



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NASA CR-

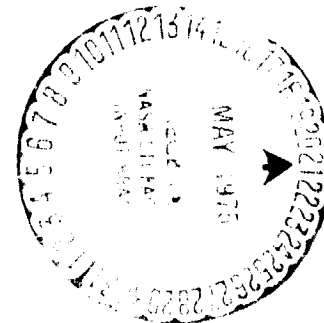
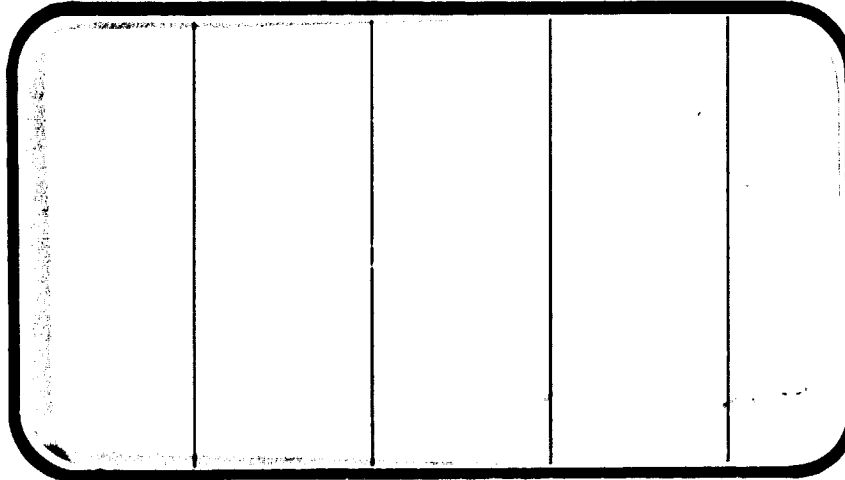
141531

(NASA-CR-141531) RESULTS OF INVESTIGATIONS
WITH AN 0.015-SCALE MODEL (49-0) OF THE
ROCKWELL INTERNATIONAL SPACE SHUTTLE VEHICLE
140A/B CONFIGURATION WITH MODIFIED OMS PODS
AND ELEVONS IN THE AEDC VKI TUNNEL B (0A79)

N75-22368

G3/18

Unclas
20840



SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA Management services



April, 1975

DMS-DR-2196
NASA CR-141,531

RESULTS OF INVESTIGATIONS WITH AN 0.015-SCALE
MODEL (49-0) OF THE ROCKWELL INTERNATIONAL
SPACE SHUTTLE VEHICLE 140A/B CONFIGURATION WITH
MODIFIED OMS PODS AND ELEVONS IN THE
AEDC VKF TUNNEL B (0A79)

By

V. Esparza and A. I. Lindsay
Rockwell International Space Division

Prepared under NASA Contract Number NAS9-13247

By

Data Management Services
Chrysler Corporation Space Division
New Orleans, La. 70189

for

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

WIND TUNNEL TEST SPECIFICS:

Test Number: AEDC V41B-71A
NASA Series Number: OA79
Model Number: 49-0
Test Dates: 1 August through 3 August, 1974
Occupancy Hours: 24

FACILITY COORDINATOR:

L. L. Trimmer
VFK-SH
ARO, Inc.
Arnold Air Force Station, Tenn. 37389

Phone: (615) 455-2611, x7377

PROJECT ENGINEERS:

V. Esparza
A. I. Lindsay
Rockwell International
Space Division
12214 Lakewood Blvd
Mail Code AC07
Downey, California 90241

Phone: (213) 922-4620

AERODYNAMICS ANALYSIS ENGINEERS:

L. G. Zerby
Rockwell International
Space Division
12214 Lakewood Blvd.
Mail Code AC07
Downey, California 90241

Phone: (213) 922-2092

DATA MANAGEMENT SERVICES:

Prepared by: Liaison--D. A. Sarver, V. W. Sparks
Operations--M. M. Mann

Reviewed by: D. E. Poucher, J. L. Glynn *jp*

Approved: *N. D. Kemp*
N. D. Kemp, Manager
Data Management Services

Concurrence: *J. G. Swider*
J. G. Swider, Manager
Flight Technology Branch

Chrysler Corporation Space Division assumes no responsibility for the data presented other than display characteristics.

RESULTS OF INVESTIGATIONS WITH AN 0.015-SCALE
MODEL (49-0) OF THE ROCKWELL INTERNATIONAL
SPACE SHUTTLE VEHICLE 140A/B CONFIGURATION WITH
MODIFIED OMS PODS AND ELEVONS IN THE
AEDC VKF TUNNEL B (0A79)

By

V. Esparza and A. I. Lindsay
Rockwell International Space Division

ABSTRACT

This report documents aerodynamic data obtained from wind tunnel tests of an 0.015-scale SSV Orbiter model of a 140A/B configuration with modified OMS pods and elevons. This test was conducted at Mach 8 in the B tunnel of the Von Karman Gas Dynamics Facility.

Force data was obtained at various control surface settings and Reynolds numbers in the angle of attack range of 15° to 45° and at angles of sideslip of -5° to $+5^\circ$. Control surface variables included elevon, rudder, speed brake and body flap configurations. This test was conducted during the period August 1, 1974 through August 3, 1974.

TABLE OF CONTENTS

	Page
ABSTRACT	iii
INDEX OF MODEL FIGURES	2
INDEX OF DATA FIGURES	3
NOMENCLATURE	6
CONFIGURATIONS INVESTIGATED	10
INSTRUMENTATION	12
TEST FACILITY DESCRIPTION	13
DATA REDUCTION	14
TABLES	
I. TEST CONDITIONS	16
II. DATA SET/RUN NUMBER COLLATION SUMMARY	17
III. MODEL DIMENSIONAL DATA	22
FIGURES	
MODEL	33
DATA	39
APPENDIX	
TABULATED SOURCE DATA	

INDEX OF MODEL FIGURES

Figures	Title	Page
1.	Axis systems.	33
2.	Model sketches.	
	a. SSV Orbiter Configuration 140A/B-Modified	34
	b. Model Configuration	35
	c. Base and Cavity Pressure Locations	36
3.	Model photographs.	
	a. View Looking Aft With Model Rolled	37
	b. Side View of Model for a Beta Sweep	38

INDEX OF DATA FIGURES

FIGURE NUMBER	TITLE	SCHEDULE OF COEFFICIENTS PLOTTED	CONDITIONS VARYING	PAGES
Fig. 4	EFFECT OF OMS PODS	(A)	CONFIGURATION	1-14
Fig. 5	EFFECT OF SEALING ELEVON GAP	(A)	EL-GAP	15-28
Fig. 6	FULL SPAN ELEVON EFFECTIVENESS (NEGATIVE DEFLECTIONS)	(A)	ELV-LO, ELV-LI, ELV-RI, ELV-RO	29-42
Fig. 7	FULL SPAN ELEVON EFFECTIVENESS (POSITIVE DEFLECTIONS)	(A)	ELV-LO, ELV-LI, ELV-RO, ELV-RI	43-56
Fig. 8	INCREMENTAL EFFECTS OF ELEVON DEFLECTION	(B)	ALPHA, DLIELV	57-80
Fig. 9	FULL SPAN AILERON EFFECTIVENESS	(A)	ELV-LO, ELV-LI, ELV-RO, ELV-RI	81-94
Fig. 10	INCREMENTAL EFFECTS OF AILERON DEFLECTION	(C)	ALPHA, DLTARN	95-127
Fig. 11	INBOARD ELEVON EFFECTIVENESS WITH OUTBOARD UNDEFLECTED	(A)	ELV-LI, ELV-RI	128-141
Fig. 12	INCREMENTAL EFFECTS OF INBOARD ONLY ELEVON DEFLECTIONS	(D)	ALPHA, DLE-LI	142-165
Fig. 13	OUTBOARD ELEVON EFFECTIVENESS WITH INBOARDS UNDEFLECTED	(A)	ELV-LO, ELV-RO	166-179
Fig. 14	INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS	(E)	ALPHA, DLE-LO	180-203
Fig. 15	BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 3.53)	(A)	BDFLAP	204-217

INDEX OF DATA FIGURES (Continued)

FIGURE NUMBER	TITLE	SCHEDULE OF COEFFICIENTS PLOTTED	CONDITIONS VARYING	PAGES
Fig. 16	INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER = 3.53)	(F)	ALPHA, DLBDFP	218-241
Fig. 17	BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 1.86)	(A)	BDFLAP	242-255
Fig. 18	INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER = 1.86)	(F)	ALPHA, DLBDFP	256-279
Fig. 19	BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 0.50)	(A)	BDFLAP	280-293
Fig. 20	INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER = 0.50)	(F)	ALPHA, DLBDFP	294-317
Fig. 21	REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 0)	(A)	RN/L	318-331
Fig. 22	REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 16.3)	(A)	RN/L	332-345
Fig. 23	REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = -11.7)	(A)	RN/L	346-359
Fig. 24	REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 0)	(A)	RN/L	360-373
Fig. 25	REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 0)	(A)	RN/L	374-387
Fig. 26	REYNOLDS NUMBER EFFECTS (ELEVON = -40, BODY FLAP = 0)	(A)	RN/L	388-401

INDEX OF DATA FIGURES (Concluded)

FIGURE NUMBER	TITLE	SCHEDULE OF COEFFICIENTS PLOTTED	CONDITIONS VARYING	PAGES
Fig. 27	REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 16.3)	(A)	RN/L	402-415
Fig. 28	REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 16.3)	(A)	RN/L	416-429

SCHEDULE OF COEFFICIENTS PLOTTED:

- (A) CN, CLMFW, CLMAFT, XCP/L, CA, CAF, CAB, CY, CL, CD, L/D versus ALPHA
CN versus CLMFW, CN versus CLMAFT, CL versus CD
- (B) DLTCN, DLTCMF, DLTCMA, DLTCA, DLTCAF, DLTCAB, DLTCCL, DLTCO versus DLTELV
- (C) DLTCN, DLTCMF, DLTCMA, DLTCA, DLTCAF, DLTCAB, DLTCCL, DLTCO, DLTCY, DLTCYN
DLTCBL versus DLTCRN
- (D) DLTCN, DLTCMF, DLTCMA, DLTCA, DLTCAF, DLTCAB, DLTCCL, DLTCO versus DLE-LI
- (E) DLTCN, DLTCMF, DLTCMA, DLTCA, DLTCAF, DLTCAB, DLTCCL, DLTCO versus DLE-LO
- (F) DLTCN, DLTCMF, DLTCMA, DLTCA, DLTCAF, DLTCAB, DLTCCL, DLTCO versus DLBDFP

NOMENCLATURE
General

<u>SYMBOL</u>	<u>Plot SYMBOL</u>	<u>DEFINITION</u>
a		speed of sound; m/sec, ft/sec
C_p	CP	pressure coefficient; $(p_1 - p_\infty)/q$
M	MACH	Mach number; V/a
P		pressure; N/m^2 , psf
q	Q(NSM) Q(PSF)	dynamic pressure; $1/2\rho V^2$, N/m^2 , psf
RN/L	RN/L	unit Reynolds number; per m, per ft
V		velocity; m/sec, ft/sec
α	ALPHA	angle of attack, degrees
β	BETA	angle of sideslip, degrees
ψ	PSI	angle of yaw, degrees
ϕ	PHI	angle of roll, degrees
ρ		mass density; kg/m^3 , slugs/ft ³

Reference & C.G. Definitions

A_b		base area; m ² , ft ²
b	BREF	wing span or reference span; m, ft
c.g.		center of gravity
$\frac{l}{c}$	LREF	reference length or wing mean aerodynamic chord; m, ft
S	SREF	wing area or reference area; m ² , ft ²
	MRP	moment reference point
	XMRP	moment reference point on X axis
	YMRP	moment reference point on Y axis
	ZMRP	moment reference point on Z axis

SUBSCRIPTS

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

NOMENCLATURE (Continued)

Body-Axis System

<u>SYMBOL</u>	<u>Plot SYMBOL</u>	<u>DEFINITION</u>
C_N	CN	normal-force coefficient; $\frac{\text{normal force}}{qS}$
C_A	CA	axial-force coefficient; $\frac{\text{axial force}}{qS}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_{A_b}	CAB	base-force coefficient; $\frac{\text{base force}}{qS}$ $-A_b(P_b - P_a)/qS$
C_{A_f}	CAF	forebody axial force coefficient, $C_A - C_{A_b}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS^2/REF}$
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; $\frac{\text{pitching moment}}{qS^2/REF}$
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/D _f	lift to forebody drag ratio: C_L/C_{D_f}

NOMENCLATURE (Continued)
Additions To Nomenclature

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
$\delta_{e_{LO}}$	ELE-LO	left outboard elevon surface deflection angle, positive deflection trailing edge down; degrees
$\delta_{e_{LI}}$	ELE-LI	left inboard elevon surface deflection angle, positive deflection trailing edge down; degrees
$\delta_{e_{RO}}$	ELE-RO	right outboard elevon surface deflection angle, positive deflection trailing edge down; degrees
$\delta_{e_{RI}}$	ELE-RI	right inboard elevon surface deflection angle, positive deflection trailing edge down; degrees.
δ_{SB}	SPDBRK	speed brake deflection angle (parallel to freestream), degrees
δ_R	RUDDER	rudder deflection angle, degrees
δ_{BF}	BDFLAP	body flap deflection angle, degrees
X_{CP}/l_{ref}	XCP/L	normal force center of pressure, percent reference length
C_{mFWD}	CLMFWD	pitching moment coefficient at .65 body length (forward C.G.)
C_{mAFT}	CLMAFT	pitching moment coefficient at .675 body length (aft C.G.)
$\Delta\delta_e$	DLTELV	incremental full span elevon deflection angle, degrees
ΔC_N	DLTCN	incremental normal force coefficient
ΔC_{mFWD}	DLTCMF	incremental pitching moment coefficient (fwd. C.G.)
ΔC_{mAFT}	DLTCMA	incremental pitching moment coefficient (aft C.G.)
ΔC_A	DLTCA	incremental axial force coefficient

NOMENCLATURE (Concluded)
Additions to Nomenclature

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
ΔC_{AF}	DLTCAF	incremental forebody axial force coefficient
ΔC_{AB}	DLTCAB	incremental base axial force coefficient
ΔC_L	DLTCL	incremental lift coefficient
ΔC_D	DLTCD	incremental drag coefficient
ΔC_Y	DLTCY	incremental side force coefficient
ΔC_n	DLTCYN	incremental yawing moment coefficient
ΔC_l	DLTCBL	incremental rolling moment coefficient
$\Delta \delta_{e_i}$	DLE-LI	incremental inboard elevon deflection angle, degrees
$\Delta \delta_{BF}$	DLBDFP	incremental body flap deflection angle, degrees
$\Delta \delta_{e_o}$	DLE-LO	incremental outboard elevon deflection angle, degrees
$\Delta \delta_a$	DLTARN	incremental aileron deflection angle, degrees

CONFIGURATIONS INVESTIGATED

Effects of OMS pod configurations and elevon gap (between inboard and outboard panels) were investigated. The model was tested with OMS pods off, with the baseline OMS pods, and new OMS pods. Tests were conducted with both a 6-inch (full scale) elevon gap and with a sealed elevon gap.

$$O_1 = B_{26} C_9 E_{43} F_8 M_{16} N_{28} R_5 V_8 W_{116}$$

$$O_2 = B_{26} C_9 E_{43} F_8 N_{28} R_5 V_8 W_{116}$$

$$O_3 = B_{26} C_9 E_{43} F_8 M_7 N_{28} R_5 V_8 W_{116}$$

<u>Component</u>	<u>Definition</u>
B ₂₆	fuselage per Rockwell lines VL70-000143B, -000200, -000205, -006089, -000145, -000140A and -000140B (model drawing SS-A00147)
C ₉	canopy per Rockwell lines VL70-000143B (model drawing SS-A00147)
E ₄₃	slotted version (6-inch) of E ₂₆ elevons per Rockwell lines VL70-000200, -006089, -006092 (model drawing SS-A00148)
F ₈	body flap per Rockwell lines VL70-000140A, 000145 (model drawing SS-A00147)
M ₇	OMS/RCS pods per Rockwell lines VL70-000140A, -000145 (model drawing SS-A00147)
M ₁₆	OMS/RCS pods per Rockwell lines VL70-008410, -000140C (model drawing SS-A00147)
N ₂₈	OMS engine nozzle per Rockwell lines VL70-000140A (model drawing SS-A00147)

CONFIGURATIONS INVESTIGATED (Concluded)

<u>Component</u>	<u>Definition</u>
R ₅	rudder per Rockwell lines VL70-000146A, -000095, -000139 (model drawing SS-A00148)
V ₈	vertical tail per Rockwell lines VL70-000146A (model drawing SS-A00148)
W ₁₁₆	wing per Rockwell lines VL70-000140B, -000200 (model drawing SS-A00148)

INSTRUMENTATION

Force instrumentation consisted of a six component internal force balance mounted in the Orbiter sting cavity.

Pressure instrumentation consisted of a base pressure rake and one sting cavity pressure which were routed along the sting to externally mounted transducers for pressure measurement.

Three thermocouples were mounted in the Orbiter. The first thermocouple was located in the lower wing at outer mold line $X_0 = 17.83$ inch m.s., $Y_0 = 4.215$ inch m.s.; the second at the lower fuselage centerline at outer mold line $X_0 = 17.83$ inch m.s., $Y_0 = 0.000$ inch m.s. and the third thermocouple at the lower fuselage centerline at outer mold line $X_0 = 6.00$ inch m.s., $Y_0 = 0.00$ inch m.s.

These thermocouples were used to monitor the surface temperature on the model.

TEST FACILITY DESCRIPTION

The Arnold Engineering Development Center (AEDC) is an Air Force Facility located in Tullahoma, Tennessee. Tunnel B is a continuous, closed circuit, variable density wind tunnel with an axisymmetric contoured nozzle and a 50-inch diameter test section. The tunnel can be operated at a nominal Mach number of 6 or 8 at stagnation pressures from 20 to 300 and 50 to 900 psia, respectively, and at a stagnation temperature of up to 1350°R. The model may be injected into the tunnel for a test run and then retracted for model cooling or model changes without interrupting the tunnel flow.

DATA REDUCTION

The aerodynamic forces and moments recorded by the internal strain gage balance were reduced to coefficient form in the body and stability axis systems utilizing the following reference dimensions:

<u>Symbol</u>		<u>Model Scale</u>	<u>Full Scale</u>
A_B	Total base area excluding sting cavity, ft ²	0.06080	270.2
A_{SC}	sting cavity area, ft ²	0.03409	151.5
S	wing planform area, ft ²	0.60525	2690.0
l_b	body reference length, in	19.3545	1290.3
$\bar{c}(l_{ref})$	wing M.A.C., in	7.1222	474.81
b_{ref}	wing span, in	14.0502	936.68

Moments are referenced about model station 16.150 (fuselage station 1076.68) on the fuselage at model water line 5.625 (full scale water line 375)

Model base and cavity pressures were measured during the test and have been used to correct the data for model base effects. Location and areas for these pressures were as shown in figure 2b.

Axial force coefficients were determined as follows:

$$C_A = C_{AU} - C_{ASC}$$

$$C_{AF} = C_{AU} - C_{AB}$$

DATA REDUCTION (Concluded)

where: C_{AU} = axial force coefficient unadjusted for base or
sting cavity pressures

C_{ASC} = sting cavity axial force coefficient

C_{AB} = base axial force coefficient

ORIGINAL PAGE IS
OF POOR QUALITY

TABLE II. - Continued.

TEST:	DATA SET IDENTIFIER	CONFIGURATION	SCHD.	PARAMETERS/VALUES										NO. OF RUNS	MACH NUMBERS			
				α	β	S ₁₀	S ₁₁	S ₁₂	S ₁₃	S ₁₄	S ₁₅	S ₁₆	S ₁₇		S ₁₈	S ₁₉	S ₂₀	
	RTN 037	See Enst. Form No. 814	A	0	0	-10	-10	0	55	0	55	0	3.53		145	81	82	83
	038		A	0	0	-20	0	0	55	0	55	0	↓		146			
	039		O	B	0	0	0	0	55	0	55	0	↓		147			(HEAT SENS)
	040		A	0	0	0	0	0	55	0	55	0	1.86			148		
	041		A	0	0	0	0	0	55	0	55	0	↓			149		(Tech Base)
	042		A	0	0	-20	-20	0	55	0	55	0	3.53		157			(SEALED GAP)
	043		A	0	0	0	0	0	55	0	55	0	↓		158			↓
	044		A	0	0	0	0	0	25	0	25	0	↓		159			
	045		A	0	0	0	0	0	85	0	85	0	↓		160			
	046		A	0	0	-30	-30	0	55	0	55	0	↓		161			
	047		A	0	0	-10	-10	+10	55	0	55	0	↓		162			
	048		A	0	0	0	0	0	55	0	55	0	1.86			150		
	049		A	0	0	0	0	0	55	0	55	0	↓			151		
	050		A	0	0	+10	+10	0	55	0	55	0	↓			152		
	051		A	0	0	+10	+10	0	55	0	55	0	↓			153		
	052		A	0	0	+20	+20	0	55	0	55	0	↓			154		
	053		A	0	0	+20	+20	0	55	0	55	0	↓			155		
	RTN 054	See Enst. Form No. 814	A	0	0	-40	-40	0	55	0	55	0	↓			156		

19 25 31 37 43 49 55 61 67 73 79
 CAE CLME IGY GYN IGBL CAB XCP/HGLE ISDF MASH ALPHA
 REFERENCE: 10 APR 71 10 APR 71

TABLE II. - Continued.

TEST: OA79		DATA SET RUN NUMBER COLLATION SUMMARY										DATE: 8-13-74											
DATA SET IDENTIFIER	CONFIGURATION	PARAMETERS/VALUES										NO. OF PUNS	MACH NUMBERS										
		SCMD.	S10	S11	S12	S13	S14	S15	S16	S17	S18		R/Ft	8'	8 ²	8 ³							
RTW055	BROG-F-108-116	A	0	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10	163			
056		A	0	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10	164			
057																				165			
058																				166			
059																				167			
060																				168			
061																				169			
062																				170			
063																					171		
065																					172		
066																					173		
067																					174		
068																					175		
069																					176		
070																					177		
071																					178		
RTW072																					179		

TEST RUN NUMBERS

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

CAE CLME CSY SYN GBL GAB XCP/L CLF SDF MACH ALPHA

COEFFICIENTS

αA: +5° → 45°

αB: -5° → +5°

15. APR 12 '69

TABLE III. - MODEL DIMENSIONAL DATA

MODEL COMPONENT: BODY - B₂₆

GENERAL DESCRIPTION: Configuration 140A/B Orbiter Fuselage

NOTE: B₂₆ is identical to B₂₄ except underside of fuselage has been repaired to accept W₁₁₆.

MODEL SCALE: 0.015 MODEL DRAWING: SS-A00147, RELEASE 12

DRAWING NUMBER: VI.73-000143B, -000200, 000205, -006089, -000145, 000140A, 000140B

DIMENSIONS:	FULL SCALE	MODEL SCALE
*Length (OML: Fwd Sta. X ₀ =235)-In.	<u>1293.3</u>	<u>19.400</u>
*Length (IML: Fwd Sta. X ₀ =238)-In.	<u>1290.3</u>	<u>19.354</u>
* Max Width (@ X = 1528.3) - In.	<u>264.0</u>	<u>3.960</u>
Max Depth (@ X ₀ = 1464) - In.	<u>250.0</u>	<u>3.750</u>
Fineness Ratio	<u> </u>	<u> </u>
Area - Ft ²	<u> </u>	<u> </u>
Max. Cross-Sectional	<u>340.88</u>	<u>0.017</u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

*REVISED 4/24/74

TABLE III. - MODEL DIMENSIONAL DATA- Continued.

MODEL COMPONENT : CANOPY - C₉

GENERAL DESCRIPTION : Configuration 3A, Canopy used with Buselage

B₂₆

MODEL SCALE: 0.015 MODEL DRAWING: SS-A00147, RELEASE 12

DRAWING NUMBER VL70-000143A

DIMENSIONS :	FULL SCALE	MODEL SCALE
* Length ($X_0 = 434.643$ to 578)	<u>143.357</u>	<u>2.150</u>
Max Width (@ $X_0 = 513.127$)	<u>152.412</u>	<u>2.286</u>
Max Depth (@ $X_0 = 485.0$)	<u>25.000</u>	<u>0.375</u>
Fineness Ratio	<u> </u>	<u> </u>
Area	<u> </u>	<u> </u>
Max. Cross-Sectional	<u> </u>	<u> </u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: SLOTTED ELEVON (6-INCH MAP) - E₄₃

GENERAL DESCRIPTION: Configuration 140A/B Orbiter elevon.

NOTE: E₄₃ is a slotted version of E₂₆. Data are for one side.

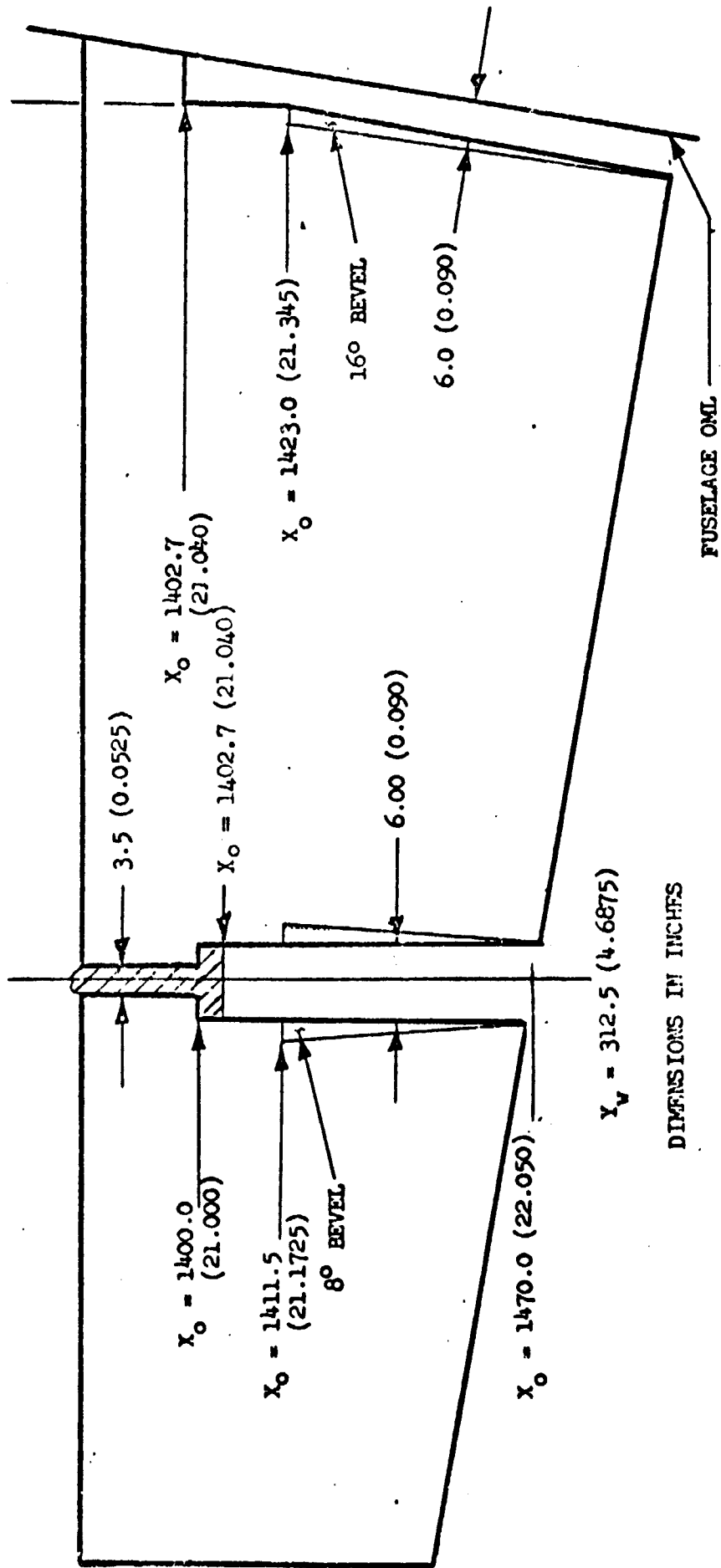
MODEL SCALE: 0.015

DRAWING NUMBER: VL70-000200, VL70-006089, VL006092

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area - Ft ²	<u>210.0</u>	<u>0.0473</u>
Span (equivalent) - In.	<u>349.2</u>	<u>5.238</u>
Inb'd equivalent chord In.	<u>118.004</u>	<u>1.770</u>
Outb'd equivalent chord In.	<u>55.192</u>	<u>0.828</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.2096</u>	<u>0.2096</u>
At Outb'd equiv. chord	<u>0.4004</u>	<u>0.4004</u>
Sweep Back Angles, degrees		
Leading Edge	<u>0.00</u>	<u>0.00</u>
Trailing Edge	<u>-10.056</u>	<u>-2.1456</u>
Hingeline	<u>0.00</u>	<u>0.00</u>
Area Moment (Product of Area and \bar{c}) - Ft ³	<u>1587.25</u>	<u>0.00536</u>
Mean Aerodynamic Chord (\bar{c}), in.	<u>90.7</u>	<u>1.3605</u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

$$Y_v = 128.50 \text{ (1.928)}$$



DIMENSIONS IN INCHES

Slotted Elevon - E₄₃ (6-inch Cap)

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT : BODY FLAP - F₆

GENERAL DESCRIPTION : Configuration 140A/B Orbiter Body Flap.

Hingeline located at X₀ = 1528.3, Z₀ = 284.3

MODEL SCALE: 0.015 MODEL DRAWING: SS-A00147, RELEASE 12

DRAWING NUMBER : VL7-000140A, VL70-000145

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (X ₀ =1520 TO X ₀ =1613) In.	<u>93.000</u>	<u>1.395</u>
Max Width (In.)	<u>262.00</u>	<u>3.930</u>
Max Depth (X ₀ = 1520) - In.	<u>23.000</u>	<u>0.345</u>
Fineness Ratio	<u> </u>	<u> </u>
Area - Ft ²	<u> </u>	<u> </u>
Max. Cross-Sectional	<u> </u>	<u> </u>
Planform	<u>150.525</u>	<u>0.0339</u>
Wetted	<u> </u>	<u> </u>
Base	<u>41.84722</u>	<u>0.00941</u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: O/S Pod (M7)

GENERAL DESCRIPTION: Configuration 140 A/B Orbiter O/S-Pod

Model Scale = 0.015,

Model Drawing No. SS-A00147

DRAWING NUMBER

VL70-000140A

VL70-000145

DIMENSION:

FULL SCALE

MODEL SCALE

Length (O/S Fwd Sta $X_0=1233.0$) - IN.

327.000

4.905

Max Width (@ $X_0=1450.0$) - IN.

94.5

1.418

Max Depth (@ $X_0=1493.0$) - IN.

109.000

1.635

Fineness Ratio

Area

Max Cross-Sectional

Planform

Wetted

Base

ORIGINAL PAGE IS
OF POOR QUALITY

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: O/S Pod (1/4)

GENERAL DESCRIPTION: Configuration 1400 Orbiter O/S-Pod

Model Scale = 0.015.

Model Drawing No.

DRAWING NUMBER

V170-000140 C
V170-018110

DIMENSION:

FULL SCALE

MODEL SCALE

Length (O/S Fwd Sta $X_0=1311.0$)-In.	<u>258.5</u>	<u>3.878</u>
Max Width (@ $X_0 = 1511$)-In.	<u>136.8</u>	<u>2.052</u>
Max Depth (@ $X_0 = 1511$)-In.	<u>74.7</u>	<u>1.121</u>
Fineness Ratio	<u>2.484</u>	<u>2.484</u>
Area - FT ²		
Max Cross-Sectional	<u>58.864</u>	<u>0.013</u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

ORIGINAL PAGE IS
OF POOR QUALITY

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: OMS NOZZLES - N28

GENERAL DESCRIPTION: Configuration 140A/B Orbiter OMS Nozzles

MODEL SCALE: 0.015 MODEL DRAWING: SS-A00106, RELEASE 5 (Contour)

DRAWING NUMBER: VL70-000140A (Location)

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
MACH NO.		
Length - In.		
Gimbal Point to Exit Plane		
Throat to Exit Plane		
Diameter - In.		
Exit		
Throat		
Inlet		
Area - ft ²		
Exit		
Throat		
Gimbal Point (Station) - In.		
Left Nozzle		
X _o	<u>1518.0</u>	<u>22.770</u>
Y _o	<u>- 88.0</u>	<u>- 1.320</u>
Z _o	<u>492.0</u>	<u>7.380</u>
Right Nozzle		
X _o	<u>1518.0</u>	<u>22.770</u>
Y _o	<u>+ 88.0</u>	<u>+ 1.320</u>
Z _o	<u>492.0</u>	<u>7.380</u>
Null Position - Deg.		
Left Nozzle		
Pitch	<u>15°49'</u>	<u>15°49'</u>
Yaw	<u>12°17'</u>	<u>12°17'</u>
Right Nozzle		
Pitch	<u>15°49'</u>	<u>15°49'</u>
Yaw	<u>12°17'</u>	<u>12°17'</u>

ORIGINAL PAGE IS
OF POOR QUALITY

*REVISED 4/24/74

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: RUDDER - R₅

GENERAL DESCRIPTION: 2A, 3, 3A and 140Z/B Configurations

MODEL SCALE: 0.015

DRAWING NUMBER: VL70-000146A, VL70-000095, VL70-000139.

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
*Area- Ft ²	<u>100.15</u>	<u>0.0225</u>
Span (equivalent) - In	<u>201.0</u>	<u>3.015</u>
Inb'd equivalent chord - In.	<u>91.585</u>	<u>1.3738</u>
Outb'd equivalent chord - In.	<u>50.833</u>	<u>0.7625</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
At Outb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
Sweep Back Angles, degrees		
Leading Edge	<u>34.83</u>	<u>34.83</u>
Trailing Edge	<u>26.25</u>	<u>26.25</u>
Hingeline	<u>34.83</u>	<u>34.83</u>
* Area Moment (Product of area & \bar{c})-Ft ³	<u>610.92</u>	<u>0.002</u>
*Mean Aerodynamic Chord, In.	<u>73.2</u>	<u>1.098</u>

ORIGINAL PAGE IS
OF POOR QUALITY

*REVISED 4/24/74

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: VERTICAL - V8

GENERAL DESCRIPTION: Configuration 140A/B Orbiter Vertical Tail

MODEL SCALE: 0.015

MODEL DRAWING: SS-A00148, RELEASE 6

DRAWING NUMBER: VL70-000146A

DIMENSIONS:

FULL SCALE MODEL SCALE

TOTAL DATA

Area (Theo) - Ft ²		
Planform	<u>413.253</u>	<u>0.093</u>
Span (Theo) - In.	<u>315.720</u>	<u>4.736</u>
Aspect Ratio	<u>1.675</u>	<u>1.675</u>
Rate of Taper	<u>0.507</u>	<u>0.507</u>
Taper Ratio	<u>0.404</u>	<u>0.404</u>
Sweep-Back Angles, Degrees.		
Leading Edge	<u>45.000</u>	<u>45.000</u>
* Trailing Edge	<u>26.2</u>	<u>26.2</u>
0.25 Element Line	<u>41.130</u>	<u>41.130</u>
Chords:		
Root (Theo) WP	<u>268.500</u>	<u>4.028</u>
Tip (Theo) WP	<u>108.470</u>	<u>1.627</u>
M/C	<u>199.808</u>	<u>2.997</u>
Fus. Sta. of .25 MAC	<u>1463.50</u>	<u>21.953</u>
W.P. of .25 MAC	<u>635.522</u>	<u>9.533</u>
B.L. of .25 MAC	<u>0.00</u>	<u>0.00</u>
Airfoil Section		
Leading Wedge Angle - Deg.	<u>10.00</u>	<u>10.00</u>
Trailing Wedge Angle - Deg.	<u>14.920</u>	<u>14.920</u>
Leading Edge Radius	<u>2.00</u>	<u>0.030</u>
Void Area	<u>13.17</u>	<u>0.003</u>
Blanketed Area	<u>0.00</u>	<u>0.00</u>

ORIGINAL PAGE IS
OF POOR QUALITY

TABLE III. - MODEL DIMENSIONAL DATA - Concluded. *REVISED 4/24/74

MODEL COMPONENT: WING-W 116

GENERAL DESCRIPTION: Model section 4

NOTE: Identical to W₁₁₆ except airfoil thickness. Dihedral angle is along trailing edge of wing.

MODEL SCALE: 0.015 MODEL DRAWING: SC 100148 RELEASE 6

TEST NO. _____ DWG. NO. V570 000140B, -000200

DIMENSIONS: FULL-SCALE MODEL SCALE

TOTAL DATA

Area (Theo.) Ft^2

Planform	2690.00	0.605
Span (Theo) In.	735.68	14.050
Aspect Ratio	2.265	2.265
Rate of Taper	1.177	1.177
Taper Ratio	0.200	0.200
Dihedral Angle, degrees	3.500	3.500
Incidence Angle, degrees	0.500	0.500
Aerodynamic Twist, degrees	+ 3.000	+ 3.000
Sweep Back Angles, degrees		
Leading Edge	45.000	45.000
Trailing Edge	- 10.056	- 10.056
0.25 Element Line	35.209	35.209
Chords:		
Root (Theo) B.P.O.O.	689.24	10.339
Tip, (Theo) B.P.	137.85	2.068
MAC	474.81	7.122
*Fus. Sta. of .25 MAC	1126.83	17.052
* W.P. of .25 MAC	207.58	4.359
* B.L. of .25 MAC	182.13	2.732

EXPOSED DATA

* Area (Theo) Ft^2	1751.50	0.394
* Span, (Theo) In. BP108	735.68	10.810
* Aspect Ratio	2.059	2.059
Taper Ratio	0.245	0.245
Chords		
* Root BL108	562.09	8.431
Tip $1.00 \frac{b}{2}$	137.85	2.068
* MAC	392.83	5.892
* Fus. Sta. of .25 MAC	1185.08	17.700
* W.P. of .25 MAC	204.30	4.415
* B.L. of .25 MAC	251.77	3.777

Airfoil Section (Rockwell Mod NASA)
XXXX-64

Root $\frac{b}{2}$ =	0.113	0.113
Tip $\frac{b}{2}$ =	0.12	0.12

Data for (1) of (2) Sides

Leading Edge Cuff		
* Planform Area Ft^2	113.18	0.025
* Leading Edge Intersects Fus M. L. @ Sta	500.0	7.50
* Leading Edge Intersects Wing @ Sta	1024.00	15.36

Notes

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

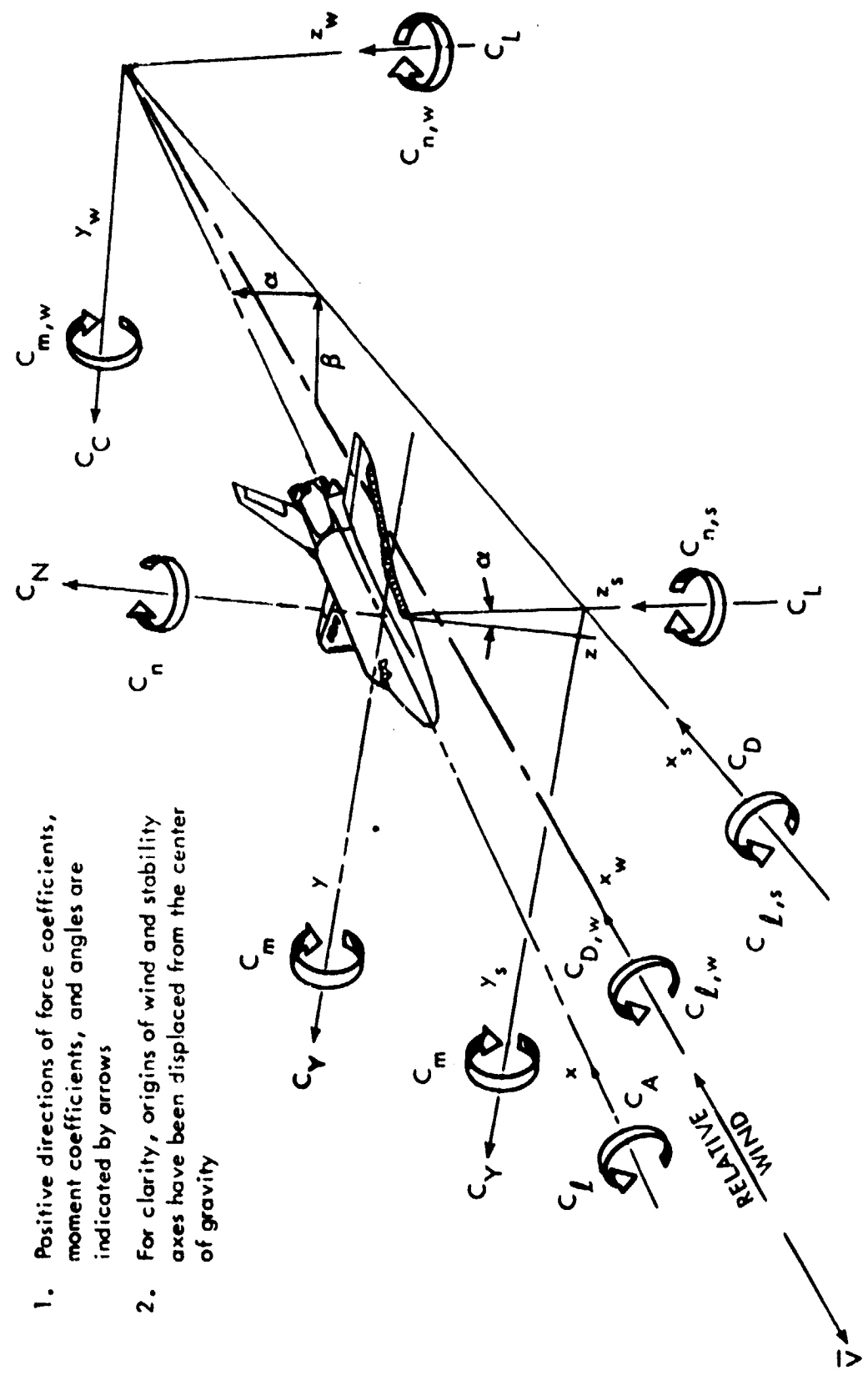
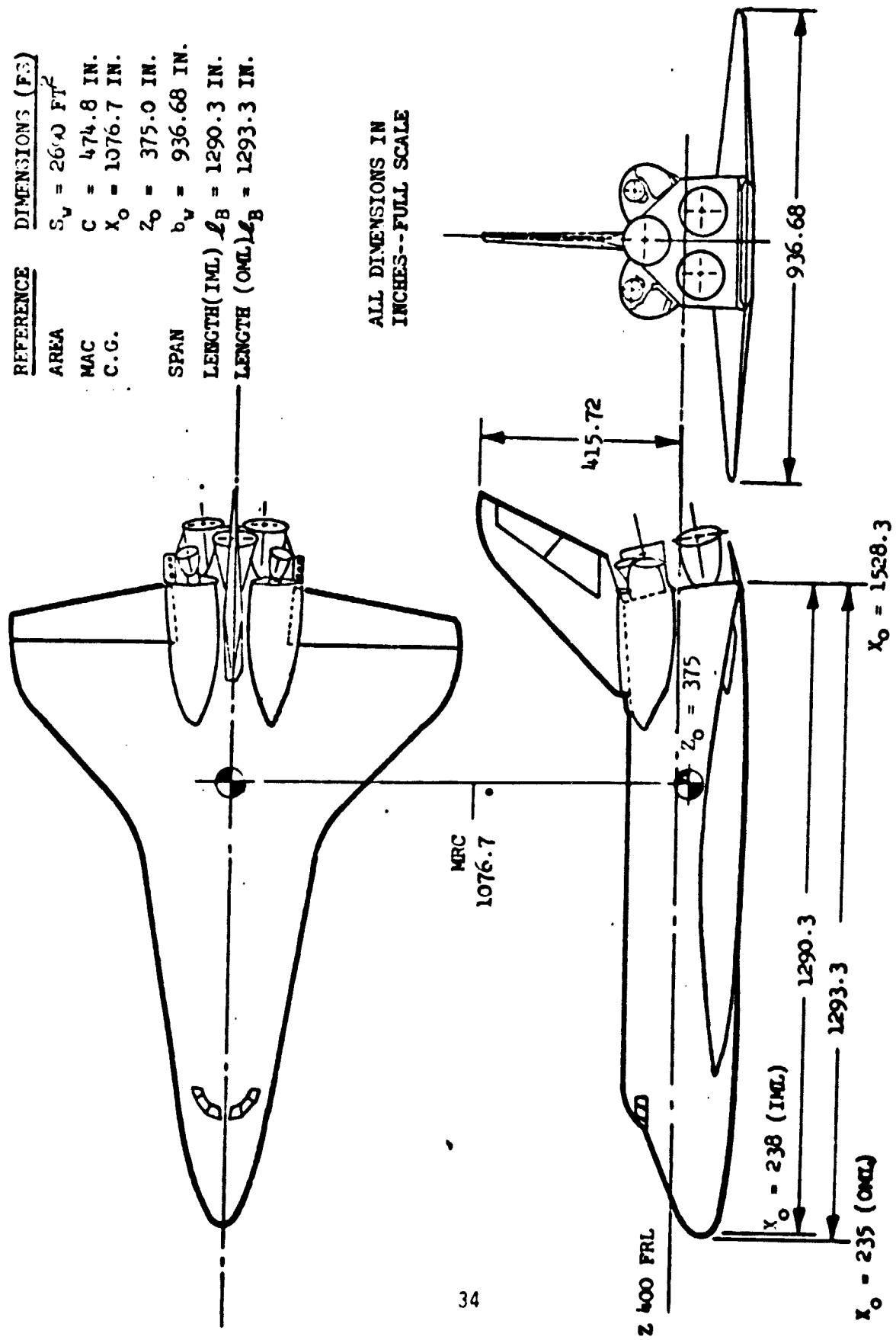


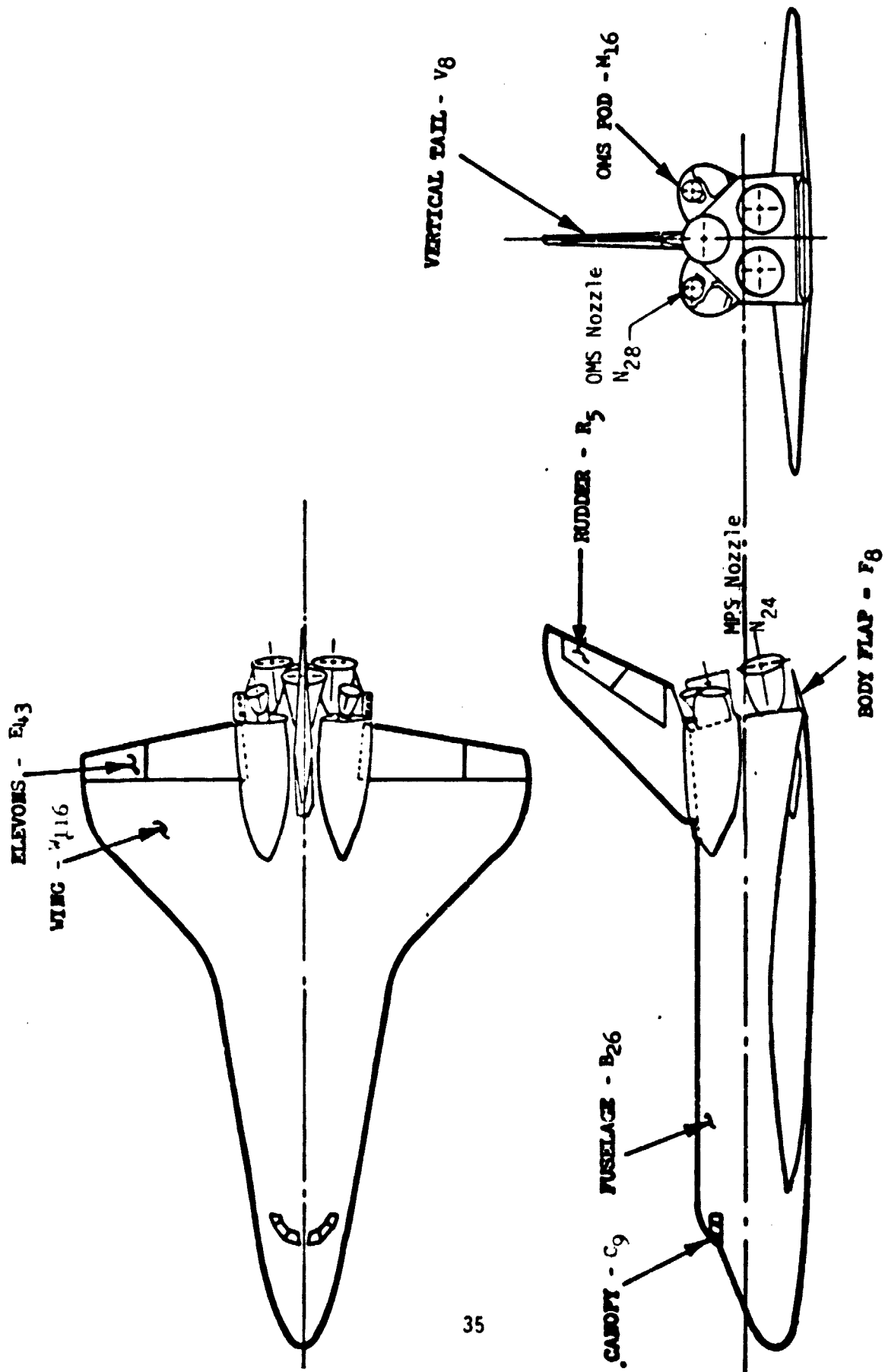
Figure 1. - Axis systems.

REFERENCE	DIMENSIONS (FS)
AREA	$S_V = 2600 \text{ FT}^2$
MAC	$C = 474.8 \text{ IN.}$
C.G.	$X_0 = 1076.7 \text{ IN.}$
	$Z_0 = 375.0 \text{ IN.}$
SPAN	$b_V = 936.68 \text{ IN.}$
LENGTH (IML)	$L_B = 1290.3 \text{ IN.}$
LENGTH (OML)	$L_B = 1293.3 \text{ IN.}$

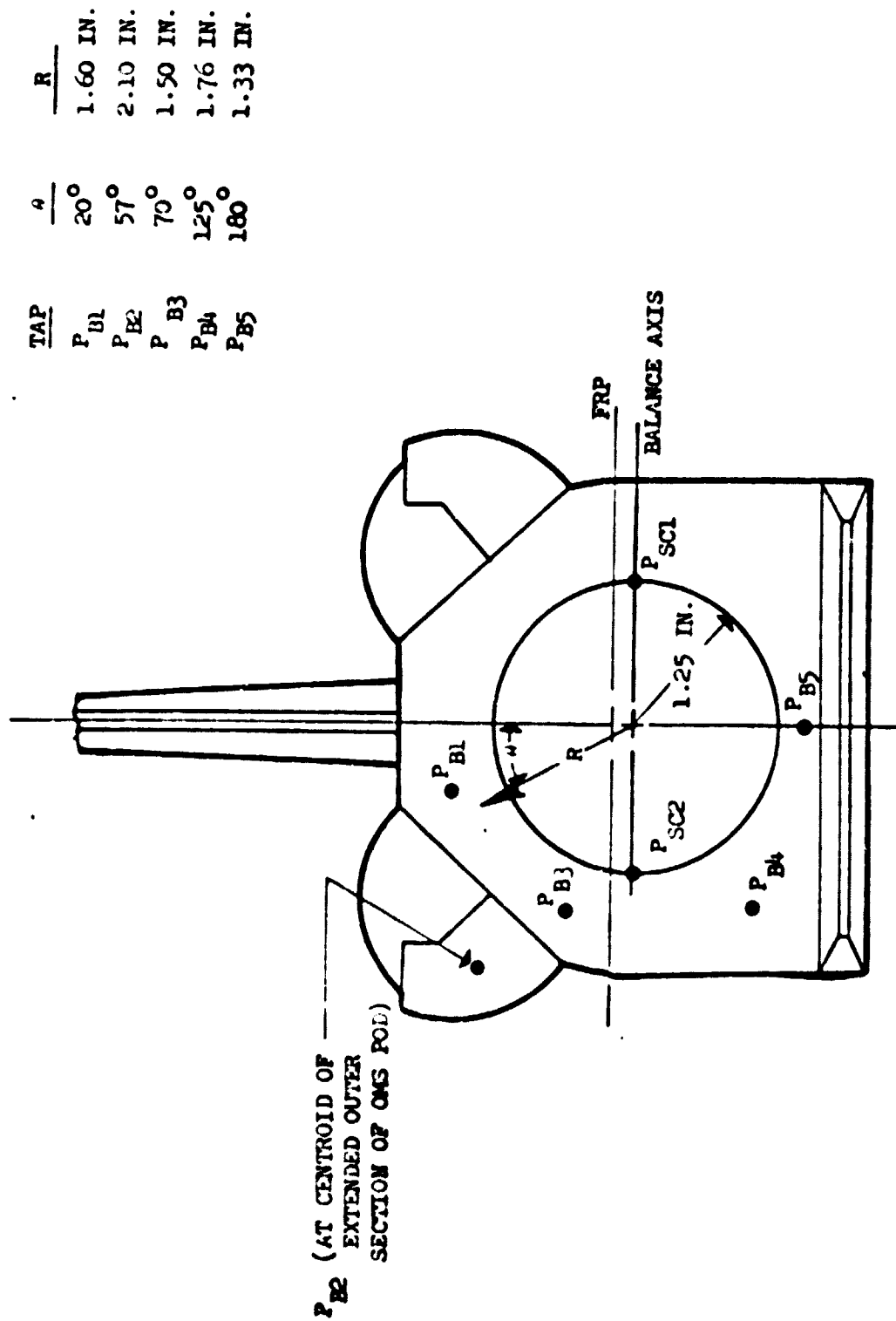


a. SSV Orbiter Configuration 140A/B-Modified

Figure 2. - Model sketches.



b. Model Configuration
Figure 2. - Continued.



TAP	θ	R
P _{B1}	20°	1.60 IN.
P _{B2}	57°	2.10 IN.
P _{B3}	79°	1.50 IN.
P _{B4}	125°	1.76 IN.
P _{B5}	180°	1.33 IN.

c. Base and Cavity Pressure Locations

Figure 2. - Concluded.



a. View Looking Aft With Model Rolled
Figure 3. - Model photographs.



b. Side View of Model for a Beta Sweep

Figure 3. - Concluded.

DATA FIGURES

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(C1V006)	0A79 826 C9 E43 F8 N28 R5 V8 V116	.000	.000	.000	.000	SREF 2690.0000 SQ.FT.
(C1V001)	0A79 826 C9 E43 F8 M16 N28 R5 V8 V116	.000	.000	.000	.000	LREF 474.8100 IN.
(C1V009)	0A79 826 C9 E43 F8 M7 N28 R5 V8 V116	.000	.000	.000	.000	BREF 936.6800 IN.
						XMRP 1076.0000 IN.X0
						YMRP .0000 IN.Y0
						ZMRP 375.0000 IN.Z0
						SCALE .0150

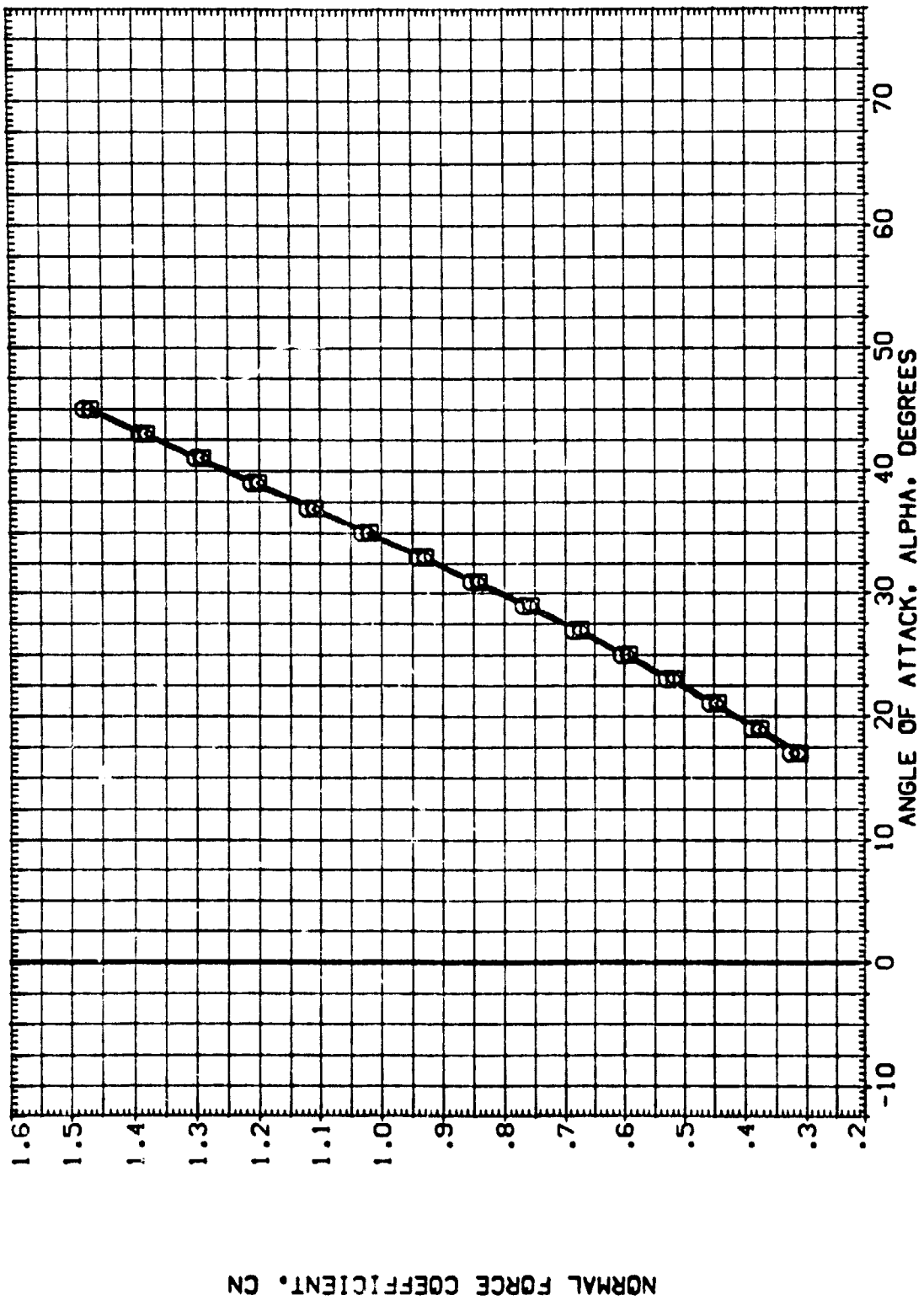


FIG. 4 EFFECT OF OMS PODS

(A)MACH = 8.00

ORIGINAL PAGE IS
OF SUPERIOR QUALITY

PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH(FORWARD C. G.) CLMFD

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(CTV006)	0A79 826 C9 E43 F8 N28 R5 V8 V116	.000	.000	.000	.000	2690.0000 SQ.FT.
(CTV001)	0A79 826 C9 E43 F8 M16 N28 R5 V8 V116	.000	.000	.000	.000	474.8100 IN.
(CTV008)	0A79 826 C9 E43 F8 M7 N28 R5 V8 V116	.000	.000	.000	.000	536.6800 IN.
						1076.0000 IN.X0
						375.0000 IN.Y0
						SCALE .0150

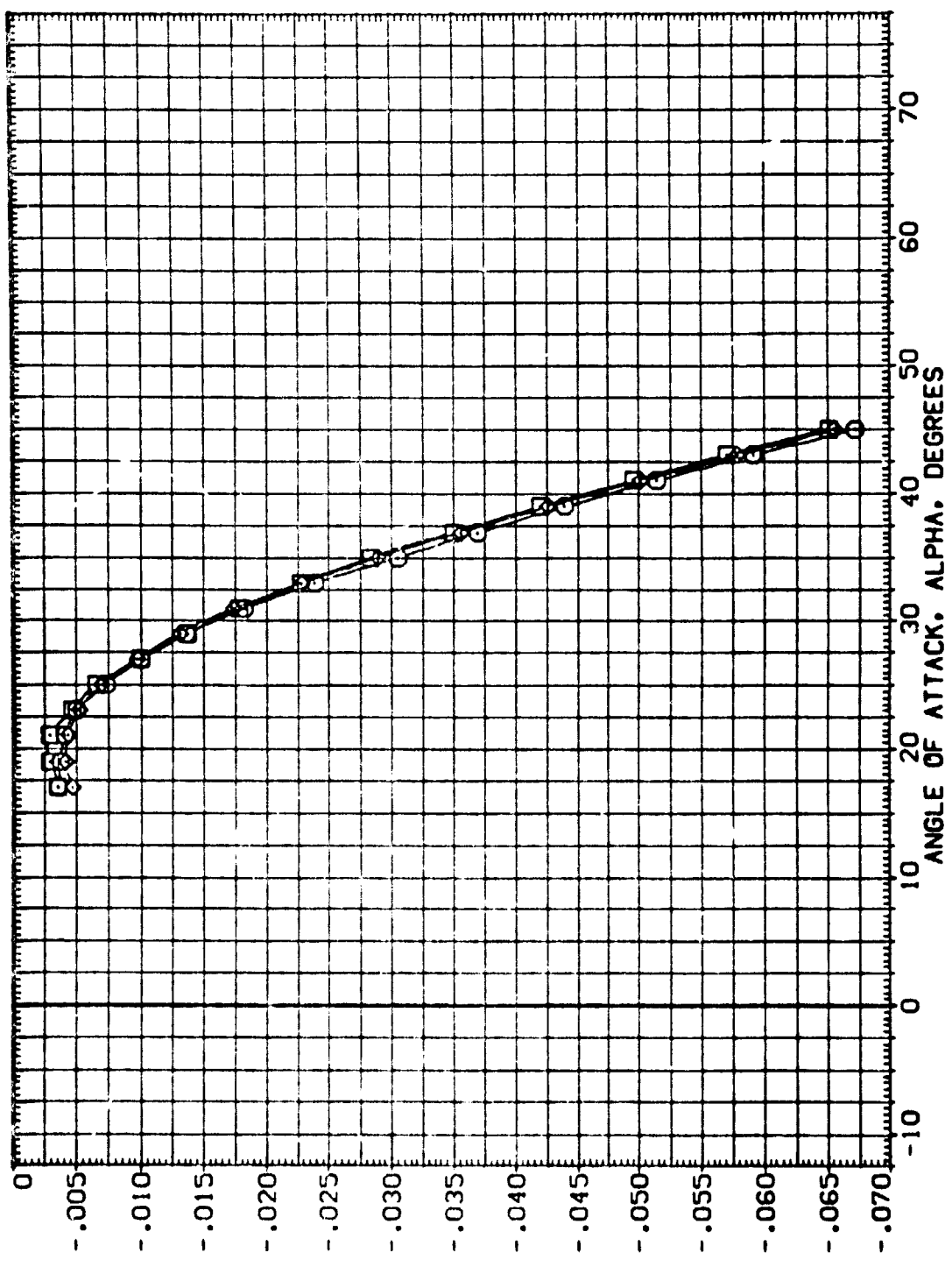


FIG. 4 EFFECT OF GMS PODS

(A)MACH = 8.00



PITCHING MOMENT COEFFICIENT AT .675 BODY LENGTH(AFT C. G.) CLMFT

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(CTV006)	0A79 826 C9 E43 F8 N28 R5 V8 V116	.000	.000	.000	.000	SREF 2650.0000 SQ.FT.
(CTV007)	0A79 826 C9 E43 F8 M16 N28 R5 V8 V116	.000	.000	.000	.000	LREF 474.8100 IN.
(CTV009)	0A79 826 C9 E43 F8 M7 N28 R5 V8 V116	.000	.000	.000	.000	BREF 936.6800 IN.
						XREF 1076.6800 IN. X0
						YREF .0000 IN. Y0
						ZREF 375.0000 IN. Z0
						SCALE .0150

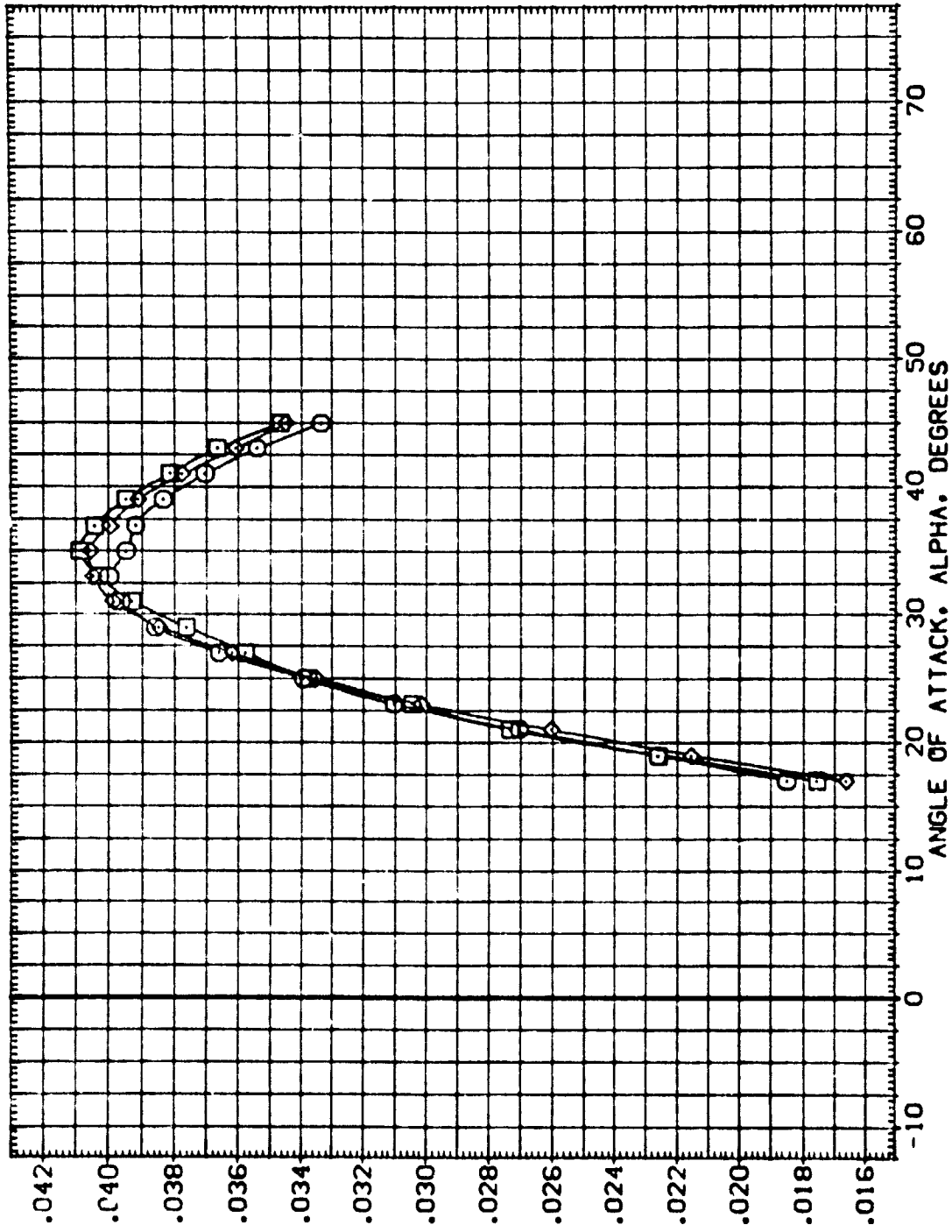


FIG. 4 EFFECT OF OMS PODS

(M)MACH = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(CTV006)	0A79 B26 C9 E43 F8 M28 R5 V8 V116	.000	.000	.000	.000	SREF 2650.0000 SQ.FT.
(CTV001)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.000	.000	.000	.000	LREF 474.8100 IN.
(CTV009)	0A79 B26 C9 E43 F8 M7 N28 R5 V8 V116	.000	.000	.000	.000	BREF 936.8800 IN.
						XTRP 1076.6800 IN.X0
						YTRP .0000 IN.Y0
						ZTRP 375.0000 IN.Z0
						SCALE .0150

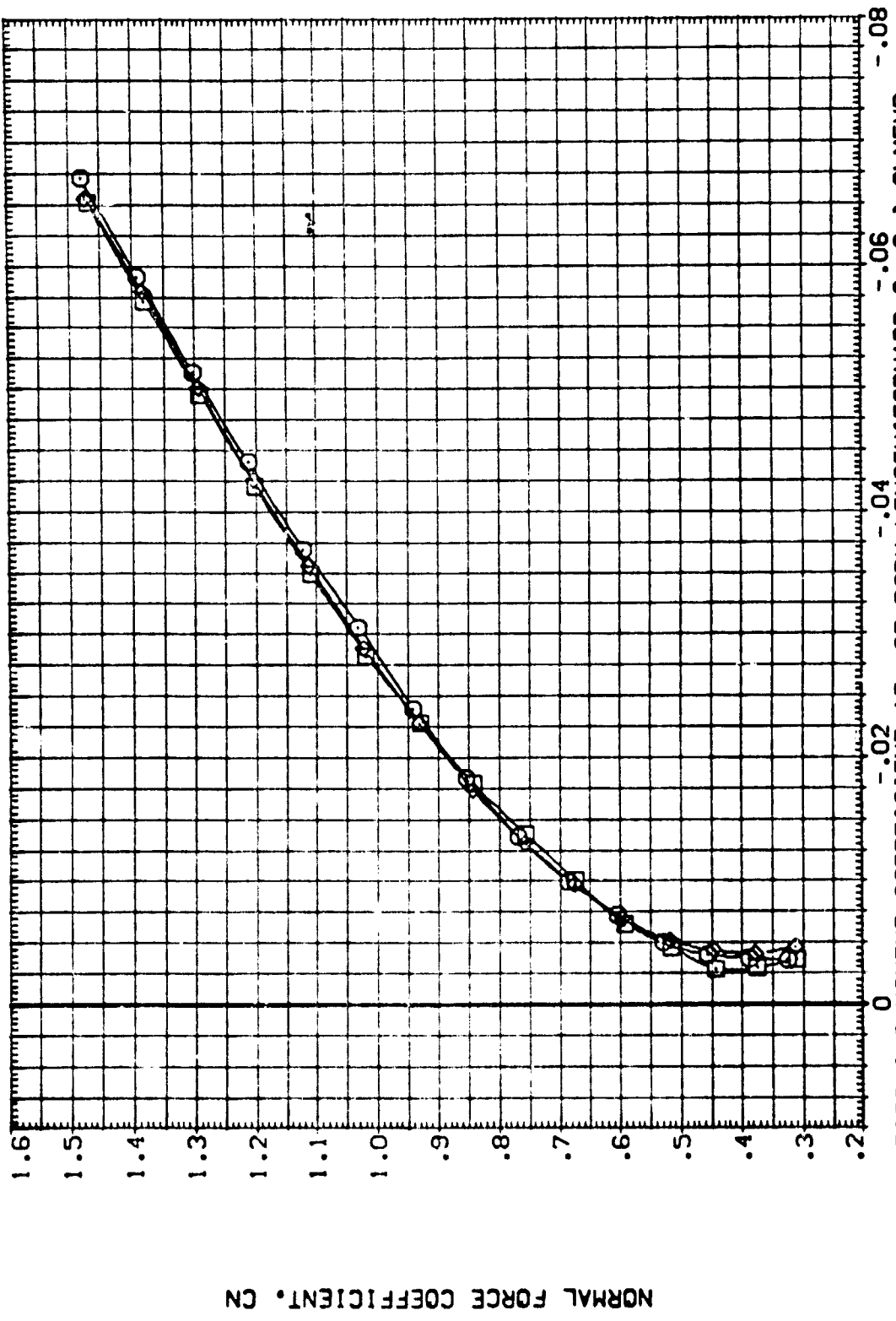


FIG. 4 EFFECT OF OMS PODS
 (A)MACH = 8.00



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(C1'0005)	0A79 B26 C9 E43 F8 N28 R5 V8 V116	.000	.000	.000	.000	SREF 2690.0000 SQ.FT.
(C1'0001)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.000	.000	.000	.000	LREF 474.8100 IN.
(C1'0003)	0A79 B26 C9 E43 F8 M7 N28 R5 V8 V116	.000	.000	.000	.000	BREF 936.6800 IN.
						XMRP 1076.6800 IN.
						YMRP .0000 IN.
						ZMRP 375.0000 IN.
						SCALE .0150

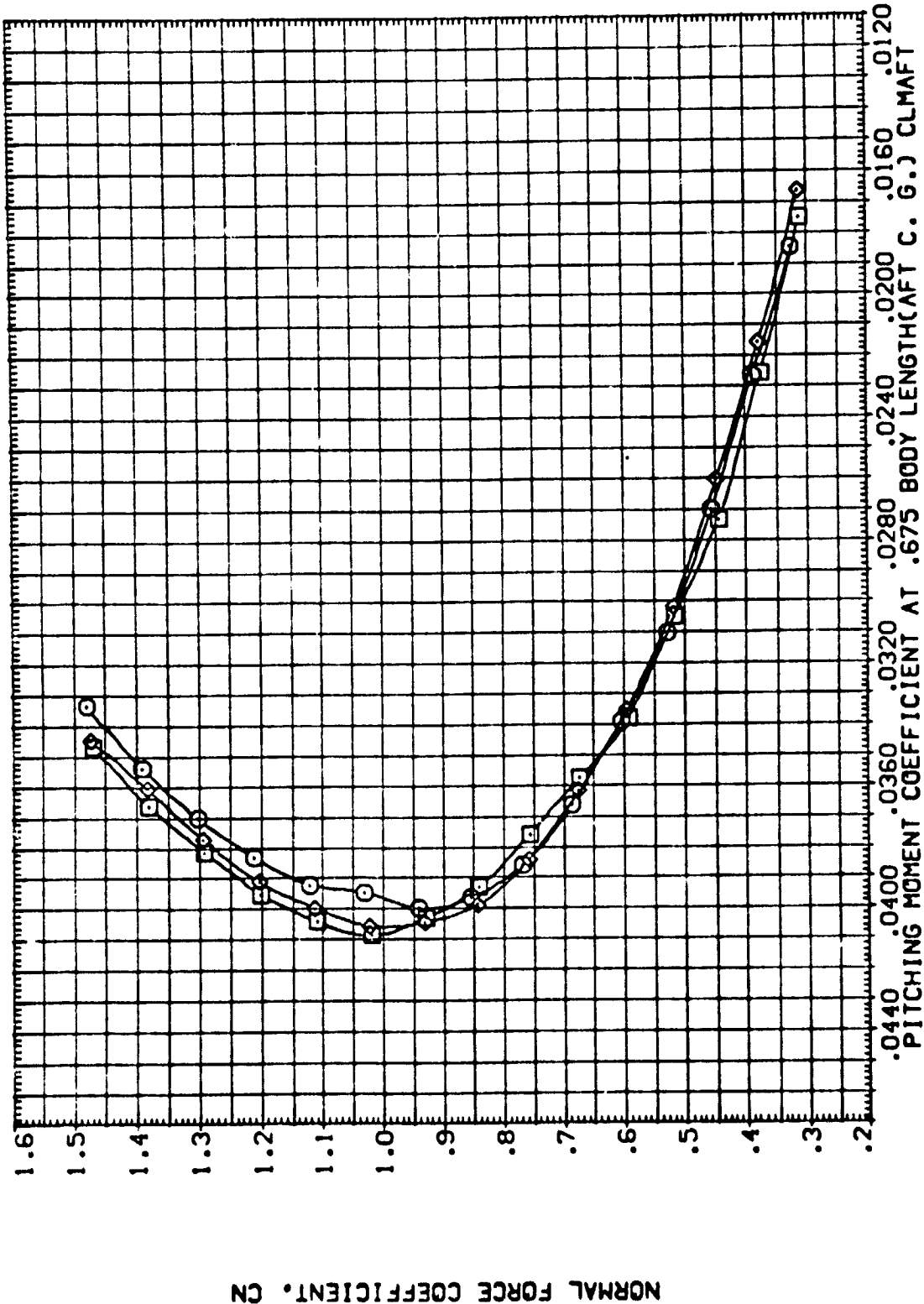


FIG. 4 EFFECT OF OMS PODS

(A)MACH = 8.00

CENTER OF PRESSURE LOCATION AS A FRACTION OF BODY LENGTH. XCP/L

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CTV006) 0A79 B26 C9 E43 F8 N28 R5 V8 W116
 (CTV001) 0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116
 (CTV009) 0A79 B26 C9 E43 F8 M7 N28 R5 V8 W116

ELV-L0 ELV-L1 ELV-R1 ELV-R0
 .000 .000 .000 .000
 .000 .000 .000 .000
 .000 .000 .000 .000

REFERENCE INFORMATION
 COST 2690.0000 SP.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.X0
 XPRP 1075.0000 IN.Y0
 YPRP 375.0000 IN.Z0
 ZPRP .0150 SCALE

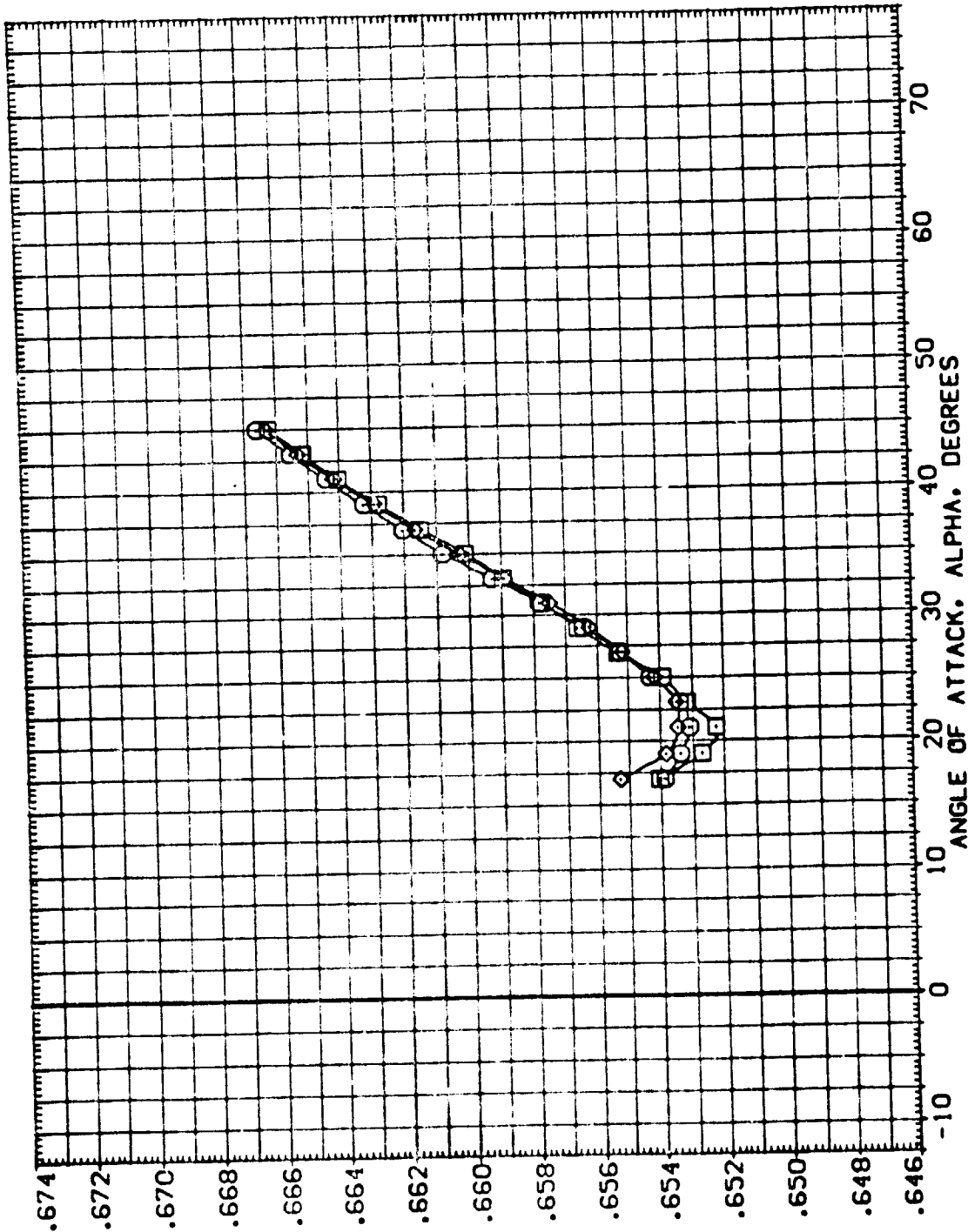


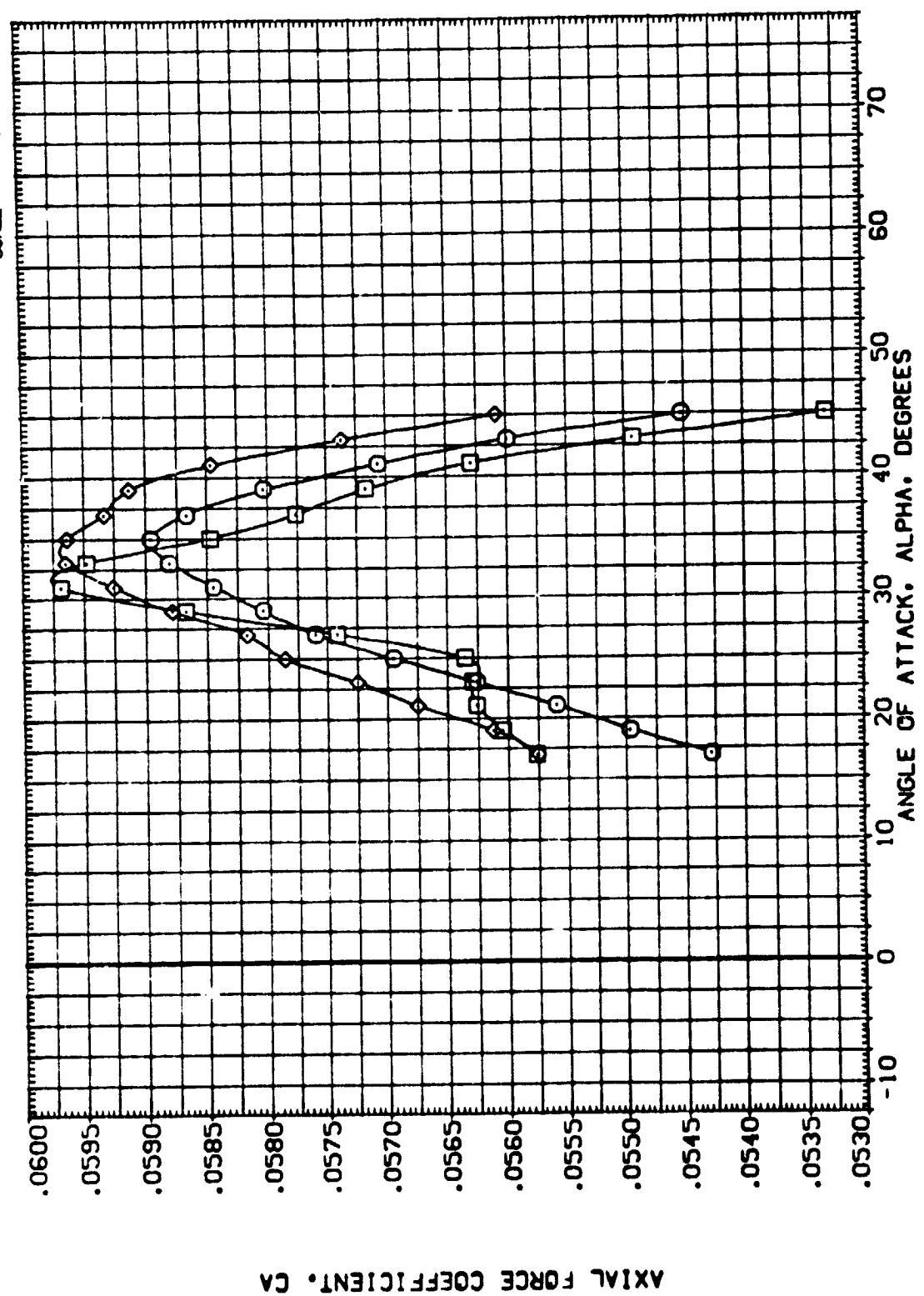
FIG. 4 EFFECT OF OMS PODS

(A)MACH = 8.00

REFERENCE INFORMATION
 SQ.FT.
 SREF 2690.0000 IN.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XPRP 1076.0000 IN.
 YPRP .0000 IN.
 ZPRP 375.0000 IN.
 SCALE .0150

ELV-L0 ELV-L1 ELV-R1 ELV-R0
 .000 .000 .000 .000
 .000 .000 .000 .000
 .000 .000 .000 .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CTV006) 0A79 826 C9 E43 F8 N28 R5 V8 V116
 (CTV001) 0A79 826 C9 E43 F8 M16 N28 R5 V8 V116
 (CTV009) 0A79 826 C9 E43 F8 M7 N28 R5 V8 V116



AXIAL FORCE COEFFICIENT, CA

FIG. 4 EFFECT OF OMS PODS

(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (C1V006) 0A79 B26 C9 E43 F8 N28 R5 V8 V116
 (C1V007) 0A79 B26 C9 E43 F8 N16 N28 R5 V8 V116
 (C1V008) 0A79 B26 C9 E43 F8 M7 N28 R5 V8 V116

ELV-L6 ELV-LJ ELV-RI ELV-R0
 .000 .000 .000 .000
 .000 .000 .000 .000
 .000 .000 .000 .000

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 174.8100 IN.
 BREF 936.6800 IN.
 XREF 1076.6800 IN. X0
 YREF .0000 IN. Y0
 ZREF 375.0000 IN. Z0
 SCALE .0150

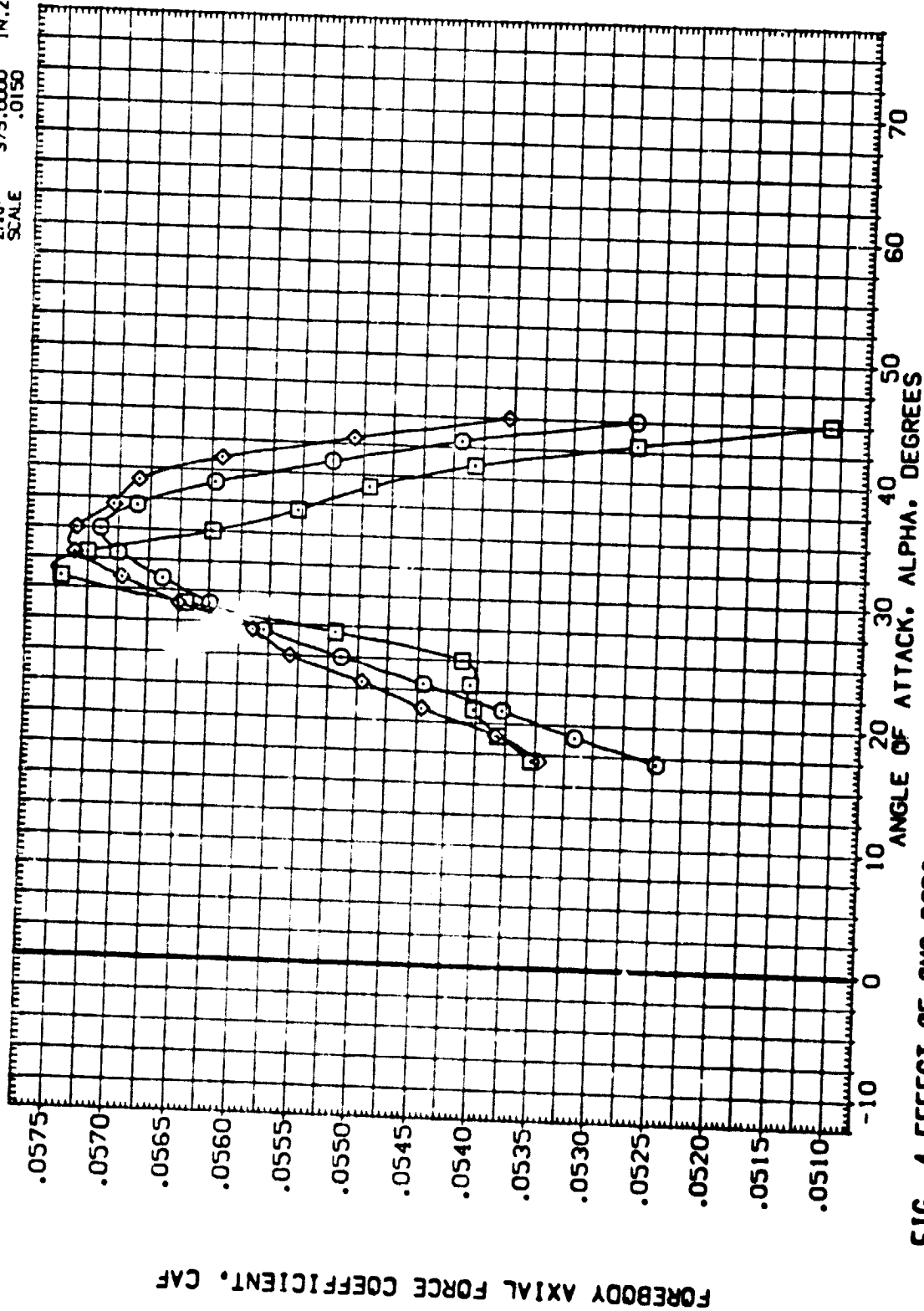


FIG. 4 EFFECT OF OMS POOS

(A)MACH = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(C1V005)	0A79 B26 C9 E43 F8 N28 R5 V8 V116	.000	.000	.000	.000	SREF 2650.0000 SQ.FT.
(C1V001)	0A79 B26 C9 E43 F8 M15 N28 R5 V8 V116	.000	.000	.000	.000	LREF 474.8100 IN.
(C1V009)	0A79 B26 C9 E43 F8 M7 N28 R5 V8 V116	.000	.000	.000	.000	GREF 936.6800 IN.
						XREF 1076.6800 IN.X0
						YREF .0000 IN.Y0
						ZREF 375.0000 IN.Z0
						SCALE .0150

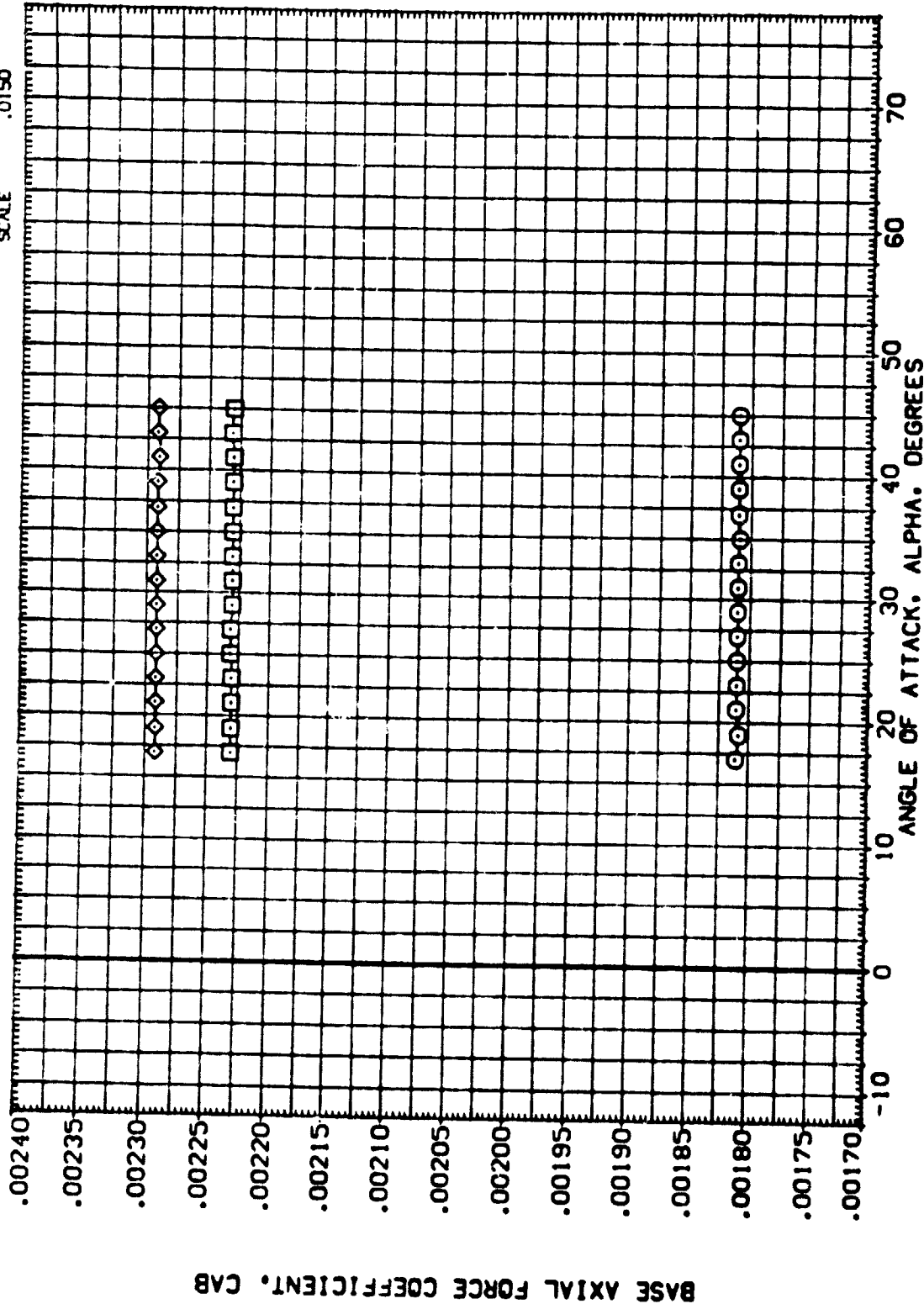


FIG. 4 EFFECT OF GMS PODS

(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (C1V006) 0A79 B06 C9 E43 F8 N28 R5 Y8 V116
 (C1V001) 0A79 B06 C9 E43 F8 M16 N28 R5 Y8 V116
 (C1V009) 0A79 B06 C9 E43 F8 M7 N28 R5 Y8 V116

ELV-L0 ELV-L1 ELV-R1 ELV-R0
 .000 .000 .000 .000
 .000 .000 .000 .000
 .000 .000 .000 .000

REFERENCE INFORMATION
 GREF 2690.0000 50. FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 YARP 1076.6800 IN.
 YARP .0000 IN.
 ZARP 375.0000 IN.
 SCALE .0150 IN.

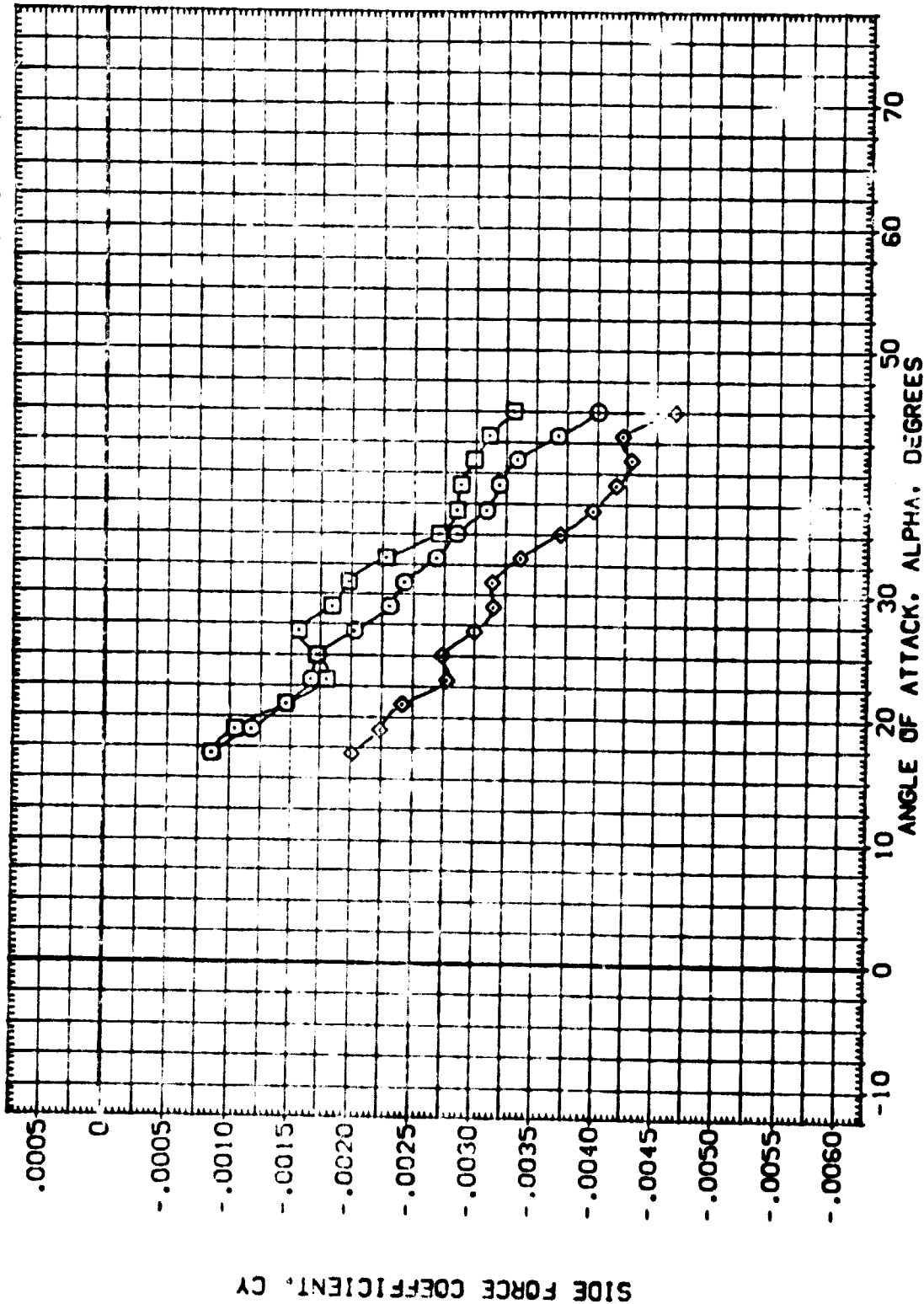


FIG. 4 EFFECT OF OMS PODS

(A)MACH = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(A1V006)	DAY9 B26 C9 E43 FB M08 RS V8 V116	.000	.000	.000	.000	SIZE 2030.0000 30.FT.
(A1V007)	DAY9 B26 C9 E43 FB M16 N08 RS V8 V116	.000	.000	.000	.000	LREF 474.8100 IN.
(A1V009)	DAY9 B26 C9 E43 FB M7 N28 RS V8 V116	.000	.000	.000	.000	SREF 936.6800 IN.
						XREF 1076.0000 IN. X0
						YREF 375.0000 IN. Y0
						ZREF 0.0000 IN. Z0
						SCALE

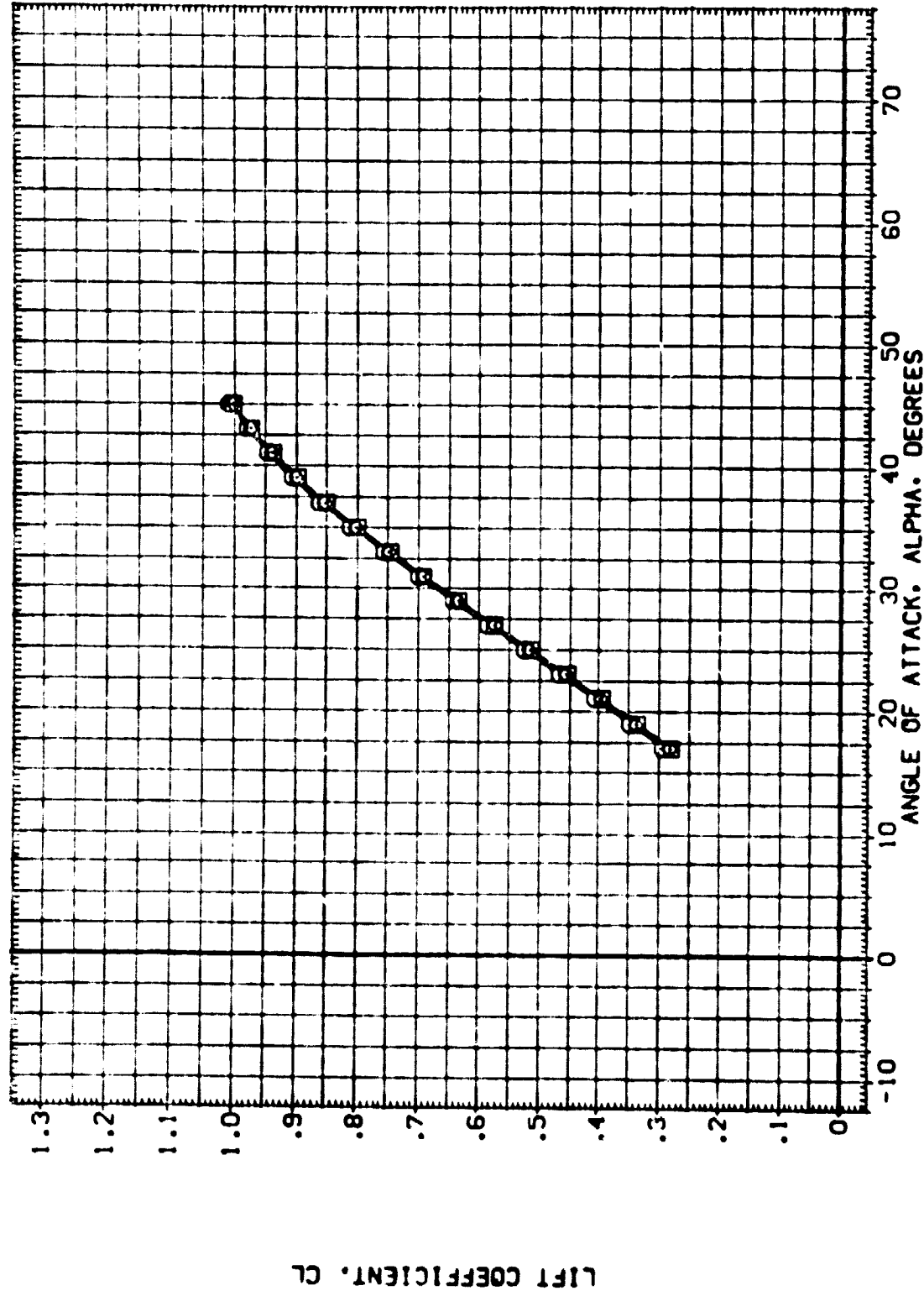


FIG. 4 EFFECT OF OMS PODS

(A)MACH = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	REFERENCE INFORMATION
(ATV006)	0A79 B25 C9 E43 F8 N28 R5 V8 V116	COEF 2000.0000 SQ.FT.
(ATV001)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	LINEF 474.8100 IN.
(ATV009)	0A79 B26 C9 E43 F8 M7 N28 R5 V8 V116	PROF 936.6800 IN.
		AREA 1076.6800 IN. ²
		TRAP .0000 IN. ²
		ZTRAP .0000 IN. ²
		SCALE .0150

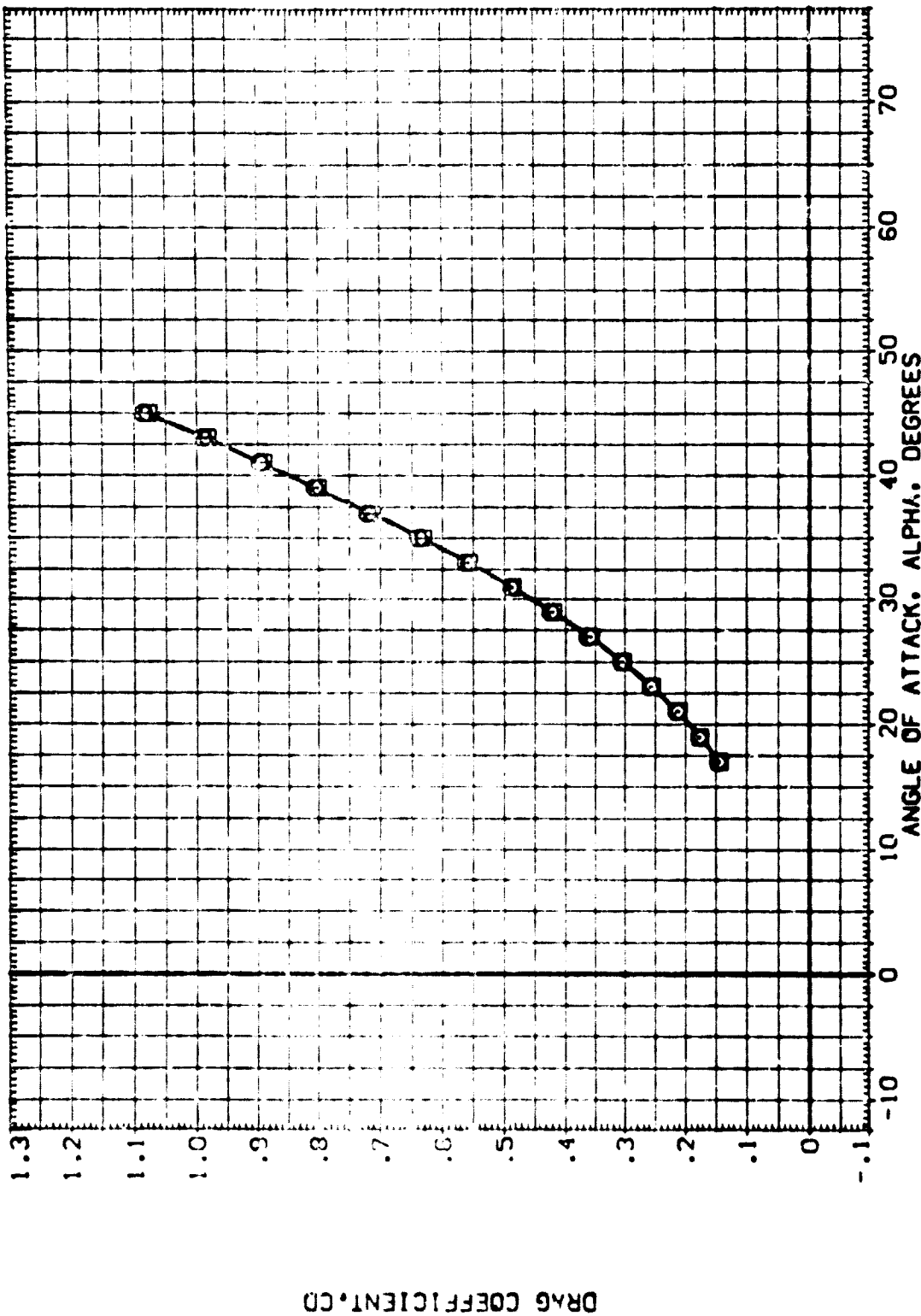


FIG. 4 EFFECT OF OMS PODS

(A)MACH = 8.00



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L6	ELV-L1	ELV-R1	ELV-R6	REFERENCE INFORMATION
(ATV006)	0A79 B26 C9 E43 F8 M16 N28 RS V8 V116	.000	.000	.000	.000	SREF 2650.0000 59.FT.
(ATV001)	0A79 B26 C9 E43 F8 M16 N28 RS V8 V116	.000	.000	.000	.000	LREF 474.8100 IN.
(ATV003)	0A79 B26 C9 E43 F8 M7 N28 RS V8 V116	.000	.000	.000	.000	BREF 936.6800 IN.X0
						XMRP 1076.6800 IN.Y0
						YMRP .0000 IN.Y0
						ZMRP 375.0000 IN.Z0
						SCALE .0150

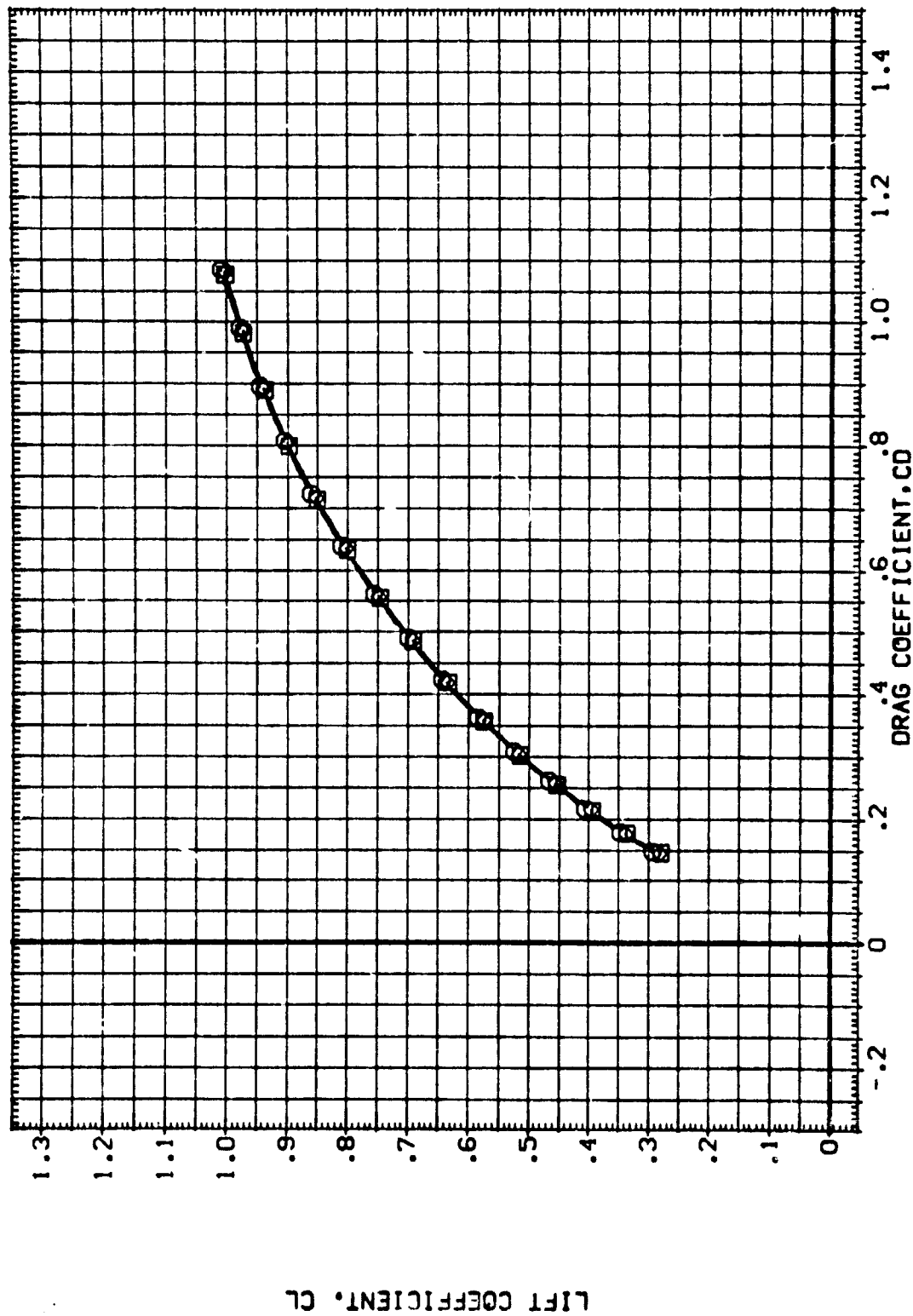


FIG. 4 EFFECT OF OMS PODS

(AJMACH = 8.00



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(ATV006)	Q179 B26 C9 E43 F8 N28 R5 V8 V116	.000	.000	.000	.000	SREF 2690.0000 SO.FT.
(ATV001)	Q179 B26 C9 E43 F8 M16 N28 R5 V8 V116	.000	.000	.000	.000	LREF 474.8100 IN.
(ATV009)	Q179 B26 C9 E43 F8 M7 N28 R5 V8 V116	.000	.000	.000	.000	BREF 936.6800 IN.
						XREF 1076.6800 IN. V0
						YREF .0000 IN. V0
						ZREF 375.0000 IN. Z0
						SCALE .0150

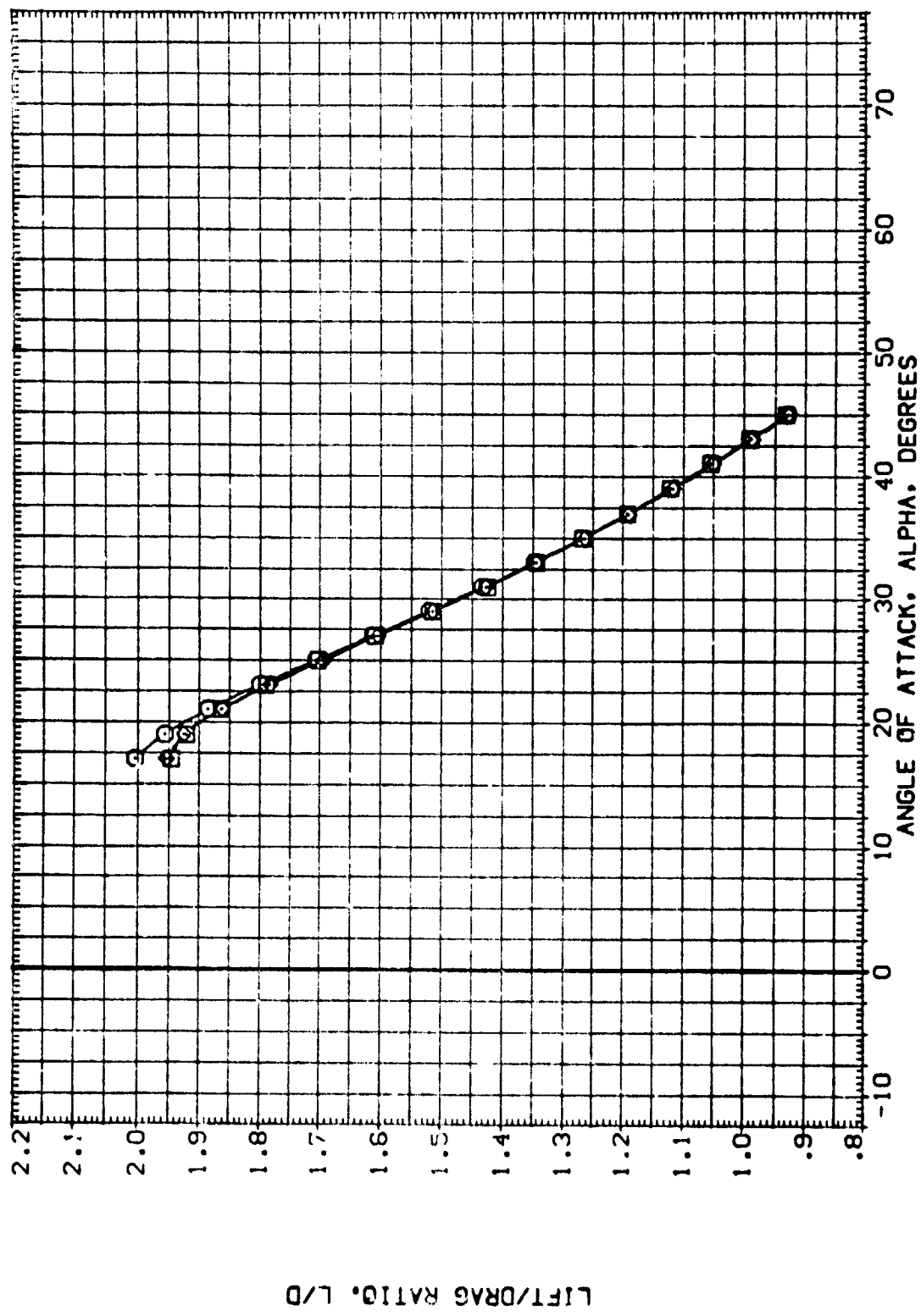


FIG. 4 EFFECT OF OMS PODS

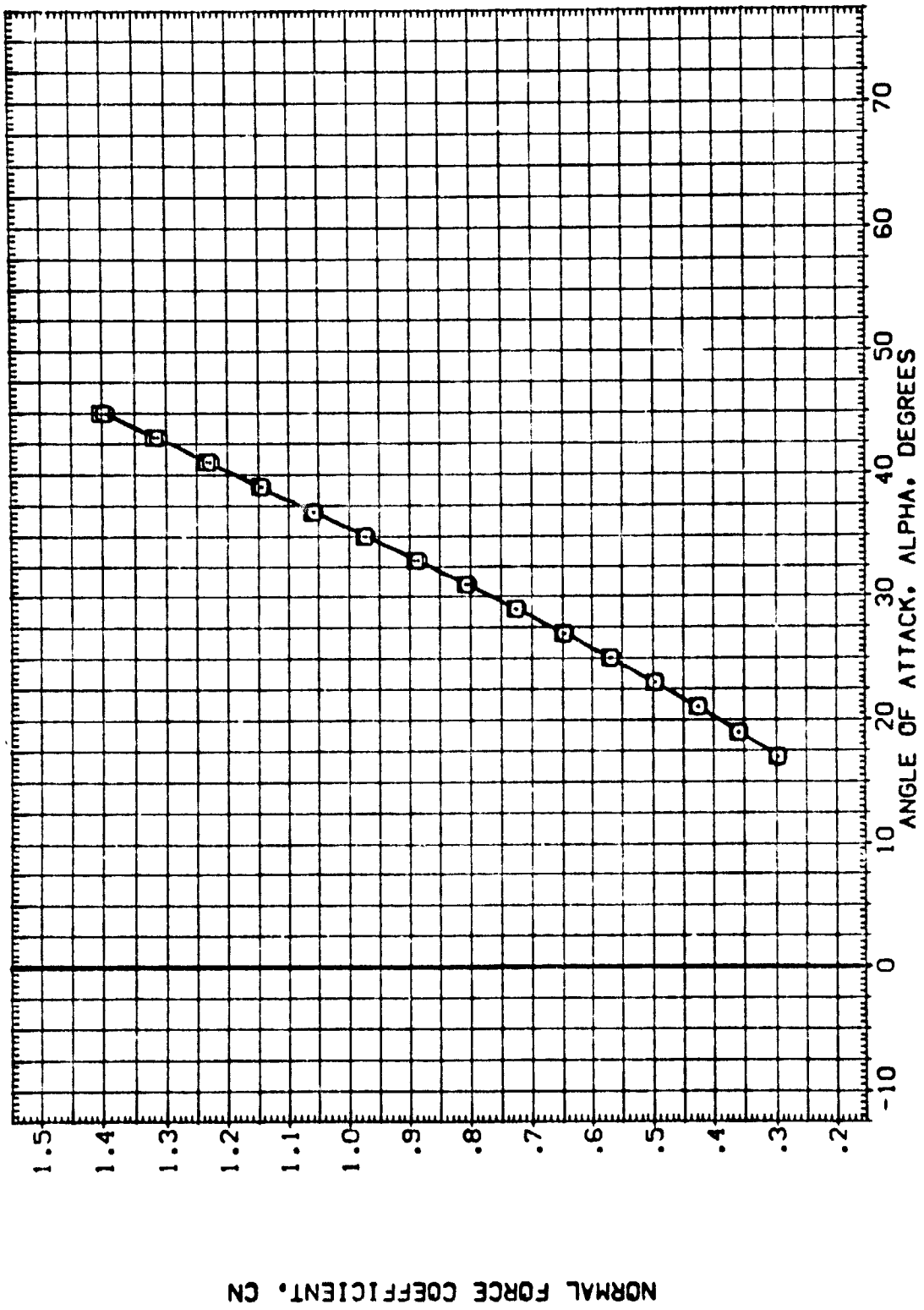
(A)MACH = 8.00

DATA SET SYMBOL (G1W015) □ (G1W042) □

CONFIGURATION DESCRIPTION
 DAY9 B26 C9 E43 F8 M16 N28 R5 V8 V116
 DAY5 B26 C9 E43 F8 M16 N28 R5 V8 V116 SEALED GAP

EL-GAP
 1.000
 .000

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 L.REF 474.8100 IN.
 BREF 536.8800 IN.
 XMRP 1076.8800 IN.X0
 YMRP .0000 IN.Y0
 ZMRP 375.0000 IN.Z0
 SCALE .0150



NORMAL FORCE COEFFICIENT, CN

FIG. 5 EFFECT OF SEALING ELEVON GAP

(A)MACH = 8.00

DATA SET SYMBOL: (GT4015) (GT4042) \square EL-GAP: 1.000 .000

CONFIGURATION DESCRIPTION: BA79 B26 C9 E43 F8 H16 N28 RS V8 V116 SEALD GAP

REFERENCE INFORMATION:
 SREF 2690.0000 SQ.FT.
 LREF 174.3100 IN.
 BREF 936.6800 IN.X3
 XMRP 1076.6800 IN.Y8
 YMRP .0000 IN.Y8
 ZMRP 375.0000 IN.Z0
 SCALE .0150

PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH (FORWARD C. G.) CLMFD

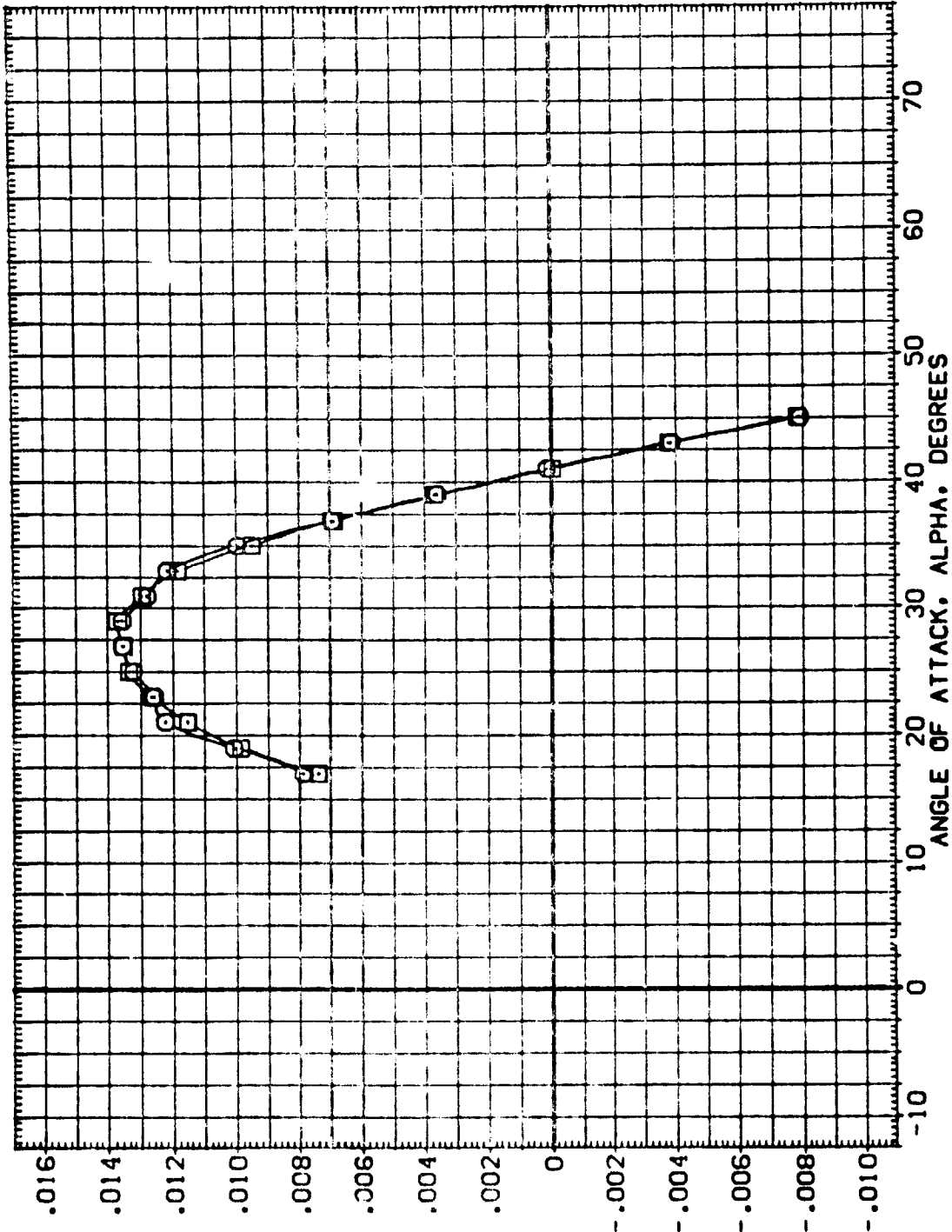


FIG. 5 EFFECT OF SEALING ELEVON GAP

(A)MACH = 8.00



DATA SET SYMBOL (GT1015) (GT1042) \square

EL-GAP 1.000
1.000

SEALED GAP

V8 V116

RS V8 V116

RS V8 V116

RS V8 V116

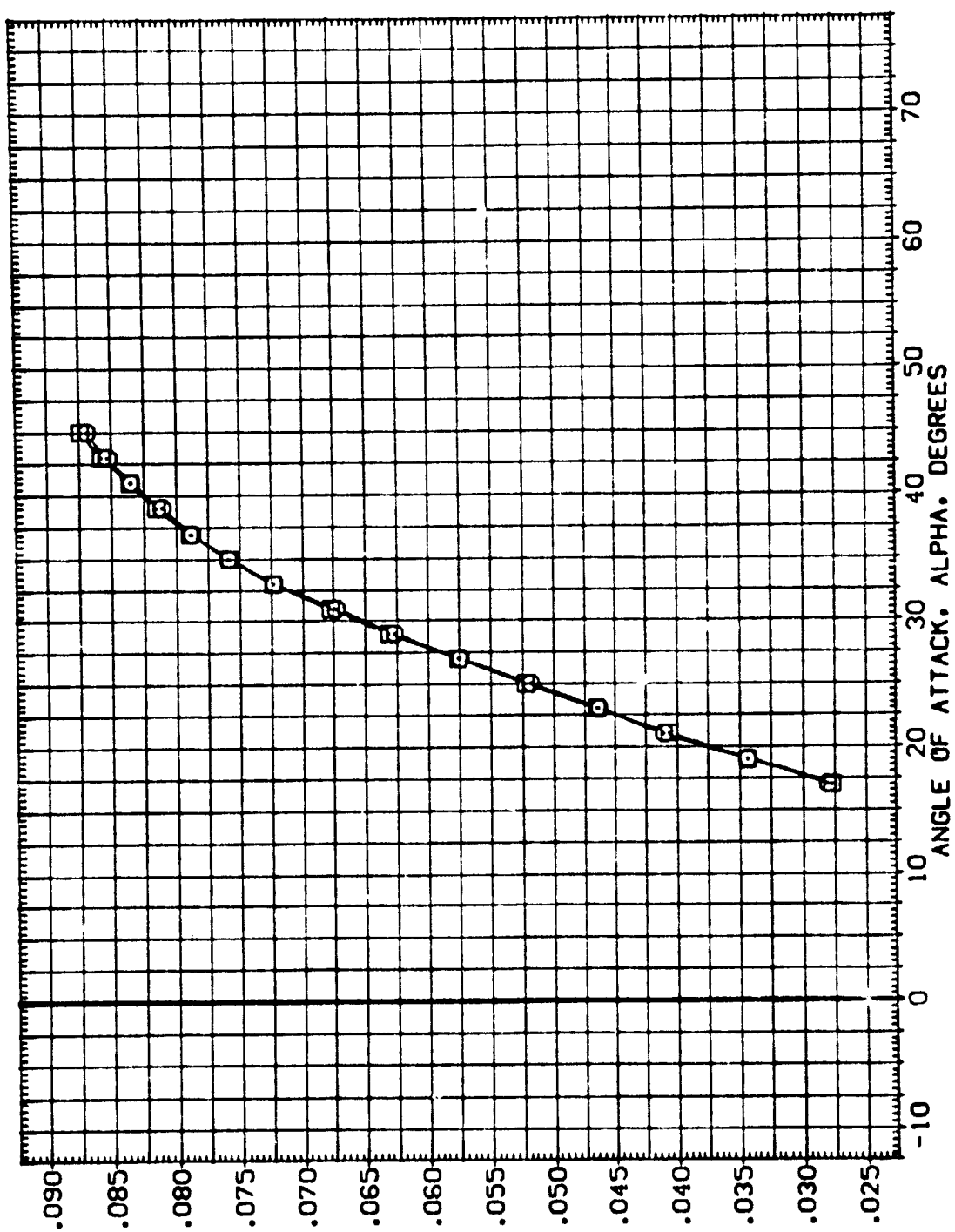
RS V8 V116

RS V8 V116

RS V8 V116

RS V8 V116

REFERENCE INFORMATION
SREF 2690.0000 SO.FT.
LREF 471.8100 IN.
BREF 936.6800 IN.
XMRP 1076.6800 IN.
YMRP .0000 IN.
ZMRP 375.0000 IN.
SCALE .0150



PITCHING MOMENT COEFFICIENT AT .675 BODY LENGTH (Cp) CLMFT

FIG. 5 EFFECT OF SEALING ELEVON GAP

(A) MACH = 8.00

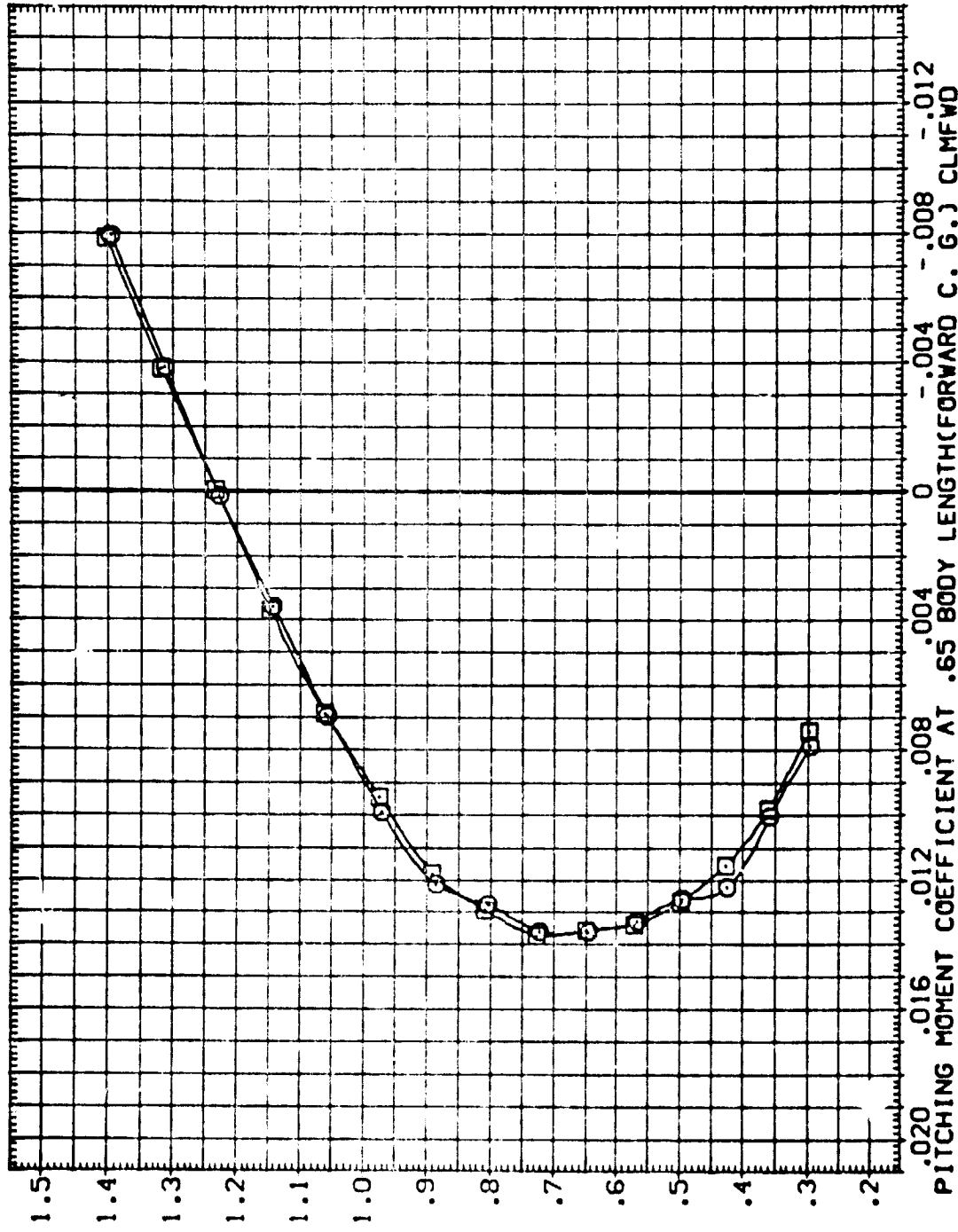
DATA SET SYMBOL (G1V015) (G1V042) □

EL-GAP 1.000 .000

SEALED GAP

CONFIGURATION DESCRIPTION
 0A79 B26 C9 E43 F8 M16 N28 P5 V8 V116
 0A79 B26 C9 E43 F8 M16 N28 P5 V8 V116

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.X0
 XTRP 1076.6800 IN.Y0
 YTRP .0000 IN.Z0
 ZTRP 375.0000 IN.Z0
 SCALE .0150



NORMAL FORCE COEFFICIENT, CN

PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH (FORWARD C. G.) CLMFW

FIG. 5 EFFECT OF SEALING ELEVON GAP

(A)MACH = 8.00

DATA SET SYMBOL (G1V015)
 CONFIGURATION DESCRIPTION DAY9 B26 C9 E43 F8 M16 N28 R5 V8 V116
 EL-GAP 1.000
 SEALING GAP 0.000

REFERENCE INFORMATION
 SREF 2690.0000 SO.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.X9
 X1RP 1076.0000 IN.Y8
 Y1RP 0.0000 IN.Y8
 Z1RP 375.0000 IN.Z0
 SCALE .0150

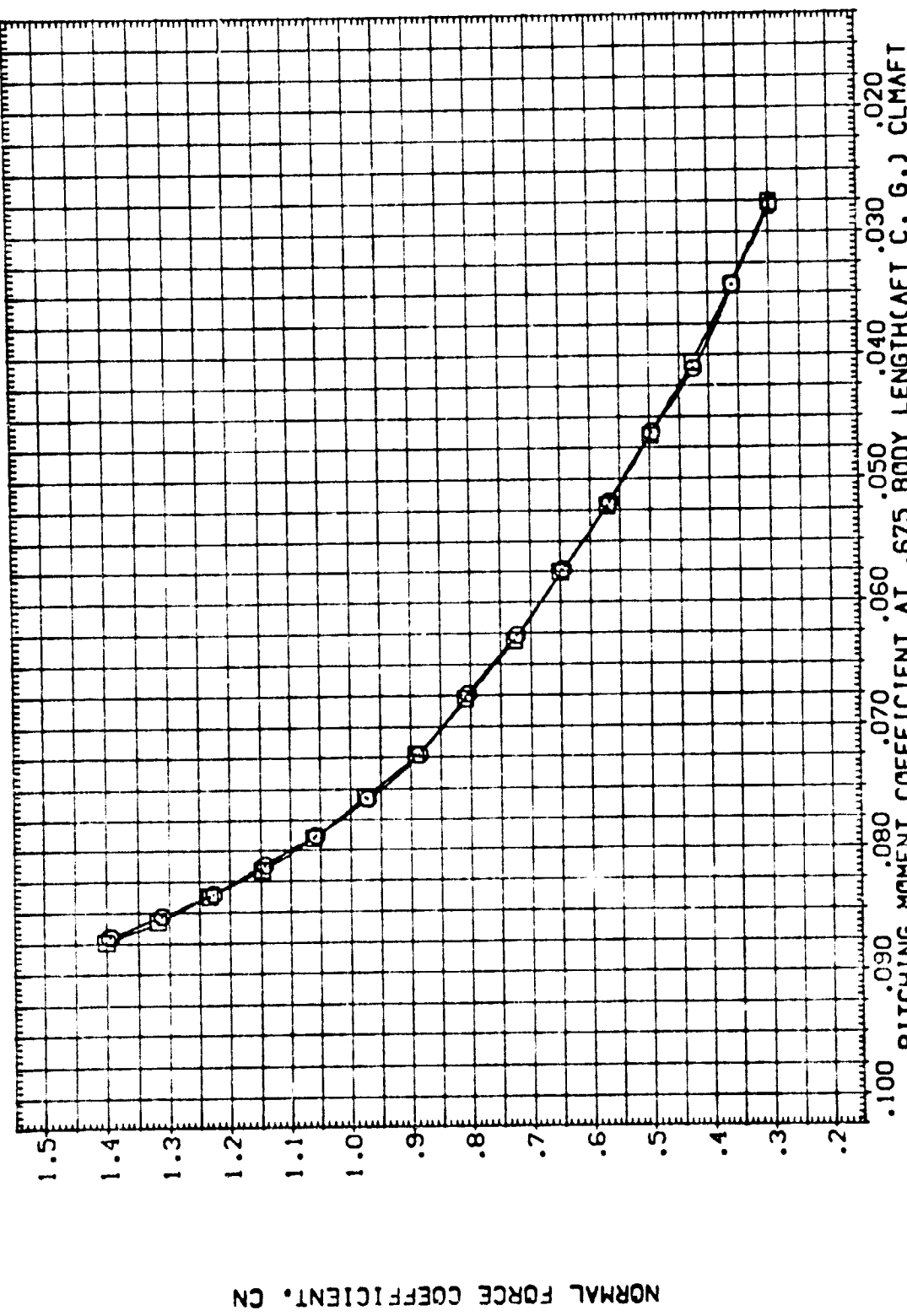


FIG. 5 EFFECT OF SEALING ELEVON GAP

(A)MACH = 8.00

CENTER OF PRESSURE LOCATION AS A FRACTION OF BODY LENGTH, XCP/L

DATA SET SYMBOL CONFIGURATION DESCRIPTION EL-GAP
 (GTVC15) □ 0A79 B26 C9 E43 FB M16 N28 RS V8 V116 1.000
 (GTVC42) □ 0A79 B26 C9 E43 FB M16 N28 RS V8 V116 SEALED GAP .000

REFERENCE INFORMATION
 SREF 2690.0000 50.FT.
 LREF 474.9100 IN.
 BREF 936.6800 IN.
 XPRP 1076.6800 IN.X0
 YPRP .0000 IN.Y0
 ZPRP 375.0000 IN.Z0
 SCALE .0150

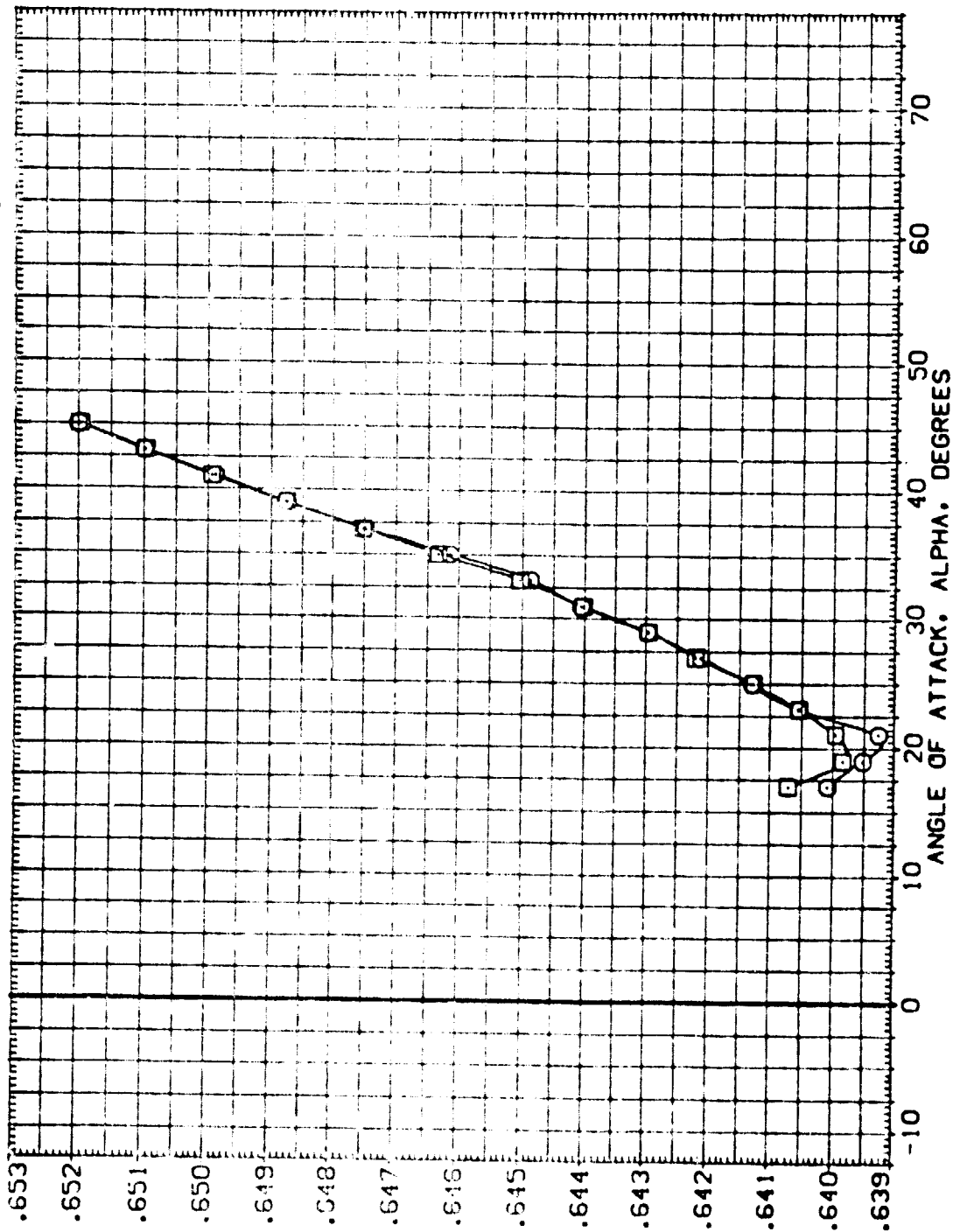


FIG. 5 EFFECT OF SEALING ELEVON GAP

(A)MACH = 8.00



REFERENCE INFORMATION
 SREF 2690.0000 50.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.X0
 XPRP 1076.6800 IN.X0
 YPRP .0000 IN.Z0
 ZPRP 375.0000 IN.Z0
 SCALE .0150

EL-GAP
 1.000
 .000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (G1V015) □ CA79 B26 C9 E43 F8 H16 N28 R5 V8 V116
 (GTV042) □ CA79 B26 C9 E43 F8 H16 N28 R5 V8 V116 SEALED GAP

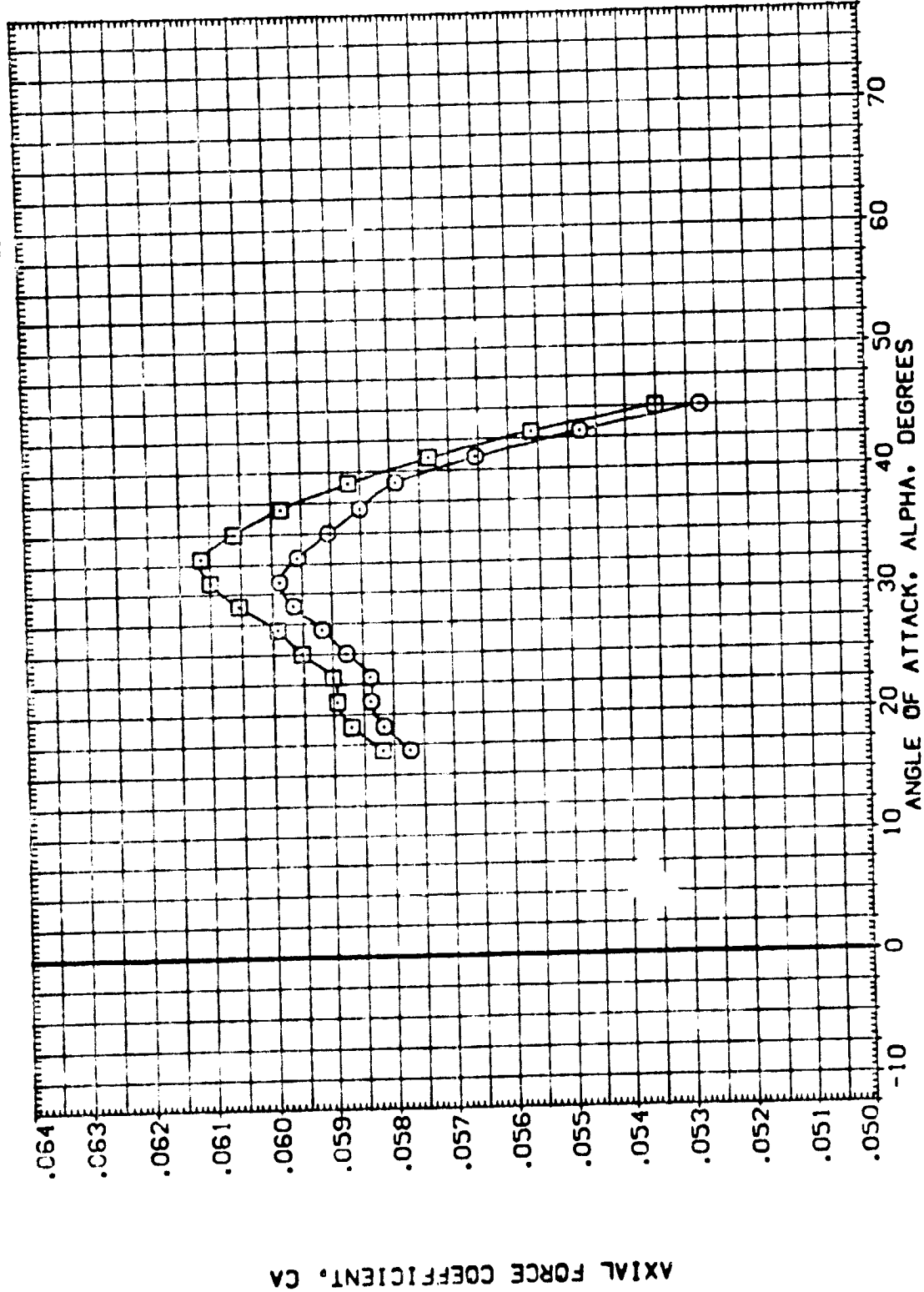


FIG. 5 EFFECT OF SEALING ELEVON GAP

(M)MACH = 8.00

DATA SET SYMBOL: (GT1013) (GT1042) □

CONFIGURATION DESCRIPTION: BA74 BA26 C9 E43 FB H16 N28 RS V8 V116 BA79 BA26 C9 E43 FB H16 N28 RS V8 V116 SEALED GAP

CL-GAP: 1.000
.000

REFERENCE INFORMATION

SREF: 2850.0000 50.FT.
LREF: 474.8100 IN.
BREF: 536.6800 IN.X0
XREF: 1076.6800 IN.Y0
YREF: 375.0000 IN.Z0
ZREF: 375.0000 IN.Z0
SCALE: .0150

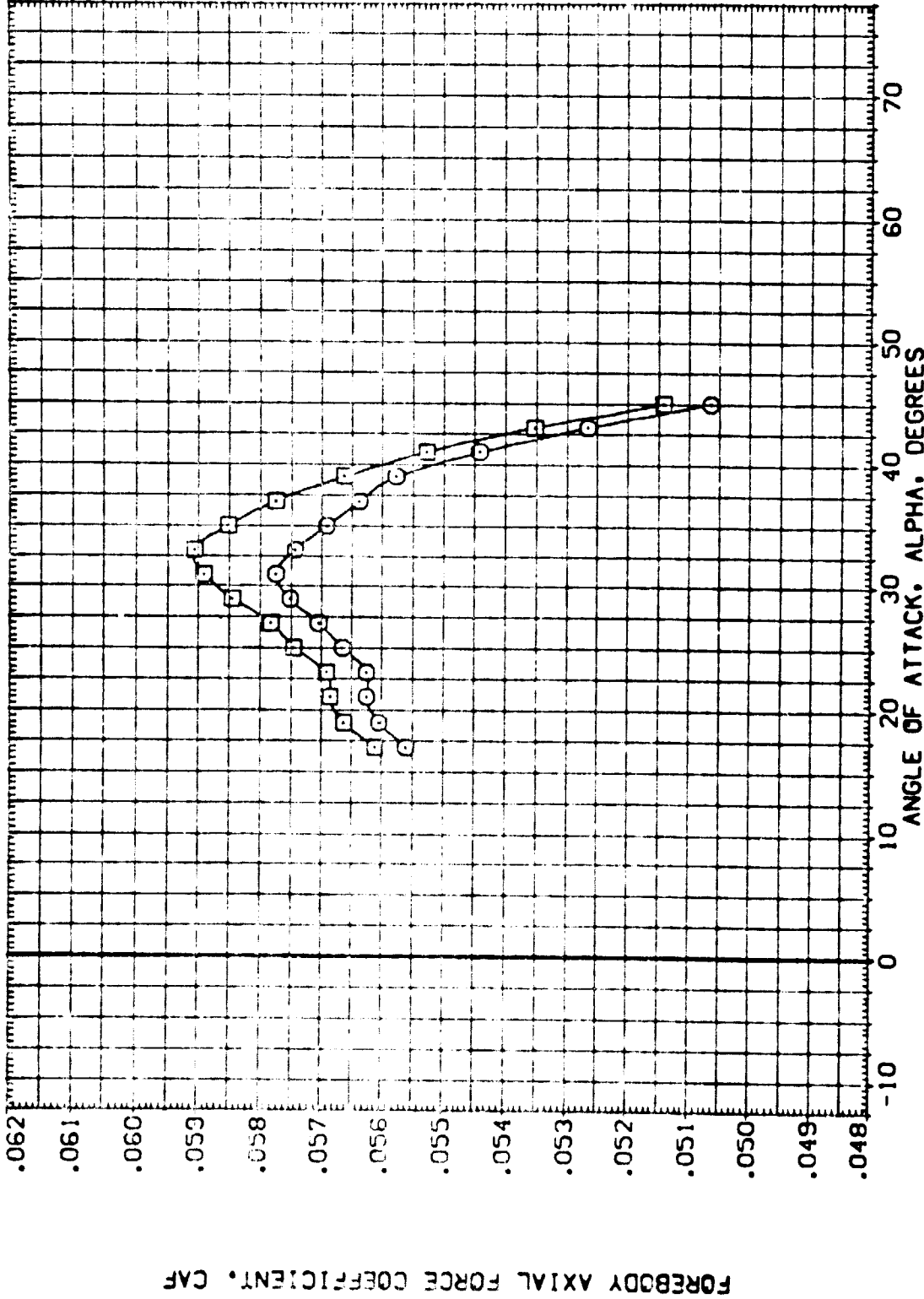


FIG. 5 EFFECT OF SEALING ELEVON GAP

(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION EL-GAP

(G1V015) □ CA79 B26 C9 E43 F8 M16 N28 R5 V8 V116 1.000

(G1V042) □ CA79 B26 C9 E43 F8 M16 N28 R5 V8 V116 SEALED GAP .000

REFERENCE INFORMATION

SREF 2630.0000 SQ.FT.

LREF 474.8100 IN.

BREF 936.6800 IN.

XPRP 1076.6800 IN.X0

YPRP .0000 IN.Y0

ZPRP 375.0000 IN.Z0

SCALE .0150

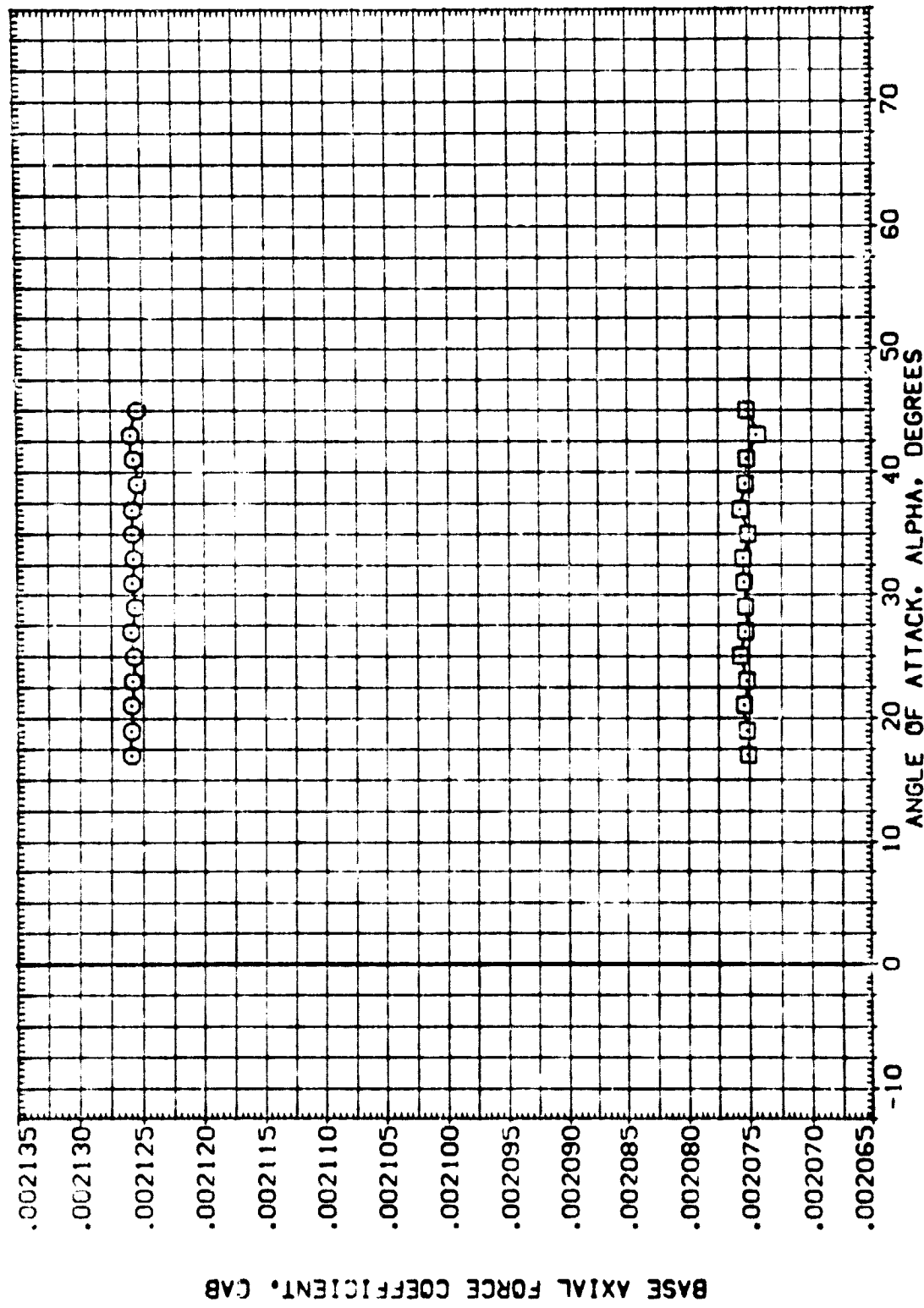


FIG. 5 EFFECT OF SEALING ELEVON GAP

(A)MACH = 8.00

DATA SET SYMBOL (GT1013) □
 CONFIGURATION DESCRIPTION CA79 B26 CS E43 FB M16 N28 RS V8 V116 SEALED GAP
 EL-GAP 1.000

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 956.6800 IN.
 AREF 1078.6800 IN.
 YHPP .0000 IN.
 ZHPP 375.0000 IN.
 SCALE .0150

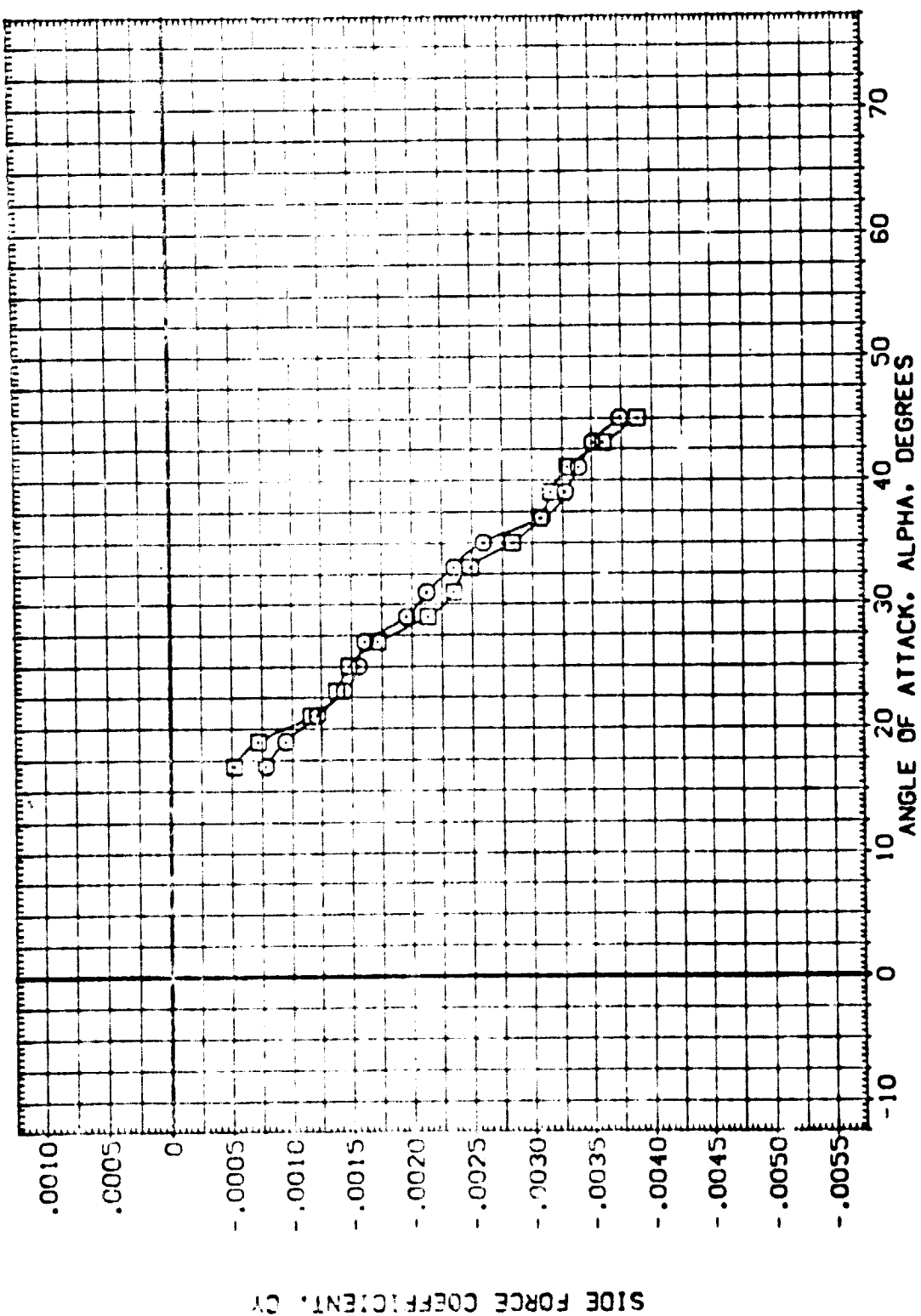


FIG. 5 EFFECT OF SEALING ELEVON GAP

(A)MACH = 8.00



DATA SET SYMBOL (HTV015) (HTV042) □

CONFIGURATION DESCRIPTION
 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 0A79 R76 C9 F43 F8 M16 N28 R5 V8 V116 SEALED GAP

EL-GAP 1.000

REFERENCE INFORMATION

SREF	2630.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XARP	1076.0000	IN. X0
YARP	375.0000	IN. Y0
ZARP	375.0000	IN. Z0
SCALE	.0150	

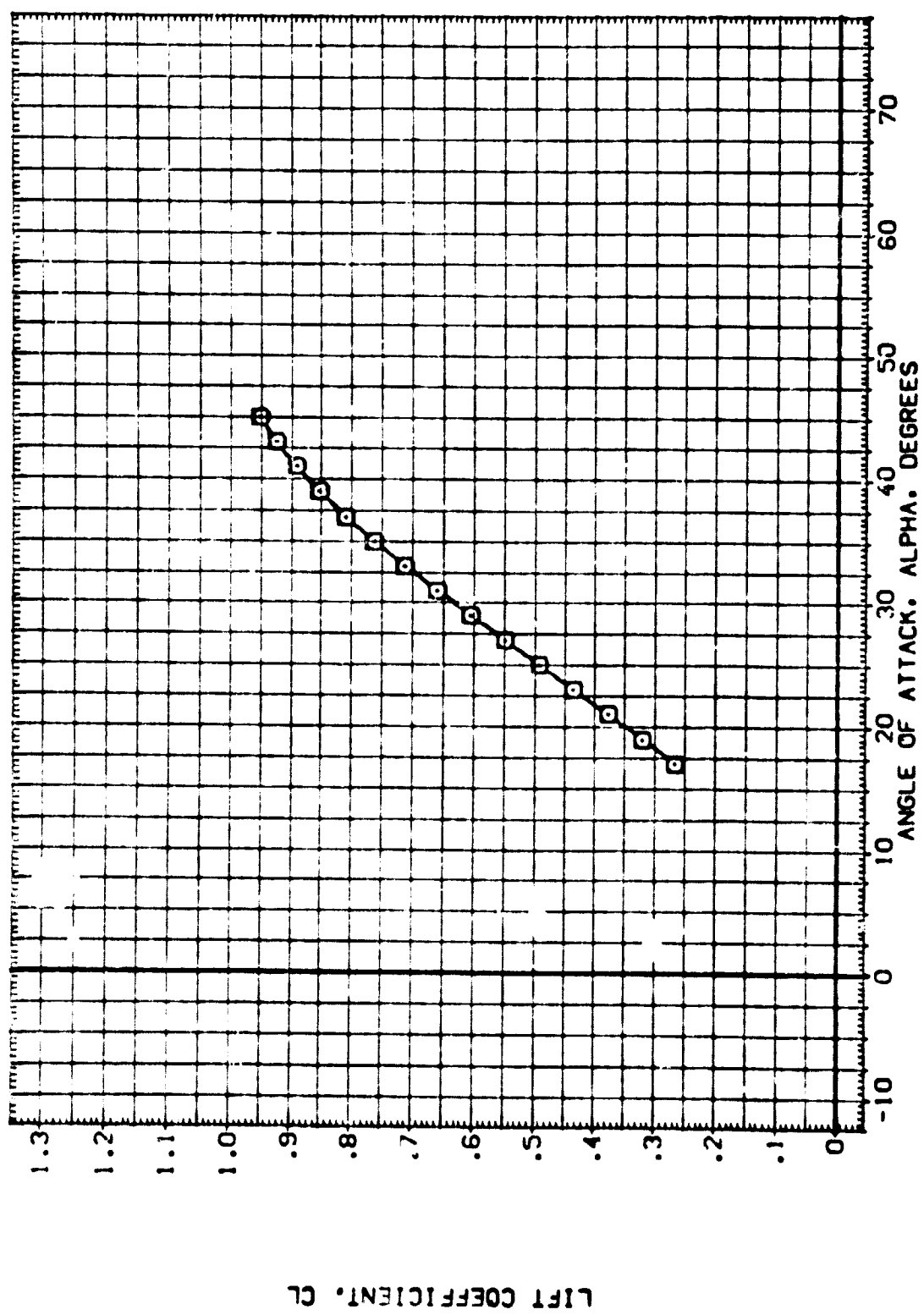
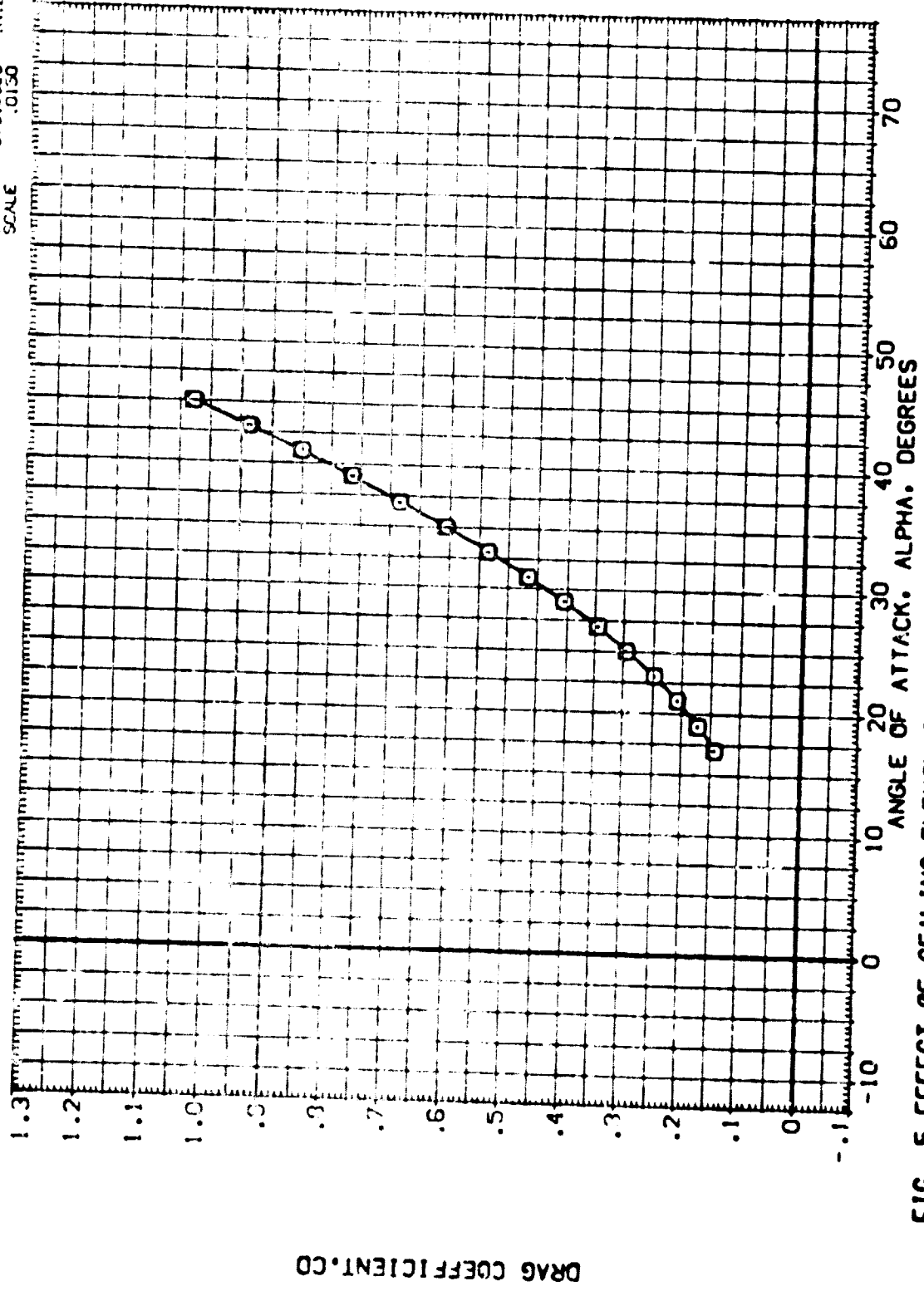


FIG. 5 EFFECT OF SEALING ELEVON GAP

(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION EL-GAP
 (M1V015) 0 0A79 626 C9 E43 F8 M16 N08 P5 V8 V116 1.000
 (M1V012) 0 2A79 626 C9 E43 F8 M16 N08 P5 V8 V116 SEALED GAP

REFERENCE INFORMATION
 SREF 2690.0000 50.FT.
 LREF 171.9100 IN.
 BREF 936.6000 IN.
 XPRP 1076.6800 IN. X0
 YPRP .0000 IN. Y0
 ZPRP 375.0000 IN. Z0
 SCALE .0150



DRAG COEFFICIENT, CD

FIG. 5 EFFECT OF SEALING ELEVON GAP
 (A)MACH = 8.00



DATA SET SYMBOL (HTV015) (HTV042) □

CONFIGURATION DESCRIPTION
 GA79 B26 C9 E43 F8 H16 N28 RS V8 V116
 GA79 B26 C9 E43 F8 P.6 N28 RS VE V116

EL-GAP
 1.000
 1.000

SEALING GAP

REFERENCE INFORMATION
 SREF 2690.0000 50.FT.
 LREF 471.8100 IN.
 BREF 936.6800 IN.
 YMRP 1076.6800 IN. X0
 YMRP .0000 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .015C

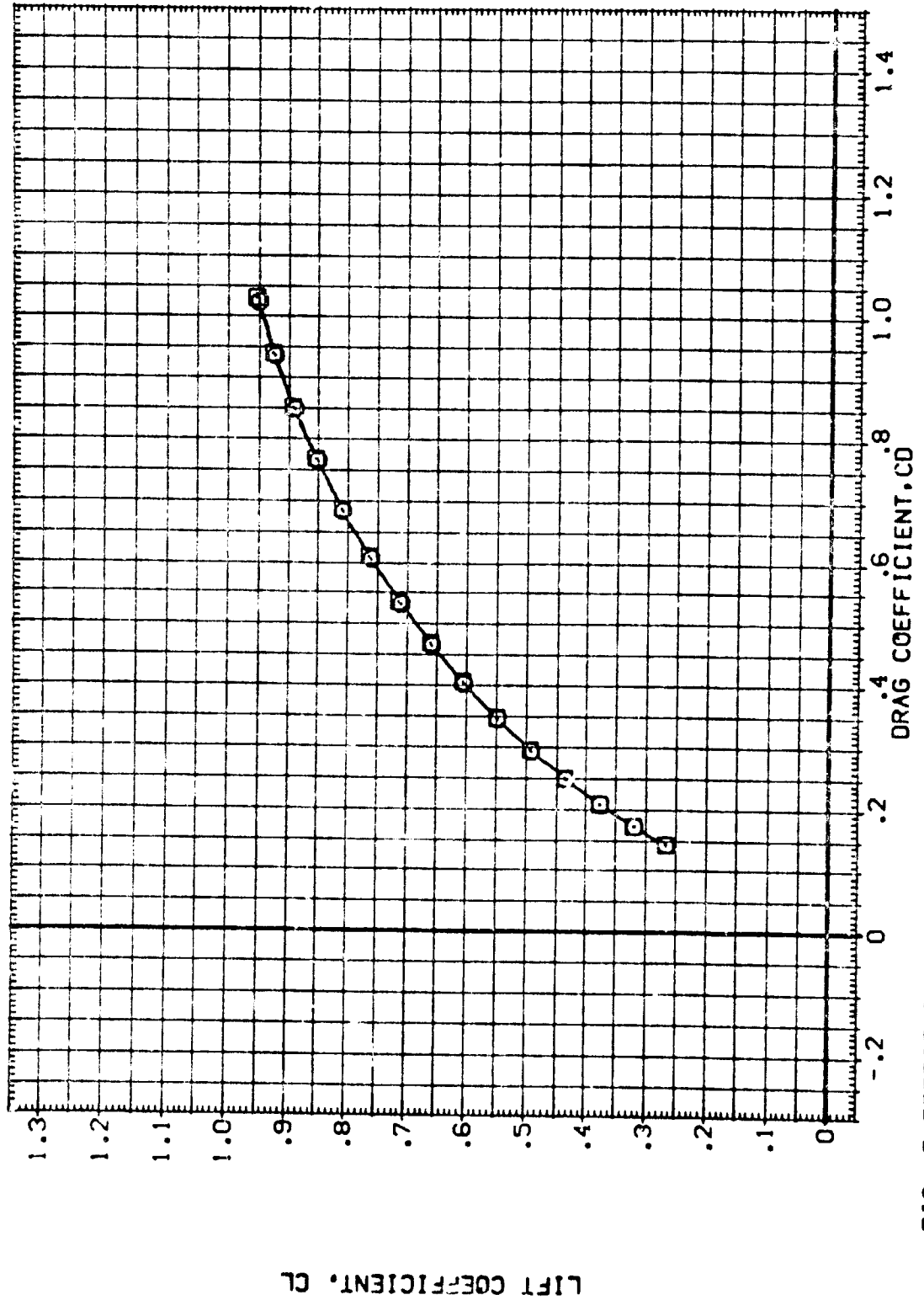


FIG. 5 EFFECT OF SEALING ELEVON GAP

(A)MACH = 8.00

DATA SET SYMBOL (HTV015) (HTV042) □

CONFIGURATION DESCRIPTION
 0A79 B26 C3 E43 F8 M16 N23 RS V8 V116
 0A79 B26 C3 E43 F8 M16 N23 RS V8 V116

EL-GAP
 1.000
 .000

SEALED GAP

REFERENCE INFORMATION
 SCALE 2650.0000 IN.
 L REF 474.8100 IN.
 B REF 936.6800 IN.
 X REF 1076.0000 IN.
 Y REF .0000 IN.
 Z REF 375.0000 IN.
 SCALE .0150

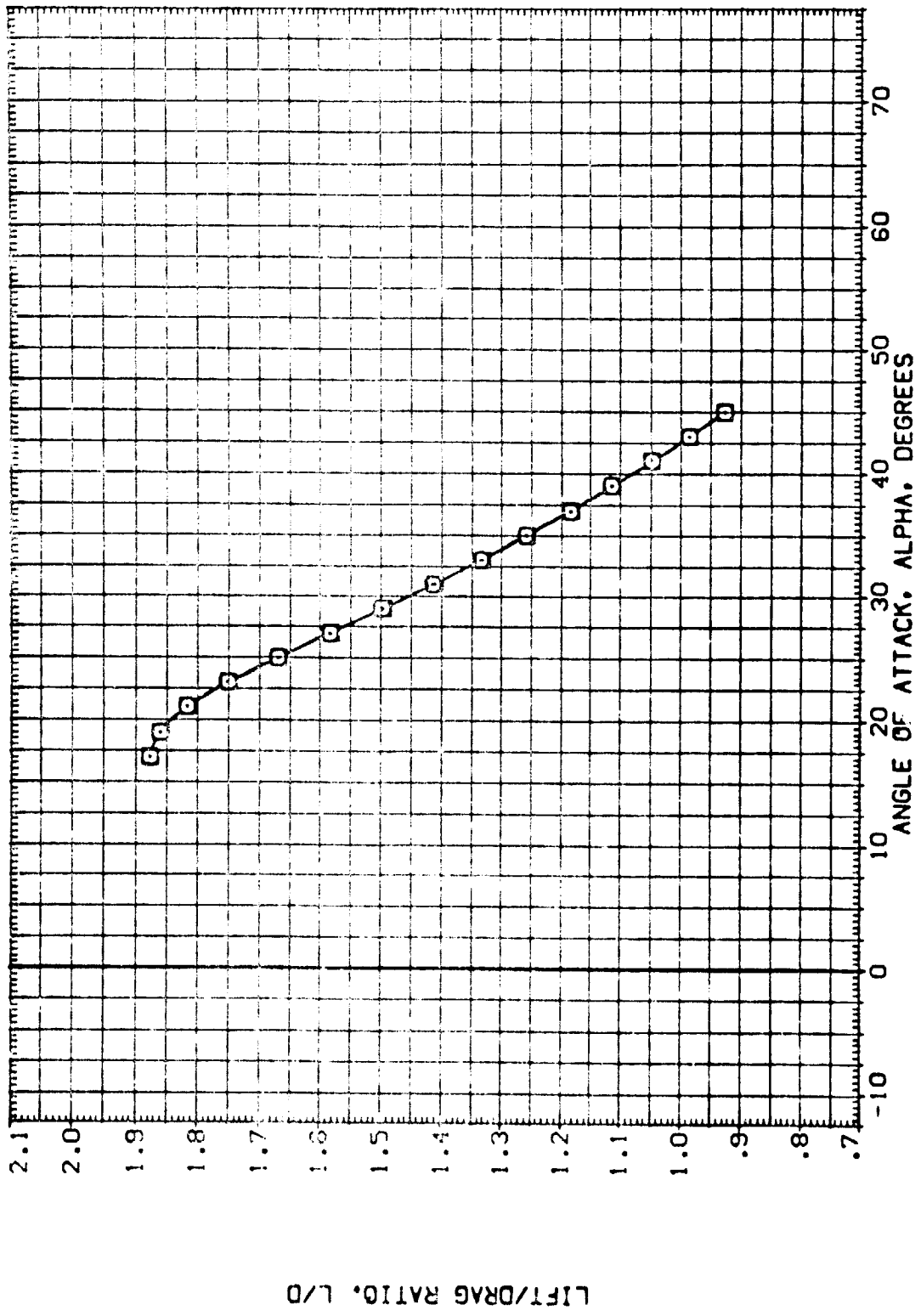


FIG. 5 EFFECT OF SEALING ELEVON GAP

(A)MACH = 8.00



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(CTV025)	GA79 B26 C9 E13 F8 H16 N28 R0 V0 V116	-10,000	-40,000	-40,000	-40,000	CREF 2050,0000 SQ.FT.
(CTV046)	GA79 B26 C9 E43 F8 H16 N28 R5 V8 V116	-30,000	-30,000	-30,000	-30,000	LREF 474,8100 IN.
(CTV015)	GA79 B26 C9 E43 F8 H16 N28 R5 V8 V116	-20,000	-20,000	-20,000	-20,000	BREF 936,6300 IN.X0
(CTV023)	GA79 B26 C9 E43 F8 H16 N28 R5 V8 V116	-10,000	-10,000	-10,000	-10,000	XREF 1076,6600 IN.Y0
(CTV001)	GA79 B26 C9 E43 F9 H16 N28 R5 V8 V116	,000	,000	,000	,000	ZREF 375,0000 IN.Z0
						SCALE .0150

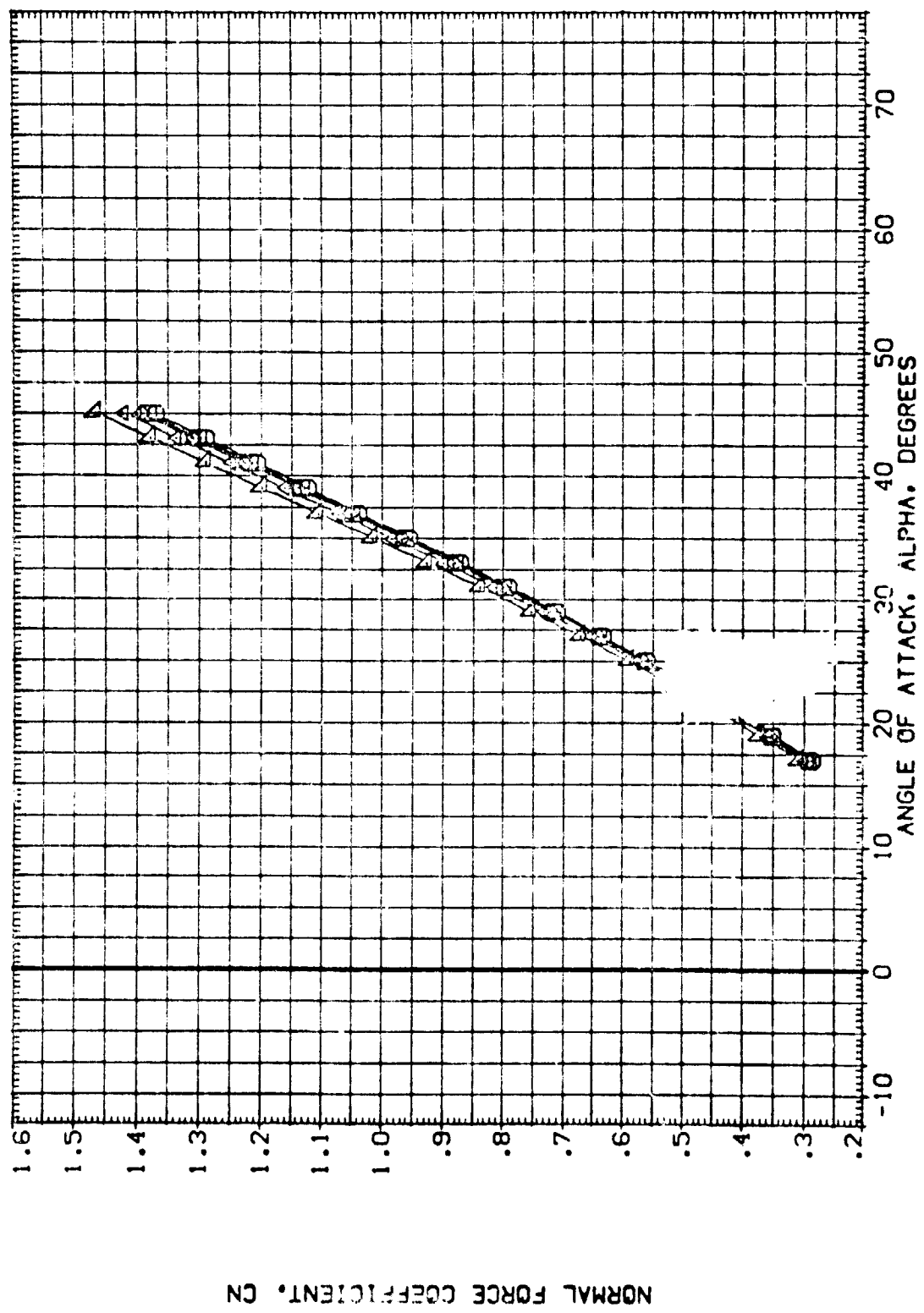


FIG. 6 FULL SPAN ELEVON EFFECTIVENESS (NEGATIVE DEFLECTIONS)

(A)MACH = 8.00

PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH(FORWARD C. G.) CL(MFX)

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(C1V025)	GA79 B26 U3 E43 F8 H16 N28 K5 V8 W116	-30.000	-40.000	-30.000	-30.000	DRP 550.0000 IN.10
(C1V046)	GA79 B26 C9 E43 F8 H16 N28 K5 V8 W116	-30.000	-30.000	-30.000	-30.000	DRP 474.8100 IN.10
(C1V019)	GA79 B26 C9 E43 F8 H16 N28 K5 V8 W116	-20.000	-20.000	-20.000	-20.000	DRP 436.6100 IN.10
(C1V023)	GA79 B25 C9 E43 F8 H16 N28 K5 V8 W116	-10.000	-10.000	-10.000	-10.000	DRP 1078.6000 IN.10
(C1V001)	GA79 B25 C9 E43 F8 H16 N28 K5 V8 W116	.000	.000	.000	.000	DRP 375.0000 IN.10

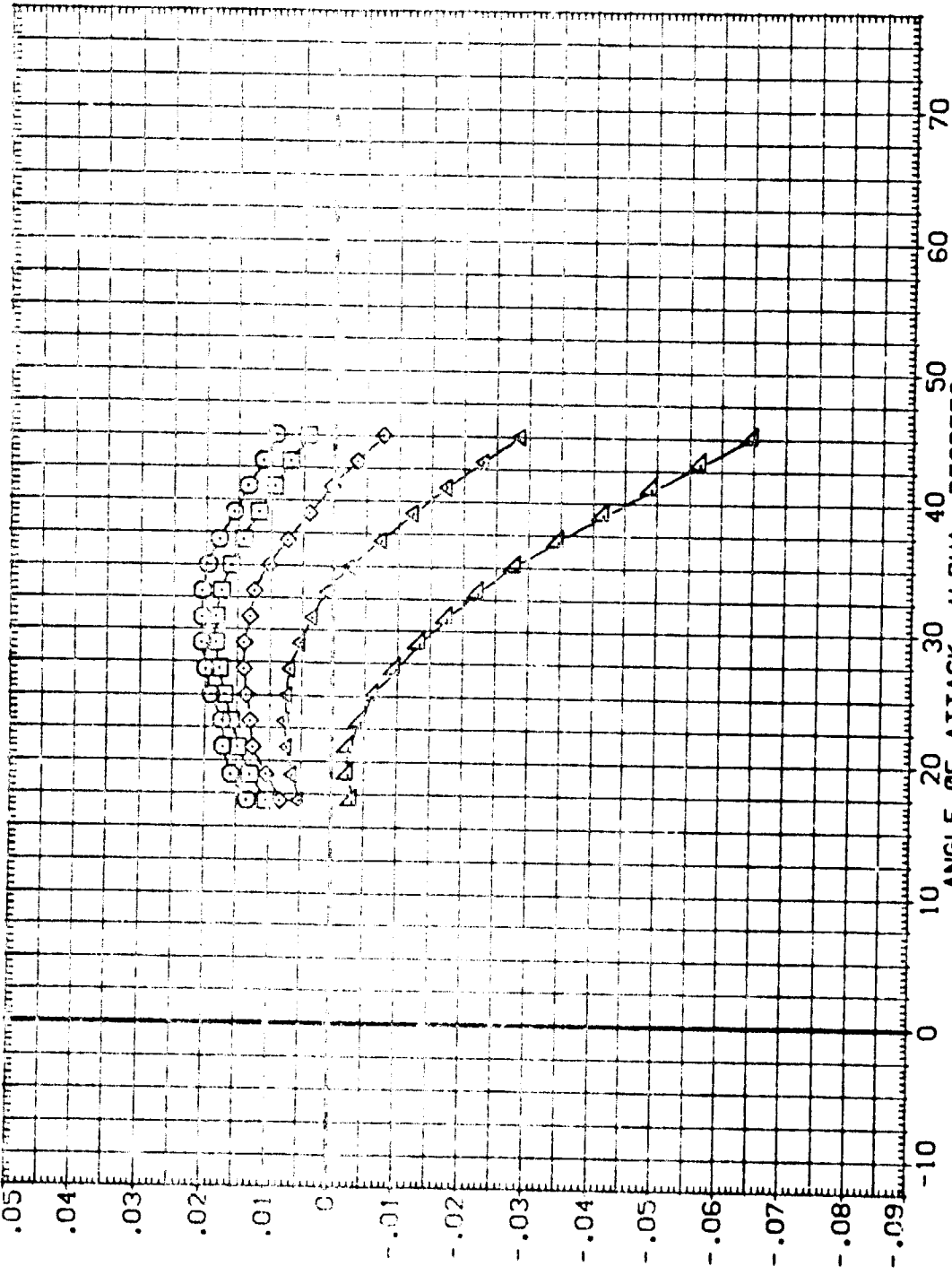


FIG. 6 FULL SPAN ELEVON EFFECTIVENESS (NEGATIVE DEFLECTIONS)

(A)MACH = 8.00



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (C1V025) DA79 B26 C9 E43 F8 M 6 N28 R5 V8 V116
 (C1V046) DA79 B26 C9 E43 F8 M 6 N28 R5 V8 V116
 (C1V015) DA79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 (C1V023) DA79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 (C1V001) DA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

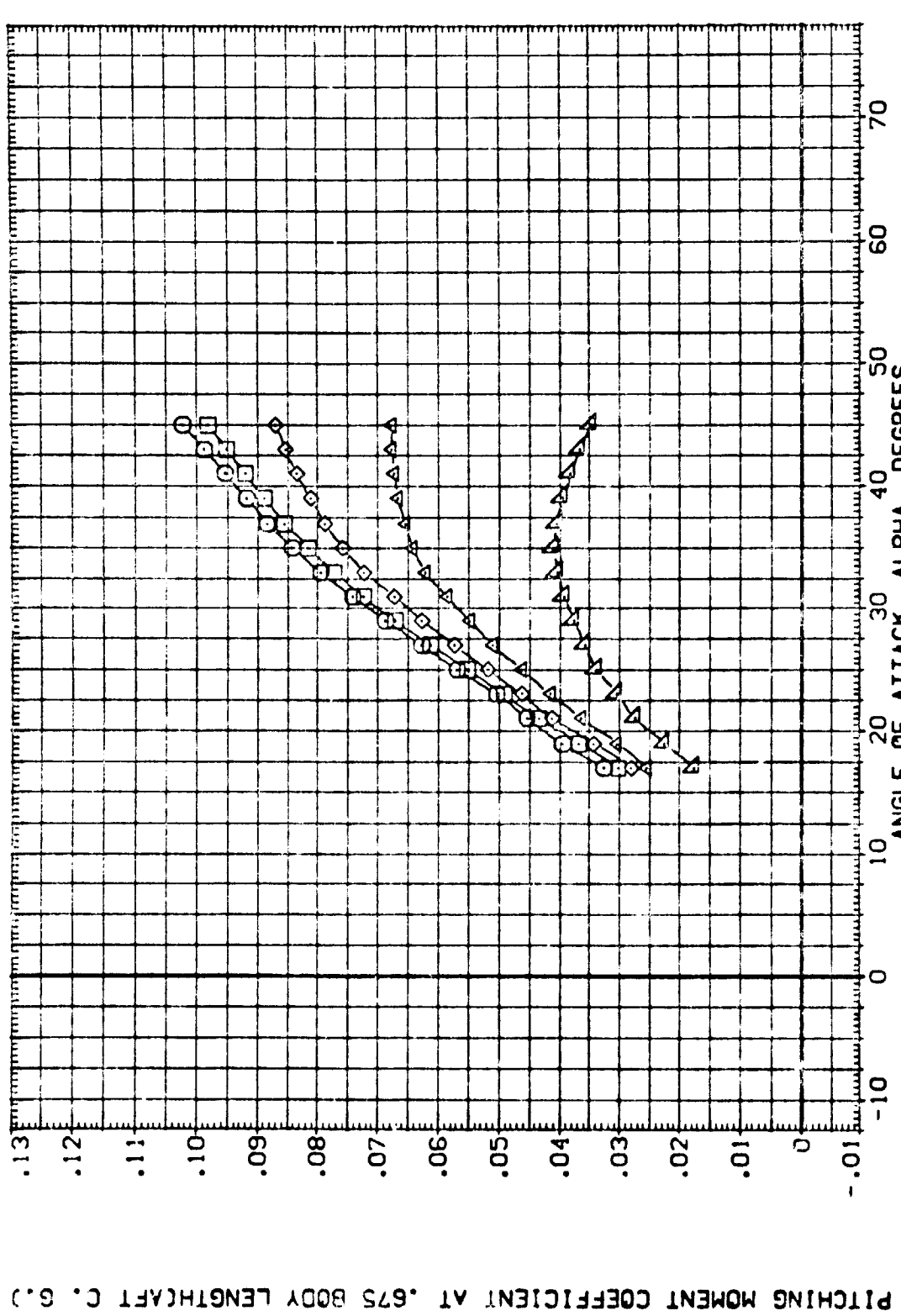


FIG. 6 FULL SPAN ELEVON EFFECTIVENESS (NEGATIVE DEFLECTIONS)

