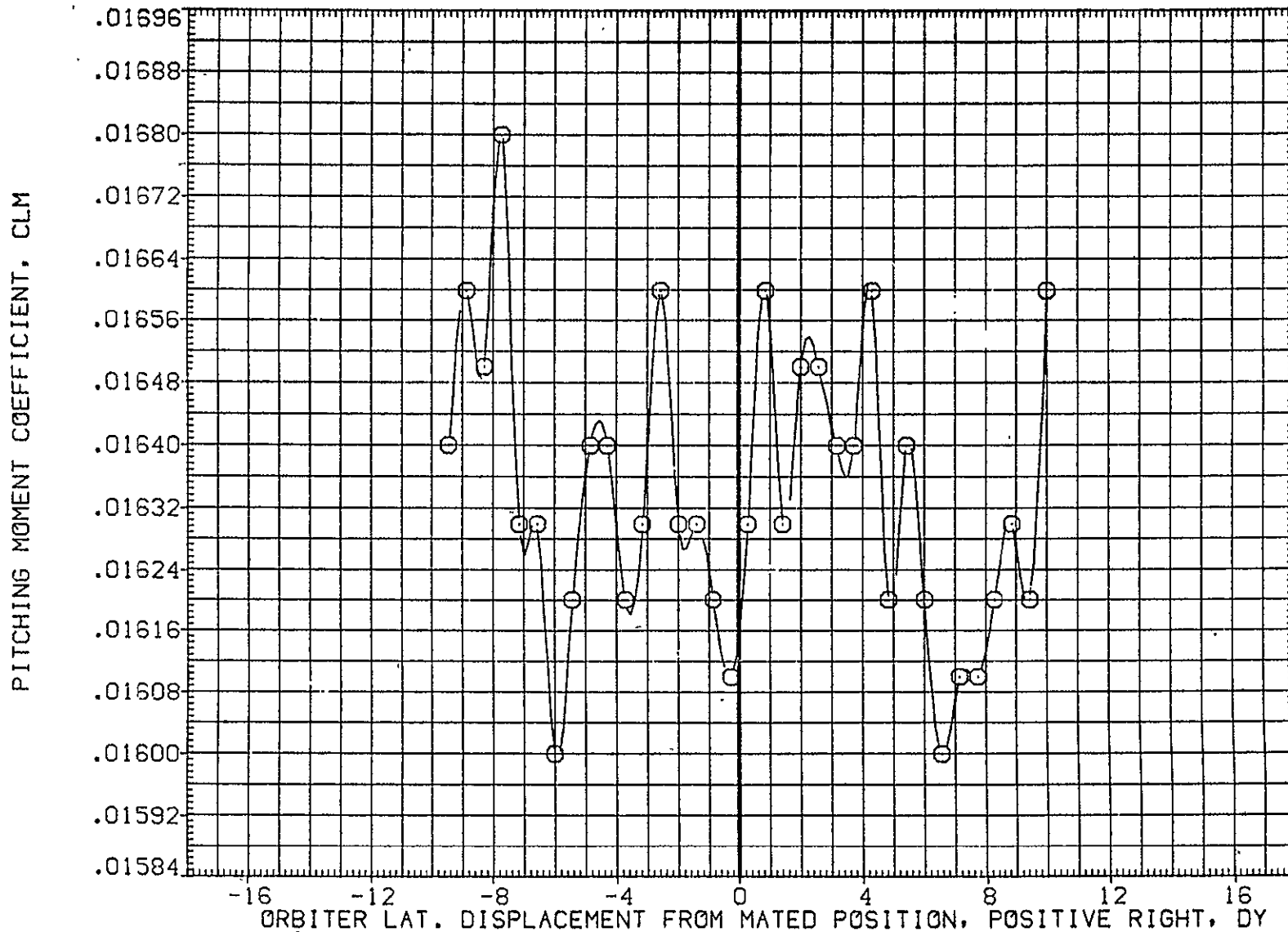


FIG. 51 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE060

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE060)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.608	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	10.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

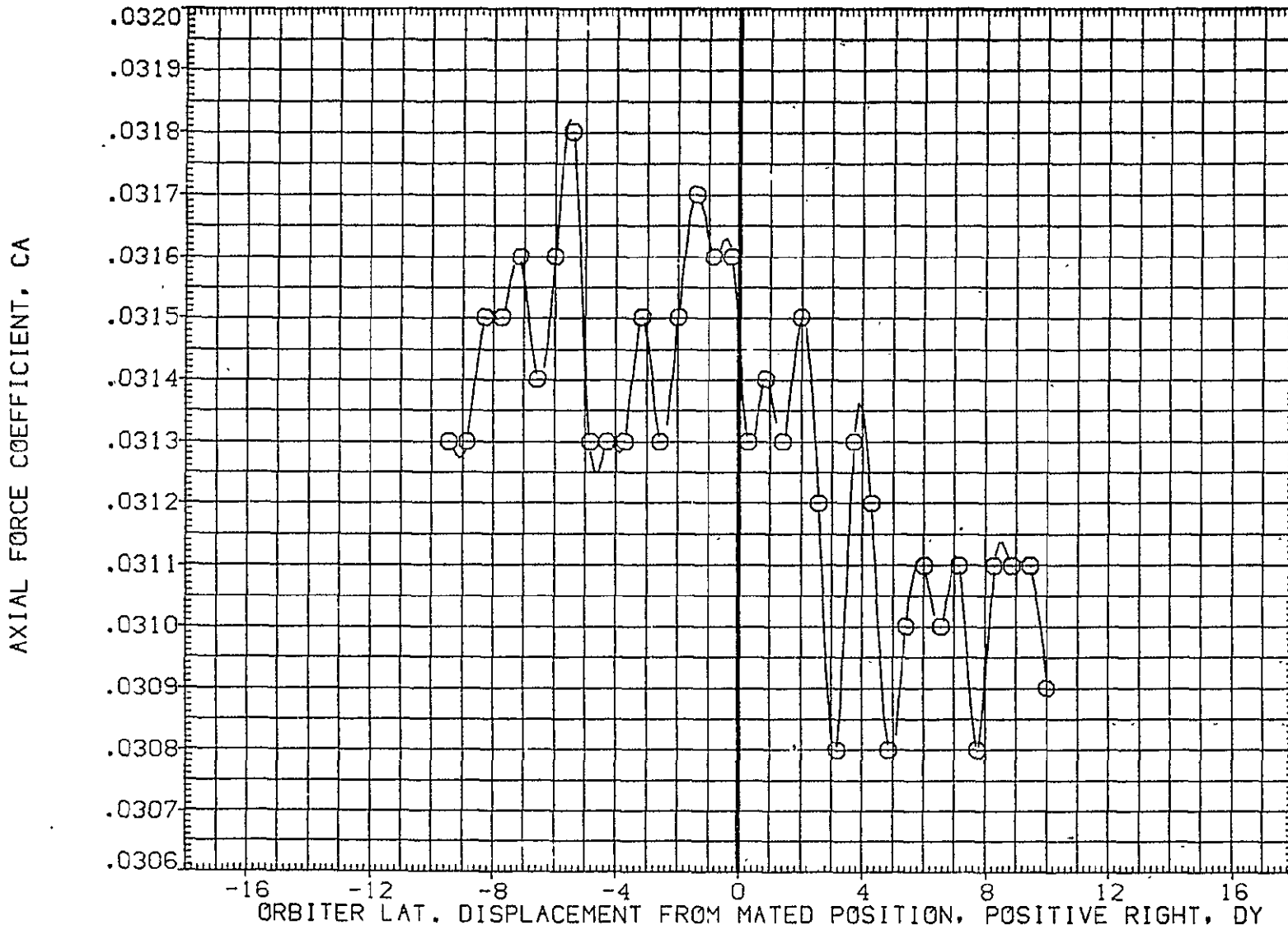


FIG. 51 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE060

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.608	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	10.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

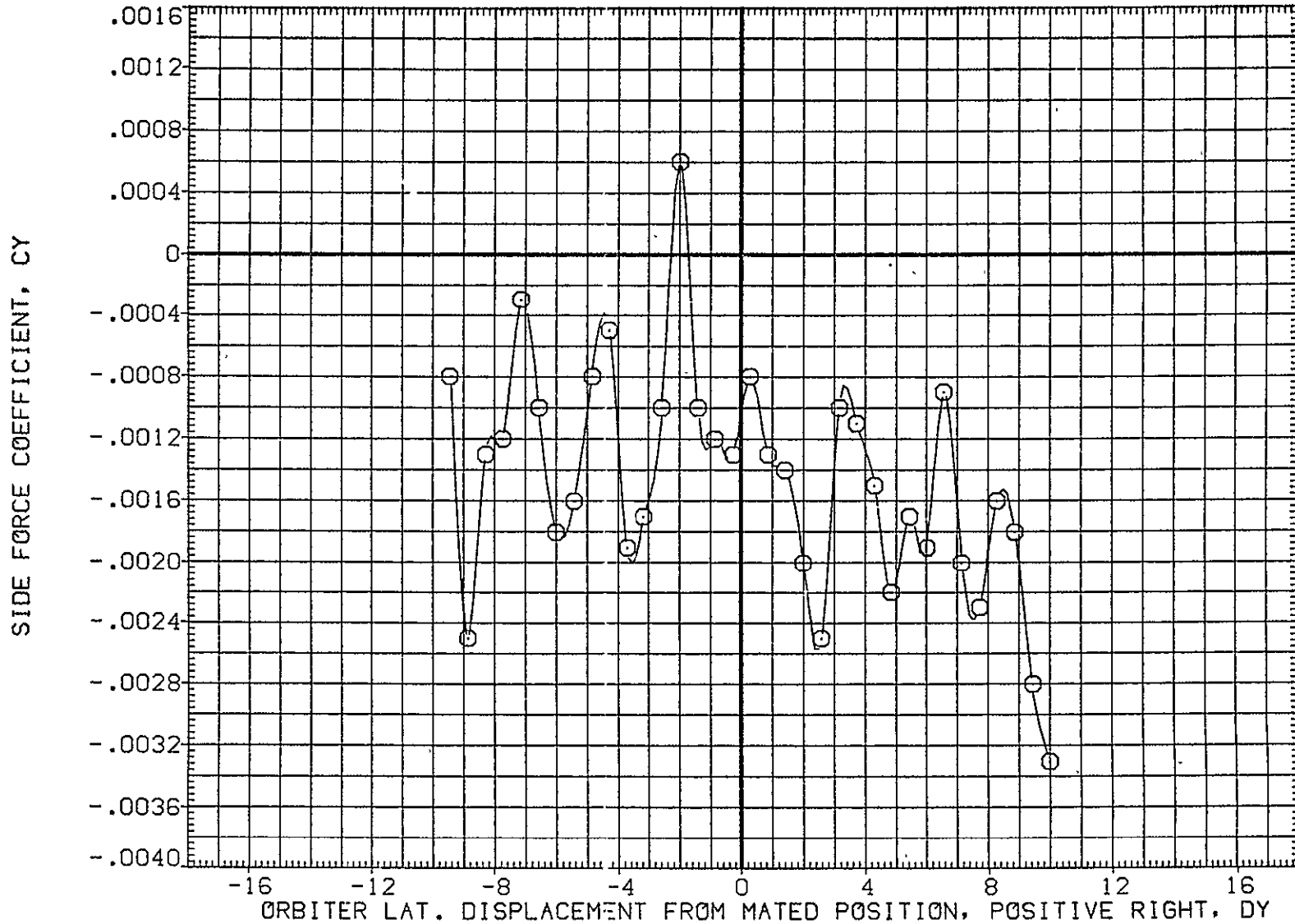


FIG. 51 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE060

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE060)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.608	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SO.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	10.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

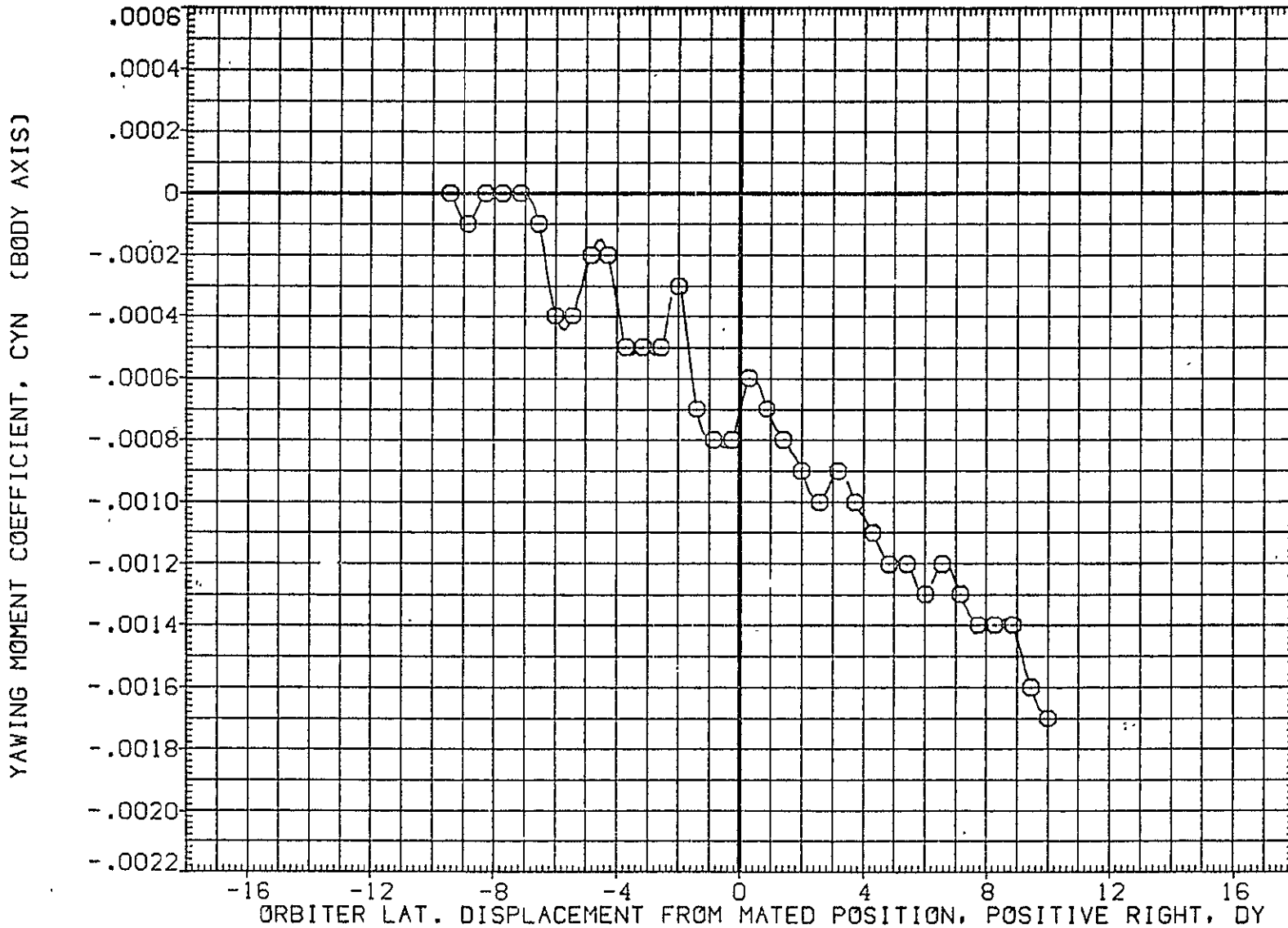


FIG. 51 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE060.

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	IN.	SQ.FT.
○	.608	2.000	.000	5.000	10.000	2690.0000	474.8100	936.6800
		BDFLAP	.000	10.000	6.000	1109.0000	.0000	375.0000
		DZ	15.000	1.000	.000	SCALE	.0125	
		BETA0	.000	RUDDER	.000			

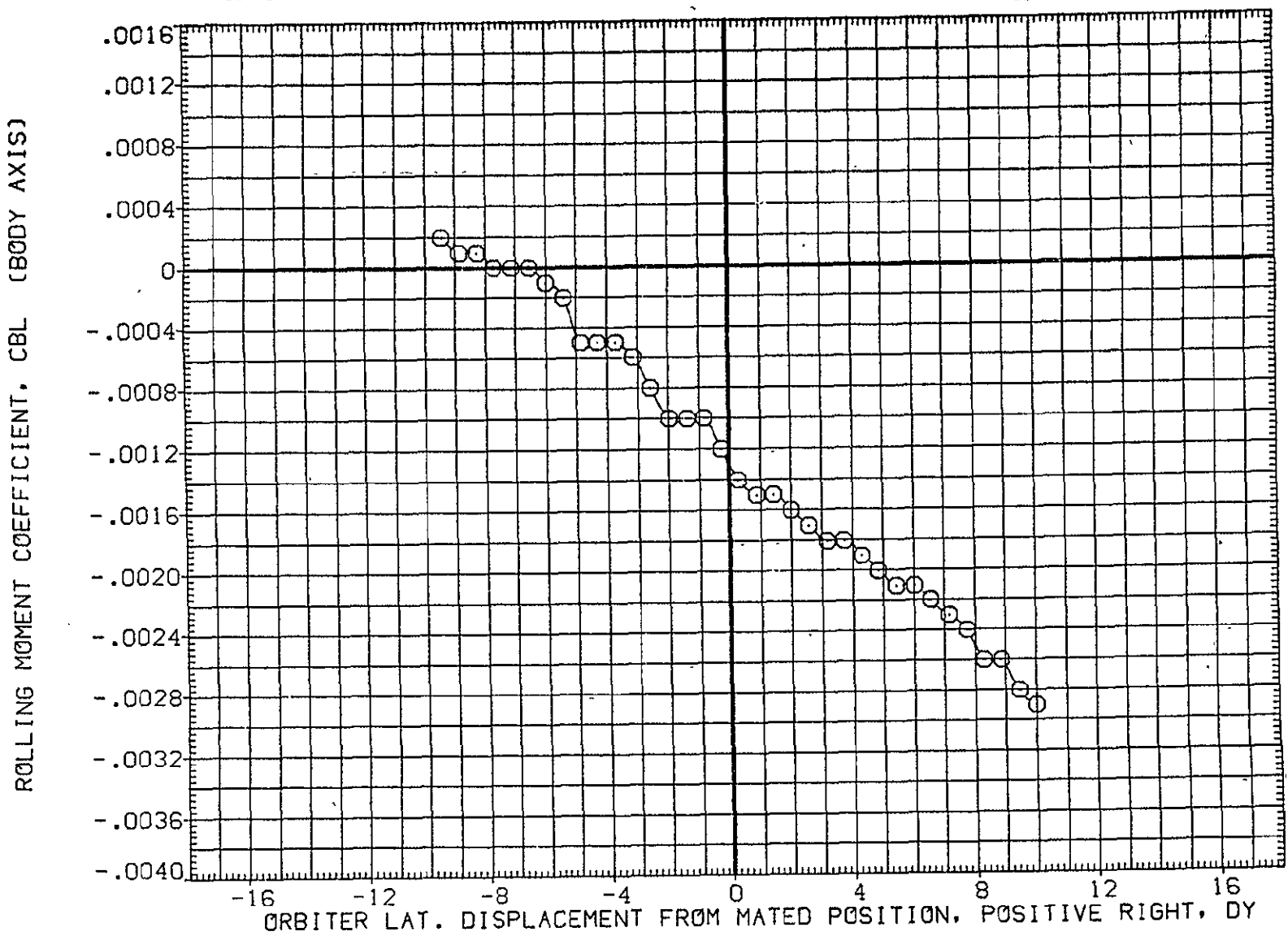


FIG. 51 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE060

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE060)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.608	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	10.000	BREF	936.6800	IN.
		D7	15.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

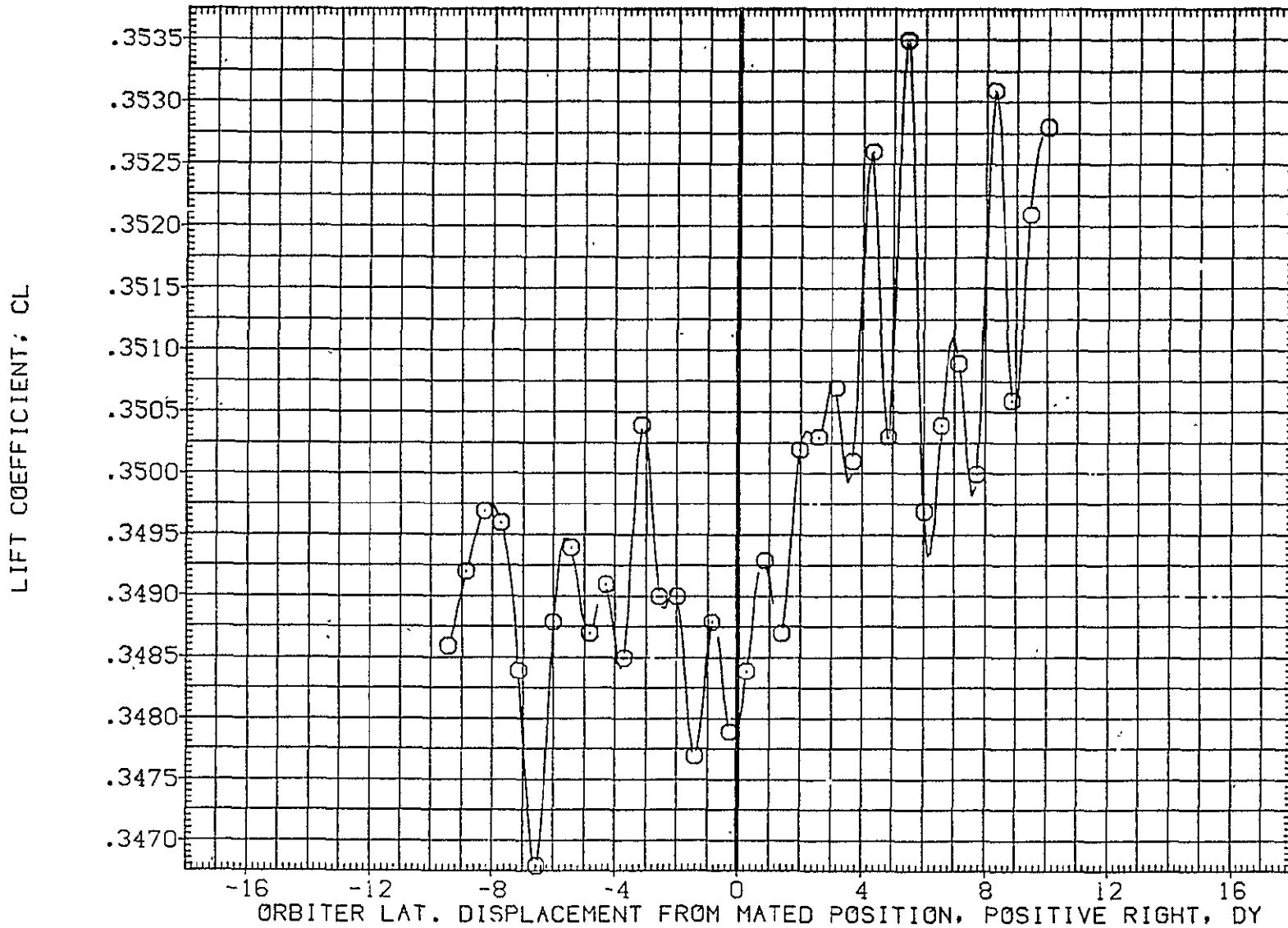


FIG. 51 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE060

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.608	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	10.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

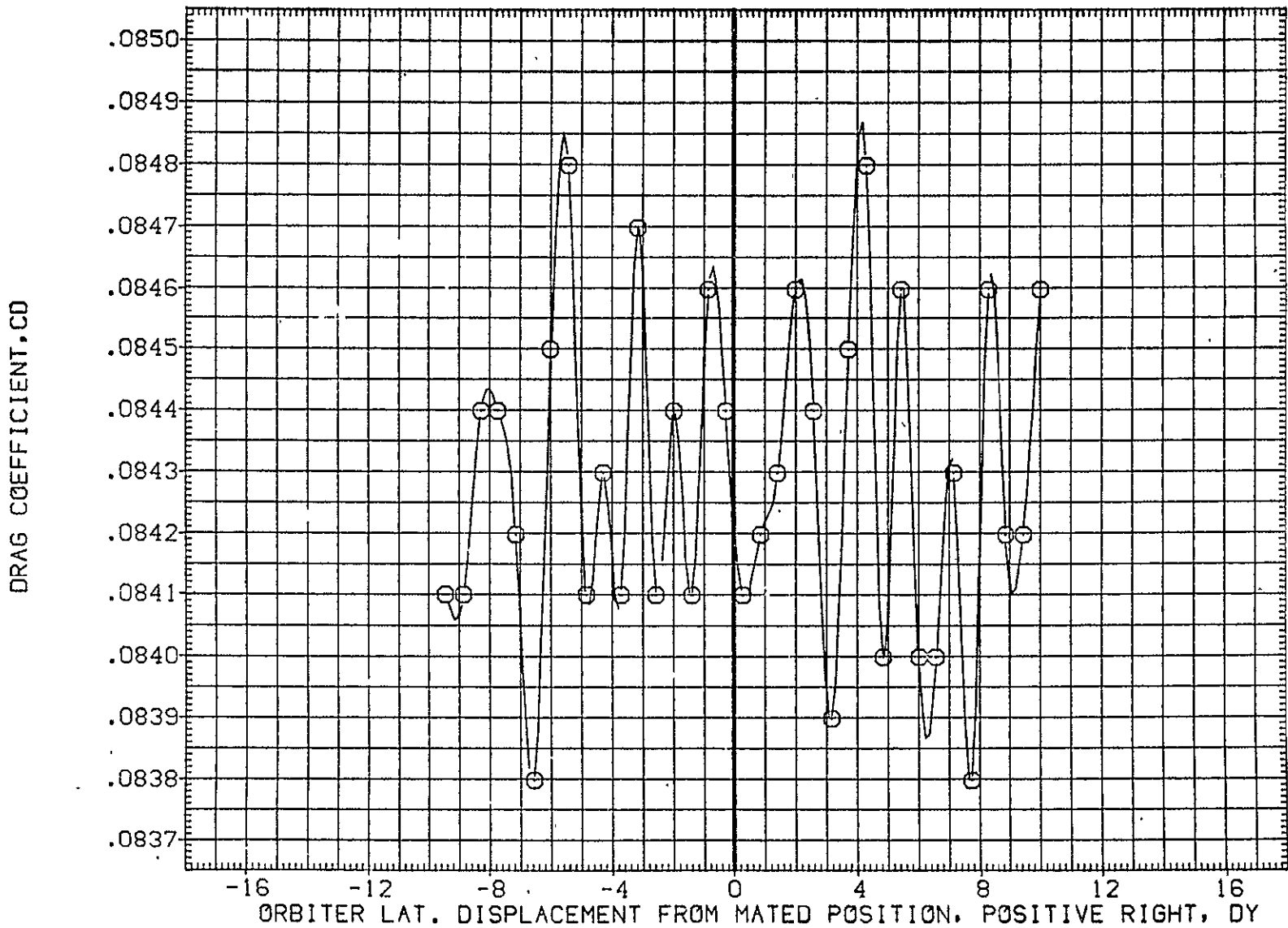


FIG. 51 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE060

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE061)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	LREF	BREF
○	.607	2.000	.000	5.000	10.000	2690.0000	474.8100	936.6800
		BDFLAP	DZ	IORB	RUDDER	XMRP	YMRP	ZMRP
		.000	60.000	6.000	.000	1109.0000	.0000	375.0000
		BETA0				SCALE		
		.000				.0125		

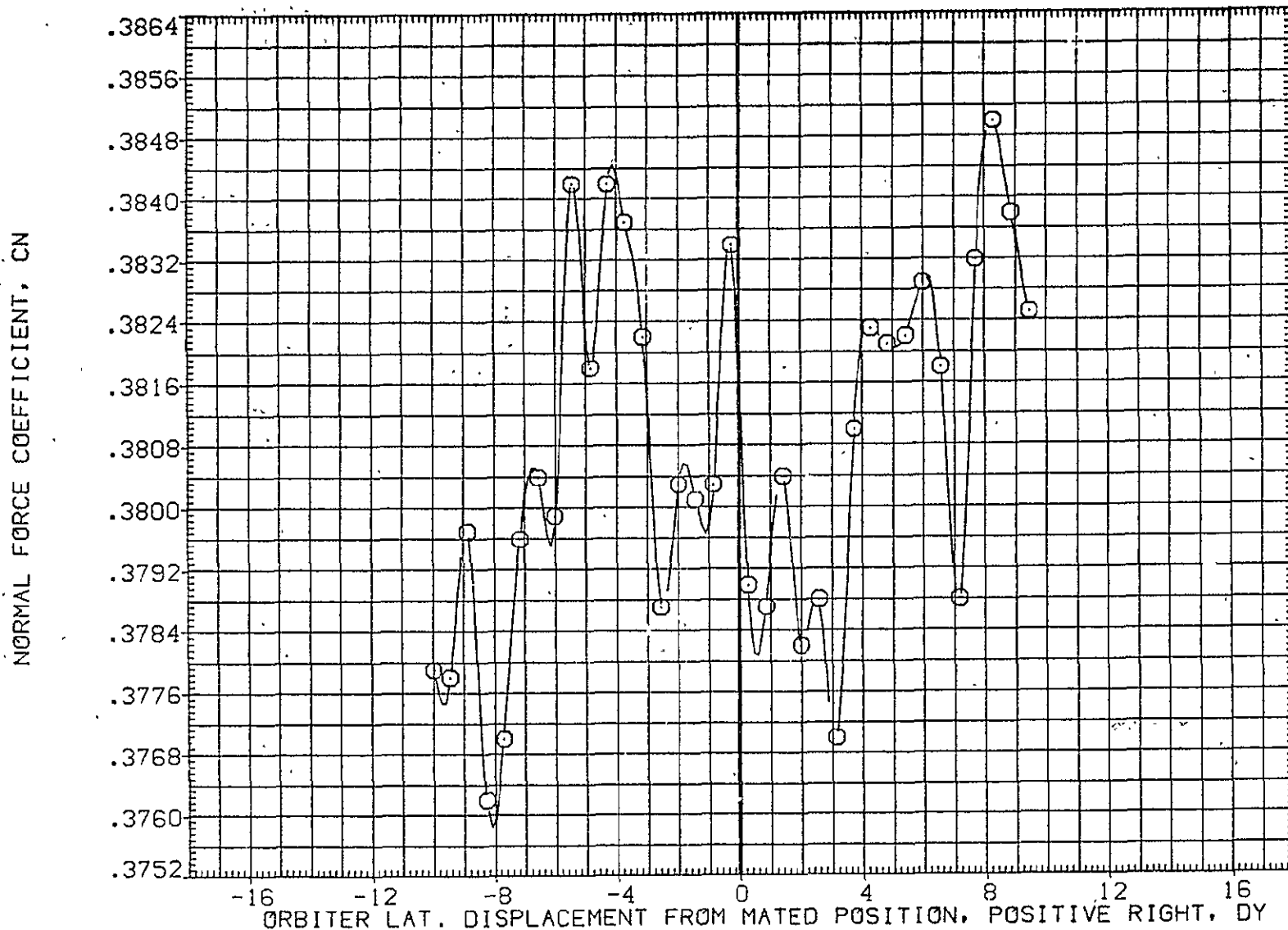


FIG. 52 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE061

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.607	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	10.000	BREF	936.8800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

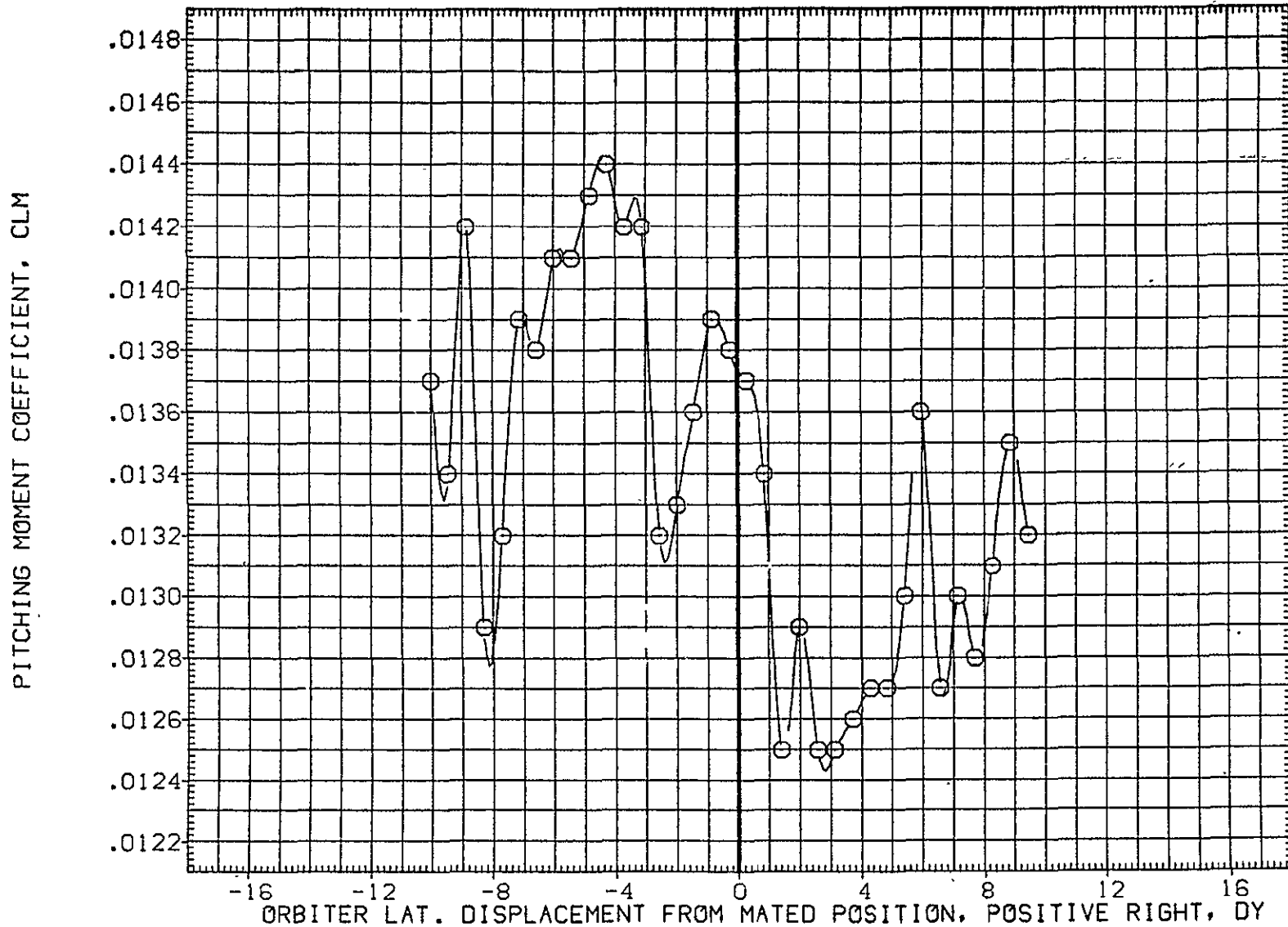


FIG. 52 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE061

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE061)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.607	ALPHAC	2.000	BETAC	.000
		STAB	5.000	ELEVON	5.000
		BDFLAP	.000	DX	10.000
		OZ	60.000	IORB	6.000
		BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

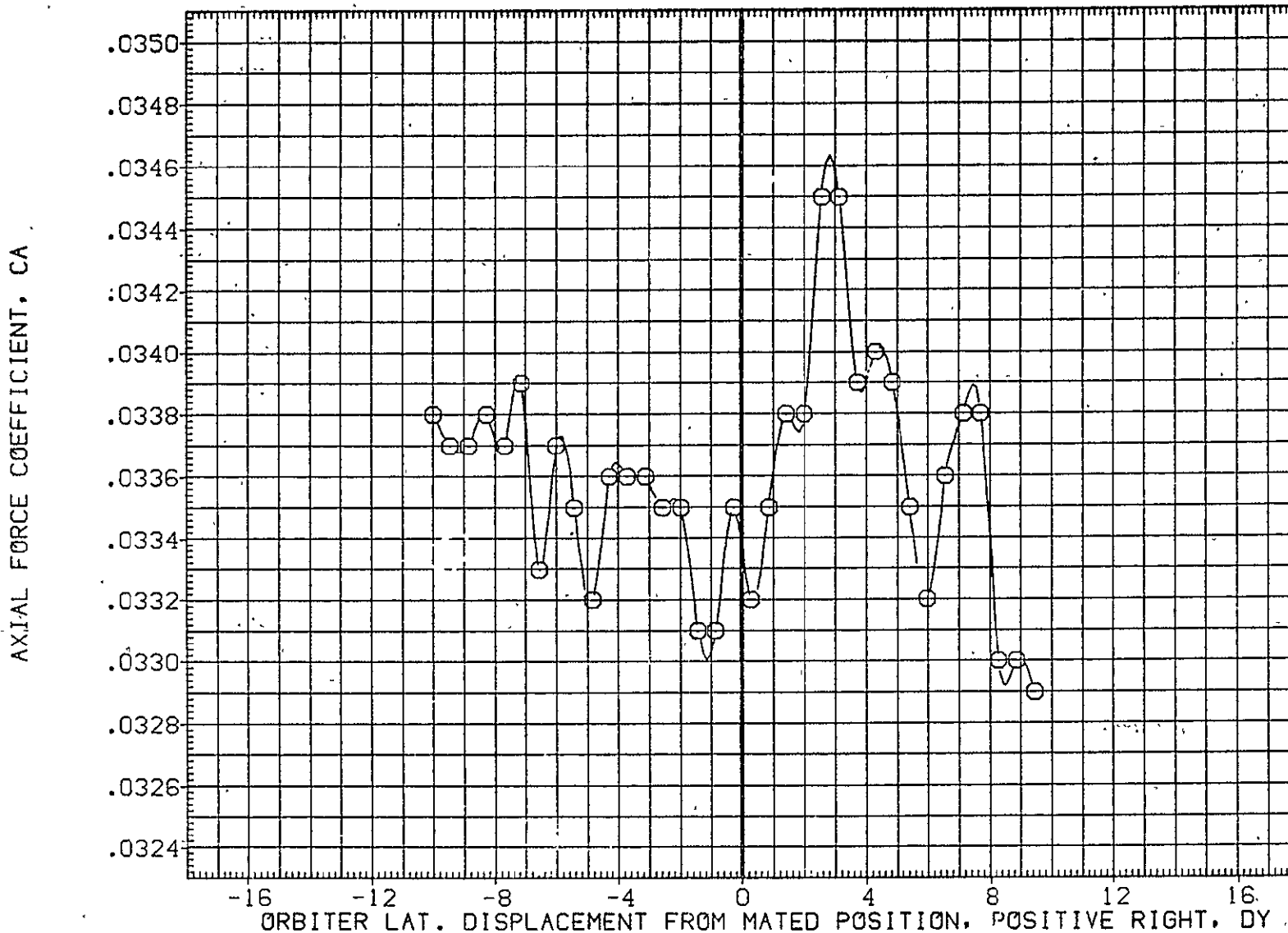


FIG. 52 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE061

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.607	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50. FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	10.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

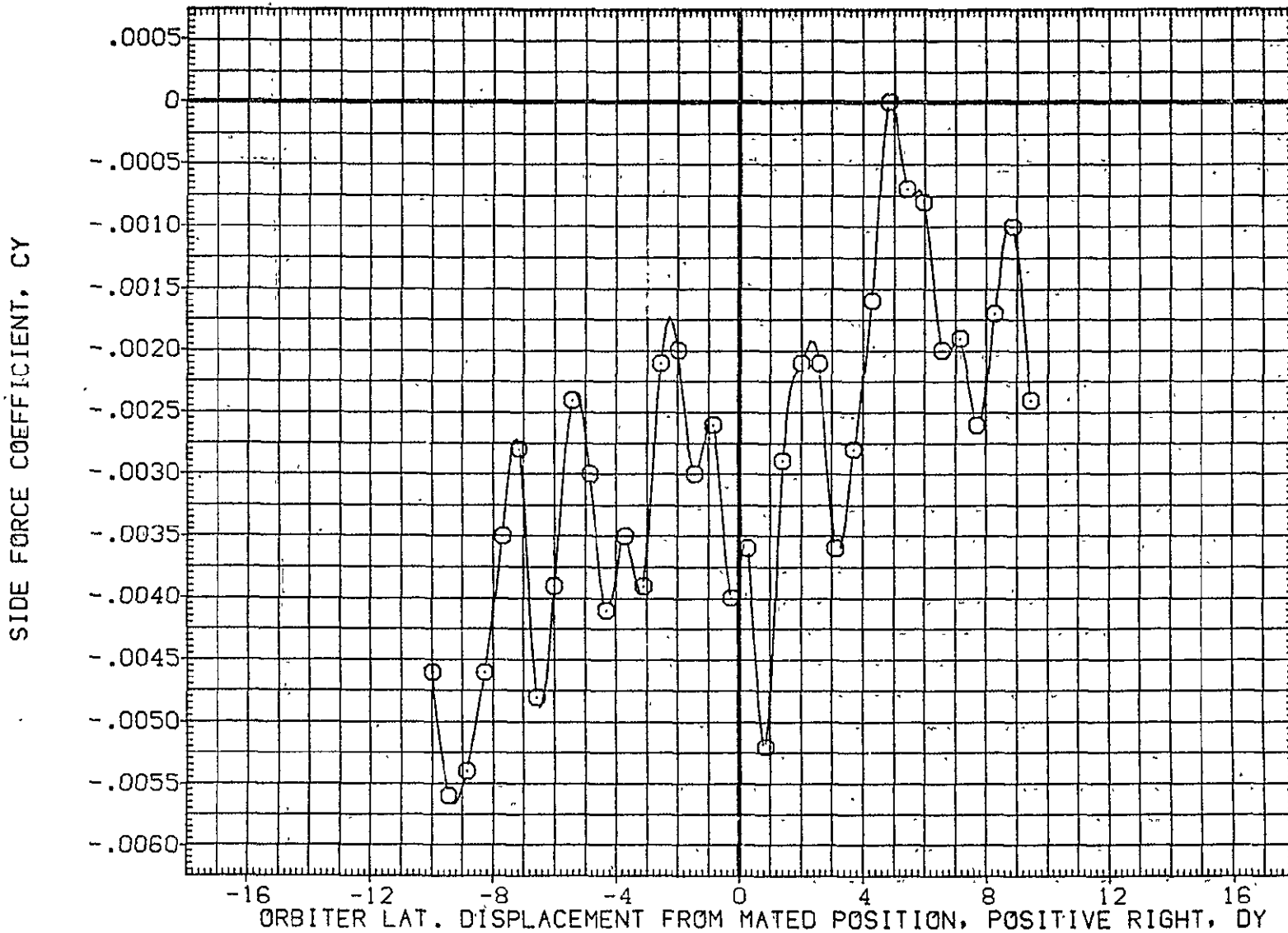


FIG. 52 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE061

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE061)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.607	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	10.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

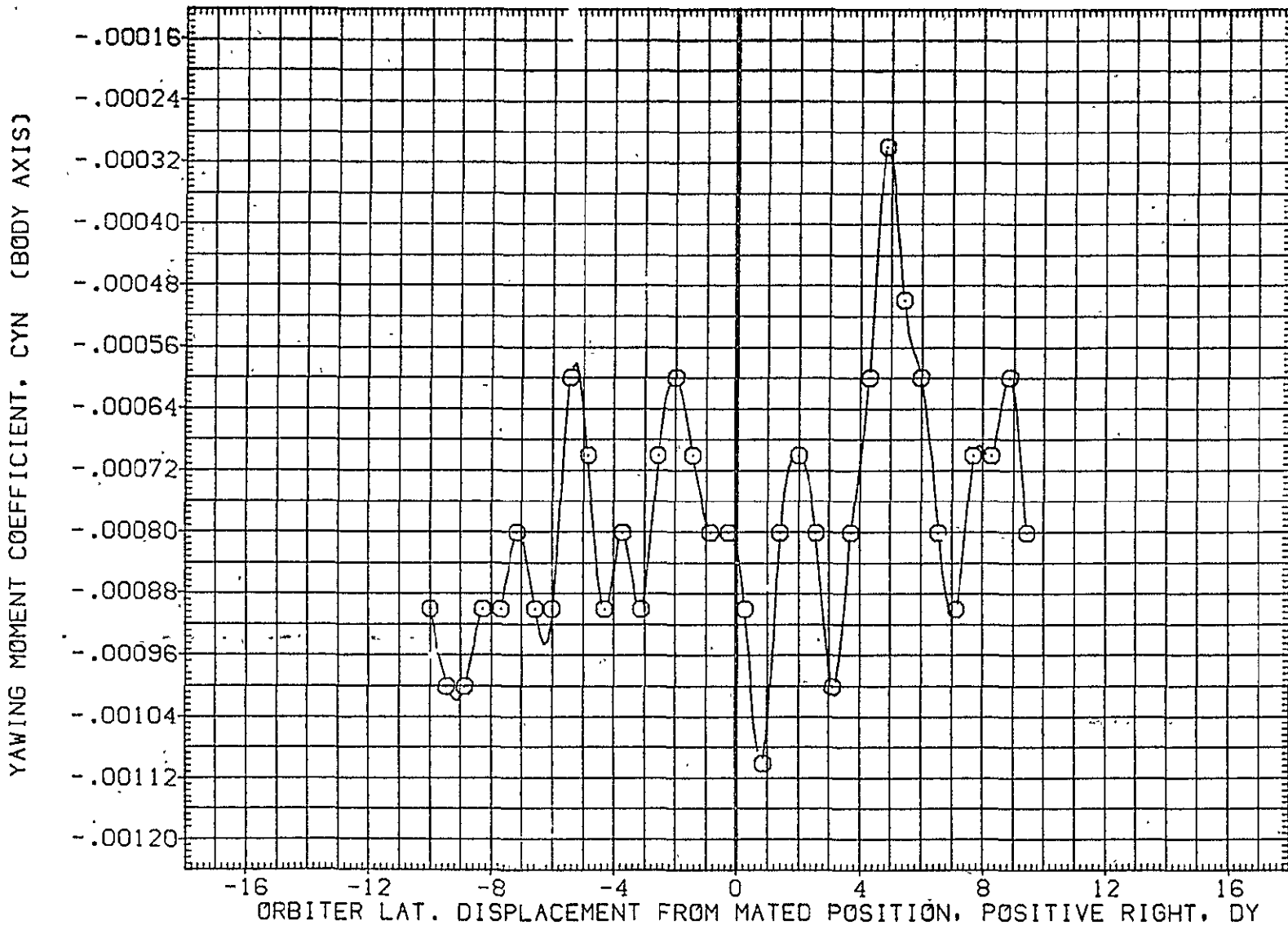


FIG. 52 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE061

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.607	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	90.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	10.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

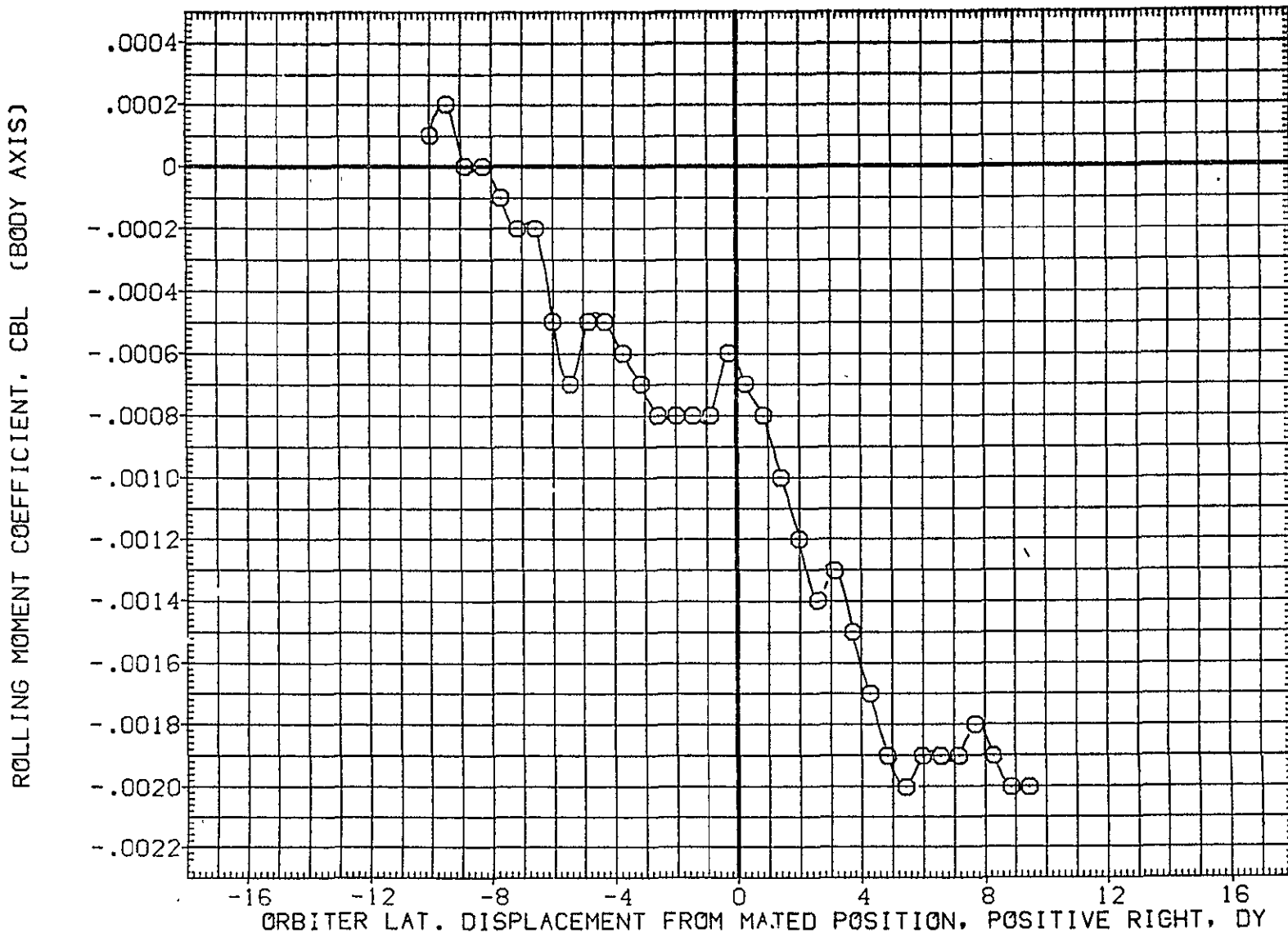


FIG. 52 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE061

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE061)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.607	ALPHAC	2.000	BETAC	.000	SREF	2890.0000	60.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	10.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

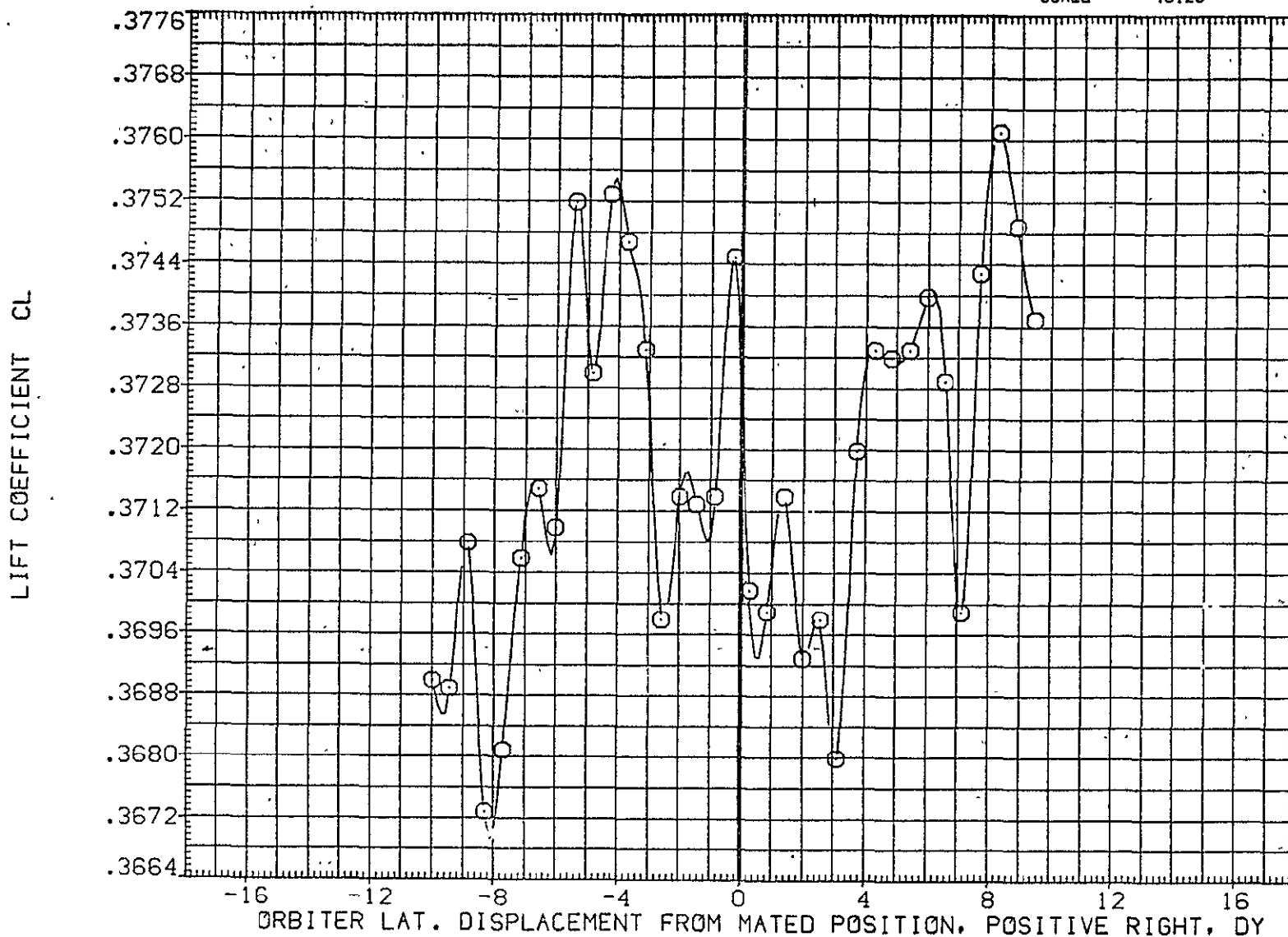


FIG. 52 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE061

SYMBOL
○

MACH	PARAMETRIC VALUES			
.607	ALPHAC	2.000	BETAC	.000
	STAB	5.000	ELEVON	5.000
	BDFLAP	.000	DX	10.000
	DZ	60.000	IORB	6.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

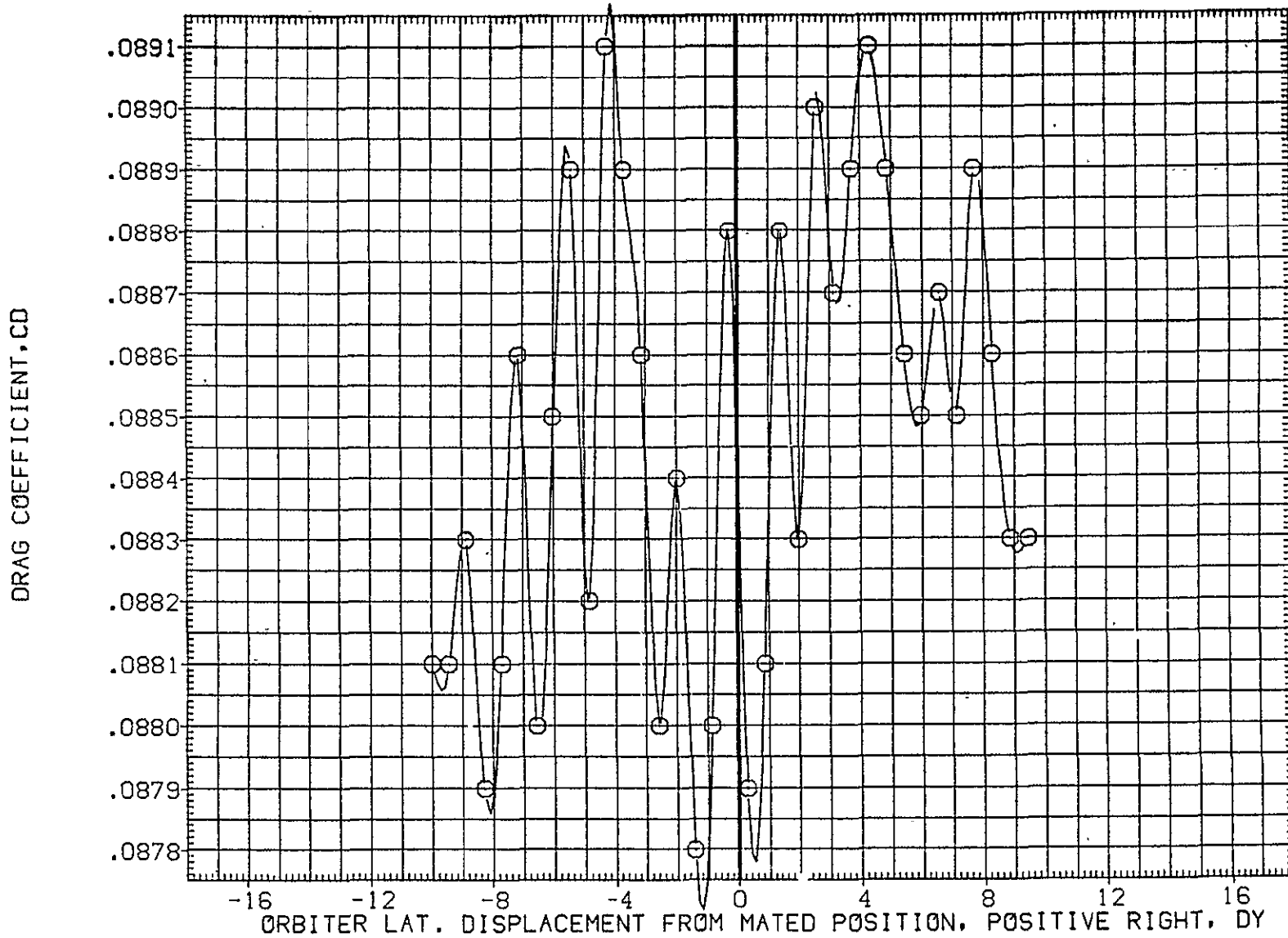


FIG. 52 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFF061

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE062)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.608	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

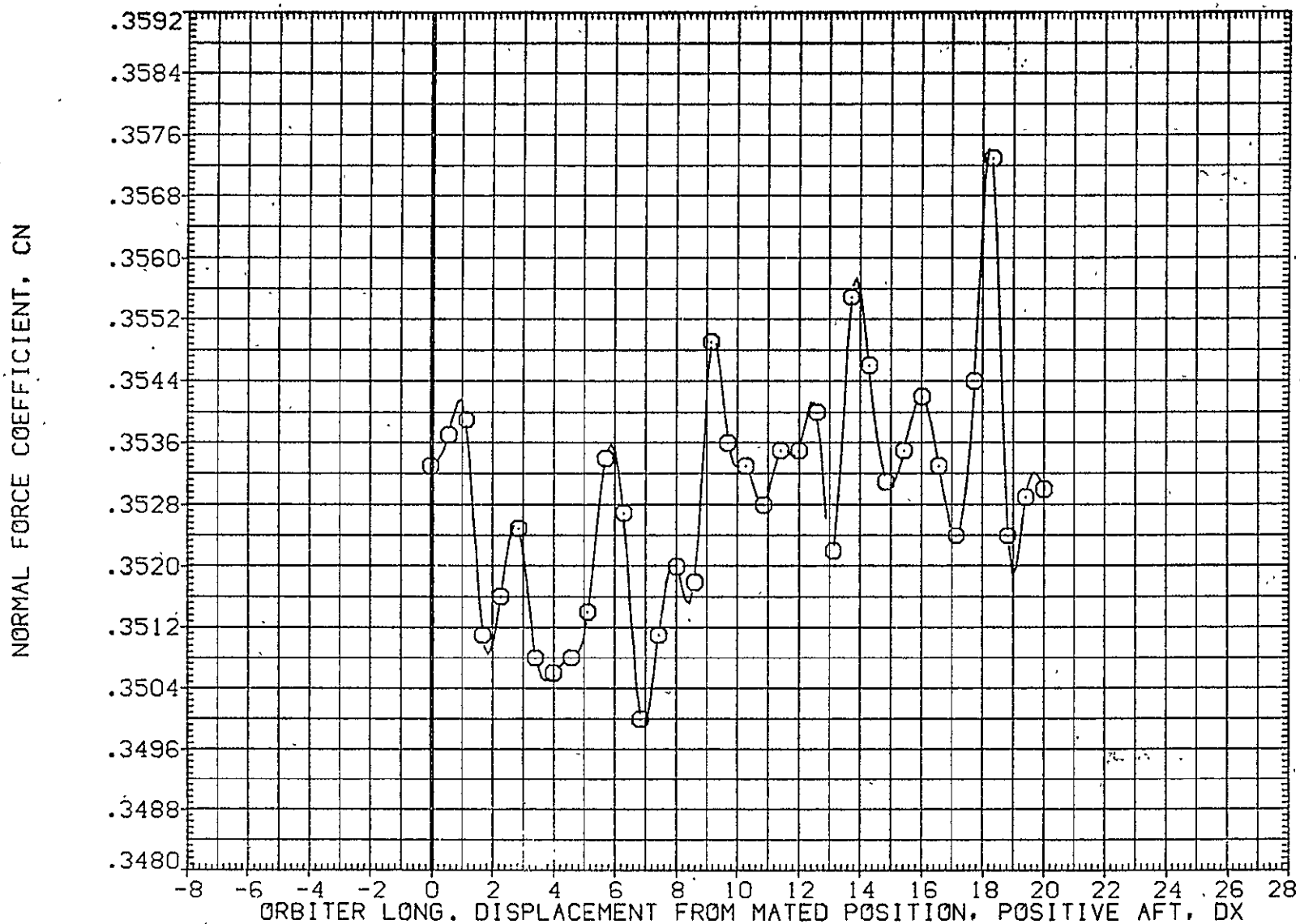


FIG. 53 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE062

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.608	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SG.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	426.6800	IN.
		OZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

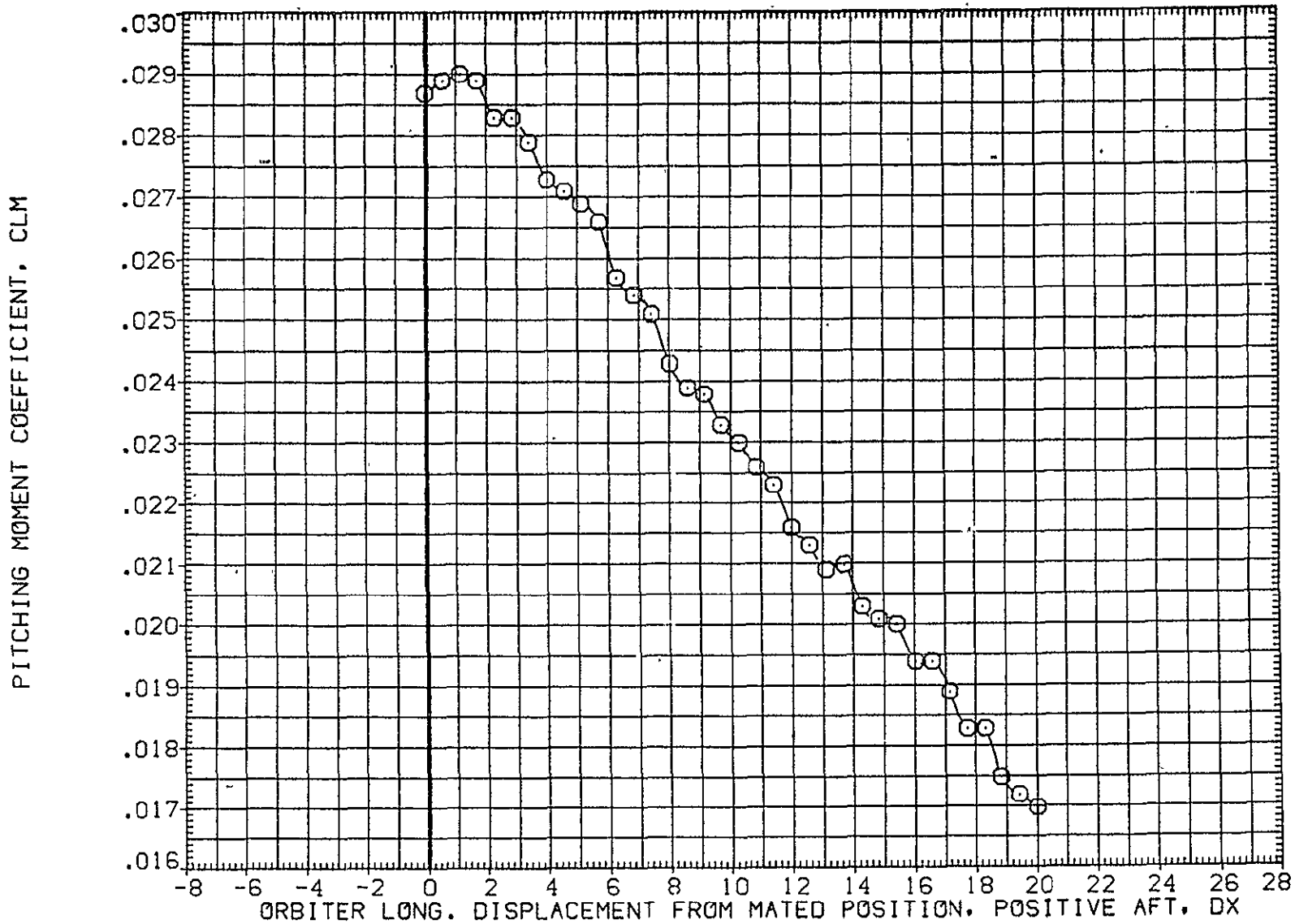


FIG. 53 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE062

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE062)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.608	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN
		BOFLAP	.000	DY	.000	BREF	936.6800	IN
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN
						ZMRP	375.0000	IN
						SCALE	.0125	

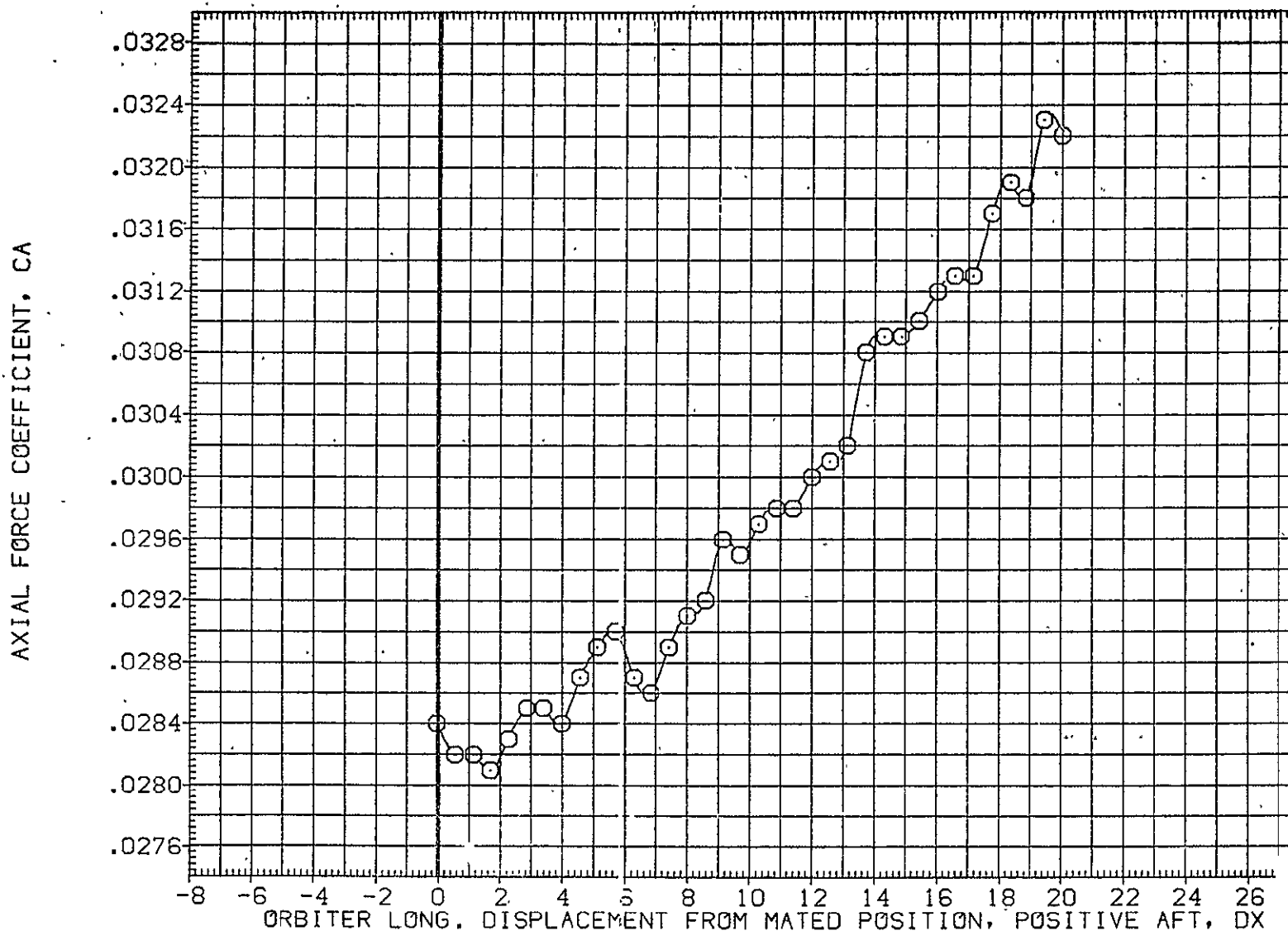


FIG. 53 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE062

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.608	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	Y _c	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	Y _r -P	.0000	IN. Y0
						ZHRP	375.0000	IN. Z0
						SCALE	.0125	

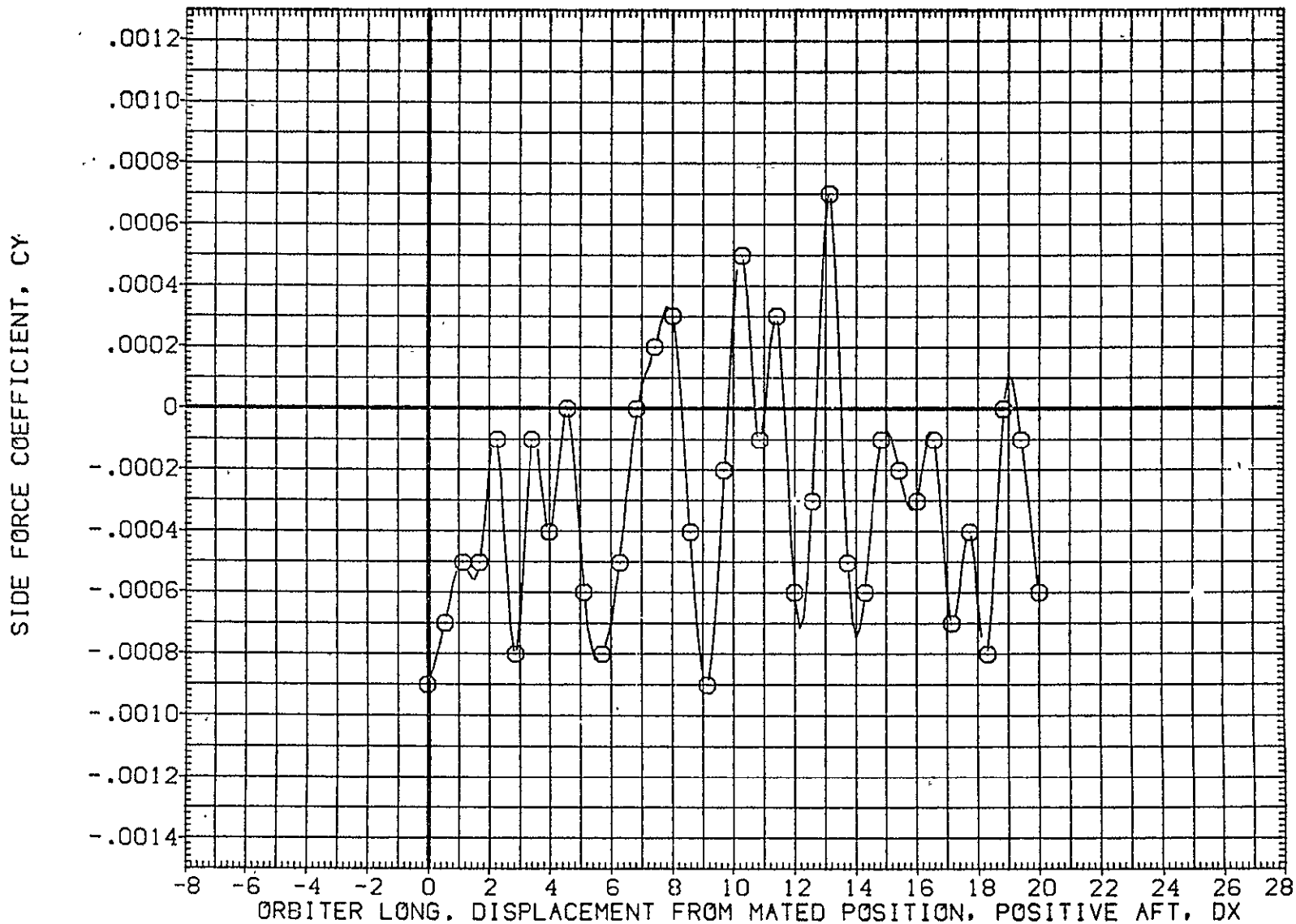


FIG. 53 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE062

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE062)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.608	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		OZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETAO	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

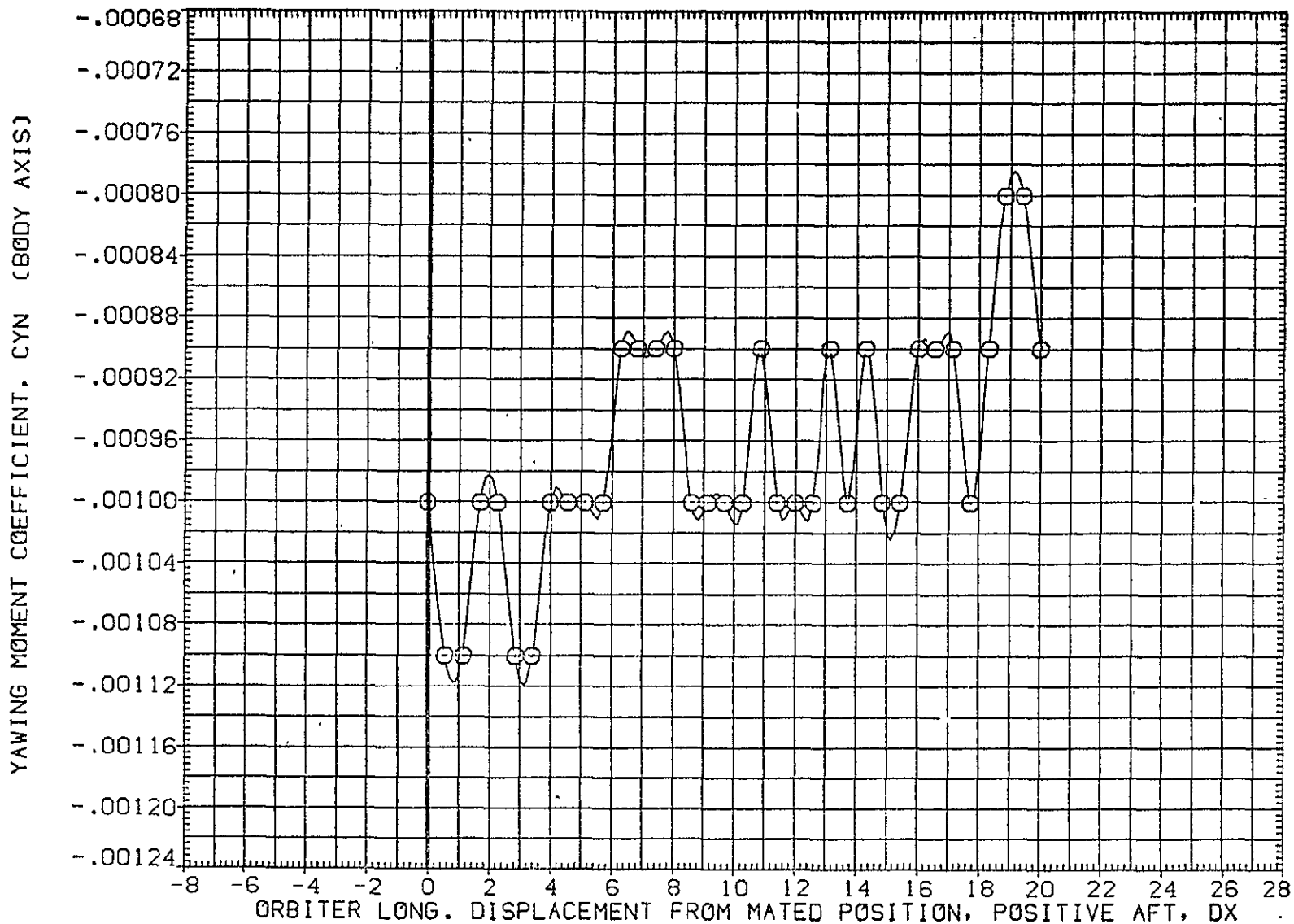


FIG. 53 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE062

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.608	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

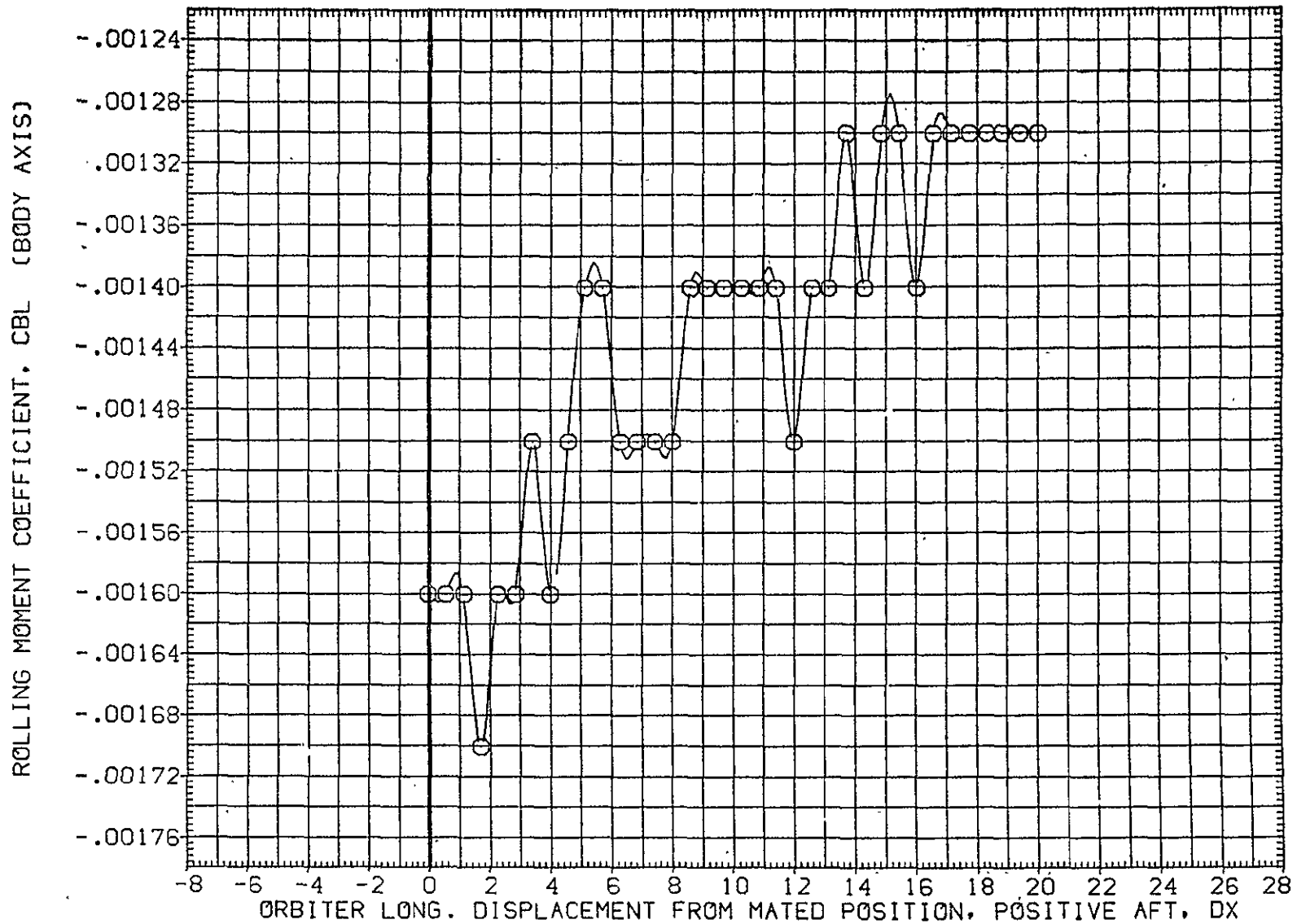


FIG. 53 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE062

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE062)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.608	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

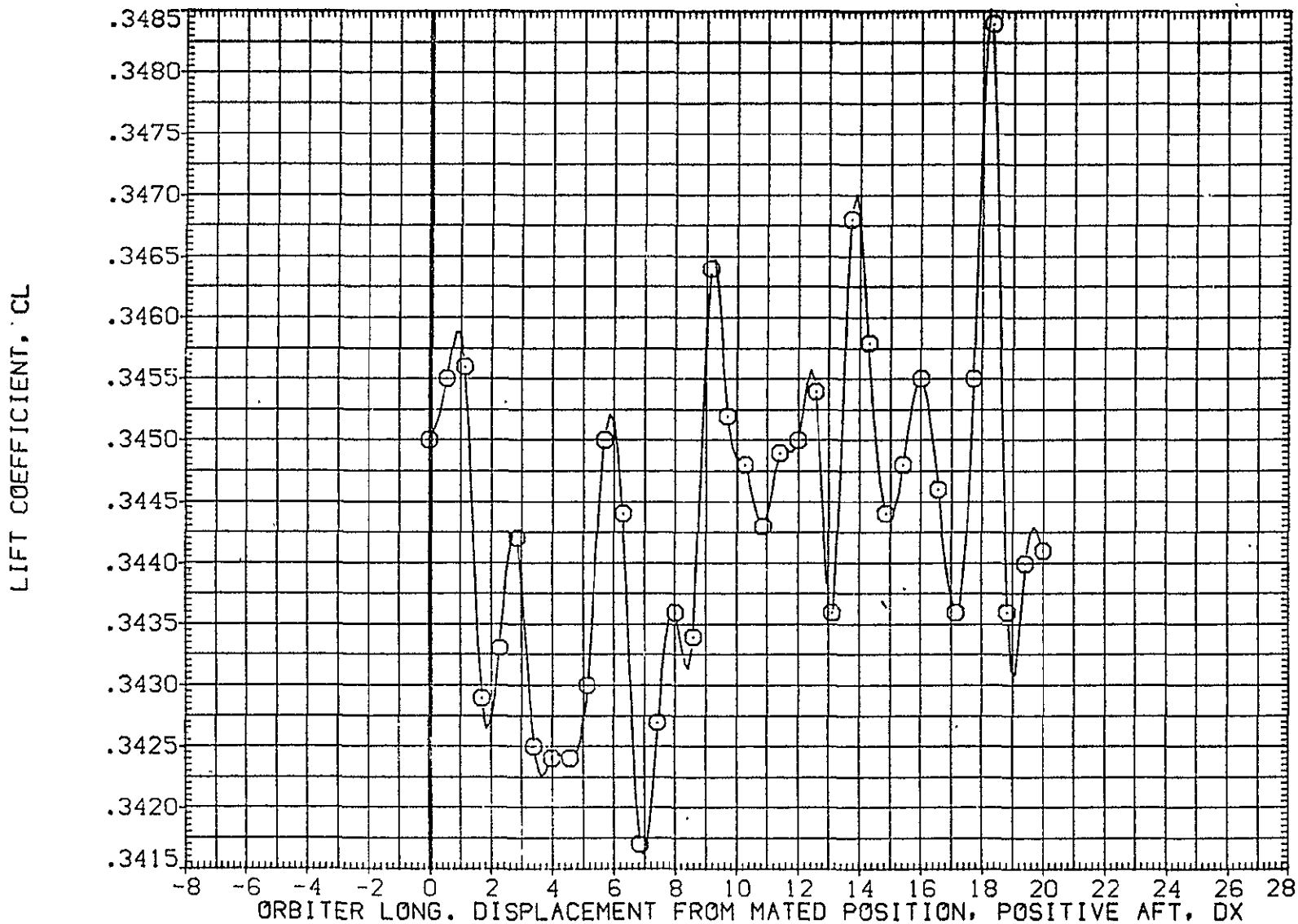


FIG. 53 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE062

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	BETAO	BETAG	SREF	SR.FT.	SR
○	.608	2.000	.000	.000		2690.0000	IN.	
		5.000	5.000			474.8100	IN.	
		BDFLAP	.000	0Y	.000	936.6800	IN.	
		DZ	.000	IORB	6.000	1109.0000	IN.	XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN.
						ZMRP	375.0000	IN.
						SCALE	.0125	YO

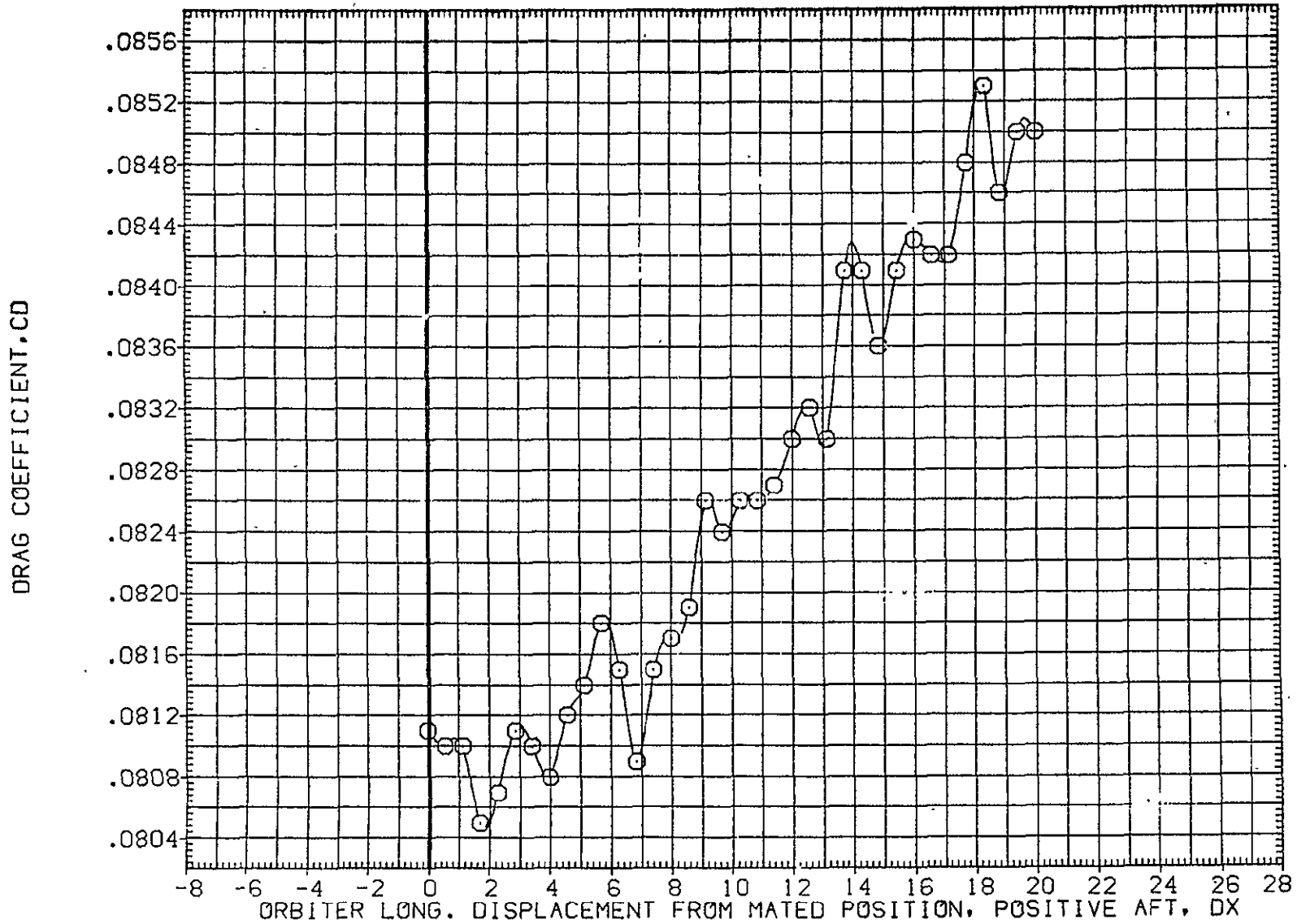


FIG. 53 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE062

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE063)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		SDFLAP	.000	DY	.000	BREF	936.6800	IN.
		OZ	15.000	IORB	6.000	XMRP	1109.0000	IN. XC
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YC
						ZMRP	375.0000	IN. ZC
						SCALE	.0125	

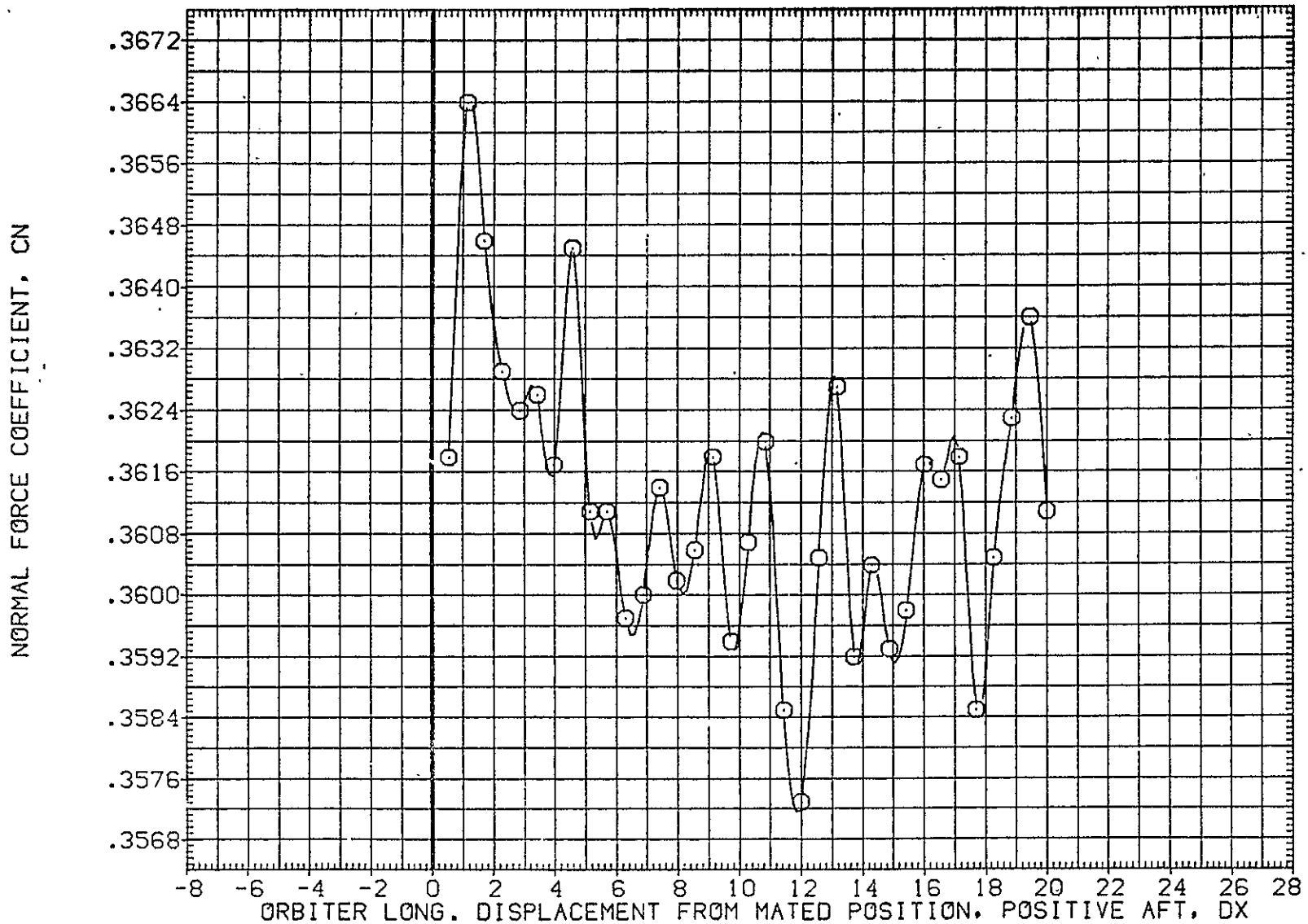


FIG. 54 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE063

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

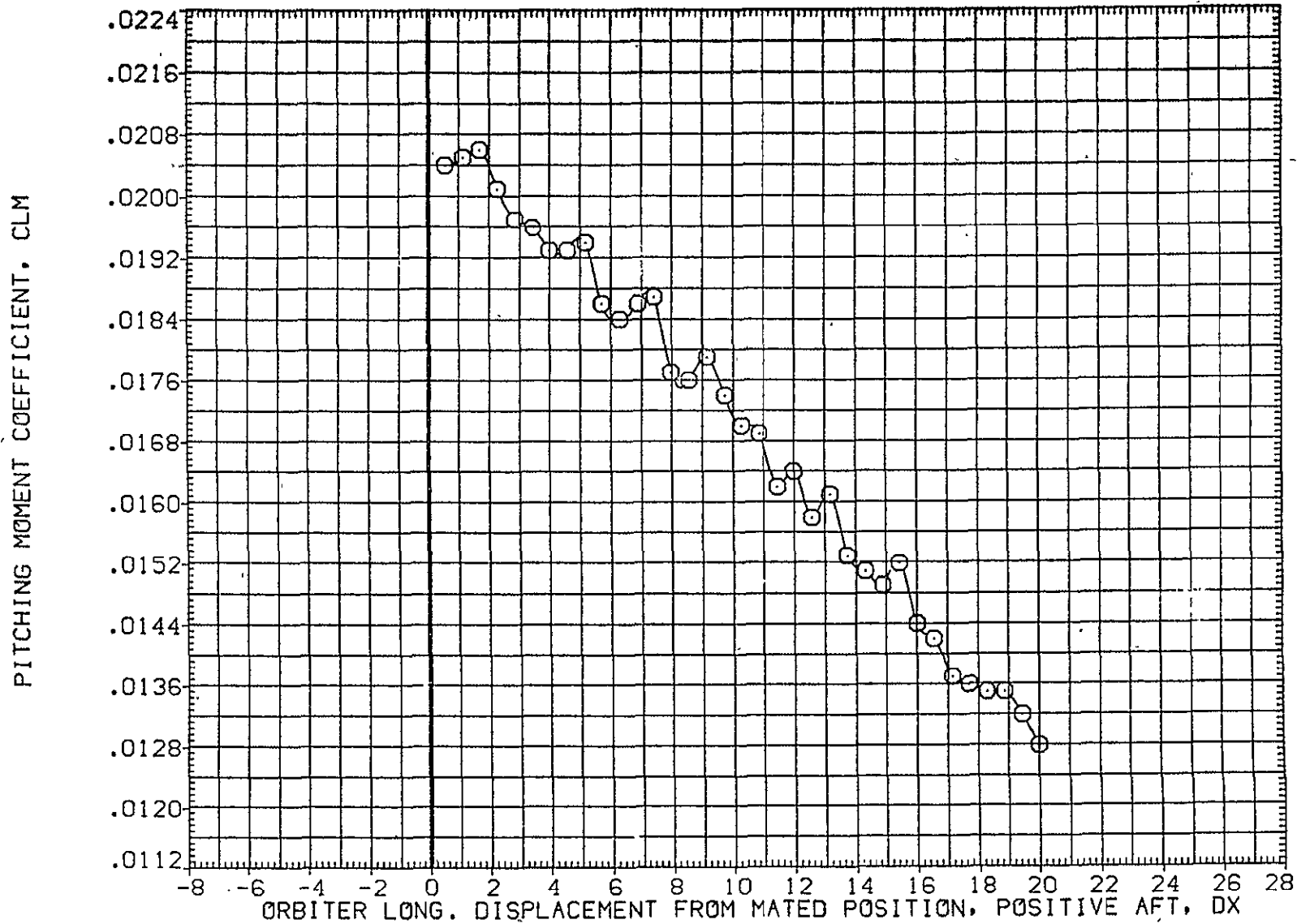


FIG. 54 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE063

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE063)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		OZ	15.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

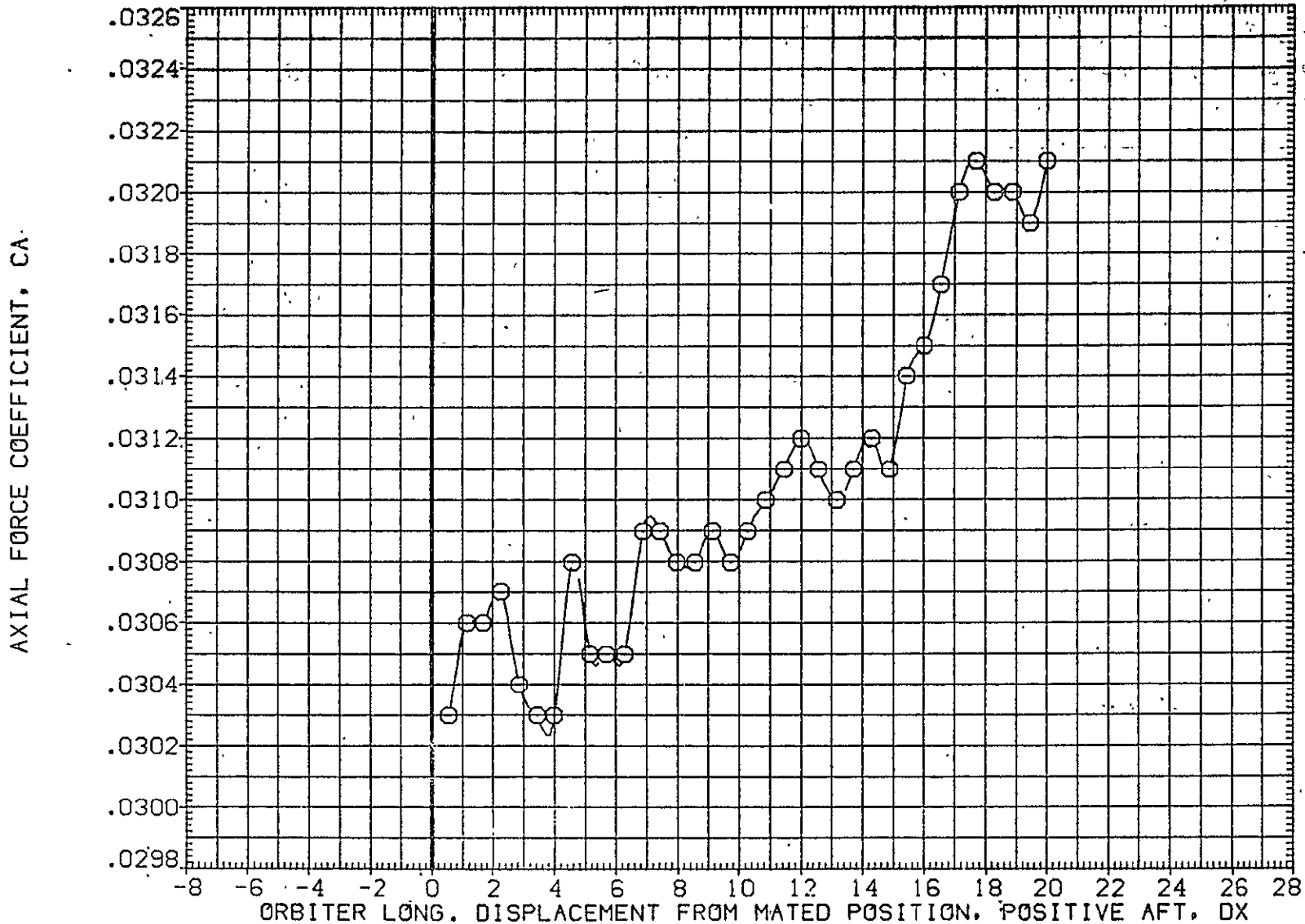


FIG. 54 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE063

SYMBOL
○

MACH
.609

PARAMETRIC VALUES					
ALPHAC	2.000	BETAC	.000		
STAB	5.000	ELEVON	5.000		
BDFLAP	.000	DY	.000		
DZ	15.000	IORB	6.000		
BETA0	.000	RUDDER	.000		

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.3800	IN.
XMRP	1109.0000	IN. XC
YMRP	.0000	IN. YC
ZMRP	375.0000	IN. ZC
SCALE	.0125	

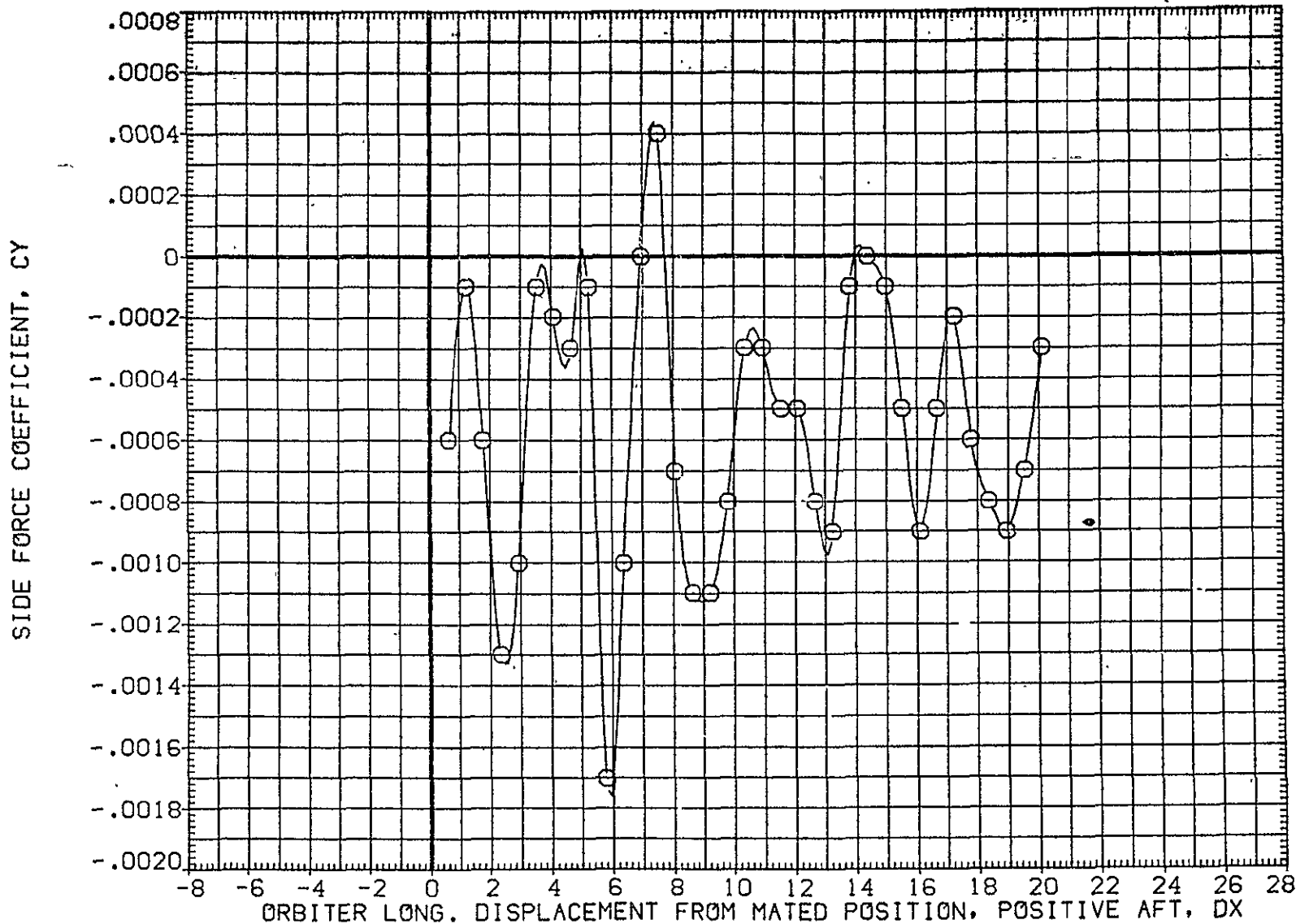


FIG. 54 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE063

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE063)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.509	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. XC
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YC
						ZMRP	375.0000	IN. ZC
						SCALE	.0125	

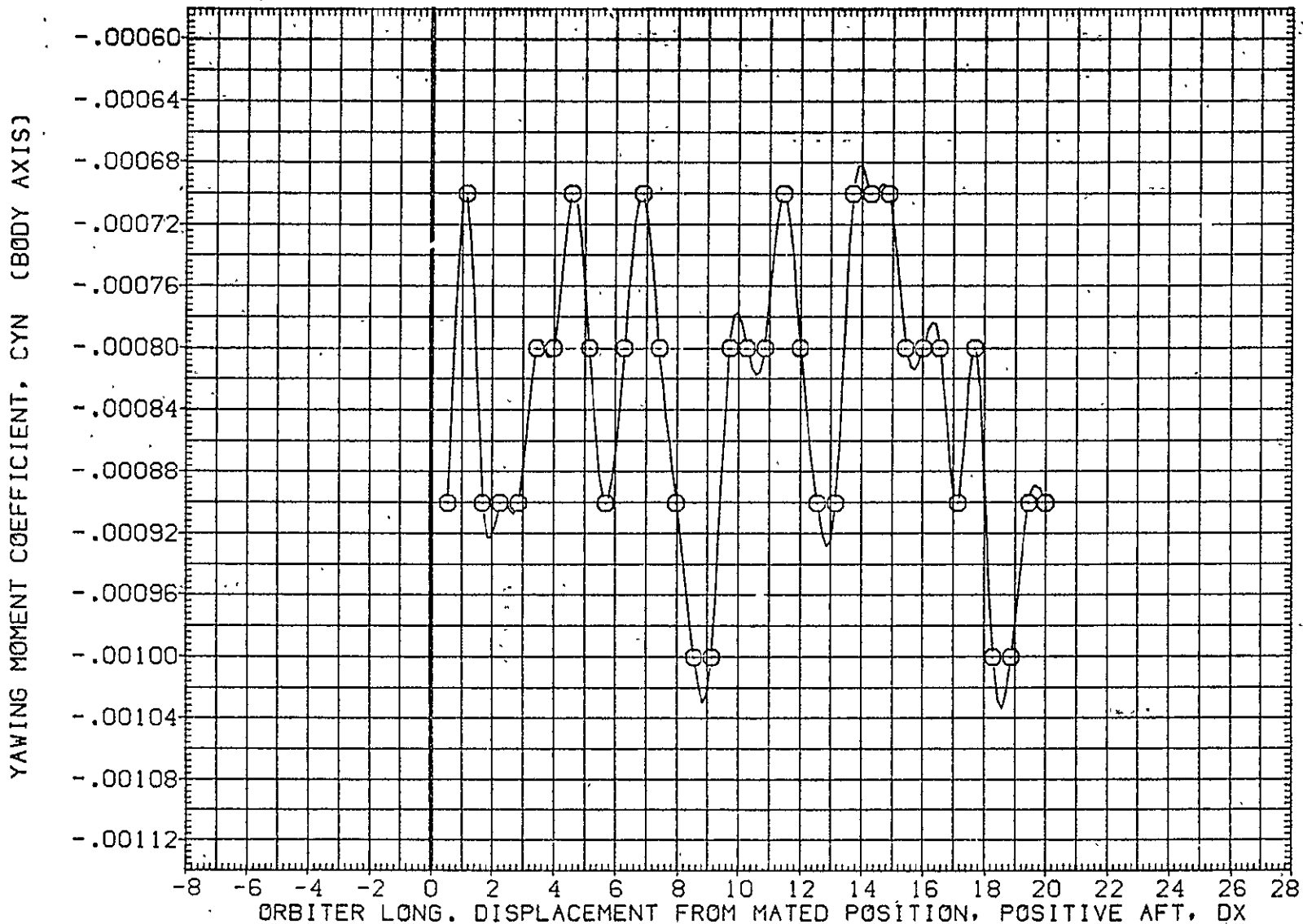


FIG. 54 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE063

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. XC
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YC
						ZMRP	375.0000	IN. ZC
						SCALE	.0125	

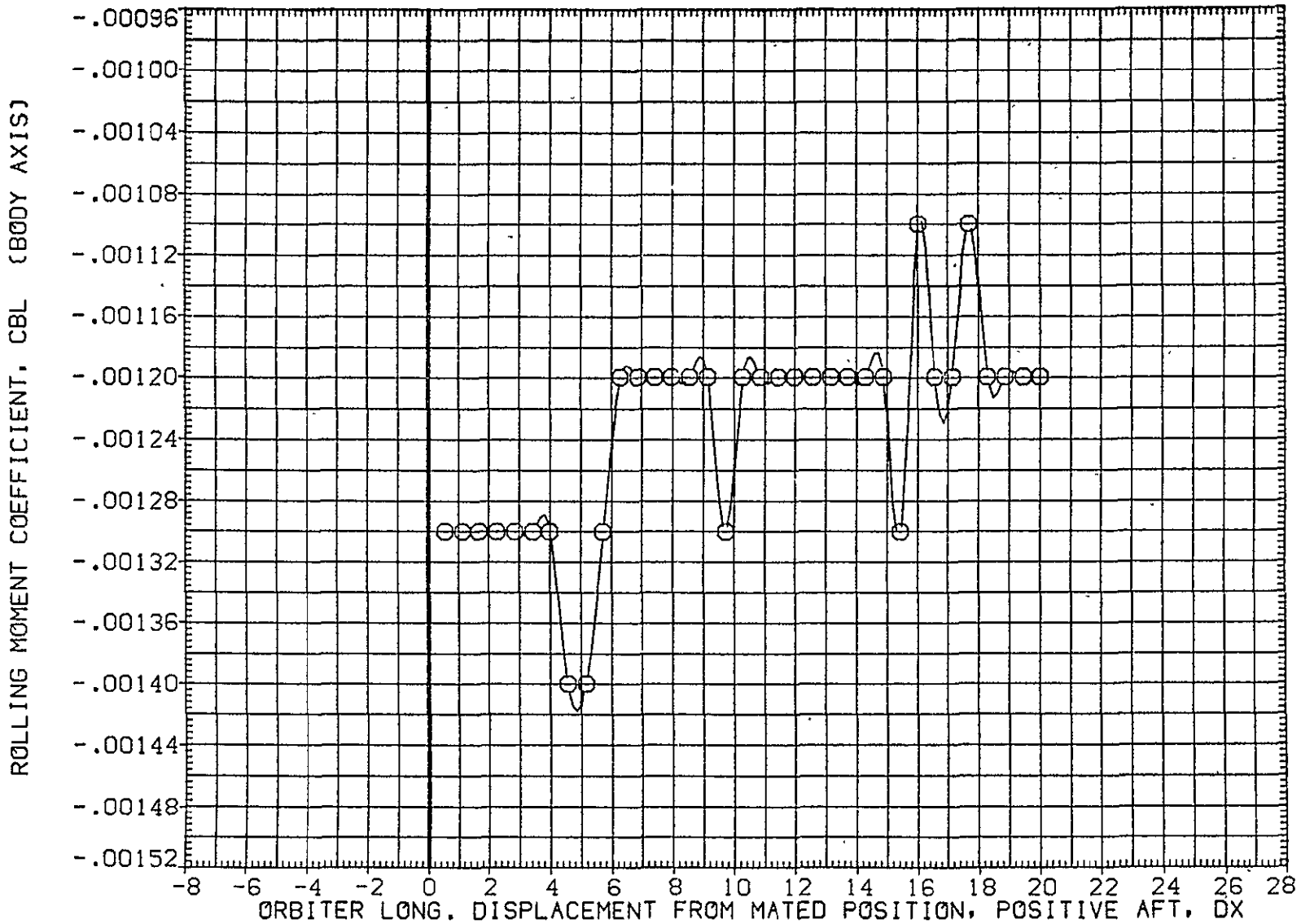


FIG. 54 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE063

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE063)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	S
		STAB	5.000	ELEVON	5.000	LREF	474.8100	I
		BDFLAP	.000	DY	.000	BREF	936.6800	I
		DZ	15.000	IORB	6.000	XMRP	1109.0000	I
		BETA0	.000	RUDDER	.000	YMRP	.0000	I
						ZMRP	375.0000	I
						SCALE	.0125	

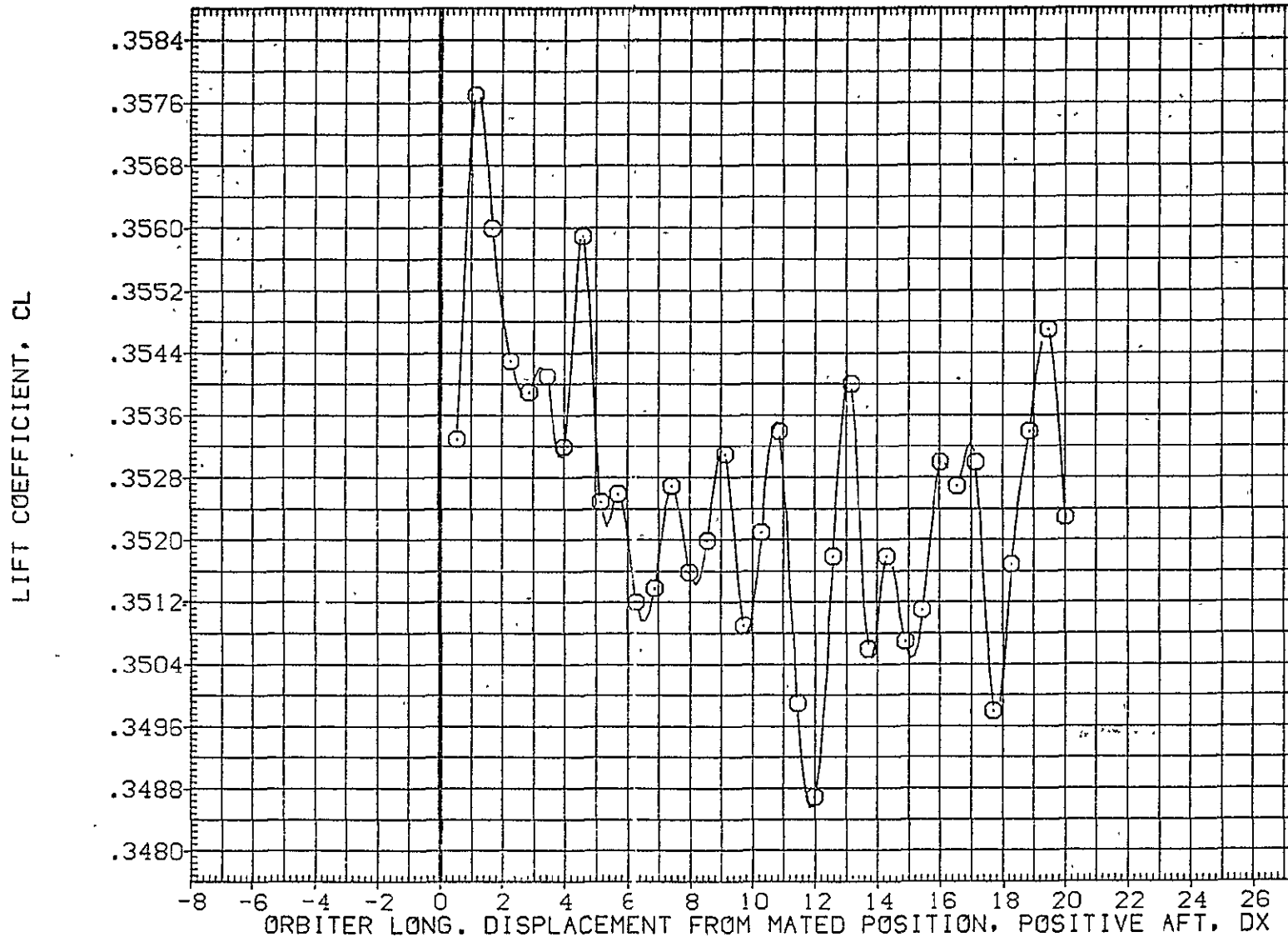


FIG. 54 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE063

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION											
		ALPHAC	BETAC	ELEVON	DY	SREF	LREF	BREF	YMRP	ZMRP	SCALE	SQ.FT.	IN.	IN.	IN. X0	IN. Y0	IN. Z0
○	.609	2.000	.000	5.000	.000	2690.0000	474.8100	936.6800	1109.0000	.0000	.0125						
		BDFLAP	.000	DZ	15.000	IORB	6.000										
		BETA0	.000	RUDDER	.000												

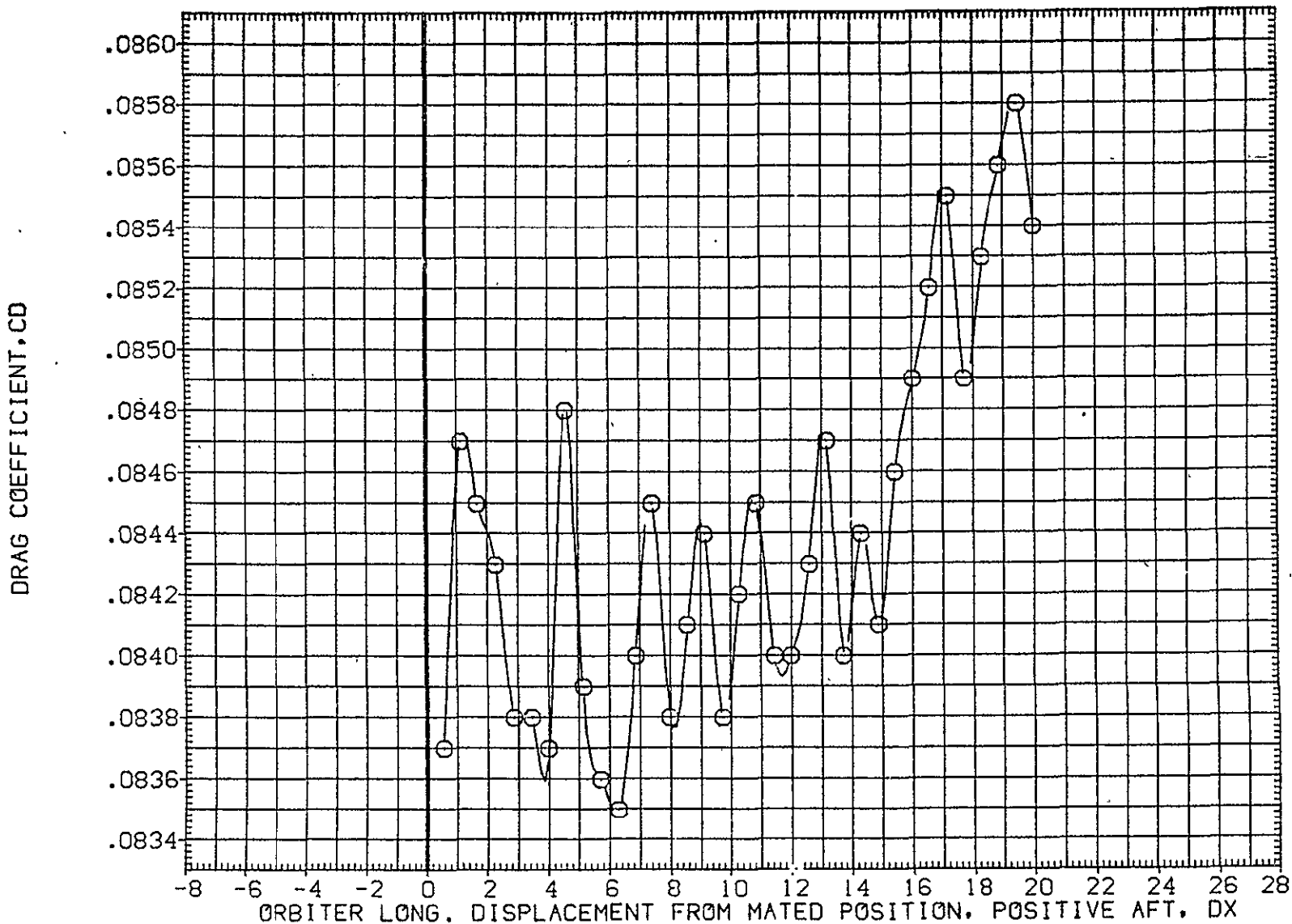


FIG. 54 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE063

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE064)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.611	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LRCF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

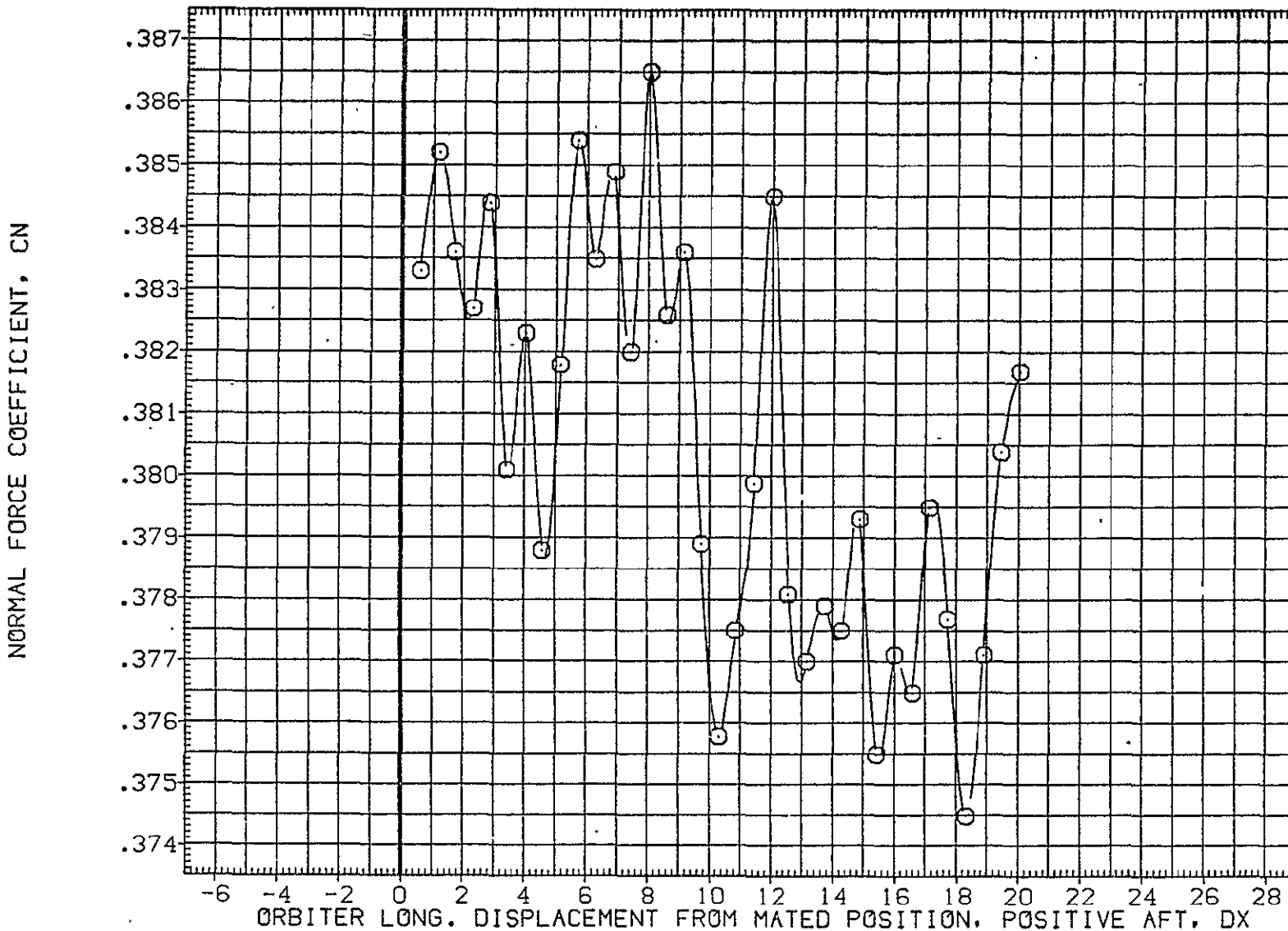


FIG. 55 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE064

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.611	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		OZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

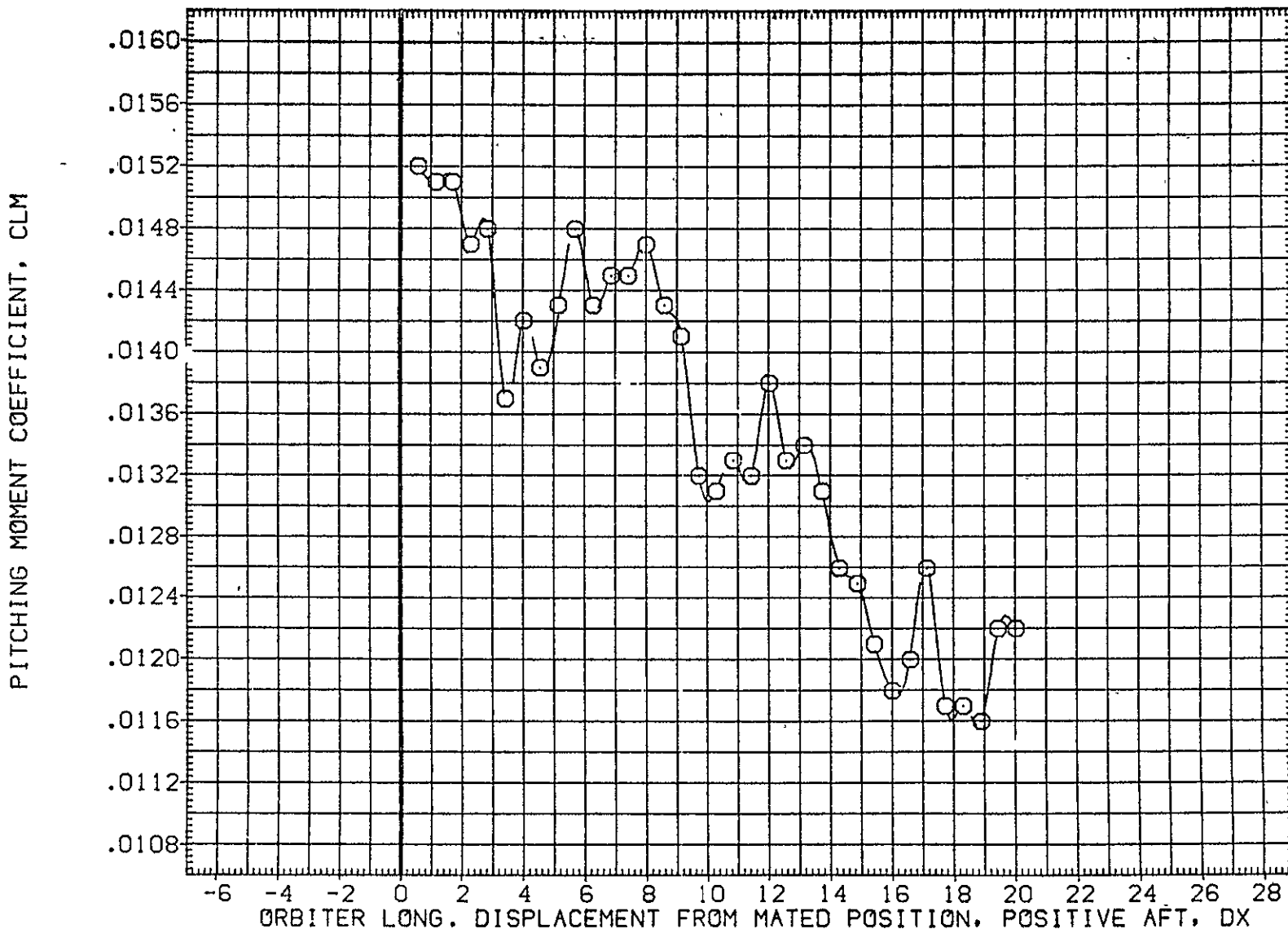


FIG. 55 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE064

LTV44-559(CA26) 747/1 ATY. 02 S1 (ORBITER DATA) (AFE064)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.611	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

