NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

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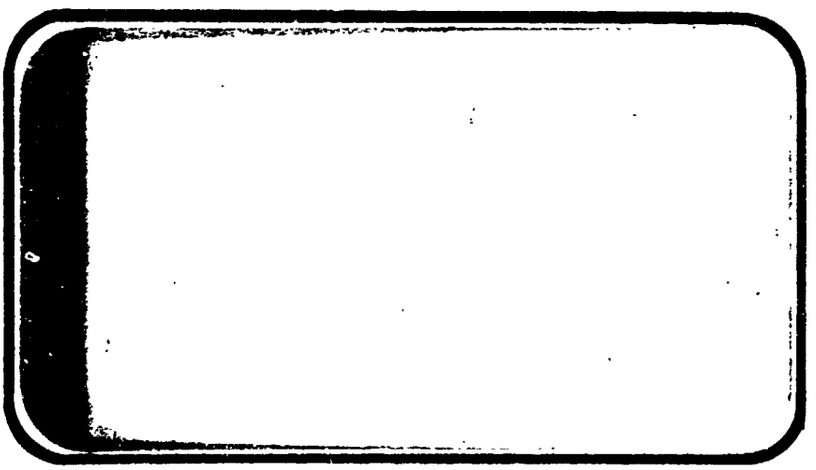

SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANagement services

SPACE DIVISION CHRYSLER CORPORATION

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EFFECT OF THE SIX ENGINE AIR BREATHING PROPULSION SYSTEM ON SPACE SHUTTLE ORBITER SUBSONIC AND TRANSONIC STABILITY AND CONTROL CHARACTERISTICS

(0A91)

By

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Prepared under NASA Contract Number NAS9-13247

by

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for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number:	Rockwell Trisonic 278
NASA Series Number:	0A91
Model Number:	42-0
Test Dates:	26 October thru 1 November 1973

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ABSTRACT

Experimental aerodynamic investigations were conducted on a 0.015 scale representation (Model 42-0) of the VL70-000139B space shuttle orbiter configuration in the Rockwell International Trisonic Wind Tunnel from October 26, 1973 to November 1, 1973. The test objective was to determine the effect of three air breathing propulsion system ferry/flight test configurations on the transonic drag rise, the elevon effectiveness, the longitudinal stability, and the lateral-directional stability of the -139B shuttle orbiter.

The model was sting mounted on a Task 1.5 inch internal strain gage balance, and six-component aerodynamic force and moment data were recorded over an angle of attack range of -3° to 14° at Mach numbers of 0.5, 0.6, 0.7, 0.8, and 0.9 with a Reynolds number of 6.4 x 10^6/ft. Data were also recorded at a sideslip angle of five degrees.

Rakes with five total pressure probes each were installed at the exit in three ducts of the forward pylon mounted nacelles. The ducts were thoroughly cleaned after the first four blows to determine the effect of foreign material that was adhering to the inner surfaces. Force data taken with the rakes installed are not presented.

Base and balance chamber pressures were measured and used to correct axial force. The data were also corrected for estimated duct internal chord force and its effective pitching moment.

The body flap was deflected -11.7° during the entire test, and data were recorded at elevon deflections of 0°, +10°, and -10°.

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PLOT SCHEDULES:

(A) CN, CLF, CAF, CABT, CDF, CLM vs ALPHA

CN, CLF vs CLM, CLF vs CDF, XCP/L,

LF/DF vs ALPHA

(B) CYN, CBL, CY vs ALPHA

(C) PT1 THROUGH PT15 vs ALPHA

NOMENCLATURE
General

SYMBOL	SADSAC SYMBOL	DEFINITION
a		speed of sound; m/sec, ft/sec
C_p	CP	pressure coefficient; $(p_l - p_\infty)/q$
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
$\frac{\ell_{REF}}{c}$	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

NOMENCLATURE (Continued)

Body-Axis System

SYMBOL	SADSAC SYMBOL	DEFINITION
C_N	CN	normal-force coefficient; $\frac{\text{normal force}}{qS}$
C_A	CA	axial-force coefficient; $\frac{\text{axial force}}{qS}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_{A_b}	CAB	base-force coefficient; $\frac{\text{base force}}{qS}$ $-A_b(p_b - p_\infty)/qS$
C_{A_f}	CAF	forebody axial force coefficient, $C_A - C_{A_b}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS\ell_{REF}}$
C_n	CYN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qSb}$
C_ℓ	CBL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qSb}$
		Stability-Axis System
C_L	CL	lift coefficient; $\frac{\text{lift}}{qS}$
C_D	CD	drag coefficient; $\frac{\text{drag}}{qS}$
C_{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	CLM	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 (Concluded)

ADDITIONS TO STANDARD NOMENCLATURE

SYMBOL	SADSAC SYMBOL	DEFINITION
A_{bc}	ABC	balance cavity area, ft^2
A_{b_1}, A_{b_2},---A_{b_6}		base area at station 1, 2,---6, respectively
CA_{bc}		balance cavity axial force coefficient
CA_{bt}	CABT	total base axial force coefficient
CA_{sf}		nacelle internal duct axial force correction
CA_t		weight tare axial force coefficient
CA_u		balance measured axial force coefficient
Cm_u		balance measured pitching moment coefficient
Cm_{sf}		pitching moment coefficient due to nacelle internal duct axial force
$C_{p_{bc}}$		balance cavity pressure coefficient
$C_{p_{b_1}}$, $C_{p_{b_2}}$,---$C_{p_{b_6}}$		base pressure coefficient at station 1, 2,---6, respectively
L_B		body length, in.
L_f/D_f	LF/DF	forebody lift to drag ratio
P_s		freestream static pressure, psia
P_{t_i}/P_t	PTI/PT	nacelle to freestream total pressure ratio at station i, i = 1, 2,---i5
P_∞		pressure at station x, psia
X_{cp}/ℓ	XCP/L	longitudinal center of pressure location, fraction of body length
δ_e	ELEVON	elevon, surface deflection angle, positive deflection, trailing edge down; degrees
δ_f	BFLAP	flap, surface deflection angle, positive deflection, trailing edge down; degrees
δ_r	RUDDER	rudder, surface deflection angle, positive deflection trailing edge to the left; degrees
C_{L_f}	CLF	forebody lift coefficient

CONFIGURATIONS INVESTIGATED

The model used for this test period was a 0.015 scale representation of the VL70-000139B Space Shuttle Orbiter configuration. The basic model was of the blended wing-body design utilizing a double delta wing (75°/45° Λ_{LE}), full span elevons (unswept hingelines), a centerline vertical tail with rudder and speed brake capability, a body flap, and a canopy.

Three double air breathing propulsion system nacelles were mounted under the wings and fuselage in three different configurations. Two of these configurations utilized pylons with the wing mounted nacelles at two locations, and the third configuration consisted of flush mounted nacelles.

The model was constructed around an Armco 17-4 steel balance block sleeved to accept the 1.5 inch Task MK XXIIA internal force balance. All model body mold lines, fairings, wings, etc. attached directly to the balance block.

The six base pressure tubes were attached to the sting and terminated approximately 1/16 inch from the base of the model. The balance chamber pressure tube was also attached to the sting and extended into the rear of the model to the aft end of the balance. The other end of these tubes were routed to transducers in the sector pit.

During seven blows, total pressures were measured in the two ducts of the left hand underwing nacelle and in the left hand duct of the fuselage mounted nacelle by means of a rake that attached to the rear of the model. The total pressure probes extended into the duct exits a distance of 0.3 in The location and probe number is shown in figure 2.

The following nomenclature was used to designate the various model components:

Symbol	Description
B_{19}	Basic fuselage built to orbiter configuration VL70-000139B
C_7	Basic configuration 3A canopy built to drawing lines VL70-000139B
E_{23}	Elevons that provide a forward sweep trailing edge on the basic W_{107} wing (VL70-000139B)
F_5	Basic configuration 3A body flap (VL70-000139B)

CONFIGURATIONS INVESTIGATED (Concluded)

Symbol	Description
J_{59}	Three standard configuration double ABPS nacelles (VL73-000060)
J_{60}	Same as J_{59} except with the underwing nacelles moved aft from X_o = 950 to X_o = 1050 (full scale)
J_{61}	Same as J_{59} except without pylons and with the underwing nacelles moved aft to X_o = 1100 (full scale)
R_5	Basic configuration 3A rudder (VL70-000139B)
V_7	Basic configuration 3A vertical tail (VL70-000139B)
W_{107}	Basic configuration 3A wing with incidence angle 0.5°, built to drawing lines VL70-000139B.
X_{20}	Boundary layer transition strip

TEST FACILITY DESCRIPTION

The Rockwell International Trisonic Wind Tunnel is an intermittent blow down facility with a 7' x 7' tandem test section capable of testing force, duct, pressure, and flutter models at Mach numbers from 0.1 to 3.5.

Two synchronous motor-driven centrifugal compressors, operating in series, supply dry air at a rate of 40 lb/sec. to eight storage spheres having a total volume of 214,000 cu. ft.. The air is dried to a moisture content of 0.001 lb. or less of water per lb. of dry air (approx. -35°F dew-point) and stored at a pressure of ten atmospheres. Flow from the air storage spheres is regulated by a servo controlled valve. The eight foot diameter valve opens within two seconds to control and stabilize the settling chamber at a preselected pressure.

Downstream of the settling chamber is a fixed nozzle which provides a transition from the circular cross-section of the settling chamber to the rectangular cross-section of the variable nozzle. Two seven foot wide steel plates, supported between parallel walls by hydraulic jacks, form the floor and ceiling of the flexible nozzle section. Changes in nozzle contours to produce variations in Mach number are accomplished by means of these jacks and require 30 to 50 minutes to complete.

Two test sections, for supersonic, transonic, and subsonic testing are 7 ft. wide by 7 ft. high and are permanently installed in a tandem arrangement. The standard supersonic test section (for testing at Mach numbers greater than 1.3) is in the downstream end of the flexible nozzle. The test section for subsonic and transonic operation is located downstream in the porous wall area. An access door to the test area is located in the variable diffuser.

The variable diffuser downstream of the porous wall area may be adjusted to provide subsonic Mach number control, to generate transonic Mach numbers, and to minimize start time for supersonic testing with models having high tunnel blockage.

An equivalent 5° conical expansion angle is provided in a fixed diffuser which completes the basic tunnel circuit. Downstream of the diffuser is a sound abatement muffler building where the air is exhausted to the atmosphere.

DATA REDUCTION

The aerodynamic force and moment data presented were measured with the Task Corporation 1.5 inch MK XXII A internal strain gage balance. The data have been corrected for base and balance chamber pressure effects, duct internal chord force and its associated pitching moment, subsonic and transonic wall interference effects, sting and balance deflections, and model weight tare.

The corrections to the axial force were made in the following manner:

$$C_A = C_{A_u} - C_{A_{sf}} - C_{A_t}$$

where $C_{A_{sf}}$ = duct internal chord force given at the end of this section

and C_{A_t} = model axial force weight tare

$$C_{A_f} = C_A - C_{A_{bt}}$$

where $C_{A_{bt}} = C_{A_b} + C_{A_{bc}}$

and $C_{A_{bc}} = -C_{p_{bc}} A_{bc}/S$

$$C_{A_b} = -(C_{p_{b_1}} A_{b_1} + C_{p_{b_2}} A_{b_2} + C_{p_{b_3}} A_{b_3} + C_{p_{b_4}} A_{b_4} + C_{p_{b_5}} A_{b_5} + C_{p_{b_6}} A_{b_6})/S$$

$$C_p = (P_x - P_\infty)/q$$

The nacelle rake pressures are called P_{t_1}, P_{t_2}, etc. but are actually computed as a ratio to tunnel total pressure - P_{t_1}/P_t, P_{t_2}/P_t, P_{t_3}/P_t, etc.

The correction to pitching moment due to the duct internal chord force was made as follows:

$$C_m = C_{m_u} - C_{m_{sf}}$$

where $C_{m_{sf}}$ is given below with $C_{A_{sf}}$ as a function of Mach number and nacelle configuration.

DATA REDUCTION (Continued)

	J_{59} & J_{60}		J_{61}	
MACH	$C_{A_{sf}}$	$C_{m_{sf}}$	$C_{A_{sf}}$	$C_{m_{sf}}$
0.5	0.002345	-.000779		-.000703
0.6	0.002320	-.000771	Same	-.000696
0.7	0.002295	-.000763	as J_{59} & J_{60}	-.000688
0.8	0.002246	-.000746		-.000673
0.9	0.002221	-.000738		-.000666

The following reference dimensions were used for reducing the aerodynamic data to coefficient form:

Symbol	Definition	Value
A_{b_1}	Base area for P_{b_1}, ft^2	0.00856
A_{b_2}	Base area for P_{b_2}, ft^2	0.00840
A_{b_3}	Base area for P_{b_3}, ft^2	0.00868
A_{b_4}	Base area for P_{b_4}, ft^2	0.00347
A_{b_5}	Base area for P_{b_5}, ft^2	0.00875
A_{b_6}	Base area for P_{b_6}, ft^2	0.00837
A_{bc}	Area of balance cavity, ft^2	0.03472
b	Wing span, in.	14.0502
$\bar{c}$	Wing MAC, in.	7.1222
L_B	Length of model body, in.	19.3545
S	Wing area, ft^2	0.6053
XMRP	Reference center of gravity, fus. sta.	16.1471
	Reference center of gravity, in. aft of nose	12.5771
YMRP	Reference center of gravity, buttock plane	0.0000
ZMRP	Reference center of gravity, waterplane	5.625

TABLE I.

TEST : 0A91 DATE : 11/7/73

TEST CONDITIONS

MACH NUMBER	REYNOLDS NUMBER (per unit length)	DYNAMIC PRESSURE (pounds/sq. ft.)	STAGNATION TEMPERATURE (degrees Fahrenheit)
0.50	6.4×10^6/ft.	635	60° to 75°
0.60	6.4×10^6/ft.	760	
0.70	6.4×10^6/ft.	845	
0.80	6.4×10^6/ft.	920	
0.90	6.4×10^6/ft.	1005	

BALANCE UTILIZED: Task 1.5" MK XXII A

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF	2000 lb.	± .25%	
SF	1000 lb.	± .25%	
AF	600 lb.	± .25%	
PM			
RM	1600 in. lb.	± .25%	
YM			

COMMENTS:

TABLE II.

TEST: ΦA91 — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: 11-7-73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_{SL}	δ_{SR}	δ_{SF}	COEF. SCH.	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.5	0.6	0.7	0.8	0.9	TEST RUN NUMBERS
BDYA01	$B_{19}C_7F_5J_{59}W_{107}E_{23}V_7R_5X_{20}$	A	0	0	0	-11.7	A	3	5		6	7		
B01	PLUS NACELLE RAKES						B	3	5		6	7		
A02							A	4		4	3	2	1	
B02							B	4		4	3	2	1	
003	$B_{19}C_7F_5J_{59}W_{107}E_{23}V_7R_5X_{20}$						C	5	10	11	12	8	9	
004			5					2	15		14			
005			0	+10				1			13			
006	$B_{19}C_7F_5J_{59}W_{107}E_{23}V_7R_5X_{20}$			0				3		27	24	26		
007				+10				1			25			
008	$B_{19}C_7F_5J_{59}W_{107}E_{23}V_7R_5X_{20}$			0				5	33	28	30	29	32	
009			5					2	35		34			
010			0	+10				2	36		31			
011				-10				2	38		37			
012	$B_{19}C_7F_5W_{107}E_{23}V_7R_5X_{20}$			0				5	22	21	18	19	20	
013			5					2	16		17			
014			0	+10				1			23			

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

*DUCTS CLEANED α OR β SCHEDULES

COEFFICENTS

α(A) = -4° — (Δα = 1°) → 15°

COEF. SCH(A) = PT1 → PT10

COEF. SCH(B) = PT11 → PT15

COEF. SCH(C) = CN, CAF, CLM, CY, CYN, CBL, CAB, CAE, CA, XCP/L

IDVAR (1) IDVAR (2) NDV

TABLE III
MODEL DIMENSIONAL DATA

MODEL COMPONENT: BODY - B19

GENERAL DESCRIPTION: Fuselage, Configuration 3, per Rockwell Lines VL70-0001393.

NOTE: Identical to B17 except forebody.

Model Scale = 0.015

DRAWING NUMBER: VL70-0001393

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length - IN.	1290.3	19.35
Max. Width - IN.	267.6	4.0140
Max. Depth - IN.	244.5	3.668
Fineness Ratio	4.82175	4.82175
Area - FT^2		
Max. Cross-Sectional	386.67	0.087
Planform		
Wetted		
Base		

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: Canopy - C7

GENERAL DESCRIPTION: Configuration 3 per Rockwell Lines VL70-000139

Model Scale = 0.015

DRAWING NUMBER VL70-000139

DIMENSION:	FULL SCALE	MODEL SCALE
Length (X_o = 433 to X_o = 670) - in. FS	237	3.555
Max Width		
Max Depth (Z_o = to Z_o = 501) - in FS		
Fineness Ratio		
Area		
Max Cross-Sectional		
Planform		
Wetted		
Base		

TABLE III (Continued)

MODEL COMPONENT: ELEVON - B23

GENERAL DESCRIPTION: Configuration 3 per W107 Rockwell Lines VL70-0001392, data for (1) of (2) sides

Model Scale = .015

DRAWING NUMBER: VL70-0001392

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Area - FT^2	205.52	0.04624
Span (equivalent) - IN.	353.34	5.30010
Inb'd equivalent chord	114.78	1.72170
Outb'd equivalent chord	55.00	0.8250
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	.208	.208
At Outb'd equiv. chord	.400	.400
Sweep Back Angles, degrees		
Leading Edge	0.00	0.00
Tailing Edge	-10.24	-10.24
Hingeline	0.00	0.00
Area Moment (Normal to hinge line)- FT^3 Product of Area Moment	1548.07	0.00522

TABLE III (Continued)

MODEL COMPONENT: F5 Body Flap

GENERAL DESCRIPTION: 3 Configuration per Rockwell Lines VL70-000139

Scale Model = .015

DRAWING NUMBER VL70-000139

DIMENSION:	FULL SCALE	MODEL SCALE
Length - in	84.70	1.2705
Max Width - in	267.6	4.0140
Max Depth		
Fineness Ratio		
Area - Ft^2		
Max Cross-Sectional		
Planform	142.5	0.03207
Wetted		
Base	38.095	0.00857

TABLE III (Continued)

MODEL COMPONENT: AIR BREATHING PROPULSION SYSTEM (ABPS) - J_{59}

GENERAL DESCRIPTION: Two wing-mounted nacelles with a center-mounted nacelle. Inlet has a short cowl, short interengine fairing, 7° inlet face cant and 5° outboard cluster toe-in from point of rotation.

MODEL SCALE: 0.015

DRAWING NUMBER: VL73-000060 MOD/SS-A01165

DIMENSIONS:	FULL SCALE	MODEL SCALE
Length - In.	223.50	3.352
Max. width - In.	132.00	1.980
Max. depth - In.	66.00	0.990
Cross-sectional area - ft^2		
Leading edge air stagnation face	16.490	0.00371
Inlet	12.566	0.00350
Exit	12.845	0.00289
Maximum	23.758	0.00534

Point of Rotation for				
Right and Left	X_o	Y_o	X_o	Y_o
Wing nacelles	950.00	236.866	14.250	3.553
Center nacelle	950.00	00.00	14.250	0.00
Incidence - deg.	+ 3°56'		+3° 56'	

Right and left wing mounted nacelles located 0.225 in MS from lower wing surface to top ML of nacelle. Center nacelle located 0.053 in MS from lower ML of fuselage to top of nacelle cowl.

TABLE III (Continued)

MODEL COMPONENT: AIR BREATHING PROPULSION SYSTEM (ABPS) J_{60}

GENERAL DESCRIPTION: Same as J_{59} ABPS except left and right nacelles moved aft

MODEL SCALE: 0.015

DRAWING NUMBER: VL73-000060 MOD/SS-A01165

DIMENSIONS:	FULL SCALE	MODEL SCALE
Length - In.	223.50	3.352
Max. Width - In.	132.00	1.980
Max. Depth - In.	66.00	0.990
Cross-sectional area - ft^2		
Leading edge air stagnation face	16.490	0.00371
Inlet	12.566	0.00350
Exit	12.845	0.00289
Maximum	23.758	0.00534

Point of Rotation for	X_o	Y_o	X_o	Y_o
Right and left wing nacelles	1050	245.60	15.750	3.684
Center nacelle	950.00	0.00	14.250	0.00
Incidence - deg.	+ 3° 56'		+ 3° 56'	

Right and left wing mounted nacelles located 0.285 inches MB from lower wing surface to top ML of nacelle. Center nacelle located 0.053 inches MB from lower ML of fuselage to top of nacelle cowl.

TABLE III (Continued)

MODEL COMPONENT: AIR BREATHING PROPULSION SYSTEM (ABPS) - J_{61}

GENERAL DESCRIPTION: Two wing nacelles flush-mounted with a center nacelle flush-mounted to fuselage. Otherwise, same as J_{59} ABPS description.

MODEL SCALE: 0.015

DRAWING NUMBER: VL73-000060 MOD/SS-A01165

DIMENSIONS:			FULL SCALE		MODEL SCALE	
Length - In.			223.50		3.352	
Max. Width In.			132.00		1.980	
Max. Depth - In.			66.00		0.990	
Cross-sectional area - ft^2						
Leading edge air stagnation face			16.490		0.00371	
Inlet			12.566		0.00350	
Exit			12.845		0.00289	
Maximum			23.758		0.00534	
Point of Rotation for	X_o	Y_o	X_o	Y_o		
Right and left wing nacelle	1100	0.0	16.50	3.795		
Center nacelle	950	0.0	14.250	0.00		
Incidence, deg.						
Wing nacelles		1.5°		1.5°		
Center nacelle		1.0°		1.0°		

TABLE III (Continued)

MODEL COMPONENT: RUDDER - R5

GENERAL DESCRIPTION: 2A, 3 and 3A Configuration per Rockwell Lines VL70-000095

Model Scale = .015

DRAWING NUMBER VL70-000095

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Area - FT^2	106.38	0.024
Span (equivalent) - IN.	201.0	3.015
Inb'd equivalent chord	91.585	1.374
Outb'd equivalent chord	50.833	0.762
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.400	0.400
At Outb'd equiv. chord	0.400	0.400
Sweep Back Angles, degrees		
Leading Edge	34.83	34.83
Tailing Edge	26.25	26.25
Hingeline	34.83	34.83
Area Moment (Normal to hinge line)- FT^3 Product of Area and Mean Chord	526.13	0.0018

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: VERTICAL - V7

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

NOTE: Same as V5, but with manipulator housing removed.

Model Scale = 0.015

DRAWING NUMBER: VL70-000139

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo) Ft^2	425.92	0.09583
Planform		
Span (Theo) In	315.72	4.7358
Aspect Ratio	1.675	1.675
Rate of Taper	0.507	0.507
Taper Ratio	0.404	0.404
Sweep Back Angles, degrees		
Leading Edge	45.000	45.000
Trailing Edge	26.249	26.249
0.25 Element Line	41.130	41.130
Chords:		
Root (Theo) WP	268.50	4.02750
Tip (Theo) WP	108.47	1.62705
MAC	199.81	2.99715
Fus. Sta. of .25 MAC	1463.50	21.95250
W. P. of .25 MAC	635.532	9.53283
B. L. of .25 MAC	0.00	0.00
Airfoil Section		
Leading Wedge Angle Deg	10.000	10.000
Trailing Wedge Angle Deg	14.930	14.930
Leading Edge Radius	2.0	0.030
Void Area - Ft^2	13.17	0.00296
Blanketed Area	0.00	0.00

TABLE III (Continued)

MODEL COMPONENT: WING-Wash

GENERAL DESCRIPTION: Configuration 3 per Rockwell Lines VI70-000,3[illegible]

NOTE: Same as W203, except cuff, airfoil and incidence angle.

Model Scale =

TEST NO. DWG. NO. VI70-000[illegible]

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo.) Ft^2		
Planform	2690.00	0.605
Span (Theo In.	933.68	14.050
Aspect Ratio	2.265	2.265
Rate of Taper	1.177	1.177
Taper Ratio	0.200	0.200
Dihedral Angle, degrees (@ TE of Eleven)	3.500	3.500
Incidence Angle, degrees	0.500	0.500
Aerodynamic Twist, degrees	+3.000	+3.000
Sweep Back Angles, degrees		
Leading Edge	45.000	45.000
Trailing Edge	-10.24	-10.24
0.25 Element Line	35.209	35.209
Chords:		
Root (Theo) B.P.0.0.	689.24	10.339
Tip, (Theo) B.P.	137.85	2.068
MAC	474.21	7.122
Fus. Sta. of .25 MAC	1136.89	17.053
W.P. of .25 MAC	299.20	4.488
B.L. of .25 MAC	182.13	2.732
EXPOSED DATA		
Area (Theo) Ft^2	1752.29	0.394
Span, (Theo) In. BP108	720.68	10.810
Aspect Ratio	2.058	2.058
Taper Ratio	0.2451	0.2451
Chords		
Root BP108	562.40	8.436
Tip 1.00 $\frac{b}{2}$	137.85	2.068
MAC	393.03	5.896
Fus. Sta. of .25 MAC	1185.31	17.780
W.P. of .25 MAC	300.20	4.503
B.L. of .25 MAC	221.76	3.776
Airfoil Section (Rockwell Mod NASA) XXXX-64		
Root $\frac{b}{2}$ =	0.10	0.10
Tip $\frac{b}{2}$ =	0.12	0.12
Data for (1) of (2) Sides		
Leading Edge Cuff Planform Area Ft^2	118.333	0.027
Leading Edge Intersects Fus M. L. @ Sta	500	7.500
Leading Edge Intersects Wing @ Sta	1083.4	16.251

TABLE III (Concluded)

MODEL COMPONENT: BOUNDARY LAYER TRANSITION STRIP - X_{20}

GENERAL DESCRIPTION: Glass beads located on model surface.

MODEL SCALE: 0.015

DIMENSIONS:	MODEL SCALE
Wing, Tail, and Nacelle:	
Width, In.	0.0625
Distance aft of leading edge, inches streamwise	0.6
Nominal height, In.	0.0025
Body Nose:	
Width, In.	0.0625
Distance aft of leading edge, inches streamwise	0.125
Nominal height, inches	0.0025

Notes:

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

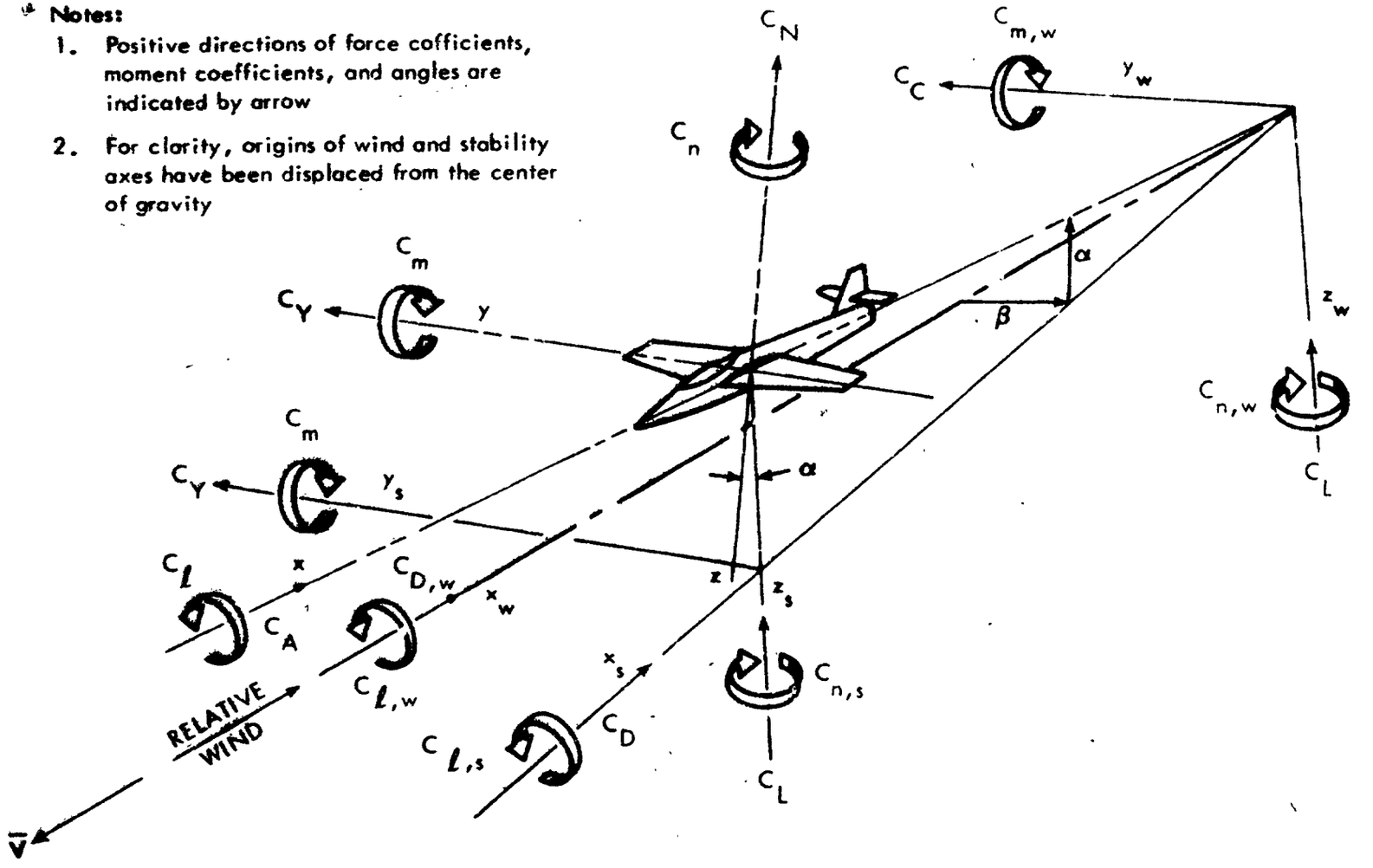
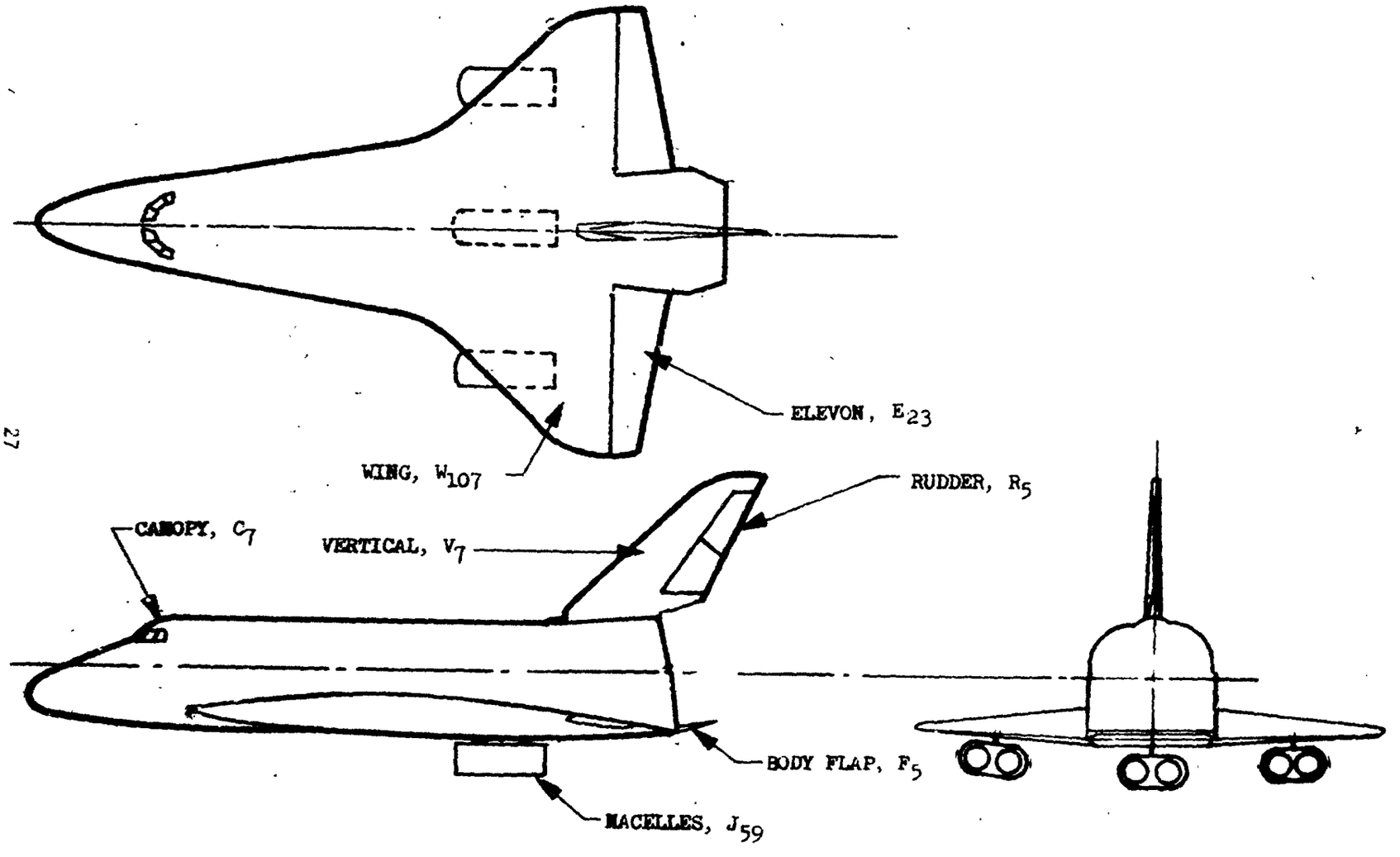
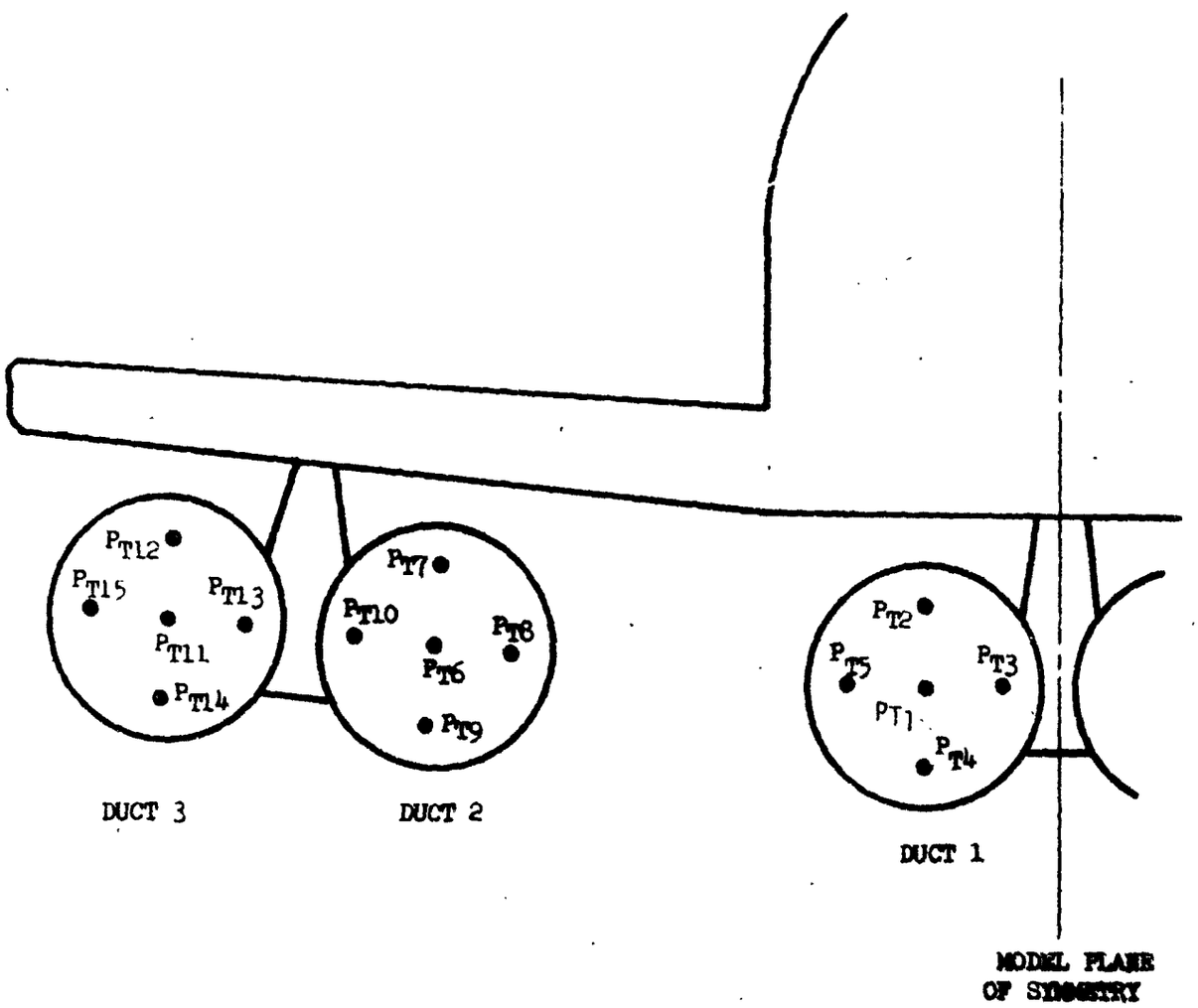


Figure 1. - Axis systems.



a. General Arrangement - 139B Orbiter

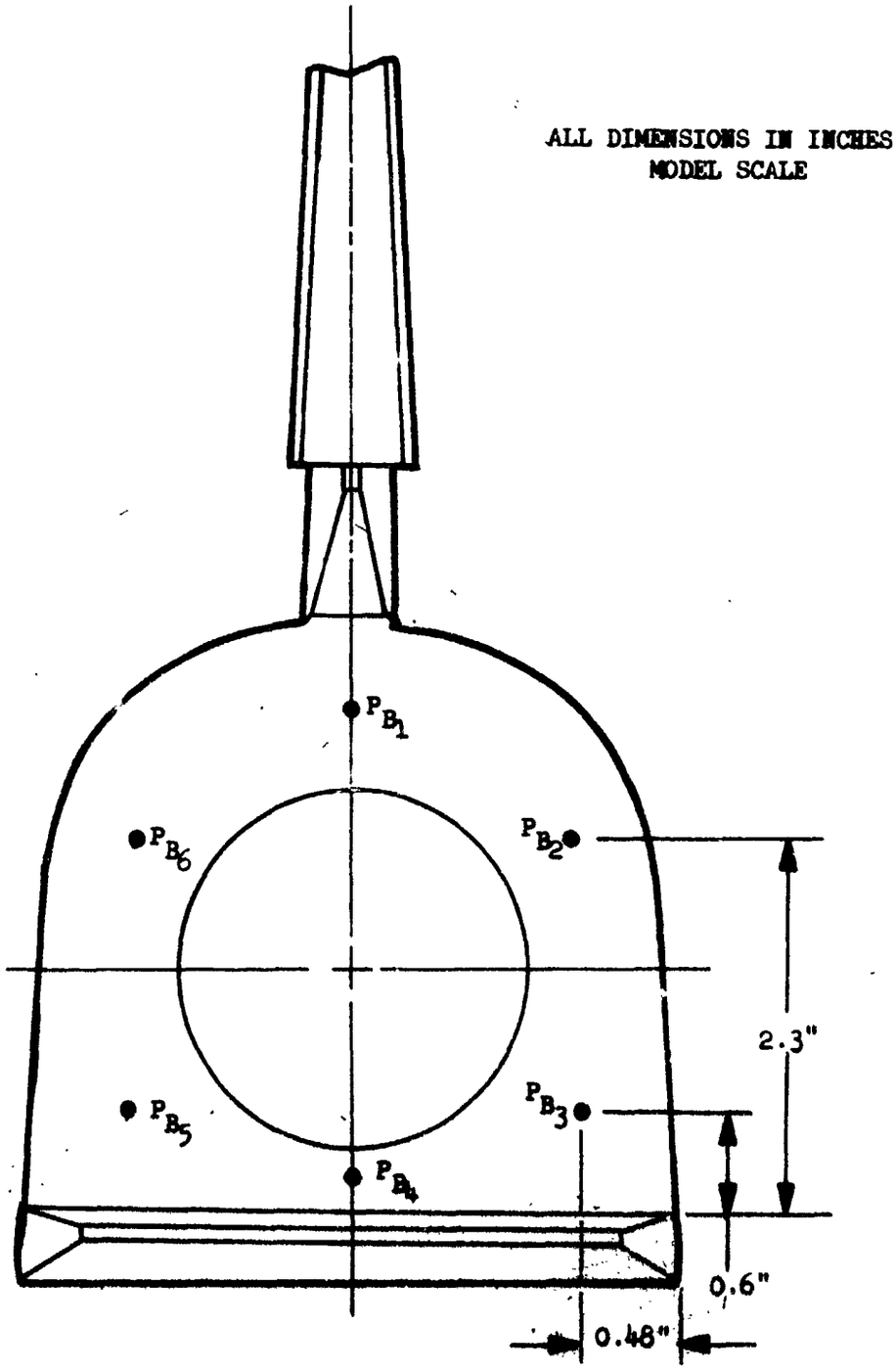
Figure 2.- Model Sketches.



VIEW LOOKING FORWARD

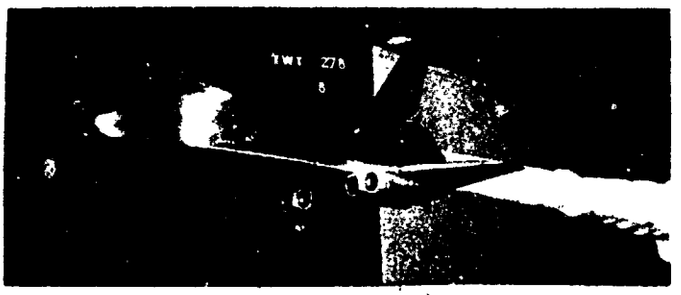
b. Nacelle Pressure Locations

Figure 2. - Continued.



c. Base Pressure Locations

Figure 2. - Concluded.



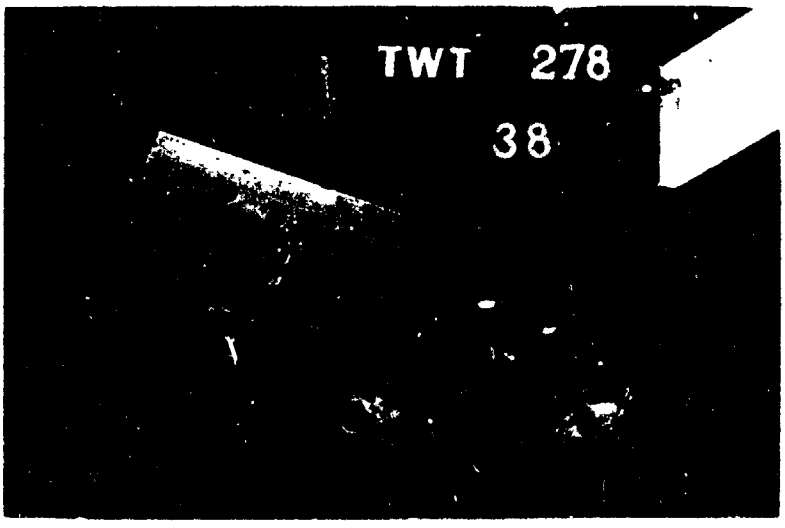
a. J_{59} Baseline ABPS Configuration.

b. J_{59} Baseline ABPS Configuration.

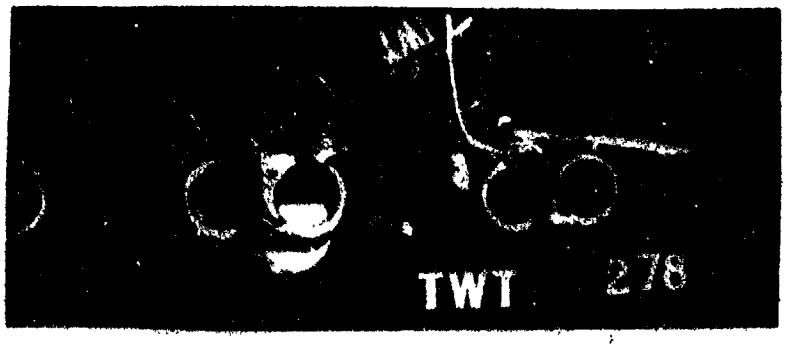
c. J_{60} Wing ABPS Moved Aft.

Figure 3. - Model Installation Photographs.

d. J_{61} Flush ABPS Configuration.



e. J_{61} Flush ABPS Configuration.



f. J_{61} Flush ABPS Configuration.

Figure 3. - Concluded.

DATA FIGURES

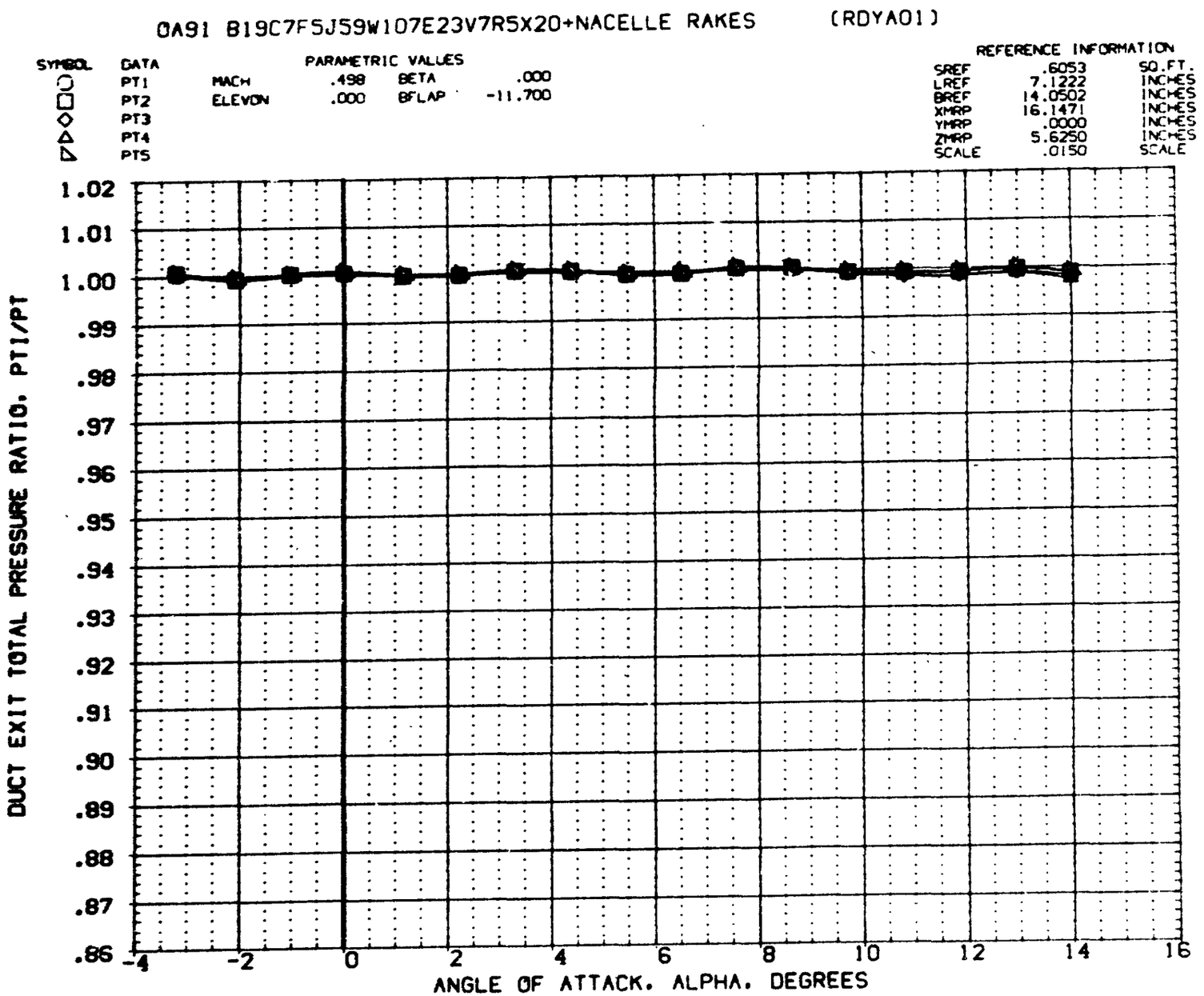


FIG. 4 DUCT EXIT TOTAL PRESSURE CLEAN DUCT

0A91 B19C7F5J59W107E23V7R5X20+NACELLE RAKES (RDYA01)

SYMBOL	DATA
△	PT1
◇	PT2
□	PT3
○	PT4
△	PT5

PARAMETRIC VALUES

MACH	.696	BETA	.000
ELEVON	.000	BFLAP	-11.700

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

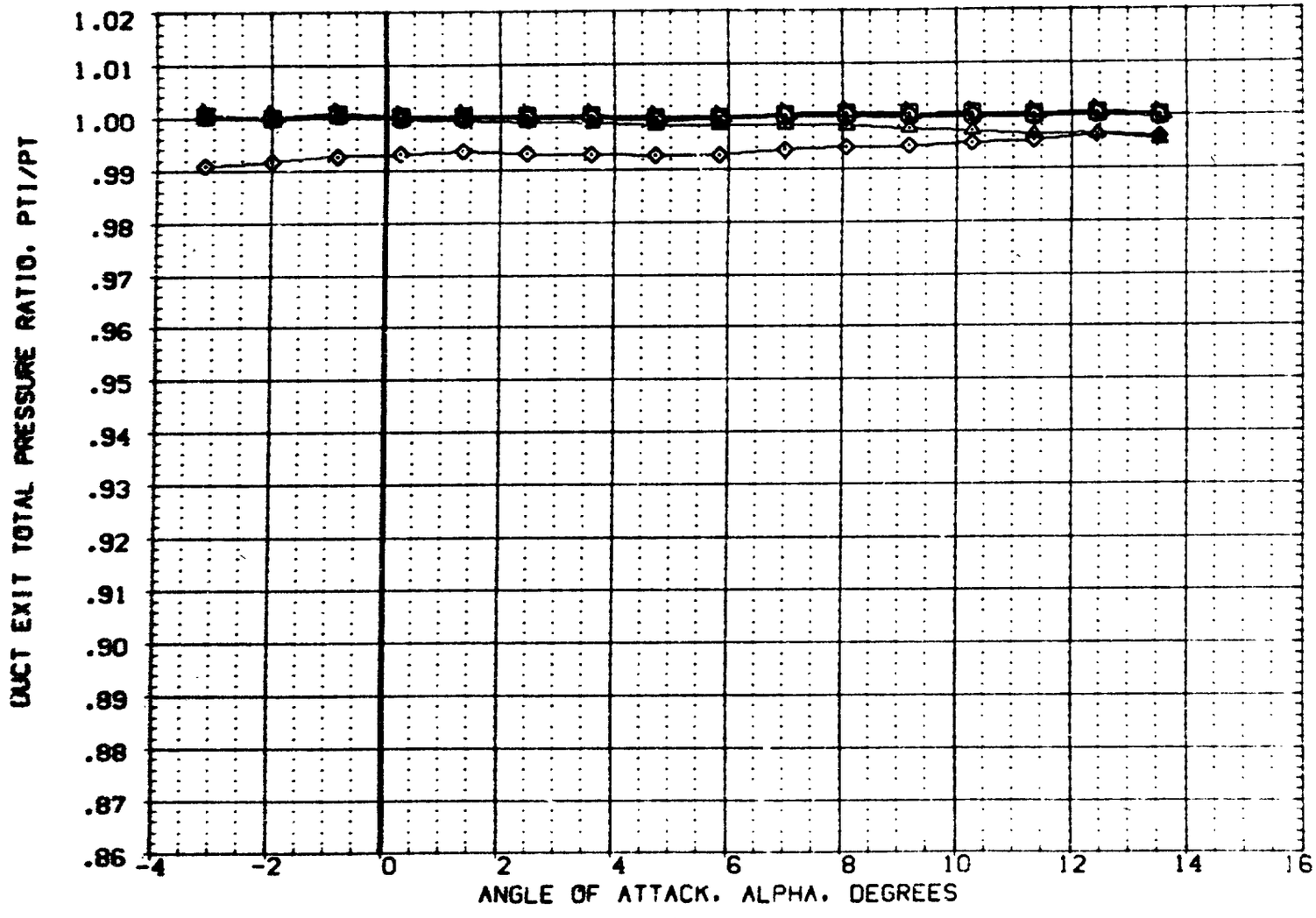


FIG. 4 DUCT EXIT TOTAL PRESSURE CLEAN DUCT

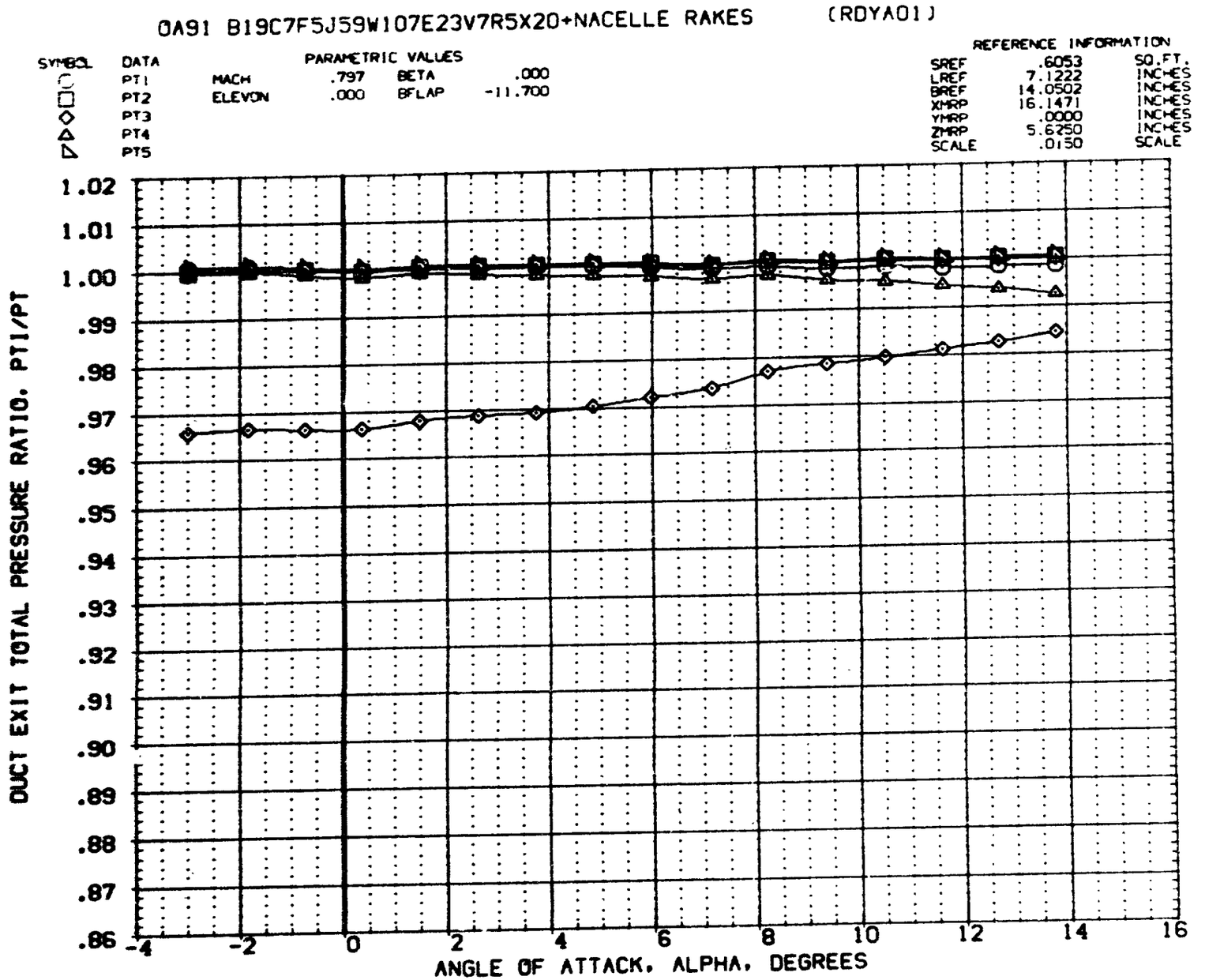


FIG. 4 DUCT EXIT TOTAL PRESSURE CLEAN DUCT

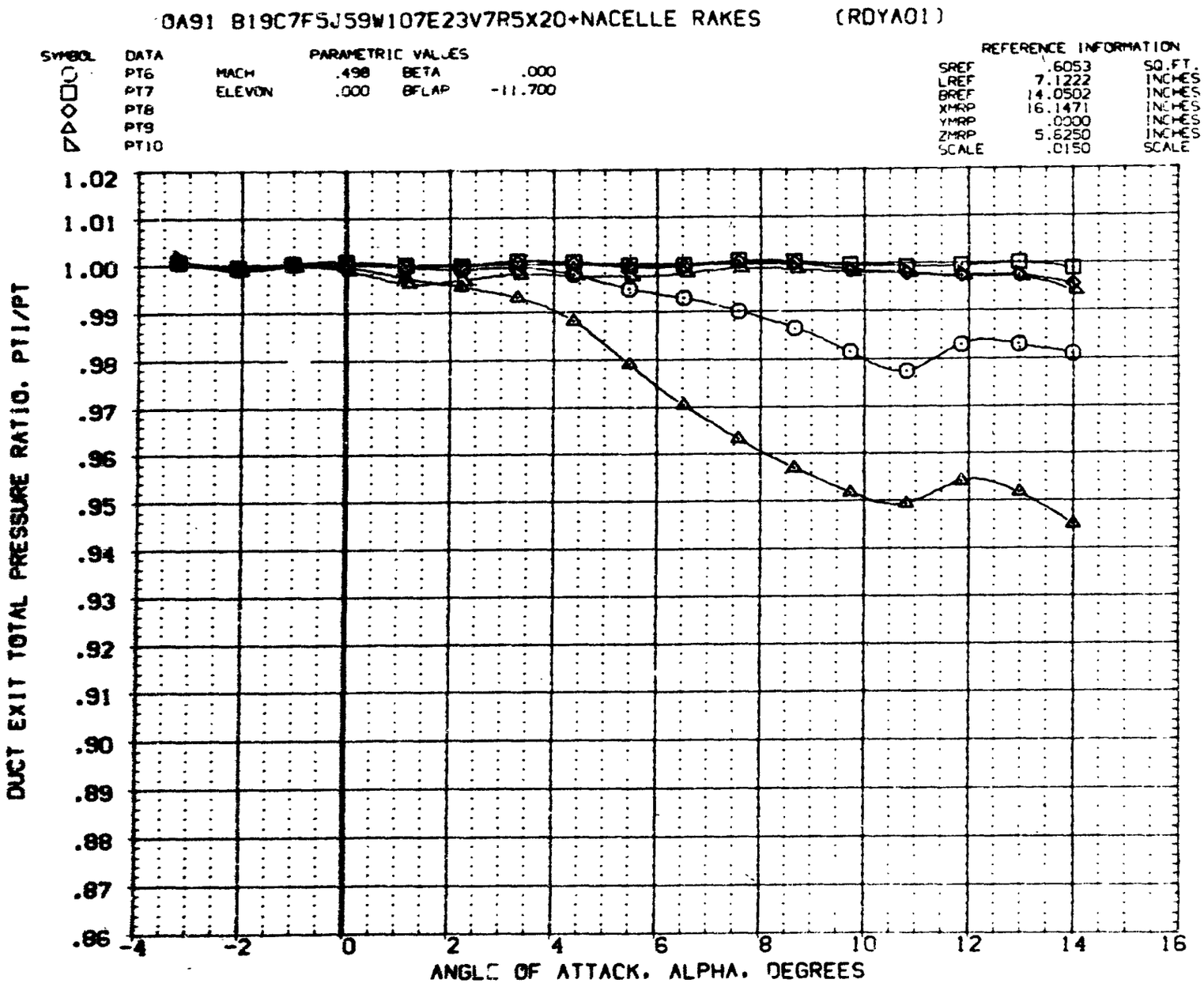


FIG. 4 DUCT EXIT TOTAL PRESSURE CLEAN DUCT

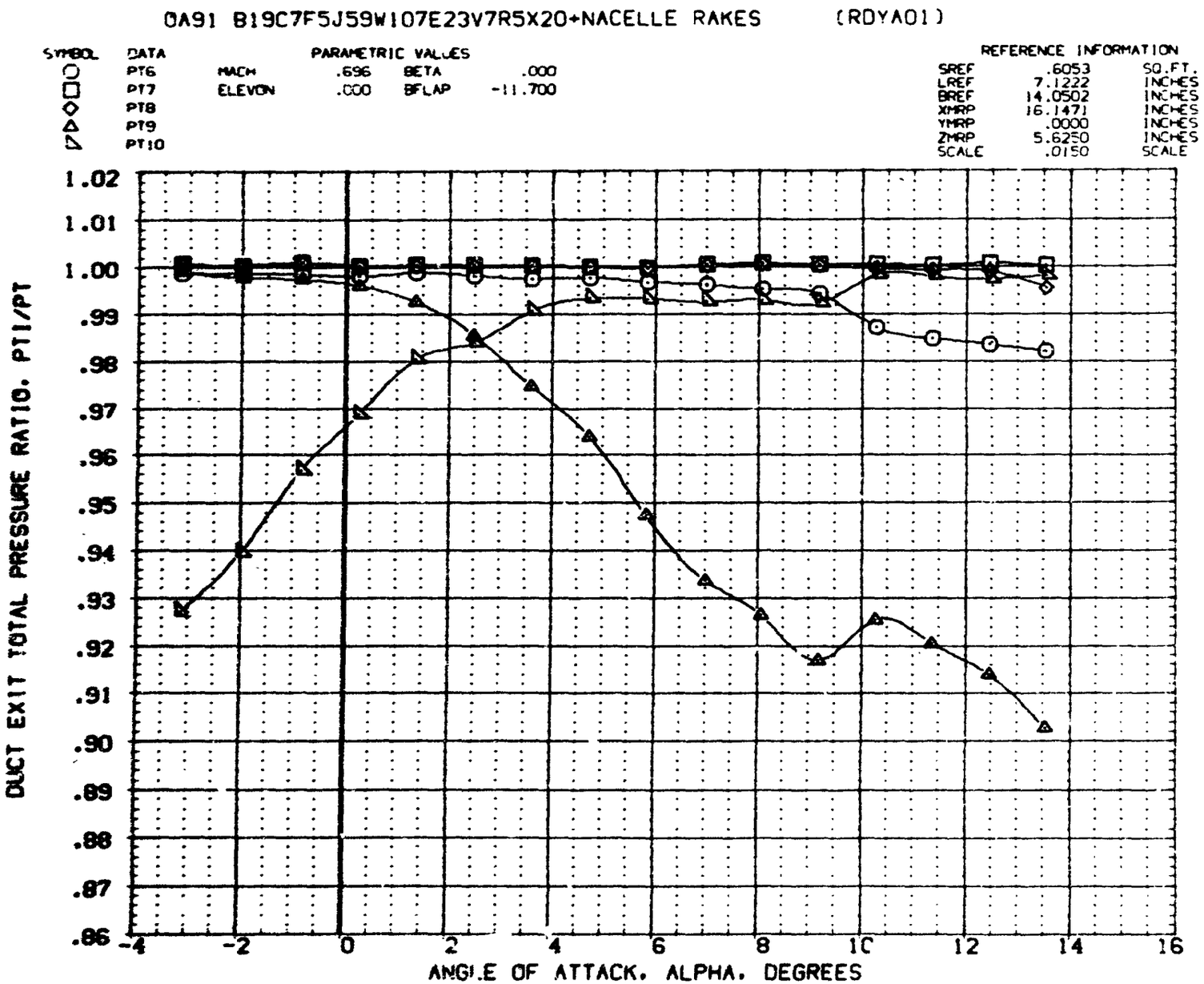


FIG. 4 DUCT EXIT TOTAL PRESSURE CLEAN DUCT

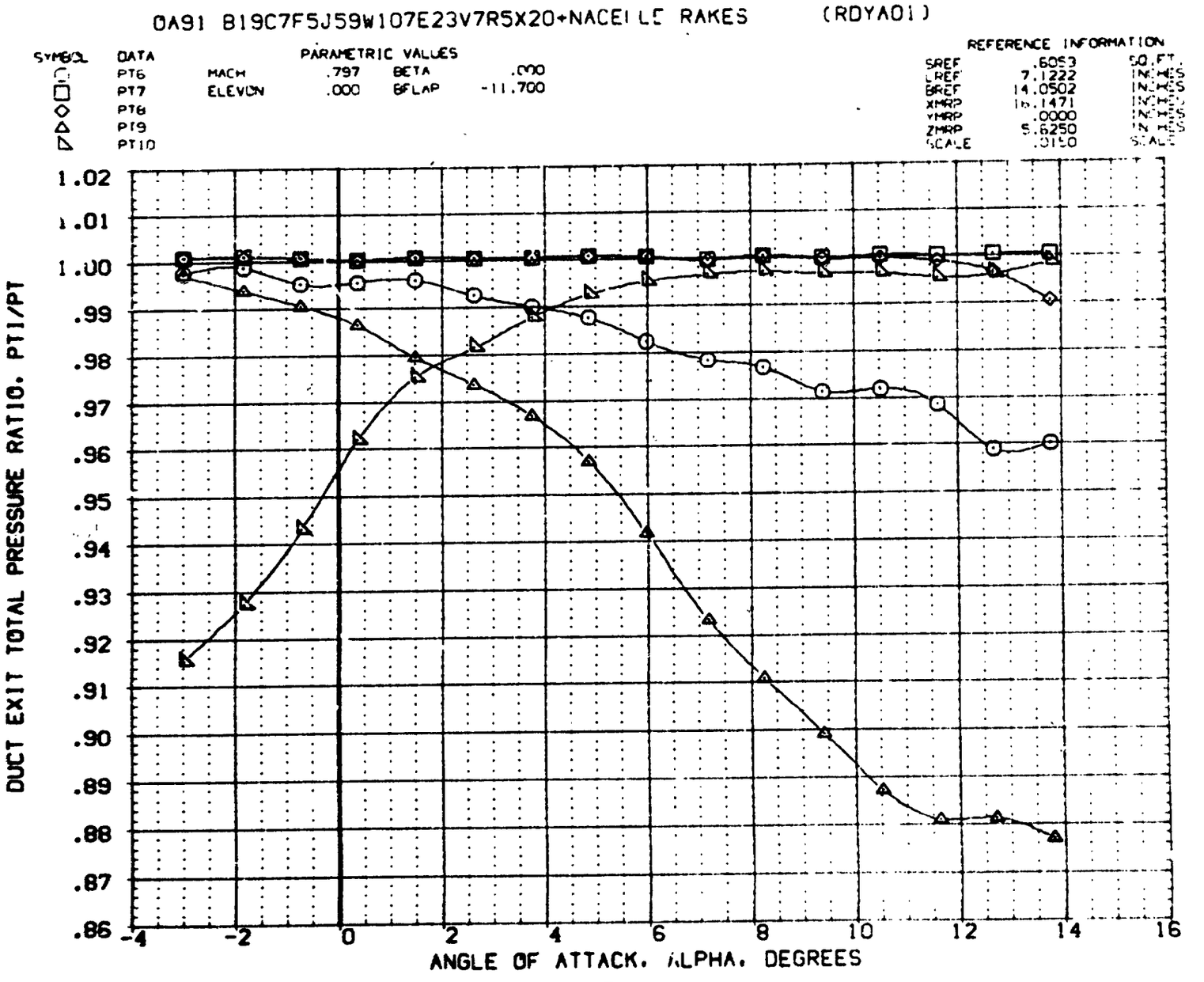


FIG. 4 DUCT EXIT TOTAL PRESSURE CLEAN DUCT

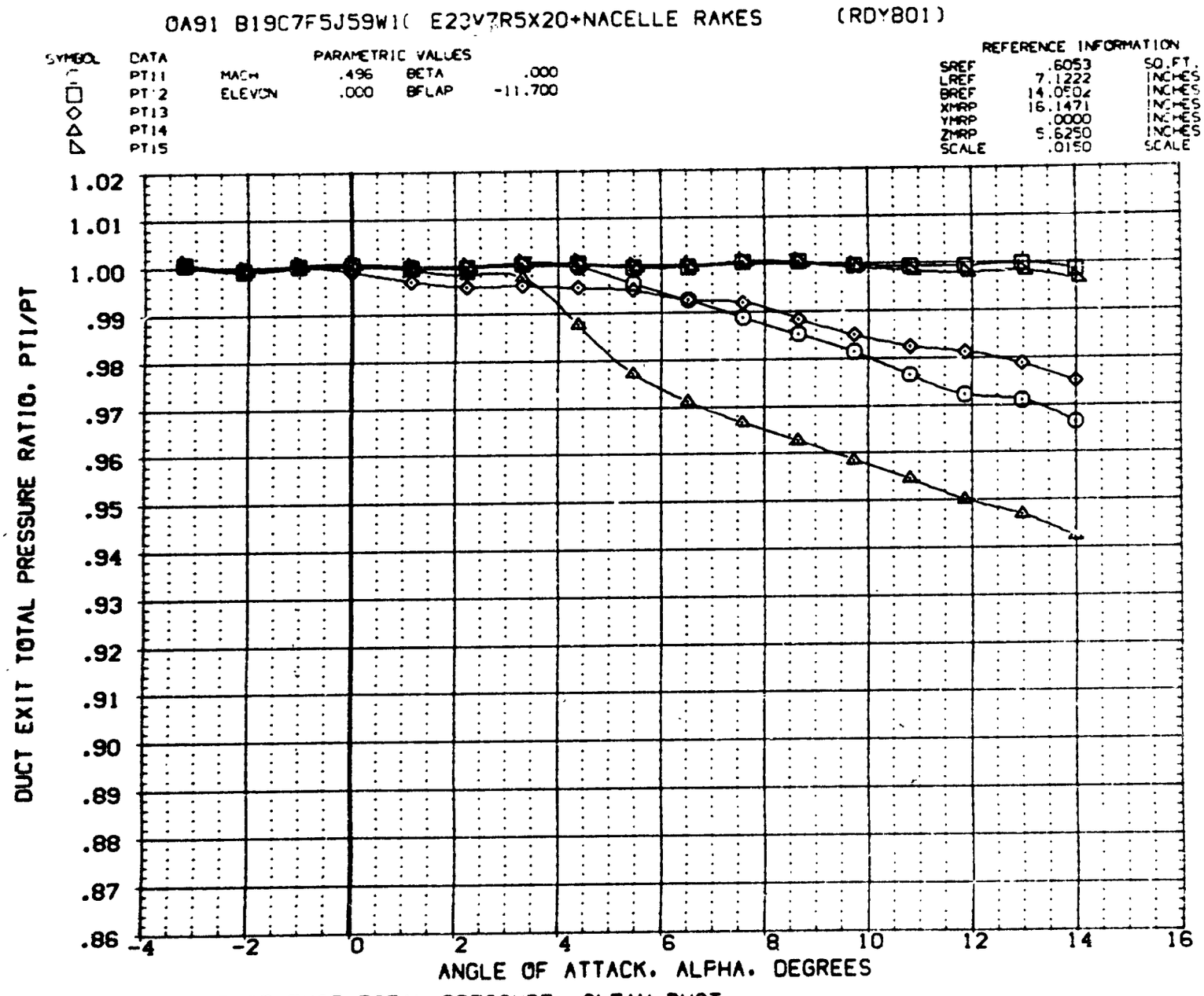


FIG. 4 DUCT EXIT TOTAL PRESSURE CLEAN DUCT

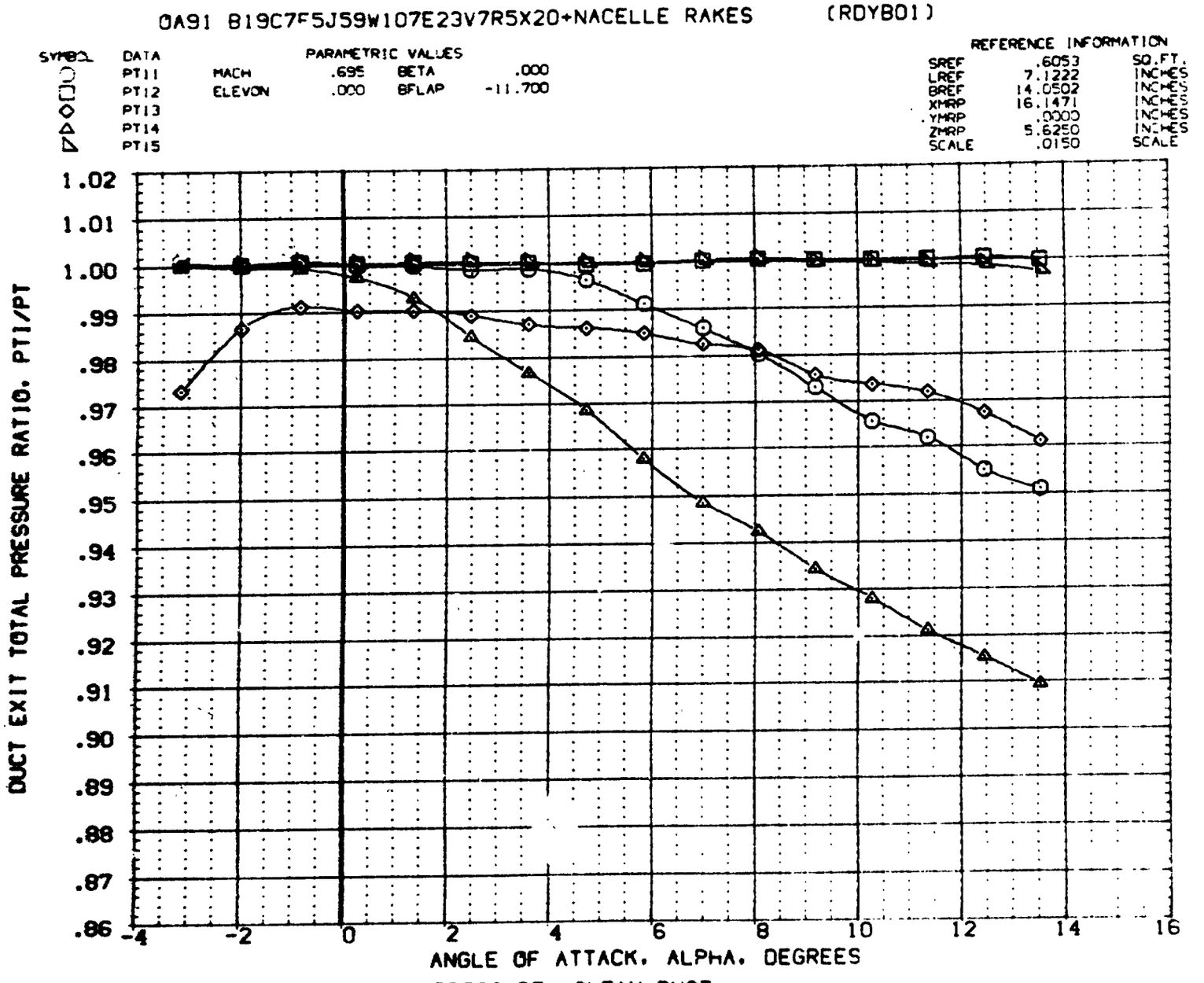


FIG. 4 DUCT EXIT TOTAL PRESSURE CLEAN DUCT

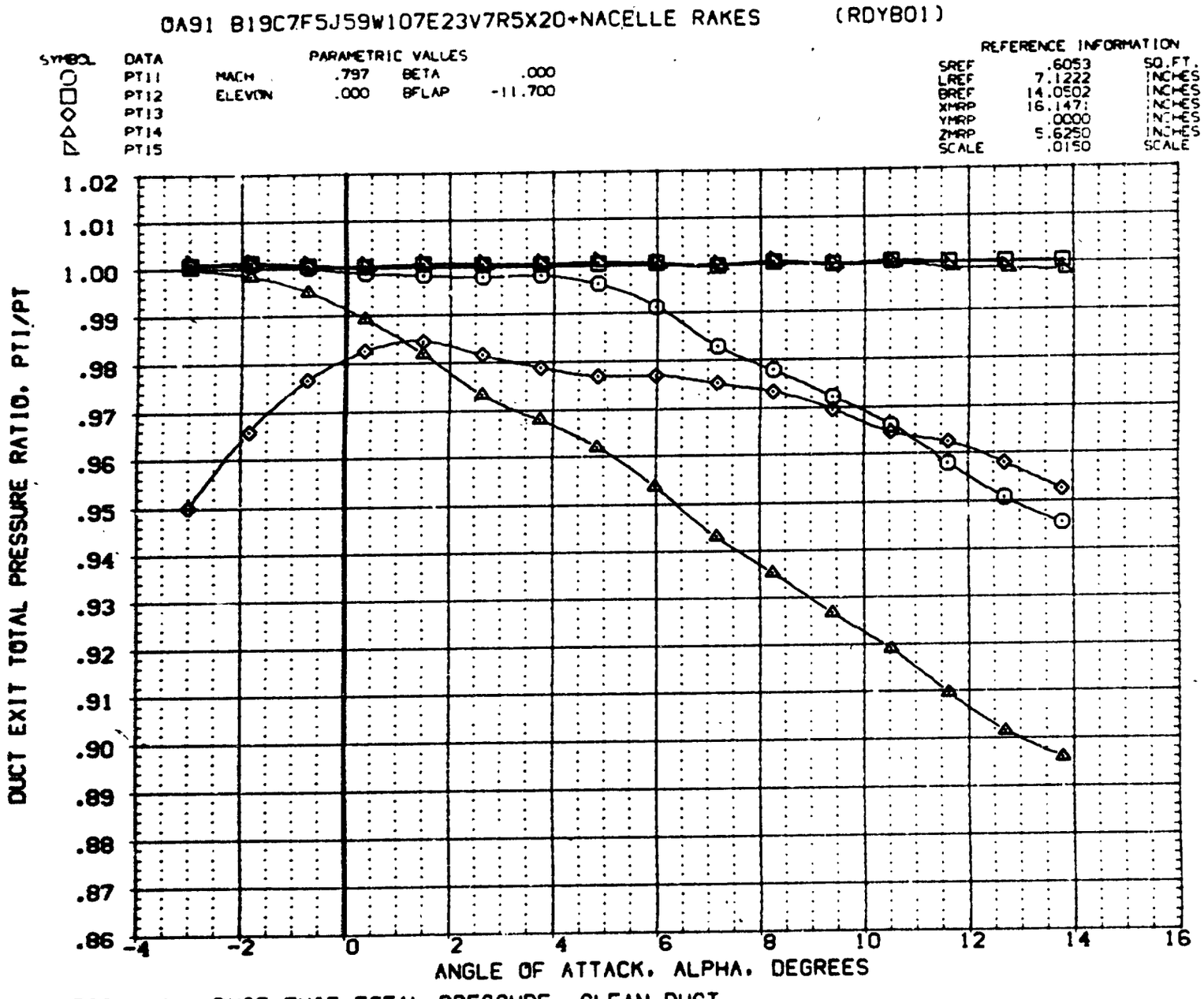


FIG. 4 DUCT EXIT TOTAL PRESSURE CLEAN DUCT

0A91 B19C7F5J59W107E23V7R5X20+NACELLE RAKES (RDYA02)