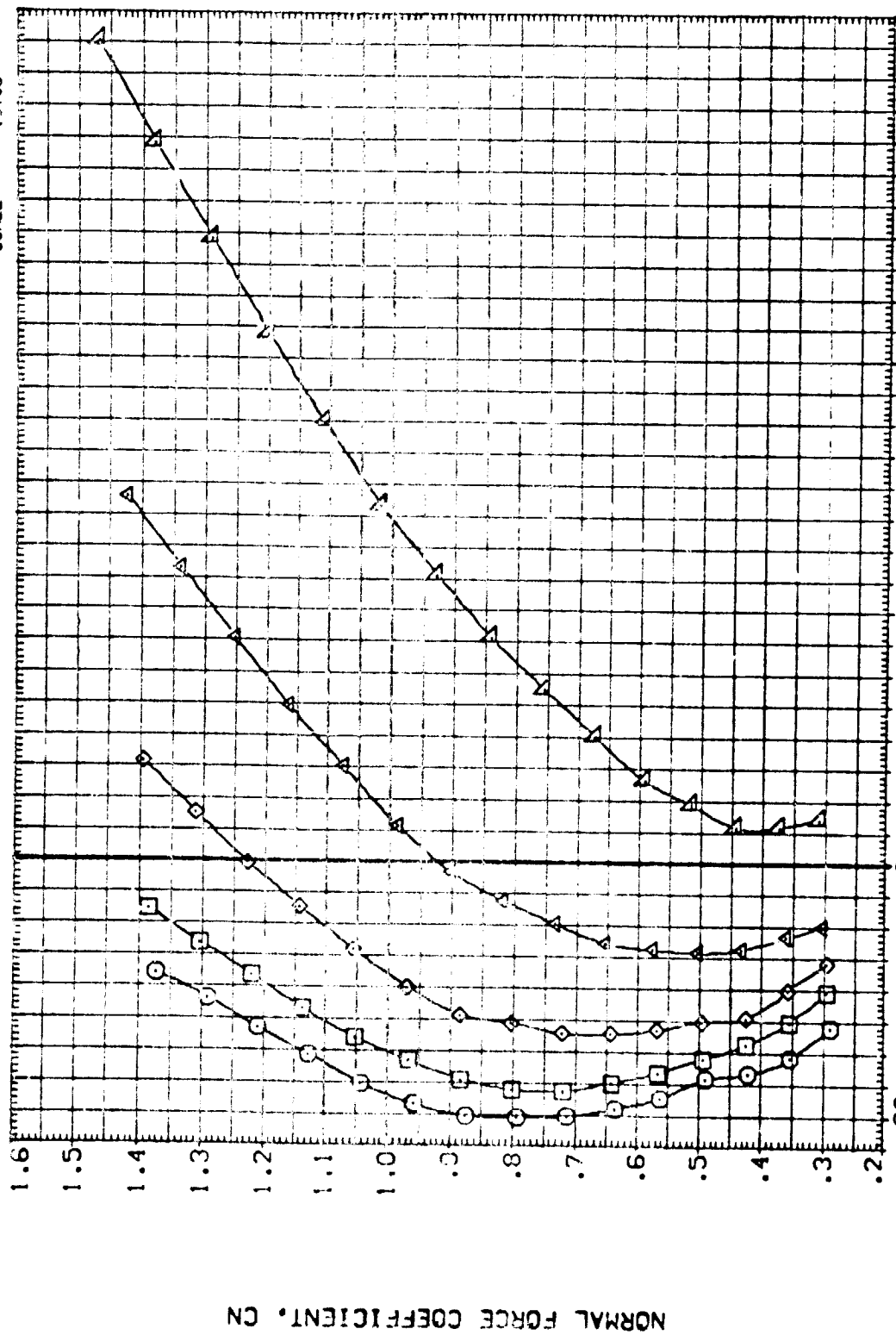
(A)MACH = 8.00

DATA SET 50780L
 (CTV0275)
 (CTV0416)
 (CTV0115)
 (CTV023)
 (CTV0011)

CONFIGURATION DESCRIPTION
 GA73 R26 C9 E43 F8 M16 N28 R5 V8 V116
 GA73 R26 C9 E43 F8 M16 N28 R5 V8 V116
 GA73 R26 C9 E43 F8 M16 N28 R5 V8 V116
 GA73 R26 C9 E43 F8 M16 N28 R5 V8 V116

ELV-L0 ELV-L1 ELV-R1 ELV-R0
 -40.000 -40.000 -40.000 -40.000
 -30.000 -30.000 -30.000 -30.000
 -20.000 -20.000 -20.000 -20.000
 -10.000 -10.000 -10.000 -10.000

REFERENCE INFORMATION
 COEF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 935.6300 IN.
 XTRP 1075.0000 IN.X0
 YTRP .0000 IN.Y0
 ZTRP 375.0000 IN.Z0
 SCALE .0150



PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH (FORWARD C. G.) CLMFWD

FIG. 6 FULL SPAN ELEVON EFFECTIVENESS (NEGATIVE DEFLECTIONS)

(A) MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	REF. POINT	COEFFICIENT
(CTV0001)	CA79 826 C9 E43 F8 M16 N28 R5 V8 V116	SAFE	2650.0000
(CTV0002)	CA79 826 C9 E43 F8 M16 N28 R5 V8 V116	LREF	474.8100
(CTV0003)	CA79 826 C9 E43 F8 M16 N28 R5 V8 V116	BREF	938.6900
(CTV0004)	CA79 826 C9 E43 F8 M16 N28 R5 V8 V116	XHFP	1076.0000
(CTV0005)	CA79 826 C9 E43 F8 M16 N28 R5 V8 V116	YHFP	375.0000
(CTV0006)	CA79 826 C9 E43 F8 M16 N28 R5 V8 V116	ZHFP	0.0150

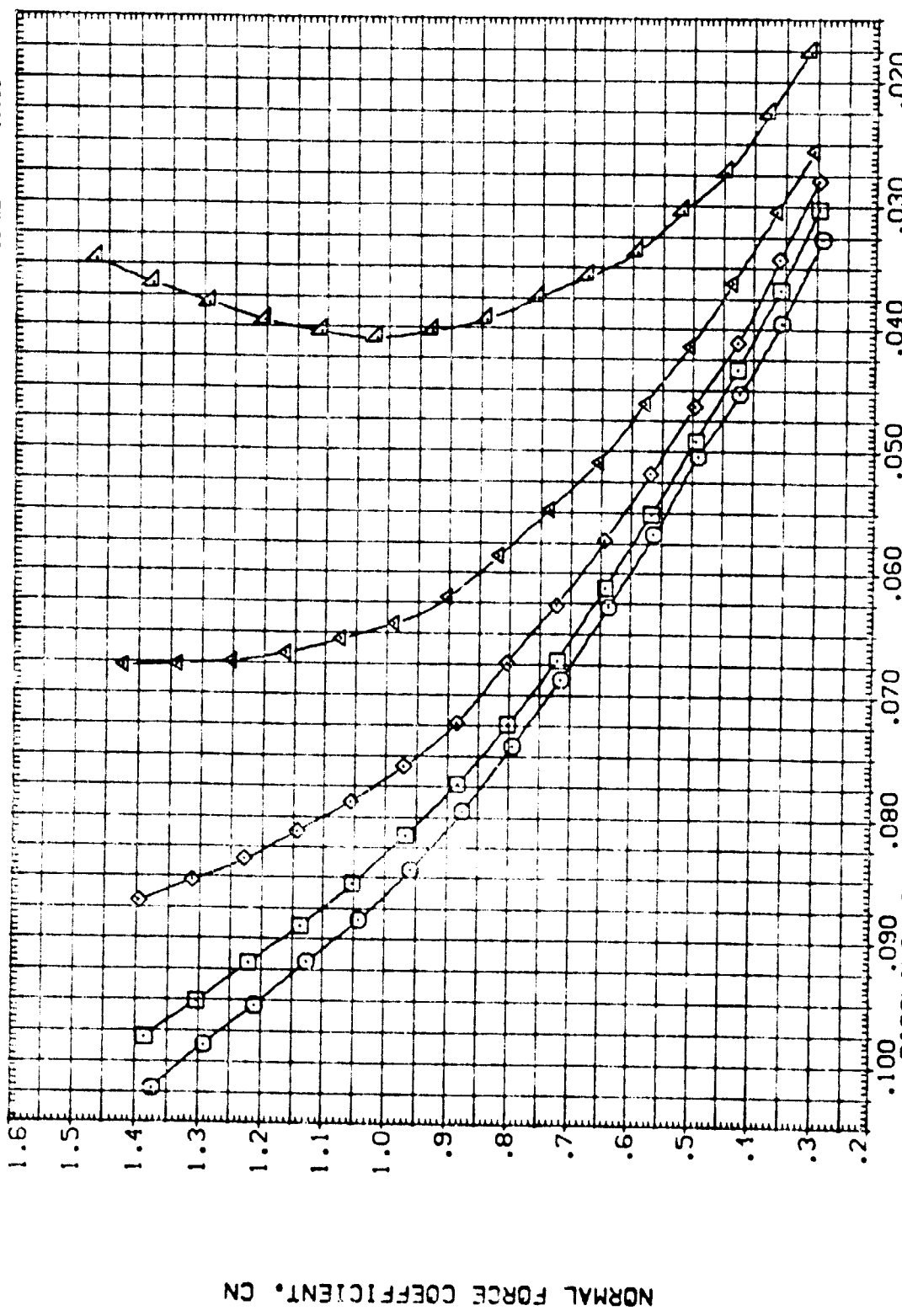


FIG. 6 FULL SPAN ELEVON EFFECTIVENESS (NEGATIVE DEFLECTIONS)
 (A)MACH = 8.00
 PAGE 33

DATA SET SYMBOL COEFFICIENT DESCRIPTION REFERENCE INFORMATION

(C1V025)	DATA 528 C9 E43 F8 H16 N28 R5 V8 V116	200000000
(C1V046)	DATA 828 C9 E43 F8 H16 N28 R5 V8 V116	200000000
(C1V015)	DATA 828 C9 E43 F8 H16 N28 R5 V8 V116	200000000
(C1V023)	DATA 828 C9 E43 F8 H16 N28 R5 V8 V116	200000000
(C1V001)	DATA 828 C9 E43 F8 H16 N28 R5 V8 V116	200000000

ELY-10	ELY-11	ELY-12	ELY-13	ELY-14	ELY-15	ELY-16	ELY-17	ELY-18	ELY-19
100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000
-20.000	-20.000	-20.000	-20.000	-20.000	-20.000	-20.000	-20.000	-20.000	-20.000
-10.000	-10.000	-10.000	-10.000	-10.000	-10.000	-10.000	-10.000	-10.000	-10.000
10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000

SCALE 975 (MACH) 0.010

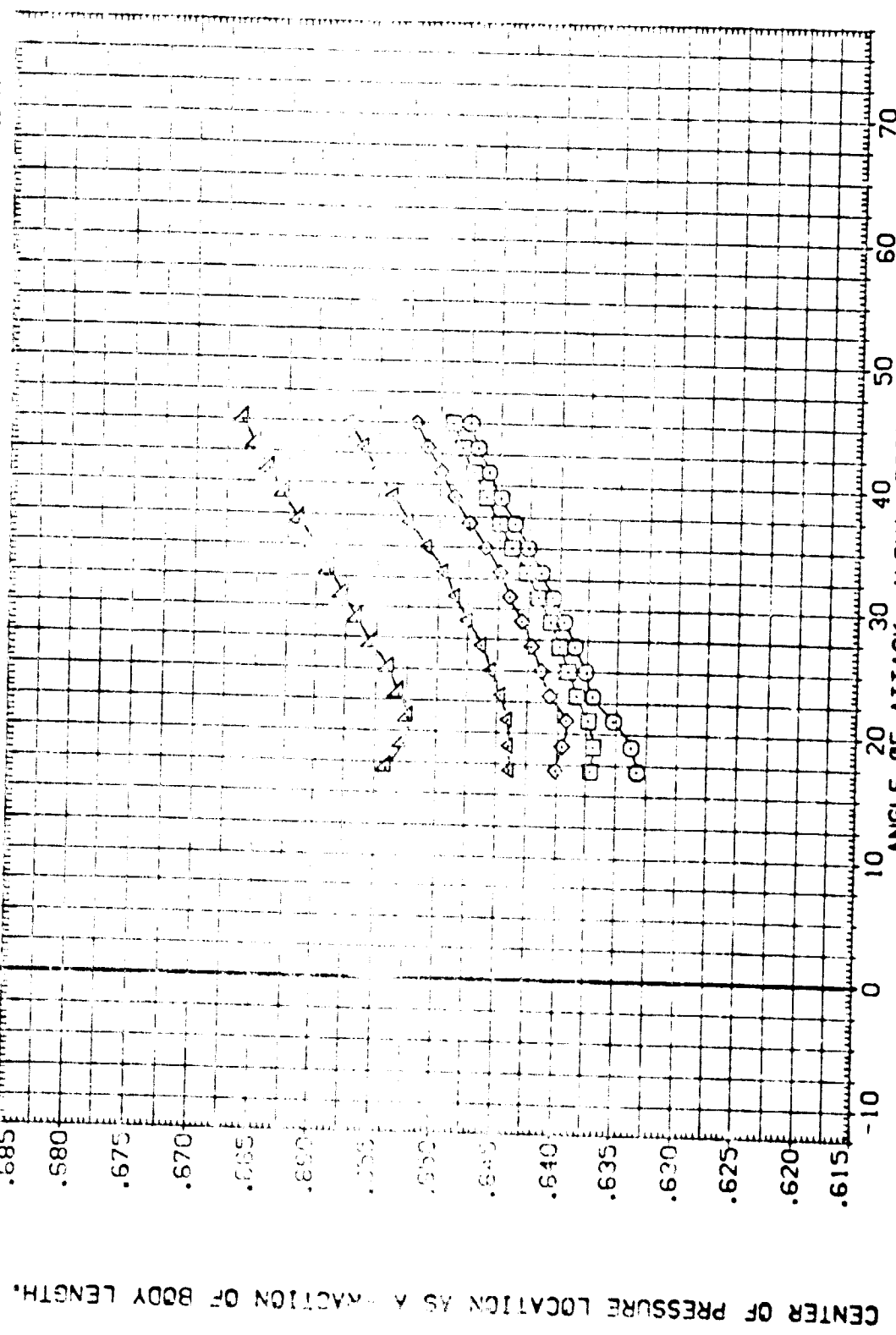


FIG. 6 FULL SPAN ELEVON EFFECTIVENESS (NEGATIVE DEFLECTIONS)

(M)MACH = 8.00



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(C1V025)	CA79 B26 C9 E43 F8 M16 N28 P5 V8 V116	-40.000	-40.000	-40.000	-40.000	SREF 2690.0000 SQ.FT.
(C1V015)	CA79 B26 C9 E43 F8 M16 N28 P5 V8 V116	-30.000	-30.000	-30.000	-30.000	LREF 474.8100 IN.
(C1V015)	CA79 B26 C9 E43 F8 M16 N28 P5 V8 V116	-20.000	-20.000	-20.000	-20.000	BREF 536.6800 IN.
(C1V023)	CA79 B26 C9 E43 F8 M16 N28 P5 V8 V116	-10.000	-10.000	-10.000	-10.000	XREF 1078.5600 IN.X0
(C1V011)	CA79 B26 C9 E43 F8 M16 N28 P5 V8 V116	.000	.000	.000	.000	YREF 375.0000 IN.Y0
						ZREF .0150

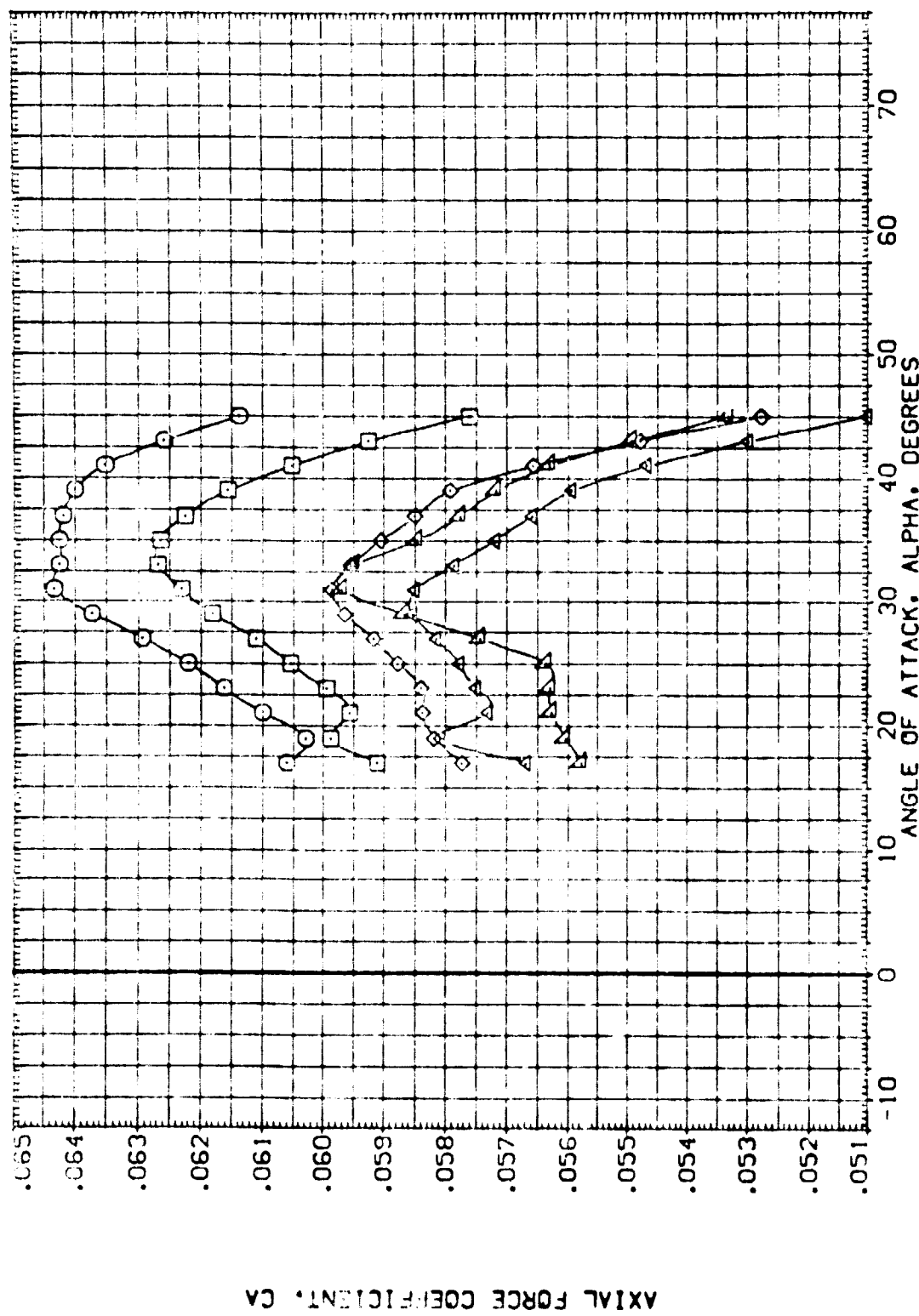


FIG. 6 FULL SPAN ELEVON EFFECTIVENESS (NEGATIVE DEFLECTIONS)

(A)MACH = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(C1V005)	DA79 806 C9 E43 F8 M16 N28 RS V8 V116	-40.000	-40.000	-40.000	-40.000	SREF 2690.0000 SO.FT.
(C1V016)	DA79 806 C9 E43 F8 M16 N28 RS V8 V116	-30.000	-30.000	-30.000	-30.000	LREF 474.8100 IN.
(C1V015)	DA79 806 C9 E43 F8 M16 N28 RS V8 V116	-20.000	-20.000	-20.000	-20.000	RREF 936.6900 IN.
(C1V023)	DA79 826 C9 E43 F8 M16 N28 RS V8 V116	-10.000	-10.000	-10.000	-10.000	XREF 1076.6900 IN.V8
(C1V001)	DA79 806 C9 E43 F8 M16 N28 RS V8 V116	.000	.000	.000	.000	YREF 375.0000 IN.V8
						ZREF .0150 IN.Z0
						SCALE

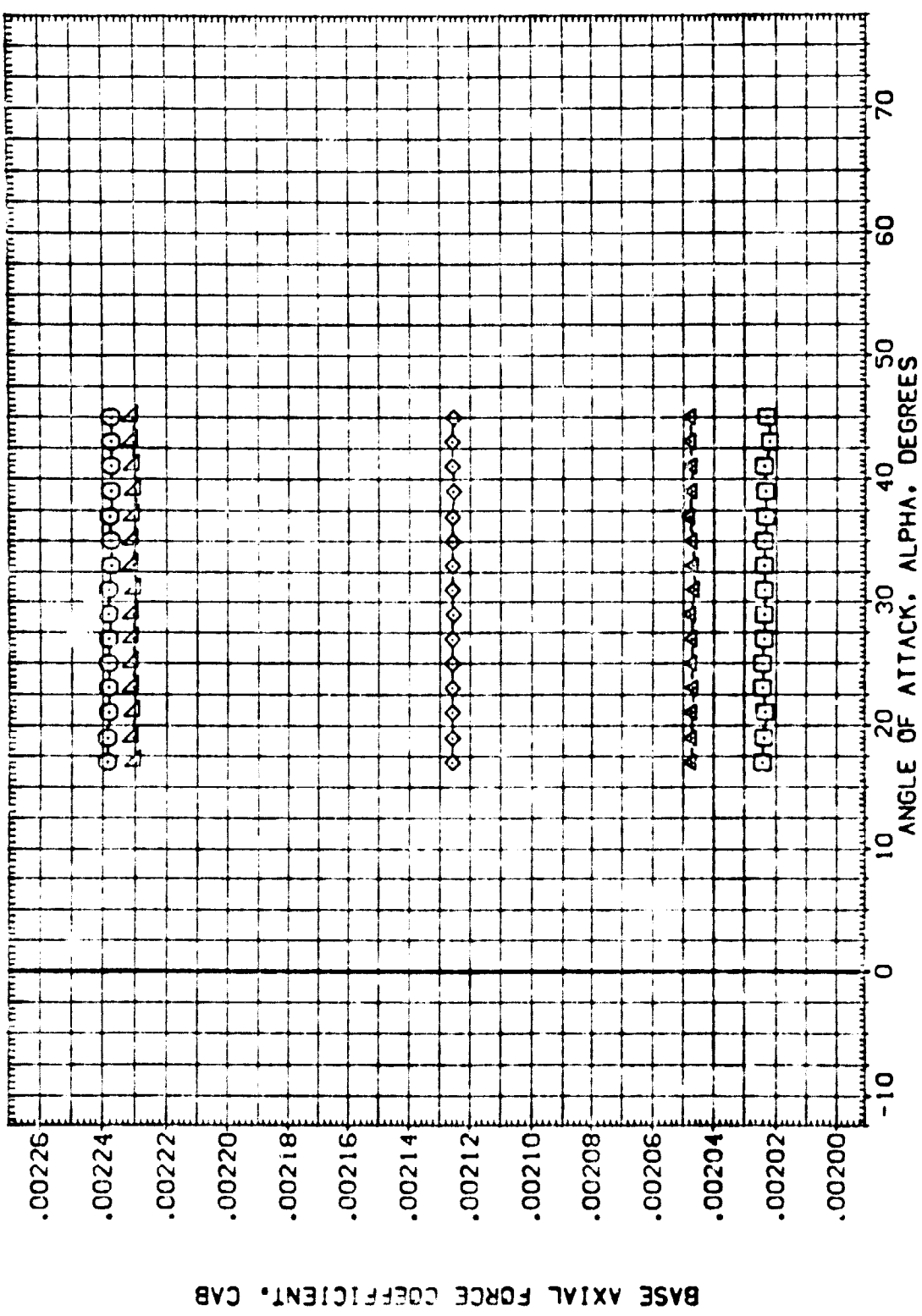


FIG. 6 FULL SPAN ELEVON EFFECTIVENESS (NEGATIVE DEFLECTIONS)

(A)MACH = 8.00

DATA SET S NO. 1
 (1) V161
 (2) V162
 (3) V163
 (4) V164
 (5) V165
 (6) V166
 (7) V167
 (8) V168
 (9) V169
 (10) V170

DESCRIPTION
 N28 P5 V8 VIII6
 N28 P5 V8 VIII6
 N28 P5 V8 VIII6
 N28 P5 V8 VIII6
 N28 P5 V8 VIII6
 N28 P5 V8 VIII6
 N28 P5 V8 VIII6
 N28 P5 V8 VIII6
 N28 P5 V8 VIII6
 N28 P5 V8 VIII6

SCALE
 10.000
 10.000
 10.000
 10.000
 10.000
 10.000
 10.000
 10.000
 10.000
 10.000
 10.000

ANGLE OF ATTACK, ALPHA, DEGREES
 0
 10
 20
 30
 40
 50
 60
 70

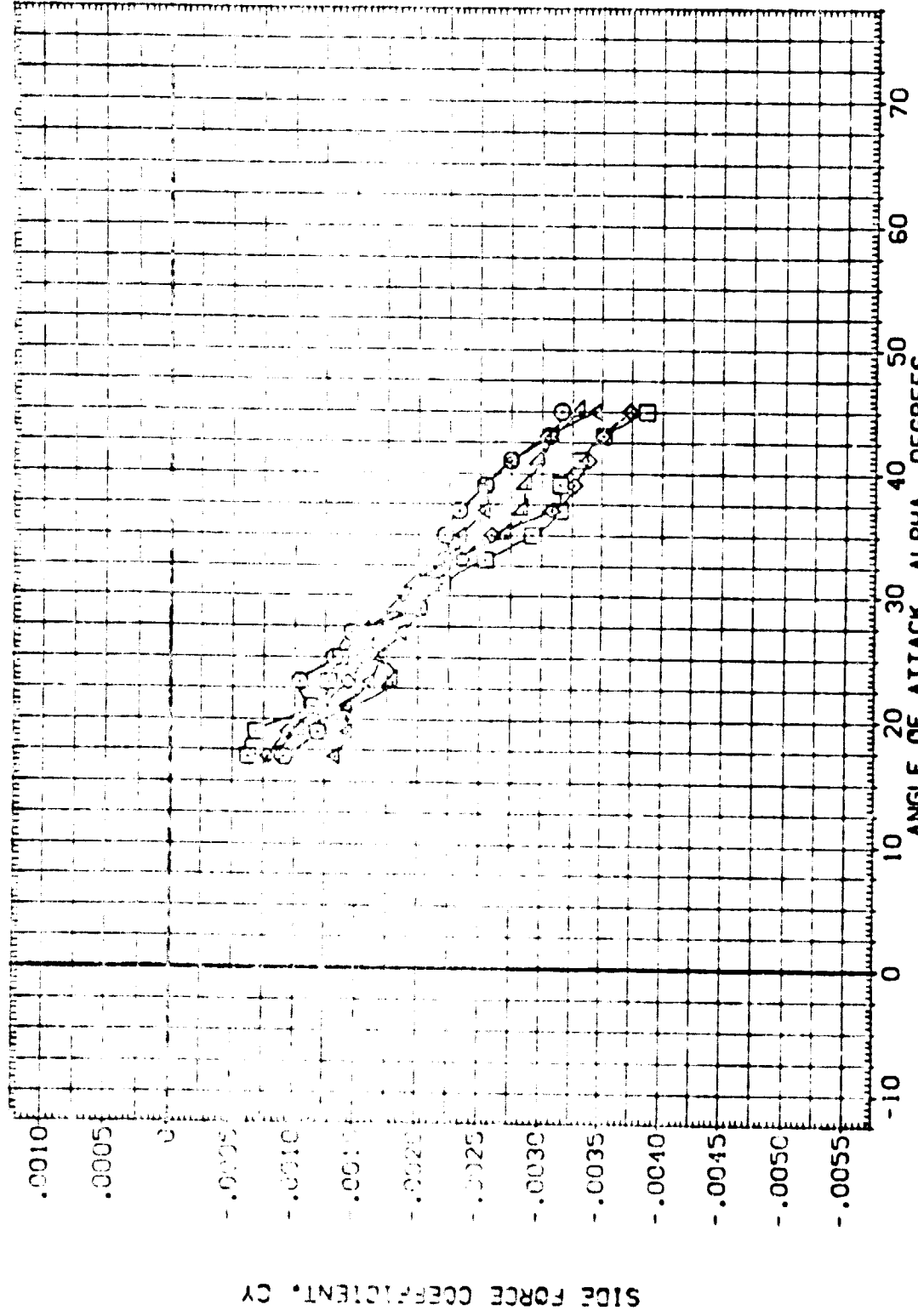


FIG. 6 FULL SPAN ELEVON EFFECTIVENESS (NEGATIVE DEFLECTIONS)

(A) MACH = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(A)WZ0)	CA 3 M 6 L9 E43 F8 M16 N08 R5 V3 V116	40.000	-40.000	40.000	-40.000	SREF 4850.0000
(A)WZ1)	CA 3 M 6 L9 E43 F8 M16 N08 R5 V3 V116	30.000	-30.000	30.000	-30.000	LREF 474.8100
(A)WZ2)	CA 3 M 6 L9 E43 F8 M16 N08 R5 V3 V116	20.000	-20.000	20.000	-20.000	SREF 936.5800
(A)WZ3)	CA 3 M 6 L9 E43 F8 M16 N08 R5 V3 V116	10.000	-10.000	10.000	-10.000	A11P 1076.3400
(A)WZ4)	CA 3 M 6 L9 E43 F8 M16 N08 R5 V3 V116	0.000	0.000	0.000	0.000	M13P 375.0000
(A)WZ5)	CA 3 M 6 L9 E43 F8 M16 N08 R5 V3 V116	0.000	0.000	0.000	0.000	Z14P 375.0000
						SCALE .0150

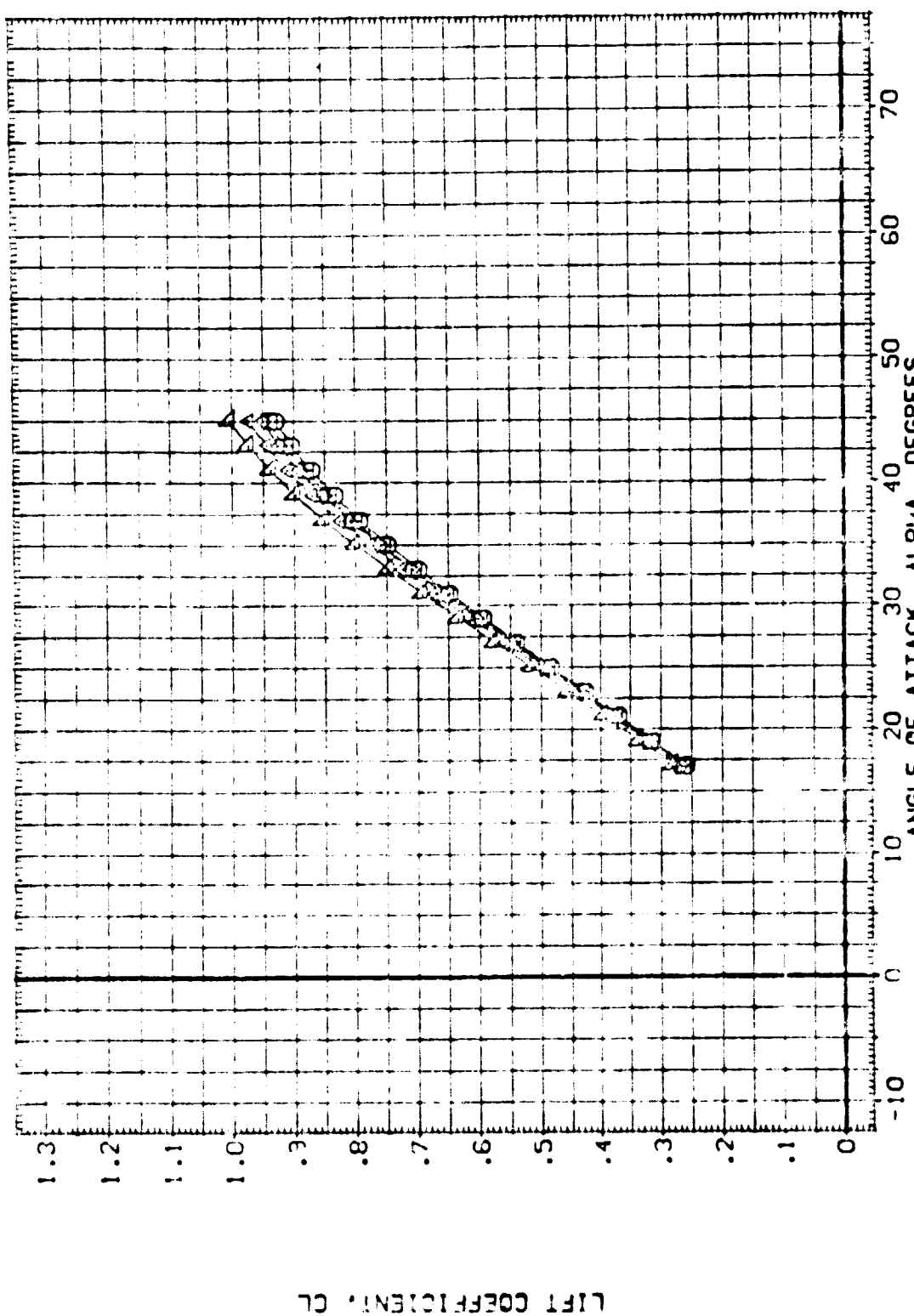
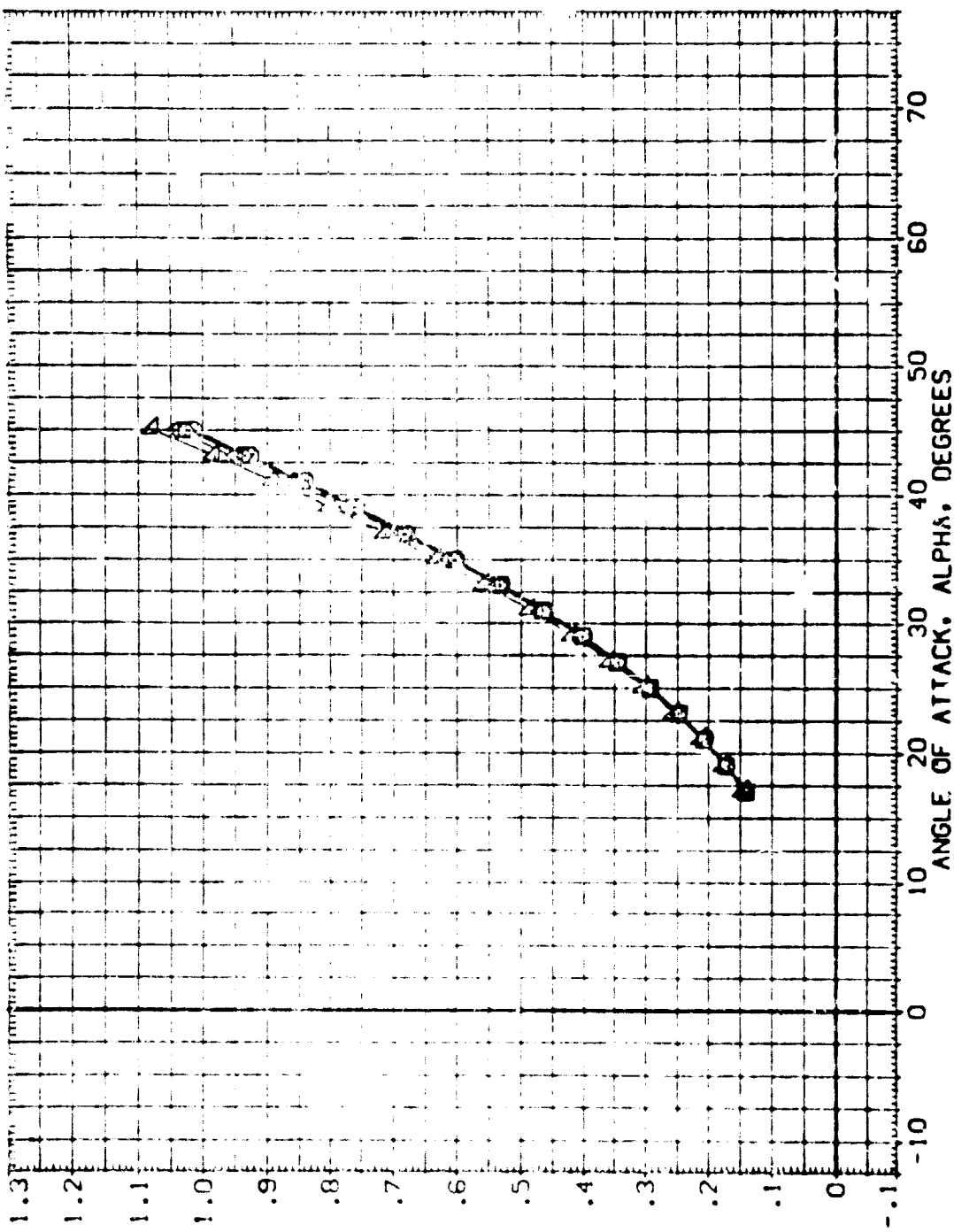


FIG. 6 FULL SPAN ELEVON EFFECTIVENESS (NEGATIVE DEFLECTIONS)

(A)MACH = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(AT1023)	BA79 B26 C9 E43 FB H16 N28 RS V8 V116	-10.000	-10.000	-40.000	40.000	20.00 0.10 0.10
(AT1015)	BA79 B26 C9 E43 FB H16 N28 RS V8 V116	-20.000	-20.000	-50.000	-50.000	20.00 0.10 0.10
(AT1023)	BA79 B26 C9 E43 FB H16 N28 RS V8 V116	-20.000	-20.000	-20.000	-20.000	20.00 0.10 0.10
(AT1001)	BA79 B26 C9 E43 FB H16 N28 RS V8 V116	-10.000	-10.000	-10.000	-10.000	20.00 0.10 0.10
						1076 0.00 0.00
						075 0.00 0.00
						SCALE 0.10 0.10



DRAG COEFFICIENT, CD

FIG. 6 FULL SPAN ELEVON EFFECTIVENESS (NEGATIVE DEFLECTIONS)

(A) MACH = 8.00



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(ATV075)	GA79 826 C9 E43 F8 M16 N28 R5 V8 V116	-40.000	-40.000	-40.000	-40.000	SREF 2690.0000 SQ.FT.
(ATV045)	GA79 826 C9 E43 F8 M16 N28 R5 V8 V116	-30.000	-30.000	-30.000	-30.000	LREF 474.8100 IN.
(ATV015)	GA79 826 C9 E43 F8 M16 N28 R5 V8 V116	-20.000	-20.000	-20.000	-20.000	BREF 936.6800 IN.
(ATV023)	GA79 826 C9 E43 F8 M16 N28 R5 V8 V116	-10.000	-10.000	-10.000	-10.000	XMRP 1076.6800 IN.X0
(ATV001)	GA79 826 C9 E43 F8 M16 N28 R5 V8 V116	.000	.000	.000	.000	YMRP .0000 IN.Y0
						ZMRP 275.0000 IN.Z0
						SCALE .0.50

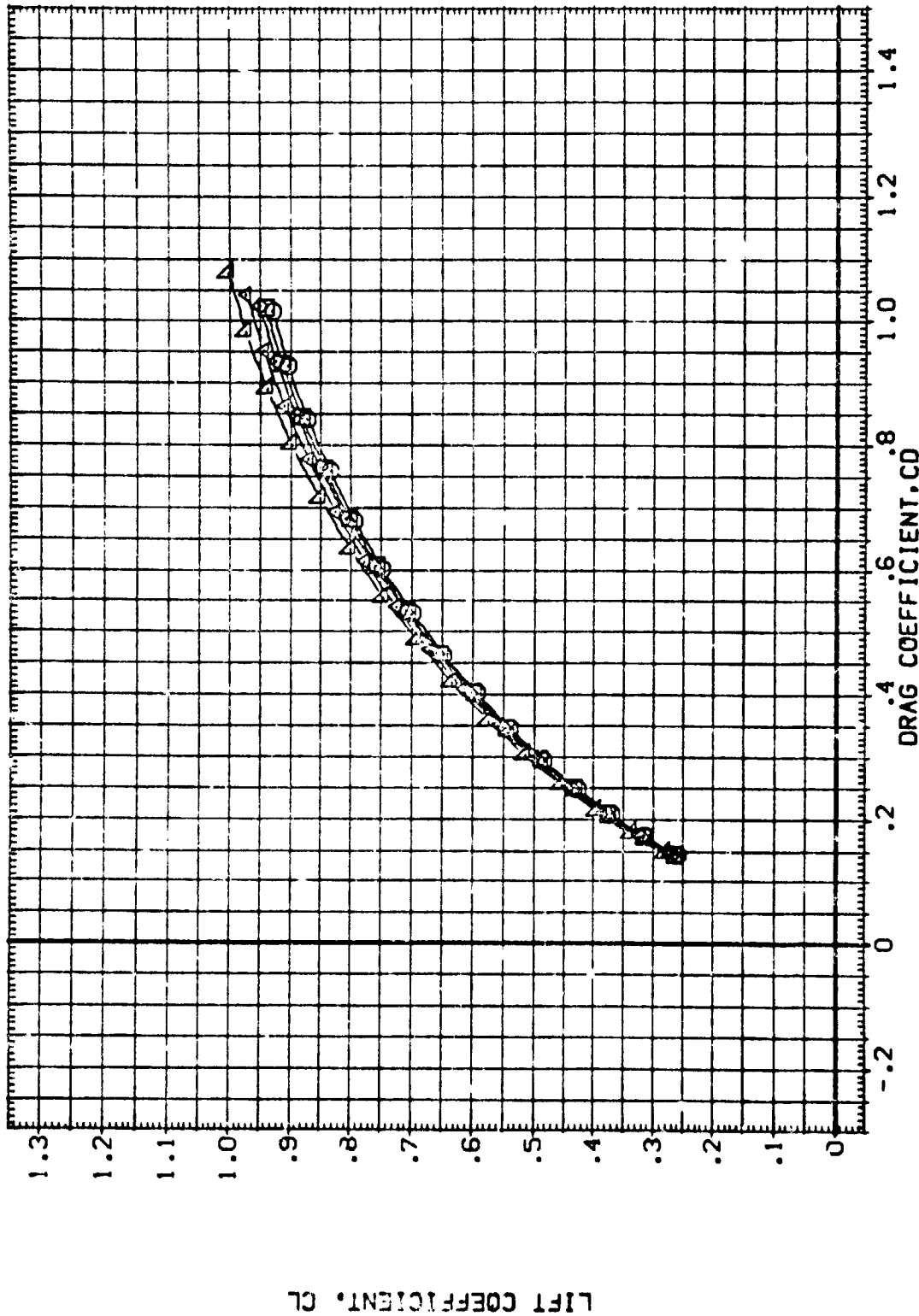


FIG. 6 FULL SPAN ELEVON EFFECTIVENESS (NEGATIVE DEFLECTIONS)

(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION REFERENCE INFORMATION

(ATV025)	0A79 B26 C9 E43 F8 M16 N28 RS V8 V116	SREF 2690.0000	50.FT.
(ATV046)	0A79 B26 C9 E43 F8 M16 N28 RS V8 V116	LREF 474.8100	IN.
(ATV015)	0A79 B26 C9 E43 F8 M16 N28 RS V8 V116	DREF 936.6800	IN.
(ATV023)	0A79 B26 C9 E43 F8 M16 N28 RS V8 V116	XREF 1076.0000	IN.
(ATV001)	0A79 B26 C9 E43 F8 M16 N28 RS V8 V116	YREF 375.0000	IN.
		ZMP	IN.
		SCALE	.0150

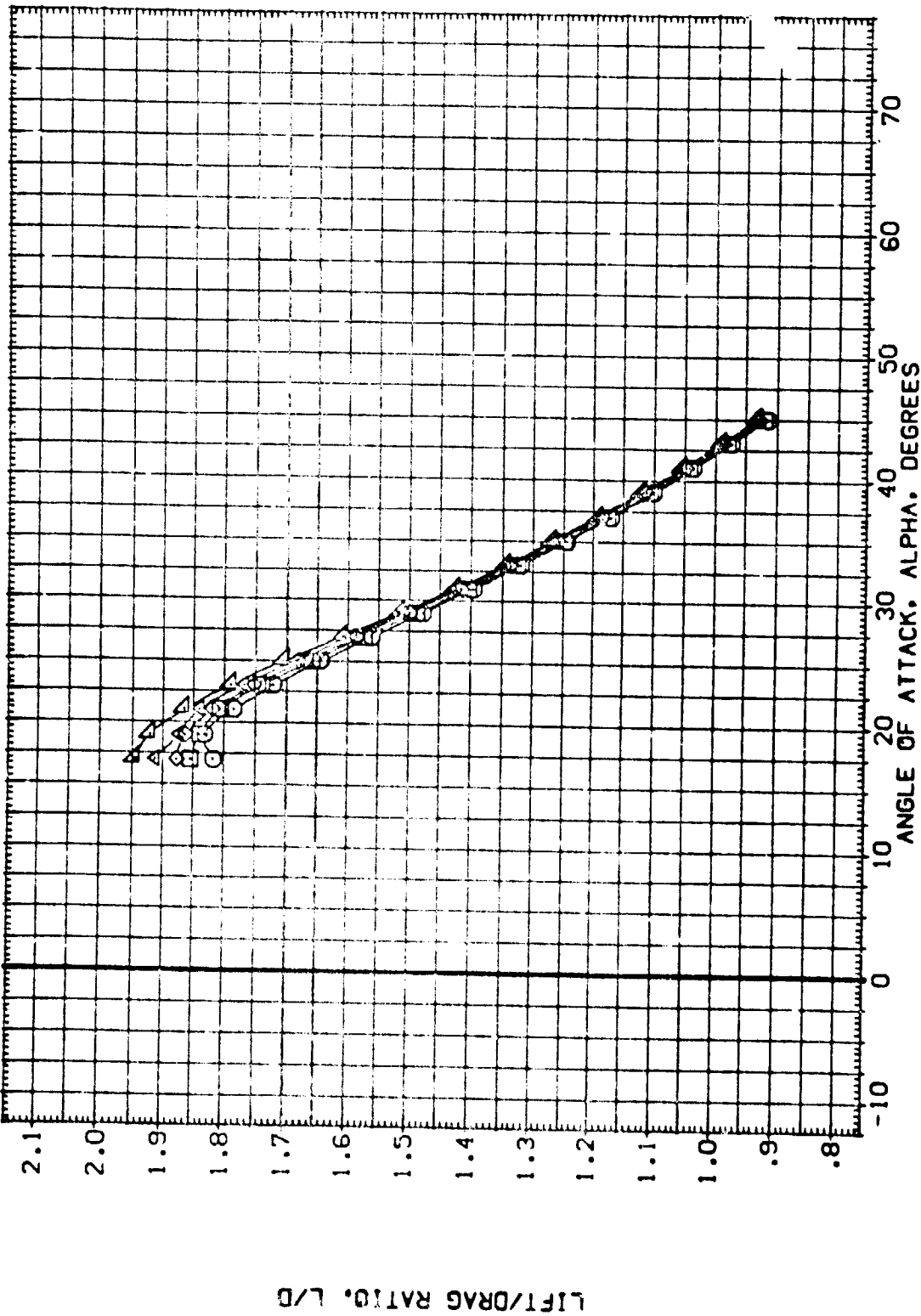


FIG. 6 FULL SPAN ELEVON EFFECTIVENESS (NEGATIVE DEFLECTIONS)

(MACH = 8.00)



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(C1V001) □ 0A79 R26 C9 E43 F8 M16 N28 RS V8 V116

(C1V017) ○ 0A79 R26 C9 E43 F8 M16 N28 RS V8 V116

(C1V020) ◇ 0A79 R26 C9 E43 F8 M16 N28 RS V8 V116

ELV-L0 ELV-L1 ELV-R1 ELV-R0

0.000 0.000 0.000 0.000

10.000 10.000 10.000 10.000

20.000 20.000 20.000 20.000

REFERENCE INFORMATION

SREF 2630 C000 SC.FT.

LREF 474.8100 IN.

BREF 536.6800 IN.

XPRP 1076.0000 IN. X0

YPRP .0000 IN. Y0

ZPRP 375.0000 IN. Z0

SCALE .0150

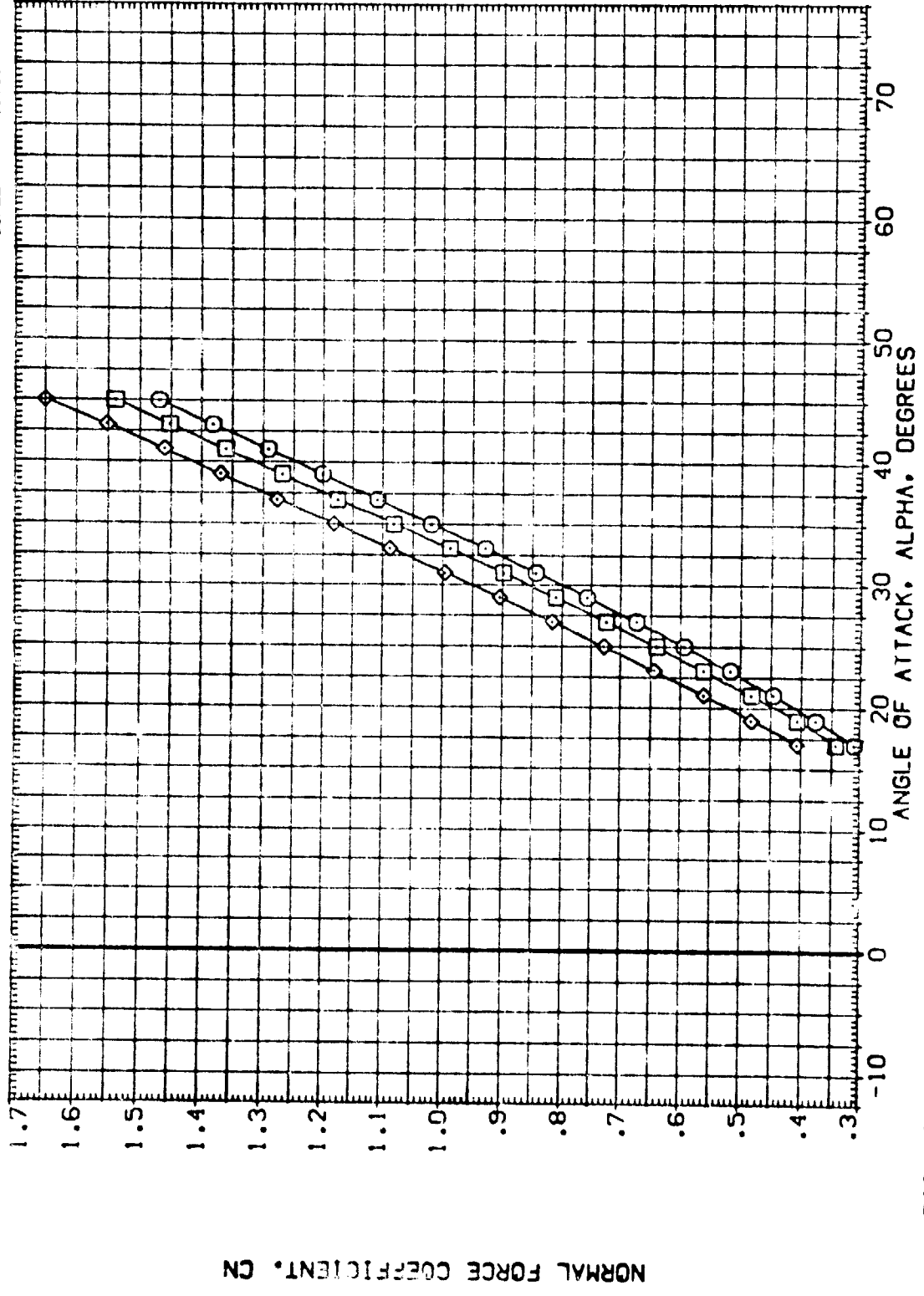


FIG. 7 FULL SPAN ELEVON EFFECTIVENESS (POSITIVE DEFLECTIONS)

(M)MACH = 8.00

PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH(FORWARD C. G.) CLMPWD

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (C1V001) ○ 0A79 B26 C9 E43 F8 M16 M28 R5 V8 V116
 (C1V017) ◇ 0A79 B26 C9 E43 F8 M16 M28 R5 V8 V116
 (C1V020) ◇ 0A79 B26 C9 E43 F8 M16 M28 R5 V8 V116

ELV-L0 ELV-L1 ELV-R1 ELV-R0
 10.000 .000 .000 .000
 10.000 10.000 10.000 10.000
 20.000 20.000 20.000 20.000

REFERENCE INFORMATION
 BASE 4094.0000 IN.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XREF 1076.6800 IN.
 YREF .0000 IN.
 ZREF 375.0000 IN.
 SCALE .0150

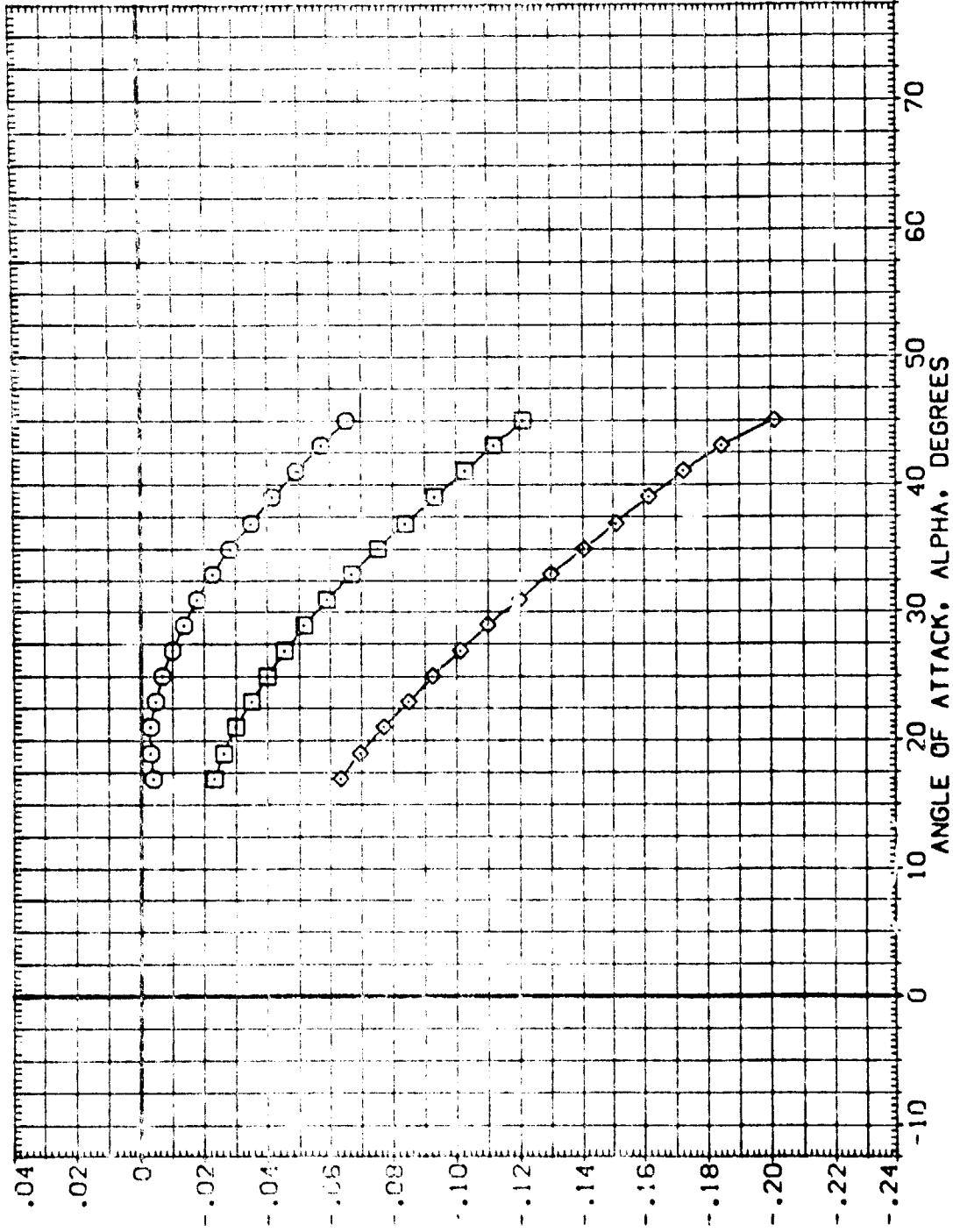


FIG. 7 FULL SPAN ELEVON EFFECTIVENESS (POSITIVE DEFLECTIONS)

(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(C1V011) O CA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

(C1V017) O CA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

(C1V020) O CA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

ELV-L0 ELV-L1 ELV-R1 ELV-R0

10,000 10,000 10,000 10,000

20,000 20,000 20,000 20,000

REFERENCE INFORMATION

DATE 2650.0000 SQ.FT.

LREF 474.8100 IN.

BREF 936.8800 IN.

XPRP 1076.6800 IN.X0

YPRP .0000 IN.Y0

ZPRP 375.0000 IN.Z0

SCALE .0150

PITCHING MOMENT COEFFICIENT AT .675 BODY LENGTH(AFT C. G.) CLMAY

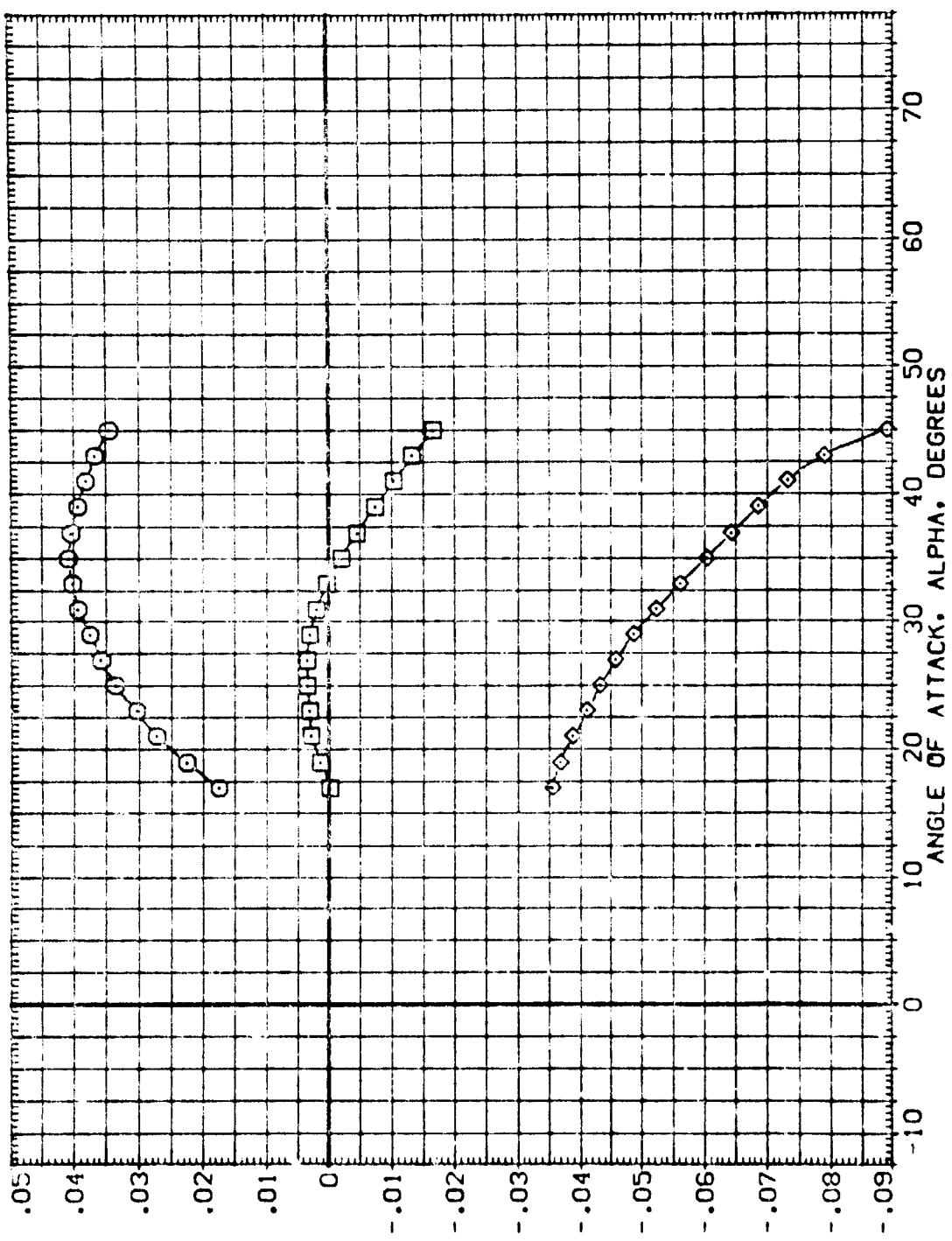


FIG. 7 FULL SPAN ELEVON EFFECTIVENESS (POSITIVE DEFLECTIONS)

(A)MACH = 8.00

DATA SET SYMBOL: (C1V001), (C1V017), (C1V020)

CONFIGURATION DESCRIPTION: CA19 B26 C9 E43 F8 M16 N28 P5 V8 V116, CA19 B26 C9 E43 F8 M16 N28 P5 V8 V116, CA19 B16 C9 E43 F8 M16 N28 P5 V8 V116

REFERENCE INFORMATION: SREF 2690.0000 SQ.FT., LREF 474.8100 IN., BREF 9.96.6400 IN., XREF 1076.6800 IN., YREF 0.0000 IN., ZREF 375.0000 IN., SCALE 0.1

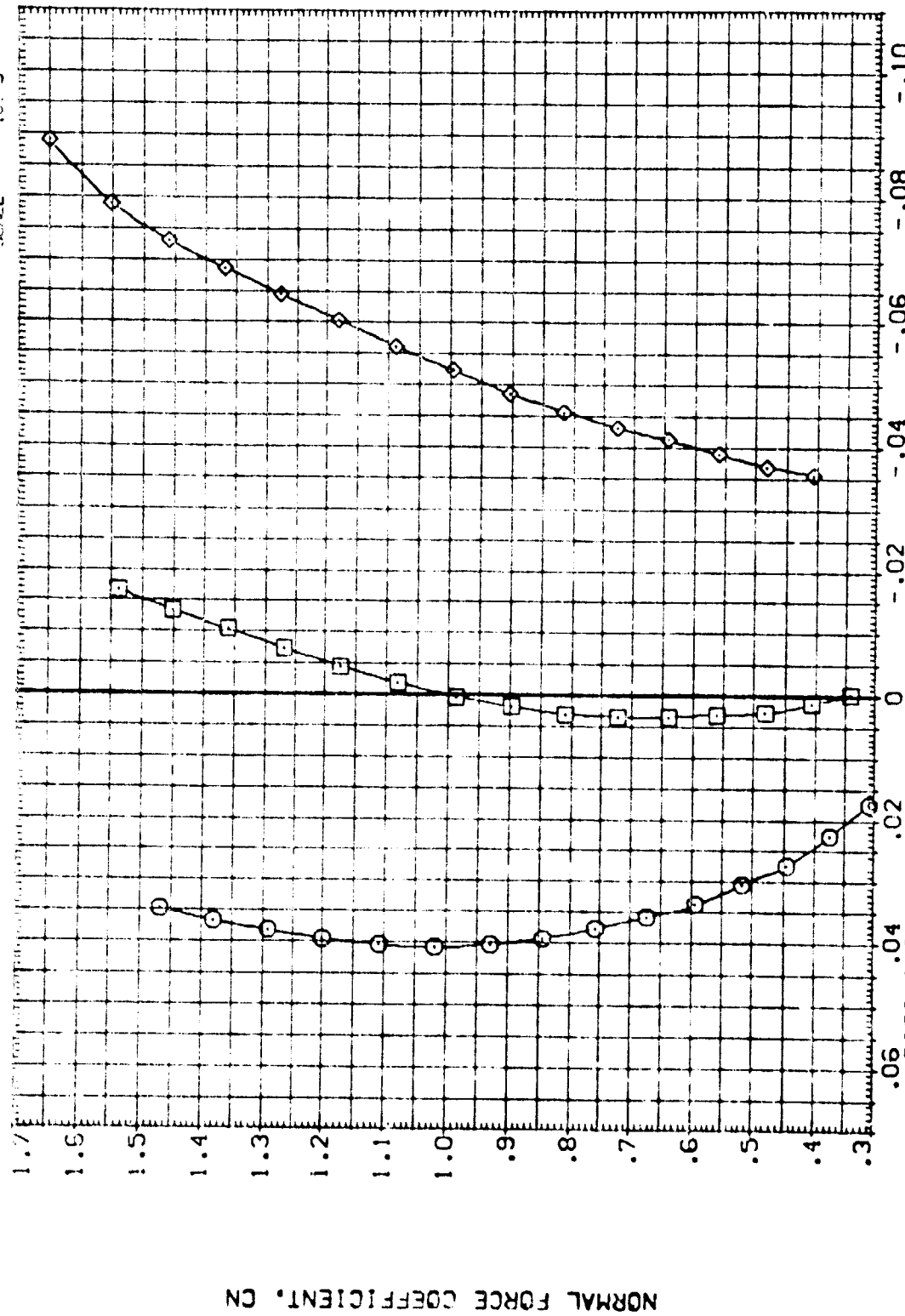


FIG. 7 FULL SPAN ELEVON EFFECTIVENESS (POSITIVE DEFLECTIONS)

(A) MACH = 8.00

CENTER OF PRESSURE LOCATION AS A FRACTION OF BODY LENGTH, XCP/L

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CTV001) 0A79 B26 C9 E43 F8 H16 N28 RS V8 V116
 (CTV017) 0A79 B26 C9 E43 F8 H16 N28 RS V8 V116
 (CTV020) 0A79 B26 C9 E43 F8 H16 N28 RS V8 V116

ELV-L0 ELV-L1 ELV-R1 ELV-R0
 .000 .000 .000 .000
 10.000 10.000 10.000 10.000
 20.000 20.000 20.000 20.000

REFERENCE INFORMATION
 SREF 2590.0000 SQ.FT.
 LREF 474.6100 IN.
 BREF 926.6800 IN.
 XMRP 1076.6000 IN. X0
 YMRP .0000 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .0150

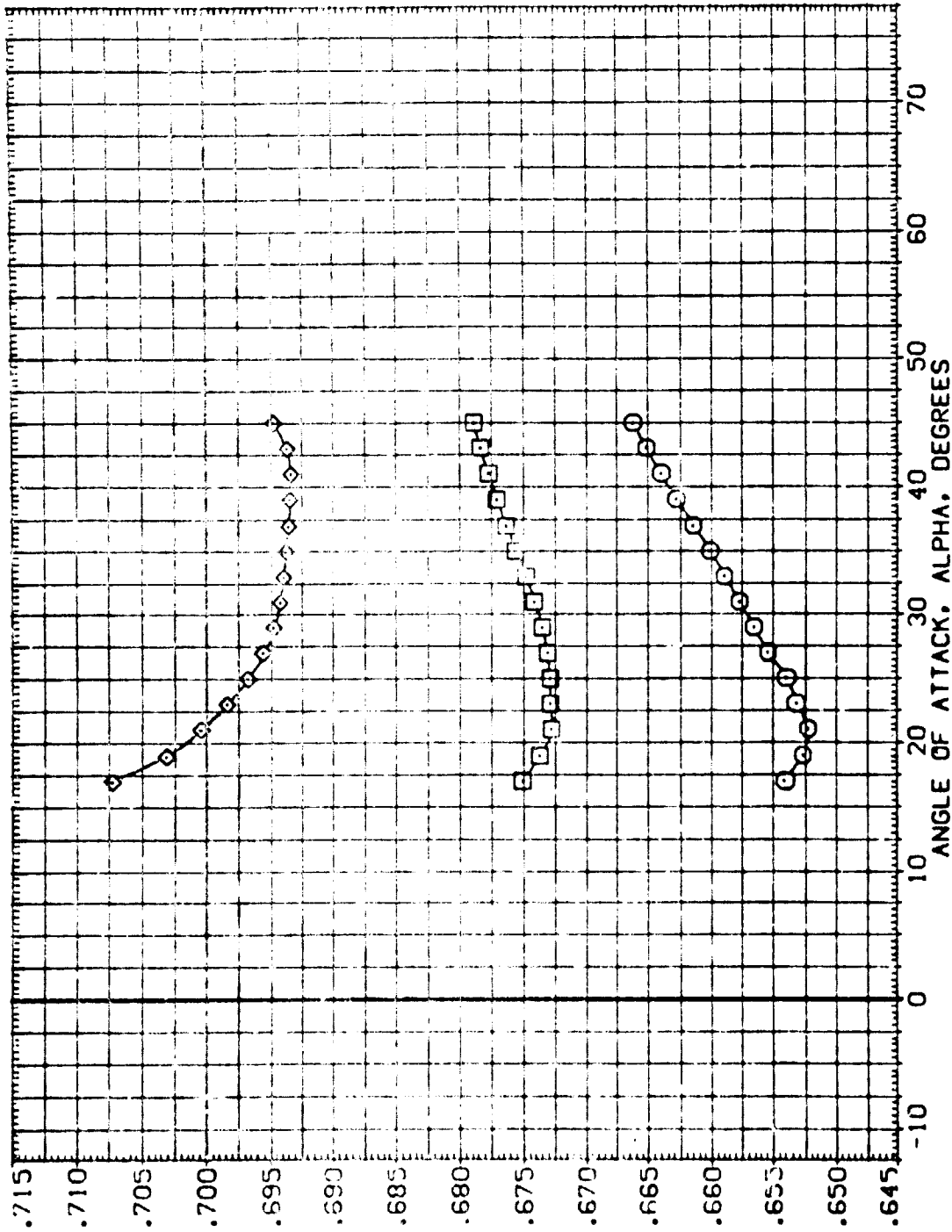


FIG. 7 FULL SPAN ELEVON EFFECTIVENESS (POSITIVE DEFLECTIONS)

(A)MACH = 8.00



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(CTV001)	0A79 R26 C9 E43 F8 M16 N28 R5 V8 V116	.000	.000	.000	.000	SREF 2690.0000 SQ. FT.
(CTV002)	0A79 R26 C9 E43 F8 M16 N28 R5 V8 V116	10.000	10.000	10.000	10.000	LREF 474.9100 IN.
(CTV003)	0A79 R26 C9 E43 F8 M16 N28 R5 V8 V116	20.000	20.000	20.000	20.000	SREF 936.6800 IN.
						XPRP 1076.6800 IN. X0
						YPRP .0000 IN. Y0
						ZPRP 375.0000 IN. Z0
						SCALE .0150

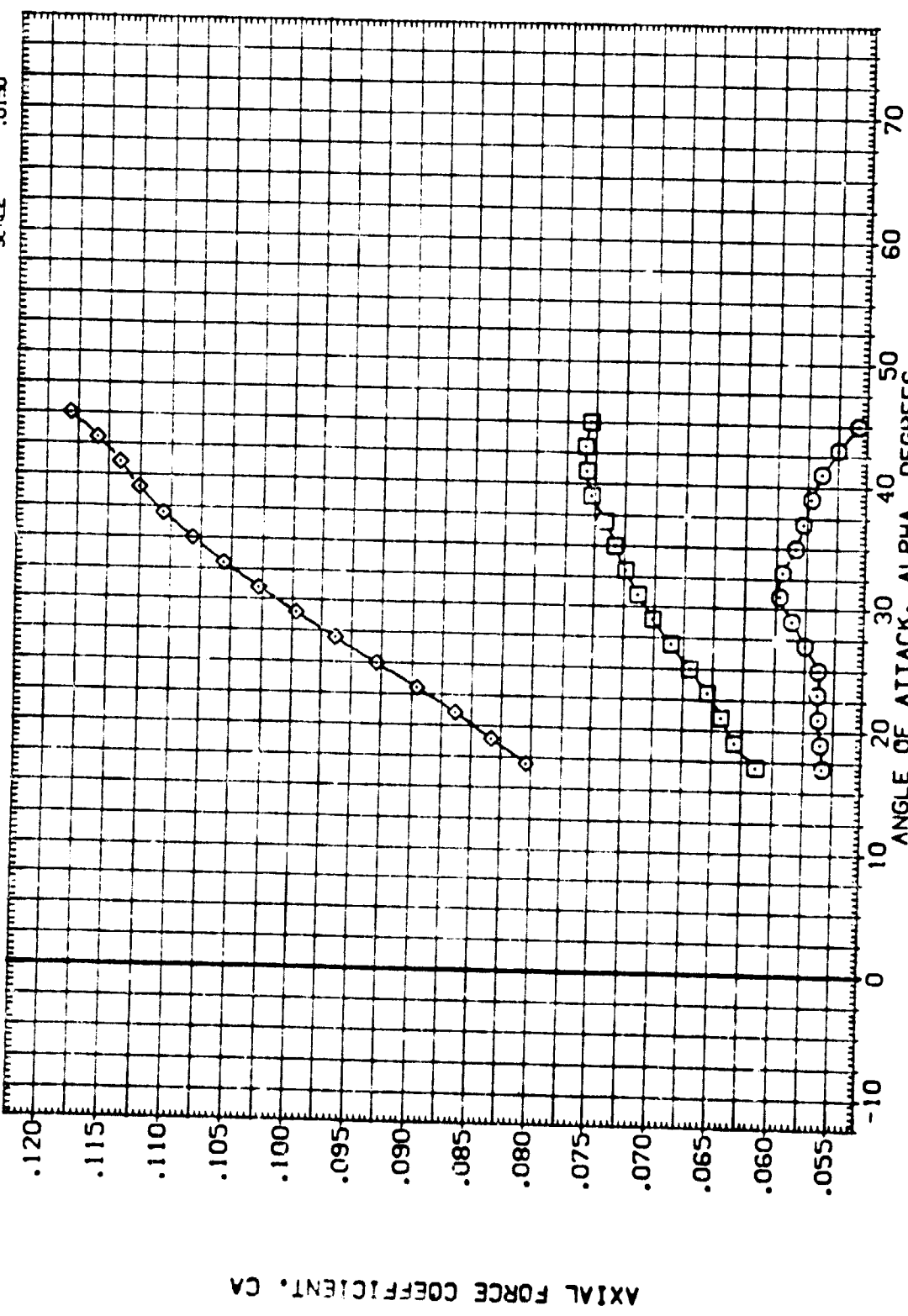


FIG. 7 FULL SPAN ELEVON EFFECTIVENESS (POSITIVE DEFLECTIONS)
 (A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(C1W001)	DA79 B26 C9 E43 F8 M16 N28 R5 V8 V116
(C1W017)	DA79 B26 C9 E43 F8 M16 N28 R5 V8 V116
(C1W020)	DA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

REFERENCE INFORMATION

SREF	2690.0000	SO. FT.
LREF	474.8100	IN.
BREF	936.5800	IN. X0
YREF	1076.5800	IN. Y0
ZREF	.0000	IN. Z0
SCALE	375.0000	.0150

ELV. L0	ELV. L1	ELV. R1	ELV. R0
.000	.000	.000	.000
10.000	10.000	10.000	10.000
20.000	20.000	20.000	20.000

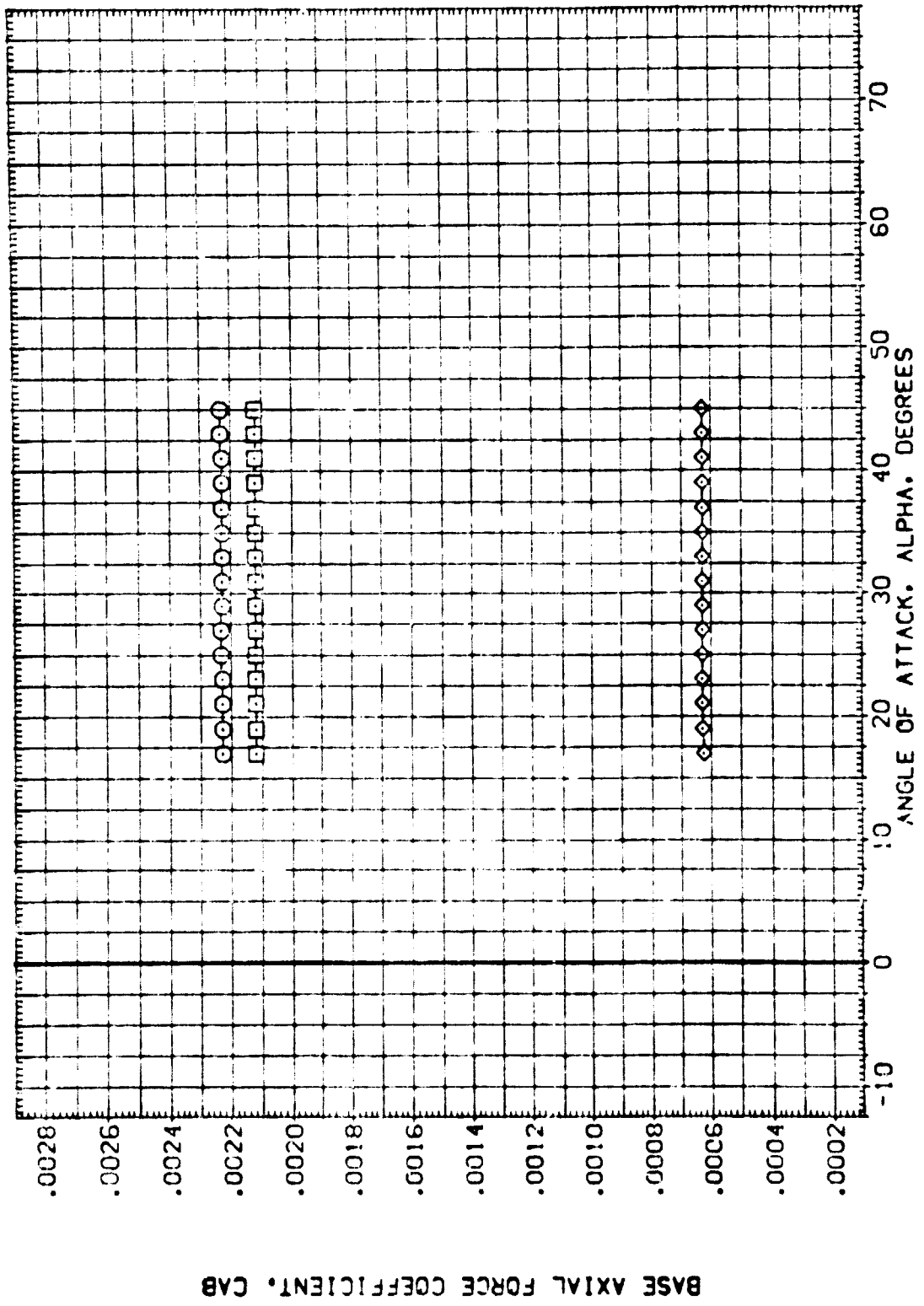


FIG. 7 FULL SPAN ELEVON EFFECTIVENESS (POSITIVE DEFLECTIONS)

(A)MACH = 8.00

DATA SET SYMBOL: (C1) (C2) (C3) (C4) (C5) (C6) (C7) (C8) (C9) (C10)

CONFIGURATION DESCRIPTION: BAYS B26 C9 E43 F8 H16 M28 P5 V8 V116
 BAYS B26 C9 E43 F8 H16 M28 P5 V8 V116
 BAYS B26 C9 E43 F8 H16 M28 P5 V8 V116

ELV-00: 000 10.000 20.000
 ELV-01: 000 10.000 20.000
 ELV-02: 000 10.000 20.000

REFERENCE ELEVATION: 50 FT.
 SREF: 174.8100
 LREF: 936.8100
 VREF: 1076.6800
 ZREF: 375.0000
 SCALE: 2150

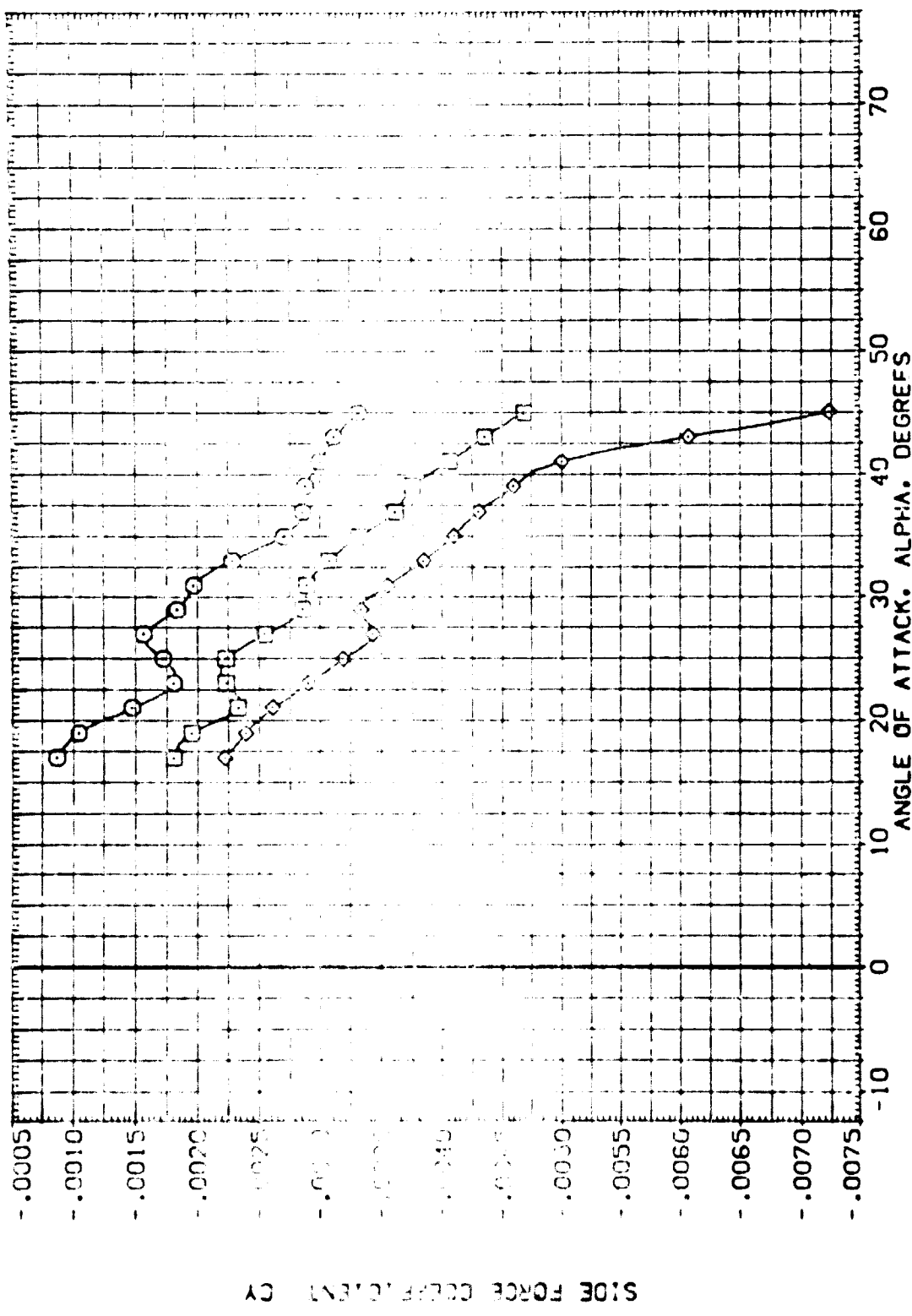


FIG. 7 FULL SPAN ELEVON EFFECTIVENESS (POSITIVE DEFLECTIONS)

(A)MACH = 8.00



DATA SET SYMBOL CONFIGURATION DESCRIPTION REFERENCE INFORMATION

(A1V001)	SA19 C05 C9 E13 F0 M16 N20 R5 V8 V116	CREF 2550.0000	SO.FT.
(A1V012)	SA19 C05 C9 E13 F0 M16 N20 R5 V8 V116	LREF 474.8100	IN.
(A1V020)	SA19 C05 C9 E13 F8 M16 N28 R5 V8 V116	BREF 936.6400	IN.
		XREF 1076.6800	IN.X8
		YREF .0000	IN.Y8
		ZREF 375.0000	IN.Z8
		SCALE .0150	

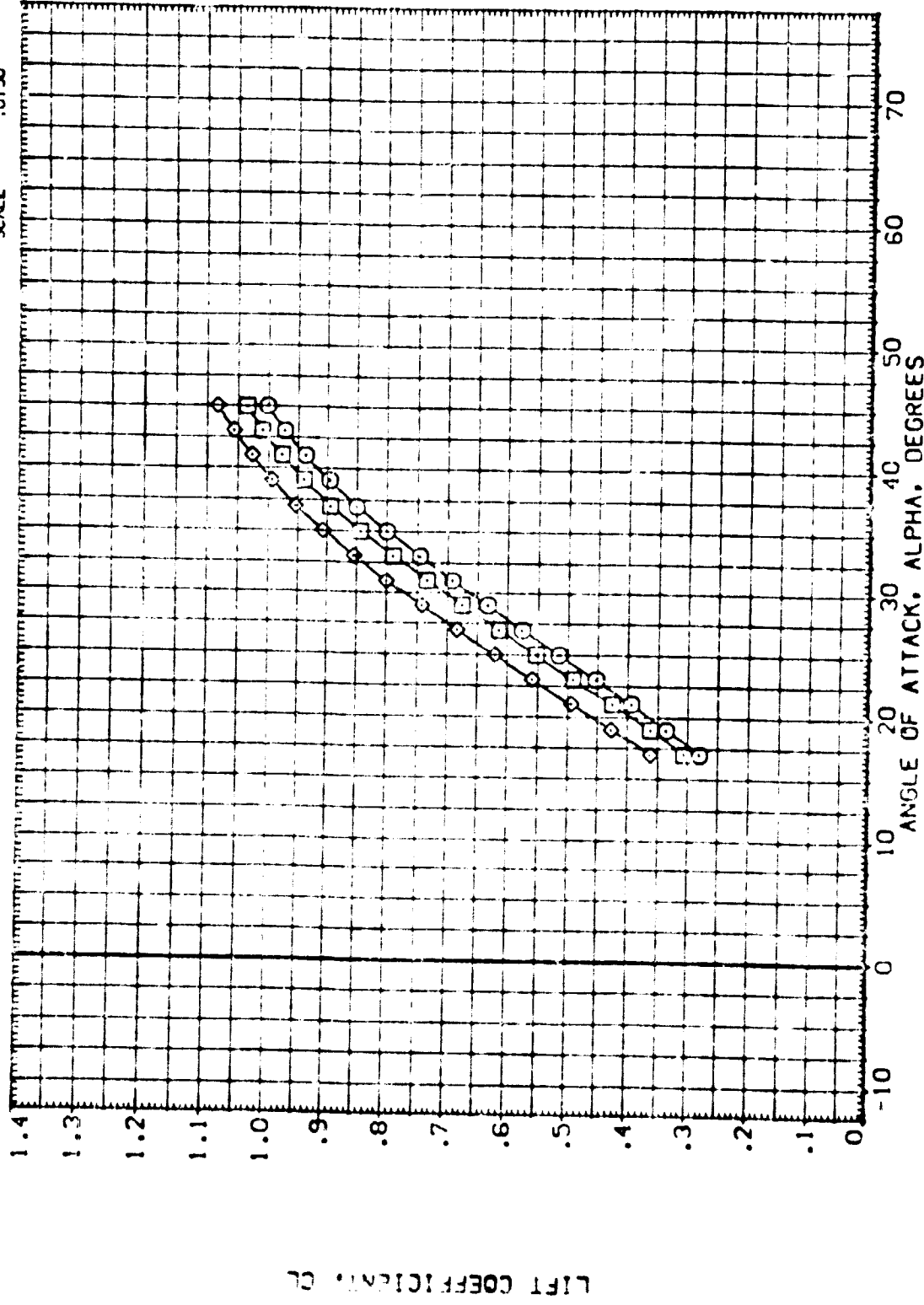


FIG. 7 FULL SPAN ELEVON EFFECTIVENESS (POSITIVE DEFLECTIONS)

(A)MACH = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(A1V001)	QAT9 B26 C9 E43 F8 M16 N28 R5 V8 V116	.000	.000	.000	.000	SREF 2690.0000 SQ.FT.
(A1V017)	QAT9 B26 C9 E43 F8 M16 N28 R5 V8 V116	10.000	10.000	10.000	10.000	LREF 474.8100 IN.
(A1V020)	QAT9 B26 C9 E43 F8 M16 N28 R5 V8 V116	20.000	20.000	20.000	20.000	BREF 936.6800 IN. X0
						XTRP 1076.6800 IN. Y0
						ZTRP 375.0000 IN. Z0
						SCALE .0150

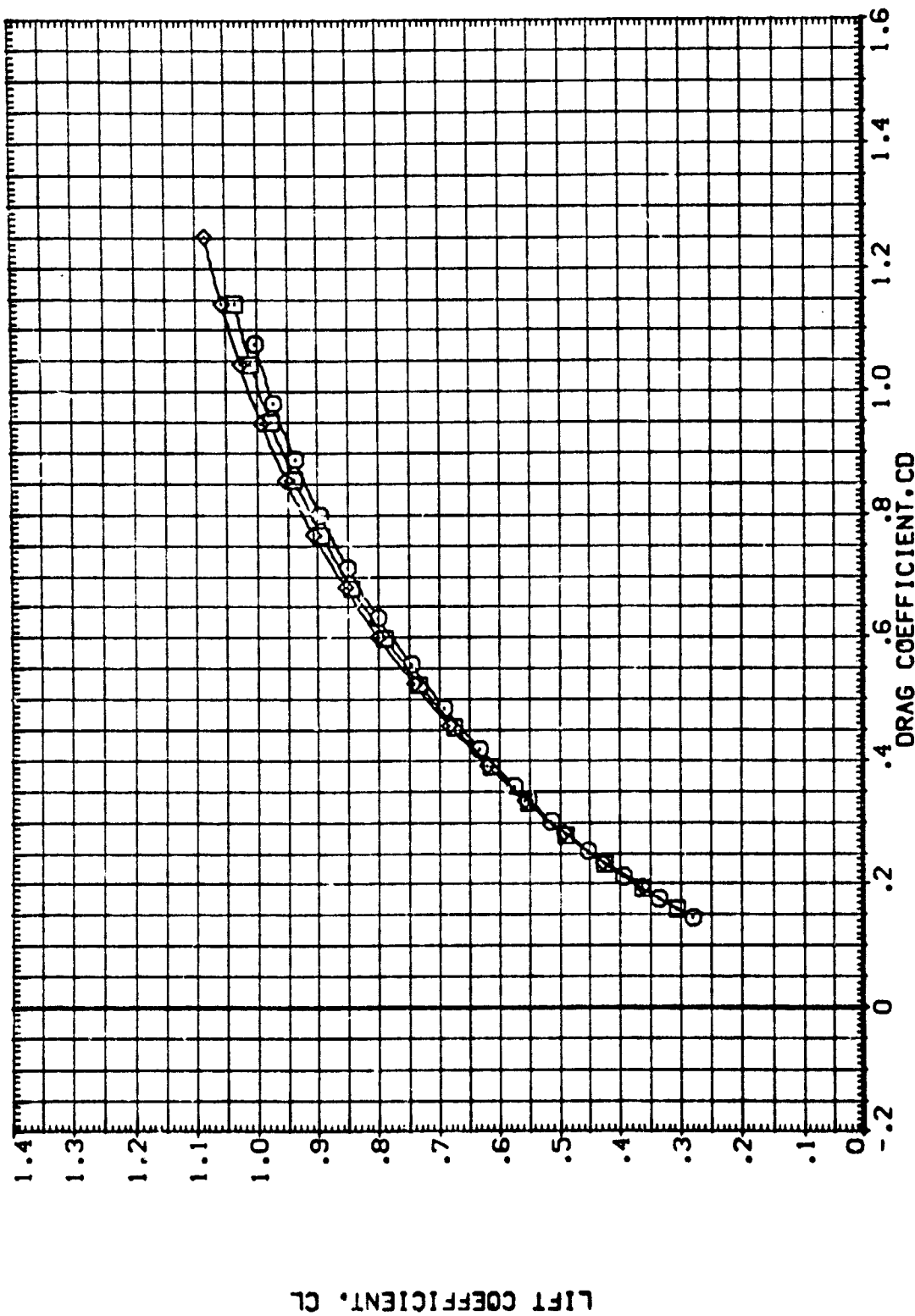


FIG. 7 FULL SPAN ELEVON EFFECTIVENESS (POSITIVE DEFLECTIONS)

(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (ATW001) □ CA79 B26 C9 E43 F8 H16 N28 R5 V8 V116
 (ATW017) □ CA79 B26 C9 E43 F8 H16 N28 R5 V8 V116
 (ATW020) ◇ CA79 B26 C9 E43 F8 H16 N28 R5 V8 V116

ELV-L0 0.000
 10.000
 20.000

ELV-L1 0.000
 10.000
 20.000

ELV-R1 0.000
 10.000
 20.000

ELV-R0 0.000
 10.000
 20.000

REFERENCE INFORMATION
 SREF 2690.0000 SO.FT.
 LREF 474.9100 IN.
 BREF 936.6800 IN.
 XTRP 1076.6800 IN.X0
 YTRP 0.0000 IN.Y0
 ZTRP 375.0000 IN.Z0
 SCALE .0150

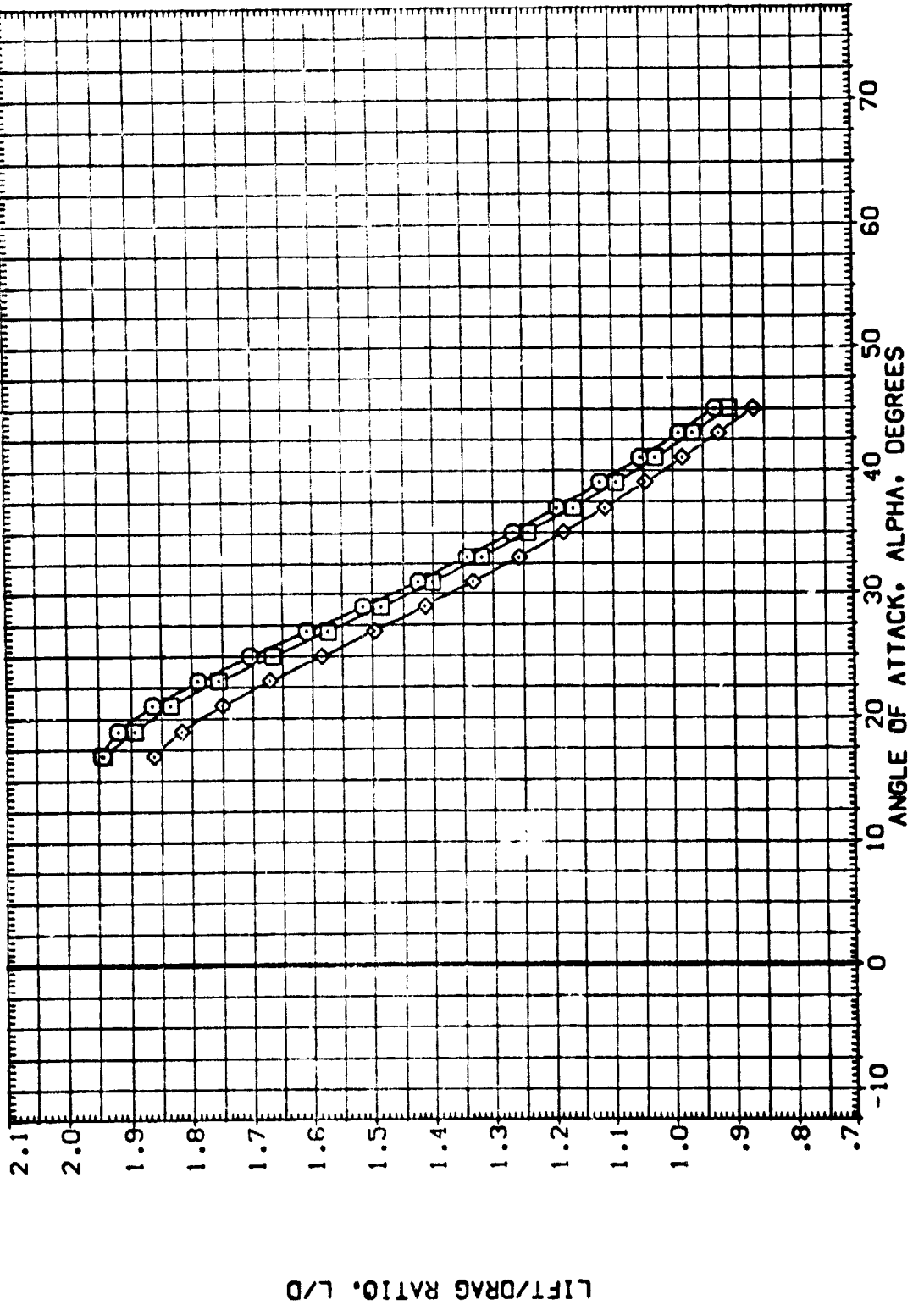


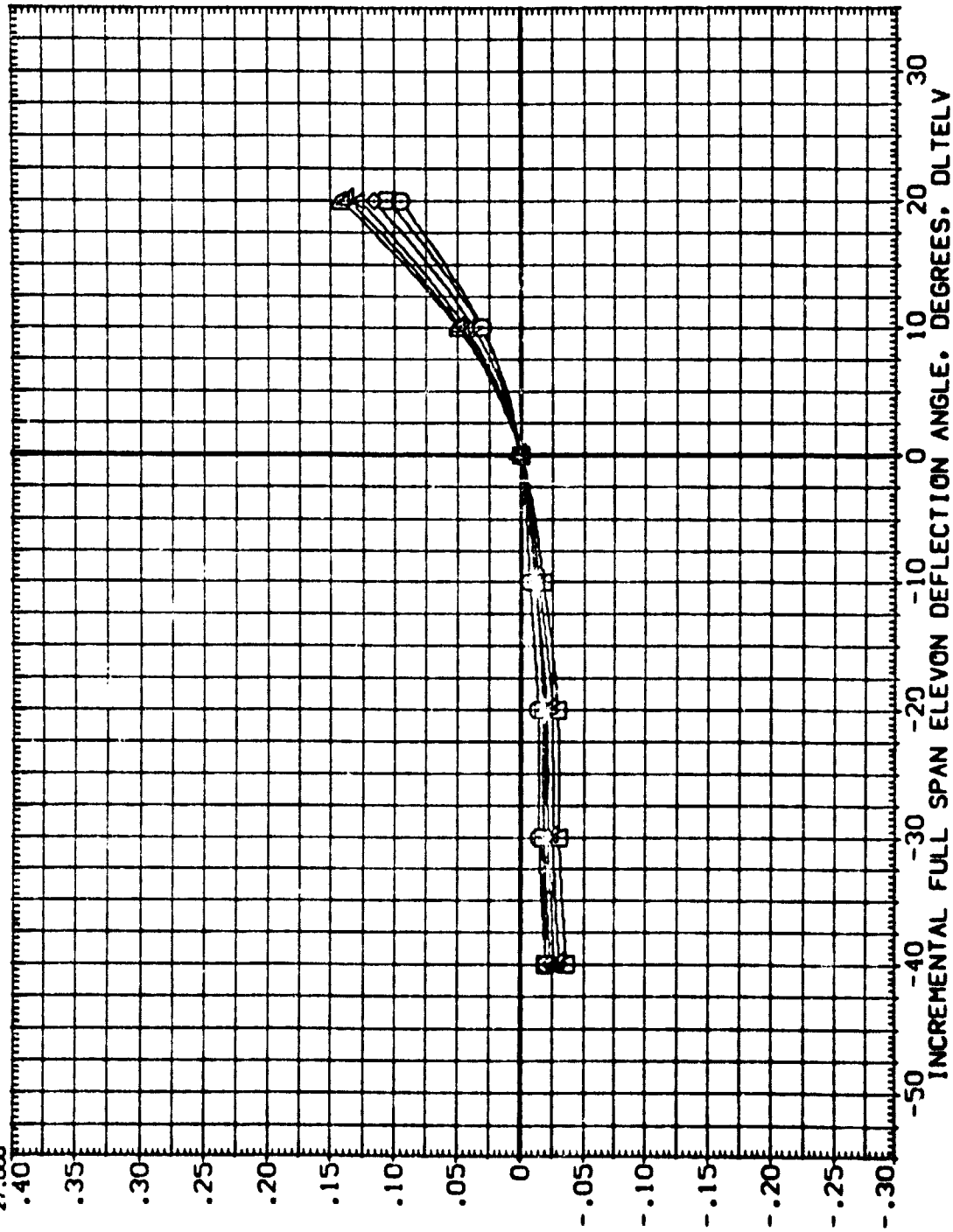
FIG. 7 FULL SPAN ELEVON EFFECTIVENESS (POSITIVE DEFLECTIONS)

(A)MACH = 8.00



0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (ITW025)

SYMBOL		PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION			
□	ALPHA	8.000	CLREFP	.000	ITW025	DLTELY	SREF	2690.0000	50.FT.
□	BETA	.000	SPOBRK	56.000	ITW025	-40.000	LREF	474.8100	IN.
□	RUDDER	.000	RVL	3.530	ITW025	-10.000	BREF	936.6800	IN.
□					ITW001	10.000	XPRP	1076.6800	IN. X0
□					ITW020	20.000	YPRP	0.0000	IN. Y0
□							ZPRP	375.0000	IN. Z0
□							SCALE	.0150	



INCREMENTAL NORMAL FORCE COEFFICIENT, DLTCN

INCREMENTAL FULL SPAN ELEVON DEFLECTION ANGLE, DEGREES, DLTELY

FIG. 8 INCREMENTAL EFFECTS OF ELEVON DEFLECTION

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (ITW025)

SYMBOL		PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION			
□	ALPHA	8.000	DLBDFP	.000	DATASET	DL TELV	SREF	2650.0000	SQ.FT.
◇	MACH	.000	SPOBRK	55.000	ITW025	-30.000	LREF	474.8100	IN.
△	BETA	.000	RNVL	3.530	ITW015	-10.000	BREF	936.6800	IN.
▽	RUDDER				ITW001	10.000	XREF	1076.6800	IN.X0
◇					ITW020		YREF	.0000	IN.Y0
							ZREF	375.0000	IN.Z0
							SCALE	.0150	

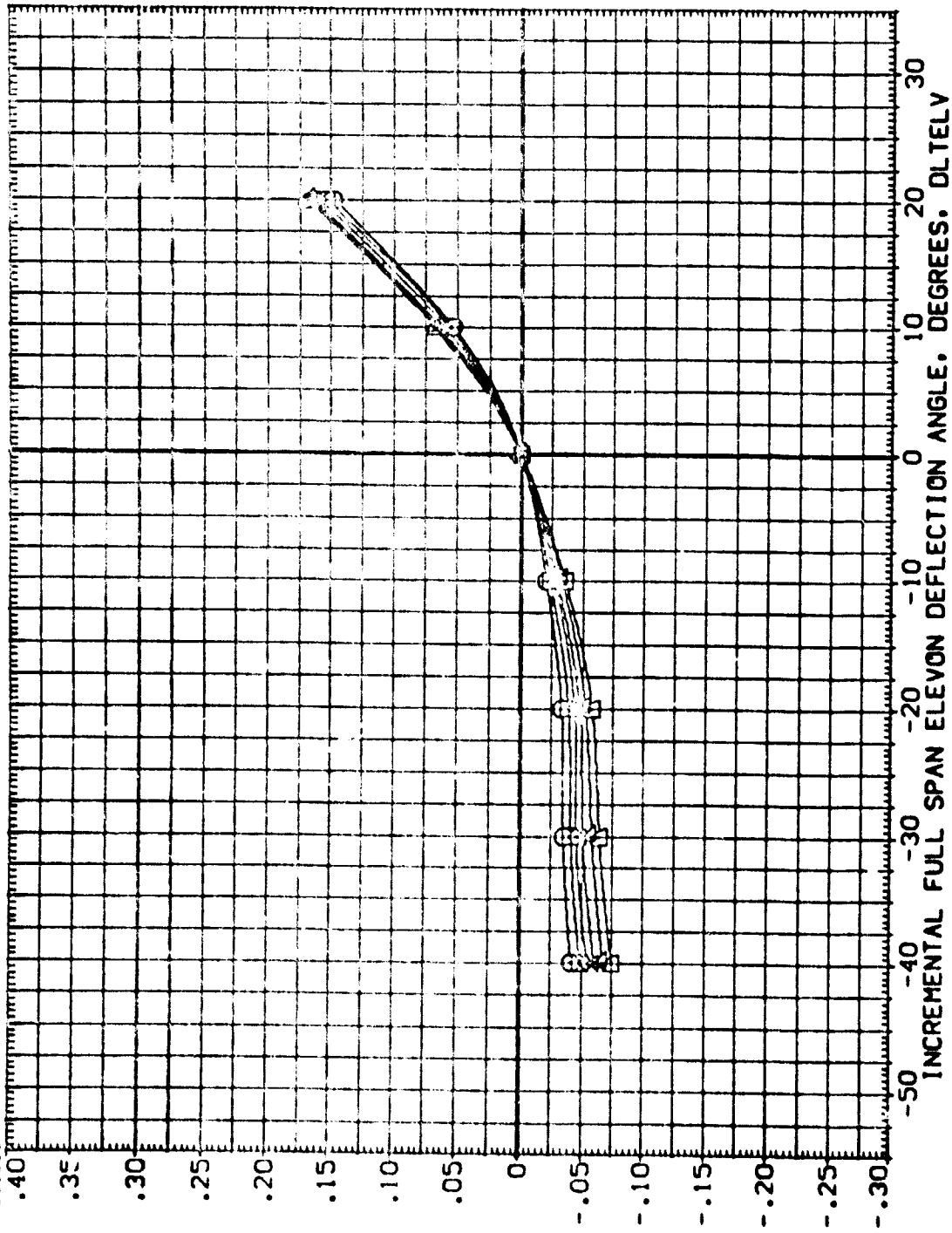


FIG. 8 INCREMENTAL EFFECTS OF ELEVON DEFLECTION

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (JTW025)

ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
17.000	8.000	DLBDFP	.000 DATASET	2630.0000 SO.FT.
19.000	.000	SPDRK	55.000 ITW025	474.8100 IN.
21.000	.000	RV/L	3.530 ITW015	936.6800 IN.
23.000	.000		ITW001	1076.6800 IN.
25.000			ITW020	375.0000 IN.
27.000				375.0150 IN.

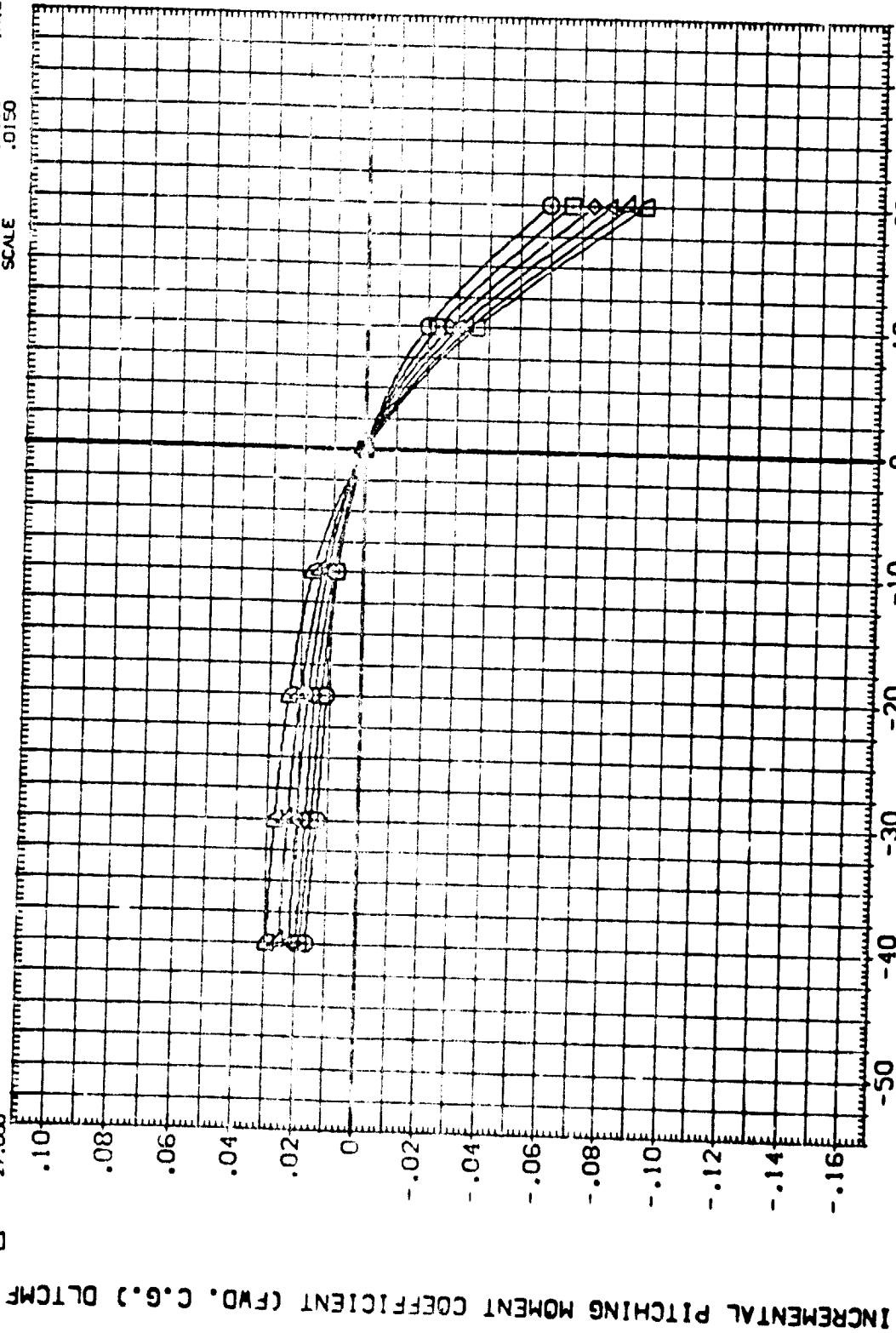


FIG. 8 INCREMENTAL EFFECTS OF ELEVON DEFLECTION

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (ITW025)

SYMBOL	ALPHA	MACH	BETA	PLUDDER	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
○	41.000	.000	.000	.000	DLBOFP	DLTELY	2630.0000
□	43.000	.000	.000	.000	SPOBRK	DLTELY	474.8100
◇	45.000	.000	.000	.000	RVL	DLTELY	936.6800
							1076.6800
							375.0000
							375.0000
							.0150

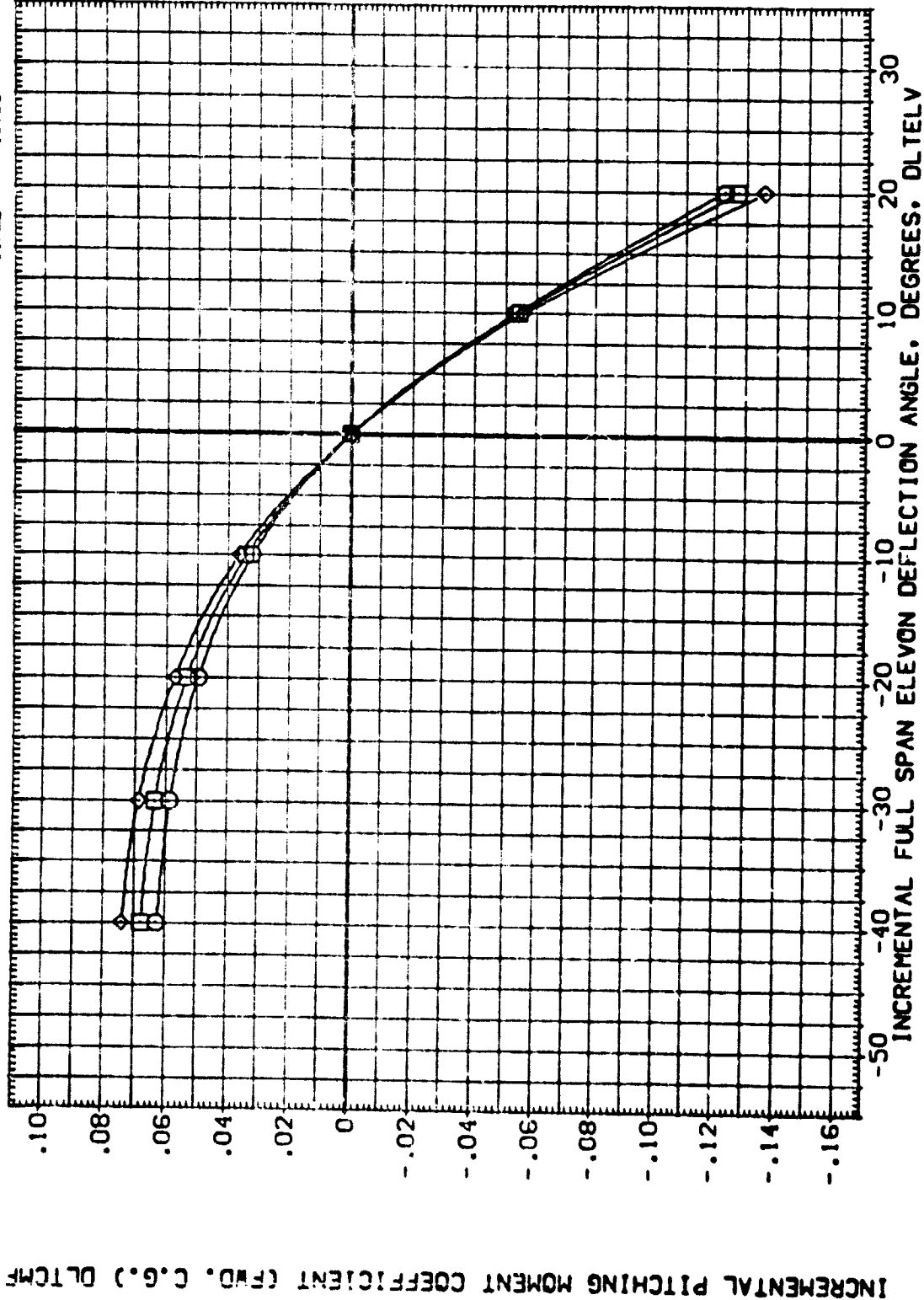


FIG. 8 INCREMENTAL EFFECTS OF ELEVON DEFLECTION

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (ITW025)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	MACH	.000	DI BOFF	2630.0000	50.FT.
19.000	BETA	.000	SPOBRK	474.8100	IN.
21.000	RUDDER	.000	RVL	936.6800	IN.
23.000		3.530		1076.6800	IN.X0
25.000				375.0000	IN.Y0
27.000				.0150	IN.Z0
				SCALE	

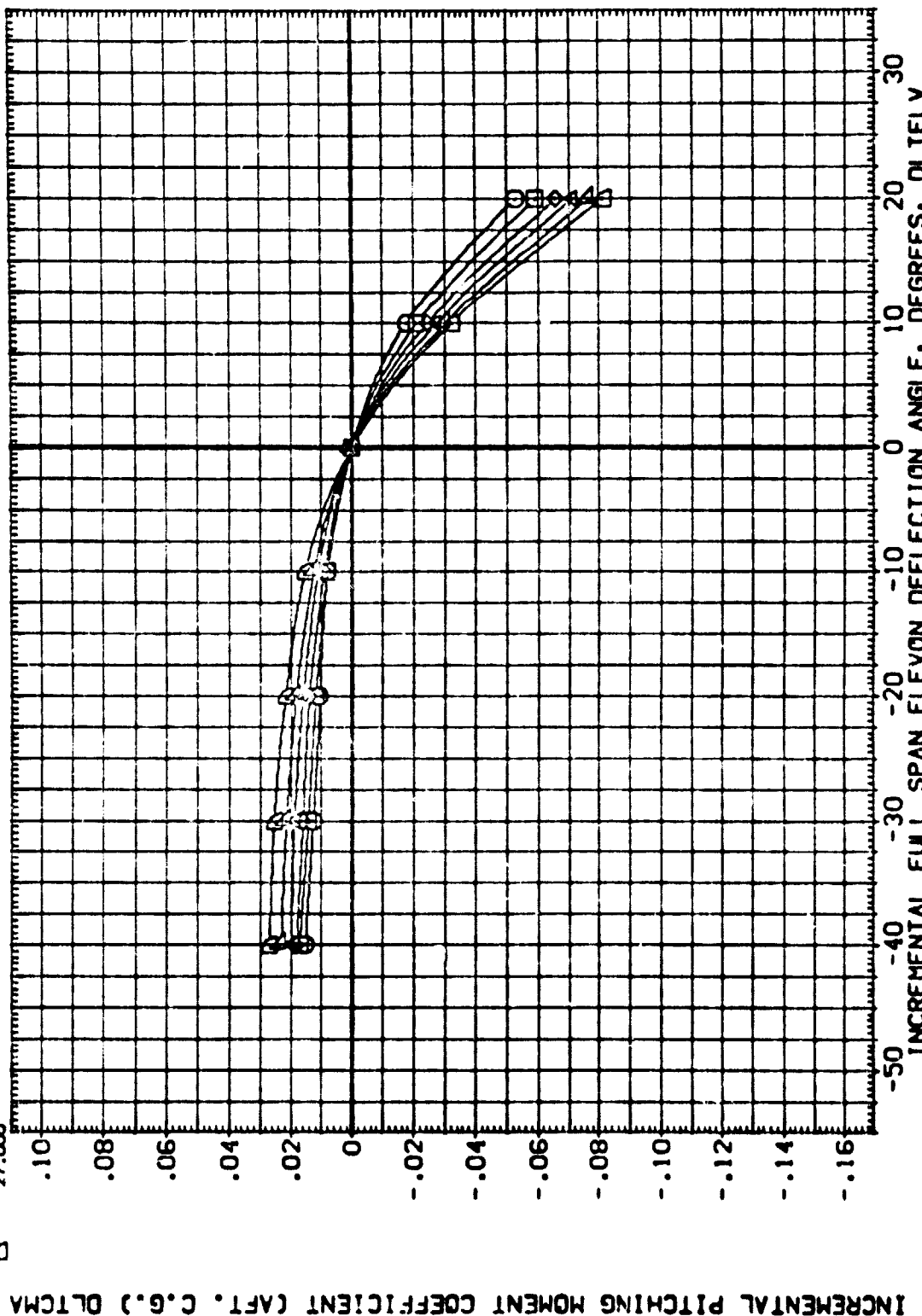
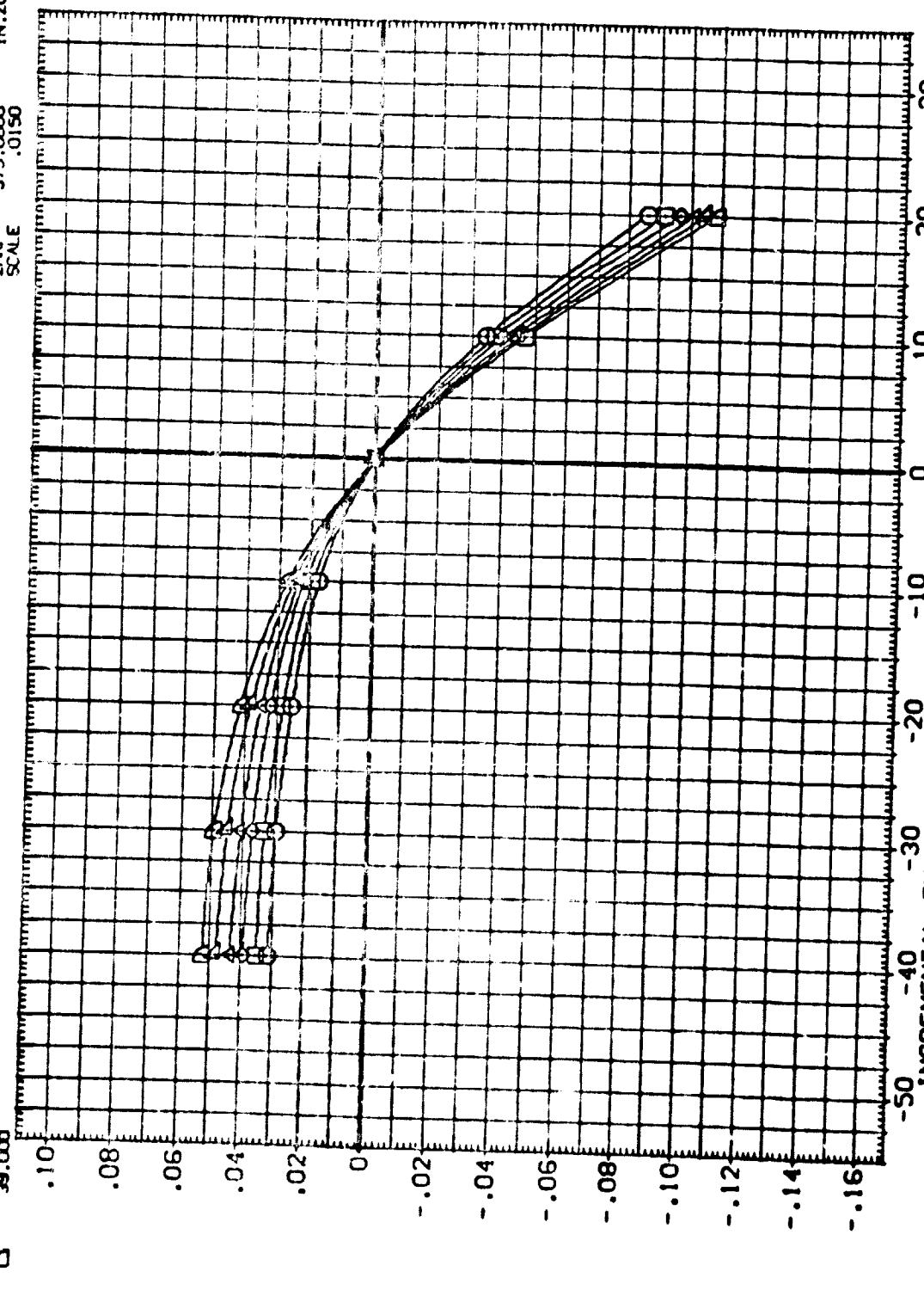


FIG. 8 INCREMENTAL EFFECTS OF ELEVON DEFLECTION

0A79 826 C9 E43 F8 M16 N28 R5 V8 W116 (ITW025)

ALPHA	MACH	BETA	RUDER	PARAMETRIC VALUES	.000	DATASET	DATA SOURCE	DATASET	DLTELY	SREF	REFERENCE INFORMATION
29.000	.000	.000	.000	DLBDFP	55.000	ITW025	DLTELY	11W046	-30.000	LREF	2690.0000
31.000	.000	.000	.000	SPDRK	3.530	ITW015	-40.000	11W023	-10.000	XREF	474.8100
33.000	.000	.000	.000	RV/L		ITW001	-20.000	11W017	10.000	ZREF	536.6800
35.000							.000			YREF	1076.6800
37.000							20.000			ZTRP	.0000
39.000										YTRP	375.0000
										SCALE	.0150



INCREMENTAL PITCHING MOMENT COEFFICIENT (Cp, C.G.) DLTCM

FIG. 8 INCREMENTAL EFFECTS OF ELEVON DEFLECTION

0A79 826 C9 E43 F8 M16 N28 R5 V8 M116 (ITW025)

SYMBOL	ALPHA	MACH	BETA	RUDDER	PARAMETRIC VALUES	DATA SOURCE	DATA SET	DL TELV	DL TELV	DL TELV	SCALE	REFERENCE INFORMATION
○	41.000	0.000	DL90FP	0.000	.000	ITW025	-40.000	ITW025	-30.000	SREF	2690.0000	SO.FT.
□	43.000	.000	SPOBRK	55.000	55.000	ITW025	-20.000	ITW025	-10.000	LREF	474.8100	IN.
◇	45.000	.000	RAVL	3.530	3.530	ITW001	.000	ITW001	10.000	BREF	936.6800	IN.
						ITW020	20.000	ITW020	10.000	XMRP	1076.6800	IN.X0
										YMRP	375.0000	IN.Y0
										ZMRP	375.0000	IN.Z0

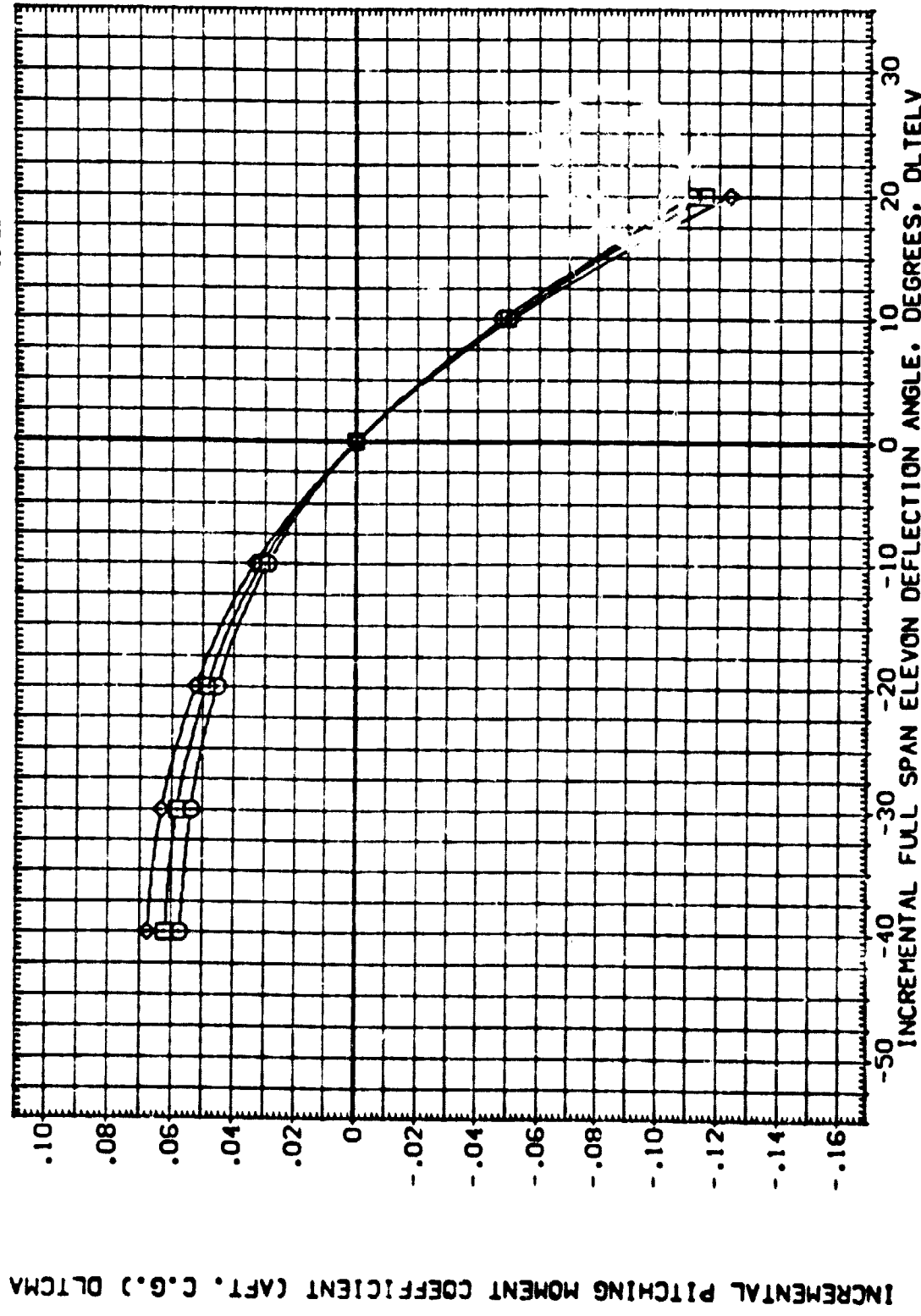
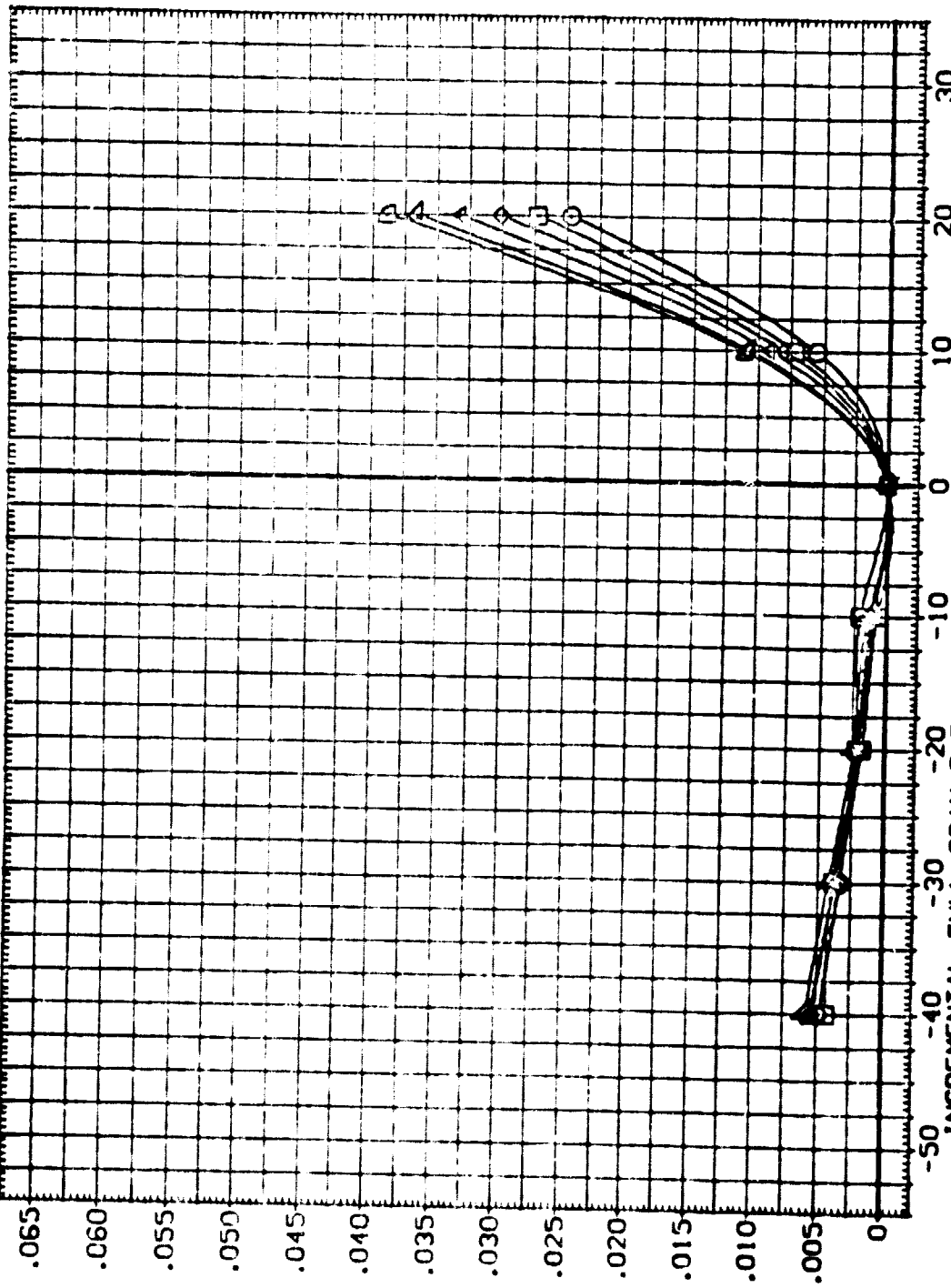


FIG. 8 INCREMENTAL EFFECTS OF ELEVON DEFLECTION

0A79 826 C9 E43 F8 M16 N28 R5 V8 W116 (ITW025)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	.000 DATASET	DATA SOURCE	DATASET	DLTELY	DLTELY	SIZEF	REFERENCE INFORMATION
○	17.000	8.000	DLBOFP	ITW025	DLTELY	ITW046	-40.000	-20.000	2050.0000	50.FT.
□	19.100	.000	SFOBRK	ITW015	-40.000	ITW045	-20.000	474.8100	IN.	
◇	21.00	.000	RVL	ITW001	-20.000	ITW023	-10.000	936.6300	IN.	
△	23.000	.000		ITW020	20.000	ITW017	10.000	1076.6600	IN.	
▽	25.000							375.0000	IN.	
○	27.000							.0150	IN.	

INCREMENTAL AXIAL FORCE COEFFICIENT, DLTA

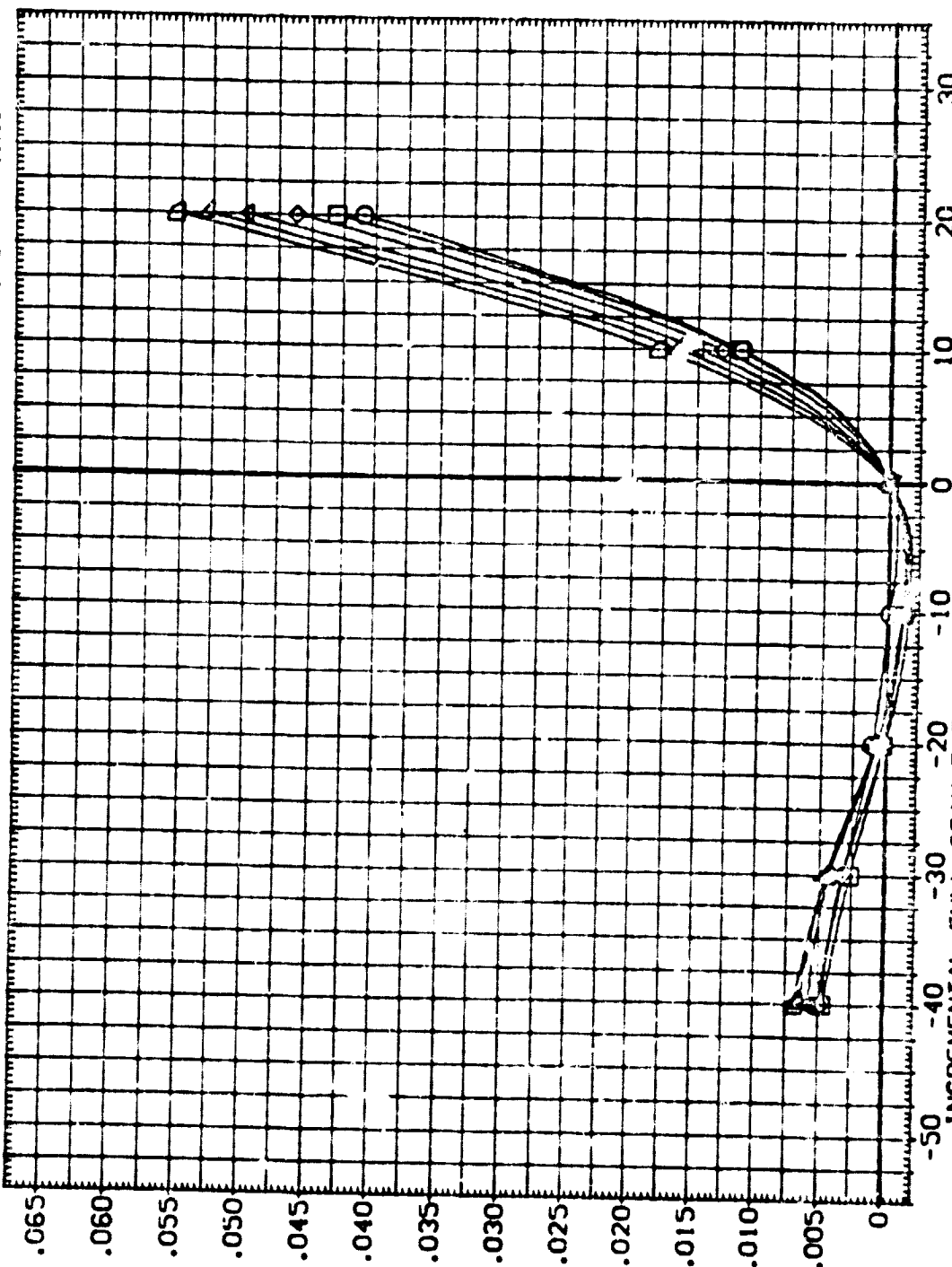


INCREMENTAL FULL SPAN ELEVON DEFLECTION ANGLE, DEGREES. DLTELY
 FIG. 8 INCREMENTAL EFFECTS OF ELEVON DEFLECTION



0A79 B26 C9 E43 F8 M15 N28 R5 V8 W116 (1TW025)

SYMBOL	ALPHA	MACH	BETA	RUDDER	PARAMETRIC VALUES	DATA SOURCE	DATASET	DLTCLV	DLTCLV	DLTCLV	SREF	REFERENCE INFORMATION
○	29.000	8.000	0.000	0.000	DLBDFP	.000	11W025	-40.000	11W046	-30.000	LREF	2690.0000
□	31.000	.000	.000	.000	SPOBRK	55.000	11W015	-20.000	11W023	-10.000	BREF	474.8100
△	33.000	.000	.000	.000	RVL	3.530	11W001	.000	11W017	10.000	XPRP	936.6800
▽	35.000	.000	.000	.000			11W020	.000			YPRP	1076.6800
◇	37.000							20.000			ZPRP	.0000
◇	39.000										SCALE	375.0000
												IN.20
												IN.10
												IN.50
												IN.



INCREMENTAL AXIAL FORCE COEFFICIENT, DLTCA

FIG. 8 INCREMENTAL EFFECTS OF ELEVON DEFLECTION

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (ITW025)

SYMBOL
 ○
 □
 ◇

ALPHA
 41.000
 43.000
 45.000

MACH
 9.000
 .000
 .000

PARAMETRIC VALUES
 DLBOFP
 SPOBRK
 RVVL

.000
 55.000
 3.530

DATASET
 ITW025
 ITW015
 ITW001
 ITW020

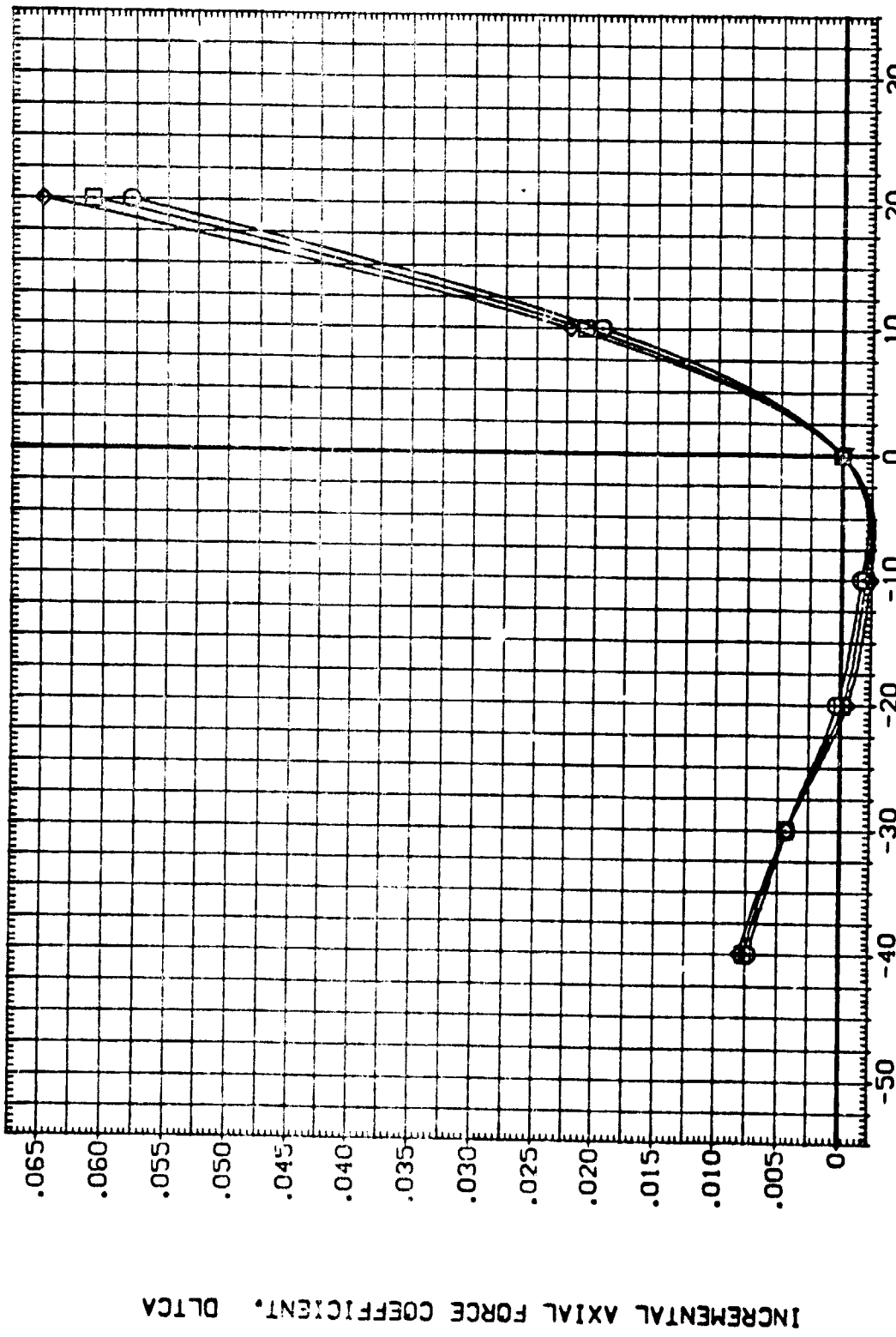
DATA SOURCE
 DLTELY
 -40.000
 -20.000
 .000
 20.000

DATASET
 ITW046
 ITW023
 ITW017

DLTELY
 -30.000
 -10.000
 10.000

SCALE
 .0150

REFERENCE INFORMATION
 SQ.FT.
 2690.0000
 474.8100
 936.8600
 1076.8600
 .0000
 375.0000
 .0150



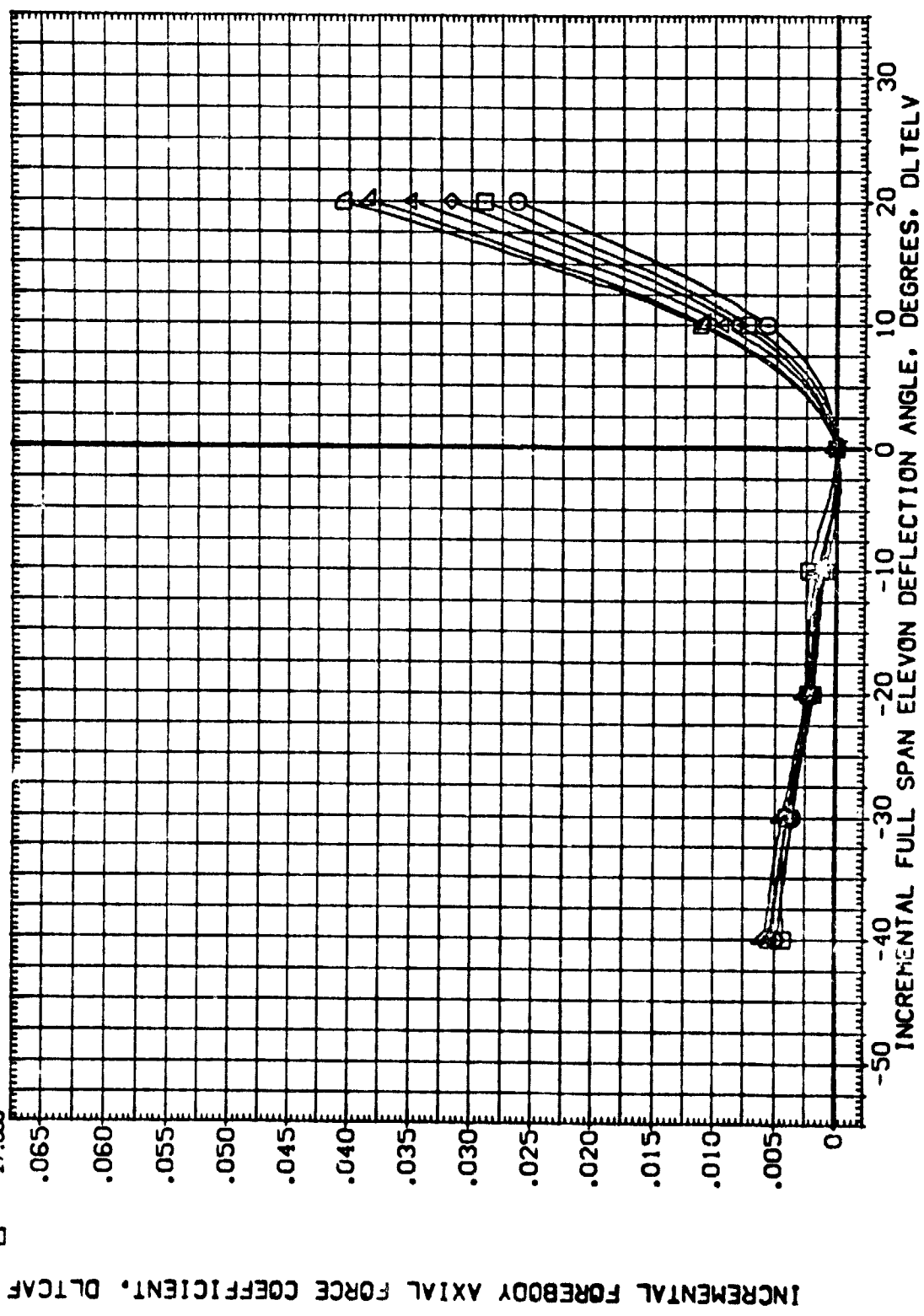
INCREMENTAL AXIAL FORCE COEFFICIENT, DLTCA

INCREMENTAL FULL SPAN ELEVON DEFLECTION ANGLE, DEGREES, DLTELY

FIG. 8 INCREMENTAL EFFECTS OF ELEVON DEFLECTION

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (ITW025)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	MACH	.000	DLTELY	SREF	SD.FT.
17.000	8.000	DLBOFF	DLTELY	LREF	IN.
19.000	.000	SPOBRK	DLTELY	BREF	IN.
21.000	.000	RVVL	DLTELY	XMRP	IN.X0
23.000	.000	RVVL	DLTELY	YMRP	IN.Y0
25.000	.000	RVVL	DLTELY	ZMRP	IN.Z0
27.000	.000	RVVL	DLTELY	SCALE	.0150



INCREMENTAL FOREBODY AXIAL FORCE COEFFICIENT, DLTCAF

FIG. 8 INCREMENTAL EFFECTS OF ELEVON DEFLECTION

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (ITW025)

SYMBOL	ALPHA	MACH	BETA	RUDDER	PARAMETRIC VALUES	.000	DATASET	DLTELY	DATA SOURCE	DATASET	DLTELY	SREF	REFERENCE INFORMATION
□	29.000	8.000	0.000	0.000	DLBDFP	56.000	ITW025	-40.000	DLTELY	ITV046	-30.000	474.8100	50.FT.
□	31.000	8.000	0.000	0.000	SPOBRK	3.530	ITW015	-20.000	DLTELY	ITV023	-10.000	936.6800	IN.
◇	33.000	8.000	0.000	0.000	RNVL		ITW001	0.000	DLTELY	ITV017	10.000	1076.6800	IN. 20
▽	35.000	8.000	0.000	0.000			ITW020	20.000	DLTELY			375.0000	IN. 10
▽	37.000	8.000	0.000	0.000					DLTELY			375.0000	IN. 20
□	39.000	8.000	0.000	0.000					DLTELY			375.0000	IN. 20
													SCALE .0150

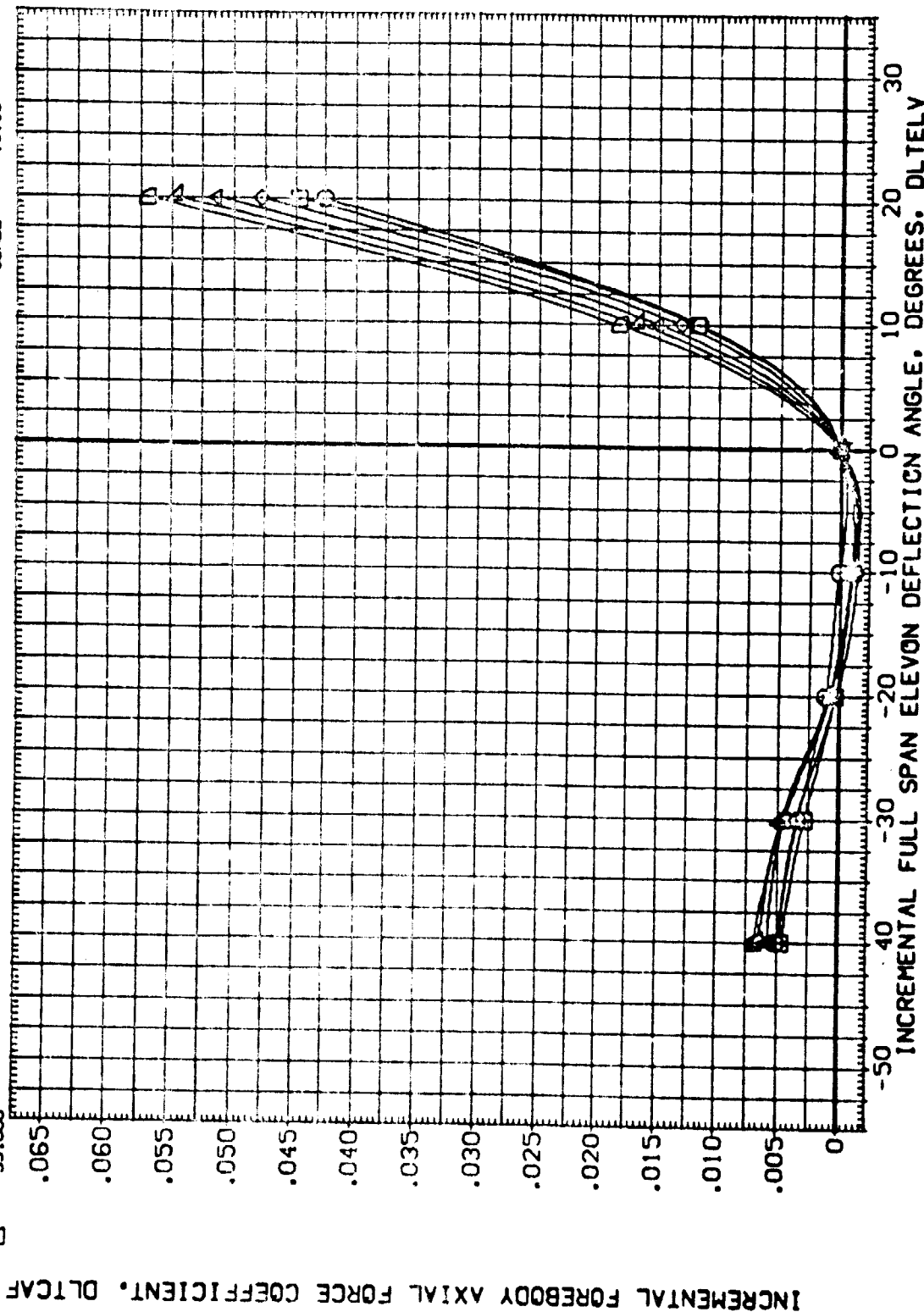


FIG. 8 INCREMENTAL EFFECTS OF ELEVON DEFLECTION

0A79 826 C9 E43 F8 M16 N28 R5 V8 W116 (ITW025)

SYMBOL		PARAMETRIC VALUES			DATA SOURCE			REFERENCE INFORMATION			
○	ALPHA	41.000	MACH	8.000	DLBOFP	.000	DATASET	DLTELY	SREF	2690.0000	50.FT.
□	BETA	43.000	BETA	.000	SFOBRK	55.000	ITW025	-30.000	LREF	474.8100	IN.
◇	RUDDER	45.000	RUDDER	.000	RVL	3.530	ITW015	-10.000	BREF	936.6800	IN.
							ITW017	10.000	XPRP	1076.6800	IN. X0
							ITW001	20.000	YPRP	.0000	IN. Y0
							ITW021	20.000	ZPRP	375.0000	IN. Z0
								SCALE		.0150	

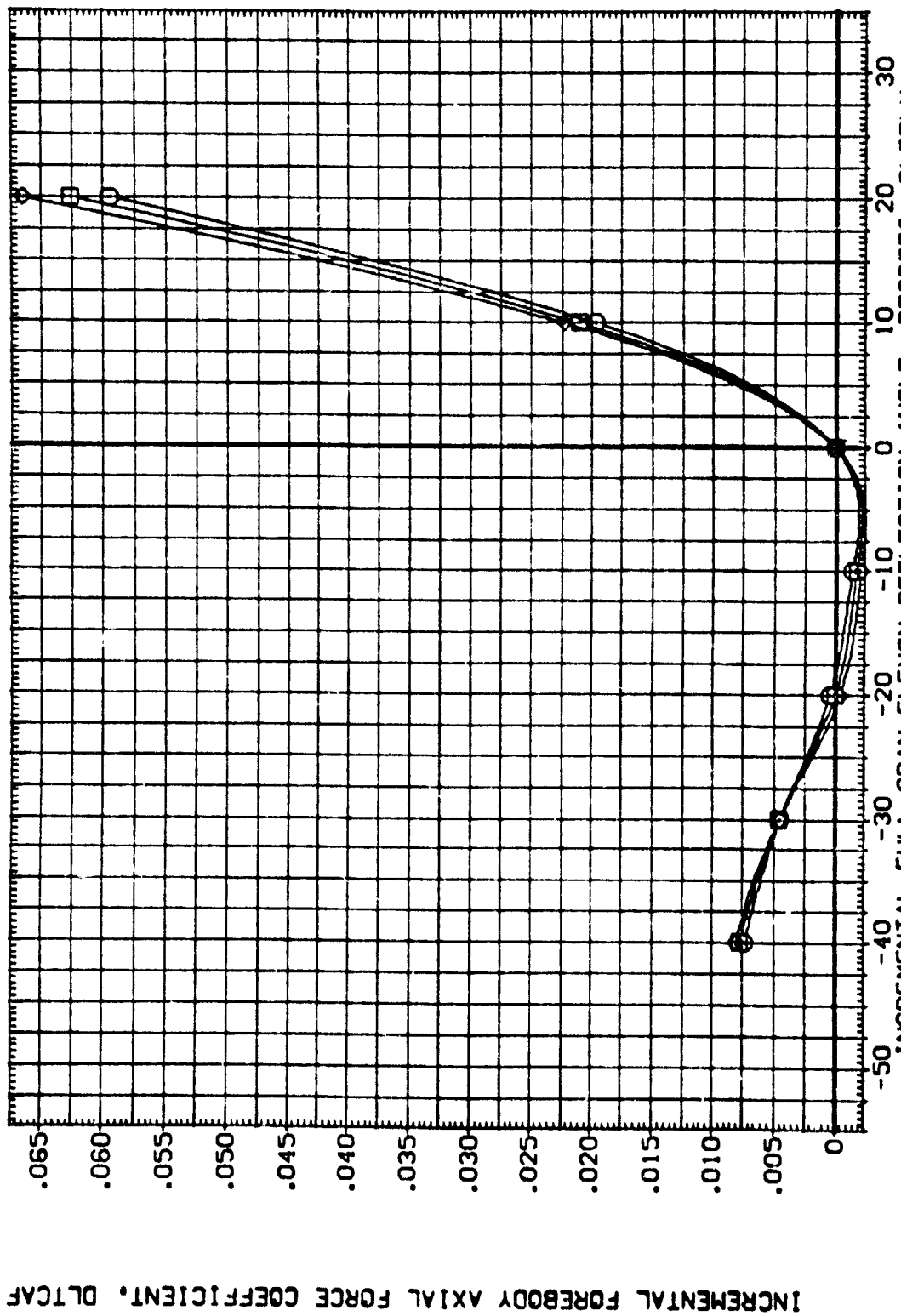


FIG. 8 INCREMENTAL EFFECTS OF ELEVON DEFLECTION

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (1TW025)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	MACH	.000	DLTCLV	SREF	SO.FT.
29.000	8.000	DLTCLV	DLTCLV	LREF	IN.
31.000	.000	DLTCLV	DLTCLV	BREF	IN.
33.000	.000	DLTCLV	DLTCLV	XTRP	IN.
35.000	.000	DLTCLV	DLTCLV	YTRP	IN.
37.000	.000	DLTCLV	DLTCLV	ZTRP	IN.
39.000	3.530	DLTCLV	DLTCLV	SCALE	IN.
	55.000	DLTCLV	DLTCLV		
	3.530	DLTCLV	DLTCLV		
	RV/L	DLTCLV	DLTCLV		
	DLBOFP	DLTCLV	DLTCLV		
	SPDRK	DLTCLV	DLTCLV		
	RV/L	DLTCLV	DLTCLV		
	RUDDER	DLTCLV	DLTCLV		
	BETA	DLTCLV	DLTCLV		
	RUDDER	DLTCLV	DLTCLV		

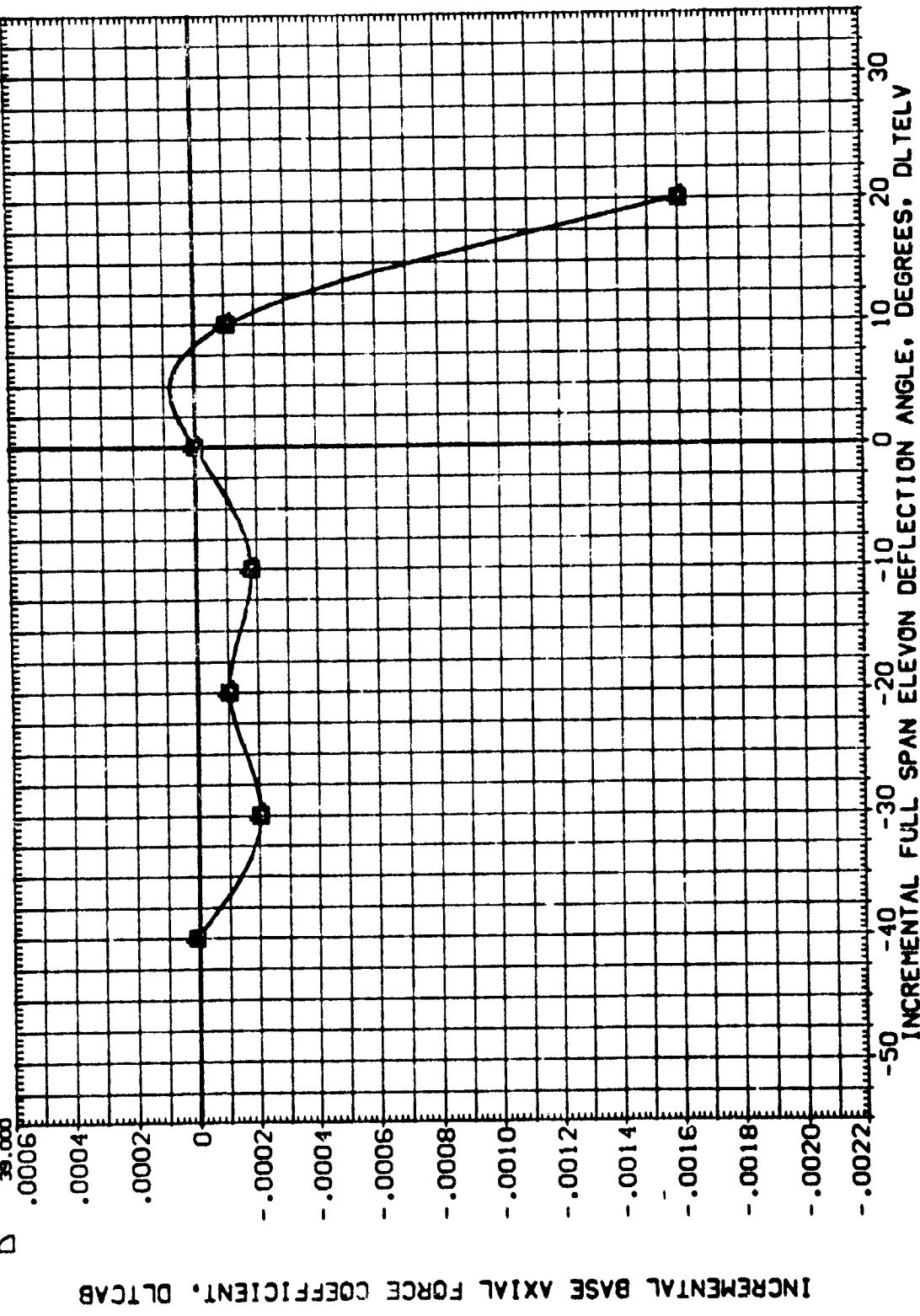


FIG. 8 INCREMENTAL EFFECTS OF ELEVON DEFLECTION

(ITW025)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116

SYMBOL		PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
○	ALPHA	41.000	MCH	.000	DATASET	REF	2850.0000
□	BETA	.000	DELTA	ITW025	DTELY	REF	474.8100
◇	RUDDER	.000	SPOBRK	56.000	ITW046	REF	936.8800
			PAUL	3.500	ITW023	REF	1076.8800
					ITW017	REF	1076.8800
						REF	575.0000
						SCALE	10.000

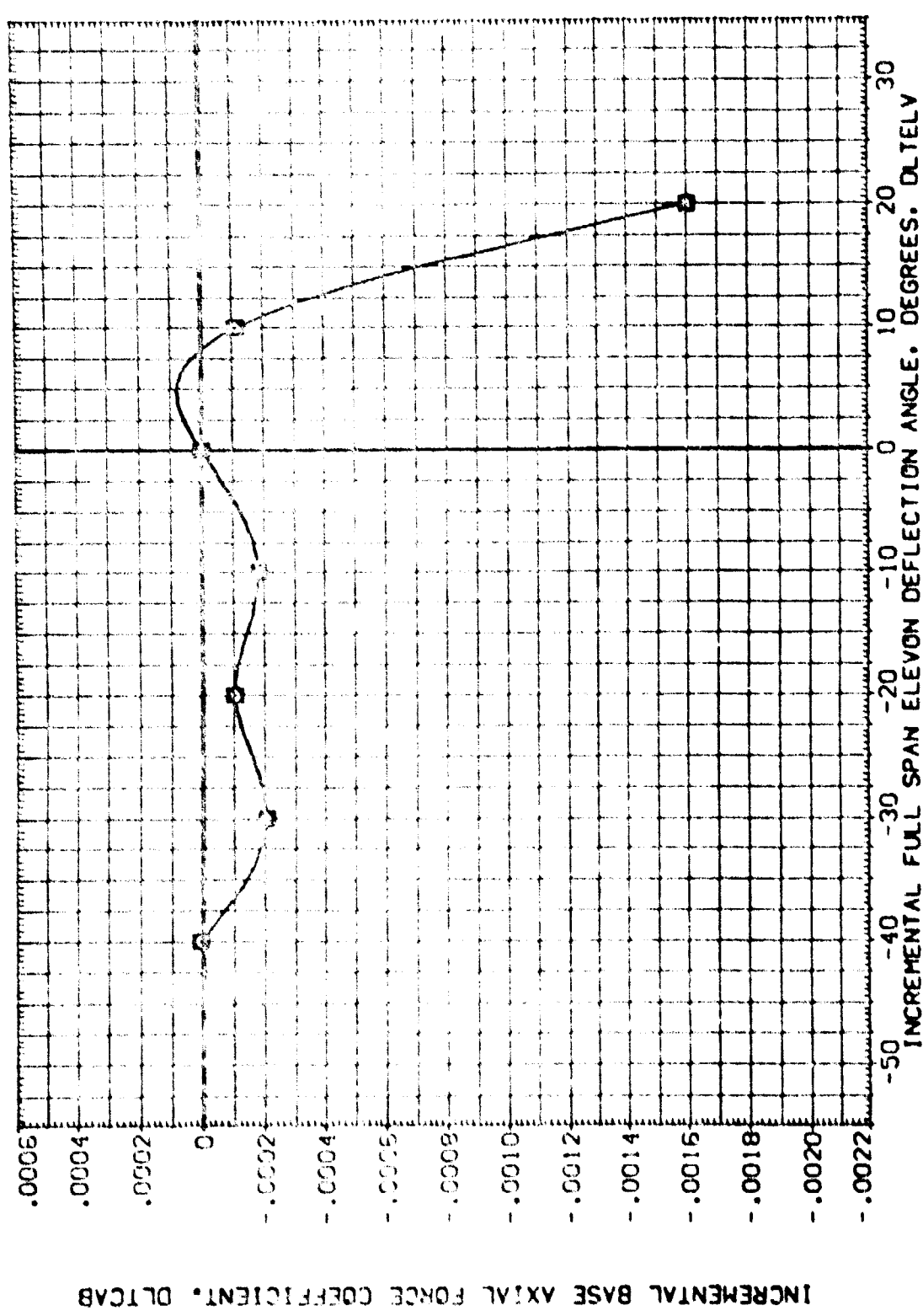
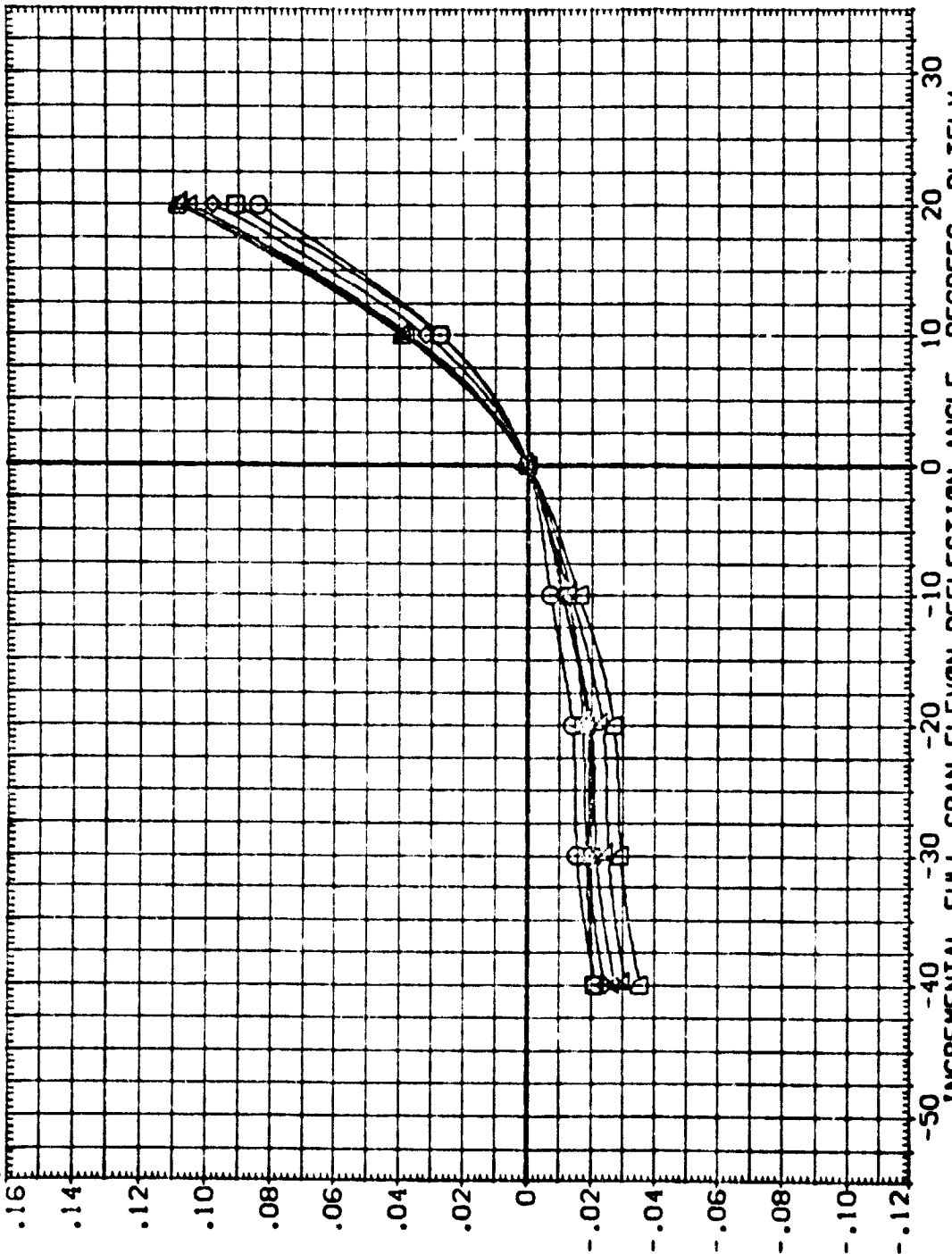


FIG. 8 INCREMENTAL EFFECTS OF ELEVON DEFLECTION

0A79 826 C9 E43 F8 M16 N28 R5 V8 W116 (ITW025)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	MACH	.000	DLTELV	SREF	SO.FT.
17.000	8.000	ITW025	-40.000	LREF	IN.
19.000	.000	ITW015	-20.000	BREF	IN.
21.000	.000	ITW001	20.000	XPRP	IN.40
23.000	.000	ITW020		YPRP	IN.10
25.000				ZPRP	IN.20
27.000				SCALE	
					375.0000
					.0150



INCREMENTAL LIFT COEFFICIENT, DLTCL

FIG. 8 INCREMENTAL EFFECTS OF ELEVON DEFLECTION

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (ITW025)

SYMBOL
 □ □ ◇ △ △ ▽

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	MACH	.003	DLTCLV	DLTCLV	SCALE
29.000	8.000	ITW025	-40.000	SREF	2650.0000
31.000	.000	ITW015	-20.000	LREF	474.8100
33.000	.000	ITW001	.000	BREF	935.6800
35.000	.000	ITW020	20.000	XFRP	1076.6800
37.000	3.530			YFRP	.0000
39.000				ZFRP	375.0000
					.0150

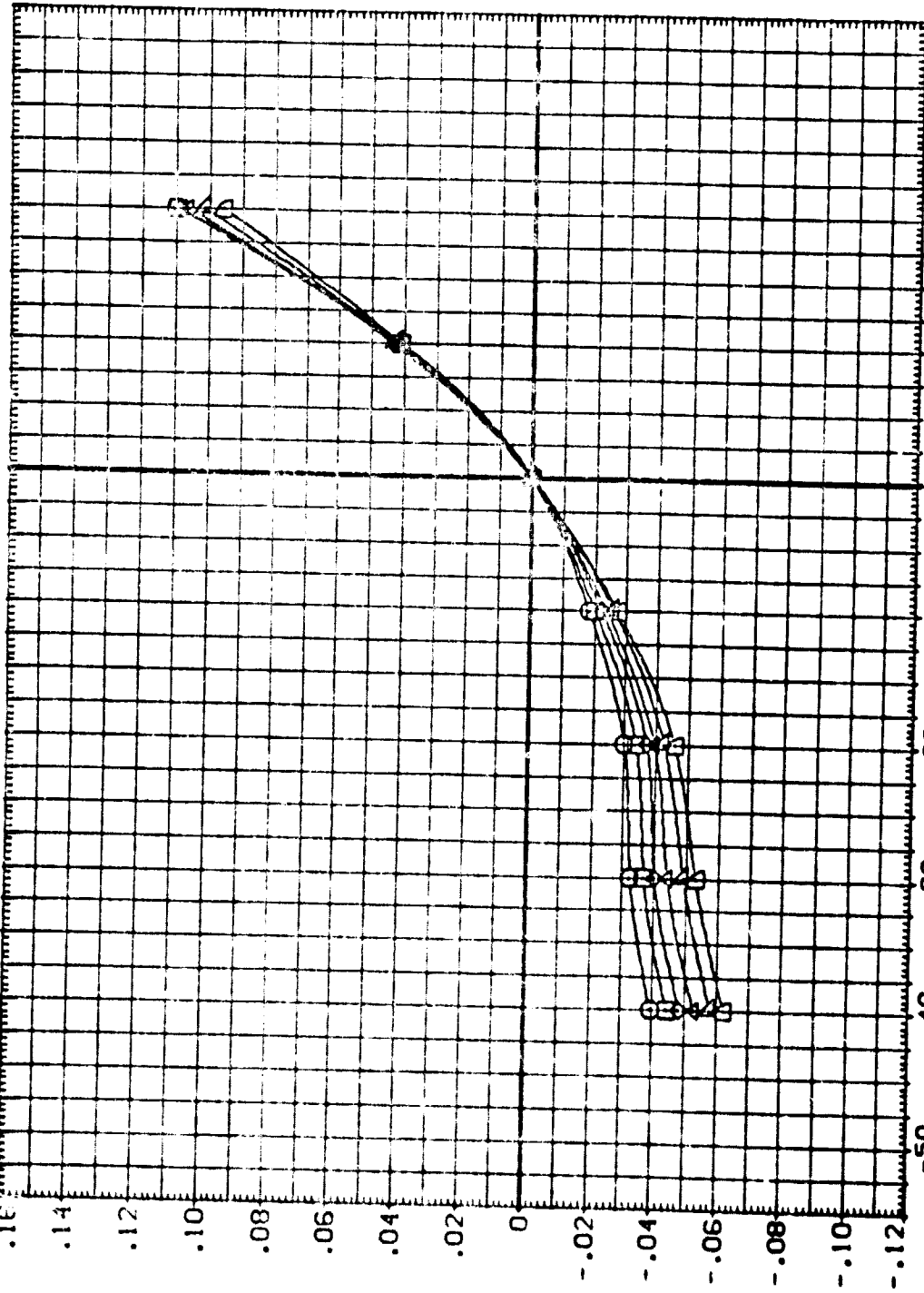


FIG. 8 INCREMENTAL EFFECTS OF ELEVON DEFLECTION

(ITWC25)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116

SYMBOL
 ○
 □
 ◇

ALPHA
 41.000
 43.000
 45.000

MACH
 BETA
 RUDDER

PARAMETRIC VALUES
 8.000 DLBOFF
 .000 SPOBRK
 .000 RV/L
 .000
 3.530
 20.000

DATA SOURCE
 DL TELV
 DATASET
 ITV025
 ITV015
 ITV001
 ITV020

DL TELV
 -40.000
 -20.000
 .000
 20.000

DATASET
 ITV046
 ITV023
 ITV017

DL TELV
 -30.000
 -10.000
 10.000

SREF
 LREF
 BREF
 YARP
 ZARP
 SCALE

2690.0000
 474.8100
 936.6800
 1076.0000
 375.0000
 .0150

50.FT.
 IN.
 IN.
 IN.
 IN.
 IN.