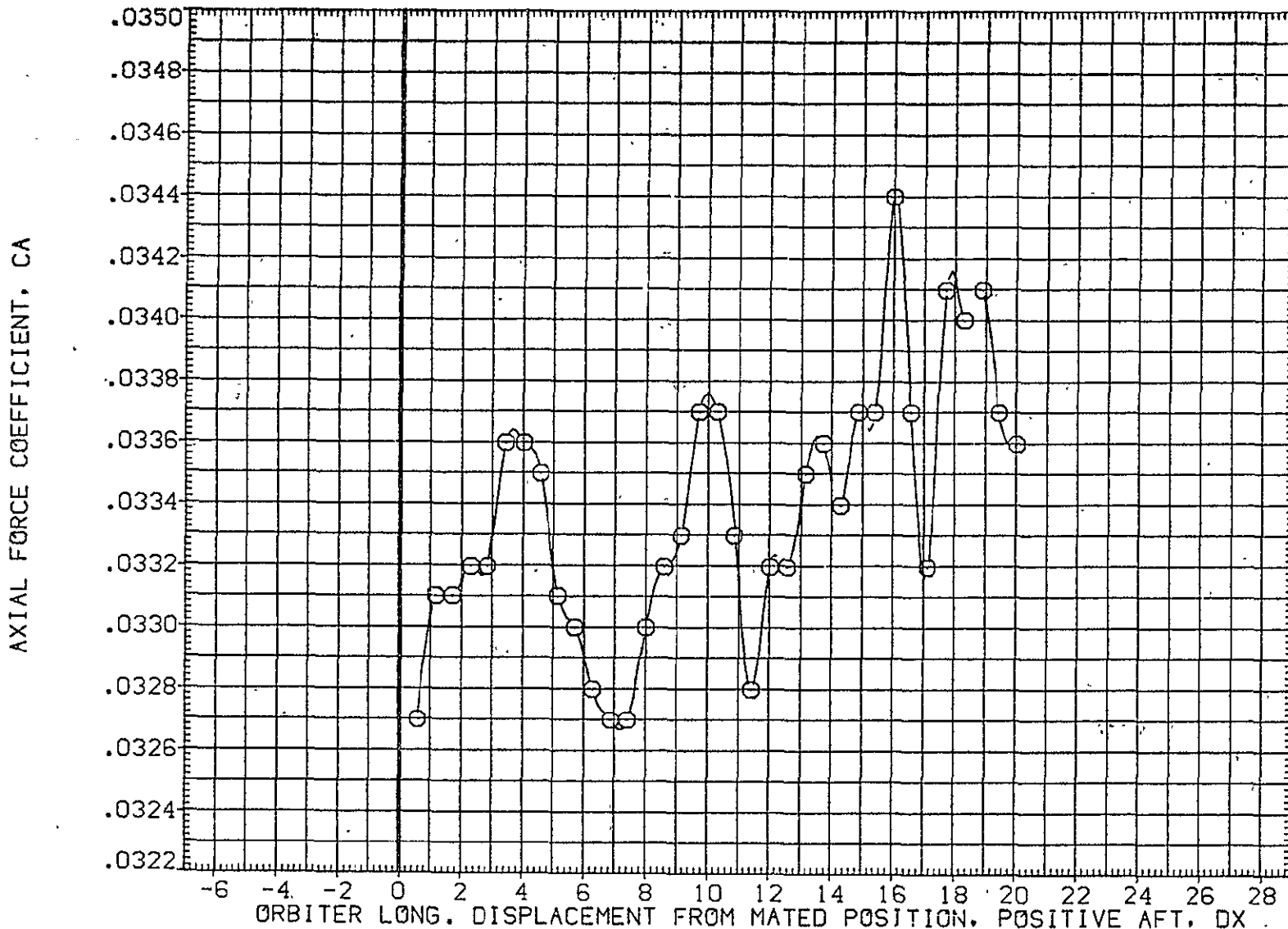


FIG. 55 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE064

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.611	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. XC
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YC
						ZMRP	375.0000	IN. ZC
						SCALE	.0125	

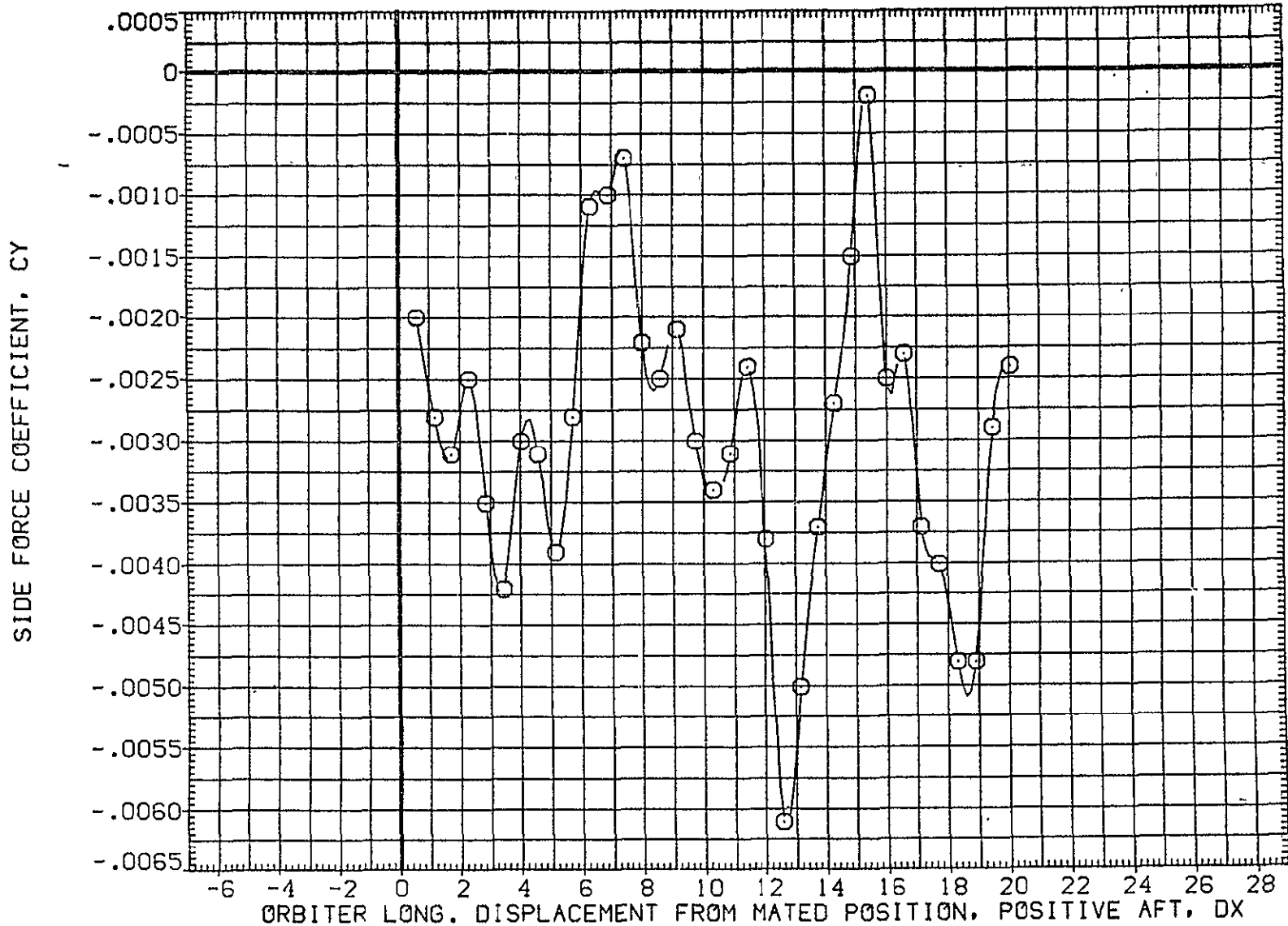


FIG. 55 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE064

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE064)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.611	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SG.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BOFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. XC
		BETAQ	.000	RUDDER	.000	YMRP	.0000	IN. YC
						ZMRP	375.0000	IN. ZC
						SCALE	.0125	

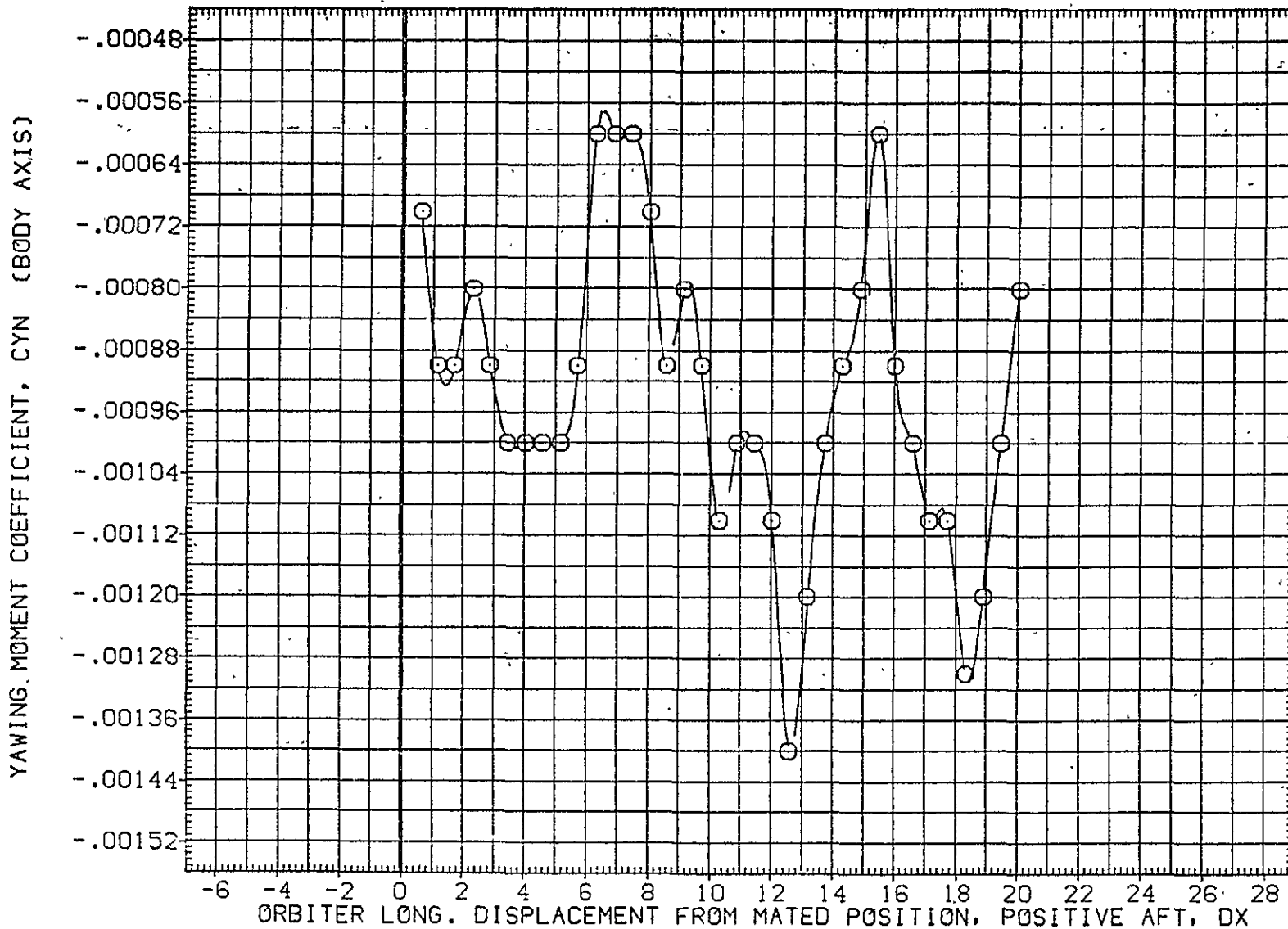


FIG. 55 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETAQ=0, AFE064

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.611	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BOFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

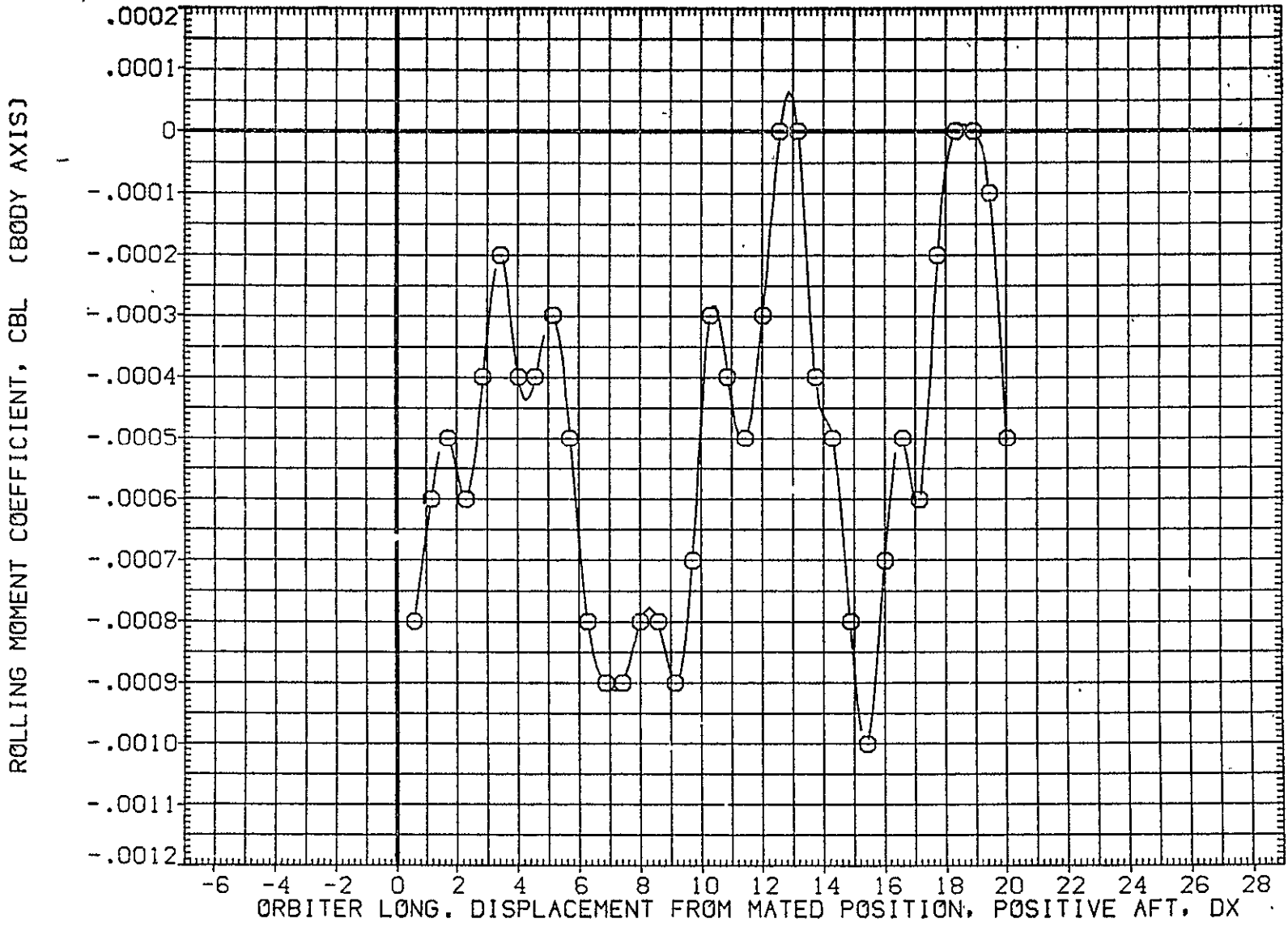


FIG. 55 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE064

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE064)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.611	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. XC
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YC
						ZMRP	375.0000	IN. ZC
						SCALE	.0125	

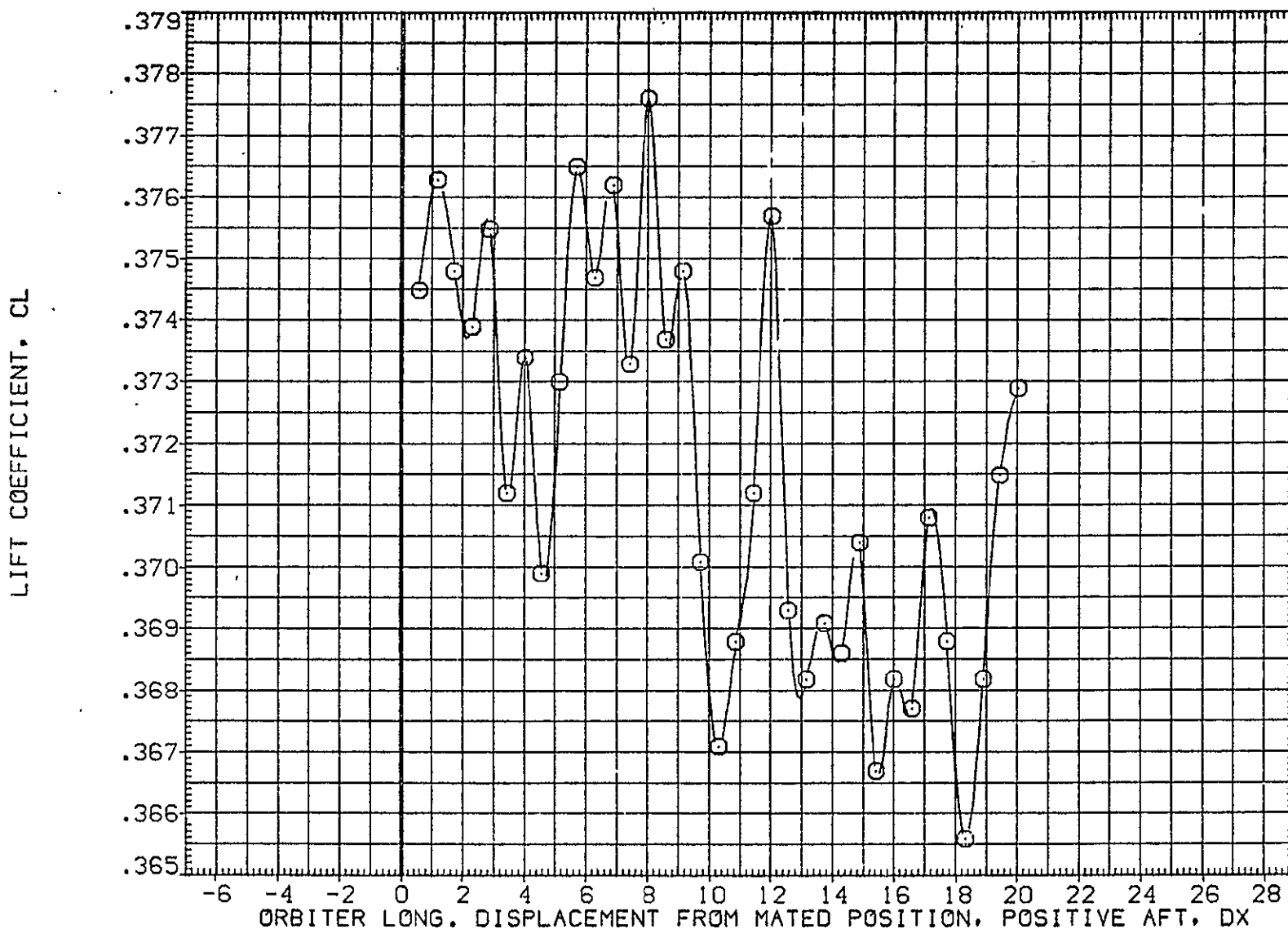


FIG. 55 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE064

SYMBOL
○

MACH	PARAMETRIC VALUES			
.611	ALPHAC	2.000	BETAC	.000
	STAB	5.000	ELEVON	5.000
	BDFLAP	.000	DY	.000
	DZ	60.000	IORB	6.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

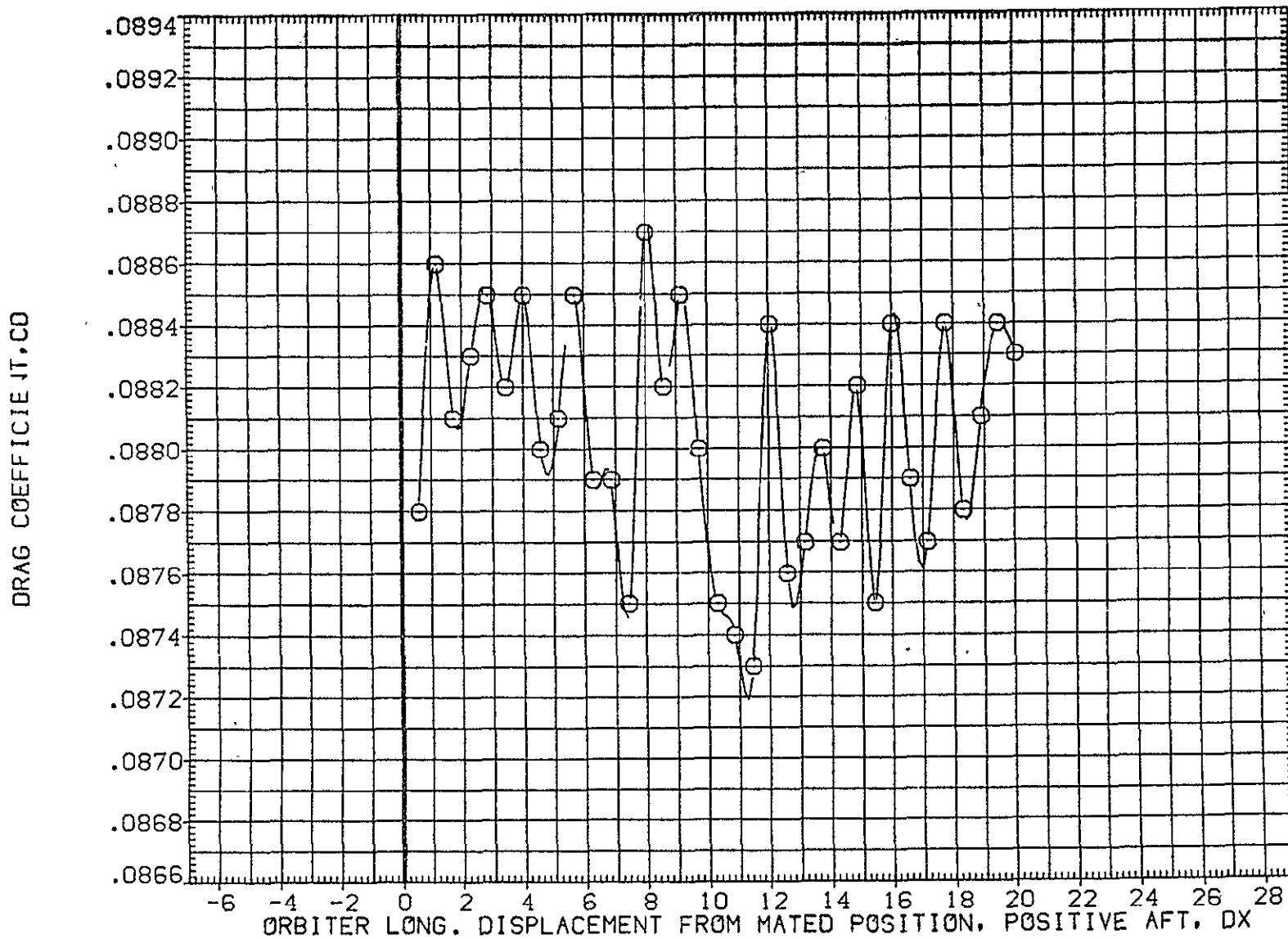


FIG. 55 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE064

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE065)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. XC
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. YC
						ZMRP	375.0000	IN. ZC
						SCALE	.0125	

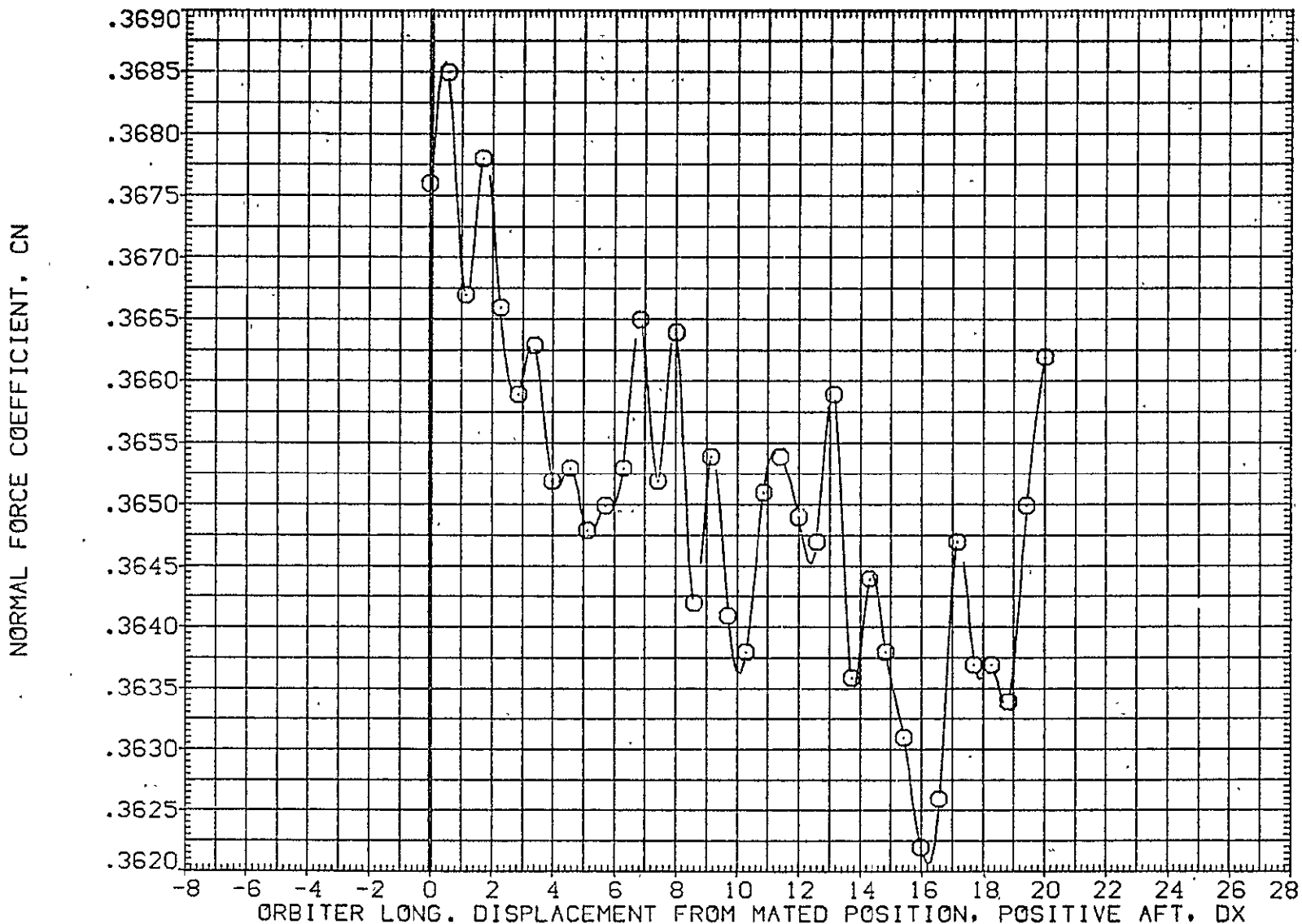


FIG. 56 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE065

SYMBOL
○

MACH	PARAMETRIC VALUES			
.609	ALPHAC	2.000	BETAC	.000
	STAB	5.000	ELEVON	5.000
	BDFLAP	.000	DY	.000
	DZ	.000	IORB	6.000
	BETA0	5.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0125	

PITCHING MOMENT COEFFICIENT, CLM

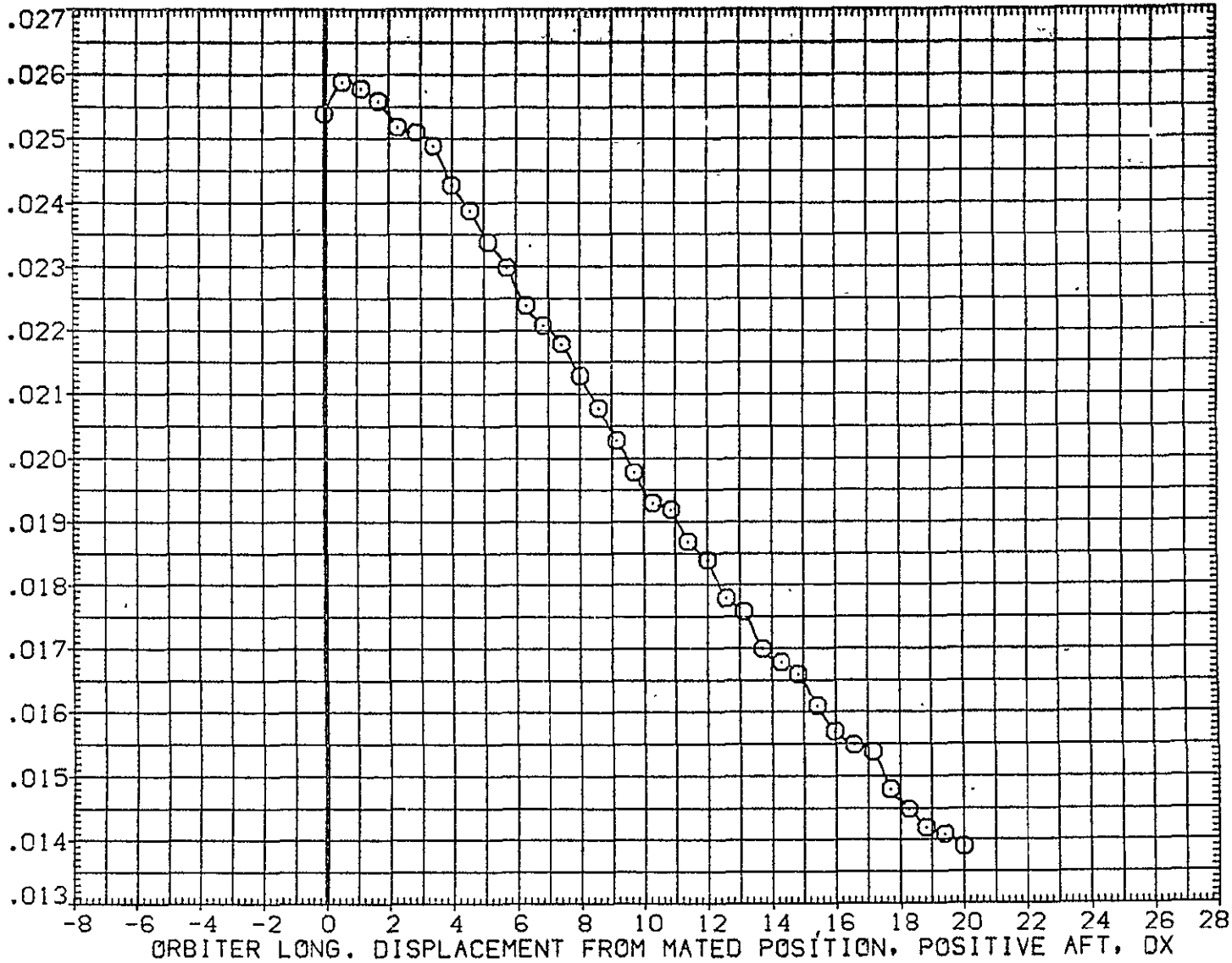


FIG. 56 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE065

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE065)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.509	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN. X
		DZ	.000	IORB	6.000	YLRP	.0000	IN. Y
		BETA0	5.000	RUDDER	.000	ZMRP	375.0000	IN. Z
						SCALE	.0125	

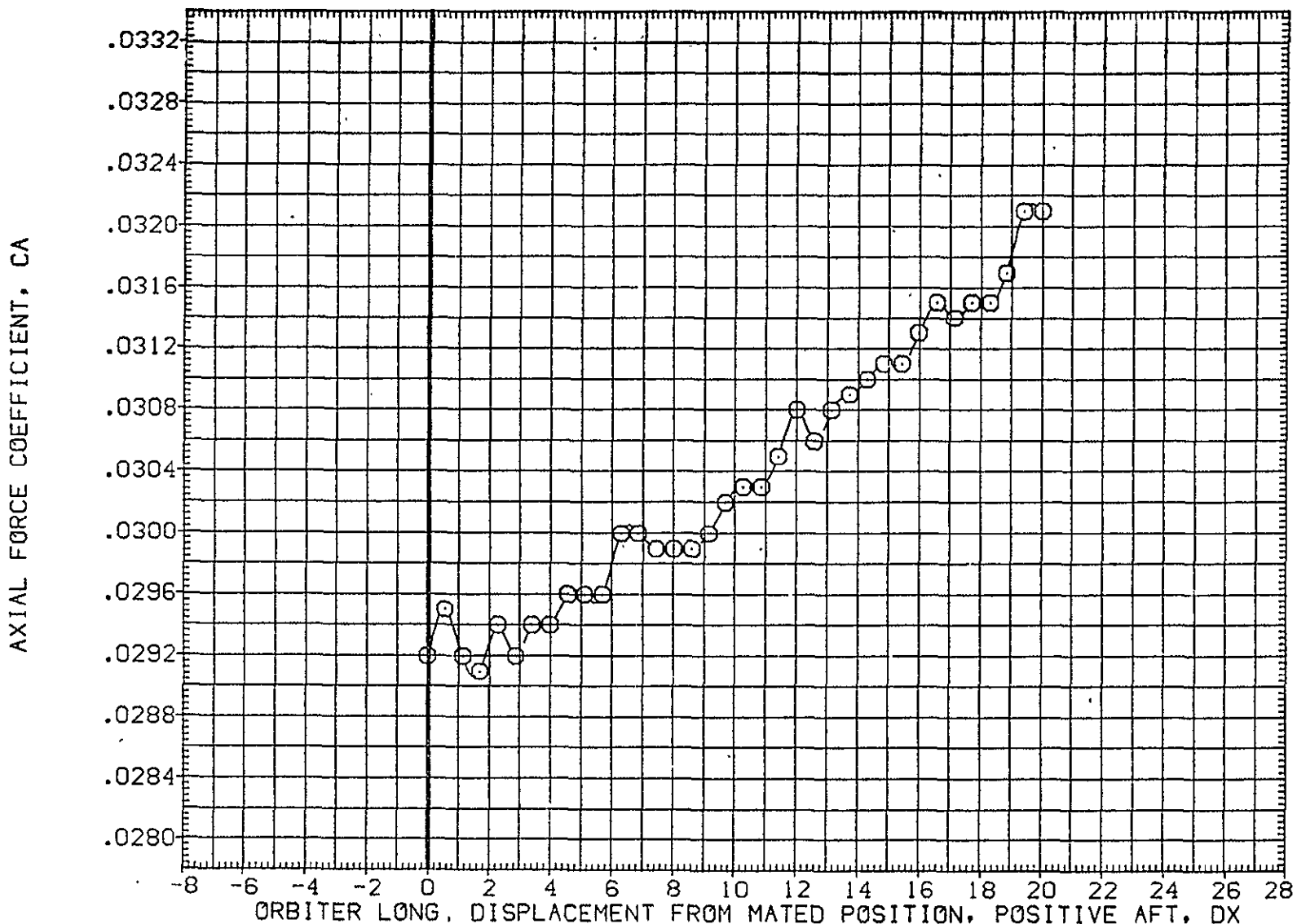


FIG. 56 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE065

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		OZ	.000	IORB	6.000	XMRP	1109.0000	IN. XI
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. YI
						ZMRP	375.0000	IN. ZI
						SCALE	.0125	

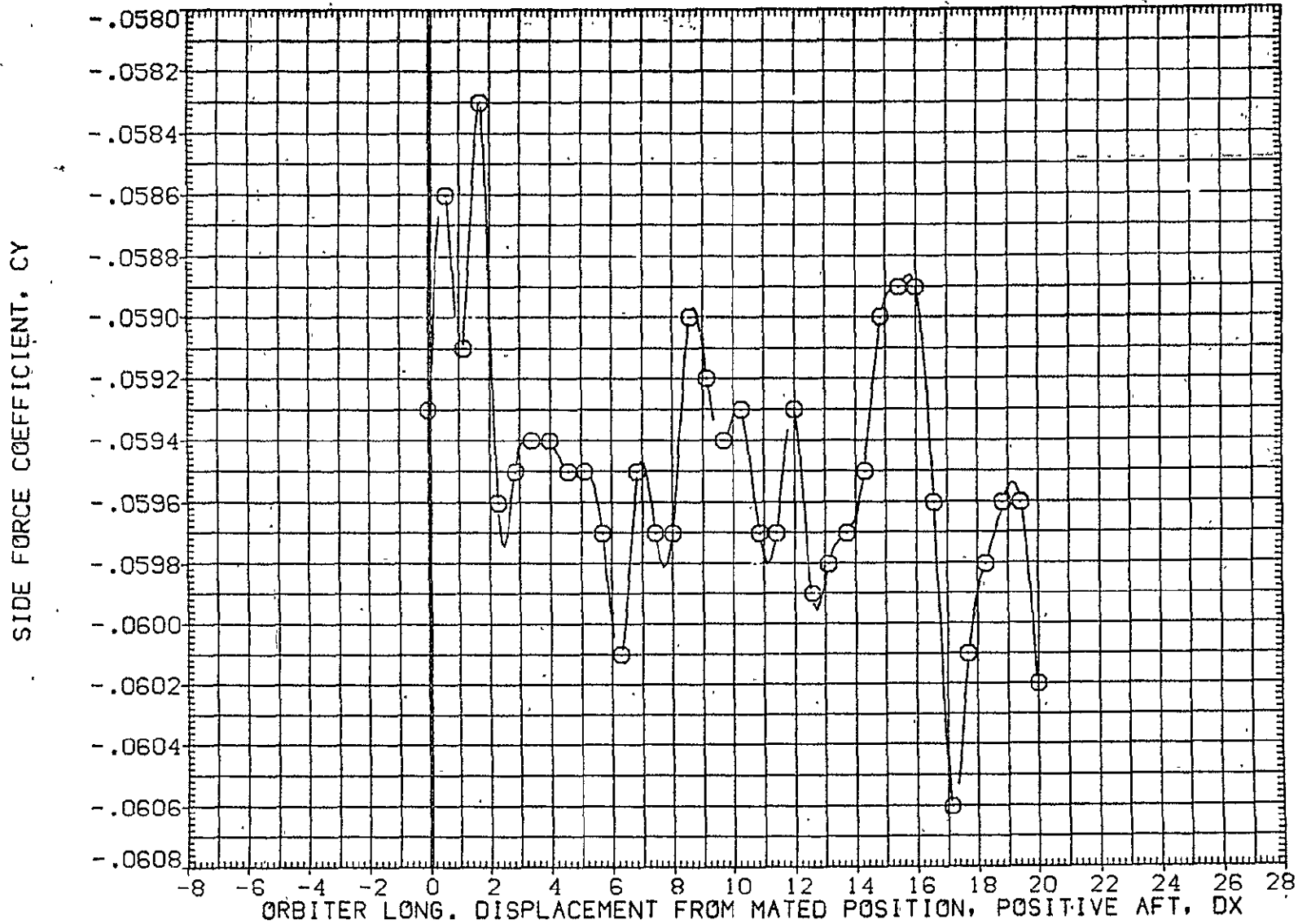


FIG. 56 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE065

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFF065)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SO.FT
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. X
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y
						ZMRP	375.0000	IN. Z
						SCALE	.0125	

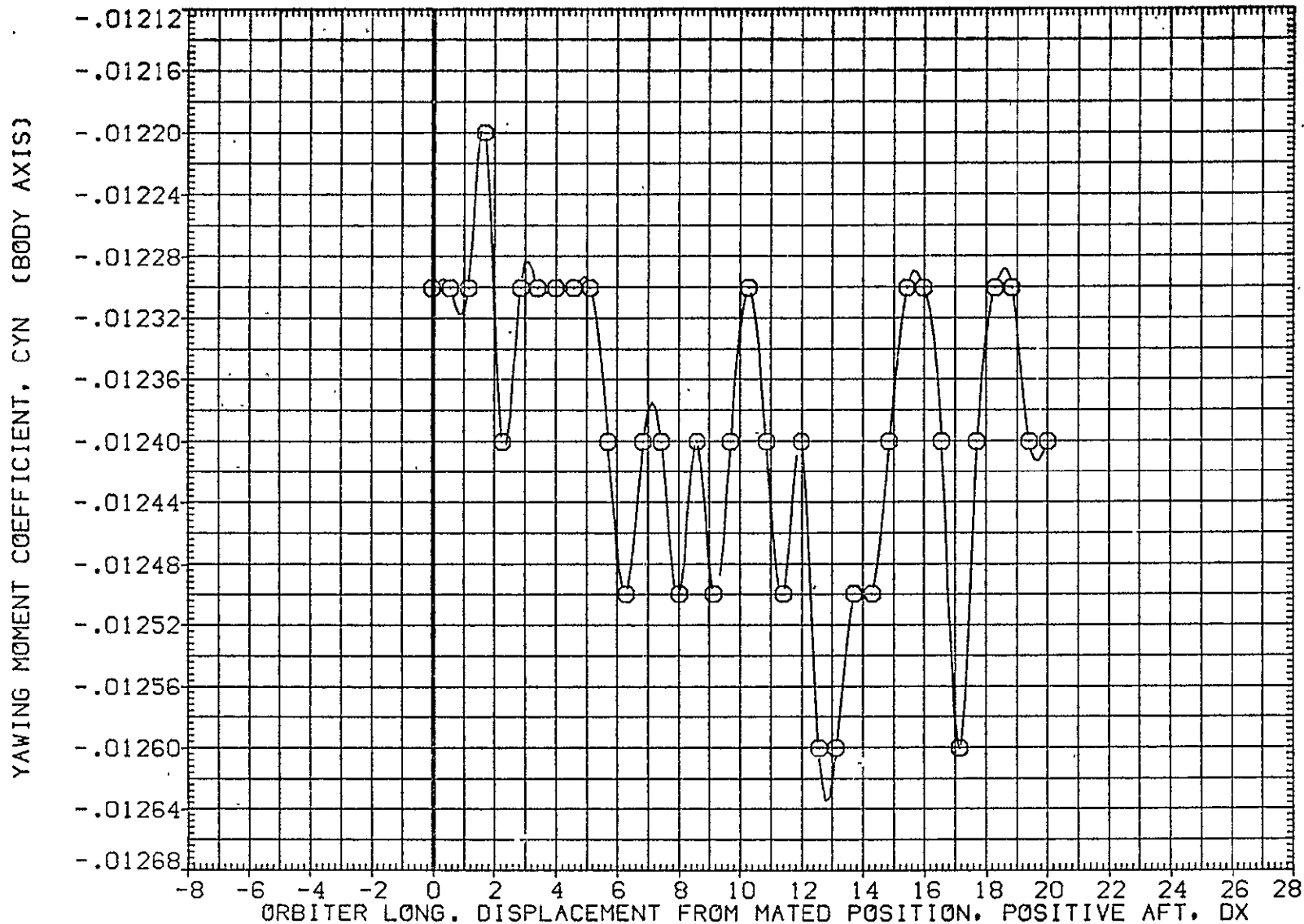


FIG. 56 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFF065

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN.
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN.
						ZMRP	375.0000	IN.
						SCALE	.0125	

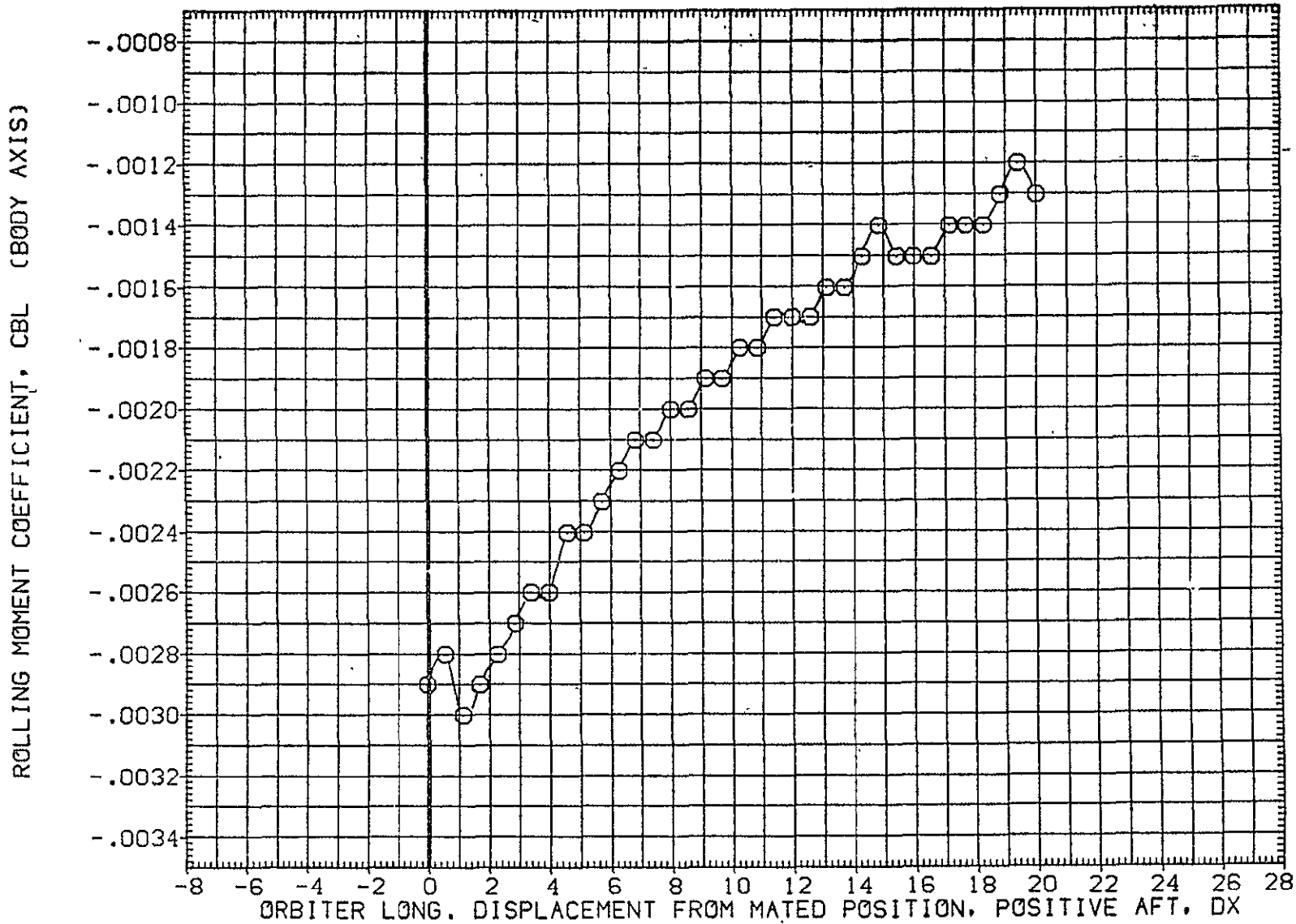


FIG. 56 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE065

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE065)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		TAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. XC
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. YC
						ZMRP	375.0000	IN. ZC
						SCALE	.0125	

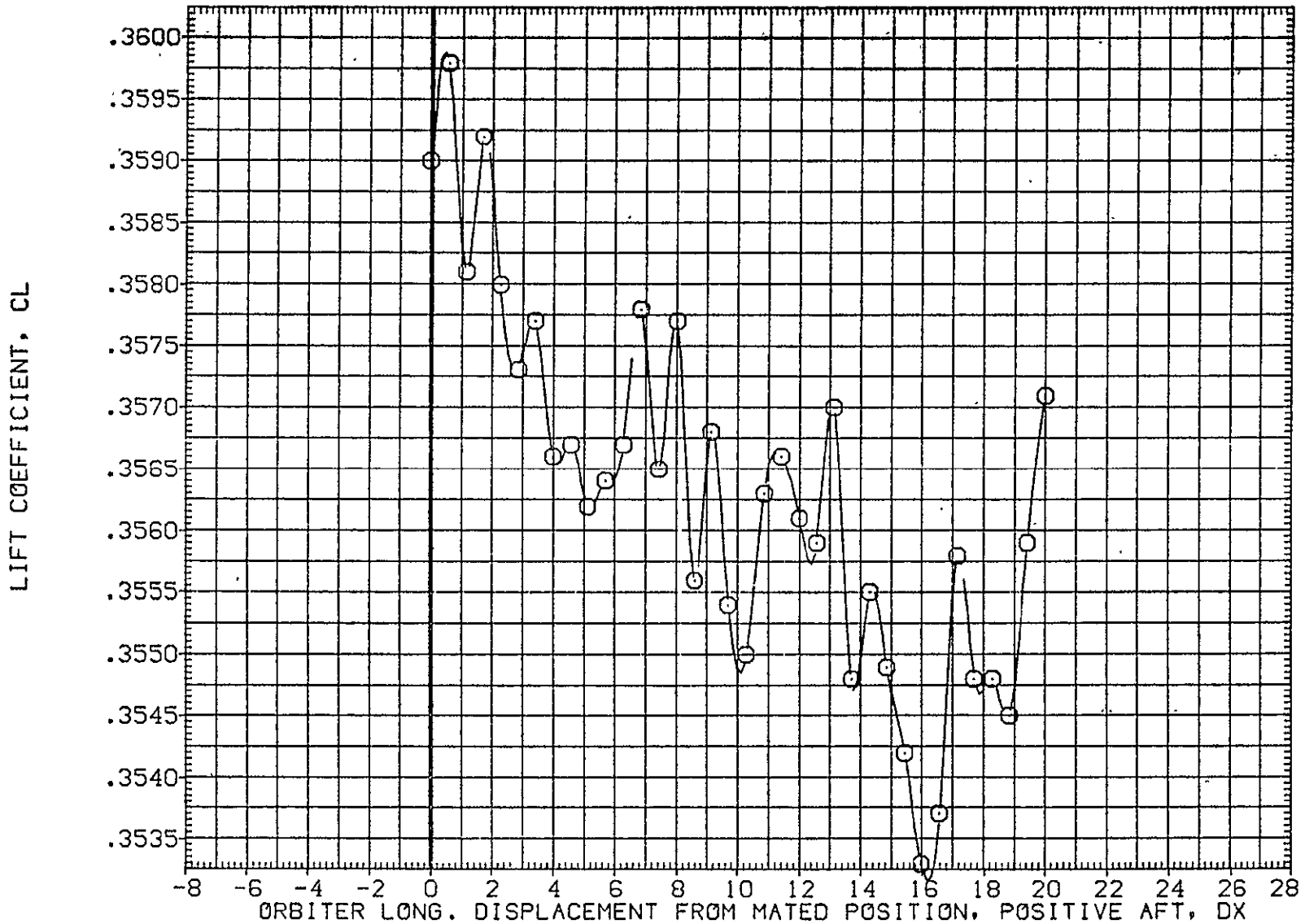


FIG. 56 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE065

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	DETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

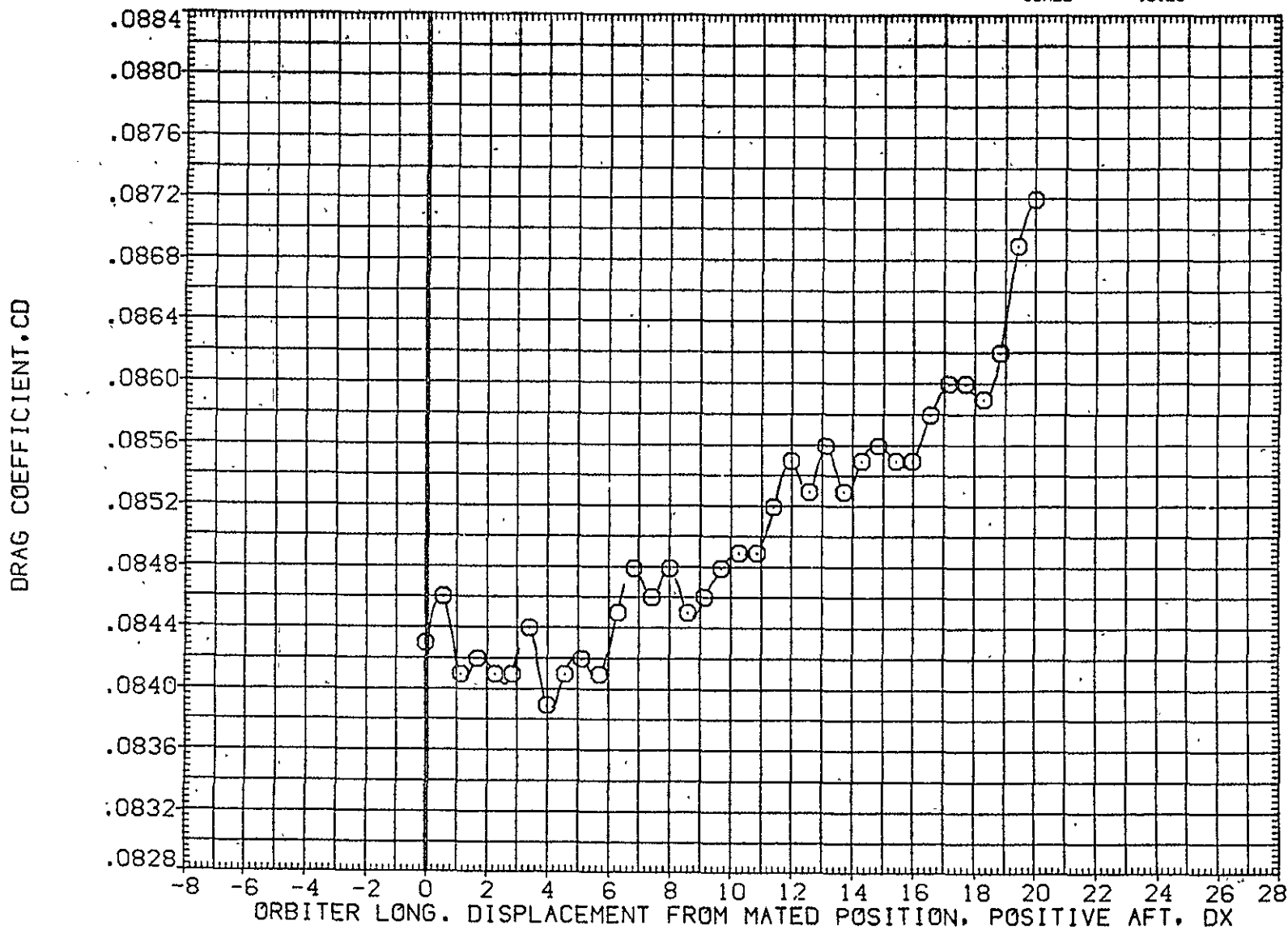


FIG. 56 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE065

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE066)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DY	SREF	SO.F1	
○	.610	2.000	.000	5.000	.000	2690.0000	IN.	
		5.000	.000	.000	.000	474.8100	IN.	
		.000	.000	.000	.000	936.6800	IN.	
		15.000	6.000	.000	.000	1109.0000	IN.	
		5.000	.000	.000	.000	375.0000	IN.	
						SCALE	.0125	

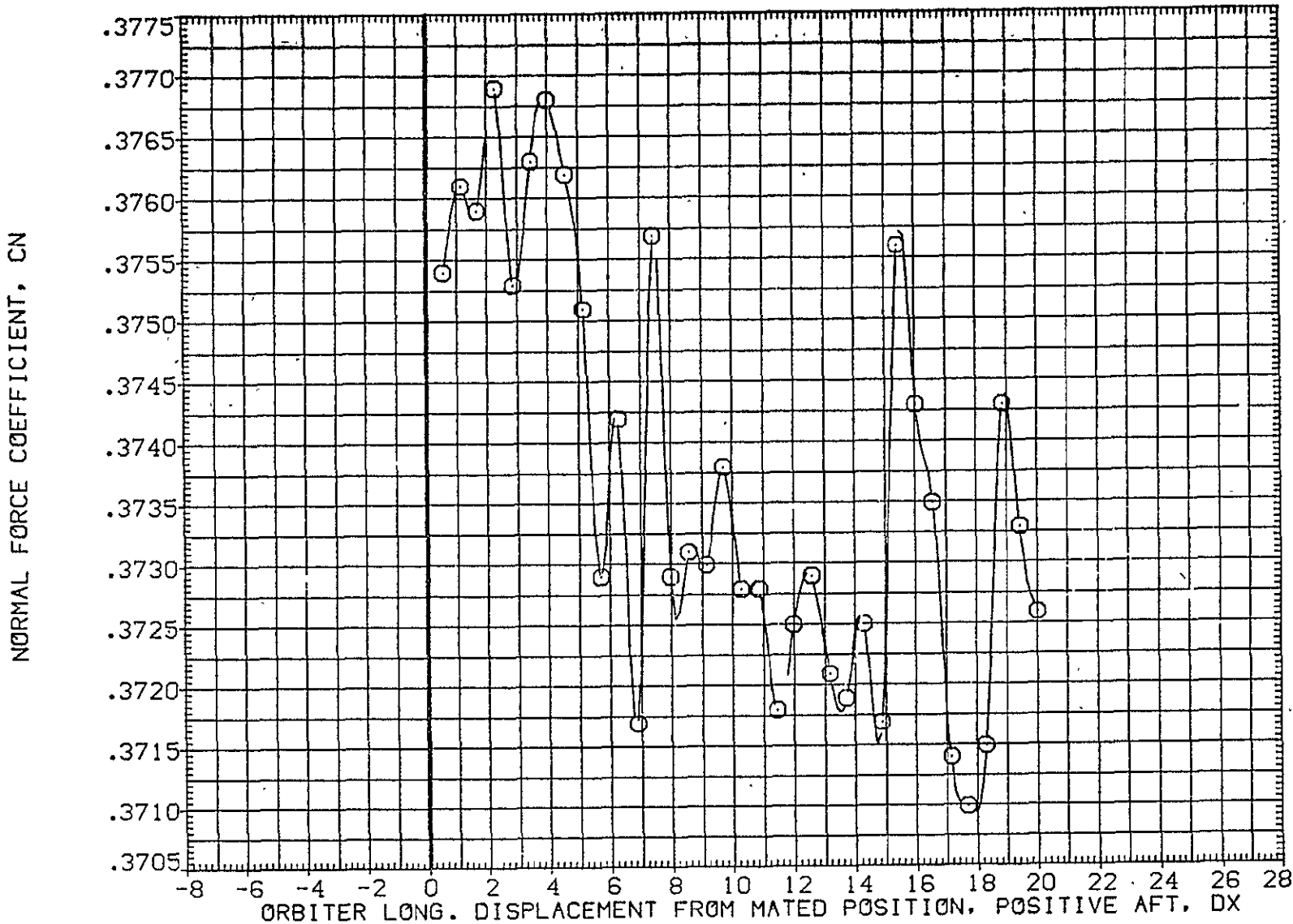


FIG. 57 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE066

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.610	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.F'
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN.
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN.
						ZMRP	375.0000	IN.
						SCALE	.0125	

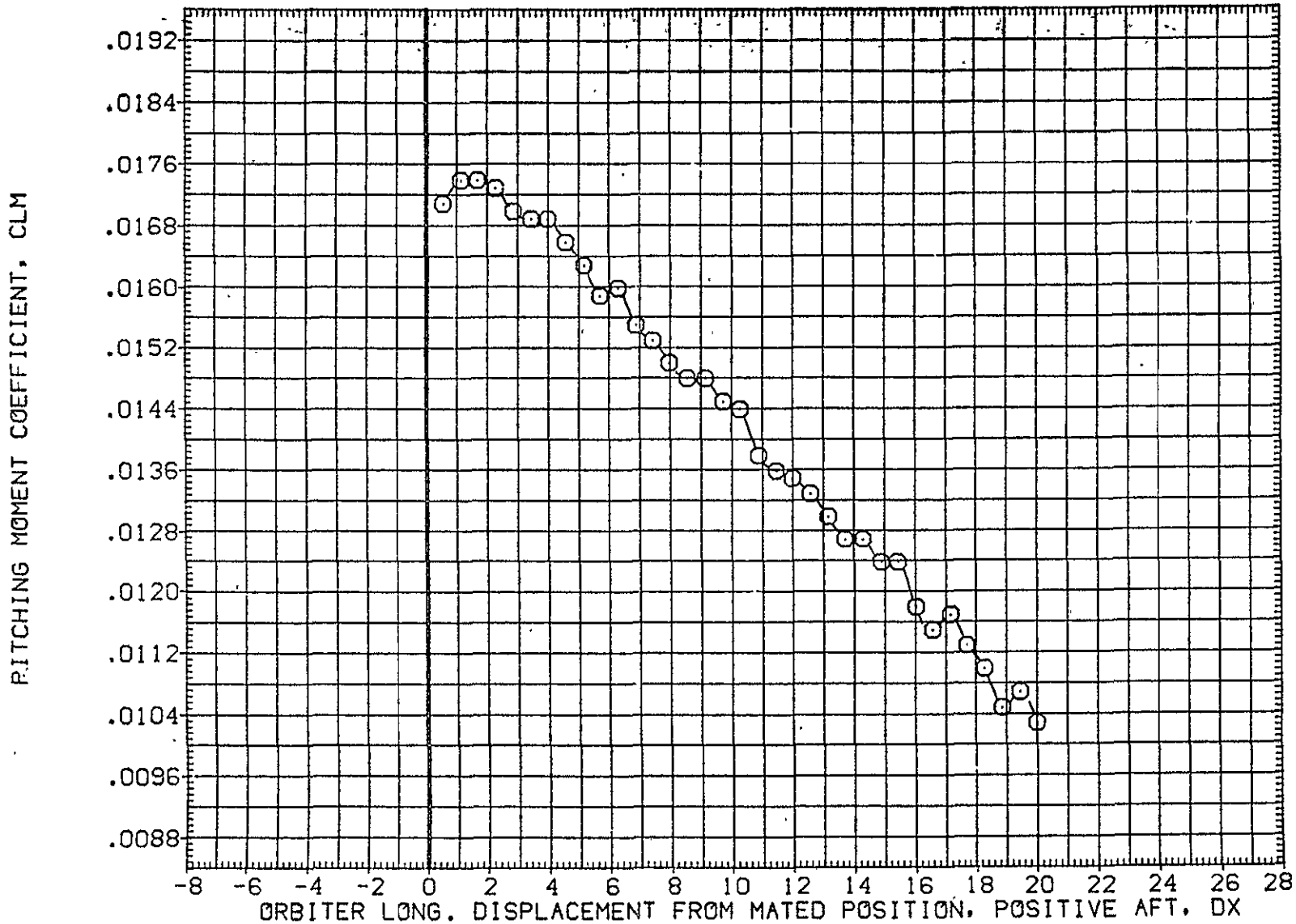


FIG. 57 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE066

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE066)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.610	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.F
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		OZ	15.000	IORB	6.000	XMRP	1109.0000	IN.
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN.
						ZMRP	375.0000	IN.
						SCALE	.0125	

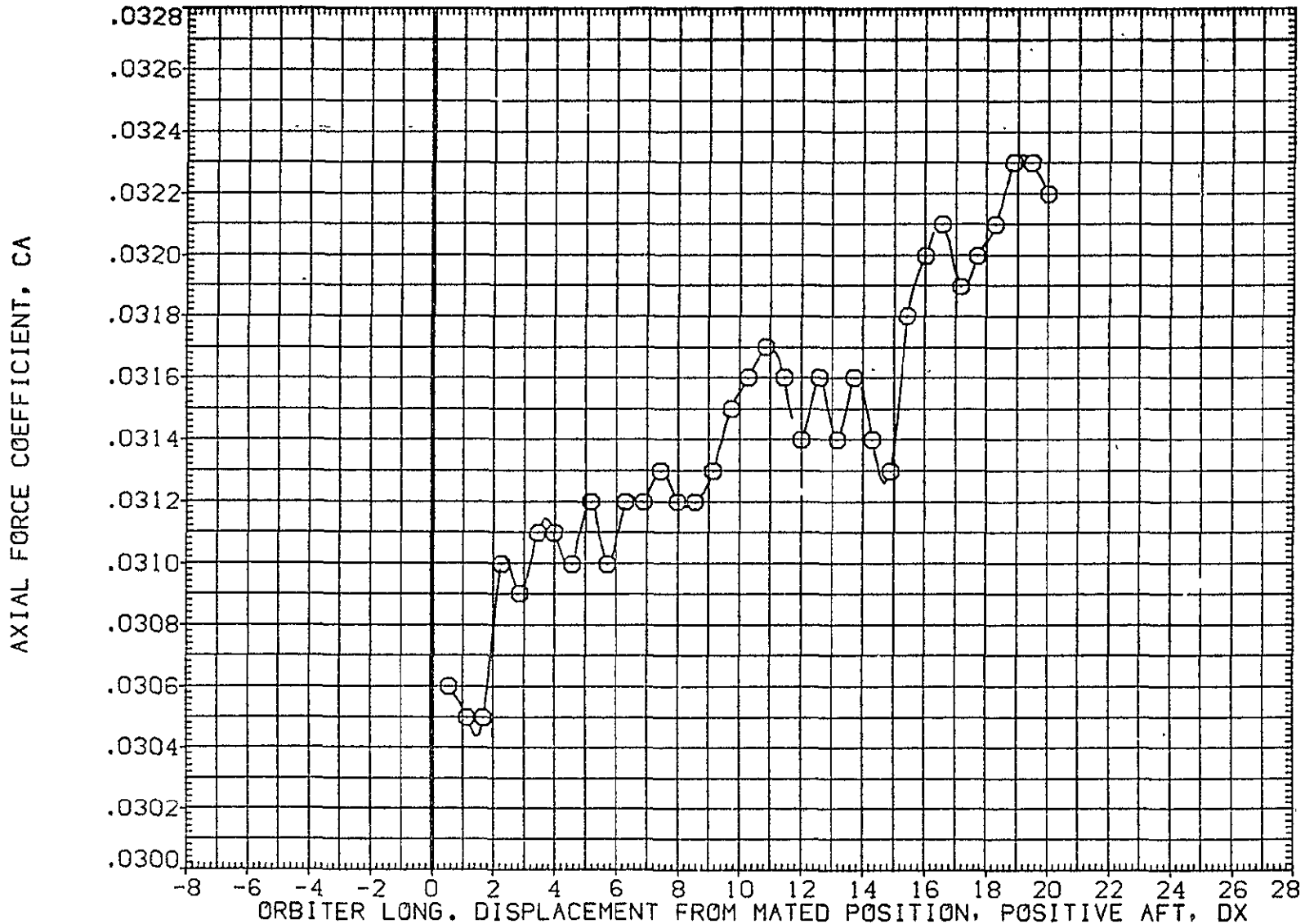


FIG. 57 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE066

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.610	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50. F'
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. :
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. :
						ZMRP	375.0000	IN. :
						SCALE	.0125	

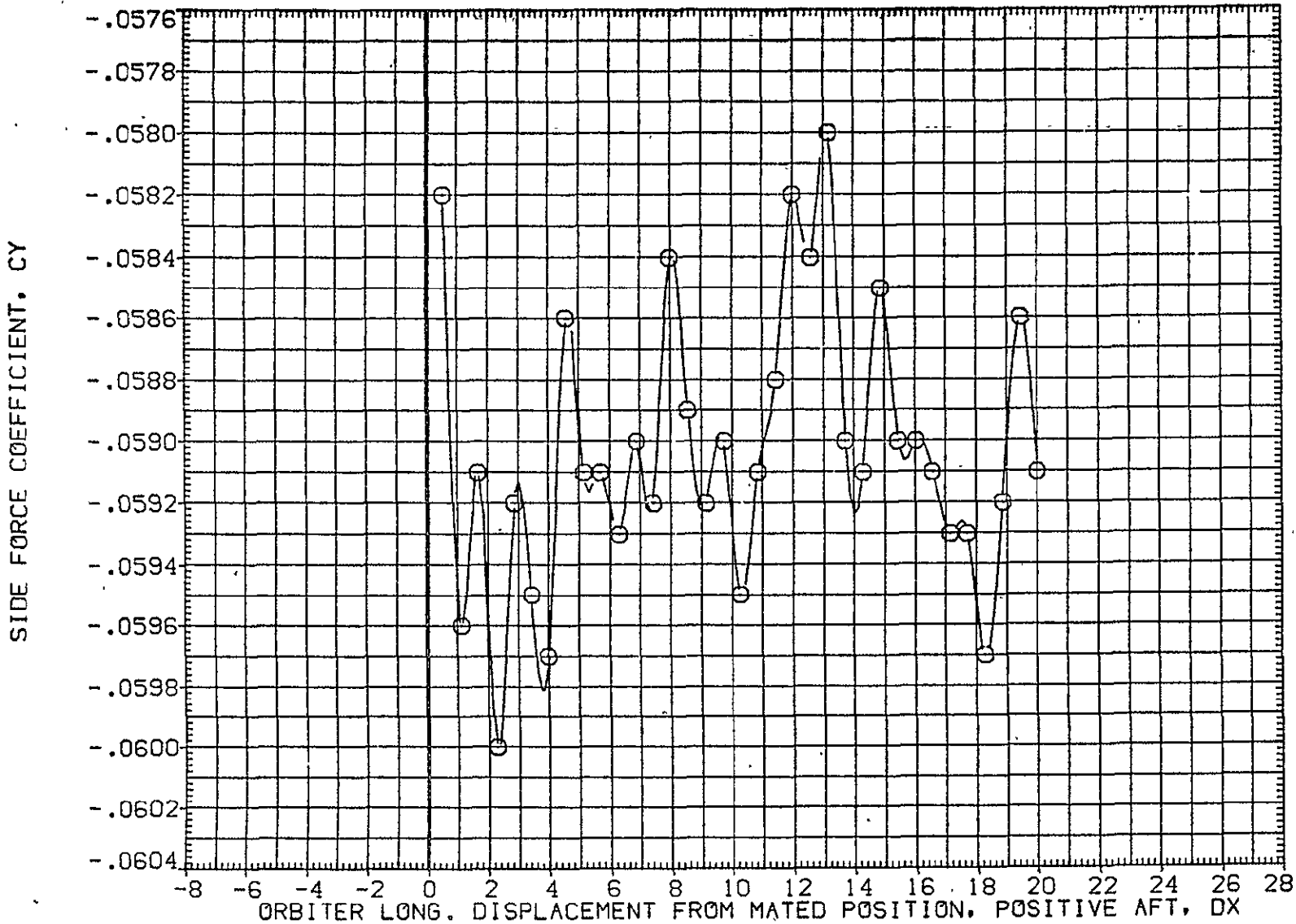


FIG. 57 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE066

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE066)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION	
○	.610	ALPHAC	2.000	BETAC	.000	SREF	2690.0000 SQ.F
		STAB	5.000	ELEVON	5.000	LREF	474.8100 IN.
		BDFLAP	.000	DY	.000	BREF	936.6800 IN.
		OZ	15.000	IORB	6.000	XMRP	1109.0000 IN.
		BETA0	5.000	RUDDER	.000	YMRP	.0000 IN.
						ZMRP	375.0000 IN.
						SCALE	.0125

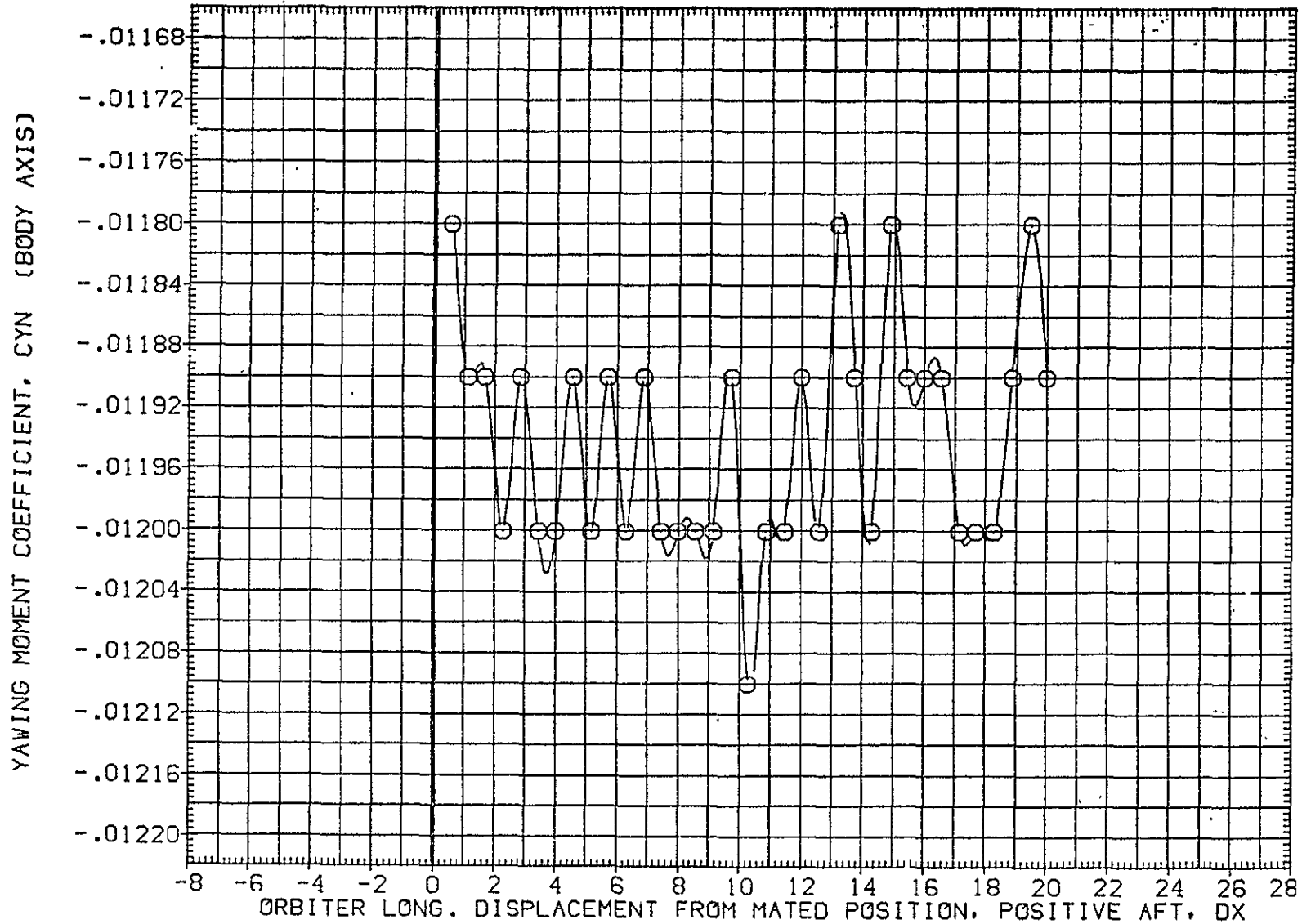


FIG. 57 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE066

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.610	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. X
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y
						ZMRP	375.0000	IN. Z
						SCALE	.0125	

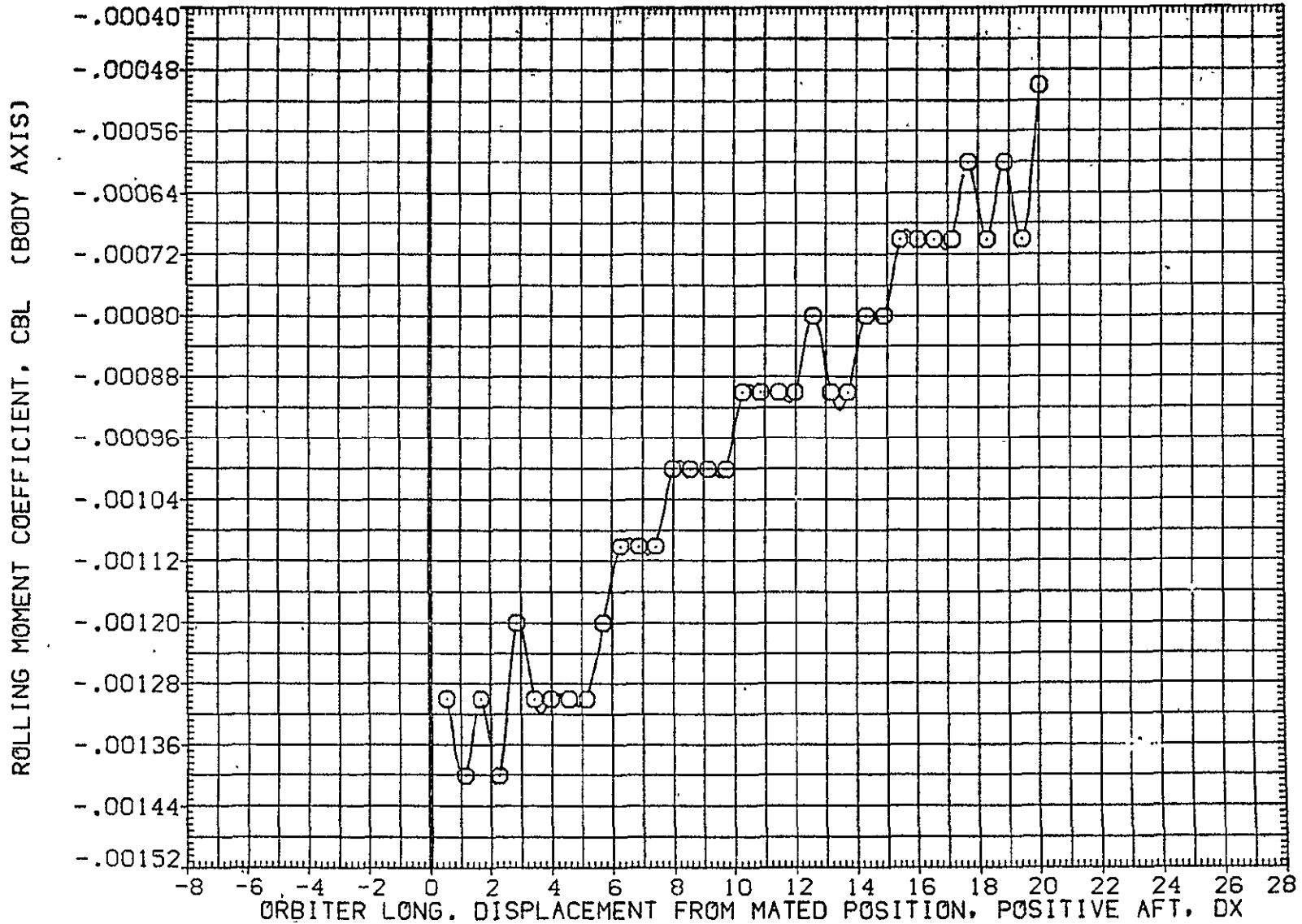


FIG. 57 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE066

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE066)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.510	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. XC
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. YC
						ZMRP	375.0000	IN. ZC
						SCALE	.0125	

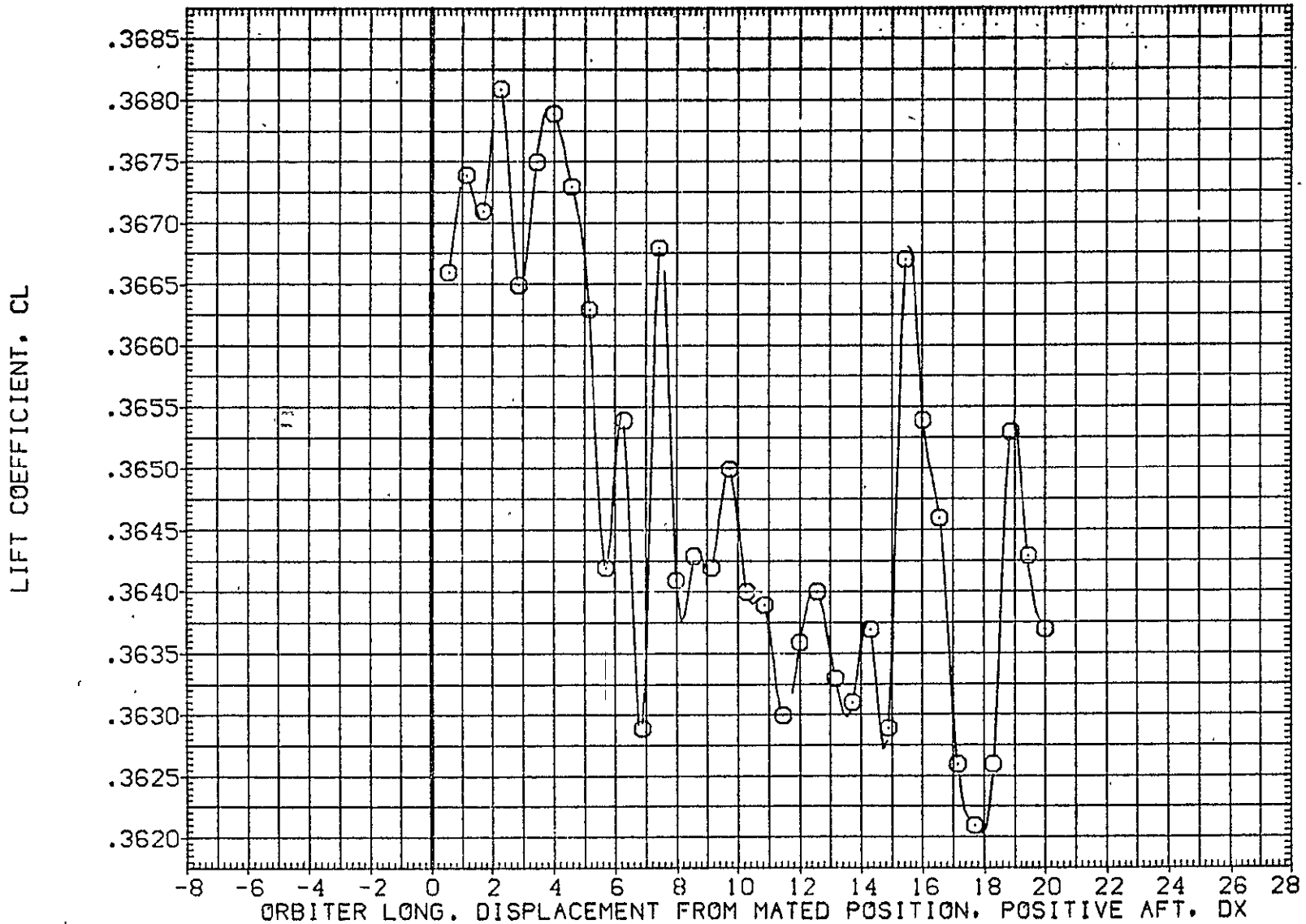


FIG. 57 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE066

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.610	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

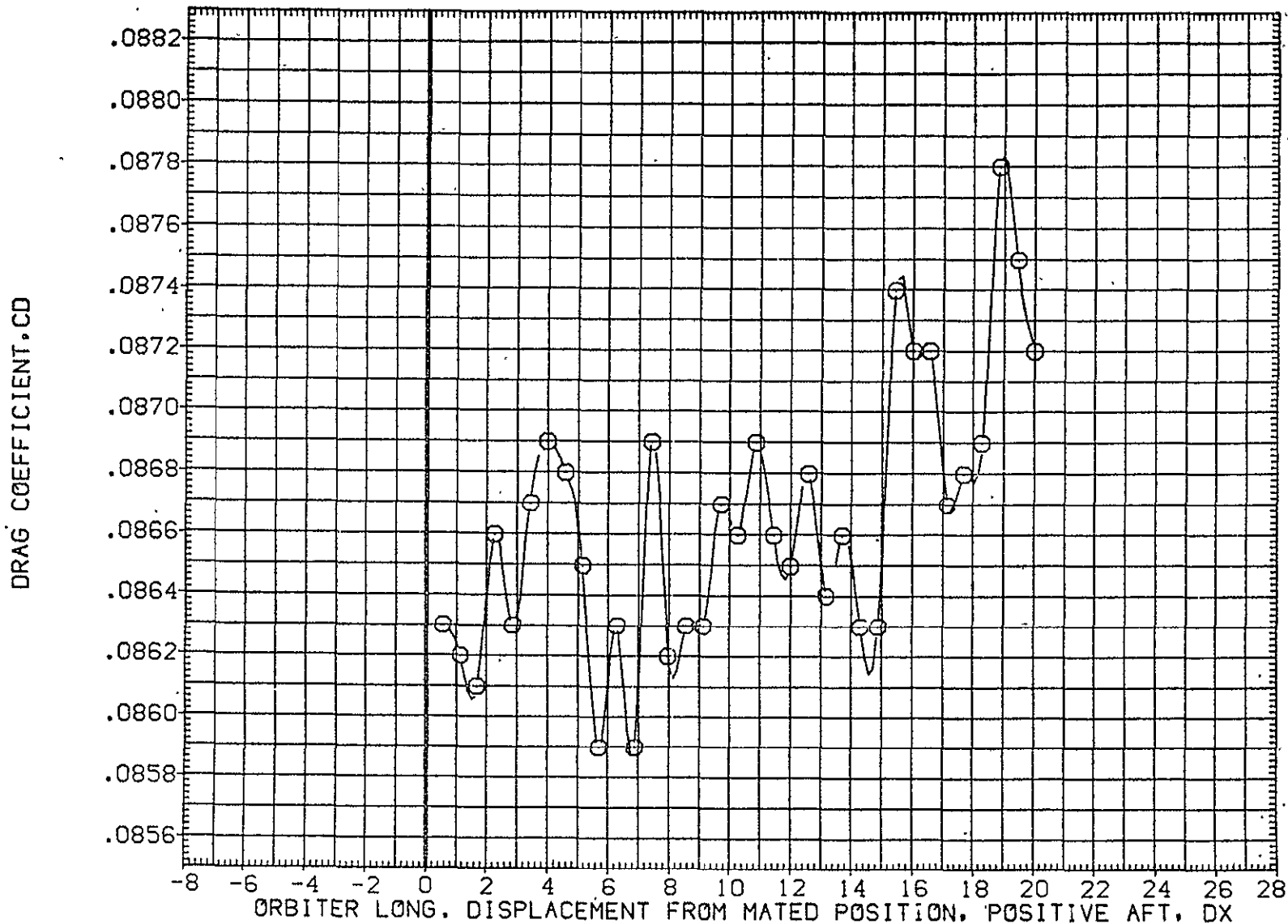


FIG. 57 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE066

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AF067)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. XI
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. YI
						ZMRP	375.0000	IN. ZI
						SCALE	.0125	

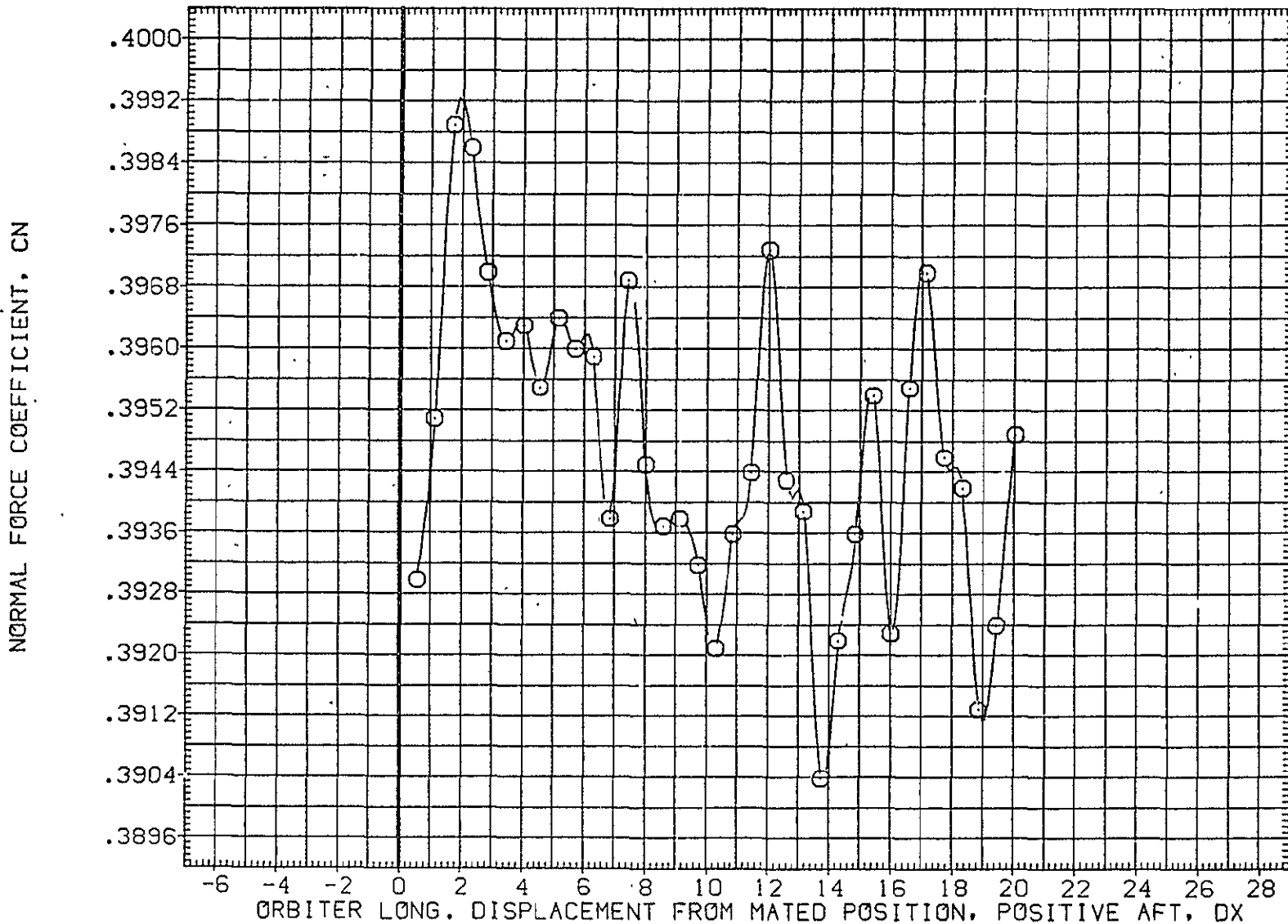


FIG. 58 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AF067

SYMBOL	MACH	PARAMETRIC VALUES						REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.		
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.		
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.		
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. XC		
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. YC		
						ZMRP	375.0000	IN. ZC		
						SCALE	.0125			

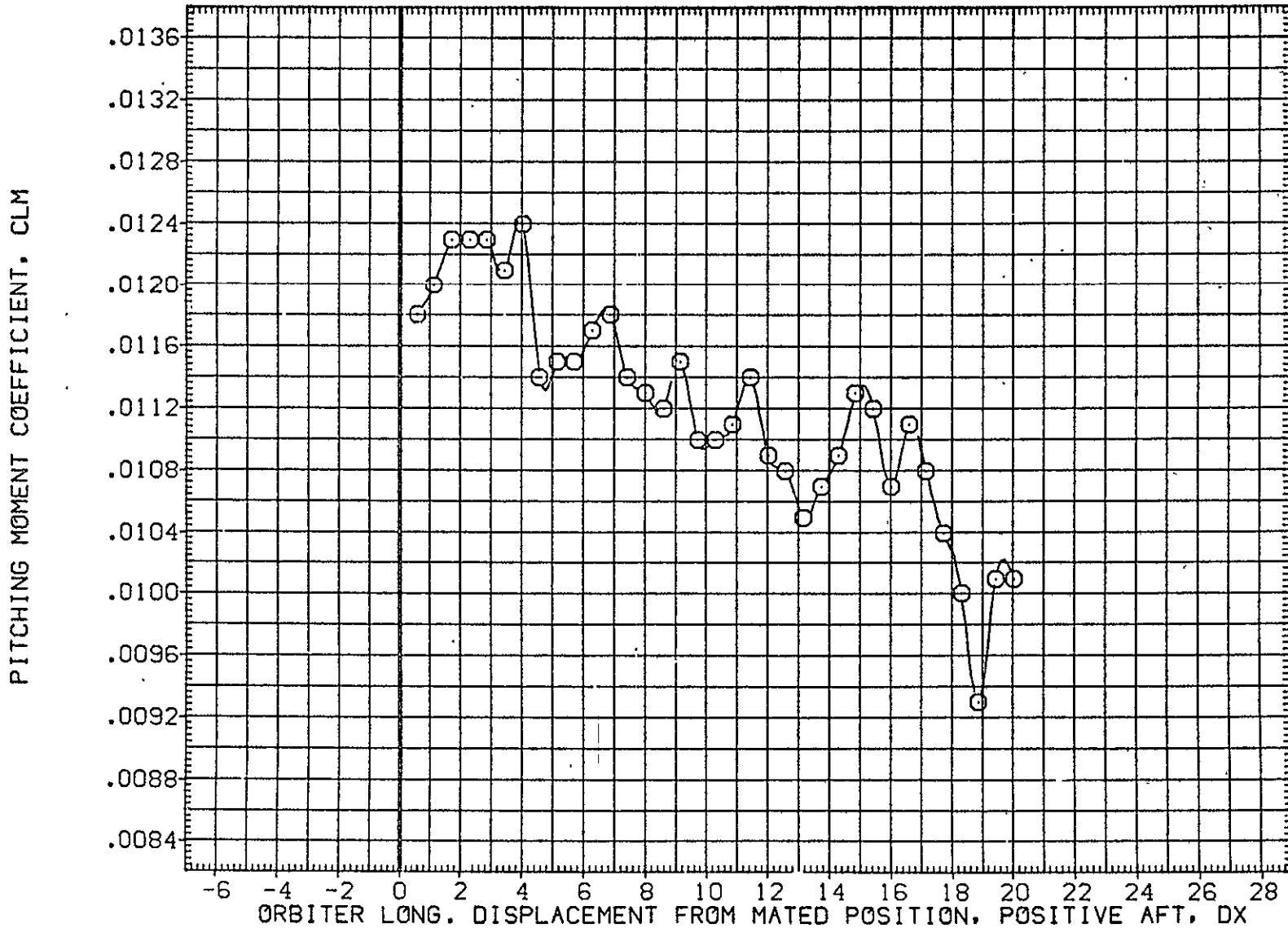


FIG. 58 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE067

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE067)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DY	SREF	SO	IN
○	.609	2.000	.000	5.000	.000	2690.0000	IN	IN
		5.000	.000	6.000	.000	474.8100	IN	IN
		.000	60.000	10RB	6.000	936.6800	IN	IN
		60.000	5.000	RUDDER	.000	1109.0000	IN	IN
		5.000				YMRP	.0000	IN
						ZMRP	375.0000	IN
						SCALE	.0125	

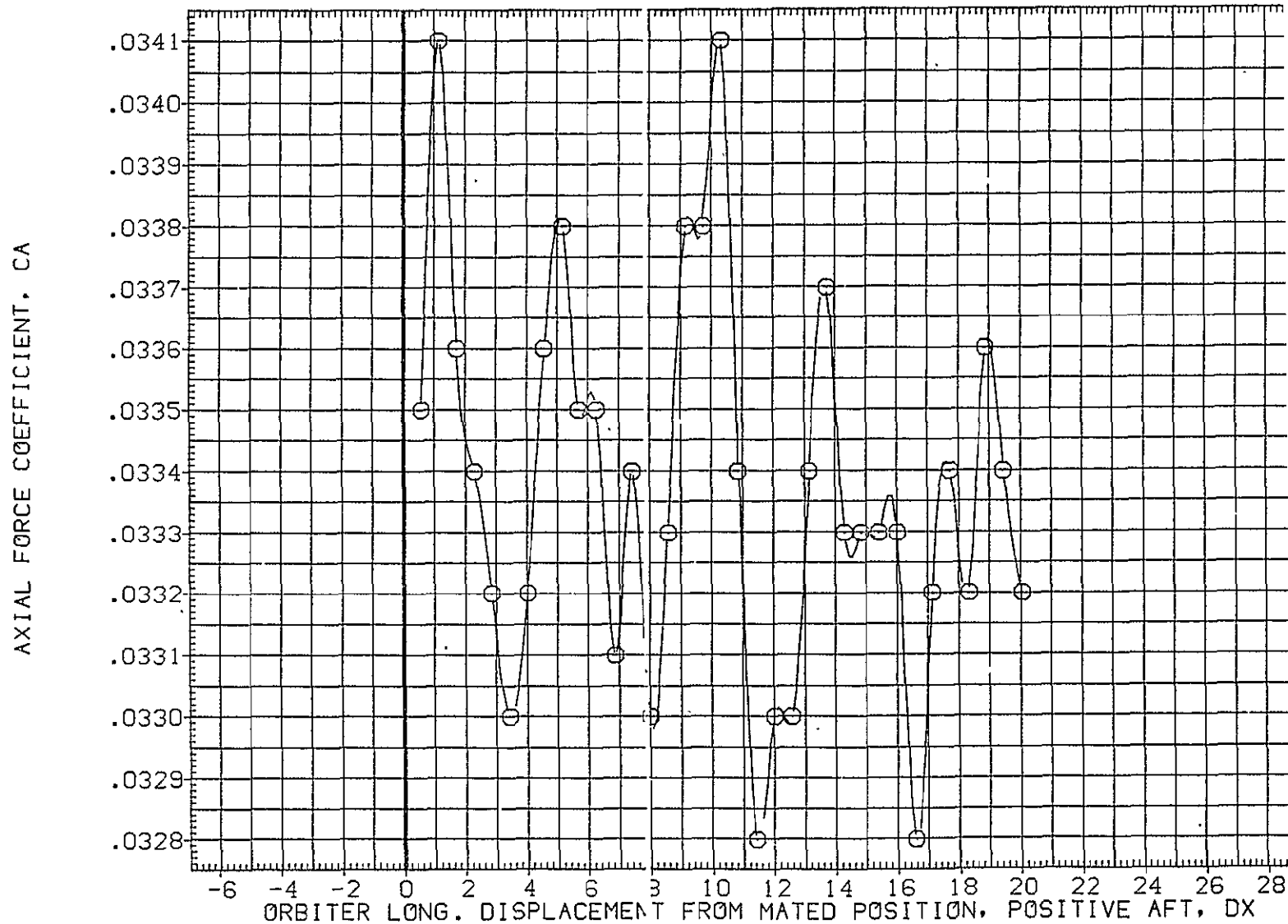


FIG. 58 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE067

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE067)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.F
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN.
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN.
						ZMRP	375.0000	IN.
						SCALE	.0125	

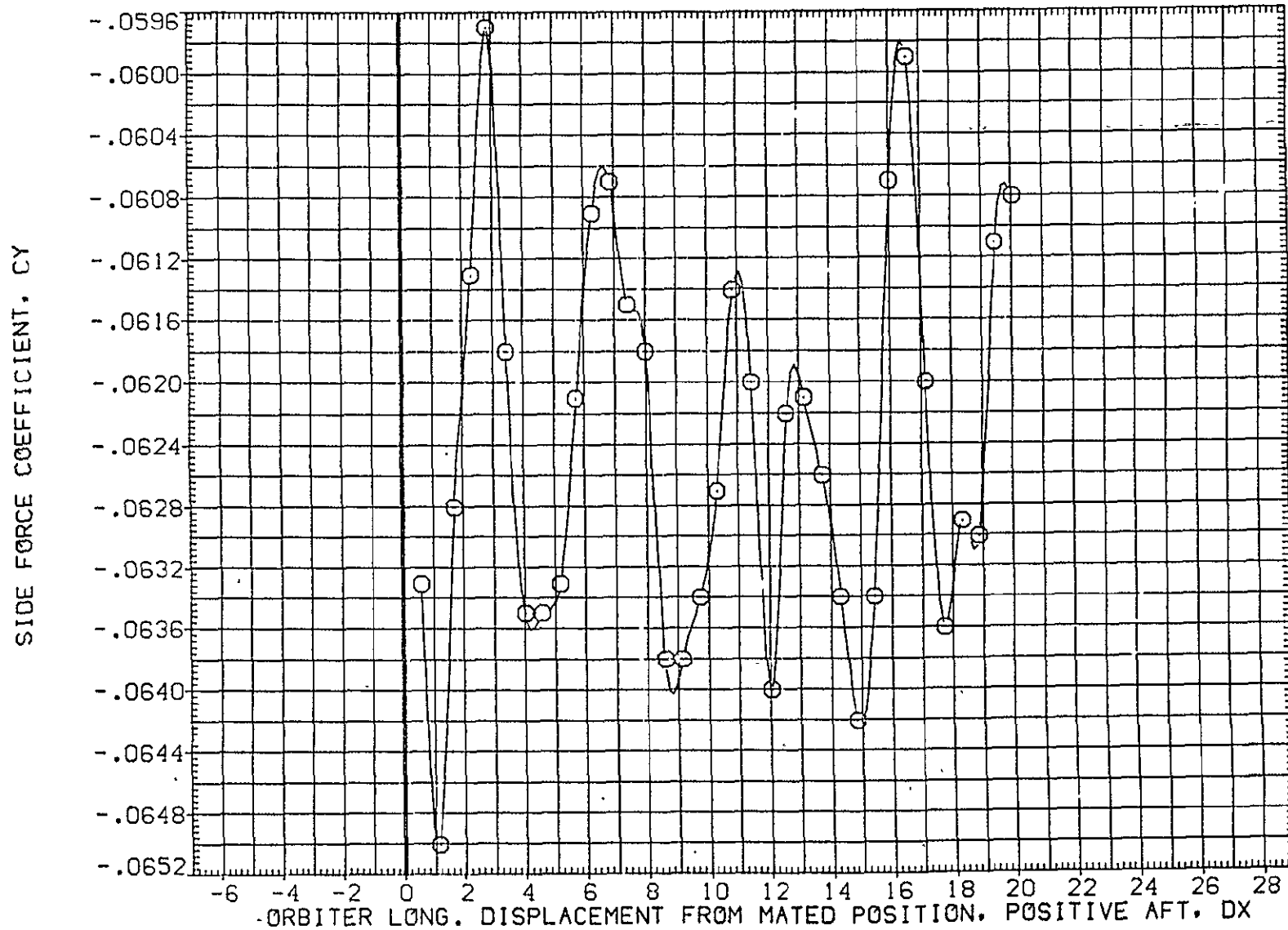


FIG. 58 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE067

LTV44-559(CA26) 747/1 ATY 02 91 (ORBITER DATA) (AFE067)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN
		BDFLAP	.000	DY	.000	BREF	936.6800	IN
		OZ	60.000	IORB	6.000	XMRP	1109.0000	IN
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN
						ZMRP	375.0000	IN
						SCALE	.0125	

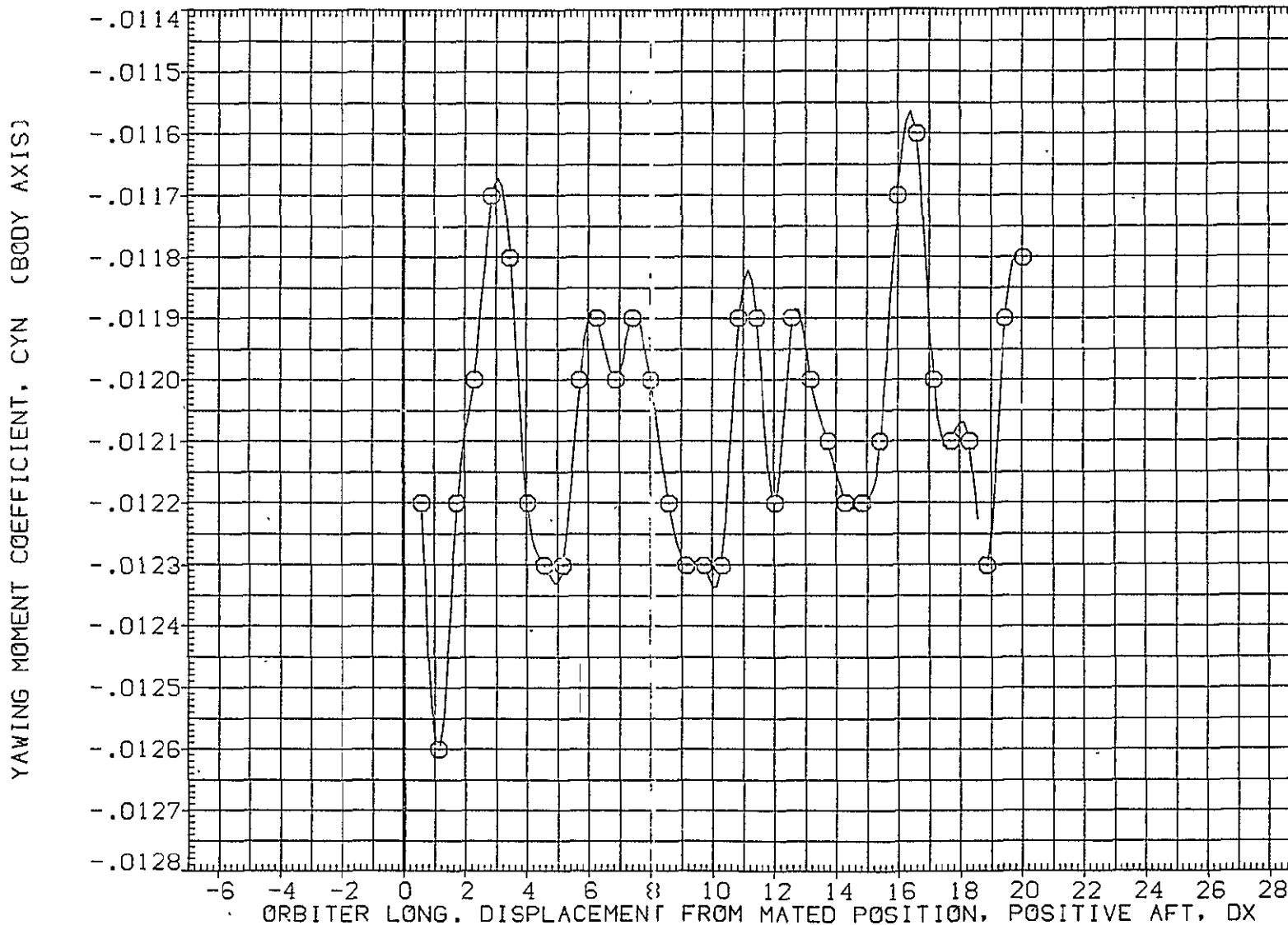


FIG. 58 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE067

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.609	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SO.F
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		OZ	60.000	IORB	6.000	XMRP	1109.0000	IN.
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN.
						ZMRP	375.0000	IN.
						SCALE	.0125	

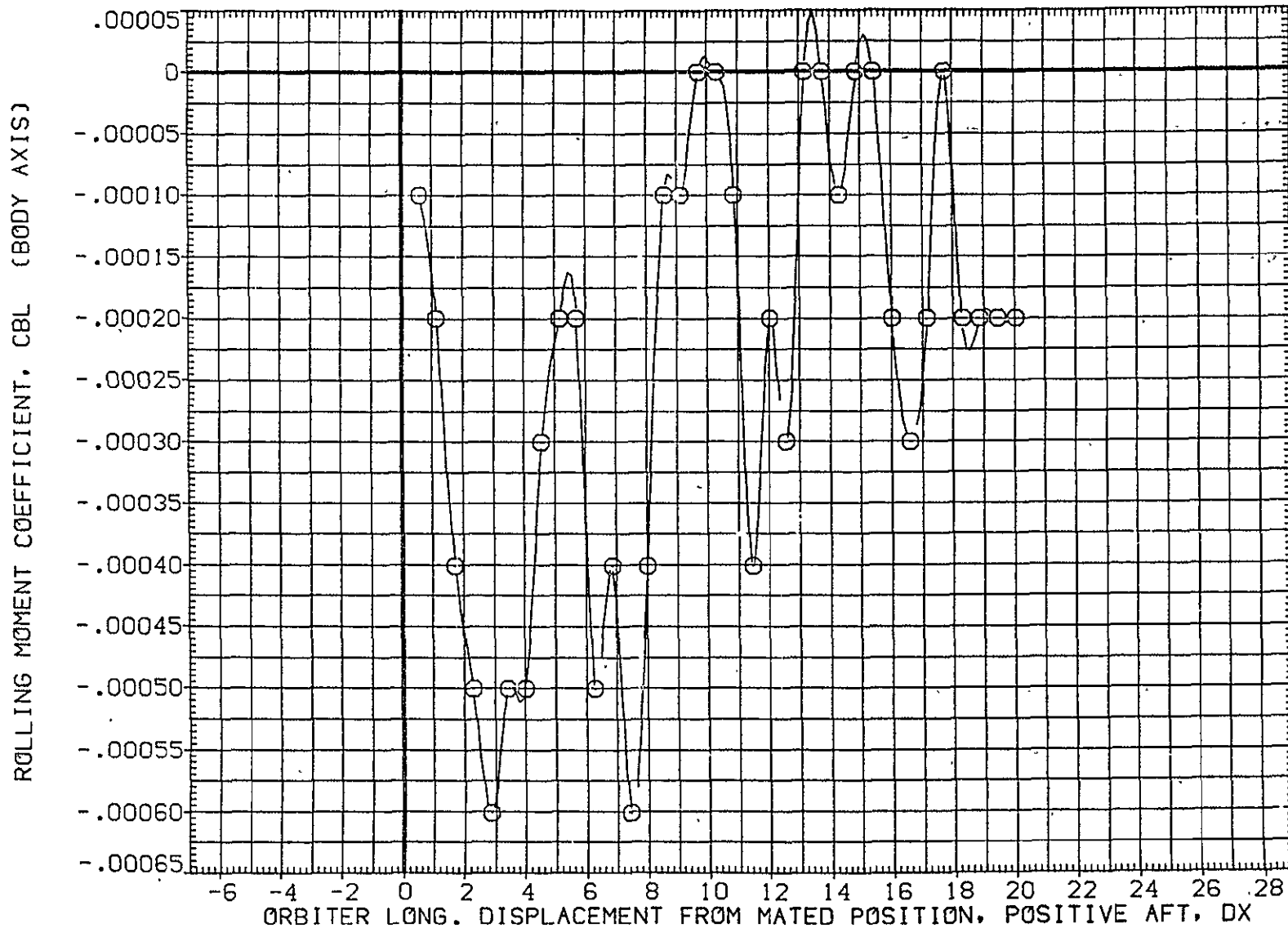


FIG. 58 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE067

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE067)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION	
○	.609	ALPHAC	2.000	BETAC	.000	SREF	2690.0000 SQ.F
		STAB	5.000	ELEVON	5.000	LREF	474.8100 IN.
		BDFLAP	.000	DY	.000	BREF	936.6800 IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000 IN.
		BETA0	5.000	RUDDER	.000	YMRP	.0000 IN.
						ZMRP	375.0000 IN.
						SCALE	.0125

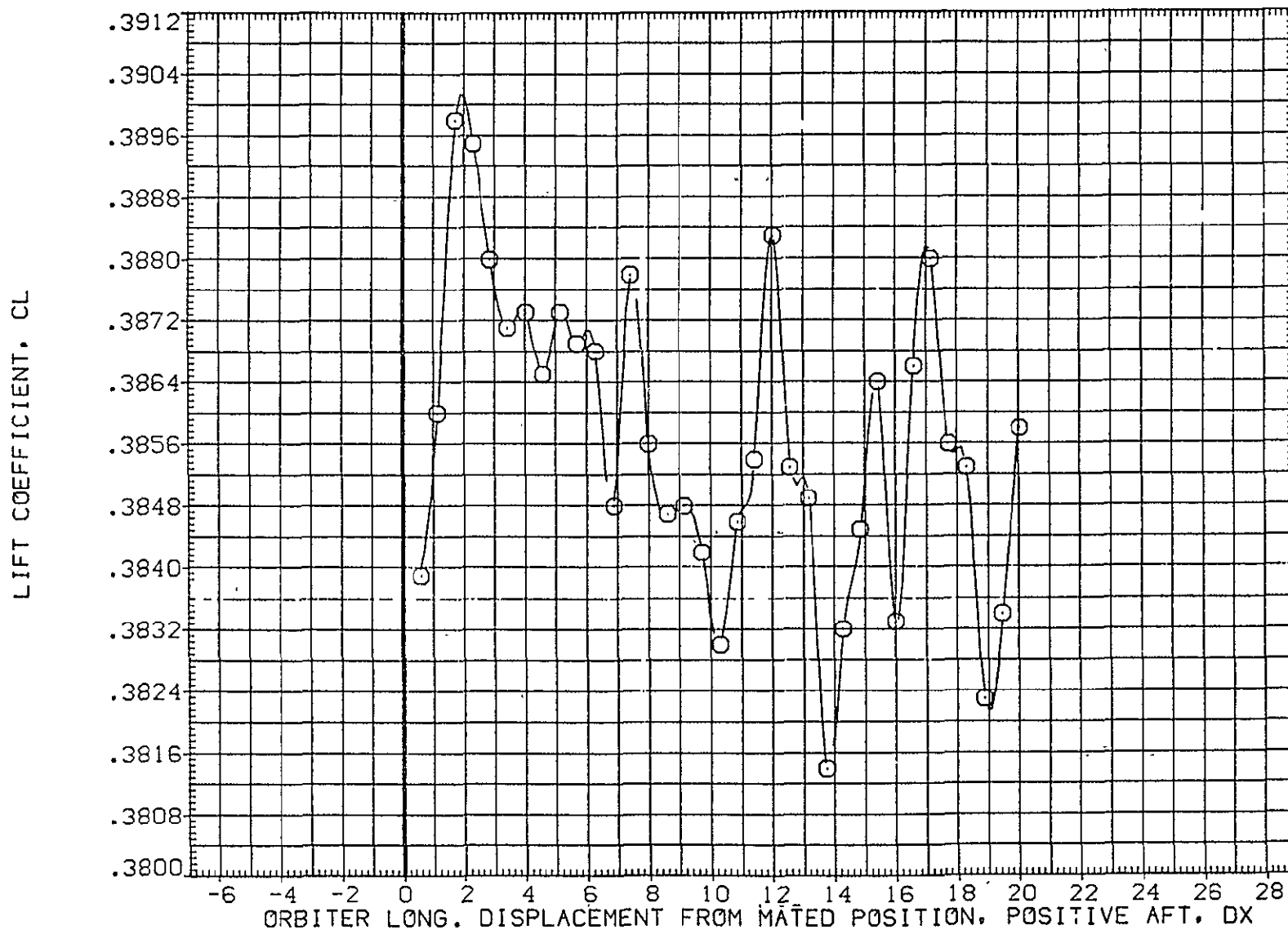


FIG. 58 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE067

SYMBOL
○

MACH	PARAMETRIC VALUES			
.609	ALPHAC	2.000	BETAC	.000
	STAB	5.000	ELEVON	5.000
	BDFLAP	.000	DY	.000
	DZ	60.000	IORB	6.000
	BETA0	5.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2990.0000	SQ.F
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0125	

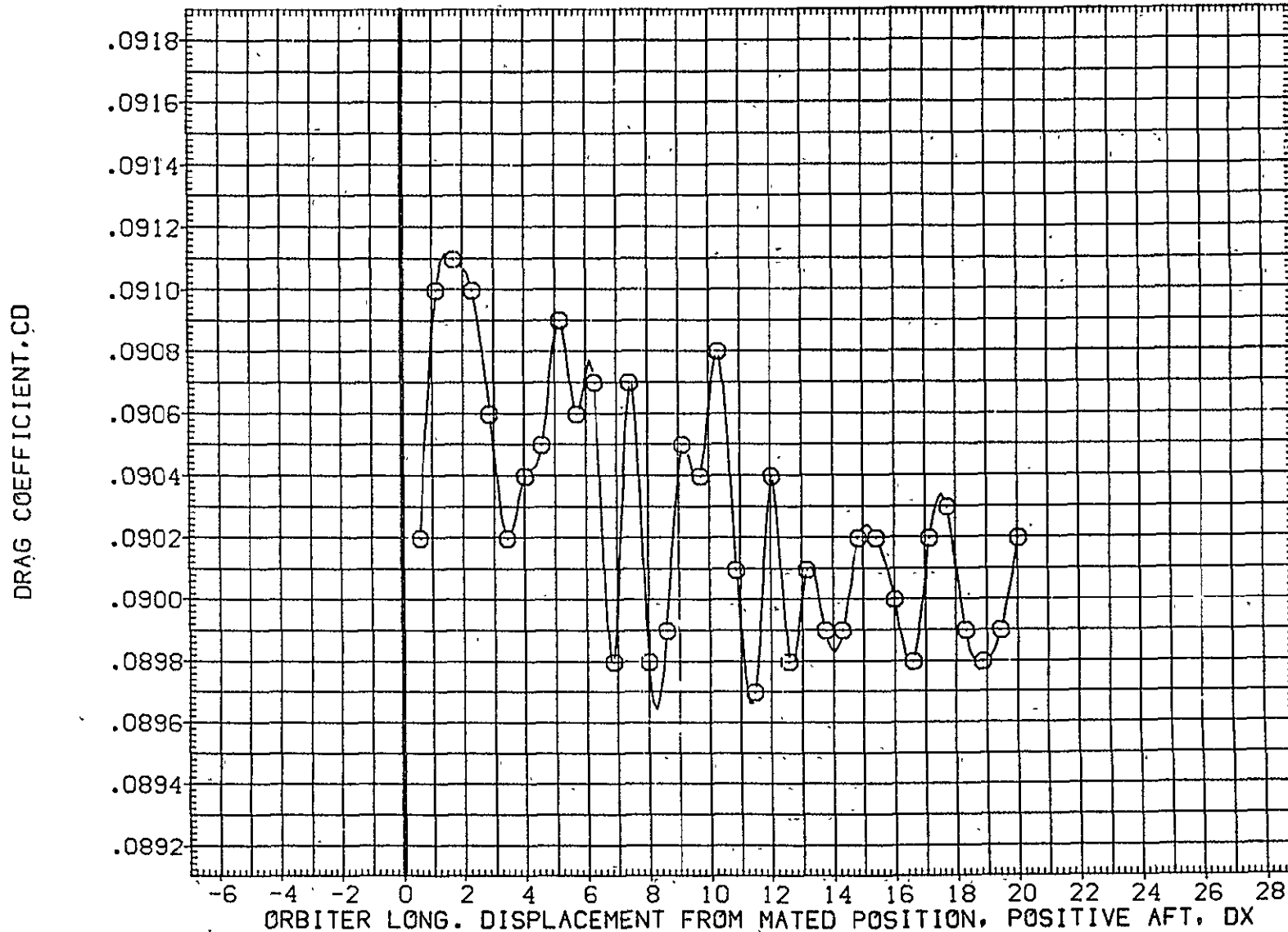


FIG. 58 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=5, AFE067

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE068)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	16.300	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

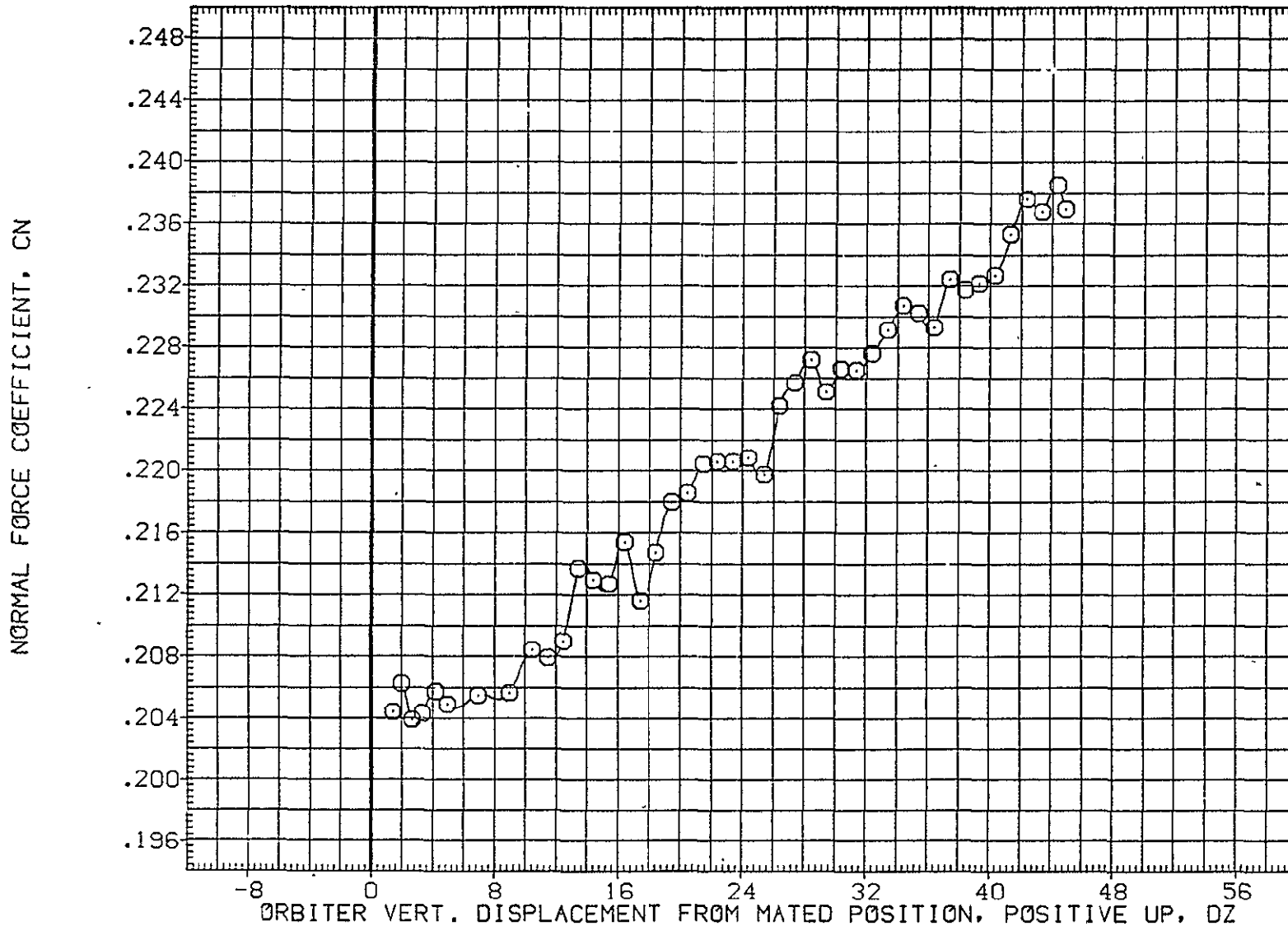


FIG. 59 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE068

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	16.300	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

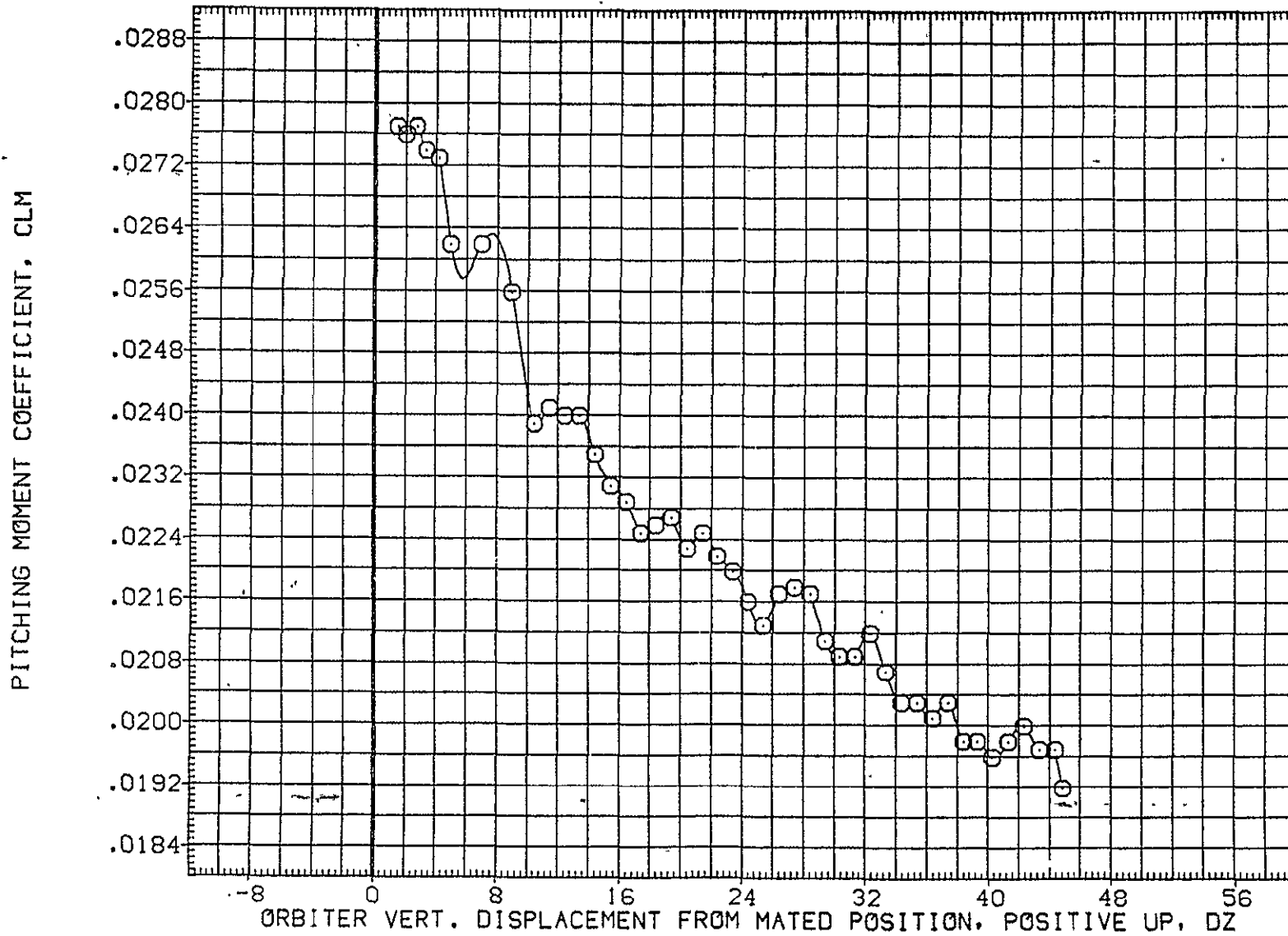


FIG. 59 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE068

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE068)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SG.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	16.300	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

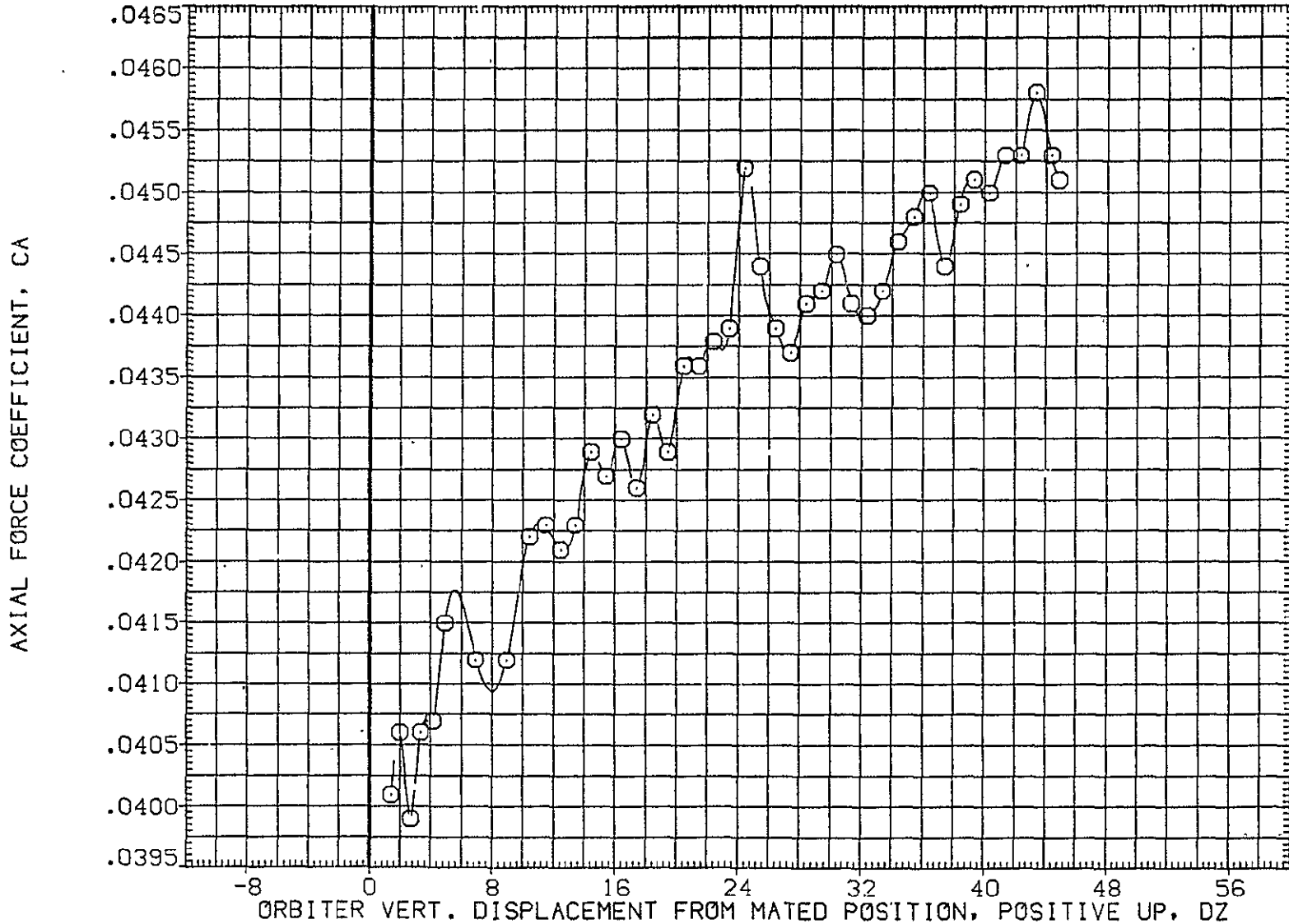


FIG. 59 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE068

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SC.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	16.300	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