SYMBOL	DATA
○	PT1
□	PT2
◇	PT3
△	PT4
▽	PT5

PARAMETRIC VALUES

MACH	.597	BETA	.000
ELEVON	.000	BFLAP	-11.700

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

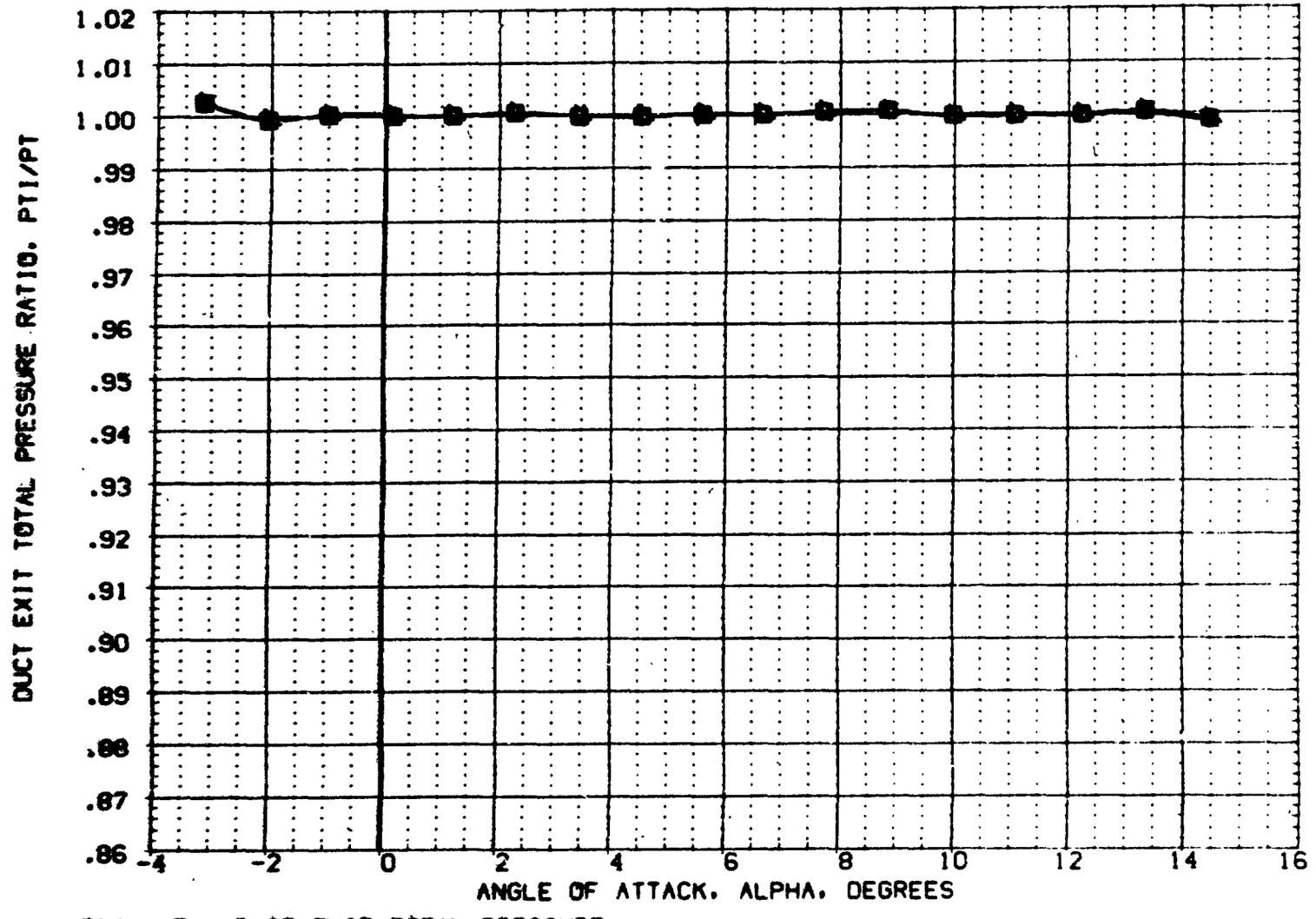


FIG. 5 DUCT EXIT TOTAL PRESSURE

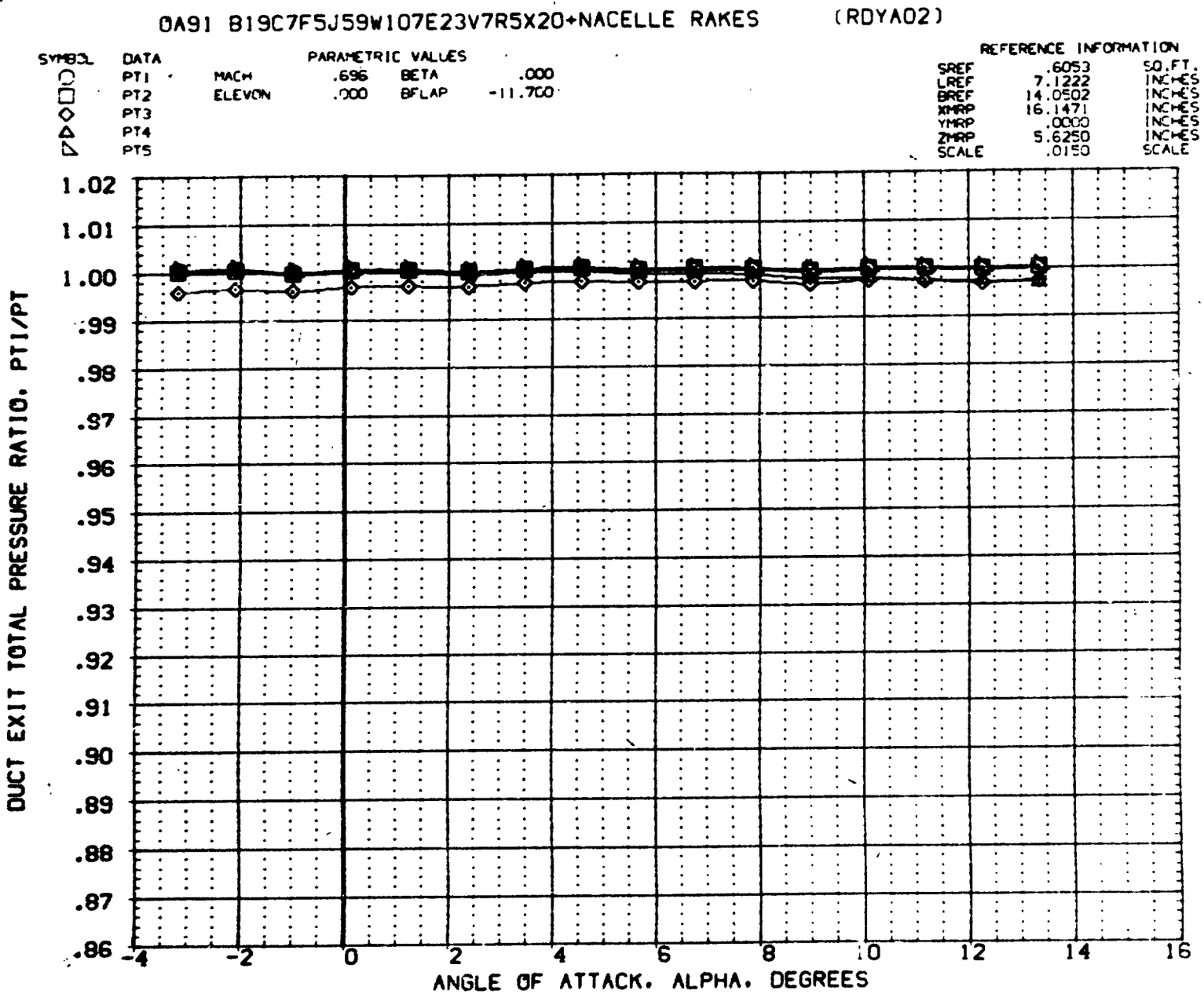


FIG. 5 DUCT EXIT TOTAL PRESSURE

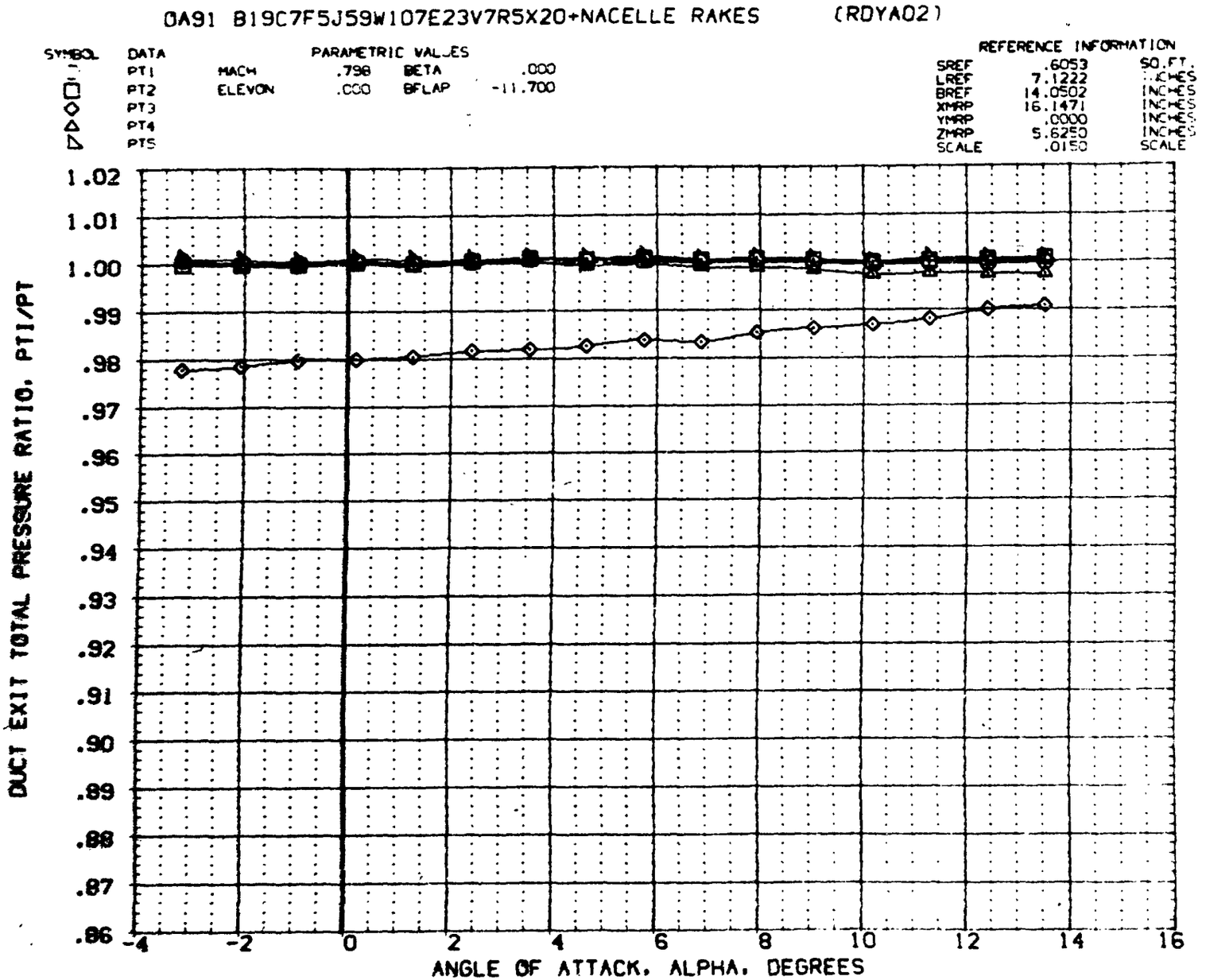


FIG. 5 DUCT EXIT TOTAL PRESSURE

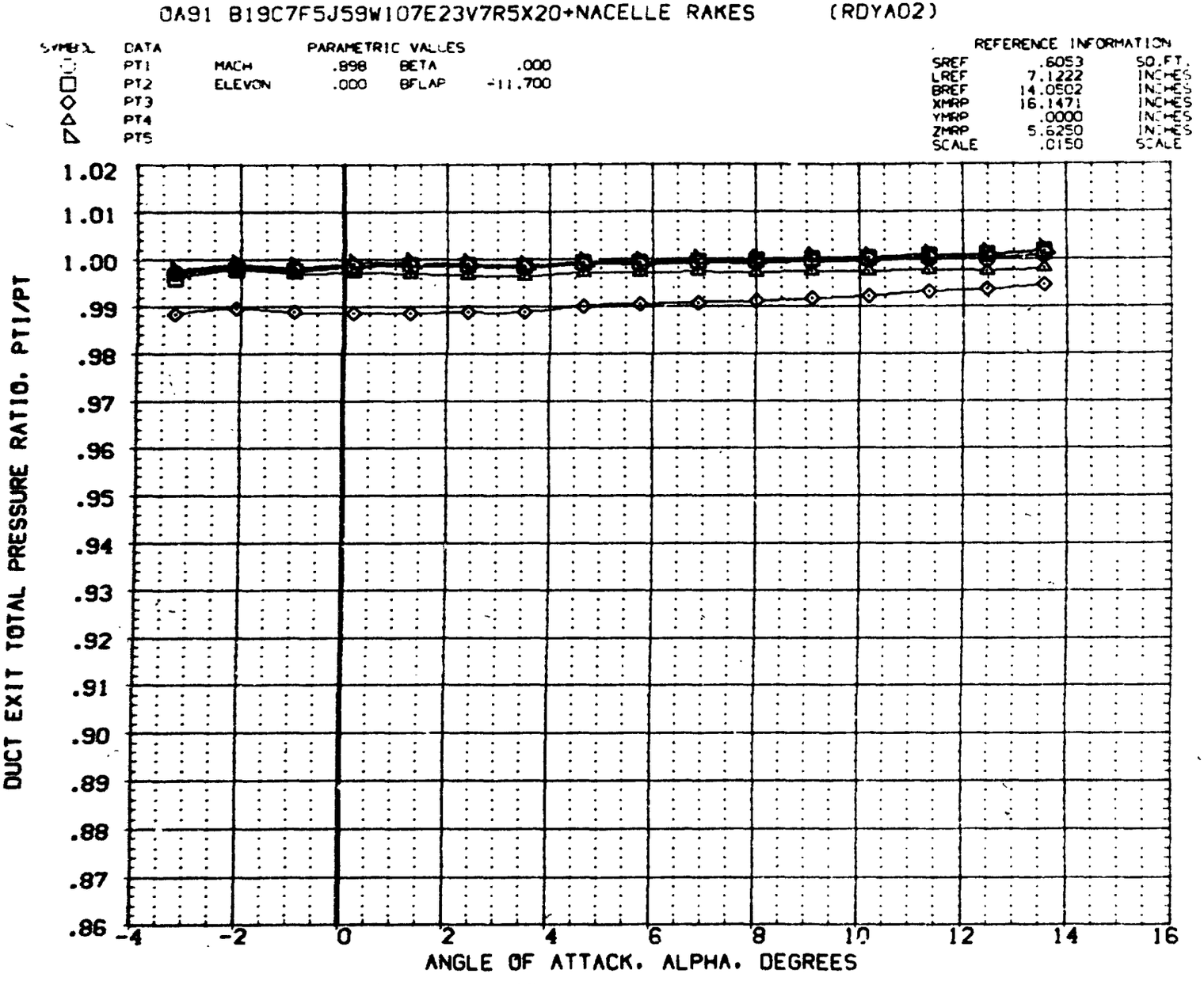


FIG. 5 DUCT EXIT TOTAL PRESSURE

0A91 B19C7F5J59W107E23V7R5X20+NACELLE RAKES (RDYA02)

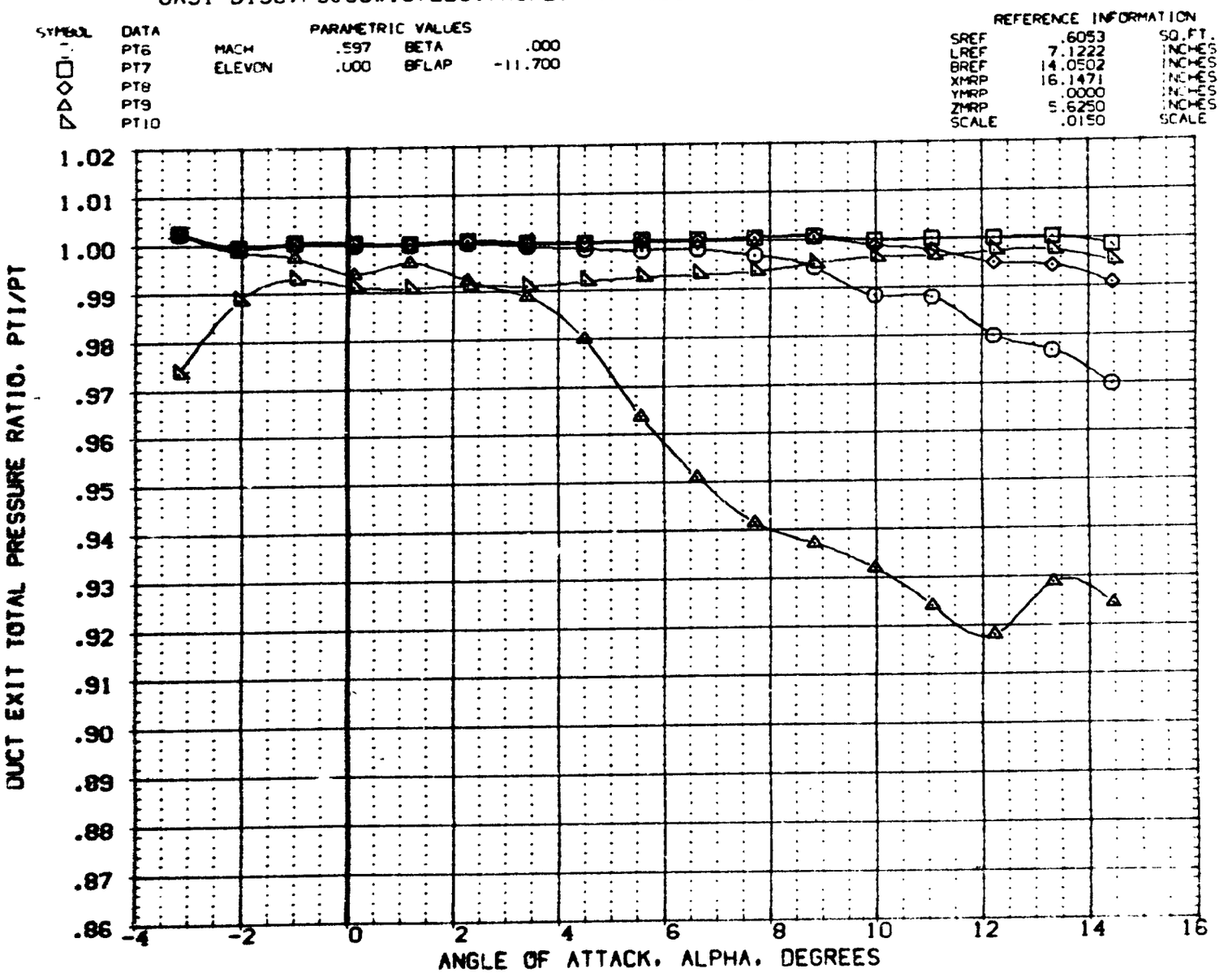


FIG. 5 DUCT EXIT TOTAL PRESSURE

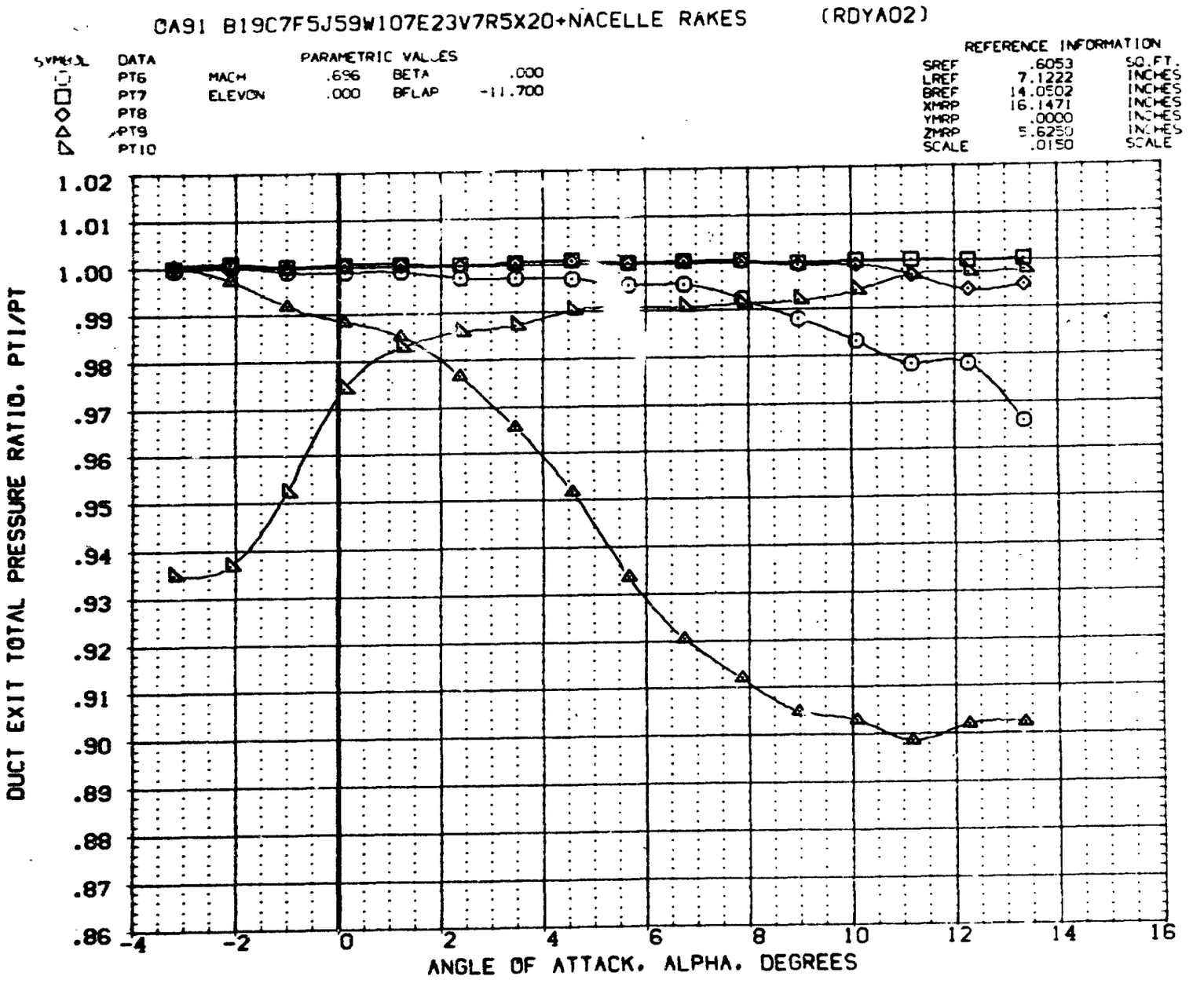


FIG. 5 DUCT EXIT TOTAL PRESSURE

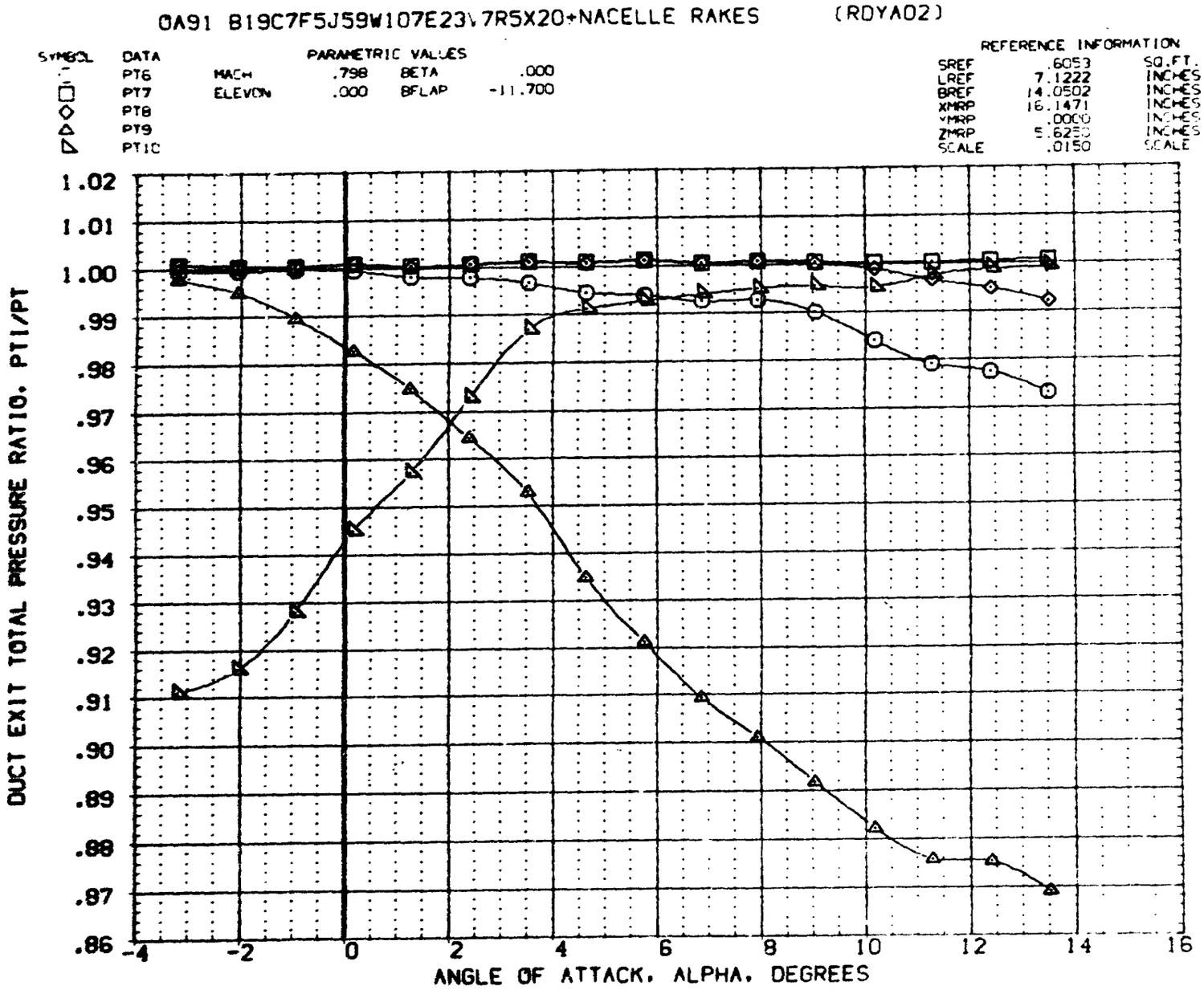


FIG. 5 DUCT EXIT TOTAL PRESSURE

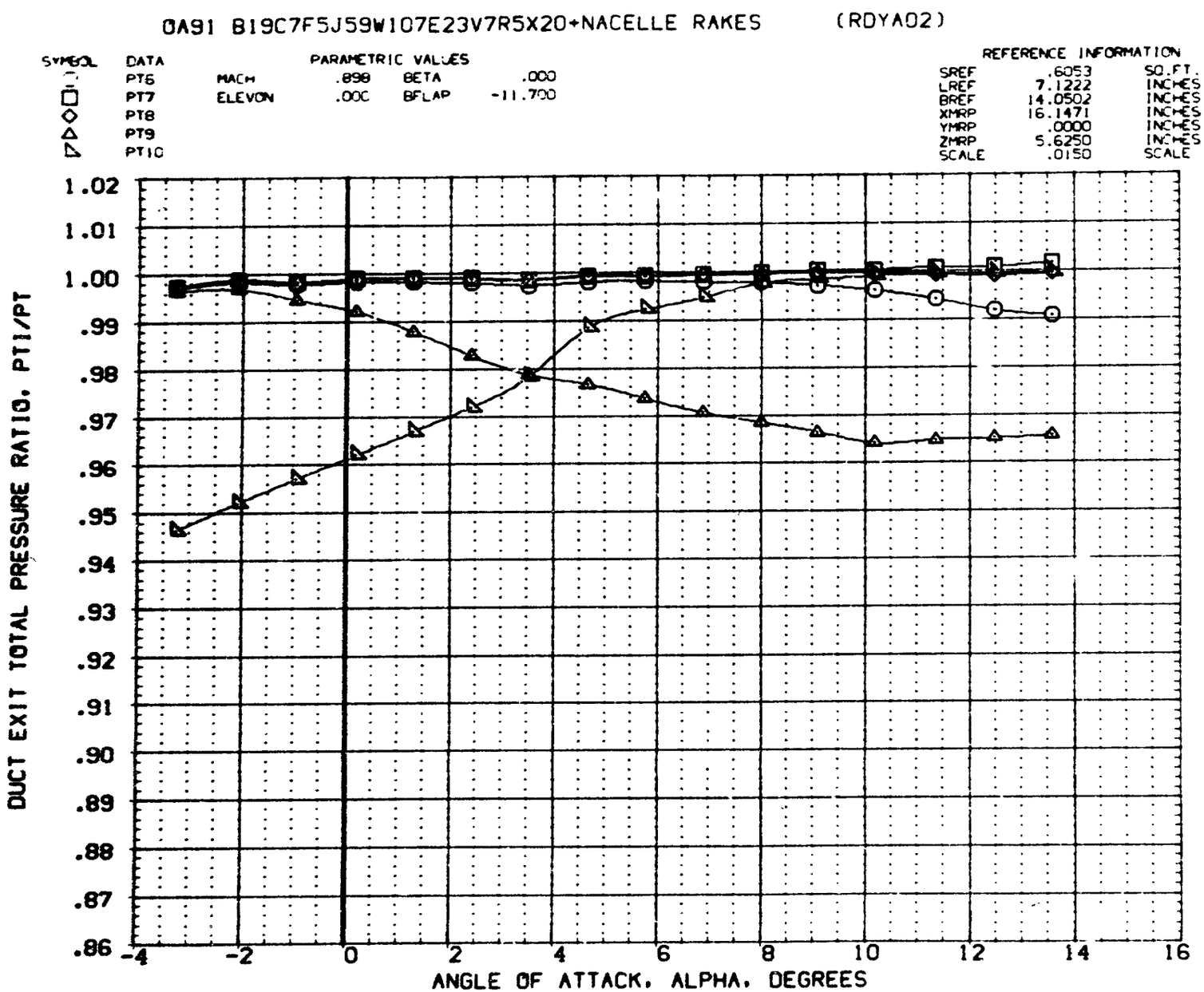


FIG. 5 DUCT EXIT TOTAL PRESSURE

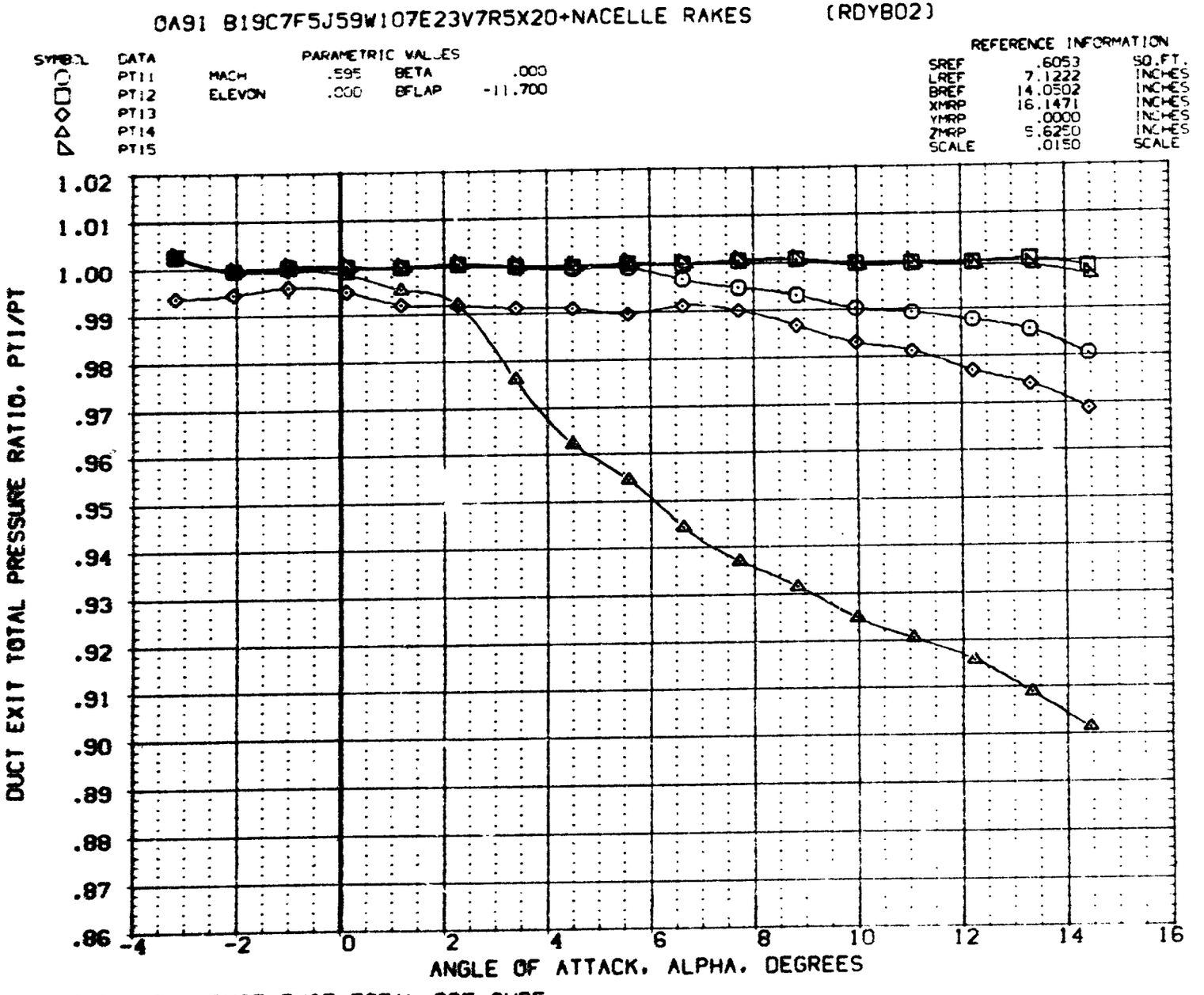


FIG. 5 DUCT EXIT TOTAL PRESSURE

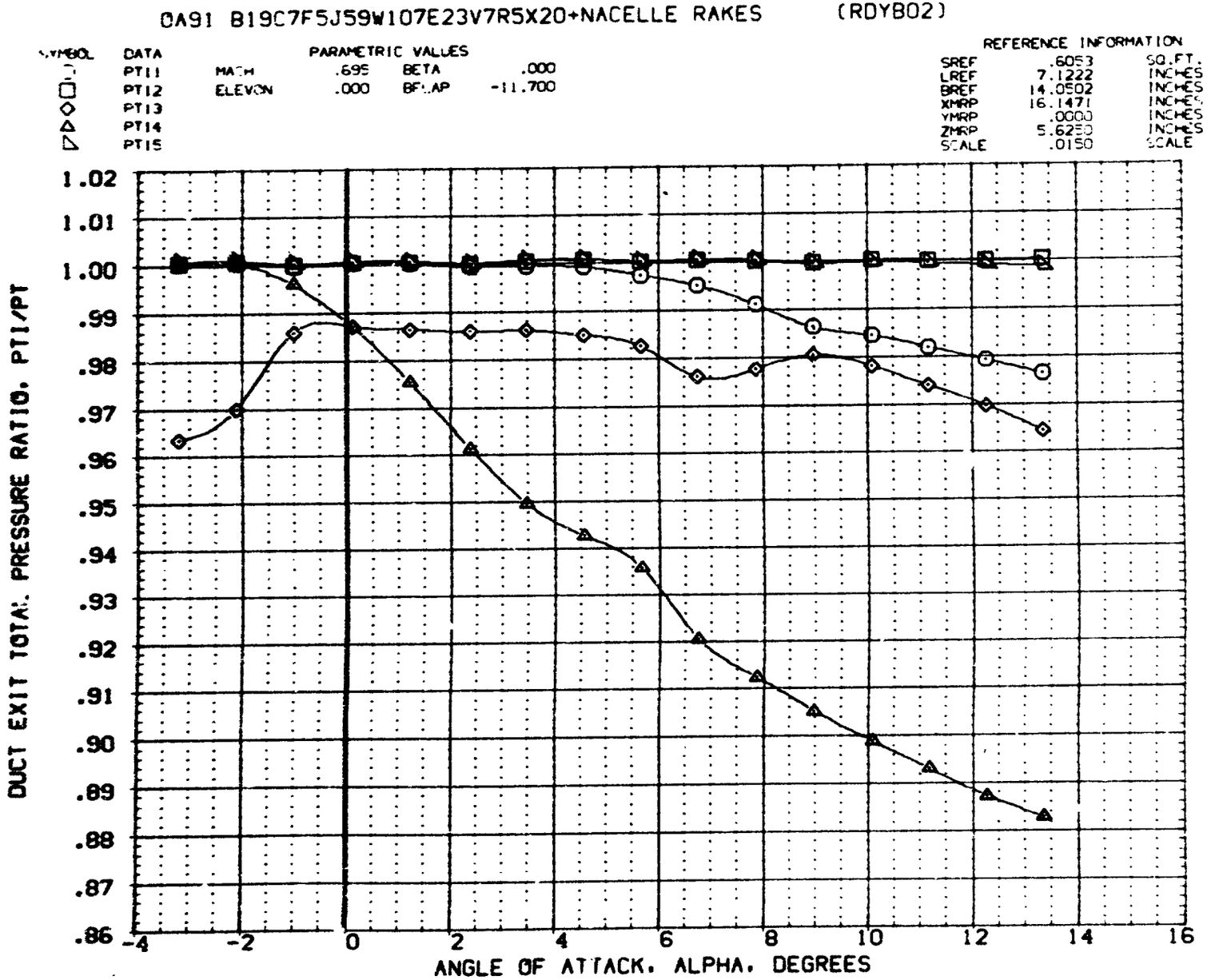


FIG. 5 DUCT EXIT TOTAL PRESSURE

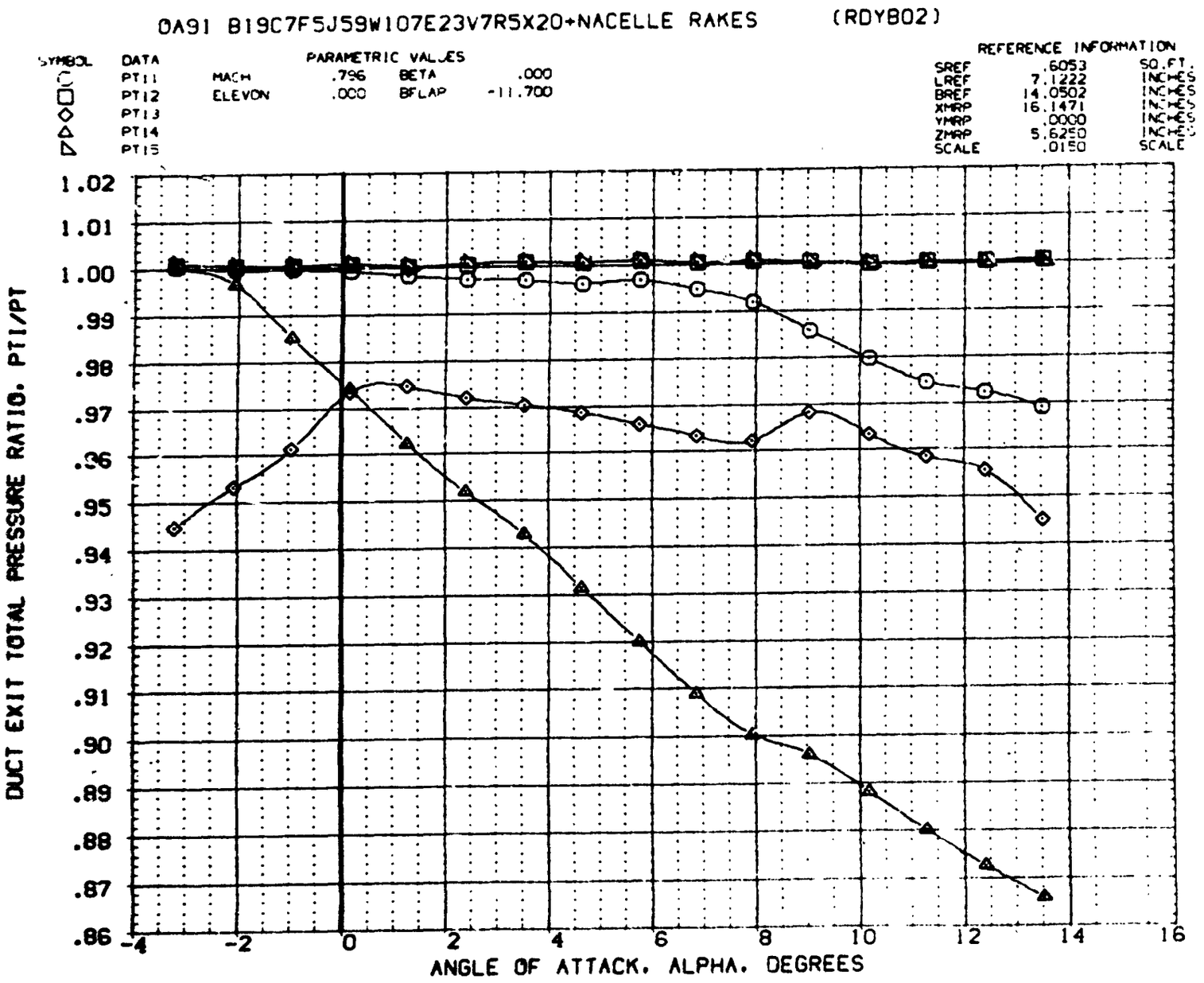


FIG. 5 DUCT EXIT TOTAL PRESSURE

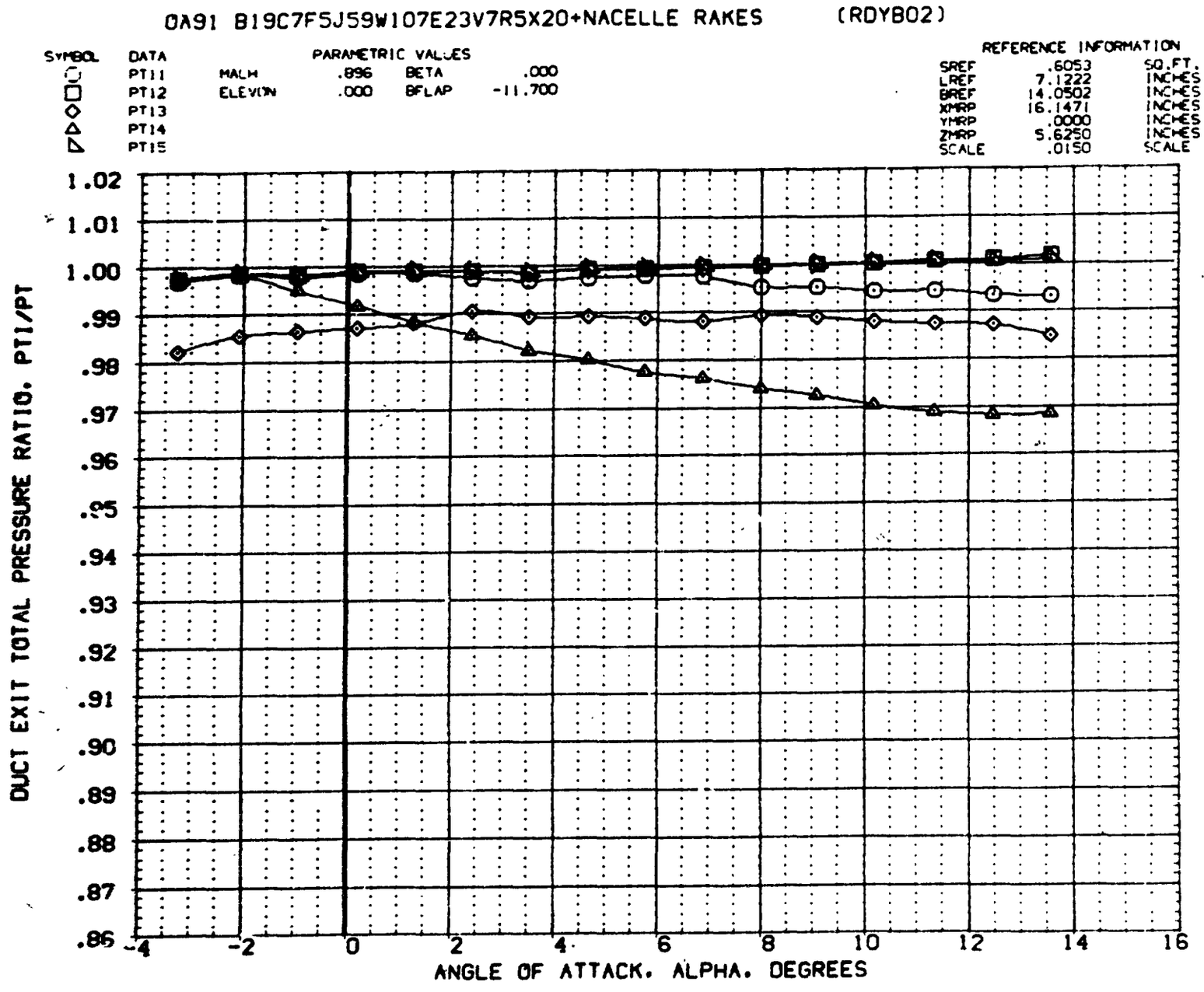


FIG. 5 DUCT EXIT TOTAL PRESSURE

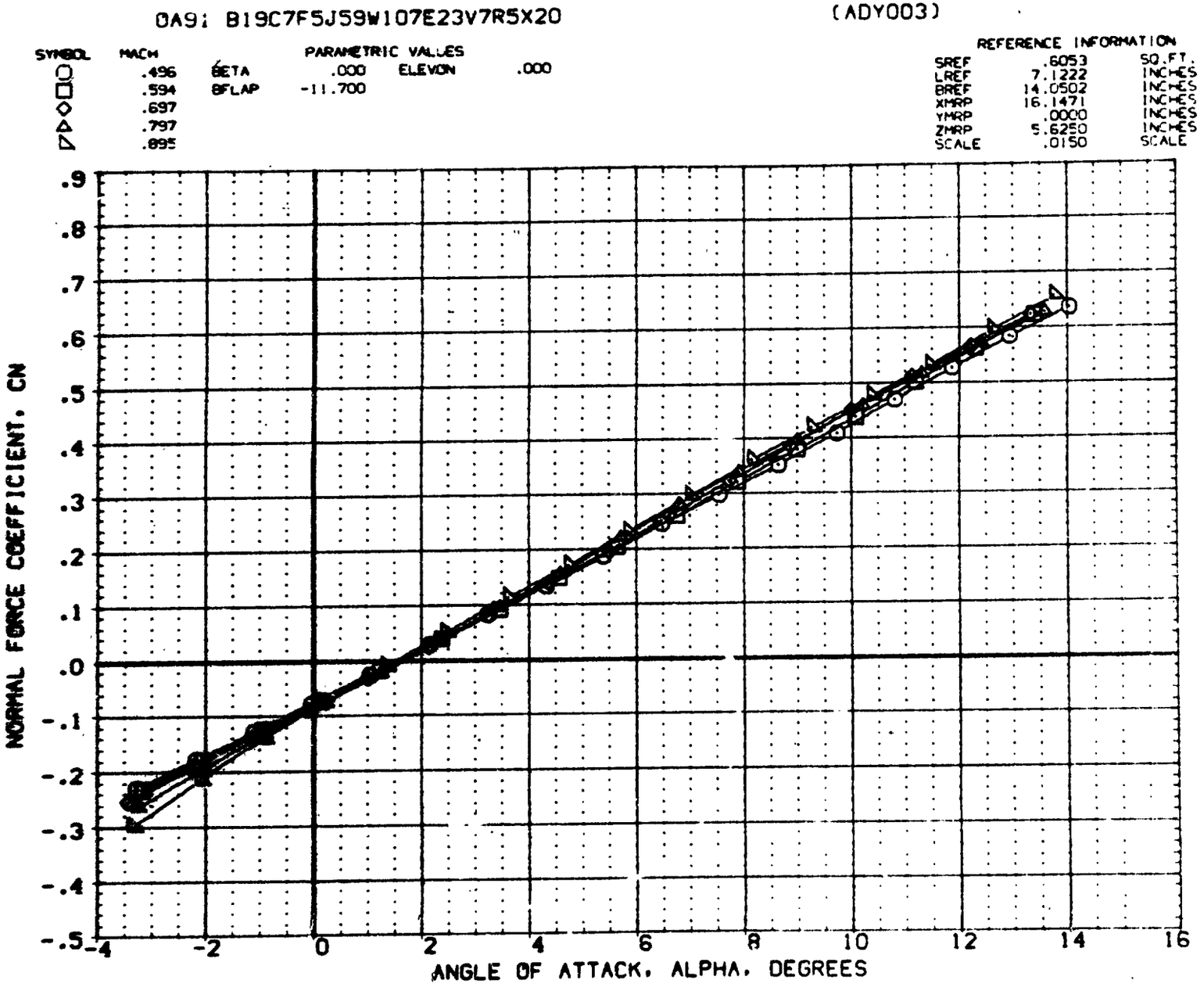


FIG. 6 LONGITUDINAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES

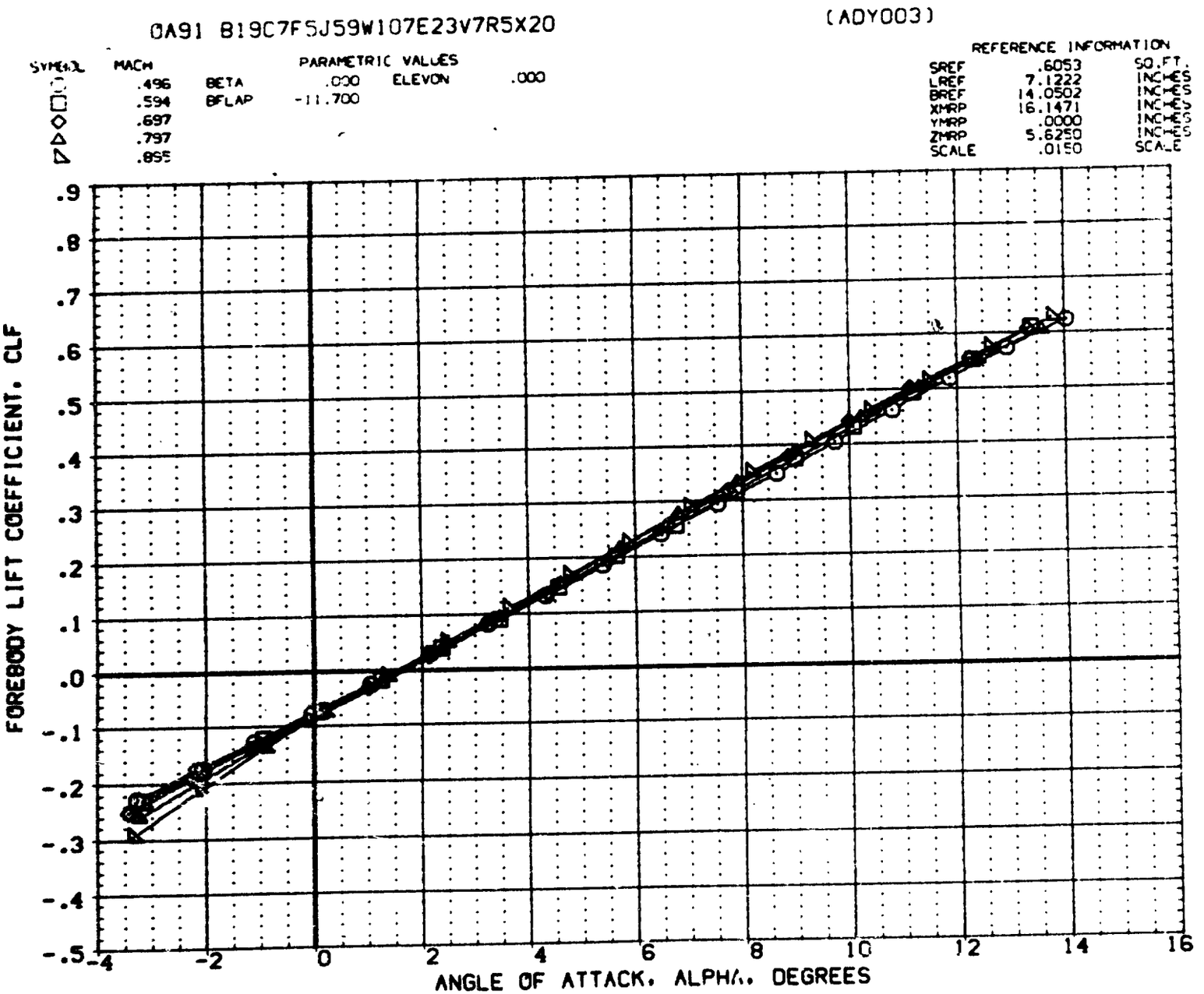
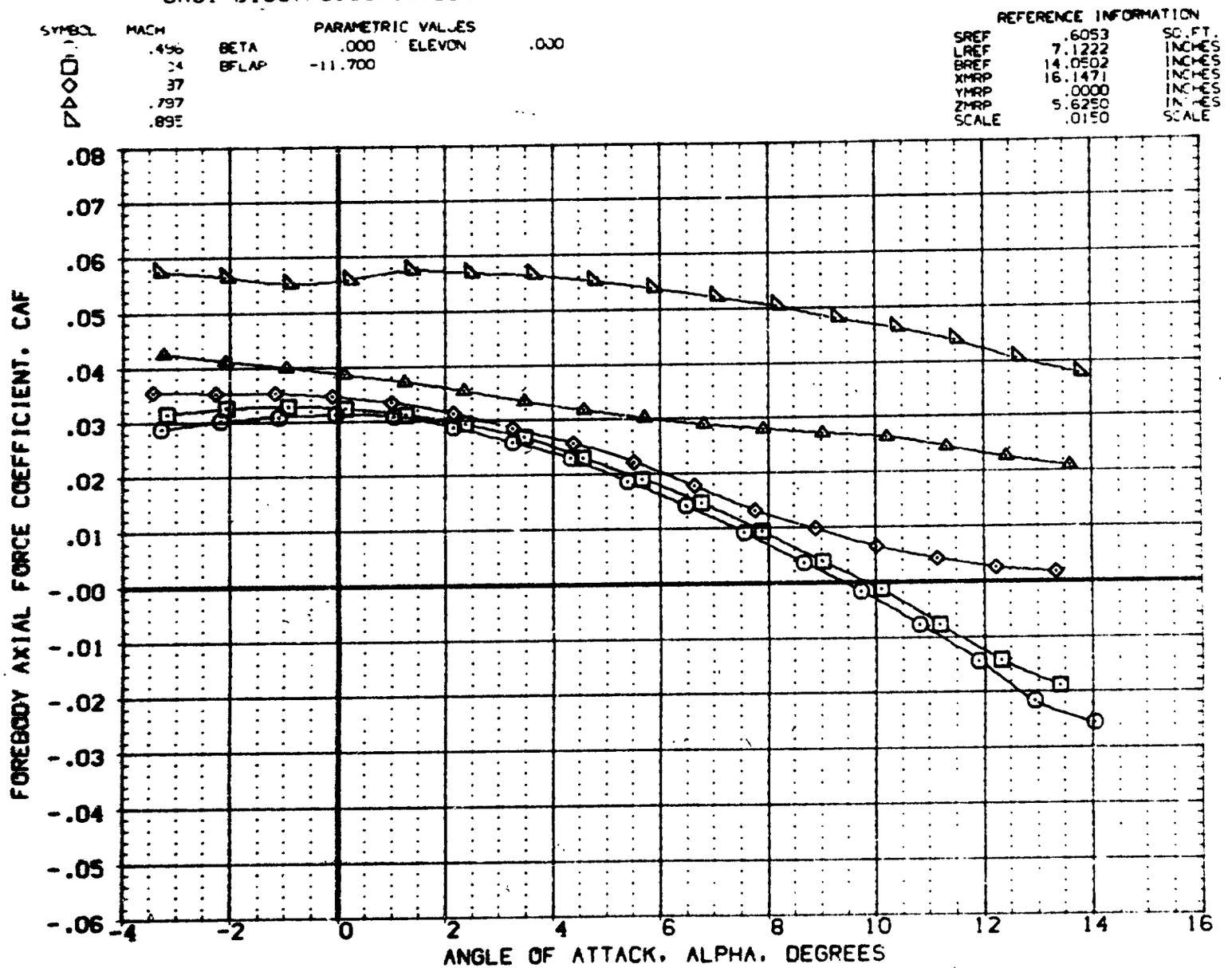


FIG. 6 LONGITUDINAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES

0A91 B19C7F5J59W107E23V7R5X20 (ADY003)



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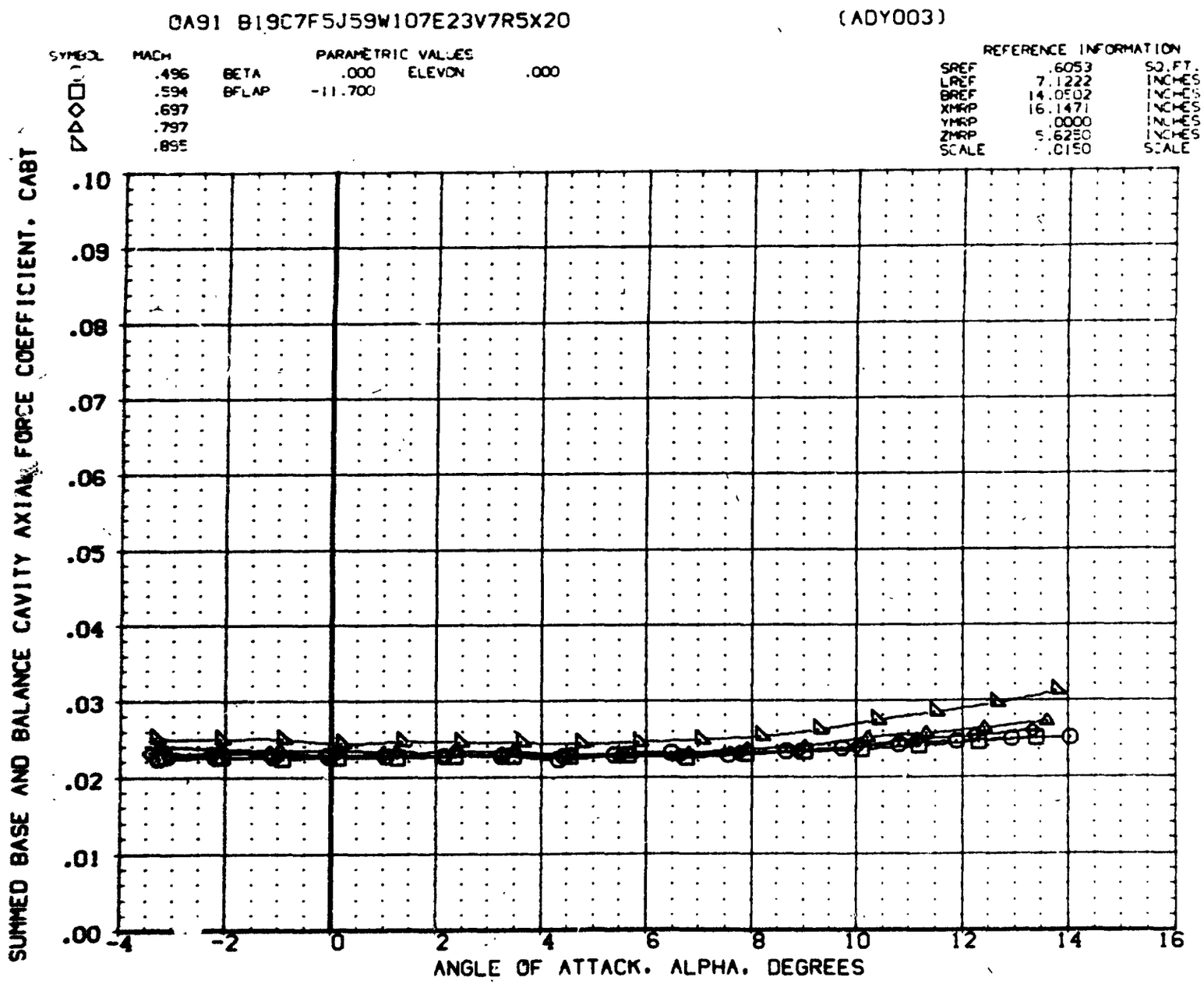

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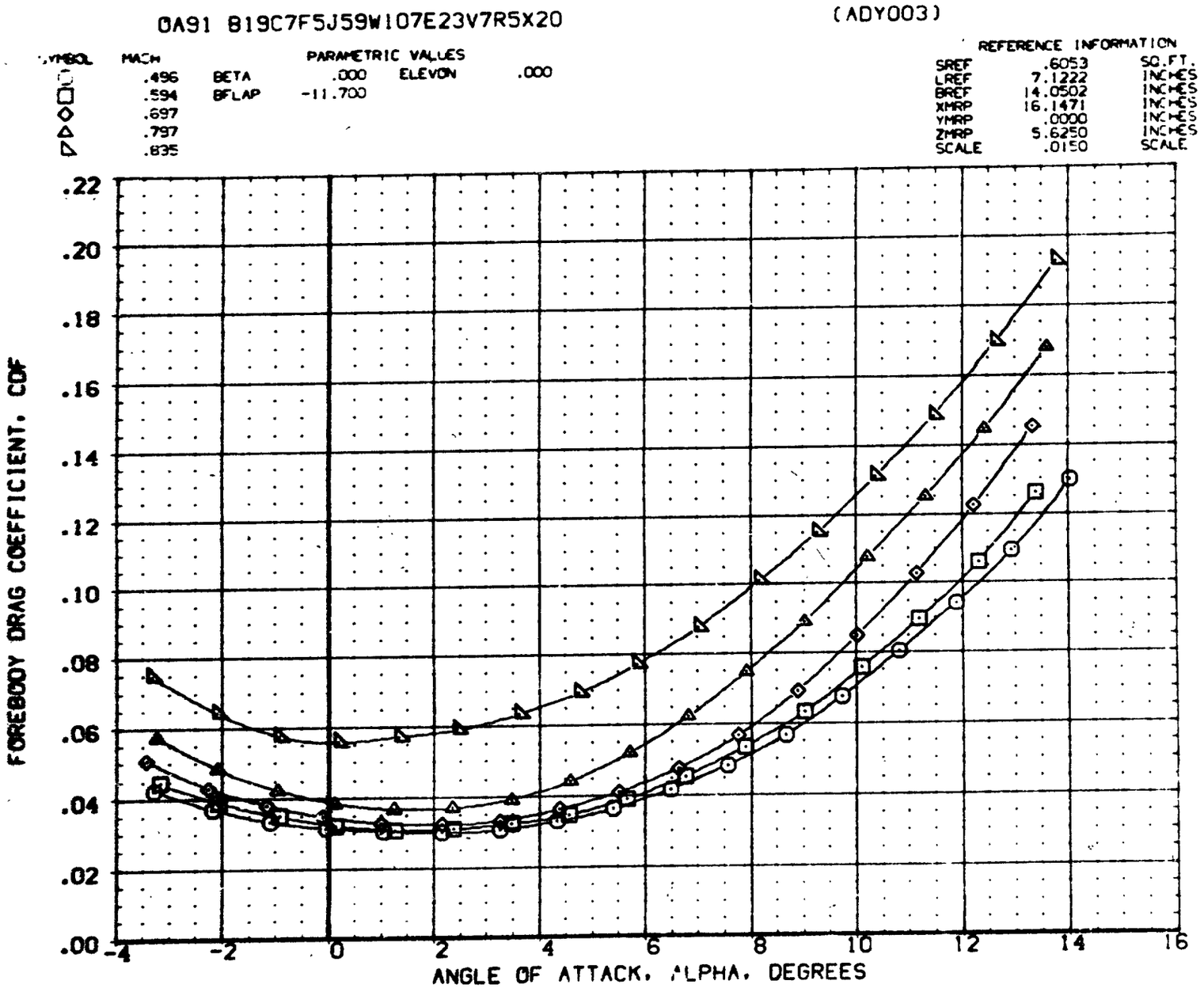

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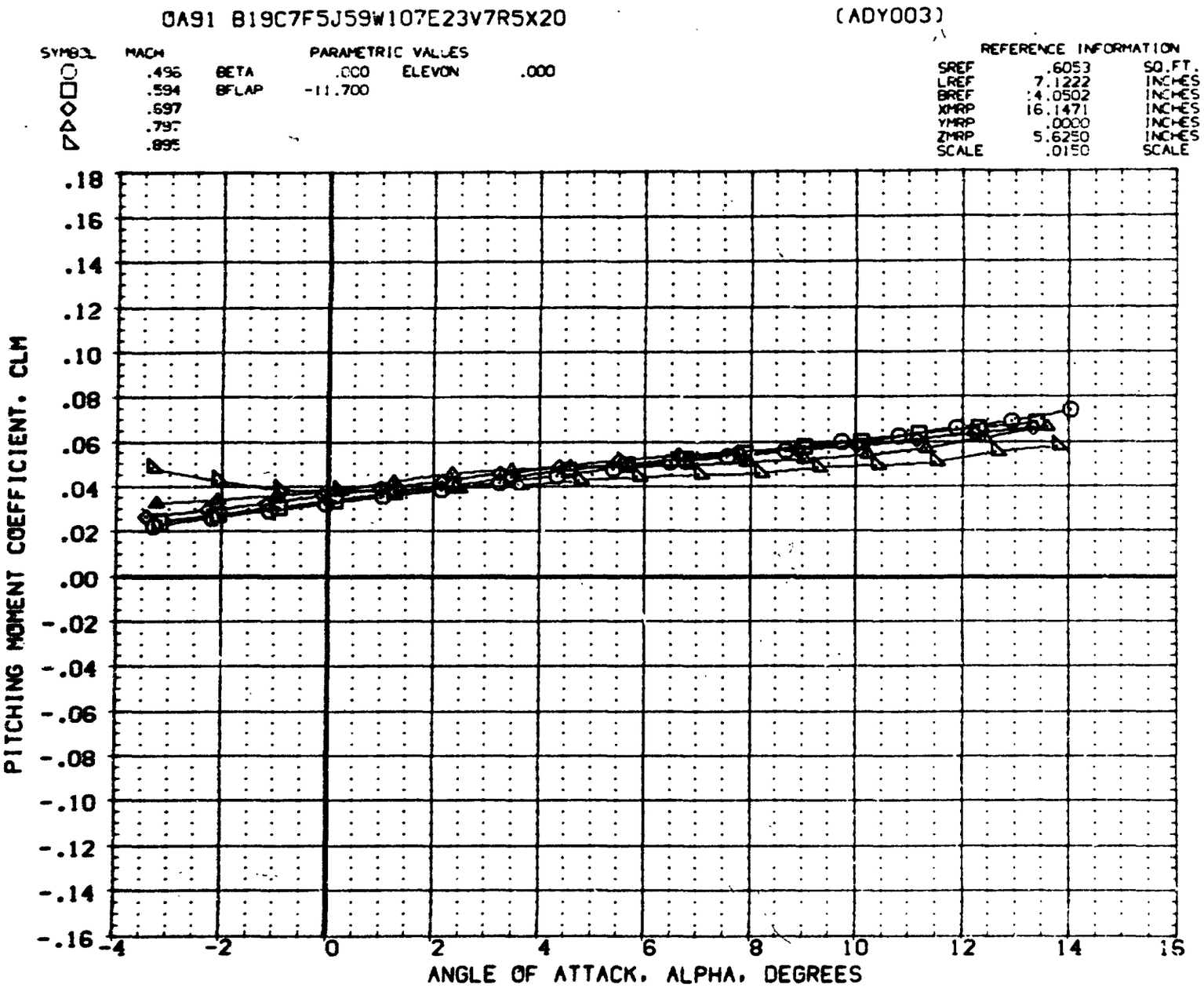

FIG. 6 LONGITUDINAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES

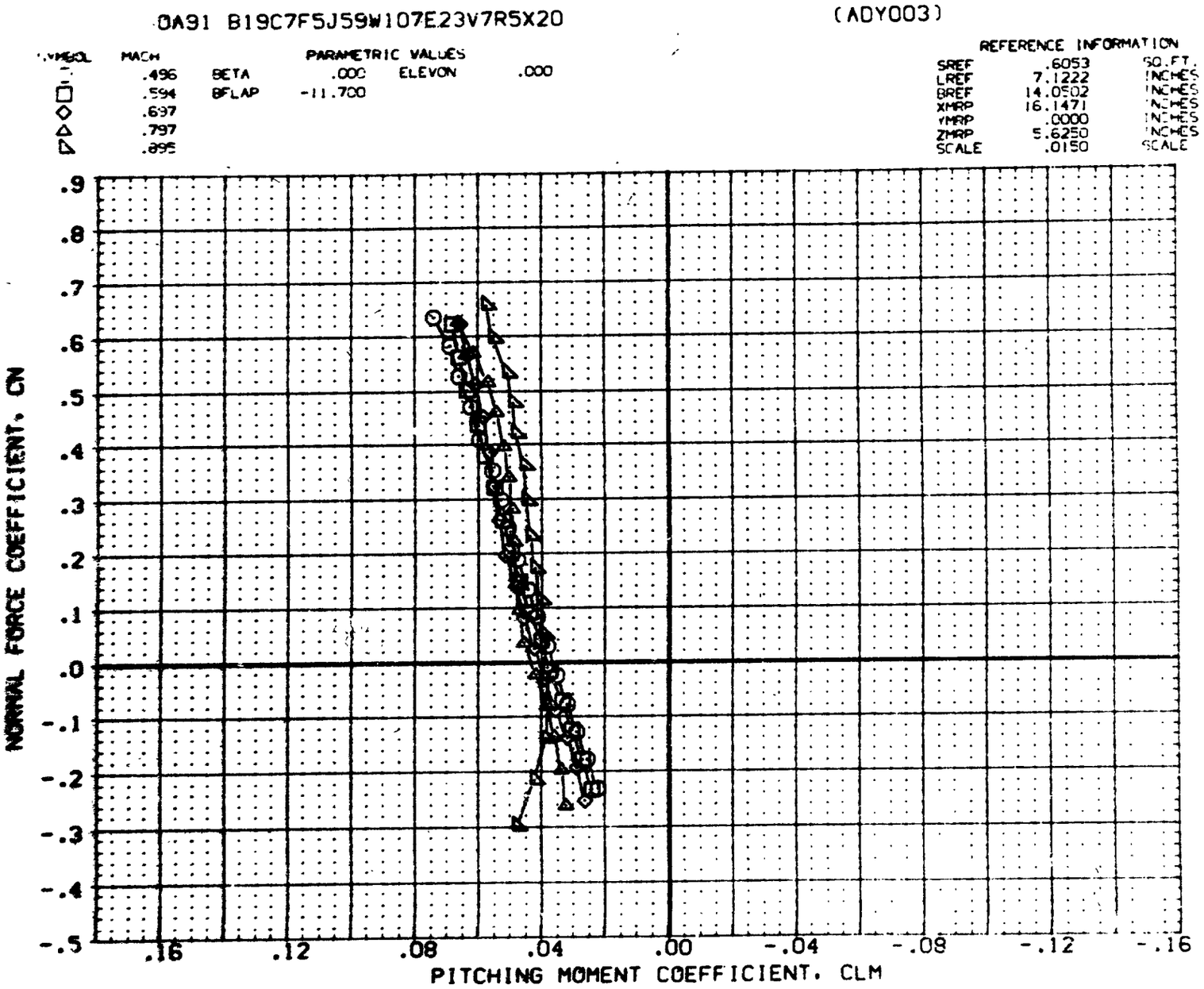

FIG. 6 LONGITUDINAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES

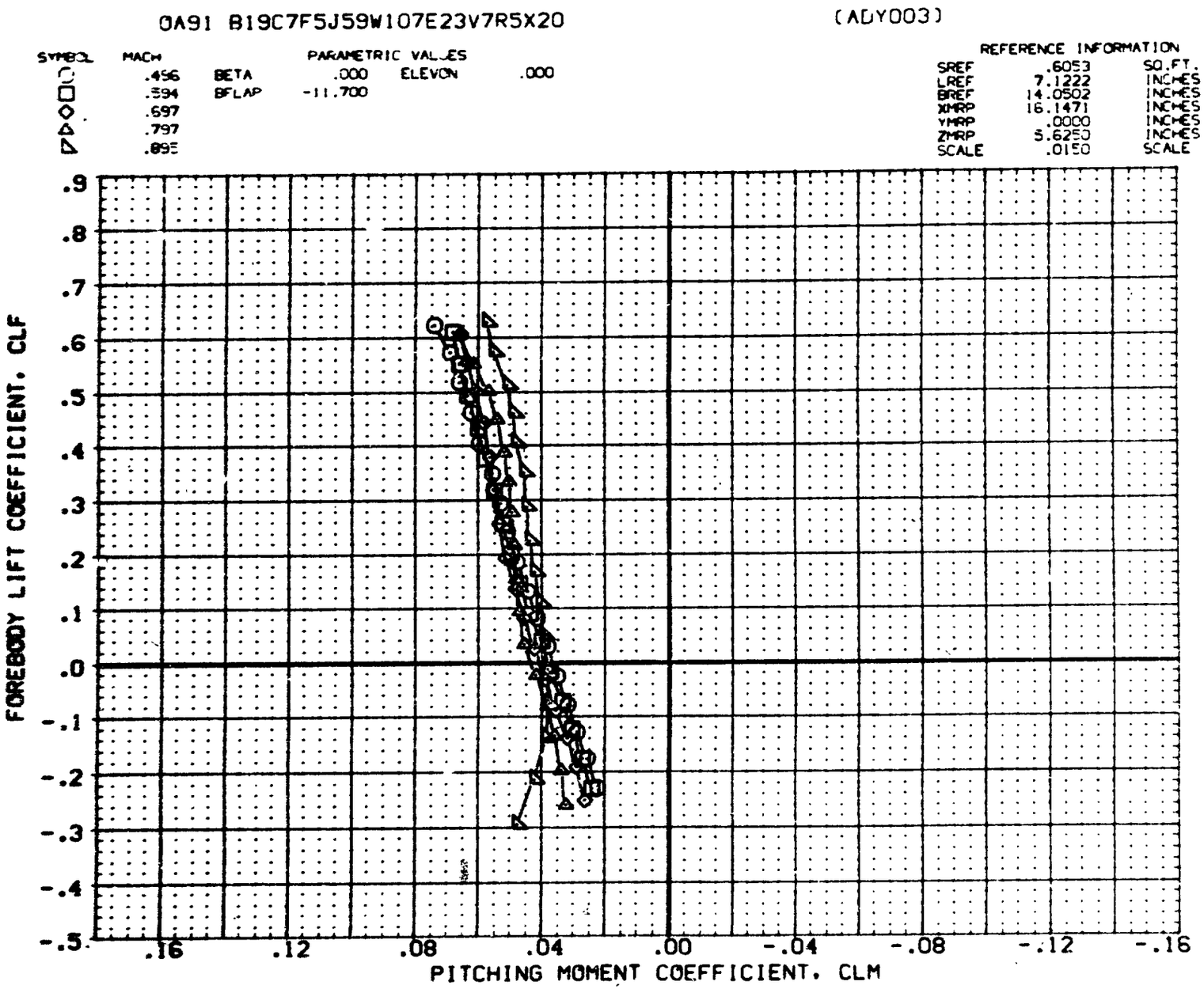

FIG. 6 LONGITUDINAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES

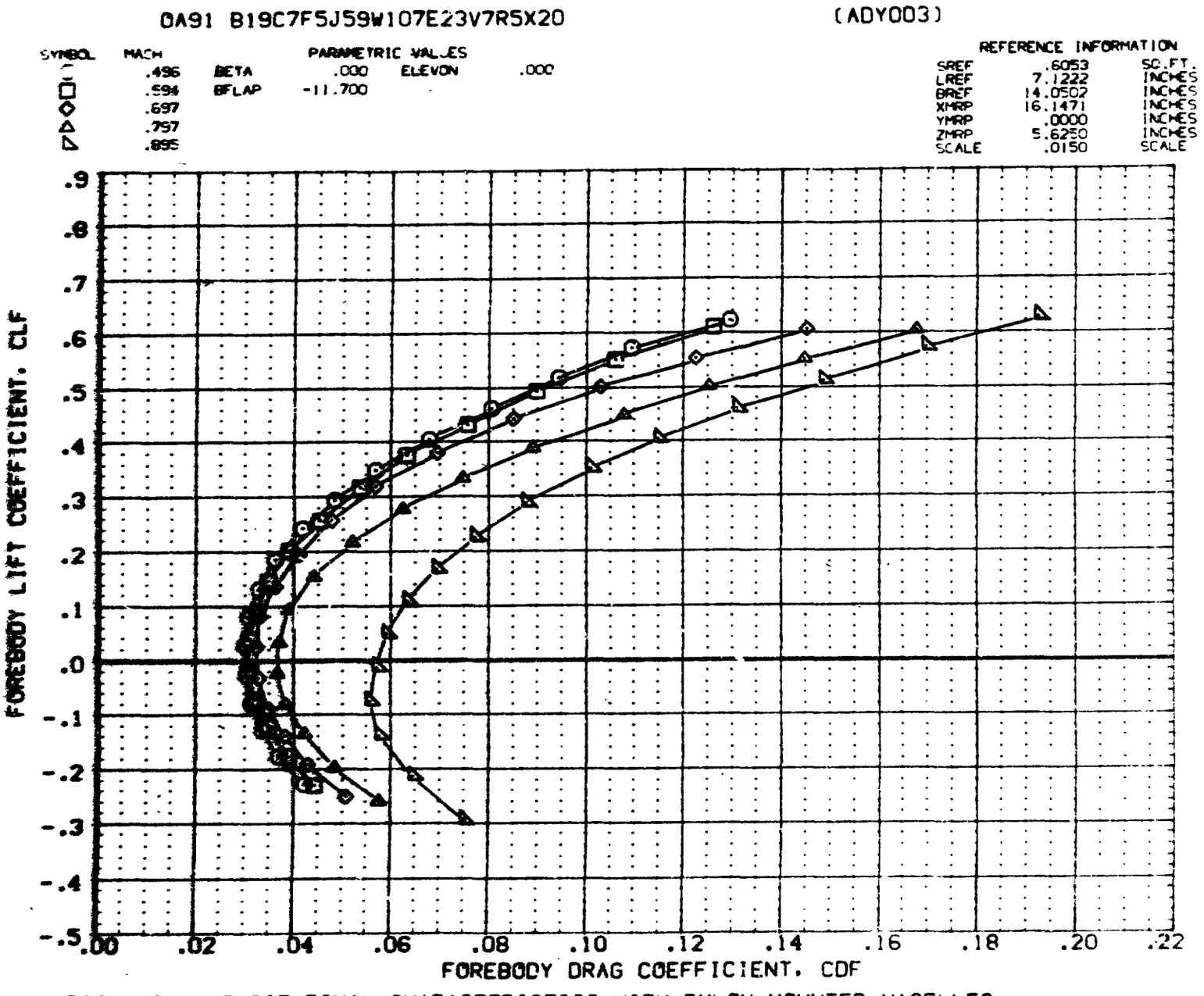

FIG. 6 LONGITUDINAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES

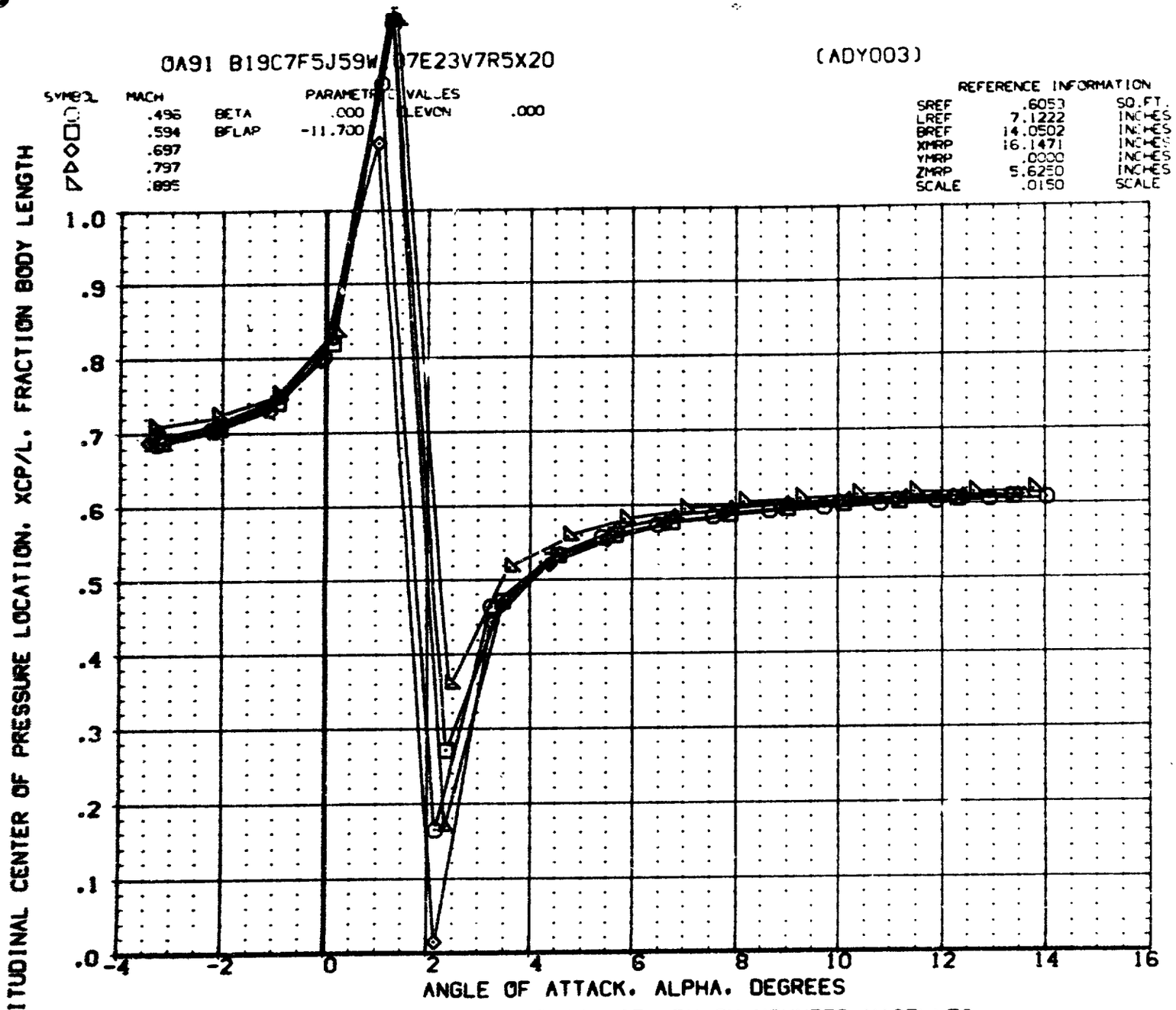

FIG. 6 LONGITUDINAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES

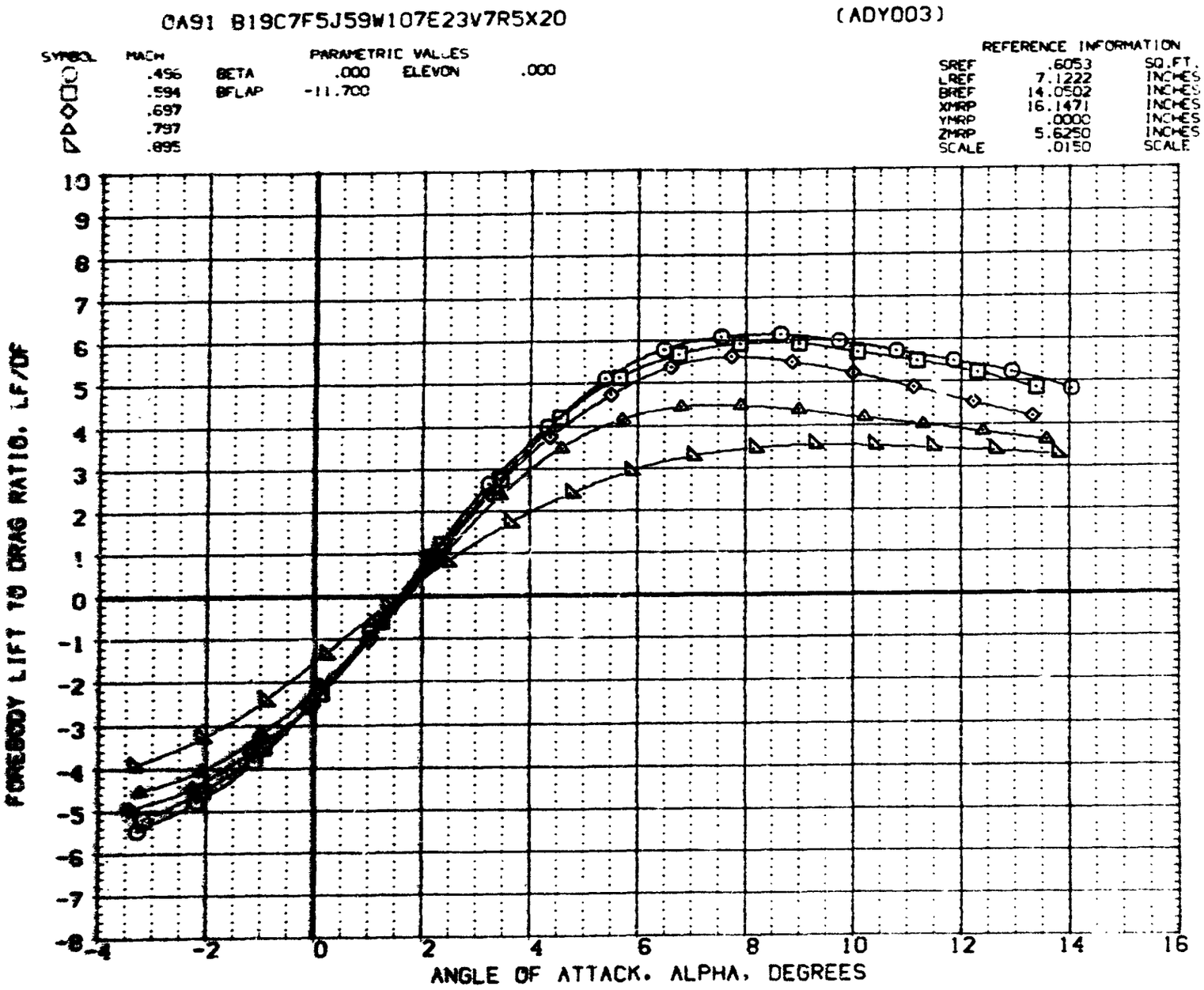

FIG. 6 LONGITUDINAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES

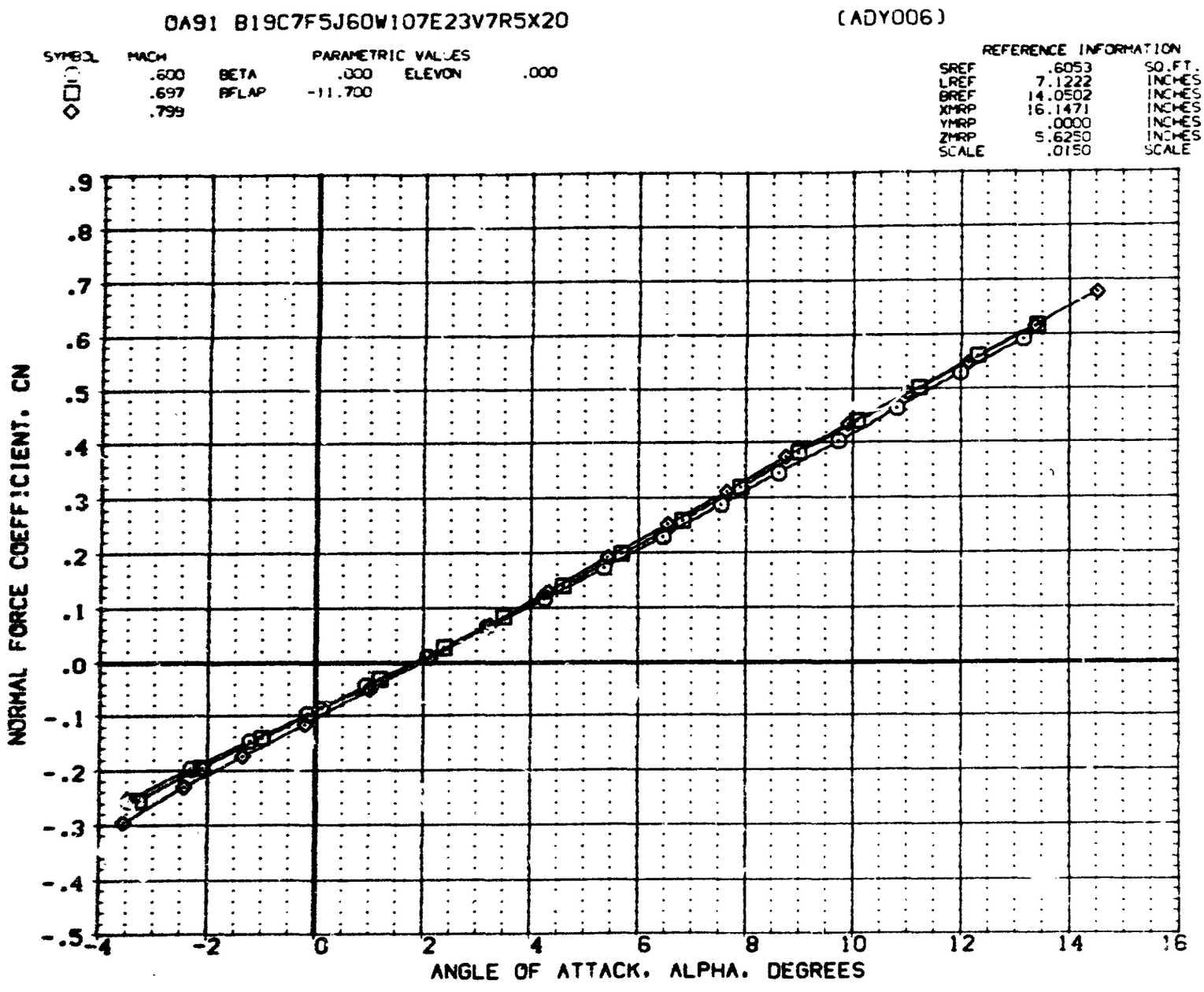

FIG. 7 LONGITUDINAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES MOVED AFT