INCREMENTAL LIFT COEFFICIENT, DLTEL

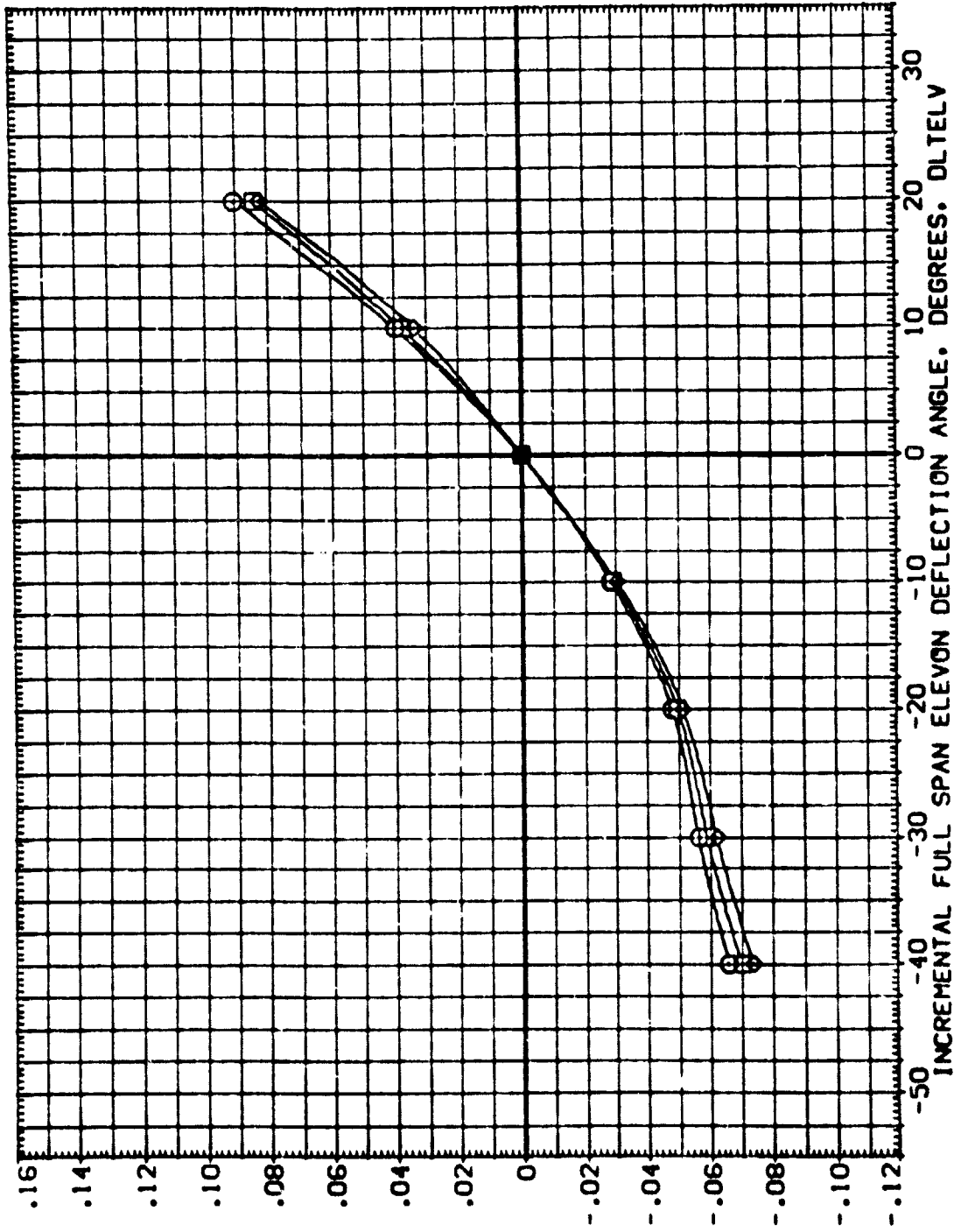


FIG. 8 INCREMENTAL EFFECTS OF ELEVON DEFLECTION

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (ITW025)

ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
17.000	8.000	DLBOFP	DL TELV	2690.0000 SQ.F.
19.000	.000	SPOBRK	DL TELV	474.8100 IN.
21.000	.000	RVAL	ITV025	936.6800 IN.
23.000	.000		ITV015	1076.6800 IN. X0
25.000			ITV001	375.0000 IN. Y0
27.000			ITV020	375.0000 IN. Z0
				SCALE .0150

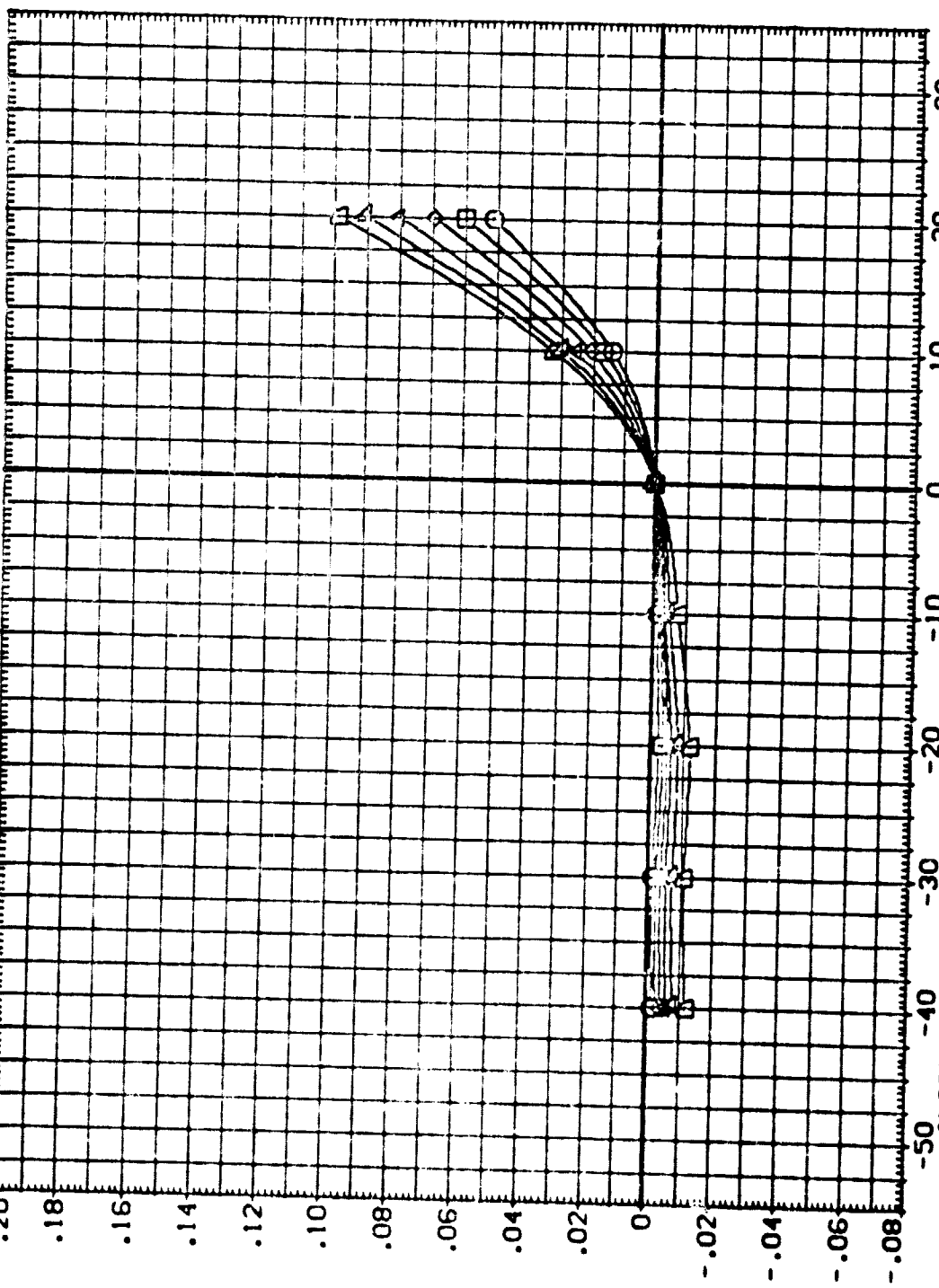


FIG. 8 INCREMENTAL EFFECTS OF ELEVON DEFLECTION

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (1TW025)

ALPHA	MACH	PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
		DLIFT	DLIFT	DLTLY	DLTLY	SREF	SQ.FT.
29.000	.000	.000	.000	.000	.000	2690.0000	IN.
31.000	.000	55.000	55.000	-40.000	-30.000	474.8100	IN.
33.000	.000	3.530	3.530	-20.000	-10.000	936.6800	IN.
35.000	.000			.000	10.000	1076.6800	IN.
37.000				20.000		375.0000	IN.
						SCALE	.0150

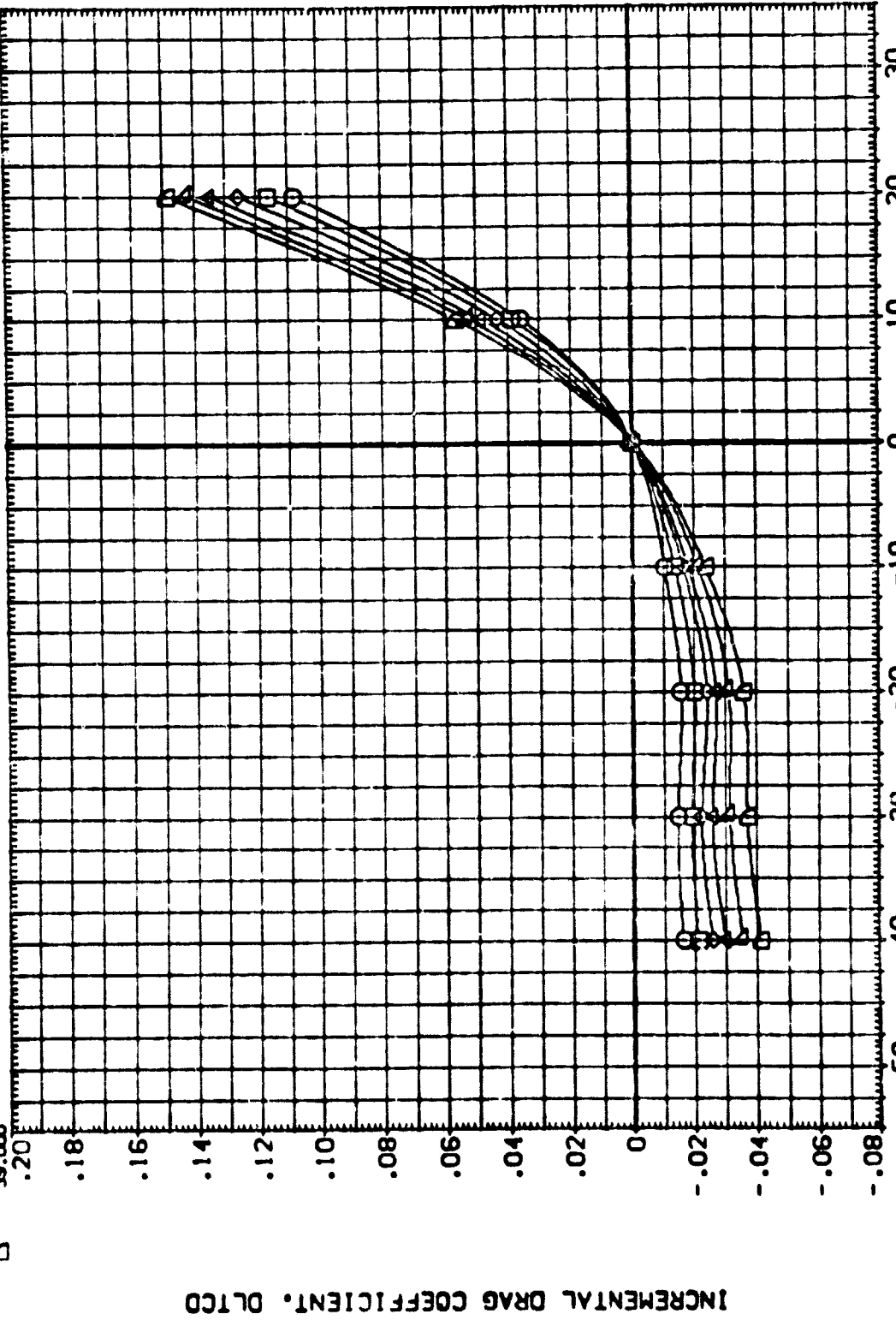


FIG. 8 INCREMENTAL EFFECTS OF ELEVON DEFLECTION

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (ITW025)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	MACH	.000	DLTELY	SREF	50.FT.
43.000	BETA	55.000	ITW025	LREF	IN.
45.000	RUDDER	3.530	ITW015	BREF	IN.
			ITW001	XREF	IN.X0
			ITW020	YREF	IN.Y0
				ZREF	IN.Z0
				SCALE	.0150

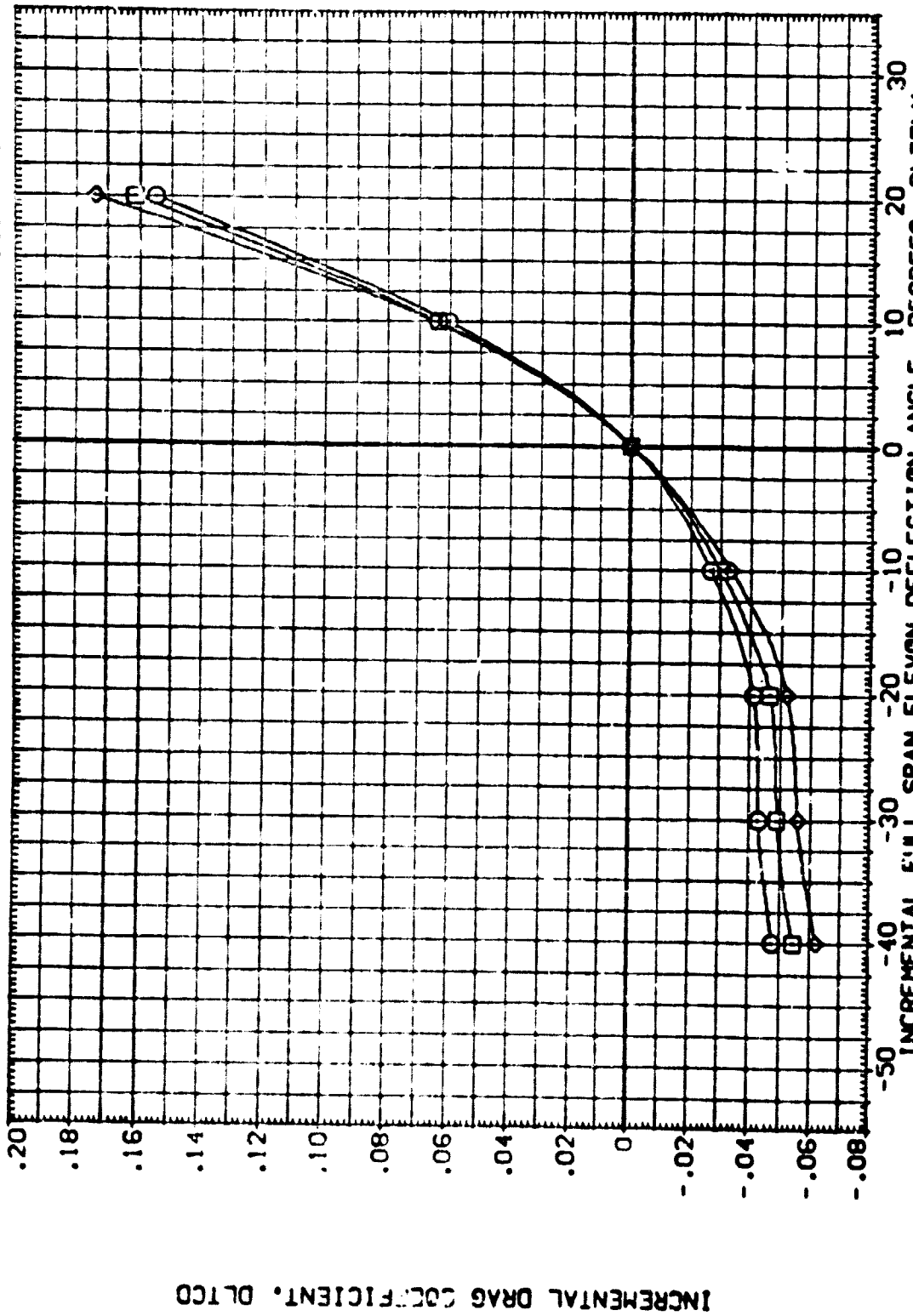


FIG. 8 INCREMENTAL EFFECTS OF ELEVON DEFLECTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(CTV001)	0A79 B26 C9 E43 F8 H16 N28 R5 V8 V116	.000	.000	.000	.030	SREF 2690.0000 SO.FT.
(CTV070)	0A79 B26 C9 E43 F8 H16 N28 R5 V8 V116	-5.000	-5.000	5.000	5.000	LREF 474.8100 IN.
(CTV024)	0A79 B26 C9 E43 F8 H16 N28 R5 V8 V116	-10.000	-10.000	10.000	10.000	BREF 926.6800 IN.
						XREF 1076.6800 IN.X0
						YREF .0000 IN.Y0
						ZREF 375.0000 IN.Z0
						SCALE .0150

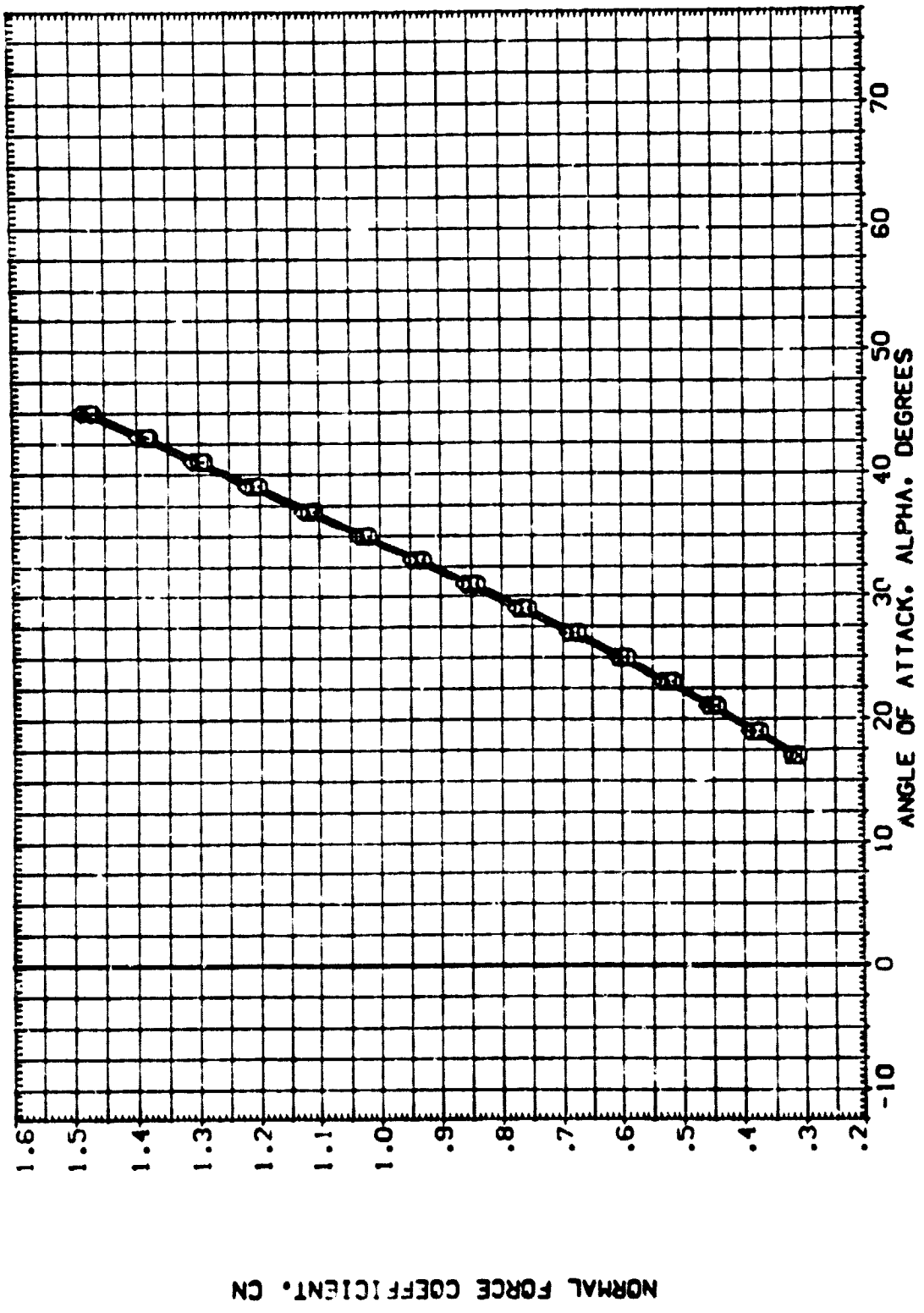


FIG. 9 FULL SPANAILERON EFFECTIVENESS

(A)MACH = 0.00

PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH (FORWARD C. G.) CLMFD

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CTV001) OAY9 B26 C9 E43 F8 M16 N28 R5 V8 V116
 (CTV070) OAY9 B26 C9 E43 F8 M16 N28 R5 V8 V116
 (CTV024) OAY9 B26 C9 E43 F8 M16 N28 R5 V8 V116

ELV-L0 ELV-L1 ELV-R1 ELV-R0 REFERENCE INFORMATION SQ. FT.
 .000 .000 .000 .000 SREF 2690.0000
 -5.000 -5.000 5.000 5.000 LREF 474.8100
 -10.000 -10.000 10.000 10.000 BREF 936.6800
 XTRP 1076.6800 IN. X0
 YTRP .0000 IN. Y0
 ZTRP .0000 IN. Z0
 SCALE .0150

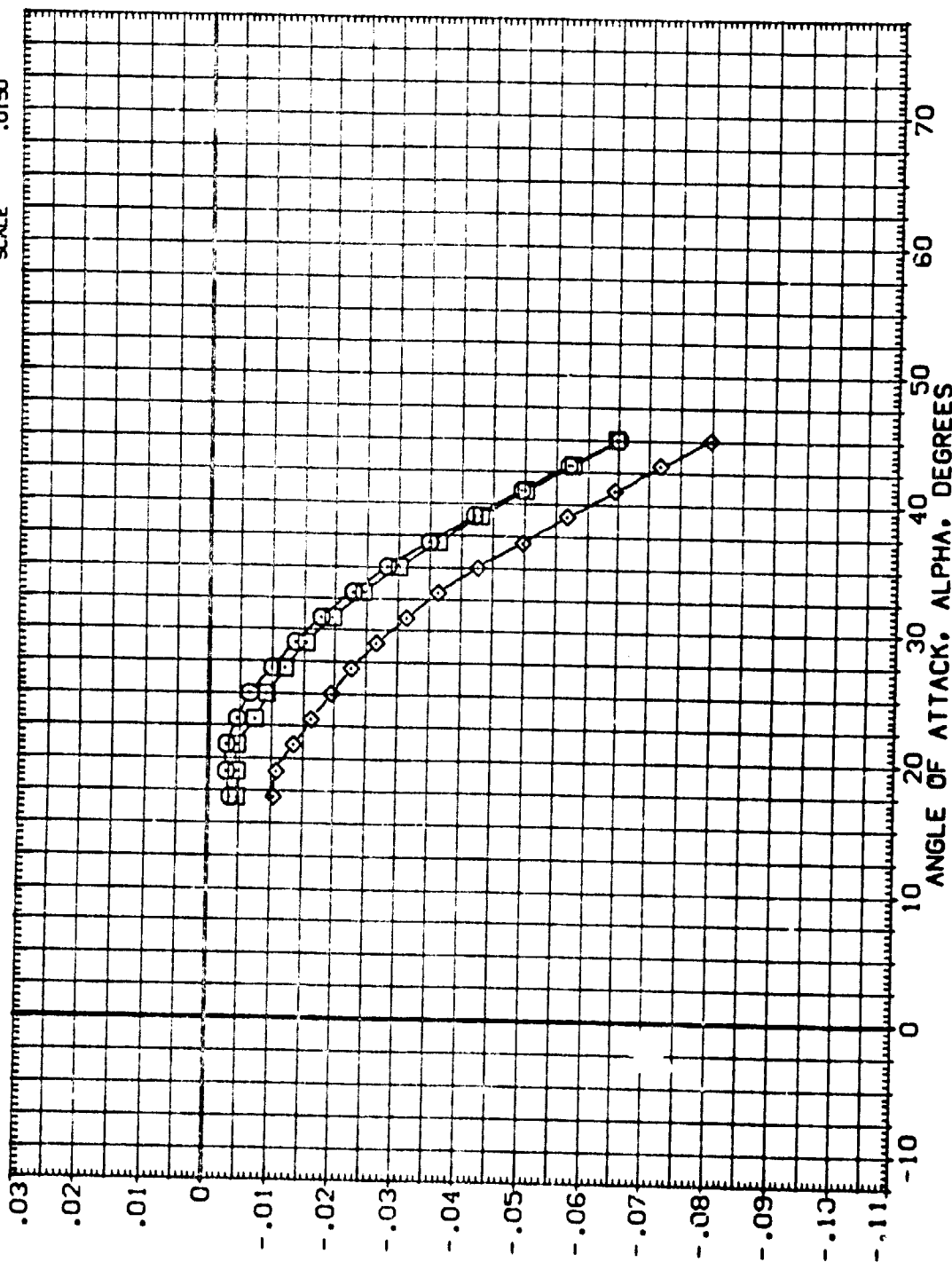


FIG. 9 FULL SPAN AILERON EFFECTIVENESS

(A)MACH = 8.00

PITCHING MOMENT COEFFICIENT AT .675 BODY LENGTH(AFT C. G.) CLMFT

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(C1V001)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.000	.000	.000	.000	SREF 2630.0000 SQ.FT.
(C1V070)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	-5.000	-5.000	5.000	5.000	LREF 474.8100 IN.
(C1V024)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	-10.000	-10.000	10.000	10.000	BREF 936.6800 IN.
						XREF 1076.6800 IN.X0
						YREF .0000 IN.Y0
						ZREF 375.0000 IN.Z0
						SCALE .0150

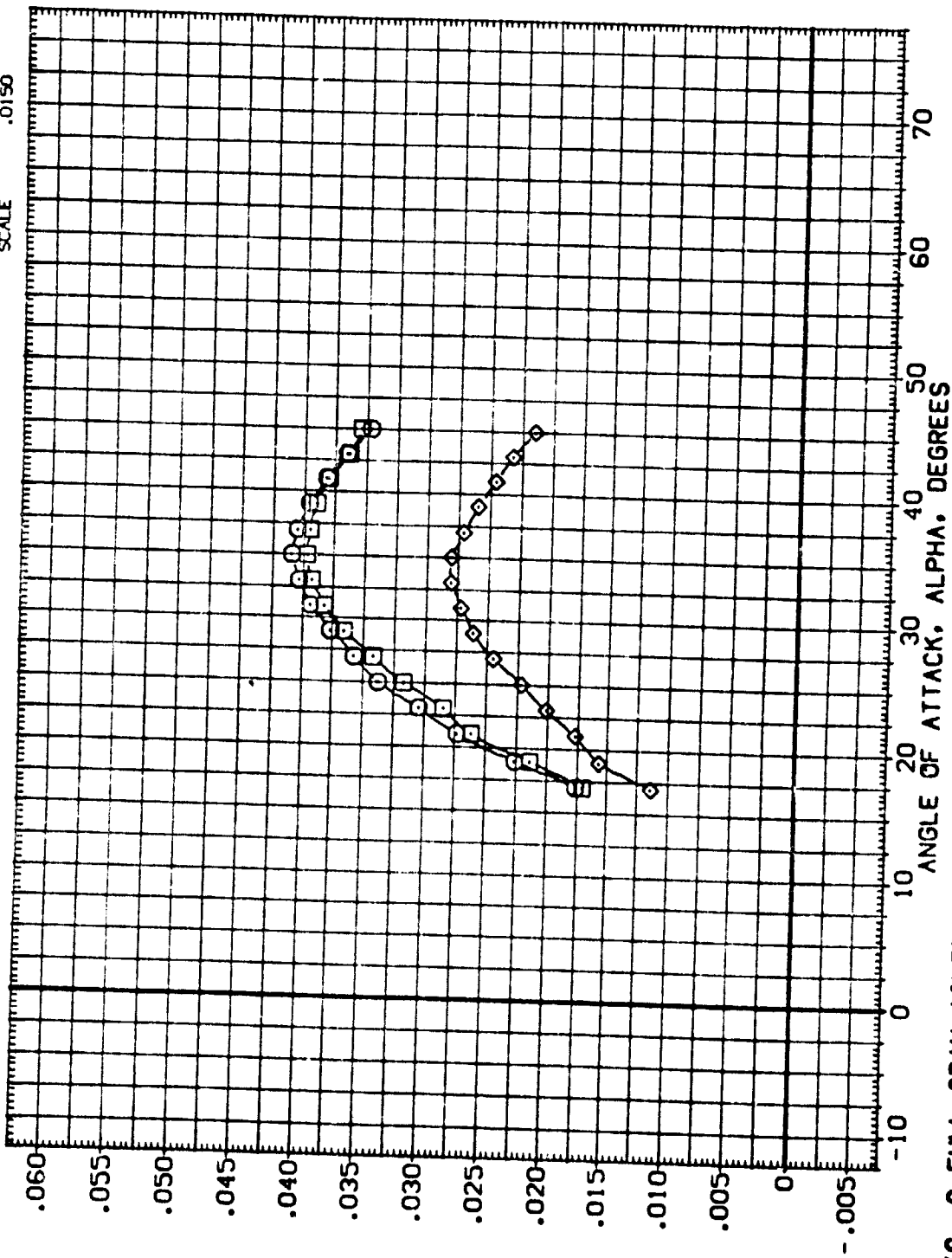


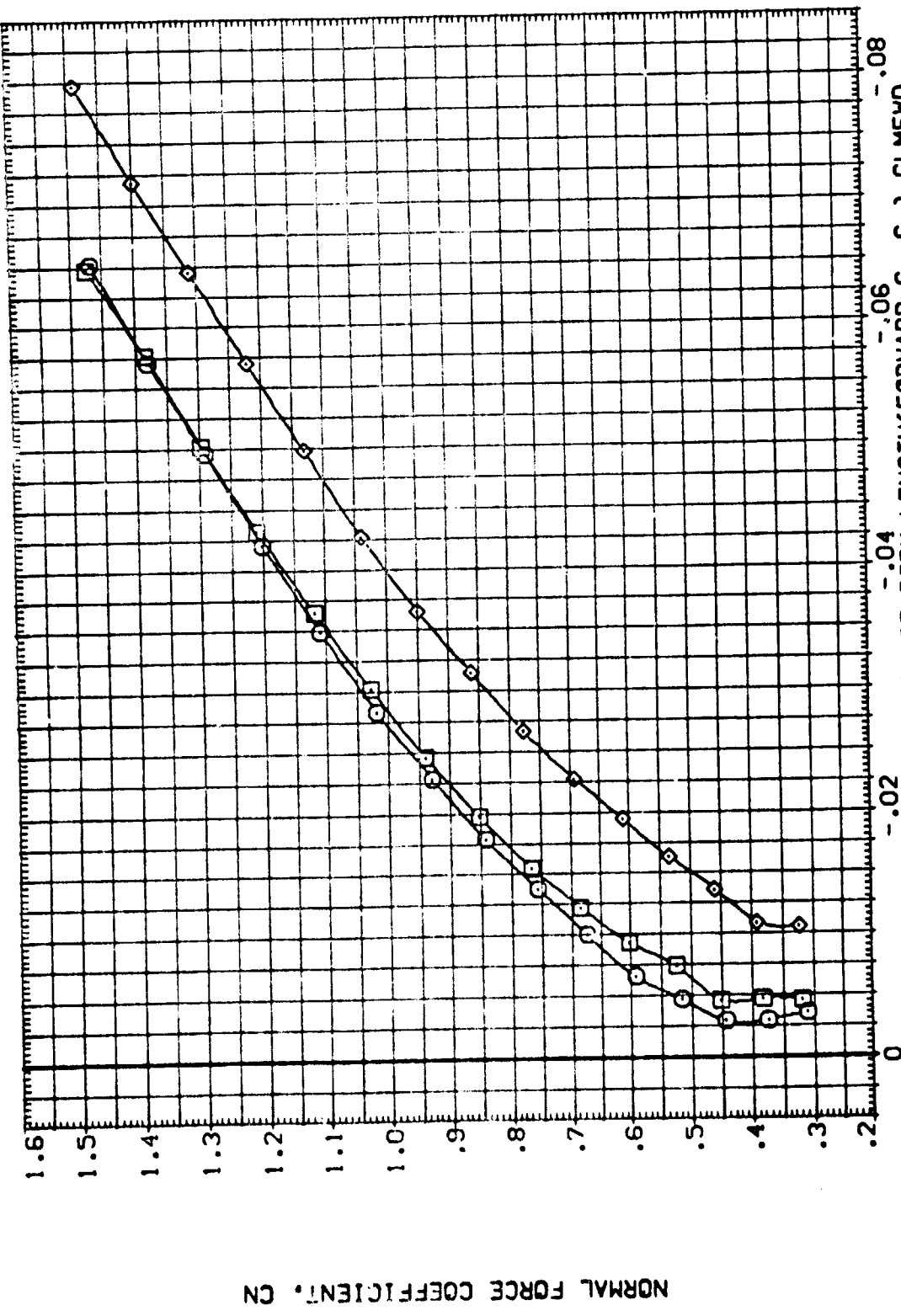
FIG. 9 FULL SPANAILERON EFFECTIVENESS

(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CTV001) 0A79 B26 C9 E43 F8 H16 N28 R5 V8 V116
 (CTV070) 0A79 B26 C9 E43 F8 H16 N28 R5 V8 V116
 (CTV024) 0A79 B26 C9 E43 F8 H16 N28 R5 V8 V116

ELEVATION ELEVATION ELEVATION ELEVATION ELEVATION
 ELV-L0 ELV-L1 ELV-R1 ELV-R0 ELV-R0
 .000 .000 .000 .000 .000
 -5.000 -5.000 5.000 5.000 5.000
 -10.000 -10.000 10.000 10.000 10.000

REFERENCE INFORMATION SQ.FT.
 SREF 2890.0000 IN.
 LREF 474.8100 IN.
 XREF 936.6800 IN.
 YMRP 1076.6800 IN.
 ZMRP .0000 IN.
 SCALE 375.0000 IN.
 .0150



PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH (FORWARD C. G.) CLMFWD

FIG. 9 FULL SPAN AILERON EFFECTIVENESS

(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CTV001)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
(CTV070)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
(CTV024)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116

REFERENCE INFORMATION

SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1076.6800	IN.XB
YMRP	.0000	IN.YB
ZMRP	375.0000	IN.ZB
SCALE	.0150	

ELV-L0	.000	ELV-L1	.000	ELV-R0	.000
-5.000	-5.000	.000	5.000	.000	
-10.000	-10.000	10.000	10.000		

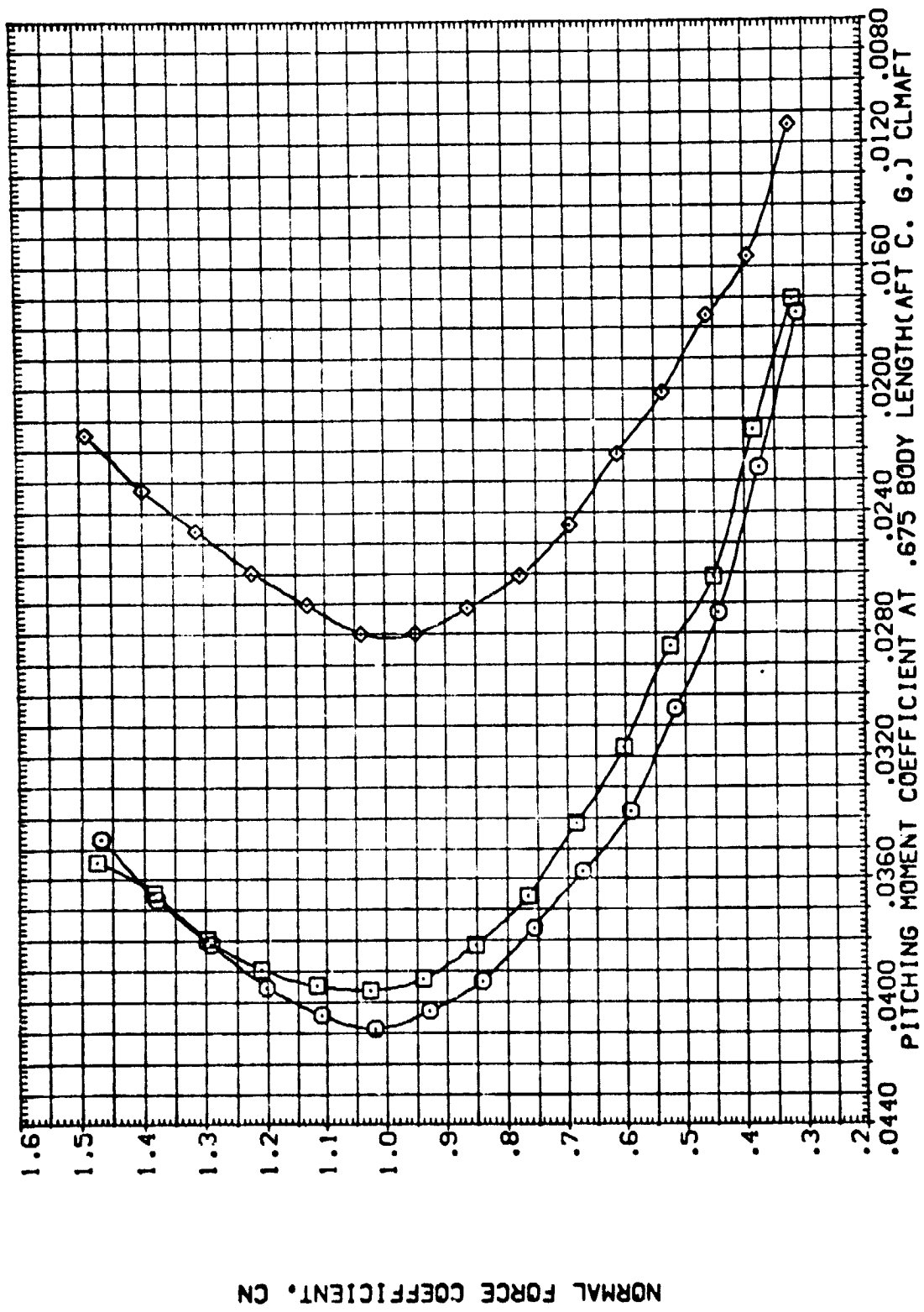


FIG. 9 FULL SPANAILERON EFFECTIVENESS

(M)MACH = 8.00

DATA SET SYMBOL (CTV001) (CTV070) (CTV024)

CONFIGURATION DESCRIPTION		REFERENCE INFORMATION	
0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	ELV-L0	2690.0000	50. FT.
0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	ELV-L1	474.8100	IN.
0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	ELV-R0	1076.6800	IN.
	ELV-R1	0.0000	IN.
	ELV-R2	5.0000	IN.
	ELV-R3	10.0000	IN.
	SCALE	375.0000	IN.

CENTER OF PRESSURE LOCATION AS A FRACTION OF BODY LENGTH, XCP/L

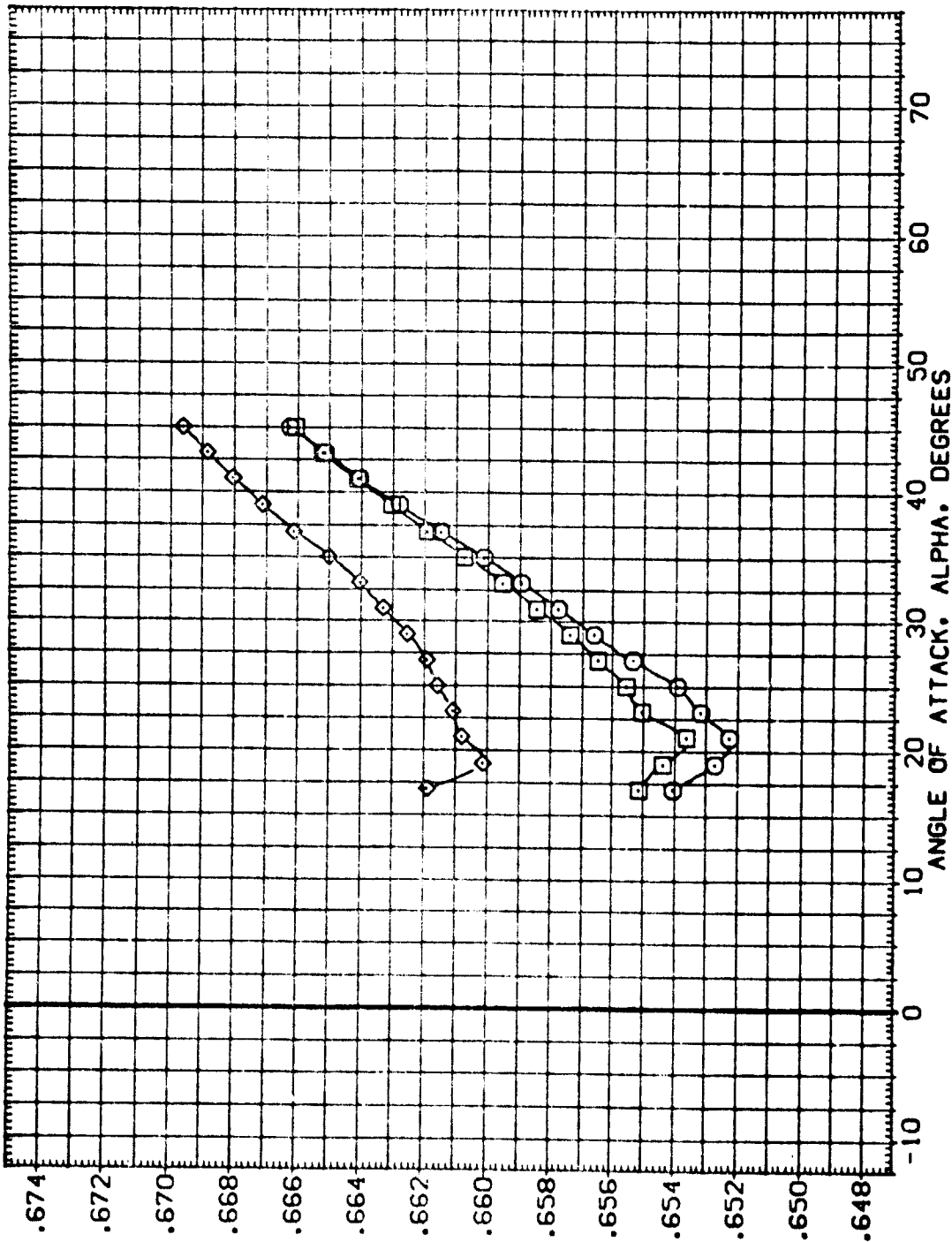


FIG. 9 FULL SPANAILERON EFFECTIVENESS

(M)MACH = 8.00



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(C1V001)	DA79 B26 C9 E43 F8 M16 N28 R5 V8 V116
(C1V070)	DA79 B26 C9 E43 F8 M16 N28 R5 V8 V116
(C1V024)	DA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

ELV-L0	ELV-L1	ELV-R1	ELV-R0
.000	.000	.000	.000
-5.000	-5.000	5.000	5.000
-10.000	-10.000	10.000	10.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XTRP	1076.6800	IN.X0
YTRP	.0000	IN.Y0
ZTRP	375.0000	IN.Z0
SCALE	.0150	

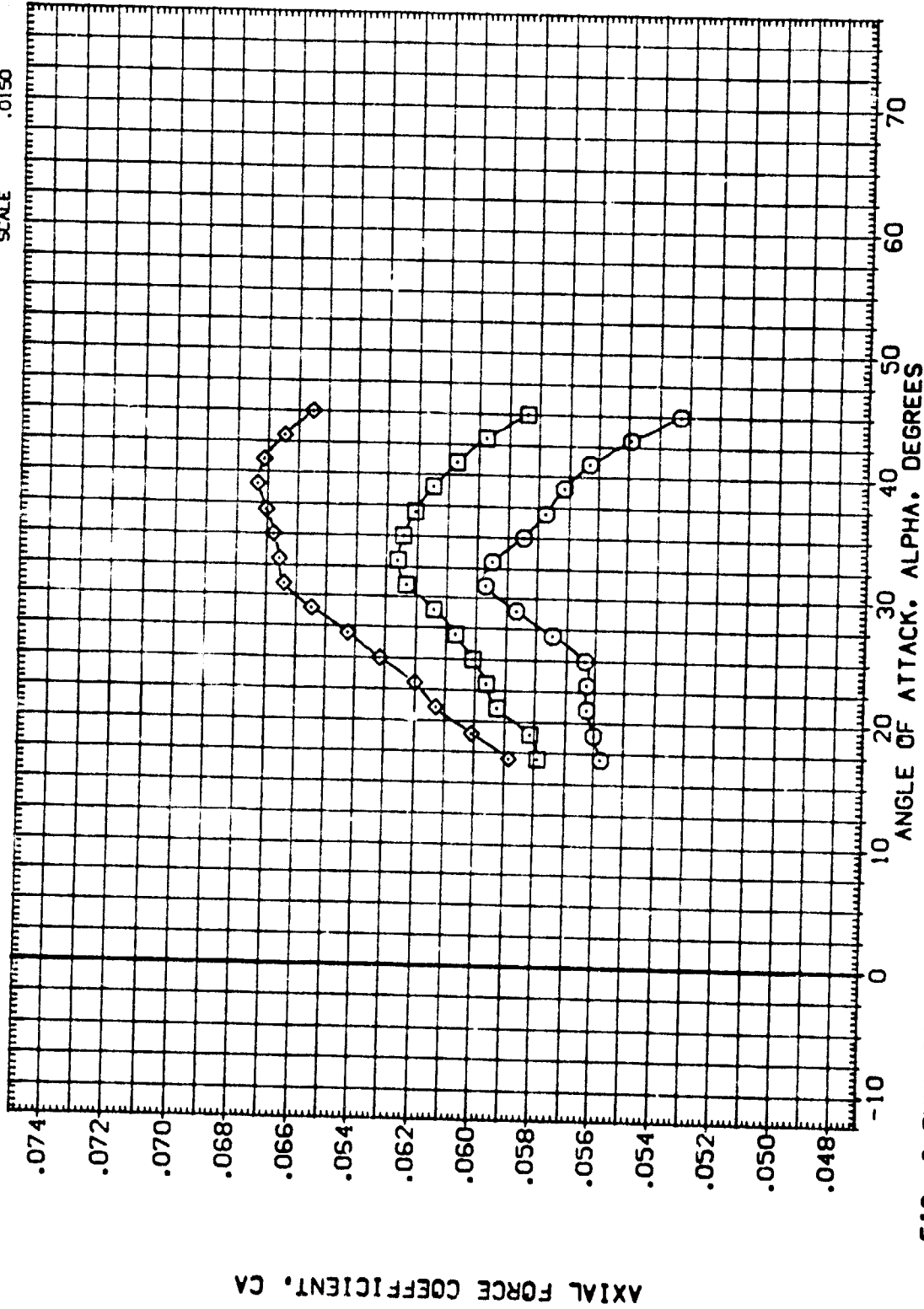


FIG. 9 FULL SPANAILERON EFFECTIVENESS
(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CTV001) ○ OA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

(CTV070) ○ OA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

(CTV024) ◇ OA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

ELV-L0 ELV-L1 ELV-R1 ELV-R0

.000 .000 .000 .000

-5.000 -5.000 5.000 5.000

-10.000 -10.000 10.000 10.000

REFERENCE INFORMATION SQ.FT. IN. IN. IN. IN. IN. IN.

SREF 2690.0000 474.8100 926.5800 1076.6800 375.0000 .0150

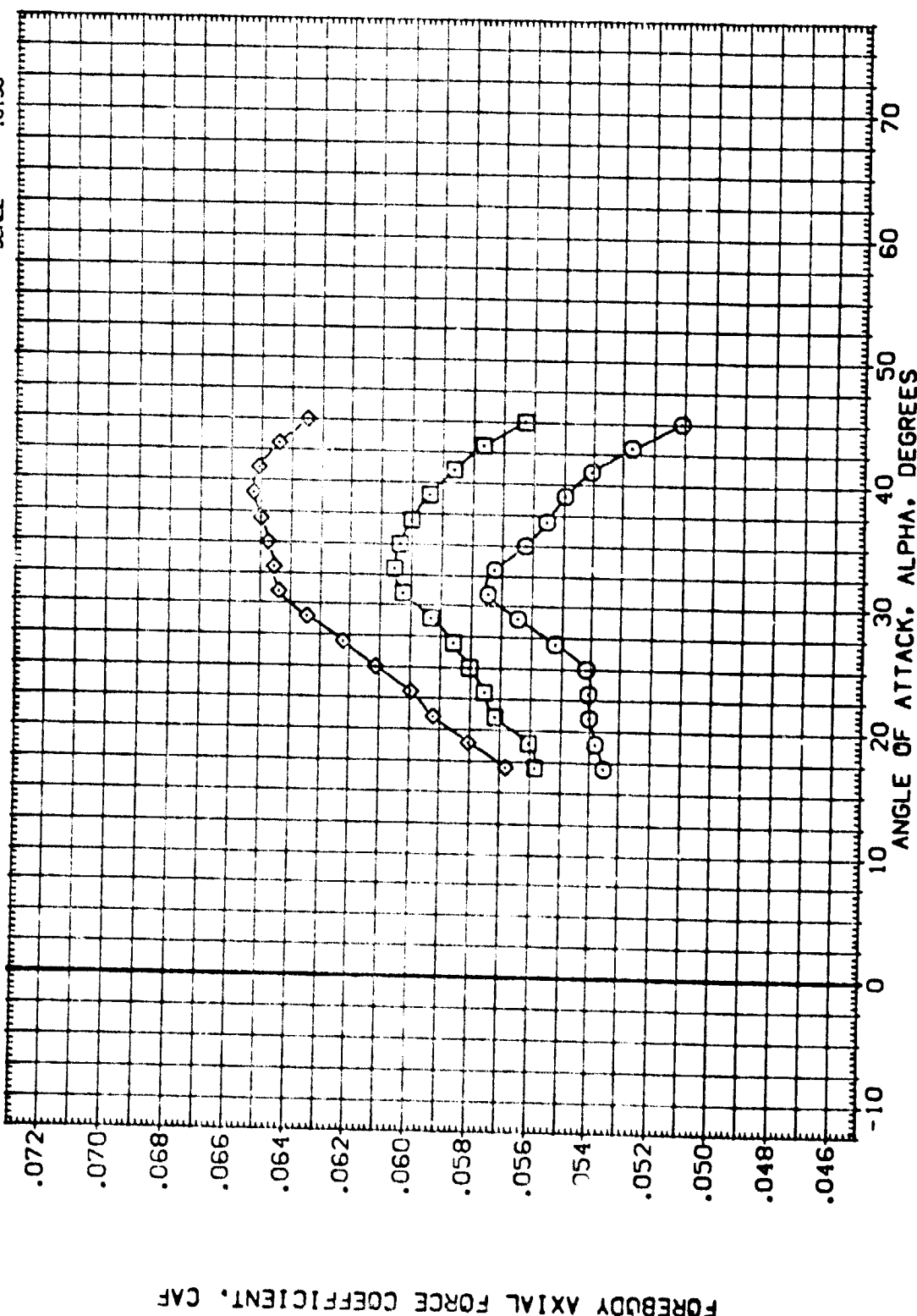
LREF 474.8100 926.5800 1076.6800 375.0000 .0150

BREF 926.5800 1076.6800 375.0000 .0150

XPRP 1076.6800 375.0000 .0150

ZPRP 375.0000 .0150

SCALE .0150



FOREBODY AXIAL FORCE COEFFICIENT, CAF

FIG. 9 FULL SPANAILERON EFFECTIVENESS

(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

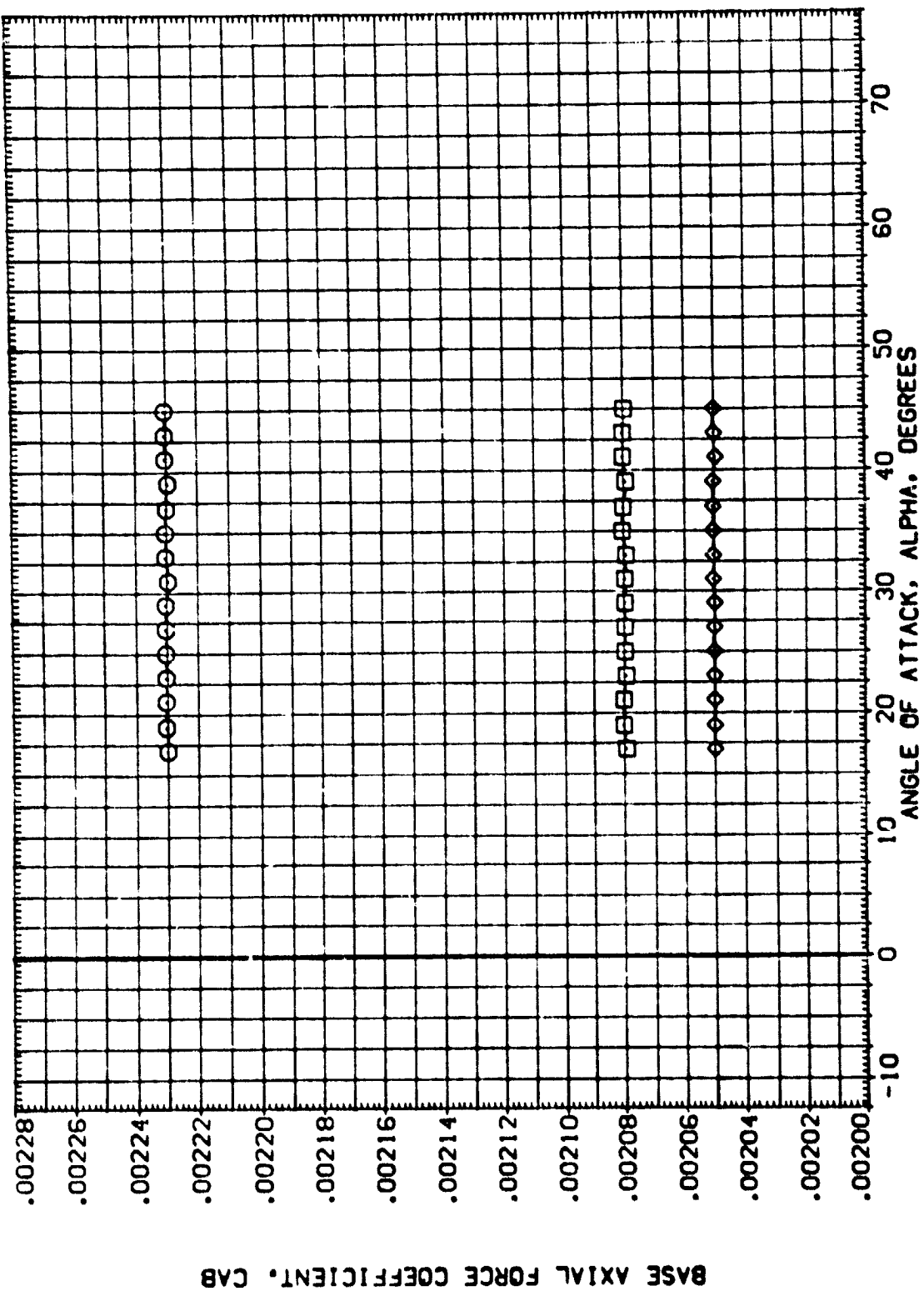
(CT1001)	0A79 826 C9 E43 F8 M16 N28 R5 V8 V116
(CT1007)	0A79 826 C9 E43 F8 M16 N28 R5 V8 V116
(CT1024)	0A79 826 C9 E43 F8 M16 N28 R5 V8 V116

ELV-L0 ELV-L1 ELV-R1 ELV-R0

.000	.000	.000	.000
-5.000	-5.000	5.000	5.000
-10.000	-10.000	10.000	10.000

REFERENCE INFORMATION

SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XPRP	1076.6800	IN. X0
YPRP	.0000	IN. Y0
ZPRP	375.0000	IN. Z0
SCALE	.0150	



BASE AXIAL FORCE COEFFICIENT, CAB

FIG. 9 FULL SPANAILERON EFFECTIVENESS

(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (C1V021) Ⓚ 0A79 B26 C9 E43 F8 H16 N28 R5 V8 V116
 (C1V070) Ⓚ 0A79 B26 C9 E43 F8 H16 N28 R5 V8 V116
 (C1V024) Ⓚ 0A79 B26 C9 E43 F8 H16 N28 R5 V8 V116

ELV-L0 ELV-L1 ELV-R1 ELV-R0
 .000 .000 .000 .000
 -5.000 -5.000 5.000 5.000
 -10.000 -10.000 10.000 10.000

REFERENCE INFORMATION
 CREP 2630.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XREF 1076.0000 IN.
 YREF .0000 IN.
 ZREF 375.0000 IN.
 SCALE .0150

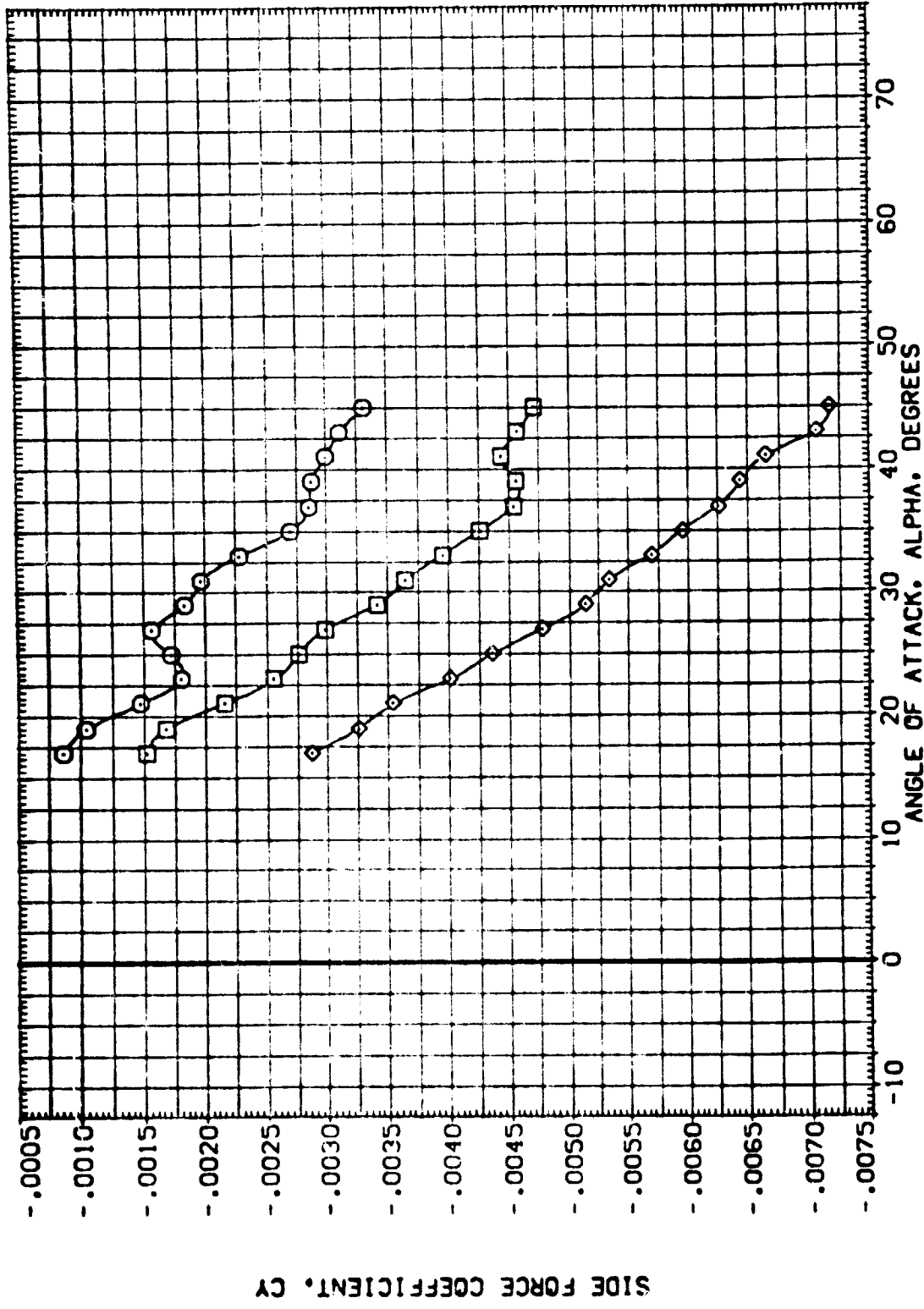


FIG. 9 FULL SPANAILERON EFFECTIVENESS

(A)MACH = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(A1W001)	0A79 B26 C9 E43 F8 M16 N28 P5 V8 V116	.000	.000	.000	.000	SREF 2650.0000 SQ.FT.
(A1W070)	0A79 B26 C9 E43 F8 M16 N28 P5 V8 V116	-5.000	-5.000	5.000	5.000	LREF 474.8100 IN.
(A1W024)	0A79 B26 C9 E43 F8 M16 N28 P5 V8 V116	-10.000	-10.000	10.000	10.000	BREF 936.6800 IN.X0
						XPRP 1076.6800 IN.Y0
						YPRP .0000 IN.Z0
						ZPRP 375.0000 IN.Z0
						SCALE .0150

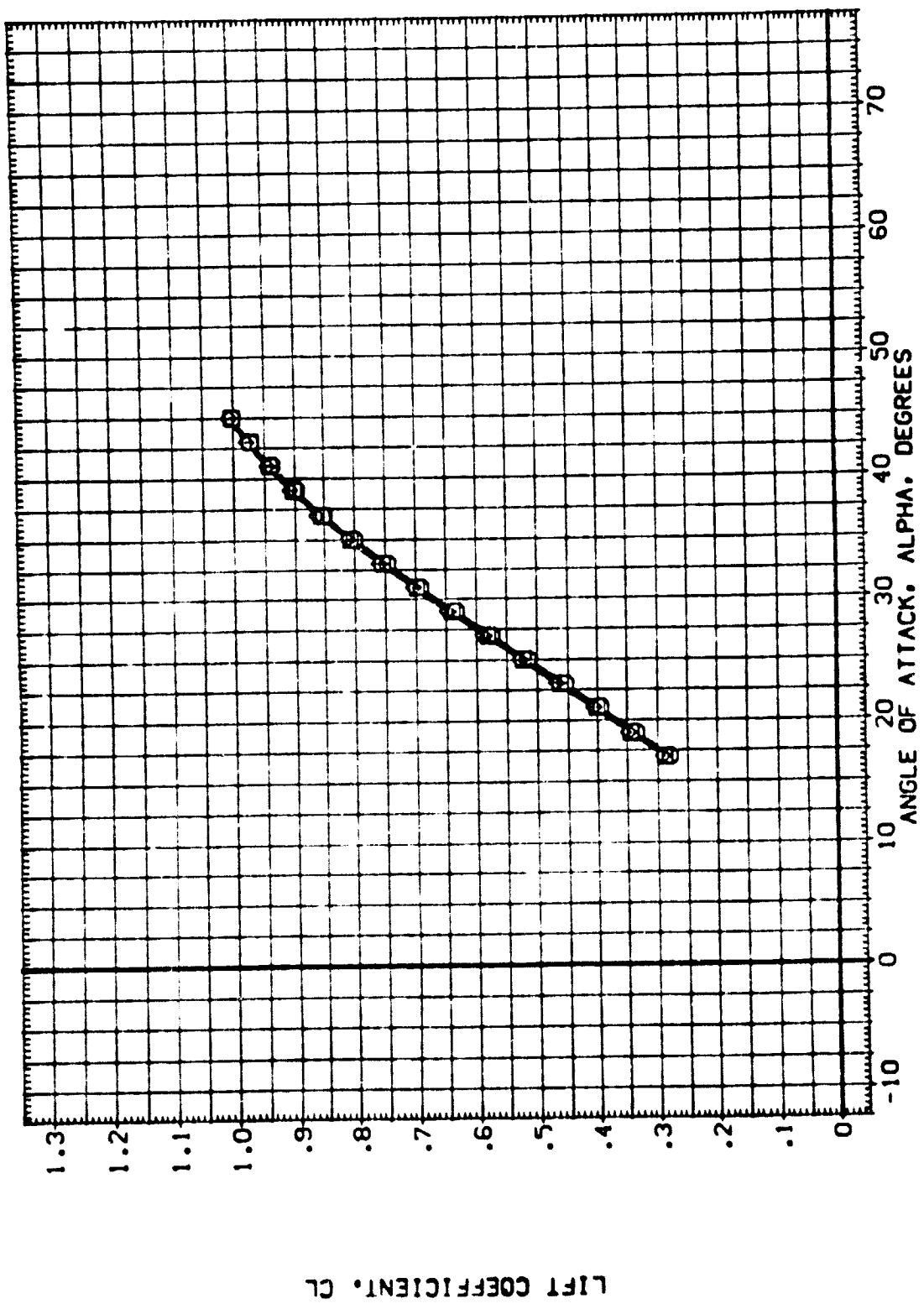


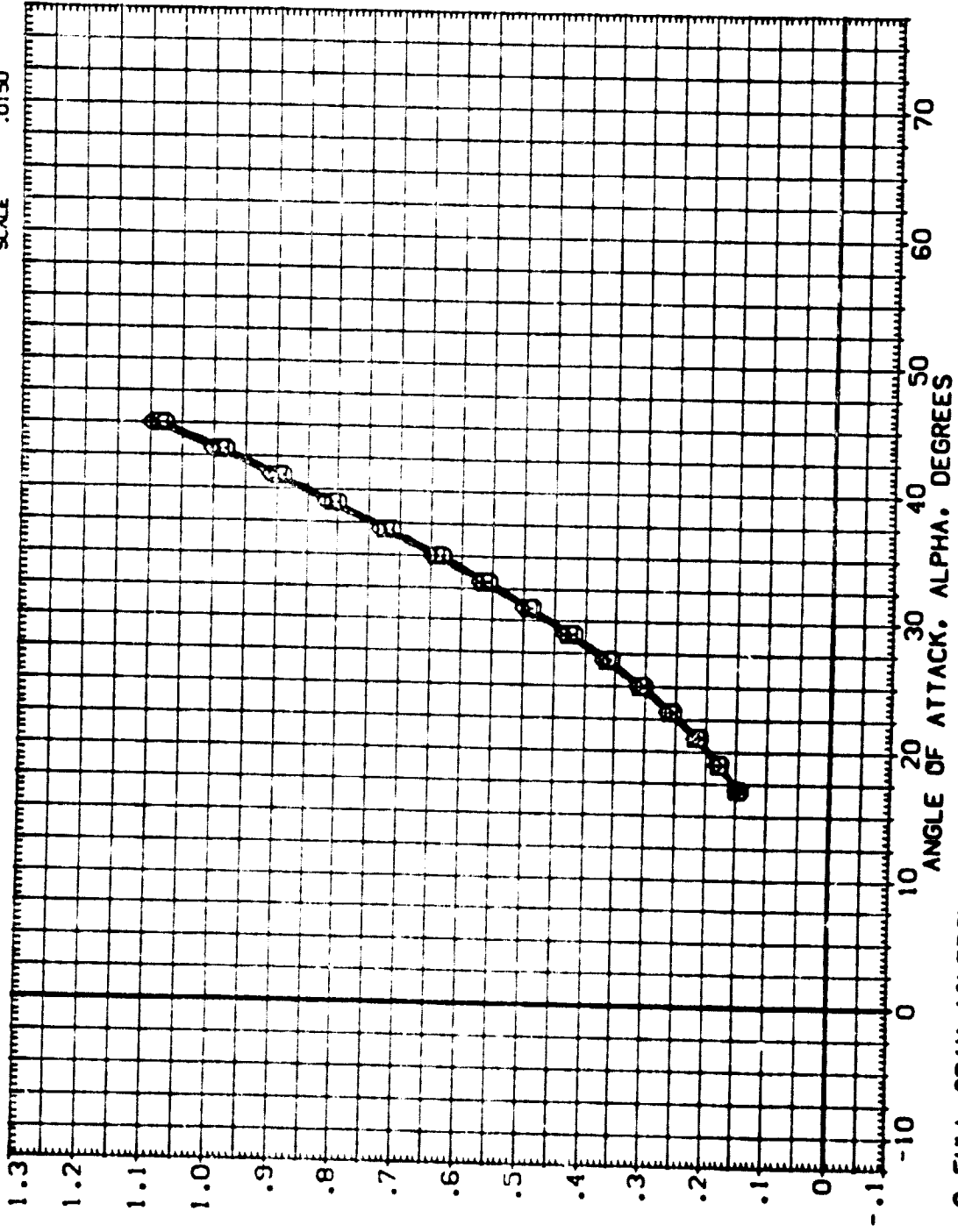
FIG. 9 FULL SPANAILERON EFFECTIVENESS

(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (ATV001) Q DAY8 B26 C9 E43 F8 M16 N28 P5 V8 V116
 (ATV070) Q DAY8 B26 C9 E43 F8 M16 N28 P5 V8 V116
 (ATV024) Q DAY8 B26 C9 E43 F8 M16 N28 P5 V8 V116

ELV-L0 ELV-L1 ELV-R1 ELV-R0
 .000 .000 .000 .000
 -5.000 -5.000 5.000 5.000
 -10.000 -10.000 10.000 10.000

REFERENCE INFORMATION
 SREF 2690.0000 50.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 YMRP 1076.6800 IN.X0
 YMRP .0000 IN.Y0
 ZMRP 375.0000 IN.Z0
 SCALE .0150



DRAG COEFFICIENT, CD

FIG. 9 FULL SPANAILERON EFFECTIVENESS
 (A)MACH = 8.00



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(ATW001) CA79 B26 C9 E43 F9 M16 108 RS V8 V116

(ATW070) CA79 B26 C9 E43 F8 M16 N28 RS V8 V116

(ATW024) CA79 B26 C9 E43 F8 M16 N28 RS V8 V116

ELV-L0 ELV-L1 ELV-R1 ELV-R0

 .000 .000 .000 .000

-5.000 -5.000 5.000 5.000

-10.000 -10.000 10.000 10.000

REFERENCE INFORMATION

SREF 2690.0000 50. FT.

LREF 474.8100 IN.

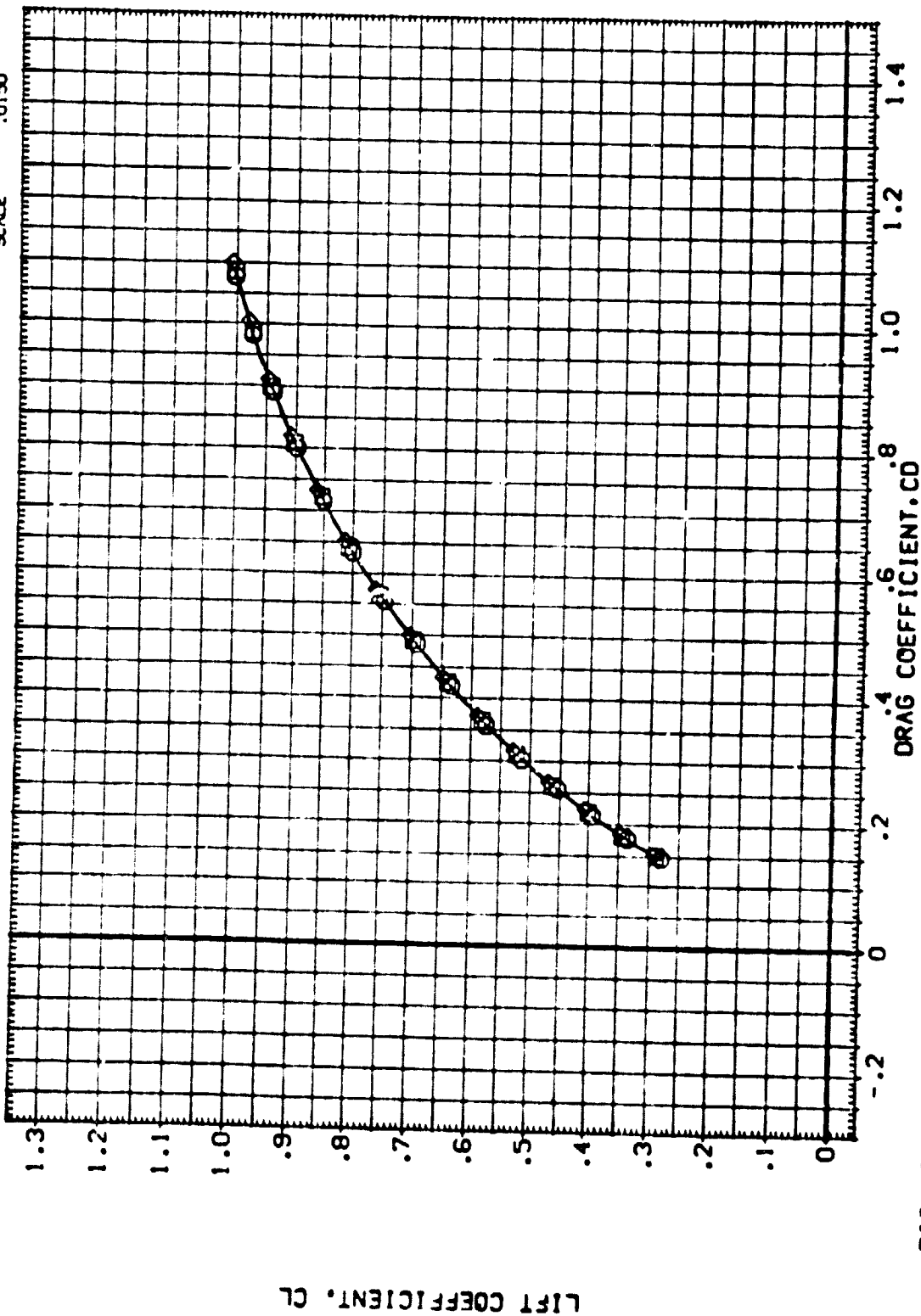
BREF 936.6800 IN.

XPRP 1076.6800 IN. X0

YPRP .0000 IN. Y0

ZPRP 375.0000 IN. Z0

SCALE .0150



LIFT COEFFICIENT, CL

FIG. 9 FULL SPAN AILERON EFFECTIVENESS

(A) MACH = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(ATW001)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.000	.000	.000	.000	2690.0000 SQ.FT.
(ATW070)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	-5.000	-5.000	5.000	5.000	474.8100 IN.
(ATW024)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	-10.000	-10.000	10.000	10.000	536.6800 IN.
						1076.6800 IN. AG
						YPRP .0000 IN. Y0
						ZPRP 375.0000 IN. Z0
						SCALE .0150

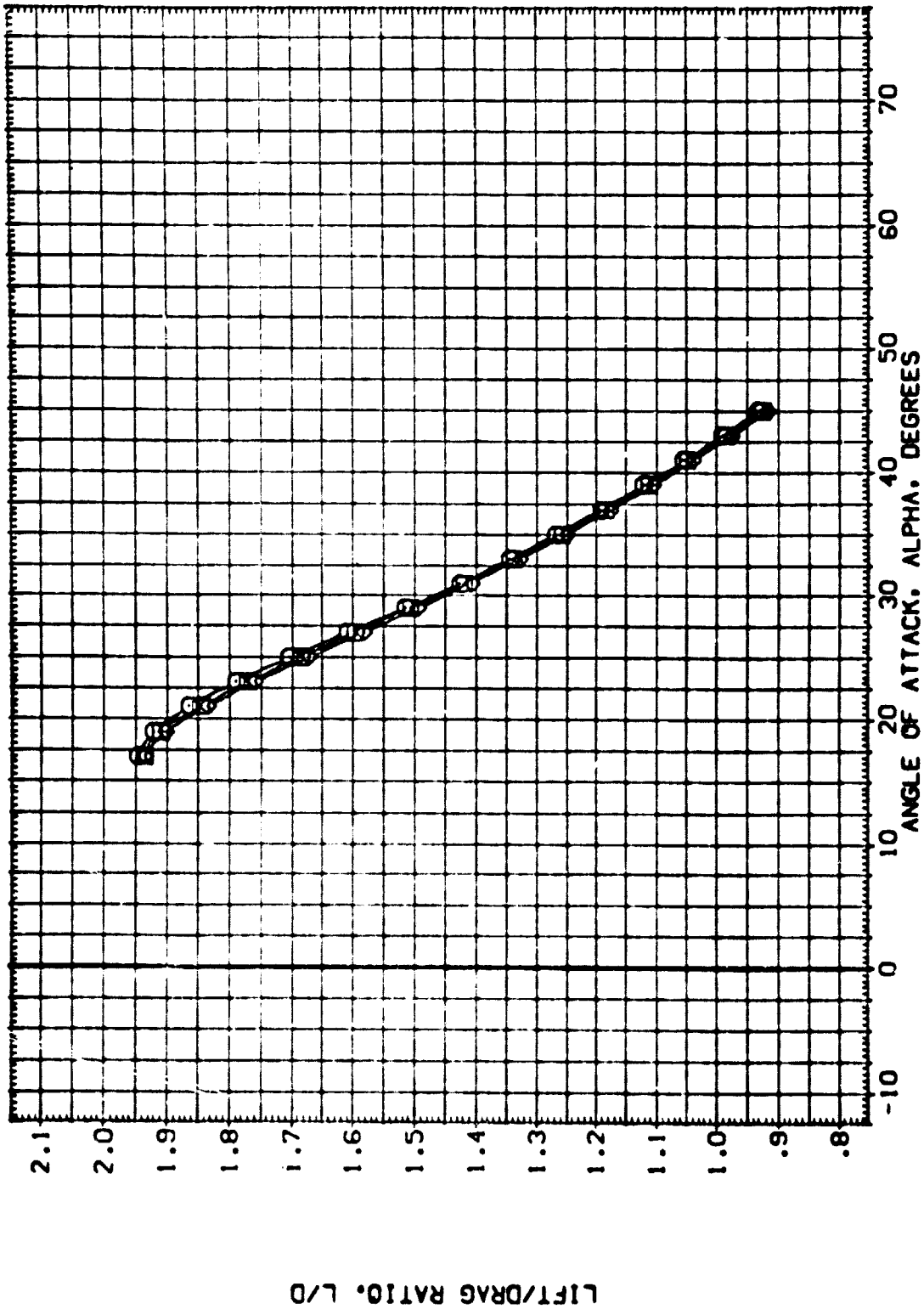
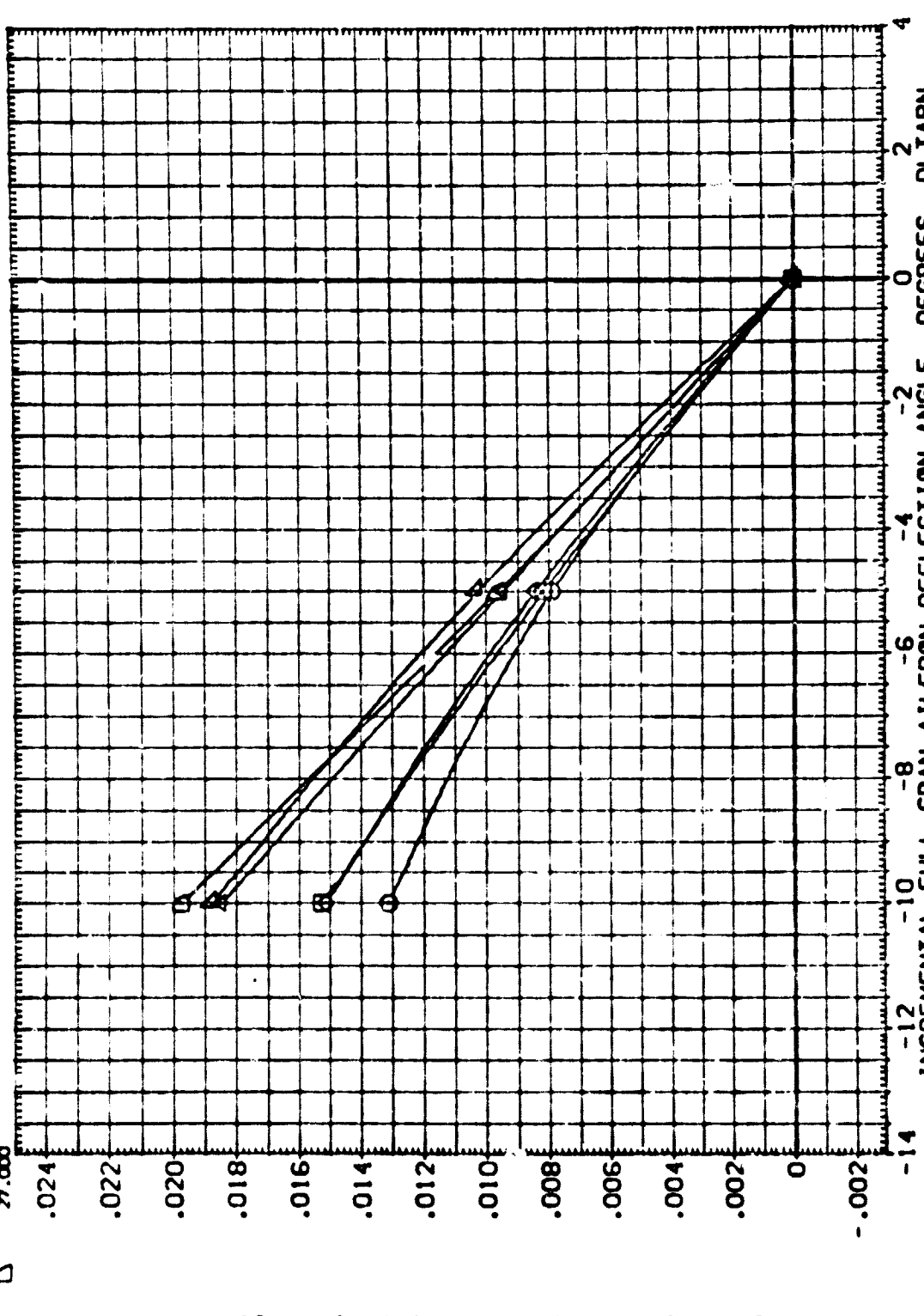


FIG. 9 FULL SPANAILERON EFFECTIVENESS

(A)MACH = 8.00

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (JTW024)

ALPHA	MACH	BETA	RUDDER	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
17.000	0.000	0.000	DL PROF	.000	DLTARN	2690.0000 SQ.FT.
19.000	.000	SPOBRK	55.000	JTW024	-10.000	474.8100 IN.
21.000	.000	RVAL	3.530	JTW001	.000	936.6800 IN.
23.000						1076.6800 IN.X8
25.000						375.0000 IN.Y8
27.000						.0150 IN.Z8



INCREMENTAL NORMAL FORCE COEFFICIENT, DLTN

FIG. 10 INCREMENTAL EFFECTS OF AILERON DEFLECTION

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (JTW024)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	MACH	DLBDFP	DLTARN	SREF	S9, FT.
29.000	8.000	.000	-10.000	474.8100	IN.
31.000	.000	55.000	.000	536.6800	IN.
33.000	.000	3.530	.000	1076.6800	IN.
35.000	RUDDER			375.0000	IN.
37.000					IN.
39.000					IN.
				SCALE	
					.0150

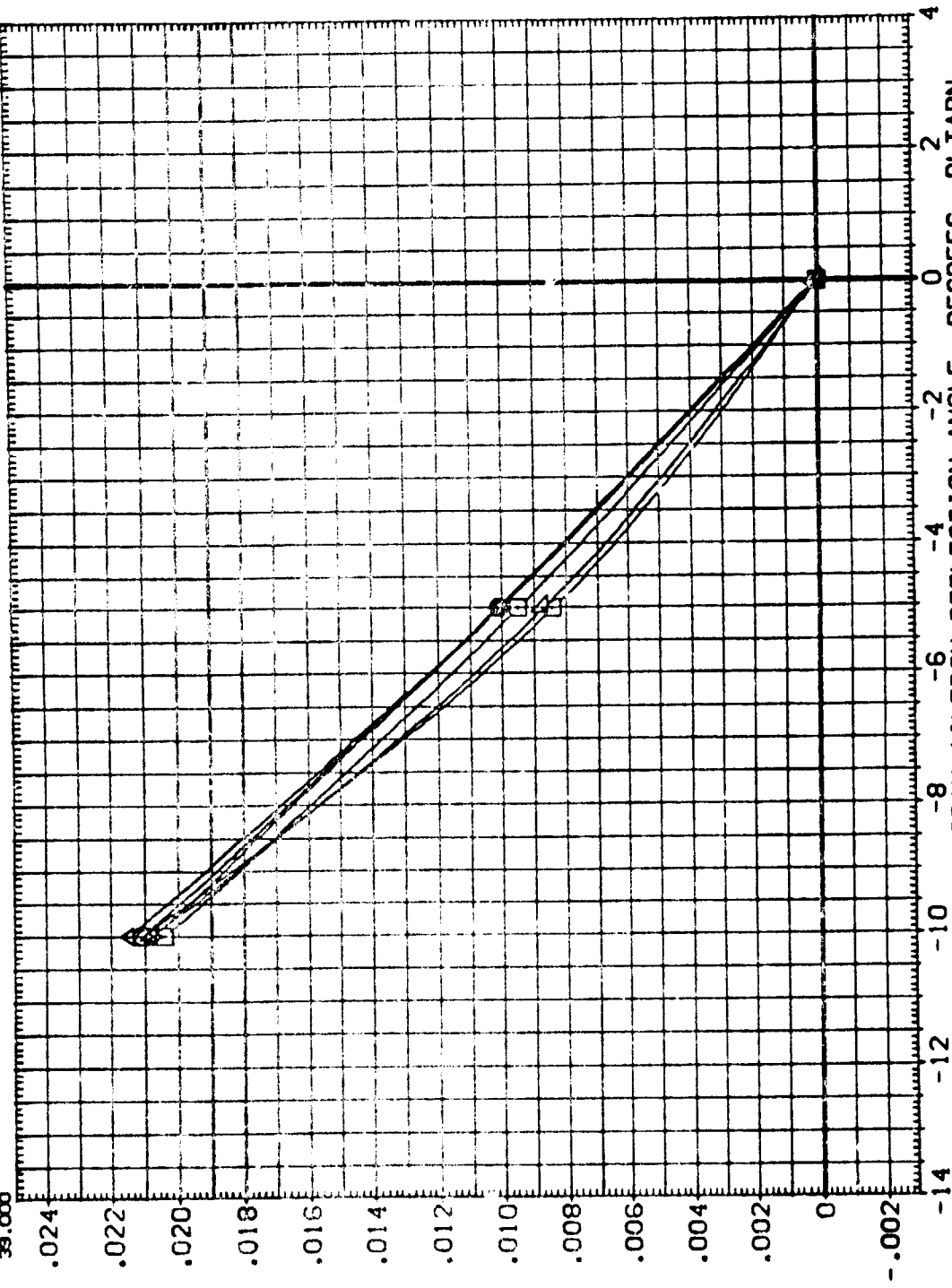
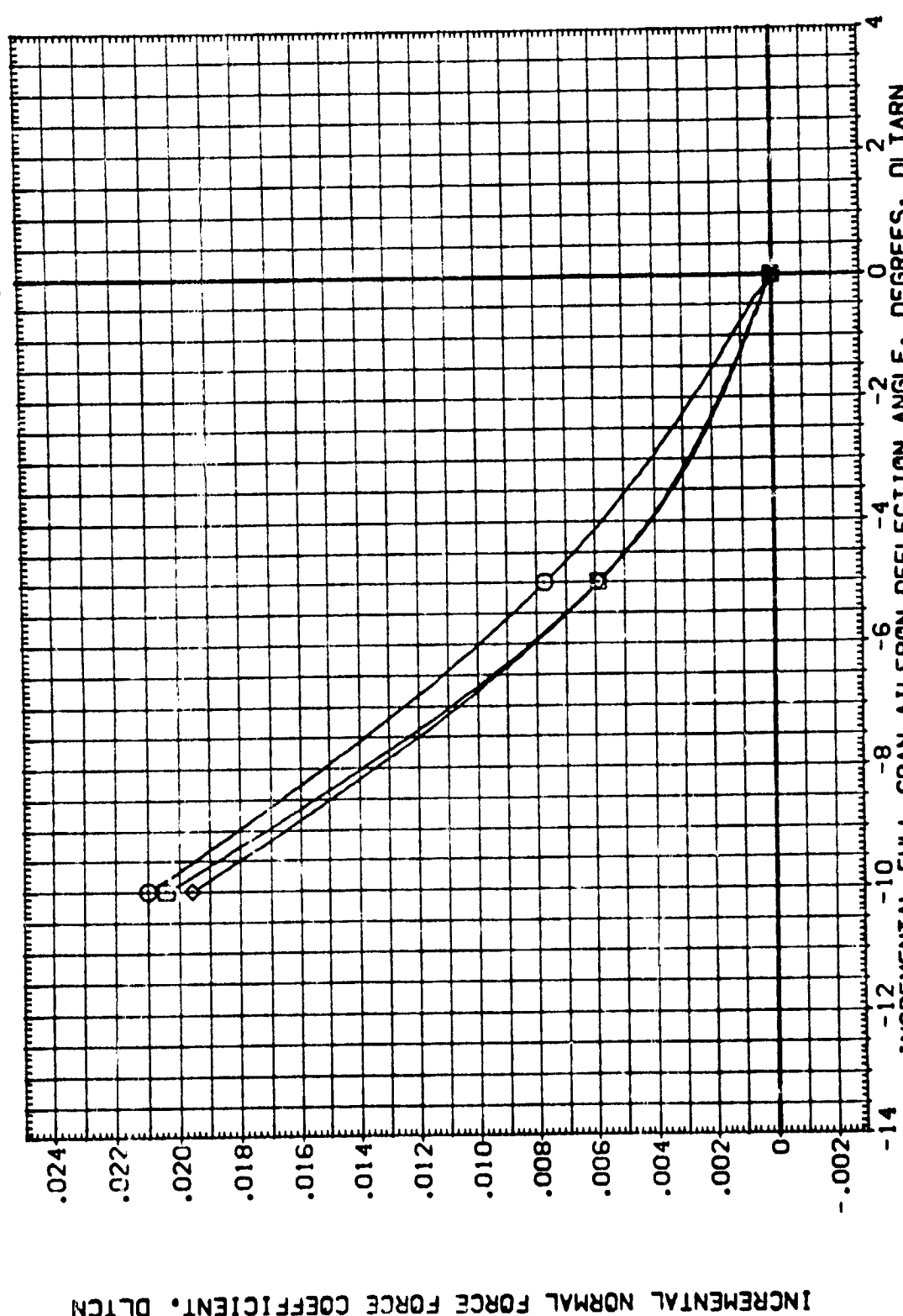


FIG. 10 INCREMENTAL EFFECTS OFAILERON DEFLECTION

(JTW024)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116

SYMBOL		PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
○	ALPHA	8.000	DLBDFP	.000	DLTARN	SREF	2690.0000
□	MACH	.000	DLBDFP	55.000	JTW024	LREF	474.8100
◇	BETA	.000	SFOBRK	3.530	JTW001	BREF	936.6800
	RUDDER	.000	RV/L			XTRP	1076.0000
						YTRP	0.0000
						ZTRP	375.0000
						SCALE	.0150
							SO.FT.
							IN.
							IN.X0
							IN.Y0
							IN.Z0

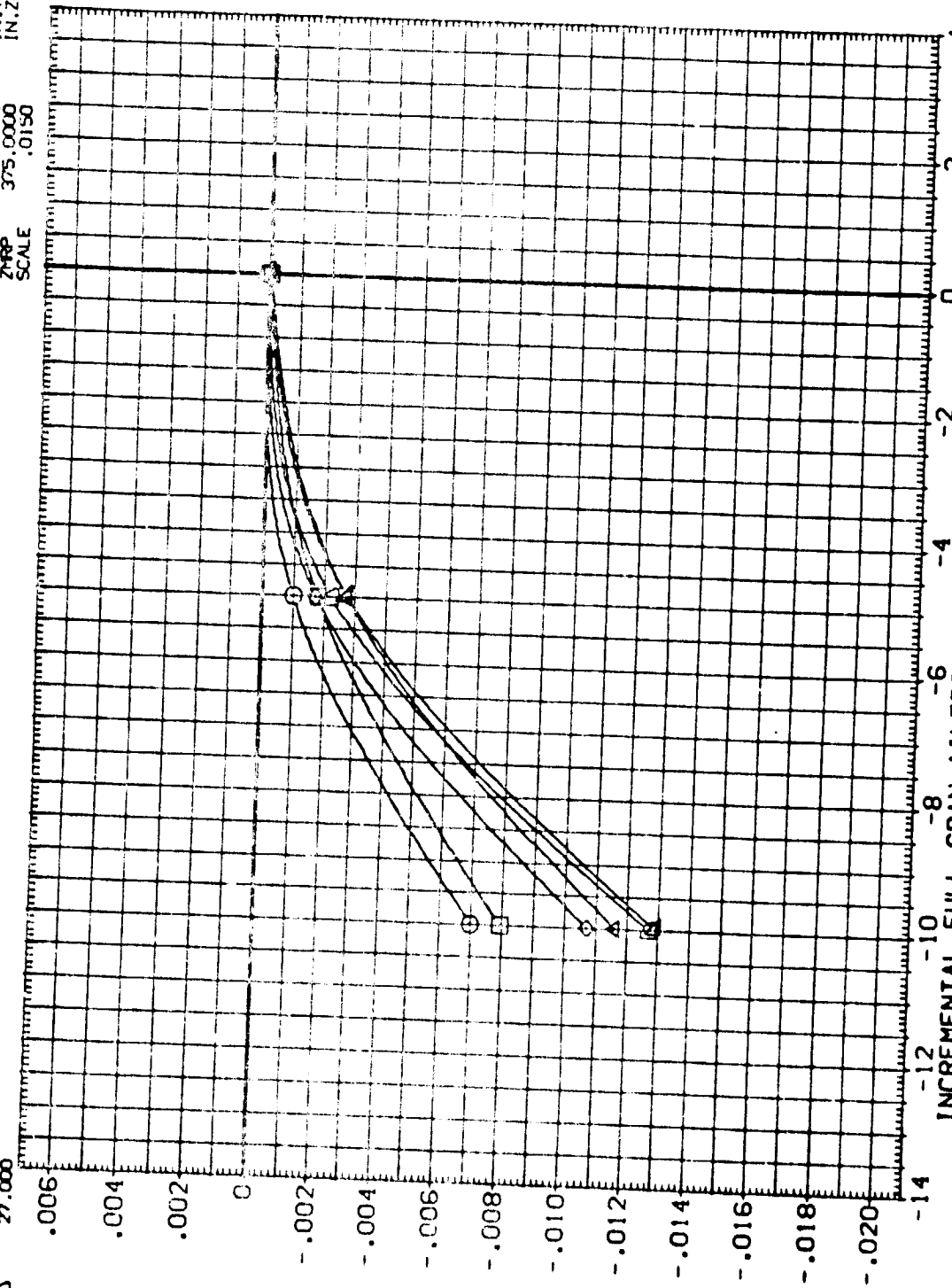


INCREMENTAL NORMAL FORCE COEFFICIENT, DLTCN

FIG. 10 INCREMENTAL EFFECTS OF AILERON DEFLECTION

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (JTWO24)

ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
17.000	8.000	DLBDFP	DLTARN	2690.0000 SQ.FT.
19.000	.000	SPOBRK	DLTARN	474.8100 IN.
21.000	.000	RVL	DLTARN	936.6800 IN.
23.000	.000		DLTARN	1076.6800 IN. X0
25.000			DLTARN	375.0000 IN. Y0
27.000			DLTARN	375.0000 IN. Z0
			SCALE	.0150



INCREMENTAL PITCHING MOMENT COEFFICIENT (FWD. C.G.) DLTCM

FIG. 10 INCREMENTAL EFFECTS OFAILERON DEFLECTION



(JTW024)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116

SYMBOL
▽
◇
□
○

ALPHA
29.000
31.000
33.000
35.000
37.000
39.000

W/D1
BETA
RUDDER

PARAMETRIC VALUES
.000
.000
.000

.000
55.000
3.530

.000 DATASET
JTW024
JTW001

DATA SOURCE
DLTARN
-10.000
.000

DLTARN
-5.000
GTW070

REFERENCE INFORMATION
SQ.FT.
2650.0000
IN.
474.8100
936.6800
1076.6800
IN.X0
IN.Y0
IN.Z0
375.0000
SCALE
.0150

INCREMENTAL PITCHING MOMENT COEFFICIENT (FWD. C.G.) DLTCMF

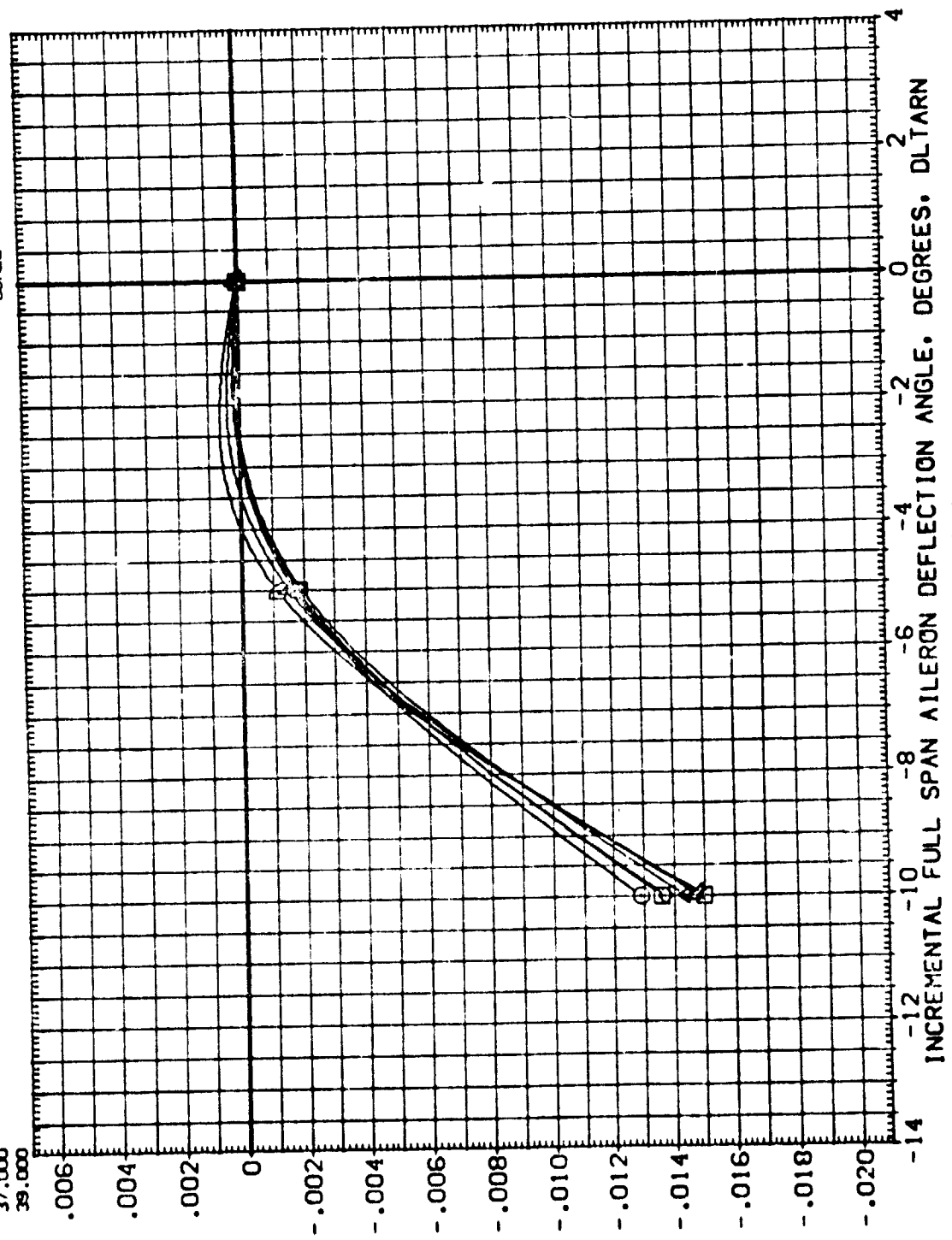


FIG. 10 INCREMENTAL FULL SPANAILERON DEFLECTION ANGLE. DEGREES. DLTARN

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (JTWO24)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	DATASET	DLTARN	SREF	REFERENCE INFORMATION
○	41.000	8.000	DLBOFP	.000	JTWO24	-10.000	474.8100	2690.0000
□	43.000	.000	SPOBRK	56.000	JTWO24	.000	1076.6800	IN.
◇	45.000	.000	RUDDER	3.530	JTWO01	.000	375.0000	IN. X0
								IN. Y0
								IN. Z0
								SCALE
								.0150

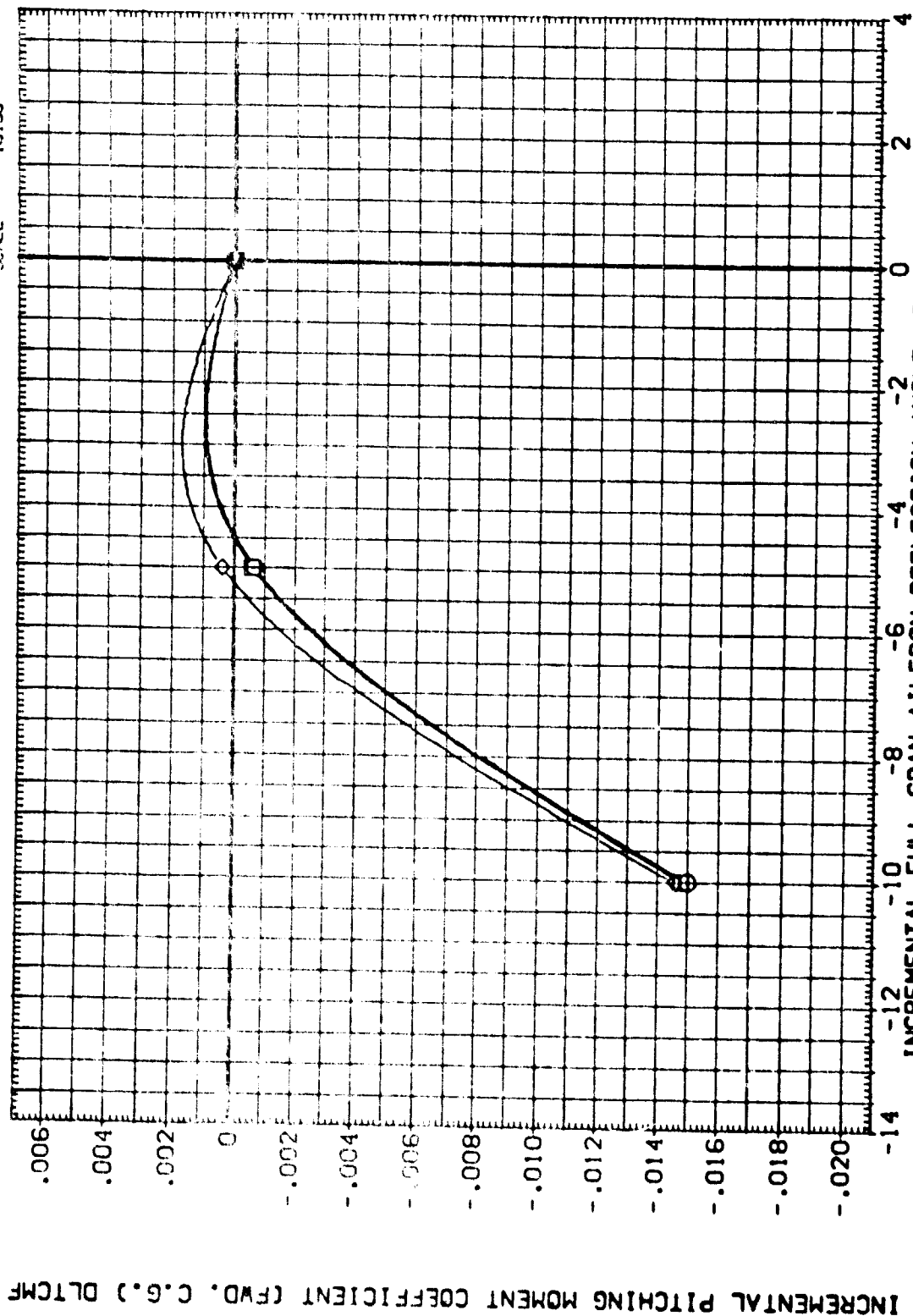


FIG. 10 INCREMENTAL EFFECTS OFAILERON DEFLECTION

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (JTWO24)

SYMBOL	ALPHA	MACH	BETA	RUDDER	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
□	29.000	8.000	0.000	0.000	DLBDFP	DLTARN	2690.0000 SQ.FT.
◇	31.000	.000	.000	.000	SPORPK	DLTARN	474.8100 IN.
△	30.000	.000	.000	.000	RNVL	JTW070	936.6800 IN.
▽	35.000	.000	.000	.000		JTW024	1075.8500 IN.X0
◇	37.000	.000	.000	.000		JTW001	1075.8500 IN.Y0
▽	39.000	.000	.000	.000			375.0000 IN.Z0
							SCALE .0150

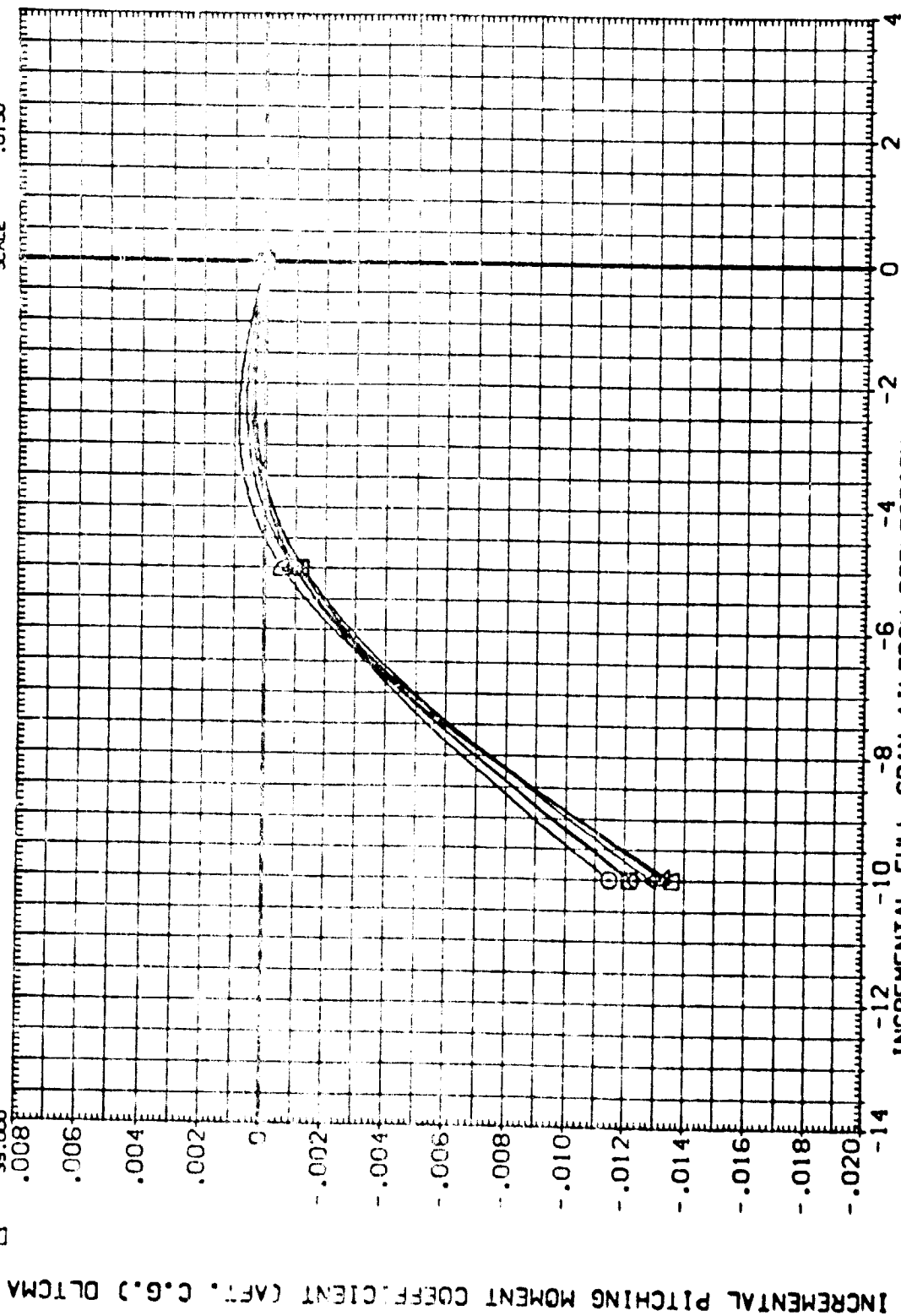


FIG. 10 INCREMENTAL EFFECTS OFAILERON DEFLECTION

0A79 826 C9 E43 F8 M16 N28 R5 V8 W116 (JTWD24)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	DLTARN	DATASET	DLTARN	SREF	REFERENCE INFORMATION
○	41.000		0.000	.000	DLTARN	JTWD24	-5.000	LREF	2690.0000
□	43.000	BETA	.000	56.000	JTWD24	JTWD24	-10.000	BRFP	474.8100
◇	45.000	RUDDER	.000	3.530	JTWD01		.000	XPRP	936.6800
								YPRP	1076.6800
								ZPRP	.0000
								SCALE	375.0000
									.0150

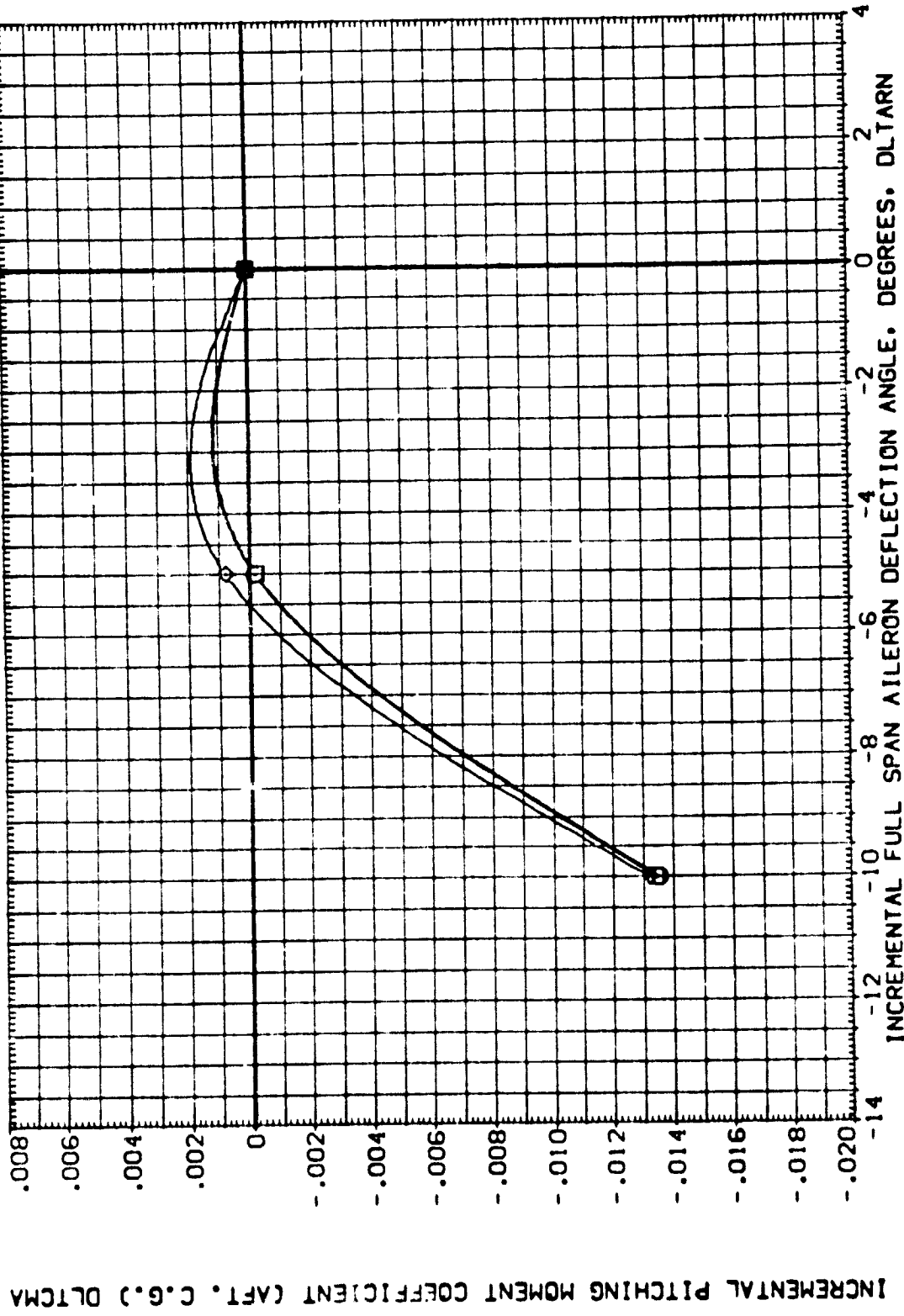
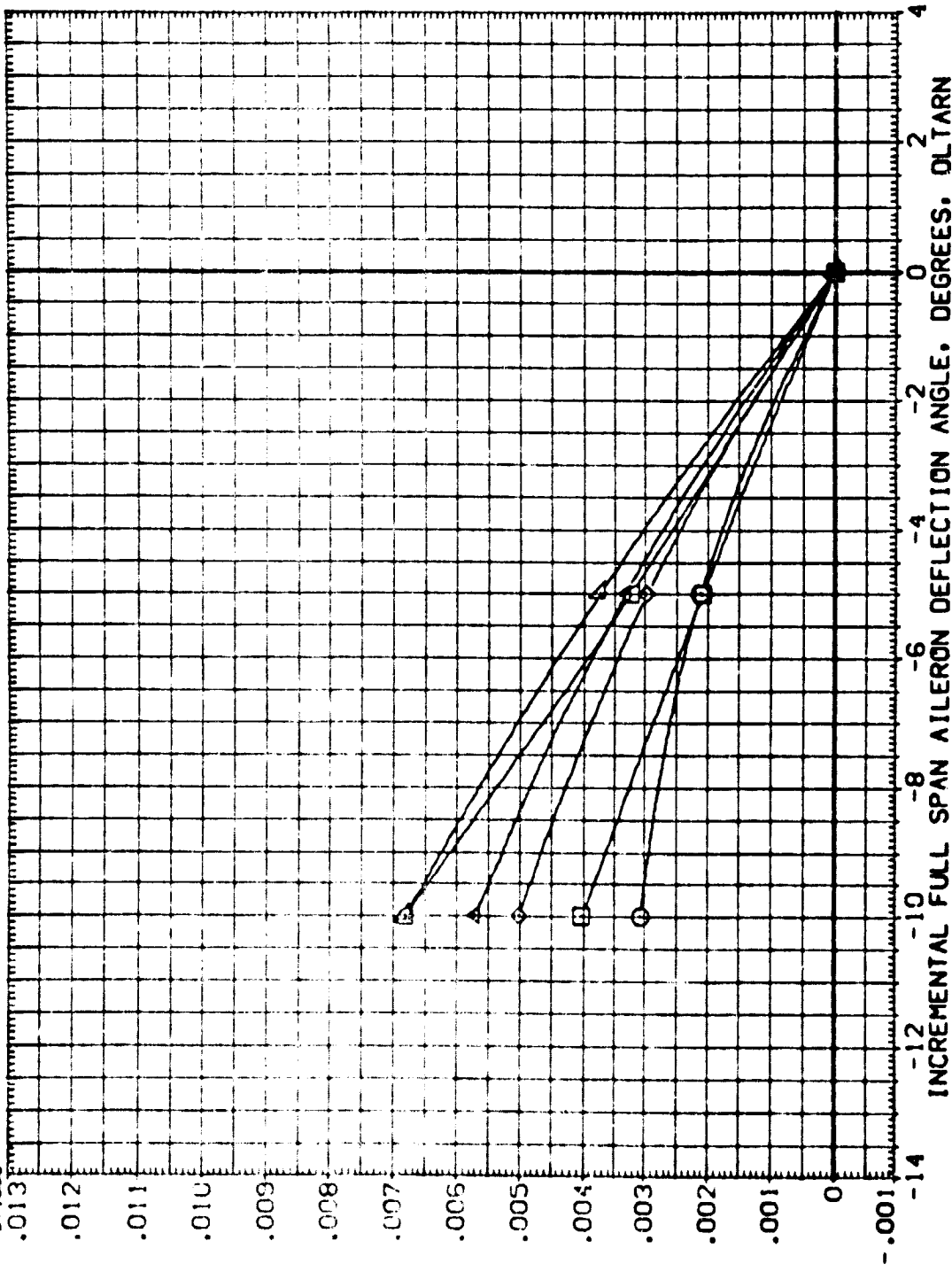


FIG. 10 INCREMENTAL EFFECTS OFAILERON DEFLECTION

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (JTW024)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	MACH	.000	DLTARN	SREF	2690.0000
17.000	8.000	.000	JTW024	LREF	474.8100
19.000	.000	55.000	JTW070	BREF	936.6800
21.000	.000	3.530	JTW001	XREF	1076.6200
23.000	BETA			YREF	375.0000
25.000	RUDDER			ZREF	.0150
27.000				SCALE	



INCREMENTAL AXIAL FORCE COEFFICIENT, DLTA

FIG. 10 INCREMENTAL EFFECTS OFAILERON DEFLECTION

(JTW024)

CA79 B26 C9 E43 F8 M16 N28 R5 V8 W116

SYMBOL

○	◇
□	◇

PARAMETRIC VALUES

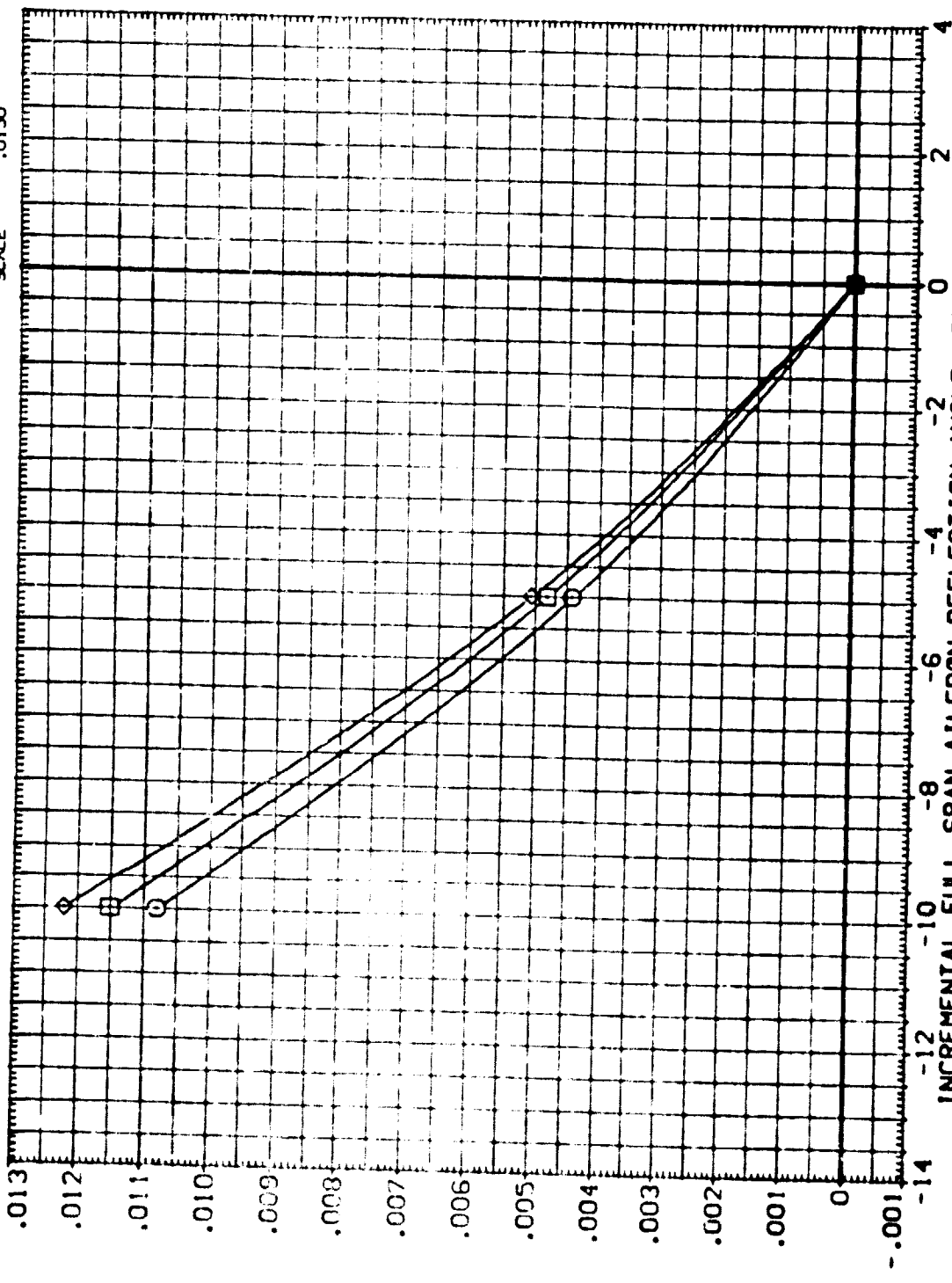
MACH	8.000	CLGFP	.000	DATASET	.000	DLTARN	-10.000
BETA	.000	SPOBRK	55.000	JTW024	3.530	JTW070	-5.000
RUDDER	.000	RVVL	3.530	JTW001			

DATA SOURCE

DATASET	JTW070
DLTARN	-5.000

REFERENCE INFORMATION

SREF	2000.0000	CG.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1076.6800	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0150	



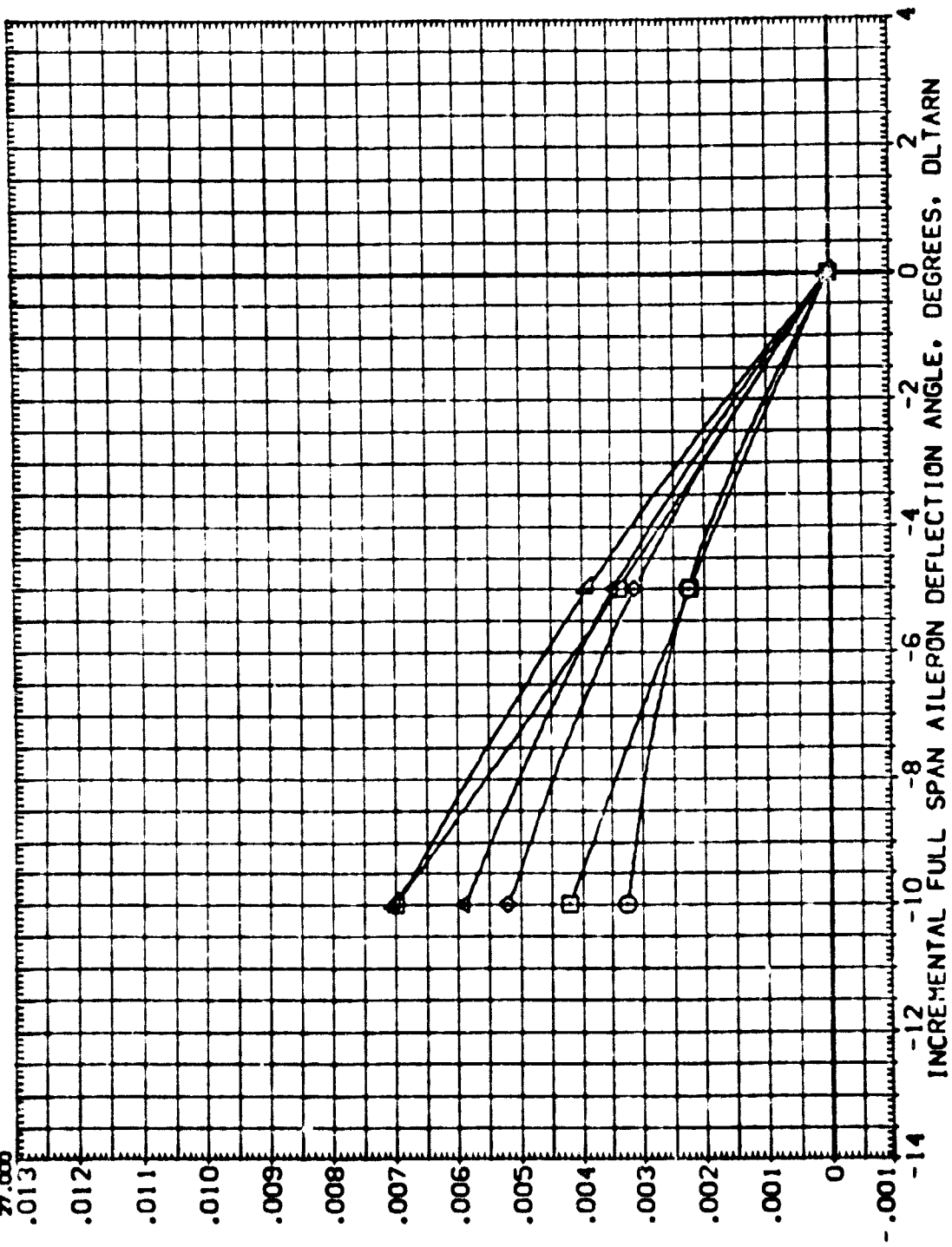
INCREMENTAL AXIAL FORCE COEFFICIENT, DLTA

FIG. 10 INCREMENTAL EFFECTS OFAILERON DEFLECTION



0A79 826 C9 E43 F8 M16 N28 R5 V8 W116 (JTW024)

ALPHA	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
17.000	MACH 8.000	.000 DLTARN	2690.0000 SQ.FT.
19.000	BETA .000	.000 DATASET JTW024	474.8100 IN.
21.000	RUDDER .000	55.000 SPDRK JTW001	936.6800 IN.
23.000		3.530 RVL JTW001	1076.6800 IN.
25.000			375.0000 IN.
27.000			375.0000 IN.
			SCALE .0150



INCREMENTAL FOREBODY AXIAL FORCE COEFFICIENT, DLTAFC

FIG. 10 INCREMENTAL EFFECTS OFAILERON DEFLECTION

(JTW024)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	8.000	DLTARN	DLTARN	SREF	2630.0000
MACH	0.000	DLTARN	DLTARN	LREF	474.8100
BETA	.000	DLTARN	DLTARN	SREF	936.6800
RUDDER	.000	DLTARN	DLTARN	YREF	1076.0000
		DLTARN	DLTARN	ZREF	375.0000
		DLTARN	DLTARN	SCALE	.0150

INCREMENTAL FOREBODY AXIAL FORCE COEFFICIENT, DLTCAF

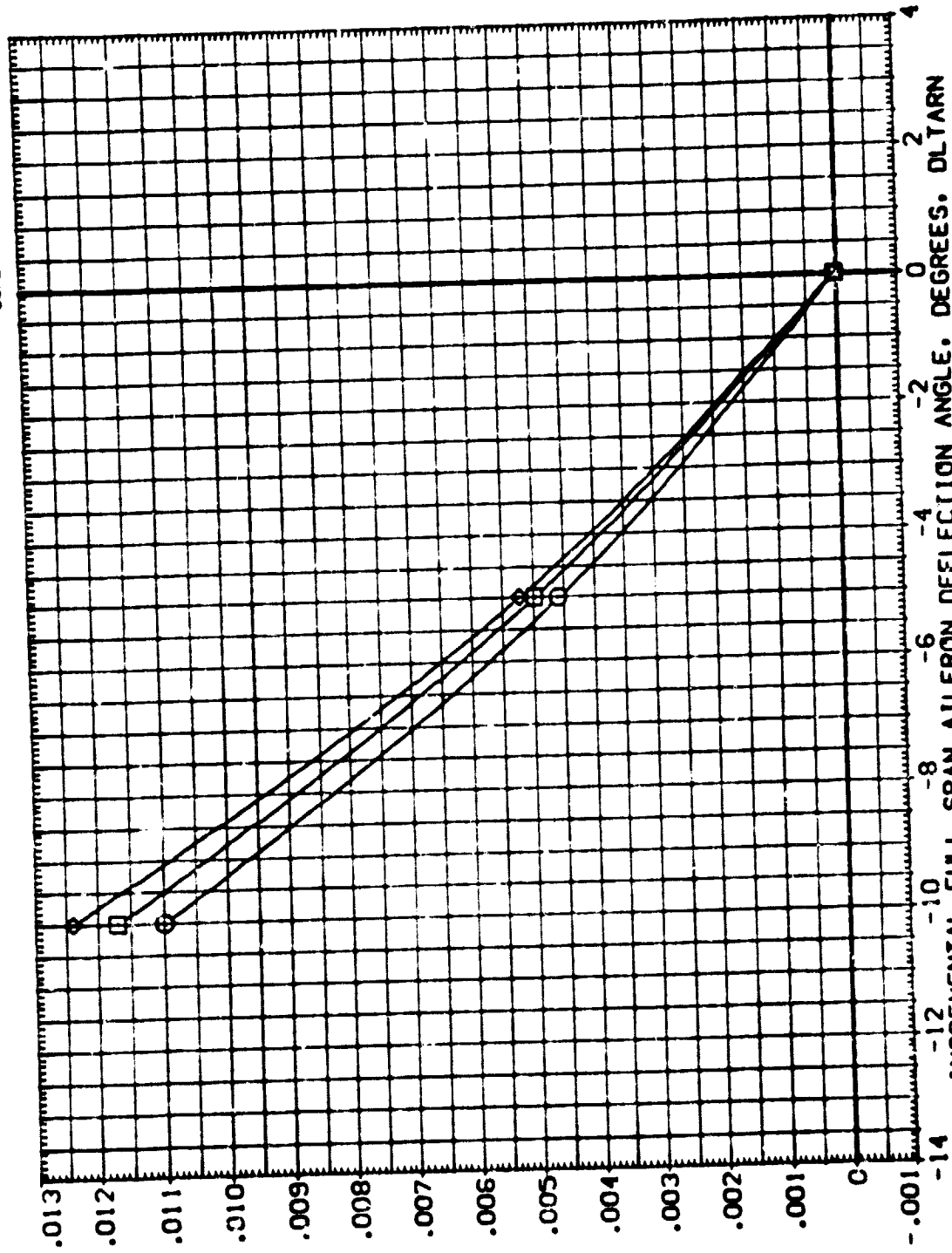


FIG. 10 INCREMENTAL EFFECTS OFAILERON DEFLECTION

(JTW024)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116

SYMBOL ALPHA MACH BETA RUDDER
 O 17.000
 □ 19.000
 ◇ 21.000
 △ 23.000
 ▽ 25.000
 ▽ 27.000

PARAMETRIC VALUES
 8.000 DLBOFP
 .000 SPDRK
 .000 RV/L

DATA SOURCE
 .000 DATASET
 55.000 JTW024
 3.530 JTW001

DLTARN DATASET JTW070
 -5.000

REFERENCE INFORMATION
 2630.0000 SQ.FT.
 474.8100 IN.
 936.6800 IN.
 1076.6800 IN.X0
 .0000 IN.Y0
 375.0000 IN.Z0
 ZPRP SCALE .0150

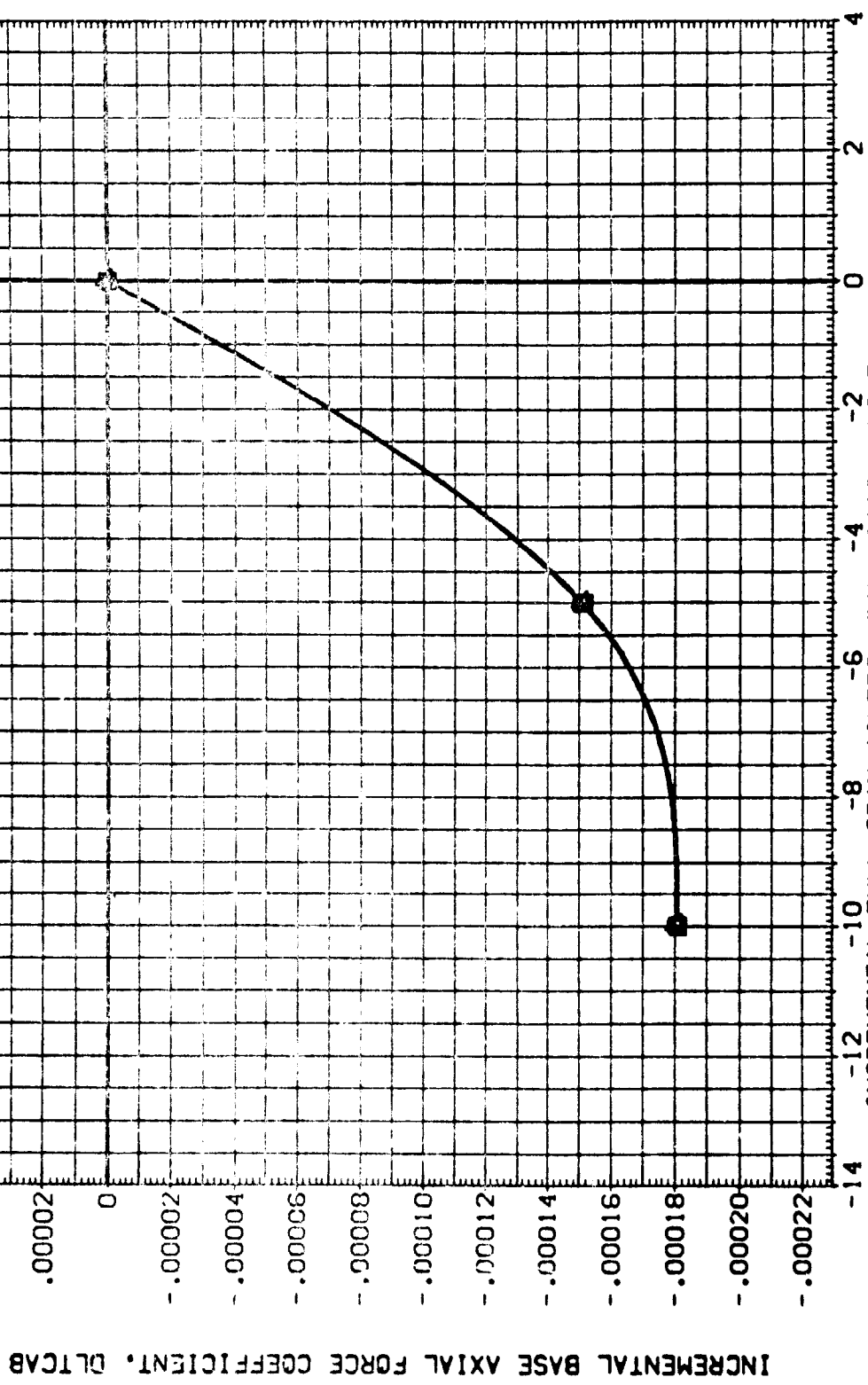


FIG. 10 INCREMENTAL EFFECTS OFAILERON DEFLECTION

(JTWO24)

CA79 B26 C9 E43 F8 M16 N28 R5 V8 W116

SYMBOL
○
□
◇
△
▽

ALPHA
29.000
31.000
33.000
35.000
37.000
39.000

MACH
BETA
RUDDER

PARAMETRIC VALUES
8.000 DLBDFP
.000 SPOBRK
.000 RN/L

.000 DATASET
55.000 JTWO24
3.530 JTW001

DATA SOURCE
DLTARN
-10.000
.000

DLTARN
-5.000

SREF 2690.0000
LREF 474.8100
BREF 936.6800
XTRP 1076.6800
YTRP .0000
ZTRP 375.0000
SCALE .0150

REFERENCE INFORMATION
SQ.FT.
IN.
IN.
IN.
IN.
IN.

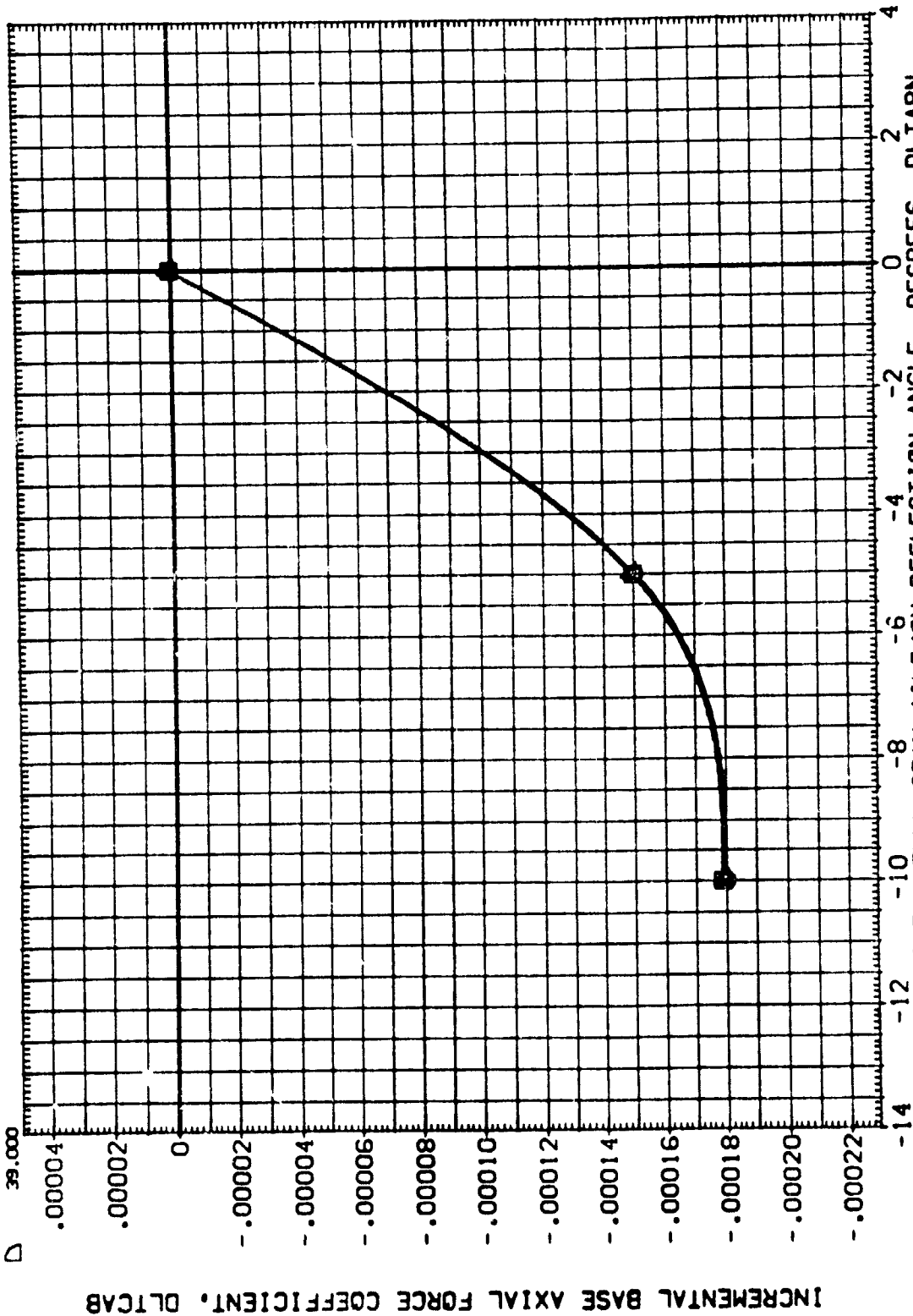


FIG. 10 INCREMENTAL EFFECTS OFAILERON DEFLECTION

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (JTW024)

SYMBOL	ALPHA	MACH	BETA	RUDDER	PARAMETRIC VALUES	DATA SOURCE	DATASET	DLTARN	SREF	REFERENCE INFORMATION
○	41.000				8.000 DLBDFP	.000 DATASET	JTW024	-10.000	474.8100	2630.0000 SQ.F.T.
□	43.000				.000 SPDBRK	55.000 JTW024	JTW070	-5.000	936.6800	IN.
◇	45.000				.000 RNVL	3.530 JTW001			1076.6800	IN.X0
									YFRP .0000	IN.Y0
									ZFRP .0000	IN.Z0
									SCALE .0150	

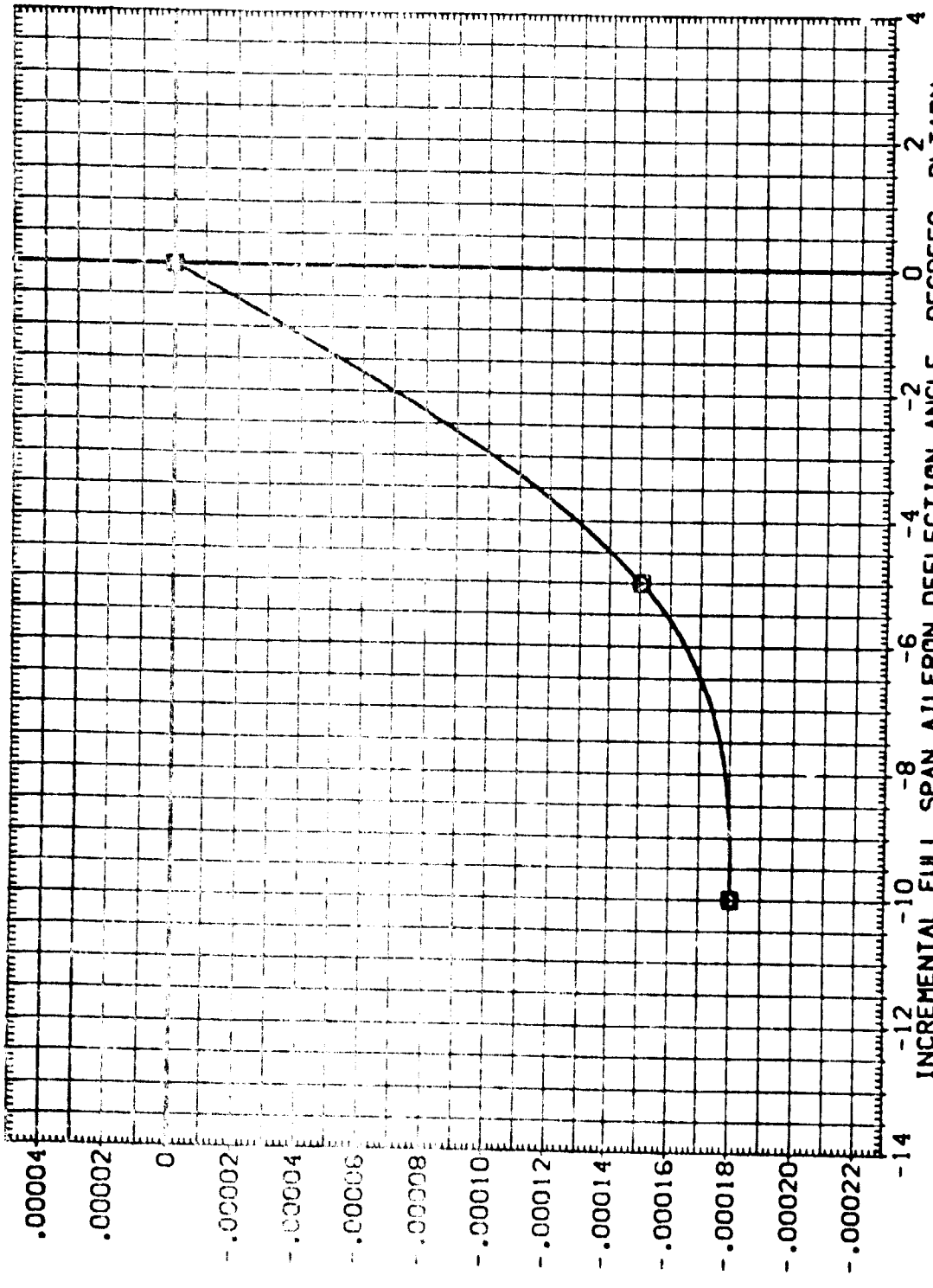
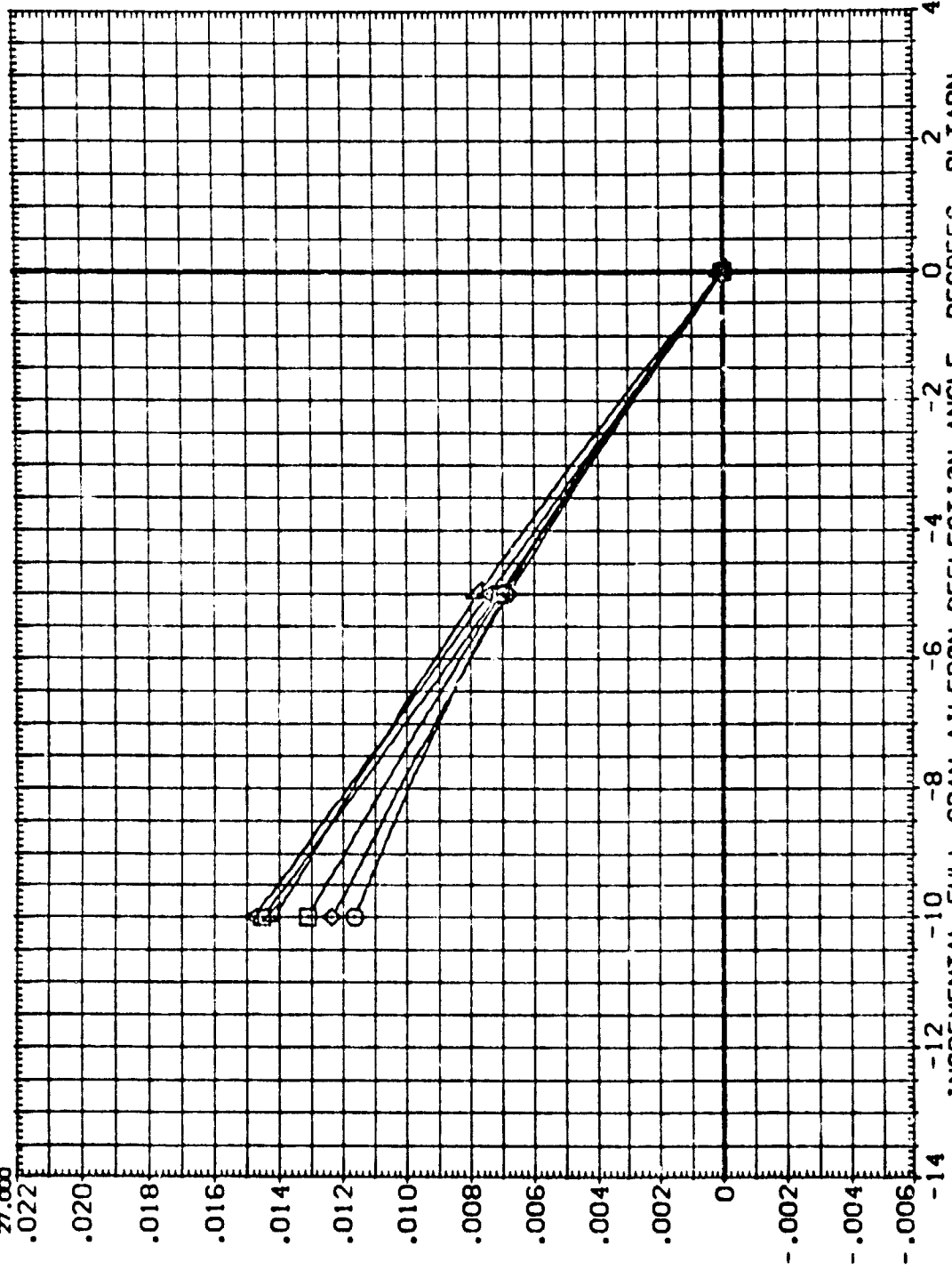


FIG. 10 INCREMENTAL EFFECTS OFAILERON DEFLECTION

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (JTW024)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
MACH	8.000	DLTARN	DLTARN	C _{LF}	2690.0000
BETA	.000	DATASET	JTW070	LREF	474.8100
RUDDER	.000	DATASET	JTW024	BREF	936.6800
			JTW001	XPRP	1076.6800
				YMRP	.0000
				ZMRP	375.0000
				SCALE	%.0150

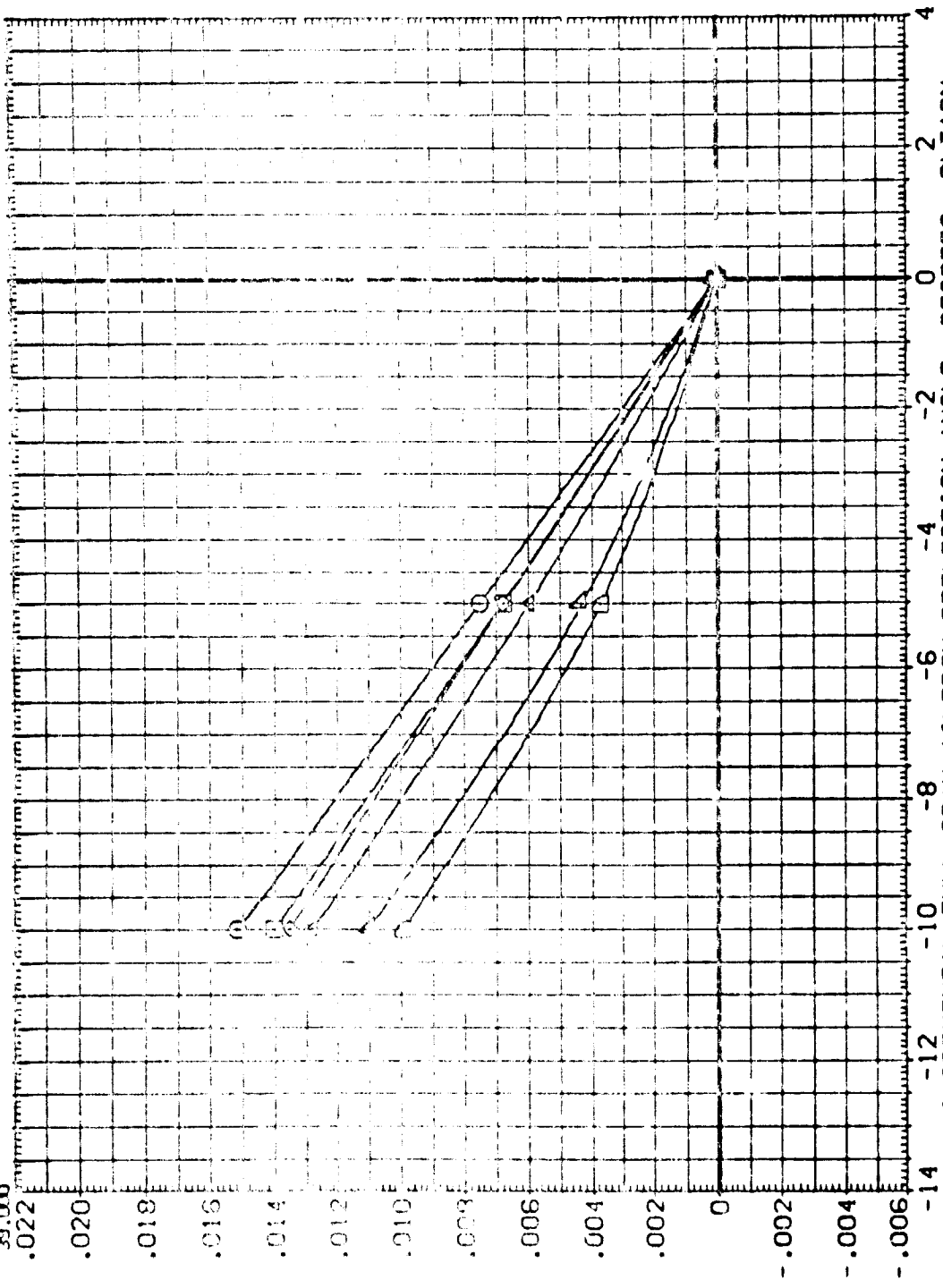


INCREMENTAL LIFT COEFFICIENT, DLTCL

FIG. 10 INCREMENTAL EFFECTS OFAILERON DEFLECTION

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (JTW024)

SYMBOL	ALPHA	MACH	BETA	RUDDER	PARAMETRIC VALUES	DATA SOURCE	DLTARN	DATASET	DLTARN	SKEF	SO.FT.
□	29.000	8.000	.000		DLBOFF	DLTARN		JTW070	-5.000	2650.0100	50.000
□	31.000	.000	.000		SPOBRK	JTW024	-10.000			474.0100	10.000
◇	33.000	.000	.000		RVL	JTW001	.000			936.8300	10.000
△	35.000									1076.8800	10.000
▽	37.000									375.0000	10.000
▽	.022									375.0000	10.000
	.020									.0150	



INCREMENTAL LIFT COEFFICIENT, DLCL

INCREMENTAL FULL SPAN AILERON DEFLECTION ANGLE, DEGREES, DLTARN

FIG. 10 INCREMENTAL EFFECTS OF AILERON DEFLECTION



(JTWO24)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116

SYMBOL
○ □ ◇

ALPHA 41.000
MACH 8.000
BETA .000
RUDDER .000

PARAMETRIC VALUES
DLEDFP 8.000
SPDRBK .000
RVL .000

DATA SOURCE
DLTARN .030
DLTARN -10.000
DLTARN .000

DATA SET DATASET
DLTARN JTWO24
DLTARN JTWO01

REFERENCE INFORMATION
SREF 2690.0000
LREF 474.8100
BREF 936.6800
XTRP 1075.6500
YTRP .0000
ZTRP 375.0000
SCALE .0150

SO.F.T.
IN.
IN.
IN.
IN.
IN.

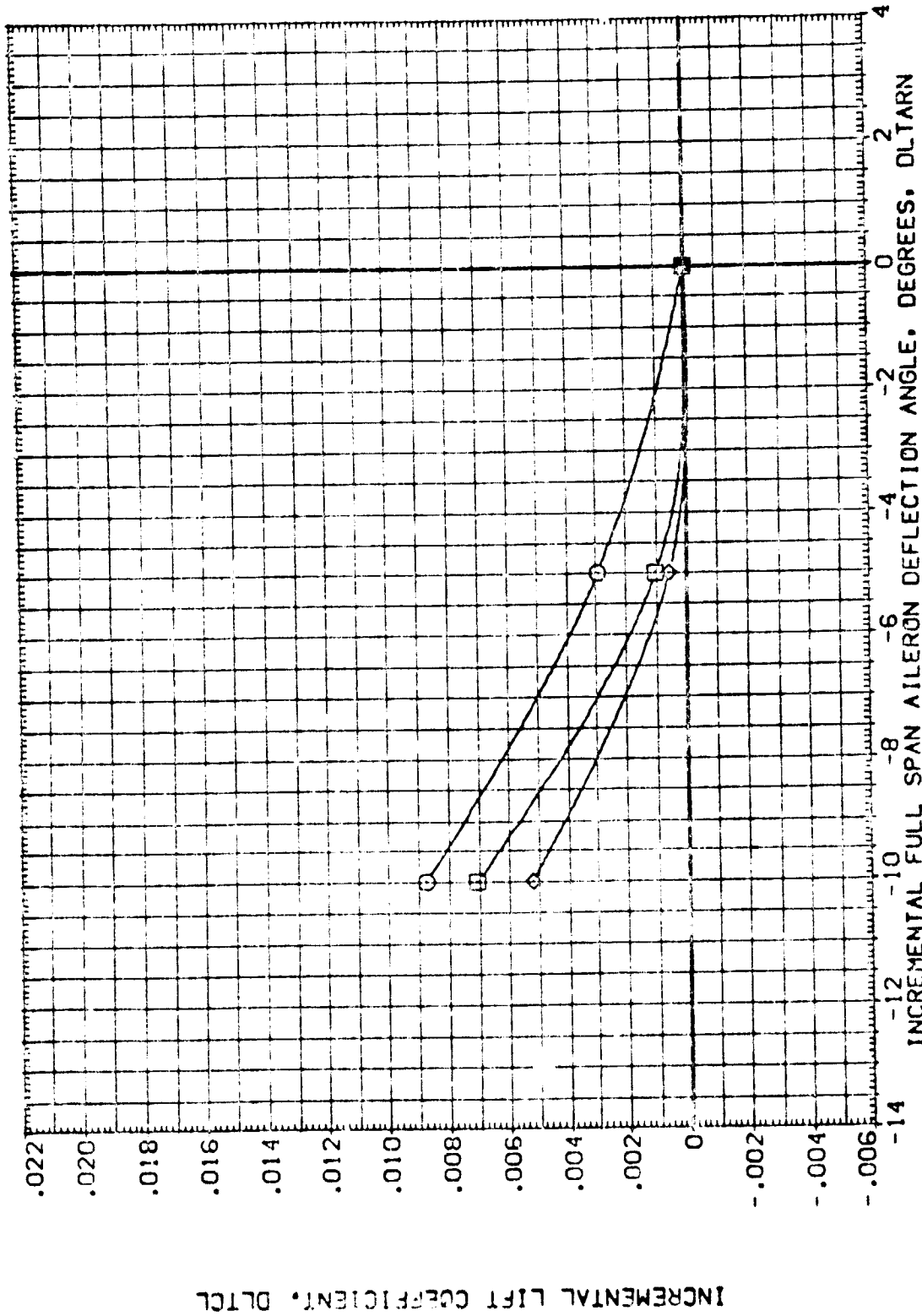


FIG. 10 INCREMENTAL EFFECTS OFAILERON DEFLECTION

(JTW024)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116

SYMBOL

○ □ ◇ △ ▽

ALPHA
17.000
19.000
21.000
23.000
25.000
27.000

PARAMETRIC VALUES

MACH 8.000
BETA .000
FLUDER .000

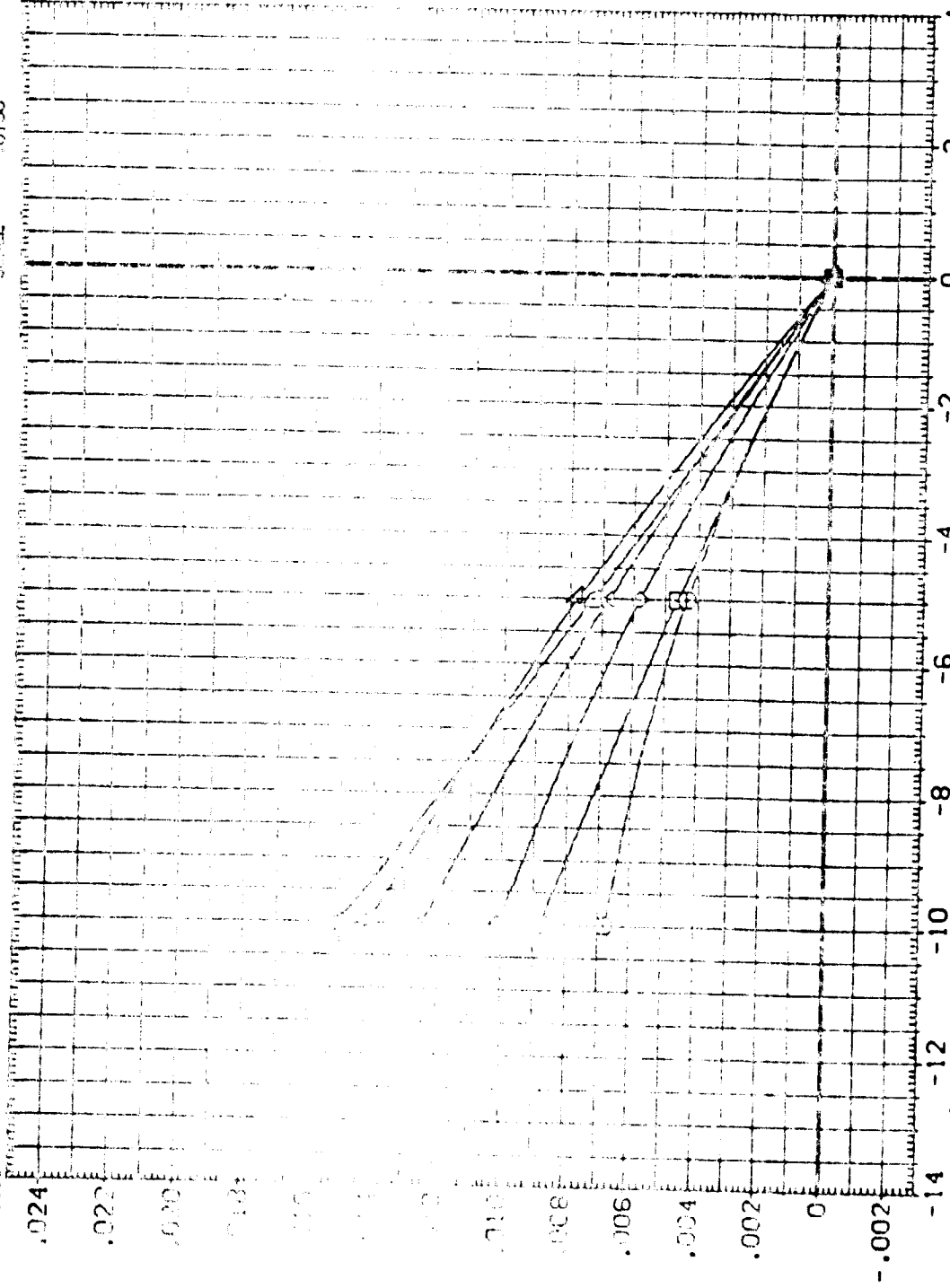
DATA SOURCE

.000 DATASET JTW024
55.000 JTW024
3.500 JTW001

DATASET JTW070
DLTARN -5.000

REFERENCE INFORMATION

2000.0000 SQ.FT.
174.8110 IN.
976.1500 IN.
1076.0300 IN.
575.0000 IN.
0150



INCREMENTAL FULL SPAN AILERON DEFLECTION ANGLE, DEGREES, DLTARN

INCREMENTAL EFFECTS OF AILERON DEFLECTION



(JTWO24)

0A79 826 C9 E43 F8 M16 N28 R5 V8 W116

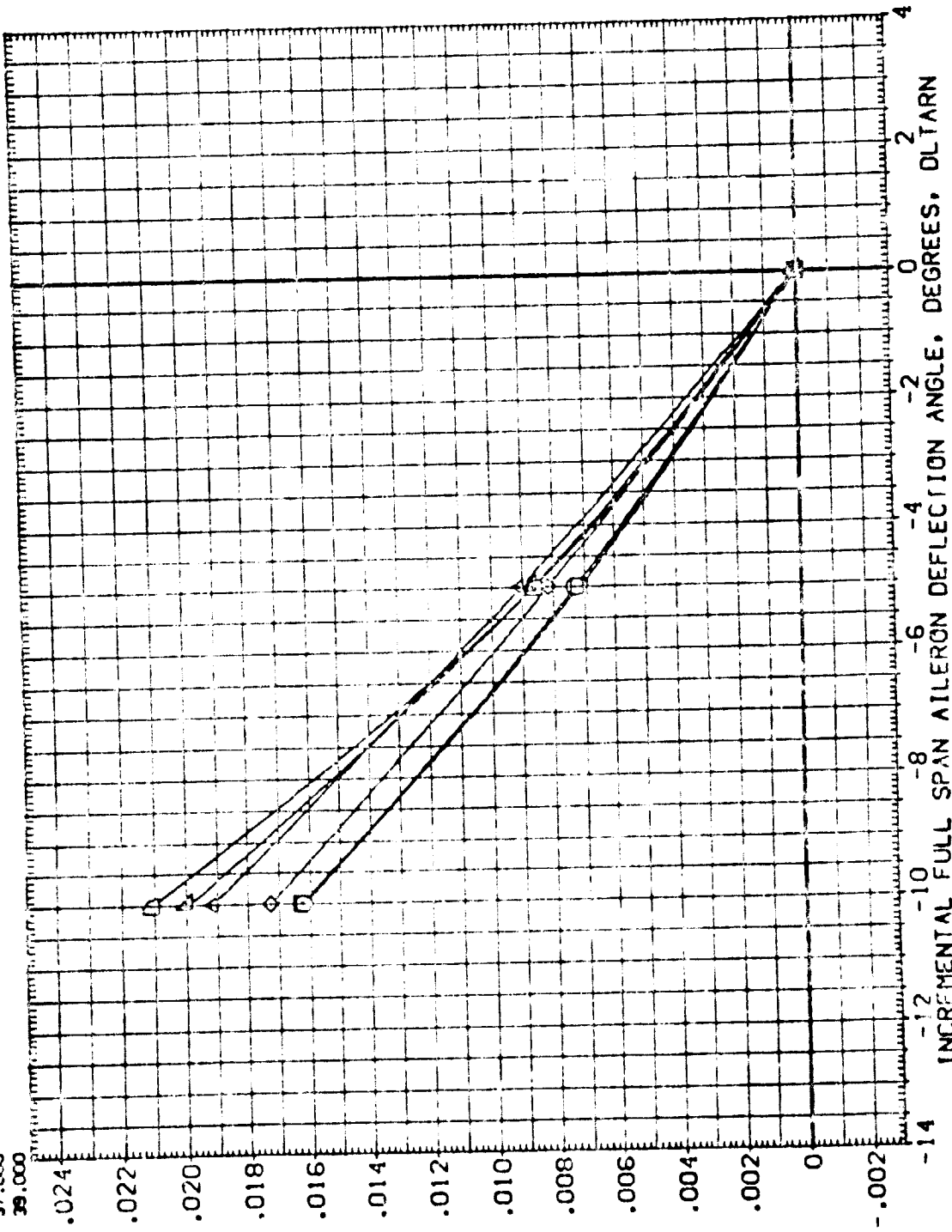
REFERENCE INFORMATION
 SREF 2690.0000 59.FT.
 LREF 474.8100 IN.
 XREF 936.6800 IN. X0
 YREF 1076.6800 IN. Y0
 YTRP 0.0000 IN. Y0
 ZTRP 375.0000 IN. Z0
 SCALE .0150

DATA SOURCE
 DATASET JTWO70
 DLTRN -5.000

PARAMETRIC VALUES
 .000 DLTRN
 .000 DATASET
 .000 DLTRN
 .000 DATASET
 .000 DLTRN
 .000 DATASET
 .000 DLTRN
 .000 DATASET
 .000 DLTRN

ALPHA 29.000
 MACH 0.000
 BETA .000
 RUDDER .000
 33.000
 35.000
 37.000
 39.000

SYMBOL
 ○
 □
 △
 ▼
 ▽



INCREMENTAL DRAG COEFFICIENT, DLICD

INCREMENTAL FULL SPANAILERON DEFLECTION ANGLE, DEGREES, DLTARN

FIG. 10 INCREMENTAL EFFECTS OFAILERON DEFLECTION

0A79 826 C9 E43 F8 M16 N28 R5 V8 W116 (JTW024)

SYMBOL		PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
○	ALPHA	9.000	DLTARN	.000	DLTARN	USEF	2630.0000
□	MACH	.000	DLTARN	-10.000	DLTARN	REF	474.8100
◇	BETA	.000	SI-080K	.000	JTW024	REF	936.6800
	RUDDER	.000	RAVL	3.500	JTW001	X-REF	1016.6800
						Y-REF	.0000
						Z-REF	375.0000
						SCALE	.0150

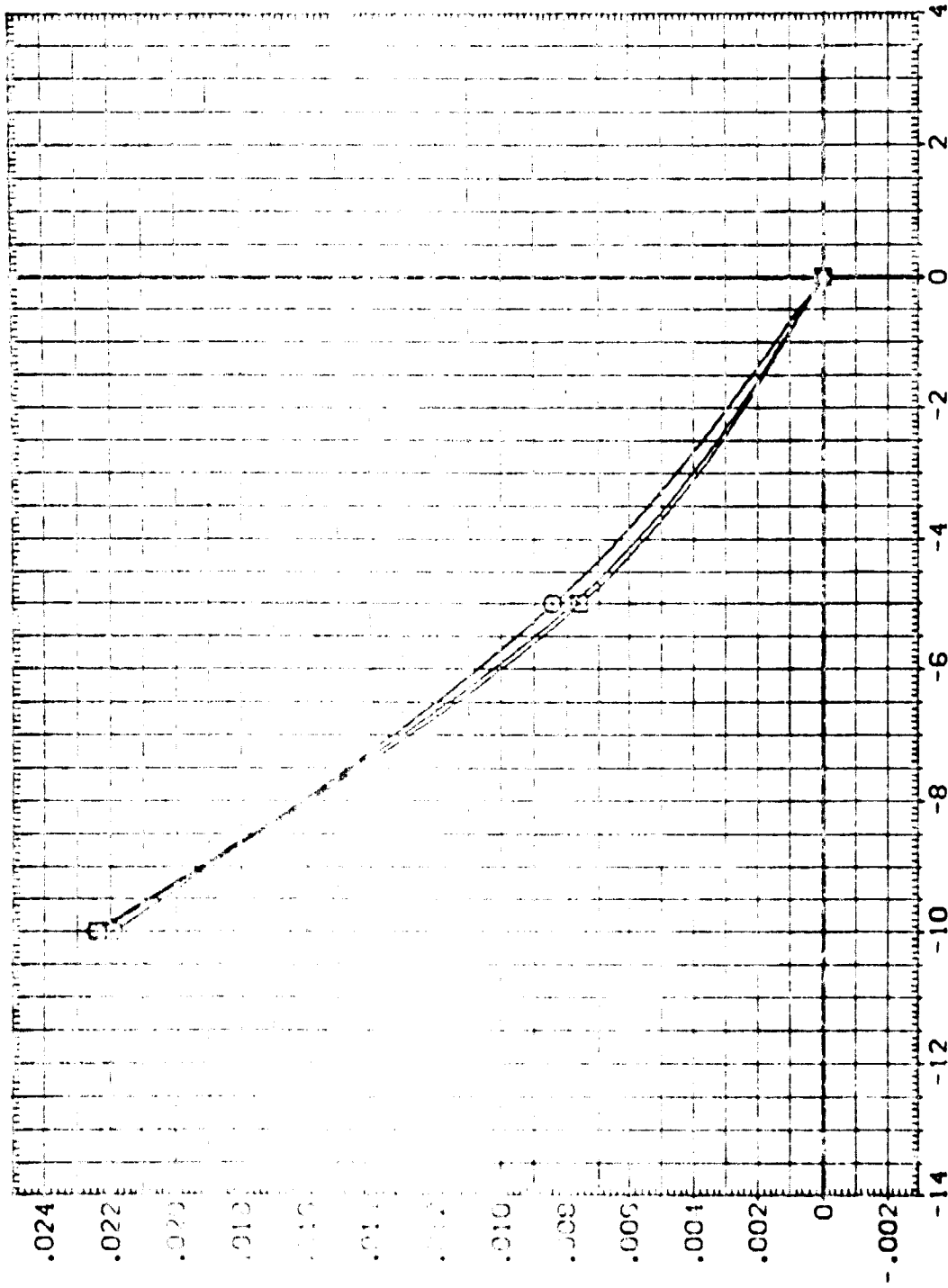


FIG. 10 INCREMENTAL EFFECTS OFAILERON DEFLECTION

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (KTW024)

REFERENCE INFORMATION
 SQ.FT. 2690.0000
 IN. 474.8100
 IN. 536.6800
 IN. 1076.6800
 IN. 375.0000
 IN. 375.0000
 IN. 375.0150

DATA SOURCE
 DATASET KTW070
 DLTARN -5.000

PARAMETRIC VALUES
 MACH 8.000
 BETA .000
 RUDER .000

DLBFP .000
 SFTCRK 55.000
 RVL 3.530

DLTARN -10.000
 KTW024
 KTW001

SYMBOL
 17.000
 19.000
 21.000
 23.000
 25.000
 27.000

INCREMENTAL SIDE FORCE COEFFICIENT, C_{LFC}

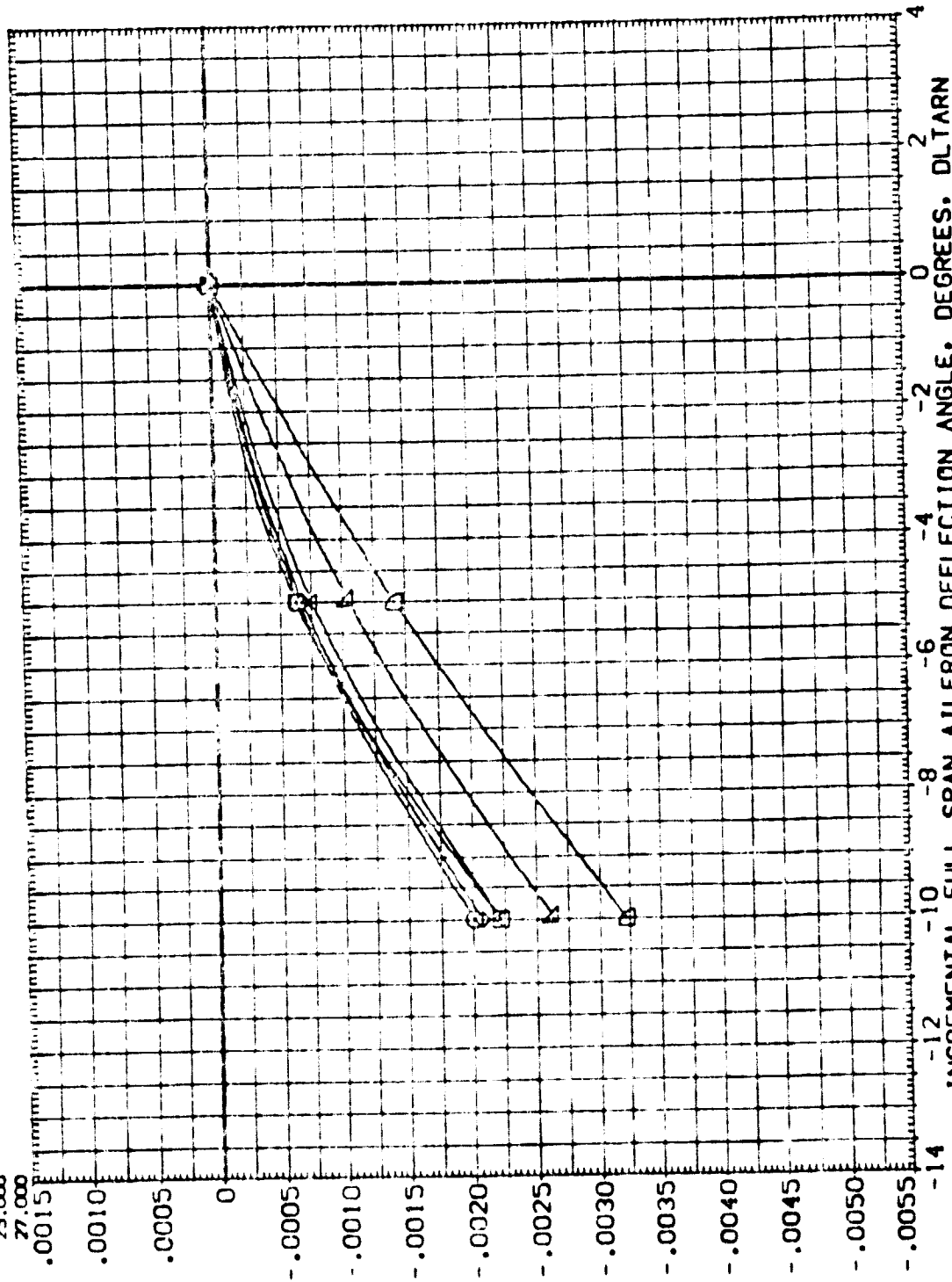


FIG. 10 INCREMENTAL EFFECTS OFAILERON DEFLECTION

(KTW024)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116

SYMBOL	□	◇	△	▽	○
--------	---	---	---	---	---

ALPHA	29.000
BETA	31.000
MACH	30.000
RUDER	35.000
DLBDFP	37.000
SPOBRK	39.000
RNVL	

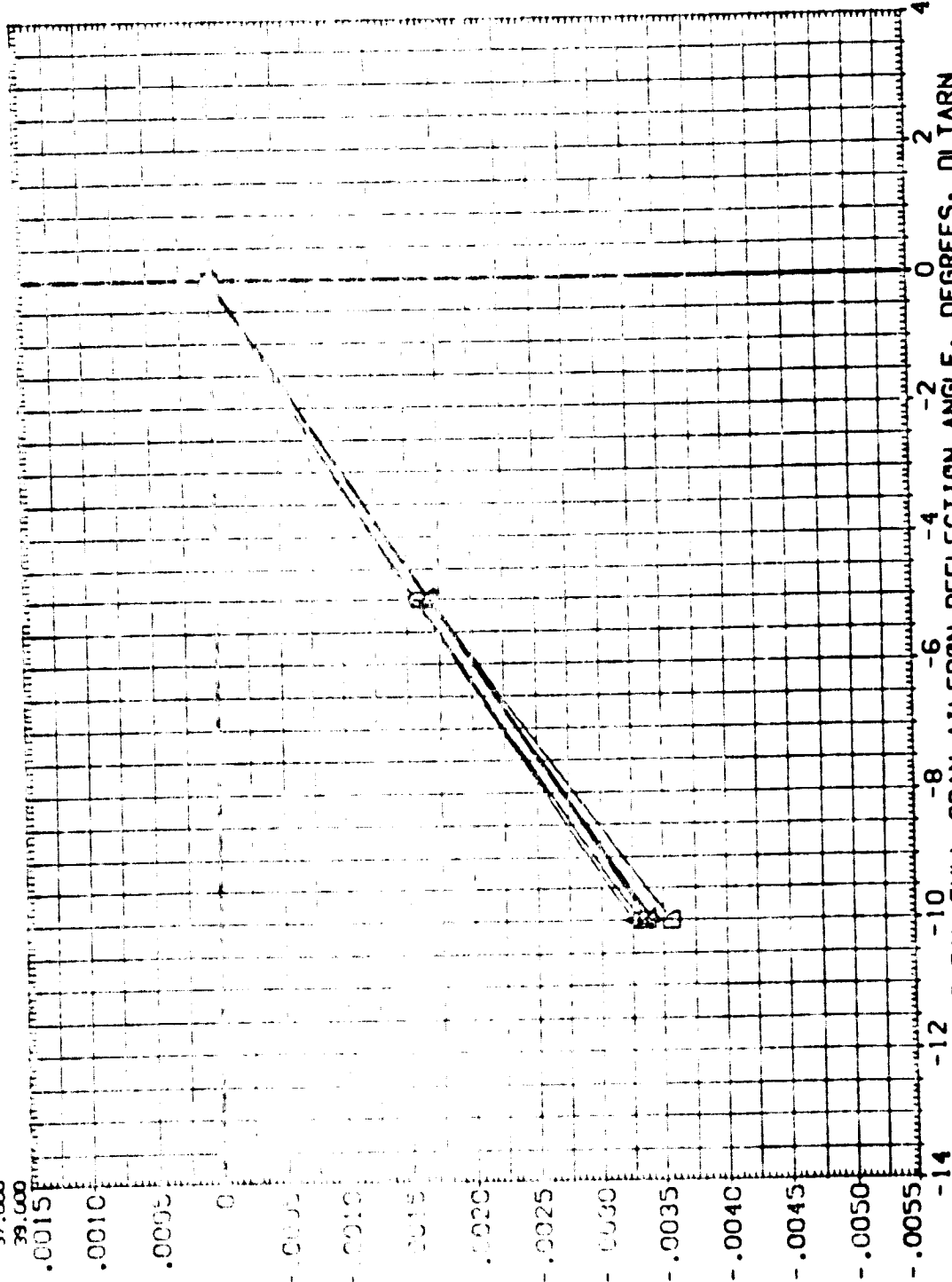
PARAMETRIC VALUES	
.000	DLBDFP
.000	SPOBRK
.000	RNVL
.000	KTW024
.000	KTW001
3.530	

DATA SOURCE	
DLTARN	-10.000
KTW070	.000

DATASET	KTW070
DLTARN	-5.000

SCALE	.0150
TRIP	375.0000
YH22	1076.5800
XH22	936.6300
BREF	474.3100
LREF	2690.0000

REFERENCE INFORMATION	
SO.FT.	IN.
375.0000	IN.70
1076.5800	IN.70
936.6300	IN.70
474.3100	IN.70
2690.0000	IN.70



INCREMENTAL SIDE FORCE COEFFICIENT, CLCY

INCREMENTAL FULL SPANAILERON DEFLECTION ANGLE, DEGREES, DLTARN

FIG. 10 INCREMENTAL EFFECTS OFAILERON DEFLECTION



(KTW024)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116

REFERENCE INFORMATION
SQ.FT. 2690.0000
IN. 474.6100
IN. X0 936.6800
IN. Y0 1076.6800
IN. Z0 375.0000
SCALE .0150

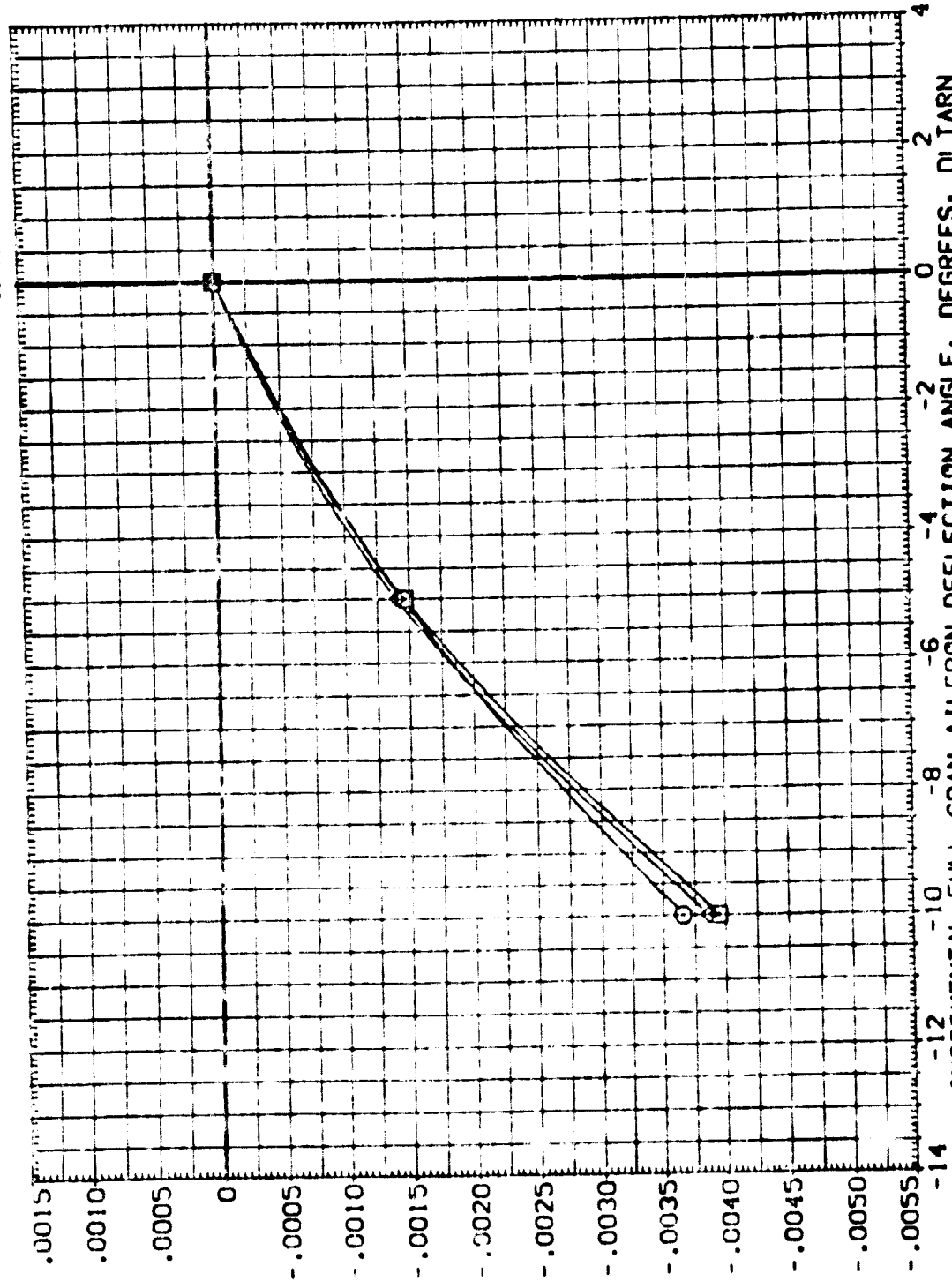
DATA SOURCE
DLTARN -10.000
KTW070

PARAMETRIC VALUES
DLBOFP 0.000
SPOCRK .000
R/L 3.530

ALPHA 41.000
MACH 43.000
BETA 45.000
RUDDER

DLTARN -5.000

DLTARN -5.000



INCREMENTAL SIDE FORCE COEFFICIENT, DLTCY

INCREMENTAL FULL SPANAILERON DEFLECTION ANGLE, DEGREES, DLTARN

FIG. 10 INCREMENTAL EFFECTS OFAILERON DEFLECTION

0A79 826 C9 E43 F8 M16 N28 R5 V8 W116 (KTW024)

SYMBOL
 □
 ◇
 △
 ○
 ○

ALPHA
 29.000
 31.000
 33.000
 35.000
 37.000

MACH
 BETA
 RORDER

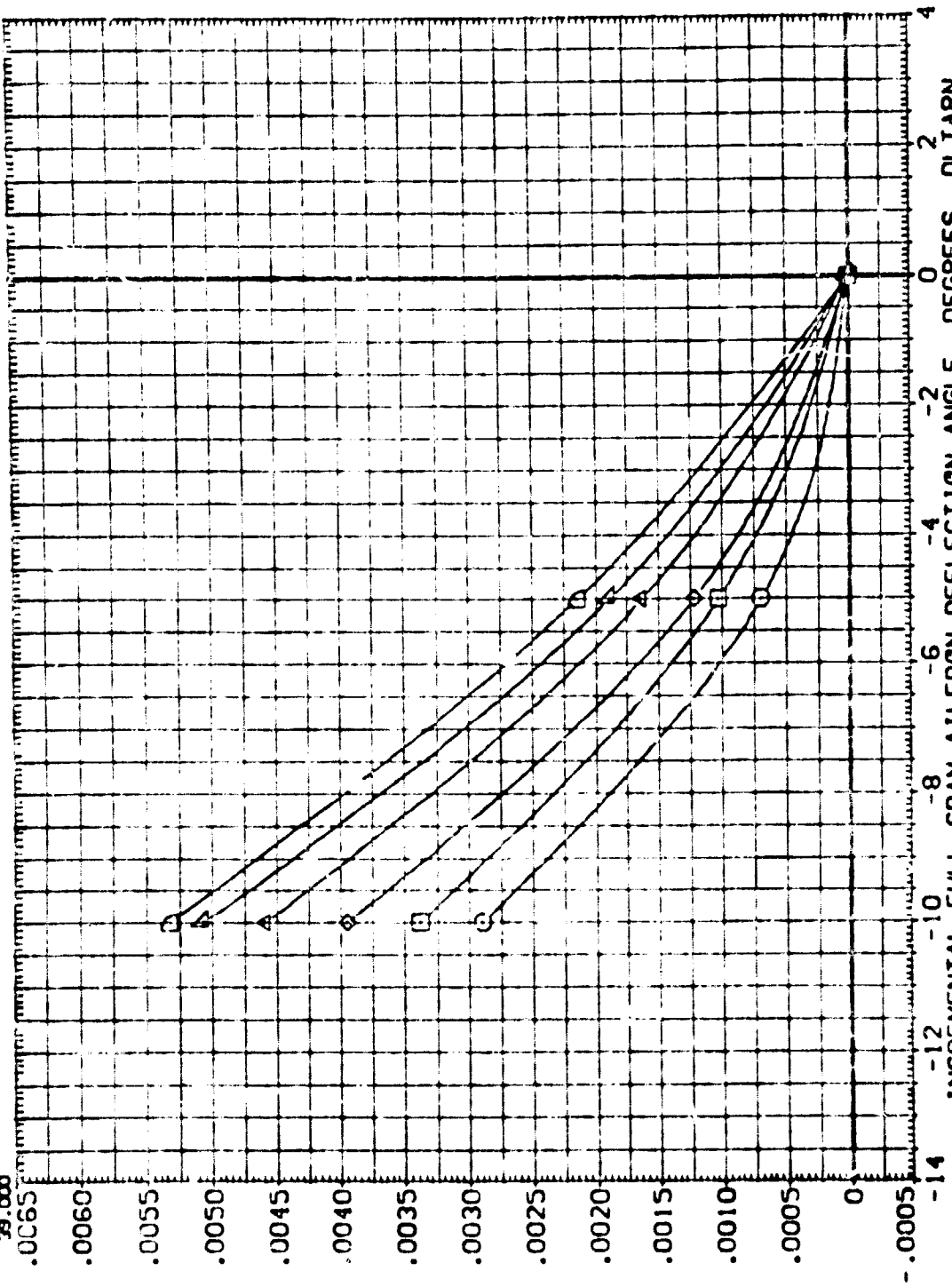
PARAMETRIC VALUES
 0.000 CLBOFP
 .000 SPOBRK
 .000 RVUL

DATA SOURCE
 DATASET ULTARN
 .000 DATASET KTW024
 55.000 KTW024
 3.530 KTW001
 -10.000
 .000

DLTARN
 -5.000

SREF
 LREF
 XREF
 YREF
 ZREF
 SCALE

REFERENCE INFORMATION
 2690.0000 SO.FT.
 474.8100 IN.
 936.6800 IN.
 1075.6800 IN.
 0000 IN.
 0000 IN.
 375.0000 IN.
 .0150



INCREMENTAL YAWING MOMENT COEFFICIENT, CLCYN

INCREMENTAL FULL SPAN AILERON DEFLECTION ANGLE, DEGREES, DLTARN

FIG. 10 INCREMENTAL EFFECTS OF AILERON DEFLECTION

(KTW024)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116

SYMBOL
○
□
◇

PARAMETRIC VALUES
MACH 8.000
BETA .000
RUDDER .000
REF .000
OFF .000
SPDRK .000
RAVL .000

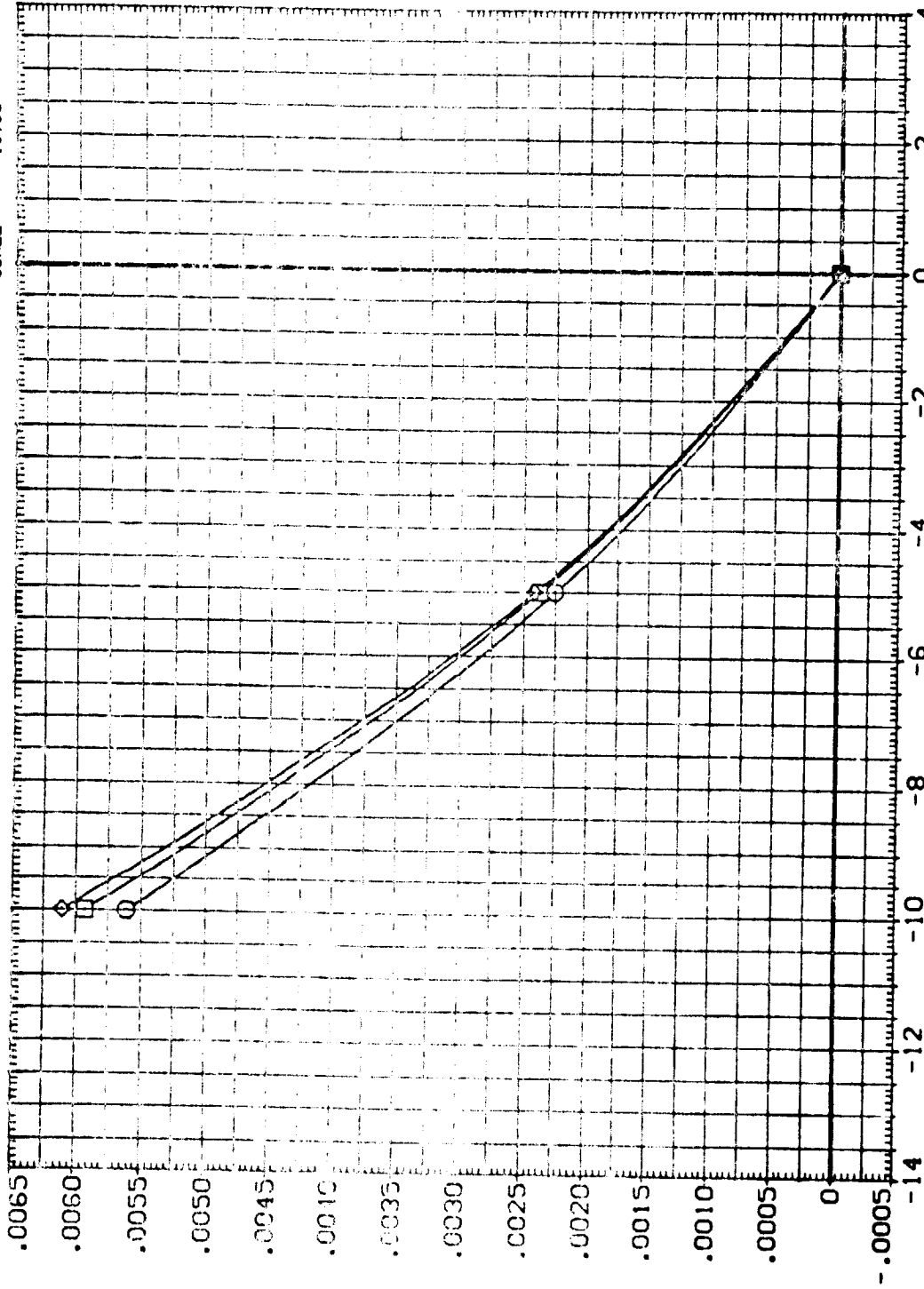
DATA SOURCE
DLTARN -10.000
KTW024
3.530 KTW001

DATASET
KTW070

DLTARN -5.000

REFERENCE INFORMATION
SREF 2850.0000
LREF 474.8100
XREF 936.6800
YREF 1076.6800
ZREF 375.0000
SCALE .0150

SO.FT.
IN.
IN.
IN.
IN.
IN.



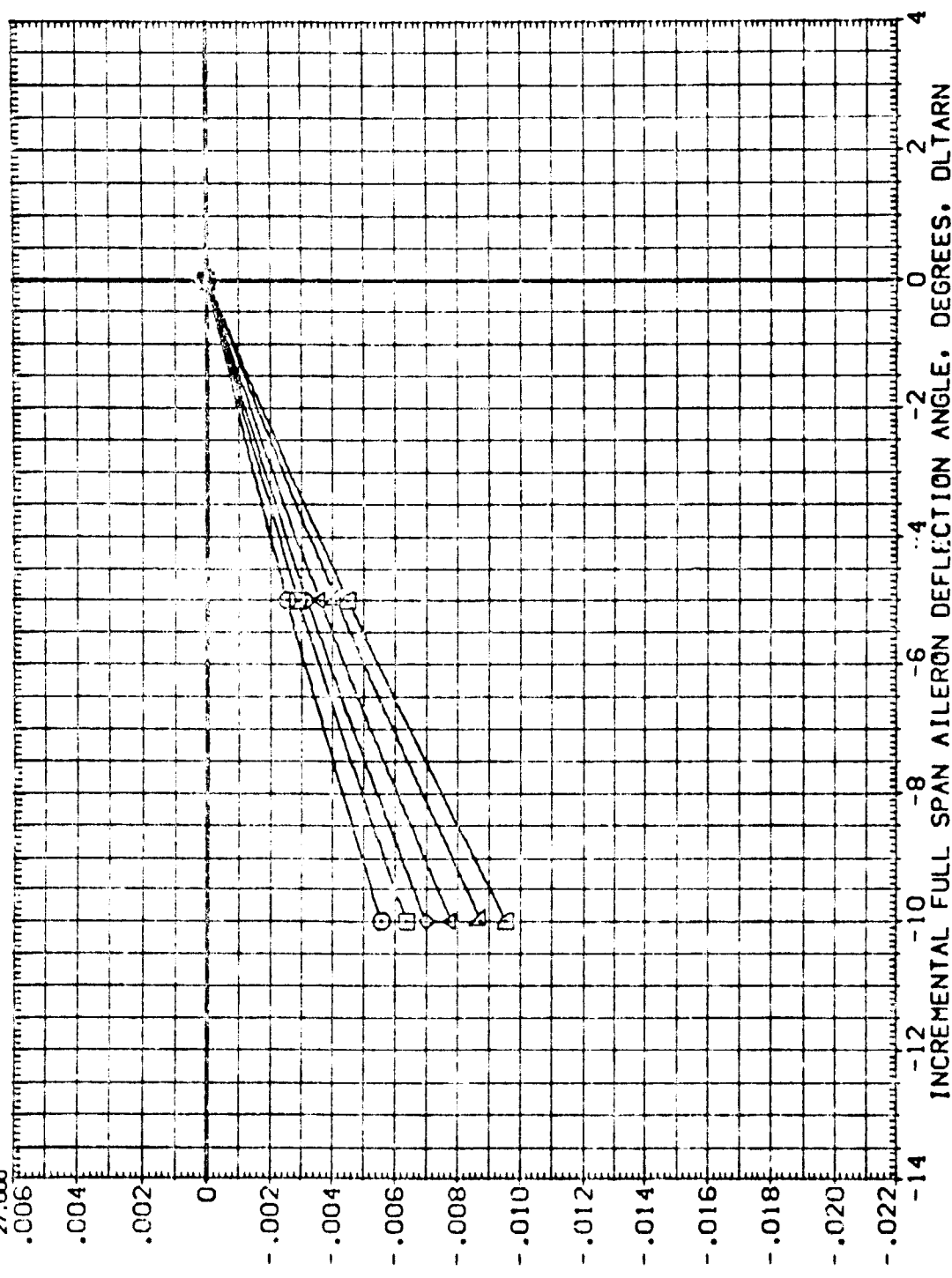
INCREMENTAL YAWING MOMENT COEFFICIENT, DLTARN

INCREMENTAL FULL SPANAILERON DEFLECTION ANGLE, DEGREES, DLTARN
FIG. 10 INCREMENTAL EFFECTS OFAILERON DEFLECTION



0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (KTW024)

ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
17.000	8.000	DBEFP	DLTARN	2650.0000 SQ.FT.
19.000	.000	SFOBRK	DLTARN	474.8100 IN.
21.000	.000	RVL	DLTARN	936.6800 IN.
23.000	.000	RVL	DLTARN	1076.6800 IN.XD
25.000	.000	RVL	DLTARN	375.0000 IN.YD
27.000	.000	RVL	DLTARN	375.0000 IN.ZD
			SCALE	.0150



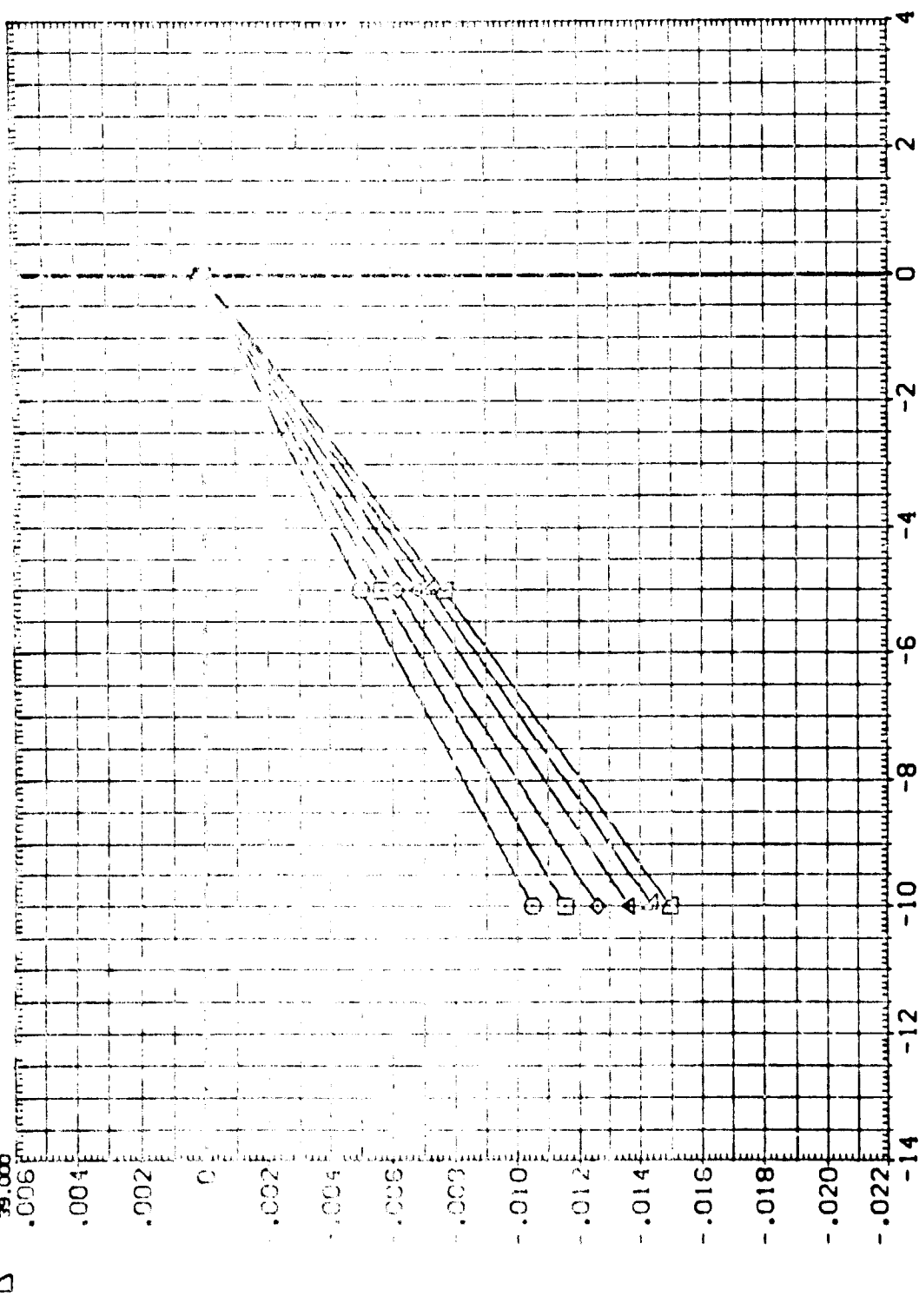
INCREMENTAL ROLLING MOMENT COEFFICIENT, DLTCL

INCREMENTAL FULL SPAN AILERON DEFLECTION ANGLE, DEGREES, DLTARN

FIG. 10 INCREMENTAL EFFECTS OF AILERON DEFLECTION

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (KTW024)

ALPHA	29.000	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
BETA	31.000	8.000 DLBDFP	.000 DLASET	2000.0000
RUDDER	33.000	.000 SPOBRK	KTW024	174.0000
	35.000	.000 RVL	KTW001	936.0000
	37.000			1976.0000
				375.0000
				.0150



INCREMENTAL ROLLING MOMENT COEFF. CLM, DLTCL

FIG. 10 INCREMENTAL EFFECTS OFAILERON DEFLECTION



0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (KTW024)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION							
ALPHA	41.000	MACH	8.000	DLBOFP	.000	DATASET	DLTARN	-5.000	SREF	2690.0000	SO.FT.
BETA	43.000	BETA	.000	SP08RK	55.000	KTW024	DLTARN	-5.000	LRFF	474.8100	IN.
RUDDER	45.000	RUDDER	.000	RN/L	3.500	KTW001	DLTARN	-5.000	BRFF	936.6800	IN.
							DLTARN	-5.000	XTRP	1076.6800	IN.
							DLTARN	-5.000	YTRP	.0000	IN.
							DLTARN	-5.000	ZTRP	375.0000	IN.
							DLTARN	-5.000	SCALE	.0150	IN.