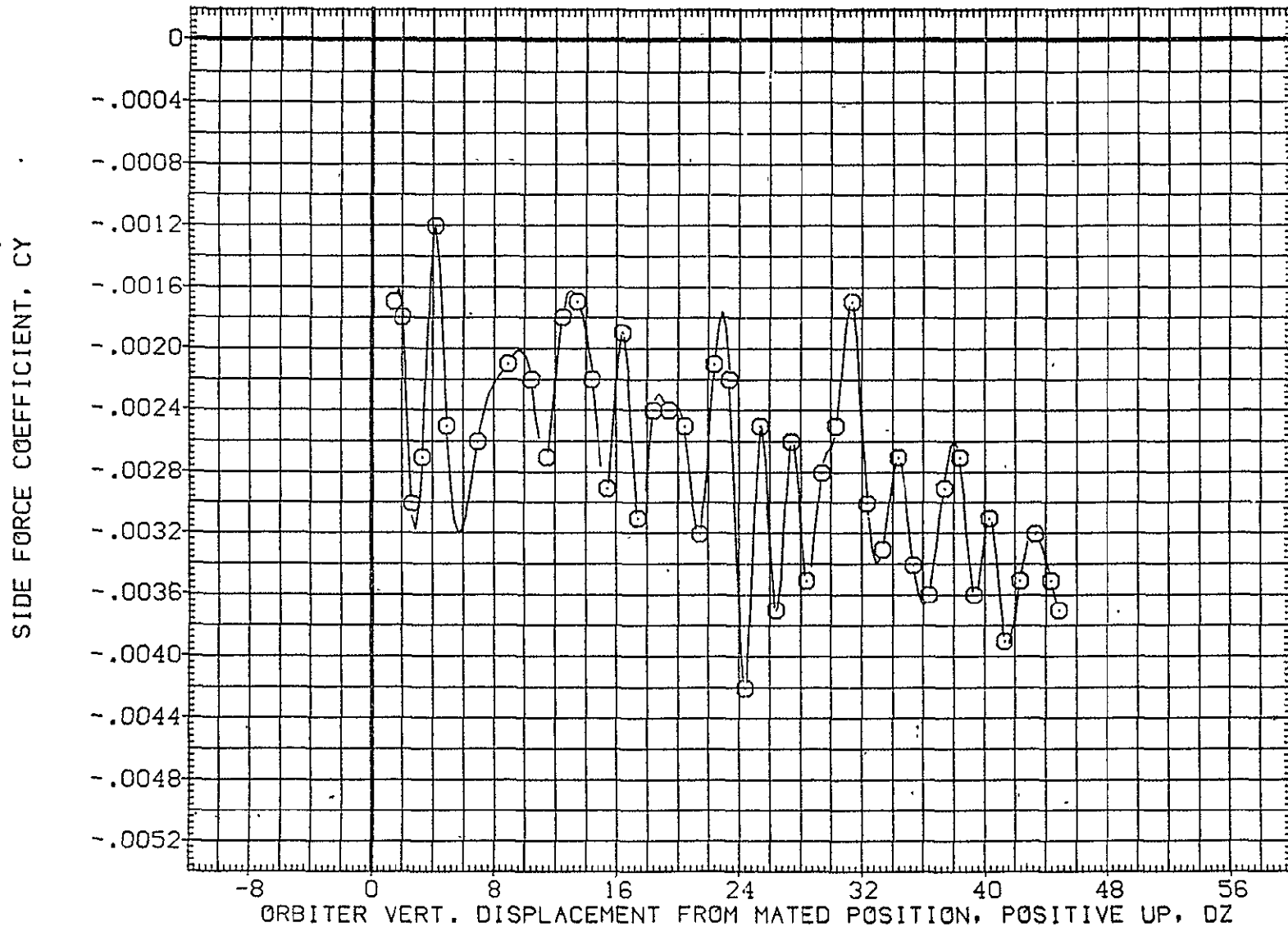


FIG. 59 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE068

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE068)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	16.300	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

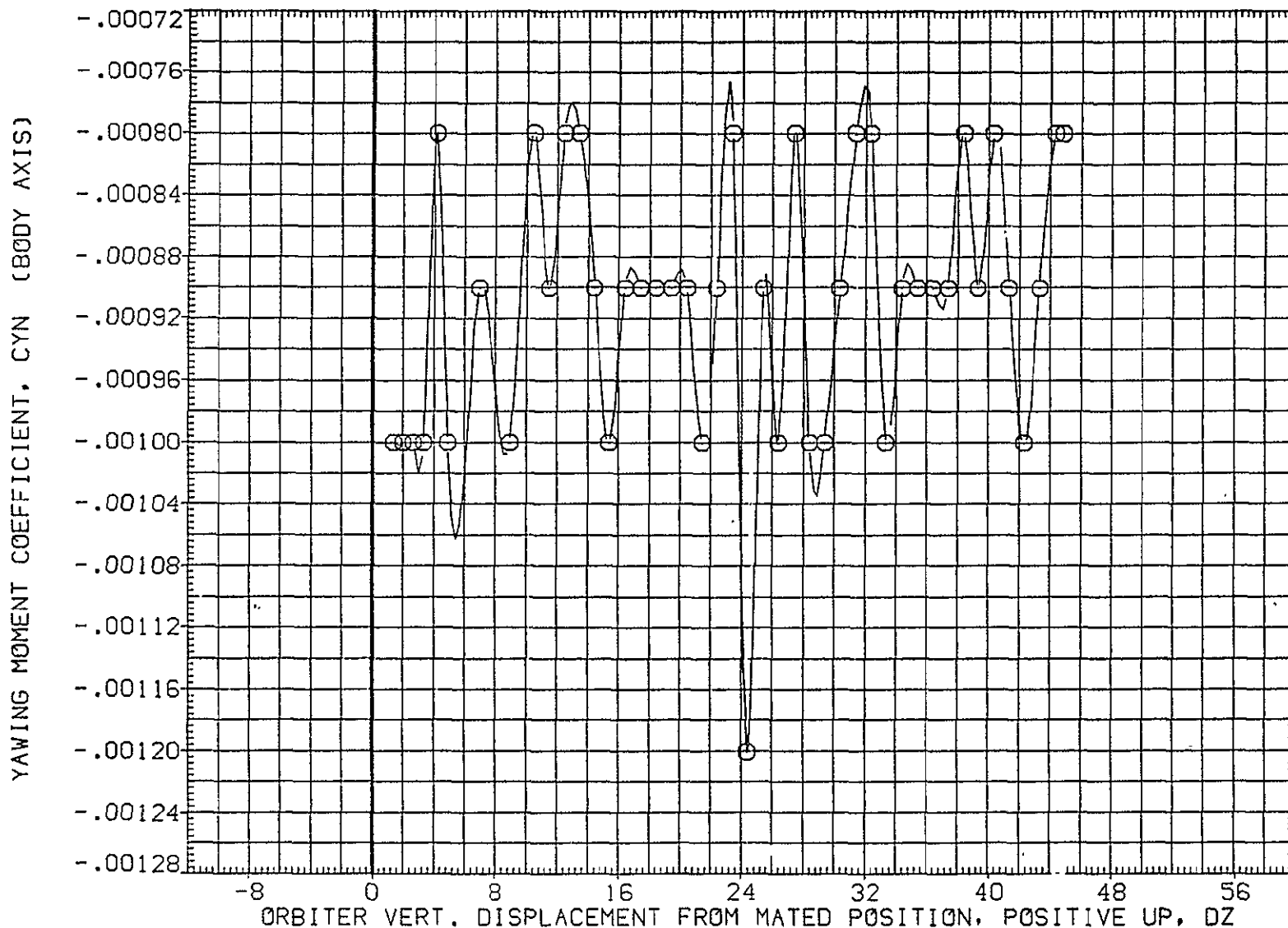


FIG. 59 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE068

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	16.300	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

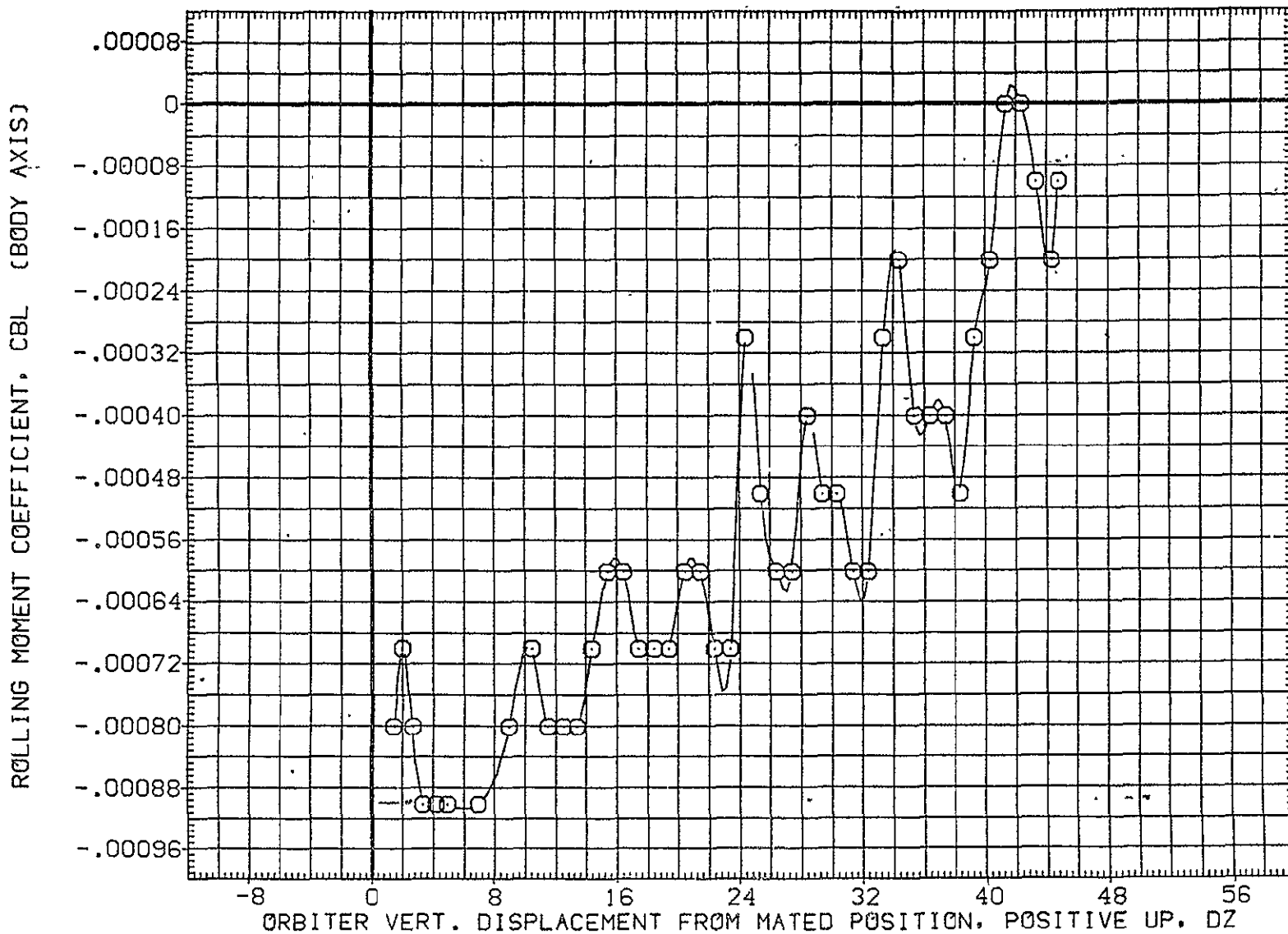


FIG. 59 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE068

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE068)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION	
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000 SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100 IN.
		BDFLAP	16.300	DX	.000	BREF	936.8800 IN.
		DY	.000	IORB	4.000	XMRP	1109.0000 IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000 IN. Y0
						ZMRP	375.0000 IN. Z0
						SCALE	.0125

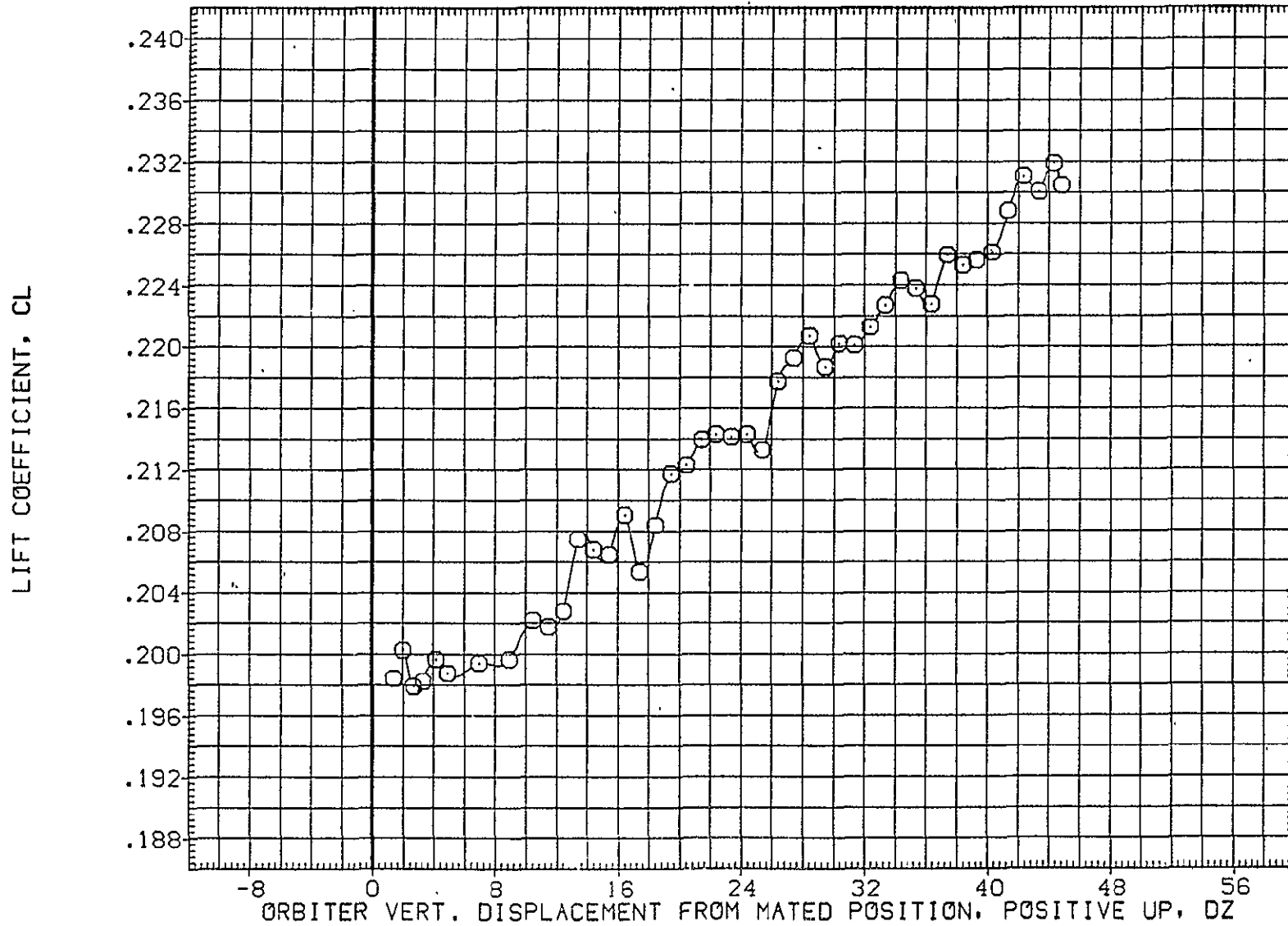


FIG. 59 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE068

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	16.300	DX	.000	BREF	936.6800	IN.
		OY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

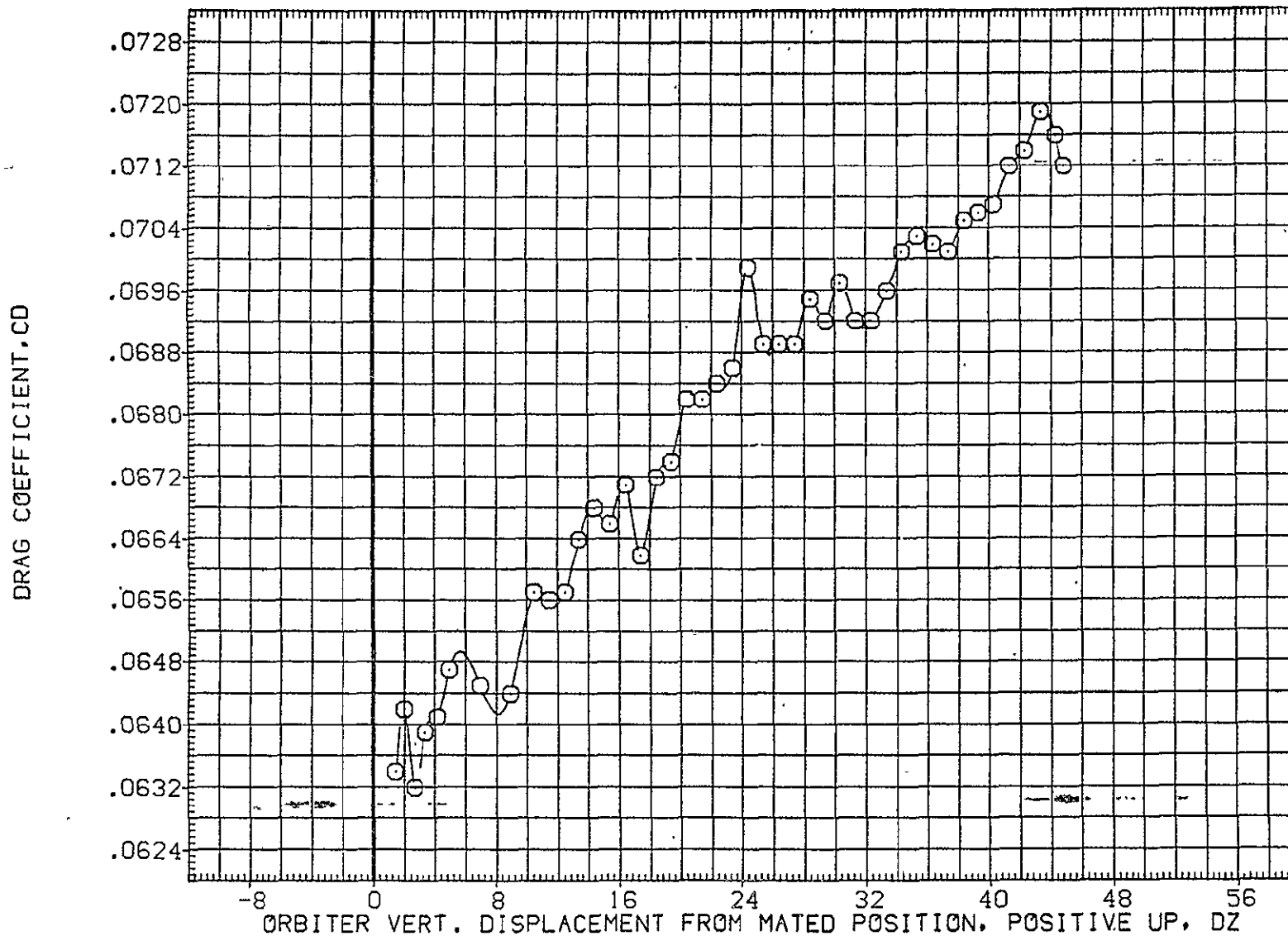


FIG. 59 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE068

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE069)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BOFLAP	16.300	DX	.000	BREF	536.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETAC	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

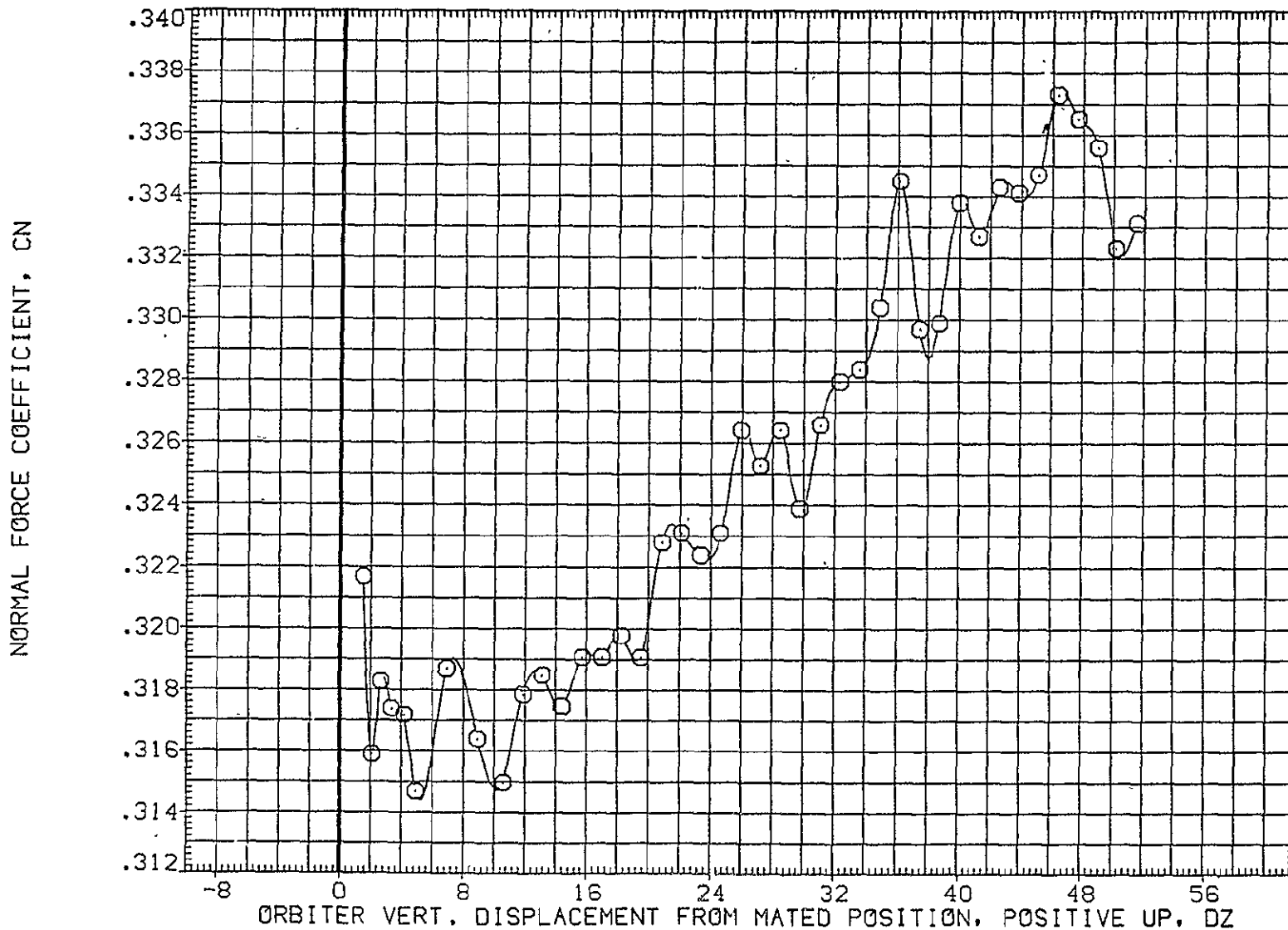


FIG. 60 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE069

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	16.300	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. Y0
		BETAG	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

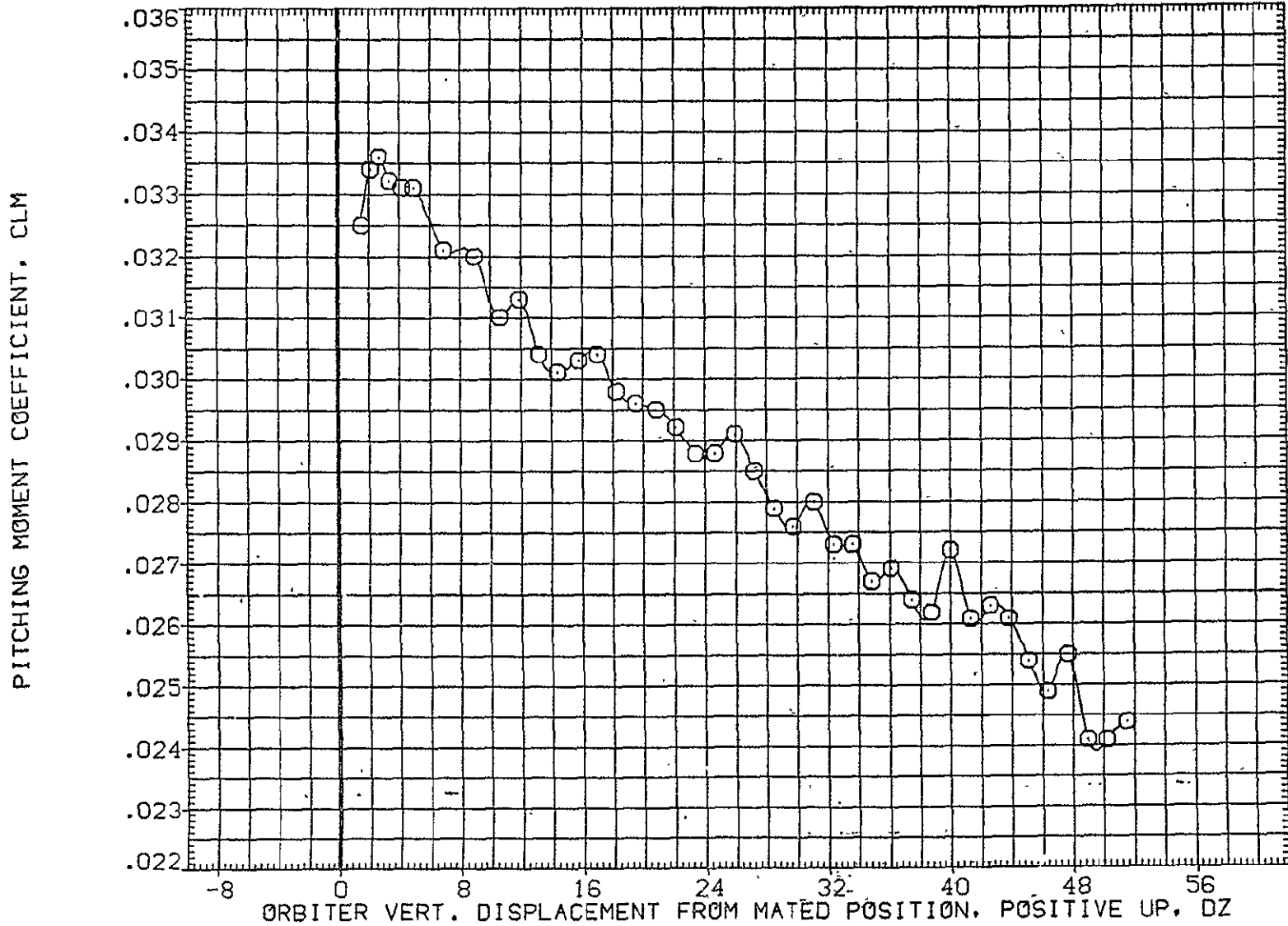


FIG. 60 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE069

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE069)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	16.300	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

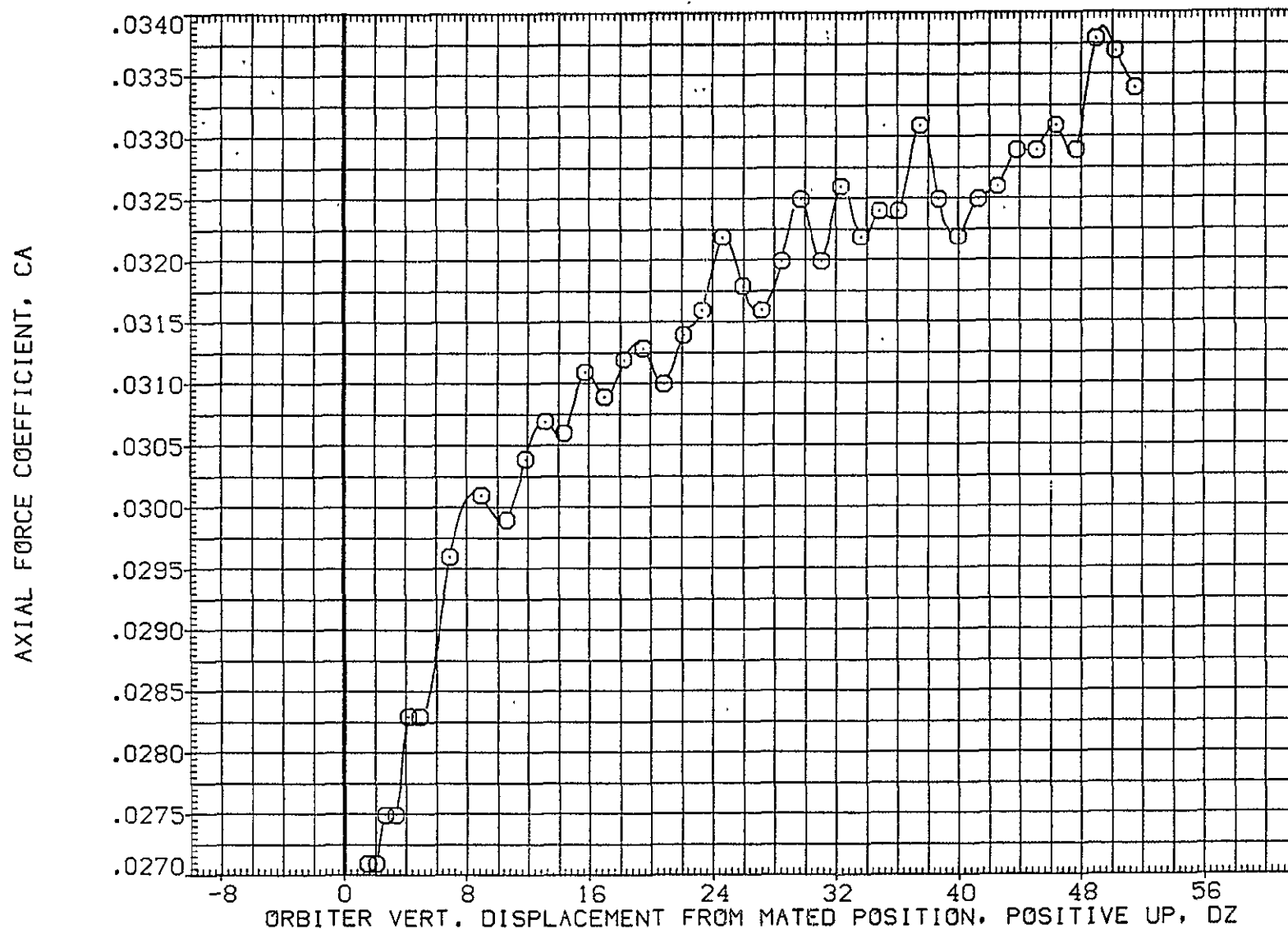


FIG. 60 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE069

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	BETAC	BETAC	SREF	SO.FT.	SO.FT.
○	.603	2.000	5.000	5.000	.000	2690.0000	2690.0000	2690.0000
		STAB	16.300	ELEVON	.000	LREF	474.8100	474.8100
		BDFLAP	DX	DX	.000	BREF	936.6800	936.6800
		DY	10RB	10RB	6.000	XMRP	1109.0000	1109.0000
		BETA0	RUDDER	RUDDER	.000	YMRP	.0000	.0000
						ZMRP	375.0000	375.0000
						SCALE	.0125	.0125

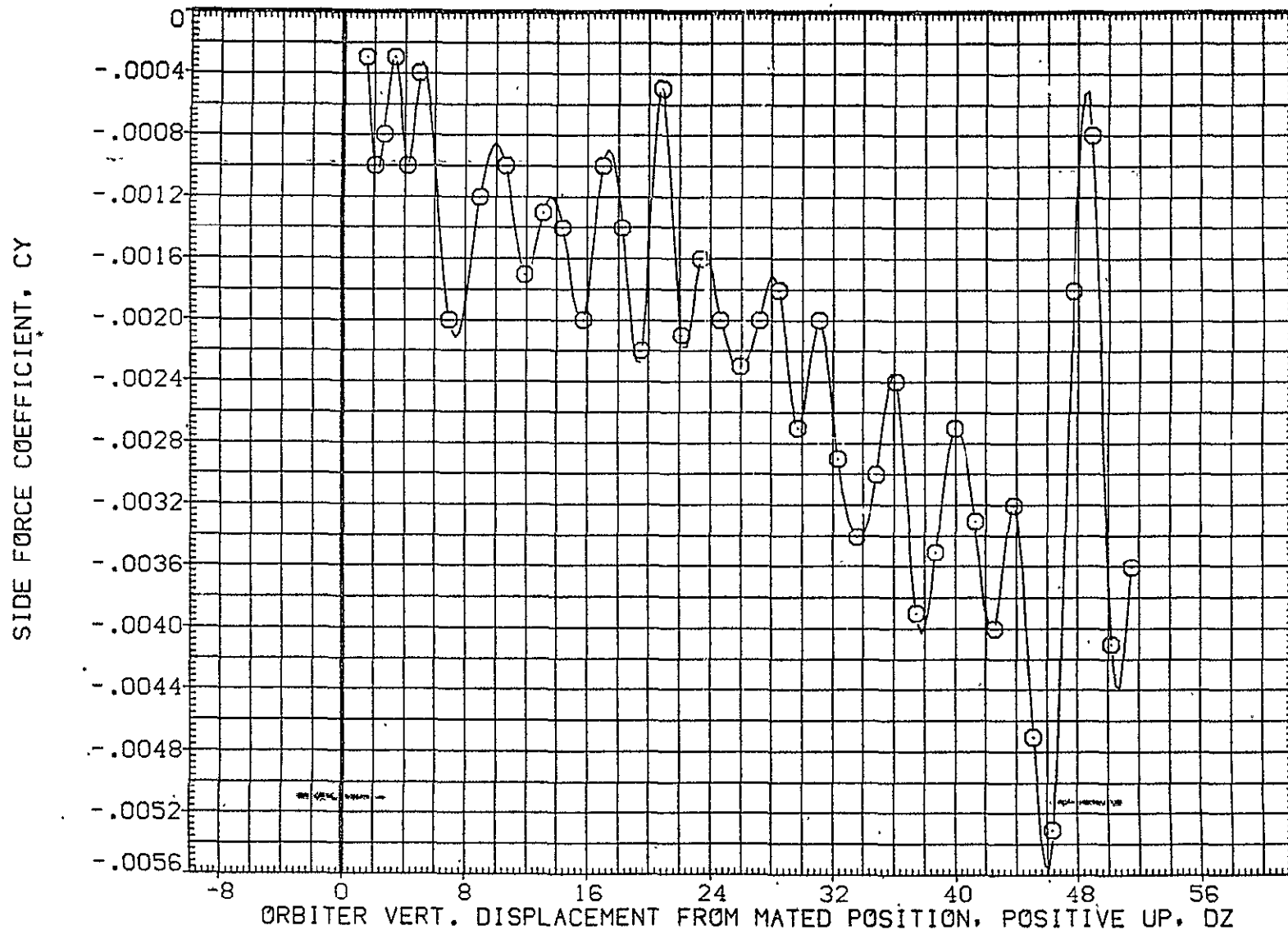


FIG. 60 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, 10RB=6, BETAC=0, BETA0=0, AFE069

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE069)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	16.300	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

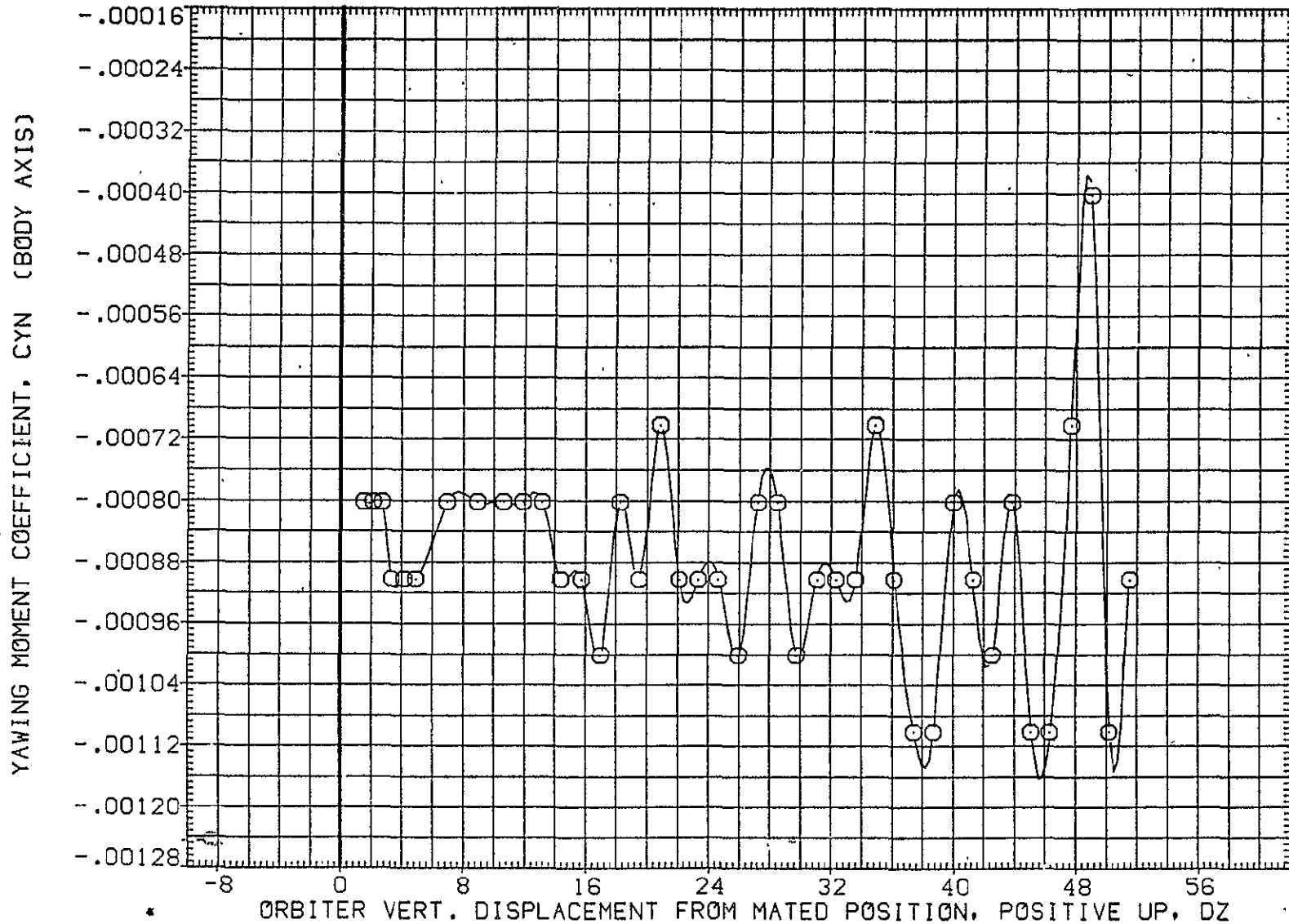


FIG. 60 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE069

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	16.300	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

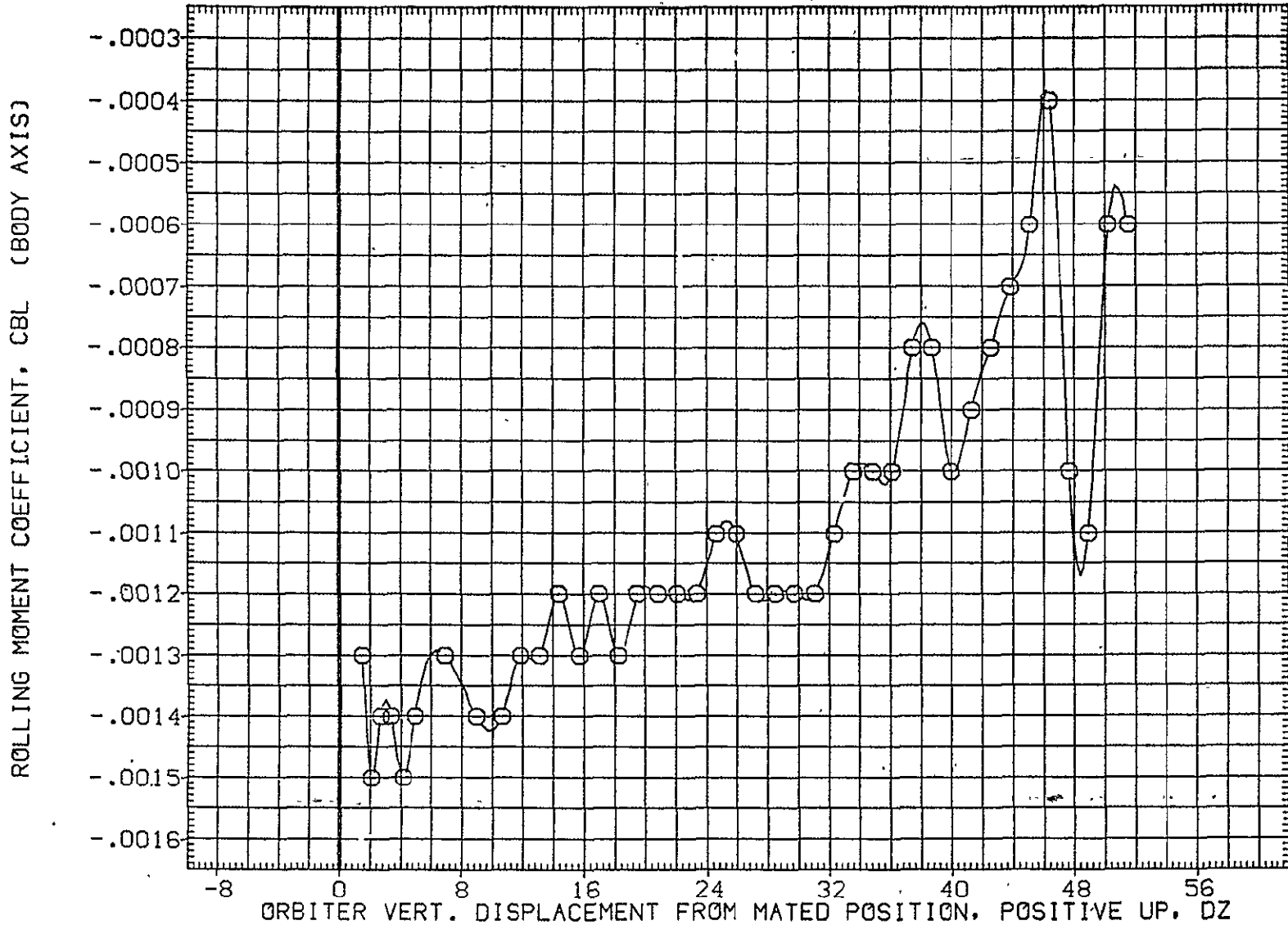


FIG. 60 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE069

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE069)

SYMBOL
○

MACH
.603

PARAMETRIC VALUES			
ALPHAC	2.000	BETAC	.000
STAB	5.000	ELEVON	.000
BDFLAP	16.300	DX	.000
DY	.000	IORB	6.000
BETA0	.000	RUDDER	.000

REFERENCE INFORMATION

SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

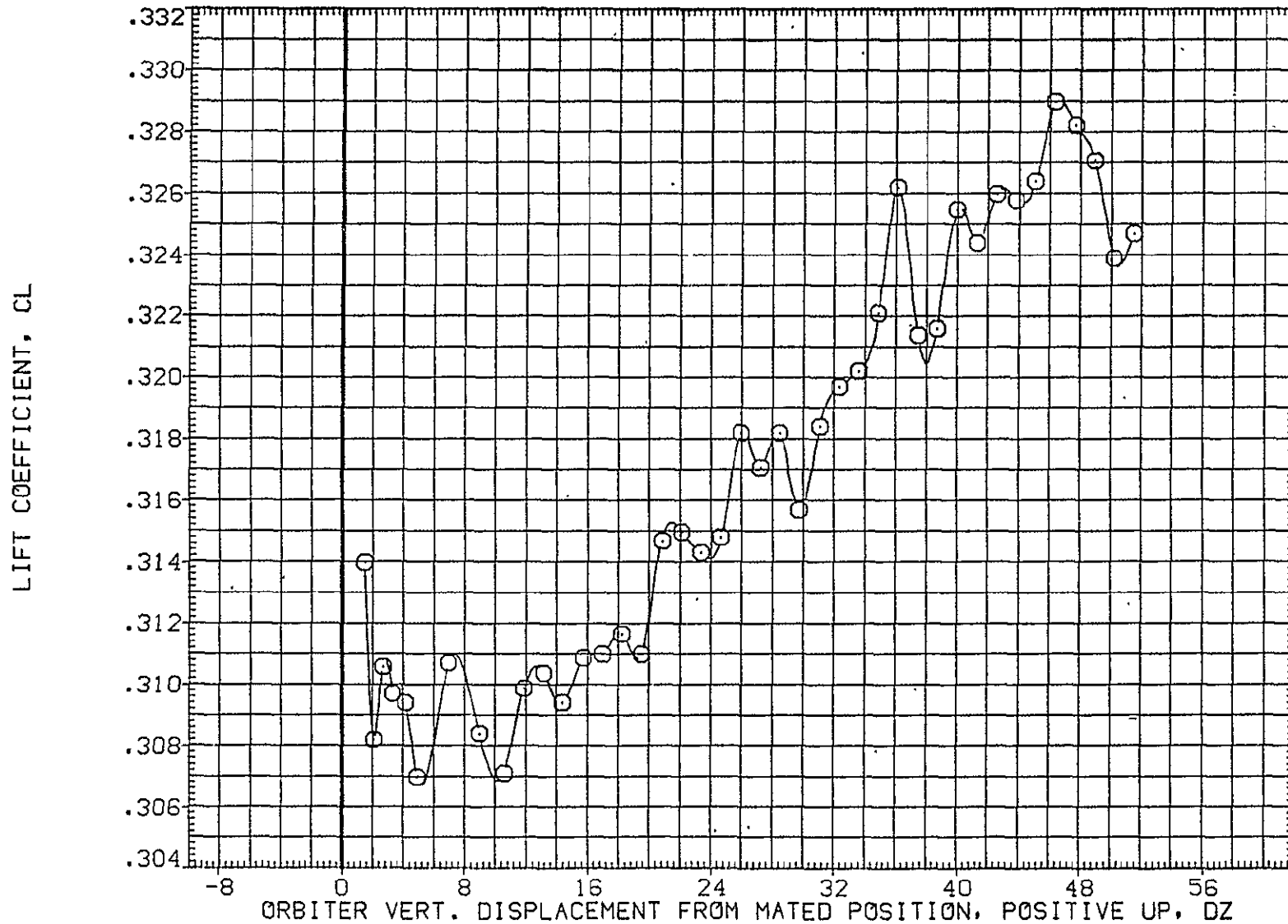


FIG. 60 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE069

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	16.300	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETAC	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

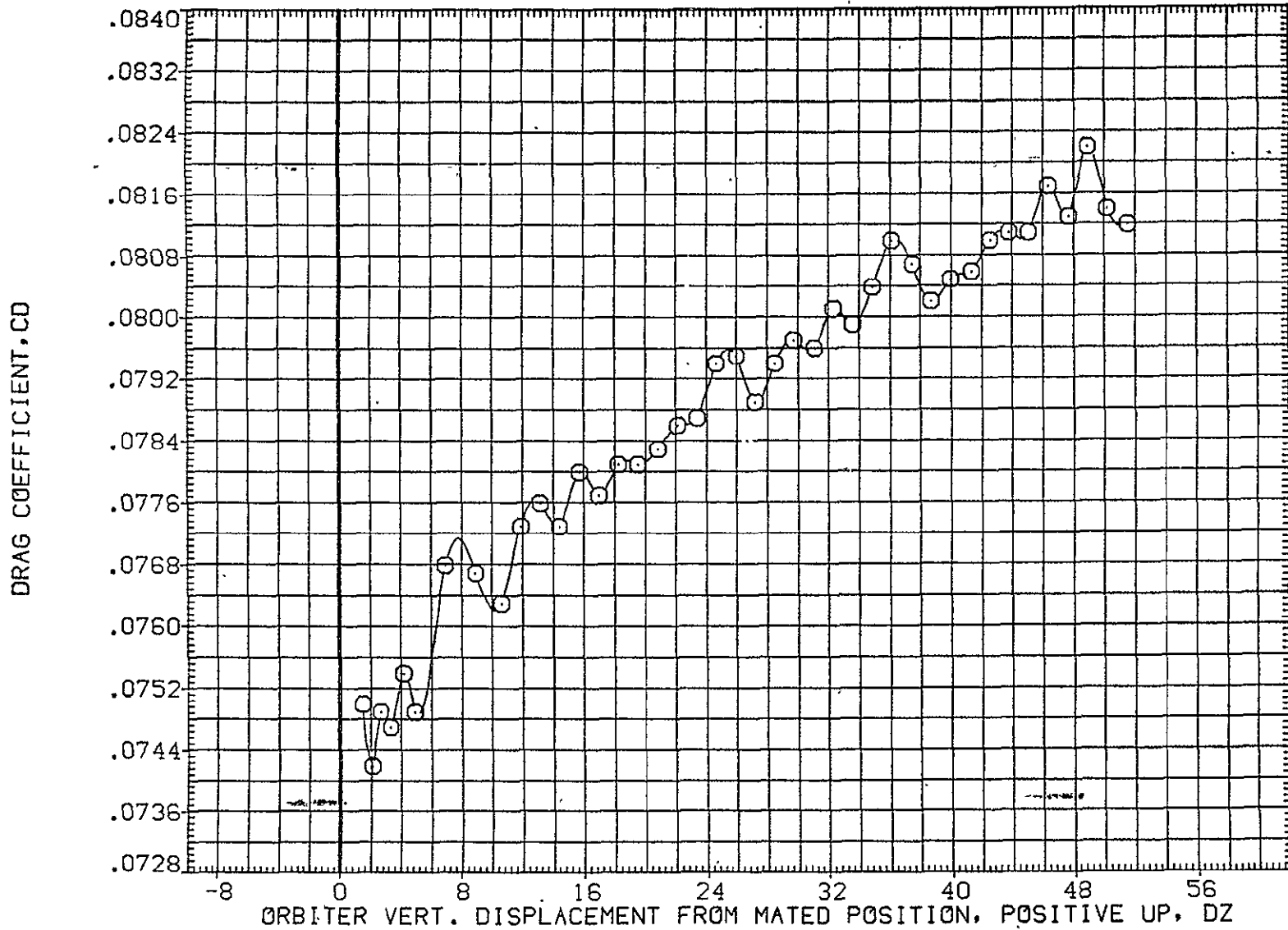


FIG. 60 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE069

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE070)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.597	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	16.300	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

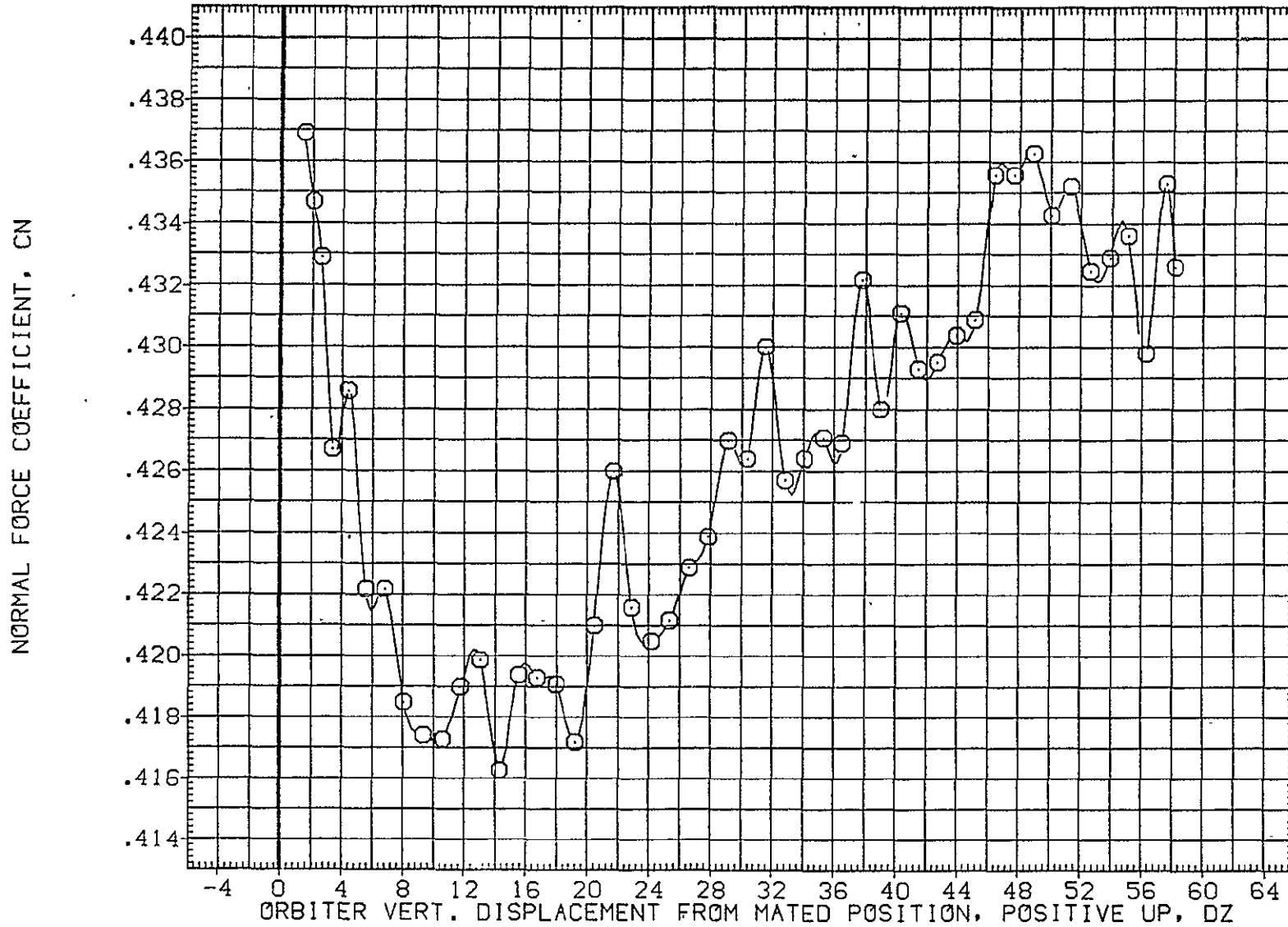


FIG. 61 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE070

SYMBOL
○

MACH	PARAMETRIC VALUES			
.597	ALPHAC	2.000	BETAC	.000
	STAB	5.000	ELEVON	.000
	BDFLAP	16.300	DX	.000
	DY	.000	IORB	8.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

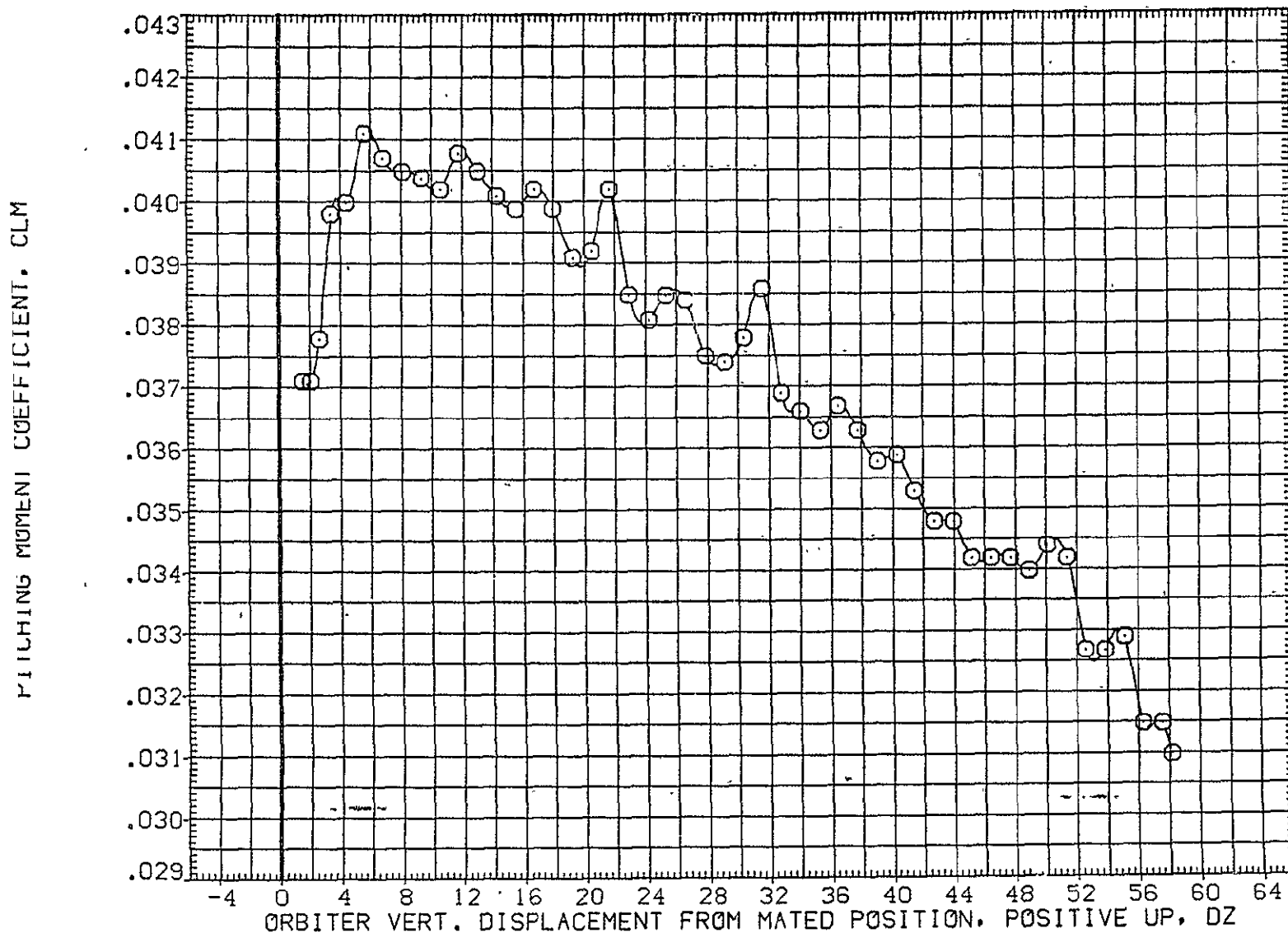


FIG. 61 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE070

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE070)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.597	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	16.300	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

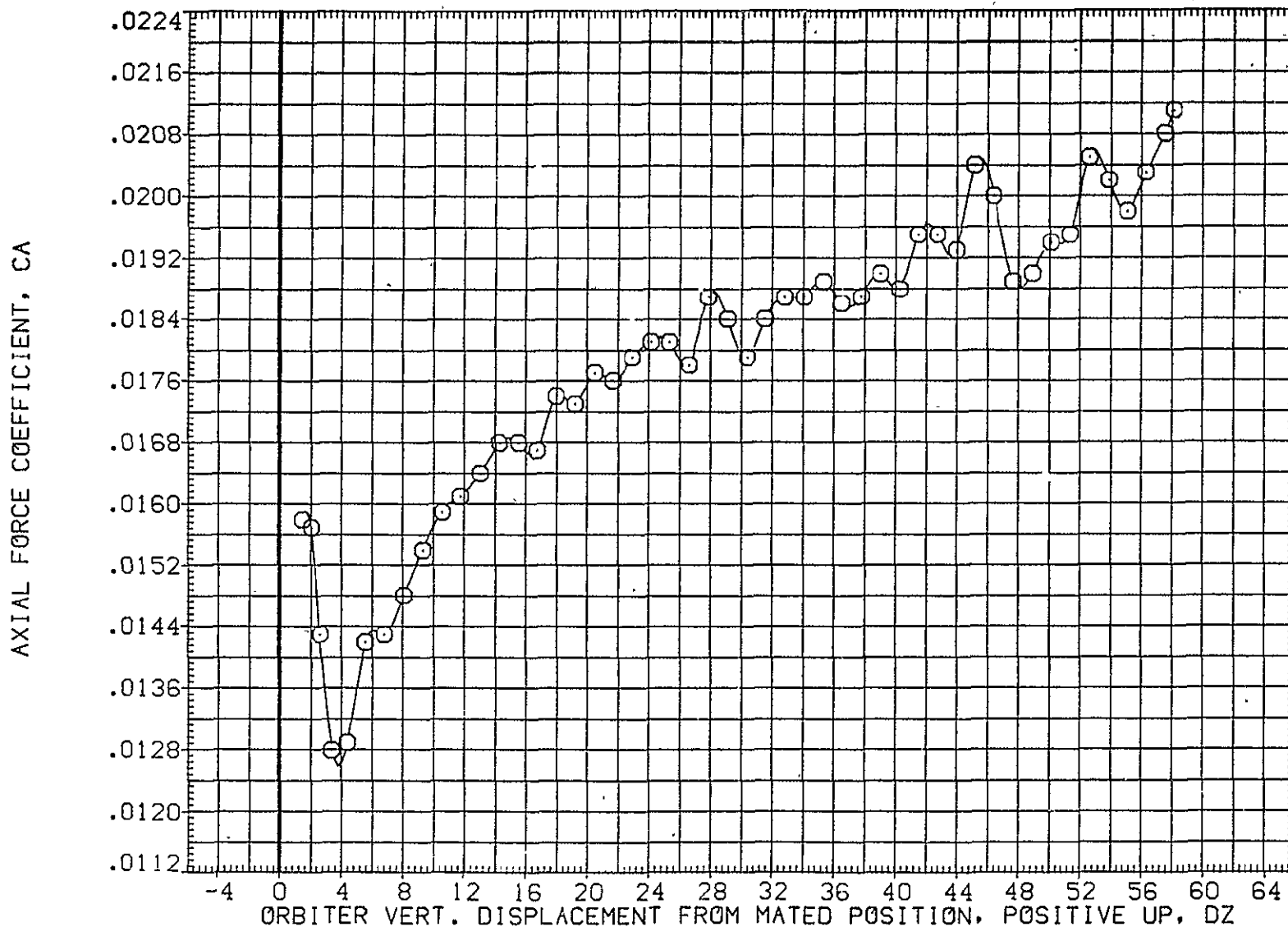


FIG. 61 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE070

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.597	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	16.300	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

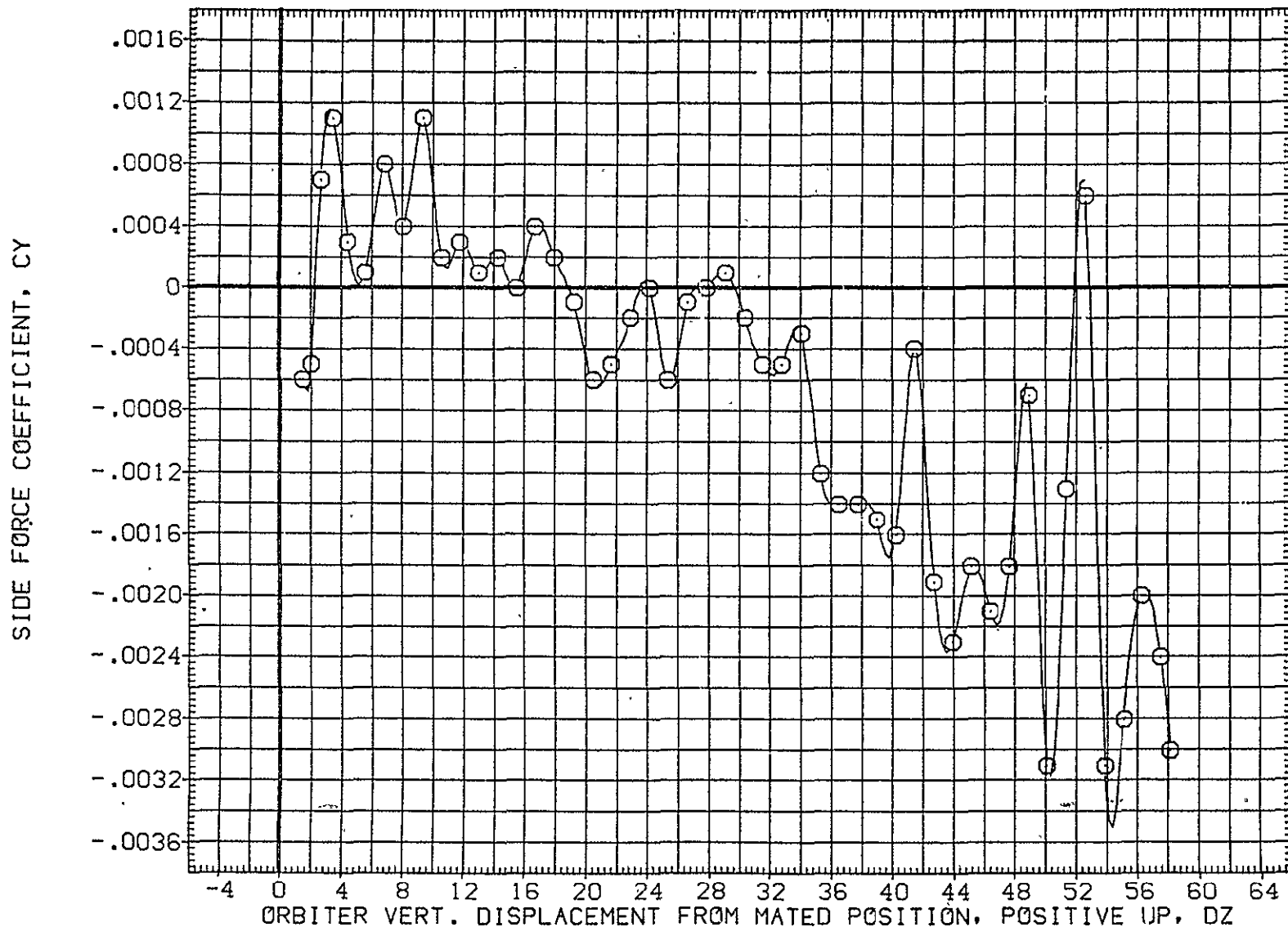
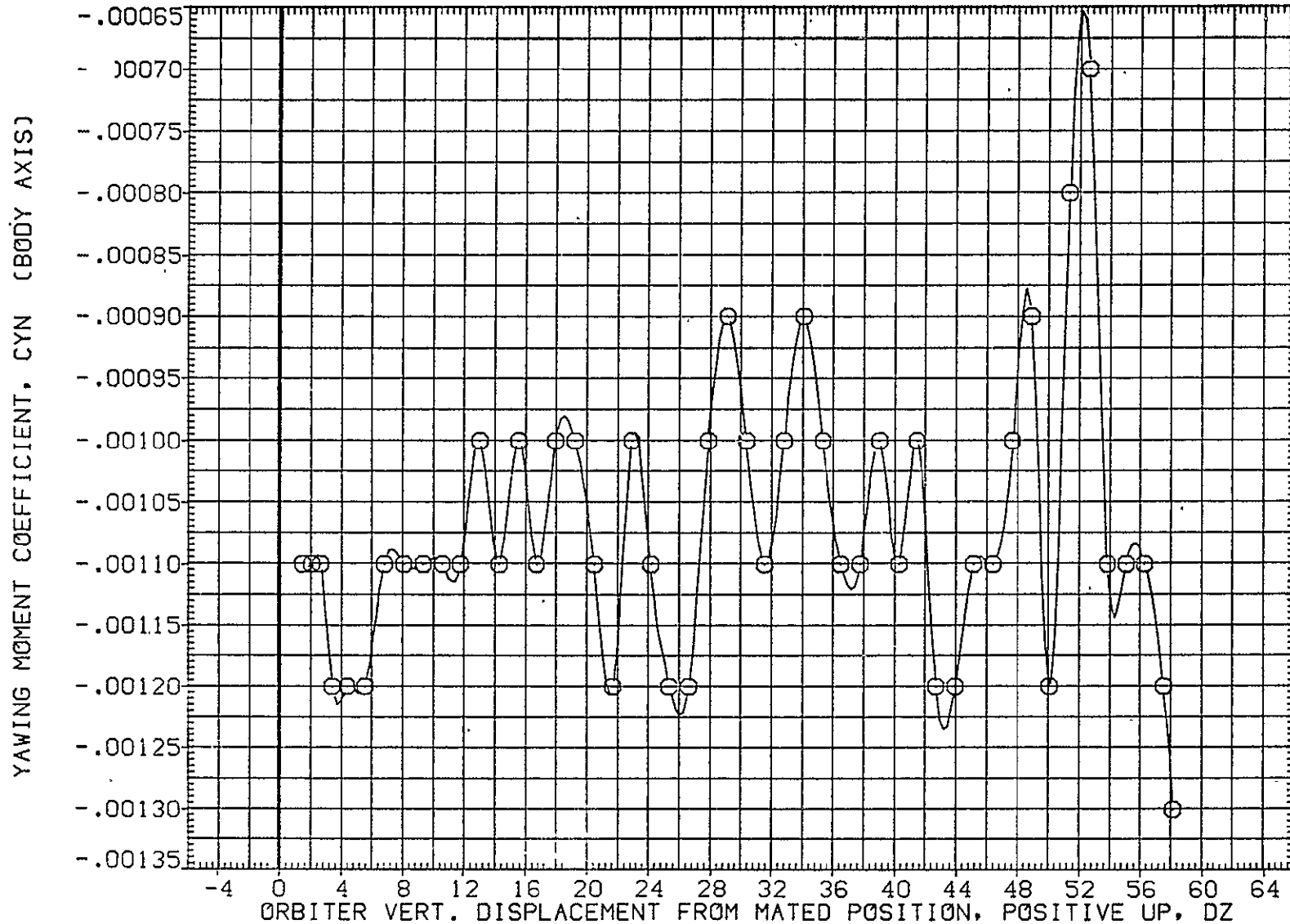


FIG. 61 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE070

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE070)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.597	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SG.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	16.300	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	



16. 61 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE070

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.597	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50. FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	16.300	DX	.000	BREF	935.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

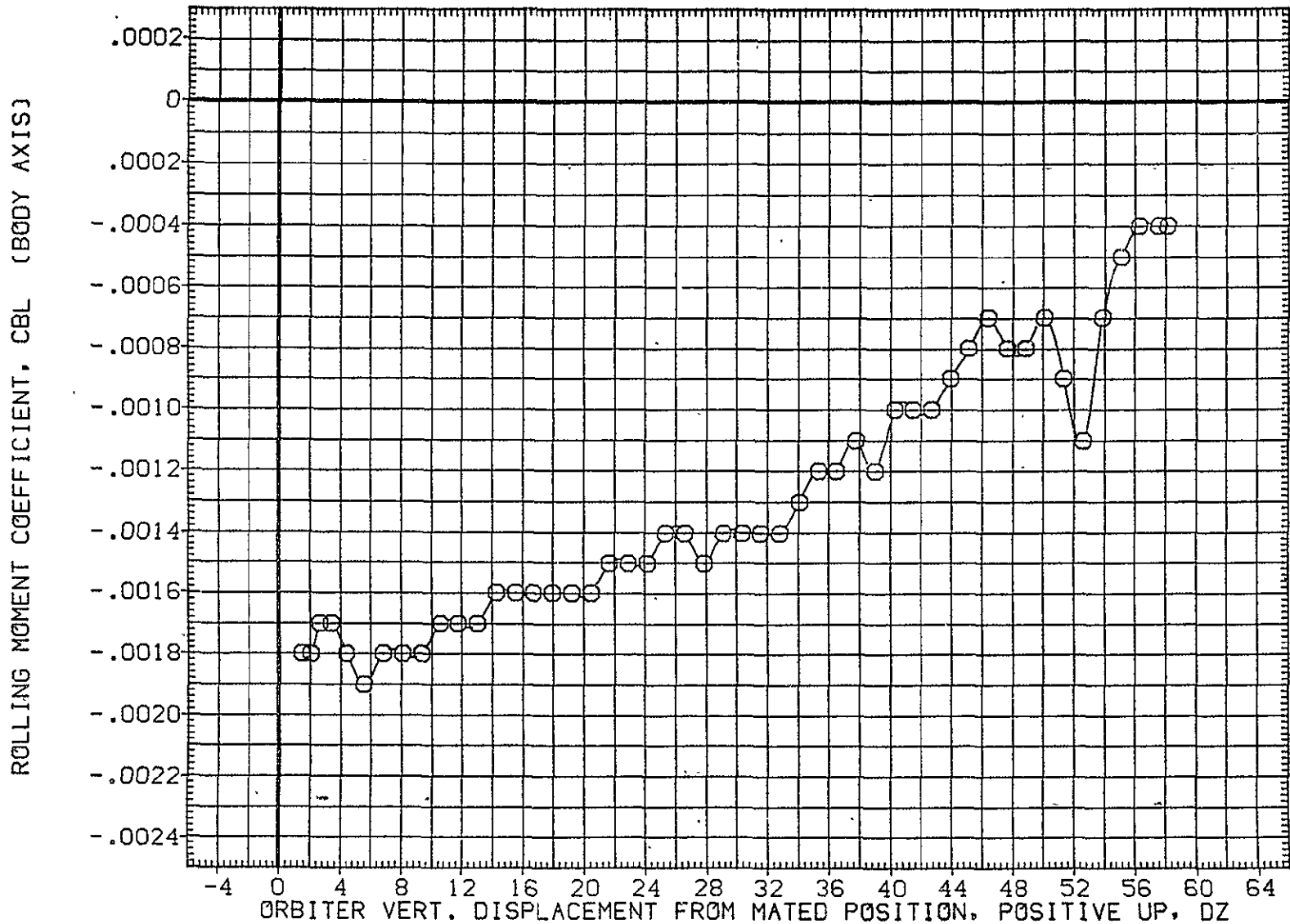


FIG. 61 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE070

LTV44-559(CA26) 747/1 ATY 02-S1 (ORBITER DATA) (AFE070)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.597	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	16.300	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

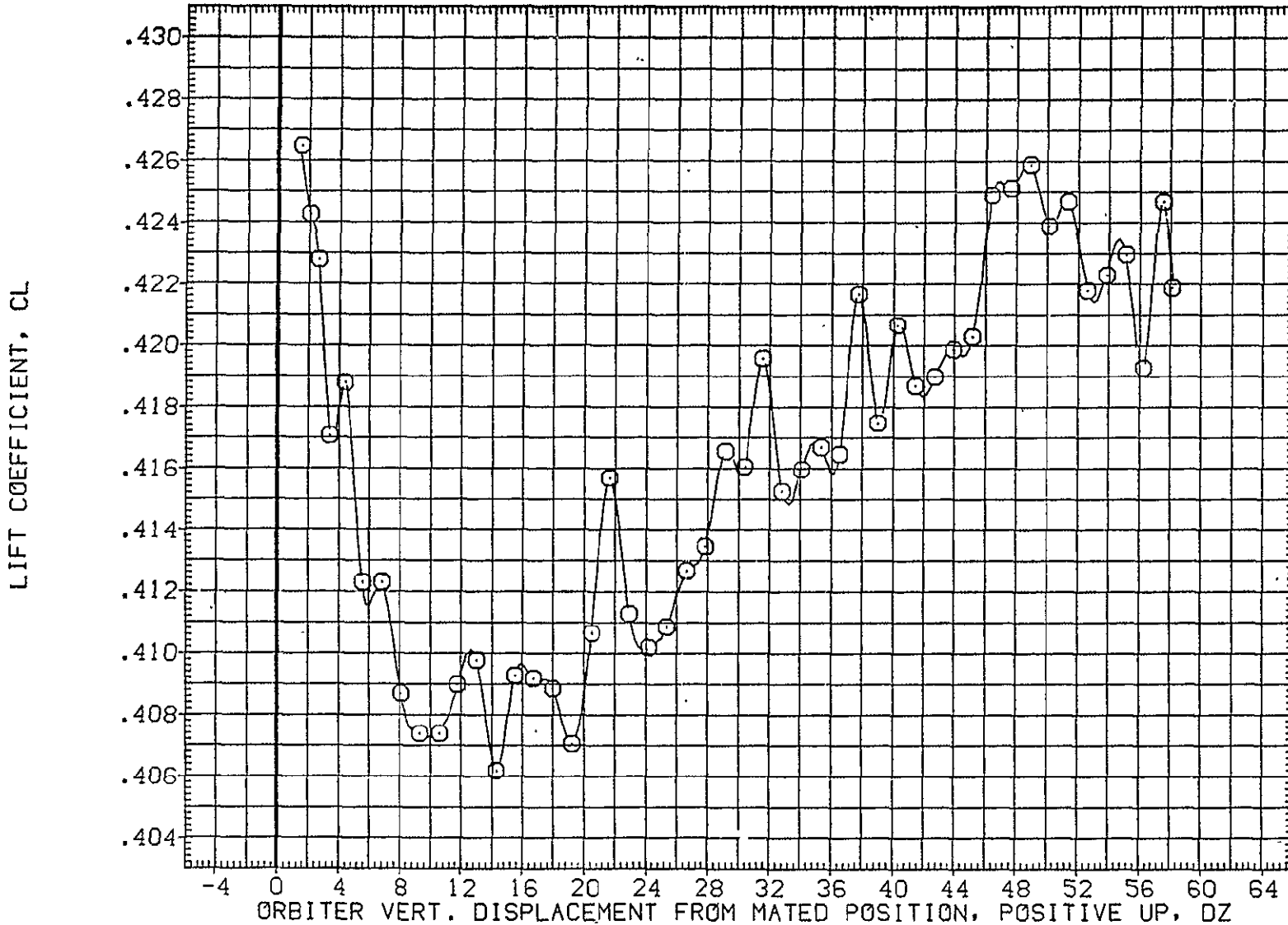


FIG. 61 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE070

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.597	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	16.300	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

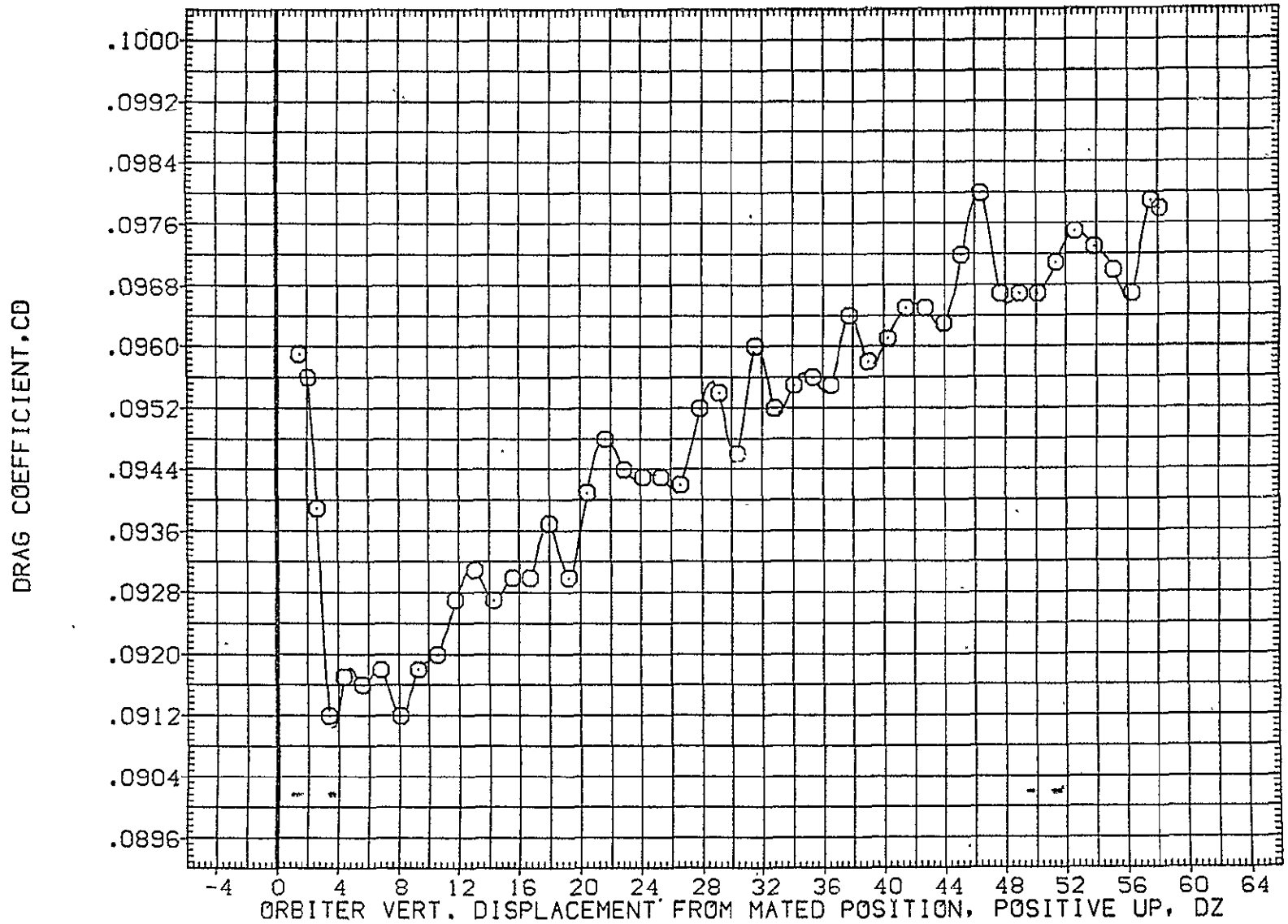
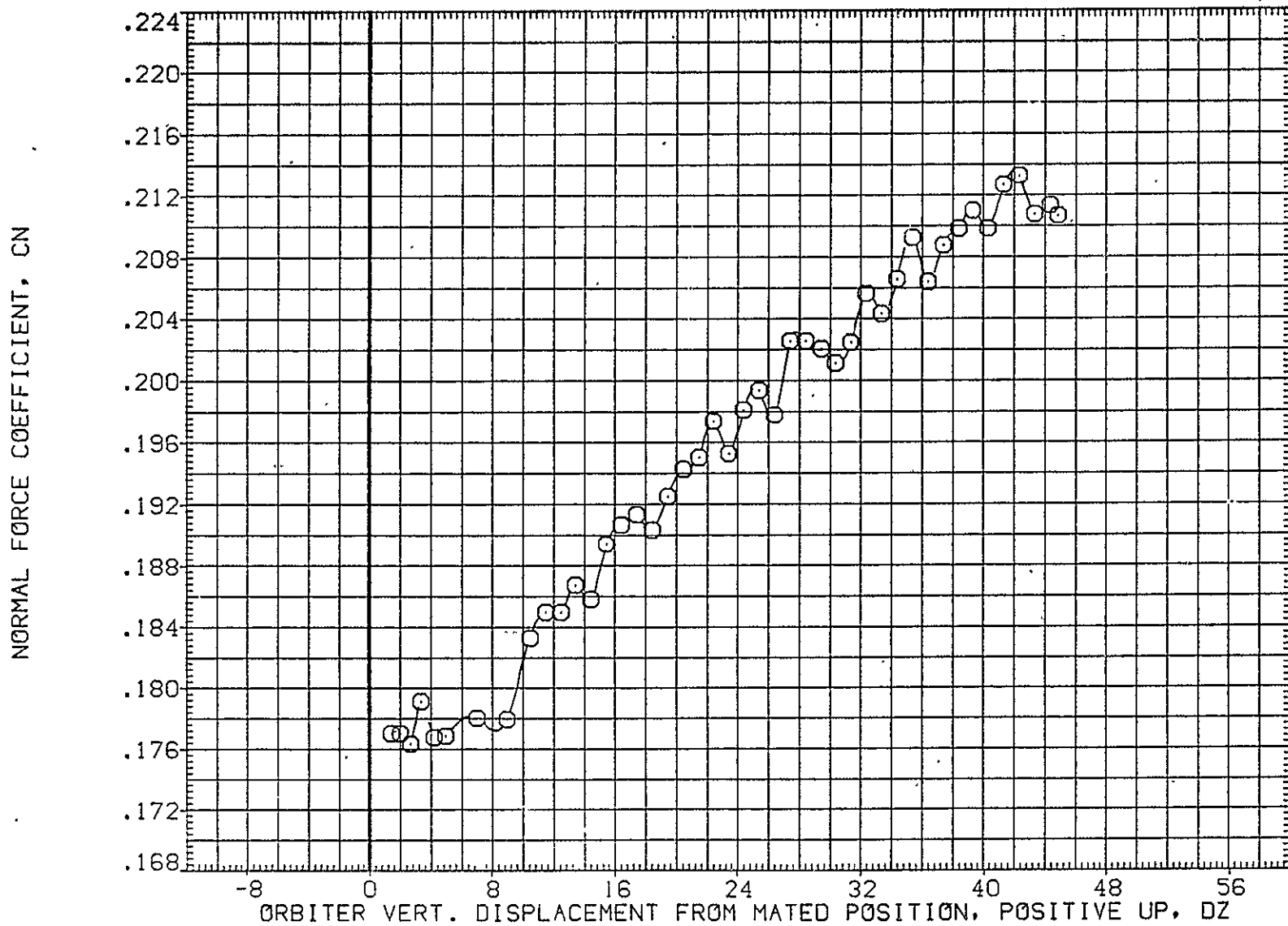


FIG. 61 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE070

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE071)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.600	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	



IG. 62 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE071

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.600	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

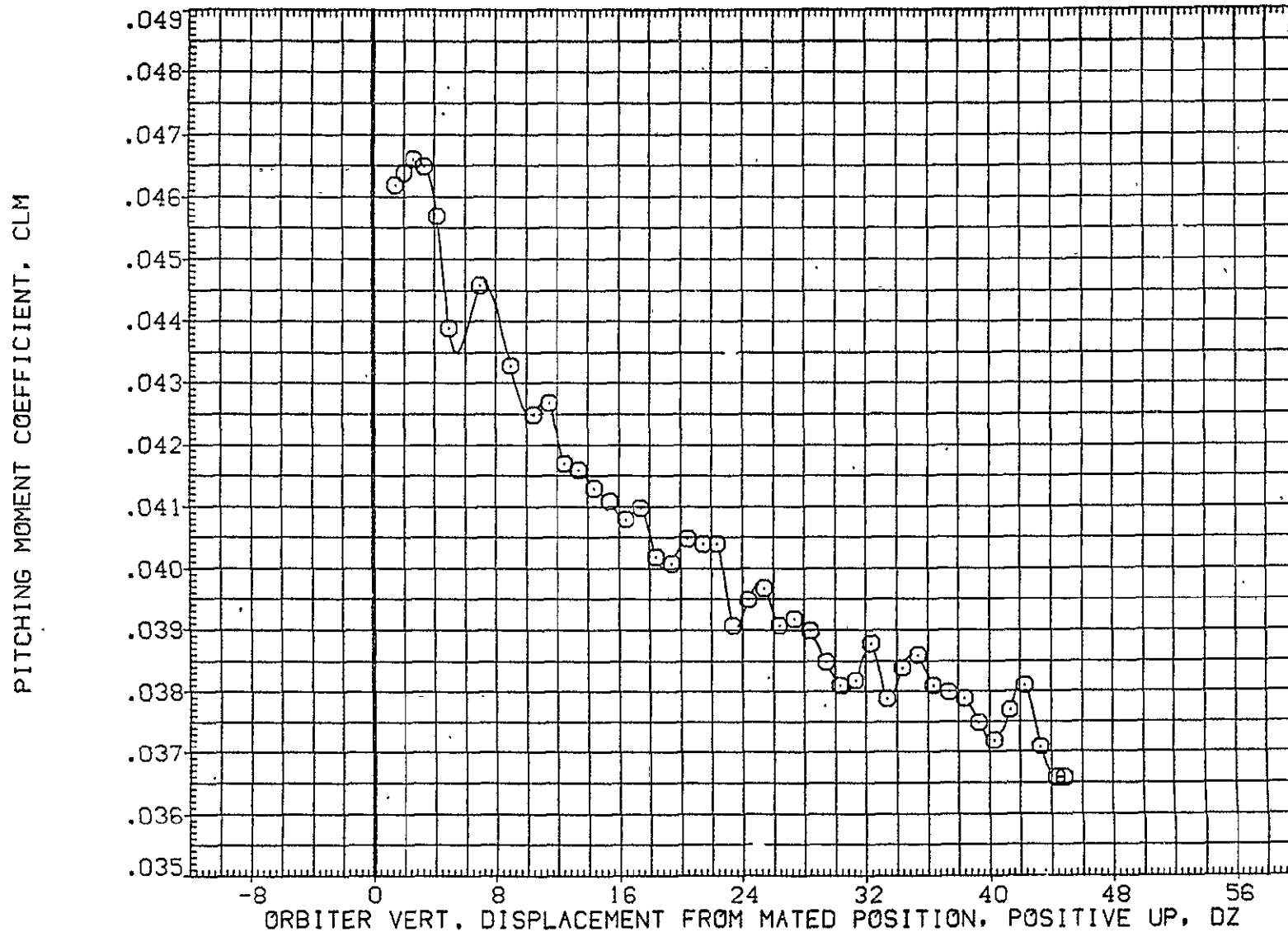


FIG. 62 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE071

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE071)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.600	ALPHAC	2.000	BETAC	.000
		STAB	5.000	ELEVON	.000
		BDFLAP	5.000	DX	.000
		DY	.000	IORB	4.000
		BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ. FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
.XMRP	1109.0000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0125	

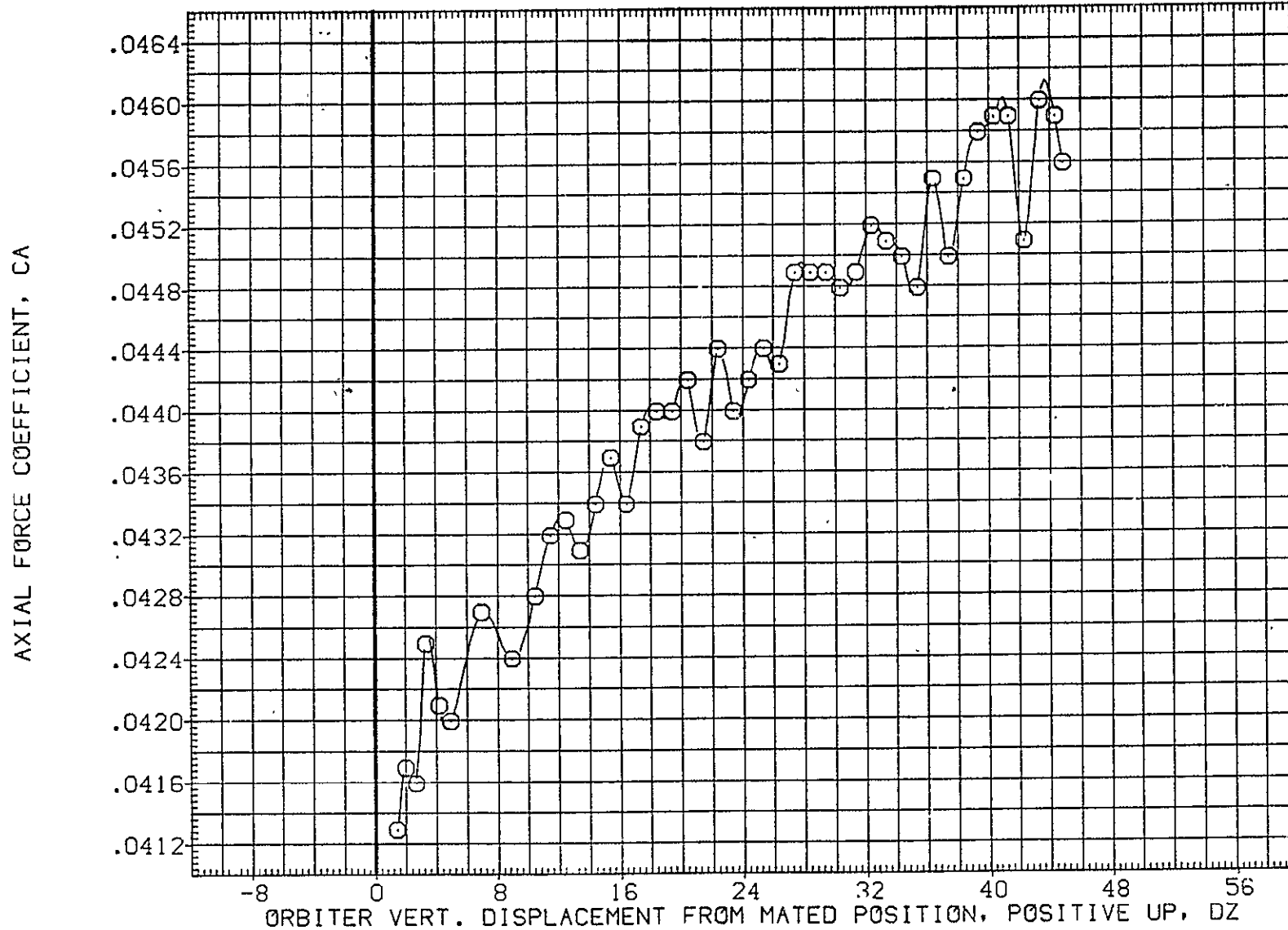


FIG. 62 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE071

SYMBOL	MACH	PARAMETRIC VALUES			
○	.600	ALPHAC	2.000	BETAC	.000
		STAB	5.000	ELEVON	.000
		BDFLAP	5.000	DX	.000
		DY	.000	IORB	4.000
		BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

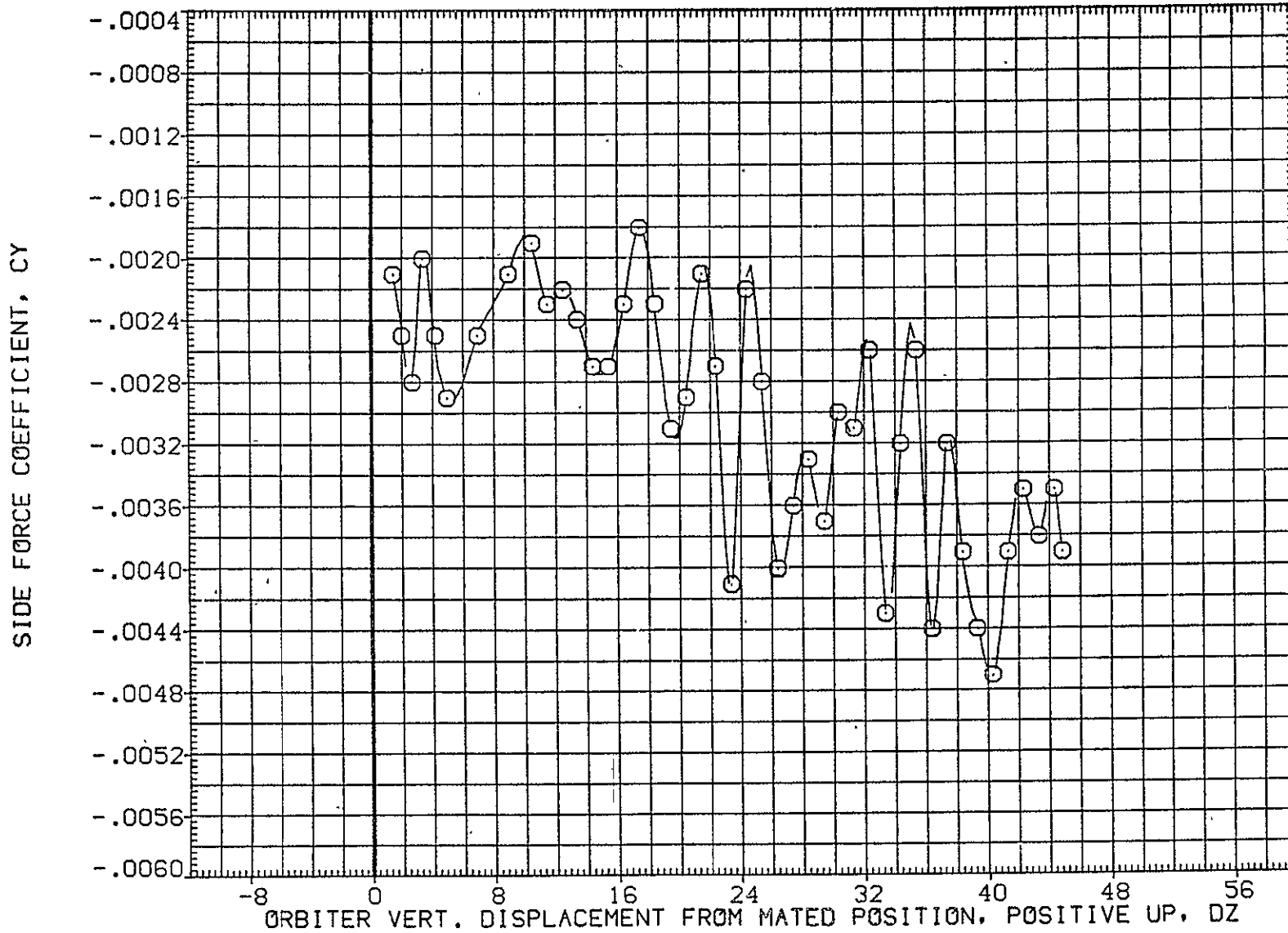
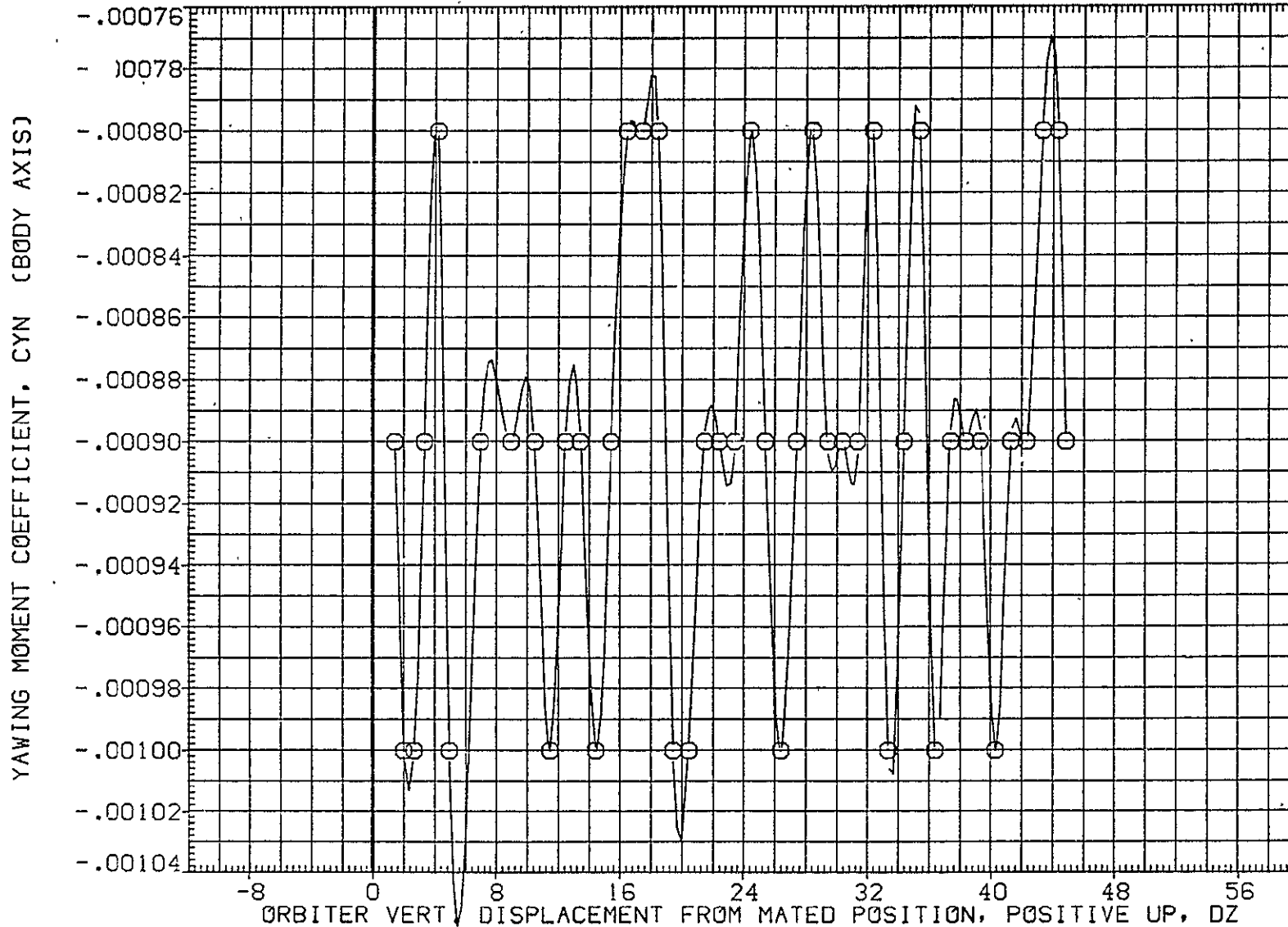


FIG. 62 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE071

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE071)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.600	ALPHAC	2.000	BETAC	.000
		STAB	5.000	ELEVON	.000
		BDFLAP	5.000	DX	.000
		DY	.000	IORB	4.000
		BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	



IG. 62 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE071

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.600	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. XG
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

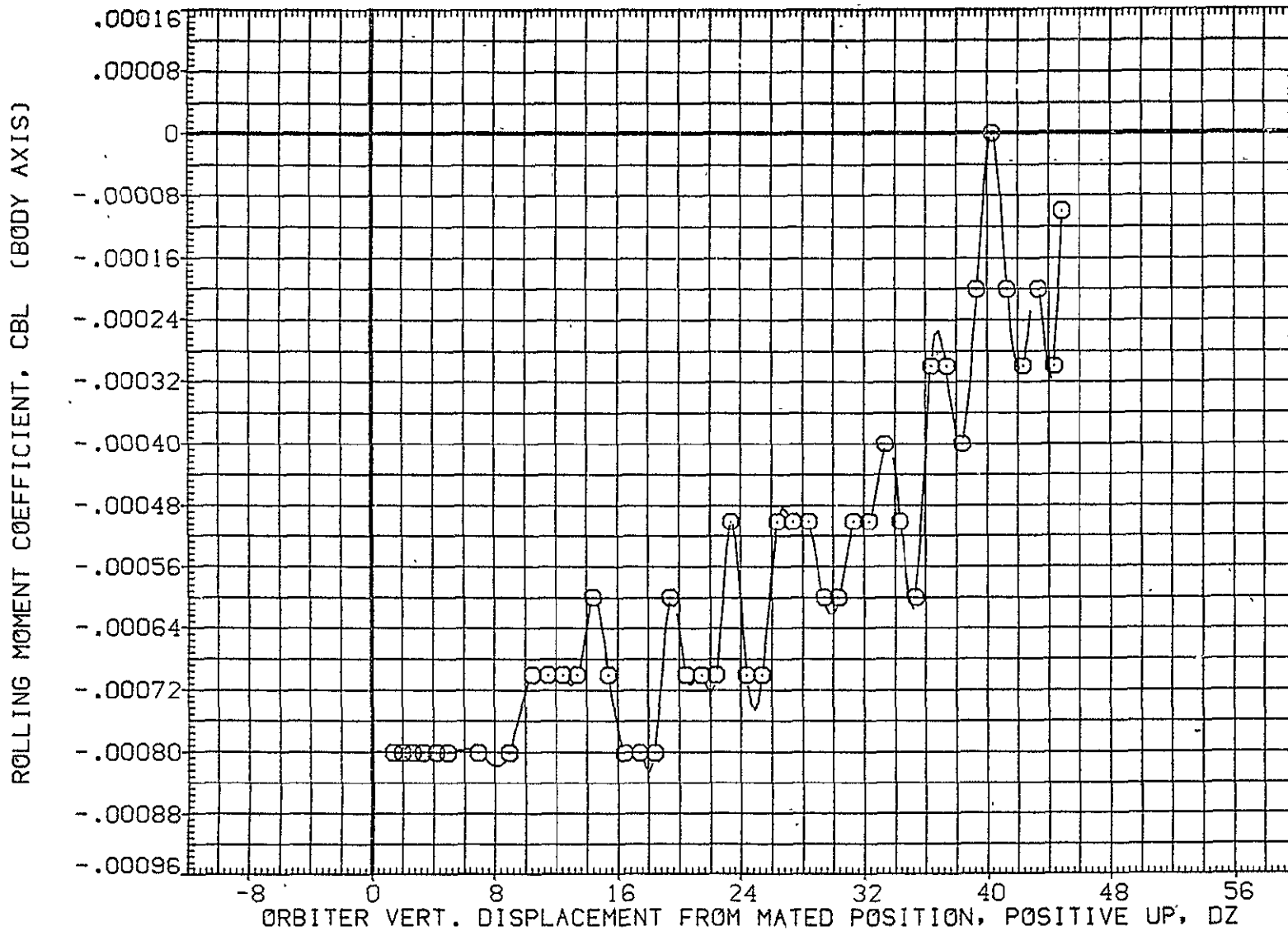


FIG. 62 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE071

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE071)

SYMBOL
○

MACH	PARAMETRIC VALUES			
.600	ALPHAC	2.000	BETAC	.000
	STAB	5.000	ELEVON	.000
	BDFLAP	5.000	DX	.000
	OY	.000	IORB	4.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0125	

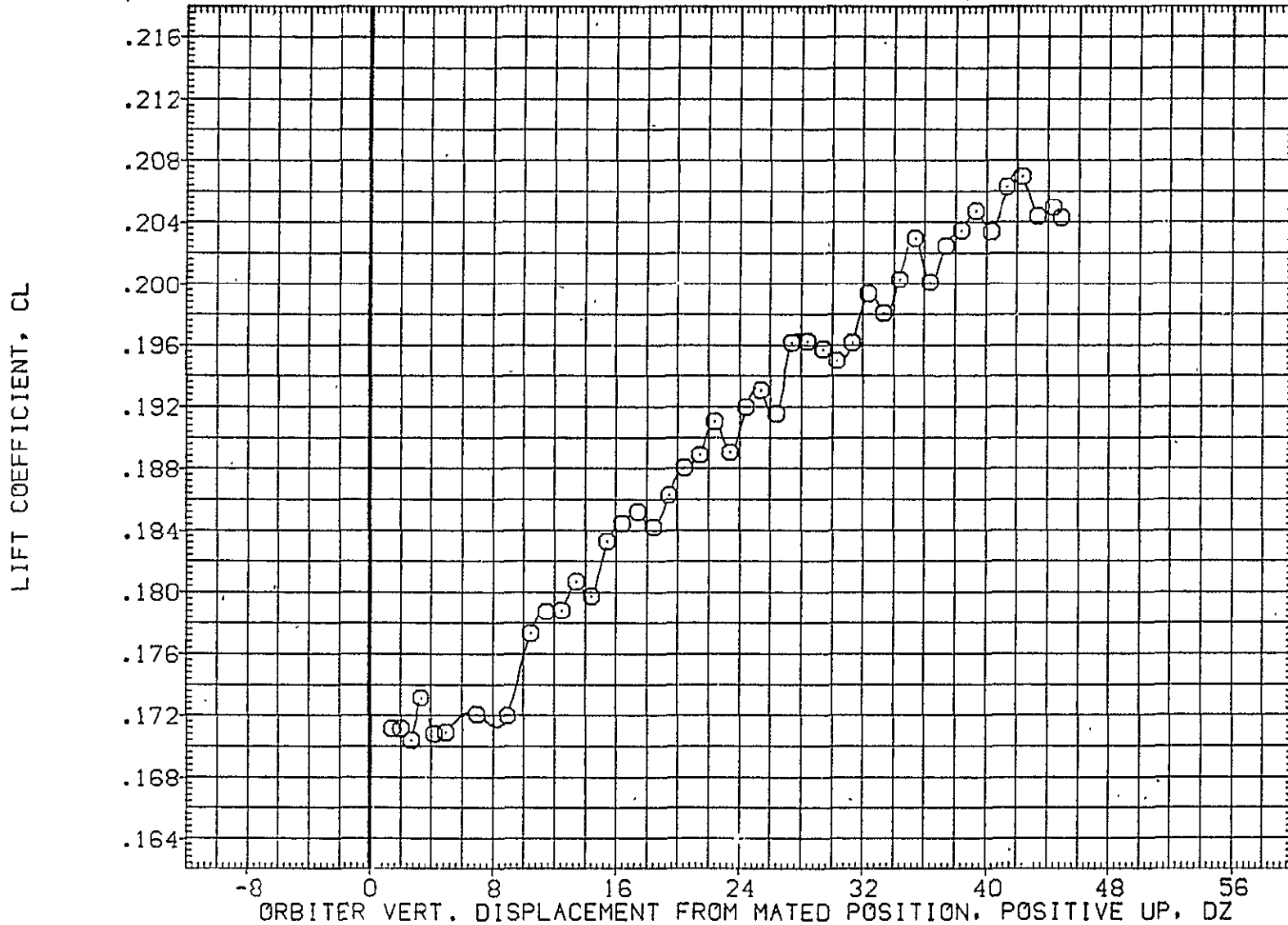


FIG. 62 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE071

SYMBOL
○

MACH
.600

PARAMETRIC VALUES			
ALPHAC	2.000	BETAC	.000
STAB	5.000	ELEVON	.000
BDFLAP	5.000	DX	.000
DY	.000	IORB	4.000
BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

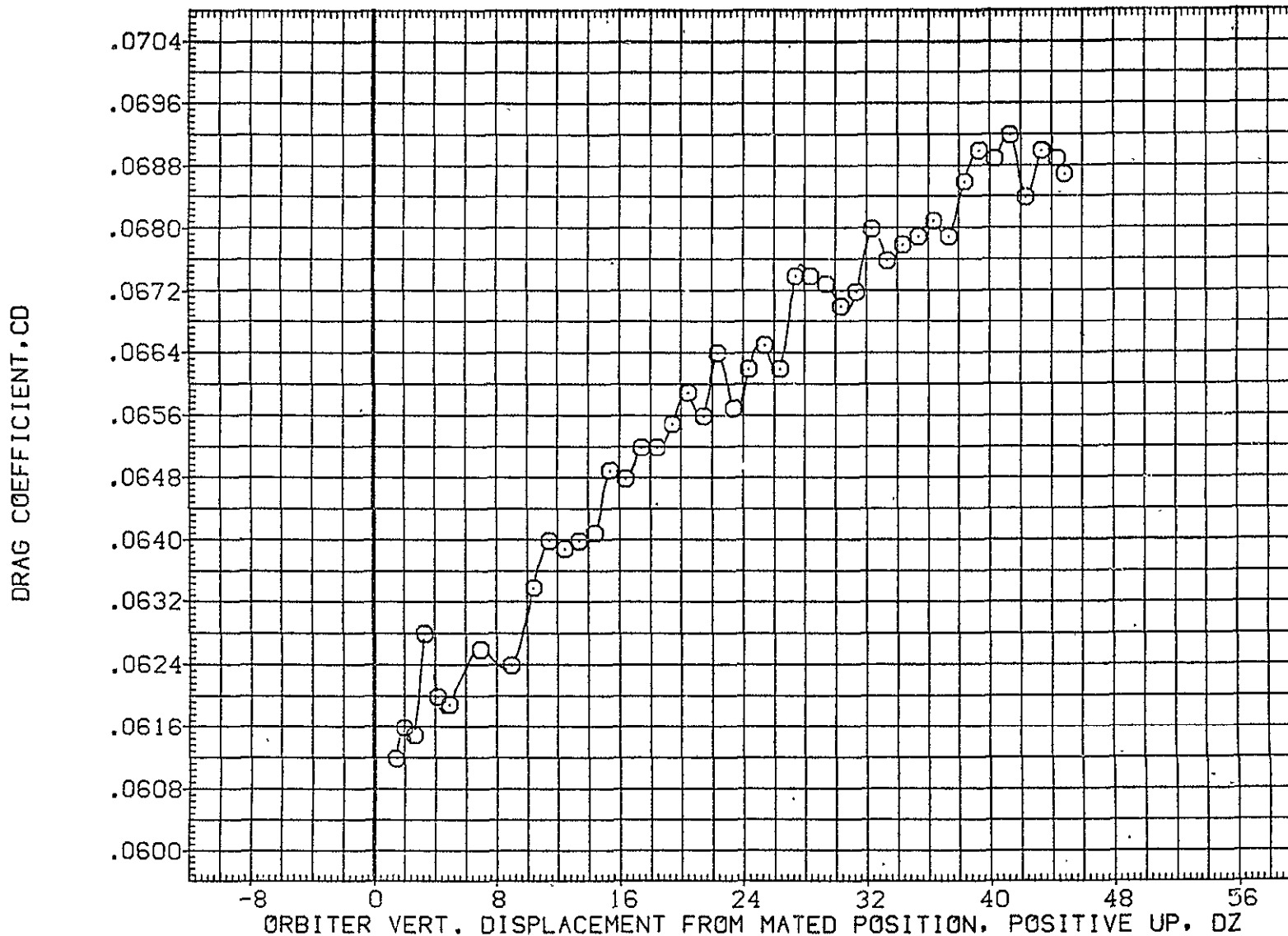


FIG. 62 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE071

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE072)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.598	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

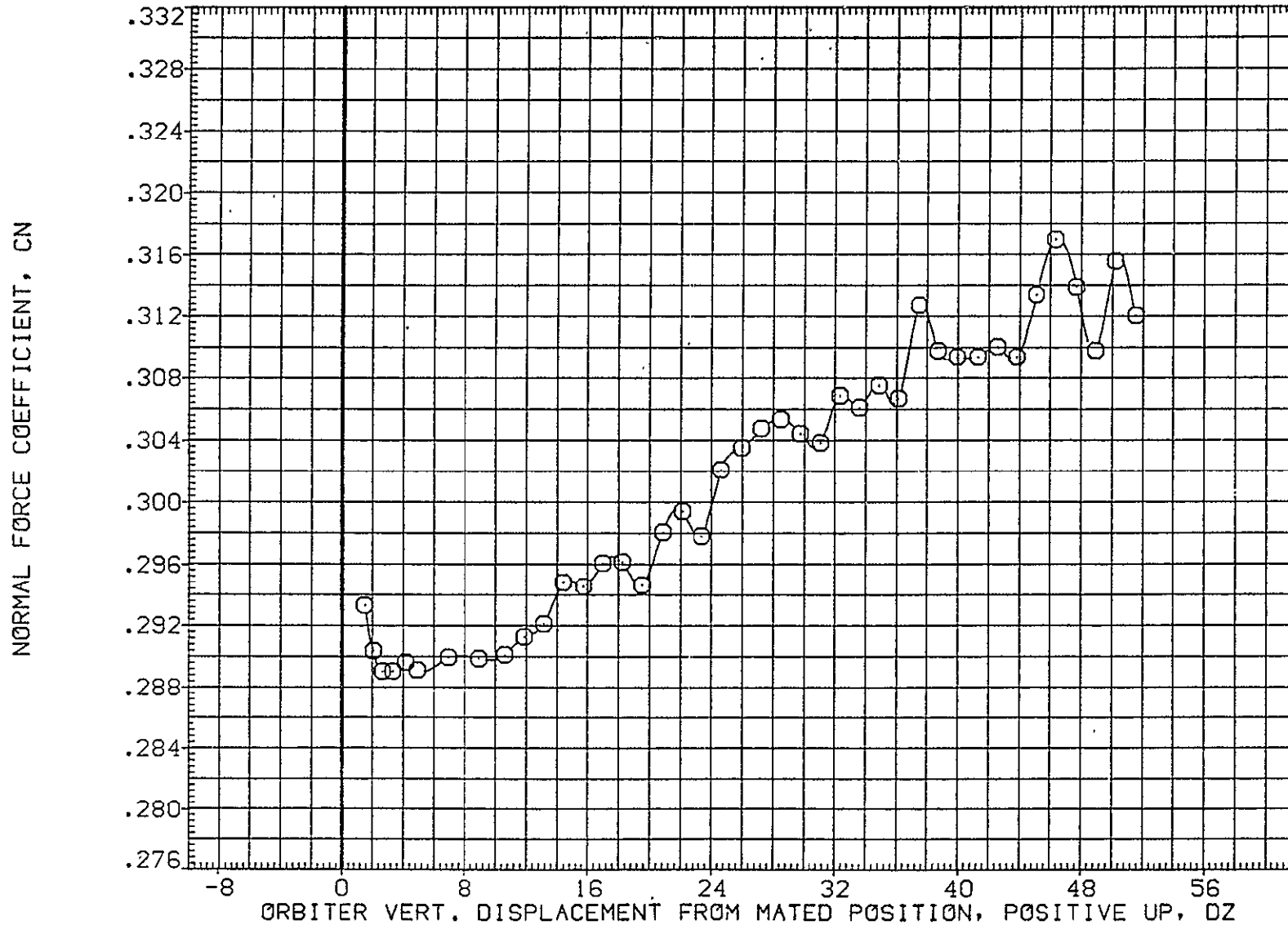


FIG. 63 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE072

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.598	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

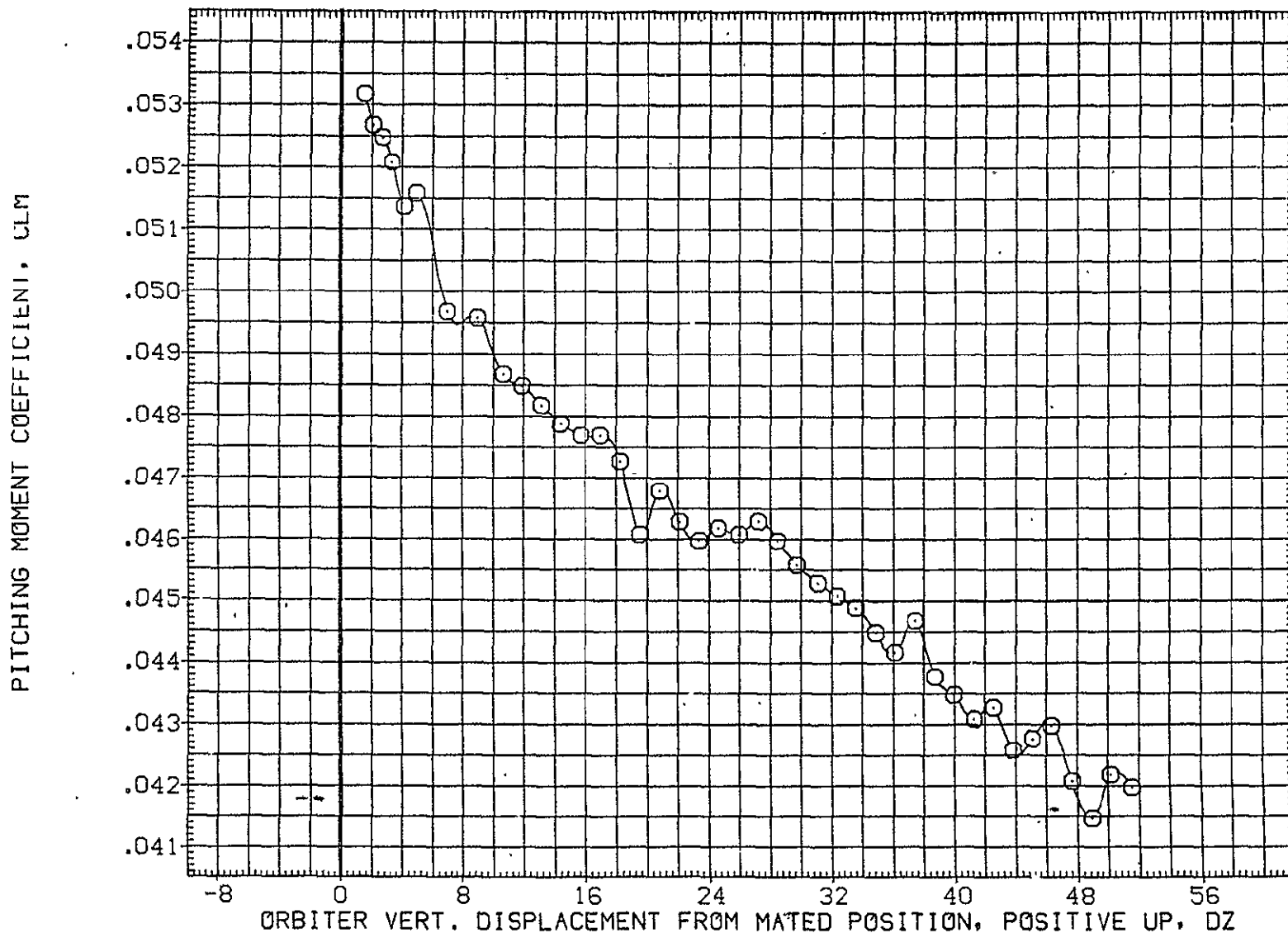


FIG. 63 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE072

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE072)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.598	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

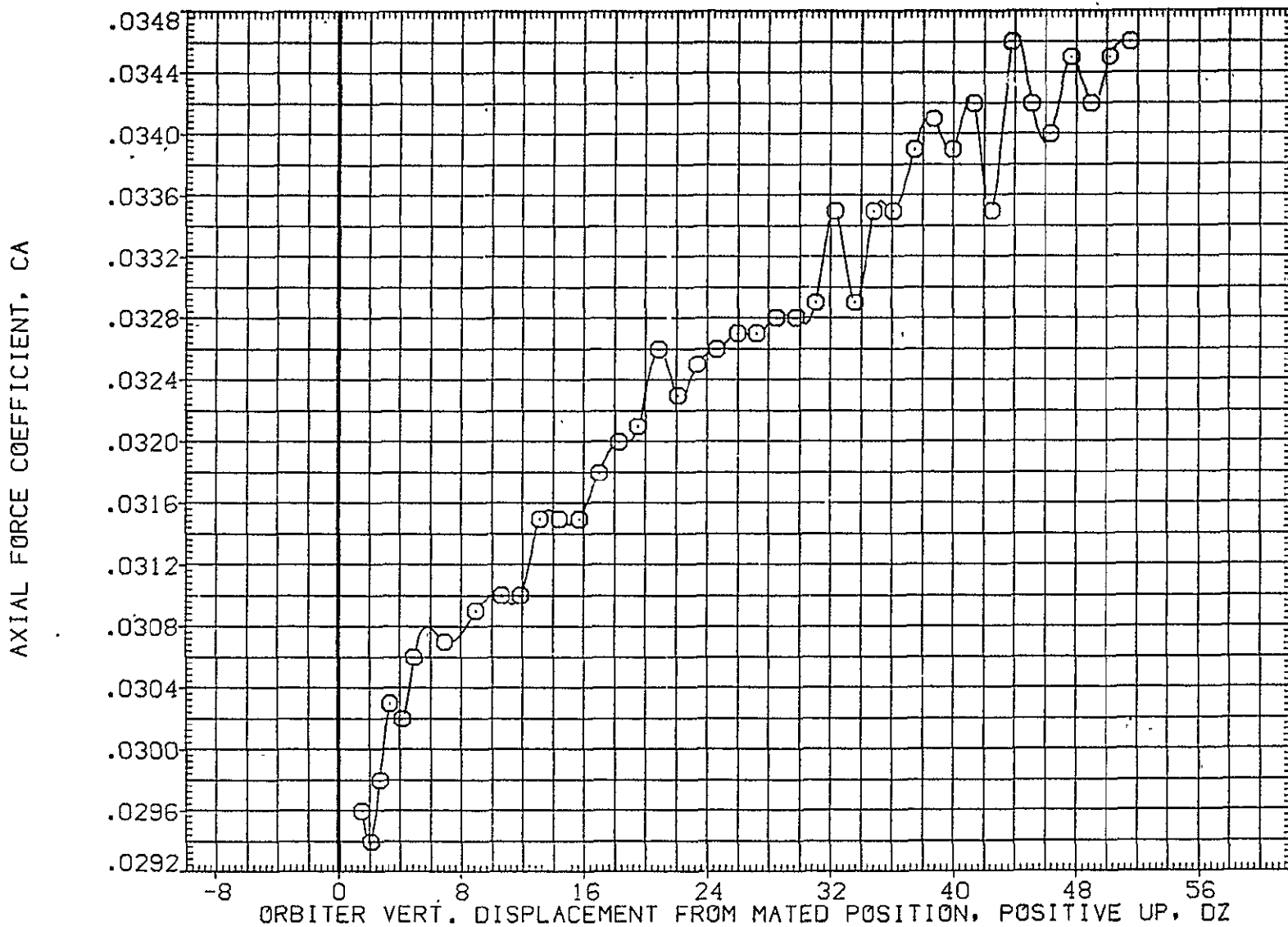


FIG. 63 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE072

SYMBOL	MACH	PARAMETRIC VALUES			
○	.598	ALPHAC	2.000	BETAC	.000
		STAB	5.000	ELEVON	.000
		BDFLAP	5.000	DX	.000
		DY	.000	IORB	6.000
		BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0125	

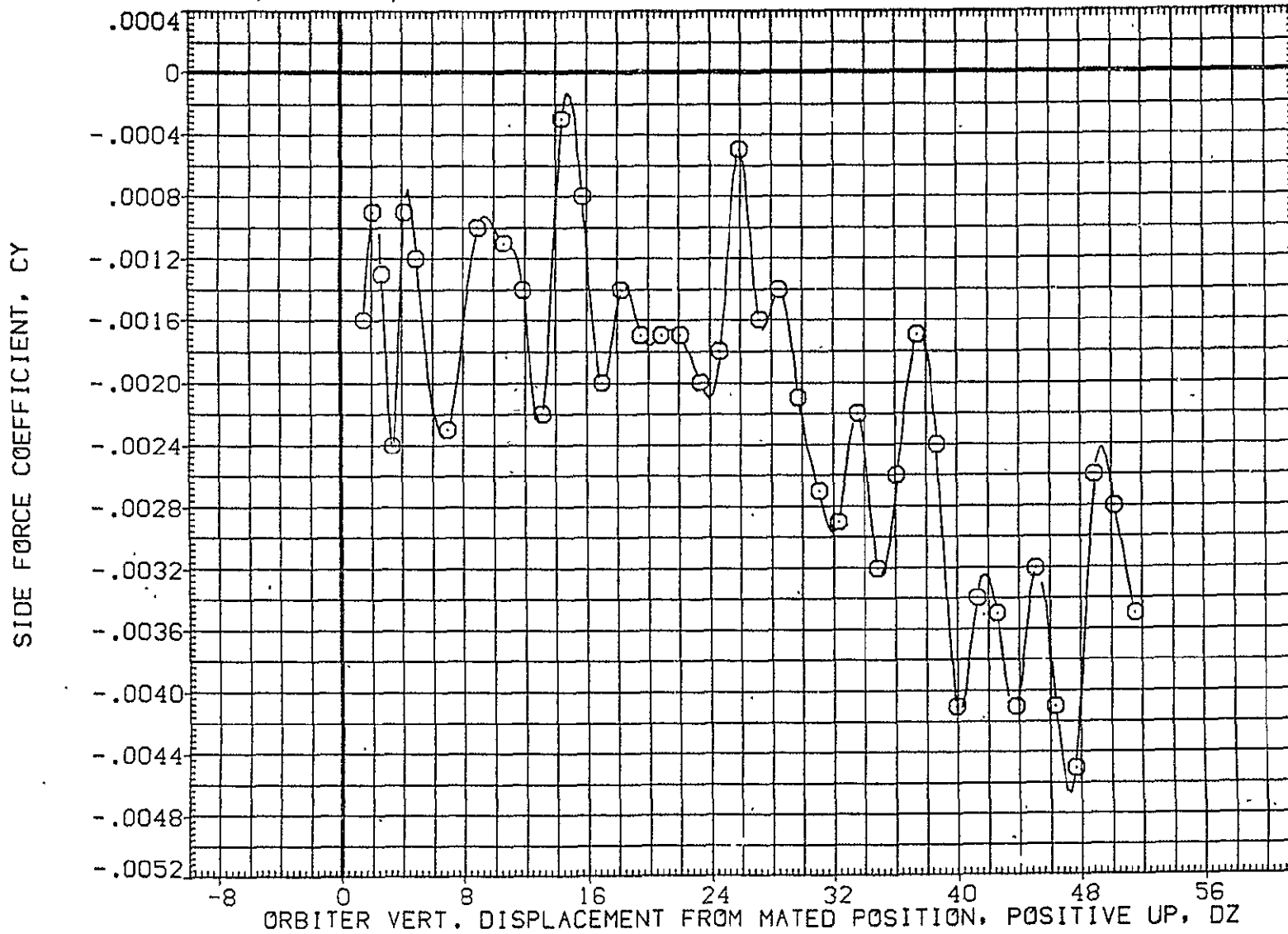


FIG. 63 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE072

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE072)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.598	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SO.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