SYMBOL	MACH		PARAMETRIC VALUES		
□	.600	BETA	.000	ELEVON	.000
◇	.697	BFLAP	-11.700		
	.799				

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
CREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

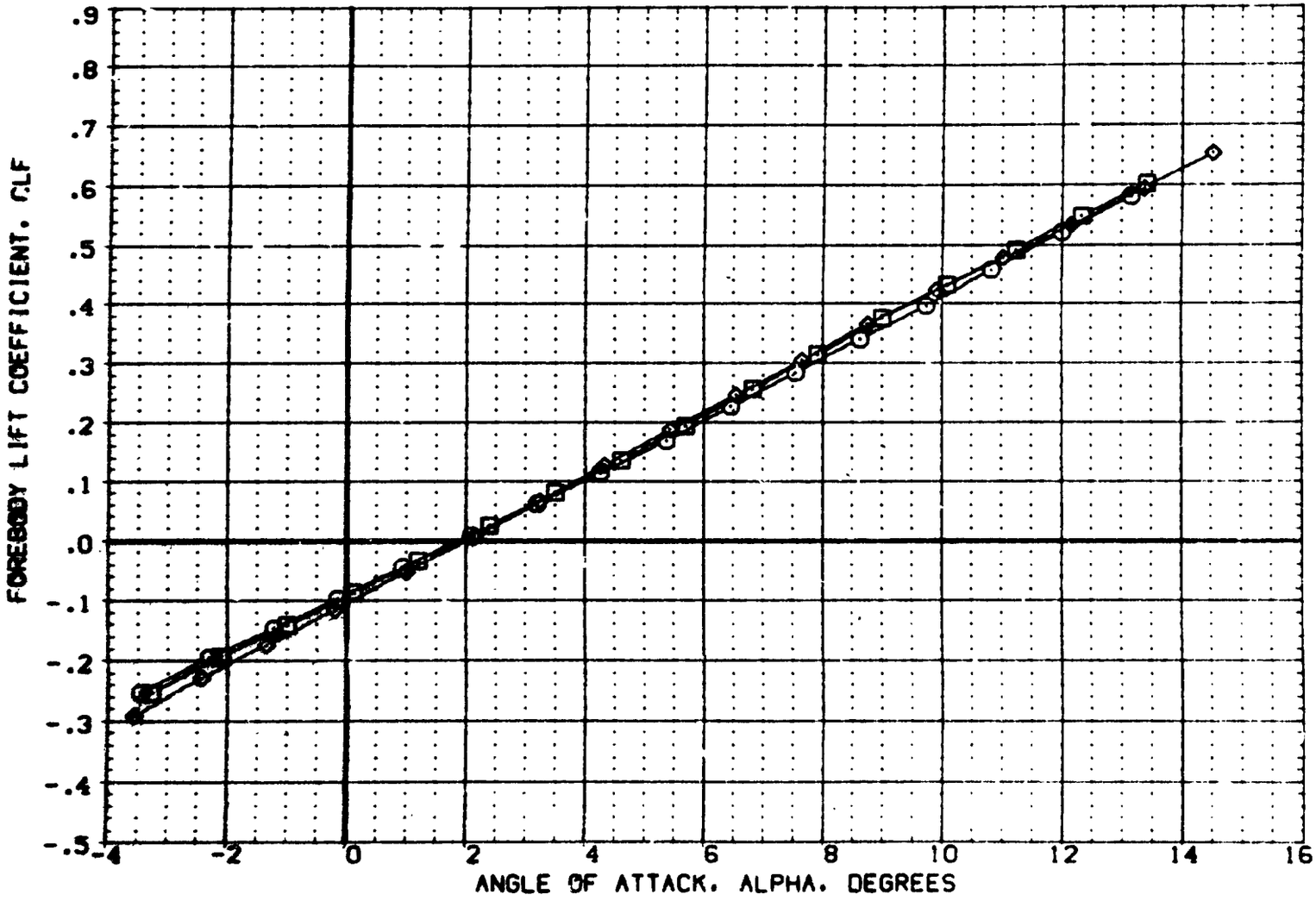

FIG. 7 LONGITUDINAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES MOVED AFT

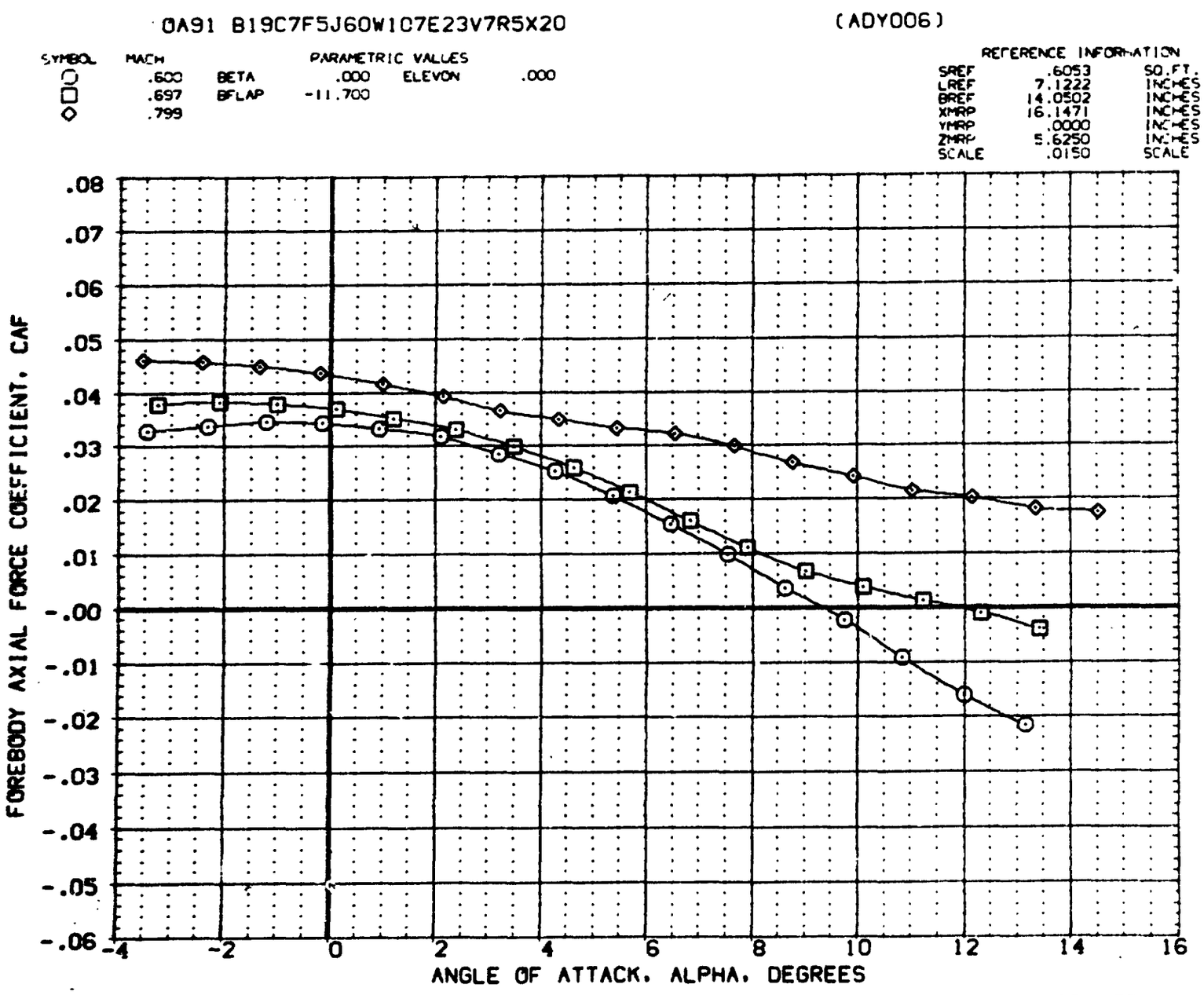

FIG. 7 LONGITUDINAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES MOVED AFT

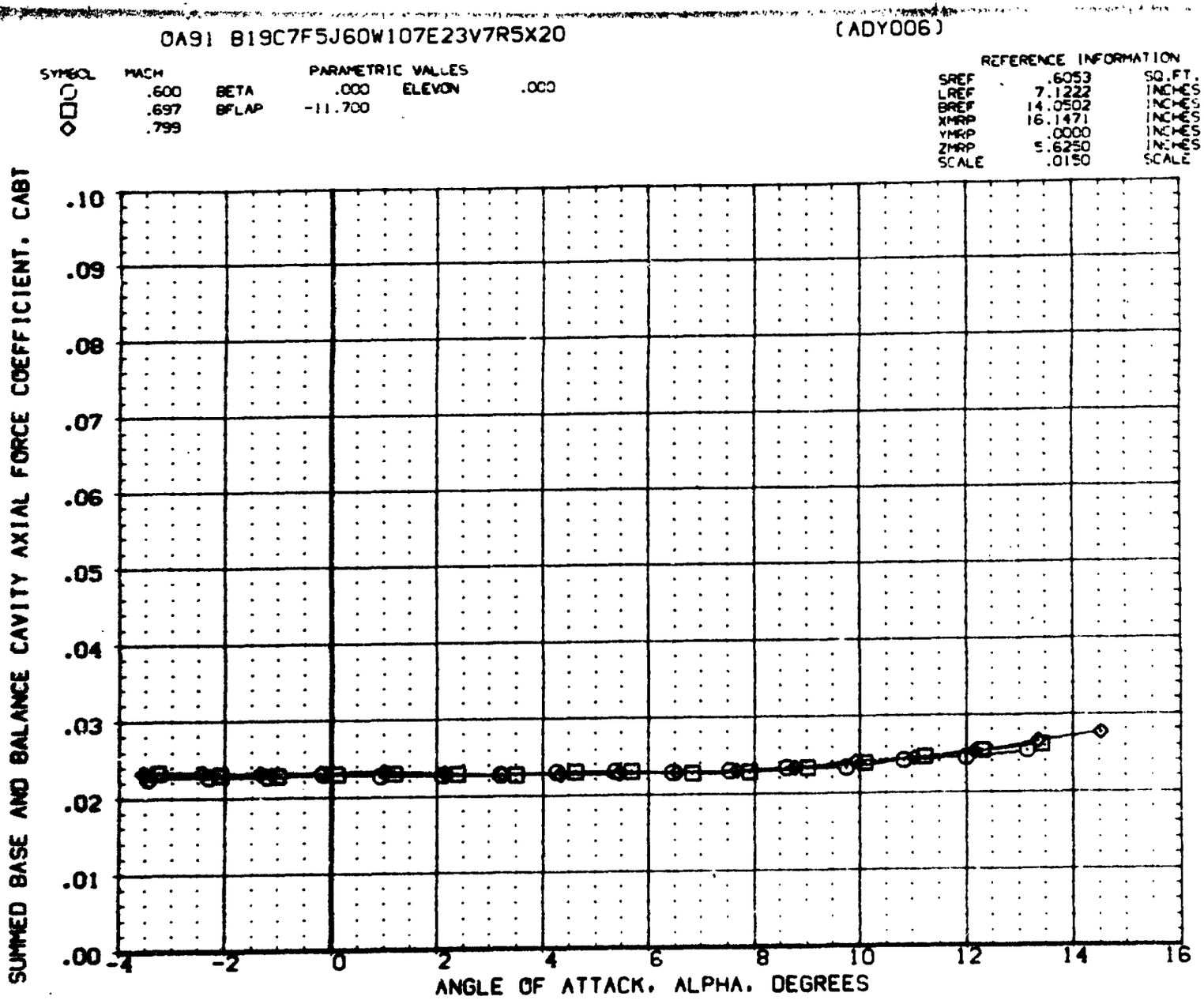

FIG. 7 LONGITUDINAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES MOVED AFT

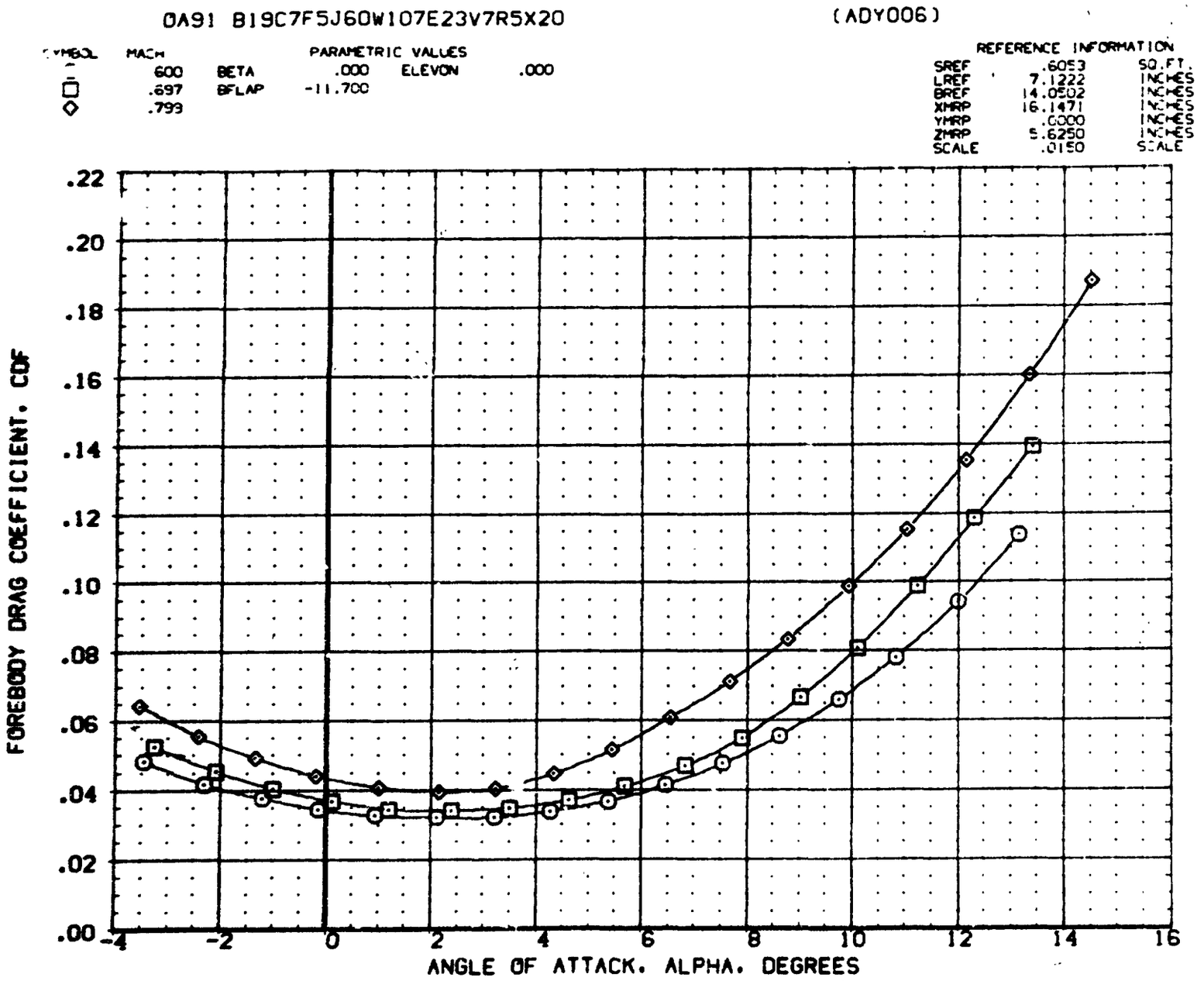

FIG. 7 LONGITUDINAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES MOVED AFT

0A91 B19C7F5J60W107E23V7R5X20 (ADY006)

SYMBOL	MACH		PARAMETRIC VALUES		
○	.600	BETA	.000	ELEVON	.000
□	.697	BFLAP	-11.700		
◇	.799				

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

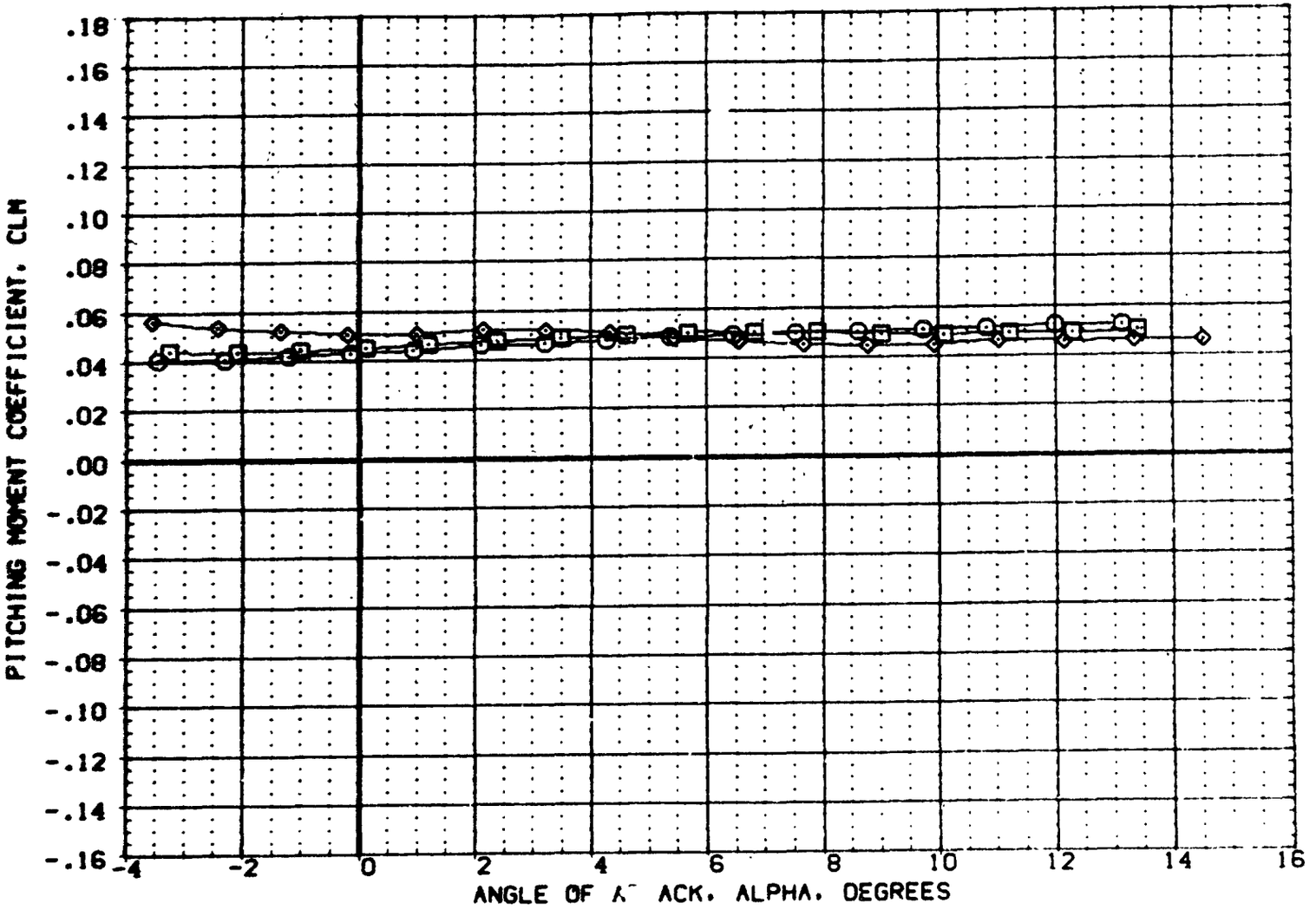

FIG. 7 LONGITUDINAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES MOVED AFT

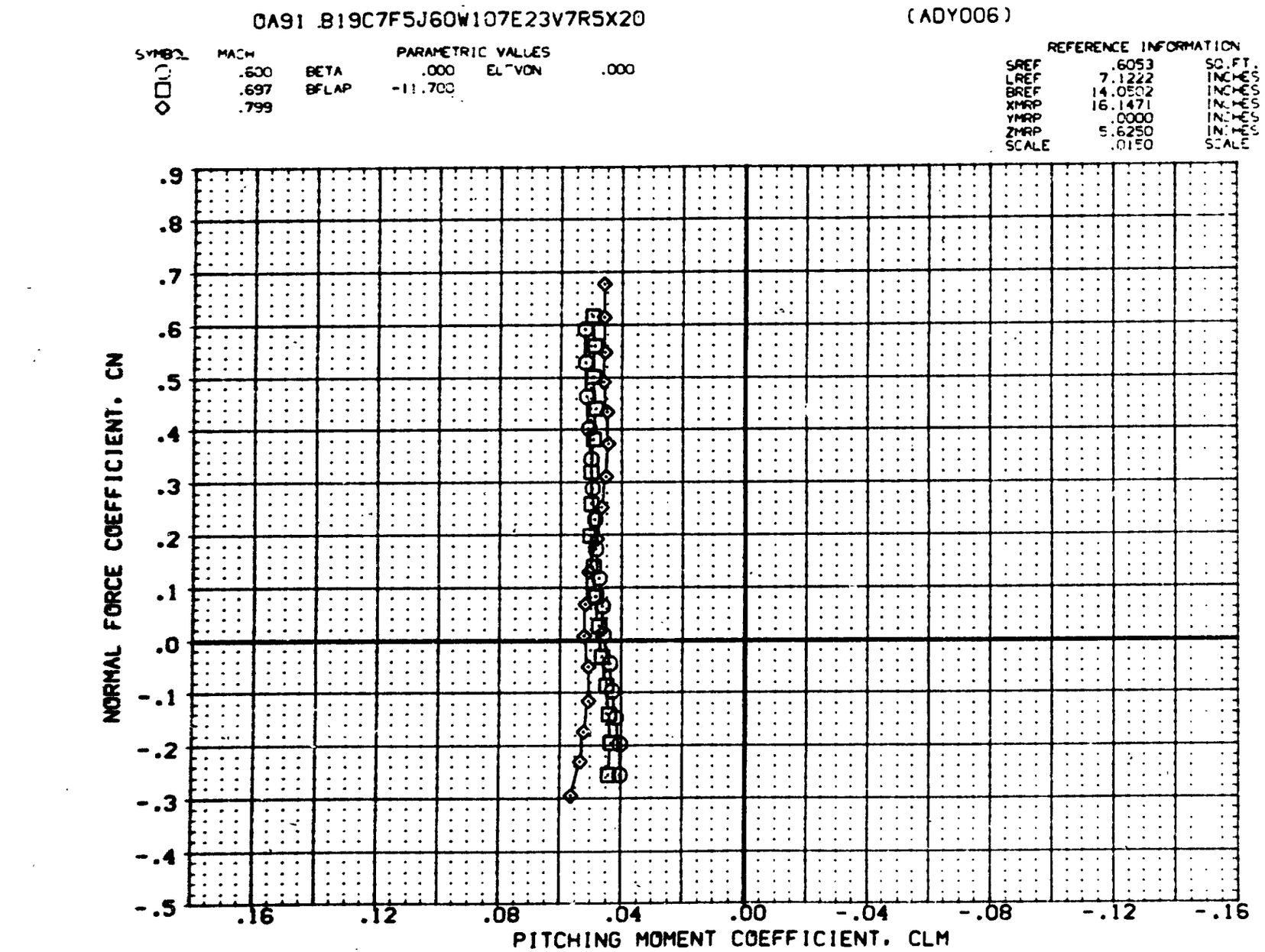

FIG. 7 LONGITUDINAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES MOVED AFT

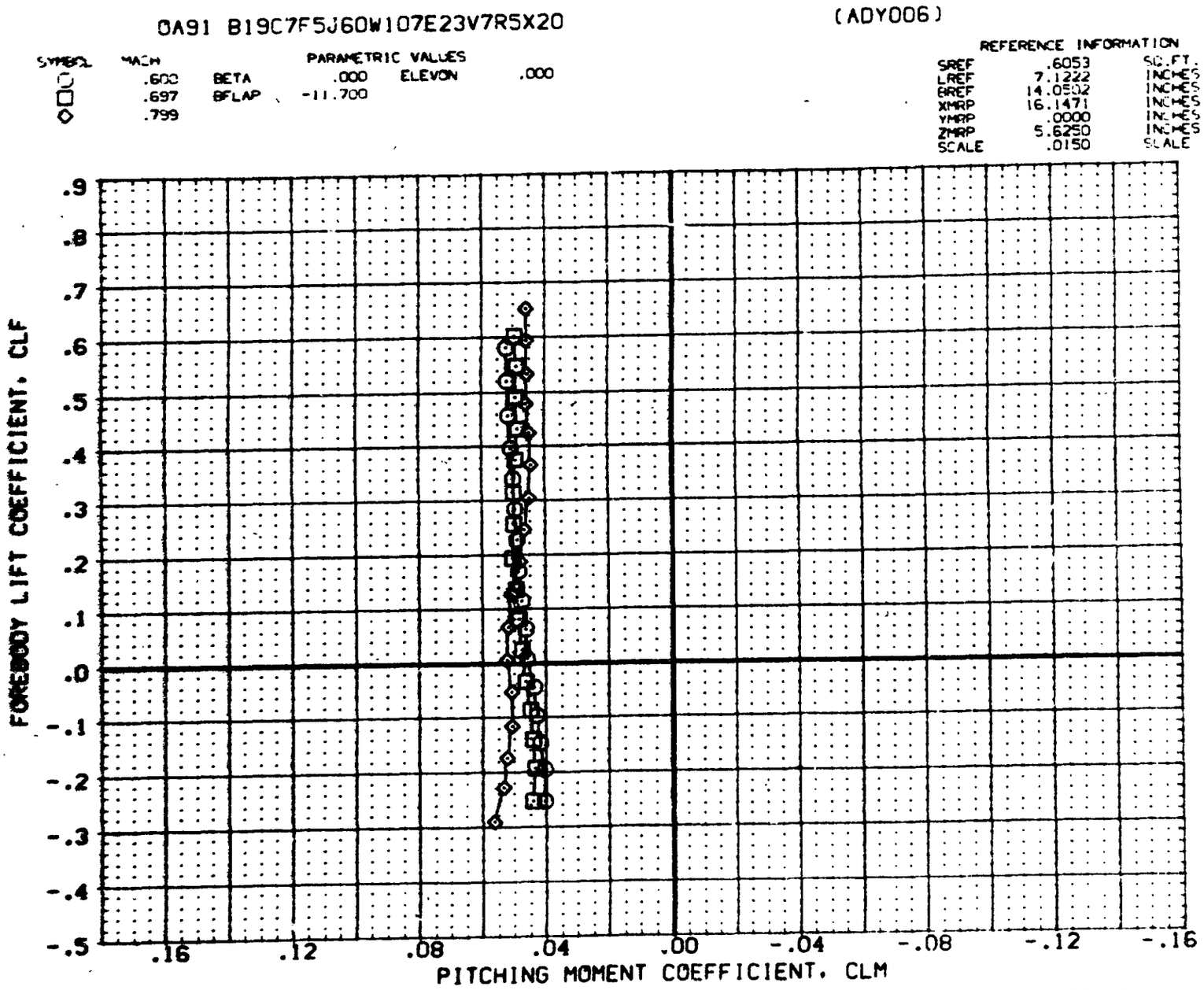

FIG. 7 LONGITUDINAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES MOVED AFT

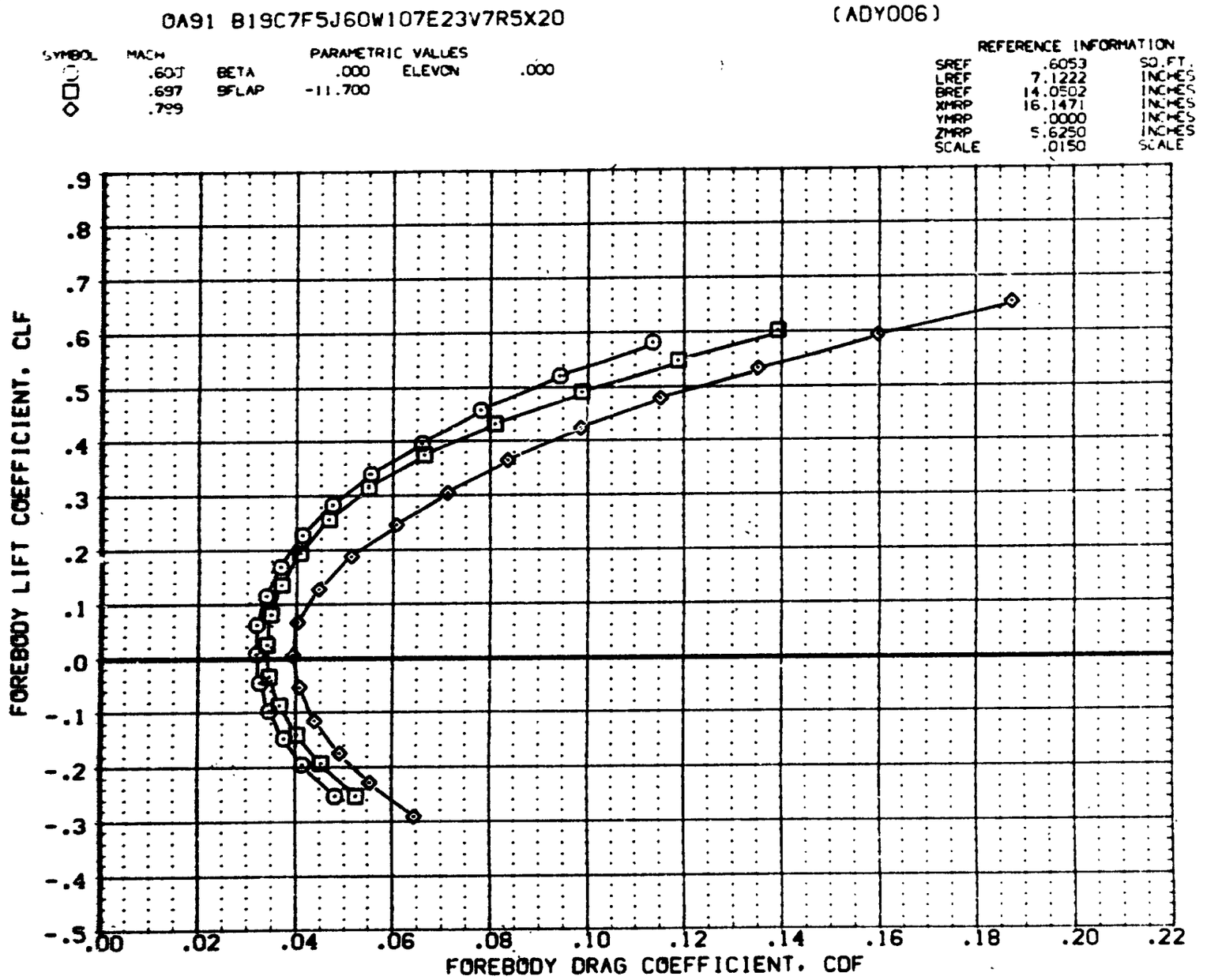

FIG. 7 LONGITUDINAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES MOVED AFT

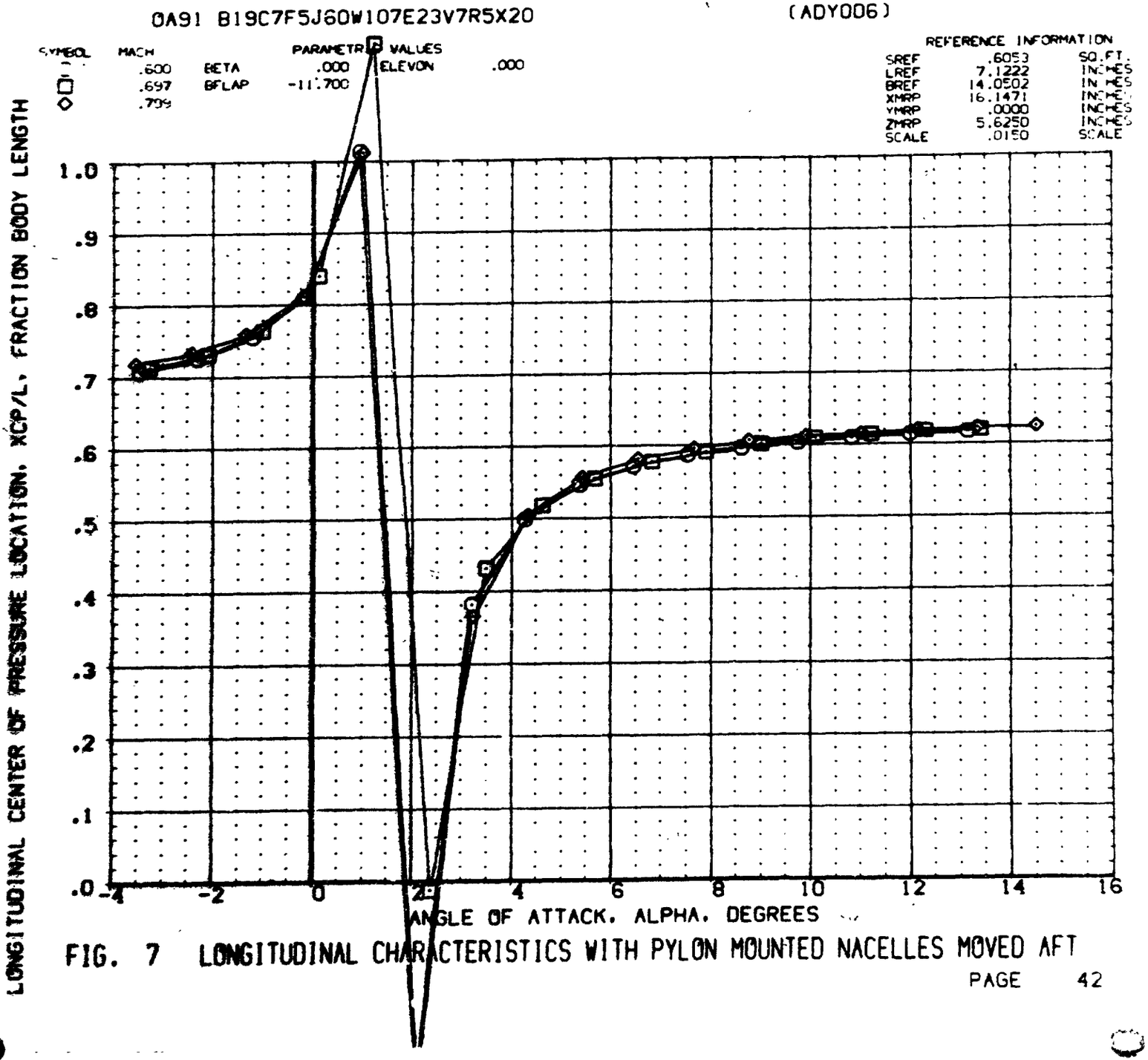

FIG. 7 LONGITUDINAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES MOVED AFT

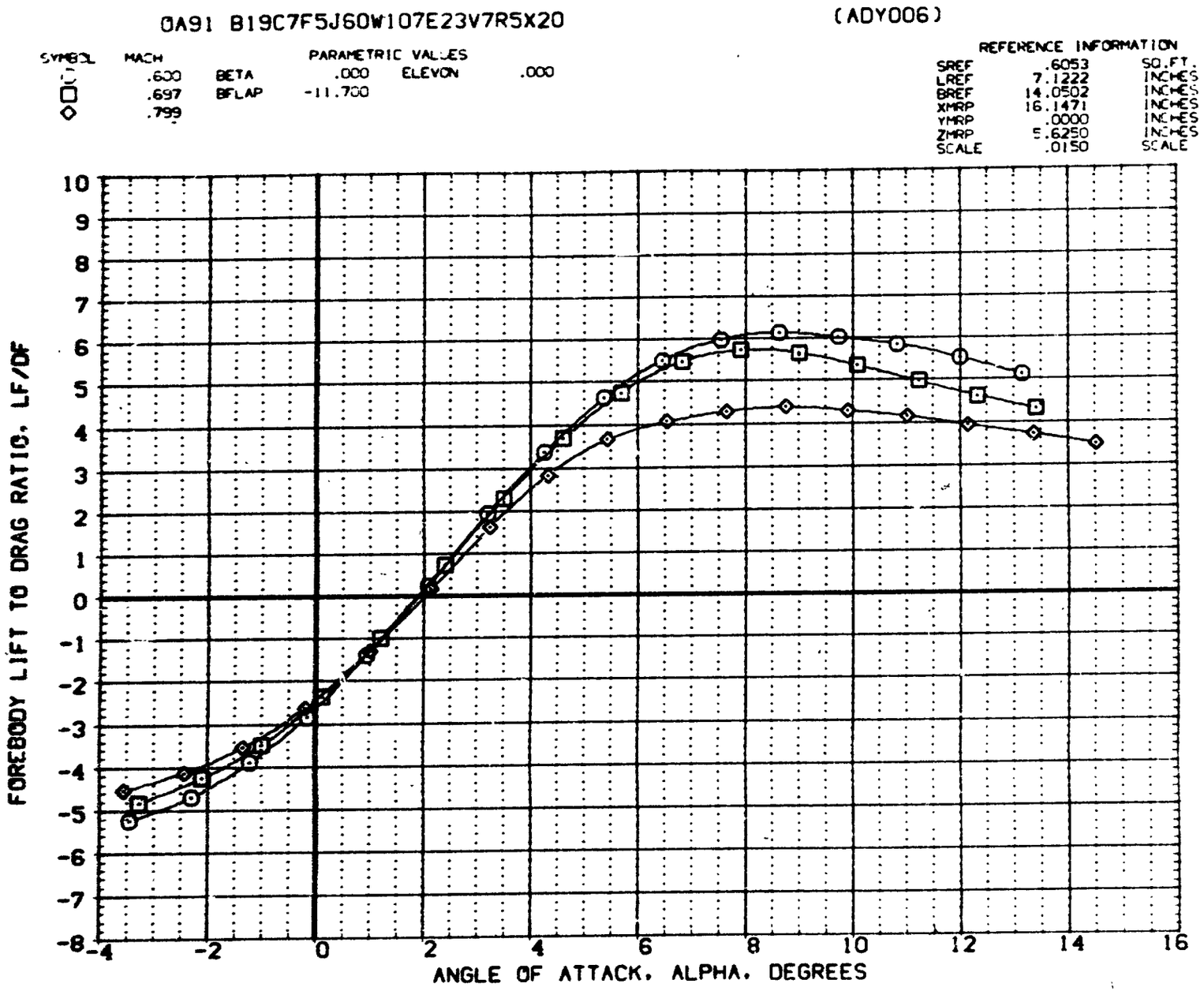

FIG. 7 LONGITUDINAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES MOVED AFT

0A91 B19C7F5J61W107E23V7R5X20 (ADY008)

SYMBOL	MACH	PARAMETRIC VALUES			
	.496	BETA	.000	ELEVON	.000
	.595	BFLAP	-11.700		
	.691				
	.795				
	.898				

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

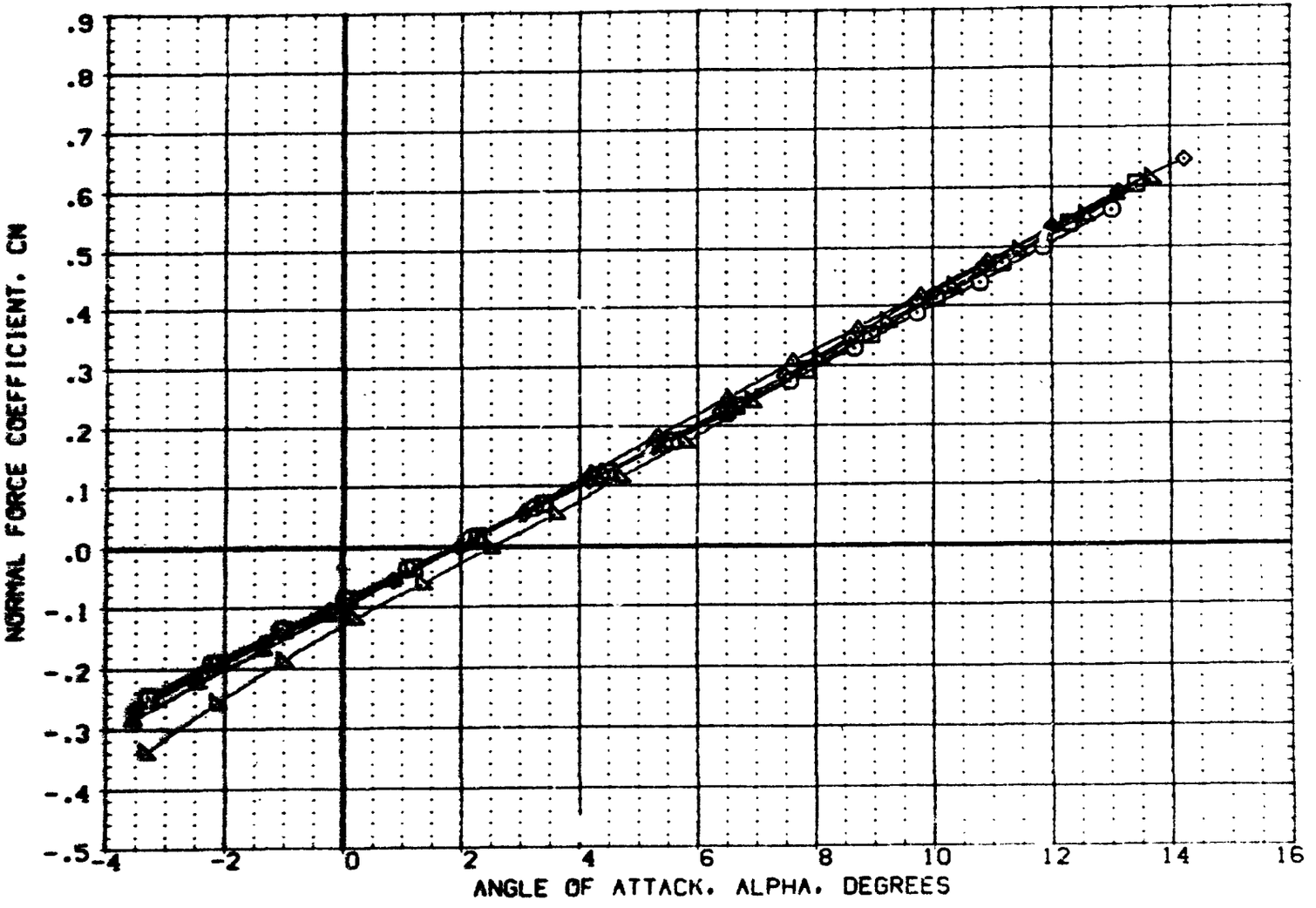

FIG. 8 LONGITUDINAL CHARACTERISTICS WITH FLUSH MOUNTED NACELLES

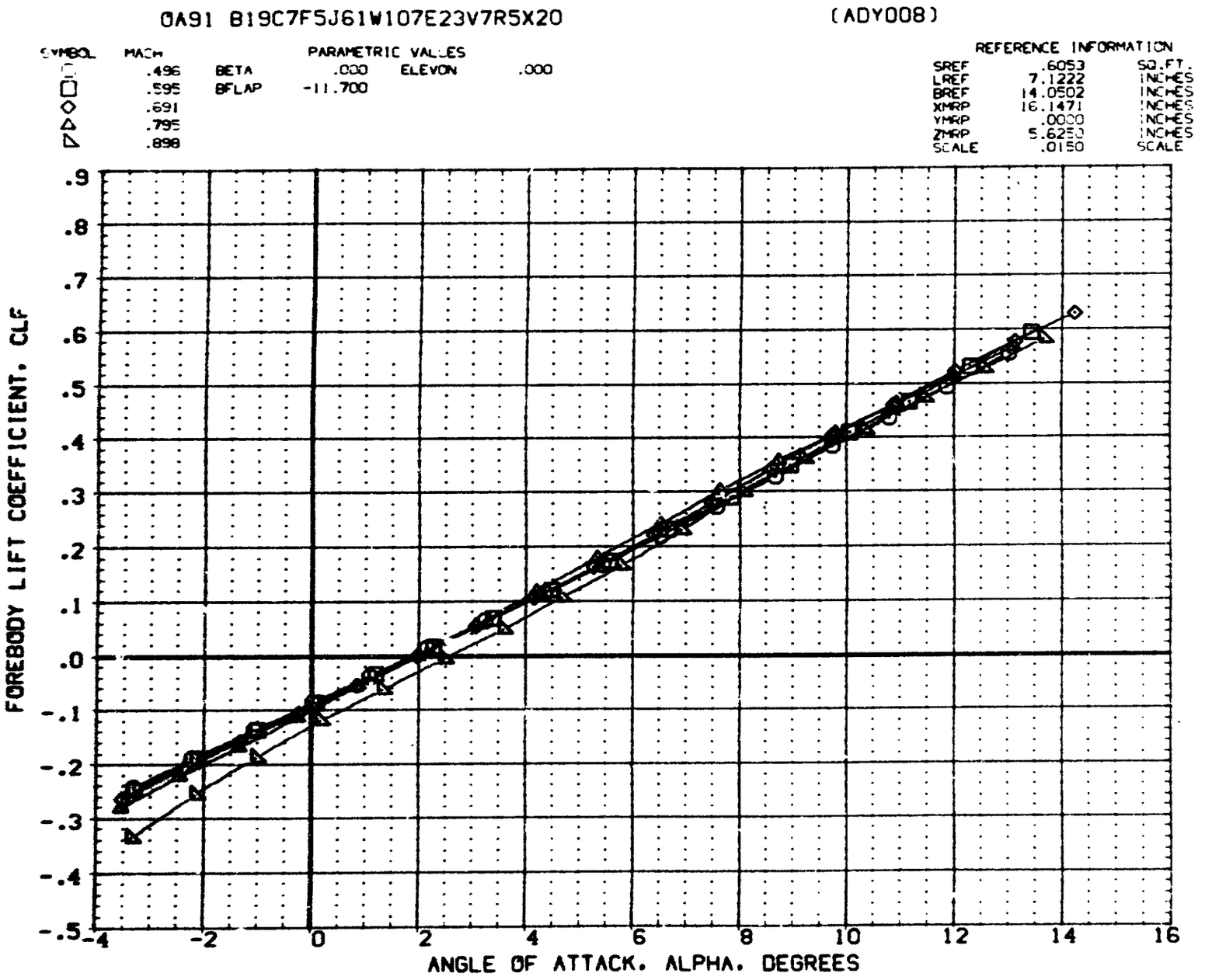

FIG. 8 LONGITUDINAL CHARACTERISTICS WITH FLUSH MOUNTED NACELLES

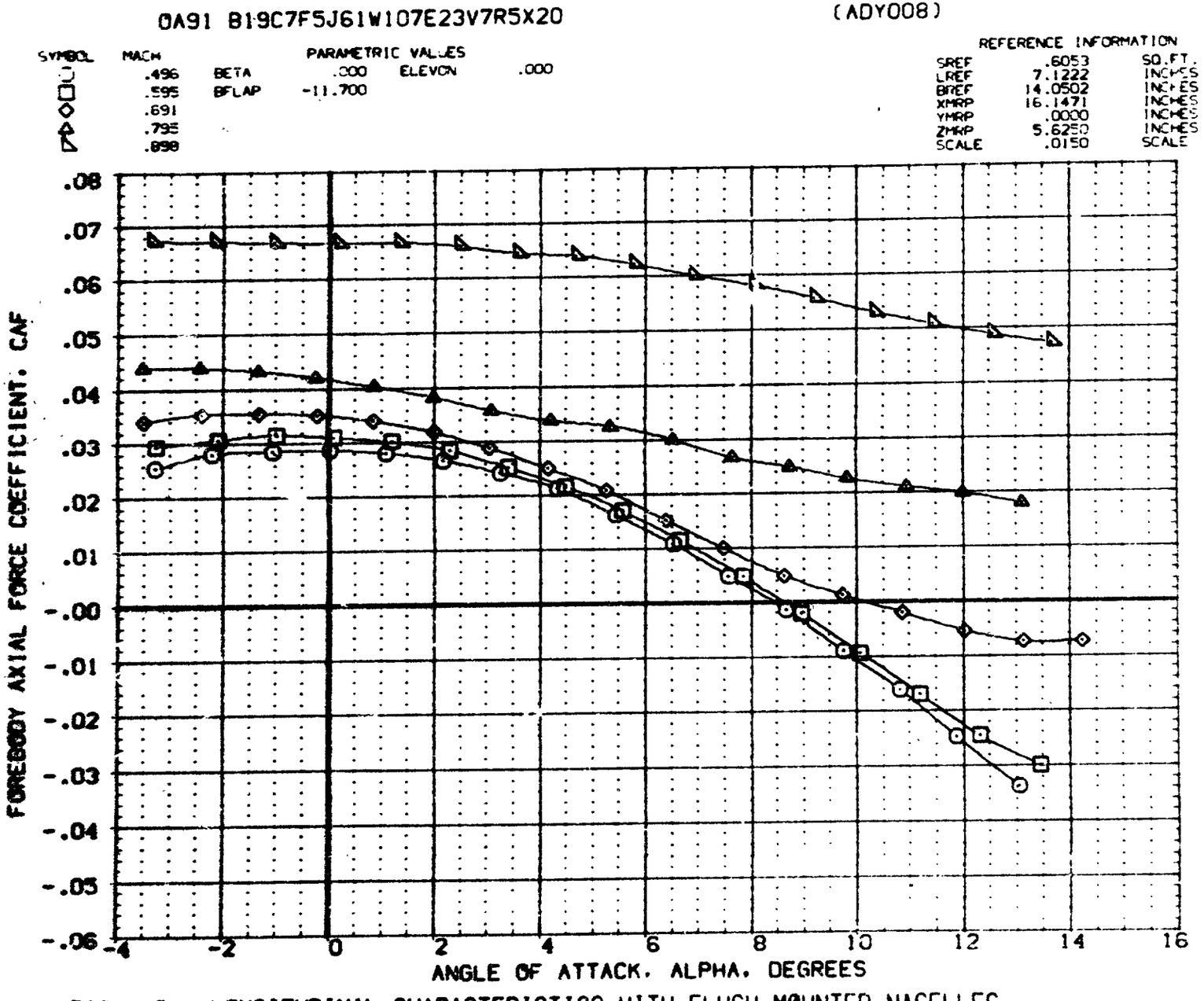

FIG. 8 LONGITUDINAL CHARACTERISTICS WITH FLUSH MOUNTED NACELLES

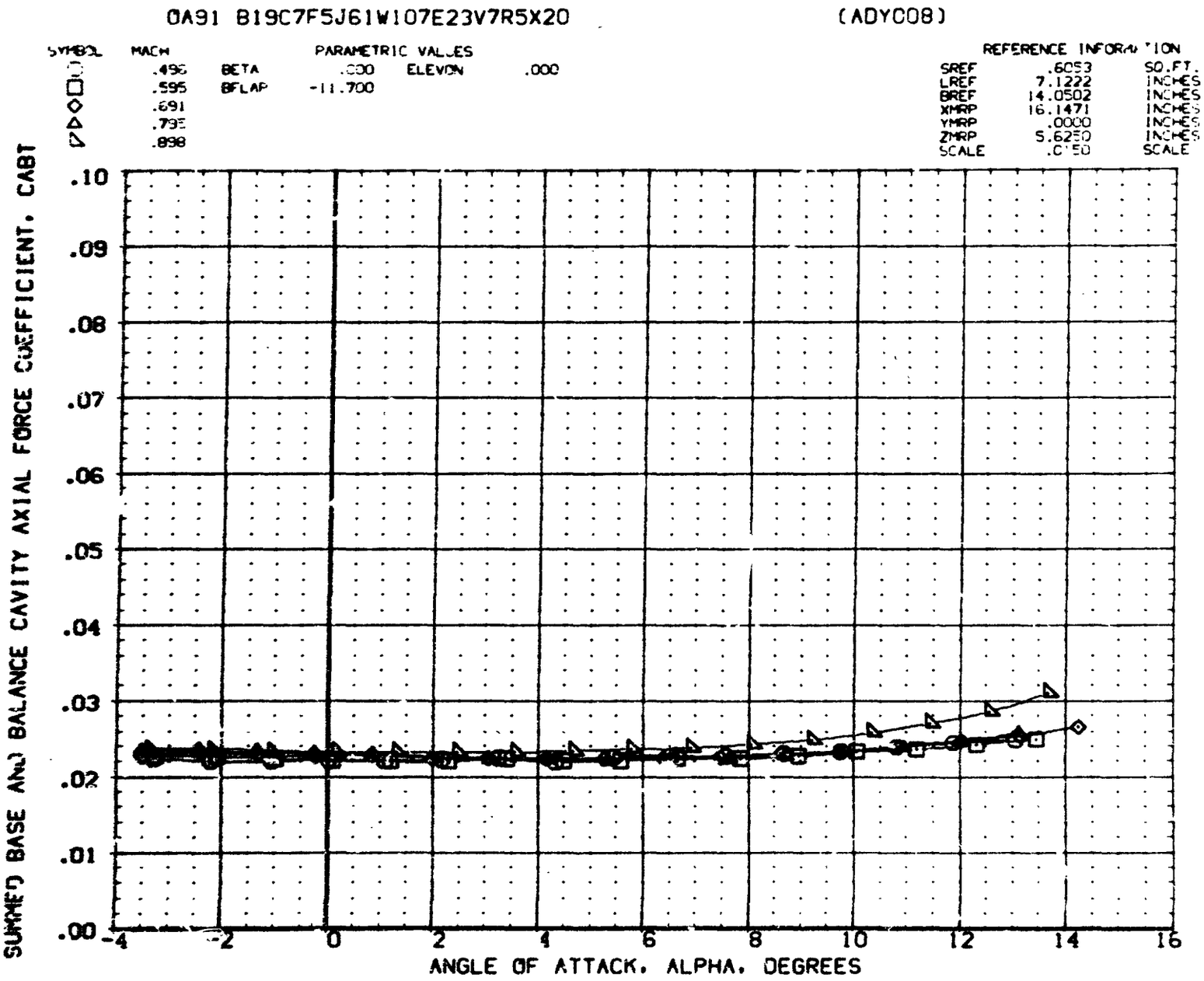

FIG. 8 LONGITUDINAL CHARACTERISTICS WITH FLUSH MOUNTED NACELLES

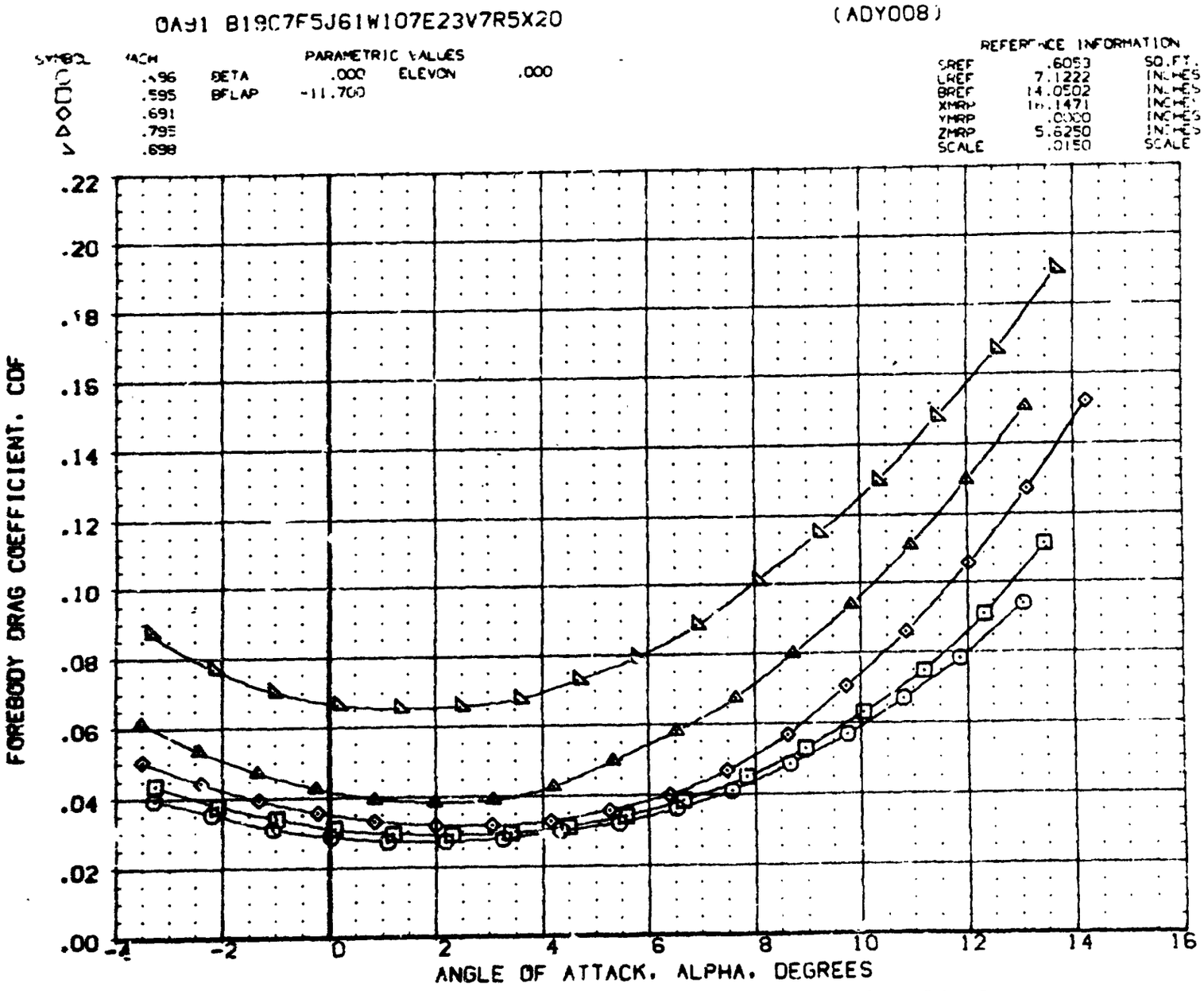

FIG. 8 LONGITUDINAL CHARACTERISTICS WITH FLUSH MOUNTED NACELLES

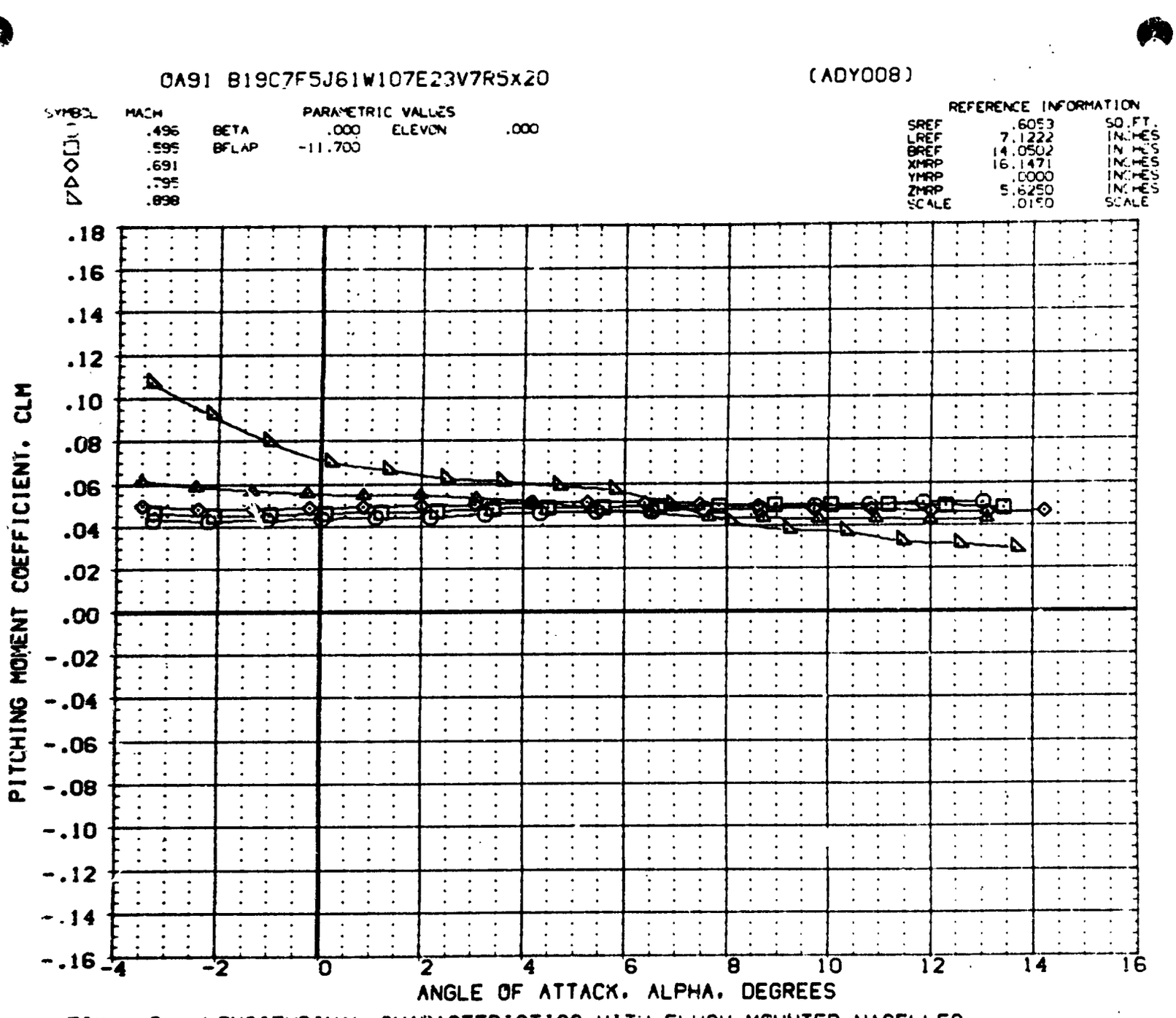

FIG. 8 LONGITUDINAL CHARACTERISTICS WITH FLUSH MOUNTED NACELLES

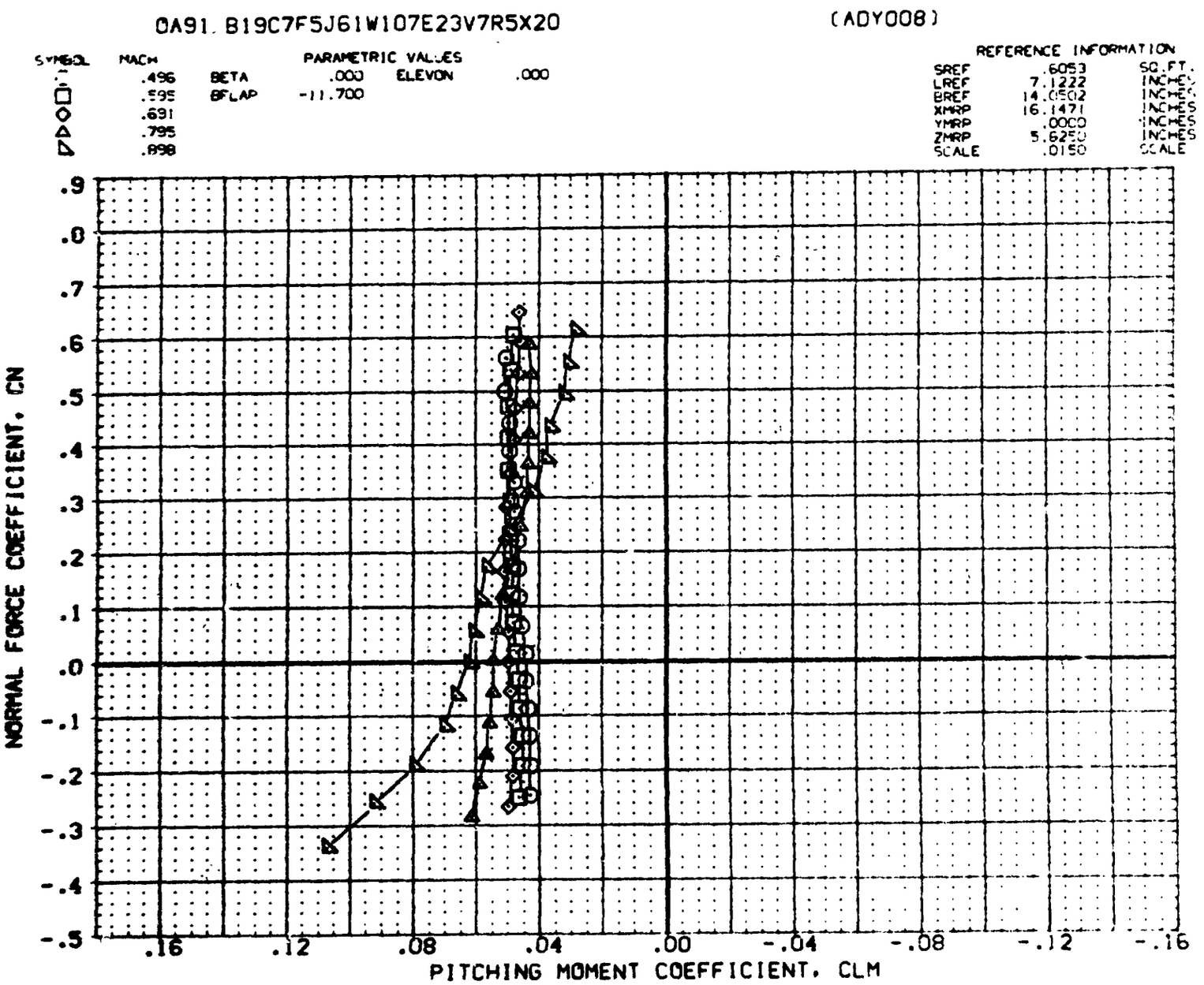

FIG. 8 LONGITUDINAL CHARACTERISTICS WITH FLUSH MOUNTED NACELLES

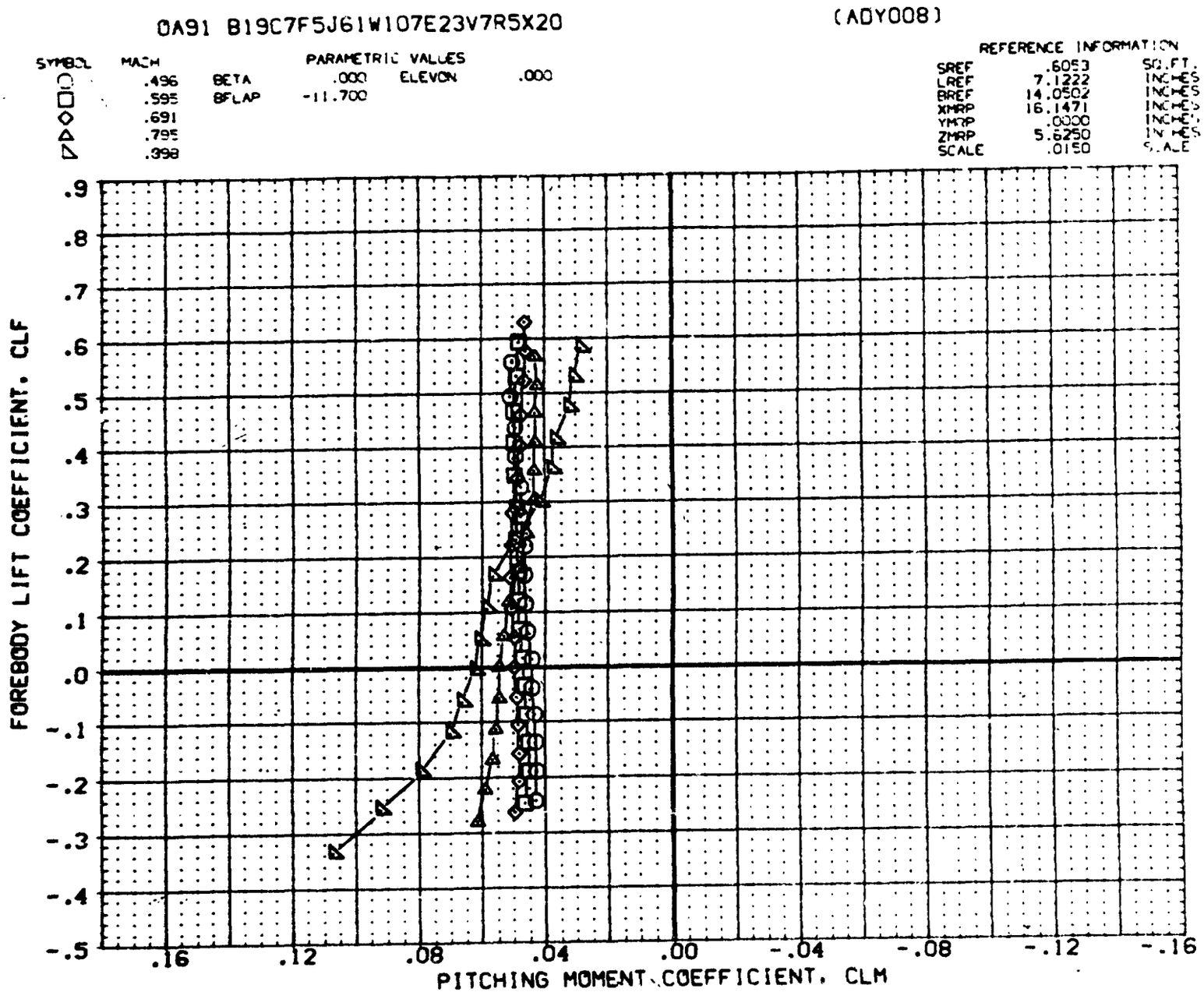

FIG. 8 LONGITUDINAL CHARACTERISTICS WITH FLUSH MOUNTED NACELLES

0A91 B19C7F5J61W107E23V7R5X20 (ADY008)