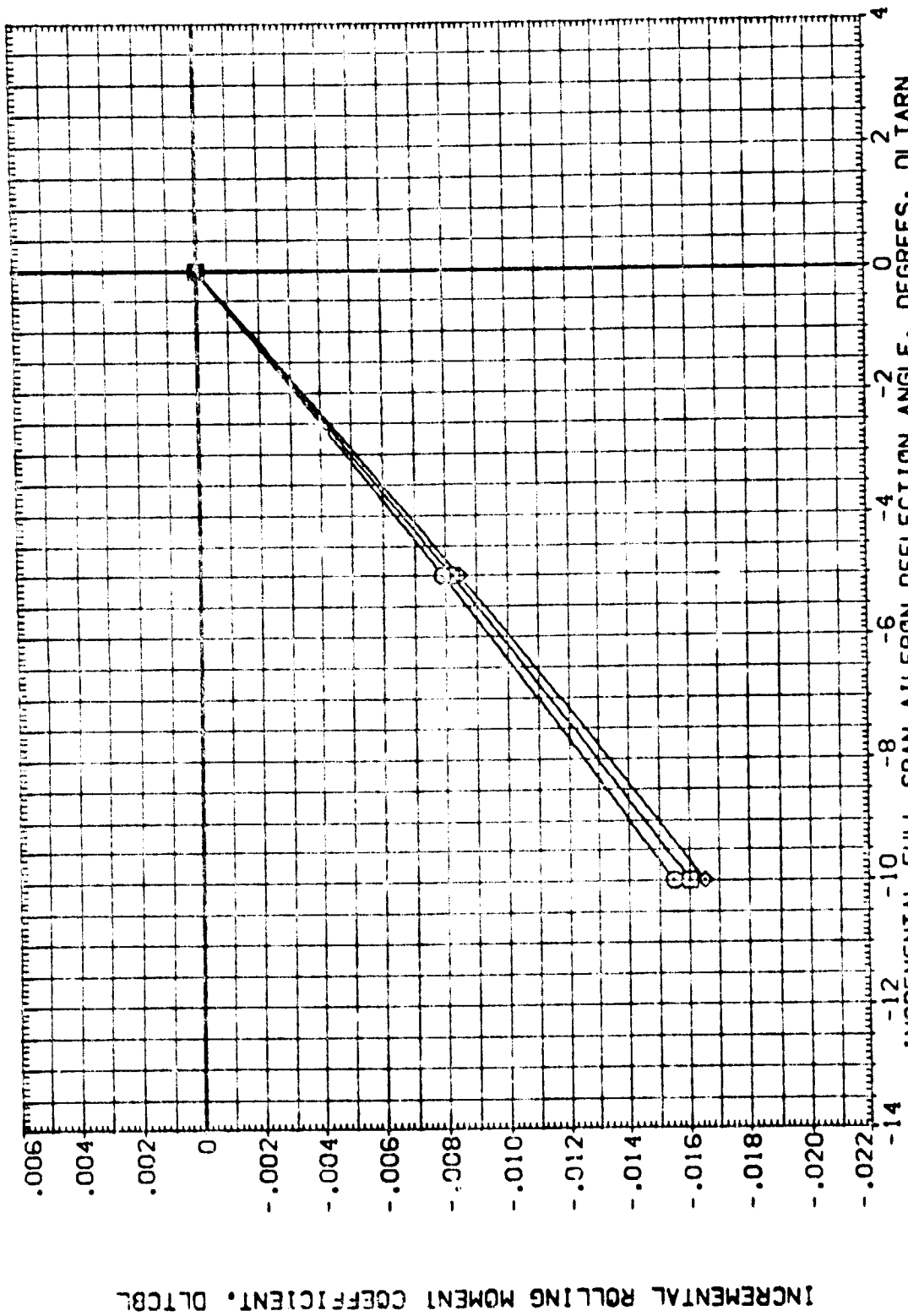


FIG. 10 INCREMENTAL EFFECTS OFAILERON DEFLECTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(CT1027)	0A79 826 C9 E43 F8 M16 N28 R5 V8 V116	.000	-10.000	-40.000	.000	CREF 2690.0000 50.FT.
(CT1030)	0A79 826 C9 E43 F8 M16 N28 R5 V8 V116	.000	-20.000	-20.000	.000	LREF 1773.5100 IN.
(CT1029)	0A79 826 C9 E43 F8 M16 N28 R5 V8 V116	.000	-10.000	-10.000	.000	CREF 325.5900 IN.
(CT1001)	0A79 826 C9 E43 F8 M16 N28 R5 V8 V116	.000	10.000	10.000	.000	XREF 1076.5900 IN.X0
(CT1028)	0A79 826 C9 E43 F8 M16 N28 R5 V8 V116	.000	10.000	10.000	.000	ZREF 375.0000 IN.Z0
						SCALE .0150

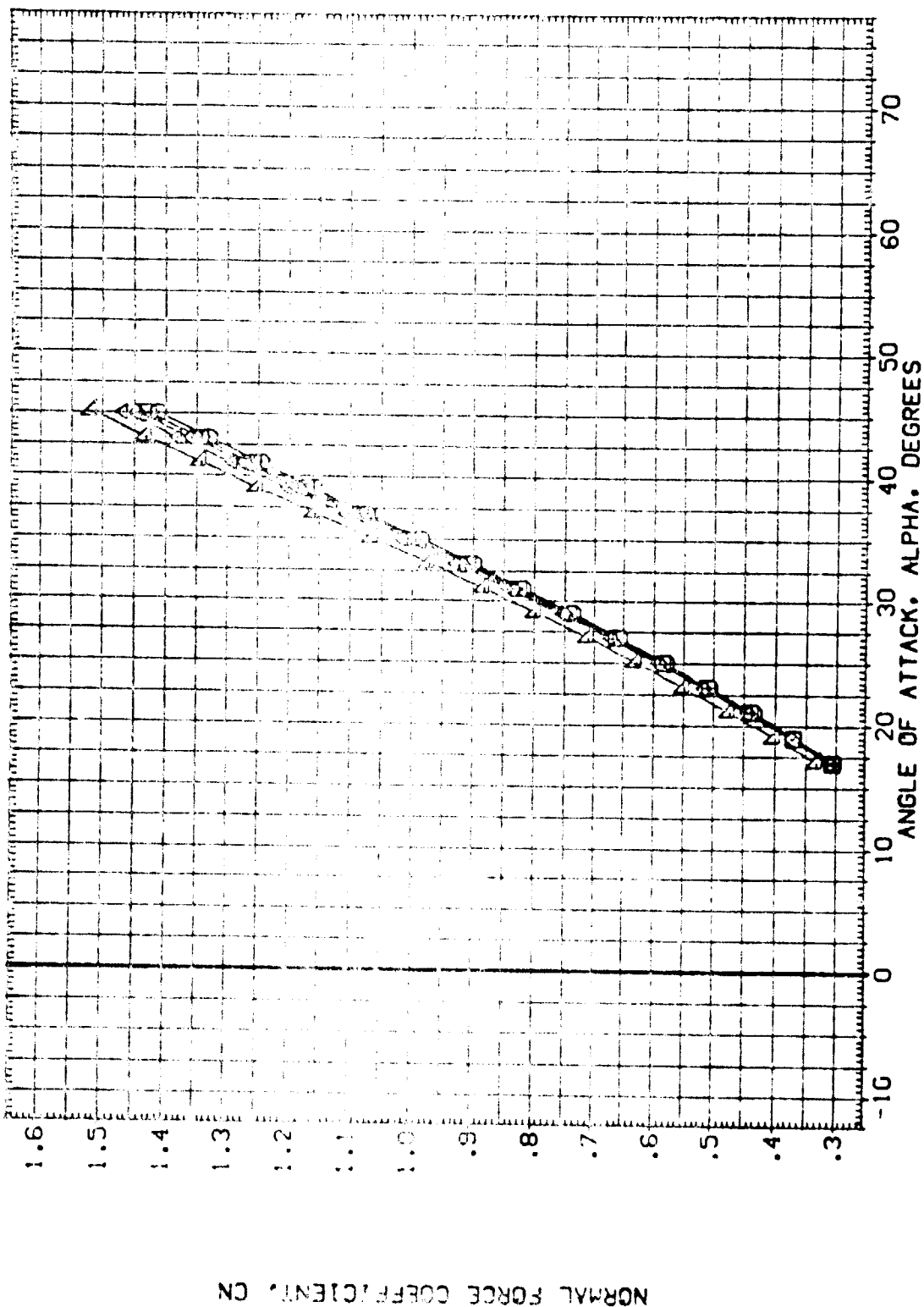


FIG. 11 INBOARD ELEVON EFFECTIVENESS WITH OUTBOARD UNDEFLECTED
 (MACH = 8.00)



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEV-L0	ELEV-L1	ELEV-R1	ELEV-R0	REFERENCE INFORMATION
(CT1927)	GA79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.000	-10.000	-40.000	.000	SREF 2690.0000 SO.FT.
(CT1930)	GA79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.000	-20.000	-20.000	.000	LREF 474.8100 IN.
(CT1933)	GA79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.000	-10.000	-10.000	.000	BREF 926.6800 IN.X0
(CT1931)	GA79 B26 C9 E43 F8 M16 N28 R5 V9 V116	.000	.000	10.000	.000	XREF 1076.6800 IN.Y0
(CT1928)	GA79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.000	10.000	10.000	.000	ZREF 375.0000 IN.Z0
						SCALE .0150

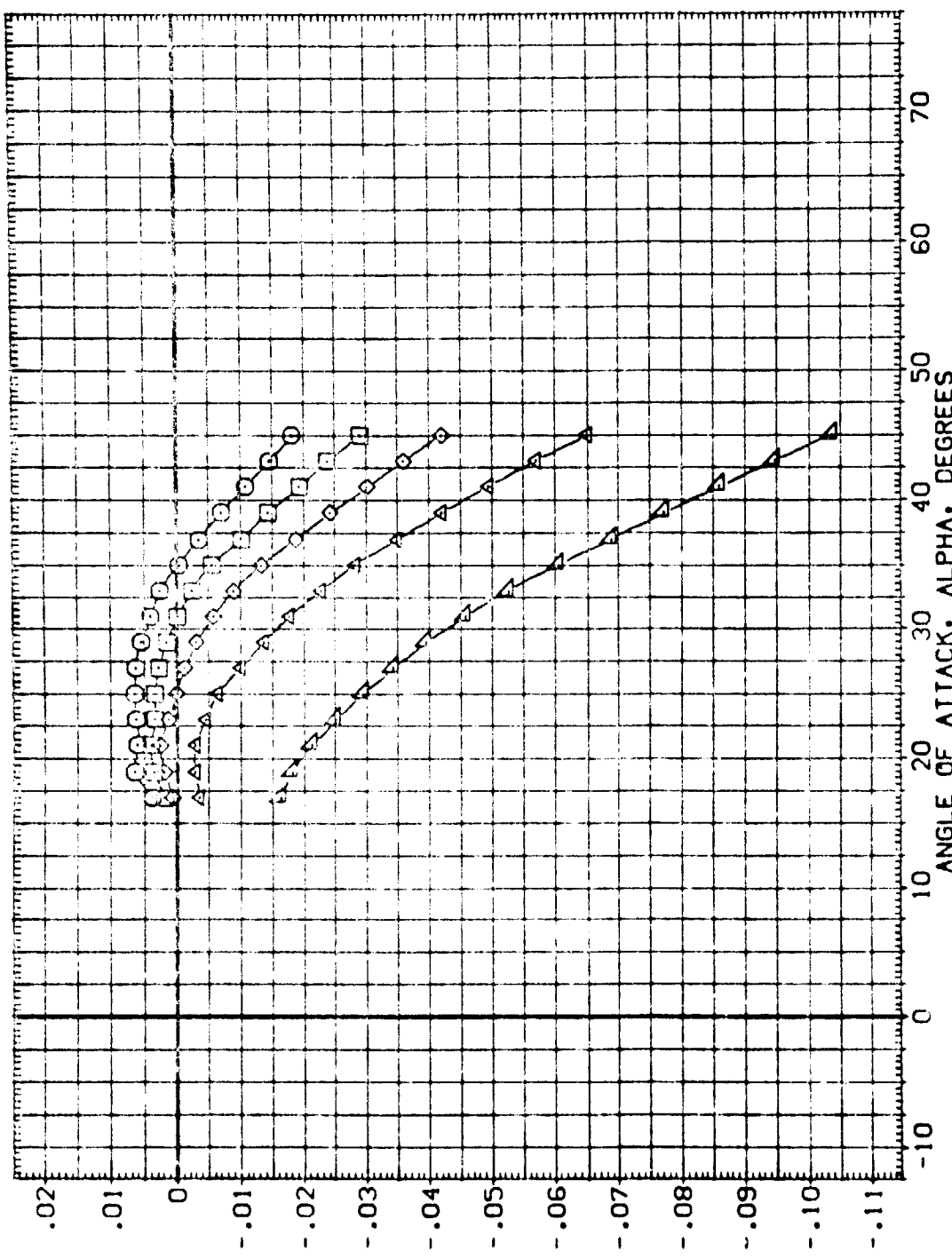


FIG. 11 INBOARD ELEVON EFFECTIVENESS WITH OUTBOARD UNDEFLECTED

(A)MACH = 8.00

PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH (FORWARD C. G.) CLMFW

DATA SET SYMBOL
 (C1V027)
 (C1V030)
 (C1V029)
 (C1V001)
 (C1V028)

ITERATION DESCRIPTION
 DAY8 B26 C9 E43 F8 M16 N28 R5 V8 V116
 DAY9 B26 C9 E43 F8 M16 N28 R5 V8 V116
 DAY9 B26 C9 E43 F8 M16 N28 R5 V8 V116
 DAY9 B26 C9 E43 F8 M16 N28 R5 V8 V116

ELV-L0 ELV-L1 ELV-R1 ELV-R0
 .000 -40.000 -40.000 .000
 .000 -20.000 -20.000 .000
 .000 -10.000 -10.000 .000
 .000 .000 .000 .000
 .000 10.000 10.000 .000

SCALE
 .0150
 4000
 375.0000
 IN.70
 2600.0000
 471.0000
 935.0000
 1075.0000
 375.0000
 IN.70
 2600.0000
 471.0000
 935.0000
 1075.0000
 375.0000
 IN.70

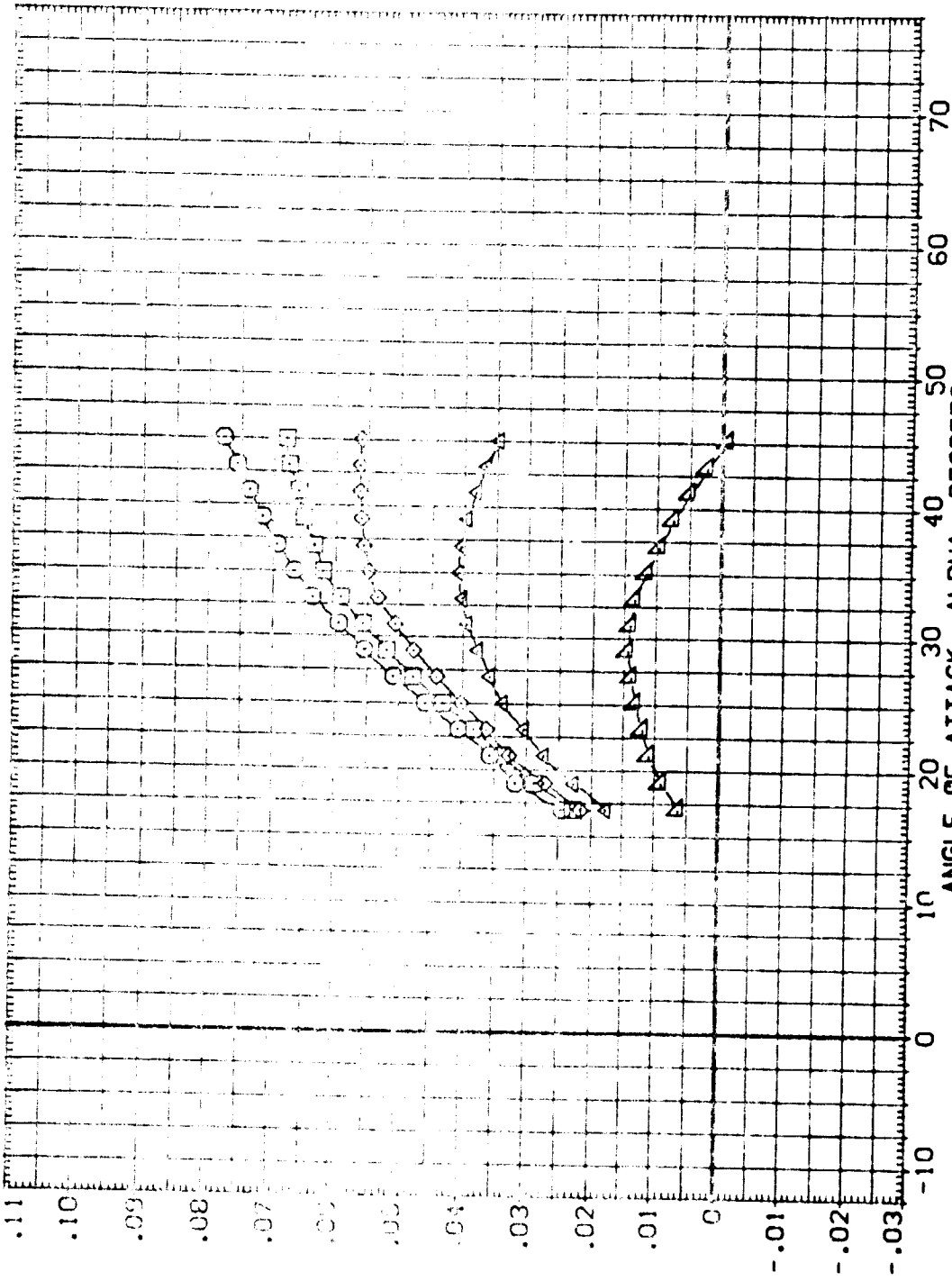


FIG. 11 INBOARD ELEVON EFFECTIVENESS WITH OUTBOARD UNDEFLECTED
 (A)MACH = 8.00

PITCHING MOMENT COEFFICIENT AT 8.00 BODY LENGTH(AFT C. G.) CLX



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(C1V027)	DA79 826 C9 E43 F8 M16 N28 RS V8 V116	.000	-10.000	-10.000	.000	SREF 2690.0000 SC.FT.
(C1V030)	DA79 826 C9 E43 F8 M16 N28 RS V8 V116	.000	-20.000	-20.000	.000	LREF 474.8100 IN.
(C1V028)	DA79 826 C9 E43 F8 M16 N28 RS V8 V116	.000	-10.000	-10.000	.000	BREF 936.6800 IN.
(C1V001)	DA79 826 C9 E43 F8 M16 N28 RS V8 V116	.000	10.000	10.000	.000	XMRP 1076.0000 IN.X0
(C1V028)	DA79 826 C9 E43 F8 M16 N28 RS V8 V116	.000	10.000	10.000	.000	YMRP 375.0000 IN.Y0
						ZMRP 0.0150
						SCALE

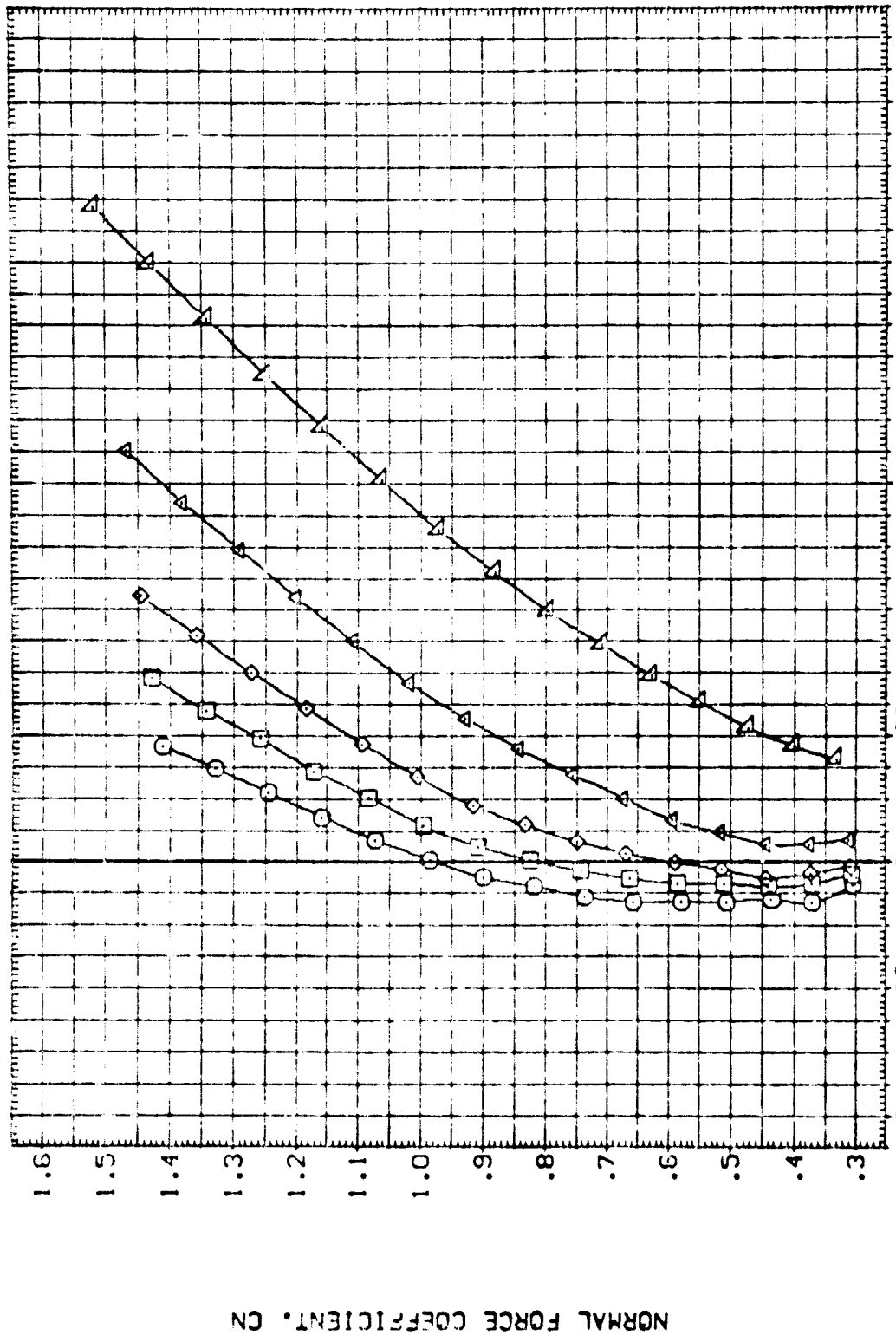


FIG. 11 INBOARD ELEVON EFFECTIVENESS WITH OUTBOARD UNDEFLECTED

(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(C1-027)	CA79	B26	C9	E43	F8	M16	N28	R5	V8	V116
(C1-030)	CA79	B26	C9	E43	F8	M16	N28	R5	V8	V116
(C1-029)	CA79	B26	C9	E43	F8	M16	N28	R5	V8	V116
(C1-001)	CA79	B26	C9	E43	F8	M16	N28	R5	V8	V116
(C1-028)	CA79	B26	C9	E43	F8	M16	N28	R5	V8	V116

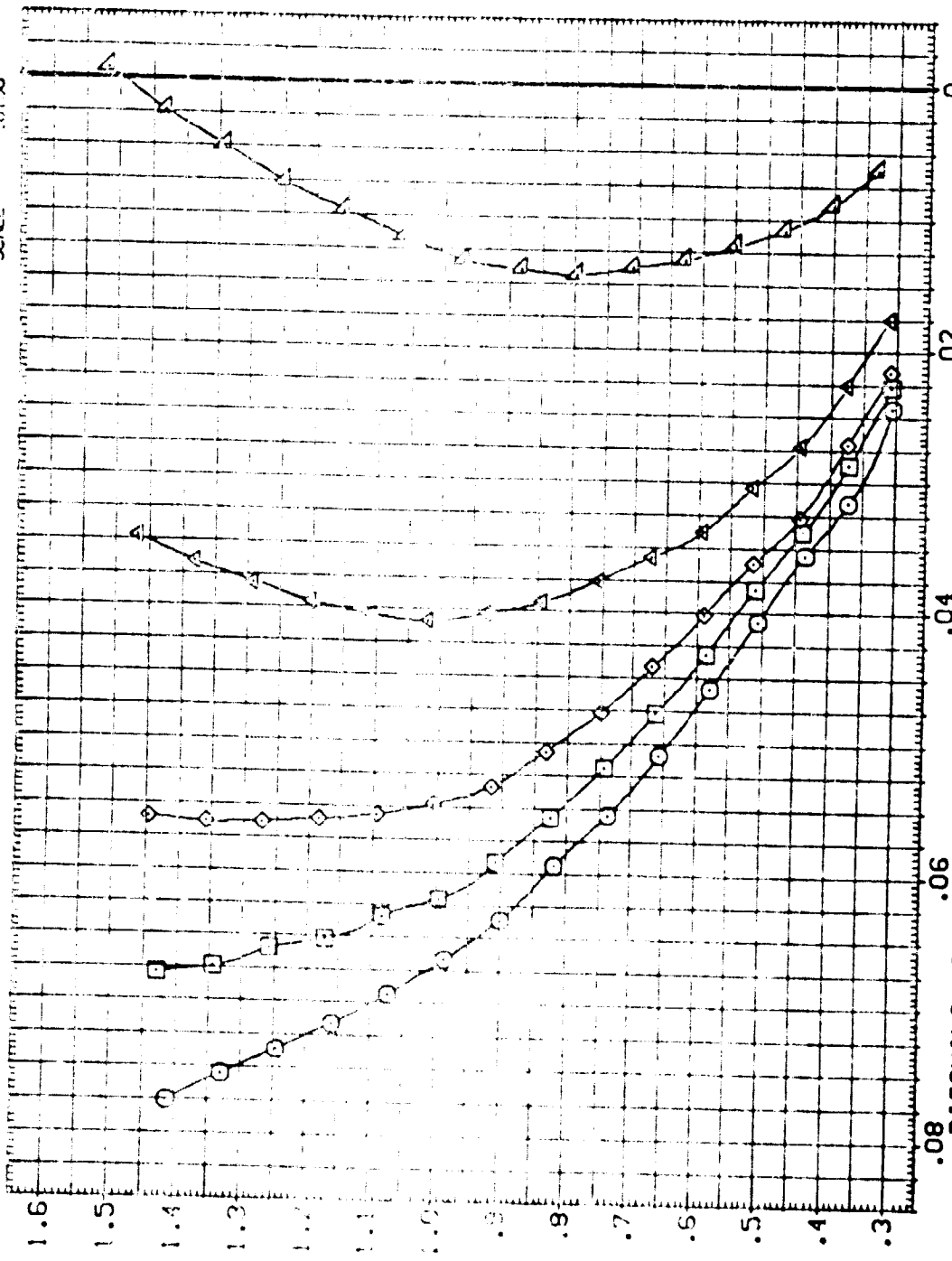
ELV-L0 ELV-L1 ELV-R1 ELV-R0

0.00	-10.000	-10.000	0.00
0.00	-20.000	-20.000	0.00
0.00	-10.000	-10.000	0.00
0.00	10.000	10.000	0.00

REFERENCE ELEVATION

SPCF	2850.000	CG LFT.
INSEF	474.000	IN.
BASEF	936.000	IN.
ANAL	1076.000	IN.
ANR0	1000.000	IN.
ANR1	375.0000	IN.
ANR2	0.0150	IN.

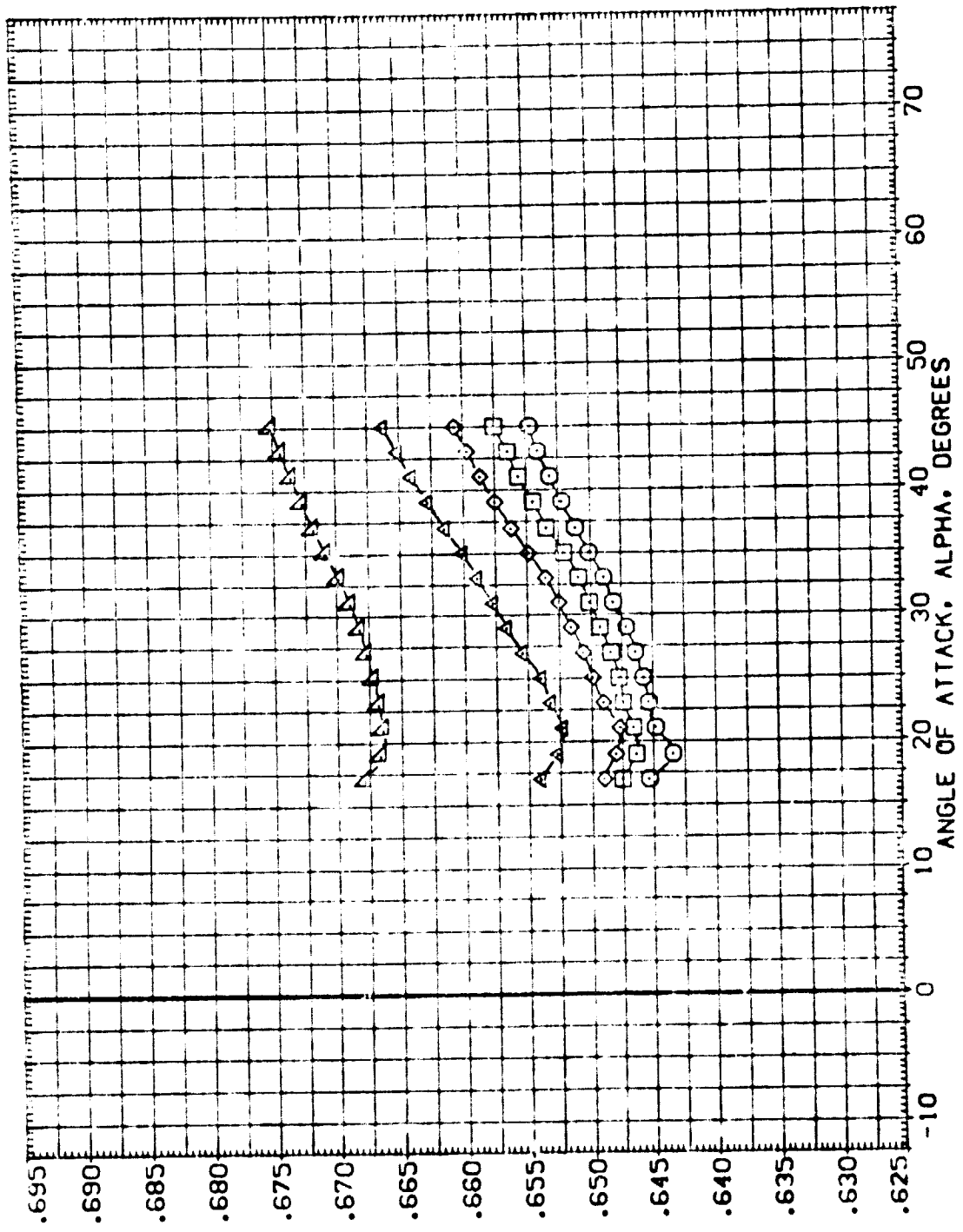
ZMRP SCALE



PITCHING MOMENT COEFFICIENT AT .675 BODY LENGTH(CAFT C. G.) CLMAFT
 FIG. 11 INBOARD ELEVON EFFECTIVENESS WITH OUTBOARD UNDEFLECTED
 (A)MACH = 8.00



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L6	ELV-L1	ELV-R1	ELV-R6	REFERENCE INFORMATION
(C1V027)	QAY9 B26 C9 E43 F8 H16 N28 R5 V8 V116	.000	-40.000	-40.000	.000	SREF 2690.0000 SO.FT.
(C1V030)	QAY9 B26 C9 E43 F8 H16 N28 R5 V8 V116	.000	-20.000	-20.000	.000	LREF 474.9100 IN.
(C1V033)	QAY9 B26 C9 E43 F8 H16 N28 R5 V8 V116	.000	-10.000	-10.000	.000	SREF 936.6800 IN.
(C1V001)	QAY9 B26 C9 E43 F8 H16 N28 R5 V8 V116	.000	.000	.000	.000	XPRP 1076.6800 IN.X0
(C1V028)	QAY9 B26 C9 E43 F8 H16 N28 R5 V8 V116	.000	10.000	10.000	.000	ZPRP 375.0000 IN.Y0
						SCALE .0150



CENTER OF PRESSURE LOCATION AS A FRACTION OF BODY LENGTH. XCP/L

FIG. 11 INBOARD ELEVON EFFECTIVENESS WITH OUTBOARD UNDEFLECTED

(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(C1V027)	CA79	326	C9	E43	F8	M16	N28	R5	V8	V116
(C1V030)	CA79	348	C9	E43	F8	M16	N28	R5	V8	V116
(C1V029)	CA79	826	C9	E43	F8	M16	N28	R5	V8	V116
(C1V001)	CA79	826	C9	E43	F8	M16	N28	R5	V8	V116
(C1V028)	CA79	826	C9	E43	F8	M16	N28	R5	V8	V116

REFERENCE INFORMATION

SIZE	2000.0000	SO.FT.
WAVE	174.8100	IN.
WAVE	336.8800	IN.
WAVE	1076.0000	IN.
WAVE	375.0000	IN.

SCALE .0150

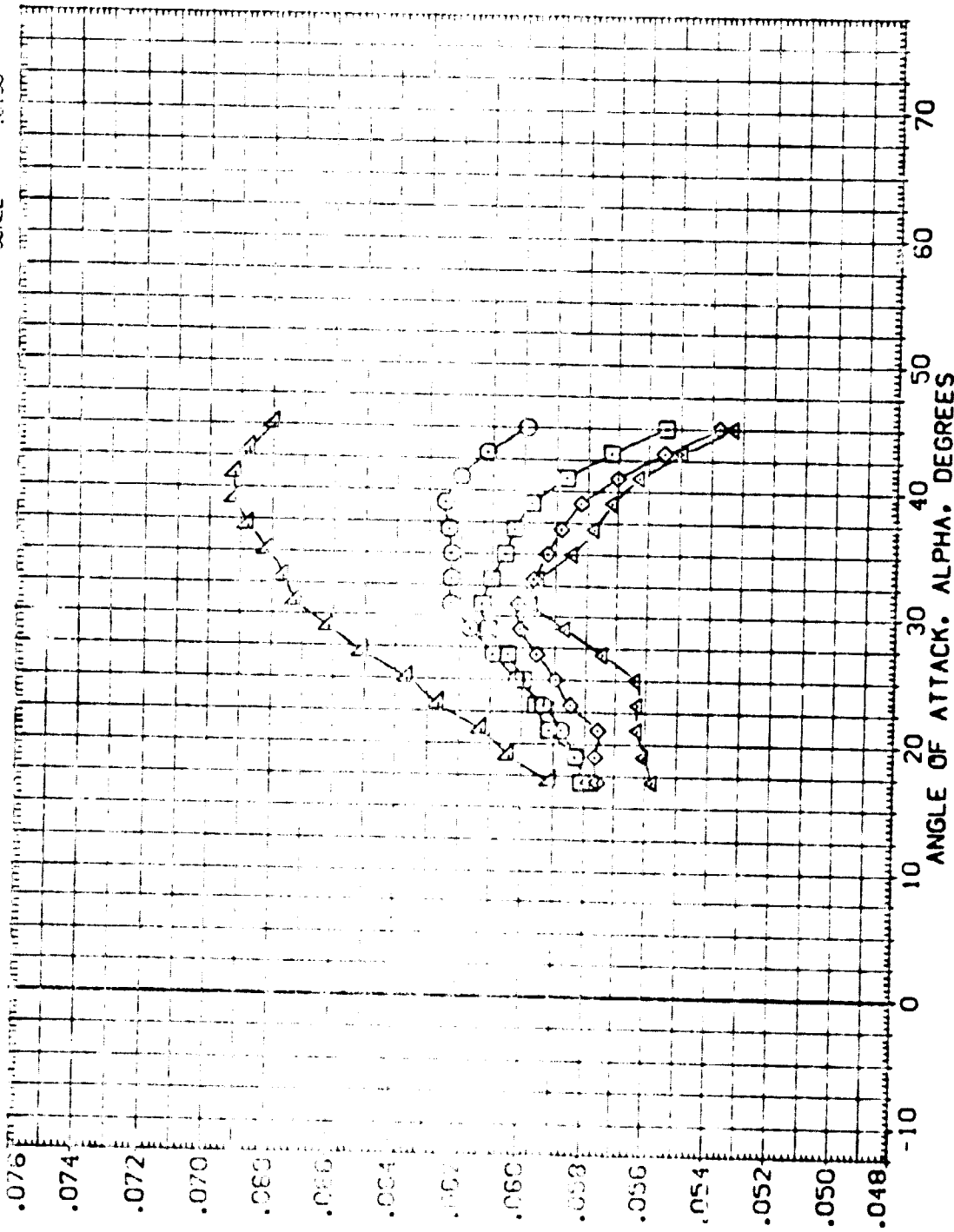


FIG. 11 INBOARD ELEVON EFFECTIVENESS WITH OUTBOARD UNDEFLECTED

(A)MACH = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(C1V027)	0A79 B26 C9 E43 F8 M16 N08 R5 V8 V116	.000	-40.000	-40.000	.000	SREF 2690.0000 50.FT.
(C1V030)	0A79 B26 C9 E43 F8 M16 N08 R5 V8 V116	.000	-20.000	-20.000	.000	LREF 474.8100 IN.
(C1V031)	0A79 B26 C9 E43 F8 M16 N08 R5 V8 V116	.000	-10.000	-10.000	.000	BREF 936.6800 IN. Y0
(C1V032)	0A79 B26 C9 E43 F8 M16 N08 R5 V8 V116	.000	.000	.000	.000	XREF 1076.0000 IN. Y0
(C1V033)	0A79 B26 C9 E43 F8 M16 N08 R5 V8 V116	.000	10.000	10.000	.000	YREF 375.0000 IN. Z0
						ZREF .0150 SCALE

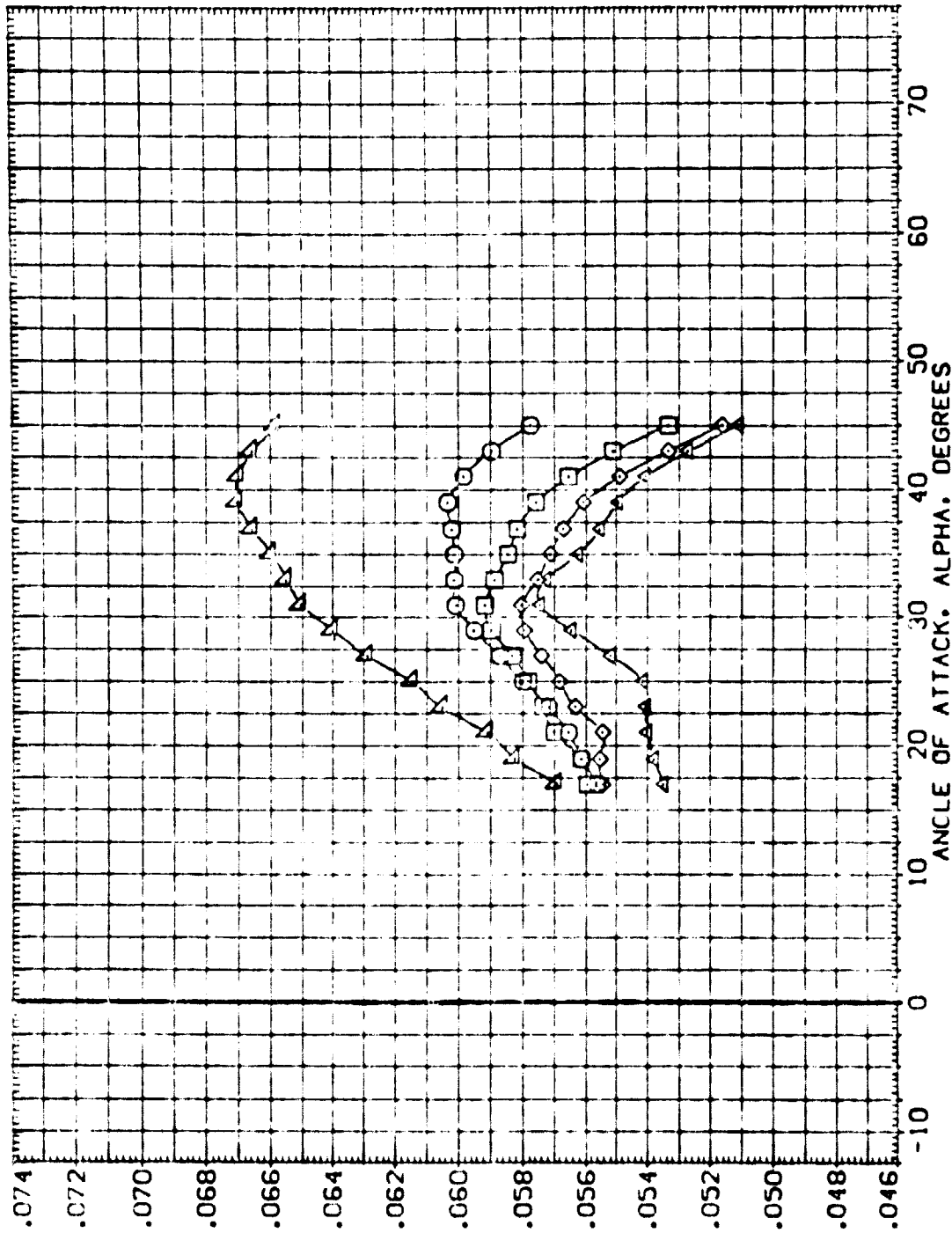


FIG. 11 INBOARD ELEVON EFFECTIVENESS WITH OUTBOARD UNDEFLECTED

(A)MACH = 8.00

DATA SET SYMOL	CONF. QUANTIFICATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(C1V027)	CA79 326 C9 E43 F8 H16 N28 RS V8 V116	.000	-40.000	-40.000	.000	2650.5000 SO.FT.
(C1V030)	CA79 326 C9 E43 F8 H16 N28 RS V8 V116	.000	-20.000	-20.000	.000	474.8100 IN.
(C1V029)	CA79 326 C9 E43 F8 H16 N28 RS V8 V116	.000	-10.000	-10.000	.000	935.8300 IN.
(C1V001)	CA79 326 C9 E43 F8 H16 N28 RS V8 V116	.000	.000	.000	.000	1076.0000 IN.
(C1V028)	CA79 326 C9 E43 F8 H16 N28 RS V8 V116	.000	10.000	10.000	.000	275.0000 IN.
						SCALE .0150

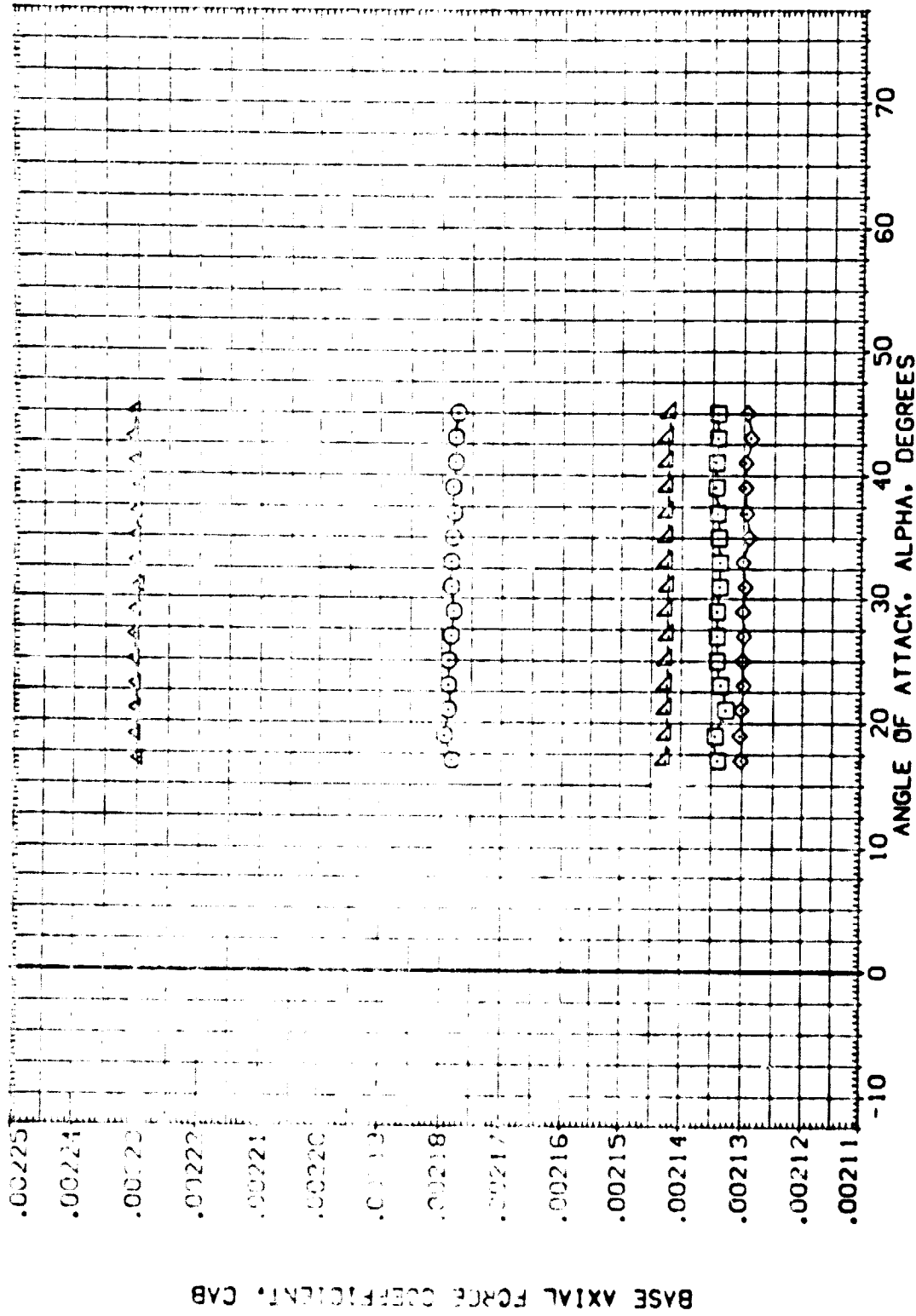


FIG. 11 INBOARD ELEVON EFFECTIVENESS WITH OUTBOARD UNDEFLECTED

(A)MACH = 8.00

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(C14077)	0A79 976 C9 E43 F8 M16 N28 R5 V8 V1 6		.000	-40.000	-40.000	.000	SREF 2600.0000 SQ.FT.
(C14030)	0A79 876 C9 E43 F8 M16 N28 R5 V8 V116		.000	-20.000	-20.000	.000	LREF 474.8100 IN.
(C14079)	0A79 876 C9 E43 F8 M16 N28 R5 V8 V116		.000	-10.000	-10.000	.000	SREF 936.6800 IN.
(C14031)	0A79 976 C9 E43 F8 M16 N28 R5 V8 V116		.000	10.000	10.000	.000	XREF 1075.0800 IN.
(C14028)	0A79 976 C9 E43 F8 M16 N28 R5 V8 V116		.000	10.000	10.000	.000	YREF 375.0000 IN.
							ZREF .0150 IN.
							SCALE

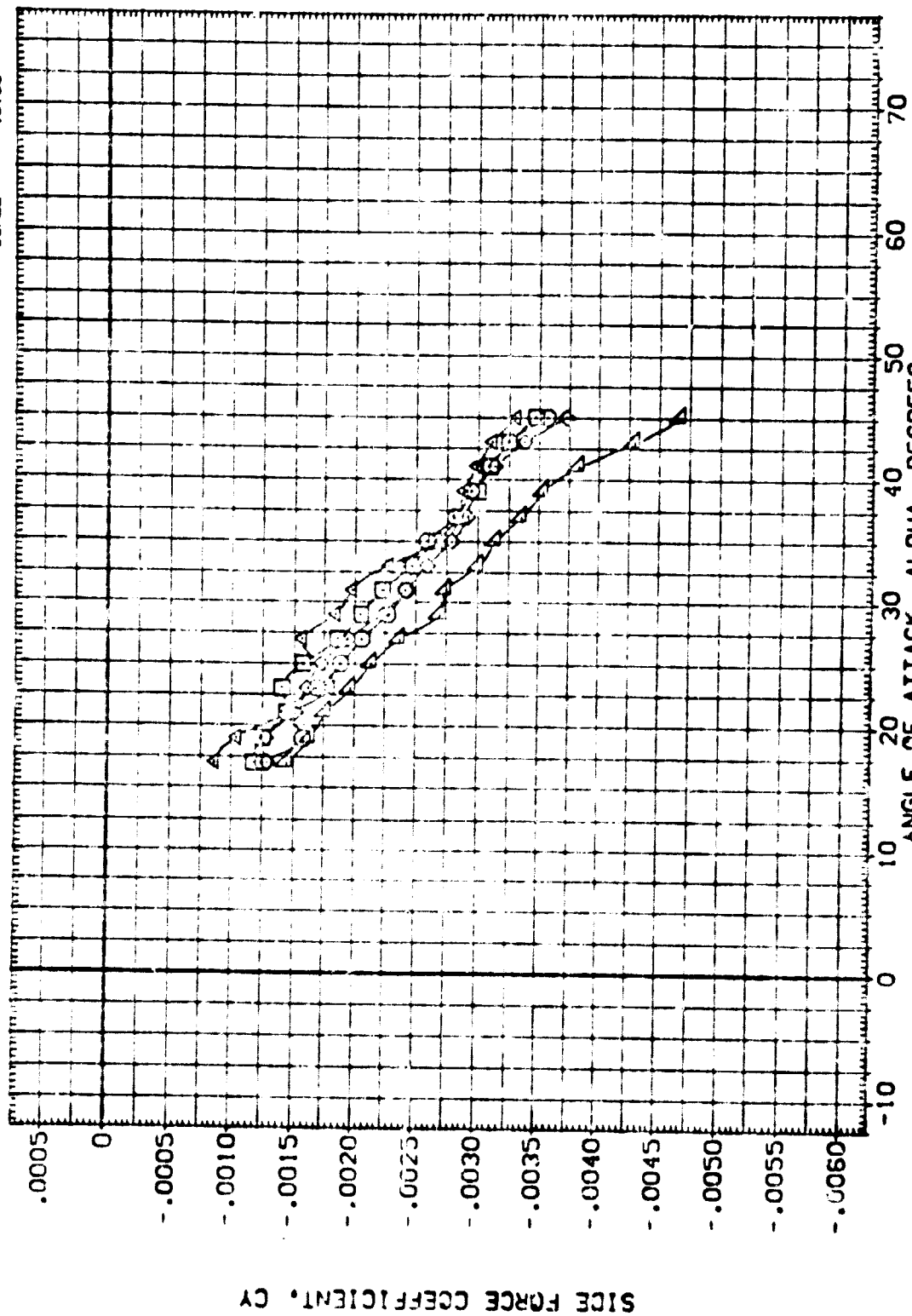


FIG. 11 INBOARD ELEVON EFFECTIVENESS WITH OUTBOARD UNDEFLECTED

(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(ATV027)	0A79	826	C9	E43	F8	MIS	N09	R5	V8	V116
(ATV028)	0A79	826	C9	E43	F8	MIS	N08	R5	V8	V116
(ATV029)	0A79	826	C9	E43	F8	MIS	N08	R5	V8	V116
(ATV001)	0A79	826	C9	E43	F8	MIS	N29	R5	V8	V116
(ATV028)	0A79	826	C9	E43	F8	MIS	N08	R5	V8	V116

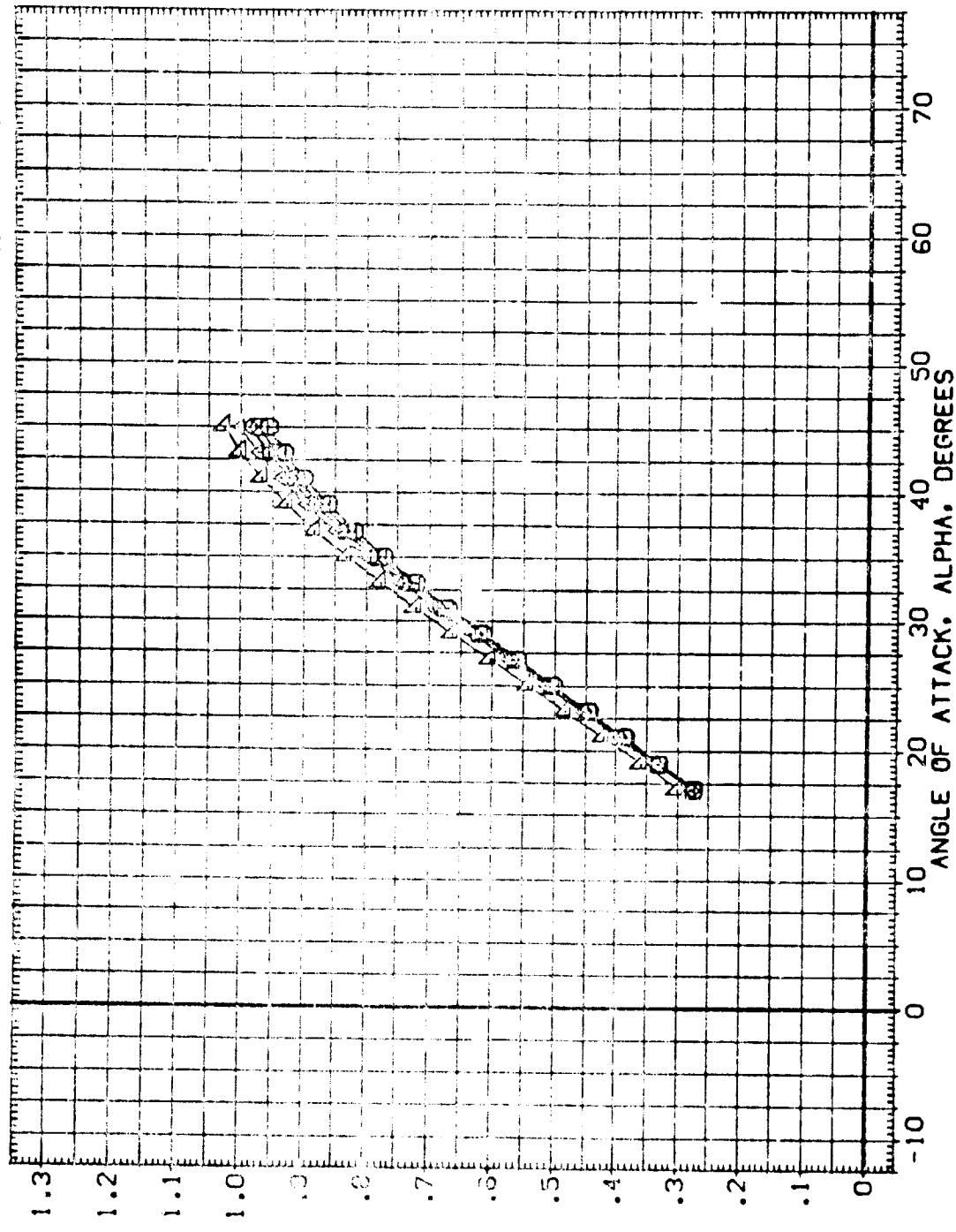
ELV-L0 ELV-L1 ELV-R1 ELV-R0

.000	-10.000	-10.000	.000
.000	-20.000	-20.000	.000
.000	-10.000	-10.000	.000
.000	10.000	10.000	.000

REFERENCE INFORMATION

SREF	2690	0120	50	FT.
UREF	474	8100		IN.
BREF	758	8800		IN.
XTRP	1078	8800		IN.
YTRP	1000			IN.
ZTRP	375	0100		IN.

SCALE .0150



LIFT COEFFICIENT, CL

FIG. 11 INBOARD ELEVON EFFECTIVENESS WITH OUTBOARD UNDEFLECTED

(A)MACH = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(ATV027)	0A79 826 C9 E43 F8 M16 N28 RS V8 VII6	.000	-40.000	-40.000	.000	SREF 2690.0000 SO.FT.
(ATV030)	0A79 826 C9 E43 F8 M16 N28 RS V8 VII6	.000	-20.000	-20.000	.000	LREF 474.8100 IN.
(ATV029)	0A79 826 C9 E43 F8 M16 N28 RS V8 VII6	.000	-10.000	-10.000	.000	BREF 936.6800 IN. X0
(ATV001)	0A79 826 C9 E43 F8 M16 N28 RS V8 VII6	.000	10.000	10.000	.000	XREF 1076.0800 IN. X0
(ATV028)	0A79 826 C9 E43 F8 M16 N28 RS V8 VII6	.000	10.000	10.000	.000	ZREF 375.0000 IN. Z0
						ZHREF .0150 SCALE

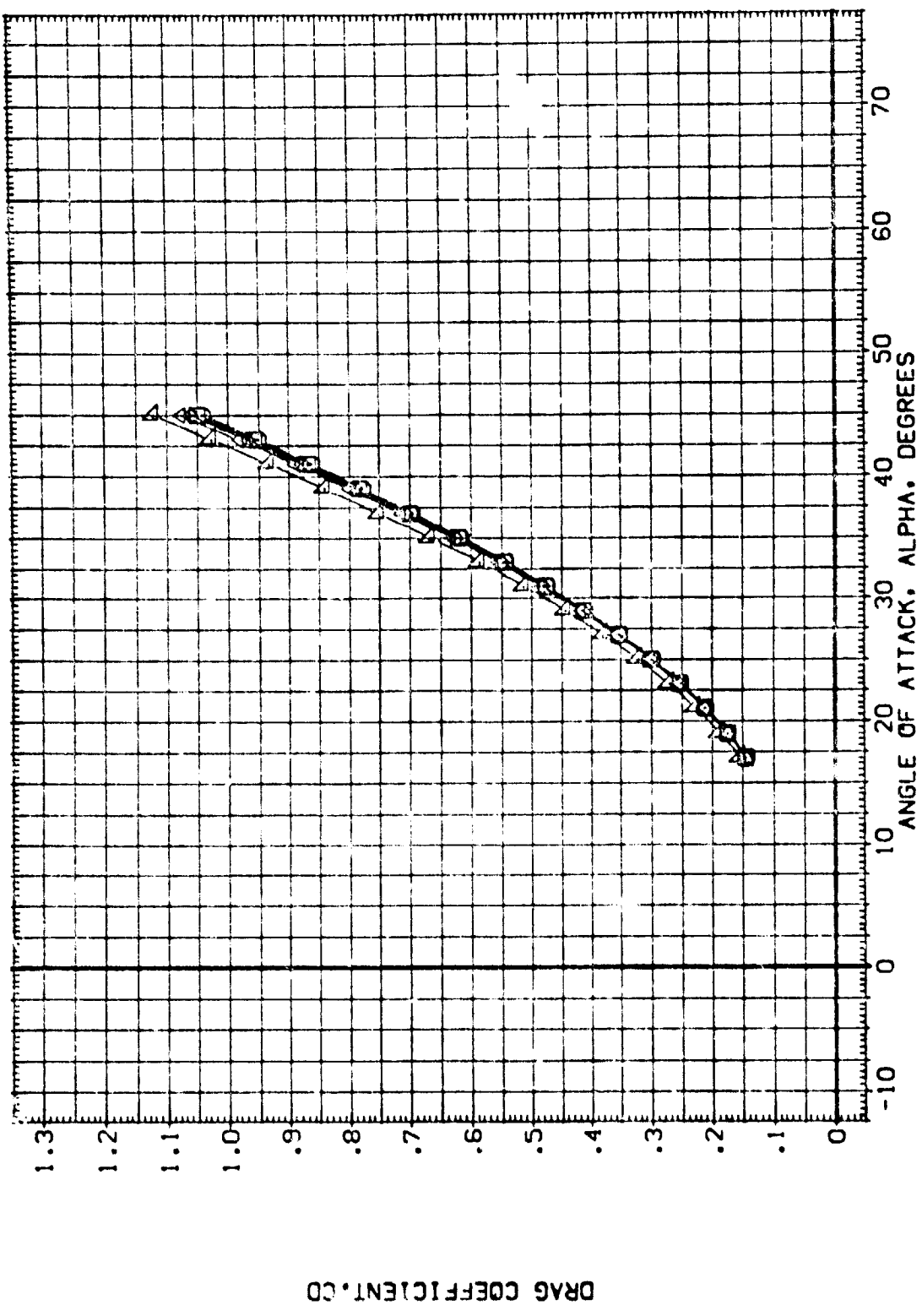


FIG. 11 INBOARD ELEVON EFFECTIVENESS WITH OUTBOARD UNDEFLECTED

(A)MACH = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION	SO. FT.
(ATV077)	0A79 B26 C9 E43 F8 H16 N28 P5 V8 V116	.000	-40.000	-40.000	.000	SREF	2830.0000
(ATV030)	0A79 B26 C9 E43 F8 H16 N28 P5 V8 V116	.000	-20.000	-20.000	.000	LRREF	474.8100
(ATV029)	0A79 B26 C5 E43 F8 H16 N28 P5 V3 V116	.000	-10.000	-10.000	.000	BRREF	936.8900
(ATV001)	0A79 B26 C9 E43 F8 H16 N28 P5 V3 V116	.000	-10.000	-10.000	.000	X-REF	1076.8900
(ATV028)	0A79 B26 C9 E43 F8 H16 N28 P5 V3 V116	.000	10.000	10.000	.000	Y-REF	375.0000
						Z-REF	0.0000
						SCALE	.0150

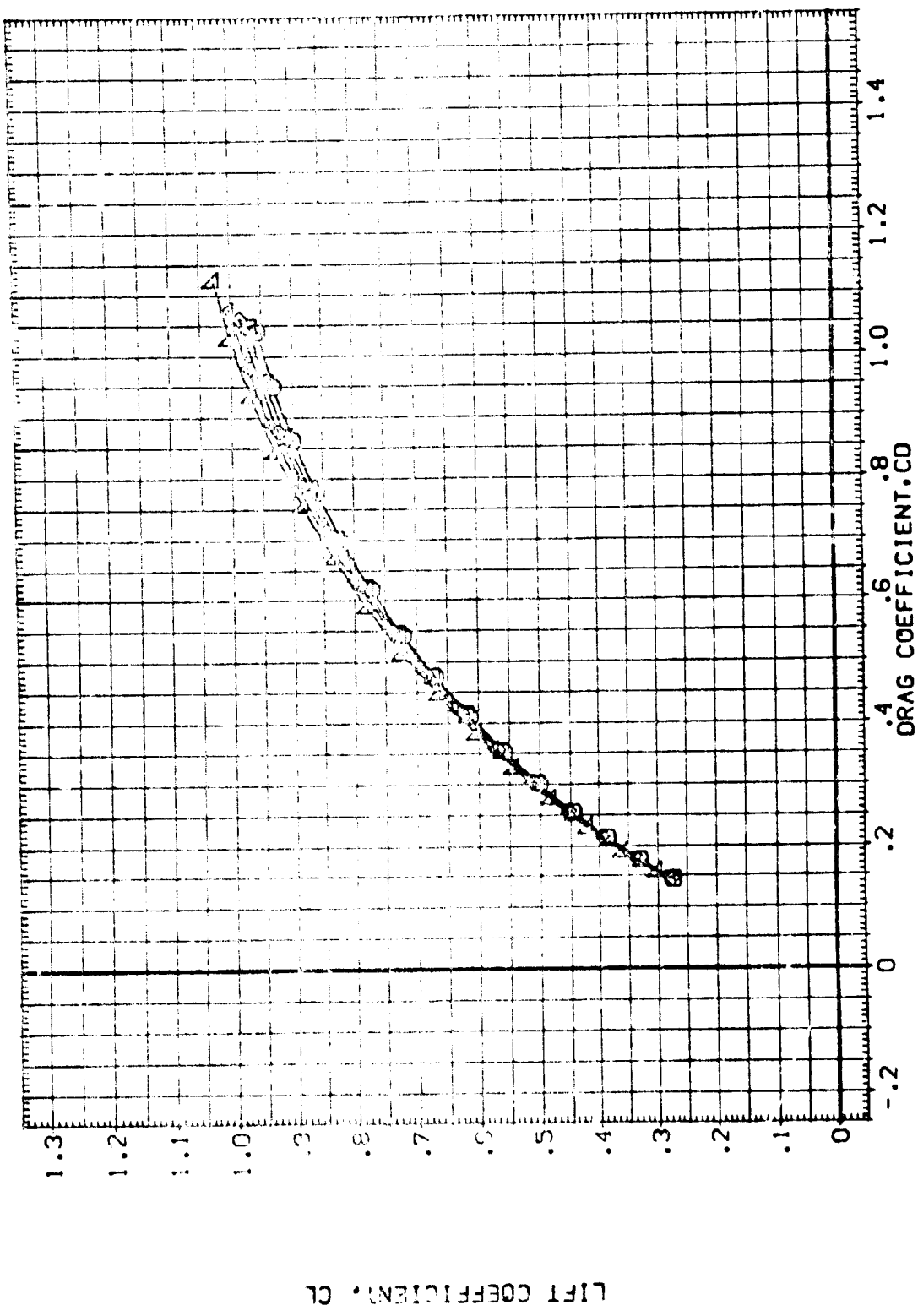


FIG. 11 INBOARD ELEVON EFFECTIVENESS WITH OUTBOARD UNDEFLECTED

(A)MACH = 8.00



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(ATV027)	DA79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.000	-40.000	-40.000	.000	SREF 2650.0000 SQ.FT.
(ATV030)	DA79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.000	-20.000	-20.000	.000	LREF 474.8100 IN.
(ATV028)	DA79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.000	-10.000	-10.000	.000	BREF 936.6800 IN.X0
(ATV001)	DA79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.000	10.000	10.000	.000	XTRP 1076.6800 IN.X0
(ATV029)	DA79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.000	10.000	10.000	.000	ZTRP 375.0000 IN.Z0
						SCALE .0150

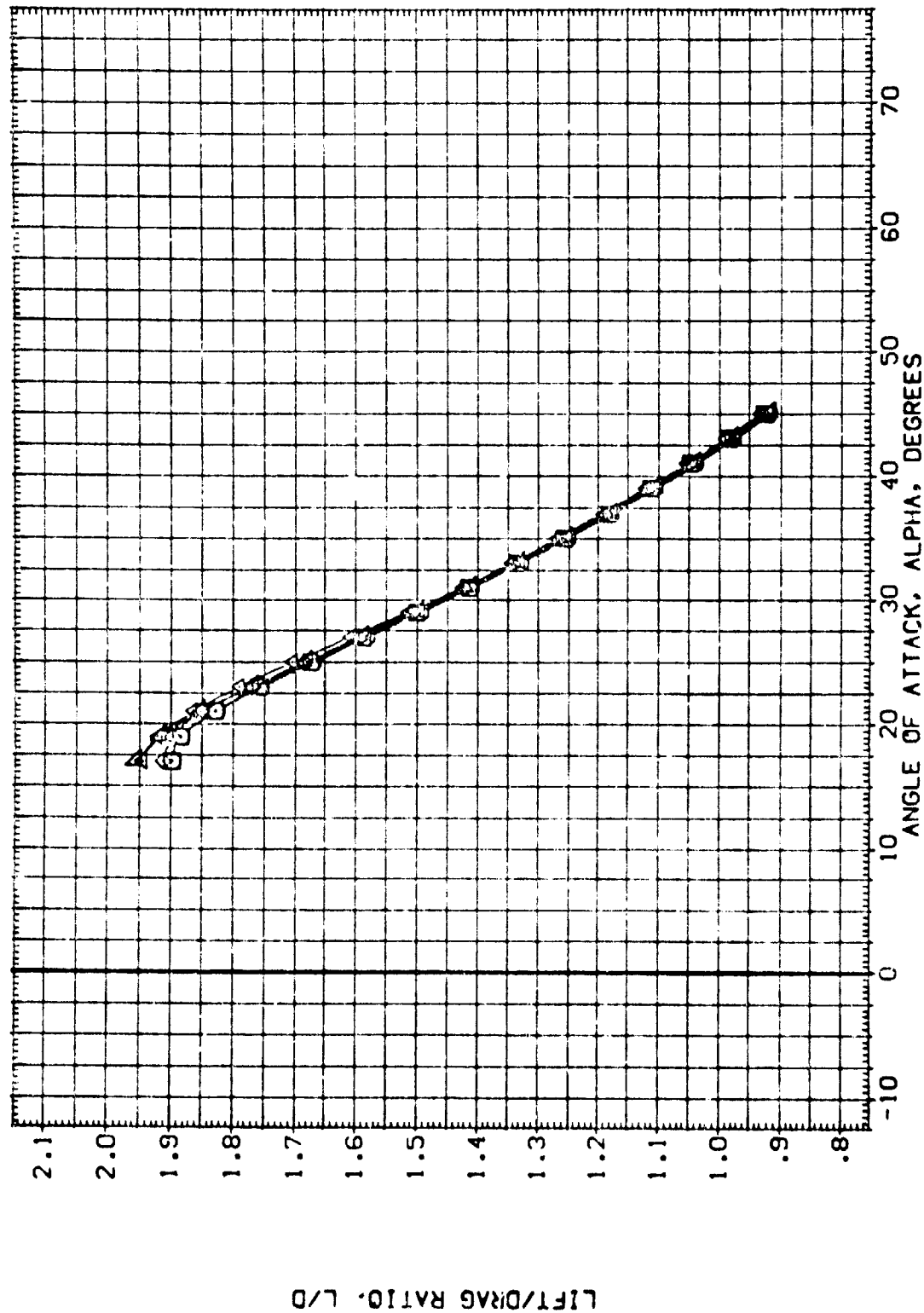


FIG. 11 INBOARD ELEVON EFFECTIVENESS WITH OUTBOARD UNDEFLECTED

(A)MACH = 8.00

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW027)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	.000	DATASET	DATA SOURCE	DLE-LI	DATASET	DLE-LI	SOEF	REFERENCE INFORMATION
□	17.000	5.144K	8.000 BETA	.000	DTW027	DLE-LI	-20.000	DTW030	-20.000	2690.0000	SO.FT.
□	19.000	RVL	35.000 RUDDER	.000	DTW028	-40.000	.000	DTW001	.000	174.8100	IN.
△	21.000		3.530			-10.000				936.6800	IN.
△	23.000					10.000				1076.6800	IN.X0
△	25.000									.0000	IN.Y0
△	27.000									375.0000	IN.Z0
										ZM3P	
										SCALE	
										.0150	

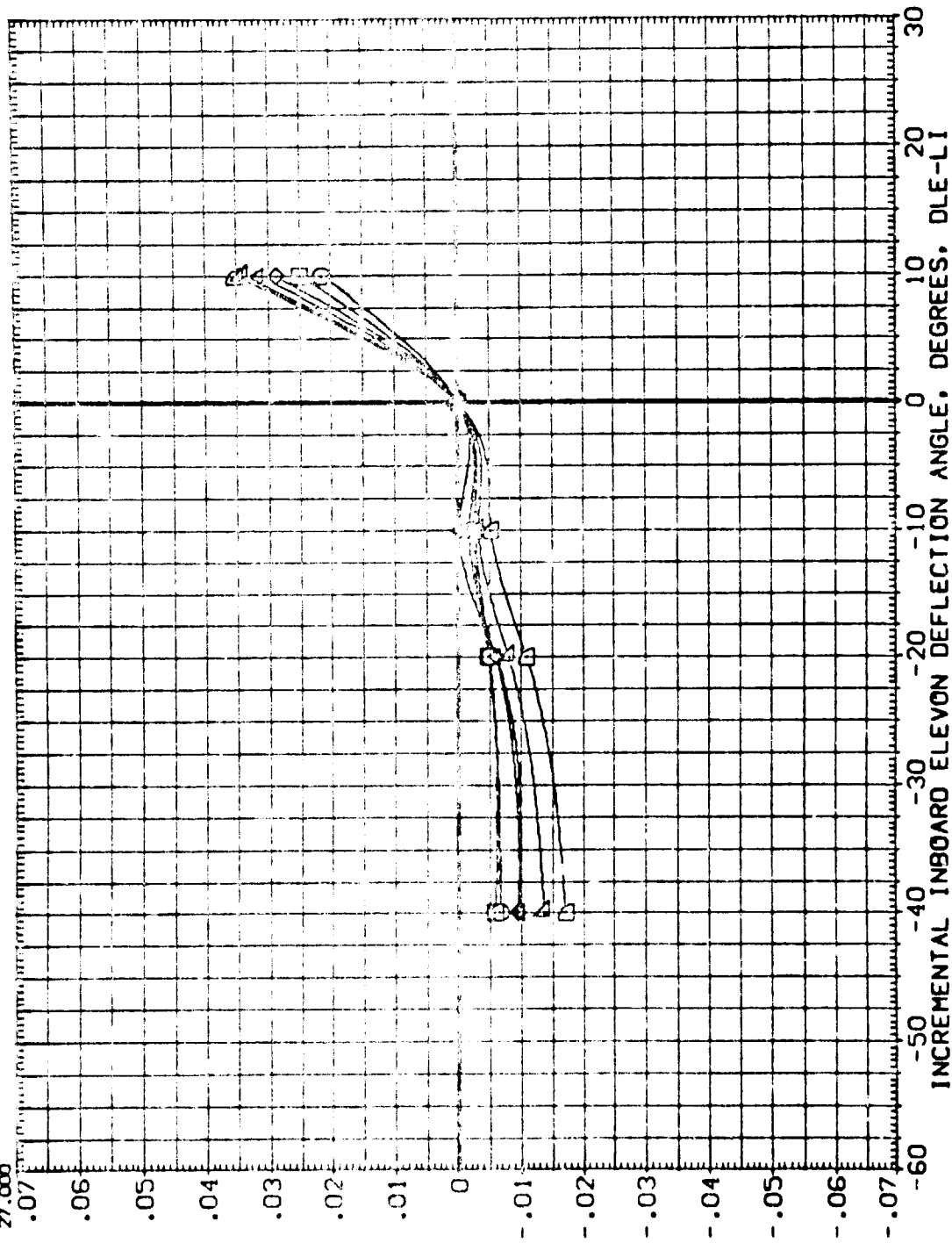
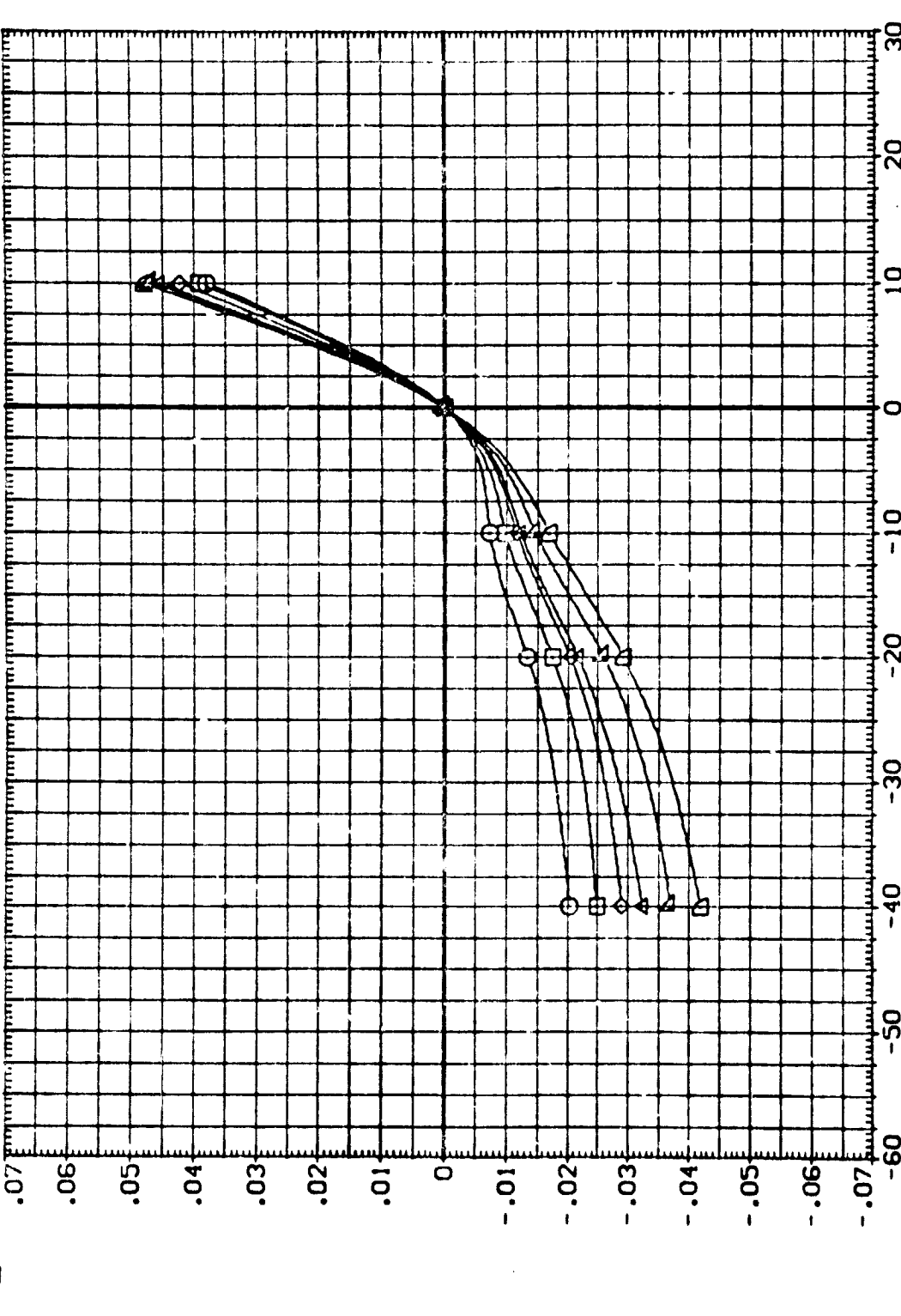


FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW027)

ALPHA		MACH		PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION																			
29.000	31.000	33.000	35.000	37.000	39.000	8.000	BETA	55.000	RUDDER	3.530	.000	DTW027	DTW028	DTW029	DTW030	DTW001	DLE-LI	SREF	2690.0000	474.8100	936.6800	1076.6800	375.0000	SCALE	.0150		

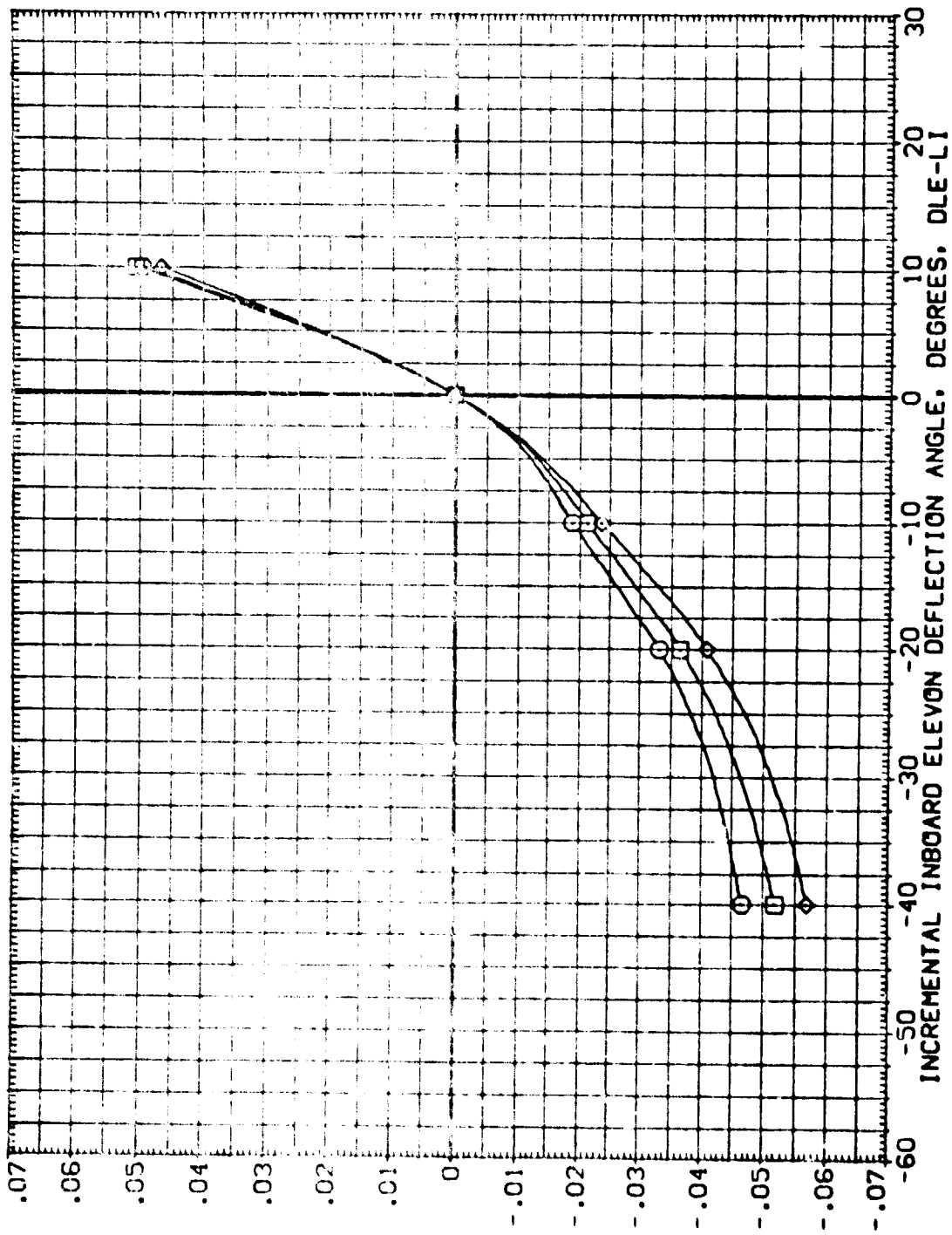


INCREMENTAL NORMAL FORCE COEFFICIENT, DLTCN

FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW027)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION		
ALPHA	MACH	.000	DATASET	DLE-LI	REF	SO. FT.
41.000	8.000	.000	DTW027	-20.000	LREF	474.8100
43.000	56.000	.000	DTW028	-10.000	SREF	956.8600
45.000	3.530	.000	DTW029	-10.000	XREF	1076.8600
					YREF	.0000
					ZREF	375.0000
					SCALE	.0150



INCREMENTAL NORMAL FORCE COEFFICIENT, DLTN

FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW027)

ALPHA	MACH	SPDR BK	RVL	PARAMETRIC VALUES	DATA SOURCE	DATA SET	DLE-LI	REF	REFERENCE INFORMATION
17.000	8.000	55.000	3.530	BETA	DLE-LI	D1W030	-20.000	LREF	2650.0000 SQ.FT.
19.000	8.000	55.000	3.530	RUDDER	DTW027	D1W001	.000	BREF	474.8100 IN.
21.000	8.000	55.000	3.530		DTW029			XPRP	936.6800 IN.XG
23.000	8.000	55.000	3.530		DTW028			YPRP	1076.6800 IN.YG
25.000	8.000	55.000	3.530					ZPRP	375.0000 IN.ZG
27.000	8.000	55.000	3.530					SCALE	.0150

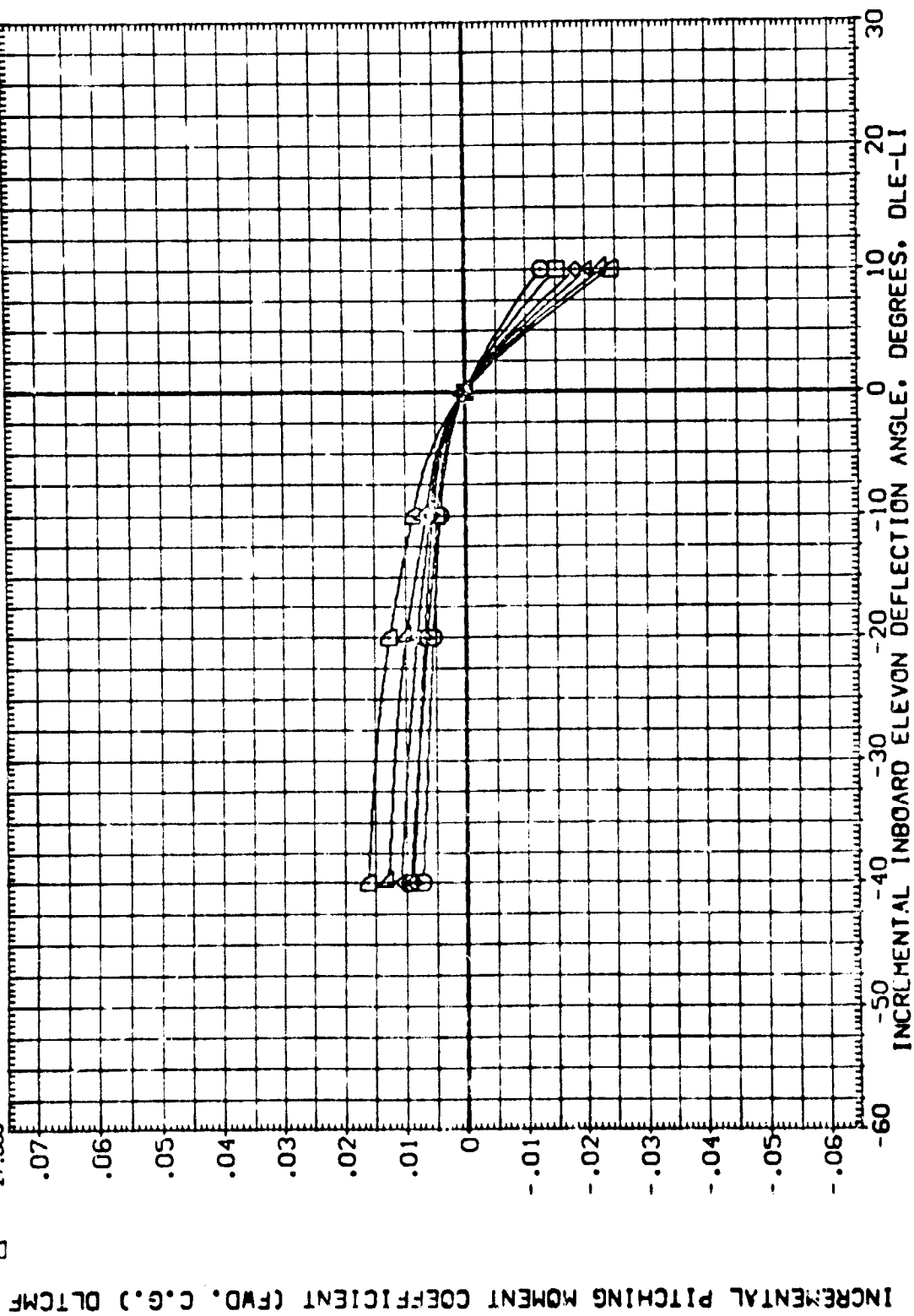


FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW027)

SYMBOL
 □ ▽ ▲ ▾ ◇ ○

ALPHA
 29.000
 31.000
 33.000
 35.000
 37.000
 39.000

MACH
 8.000
 56.000
 3.530

PARAMETRIC VALUES
 BETA
 RUDDER

.000
 .000
 .000
 .000
 .000
 .000

DATA SOURCE
 DLE-LI
 DLE-LI
 DLE-LI
 DLE-LI
 DLE-LI
 DLE-LI

DATASET
 DTW030
 DTW001
 DTW027
 DTW029
 DTW028

DLE-LI
 -20.000
 .000
 .000
 .000
 .000
 .0150

REFERENCE INFORMATION
 2690.0000
 474.8100
 936.6800
 1078.6800
 375.0000
 .0150

SO. FT.
 IN.
 IN.
 IN.
 IN.
 IN.

INCREMENTAL PITCHING MOMENT COEFFICIENT (PND, 0.6.) DLTCMF

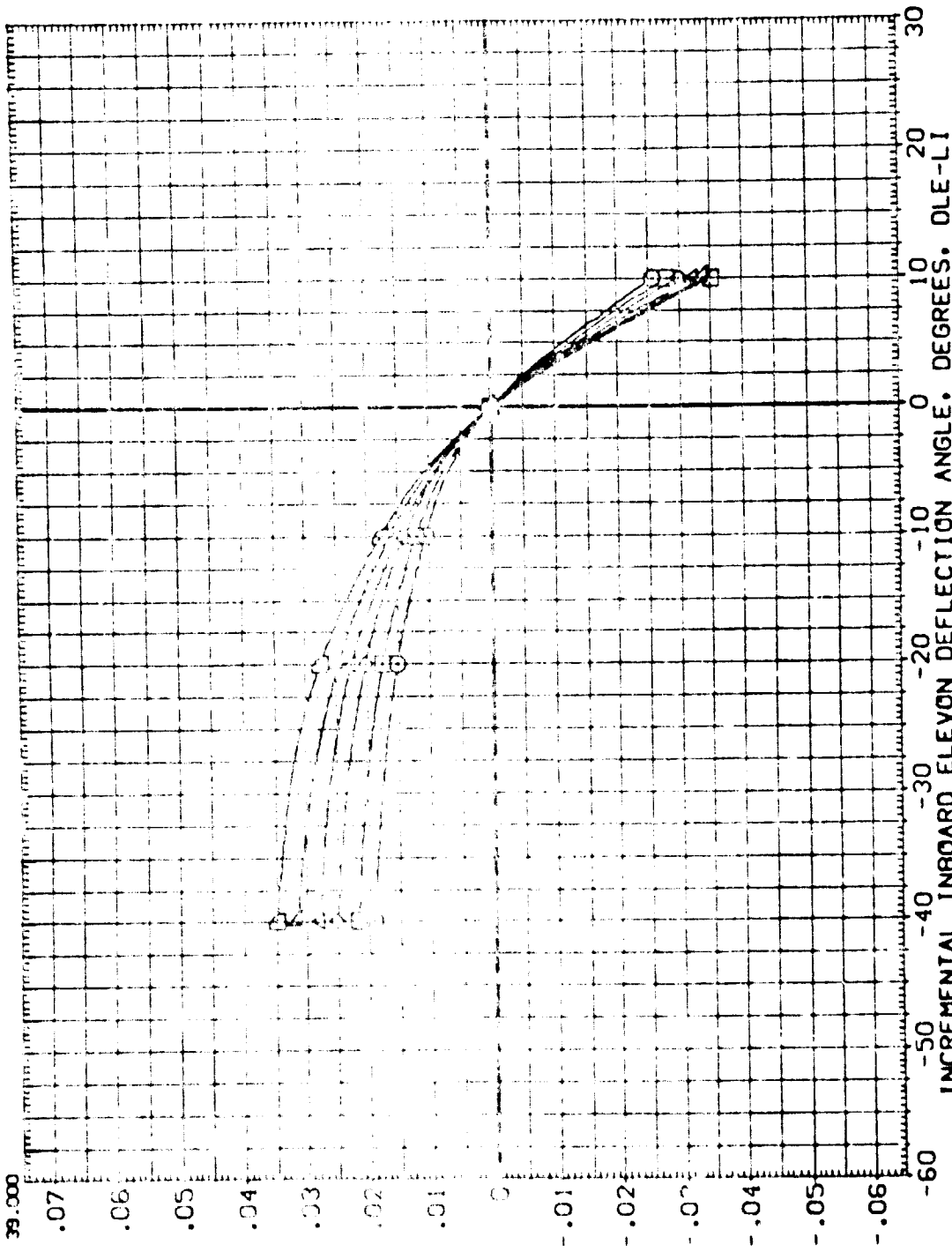


FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW027)

SYMBOL		PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION			
○	ALPHA	8.000	BETA	.000	DATASET	DLE-LI	SREF	2690.0000	SO.FT.
□	41.000	55.000	RUDDER	.000	DTW027	-20.000	LSREF	474.8100	IN.
◇	43.000	3.530		.000	DTW028	.000	DRREF	936.6800	IN. X0
	45.000			10.000			XPRP	1076.6800	IN. Y0
							YPRP	575.0000	IN. Z0
							ZPRP		
							SCALE	.0150	

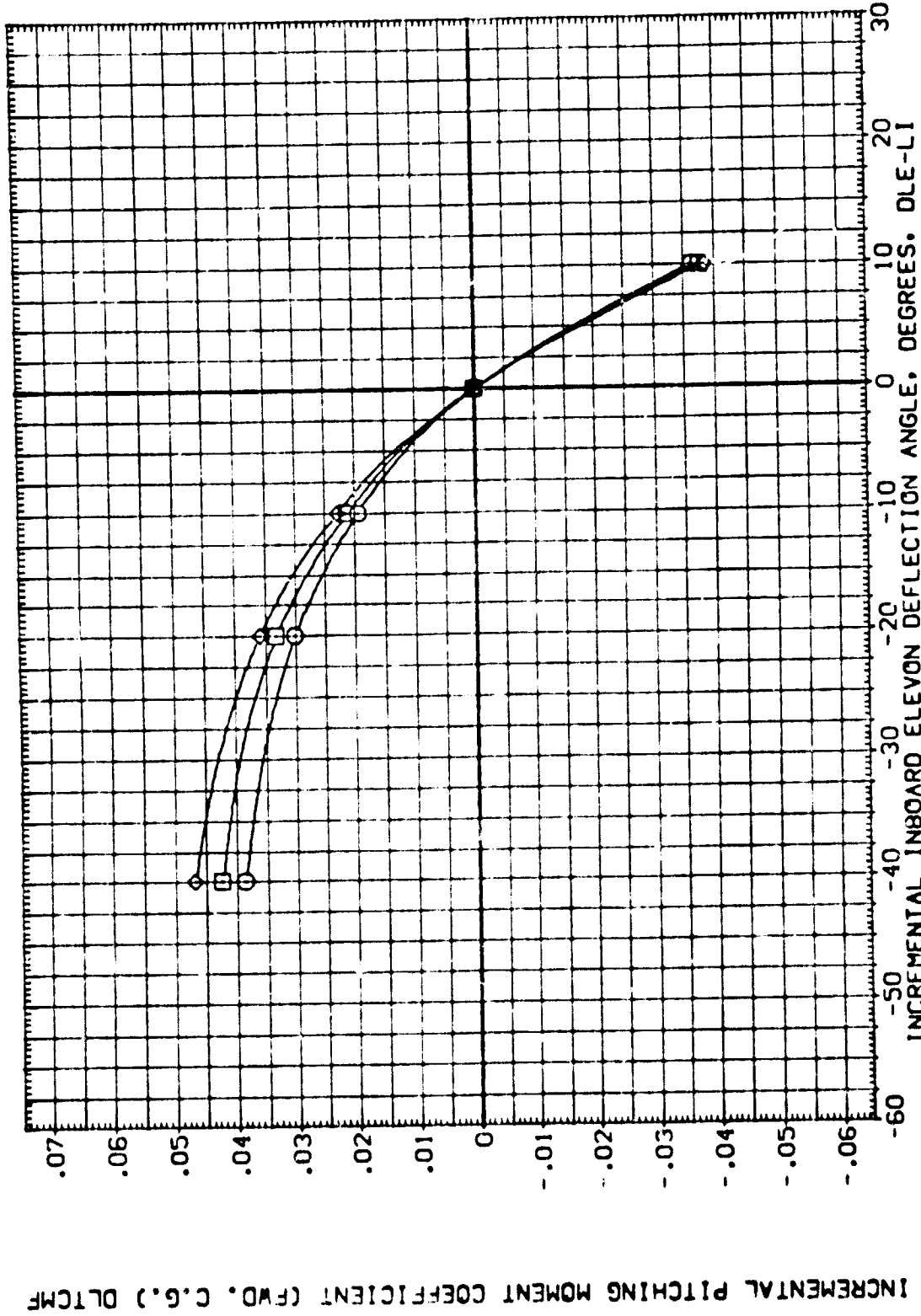


FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY ELEVON DEFLECTIONS

0A79 825 C9 E43 F8 116 N28 R5 V8 W116 (01W027)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION		
ALPHA	MACH	.000	DATASET	DLE-LI	SREF	20.FT.
17.000	8.000	.000	01W027	-20.000	LREF	474.8100
19.000	55.000	.000	01W028	-40.000	BRFF	536.6800
21.000	3.530	-10.000		-10.000	XREF	1076.6800
23.000		10.000			YREF	375.0000
25.000					ZREF	.0150
27.000					SCALE	

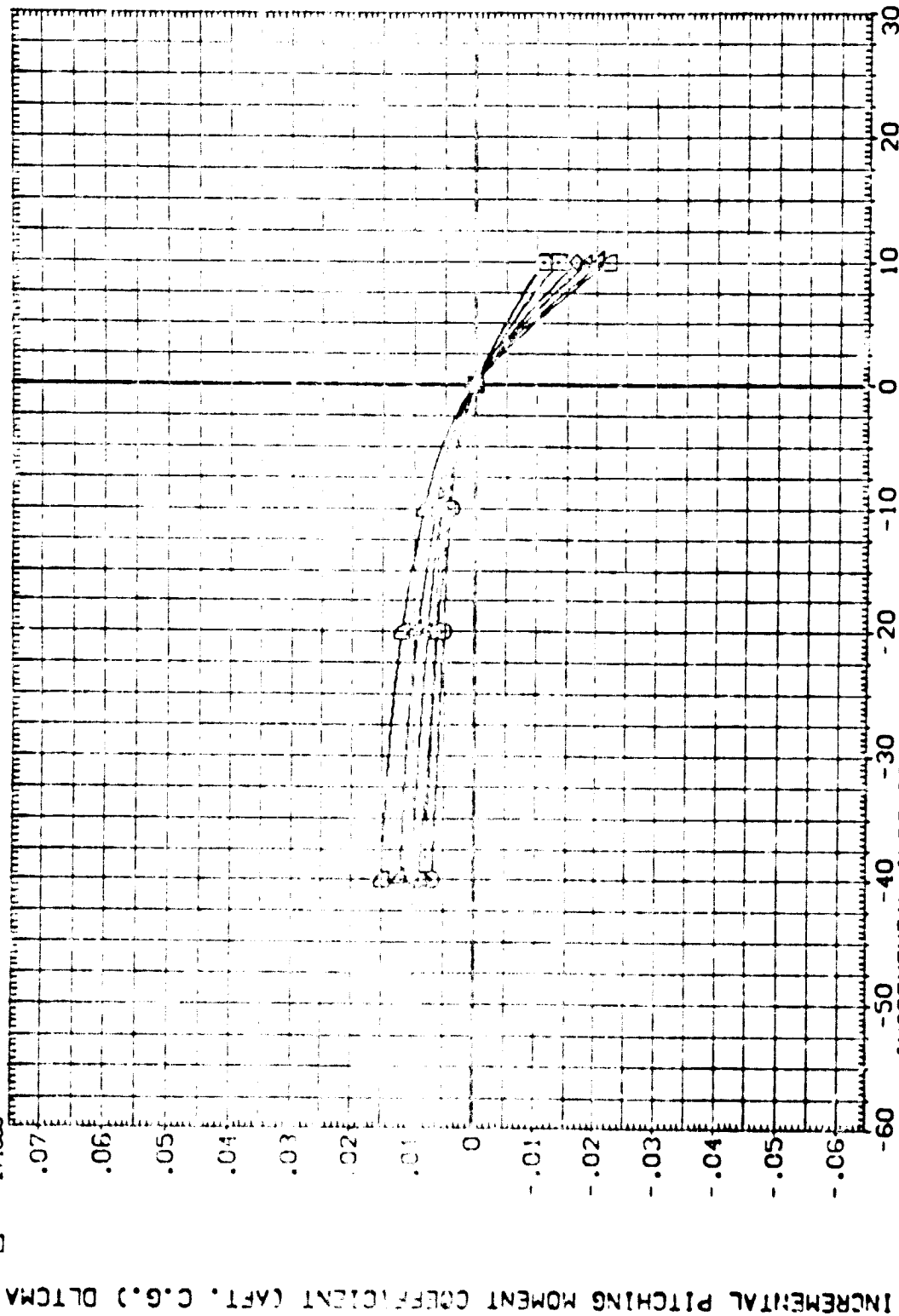


FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY ELEVON DEFLECTIONS

INCREMENTAL PITCHING MOMENT COEFFICIENT (Cp, C.G.) DLTCA

0A79 826 C9 E43 F8 M16 N28 R5 V8 W116 (DTW027)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	BETA	DATA SET	DLE-LI	REF	SO. FT.
29.000	8.000	.000	DLE-LI	LREF	474.8100
31.000	55.000	.000	DTW027	BREF	936.6800
33.000	3.530	.000	D1V029	XFRP	1076.6800
35.000			DTW028	YFRP	.0000
37.000				ZFRP	375.0000
				SCALE	.0150

Symbol
 □
 ◇
 △
 ○
 ●

INCREMENTAL PITCHING MOMENT COEFFICIENT (C.P. C.G.) DLTCM

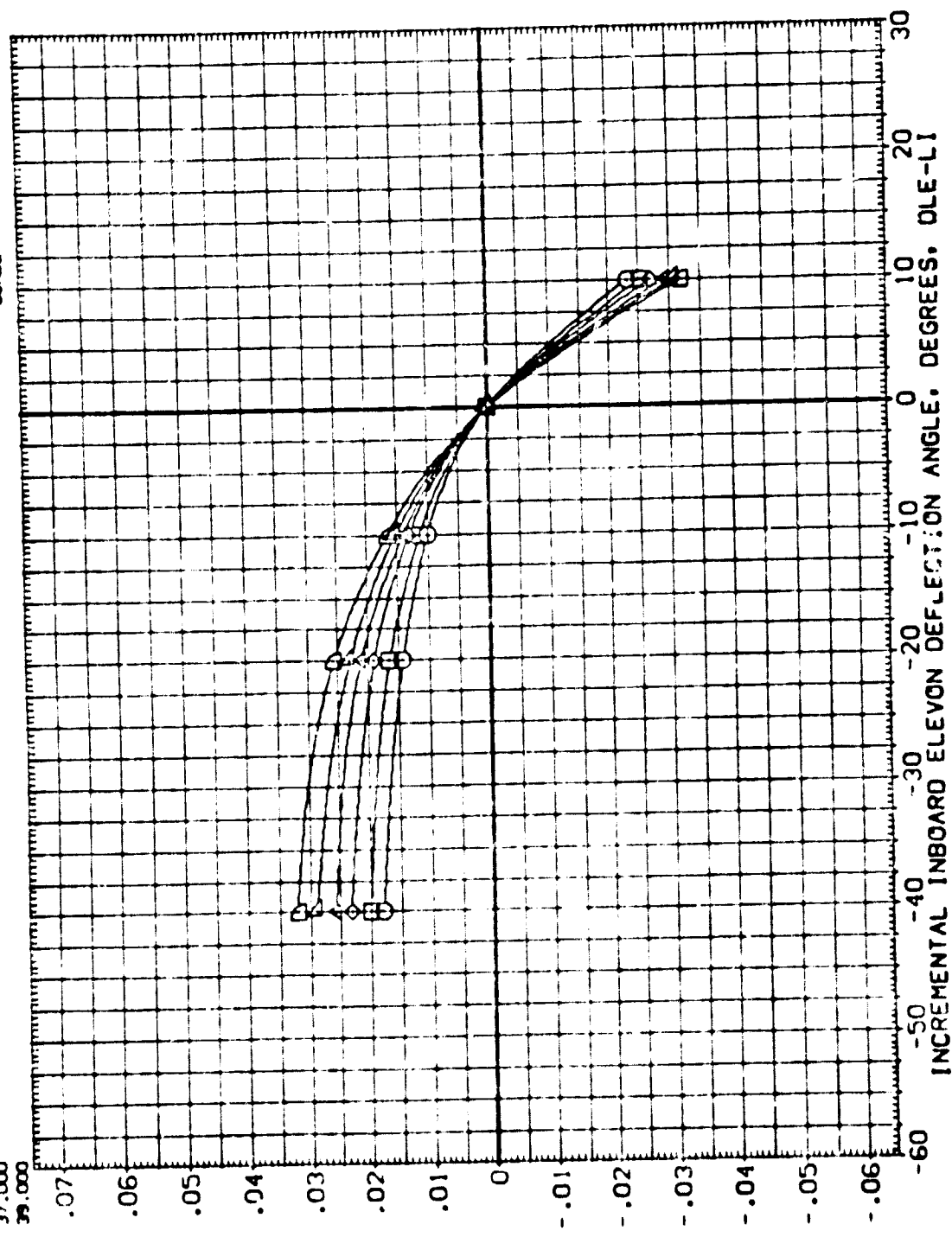


FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW027)

SYMBOL		PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
○	ALPHA	MACH	BETA	DATASET	DLE-LI	SREF	50.FT.
□	41.000	8.000	-40.000	.000 DTW027	-20.000	474.8100	IN.
◇	43.000	55.000	-10.000	.000 DTW028	.000	836.6800	IN. X8
	45.000	3.530	10.000			1076.6900	IN. 10
						375.0000	IN. 70
						.0150	SCALE

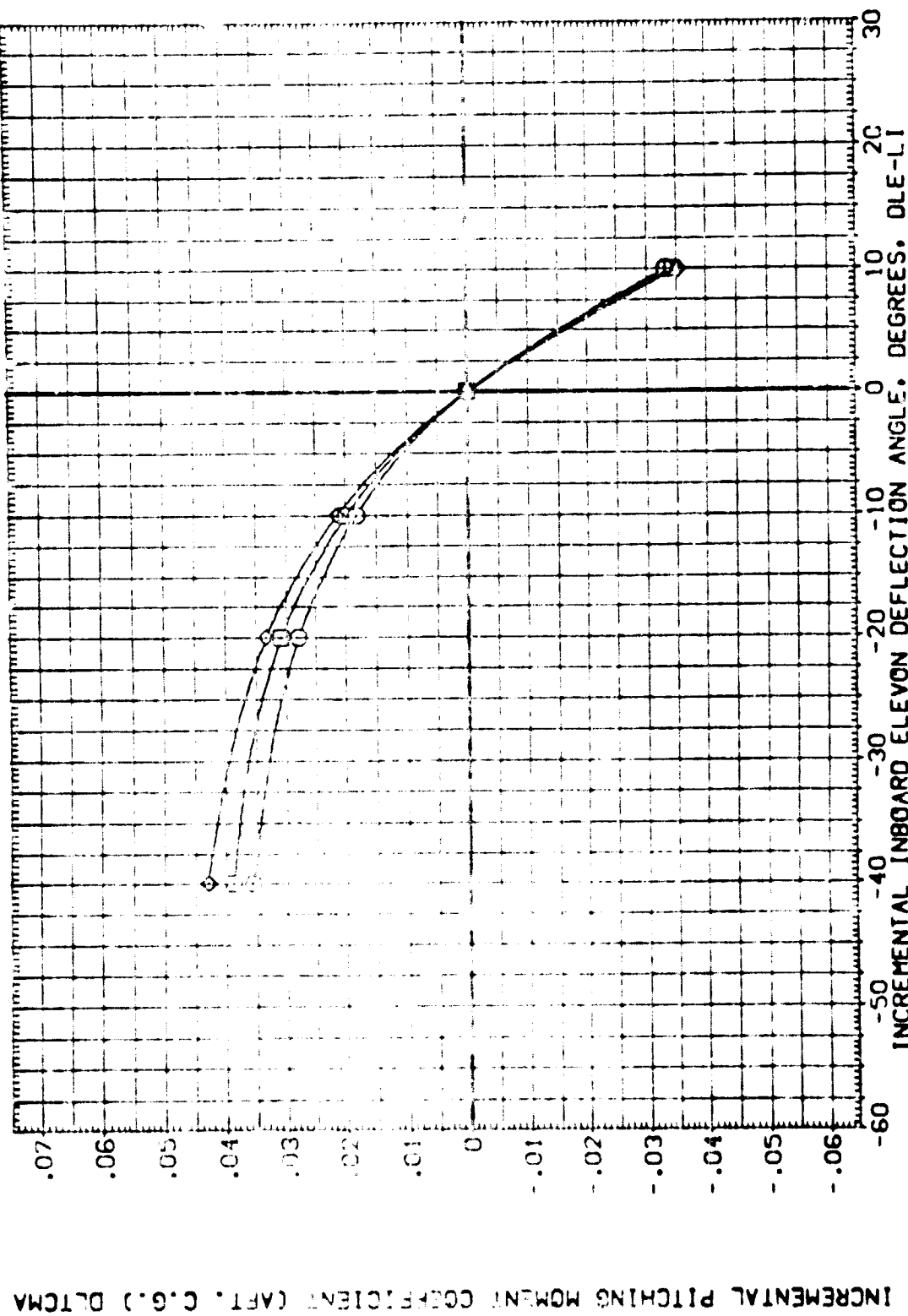
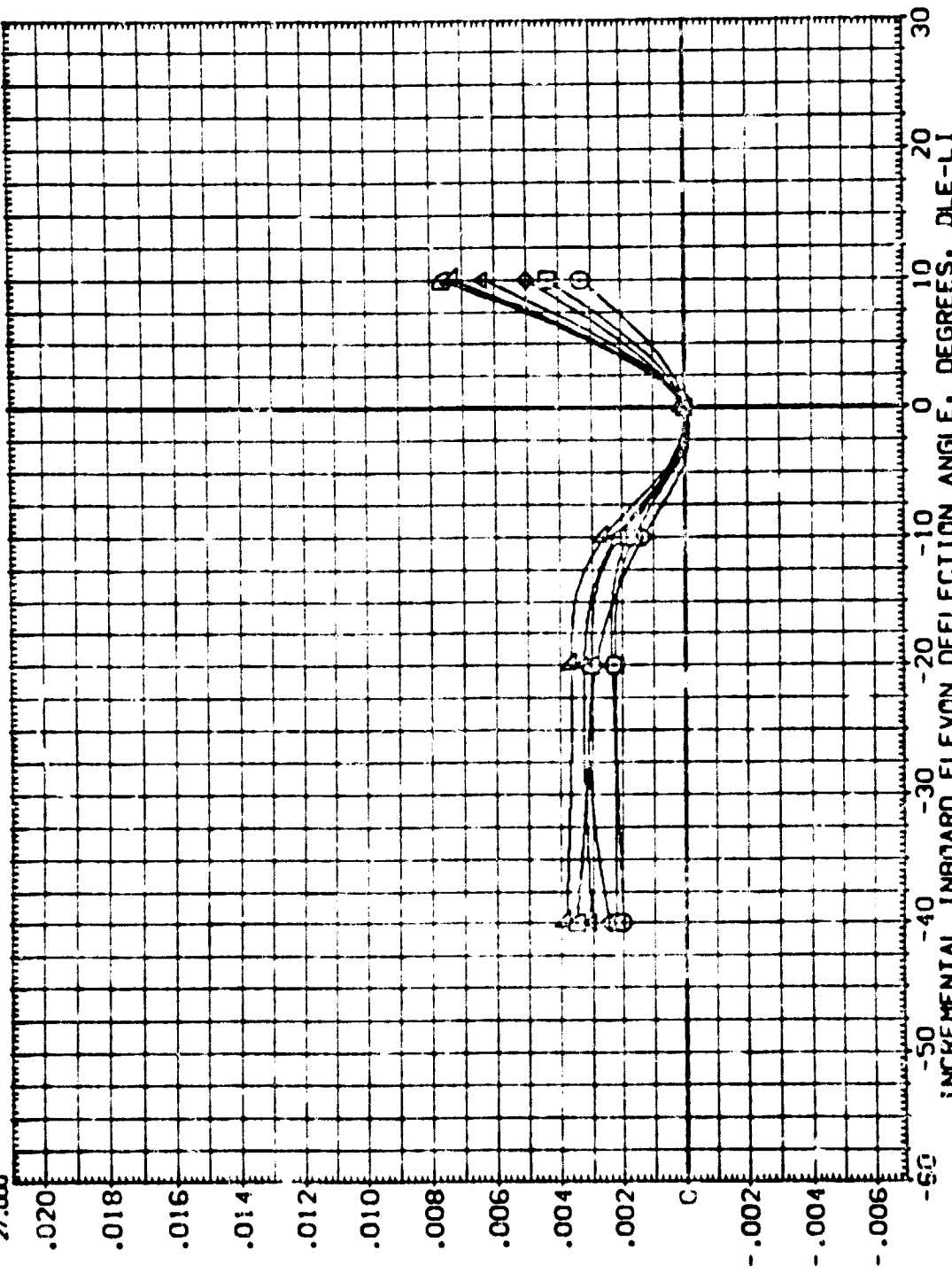


FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY ELEVON DEFLECTIONS

0A79 B2E C3 E43 F8 M16 N28 R5 V8 W116 (DTW027)

ALPHA	HACH	PARAMETRIC VALUES	.000	DATA SOURCE	DATA SET	DLE-LI	SREF	REFERENCE INFORMATION
17.000		8.000		DLE-LI	DTW030	-20.000	2690.0000	50. FT.
19.000	SPOEPRK	55.000	DTW027	-40.000	DTW001	.000	474.8100	IN.
21.000	RMAL	3.500	DTW029	-10.000			936.6800	IN. X0
23.000			DTW026	10.000			1076.0000	IN. Y0
25.000							375.0000	IN. Z0
27.000								SCALE
								.0150



INCREMENTAL AXIAL FORCE COEFFICIENT, DLTCA

INCREMENTAL INBOARD ELEVON DEFLECTION ANGLE, DEGREES, DLE-LI

FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW027)

SYMBOL
 □
 ◇
 △
 ▽

ALPHA
 29.000
 31.000
 33.000
 35.000
 37.000
 39.000

MACH
 8.000
 55.000
 3.530

PARAMETRIC VALUES
 BETA
 RUDDER

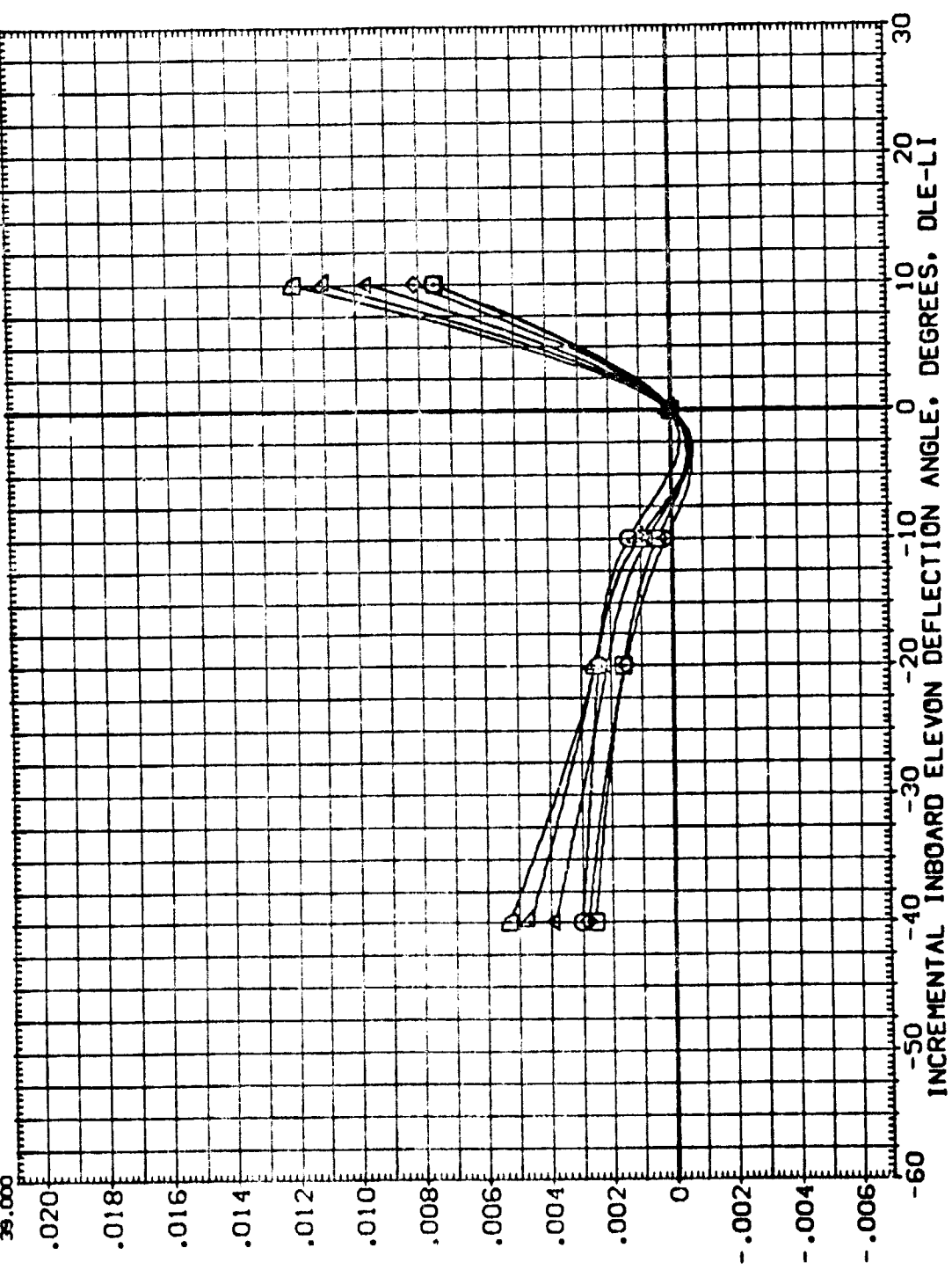
.000 DATASET
 DTW027
 DTW028
 DTW028

DATA SOURCE
 DLE-LI
 -40.000
 -10.000
 10.000

DATASET
 DTW030
 DTW001

DLE-LI
 -20.000
 .000

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XTRP 1076.6800 IN. X0
 YTRP 375.0000 IN. Y0
 ZTRP .0150 IN. Z0
 SCALE



INCREMENTAL AXIAL FORCE COEFFICIENT, $\Delta L C_A$

INCREMENTAL INBOARD ELEVON DEFLECTION ANGLE, DEGREES, DLE-LI

FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW027)

ALPHA	41.000	MACH	8.000	PARAMETRIC VALUES	.000	DATASET	DLE-LI	DATA SOURCE	DLE-LI	DATASET	DLE-LI	SREF	2690.0000	SO.FT.
	43.000	SPDRK	55.000	BETA	.000	DTW027	40.000		474.8100	DTW030	-20.000	LREF	474.8100	IN.
	45.000	RVL	3.530	RUDDER	.000	DTW029	-10.000		936.6800	DTW001	.000	BREF	936.6800	IN.
SYMBOL						DTW028	10.000		XFRP			XFRP	1076.6800	IN.V8
	○								ZFRP			ZFRP	375.0000	IN.V8
	□								SCALE				.0150	IN.Z0
	◇													

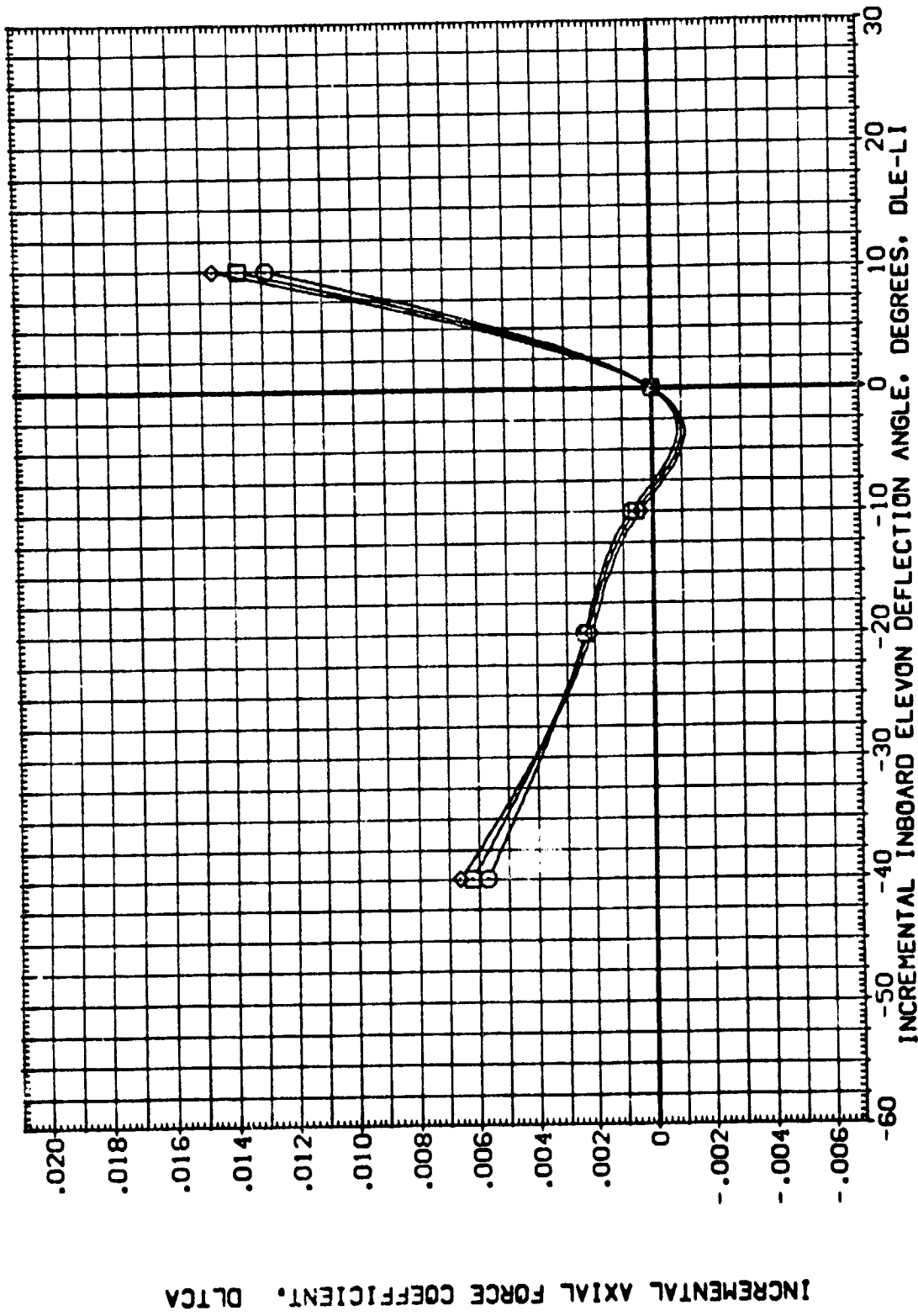


FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW027)

SYMBOL
 □
 ◇
 △
 ▽
 ○

ALPHA 17.000
 19.000
 21.000
 23.000
 25.000
 27.000

MACH 8.000
 SPODRK 55.000
 RV/L 3.530

PARAMETRIC VALUES
 BETA
 RUDDER

.000 DATASET .000 DATASET
 DTW027 DTW030
 DTW028 DTW001

DATA SOURCE
 DLE-L1
 -40.000
 -10.000
 10.000

DLE-L1
 -20.000
 .000

SREF 2630.0000
 LREF 474.8100
 BREF 936.8600
 YMRP 1076.8600
 ZMRP 375.0000
 SCALE .0150

SO.FT.
 IN.
 IN.
 IN.
 IN.
 IN.

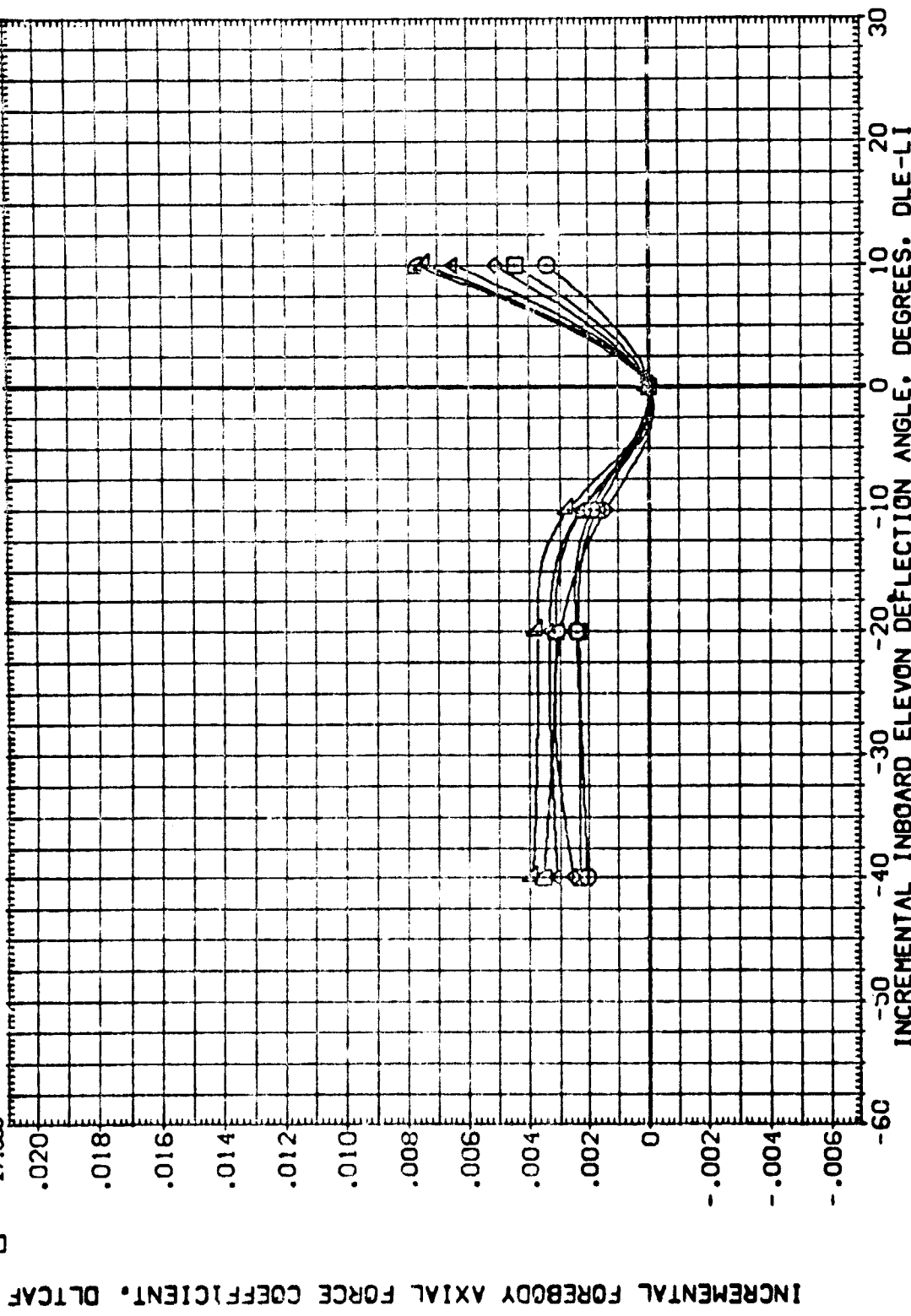


FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW027)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	MACH	.000	DATA SET	DLE-LI	SREF
29.000	8.000	.000	DTW027	-20.000	2690.0000
31.000	55.000	.000	DTW028	.000	474.8100
33.000	3.530	-10.000	DTW028		936.6800
35.000		10.000			1076.6800
37.000					375.0000
39.000					.0150

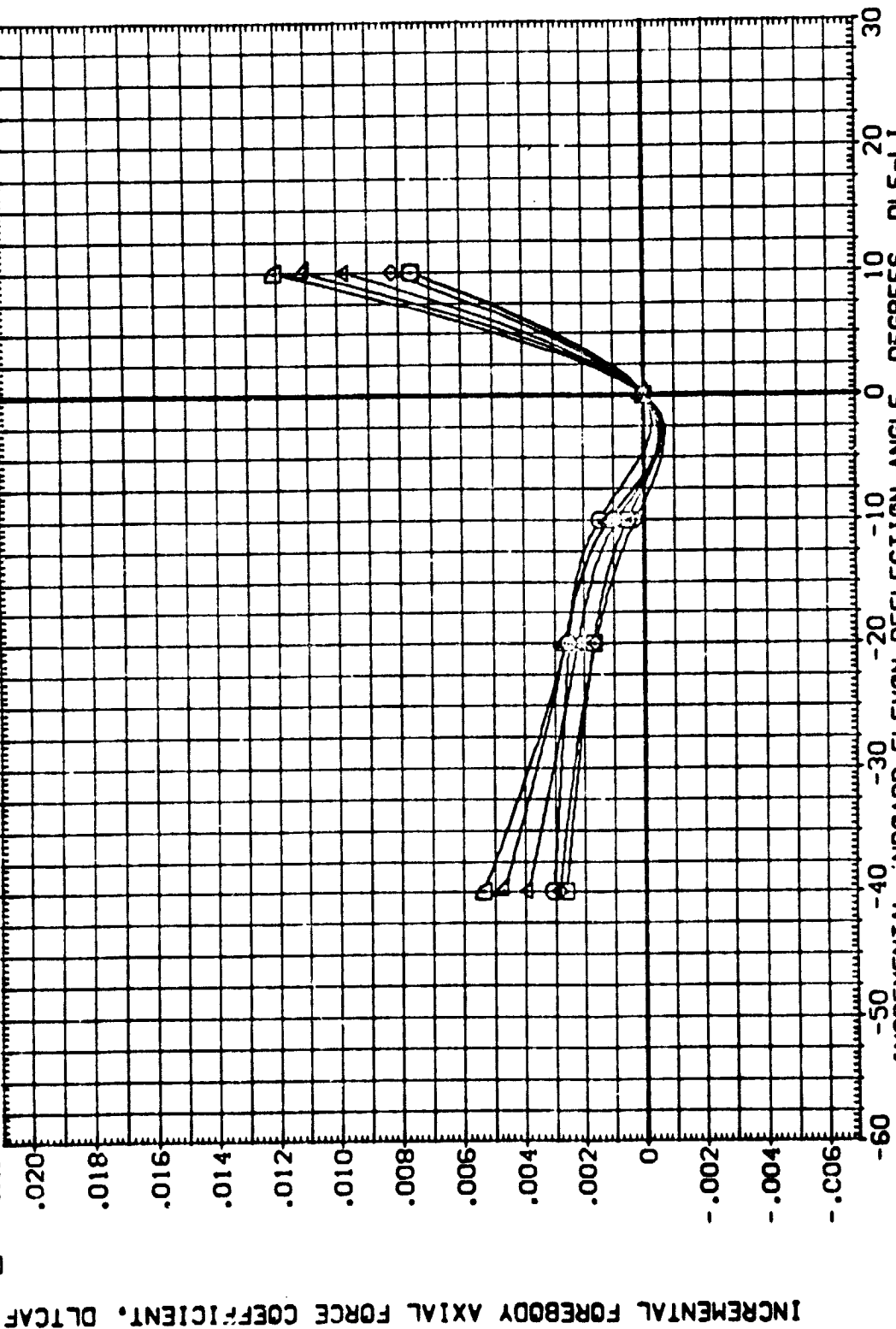
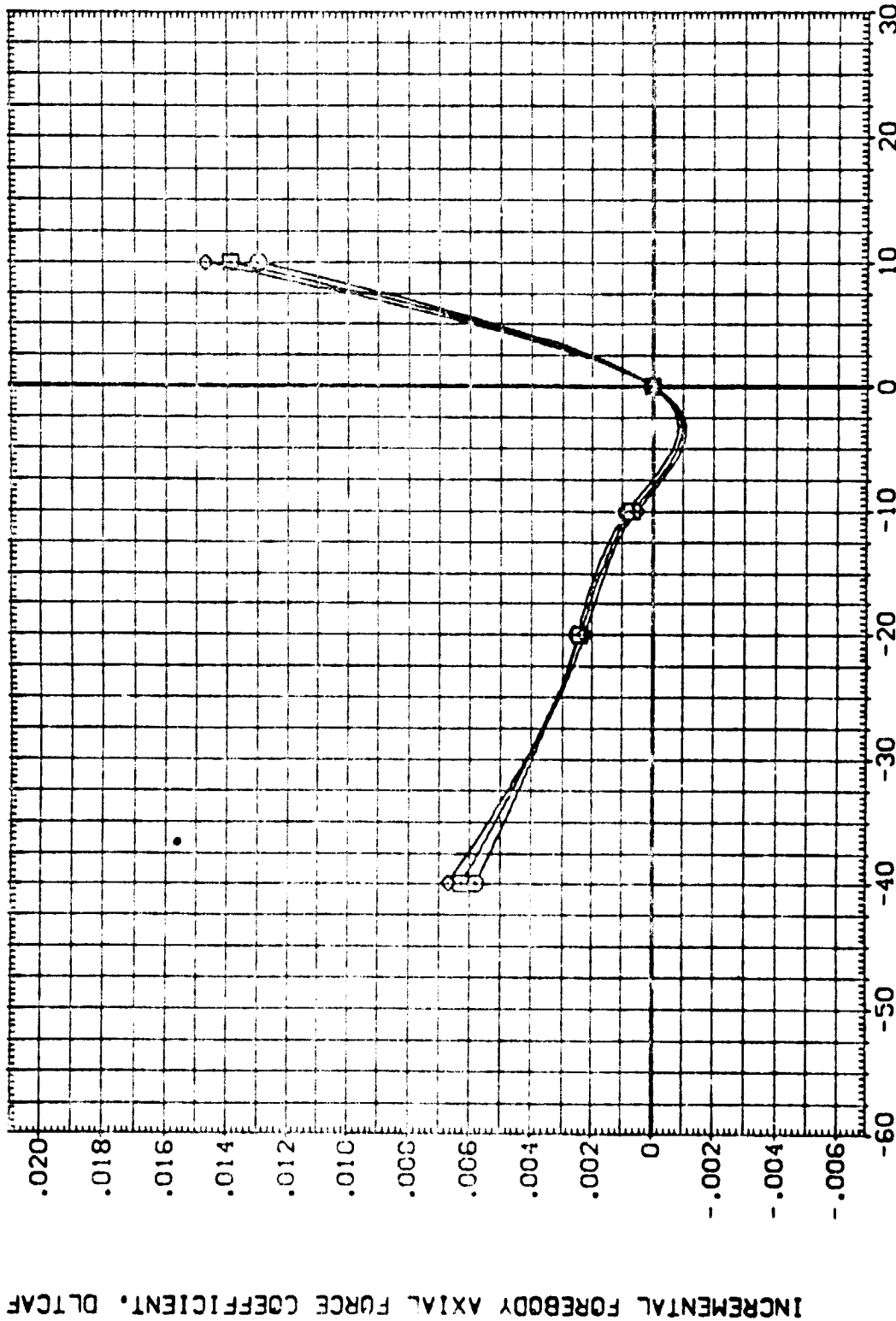


FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (OTW027)

SYMBOL		PARAMETRIC VALUES			DATA SOURCE		REFERENCE INFORMATION		
○	ALPHA	41.000	MACH	8.000	BETA	DLE-L1	SREF	2690.0000	50.FT.
□		43.000	SPOBRK	55.000	RUDDER	DTW027	LREF	474.8100	IN.
◇		45.000	RV/L	3.530		DTW028	BREF	936.6800	IN.
							XPRP	1076.6000	IN. X0
							YPRP	.0000	IN. Y0
							ZMP	375.0000	IN. Z0
							SCALE	.0150	



INCREMENTAL FOREBODY AXIAL FORCE COEFFICIENT, DLTCAF

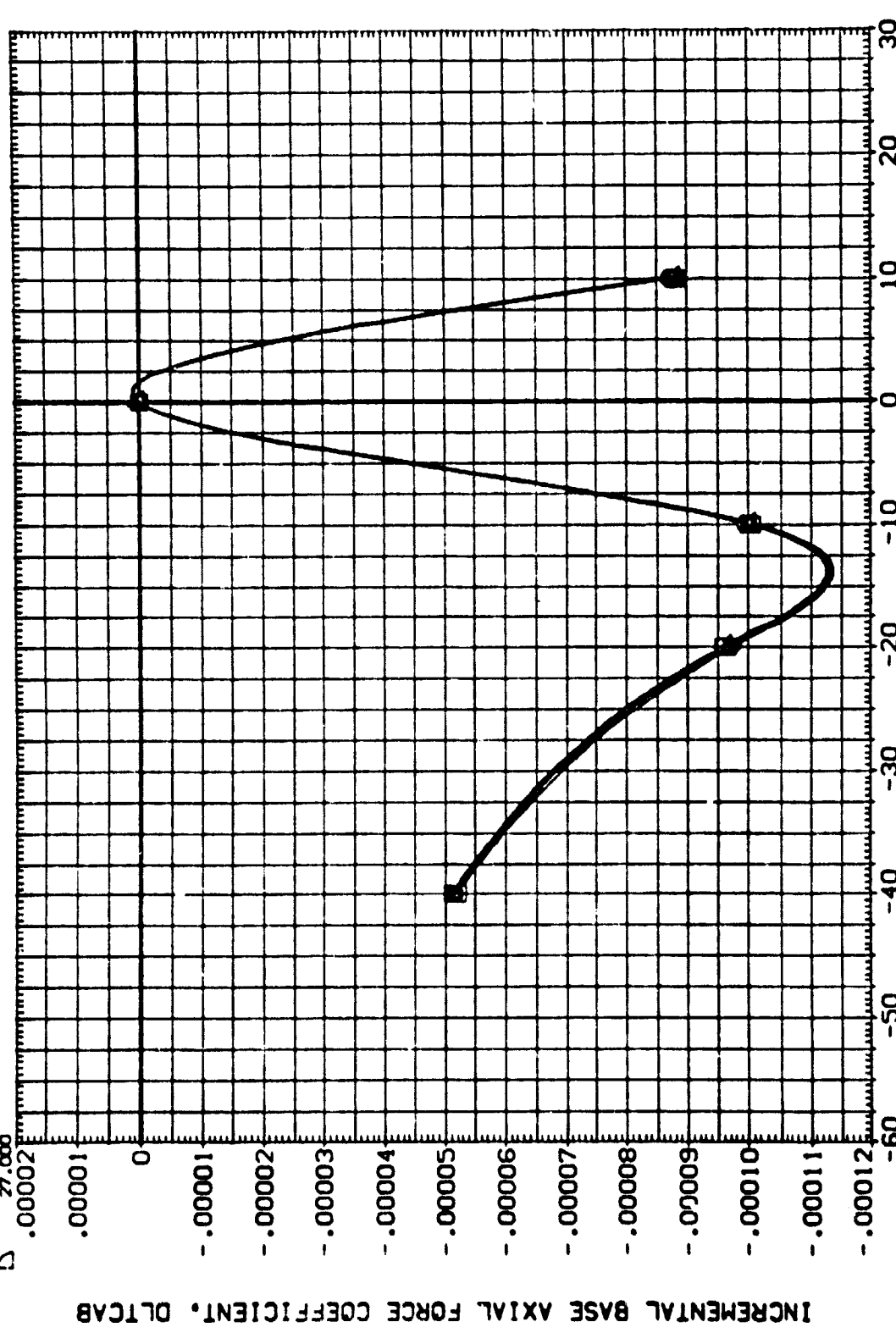
INCREMENTAL INBOARD ELEVON DEFLECTION ANGLE, DEGREES, DLE-L1

FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY ELEVON DEFLECTIONS

PAGE 156

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW027)

SYMBOL	ALPHA	MACH	SPDRK	RVL	PARAMETRIC VALUES	.000	DATASET	DLE-LI	DATA SOURCE	DATASET	DLE-LI	SREF	REFERENCE INFORMATION
○	17.000				BETA		DTW027	-20.000		DTW030	-20.000	2650.0000	50.FT.
□	19.000				RUDER		DTW029	-40.000		DTW001		474.8100	IN.
△	21.000						DTW028	-10.000				936.6800	IN.
▽	23.000											1076.0000	IN.
◇	25.000											375.0000	IN.
◇	27.000											.0150	IN.



INCREMENTAL INBOARD ELEVON DEFLECTION ANGLE, DEGREES, DLE-LI
 INCREMENTAL BASE AXIAL FORCE COEFFICIENT, DLTCAB

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW027)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	DATASET	DLE-LI	SREF	REFERENCE INFORMATION
○	29.000	8.000	BETA	DLE-LI	.000	-20.000	2690.0000	SO.FT.
□	31.000	55.000	RAJDER	.000	DTW027	.000	474.8100	IN.
◇	30.000	3.530		-10.000	DTW029		936.6800	IN.
△	35.000			10.000	DTW028		1076.6800	IN.X0
▽	37.000						0.0000	IN.Y0
◇	39.000						375.0000	IN.Z0
							SCALE	.0150

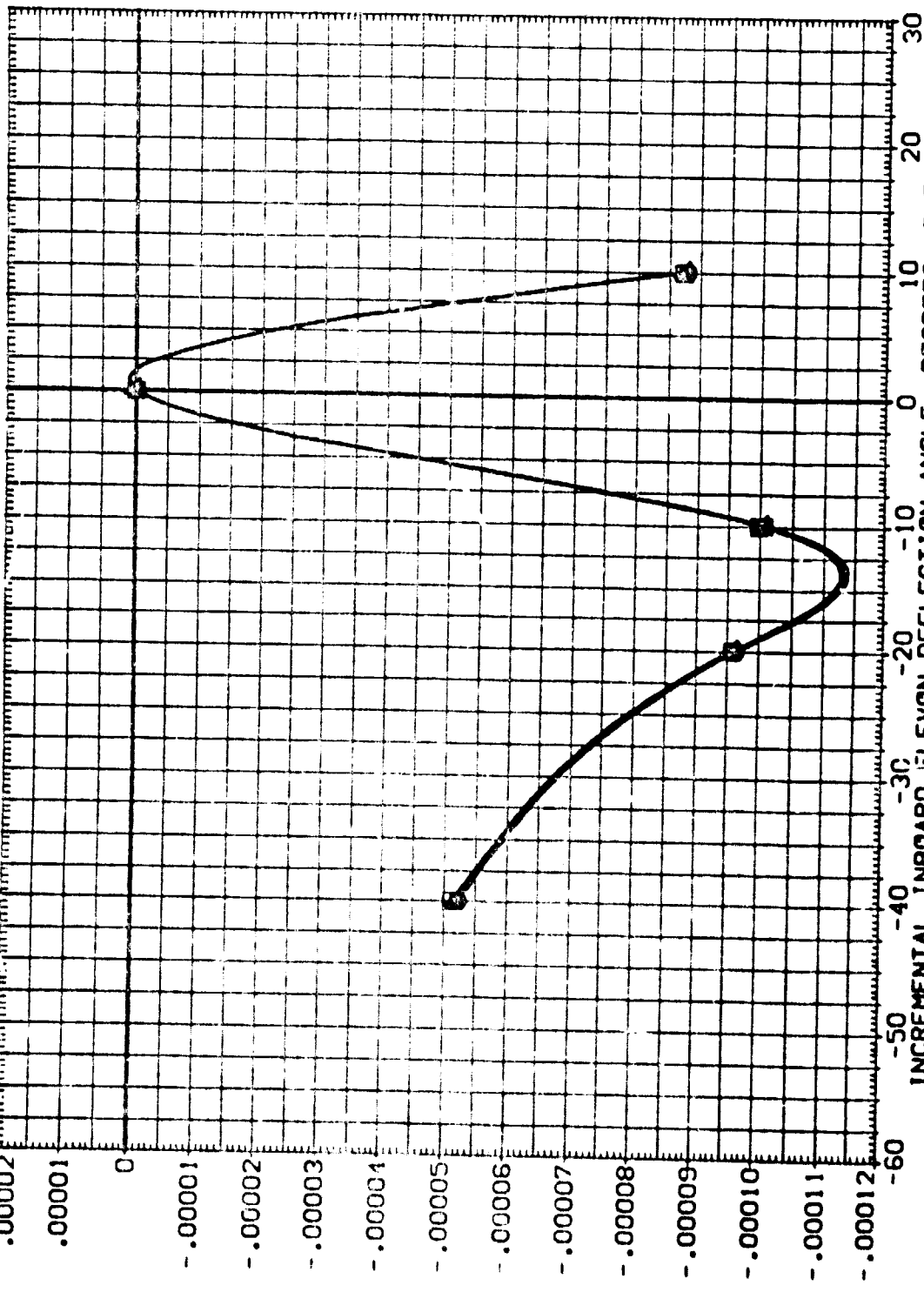


FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY EILEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW027)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	DATASET	DLE-LI	REFERENCE INFORMATION
○	41.000		8.000 BETA	.000 DATASET	DLE-LI	SREF	2690.0000 SQ.FT.
□	43.000	SPOBRK	55.000 RUDDER	.000 DTW027	-20.000	LREF	474.8100 IN.
◇	45.000	RV/L	3.530	.000 DTW028	.000	BREF	936.6800 IN.
						XTRP	1076.6800 IN. X0
						YTRP	.0000 IN. Y0
						ZTRP	375.0000 IN. Z0
						SCALE	.0150

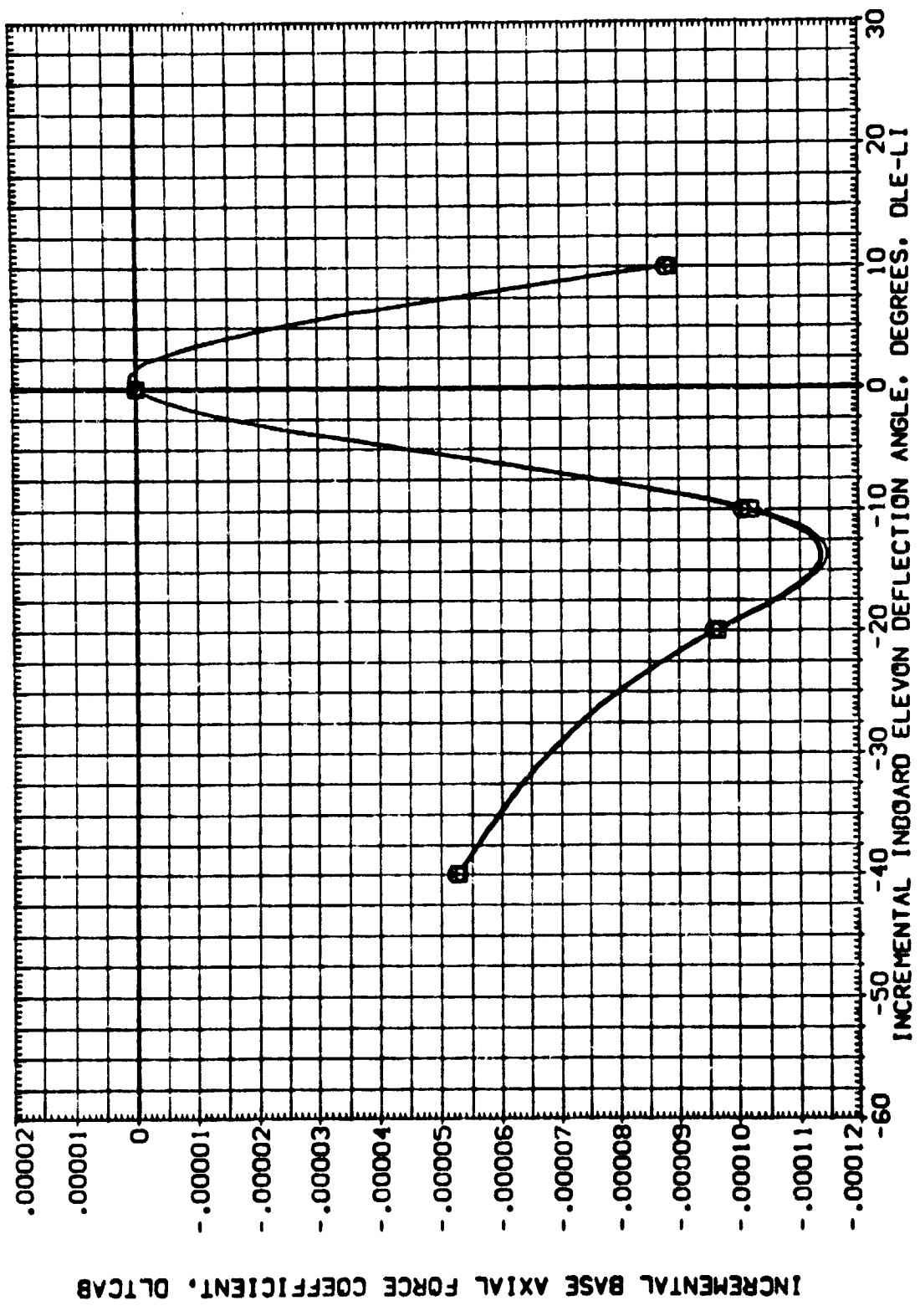
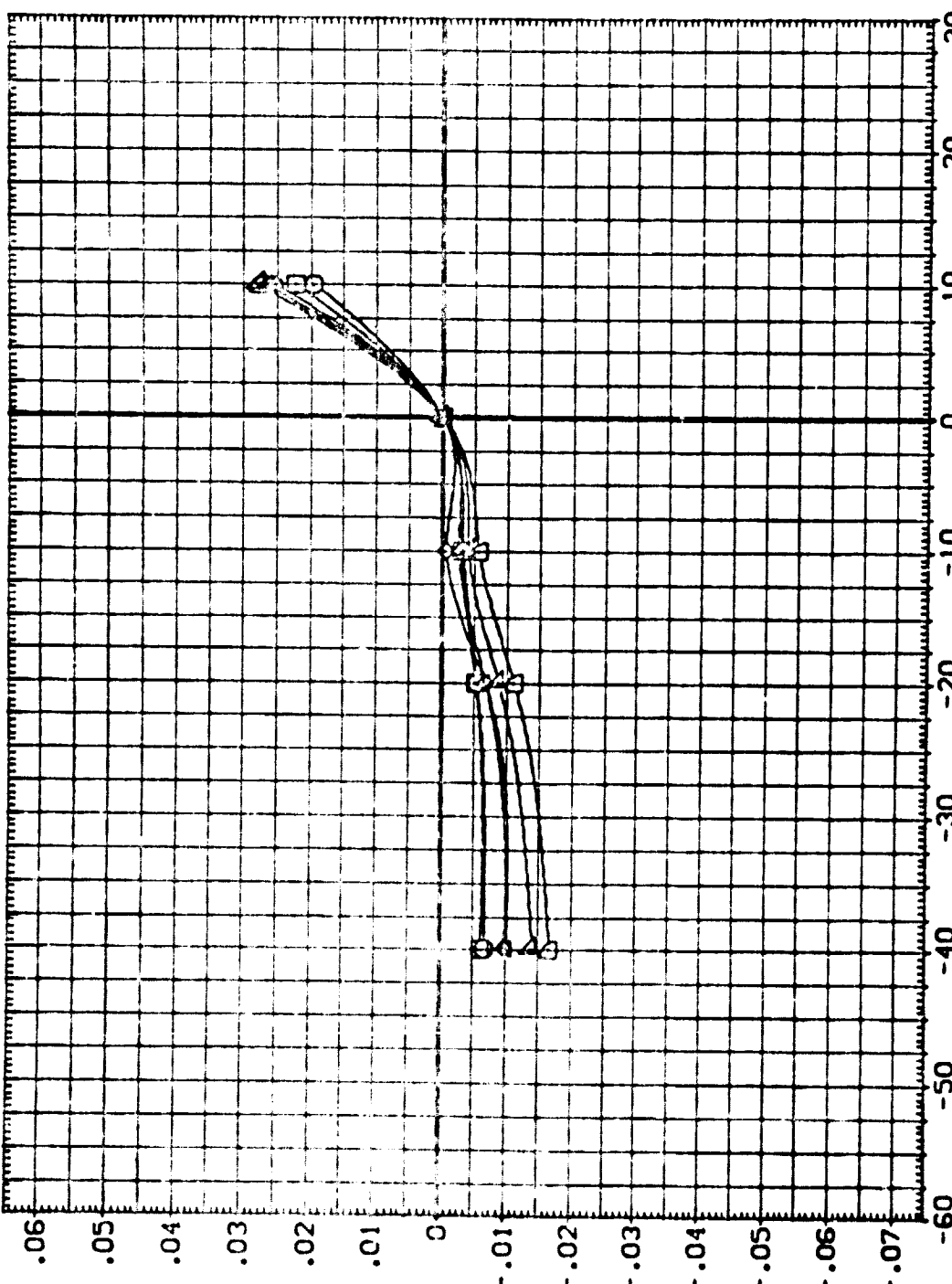


FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY EVELON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW027)

ALPHA	MACH	PARAMETRIC VALUES	.000	DATASET	OLE-LI	DATASET	OLE-LI	SREF	2690.0000	SO.FT.
17.000	8.000	BETA	.000	DTW027	-40.000	DTW030	-20.000	LREF	474.8100	IN.
19.000	56.000	RUDDER	.000	DTW029	-10.000	DTW001	.000	BREF	906.6800	IN.
21.000	3.530			DTW028	10.000			XRRP	1076.6800	IN.XB
23.000								YRRP	.0000	IN.YB
25.000								ZRRP	375.0000	IN.ZB
27.000								SCALE	.0150	

SYMBOL
 ◻ ◻ ◻ ◻ ◻ ◻



INCREMENTAL LIFT COEFFICIENT, CLTC

INCREMENTAL INBOARD ELEVON DEFLECTION ANGLE, DEGREES, DLE-LI
 FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW027)

SYMBOL		PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION					
ALPHA	29.000	MACH	8.000	BETA	0.000	DATASET	DLE-LI	SREF	2690.0000	SO.FT.	50.0000
	31.000	SPOBRK	55.000	RUDDER	-10.000	DTW027	-20.000	LREF	474.8100	IN.	10.0000
	33.000	RNVL	3.530		-10.000	DTW029	.000	BREF	936.6800	IN.	10.0000
	35.000				10.000	DTW028		XREF	1076.6800	IN.	10.0000
	37.000							YREF	0.0000	IN.	10.0000
	39.000							ZREF	375.0000	IN.	10.0000
								SCALE	.0150		

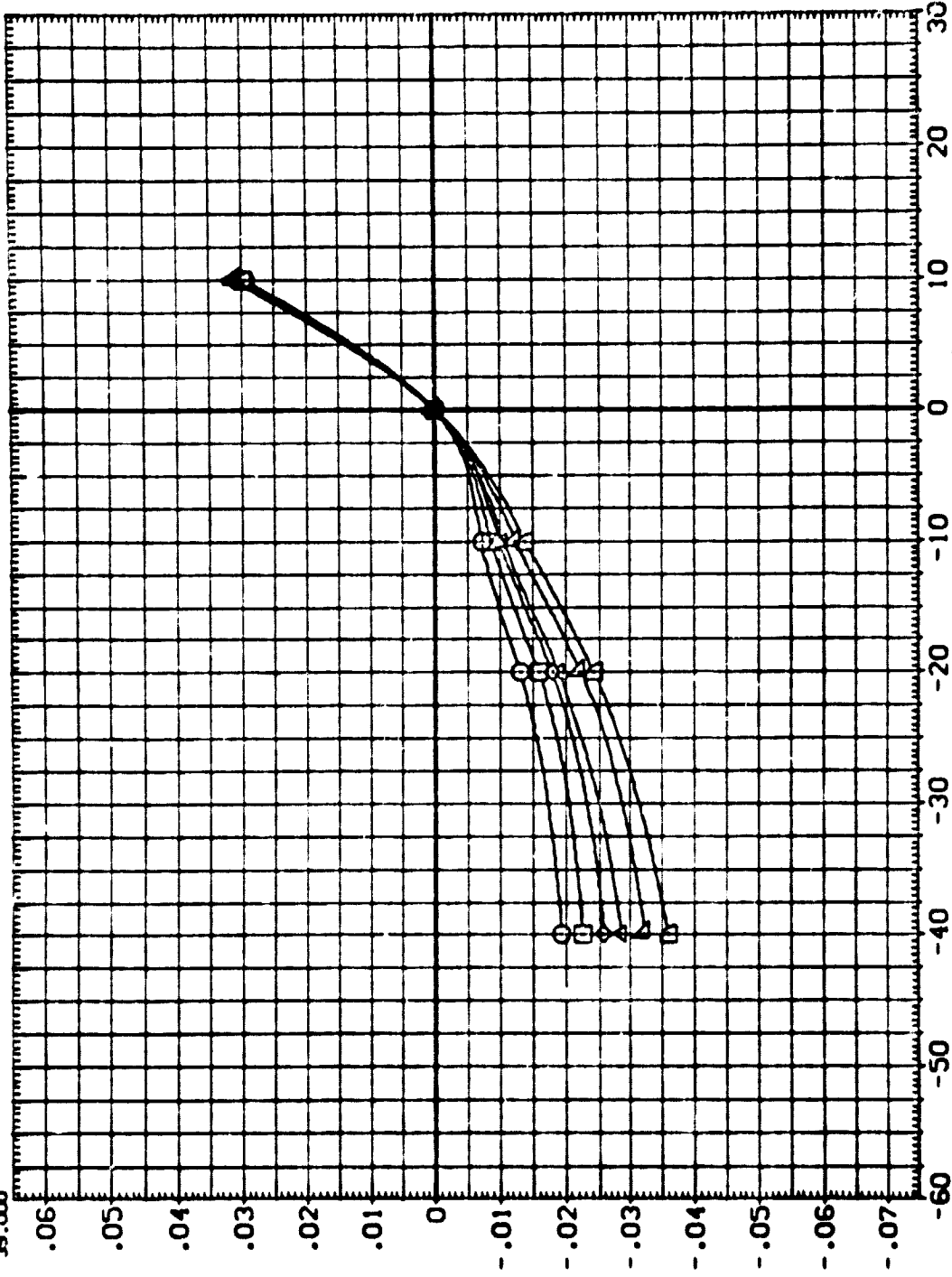


FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW027)

ALPHA	41.000	MACH	9.000	BETA	9.000	DATA SOURCE	DLE-LI	DATASET	DLE-LI	SREF	2630.0000	SO.FT.
	43.000	SPOBRK	55.000	RUDDER	3.530		-40.000	DTW027	-20.000	LREF	474.8100	IN.
	45.000	RAVL					-10.000	DTW028	.000	BREF	536.6800	IN. X0
SYMBOL	○						10.000		.000	X-ZP	1076.0000	IN. Y0
	□									Y-MP	375.0000	IN. Z0
	◇									Z-MP		
										SCALE	.0150	

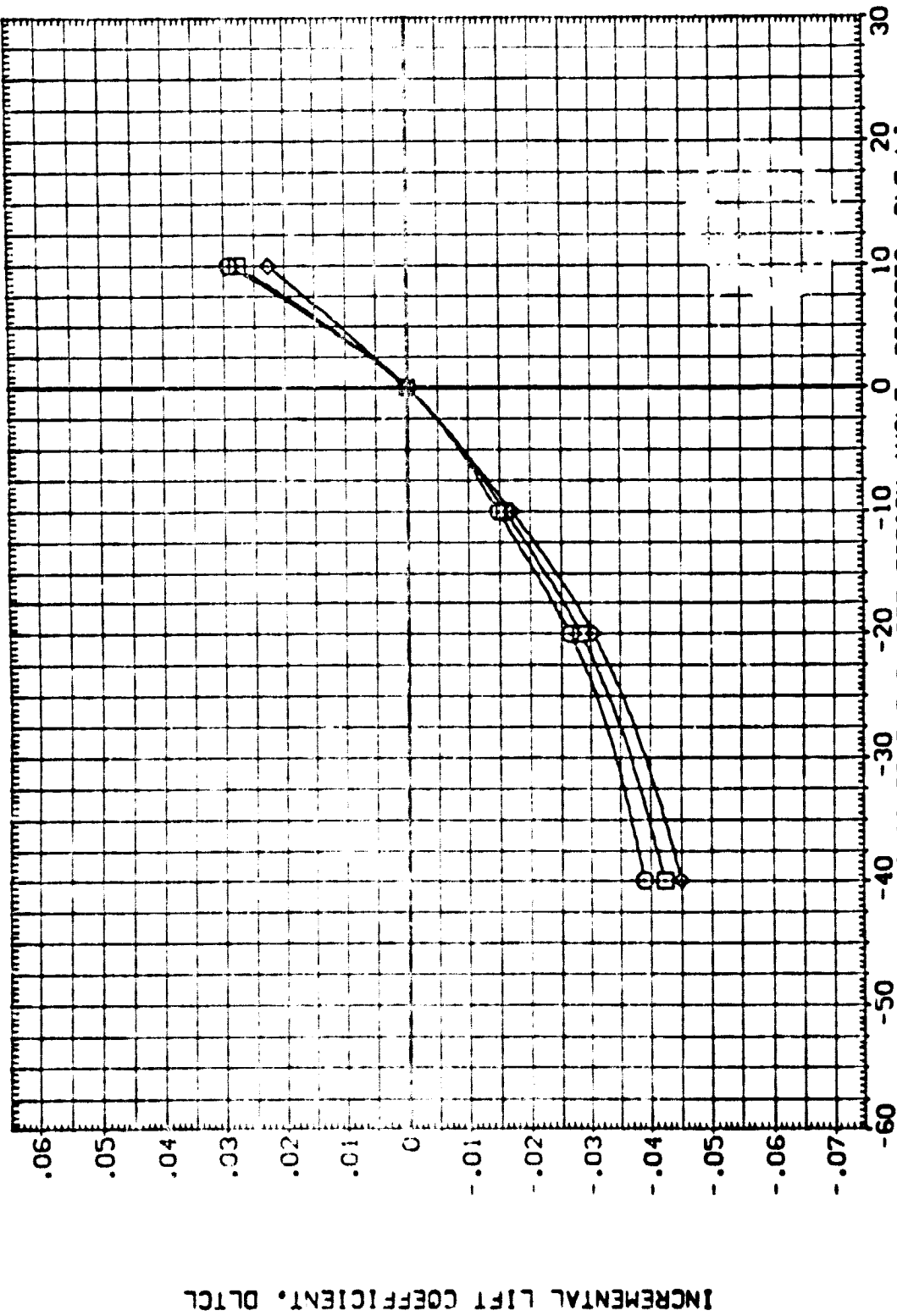
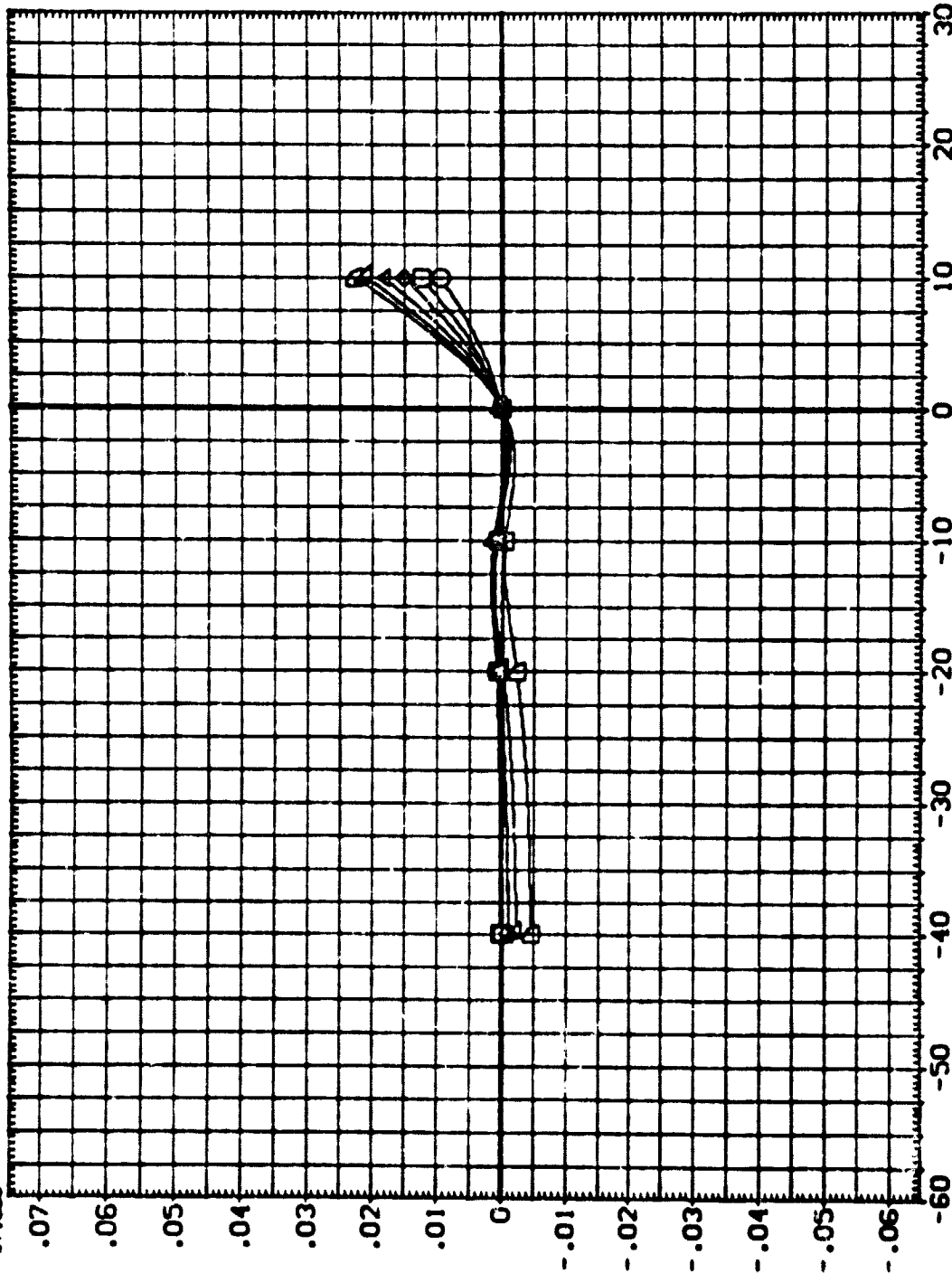


FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW027)

ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	DATASET	DLE-L1	SREF	REFERENCE INFORMATION
17.000	8.000	BETA	DLE-L1	DLE-L1	2690.0000	SO.FT.	
19.000	55.000	RUDDER	DTW027	DTW030	474.8100	IN.	
21.000	3.530		DTW029	DTW001	906.6800	IN.	
23.000			DTW028		1076.6800	IN.X0	
25.000					.0000	IN.Y0	
27.000					375.0000	IN.Z0	
					SCALE	.0150	



INCREMENTAL DRAG COEFFICIENT, DLTCO

INCREMENTAL INBOARD ELEVEN DEFLECTION ANGLE, DEGREES, DLE-L1
 FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY ELEVEN DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW027)

ALPHA	MACH	PARAMETRIC VALUES	.000	DATASET	DLE-LI	DATA SOURCE	DLE-LI	SREF	REFERENCE INFORMATION	SO.FT.
79.000	0.000	BETA	.000	DTW027	-20.000	DLE-LI	-20.000	LREF	2690	0000
31.000	55.000	RUDDER	.000	DTW028	-10.000	DTW030	.000	BREF	474	8100
33.000	3.530		.000	DTW029	10.000	DTW001	.000	XREF	536	6800
35.000								YREF	1076	6800
37.000								ZREF	375	0000
39.000								SCALE		.0150

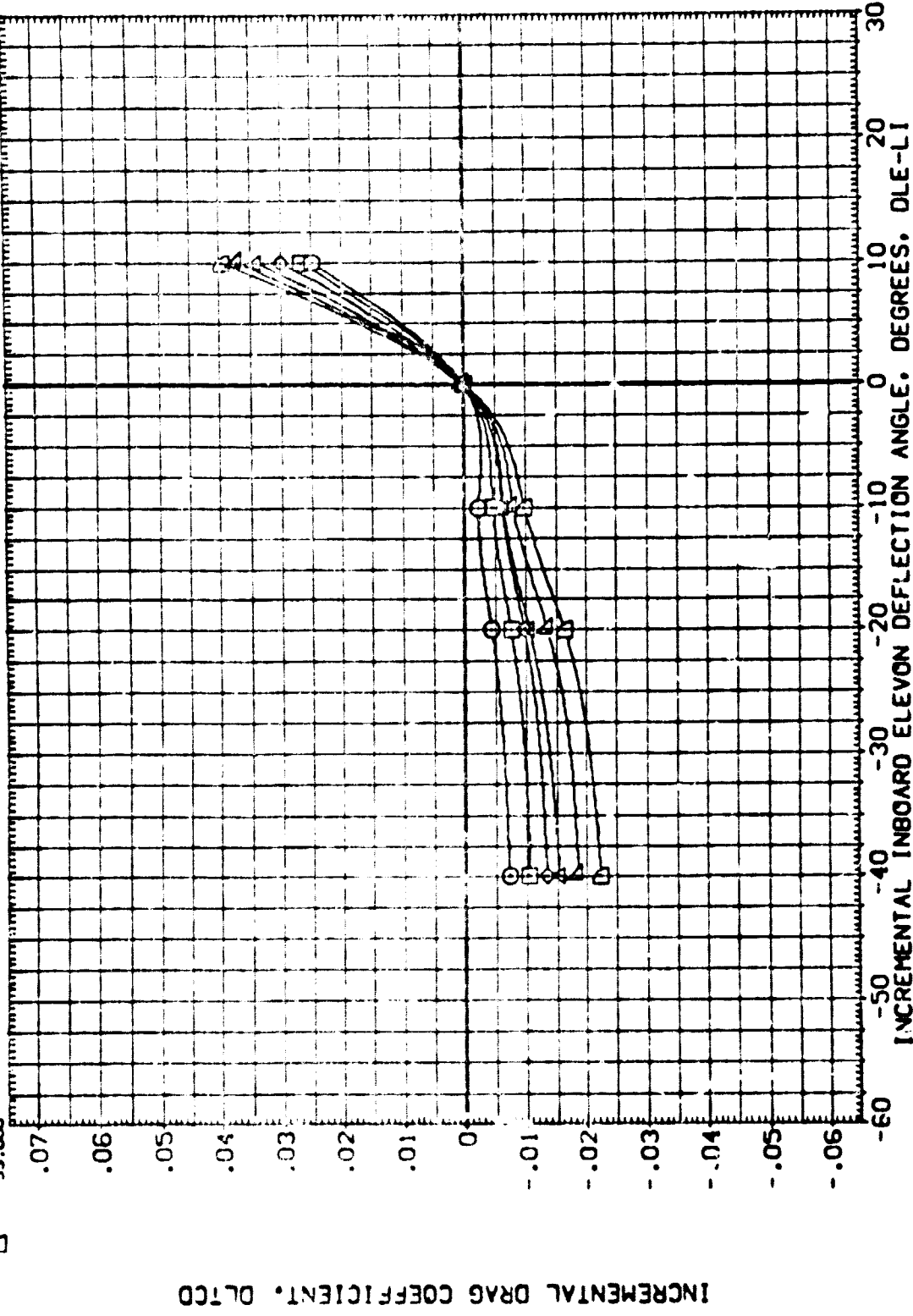
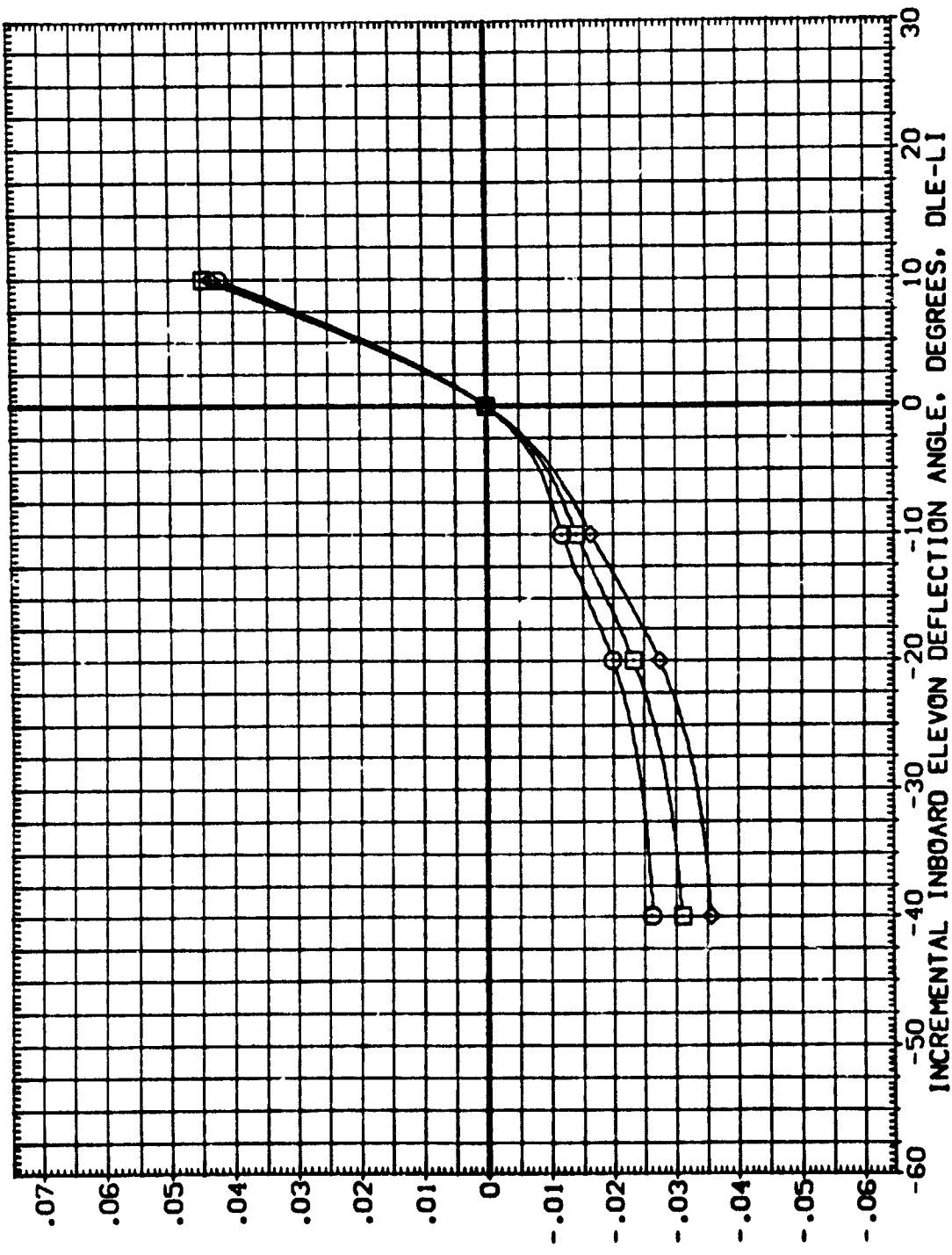


FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW027)

ALPHA	MACH	PARAMETRIC VALUES	.000	DATASET	DATA SOURCE	DLE-LI	DATASET	DLE-LI	SREF	REFERENCE INFORMATION	SO.FT.
41.000	8.000	BETA	.000	DTW027	DLE-LI	-20.000	DTW030	-20.000	LREF	2690.0000	IN.
43.000	55.000	RUDER	.000	DTW029	-10.000	.000	DTW001	.000	SREF	474.8100	IN.
45.000	3.530			DTW028	10.000				XTRP	936.6800	IN.
									YTRP	1076.6800	IN.
									ZTRP	375.0000	IN.
									SCALE	.0150	IN.