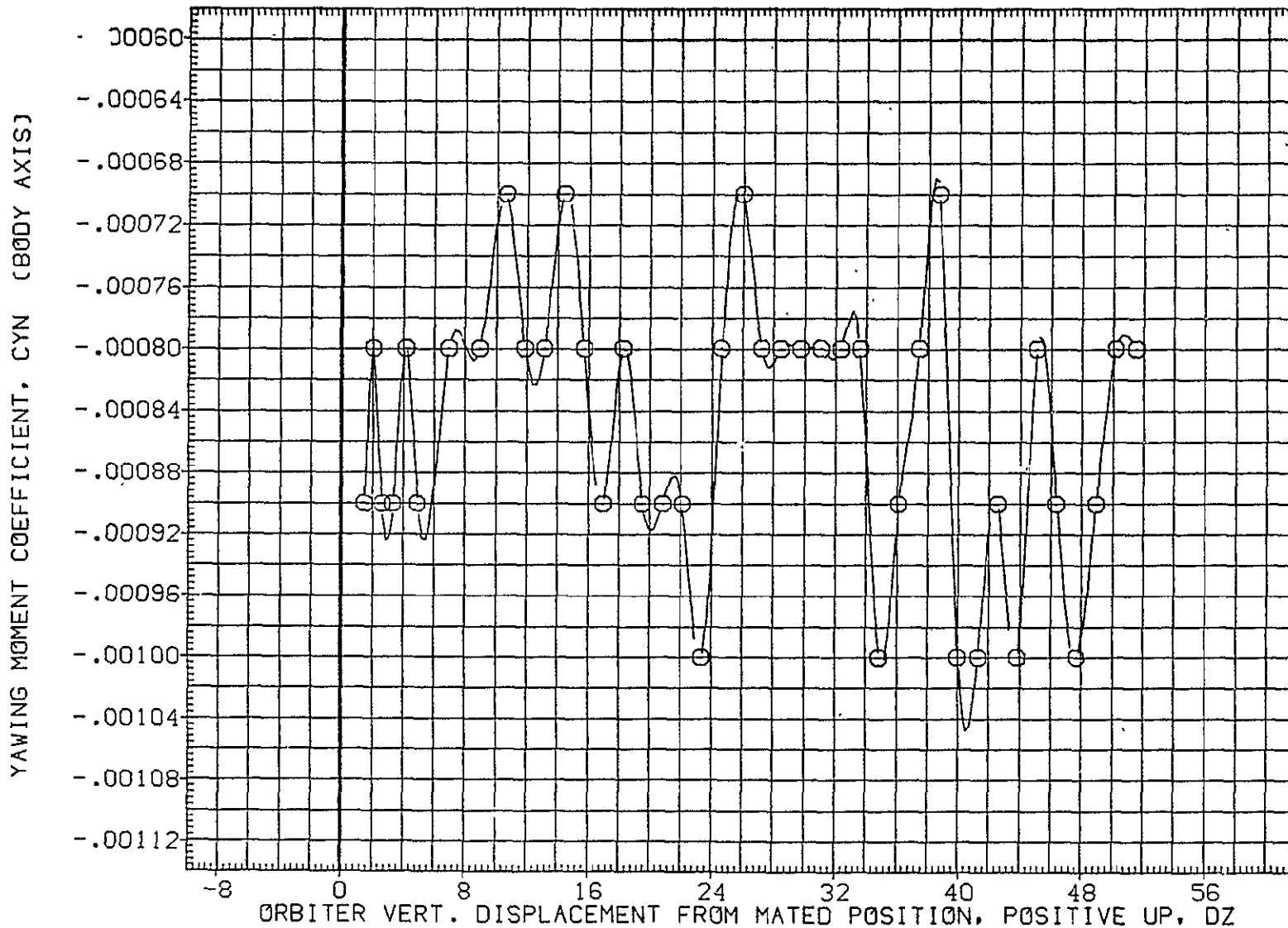


FIG. 63 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE072

SYMBOL	MACH	PARAMETRIC VALUES						REFERENCE INFORMATION		
○	.598	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.		
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.		
		BDFLAP	5.000	DX	.000	BREF	936.6800	IN.		
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0		
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0		
						ZMRP	375.0000	IN. Z0		
						SCALE	.0125			

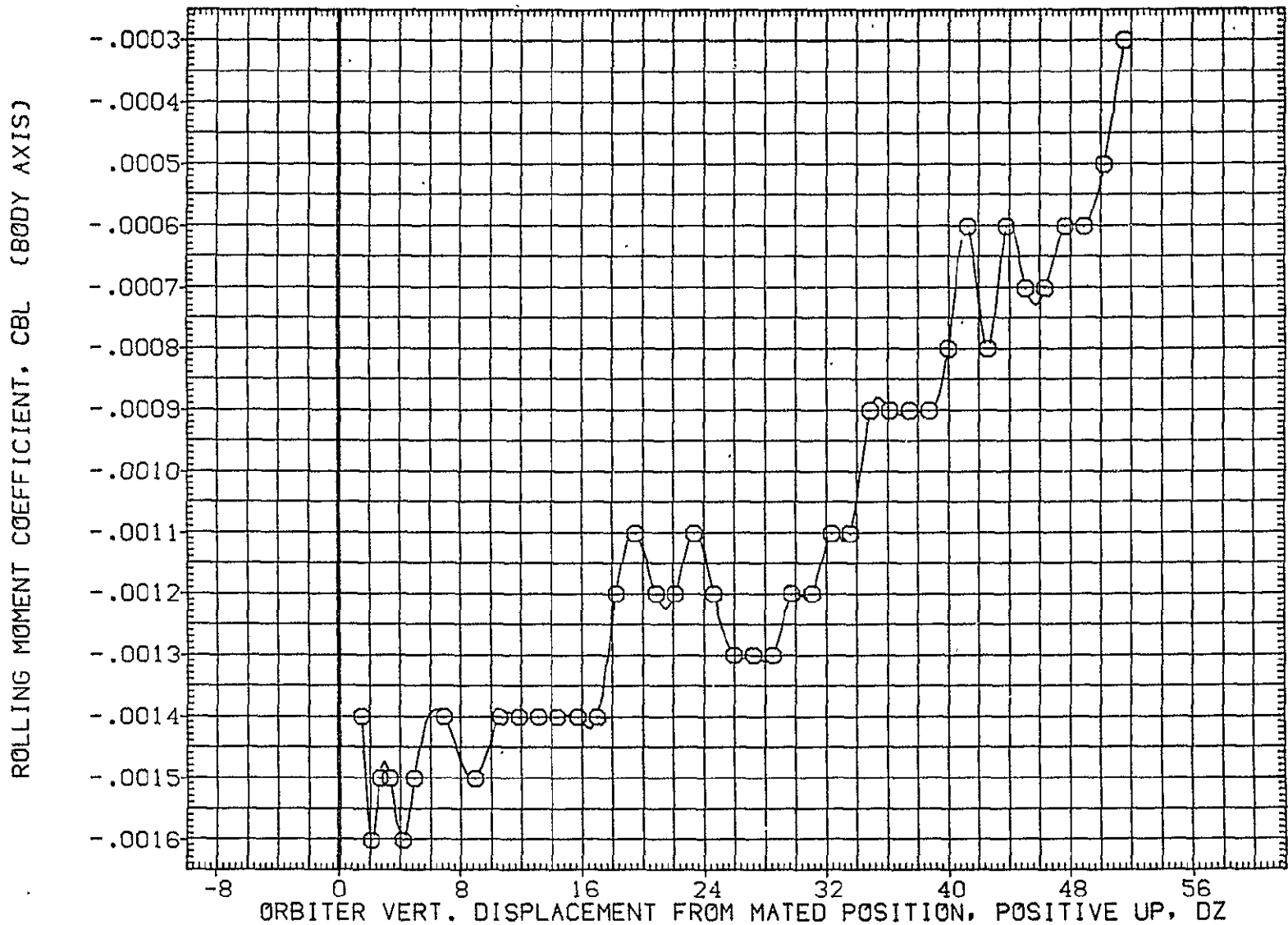


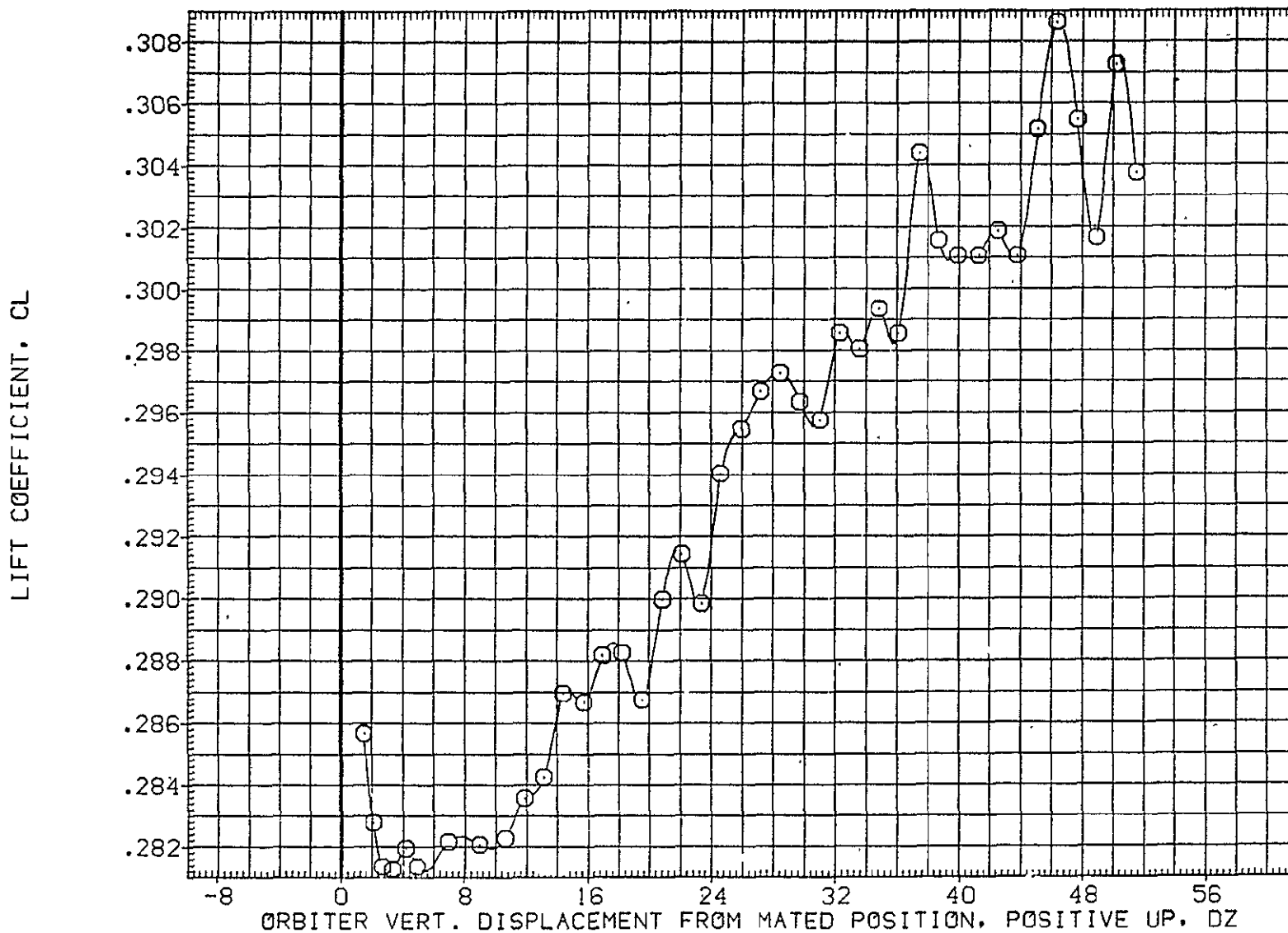
FIG. 63 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE072

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE072)

SYMBOL
○

MACH	PARAMETRIC VALUES			
.598	ALPHAC	2.000	BETAC	.000
	STAB	5.000	ELEVON	.000
	BDFLAP	5.000	DX	.000
	DY	.000	IORB	6.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2590.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	



IG. 63 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE072

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.598	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	5.000	DX	.000	BREF	936.6800	IN.
		OY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

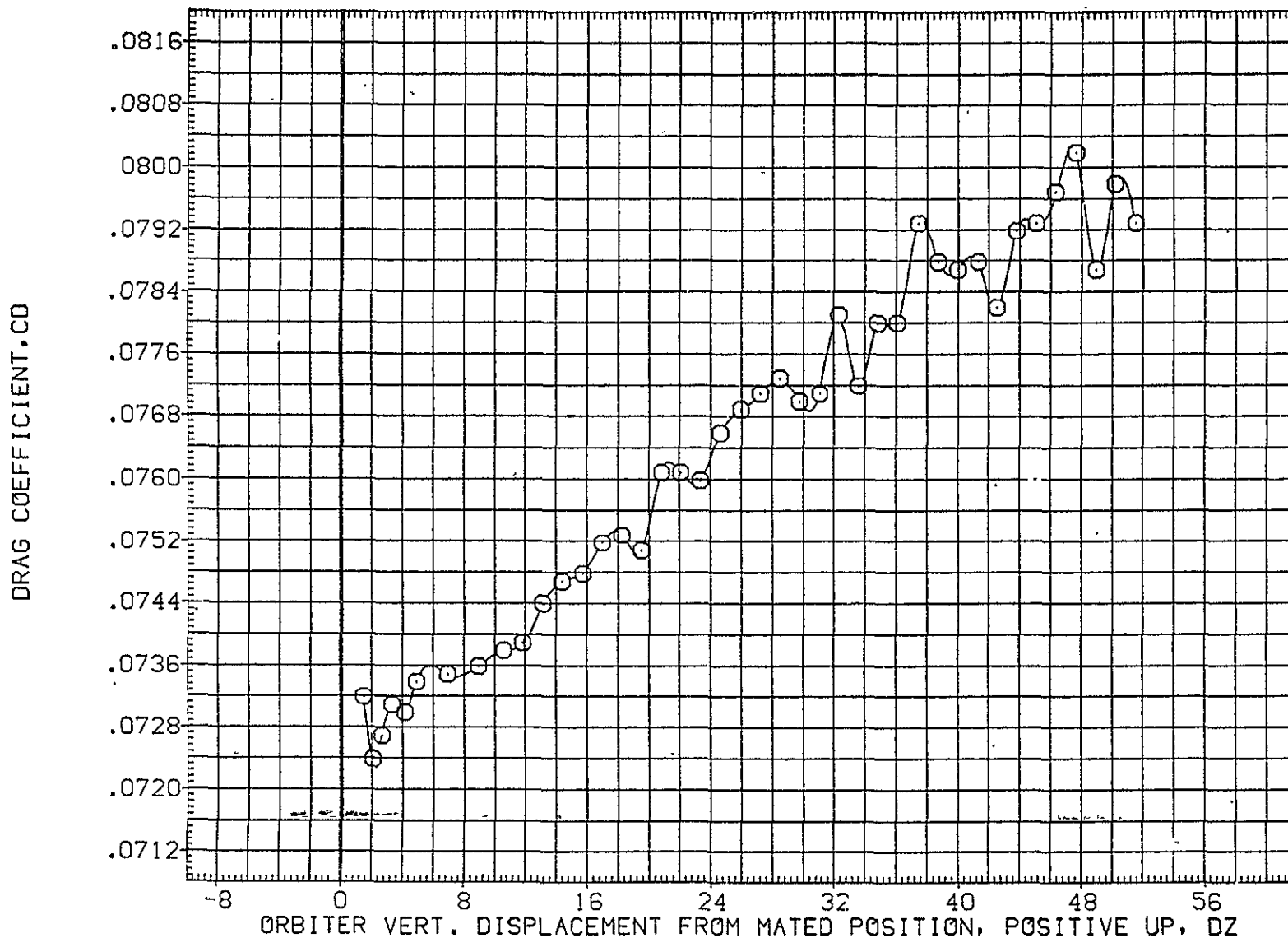


FIG. 63 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0; AFE072

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE073)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

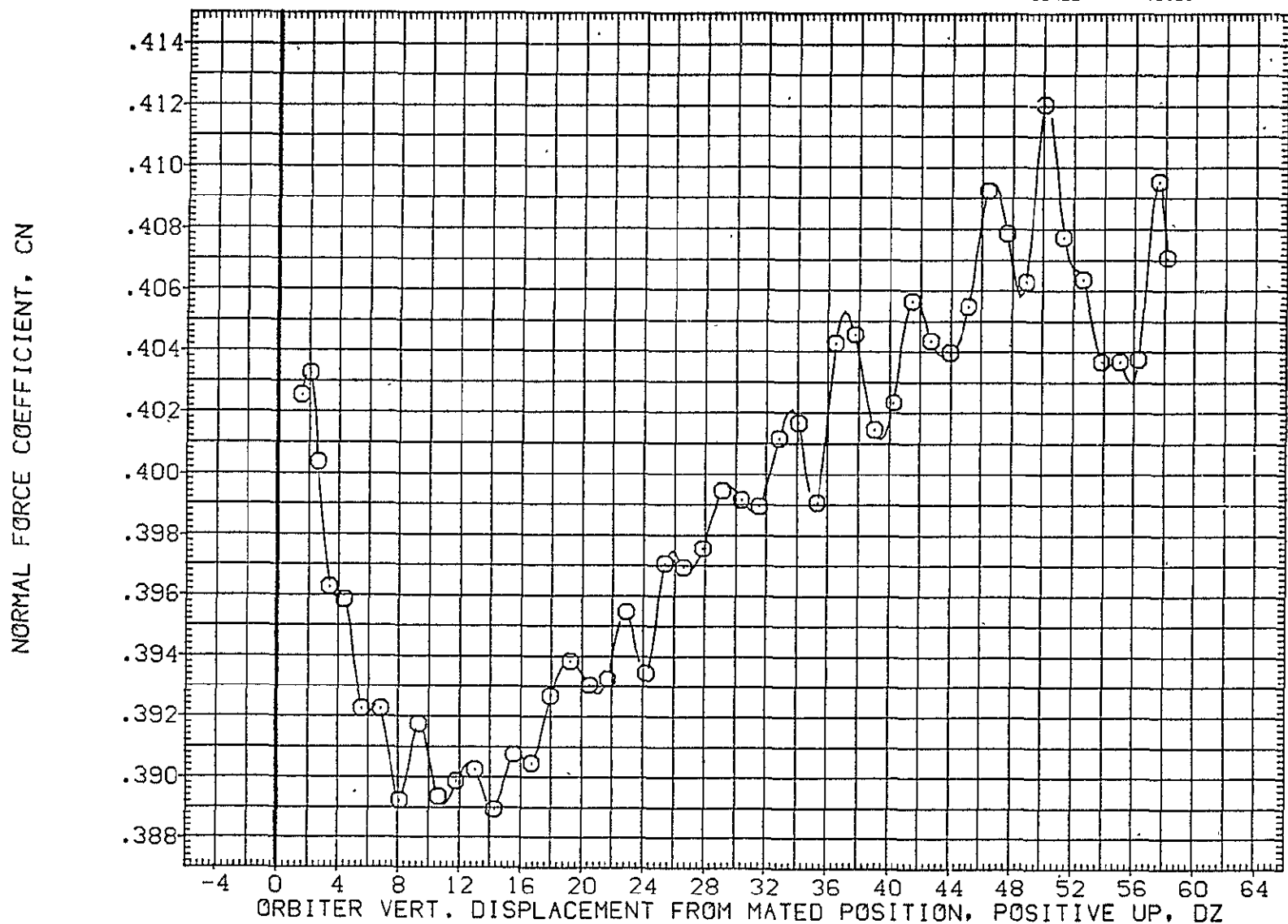


FIG. 64 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE073

SYMBOL
○

MACH	PARAMETRIC VALUES			
.599	ALPHAC	2.000	BETAC	.000
	STAB	5.000	ELEVON	.000
	BDFLAP	5.000	DX	.000
	DY	.000	IORB	8.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

PITCHING MOMENT COEFFICIENT, CLM

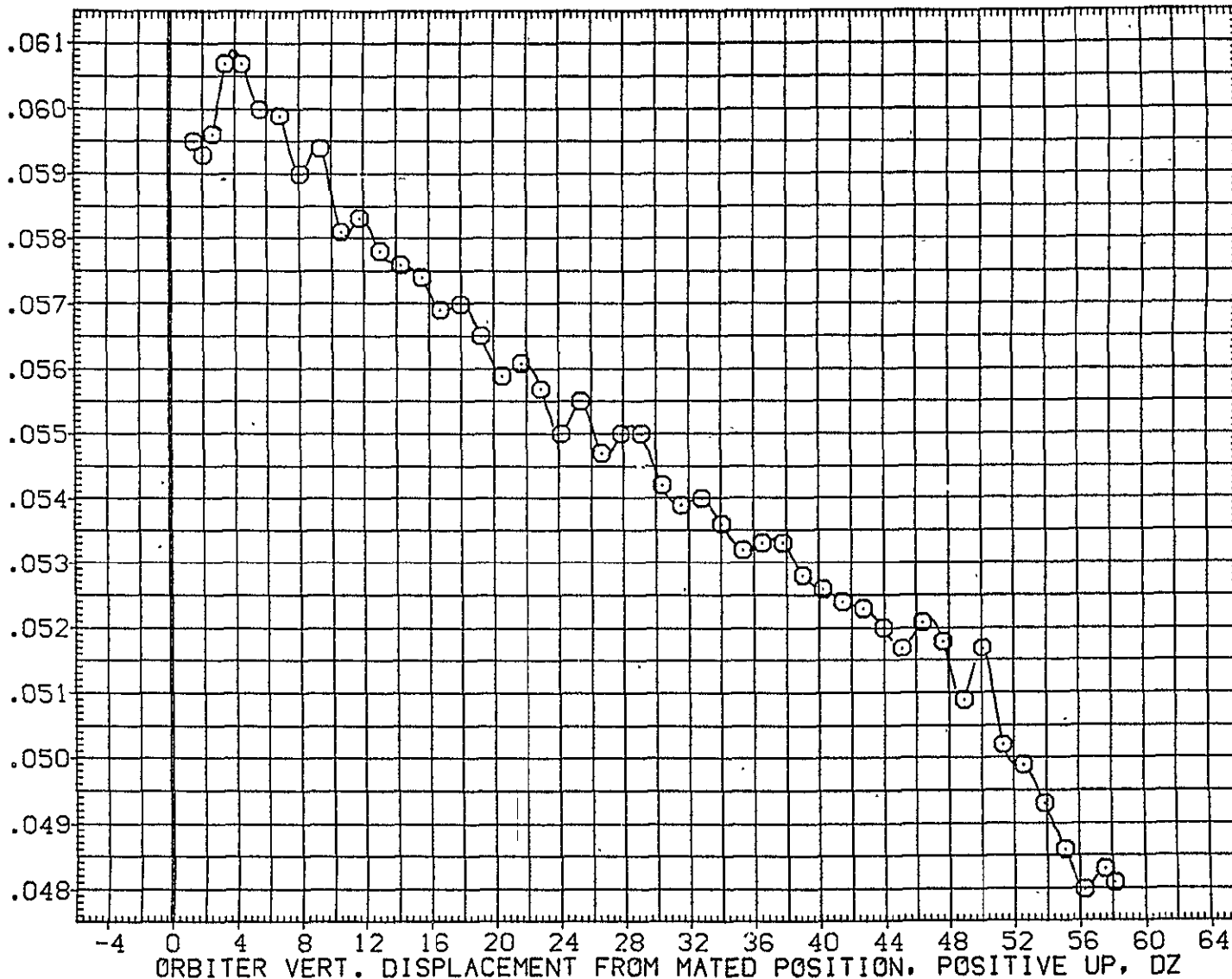


FIG. 64 ORB. DATA. CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE073

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE073)

SYMBOL
○

MACH
.599

PARAMETRIC VALUES			
ALPHAC	2.000	BETAC	.000
STAB	5.000	ELEVON	.000
BDFLAP	5.000	DX	.000
DY	.000	IORB	8.000
BETA0	.000	RUDDER	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

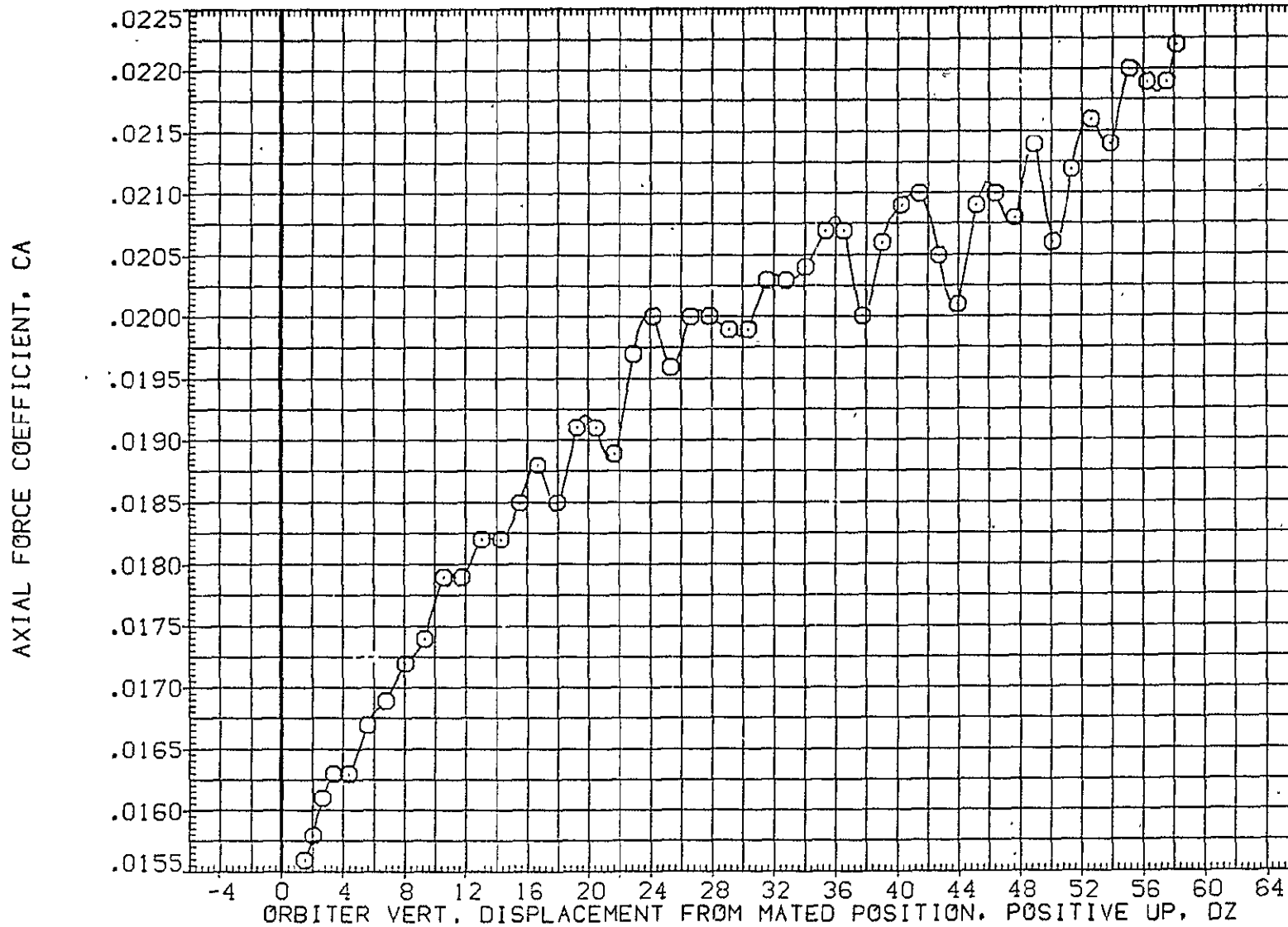


FIG. 64 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE073

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

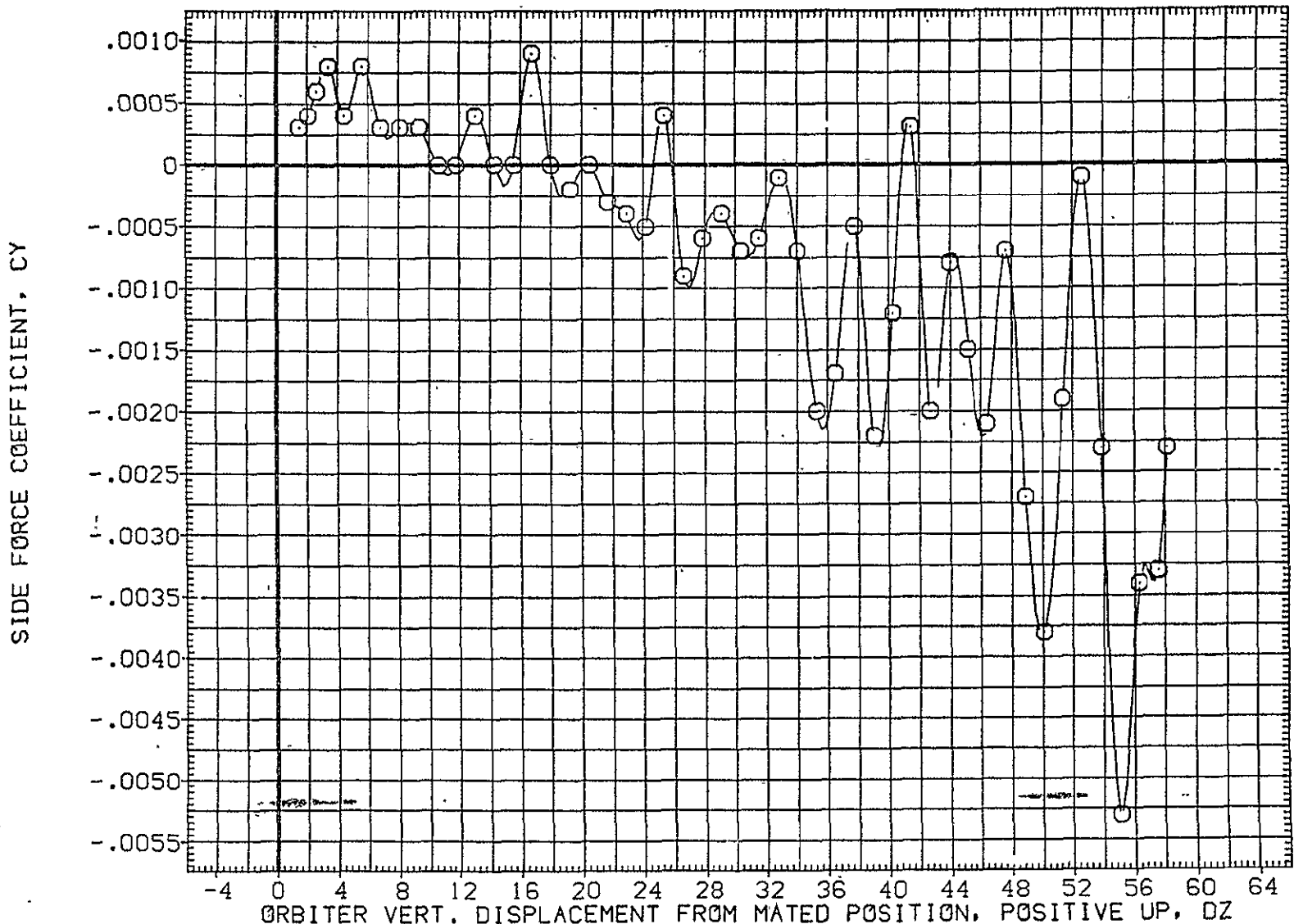
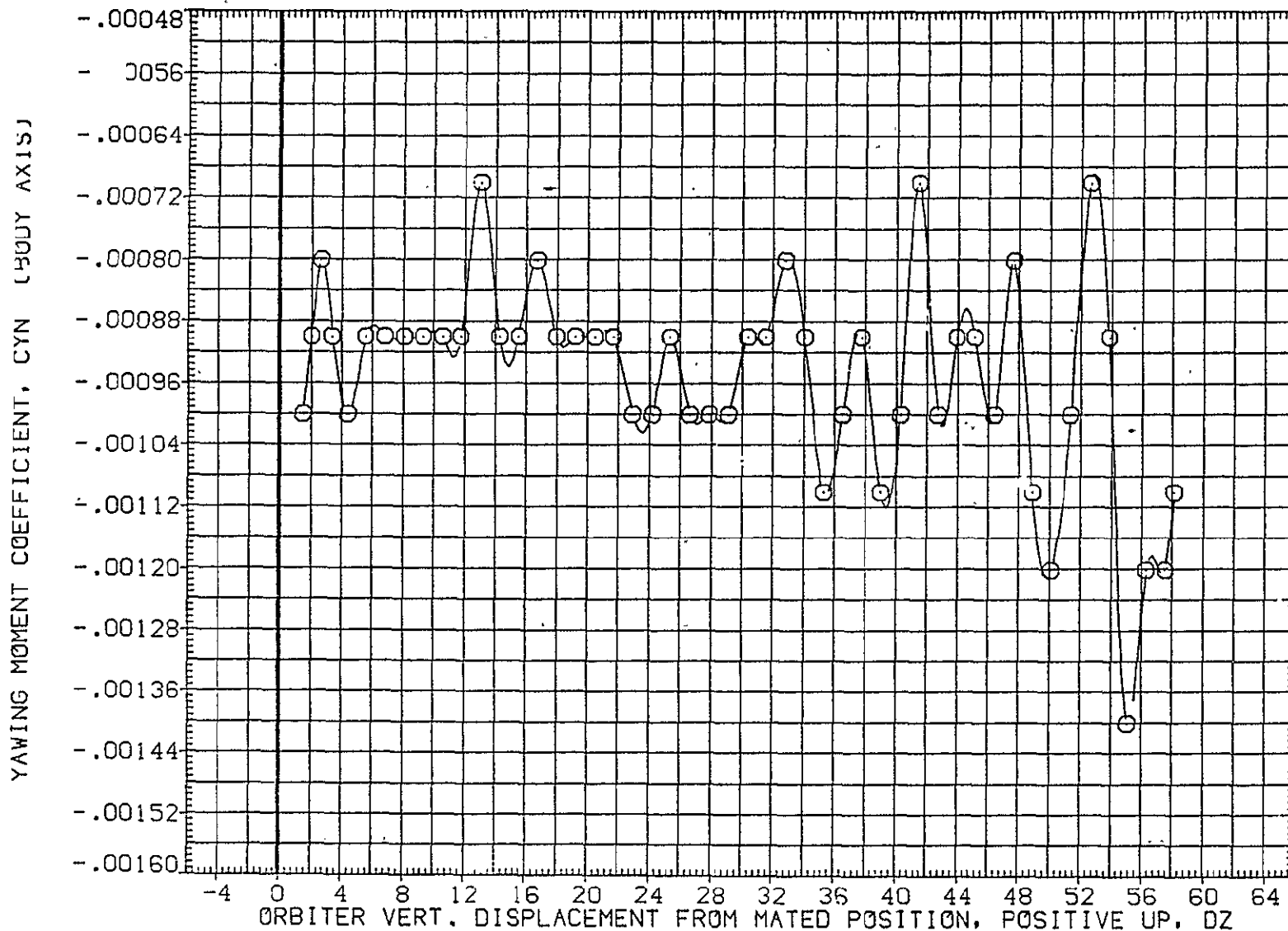


FIG. 64 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE073

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE073)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	



IG. 64 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE073

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

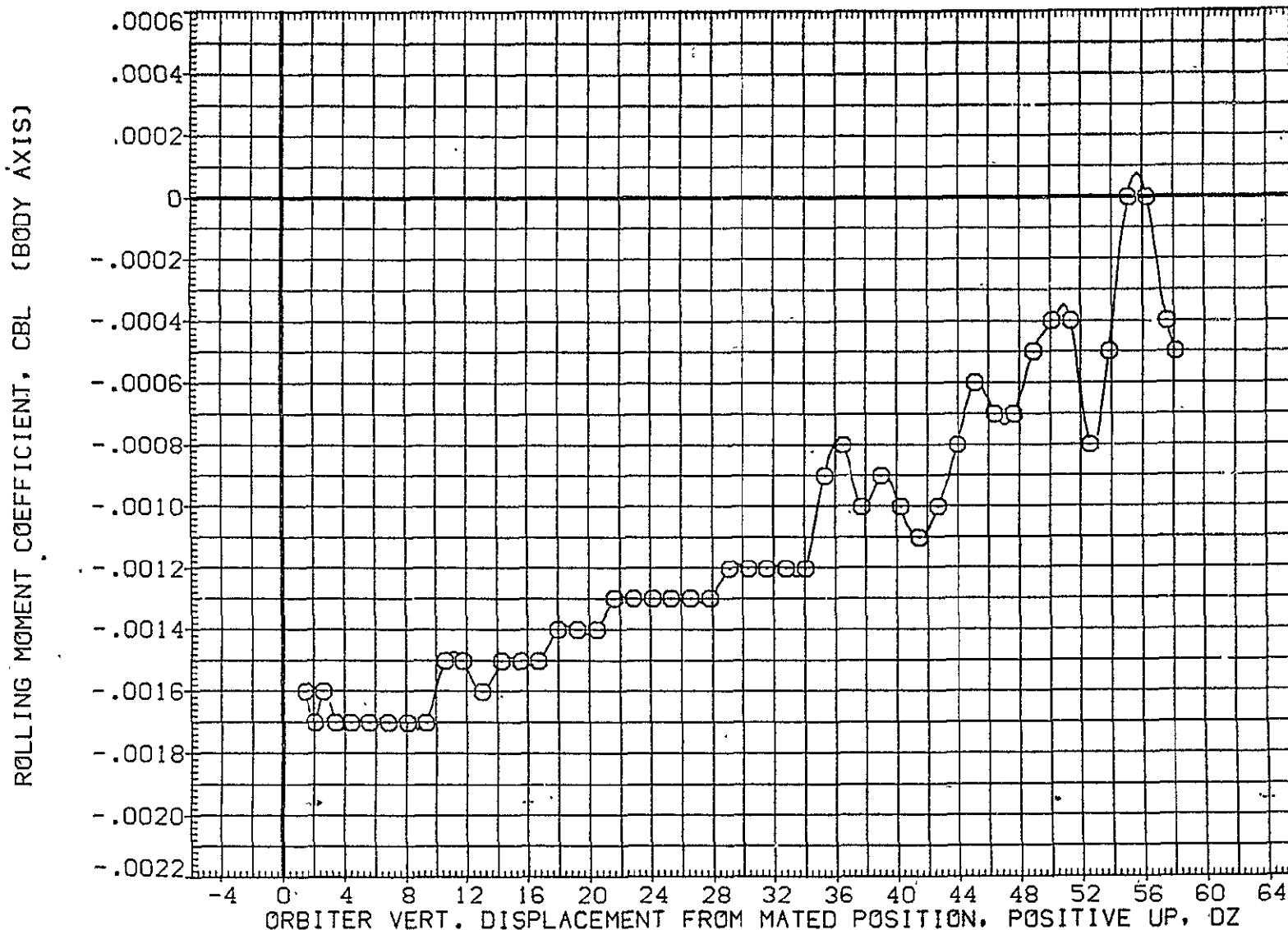
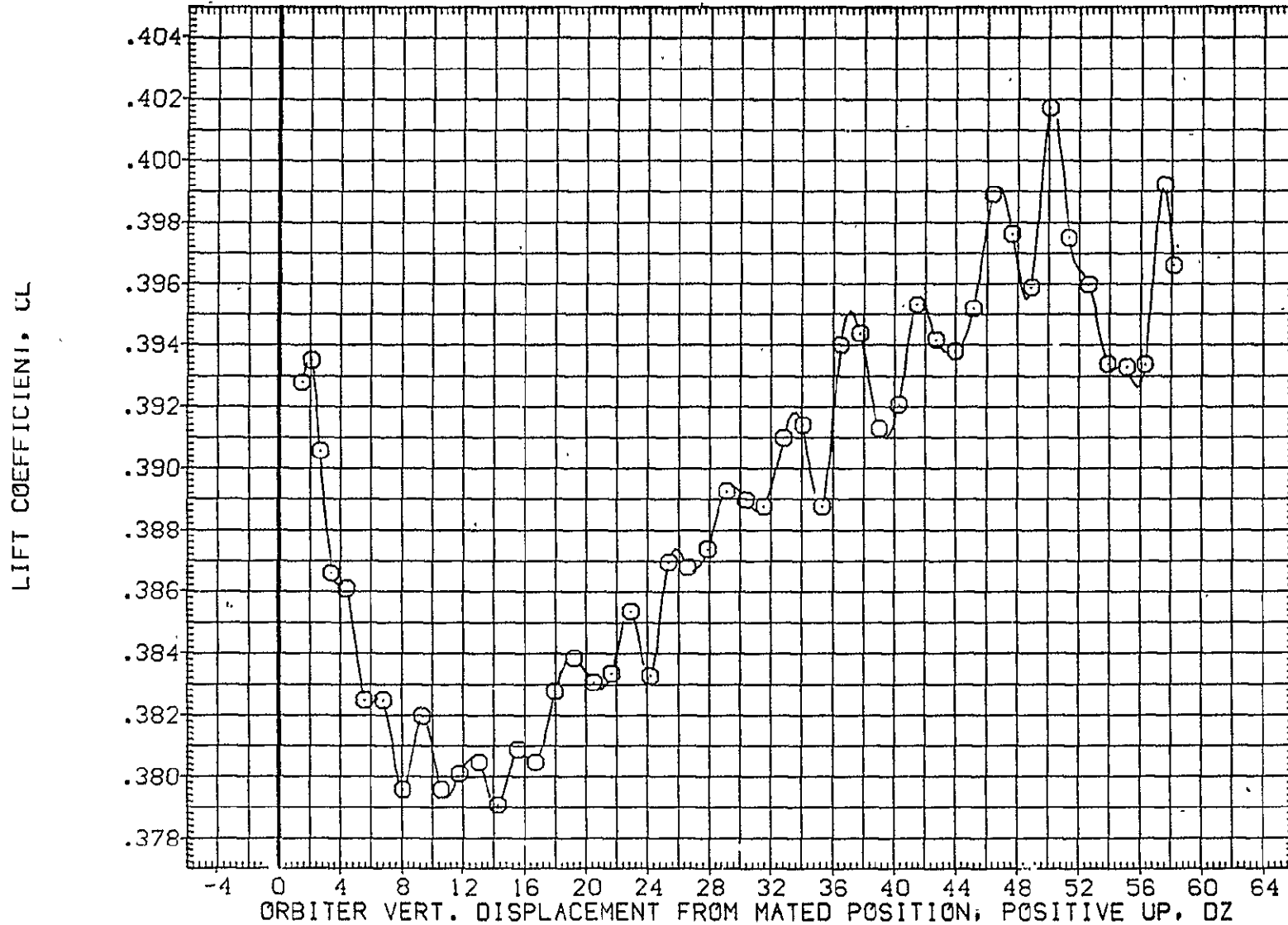


FIG. 64 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE073

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE073)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	



IG. 64 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE073

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

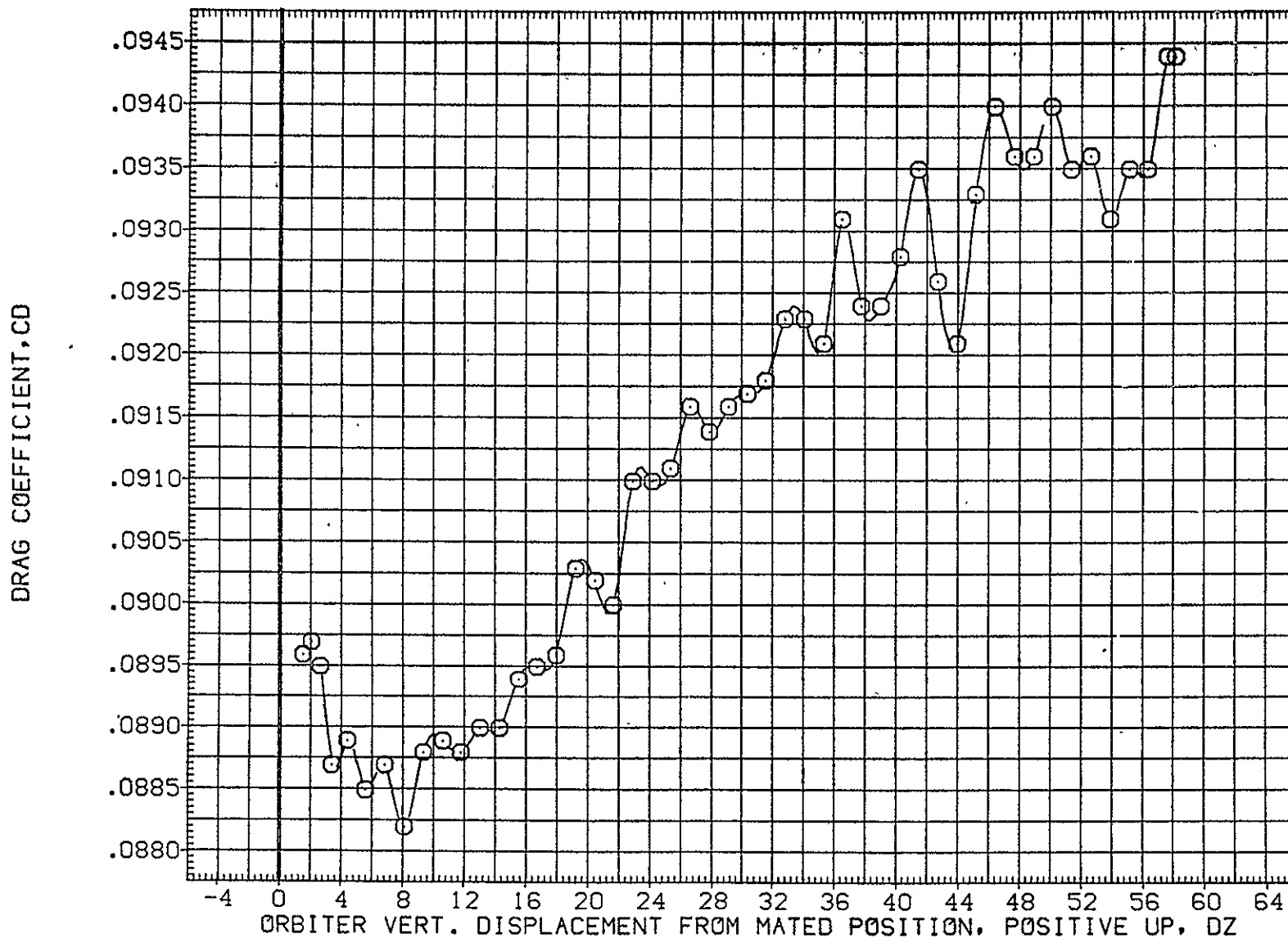


FIG. 64 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE073

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE074)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	ICRB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

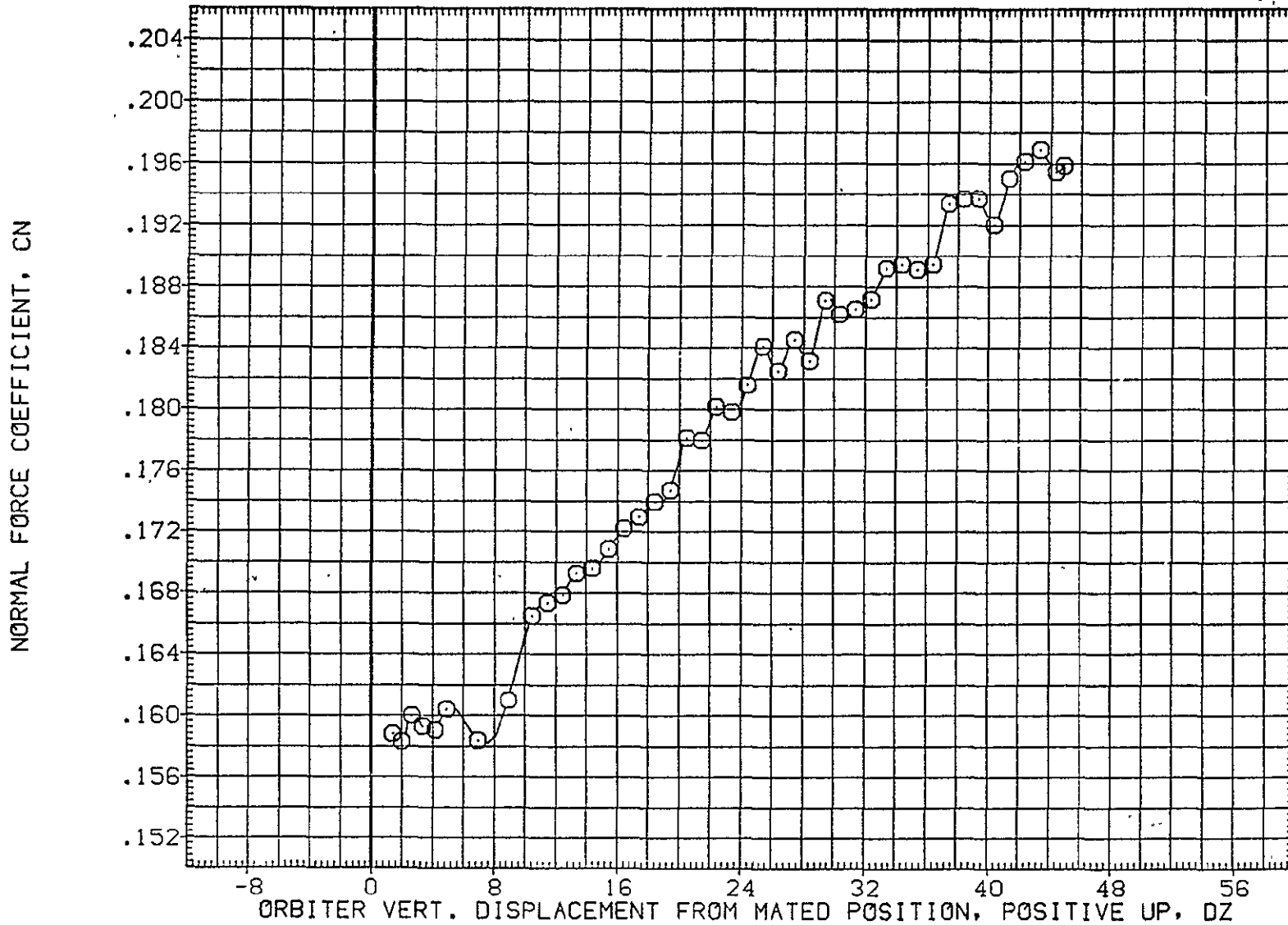


FIG. 65 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, ICRB=4, BETAC=0, BETA0=0, AFE074

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	LREF	BREF
○	.602	2.000	.000	.000	.000	2690.0000	474.8100	936.6800
		5.000	.000	.000	.000	1109.0000	.0000	.0000
		.000	.000	.000	.000	375.0000	.0125	
		.000	4.000	.000				
		.000	.000	.000				

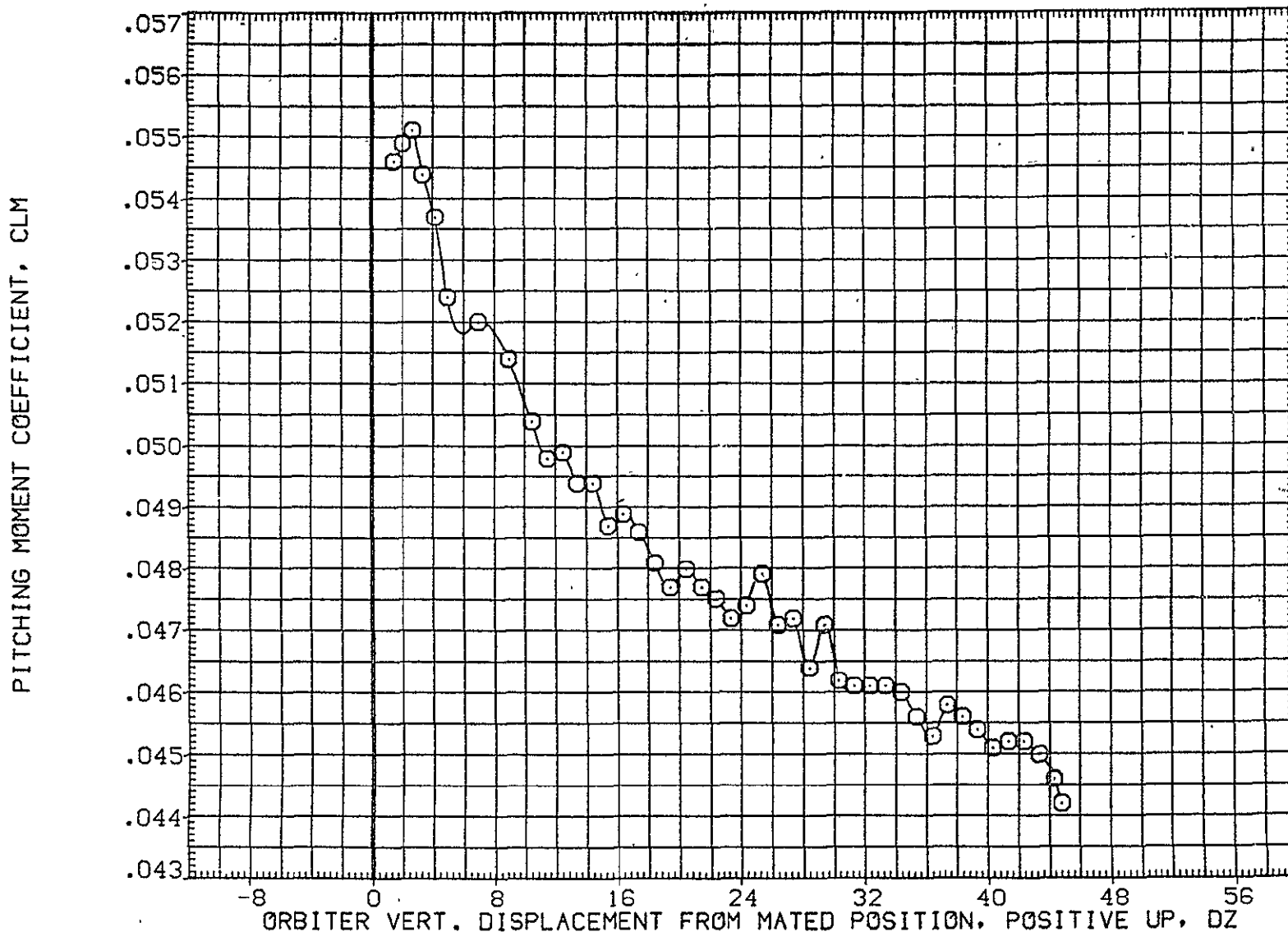


FIG. 65 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE074

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE074)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

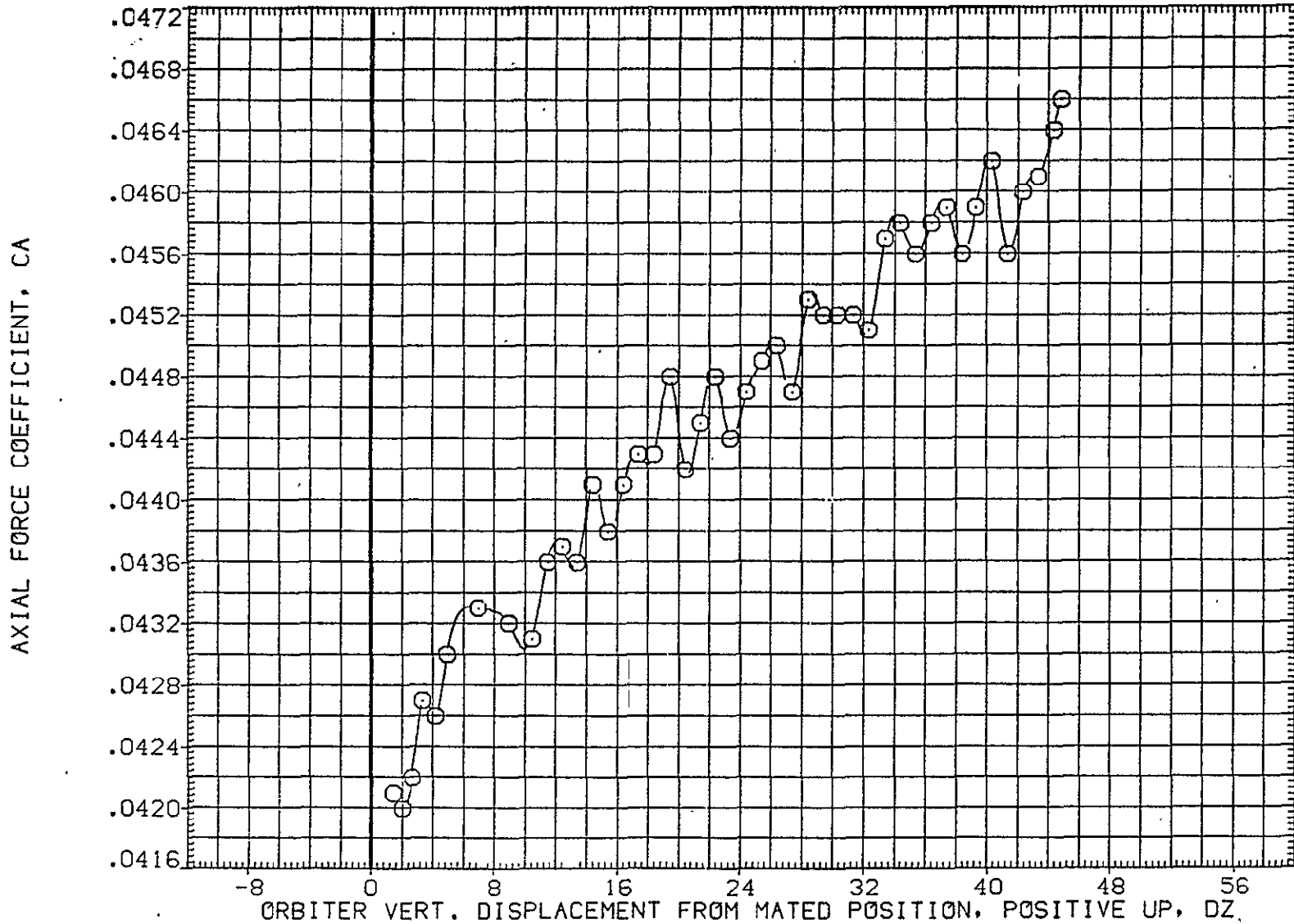


FIG. 65 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE074

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		SDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

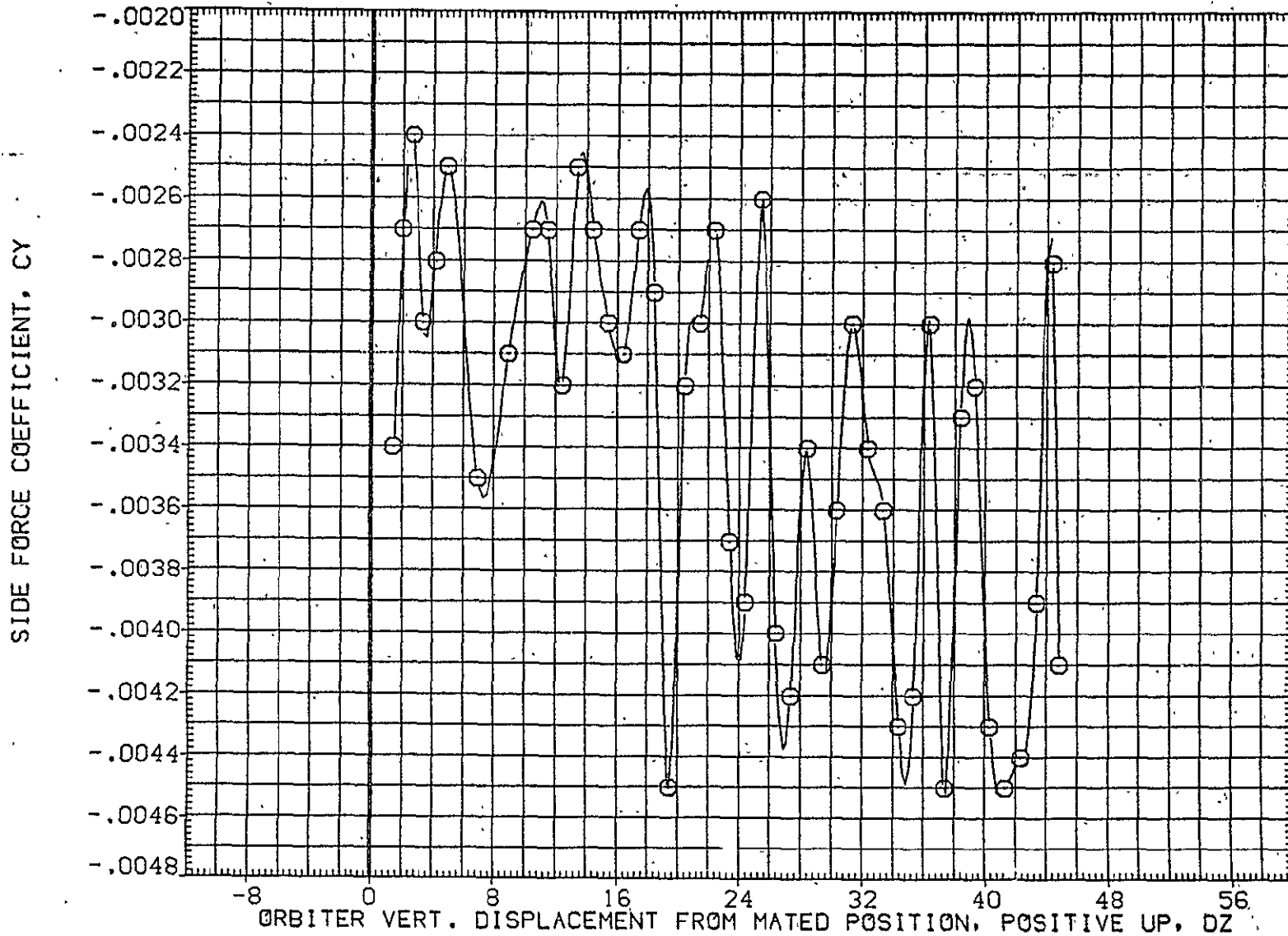
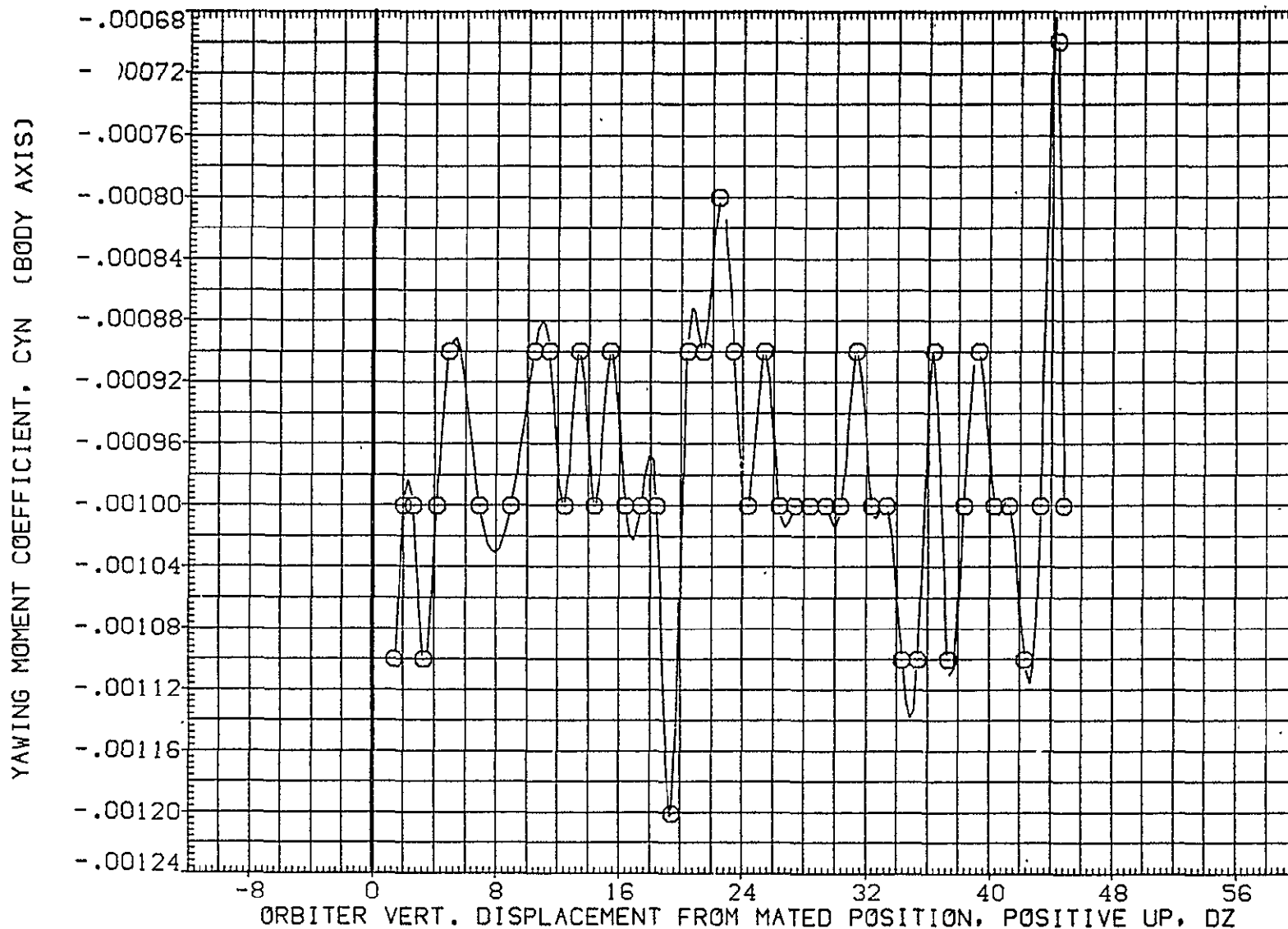


FIG. 65 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE074

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE074)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	



IG. 65 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE074

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

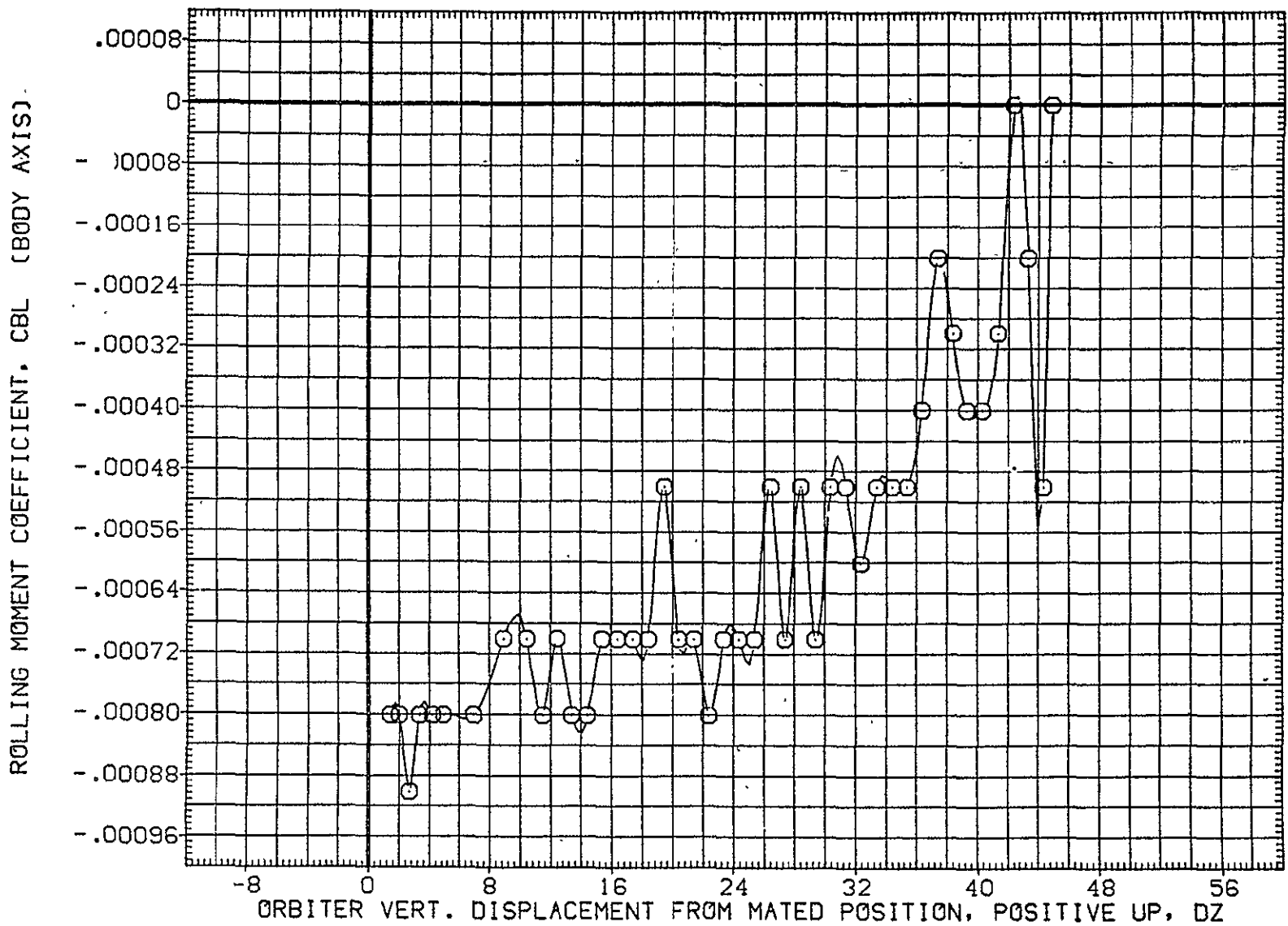


FIG. 65 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE074

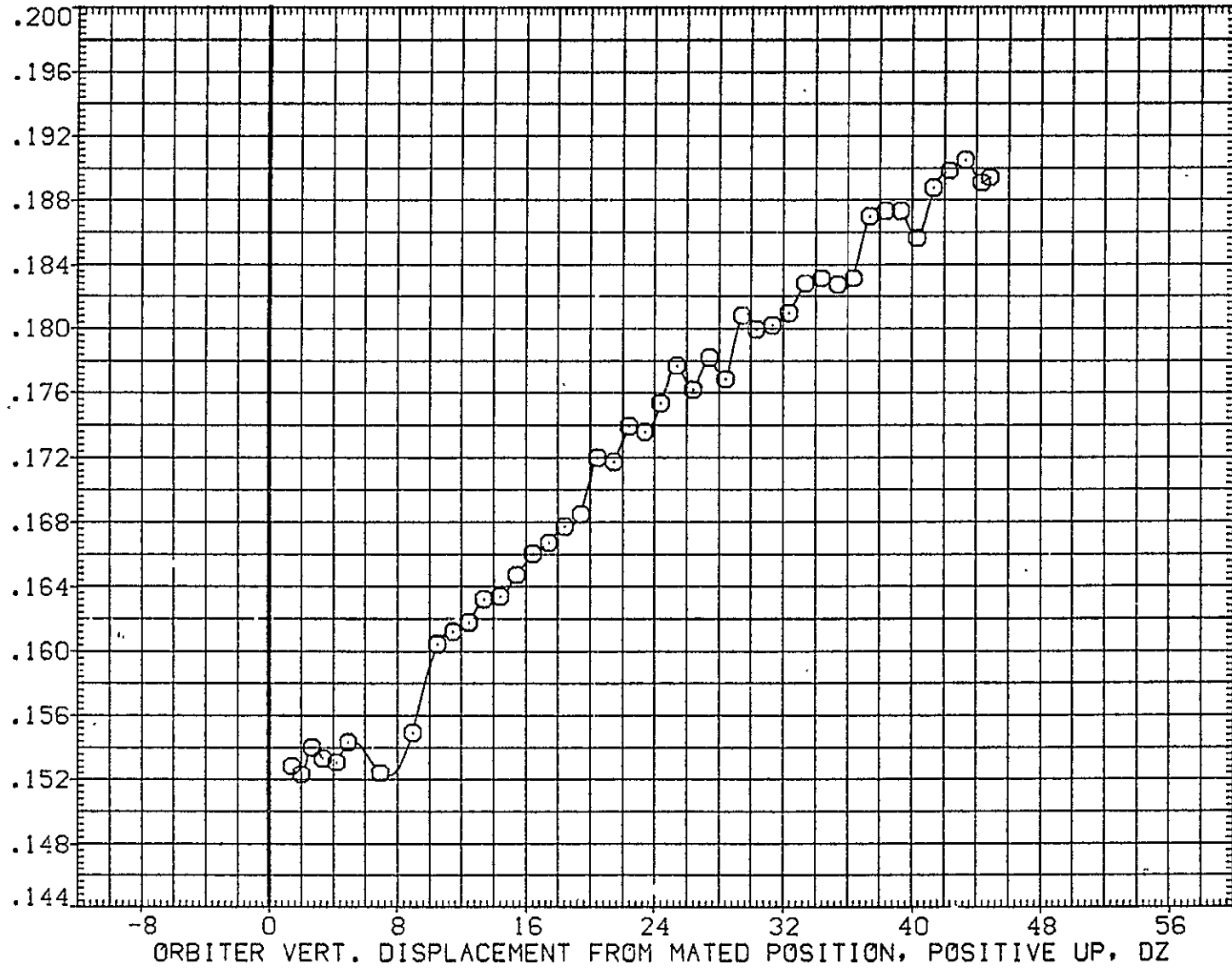
LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE074)

SYMBOL
○

MACH	PARAMETRIC VALUES			
.602	ALPHAC	2.000	BETAC	.000
	STAB	5.000	ELEVON	.000
	BDFLAP	.000	DX	.000
	DY	.000	IORB	4.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

LIFT COEFFICIENT, CL



IG. 65 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE074

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

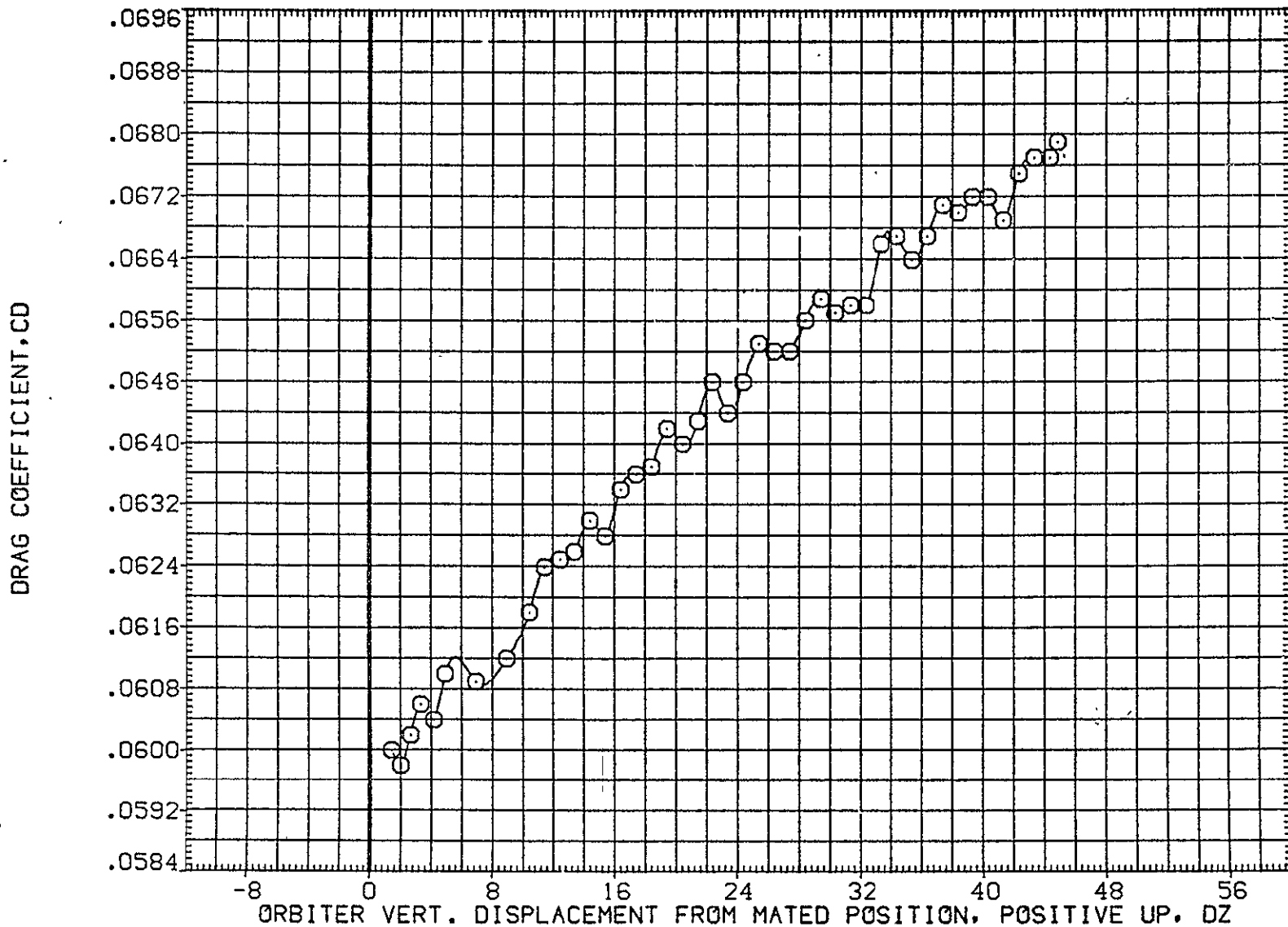


FIG. 65 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=0, BETA0=0, AFE074

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE075)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

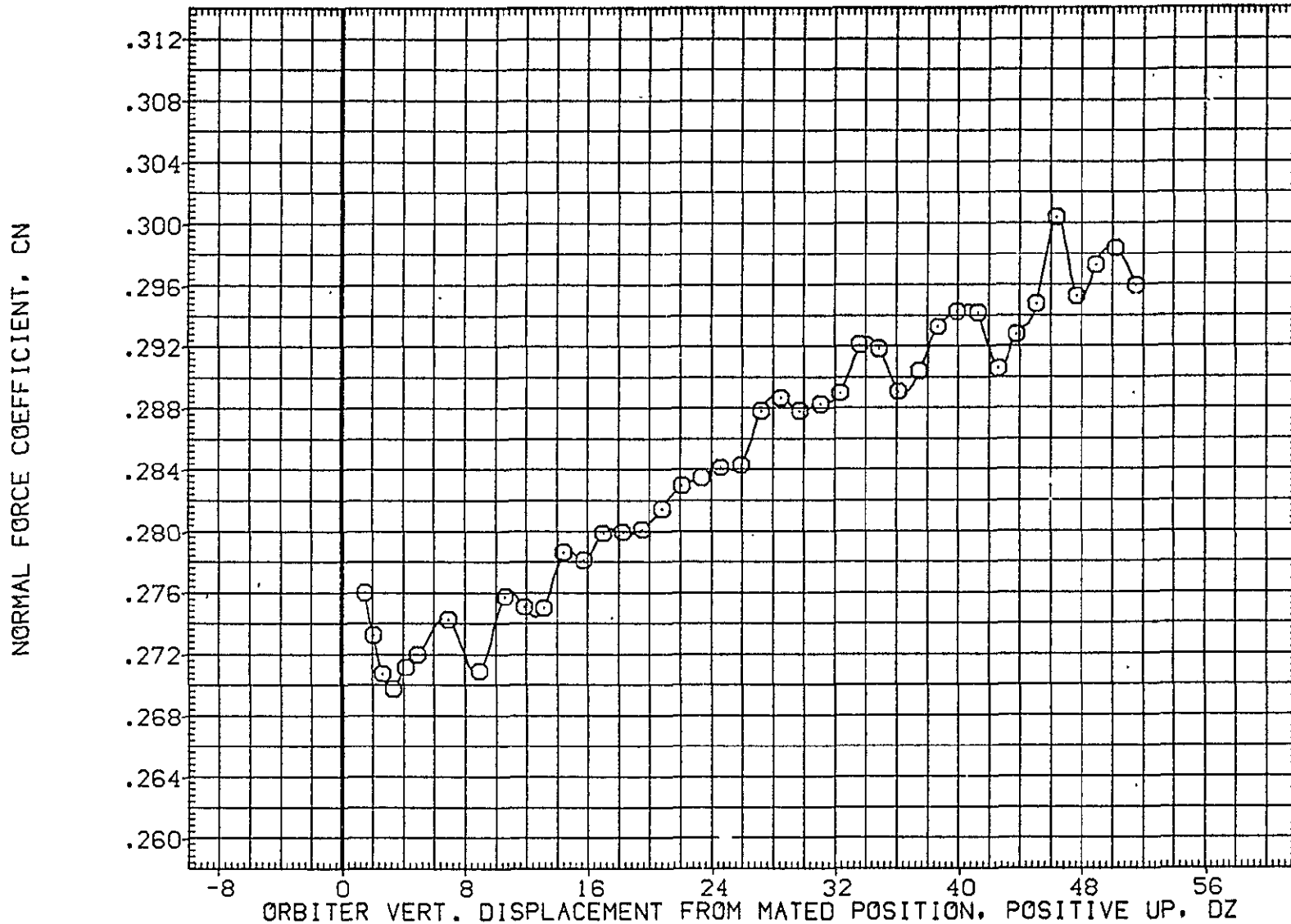


FIG. 66 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE075

SYMBOL
○

MACH
.603

PARAMETRIC VALUES			
ALPHAC	2.000	BETAC	.000
STAB	5.000	ELEVON	.000
BDFLAP	.000	DX	.000
DY	.000	IORB	6.000
BETA0	.000	RUDDER	.000

REFERENCE INFORMATION

SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. XO
YMRP	.0000	IN. YO
ZMRP	375.0000	IN. ZO
SCALE	.0125	

PITCHING MOMENT COEFFICIENT, CLM

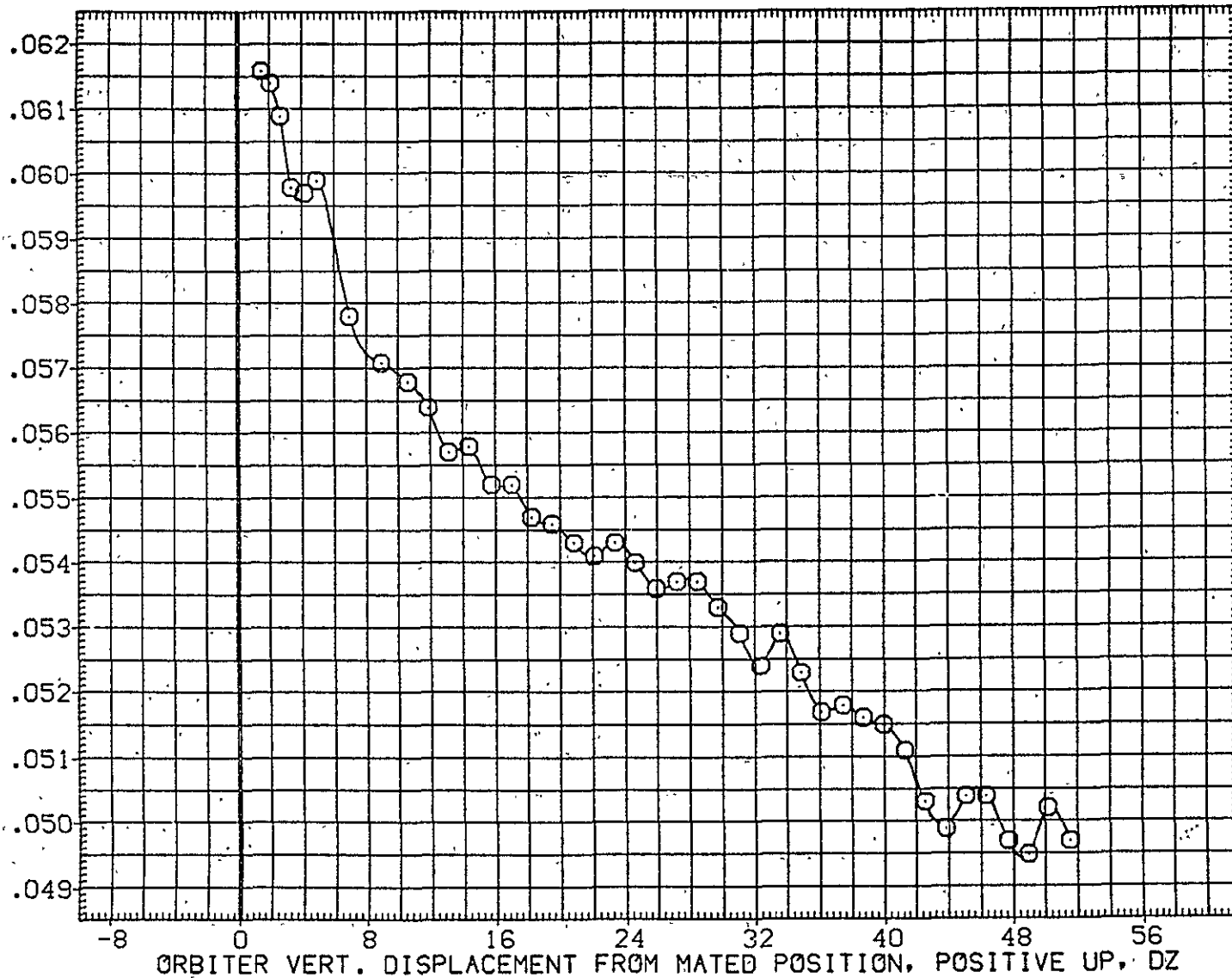


FIG. 66 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE075

LTV44-559(CA26) 747/1 ATY, 02 S1 (ORBITER DATA) (AFE075)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		SDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

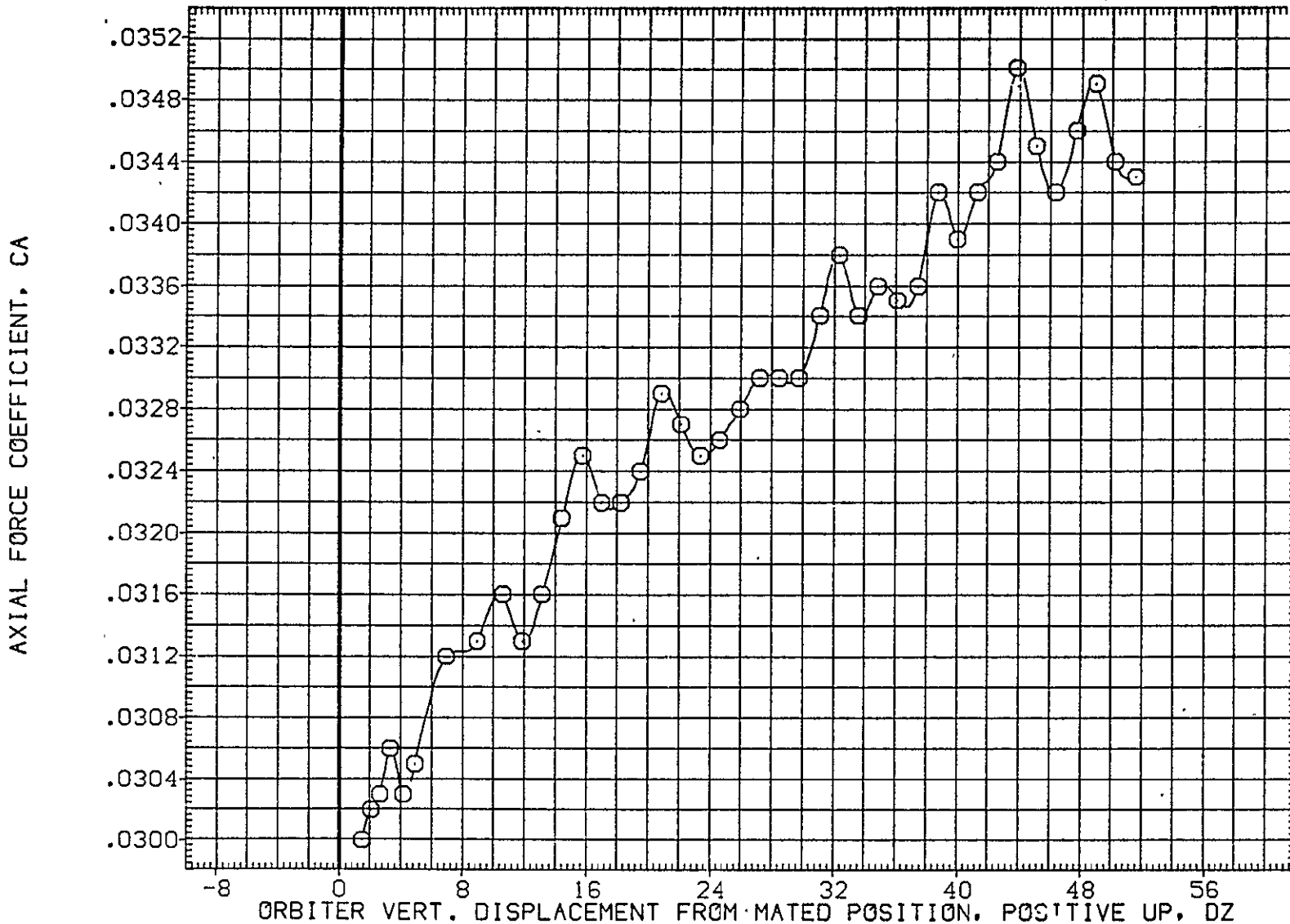


FIG. 66 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE075

SYMBOL	MACH	PARAMETRIC VALUES			
○	.603	ALPHAC	2.000	BETAC	.000
		STAB	5.000	ELEVON	.000
		BDFLAP	.000	DX	.000
		DY	.000	IORB	6.000
		BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

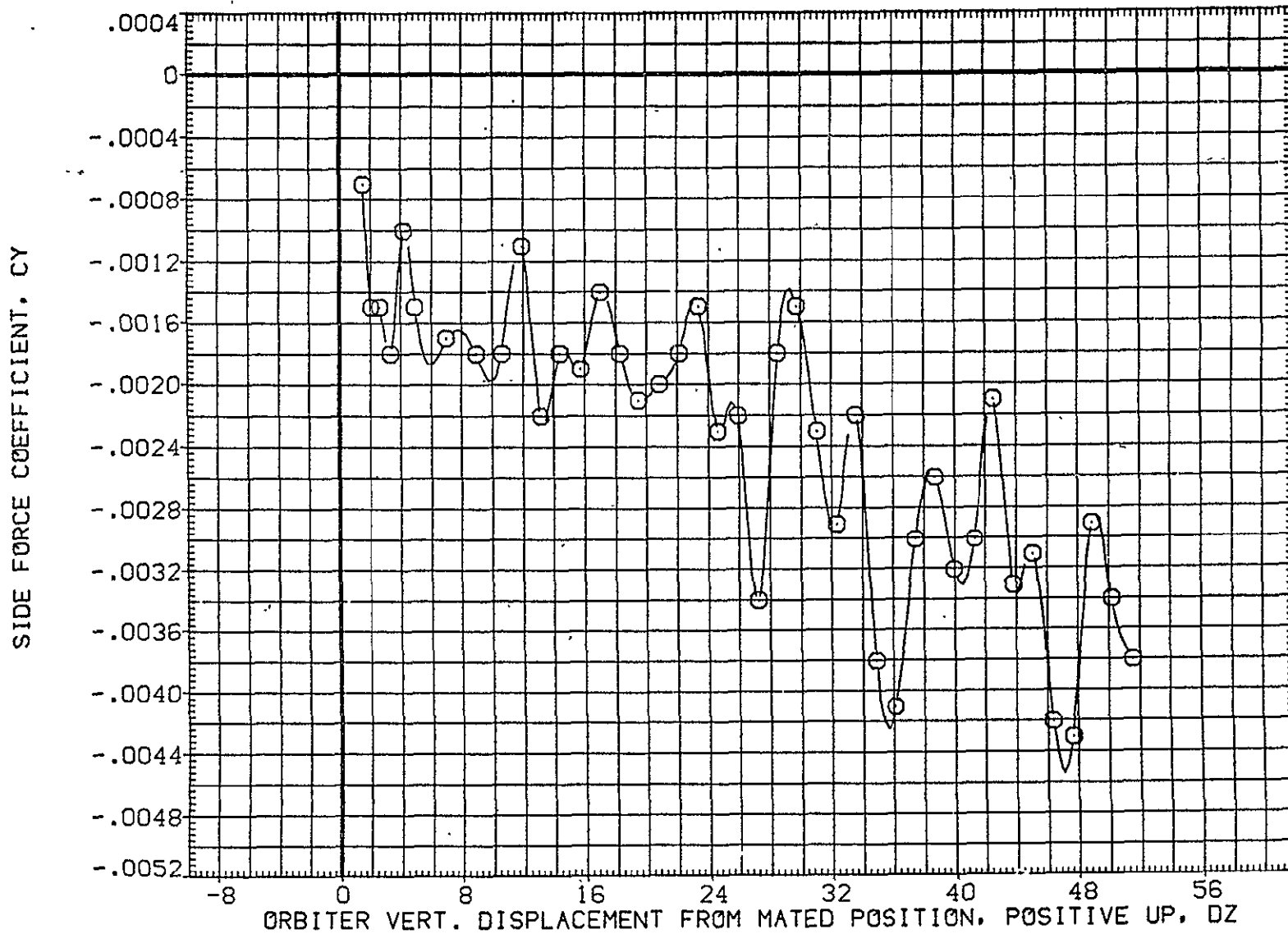


FIG. 66 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE075

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE075)

SYMBOL	MACH	PARAMETRIC VALUES						REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SG.FT.		
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.		
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.		
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0		
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0		
						ZMRP	375.0000	IN. Z0		
						SCALE	.0125			

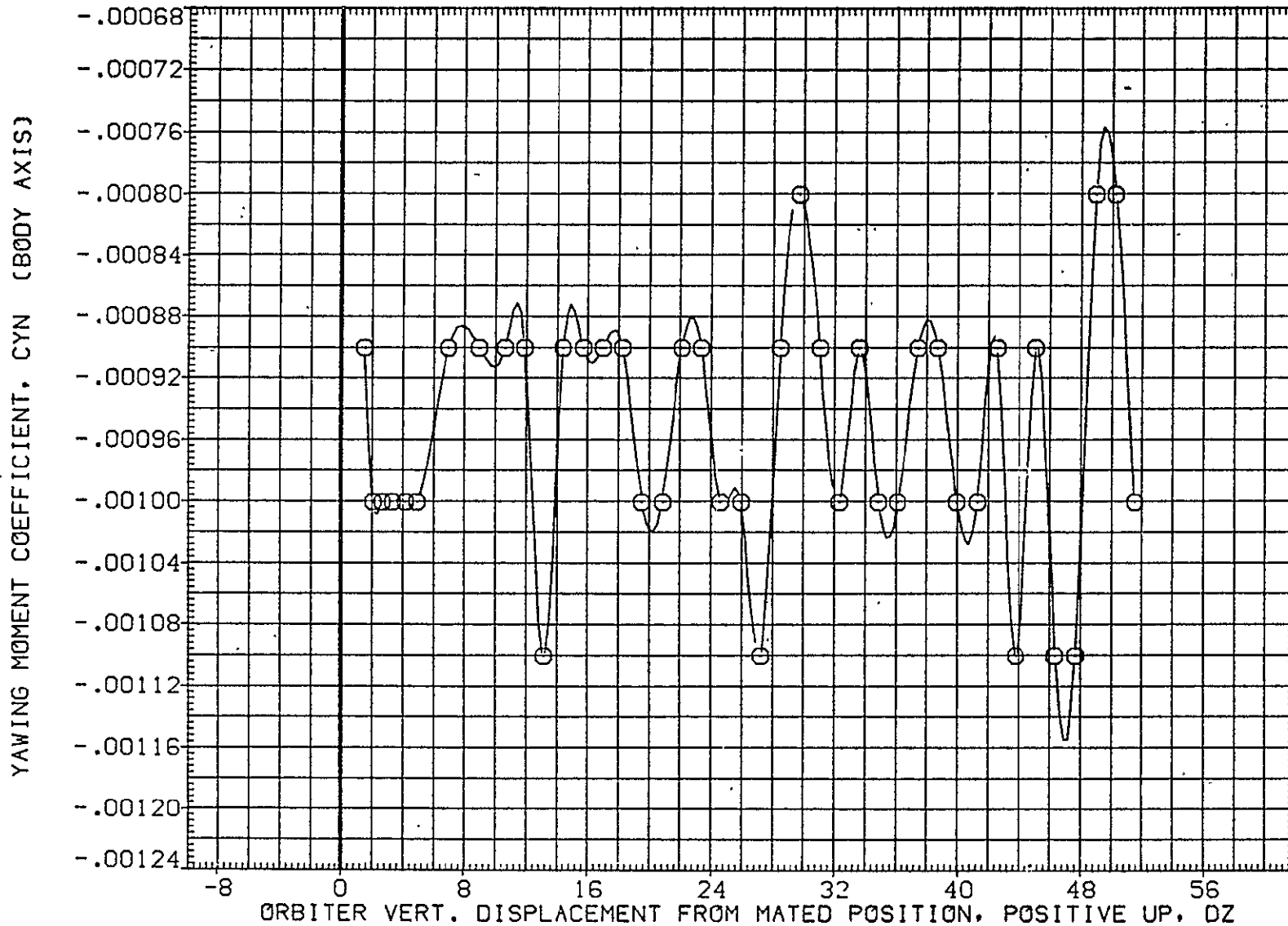


FIG. 66 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE075

SYMBOL

MACH

PARAMETRIC VALUES

REFERENCE INFORMATION

○

.603

ALPHAC

2.000

BETAC

.000

SREF

2690.0000

50.FT.

STAB

5.000

ELEVON

.000

LREF

474.8100

IN.

BOFLAP

.000

DX

.000

BREF

936.6800

IN.

DY

.000

IORB

6.000

XMRP

1109.0000

IN. X0

BETA0

.000

RUDDER

.000

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0125

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)

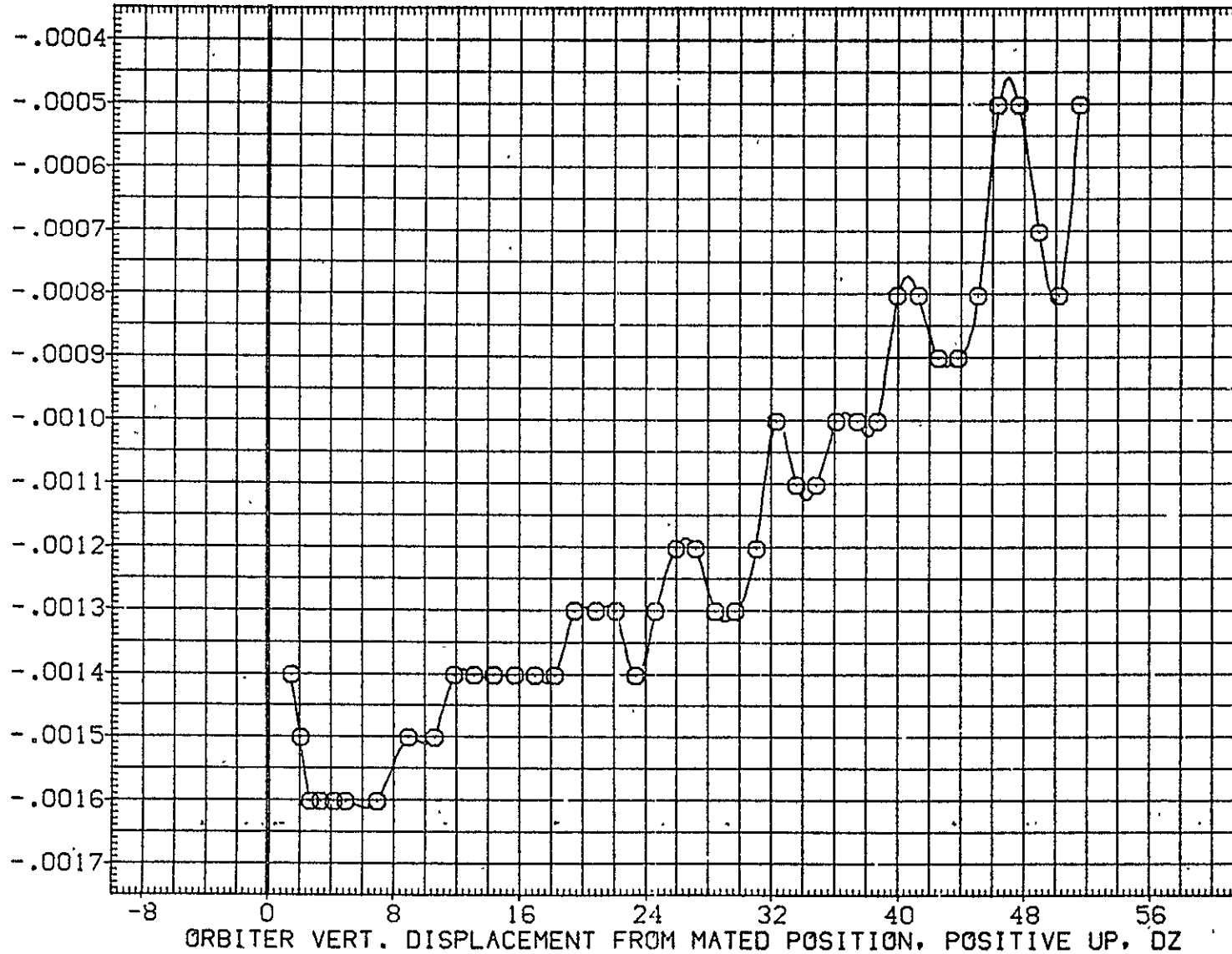


FIG. 66 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE075

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE075)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

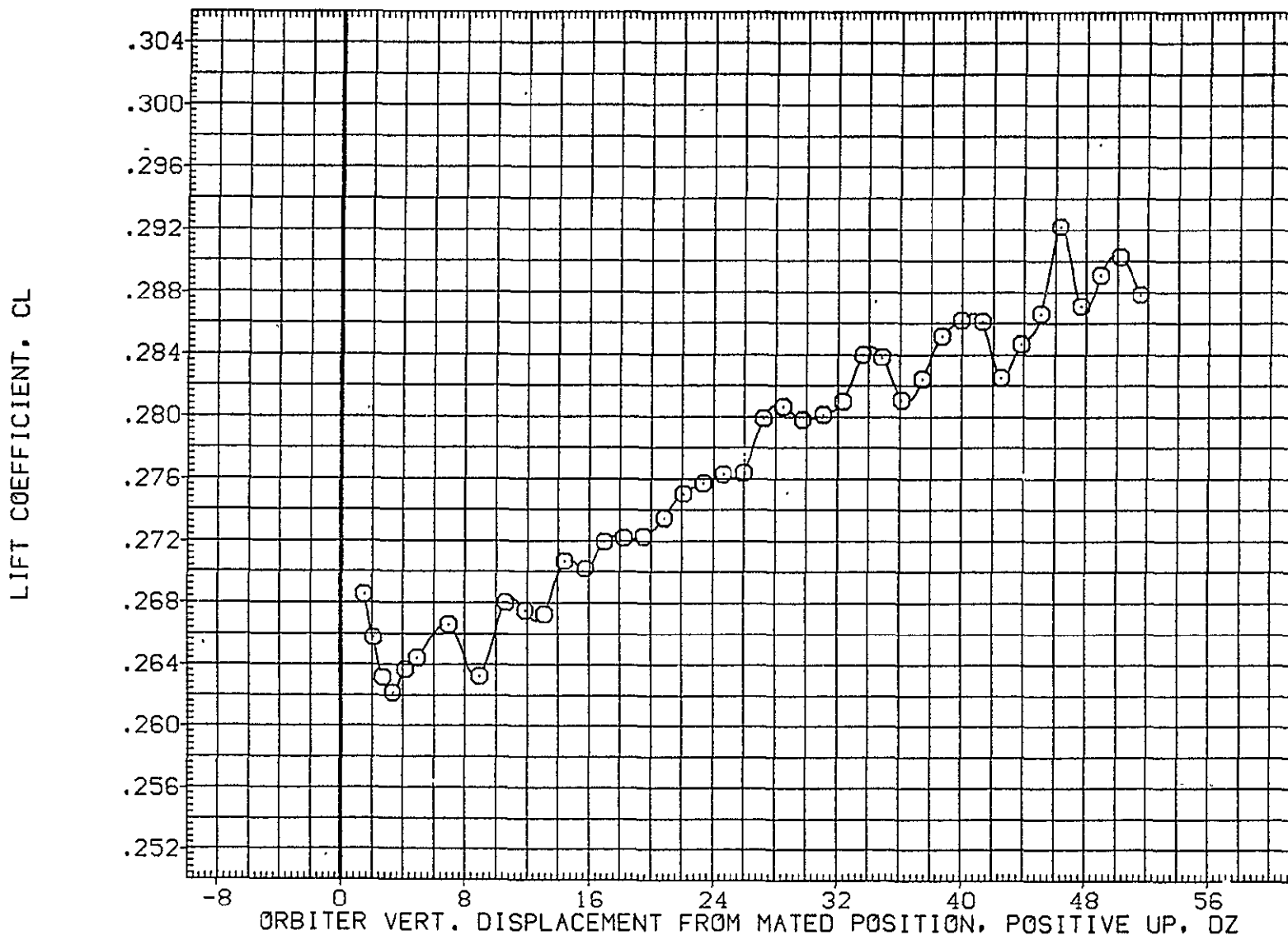


FIG. 66 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE075

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.603	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

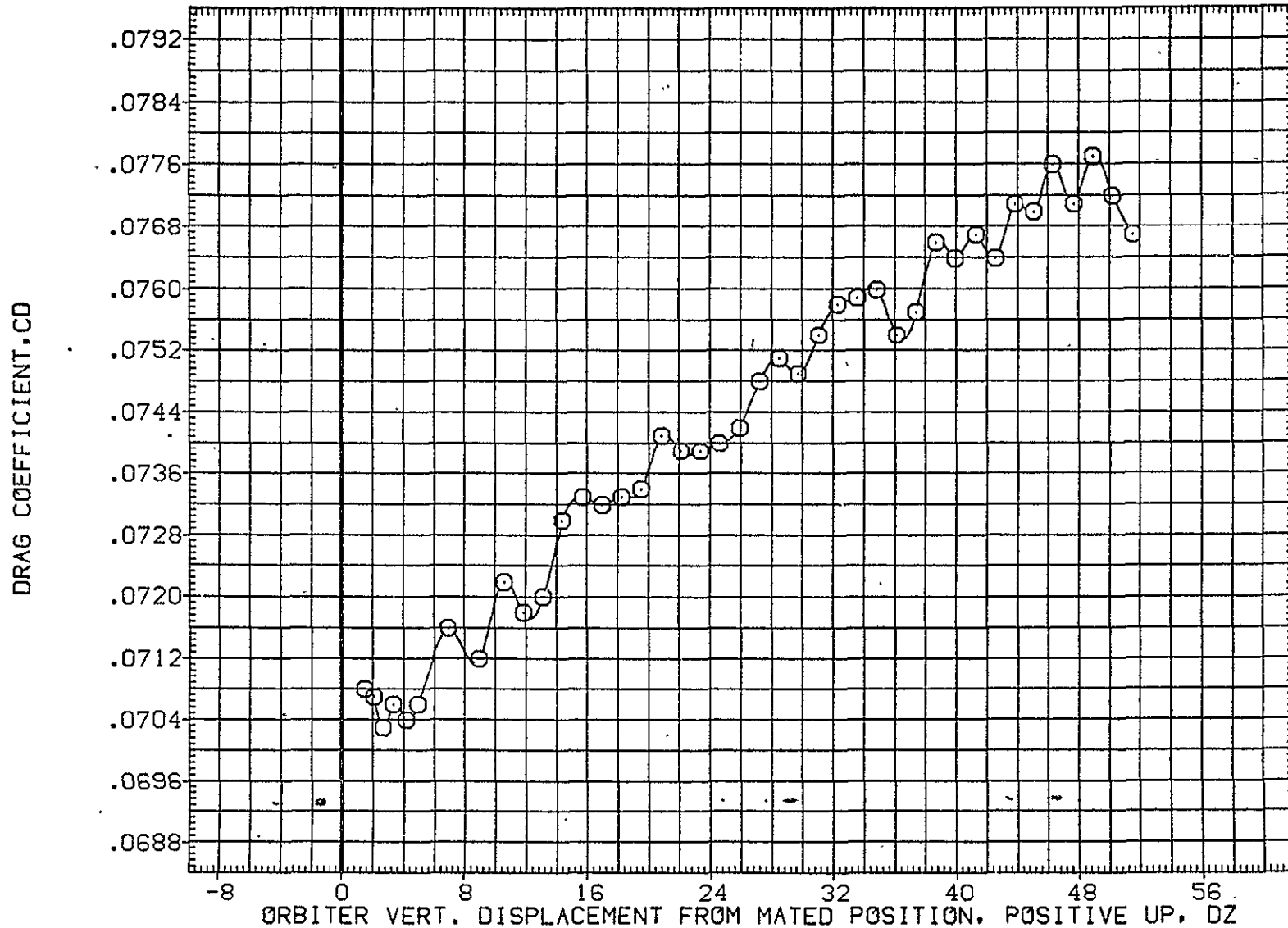


FIG. 66 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE075

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE076)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

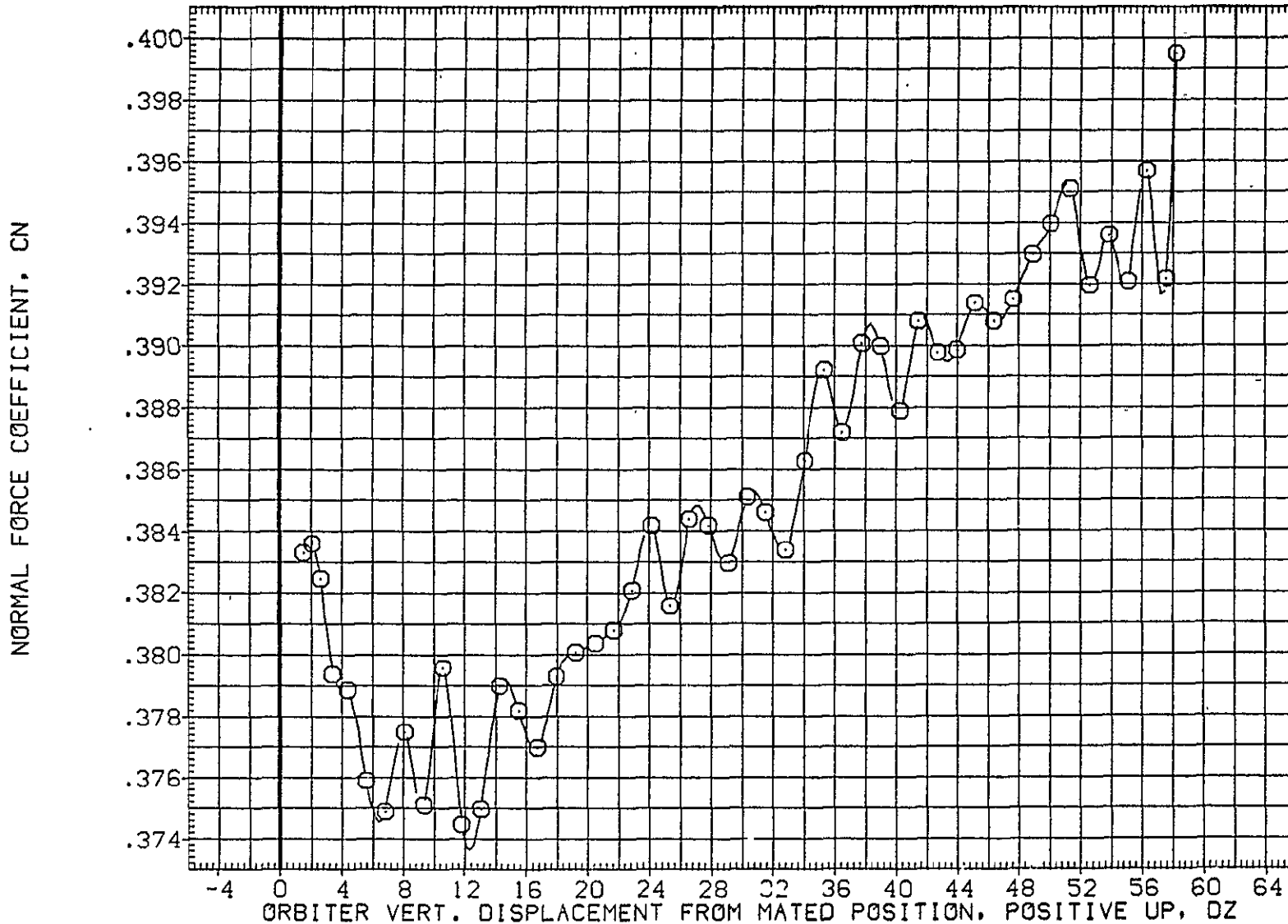


FIG. 67 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE076

SYMBOL
○

MACH	PARAMETRIC VALUES			
.599	ALPHAC	2.000	BETAC	.000
	STAB	5.000	ELEVON	.000
	BDFLAP	.000	DX	.000
	DY	.000	IORB	8.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

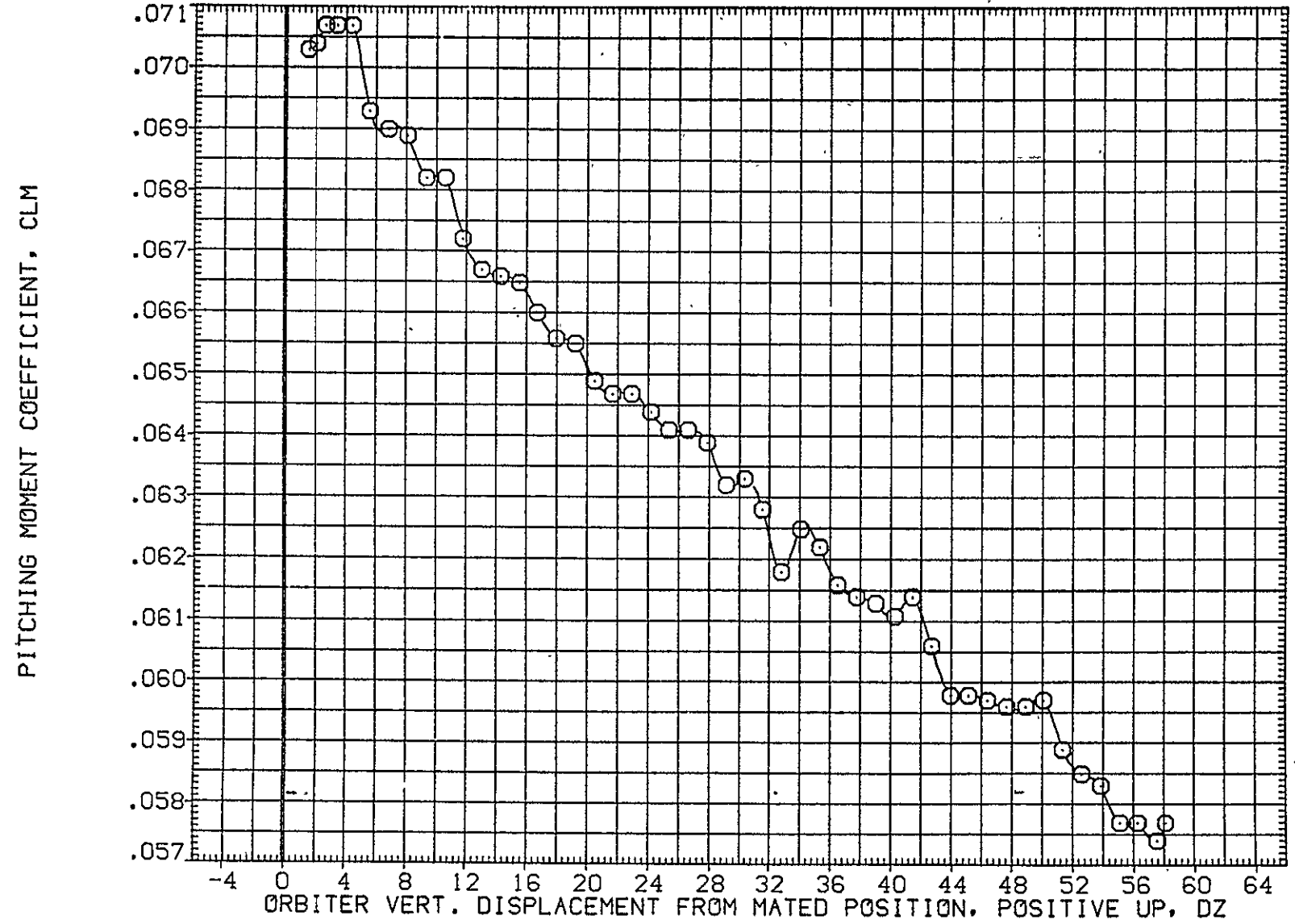


FIG. 67 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE076

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE076)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

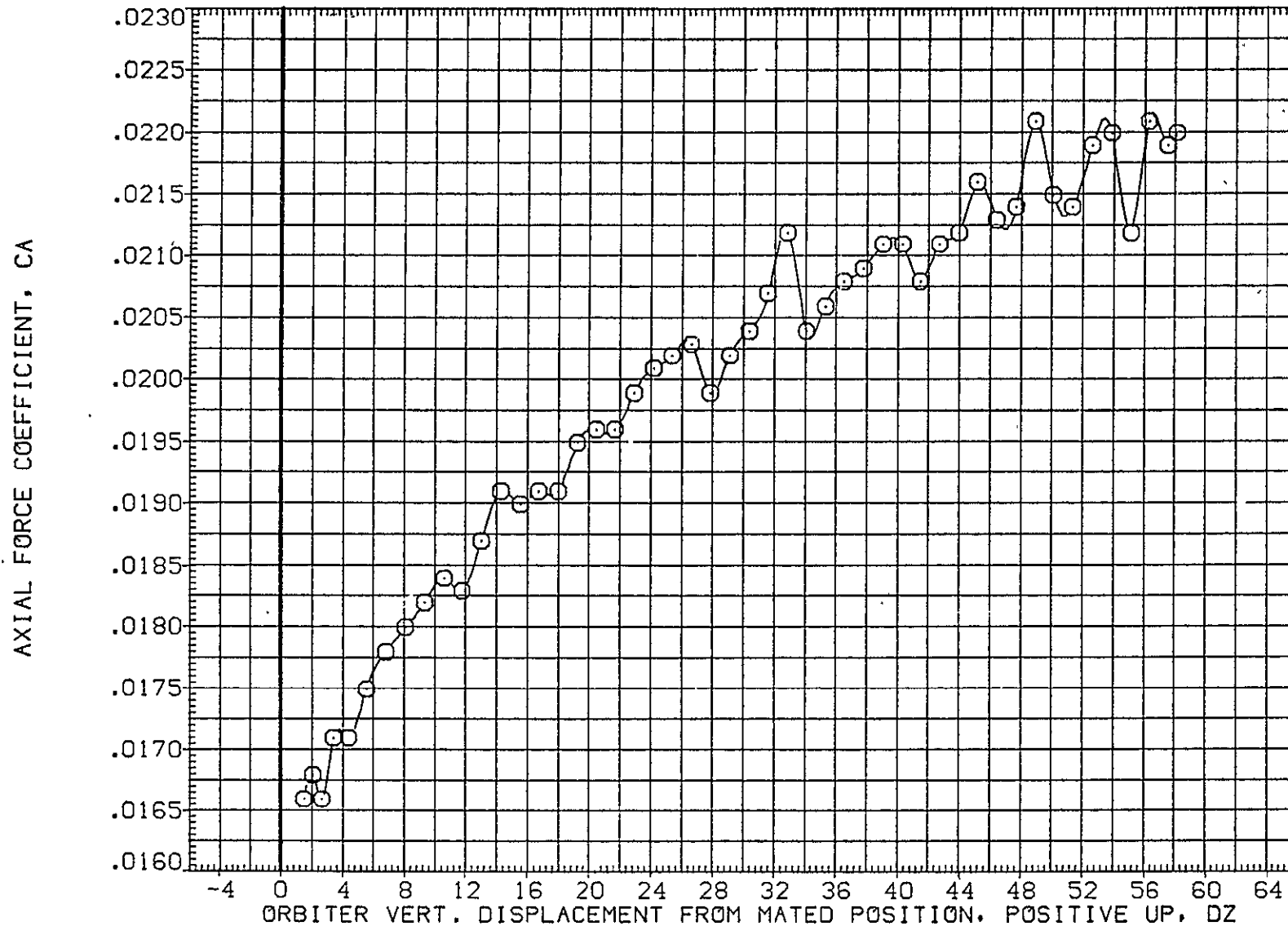


FIG. 67 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE076

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

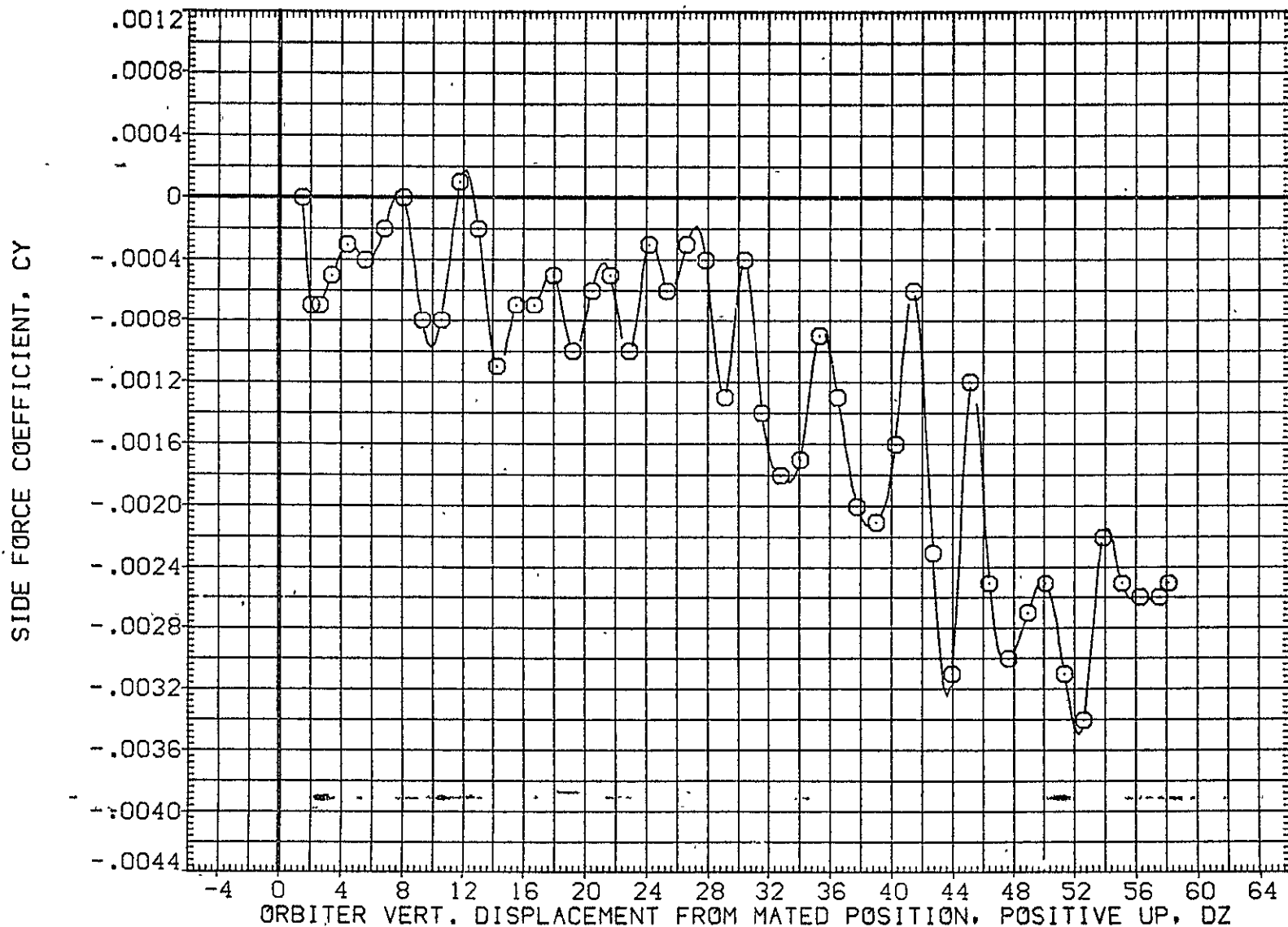


FIG. 67 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE076

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE076)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