SYMBOL	MACH	PARAMETRIC VALUES			
○	.496	BETA	.000	ELEVON	.000
□	.595	BFLAP	-11.700		
◇	.691				
△	.795				
▷	.898				

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

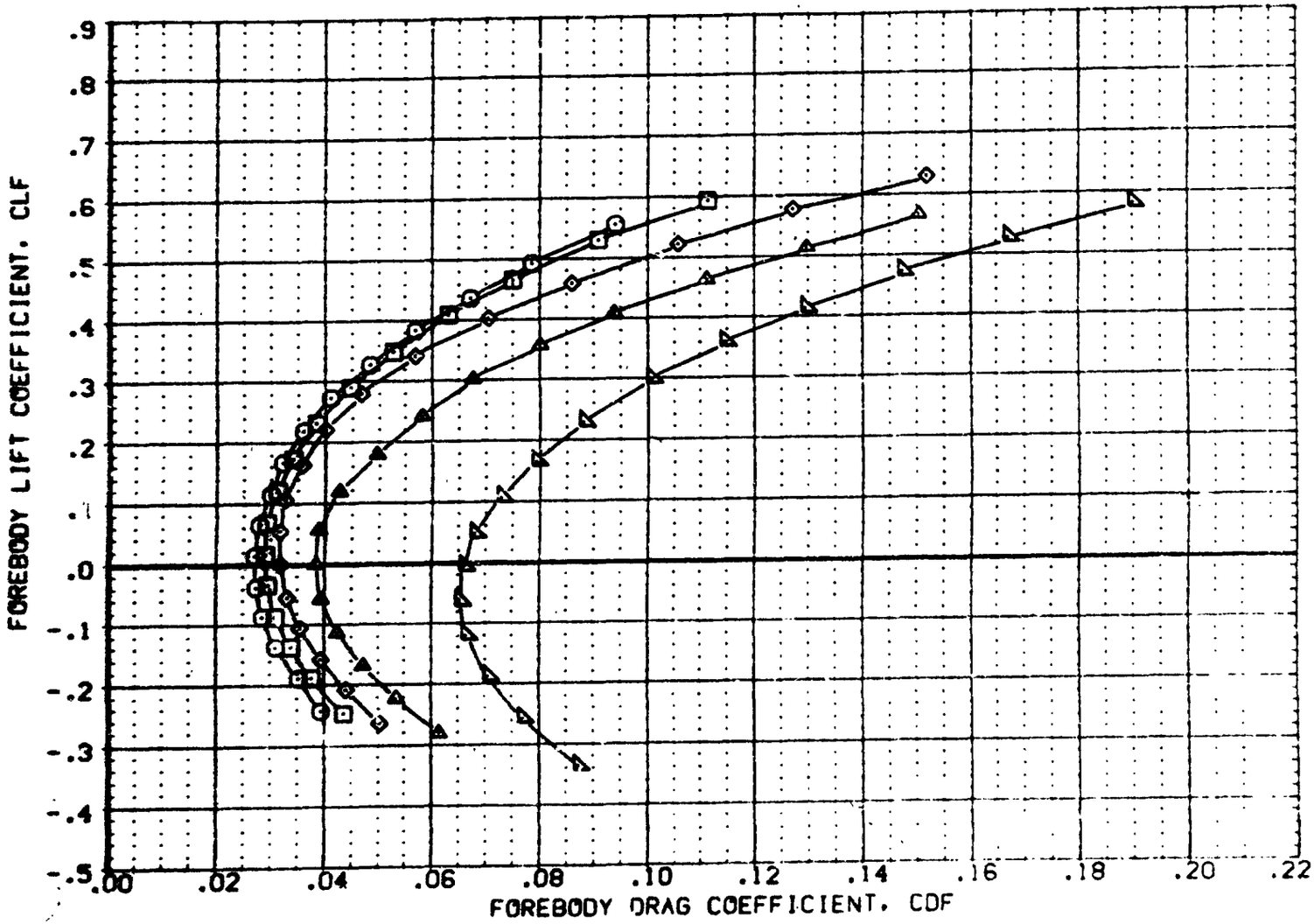

FIG. 8 LONGITUDINAL CHARACTERISTICS WITH FLUSH MOUNTED NACELLES

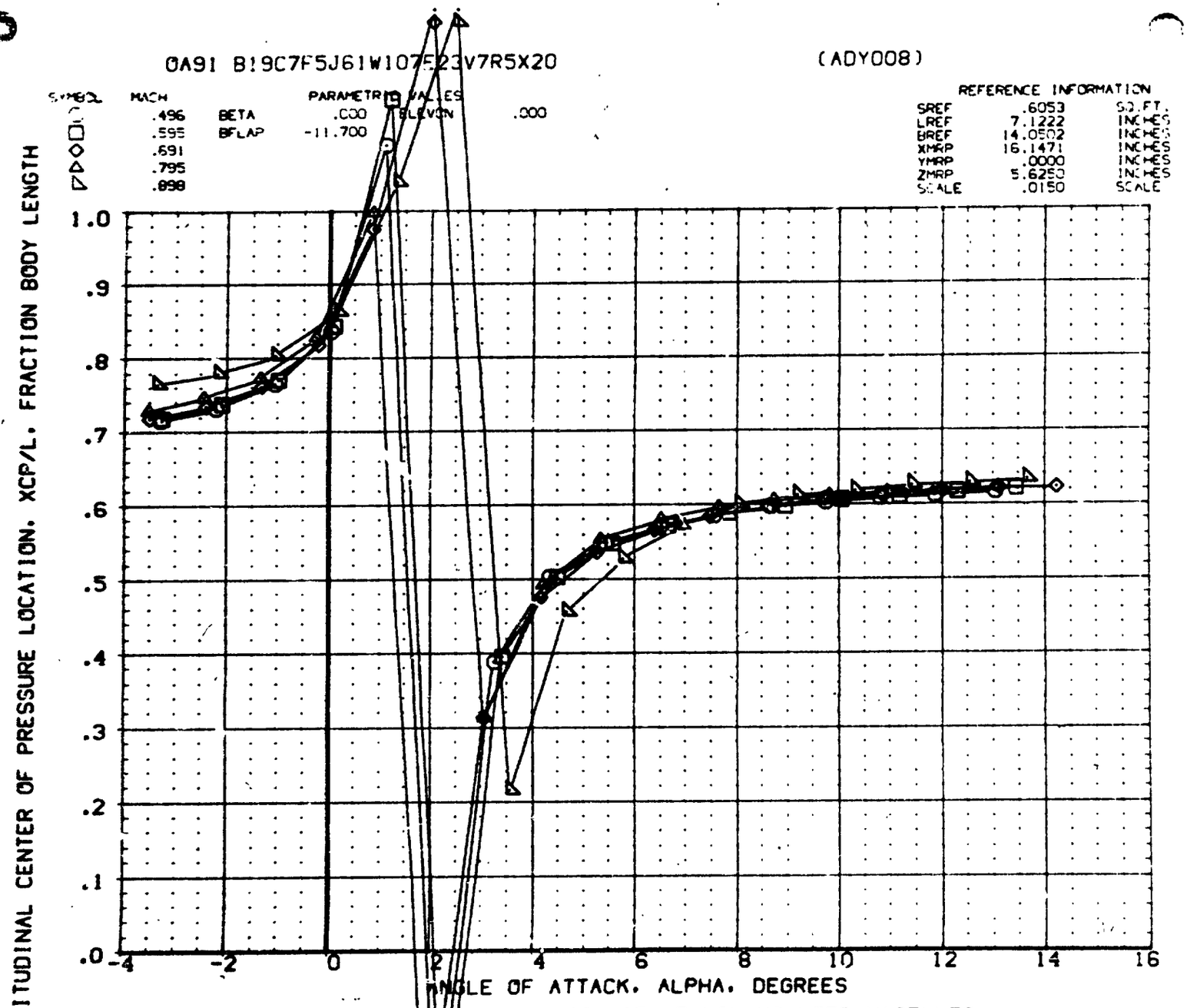

FIG. 8 LONGITUDINAL CHARACTERISTICS WITH FLUSH MOUNTED NACELLES

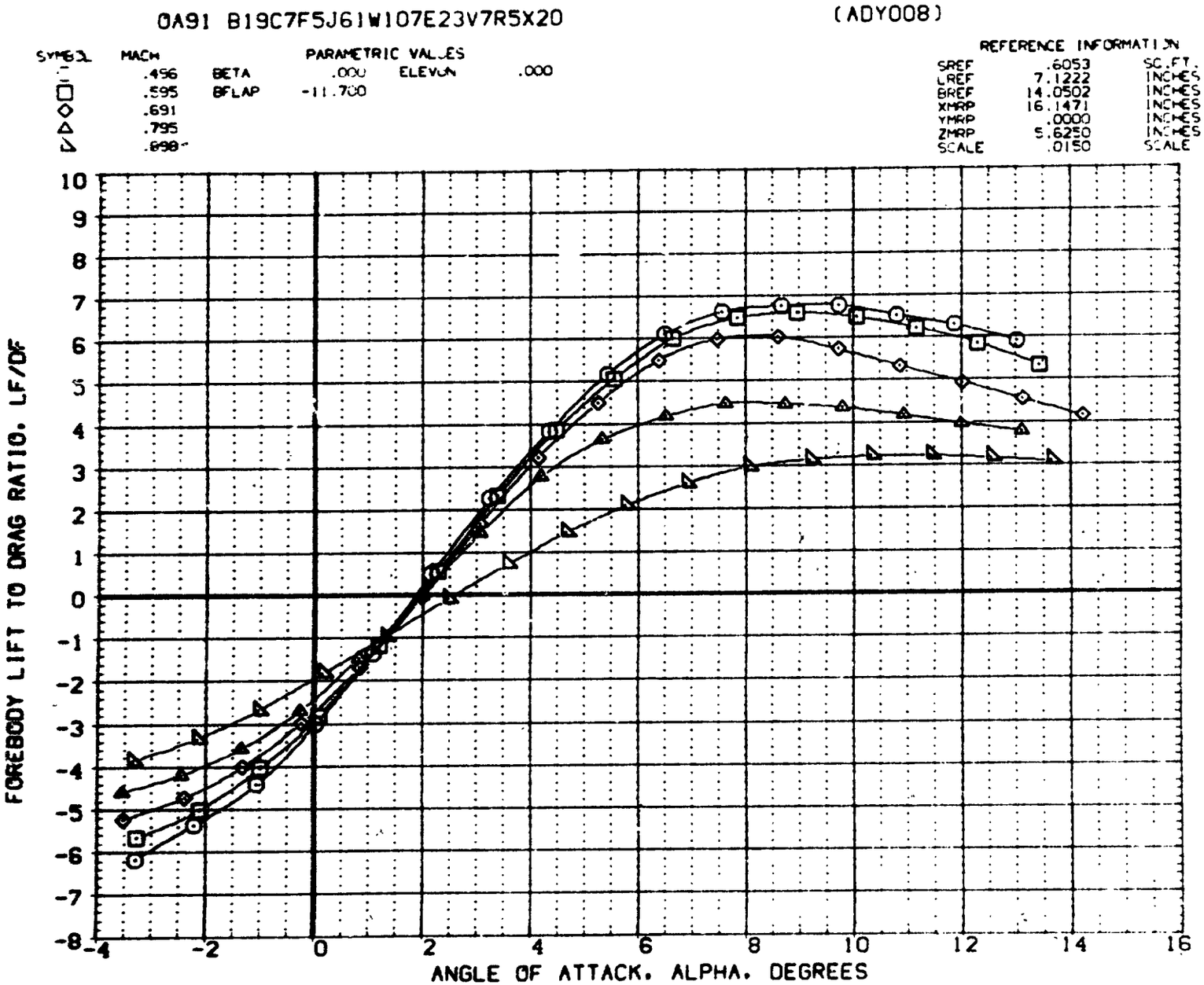

FIG. 8 LONGITUDINAL CHARACTERISTICS WITH FLUSH MOUNTED NACELLES

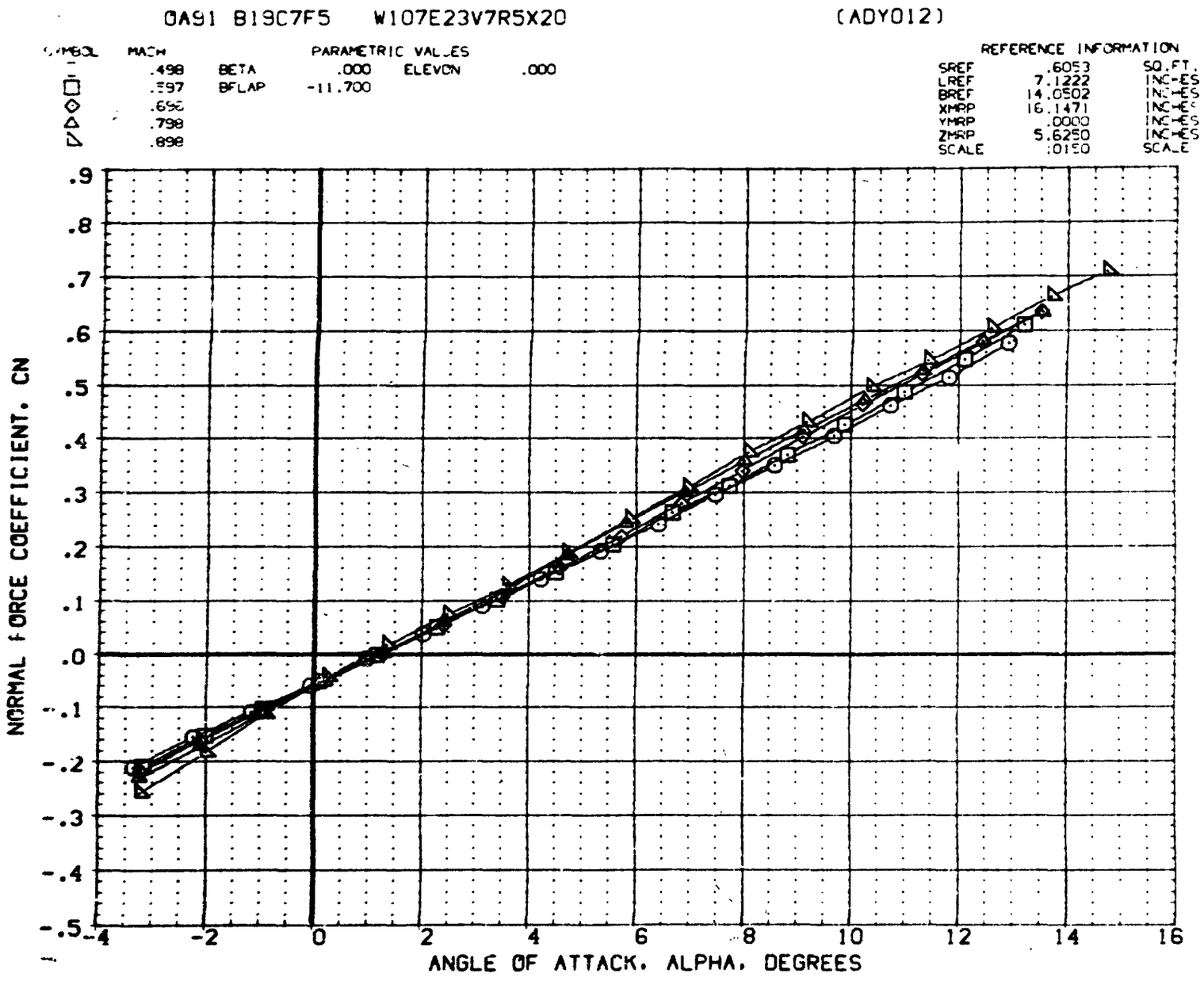

FIG. 9 LONGITUDINAL CHARACTERISTICS WITH OUT NACELLES

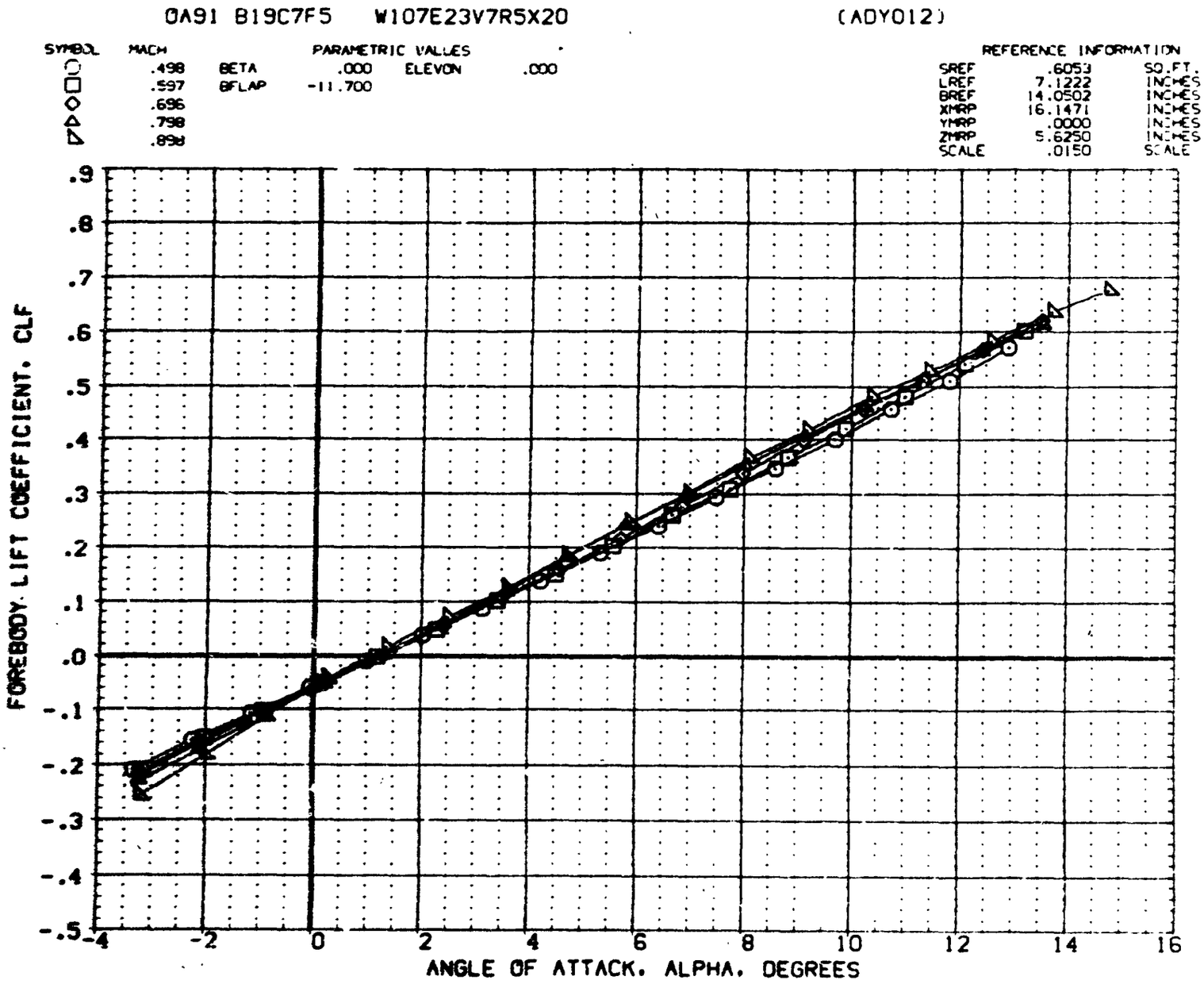

FIG. 9 LONGITUDINAL CHARACTERISTICS WITH OUT NACELLES

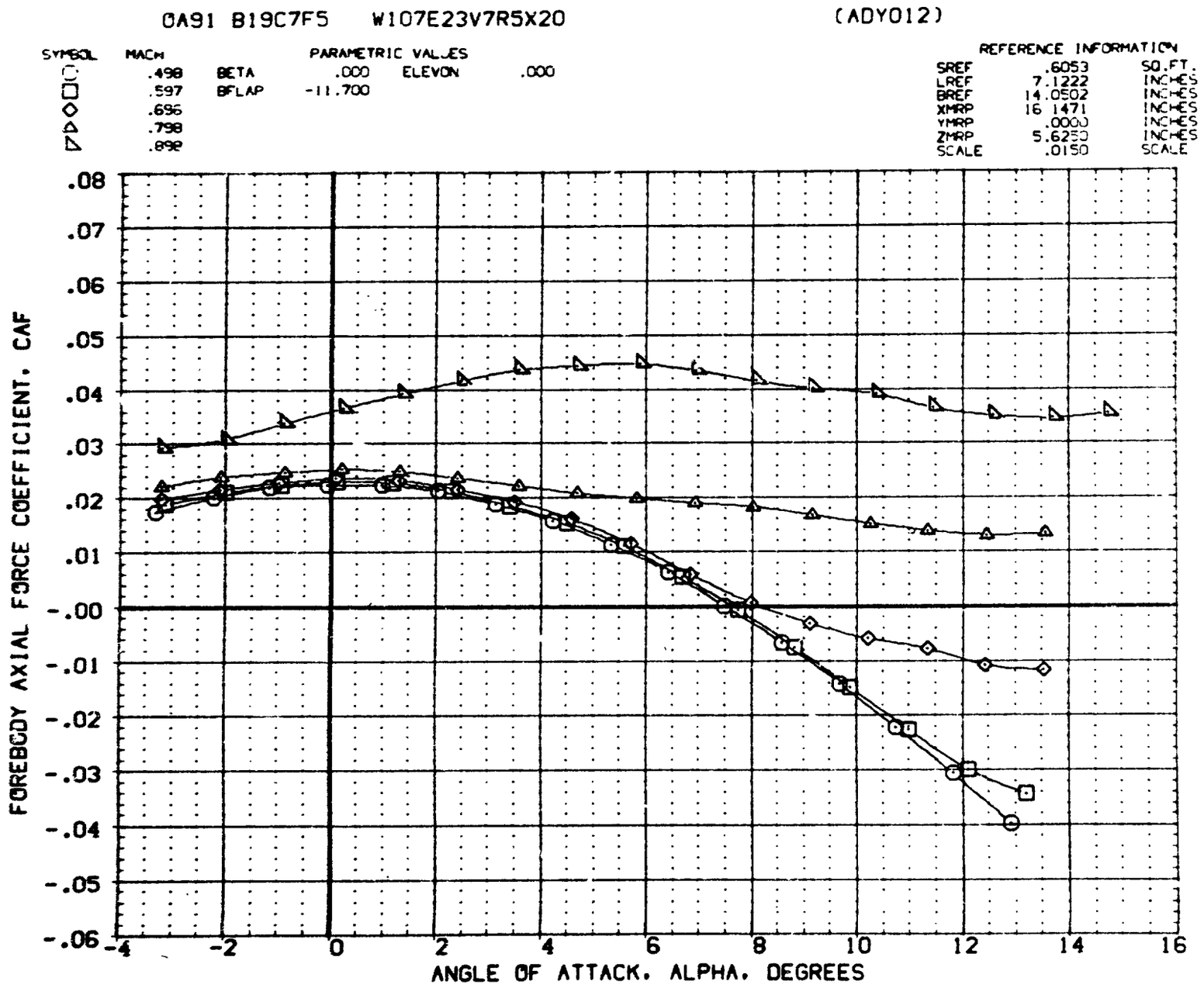

FIG. 9 LONGITUDINAL CHARACTERISTICS WITH OUT NACELLES

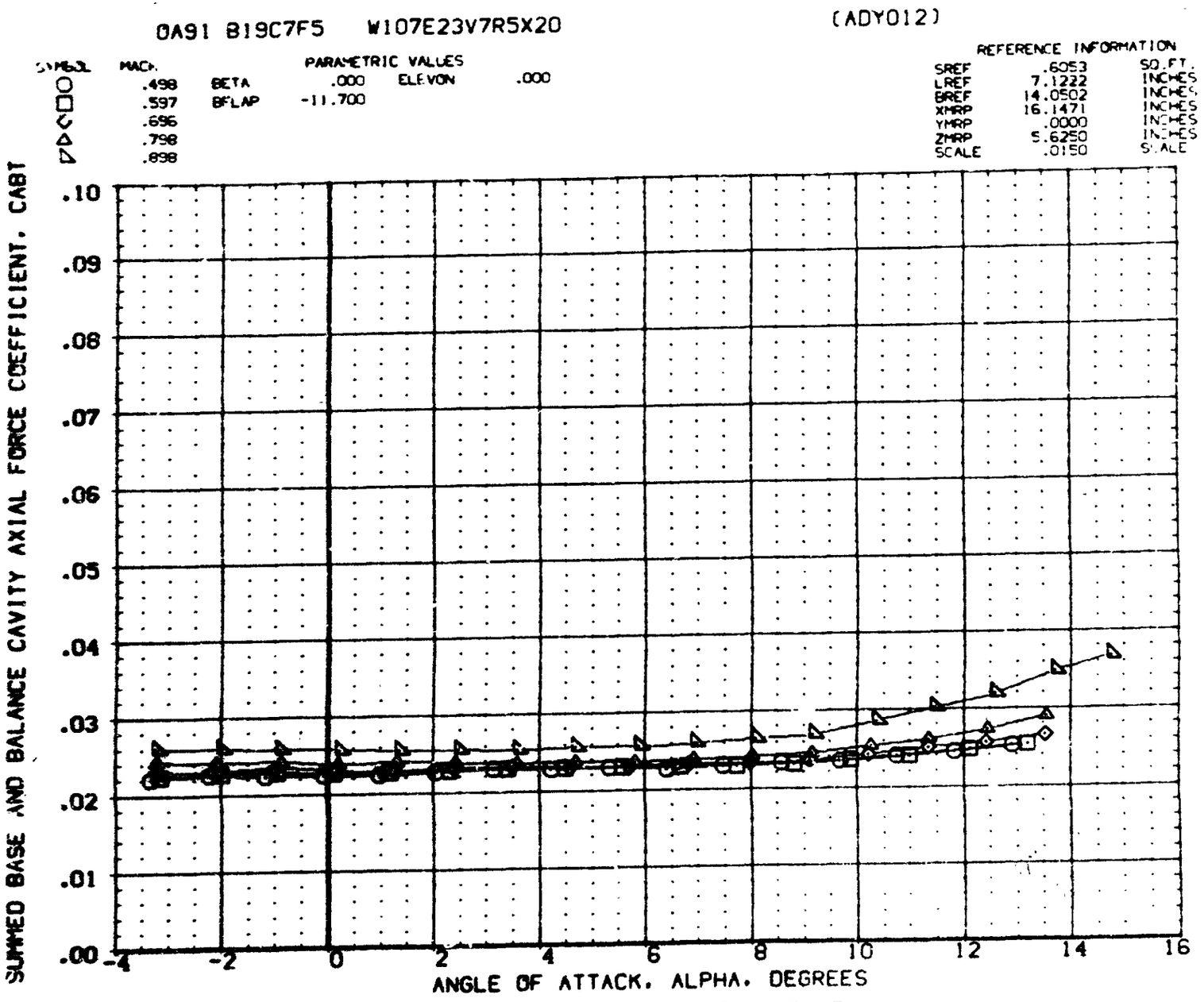

FIG. 9 LONGITUDINAL CHARACTERISTICS WITH OUT NACELLES

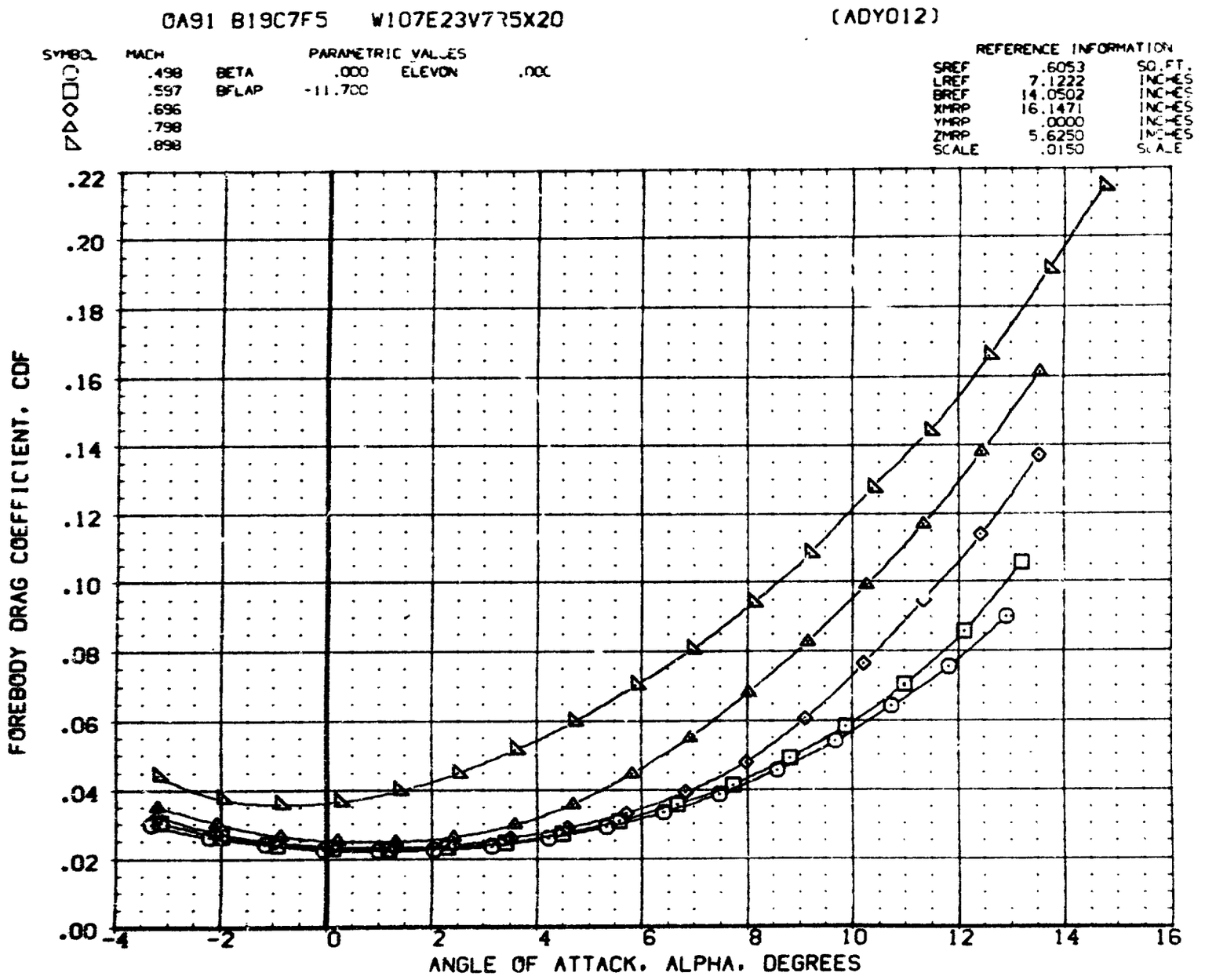

FIG. 9 LONGITUDINAL CHARACTERISTICS WITH OUT NACELLES

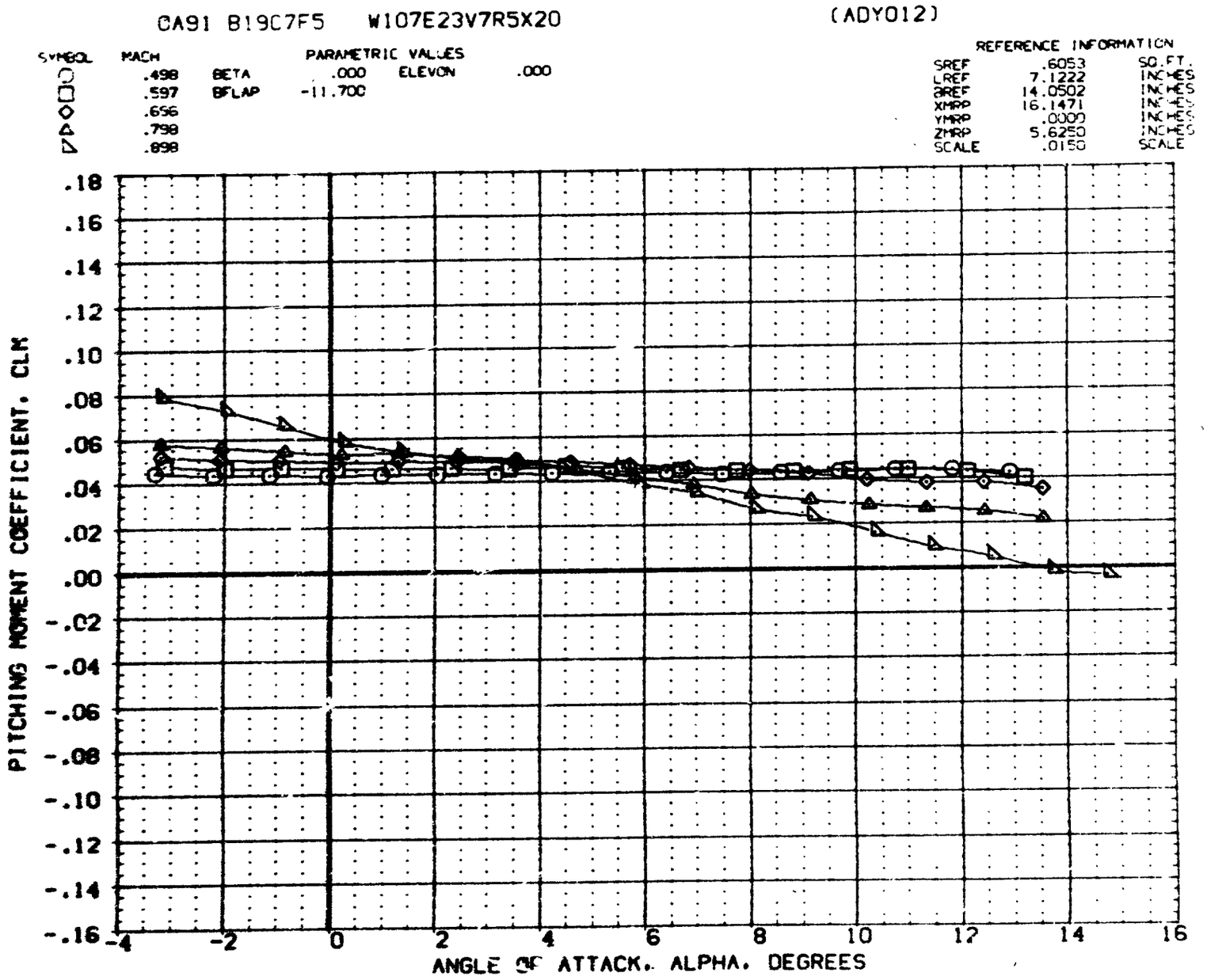

FIG. 9 LONGITUDINAL CHARACTERISTICS WITH OUT NACELLES

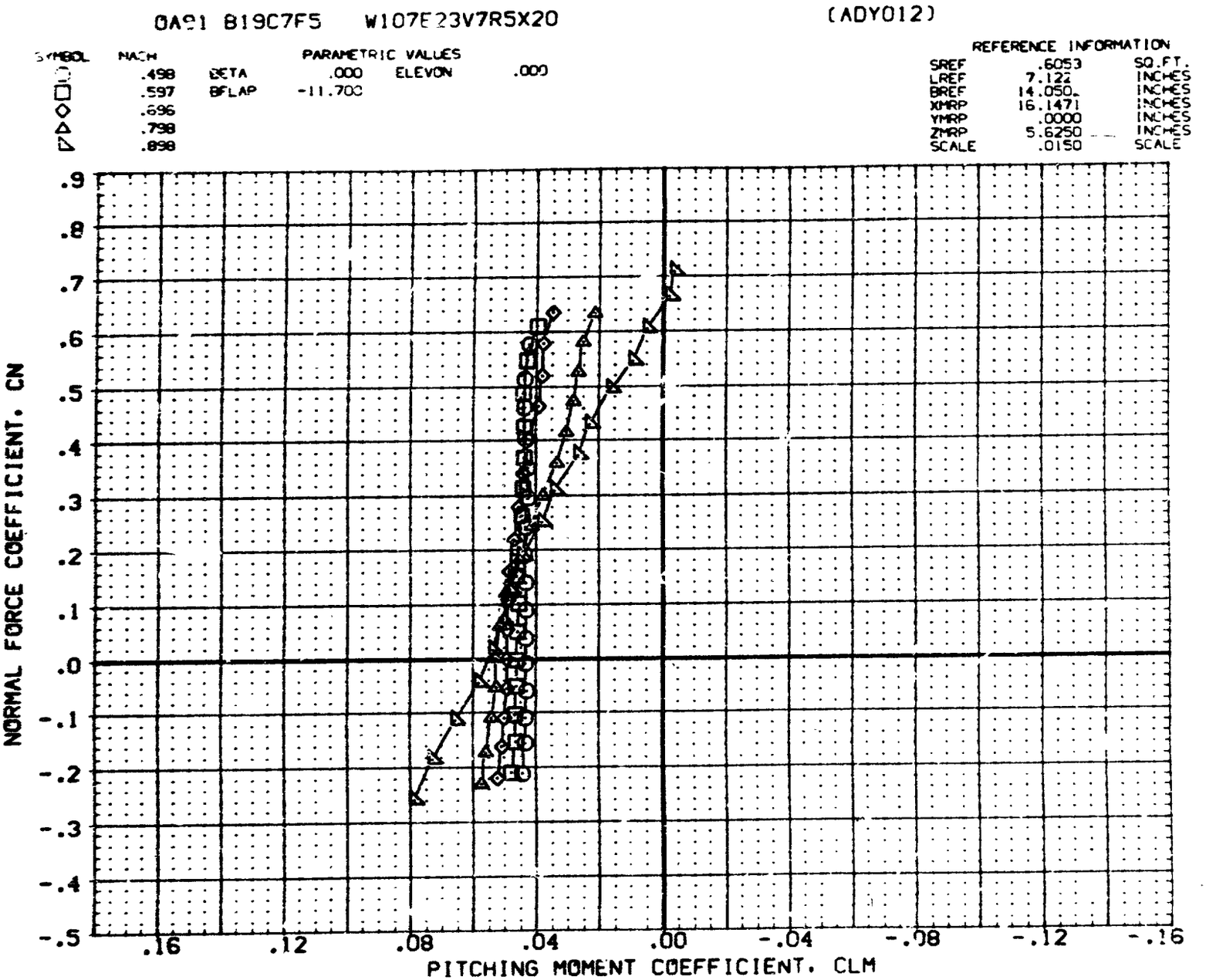

FIG. 9 LONGITUDINAL CHARACTERISTICS WITH OUT NACELLES

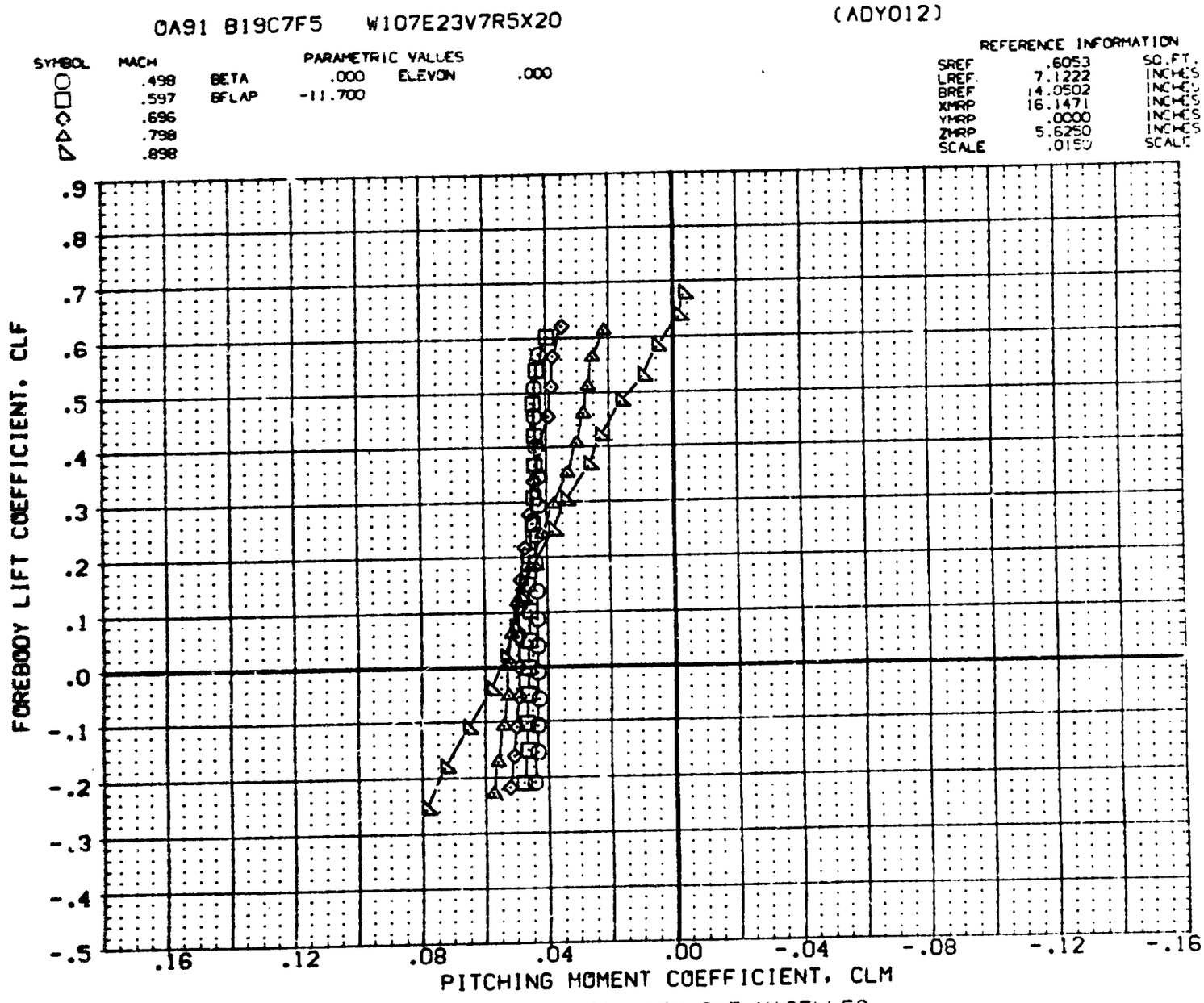

FIG. 9 LONGITUDINAL CHARACTERISTICS WITH OUT NACELLES

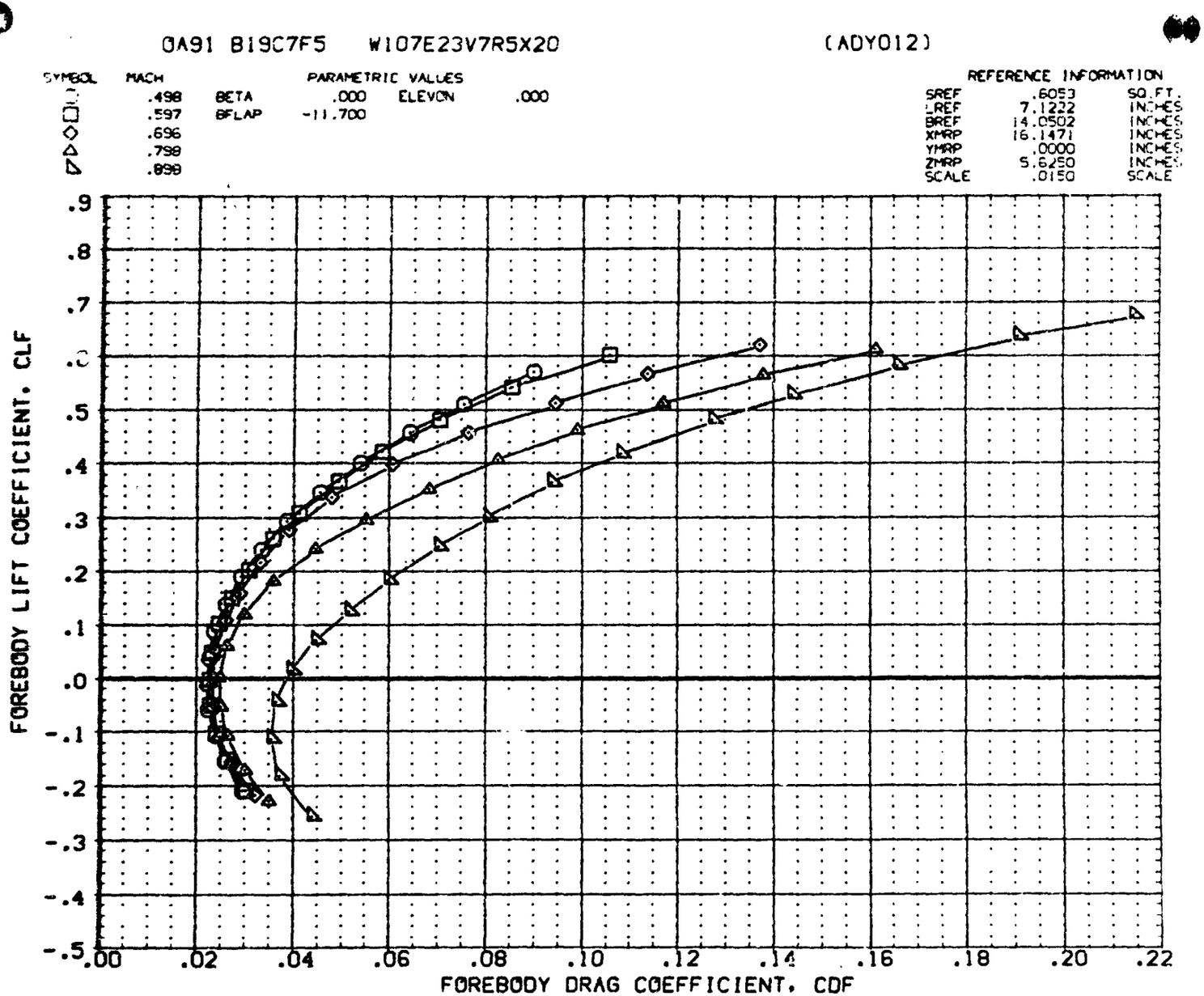

FIG. 9 LONGITUDINAL CHARACTERISTICS WITH OUT NACELLES

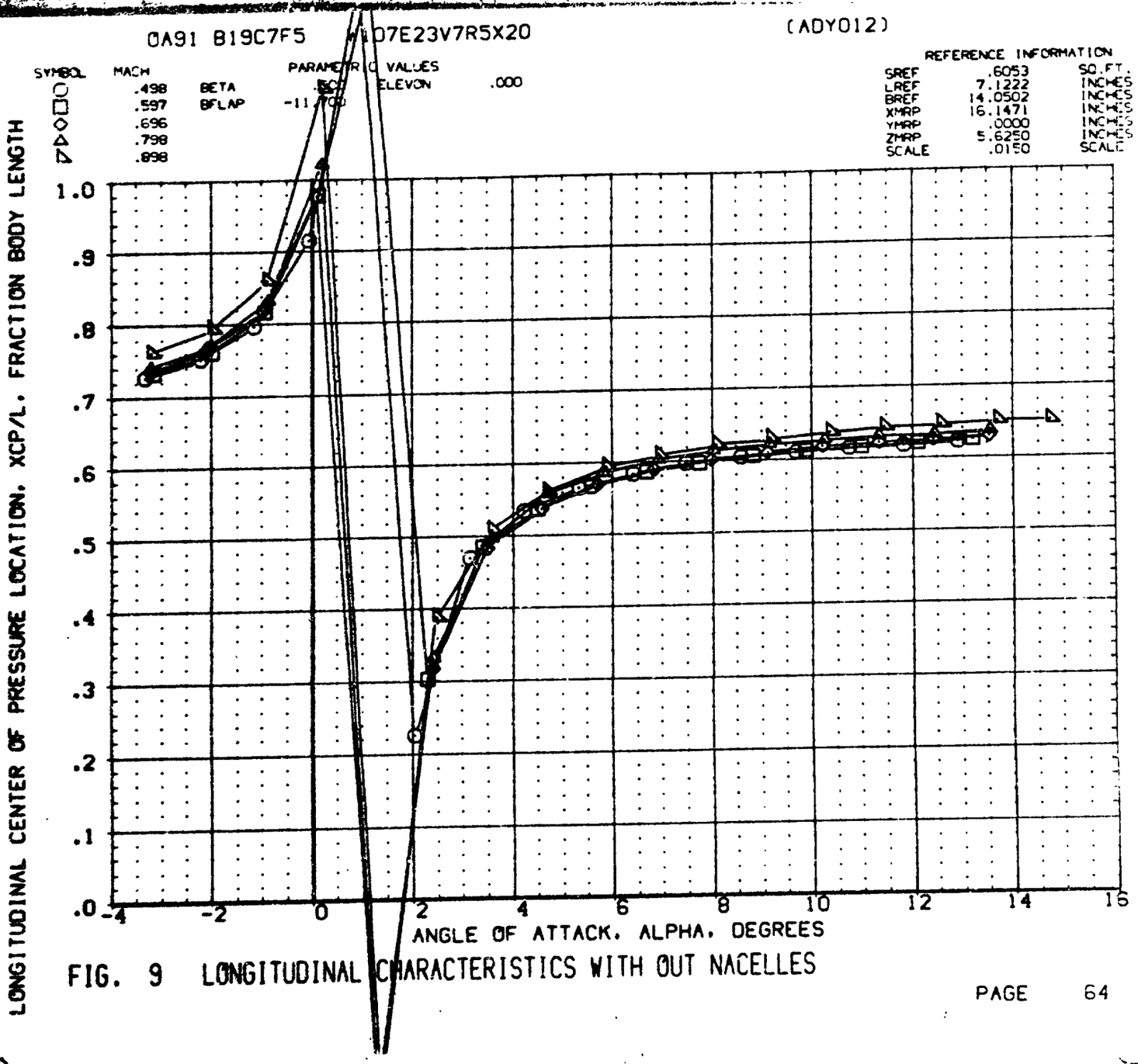

FIG. 9 LONGITUDINAL CHARACTERISTICS WITH OUT NACELLES

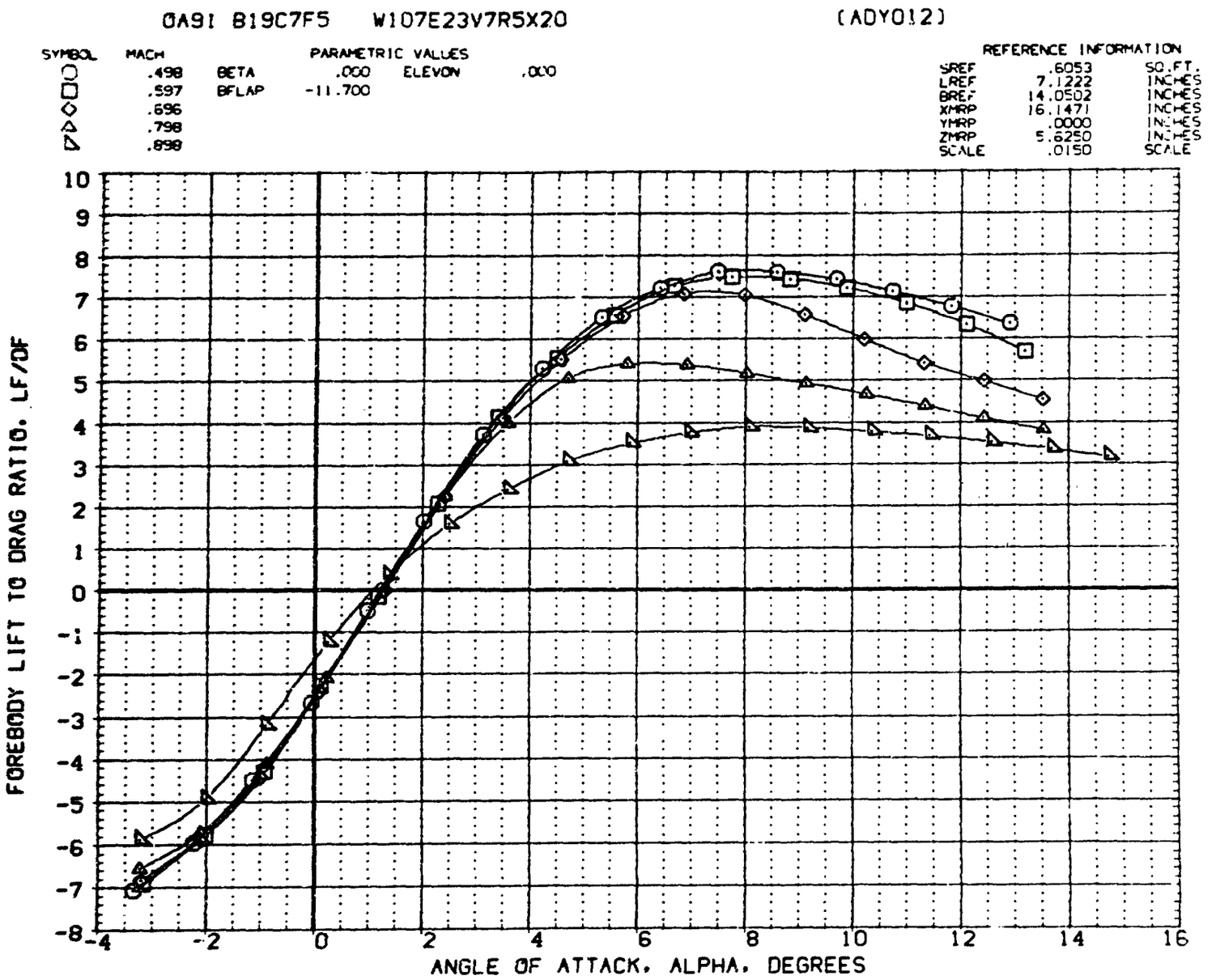

FIG. 9 LONGITUDINAL CHARACTERISTICS WITH OUT NACELLES

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	BFLAP	BETA
(BDY003)	0A91 B19C7F5J59V107E23V7R5X20	.000	-11.700	.000
(ADY005)	0A91 B19C7F5J59V107E23V7R5X20	10.000	-11.700	.000

REFERENCE INFORMATION		
SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

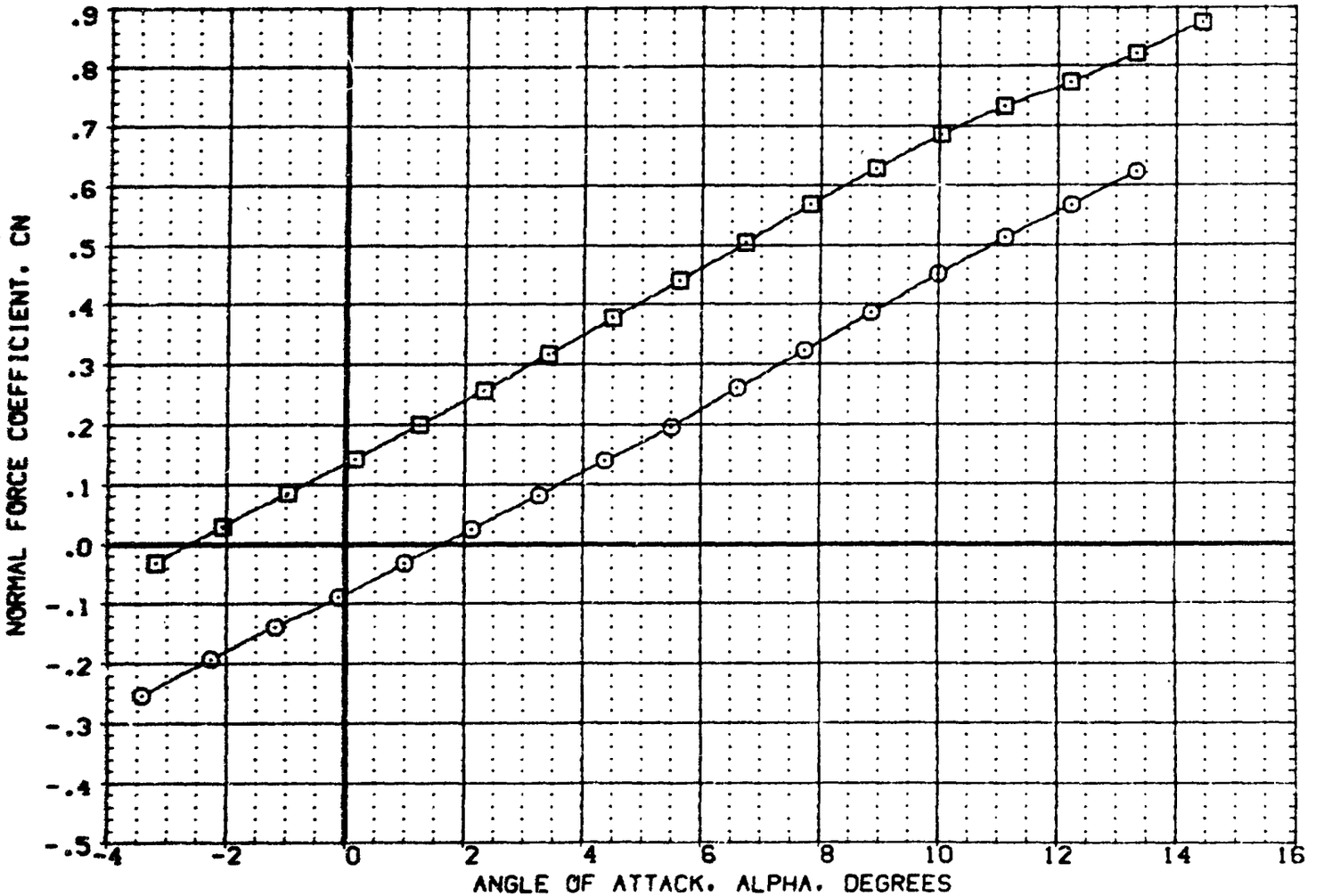

FIG. 10 ELEVON EFFECTIVENESS WITH PYLON MOUNTED NACELLES

(A)MACH = .70

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BDY003)	8	0A91 B19C7F5J59V107E23V7R5X20
ADY005)	8	0A91 B19C7F5J59V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000

REFERENCE INFORMATION		
SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

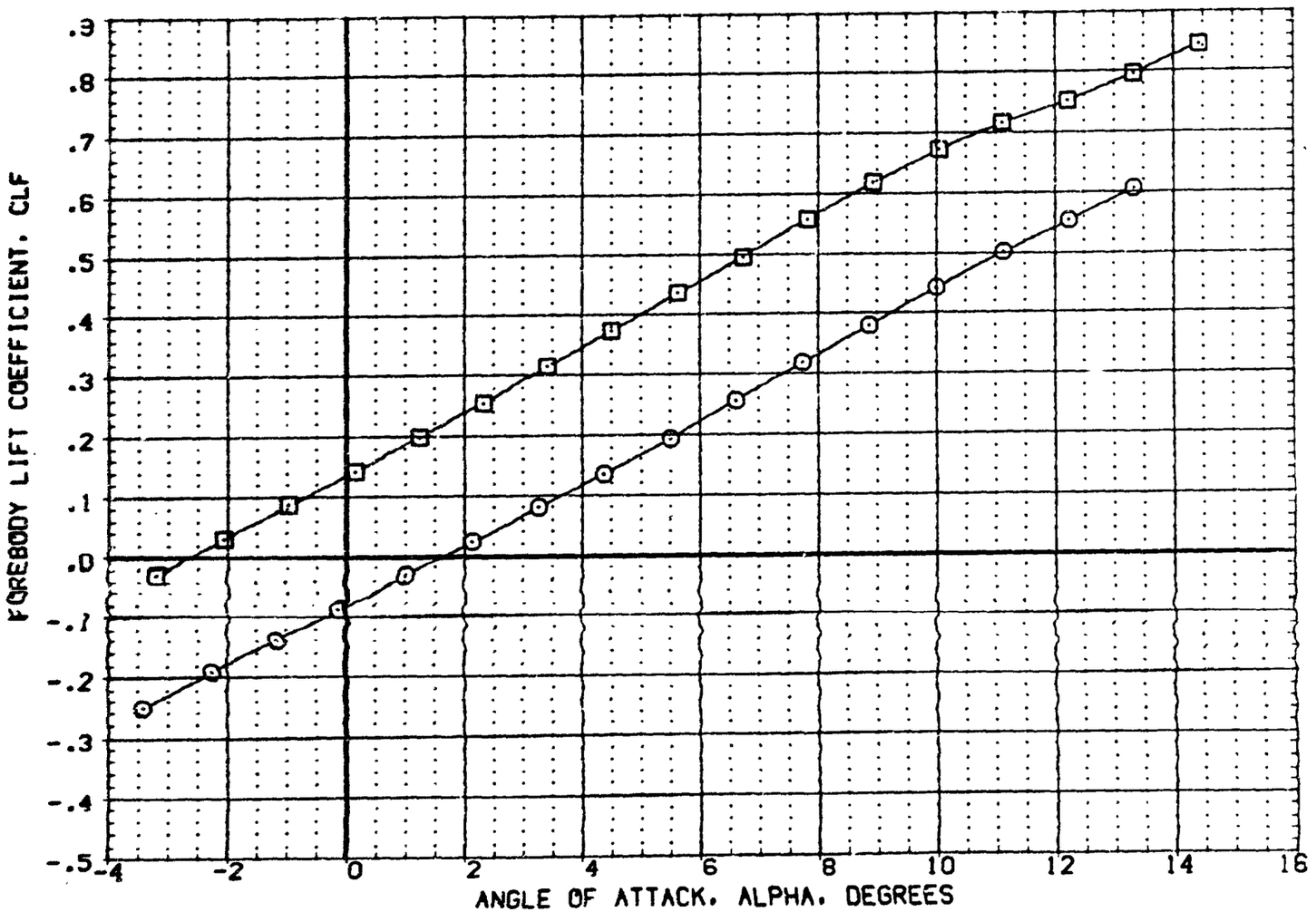

FIG. 10 ELEVON EFFECTIVENESS WITH PYLON MOUNTED NACELLES

(A)MACH = .70

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
BDY003		0A91 B19C7F5J59V107E23V7R5X20
ADY005		0A91 B19C7F5J59V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

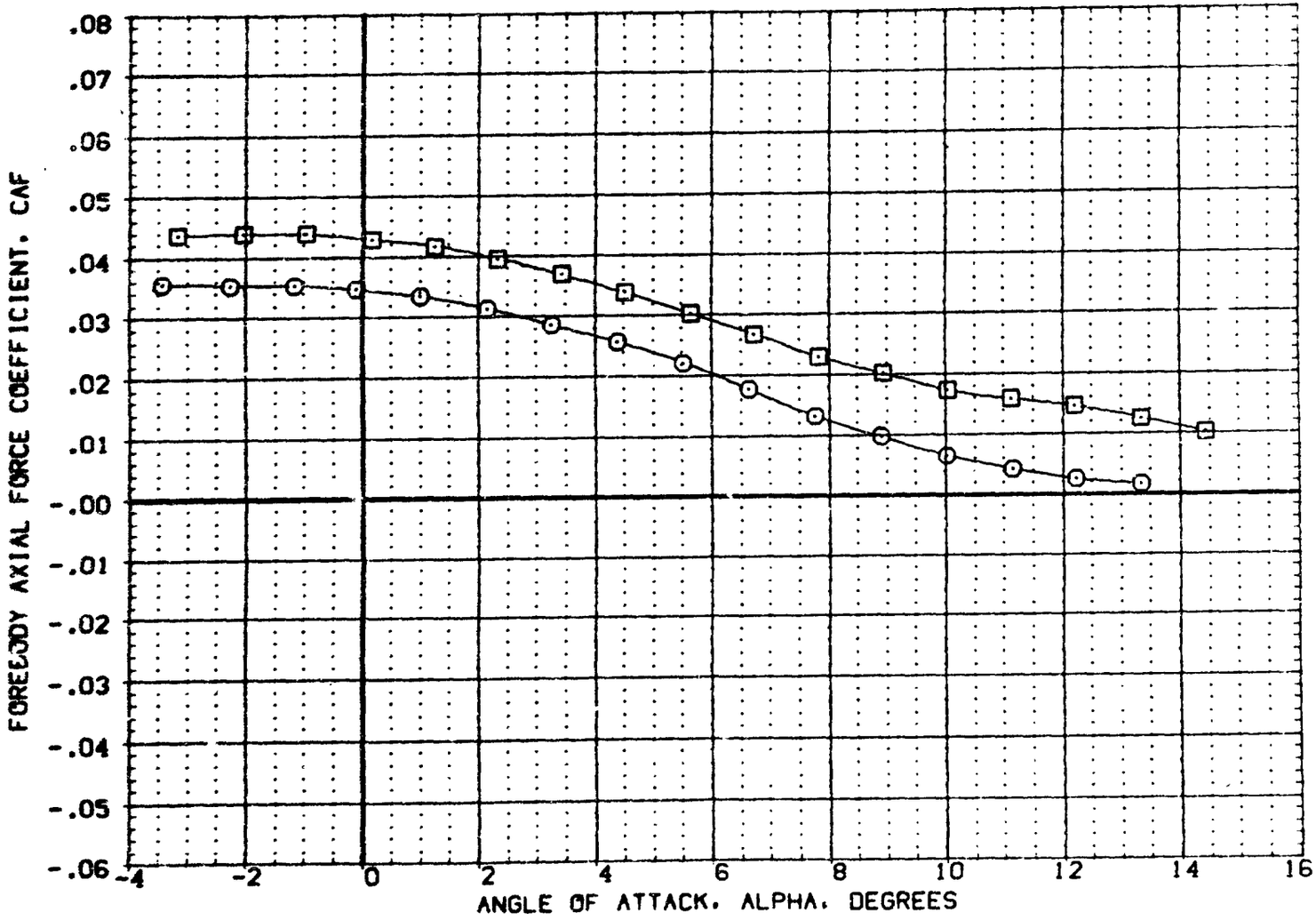

FIG. 10 ELEVON EFFECTIVENESS WITH PYLON MOUNTED NACELLES

(A)MACH = .70

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(BCY003)	0A91 B19C7F5J59V107E23V7R5X20
(ADY005)	0A91 B19C7F5J59V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

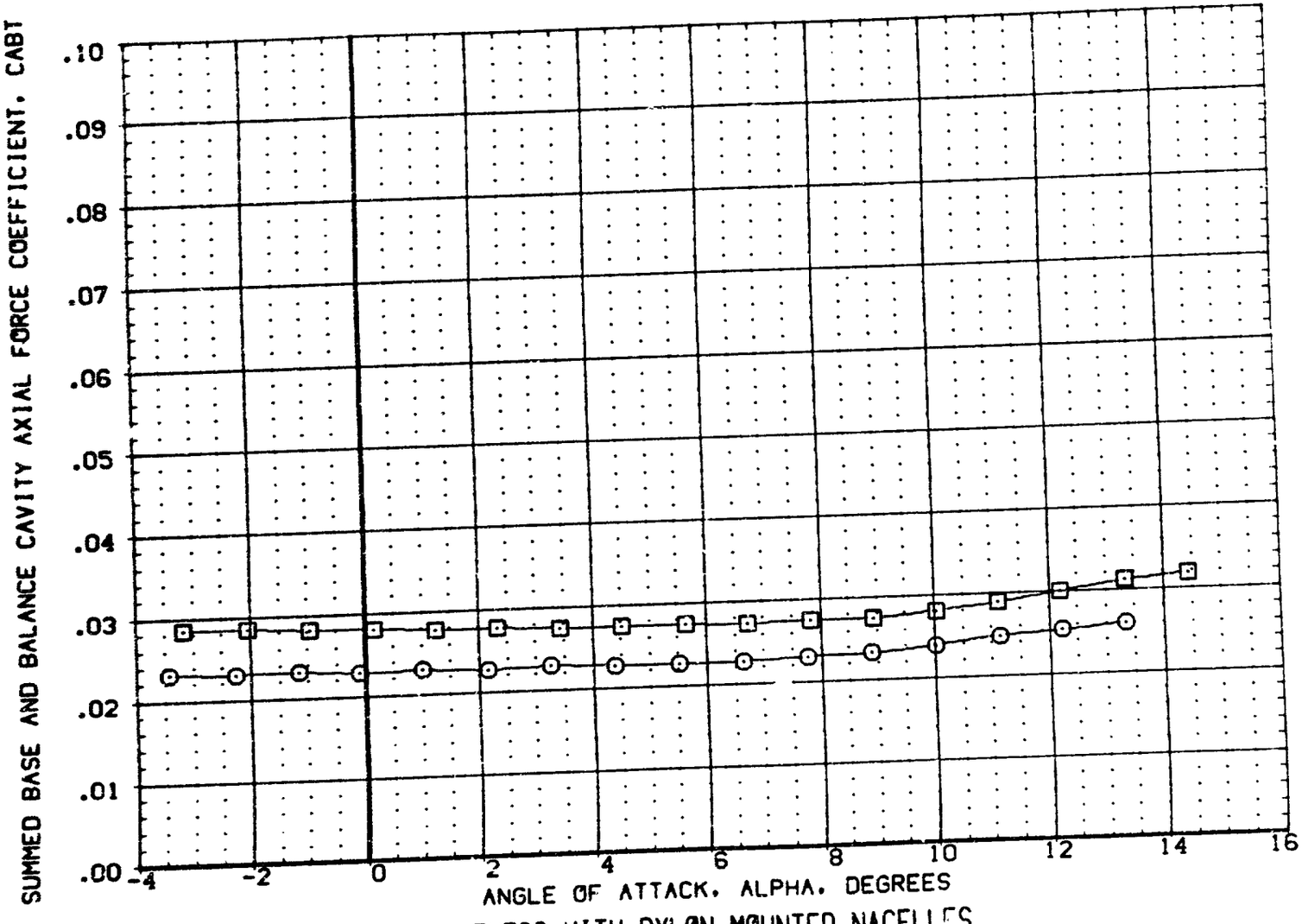

FIG. 10 ELEVON EFFECTIVENESS WITH PYLON MOUNTED NACELLES

(A)MACH = .70

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
60Y003		0A91 B19C7F5J59V107E23V7R5X20
40Y005		0A91 B19C7F5J59V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0202	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.8210	INCHES
SCALE	.0750	SCALE

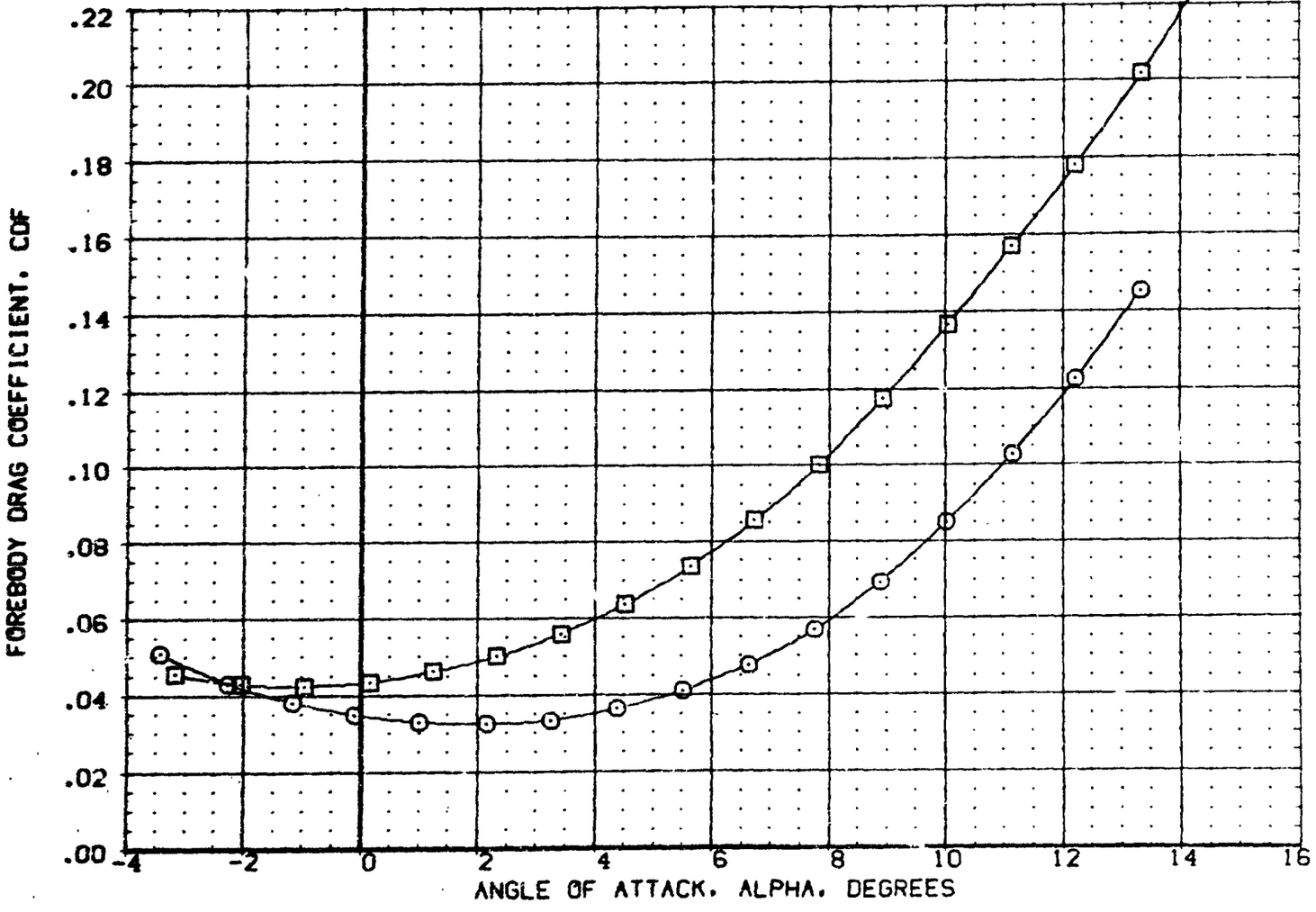

FIG. 10 ELEVON EFFECTIVENESS WITH PYLON MOUNTED NACELLES

(A)MACH = .70

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(BODY003) 3A91 819C7F5J59W107E23V7R5X20

(ADY005) 3A91 819C7F5J59W107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

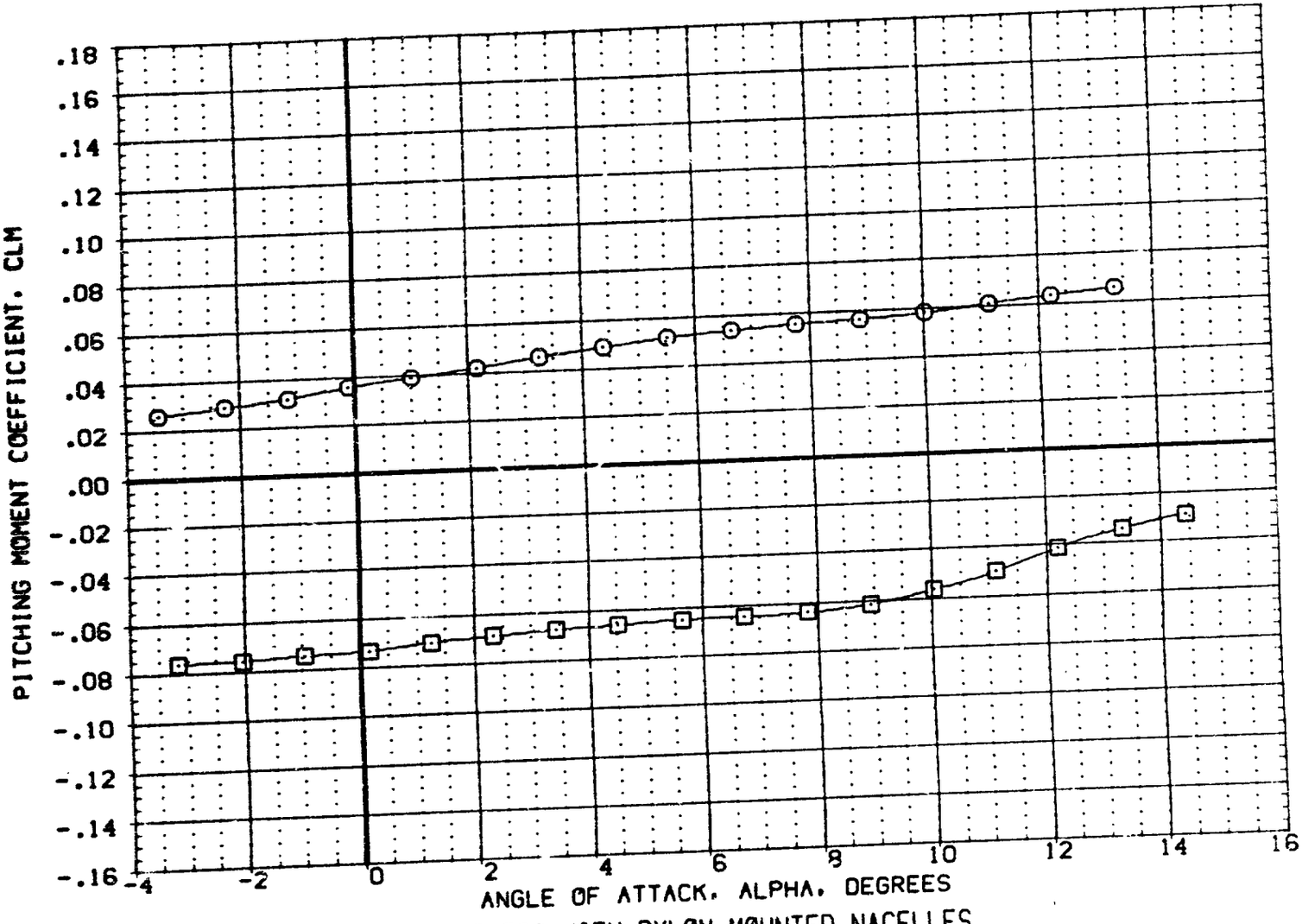

FIG. 10 ELEVON EFFECTIVENESS WITH PYLON MOUNTED NACELLES

(A)MACH = .70

DATA SET SYMBC.	CONFIGURATION DESCRIPTION
(BDY003)	DA91 B19C7F5J59V107E23V7R5X20
(ADY005)	DA91 B19C7F5J59V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

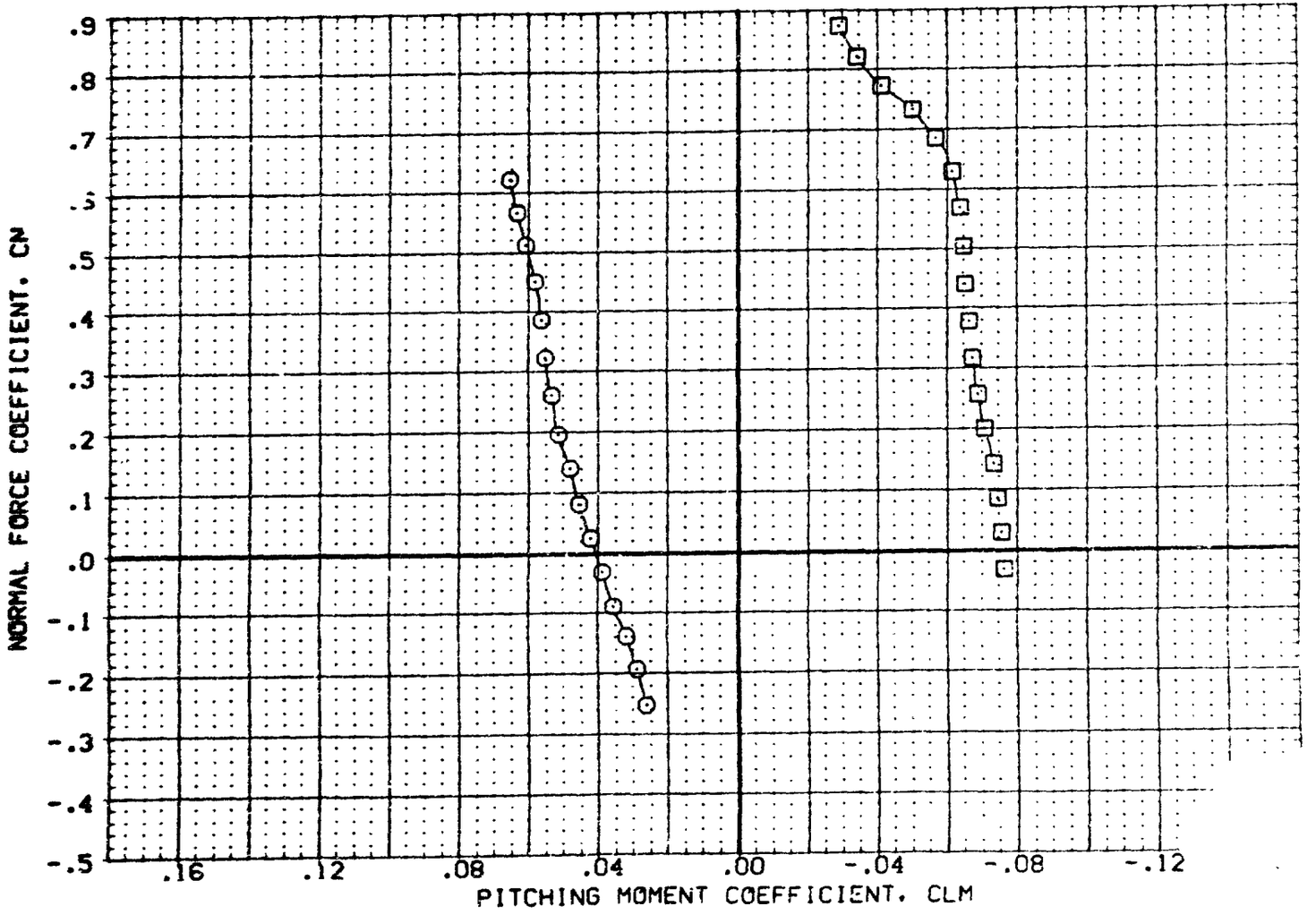

FIG. 10 ELEVON EFFECTIVENESS WITH PYLON MOUNTED NACELLES

(A)MACH = .70

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(BDYC03)	☐	0A91 B19C7F5J59W107E23V7R5X20
(ADYCC5)	☐	0A91 B19C7F5J59W107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0572	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

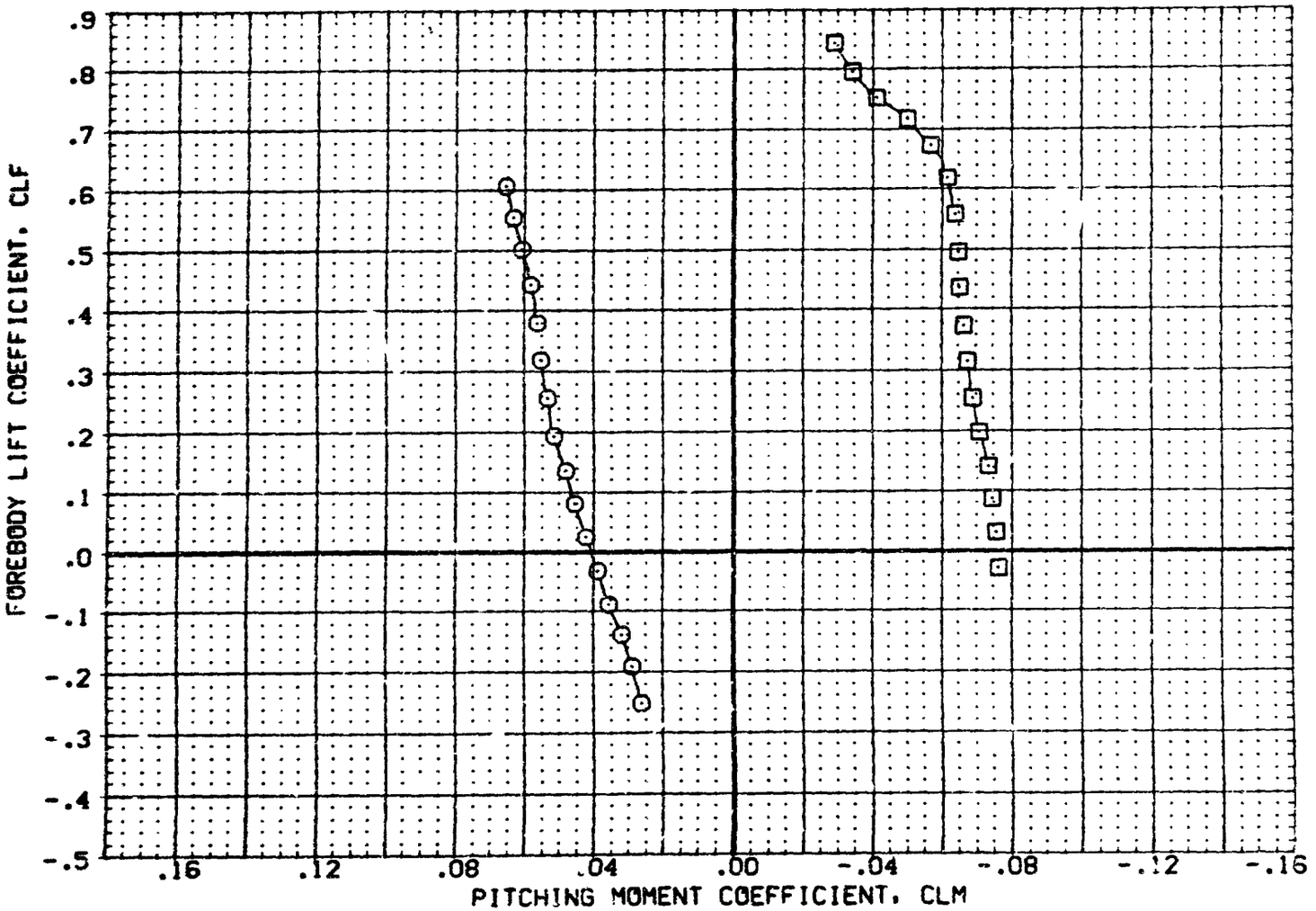

FIG. 10 ELEVON EFFECTIVENESS WITH PYLON MOUNTED NACELLES

(A)MACH = .70

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(60Y003)	0A91 B19C7F5J59W107E23V7R5X20
(ACY005)	0A91 B19C7F5J59W107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

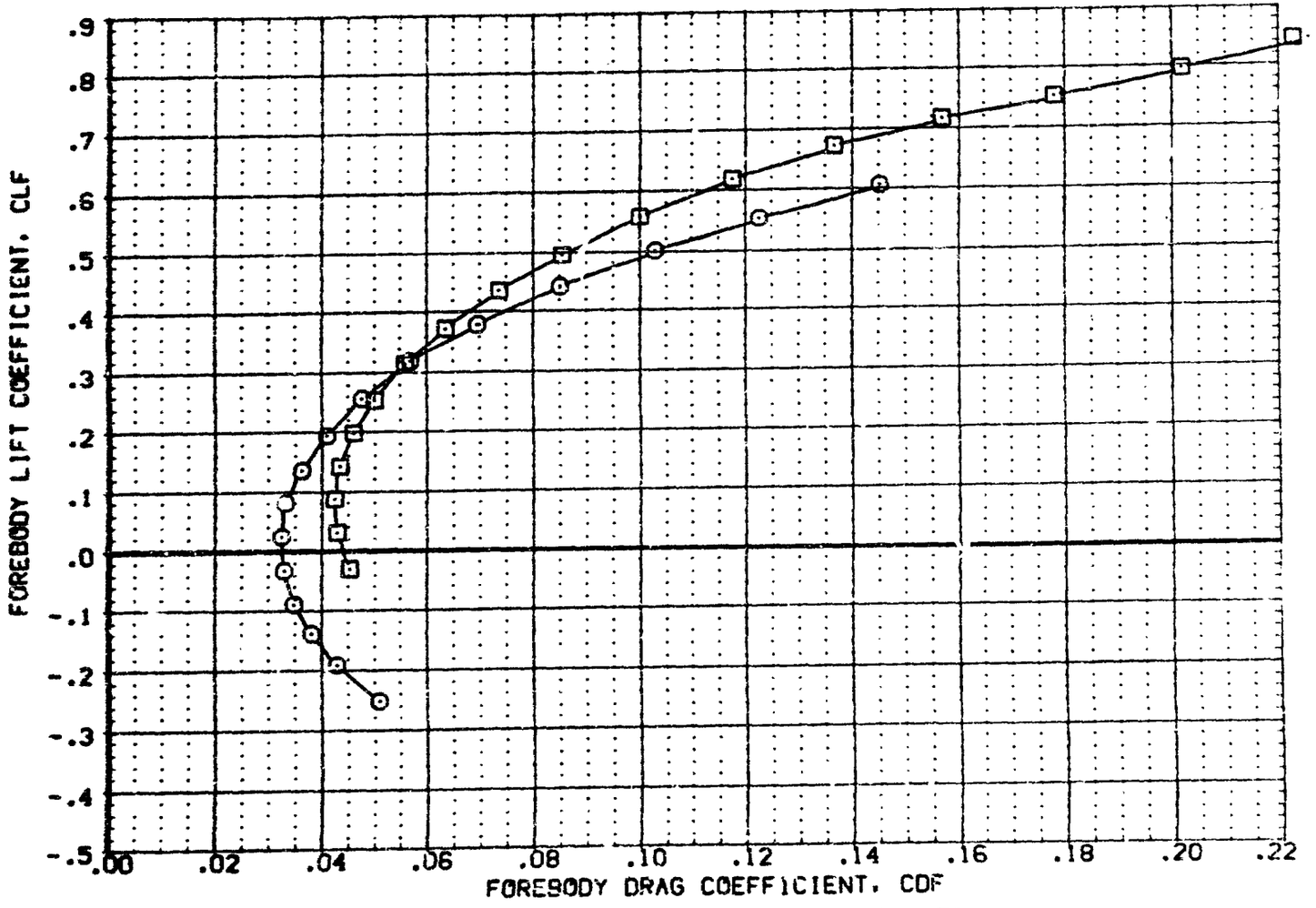

FIG. 10 ELEVON EFFECTIVENESS WITH PYLON MOUNTED NACELLES

(A)MACH = .70

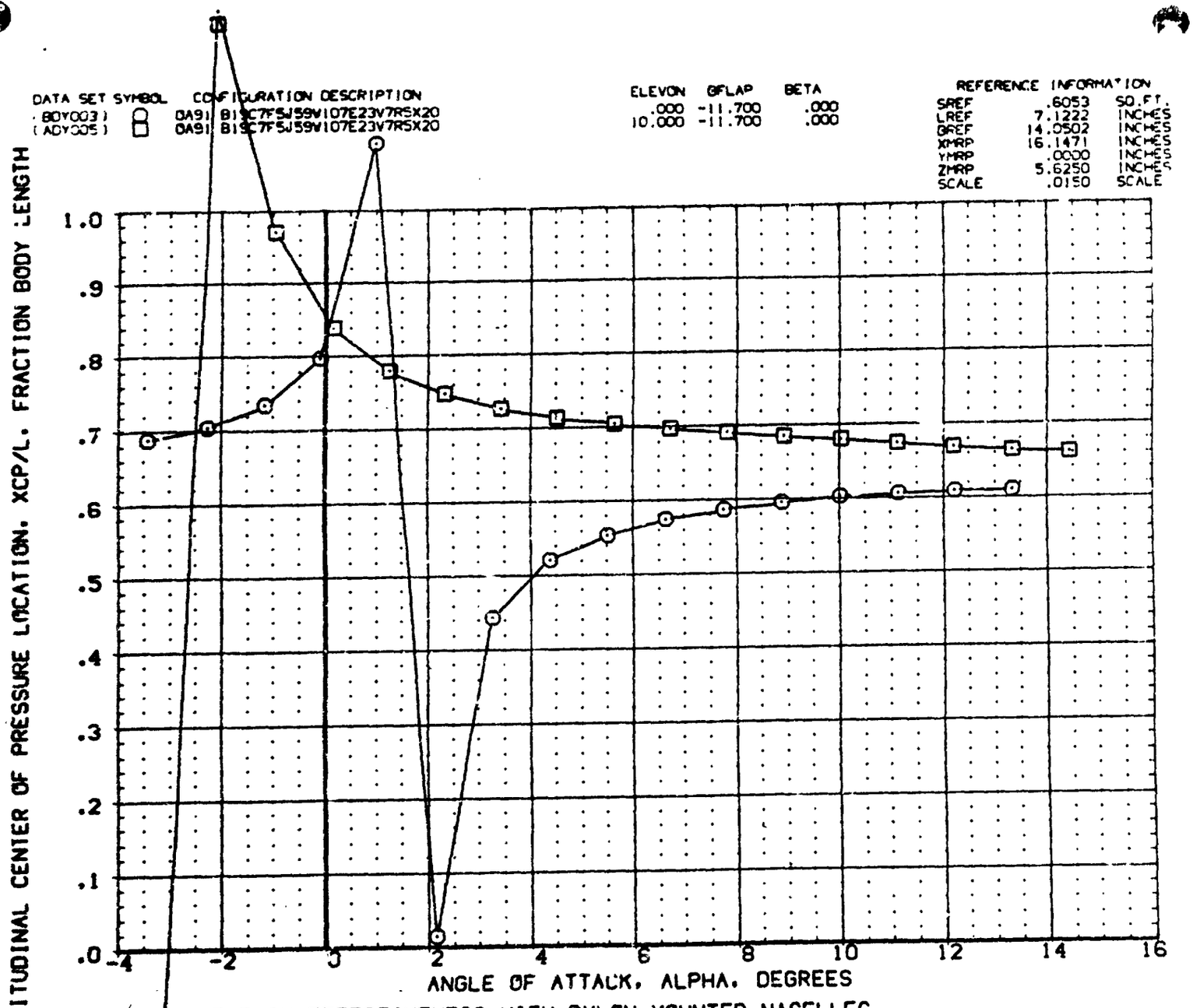

FIG. 10 ELEVON EFFECTIVENESS WITH PYLON MOUNTED NACELLES

(A)MACH = .70

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	BFLAP	BETA
(BDY003)	0A91 B19C7F5X59V107E23V7R5X20	.000	-11.700	.000
(ADY005)	0A91 B19C7F5JX59V107E23V7R5X20	10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

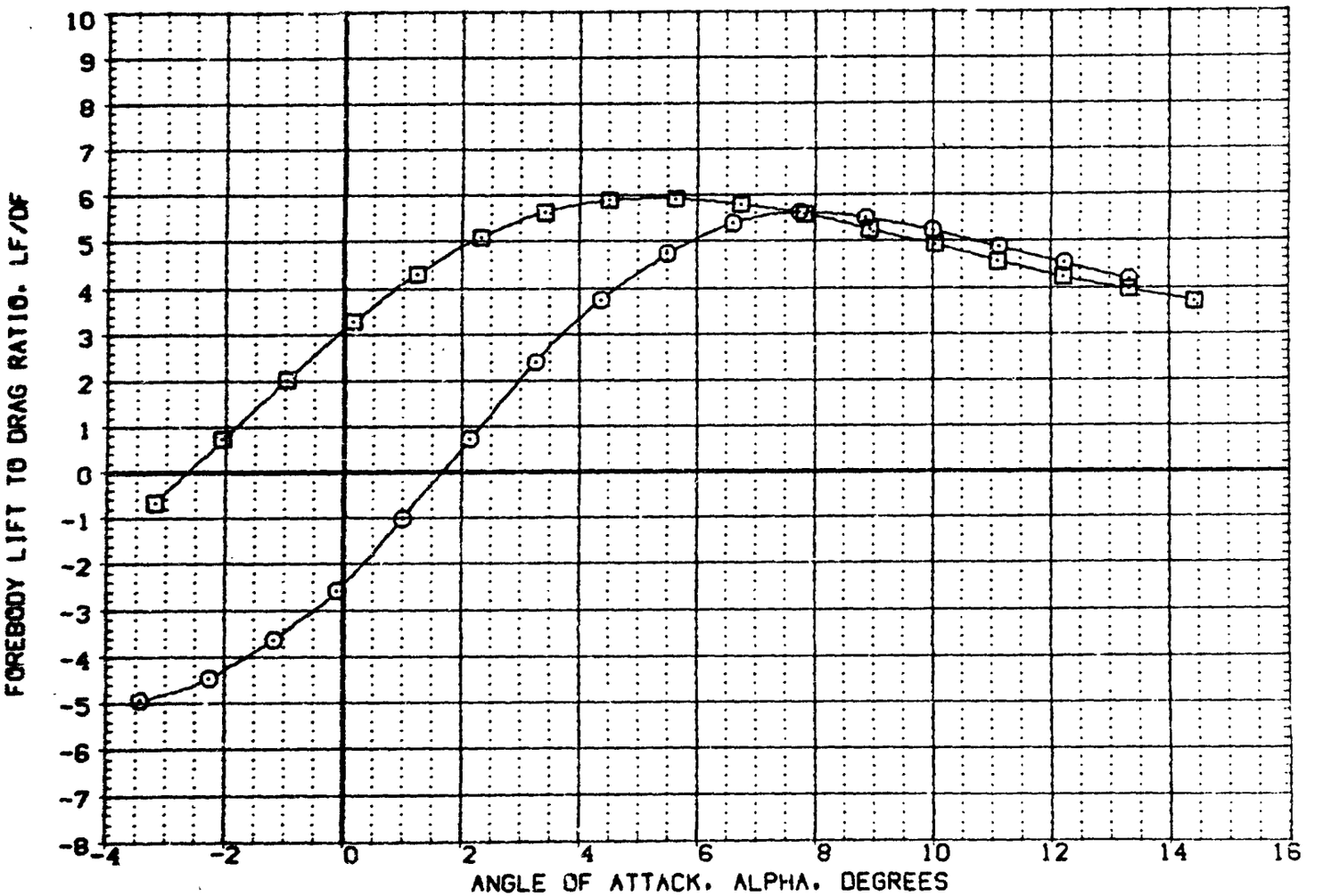

FIG. 10 ELEVON EFFECTIVENESS WITH PYLON MOUNTED NACELLES

(A)MACH = .70

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
BCY006		0A91 B19C7F5J60V107E23V7R5X20
ACY007		0A91 B19C7F5J60V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

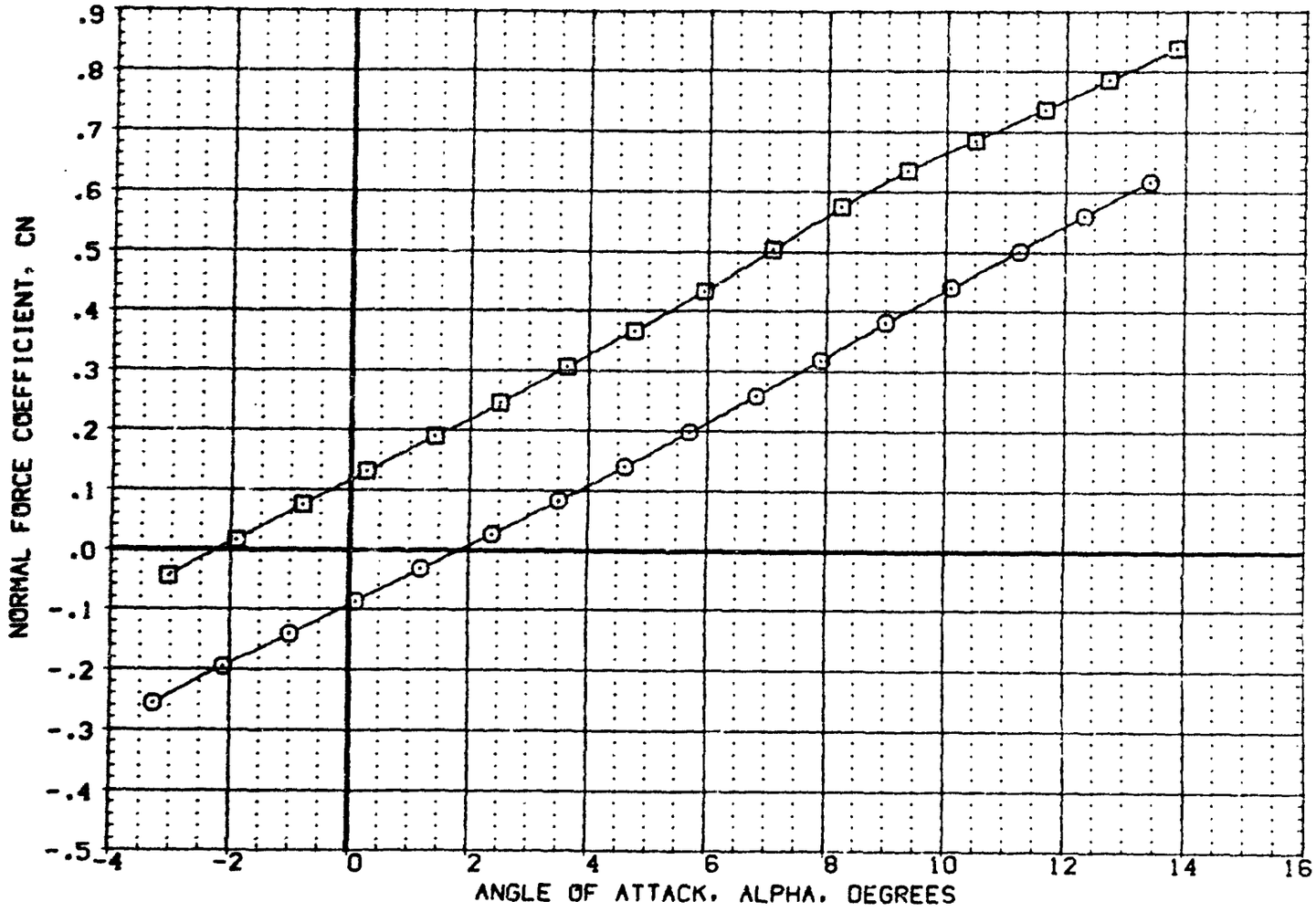

FIG. 11 ELEVON EFFECTIVENESS WITH PYLON MOUNTED NACELLES MOVED AFT

(A)MACH = .70

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
BDY006	OA91 B19C7F5J60V107E23V7R5X20
ADY007	OA91 B19C7F5J60V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