INCREMENTAL DRAG COEFFICIENT, DLTCO

FIG. 12 INCREMENTAL EFFECTS OF INBOARD ONLY ELEVON DEFLECTIONS

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(CTV038)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	-20.000	.000	.000	-20.000	SREF 2630.0000 SQ.FT.
(CTV034)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	-10.000	.000	.000	-10.000	LREF 474.8100 IN.
(CTV001)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	10.000	.000	.000	10.000	BREF 936.5800 IN.
(CTV033)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116					XTRP 1076.6800 IN.X0
						YTRP .0000 IN.Y0
						ZTRP 375.0000 IN.Z0
						SCALE .0150

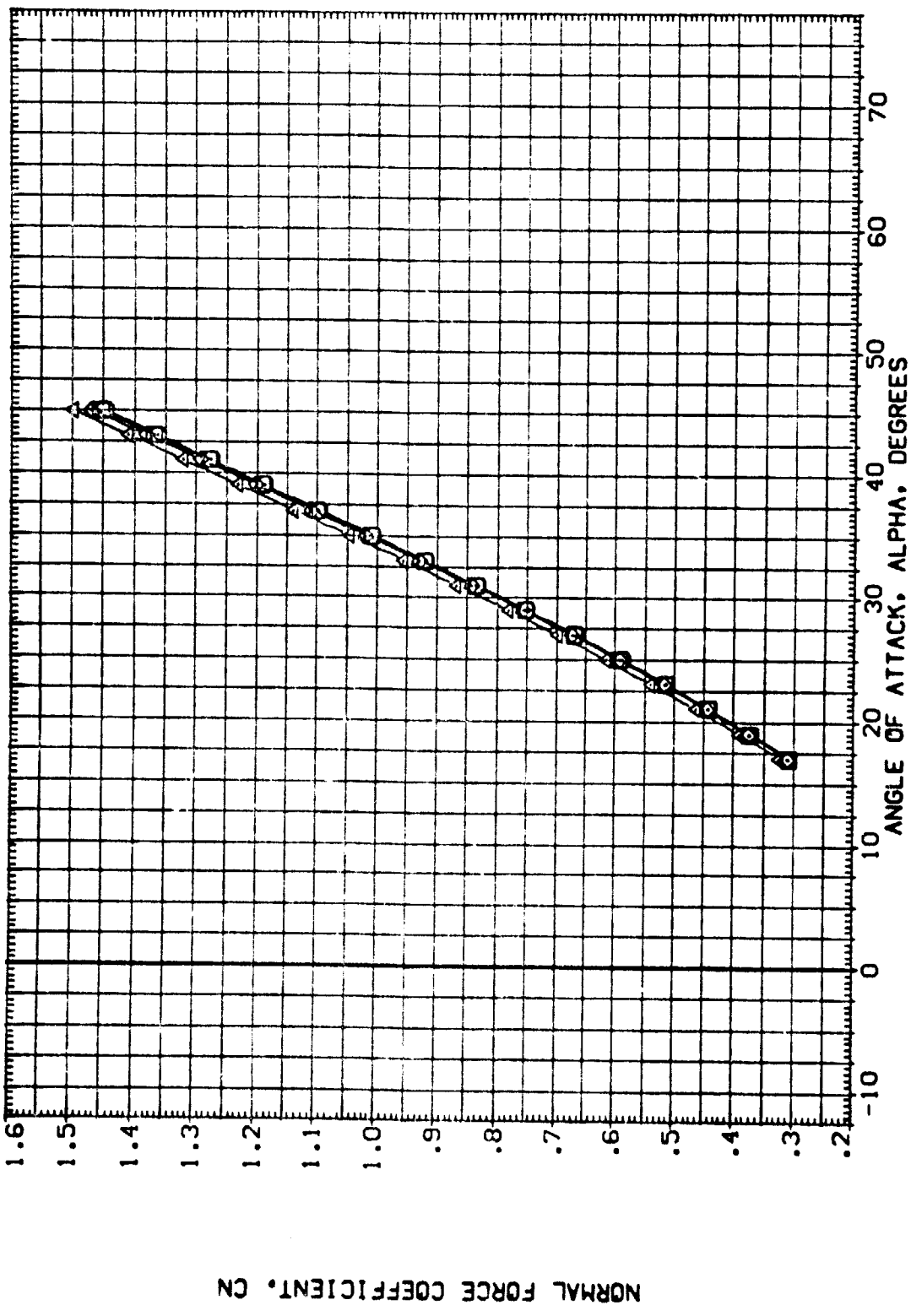
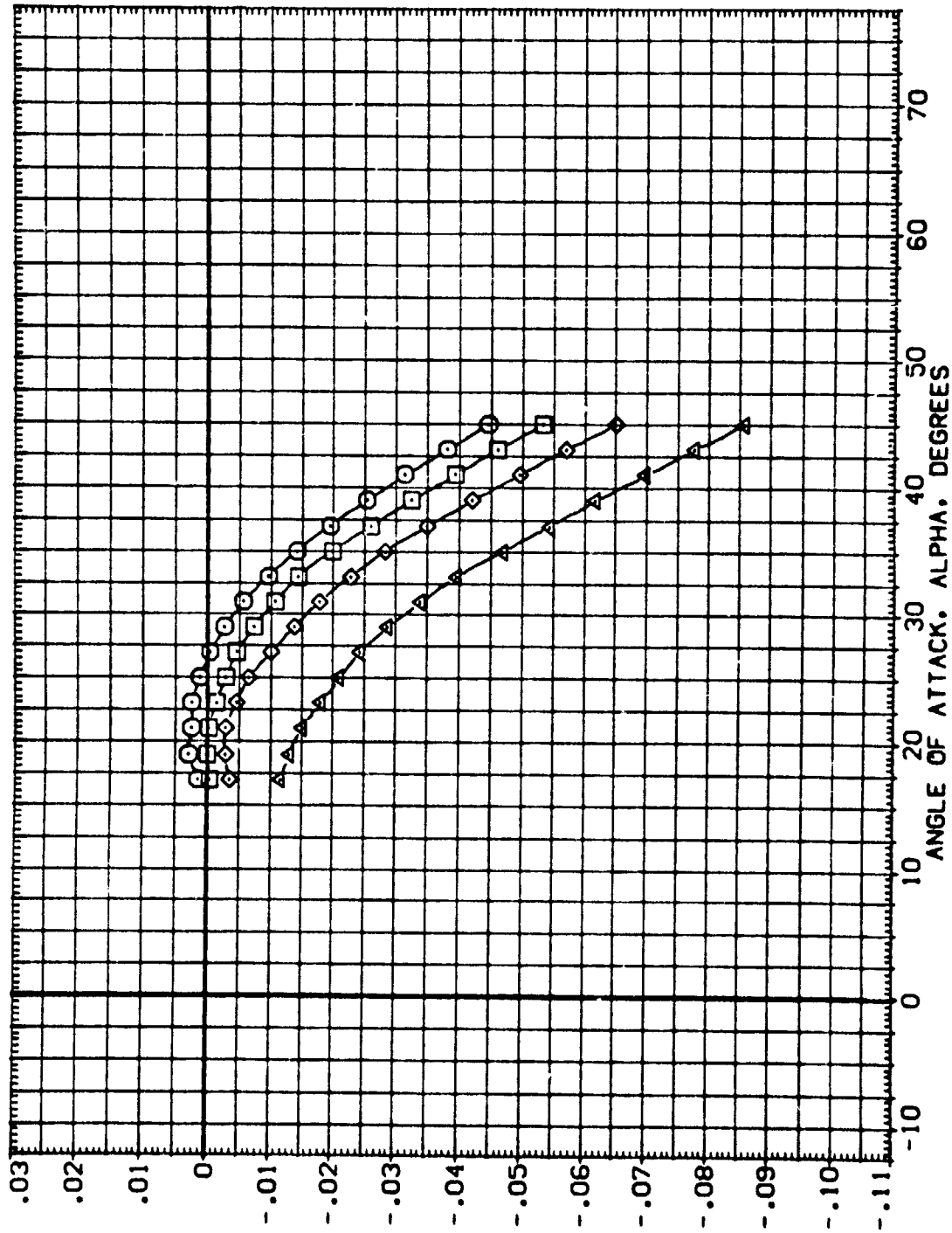


FIG. 13 OUTBOARD ELEVON EFFECTIVENESS WITH INBOARDS UNDEFLECTED
 (A)MACH = 8.00



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(CTV038)	0A79 826 C9 E43 F8 M16 N28 R5 V8 V116	-20.000	.000	.000	-20.000	SREF 2690.0000 SO.FT.
(CTV034)	0A79 826 C9 E43 F8 M16 N28 R5 V8 V116	-10.000	.000	.000	-10.000	LREF 474.8100 IN.
(CTV001)	0A79 826 C9 E43 F8 M16 N28 R5 V8 V116	10.000	.000	.000	10.000	BREF 936.6800 IN.
(CTV033)	0A79 826 C9 E43 F8 M16 N28 R5 V8 V116	10.000	.000	.000	10.000	XPRP 1076.6800 IN.X0
						YMRP .0000 IN.Y0
						ZMRP 375.0000 IN.Z0
						SCALE .0150



PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH(FORWARD C. G.) CLMFD

FIG. 13 OUTBOARD ELEVON EFFECTIVENESS WITH INBOARDS UNDEFLECTED

(A)MACH = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(CTW028)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	-20.000	.000	.000	-20.000	SREF 2690.0000 SQ.FT.
(CTW034)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	-10.000	.000	.000	-10.000	LREF 474.3100 IN.
(CTW001)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.000	.000	.000	.000	BREF 936.6800 IN.
(CTW033)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	10.000	.000	.000	10.000	XPRP 1076.6800 IN.X0
						YPRP .0000 IN.Y0
						ZPRP 375.0000 IN.Z0
						SCALE .0150

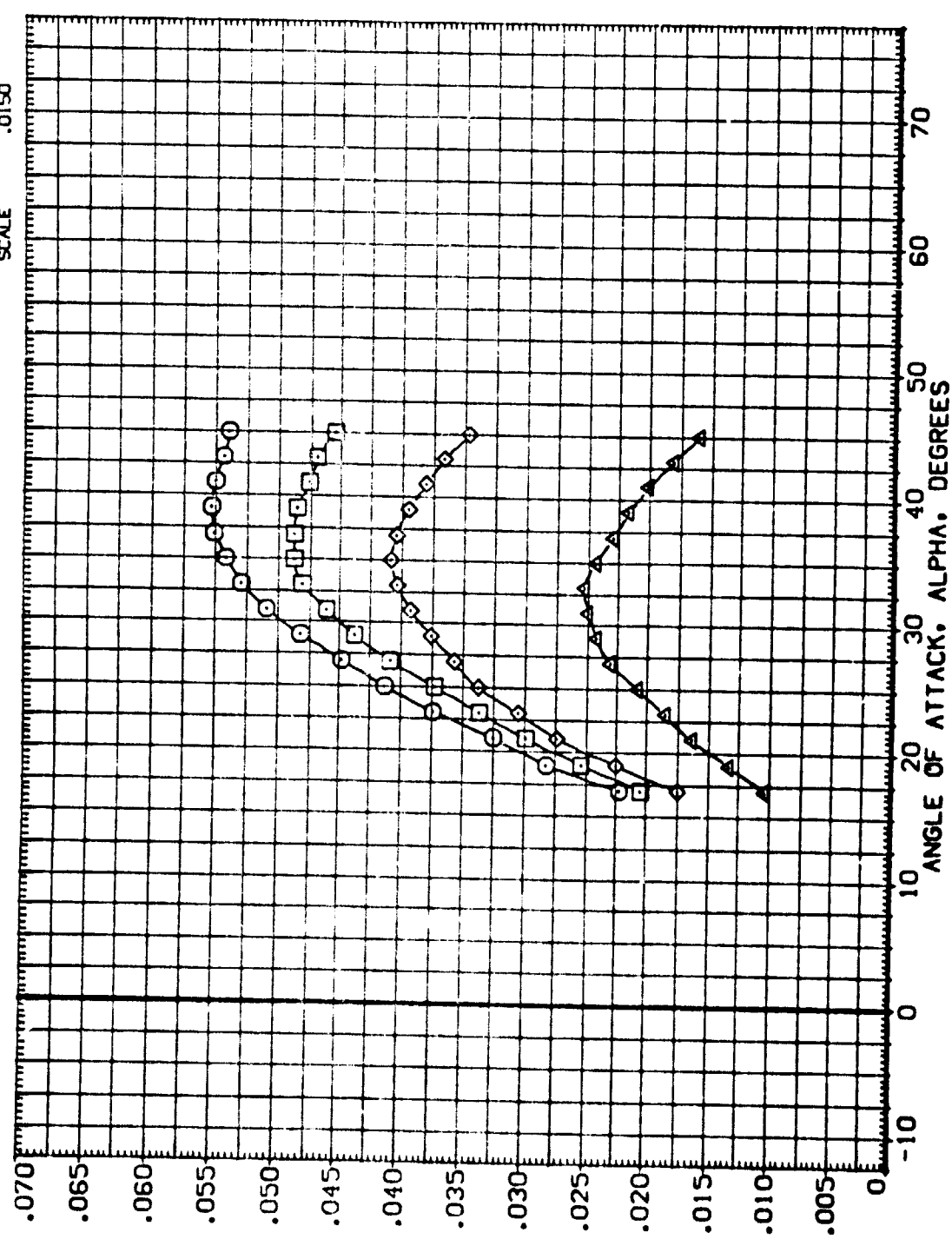


FIG. 13 OUTBOARD ELEVON EFFECTIVENESS WITH INBOARDS UNDEFLECTED
(A)MACH = 8.00



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(C1V008)	DA79 B26 C9 E43 F8 M16 N28 R5 V8 V116	-20.000	.000	.000	-20.000	SREF 2690.0000 SQ.FT.
(C1V004)	DA79 B26 C9 E43 F8 M16 N28 R5 V8 V116	-10.000	.000	.000	-10.000	LREF 474.8100 IN.
(C1V001)	DA79 B26 C9 E43 F8 M16 N28 R5 V8 V116	10.000	.000	.000	10.000	BREF 936.6800 IN. X0
(C1V003)	DA79 B26 C9 E43 F8 M16 N28 R5 V8 V116				10.000	YREF 1076.6800 IN. Y0
						ZREF 375.0000 IN. Z0
						SCALE .0150

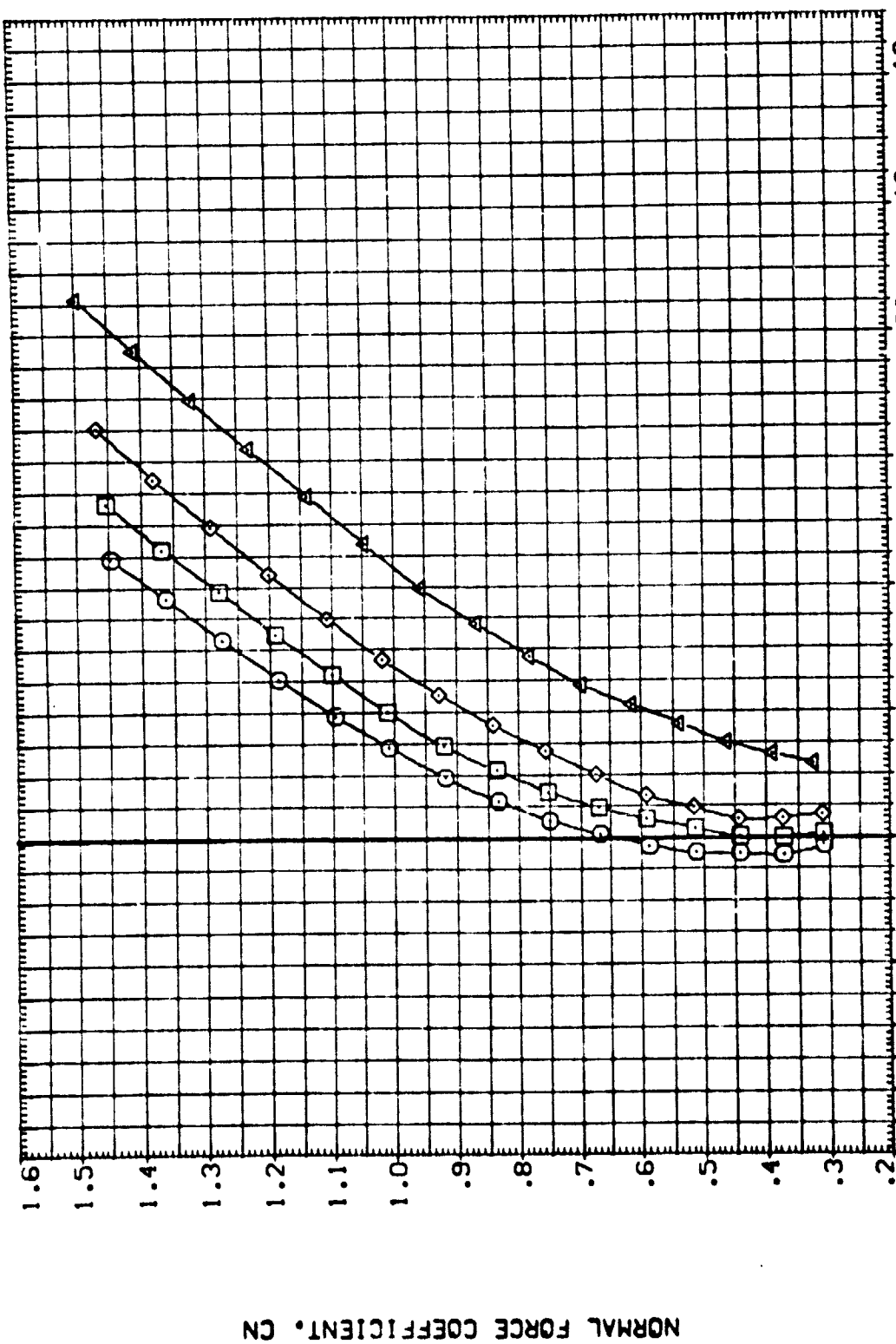
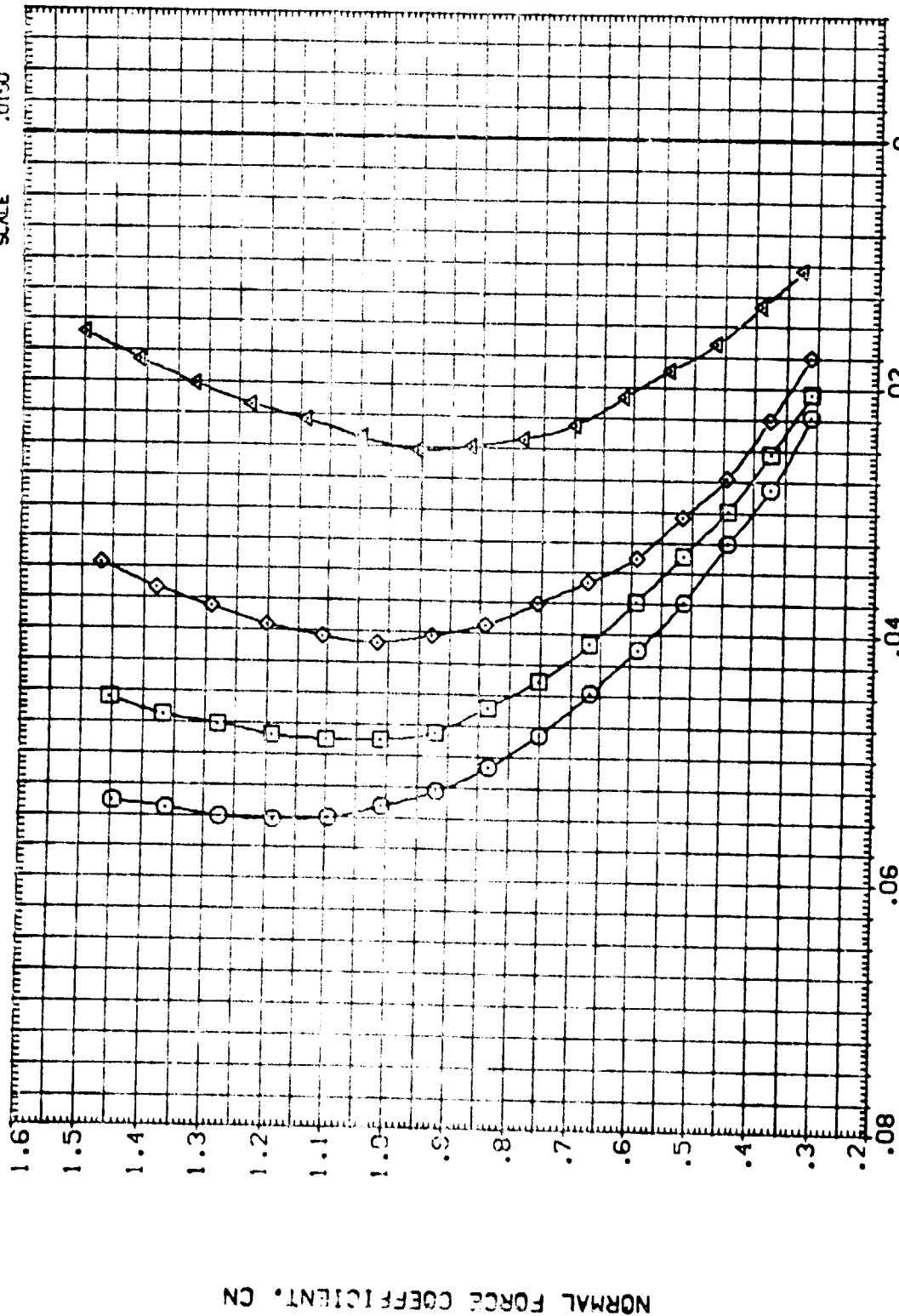


FIG. 13 OUTBOARD ELEVON EFFECTIVENESS WITH INBOARDS UNDEFLECTED
 (A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CTV008) CA79 B26 C9 E43 F8 H16 N28 RS V8 V116
 (CTV009) CA79 B26 C9 E43 F8 H16 N28 RS V8 V116
 (CTV001) CA79 B26 C9 E43 F8 H16 N28 RS V8 V116
 (CTV003) CA79 B26 C9 E43 F8 H16 N28 RS V8 V116

ELV-L0 ELV-L1 ELV-R1 ELV-R0
 -20.000 .000 .000 -20.000
 -10.000 .000 .000 -10.000
 10.000 .000 .000 10.000

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.0100 IN.
 BREF 906.6400 IN.
 XREF 1076.5600 IN.X03
 YREF .0000 IN.Y03
 ZREF 375.0000 IN.Z03
 SCALE .0150



NORMAL FORCE COEFFICIENT, CN

PITCHING MOMENT COEFFICIENT AT .675 BODY LENGTH(AFT C. G.) CLMFT
 FIG. 13 OUTBOARD ELEVON EFFECTIVENESS WITH INBOARDS UNDEFLECTED
 (A)MACH = 8.00

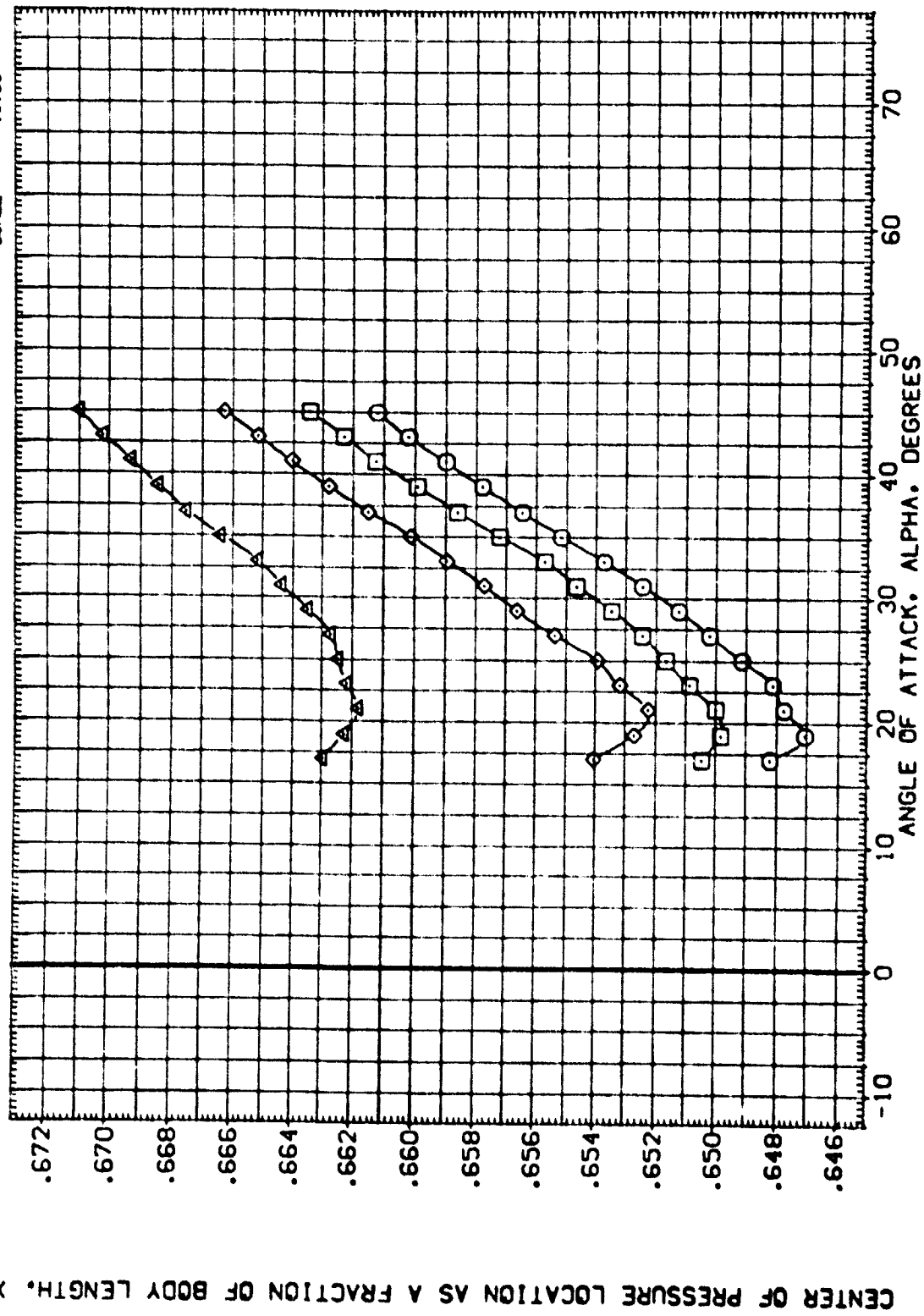
DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CT1008)	DA79 B26 C9 E43 F8 M16 N28 R5 V8 V116
(CT1034)	DA79 B26 C9 E43 F8 M16 N28 R5 V8 V116
(CT1001)	DA79 B26 C9 E43 F8 M16 N28 R5 V8 V116
(CT1033)	DA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	906.6800	IN.
XPRP	1076.6800	IN.
YPRP	.0000	IN.
ZPRP	375.0000	IN.
SCALE	.0150	

ELV-L0	ELV-L1	ELV-R1	ELV-R0
-20.000	.000	.000	-20.000
-10.000	.000	.000	-10.000
10.000	.000	.000	10.000



CENTER OF PRESSURE LOCATION AS A FRACTION OF BODY LENGTH, XCP/L

FIG. 13 OUTBOARD ELEVON EFFECTIVENESS WITH INBOARDS UNDEFLECTED

(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CTV038)	□	0A79 B26 C9 E43 F8 M16 N28 P5 V8 W116
(CTV034)	○	0A79 B26 C9 E43 F8 M16 N28 P5 V8 W116
(CTV001)	⊗	0A79 B26 C9 E43 F8 M16 N28 P5 V8 W116
(CTV033)	⊗	0A79 B26 C9 E43 F8 M16 N28 P5 V8 W116

ELV-L0 ELV-L1 ELV-R1 ELV-R0

-20.000	.000	.000	-20.000
-10.000	.000	.000	-10.000
.000	.000	.000	.000
10.000	.000	.000	10.000

REFERENCE INFORMATION

SREF	2690.0000	SO.FT.
LAFF	474.8100	IN.
BRFF	936.6800	IN.
YMRP	1076.6800	IN.
ZMRP	.0000	IN.
ZTRP	375.0100	IN.
SCALE	.0150	

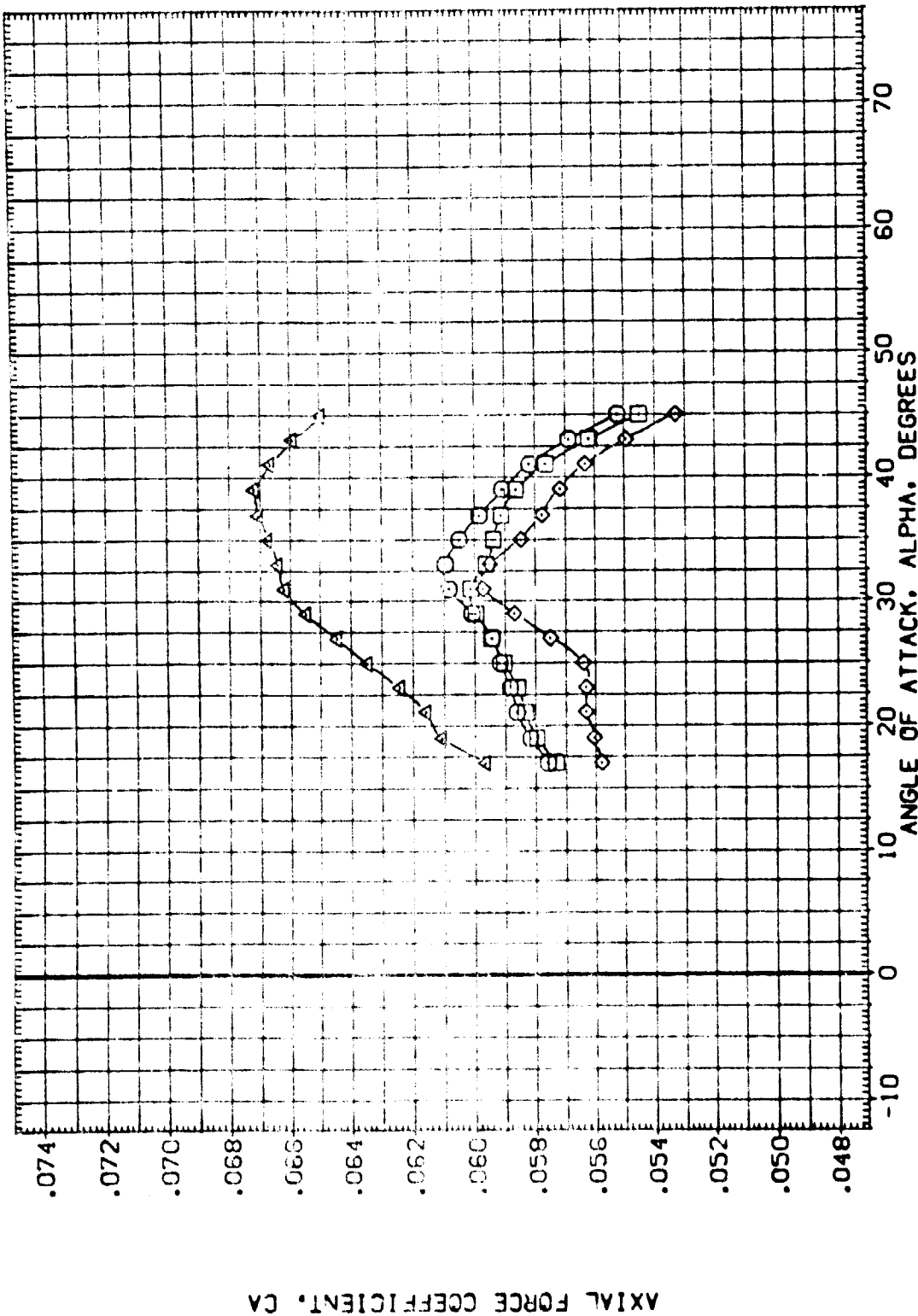
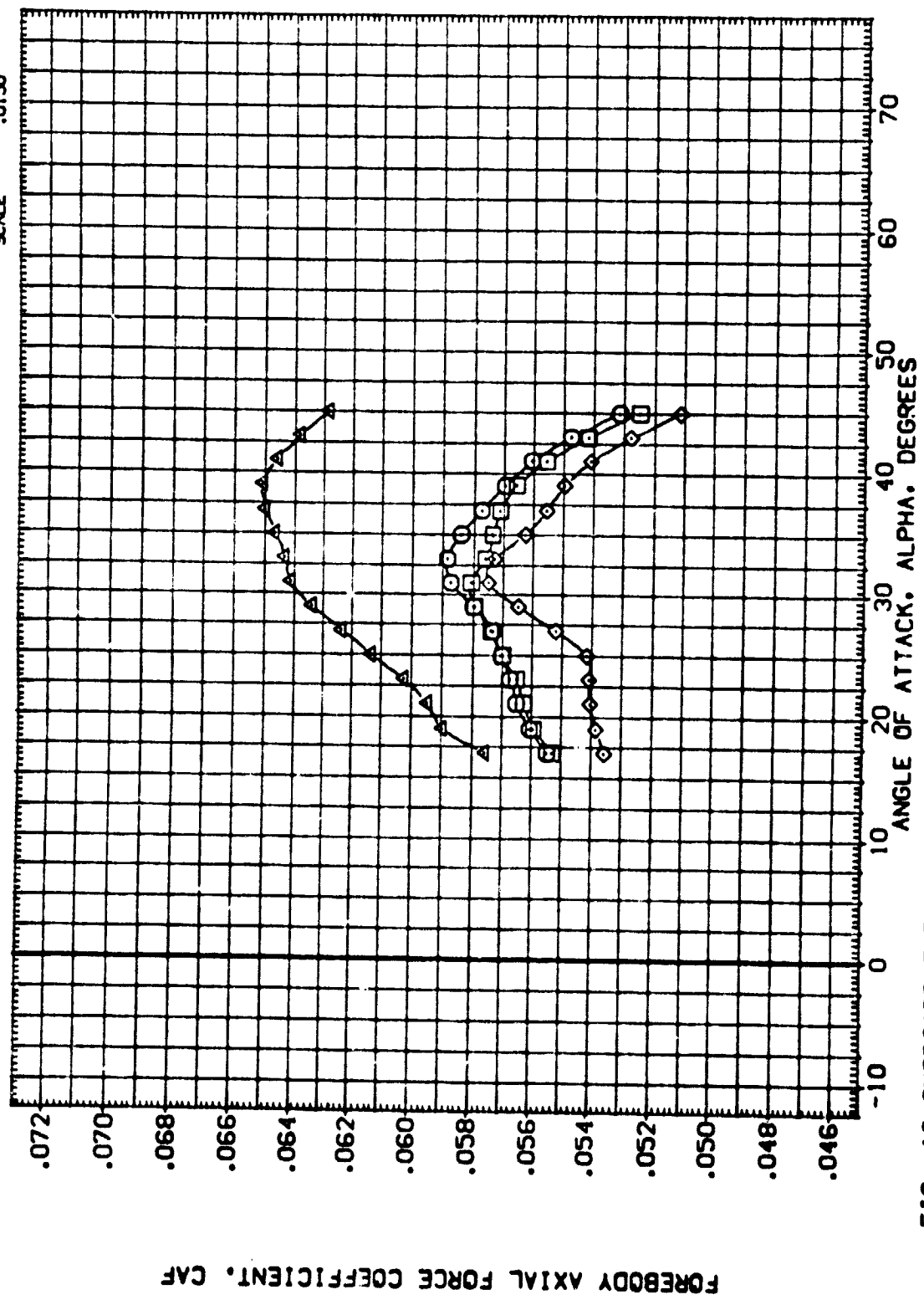


FIG. 13 OUTBOARD ELEVON EFFECTIVENESS WITH INBOARDS UNDEFLECTED

(A)MACH = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L6	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(CTV039)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	-20.000	.000	.000	-20.000	SREF 2680.0000 SO.FT.
(CTV034)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	-10.000	.000	.000	-10.000	LREF 474.8100 IN.
(CTV001)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.000	.000	.000	.000	BREF 936.6800 IN.
(CTV033)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	10.000	.000	.000	10.000	XPRP 1076.6800 IN.X0
						YPRP .0000 IN.Y0
						ZPRP .0000 IN.Z0
						SCALE .0150



FOREBODY AXIAL FORCE COEFFICIENT, CAF

FIG. 13 OUTBOARD ELEVON EFFECTIVENESS WITH INBOARDS UNDEFLECTED

(A)MACH = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(CTW029)	0A79 B26 C9 E43 F8 M16 N28 P5 V8 W116	-30.000	.000	.000	-20.000	STEF 3690.0000 SQ. FT.
(CTW034)	0A79 B26 C9 E43 F8 M16 N28 P5 V8 W116	-10.000	.000	.000	-10.000	LREF 474.8100 IN.
(CTW001)	0A79 B26 C9 E43 F8 M16 N28 P5 V8 W116	10.000	.000	.000	10.000	BREF 936.5800 IN.
(CTW003)	0A79 B26 C9 E43 F8 M16 N28 P5 V8 W116					XMRP 1076.5800 IN. X0
						YMRP .0000 IN. Y0
						ZMRP 375.0000 IN. Z0
						SCALE .0150

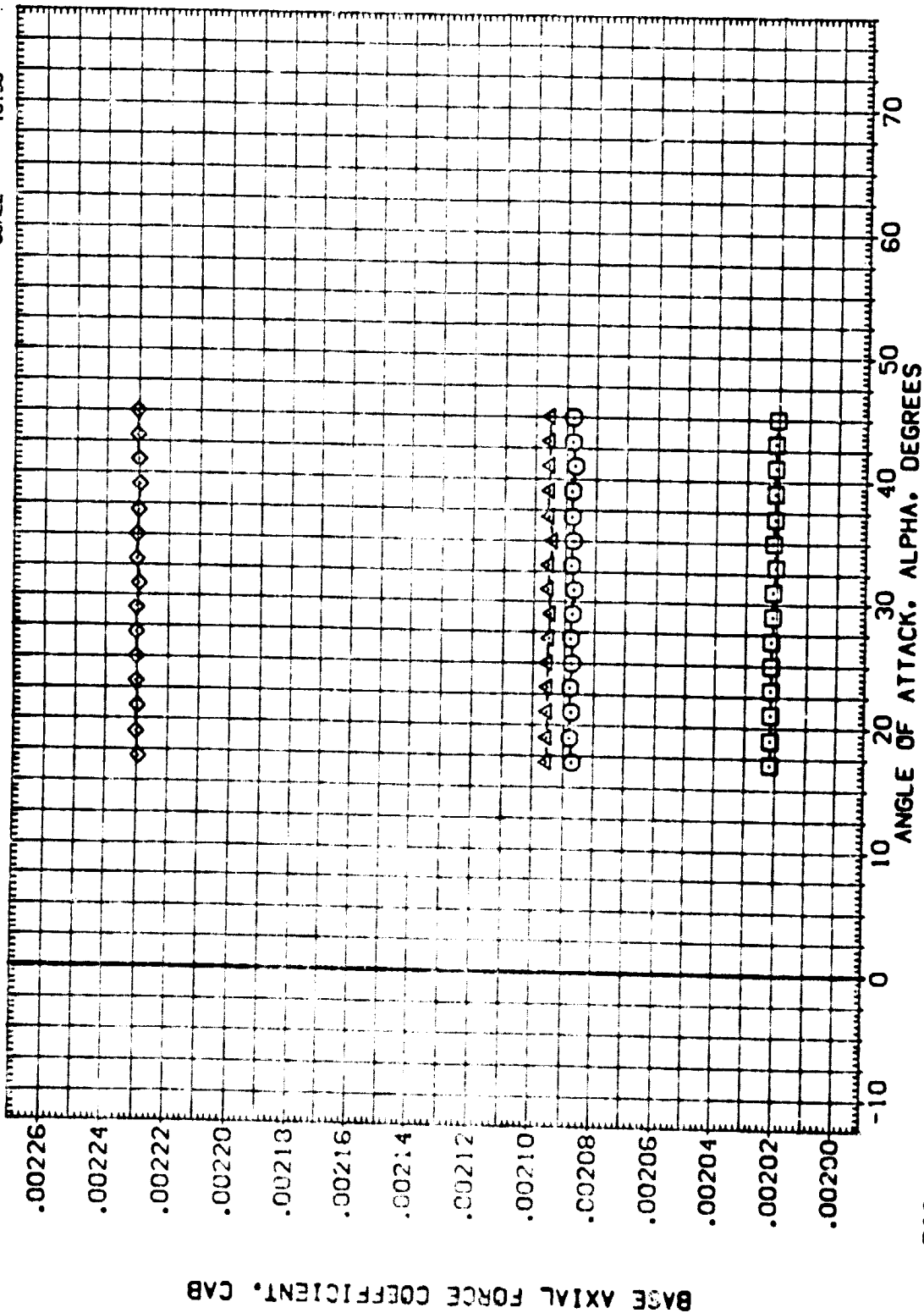
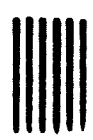


FIG. 13 OUTBOARD ELEVON EFFECTIVENESS WITH INBOARDS UNDEFLECTED
 (A) MACH = 8.00



DATA SET SYMBOL	CONFID	DATA	DESCRIPTION	ELV-L6	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(CT9038)	Q	0A79	B26 C9 E43 F8 M16 N28 P5 V8 V116	-20.000	.000	.000	-20.000	SREF 2650.0000 SQ.FT.
(CT9034)	X	0A79	B26 C9 E43 F8 M16 N28 P5 V8 V116	-10.000	.000	.000	-10.000	LREF 474.8100 IN.
(CT9001)	X	0A79	B26 C9 E43 F8 M16 N28 P5 V8 V116	10.000	.000	.000	10.000	BREF 836.6800 IN.X0
(CT9033)	X	0A79	B26 C9 E43 F8 M16 N28 P5 V8 V116	10.000	.000	.000	10.000	XTRP 1076.0000 IN.Y0
								ZTRP 375.0000 IN.Z0
								SCALE .0150

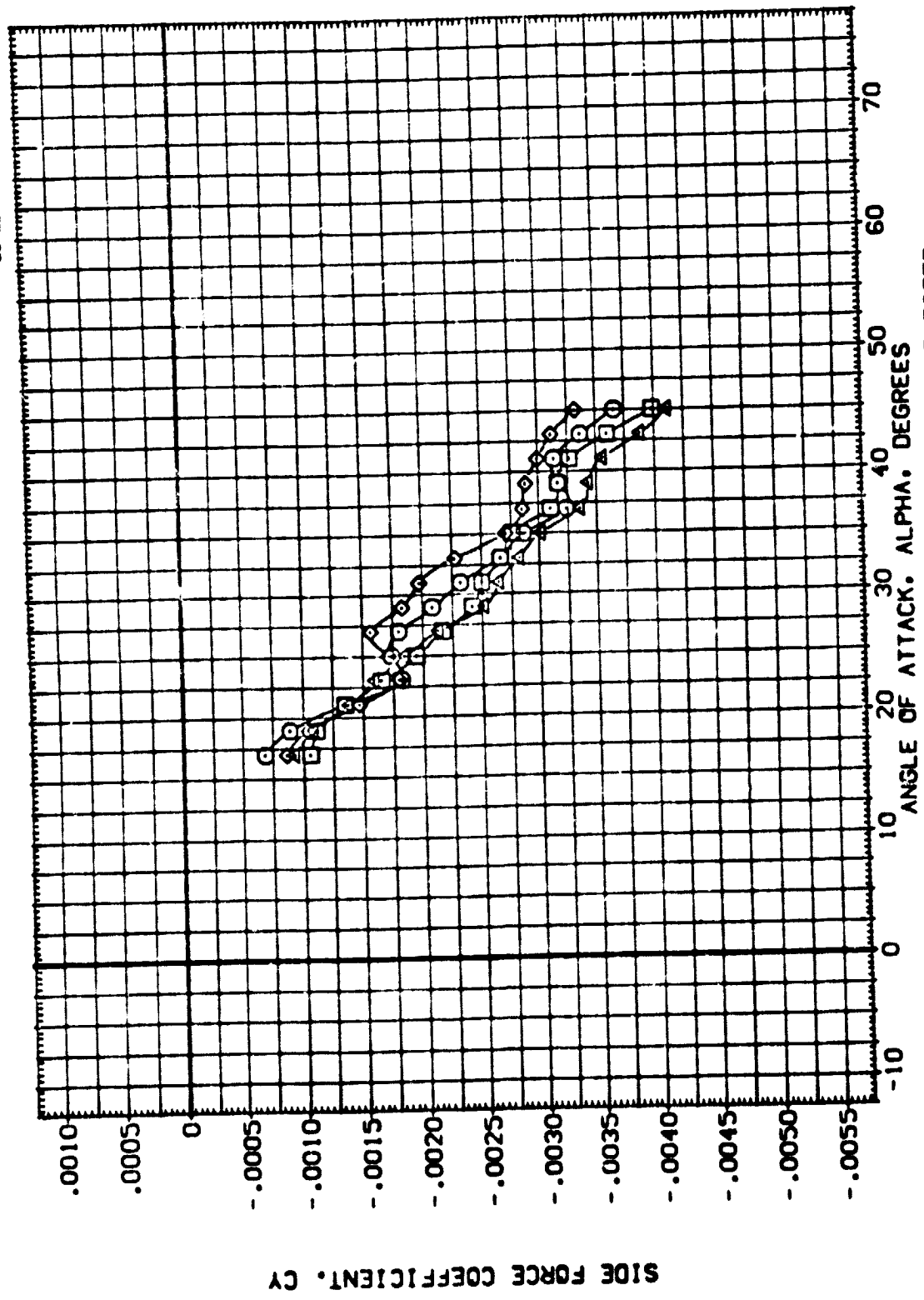


FIG. 13 OUTBOARD ELEVON EFFECTIVENESS WITH INBOARDS UNDEFLECTED

(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(ATW030) (A) U3 E43 F8 M16 N28 R5 V8 V116

(ATW034) (A) U3 E43 F8 M16 N28 R5 V8 V116

(ATW001) (A) U3 E43 F8 M16 N28 R5 V8 V116

(ATW030) (A) U3 E43 F8 M16 N28 R5 V8 V116

ELV-L0 ELV-L1 ELV-R1 ELV-R0

-20.000 .000 .000 -20.000

-10.000 .000 .000 -10.000

10.000 .000 .000 10.000

REF 2650.0000 SQ.FT.

LREF 474.8100 IN.

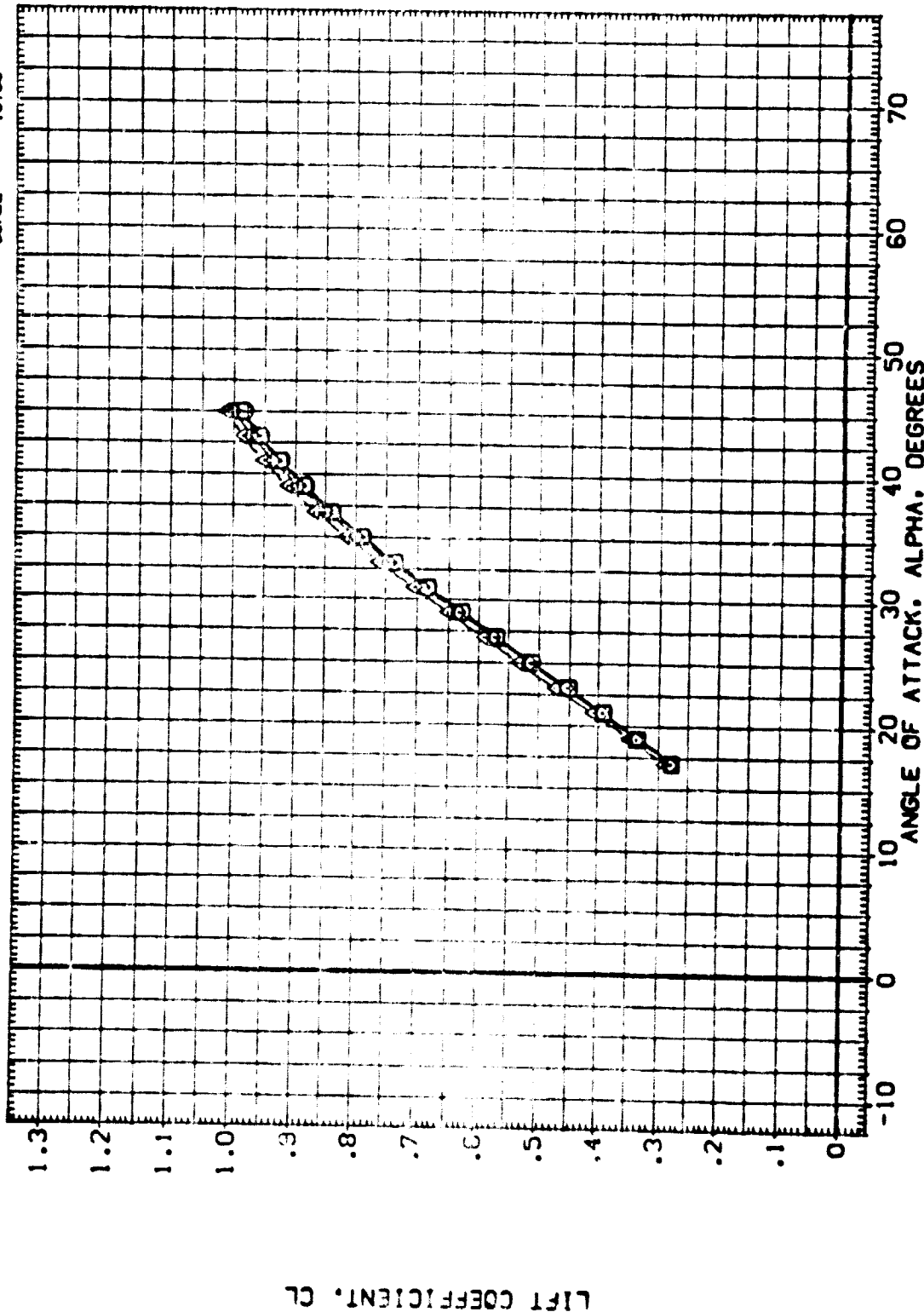
BREF 936.6800 IN.

XREF 1076.6800 IN.X3

YREF .0000 IN.Y0

ZREF 375.0000 IN.Z0

SCALE .0150



LIFT COEFFICIENT, CL

FIG. 13 OUTBOARD ELEVON EFFECTIVENESS WITH INBOARDS UNDEFLECTED

(A)MACH = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(A1W038)	DATA 826 C9 E43 F8 M16 N28 R5 V8 V116	-20.000	.000	.000	-20.000	SREF 2690.0000 SQ.FT.
(A1W034)	DATA 826 C9 E43 F8 M16 N28 R5 V8 V116	-10.000	.000	.000	-10.000	LREF 474.8100 IN.
(A1W031)	DATA 826 C9 E43 F8 M16 N28 R5 V8 V116	.000	.000	.000	10.000	BREF 276.6800 IN. X0
(A1W033)	DATA 826 C9 E43 F8 M16 N28 R5 V8 V116	10.000	.000	.000	10.000	YREF 1076.6800 IN. Y0
						ZREF 375.0000 IN. Z0
						SCALE .0150

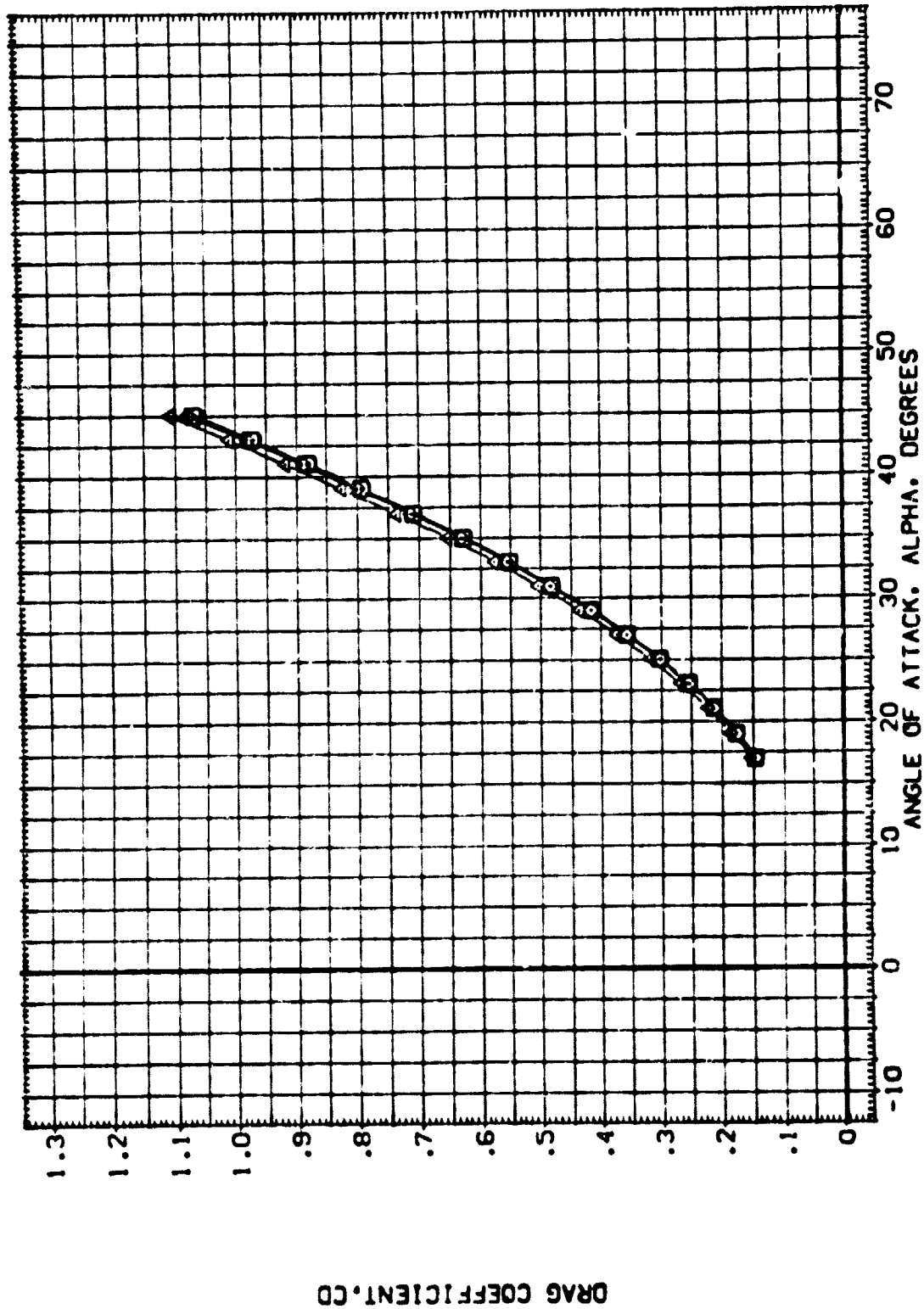


FIG. 13 OUTBOARD ELEVON EFFECTIVENESS WITH INBOARDS UNDEFLECTED

(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(AT10036)	Q179 B26 C3 E43 F8 M16 N28 R5 V8 V116
(AT10034)	Q179 B26 C9 E43 F8 M16 N28 R5 V8 V116
(AT10001)	Q179 B26 C9 E43 F8 M16 N28 R5 V8 V116
(AT10033)	Q179 B26 C9 E43 F8 M16 N28 R5 V8 V116

ELV-L8	ELV-L1	ELV-R1	ELV-R8
-20.000	.000	.000	-20.000
-10.000	.000	.000	-10.000
10.000	.000	.000	10.000

REFERENCE INFORMATION

SREF	2650.010	50. FT.
LREF	474.8100	IN.
RREF	906.6800	IN.
XTRP	1076.6800	IN. X0
YTRP	.0000	IN. Y0
ZTRP	375.0000	IN. Z0
SCALE	.0150	

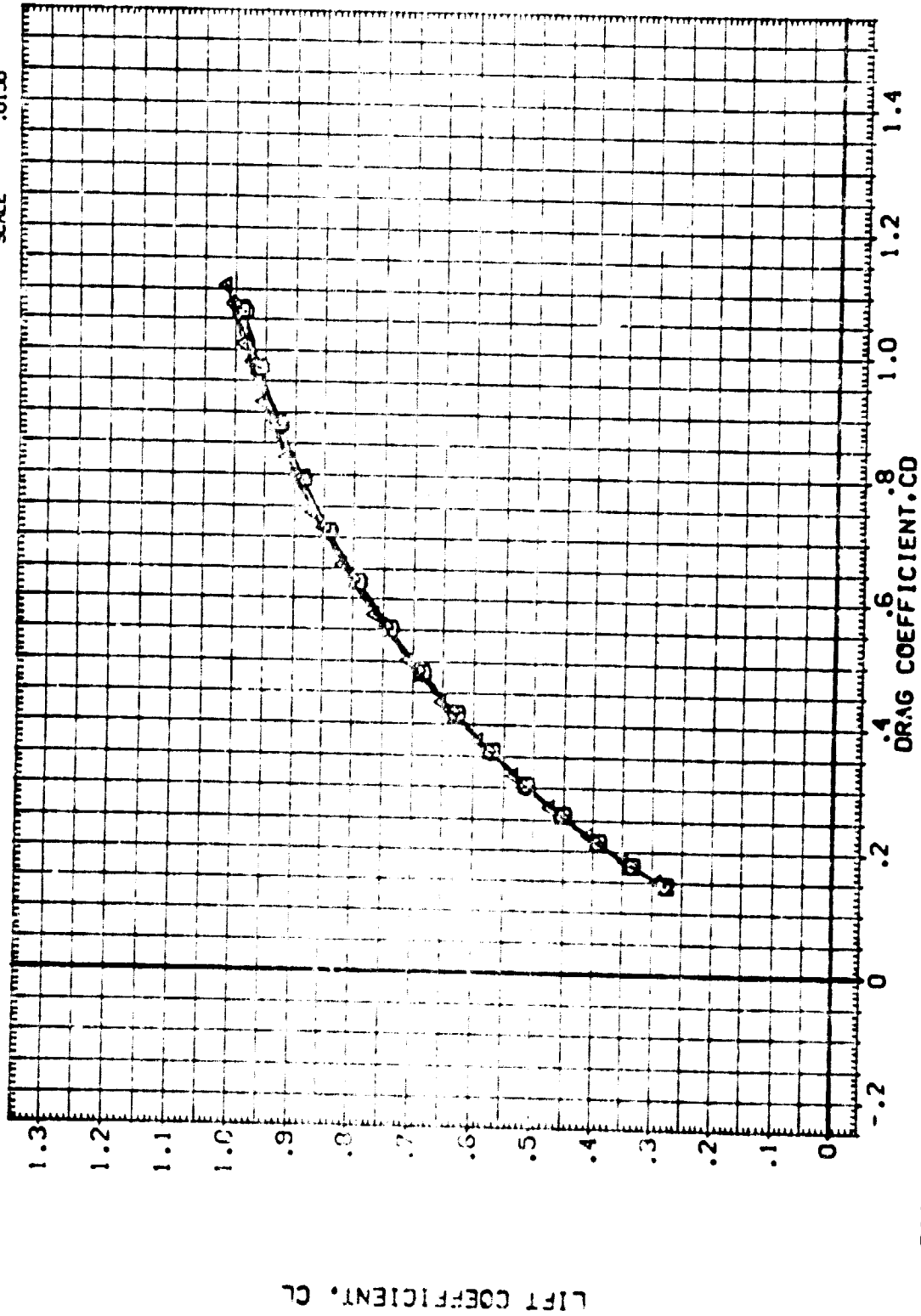


FIG. 13 OUTBOARD ELEVON EFFECTIVENESS WITH INBOARDS UNDEFLECTED
 (A)MACH = 8.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELV-L0	ELV-L1	ELV-R1	ELV-R0	REFERENCE INFORMATION
(ATV038)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	-20.000	.000	.000	-20.000	SREF 2630.0000 SQ.FT.
(ATV034)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	-10.000	.000	.000	-10.000	LREF 474.8100 IN.
(ATV001)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	10.000	.000	.000	10.000	BREF 936.6800 IN.
(ATV033)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116					XMRP 1076.6800 IN.
						ZMRP .0000 IN.
						SCALE 375.0000 IN.

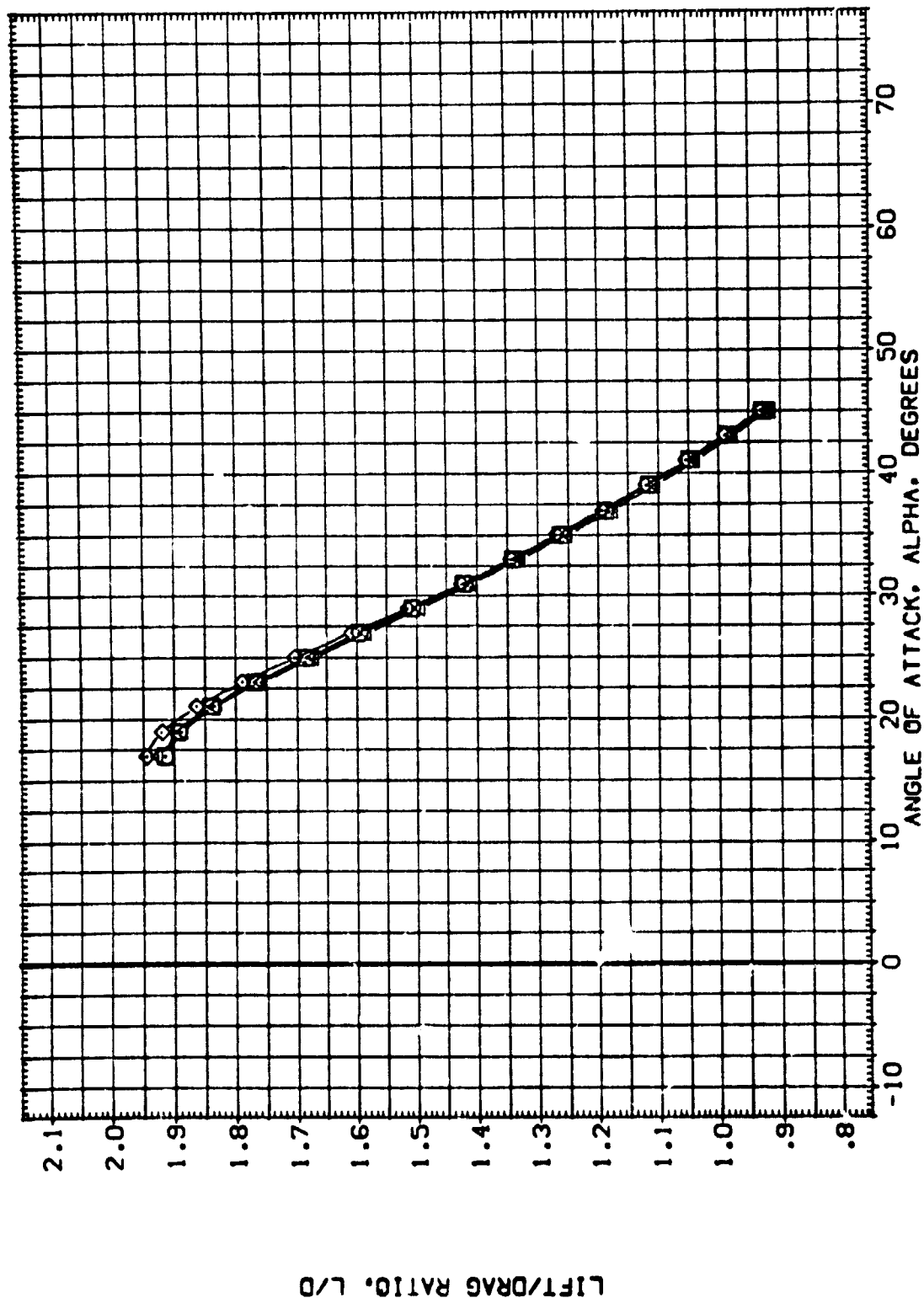


FIG. 13 OUTBOARD ELEVON EFFECTIVENESS WITH INBOARDS UNDEFLECTED

(A)MACH = 8.00

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW038)

ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	DATASET	D.E.-LO	SREF	REFERENCE INFORMATION
17.000	9.000	SETA	D.E.-LO	D.E.-LO	-10.000	LREF	2690.0000 SQ.FT.
19.000	55.000	RUDDER	.000 DTW038	DTW034	10.000	BREF	474.8100 IN.
21.000	3.530		.000 DTW001	DTW033		XMRP	936.6800 IN.X0
23.000						YMRP	1076.6800 IN.Y0
25.000						ZMRP	375.0000 IN.Z0
27.000						SCALE	.0150

INCREMENTAL NORMAL FORCE COEFFICIENT, DLTCN

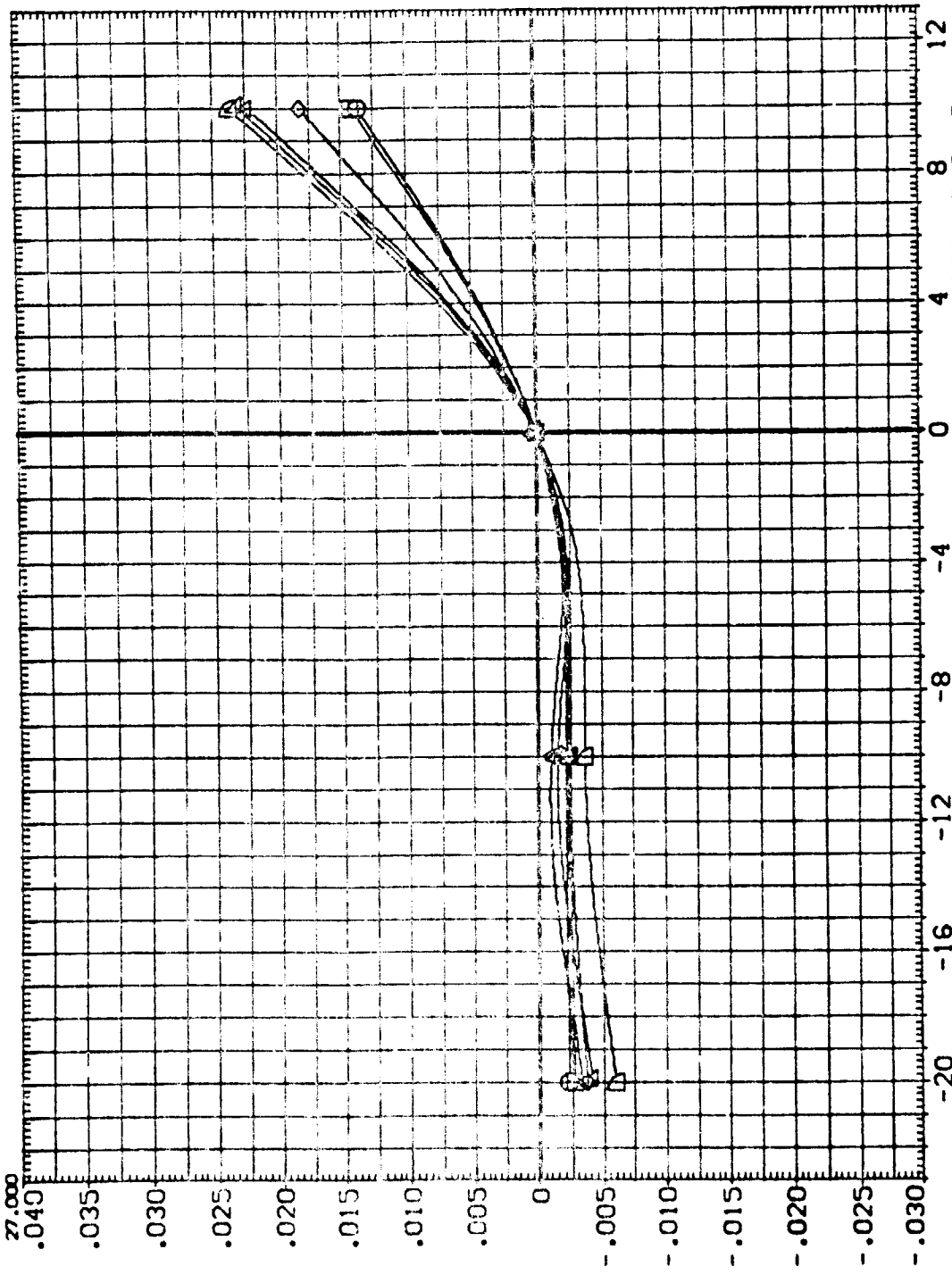


FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW038)

PARAMETRIC VALUES			DATA SOURCE			REFERENCE INFORMATION		
ALPHA	MACH	BETA	DLE-LO	DLE-LC	SREF	SO, FT.	IN.	IN.
29.000	8.000	8.000	-20.000	-10.000	474.8100	2650.0000	474.8100	2650.0000
31.000	55.000	FLUDDER	.000	.000	936.6800	1076.6800	936.6800	1076.6800
30.000	3.530				YFRP	YFRP	YFRP	YFRP
35.000					ZFRP	ZFRP	ZFRP	ZFRP
37.000					SCALE	SCALE	SCALE	SCALE
39.000								

SYMBOL
 ○
 □
 ◇
 △
 ▽
 ◊

INCREMENTAL NORMAL FORCE COEFFICIENT, DLTCN

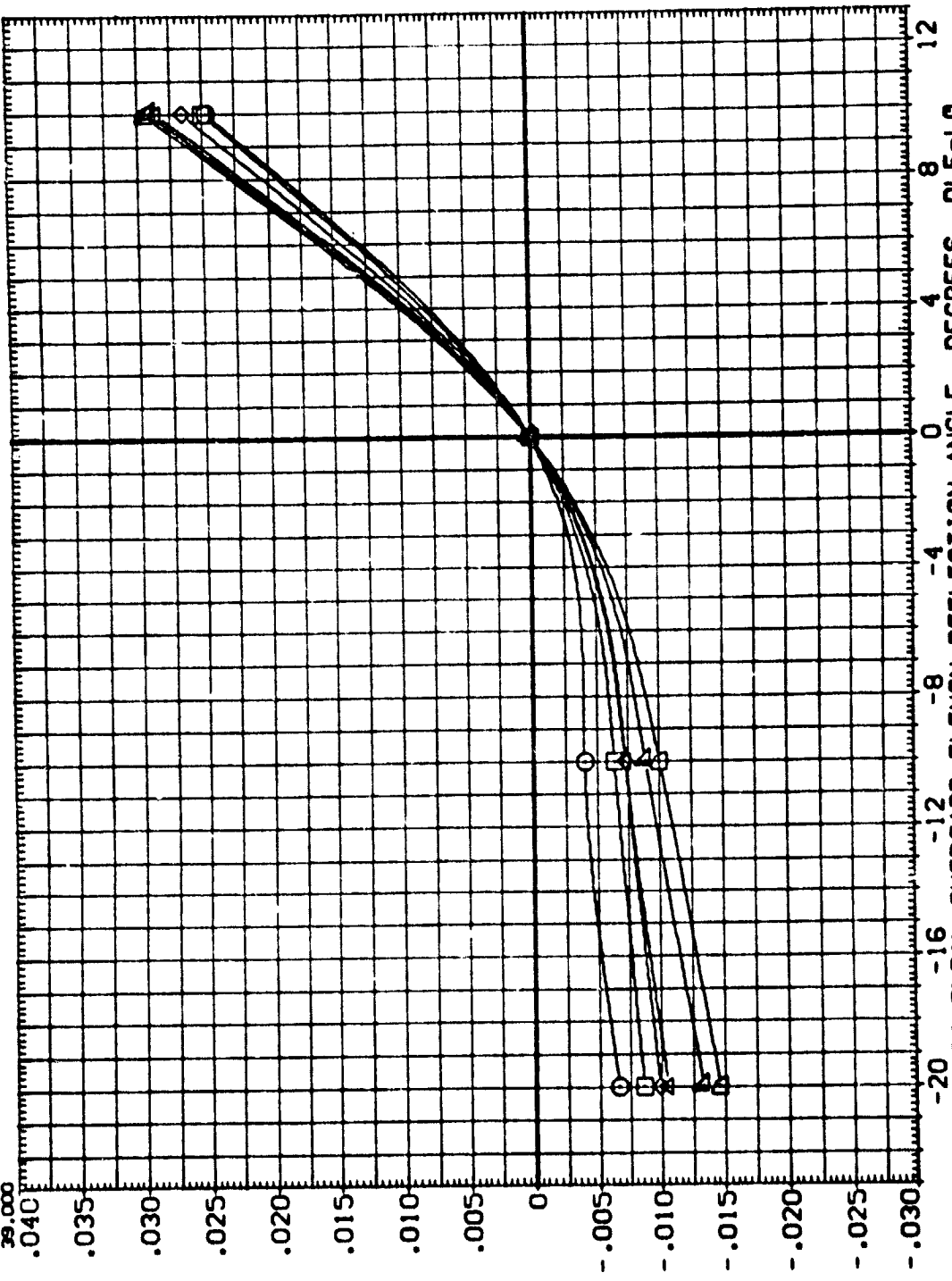


FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW038)

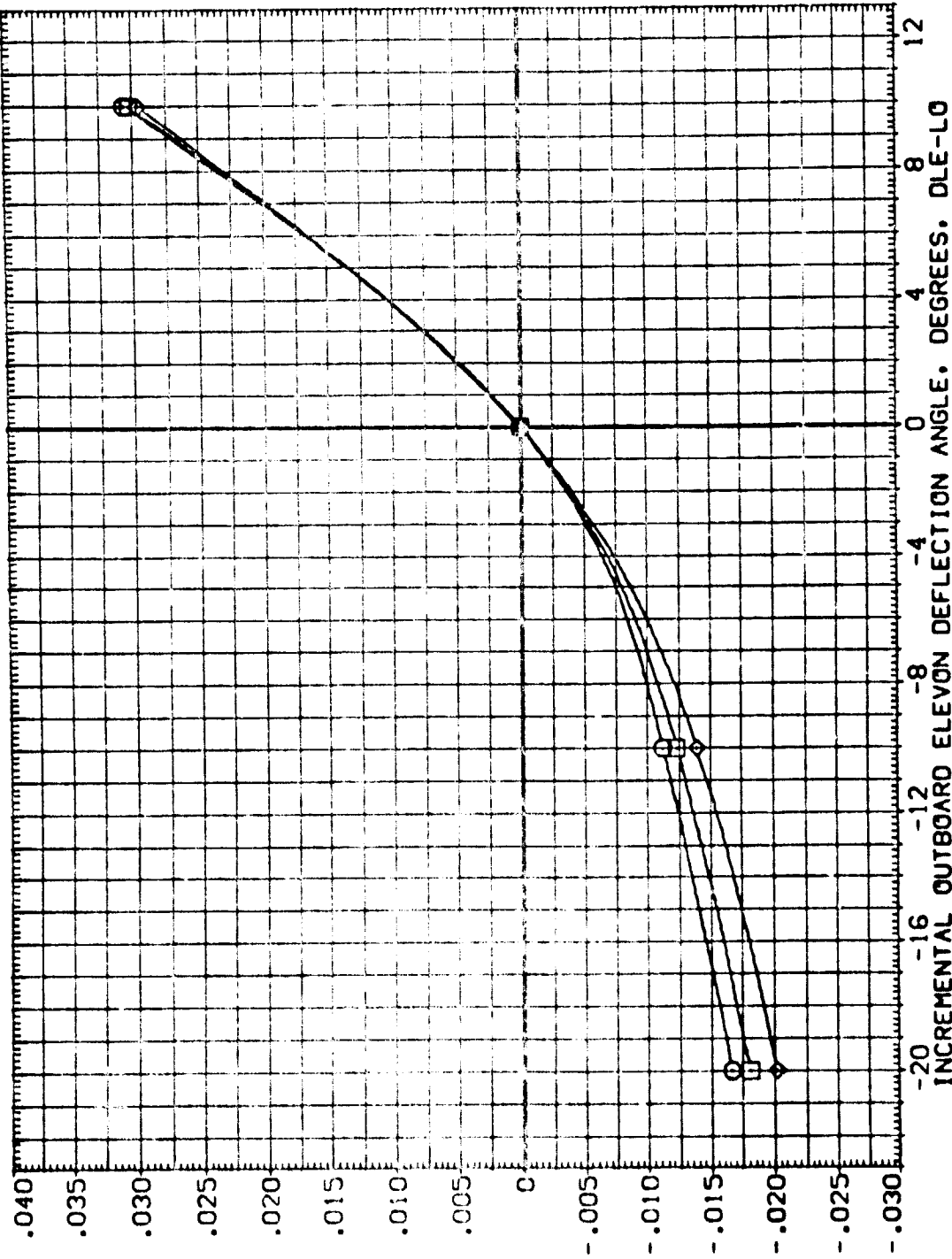
SYMBOL
 ○ □ ◇

PARAMETRIC VALUES
 MACH 8.000 BETA
 SPOBRK 55.000 RUDDER
 RNVL 3.530

DATA SOURCE
 DLE-LO .000 DATASET
 DTW038 DTW001

DLE-LO -10.000
 DATASET DTW034
 DTW033

REFERENCE INFORMATION
 SREF 2690.0000 SO.FT.
 LREF 474.8100 IN.
 BREF 936.8800 IN.
 XPRP 1076.6800 IN.
 YPRP .0000 IN.
 ZPRP 375.0000 IN.
 SCALE .0150



INCREMENTAL NORMAL FORCE COEFFICIENT, DLTCN

INCREMENTAL OUTBOARD ELEVON DEFLECTION ANGLE, DEGREES, DLE-LO

FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS

GA79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW038)

ALPHA	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
17.000	MACH 8.000	.000 DATASET DLE-LO	2690.0000 SQ.FT.
19.000	BETA 55.000	.000 DATASET DLE-LO	474.8100 IN.
21.000	SPDRK 3.530	.000 DTW038	536.6800 IN.
23.000	RVL	.000 DTW001	1076.6800 IN.
25.000			375.0000 IN.
27.000			375.0000 IN.
			.0150 SCALE

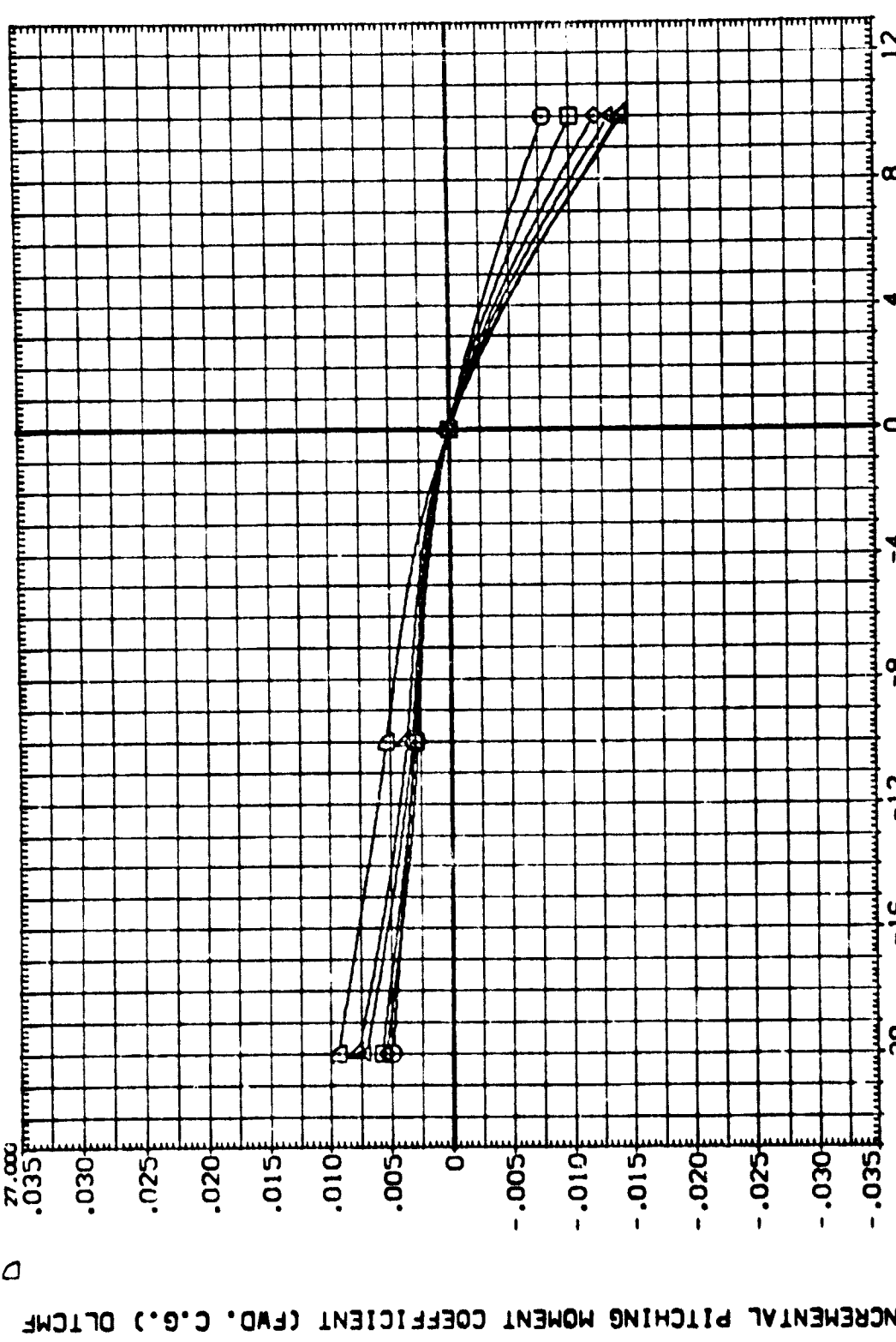


FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW038)

ALPHA	29.000	MACH	8.000	PARAMETRIC VALUES	DATA SOURCE	DATASET	DLE-L0	SREF	2690.0000	SO.FT.
31.000	SPOBRK	55.000	BETA	.000	DLE-L0	DTW034	-10.000	LREF	474.8100	IN.
33.000	RVL	3.530	RUDDER	.000	DTW038	DTW033	10.000	BREF	936.6800	IN.
35.000								XPRP	1076.6800	IN.X0
37.000								YPRP	.0000	IN.Y0
39.000								ZPRP	375.0000	IN.Z0
								SCALE	.0150	

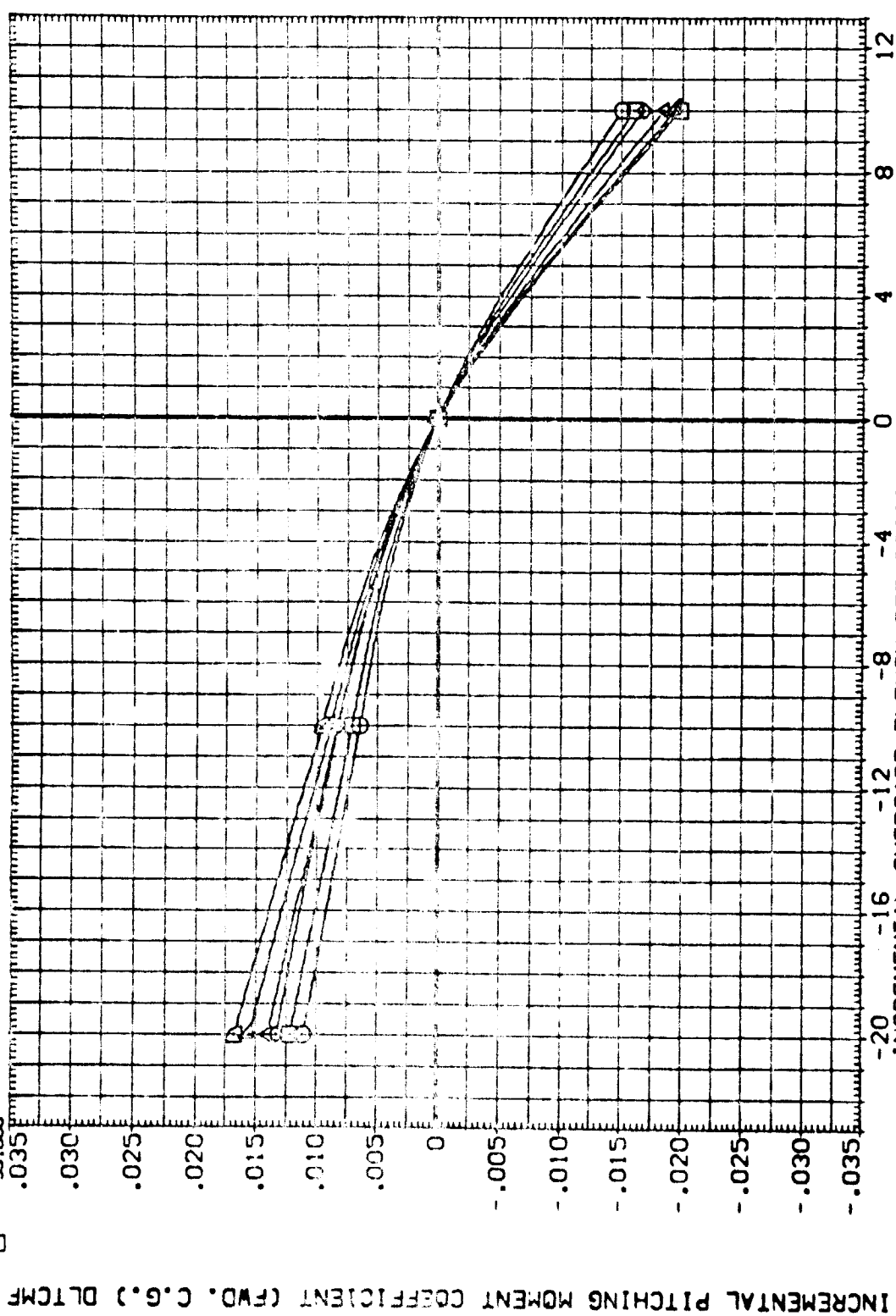


FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW038)

SYMBOL		PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION			
○	ALPHA	41.000	MACH	.000	DATASET	DLE-LO	SREF	2630.0000	50.FT.
□		43.000	SPDRBK	.000	DTW034	-10.000	LREF	474.8100	IN.
◇		45.000	RVL	.000	DTW033	10.000	RREF	936.6800	IN.
							ZPRP	1076.6800	IN.X0
							YPRP	.0000	IN.Y0
							ZPRP	375.0000	IN.Z0
							SCALE	.0150	

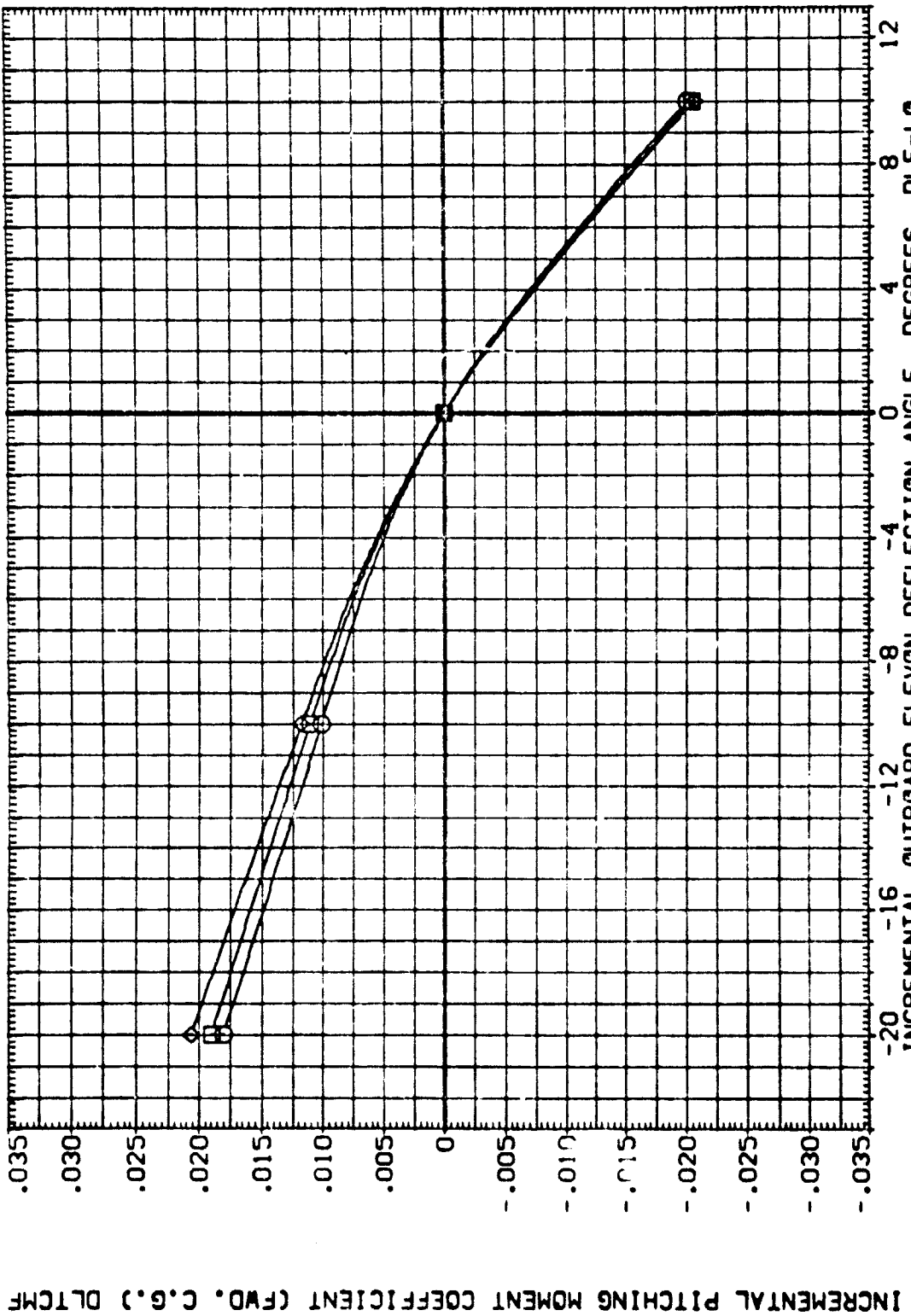


FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW038)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	DATASET	DLE-LO	REFERENCE INFORMATION
□	17.000	8.000	BETA	.000	DTW034	-10.000	2630.0000 SO.FT.
◇	19.000	55.000	RUDDER	.000	DTW038	10.000	474.8100 IN.
△	21.000	3.530					936.6800 IN.
▽	23.000						1076.6800 IN.
▽	25.000						14.78 IN.
▽	27.000						375.0000 IN.
							SCALE .0150

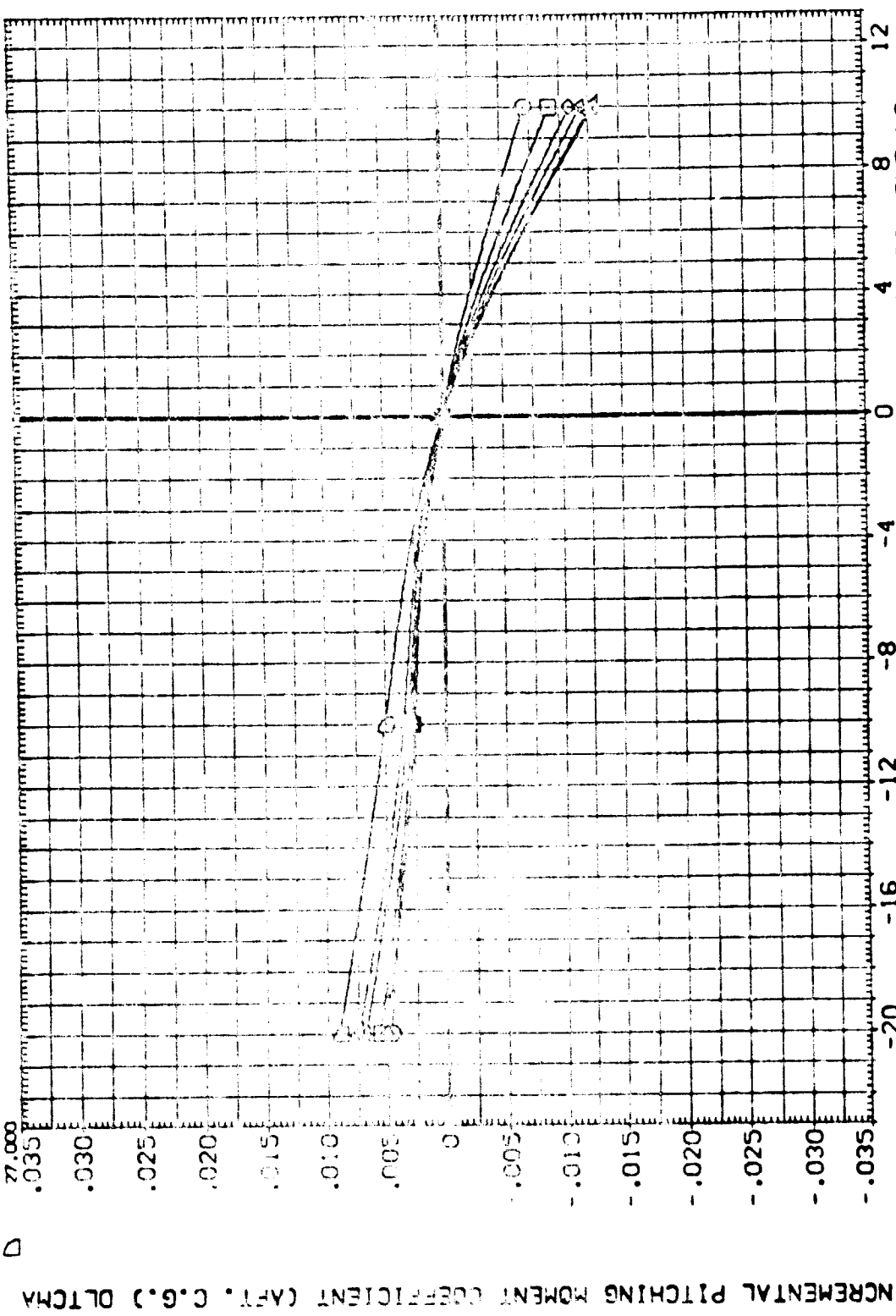


FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW038)

ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
29.000	8.000	BETA	DLE-LO	2690.0000 SQ.FT.
31.000	55.000	RUDDER	DLE-LO	474.8100 IN.
33.000	3.530		DTW038	936.6800 IN.
35.000			DTW001	1076.6800 IN.
37.000				375.0000 IN.
39.000				.0150 SCALE

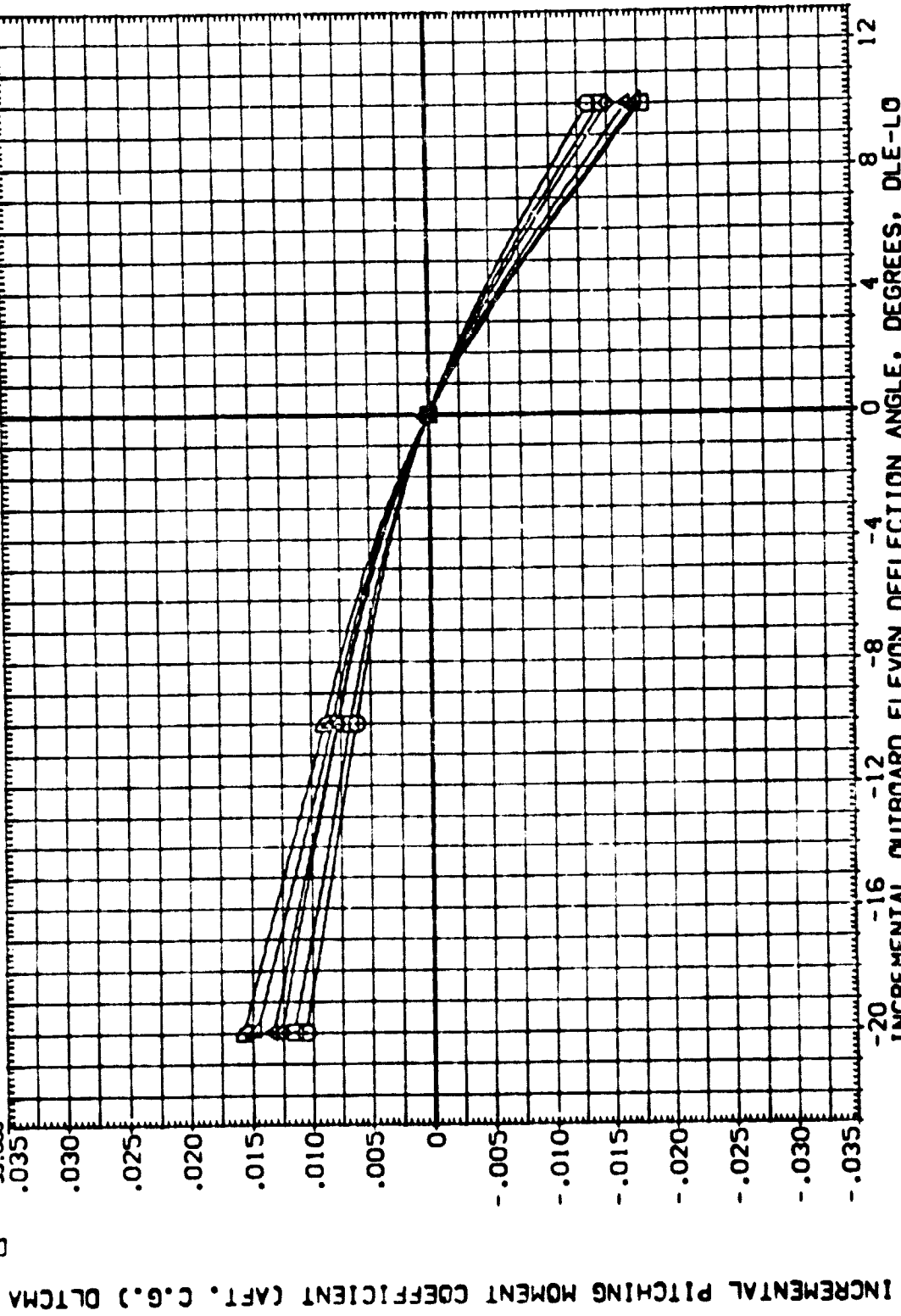


FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS

0A79 826 C9 E43 F8 M16 N28 R5 V8 W116 (DTW038)

SYMBOL	ALPHA	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
○	41.000	MACH 8.000	.000 DATASET DLE-LO	2630.0000 SQ.FT.
□	43.000	SPDRK 55.000	.000 DATASET DLE-LO	474.8100 IN.
◇	45.000	RVL 3.530	-20.000 DATASET DLE-LO	956.6800 IN.
			.000 DATASET DLE-LO	1076.6800 IN.
				375.0000 IN.
				0150 IN.
				SCALE

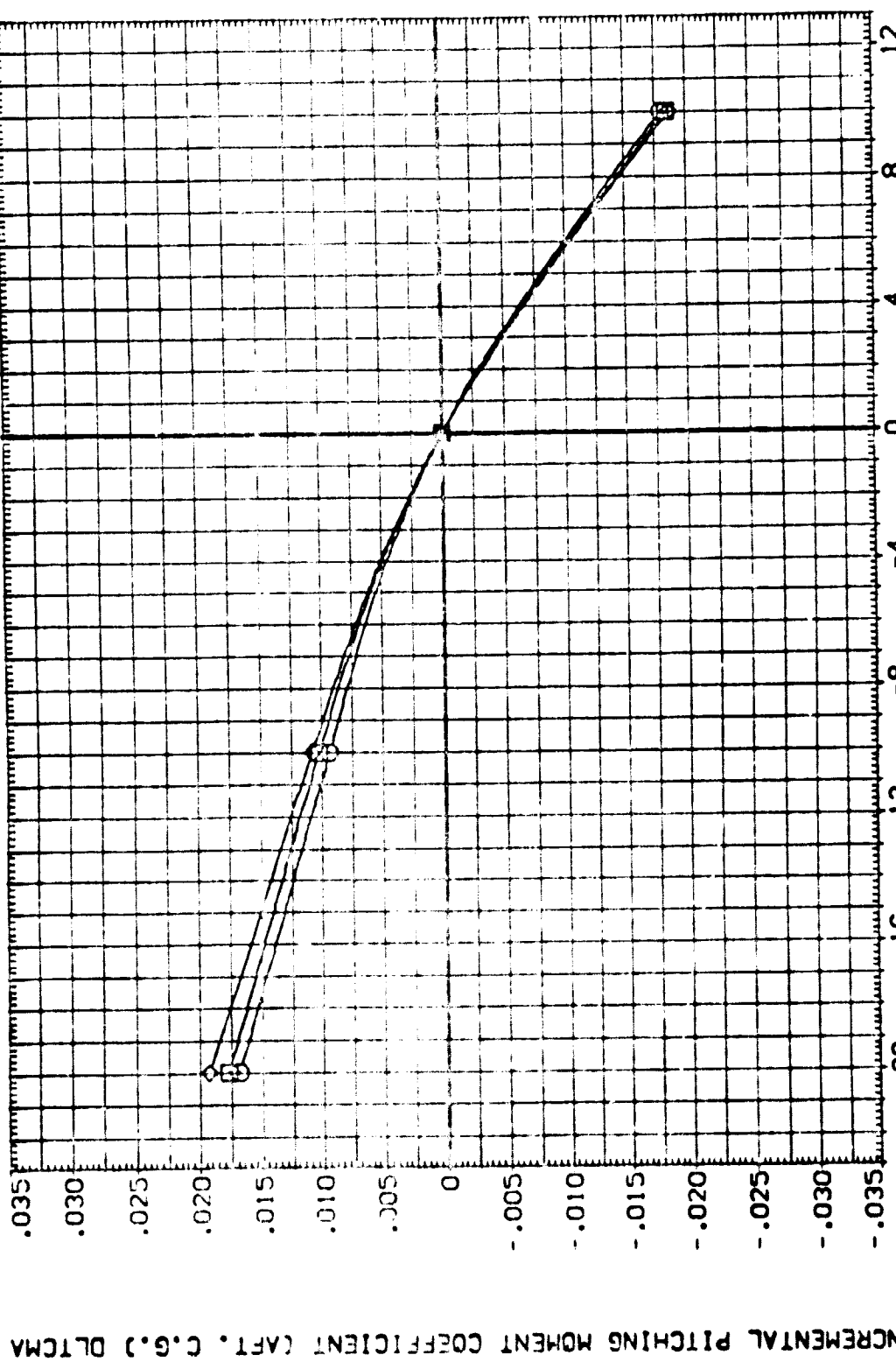
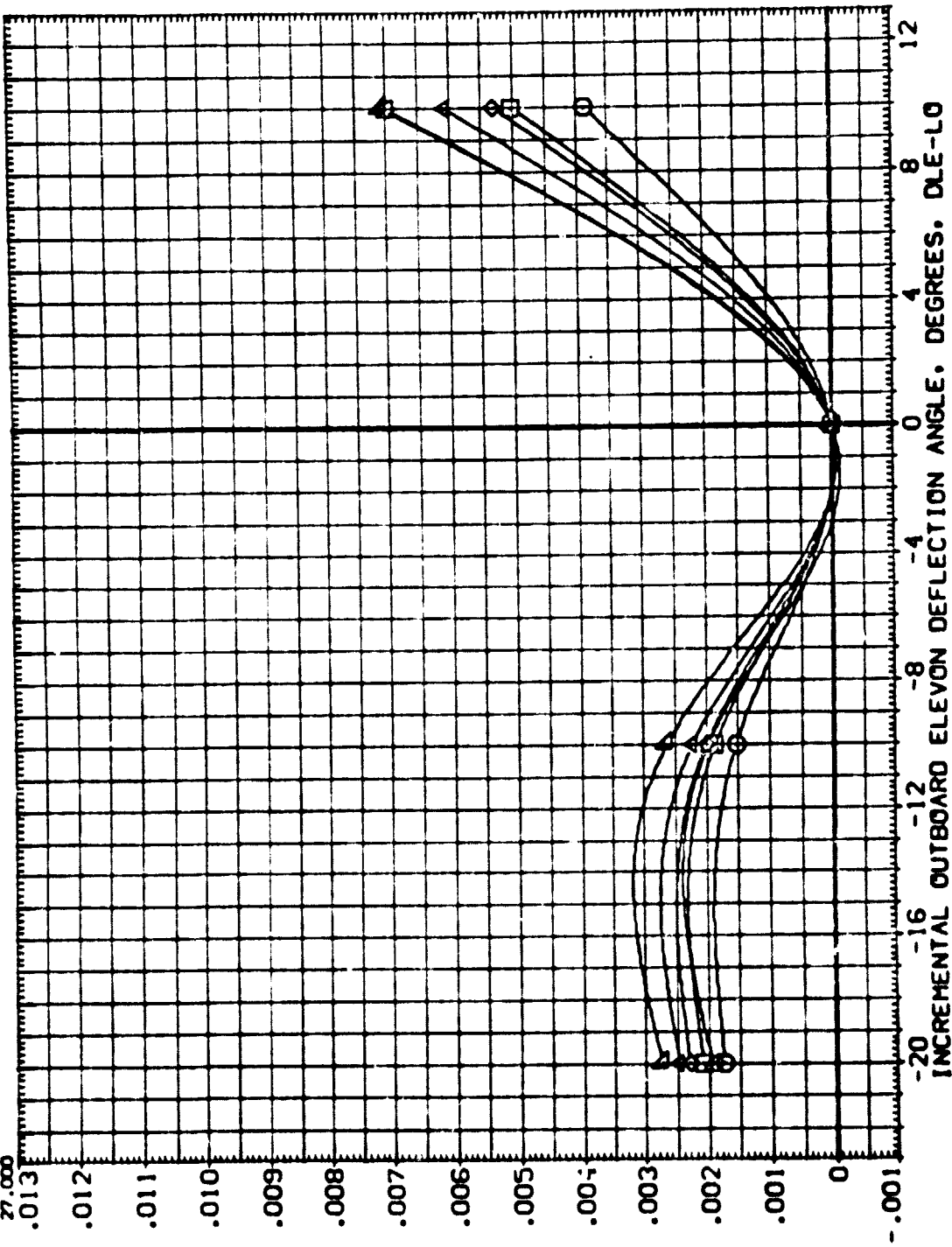


FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW038)

ALPHA	17.000	MACH	8.000	BETA		PARAMETRIC VALUES		DATA SOURCE		DATASET	DLE-LO	SREF	2650.0000	SO.FT.
	19.000	SPEED	56.000	RUDDER				DLE-LO	-20.000	DTW038	-10.000	LREF	474.8100	IN.
	21.000	RVL	3.530						.000	DTW038	10.000	BREF	936.6800	IN.
	23.000								.000	DTW038		XPRP	1076.6800	IN.X0
	25.000											YPRP	.0000	IN.Y0
	27.000											ZPRP	375.0000	IN.Z0
												SCALE	.0150	

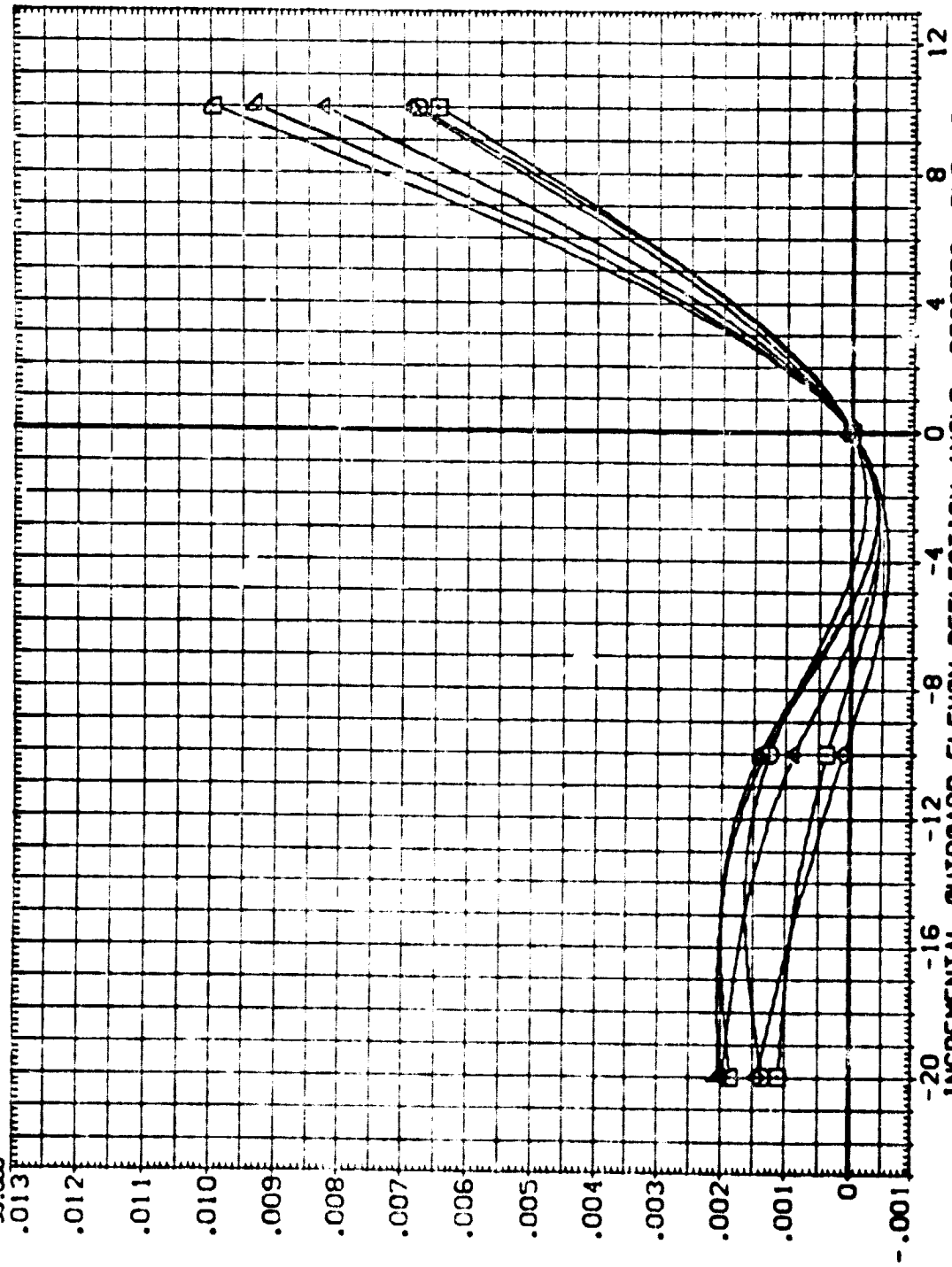


INCREMENTAL AXIAL FORCE COEFFICIENT, DLCA

FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 M116 (DTW038)

ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	DATASET	DLE-LO	SREF	REFERENCE INFORMATION
29.000	8.000	BETA	DLE-LO	DLE-LO	-10.000	2650.0000	SO.FT.
31.000	55.000	RUDDER	.000	.000	10.000	474.8100	IN.
33.000	3.530		.000	DTW038	DTW034	506.6800	IN.
35.000			.000	DTW033	DTW033	1076.6800	IN.X0
37.000						.0000	IN.Y0
39.000						375.0000	IN.Z0
							SCALE
							.0150

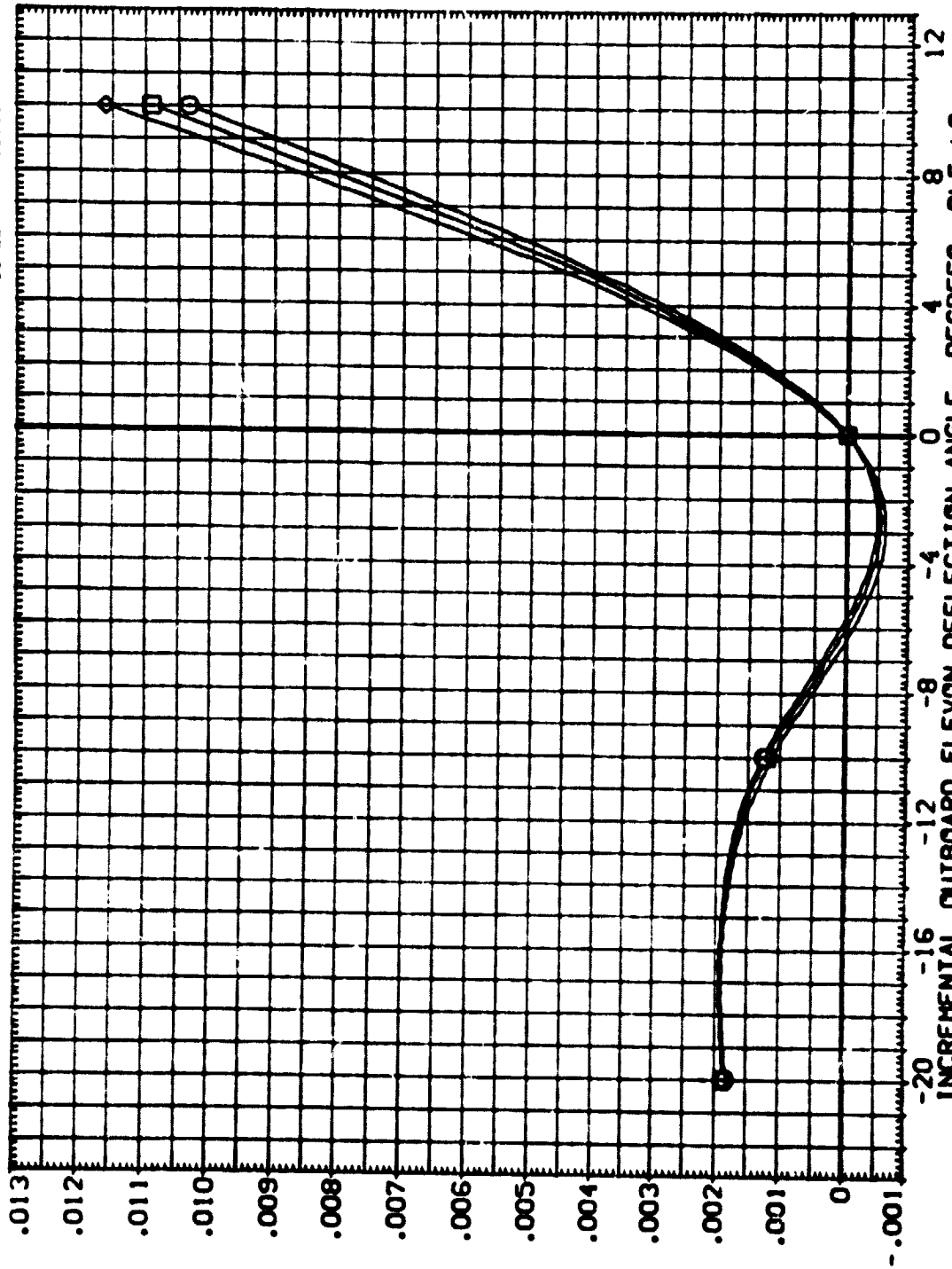


INCREMENTAL AXIAL FORCE COEFFICIENT, DLTCA

INCREMENTAL OUTBOARD ELEVON DEFLECTION ANGLE, DEGREES, DLE-LO
 FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW038)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	DATA SET	DLE-L0	REF	SCALE
○	41.000		8.000 BETA	.000 DATASET	DLE-L0	-10.000	2690.0000	50.FT.
□	43.000	SPEED	55.000 RUDDER	.000 DTW038	DTW034	10.000	474.8100	IN.
◇	45.000	REV-L	3.530	.000 DTW031	DTW033		936.6800	IN.
							1076.6800	IN.
							375.0000	IN.
							375.0000	IN.
								20
								0150



INCREMENTAL AXIAL FORCE COEFFICIENT, DLTA

FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW038)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	17.000	MACH	8.000	REF	2650.0000
	19.000	SPOBRK	55.000	LREF	474.8100
	21.000	RUDDER	3.530	REF	936.6800
	23.000			XREF	1076.6800
	25.000			YREF	.0000
	27.000			ZREF	.0000
				SCALE	.0150

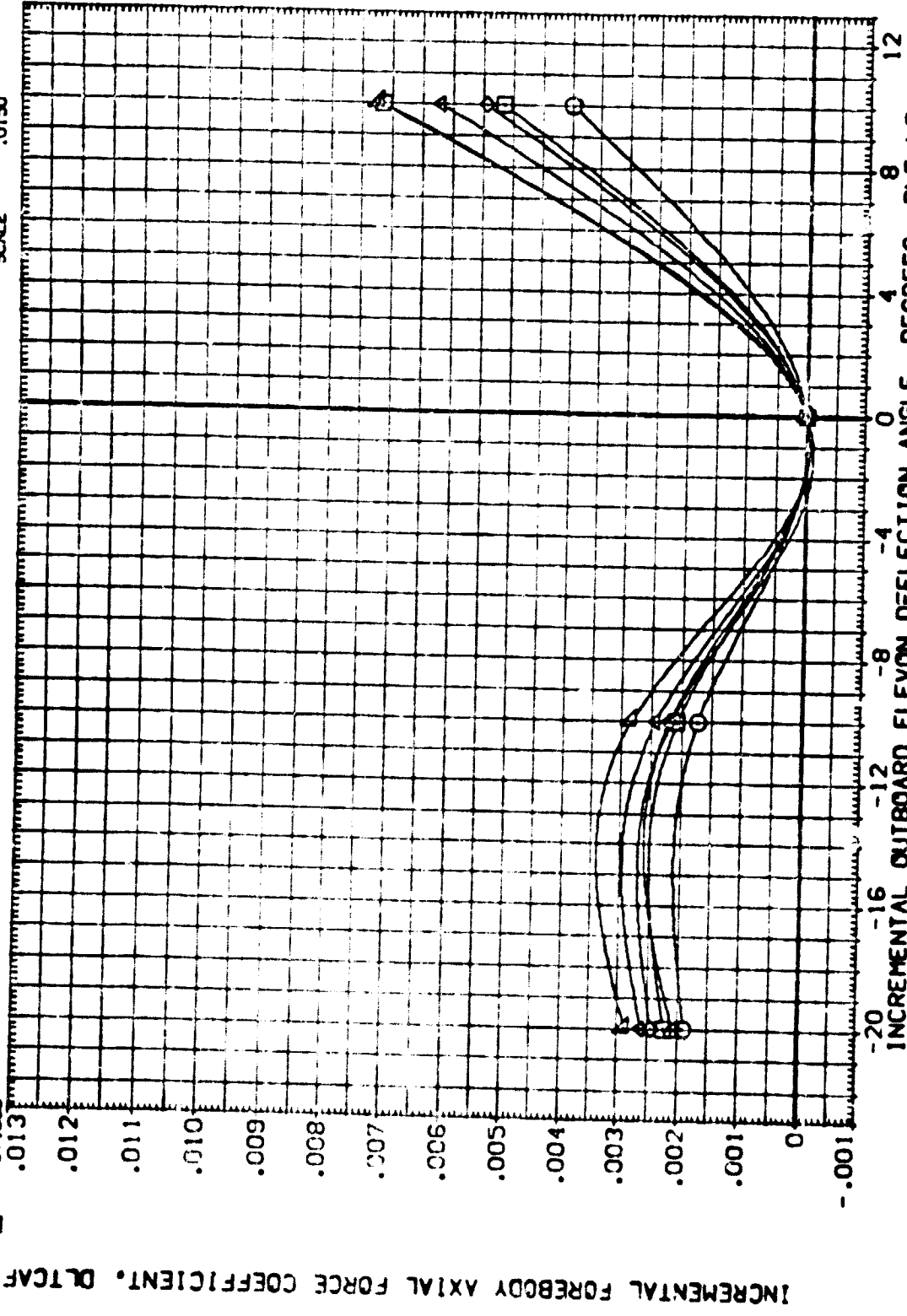
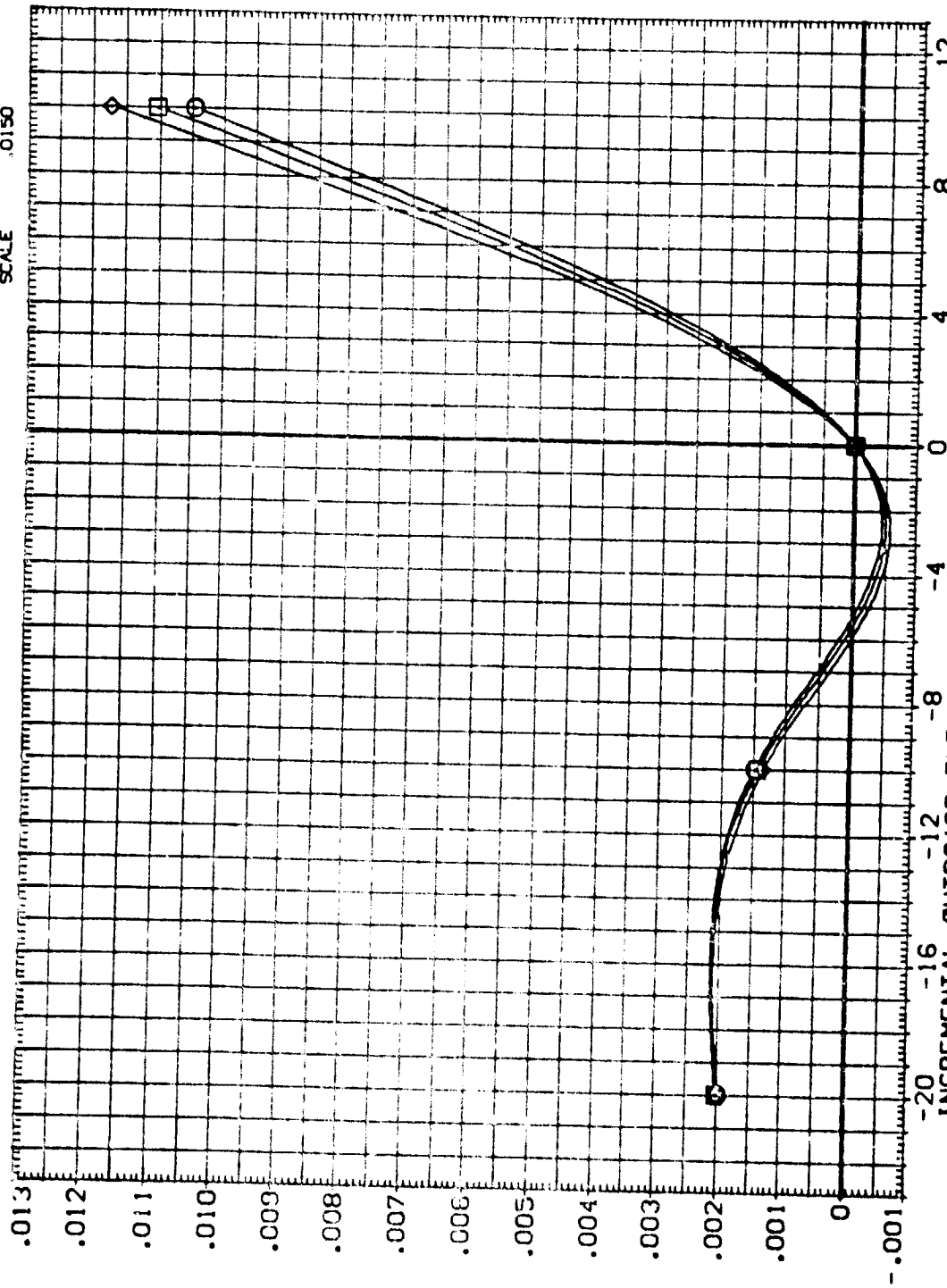


FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW038)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	DATA SET	DLE-LO	SREF	REFERENCE INFORMATION
○	41.000	8.000	BETA	DLE-LO	DTW038	-10.000	2690.0000	SO.FT.
□	43.000	55.000	RUDDER	.000 DTW038	DTW034	10.000	474.8100	IN.
◇	45.000	3.530		.000 DTW001	DTW033		906.6800	IN.
							1076.0800	IN. X0
							375.0000	IN. Y0
							375.0000	IN. Z0
							SCALE	.0150



INCREMENTAL FOREBODY AXIAL FORCE COEFFICIENT, DLTCAP

FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS



0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW038)

SYMBOL		PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION			
○	ALPHA	8.000	BETA	.000	DATASET	DLE-L0	SREF	2690.0000	SQ.FT.
□	MACH	56.000	RUCOER	.000	DTW038	-10.000	LREF	474.8100	IN.
◇	SPOBRK	3.530		.000	DTW033	10.000	BREF	936.6800	IN.
△	RVL						XMRP	1076.6800	IN. X0
▽							YMRP	.0000	IN. Y0
◊							ZMRP	375.0000	IN. Z0
							SCALE	.0150	

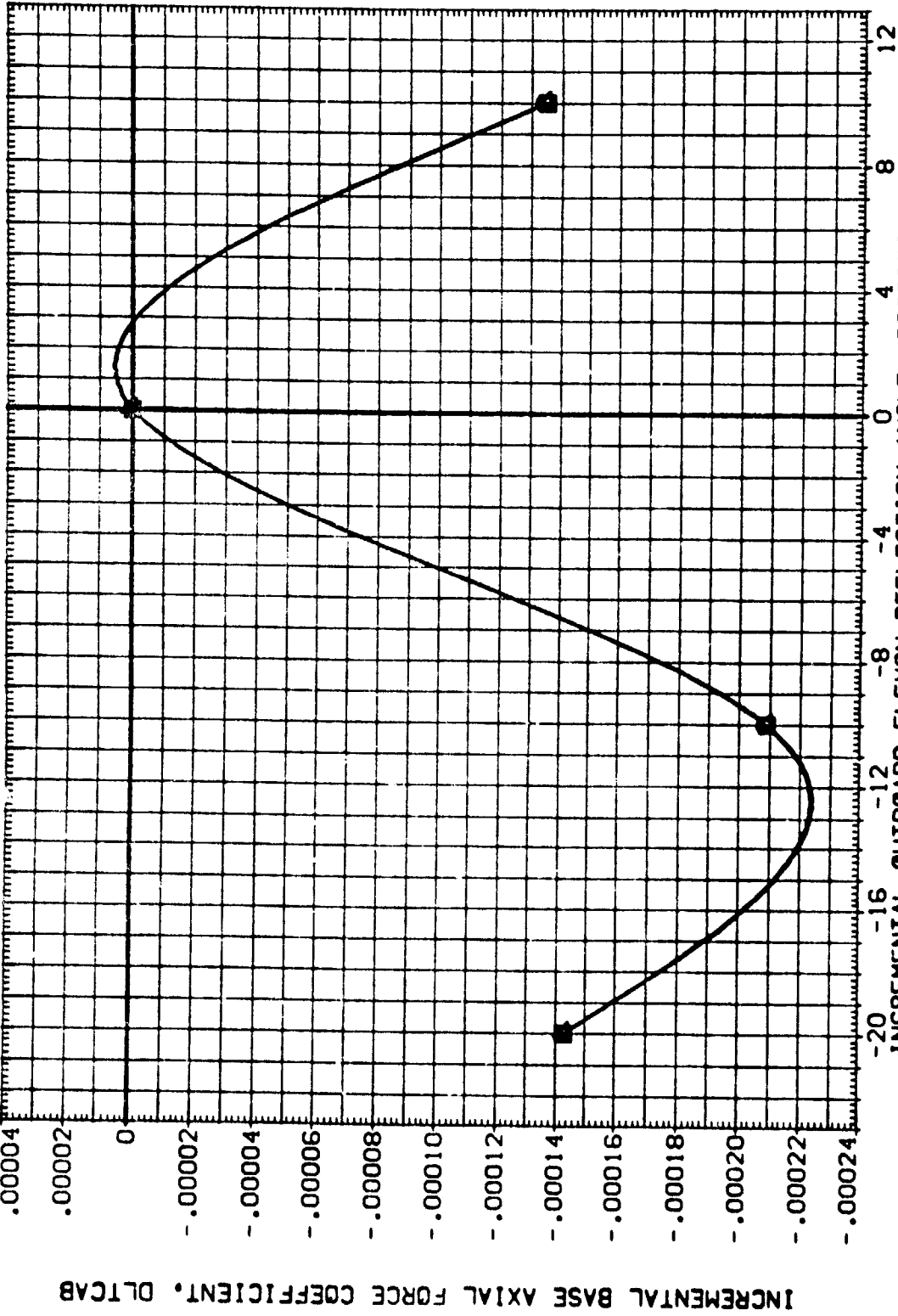


FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW038)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	.000	DATASET	DLE-LO	DATA SOURCE	DLE-LO	DATASET	DLE-LO	SREF	REFERENCE INFORMATION
□	29.000	SPDRK	8.000	BETA	.000	DTW038	DTW034	-10.000	DTW033	-10.000	LREF	2630.0000
◇	31.000	RVL	55.000	RUDER	.000	DTW001		10.000			474.8100	SO.FT.
△	33.000		3.530								936.8600	IN.
▽	35.000										1076.8600	IN.
◊	37.000										375.0000	IN.YO
◊	39.000										ZMRP	IN.ZO
											SCALE	

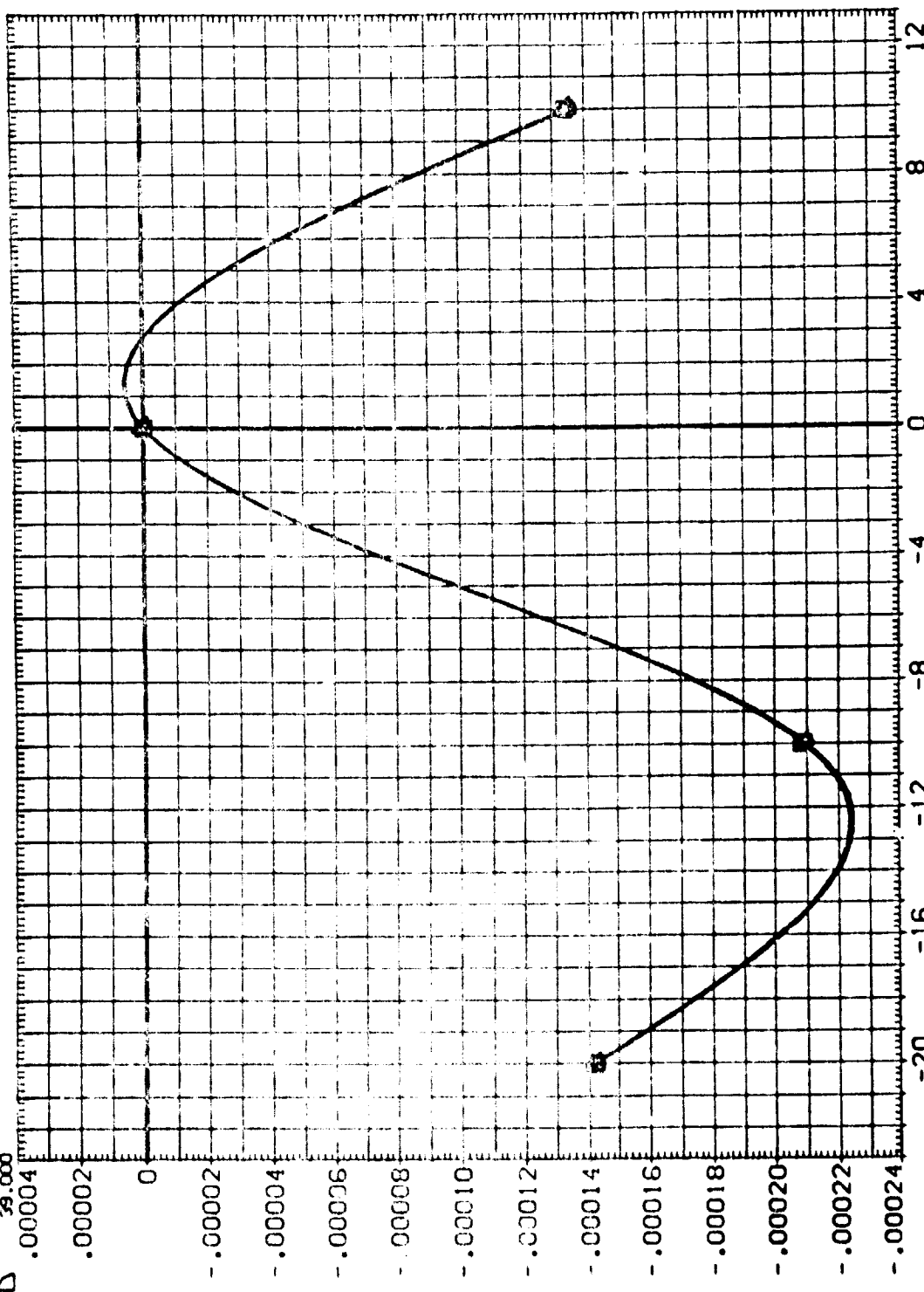


FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS

(DTW038)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116

REFERENCE INFORMATION

SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XPRP	1076.6800	IN.
YPRP	375.0000	IN.
ZPRP	375.0000	IN.
SCALE	.0150	

DATA SOURCE

DLE-LO	DLE-LO
DATASET	DATASET
D1V03A	D1V03A
D1V03B	D1V03B
D1V03C	D1V03C

PARAMETRIC VALUES

BETA	8.000
RUDDER	55.000
3.530	3.530

ALPHA

MACH	41.000
SFOBRK	43.000
FAVL	45.000

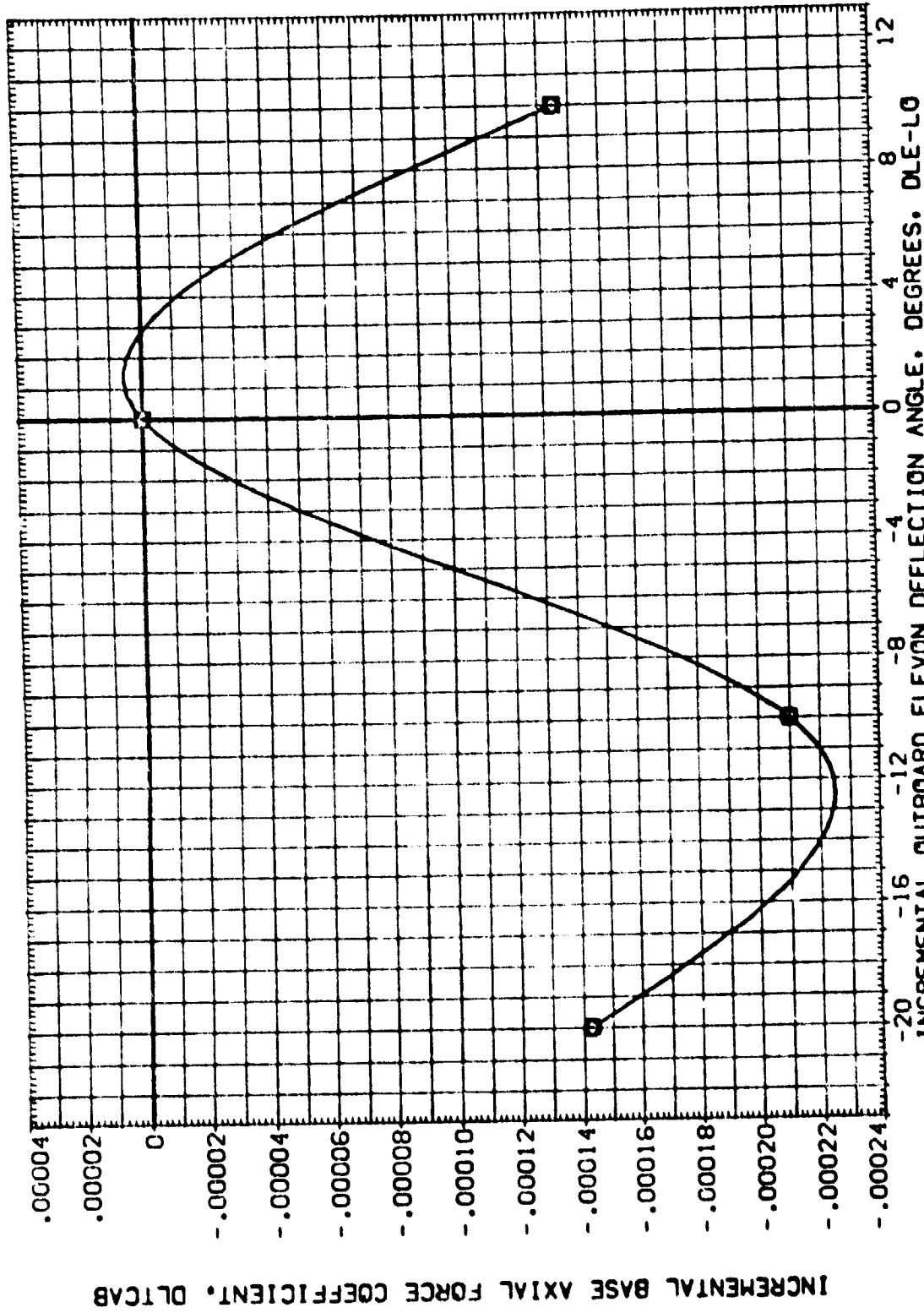


FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW038)

SYMBOL
 ○ □ ◇ △ ▽ ▾

ALPHA
 17.000
 19.000
 21.000
 23.000
 25.000
 27.000

MACH
 SP08AK
 RN/L

PARAMETRIC VALUES
 8.000 BETA
 55.000 RUDDER
 3.530

DATA SOURCE
 DLE-L0
 -20.000
 .000

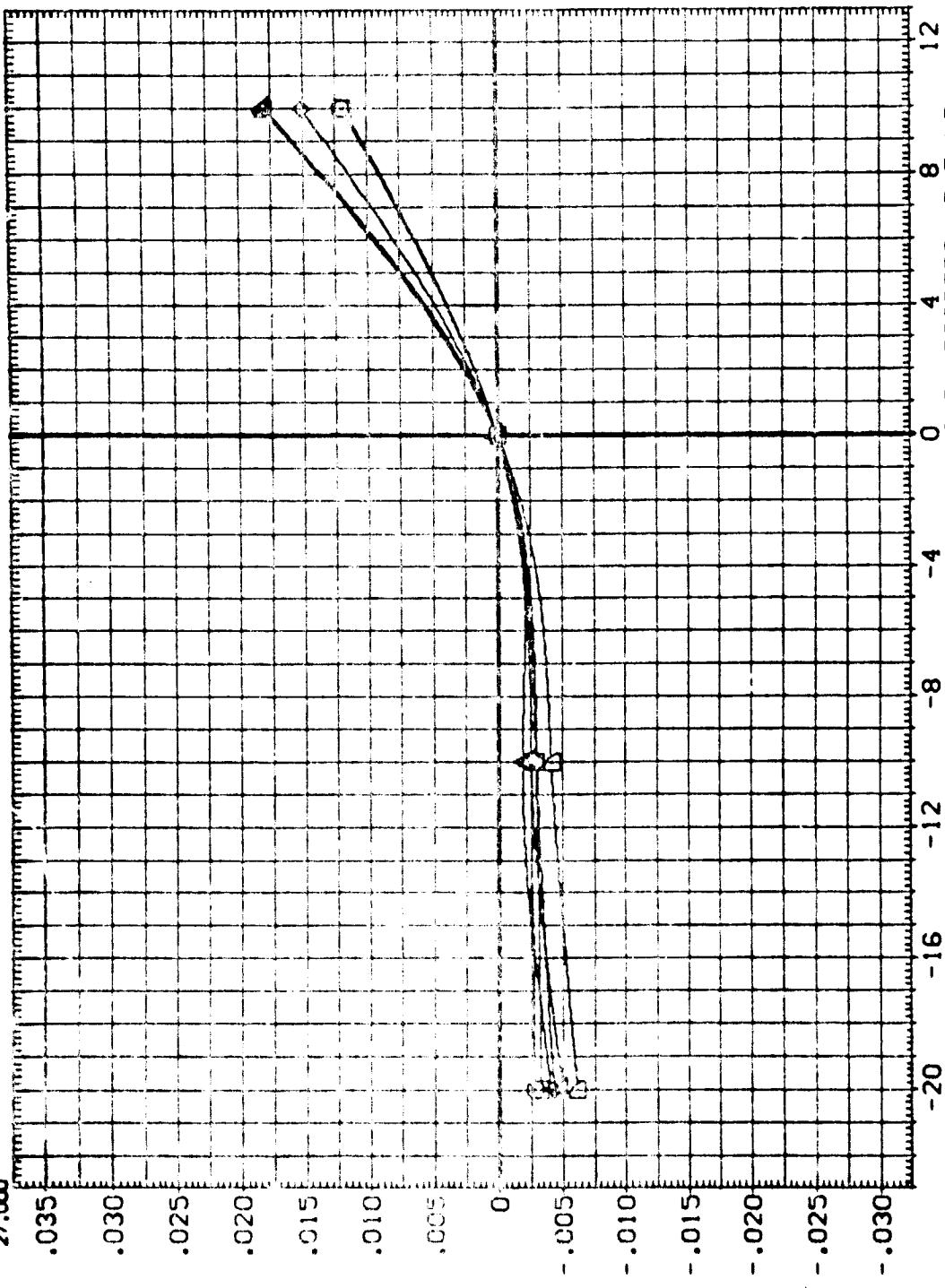
DATASET
 DTW038
 DTW001

DLE-L0
 -10.000
 10.000

SREF
 LREF
 BREF
 XREF
 YREF
 ZREF
 SCALE

2690.0000
 474.8100
 936.5800
 1076.6800
 .0000
 375.0000
 .0150

SO.FT.
 IN.
 IN.
 IN.
 IN.
 IN.



INCREMENTAL LIFT COEFFICIENT, DLCL

FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS
 INCREMENTAL OUTBOARD ELEVON DEFLECTION ANGLE, DEGREES, DLE-LO

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW038)

ALPH	MACH	SPDRK	R/VL	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
29.000	8.000	BETA	8.000	.000	DTW038	2690.0000 SQ.FT.
31.000	55.000	RUDER	55.000	.000	DTW038	474.8100 IN.
33.000	3.530		3.530	-20.000	DTW033	936.6800 IN.
35.000				.000	DTW001	1076.6800 IN.XD
37.000						.0000 IN.YD
39.000						375.0000 IN.ZD
						ZMRP .0150
						SCALE

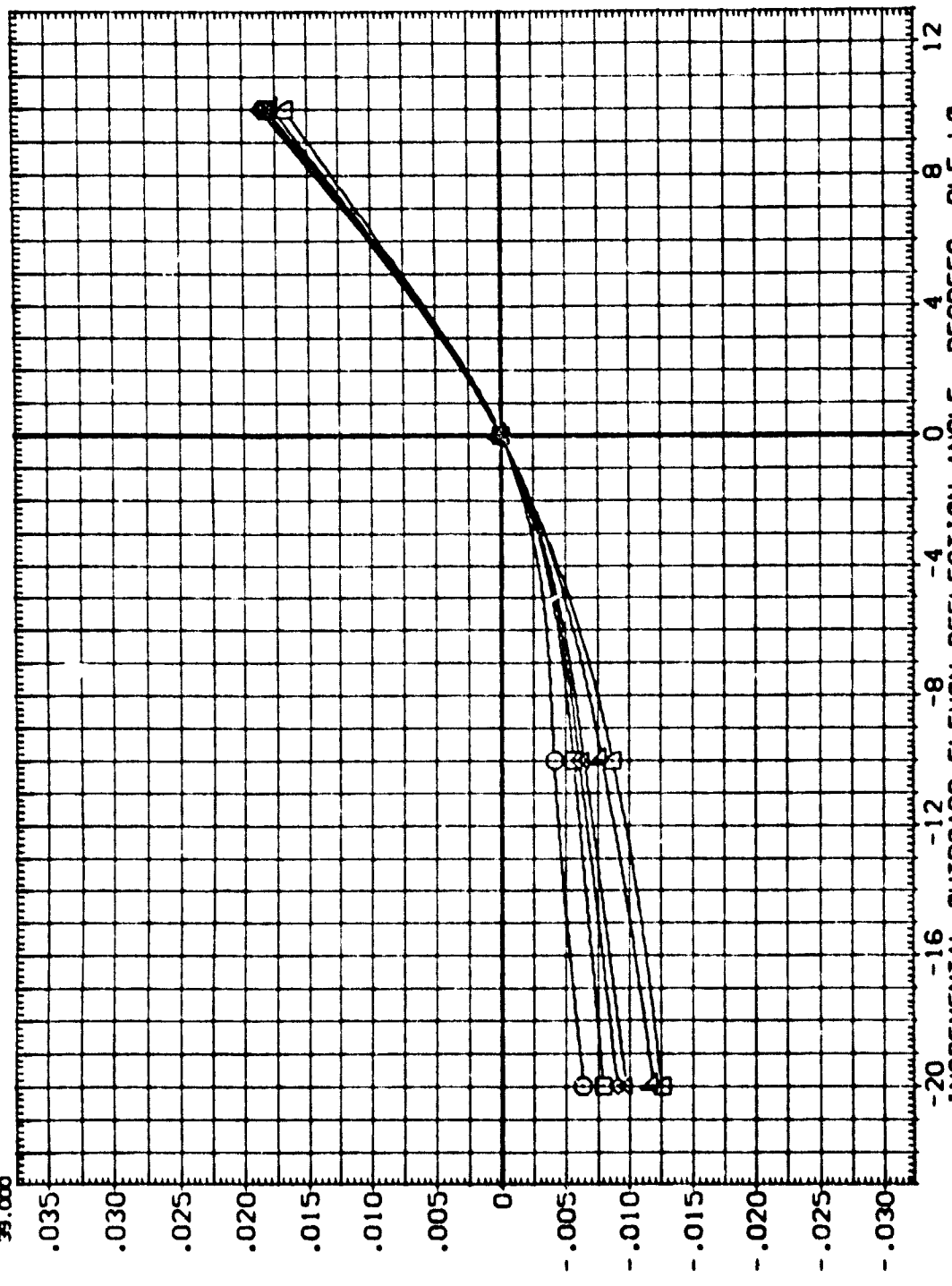


FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW038)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION			
ALPHA	MACH	.000	DATASET	DLE-L0	SREF	2690.0000	SQ.FT.
41.000	8.000	.000	DTW038	-10.000	LREF	474.8100	IN.
43.000	55.000	.000	DTW034	10.000	BREF	936.6800	IN.
45.000	3.530	.000	DTW033		XARP	1076.6800	IN.X0
					YARP	.0000	IN.Y0
					ZARP	375.0000	IN.Z0
					SCALE	.0150	

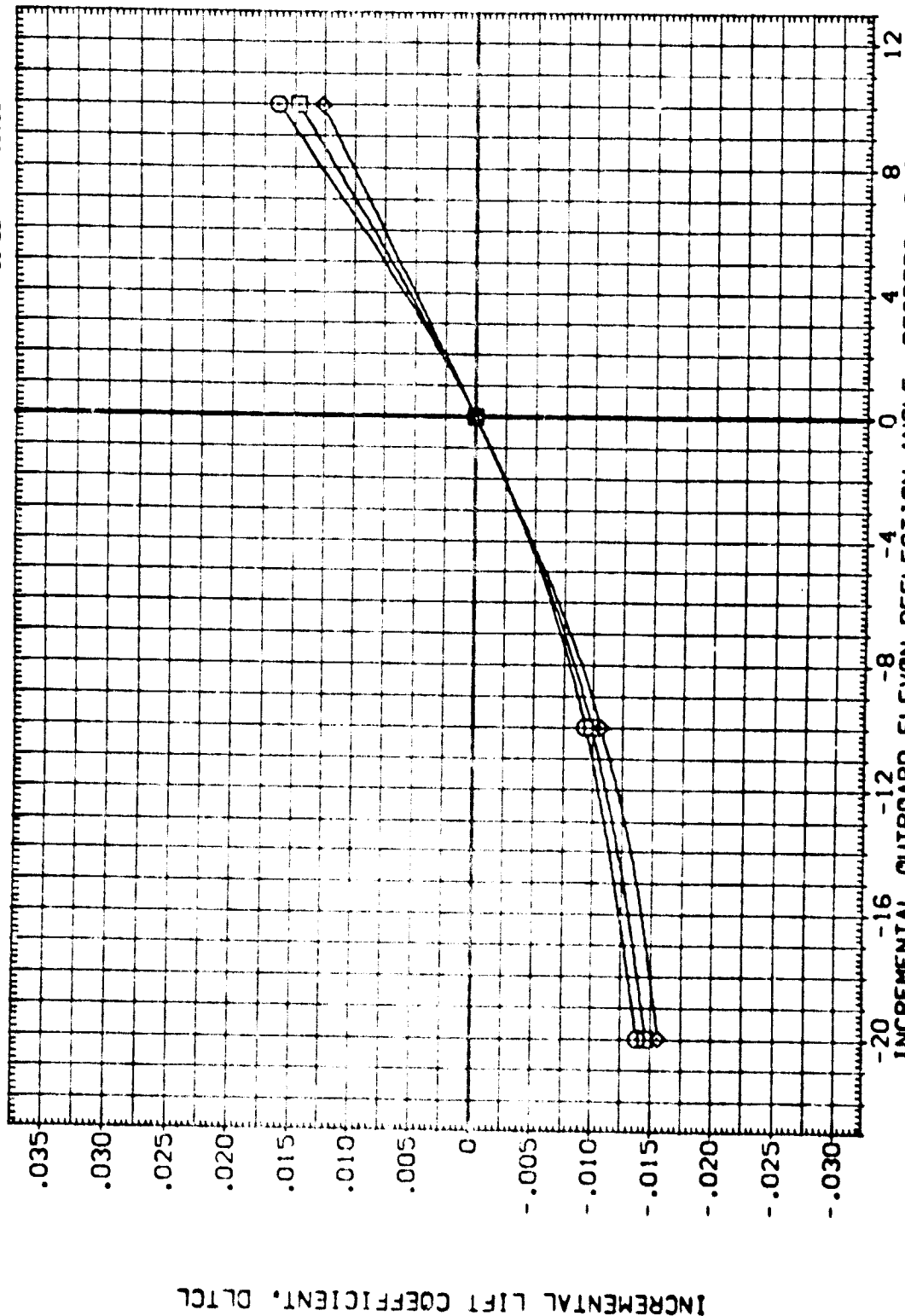
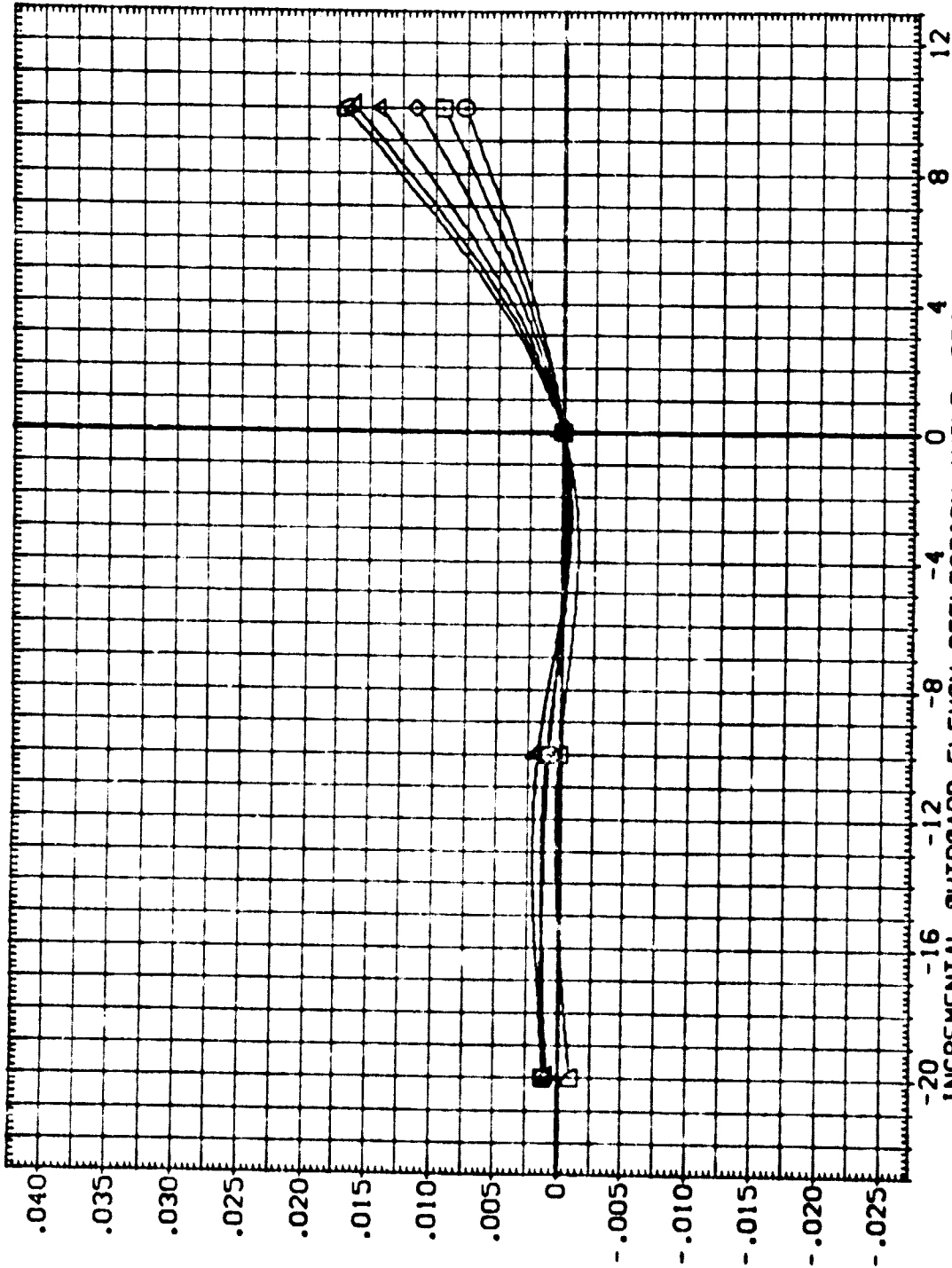


FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F3 M16 N28 R5 V8 W116 (DTW038)

ALPHA	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
17.000	MACH 8.000	.000 DATASET DLE-L0	2690.0000 SQ.FT.
19.000	BETA 55.000	.000 DTW038	474.8100 IN.
21.000	RUDDER 3.530	.000 DTW034	936.6800 IN.
23.000		.000 DTW033	1076.6800 IN.X0
25.000			Y-TRP .0000 IN.Y0
27.000			Z-TRP .0000 IN.Z0
			SCALE .0150

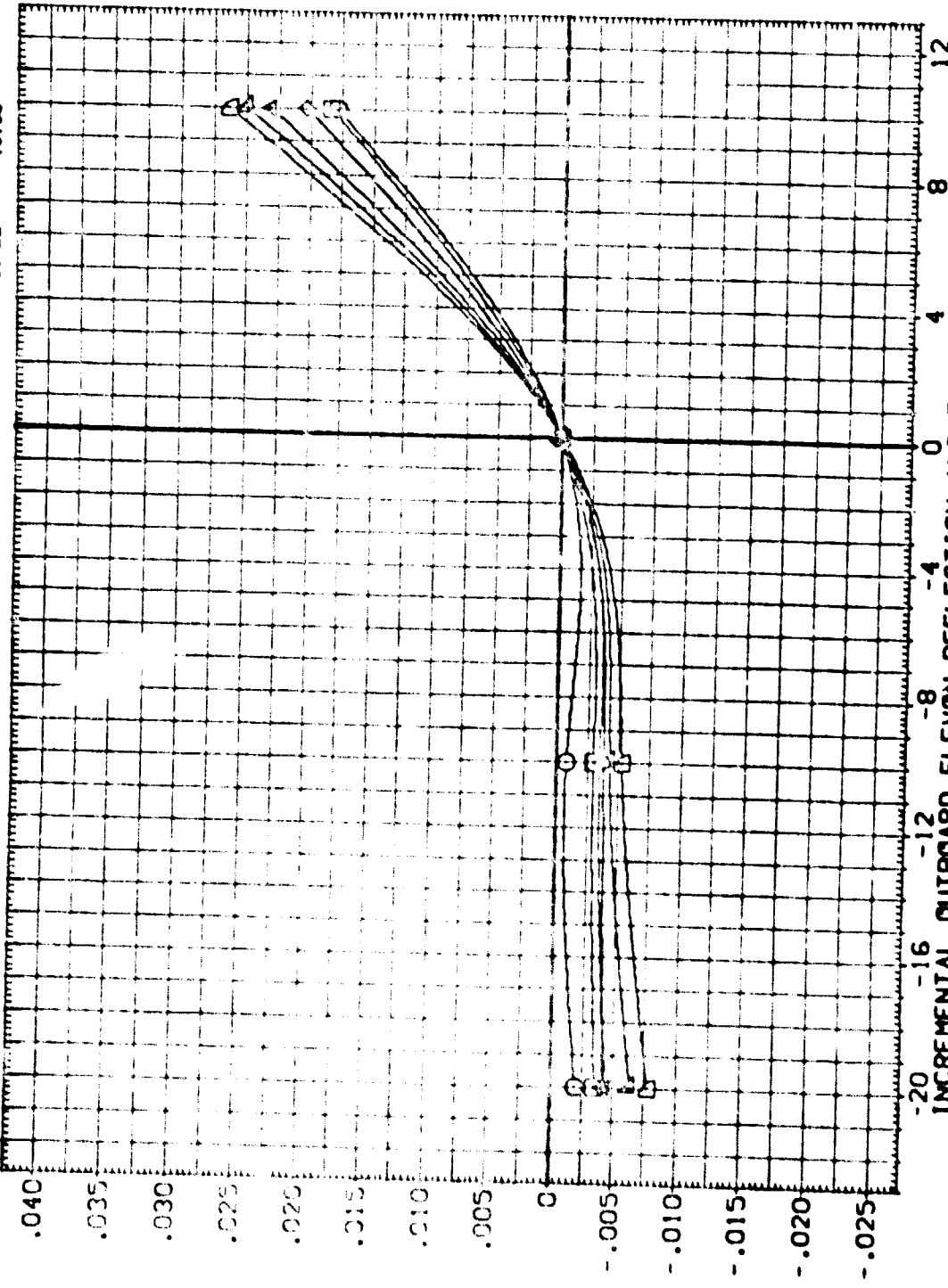


INCREMENTAL DRAG COEFFICIENT, DLTC

FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW038)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	MACH	.000	DATASET	D.E.-LO	SREF
29.000	8.000	.000	DTW038	-10.000	2690.0000
31.000	BETA	.000	DTW001	10.000	474.9100
33.000	55.000	-20.000			926.6800
35.000	RUDDER				1076.6200
37.000	3.530				0.000
39.000					375.0000
					SCALE
					.0150



INCREMENTAL DRAG COEFFICIENT, DLTCD

FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW038)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	BETA	DLE-LO	DLE-LO	SREF	SO.FT.
41.000	8.000	.000	.000	2680.0000	IN.
43.000	55.000	.000	.000	474.8100	IN.
45.000	3.530	.000	.000	936.6800	IN.X0
				1076.0300	IN.Y0
				375.0000	IN.Z0
				SCALE	.0150

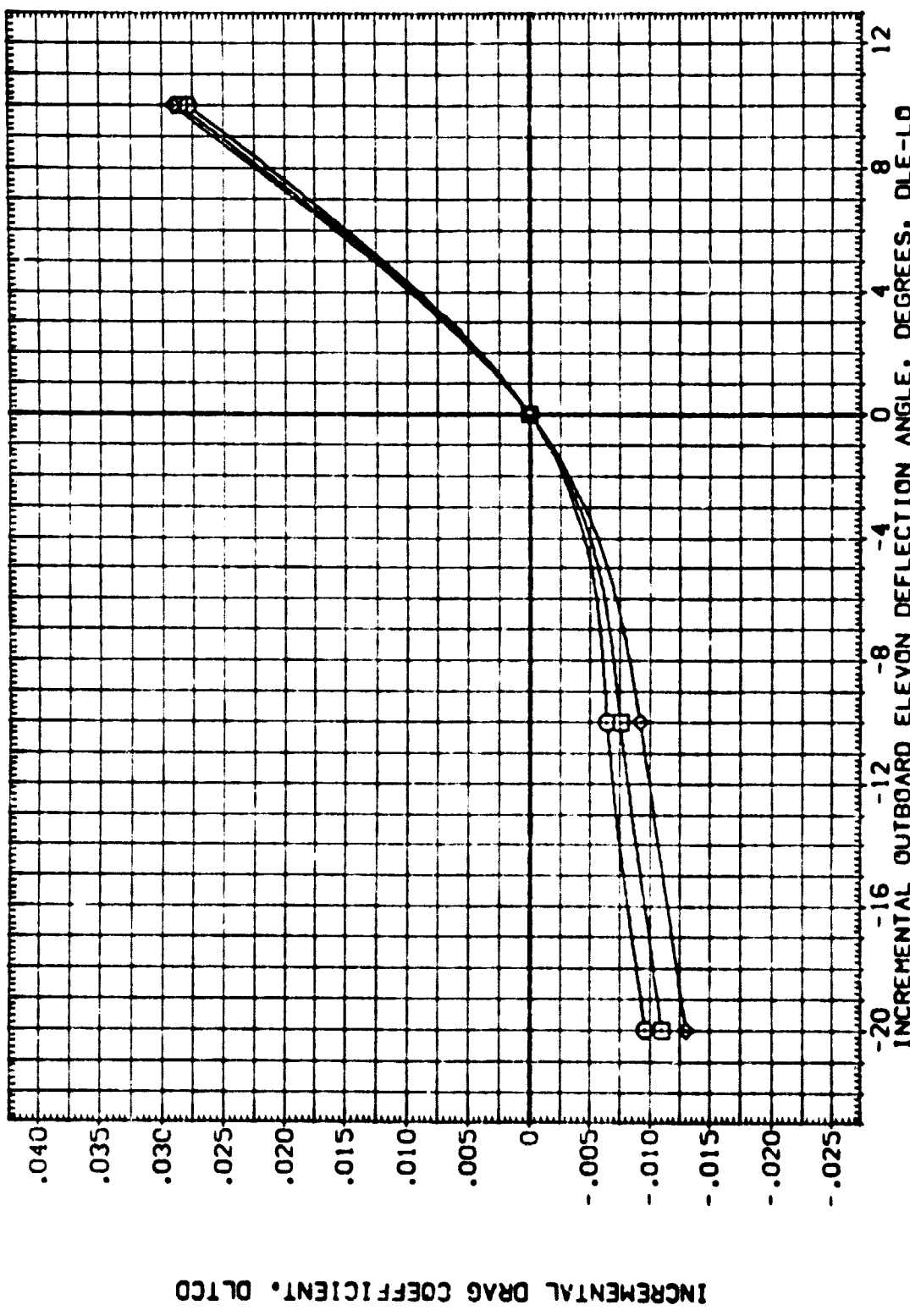


FIG. 14 INCREMENTAL EFFECTS OF OUTBOARD ONLY ELEVON DEFLECTIONS

REFERENCE INFORMATION
 SREF 2690.0000 50. FT.
 LREF 474.8100 IN.
 BREF 906.8800 IN. X0
 MFCP 1076.6900 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .0150

80FLAP RVL
 -11.700 3.530
 .000 3.530
 16.300 3.530

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (C1V012) DAY9 B26 C9 E43 F8 H16 N28 R5 V8 V116
 (C1V001) DAY9 B26 C9 E43 F8 H16 N28 R5 V8 V116
 (C1V013) DAY9 B26 C9 E43 F8 H16 N28 R5 V8 V116

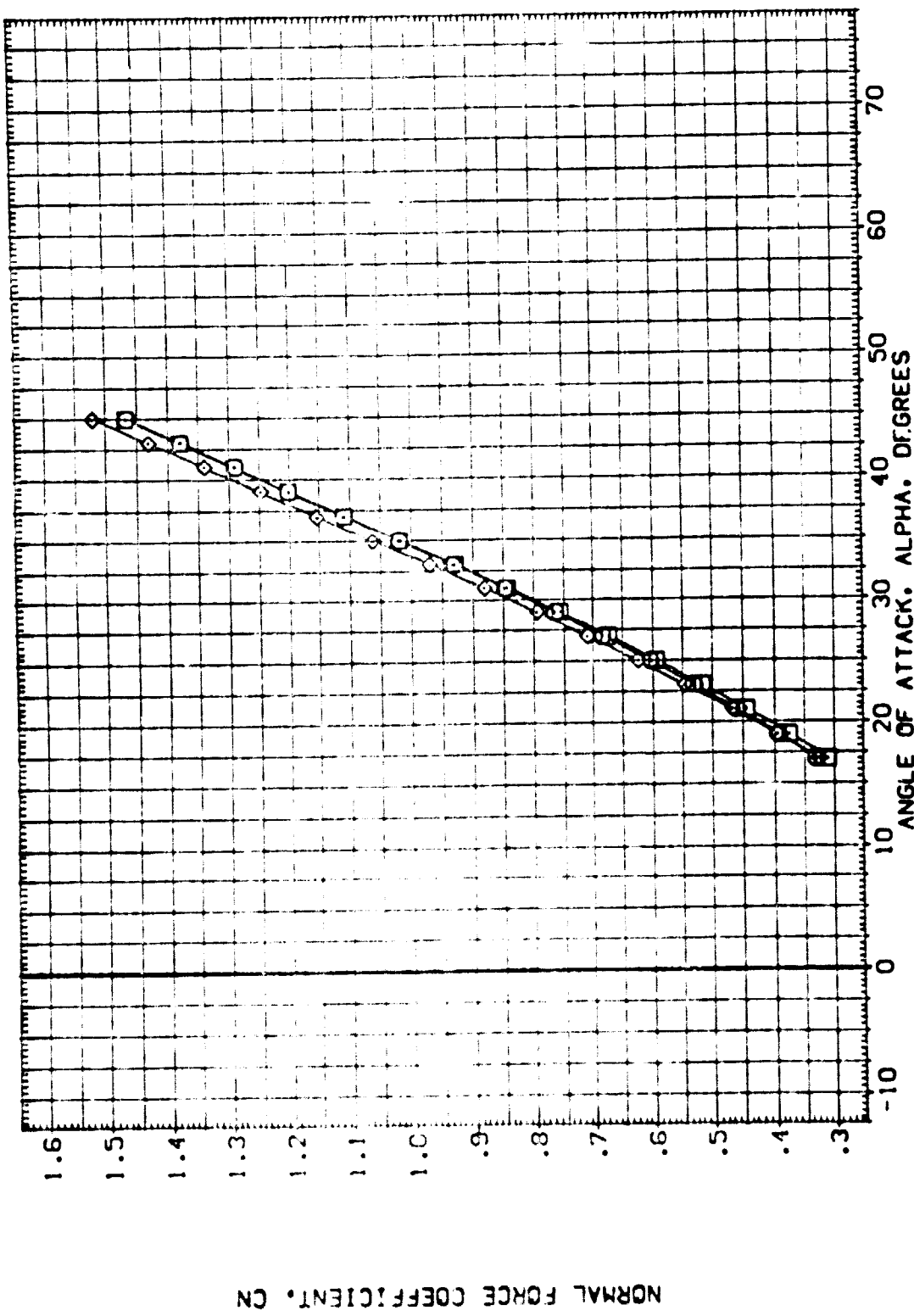


FIG. 15 800Y FLAP EFFECTIVENESS (REYNOLDS NUMBER = 3.53)

(A)MACH = 8.00

REFERENCE INFORMATION
 SREF 2630.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XPRP 1076.0000 IN. X0
 YPRP 375.0000 IN. Y0
 ZPRP 0.0000 IN. Z0
 SCALE .0150

BOFLAP RVAL
 -11.700 3.530
 .000 3.530
 16.300 3.530

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (C1W012) O A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 (C1W001) O A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 (C1W013) O A79 B26 C9 E43 F8 M16 N28 R5 V8 V116

PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH(FORWARD C. G.) CLMFD

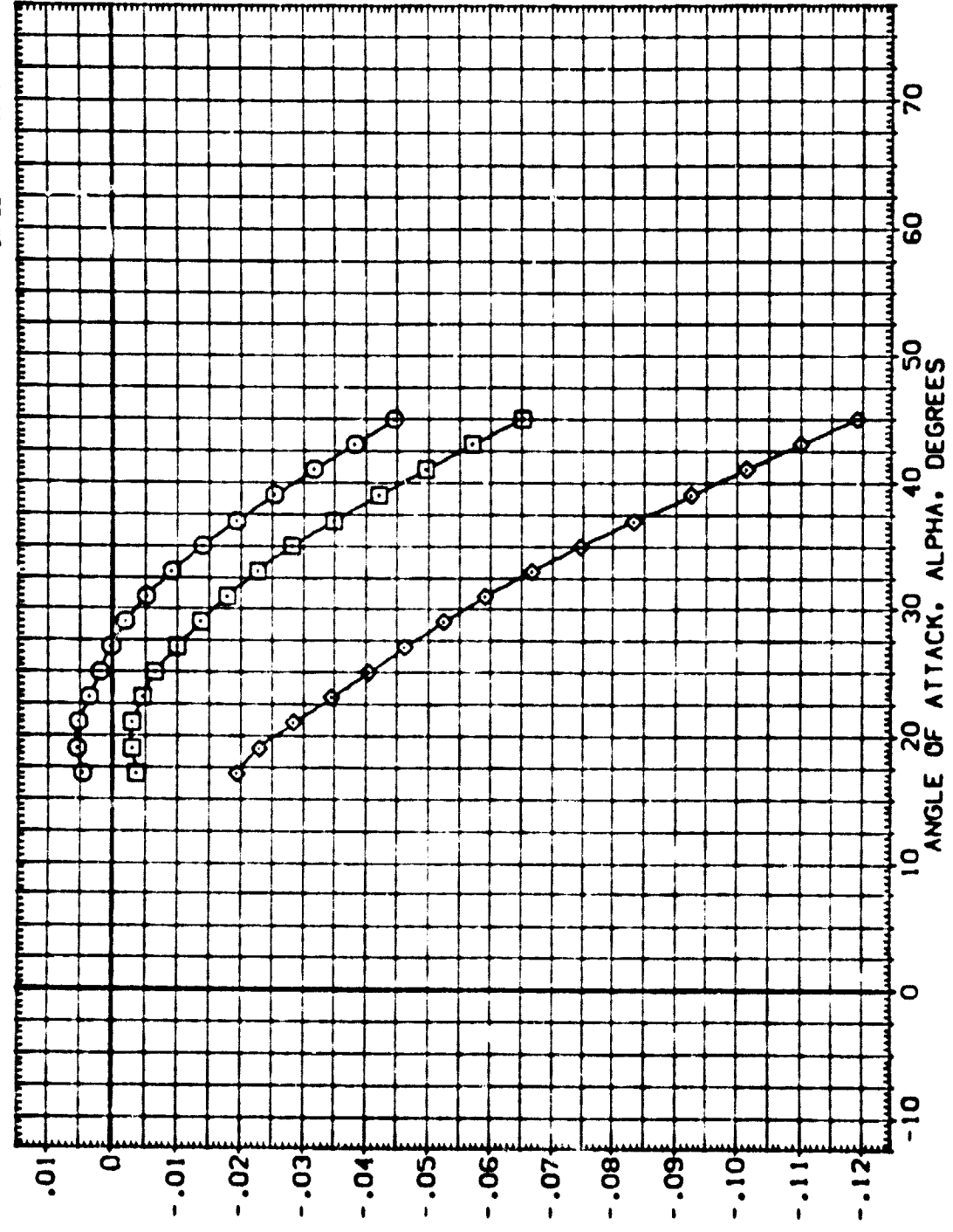


FIG. 15 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 3.53)

(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(C1V012)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
(C1V001)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
(C1V013)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116

BOFLAP RV/L

-11.700	3.530
.000	3.530
16.300	3.530

REFERENCE INFORMATION

SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XREF	1076.6800	IN.
YREF	.0000	IN.
ZREF	375.0000	IN.
SCALE	.0150	

PITCHING MOMENT COEFFICIENT AT .675 BODY LENGTH (AFT C. G.) CLMFT

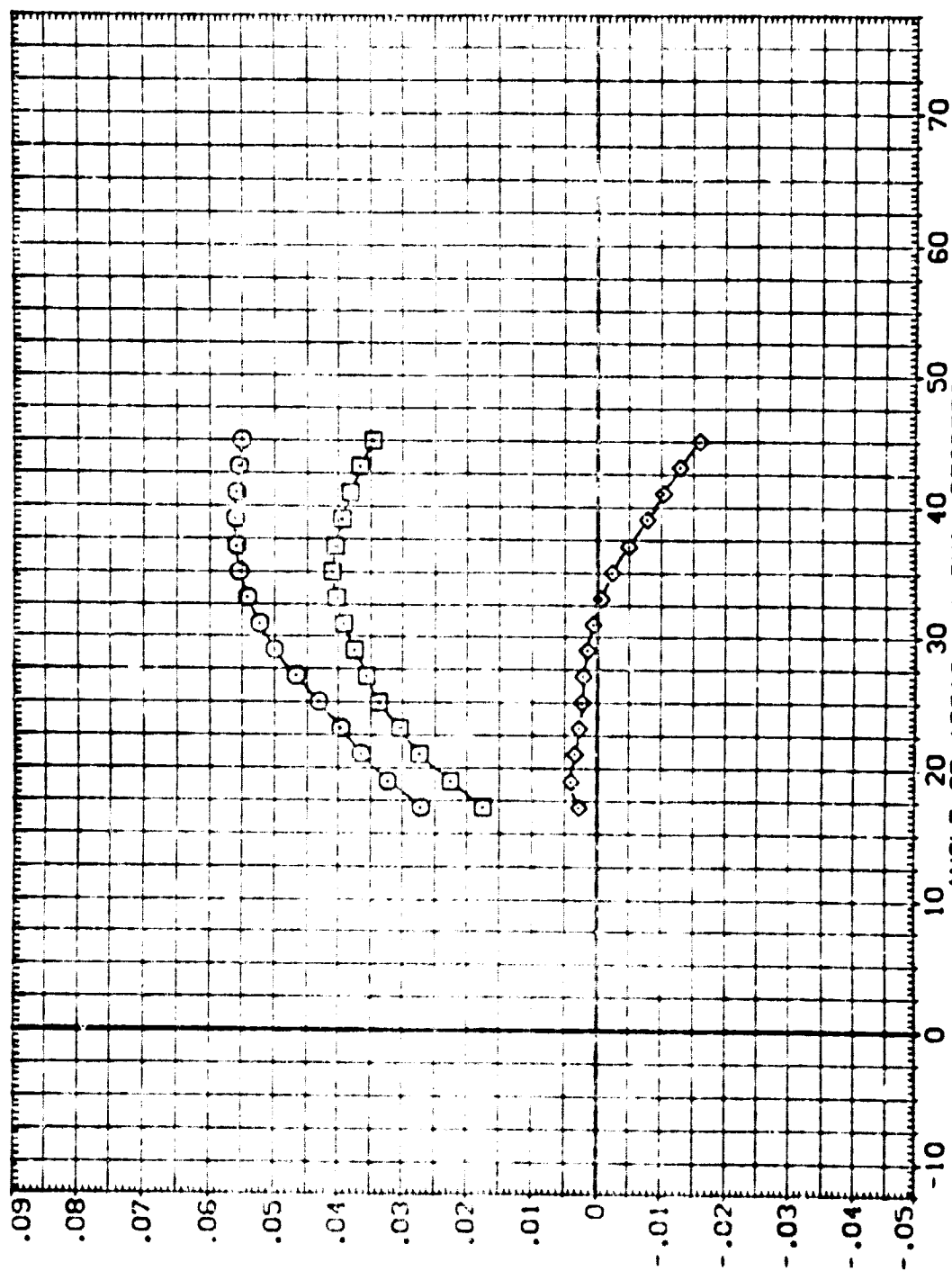


FIG. 15 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 3.53)

(A)MACH = 8.00

DATA SET SYMBOL. CONFIGURATION DESCRIPTION

(CTV012)	DA79 R26 C9 E43 F8 M16 N28 R5 V8 V116
(CTV001)	DA79 R26 C9 E43 F8 M16 N28 R5 V8 V116
(CTV013)	DA79 R26 C9 E43 F8 M16 N28 R5 V8 V116

BOFLAP RNVL

-11.700	3.530
.000	3.530
16.300	3.530

REFERENCE INFORMATION

SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1076.0000	IN.X0
YMRP	.0000	IN.Y0
ZMRP	375.0000	IN.Z0
SCALE	.0150	

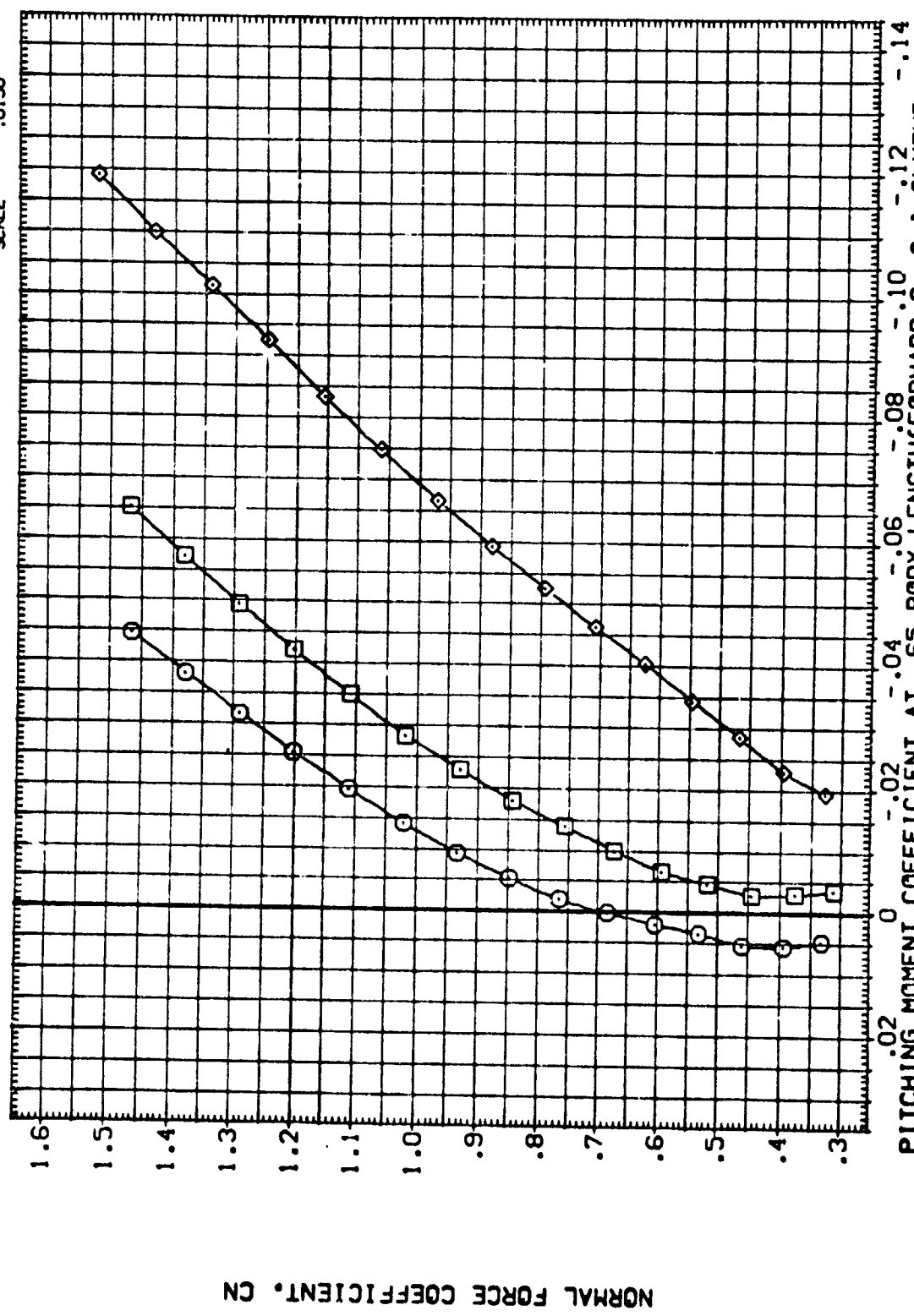


FIG. 15 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 3.53)

(A)MACH = 8.00

DATA SET SYMBOL: (CTV012), (CTV001), (CTV013)

CONFIGURATION DESCRIPTION:
 CA79 826 C9 E43 FB H16 N28 RS V8 V116
 CA79 826 C9 E43 FB H16 N28 RS V8 V116
 CA79 826 C9 E43 FB H16 N28 RS V8 V116

SOFLAP: -11.700, 16.300
 RW/L: 3.530, 3.530

REFERENCE INFORMATION:
 SREF: 2690.0000 SQ.FT.
 LREF: 474.8100 IN.
 BREF: 836.6800 IN.
 XMRP: 1076.6800 IN.
 YMRP: .0000 IN.
 ZMRP: 375.0000 IN.
 SCALE: .0150

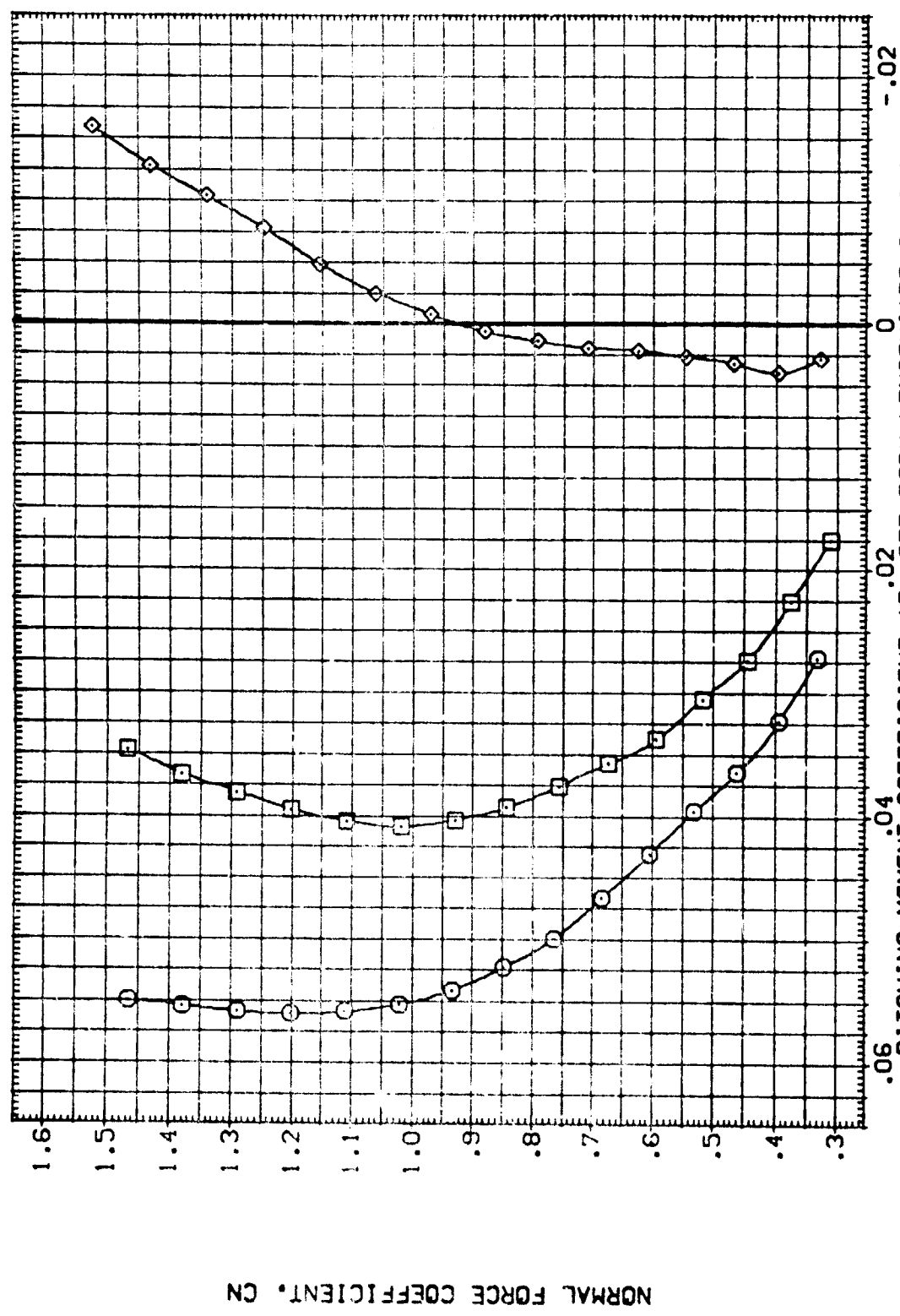


FIG. 15 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 3.53)
 (A)MACH = 8.00

REFERENCE INFORMATION
 SREF 2690.0000 50.FT.
 LREF 474.6100 IN.
 BREF 936.6800 IN.X0
 XMRP 1076.6800 IN.Y0
 YMRP .0000 IN.Z0
 ZMRP 375.0000 IN.Z0
 SCALE .0150

BDFLAP RVAL
 -11.700 3.530
 .000 3.530
 16.300 3.530

CONFIGURATIONS: DESCRIPTION
 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116

DATA SET SYMBOL
 (CTV012) □
 (CTV001) ○
 (CTV013) ◇

CENTER OF PRESSURE LOCATION AS A FRACTION OF BODY LENGTH, XCP/L

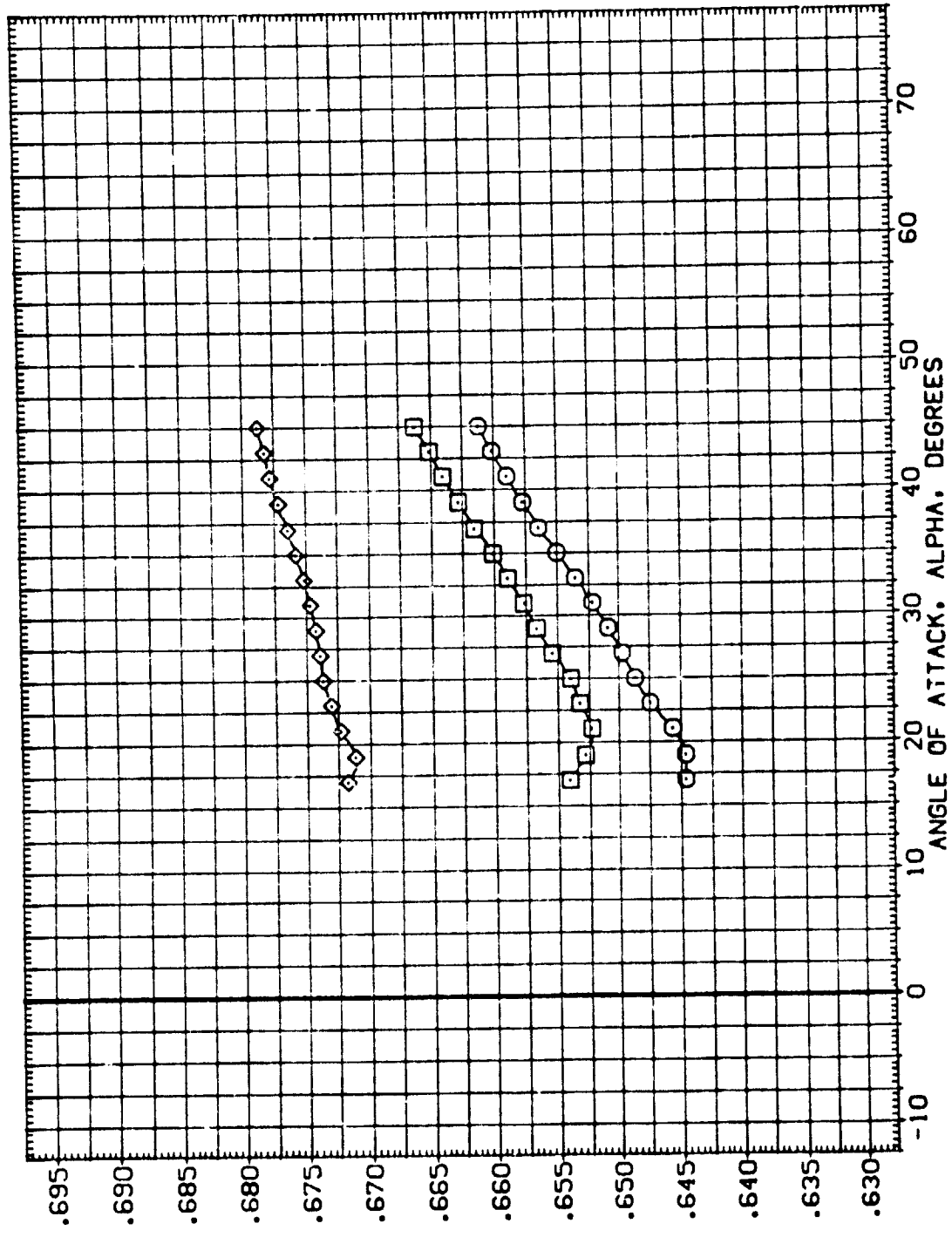


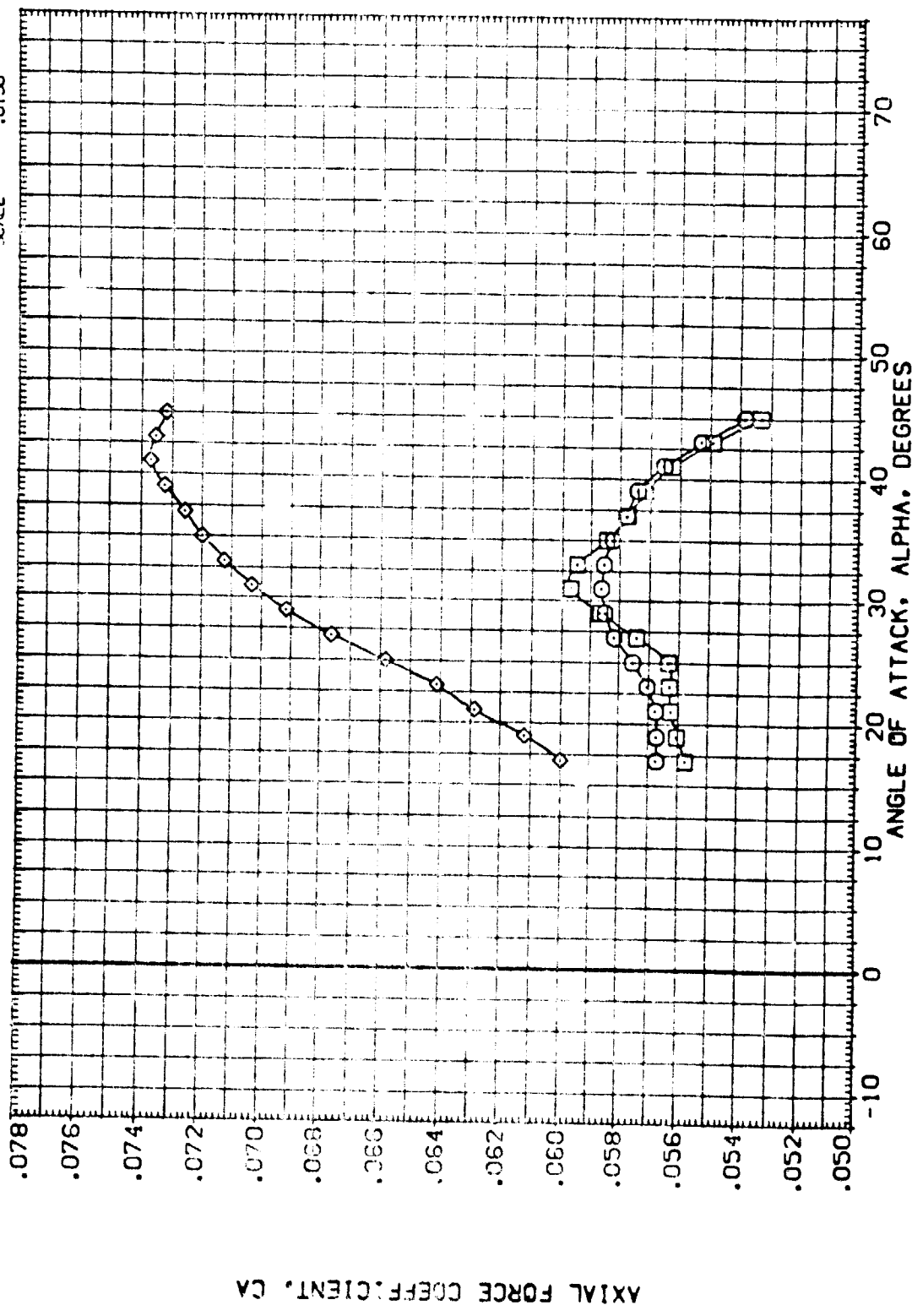
FIG. 15 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 3.53)

(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CTV012) □ 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 (CTV011) ◇ 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 (CTV013) ◇ 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116

ROFLAP RV/L
 -11.700 3.530
 .000 3.530
 16.300 3.530

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1076.6800 IN.X0
 YMRP .0000 IN.Y0
 ZMRP 375.0000 IN.Z0
 SCALE .0150



AXIAL FORCE COEFFICIENT, CA

FIG. 15 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 3.53)

(A)MACH = 8.00



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CTV012)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
(CTV001)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
(CTV013)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116

BOFLAP RVVL

-11.700	3.530
.000	3.530
16.300	3.530

REFERENCE INFORMATION

SREF	2630	.0000	50	FT.
LREF	474	.0100		IN.
BREF	936	.0800		IN.
XTRP	1076	.0800		IN.
YTRP		.0000		IN.
ZTRP	375	.0000		IN.
SCALE		.0150		

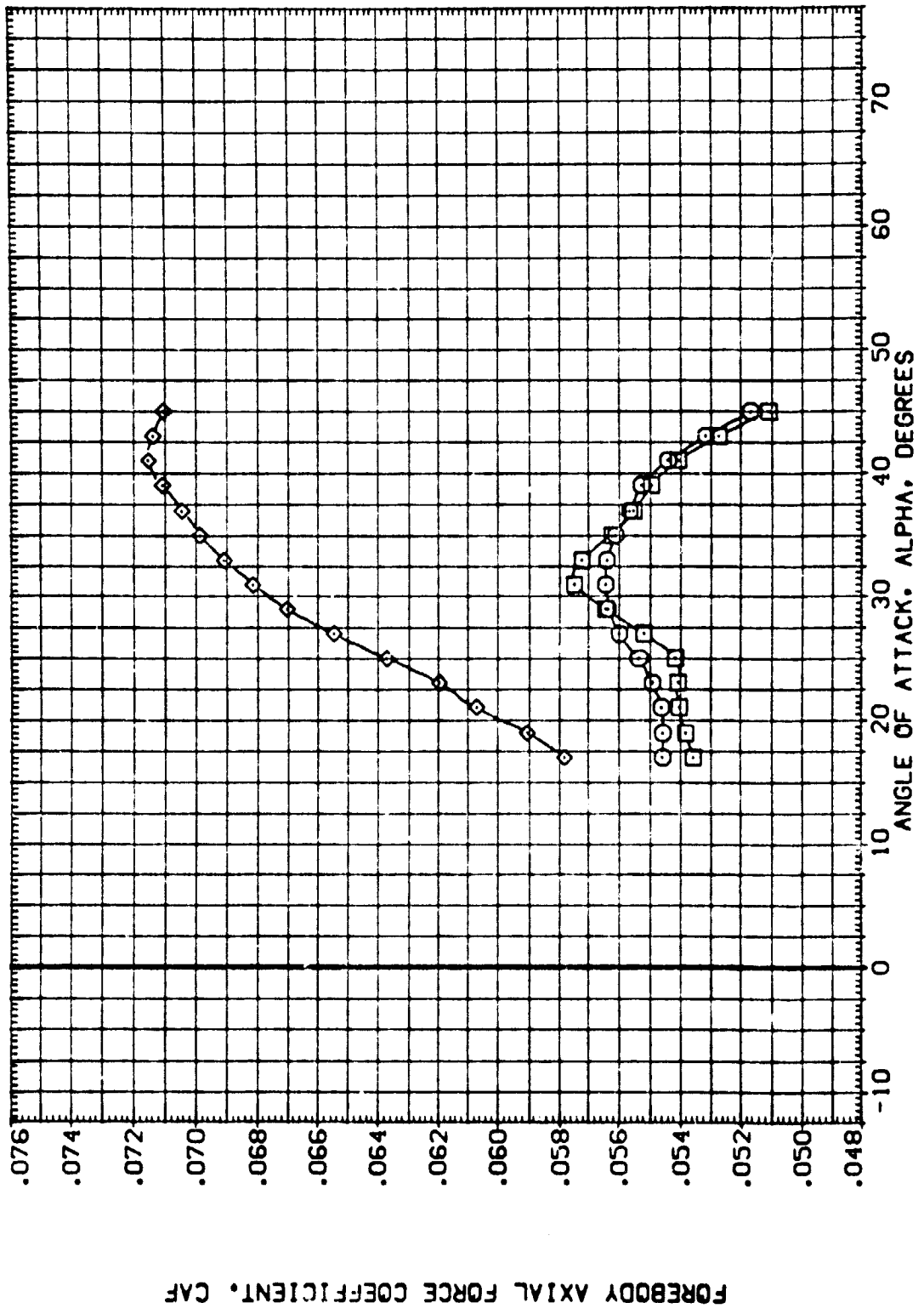


FIG. 15 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 3.53)

(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CTW012)	OA79 B26 C9 E43 F8 M16 N28 R5 V8 V116
(CTW011)	OA79 B26 C9 E43 F8 M16 N28 R5 V8 V116
(CTW013)	OA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

BDFLAP RVAL

-11.700	3.530
16.300	3.530

REFERENCE INFORMATION

SREF	2690.0000	50. FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1076.6800	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

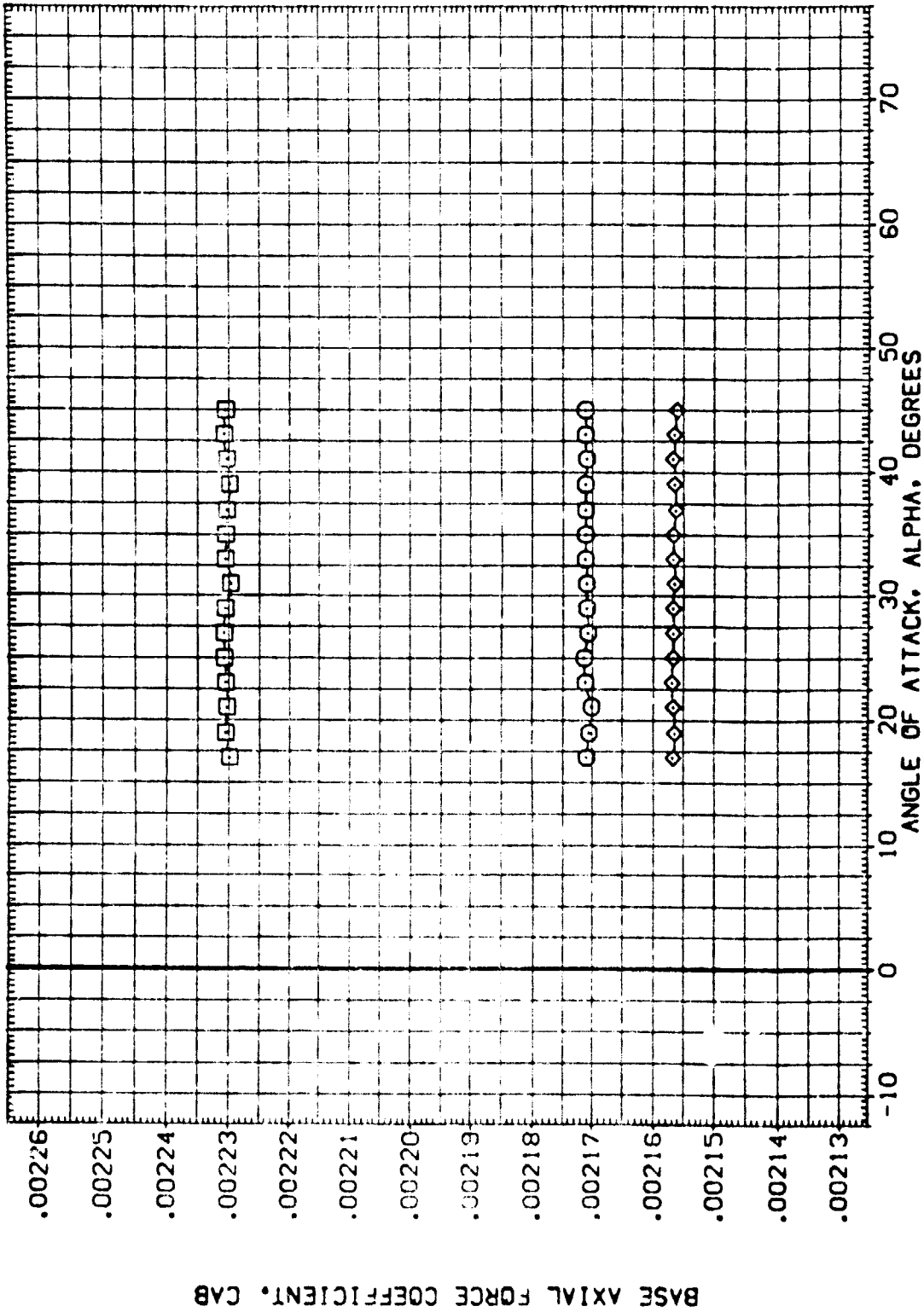


FIG. 15 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 3.53)

(A)MACH = 8.00

DATA SET SYMBOL: (C1V012), (C1V001), (C1V013)

CONFIGURATION DESCRIPTION: 0A79 B26 C9 E43 F8 M16 N28 P5 V6 V116, 0A79 B26 C9 E43 F8 M16 N28 P5 V8 V116, 0A79 B26 C9 E43 F8 M16 N28 P5 V8 V116

BDFLAP: -11.700, .000, 16.300

RNVL: 3.530, 3.530, 3.530

REFERENCE INFORMATION: SREF: 2690.0000 50.FT., LREF: 474.8100 IN., BREF: 936.6300 IN., XTRP: 1076.6800 IN., YTRP: .0000 IN., ZTRP: 375.0000 IN., SCALE: .0150

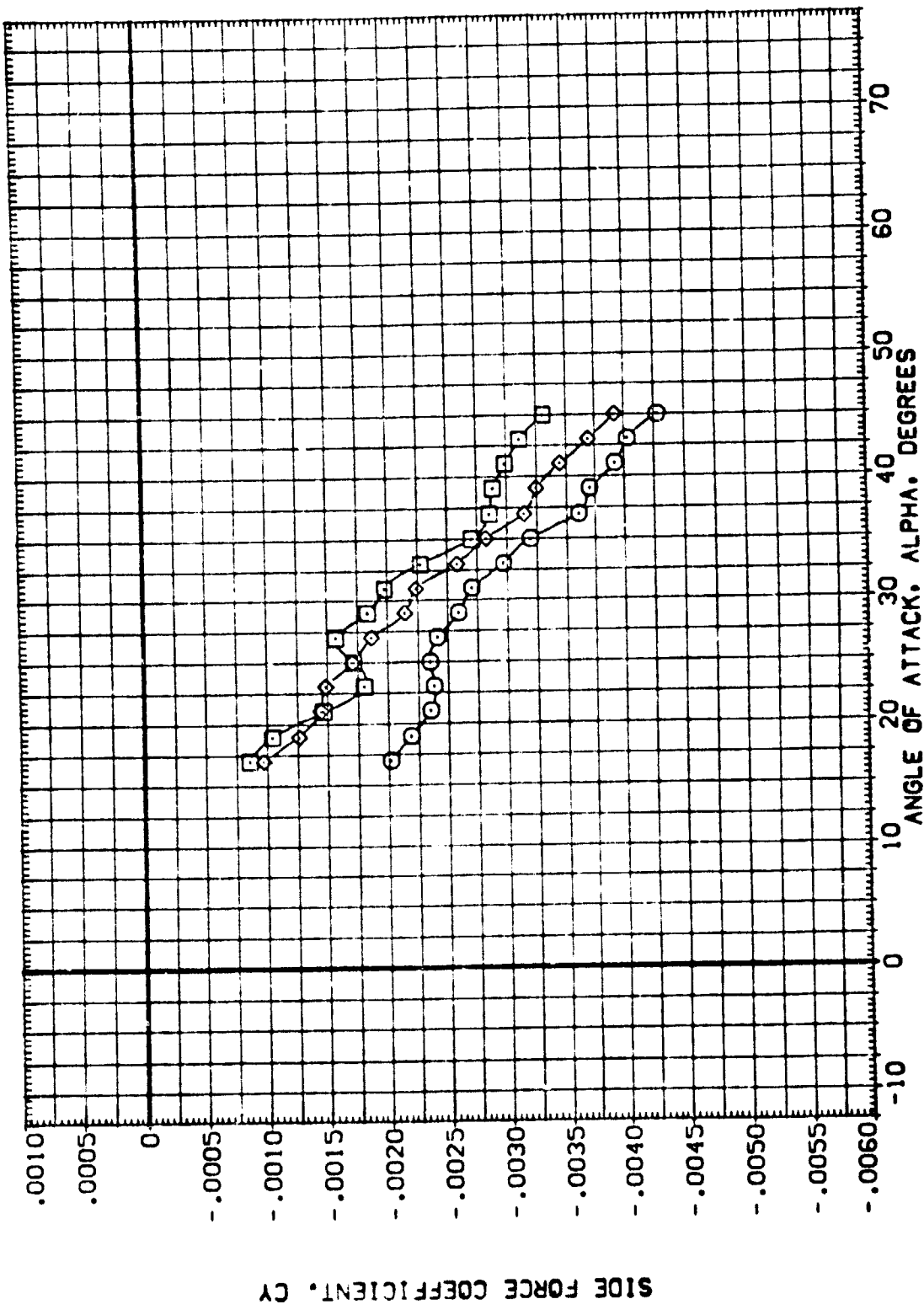


FIG. 15 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 3.53)

DATA SET SYMBOL CONFIGURATION DESCRIPTION

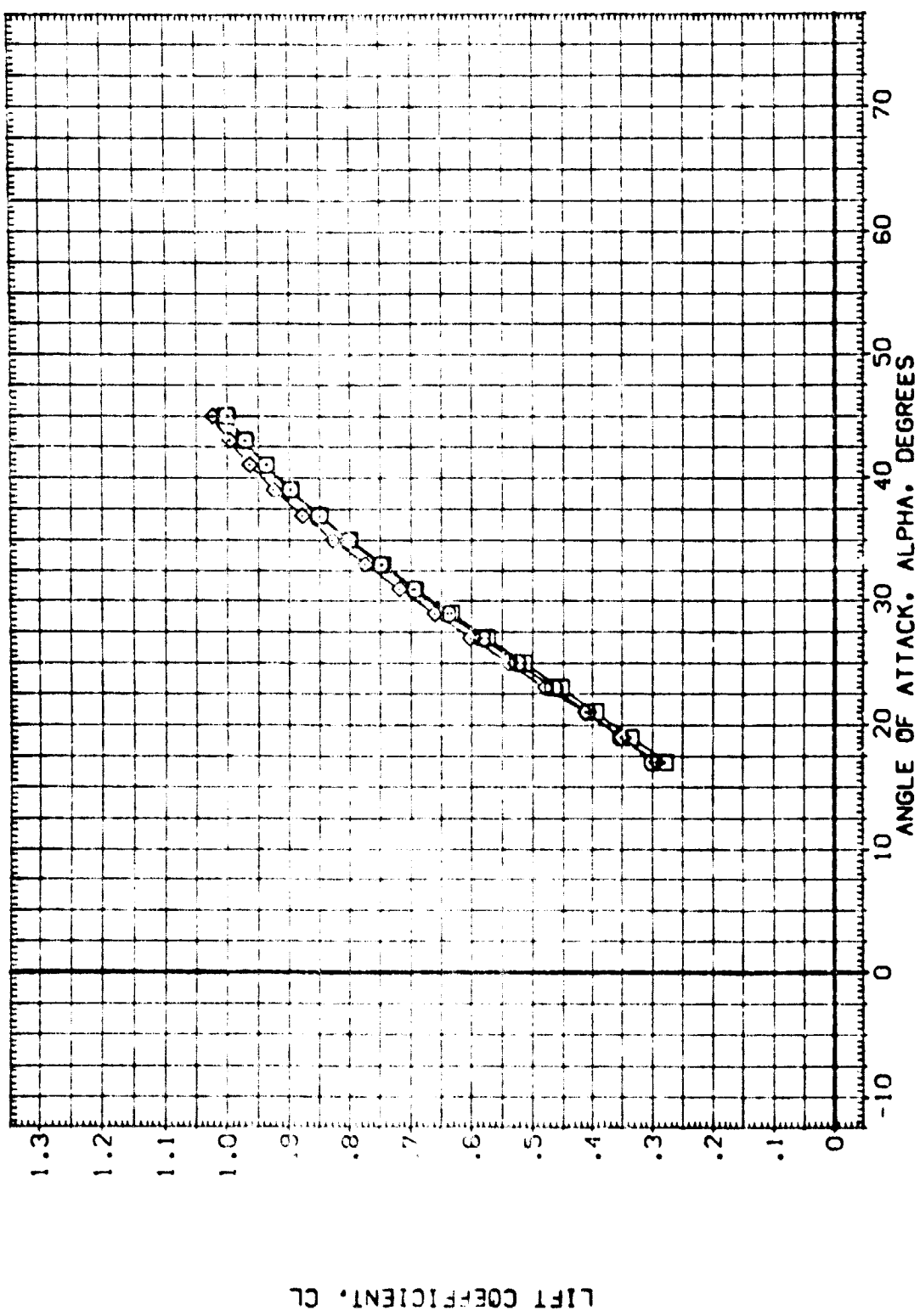
(ATW012)	QAT9 B26 C9 E43 F8 M16 N28 R5 V8 V116
(ATW011)	QAT9 B26 C9 E43 F8 M16 N28 R5 V8 V116
(ATW013)	QAT9 B26 C9 E43 F8 M16 N28 R5 V8 V116