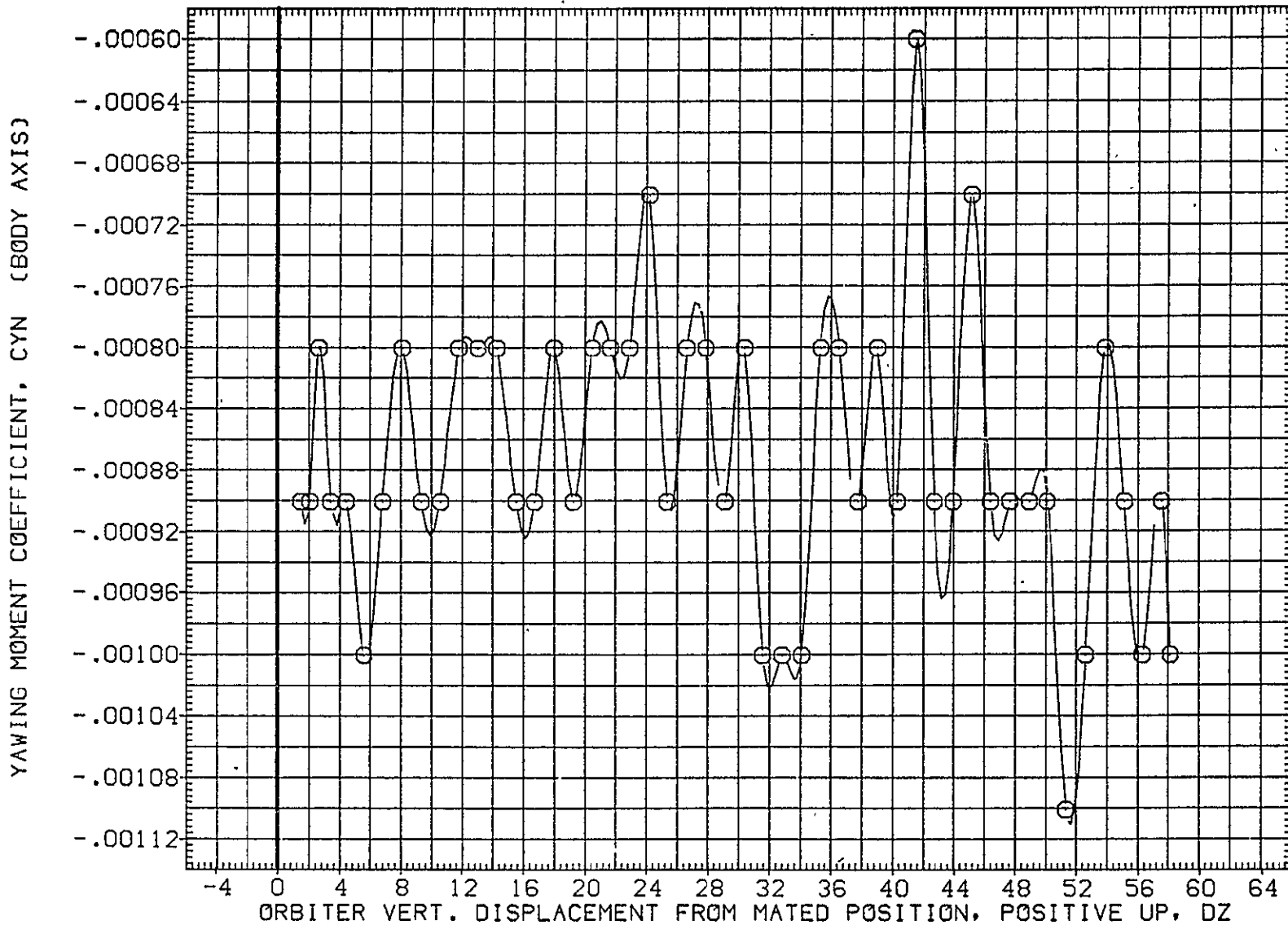


FIG. 67 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE076

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

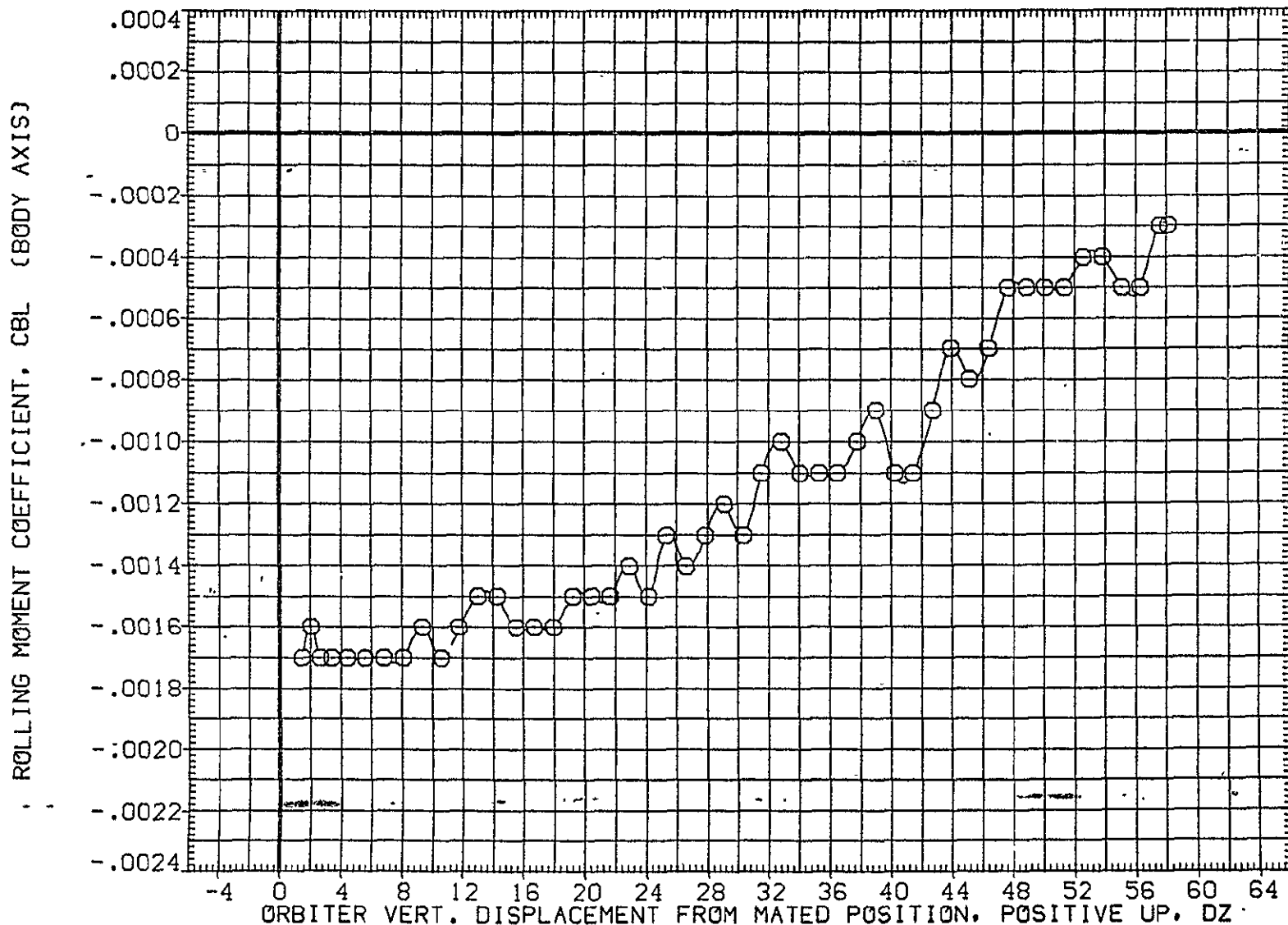


FIG. 67 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE076

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE076)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

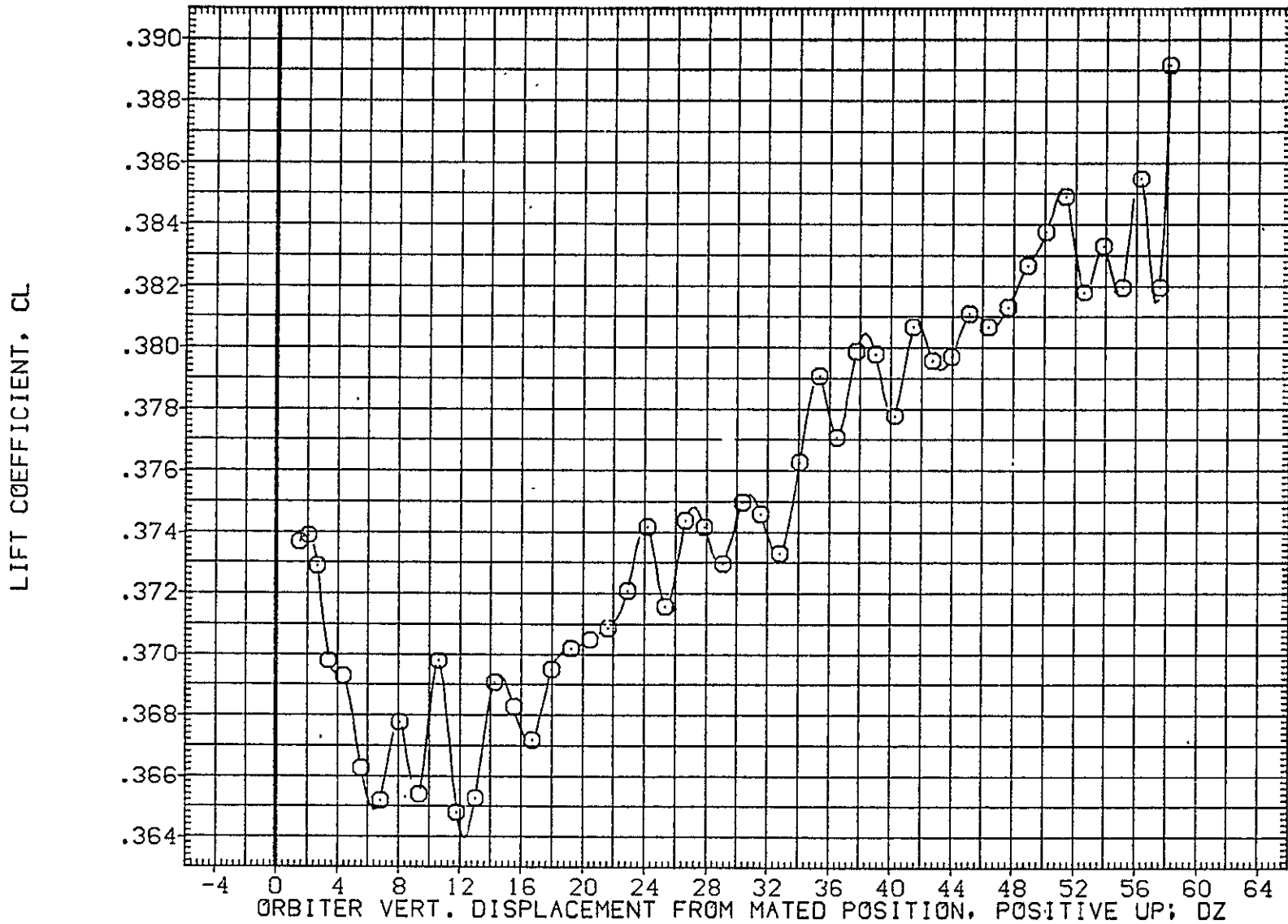


FIG. 67 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE076

SYMBOL	MACH	PARAMETRIC VALUES					REFERENCE INFORMATION													
		ALPHAC	BETAC	ELEVON	DX	IORB	SREF	LREF	BREF	XMRP	YMRP	ZMRP	SCALE	SO.FT.	IN.	IN.	IN.	IN.	IN.	IN.
○	.599	2.000	.000	5.000	.000	8.000	2690.0000	474.8100	936.6800	1109.0000	.0000	.0125								
		BDFLAP																		
		DY																		
		BETA0																		

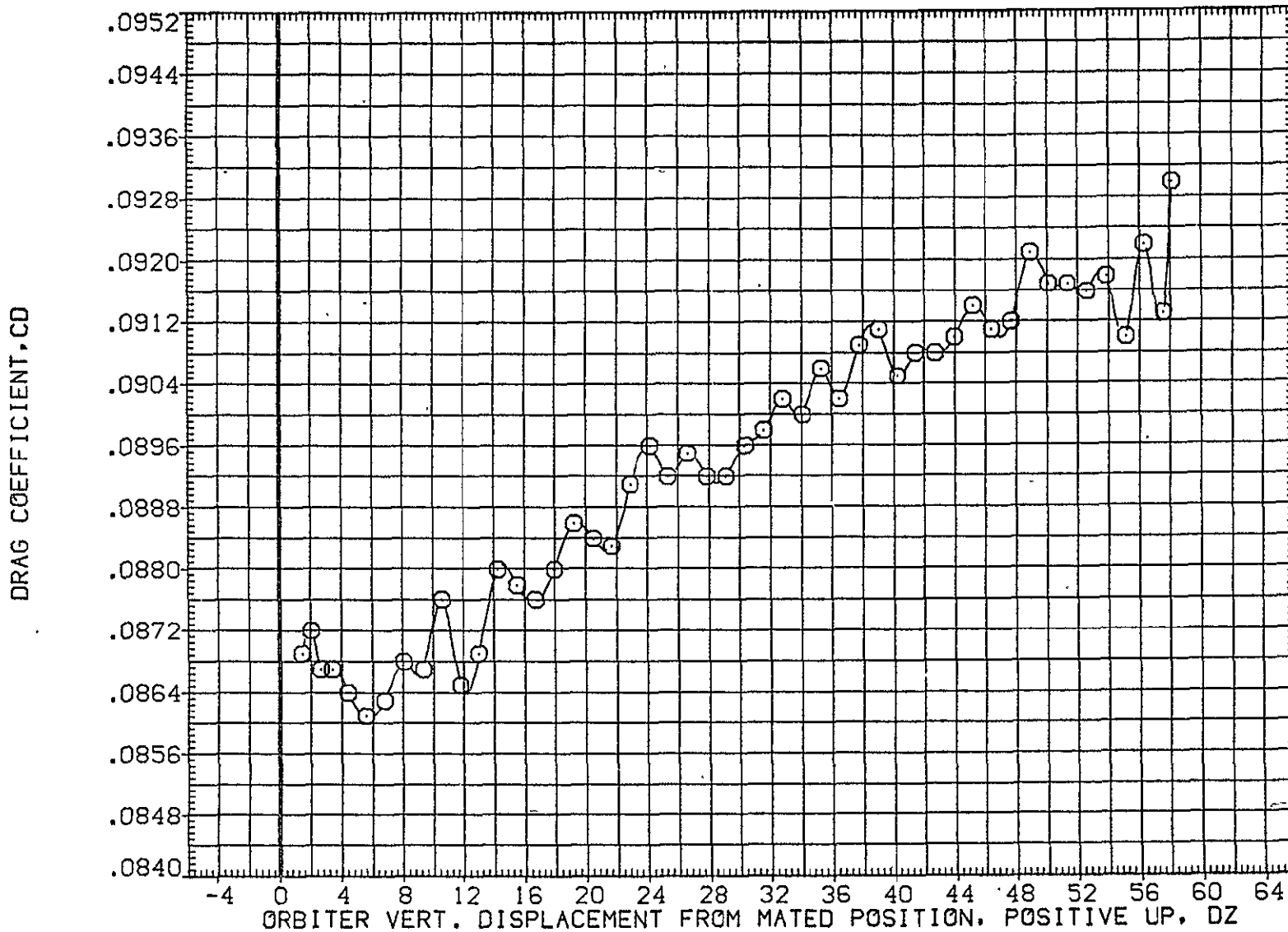


FIG. 67 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=0, BETA0=0, AFE076

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE077)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	10.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

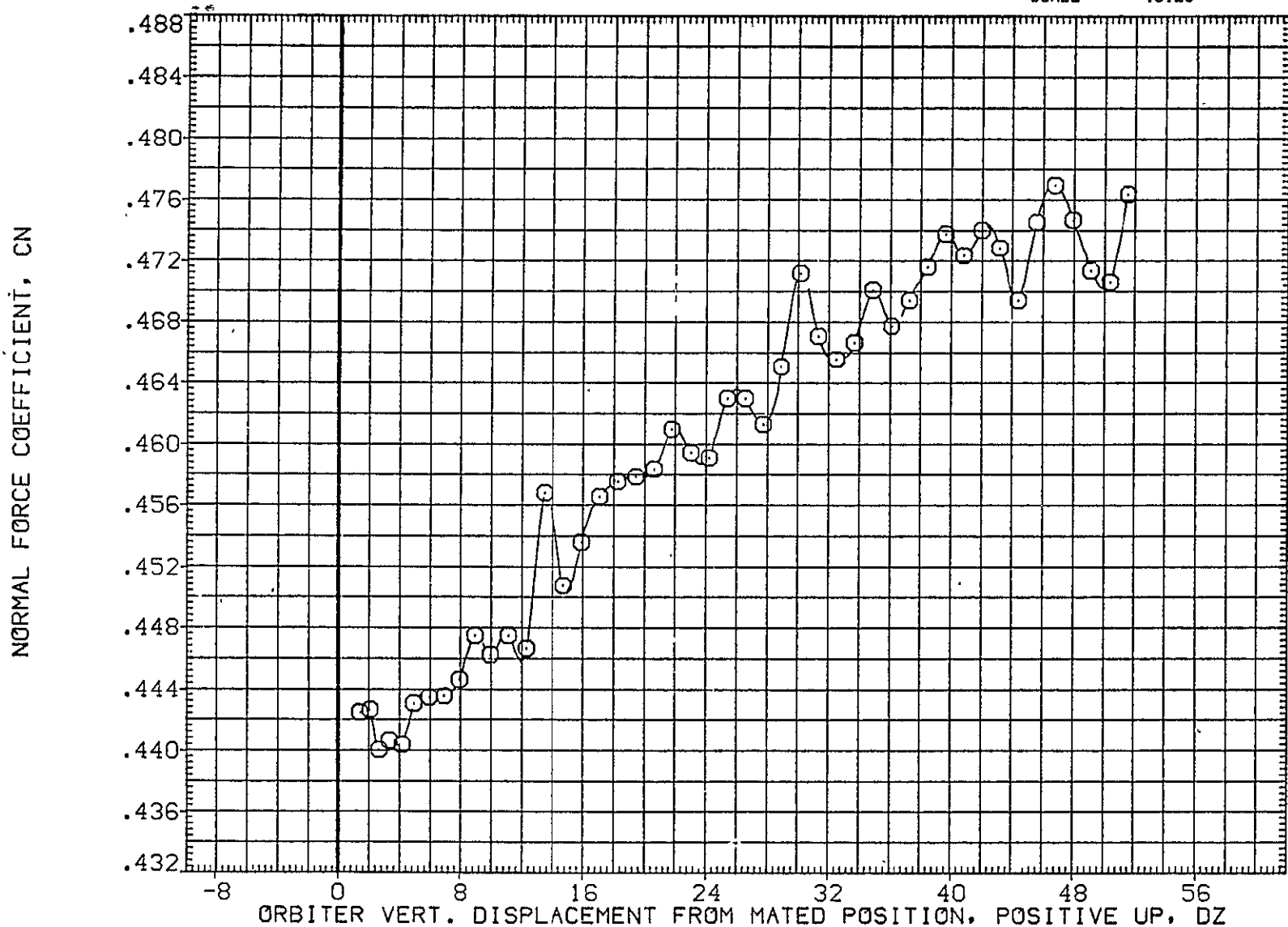


FIG. 68 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE077

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	10.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

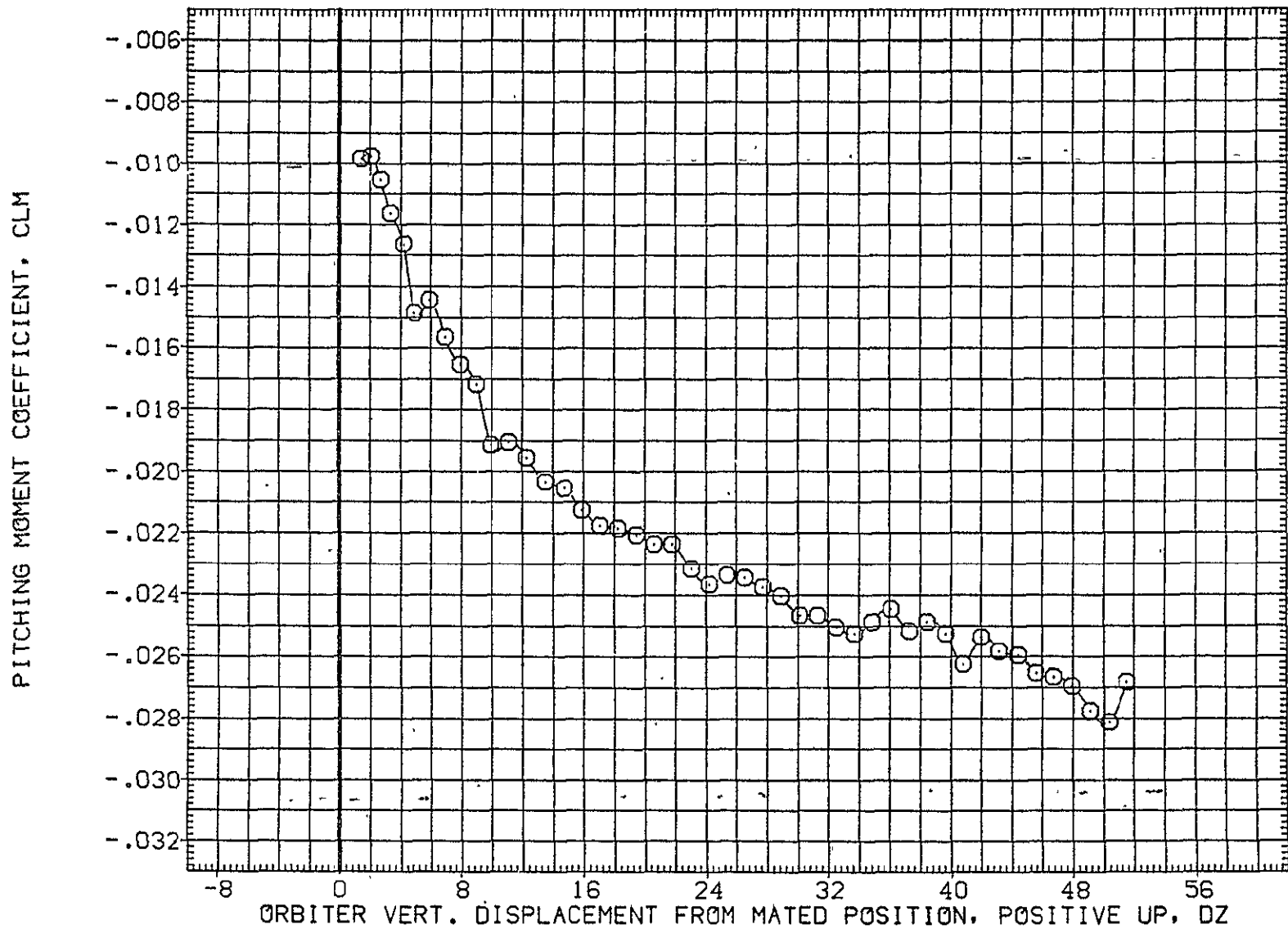


FIG. 68 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE077

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE077)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	10.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

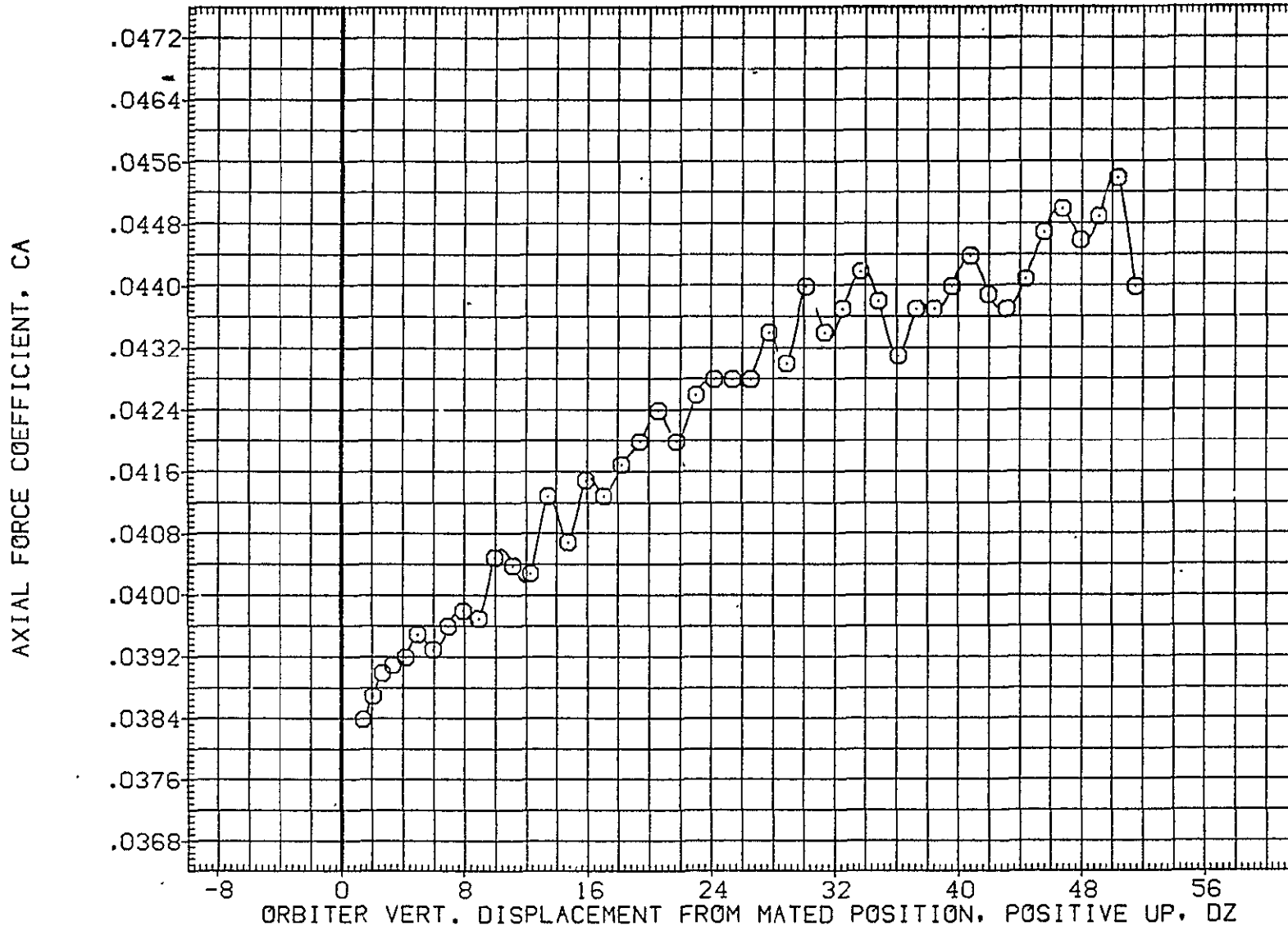


FIG. 68 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE077

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	10.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

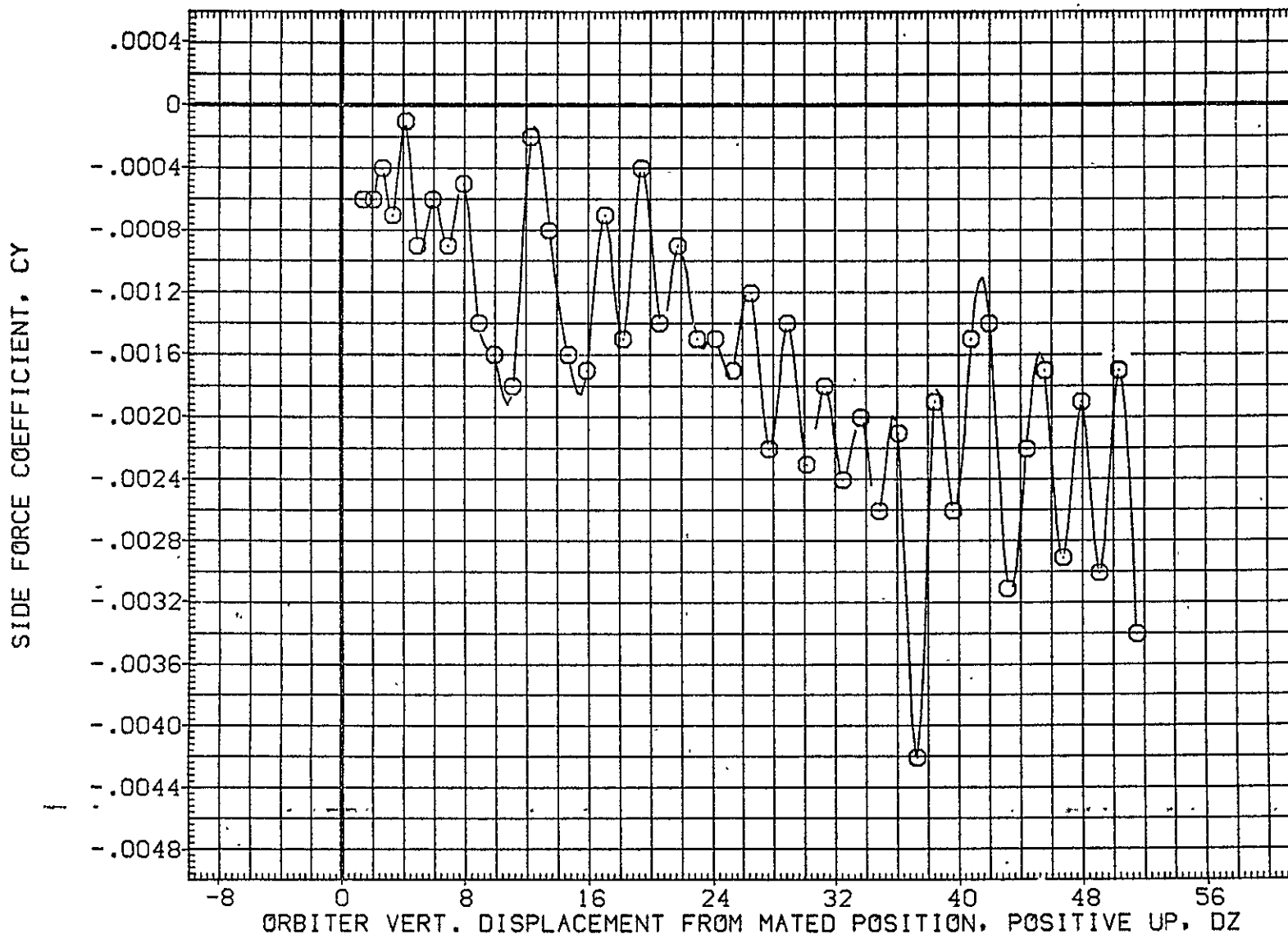


FIG. 68 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE077

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE077)

SYMBOL	MACH	PARAMETRIC VALUES						REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.		
		STAB	5.000	ELEVON	10.000	LREF	474.8100	IN.		
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.		
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0		
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0		
						ZMRP	375.0000	IN. Z0		
						SCALE	.0125			

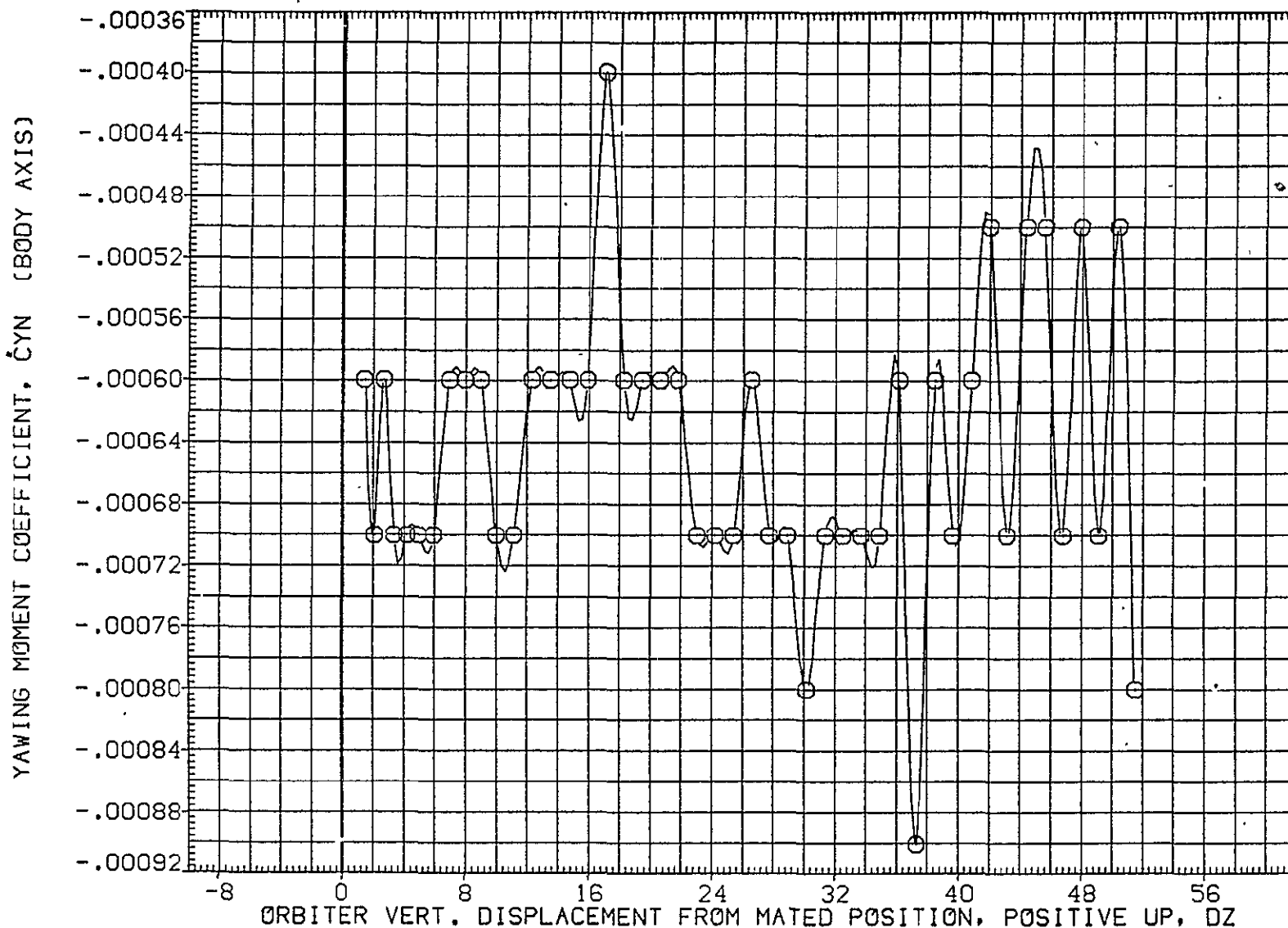


FIG. 68 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE077

SYMBOL	MACH	PARAMETRIC VALUES						REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000		SREF	2690.0000	50.FT.	
		STAB	5.000	ELEVON	10.000		LREF	474.8100	IN.	
		BDFLAP	.000	DX	.000		BREF	936.6800	IN.	
		DY	.000	IORB	6.000		XMRP	1109.0000	IN. X0	
		BETA0	.000	RUDDER	.000		YMRP	.0000	IN. Y0	
							ZMRP	375.0000	IN. Z0	
							SCALE	.0125		

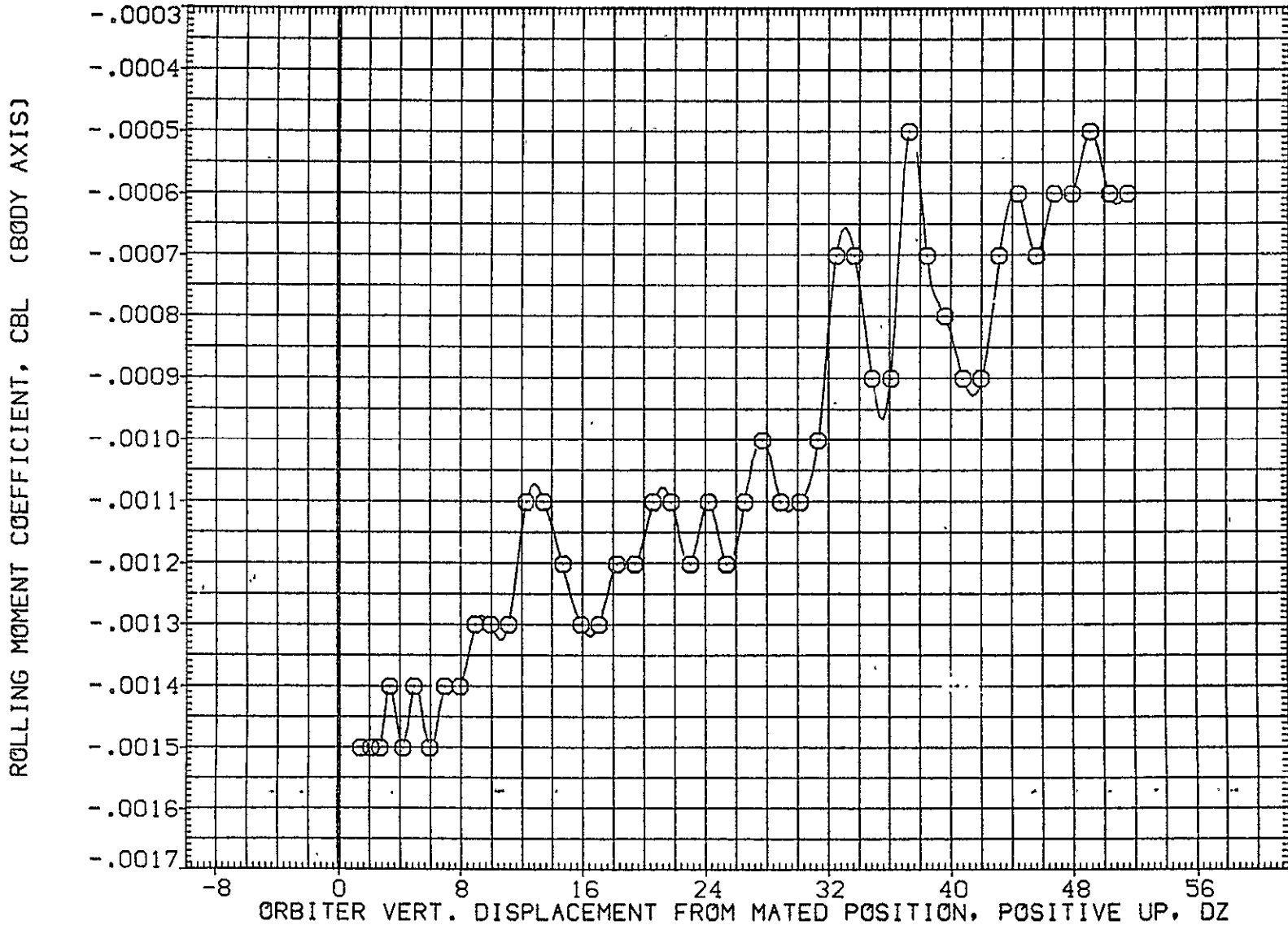


FIG. 68 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE077

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE077)

SYMBOL
○

MACH	PARAMETRIC VALUES			
.602	ALPHAC	2.000	BETAC	.000
	STAB	5.000	ELEVGN	10.000
	BDFLAP	.000	DX	.000
	DY	.000	IORB	6.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

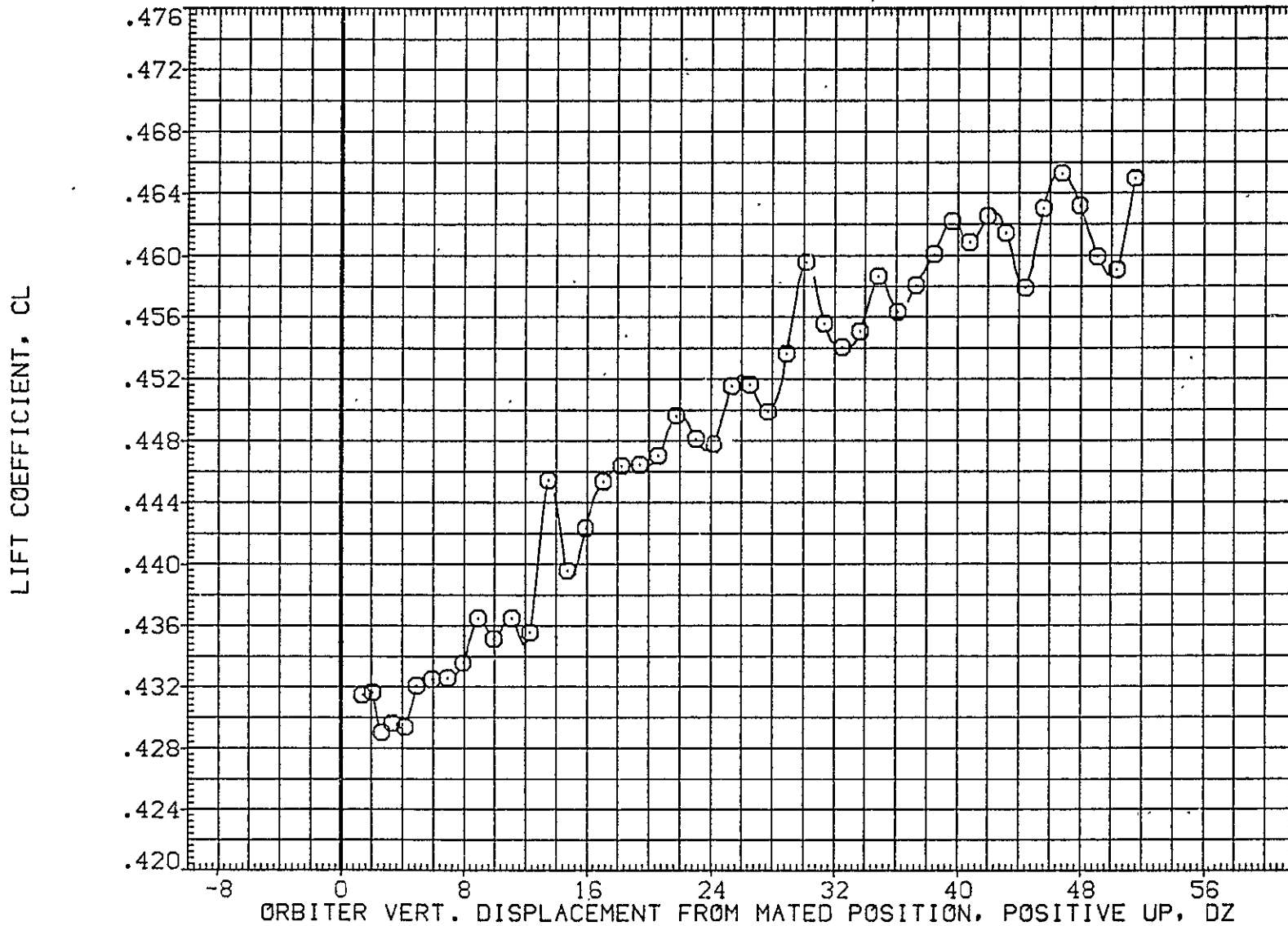


FIG. 68 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE077

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.602	ALPHAC	2.000	BETAC	.000	SREF	2630.0000	50.FT.
		STAB	5.000	ELEVON	10.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

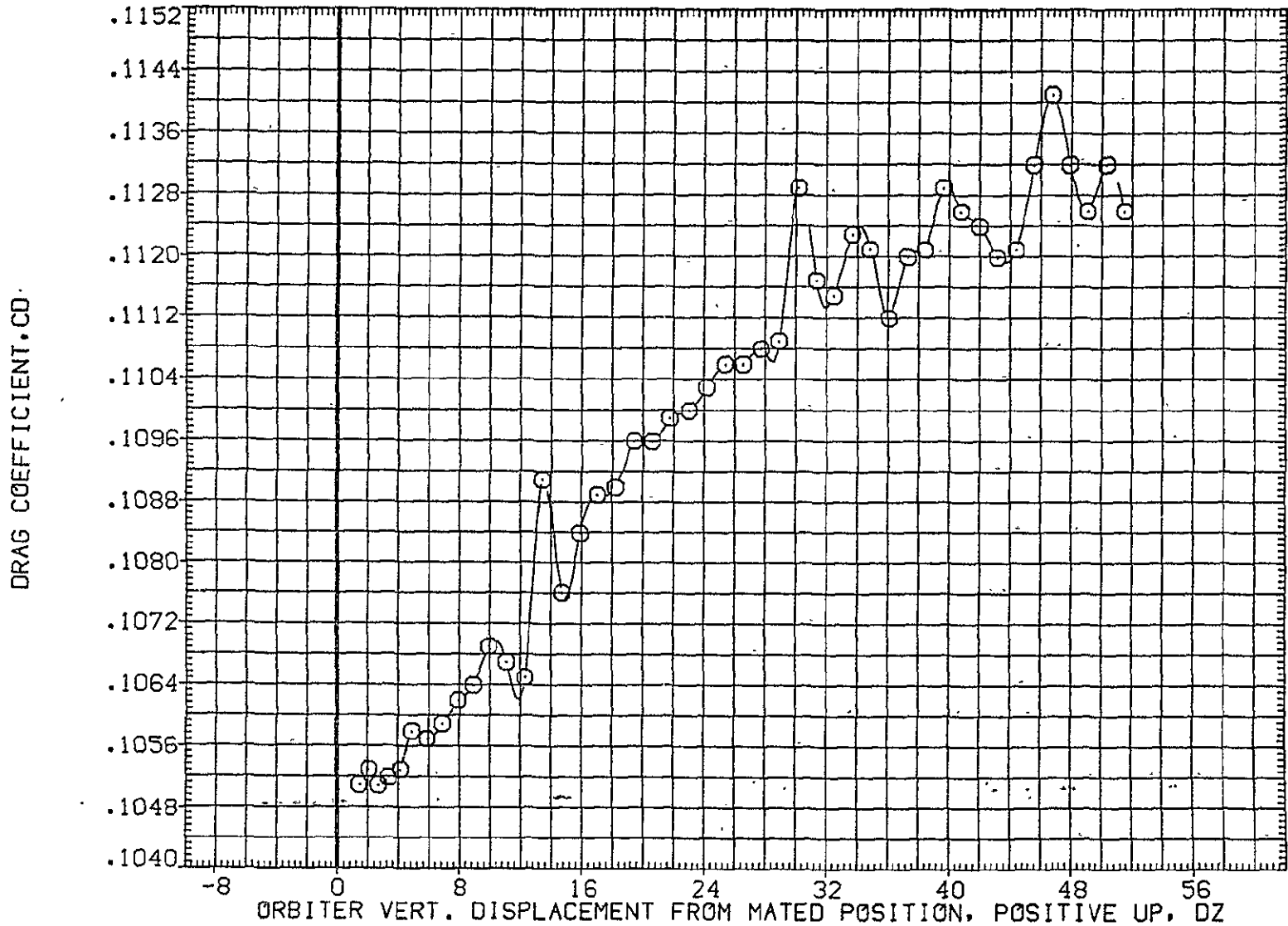


FIG. 68 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=0, BETA0=0, AFE077

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE078)

SYMBOL
○

MACH	PARAMETRIC VALUES			
.599	ALPHAC	2.000	BETAC	.000
	STAB	5.000	ELEVON	5.000
	AILRON	-5.000	DX	.000
	DY	.000	IORB	6.000
	BETA0	.000	DPHI	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

NORMAL FORCE COEFFICIENT, CN

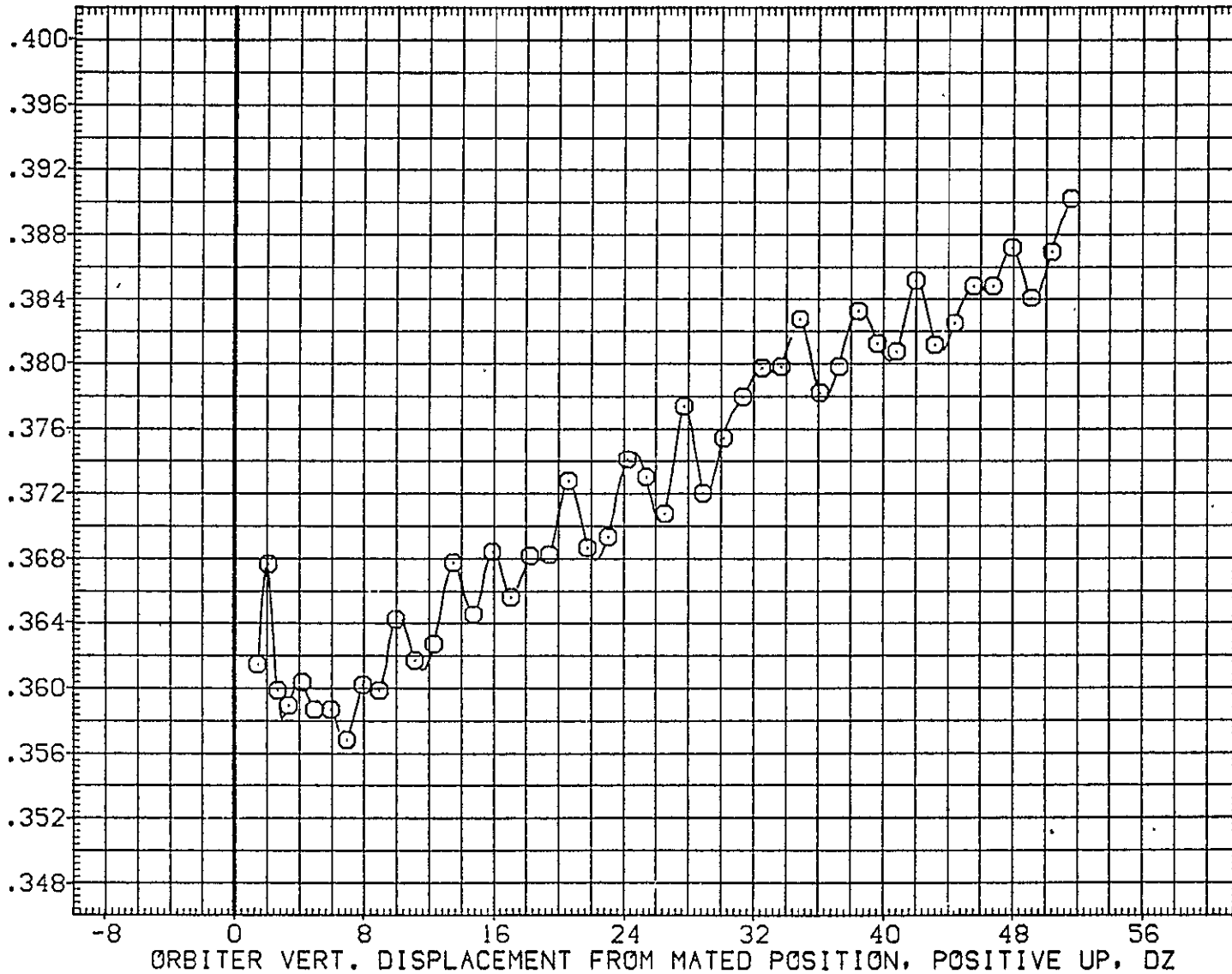


FIG. 69 ORB DATA, CAR. PROXIMITY, ALPHAC=2, IORB=6, BETAC=BETA0=0, AILRON=-5, AFE078

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		AILRON	-5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

PITCHING MOMENT COEFFICIENT, CLM

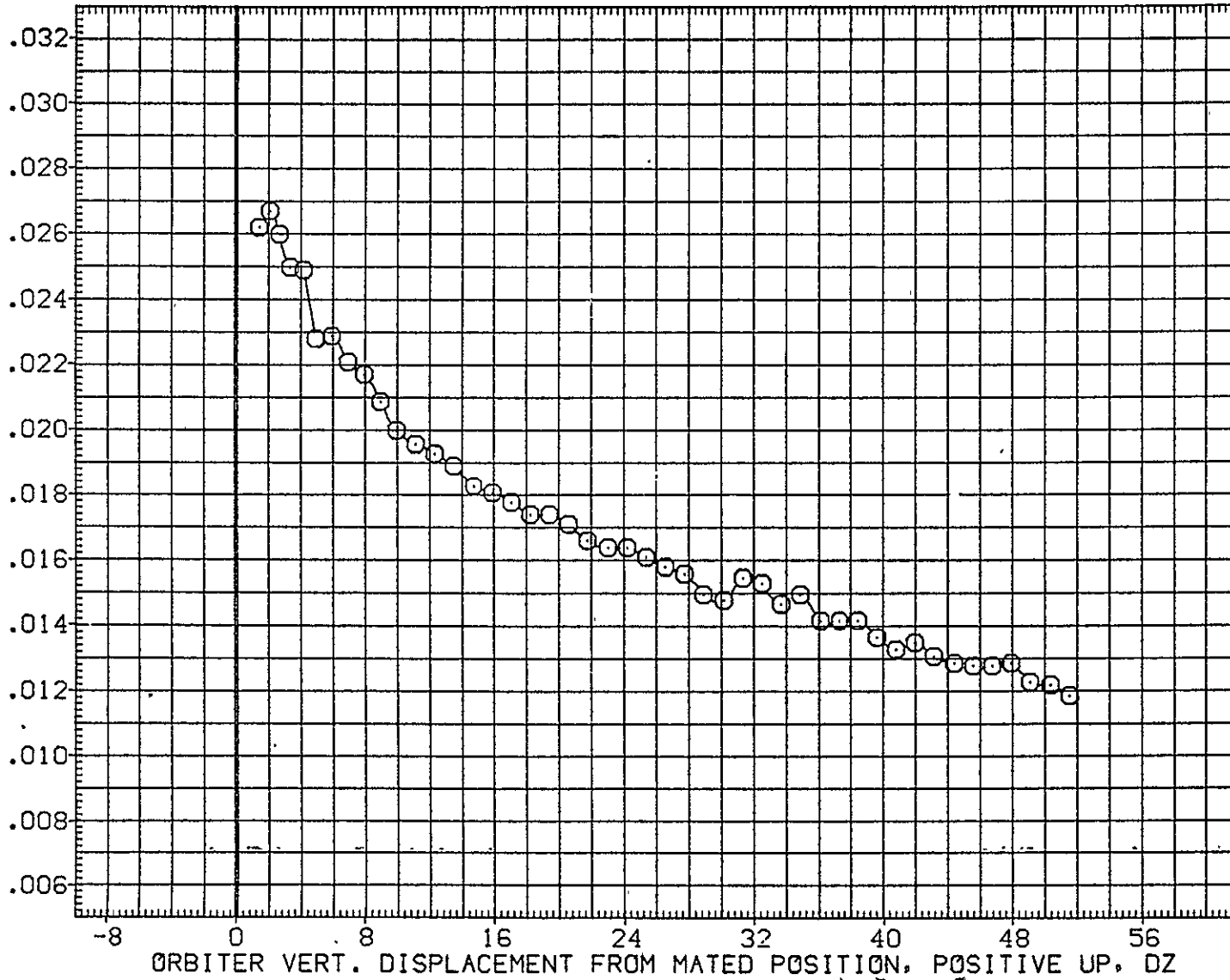


FIG. 69 ORB DATA, CAR. PROXIMITY, ALPHAC=2, IORB=6, BETAC=BETA0=0, AILRON=-5, AFE078

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE078)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		AILRON	-5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

AXIAL FORCE COEFFICIENT, CA

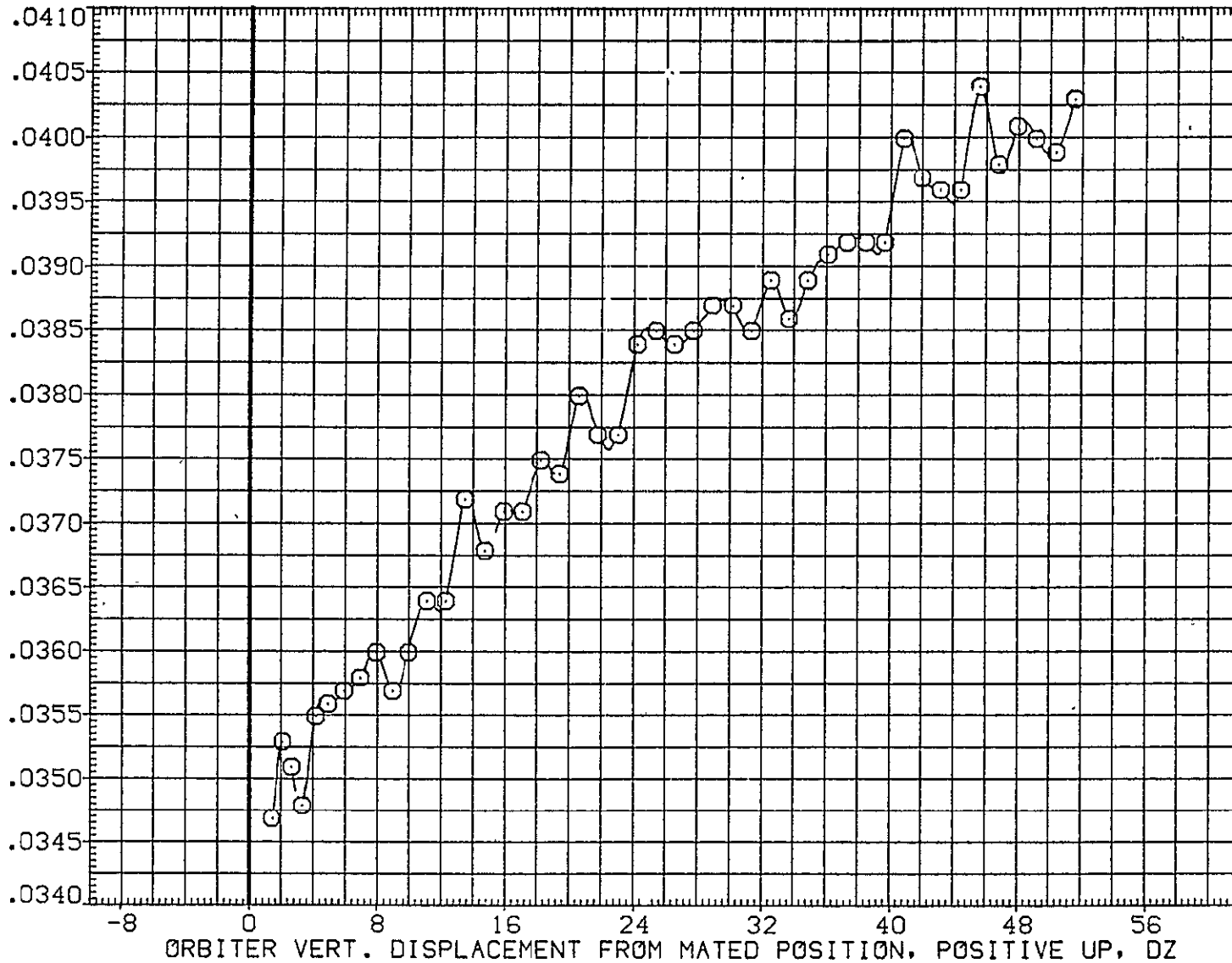


FIG. 69 ORB DATA, CAR. PROXIMITY, ALPHAC=2, IORB=6, BETAC=BETA0=0, AILRON=-5, AFE078

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		AILRON	-5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

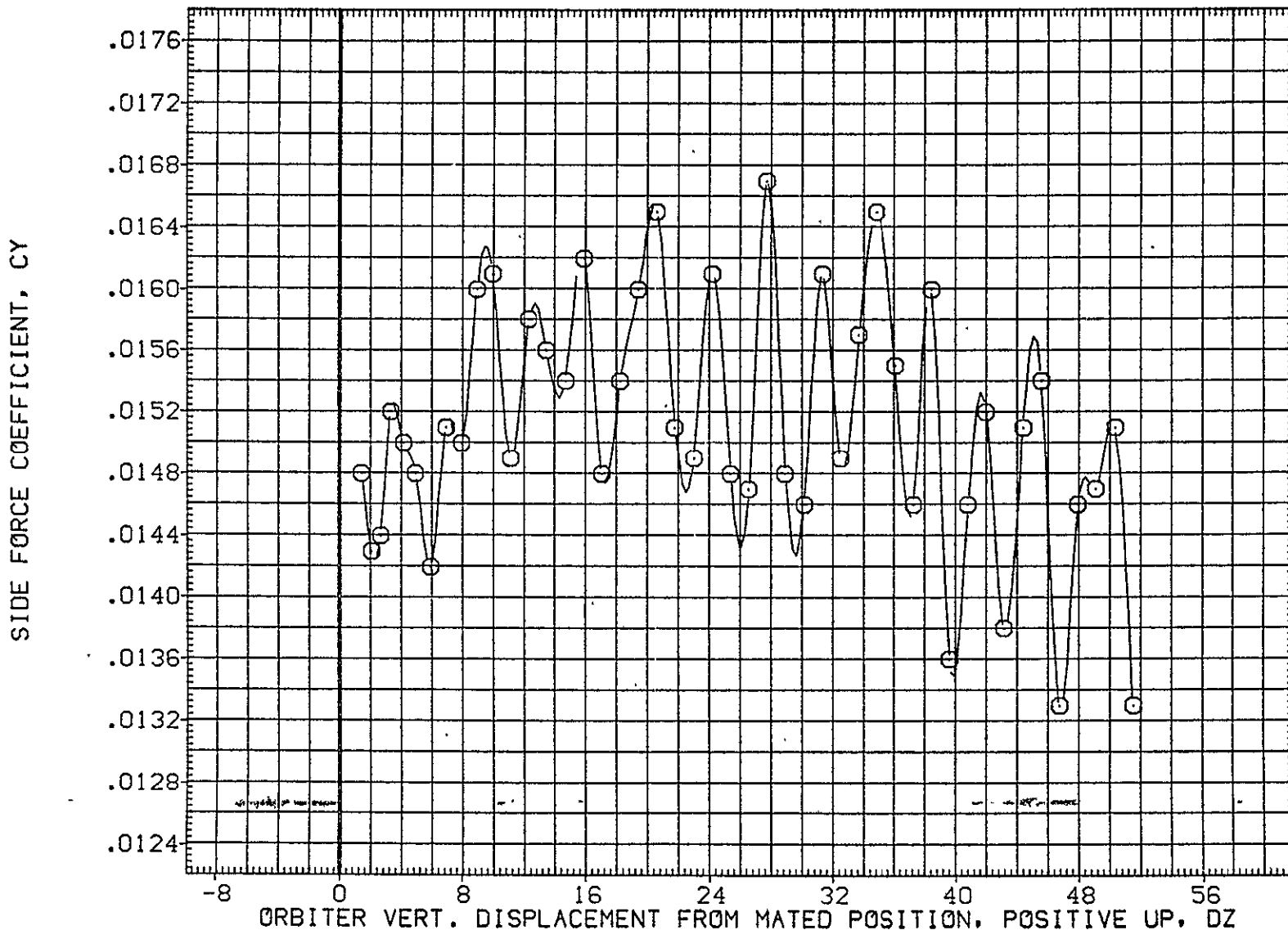


FIG. 69 ORB DATA, CAR. PROXIMITY, ALPHAC=2, IORB=6, BETAC=BETA0=0, AILRON=-5, AFE078

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE078)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		AILRON	-5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. XC
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. YC
						ZMRP	375.0000	IN. ZC
						SCALE	.0125	

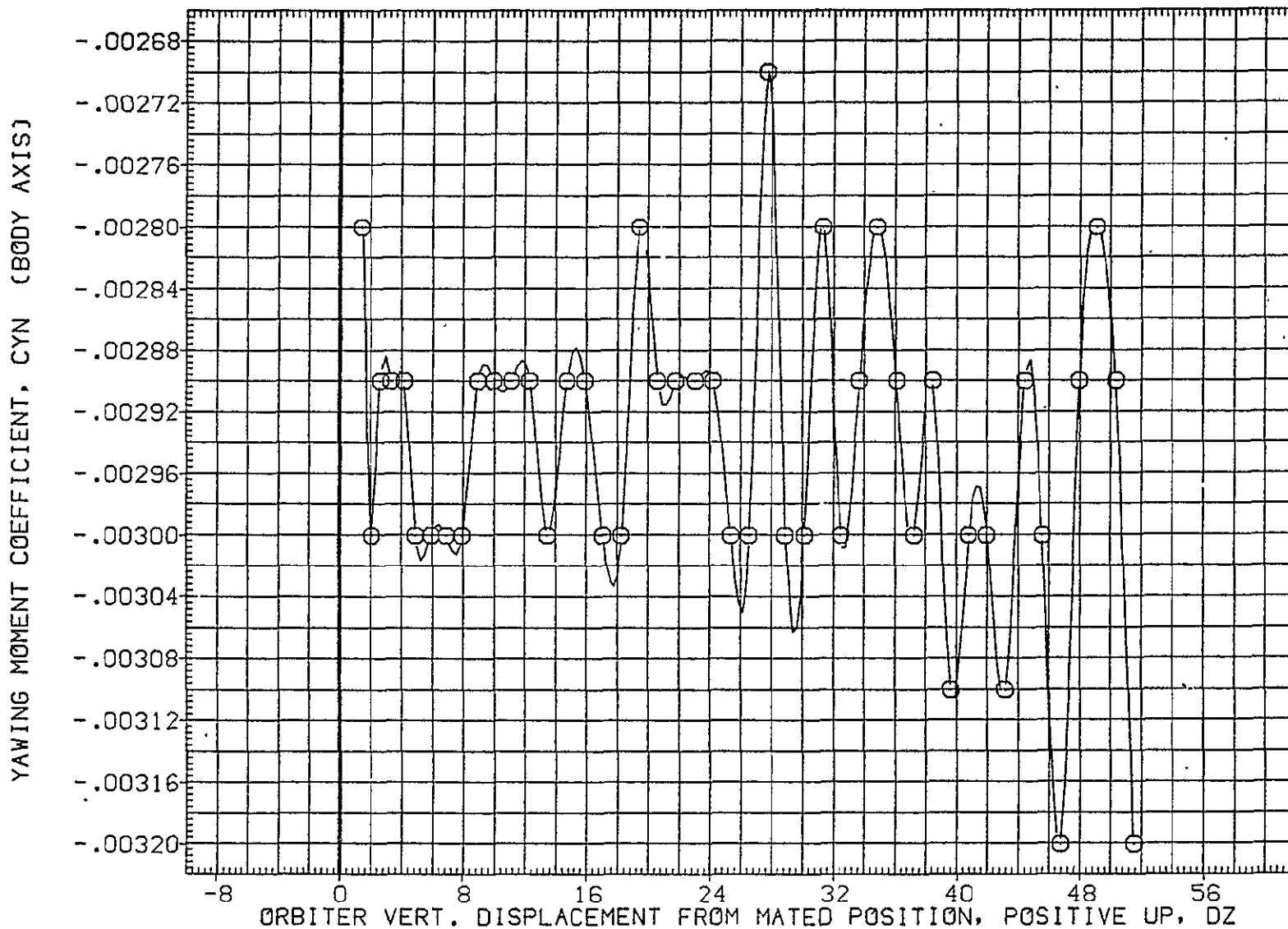


FIG. 69 ORB DATA, CAR. PROXIMITY, ALPHAC=2, IORB=6, BETAC=BETA0=0, AILRON=-5, AFE078

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE078)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		AIRON	-5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETAO	.000	DPHI	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

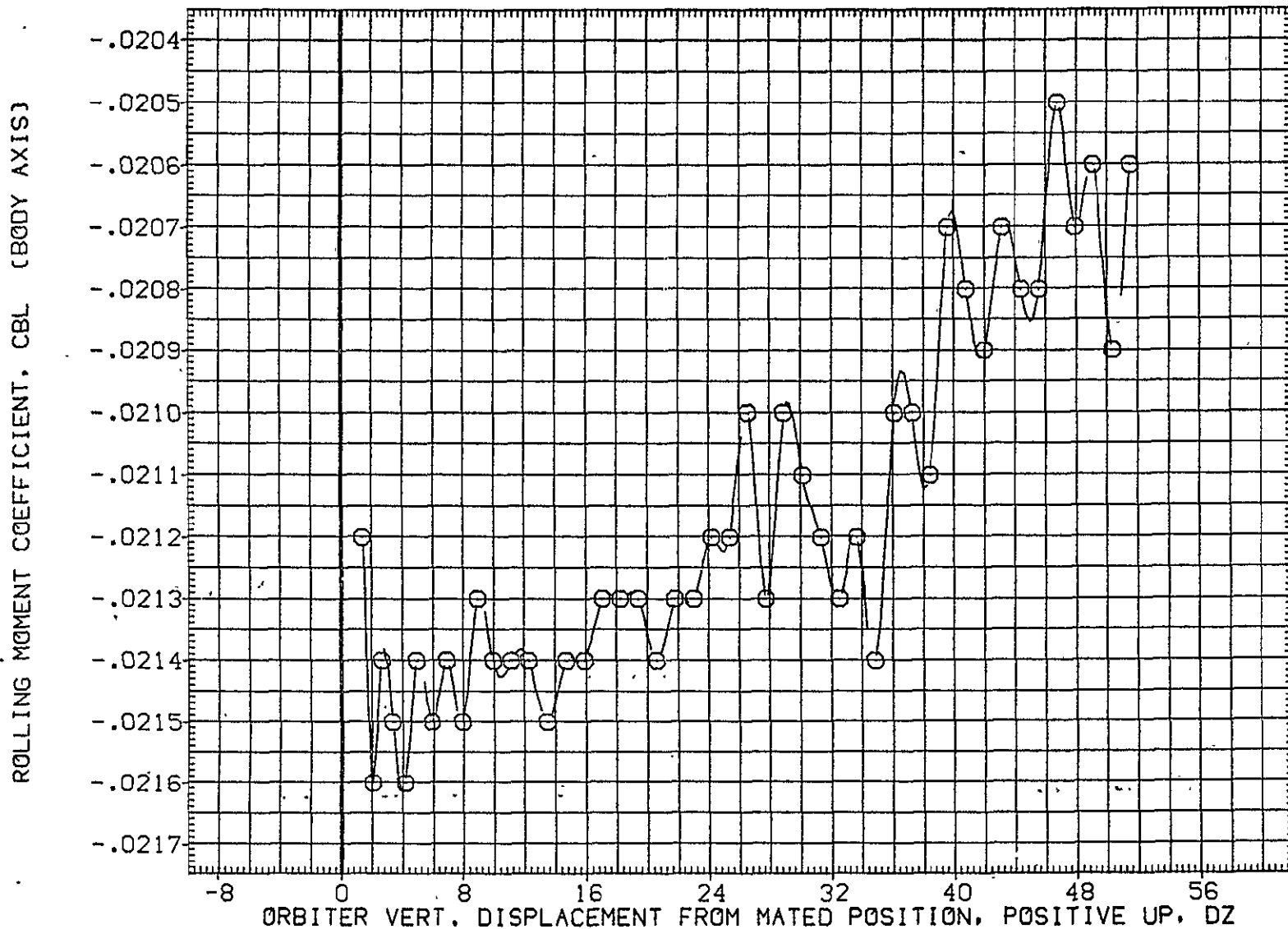


FIG. 69 ORB DATA, CAR. PROXIMITY, ALPHAC=2, IORB=6, BETAC=BETAO=0, AIRON=-5, AFE078

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE078)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		AILRON	-5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

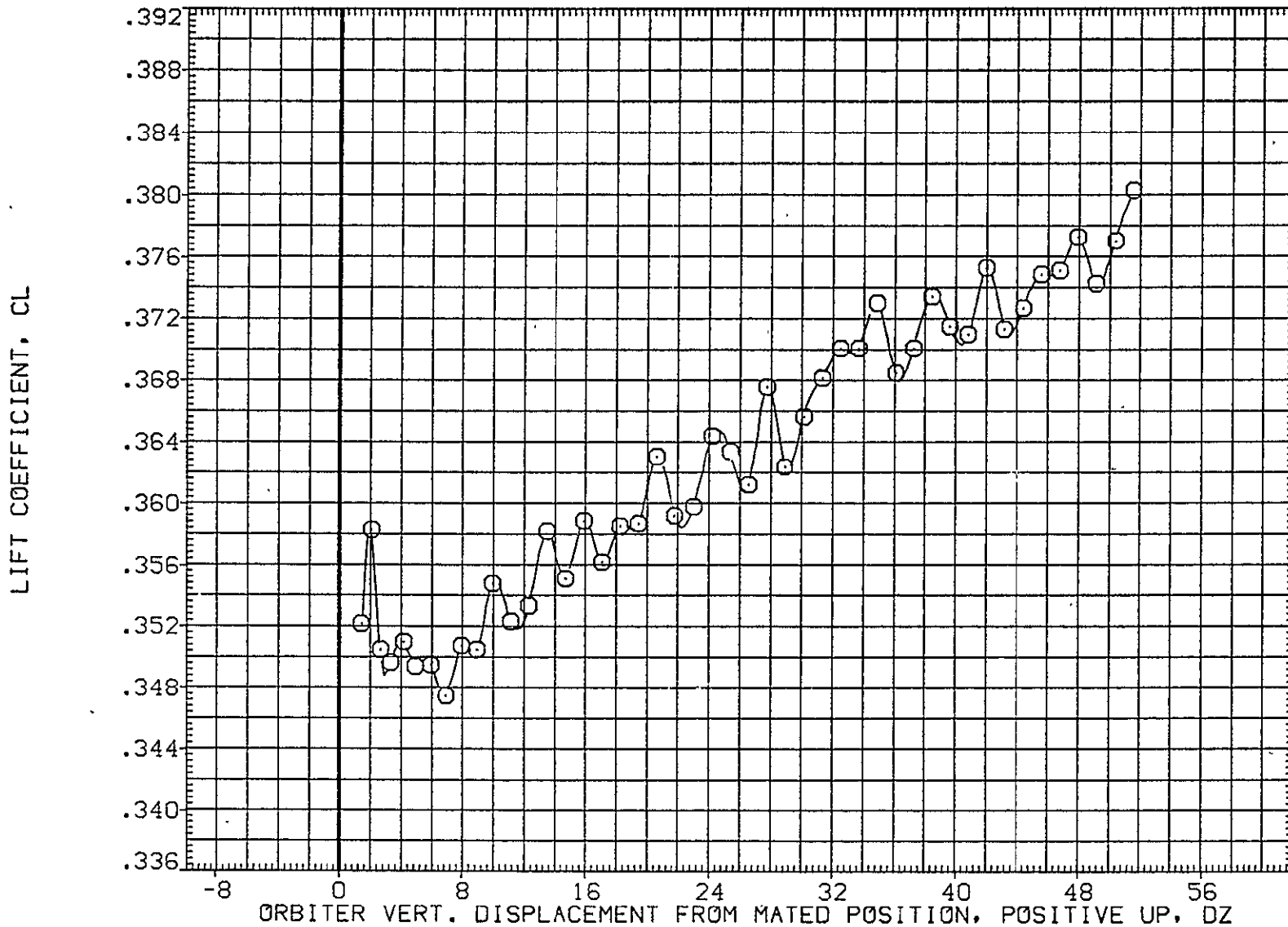


FIG. 69 ORB DATA, CAR. PROXIMITY, ALPHAC=2, IORB=6, BETAC=BETA0=0, AILRON=-5, AFE078

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.9100	IN.
		AILRON	-5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

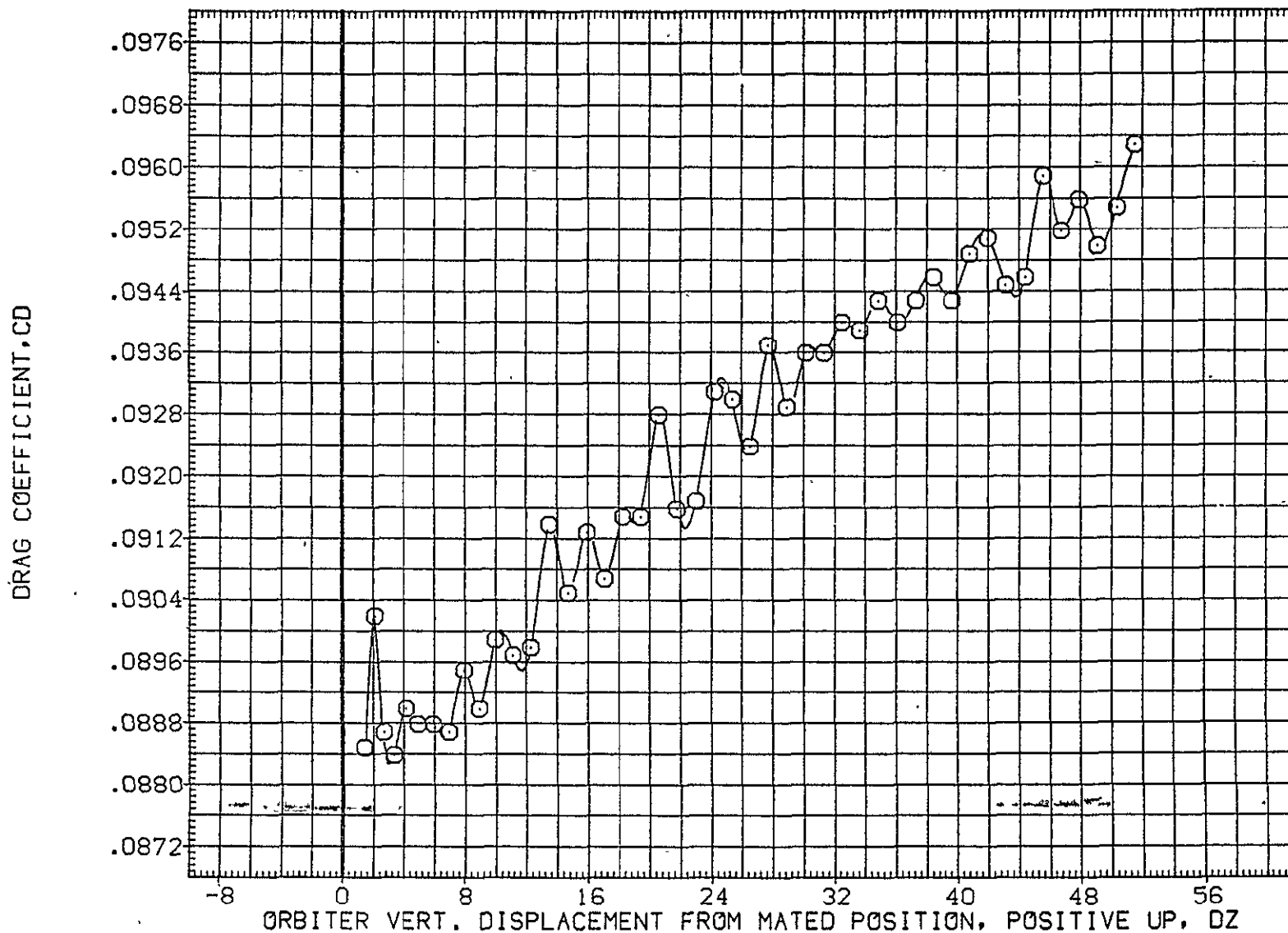


FIG. 69 ORB DATA, CAR. PROXIMITY, ALPHAC=2, IORB=6, BETAC=BETA0=0, AILRON=-5, AFE078

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE079)

SYMBOL
○

MACH	PARAMETRIC VALUES			
.599	ALPHAC	2.000	BETAC	.000
	STAB	5.000	RUDDER	10.000
	ELEVON	5.000	OX	.000
	DY	.000	IORB	6.000
	BETA0	.000	DPHI	.000

REFERENCE INFORMATION		
SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

NORMAL FORCE COEFFICIENT, CN

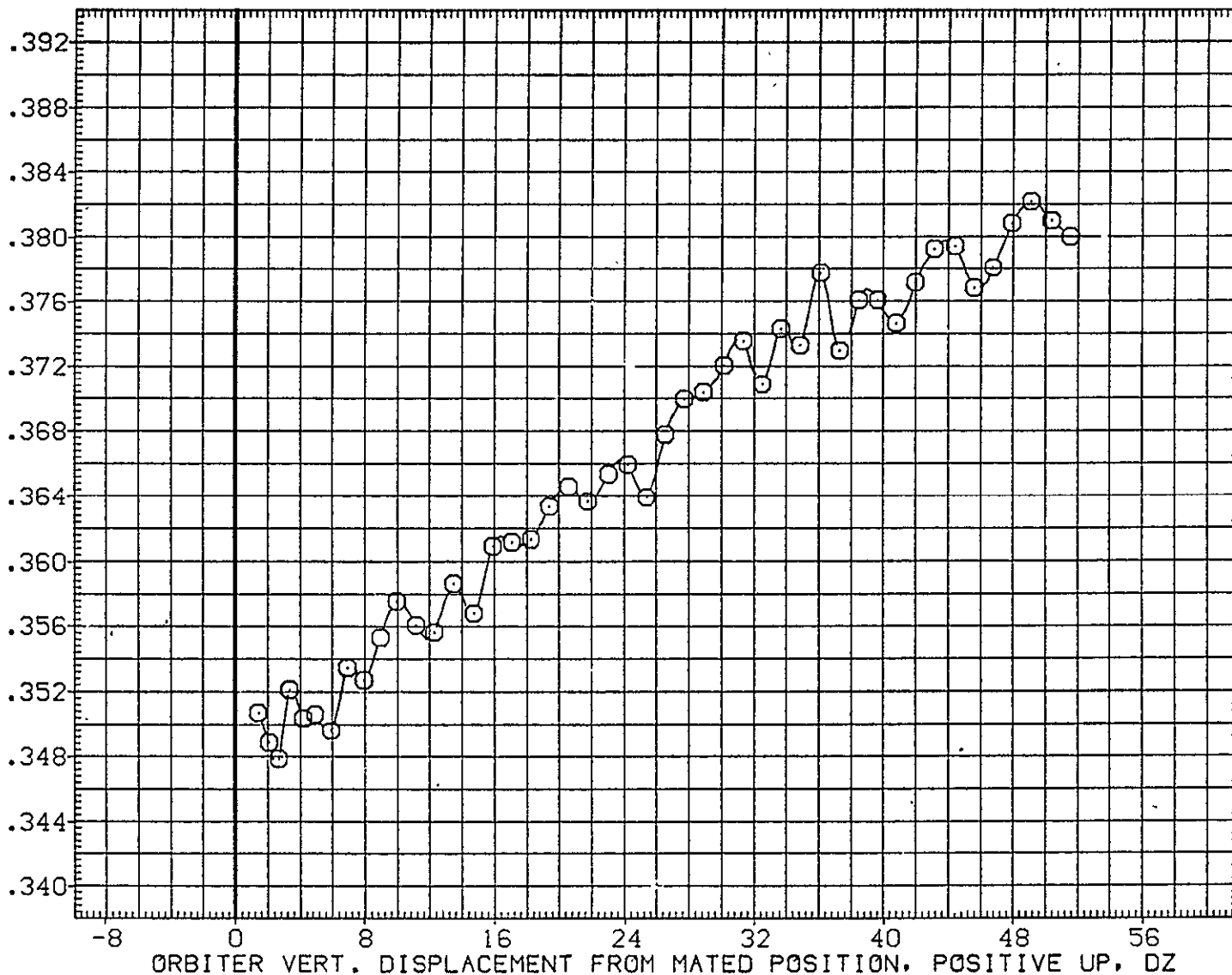


FIG. 70 ORB DATA, CAR. PROXIMITY, ALPHAC=2, IORB=6, BETAC=BETA0=0, RUDDER=10, AFE079

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION			
		ALPHAC	BETAC	RUDDER	BETAO	SREF	IN. X0	IN. Y0	IN. Z0
○	.599	2.000	.000	10.000	.000	2690.0000			SQ.FT.
		5.000				474.8100			IN.
		5.000				936.6800			IN.
		.000				1109.0000			IN.
		.000				.0000			IN.
		.000				375.0000			IN.
						.0125			SCALE

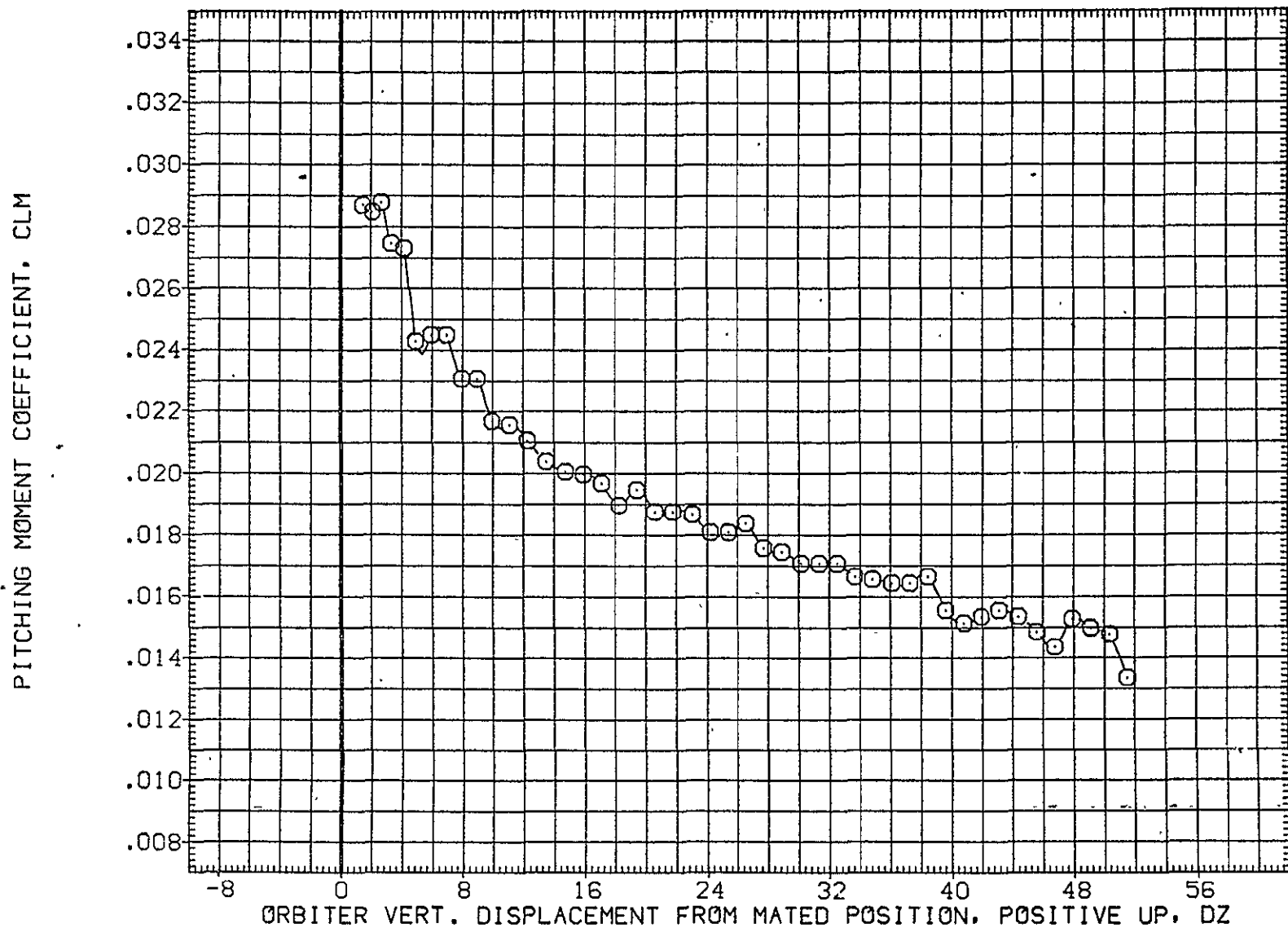


FIG. 70 ORB DATA, CAR. PROXIMITY, ALPHAC=2, IORB=6, BETAC=BETA0=0, RUDDER=10, AFE079

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE079)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	RUDDER	10.000	LREF	474.8100	IN.
		ELEVON	5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

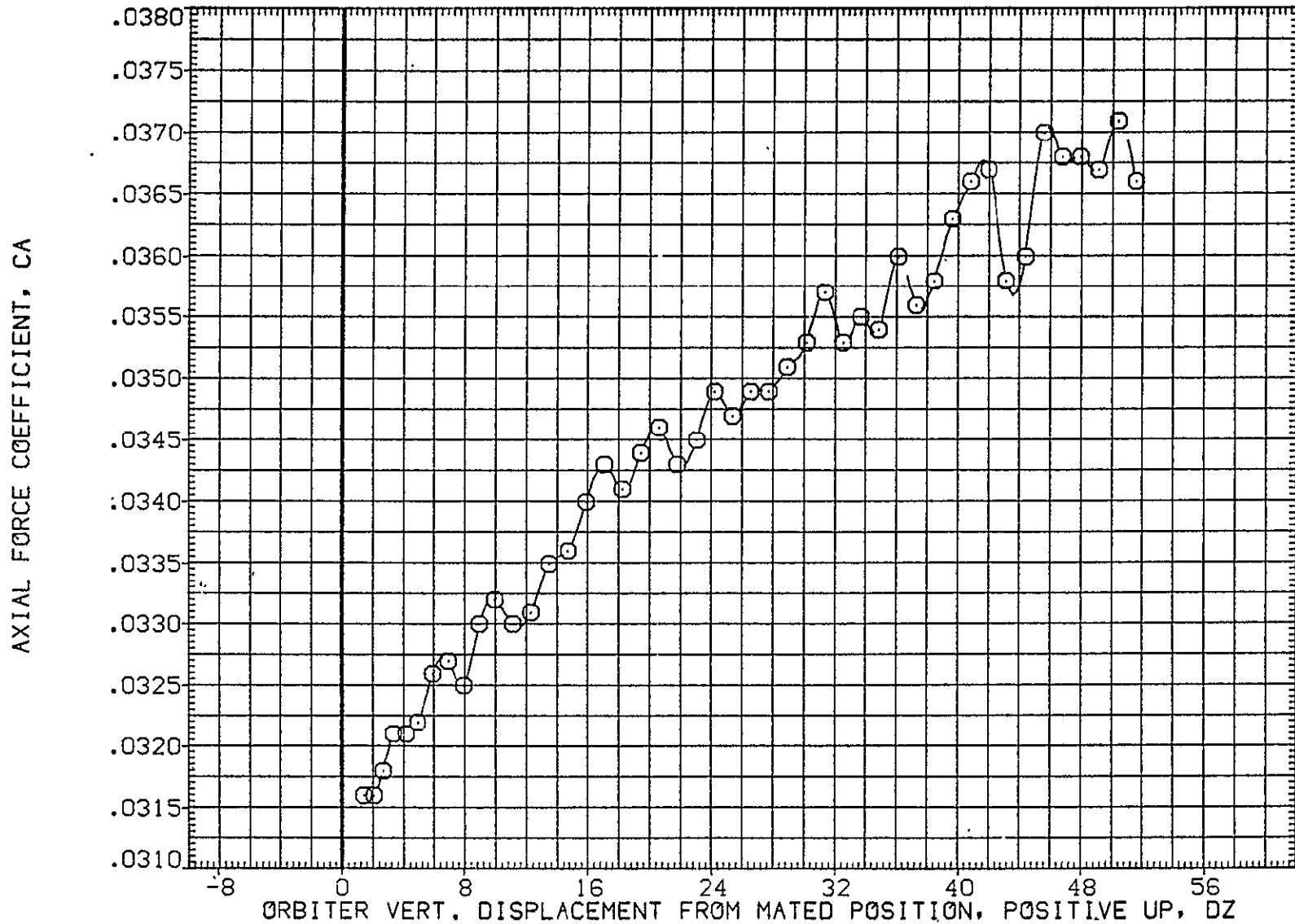


FIG. 70 ORB DATA, CAR. PROXIMITY, ALPHAC=2, IORB=6, BETAC=BETA0=0, RUDDER=10, AFE079

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	RUDDER	10.000	LREF	474.8100	IN.
		ELEVON	5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

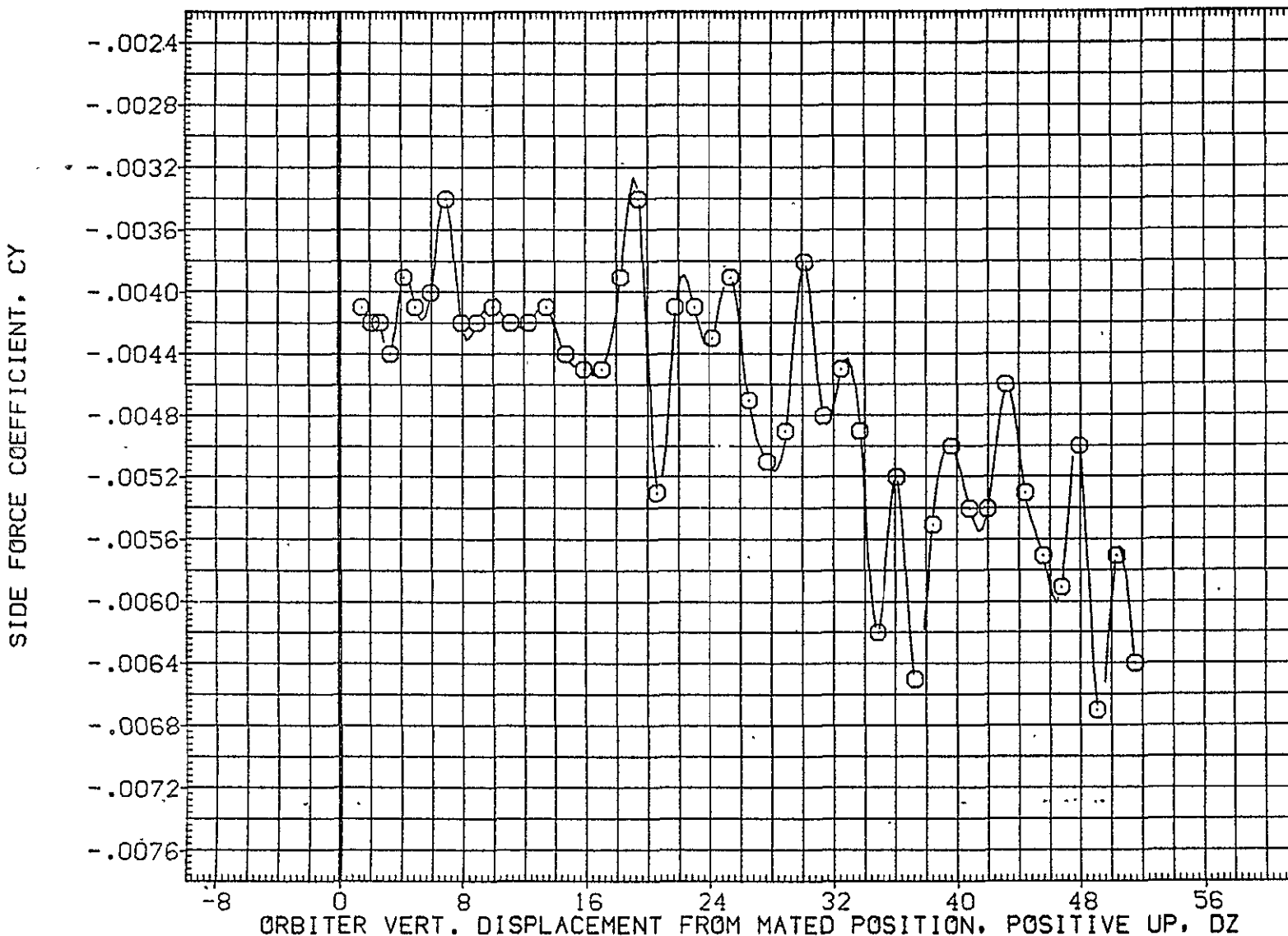


FIG. 70 ORB DATA, CAR. PROXIMITY, ALPHAC=2, IORB=6, BETAC=BETA0=0, RUDDER=10, AFE079

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE079)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SG.FT.
		STAB	5.000	RUDDER	10.000	LREF	474.8100	IN.
		ELEVON	5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

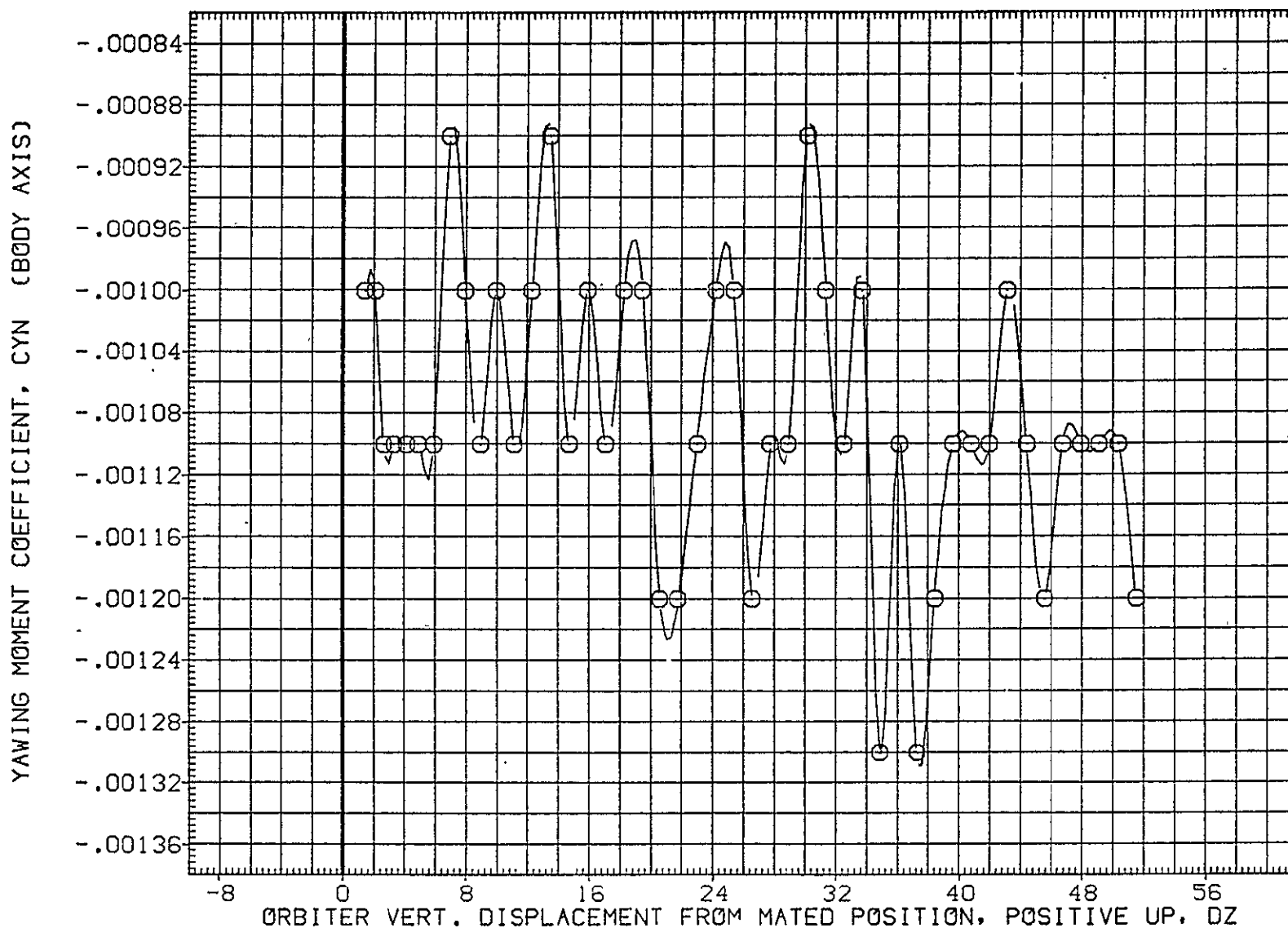


FIG. 70 ORB DATA, CAR. PROXIMITY, ALPHAC=2, IORB=6, BETAC=BETA0=0, RUDDER=10, AFE079

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	RUDDER	10.000	LREF	474.8100	IN.
		ELEVON	5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

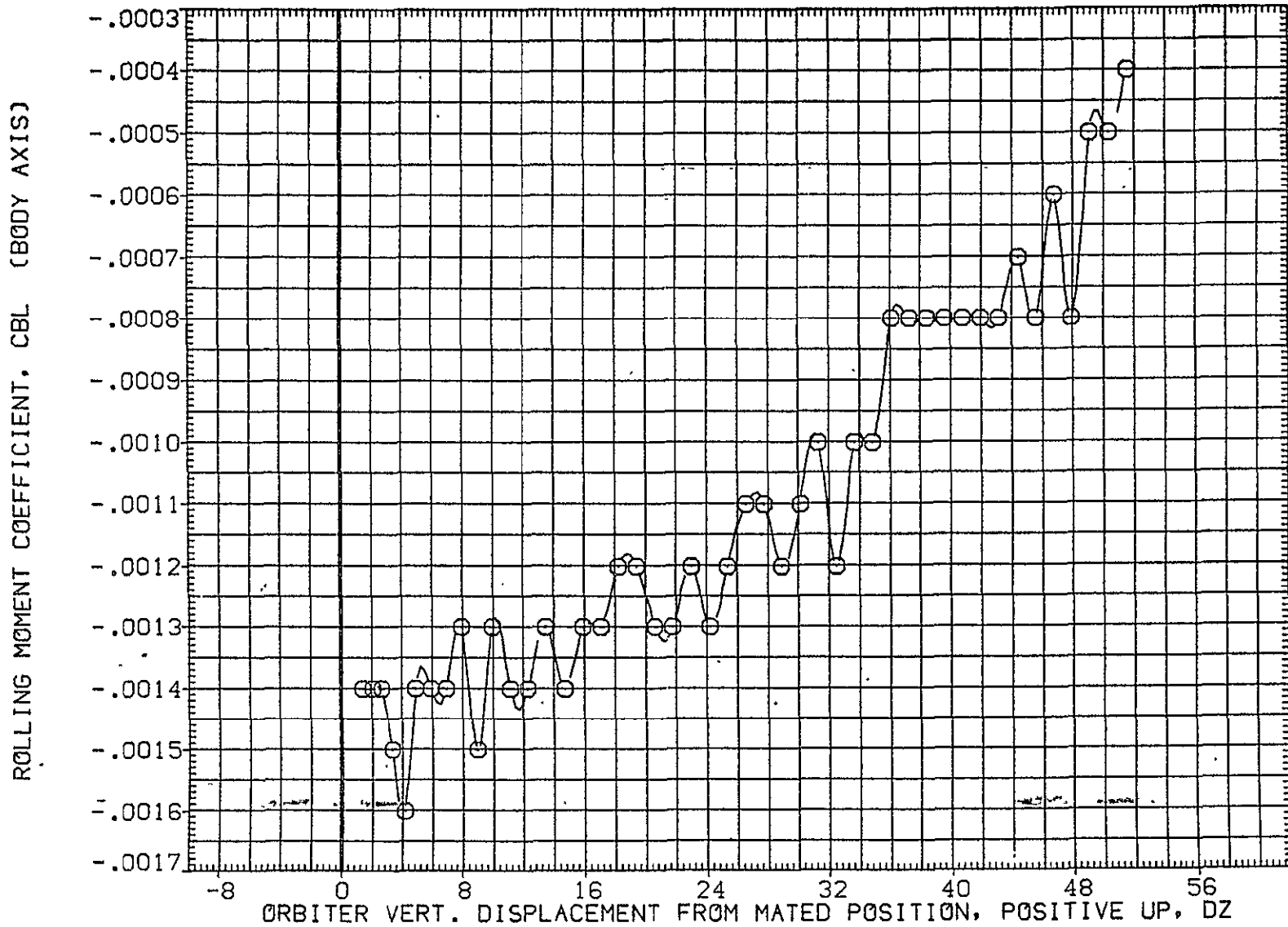


FIG. 70 ORB DATA, CAR. PROXIMITY; ALPHAC=2, IORB=6, BETAC=BETA0=0, RUDDER=10, AFE079

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE079)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	RUDDER	10.000	LREF	474.8100	IN.
		ELEVON	5.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETA0	.000	DRHI	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

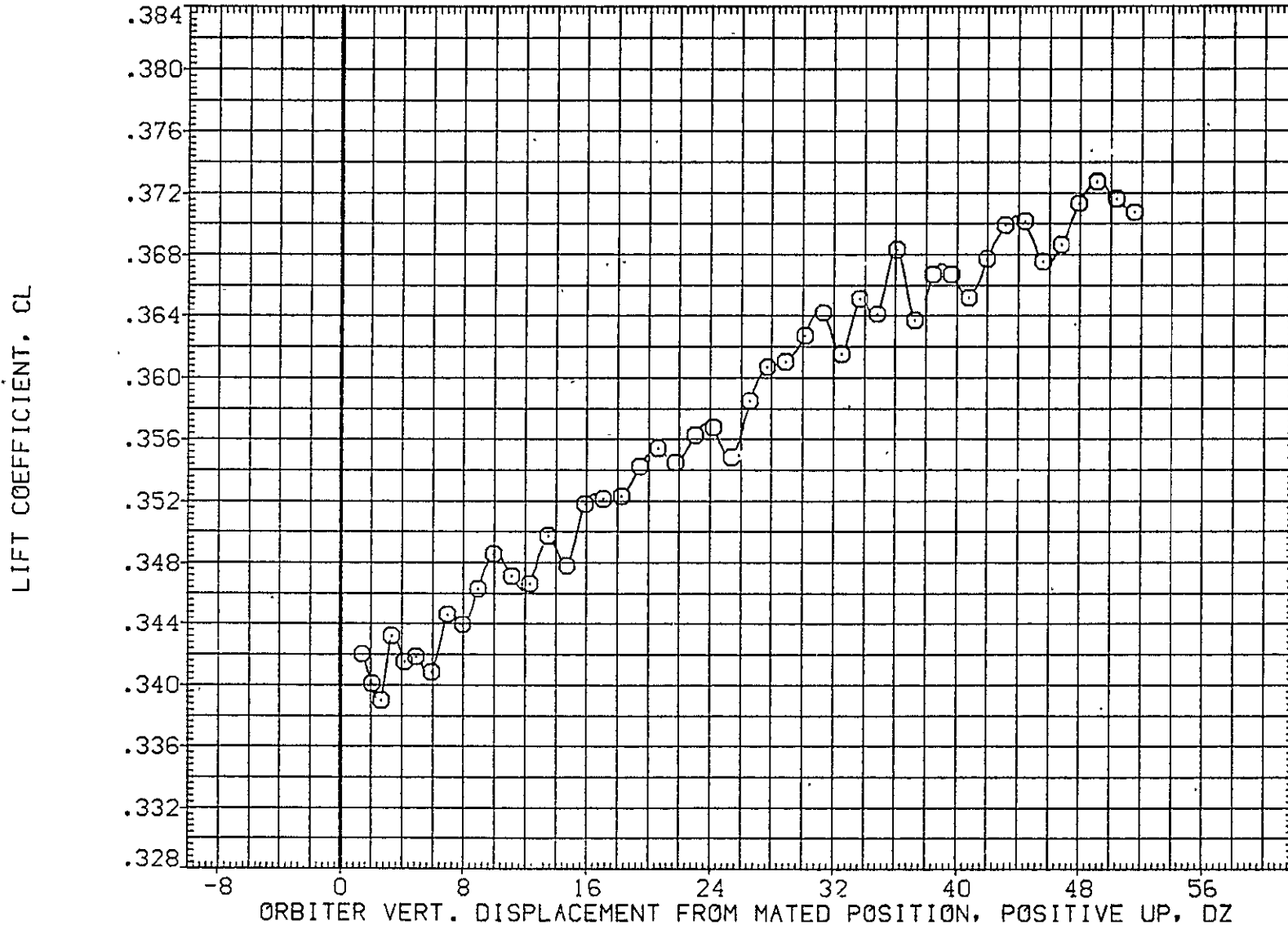


FIG. 70 ORB DATA, CAR. PROXIMITY, ALPHAC=2, IORB=6, BETAC=BETA0=0, RUDDER=10, AFE079

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	RUDDER	10.000	LREF	474.8100	IN.
		ELEVON	5.000	OX	.000	BREF	936.6800	IN.
		OY	.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETA0	.000	DPHI	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

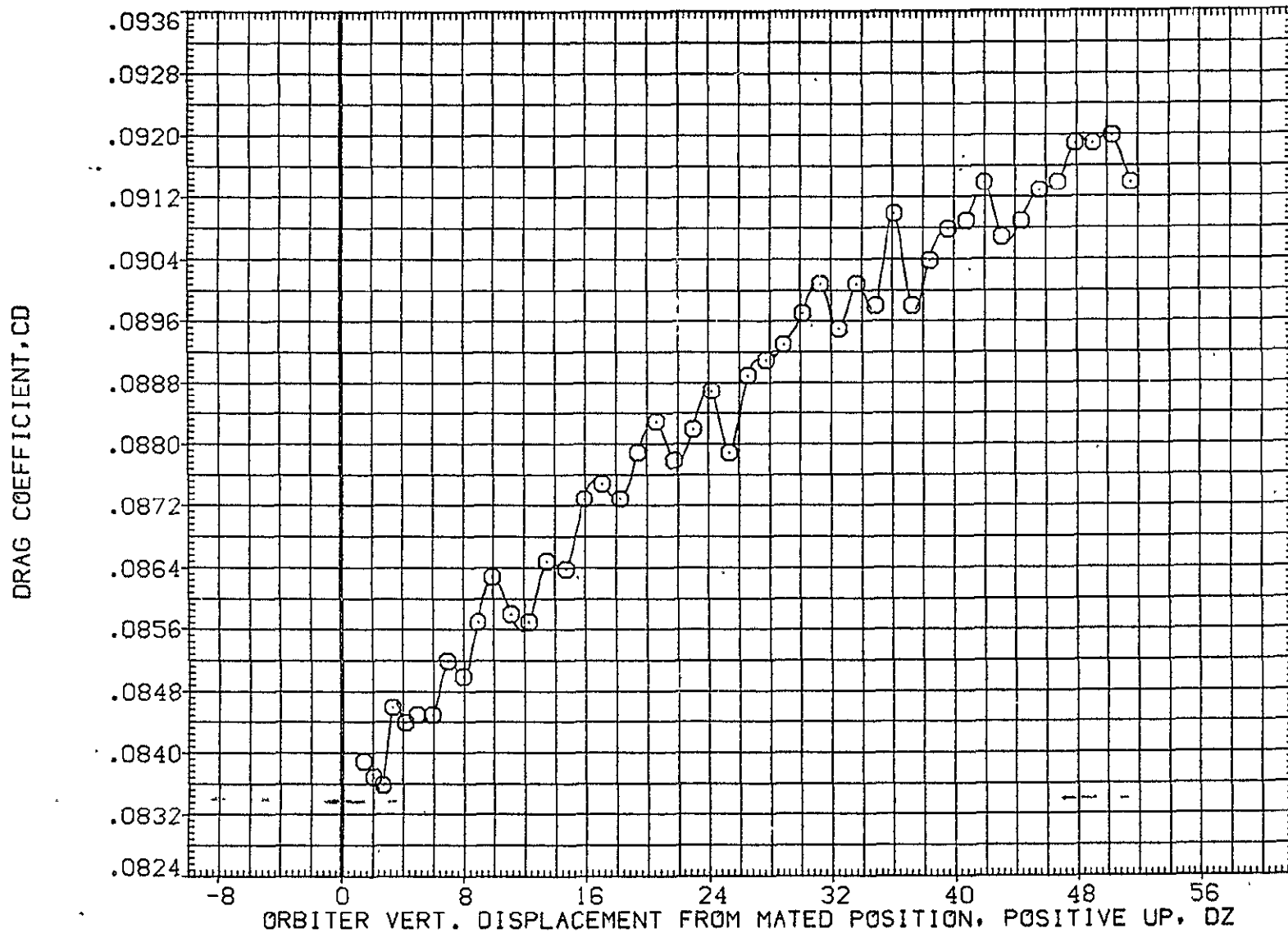


FIG. 70 ORB DATA, CAR. PROXIMITY, ALPHAC=2, IORB=6, BETAC=BETA0=0, RUDDER=10, AFE079

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE080)

SYMBOL
○

MACH	PARAMETRIC VALUES					
.589	ALPHAC	2.000	BETAC	-5.000		
	STAB	5.000	ELEVON	5.000		
	BDFLAP	.000	OX	.000		
	DY	.000	IORB	4.000		
	BETA0	-5.000	RUDDER	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

NORMAL FORCE COEFFICIENT, CN

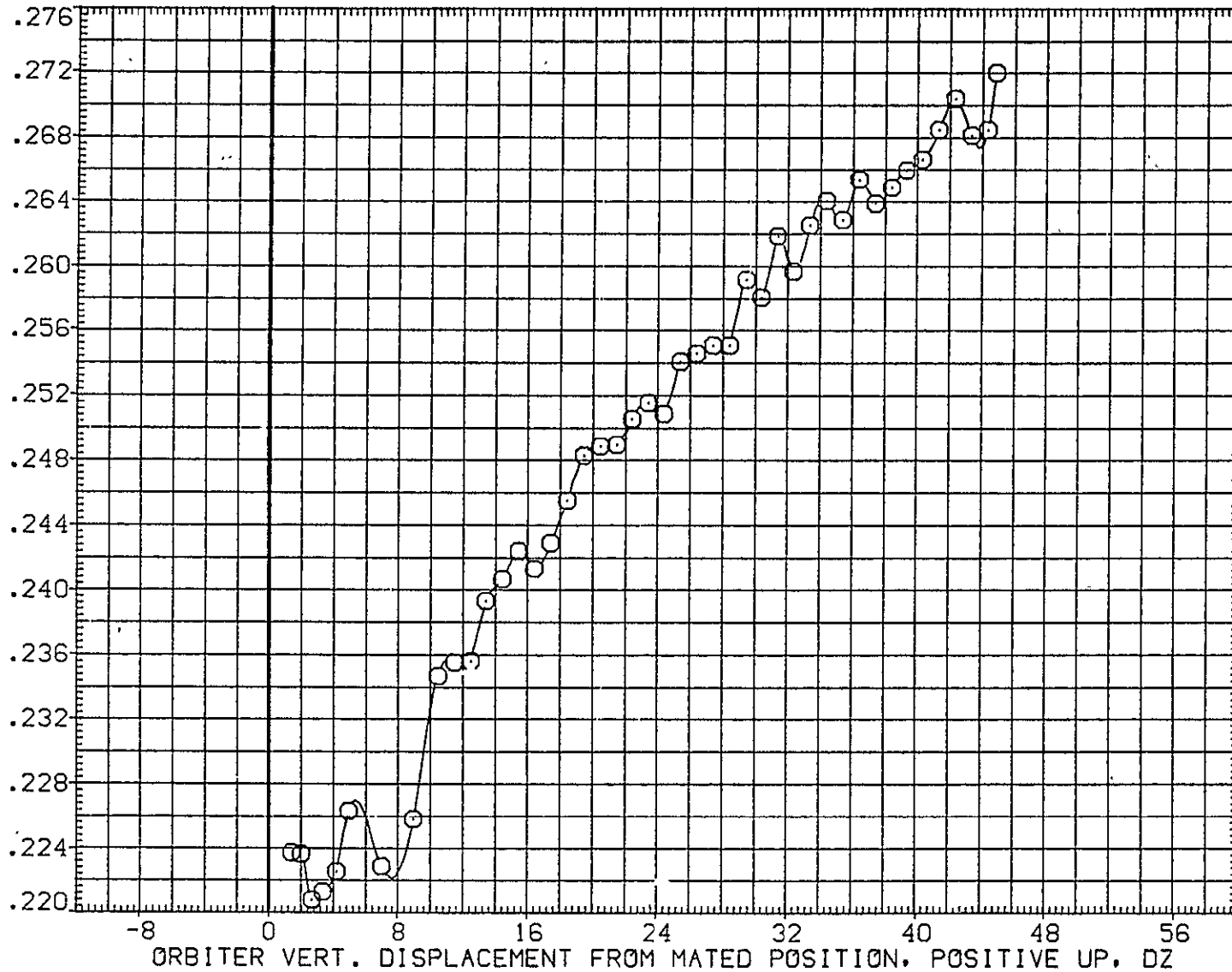


FIG. 71 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=-5, BETA0=-5, AFE080

SYMBOL
○

MACH	PARAMETRIC VALUES			
.589	ALPHAC	2.000	BETAC	-5.000
	STAB	5.000	ELEVON	5.000
	BDFLAP	.000	DX	.000
	DY	.000	IORB	4.000
	BETA0	-5.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

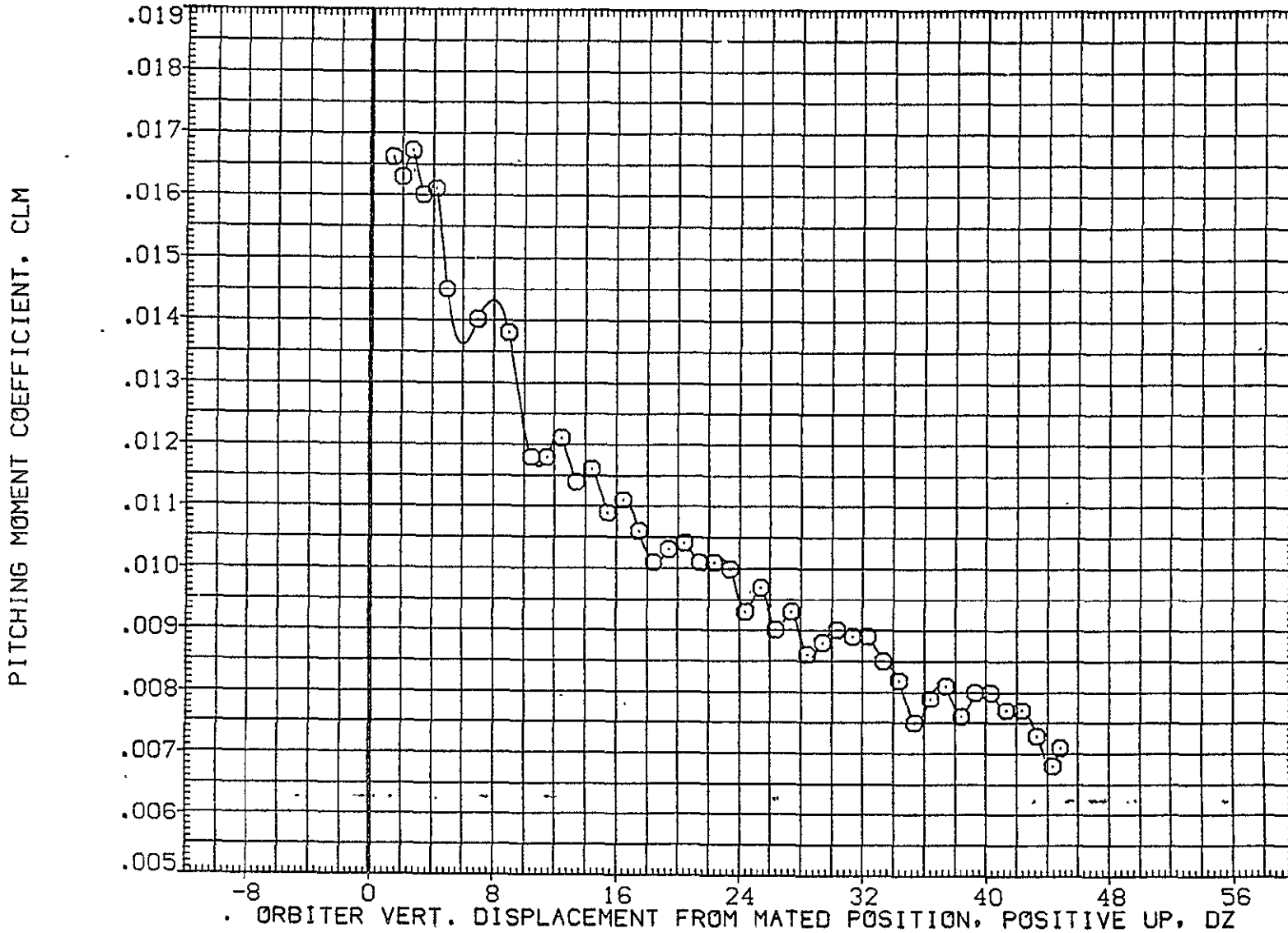


FIG. 71 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=-5, BETA0=-5, AFE080

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE080)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.589	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SO.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. XO
		BETA0	-5.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

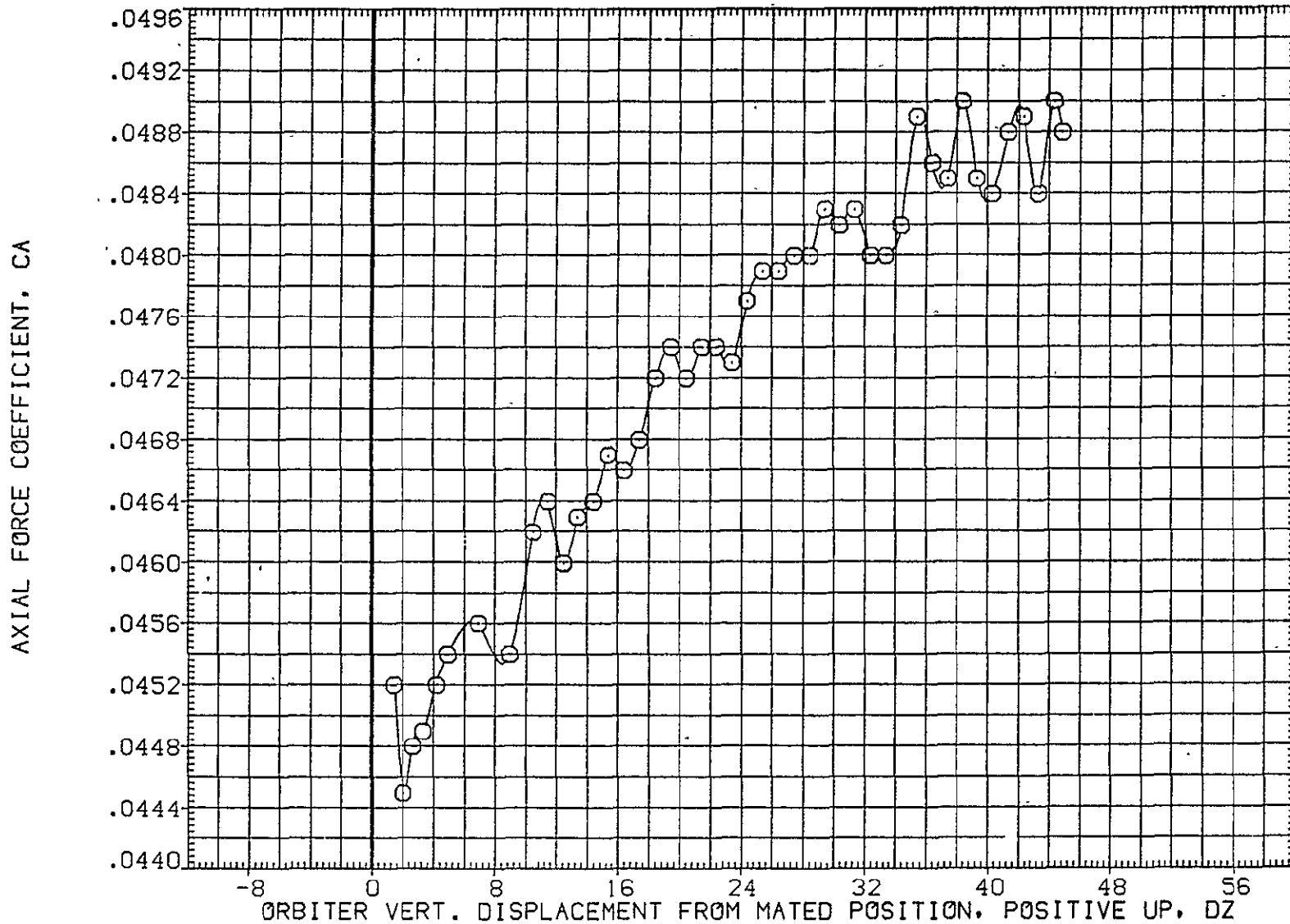


FIG. 71 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=-5, BETA0=-5, AFE080

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.589	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	OX	.000	BREF	936.6800	IN.
		OY	.000	IORB	4.000	XMRP	1109.0000	IN. XC
		BETA0	-5.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

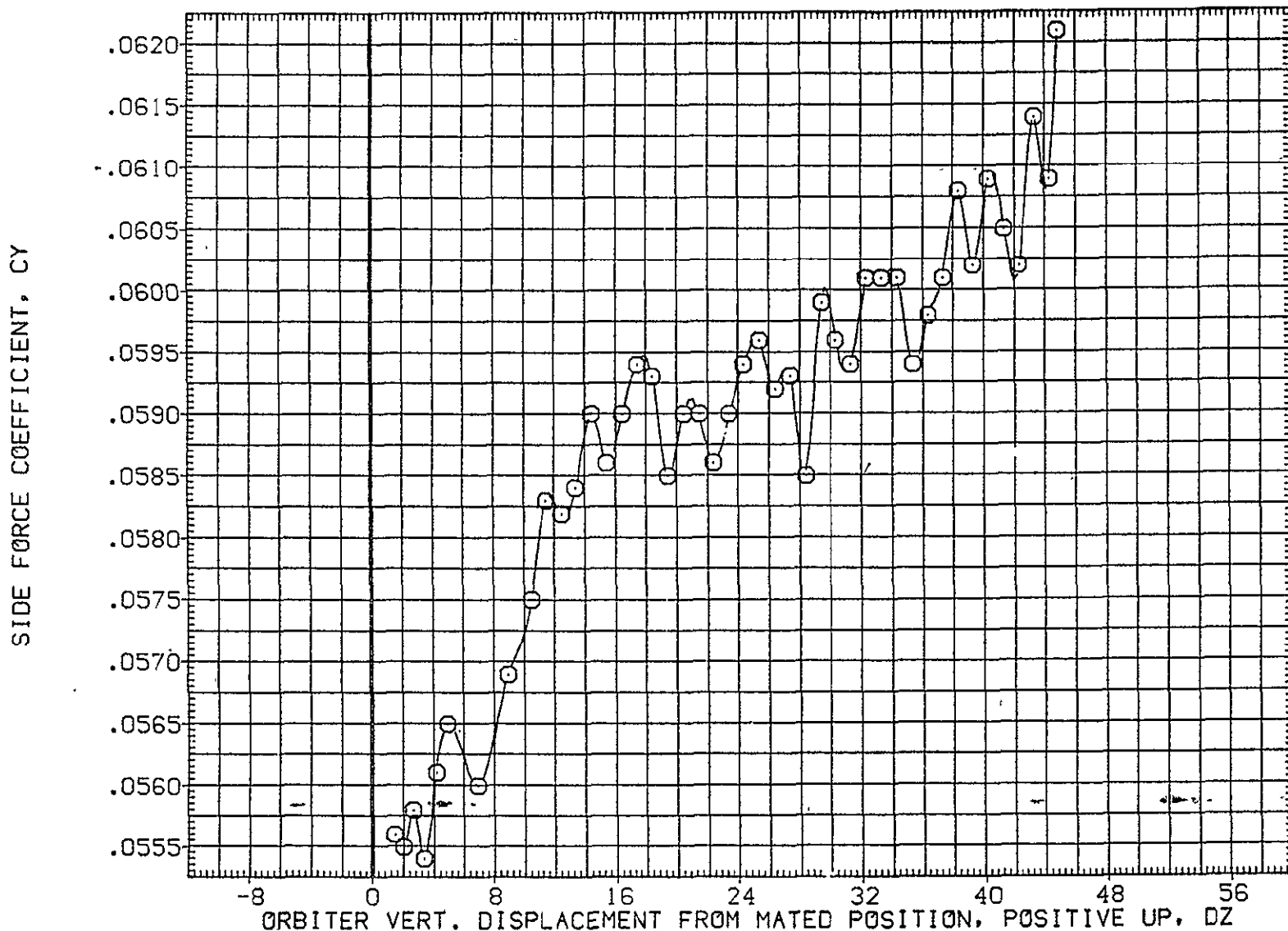


FIG. 71 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=-5, BETA0=-5, AFE080

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE080)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.589	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	-5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

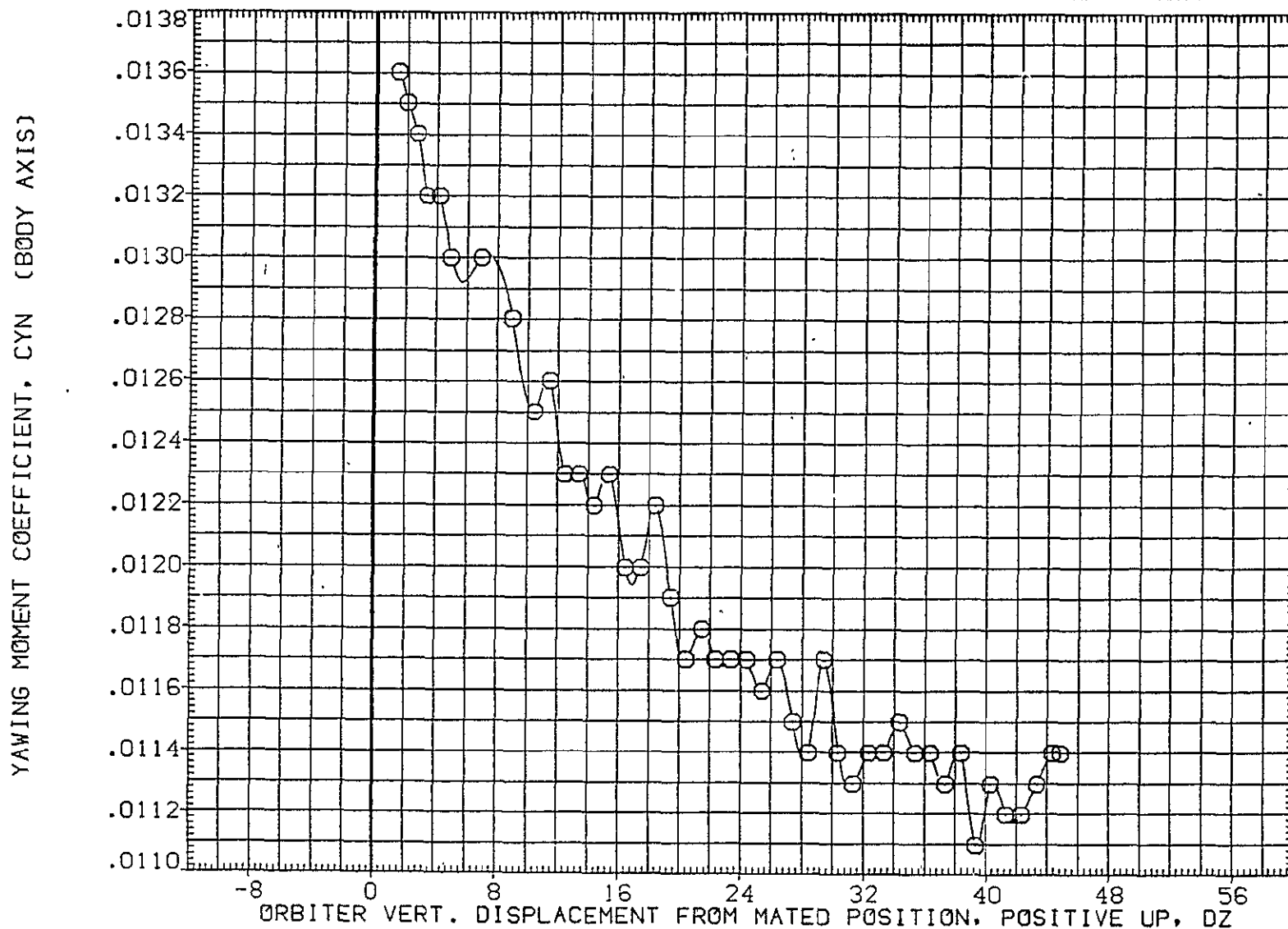


FIG. 71 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=-5, BETA0=-5, AFE080