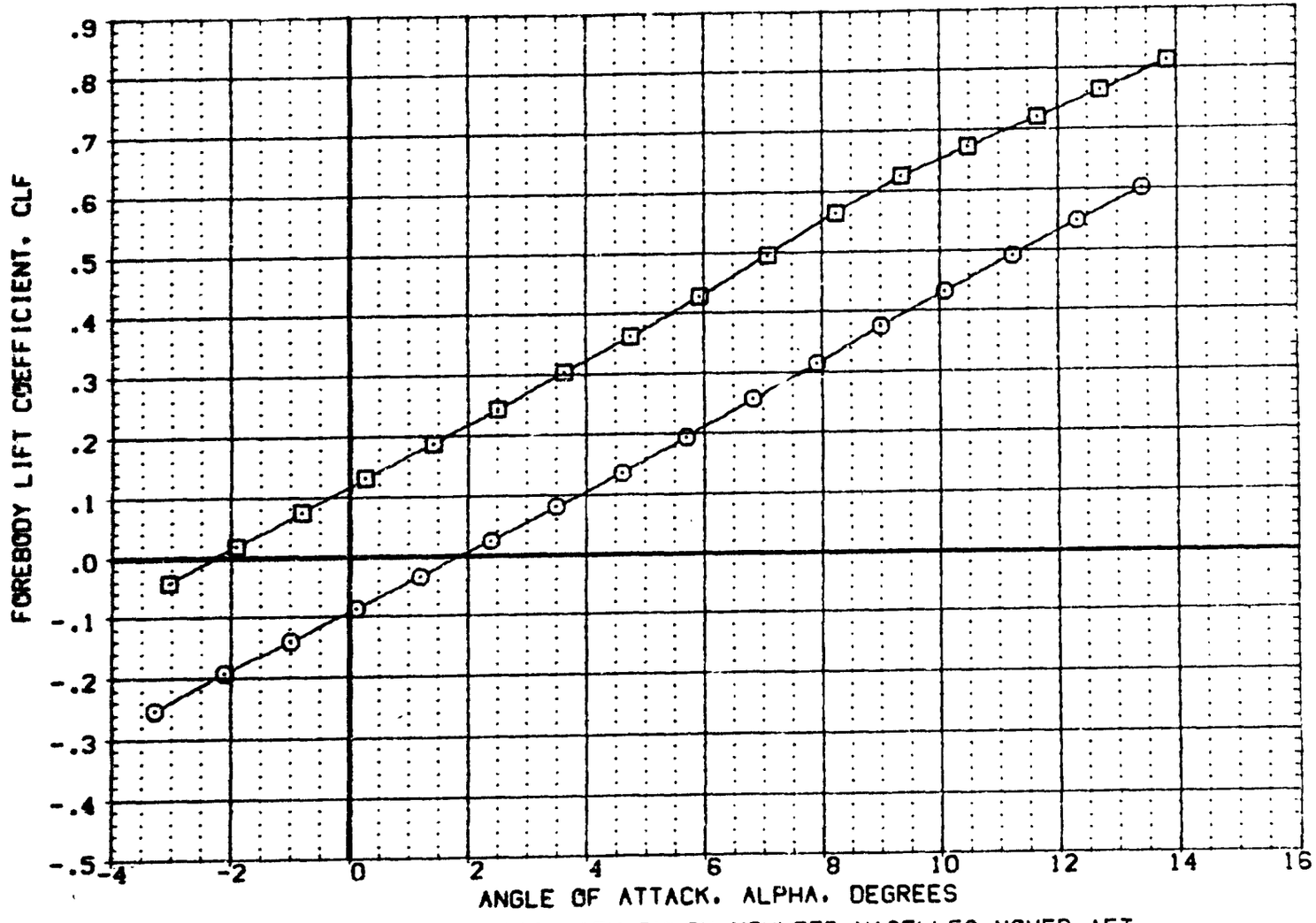

FIG. 11 ELEVON EFFECTIVENESS WITH PYLON MOUNTED NACELLES MOVED AFT

(A)MACH = .70

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BCY3G6)		OAS1 B19C7F5J60V107E23V7R5X20
ADV5U7)		OAS1 B19C7F5J60V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.5053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.015C	SC .E

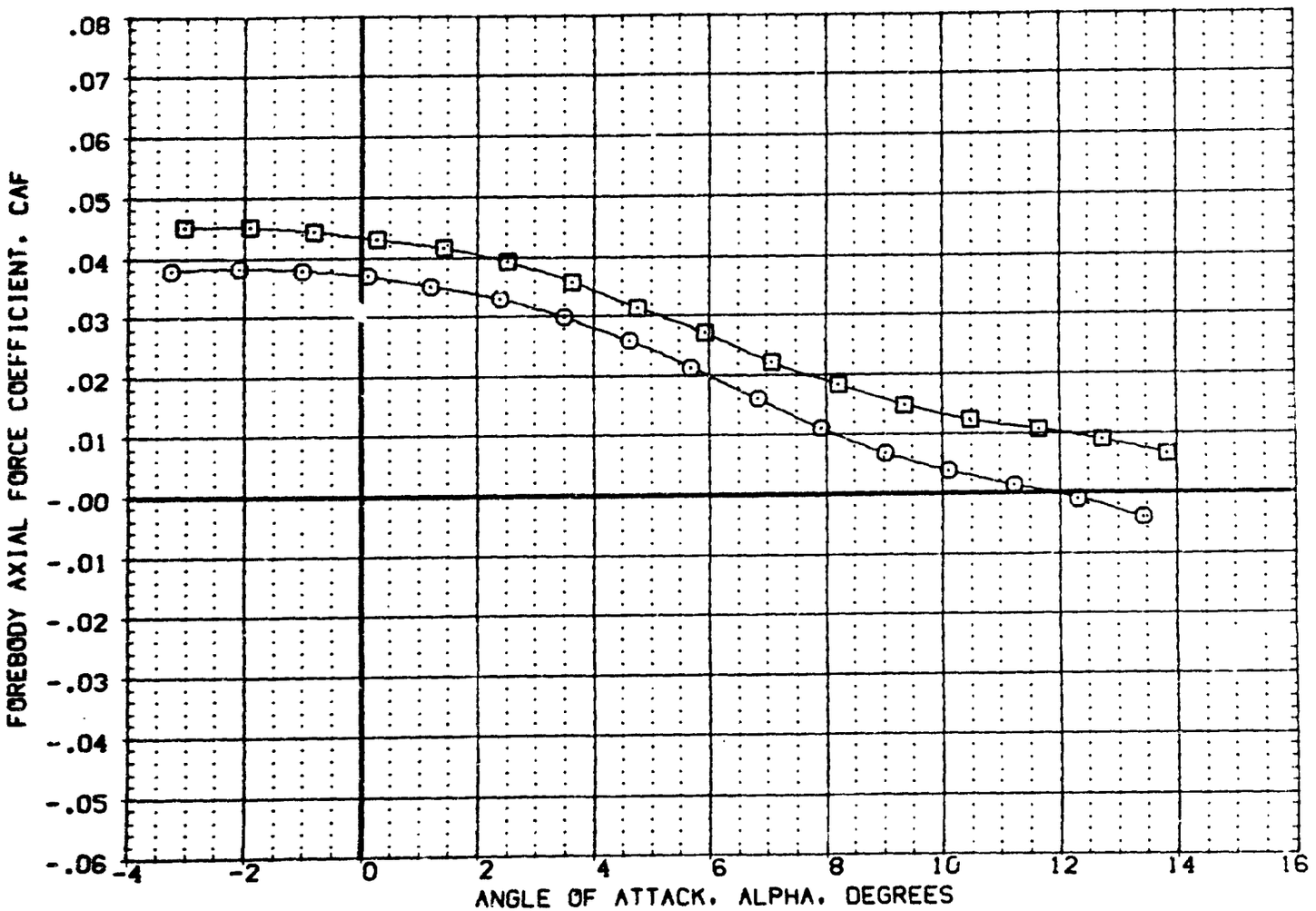

FIG. 11 ELEVON EFFECTIVENESS WITH PYLON MOUNTED NACELLES MOVED AFT

(A)MACH = .70

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(BDY036)	☐	0A91 B19C7F5J60V107E23V7R5X20
(ADY037)	☐	0A91 B19C7F5J60V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

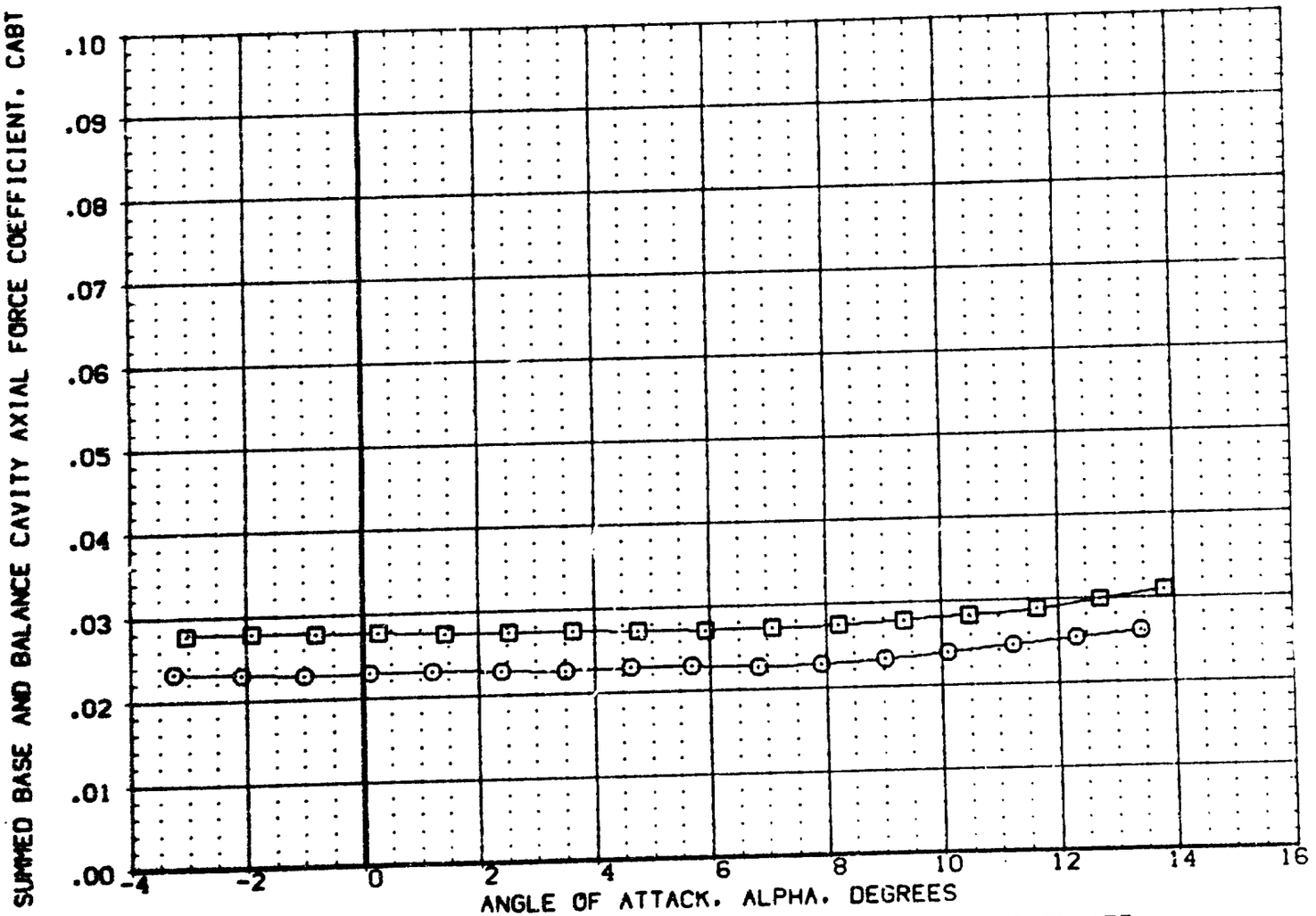

FIG. 11 ELEVON EFFECTIVENESS WITH PYLON MOUNTED NACELLES MOVED AFT

(A)MACH = .70

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	BFLAP	BETA
(BDY026)		0A91 B19C7F5V60V107E23V7R5X20	.000	-11.700	.000
(ADV027)	□	0A91 B19C7F5V60V107E23V7R5X20	10.000	-11.700	.000

REFERENCE INFORMATION		
SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

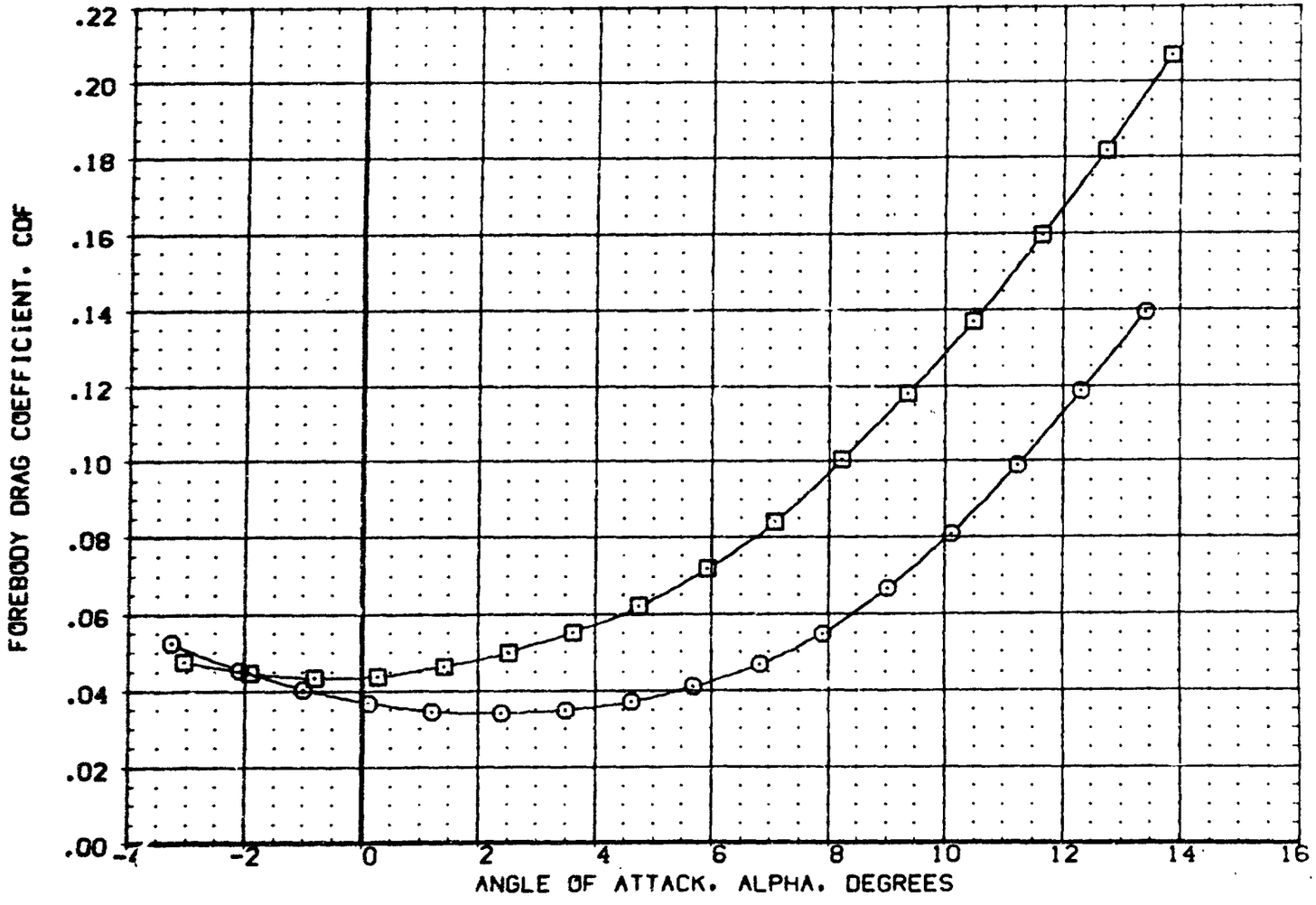

FIG. 11 ELEVON EFFECTIVENESS WITH PYLON MOUNTED NACELLES MOVED AFT

(A)MACH = .70

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
BDY006	OA91 B19C7F5J60V107E23V7R5X20
ADY007	OA91 B19C7F5J60V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000

REFERENCE INFORMATION		
SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

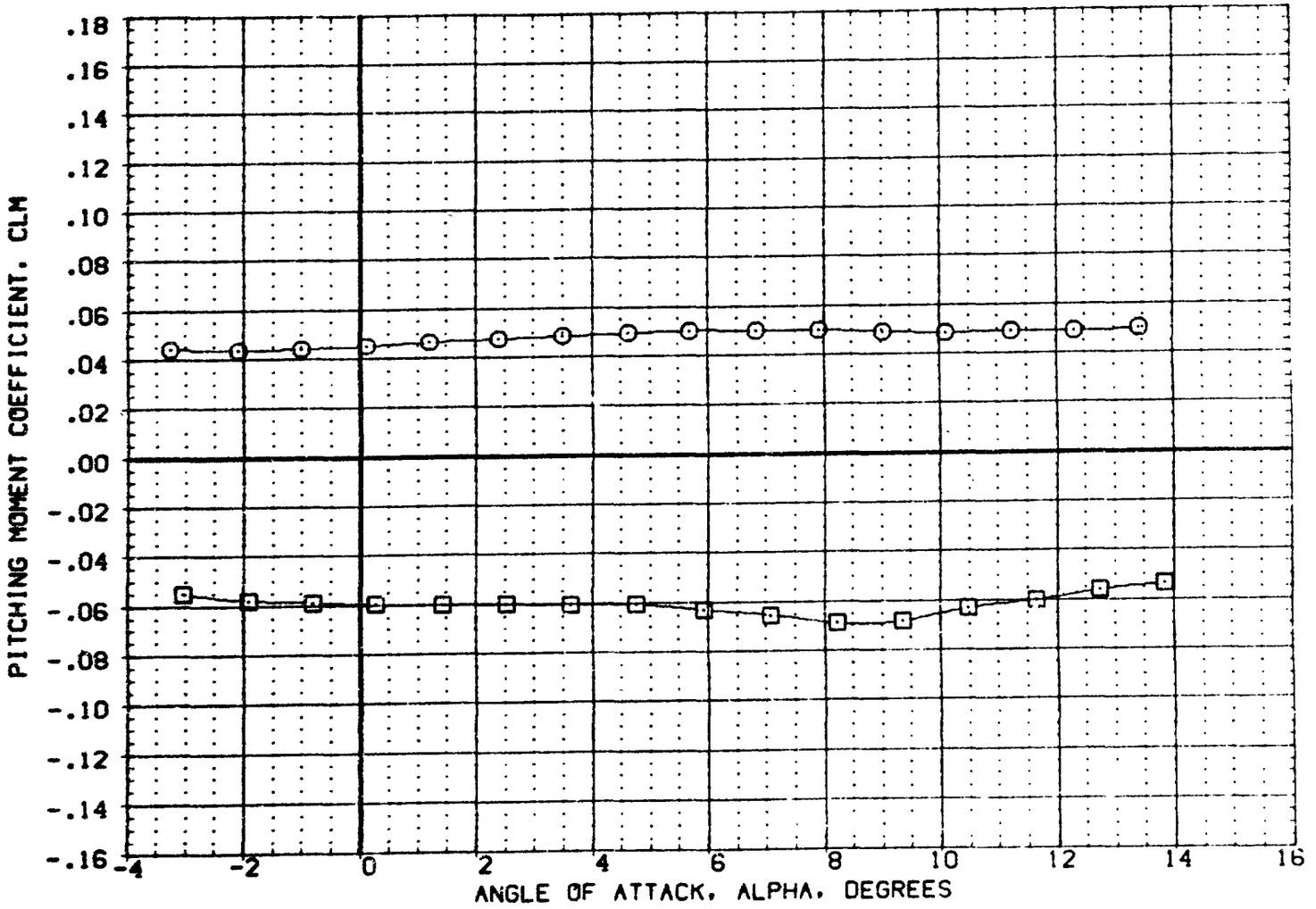

FIG. 11 ELEVON EFFECTIVENESS WITH PYLON MOUNTED NACELLES MOVED AFT

(A)MACH = .70

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	BFLAP	BETA
BDY006	○	0A91 B19C7F5J60V107E23V7R5X20	.000	-11.700	.000
ADY007	□	0A91 B19C7F5J60V107E23V7R5X20	10.000	-11.700	.000

REFERENCE INFORMATION		
SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

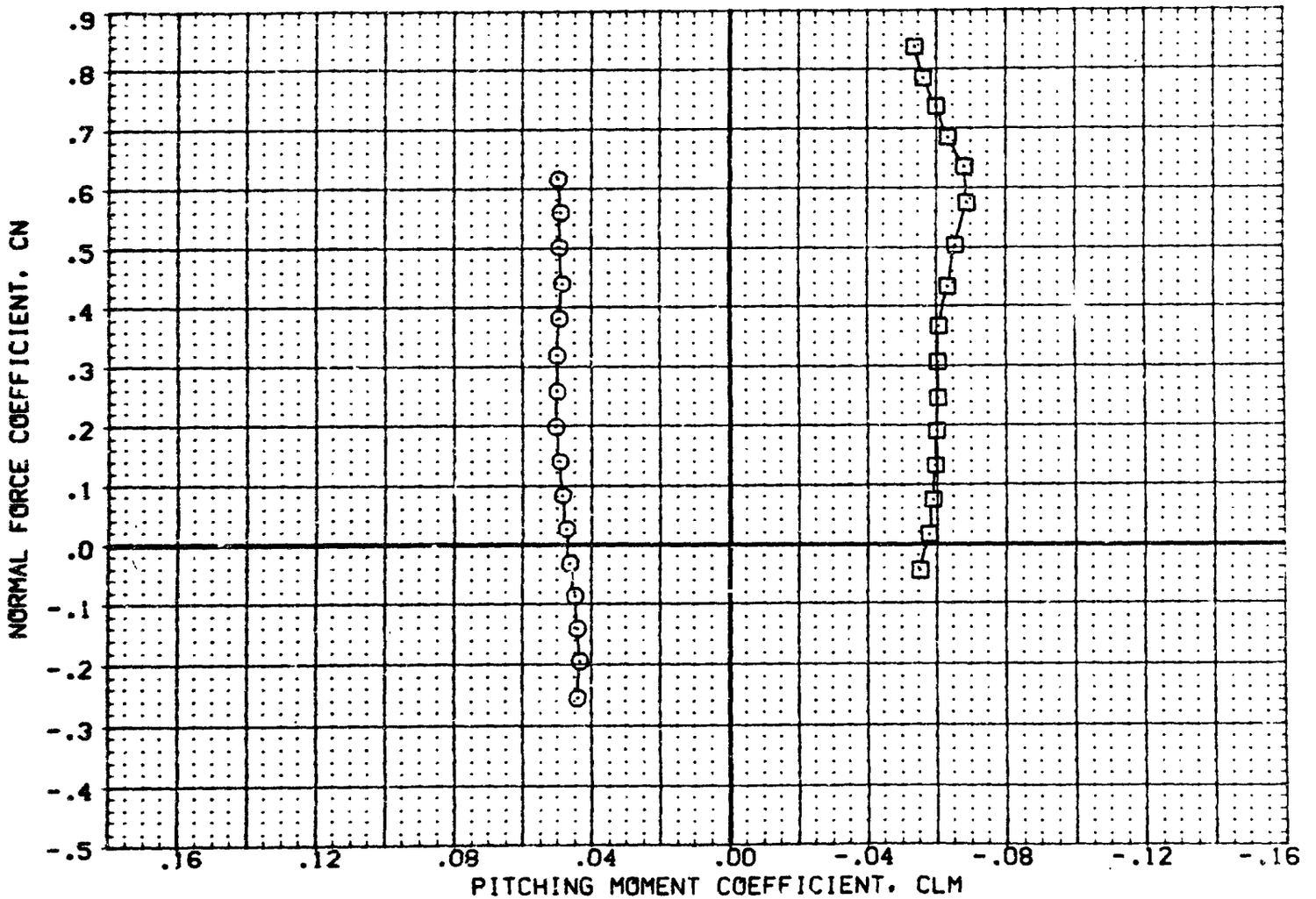

FIG. 11 ELEVON EFFECTIVENESS WITH PYLON MOUNTED NACELLES MOVED AFT

(A)MACH = .70

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	BFLAP	BETA
BDY006		0A91 B19C7F5J60V107E23V7R5X20	.000	-11.700	.000
ACY007		0A91 B19C7F5J60V107E23V7R5X20	10.000	-11.700	.000

REFERENCE INFORMATION		
SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

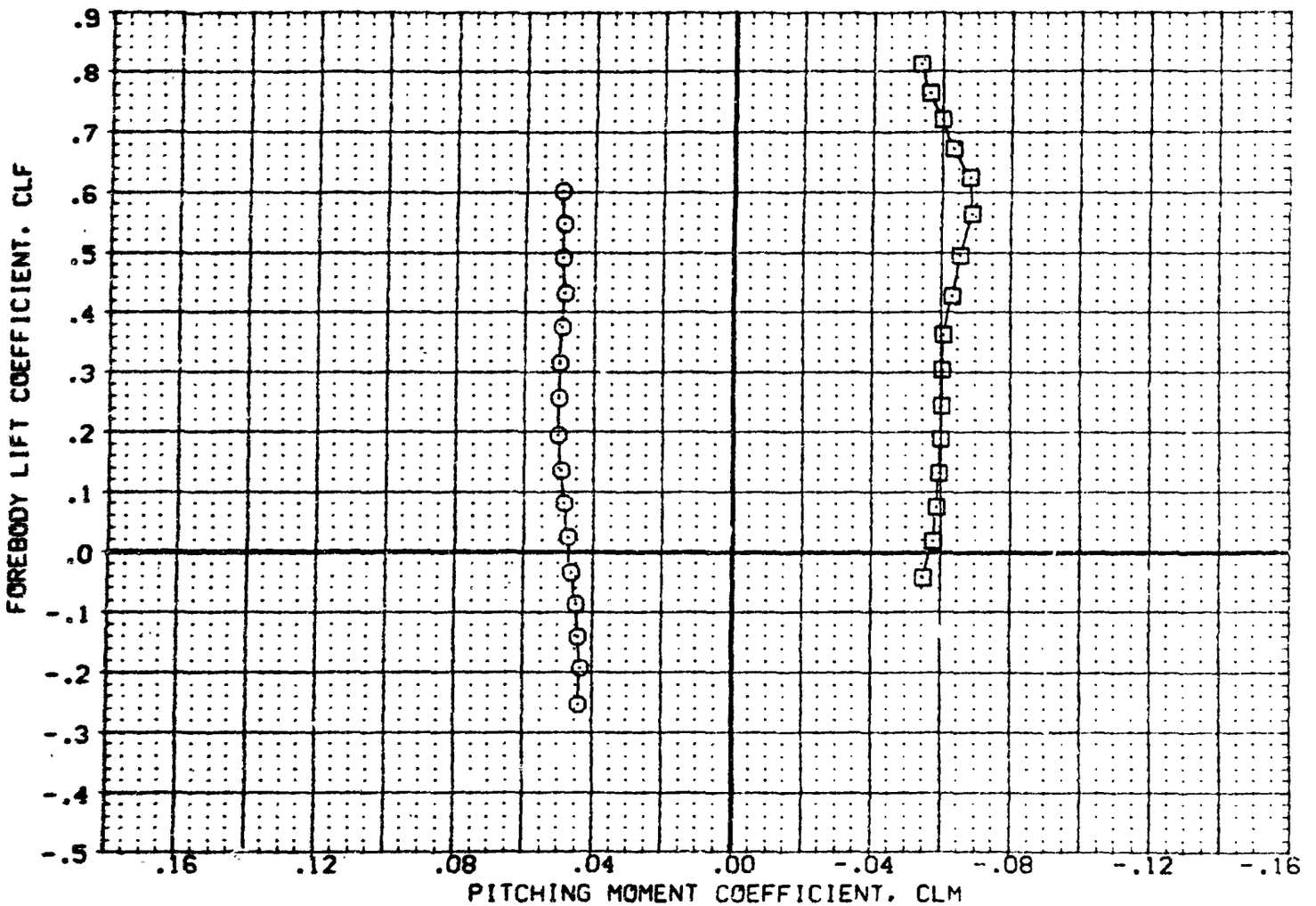

FIG. 11 ELEVON EFFECTIVENESS WITH PYLON MOUNTED NACELLES MOVED AFT

(A)MACH = .70

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
BCY006	OA91 B19C7F5J60V107E23V7R5X20
ACY007	OA91 B19C7F5J60V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

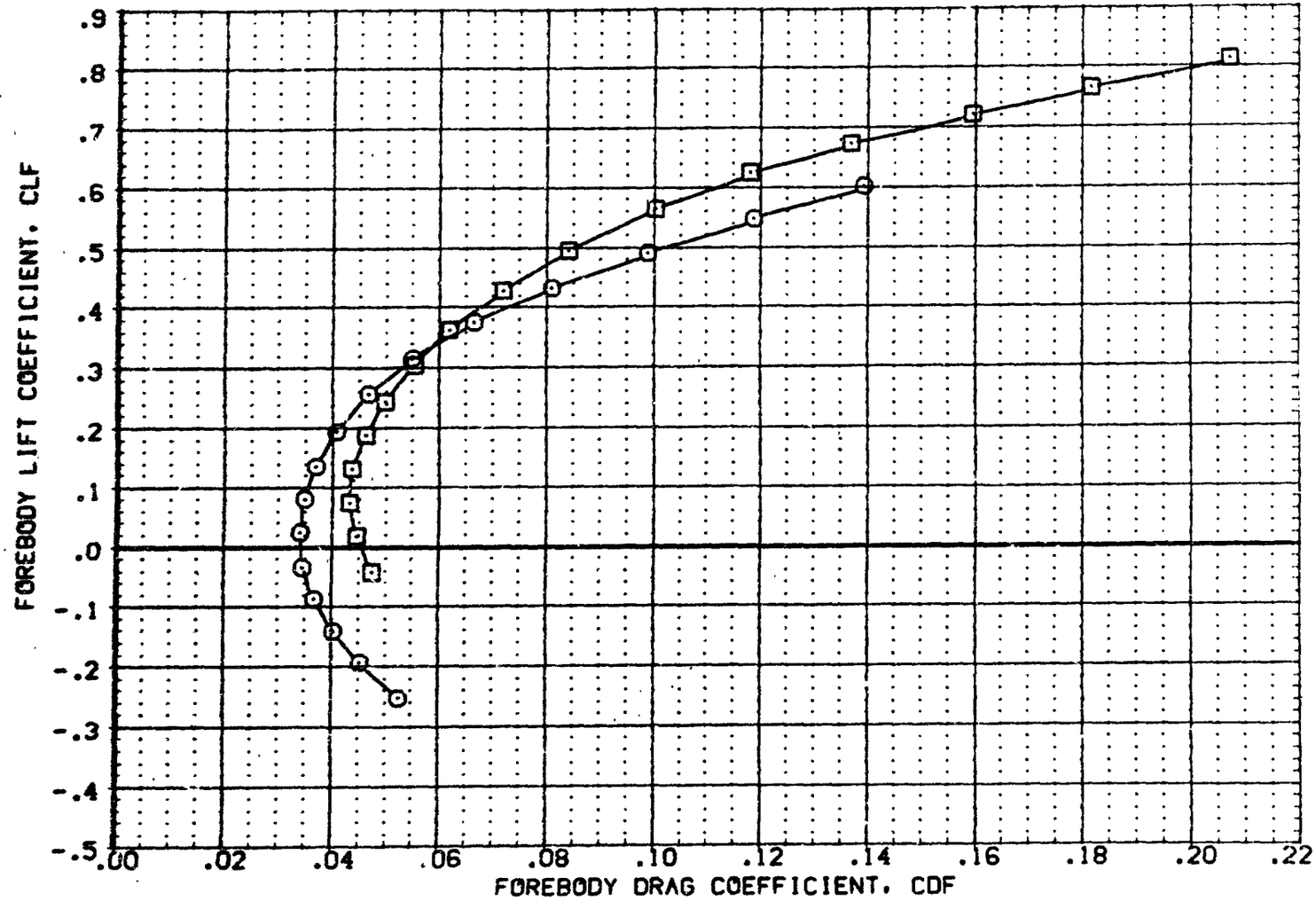

FIG. 11 ELEVON EFFECTIVENESS WITH PYLON MOUNTED NACELLES MOVED AFT

(A)MACH = .70

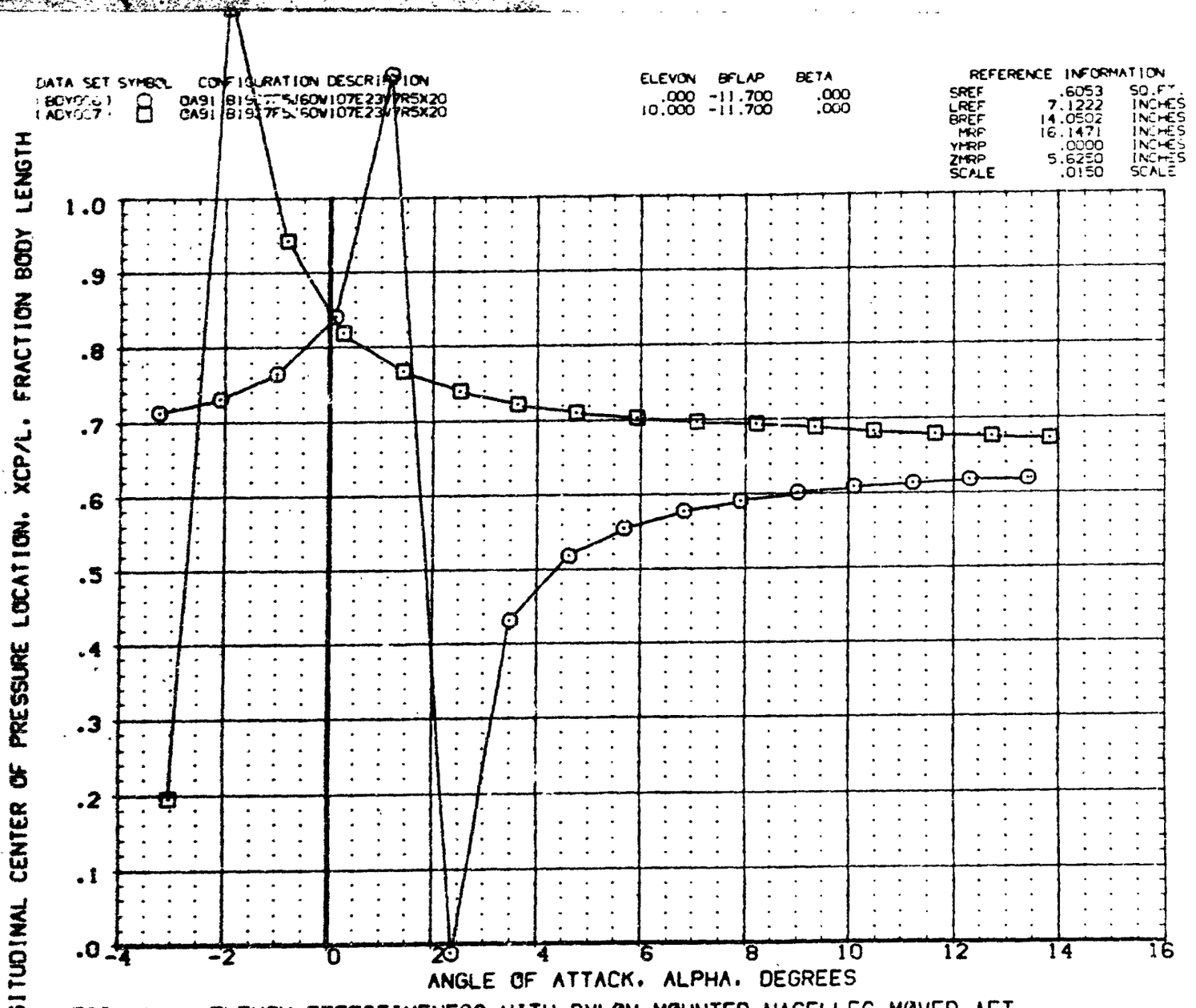

FIG. 11 ELEVON EFFECTIVENESS WITH PYLON MOUNTED NACELLES MOVED AFT

(A)MACH = .70

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(BDYC06)	○	0A91 B19C7FSJ60W107E23V7R5X20
(ADYC07)	□	0A91 B19C7FSJ60W107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

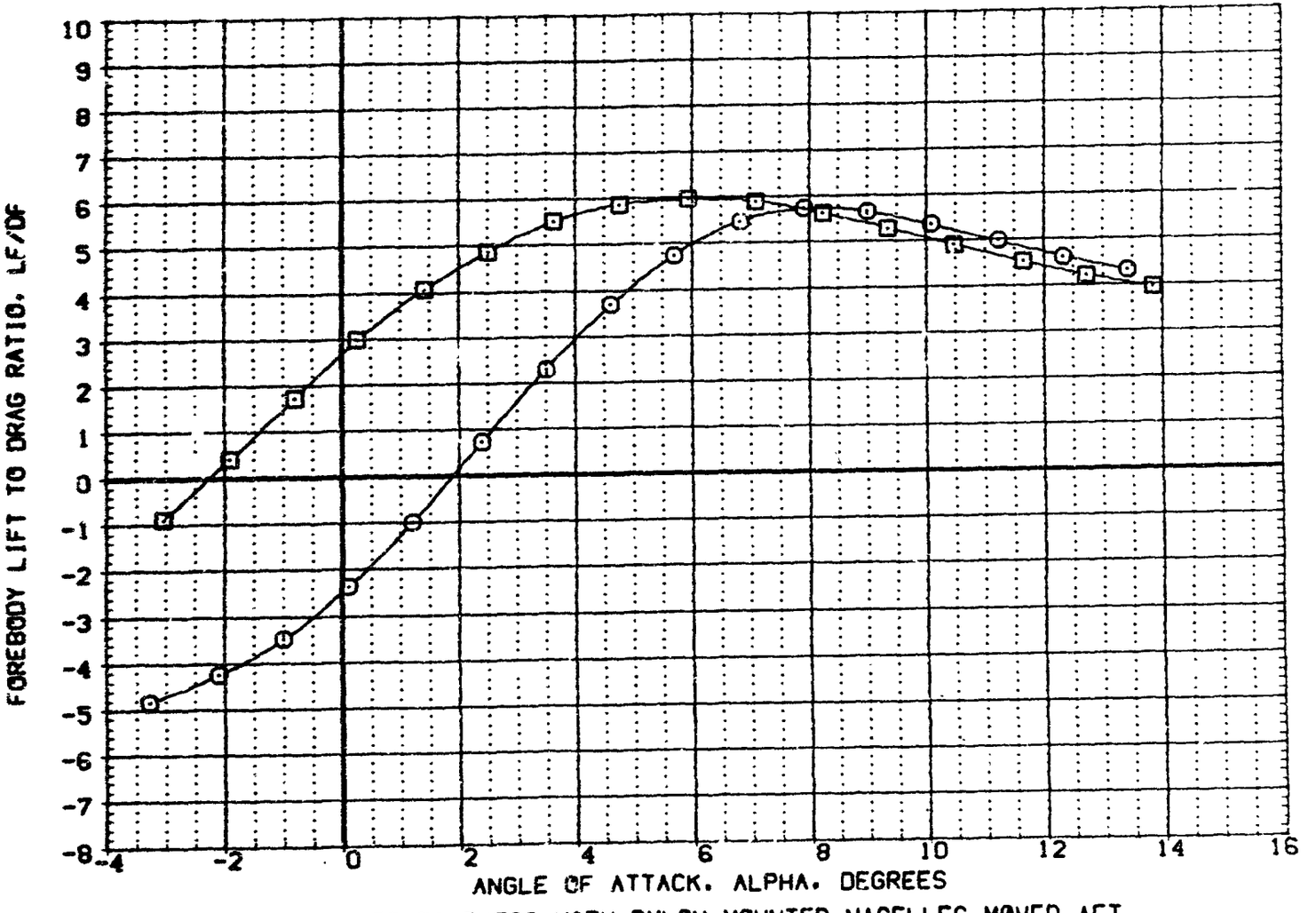

FIG. 11 ELEVON EFFECTIVENESS WITH PYLON MOUNTED NACELLES MOVED AFT

(A)MACH = .70

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
BOY00(1)	0A91 B19C7F5J61V107E23V7R5X20
ADYO1O(1)	0A91 B19C7F5J61V107E23V7R5X20
ADY011(1)	0A91 B19C7F5J61V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000
-10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

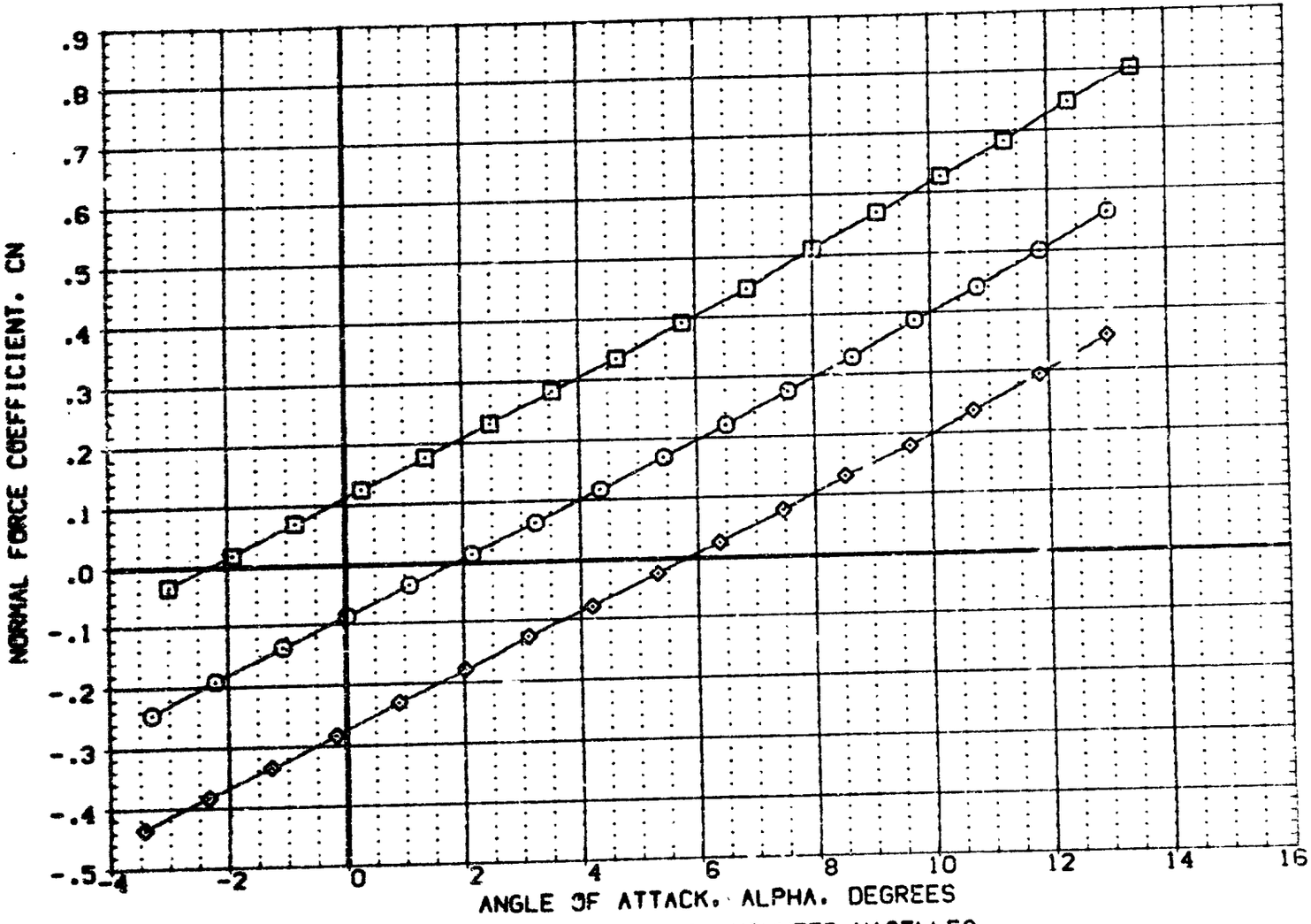

FIG. 12 ELEVON EFFECTIVENESS WITH FLUSH MOUNTED NACELLES

(A)MACH = .50

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	BFLAP	BETA
(BDY018)	0A91 B19C7F5W61W107E23V7R5X20	.000	-11.700	.000
(ADY010)	0A91 B19C7F5W61W107E23V7R5X20	10.000	-11.700	.000
(ADY011)	0A91 B19C7F5W61W107E23V7R5X20	-10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

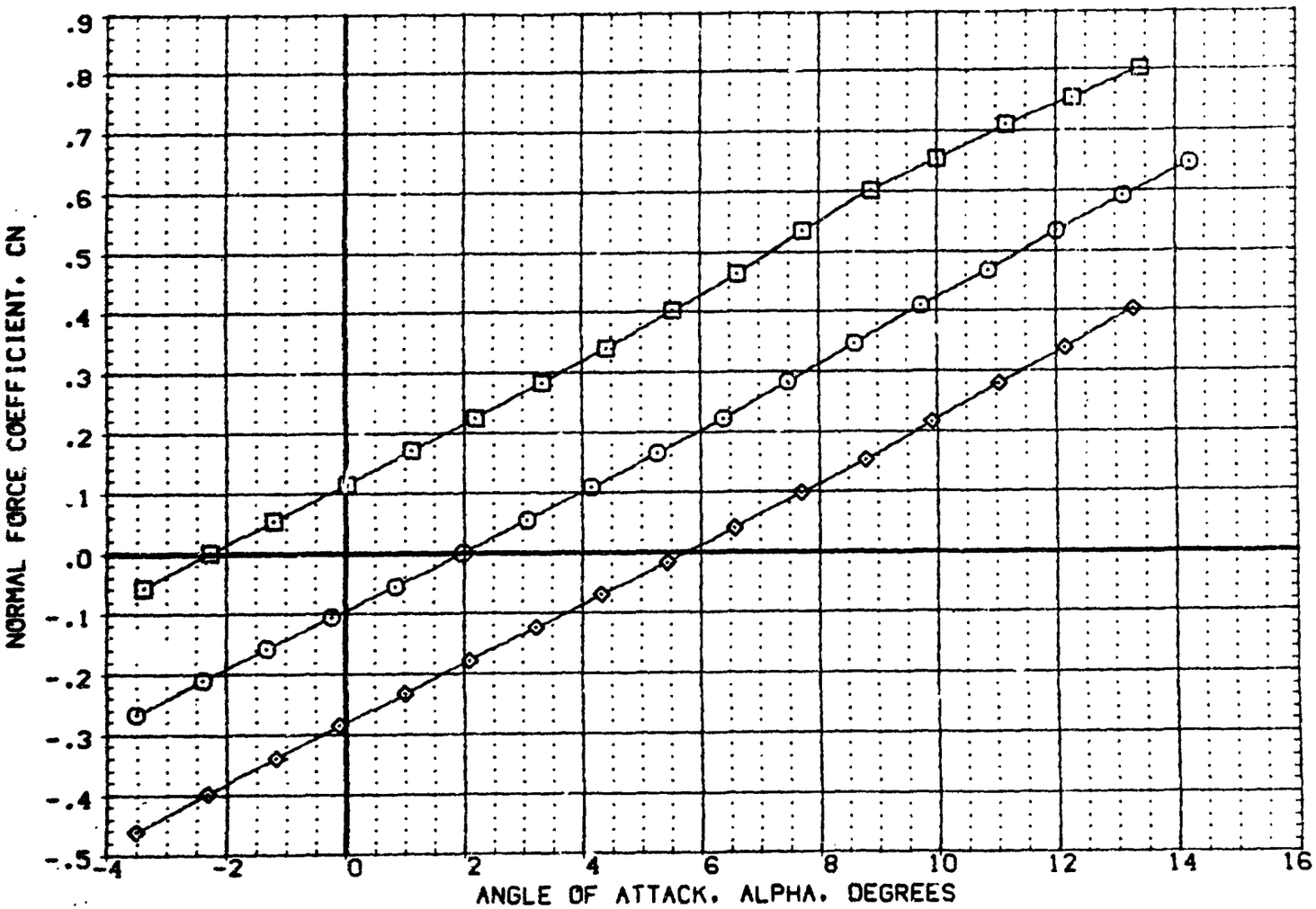

FIG. 12 ELEVON EFFECTIVENESS WITH FLUSH MOUNTED NACELLES

(B)MACH = .69

DATA SET SYMBOL		CONFIGURATION DESCRIPTION
(BCY0C8)	○	OA91 B19C7FSJ61V107E23V7PEX20
(ACY0111)	□	OA91 B19C7FSJ61V107E23V7R5X20
ADY0111	◇	OA91 B19C7FSJ61V107E23V7REX20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000
-10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	6.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

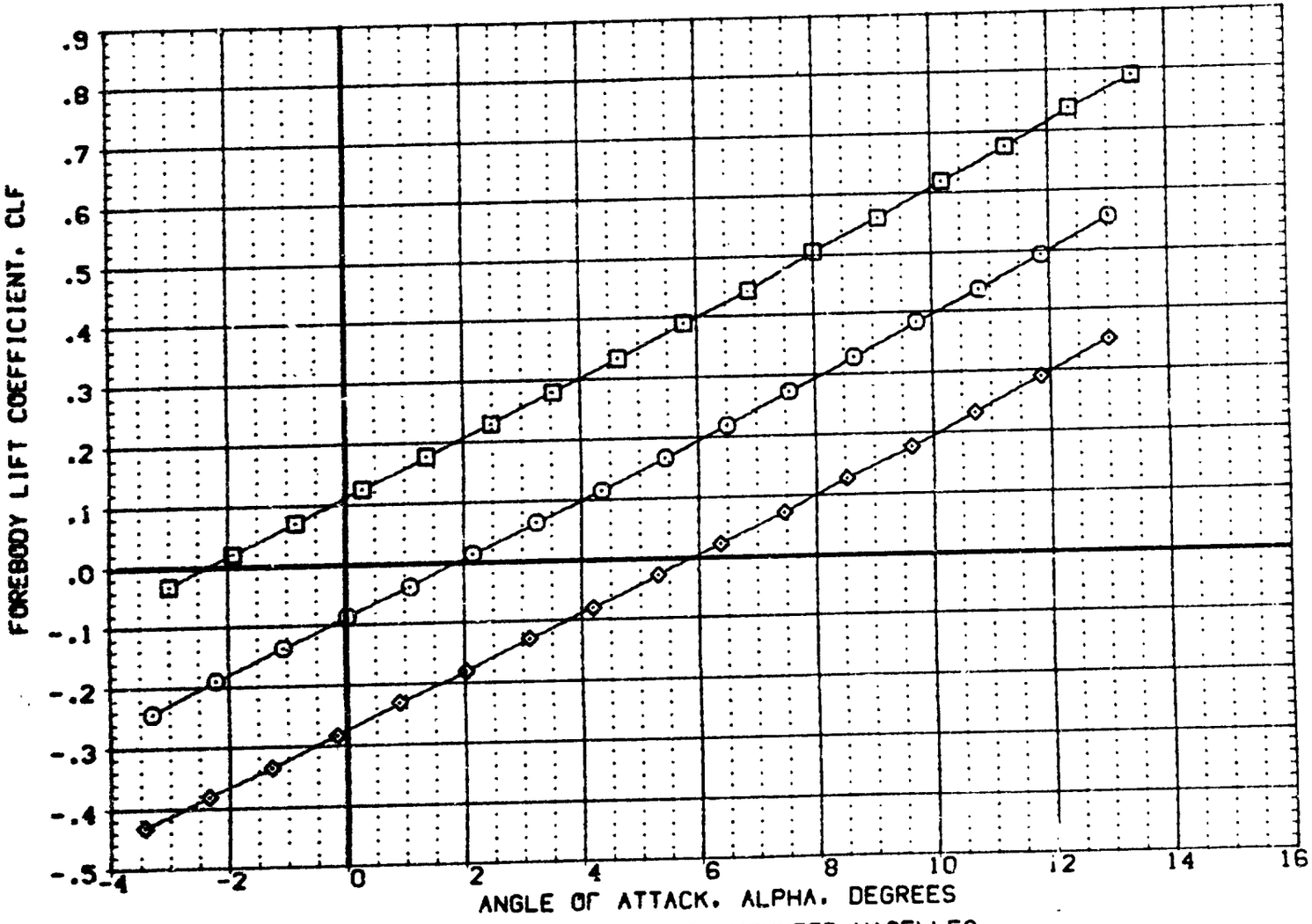

FIG. 12 ELEVON EFFECTIVENESS WITH FLUSH MOUNTED NACELLES

(A)MACH = .50

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
BOY008	□	0A91 B19C7F5J61V107E23V7R5X20
ADYC10	○	0A91 B19C7F5J61V107E23V7R5X20
ADYC11	◇	0A91 B19C7F5J61V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000
-10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT
LREF	7.1222	INCHES
BREF	14.0302	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

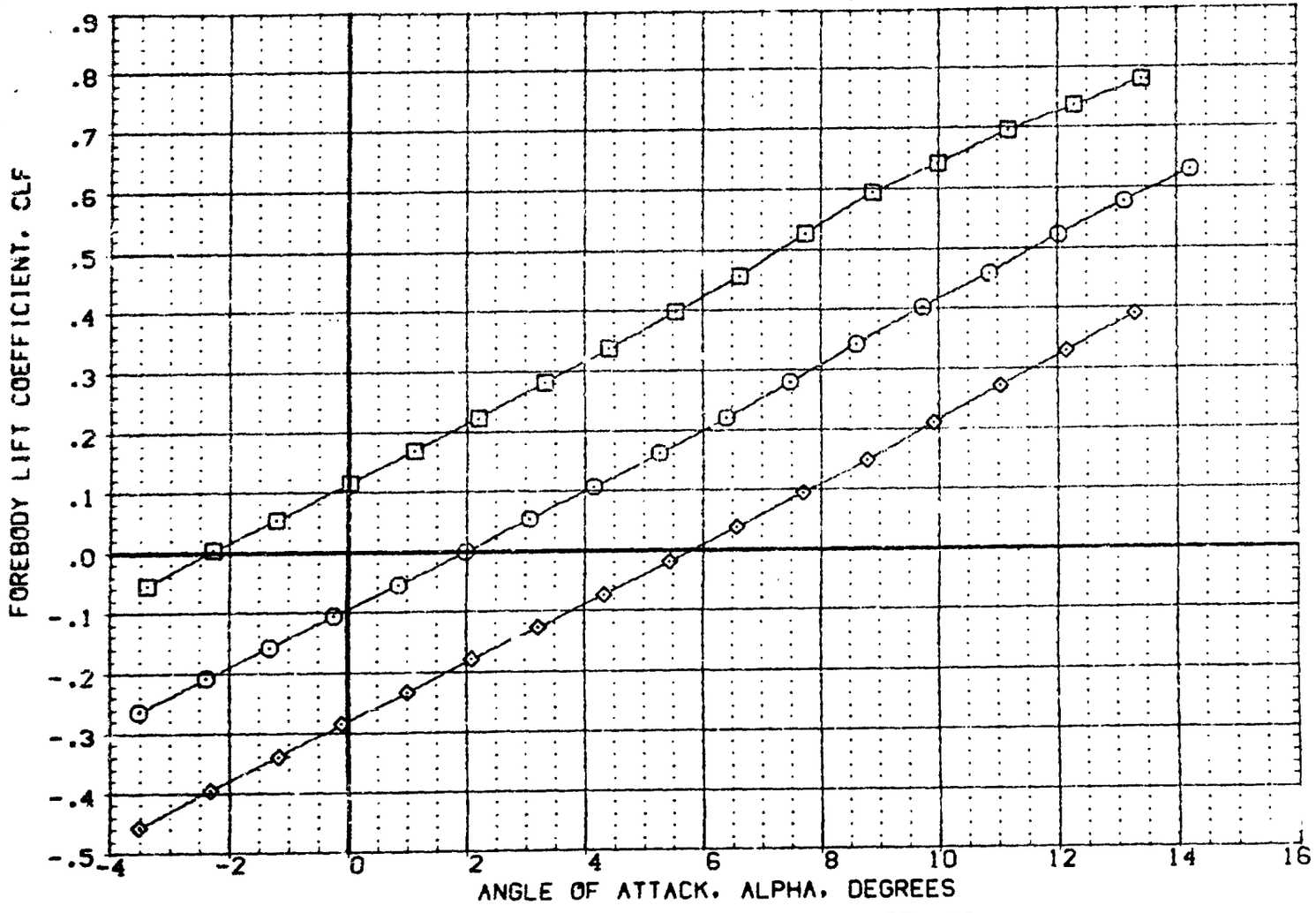

FIG. 12 ELEVON EFFECTIVENESS WITH FLUSH MOUNTED NACELLES

(B)MACH = .69

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	BFLAP	BETA
(BOY( )	OA91 B19C7F5J61W107E23V7R5X20	.000	-11.700	.000
(ADYO( )	OA91 B19C7F5J61W107E23V7R5X20	10.000	-11.700	.000
(ADYO( )	OA91 B19C7F5J61W107E23V7R5X20	-10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

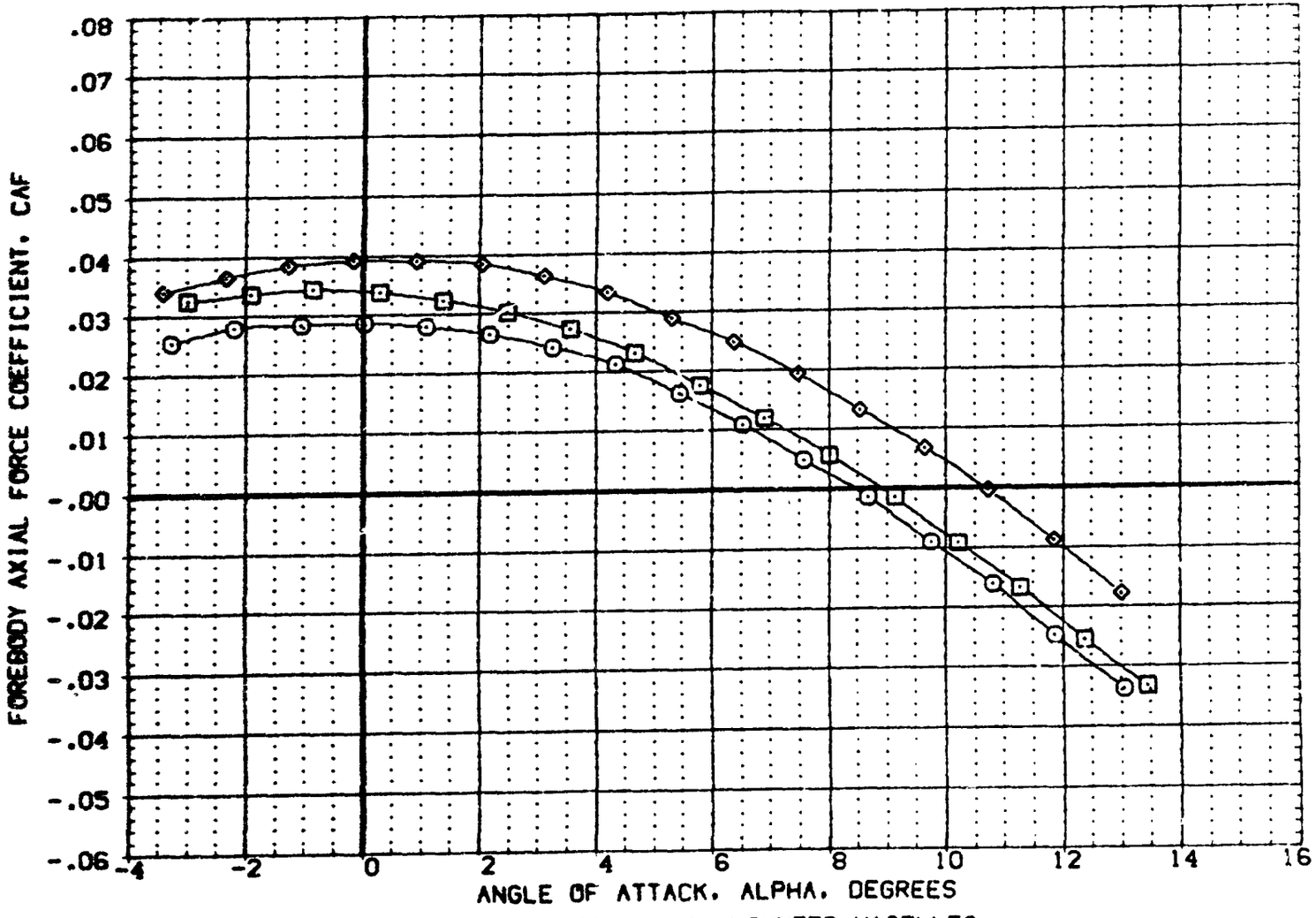

FIG. 12 ELEVON EFFECTIVENESS WITH FLUSH MOUNTED NACELLES

(A)MACH = .50

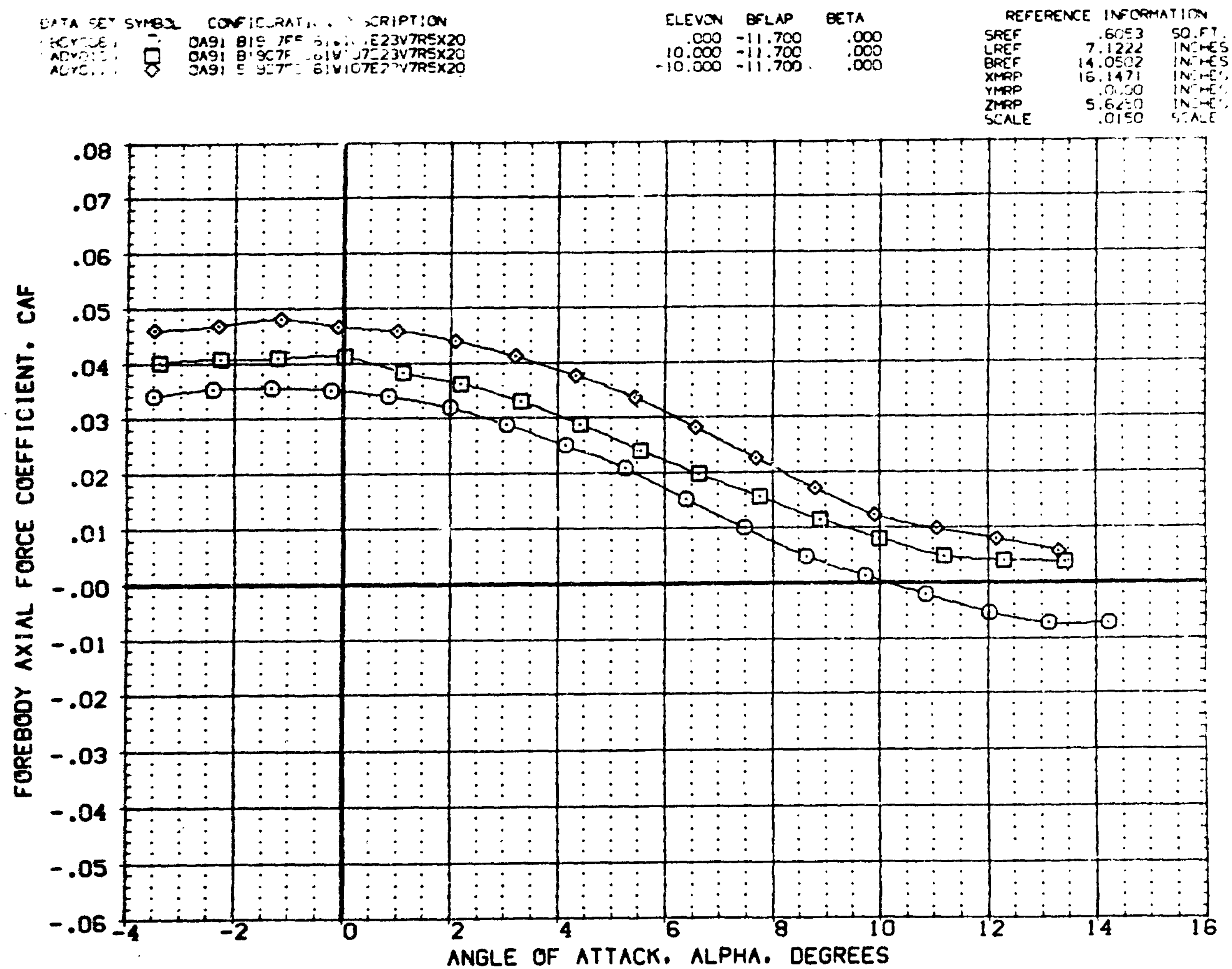

FIG. 12 ELEVON EFFECTIVENESS WITH FLUSH MOUNTED NACELLES

(B)MACH = .69

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
BCY008	□	0A91 B19C7F5J61V107E23V7R5X20
ADY010	◇	0A91 B19C7F5J61V107E23V7R5X20
ADY011	○	0A91 B19C7F5J61V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000
-10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

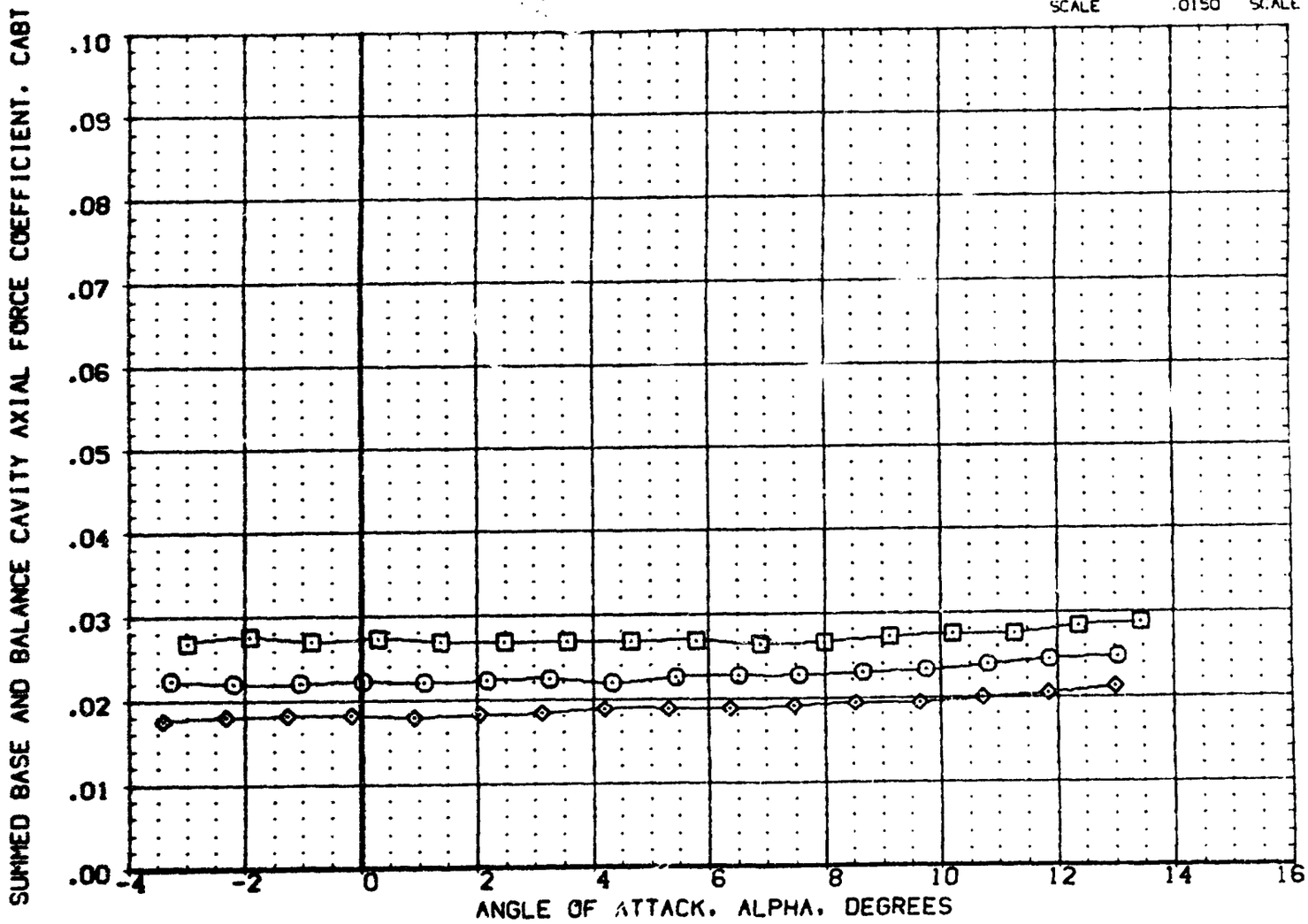

FIG. 12 ELEVON EFFECTIVENESS WITH FLUSH MOUNTED NACELLES

(A)MACH = .50

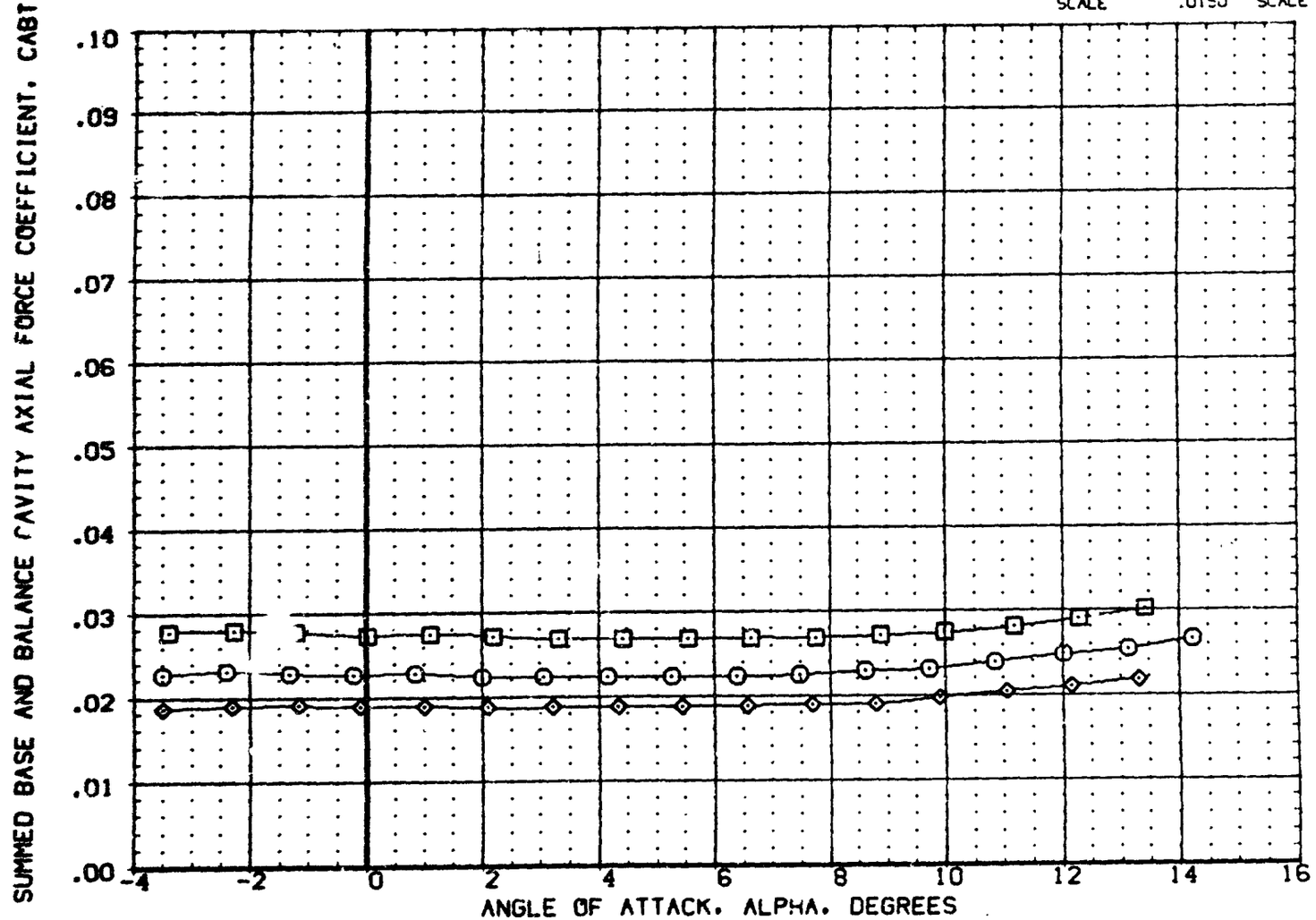

FIG. 12 ELEVON EFFECTIVENESS WITH FLUSH MOUNTED NACELLES

(3)MACH = .69

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(BDY008)	0A91 B19C7F5J61V107E23V7R5X20
(ADY010)	0A91 B19C7F5J61V107E23V7R5X20
(ADY011)	0A91 B19C7F5J61V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000
-10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

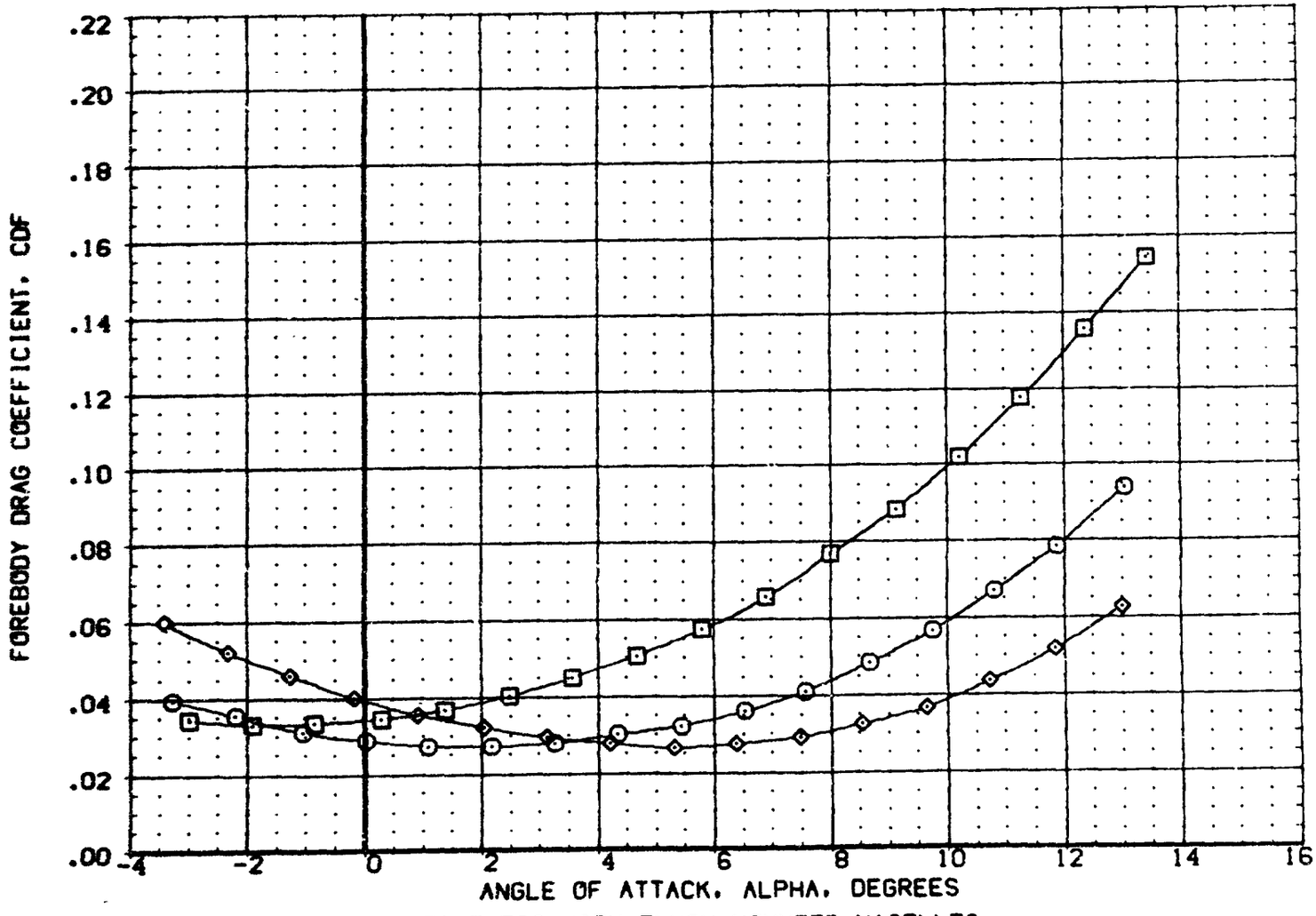

FIG. 12 ELEVON EFFECTIVENESS WITH FLUSH MOUNTED NACELLES

(A)MACH = .50

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(BDY008)	0A91 B19C7FSJ61V107E23V7R5X20
(ADY010)	0A91 B19C7FSJ61V107E23V7R5X20
(ACY011)	0A91 B19C7FSJ61V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000
-10.000	-11.700	.000

REFERENCE INFORMATION		
SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.015C	SCALE

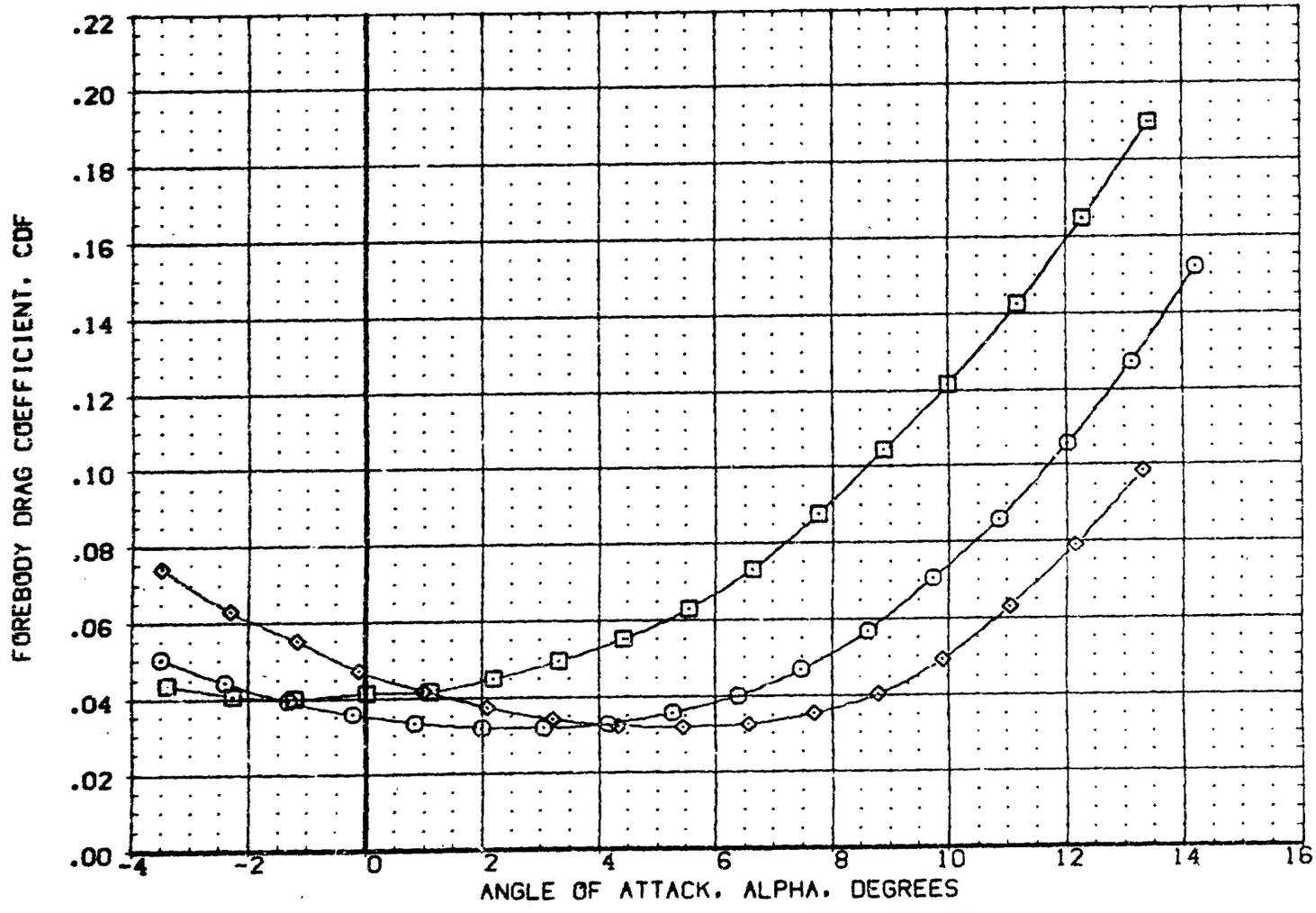

FIG. 12 ELEVON EFFECTIVENESS WITH FLUSH MOUNTED NACELLES

(B)MACH = .89

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BDY008)	○	0A91 B19C7F5J61V107E23V7R5X20
(ADY010)	□	0A91 B19C7F5J61V107E23V7R5X20
(ADY011)	◇	0A91 B19C7F5J61V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000
-10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

FIG. 12 ELEVON EFFECTIVENESS WITH FLUSH MOUNTED NACELLES

(A)MACH = .50

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
60Y008	0A91 B19C7F5J61V107E23V7R5X20
ADY010	0A91 B19C7F5J61V107E23V7R5X20
ADYC11	0A91 B19C7F5J61V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000
-10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

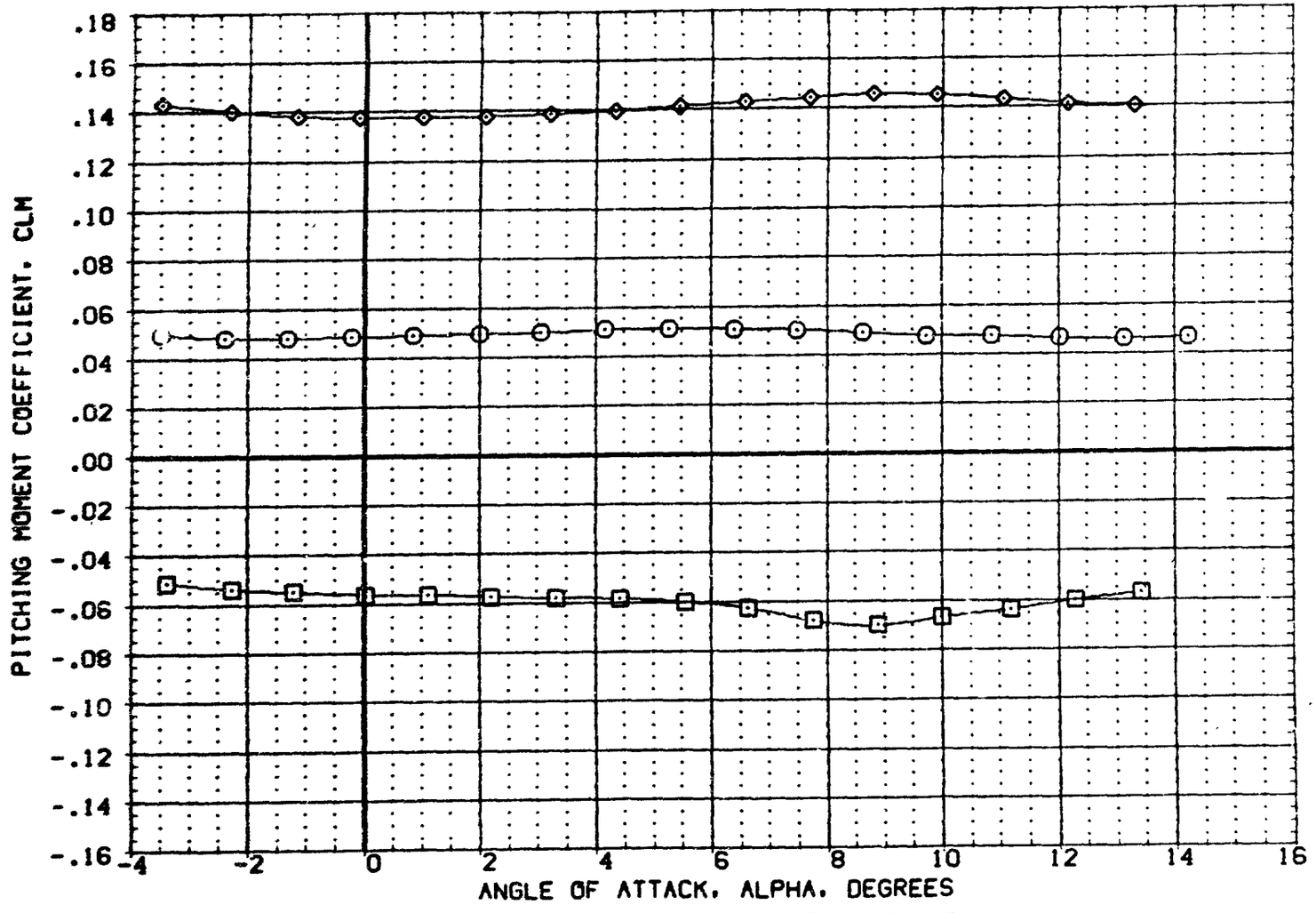

FIG. 12 ELEVON EFFECTIVENESS WITH FLUSH MOUNTED NACELLES

(B)MACH = .69

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BDY008)		0A91 B19C7F5J61V107E23V7R5X20
(ADY010)		0A91 B19C7F5J61V107E23V7R5X20
(ADY011)		0A91 B19C7F5J61V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000
-10.000	-11.700	.000