BOFLAP RV/L

-11.700	3.530
.000	3.530
16.300	3.530

REFERENCE INFORMATION

SREF	2690.0300	50. FT.
LREF	474.8100	IN.
DREF	936.6900	IN.
XMRP	1076.6900	IN. AD
YMRP	.0000	IN. FD
ZMRP	375.0000	IN. ZD
SCALE	.0150	



LIFT COEFFICIENT, CL

FIG. 15 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 3.53)

(A)MACH = 8.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(ATM012)	0A79 826 C9 E43 F8 M16 N28 RS V8 V116
(ATM001)	0A79 826 C9 E43 F8 M16 N28 RS V8 V116
(ATM013)	0A79 826 C9 E43 F8 M16 N28 RS V8 V116

BOFLAP RNL

-11.700	3.530
.000	3.530
16.300	3.530

REFERENCE INFORMATION

SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6300	IN.
XTRP	1076.6300	IN.X3
YTRP	.0000	IN.Y3
ZTRP	375.0000	IN.Z3
SCALE	.0150	

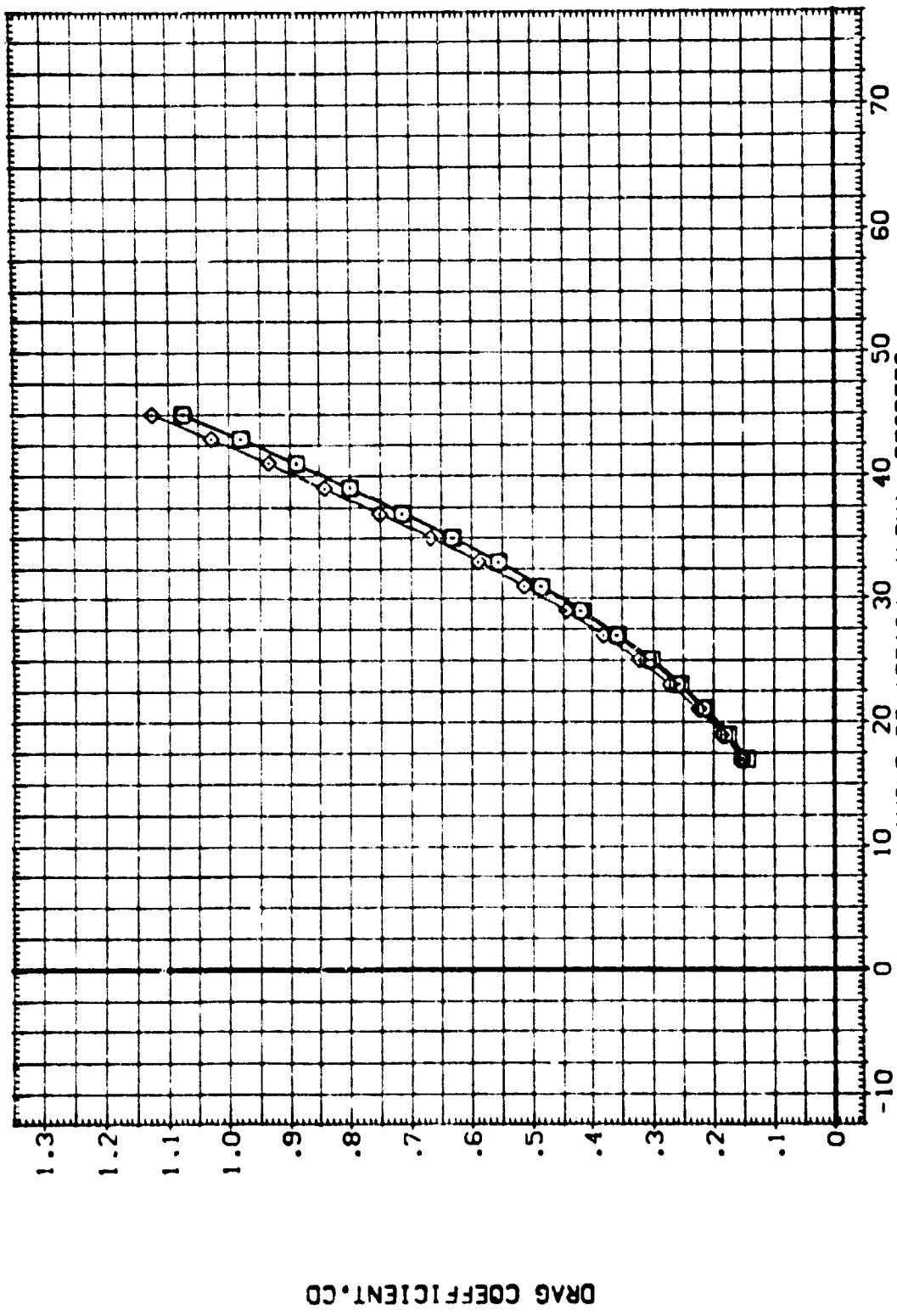


FIG. 15 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 3.53)

(A)MACH = 8.00

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1076.6800 IN.
 YMRP .0000 IN.
 ZMRP 375.0000 IN.
 SCALE .0150

BOFLAP RVAL
 -11.700 3.530
 .000 3.530
 16.300 3.530

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (ATW012) 0A79 B26 C9 E43 F8 H16 N28 R5 V8 V116
 (ATW001) 0A79 B26 C9 E43 F8 H16 N28 R5 V8 V116
 (ATW013) 0A79 B26 C9 E43 F8 H16 N28 R5 V8 V116

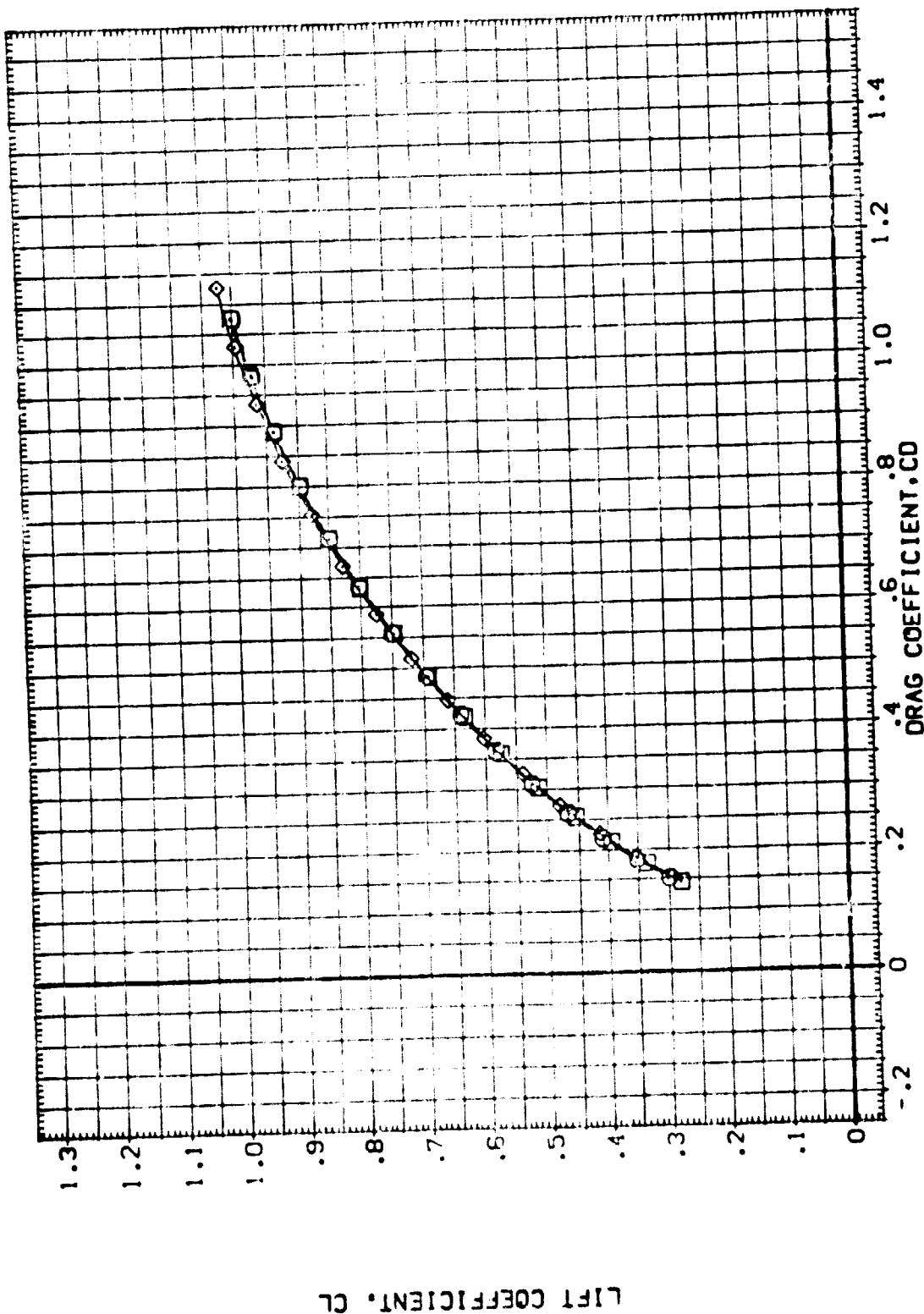


FIG. 15 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 3.53)

(A)MACH = 8.00



REFERENCE INFORMATION
 SPEC 2690.0000 50.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.X0
 XTRP 1076.6800 IN.Y0
 YTRP .0000 IN.Z0
 ZTRP 375.0000 IN.Z0
 SCALE .0150

EXFLAP RVAL
 -11.700 3.530
 16.300 3.530

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (A1W012) DA79 B26 C9 E43 F8 M16 N28 P5 V8 V116
 (A1W011) DA79 B26 C9 E43 F8 M16 N28 P5 V8 V116
 (A1W013) DA79 B26 C9 E43 F8 M16 N28 P5 V8 V116

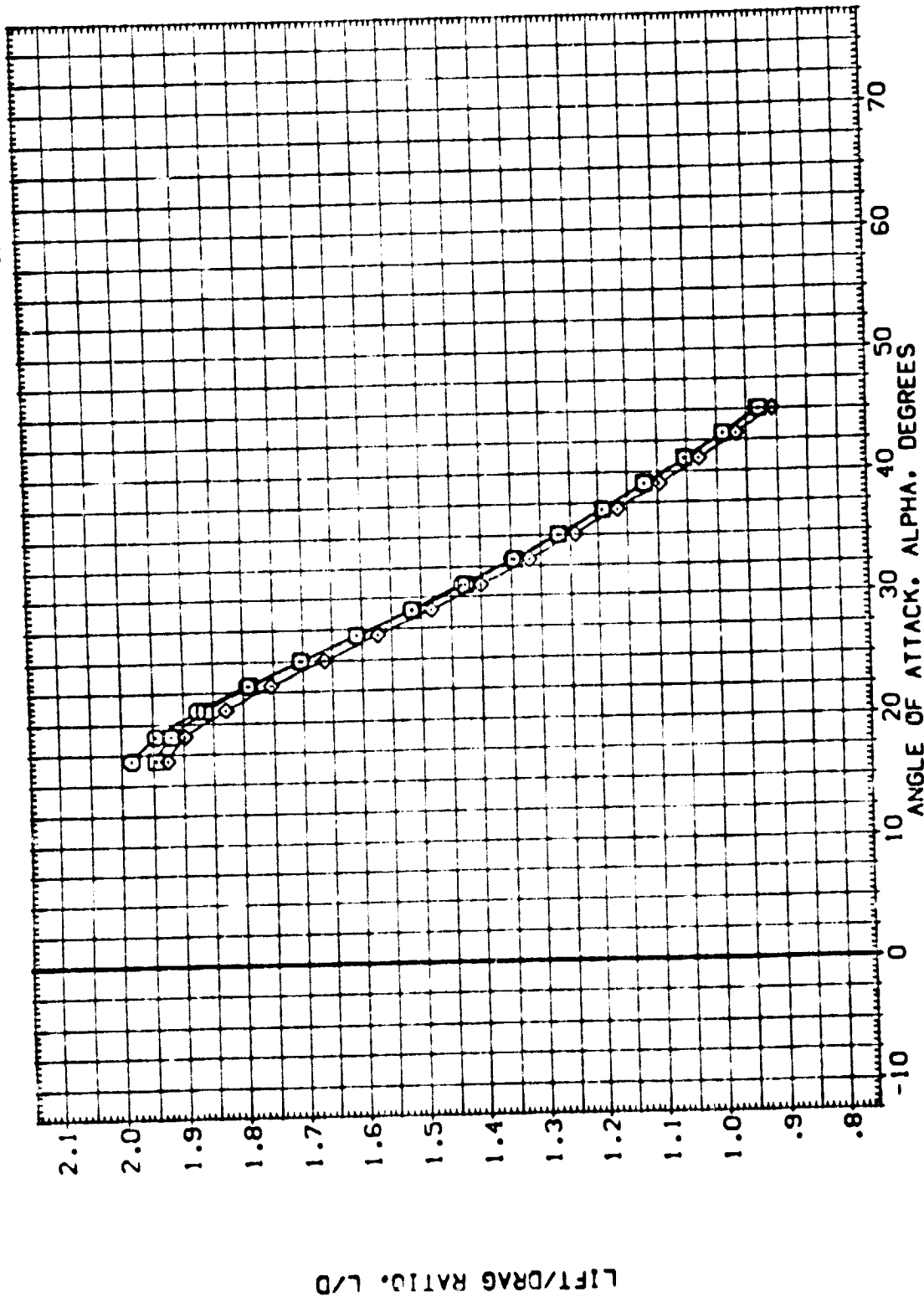


FIG. 15 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 3.53)

(A)MACH = 8.00

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW012)

ALPHA	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
17.000	HACH 2.000 BETA	.000 DATASET DLBDFP	REF 243.0000
18.000	SPDRK 55.000 RUDDER	.000 DTW012	REF 174.8100
21.000	RVL 3.530	.000 DTW013	REF 936.6800
23.000			REF 1076.6800
25.000			REF .0000
27.000			REF 375.0000
			SCALE .0150

INCREMENTAL NORMAL FORCE COEFFICIENT, DLTCN

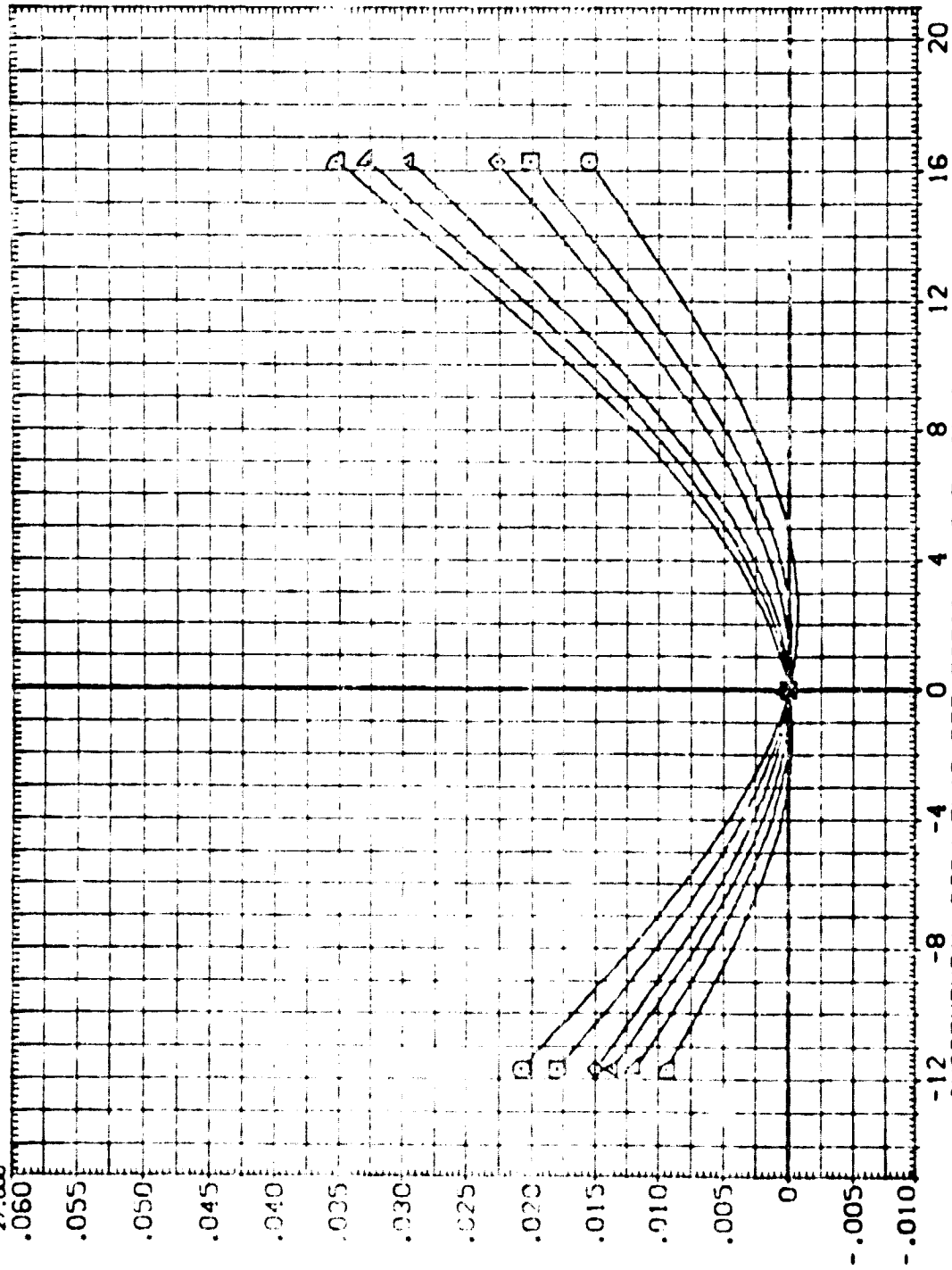


FIG. 16 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 3.53)



0A79 826 C9 E43 F8 M16 N28 R5 V8 W116 (OTW012)

SYMBOL
 ▽
 ◊
 ◻
 △
 ▽

ALPHA
 29.000
 31.000
 33.000
 35.000
 37.000
 39.000

MACH
 0.000
 55.000
 3.530

PARAMETRIC VALUES
 BETA
 RUDDER

DATA SOURCE
 DLBOFP
 DATASET
 OTW012
 OTW013

DLBOFP
 .000
 DATASET
 OTW001

REFERENCE INFORMATION
 SREF 2690.0000
 LREF 474.8100
 BRFP 936.6800
 XTRP 1076.6800
 YTRP .0000
 ZTRP 375.0000
 SCALE .0150

50. FT.
 IN.
 IN.
 IN.
 IN.

INCREMENTAL NORMAL FORCE FORCE COEFFICIENT, DLTCN

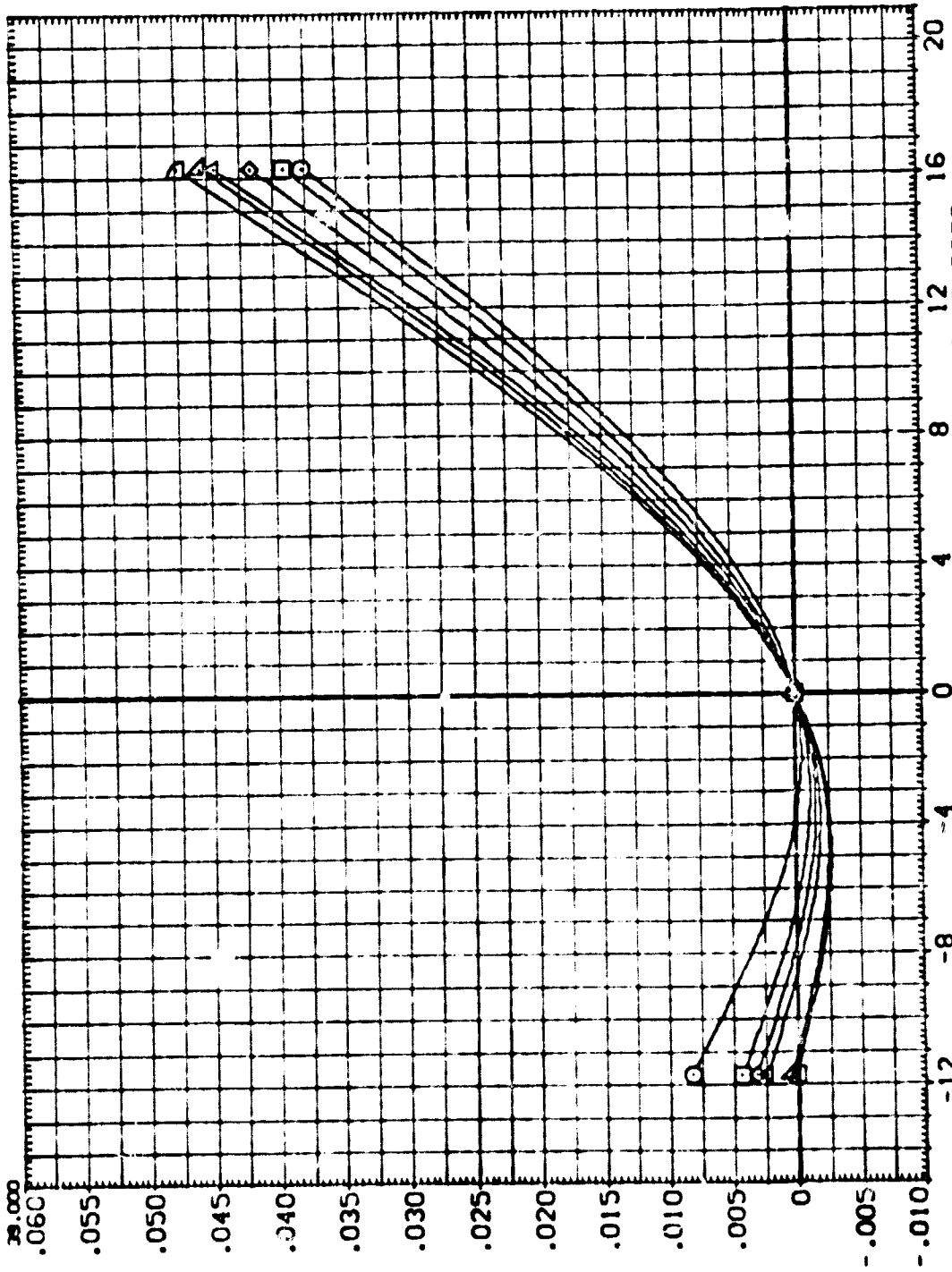


FIG. 16 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 3.53)

0A79 B26 C9 E43 F8 M16 N28 R5 V9 W116 (DTW012)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	DATA SET	DLBOFF	SREF	REFERENCE INFORMATION
○	41.000	8.000	BETA	.000	DTW012	.000	2650.0000	CG.FT.
□	43.000	55.000	RUDDER	.000	DTW013	.000	174.8100	IN.
◇	45.000	3.530		-11.700			936.6800	IN.X0
				16.300			1076.6800	IN.Y0
							375.0000	IN.Z0
							375.0150	SCALE

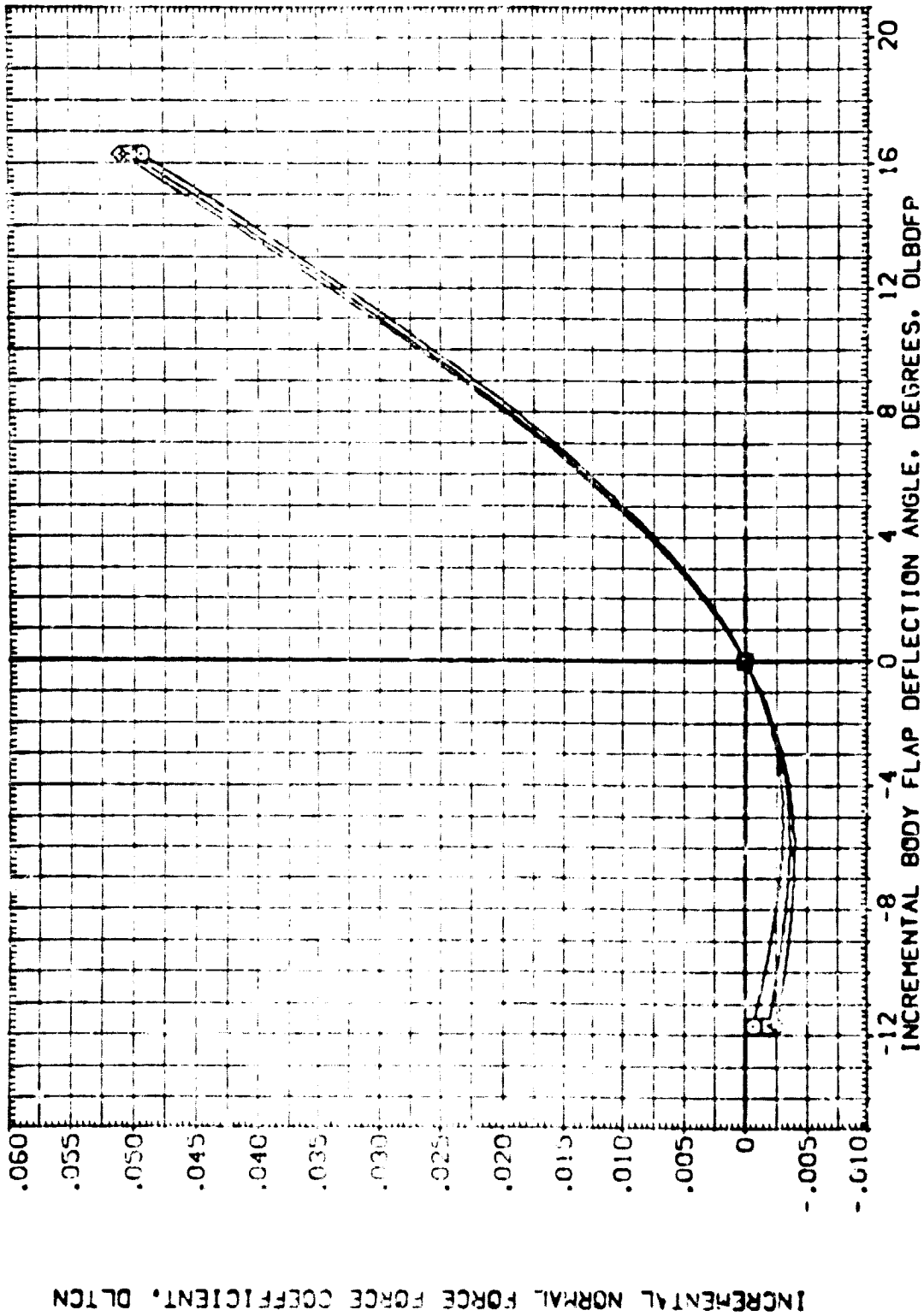


FIG. 16 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 3.53)

(DTW012)

0A79 826 C9 E43 F8 M16 N28 R5 V8 W116

REFERENCE INFORMATION
 SQ.FT. 2650.0000
 IN. 474.8100
 IN. 936.6800
 IN. 1075.6800
 IN. 375.0000
 IN. 375.0150

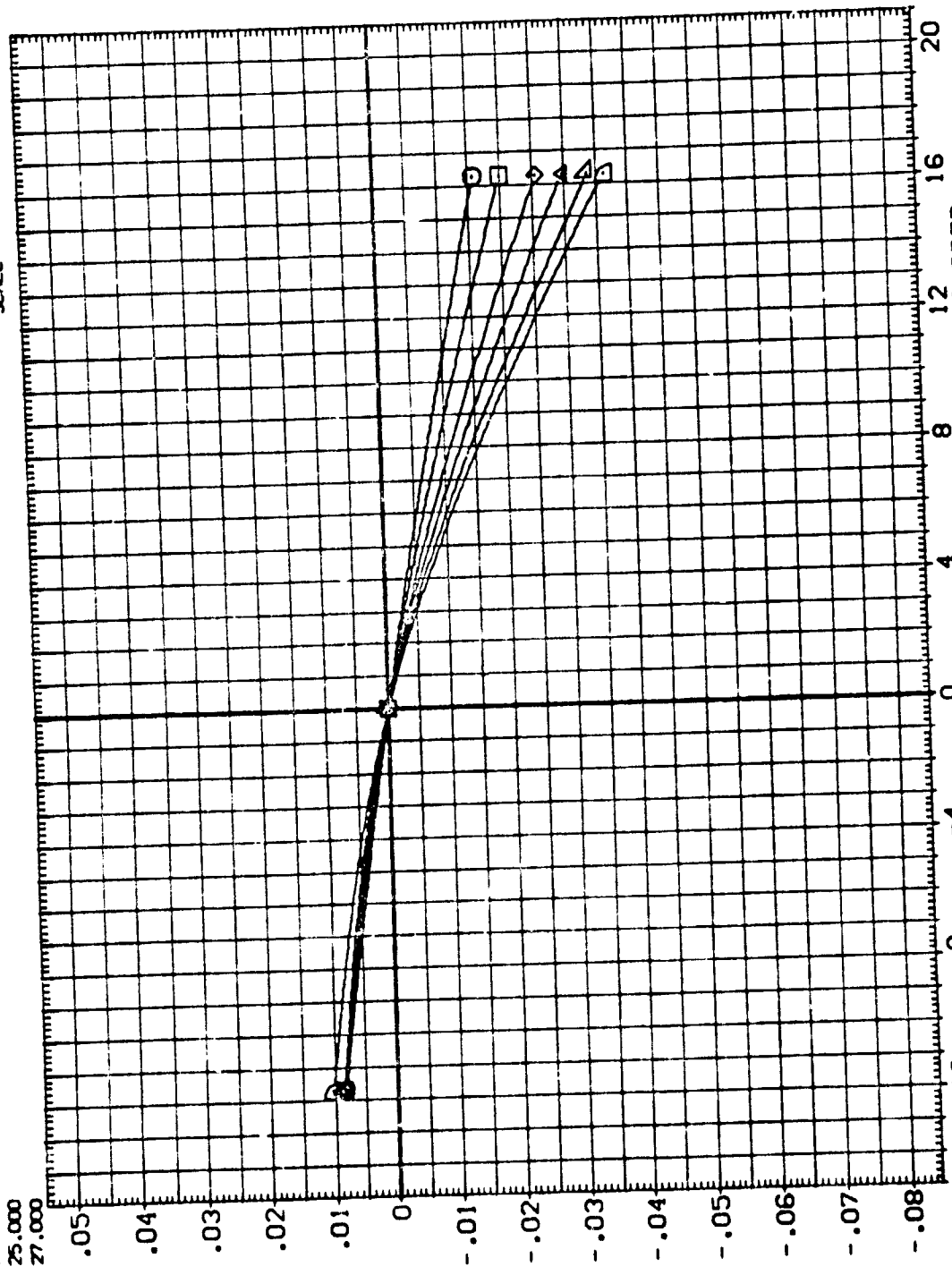
DATA SOURCE
 DLBOFF .000
 DATASET DTW001

PARAMETRIC VALUES
 MACH 8.000 BETA
 SPOBRK 55.000 RUDDER
 RVVL 3.530

ALPH. 17.000
 19.000
 21.000
 23.000
 25.000
 27.000

SYMBOL
 ○
 ◇
 △
 ▽
 ◊
 □

INCREMENTAL PITCHING MOMENT COEFFICIENT (FWD. C.G.) DLTCMF



INCREMENTAL BODY FLAP DEFLECTION ANGLE, DEGREES, DLBOFF
 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 3.53)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW012)

SYMBOL
 ▽
 ◇
 ◊
 □

ALPHA
 29.000
 31.000
 33.000
 35.000
 37.000
 39.000

MACH
 3.530

SPDRBK
 RVL

PARAMETRIC VALUES
 0.000 BETA
 55.000 RUDDER

.000 DATASET
 .000 DTW012
 .000 DTW013

DATA SOURCE
 DLBDFP
 -11.700
 16.300

DATASET
 DTW001

DLBDFP
 .000

SREF
 LREF
 BRREF
 XPRP
 YPRP
 ZPRP
 SCALE

2630.000
 474.8100
 936.6600
 1076.6600
 0.000
 375.0000
 .0150

REFERENCE INFORMATION
 SQ.FT.
 IN.
 IN.
 IN.
 IN.
 IN.

INCREMENTAL PITCHING MOMENT COEFFICIENT (FWD. C.G.) DLTCMF

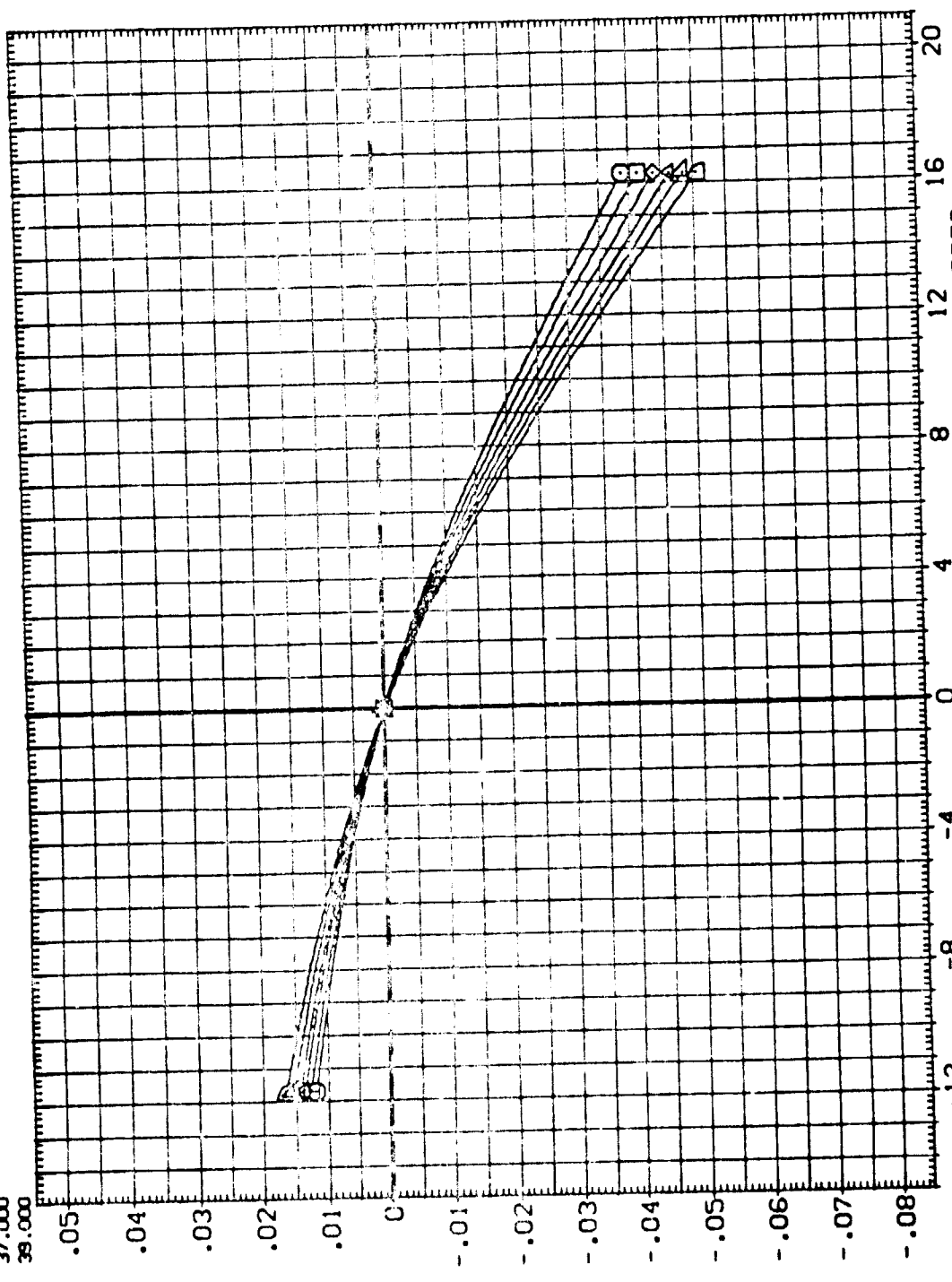


FIG. 16 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 3.53)

(DTW012)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116

SYMBOL
○ □ ◇

ALPHA
41.000
43.000
45.000

MACH
8.000
55.000
3.500

DATA SOURCE
DLBOFP
DTW012
DTW013

DLBOFP
DTW01
SCALE
.0150

REFERENCE INFORMATION
SO.FT.
IN.
IN.X0
IN.Y0
IN.Z0

SREF
LREF
GREF
XTRP
YTRP
ZTRP

2690.0000
474.8100
936.6800
1076.6800
.0000
375.0000

INCREMENTAL PITCHING MOMENT COEFFICIENT (FWD. C.G.) DLTCMF

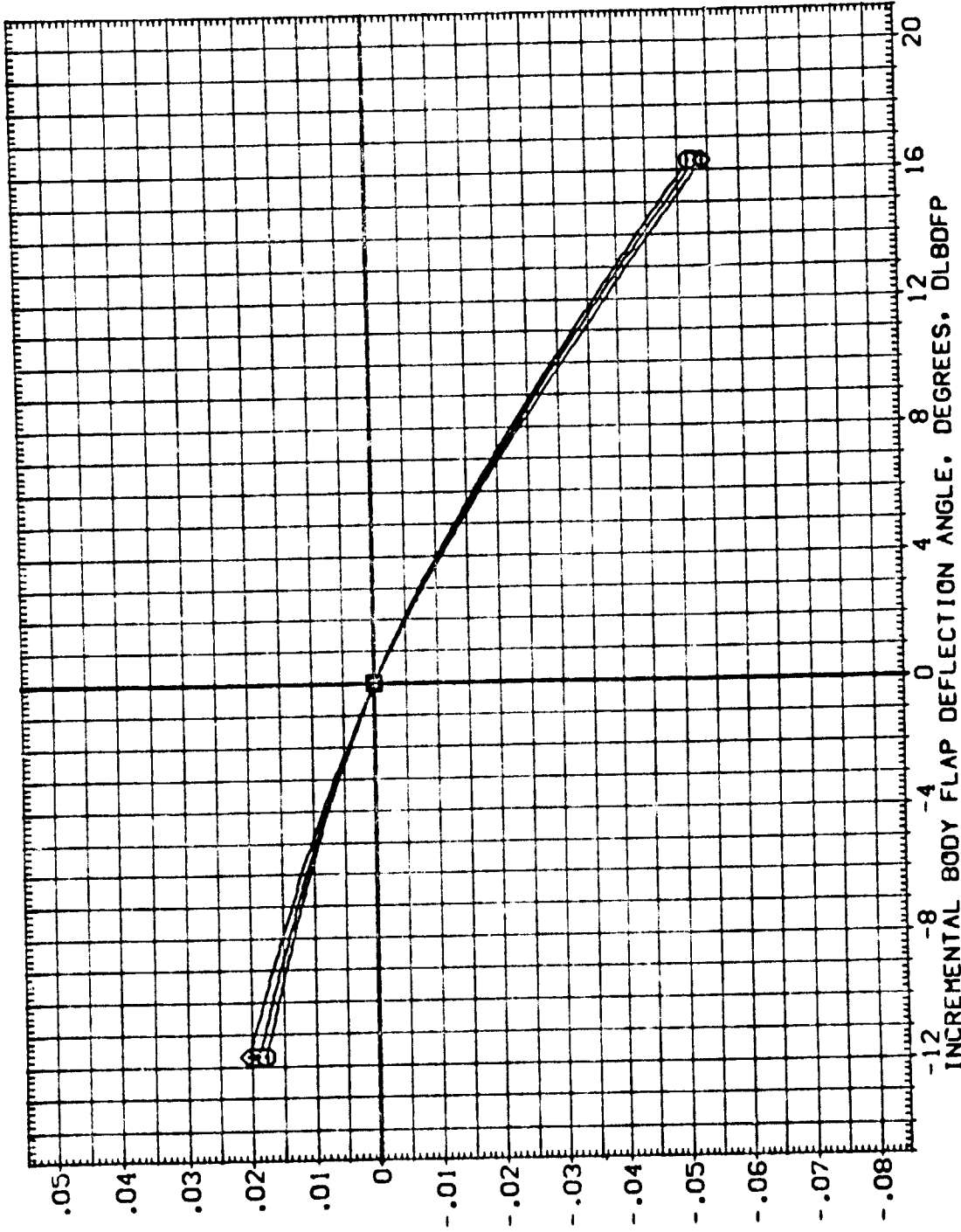


FIG. 16 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 3.53)

0A79 826 C9 E43 F8 M16 N28 R5 V8 W116 (DTW012)

ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
17.000	8.000	BETA	DLBOFF	2690.0000
19.000	55.000	RUDDER	DTW012	474.8100
21.000	3.530		DTW013	936.6800
23.000				1076.6800
25.000				.0000
27.000				375.0000
				SCALE
				.0150

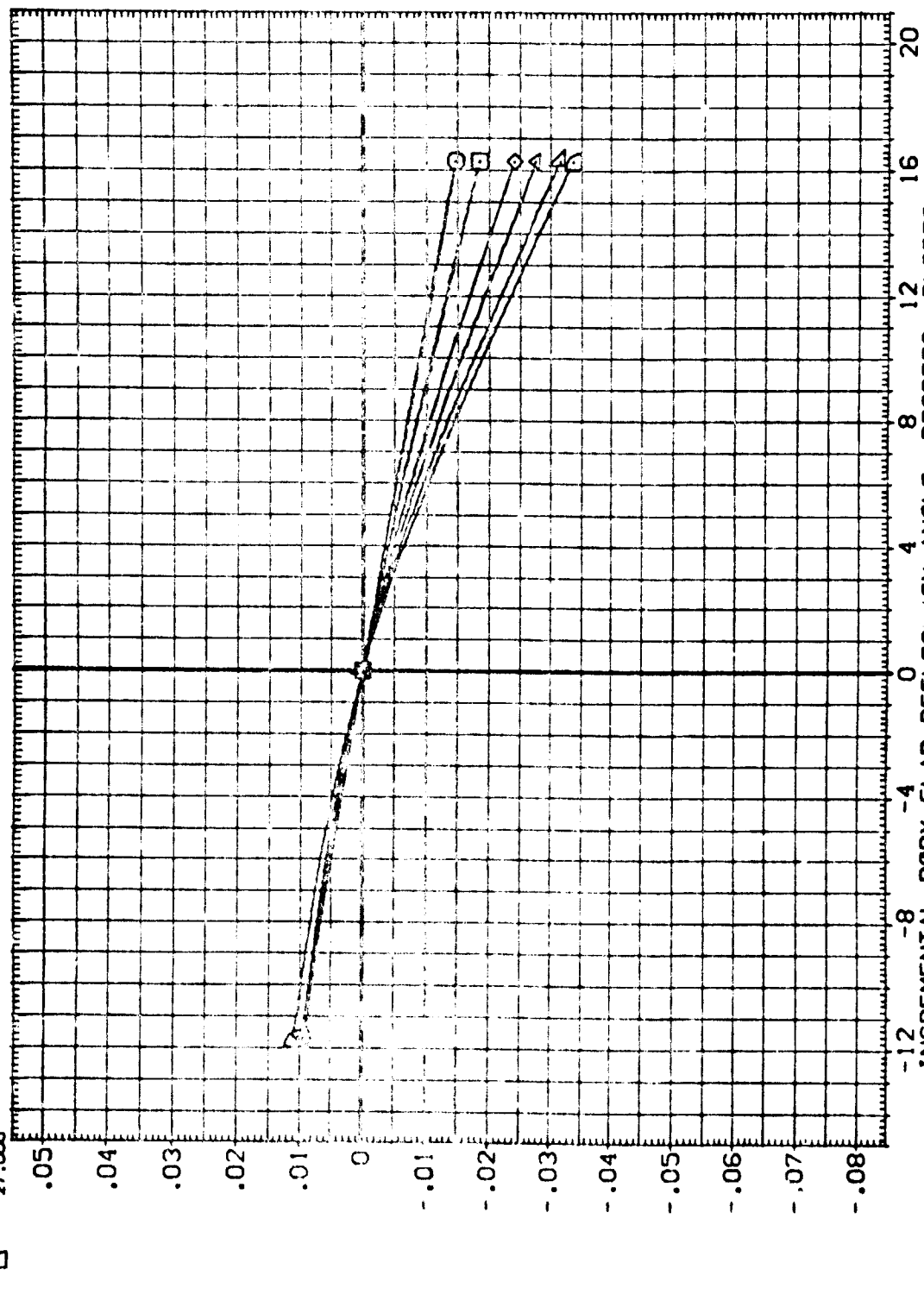


FIG. 16 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 3.53)

INCREMENTAL PITCHING MOMENT COEFFICIENT (Cp, C.G.) DLTCMA



0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW012)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	MACH	.000	.000	SREF	2690.0000
29.000	8.000	DTW012	DTW001	LREF	474.8100
31.000	55.000	DTW013		BREF	936.6800
33.000	3.530			XMRP	1076.6800
35.000				YMRP	.0000
37.000				ZMRP	375.0000
39.000				SCALE	.0150
	BETA				SO.FT.
	RUDDER				IN.
					IN.X0
					IN.Y0
					IN.Z0

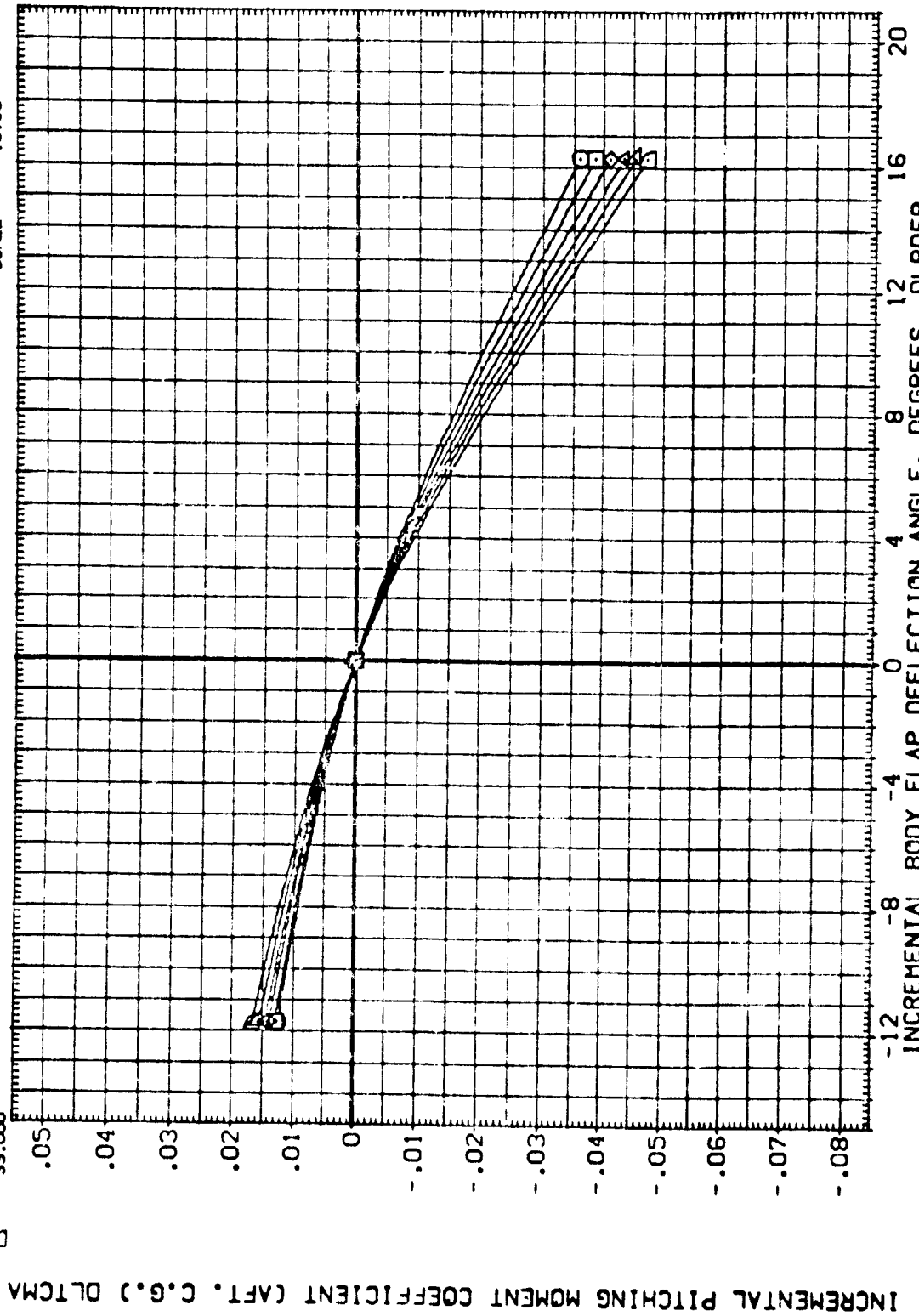


FIG. 16 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 3.53)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW012)

SYMBOL
 ○
 □
 ◇

PARAMETRIC VALUES
 MACH 8.000
 BETA 55.000
 RUDDER 3.530

DATA SOURCE
 DL8DFP
 DTW012
 DTW013

DATASET
 DTW001

DL8DFP
 .000

REFERENCE INFORMATION
 SQ.FT. 2690.0000
 IN. 474.8100
 IN. 536.5800
 IN. 1076.8800
 IN. 10
 IN. 10
 IN. 20
 IN. 20
 SCALE .0150

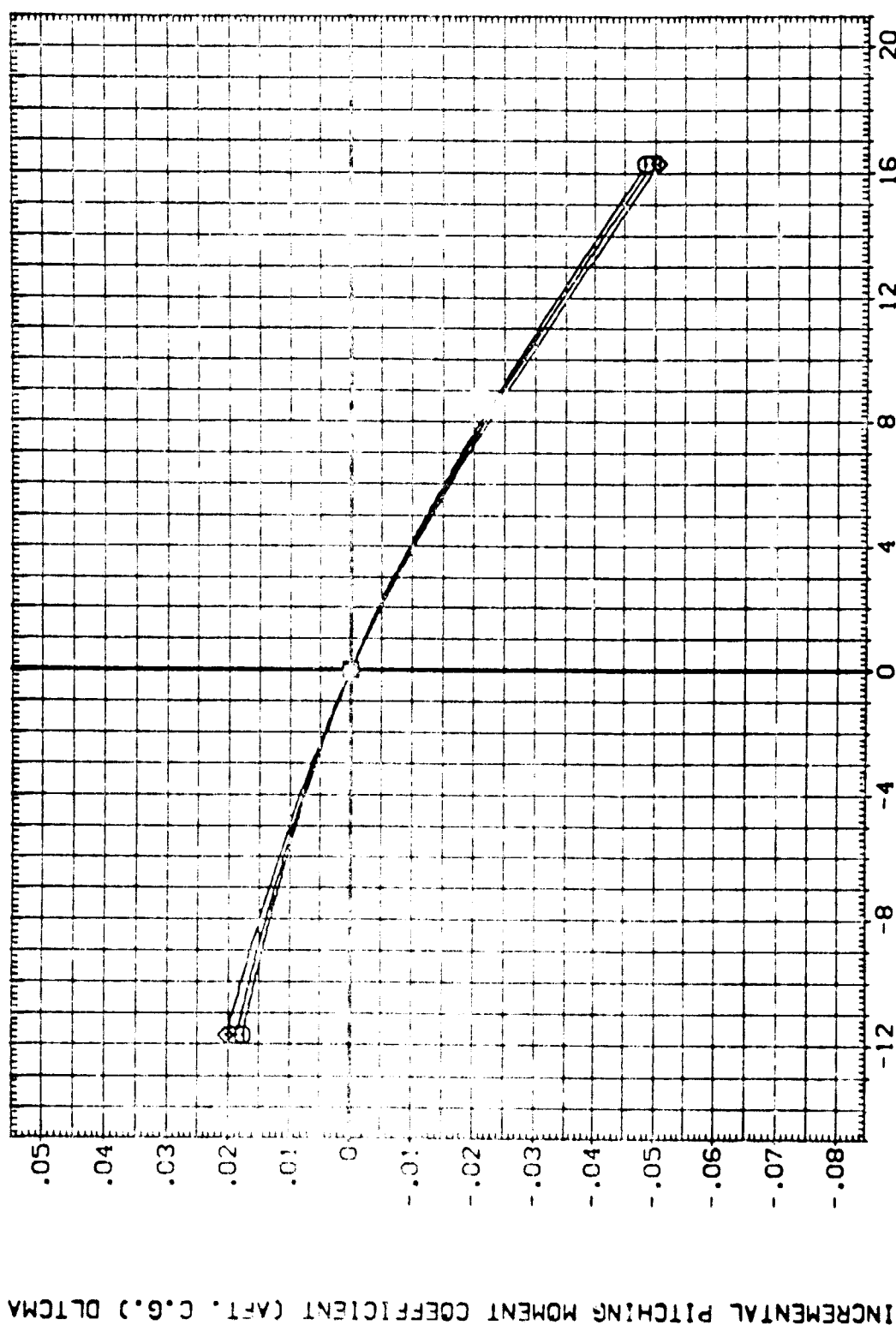
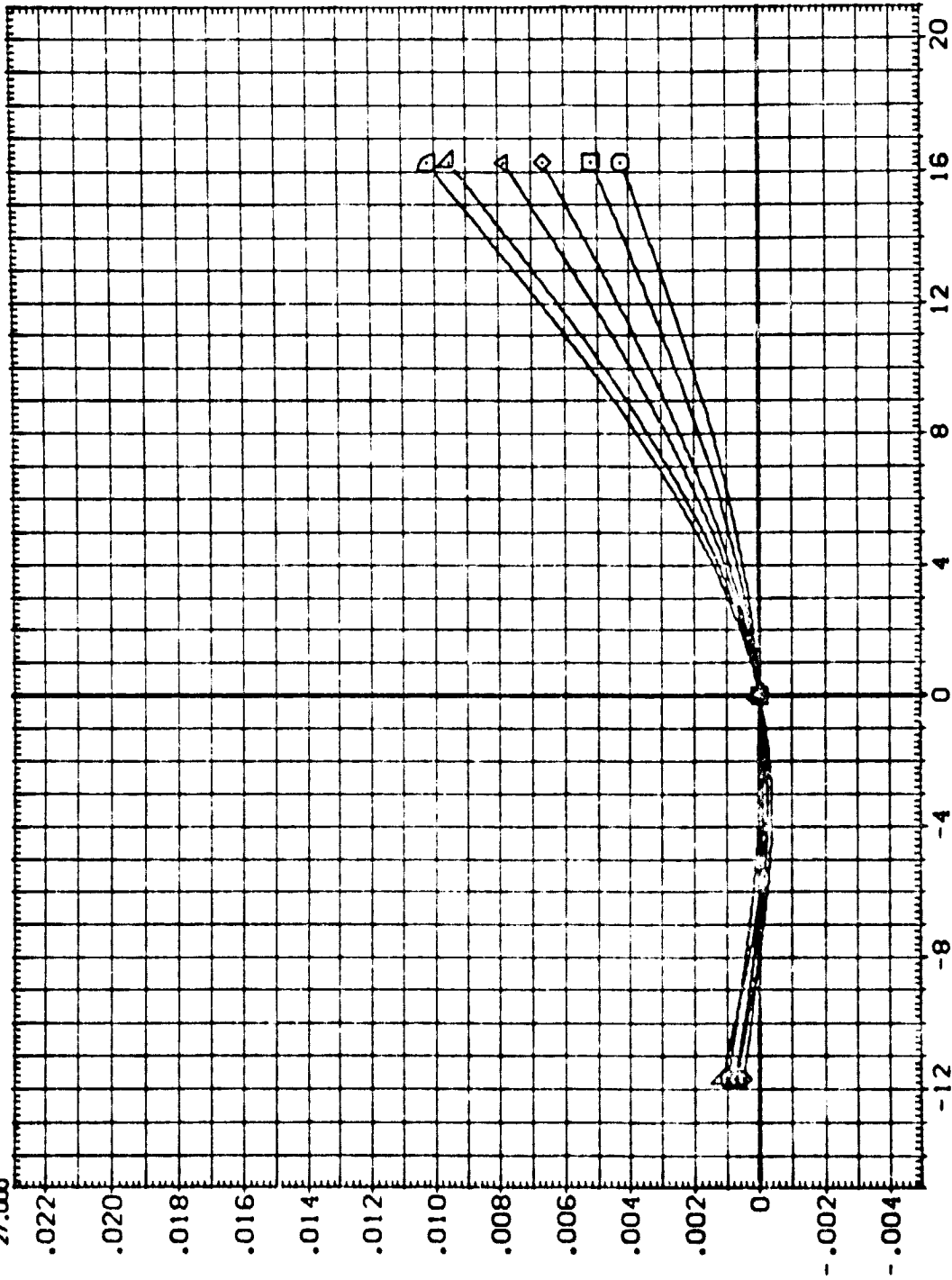


FIG. 16 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 3.53)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW012)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	MACH	.000	DLBDFP	SREF	SQ.FT.
17.000	8.000	.000	DTW012	LREF	IN.
19.000	55.000	.000	DTW013	BREF	IN.
21.000	3.530	-11.700		XTRP	IN.X0
23.000		16.300		YTRP	IN.Y0
25.000				ZTRP	IN.Z0
27.000				SCALE	



INCREMENTAL AXIAL FORCE COEFFICIENT, DLTCA

INCREMENTAL BODY FLAP DEFLECTION ANGLE, DEGREES, DLBDFP
 FIG. 16 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 3.53)

(DTW012)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116

SYMBOL
○
□
◇
△
▽
◇

ALPHA
29.000
31.000
33.000
35.000
37.000
39.000

MACH
SPOBRK
RVL

8.000
55.000
3.530

PARAMETRIC VALUES

BETA
RUDDER

.000
DTW012
DTW013

DATA SOURCE
DLBOFF

-11.700
16.300

DATASET
DTW001

DLBOFF
.000

REFERENCE INFORMATION
SREF 2690.0000
LREF 474.8100
BREF 936.6800
XTRP 1076.0000
YTRP .0000
ZTRP 375.0000
SCALE .0150

SO.FT.
IN.
IN.
IN.
IN.
IN.

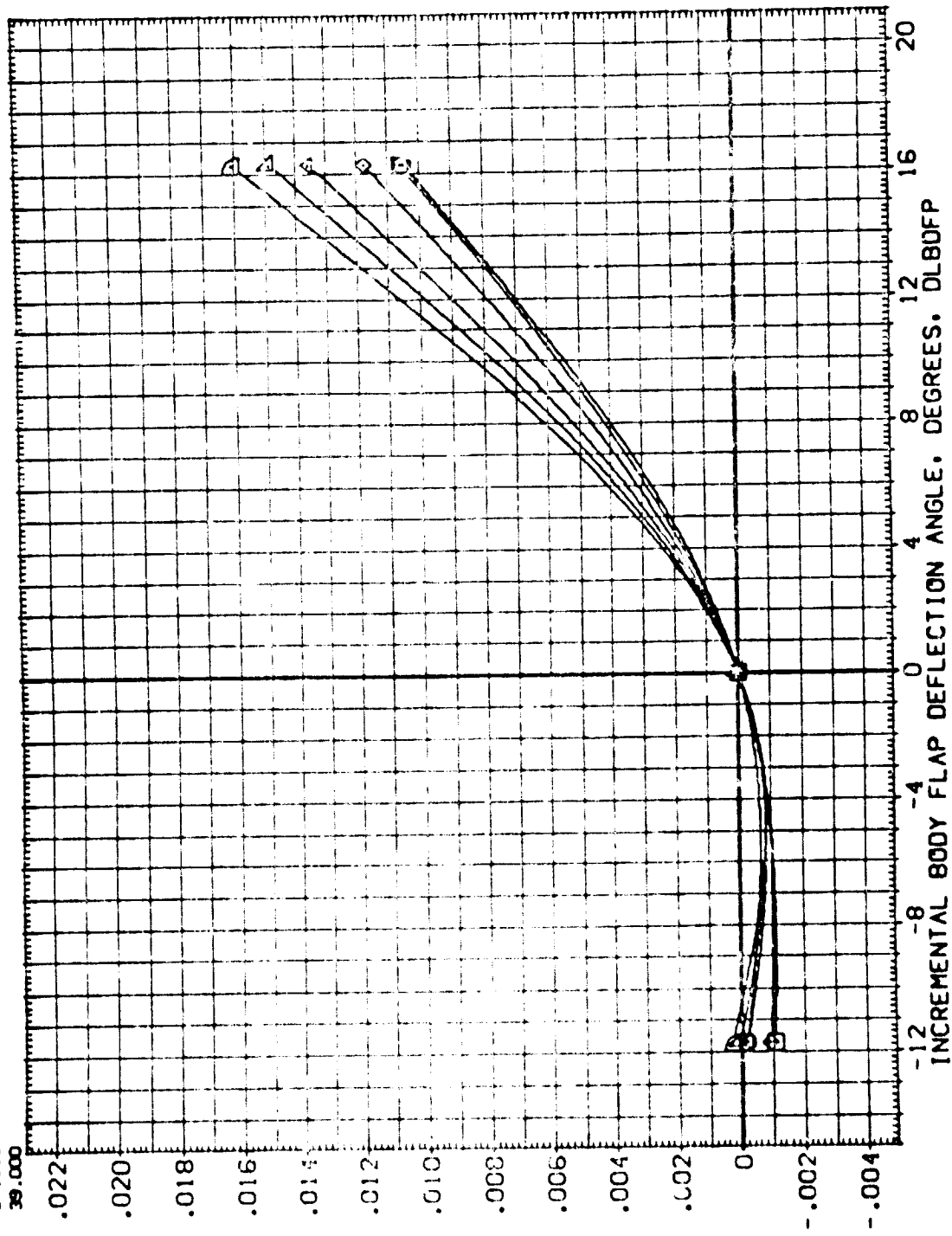


FIG. 16 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 3.53)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW012)

SYMBOL
 ○
 □
 ◇

ALPHA
 41.000
 43.000
 45.000

MACH
 9.000
 55.000
 3.530

PARAMETRIC VALUES
 BETA
 RUDDER

.000
 .000

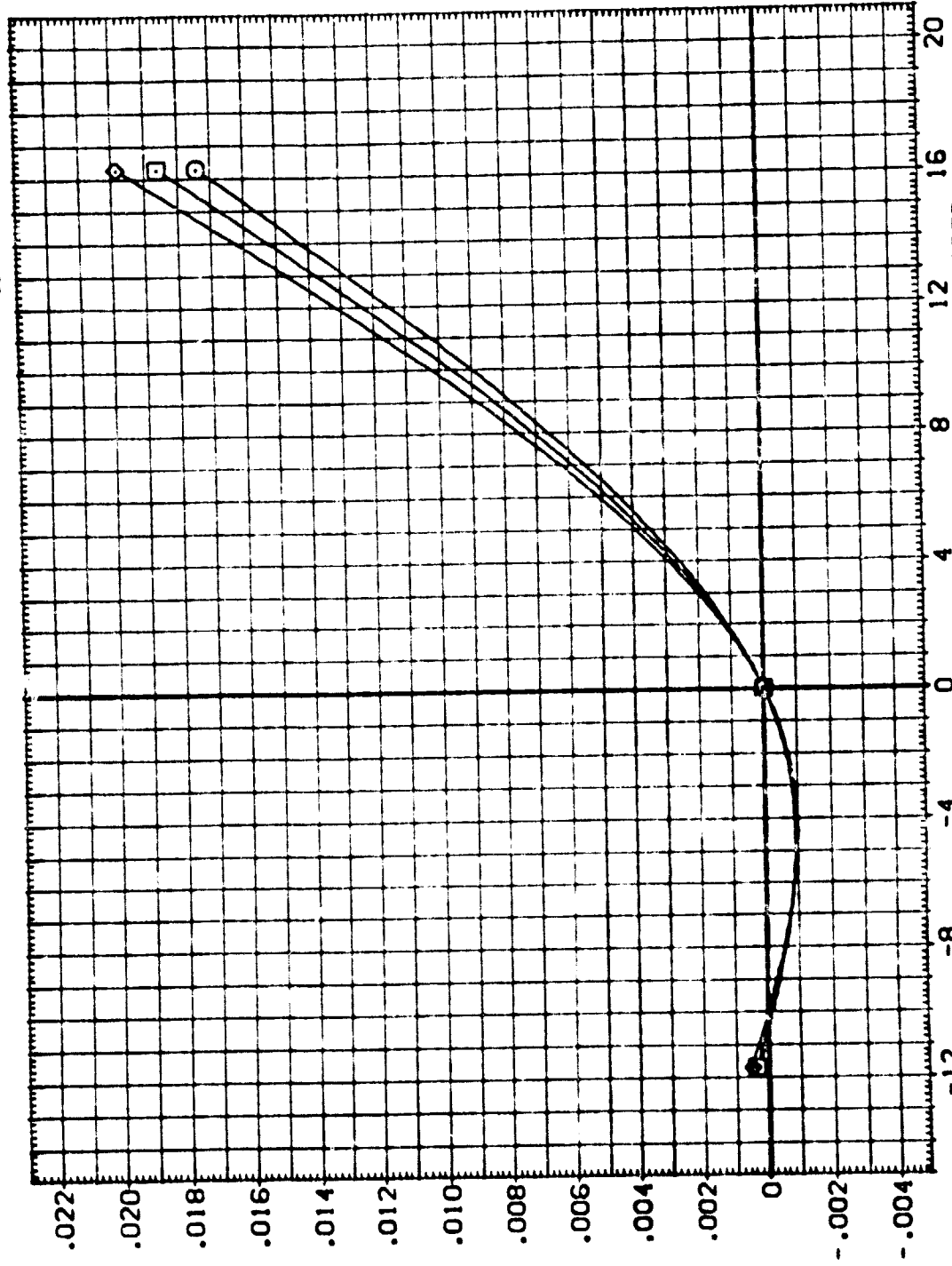
DATA SOURCE
 DLBOFP
 -11.700
 16.300

DATASET
 DTW012
 DTW013

DLBOFP
 .000

REFERENCE INFORMATION
 SQ.FT.
 IN.
 IN.XD
 IN.YD
 IN.ZD

2690.0000
 474.8100
 936.6800
 1076.0000
 375.0000
 .0150



INCREMENTAL AXIAL FORCE COEFFICIENT, DLTA

INCREMENTAL BODY FLAP DEFLECTION ANGLE, DEGREES, DLBOFP

FIG. 16 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER = 3.53)

(DTW012)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116

SYMBOL
□
◇
△
○

ALPHA
17.000
19.000
21.000
23.000
25.000
27.000

MACH
SPDRK
RNVL
8.000
55.000
3.530

PARAMETRIC VALUES
BETA
RUDDER
0.000
55.000
3.530

.000
.000
DATASET
DTW012
DTW013

DATA SOURCE
DLBDFP
-11.700
16.300

DATASET
DTW001

DLBDFP
.000

REFERENCE INFORMATION
SQ.FT.
IN.
IN.XD
IN.YD
IN.ZD
2690.0000
474.8100
936.6300
1076.6800
375.0000
375.0000
SCALE
.0150

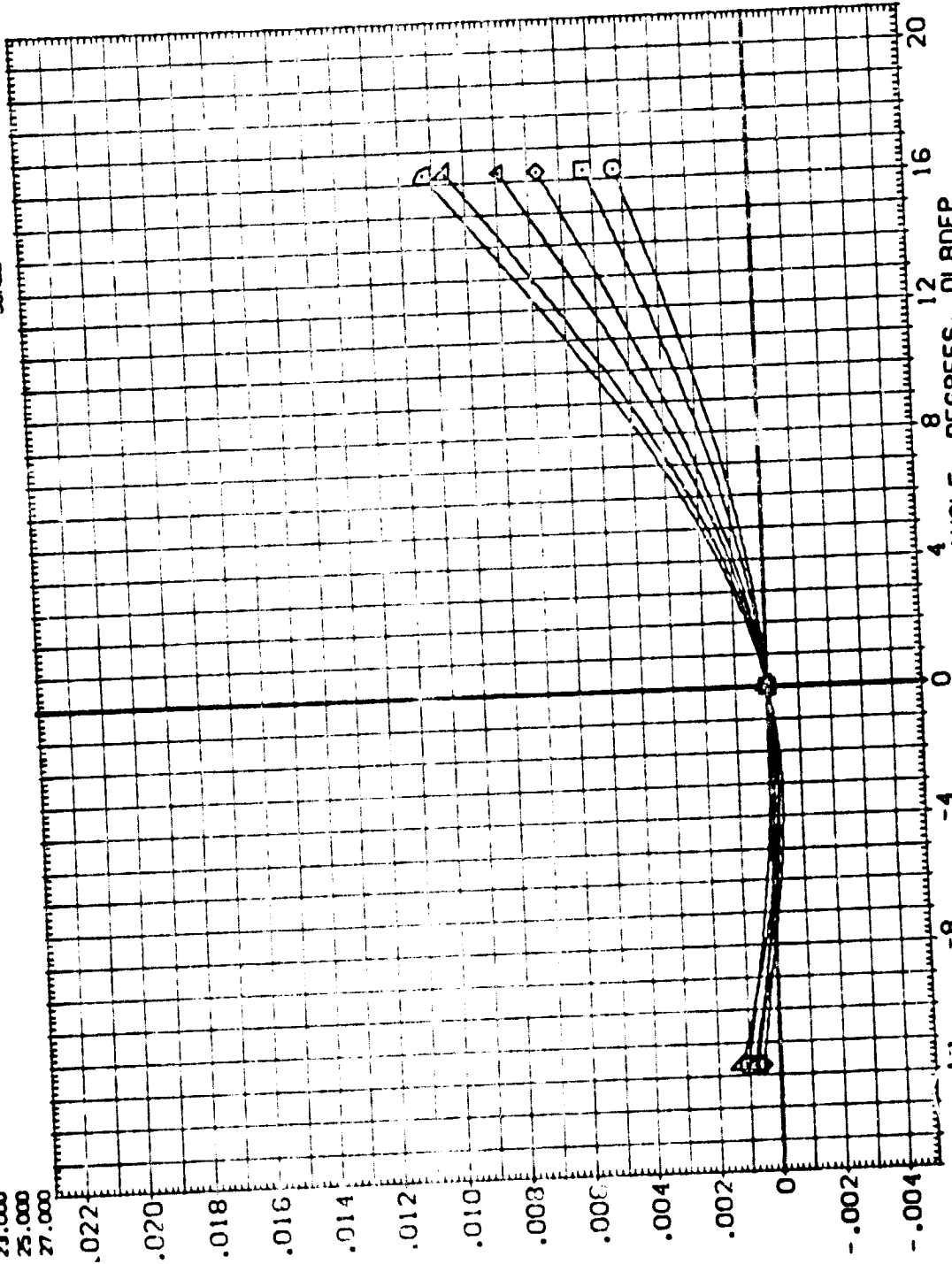


FIG. 16 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 3.53)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW012)

SYMBOL
 ○ □ △ ▲ ▽

ALPHA
 29.000
 31.000
 33.000
 35.000
 37.000
 39.000

MACH
 8.000
 55.000
 3.530

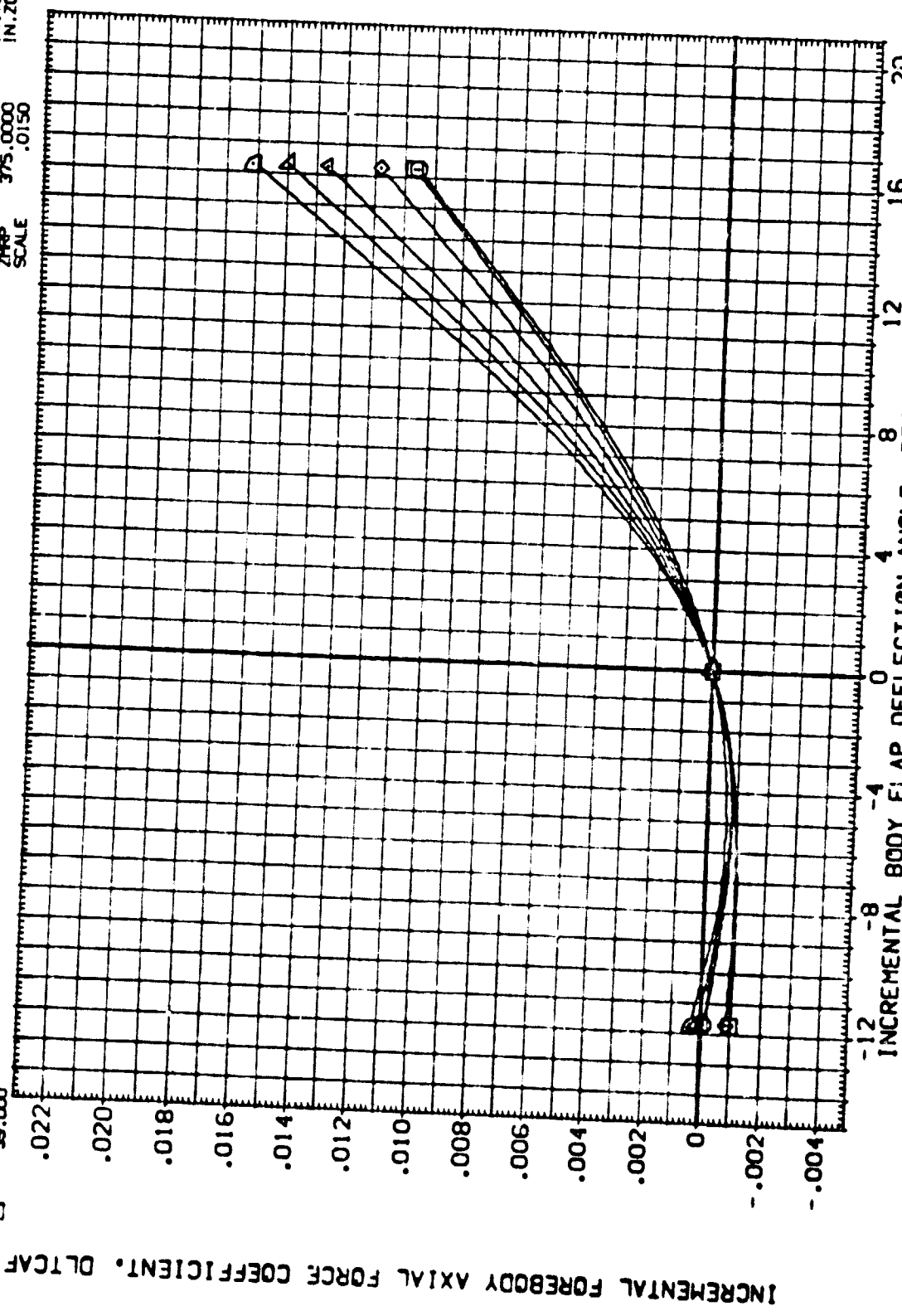
PARAMETRIC VALUES
 BETA
 RUDDER

.000 .000
 DATASET DTW012 DTW013
 DLBDFP -11.700 16.300

.000 .000
 DATASET DTW001
 DLBDFP

SREF SREF
 LREF LREF
 XREF XREF
 YREF YREF
 ZREF ZREF
 SCALE

REFERENCE INFORMATION
 SQ.FT.
 IN.
 IN.
 IN.
 IN.
 IN.



INCREMENTAL FOREBODY AXIAL FORCE COEFFICIENT, DLTCAF

FIG. 16 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 3.53)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW012)

ALPHA		MACH		PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION		
SYMBOL	VALUE	VALUE	VALUE	BETA	FLODER	DLBDFP	DATASET	DLBDFP	SREF	SO, FT.
□	41.000	SPOBRK	55.000	BETA	3.530	.000	DTW012	.000	474.8100	IN.
□	43.000	RV/L	3.530	FLODER	16.300	.000	DTW013	.000	936.6800	IN.
◇	45.000					-11.700			1076.6800	IN. V8
						16.300			375.0000	IN. V8
									SCALE	IN. Z0
										.0150

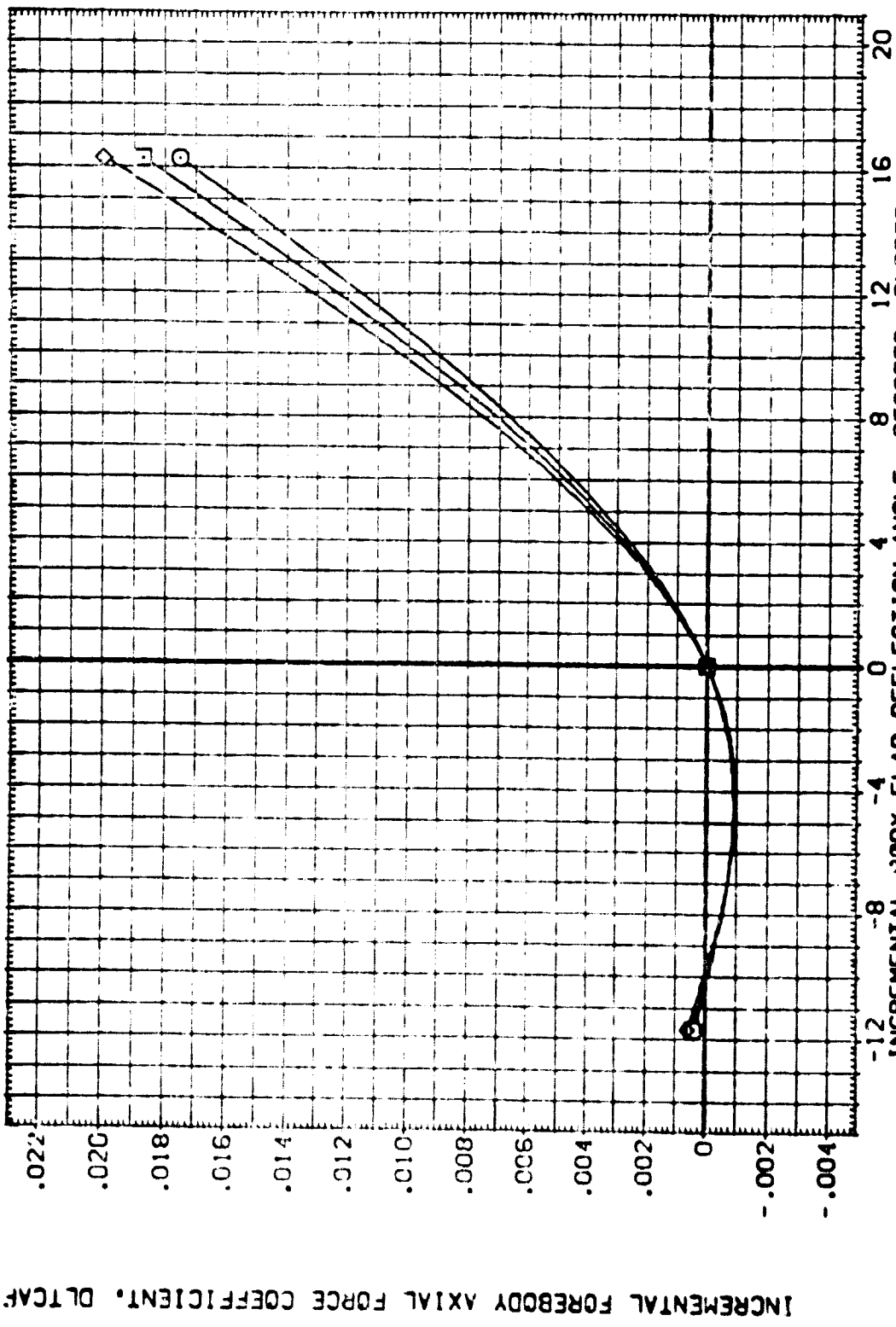


FIG. 16 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 3.53)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW012)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	.000	DATASET	DLBOFF	DATA SOURCE	DATASET	DLBOFF	SREF	REFERENCE INFORMATION
○	17.000	9.000	BETA	.000	DTW012	-11.700	DTW001	.000	2690.0000	SO.FT.	
□	19.000	55.000	RUDDER	.000	DTW013	16.300			474.8100	IN.	
◇	21.000	3.530							935.6800	IN.	
▽	23.000								1076.6800	IN.	
◇	25.000								375.0000	IN.	
▽	27.000								375.0150	IN.	
											SCALE

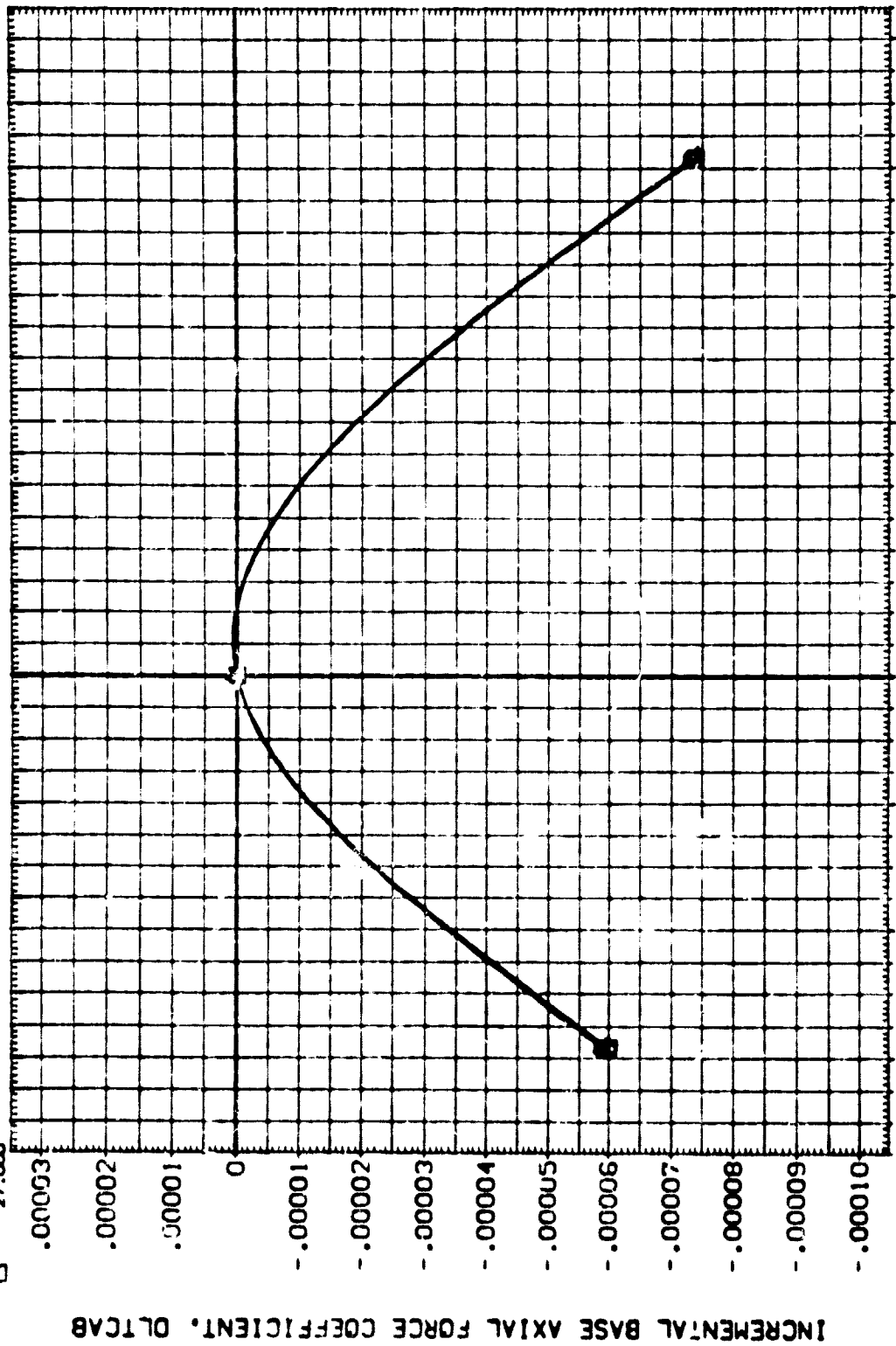


FIG. 16 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 3.53)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW012)

ALPHA	29.000	MACH	8.000	BETA	.000	DATASET	.000	DATASET	01W001	SREF	2630.0000	SQ.FT.
	31.000	SPOBRK	55.000	RUDDER	.000	DTW012	.000	DTW013		UREF	474.8100	IN.
	33.000	RNL	3.530							UREF	936.6800	IN.
	35.000									ZREF	1075.8300	IN.
	37.000									ZTRP	375.0000	IN.
	39.000									ZTRP	0150	IN.
										SCALE		

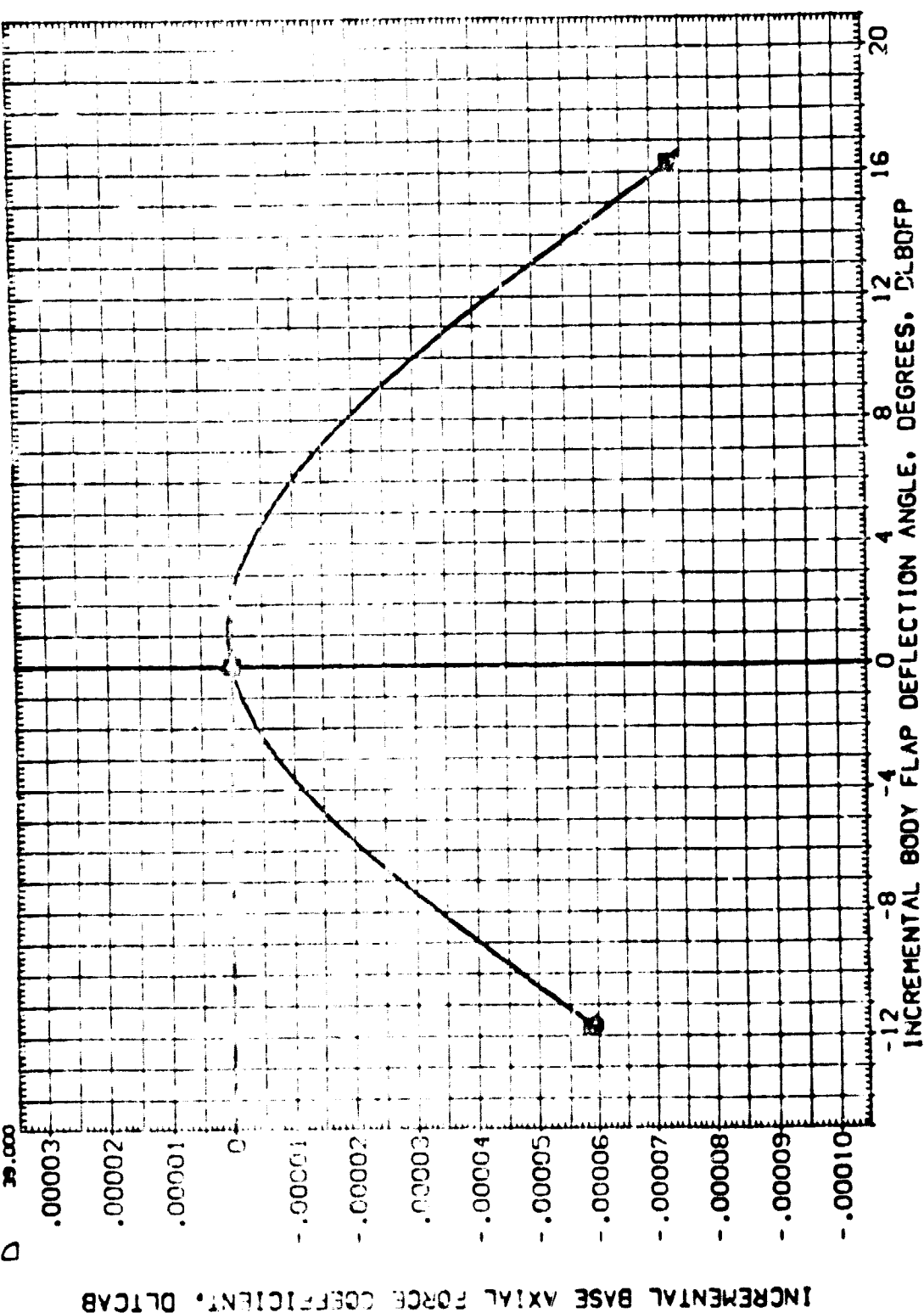


FIG. 16 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 3.53)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW012)

SYMBOL	ALPHA	MACH	SPDRBK	RVL	PARAMETRIC VALUES	.000	DATASET	DLBDFP	DATA SOURCE	.000	DATASET	DLBDFP	SSEF	REFERENCE INFORMATION	SQ. FT.
○	41.000				8.000	BE/A	DTW012	-11.700	DTW001	.000	DTW001	.000	LREF	2690.0000	IN.
□	43.000				55.000	RUDDER	DTW013	16.370					BREF	474.8100	IN.
◇	45.000				3.530								XFRP	936.6800	IN. XB
													YFRP	1076.6800	IN. YB
													ZFRP	.0000	IN. ZB
													SCALE	375.0000	IN. ZB
														.0150	

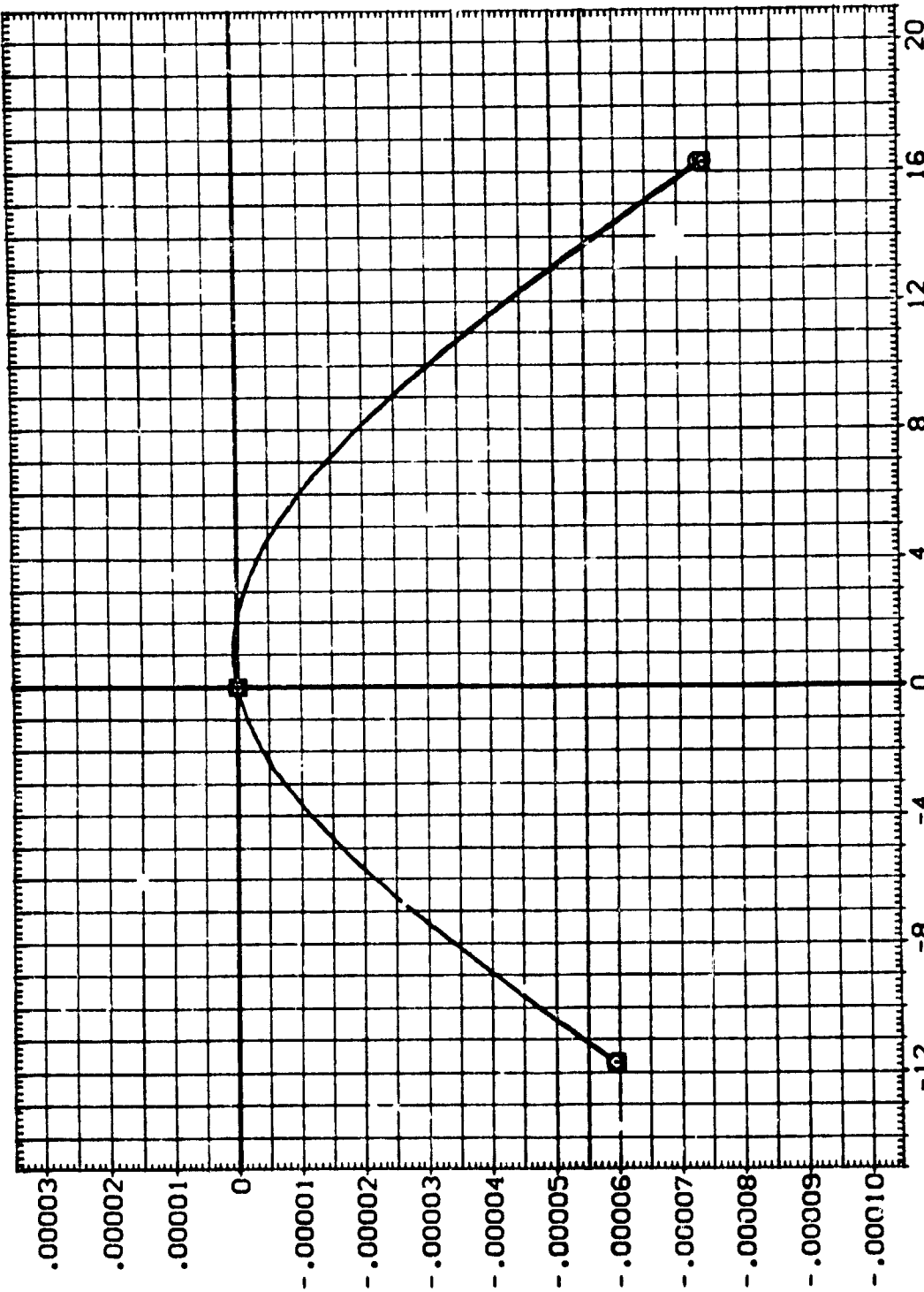
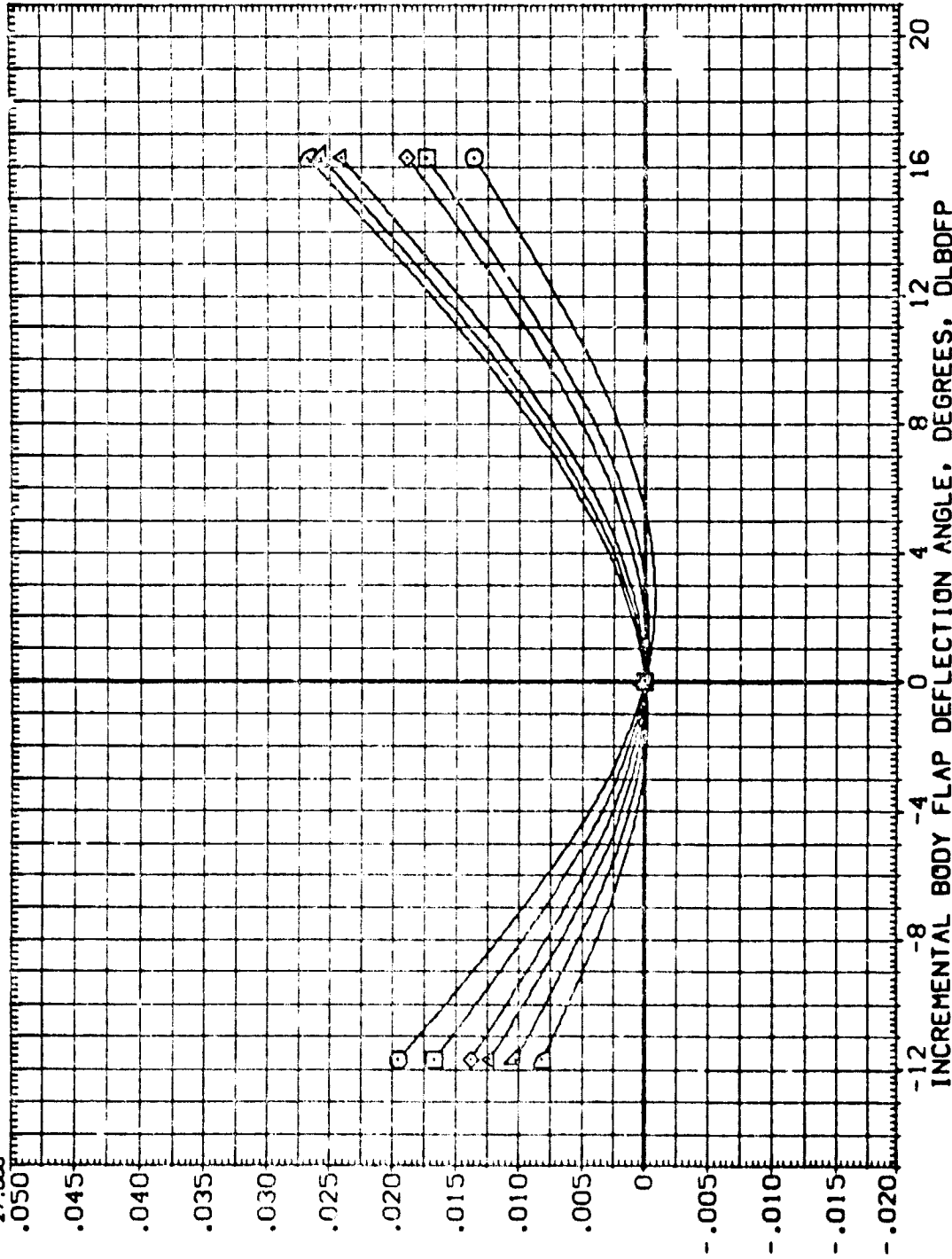


FIG. 16 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER = 3.53)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW012)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	MACH	.000	.000	SREF	2990.0000
17.000	9.000	DTW012	DTW001	LREF	474.8100
19.000	55.000	-11.700	.000	SREF	936.6800
SPORBK	RVL	16.300		XTRP	1076.6800
21.000	3.530			YTRP	.0000
23.000				ZTRP	375.0000
25.000				SCALE	.0150
27.000					

SO, FT.
IN.
IN.
IN. X0
IN. Y0
IN. Z0



INCREMENTAL LIFT COEFFICIENT, DLTCL

FIG. 16 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 3.53)



(DTW012)

ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
29.000	8.000	BETA	.000 DATASET	2690.0000
31.000	55.070	RUDDER	.000 DATASET	474.8100
33.000	3.530		.000 DTW012	936.6600
35.000			.000 DTW013	1076.6800
37.000			.000 DTW001	375.0000
39.000			.000 DLBDFP	SCALE
			-11.700	
			16.300	

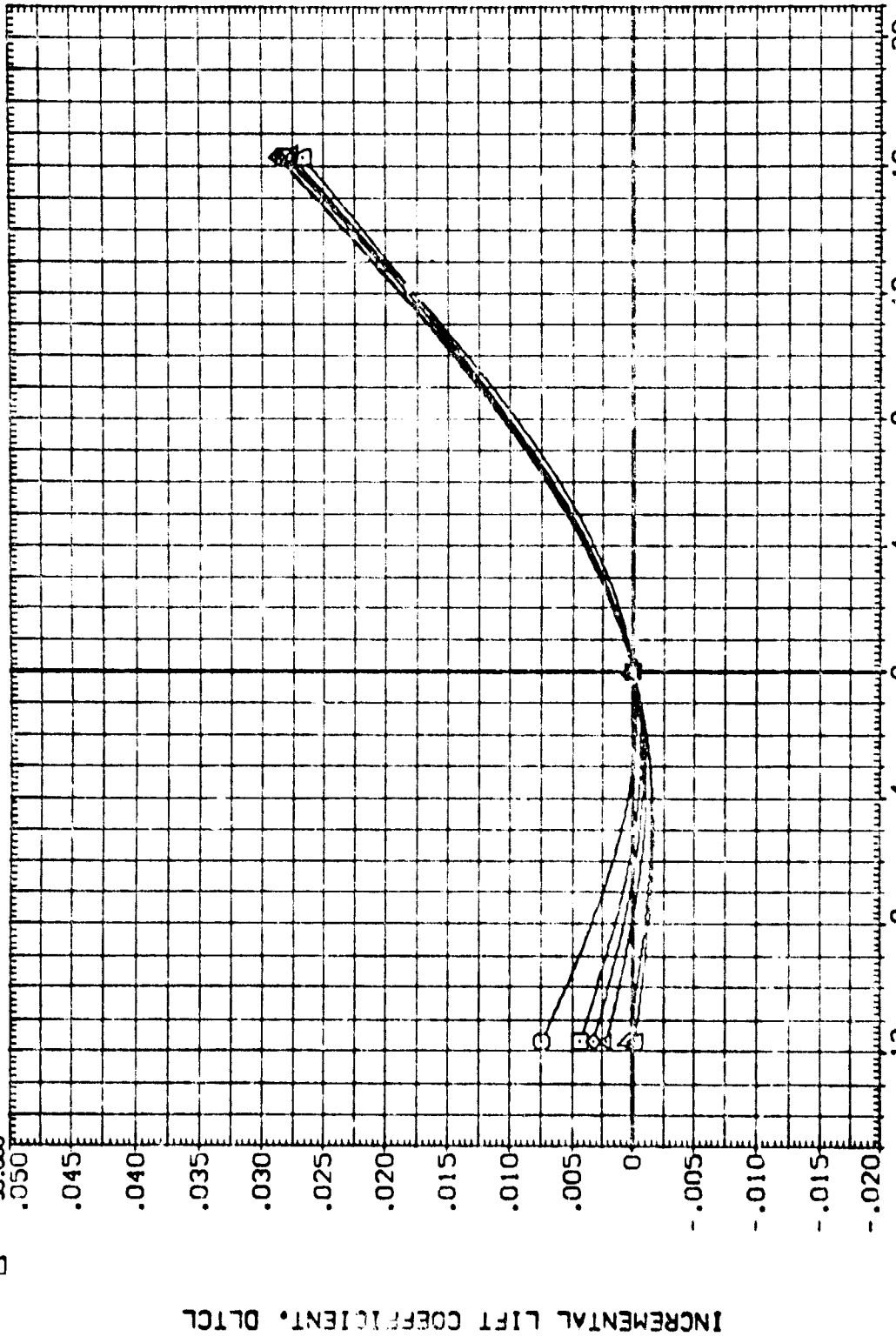


FIG. 16 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 3.53)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW012)

ALPHA	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
41.000	8.000	.000	2690.0000
43.000	BETA	DLBDFP	474.8100
45.000	55.000	.000	936.6800
	RUDDER	DATASET	1076.6200
	3.530	DTW012	XTRP .0000
		DTW013	YTRP .0000
			ZTRP .0000
			SCALE .0150

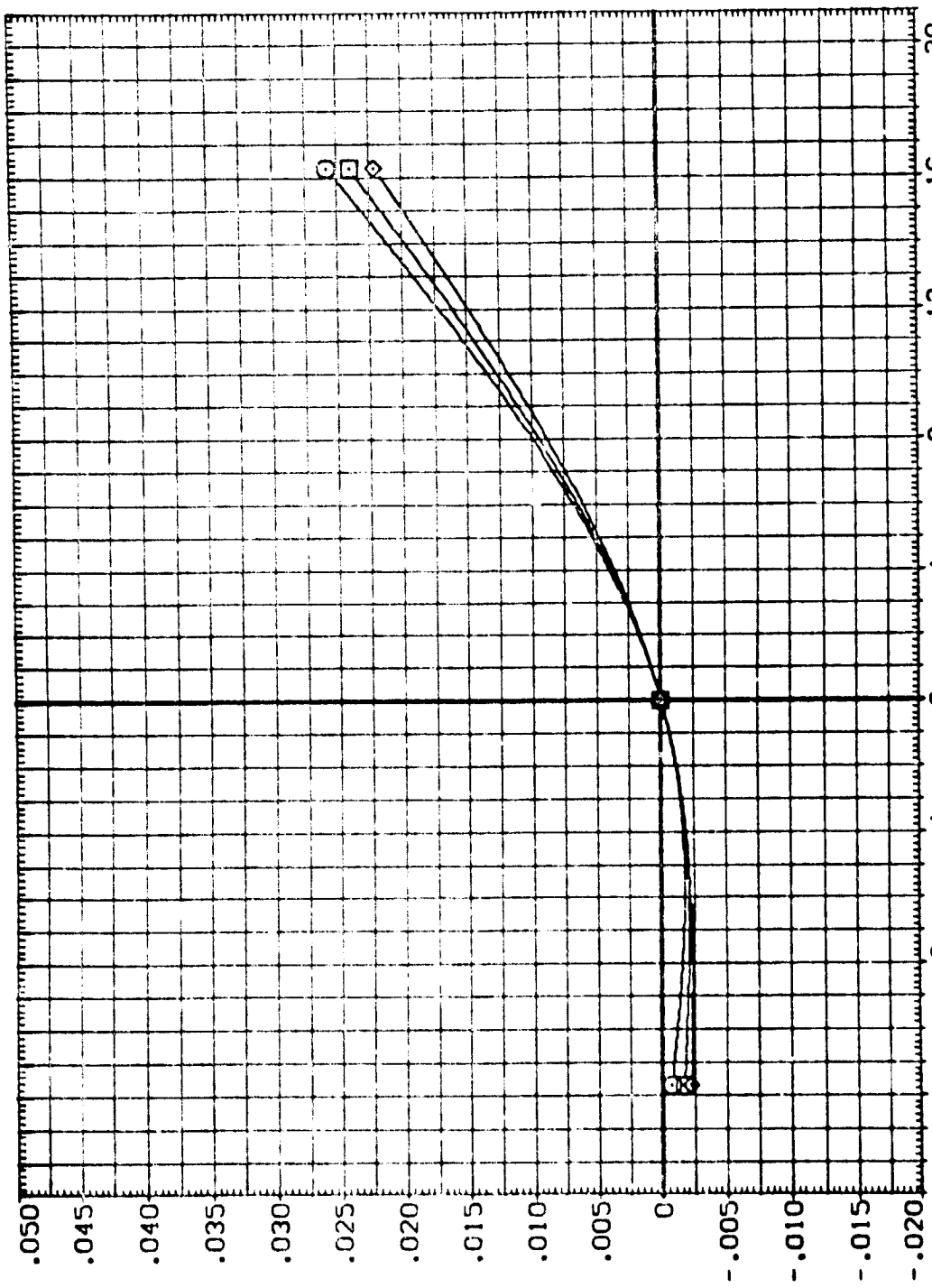


FIG. 16 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 3.53)

(DTW012)

0A79 B26 C5 E43 F8 M16 N28 R5 V8 W116

REFERENCE INFORMATION

SREF	2630.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.YD
XREF	1076.6800	IN.YD
YREF	.0000	IN.ZD
ZREF	375.0000	IN.ZD
SCALE	.0150	

DATA SOURCE

DLBDFP	.000
DLBDFP	.000
DLBDFP	-11.700
DLBDFP	16.300

DATASET

DTW012
DTW013

PARAMETRIC VALUES

BETA	8.000
RUDDER	55.000
RVL	3.530

MACH

8.000

ALPHA

17.000
19.000
21.000
23.000
25.000
27.000

SYMBOL

□
◇
△
▽
○

INCREMENTAL DRAG COEFFICIENT, DLICD

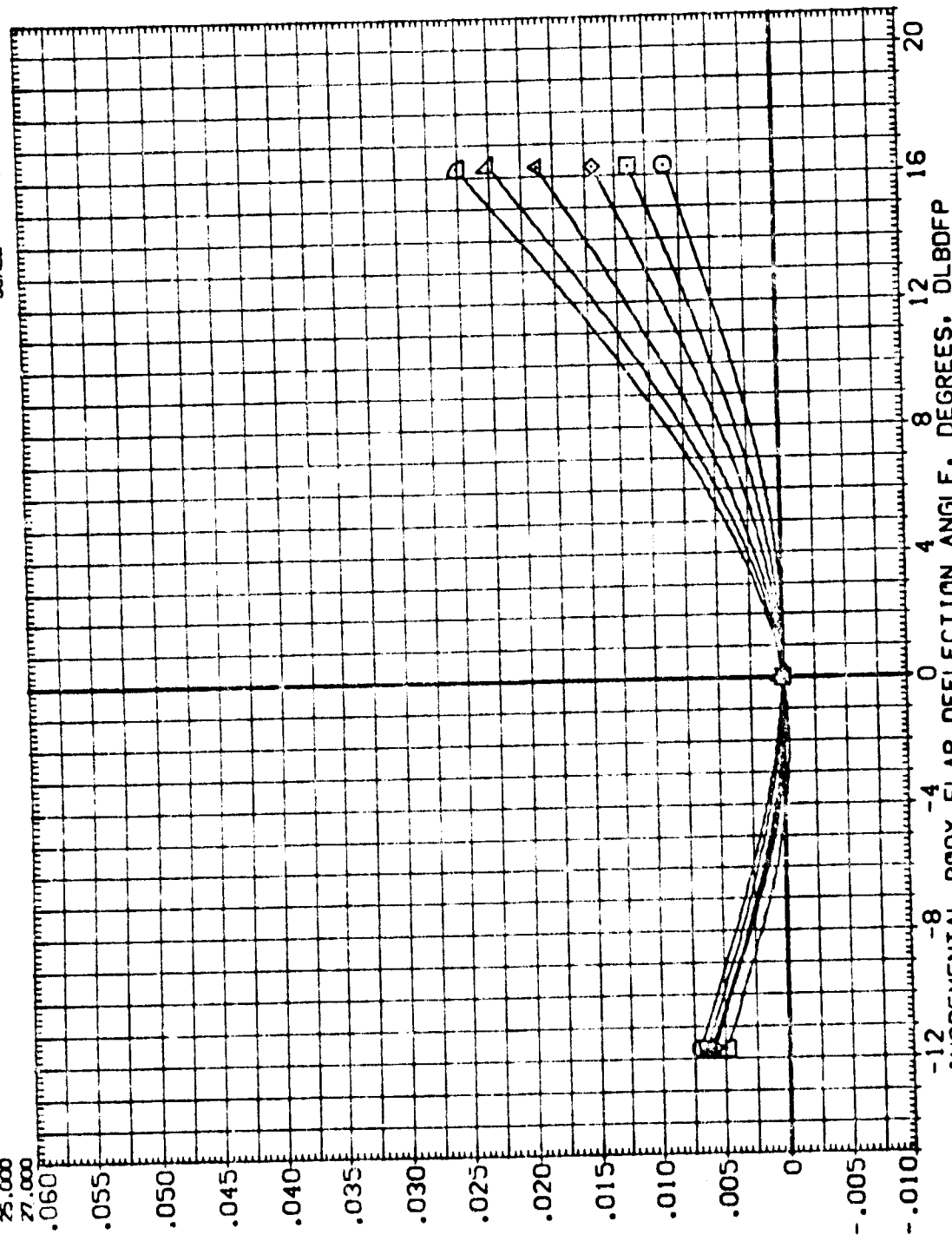
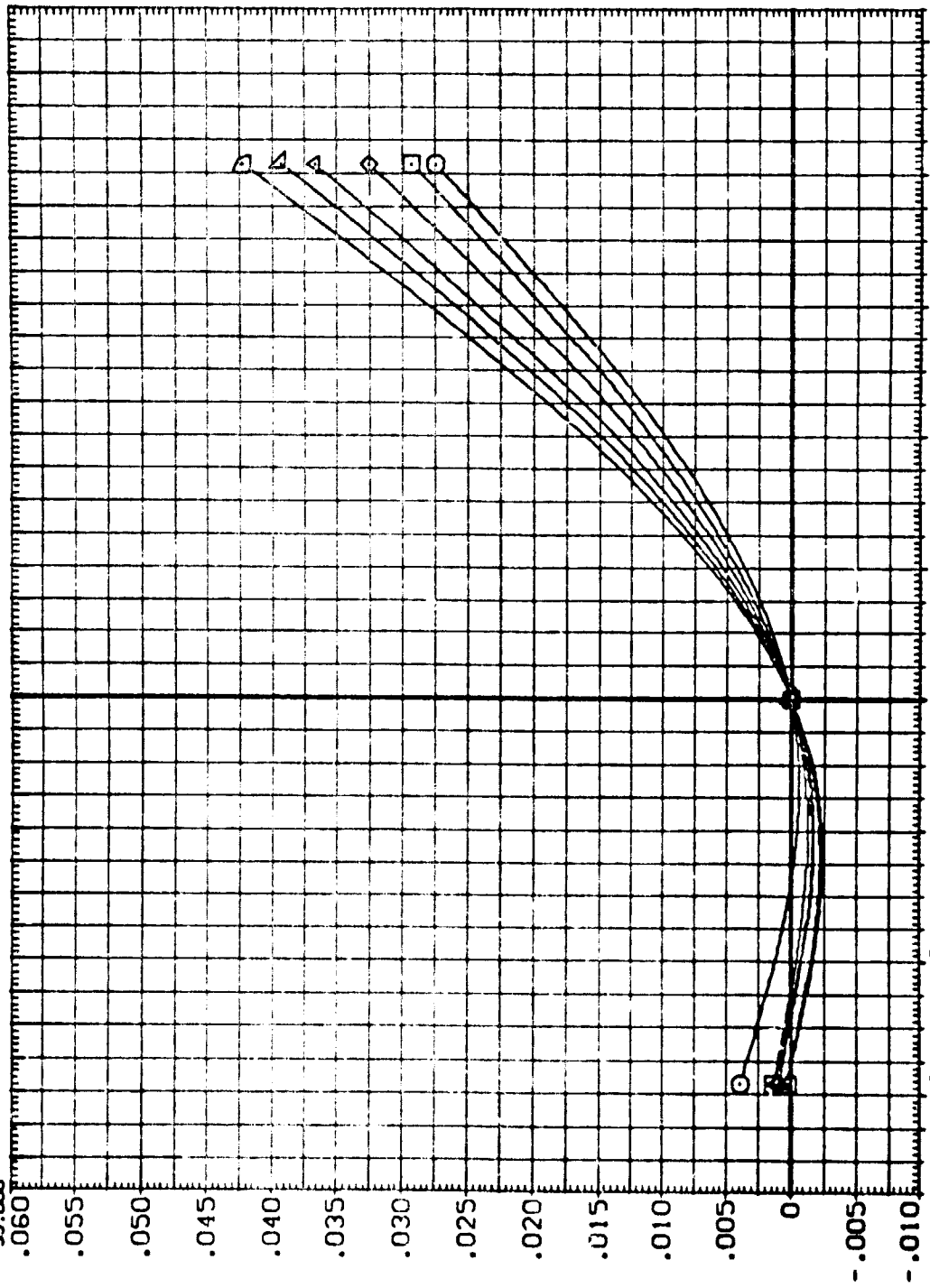


FIG. 16 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 3.53)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW012)

ALPHA	29.000	MACH	0.000	BETA	0.000	DATA SOURCE	DLBOFF	DTW001	DLBOFF	.000	SREF	2690.0000	SO.FT.
	31.000	SPDRK	55.000	RUDDER	3.530	.000	DTW012	DTW013	-11.700	16.300	LREF	474.8100	IN.
	33.000	RVL				.000	DTW012				BREF	936.6800	IN.
	35.000						DTW013				XFRP	1076.6900	IN.
	37.000										YFRP	.0000	IN.
	39.000										ZFRP	375.0000	IN.
											SCALE	.0150	IN.

REFERENCE INFORMATION



INCREMENTAL DRAG COEFFICIENT, DLTCD

INCREMENTAL BODY FLAP DEFLECTION ANGLE, DEGREES, DLBOFF

FIG. 16 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 3.53)

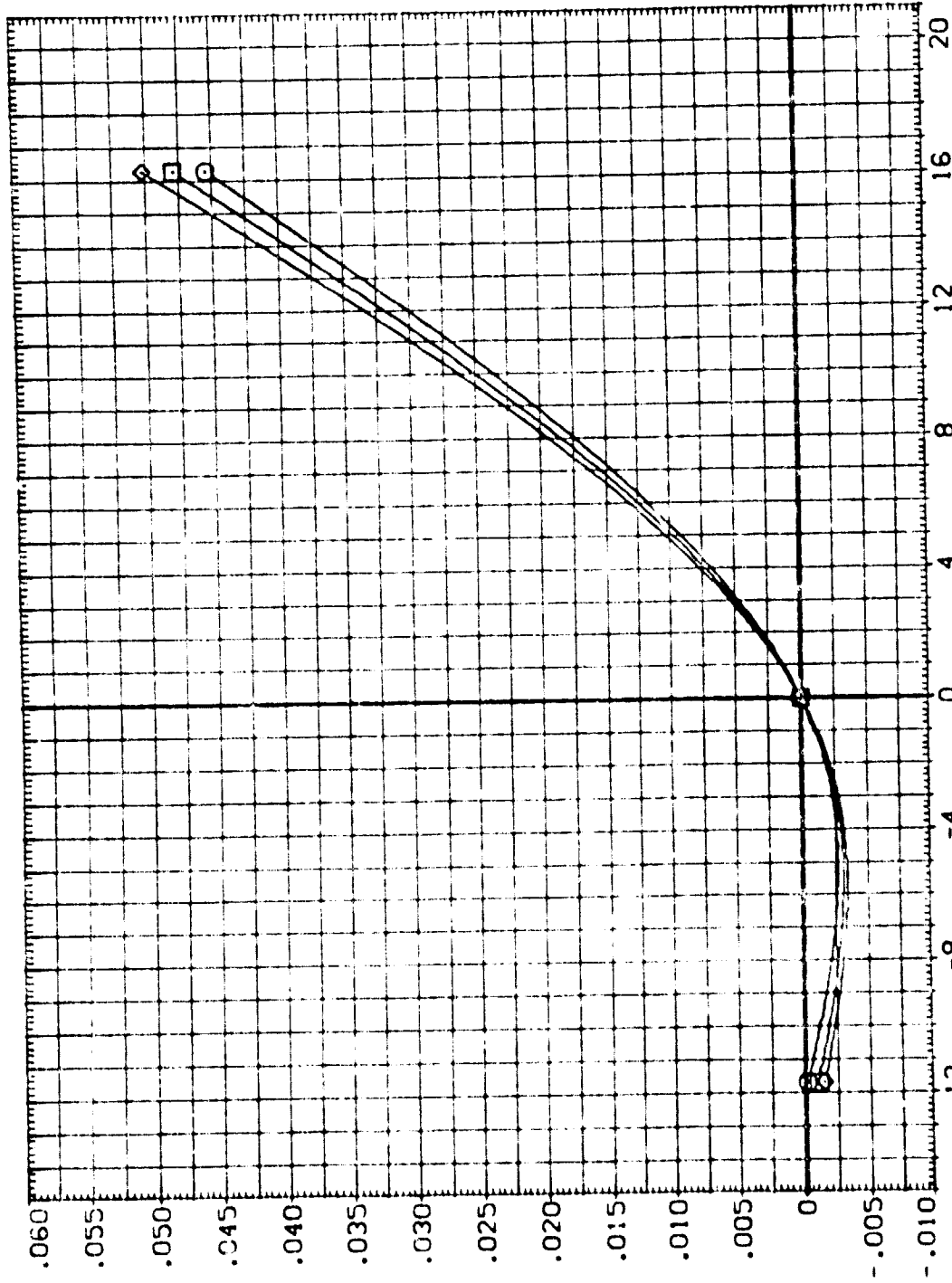
0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW012)

SYMBOL
 ○
 □
 ◇

PARAMETRIC VALUES
 ALPHA 41.000
 43.000
 45.000
 MACH 8.000
 SPDRK 55.000
 RWL 3.530
 BETA
 RUDDER

DATA SOURCE
 DLBOFP .000
 DATASET DTW012
 DTW013
 DTW001

REFERENCE INFORMATION
 SRE : 2690.0000 SO.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XTRP 1076.0000 IN.
 YTRP .0000 IN.
 ZTRP 375.0000 IN.
 SCALE .0150



INCREMENTAL BODY FLAP DEFLECTION ANGLE, DEGREES, DLBDFP
 INCREMENTAL DRAG COEFFICIENT, DLTCD
 REYNOLDS NUMBER = 3.53

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (C1V048) Ⓚ 3A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 (C1V049) Ⓚ 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 (C1V049) Ⓚ 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116

BOFLAP RVL
 -11.700 1.850
 16.300 1.850

REFERENCE INFORMATION
 SREF 2630.0000 SQ.FT.
 LREF 474.8100 IN.
 CREF 936.6800 IN.
 XTRP 1076.6800 IN.X0
 YTRP .0000 IN.Y0
 ZTRP .0000 IN.Z0
 SCALE 375.0150

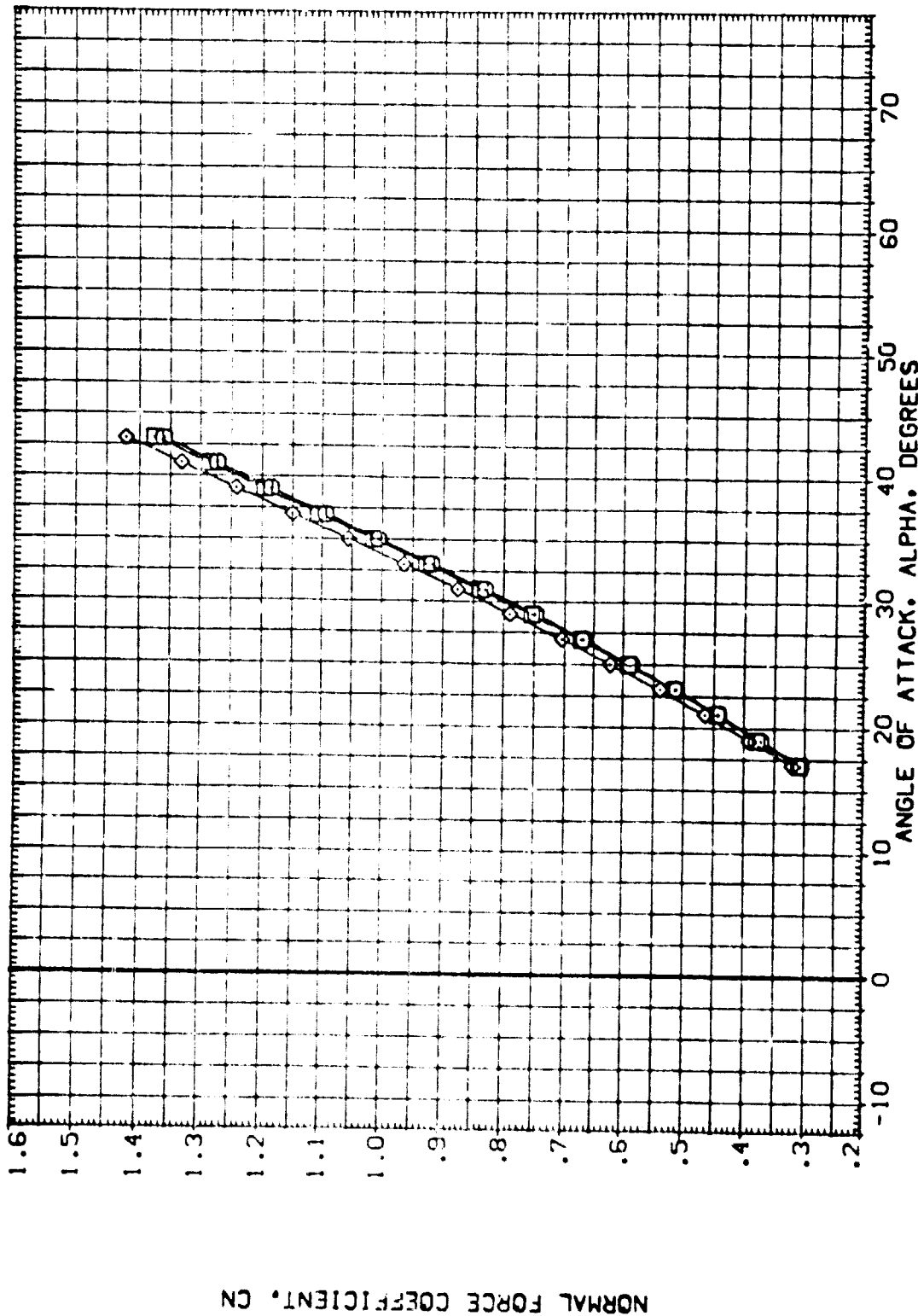


FIG. 17 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 1.86)

(A)MACH = 7.98



REFERENCE INFORMATION
 SREF 2650.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XTRP 1076.5800 IN.X3
 YTRP .0000 IN.Y8
 ZTRP 375.0000 IN.Z8
 SCALE .0150

REFLAP HAVL
 -11.700 1.860
 .000 1.860
 16.300 1.860

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CTM048) O BA79 B26 C9 E43 F8 M16 N28 RS V8 V116
 (CTM049) O BA79 B26 C9 E43 F8 M16 N28 RS V8 V116
 (CTM049) O BA79 B26 C9 E43 F8 M16 N28 RS V8 V116

PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH (FORWARD C. G.) CLMFD

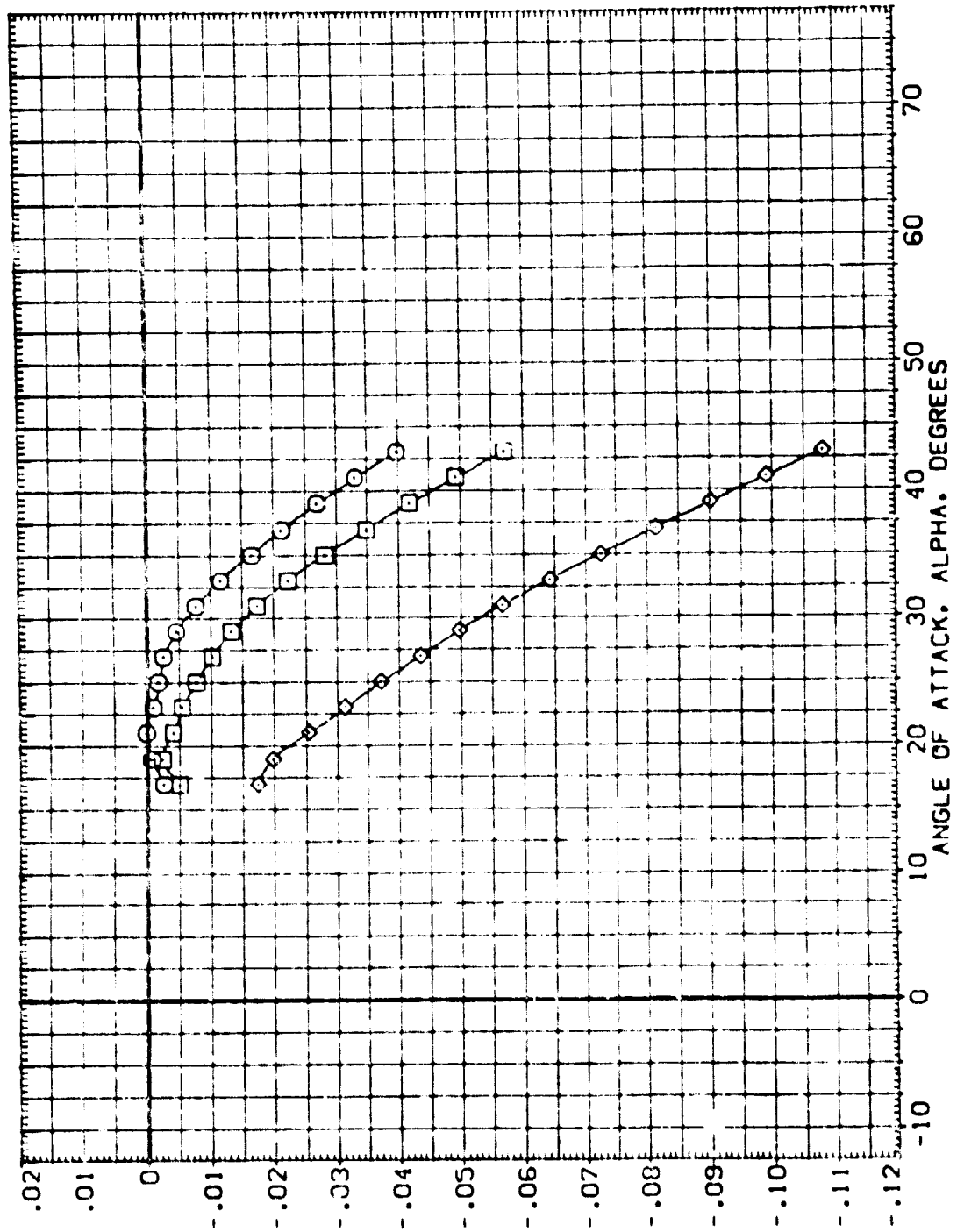


FIG. 17 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 1.86)

(A)MACH = 7.98

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CTV04B) 0A79 826 C9 E43 F8 M16 N28 R5 V8 V116
 (CTV040) 0A79 826 C9 E43 F8 M16 N28 R5 V8 V116
 (CTV04S) 0A79 826 C9 E43 F8 M16 N28 R5 V8 V116

BOFLAP RV/L
 -11.700 1.860
 .000 1.860
 16.300 1.860

REFERENCE INFORMATION
 SREF 2690.0000 50.FT.
 LREF 474.8100 IN.
 BRREF 936.6800 IN.
 XREF 1076.6800 IN.X0
 YREF .0000 IN.Y0
 ZREF 375.0000 IN.Z0
 SCALE .0150

PITCHING MOMENT COEFFICIENT AT .675 BODY LENGTH(AFT C. G.) CLMFT

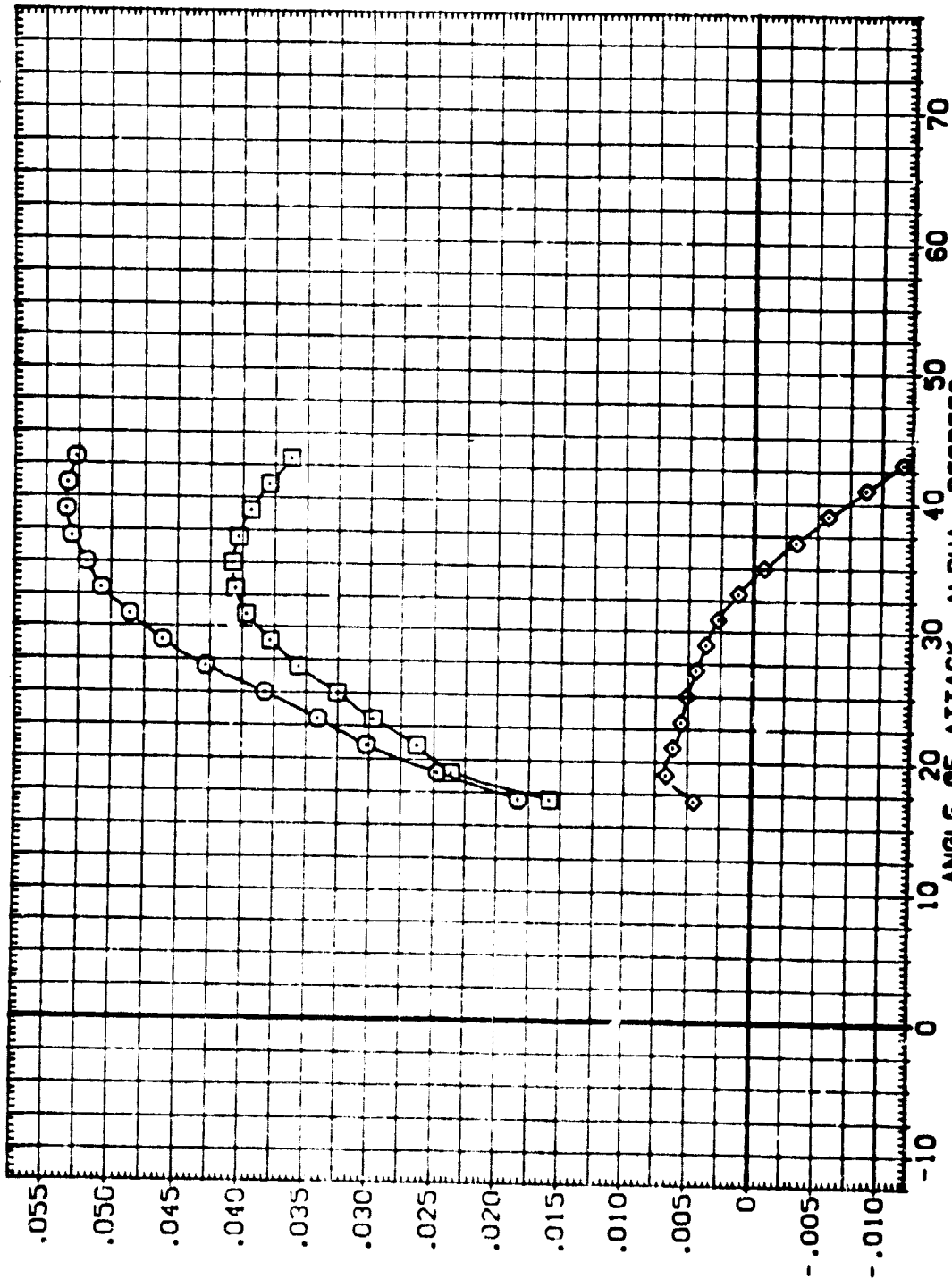


FIG. 17 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 1.86)

(A)MACH = 7.98

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	DOFLAP	RV/L	REFERENCE INFORMATION
(CTV048)	0A79 826 C9 E43 FB M16 N28 RS V8 V116	-11.700	1.860	SREF 2690.0000 SQ.FT.
(CTV049)	0A79 826 C9 E43 FB M16 N28 RS V8 V116	.000	1.860	LREF 474.8100 IN.
(CTV049)	0A79 826 C9 E43 FB M16 N28 RS V8 V116	16.300	1.860	BREF 936.6800 IN.
				XFRP 1076.6800 IN.X0
				YFRP .0000 IN.Y0
				ZFRP 375.0000 IN.Z0
				SCALE .0150

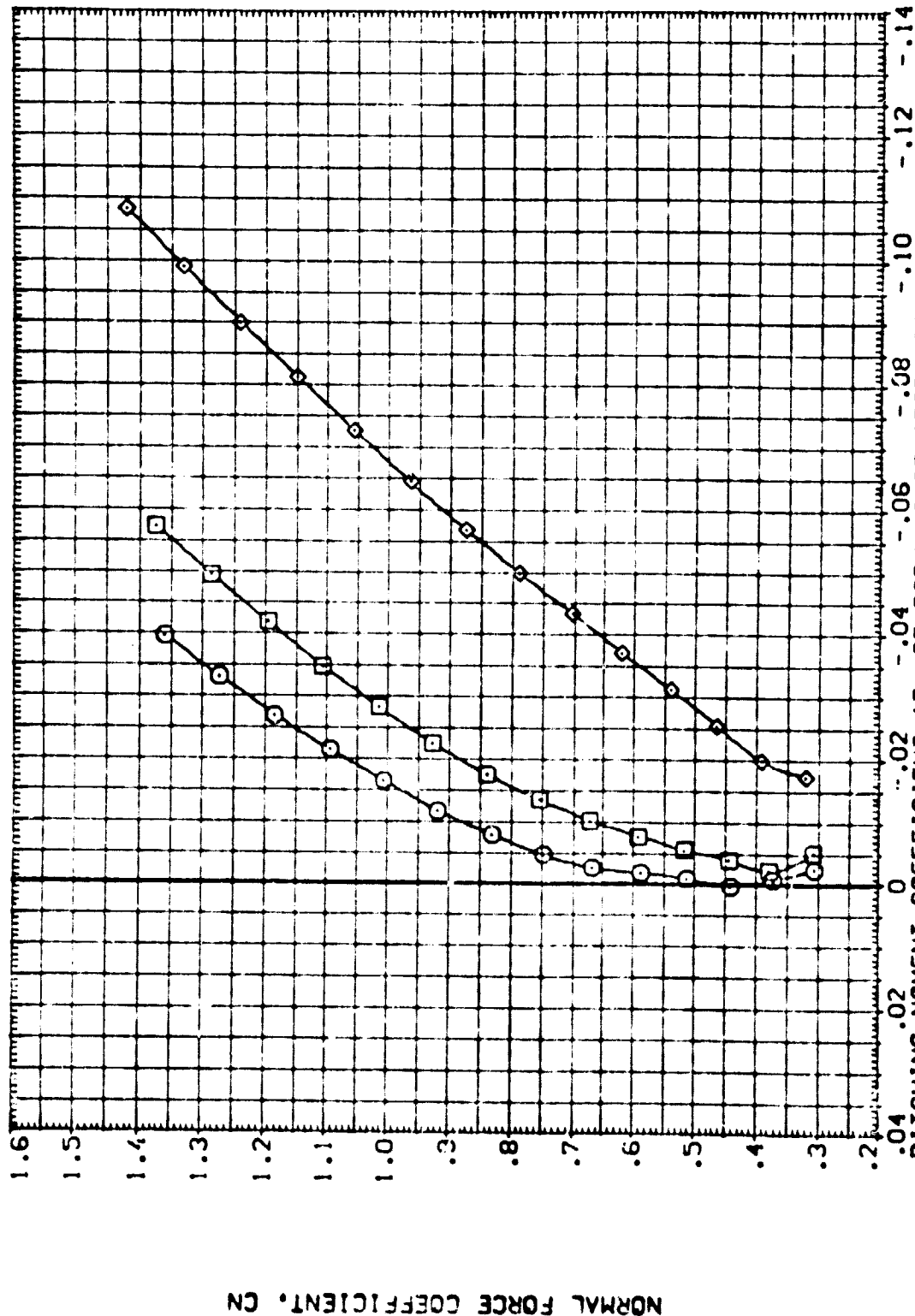


FIG. 17 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 1.86)

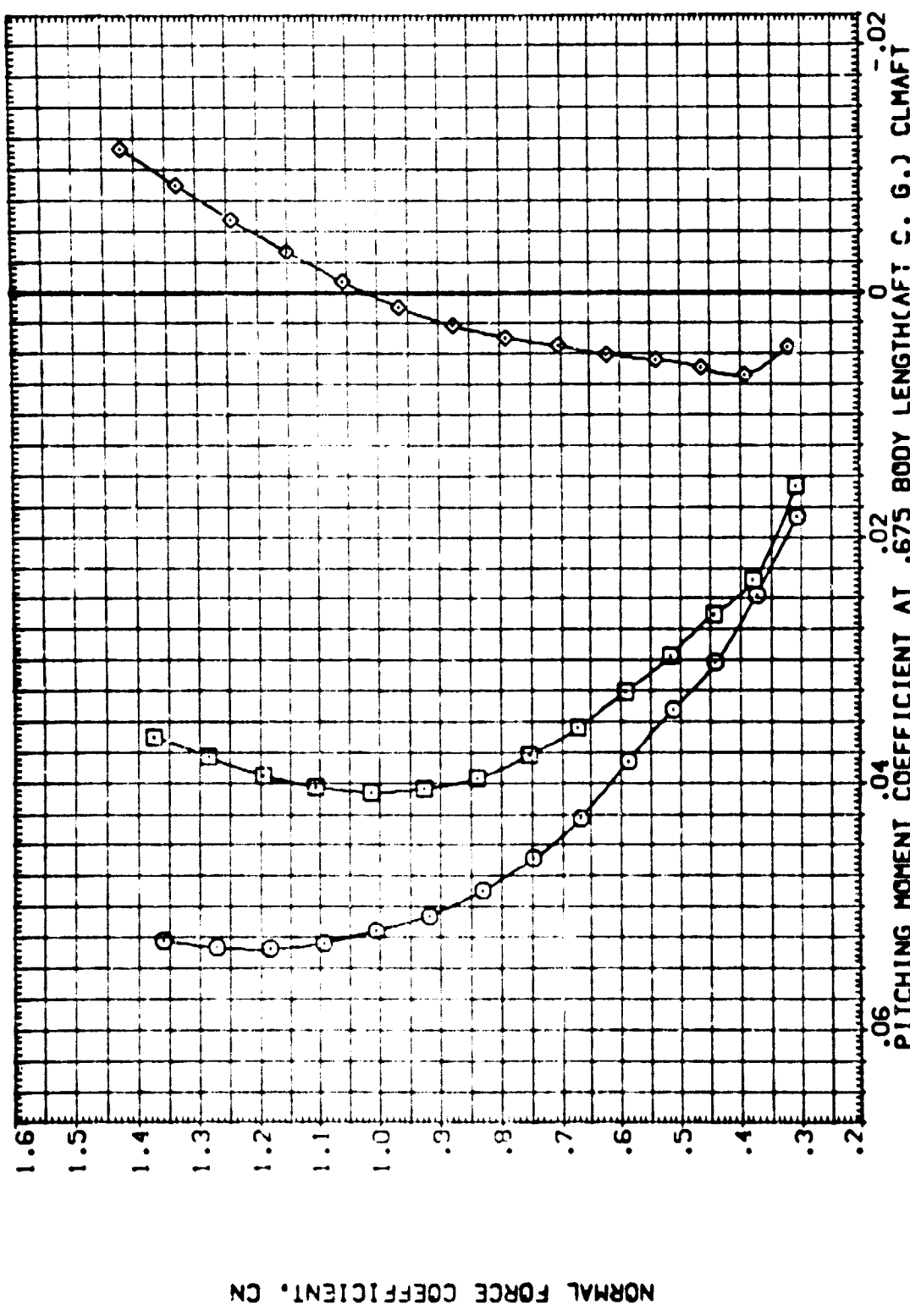
(A)MACH = 7.98

DATA SET SYMBOL (C17048) (C17049) (C17049)

CONFIGURATION DESCRIPTION
 DAY8 B26 C9 E43 F8 M16 N28 R5 V8 V116
 DAY9 B26 C9 E43 F8 M16 N28 R5 V8 V116
 DAY9 B26 C9 E43 F8 M16 N28 R5 V8 V116

BUFLAP FAVL
 -11.700 1.860
 16.300 1.860

REFERENCE INFORMATION
 SREF 2690.0000 50. FT.
 LREF 474.8100 IN.
 BRREF 936.6800 IN.
 XMRP 776.0000 IN.
 YMRP 375.0000 IN.
 ZMRP 0.0000 IN.
 SCALE .0150



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(C17048)	DATA B26 C9 E43 F8 M16 N28 R5 V8 V116
(C17049)	DATA B26 C9 E43 F8 M16 N28 R5 V8 V116
(C17049)	DATA B26 C9 E43 F8 M16 N28 R5 V8 V116

REFLAP RNL

-11.700	1.860
16.300	1.860

CENTER OF PRESSURE LOCATION AS A FRACTION OF BODY LENGTH, XCP/L

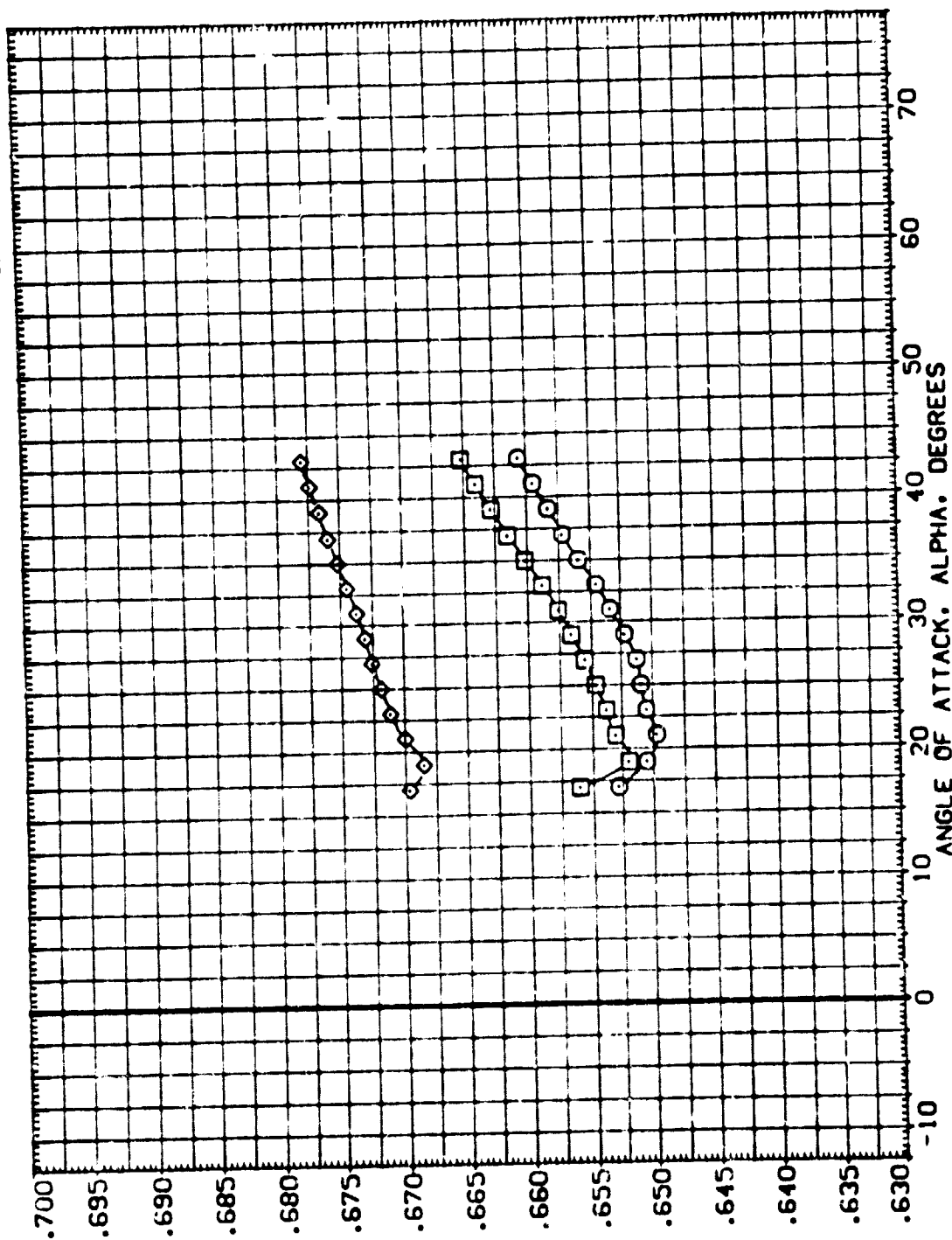


FIG. 17 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 1.86)

(A)MACH = 7.98

DATA SET SYMBOL CONFIGURATION DESCRIPTION

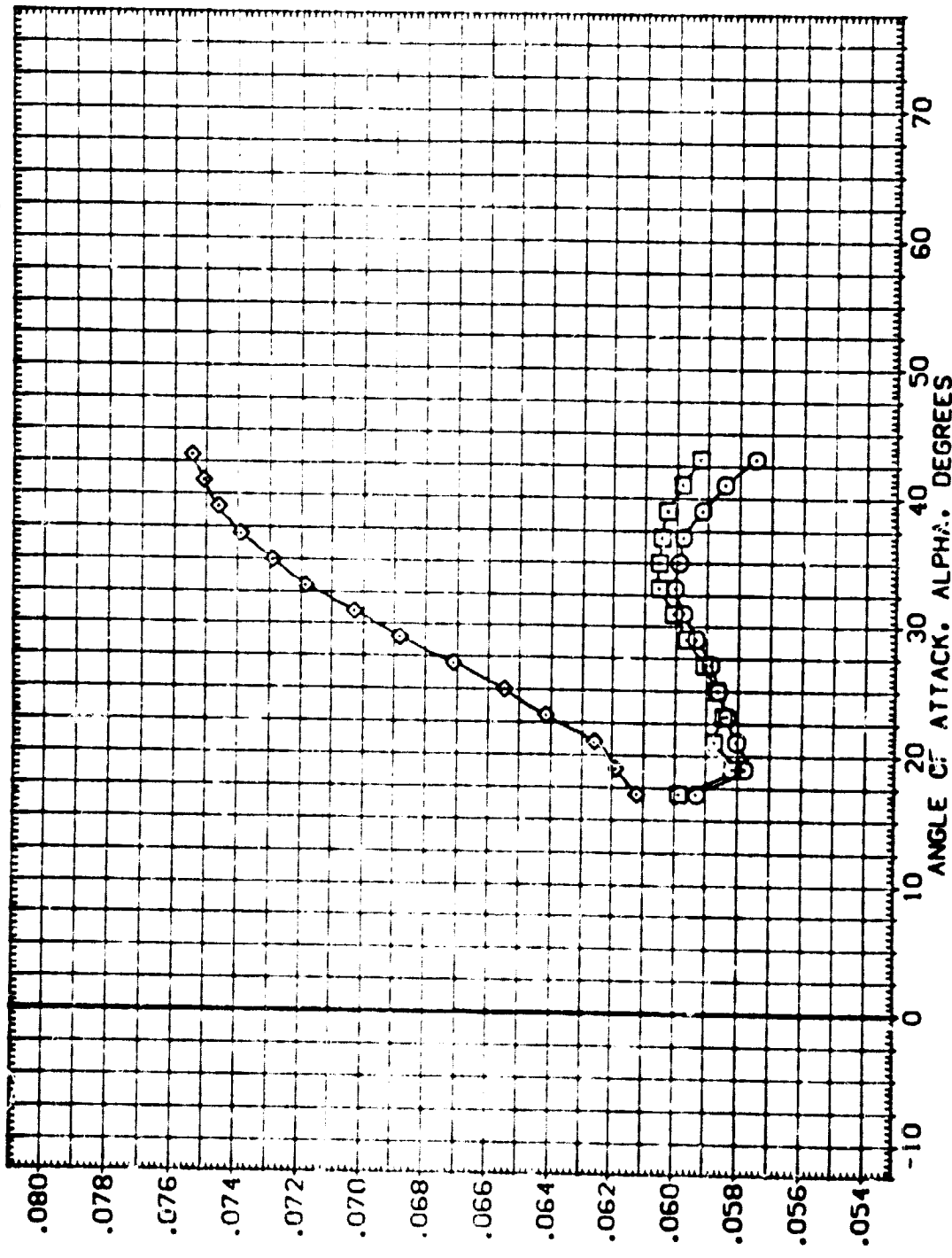
(C1V048)	0A79 B26 C9 E43 FB M16 M28 R5 V8 V116
(C1V049)	0A79 B26 C9 E43 FB M16 M28 R5 V8 V116
(C1V045)	0A79 B26 C9 E43 FB M16 M28 R5 V8 V116

BD FLAP RV/L

-11.700	1.860
.000	1.860
16.300	1.860

REFERENCE INFORMATION

SREF	2650.0000	SO.FT.
LREF	474.8100	IN.
BREF	906.6300	IN.
XPRP	1076.6800	IN.X0
YPRP	.0000	IN.Y0
ZPRP	375.0000	IN.Z0
SCALE	.0150	



AXIAL FORCE COEFFICIENT, CA

FIG. 17 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 1.86)

(A)MACH = 7.98



DATA SET SYMBOL
 (CTV048)
 (CTV049)
 (CTV049)

CONFIGURATION DESCRIPTION
 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116

80FLAP ANVL
 -11.700 1.860
 0.000 1.860
 16.300 1.860

REFERENCE INFORMATION
 SREF 2650.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1076.6800 IN.X0
 YMRP .0000 IN.Y0
 ZMRP 375.0000 IN.Z0
 SCALE .0150

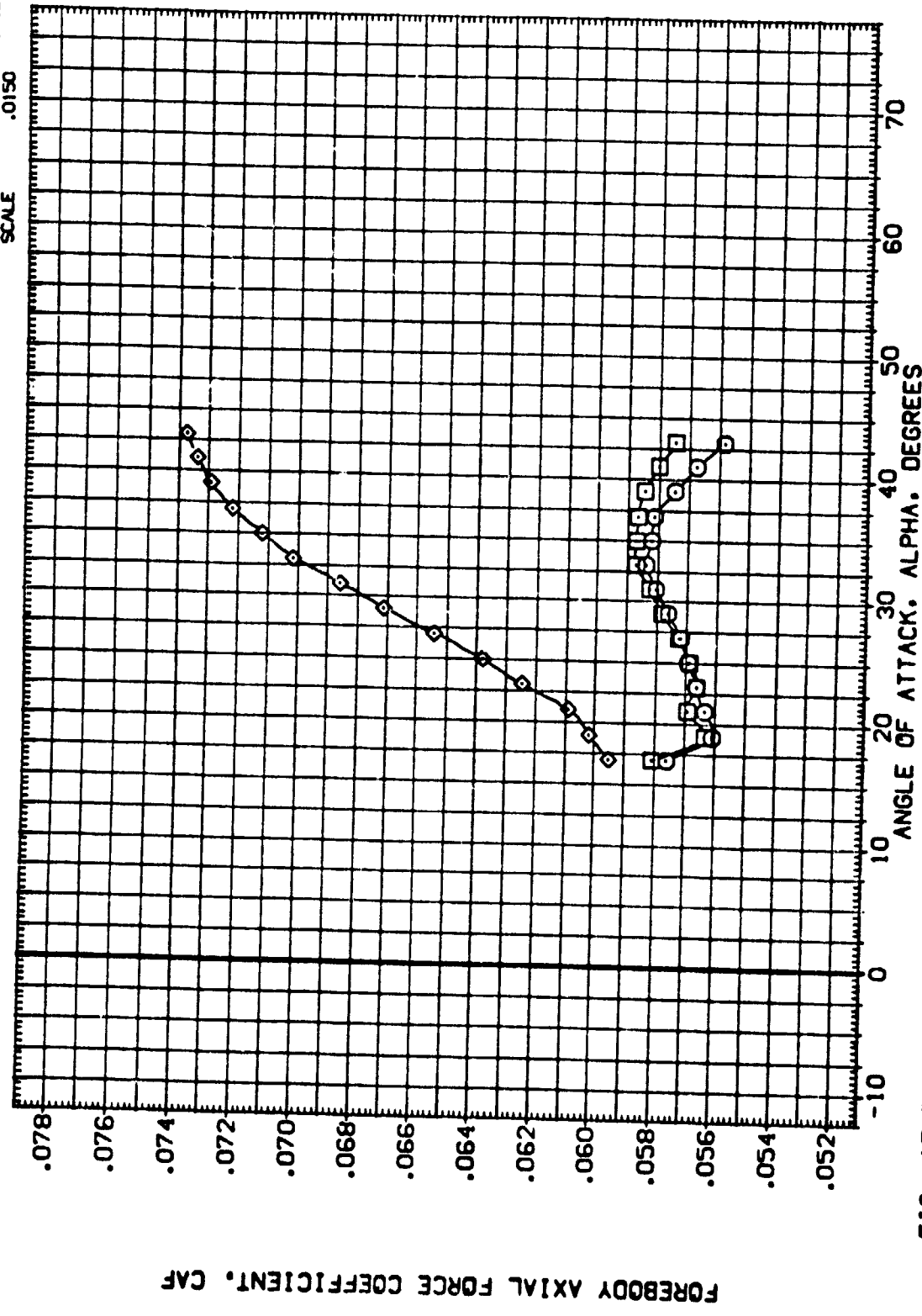


FIG. 17 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 1.86)
 (A)MACH = 7.98

DATA SET SYMBOL: (CIVOM1) (CIVOM2) (CIVOM3)

CONFIGURATION DESCRIPTION:
 DAY9 B26 C9 E43 F8 M16 N28 R5 V8 V116
 DAY9 B26 C9 E43 F8 M16 N28 R5 V8 V116
 DAY9 B26 C9 E43 F8 M16 N28 R5 V8 V116

BDFLAP RV/L
 -11.700 1.860
 .000 1.860
 16.300 1.860

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XTRP 1076.6800 IN. X0
 YTRP .0000 IN. Y0
 ZTRP 375.0000 IN. Z0
 SCALE .0150

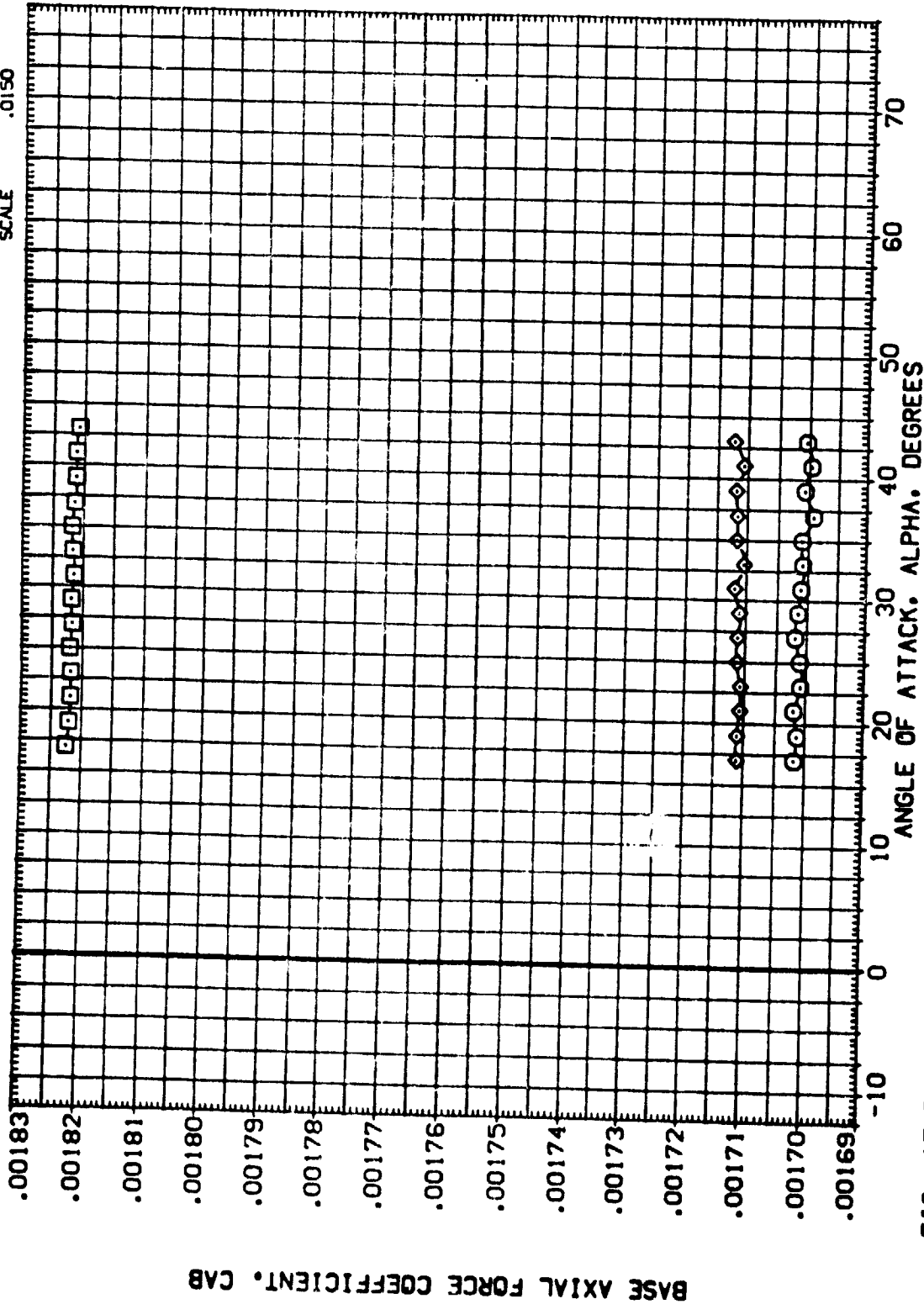


FIG. 17 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 1.86)

(A)MACH = 7.98

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CTW048)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
(CTW049)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
(CTW049)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116

BD FLAP RNVL

-11.700	1.860
.000	1.860
16.300	1.860

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN. X0
XTRP	1076.6800	IN. Y0
YTRP	.0000	IN. Z0
ZTRP	375.0000	IN. Z0
SCALE	.0150	

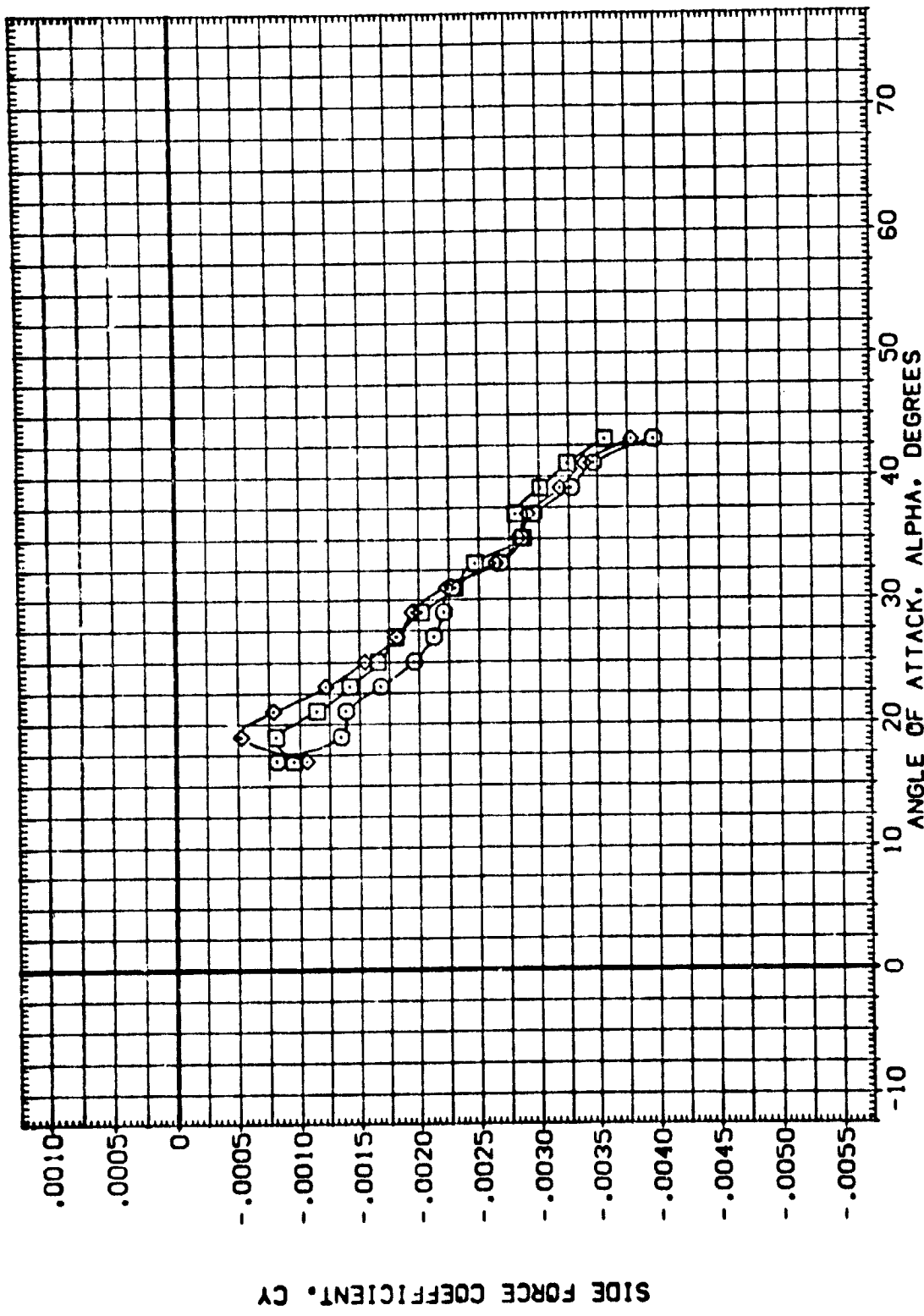


FIG. 17 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 1.86)

(A)MACH = 7.98

DATA SET SYMBOL (AT1048) (AT1049) (AT1049)

BOFLAP RVL
 -11.700 1.860
 .000 1.860
 16.300 1.860

CONFIGURATION DESCRIPTOR
 CA79 B26 C9 E43 F8 H16 N28 R5 V8 V116
 CA79 B26 C9 E43 F8 H16 N28 R5 V8 V116
 CA79 B26 C9 E43 F8 H16 N28 R5 V8 V116

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1076.6800 IN.
 YMRP .0000 IN.
 ZMRP 375.0000 IN.
 SCALE .0150

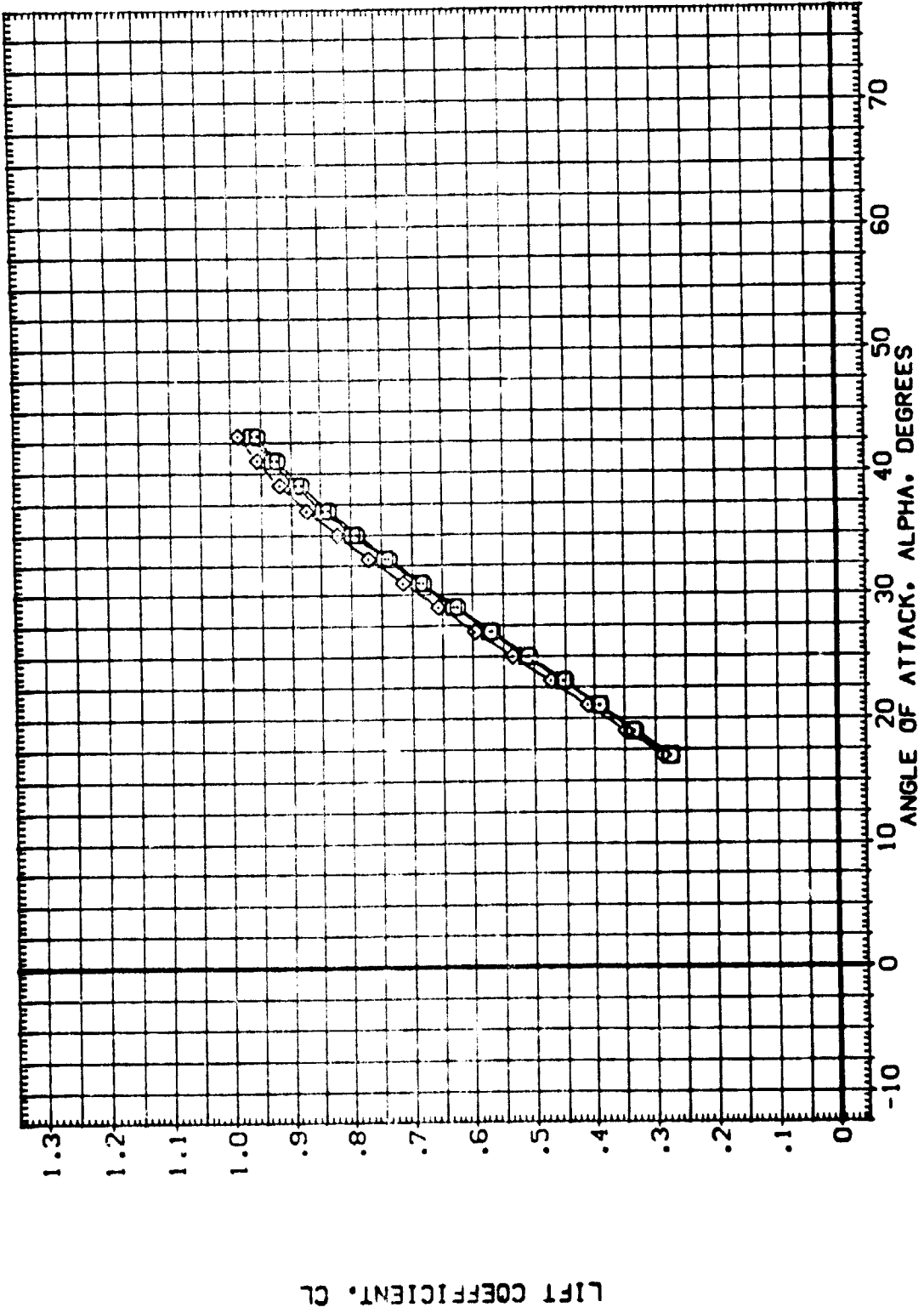


FIG. 17 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 1.86)

(A)MACH = 7.98

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(ATV048)	Ø	ØA79 B26 C9 E43 F8 M16 N28 R5 V8 V116
(ATV040)	□	ØA79 B26 C9 E43 F8 M16 N29 R5 V8 V116
(ATV045)	◇	ØA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

BDFLAP RNVL

-11.700	1.860
.000	1.860
16.300	1.860

REFERENCE INFORMATION

SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6600	IN.
XREF	1076.6600	IN.
YREF	.0000	IN.
ZREF	375.0000	IN.
SCALE	.0150	

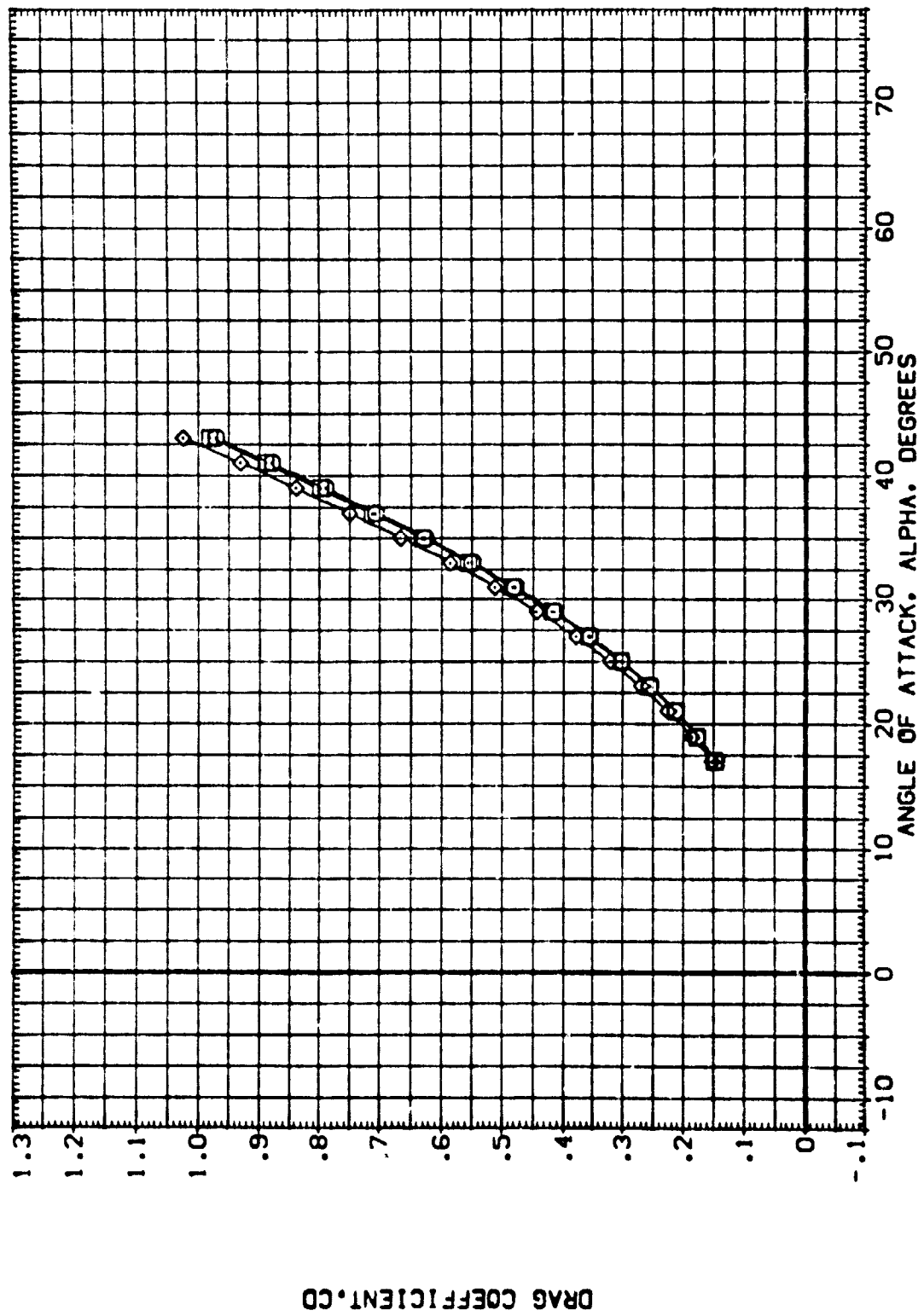


FIG. 17 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 1.86)

(A)MACH = 7.98

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(AT10048)	0A79	8Z6	C9	E43	F8	H16	N28	R5	V8	V116
(AT10049)	0A79	8Z6	C9	E43	F8	H16	N28	R5	V8	V116
(AT10049)	0A79	8Z6	C9	E43	F8	H16	N28	R5	V8	V116

BD/FLAP RVL

-11.700	1.860
0.000	1.860
16.300	1.860

REFERENCE INFORMATION

SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XMRP	1076.6800	IN. X0
YMRP	.0000	IN. Y0
ZMRP	375.0000	IN. Z0
SCALE	.0150	

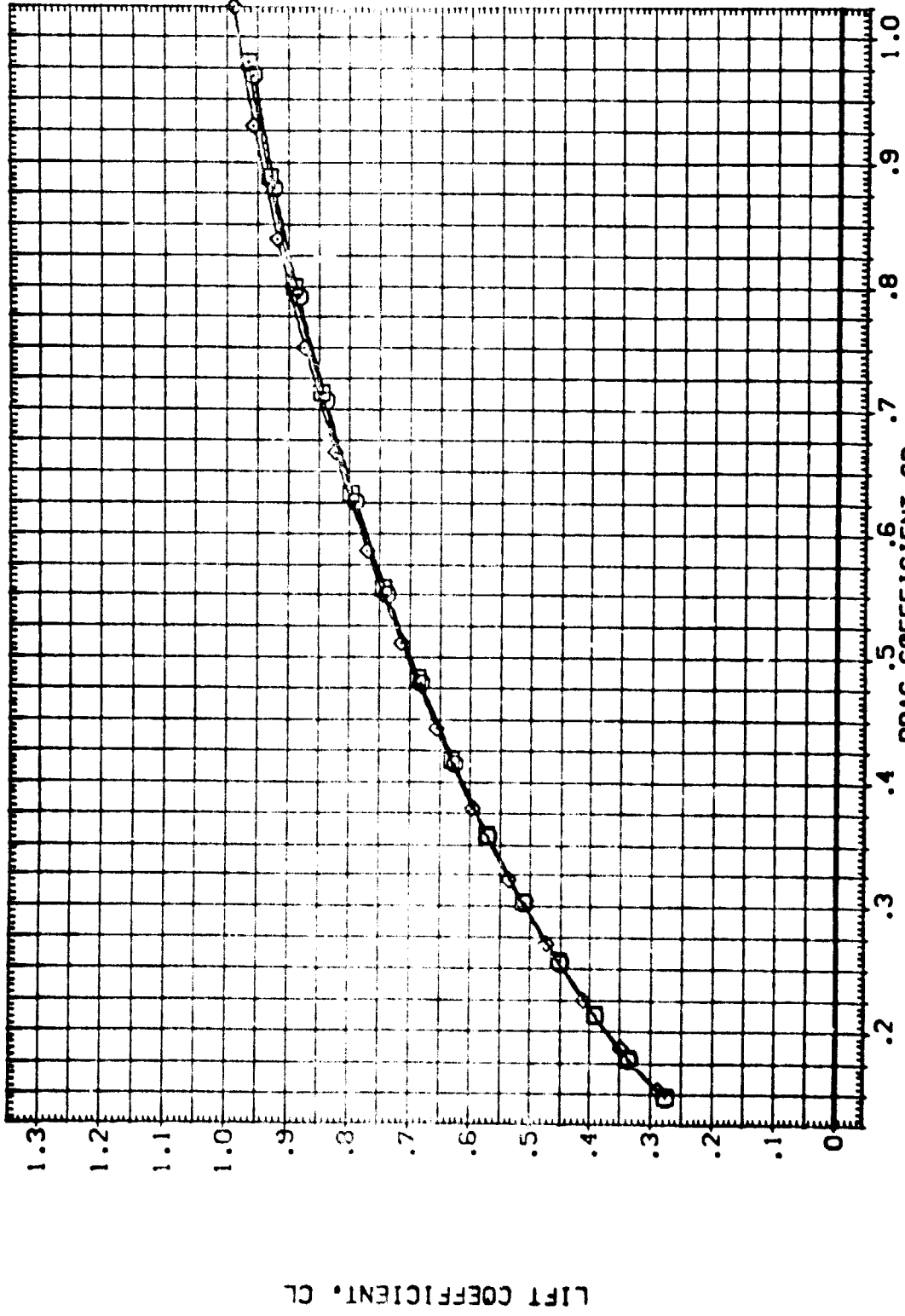


FIG. 17 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 1.86)

(A)MACH = 7.98



DATA SET SYMBOL (ATM048) (ATM040) (ATM043)

CONFIGURATION DESCRIPTION
 GA79 B26 CS E43 F8 M16 N28 RS V8 V116
 GA79 B26 CS E43 F8 M16 N28 RS V8 V116
 GA79 B26 CS E43 F8 M16 N28 RS V8 V116

BDFLAP RVAL
 -11.700 1.860
 16.300 1.860

REFERENCE INFORMATION
 SREF 2650.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XTRP 1076.6800 IN.X0
 YTRP .0000 IN.Y0
 ZTRP 375.0000 IN.Z0
 SCALE .0150

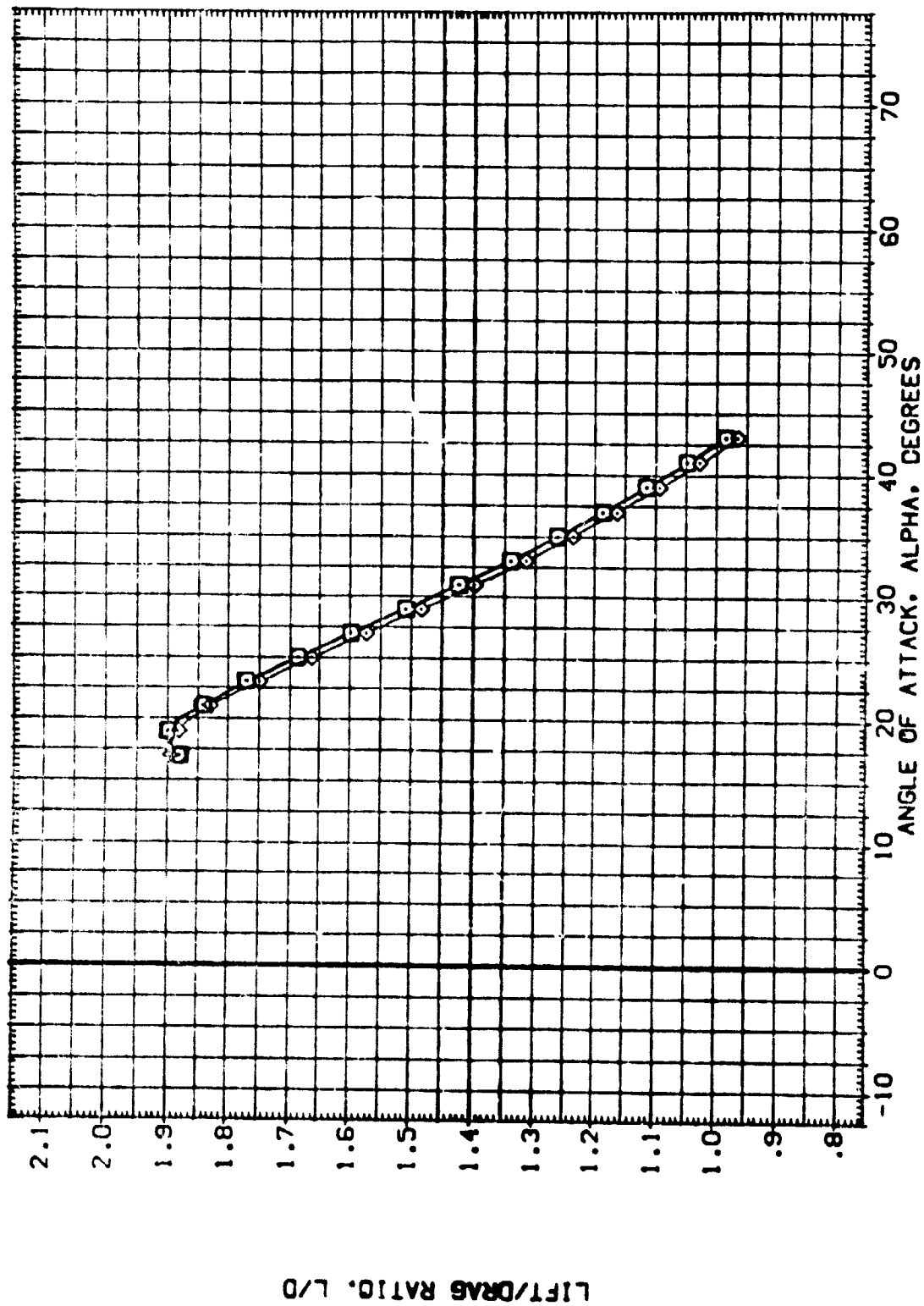
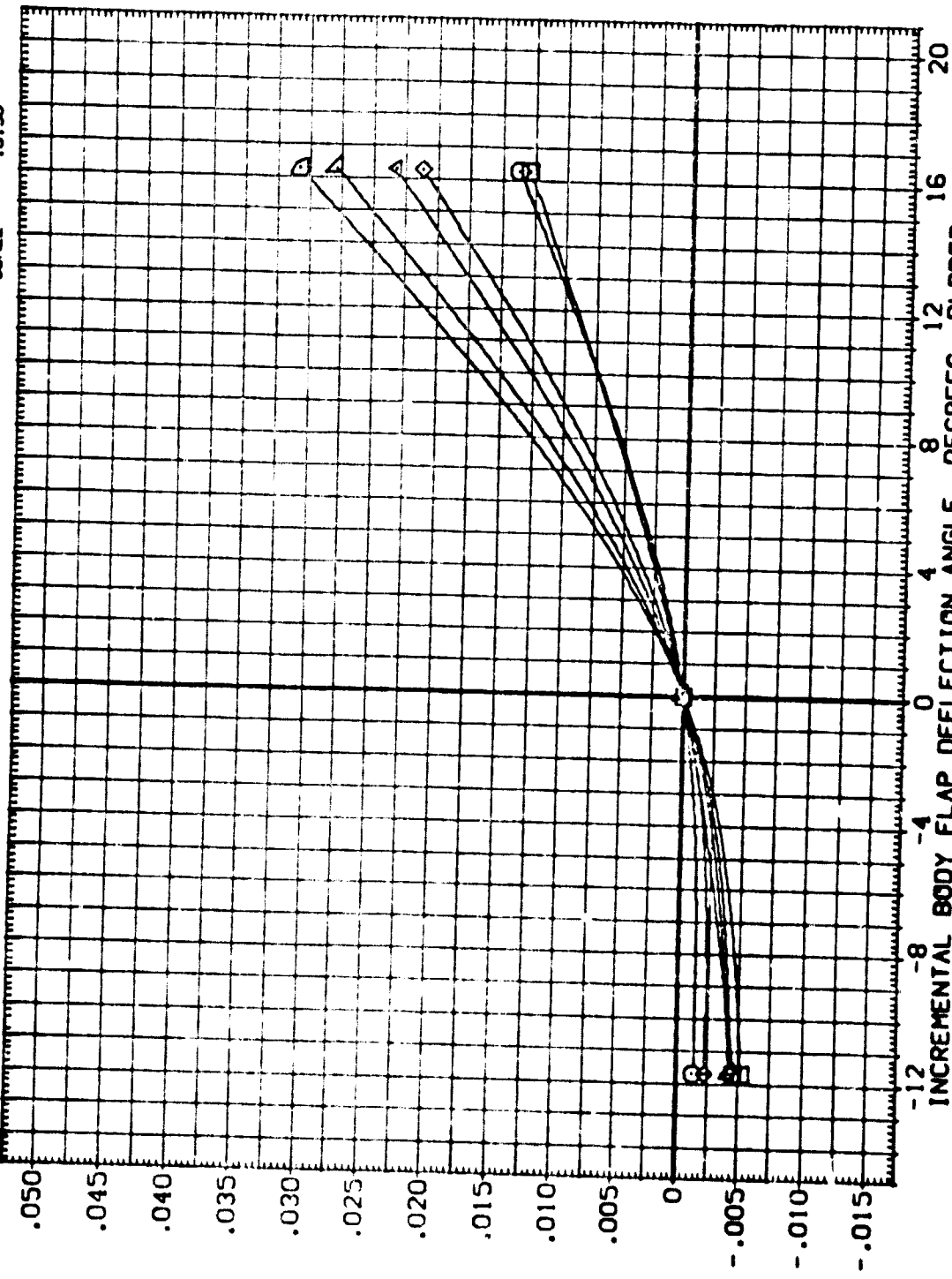


FIG. 17 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 1.86)

(A)MACH = 7.98

0A79 826 C9 E43 F8 M16 N28 R5 V8 W116 (DTW048)

ALPHA	17.000	MACH	8.000	PARAMETRIC VALUES	DATA SOURCE	DLBOFF	DTW040	DLBOFF	SREF	2680.0000	SO.FT.
19.000	ELV-L0	BETA	.000	.000	DTW048	.000	DTW040	.000	LREF	474.8100	IN.
21.000	ELV-R1	ELV-L1	.000	.000	DTW049	-11.700			BREF	936.6800	IN.
23.000	SPOBRK	ELV-R0	56.000	.000		16.300			XTRP	1076.6800	IN.X3
25.000	RVVL	RUDDER	1.860	.000					YTRP	.0000	IN.Y0
27.000									ZTRP	375.0000	IN.Z0
									SCALE	.0150	



INCREMENTAL NORMAL FORCE COEFFICIENT, DLTCN

FIG. 18 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 1.86)

(DTW048)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116

REFERENCE INFORMATION

SREF	2570.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XREF	1078.0000	IN.
YREF	1078.0000	IN.
ZREF	375.0000	IN.
SCALE	.0150	

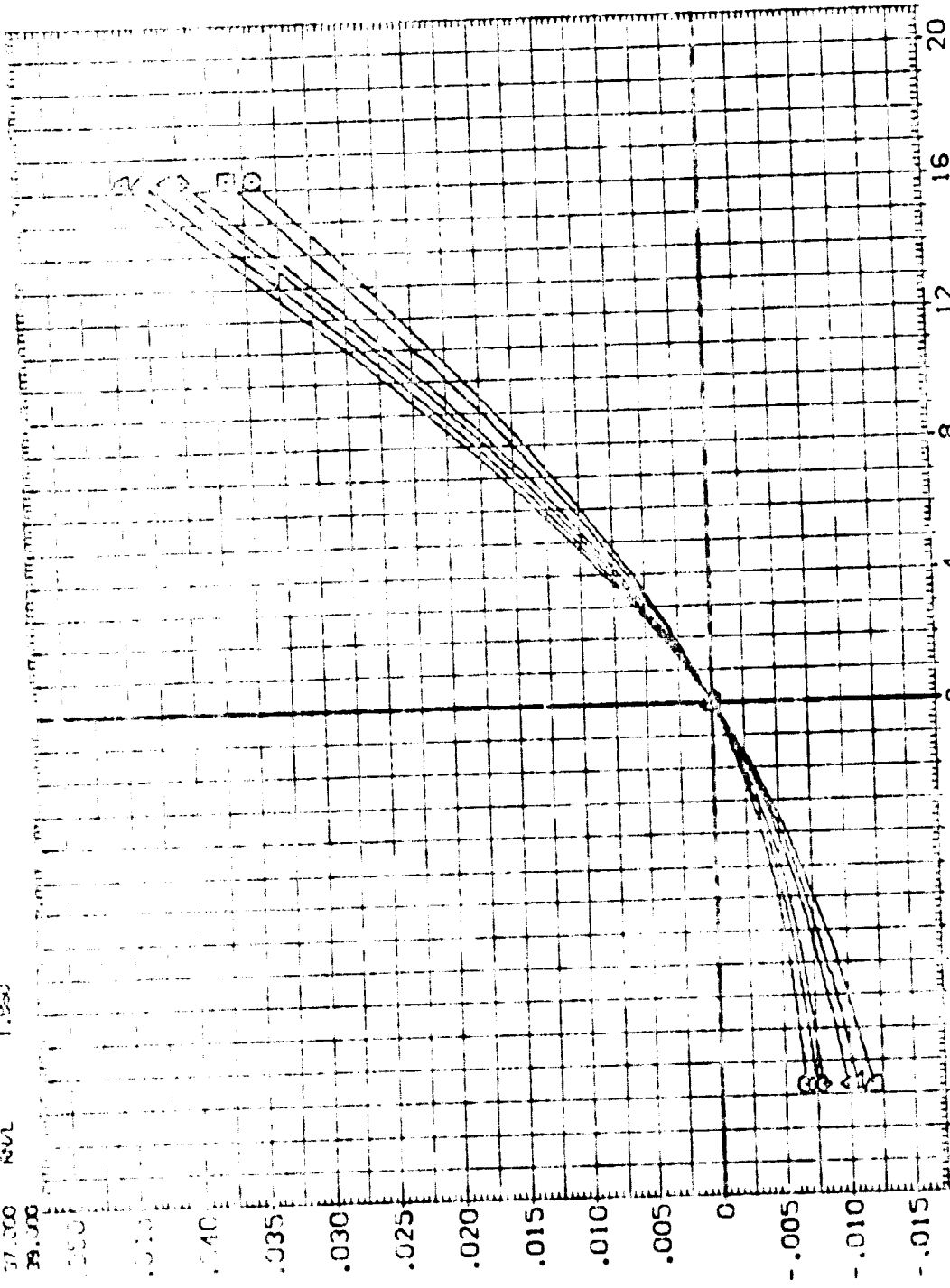
DATA SOURCE

DLBDFP	.000
DLBOFF	-11.700
DLBOFF	16.300

PARAMETRIC VALUES

ALPHA	8.000	DETA	.000
MACH	.000	ELV-LI	.000
ELV-LO	.000	ELV-RO	.000
ELV-RI	.000	PR-CLAR	.000
SA-JCX	55.000		
NSVL	1.950		

ALPHA	29.000
ALPHA	31.000
ALPHA	33.000
ALPHA	35.000
ALPHA	37.000
ALPHA	39.000



INCREMENTAL BODY FLAP DEFLECTION ANGLE, DEGREES, DLBOFF

INCREMENTAL NORMAL FORCE FORCE COEFFICIENT, CFCN

FIG. 18 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 1.86)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW048)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	DATASET	DLBDFP	SREF	REFERENCE INFORMATION
○	41.000	ELV-L0	8.000 BETA	.000 DLBDFP	DTW040	.000	2650.0000	50. FT.
□	43.000	ELV-LI	.000 ELV-LI	.000 DTW048			474.9100	IN.
◇	45.000	ELV-RI	.000 ELV-RI	-11.700			936.6800	IN.
		SPUBRK	55.000 FLUDER	16.300			1076.6800	IN. X0
		RVNL	1.860				375.0000	IN. Y0
							375.0000	IN. Z0
							SCA-E	.0150

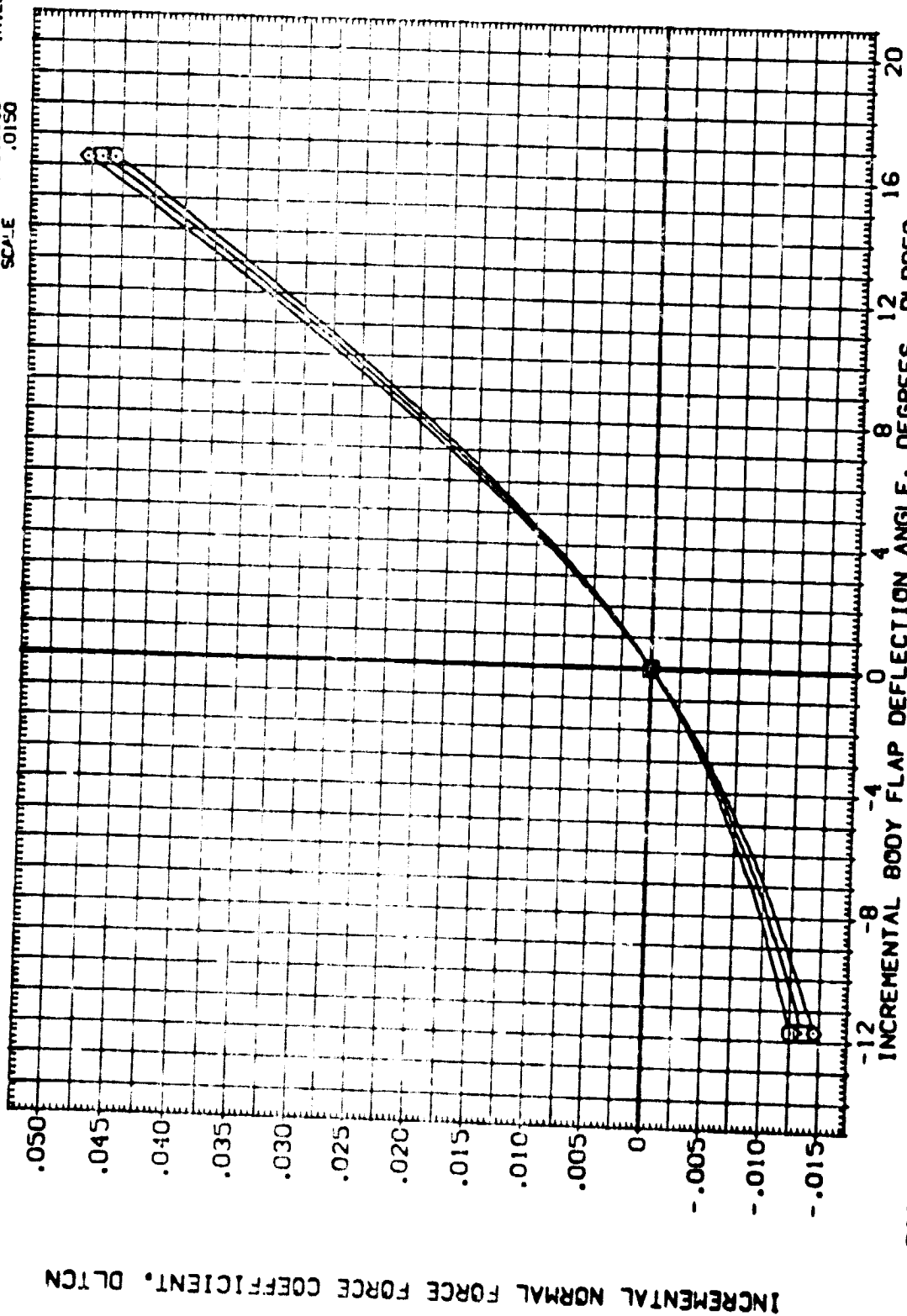


FIG. 18 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 1.86)



0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW048)

ALPHA	29.000	MAOH	8.000	PARAMETRIC VALUES	.000	DATASET	DLBOFF	DATA SOURCE	.000	DATASET	DLBOFF	SREF	2690.0000	SO.FT.
31.000	.000	ELV-L0	.000	BETA	.000	DTW048	-11.700		.000	DTW040	.000	LREF	474.8100	IN.
33.000	.000	ELV-R1	.000	ELV-L1	.000	DTW049	16.300					BREF	936.6800	IN.
35.000	.000	SPDRK	55.000	ELV-R0	.000							XTRP	1076.6800	IN.X0
37.000	1.880	P'VL		RUDDER	.000							YTRP	375.0000	IN.Y0
39.000												ZTRP	375.0000	IN.Z0
												SCALE	.0150	

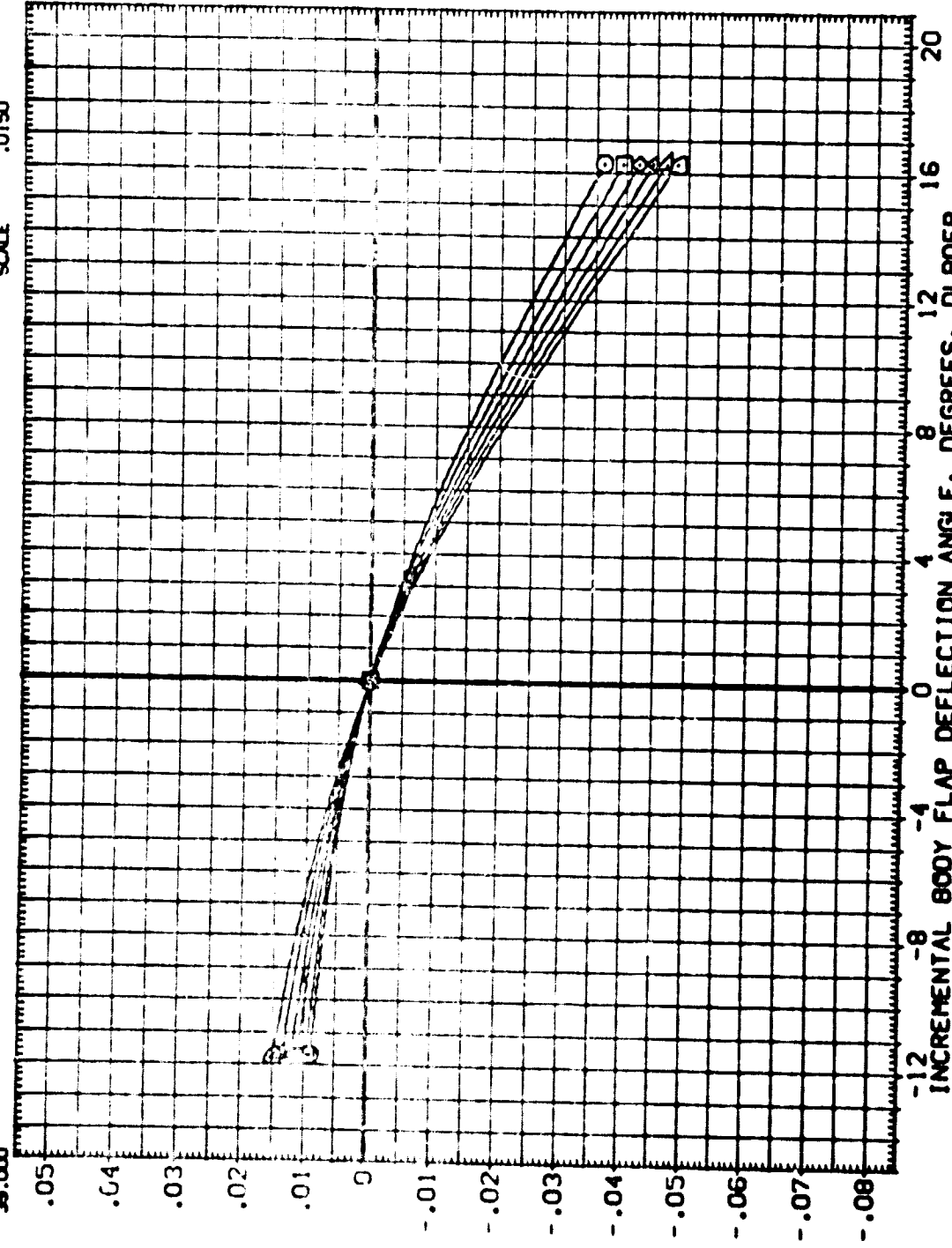


FIG. 18 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 1.86)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTWC18)

ALPHA	41.000	MACH	8.000	BETA	.000	DATASET	.000	DLBDFP	.000	DATASET	DTW040	DLBDFP	.000	SREF	2650.0000	SO.FT.	50.000
	43.000	ELV-L0	.000	ELV-L1	.000	DTW048	.000	-11.700		DTW040				LREF	474.8100	IN.	
	45.000	ELV-R1	.000	ELV-R0	.000	DTW072	.000	16.300						SRREF	925.8900	IN.	
		CLIFF	50.000	RUDDER	.000									XANG	1076.6900	IN.XG	
		SMV	1.860											YANG	1000.0000	IN.YG	
														ZREF	375.0000	IN.ZO	
														SCALE	.0150		

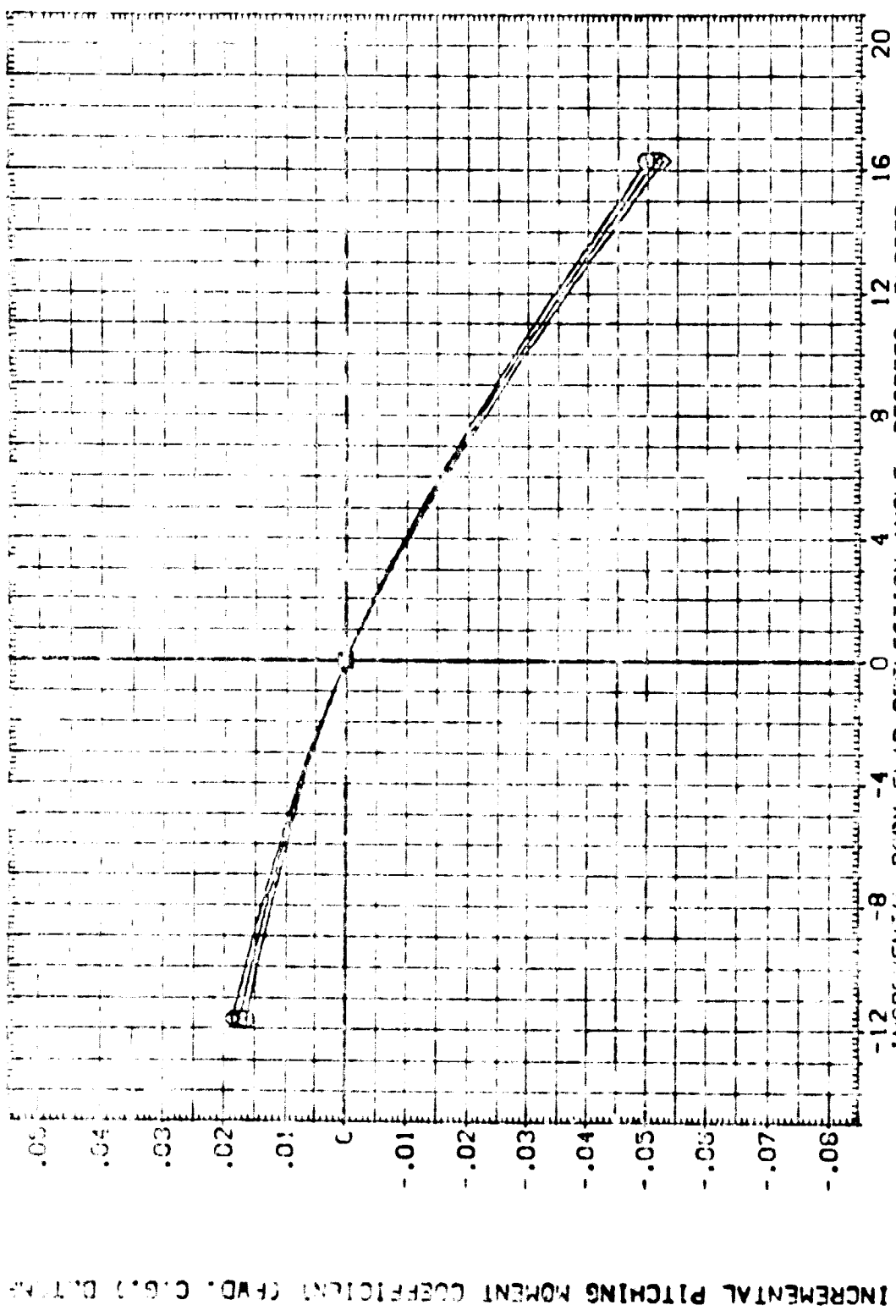


FIG. 18 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 1.86)

ORIGINAL PAGE IS
OF LOWER QUALITY

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW048)

ALPHA	17.000	MACH	8.000	BETA	.000	DATASET	.000	DATASET	DTW048	DLBDFP	.000	SREF	2690.0000	SO.FT.
	19.000	ELV-L0	.000	ELV-L1	.000	DTW049	.000	DTW040	DTW040			LREF	474.8100	IN.
	21.000	ELV-R1	.000	ELV-R0	.000							XREF	936.6800	IN.
	23.000	SPOBRK	55.000	RUDDER	.000							YREF	1076.6800	IN.
	25.000	RVAL	1.660									ZREF	.0000	IN.
	27.000											SCALE	375.0000	IN.Z0

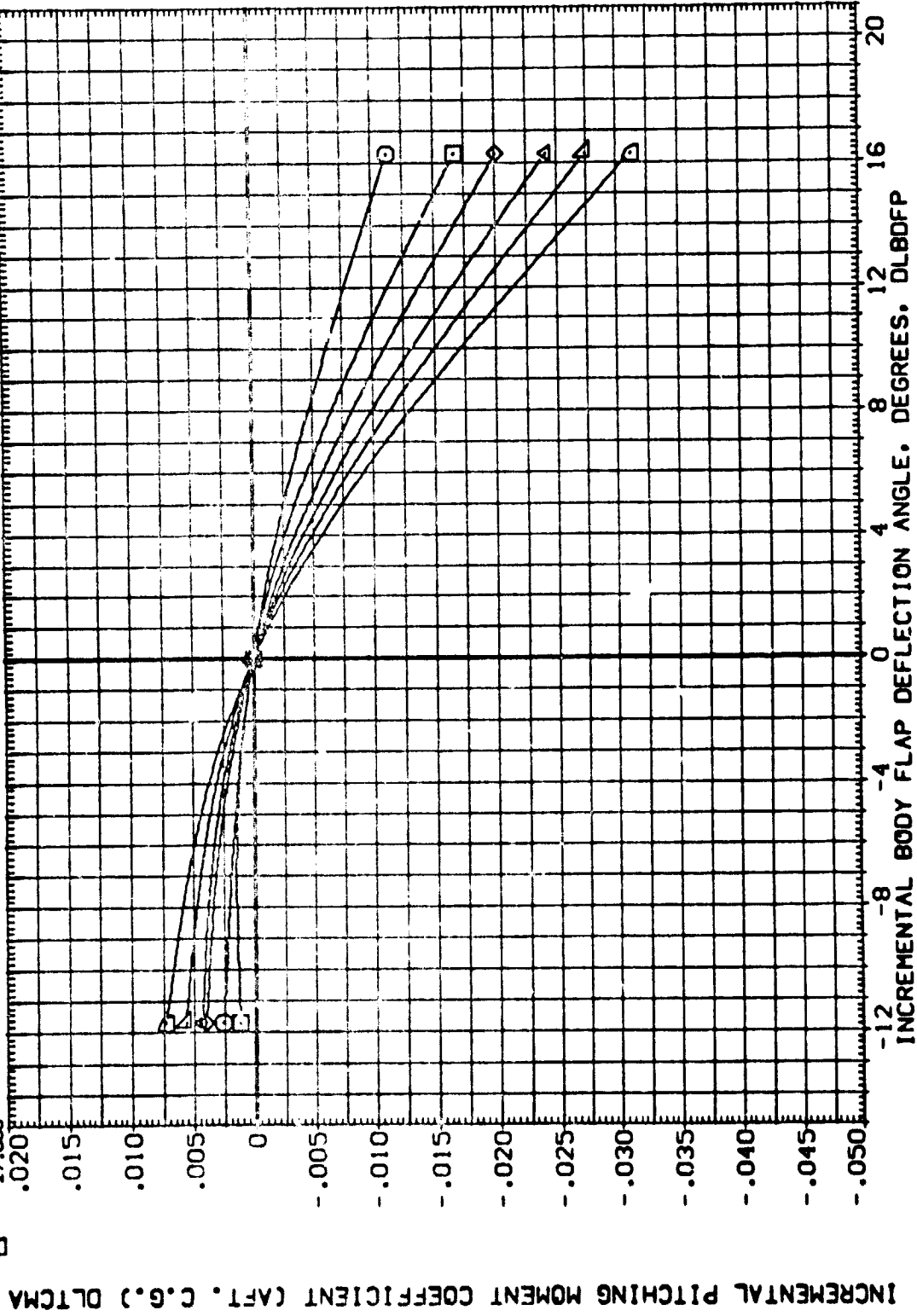


FIG. 18 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 1.86)

(DTW048)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116

REFERENCE INFORMATION

SO.FT.	2690.0000
IN.	474.8100
IN.X0	936.6800
IN.Y0	1076.0000
IN.Z0	375.0000
SCALE	.0150

DATA SOURCE

DLBDFP	.000
DTW040	DTW040

PARAMETRIC VALUES

BETA	8.000
ELV-LI	.000
ELV-RI	.000
ELV-R0	.000
RUDDER	55.000
RUDDER	1.660

DATA SOURCE

DLBDFP	-11.700
DTW048	16.300

PARAMETRIC VALUES

BETA	8.000
ELV-LI	.000
ELV-RI	.000
ELV-R0	.000
RUDDER	55.000
RUDDER	1.660

PARAMETRIC VALUES

BETA	8.000
ELV-LI	.000
ELV-RI	.000
ELV-R0	.000
RUDDER	55.000
RUDDER	1.660

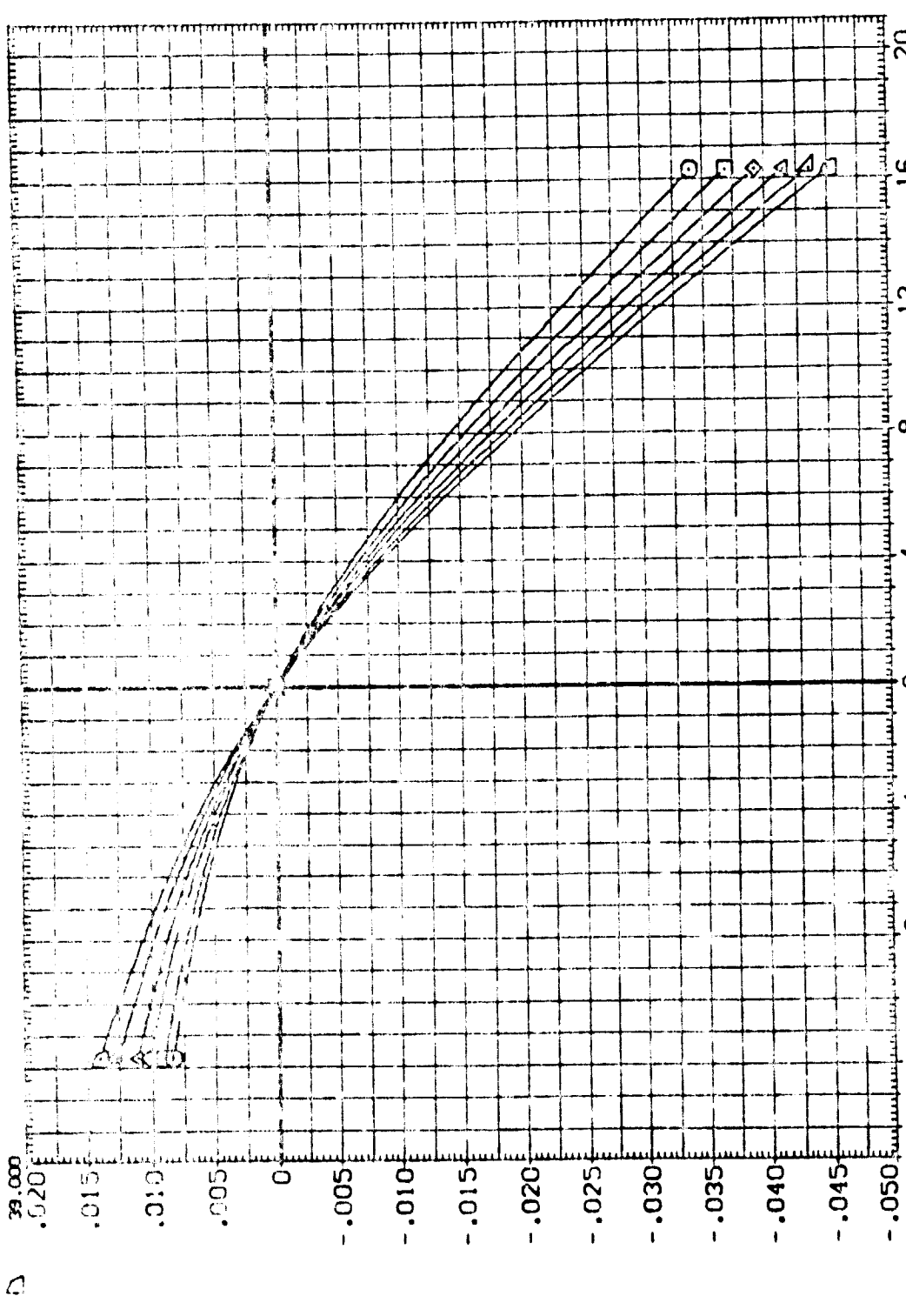


FIG. 18 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 1.86)

INCREMENTAL PITCHING MOMENT COEFFICIENT (Cp) (C.G.)