SYMBOL	MACH	PARAMETRIC VALUES						REFERENCE INFORMATION		
○	.589	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.		
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.		
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.		
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0		
		BETA0	-5.000	RUDDER	.000	YMRP	.0000	IN. Y0		
						ZMRP	375.0000	IN. Z0		
						SCALE	.0125			

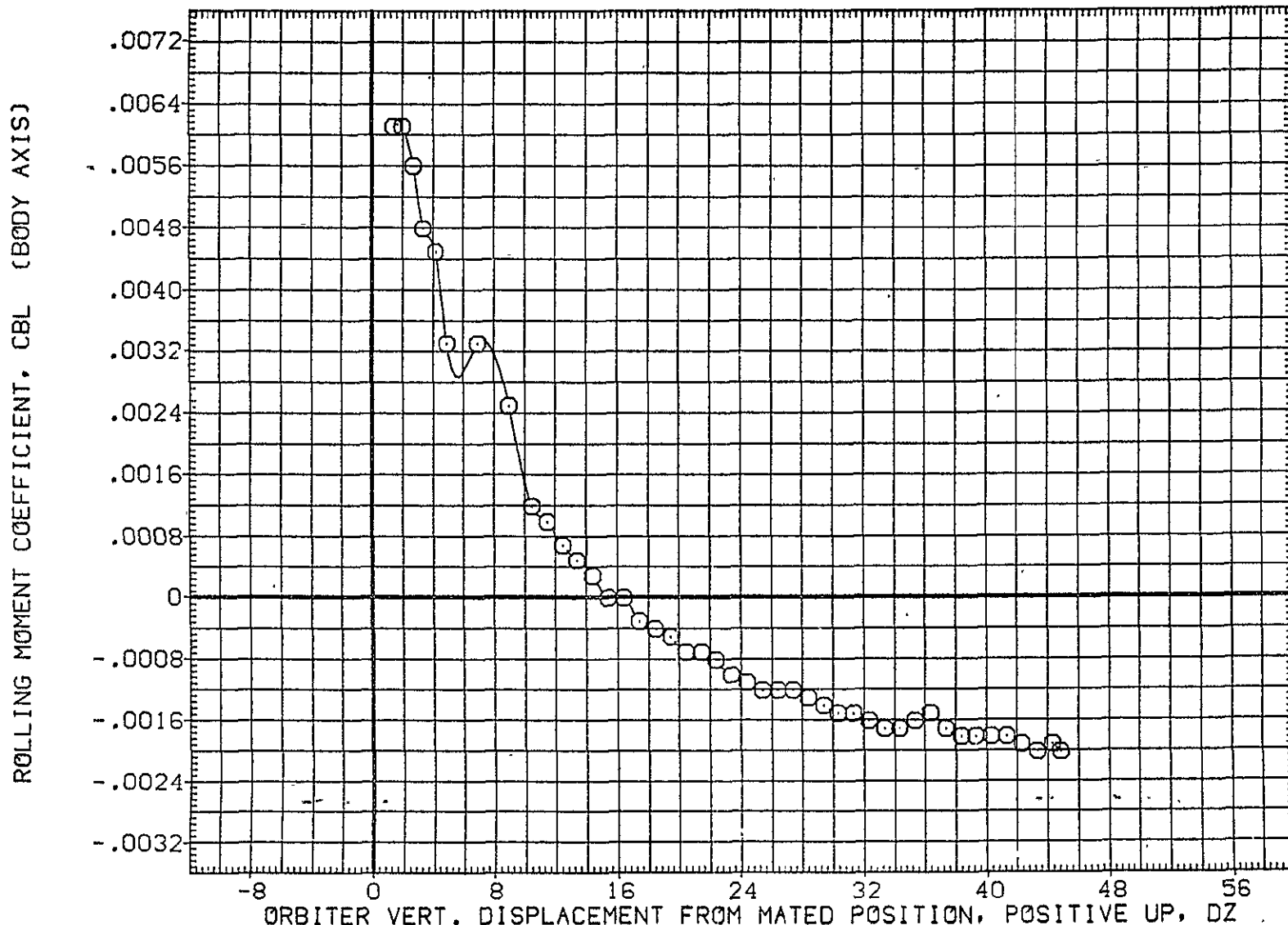


FIG. 71 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=-5, BETA0=-5, AFE080

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE080)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.589	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	50.FT.
		.STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	-5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

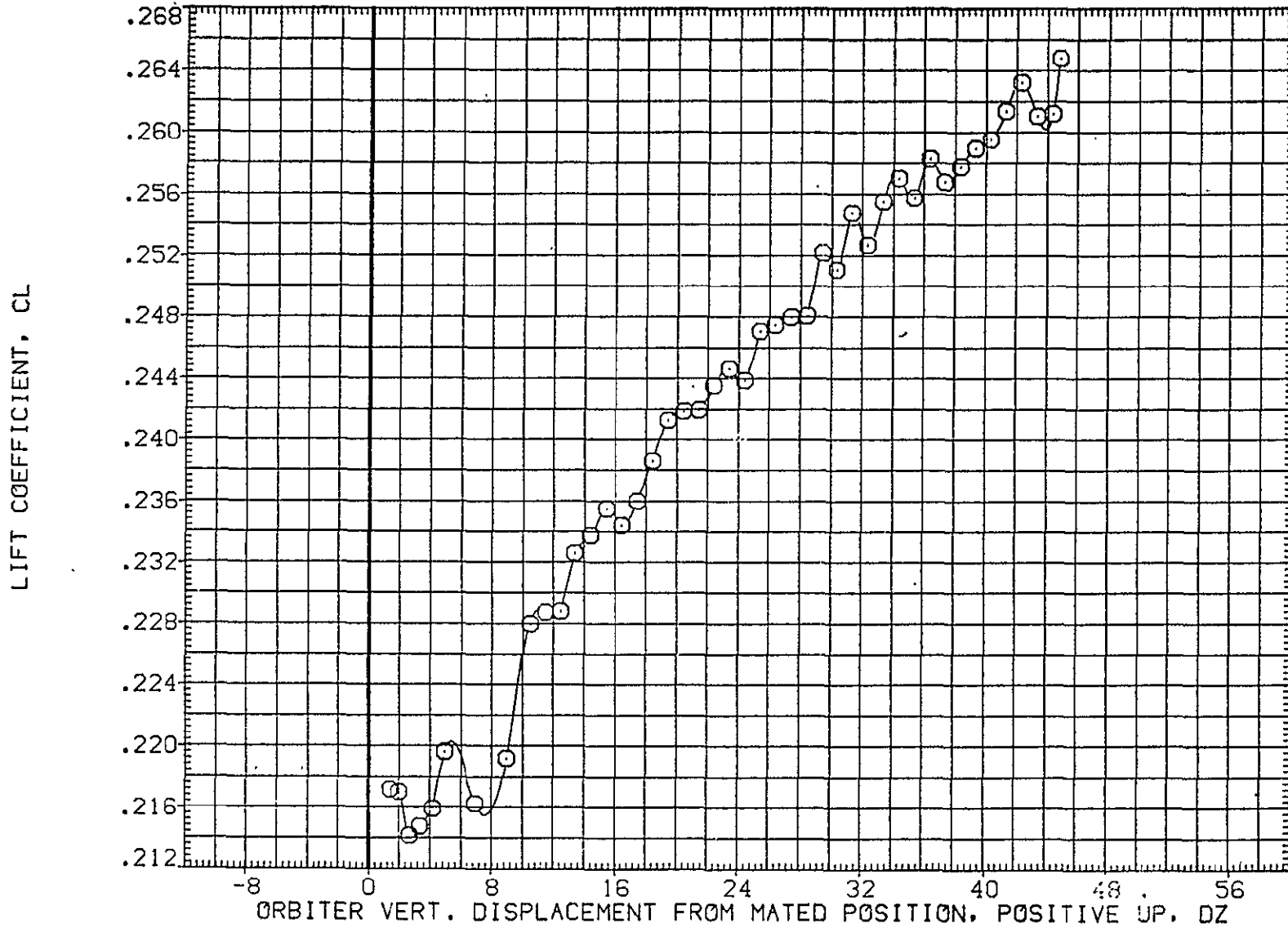


FIG. 71 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=-5, BETA0=-5, AFE080

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.589	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	-5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

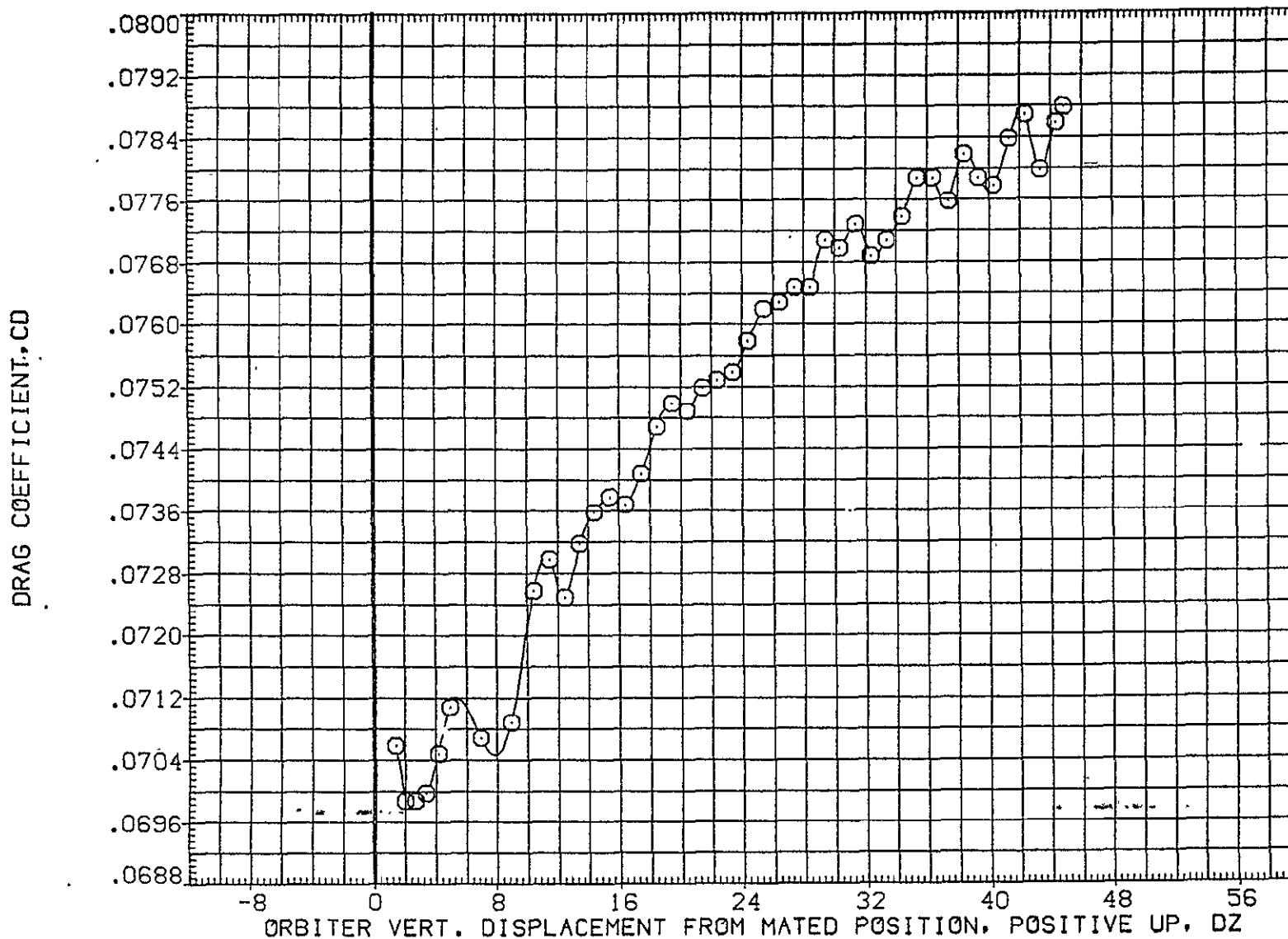


FIG. 71 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=4, BETAC=-5, BETA0=-5, AFE080

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE081)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.592	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	-5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

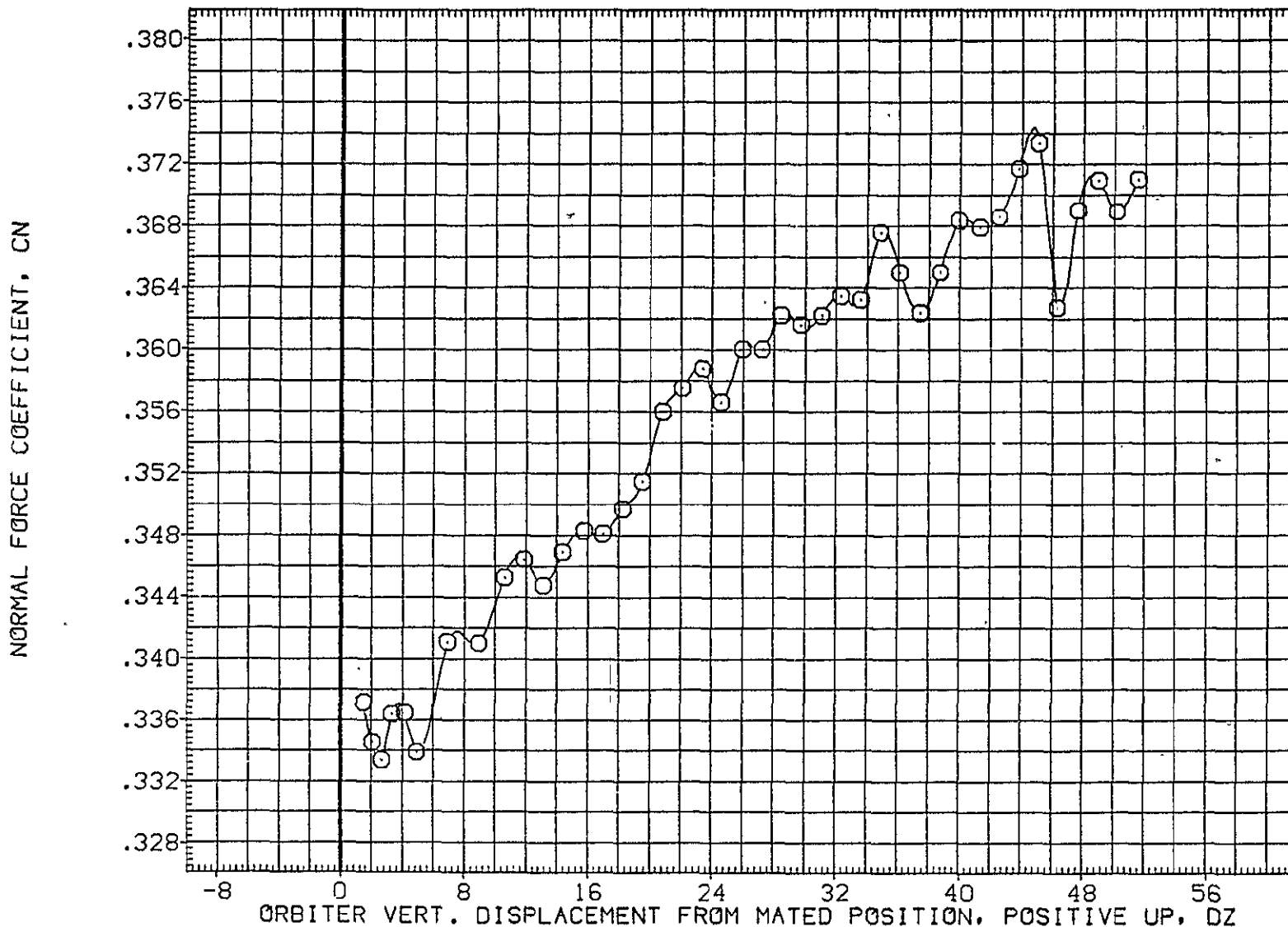


FIG. 72 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=-5, AFE081

SYMBOL
○

MACH	PARAMETRIC VALUES			
.592	ALPHAC	2.000	BETAC	-5.000
	STAB	5.000	ELEVON	5.000
	BDFLAP	.000	DX	.000
	DY	.000	IORB	6.000
	BETA0	-5.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

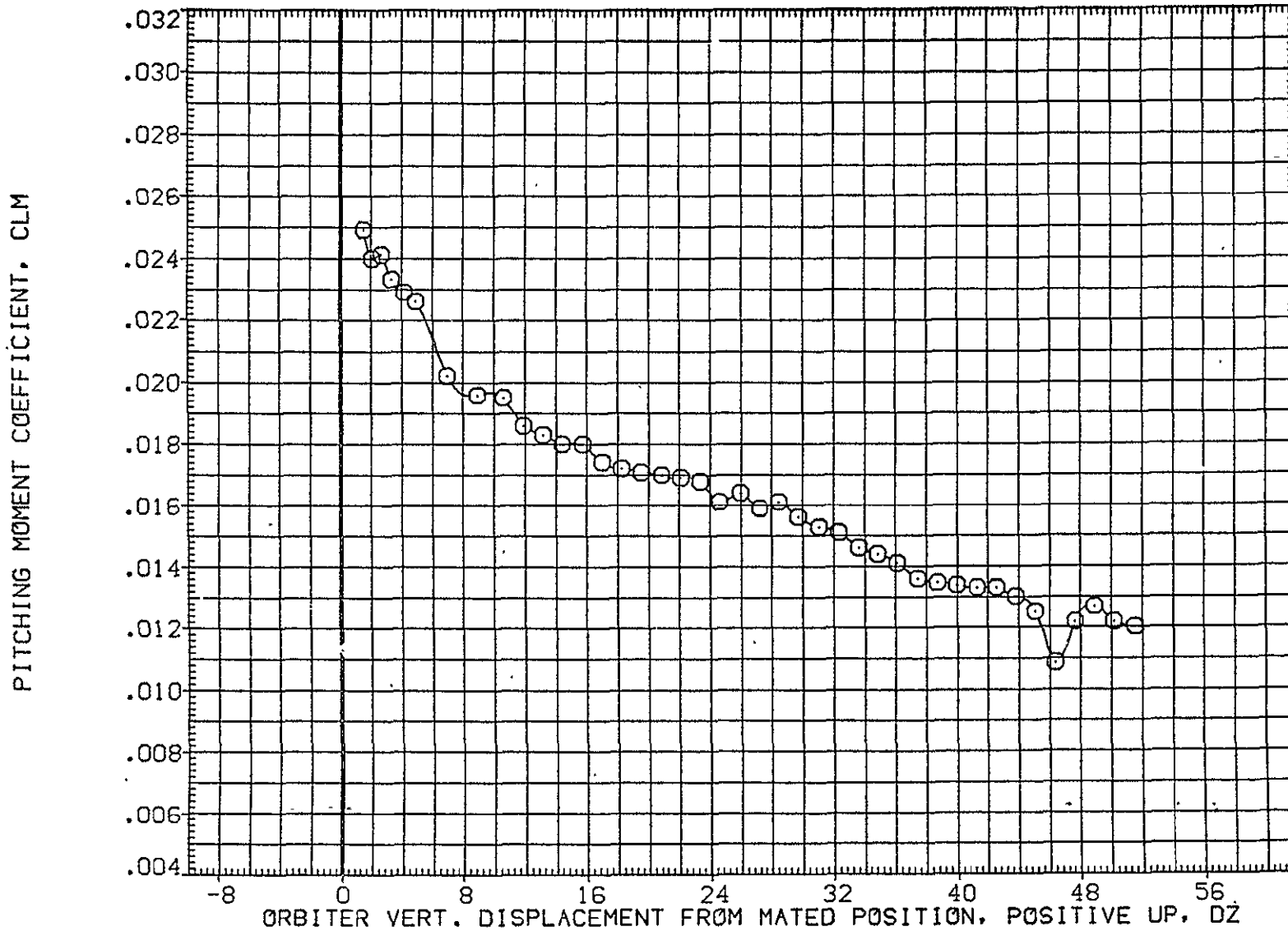


FIG. 72 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=-5, AFE081

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE081)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.592	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	-5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

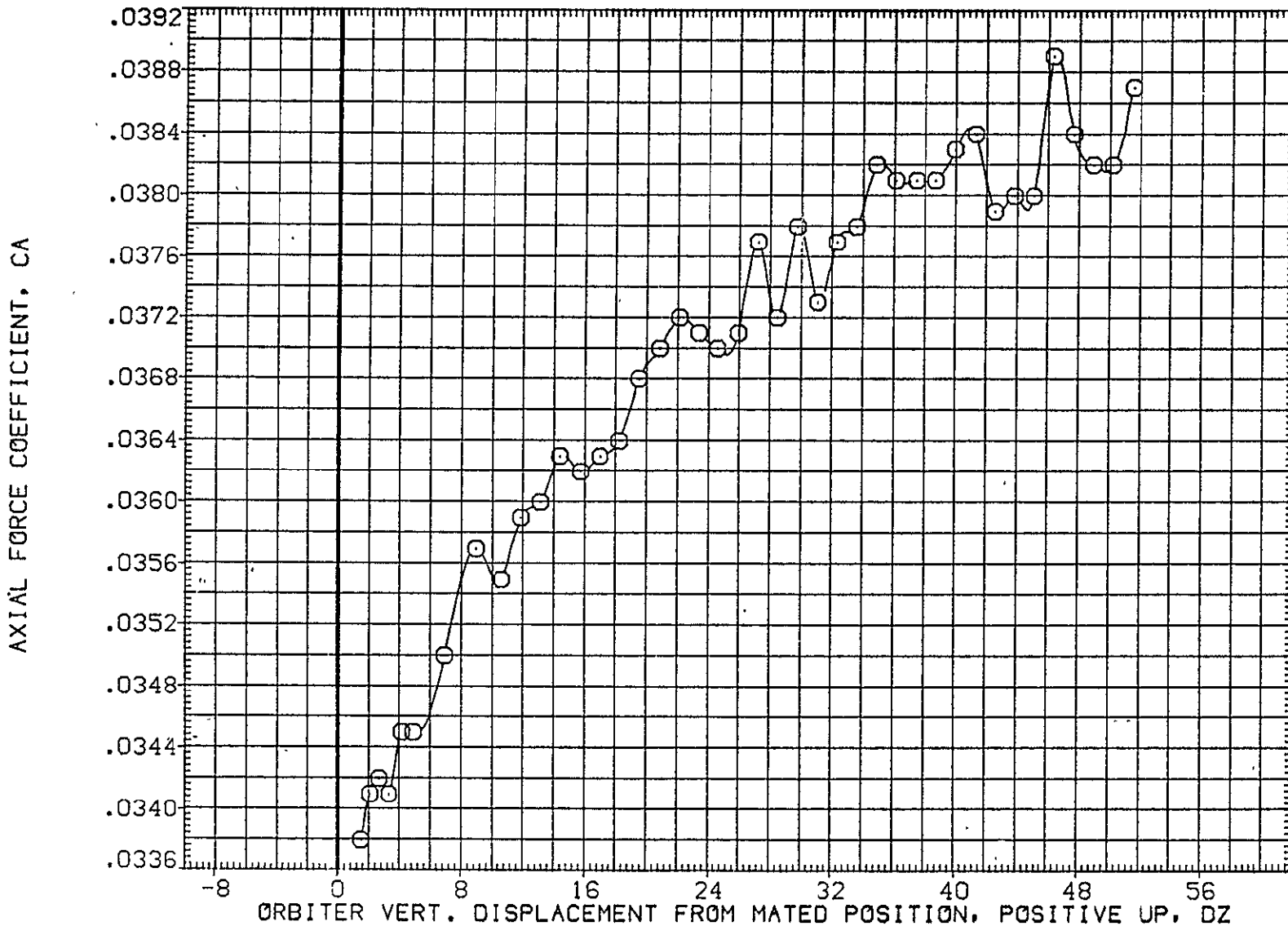


FIG. 72 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=-5, AFE081

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.592	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	-5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

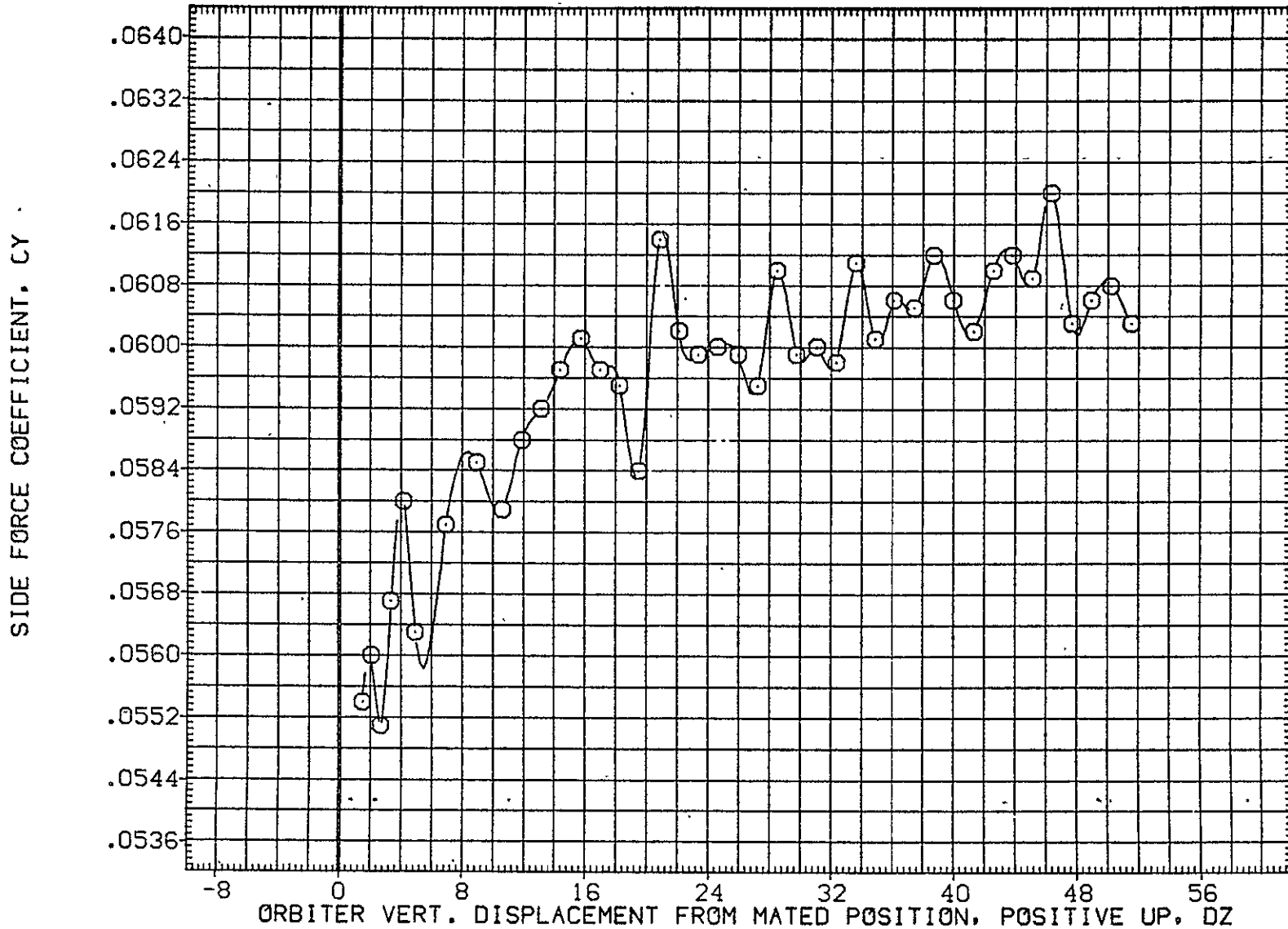


FIG. 72 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=-5, AFE081

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE081)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.592	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	-5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

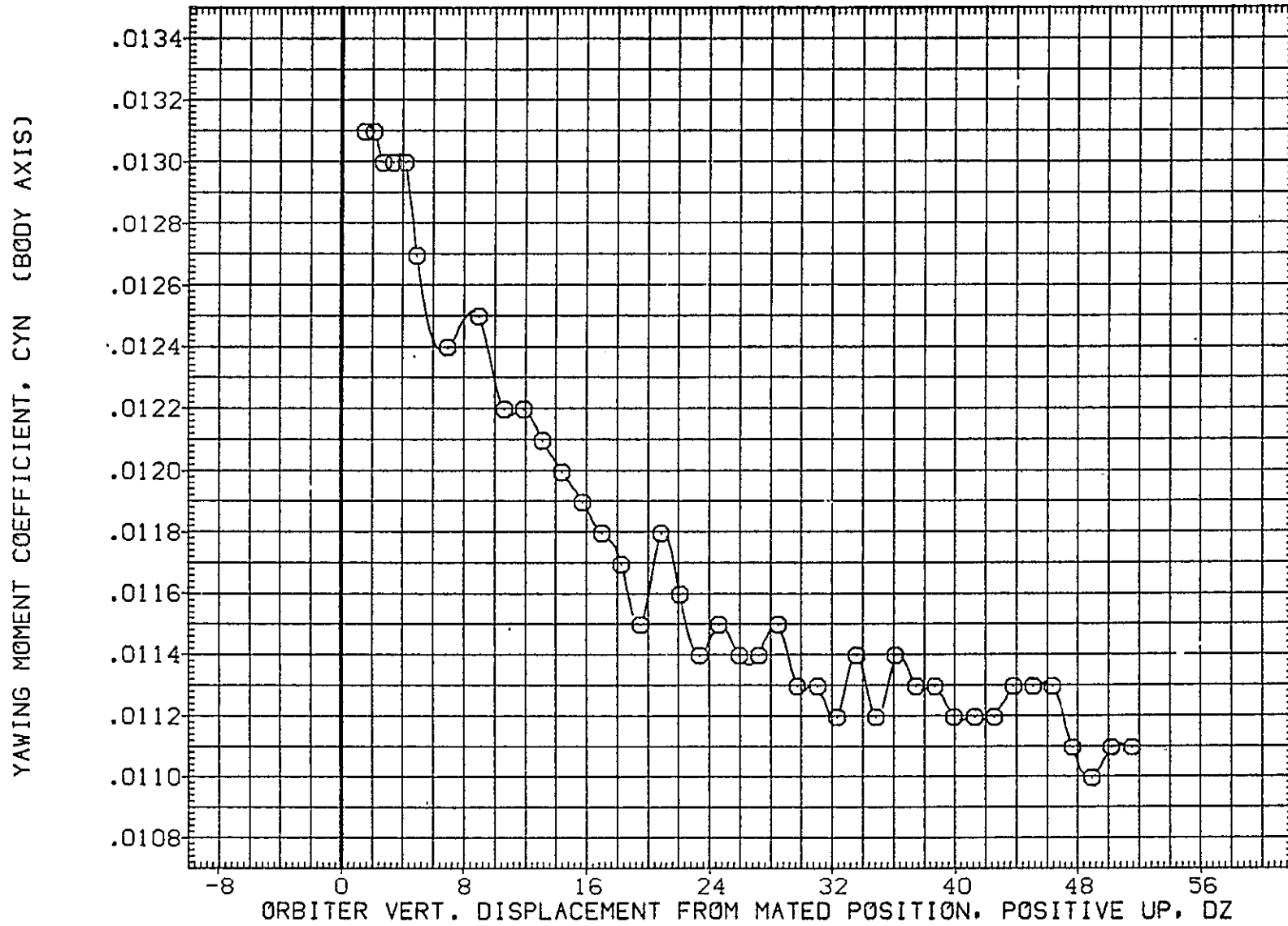


FIG. 72 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=-5, AFE081

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.592	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETA0	-5.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

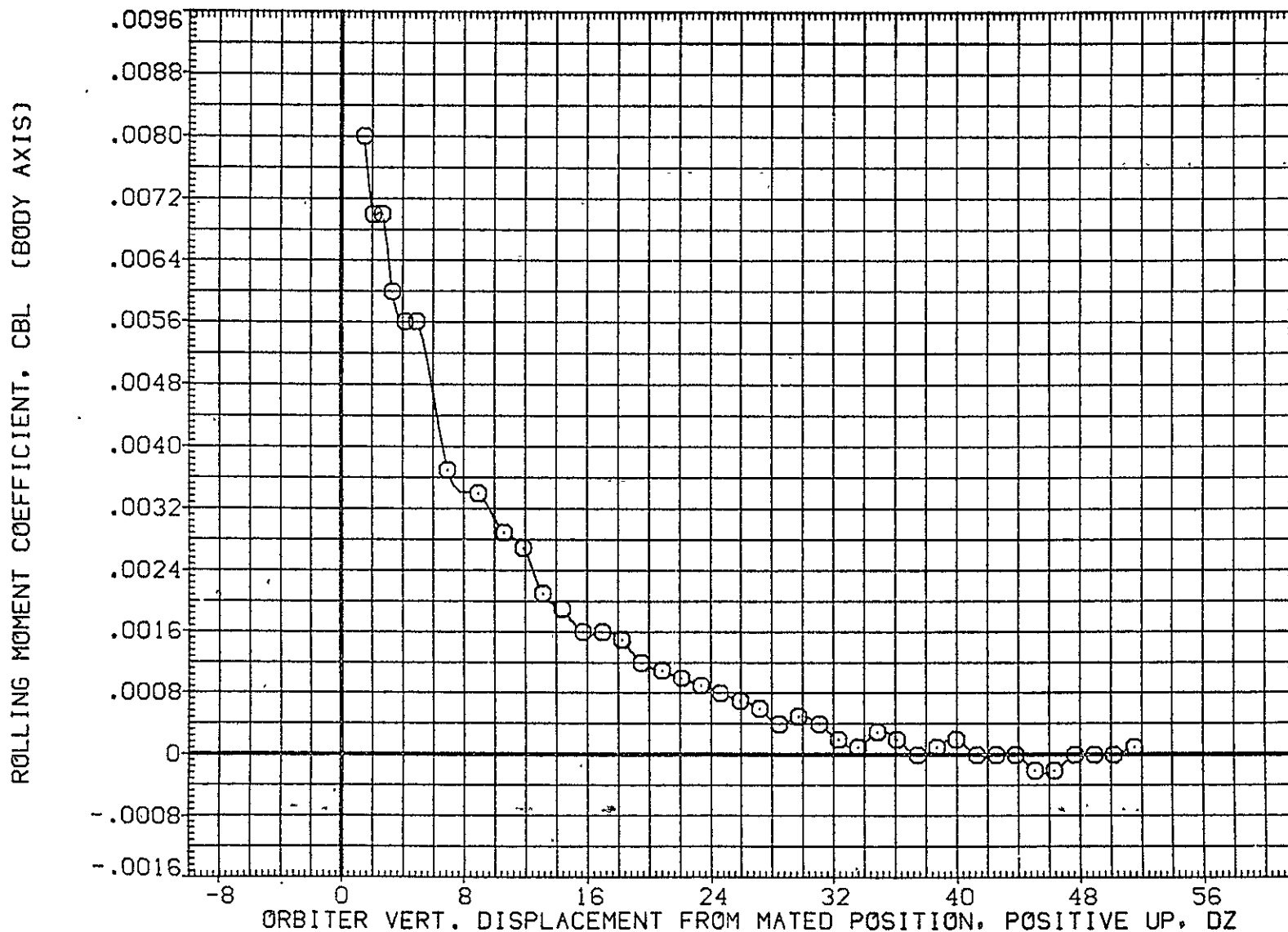


FIG. 72 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=-5, AFE081

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE081)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.592	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	-5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

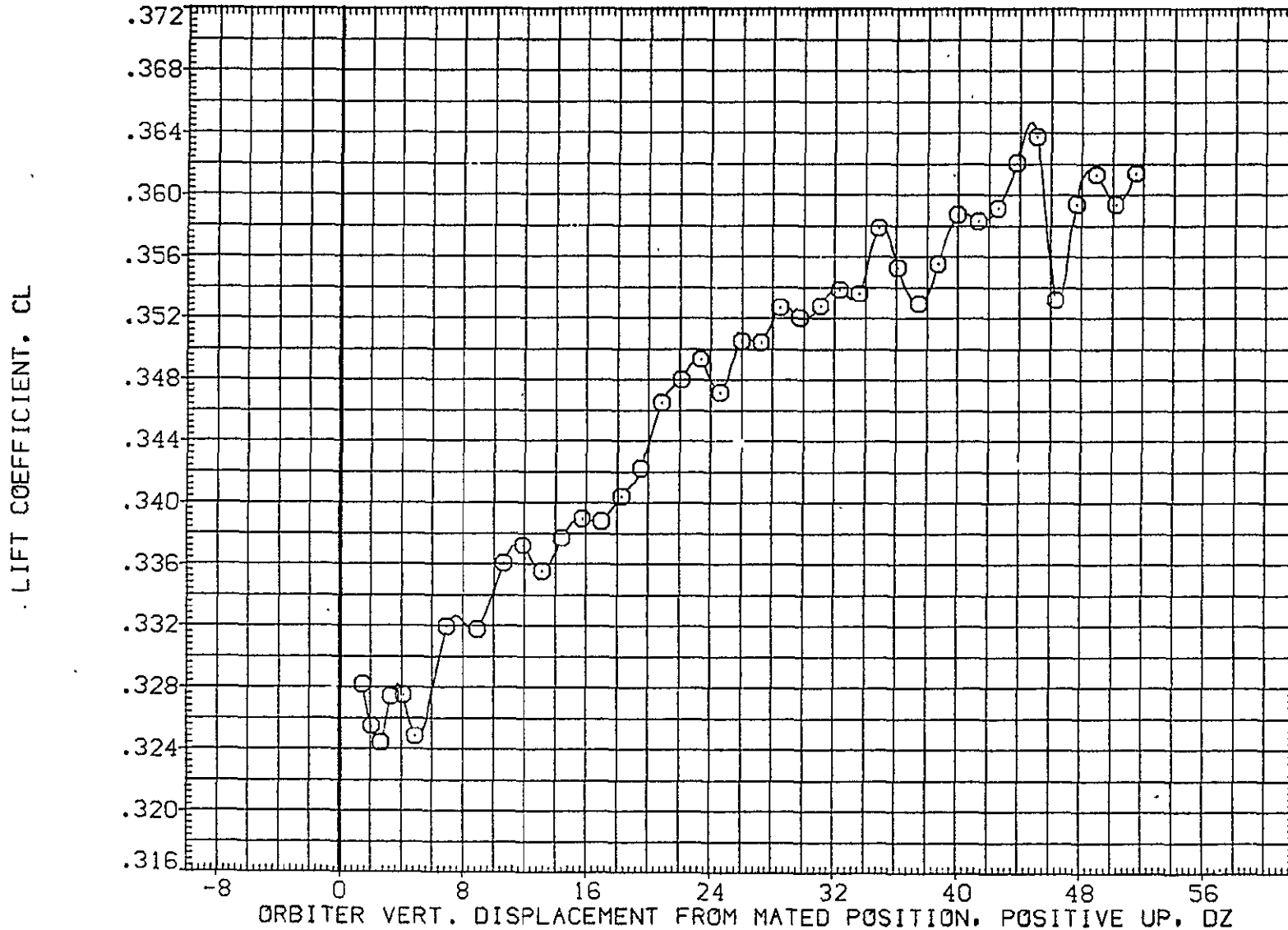


FIG. 72 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=-5, AFE081

SYMBOL
○

MACH
.592

PARAMETRIC VALUES			
ALPHAC	2.000	BETAC	-5.000
STAB	5.000	ELEVON	5.000
BDFLAP	.000	DX	.000
DY	.000	IORB	6.000
BETA0	-5.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

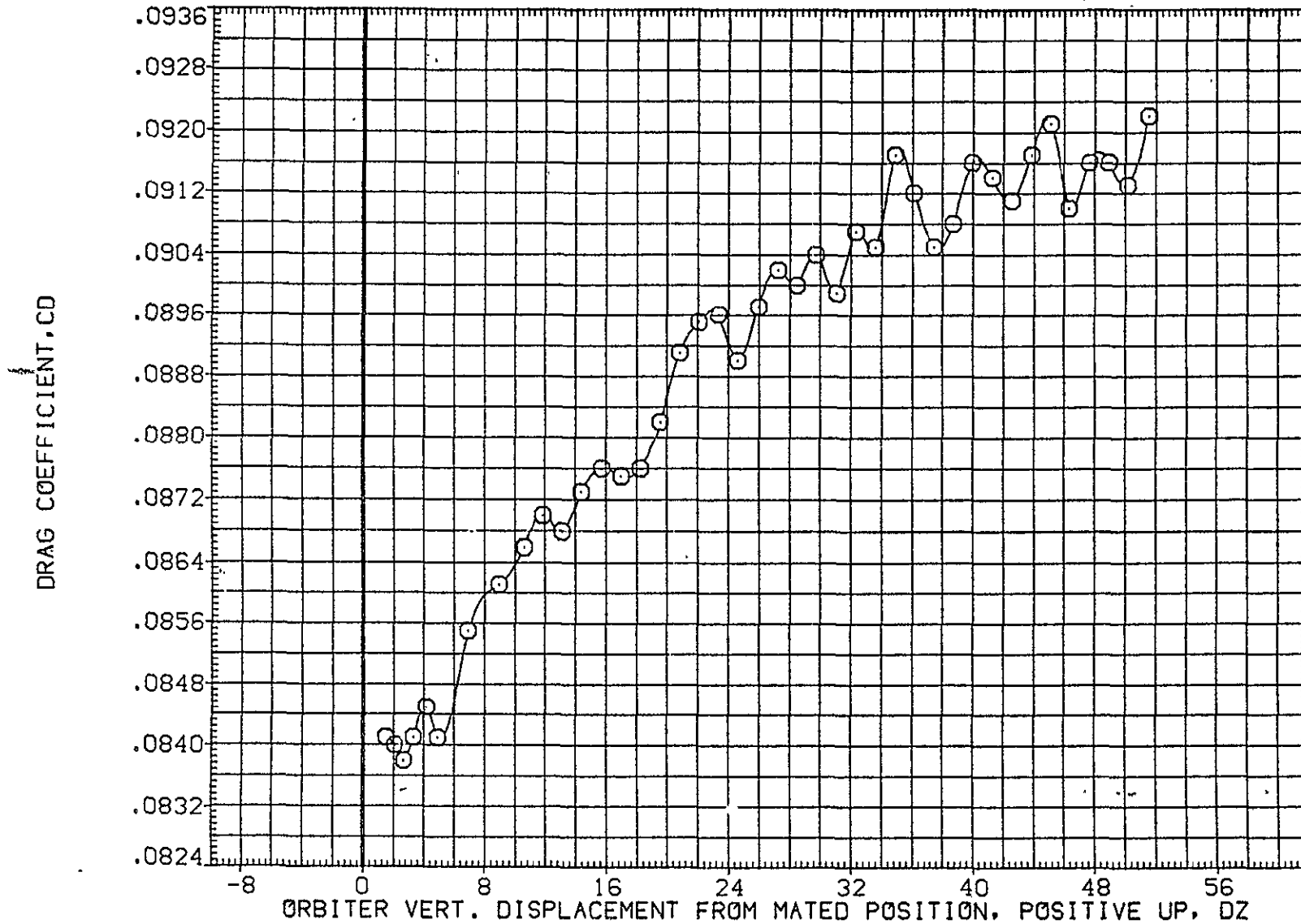


FIG. 72 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=-5, AFE081

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE082)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	-5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

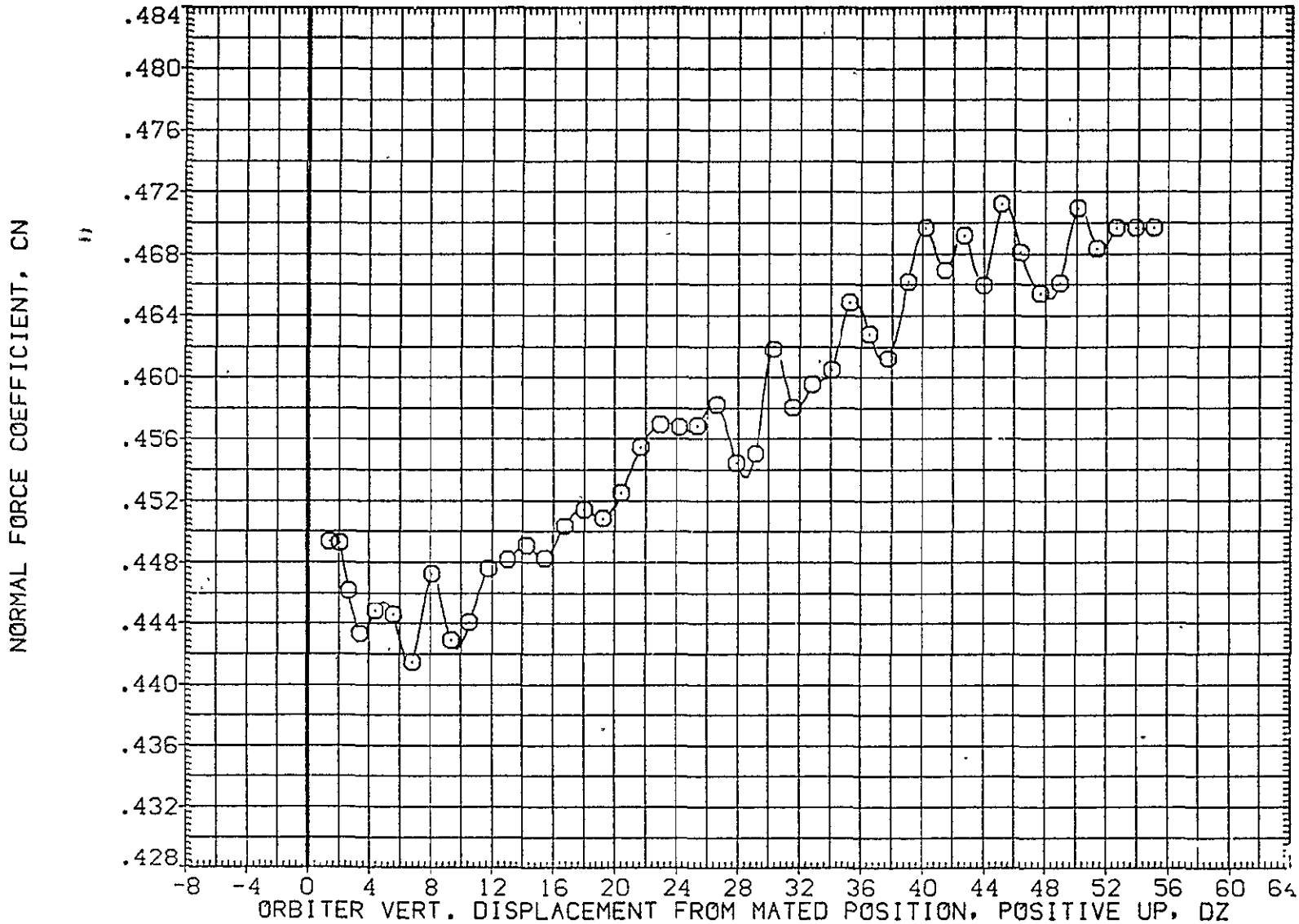


FIG. 73 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=-5, BETA0=-5, AFE082

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	-5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

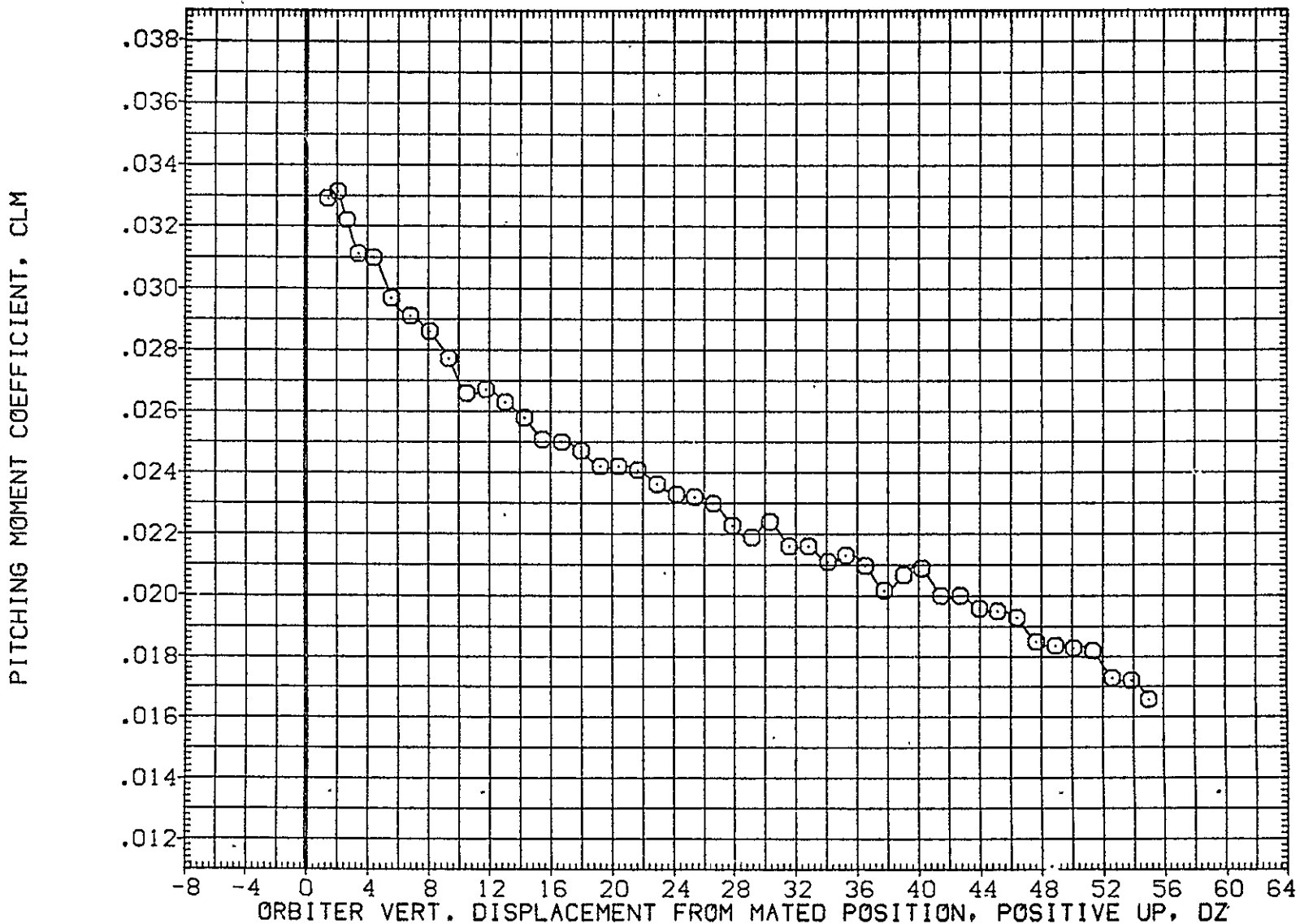


FIG. 73 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=-5, BETA0=-5, AFE082

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE082)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. XO
		BETA0	-5.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

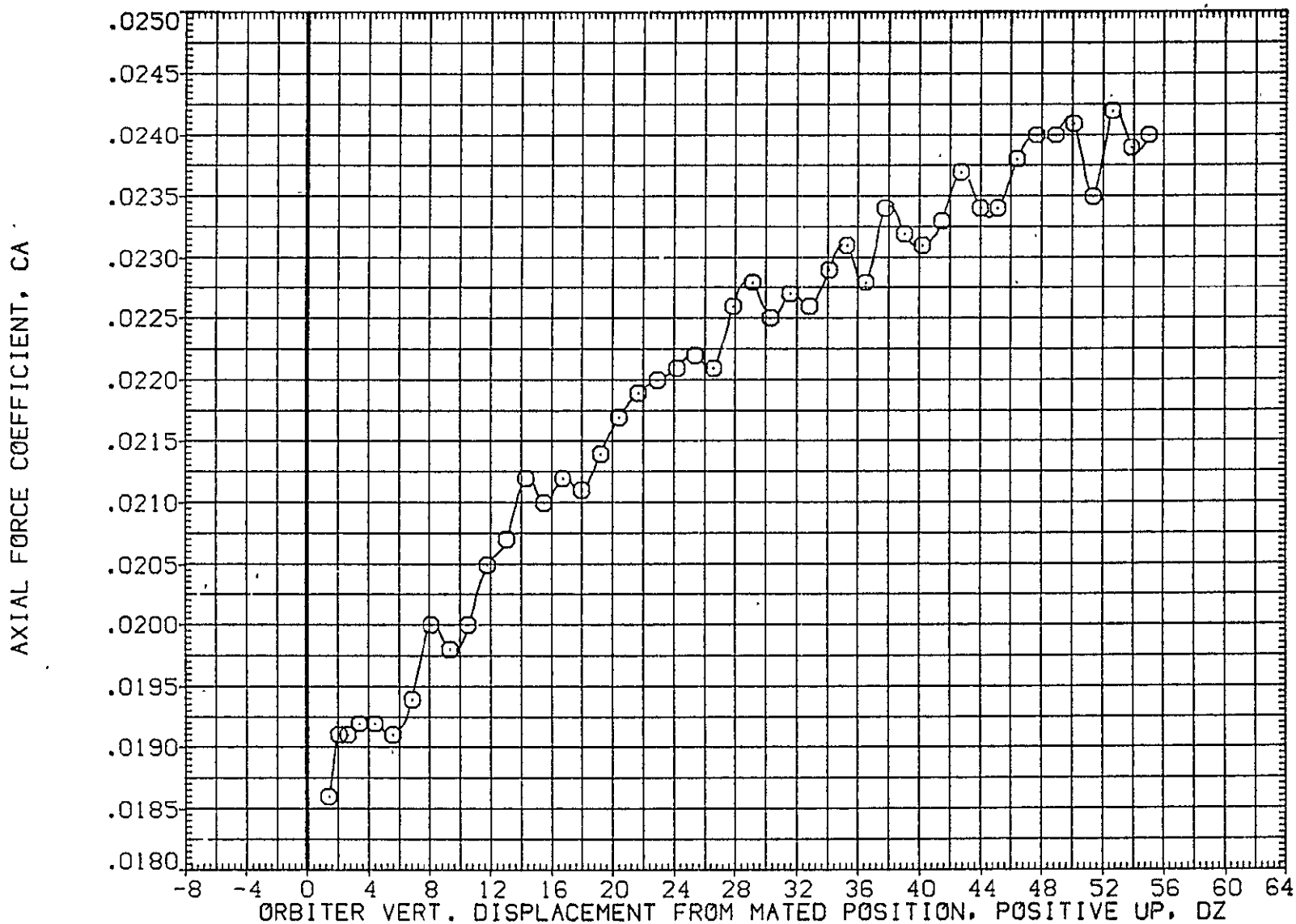


FIG. 73 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=-5, BETA0=-5, AFE082

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	-5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

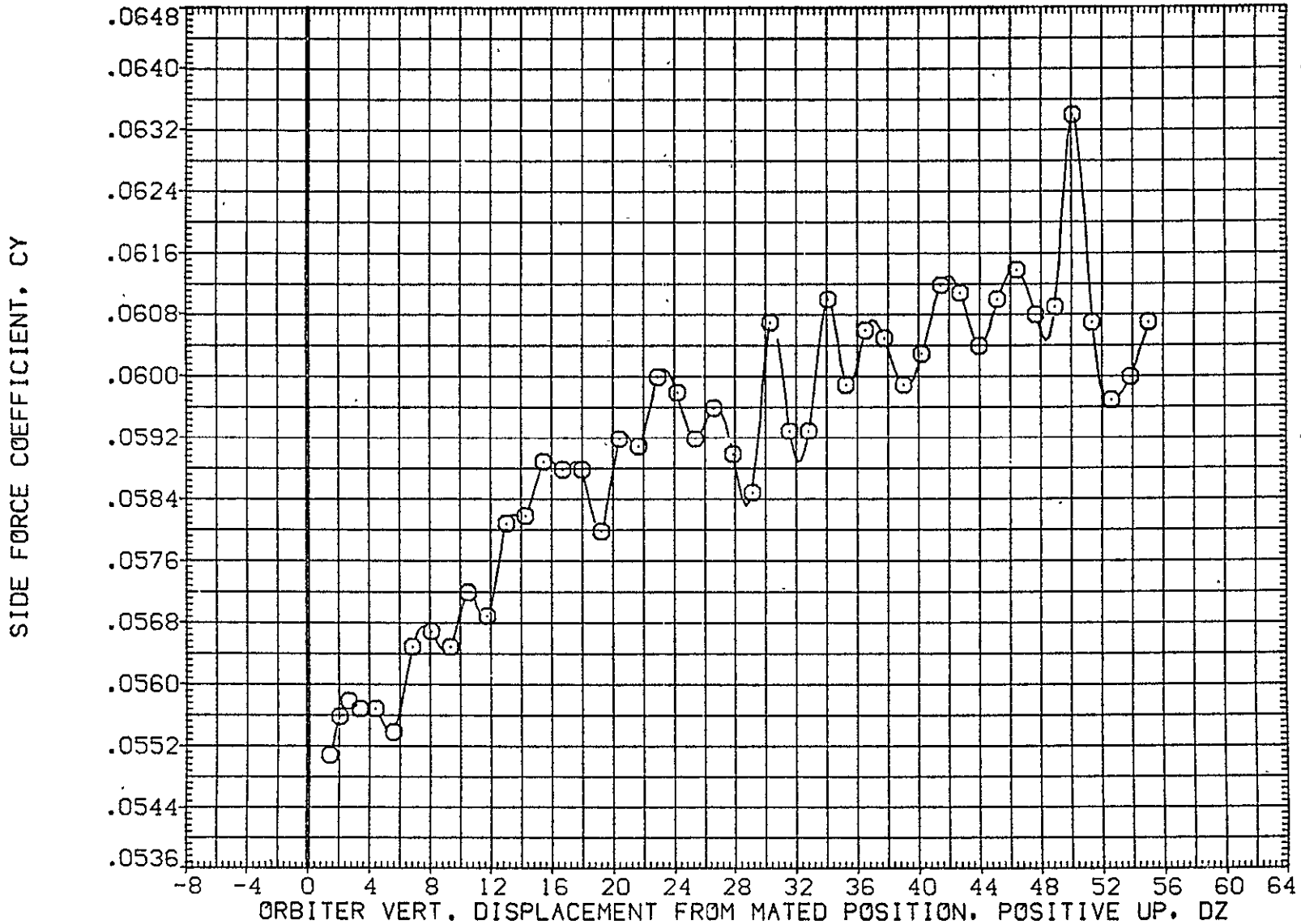


FIG. 73 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=-5, BETA0=-5, AFE082

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE082)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	-5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

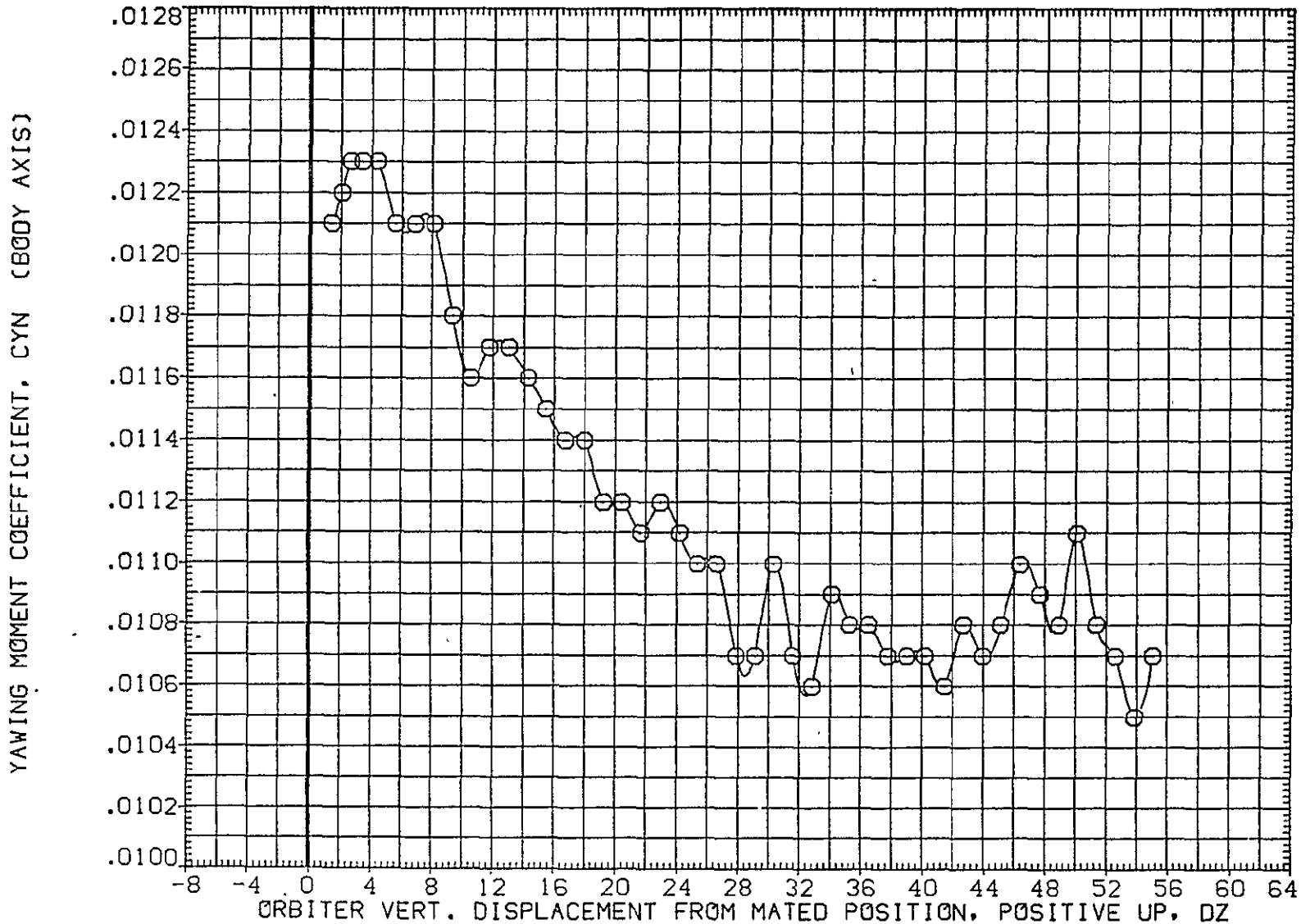


FIG. 73 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=-5, BETA0=-5, AFE082

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BOFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	-5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

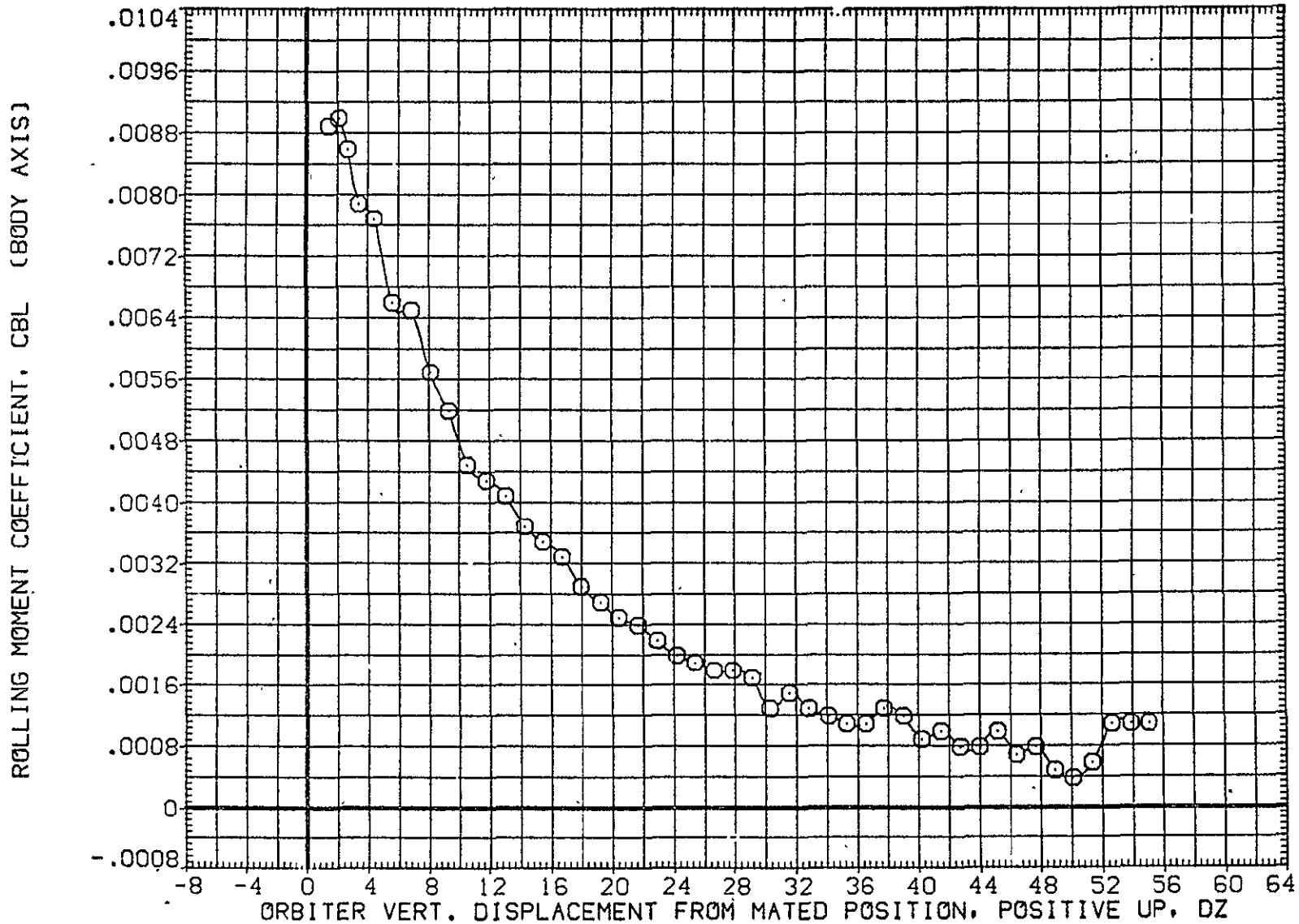


FIG. 73 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=-5, BETA0=-5, AFE082

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE082)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. XC
		BETA0	-5.000	RUDDER	.000	YMRP	.0000	IN. YC
						ZMRP	375.0000	IN. ZC
						SCALE	.0125	

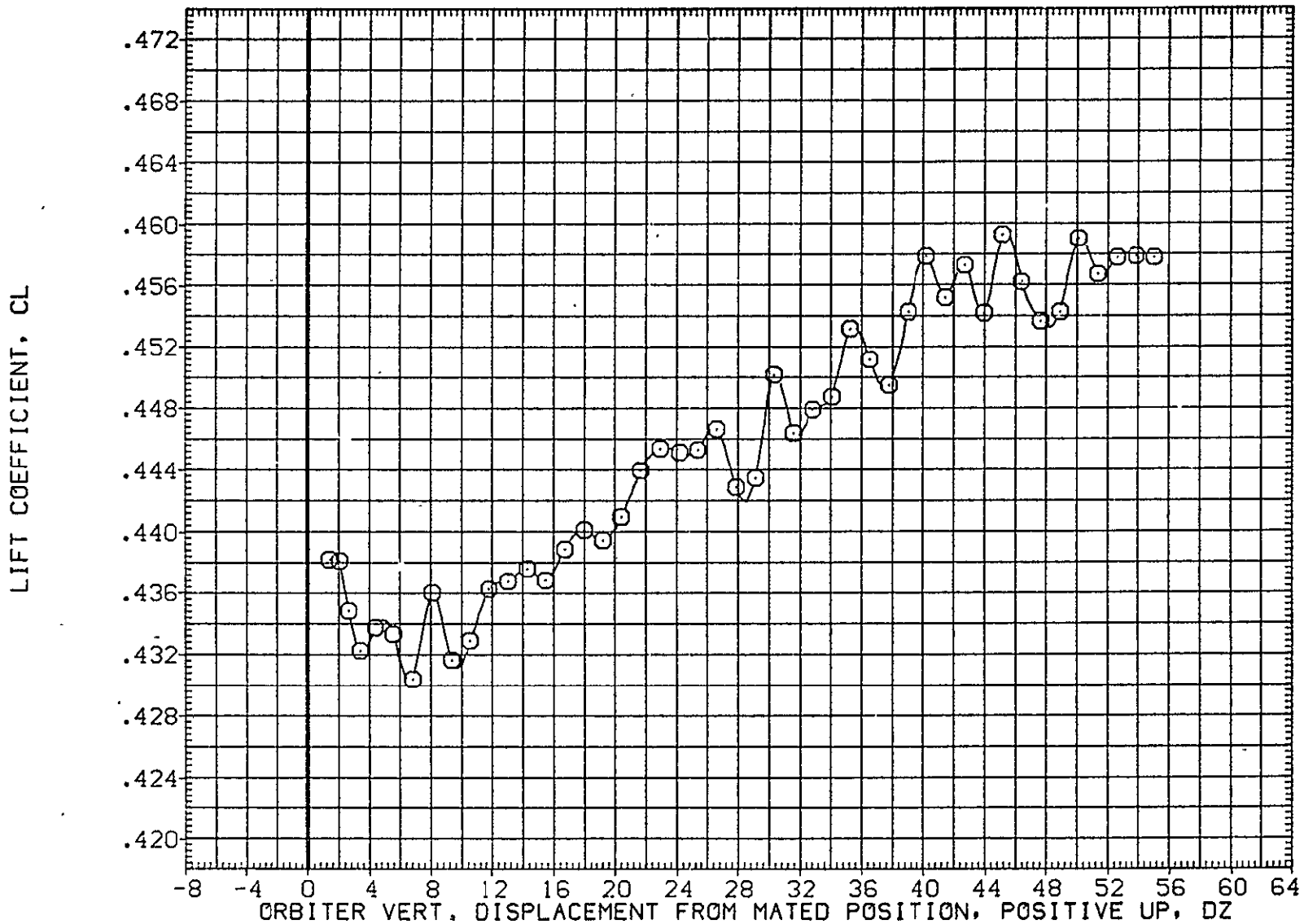


FIG. 73 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=-5, BETA0=-5, AFE082

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	-5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

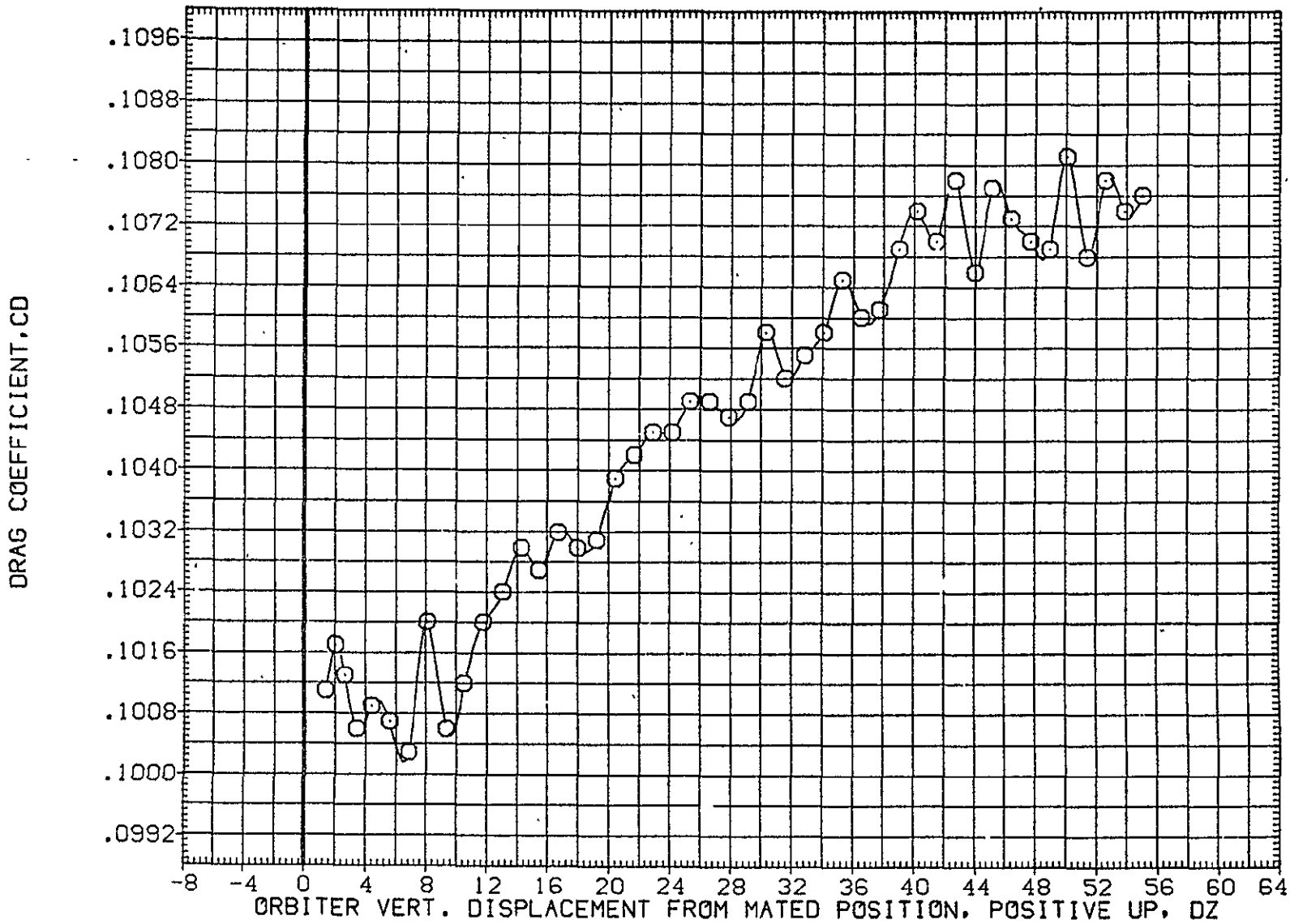


FIG. 73 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=8, BETAC=-5, BETA0=-5, AFE082

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE083)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.596	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SG.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6900	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. XC
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YC
						ZMRP	375.0000	IN. ZC
						SCALE	.0125	

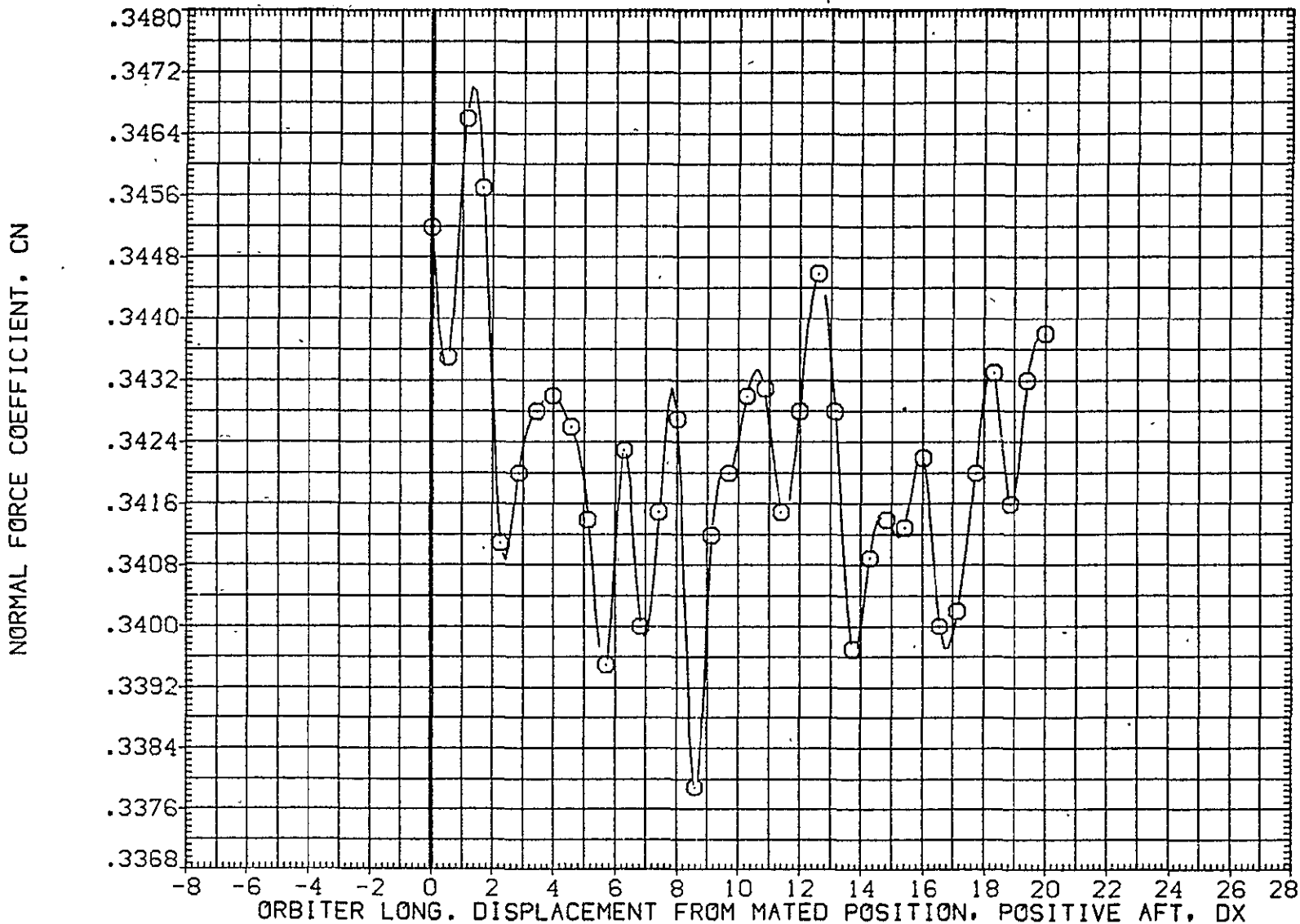


FIG. 74 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE083

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.596	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

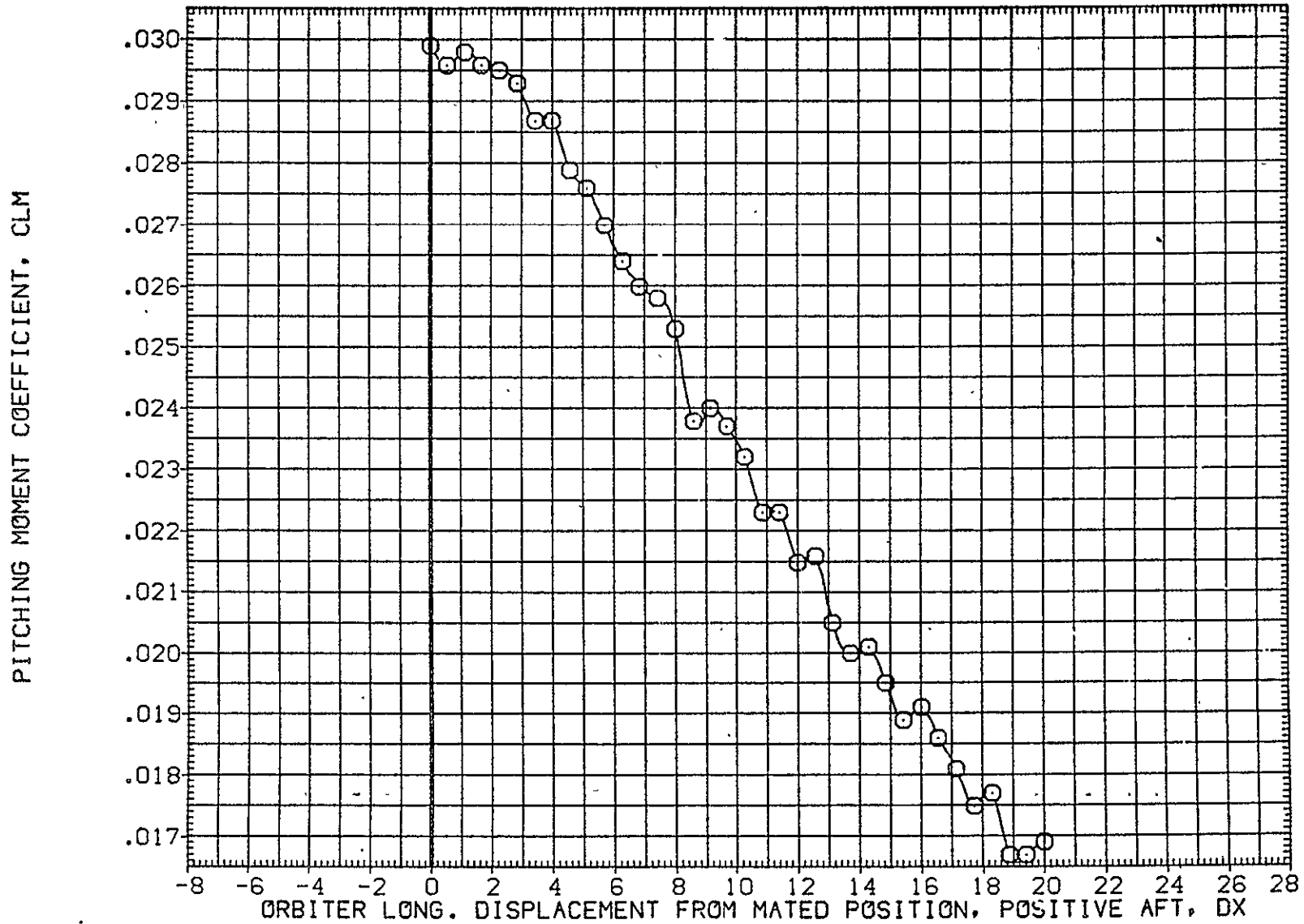


FIG. 74 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE083

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE083)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.596	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

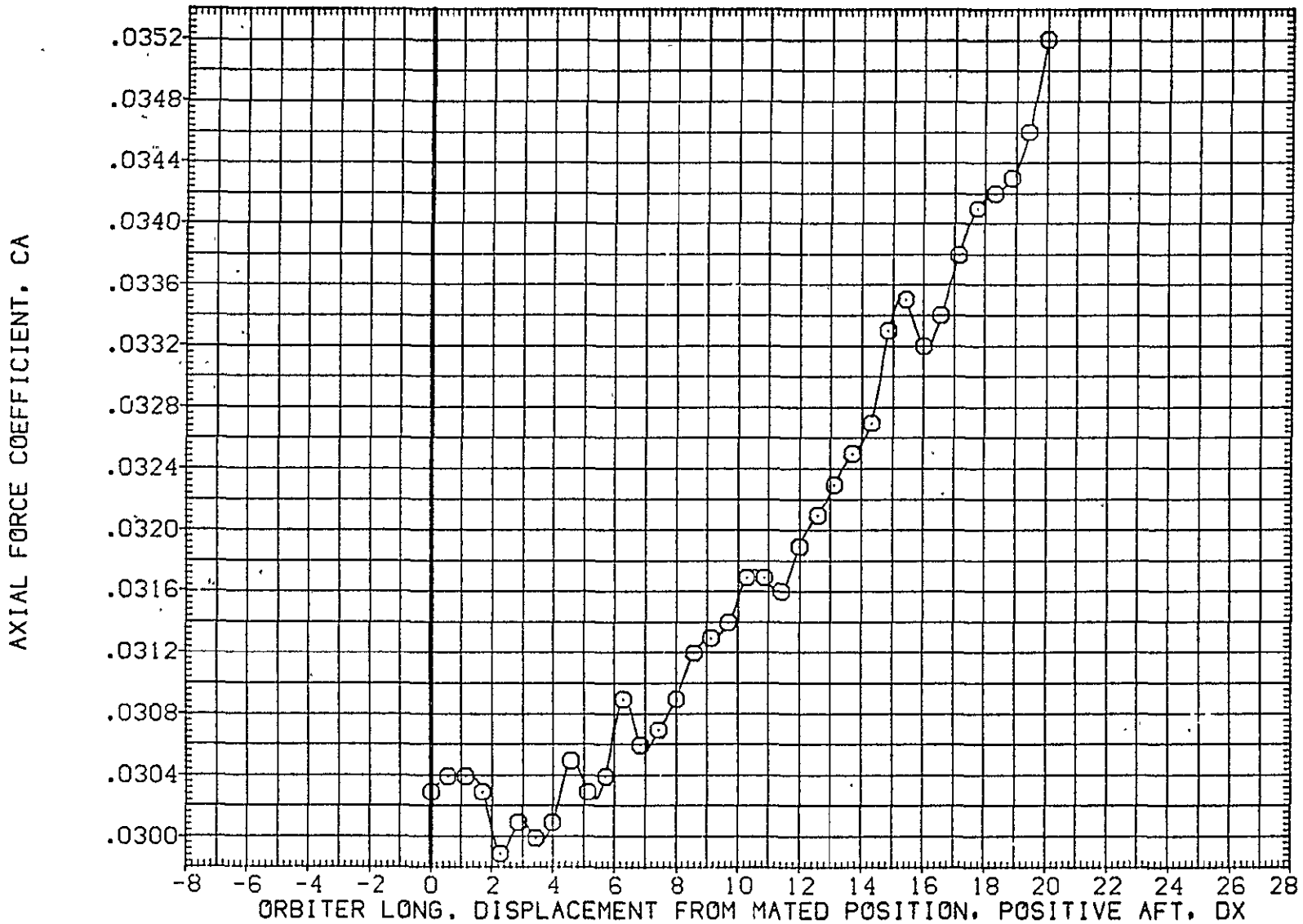


FIG. 74 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE083

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.596	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

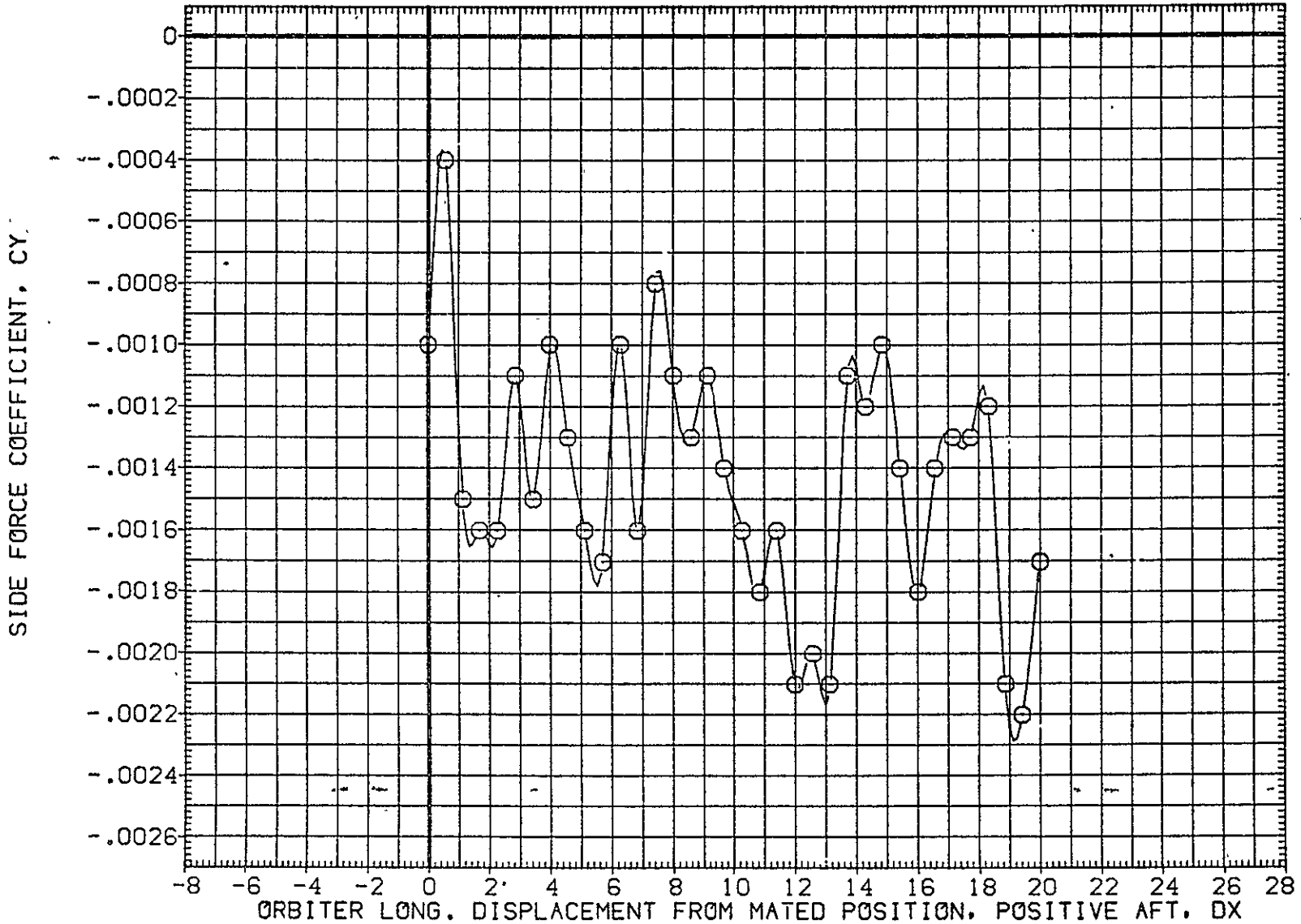


FIG. 74 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE083

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE083)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.596	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SG.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

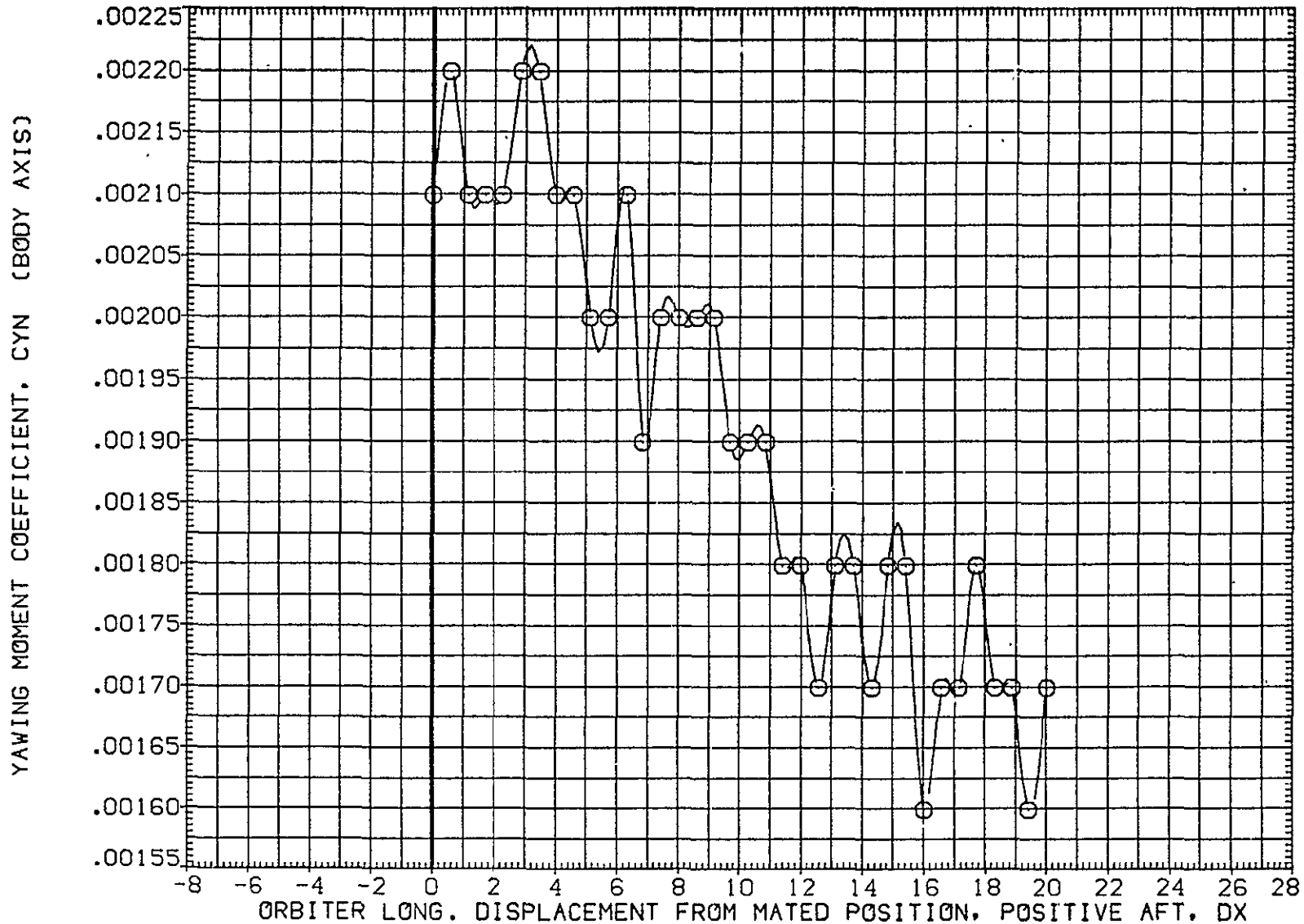


FIG. 74 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE083

SYMBOL	MACH	PARAMETRIC VALUES			
○	.596	ALPHAC	2.000	BETAC	-5.000
		STAB	5.000	ELEVON	5.000
		BDFLAP	.000	OY	.000
		OZ	.000	IORB	6.000
		BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

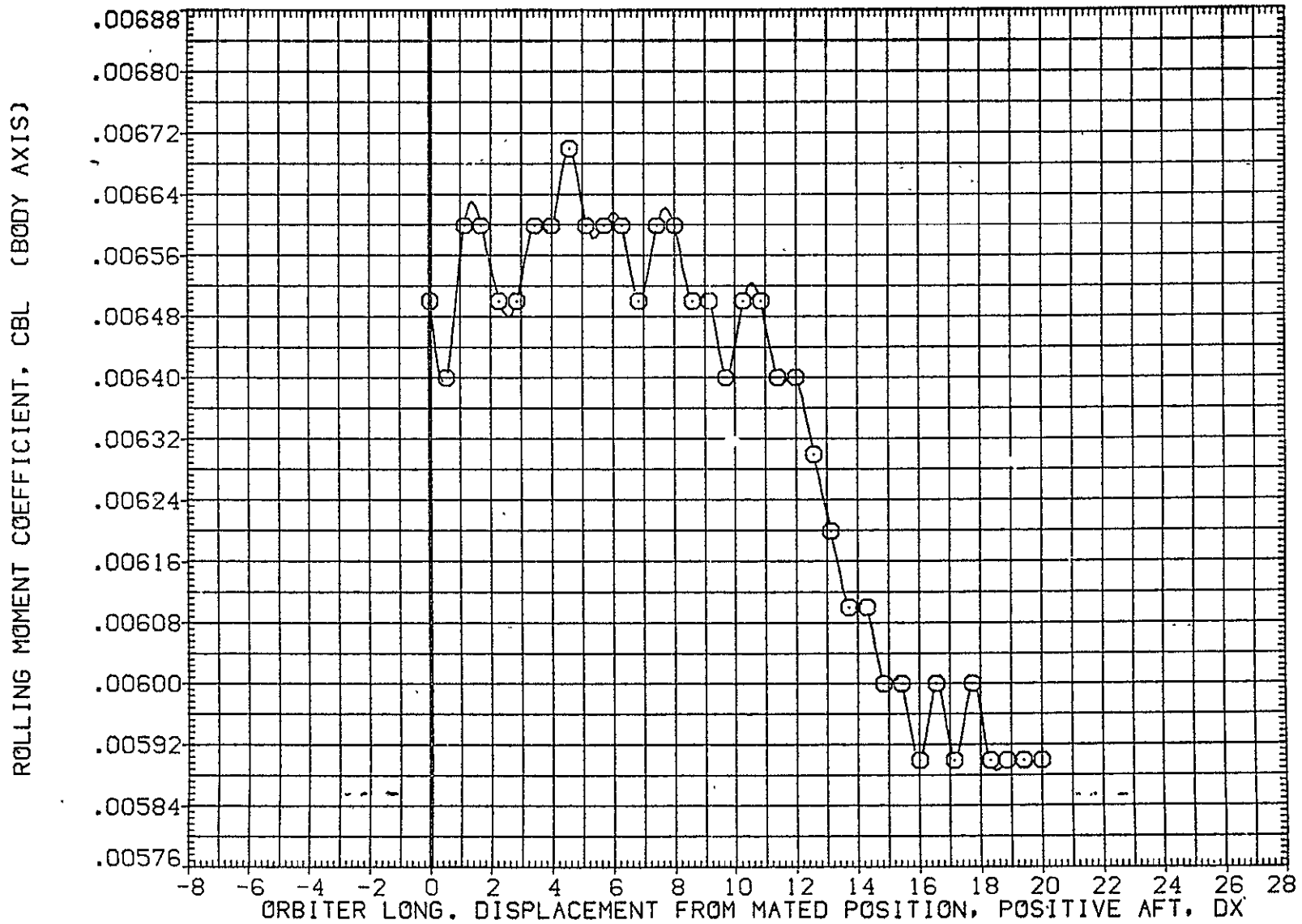


FIG. 74 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE083

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE083)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.596	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

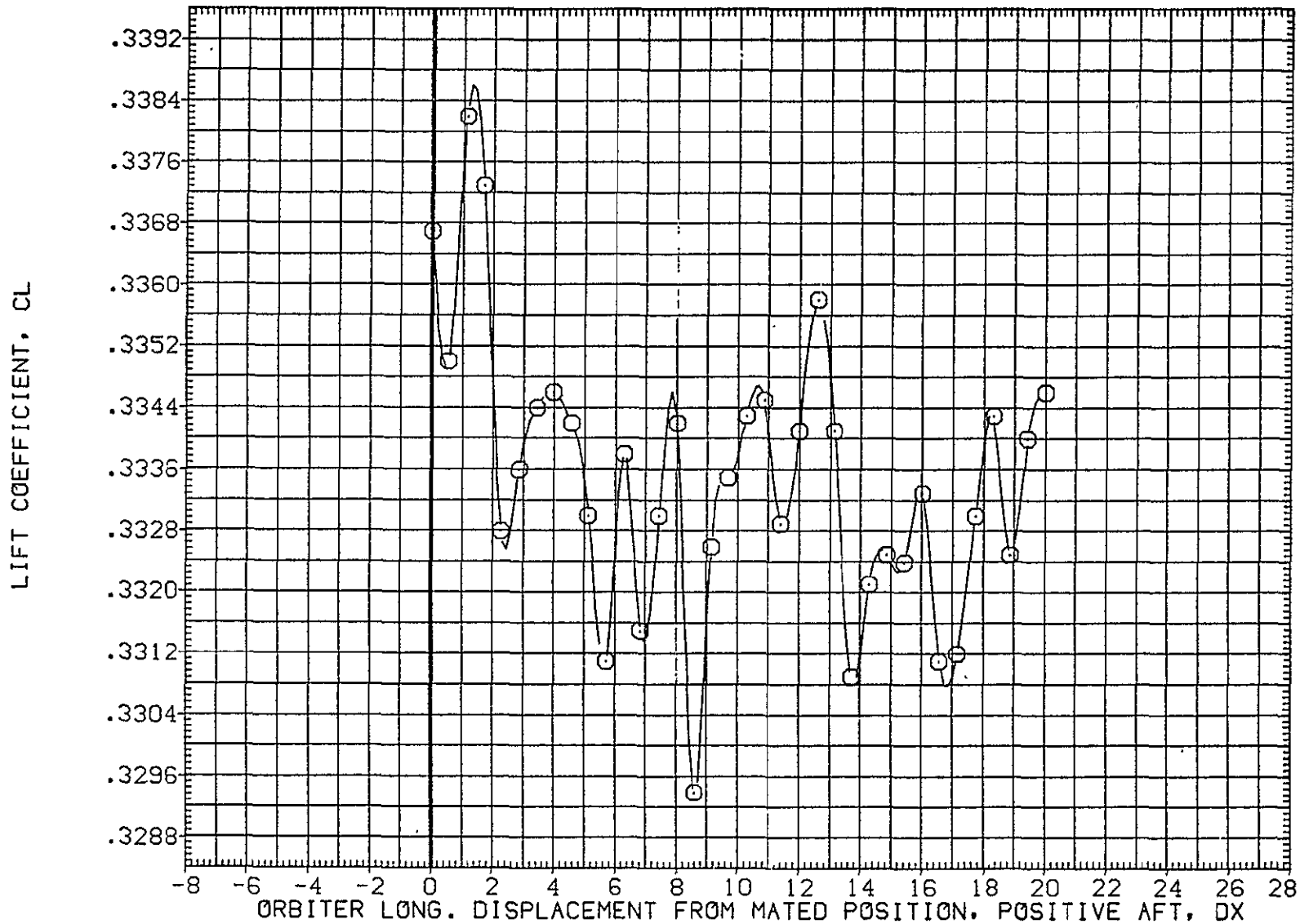


FIG. 74 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE083

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION			
		ALPHAC	BETAC	ELEVON	DY	SREF	LREF	BREF	SO.FT.
○	.596	2.000	-5.000	5.000	.000	2690.0000	474.8100	936.6800	IN.
		.000	.000	.000	.000	1109.0000	.0000	.0000	IN. X0
		.000	6.000	.000	.000	375.0000	.0125		IN. Y0
		.000	.000	.000	.000				IN. Z0

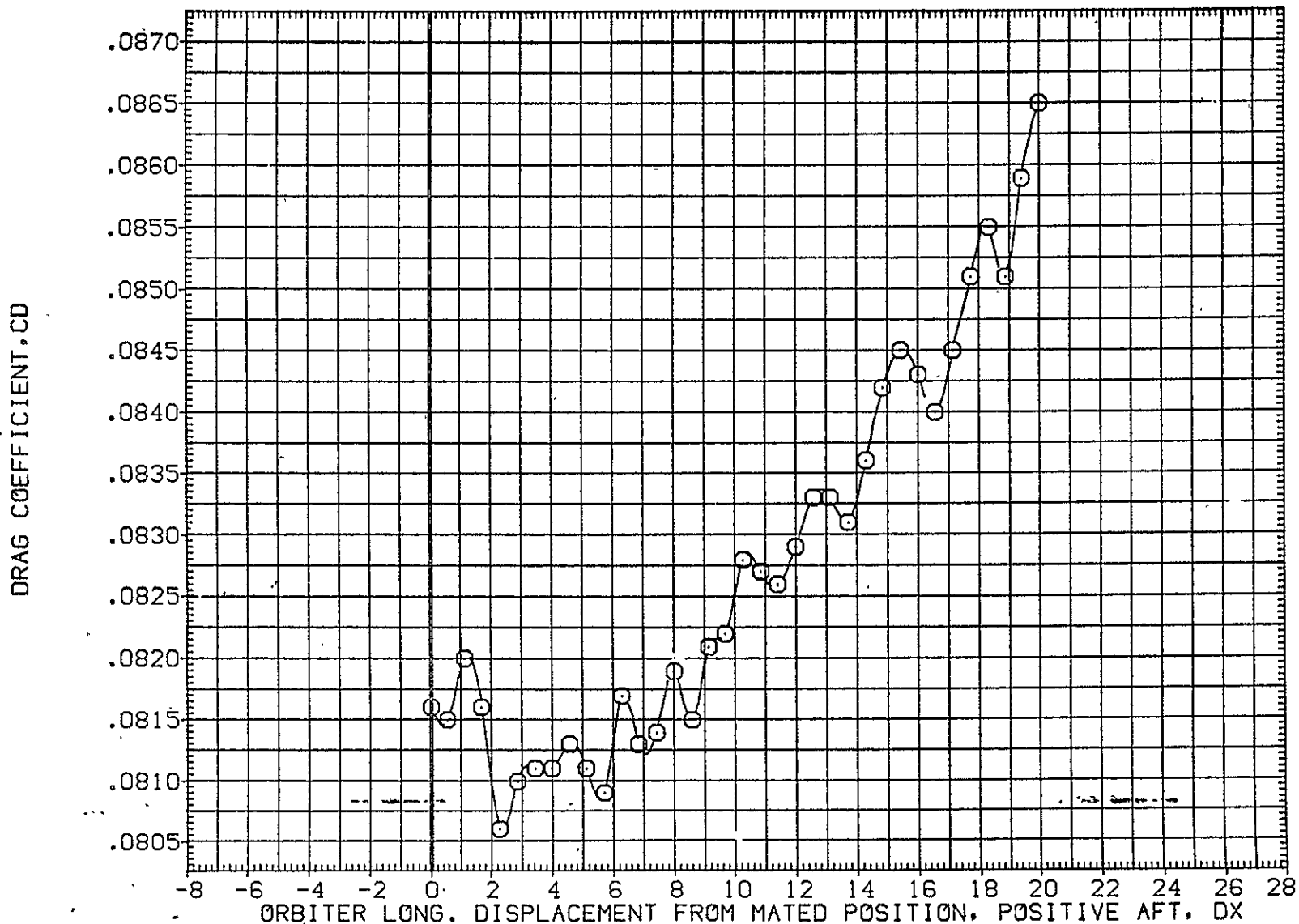


FIG. 74 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE083

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE084)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

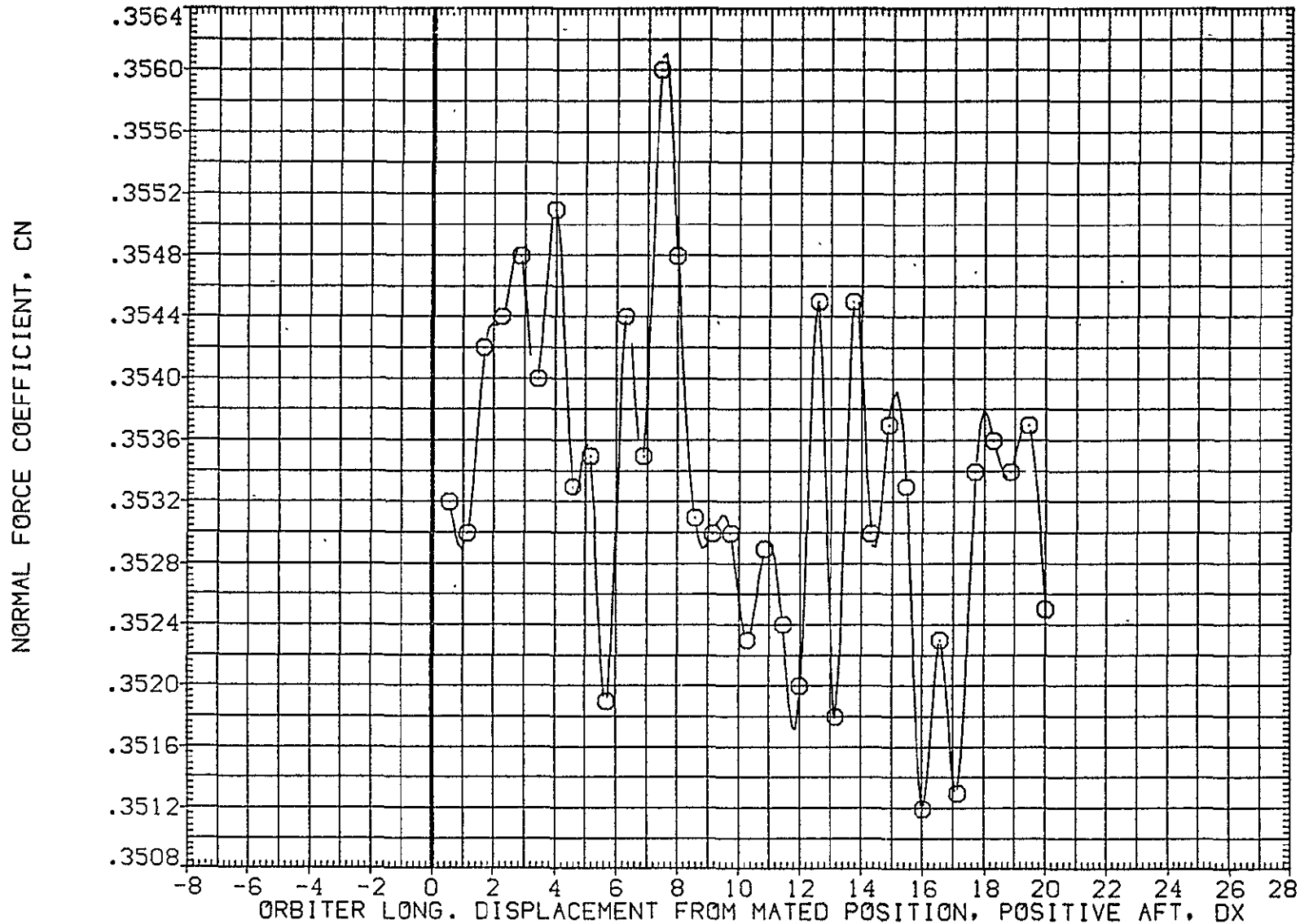


FIG. 75 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE084

SYMBOL
○

MACH
.599

PARAMETRIC VALUES	
ALPHAC	2.000
BETAC	-5.000
STAB	5.000
ELEVON	5.000
BDFLAP	.000
DY	.000
DZ	15.000
IORB	6.000
BETA0	.000
RUDDER	.000

REFERENCE INFORMATION	
SREF	2690.0000
SO.FT.	
LREF	474.8100
IN.	
BREF	936.6800
IN.	
XMRP	1109.0000
IN. X0	
YMRP	.0000
IN. Y0	
ZMRP	375.0000
IN. Z0	
SCALE	.0125

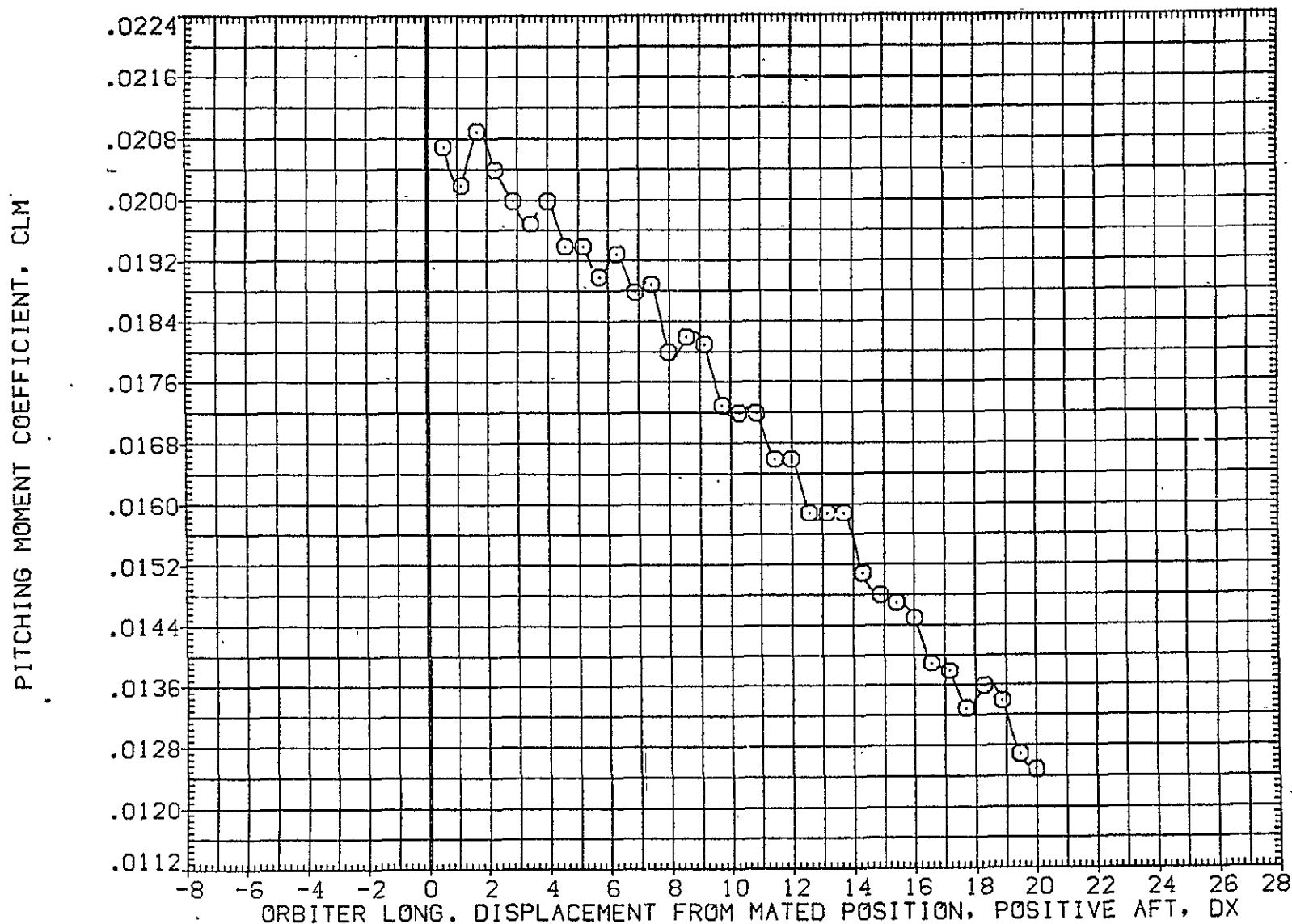


FIG. 75 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE084

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE084)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

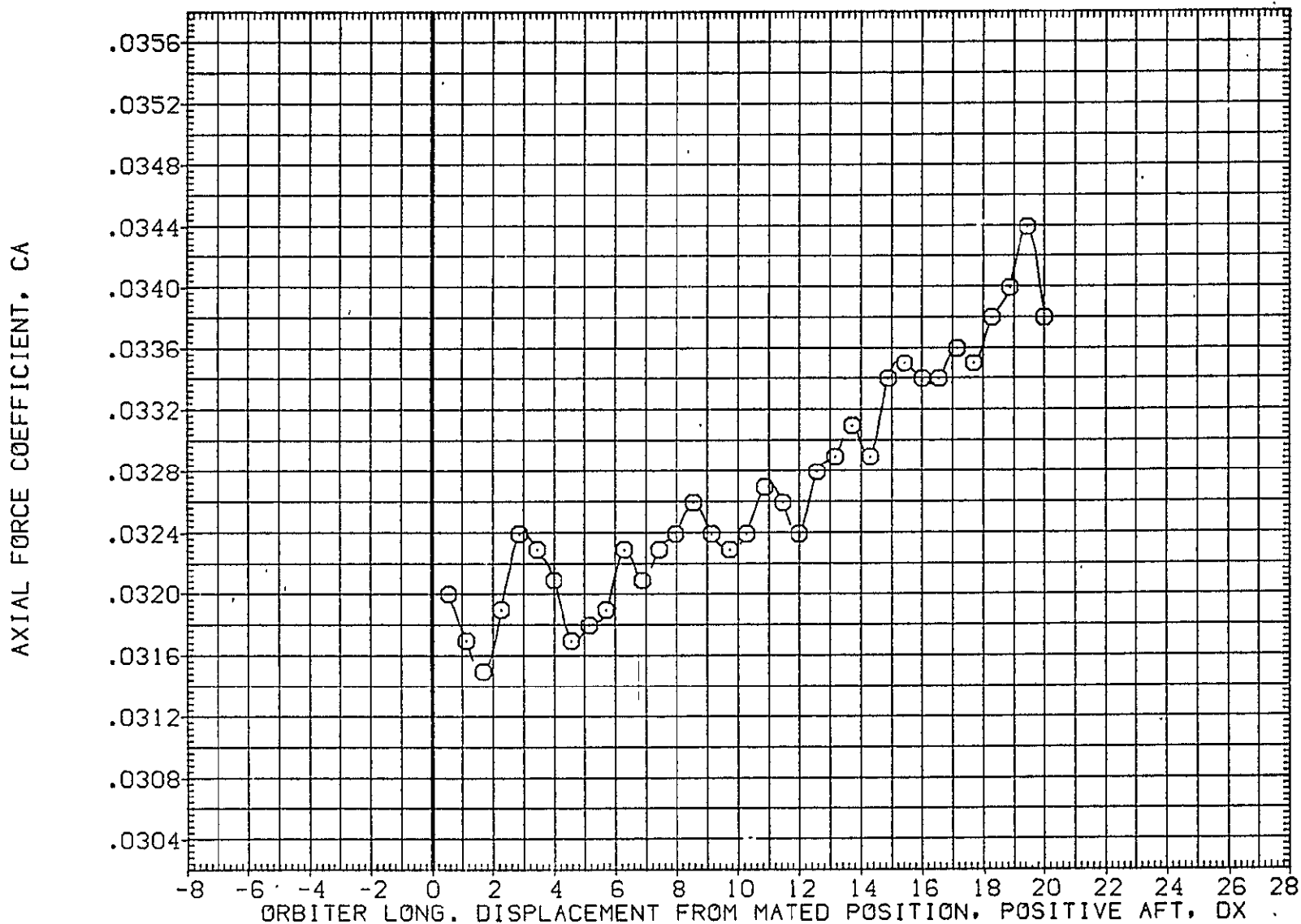


FIG. 75 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE084

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DY	SREF	SO.FT.	
○	.599	2.000	-5.000	5.000	.000	2690.0000	IN.	
		5.000	5.000	.000	.000	474.8100	IN.	
		.000	.000	.000	.000	936.6800	IN.	
		15.000	6.000	.000	.000	1109.0000	IN. X0	
		.000	.000	.000	.000	YMRP	IN. Y0	
						ZMRP	IN. Z0	
						SCALE	.0125	

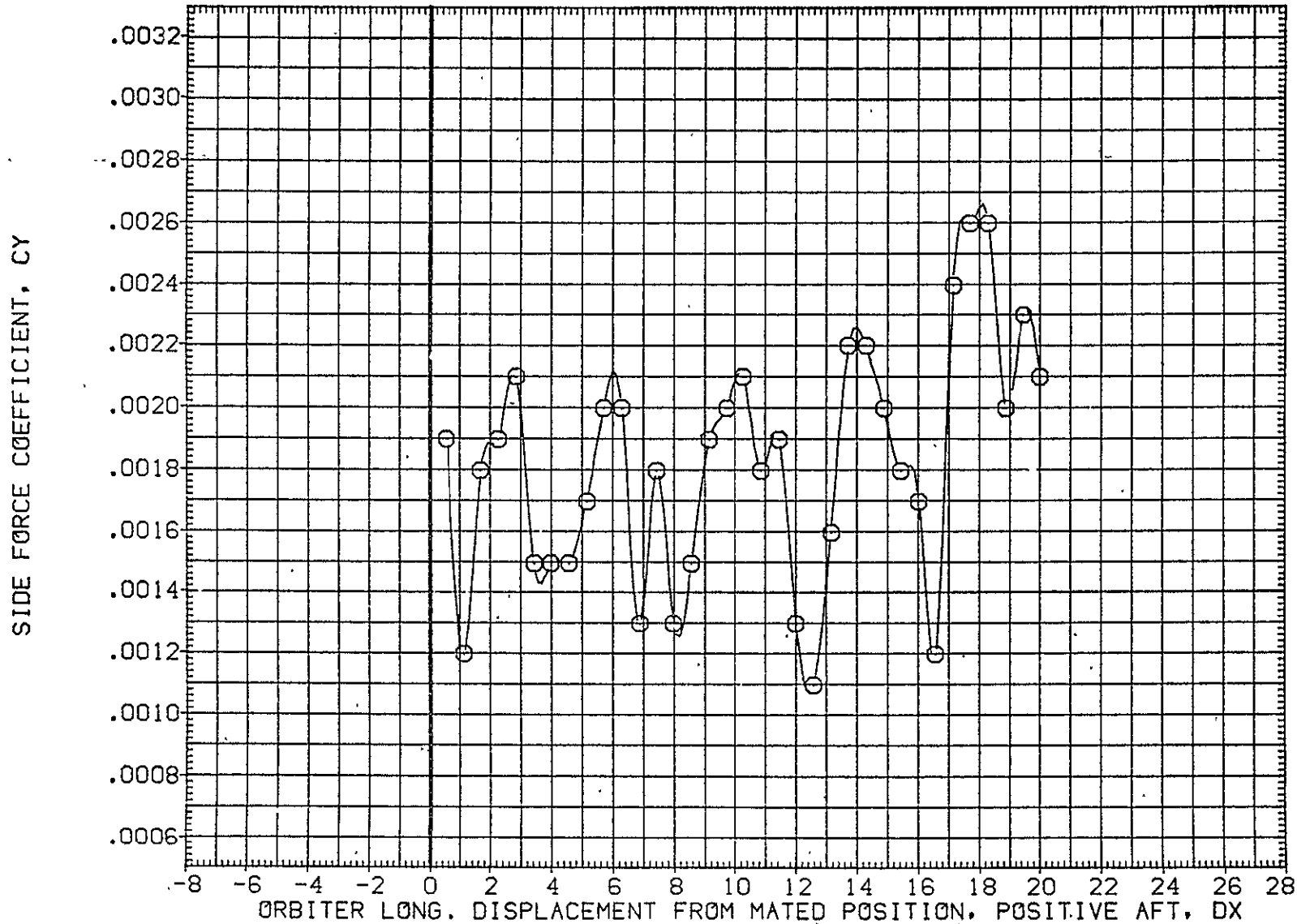


FIG. 75 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE084

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE084)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	.936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

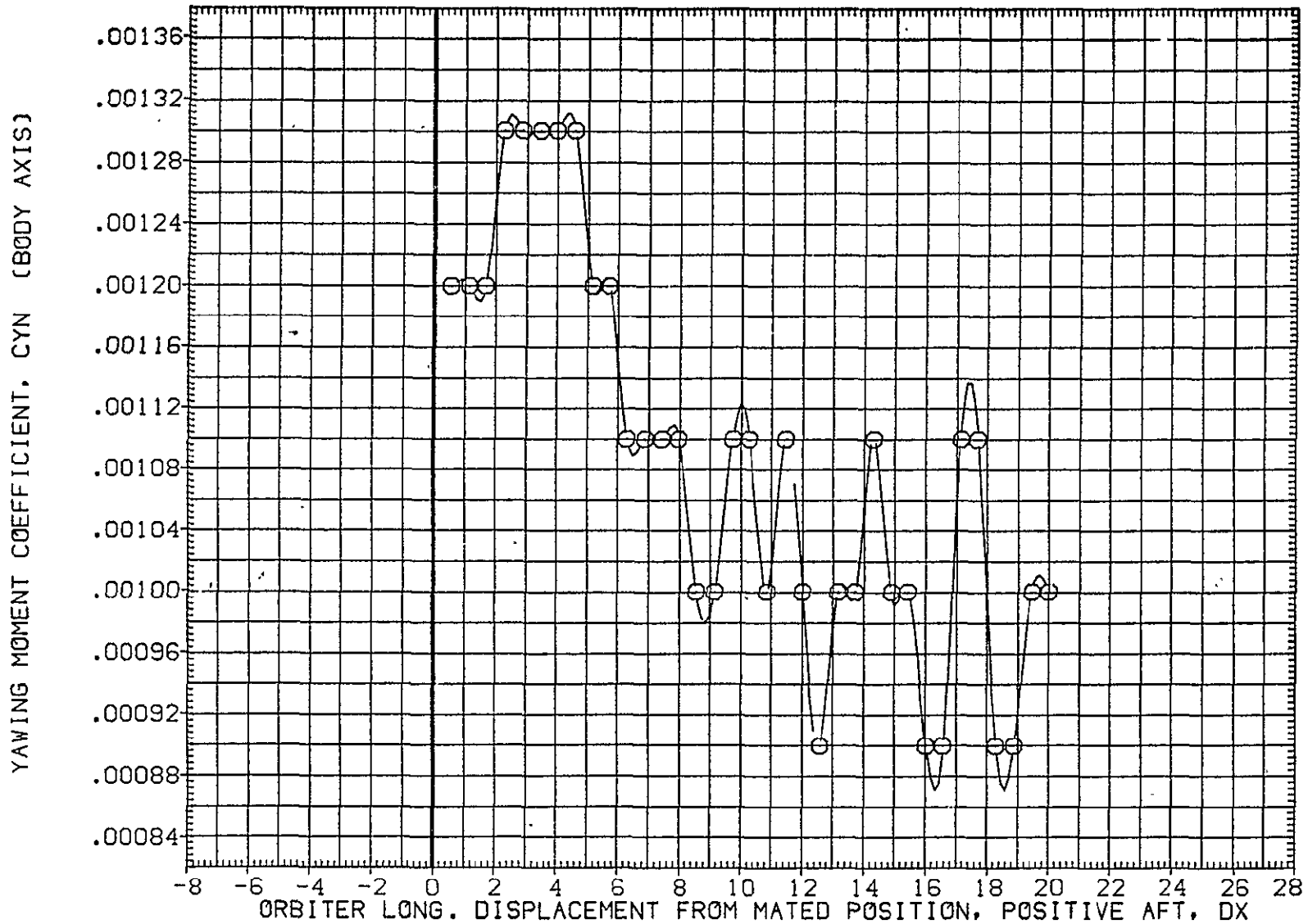


FIG. 75 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE084

SYMBOL	MACH	PARAMETRIC VALUES					REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	50.FT.	
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.	
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.	
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. X0	
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0	
						ZMRP	375.0000	IN. Z0	
						SCALE	.0125		

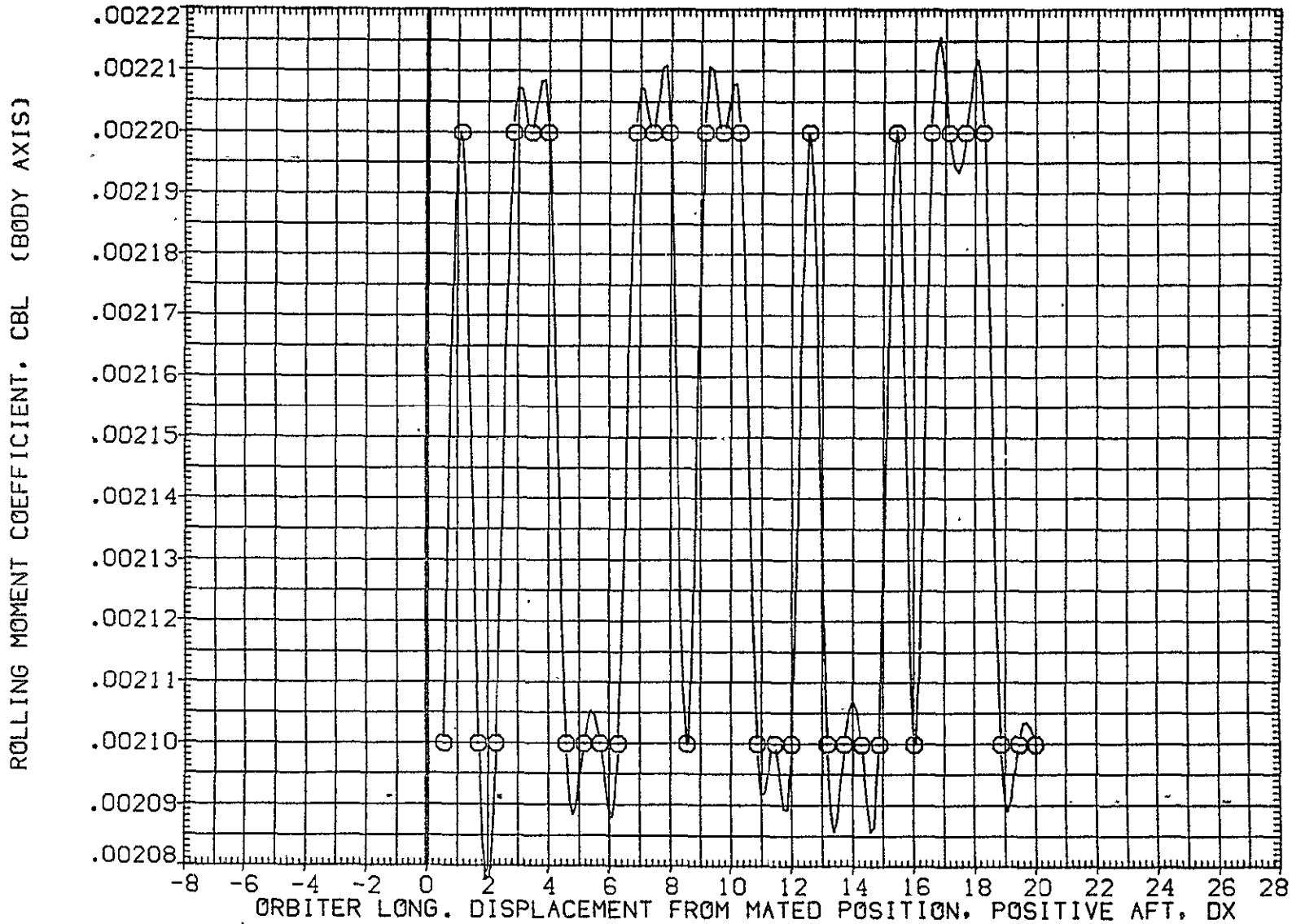


FIG. 75 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE084

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE084)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