REFERENCE INFORMATION		
SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

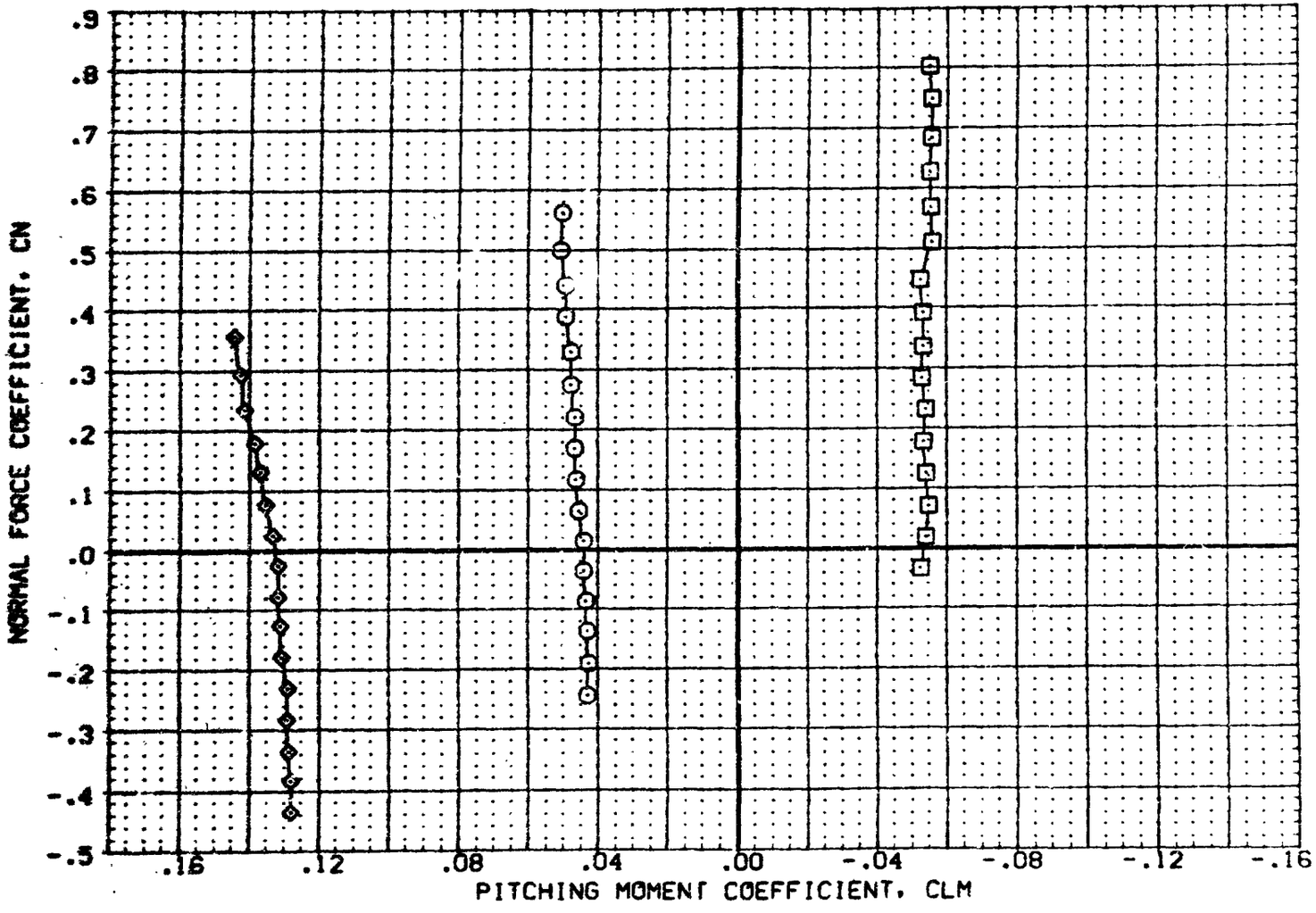

FIG. 12 ELEVON EFFECTIVENESS WITH FLUSH MOUNTED NACELLES

(A)MACH = .50

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	BFLAP	BETA
(ELEV008)	0A91 B19C7F5J61V107E23V7R5X20	.000	-11.700	.000
(ADY010)	0A91 B19C7F5J61V107E23V7R5X20	10.000	-11.700	.000
(ADY011)	0A91 B19C7F5J61V107E23V7R5X20	-10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

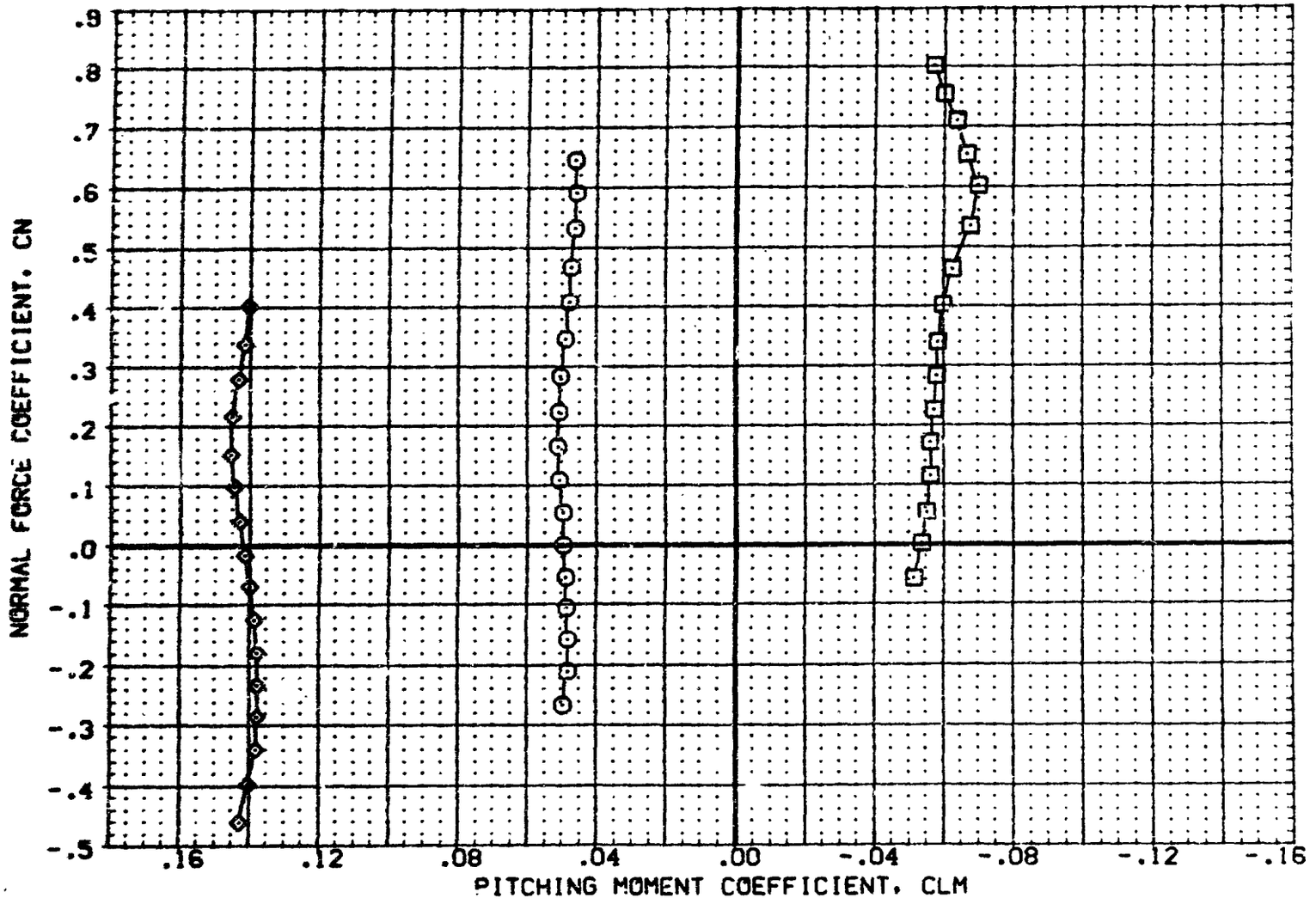

FIG. 12 ELEVON EFFECTIVENESS WITH FLUSH MOUNTED NACELLES

(B)MACH = .69

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	BFLAP	BETA
(BOY008)	OA91 B19C7F5J61V107E23V7R5X20	.000	-11.700	.000
(ADY010)	OA91 B19C7F5J61V107E23V7R5X20	10.000	-11.700	.000
(ADY011)	OA91 B19C7F5J61V107E23V7R5X20	-10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

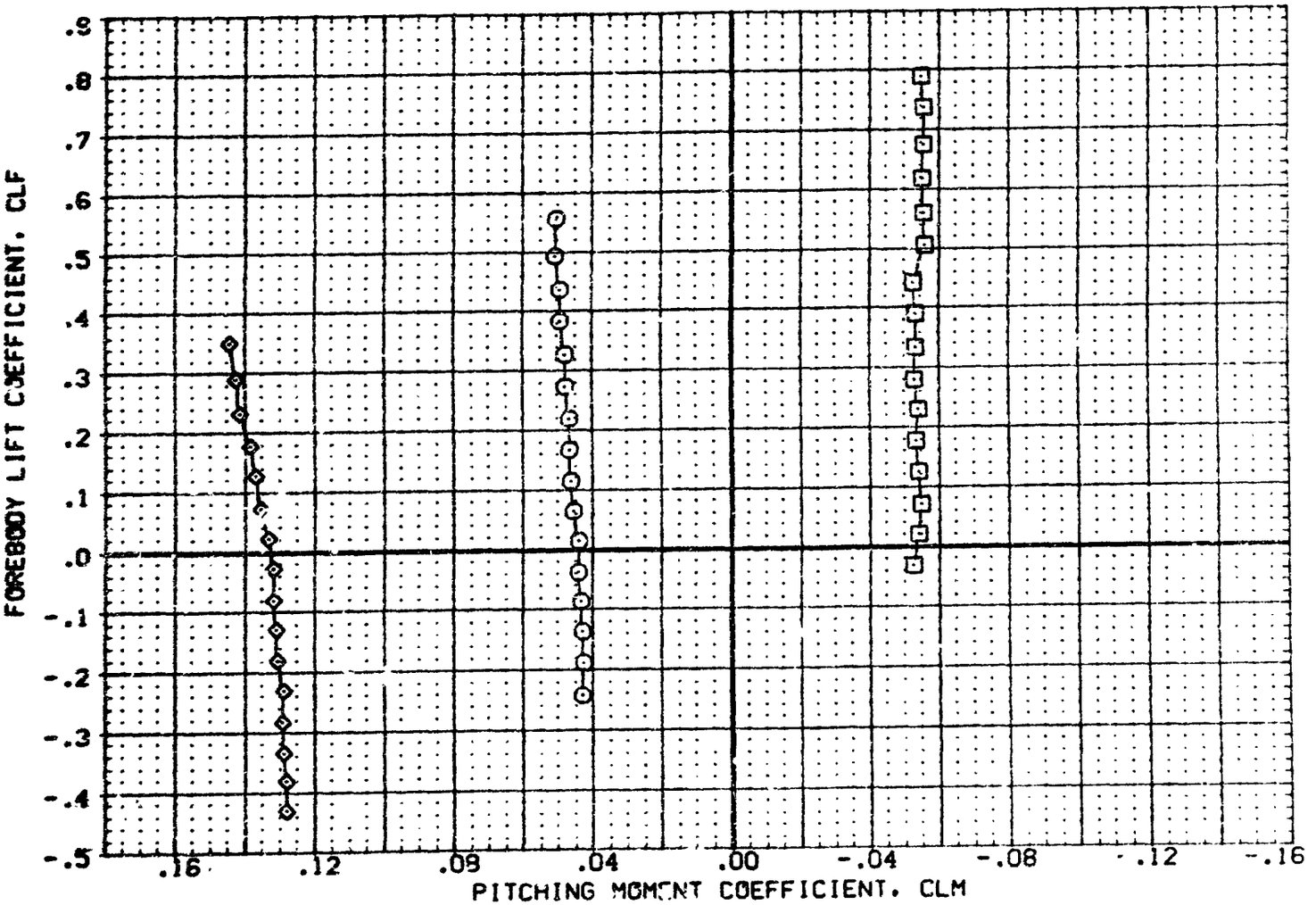

FIG. 12 ELEVON EFFECTIVENESS WITH FLUSH MOUNTED NACELLES

(A)MACH = .50

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BDY008)	□	0A91 B19C7F5J61V107E23V7R5X20
(ADY010)	○	0A91 B19C7F5J61V107E23V7R5X20
(ADY011)	◇	0A91 B19C7F5J61V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
-0.000	-11.700	.000
-10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

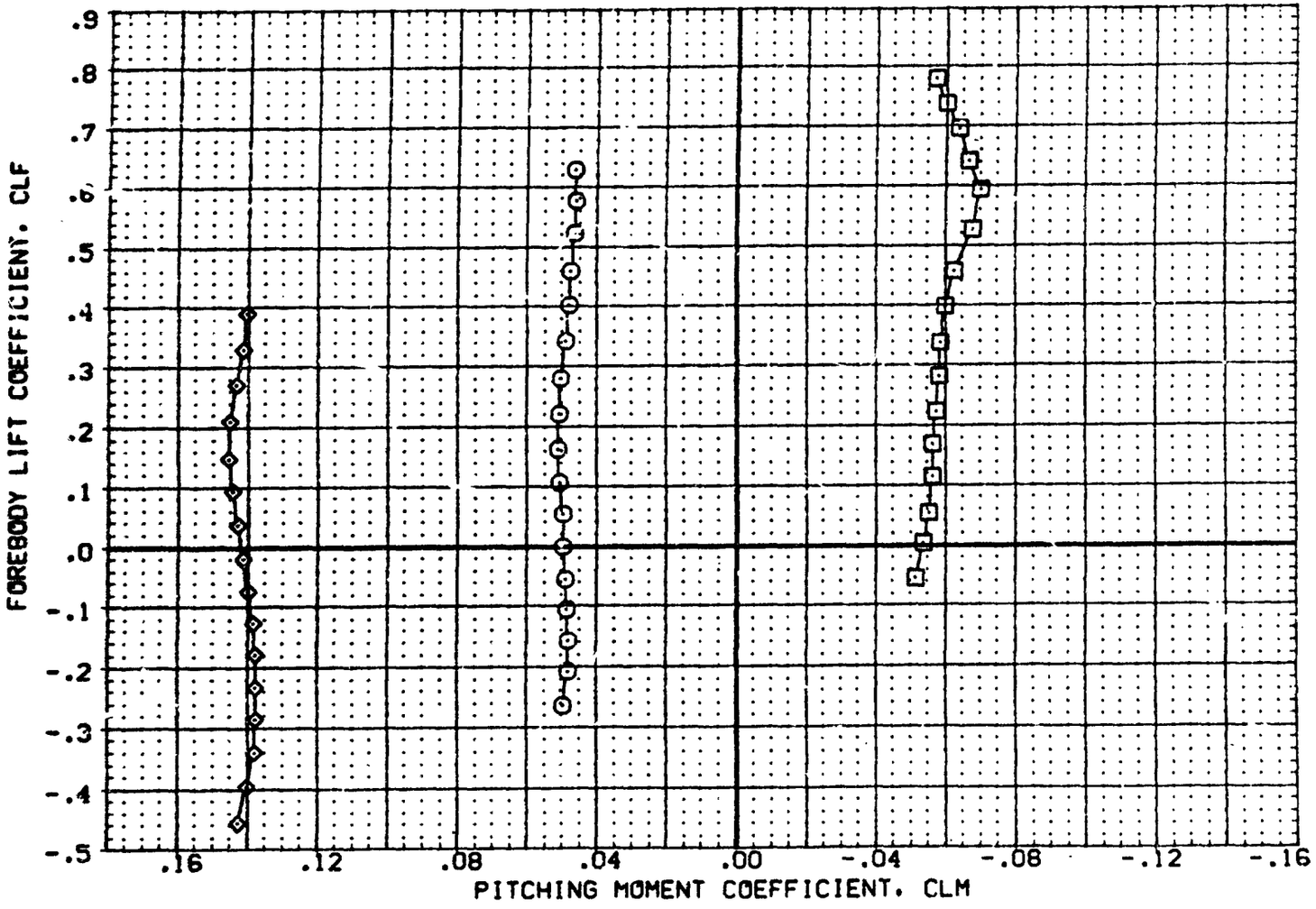

FIG. 12 ELEVON EFFECTIVENESS WITH FLUSH MOUNTED NACELLES

(B)MACH = .69

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(BDY008)	⬭	0A91 B19C7F5J61V107E23V7R5X20
(ADY010)	⬭	0A91 B19C7F5J61V107E23V7R5X20
(ADY011)	◇	0A91 B19C7F5J61V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000
-10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	10.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

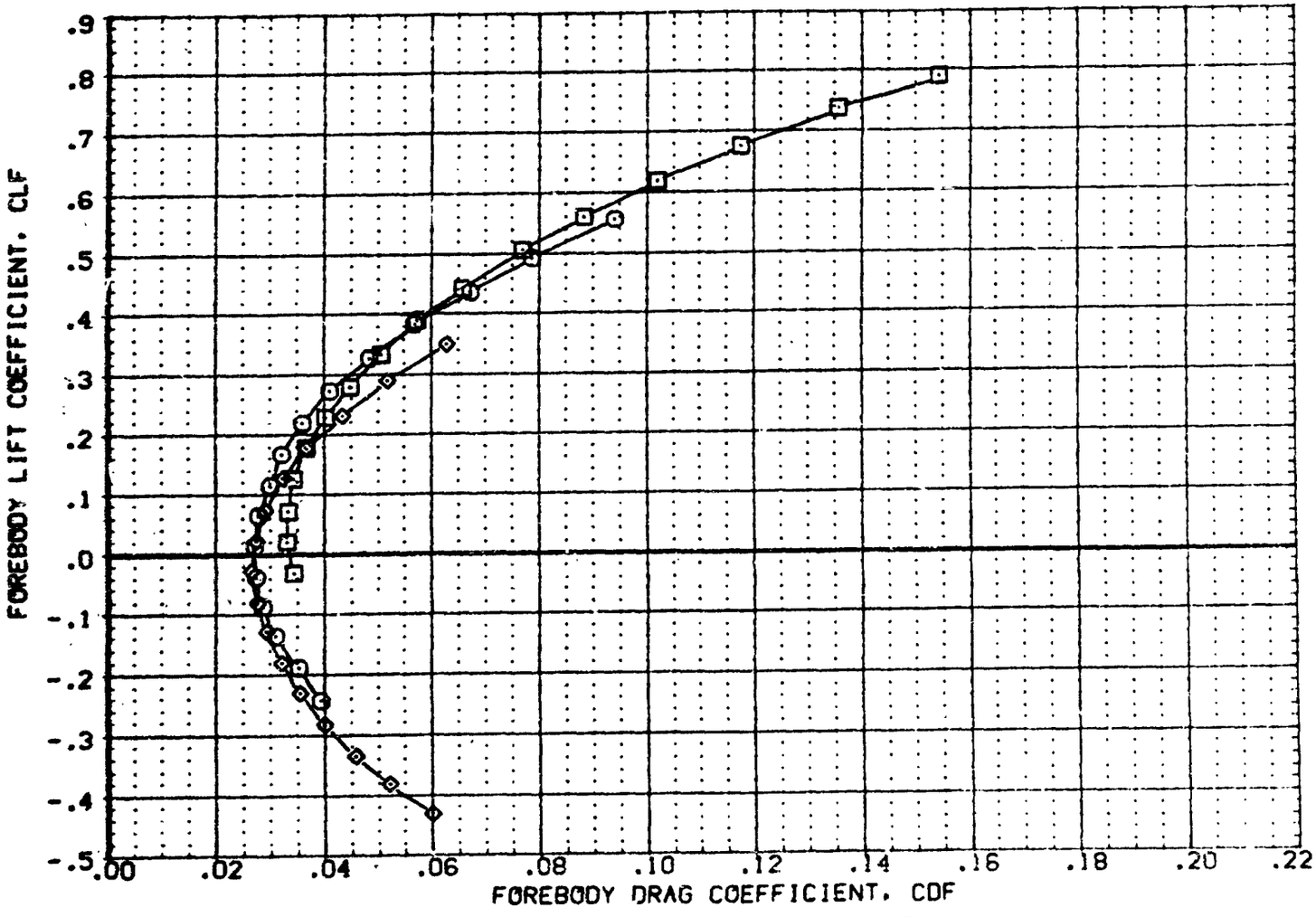

FIG. 12 ELEVON EFFECTIVENESS WITH FLUSH MOUNTED NACELLES

(A)MACH = .50

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(BDY008)	0A91 B1SC7FSJ61V107E23V7R5X20
(ADY010)	0A91 B1SC7FSJ61V107E23V7R5X20
(ADY011)	0A91 B1SC7FSJ61V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000
-10.000	-11.700	.000

REFERENCE INFORMATION		
SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

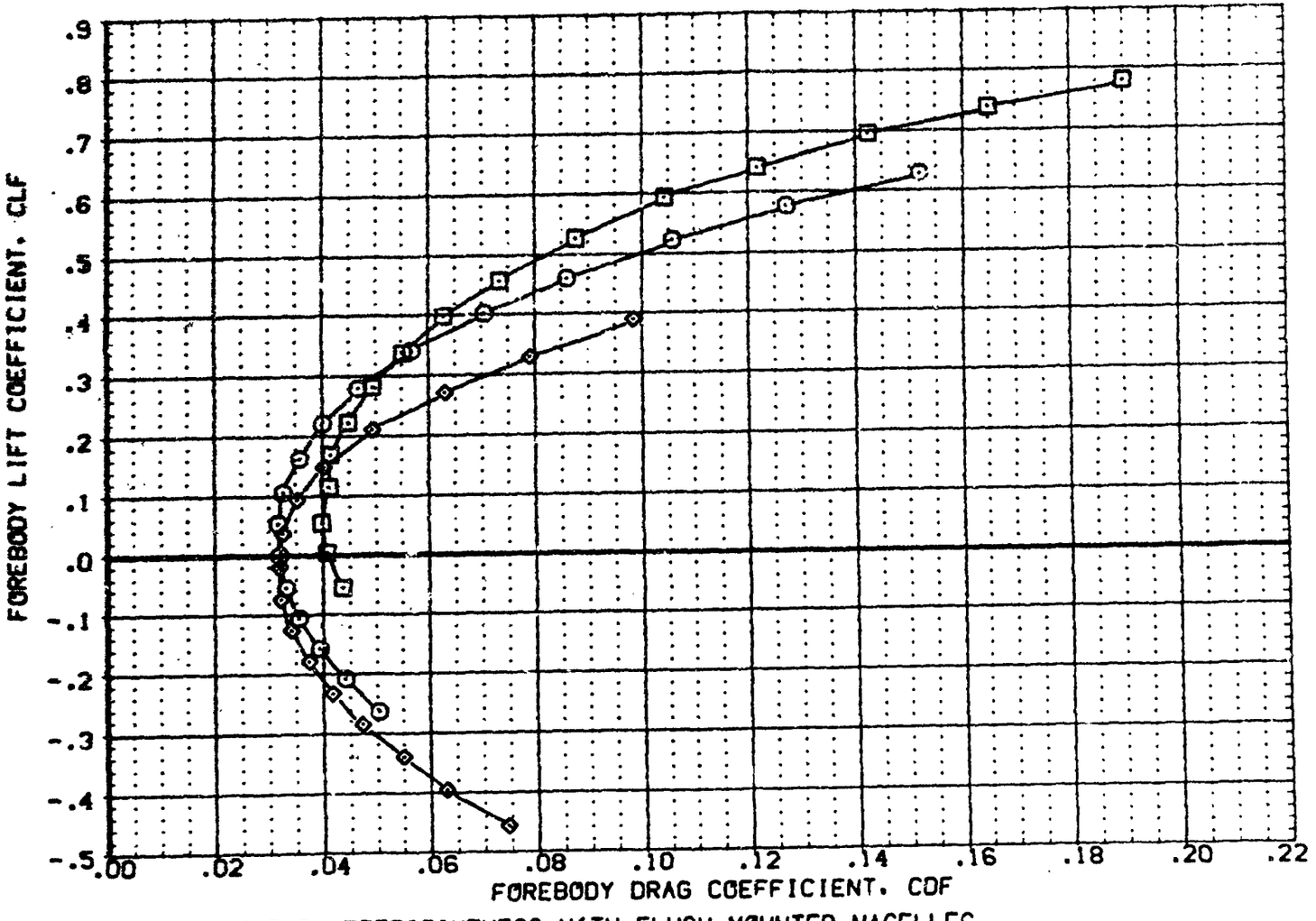

FIG. 12 ELEVON EFFECTIVENESS WITH FLUSH MOUNTED NACELLES

(B)MACH = .69

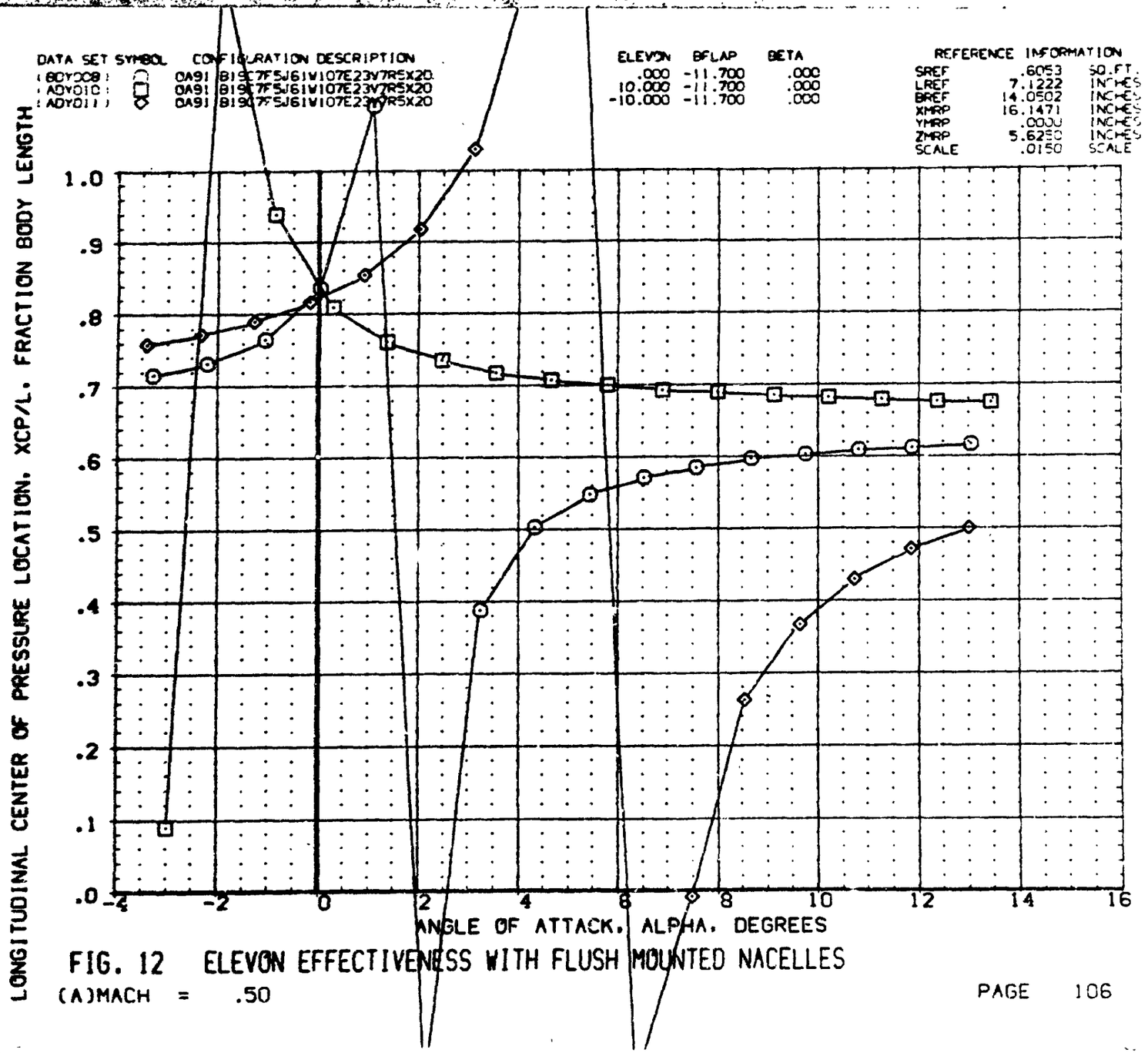

FIG. 12 ELEVON EFFECTIVENESS WITH FLUSH MOUNTED NACELLES

(A)MACH = .50

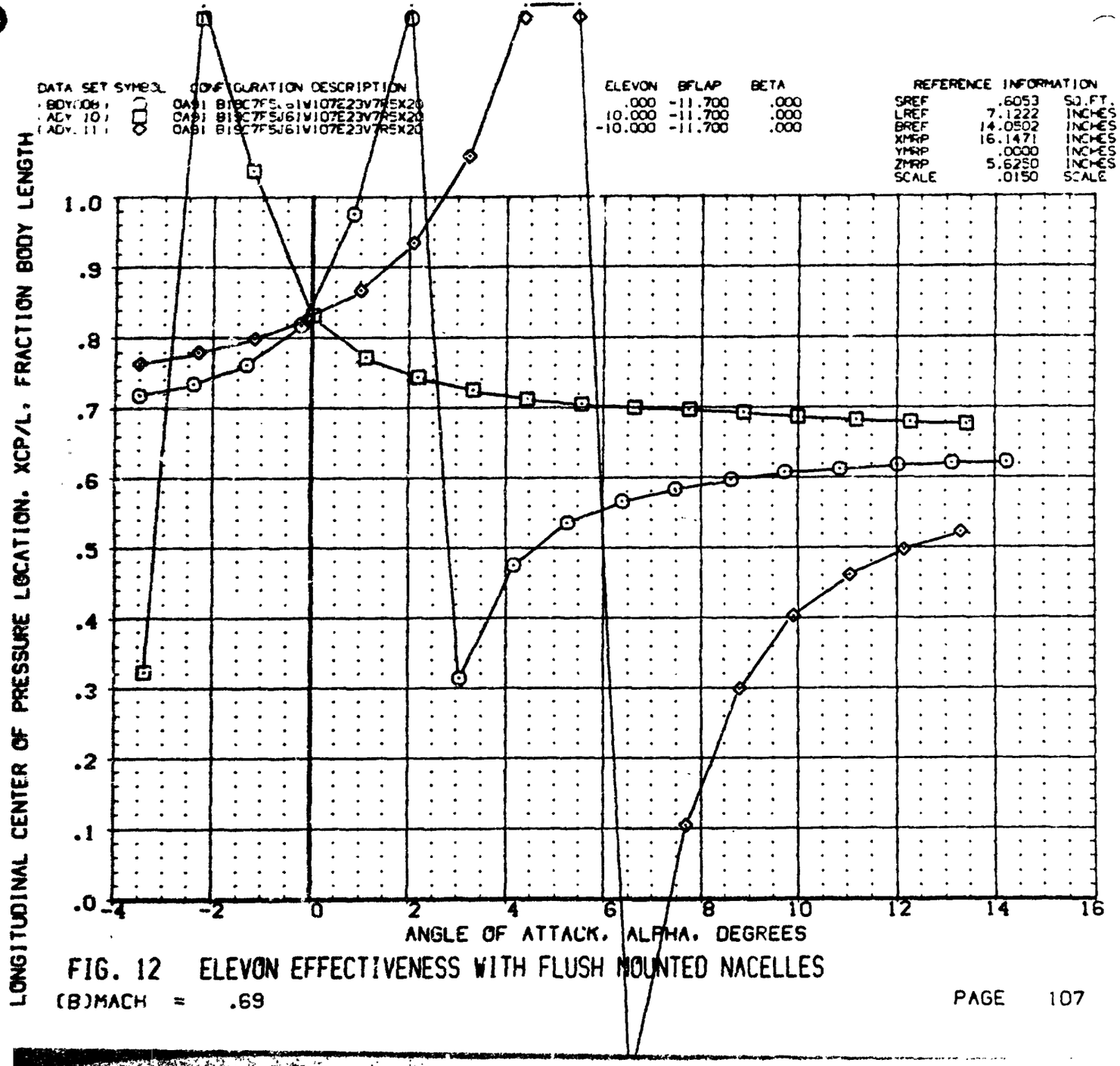

FIG. 12 ELEVON EFFECTIVENESS WITH FLUSH MOUNTED NACELLES

(B)MACH = .69

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	BFLAP	BETA
(BDY008)	OA91 B19C7F5J61V107E23V7R5X20	.000	-11.700	.000
(ADY010)	OA91 B19C7F5J61V107E23V7R5X20	10.000	-11.700	.000
(ADYC11)	OA91 B19C7F5J61V107E23V7R5X20	-10.000	-11.700	.000

REFERENCE INFORMATION		
SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

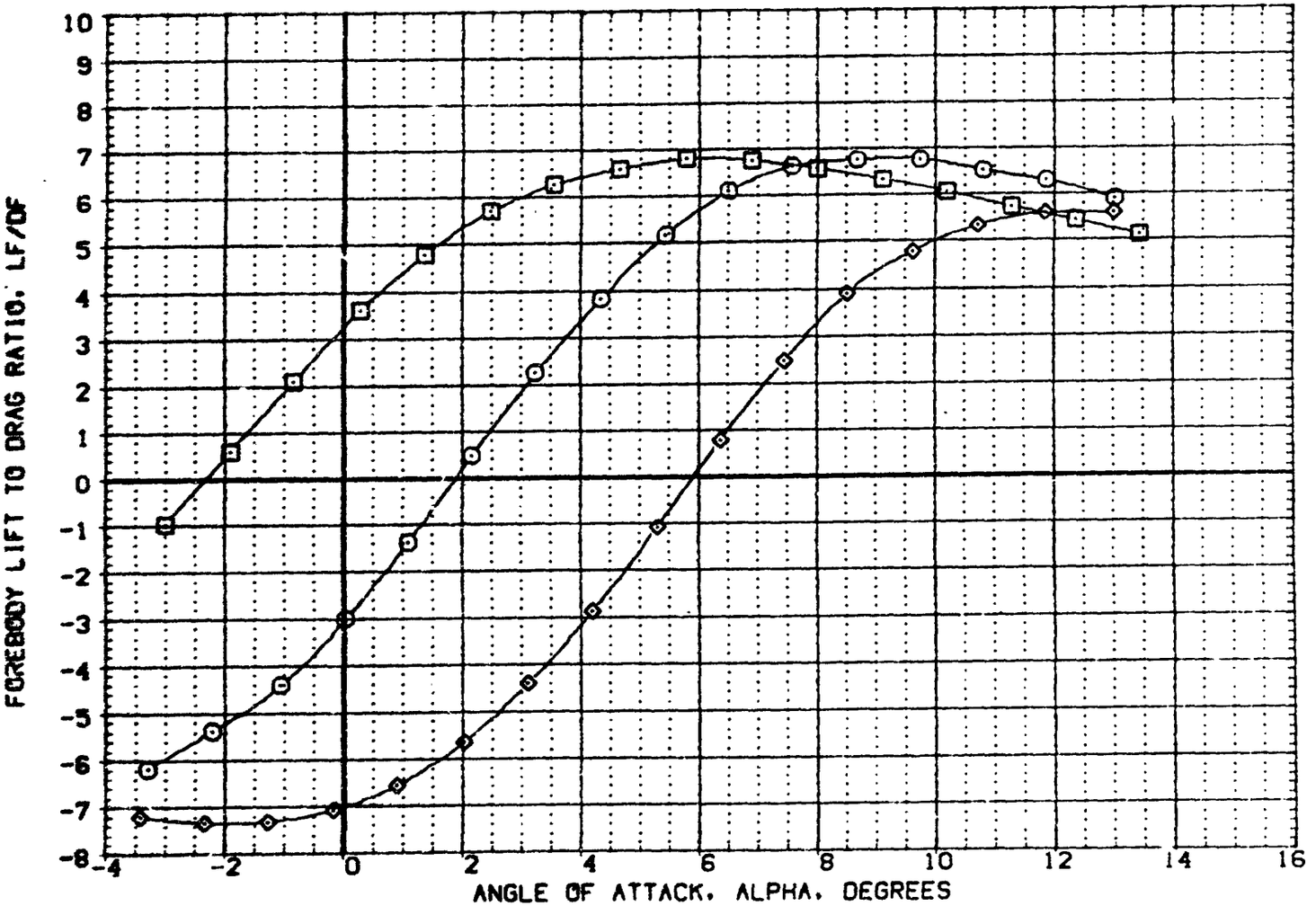

FIG. 12 ELEVON EFFECTIVENESS WITH FLUSH MOUNTED NACELLES

(A)MACH = .50

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(BDY008)	0A91 B19C7F5J61V107E23V7R5X20
(ADY010)	0A91 B19C7F5J61V107E23V7R5X20
(ADY011)	0A91 B19C7F5J61V107E23V7R5X20

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000
-10.000	-11.700	.000

REFERENCE INFORMATION		
SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

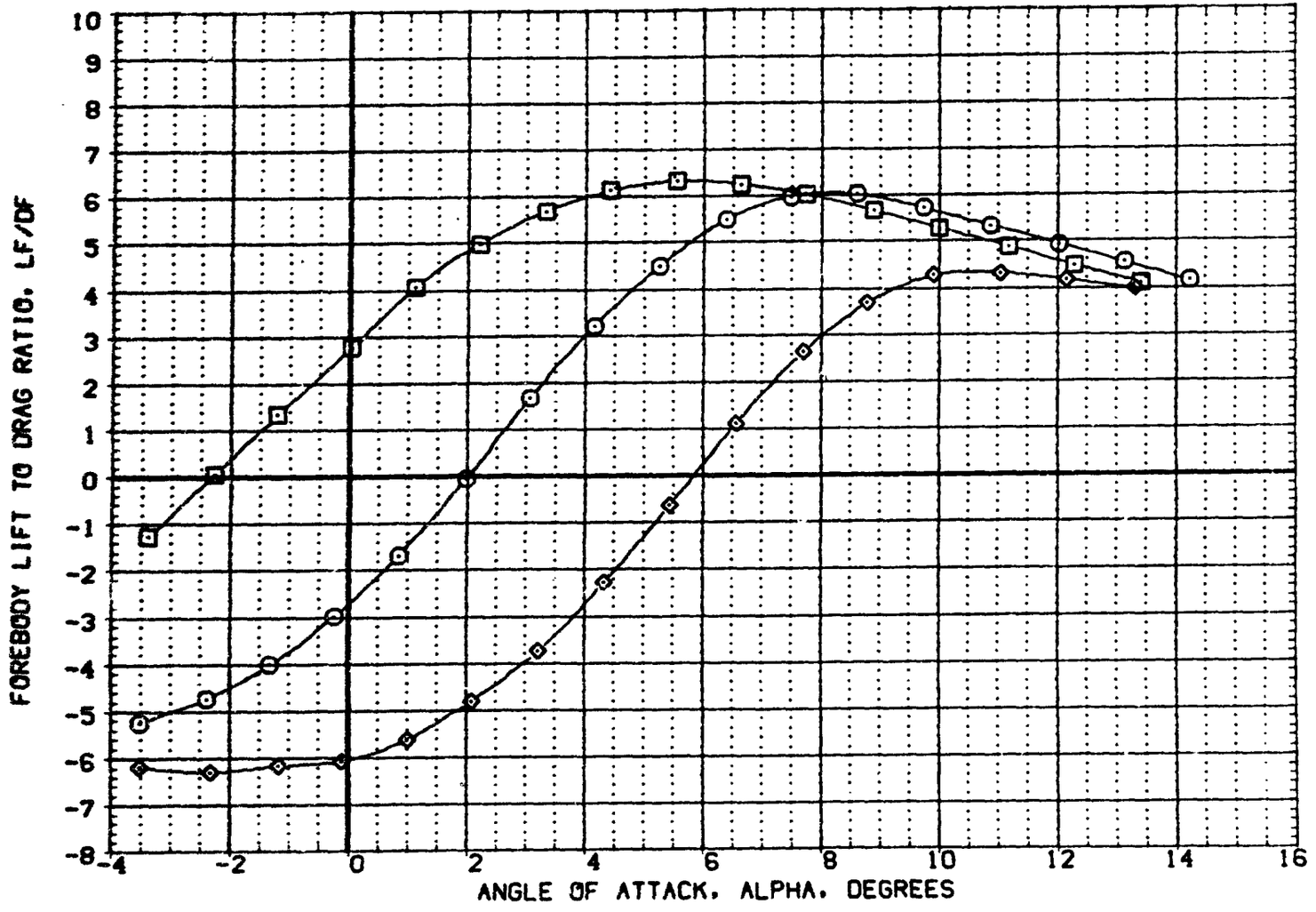

FIG. 12 ELEVON EFFECTIVENESS WITH FLUSH MOUNTED NACELLES

(B)MACH = .69

DATA SET SYMBOL	CONFIGURATION DESCRIPTION			ELEVON	BFLAP	BETA
(BOY01)	OA91	B19C7FS	W107E23V7M5X20	.000	-11.700	.000
(ADY014)	OA91	B19C7FS	W107E23C7R5X20	10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

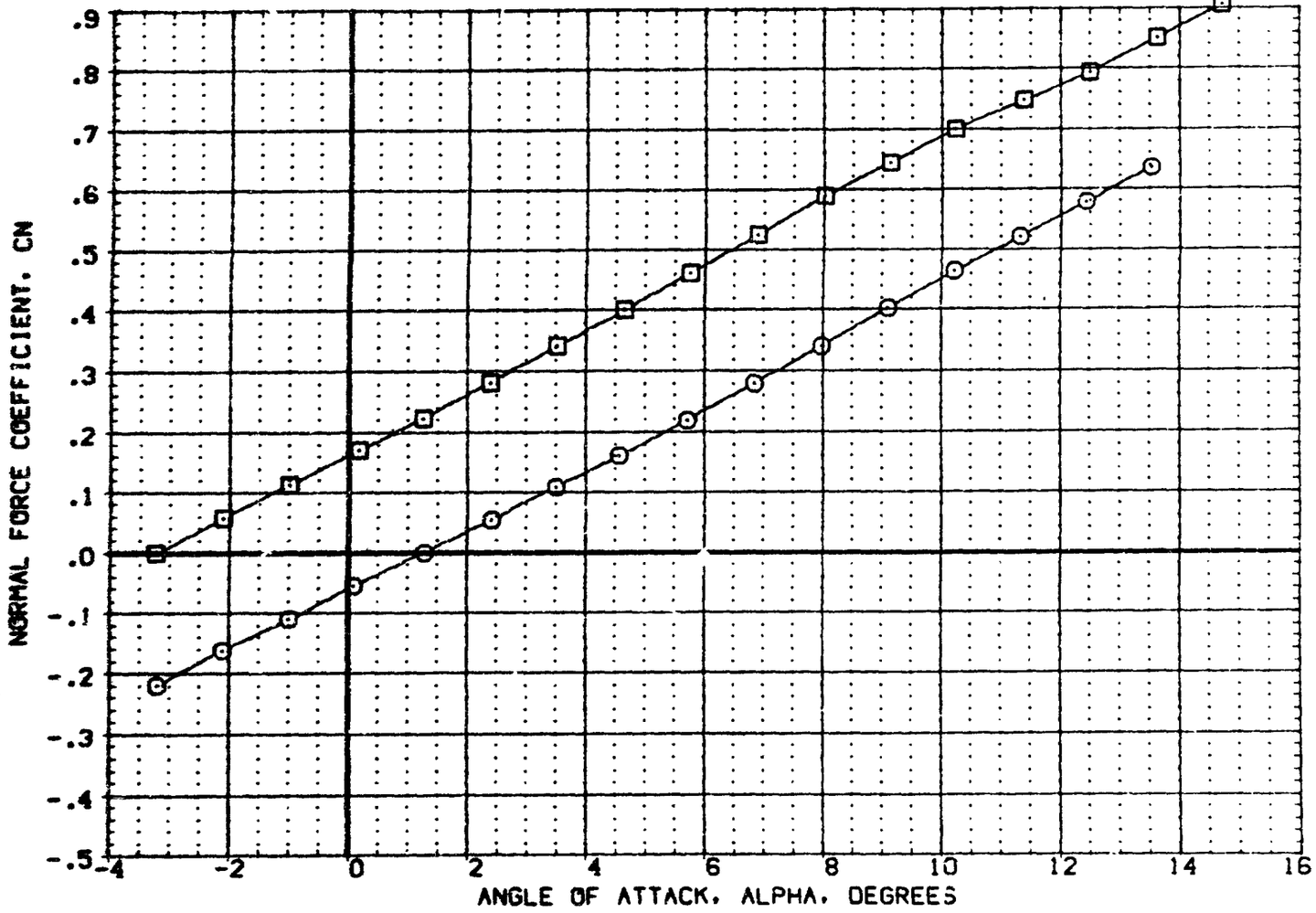

FIG. 13 ELEVON EFFECTIVENESS WITHOUT NACELLES

(A)MACH = .70

DATA SET SYMBOL	CONFIGURATION DESCRIPTION		ELEVON	BFLAP	BETA
(BDY012)	CA91 B19C7F5	W107E23V7R5X20	.000	-11.700	.000
(ADY014)	CA91 B19C7F5	W107E23C7R5X20	10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

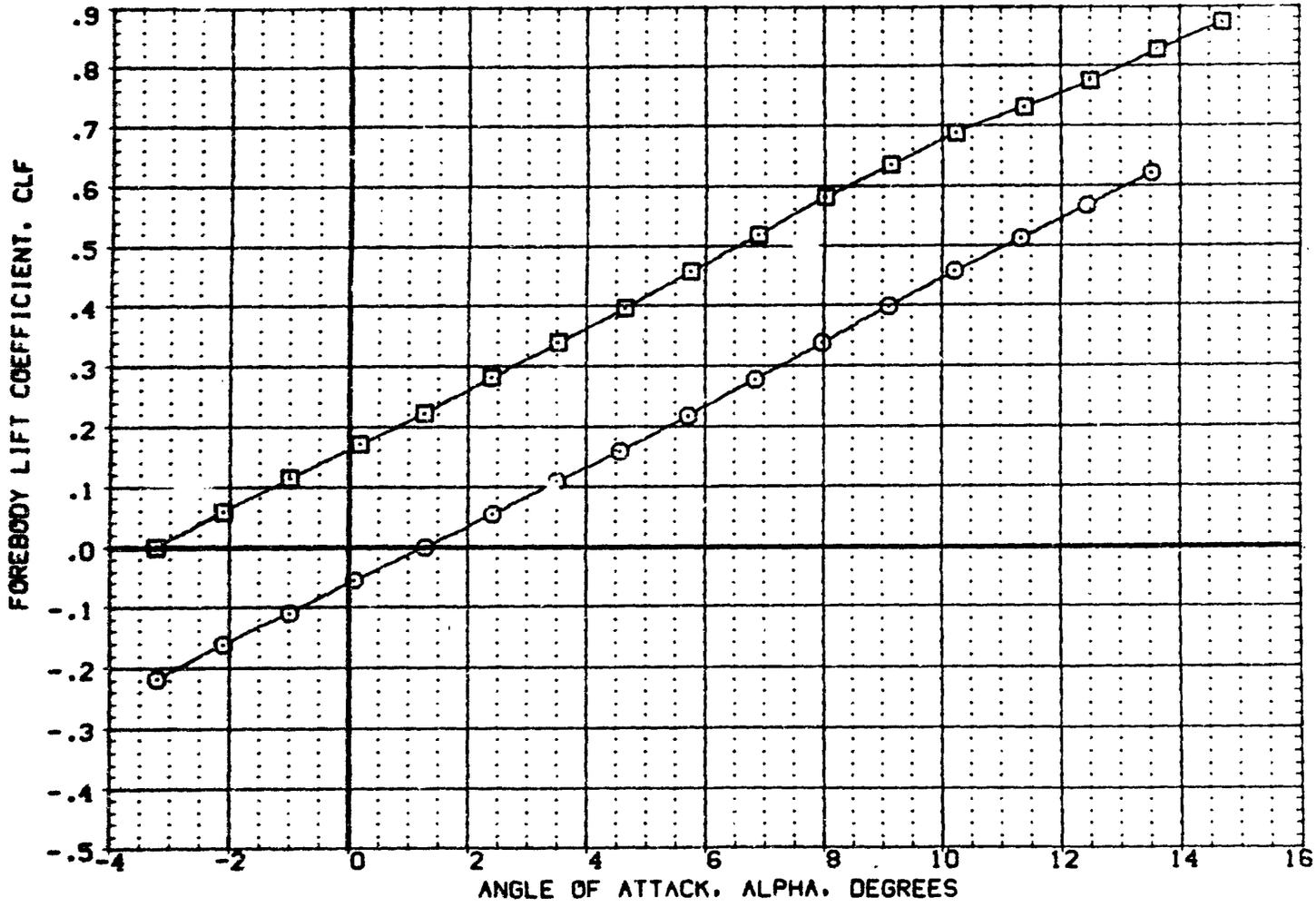

FIG. 13 ELEVON EFFECTIVENESS WITHOUT NACELLES

(A)MACH = .70

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	ELEVON	BFLAP	BETA
(BCYC12)	☐	DA91 B19C7F5 W107E23V7R5X20	.000	-11.700	.000
(ADYC14)	☐	DA91 B19C7F5 W107E23C7R5X20	10.000	-11.700	.000

REFERENCE INFORMATION		
SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

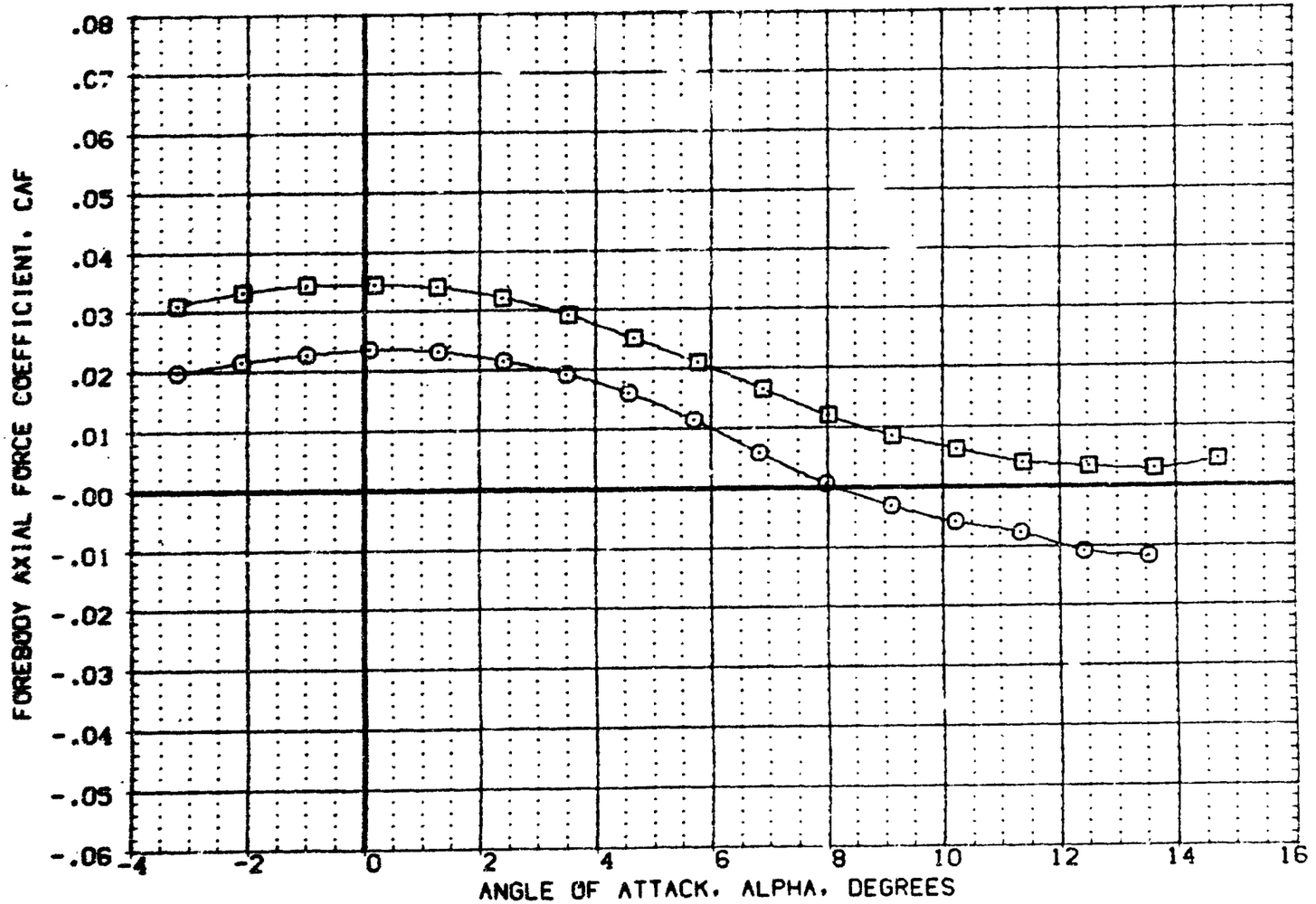

FIG. 13 ELEVON EFFECTIVENESS WITHOUT NACELLES

(A)MACH = .70

DATA SET SYMBOL	CONFIGURATION DESCRIPTION		
(BOY012)	OA91 B19C7F5	W107E23V7R5X20	
(ADY014)	OA91 B19C7F5	W107E23C7R5X20	

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000

REFERENCE INFORMATION		
SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

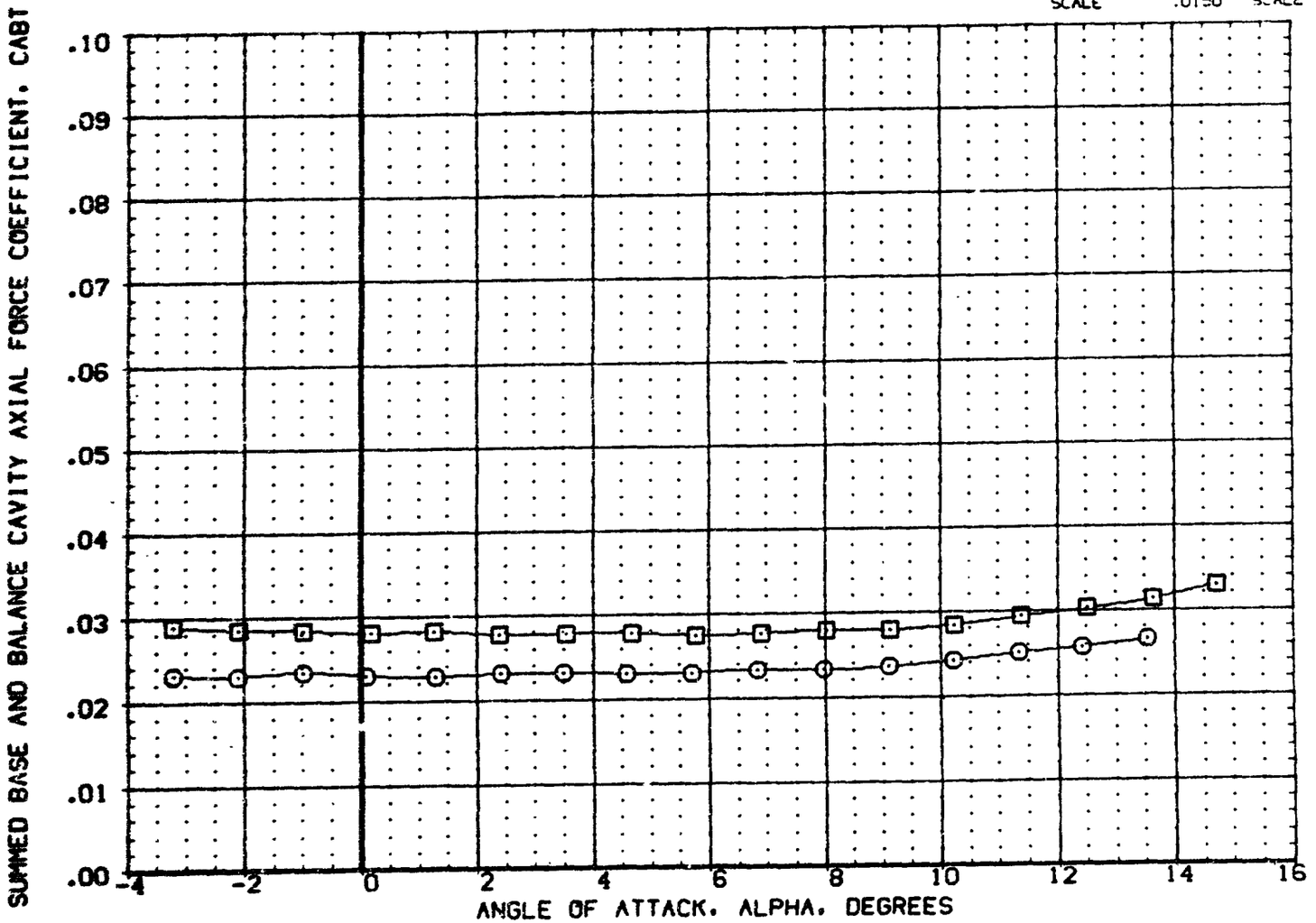

FIG. 13 ELEVON EFFECTIVENESS WITHOUT NACELLES

(A)MACH = .70

DATA SET SYMBOL	CONFIGURATION DESCRIPTION			ELEVON	BFLAP	BETA
(BDYD12)	□	0A91 B19C7F5	V107E23V7R5X20	.000	-11.700	.000
(AD[illegible]14)	□	0A91 B19C7F5	V107E23C7R5X20	10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6220	INCHES
SCALE	.0150	SCALE

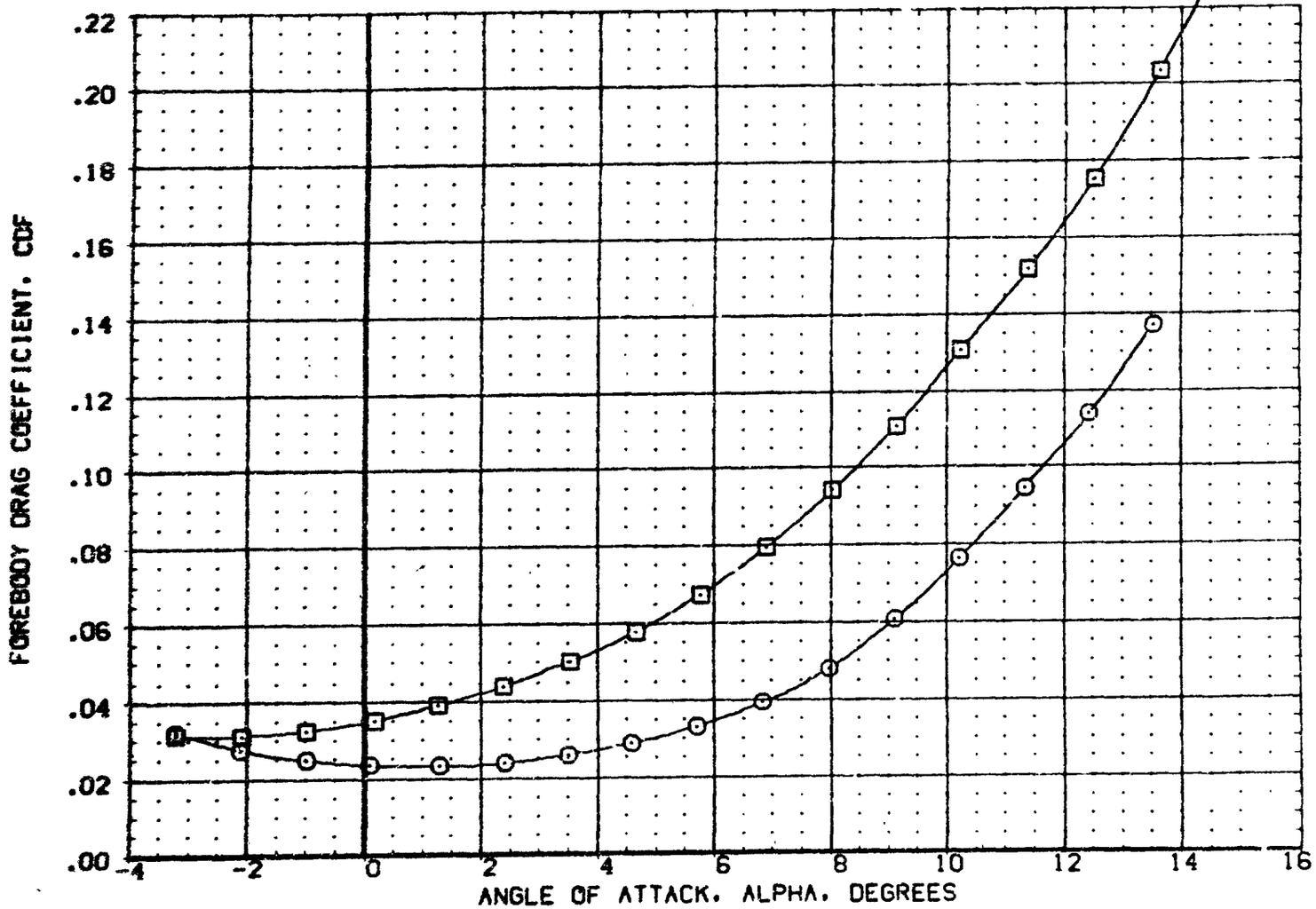

FIG. 13 ELEVON EFFECTIVENESS WITHOUT NACELLES

(A)MACH = .70

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		ELEVON	BFLAP	BETA
(BDY012)	☐	0A91 B19C7F5	W107E23V7R5X20	.000	-11.700	.000
(ADY014)	☐	0A91 B19C7F5	W107E23C7R5X20	10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

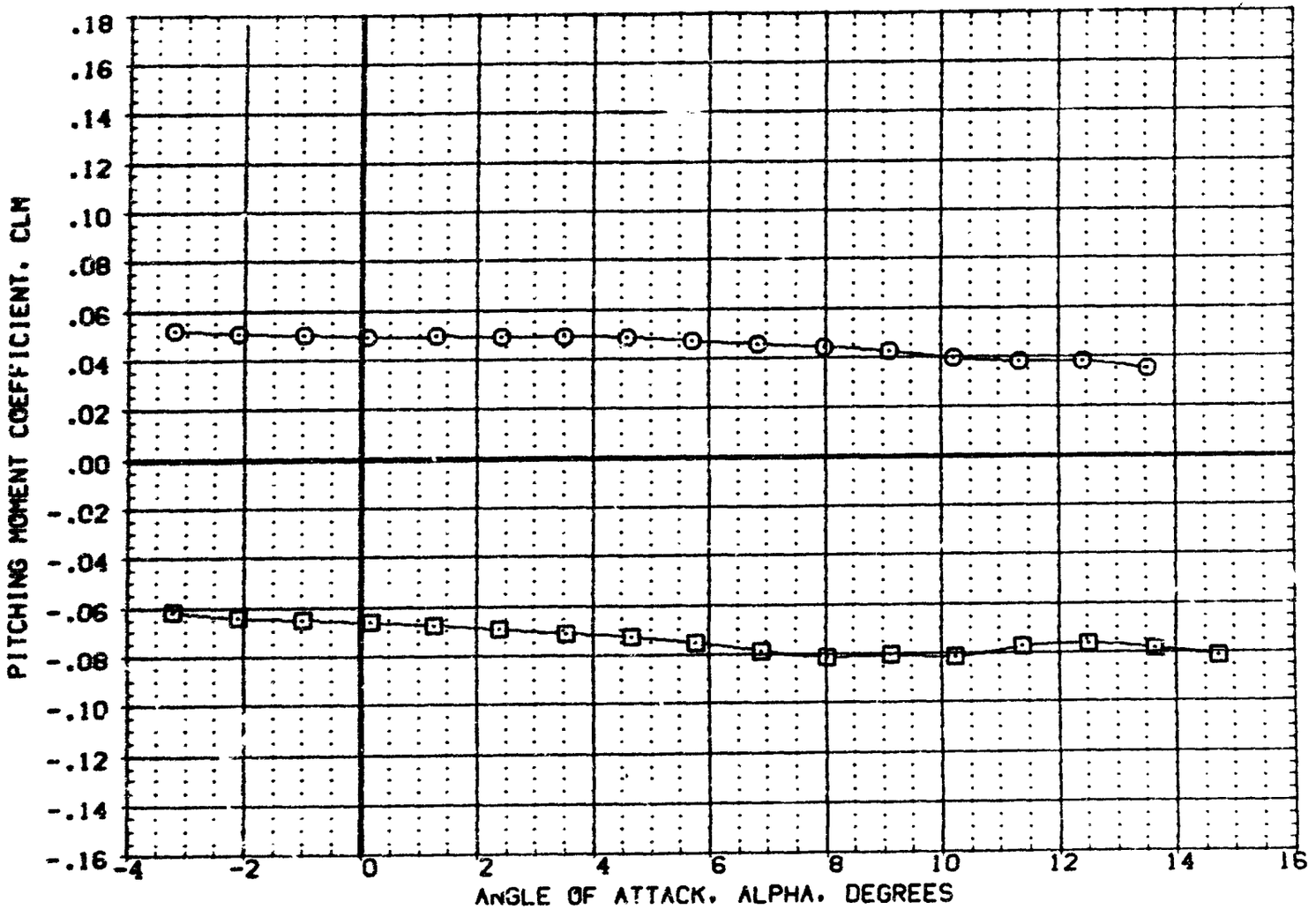

FIG. 13 ELEVON EFFECTIVENESS WITHOUT NACELLES

(A)MACH = .70

DATA SET SYMBOL		CONFIGURATION DESCRIPTION	
(BDY012)	CA91 B19C7F5	W107E23V7R5X20	
(ADY014)	CA91 B19C7F5	W107E23C7R5X20	

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

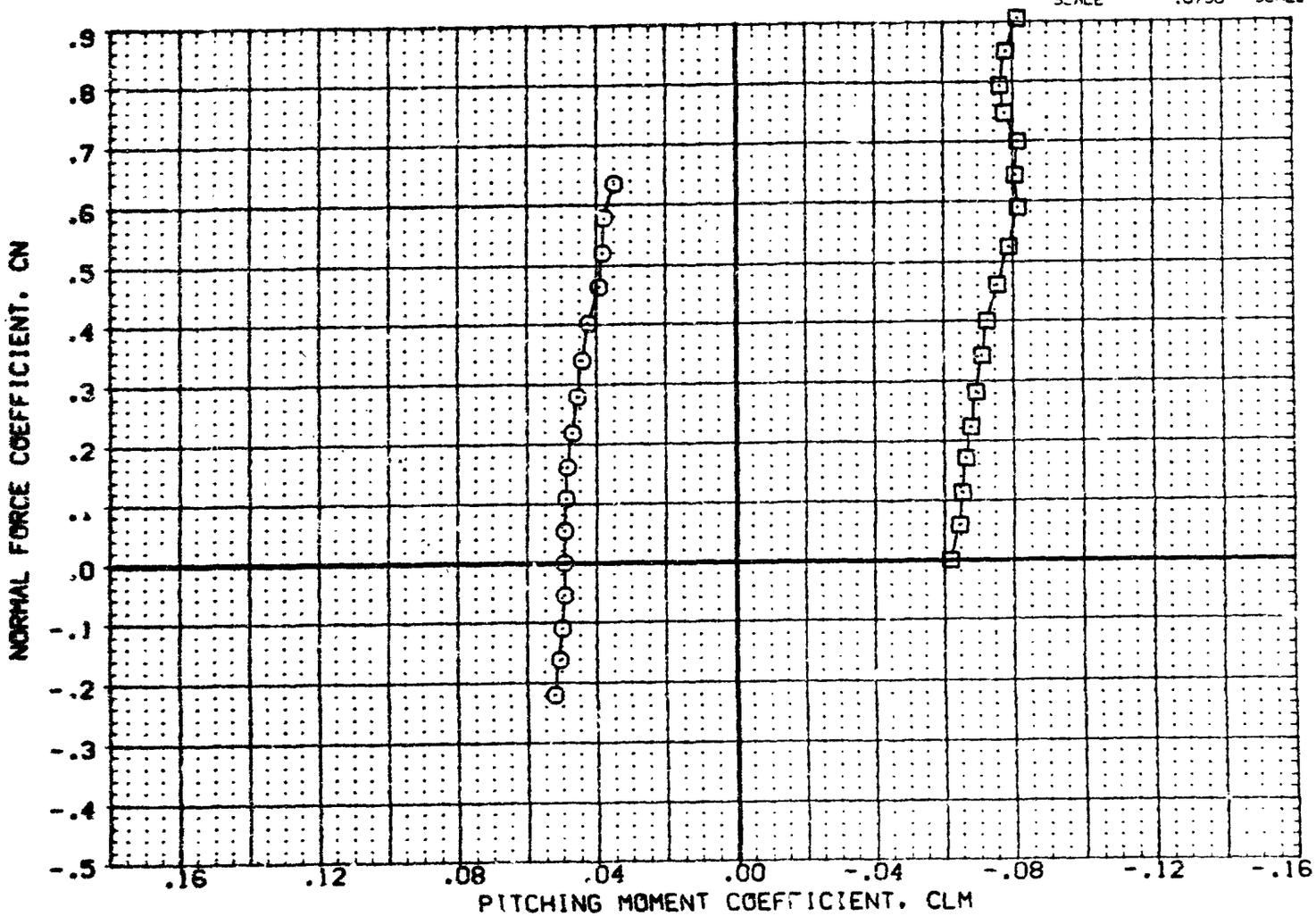

FIG. 13 ELEVON EFFECTIVENESS WITHOUT NACELLES

(A)MACH = .70

DATA SET SYMBOL	CONFIGURATION DESCRIPTION			ELEVON	BFLAP	BETA
BDY012	^	0A91 B19C7F5	W107E23V7R5X20	.000	-11.700	.000
ADY014	□	0A91 B19C7F5	W107E23C7R5X20	10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

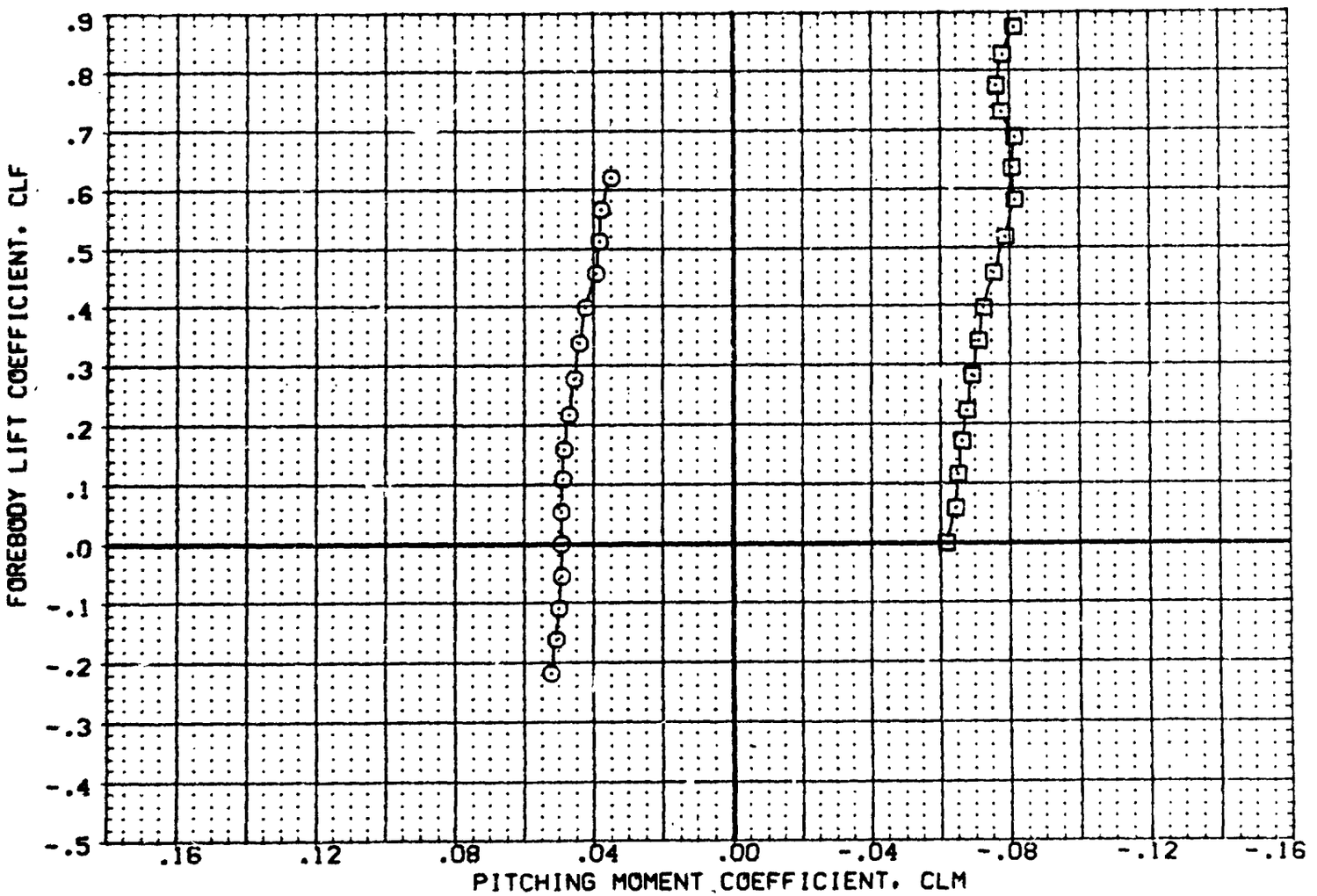

FIG. 13 ELEVON EFFECTIVENESS WITHOUT NACELLES

(A)MACH = .70

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	BFLAP	BETA
(BDY012)	○	OA91 B19C7F5 W107E23V7R5X20	.000	-11.700	.000
(ADY014)	□	OA91 B19C7F5 W107E23C7R5X20	10.000	-11.700	.000

REFERENCE INFORMATION		
SREF	.6059	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

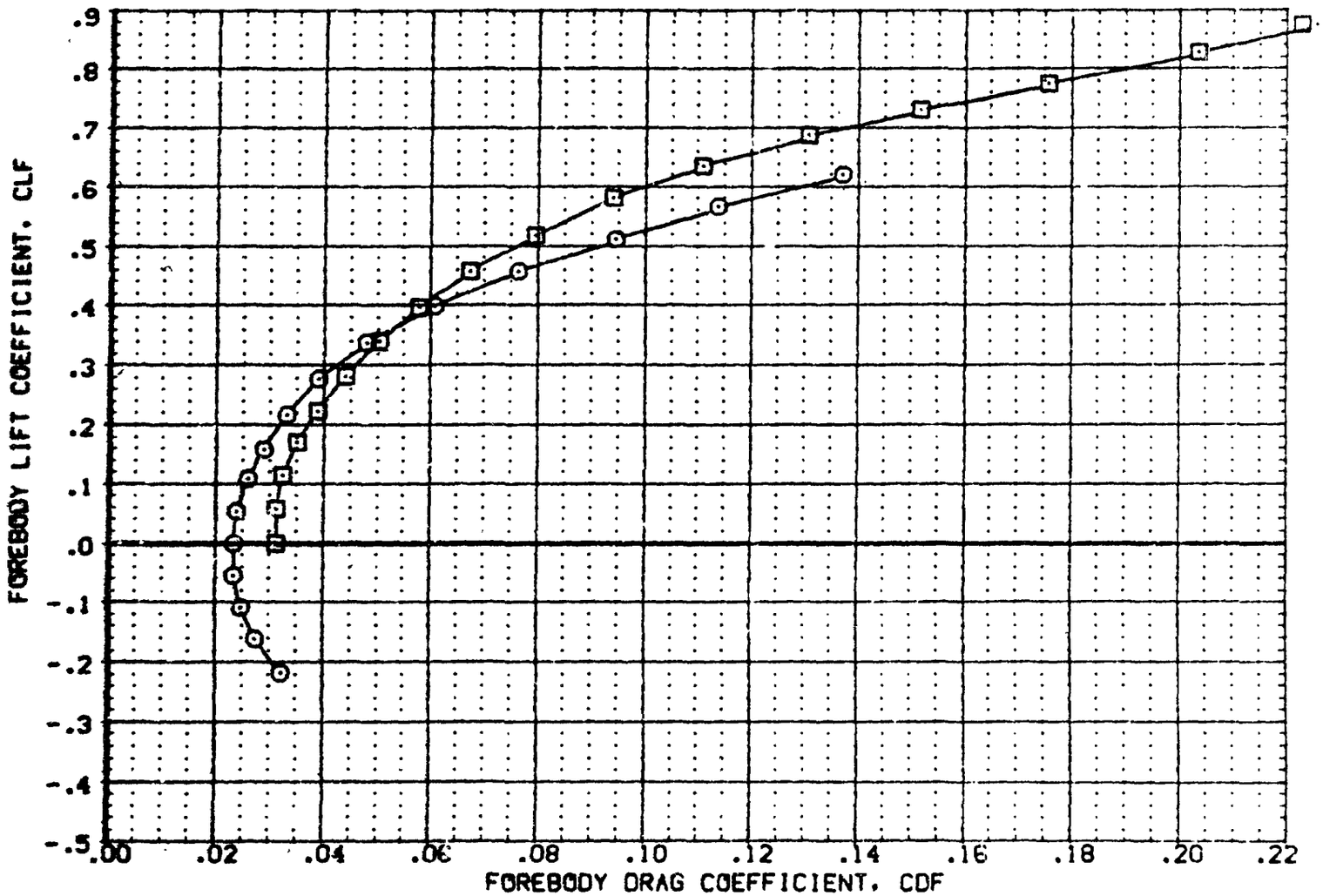

FIG. 13 ELEVON EFFECTIVENESS WITHOUT NACELLES

(A)MACH = .70

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		
(BCY012)	□	DA91 B19C7FS	W107E23V7R5X20	
(ADY014)	□	DA91 B19C7FS	W107E23C7R5X20	

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000

REFERENCE INFORMATION		
SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

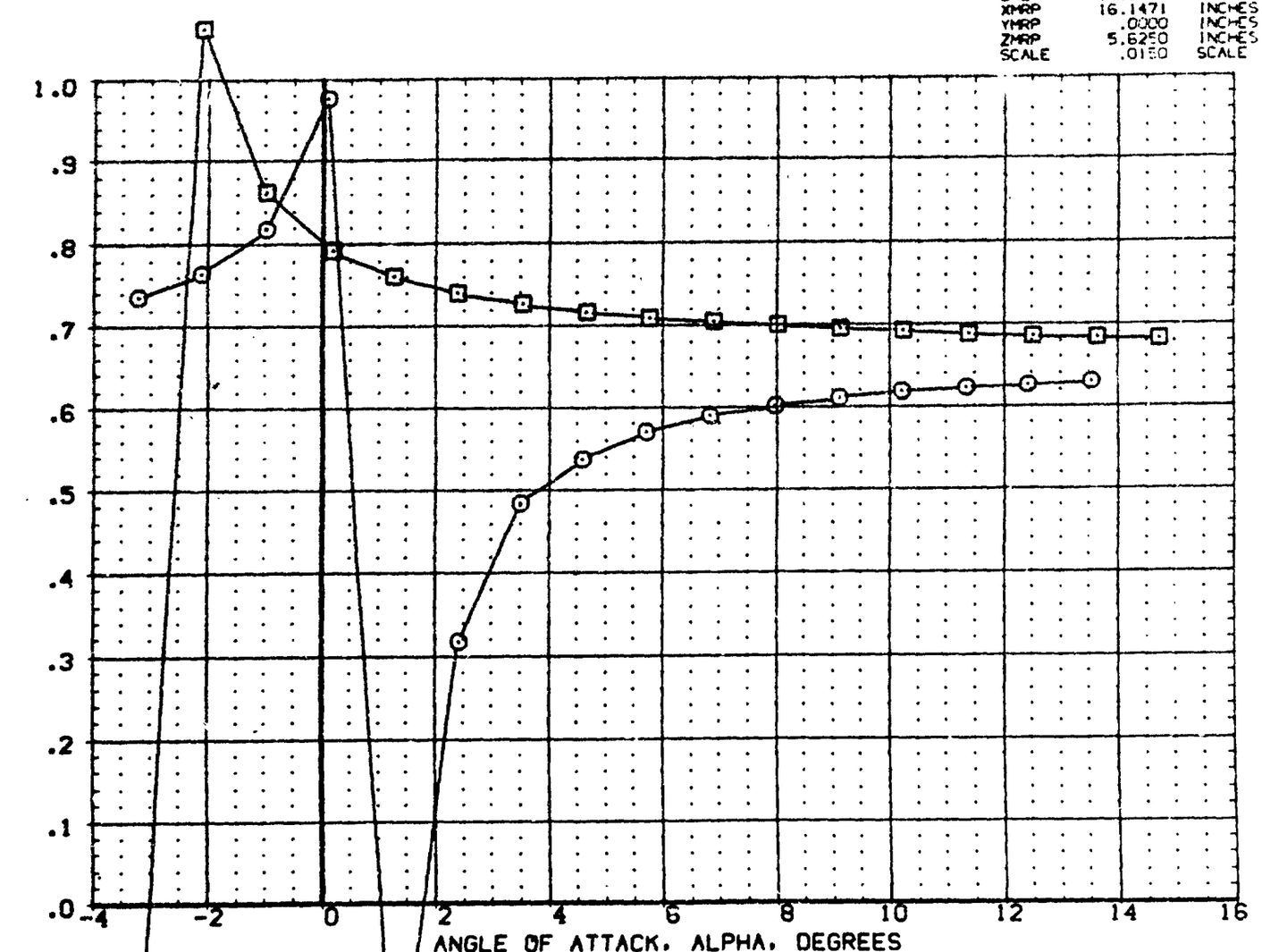

FIG. 13 ELEVON EFFECTIVENESS WITHOUT NACELLES

(A)MACH = .70

DATA SET SYMBOL		CONFIGURATION DESCRIPTION		
(BDY012)	☐	0A91 B19C7F5	W107E23V7R5X20	
(ADY014)	⊟	0A91 B19C7F5	W107E23C7R5X20	