ORIGINAL PAGE IS OF POOR QUALITY

0A79 826 C9 E43 F8 M16 N28 R5 V8 W116 (DTW048)

SYMBOL
 ○
 □
 ◇

ALPHA
 11.000
 43.000
 45.000

MACH
 ELV-L0
 ELV-R1
 SPOBRK
 RVVL

PARAMETRIC VALUES
 BETA
 ELV-L1
 ELV-R0
 RUDDER

DATA SOURCE
 DLBOFF
 DTW048
 DTW049

DLBOFF
 DTW040

REFERENCE INFORMATION
 SQ.FT.
 2690.0000
 474.8100
 936.6800
 1076.0000
 375.0000
 .0150

SREF
 LREF
 BREF
 XMRP
 YMRP
 ZMRP
 SCALE

IN.
 IN.
 IN.
 IN.
 IN.

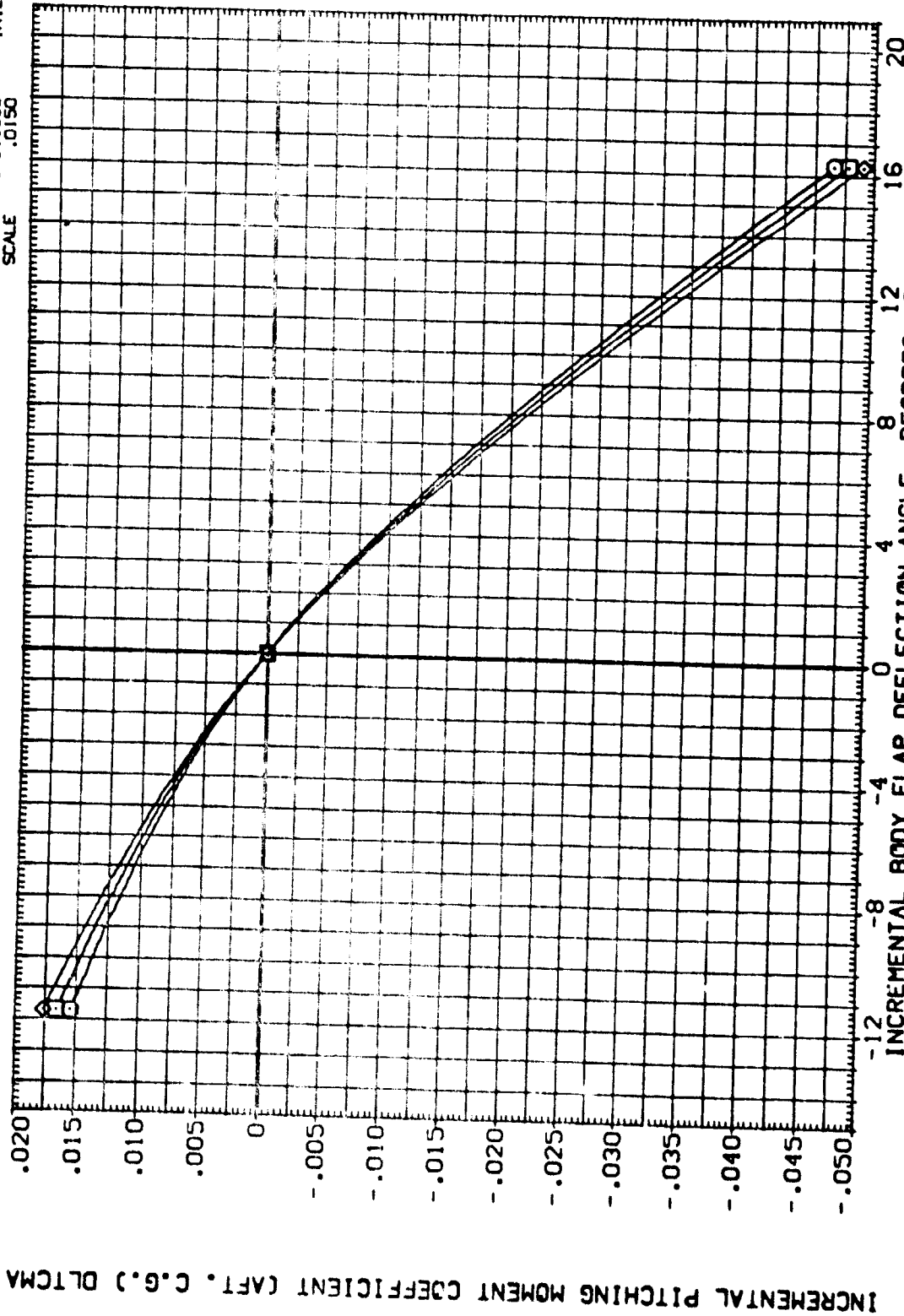
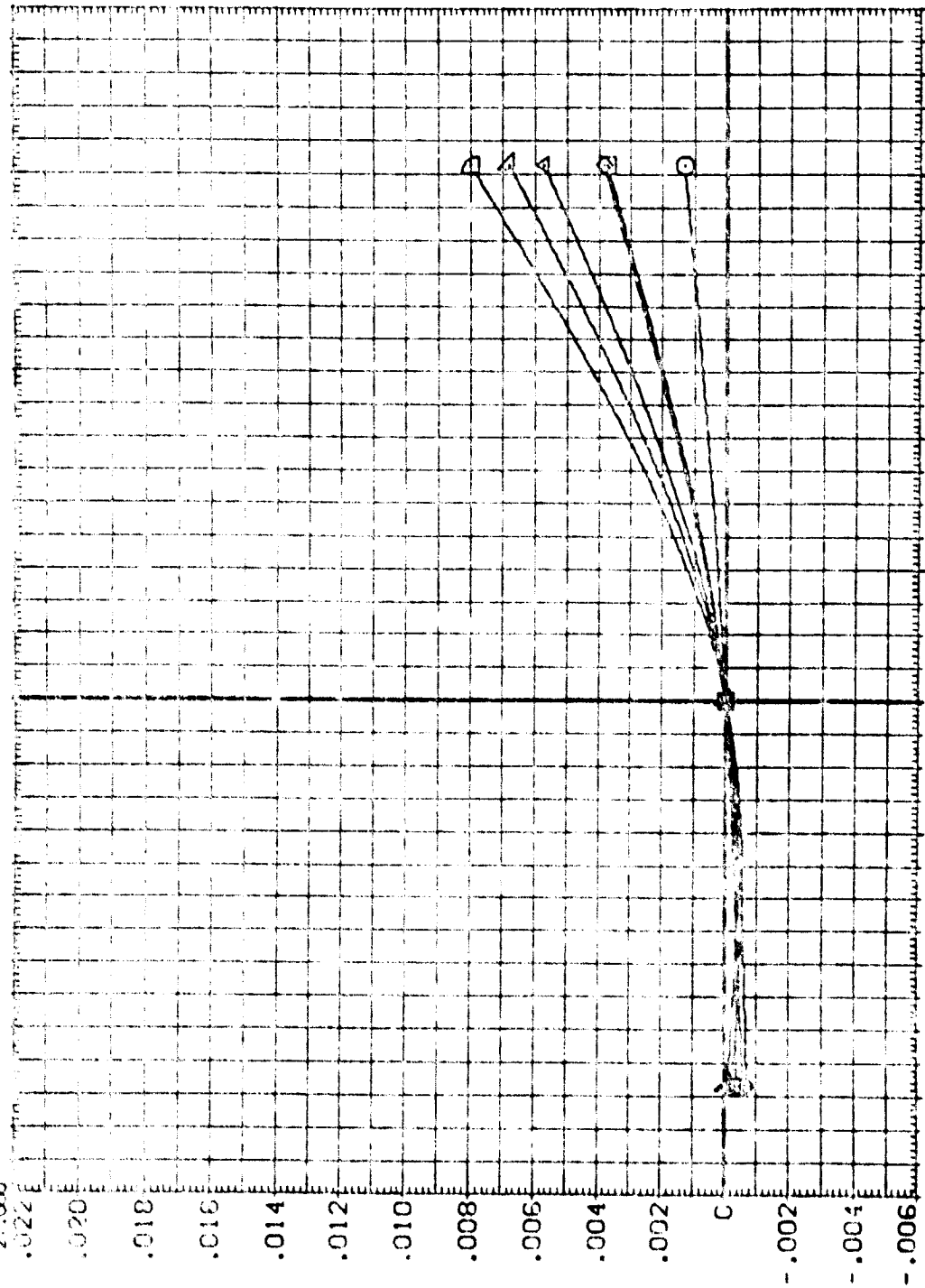


FIG. 18 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 1.86)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW048)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	MACH	.000	DLBOFF	2690.0000	50. FT.
17.000	ELV-LC	.000	DLBOFF	474.8100	IN.
19.000	ELV-RI	.000	DLBOFF	955.5000	IN.
21.000	ELV-RO	.000	DLBOFF	1678.0000	IN.
23.000	SP-DBP	.000	DLBOFF	375.0000	IN.
25.000	RS/L	.000	DLBOFF	.0150	IN.
27.000	BETA	.000	DLBOFF		IN.
	ELV-LI	.000	DLBOFF		IN.
	ELV-RO	.000	DLBOFF		IN.
	RUDER	.000	DLBOFF		IN.
	SCALE				



INCREMENTAL AXIAL FORCE COEFFICIENT, DLTCA

INCREMENTAL BODY FLAP DEFLECTION ANGLE, DEGREES, DLBOFF

FIG. 18 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER = 1.86)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW048)

SYMBOL
 □
 ◇
 △
 ▽

ALPHA
 29.000
 31.000
 33.000
 35.000
 37.000

MACH
 ELV-L0
 ELV-R1
 SPOBRK
 RVL

PARAMETRIC VALUES
 8.000 BETA
 .000 ELV-L1
 .000 ELV-R0
 55.000 RUDDER
 1.860

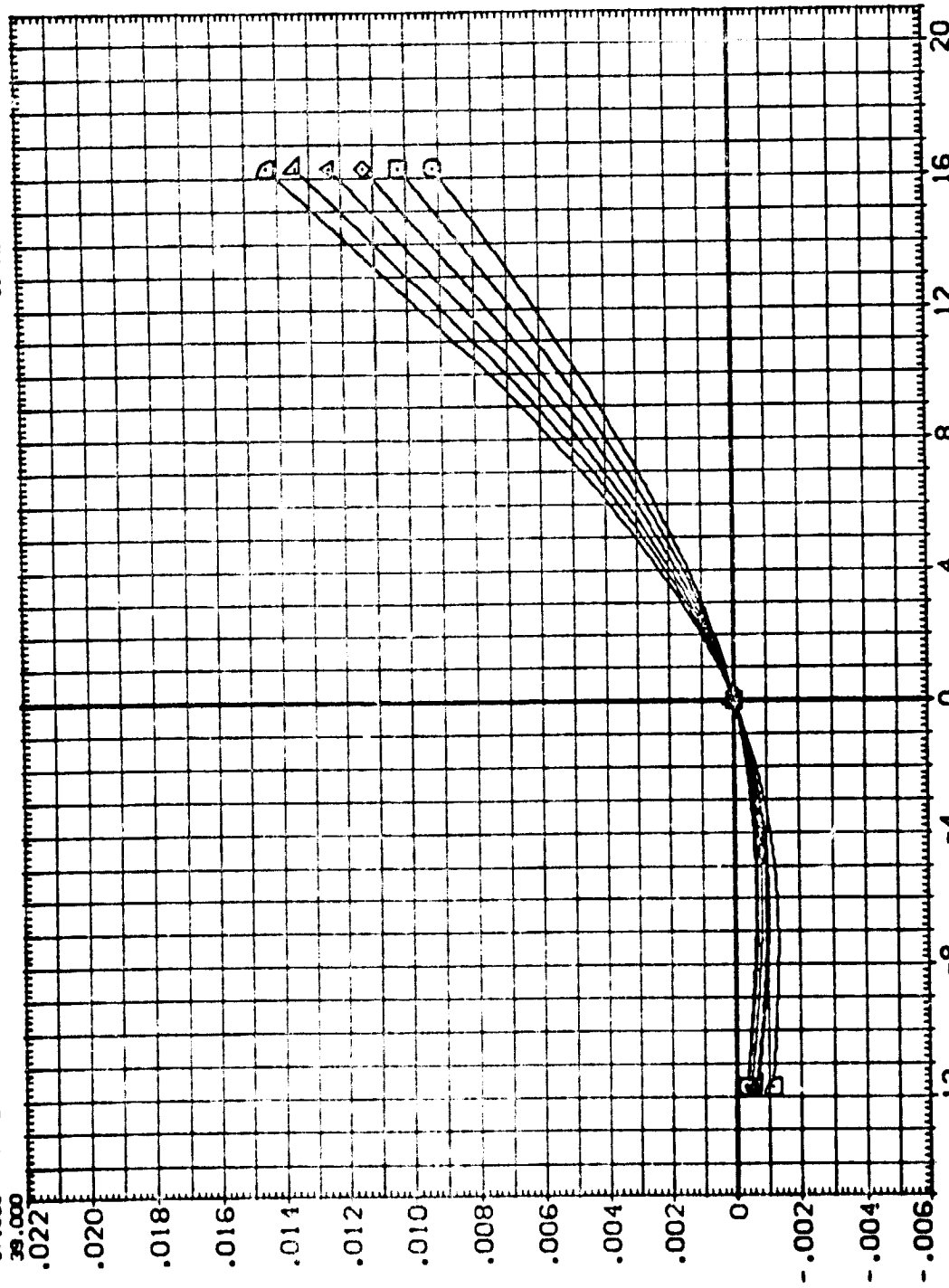
.000 DATASET
 .000 DTW048
 .000 DTW048
 .000

DATA SOURCE
 DLBOFP
 -11.700
 16.300

DATASET
 DLBOFP
 .000
 DTW040

SREF
 LREF
 BREF
 XMRP
 YMRP
 ZMRP
 SCALE

REFERENCE INFORMATION
 2690.0000 SO.FT.
 474.8100 IN.
 936.6800 IN.
 1076.6800 IN.
 375.0000 IN.
 .0150 IN.20



INCREMENTAL AXIAL FORCE COEFFICIENT, DLTCA

INCREMENTAL BODY FLAP DEFLECTION ANGLE, DEGREES, DLBOFP
 FIG. 18 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 1.86) PAGE 266



0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW048)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
□	17.000	8.000	BETA	DLBDFP	2690.0000 SO.FT.
◇	19.000	.000	ELV-LI	DLBDFP	474.8100 IN.
△	21.000	.000	ELV-RI	DTW048	936.6800 IN.
▽	23.000	.000	ELV-R0	DTW049	1076.1500 IN.
◇	25.000	56.000	RUDDER	DTW049	375.0000 IN.
◇	27.000	1.860	RVL	DTW049	375.0000 IN.
	.022			SCALE	.0150

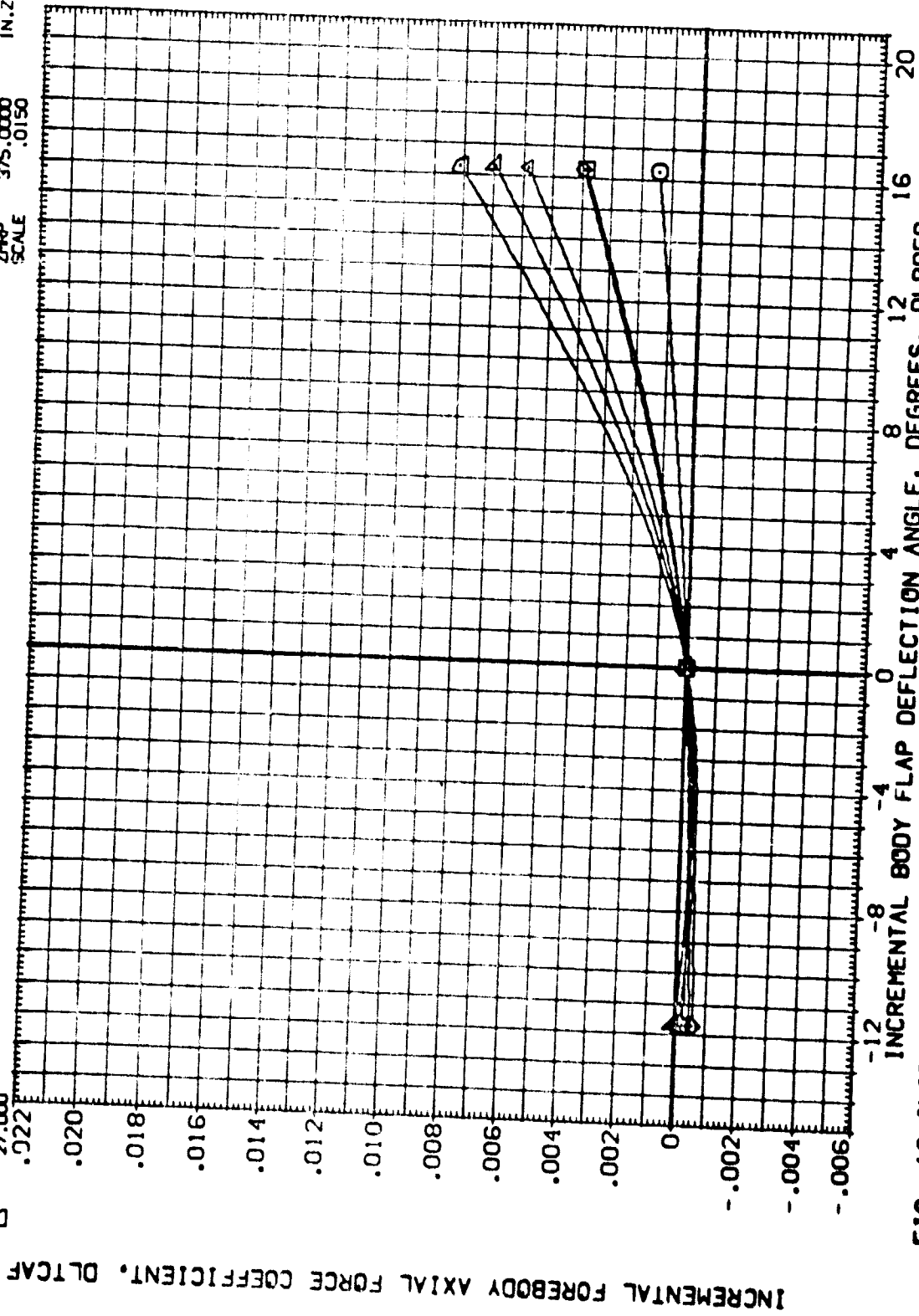


FIG. 18 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 1.86)

(DTWC48)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116

REFERENCE INFORMATION
 SQ.FT. 2690.0000
 IN. 474.8100
 IN. 936.6200
 IN. 1378.6400
 IN. 1820.6600
 IN. 2262.6800
 IN. 2704.7000

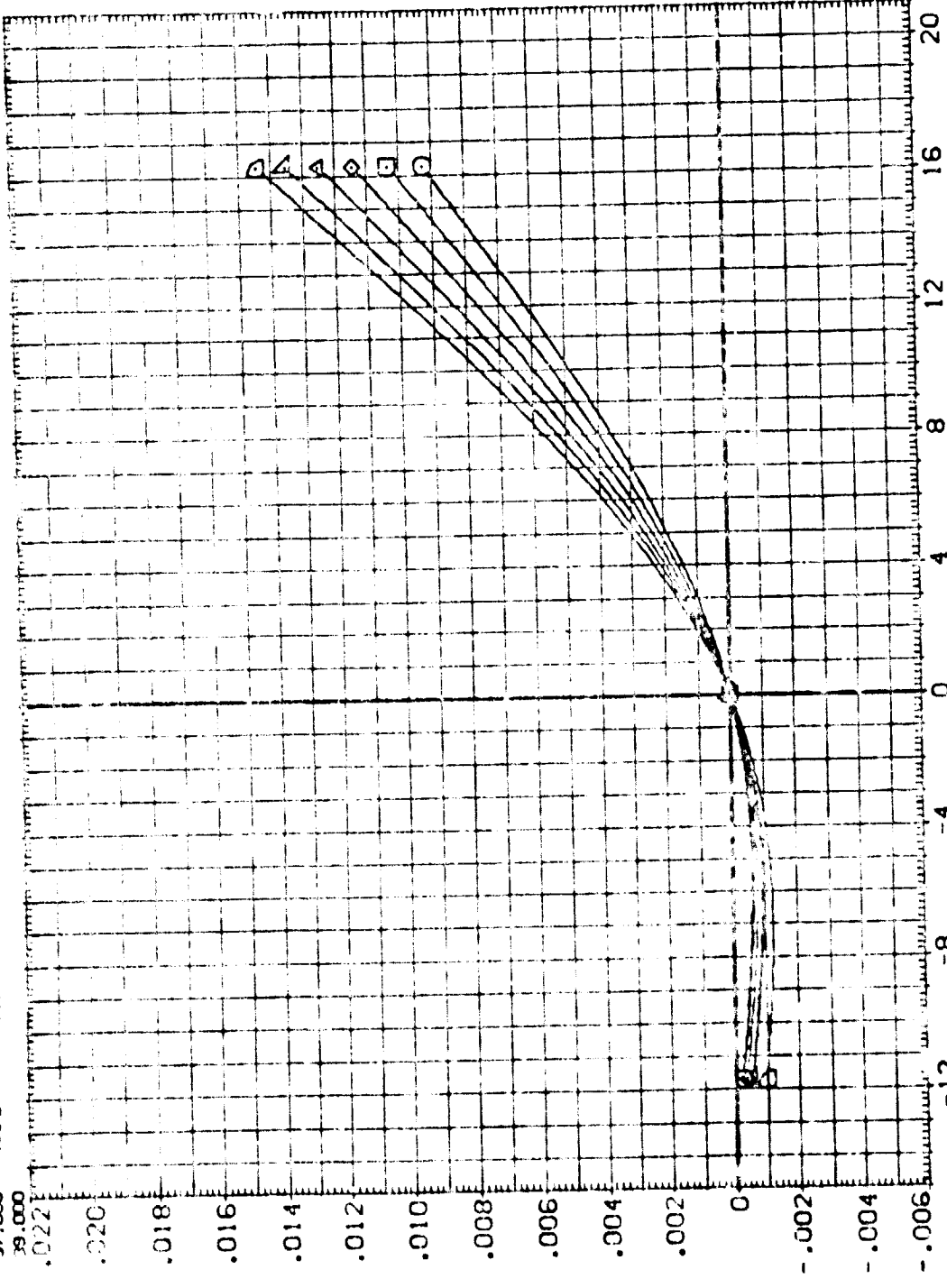
DATA SOURCE
 DLBOFF .000
 DATASET DTWC48
 DTWC48
 DTWC49

PARAMETRIC VALUES
 BETA 8.000
 ELV-LI .000
 ELV-RO .000
 RIDGER 55.000
 REV/L 1.860

DATA SOURCE
 DLBOFF -11.700
 DTWC48
 DTWC49

PARAMETRIC VALUES
 BETA 8.000
 ELV-LI .000
 ELV-RO .000
 RIDGER 55.000
 REV/L 1.860

SYMBOL
 □
 ○
 △
 ▽



INCREMENTAL FOREBODY AXIAL FORCE COEFFICIENT, DLBOFF

FIG. 18 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 1.86)
 INCREMENTAL BODY FLAP DEFLECTION ANGLE, DEGREES, DLBOFF

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW048)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	DATASET	DLBDFP	REF	REFERENCE INFORMATION
○	17.000	ELV-L0	BETA	DLBDFP	.000	DTW048	LNREF	2650.0000 SO.FT.
□	19.000	ELV-R1	ELV-L1	-11.700	.000	DTW040	LNREF	474.8100 IN.
△	21.000	SPOBRK	ELV-R0	16.300			LNREF	956.6800 IN.
▽	23.000	RVL	RUDDER				LNREF	1076.6800 IN.
◇	25.000						LNREF	375.0000 IN.
◇	27.000						LNREF	375.0000 IN.
							SCALE	.0150

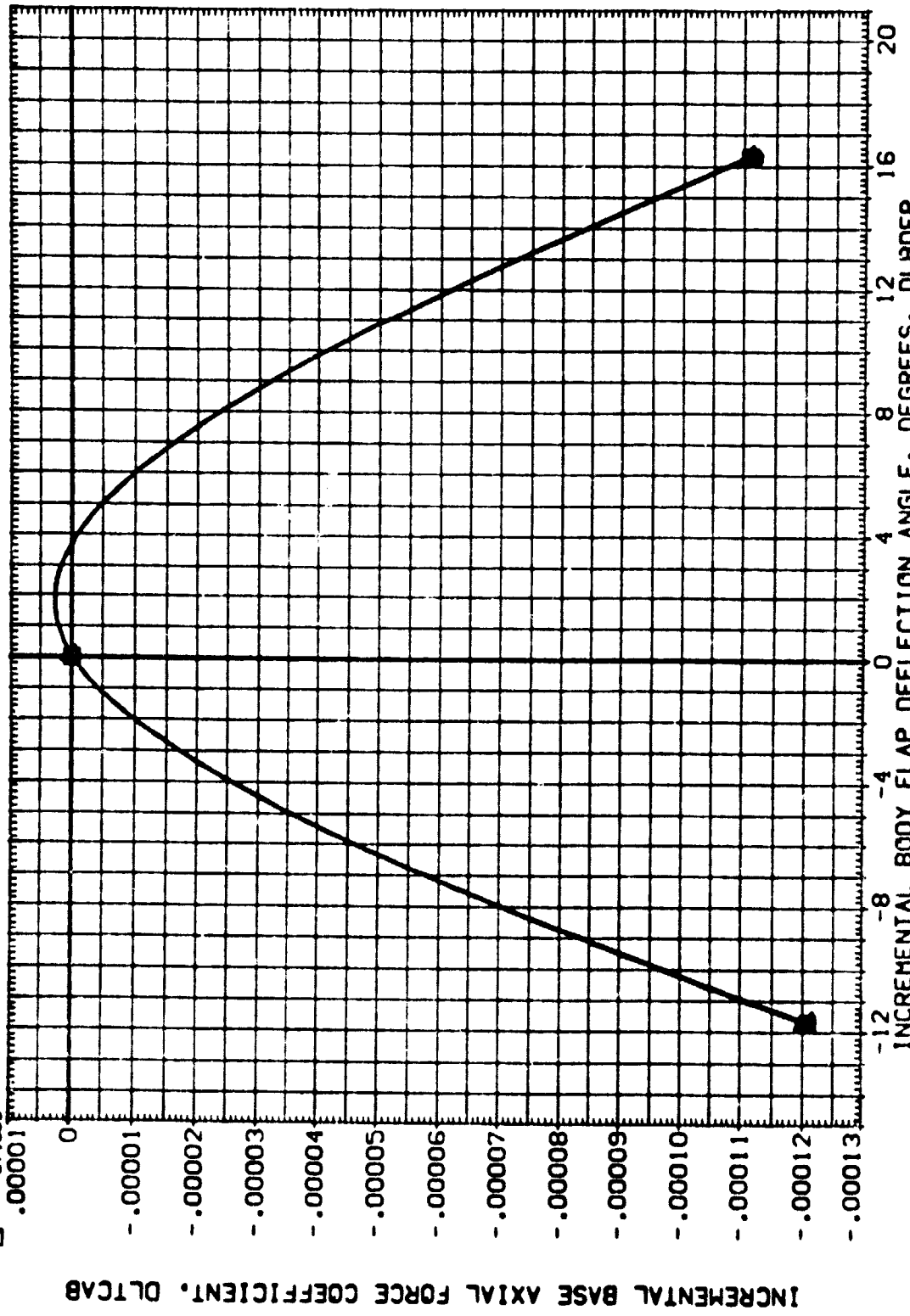


FIG. 18 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 1.86)

0A79 826 C9 E43 F8 M16 N28 R5 V8 W116 (DTW048)

SYMBOL		ALPHA		MACH		PARAMETRIC VALUES				DATA SOURCE		DATASET		DLBDFP		SREF		REFERENCE INFORMATION	
○		41.000				8.000	BETA	.000	DATASET	.000	DLBDFP	.000	DTW040	.000	DTW040	2690.0000	SO.FT.	474.8100	IN.
□		43.000		ELV-L0		.000	ELV-L1	.000	DTW048	-11.700			DTW048		BRF	936.6800	IN.	1076.6700	IN.
◇		45.000		ELV-R1		.000	ELV-R0	.000	DTW049	16.300			DTW049		ALRP	1076.6700	IN.	375.0000	IN.
				ELV-R2		55.000	M000-R	.000							ZMRP	375.0000	IN.		
				RVNL		1.860									SCALE	.0150			

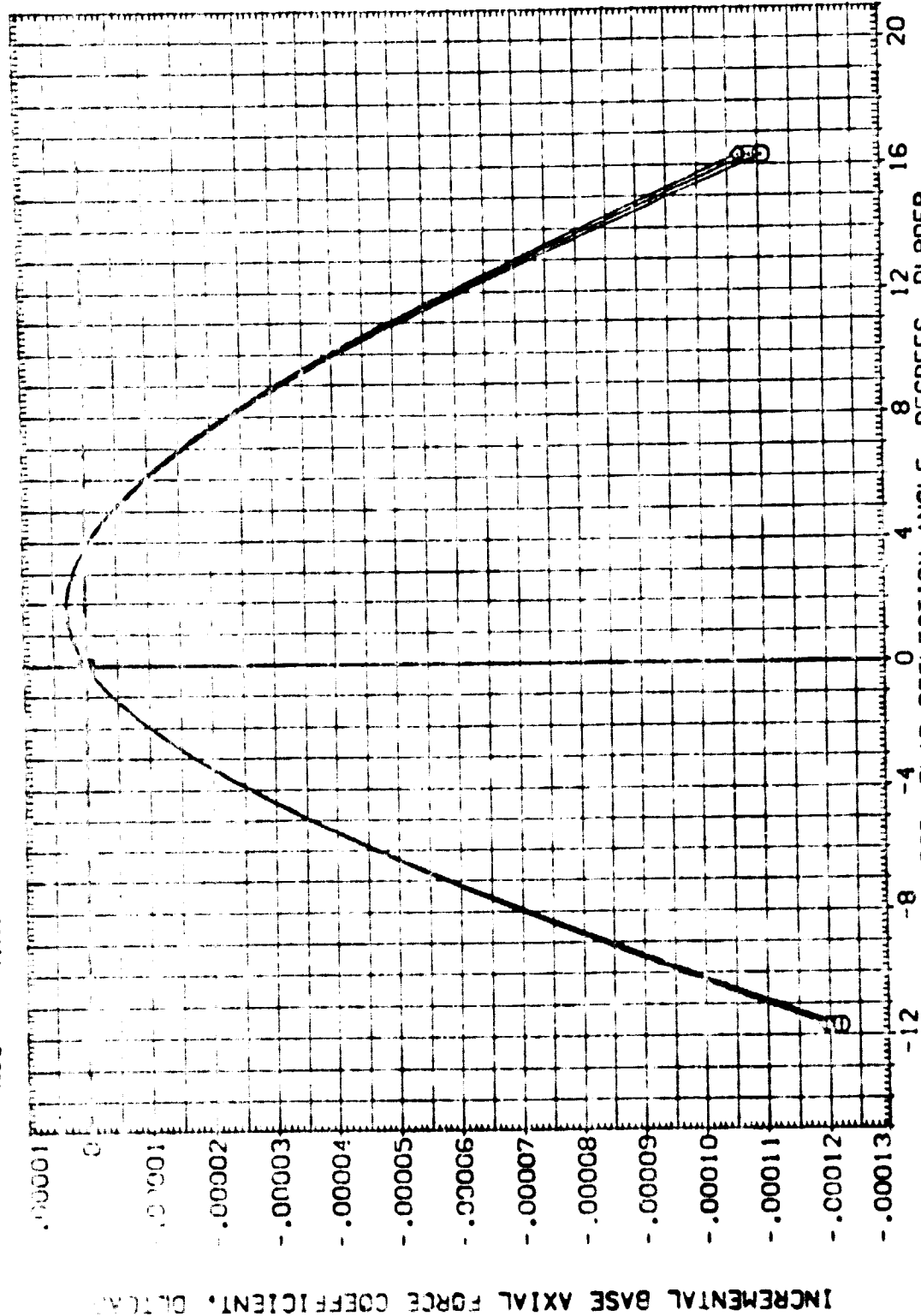


FIG. 18 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 1.86)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (OTW048)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	.000	DATASET	DLBOFP	DATA SOURCE	DATASET	DLBOFP	SREF	REFERENCE INFORMATION
□	17.000	ELV-L0	BETA	.000	DTW048	-11.700	DLBOFP	DTW040	.000	2690.0000	SO.FT.
◇	19.000	ELV-R1	ELV-L1	.000	DTW043	16.300				474.8100	IN.
△	21.000	S-CORR	ELV-R0	.000						936.6800	IN.
▽	23.000	ANL	RUDER	56.000						1076.6800	IN.
◇	25.000			1.860						375.0000	IN.
▽	27.000									375.0000	IN.
											SCALE
											.0150

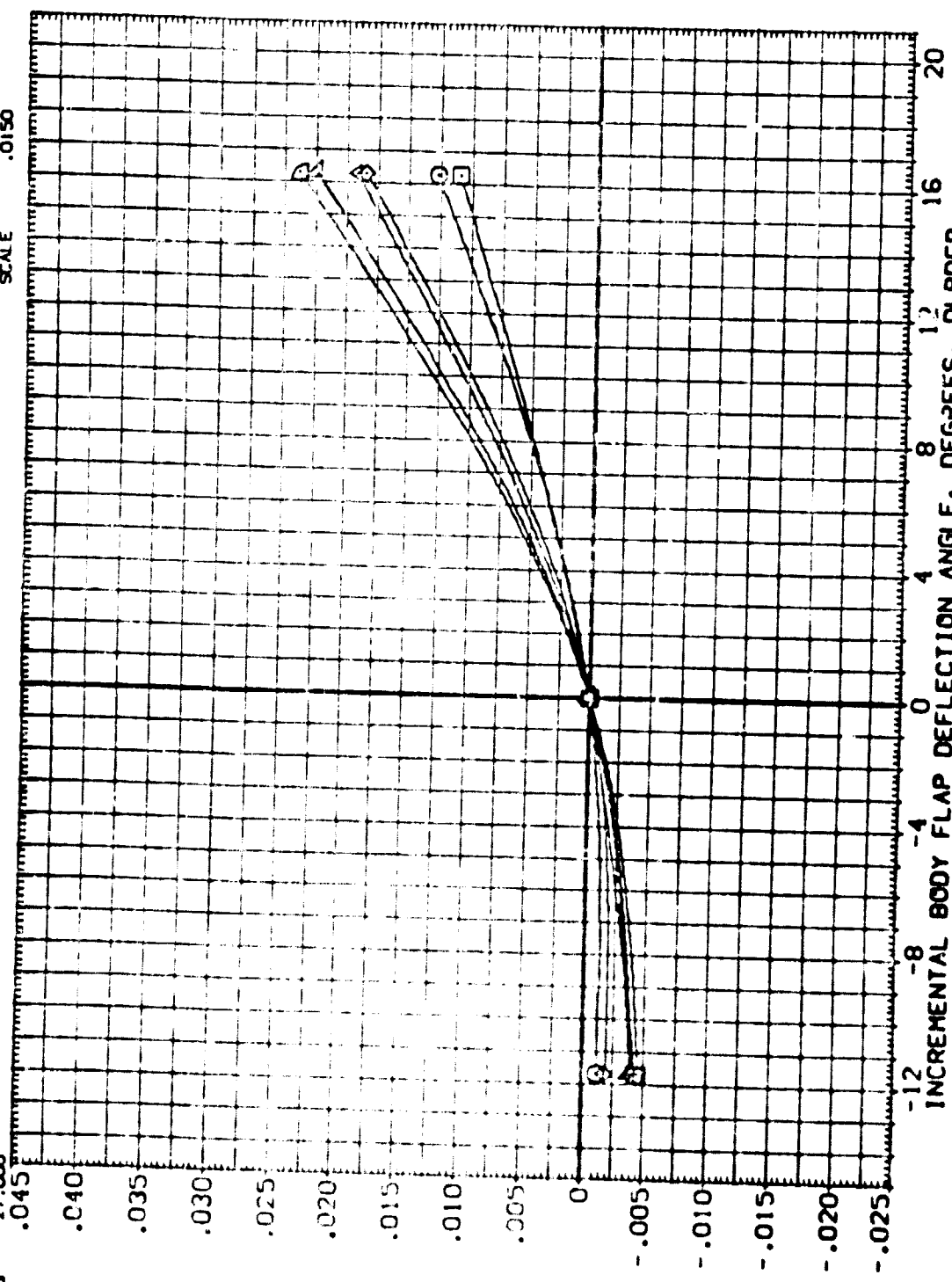


FIG. 18 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 1.86)



0A79 826 C9 E43 F8 M16 N28 R5 V8 W116 (DTW048)

ALPHA	29.000	MACH	8.000	BETA	.000	DATA SOURCE	DLBDFP	DATASET	DLBDFP	SREF	2690.0000	SQ.FT.
	31.000	ELV-L0	.000	ELV-L1	.000	DTW048	-11.700	DTW040	.000	LINEZ	474.8100	IN.
	33.000	ELV-R1	.000	ELV-R0	.000	DTW049	16.300			WAVE	576.6400	IN.
	35.000	SFCERR	55.000	RUDDER	.000					XTRP	1076.8800	IN.X0
	37.000	RNVL	1.860							YTRP	375.0000	IN.Y0
										ZTRP	.0150	IN.Z0
										SCALE		

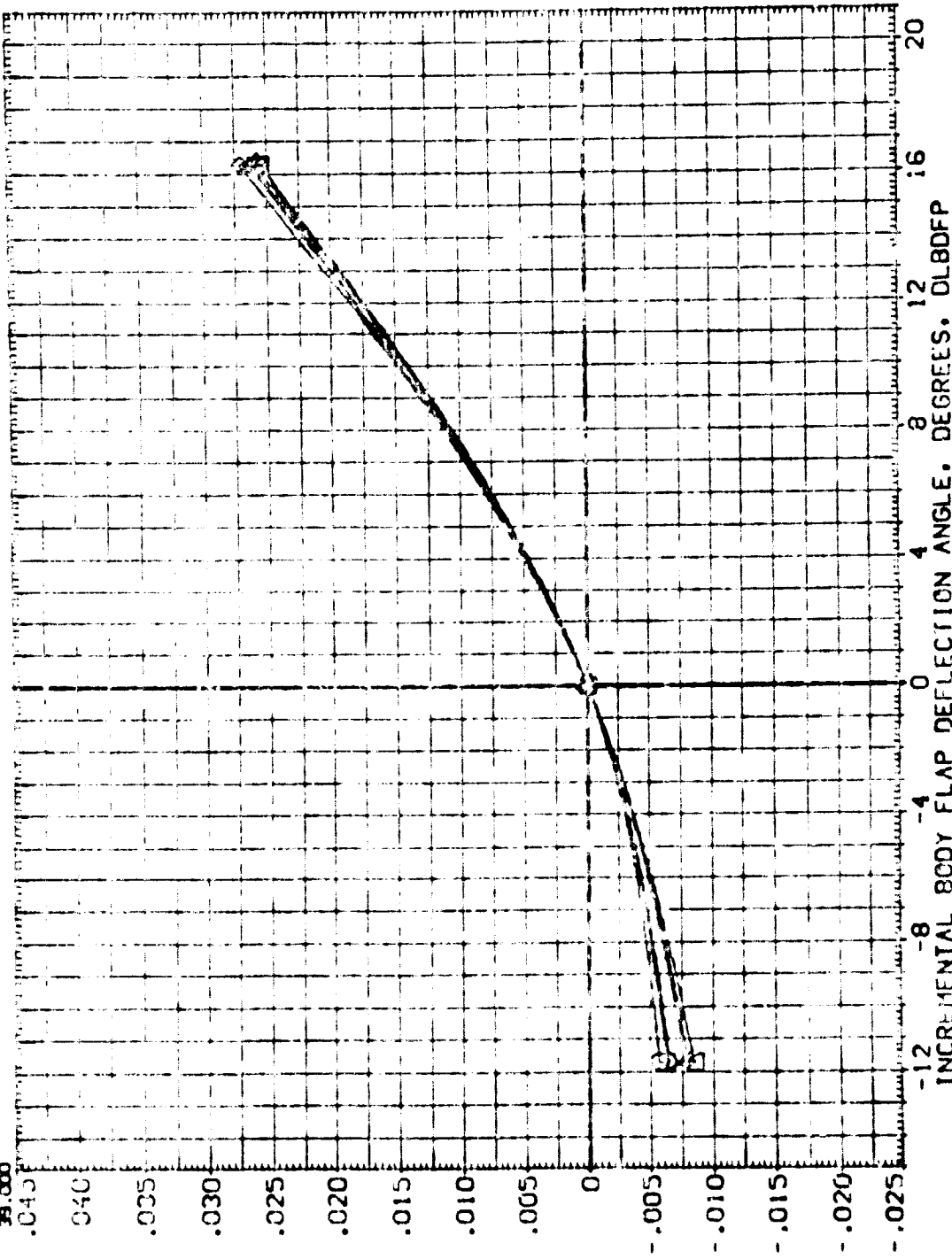
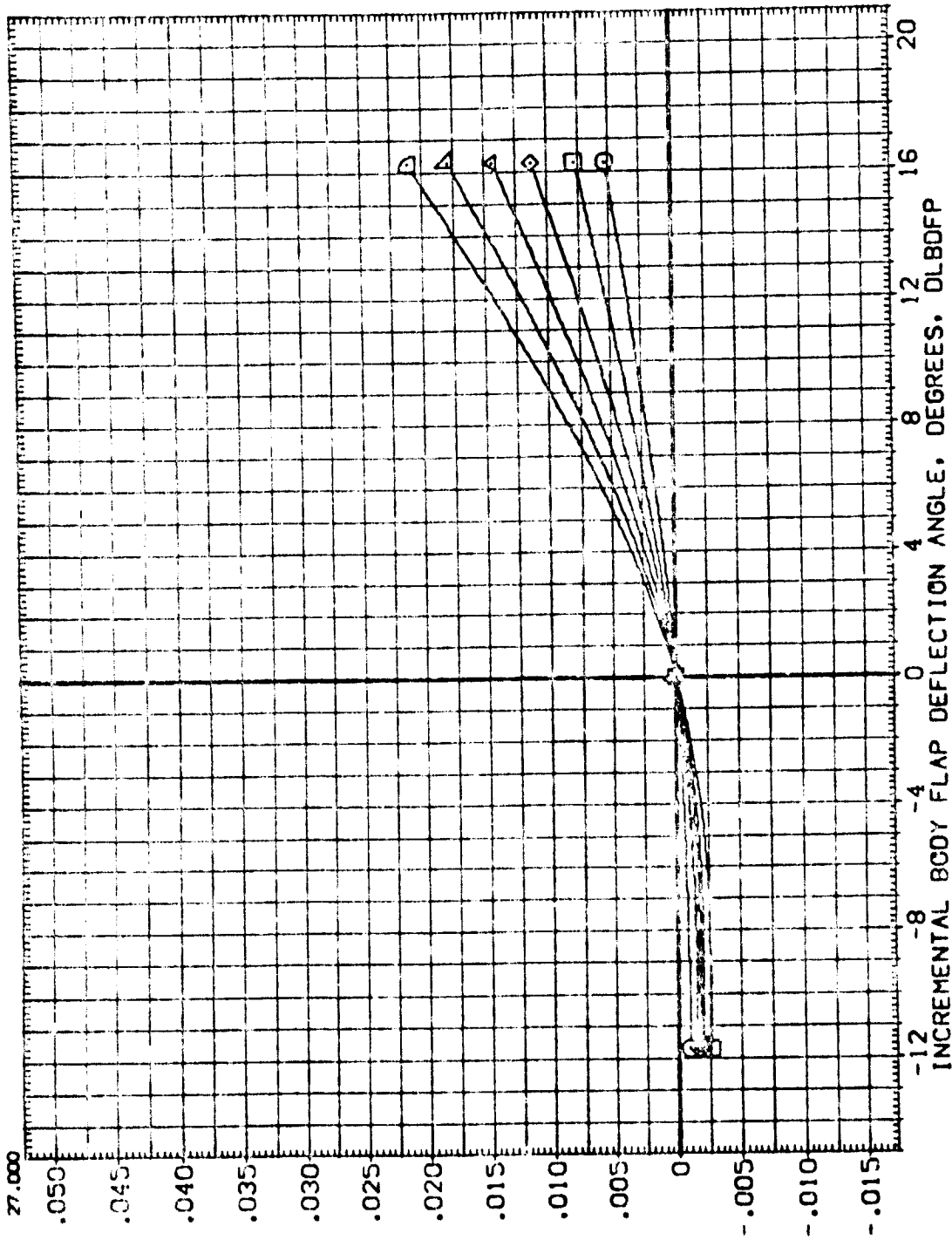


FIG. 18 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 1.86)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW048)

ALPHA	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
17.000	MACH 8.000	.000 DATASET	2690.0000 SQ.FT.
19.000	ELV-L0 .000	.000 DTW048	474.8100 IN.
21.000	ELV-R1 .000	.000 DTW049	936.6900 IN.
23.000	SFOBRK 55.000	.000	1076.6500 IN.
25.000	RVL 1.860	.000	375.0000 IN.
27.000			.0150 IN.



INCREMENTAL DRAG COEFFICIENT, DLICD

FIG. 18 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 1.86)

0A79 826 C9 E43 F8 M16 N28 R5 V8 W116 (DTW048)

ALPHA	29.000	MACH	8.000	PARAMETRIC VALUES	.000	DATA SOURCE	DTW048	DLBDFP	-11.700	DTW040	DLBDFP	.000	REF	2930.0000	SO.FT.
	31.000	ELV-L0	.000	BETA	.000	DTW048	DTW049	DLBDFP	16.300	DTW040	DLBDFP	.000	LREF	474.8100	IN.
	33.000	ELV-R1	.000	ELV-L1	.000	.000	.000						BREF	936.6600	IN.
	35.000	SPOBRK	55.000	ELV-R0	.000	.000	.000						XREF	1076.6300	IN.X3
	37.000	RVL	1.860	RUDDER	.000	.000	.000						YREF	375.0000	IN.Y0
	39.000												ZREF	375.0000	IN.Z0
													SCALE	.0150	

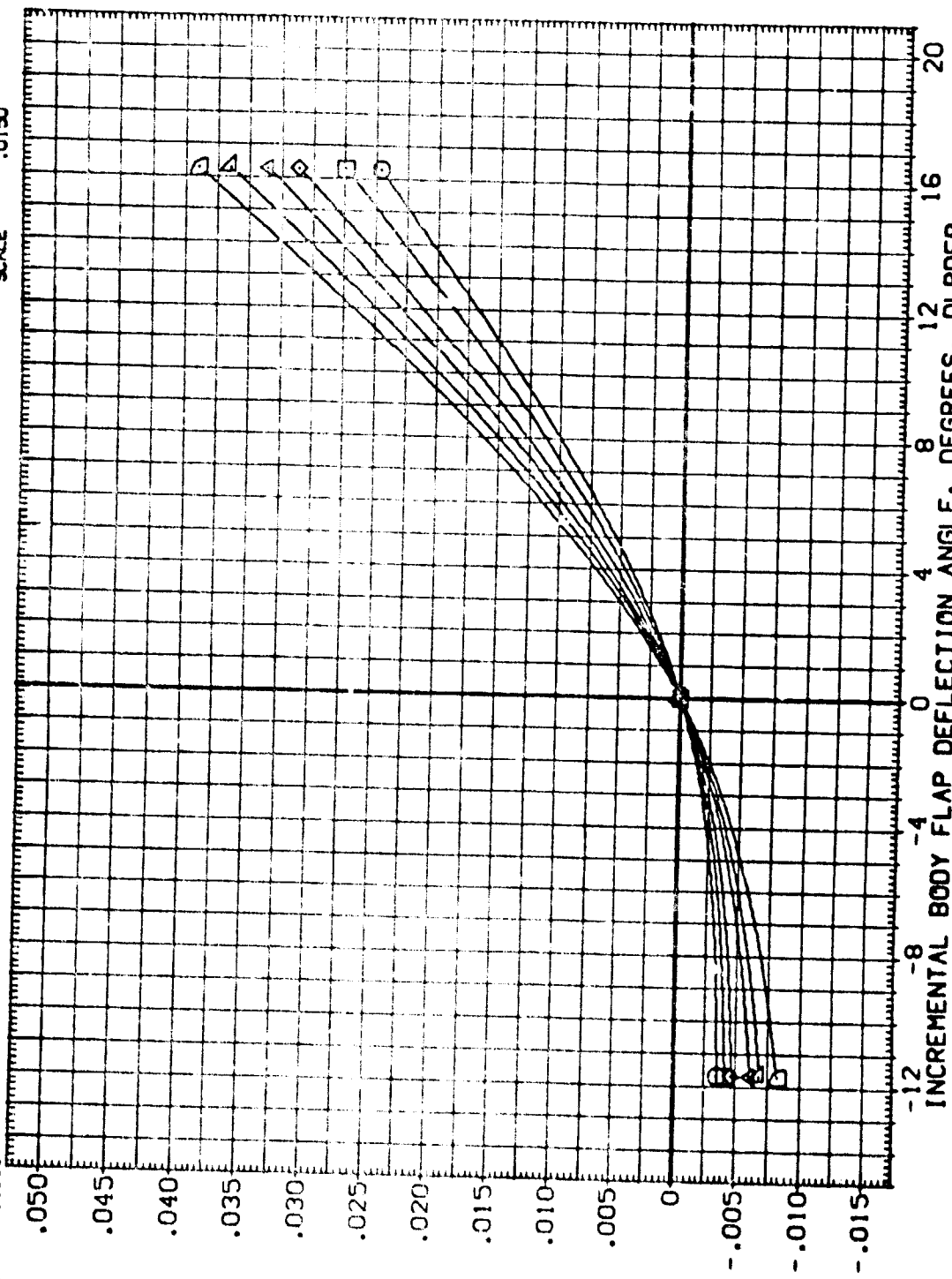


FIG. 18 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 1.86)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW048)

SYMBOL		PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION					
□	41.000	MACH	0.000	BETA	.000	DATASET	DLBDFP	SREF	2690.0000	SQ.FT.	N.
□	43.000	ELV-L0	.000	ELY-L1	.000	DTW048	DLBDFP	LREF	474.8100	SQ.FT.	N.
□	45.000	ELY-R1	.000	ELY-R3	.000	DTW048	DLBDFP	BREF	936.5800	SQ.FT.	N.
◇		S-CORR	55.000	RUDDER	.000	DTW048	DLBDFP	YREF	1076.6300	SQ.FT.	N.
		PAUL	1.860					ZREF	375.0000	SQ.FT.	N.
								SCALE	.0150		

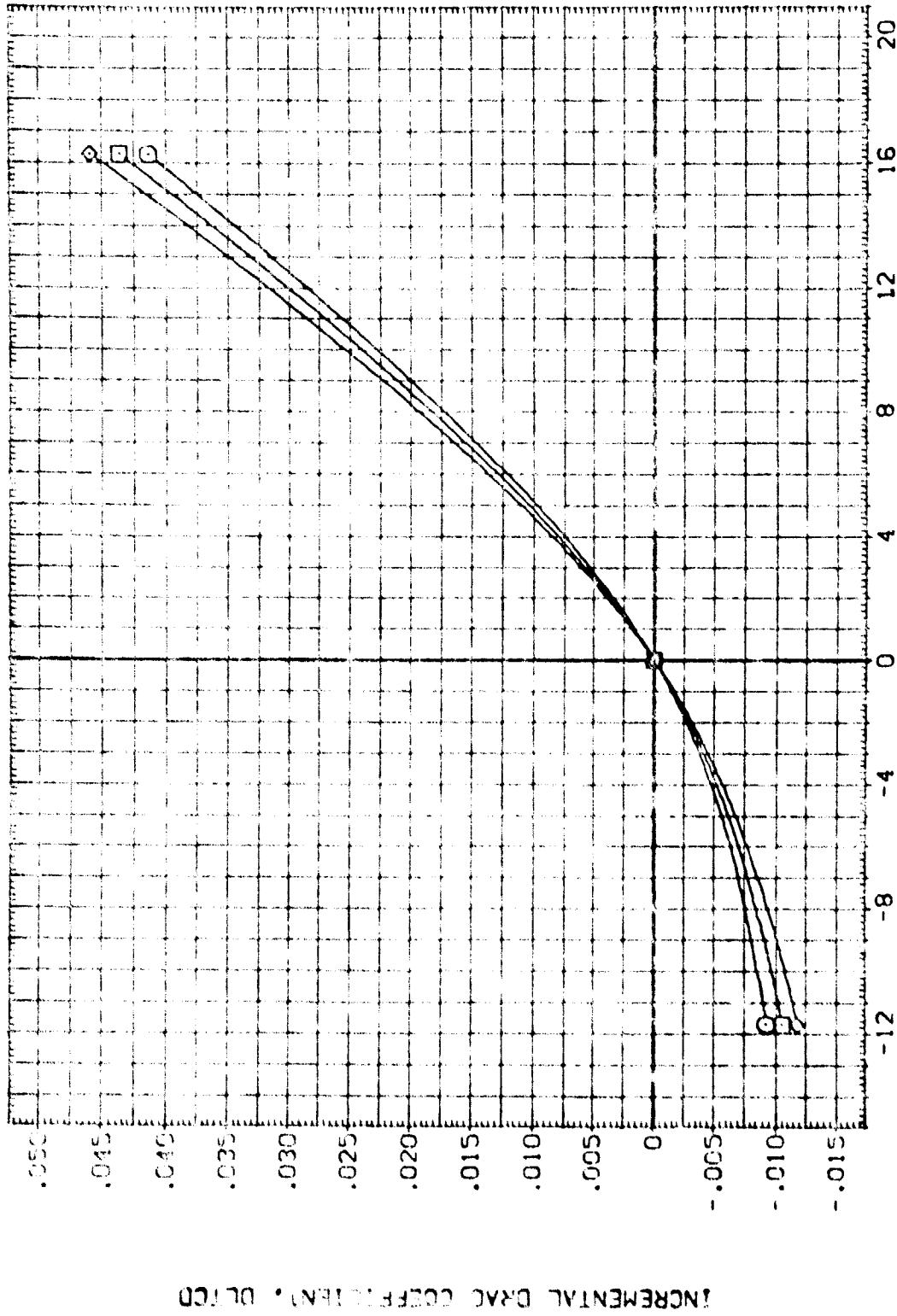


FIG. 18 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 1.86)

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CTV059) Ⓚ CA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

(CTV057) Ⓚ CA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

(CTV058) Ⓚ CA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

BOFLAP RV/L

-11.700 .500

16.700 .500

REFERENCE INFORMATION

SREF 2691.0000 SQ.FT.

LREF 474.8100 IN.

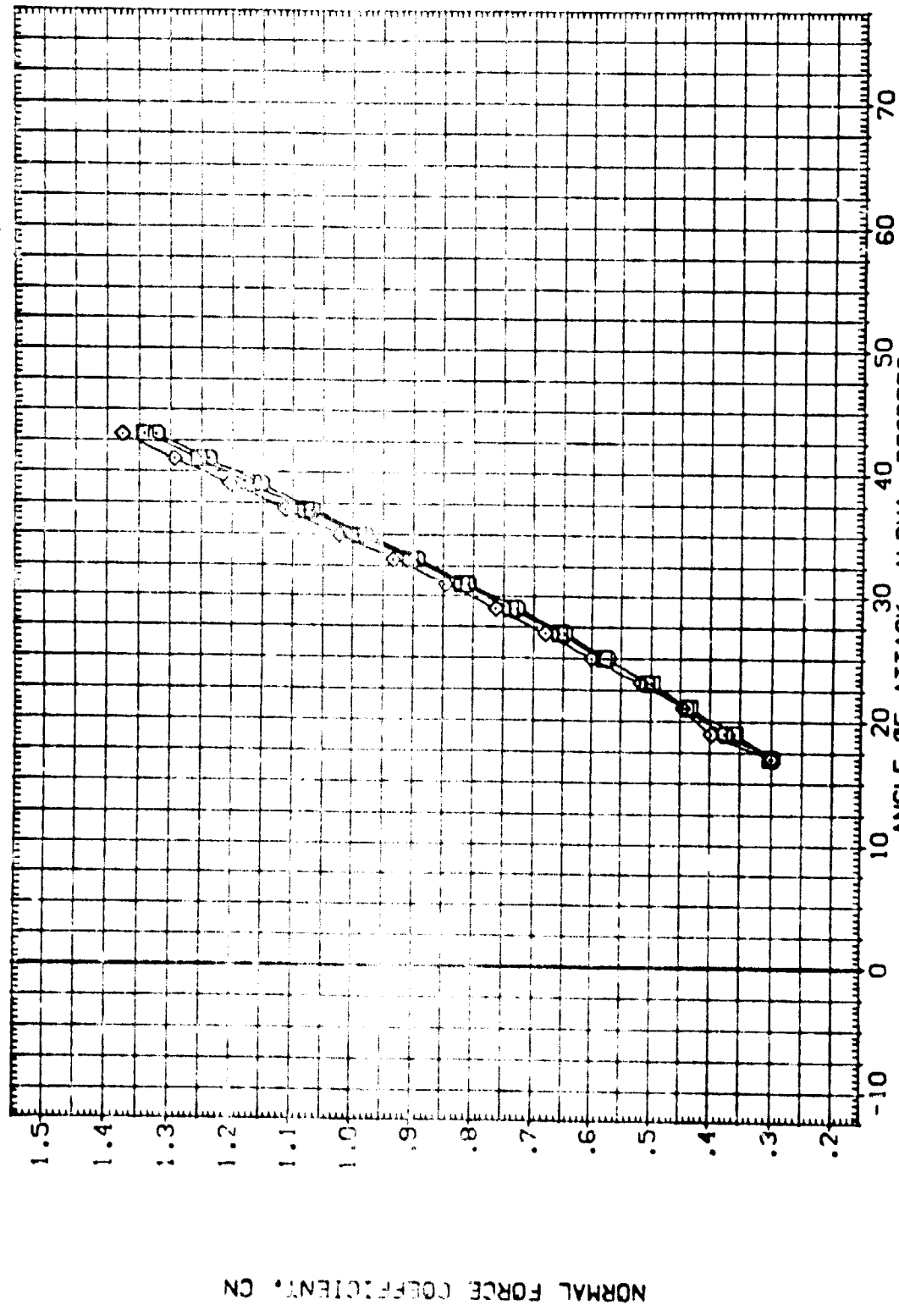
BREF 936.8100 IN.

XFRP 1076.6900 IN.X0

YFRP .0000 IN.Y0

ZFRP 375.0000 IN.Z0

SCALE .0150



NORMAL FORCE COEFFICIENT, CN

FIG. 19 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 0.50)

(A)MACH = 7.90



REFERENCE INFORMATION

SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	536.6000	IN.
XMAP	1076.0000	IN.
YMAP	0.0000	IN.
ZMAP	375.0000	IN.
SCALE	.0150	

90FLAP FNL

-11.700	.500
.000	.500
16.300	.500

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CT1059)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
(CT1057)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
(CT1059)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116

PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH(FORWARD C. G.) (CMFWD)

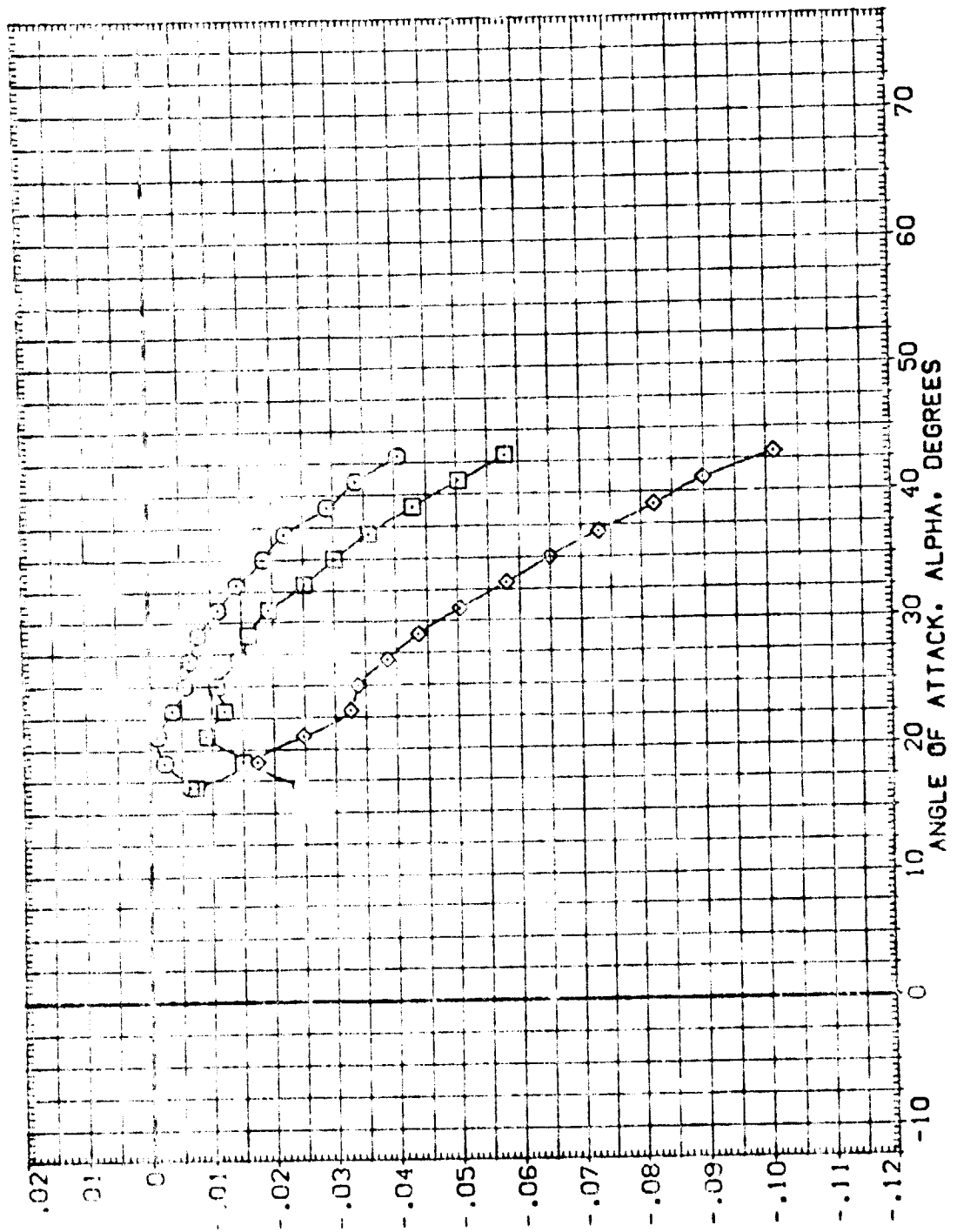


FIG. 19 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 0.50)

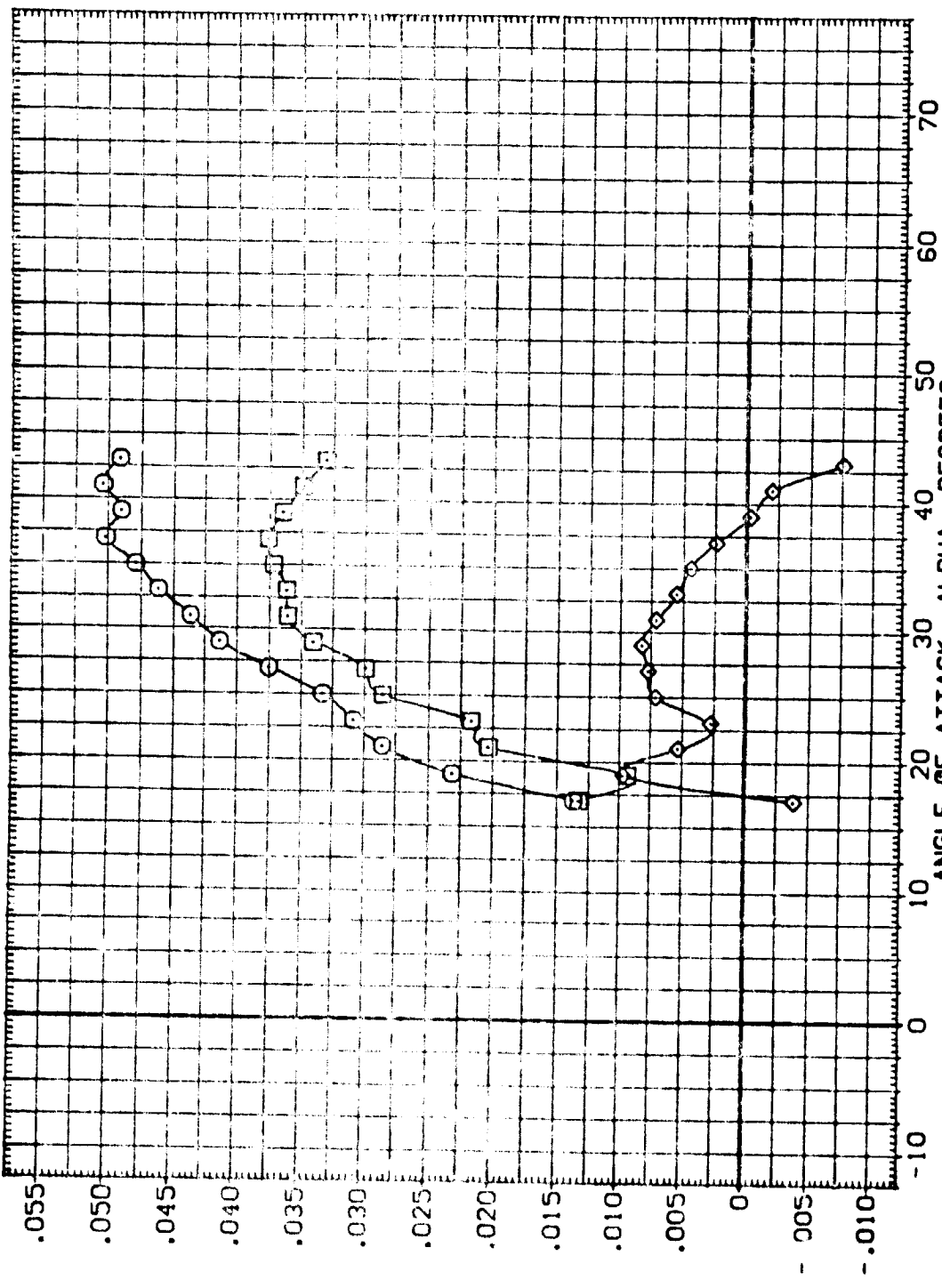
(A)MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CTW059)	OA79	B26	C9	E43	F8	H16	N28	R5	V8	V116
(CTW057)	OA79	B26	C9	E43	F8	H16	N28	R5	V8	V116
(CTW058)	OA79	B26	C9	E43	F8	H16	N28	R5	V8	V116

REFLAP 8.0
 -11.700 500
 16.300 500

REFERENCE INFORMATION:
 SREF 290.0000 50. FT.
 LREF 474.8100 IN.
 HREF 926.6800 IN.
 XTRP 1076.6300 IN.
 YTRP .0000 IN.
 ZTRP 375.0000 IN.
 SCALE .0150



PITCHING MOMENT COEFFICIENT AT .675 BODY LENGTH (C.P. G.) CLMFT

FIG. 19 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 0.50)

(A) MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CTV059)	CA79	B26	C9	E43	FB	H16	N28	RS	V8	V116
(CTV057)	CA79	B26	C9	E43	FB	H16	N28	RS	V8	V116
(CTV053)	CA79	B26	C9	E43	FB	H16	N28	RS	V8	V116

EDGE FLAP RVAL

-11.700	.500
16.300	.500

REFERENCE INFORMATION

SREF	2690.0000	50. FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XREF	1076.6800	IN.
YREF	.0000	IN.
ZREF	375.0000	IN.
SCALE	.0150	

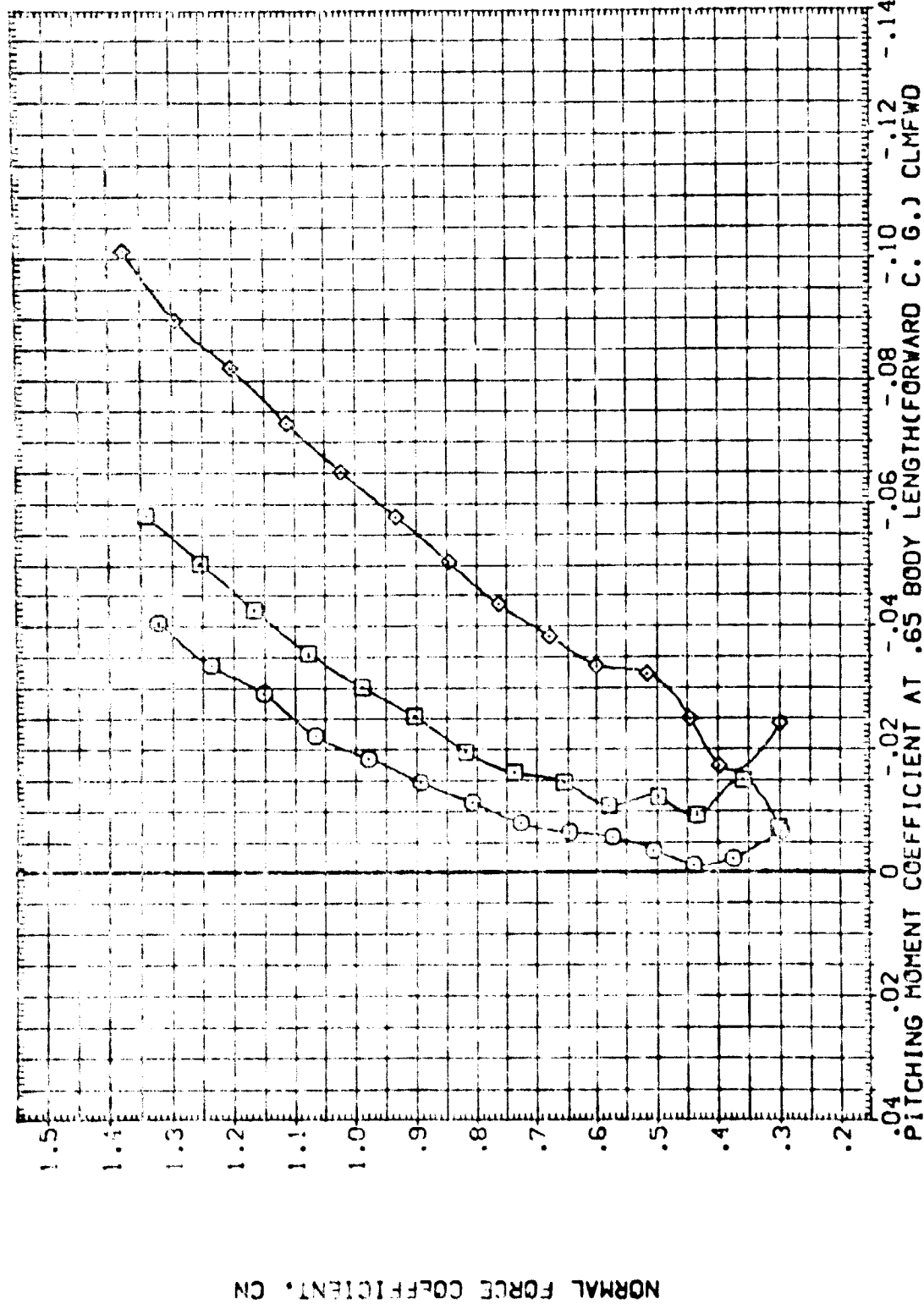


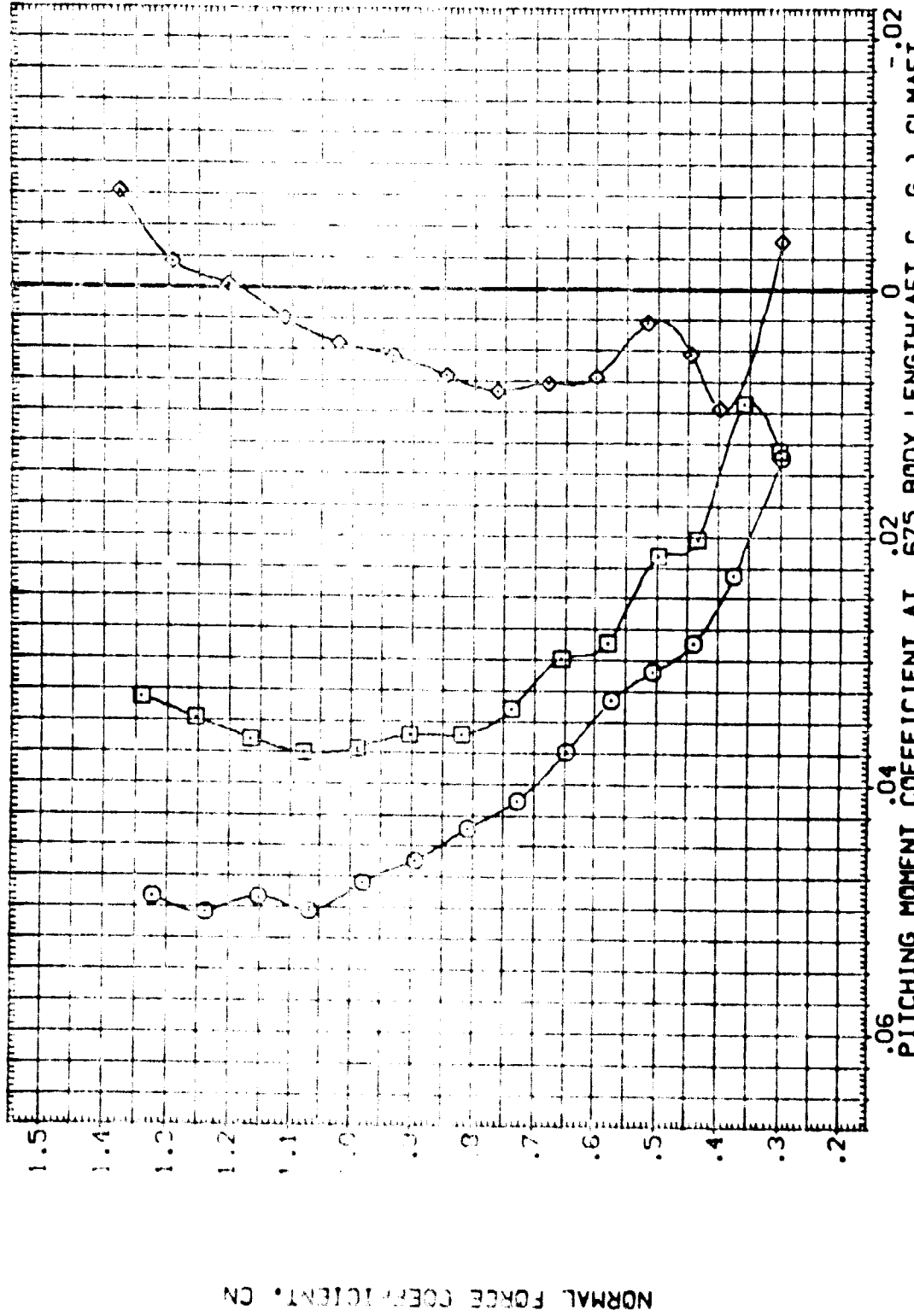
FIG. 19 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 0.50)

(A)MACH = 7.90

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 PREF 936.0000 IN.
 XREF 1078.9300 IN.
 YREF 1.00 IN.
 ZREF 375.0000 IN.
 SCALE .0150

BUFLAP (INVL)
 -11.700
 .500
 .500
 .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CTM059) □ OA79 B26 C9 E43 FB H16 N28 RS V8 V116
 (CTM057) ○ OA79 B26 C9 E43 FB H16 N28 RS V8 V116
 (CTM058) ◇ OA79 B26 C9 E43 FB H16 N28 RS V8 V116



NORMAL FORCE COEFFICIENT, CN

.06
 .04
 .02
 0
 .02
 .02
 PITCHING MOMENT COEFFICIENT AT .675 BODY LENGTH (AFT C. G.) CLMAYT

FIG. 19 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 0.50)
 (A)MACH = 7.90



DATA SET 01202 CONFIGURATION DESCRIPTION
 (CT1059) 0A79 326 09 E43 F8 M16 M28 PS V8 Y116
 (CT1057) 0A79 326 09 E43 F8 M16 M28 PS V8 Y116
 (CT1058) 0A79 326 09 E43 F8 M16 M28 PS V8 Y116

BOFLAP RVOL
 -11.700 1500
 0.000 1500
 16.300 1500

PERFORMANCE INDICATORS:
 CRDF 2590.000 50 FT.
 LREF 111.900 IN.
 DREF 116.000 IN.
 AREF 100.000 IN.
 TREF 100.000 IN.
 ZREF 100.000 IN.
 SCALE 1.000

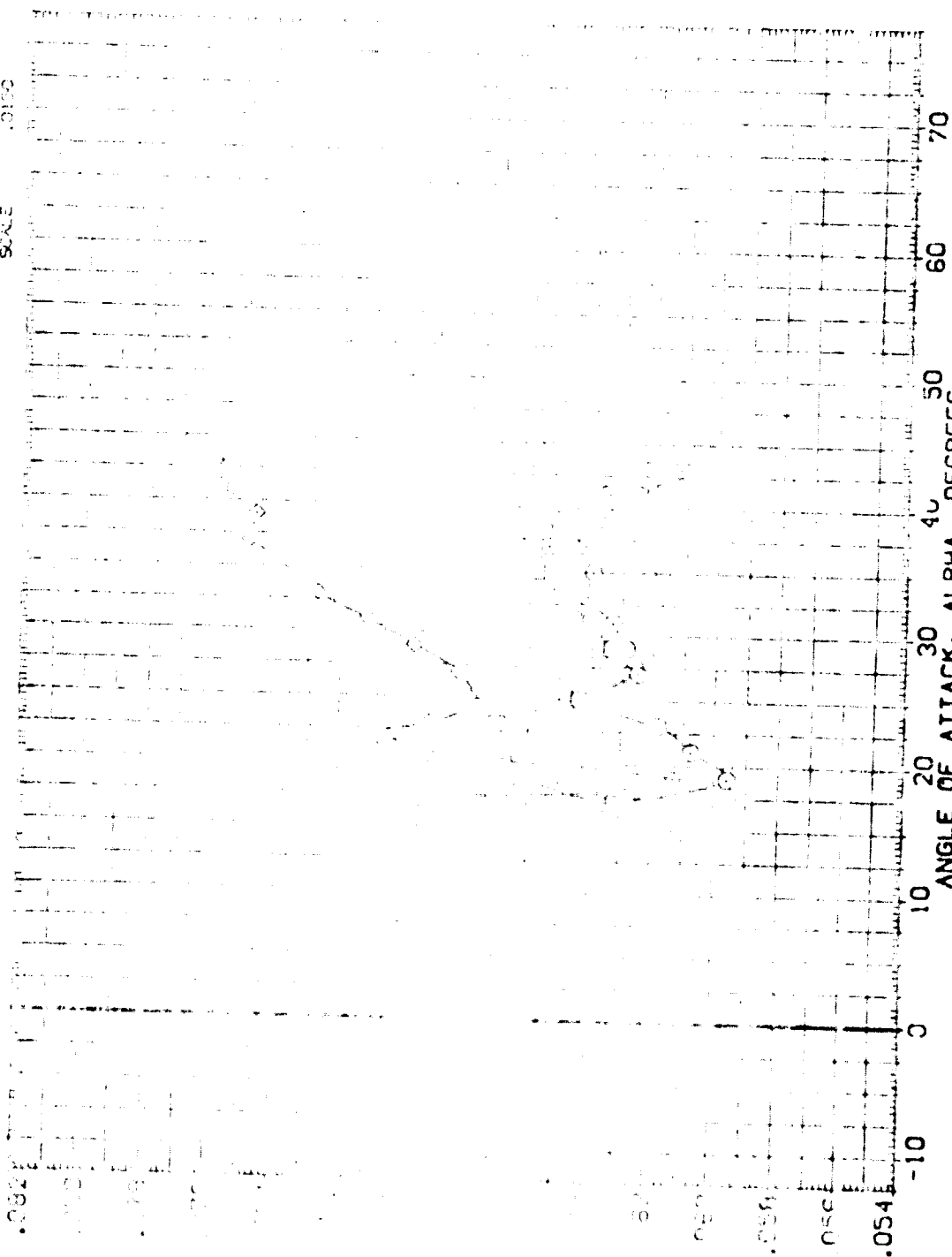


FIG. 19 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 0.50)
 (A)MACH = 7.90



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CT1059)	Q	0A79	876	C9	E43	F8	M16	N28	R5	V8	V116
(CT1057)	P	0A79	876	C9	E43	F8	M16	N28	R5	V8	V116
(CT1058)	X	0A79	876	C9	E43	F8	M16	N28	R5	V8	V116

BOFLAP FAVL

-11.700	.500
.000	.500
16.300	.500

REFERENCE INFORMATION

SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XREF	1076.0800	IN.
YREF	.0000	IN.
ZREF	375.0700	IN.
SCALE	.0150	

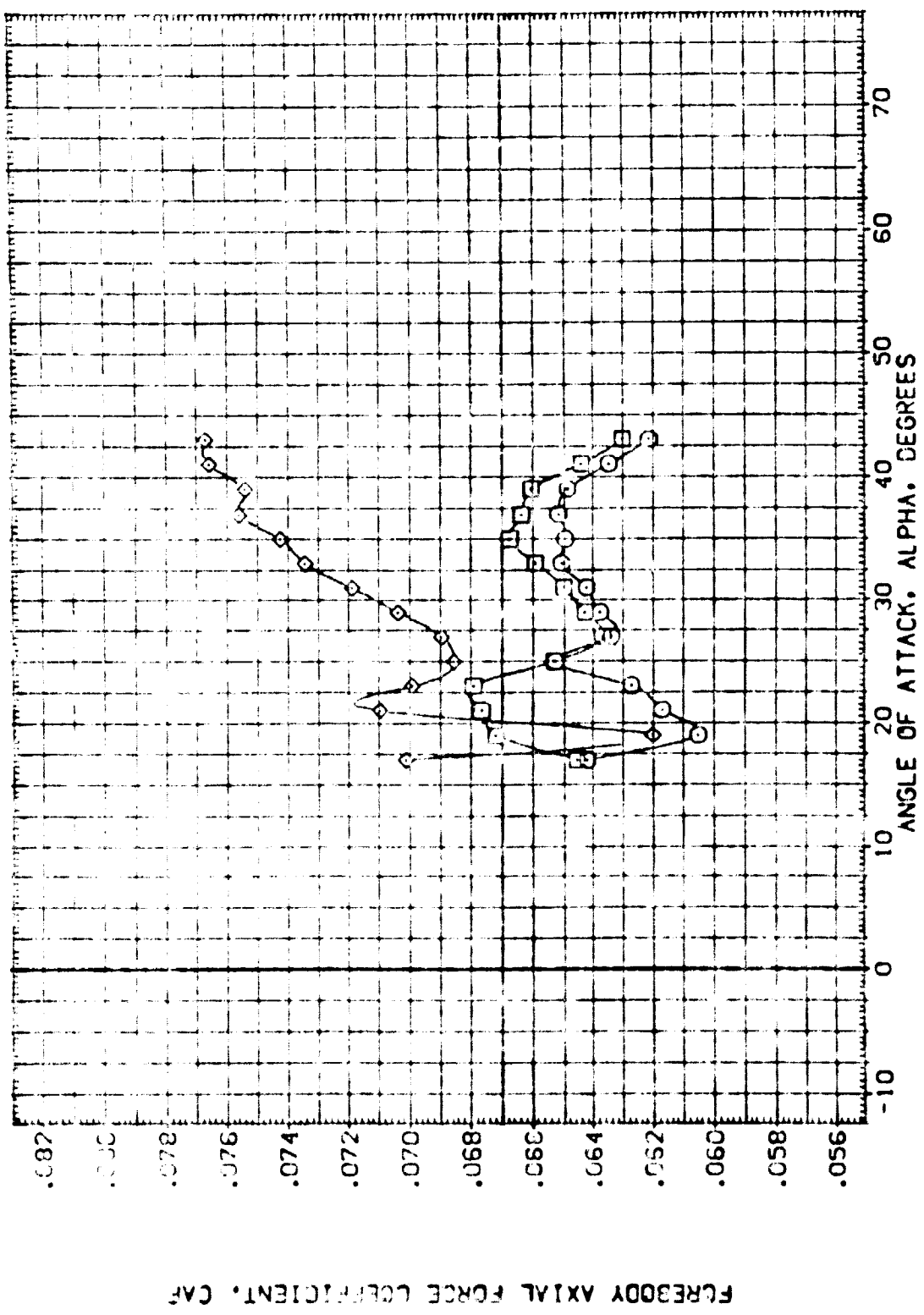


FIG. 19 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 0.50)

(A)MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (C14059) 0A79 926 C9 EA3 F8 H16 M28 R5 V8 V116
 (C14057) 0A79 926 C9 EA3 F8 H16 M28 R5 V8 V116
 (C14053) 0A79 926 C9 EA3 F8 H16 M28 R5 V8 V116

50 FLAP (RVL)
 -11.700 1500
 10.000 1500
 10.000 1500

REFERENCE INFORMATION
 DREF 2590.0000 SQ. FT.
 UREF 474.6100 IN.
 AREF 10.000000 IN. IN. AD
 VREF 10.000000 IN. IN. AD
 ZREF 375.0000 IN. IN. AD
 SCALE 1.0150

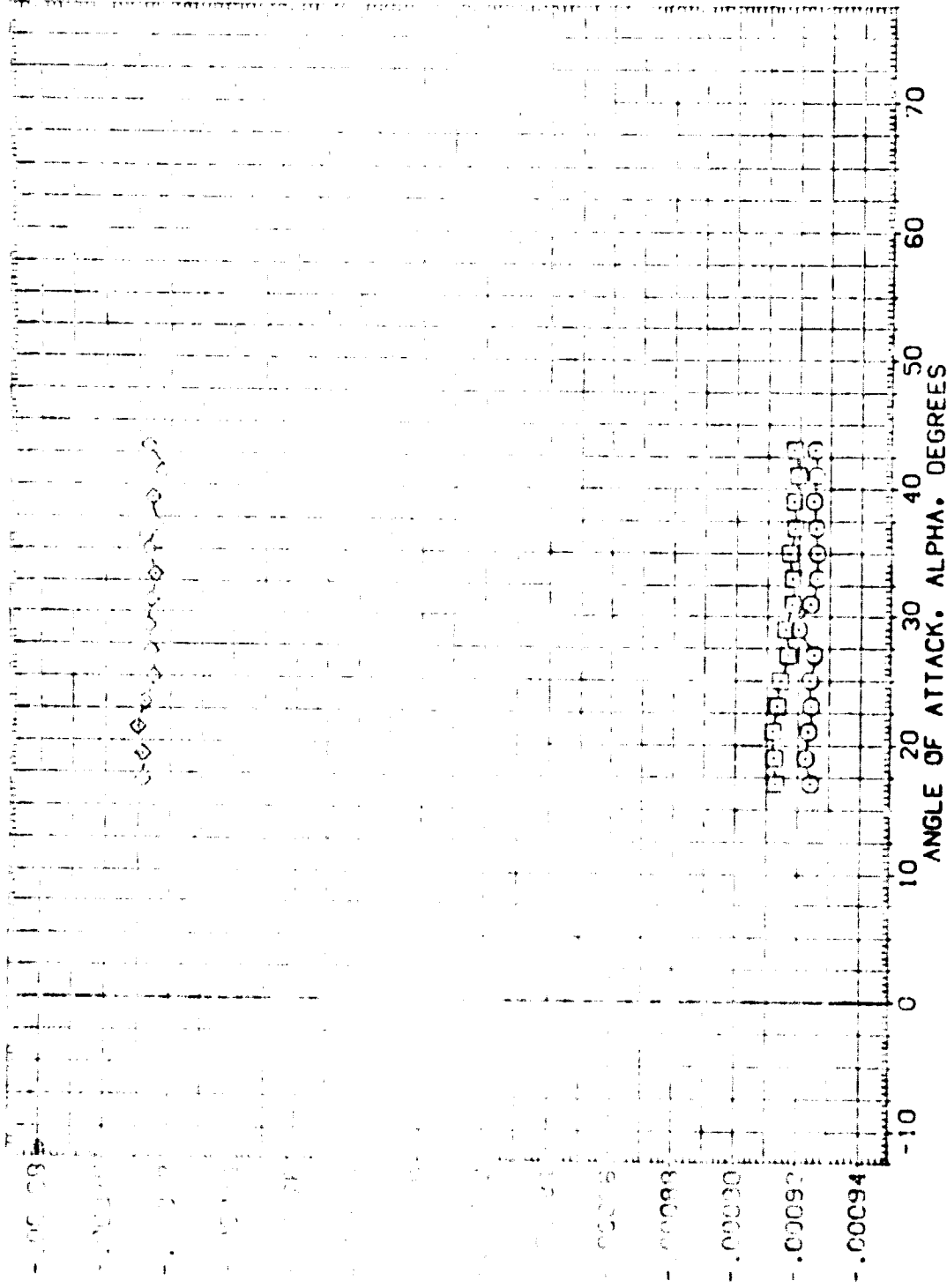


FIG. 19 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 0.50)

(A)MACH = 7.90

REFERENCE INFORMATION

SREF	2630.0000	SQ.FT.
LREF	474.8100	IN.
YREF	9.560000	IN.
XPROP	1076.0000	IN.XD
YPROP	0.0000	IN.YD
ZPROP	375.0000	IN.ZD
SCALE	.0150	

BDFLAP R/V/L

	.500
	.500
	.500

CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONF	IGURATION	DESCRIPTION
(1) (050)	0A79	B26	C9 E43 F8 M16 N08 P3 V8 V116
(2) (057)	0A79	B23	C9 E43 F8 M16 N08 P5 V8 V116
(3) (064)	0A79	B26	C9 E43 F8 M16 N08 P5 V8 V116

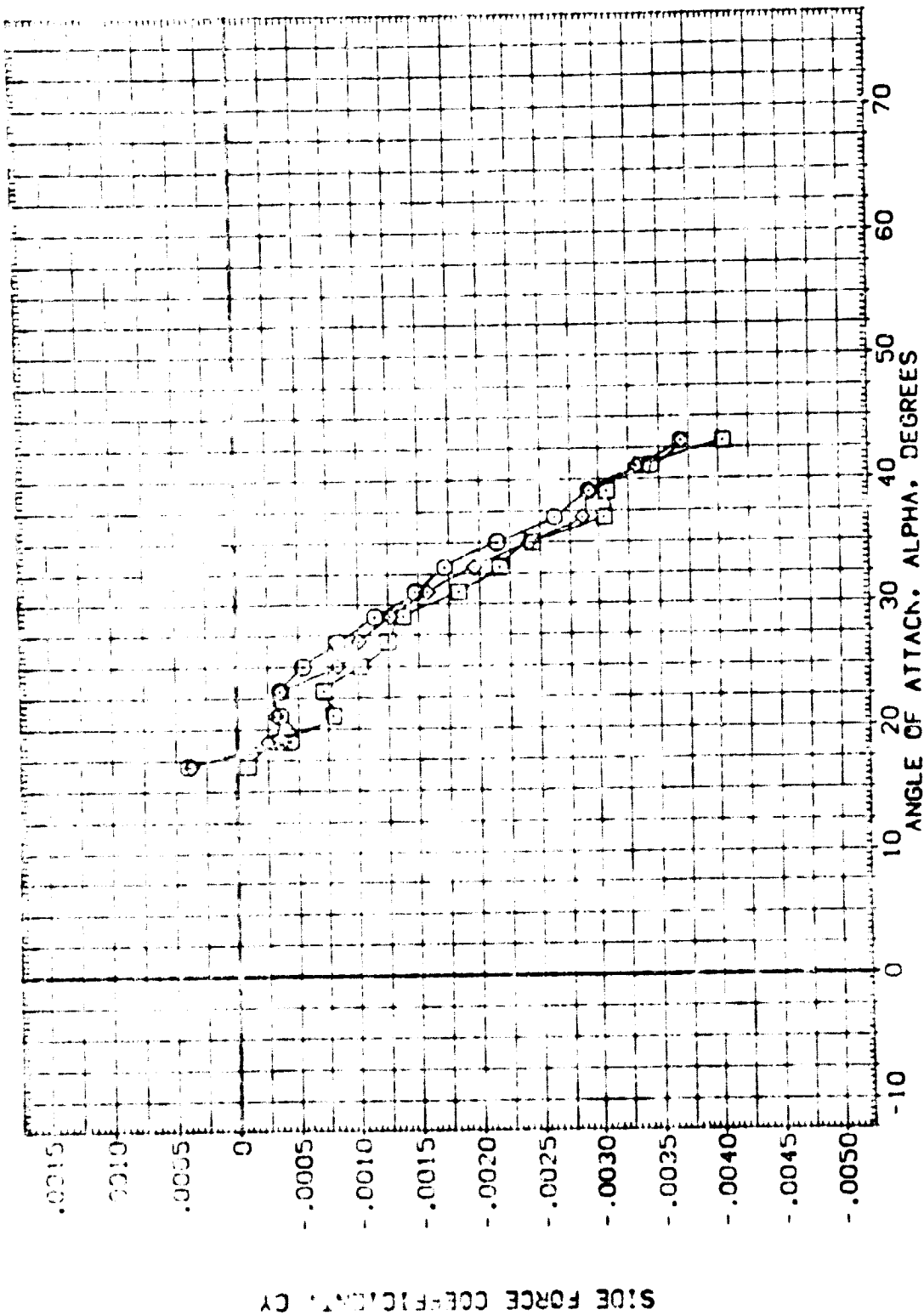


FIG. 19 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 0.50)

(A)MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(ATW059)	CA79	B26	C9	E43	F8	M16	N28	R5	V8	W116
(ATW057)	CA79	B26	C9	E43	F8	M15	N23	R5	V8	W116
(ATW058)	CA79	B36	C9	E43	F8	M15	N23	R5	V8	W116

BOFLAP RV/L

-11.700	.500
16.300	.500

REFERENCE INFORMATION

SREF	2030.0000	52. FT.
LREF	474.8100	IN.
RREF	935.6900	IN.
YREF	1075.6900	IN.
ZREF	1000.0000	IN.
SCALE	375.0000	IN.
	.0150	ZO

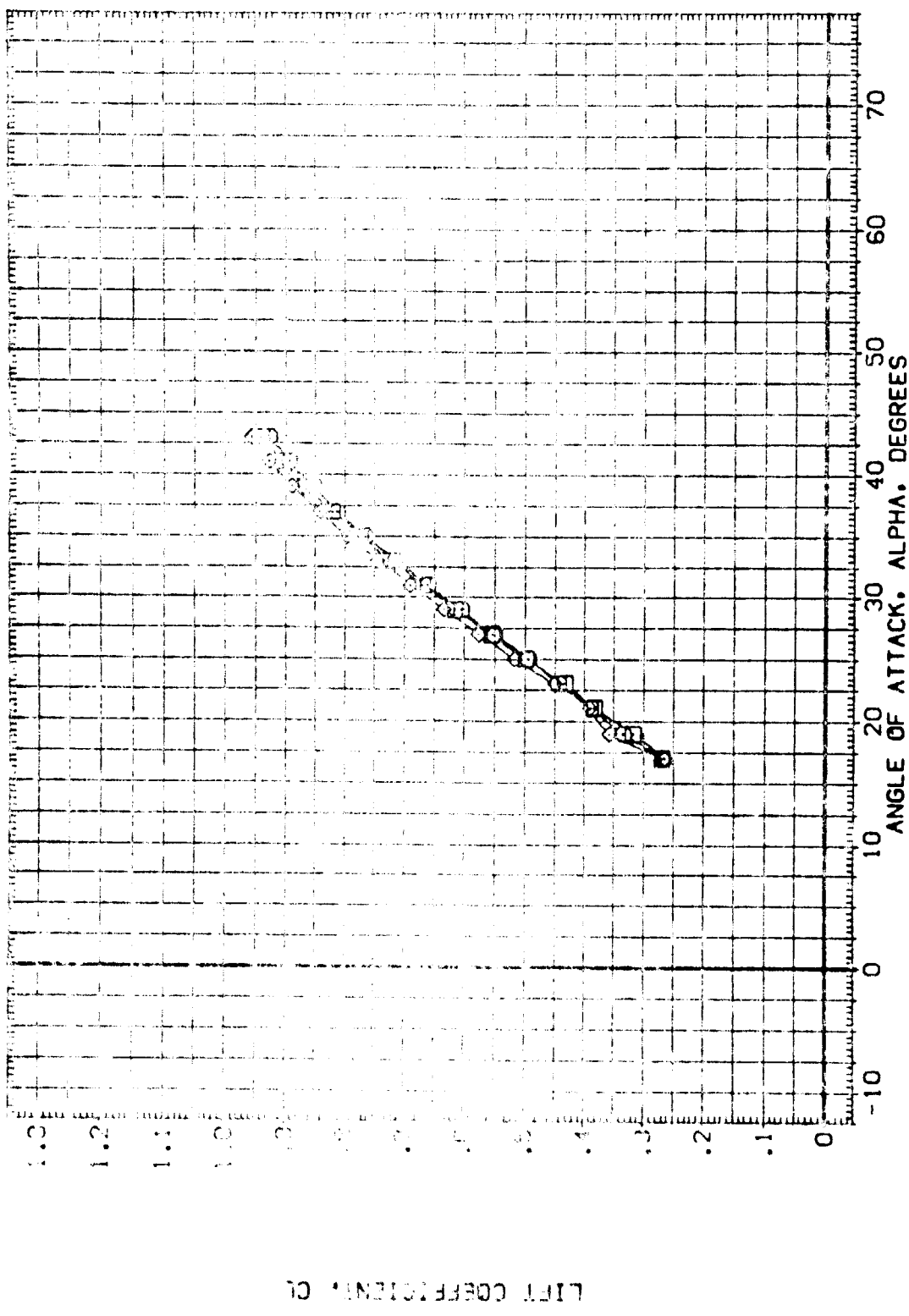


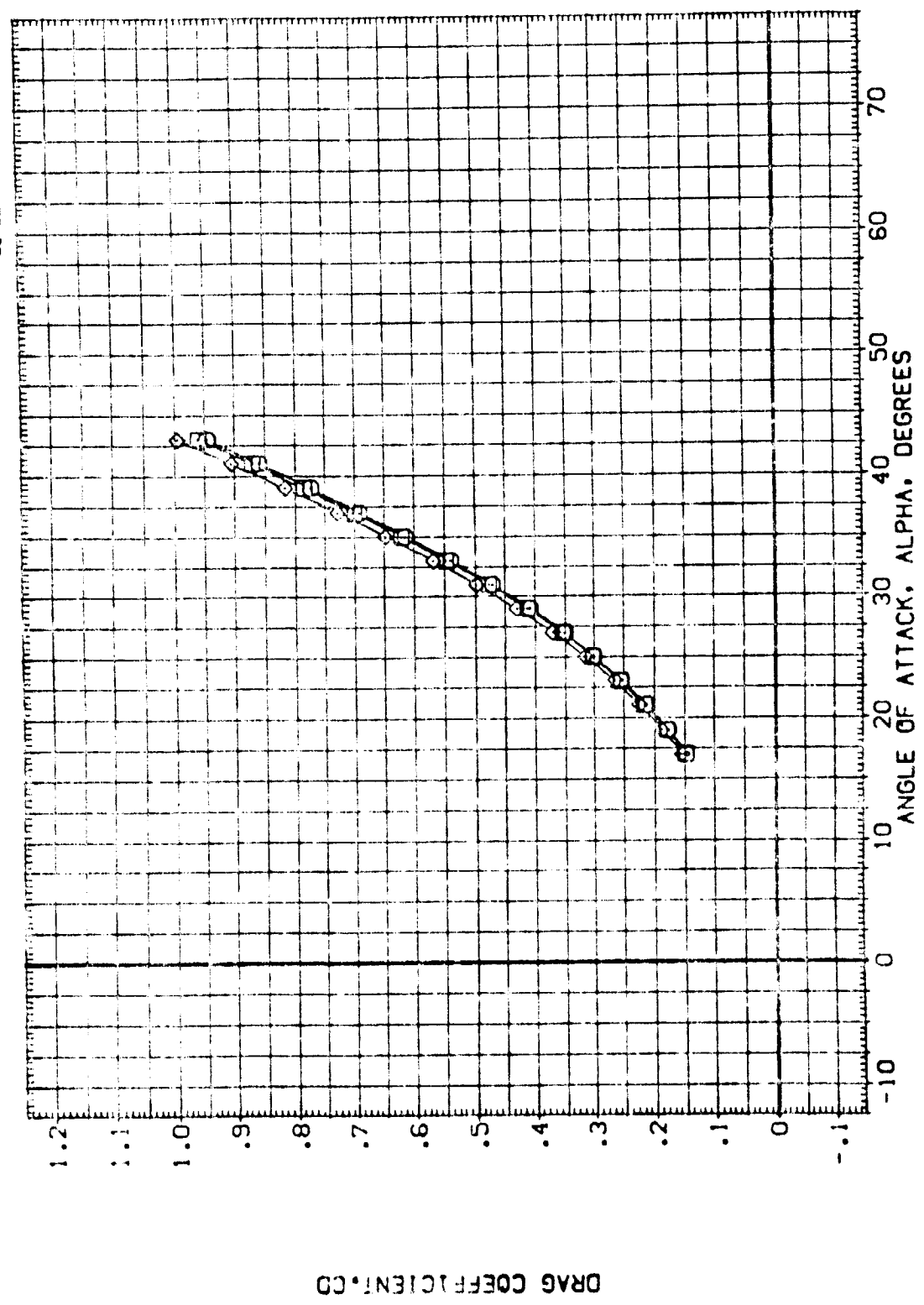
FIG. 19 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 0.50)

(A)MACH = 7.90

REFERENCE INFORMATION
 SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 RREF 936.6800 IN.
 XTRP 1076.6300 IN.
 YTRP .0000 IN.
 ZTRP 375.0000 IN.
 SCALE .0150

BDFL:P RVAL
 -11.700 .500
 .000 .500
 16.300 .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (ATM059) □ OA79 B26 C9 E43 FB M16 N28 RS V8 V116
 (ATM057) □ OA79 B26 C9 E43 FB M16 N28 RS V8 V116
 (ATM058) □ OA79 B26 C9 E43 FB M15 N28 RS V8 V116



DRAG COEFFICIENT, CD

FIG. 19 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 0.50)

(M)MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(ATV059)	CA79 B26 CS E43 FB M16 N28 RS V8 V116
(ATV057)	CA79 B26 CS E43 FB M16 N28 RS V8 V116
(ATV058)	CA79 B26 CS E43 FB M16 N28 RS V3 V116

EDGEFLAP RV/L

-11.700	.500
.000	.500
13.300	.500

REFERENCE INFORMATION

SREF	2690.0000	SO.FT.
LREF	174.8100	IN.
WREF	923.8570	IN.
AFLAP	1076.8500	IN./100
VREF	0.000	IN./Y3
ZREF	375.0000	IN./Z3
SCALE	.0150	

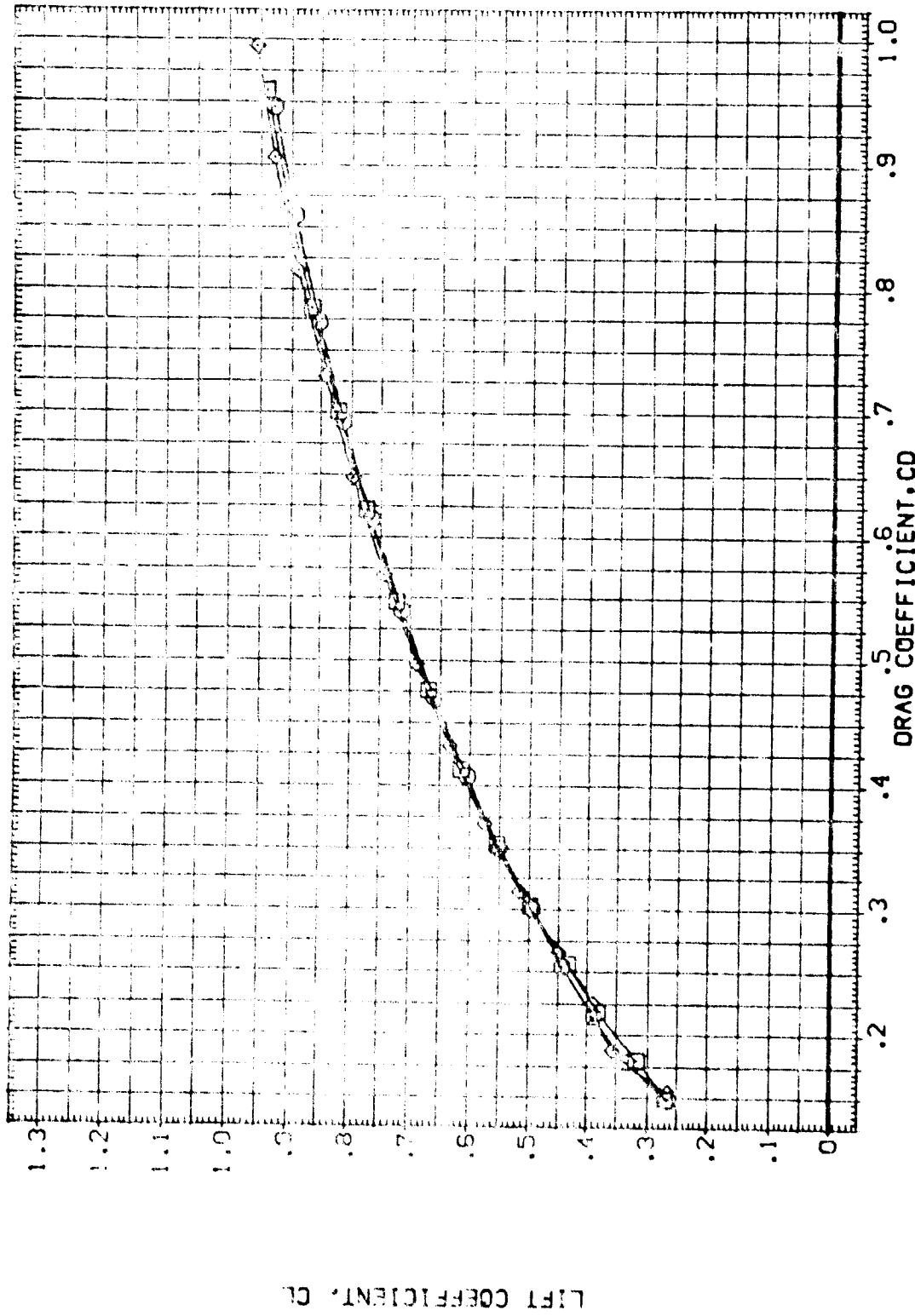


FIG. 19 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 0.50)

(A)MACH = 7.90



REFERENCE INFORMATION
 SREF 2690.0000 SO.FT.
 LREF 474.8100 IN.
 XREF 936.6800 IN. X0
 YREF 1078.6900 IN. Y0
 ZREF .0000 IN. Z0
 SCALE .0150

BOFLAP RV/L
 -11.700 .500
 16.300 .500

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (ATM029) 0A79 B26 C9 E43 FB M16 N28 RE V8 V116
 (ATM031) 0A79 B26 C9 E43 FB M16 N28 R5 V8 V116
 (ATM034) 0A79 B26 C9 E43 FB M16 N28 R5 V8 V116

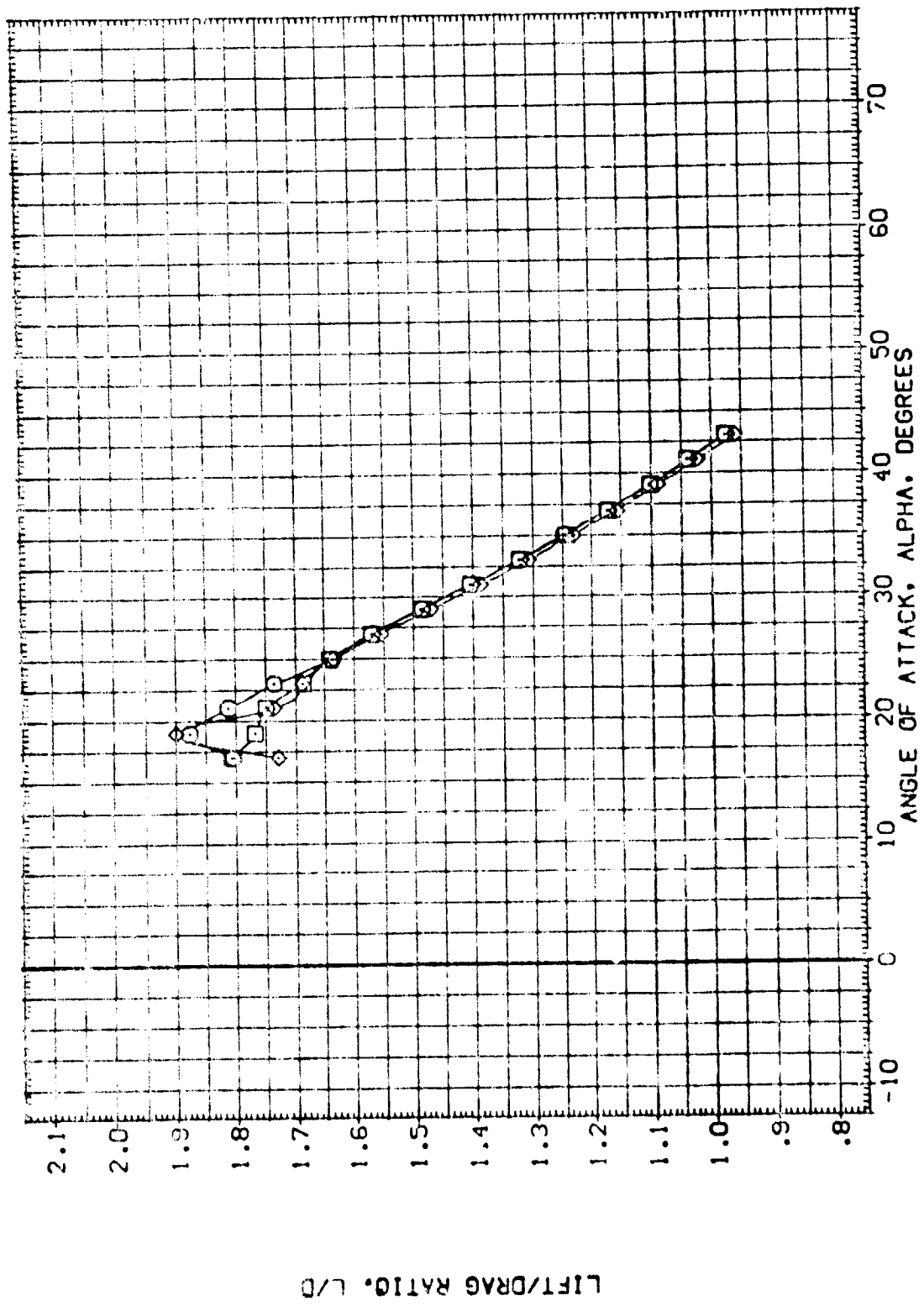


FIG. 19 BODY FLAP EFFECTIVENESS (REYNOLDS NUMBER = 0.50)

(A)MACH = 7.90

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW059)

ALPHA	17.000	MACH	0.000	PARAMETRIC VALUES	.000	DATA SOURCE	DLBDFP	.000	DATASET	DLBDFP	SREF	2650.0000	REFERENCE INFORMATION	50. FT.
	19.000	ELV-L0	.000	BETA	.000	DTW059	-11.700	.000	DTW057	.000	LREF	474.9100	IN.	
	21.000	ELV-R1	.000	ELV-L1	.000	DTW058	16.300				SREF	625.6800	IN.	
	23.000	SFOBRK	55.000	ELV-R0	.000						NZFP	1076.6000	IN.	13
	25.000	RVAL	.500	RUDDER	.000						ZTRP	.0000	IN.	20
	27.000										SCALE	.0150		

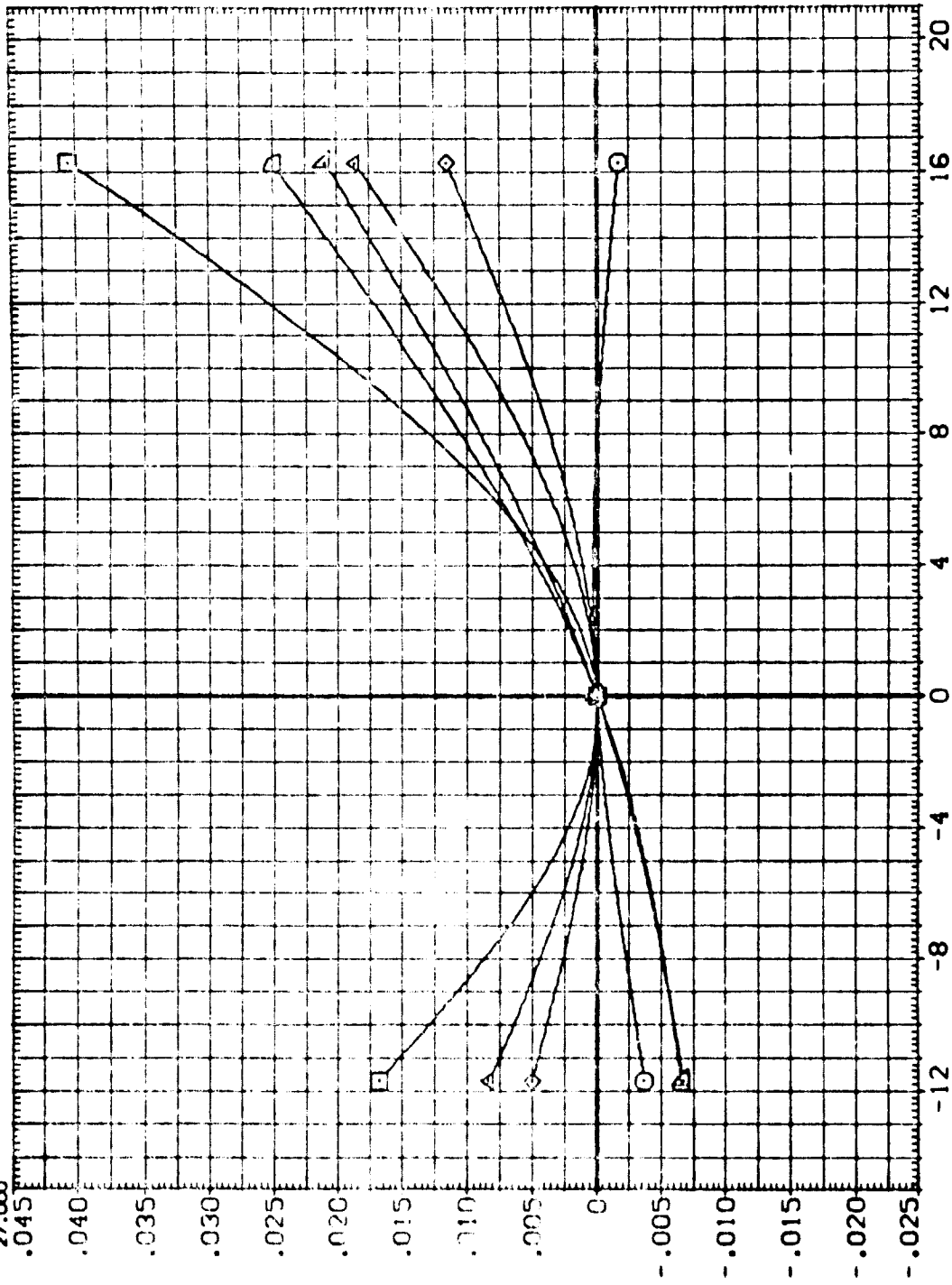
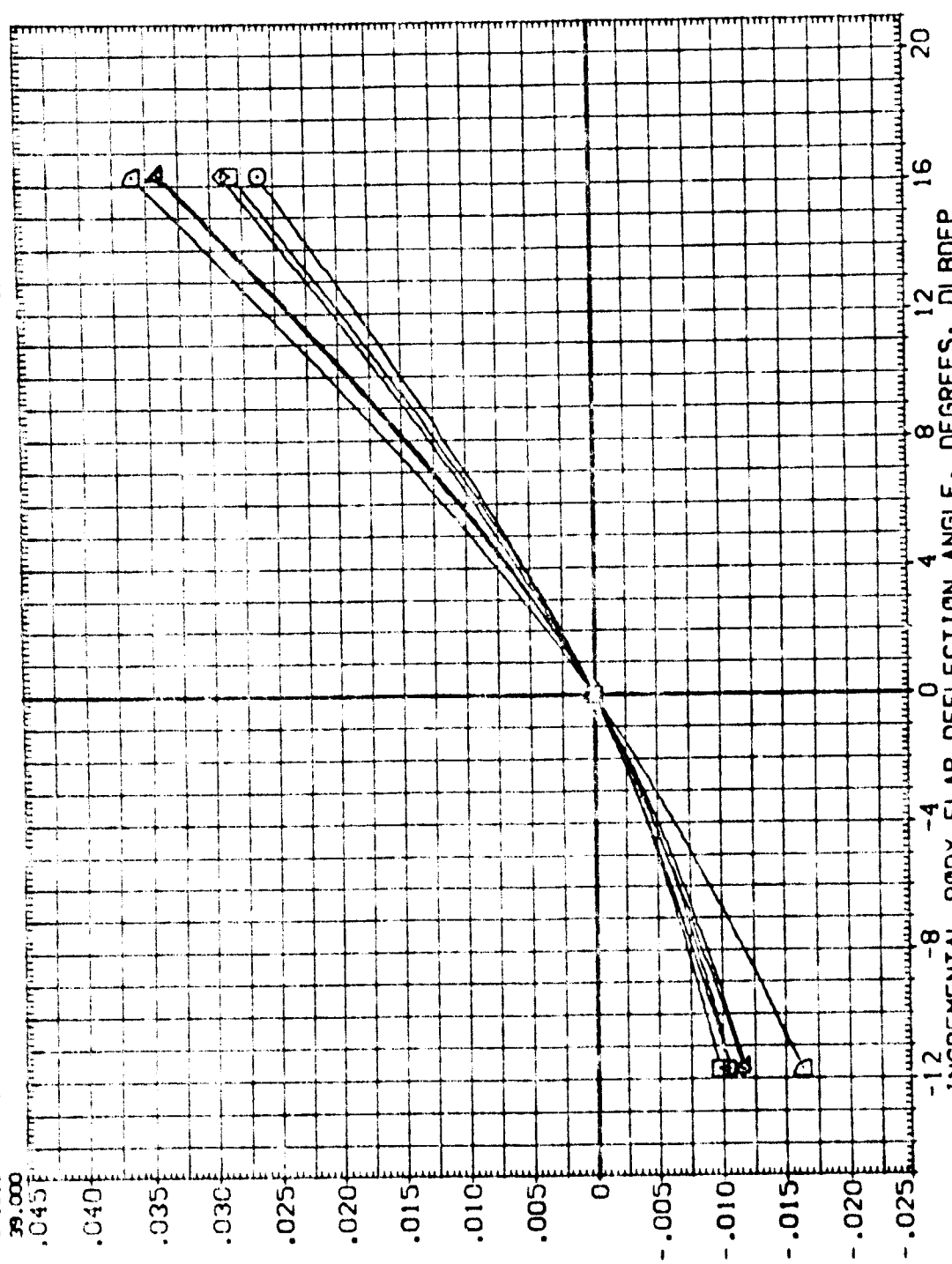


FIG. 20 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 0.50)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW059)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	MACH	.000	DLBOFF	SREF	SO.FT.
29.000	ELV-LB	.000	DLBOFF	LREF	IN.
31.000	ELV-RI	.000	DTW059	RREF	IN.
33.000	ELV-R	.000	DTW058	ALP	IN. X0
35.000	SPDRK	.000		YPRP	IN. Y0
37.000	WAL	.000		ZPRP	IN. Z0
39.000				SCALE	.0150
.045					
.040					
.035					
.030					
.025					
.020					
.015					
.010					
.005					
0					
-.005					
-.010					
-.015					
-.020					
-.025					

SYMBOL
 ○
 □
 ◇
 △
 ▽
 ○



INCREMENTAL NORMAL FORCE COEFFICIENT, DLTNC

FIG. 20 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 0.50)

(DTW059)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116

SYMBOL
 ○ □ ◇

ALPHA
 41.000
 43.000
 45.000

MACH
 8.000
 ELV-L0
 ELV-R1
 SPOB2K
 RWL

PARAMETRIC VALUES
 BETA
 ELV-L1
 ELV-R0
 RUDDER
 .500

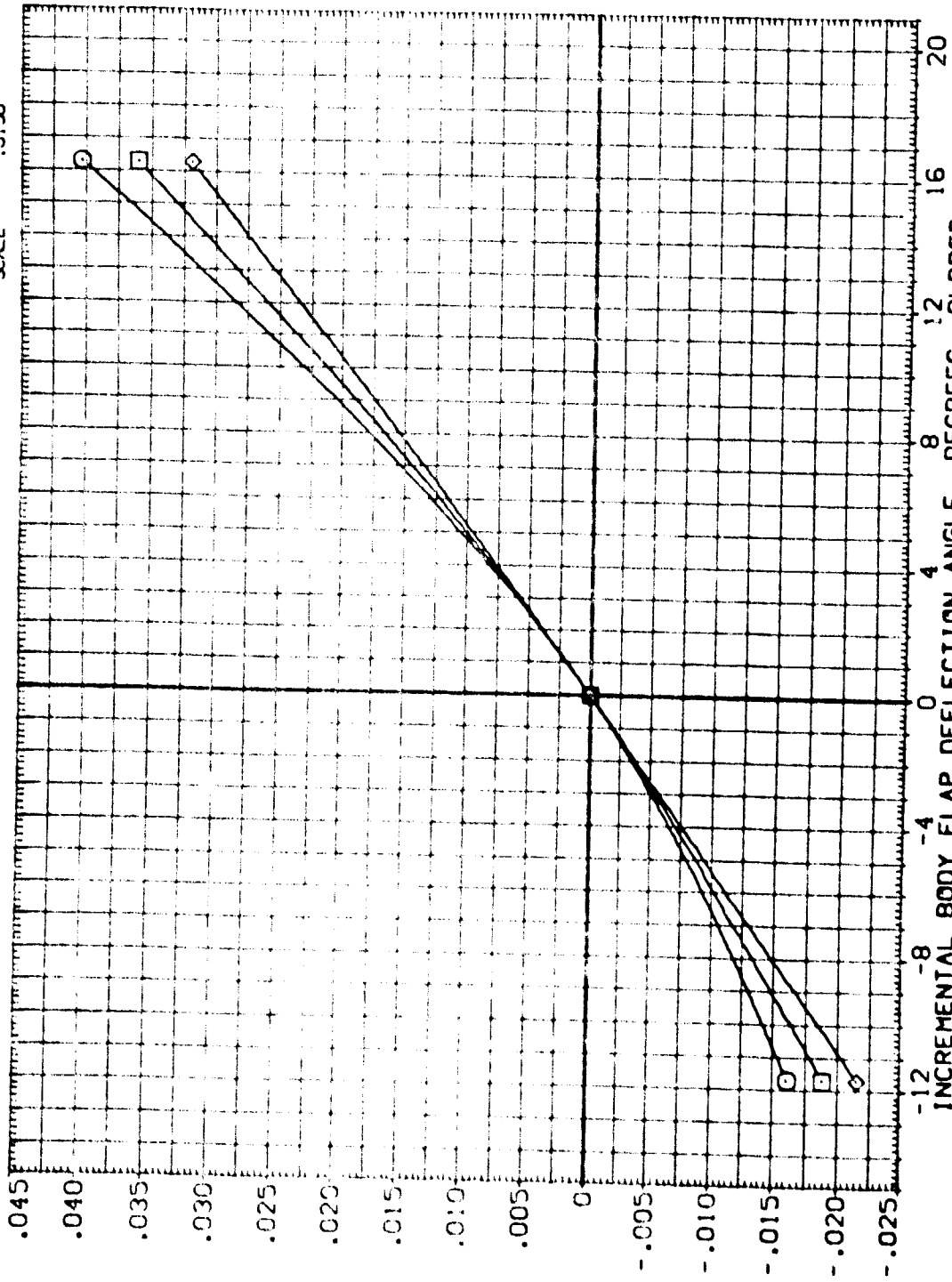
.000
 .000
 .000
 .000

DATA SOURCE
 DLBDFP
 -11,700
 15,300

DATASET
 DTW058
 DTW058

DLBDFP
 .000
 .000
 .000
 .000
 .000
 .0150

REFERENCE INFORMATION
 SQ.FT.
 2690.0000
 474.8100
 936.6800
 1076.6800
 375.0000
 .0150



INCREMENTAL NORMAL FORCE COEFFICIENT, DLTNC

FIG. 20 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 0.50)



0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW059)

PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
ALPHA	.000 DATASET	2690.0000 SQ. FT.
17.000	.000 DTW059	474.8100 IN.
19.000	.000 DTW058	935.6300 IN.
21.000	.000 DTW057	1076.5200 IN.
23.000	.000 DTW056	1217.4100 IN.
25.000	.000 DTW055	1358.3000 IN.
27.000	.000 DTW054	1500.0000 IN.
MACH	8.000	2690.0000
ELV-LD	.000	474.8100
ELV-PI	.000	935.6300
ELV-PO	.000	1076.5200
RUDDER	55.000	1217.4100
PAWL	.500	1358.3000
		1500.0000
		SCALE
		.0150

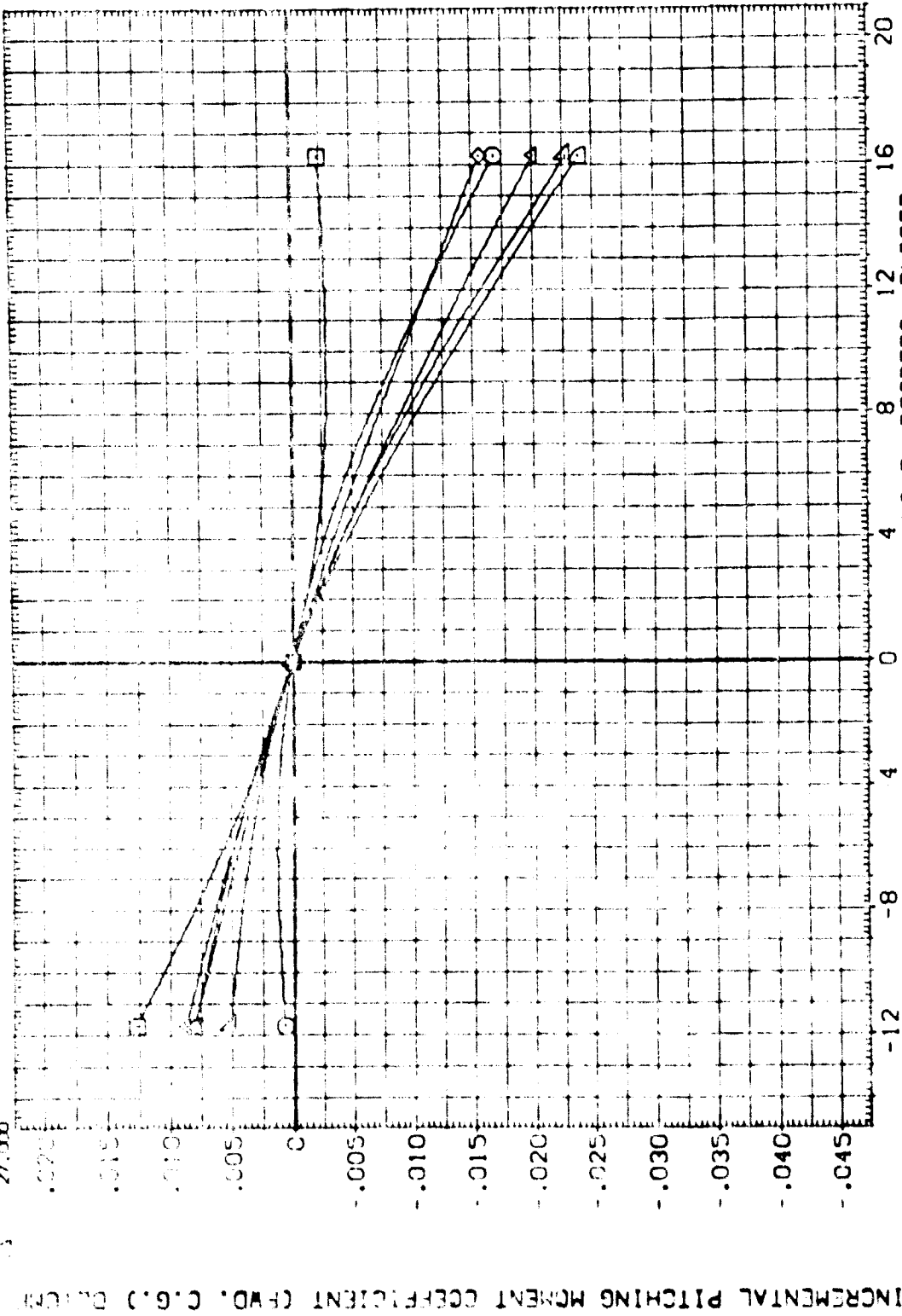


FIG. 20 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 0.50)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW059)

ALPHA	17.000	PARAMETRIC VALUES	.000	DATASET	DLBOFP	DATA SOURCE	SREF	REFERENCE INFORMATION
19.000	8.000	BETA	.000	DTW059	-11.700	.000	2690.0000	50.FT.
21.000	.000	ELV-L1	.000	DTW058	16.300	.000	474.8100	IN.
23.000	.000	ELV-R0	.000	.000			525.6800	IN.
25.000	56.000	RUDDER	.000				1076.6800	IN.
27.000	.500						375.0000	IN.
							ZREF	IN.20
							SCALE	.0150

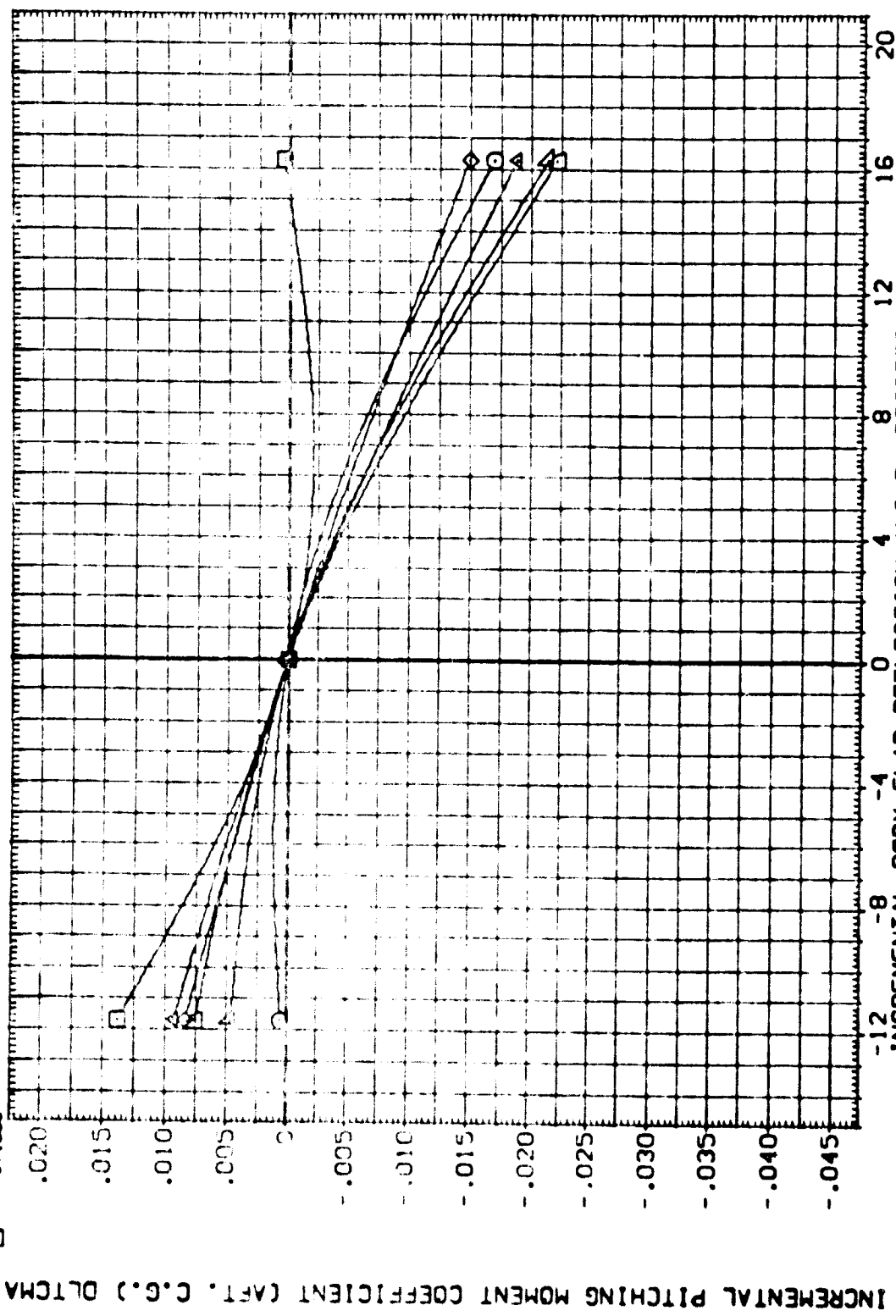


FIG. 20 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 0.50)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (OTW059)

SYMBOL		PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION				
0	29.000	MACH	8.000	BETA	.000	DATASET	DLBDFP	SREF	2690.0000	SQ.FT.
1	31.000	ELV-LO	.000	ELV-LI	.000	DTW059	.000	LREF	474.8100	IN.
2	33.000	ELV-RI	.000	ELV-RO	.000	DIV057	.000	BREF	936.6800	IN.
3	35.000	CLARK	55.000	RUDDER	.000			A-RFP	1076.6500	IN.
4	37.000	RVAL	.500					Y-RFP	.0000	IN.
5	39.000							Z-RFP	375.0000	IN.
								SCALE	.0150	IN.

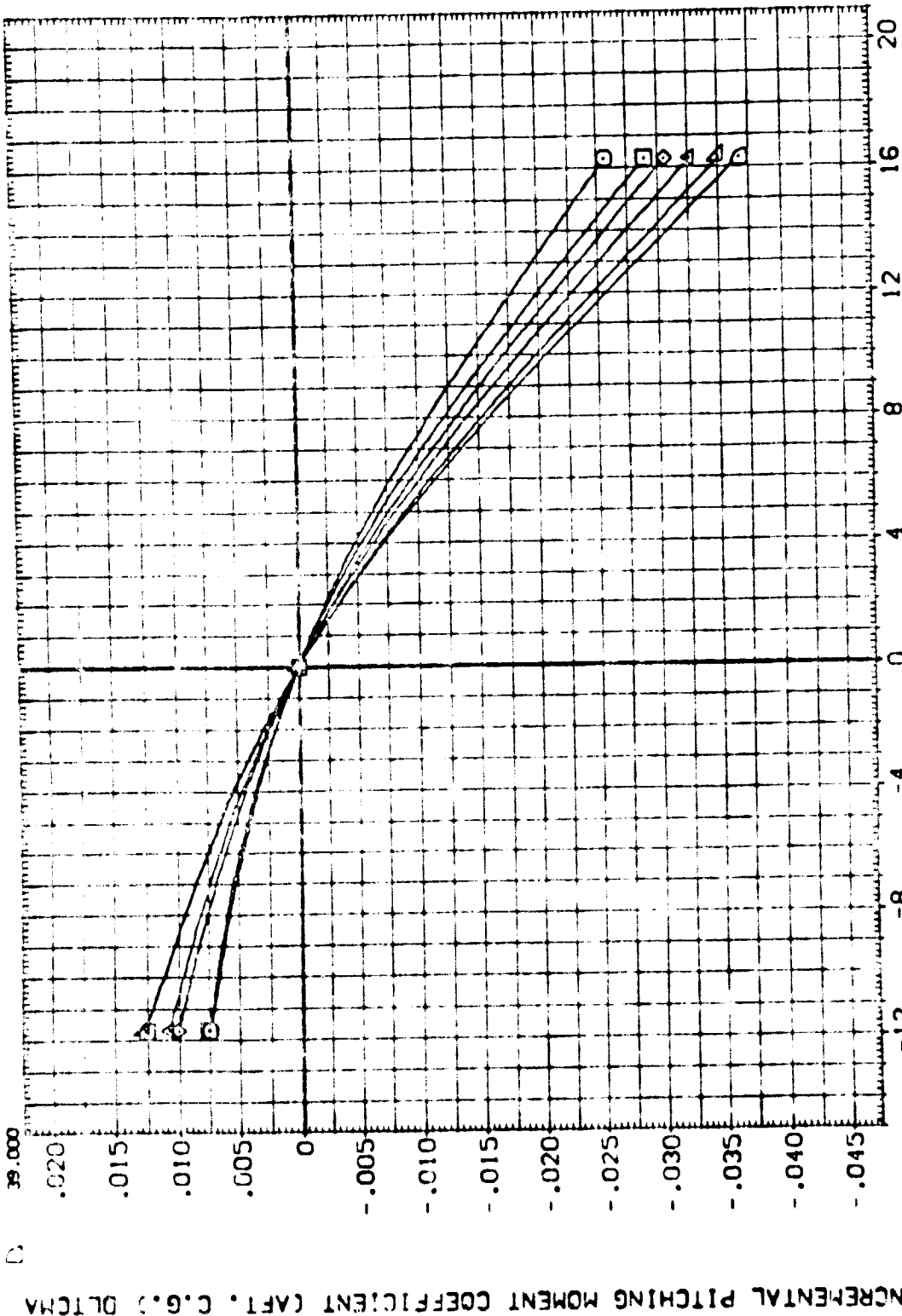
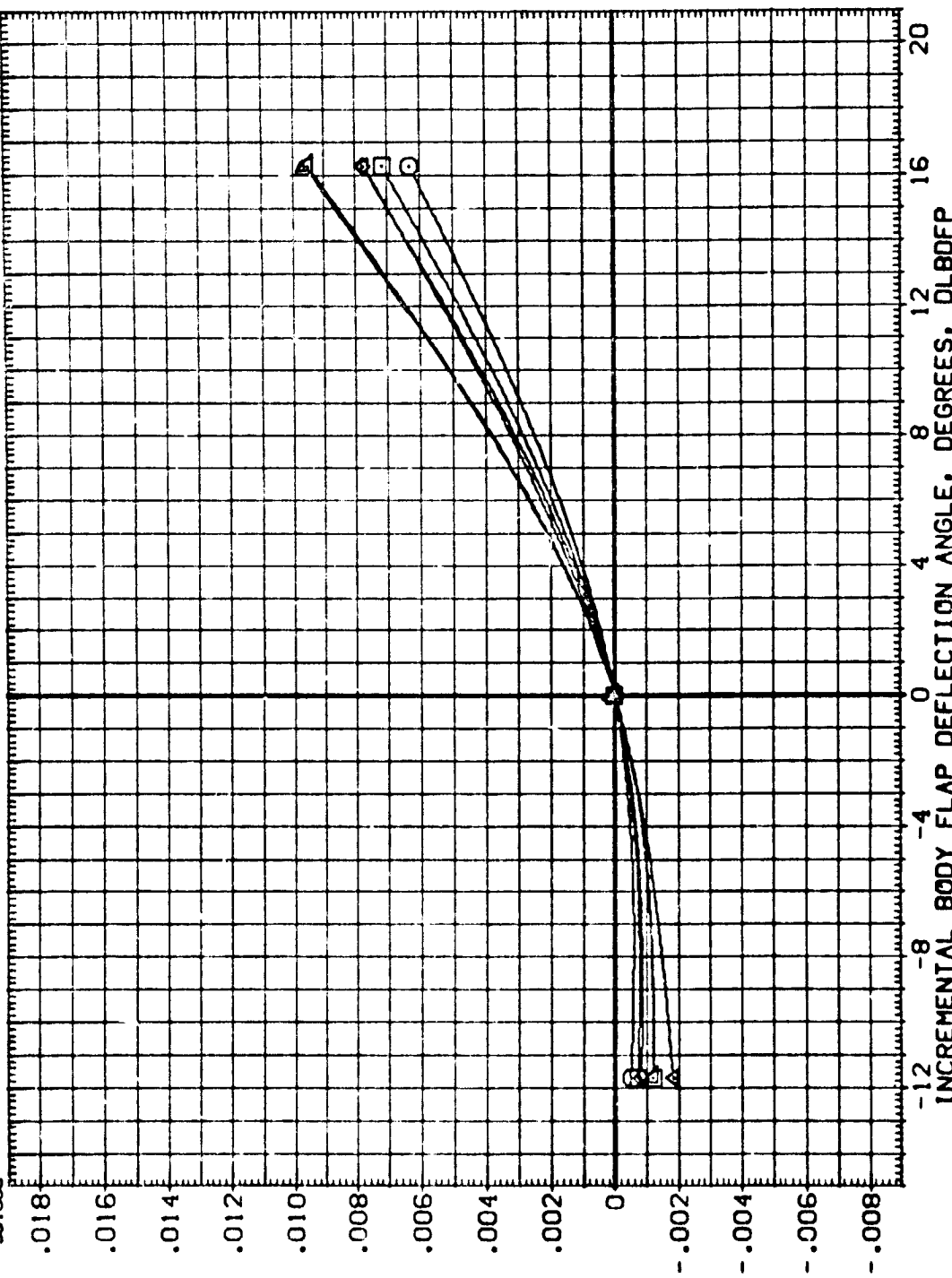


FIG. 20 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 0.50)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW059)

ALPHA	29.000	PARAMETRIC VALUES	DATA SOURCE	DATASET	DLBOFP	REFERENCE INFORMATION
MACH	9.000	BETA	DLBOFP	.000	.000	2690.0000
ELV-L0	.000	ELV-L1	.000	DTW059	.000	474.8100
ELV-R1	.000	ELV-R0	.000	DTW058	.000	956.8600
S'CLERK	56.000	RUDDER	.000			1076.6800
RNAL	.500					375.0000
						SCALE
						.0150



INCREMENTAL AXIAL FORCE COEFFICIENT, DLTCA

FIG. 20 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 0.50) PAGE 304



(DTW059)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116

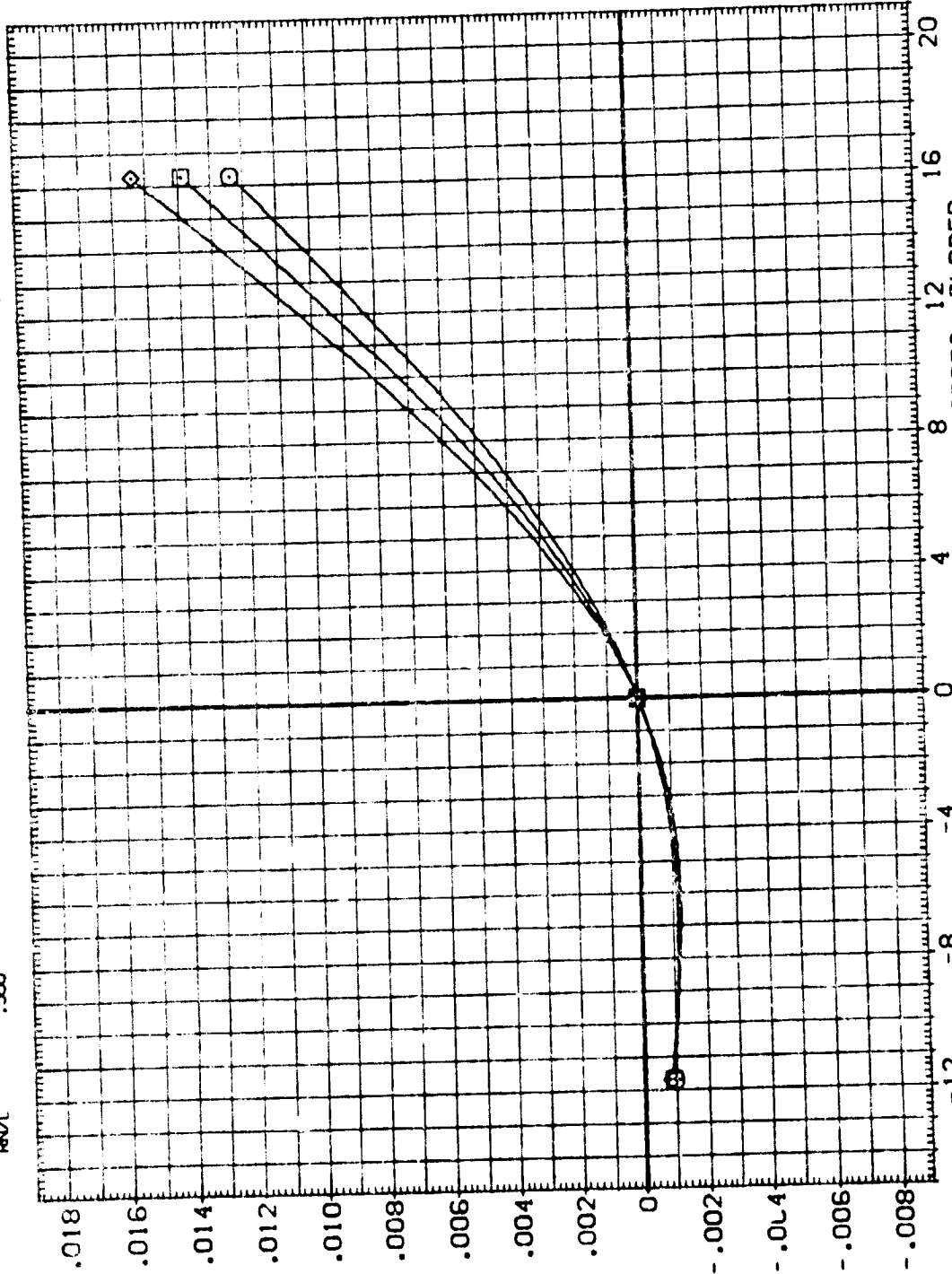
SYMBOL
○ □ ◇

PARAMETRIC VALUES
ALPHA 41.000
43.000
45.000
MACH 8.000
ELV-L0 .000
ELV-R1 .000
SPOBRX 55.000
RVAL .500

DATA SOURCE
DATASET .000
DTW059 .000
DTW058 .000
DTW057 .000
DLBDFP -11.700
16.300

DLBDFP .000
DLBDFP .000

REFERENCE INFORMATION
SREF 2690.0000 SO.FT.
LREF 474.8100 IN.
RREF 936.6800 IN.
XREF 1076.5300 IN.X0
YREF .0000 IN.Y0
ZREF 375.0000 IN.Z0
SCALE .0150



INCREMENTAL AXIAL FORCE COEFFICIENT, DLTCA

FIG. 20 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 0.50)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW059)

SYMBOL
 ○
 □
 ◇
 △
 ▽

ALPHA
 17.000
 19.000
 21.000
 23.000
 25.000
 27.000

MACH
 0.000
 .000
 .000
 55.000
 .500

ELV-L0
 ELV-R1
 SPOBRK
 RV/L

PARAMETRIC VALUES
 BETA
 ELV-L1
 ELV-R0
 RUDDER

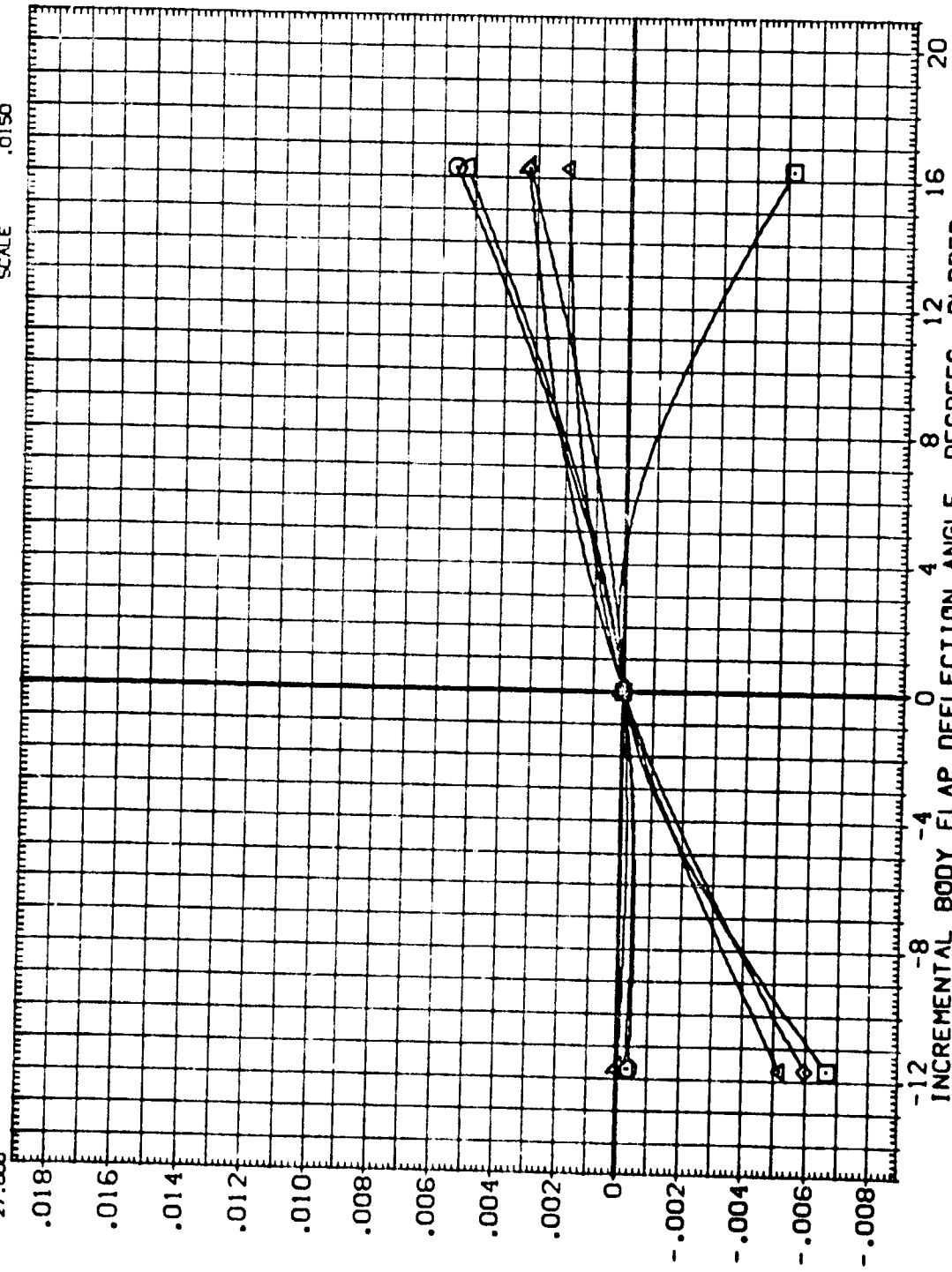
.000
 .000
 .000
 .000

DATASET
 DTW059
 DTW058
 DTW057

DATA SOURCE
 DLBOFP
 -11.700
 16.300

DATASET
 DLBOFP
 .000
 DTW057

REFERENCE INFORMATION
 SQ.FT.
 2690.0000
 IN.
 474.8100
 IN.
 936.6800
 IN.
 1076.6800
 IN.
 1076.6800
 IN.
 375.0000
 IN.
 .0150
 SCALE



INCREMENTAL FOREBODY AXIAL FORCE COEFFICIENT, DLTCAF

FIG. 20 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 0.50)



0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW059)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	DLBDFP	REFERENCE INFORMATION
□	29.000	8.000	BETA	DLBDFP	.000	2630.0000 SQ.FT.
◇	31.000	.000	ELV-LI	DTW059	.000	474.8100 IN.
△	33.000	.000	ELV-RO	DTW058	.000	936.6800 IN. X0
▽	35.000	55.000	FLIDER	DTW057	.000	1075.5800 IN. Y0
○	37.000	RNVL		DTW057	.000	375.0000 IN. Z0
○	39.000			SCALE		.0150

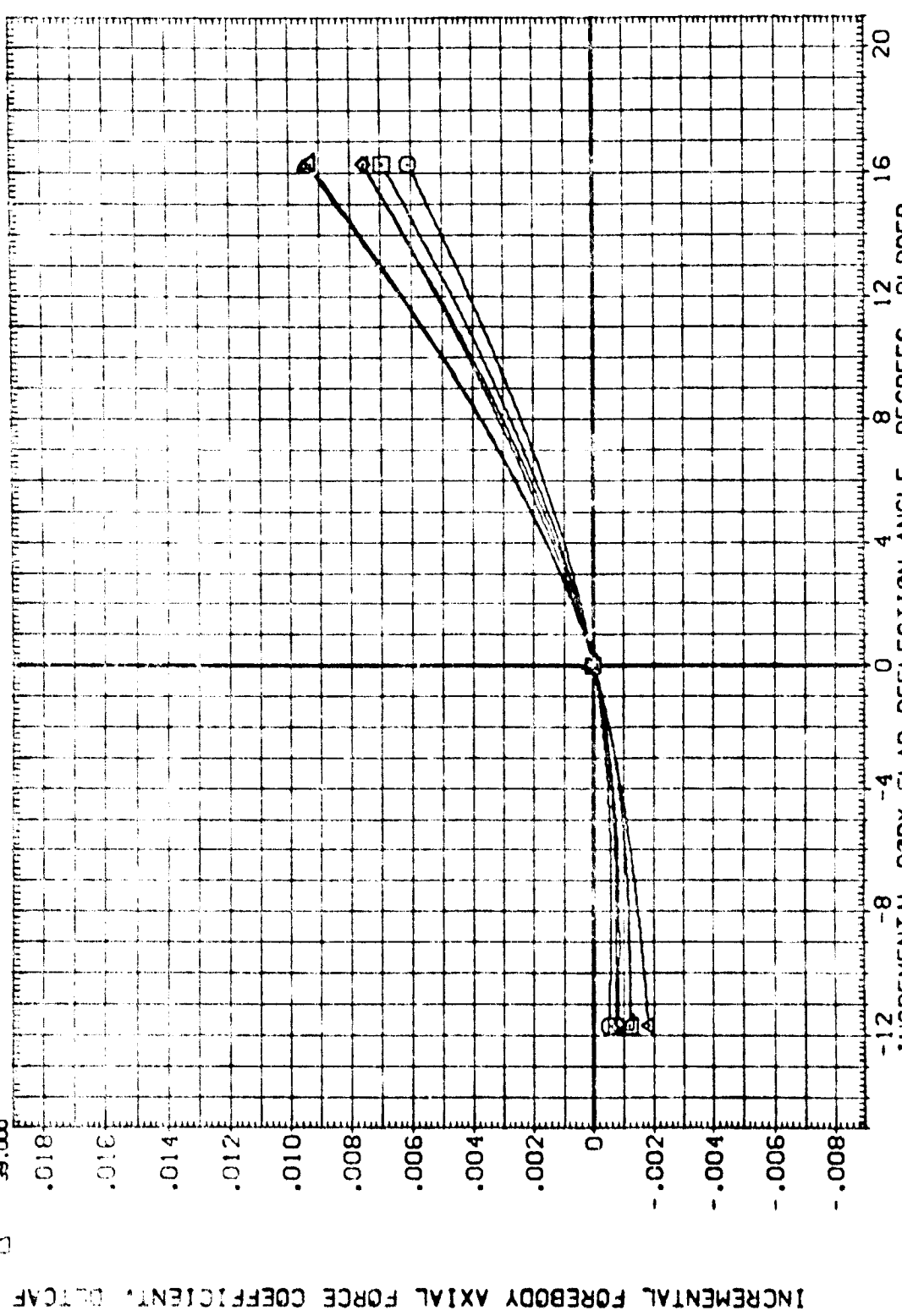


FIG. 20 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 0.50)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW059)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	DATASET	DLBOFF	REF	ITERATION	SO.FT.
○	41.000		8.000	DLBOFF	.000	DTW059	11.700	2990.0000	50.171
○	43.000	ELV-LO	.000	ELV-LO	.000	DTW059	16.700	474.8100	17.119
○	45.000	ELV-RI	.000	ELV-RI	.000	DTW059	16.700	1075.2870	17.119
◇		REFLEX	55.000	REFLEX	.000	DTW059	16.700	375.0000	17.119
		RVL	.500	RVL	.000	DTW059	16.700	375.0000	17.119
				SCALE				0150	

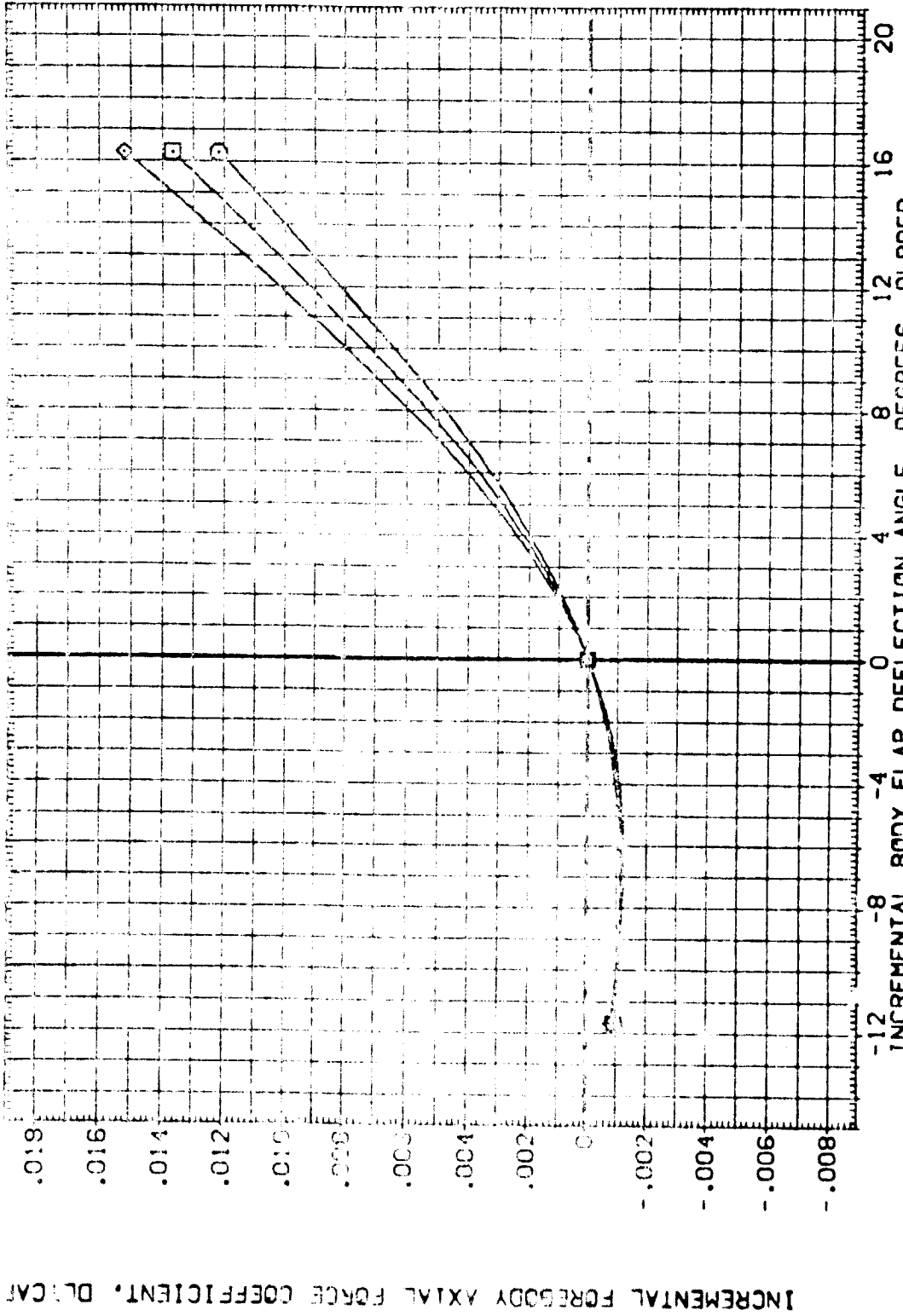
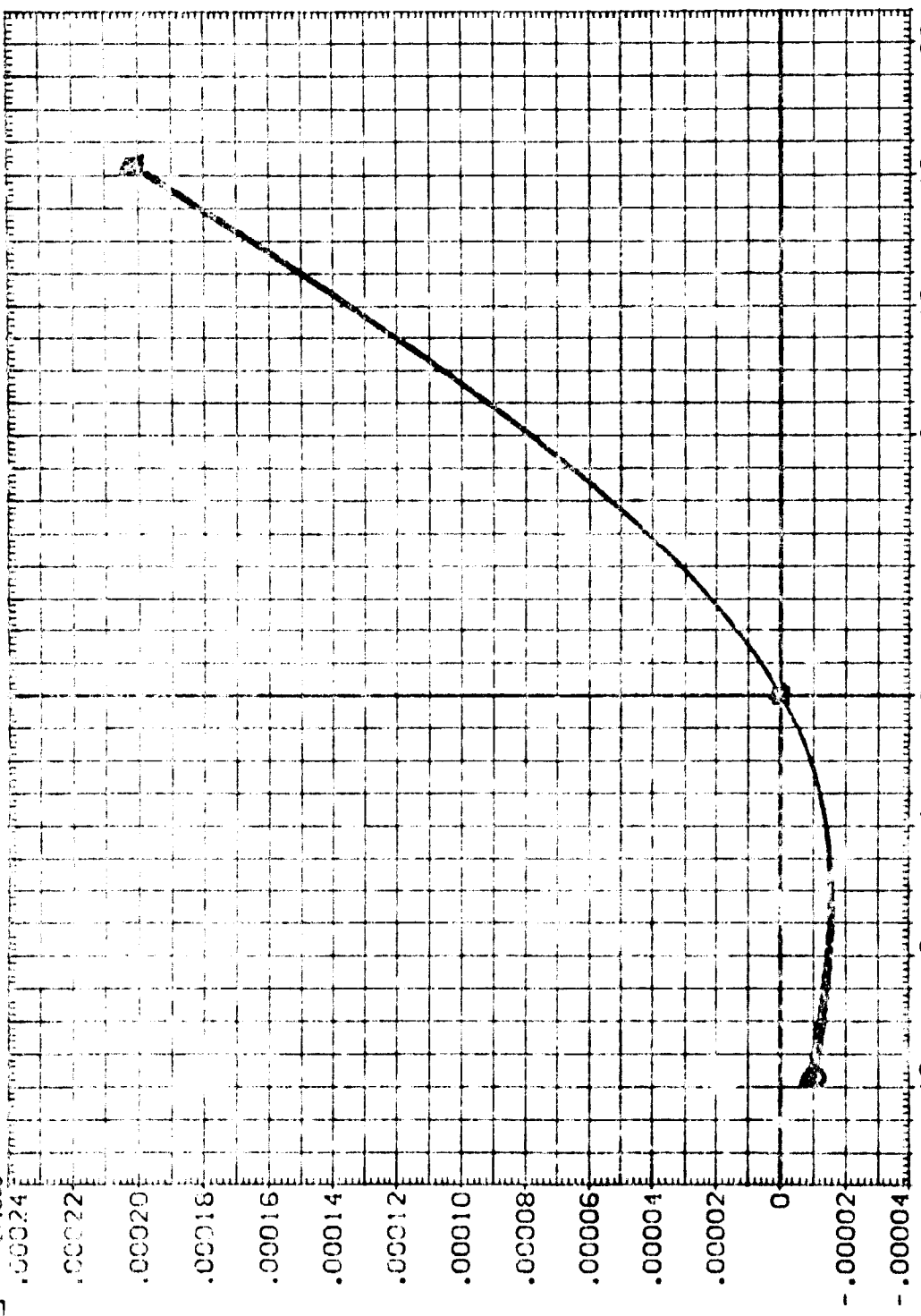


FIG. 20 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 0.50)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW059)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES			DATA SOURCE			REFERENCE INFORMATION		
□	17.000	ELV-L0	8.000	BETA	.000	DATASET	DL8DFP	SREF	2690.0000	50.FT.	
◇	19.000	ELV-R1	.000	ELV-L1	.000	DIV053	-11.700	LREF	474.8100	IN.	
△	21.000	SP052K	.000	ELV-R0	.000	DIV058	16.300	SREF	936.6800	IN.	
▽	23.000	NSVL	35.000	RAJSER	.000			XMREF	1076.0000	IN.X0	
◇	25.000							YMREF	0.0000	IN.Y0	
▽	27.000							ZMREF	375.0000	IN.Z0	
								SCALE	.0150		



INCREMENTAL BASE AXIAL FORCE COEFFICIENT, DL8DFP

INCREMENTAL BODY FLAP DEFLECTION ANGLE, DEGREES, DL8DFP

FIG. 20 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 0.50)

GA79 B26 C9 E43 F8 M16 N28 R5 V8 #116 (DTW059)

SYMBOL	ALPHA	MACH	ELV-L	ELV-R	SP06BK	PRVL	PARAMETRIC VALUES	.000	.000	.000	.000	DATA SOURCE	DATASET	DLBDFP	SCALE	REFERENCE IN. AS WALL	SO. FT.
□	29.000	ELV-LC	.000	.000	53.000	.500	BETA	.000	.000	.000	.000	DTW059	DTW057	.000	.0150	2650.0000	50. FT.
◇	31.000	ELV-R	.000	.000			ETA	-11.700	16.100			DTW058				474.8100	IN.
△	33.000	ELV-FD	.000	.000			NUMER									1076.0000	IN.
▽	35.000	ELV-FB	.000	.000												375.0000	IN.
◇	37.000	PRVL	.000	.000													IN.
▽	39.000																

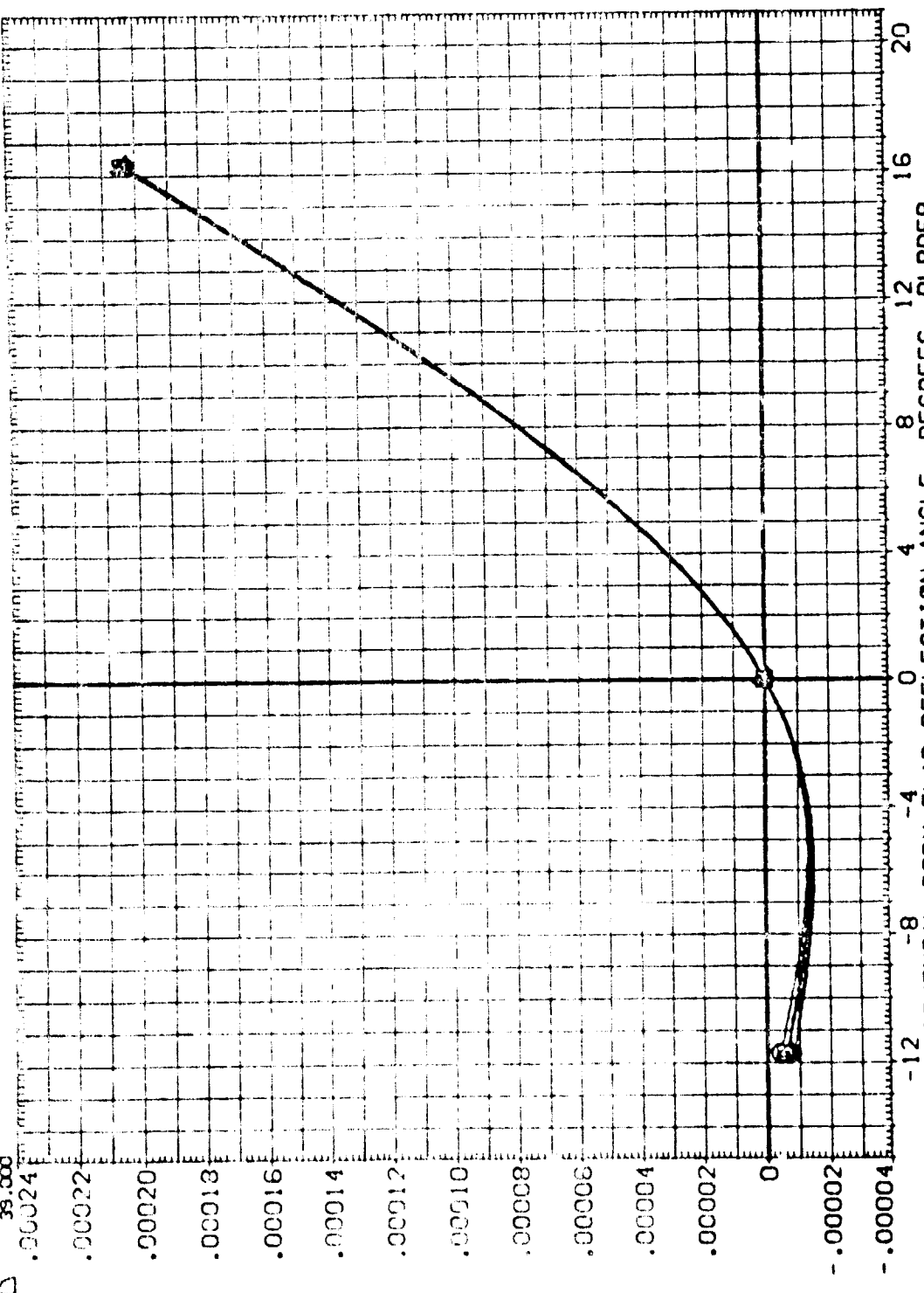


FIG. 20 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 0.50)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW059)

SYMBOL		ALPHA		MACH		PARAMETRIC VALUES		DATA SOURCE		DATASET		DLBDFP		SREF		REFERENCE INFORMATION	
							BETA		DLBDFP	DTW059	DTW057						SO.FT.
		41.000		8.000		.000		.000									2690.0000
		43.000		.000		.000	ELV-L1	.000	-11.700	DTW059	DTW057						474.8100
		45.000		.000		.000	ELV-R0	.000	16.300	DTW058							936.6900
							ELV-R0	.000									1075.6200
							RUDDER	.000									375.0000
																	.0150

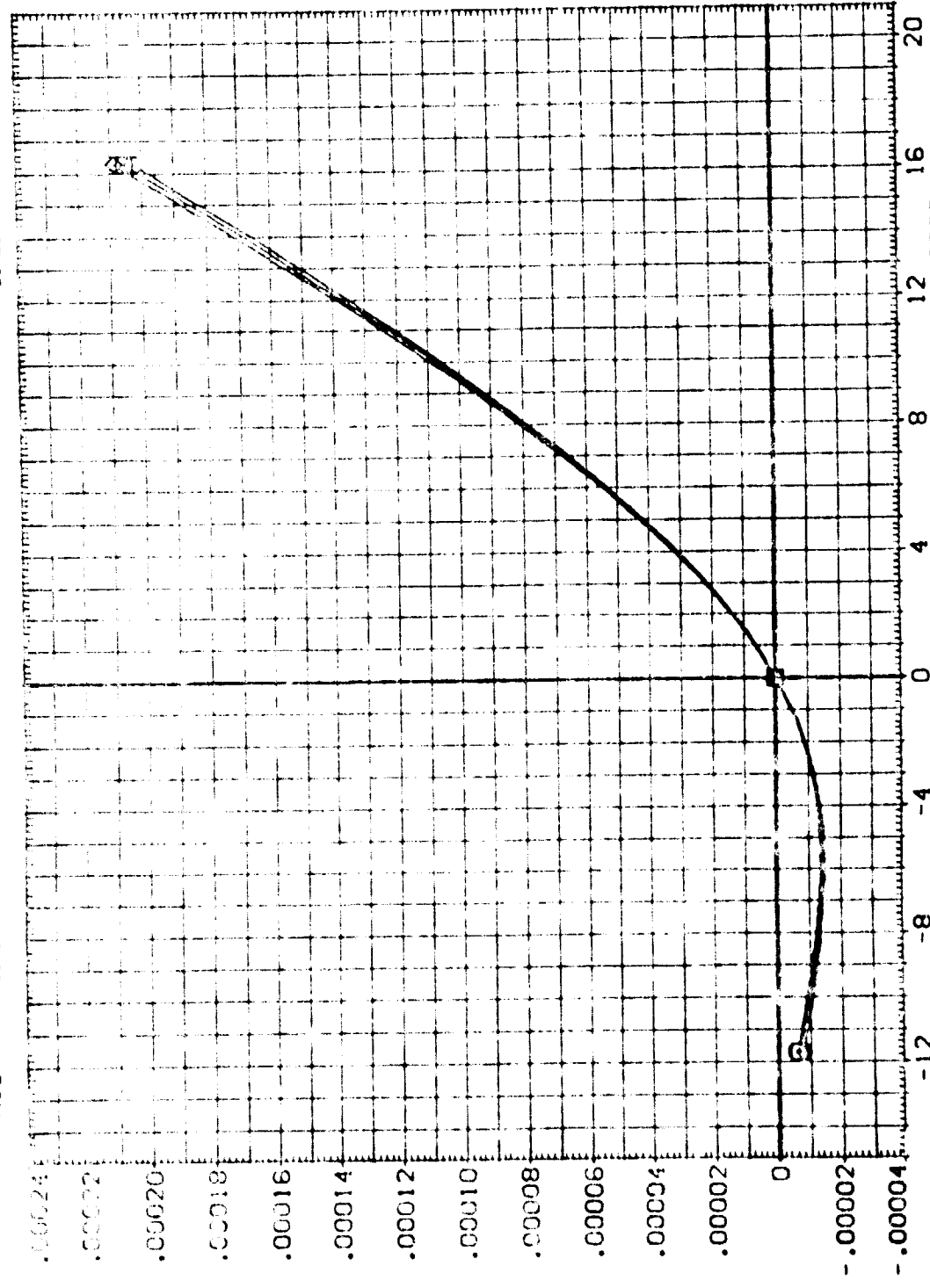


FIG. 20 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 0.50)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW059)

ALPH	79.000	PARAMETRIC VALUES	.000	DATASET	.000	DLBDFP	.000	DATASET	DTW057	SREF	2690.0000	SO.FT.
SYMBOL	□	MACH	8.000	.000	DTW059	-11.700	.000	DTW058	DTW057	LREF	474.8100	IN.
	□	ELV-L0	.000	.000	DTW058	16.300	.000			BREF	936.6800	IN.
	□	ELV-R0	.000	.000			.000			X1P0	1075.5800	IN.X0
	□	STOBER	55.000	.000			.000			Y1P0	1000.0000	IN.Y0
	□	RVL	.500	.000			.000			ZMRP	375.0000	IN.Z0
	□									SCALE	.0150	

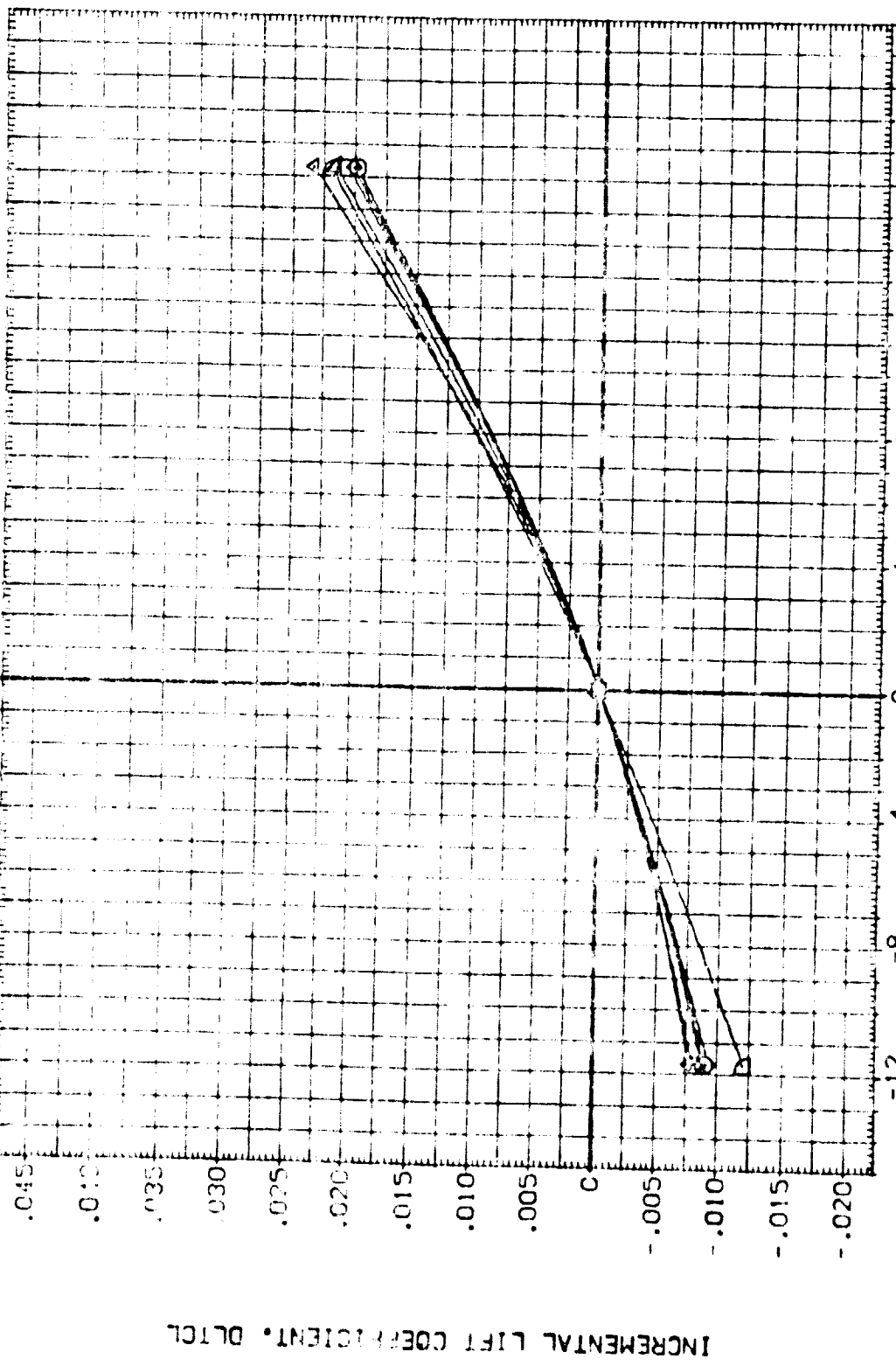


FIG. 20 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 0.50)

0A79 826 C9 543 F8 M16 N28 R5 Y8 W116 (DTW059)

ALPHA	41.000	PARA.ETRIC VALUES	.000	DATASET	DLBDFP	DATA SOURCE	DATASET	DLBDFP	REF	REF	REF	REF	REF	REF	REF
SYMBOL	○	MAD	8.000	BETA	0.000	DLBDFP	DTW057	0.000	DLBDFP	DLBDFP	DLBDFP	DLBDFP	DLBDFP	DLBDFP	DLBDFP
	○	ELV-0	0.000	ELV-1	0.000	DTW059	DTW057	0.000	DLBDFP	DLBDFP	DLBDFP	DLBDFP	DLBDFP	DLBDFP	DLBDFP
	○	ELV-1	0.000	ELV-2	0.000	DTW059	DTW057	0.000	DLBDFP	DLBDFP	DLBDFP	DLBDFP	DLBDFP	DLBDFP	DLBDFP
	○	SCALE	55.000	CLV-R0	0.000	DTW059	DTW057	0.000	DLBDFP	DLBDFP	DLBDFP	DLBDFP	DLBDFP	DLBDFP	DLBDFP
	○	SCALE	500	CLV-R1	0.000	DTW059	DTW057	0.000	DLBDFP	DLBDFP	DLBDFP	DLBDFP	DLBDFP	DLBDFP	DLBDFP
	○	SCALE	500	CLV-R2	0.000	DTW059	DTW057	0.000	DLBDFP	DLBDFP	DLBDFP	DLBDFP	DLBDFP	DLBDFP	DLBDFP

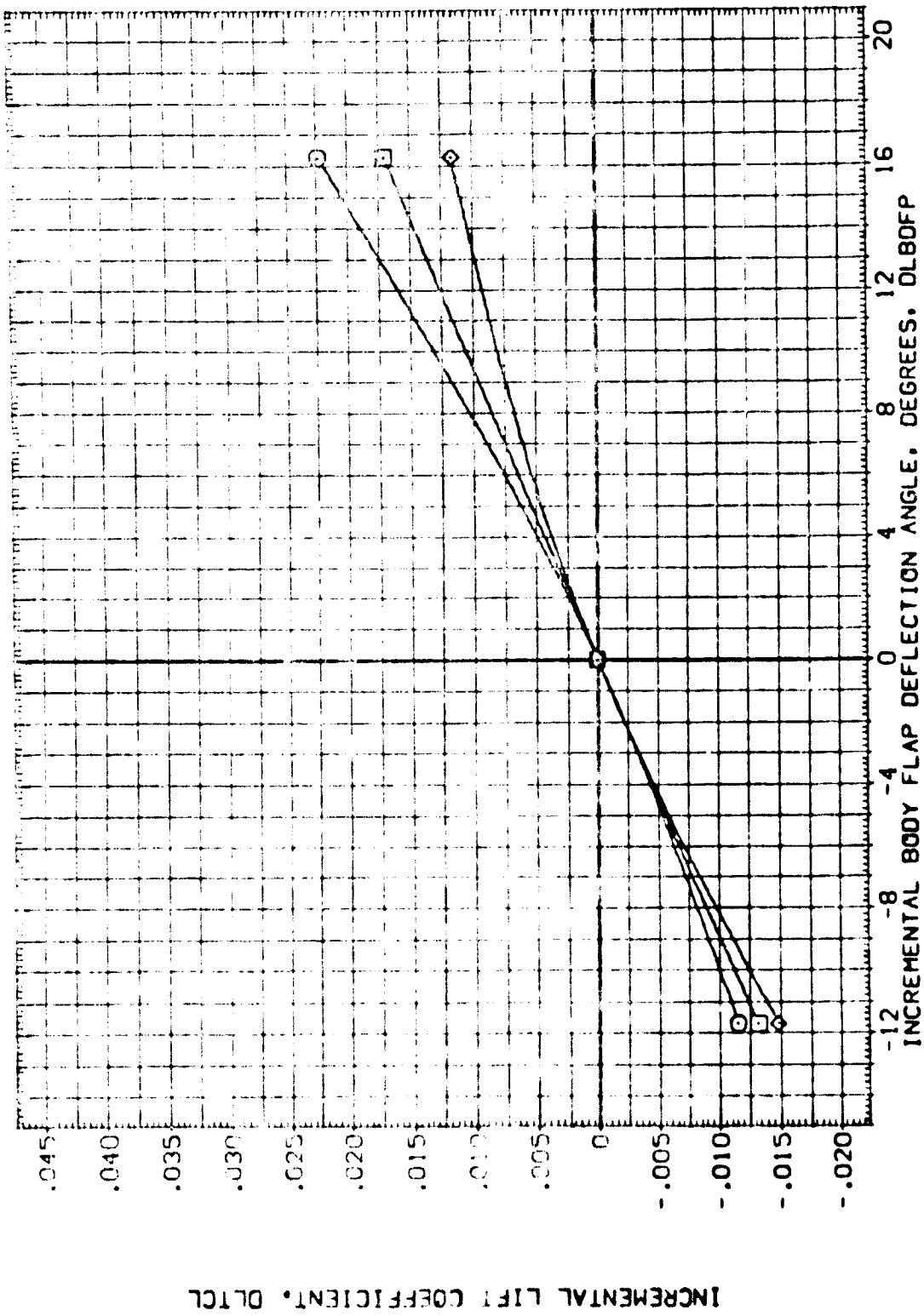


FIG. 20 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 0.50)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW059)

ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
0	ELV-L0	BETA	DLBDFP	SQ.FT.
1	ELV-R1	ELV-L1	DLBDFP	IN.
2	ELV-R2	ELV-R0	DLBDFP	IN.
3	RUDDER	RUDDER	DLBDFP	IN.
4	SCALE	SCALE	DLBDFP	IN.
5			DLBDFP	IN.