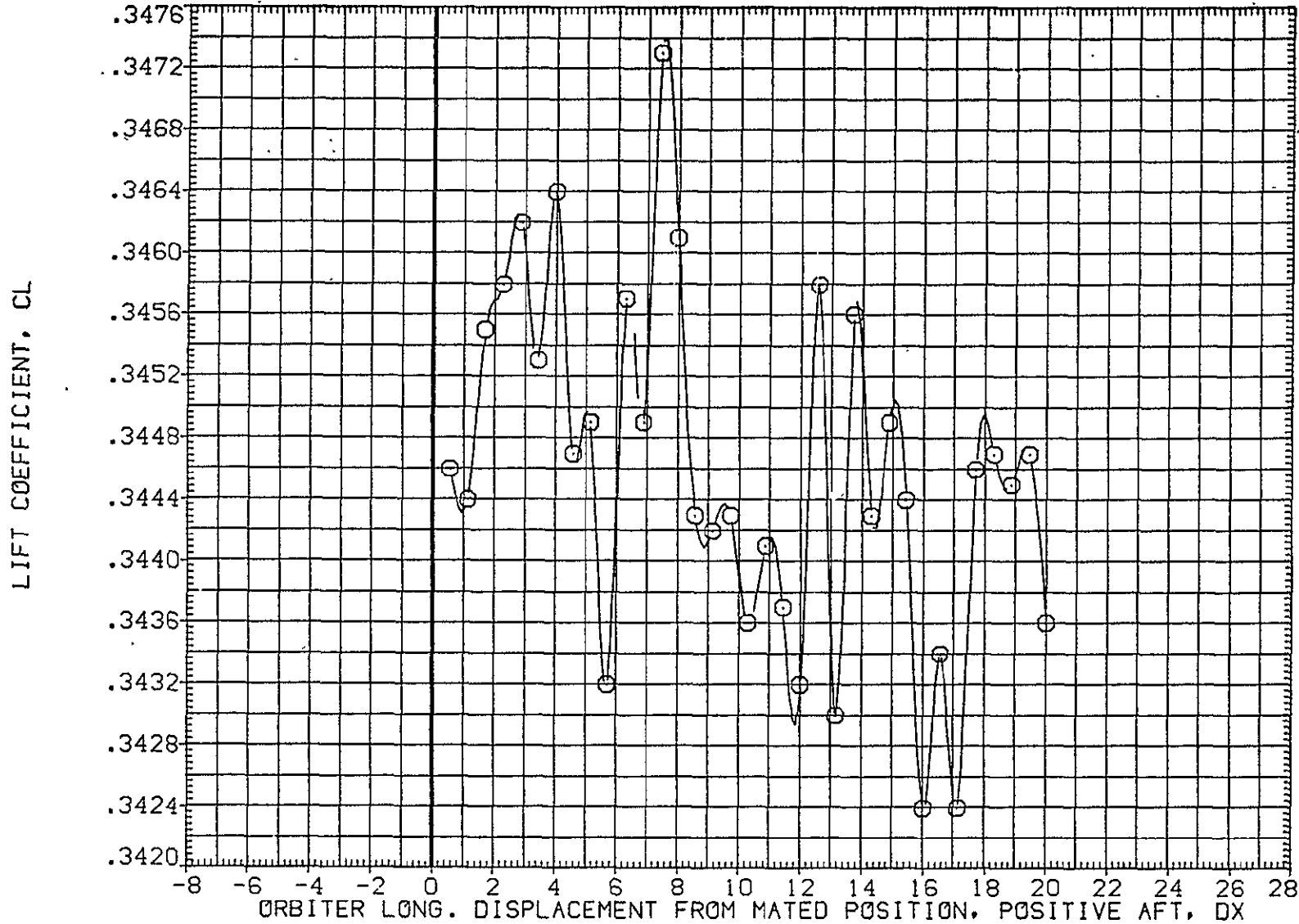


FIG. 75 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE084

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

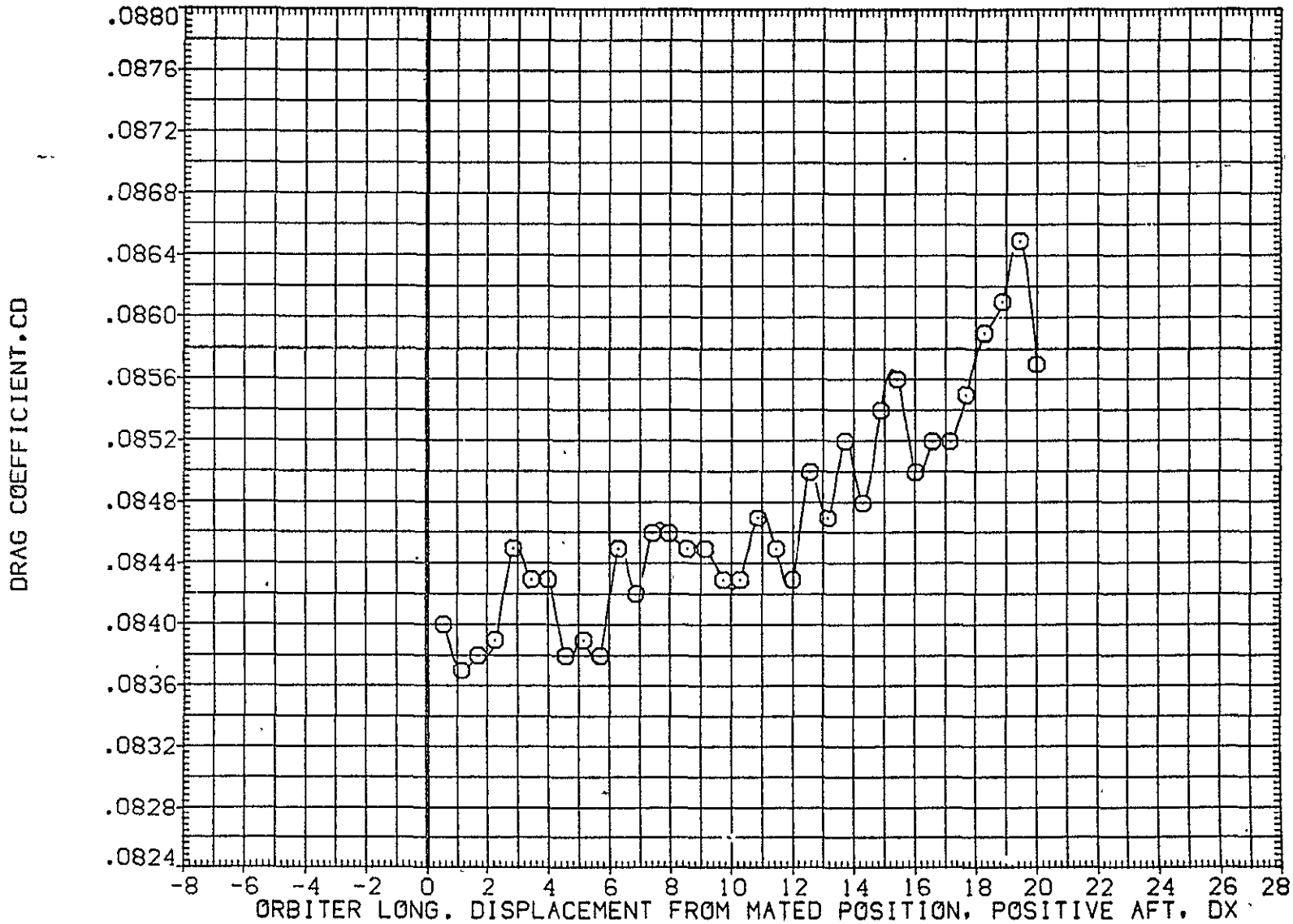


FIG. 75 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE084

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE085)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.597	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	



FIG. 76 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE085

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.597	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

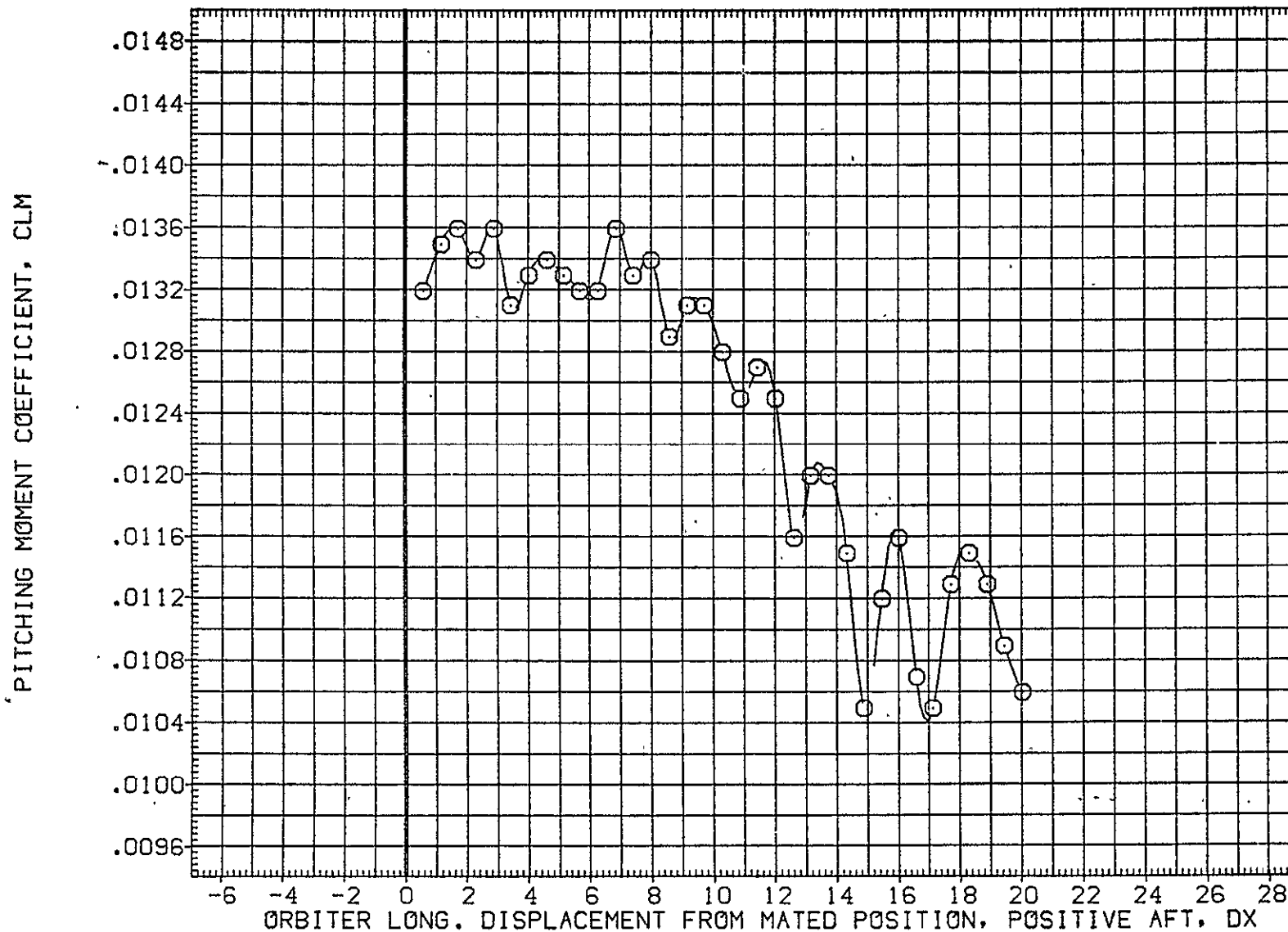


FIG. 76 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE085

Fig 76

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE085)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.597	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

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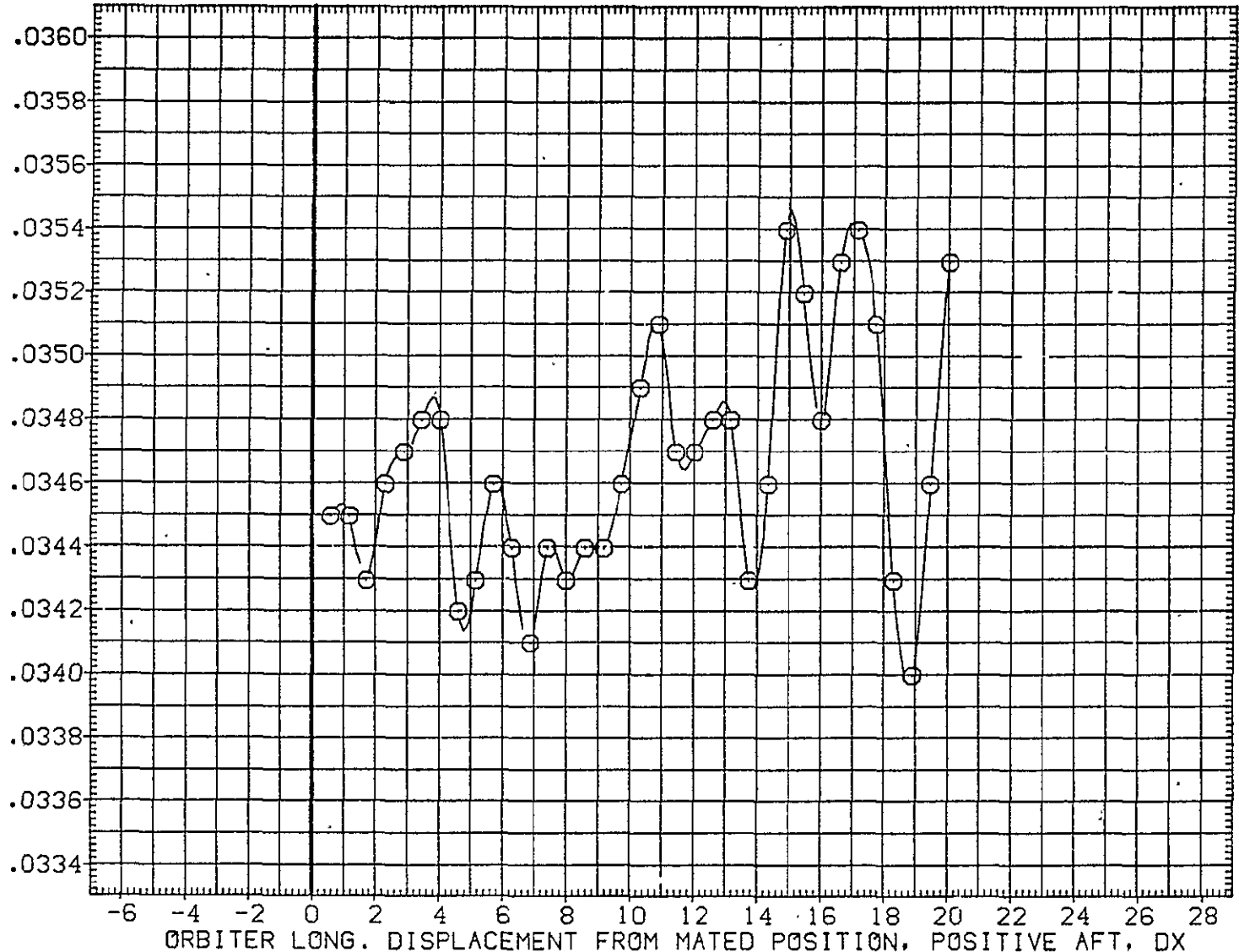


FIG. 76 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE085

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.597	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

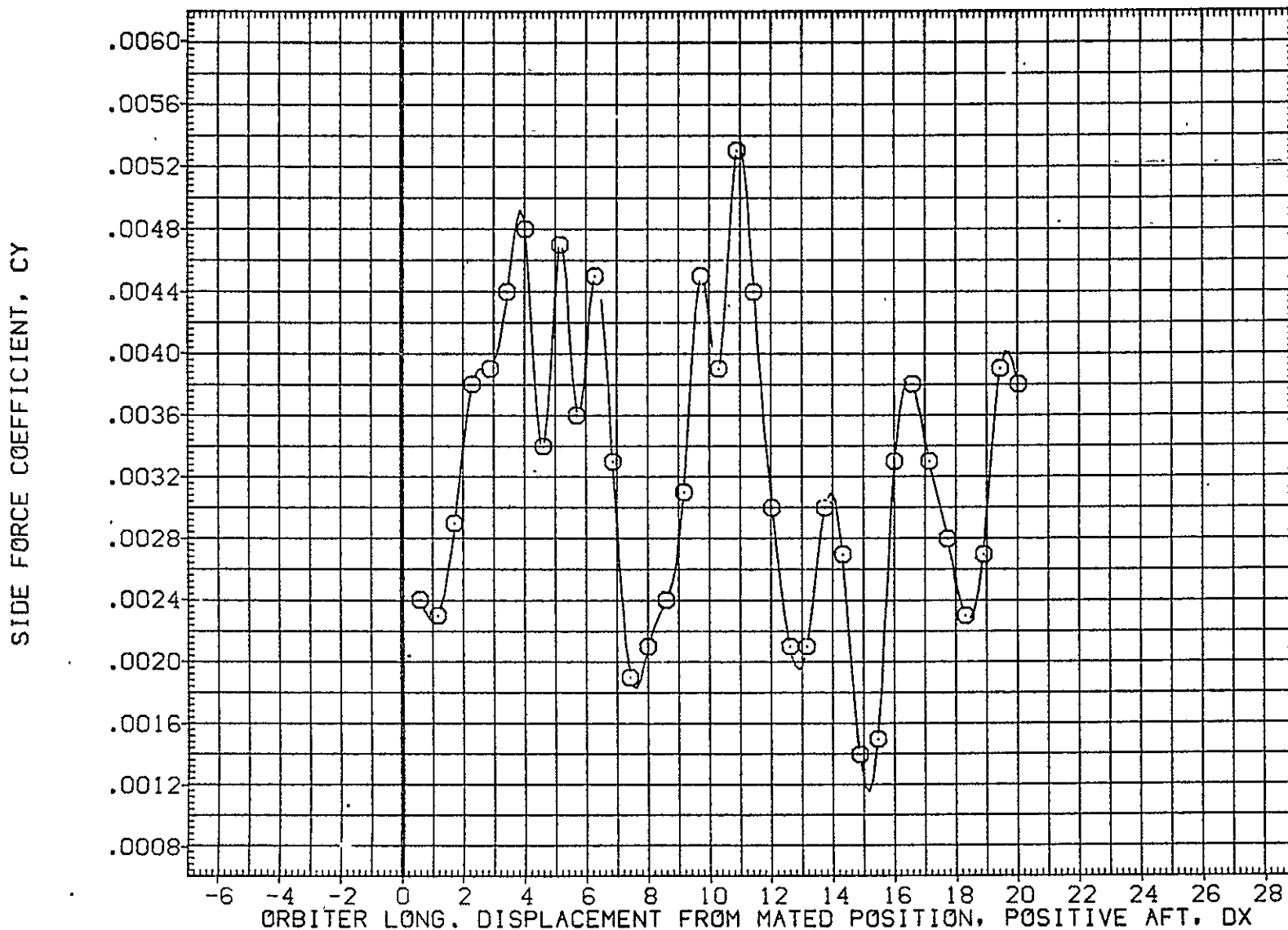


FIG. 76 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE085

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE085)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.597	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. YO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

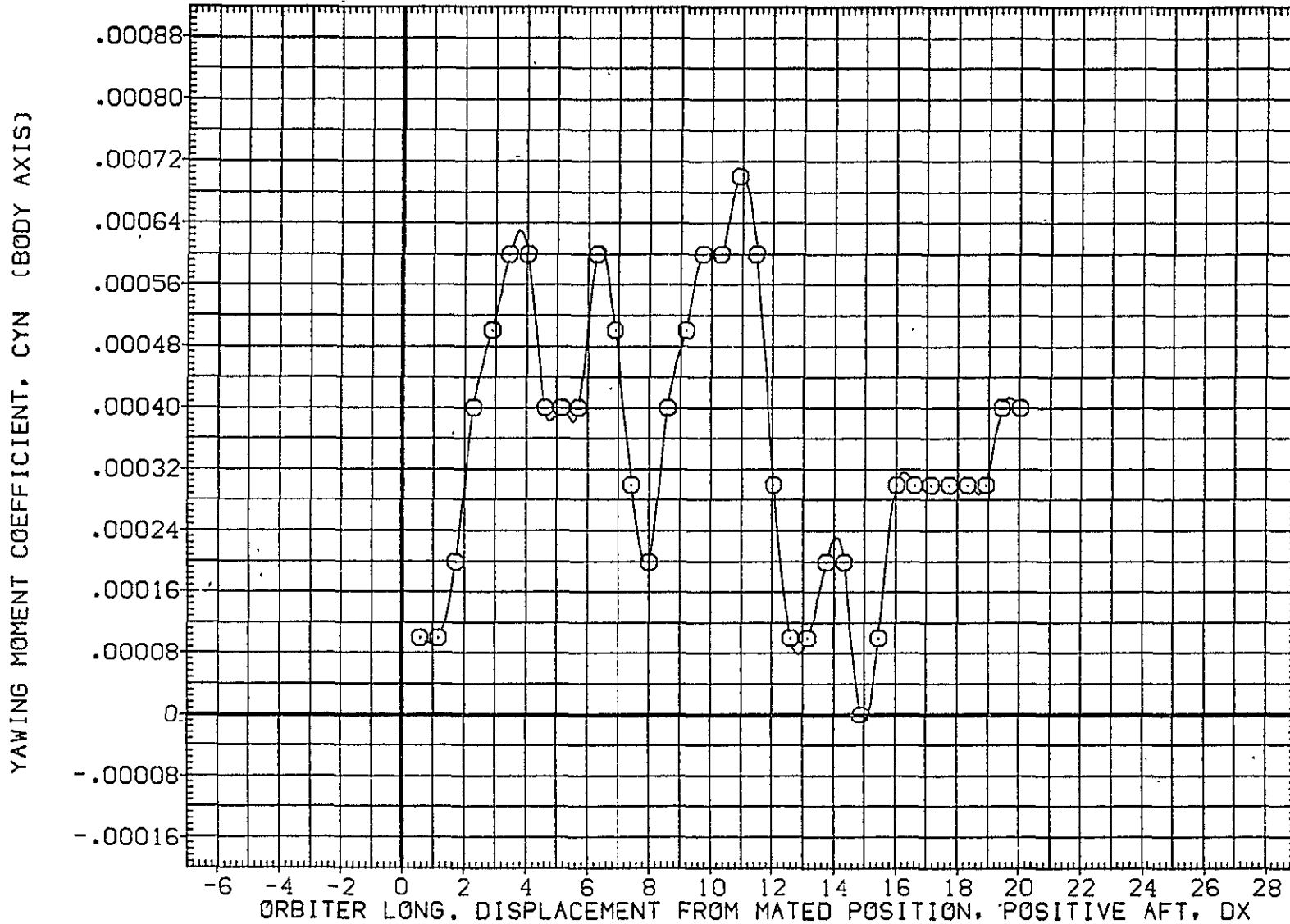


FIG. 76 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE085

SYMBOL	MACH	PARAMETRIC VALUES			
○	.597	ALPHAC	2.000	BETAC	-5.000
		STAB	5.000	ELEVON	5.000
		BDFLAP	.000	DY	.000
		DZ	60.000	IORB	6.000
		BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

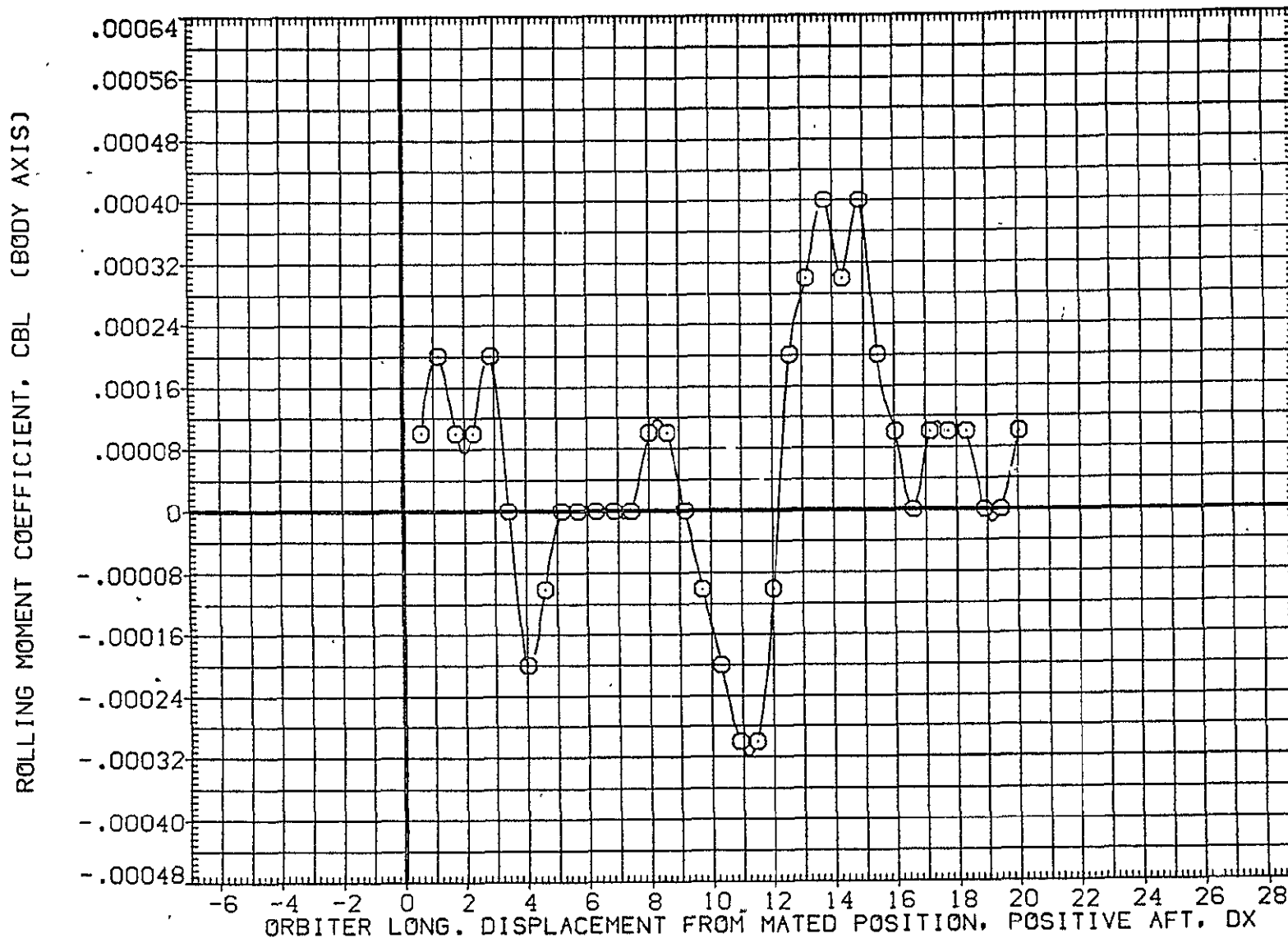


FIG. 76 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE085

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE085)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.597	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DY	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

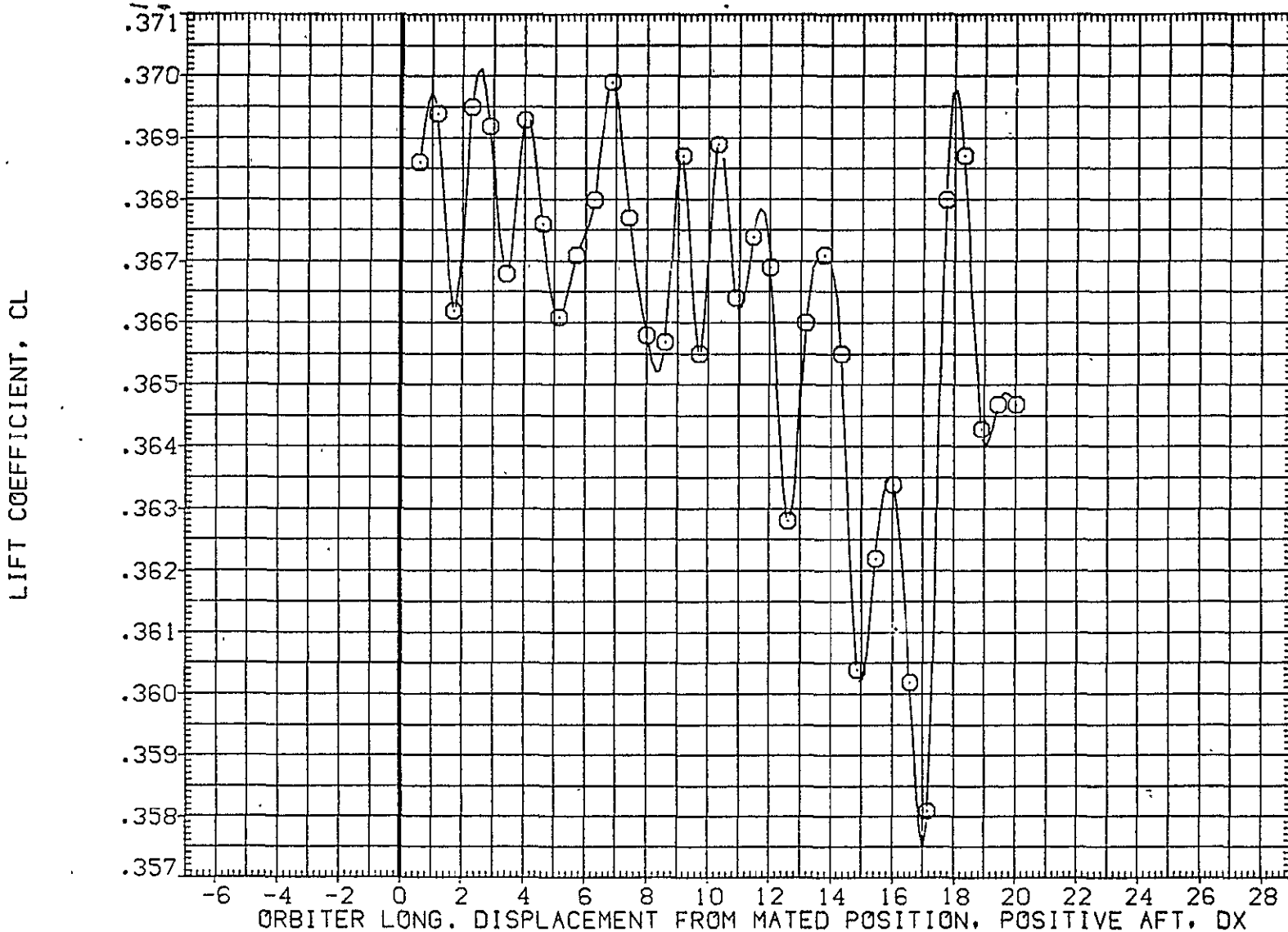


FIG. 76 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE085

SYMBOL	MACH	PARAMETRIC VALUES			
○	.597	ALPHAC	2.000	BETAC	-5.000
		STAB	5.000	ELEVON	5.000
		BDFLAP	.000	DY	.000
		DZ	60.000	IORB	6.000
		BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

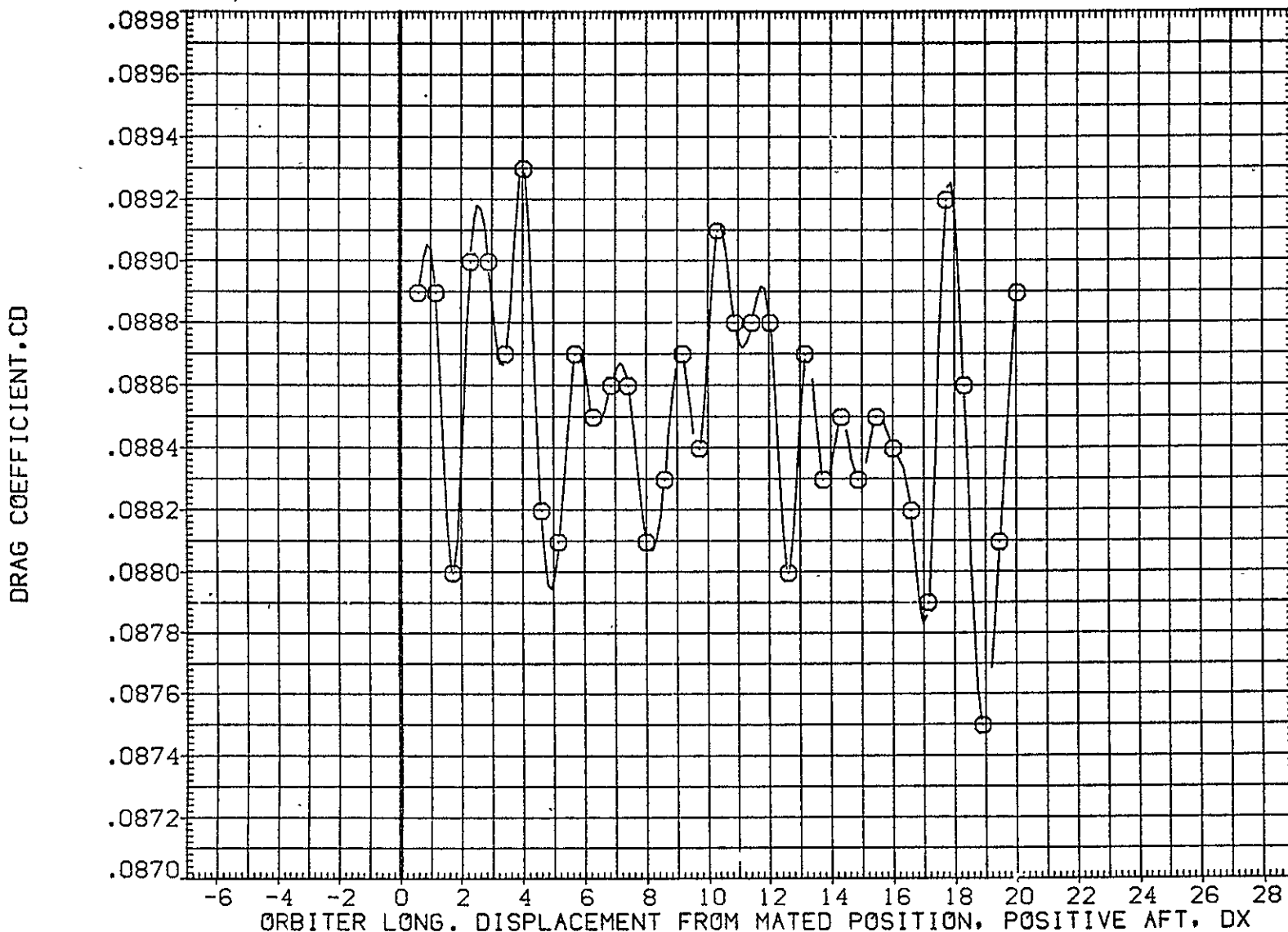


FIG. 76 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE085

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE086)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

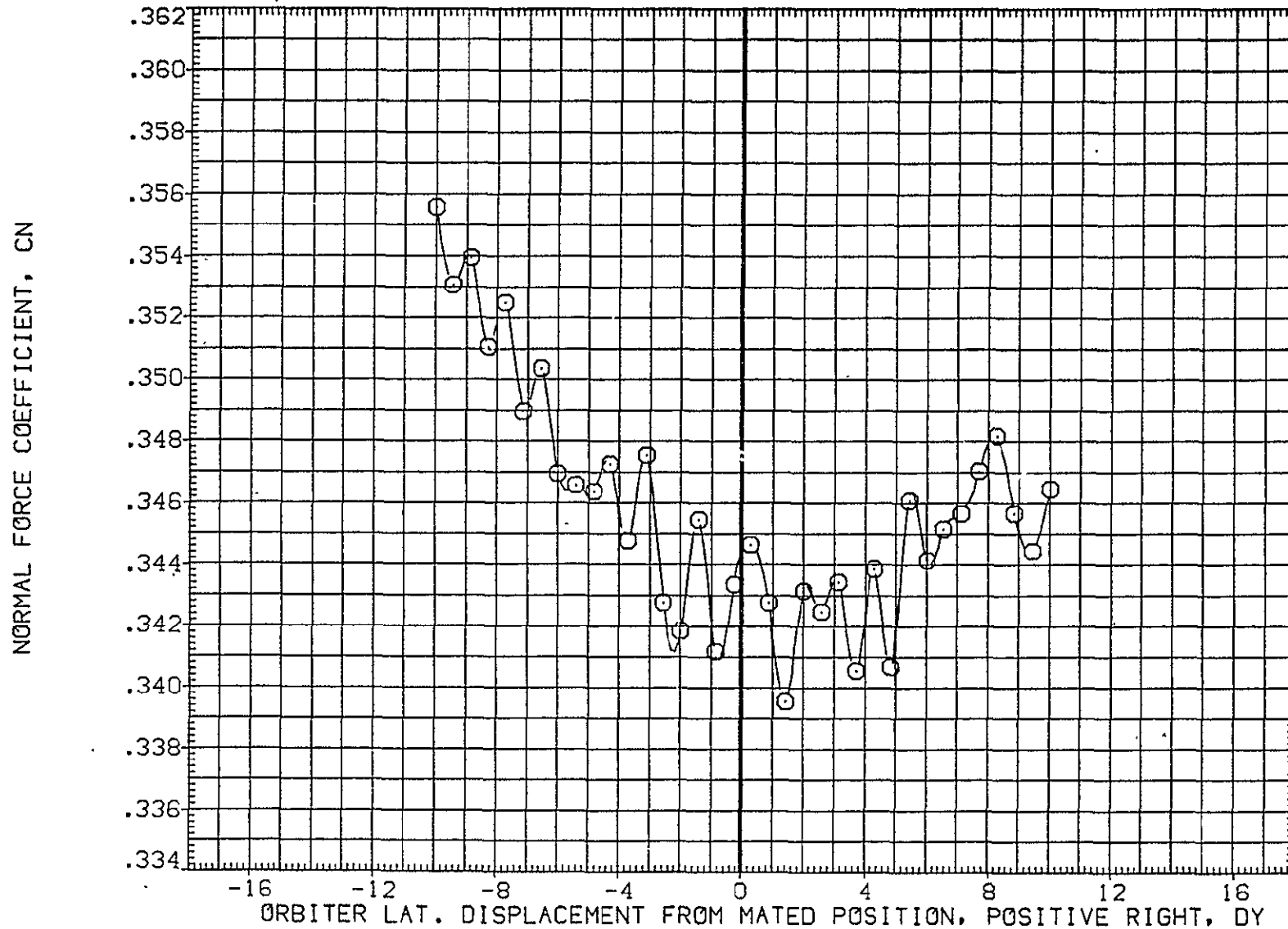


FIG. 77 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE086

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION			
		ALPHAC	BETAC	ELEVON	DX	SREF	LREF	BREF	SQ.FT.
○	.584	2.000	-5.000	5.000	.000	2690.0000	474.8100	936.6800	IN.
		5.000	5.000	.000	.000	1109.0000	.0000	.0000	IN. X0
		.000	6.000	.000	.000	375.0000			IN. Y0
		.000	.000	.000	.000	SCALE	.0125		IN. Z0

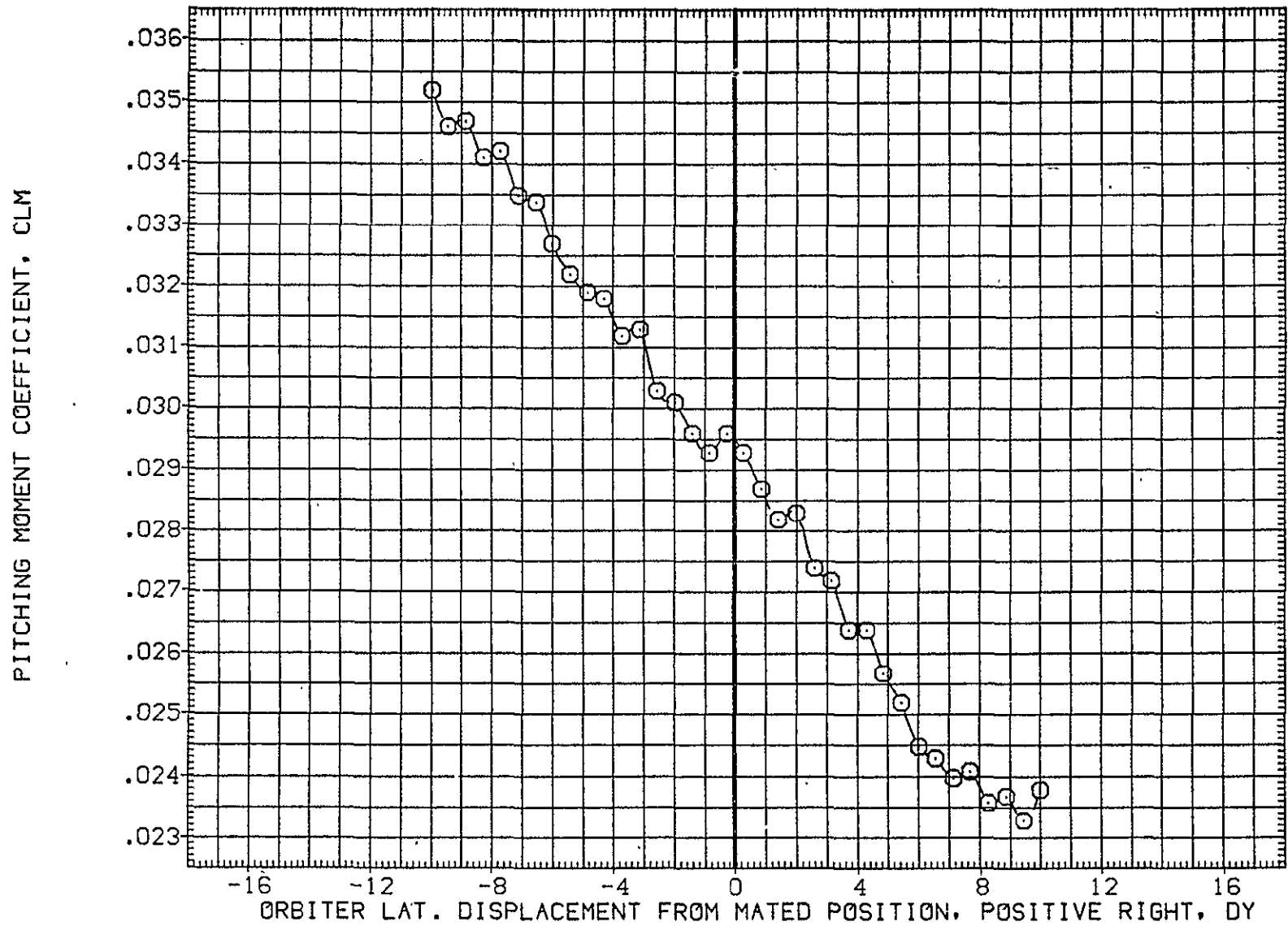


FIG. 77 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE086
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LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE086)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

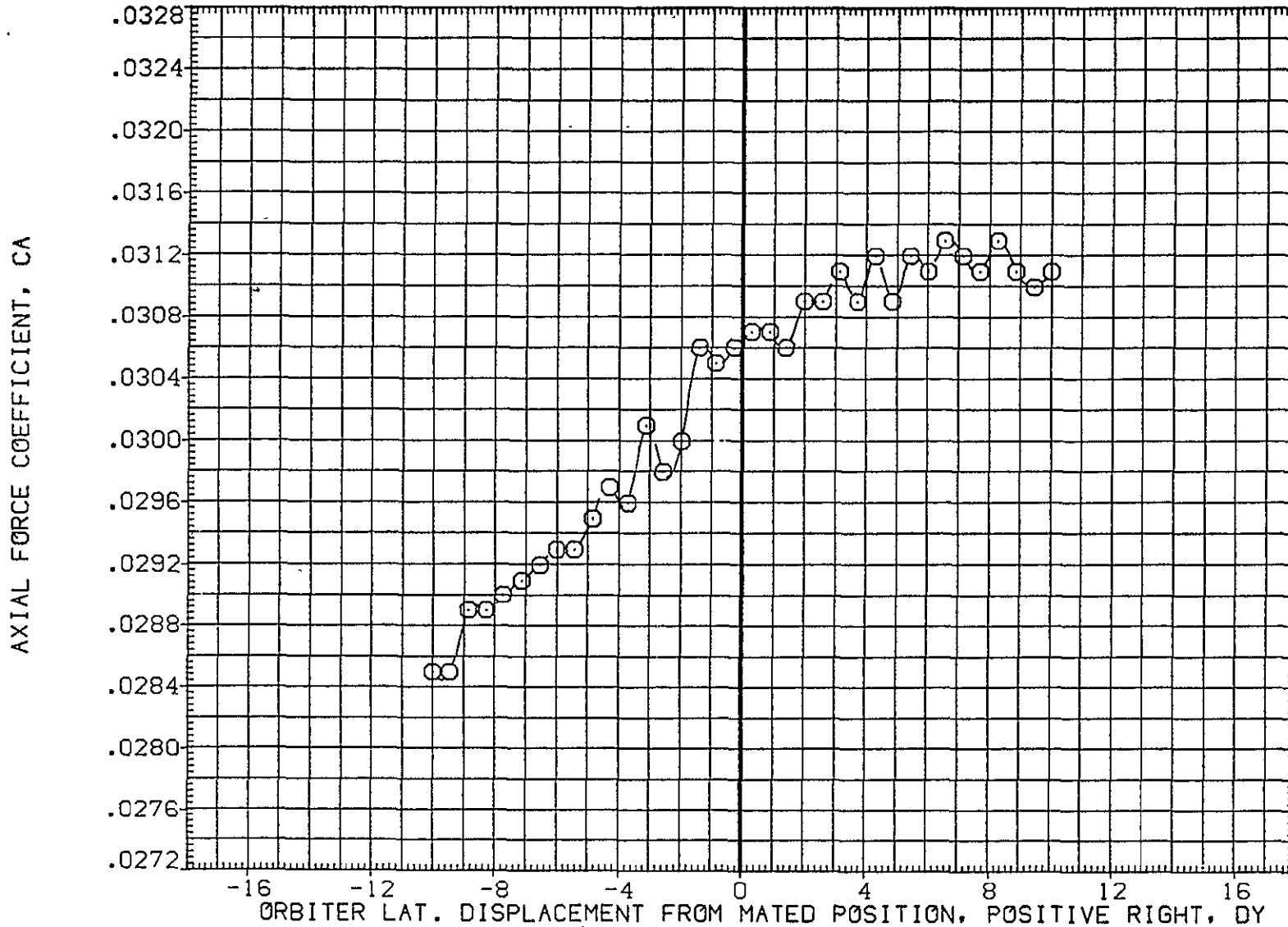


FIG. 77 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE086

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

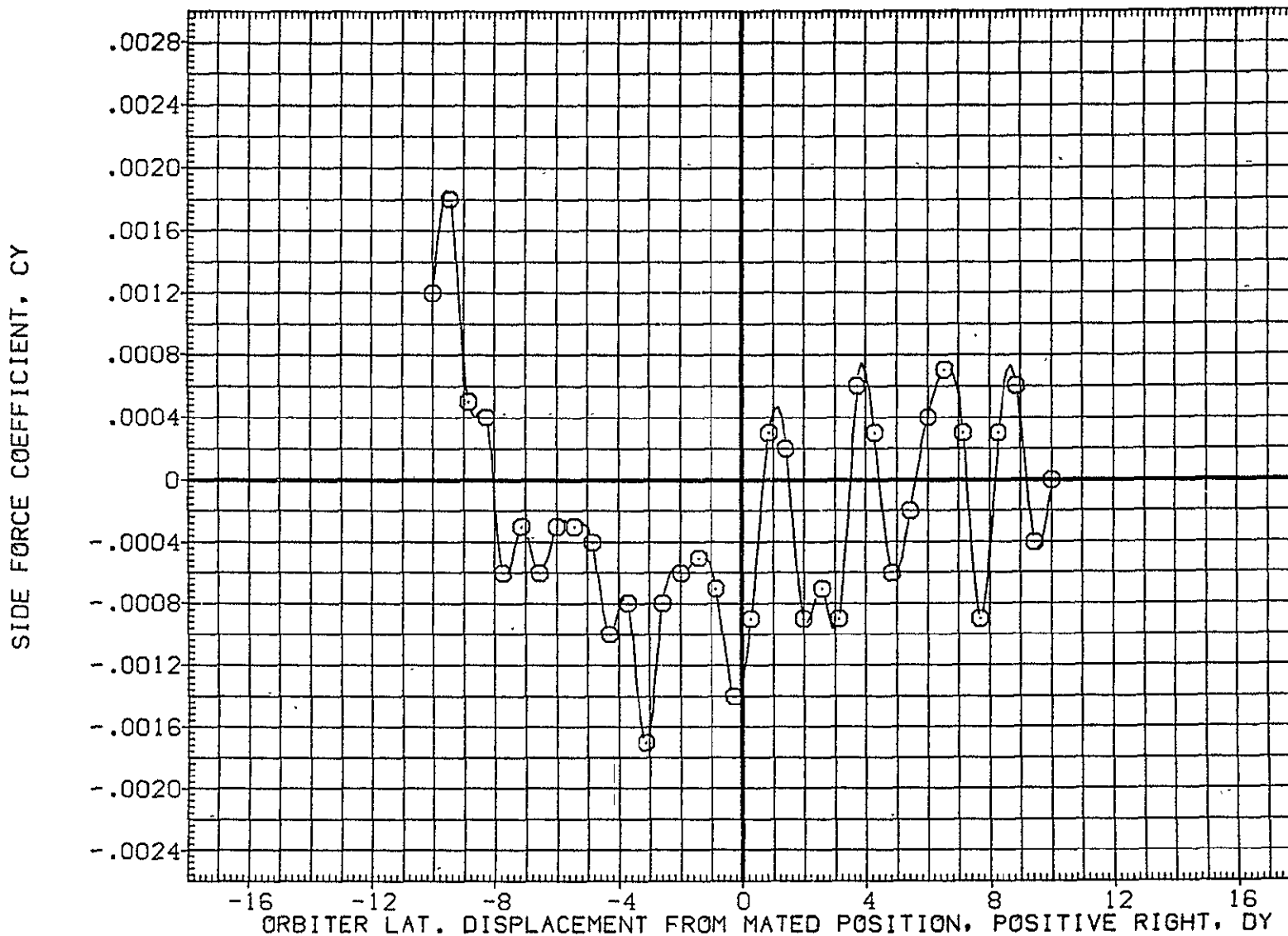


FIG. 77 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE086

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE086)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SO.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

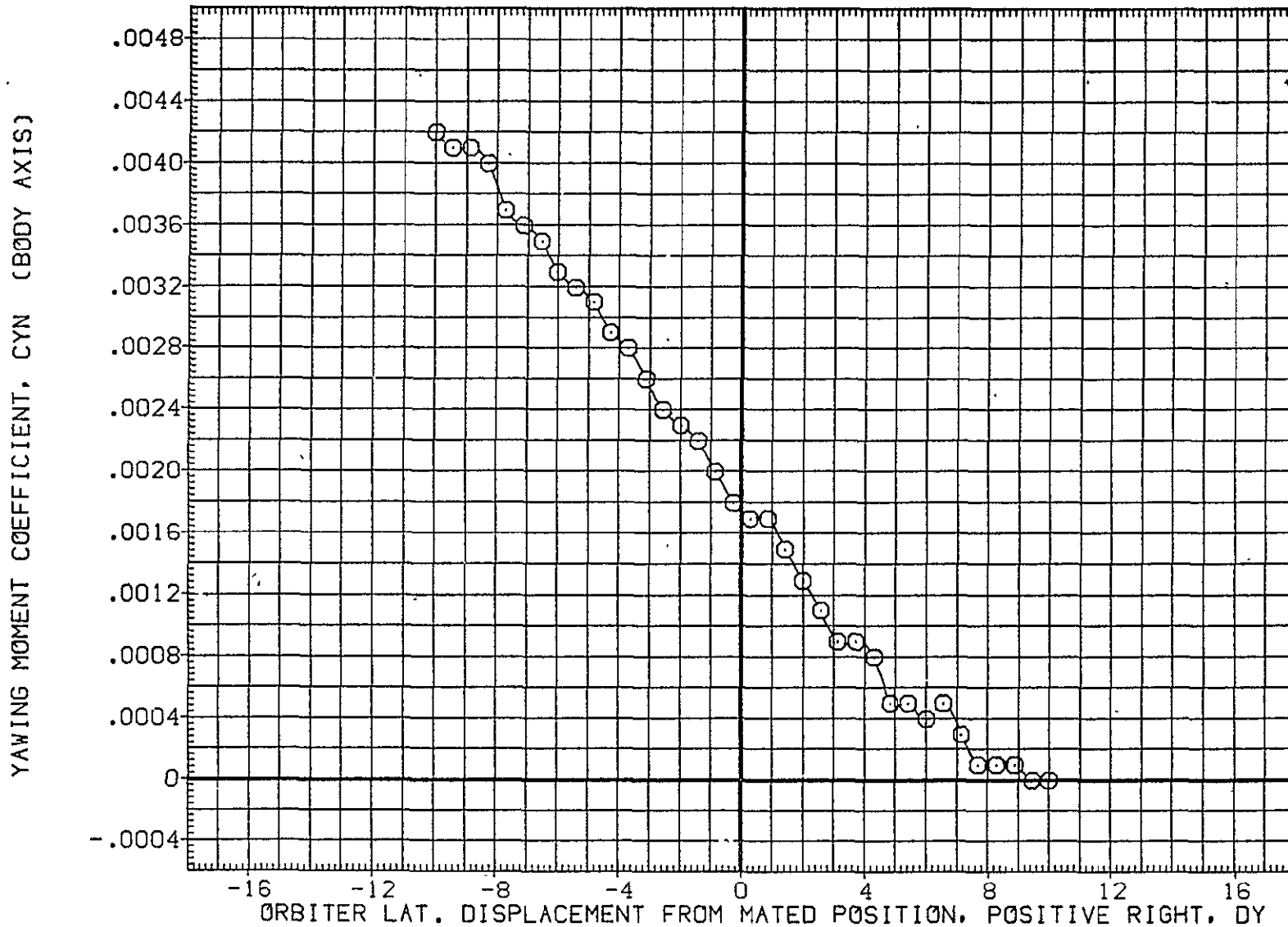


FIG. 77 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE086

SYMBOL

MACH

PARAMETRIC VALUES

REFERENCE INFORMATION

○

.594

ALPHAC

2.000

BETAC

-5.000

SREF

2690.0000

SQ.FT.

STAB

5.000

ELEVON

5.000

LREF

-474.8100

IN.

BDFLAP

.000

DX

.000

BREF

936.6800

IN.

DZ

.000

IORB

6.000

XMRP

1109.0000

IN. X0

BETA0

.000

RUDDER

.000

YMRP

.0000

IN. Y0

ZMRP

375.0000

IN. Z0

SCALE

.0125

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)

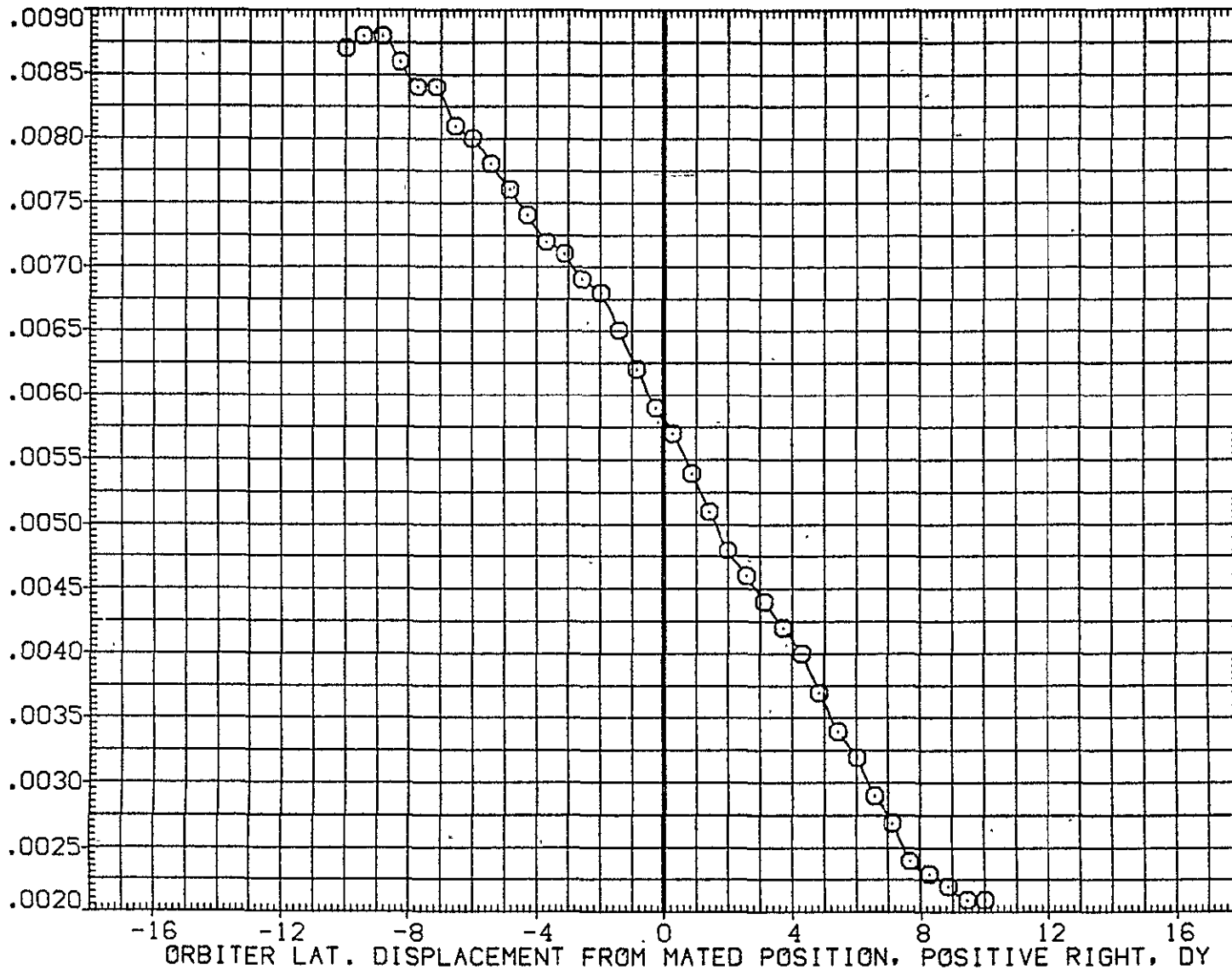


FIG. 77 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE086

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE086)

SYMBOL
○

MACH	PARAMETRIC VALUES			
.594	ALPHAC	2.000	BETAC	-5.000
	STAB	5.000	ELEVON	5.000
	BDFLAP	.000	DX	.000
	DZ	.000	IORB	6.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

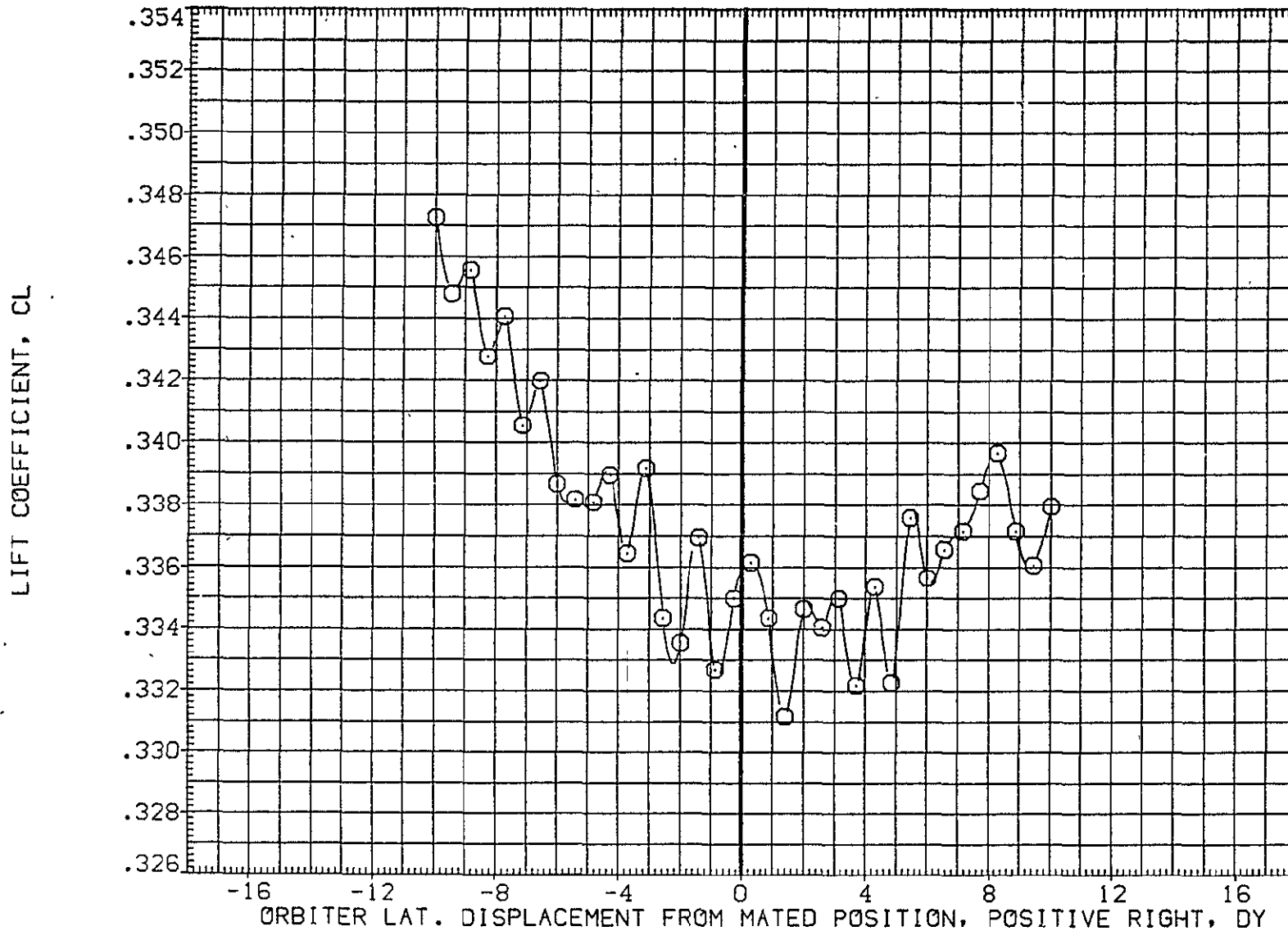


FIG. 77 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE086

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	IN.	SQ.FT.
○	.594	2.000	-5.000	5.000	.000	2690.0000	474.8100	IN.
		5.000	5.000	.000	.000	936.6800	1109.0000	IN.
		.000	6.000	.000	.000	.0000	375.0000	IN. X0
		.000	.000	.000	.000	.0125		IN. Y0
								IN. Z0

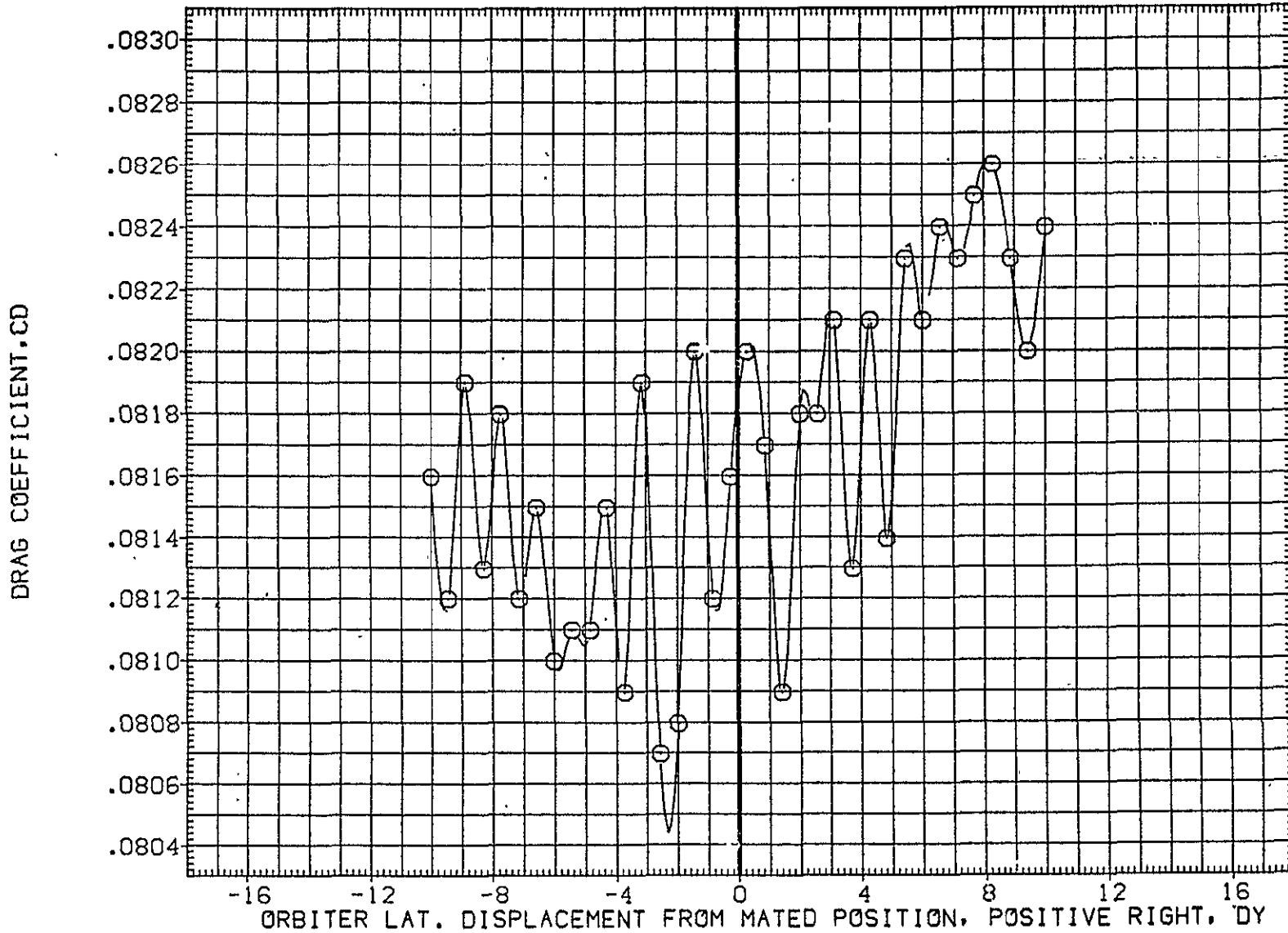


FIG. 77 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE086

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE087)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BOFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

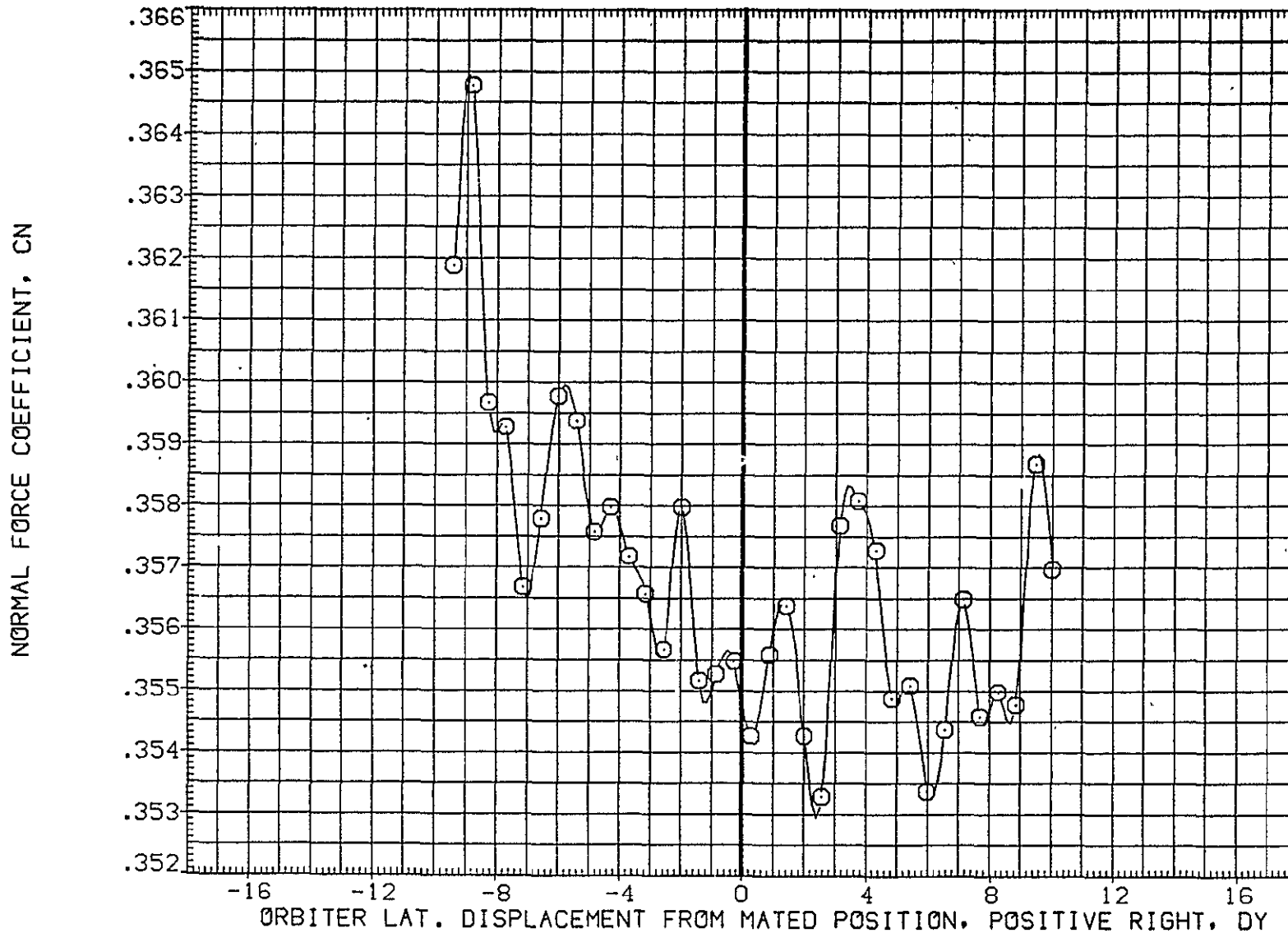


FIG. 78 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE087

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	SO.FT.	
○	.594	2.000	-5.000	5.000	.000	2690.0000	50. FT.	
		5.000	5.000	.000	.000	474.8100	IN.	
		.000	.000	15.000	6.000	936.6800	IN.	
		15.000	6.000	.000	.000	1109.0000	IN. X0	
		.000	.000	.000	.000	YMRP	IN. Y0	
						ZMRP	IN. Z0	
						SCALE		

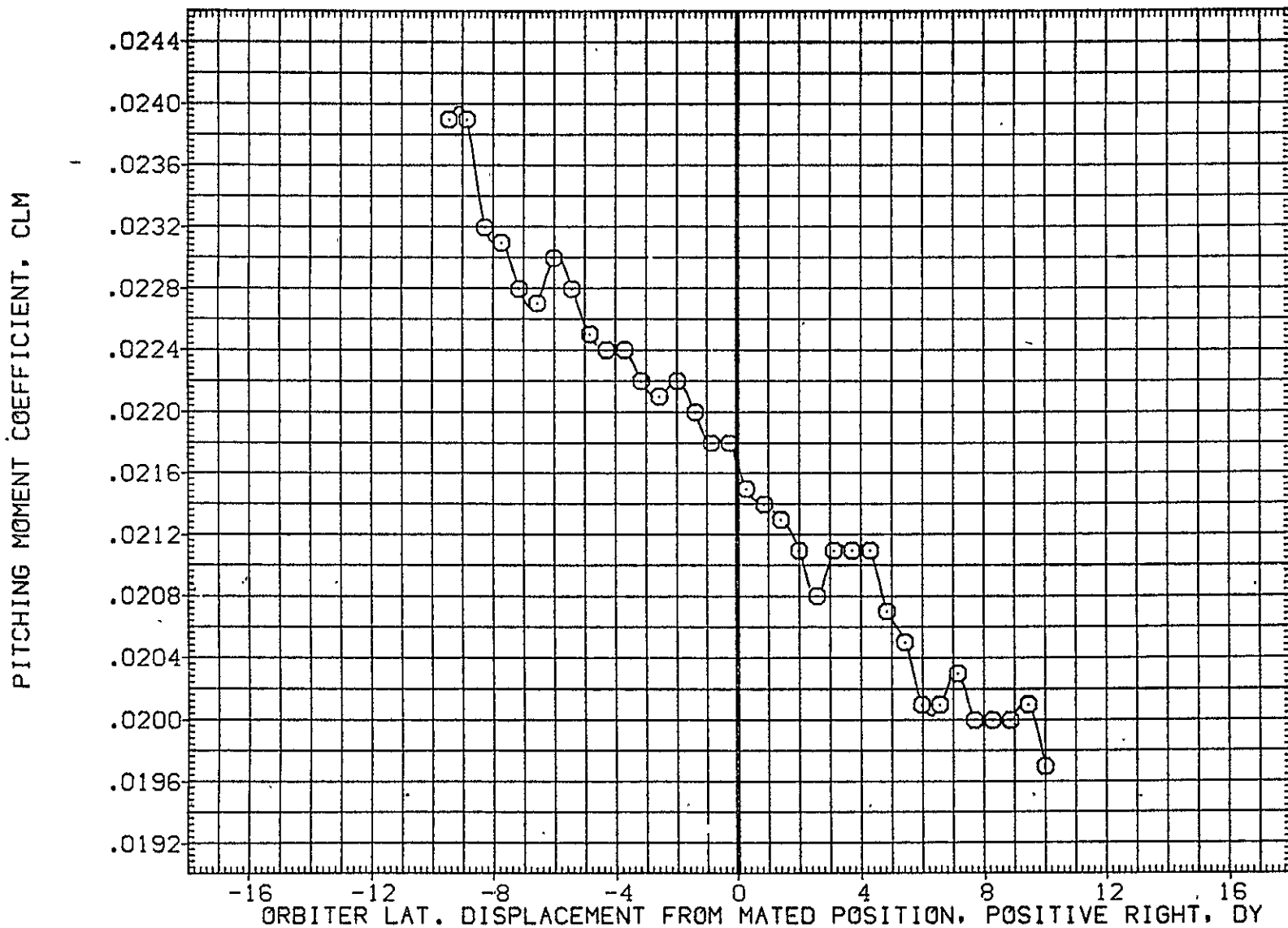


FIG. 78 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE087

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE087)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. XC
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YC
						ZMRP	375.0000	IN. ZC
						SCALE	.0125	

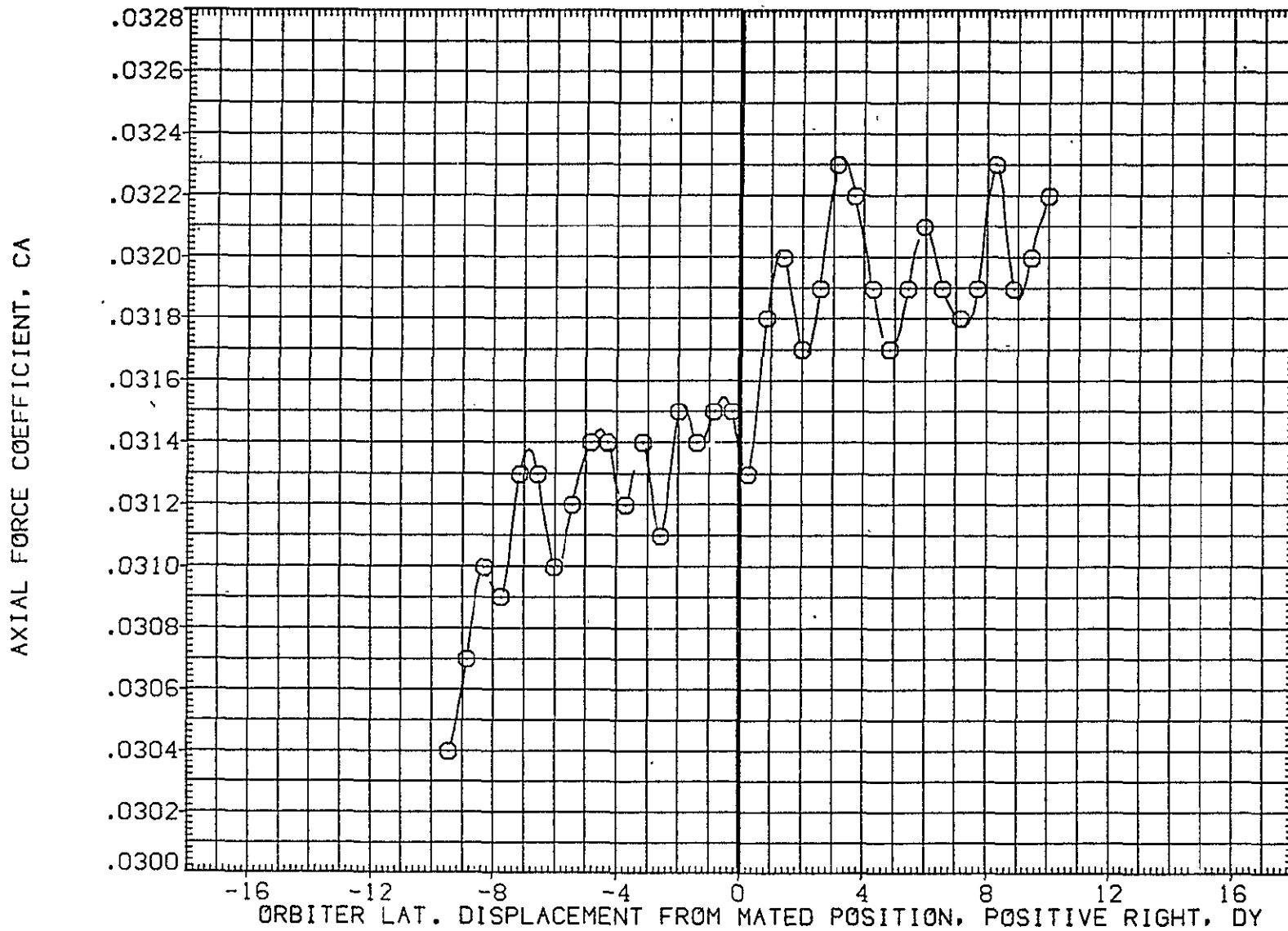


FIG. 78 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE087

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	IN.	SG.FT.
○	.594	2.000	-5.000	5.000	.000	2690.0000	IN.	474.8100
		5.000	5.000	.000	.000	936.6800	IN.	1109.0000
		.000	.000	.000	.000	.0000	IN.	375.0000
		15.000	6.000	.000	.000	.0125	IN.	
		.000	.000	.000	.000		IN.	

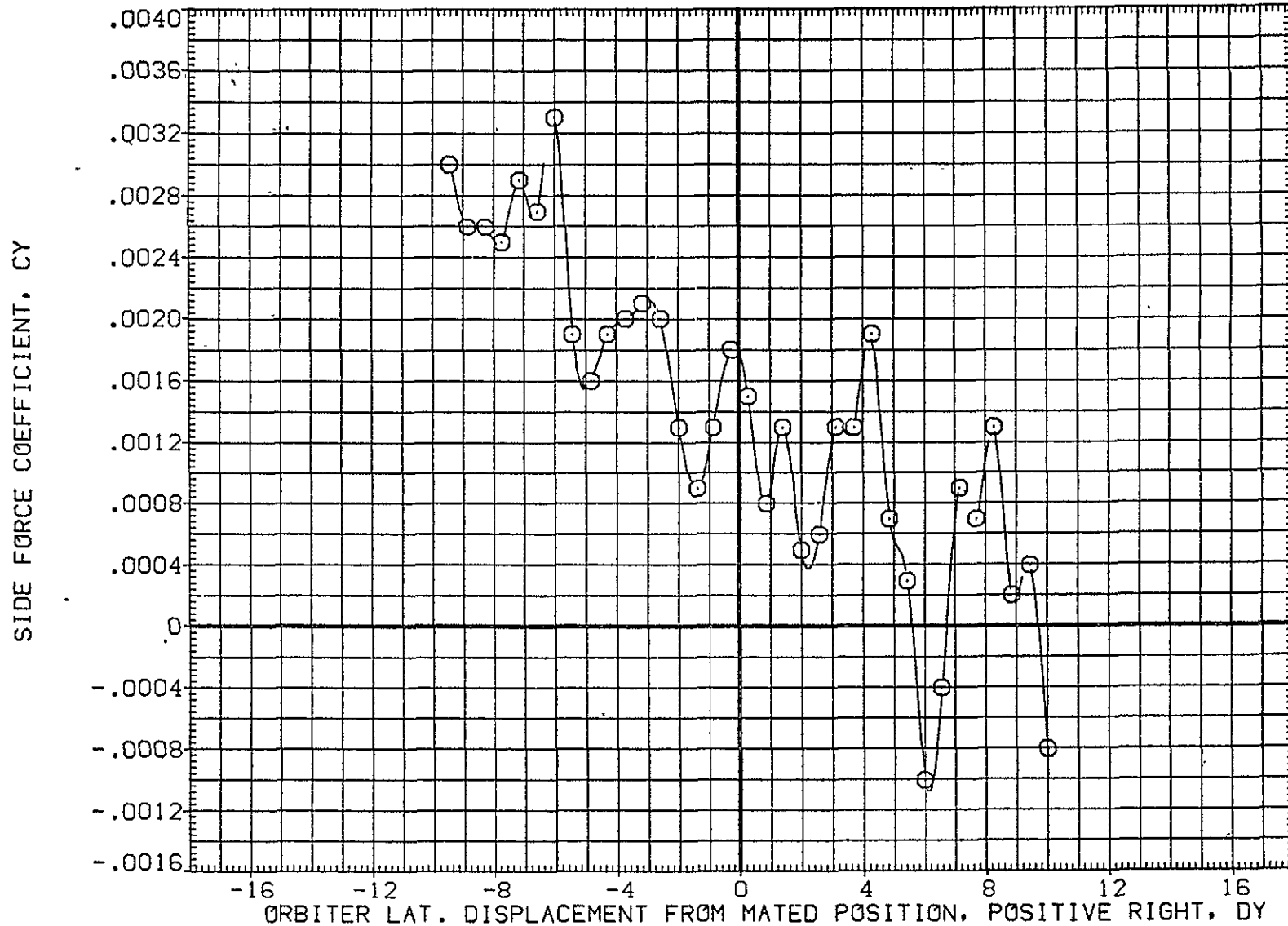


FIG. 78 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE087

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE087)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ. FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

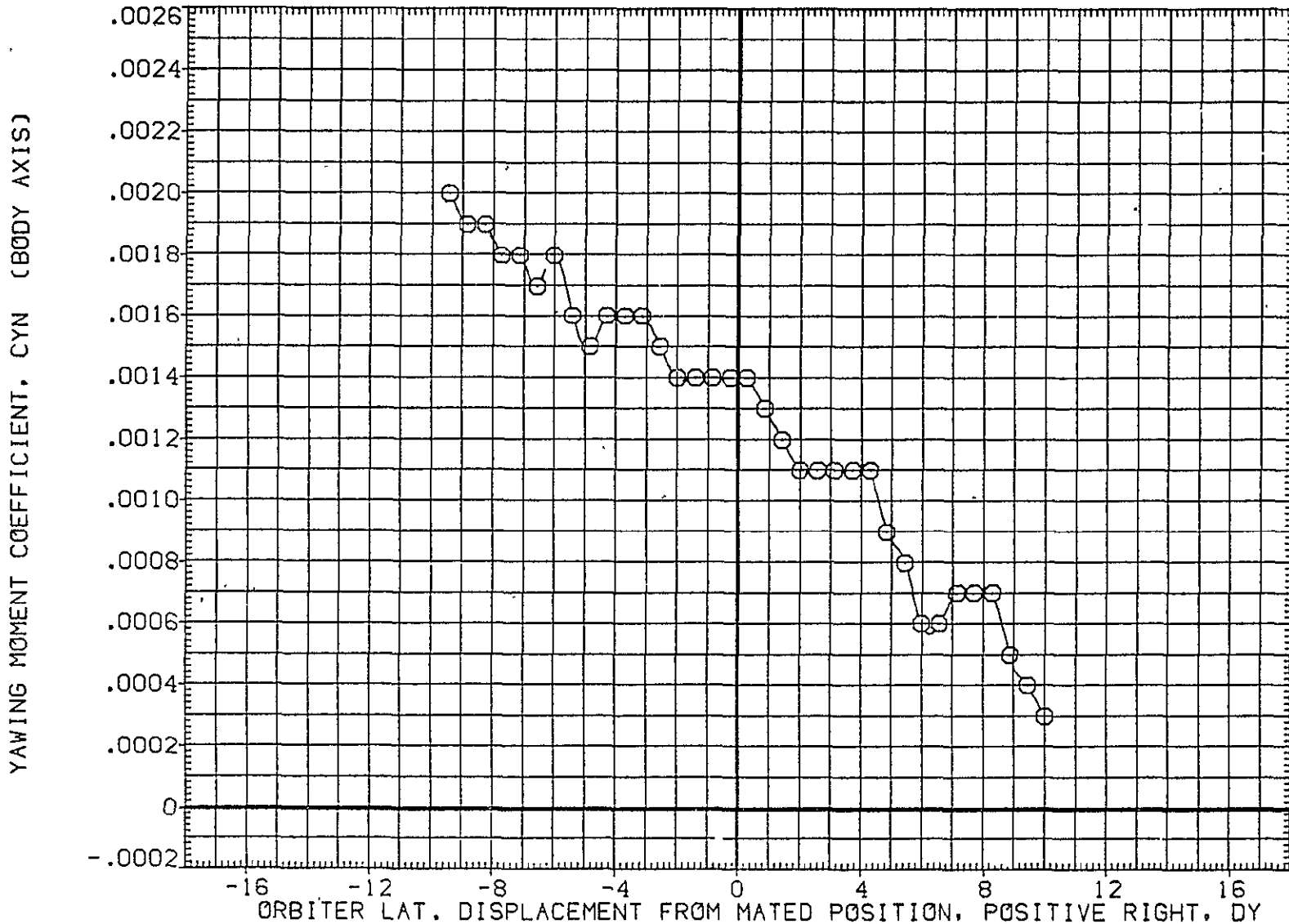


FIG. 78 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE087

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	7.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	OX	.000	BREF	936.6800	IN.
		OZ	15.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

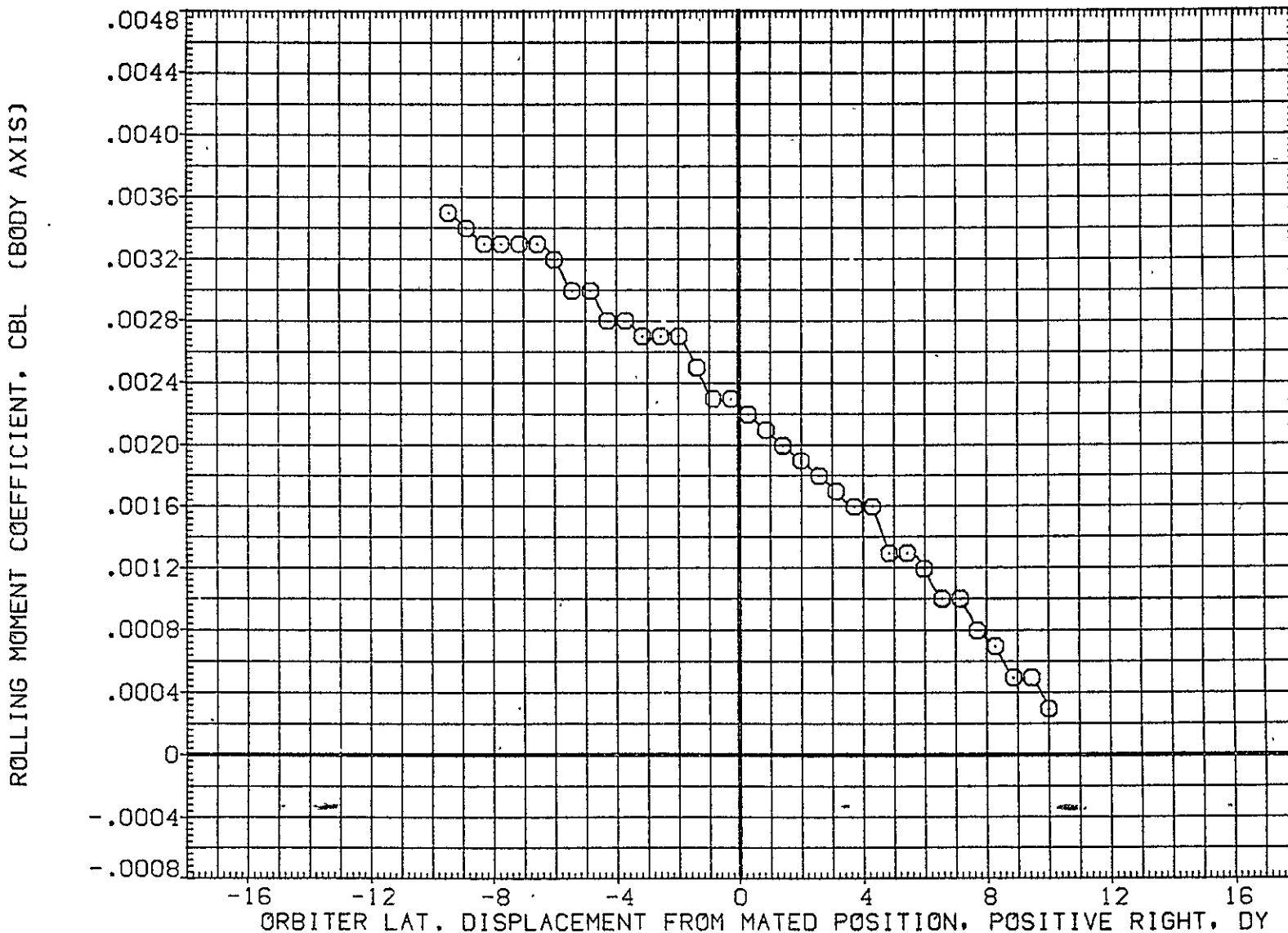


FIG. 78 ORB. DATA; CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE087

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE087)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		OZ	15.000	IORB	6.000	XMRP	1109.0000	IN. XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

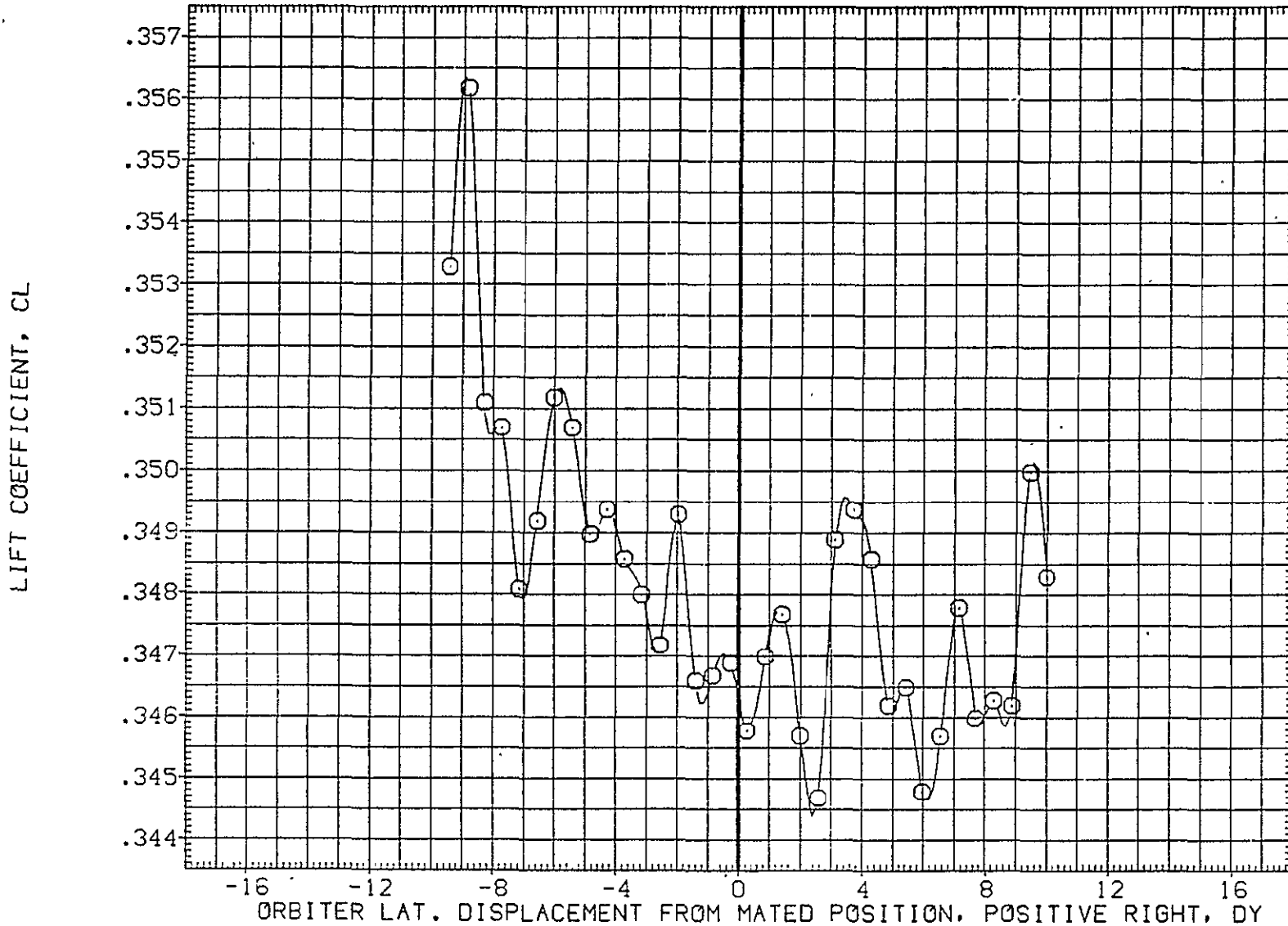


FIG. 78 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE087

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	15.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

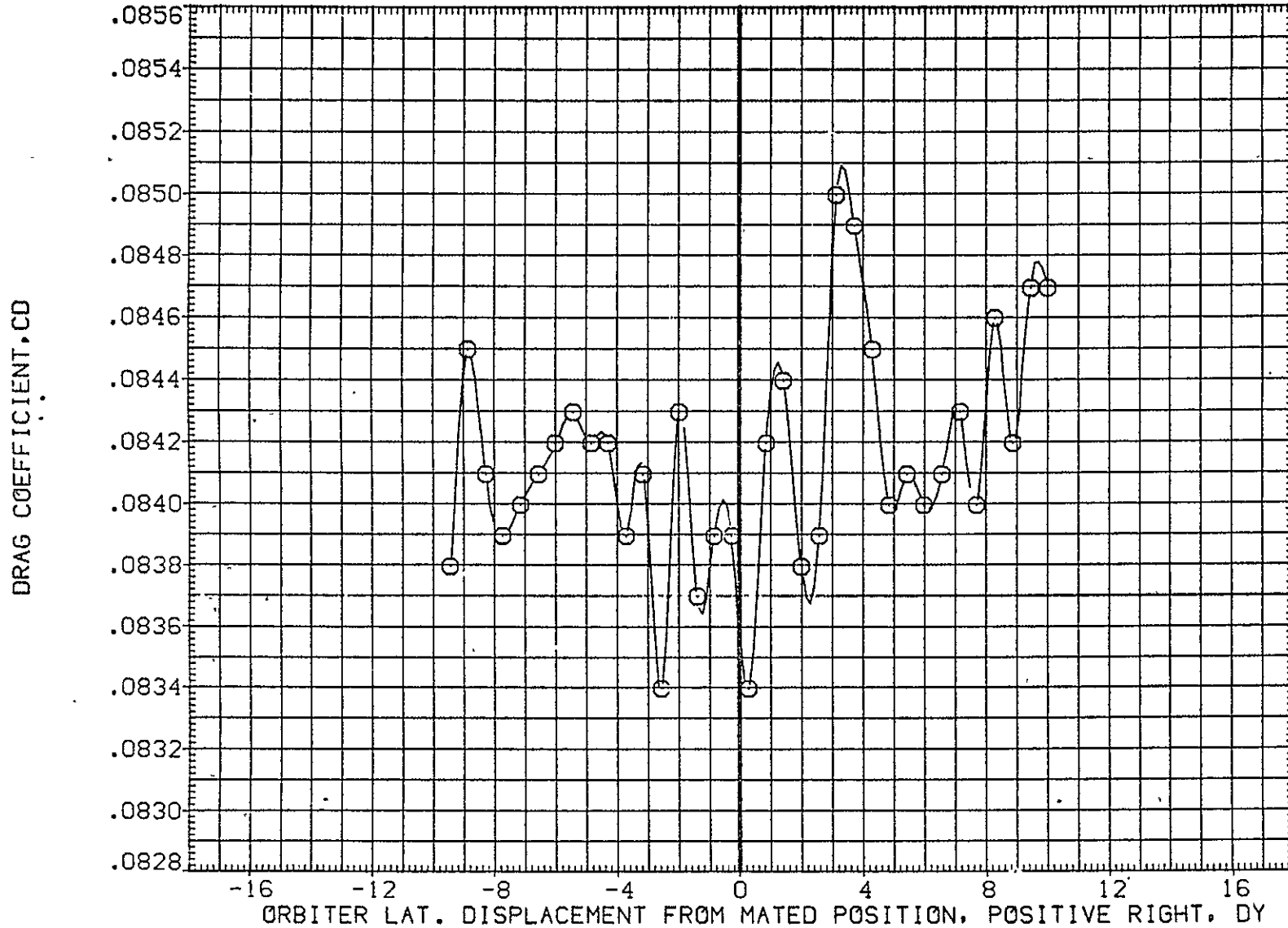


FIG. 78 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE087

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE088)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. XC
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YC
						ZMRP	375.0000	IN. ZC
						SCALE	.0125	

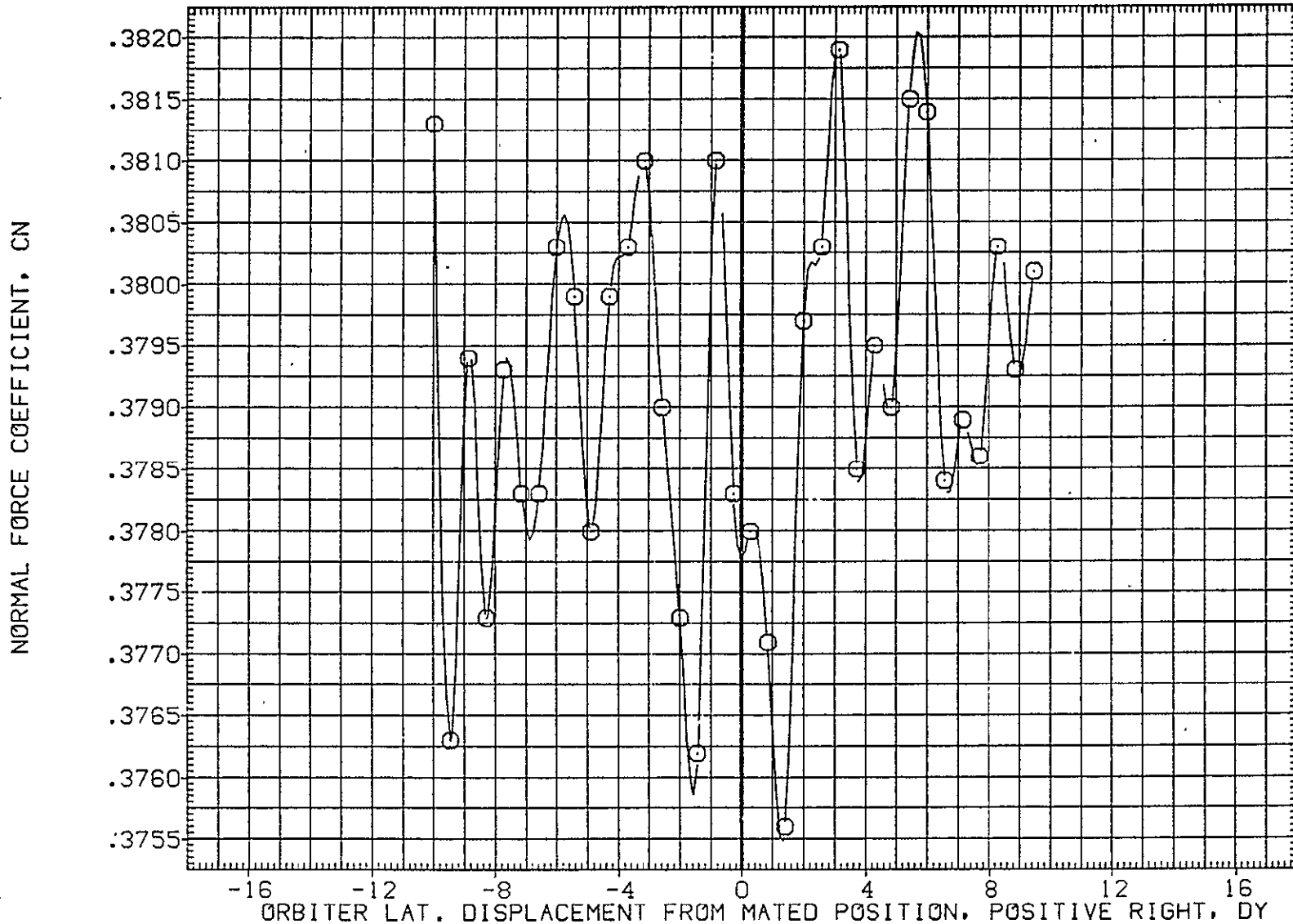


FIG. 79 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE088

SYMBOL	MACH	PARAMETRIC VALUES			
○	.594	ALPHAC	2.000	BETAC	-5.000
		STAB	5.000	ELEVON	5.000
		BDFLAP	.000	DX	.000
		DZ	60.000	IORB	6.000
		BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

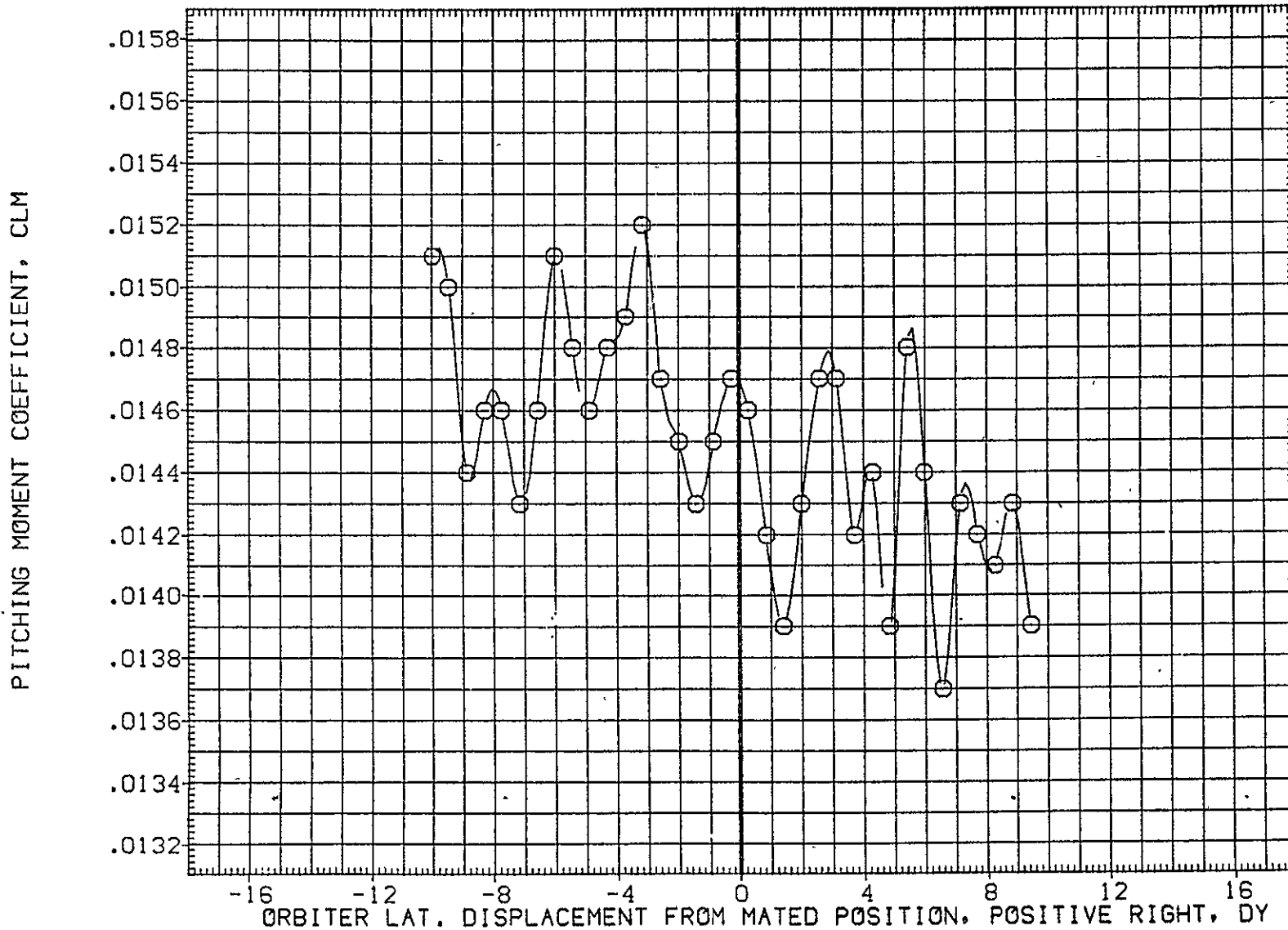


FIG. 79 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE088

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE088)

SYMBOL
○

MACH
.594

PARAMETRIC VALUES			
ALPHAC	2.000	BETAC	-5.000
STAB	5.000	ELEVON	5.000
BDFLAP	.000	DX	.000
DZ	60.000	IORB	6.000
BETA0	.000	RUDDER	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

AXIAL FORCE COEFFICIENT, CA

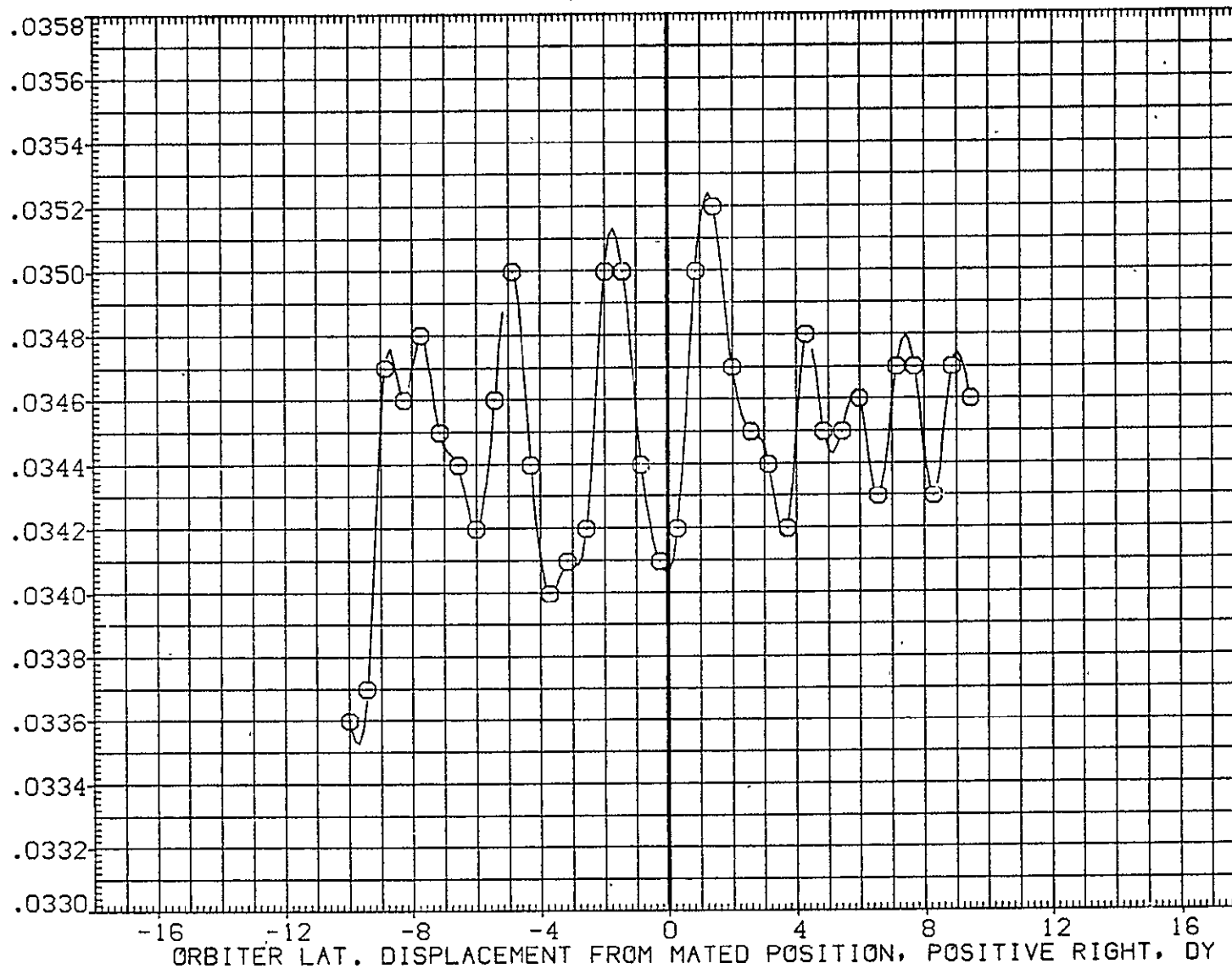


FIG. 79 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE088

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

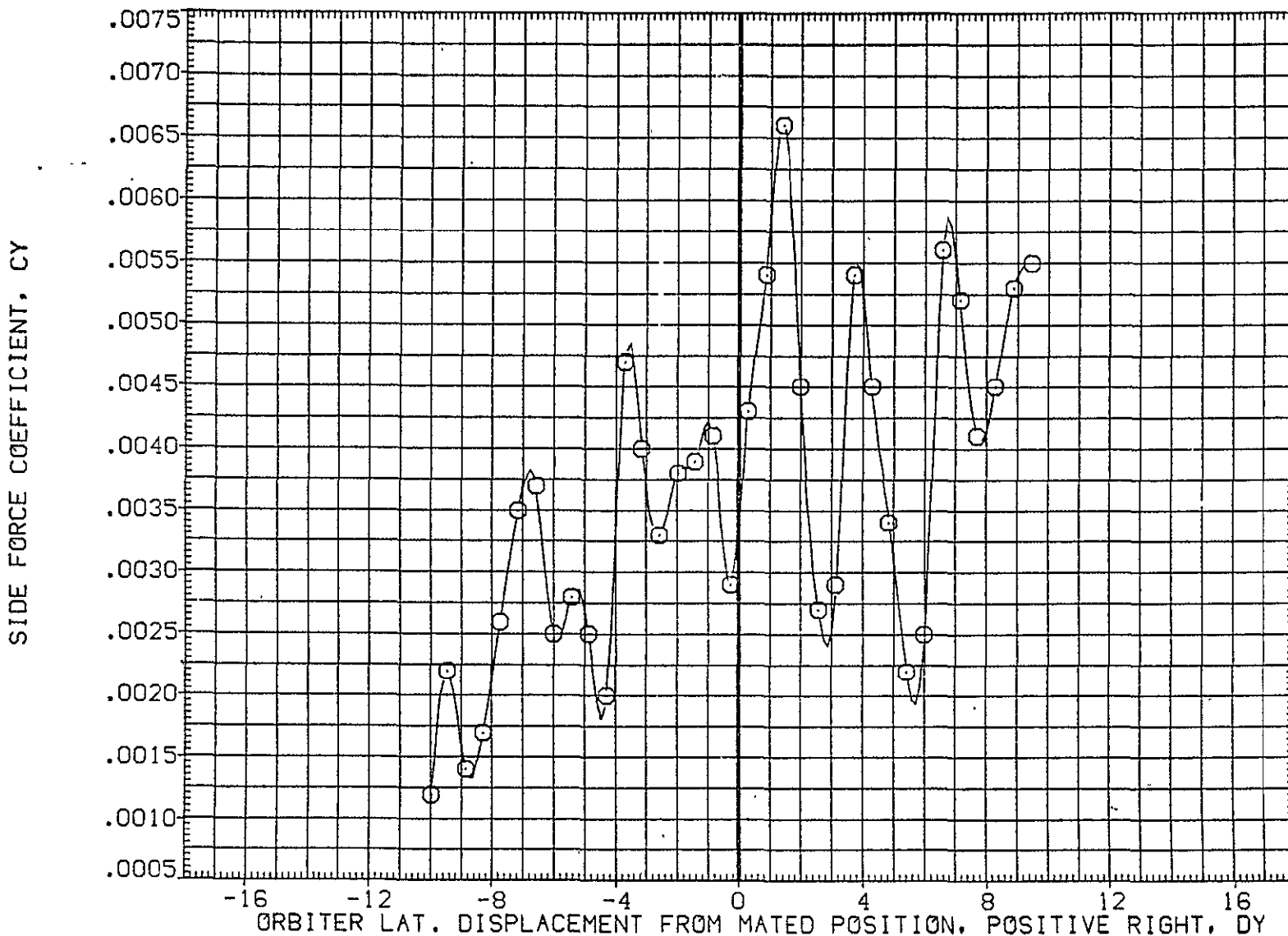


FIG. 79 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE088

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE088)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

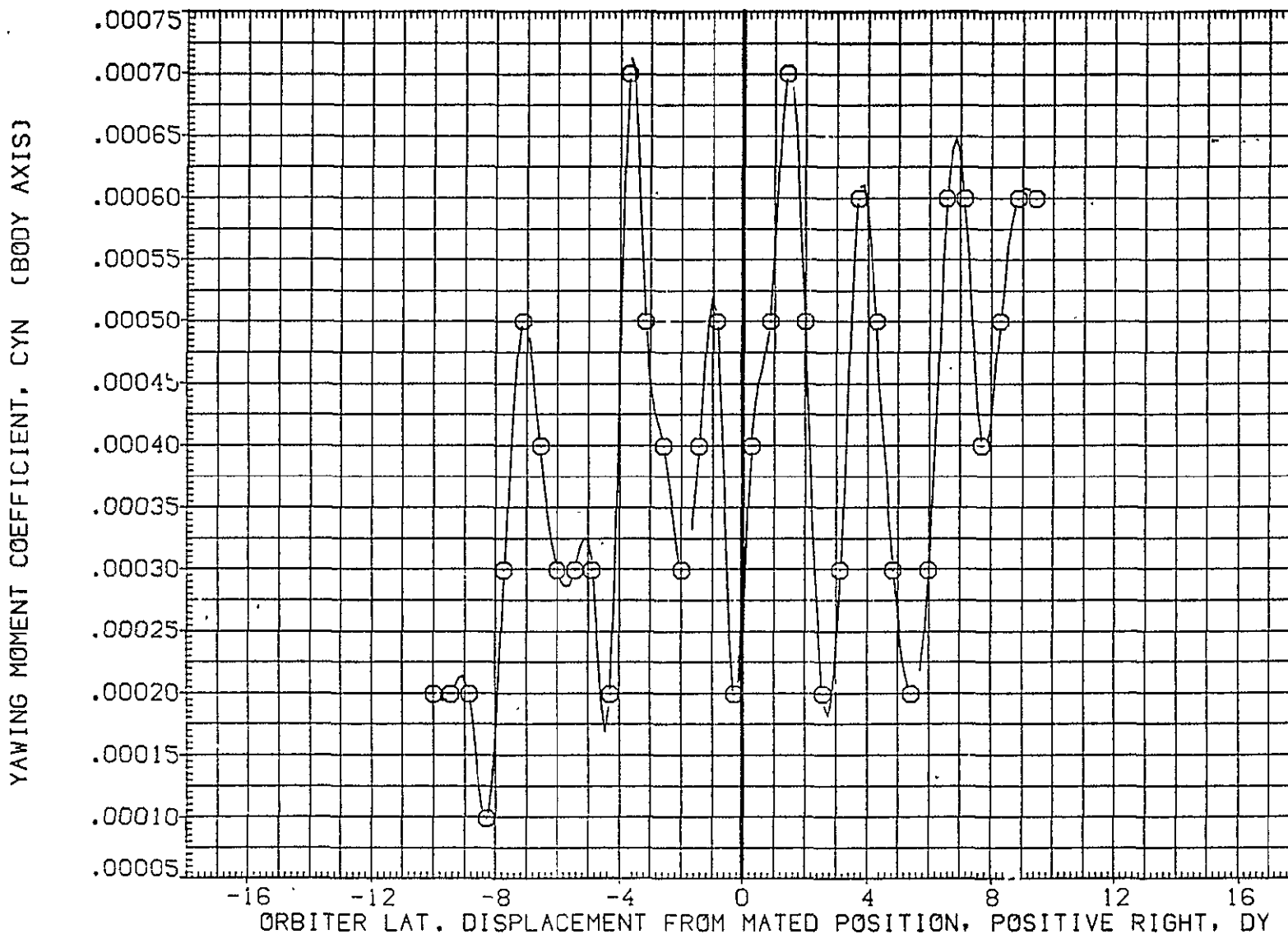


FIG. 79 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE088

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

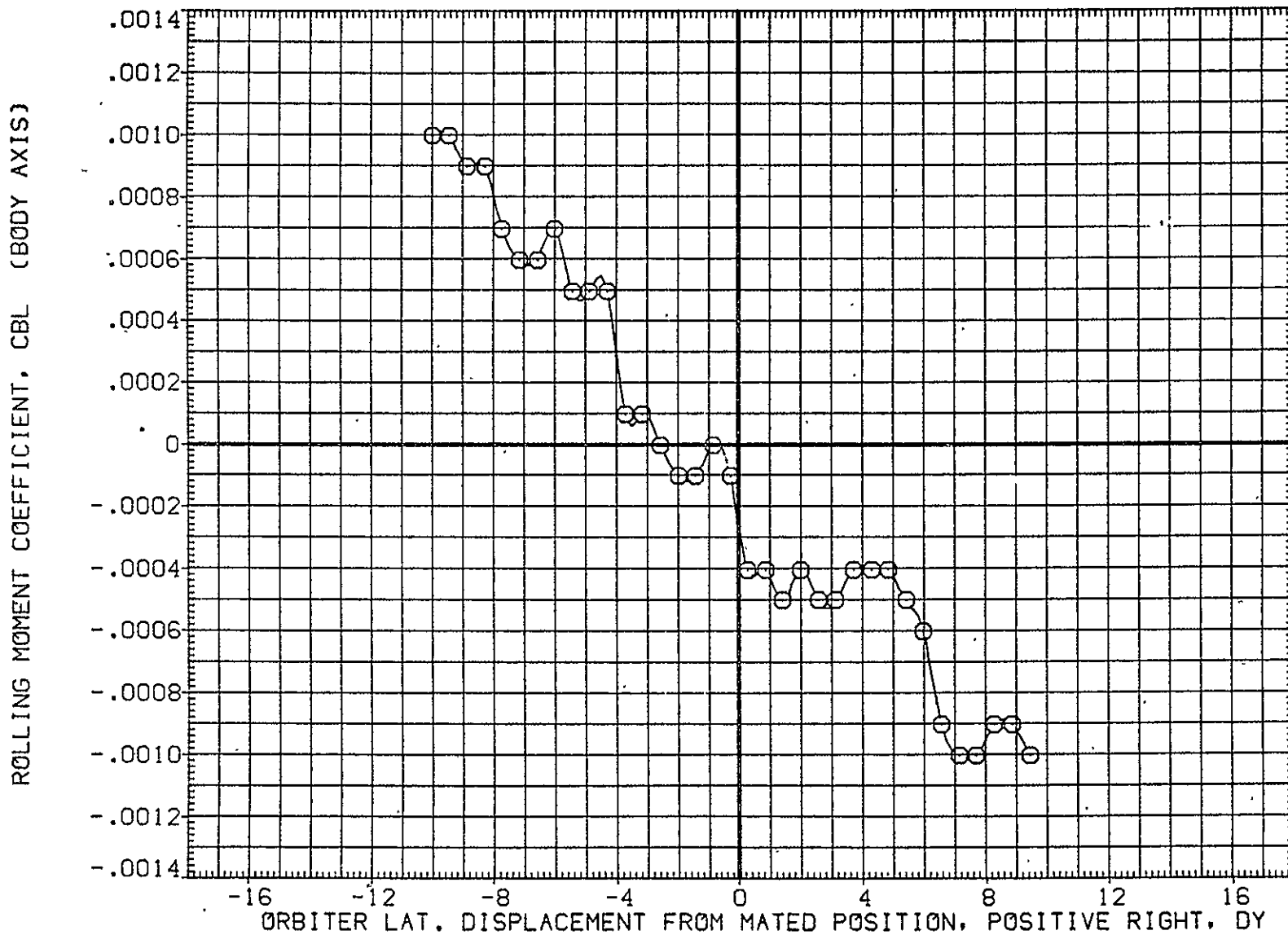


FIG. 79 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE088

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE088)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

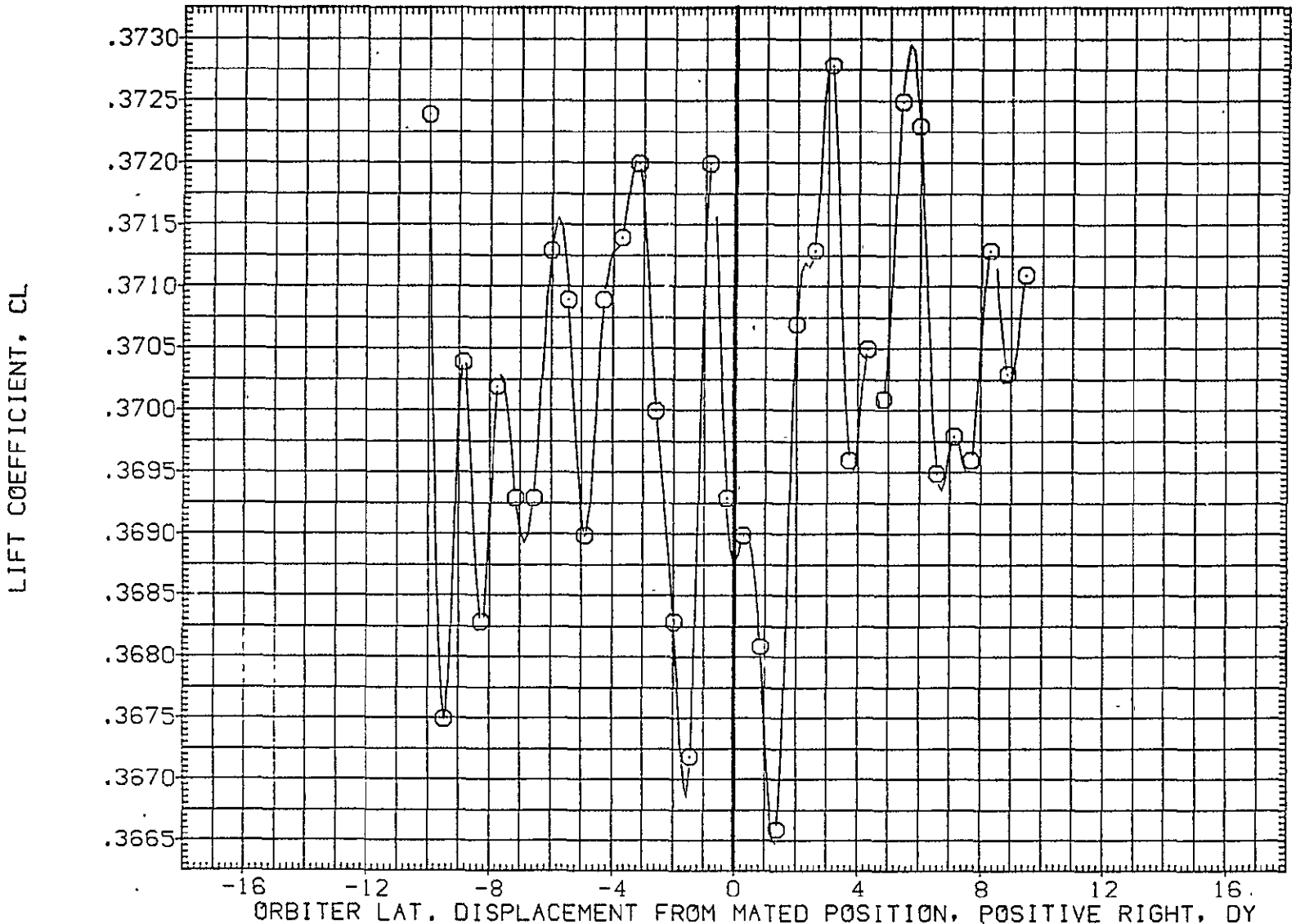


FIG. 79 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE088

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.594	ALPHAC	2.000	BETAC	-5.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DZ	60.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

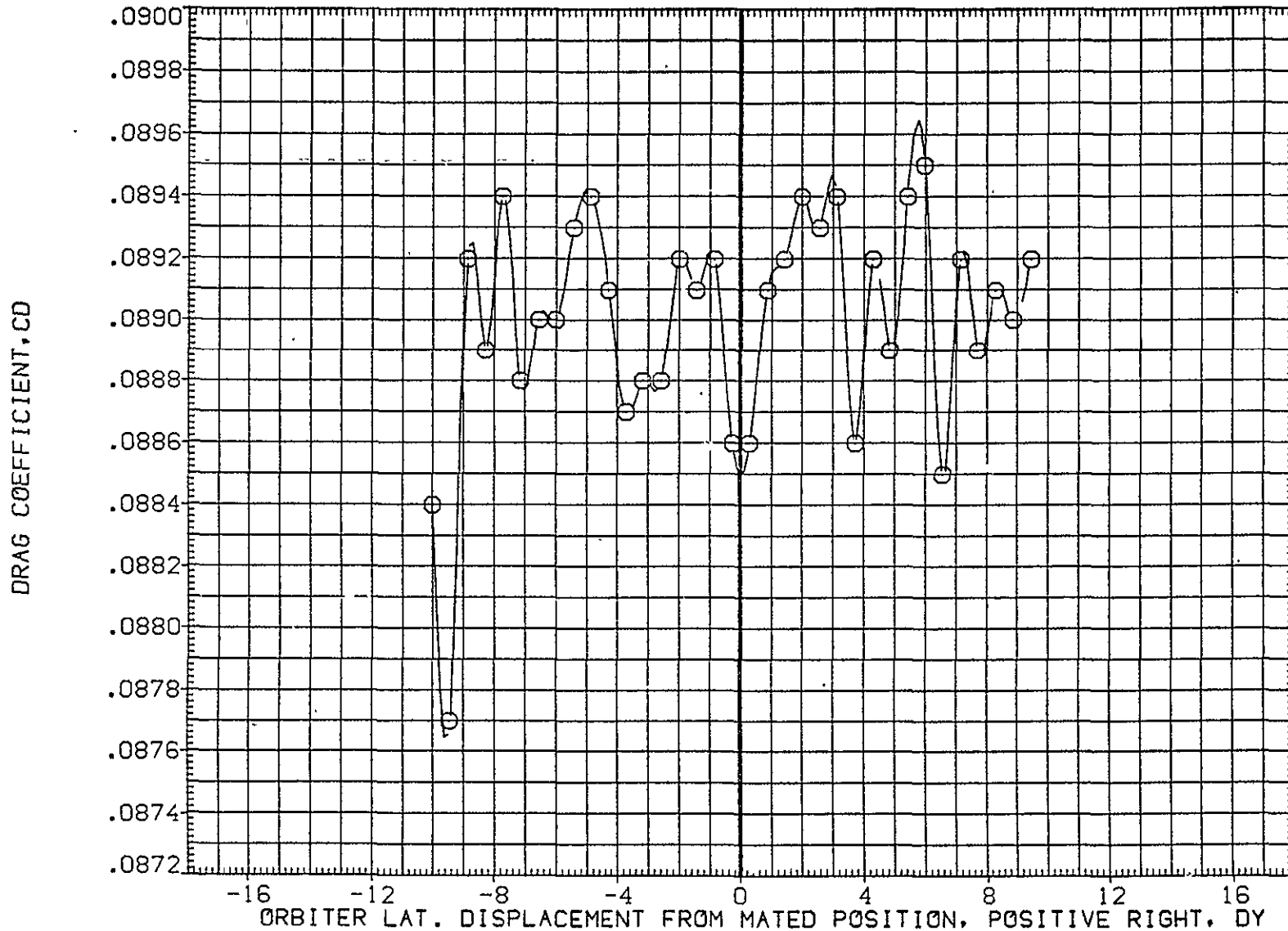


FIG. 79 ORB. DATA, CARRIER PROXIMITY, ALPHAC=2, IORB=6, BETAC=-5, BETA0=0, AFE088

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE089)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. XC
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YC
						ZMRP	375.0000	IN. ZC
						SCALE	.0125	