ELEVON	BFLAP	BETA
.000	-11.700	.000
10.000	-11.700	.000

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

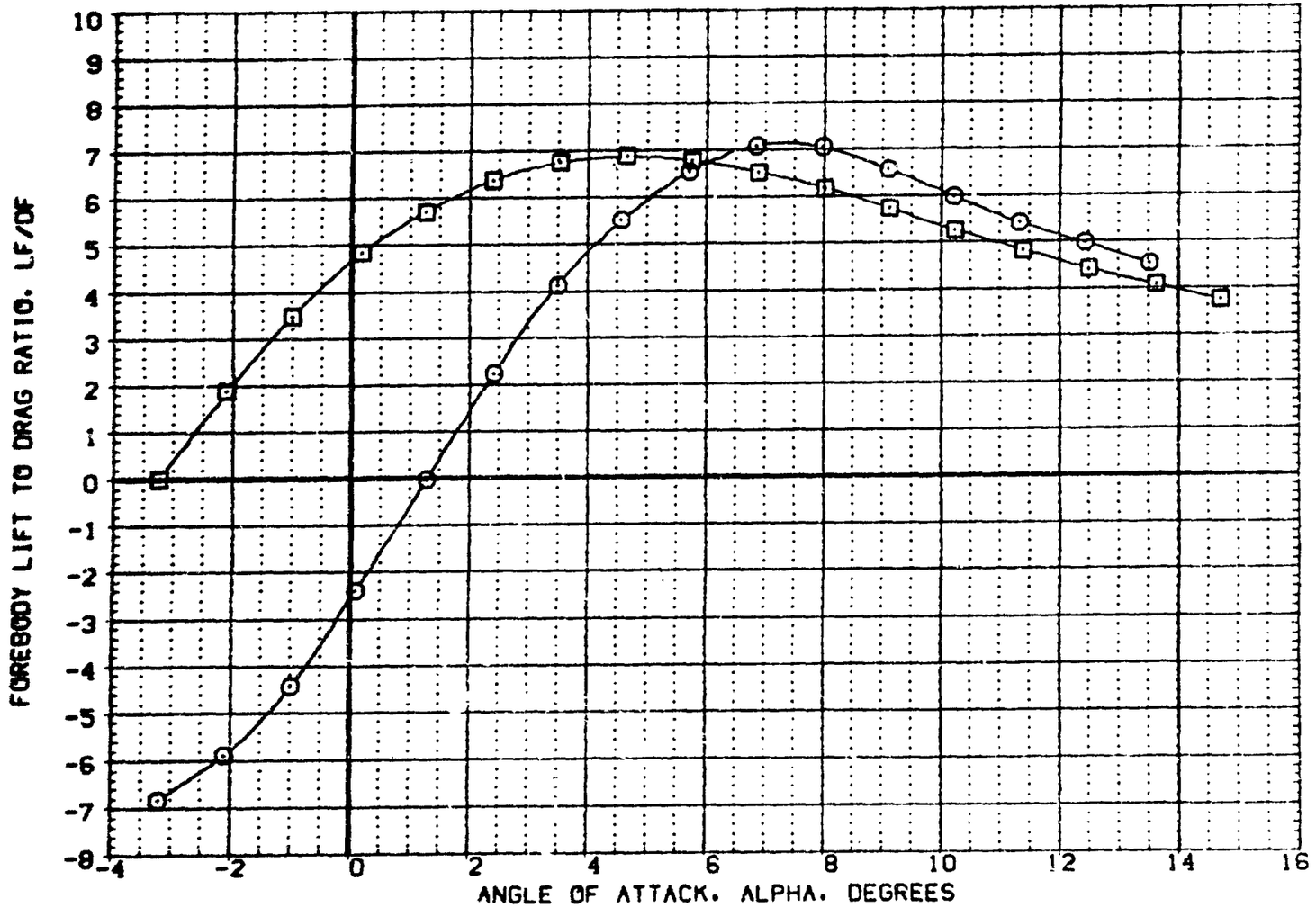

FIG. 13 ELEVON EFFECTIVENESS WITHOUT NACELLES

(A)MACH = .70

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(CDY003)	0A91 B19C7F5J59V107E23V7R5X20
(RDY004)	0A91 B19C7F5J59V107E23V7R5X20

BETA	ELEVON	BFLAP
.000	.000	-11.700
5.000	.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

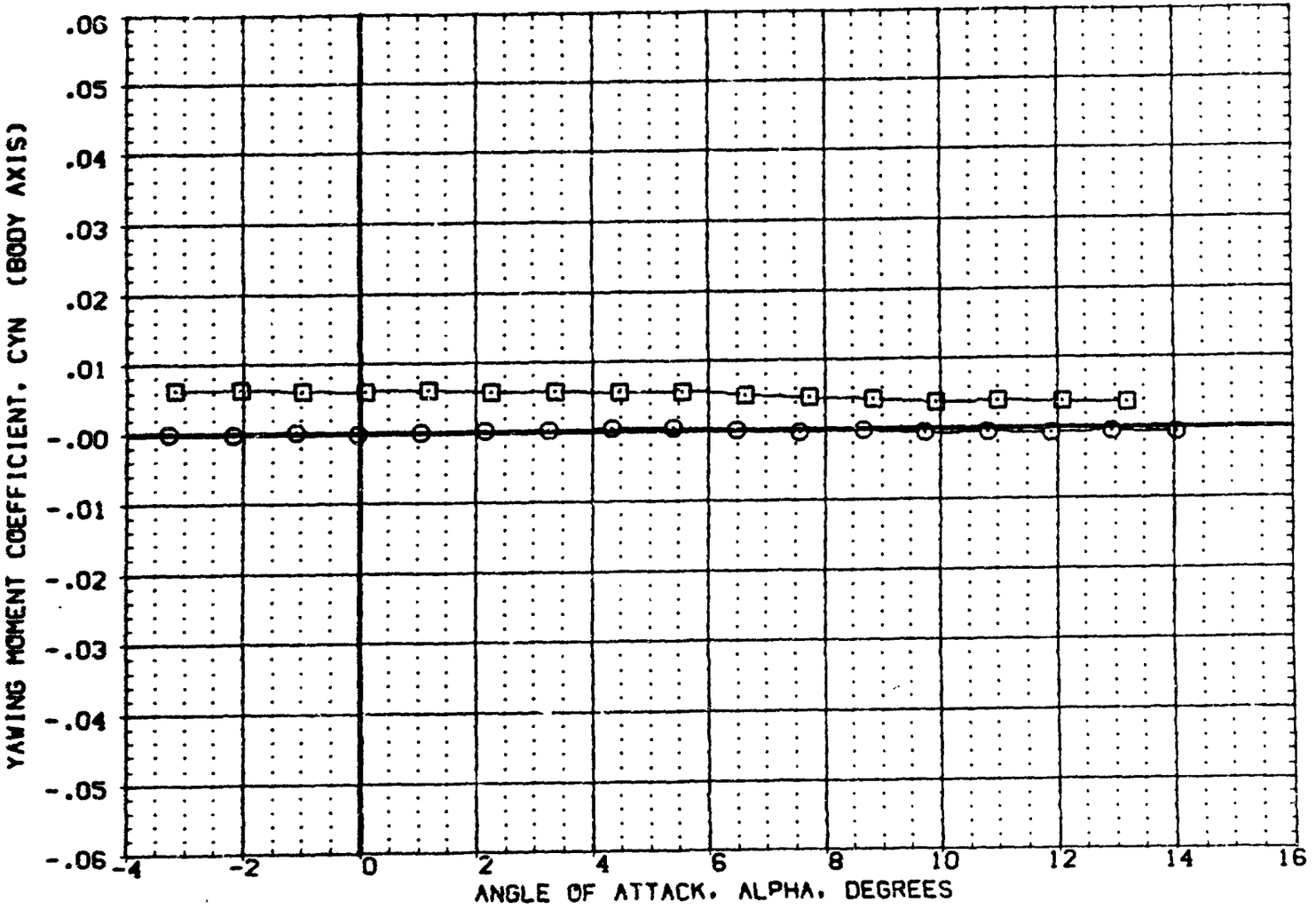

FIG. 14 LATERAL-DIRECTIONAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES

(A)MACH = .50

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BFLAP
CDY003		OA91 B19C7F5J59W107E23V7R5X20	.000	.000	-11.700
PCY004		OA91 B19C7F5J59W107E23V7R5X2C	5.000	.000	-11.700

REFERENCE INFORMATION		
SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

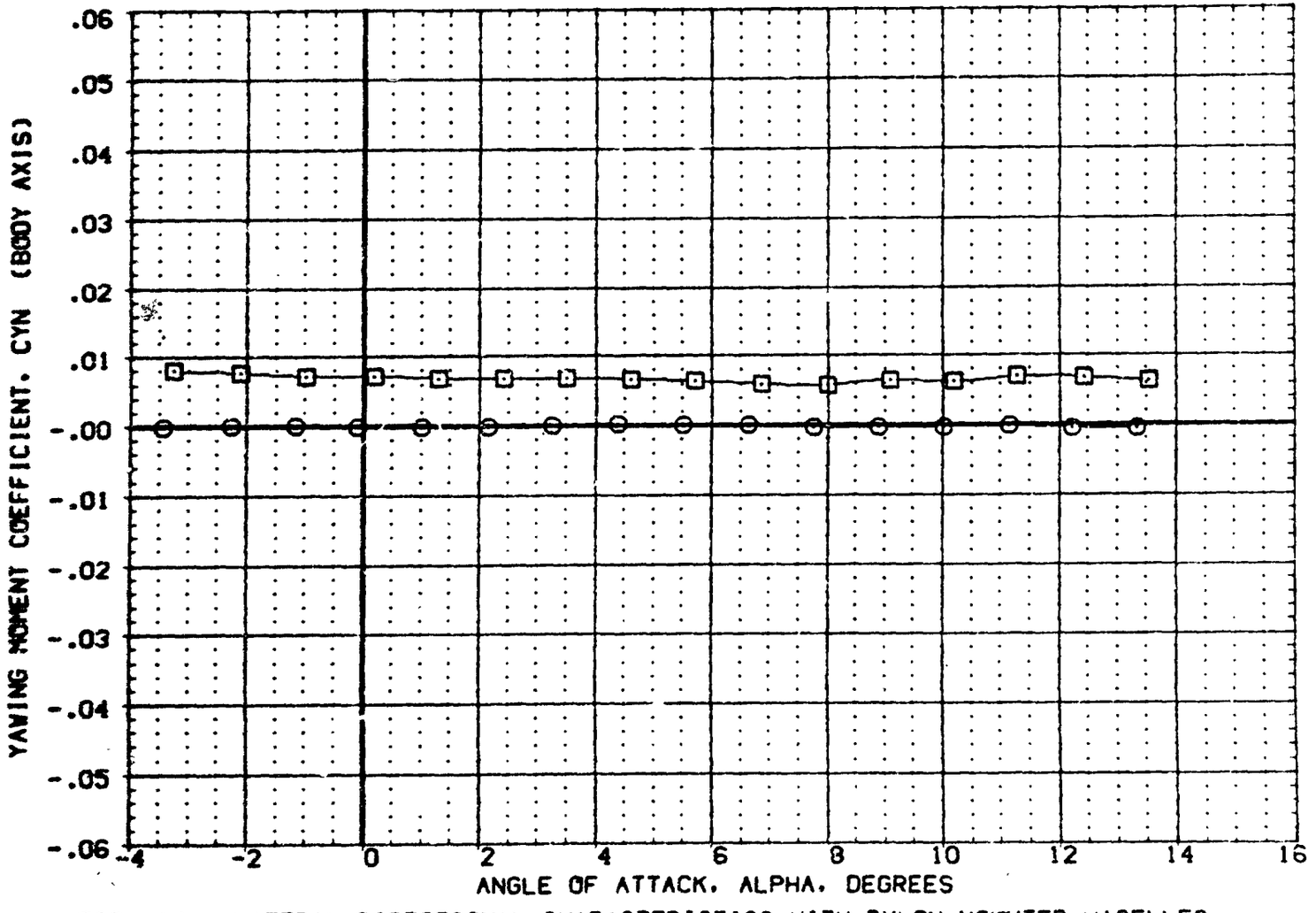

FIG. 14 LATERAL-DIRECTIONAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES

(B)MACH = .70

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
CDY003		OA91 B19C7F5J59V107E23V7R5X20
CDY004	□	OA91 B19C7F5J59V107E23V7R5X20

BETA	ELEVON	BFLAP
.000	.000	-11.700
5.000	.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

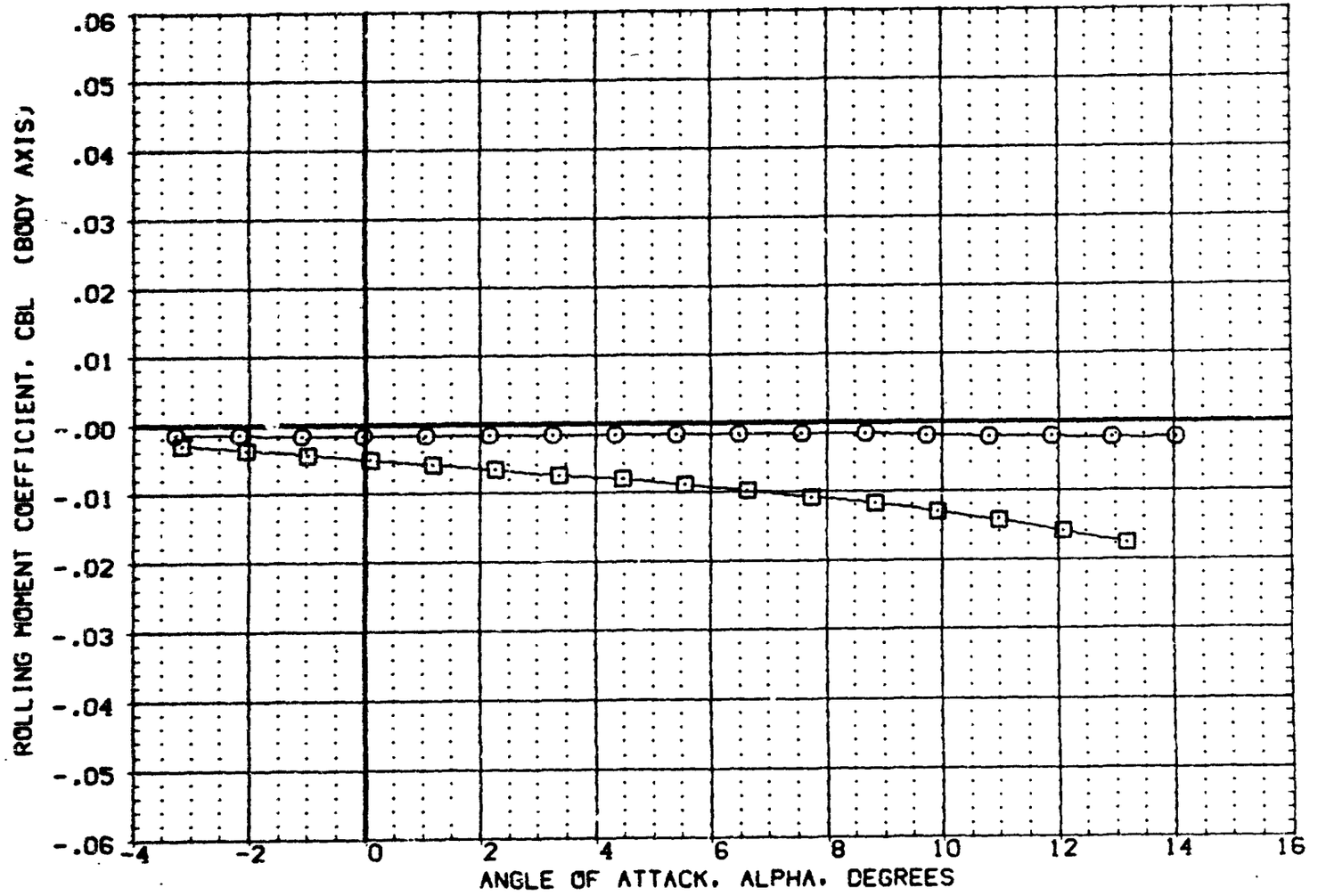

FIG. 14 LATERAL-DIRECTIONAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES

(A)MACH = .50

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BFLAP
(CDY003)	DA9I B19C7F5J59W107E23V7R5X20	.000	.000	-11.700
(RDY004)	DA9I B19C7F5[59W107E23V7R5X20	5.000	.000	-11.700

REFERENCE INFORMATION		
SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

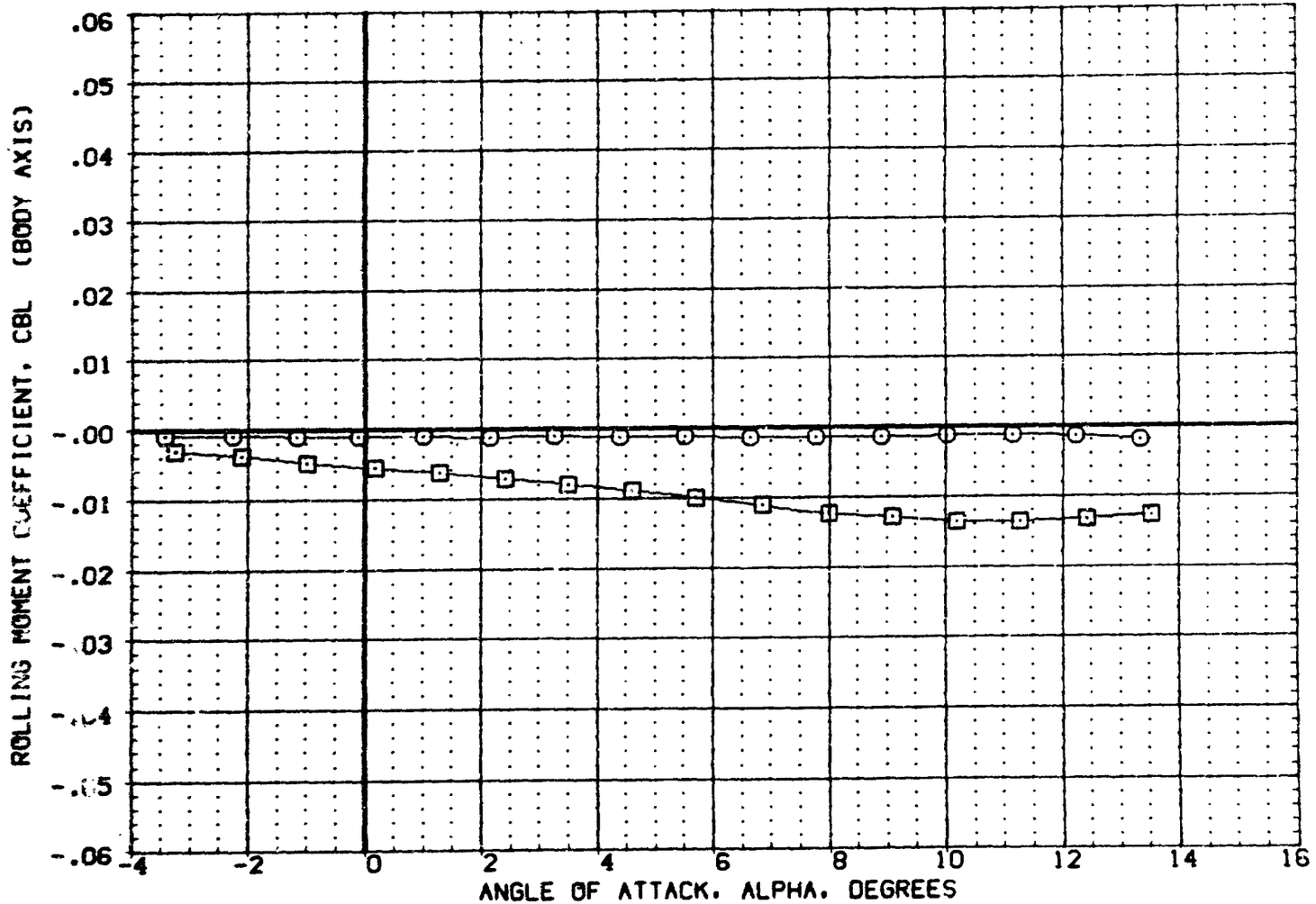

FIG. 14 LATERAL-DIRECTIONAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES

(B)MACH = .70

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(CDY003)	□	0A91 B19C7F5J59W107E23V7R5X20
(RDY004)	□	0A91 B19C7F5J59W107E23V7R5X20

BETA	ELEVON	BFLAP
.000	.000	-11.700
5.000	.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

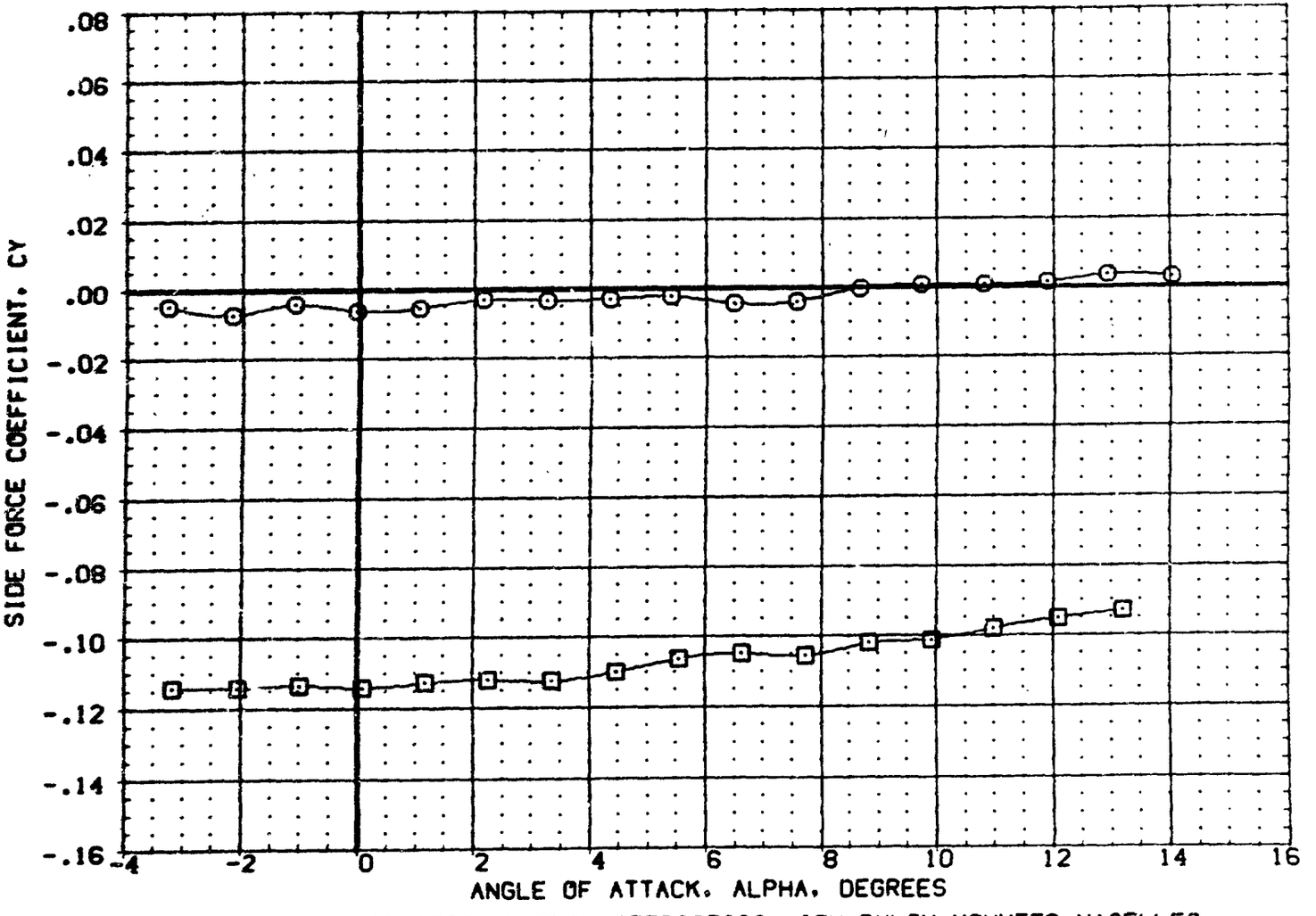

FIG. 14 LATERAL-DIRECTIONAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES

(A)MACH = .50

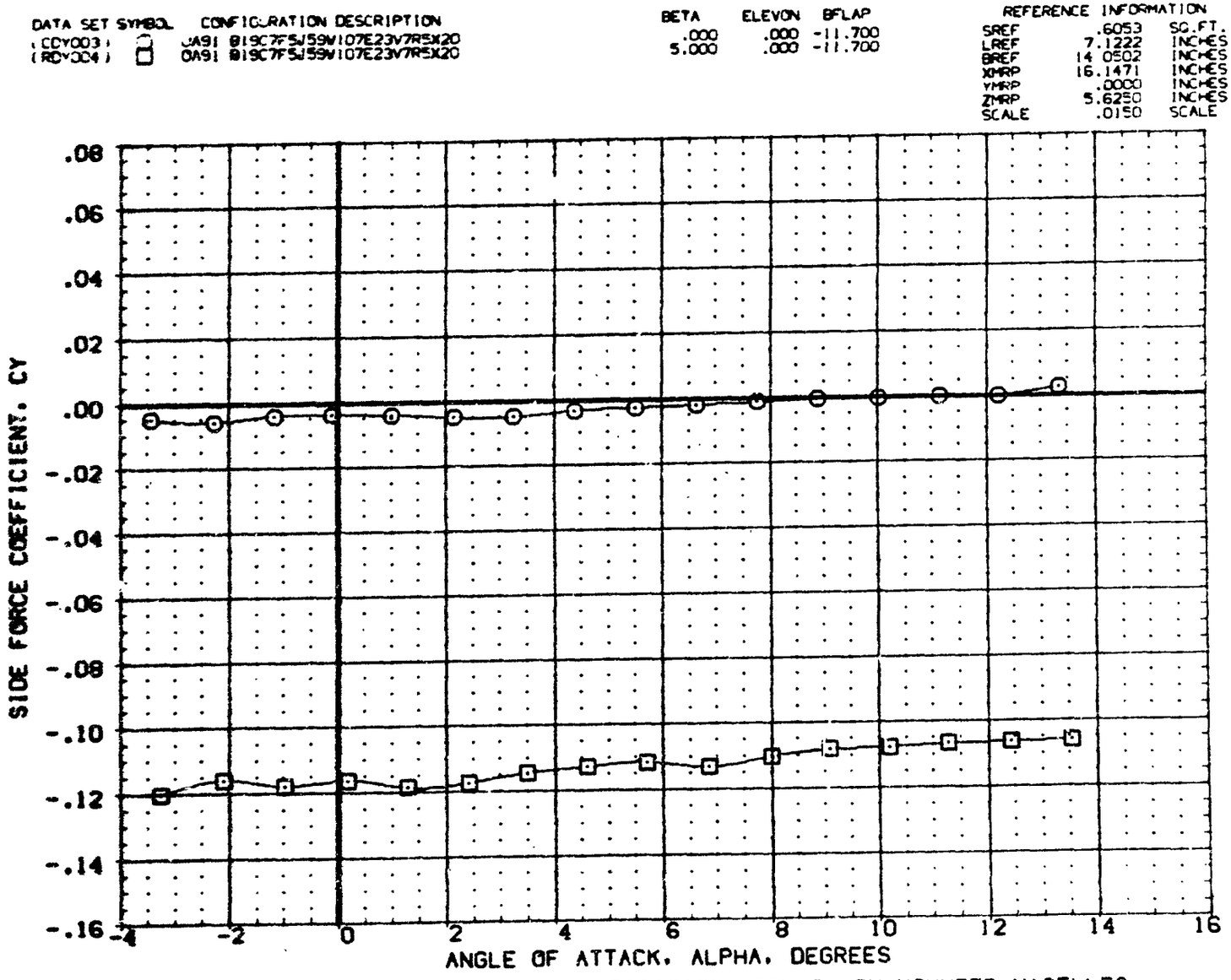

FIG. 14 LATERAL-DIRECTIONAL CHARACTERISTICS WITH PYLON MOUNTED NACELLES

(B)MACH = .70

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(CDYCDS)		OAS1 B1SC7F5J61V107E23V7R5X20
(RDYDCS)		OAS1 B1SC7F5J61V107E23V7R5X20

BETA	ELEVON	BFLAP
.000	.000	-11.700
5.000	.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

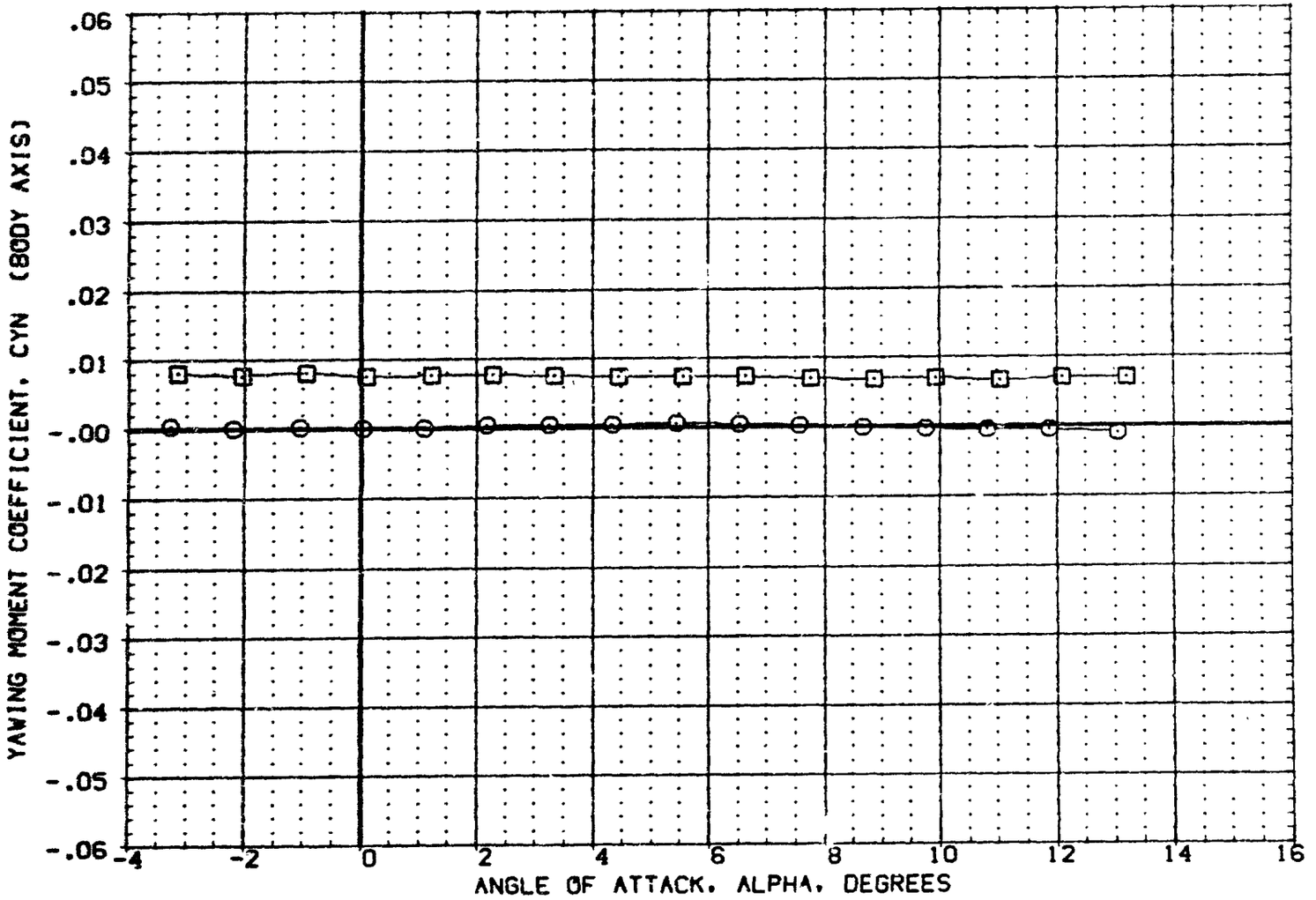

FIG. 15 LATERAL-DIRECTIONAL CHARACTERISTICS WITH FLUSH MOUNTED NACELLES

(A)MACH = .50

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(CDYDO8)	OA91 B19C7F5J61V107E23V7R5X20
(RDYDO5)	OA91 B19C7F5J61V107E23V7R5X20

BETA	ELEVON	BFLAP
.000	.000	-11.700
5.000	.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

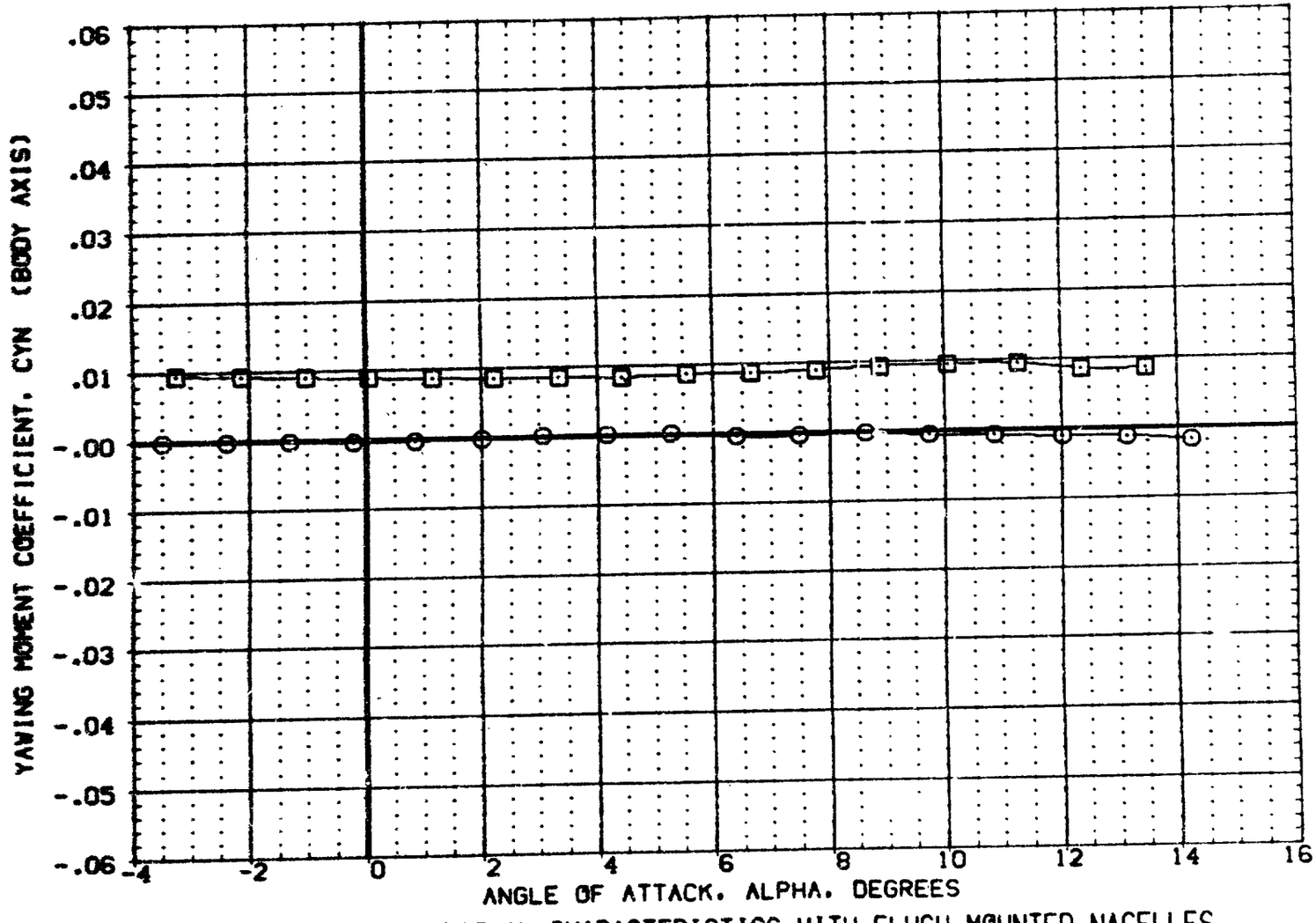

FIG. 15 LATERAL-DIRECTIONAL CHARACTERISTICS WITH FLUSH MOUNTED NACELLES

(B)MACH = .69

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
CDY008	□	0A91 B19C7F5J61V107E23V7R5X20
RCV009	□	0A91 B19C7F5J61V107E23V7R5X20

BETA	ELEVON	BFLAP
.000	.000	-11.700
5.000	.000	-11.700

REFERENCE INFORMATION		
SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

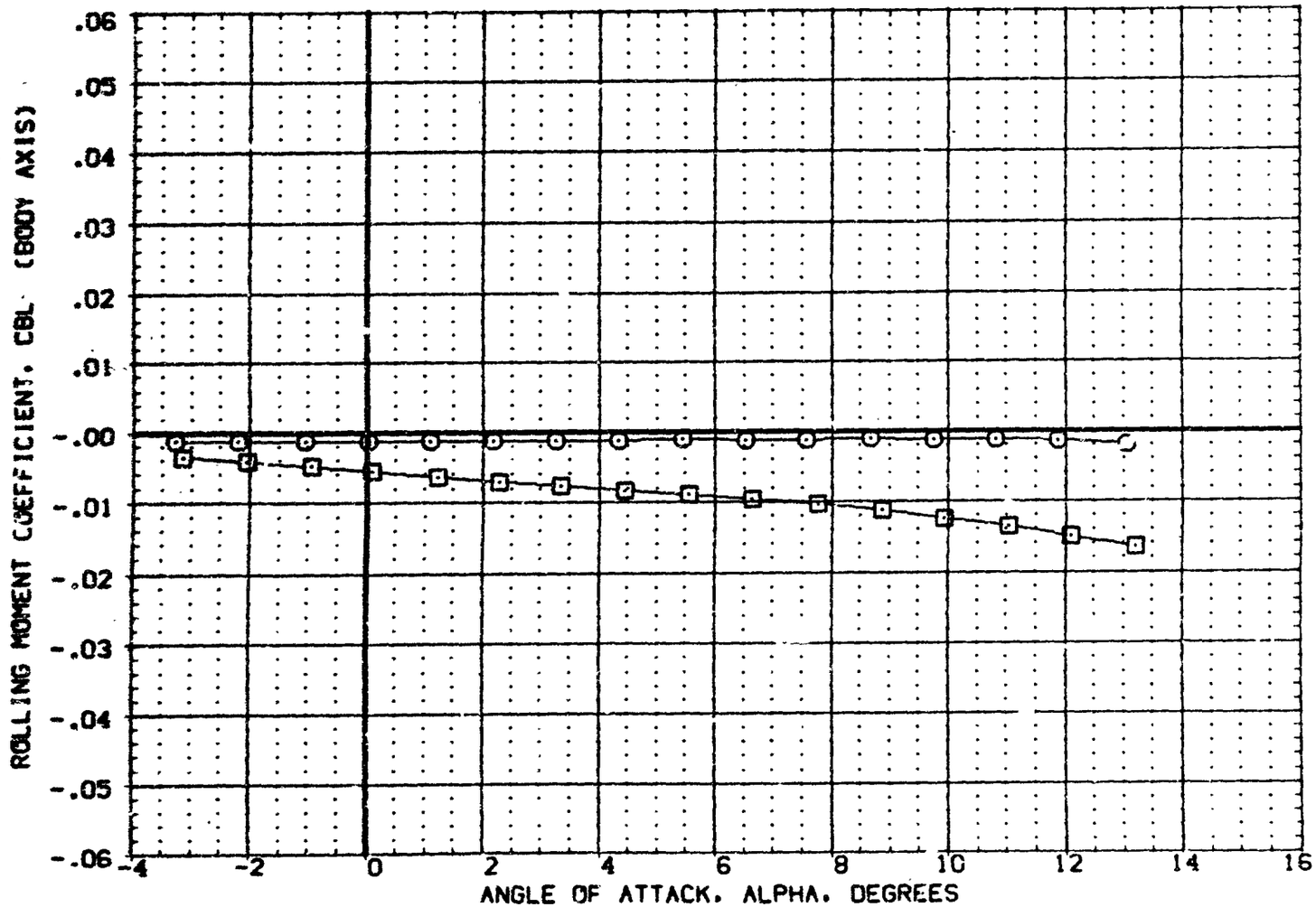

FIG. 15 LATERAL-DIRECTIONAL CHARACTERISTICS WITH FLUSH MOUNTED NACELLES

(A)MACH = .50

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(DV008)	0A91 B19C7F5J61V107E23V7R5X20
(DV009)	0A91 B19C7F5J61V107E23V7R5X20

BETA	ELEVON	GFLAP
.000	.000	-11.700
5.000	.000	-11.700

REFERENCE INFORMATION

SREF	.6050	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

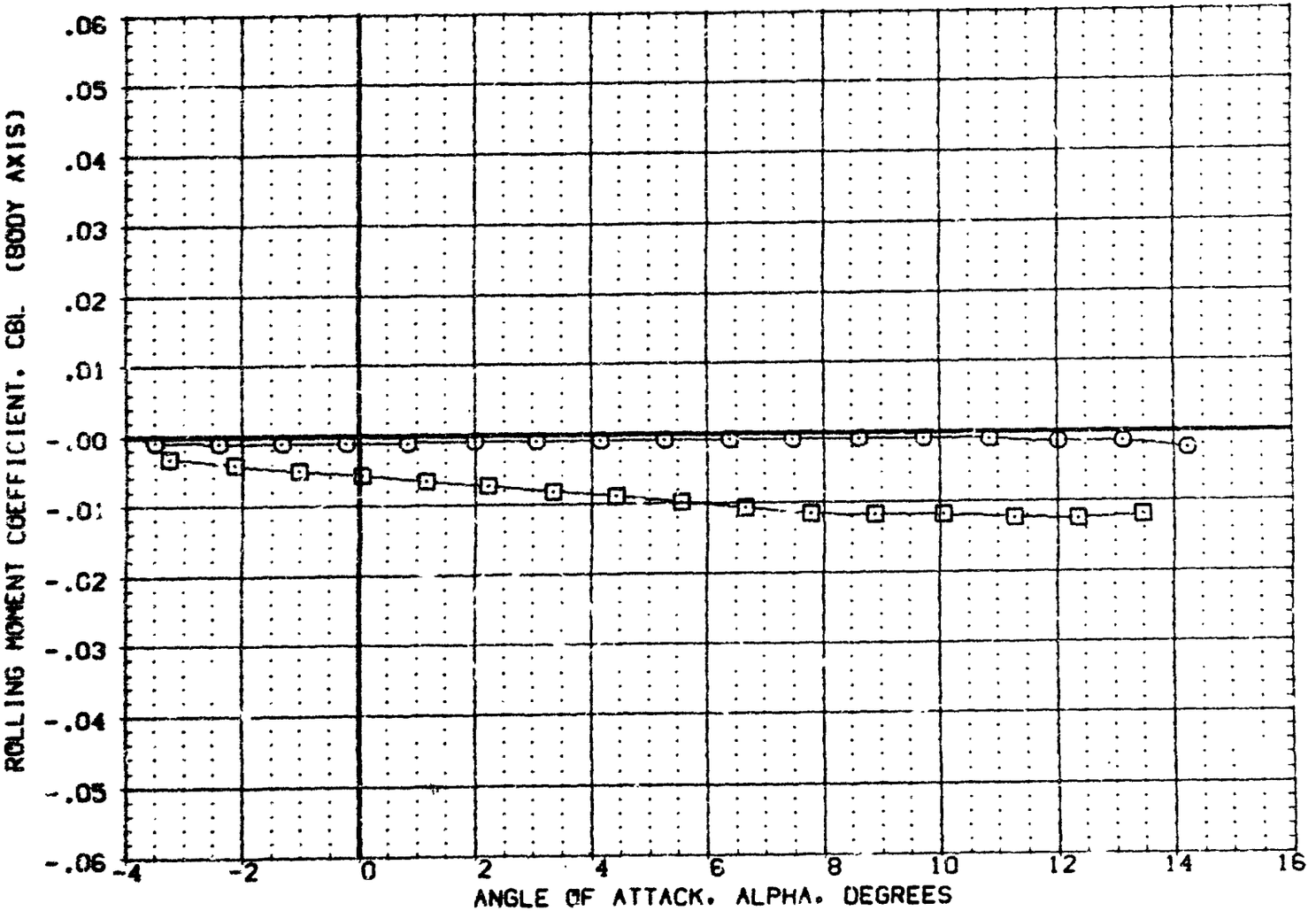

FIG. 15 LATERAL-DIRECTIONAL CHARACTERISTICS WITH FLUSH MOUNTED NACELLES

(B)MACH = .69

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(COYC08)		0A91 B19C7F5J61V107E23V7R5X20
(ROYD09)		0A91 B19C7F5J61V107E2?V7R5X20

BETA	ELEVON	BFLAP
.000	.000	-11.700
5.000	.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SQ. FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

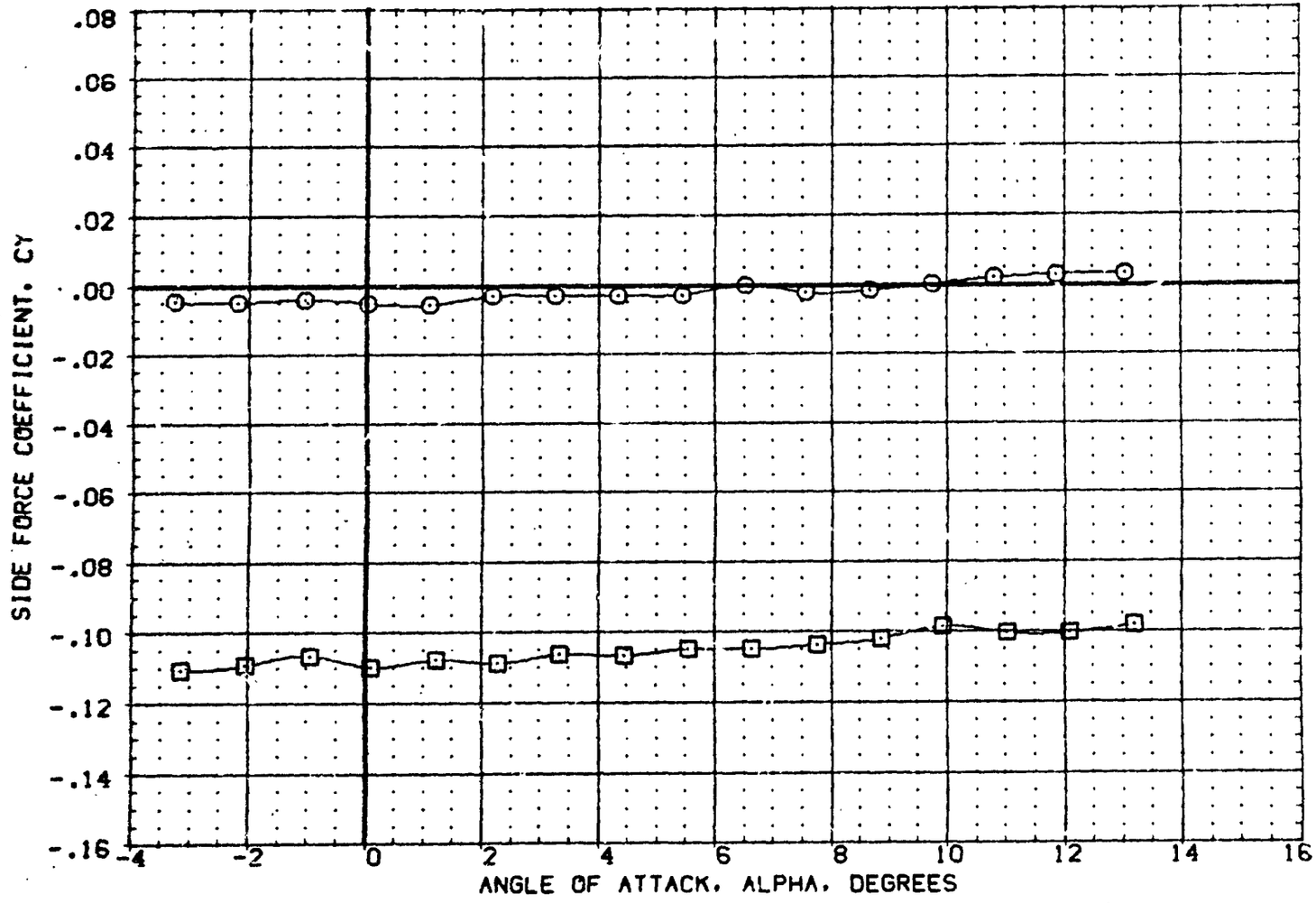

FIG. 15 LATERAL-DIRECTIONAL CHARACTERISTICS WITH FLUSH MOUNTED NACELLES

(A)MACH = .50

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(CDY008)	OA91 B19C/F5J61V107E23V7R5X20
(RCY009)	OA91 B19C7F5J61V107E23V7R5X20

BETA	ELEVON	BFLAP
.000	.000	-11.700
5.000	.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

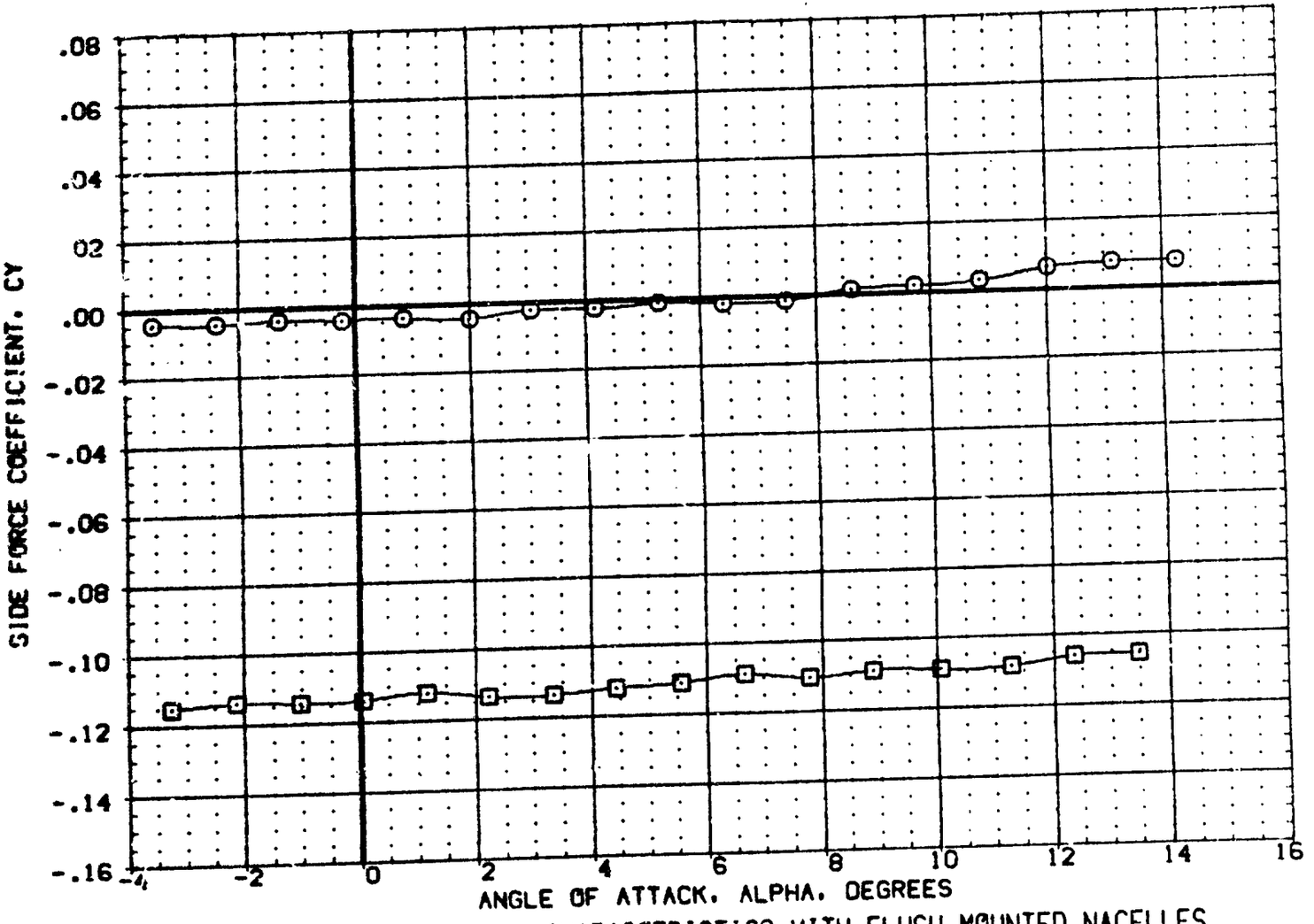

FIG. 15 LATERAL-DIRECTIONAL CHARACTERISTICS WITH FLUSH MOUNTED NACELLES

(B)MACH = .69

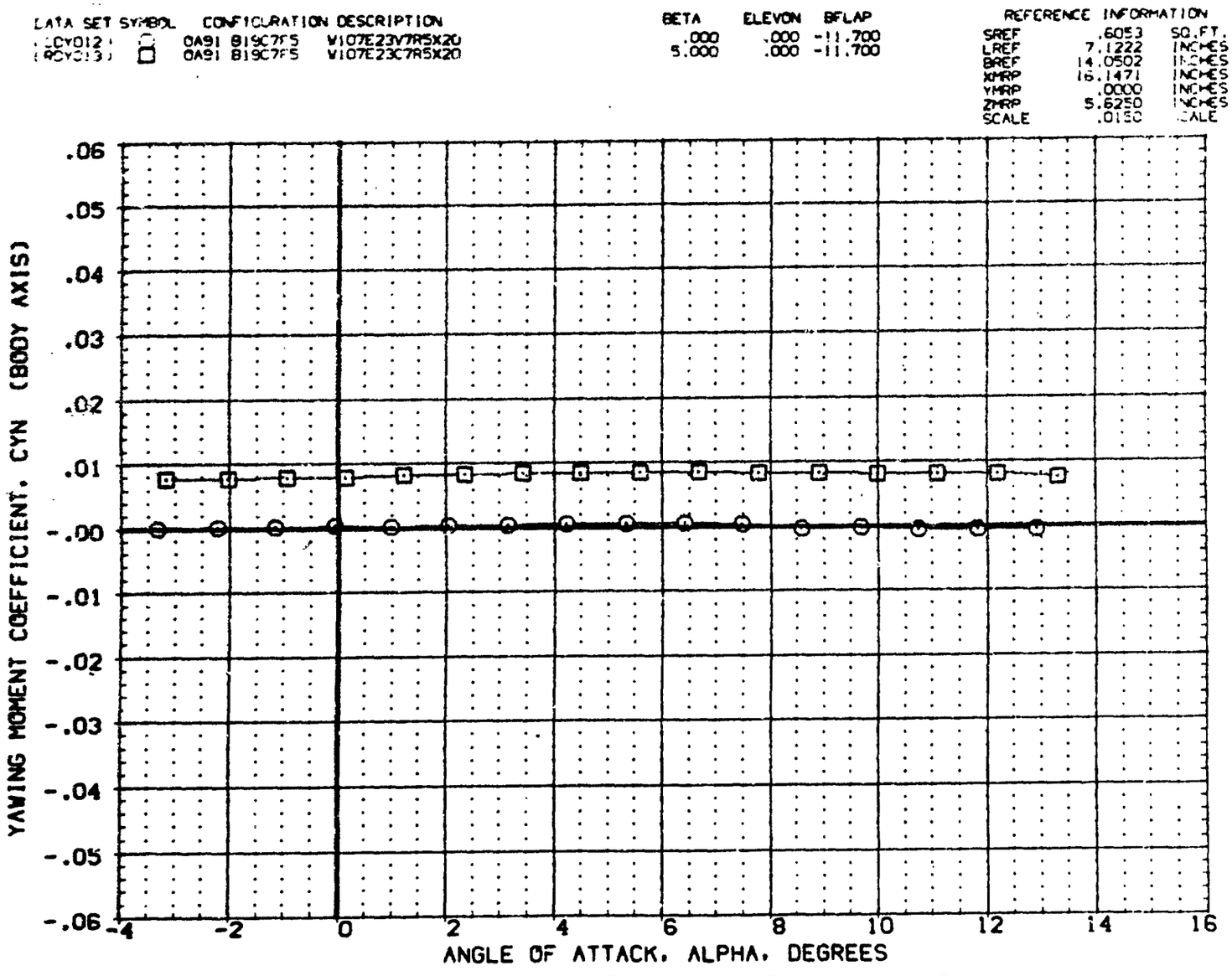

FIG. 16 LATERAL-DIRECTIONAL CHARACTERISTICS WITHOUT NACELLES

(A)MACH = .50

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		
(CDYC12)		OA91 B19C7F5	W107E23V7R5X20	
(RDYC13)	□	OA91 B19C7F5	W107E23C7R5X20	

BETA	ELEVON	BFLAP
.000	.000	-11.700
5.000	.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

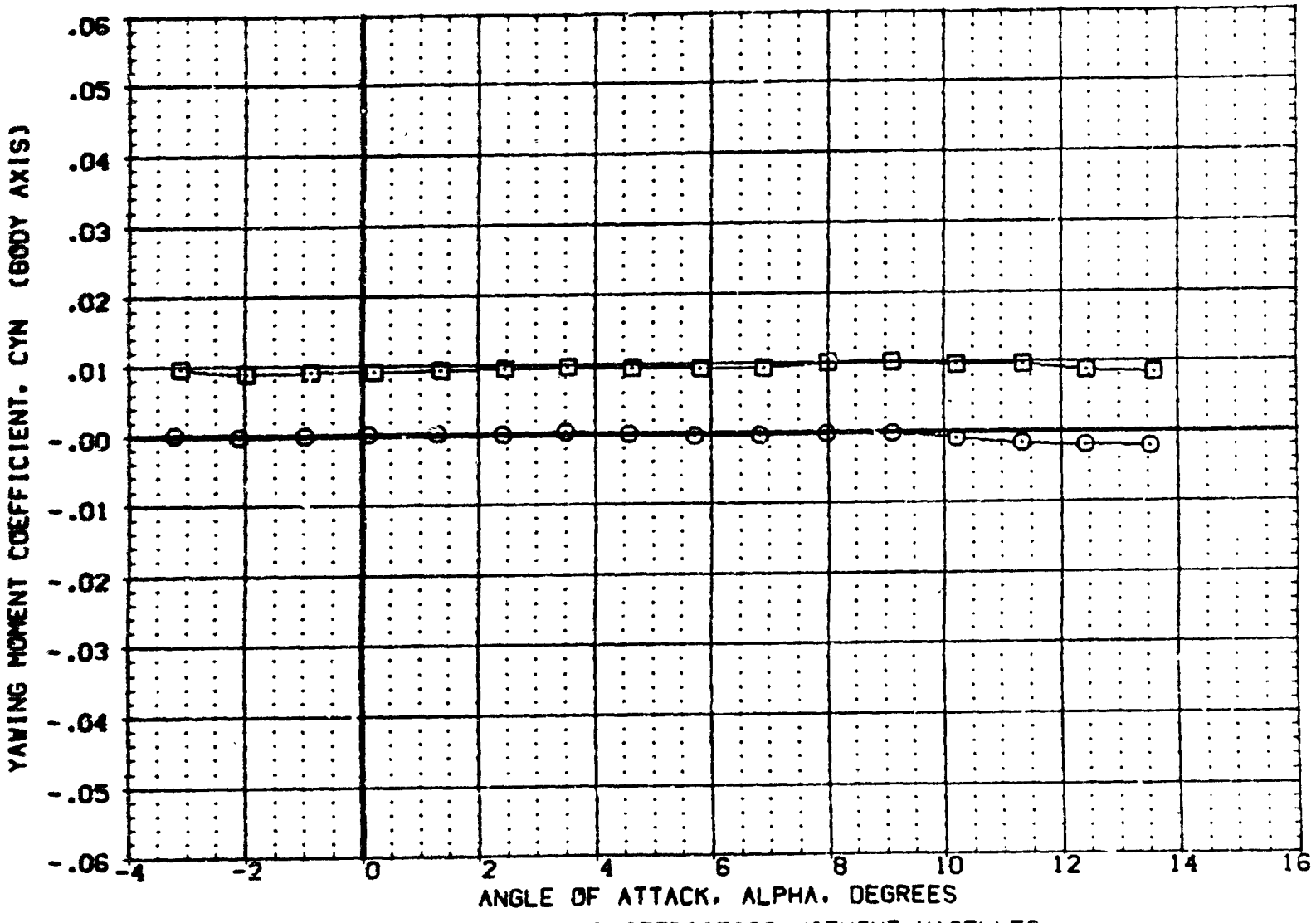

FIG. 16 LATERAL-DIRECTIONAL CHARACTERISTICS WITHOUT NACELLES

(B)MACH = .70

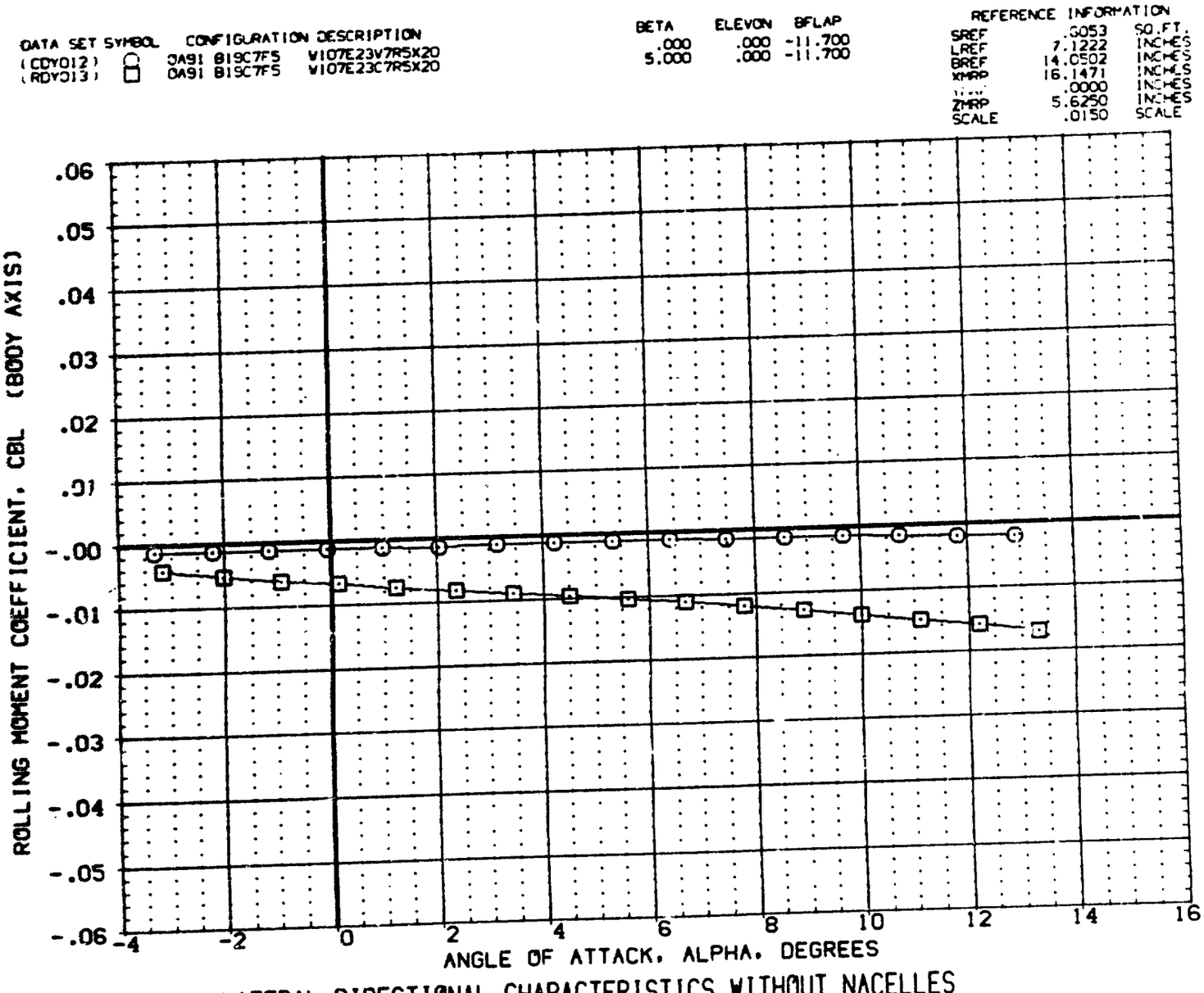

FIG. 16 LATERAL-DIRECTIONAL CHARACTERISTICS WITHOUT NACELLES

(A)MACH = .50

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BFLAP
(CDY012)		0A91 B19C7F5 V107E23V7R5X20	.000	.000	-11.700
(RDY013)		0A91 B19C7F5 V107E23C7R5X20	5.000	.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

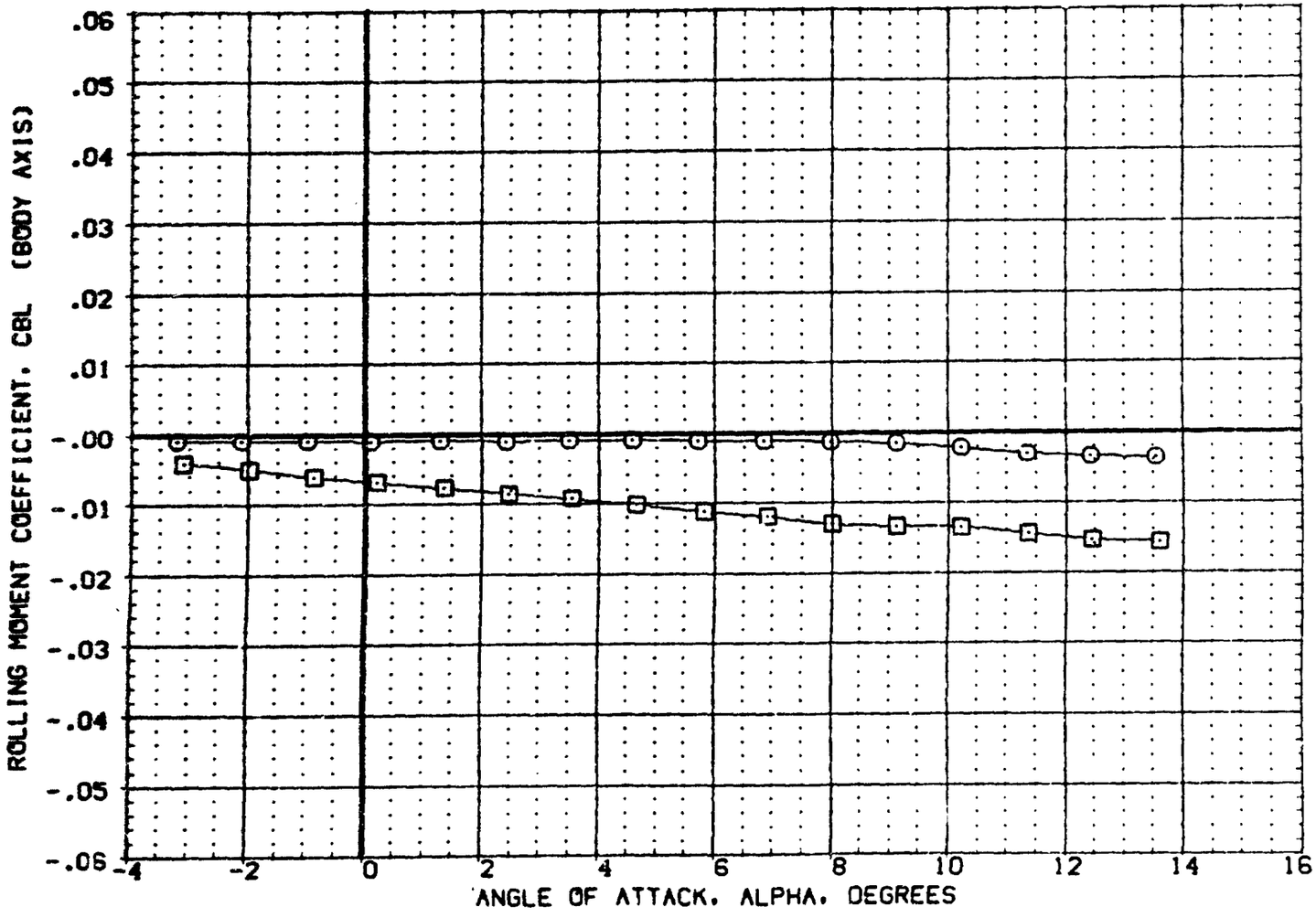

FIG. 16 LATERAL-DIRECTIONAL CHARACTERISTICS WITHOUT NACELLES

(B)MACH = .70

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(CDY012)	☐	OA91 B19C7FS V107E23V7R5X20
(RDY013)	☐	OA91 B19C7FS V107E23C7R5X20

BETA	ELEVON	BFLAP
.000	.000	-11.700
5.000	.000	-11.700

REFERENCE INFORMATION		
SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

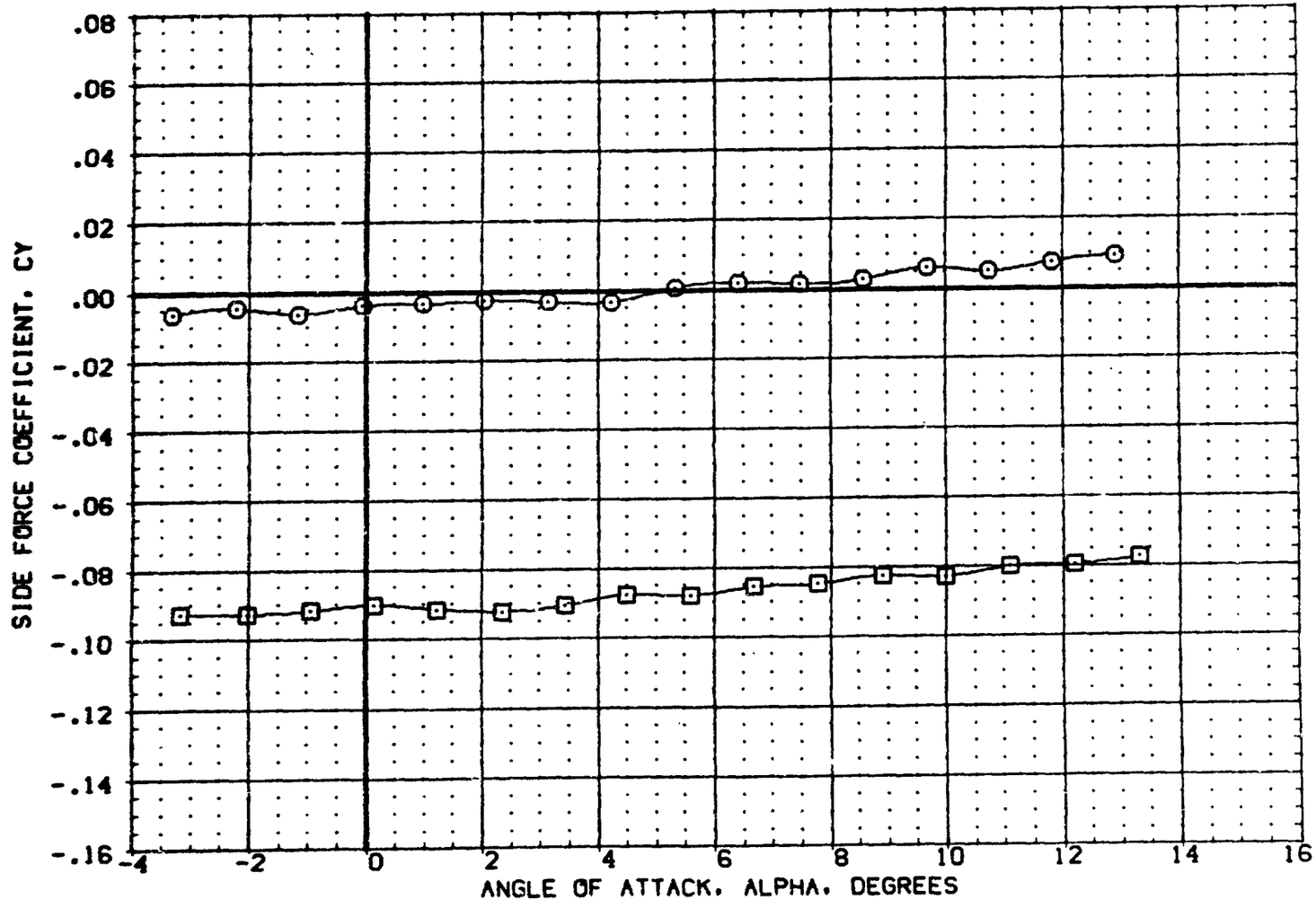

FIG. 16 LATERAL-DIRECTIONAL CHARACTERISTICS WITHOUT NACELLES

(A)MACH = .50

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		BETA	ELEVON	BFLAP
(CDYC12)		0A91 B19C7FS	W107E23V7R5X20	.000	.000	-11.700
(RDYC13)		0A91 B19C7FS	W107E23C7R5X20	5.000	.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	7.1222	INCHES
BREF	14.0502	INCHES
XMRP	16.1471	INCHES
YMRP	.0000	INCHES
ZMRP	5.6250	INCHES
SCALE	.0150	SCALE

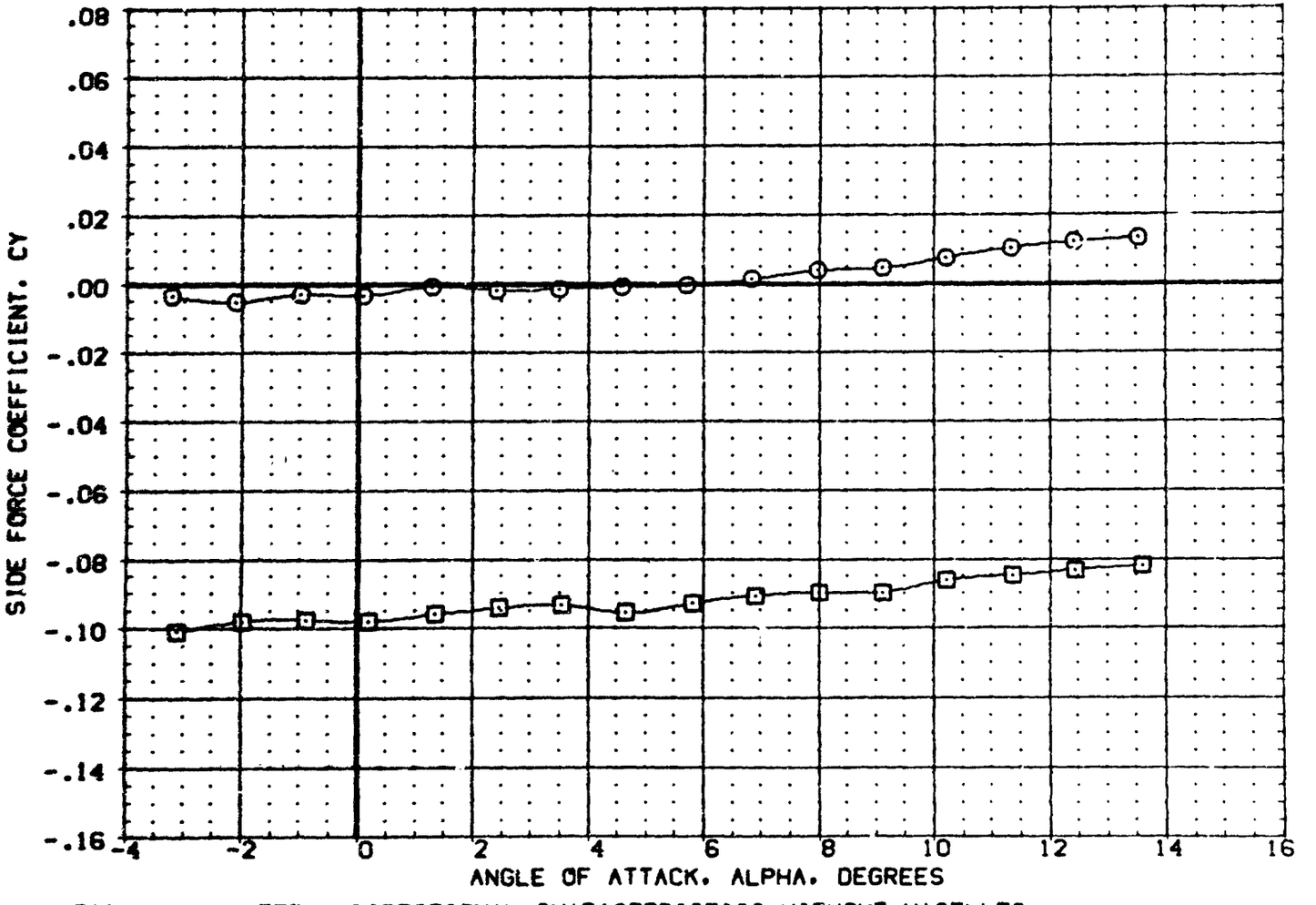

FIG. 16 LATERAL-DIRECTIONAL CHARACTERISTICS WITHOUT NACELLES

(B)MACH = .70

APPENDIX

TABULATED SOURCE DATA

Plotted data tabulations are available from Data Management Service on request.