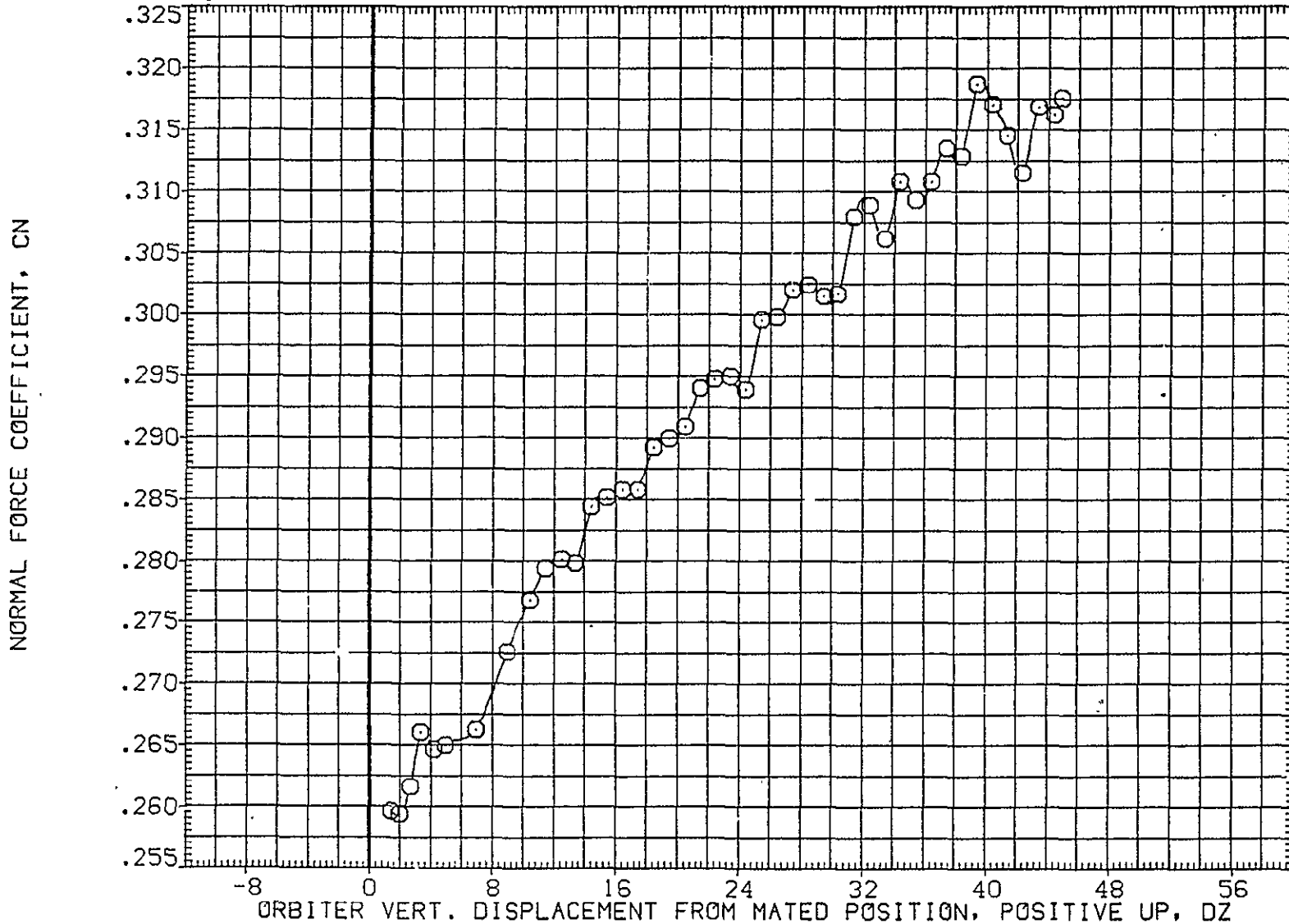


FIG. 80 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=4, BETAC=0, BETA0=0, AFE089

SYMBOL
○

MACH	PARAMETRIC VALUES			
.599	ALPHAC	4.000	BETAC	.000
	STAB	5.000	ELEVON	5.000
	BDFLAP	.000	DX	.000
	DY	.000	IORB	4.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	50. FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

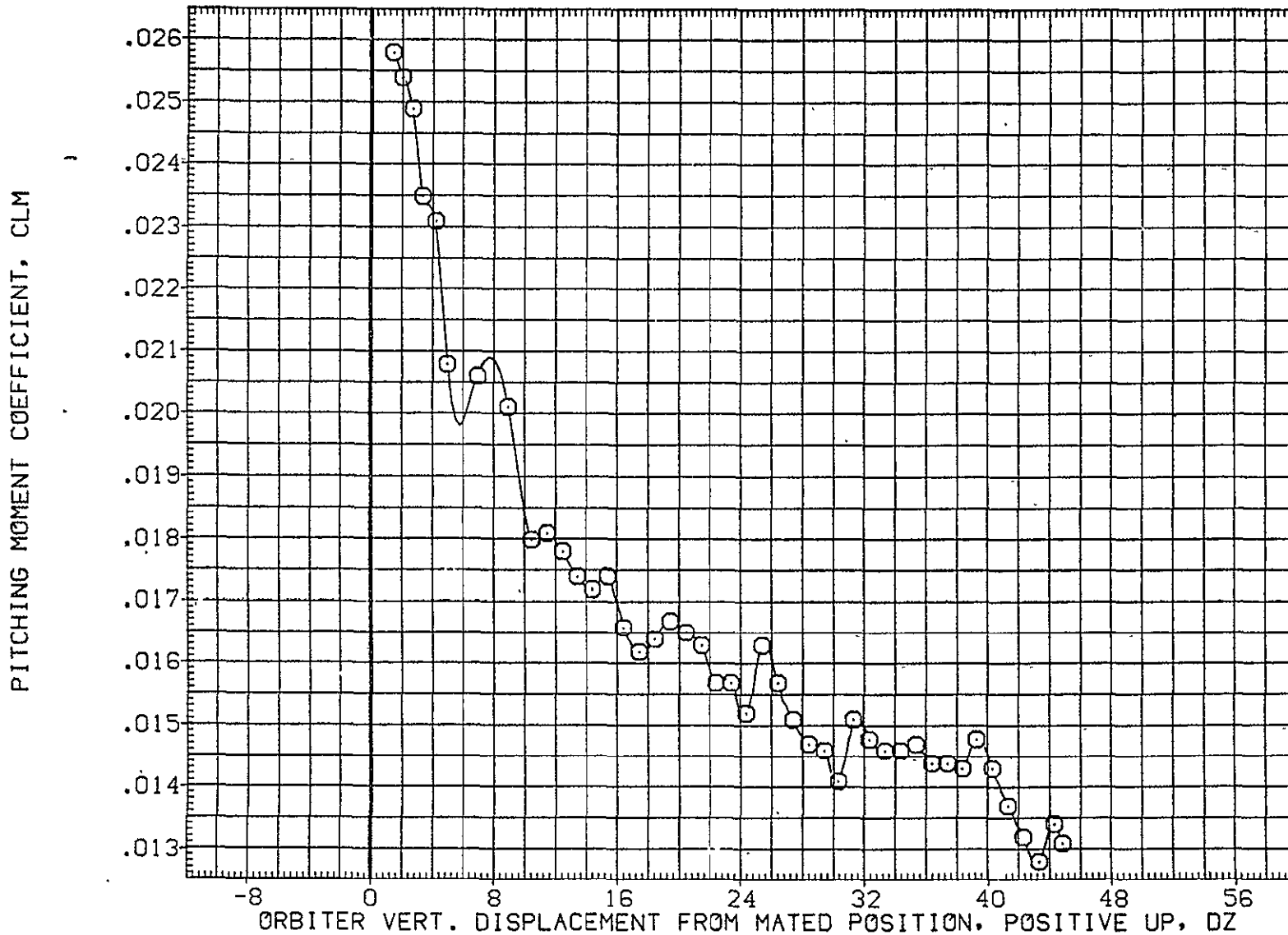


FIG. 80 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=4, BETAC=0, BETA0=0, AFE089

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE089)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	SQ.FT
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X)
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y)
						ZMRP	375.0000	IN. Z)
						SCALE	.0125	

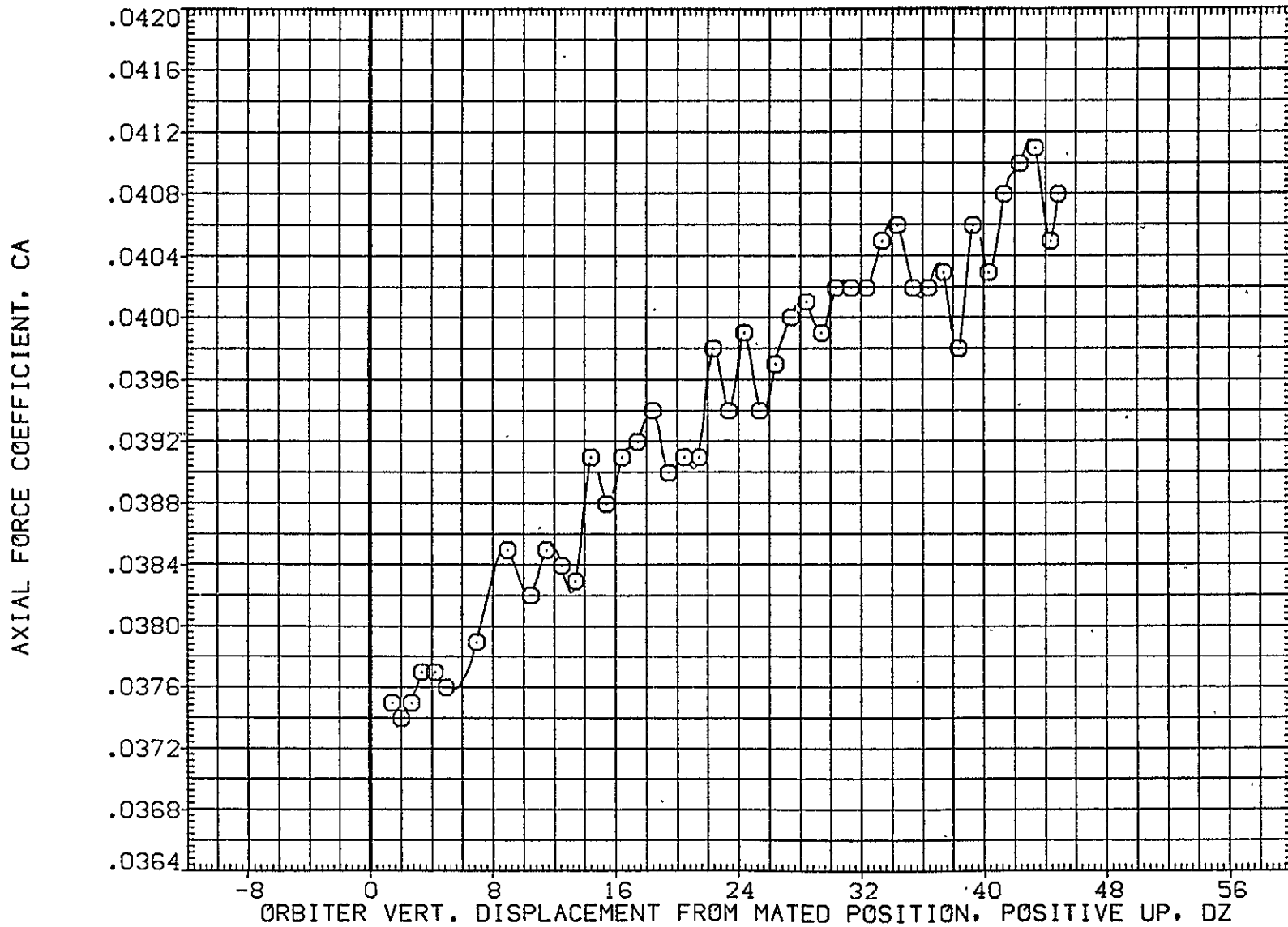


FIG. 80 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=4, BETAC=0, BETA0=0, AFE089

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	IN.	SO.FT.
○	.599	4.000	.000	5.000	.000	2690.0000	474.8100	1109.0000
		5.000	.000	4.000	.000	936.6800	.0000	375.0000
		.000	.000	.000	.000	.0125		
		10RB	RUDDER					

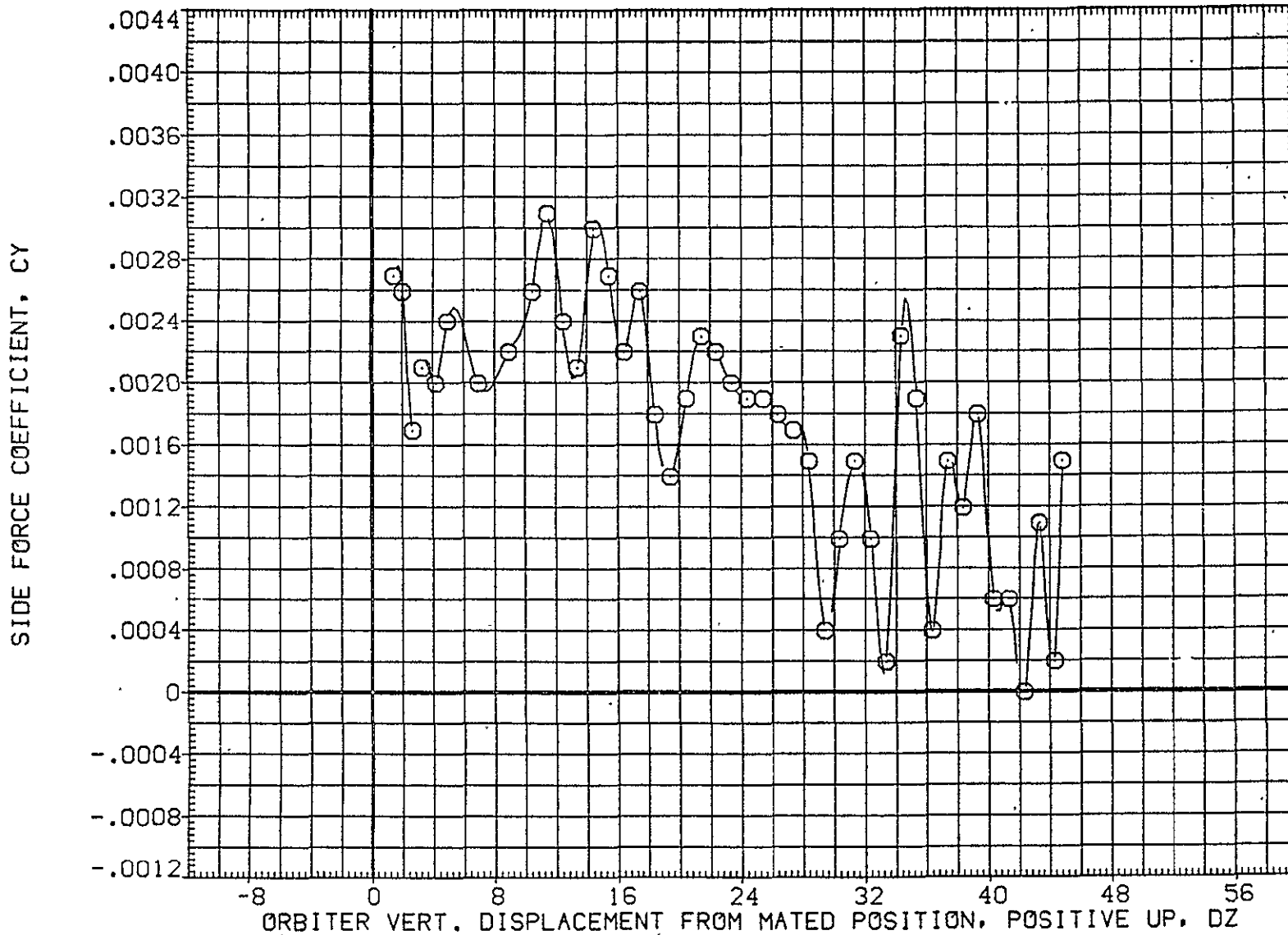


FIG. 80 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, 10RB=4, BETAC=0, BETA0=0, AFE089

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE089)

SYMBOL	MACH	PARAMETRIC VALUES						REFERENCE INFORMATION		
○	.599	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	SO.FT.		
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.		
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.		
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0		
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0		
						ZMRP	375.0000	IN. Z0		
						SCALE	.0125			

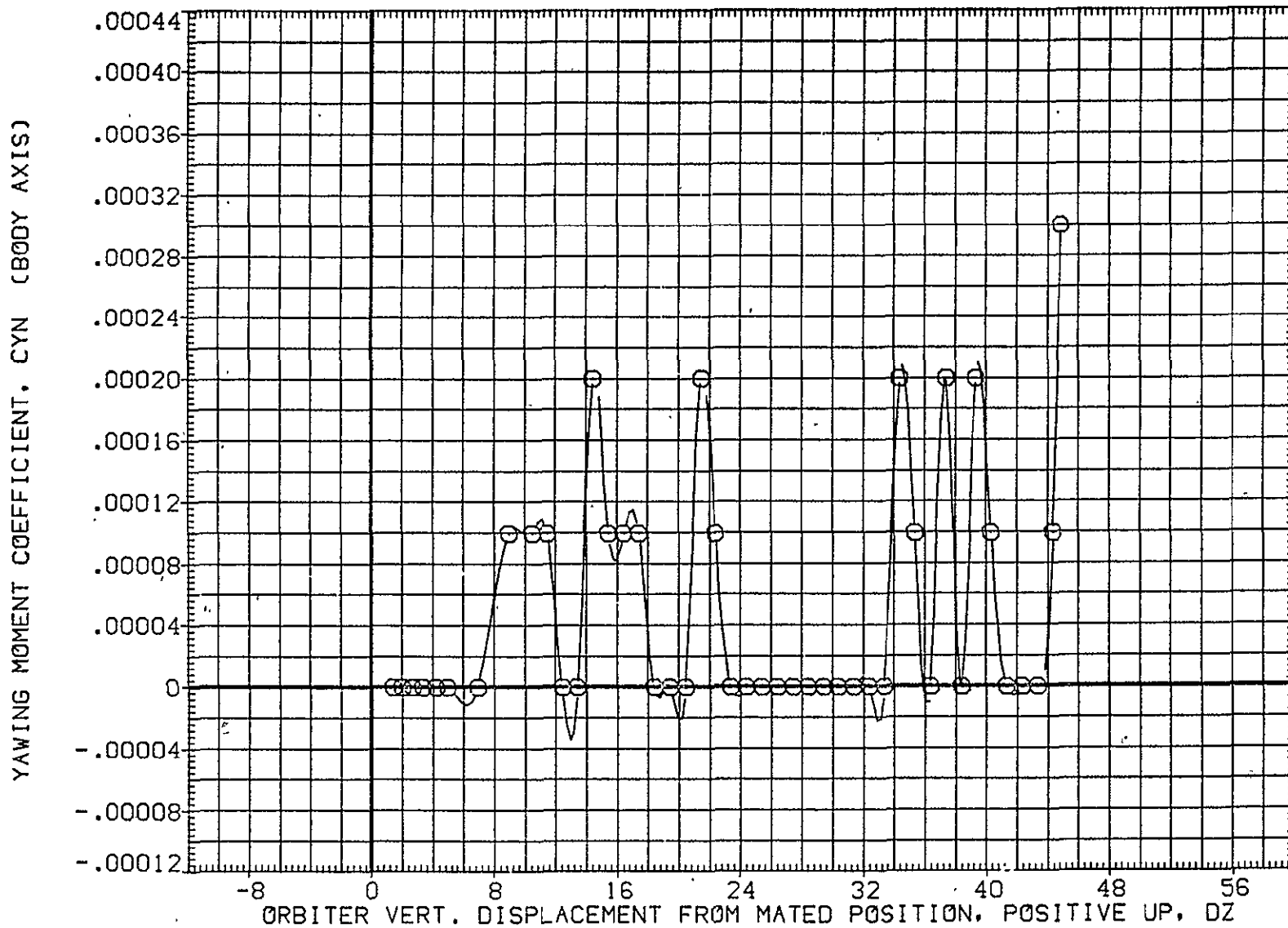


FIG. 80 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=4, BETAC=0, BETA0=0, AFE089

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

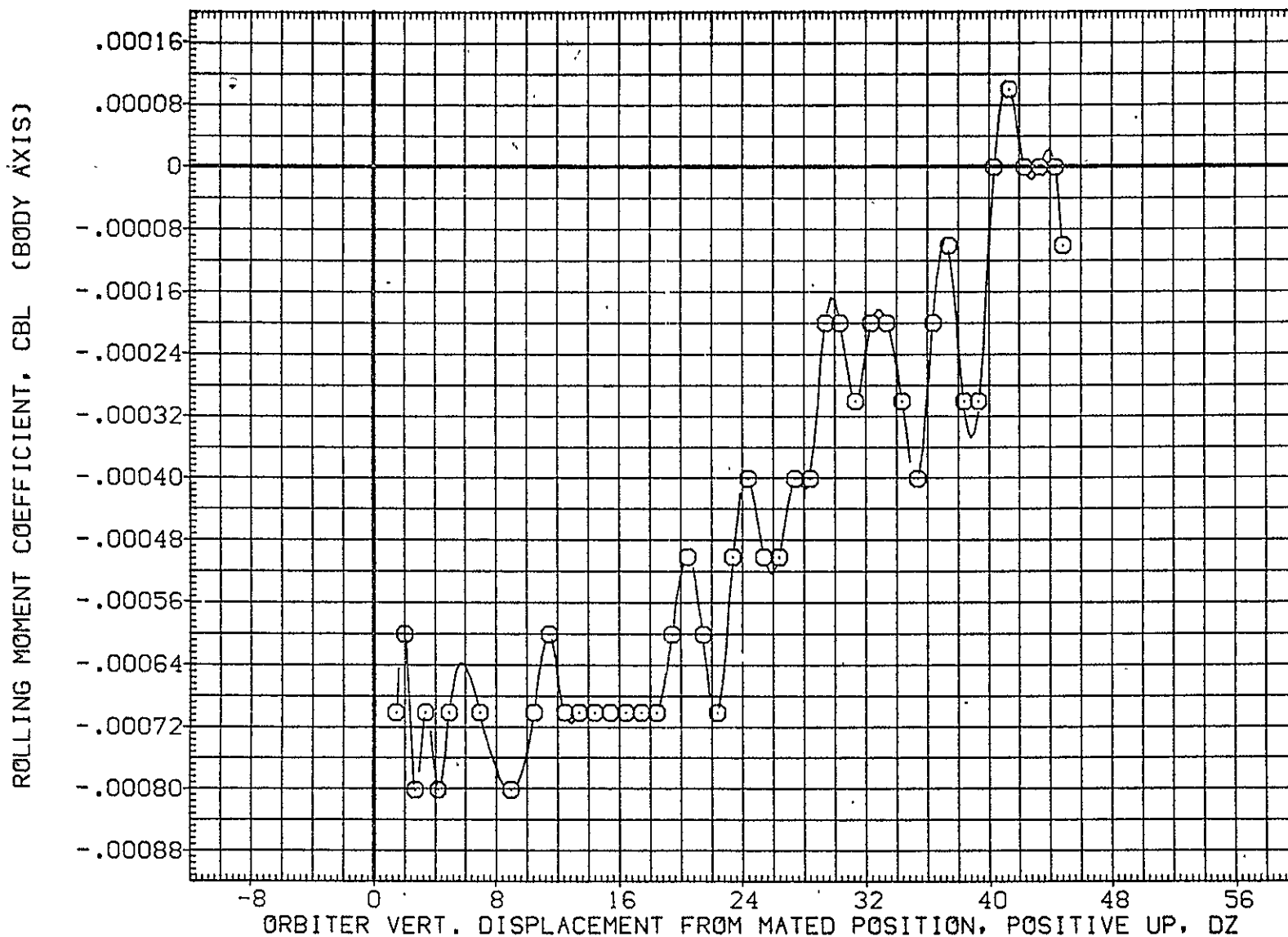


FIG. 80 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=4, BETAC=0, BETA0=0, AFE089

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE089)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	SQ.FT
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	OX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y
						ZMRP	375.0000	IN. Z
						SCALE	.0125	

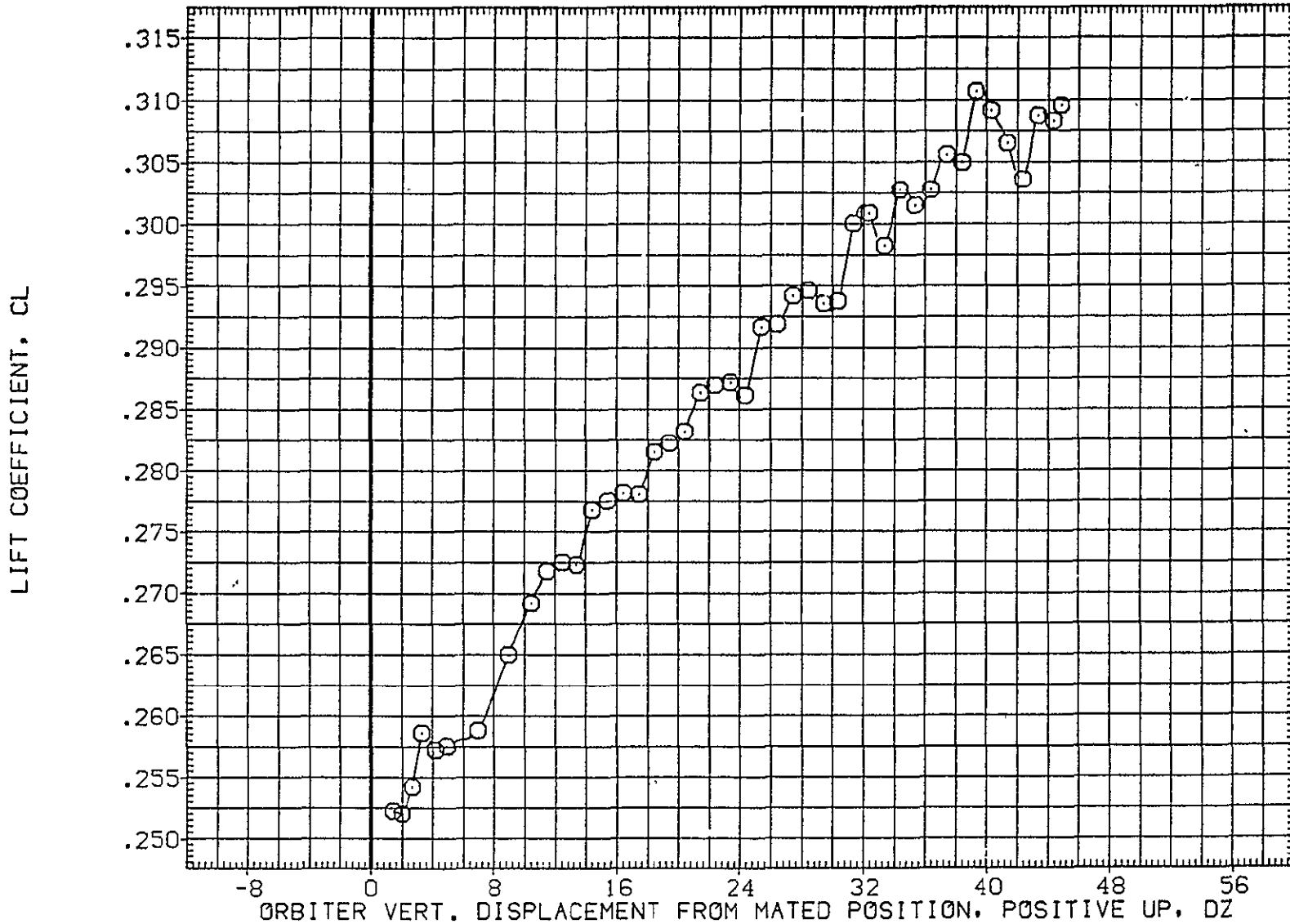


FIG. 80 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=4, BETAC=0, BETA0=0, AFE089

SYMBOL
○

MACH	PARAMETRIC VALUES			
.599	ALPHAC	4.000	BETAC	.000
	STAB	5.000	ELEVON	5.000
	BDFLAP	.000	DX	.000
	OY	.000	IORB	4.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. XI
YMRP	.0000	IN. YI
ZMRP	375.0000	IN. ZI
SCALE	.0125	

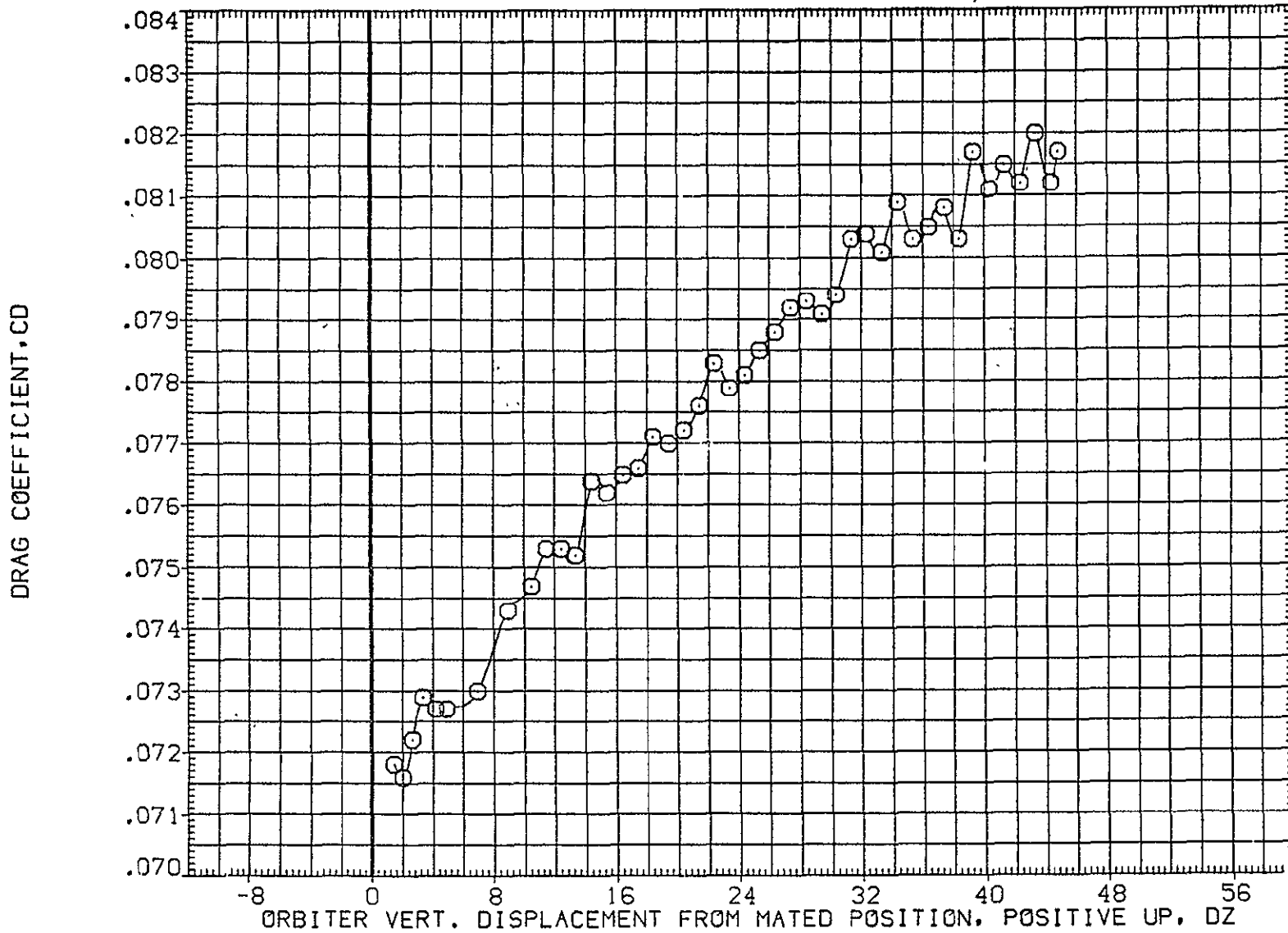


FIG. 80 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=4, BETAC=0, BETA0=0, AFE089

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE090)

SYMBOL
○

MACH	PARAMETRIC VALUES			
.598	ALPHAC	4.000	BETAC	.000
	STAB	5.000	ELEVON	5.000
	BDFLAP	.000	DX	.000
	DY	.000	IORB	6.000
	BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.F
LREF	474.8100	IN.
BREF	936.6800	IN.
XM RP	1109.0000	IN.
YM RP	.0000	IN.
ZM RP	375.0000	IN.
SCALE	.0125	

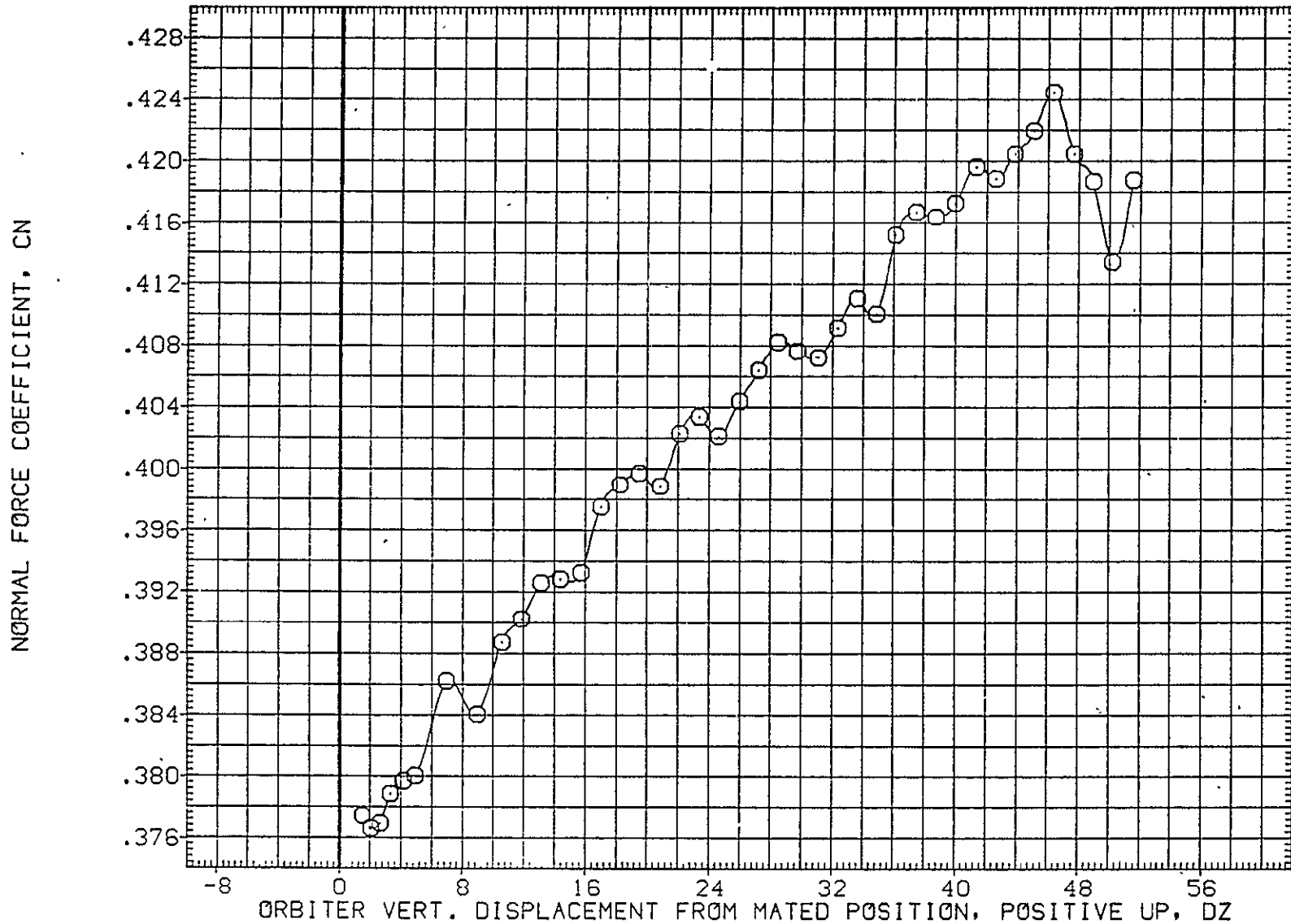


FIG. 81 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=6, BETAC=0, BETA0=0, AFE090

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.598	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

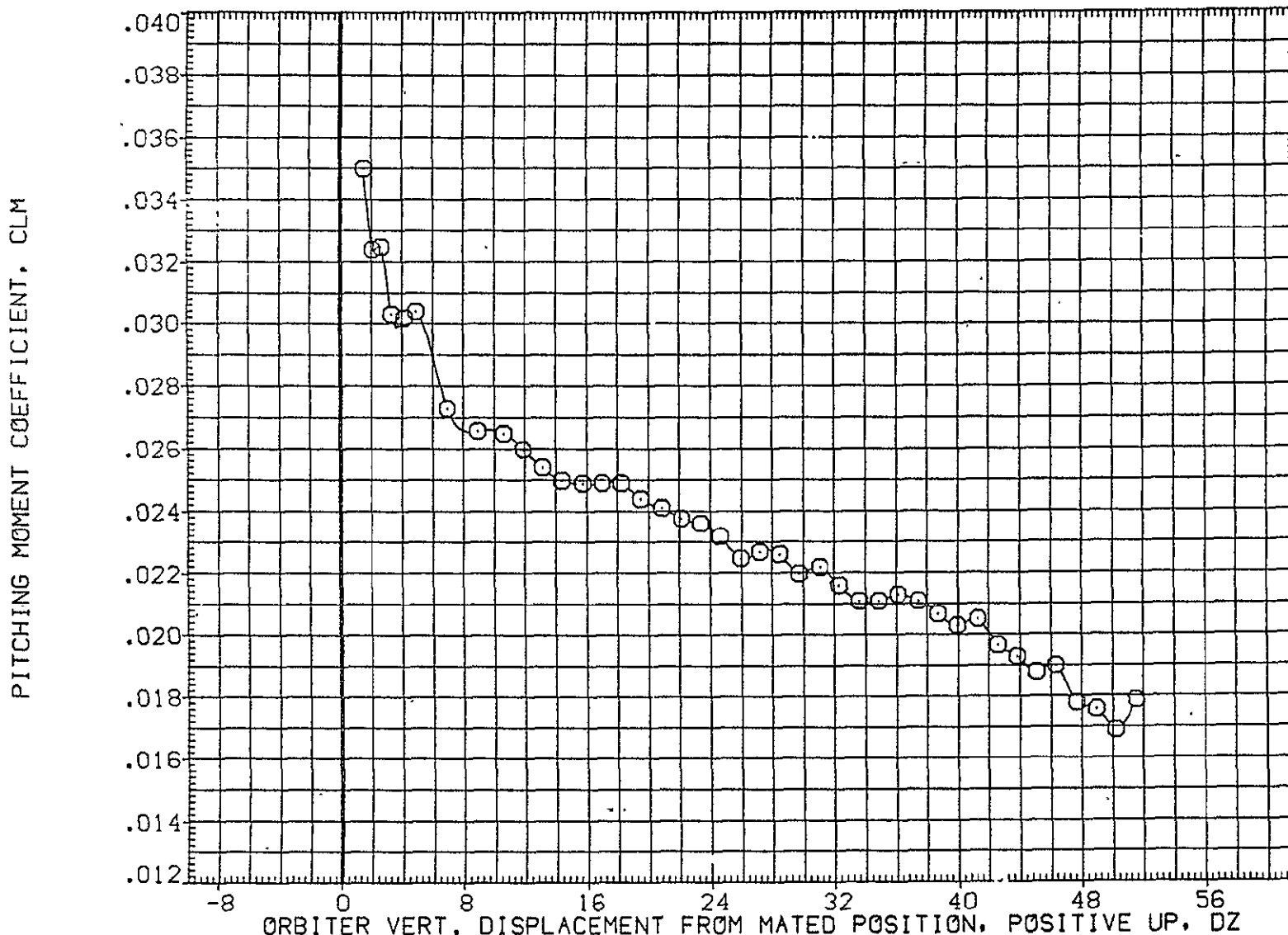


FIG. 81 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=6, BETAC=0, BETA0=0, AFE090

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE090)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
		ALPHAC	BETAC	ELEVON	DX	SREF	YREF	ZREF
○	.598	4.000	.000	5.000	.000	2690.0000	474.8100	936.6800
		5.000	6.000	.000	.000	1109.0000	.0000	.0125
		BDFLAP	10RB	RUDDER				
		.000	.000	.000				
		DY						
		.000						
		BETA0						
		.000						

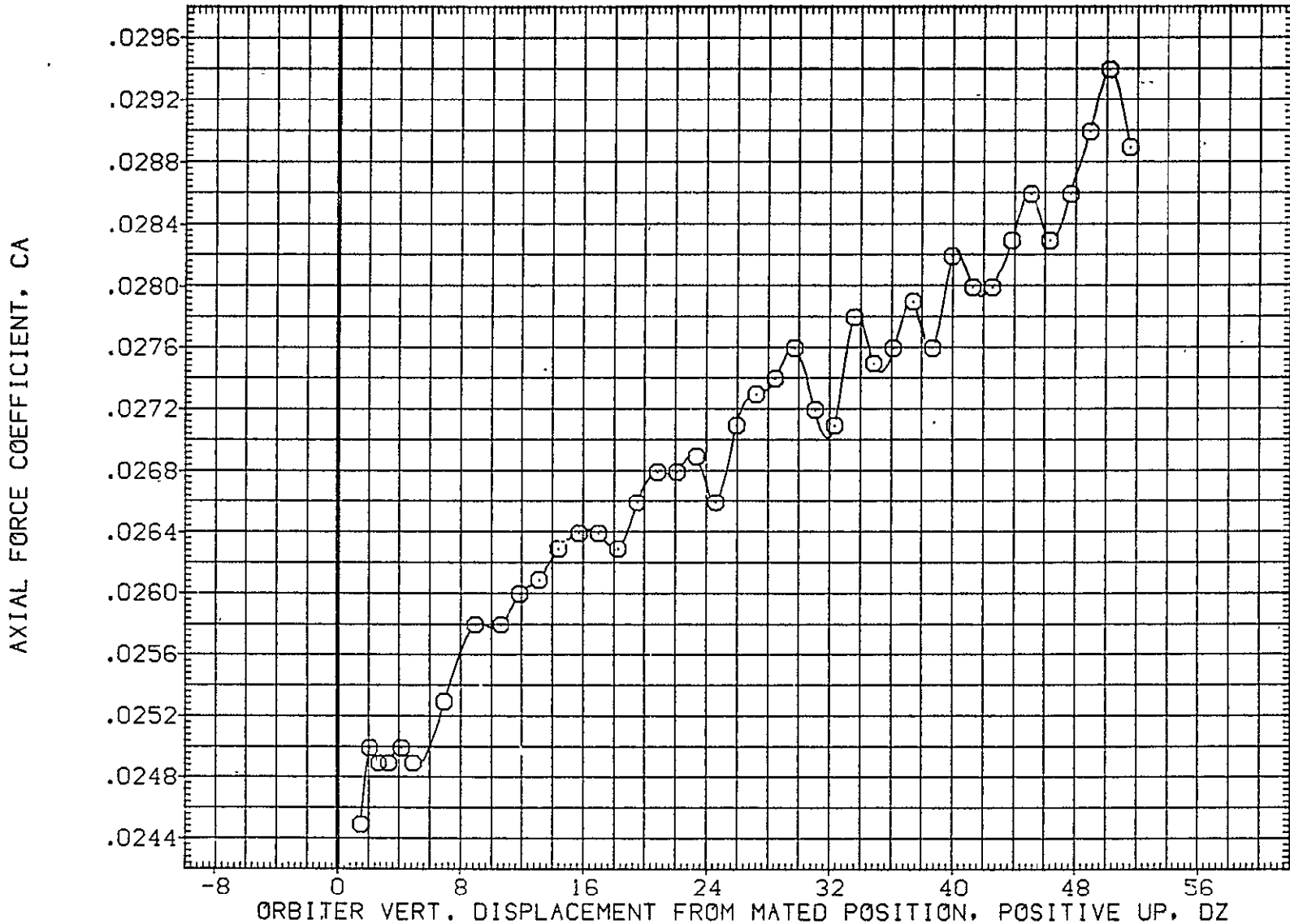


FIG. 81 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, 10RB=6, BETAC=0, BETA0=0, AFE090

SYMBOL
○

MACH
.598

PARAMETRIC VALUES			
ALPHAC	4.000	BETAC	.000
STAB	5.000	ELEVON	5.000
BDFLAP	.000	DX	.000
DY	.000	IORB	6.000
BETA0	.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

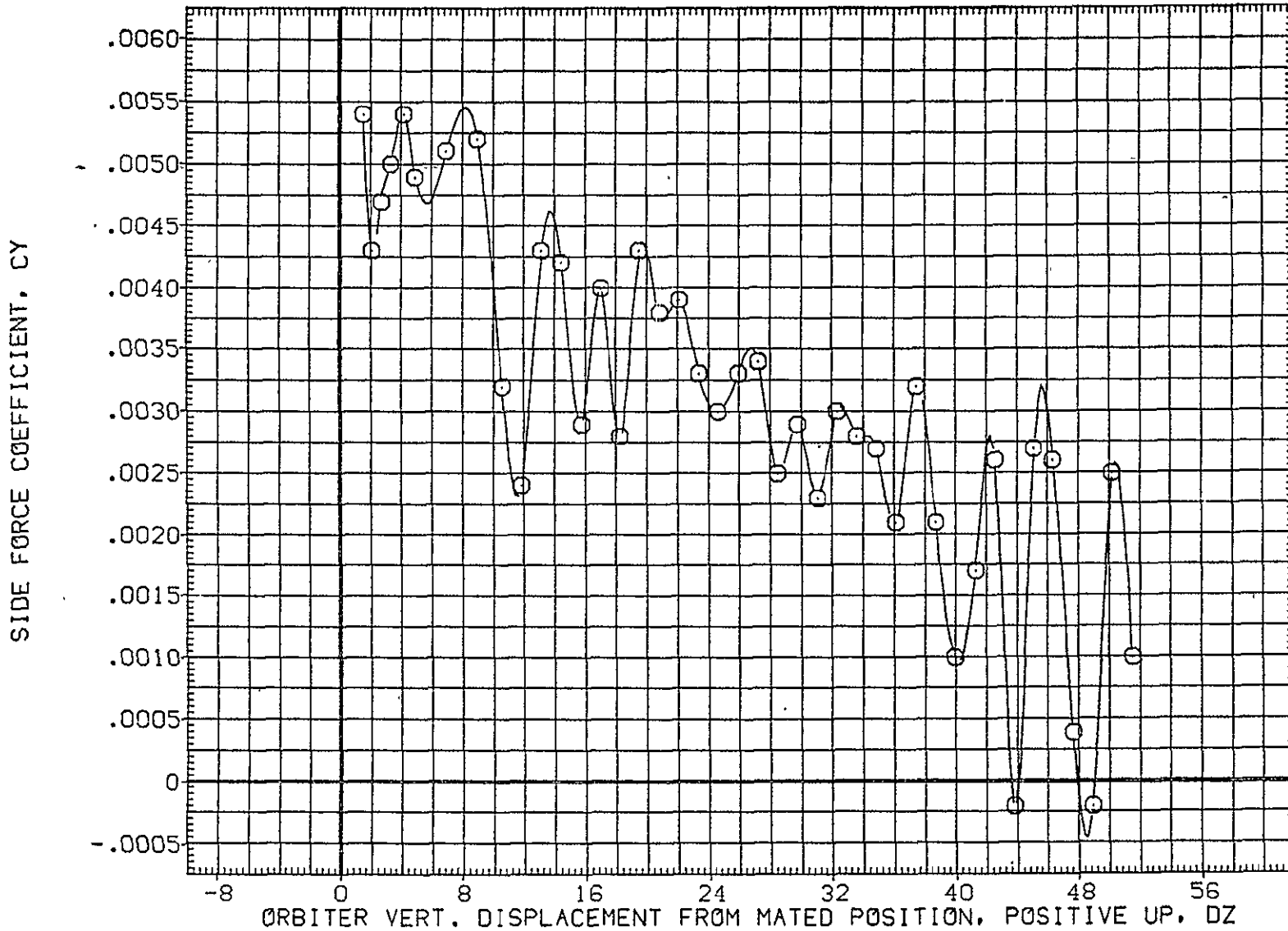


FIG. 81 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=6, BETAC=0, BETA0=0, AFE090

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE090)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.598	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

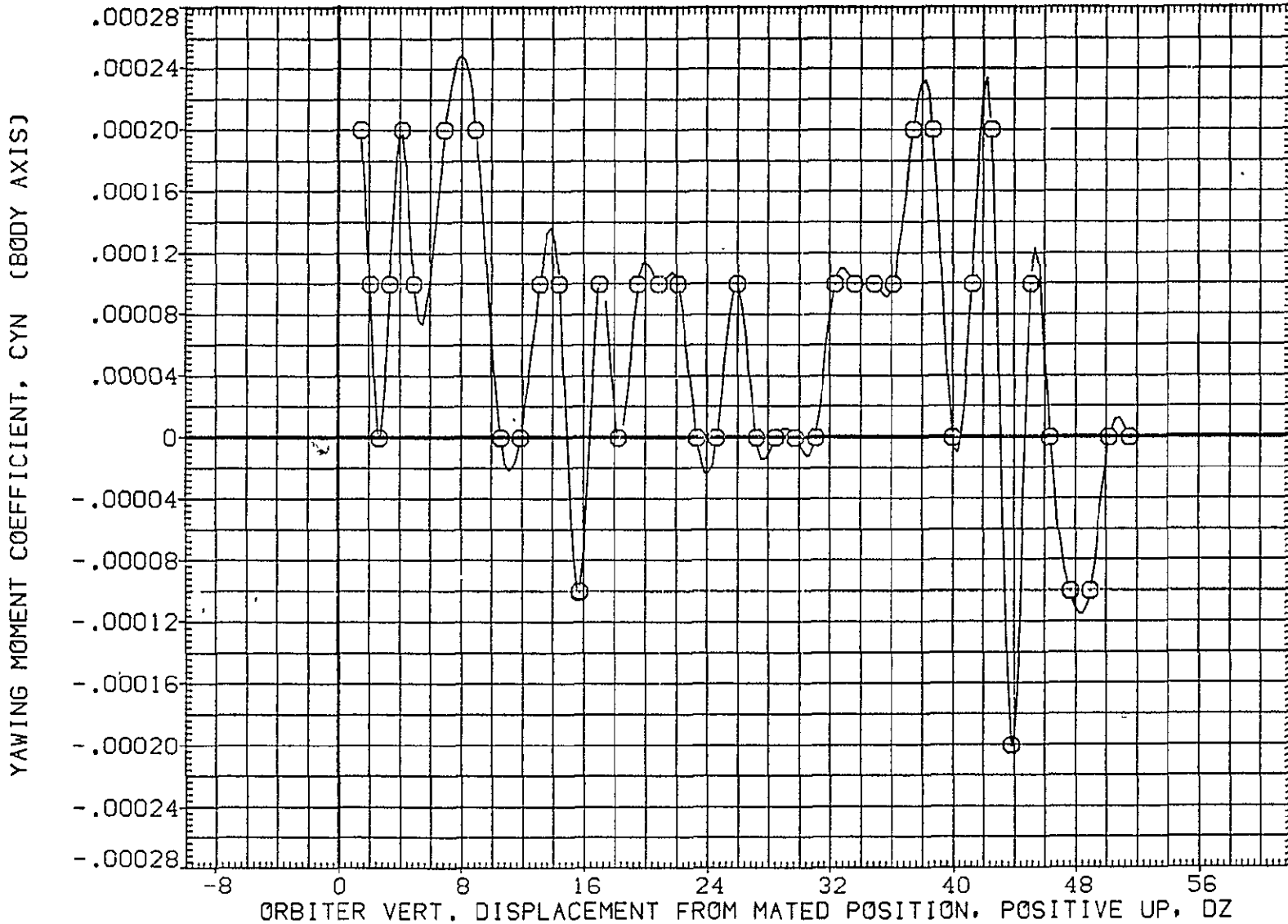


FIG. 81 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=6, BETAC=0, BETA0=0, AFE090

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.598	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	SO.F1
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN.)
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN.)
						ZMRP	375.0000	IN.)
						SCALE	.0125	

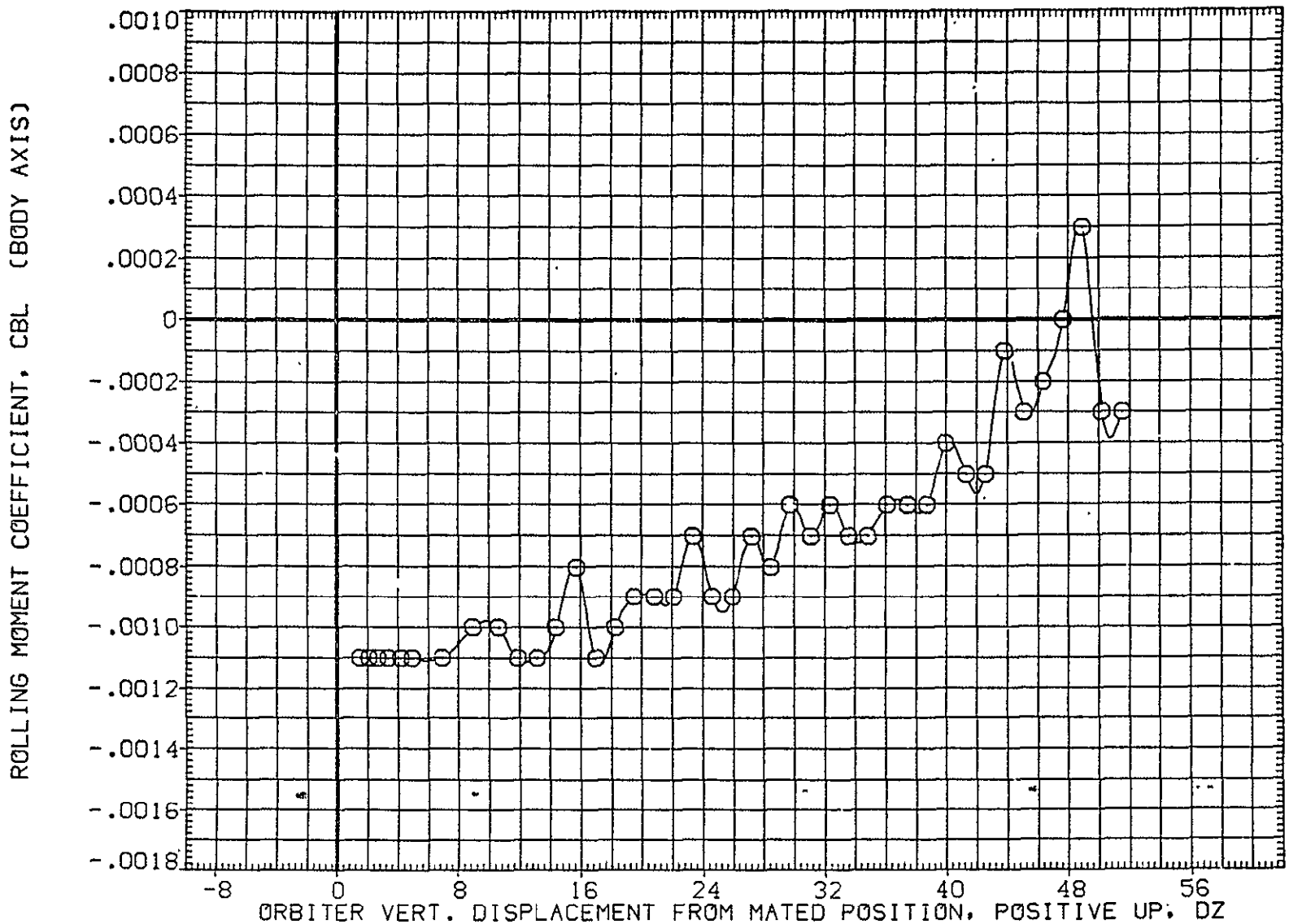


FIG. 81 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=6, BETAC=0, BETA0=0, AFE090

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE090)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.598	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	SO.1
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN.
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN.
						ZMRP	375.0000	IN.
						SCALE	.0125	

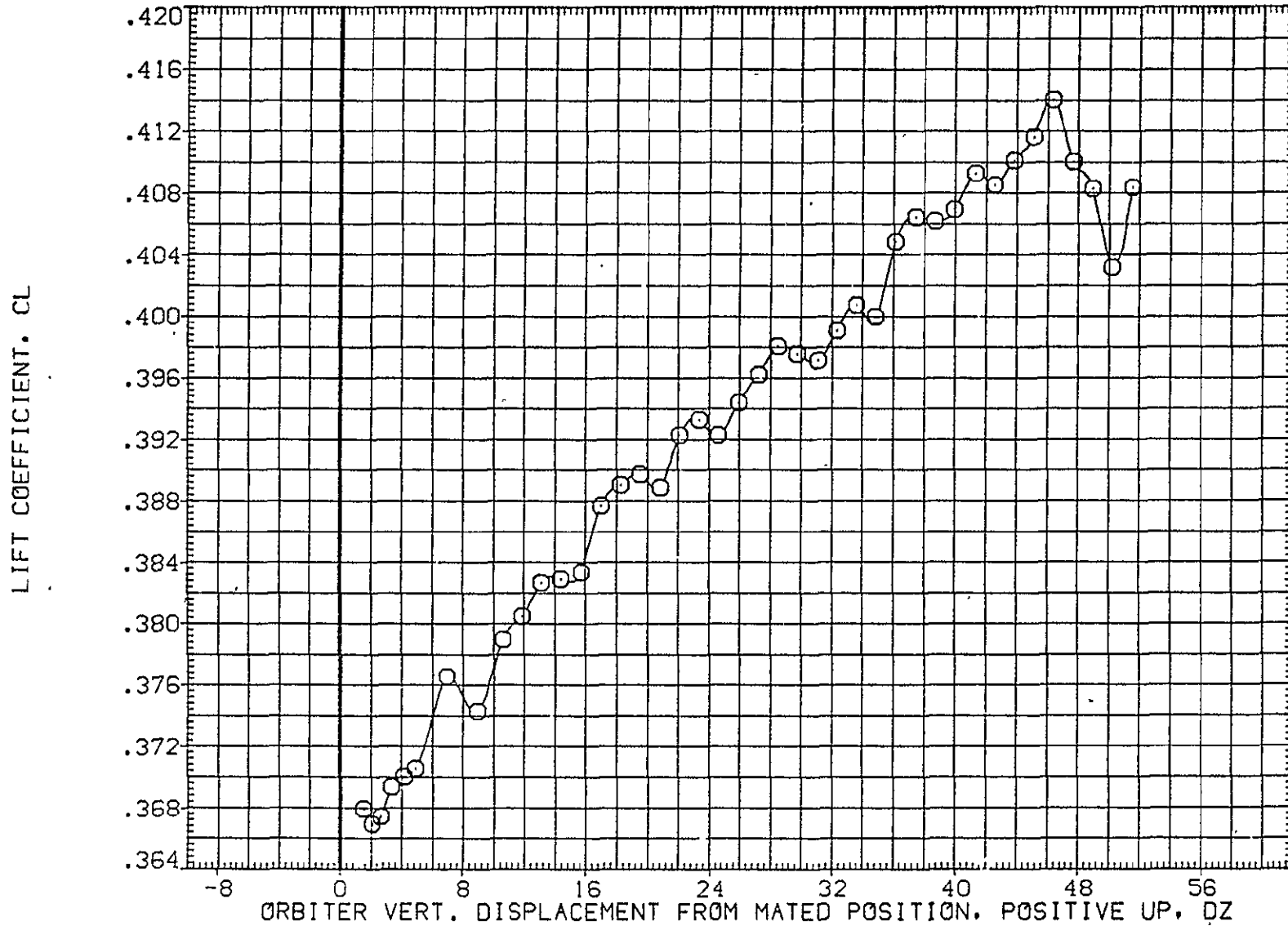


FIG. 81 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=6, BETAC=0; BETA0=0, AFE090

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.598	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	50. FT
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	6.000	XMRP	1109.0000	IN. X
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y
						ZMRP	375.0000	IN. Z
						SCALE	.0125	

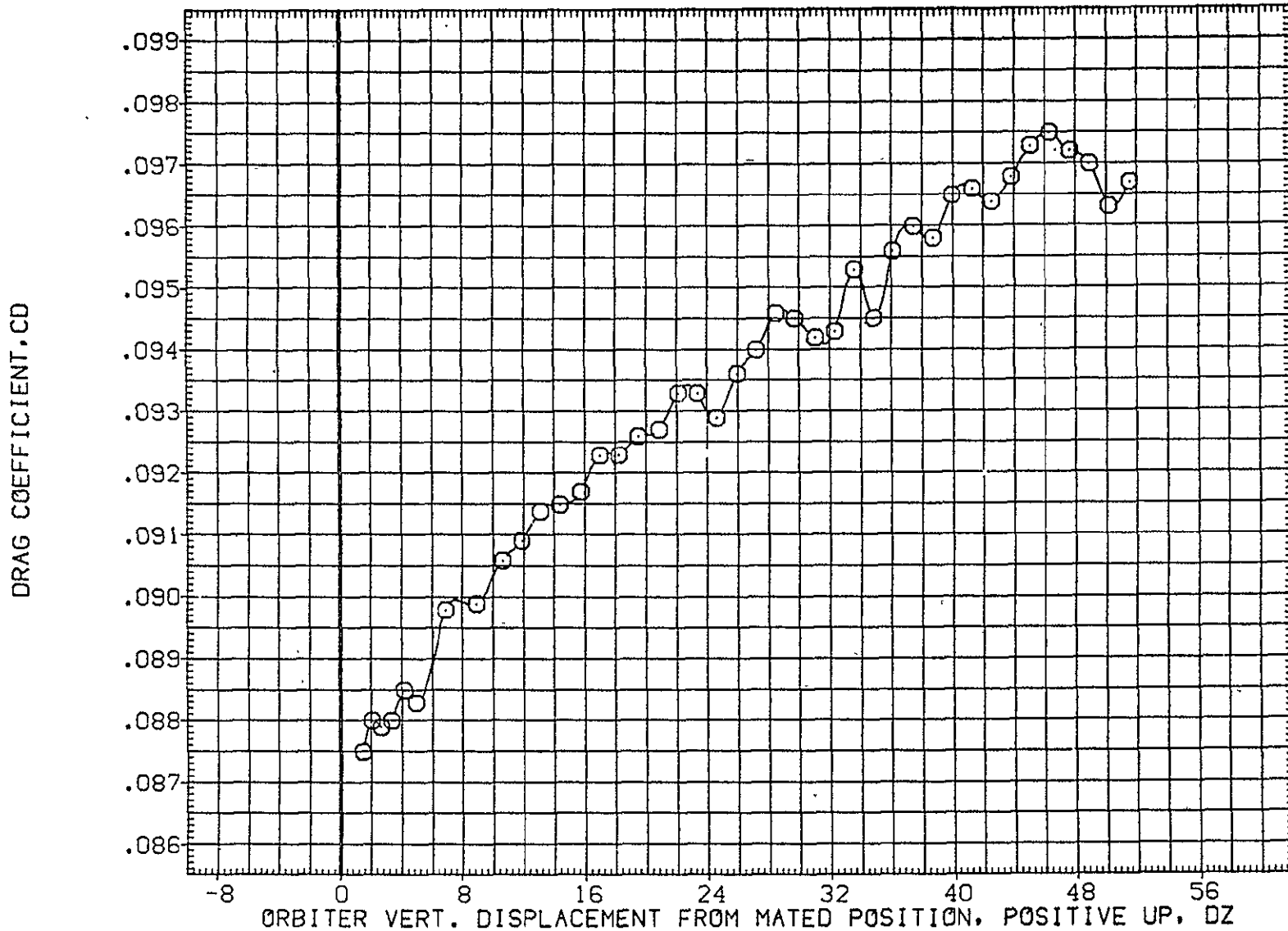


FIG. 81 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=6, BETAC=0, BETA0=0, AFE090

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE091)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.600	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	SQ.FT
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		OY	.000	IORB	8.000	XMRP	1109.0000	IN. X
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y
						ZMRP	375.0000	IN. Z
						SCALE	.0125	

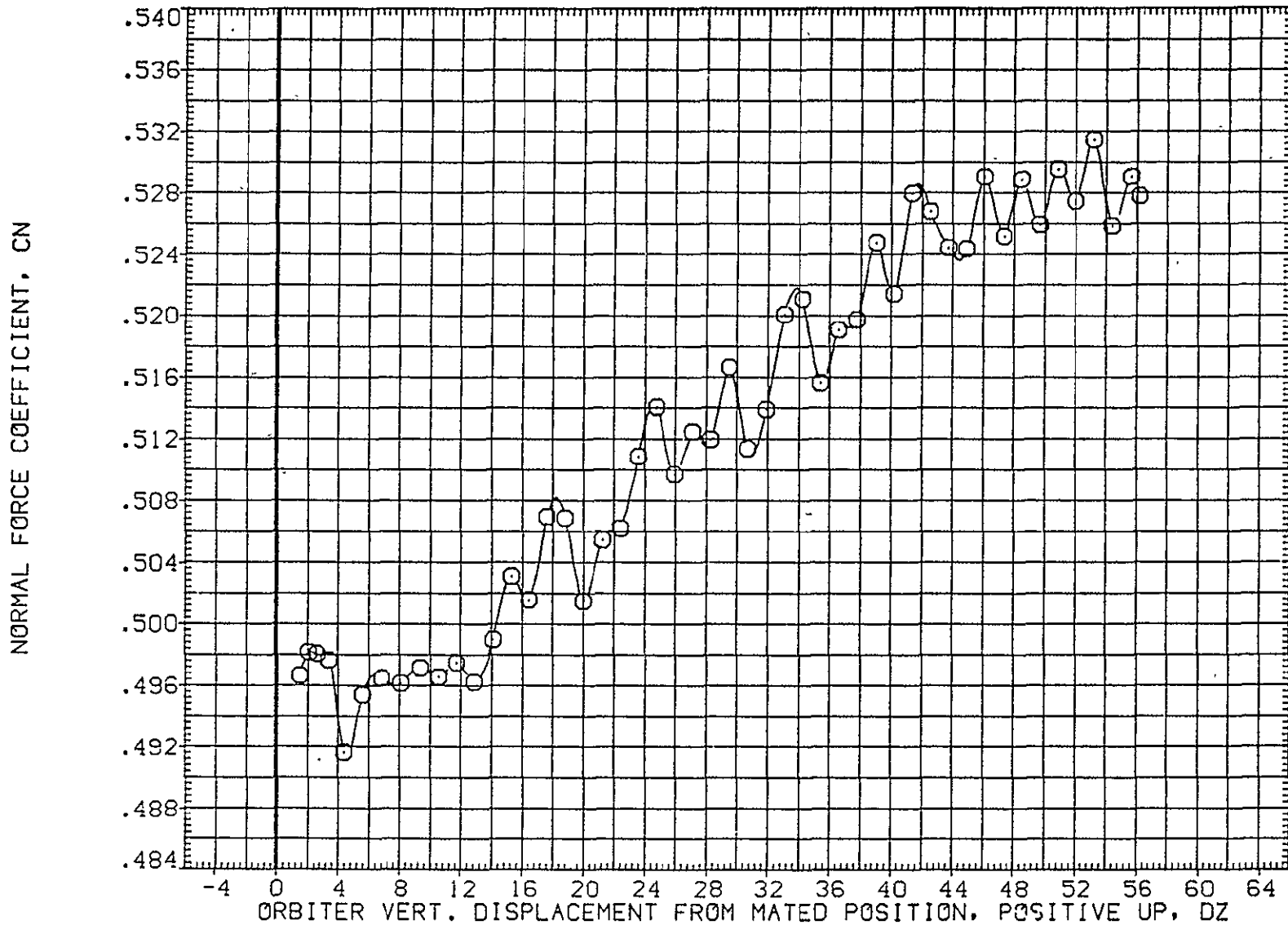


FIG. 82 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=8, BETAC=0, BETA0=0, AFE091

SYMBOL
○

MACH
.600

PARAMETRIC VALUES			
ALPHAC	4.000	BETAC	.000
STAB	5.000	ELEVON	5.000
BDFLAP	.000	DX	.000
DY	.000	IORB	8.000
BETA0	.000	RUDDER	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. XI
YMRP	.0000	IN. YI
ZMRP	375.0000	IN. ZI
SCALE	.0125	

PITCHING MOMENT COEFFICIENT, CLM

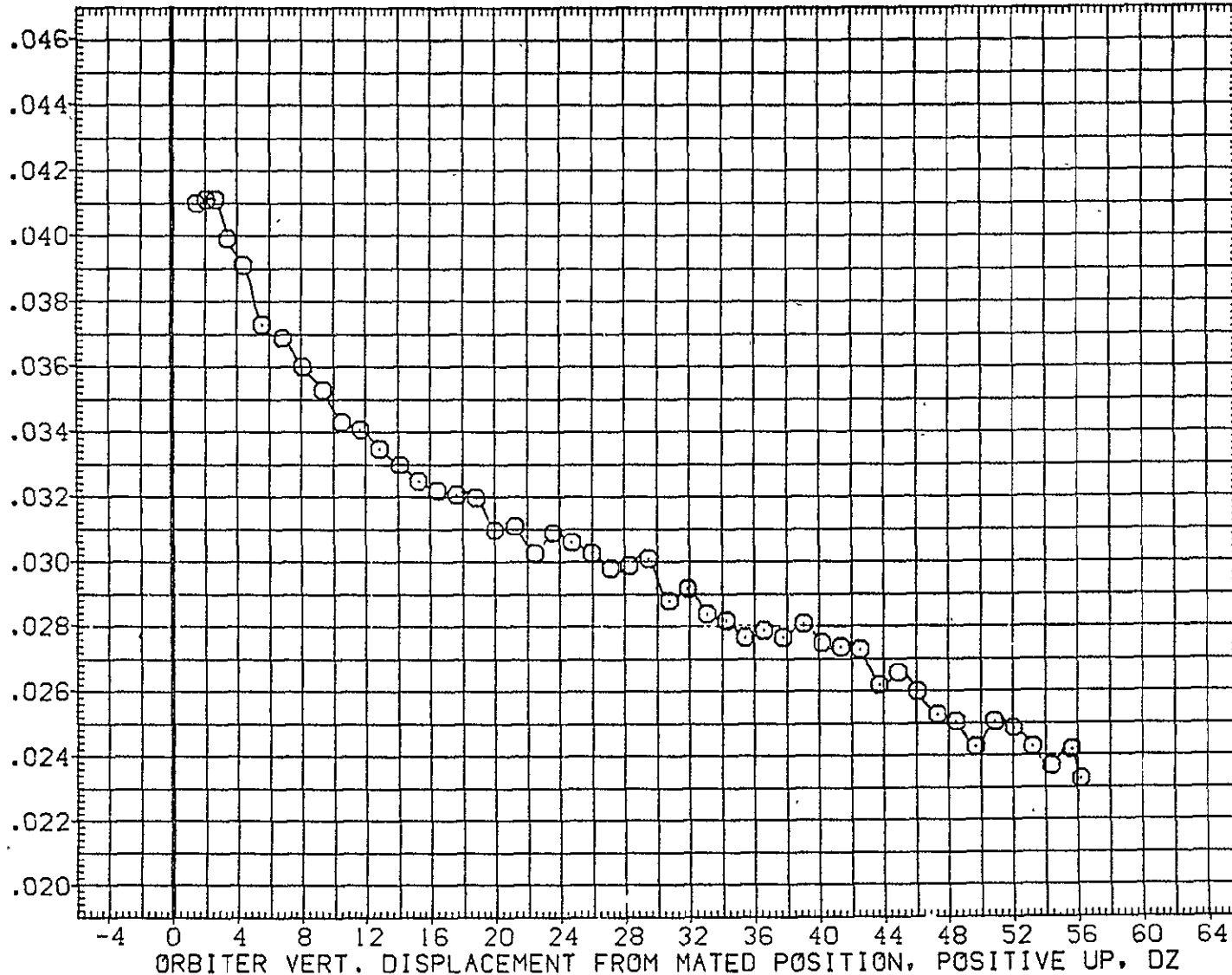


FIG. 82 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=8, BETAC=0, BETA0=0, AFE091

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE091)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.600	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

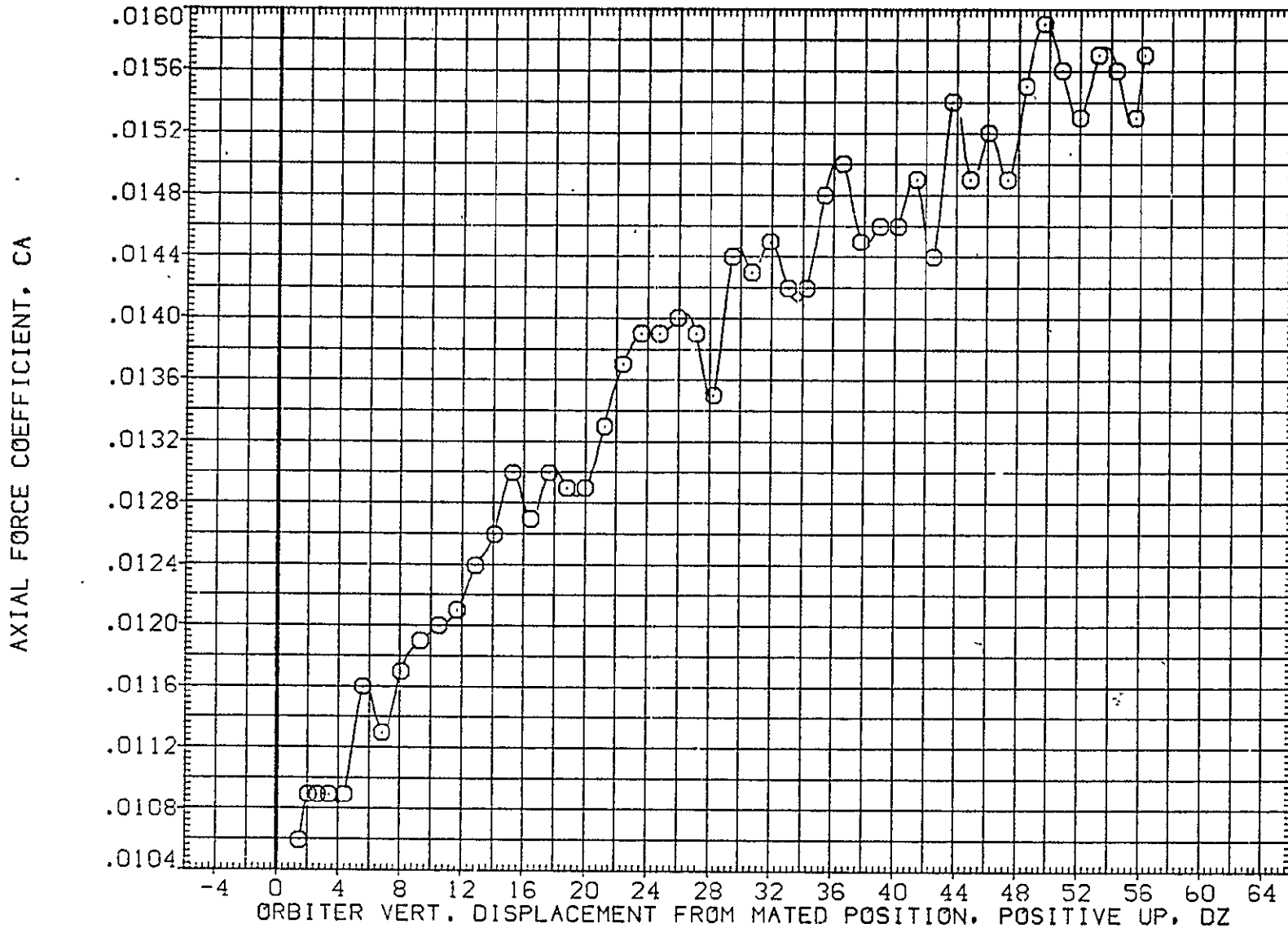


FIG. 82 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=8, BETAC=0, BETA0=0, AFE091

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.600	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. XC
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YC
						ZMRP	375.0000	IN. ZC
						SCALE	.0125	

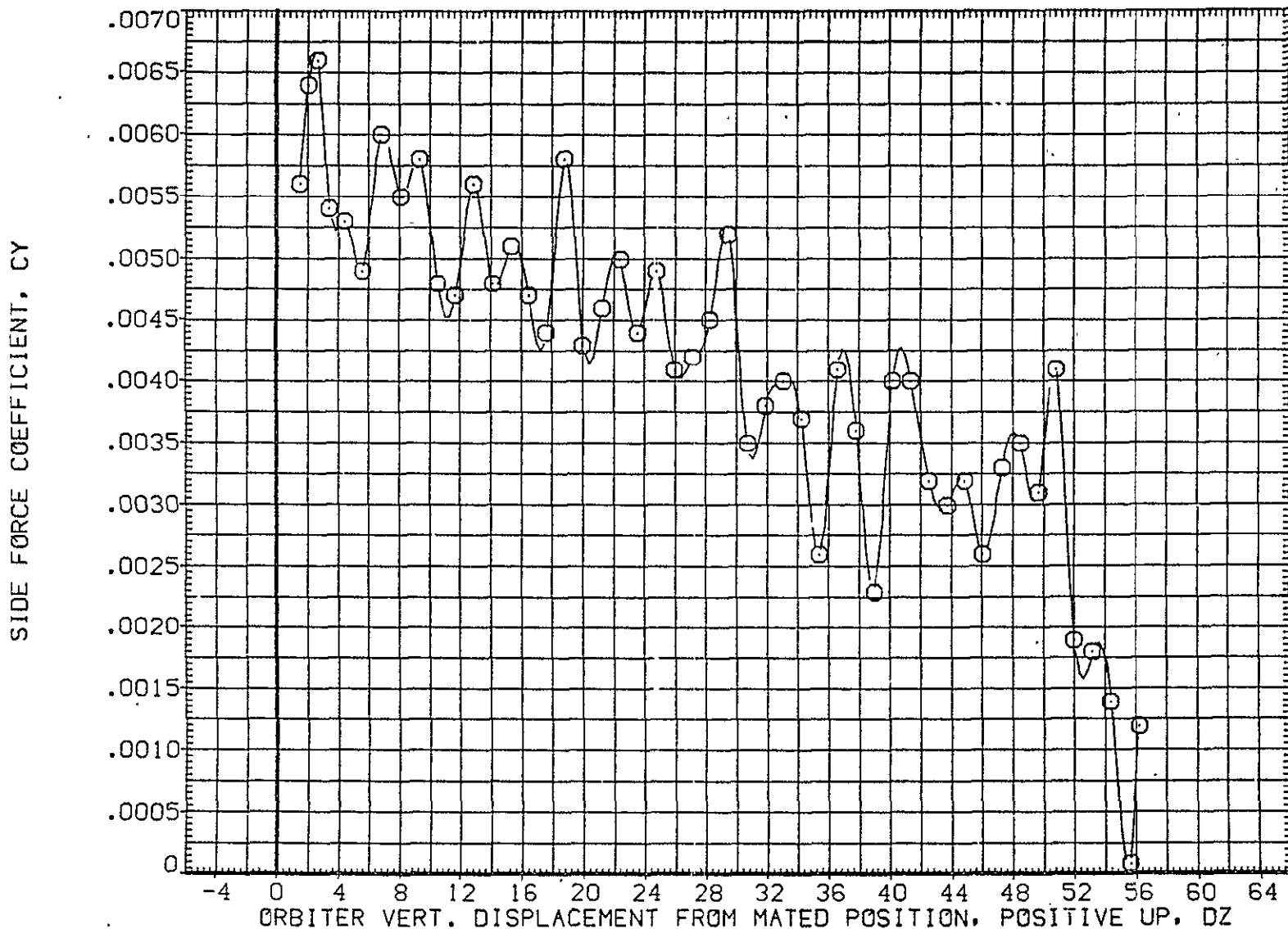


FIG. 82 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=8, BETAC=0, BETA0=0, AFE091

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE091)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.600	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. XC
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YC
						ZMRP	375.0000	IN. ZC
						SCALE	.0125	

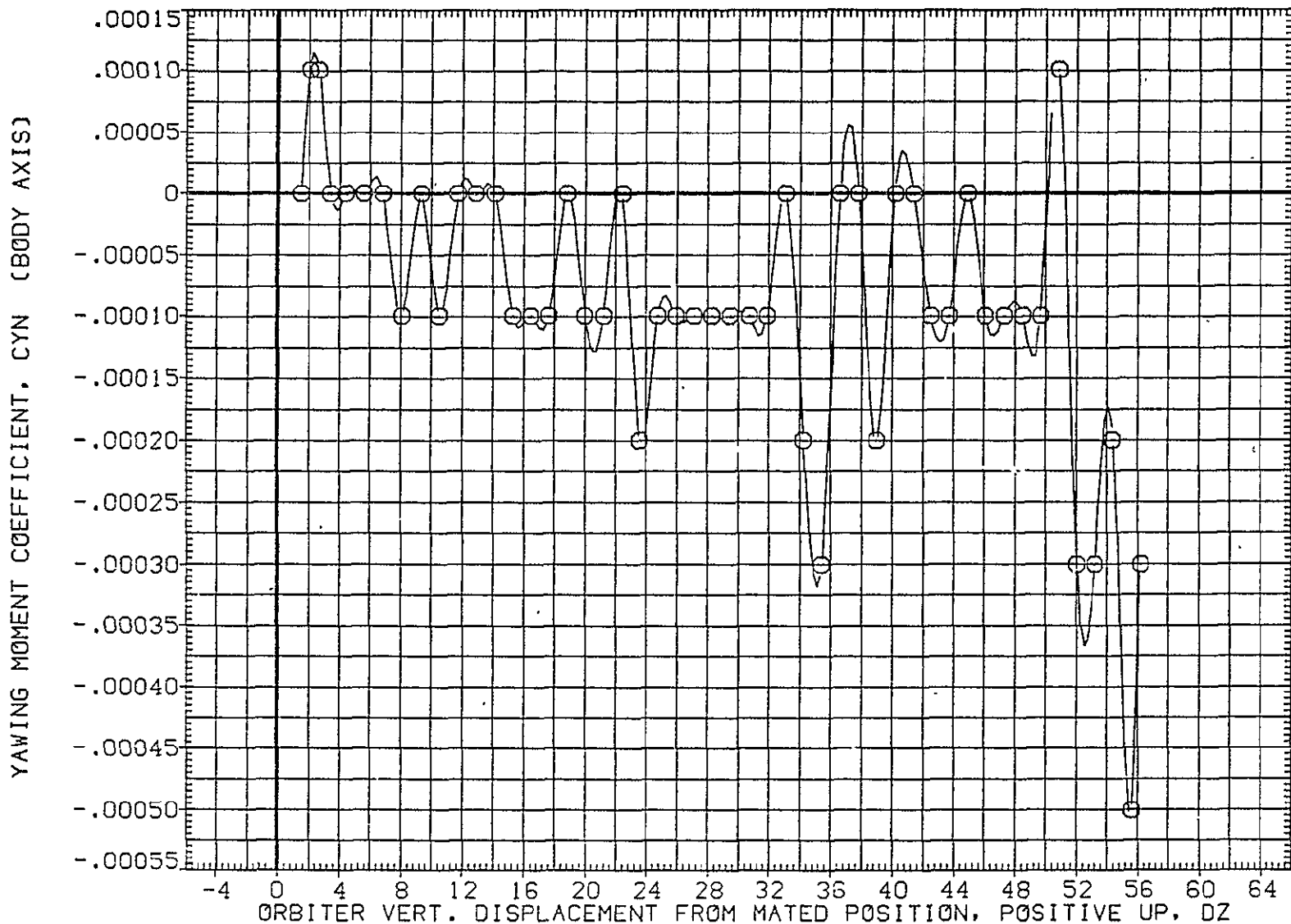


FIG. 82 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=8, BETAC=0, BETA0=0, AFE091

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.600	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	8.000	XMRP	1109.0000	IN. X0
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

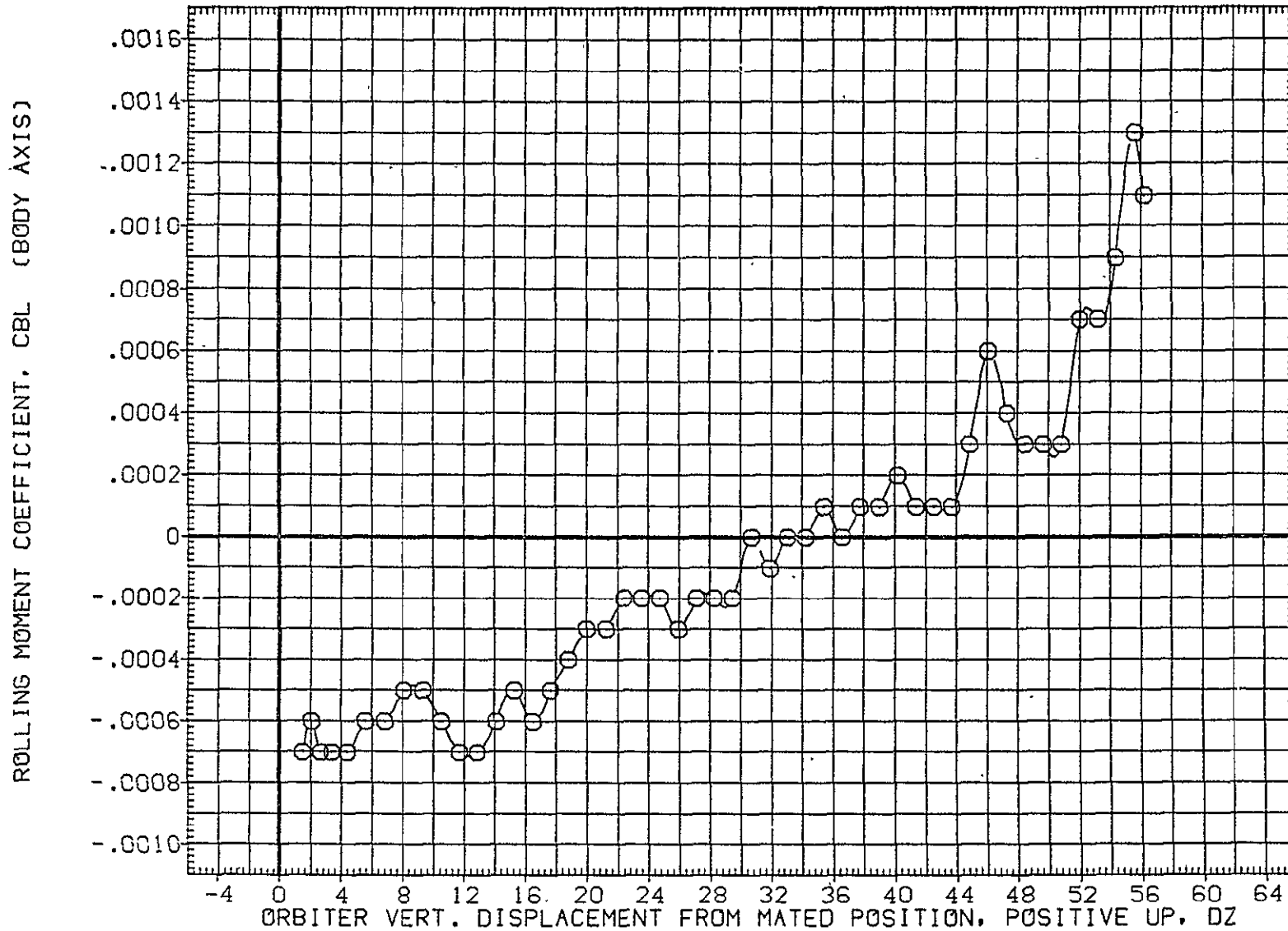


FIG. 82 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=8, BETAC=0, BETA0=0, AFE091

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE091)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.600	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	SREF	936.6800	IN.
		D1	.000	ICRB	8.000	VMRP	1109.0000	IN. XO
		BETA0	.000	RUDDER	.000	YMRP	.0000	IN. YO
						ZMRP	375.0000	IN. ZO
						SCALE	.0125	

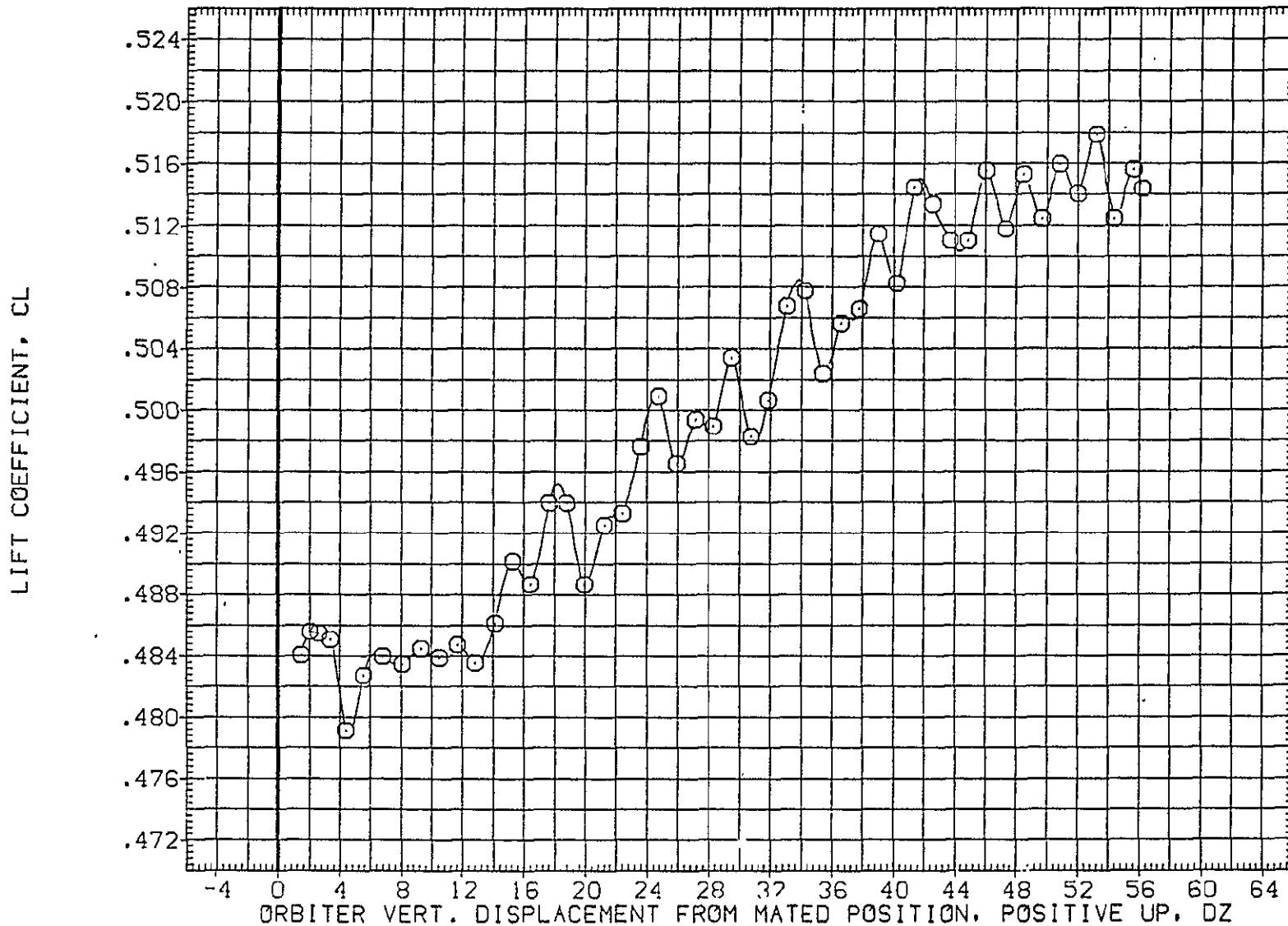


FIG. 82 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, ICRB=8, BETAC=0, BETA0=0, AFE091

SYMBOL
○

MACH	PARAMETRIC VALUES					
.600	ALPHAC	4.000	BETAC	.000		
	STAB	5.000	ELEVON	5.000		
	BDFLAP	.000	DX	.000		
	DY	.000	IORB	8.000		
	BETA0	.000	RUDDER	.000		

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

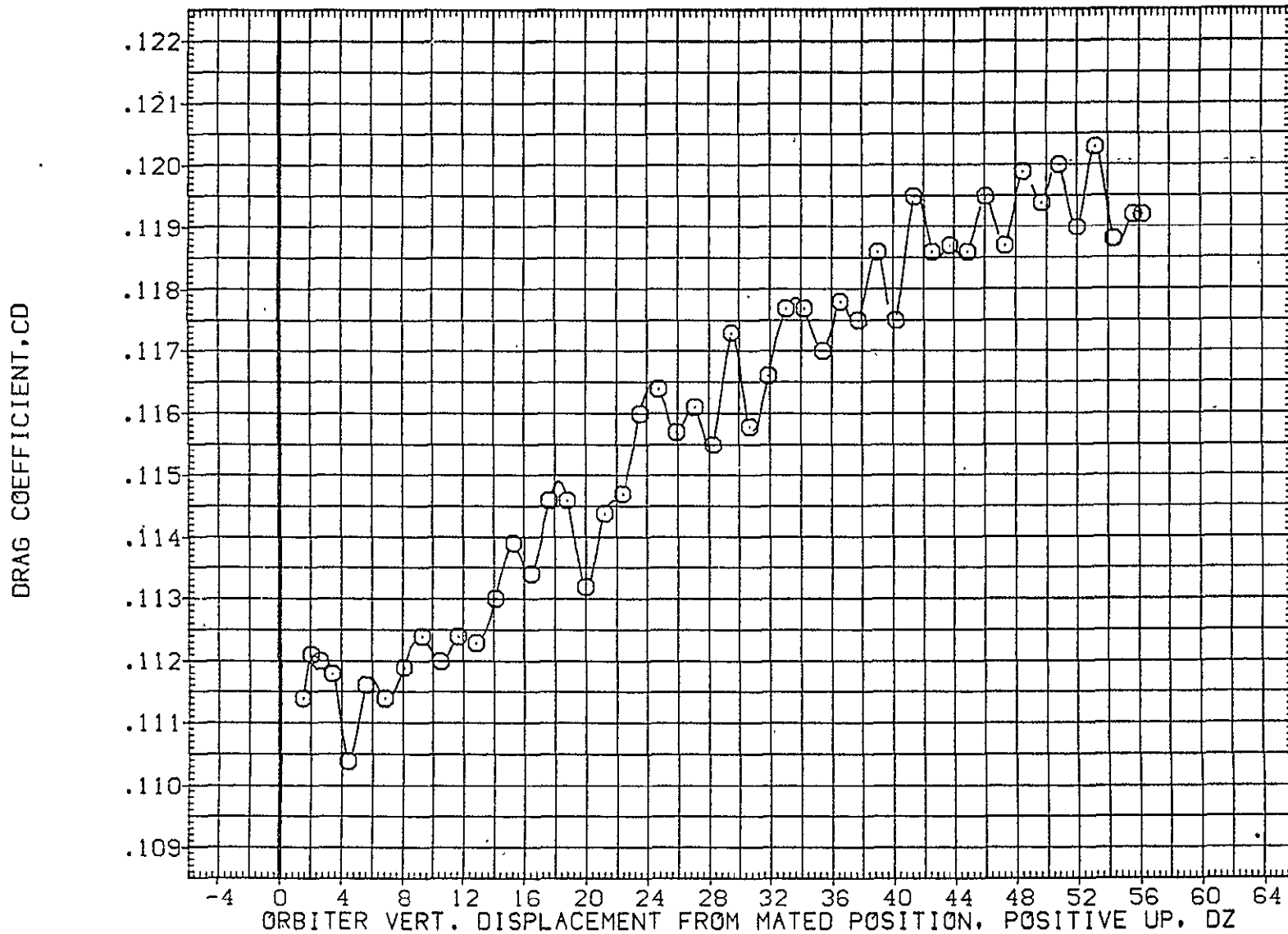


FIG. 82 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=8, BETAC=0, BETA0=0, AFE091

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE092)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BOFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

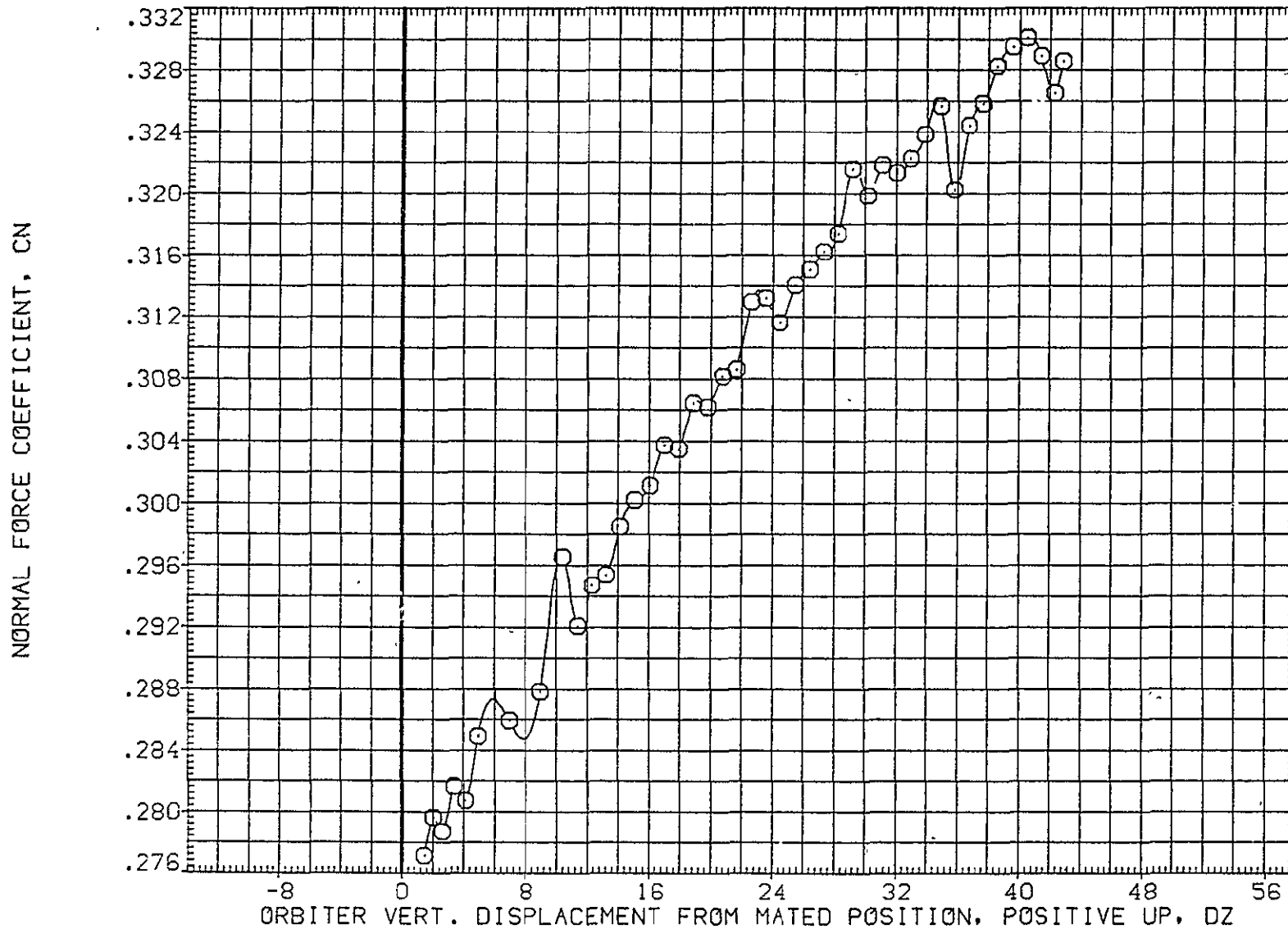


FIG. 83 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=4, BETAC=0, BETA0=5, AFE092

SYMBOL
○

MACH	PARAMETRIC VALUES			
.599	ALPHAC	4.000	BETAC	.000
	STAB	5.000	ELEVON	5.000
	BDFLAP	.000	DX	.000
	DY	.000	IORB	4.000
	BETA0	5.000	RUDDER	.000

REFERENCE INFORMATION		
SREF	2690.0000	SQ.FT.
LREF	474.9100	IN.
BREF	936.6800	IN.
XMRP	1109.0000	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0125	

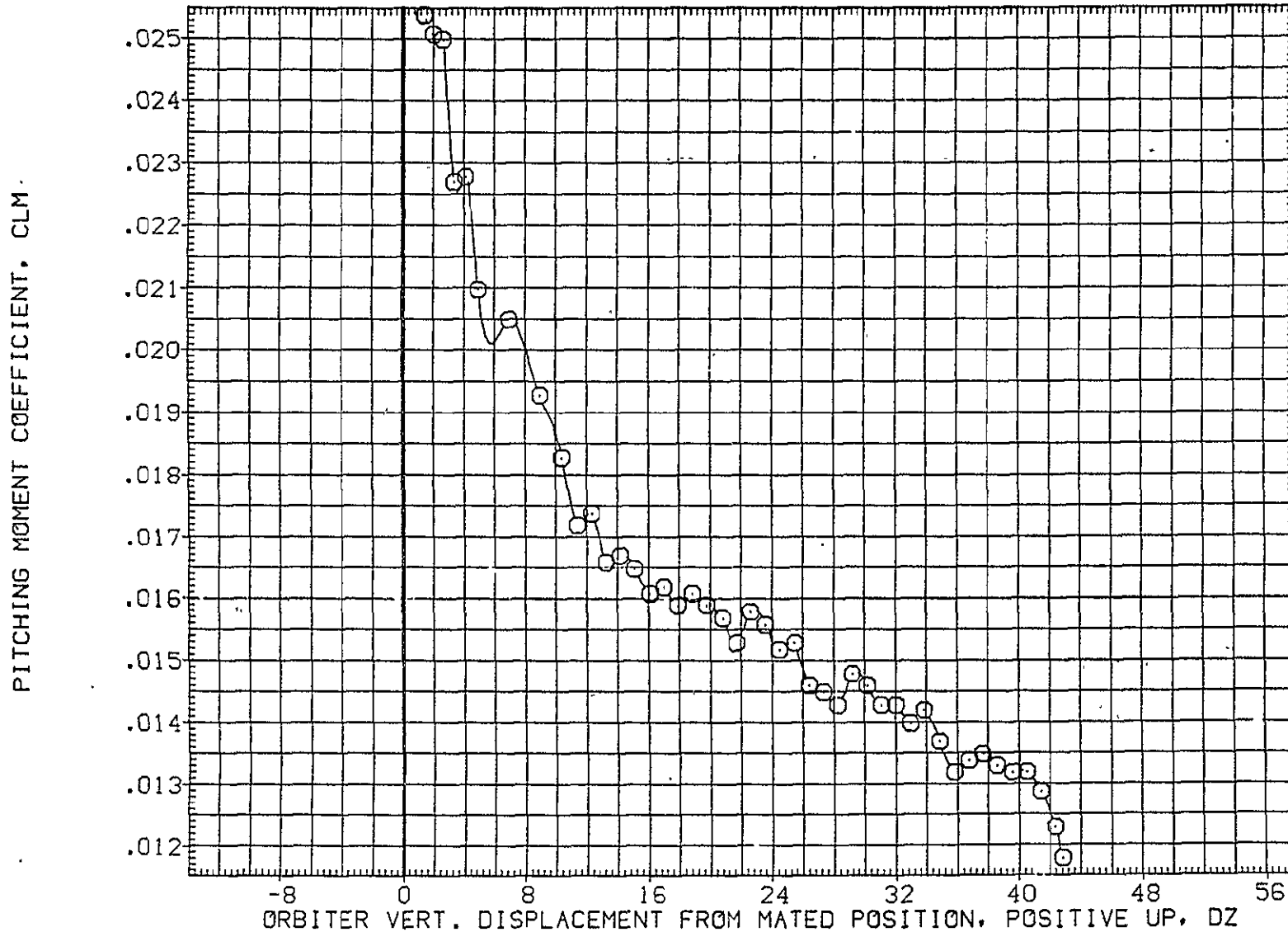


FIG. 83 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=4, BETAC=0, BETA0=5, AFE092

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE092)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

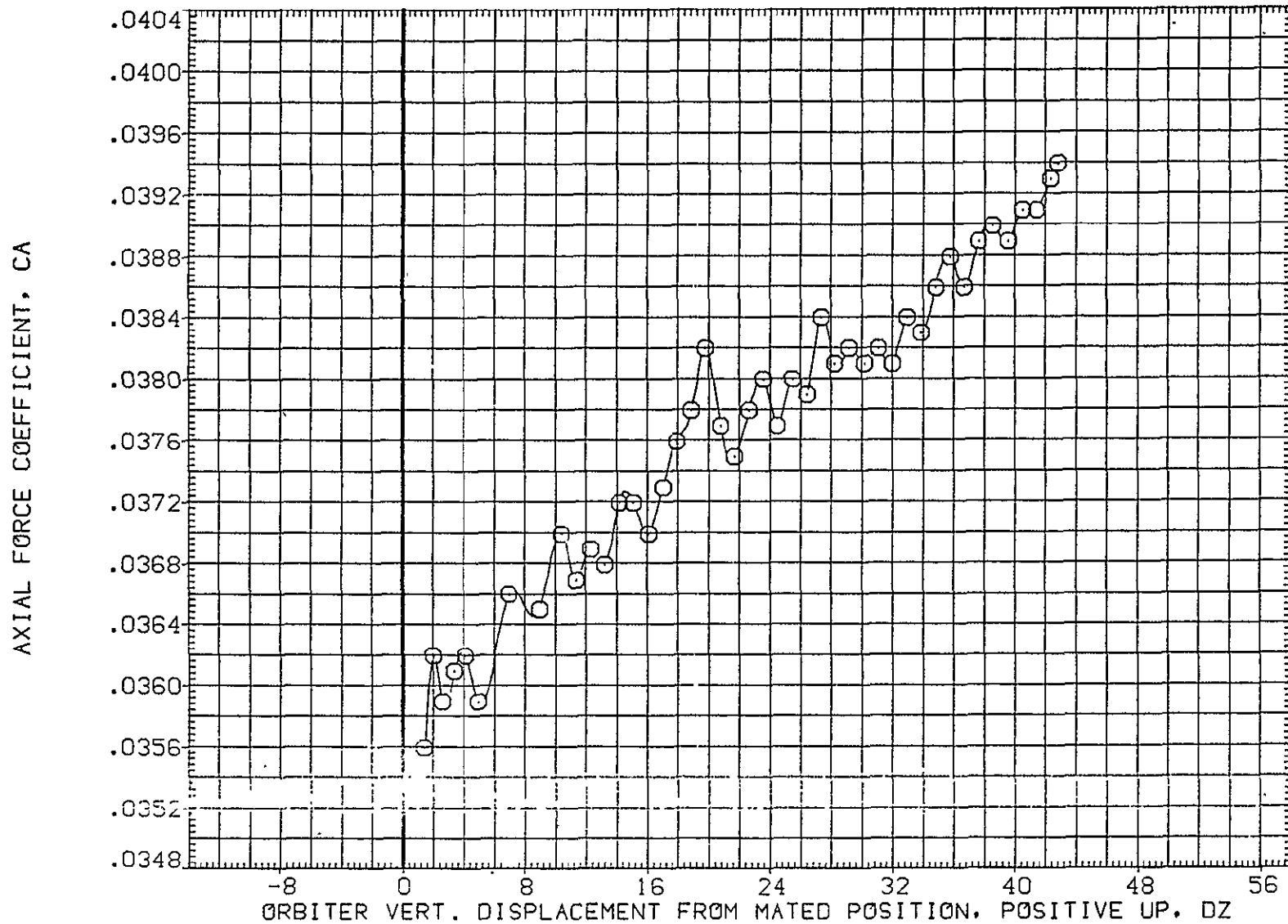


FIG. 83 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=4, BETAC=0, BETA0=5, AFE092

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

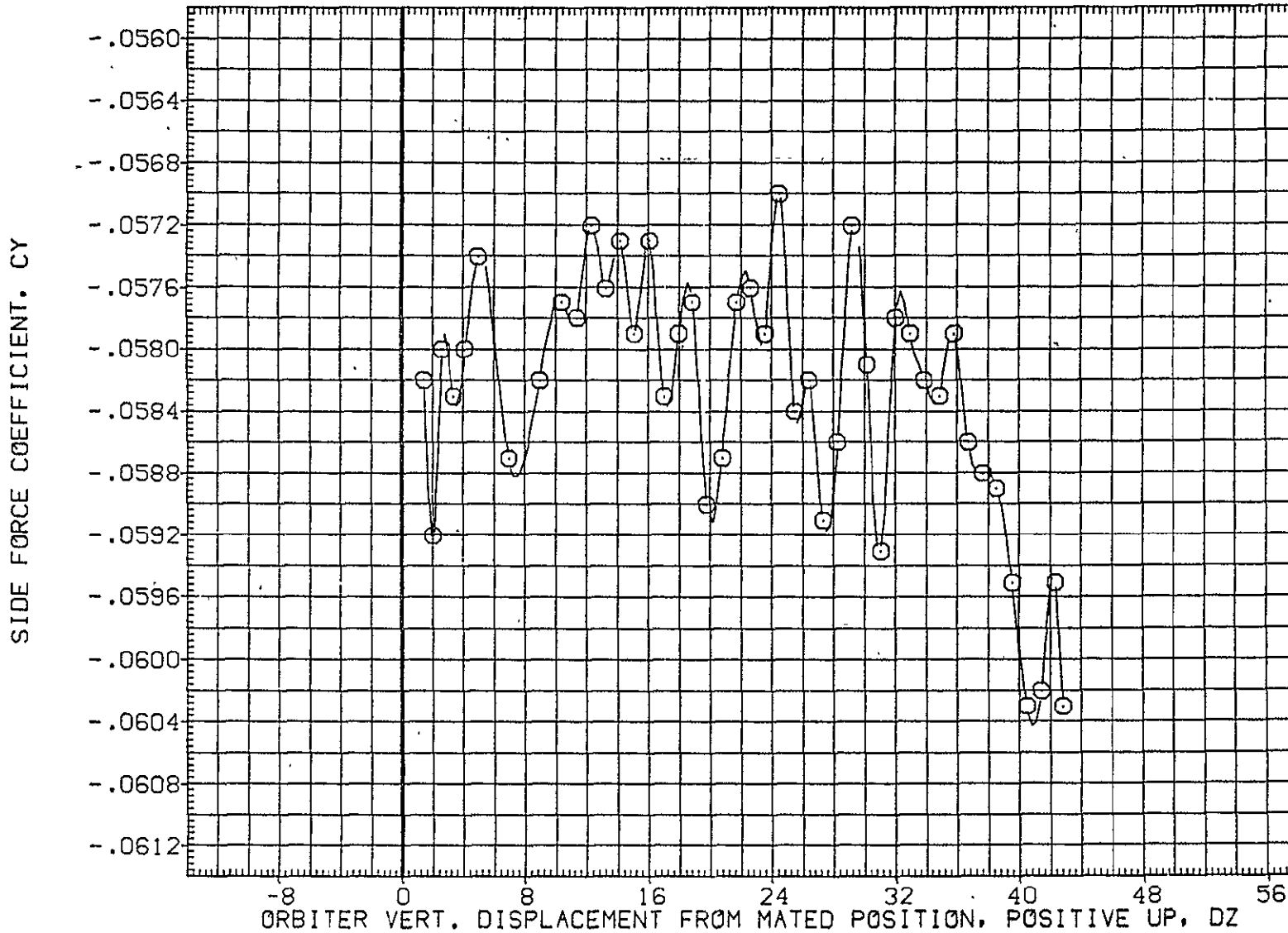


FIG. 83 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=4, BETAC=0, BETA0=5, AFE092

LTV44-559(CA26) 747/1 ATY 02 S1 (ORBITER DATA) (AFE092)

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

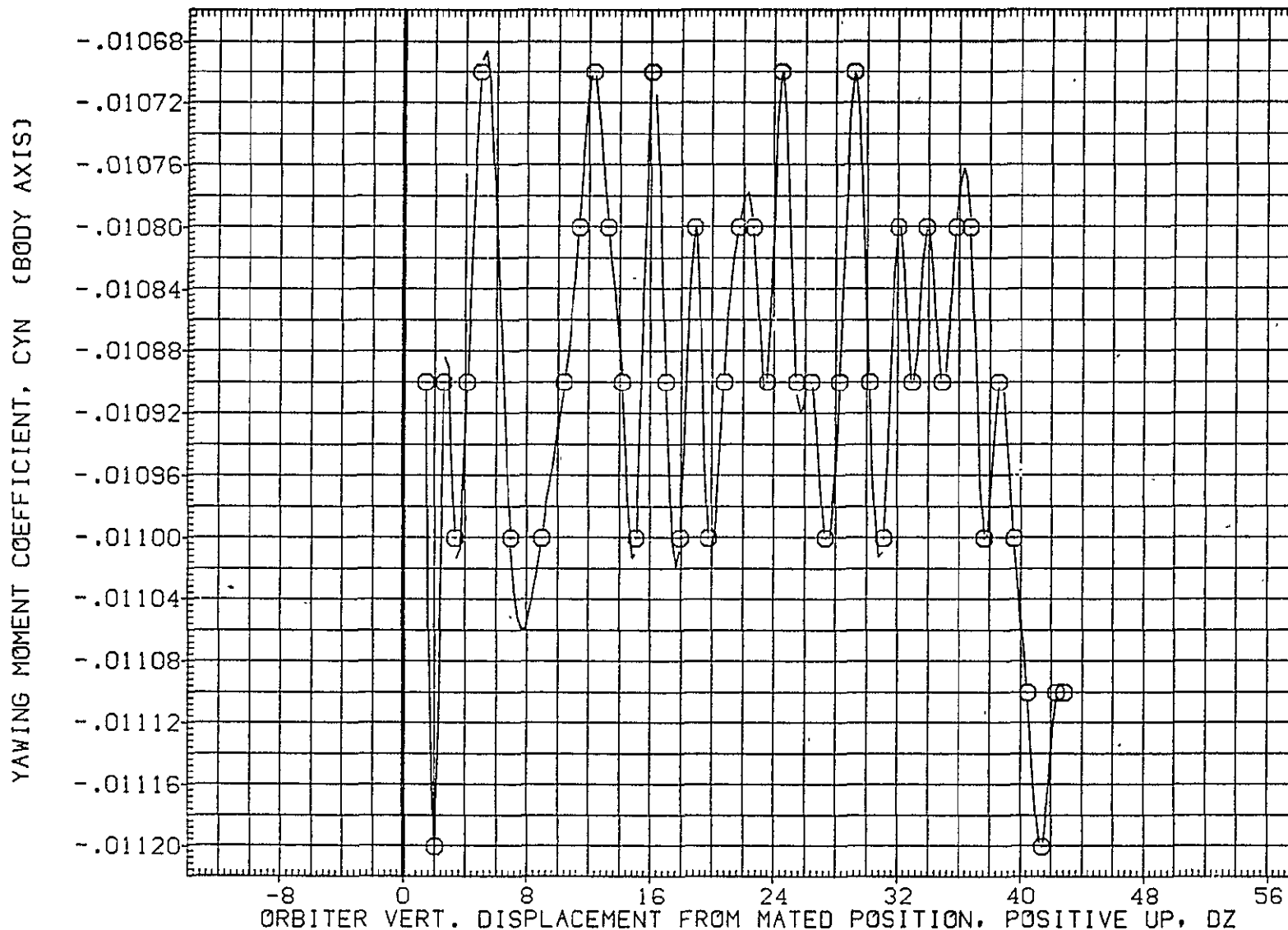


FIG. 83 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=4, BETAC=0, BETA0=5, AFE092

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	OX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

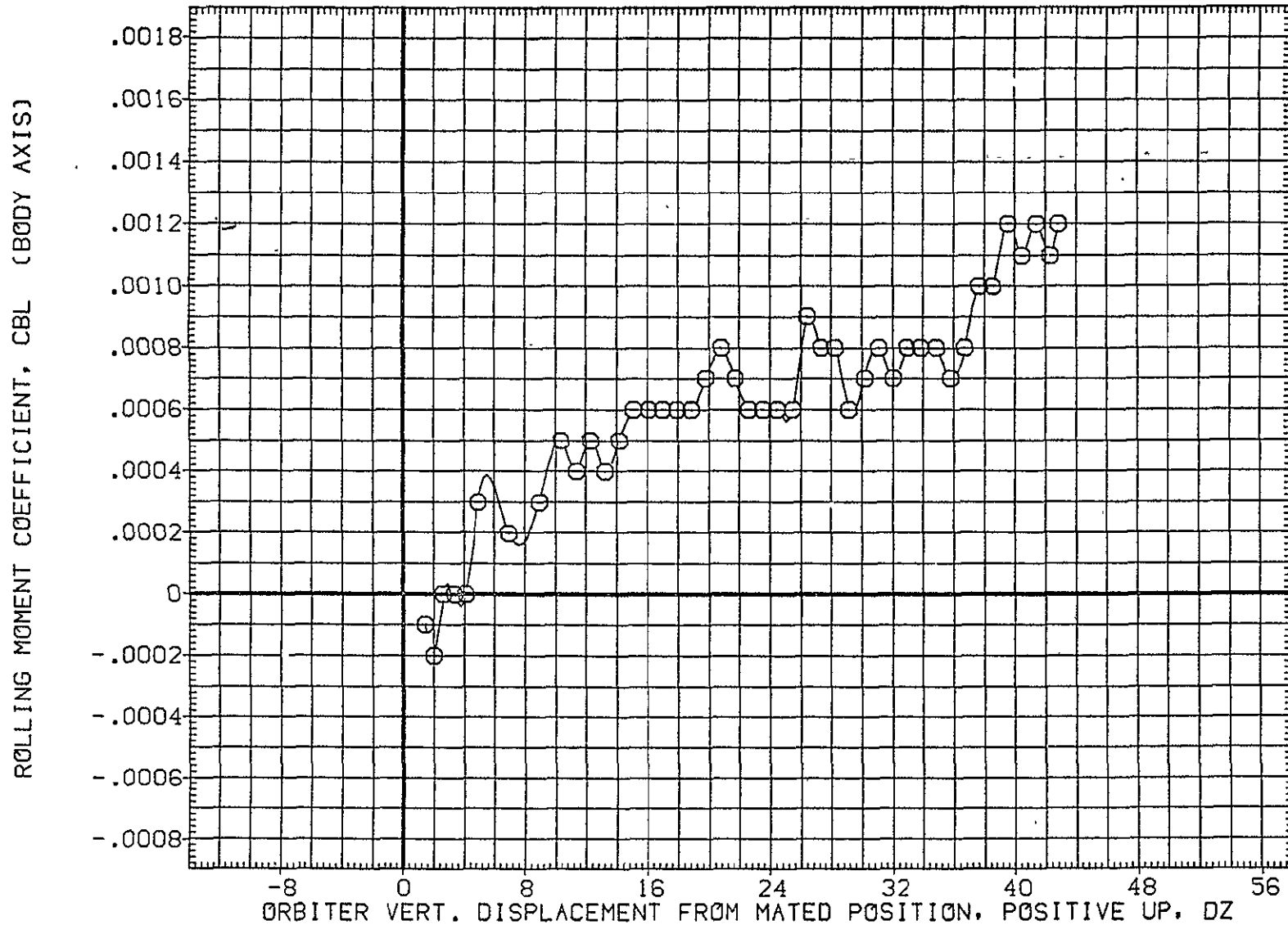


FIG. 83 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=4, BETAC=0, BETA0=5, AFE092

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SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	50.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BOFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

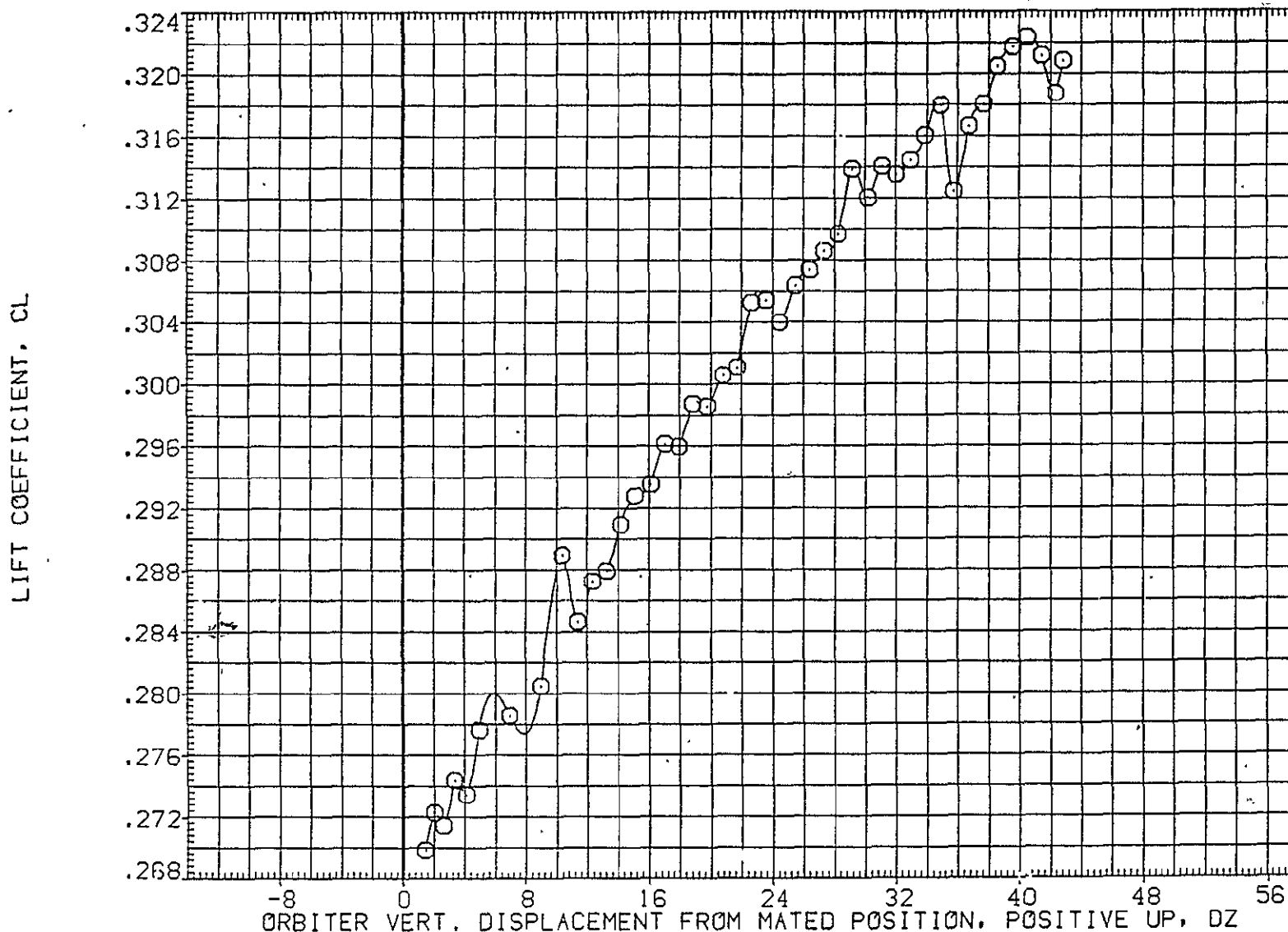


FIG. 83 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=4, BETAC=0, BETA0=5, AFE092

SYMBOL	MACH	PARAMETRIC VALUES				REFERENCE INFORMATION		
○	.599	ALPHAC	4.000	BETAC	.000	SREF	2690.0000	SQ.FT.
		STAB	5.000	ELEVON	5.000	LREF	474.8100	IN.
		BDFLAP	.000	DX	.000	BREF	936.6800	IN.
		DY	.000	IORB	4.000	XMRP	1109.0000	IN. X0
		BETA0	5.000	RUDDER	.000	YMRP	.0000	IN. Y0
						ZMRP	375.0000	IN. Z0
						SCALE	.0125	

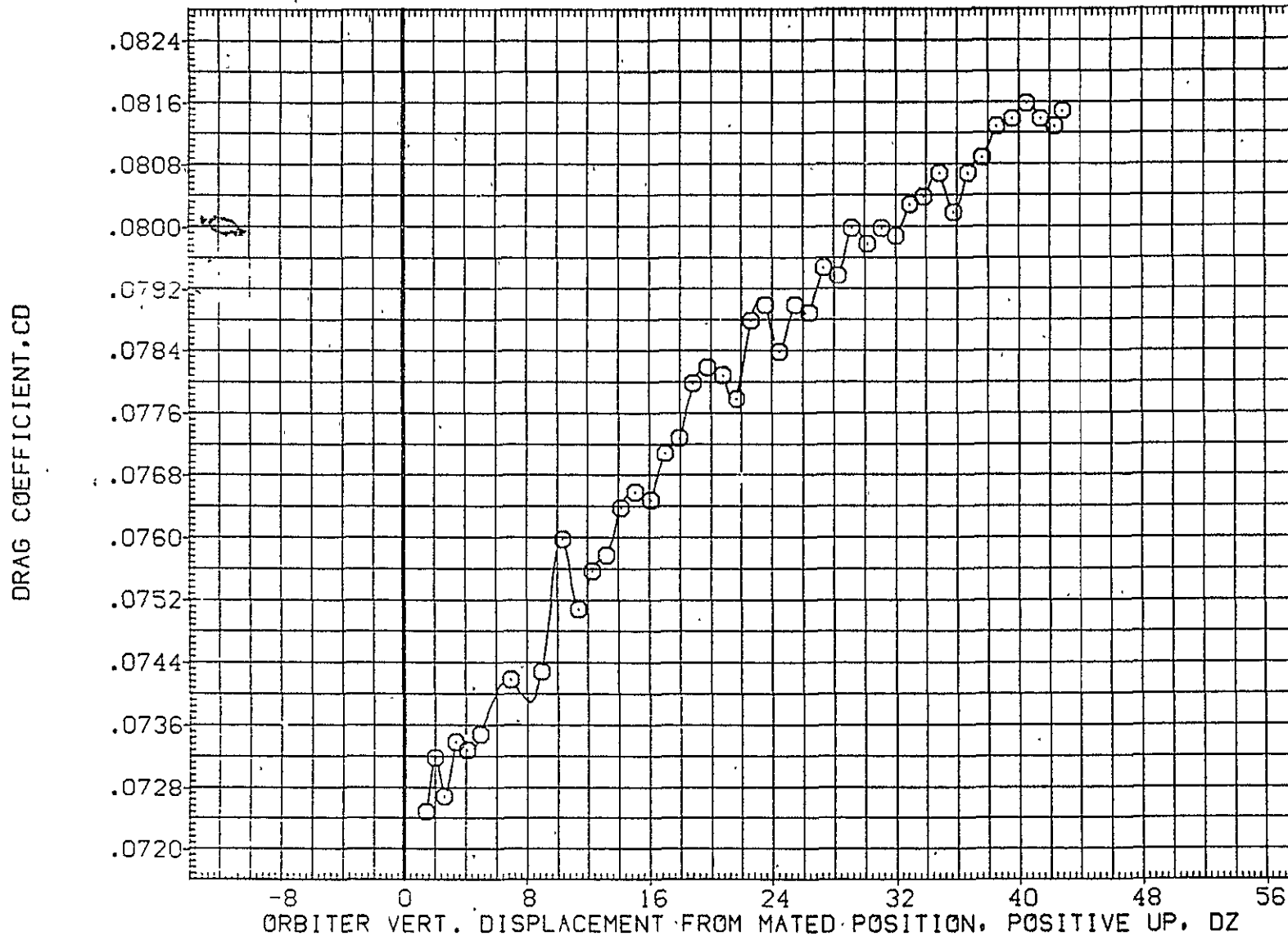


FIG. 83 ORB. DATA, CARRIER PROXIMITY, ALPHAC=4, IORB=4, BETAC=0, BETA0=5, AFE092