0A91 019C7F5J5SwL07E23V7R5X20+NACELLE RAKES (RDYA01) (07 JAN 74)

REFERENCE DATA

SREF = .6053 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
BREF = 14.0502 INCHES ZMRP = 5.6250 INCHES
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BFLAP = -11.700

RUN NO. 5/ 0 RN/L = 263.90 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	PT1	PT2	PT3	PT4	PT5	PT6	PT7	PT8	PT9	PT10
.496	-3.220	1.00080	1.00070	1.00070	1.00080	1.00060	1.00070	1.00080	1.00070	1.00060	1.00120
.496	-2.070	.99840	.99930	.99940	.99950	.99930	.99940	.99950	.99940	.99950	.99890
.496	-1.020	1.00020	1.00020	1.00020	1.00030	1.00010	1.00020	1.00030	1.00020	1.00010	.99980
.496	.020	1.00060	1.00060	1.00070	1.00080	1.00060	1.00040	1.00070	1.00060	.99960	.99890
.496	1.150	.99990	.99990	.99990	1.00000	.99980	.99960	1.00000	.99990	.99730	.99620
.496	2.230	.99980	.99980	.99980	1.00000	.99970	.99910	.99990	.99980	.99540	.99680
.496	3.320	1.00080	1.00060	1.00060	1.00070	1.00050	.99940	1.00070	1.00060	.99300	.99790
.496	4.400	1.00030	1.00030	1.00030	1.00050	1.00020	.99780	1.00040	1.00030	.98810	.99760
.496	5.470	.99950	.99950	.99960	.99970	.99950	.99480	.99970	.99950	.97890	.99730
.496	6.530	.99950	.99960	.99960	.99970	.99950	.99280	.99970	.99960	.97040	.99800
.496	7.590	1.00050	1.00080	1.00050	1.00060	1.00050	.99000	1.00070	1.00050	.96320	.99910
.496	8.660	1.00040	1.00040	1.00030	1.00040	1.00030	.98650	1.00050	1.00020	.95700	.99880
.496	9.750	.99960	.99960	.99930	.99920	.99950	.98130	.99970	.99870	.95180	.99820
.496	10.810	.99920	.99930	.99860	.99860	.99920	.97730	.99940	.99790	.94930	.99790
.496	11.880	.99830	.99940	.99850	.99840	.99930	.98290	.99950	.99730	.95420	.99710
.496	12.980	.99990	.99990	.99900	.99880	.99990	.98280	1.00000	.99730	.95160	.99700
.496	14.010	.99880	.99880	.99800	.99740	.99880	.98100	.99890	.99540	.94510	.99410
	GRADIENT	.00002	.00002	.00001	.00002	.00001	-.00027	.00001	.00001	-.00150	-.00046

RUN NO. 6/ 0 RN/L = 264.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	PT1	PT2	PT3	PT4	PT5	PT6	PT7	PT8	PT9	PT10
.696	-3.150	1.00050	1.00050	.99090	1.00040	1.00070	.99850	1.00070	1.00070	.99900	.92710
.696	-1.990	1.00010	1.00000	.99170	.99990	1.00020	.99860	1.00030	1.00030	.99770	.93960
.696	-.850	1.00060	1.00070	.99270	1.00030	1.00080	.99860	1.00090	1.00090	.99740	.95670
.696	.250	.99990	1.00020	.99300	.99980	1.00020	.99800	1.00030	1.00020	.99600	.96860
.696	1.370	.99990	1.00030	.99350	.99950	1.00030	.99890	1.00050	1.00030	.99250	.98050
.696	2.490	.99990	1.00030	.99300	.99910	1.00020	.99820	1.00040	1.00030	.98550	.98400
.696	3.610	.99980	1.00020	.99290	.99890	1.00020	.99750	1.00030	1.00030	.97470	.99070
.696	4.740	.99940	.99990	.99260	.99840	.99990	.99770	1.00000	1.00000	.96380	.99330
.696	5.850	.99960	.99990	.99270	.99830	.99980	.99680	.99990	.99990	.94730	.99320
.696	6.990	1.00000	1.00030	.99360	.99830	1.00030	.99620	1.00040	1.00030	.93360	.99250
.696	8.080	1.00000	1.00060	.99400	.99820	1.00060	.99530	1.00070	1.00060	.92630	.99290
.696	9.180	.99980	1.00040	.99420	.99760	1.00030	.99420	1.00040	1.00020	.91690	.99230
.696	10.290	.99980	1.00040	.99480	.99710	1.00030	.99310	1.00050	.99970	.92550	.99830
.696	11.370	.99980	1.00030	.99520	.99650	1.00020	.99470	1.00030	.99940	.92050	.99800
.696	12.460	1.00020	1.00050	.99630	.99650	1.00050	.98350	1.00070	.99930	.91390	.99740
.696	13.550	.99970	1.00010	.99590	.99520	1.00000	.98210	1.00020	.99560	.90260	.99820
	GRADIENT	-.00012	-.00005	.00021	-.00024	-.00008	-.00012	-.00007	-.00007	-.00424	.00862

OA91 B19C7F5J59W107E23V7R5X20+NACELLE RAKES (RDYA01) (07 JAN 74)

REFERENCE DATA

SREF = .6053 SQ.FT. XMRP = 18.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
BREF = 14.0502 INCHES ZMRP = 5.6250 INCHES
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BFLAP = -1.700

RUN NO. 7/ 8 RN/L = 263.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	PT1	PT2	PT3	PT4	PT5	PT6	PT7	PT8	PT9	PT10
.797	-3.010	1.00070	.99990	.96690	.99960	1.00080	.99760	1.00090	1.00090	.99730	.91540
.797	-1.640	1.00090	1.00030	.96650	.99980	1.00110	.99890	1.00120	1.00110	.99380	.92740
.797	-.720	1.00030	1.00020	.96630	.99900	1.00060	.99520	1.00070	1.00070	.99050	.94300
.797	.370	.99980	.99980	.96630	.99840	1.00020	.99500	1.00030	1.00030	.98630	.96190
.797	1.590	1.00020	1.00050	.96780	.99910	1.00070	.99600	1.00070	1.00080	.97940	.97520
.797	2.640	1.00010	1.00050	.96870	.99860	1.00060	.99250	1.00060	1.00050	.97360	.98150
.797	3.760	1.00020	1.00040	.96920	.99830	1.00050	.99000	1.00060	1.00050	.96690	.98780
.797	4.870	1.00020	1.00060	.97030	.99850	1.00060	.98750	1.00070	1.00070	.95700	.99250
.797	5.990	.99960	1.00040	.97200	.99770	1.00030	.98240	1.00040	1.00040	.94160	.99530
.797	7.170	.99900	.99980	.97380	.99690	.99980	.97830	.99980	.99960	.92320	.99660
.797	8.260	.99920	1.00060	.97700	.99740	1.00050	.97660	1.00060	1.00040	.91080	.99720
.797	9.410	.99850	1.00010	.97850	.99620	1.00000	.97140	1.00000	.99970	.89910	.99660
.797	10.530	.99840	1.00030	.97960	.99580	1.00050	.97190	1.00050	.99980	.88720	.99660
.797	11.630	.99840	1.00030	.98120	.99470	1.00030	.96840	1.00030	.99900	.88100	.99560
.797	12.710	.99850	1.00040	.98250	.99390	1.00040	.96890	1.00040	.99860	.88120	.99610
.797	13.800	.99860	1.00060	.98450	.99250	1.00050	.96020	1.00040	.99040	.87680	.99850
	GRADIENT	-.00008	.00007	.00056	-.00020	-.00004	-.00130	-.00005	-.00005	-.00502	.01028

0A91 019C7F5J59W407E23V7R5X20+NACELLE RAKES (RDYB01) (07 JAN 74)

REFERENCE DATA

SREF = .6053 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1722 INCHES YMRP = .0000 INCHES
BREF = 14.0502 INCHES ZMRP = 5.6250 INCHES
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BFLAP = -11.700

RUN NO. 5/ 0 RN/L = 263.90 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	PT11	PT12	PT13	PT14	PT15
.496	-3.220	1.00080	1.00070	1.00080	1.00050	1.00080
.496	-2.070	.99950	.99940	.99950	.99920	.99940
.496	-1.020	1.00030	1.00020	1.00020	1.00010	1.00020
.496	.020	1.00070	1.00060	.99900	1.00050	1.00060
.496	1.150	1.00000	.99990	.99700	.99940	.99990
.496	2.230	.99990	.99990	.99580	.99830	.99990
.496	3.320	1.00050	1.00060	.99590	.99770	1.00060
.496	4.400	.99970	1.00040	.99540	.98750	1.00040
.496	5.470	.99620	.99960	.99470	.97710	.99960
.496	6.530	.99250	.99960	.99260	.97110	.99960
.496	7.590	.98880	1.00060	.99200	.96650	1.00040
.496	8.660	.98510	1.00040	.98840	.96280	1.00020
.496	9.750	.98130	.99960	.98490	.95850	.99920
.496	10.810	.97630	.99930	.98240	.95450	.99840
.496	11.880	.97210	.99930	.98120	.95010	.99790
.496	12.980	.97090	.99990	.97870	.94690	.99820
.496	14.010	.96640	.99870	.97480	.94210	.99650
	GRADIENT	-.00005	.00002	-.00078	-.00115	.00002

RUN NO. 6/ 0 RN/L = 264.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	PT11	PT12	PT13	PT14	PT15
.695	-3.150	1.00070	1.00060	.97330	1.00040	1.00070
.695	-1.990	1.00020	1.00020	.98670	.99960	1.00030
.695	-.850	1.00070	1.00080	.99130	.99940	1.00080
.695	.250	.99990	1.00020	.99030	.99740	1.00020
.695	1.370	.99970	1.00040	.99030	.99290	1.00050
.695	2.490	.99890	1.00030	.98910	.98460	1.00040
.695	3.610	.99890	1.00020	.98700	.97670	1.00020
.695	4.740	.99640	.99990	.98620	.96840	1.00000
.695	5.850	.99110	.99990	.98490	.95800	1.00000
.695	6.990	.98530	1.00030	.98250	.94870	1.00030
.695	8.080	.98020	1.00060	.98110	.94230	1.00050
.695	9.160	.97290	1.00030	.97570	.93430	.99990
.695	10.290	.96570	1.00030	.97360	.92790	.99960
.695	11.370	.96200	1.00020	.97170	.92110	.99920
.695	12.460	.95510	1.00050	.96720	.91540	.99880
.695	13.550	.95100	.99990	.96110	.90950	.99740
	GRADIENT	-.00045	-.00007	.00091	-.00410	-.00007

OA91 B19C[illegible]07E23V7R31X20+NACELLE RAKES (RDYB01) (07 JAN 74)

REFERENCE DATA

SREF = .8033 SQ.FT. XMRP = 18.1471 INCHES
LREF = 7.1822 INCHES YMRP = .0000 INCHES
BREF = 14.0302 INCHES ZMRP = 5.6250 INCHES
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BFLAP = -11.700

RUN NO. 7/ 0 RN/L = 263.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	PT11	PT12	PT13	PT14	PT15
.797	-3.010	1.00080	1.00080	.95000	.99990	1.00090
.797	-1.840	1.00080	1.00120	.96590	.99840	1.00110
.797	-.720	1.00000	1.00060	.97660	.99500	1.00060
.797	.370	.99880	1.00020	.98250	.98920	1.00030
.797	1.500	.99830	1.00070	.98460	.98190	1.00070
.797	2.640	.99780	1.00060	.98150	.97320	1.00050
.797	3.760	.99810	1.00050	.97880	.96790	1.00050
.797	4.870	.99610	1.00060	.97680	.96210	1.00070
.797	5.990	.99130	1.00040	.97690	.95370	1.00030
.797	7.170	.98280	.99980	.97510	.94300	.99980
.797	8.260	.97770	1.00060	.97320	.93530	1.00050
.797	9.410	.97210	1.00070	.96950	.92650	.99980
.797	10.530	.96610	1.00050	.96460	.91890	1.00000
.797	11.630	.95800	1.00020	.96240	.90960	.99900
.797	12.710	.95070	1.00030	.95790	.90160	.99870
.797	13.800	.94550	1.00030	.95250	.89600	.99820
	GRADIENT	-.00057	-.00005	.00286	-.00519	-.00005

OA91 B19C7F5J59A07E23V7R5X20+NACELLE RAKES (ROYAD2) (27 JAN 74)

REFERENCE DATA

SREF = .6651 SQ.FT. XMRP = 18.1471 INCHES
LREF = 7.1222 INCHES YMRP = .C 00 INCHES
BREF = 14.0502 INCHES ZMRP = 5.6250 INCHES
SCALE = .0125 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BFLAP = -11.700

RUN NO. 4/ 0 RN/L = 285.80 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	PT1	PT2	PT3	PT4	PT5	PT6	PT7	PT8	PT9	PT10
.597	-3.170	1.00260	1.00260	1.00270	1.00280	1.00260	1.00050	1.00270	1.00260	1.00260	.97360
.597	-2.060	.99940	.99940	.99950	.99960	.99940	.99950	.99960	.99950	.99860	.98850
.597	-.980	1.00030	1.00030	1.00040	1.00040	1.00030	1.00030	1.00040	1.00030	.99740	.99290
.597	.120	1.00020	1.00010	1.00010	1.00030	1.00010	.99990	1.00030	1.00020	.99390	.99130
.597	1.190	1.00000	1.00000	1.00000	1.00010	1.00000	.99980	1.00010	1.00010	.99610	.99060
.597	2.270	1.00050	1.00050	1.00040	1.00060	1.00040	1.00000	1.00050	1.00060	.99230	.99130
.597	3.400	.99900	.99990	.99990	1.00000	.99990	.99930	1.00000	1.00000	.98680	.99100
.597	4.500	.99970	.99970	.99970	.99980	.99970	.99860	.99980	.99980	.97990	.99180
.597	5.580	1.00010	.00010	1.00010	1.00020	1.00010	.99820	1.00020	1.00010	.96370	.99260
.597	6.650	1.00000	1.00010	1.00000	1.00010	1.00000	.99830	1.00020	1.00010	.95110	.99300
.597	7.720	1.00060	1.00060	1.00050	1.00060	1.00050	.99690	1.00060	1.00060	.94140	.99350
.597	8.850	1.00070	1.00070	1.00060	1.00070	1.00060	.99430	1.00080	1.00060	.93710	.99510
.597	9.980	.99970	.99970	.99950	.99960	.99960	.98820	.99980	.99970	.93180	.99830
.597	11.060	.99970	.99990	.99970	.99970	.99980	.98790	1.00000	.99970	.92400	.99640
.597	12.240	.99990	.99990	.99970	.99950	.99990	.97980	1.00000	.99490	.91790	.99730
.597	13.340	1.00040	1.00040	1.00020	.99980	1.00040	.97670	1.00050	.99440	.92870	.99750
.597	14.460	.99900	.99890	.99860	.99810	.99890	.96970	.99870	.99070	.92430	.99520
	GRADIENT	-.00019	-.00019	-.00021	-.00020	-.00019	-.00032	-.00020	-.00018	-.00241	.00146

RUN NO. 3/ 0 RN/L = 363.70 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	PT1	PT2	PT3	PT4	PT5	PT6	PT7	PT8	PT9	PT10
.696	-3.210	1.00040	1.00030	.99590	1.00040	1.00050	.99960	1.00010	1.00060	1.00040	.93470
.696	-2.110	1.00060	1.00060	.99660	1.00060	1.00070	1.00020	1.00090	1.00090	.99740	.93670
.696	-1.010	1.00000	.99980	.99610	.99970	1.00000	.99910	1.00020	1.00010	.99190	.95220
.696	.130	1.00050	1.00040	.99700	1.00020	1.00050	.99890	1.00060	1.00060	.98840	.97420
.696	1.230	1.00050	1.00050	.99710	1.00010	1.00050	.99880	1.00060	1.00060	.98520	.98290
.696	2.300	1.00000	1.00000	.99700	.99950	1.00000	.99740	1.00020	1.00010	.97670	.98600
.696	3.480	1.00050	1.00050	.99760	.99990	1.00050	.99710	1.00060	1.00060	.96550	.98720
.696	4.570	1.00070	1.00070	.99790	1.00000	1.00070	.99700	1.00090	1.00080	.95170	.99020
.696	5.630	1.00020	1.00020	99760	.99940	1.00020	.99540	1.00030	1.00020	.93350	.99080
.696	6.760	1.00030	1.00040	.99770	.99930	1.00030	.99150	1.00050	1.00040	.92040	.99060
.696	7.870	1.00020	1.00030	.99770	.99900	1.00030	.99230	1.00040	1.00030	.91190	.99120
.696	8.980	.99950	.99980	.99700	.99810	.99970	.98790	.99980	.99940	.90490	.99180
.696	10.090	1.00000	1.00020	.99770	.99810	1.00020	.98300	1.00030	.99930	.90290	.99380
.696	11.170	1.00000	1.00020	.99750	.99760	1.00010	.97810	1.00030	.99690	.89360	.99700
.696	12.270	.99970	1.00010	.99700	.99730	1.00000	.97800	1.00010	.99370	.90190	.99740
.696	13.350	1.00000	1.00030	.99750	.99700	1.00020	.96590	1.00020	.99480	.90220	.99780
	GRADIENT	.00001	.00003	.00023	-.00007	.00000	-.00042	.00004	-.00000	-.00586	.00802

OA91 B19C7F5J59W1G7E23V7R5X20+NACELLE RAKES (RDVA02) (07 JAN 74)

REFERENCE DATA

SREF = .6053 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
BREF = 14.[illegible]202 INCHES ZMRP = 5.6250 INCHES
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BFLAP = -11.700

RUN NO. 27 0 RN/L = 263.40 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	PT1	PT2	PT3	PT4	PT5	PT6	PT7	PT8	PT9	PT10
.798	-3.210	1.00070	.99990	.97780	1.00040	1.00110	.99960	1.00090	1.00110	.99780	.91100
.798	-2.090	1.00020	.99970	.97850	.99990	1.00080	.99950	1.00060	1.00060	.99500	.91590
.798	-.950	1.00040	.99970	.97980	.99970	1.00040	.99990	1.00040	1.00050	.98960	.92790
.798	.170	1.00050	1.00030	.98000	1.00010	1.00100	.99950	1.00090	1.00090	.98260	.94500
.798	1.280	1.00000	1.00010	.98050	.99050	1.00070	.99810	1.00040	1.00020	.97470	.95720
.798	2.420	1.00030	1.00050	.98150	1.00030	1.00070	.99780	1.00070	1.00070	.96430	.97280
.798	3.530	1.00070	1.00100	.98180	1.00020	1.00100	.99670	1.00120	1.00110	.95280	.98690
.798	4.640	1.00050	1.00070	.98250	.99940	1.00090	.99450	1.00090	1.00080	.93480	.99120
.798	5.760	1.00060	1.00110	.98380	.99970	1.00130	.99390	1.00120	1.00120	.92100	.99270
.798	6.860	1.00020	1.00050	.98330	.99900	1.00060	.99250	1.00060	1.00050	.90940	.99400
.798	7.950	1.00040	1.00080	.98520	.99890	1.00080	.99270	1.00080	1.00070	.90110	.99510
.798	9.050	.99990	1.00050	.98620	.99840	1.00060	.99000	1.00060	1.00020	.8917[illegible]	.99550
.798	10.180	.99950	1.00010	.98690	.99740	.99990	.98390	1.00020	.99900	.88220	.99510
.798	11.290	.99950	1.00030	.98800	.99780	1.00080	.97900	1.00050	.99660	.87570	.99760
.798	12.420	.99980	1.00050	.98990	.99750	1.00050	.97740	1.00050	.99480	.87510	.99880
.798	13.510	.99970	1.00070	.99070	.99730	1.00050	.97310	1.00080	.99210	.86900	.99920
	GRADIENT	.00001	.00015	.00056	-.00006	.00000	-.00061	.00004	.00000	-.00782	.01130

RUN NO. 1/ 0 RN/L = 363.60 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	PT1	PT2	PT3	PT4	PT5	PT6	PT7	PT8	PT9	PT10
.898	-3.280	.99720	.99600	.98830	.99670	.99750	.99720	.99740	.99740	.99640	.94630
.898	-2.080	.99850	.99780	.98960	.99800	.99880	.99830	.99880	.99870	.99690	.95200
.898	-.950	.99800	.99760	.98870	.99700	.99830	.99780	.99830	.99820	.99460	.95700
.898	.150	.99860	.99850	.98860	.99720	.99910	.99840	.99900	.99890	.99210	.96190
.898	1.300	.99870	.99890	.98860	.99690	.99920	.99830	.99910	.99910	.98780	.96680
.898	2.410	.99860	.99880	.98870	.99660	.99900	.99800	.99900	.99890	.98280	.97190
.898	3.520	.99830	.99850	.98880	.99640	.99870	.99750	.99870	.99860	.97870	.97830
.898	4.640	.99900	.99920	.99010	.99720	.99940	.99810	.99940	.99930	.97660	.98[illegible]30
.898	5.760	.99890	.99930	.99050	.99720	.99940	.99830	.99940	.99930	.97370	.99230
.898	6.880	.99920	.99960	.99080	.99730	.99970	.99800	.99960	.99950	.97060	.99480
.898	8.000	.99920	.99970	.99110	.99720	.99980	.99780	.99980	.99960	.96840	.99770
.898	9.100	.99960	1.00010	.99160	.99740	1.00020	.9977[illegible]	1.00020	.99990	.96640	.99850
.898	10.200	.99970	1.00030	.99220	.99740	1.00030	.99610	1.00030	.99960	.96410	.99910
.898	11.360	1.00010	1.00080	.99310	.99770	1.00080	.99420	1.00080	.99930	.96470	.99960
.898	12.490	1.00010	1.00090	.99350	.99750	1.00090	.99180	1.00090	.99910	.96500	.99950
.898	13.590	1.00100	1.00180	.99460	.99800	1.00180	.99070	1.00170	.99950	.96560	.99930
	GRADIENT	.00014	.00032	.00009	-.00006	.00016	.00003	.00017	.00016	-.00284	.00503

0A91 B19C7F5J59W107E23V7R3X20+NACELLE RAKES (RC.B02) (07 JAN 74)

REFERENCE DATA

SREF = .6053 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
DREF = 14.0502 INCHES ZMRP = 5.6250 INCHES
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BFLAP = -11.700

RUN NO. 4/ 0 RN/L = 265.80 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	PT11	PT12	PT13	PT14	PT15
.595	-3.170	1.00270	1.00260	.99380	1.00260	1.00270
.595	-2.060	.99960	.99950	.99450	.99950	.99960
.595	-.990	1.00040	1.00030	.99600	.99950	1.00030
.595	.120	1.00030	1.00020	.99500	.99860	1.00030
.595	1.190	1.00010	1.00010	.99220	.99530	1.00000
.595	2.270	1.00050	1.00050	.99180	.99210	1.00060
.595	3.400	.99980	1.00000	.99120	.97600	1.00000
.595	4.500	.99930	.99980	.99100	.96230	.99990
.595	5.580	.99930	1.00020	.98960	.95460	1.00020
.595	6.650	.99660	1.00010	.99130	.94430	1.00010
.595	7.720	.99480	1.00060	.99000	.93690	1.00060
.595	8.850	.99310	1.00080	.98670	.93120	1.00060
.595	9.980	.99020	.99970	.98300	.92470	.99940
.595	11.060	.98930	.99990	.98120	.92030	.99950
.595	12.240	.98730	.99990	.97630	.91570	.99920
.595	13.340	.98540	1.00040	.97400	.90880	.99910
.595	14.460	.98030	.99890	.96880	.90140	.99700
	GRADIENT	-.00025	-.00018	-.00056	-.00464	-.00019

RUN NO. 3/ 0 RN/L = 363.70 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	PT11	PT12	PT13	PT14	PT15
.695	-3.210	1.00040	1.00060	.96340	1.00040	1.00070
.695	-2.110	1.00060	1.00080	.97100	1.00040	1.00090
.695	-1.010	.99990	1.00010	.98600	.99610	1.00020
.695	.130	1.00040	1.00050	.98720	.98710	1.00060
.695	1.230	1.00020	1.00060	.98650	.97530	1.00060
.695	2.390	.99950	1.00010	.98580	.96140	1.00010
.695	3.480	.99950	1.00060	.98610	.94960	1.00070
.695	4.570	.99920	1.00080	.98500	.94260	1.00080
.695	5.680	.99750	1.00030	.98250	.93560	1.00030
.695	6.760	.99520	1.00040	.97600	.92050	1.00050
.695	7.870	.99110	1.00030	.97750	.91230	1.00030
.695	8.980	.98630	.99970	.98040	.90520	.99960
.695	10.090	.98440	1.00020	.97810	.89880	.99990
.695	11.170	.98190	1.00010	.97390	.89310	.99950
.695	12.270	.97920	1.00000	.96970	.88720	.99910
.695	13.350	.97630	1.00020	.96430	.88290	.99870
	GRADIENT	-.00016	.00001	.00246	-.00827	-.00001

0A91 819C7F5J59W107E23V7R5X20+NACELLE RAKES (RDYB02) (07 JAN 74)

REFERENCE DATA

SREF = .6553 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
BREF = 14.0502 INCHES ZMRP = 5.6250 INCHES
SCALE = .0140 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BFLAP = -11.700

RUN NO. 2/ 0 RN/L = 283.40 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	PT11	PT12	PT13	PT14	PT15
.796	-3.210	.00050	1.00110	.94490	1.00010	1.00110
.796	-2.050	.99970	1.00030	.95330	.99670	1.00060
.796	-.950	.99970	1.00040	.96120	.98510	1.00050
.796	.170	.99930	1.00080	.97350	.97410	1.00080
.796	1.280	.99630	1.00020	.97460	.96230	1.00030
.796	2.420	.99750	1.00060	.97200	.95190	1.00070
.796	3.550	.99720	1.00100	.97040	.94290	1.00110
.796	4.640	.99630	1.00070	.96860	.93140	1.00080
.796	5.760	.99661	1.00110	.96610	.92000	1.00110
.796	6.880	.99480	1.00040	.96340	.90890	1.00040
.796	7.950	.99190	1.00070	.96220	.90040	1.00070
.796	9.050	.98570	1.00040	.96820	.89600	1.00030
.796	10.180	.97960	1.00010	.96350	.88820	.99980
.796	11.290	.97450	1.00020	.95830	.88020	.99970
.796	12.420	.97240	1.00030	.95550	.87250	.99990
.796	13.510	.96900	1.00050	.94500	.86580	.99980
	GRADIENT	-.00053	-.00000	.00303	-.00915	.00001

RUN NO. 1/ 0 RN/L = 363.60 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	PT11	PT12	PT13	PT14	PT15
.896	-3.260	.99700	.99740	.96220	.99710	.99730
.896	-2.080	.99840	.99870	.98550	.99820	.99870
.896	-.950	.99790	.99830	.98630	.99490	.99820
.896	.190	.99860	.99900	.96710	.99170	.99890
.896	1.300	.99860	.99910	.98800	.98620	.99900
.896	2.410	.99780	.99900	.99050	.98550	.99900
.896	3.520	.99700	.99870	.98930	.98220	.99870
.896	4.660	.99750	.99930	.98920	.98010	.99930
.896	5.760	.99780	.99940	.98870	.97750	.99930
.896	6.880	.99760	.99960	.98810	.97610	.99960
.896	8.000	.99530	.99970	.98930	.97400	.99970
.896	9.100	.99520	1.00010	.98880	.97250	1.00010
.896	10.200	.99430	1.00030	.98790	.97040	1.00020
.896	11.360	.99440	1.00080	.98740	.96890	1.00060
.896	12.490	.99340	1.00090	.98700	.96830	1.00050
.896	13.590	.99320	1.00180	.98480	.96840	1.00100
	GRADIENT	-.00004	.00016	.00086	-.00243	.00018

OA91 B19C7F5J59w807E23V7R5x20 (RDY003) (07 JAN 74)

REFERENCE DATA

SREF = .6053 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
BREF = 14.0502 INCHES ZMRP = 5.6250 INCHES
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BFLAP = -11.700

RUN NO. 10/ 0 RN/L = 262.80 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.496	-3.280	-.23170	.02890	.02240	-.00500	.00000	-.00150	.01390	.00840	.66540
.496	-2.170	-.17800	.03020	.02580	-.00730	-.00020	-.00150	.01400	.00850	.70320
.496	-1.100	-.12940	.03100	.02900	-.00430	.00020	-.00160	.01400	.00860	.73230
.496	-.040	-.07740	.03130	.03190	-.00620	-.00020	-.00160	.01400	.00860	.80160
.496	1.050	-.02500	.03100	.03540	-.00540	.00000	-.00160	.01420	.00840	1.17030
.496	2.160	.02900	.02890	.03840	-.00320	.00010	-.00170	.01390	.00870	.16300
.496	3.250	.08250	.02600	.04170	-.00330	.00020	-.00160	.01410	.00860	.46370
.496	4.340	.13300	.02290	.04450	-.00300	.00030	-.00160	.01380	.00840	.52650
.496	5.410	.18750	.01860	.04770	-.00250	.00030	-.00160	.01410	.00870	.55610
.496	6.490	.24520	.01410	.05090	-.00440	.00000	-.00170	.01440	.00870	.57330
.496	7.560	.29790	.00920	.05310	-.00410	-.00030	-.00160	.01420	.00860	.58410
.496	8.670	.35310	.00360	.05580	-.00050	-.00020	-.00160	.01450	.00870	.59160
.496	9.740	.41030	-.00170	.05980	.00050	-.00060	-.00190	.01470	.00900	.59610
.496	10.810	.46900	-.00770	.06240	.00040	-.00060	-.00210	.0152[illegible]	.00900	.60080
.496	11.890	.52640	-.01440	.06600	.00120	-.00070	-.00220	.01540	.00920	.60360
.496	12.950	.58210	-.02170	.06910	.00330	-.00060	-.00240	.01560	.00930	.60610
.496	1 .050	.63600	-.02560	.07410	.00260	-.00080	-.00240	.01590	.00920	.60690
	GRADIENT	.04800	-.00076	.00291	.00042	.00004	-.00002	-.00000	.00001	-.04029

RUN NO. 11/ 0 RN/L = 266.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.594	-3.170	-.23290	.03160	.02430	-.00590	-.00020	-.00100	.01400	.00870	.68830
.594	-2.060	-.17780	.03250	.02710	-.00560	-.00020	-.00110	.01390	.00870	.70590
.594	-.920	-.12380	.03290	.03050	-.00490	-.00020	-.00120	.01380	.00860	.74070
.594	.150	-.07250	.03240	.03360	-.00350	-.00020	-.00120	.01390	.00860	.82030
.594	1.260	-.01710	.03120	.03740	-.00460	.00000	-.00140	.01390	.00860	1.45590
.594	2.380	.03910	.02940	.04030	-.00370	.00000	-.00130	.01410	.00860	.27020
.594	3.470	.09050	.02690	.04390	-.00460	.00020	-.00140	.01410	.00850	.47100
.594	4.570	.14800	.02300	.04720	-.00520	.00040	-.00130	.01400	.00860	.53220
.594	5.660	.20470	.01910	.04960	-.00130	.00020	-.00150	.01410	.00870	.56030
.594	6.780	.26070	.01460	.05220	-.00310	-.00010	-.00140	.01400	.00850	.57660
.594	7.900	.32220	.00940	.05480	-.00200	-.00040	-.00150	.01430	.00860	.58710
.594	9.020	.38040	.00370	.05770	.00050	-.00050	-.00150	.01440	.00880	.59390
.594	10.100	.43920	-.00140	.06000	-.00020	-.00040	-.00170	.01460	.00890	.59950
.594	11.200	.50150	-.00780	.06340	.00140	-.00010	-.00190	.01500	.00900	.60320
.594	12.310	.56220	-.01420	.06590	.00220	.00020	-.00180	.01530	.00920	.60660
.594	13.400	.62330	-.01890	.06820	.00140	.00010	-.00160	.01570	.00930	.60950
	GRADIENT	.04903	-.00107	.00299	.00028	.00008	-.00004	.00002	-.00002	-.03287

0A91 B19C7F5J59W107E23√7R5X20 (RDY003) (07 JAN 74)

REFERENCE DATA

SREF = .6053 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
BREF = 14.0502 INCHES ZMRP = 5.8250 INCHES
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BFLAP = -11.700

RUN NO. 12/ 0 RN/L = 264.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.697	-3.430	-.25380	.03560	.02640	-.00490	-.00010	-.00090	.01430	.00880	.68820
.697	-2.260	-.19380	.03340	.02910	-.00580	.00000	-.00090	.01440	.00860	.70510
.697	-1.170	-.13880	.03530	.03210	-.00400	.00000	-.00100	.01420	.00890	.73490
.697	-.090	-.08960	.03480	.03580	-.00390	-.00020	-.00100	.01410	.00870	.79700
.697	1.000	-.03260	.03340	.03900	-.00410	-.00010	-.00110	.01410	.00880	1.09000
.697	2.15	.02440	.03140	.04220	-.00490	-.00020	-.00120	.01400	.00870	.01410
.697	3.270	.08170	.02860	.04570	-.00500	.00000	-.00110	.01410	.00880	.44370
.697	4.390	.13850	.02570	.04840	-.00330	.00010	-.00130	.01410	.00860	.52100
.697	5.510	.19600	.02220	.05165	-.00260	.00000	-.00130	.01400	.00870	.55320
.697	6.630	.26080	.01770	.05360	-.00200	.00000	-.00140	.01420	.00850	.57400
.697	7.760	.32340	.01320	.05530	-.00130	-.00030	-.00140	.01430	.00870	.58680
.697	8.890	.386[illegible]0	.00970	.05640	-.00060	-.00040	-.00150	.01440	.00880	.59610
.697	10.020	.45130	.00650	.05810	-.00070	-.00030	-.00130	.01490	.00900	.60240
.697	11.140	.51130	.00420	.06080	-.00030	-.00010	-.00135	.01540	.00940	.60600
.697	12.240	.56660	.00250	.06350	-.00010	-.00050	-.00140	.01570	.00960	.60850
.697	13.330	.62290	.00160	.06570	.00240	-.00050	-.00190	.01620	.00980	.61100
	GRADIENT	.04998	-.00125	.00289	.00013	.00001	-.00005	-.00004	-.00001	-.04688

RUN NO. 8/ 0 RN/L = 262.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.797	-3.230	-.26340	.04270	.03230	-.00230	-.00140	-.00110	.01470	.00930	.69500
.797	-2.080	-.19830	.04120	.03380	-.00550	-.00120	-.00070	.01450	.00910	.71260
.797	-.960	-.13600	.04000	.03590	-.00560	-.00110	-.00070	.01450	.00890	.74710
.797	.120	-.07960	.03860	.03820	-.00310	-.00090	-.00070	.01450	.00890	.82600
.797	1.240	-.02410	.03720	.04200	-.00300	-.00040	-.00070	.01440	.00880	1.29040
.797	2.360	.03460	.03550	.04550	-.00500	-.00070	-.00070	.01440	.00880	.16850
.797	3.470	.09490	.03340	.04720	-.00110	-.00020	-.00100	.01440	.00880	.46650
.797	4.590	.15700	.03170	.04840	-.00490	-.00020	-.00120	.01420	.00860	.53630
.797	5.720	.22140	.03020	.04870	-.00460	-.00050	-.00110	.01430	.00860	.56840
.797	6.820	.28190	.02900	.04940	-.00280	-.00080	-.00120	.01440	.00860	.58520
.797	7.920	.34110	.02810	.05060	-.00150	-.00060	-.00120	.01460	.00890	.59520
.797	9.020	.39690	.02720	.05200	-.00330	-.00060	-.00080	.01490	.00900	.60150
.797	10.220	.46030	.02640	.05400	-.00400	-.00020	-.00120	.01560	.00950	.60660
.797	11.320	.51570	.02450	.05690	-.00250	-.00030	-.00040	.01590	.00970	.60910
.797	12.430	.5701C	.02250	.06150	.00060	-.00040	-.00110	.01630	.01000	.61010
.797	13.600	.62690	.02090	.06630	.00210	-.00060	-.00150	.01680	.01040	.61080
	GRADI	.05319	-.00140	.00227	.00006	.00016	-.00002	-.00005	-.00007	-.03867

0A91 B19C7F5J59W107E23V7R5X20 (RDY003) (07 JAN 74)

REFERENCE DATA

SREF = .6053 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
BREF = 14.0502 INCHES ZMRP = 5.6250 INCHES
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BFLAP = -11.700

RUN NO. 9/ 0 RN/L = 262.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.895	-3.350	-.30060	.05750	.04790	.00160	-.00130	.00000	.01530	.00970	.70850
.895	-2.100	-.21560	.05650	.04240	.00140	-.00150	.00000	.01540	.00950	.72230
.895	-.930	-.14080	.05520	.03860	-.00250	-.00100	-.00090	.01540	.00950	.75070
.895	.160	-.07540	.05590	.03780	-.00270	-.00100	-.00060	.01510	.00920	.83430
.895	1.330	-.01190	.05740	.03830	-.00340	-.00090	-.00050	.01510	.00950	1.82820
.895	2.450	.04940	.05690	.03920	-.00230	-.00080	-.00040	.01490	.00960	.35730
.895	3.610	.11110	.05640	.04040	.00065	-.00050	-.00010	.01510	.00940	.51600
.895	4.750	.17090	.05520	.04250	-.00230	-.00080	-.00010	.01510	.00930	.55820
.895	5.850	.23180	.05380	.04390	.00000	-.00090	-.00020	.01520	.00930	.58000
.895	7.010	.29560	.05200	.04490	.00110	-.00080	-.00040	.01540	.00940	.59380
.895	8.170	.36050	.05030	.04570	.00170	-.00160	-.00060	.01570	.00950	.60310
.895	9.270	.41880	.04810	.04810	.00040	-.00170	-.00050	.01630	.00980	.60750
.895	10.370	.47540	.04620	.04910	.00260	-.00140	.00000	.01700	.01030	.61170
.895	11.470	.53150	.04380	.05070	.00140	-.00160	.00050	.01750	.01080	.61460
.895	12.630	.59470	.04050	.05510	.00120	-.00210	.00040	.01820	.01130	.61570
.895	13.780	.65540	.03770	.05760	.00200	-.00220	.00030	.01890	.01220	.61740
	GRADIENT	.05770	-.00011	-.00048	-.00033	.00008	.00000	-.00006	-.00003	-.02301

OA91 B19C7F5J59W107E23V7R3X20 (R07004) (07 JAN 74)

REFERENCE DATA

SREF = .6033 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
BREF = 14.0302 INCHES ZMRP = 5.6250 INCHES
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = 5.000 ELEVON = .000
BFL = -11.700

RUN NO. 15/ 0 RN/L = 263.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.496	-3.170	-.22230	.02540	.01910	-.11410	.00620	-.00700	.01430	.00860	.68150
.496	-2.050	-.16650	.02700	.02120	-.11430	.00630	-.00370	.01410	.00840	.69670
.496	-.980	-.11590	.02730	.02490	-.11360	.00610	-.00440	.01440	.00850	.72890
.496	.110	-.06520	.02710	.02800	-.11420	.00600	-.00520	.01440	.00880	.80780
.496	1.190	-.01420	.02610	.03160	-.11290	.00610	-.00590	.01440	.00900	1.46490
.496	2.260	.03950	.02440	.03480	-.11220	.00570	-.00670	.01430	.00880	.32740
.496	3.360	.09160	.02190	.03780	-.11260	.00570	-.00750	.01430	.00840	.49800
.496	4.480	.14540	.01850	.04150	-.11000	.00560	-.00810	.01420	.00890	.54470
.496	5.550	.19850	.01450	.04490	-.10640	.00560	-.00900	.01440	.00900	.56640
.496	6.650	.25540	.01010	.04880	-.10490	.00510	-.00990	.01450	.00890	.57940
.496	7.740	.31090	.00510	.05210	-.10570	.00460	-.01090	.01450	.00900	.58000
.496	8.860	.36980	-.00010	.05540	-.10220	.00430	-.01180	.01450	.00890	.59460
.496	9.930	.42570	-.00600	.05840	-.10120	.00380	-.01310	.01480	.00900	.59920
.496	11.000	.48350	-.01180	.06110	-.09810	.00390	-.01440	.01490	.00890	.60320
.496	12.100	.54350	-.01850	.06420	-.09520	.00370	-.01600	.01500	.00930	.60620
.496	13.200	.60330	-.02490	.06800	-.09310	.00360	-.01780	.01550	.00950	.60830
	GRADIENT	.04794	-.00091	.00298	.00047	-.00009	-.00068	-.00000	.00006	-.02724

RUN NO. 14/ 0 RN/L = 264.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.696	-3.170	-.24020	.03170	.02190	-.12030	.00800	-.00310	.01440	.00900	.68340
.696	-2.100	-.17920	.03180	.02450	-.11590	.00770	-.00380	.01440	.00890	.70020
.696	-.980	-.12470	.03150	.02770	-.11790	.00720	-.00480	.01440	.00890	.73160
.696	.190	-.06830	.03080	.03170	-.11630	.00720	-.00560	.01440	.00890	.82070
.696	1.290	-.01310	.02900	.03440	-.11860	.00690	-.00630	.01430	.00890	1.61450
.696	2.420	.04230	.02710	.03850	-.11740	.00680	-.00720	.01430	.00900	.31520
.696	3.500	.09840	.02490	.04190	-.11460	.00680	-.00800	.01430	.00890	.49310
.696	4.610	.15360	.02170	.04510	-.11290	.00670	-.00900	.01430	.00900	.54130
.696	5.720	.21400	.01810	.04910	-.11160	.00640	-.01000	.01430	.00900	.56530
.696	6.860	.27630	.01360	.05160	-.11330	.00600	-.01120	.01430	.00910	.58110
.696	8.000	.33960	.00950	.05580	-.11030	.00580	-.01240	.01440	.00900	.59140
.696	9.100	.40040	.00610	.05590	-.10830	.00650	-.01290	.01460	.00900	.59840
.696	10.200	.46470	.00280	.05710	-.10770	.00620	-.01360	.01480	.00910	.60450
.696	11.280	.52180	.00040	.05830	-.10690	.00700	-.01360	.01510	.00940	.60860
.696	12.440	.58630	-.00240	.05970	-.10640	.00680	-.01320	.01540	.00960	.61230
.696	13.540	.64200	-.00480	.06350	-.10600	.00630	-.01270	.01580	.01010	.61330
	GRADIENT	.04991	-.00126	.00306	.00062	-.00016	-.00074	-.00002	.00060	-.02586

OA91 B19C7F5J59%107E23V7R5X20 (RDY005) (07 JAN 74)

REFERENCE DATA

SREF = .6053 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
BREF = 14.0502 INCHES ZMRP = 5.6250 INCHES
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = 10.000
BFLAP = -11.700

RUN NO. 13/ 0 RN/L = 264.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.696	-3.160	-.03240	.04370	-.07620	-.00010	-.00090	-.00040	.01710	.01140	-.21600
.696	-2.050	.02940	.04390	-.07570	.00040	-.00110	-.00050	.01720	.01130	1.59700
.696	-.960	.08530	.04380	-.07430	.00030	-.00080	-.00060	.01700	.01120	.97060
.696	.160	.14190	.04290	-.07320	.00050	-.00120	-.00060	.01690	.01120	.83970
.696	1.250	.19970	.04170	-.07060	.00240	-.00110	-.00070	.01670	.01110	.77990
.696	2.330	.25700	.03960	-.06900	.00080	-.00120	-.00080	.01660	.01110	.74860
.696	3.430	.31750	.03690	-.06730	.00200	-.00070	-.00090	.01660	.01090	.72780
.696	4.520	.37810	.03380	-.06630	.00150	-.00100	-.00080	.01660	.01080	.71440
.696	5.640	.44080	.03030	-.06510	.00090	-.00100	-.00090	.01650	.01090	.70420
.696	6.740	.50260	.02680	-.06480	.00070	-.00100	-.00090	.01650	.01080	.69720
.696	7.830	.56730	.02300	-.06390	.00310	-.00070	-.00080	.01670	.01080	.69130
.696	8.940	.62830	.02020	-.06150	.00020	-.00100	-.00050	.01670	.01080	.68580
.696	10.050	.68550	.01730	-.05670	.00070	-.00070	-.00040	.01700	.01110	.68020
.696	11.130	.73290	.01580	-.05020	-.00170	-.00070	.00000	.01750	.01140	.67500
.696	12.220	.77340	.01460	-.04110	.00170	-.00120	-.00090	.01830	.01170	.66930
.696	13.330	.82220	.01260	-.03410	.00270	-.00170	-.00200	.01900	.01210	.66510
.696	14.450	.87480	.01020	-.02890	.00550	-.00210	-.00270	.01950	.01230	.66200
	GRADIENT	.05297	-.00128	.00141	.00025	.00000	-.00006	-.00009	-.00007	.01626

OA91 B19C7F5J60A107E23V7..5X20 (RDY006) (07 JAN 74)

REFERENCE DATA

SREF = .6053 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
DREF = 14.0502 INCHES ZMRP = 5.8250 INCHES
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BFLAP = -11.700

RUN NO. 27/ 0 RN/L = 165.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.600	-3.450	-.25590	.03290	.04060	-.01080	-.00010	-.00130	.01370	.00880	.70830
.600	-2.300	-.19720	.03370	.04050	-.01030	-.00030	-.00140	.01380	.00890	.72540
.600	-1.210	-.14720	.03430	.04210	-.00970	.00000	-.00100	.01370	.00890	.75510
.600	-.150	-.09780	.03420	.04300	-.00740	-.00010	-.00060	.01380	.00910	.81170
.600	.940	-.04470	.03330	.04400	-.00710	-.00010	-.00130	.01380	.00890	1.01220
.600	2.100	.00940	.03170	.04590	-.00560	.00000	-.00110	.01390	.00890	-1.13420
.600	3.210	.06370	.02850	.04640	-.00600	.00000	-.00130	.01390	.00880	.38130
.600	4.280	.11600	.02520	.04760	-.00640	-.00010	-.00130	.01390	.00900	.49870
.600	5.380	.17220	.02060	.04870	-.00590	.00000	-.00140	.01400	.00890	.54560
.600	6.460	.22960	.01540	.04900	-.00550	.00000	-.00120	.01400	.00880	.57110
.600	7.550	.28780	.00970	.04980	-.00400	-.00050	-.00100	.01410	.00880	.58600
.600	8.640	.34540	.00360	.05010	-.00290	-.00080	-.00110	.01420	.00900	.59630
.600	9.760	.40260	-.00230	.05080	.00010	-.00050	-.00130	.01430	.00900	.60330
.600	10.830	.46400	-.00920	.05140	.00000	-.00040	-.00140	.01490	.00920	.60900
.600	12.020	.52680	-.01620	.05210	.00270	-.00040	-.00160	.01510	.00940	.61350
.600	13.160	.59150	-.02170	.05230	.00200	-.00100	-.00200	.01540	.00990	.61720
	GRADIENT	.04780	-.00096	.00098	.00068	.00002	-.00000	.00002	.00001	-.09438

RUN NO. 24/ 0 RN/L = 165.70 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.697	-3.270	-.25640	.03790	.04410	-.00270	-.00100	-.00160	.01390	.00930	.71320
.697	-2.090	-.19450	.03830	.04340	-.00740	-.00100	-.00160	.01380	.00920	.73190
.697	-1.000	-.14200	.03790	.04410	-.00520	-.00020	-.00130	.01370	.00910	.76420
.697	.130	-.08660	.03690	.04500	-.00830	-.00030	-.00120	.01380	.00910	.84140
.697	1.210	-.03330	.03520	.04650	-.00830	-.00030	-.00110	.01380	.00920	1.16370
.697	2.400	.02840	.03530	.04760	-.00560	.00000	-.00110	.01370	.00910	-.01220
.697	3.510	.08180	.02980	.04860	-.00580	.00010	-.00110	.01380	.00890	.43100
.697	4.630	.13870	.02590	.04940	-.00640	-.00020	-.00110	.01380	.00910	.51960
.697	5.700	.19690	.02140	.05040	-.00700	-.00030	-.00120	.01390	.00900	.55550
.697	6.830	.25920	.01600	.05020	-.00510	-.00080	-.00120	.01380	.00890	.57840
.697	7.920	.31890	.01100	.05010	-.00260	-.00040	-.00120	.01390	.00890	.59190
.697	9.020	.38170	.00670	.04930	-.00070	-.00020	-.00140	.01410	.00910	.60220
.697	10.100	.43980	.00380	.04870	.00040	-.00050	-.00120	.01450	.00930	.60900
.697	11.240	.50150	.00120	.04920	.00280	-.00080	-.00150	.01490	.00970	.61370
.697	12.330	.56010	-.00100	.04890	.00280	-.00120	-.00190	.01540	.00990	.61760
.697	13.430	.61740	-.00410	.04990	.00090	-.00130	-.00190	.01580	.01030	.62090
	GRADIENT	.04979	-.00151	.00079	-.00020	.00012	.00007	-.00001	-.00003	-.05224

CA91 B19C7F5J60W107E25V7R5X20 (RDY006) (07 JAN 74)

REFERENCE DATA

SREF = .6053 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
DREF = 14.0592 INCHES ZMRP = 5.6250 INCHES
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BFLAP = -11.700

RUN NO. 26/ 0 RN/L = 162.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.799	-3.550	-.29620	.04620	.05640	-.00150	-.00180	-.00240	.01410	.00920	.71990
.799	-2.430	-.23110	.04570	.05350	-.00170	-.00160	-.00230	.01400	.00920	.73500
.799	-1.330	-.17510	.04500	.05220	-.00320	-.00140	-.00210	.01390	.00920	.75960
.799	-.190	-.11540	.04360	.05080	-.00450	-.00110	-.00150	.01390	.00920	.81170
.799	1.000	-.05190	.04160	.05090	-.00790	-.00060	-.00110	.01390	.00930	1.01090
.799	2.150	.00750	.03920	.05220	-.00580	-.00010	-.00100	.01370	.00920	-1.90820
.799	3.240	.06720	.03660	.05190	-.00450	.00000	-.00110	.01380	.00900	.36570
.799	4.340	.12950	.03490	.05080	-.00530	.00010	-.00110	.01370	.00900	.50520
.799	5.440	.19160	.03330	.04830	-.00460	.00010	-.00110	.01380	.00890	.55690
.799	6.560	.25150	.03220	.04660	-.00520	.00010	-.00080	.01380	.00900	.58160
.799	7.670	.31190	.02980	.04530	-.00430	.00020	-.00040	.01400	.00890	.59630
.799	8.780	.37430	.02670	.04450	-.00440	.00010	-.00020	.01420	.00900	.60600
.799	9.920	.43390	.02420	.04480	-.00290	-.00030	-.00070	.01470	.00930	.61170
.799	11.040	.49050	.02160	.04620	.00040	-.00050	-.00110	.01490	.00950	.61510
.799	12.160	.54830	.02020	.04580	.00210	-.00080	-.00150	.01550	.00970	.61900
.799	13.370	.61510	.01820	.04610	.00430	-.00120	-.00170	.01610	.01040	.62220
.799	14.540	.67810	.01760	.04600	.00460	-.00110	-.00140	.01670	.01090	.62480
	GRADIENT	.05338	-.00151	-.00049	-.00055	.00027	.00020	-.00005	-.00002	-.11918

OA91 B19C7F5J6GA407E23V7R5X20 (RDY007) (07 JAN 74)

REFERENCE DATA

SREF = .6033 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
DREF = 14.0502 INCHES ZMRP = -.6250 INCHES
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = 10.000
BFLAP = -11.700

RUN NO. 25/ 0 RN/L = 163.40 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLN	CY	CYN	CBL	CAB	CABC	XCP/L
.696	-3.030	-.04460	.04520	-.05510	.00260	-.00250	-.00100	.01670	.01110	.19510
.696	-1.910	.01650	.04510	-.05800	.00190	-.00230	-.00120	.01670	.01120	1.93990
.696	-.800	.07410	.04430	-.05890	-.00360	-.00100	-.00100	.01660	.01120	.94250
.696	.280	.13020	.04300	-.05980	-.00400	-.00070	-.00080	.01660	.01110	.81870
.696	1.420	.18230	.04160	-.06020	-.00350	-.00130	-.00080	.01650	.01100	.75690
.696	2.520	.24550	.03920	-.06030	.00140	-.00130	-.00070	.01640	.01100	.74020
.696	3.640	.30740	.03560	-.06050	-.00070	-.00130	-.00070	.01630	.01110	.72230
.696	4.770	.36740	.03140	-.06070	-.00170	-.00100	-.00070	.01630	.01100	.71060
.696	5.940	.43340	.02710	-.06330	-.00120	-.00100	-.00070	.01620	.01100	.70350
.696	7.090	.50240	.02210	-.06550	-.00170	-.00080	-.00030	.01620	.01110	.69780
.696	8.240	.57370	.01640	-.06900	-.00220	-.00070	-.00040	.01630	.01110	.69400
.696	9.360	.63470	.01490	-.06830	-.00040	-.00100	-.00120	.01650	.01130	.68940
.696	10.490	.68580	.01230	-.06320	.00080	-.00100	-.00040	.01690	.01130	.68370
.696	11.660	.73830	.01070	-.06020	.00260	-.00130	-.00070	.01720	.01150	.67980
.696	12.730	.78530	.00890	-.05620	.00570	-.00140	-.00100	.01790	.01190	.67610
.696	13.850	.83880	.00650	-.05370	.00460	-.00180	-.00100	.01850	.01240	.67330
	GRADIENT	.05256	-.00171	-.00060	-.00029	.00015	.00006	-.00006	-.00002	-.03339

OA91 B19C7F5J61W107E23V7R5X20 (RDY008) (07 JAN 74)

REFERENCE DATA

SREF = .6053 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
BREF = 14.0502 INCHES ZMRP = 5.6250 INCHES
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BFLAP = -11.700

RUN NO. 33/ 0 RN/L = 163.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.496	-3.290	-.24340	.02540	.04320	-.00430	.00030	-.00130	.01380	.00950	.71460
.496	-2.200	-.19080	.02800	.04270	-.00490	.00000	-.00120	.01350	.00850	.73220
.496	-1.050	-.13760	.02650	.04310	-.00400	.00010	-.00120	.01350	.00850	.76520
.496	.040	-.08610	.02270	.04360	-.00510	.00000	-.00120	.01360	.00860	.83630
.496	1.100	-.03700	.02800	.04420	-.00560	.00000	-.00120	.01350	.00850	1.08890
.496	2.170	.01420	.02660	.04430	-.00310	.00030	-.00120	.01350	.00870	-.49820
.496	3.260	.06450	.02430	.04570	-.00310	.00030	-.00120	.01380	.00860	.38860
.496	4.350	.11640	.02120	.04630	-.00290	.00040	-.00120	.01350	.00840	.50320
.496	5.450	.16900	.01820	.04660	-.00290	.00050	-.00110	.01390	.00860	.54820
.496	6.520	.22190	.01080	.04680	.00000	.00040	-.00120	.01400	.00860	.57210
.496	7.580	.27540	.00480	.04780	-.00230	.00020	-.00120	.01390	.00870	.58590
.496	8.680	.33070	-.00150	.04780	-.00170	-.00010	-.00110	.01410	.00880	.59650
.496	9.760	.38770	-.00910	.04920	.00020	-.00040	-.00130	.01430	.00890	.60300
.496	10.820	.44150	-.01620	.04950	.00180	-.00050	-.00130	.01490	.00890	.60850
.496	11.880	.49920	-.02480	.05070	.00280	-.00060	-.00140	.01530	.00920	.61240
.496	13.040	.56210	-.03370	.05050	.00310	-.00100	-.00190	.01530	.00940	.61670
	GRADIENT	.04714	-.00059	.00045	.00025	.00003	.00001	-.00001	.00000	-.07304

RUN NO. 28/ 0 RN/L = 265.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.595	-3.270	-.25030	.02950	.04640	-.00280	-.00010	-.00100	.01380	.00890	.71800
.595	-2.090	-.19060	.03030	.04520	-.00430	-.00050	-.00110	.01370	.00890	.73710
.595	-.980	-.13770	.03160	.04540	-.00360	-.00050	-.00100	.01350	.00880	.77110
.595	.100	-.08730	.03110	.04620	-.00280	.00000	-.00100	.01340	.00870	.84450
.595	1.200	-.03420	.03020	.04650	-.00570	-.00030	-.00090	.01340	.00860	1.14950
.595	2.300	.01680	.02840	.04710	-.00160	.00030	-.00090	.01330	.00870	-.38180
.595	3.410	.06990	.02520	.04820	.00000	.00030	-.00090	.01360	.00870	.39580
.595	4.490	.12260	.02170	.04880	-.00200	.00010	-.00100	.01350	.00860	.50320
.595	5.570	.17490	.01710	.04870	-.00010	.00010	-.00090	.01350	.00860	.54710
.595	6.670	.23370	.01140	.04950	-.00140	-.00020	-.00100	.01380	.00860	.57210
.595	7.850	.29360	.00470	.04910	.00140	-.00020	-.00090	.01380	.00860	.58820
.595	8.960	.35260	-.00210	.04970	.00070	-.00050	-.00070	.01390	.00870	.59790
.595	10.070	.41360	-.00940	.04960	.00300	-.00020	-.00110	.01420	.00900	.60560
.595	11.190	.47220	-.01700	.04960	.00330	-.00010	-.00130	.01450	.00900	.61110
.595	12.320	.53860	-.02460	.04910	.00210	-.00030	-.00150	.01490	.00930	.61620
.595	13.440	.60360	-.02990	.04810	.00410	-.00070	-.00230	.01530	.00960	.62040
	GRADIENT	.04775	-.00100	.00040	.00032	.00008	.00002	-.00003	-.00004	-.06845

OA91 B19C7F5J61L107E23V7R5X20 (RDY058) (07 JAN 74)

REFERENCE DATA

SREF = .6053 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
BREF = 14.0502 INCHES ZMRP = 5.6250 INCHES
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BFLAP = -11.700

RUN NO. 30/ 0 RN/L = 163.40 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.691	-3.310	-.26750	.03410	.04970	-.00450	-.00010	-.00090	.01370	.00890	.71830
.691	-2.390	-.21070	.03540	.04830	-.00460	-.00010	-.00100	.01390	.00920	.73430
.691	-1.320	-.15850	.03560	.04810	-.00380	-.00020	-.00100	.01380	.00900	.76150
.691	-.220	-.10310	.03520	.04860	-.00400	-.00030	-.00110	.01360	.00900	.81140
.691	.850	-.05540	.03400	.04900	-.00390	-.00030	-.00100	.01370	.00910	.97550
.691	1.990	-.00050	.03190	.04960	-.00440	-.00010	-.00090	.01350	.00890	35.01200
.691	3.070	.05450	.02880	.04990	-.00230	.00010	-.00090	.01360	.00880	.31250
.691	4.160	.10730	.02500	.05100	-.00250	.00010	-.00090	.01370	.00870	.47480
.691	5.280	.16410	.02080	.05110	-.00130	.00010	-.00090	.01360	.00870	.53520
.691	6.400	.22330	.01520	.05090	-.00190	-.00040	-.00090	.01360	.00870	.56580
.691	7.490	.28340	.00990	.05030	-.00160	-.00040	-.00090	.01370	.00880	.58440
.691	8.620	.34700	.00480	.04910	.00120	-.00020	-.00090	.01390	.00900	.59770
.691	9.740	.40960	.00120	.04770	.00190	-.00060	-.00090	.01410	.00900	.60690
.691	10.870	.46780	-.00220	.04740	.00290	-.00080	-.00100	.01460	.00930	.61240
.691	12.030	.53280	-.00540	.04610	.00610	-.00110	-.00150	.01500	.00970	.61770
.691	13.140	.59130	-.00740	.04590	.00720	-.00120	-.00150	.01540	.01000	.62120
.691	14.240	.64670	-.00730	.04650	.00750	-.00180	-.00250	.01610	.01050	.62330
	GRADIENT	.04882	-.00119	.00024	.00026	.00003	.00001	-.00003	-.00004	1.08969

RUN NO. 29/ 0 RN/L = 163.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.795	-3.530	-.28450	.04390	.06140	-.00420	-.00060	-.00130	.01410	.00930	.72920
.795	-2.440	-.22550	.04380	.05890	-.00120	-.00020	-.00120	.01420	.00940	.74600
.795	-1.330	-.16990	.04320	.05690	-.00560	-.00060	-.00130	.01410	.00930	.77310
.795	-.250	-.11450	.04200	.05550	-.00460	-.00090	-.00120	.01390	.00920	.82870
.795	.840	-.05750	.04030	.05450	-.00230	-.00060	-.00110	.01380	.00910	.99800
.795	1.980	.00030	.03830	.05460	-.00360	-.00050	-.00100	.01360	.00890	-66.31800
.795	3.080	.05820	.03580	.05320	-.00110	.00010	-.00100	.01350	.00870	.31310
.795	4.210	.12070	.03380	.05140	-.00010	.00010	-.00110	.01350	.00870	.49310
.795	5.340	.18390	.03270	.04820	-.00070	.00010	-.00100	.01360	.00850	.55330
.795	6.530	.24670	.03010	.04590	-.00010	-.00010	-.00090	.01360	.00870	.58120
.795	7.650	.30820	.02670	.04400	.00220	.00000	-.00040	.01380	.00860	.59720
.795	8.740	.36420	.02490	.04350	.00150	-.00060	-.00090	.01400	.00870	.60570
.795	9.820	.41870	.02270	.04290	.00340	-.00070	-.00150	.01430	.00890	.61210
.795	10.950	.47540	.02110	.04300	.00540	-.00130	-.00200	.01470	.00920	.61650
.795	12.020	.52980	.01960	.04250	.00690	-.00120	-.00160	.01510	.00950	.62020
.795	13.110	.58590	.01800	.04290	.00800	-.00140	-.00190	.01570	.01010	.62280
	GRADIENT	.05197	-.00137	-.00115	.00040	.00008	.00004	-.00010	-.00016	-2.21213

OA91 B19C7F5J61W107E23V7R5X20 (RDY008) (07 JAN 74)

REFERENCE DATA

SREF = .6033 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
BREF = 14.0902 INCHES ZMRP = 5.6250 INCHES
SCALE = .0130 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BFLAP = -11.700

RUN NO. 32/ 0 RN/L = 163.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.898	-3.360	-.34210	.06730	.10730	-.00360	-.00020	-.00110	.01400	.00940	.76520
.898	-2.170	-.26090	.06710	.09210	-.00470	-.00010	-.00090	.01390	.00930	.77980
.898	-1.045	-.19040	.06690	.07980	-.00360	.00020	-.00070	.01380	.00930	.80410
.898	.170	-.12060	.06670	.07010	-.00370	.00030	-.00060	.01390	.00920	.86330
.898	1.310	-.06290	.06670	.06640	-.00440	.00030	-.00030	.01390	.00920	1.03870
.898	2.460	-.00410	.06680	.06240	-.00450	.00030	-.00080	.01390	.00920	6.17320
.898	3.570	.05150	.06460	.06100	-.00550	.00040	-.00150	.01390	.00920	.21450
.898	4.670	.11130	.06400	.05870	-.00280	.00060	-.00110	.01410	.00920	.45580
.898	5.780	.17080	.06230	.05660	-.00220	.00080	-.00080	.01440	.00910	.52760
.898	6.900	.23720	.06010	.04980	-.00120	.00030	-.00080	.01460	.00910	.57240
.898	8.050	.30970	.05[illegible]	.04180	-.00280	-.00020	-.00040	.01500	.00920	.60010
.898	9.200	.37200	.05570	.03790	.00010	-.00050	-.00060	.01530	.00950	.61220
.898	10.330	.43090	.05300	.03670	.00000	-.00040	-.00050	.01600	.00980	.61840
.898	11.440	.49190	.05080	.03240	.00250	-.00020	-.00080	.01660	.01040	.62550
.898	12.560	.54950	.04870	.03100	.00430	-.00030	-.00040	.01750	.01100	.62900
.898	13.670	.60990	.04710	.02880	.00460	-.00070	-.00090	.01870	.01230	.63240
	GRADIENT	.05547	-.00039	-.00574	.00001	.00009	-.00000	.00001	-.00002	.12086

0A91 819C7F5J61W107E23V7R5X20 (REV0 3) (07 JAN 74)

REFERENCE DATA

SREF = .6053 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
DREF = 14.0592 INCHES ZMRP = 5.6250 INCHES
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = 5.00 ELEVON = .000
DFLAP = -11.700

RUN NO. 35/ 0 RN/L = 162.40 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.494	-3.140	-.23320	.02270	.03940	-.11080	.00810	-.00350	.01410	.00840	.71210
.494	-2.040	-.17600	.02420	.03810	-.10940	.00780	-.00420	.01400	.00850	.72950
.494	-.950	-.12560	.02530	.03810	-.10660	.00810	-.00490	.01380	.00850	.76130
.494	.100	-.07790	.02550	.03850	-.10990	.00750	-.00560	.01380	.00850	.83170
.494	1.220	-.02430	.02440	.03920	-.10790	.00770	-.00640	.01400	.00860	1.24250
.494	2.280	.02620	.02300	.03950	-.10890	.00770	-.00710	.01390	.00860	.09530
.494	3.350	.07470	.02030	.04120	-.10650	.00750	-.00770	.01410	.00870	.44680
.494	4.460	.12640	.01660	.04200	-.10680	.00740	-.00840	.01410	.00870	.52740
.494	5.560	.17780	.01230	.04340	-.10490	.00740	-.00900	.01390	.00870	.55990
.494	6.650	.23250	.00790	.04440	-.10510	.00730	-.00970	.01410	.00880	.57950
.494	7.760	.29020	.00090	.04510	-.10380	.00700	-.01040	.01440	.00870	.59260
.494	8.870	.34580	-.00540	.04530	-.10210	.00690	-.01110	.01440	.00880	.60160
.494	9.930	.40420	-.01280	.04620	-.09850	.00700	-.01250	.01440	.00880	.60770
.494	11.040	.46080	-.02080	.04580	-.10040	.00660	-.01360	.01470	.00880	.61320
.494	12.110	.51750	-.02850	.04580	-.10040	.00700	-.01510	.01490	.00890	.61720
.494	13.210	.57780	-.03730	.04580	-.09810	.00700	-.01650	.01550	.00950	.62060
	GRADIENT	.04705	-.00077	.00042	.00041	-.00008	-.00065	.00001	.00004	-.04692

RUN NO. 34/ 0 RN/L = 163.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.695	-3.270	-.25160	.03120	.04670	-.11530	.00950	-.00320	.01380	.00860	.71810
.695	-2.140	-.19190	.03170	.04400	-.11400	.00930	-.00420	.01390	.00880	.73430
.695	-1.030	-.13750	.03160	.04340	-.11420	.00910	-.00510	.01380	.00880	.76620
.695	.050	-.08530	.03120	.04340	-.11380	.00890	-.00570	.01390	.00880	.83710
.695	1.160	-.03020	.03000	.04350	-.11250	.00880	-.00660	.01390	.00880	1.17890
.695	2.230	.02130	.02750	.04400	-.11360	.00860	-.00740	.01400	.00880	-.13780
.695	3.340	.07560	.02470	.04430	-.11360	.00860	-.00820	.01390	.00880	.43370
.695	4.430	.13000	.02090	.04610	-.11200	.00850	-.00890	.01390	.00880	.51[illegible]
.695	5.550	.18880	.01620	.04640	-.11100	.00870	-.00970	.01390	.00880	.[illegible]
.695	6.670	.24770	.01130	.04670	-.10900	.00880	-.01070	[illegible]	[illegible]	[illegible]
.695	7.790	.30910	.00580	.04680	-.11040	.00900	-.01160	[illegible]	[illegible]	[illegible]
.695	8.900	.37120	.00140	.04510	-.10880	.00940	-.01300	[illegible]	[illegible]	[illegible]
.695	10.070	.43550	-.00210	.04230	-.10[illegible]	.00950	[illegible]	[illegible]	[illegible]	[illegible]
.695	11.280	.50350	-.00580	.04050	-.10850	.00950	-.01520	[illegible]	[illegible]	[illegible]
.695	12.370	.56010	-.00770	.03900	-.10600	.00960	-.01[illegible]	[illegible]	[illegible]	[illegible]
.695	13.460	.61600	-.00880	.03790	-.10560	.00860	[illegible]	[illegible]	[illegible]	[illegible]
	GRADIENT	.04925	-.00131	-.00061	.00031	-.00012	[illegible]	[illegible]	[illegible]	[illegible]

0A91 B19C7F5J61W107E23V7R5X20 (RDY010) (07 JAN 74)

REFERENCE DATA

SREF = .6053 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
BREF = 14.0502 INCHES ZMRP = 5.6250 INCHES
SCALE = .0139 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = 10.000
DFLAP = -11.700

RUN NO. 36/ 0 RN/L = 163.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.498	-3.000	-.03460	.03250	-.05270	-.00010	-.00020	-.00050	.01620	.01070	.08930
.498	-1.910	.01880	.03370	-.05420	.00000	-.00050	-.00060	.01650	.01110	1.70920
.498	-.840	.06960	.03440	-.05480	-.00050	-.00050	-.00060	.01640	.01060	.93940
.498	.290	.12450	.03380	-.05400	-.00060	-.00070	-.00050	.01640	.01090	.80930
.498	1.390	.17690	.03240	-.05350	.00070	-.00070	-.00050	.01630	.01060	.76120
.498	2.490	.23180	.03030	-.05420	-.00020	-.00070	-.00050	.01630	.01060	.73580
.498	3.560	.28280	.02730	-.05300	-.00030	.00080	-.00060	.01620	.01060	.71880
.498	4.670	.33670	.02320	-.05320	.00050	-.00080	-.00050	.01620	.01060	.70790
.498	5.800	.39330	.01760	-.05320	.00260	-.00080	-.00060	.01620	.01070	.69960
.498	6.910	.44740	.01180	-.05270	.00260	-.00070	-.00080	.01600	.01040	.69320
.498	8.020	.51050	.00560	-.05610	.05200	-.00090	-.00060	.01610	.01050	.69020
.498	9.130	.56740	-.00160	-.05550	.00230	-.00100	-.00080	.01640	.01070	.68580
.498	10.210	.62670	-.00920	-.05530	.00400	-.00130	-.00110	.01670	.01080	.68230
.498	11.290	.68420	-.01670	-.05550	.00470	-.00100	-.00130	.01690	.01060	.67960
.498	12.390	.74900	-.02550	-.05550	.00440	-.00140	-.00130	.01750	.01090	.67710
.498	13.450	.80360	-.03340	-.05470	.00690	-.00150	-.00150	.01750	.01120	.67490
	GRADIENT	.94839	-.00120	.00005	.00005	-.00007	.00000	-.00002	-.00004	-.01407

RUN NO. 31/ 0 RN/L = 163.40 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.696	-3.390	-.05760	.04320	-.05140	-.00170	-.00050	-.00010	.01670	.01110	.32260
.696	-2.270	.00150	.04080	-.05380	-.00330	-.00080	-.00030	.01680	.01110	19.69030
.696	-1.200	.05250	.04090	-.05520	.00080	-.00050	-.00030	.01660	.01110	1.03630
.696	.030	.11420	.04120	-.05640	.00030	-.00090	-.00030	.01630	.01100	.83140
.696	1.110	.16970	.03830	-.05650	-.00020	-.00110	-.00020	.01640	.01110	.77230
.696	2.200	.22530	.03620	-.05740	.00160	-.00100	-.00020	.0162[illegible]	.01100	.74360
.696	3.330	.28380	.03300	-.05820	.00080	-.00110	-.00020	.01600	.01080	.72530
.696	4.420	.34050	.02890	-.05850	.00120	-.00110	-.00040	.01600	.01090	.71300
.696	5.550	.40200	.02410	-.06000	.00280	-.00080	-.00030	.01600	.01080	.70480
.696	6.640	.46380	.01960	-.06270	-.00080	-.00100	-.00030	.01600	.01090	.69960
.696	7.760	.53410	.01560	-.06790	.00310	-.00070	-.00070	.01610	.01080	.69660
.696	8.900	.60210	.01140	-.07000	.00200	-.00090	-.00120	.01620	.01090	.69260
.696	10.010	.65370	.00840	-.06680	.00220	-.00070	-.00040	.01640	.01100	.68740
.696	11.190	.70960	.00480	-.06380	.00230	-.00050	.00050	.01680	.01120	.68290
.696	12.300	.75540	.00490	-.06010	.00280	-.00130	.00030	.01730	.01160	.67910
.696	13.420	.80290	.00370	-.05710	.00590	-.00160	-.00030	.01810	.01200	.67600
	GRADIENT	.93083	-.00143	-.00084	.00045	-.00008	-.00001	-.00011	-.00003	-.99413

OA91 B19C7F5J61W107E23V7R5Y20 (RDY011) (07 JAN 74)

REFERENCE DATA

SREF = .6053 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
BREF = 14.0502 INCHES ZMRP = 5.6250 INCHES
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = -10.000
BFLAP = -11.700

RUN NO. 38/ 0 RN/L = 162.60 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.496	-3.420	-.43330	.03400	.12810	-.00520	.00080	-.00070	.01130	.00630	.75810
.496	-2.330	-.38350	.03650	.12790	-.00700	.00030	-.00060	.01150	.00650	.77250
.496	-1.280	-.33670	.03840	.12890	-.00380	.00040	-.00070	.01160	.00650	.79070
.496	-.170	-.28340	.03925	.12910	-.00670	-.00010	-.00060	.01150	.00660	.81740
.496	.910	-.23140	.03910	.12900	-.00370	.00020	-.00040	.01150	.00640	.85490
.496	2.040	-.17560	.03650	.13080	-.00520	.00010	-.00050	.01160	.00650	.91790
.496	3.120	-.12740	.03630	.13120	-.00510	.00040	-.00050	.01170	.00660	1.02850
.496	4.210	-.07740	.03340	.13190	-.00470	.00030	-.00050	.01200	.00680	1.27670
.496	5.310	-.02580	.02900	.13190	-.00330	.00060	-.00050	.01210	.00670	2.52500
.496	6.370	.02440	.02490	.13330	-.00230	.00080	-.00070	.01210	.00660	-1.35380
.496	7.470	.07560	.01940	.13530	-.00340	.00090	-.00050	.01230	.00670	-.00460
.496	8.540	.13020	.01320	.13690	-.00440	.00080	-.00060	.01260	.00680	.26290
.496	9.640	.17980	.00670	.13830	-.00370	.00080	-.00050	.01260	.00680	.36660
.496	10.720	.23590	-.00050	.14140	-.00440	.00080	-.00060	.01290	.00700	.42910
.496	11.850	.29390	-.00880	.14240	-.00250	.00070	-.00040	.01310	.00720	.47140
.496	13.010	.35620	-.01790	.14450	.00030	.00060	-.00090	.01360	.00750	.50040
	GRADIENT	.04699	-.00006	.00053	.00013	-.00004	.00003	.00006	.00004	.05818

RUN NO. 37/ 0 RN/L = 163.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.696	-3.510	-.46180	.04600	.14300	-.00520	.00040	-.00060	.01160	.00700	.76370
.696	-2.320	-.39630	.04680	.14020	-.00800	.00020	-.00070	.01180	.00710	.77930
.696	-1.170	-.34000	.04800	.13810	-.00370	.00020	-.00050	.01170	.00730	.79930
.696	-.090	-.28600	.04670	.13770	-.00350	.00010	-.00060	.01170	.00720	.82710
.696	1.010	-.23320	.04580	.13780	-.00750	-.00020	-.00050	.01170	.00720	.86730
.696	2.090	-.17810	.04390	.13780	-.00420	.00010	-.00030	.01170	.00700	.93440
.696	3.225	-.12530	.04110	.13860	-.00350	.00020	-.00030	.01170	.00700	1.07250
.696	4.340	-.07080	.03760	.13980	-.00500	.00020	-.00020	.01180	.00700	1.37640
.696	5.450	-.01700	.03360	.14120	-.00540	.00040	-.00020	.01120	.00690	3.69170
.696	6.570	.03950	.02820	.14270	-.00600	.00040	-.00040	.01210	.00680	-.67200
.696	7.710	.09730	.02250	.14420	-.00490	.00060	-.00040	.01230	.00710	-.01450
.696	8.850	.15230	.01710	.14560	-.00440	.00100	-.00060	.01240	.00690	.23790
.696	9.920	.21590	.01230	.14510	-.00370	.00130	-.00050	.01260	.00710	.41040
.696	11.050	.27910	.00970	.14340	-.00370	.00060	-.00040	.01280	.00710	.50480
.696	12.160	.33900	.00790	.14130	-.00260	.00010	-.00040	.01310	.00710	.56610
.696	13.310	.40330	.00570	.14030	-.00010	-.00020	-.00020	.01340	.00730	.62190
	GRADIENT	.04962	-.00107	-.00034	.00020	-.00002	.00006	.00014	.00006	.06078

OA91 B1SC7F5 W1G7E23V7R5X20 (RDY012) (07 JAN 74)

REFERENCE DATA

SREF = .6453 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
BREF = 14.0502 INCHES ZMRP = 5.6250 INCHES
SCALE = .015 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BFLAP = -11.700

RUN NO. 22/ 0 RN/L = 163.60 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.498	-3.330	-.21130	.01740	.04450	-.00610	.00000	-.00120	.01390	.00820	.72740
.498	-2.220	-.15620	.02000	.04350	-.00440	.00010	-.00130	.01400	.00850	.75230
.498	-1.150	-.10880	.02190	.04350	-.00620	.00010	-.00130	.01390	.00840	.79680
.498	-.060	-.05970	.02240	.04310	-.00390	.00030	-.00130	.01410	.00830	.91530
.498	.990	-.01020	.02230	.04350	-.00340	.00020	-.00130	.01410	.00820	2.20710
.498	2.040	.03760	.02120	.04350	-.00280	.00040	-.00140	.01420	.00840	.22500
.498	3.140	.08880	.01870	.04350	-.00310	.00040	-.00120	.01430	.00860	.46940
.498	4.230	.13900	.01570	.04330	-.00330	.00060	-.00130	.01440	.00840	.53510
.498	5.330	.19110	.01130	.04390	.00060	.00050	-.00130	.01450	.00850	.56510
.498	6.430	.24270	.00620	.04330	.00210	.00050	-.00130	.01440	.00830	.58410
.498	7.490	.29650	.00000	.04260	.00150	.00030	-.00140	.01450	.00850	.59690
.498	8.590	.35010	-.00670	.04280	.00270	-.00030	-.00150	.01460	.00870	.60470
.498	9.700	.40440	-.01430	.04340	.00600	-.00020	-.00140	.01470	.00870	.61030
.498	10.760	.46110	-.02230	.04390	.00480	-.00050	-.00170	.01500	.00900	.61470
.498	11.830	.51440	-.03070	.04380	.00740	-.00060	-.00190	.01530	.00920	.61840
.498	12.920	.57610	-.03990	.04230	.00920	-.00050	-.00210	.01580	.00940	.62270
	GRADIENT	.04611	-.00023	-.00009	.00041	.00007	-.00001	.00007	.00002	-.03495

RUN NO. 21/ 0 RN/L = 165.40 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.597	-3.160	-.21050	.01870	.04780	-.00650	.00060	-.00090	.01390	.00850	.73340
.597	-2.010	-.15310	.02100	.04640	-.00500	.00010	-.00110	.01410	.00860	.76130
.597	-.930	-.10320	.02230	.04670	-.00450	.00020	-.00110	.01420	.00860	.81630
.597	.130	-.05170	.02300	.04630	-.00310	.00010	-.00100	.01410	.00850	.97900
.597	1.190	-.00330	.02270	.04630	-.00430	.00020	-.00120	.01420	.00850	5.76980
.597	2.300	.04890	.02120	.04600	-.00330	.00030	-.00110	.01430	.00850	.30320
.597	3.420	.10260	.01840	.04570	-.00280	.00060	-.00110	.01440	.00860	.48560
.597	4.500	.15190	.01520	.04650	-.00300	.00020	-.00110	.01430	.00860	.53710
.597	5.570	.20380	.01100	.04570	-.00020	.00020	-.00100	.01430	.00860	.56710
.597	6.680	.26260	.00530	.04450	-.00120	-.00020	-.00120	.01450	.00850	.58740
.597	7.740	.31230	-.00070	.04430	.00200	-.00050	-.00140	.01440	.00860	.59760
.597	8.830	.37010	-.00760	.04370	.00510	-.00030	-.00140	.01450	.00860	.60630
.597	9.900	.42540	-.01500	.04490	.00370	-.00030	-.00130	.01480	.00870	.61170
.597	11.000	.48590	-.02270	.04410	.00680	-.00020	-.00160	.01510	.00890	.61630
.597	12.120	.54730	-.03000	.04290	.00760	-.00050	-.00170	.01540	.00930	.62090
.597	13.210	.60990	-.03440	.03980	.00990	-.00130	-.00240	.01570	.00960	.62580
	GRADIENT	.04720	-.00045	-.00016	.00041	.00005	-.00002	.00005	.00000	.00199

OA91 B19C7F5 W107E23V7R5X20 (RDY012) (07 JAN 74)

REFERENCE DATA

SREF = .6053 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
BREF = 14.0502 INCHES ZMRP = 5.6250 INCHES
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BFLAP = -11.700

RUN NO. 18/ 0 RN/L = 263.90 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.696	-3.210	-.22100	.01980	.05220	-.00340	.00020	-.00090	.01440	.00870	.73680
.696	-2.100	-.16210	.02150	.05070	-.00330	-.00010	-.00090	.01410	.00890	.76490
.696	-.980	-.10980	.02280	.05010	-.00300	.00000	-.00090	.01450	.00890	.81770
.696	.100	-.05560	.02350	.04930	-.00350	.00020	-.00100	.01430	.00870	.97620
.696	1.290	.00010	.02320	.04940	-.00080	.00010	-.00090	.01410	.00870	-121.32000
.696	2.420	.05440	.02150	.04920	-.00190	.00000	-.00100	.01430	.00880	.31700
.696	3.500	.10830	.01930	.04900	-.00150	.00030	-.00090	.01430	.00880	.48330
.696	4.580	.16010	.01600	.04870	-.00100	.00000	-.00090	.01430	.00870	.53780
.696	5.720	.21930	.01140	.04710	-.00070	-.00030	-.00100	.01430	.00870	.57060
.696	6.850	.27990	.00580	.04560	.00110	-.00030	-.00110	.01410	.00880	.58970
.696	7.980	.34070	.00060	.04430	.00370	-.00010	-.00120	.01440	.00880	.60190
.696	9.110	.40310	-.00320	.04230	.00450	-.00020	-.00150	.01460	.00890	.61110
.696	10.230	.46290	-.00600	.03940	.00750	-.00090	-.00220	.01490	.00930	.61840
.696	11.340	.52000	-.00780	.03810	.01030	-.00170	-.00300	.01540	.00960	.62280
.696	12.440	.57780	-.01090	.03790	.01200	-.00200	-.00340	.01580	.00990	.62560
.696	13.530	.63470	-.01170	.03490	.01320	-.00210	-.00360	.01620	.01030	.62950
	GRADIENT	.04863	-.00044	-.00038	.00045	.00001	-.00000	-.00001	-.00001	-1.42018

RUN NO. 19/ 0 RN/L = 362.60 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.798	-3.220	-.23130	.02210	.05760	-.00120	-.00010	-.00080	.01480	.00950	.74160
.798	-2.090	-.17340	.02380	.05610	-.00200	-.00010	-.00070	.01470	.00940	.76880
.798	-.870	-.10890	.02470	.05420	-.00470	-.00040	-.00080	.01480	.00940	.83360
.798	.220	-.05220	.02520	.05280	-.00230	-.00020	-.00080	.01460	.00920	1.02210
.798	1.310	.00170	.02480	.05300	-.00210	-.00020	-.00080	.01470	.00930	-10.65800
.798	2.430	.05980	.02360	.05150	-.00130	.00000	-.00080	.01460	.00920	.33260
.798	3.590	.12020	.02220	.04970	-.00080	.00000	-.00100	.01450	.00910	.49760
.798	4.700	.18400	.02080	.04530	-.00020	.00000	-.00110	.01470	.00950	.55970
.798	5.820	.24490	.01990	.04150	.00160	-.00020	-.00090	.01460	.00900	.58730
.798	6.920	.30140	.01900	.03780	.00200	-.00060	-.00140	.01480	.00920	.60360
.798	8.040	.35860	.01820	.03360	.00380	-.00090	-.00160	.01500	.00910	.61530
.798	9.150	.41610	.01670	.03060	.00880	-.00120	-.00270	.01520	.00940	.62260
.798	10.270	.47280	.01510	.02840	.00790	-.00170	-.00370	.01560	.00970	.62770
.798	11.350	.52580	.01380	.02700	.00890	-.00120	-.00340	.01610	.01000	.63110
.798	12.450	.58040	.01300	.02530	.01200	-.00120	-.00350	.01620	.01010	.63370
.798	13.550	.63310	.01330	.02180	.01180	-.00070	-.00440	.01750	.01140	.63710
	GRADIENT	.05204	-.00022	-.00133	.00024	.00002	-.00004	.00012	-.00006	-.16315

OA91 B19C7F5 W107E23V7R5x20 (RDY012) (07 JAN 74)

REFERENCE DATA

SREF = .6053 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
BREF = 14.0502 INCHES ZMRP = 5.6250 INCHES
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BFLAP = -11.700

RUN NO. 20/ 0 RN/L = 163.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.898	-3.220	-.25970	.02930	.07890	-.00160	-.00130	-.00060	.01580	.01020	.76170
.898	-2.910	-.18520	.03080	.07290	.00010	-.00150	-.00040	.01570	.01020	.79460
.898	-.900	-.11480	.03380	.06570	-.00080	-.00090	-.00080	.01560	.01020	.86050
.898	.240	-.04490	.03660	.05810	-.00060	-.00060	-.00090	.01550	.01020	1.12630
.898	1.360	.01480	.03920	.05380	-.00140	-.00030	-.00120	.01550	.01000	-.68480
.898	2.480	.07150	.04160	.05070	-.00010	.00030	-.00150	.01540	.01010	.38840
.898	3.590	.12670	.04360	.04850	.00050	.00040	-.00130	.01530	.01000	.50670
.898	4.700	.18670	.04440	.04450	.00060	.00030	-.00110	.01550	.01010	.56200
.898	5.880	.25110	.04470	.03830	.00290	.00300	-.00110	.01570	.00990	.59360
.898	6.960	.30870	.04340	.03430	.00380	.00090	-.00120	.01580	.01010	.60880
.898	8.100	.37420	.04150	.02700	.00370	.00010	-.00010	.01620	.01020	.62320
.898	9.190	.43000	.04010	.02300	.00180	-.00020	.00020	.01650	.01040	.63010
.898	10.370	.49460	.03900	.01630	.00700	-.00060	-.00180	.01740	.01110	.63760
.898	11.450	.54450	.03650	.00960	.00910	-.00110	-.00340	.01830	.01180	.64320
.898	12.590	.60340	.03510	.00490	.00780	-.00060	-.00250	.01930	.01260	.64670
.898	13.710	.66250	.03460	-.00190	.00850	-.00020	-.00190	.02070	.01400	.65080
.898	14.750	.70790	.03550	-.00360	.00900	-.00100	-.00150	.02180	.01490	.65170
	GRADIENT	.05602	.00207	-.00436	.00020	.00023	-.00011	-.00005	-.00002	-.06410

OA91 B19C7F5 W107E23C7R5X20 (RDY013) (07 JAN 74)

REFERENCE DATA

SREF = .6033 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
BREF = 14.0502 INCHES ZMRP = 5.6250 INCHES
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = 5.000 ELEVON = .000
BFLAP = -11.700

RUN NO. 16/ 0 RN/L = 263.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.498	-3.170	-.13600	.01390	.03860	-.09270	.00780	-.00420	.01410	.00850	.72240
.498	-2.520	-.13890	.01640	.03770	-.09270	.00770	-.00520	.01440	.00880	.74990
.498	-.940	-.09010	.01800	.03740	-.09170	.00790	-.00610	.01430	.00870	.80260
.498	.140	-.04120	.01850	.03740	-.09020	.00790	-.00670	.01440	.00870	.98430
.498	1.220	.00720	.01800	.03780	-.09150	.00820	-.00760	.01460	.00880	-1.27310
.498	2.350	.05850	.01670	.03790	-.09220	.00820	-.00830	.01450	.00870	.41110
.498	3.430	.10730	.01440	.03920	-.09070	.00840	-.00900	.01450	.00880	.51540
.498	4.500	.15770	.01080	.03910	-.08770	.00850	-.00960	.01450	.00880	.55850
.498	5.600	.21130	.00610	.04000	-.08810	.00840	-.01040	.01490	.00920	.58010
.498	6.690	.26260	.00140	.03980	-.08570	.00840	-.01110	.01450	.00880	.59400
.498	7.790	.31680	-.00520	.03980	-.08490	.00830	-.01200	.01470	.00900	.60350
.498	8.910	.37520	-.01230	.04100	-.08260	.00830	-.01300	.01500	.00880	.60950
.498	10.000	.42780	-.01980	.04040	-.08310	.00810	-.01400	.01500	.00880	.61500
.498	11.150	.48220	-.02770	.03930	-.08030	.00810	-.01510	.01510	.00880	.61980
.498	12.220	.54450	-.03600	.03780	-.07970	.00810	-.01600	.01540	.00920	.62420
.498	13.320	.61300	-.04580	.03680	-.07780	.00750	-.01720	.01590	.00950	.62770
	GRADIENT	.04572	-.00039	.00014	.00046	.00010	-.00070	.00004	.00002	-.06204

RUN NO. 17/ 0 RN/L = 263.60 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.695	-3.100	-.20820	.01610	.04560	-.10090	.00960	-.00410	.01470	.00920	.73050
.695	-1.980	-.14900	.01790	.04360	-.09800	.00890	-.00500	.01470	.00910	.75760
.695	-.870	-.09700	.01920	.04340	-.09760	.00910	-.00610	.01460	.00900	.81460
.695	.200	-.04550	.01950	.04330	-.09810	.00910	-.00690	.01460	.00910	.99930
.695	1.360	.00990	.01910	.04310	-.09610	.00930	-.00780	.01460	.00910	-.94840
.695	2.470	.06230	.01760	.04310	-.09430	.00950	-.00860	.01470	.00900	.39510
.695	3.530	.11420	.01540	.04320	-.09350	.00960	-.00940	.01470	.00910	.51050
.695	4.650	.17130	.01170	.04340	-.09570	.00950	-.01030	.01460	.00910	.55650
.695	5.820	.23110	.00720	.04300	-.09310	.00940	-.01130	.01460	.00900	.58130
.695	6.900	.28670	.00220	.04270	-.09080	.00940	-.01210	.01460	.00900	.59490
.695	8.020	.34850	-.00280	.04090	-.08980	.01000	-.01310	.01480	.00890	.60660
.695	9.120	.41050	-.00650	.03830	-.08970	.01010	-.01340	.01490	.00900	.61540
.695	10.220	.47110	-.00970	.03490	-.08620	.00970	-.01360	.01510	.00920	.62250
.695	11.360	.53220	-.01230	.03250	-.08480	.00960	-.01450	.01550	.00970	.62730
.695	12.450	.59080	-.01460	.02860	-.08330	.00880	-.01540	.01580	.01030	.63190
.695	13.600	.65380	-.01670	.02730	-.08200	.00850	-.01570	.01650	.01080	.63440
	GRADIENT	.04841	-.00052	-.00020	.00076	.00005	-.00079	-.00001	.00001	-.06171

OA91 B19C7F5 W107E23C7R5X20 (RDY014) (07 JAN 74)

REFERENCE DATA

SREF = .6053 SQ.FT. XMRP = 16.1471 INCHES
LREF = 7.1222 INCHES YMRP = .0000 INCHES
BREF = 14.0502 INCHES ZMRP = 5.6250 INCHES
SCALE = .0150 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = 10.000
DFLAP = -11.750

RUN NO. 23/ 0 RN/L = 163.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CAF	CLM	CY	CYN	CBL	CAB	CABC	XCP/L
.697	-3.220	-.00190	.03120	-.06190	-.00040	-.00070	-.00040	.01740	.01150	-10.84500
.697	-2.090	.05730	.03330	-.06430	-.00180	-.00100	-.00060	.01720	.01130	1.06260
.697	-.980	.11260	.03440	-.06520	.00000	-.00100	-.00060	.01730	.01110	.86300
.697	.190	.17010	.03450	-.06640	-.00010	-.00130	-.00060	.01700	.01100	.79340
.697	1.270	.22330	.03400	-.06770	.00050	-.00120	-.00060	.01710	.01110	.76120
.697	2.400	.28260	.03220	-.06940	.00310	-.00080	-.00070	.01680	.01090	.74020
.697	3.540	.34180	.02920	-.07120	.00210	-.00080	-.00080	.01690	.01090	.72650
.697	4.670	.40060	.02520	-.07270	.00250	-.00080	-.00080	.01700	.01080	.71650
.697	5.780	.46150	.02100	-.07550	.00480	-.00060	-.00090	.01680	.01070	.71000
.697	6.910	.52480	.01650	-.07870	.00380	-.00080	-.00070	.01680	.01080	.70500
697	8.030	.58850	.01200	-.08130	.00410	-.00080	-.00080	.01700	.01090	.70100
.697	9.140	.64410	.00860	-.08070	.00430	-.00120	-.00070	.01700	.01090	.69590
.697	10.240	.69980	.00630	-.08140	.00610	-.00190	-.00240	.01730	.01110	.69260
.697	11.490	.74760	.00400	-.07760	.00840	-.00130	-.00140	.01790	.01140	.68650
.697	12.520	.79520	.00330	-.07640	.01090	-.00220	-.00220	.01830	.01190	.68510
.697	13.640	.85160	.00280	-.07820	.01380	-.00310	-.00410	.01900	.01230	.68360
.697	14.720	.90460	.00430	-.08130	.01410	-.00390	-.00370	.02010	.01290	.68290
	GRADIENT	.05076	-.00074	-.00131	.00052	.00001	-.00004	-.00006	-.00008	.83367