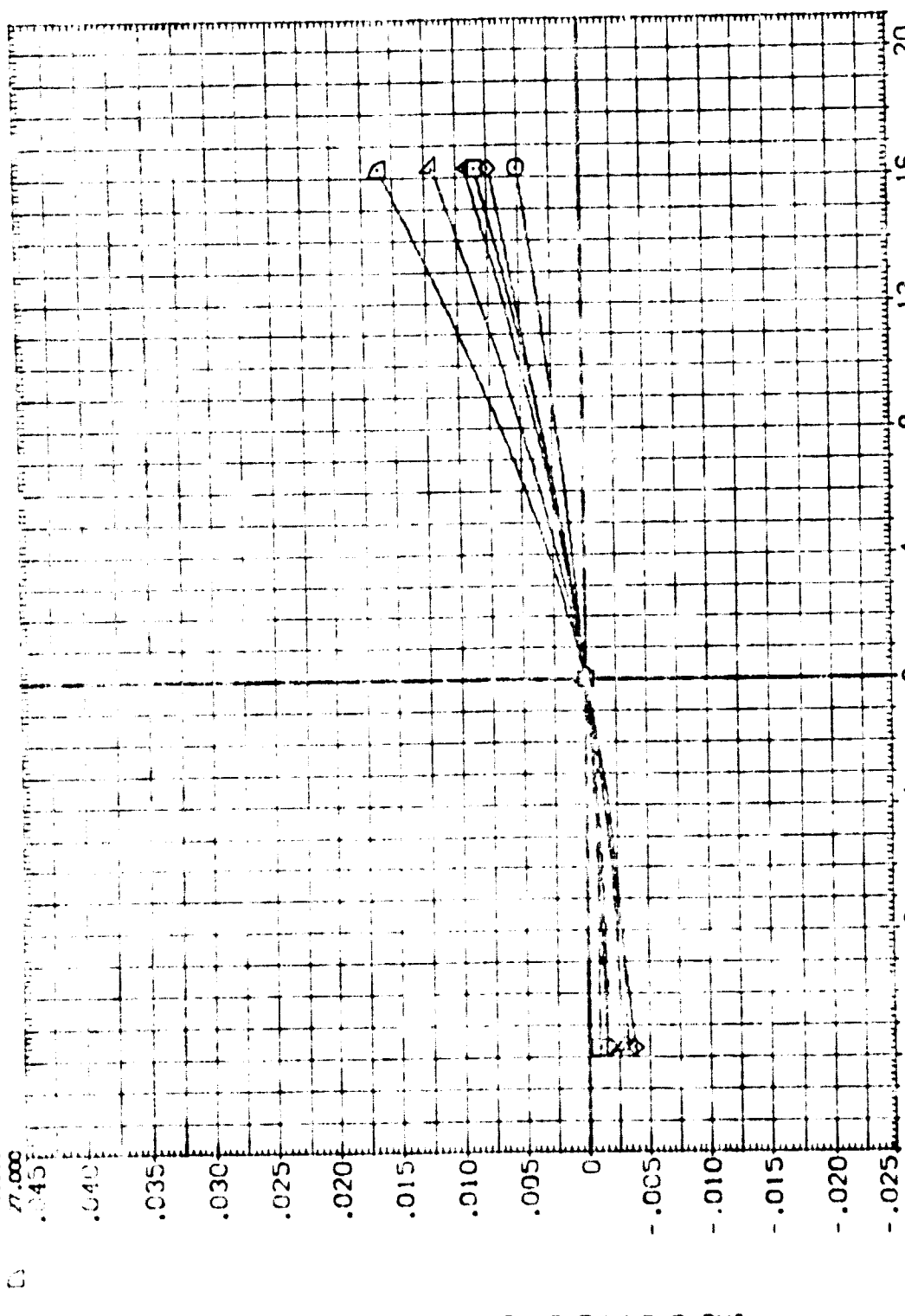


FIG. 20 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 0.50)

0A79 B26 C9 E43 F8 M16 N28 R5 V8 W116 (DTW059)

ALPHA	41.000	PARAMETRIC VALUES	.000	DATASET	DLBDFP	DATASET	DLBDFP	SREF	REFERENCE INFORMATION:
43.000	MACH	8.000	.000	DLBDFP	.000	D1W057	.000	2690.0000	SO.F.T.
45.000	ELV-L3	.000	.000	D1W058	-11.700			474.8100	IN.
	ELV-R1	.000	.000	D1W058	16.300			936.6300	IN.
	SPREAD	55.000	.000					1076.6000	IN.43
	REVL	.500	.000					375.0000	IN.Y0
									IN.Z3
									SCALE
									.0150

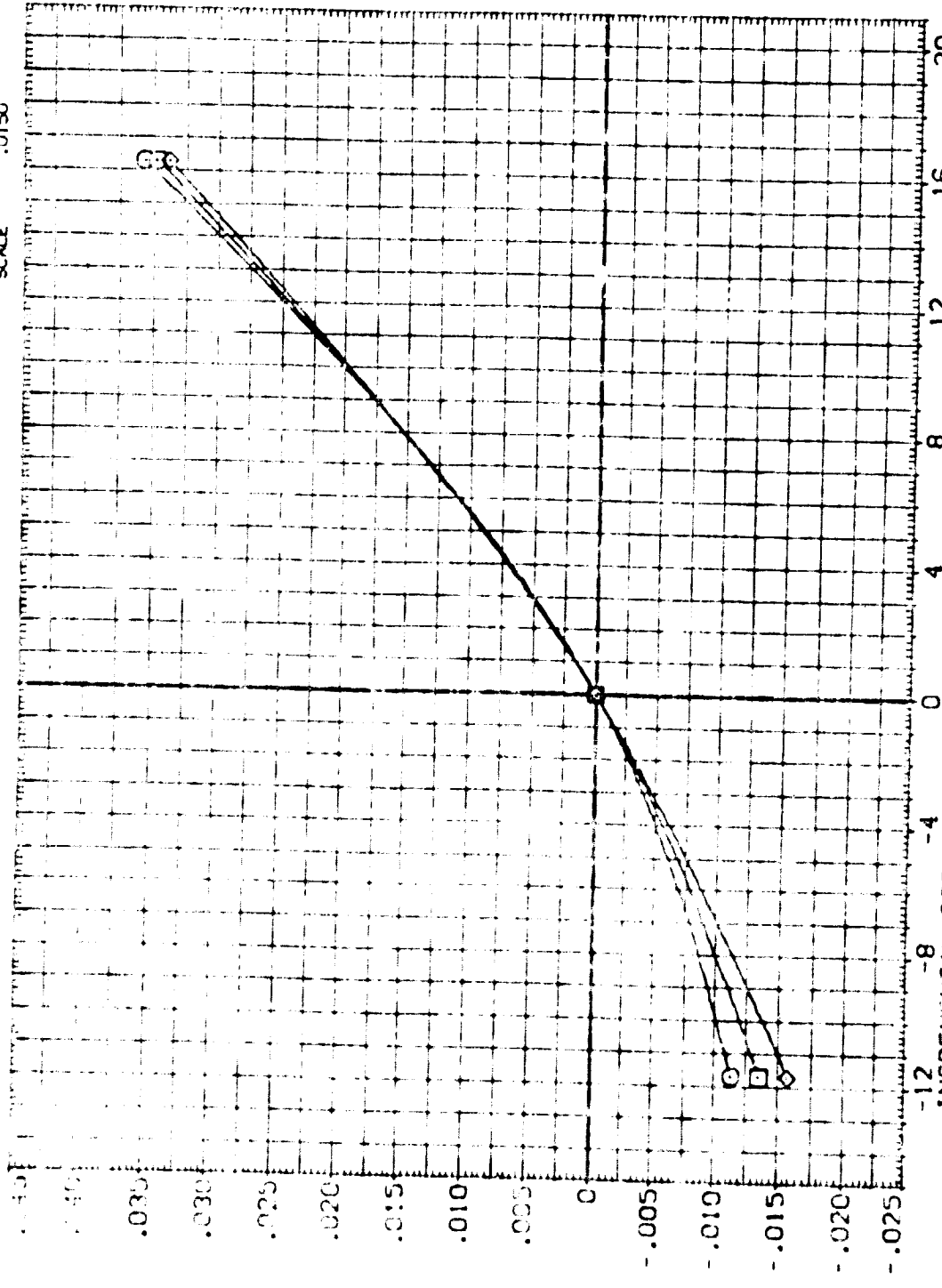


FIG. 20 INCREMENTAL EFFECTS OF BODY FLAP DEFLECTION (REYNOLDS NUMBER= 0.50)

DATA SET SYMBOL CONFIGURATION DESCRIPTION REF. INFO REFERENCE INFORMATION

(SYV037)	DAY9 926 C9 E43 F8 M16 N28 R3 V8 V116	500	SRCE	2690.0000	50.FT.
(SYV040)	DAY9 926 C9 E43 F8 M16 N28 R5 V8 V116	1.860	LRCE	474.8100	IN.
(SYV001)	DAY9 926 C9 E43 F8 M16 N28 R6 V8 V116	3.530	SRCE	936.6800	IN.
			XFRP	1076.6800	IN. X0
			YFRP	375.0000	IN. Y0
			ZFRP	375.0000	IN. Z0
			SCALE	.0150	

PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH (FORWARD C.G.) CLMFD

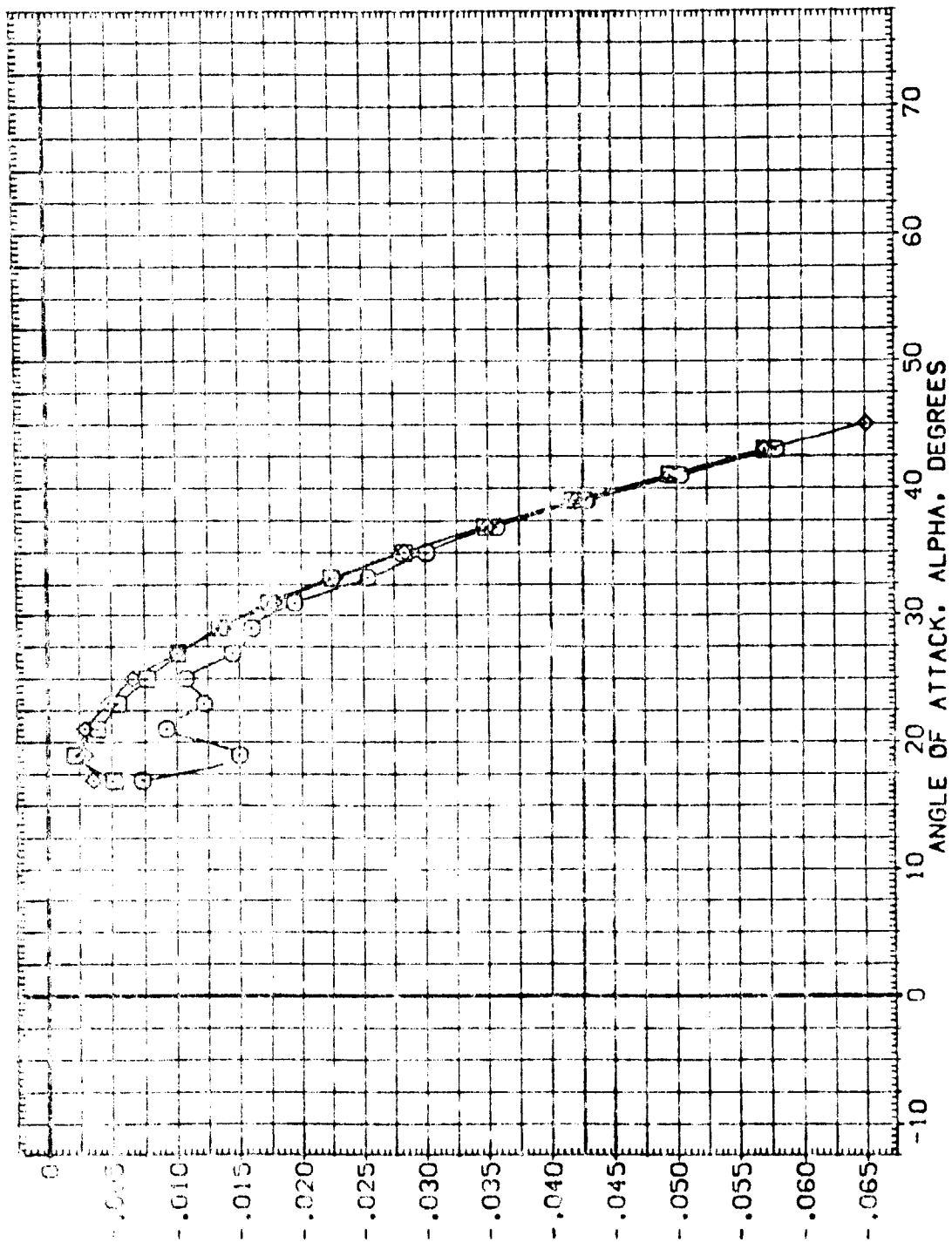


FIG. 21 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 0)

(A)MACH = 7.90

DATA SET 1000
 (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20)
 (21) (22) (23) (24) (25) (26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37) (38) (39) (40)
 (41) (42) (43) (44) (45) (46) (47) (48) (49) (50) (51) (52) (53) (54) (55) (56) (57) (58) (59) (60)
 (61) (62) (63) (64) (65) (66) (67) (68) (69) (70) (71) (72) (73) (74) (75) (76) (77) (78) (79) (80)
 (81) (82) (83) (84) (85) (86) (87) (88) (89) (90) (91) (92) (93) (94) (95) (96) (97) (98) (99) (100)

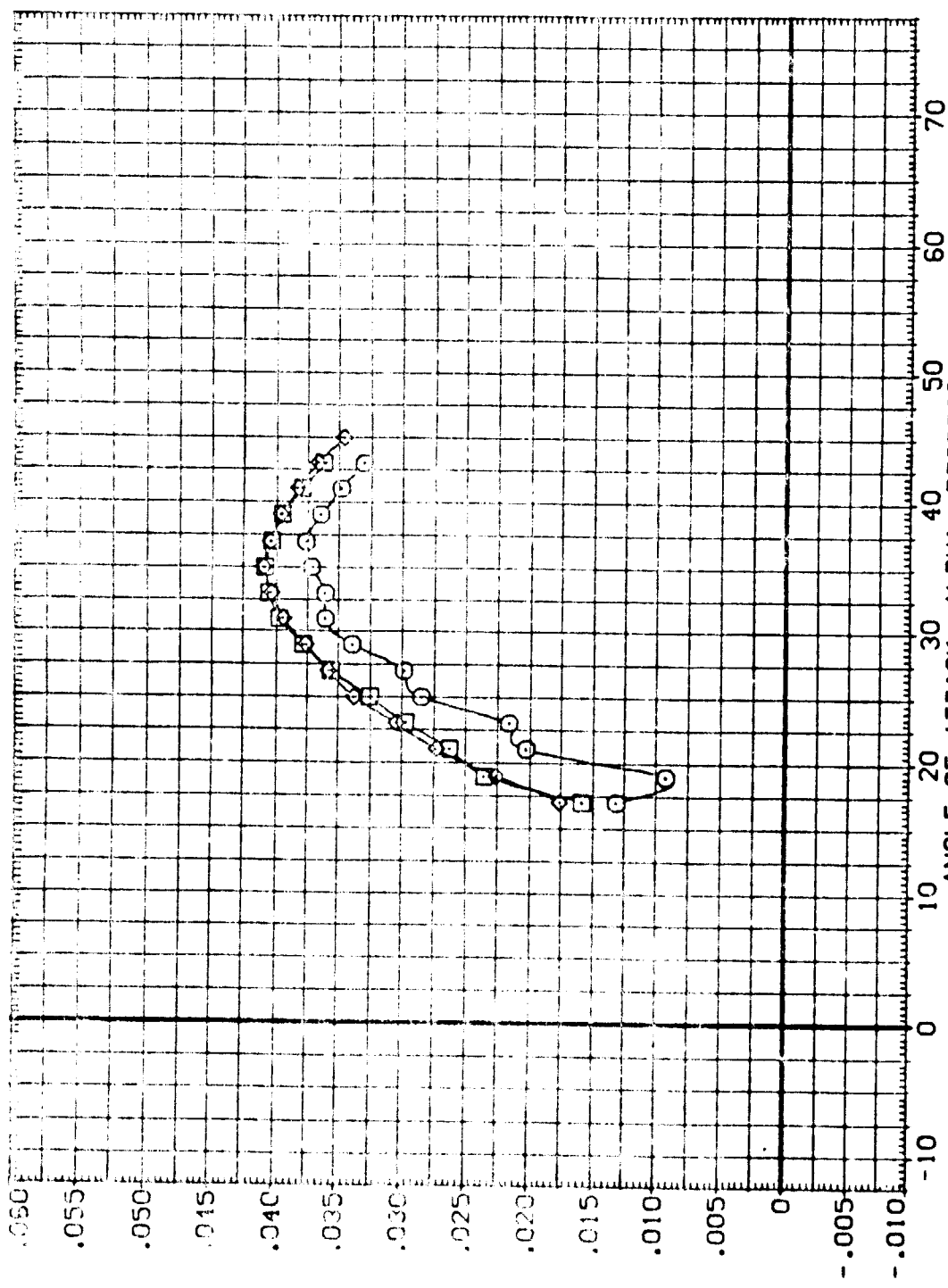


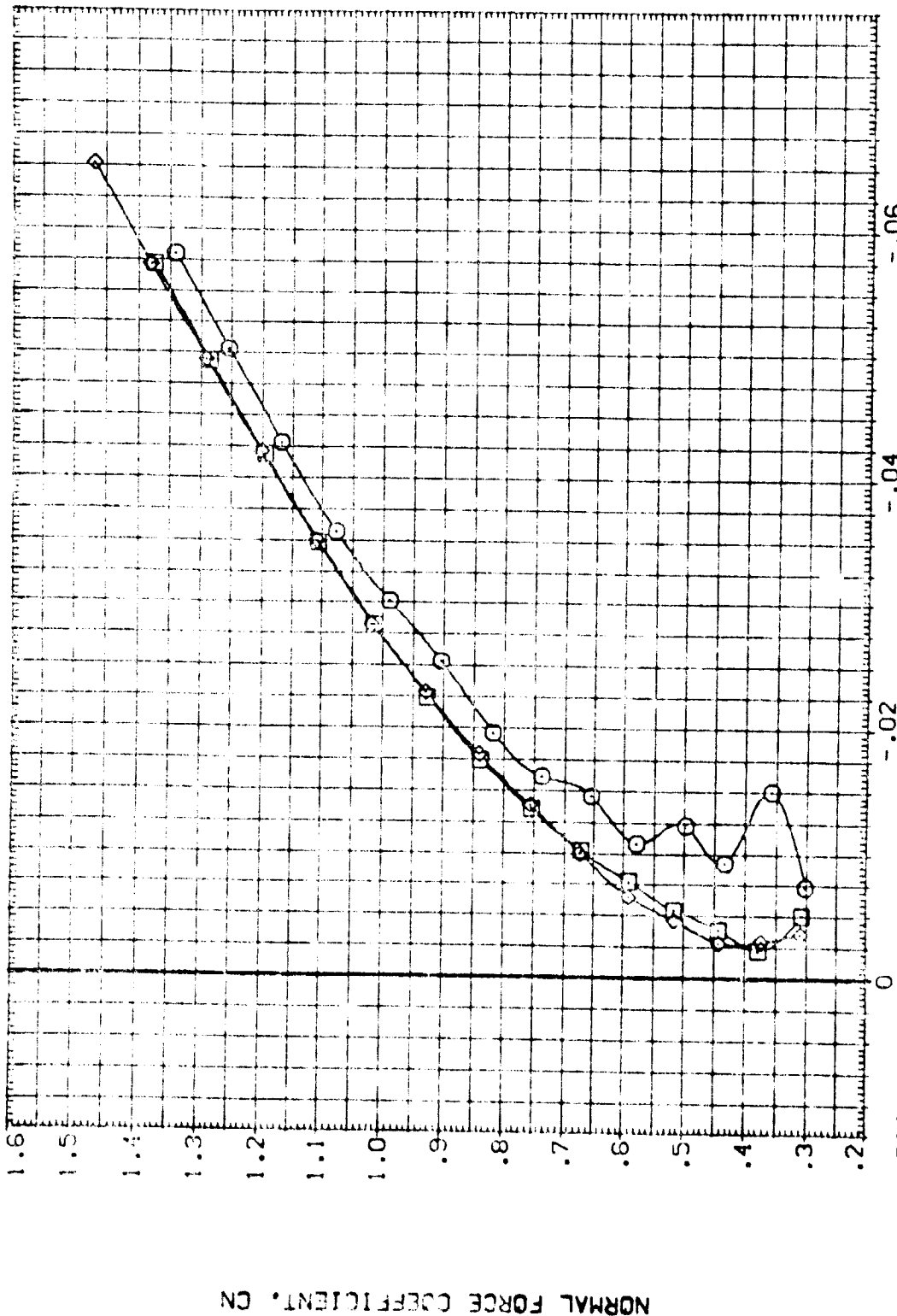
FIG. 21 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 0)

(A)MACH = 7.90



DATA SET 5-901

CONFIGURATION	DESCRIPTION	RVL	BOFLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
0A79 826	C9 E43 F8 M16 N28 R5 V8 V116	.500	.000	.000	.000	SREF 2690.0000 SQ.FT.
0A79 826	C9 E43 F8 M16 N28 R5 V8 V116	1.860	.000	.000	.000	LREF 474.8100 IN.
0A79 826	C9 E43 F8 M16 N28 R5 V8 V116	3.530	.000	.000	.000	BREF 926.6900 IN.
						XREF 1076.6600 IN.X0
						YREF .0000 IN.Y0
						ZREF 375.0000 IN.Z0
						SCALE .0150



PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH (FORWARD C. G.) CLMFWD
 FIG. 21 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 0)

(A) MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(C1V057) □ QAY8 B26 C9 E43 F8 M16 N28 R5 V8 V116

(C1V040) ◇ QAY8 B26 C9 E43 F8 M16 N28 R5 V8 V116

(C1V001) QAY8 B26 C9 E43 F8 M16 N28 R5 V8 V116

RVAL BOFLAP ELV-L0 ELV-L1

1.500 .000 .000 .000

1.860 .000 .000 .000

3.530 .000 .000 .000

REFERENCE INFORMATION

SREF 2680.0000 SQ.FT.

LREF 474.8100 IN.

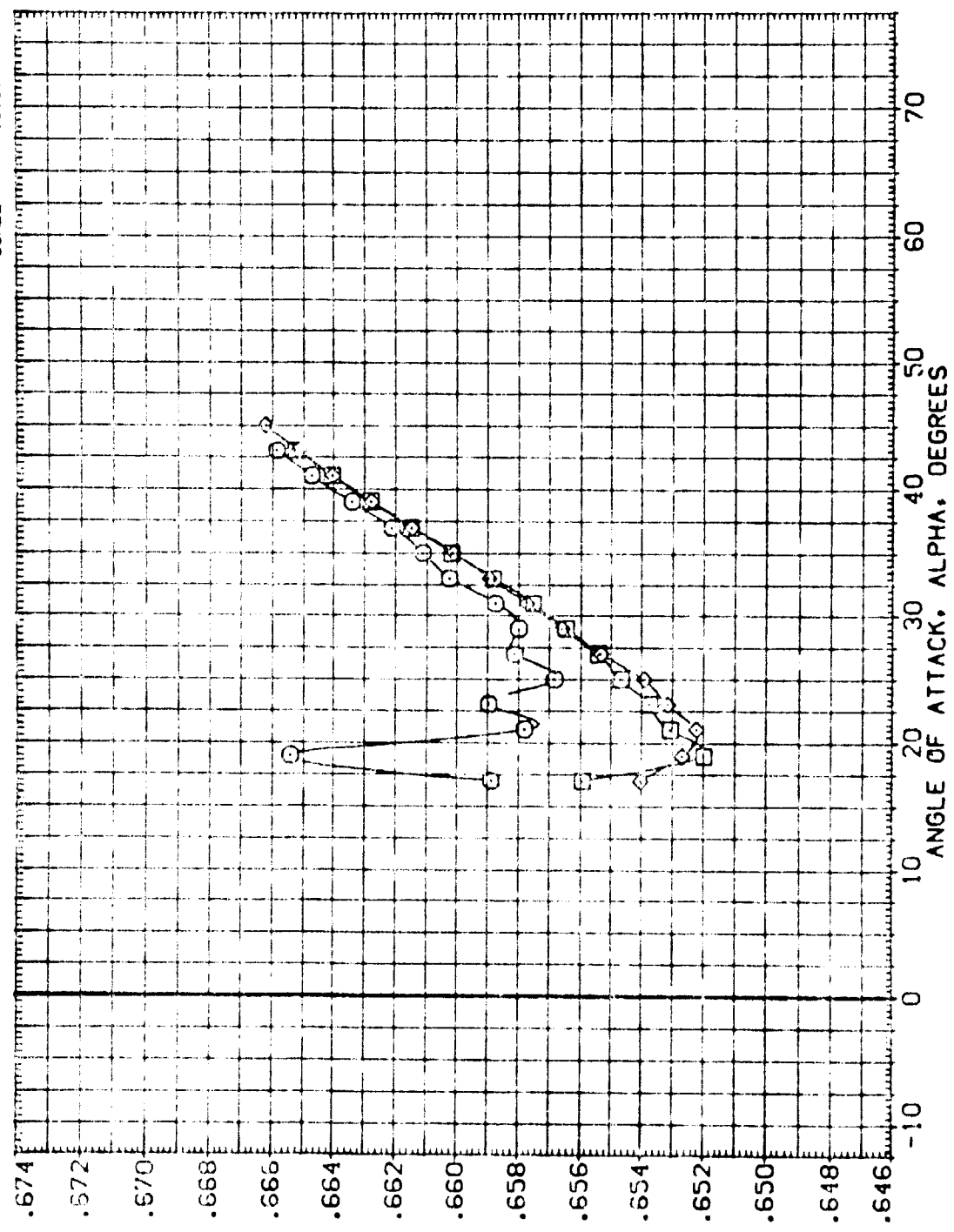
BREF 536.6800 IN.

XPRP 1076.6800 IN.X0

YPRP .0000 IN.Y0

ZPRP 375.0000 IN.Z0

SCALE .0150



CENTER OF PRESSURE LOCATION AS A FRACTION OF BODY LENGTH, XCP/L

FIG. 21 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 0)

(A)MACH = 7.90

DATA SET SYMBOL: (C1V007)
 (C1V040)
 (C1V001)

CONFIGURATION DESCRIPTION:
 CAY8 B08 C3 E43 F8 M16 N28 P5 V8 V11.6
 CAY9 B08 C3 E43 F8 M16 N28 P5 V8 V11.6
 CAY9 B08 C3 E43 F8 M16 N28 P5 V8 V11.6

RVAL: .500
 1.850
 3.530

BOFLAP: .000
 .000
 .000

ELV-L0: .000
 .000
 .000

ELV-L1: .000
 .000
 .000

REFERENCE INFORMATION:
 SREF: 2650 0000 53.FT.
 LREF: 474.8100 IN.
 BREF: 936.6900 IN.
 XTRP: 1076.6900 IN.
 YTRP: .0000 IN.
 ZTRP: 375.0000 IN.
 SCALE: .0150

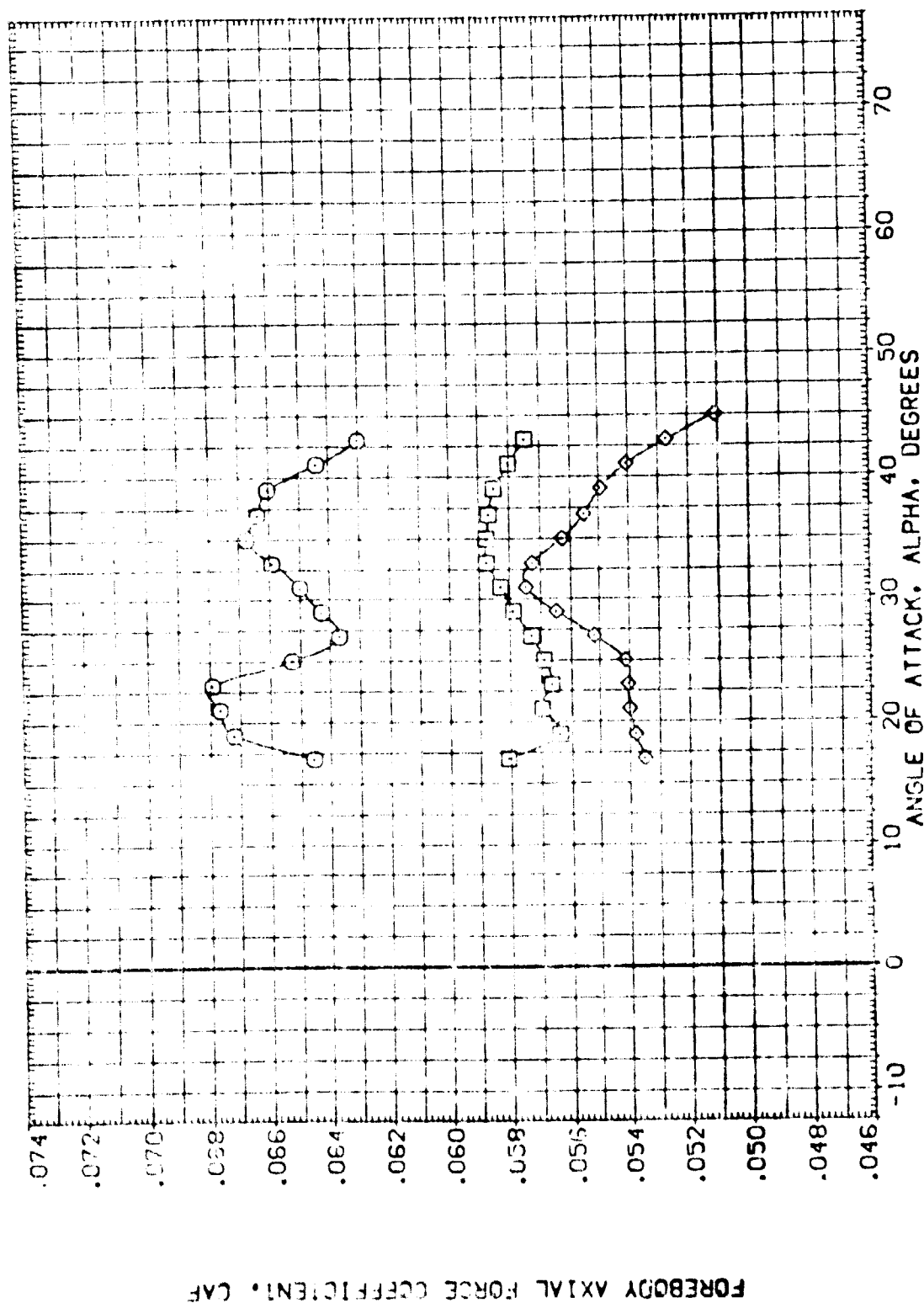


FIG. 21 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 0)

(A)MACH = 7.90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	BOFLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(01) (02)	09 076 09 E43 FB M16 N48 R0 V8 V116	.500	.000	.000	.000	SREF 2650.0000 SQ.FT.
(01) (03)	09 076 09 E43 FB M16 N28 R0 V8 V116	1.860	.000	.000	.000	LREF 474.8100 IN.
(01) (04)	09 076 09 E43 FB M16 N28 R0 V8 V116	3.530	.000	.000	.000	BREF 936.6800 IN.
(01) (05)	09 076 09 E43 FB M16 N28 R0 V8 V116					XREF 1076.6800 IN.
						TRAP .0000 IN.
						ZTRAP .0000 IN.
						SCALE .0150

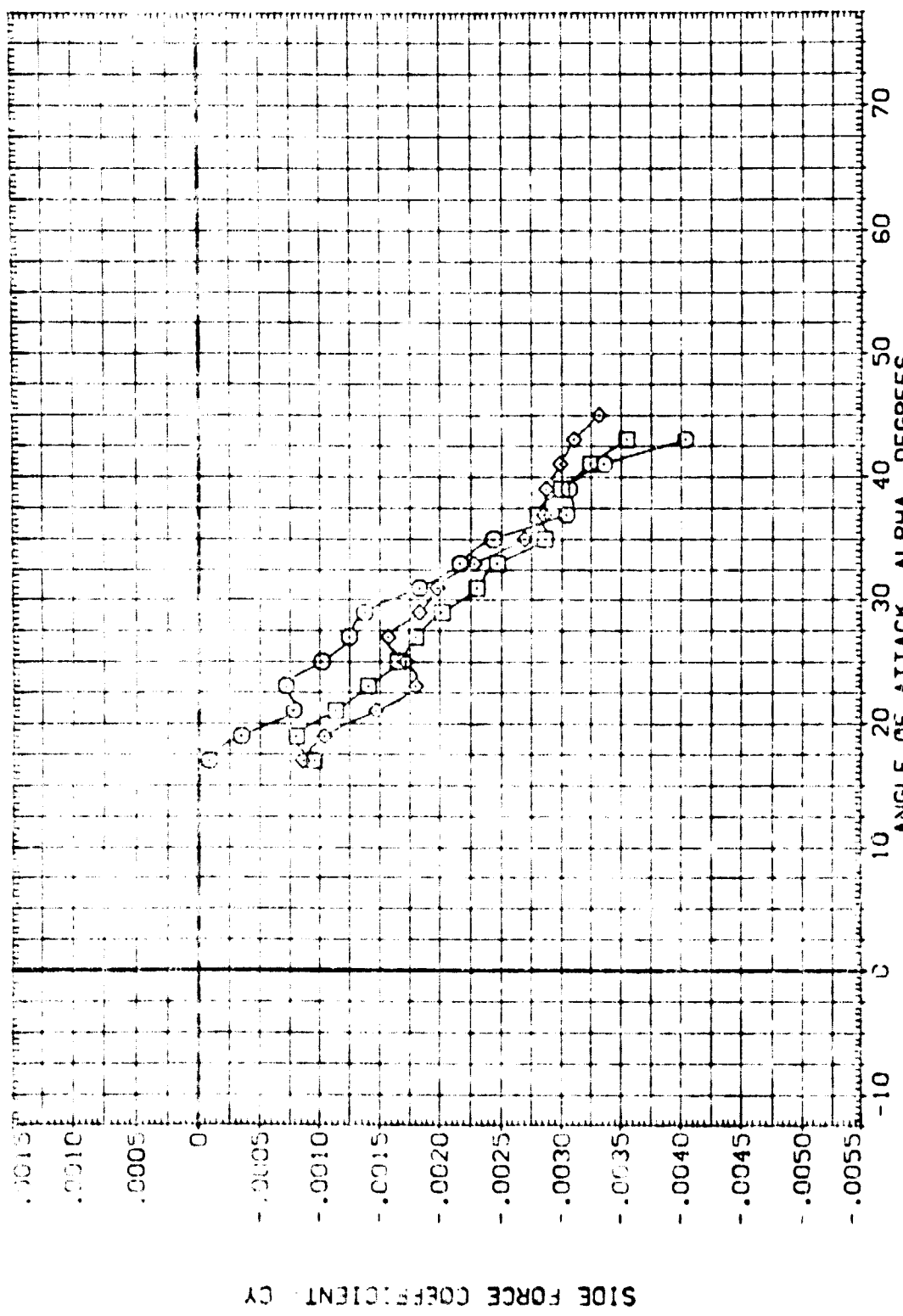


FIG. 21 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 0)

(A)MACH = 7.90

DATA SET SYMBOL. CONFIGURATION DESCRIPTION

(A10057)	Q	CA79	BD6	C9	E43	F8	M16	N28	PS	V8	V116
(A10040)	Q	CA79	BD6	C9	E43	F8	M16	N28	PS	V8	V116
(A10001)	Q	CA79	BD6	C9	E43	F8	M16	N28	PS	V8	V116

RV/L 500
1.860
3.530

BOFLAP .000
.000
.000

ELV-L0 .000
.000
.000

ELV-L1 .000
.000
.000

REFERENCE INFORMATION

SREF	2690.0000	50. FT.
LREF	474.8100	IN.
BREF	936.6400	IN.
X-REF	1076.8900	IN. X0
Y-REF	.0000	IN. Y0
Z-REF	375.0000	IN. Z0
SCALE	.0150	

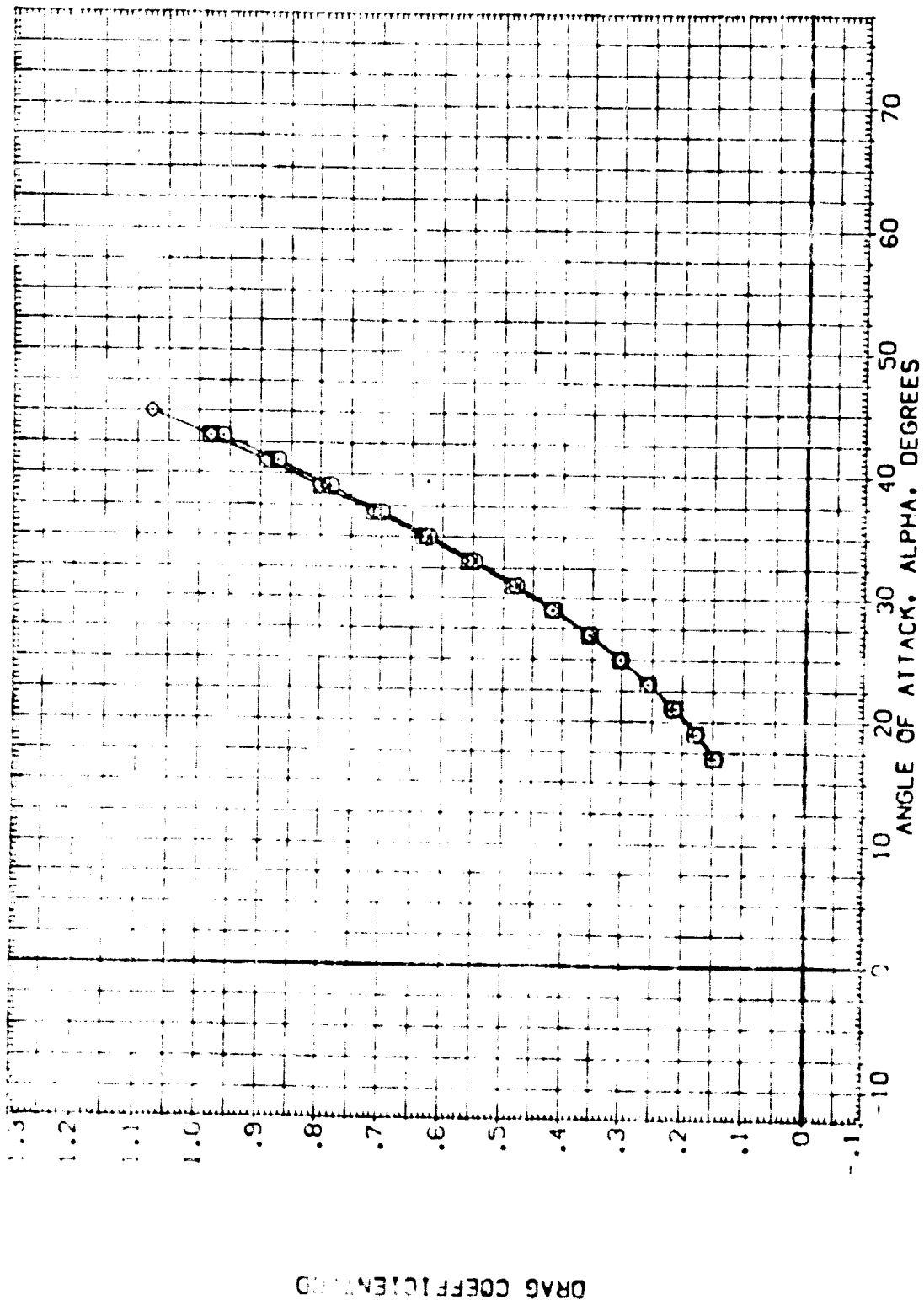


FIG. 21 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 0)

(A)MACH = 7.90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RMVL	BOFLAP	EVL-L0	LV-L1	REFERENCE INFORMATION
(ATM07)	0A79 806 C9 E43 F8 M16 N29 R5 V8 V116	500	.000	.000	.000	REF 2620.0000 SO.FT.
(ATM08)	0A79 826 C9 E43 F8 M16 N29 R5 V8 V116	1.860	.000	.000	.000	LRXF 474.8100 IN.
(ATM001)	0A79 826 C9 E43 F8 M16 N29 R5 V8 V116	3.530	.000	.000	.000	BREF 936.6800 IN.
						XTRP 1076.6800 IN.X0
						YTRP .0000 IN.Y0
						ZTRP 375.0000 IN.Z0
						SCALE .0150

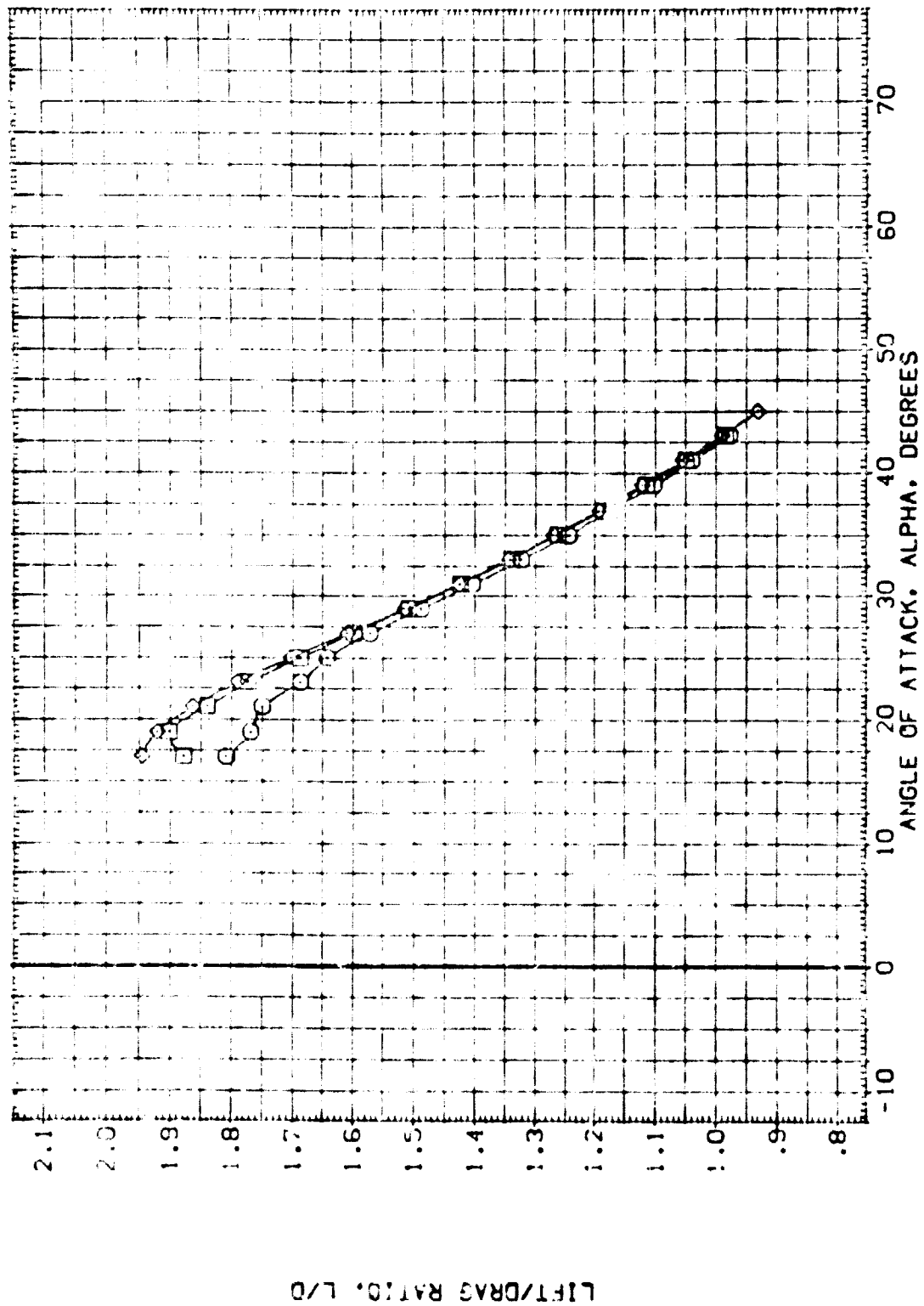


FIG. 21 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 0)

(A)MACH = 7.90

DATA SET SYMBOL: (C1V058)
 (C1V049)
 (C1V013)

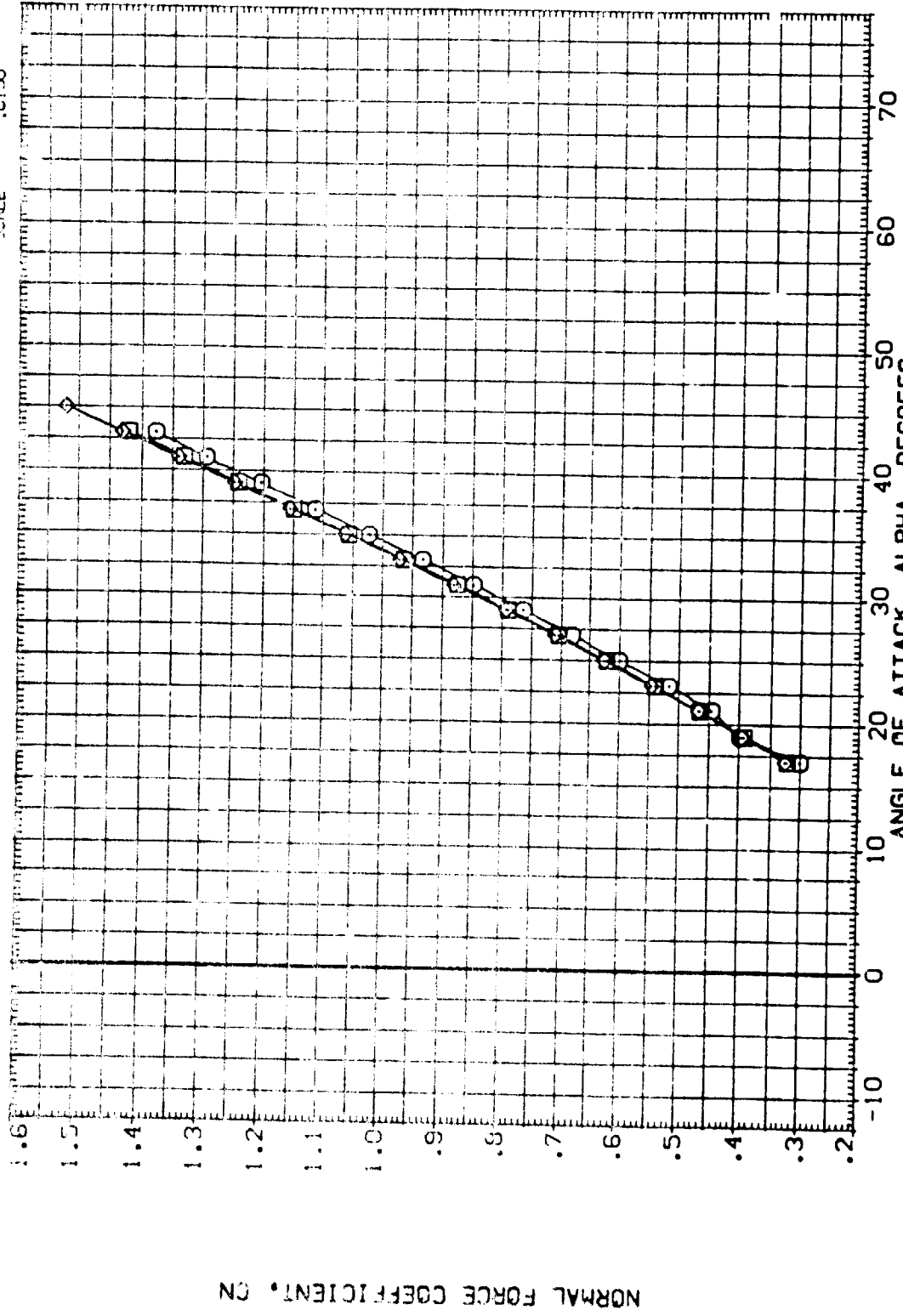
CONFIGURATION DESCRIPTION:
 0179 326 C3 E43 F8 M15 N09 R5 V8 V116
 0179 828 C3 E43 F8 M15 N22 R5 V8 V116
 0179 828 C3 E43 F8 M15 N29 R5 V8 V115

REF: 2830.0070 (1) FT.
 LREF: 374.6110 IN.
 XREF: 374.6110 IN.
 XREF: 1076.1600 IN X0
 YREF: 1076.1600 IN Y0
 ZREF: 375.1000 IN Z0
 SCALE: .0150

FLAP: 15.300
 15.300
 16.300
 16.300

ELV: 0.000
 0.000
 0.000

SCALE: .0150



NORMAL FORCE COEFFICIENT, CN

FIG. 22 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 16.3)
 (A) MACH = 7.90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RVL	BD FLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(C1V036)	CA79 B26 C9 E43 F8 H16 N26 R5 V8 V116	.500	16.300	.000	.000	SREF 2690.0000 SQ.FT.
(C1V049)	CA79 B26 C9 E43 F8 H16 N28 R5 V8 V116	1.060	16.300	.000	.000	LREF 174.8100 IN.
(C1V013)	CA79 B26 C9 E43 F8 H16 N28 R5 V8 V116	3.530	16.300	.000	.000	BREF 836.6800 IN.
						VMFP 1076.6800 IN.X0
						VMFP .0000 IN.Y0
						ZMPR 375.0000 IN.Z0
						SCALE .0150

PITCHING MOMENT COEFFICIENT M₁ .65 BODY LENGTH(FORWARD C. G.) CL(MWD)

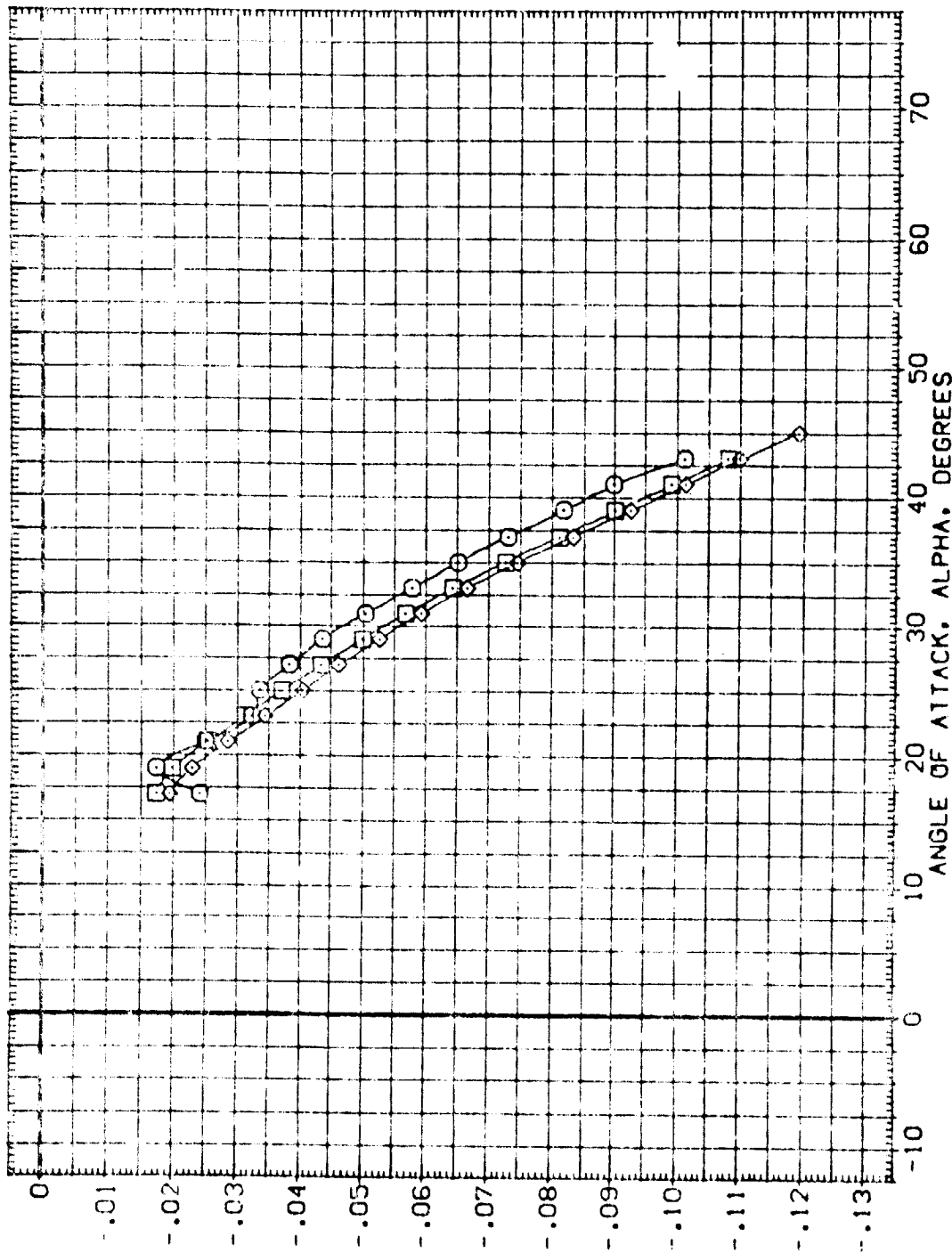


FIG. 22 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 16.3)

(A)MACH = 7.90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RN/L	BD FLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(C1V058)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.500	16.300	.000	.000	SREF 2630.0000 SQ.FT.
(C1V049)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	1.960	16.300	.000	.000	LREF 474.8100 IN.
(C1V013)	0A79 B26 C9 E43 F8 M16 N26 R5 V8 V116	3.530	16.300	.000	.000	BREF 936.6800 IN.
						XREF 1073.6800 IN.X0
						YREF .0000 IN.Y0
						ZREF .0000 IN.Z0
						SCALE .0150

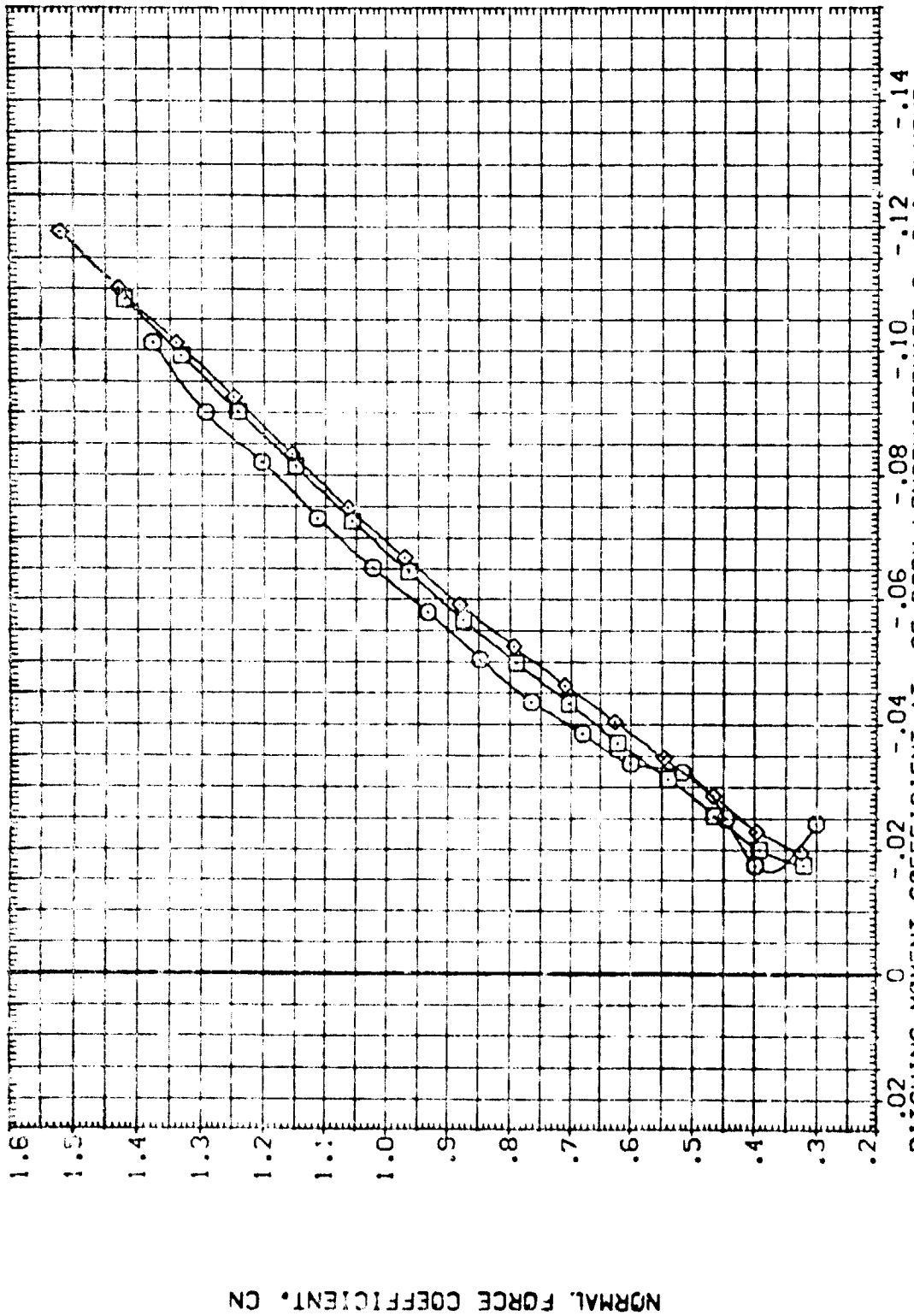


FIG. 22 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 16.3)

DATA SET SYMBOL: (CT1008) (CT1049) (CT1013)
 TEST HEADLINE: 0A75 R26 09 P43 F9 M15 R28 V5 V9 M16
 DESCRIPTION: N28 P5 V8 V16 N29 P5 V9 V16
 REFERENCE INFORMATION:
 DATE: 2850 2400 50 FT
 TIME: 1000
 PRESS: 1014 8150 IN.
 GAGE: 1036 6920 IN.
 XMAP: 1076 6920 IN.
 YMAP: 1036 6920 IN.
 ZMAP: 1075 6920 IN.
 SCALE: .0150

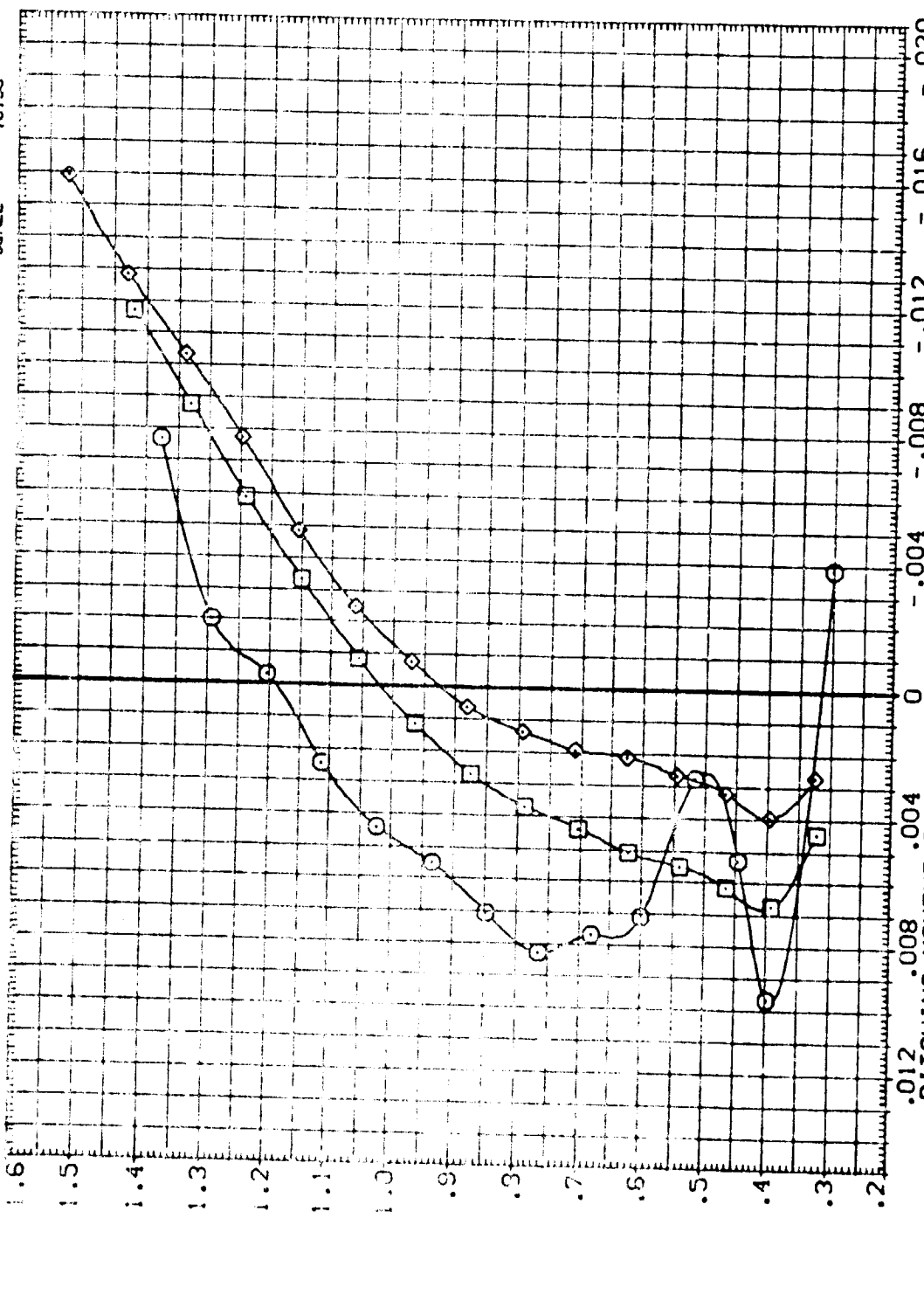


FIG. 22 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 16.3)
 (A)MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION
(C1)M(2)	0A79 826 C9 E43 F8 M16 N28 RS	V8 M116
(C1)M(3)	0A79 806 C9 E43 F8 M16 N28 RS	V8 M116
(C1)M(13)	0A79 826 C9 E43 F8 M16 N28 RS	V8 M116

REFERENCE INFORMATION

REFERENCE INFORMATION	SO. FT.
SREF	2690.0000
LREF	474.8100
DREF	926.6800
XMRP	1076.6800
YMRP	.0000
ZMRP	375.0000
SCALE	.0150

RV/L BOFLAP ELV-L0 ELV-L1

RV/L	BOFLAP	ELV-L0	ELV-L1
.500	16.300	.000	.000
1.060	16.300	.000	.000
3.530	16.300	.000	.000

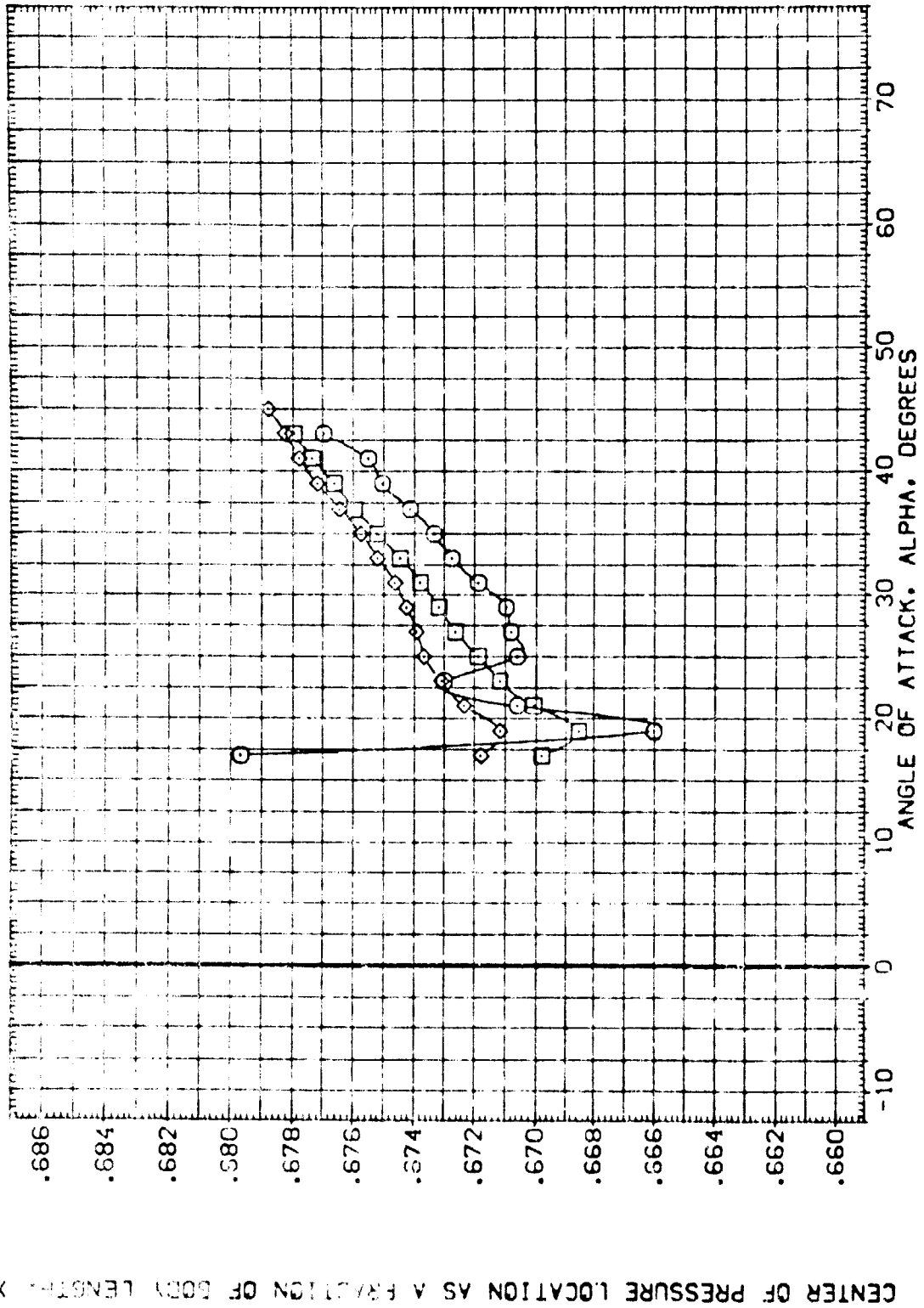


FIG. 22 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 16.3)

(A)MACH = 7.90

DATA SET SYMBOL CASE NO. QUANTITY DESCRIPTION UNIT
 (010258) C 2479 325 C9 E43 FB M15 A28 P5 VB V116
 (010418) C 2479 326 C9 E43 FB M15 A28 P5 VB V116
 (010613) C 2479 328 C9 E43 FB M15 A28 P5 VB V116

RWAL 1.500 15.000
 1.360 15.500
 3.530 16.500

SUPPL 1.000 1.000
 1.000 1.000
 1.000 1.000

REFERENCE INFORMATION
 CASE 2479.0000 52.00
 (REF) 474.8100 IN.
 PAGE 336.6900 IN.
 ALPH 1976.0000 IN.
 THRO 375.0000 IN.
 ZPROP 16.20
 SCALE .0150

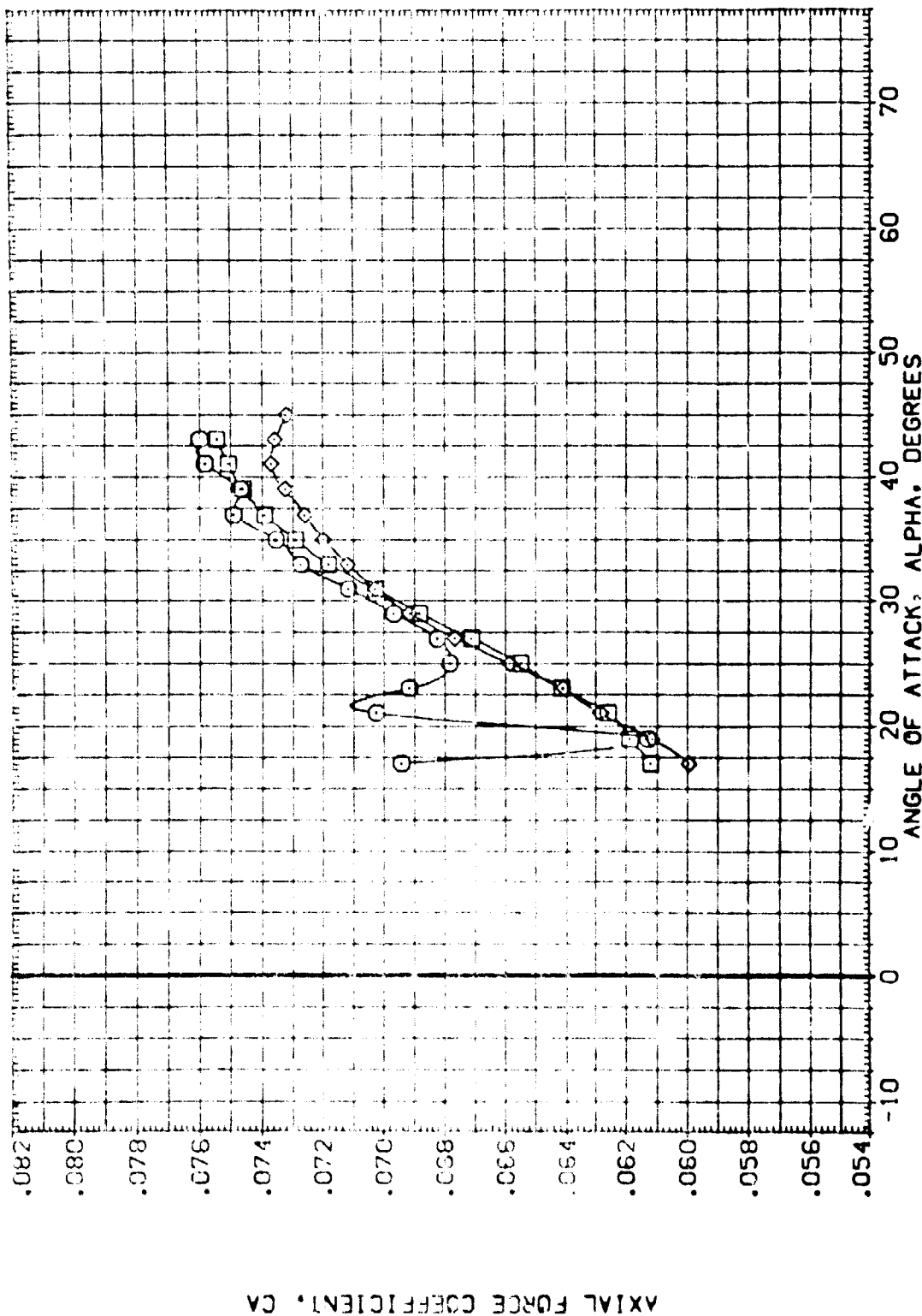


FIG. 22 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 16.3)

(A)MACH = 7.90



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(C1:058)	Q	0A79	B26	C9	E43	F8	M16	N28	RS	V8	V116
(C1:049)	Q	0A79	B26	C9	E43	F8	M16	N28	RS	V8	V116
(C1:013)	Q	0A79	B26	C9	E43	F8	M16	N28	RS	V8	V116

RMVL 500
1.860
3.530

BDFLAP 16.300
16.300
16.300

ELV-L1 .000
ELV-L0 .000
ELV-L2 .000

REFERENCE INFORMATION

SREF	2690.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
ZMRP	1076.0000	IN.
YMRP	.0000	IN.
ZMRP	375.0000	IN.
SCALE	.0150	

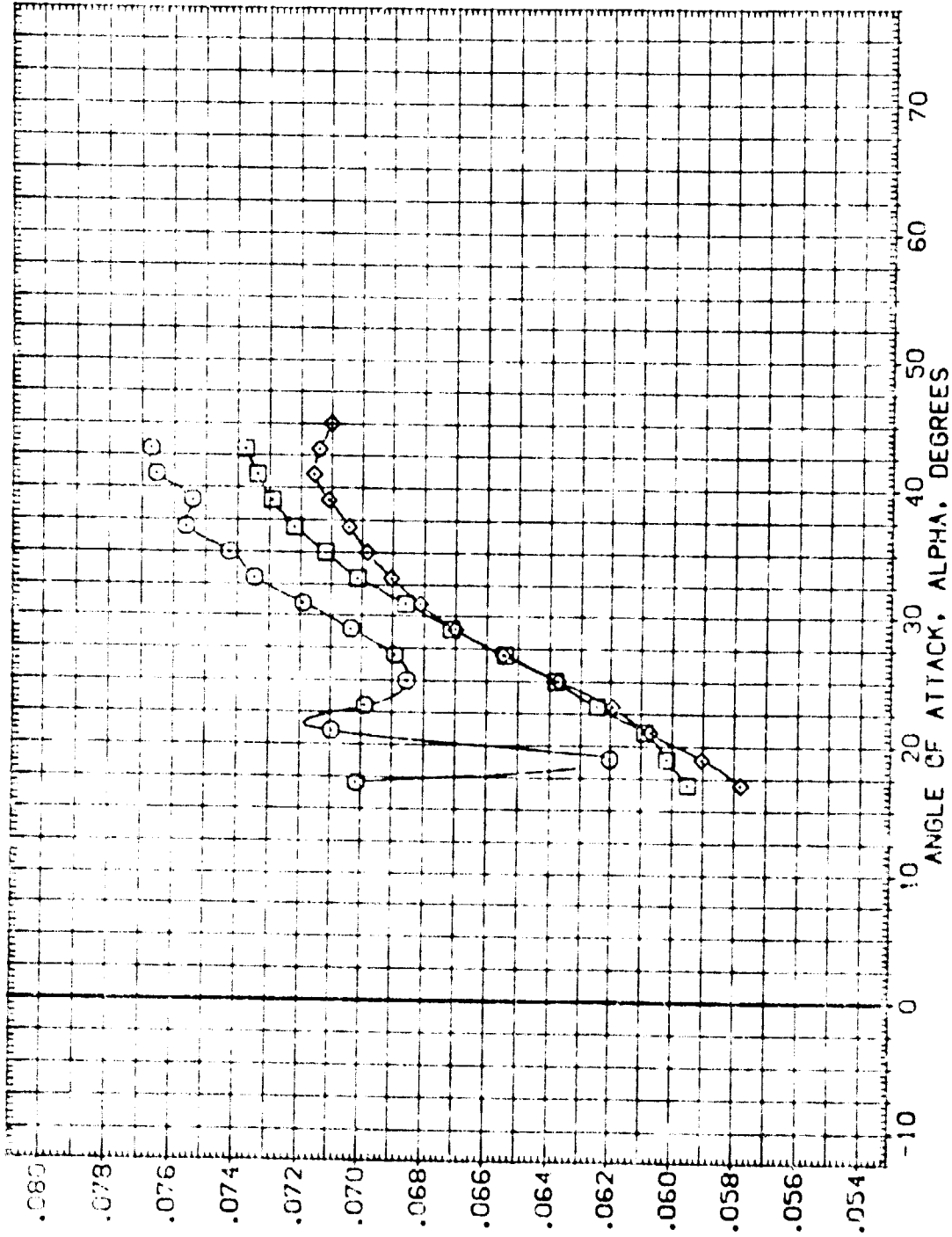


FIG. 22 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 16.3)

(A)MACH = 7.90

REYNOLDS NUMBER EFFECTS
 (A)MACH = 7.90
 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 16.3)

REYNOLDS NUMBER EFFECTS
 (A)MACH = 7.90
 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 16.3)

REYNOLDS NUMBER EFFECTS
 (A)MACH = 7.90
 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 16.3)

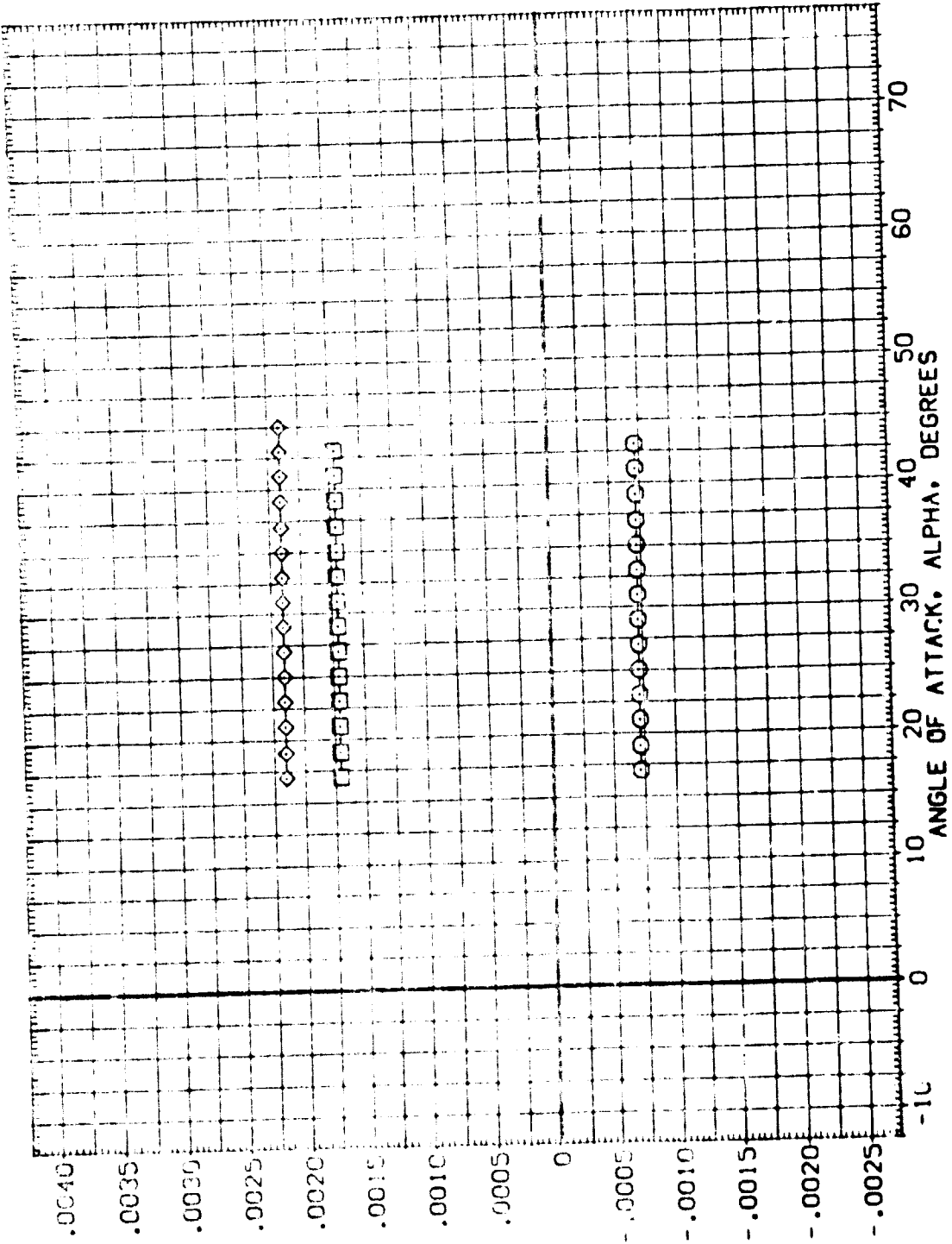


FIG. 22 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 16.3)
 (A)MACH = 7.90
 PAGE 340



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	EXFLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(CTV058)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	5.00	16.300	.000	.000	SREF 2690.0000 SQ.FT.
(CTV049)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	1.860	16.300	.000	.000	LREF 474.8100 IN.
(CTV013)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	3.530	16.300	.000	.000	BREF 936.6800 IN.
						XTRP 1076.6800 IN. X0
						YTRP .0000 IN. Y0
						ZTRP .0000 IN. Z0
						SCALE .0150

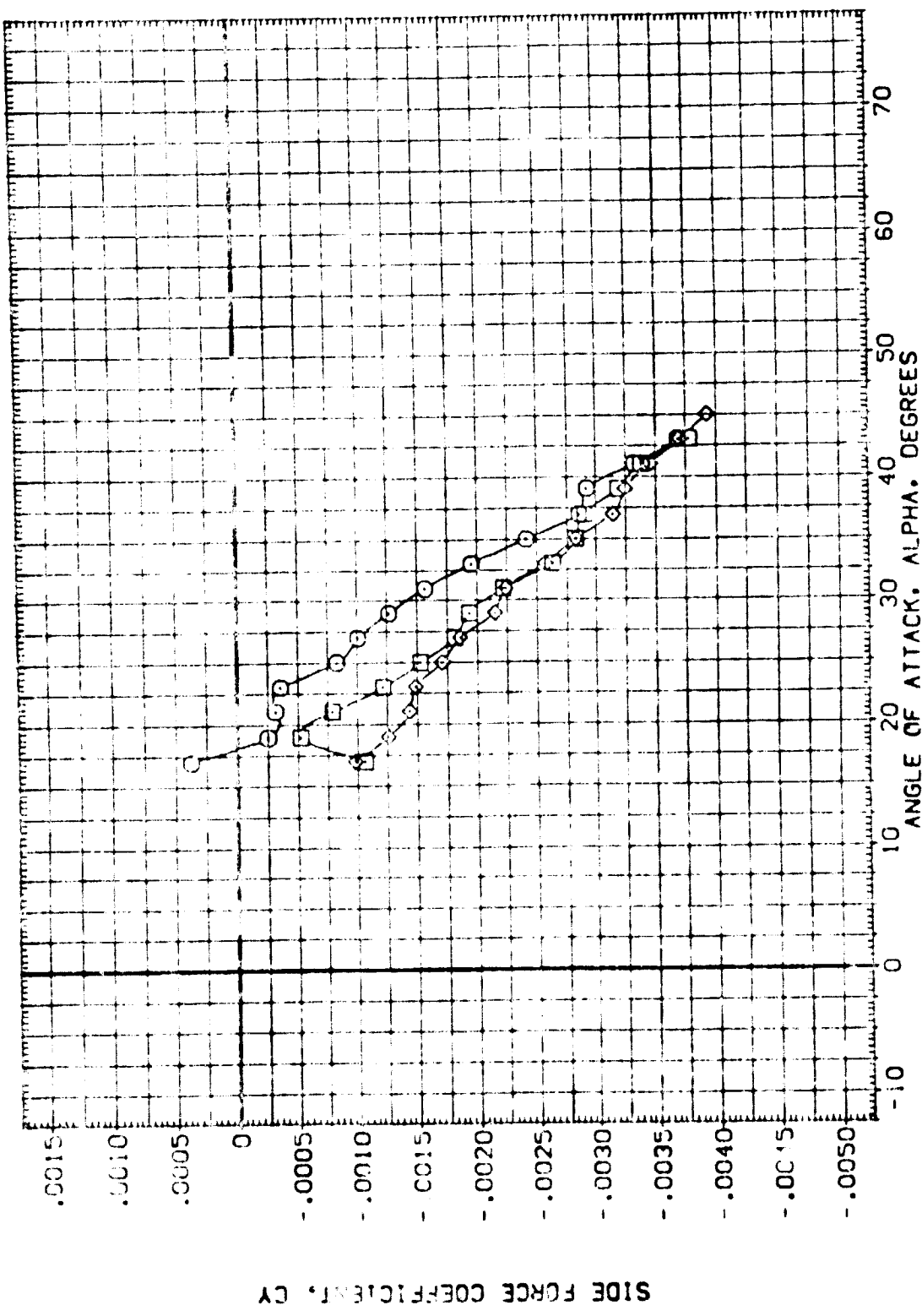


FIG. 22 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 16.3)

(A) MACH = 7.90

DATA SET 01500
 (A) (U) (S)
 (A) (U) (S)
 (A) (U) (S)

CONFIGURATION DESCRIPTION
 0A79 328 CS E43 FB H16 N28 RS V8 W116
 0A79 828 CS E43 FB H16 N28 RS V8 W116
 0A79 828 CS E43 FB H16 N28 RS V8 W116

REF. AP ELEV. S FLAP V
 16.300 0.000 0.000
 16.300 0.000 0.000
 16.300 0.000 0.000

REF. INFORMATION
 1076.6870 N.X0
 1076.6870 N.Y0
 375.0070 N.Z0
 375.0070 N.Z0
 SCALE .0150

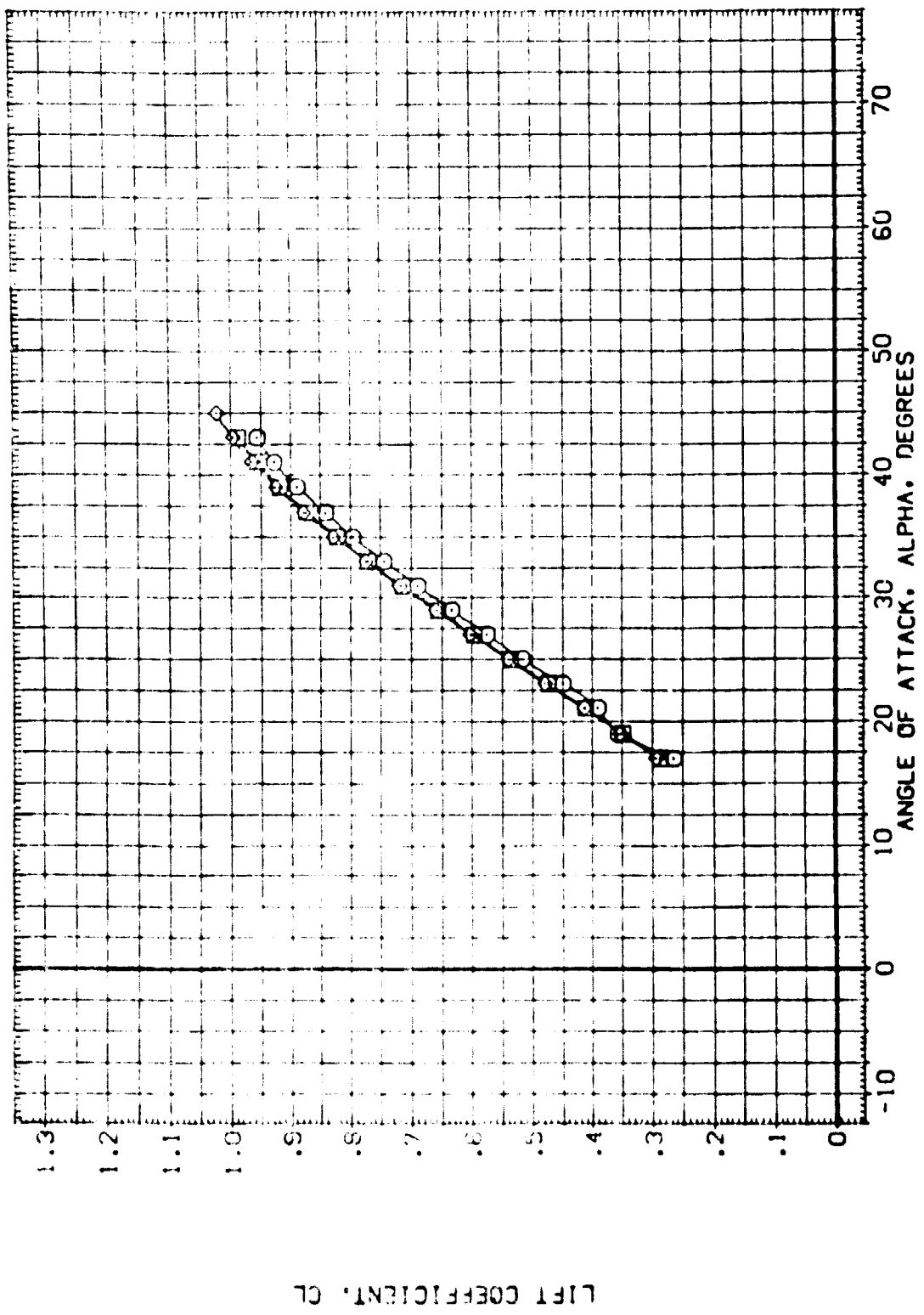


FIG. 22 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 16.3)

(A)MACH = 7.90



DATA SET SYMBOL: (ATW059) (ATW049) (ATW013)

CONFIGURATION DESCRIPTION: CA79 B26 C9 E43 F8 M16 N29 R5 V8 V116
 CA79 B26 C9 E43 F8 M16 N29 R5 V8 V116
 CA79 B26 C9 E43 F8 M16 N29 R5 V8 V116

REFL: .500
 1.860
 3.530

DOFLAP: 16.300
 16.300
 16.300

ELV-L0: .000
 .000
 .000

ELV-L1: .000
 .000
 .000

REFERENCE INFORMATION: SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 936.6300 IN.
 XFRP 1076.6800 IN.
 YFRP .0000 IN.
 ZFRP 375.0300 IN.
 SCALE .0150

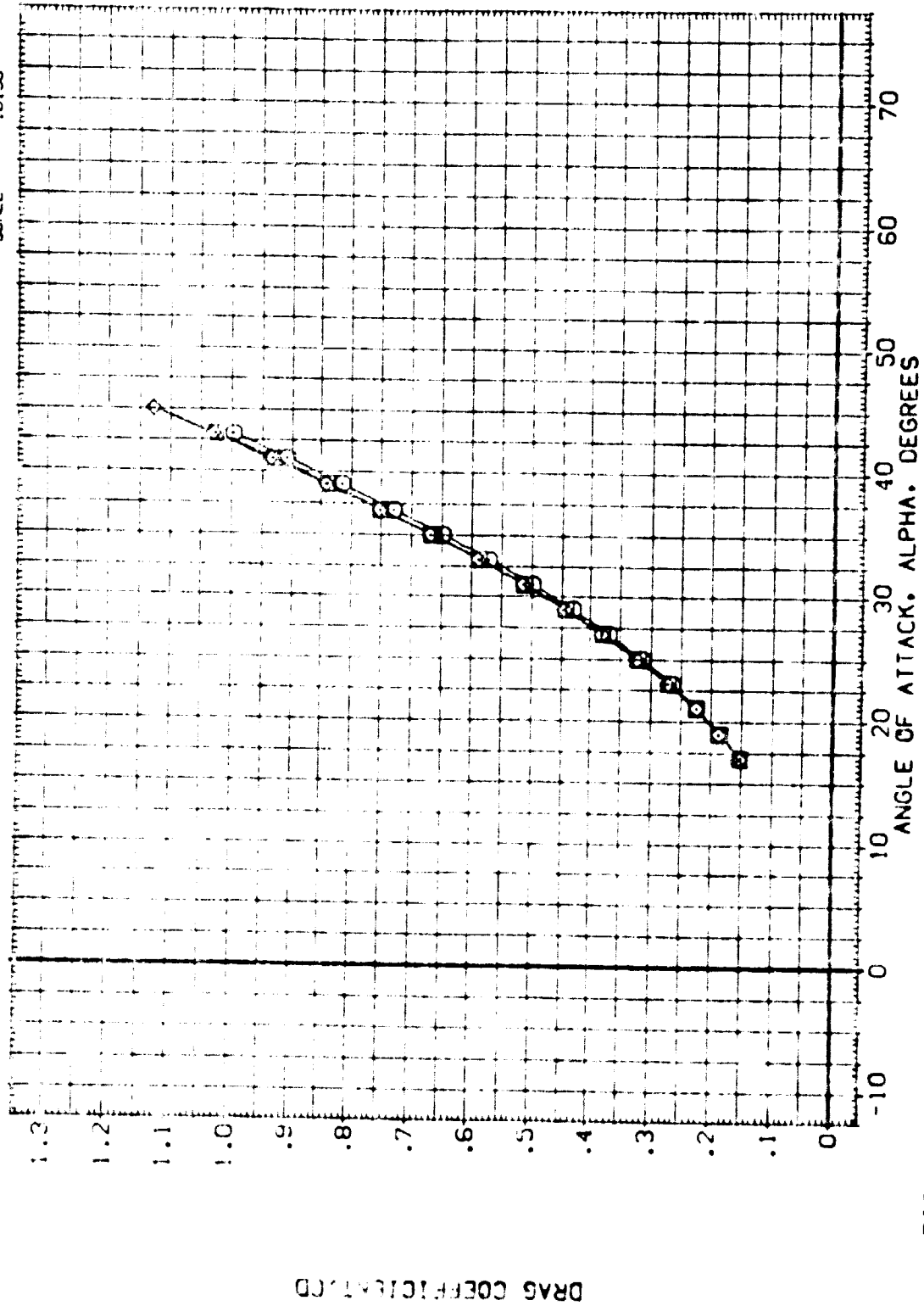


FIG. 22 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 16.3)

(A)MACH = 7.90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	BD FLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
[A1058]	DATA 826 C9 E43 F8 M16 N28 RS V8 M16	.500	16.300	.000	.000	SREF 2650.0000 SQ.FT.
[A1049]	DATA 826 C9 E43 F8 M16 N28 RS V8 M16	1.660	16.300	.000	.000	LREF 474.8100 IN.
[A1053]	DATA 826 C5 E43 F8 M16 N26 RS V8 M16	3.530	16.300	.000	.000	BREF 936.6800 IN.
						ATRP 1076.8900 IN.
						YTRP .0000 IN.
						ZTRP .0000 IN.
						SCALE .0150

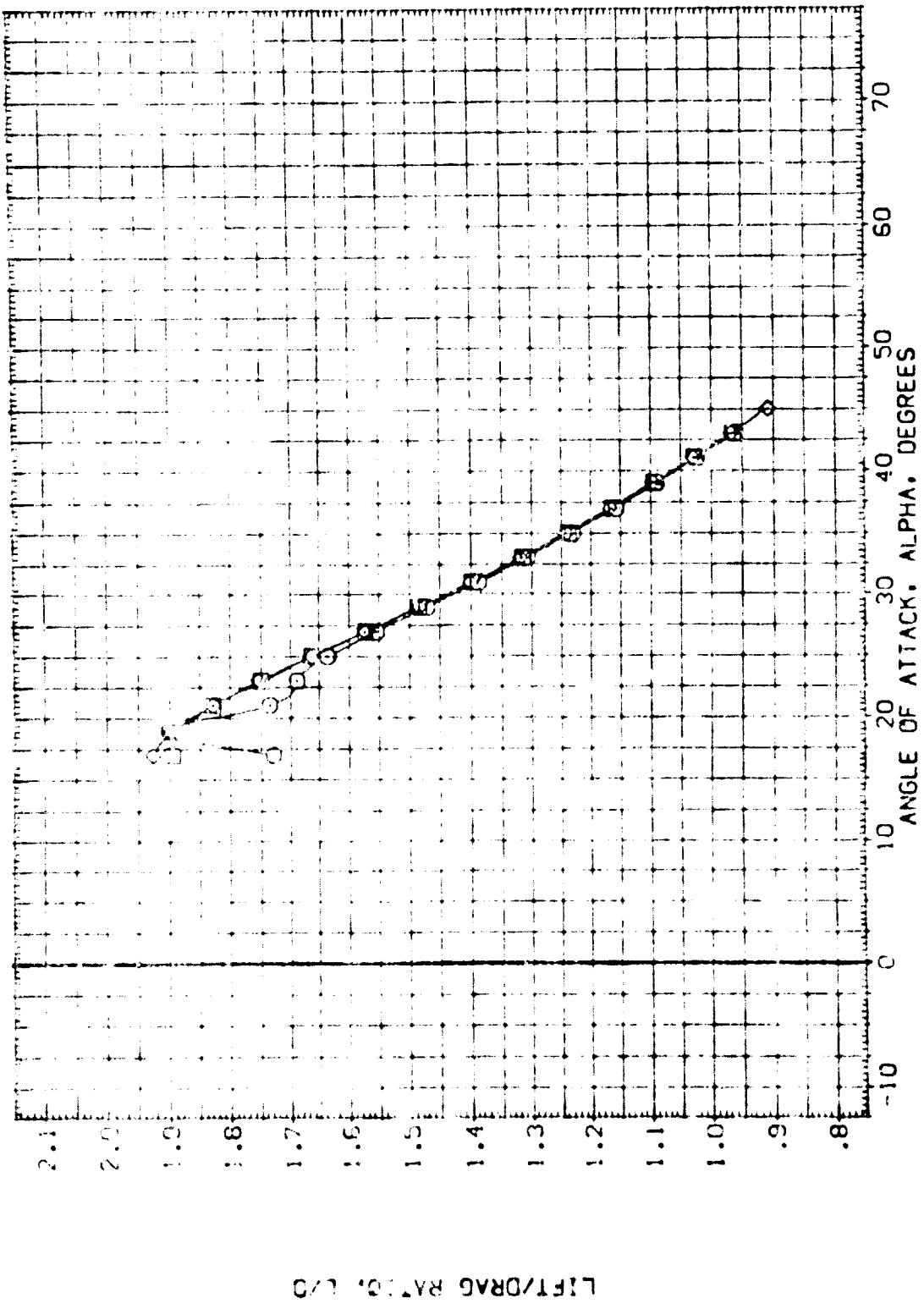


FIG. 22 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = 16.3)

(A)MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CTM059) 0A79 B26 C9 E43 F8 H16 N28 R3 V8 V116
 (CTM048) 0A79 B26 C9 E43 F8 H16 N28 R3 V8 V116
 (CTM012) 0A79 B26 C9 E43 F8 H16 N28 R3 V8 V116

RVL 500 -11.700 ELV-L0 .000
 1.860 -11.700 .000
 3.530 -11.700 .000

REFERENCE INFORMATION
 SREF 2690.0000 50.FT.
 LREF 474.8100 IN.
 BREF 936.6300 IN.
 XREF 1076.0000 IN.
 YREF 375.0000 IN.
 ZREF 375.0000 IN.
 SCALE .0150

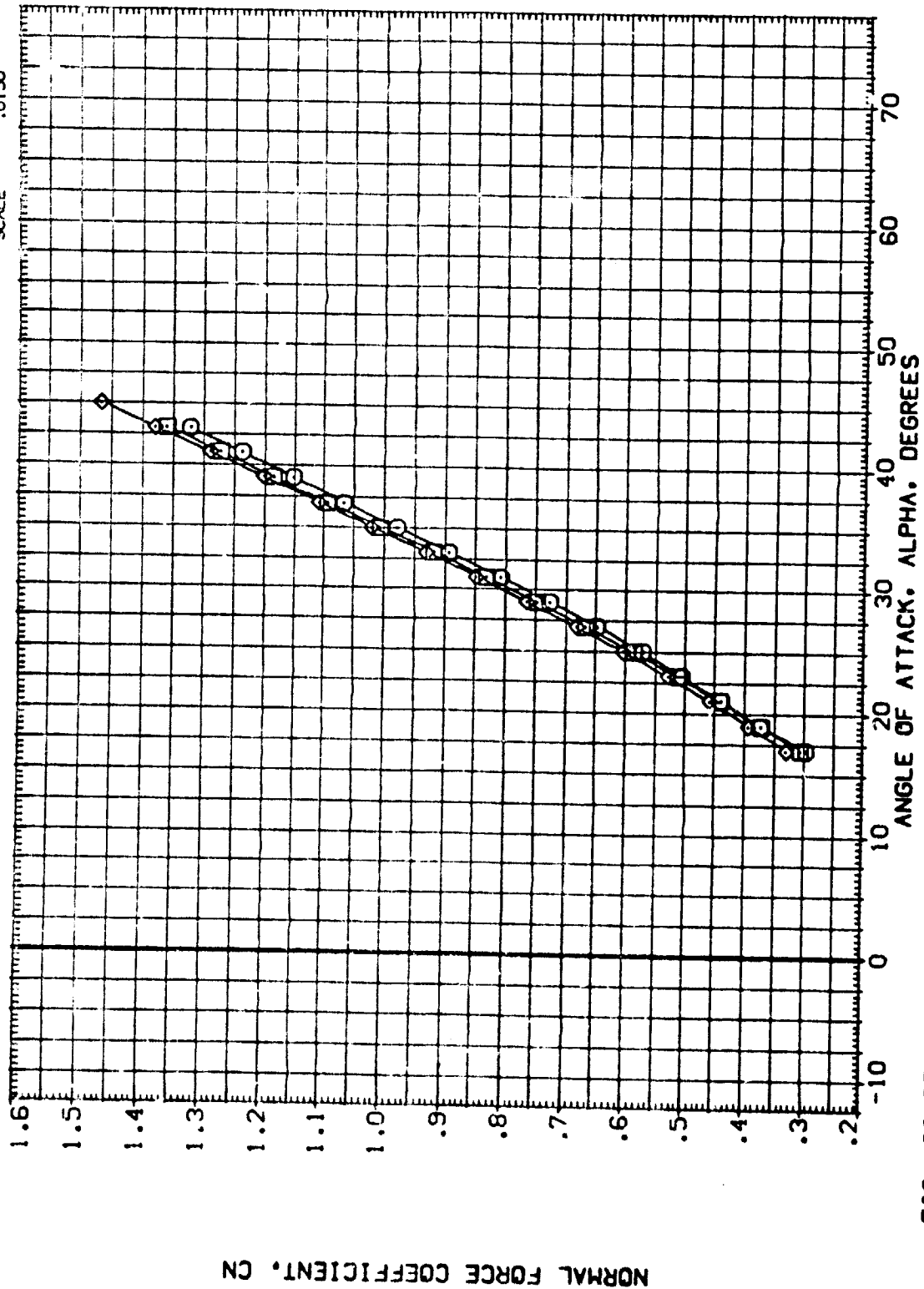


FIG. 23 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP=-11.7)
 (A)MACH = 7.90

PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH(FORWARD C. G.) CLMFRD

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	BD FLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(CTV059)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.500	-11.700	.000	.000	SREF 2690.0000 SO.FT.
(CTV048)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	1.860	-11.700	.000	.000	LREF 474.8100 IN.
(CTV012)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	3.530	-11.700	.000	.000	BREF 936.8800 IN.
						XMFP 1076.8800 IN.
						YMFP .0000 IN.
						ZMFP 375.0000 IN.
						SCALE .0150

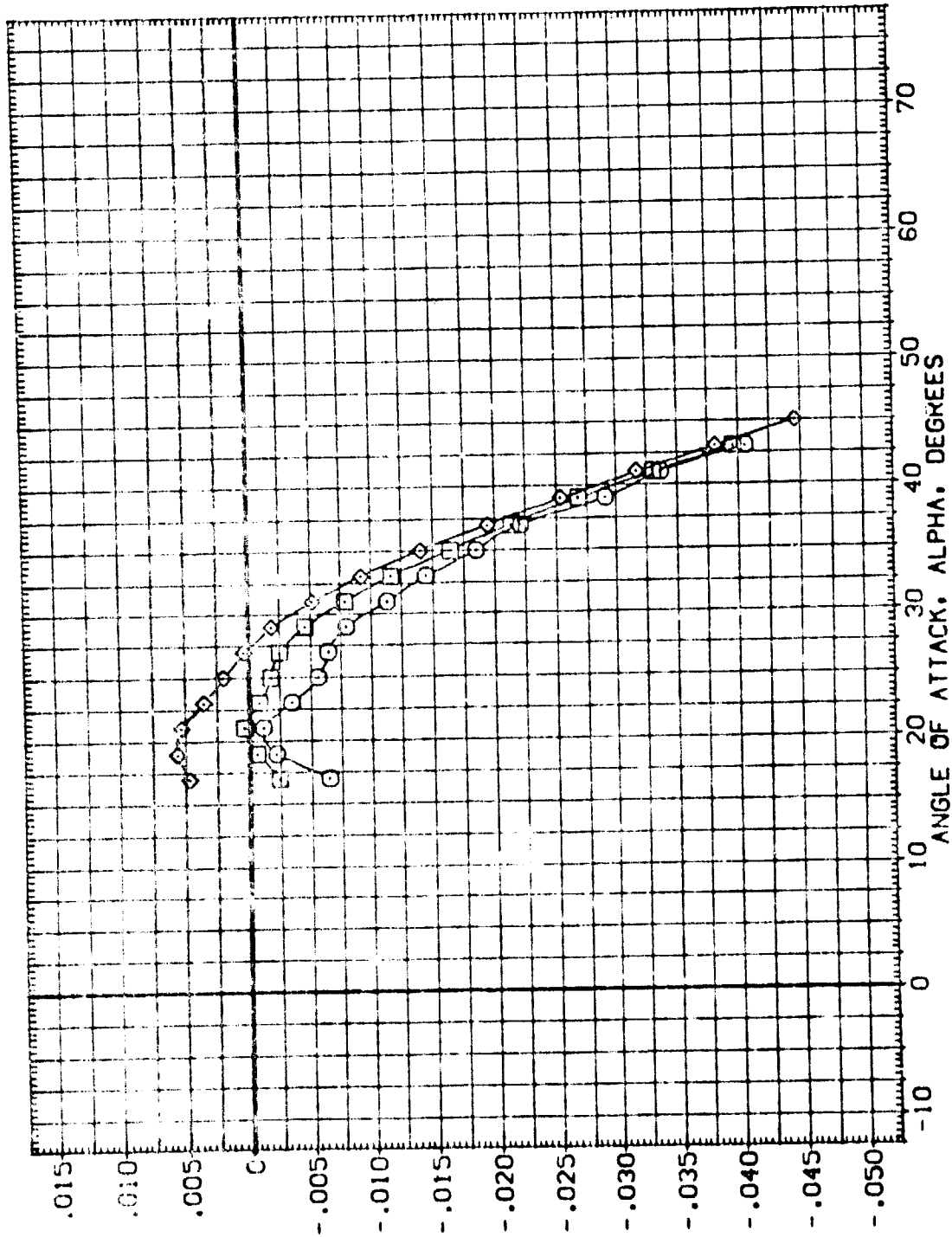


FIG. 23 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP=-11.7)

(A)MACH = 7.90

DATA SET SYMBOL
(C1V059)
(C1V048)
(C1V012)

CONFIGURATION DESCRIPTION
0A79 B26 C9 E43 F8 H16 N28 RS V8 V116
0A79 B26 C9 E43 F8 H15 N28 RS V8 V116
0A79 B26 C9 E43 F9 H15 N28 RS V8 V116

RVAL BOFLAP ELV-LC ELV-LI
500 -11.700 .000 .000
1.850 -11.700 .000 .000
3.530 -11.700 .000 .000

REFERENCE INFORMATION
SREF 2690.0000 50.FT.
LREF 474.8100 IN.
UAREF 936.0000 IN.
XMRP 1076.6800 IN. X8
YMRP .0000 IN. Y8
ZMRP 375.0000 IN. Z8
SCALE .0150

PITCHING MOMENT COEFFICIENT AT .675 BODY LENGTH (C. G.) CLMPT

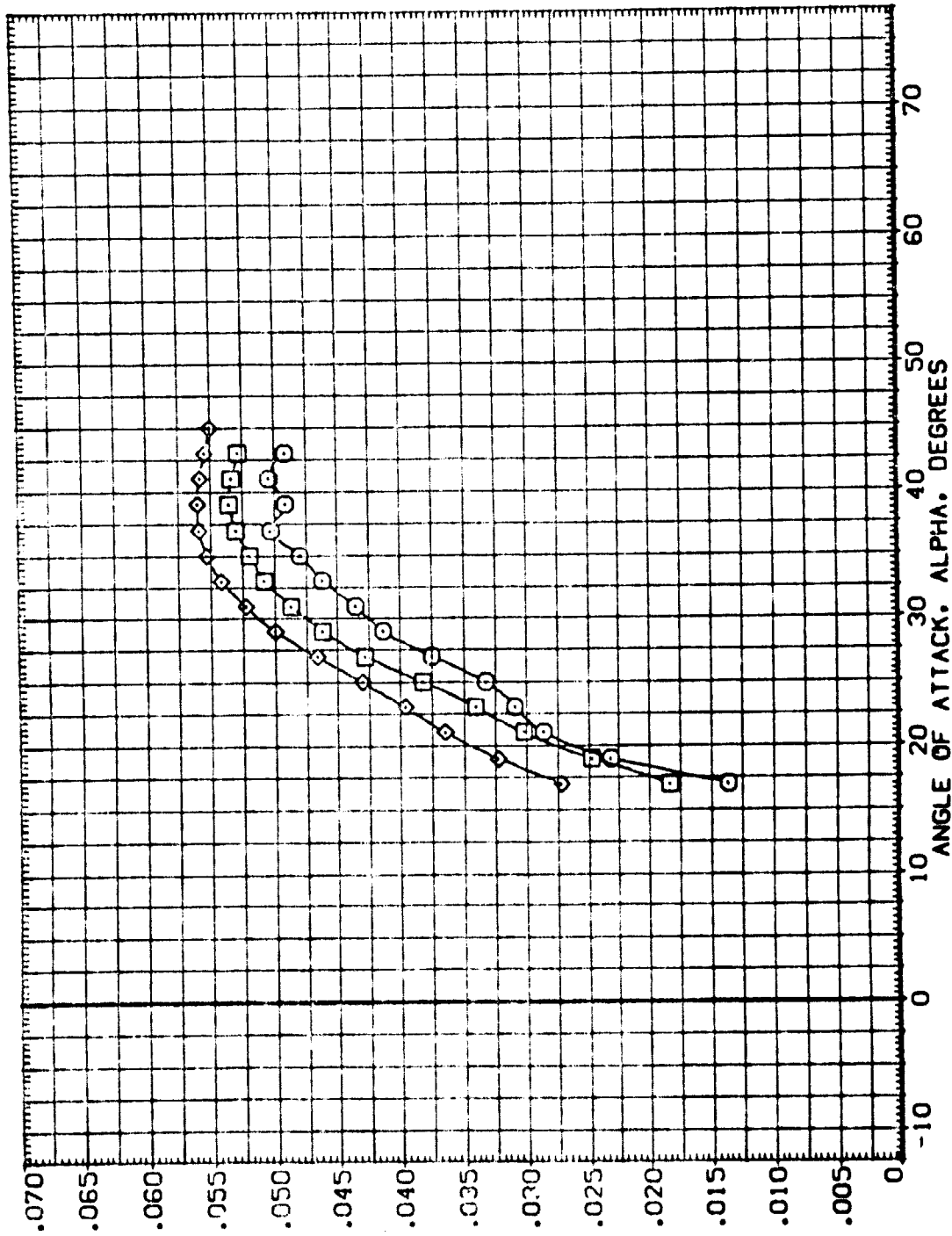
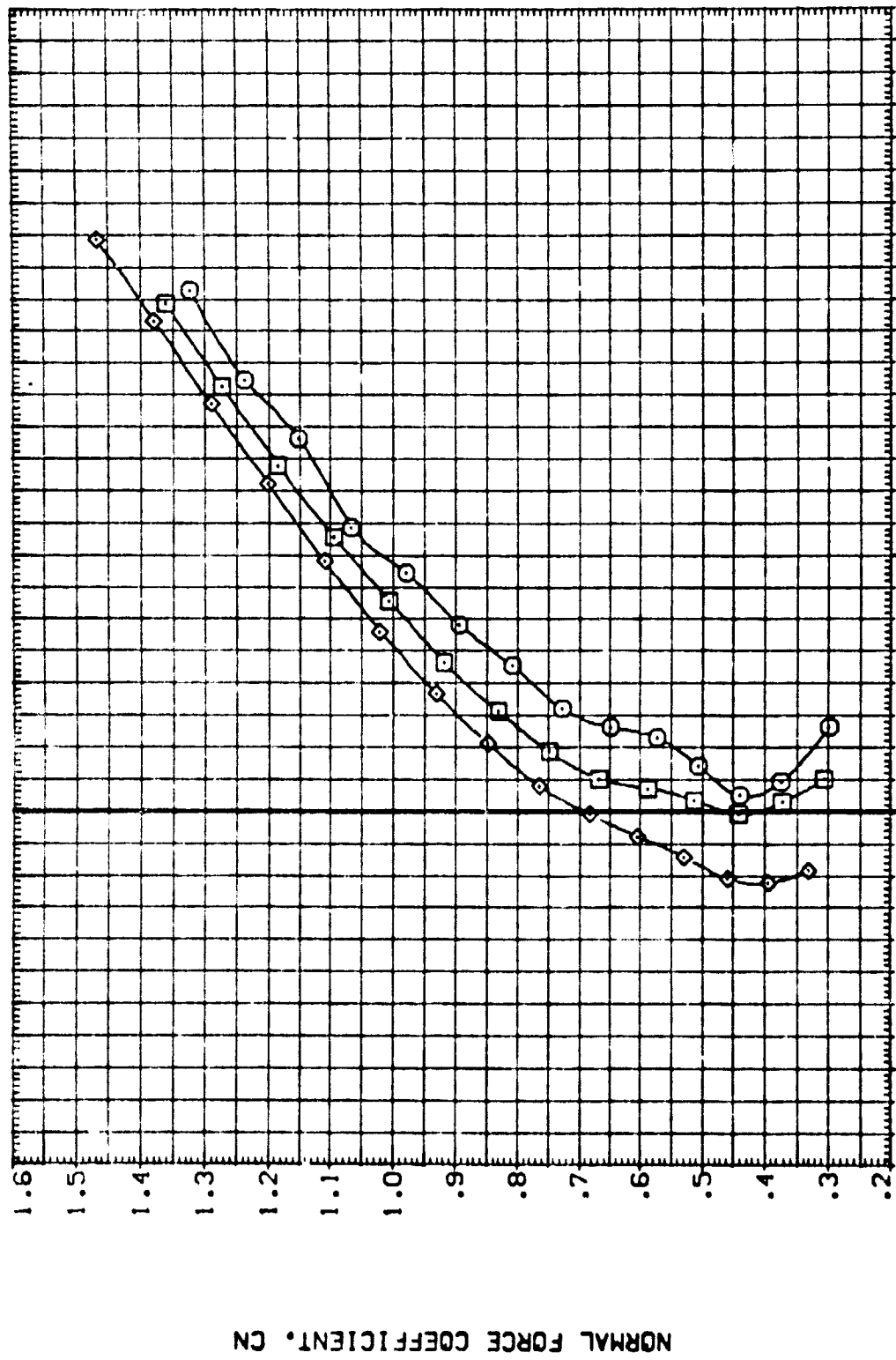


FIG. 23 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP=-11.7)

(A)MACH = 7.90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RVL	BDFLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(CTV059)	0A79 B26 C9 E43 F8 M16 N28 P5 V8 V116	.500	-11.700	.000	.000	SREF 2690.0000 SQ.FT.
(CTV048)	0A79 B26 C9 E43 F8 M16 N28 P5 V8 V116	1.860	-11.700	.000	.000	LREF 474.8100 IN.
(CTV012)	0A79 B26 C9 E43 F8 M16 N28 P5 V8 V116	3.530	-11.700	.000	.000	BREF 936.6800 IN.
						XMPR 1076.6800 IN.X0
						YMPR .0000 IN.Y0
						ZMPR 375.0000 IN.Z0
						SCALE .0150



PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH(FORWARD C. G.) CLMFWD - .06
 .02 - .04 - .06
 FIG. 23 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP=-11.7)
 (A)MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(C1V059) 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116

(C1V048) 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116

(C1V012) 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116

RNVL BOFLAP ELV-L0 ELV-L1

.500 -11.700 .000 .000

1.860 -11.700 .000 .000

3.530 -11.700 .000 .000

REFERENCE INFORMATION

SREF 2690.0000 SQ.FT.

LREF 474.8100 IN.

XREF 936.6800 IN.X0

YREF 1076.0000 IN.Y0

ZREF 375.0000 IN.Z0

SCALE .0150

CENTER OF PRESSURE LOCATION AS A FRACTION OF BODY LENGTH, XCP/L

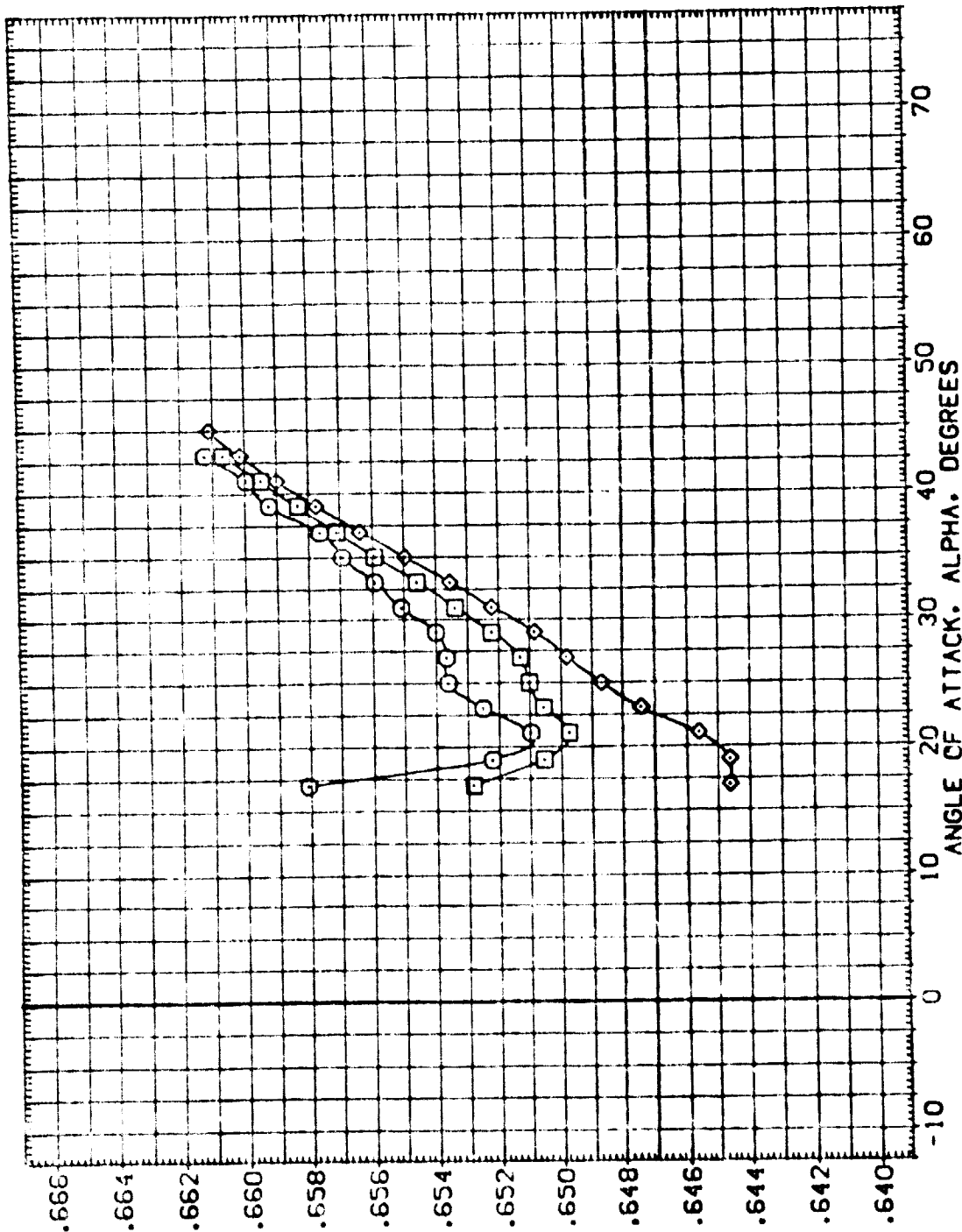


FIG. 23 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP=-11.7)

(A)MACH = 7.90

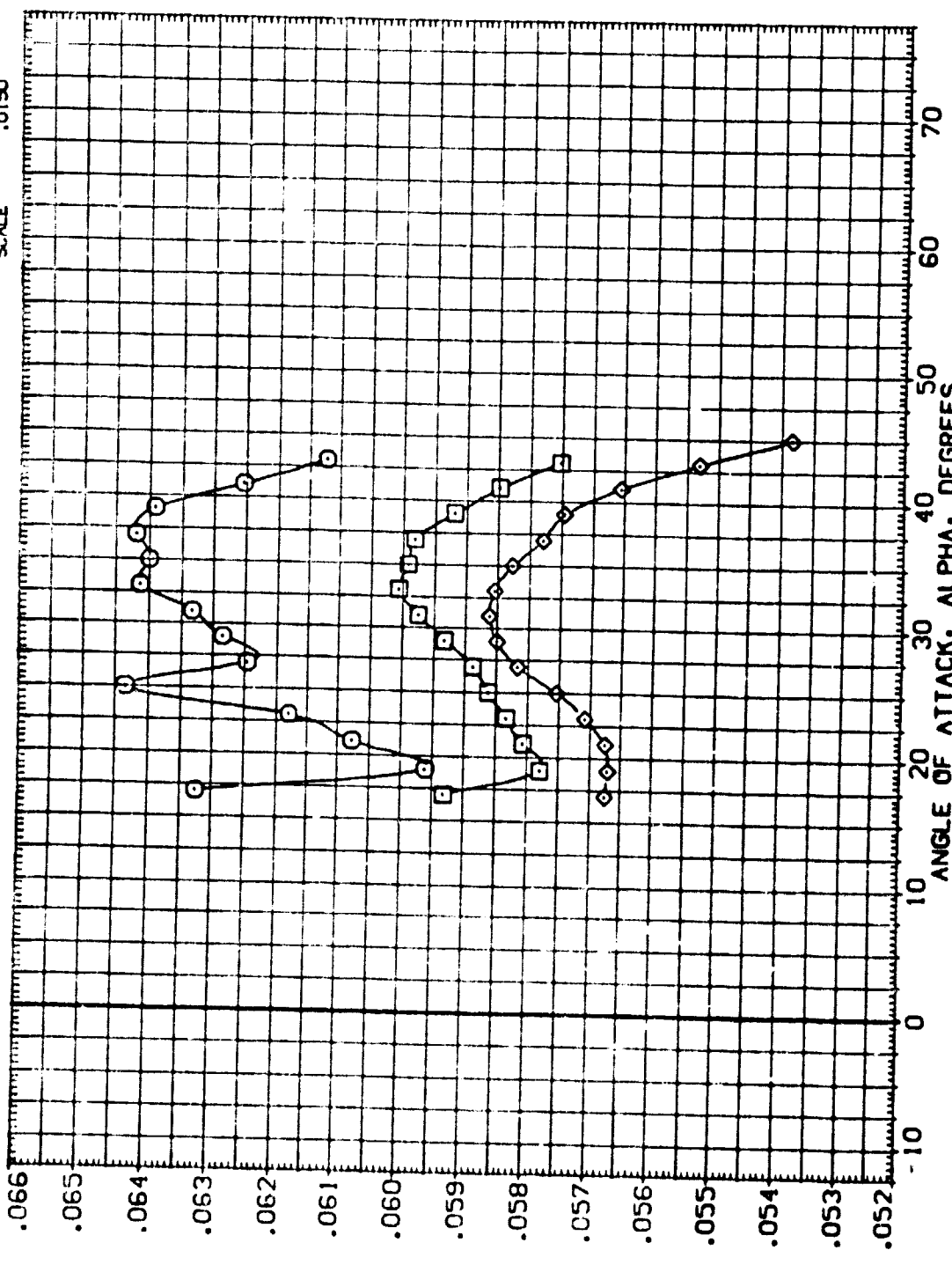
DATA SET SYMBOL
 (CTV059)
 (CTV048)
 (CTV012)

CONFIGURATION DESCRIPTION
 OA79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 OA79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 OA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

RV/L 500 -11.700
 1.860 -11.700
 3.530 -11.700

BOFL/P
 ELV-L0 .000
 ELV-L1 .000

REFERENCE INFORMATION
 SREF 2690.0000 SO.FT.
 LREF 474.8100 IN.
 XMRP 1076.8600 IN.
 YMRP .0000 IN.
 ZMRP 375.0000 IN.
 SCALE .0150



AXIAL FORCE COEFFICIENT, CA

FIG. 23 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = -11.7)
 (A) MACH = 7.90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RVL	BDFLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(CTV059)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.500	-11.700	.000	.000	SREF 2650.0000 SQ.FT.
(CTV048)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	1.860	-11.700	.000	.000	LREF 474.8100 IN.
(CTV012)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	3.530	-11.700	.000	.000	BREF 936.6800 IN.
						XMRP 1076.6800 IN.X0
						YMRP .0000 IN.Y0
						ZMRP .0000 IN.Z0
						SCALE .0150

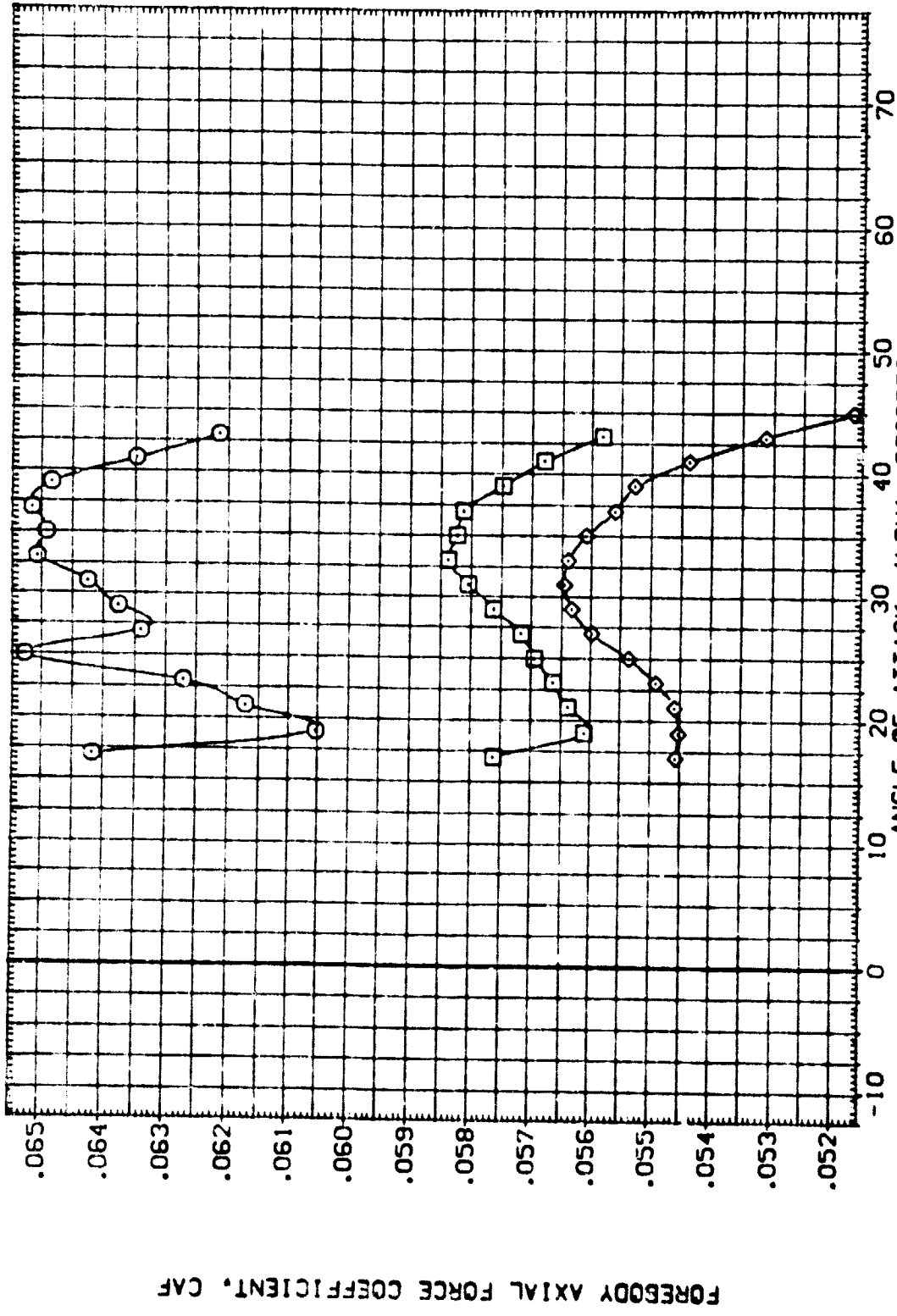


FIG. 23 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = -11.7)

(A)MACH = 7.90

DATA SET SYMBOL: (CTV059) (CTV048) (CTV012)

CONFIGURATION	DESCRIPTION	RS	V8	V116	RVAL	BU-LAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
0A79 B26 C9	E43 F8 M16 N28 RS	V8	V116		.500	-11.700	.000	.000	SREF 2650.0000 90.FT.
0A79 B26 C9	E43 F8 M16 N28 RS	V8	V116		1.850	-11.700	.000	.000	LREF 474.8100 IN.
0A79 B26 C9	E43 F8 M16 N28 RS	V8	V116		3.530	-11.700	.000	.000	RREF 936.6800 IN.
									XREF 1076.2400 IN.X0
									YREF .0000 IN.Y0
									ZREF 375.0000 IN.Z0
									SCALE .0150

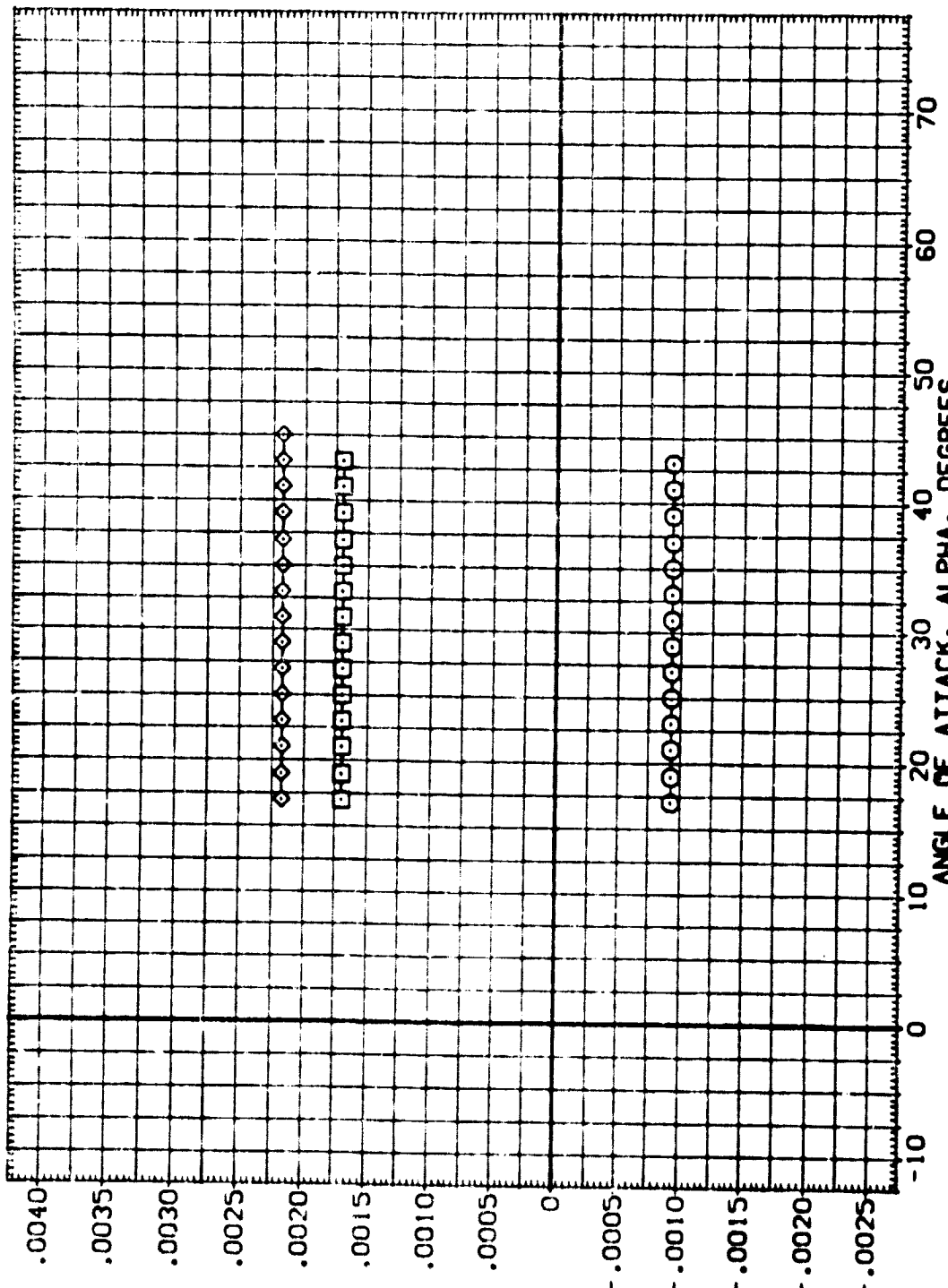


FIG. 23 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP=-11.7)
(A)MACH = 7.90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RVL	BDFLAP	ELV-LB	ELV-LI	REFERENCE INFORMATION
(C1V059)	DATA 826 C9 E43 F8 M16 N28 RS V8 V116	.500	-11.700	.000	.000	SREF 2690.0000 50.FT.
(C1V048)	DATA 826 C9 E43 F8 M16 N28 RS V8 V116	1.860	-11.700	.000	.000	LREF 474.8100 IN.
(C1V012)	DATA 826 C9 E43 F8 M16 N28 RS V8 V116	3.530	-11.700	.000	.000	EREF 535.6900 IN.
						XREF 1078.6800 IN.
						YREF .0000 IN.
						ZREF .0000 IN.
						SCALE .0150

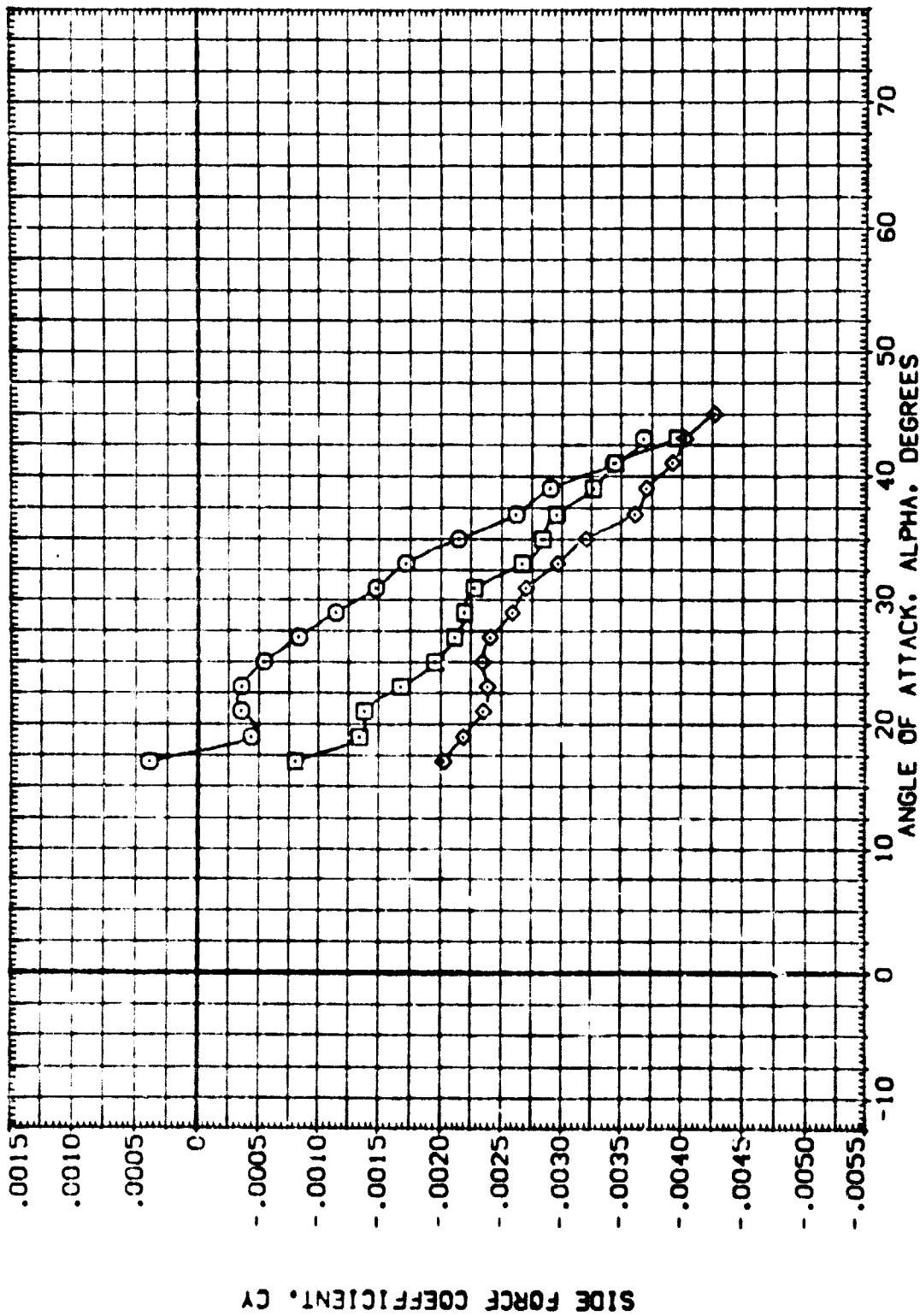


FIG. 23 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = -11.7)

(A) MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(ATV059)	0A79	826	C9	E43	F8	H16	N28	R5	V8	V116
(ATV018)	0A79	826	C9	E43	F8	H16	N28	R5	V8	V116
(ATV012)	0A79	826	C9	E43	F8	H16	N28	R5	V8	V116

RMVL SOFLAP ELV-L0 ELV-L1 REFERENCE INFORMATION

.500	-11.700	.000	.000	SREF	2690.0000	50. FT.
1.860	-11.700	.000	.000	LREF	474.8100	IN.
3.530	-11.700	.000	.000	BREF	936.0900	IN.
				XMRP	1076.6500	IN.
				YMRP	.0000	IN.
				ZMRP	375.0000	IN.
				SCALE	.0150	IN.

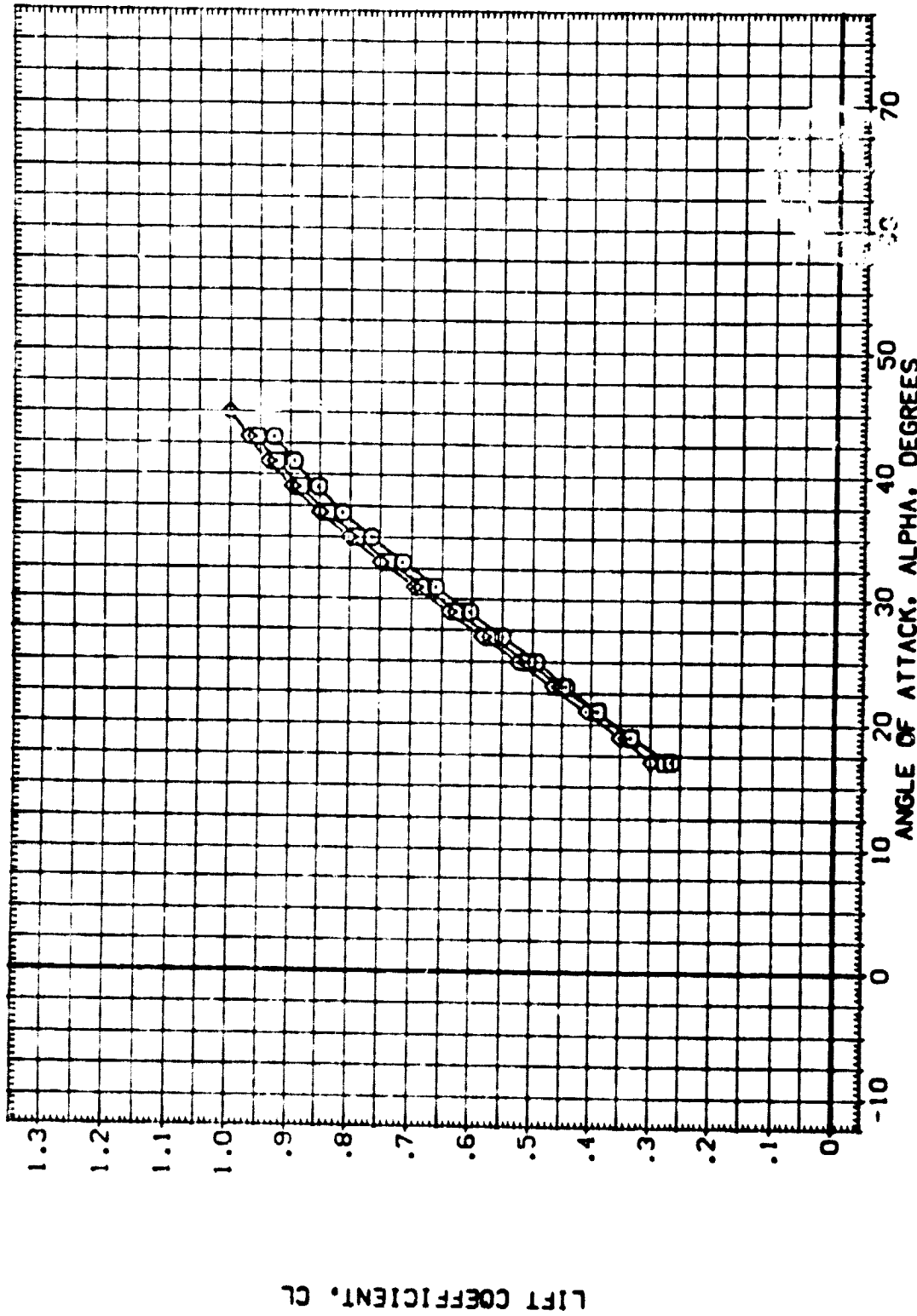


FIG. 23 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP=-11.7)

(A)MACH = 7.90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RVL	BOFLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(ATV059)	DA79 B06 C3 E43 F8 M16 N08 R5 V8 V116	.500	-11.700	.000	.000	2690.0000 SQ.FT.
(ATV048)	DA79 B06 C3 E43 F8 M16 N08 R5 V8 V116	1.850	-11.700	.000	.000	474.8100 IN.
(ATV012)	DA79 B06 C3 E43 F8 M16 N08 R5 V8 V116	3.530	-11.700	.000	.000	936.6800 IN.
						1076.6800 IN.X0
						Y-REF .0000 IN.Y0
						Z-REF .0000 IN.Z0
						SCALE .0150

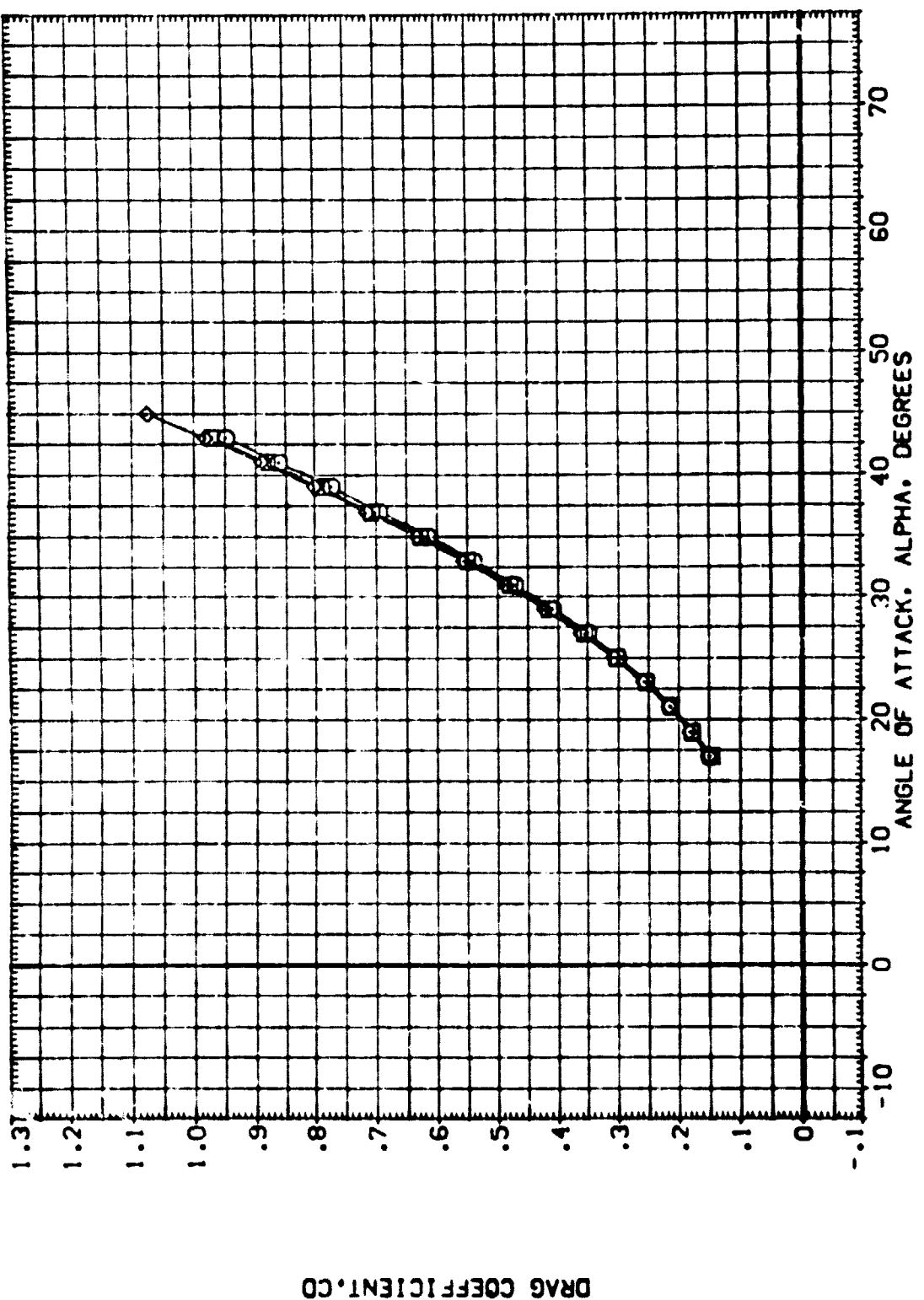


FIG. 23 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP = -11.7)

(A) MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

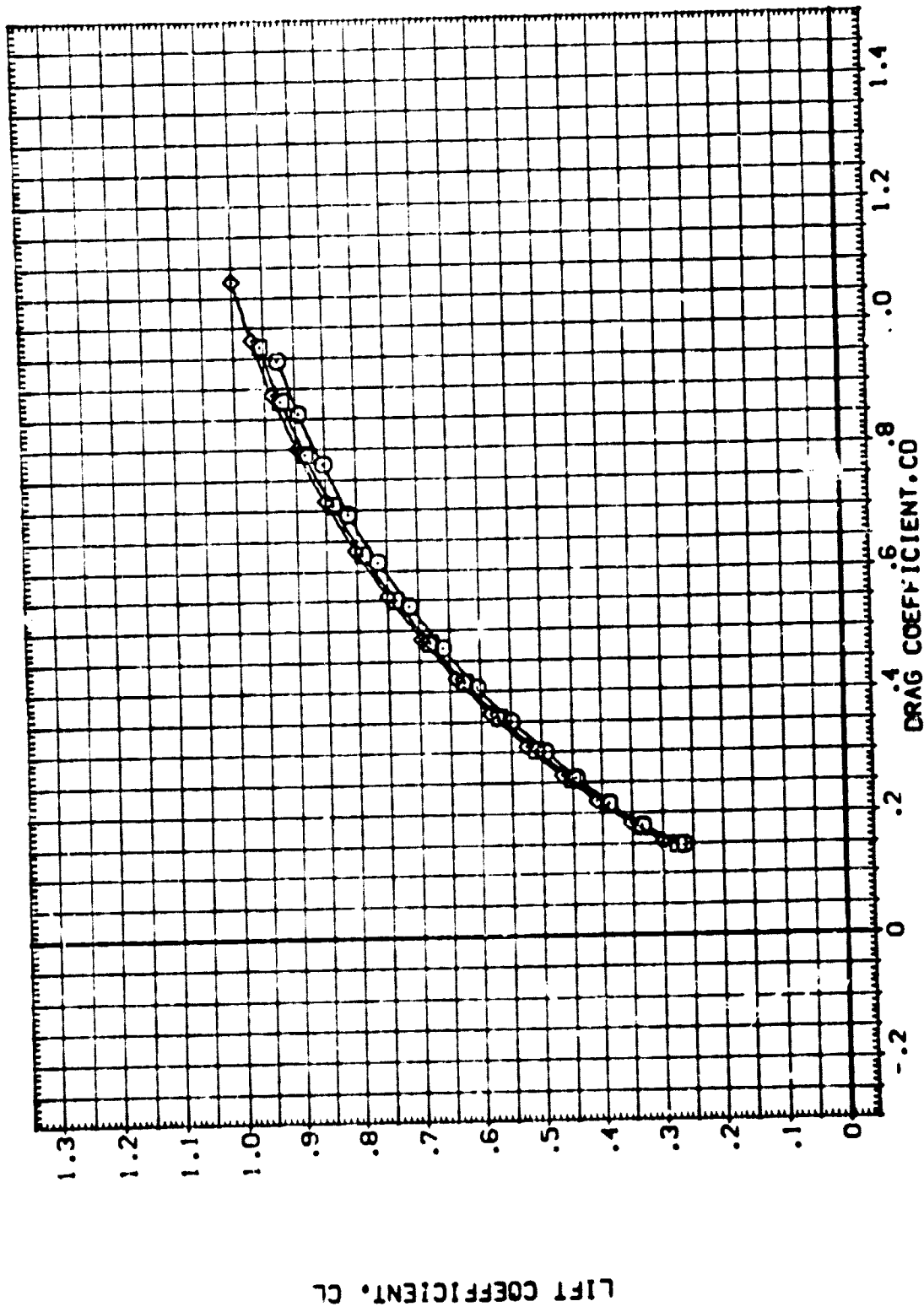
(ATV059)	0A79 B26 C9 E43 FB M16 N28 R5 V8 V116
(ATV048)	0A79 B26 C9 E43 FB M16 N28 R5 V8 V116
(ATV012)	0A79 B26 C9 E43 FB M16 N28 R5 V8 V116

REFL GOLFAP ELV-L0 ELV-L1

.500	-11.700	.000	.000
1.860	-11.700	.000	.000
3.530	-11.700	.000	.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.6800	IN. X3
XTRP	1076.0000	IN. Y3
ZTRP	375.0000	IN. Z0
SCALE	.0150	



LIFT COEFFICIENT, CL

FIG. 23 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP=-11.7)

(A)MACH = 7.90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RNAL	BOFLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(A1V058)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.500	-11.700	.000	.000	SREF 2690.0000 50.FT.
(A1V048)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	1.050	-11.700	.000	.000	LREF 474.8100 IN.
(A1V012)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	3.530	-11.700	.000	.000	BREF 936.6800 IN.
						XPRP 1076.0000 IN. X0
						YPRP .0000 IN. Y0
						ZPRP .0000 IN. Z0
						SCALE .0150

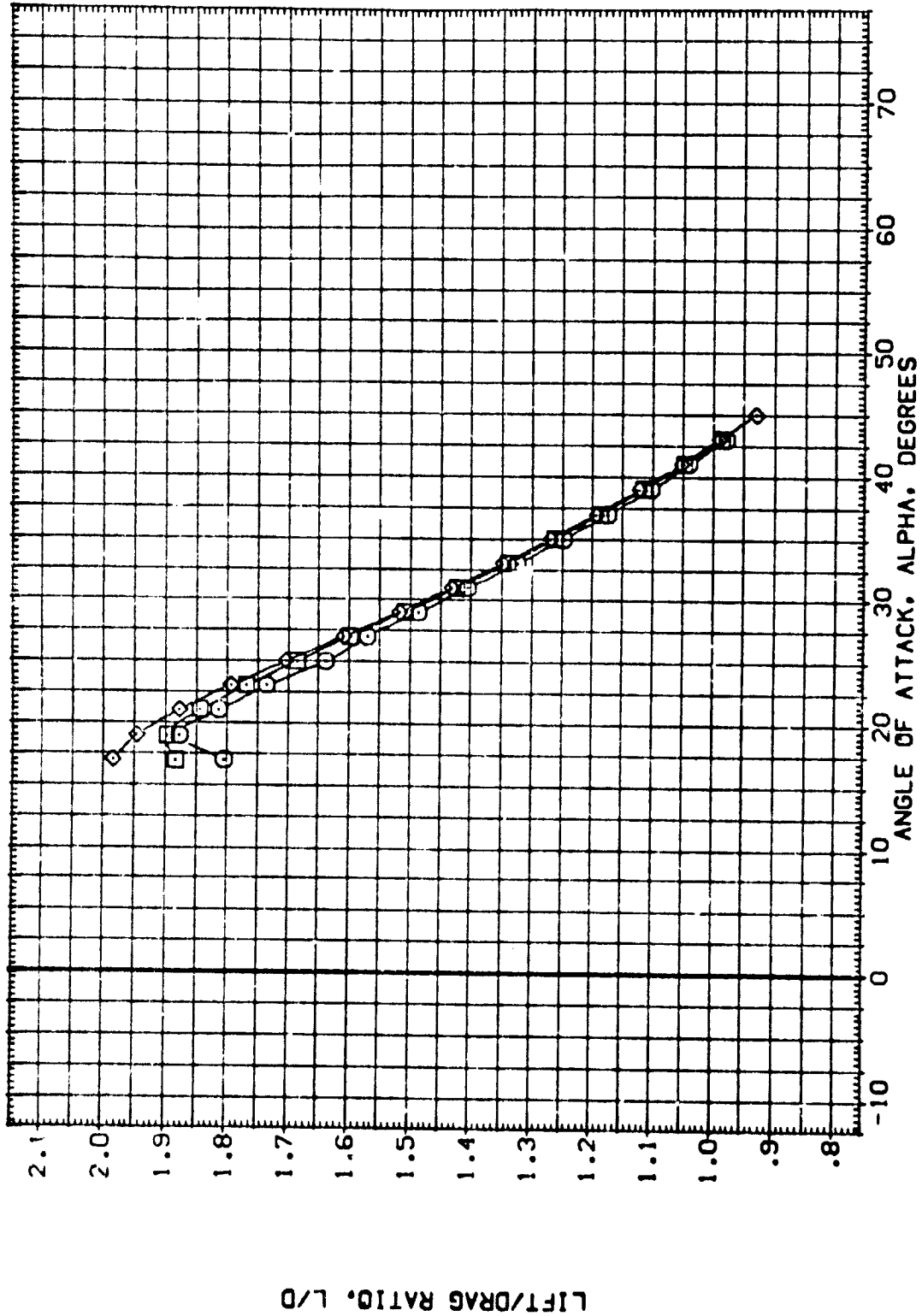


FIG. 23 REYNOLDS NUMBER EFFECTS (ELEVON = 0, BODY FLAP=-11.7)

(A)MACH = 7.90

DATA SET SYMBOL
 (CTV056)
 (CTV051)
 (CTV017)

CONFIGURATION DESCRIPTION
 0A79 826 C9 E43 F8 M16 N28 R5 V8 V116
 0A79 825 C9 E43 F8 M16 N28 R5 V8 V116
 0A79 826 C9 E43 F8 M16 N28 R5 V8 V116

RMVL
 .500
 1.860
 3.530

60FL/AP
 .000
 .000
 .000

ELV-L1
 10.000
 10.000
 10.000

ELV-L3
 10.000
 10.000
 10.000

ELV-L2
 10.000
 10.000
 10.000

SCALE
 .0150

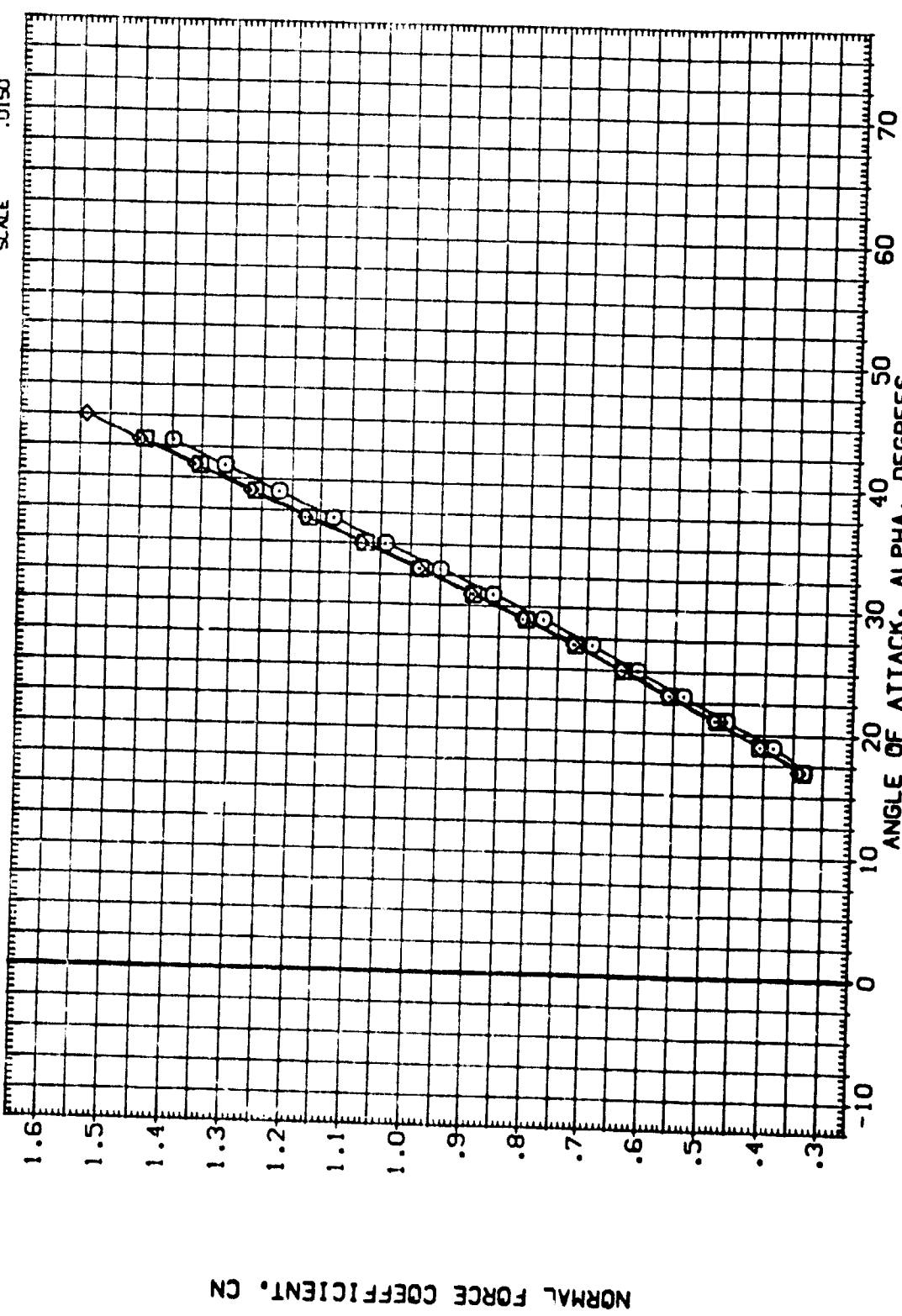


FIG. 24 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 0)
 (A)MACH = 7.90

DATA SET SYMBOL: (CTM056), (CTM051), (CTM017)

CONFIGURATION DESCRIPTION: BA79 B26 C9 E43 F8 M16 N28 R5 V8 V116, BA79 B26 C9 E43 F8 M16 N28 R5 V8 V116, BA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

RVL: .500, 1.860, 3.530

BOFLAP: .000, .000, .000

ELV-L0: 10.000, 10.000, 10.000

ELV-L1: 10.000, 10.000, 10.000

REFERENCE INFORMATION: SQ.FT., SREF (2690.0000), LREF (174.8100), BREF (936.6800), XMRP (1076.6800), YMRP (.0000), ZMRP (.0000), SCALE (.0150)

PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH (FORWARD C. G.) CLMFWD

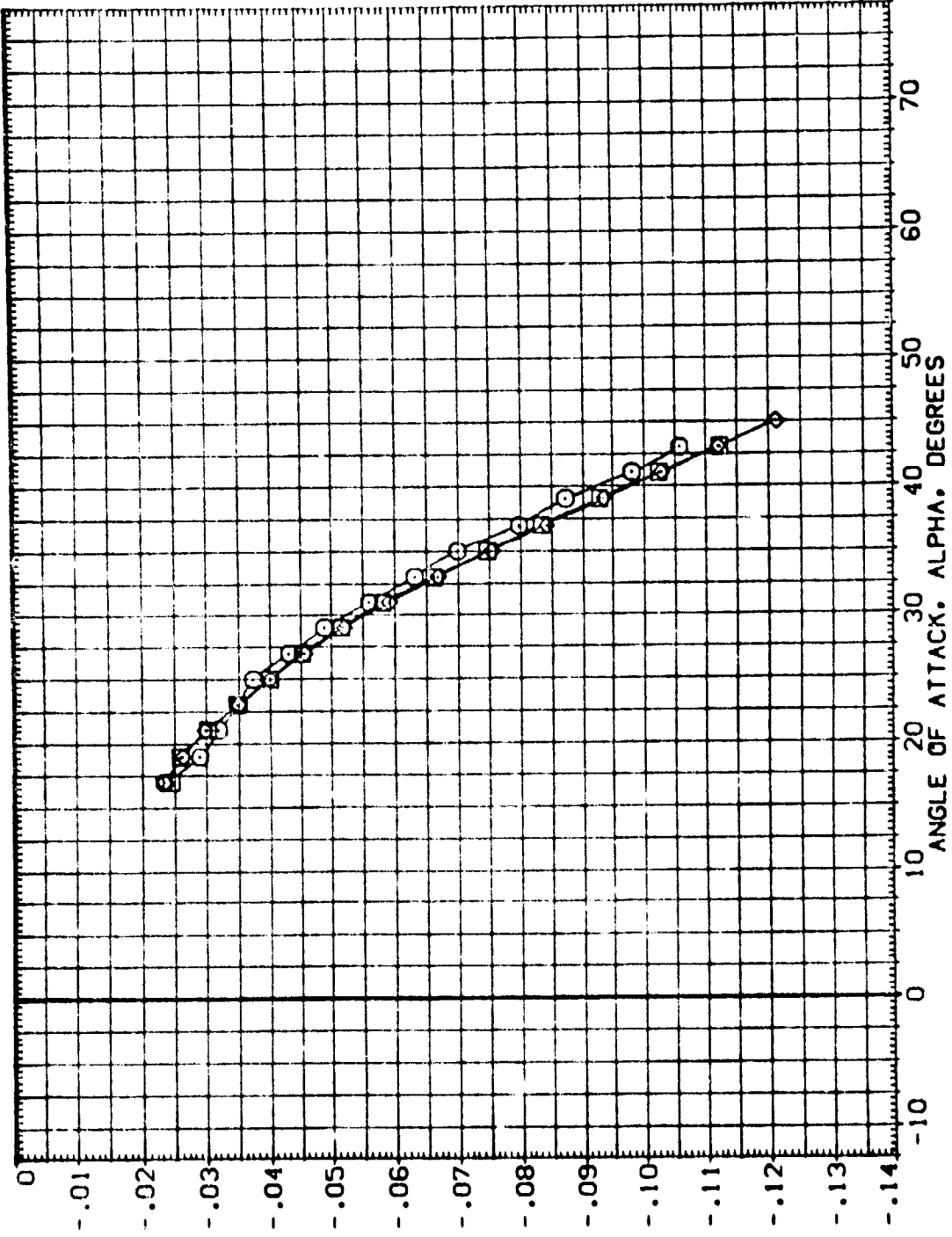


FIG. 24 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 0)

(A)MACH = 7.90

DATA SET SYMBOL (CTV056) (CTV051) (CTV017)

CONFIGURATION DESCRIPTION	RV/L	BD/FLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
0A79 B26 C9 E43 F8 H16 N28 RS V8 V116	1.500	.000	10.000	10.000	SREF 2690.0000 50.FT.
0A79 B26 C9 E43 F8 H16 N28 RS V8 V116	1.860	.000	10.000	10.000	LREF 474.8100 IN.
0A79 B26 C9 E43 F8 H16 N28 RS V8 V116	3.530	.000	10.000	10.000	BRF 936.6800 IN.
					XTRP 1076.0000 IN.X8
					YTRP 375.0000 IN.Y8
					ZTRP 375.0000 IN.Z8
					SCALE .0150

PITCHING MOMENT COEFFICIENT AT .675 BODY LENGTH(AFT C. G.) CLMAYT

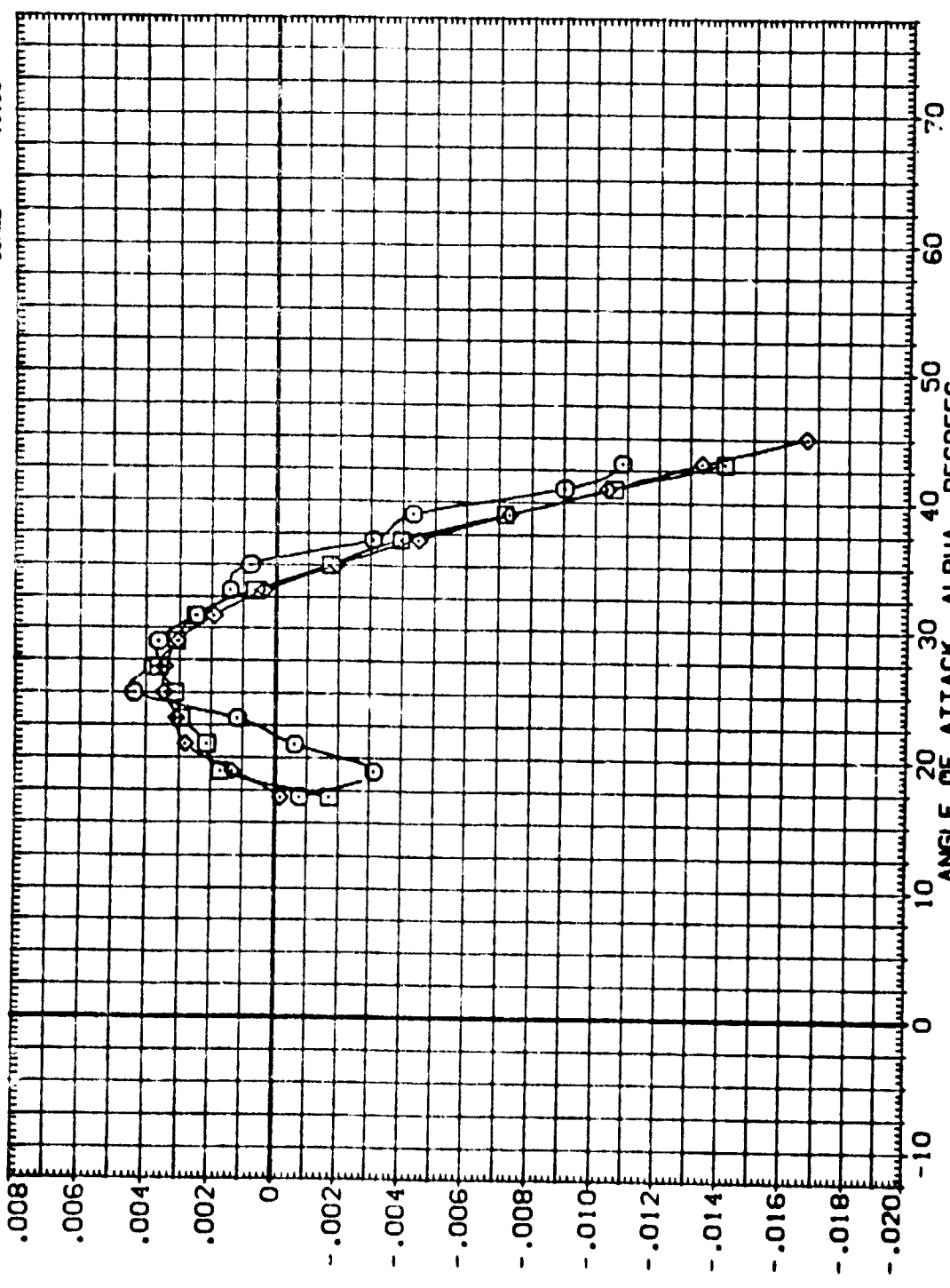


FIG. 24 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 0)
 (A)MACH = 7.90



DATA SET SYMBOL: (CTV056), (CTV057), (CTV058), (CTV017)

CONFIGURATION DESCRIPTION: CA79 826 C9 E43 F8 M16 N28 RS V8 V116, CA79 826 C9 E43 F8 M16 N28 RS V8 V116, CA79 826 C9 E43 F8 M16 N28 RS V8 V116

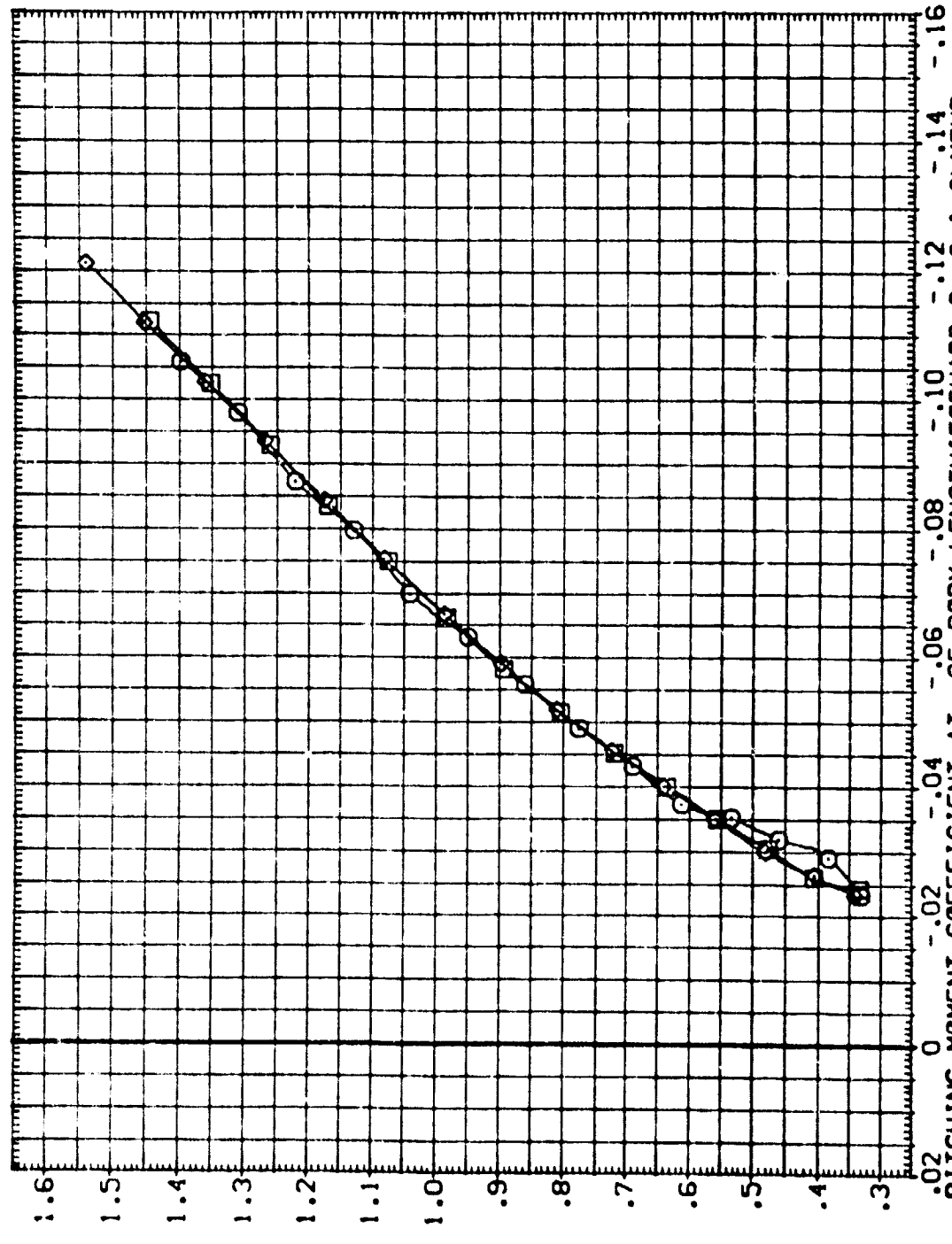
RVAL: .500, 1.860, 3.130

BOFLAP: .000, .000, .000

ELV-L0: 10.000, 10.000, 10.000

ELV-L1: 10.000, 10.000, 10.000

REFERENCE INFORMATION: SREF 2690.0000 SQ.FT., LREF 474.8100 IN., BREF 536.6300 IN., XPRP 1076.6800 IN., YPRP .0000 IN., ZPRP 375.0000 IN., SCALE .0150



NORMAL FORCE COEFFICIENT, CN

FIG. 24 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 0)

DATA SET SYMBOL
 (C1V055)
 (C1V051)
 (C1V017)

CONFIGURATION DESCRIPTION
 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116

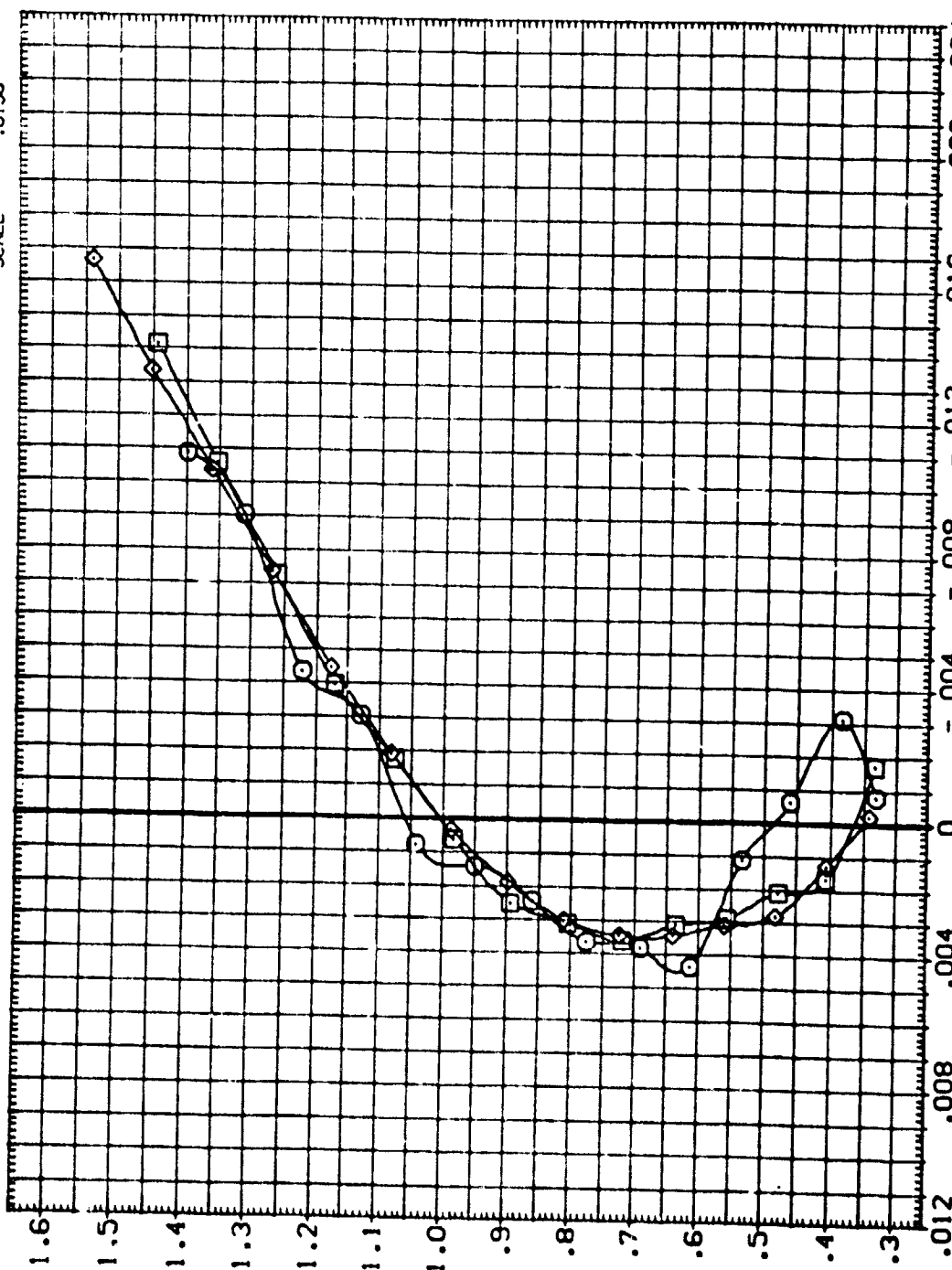
RM/L
 500
 1.860
 3.530

BOFLAP
 .000
 .000
 .000

ELV-L0
 10.000
 10.000
 10.000

ELV-L1
 10.000
 10.000
 10.000

REFERENCE INFORMATION
 SREF 2690.0000 50. FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XMRP 1076.6800 IN. X0
 YMRP .0000 IN. Y0
 ZMRP 375.0000 IN. Z0
 SCALE .0150



NORMAL FORCE COEFFICIENT, CN

FIG. 24 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 0)
 (A) MACH = 7.90



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(C1V056)	UAT9 B26 C9 E43 F8 M16 N28 R5 V8 V116
(C1V051)	DAY9 B26 C9 E43 F8 M16 N28 R5 V8 V116
(C1V017)	DAY9 B26 C9 E43 F8 M16 N28 R5 V8 V116

RMV BDFLAP ELV-L0 ELV-L1

.500	.000	10.000	10.000
1.850	.000	10.000	10.000
3.530	.000	10.000	10.000

REFERENCE INFORMATION

SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6800	IN.
XPRP	1076.6800	IN. X0
YPRP	375.0000	IN. Y0
ZPRP	375.0000	IN. Z0
SCALE	.0150	

CENTER OF PRESSURE LOCATION AS A FRACTION OF BODY LENGTH, XCP/L

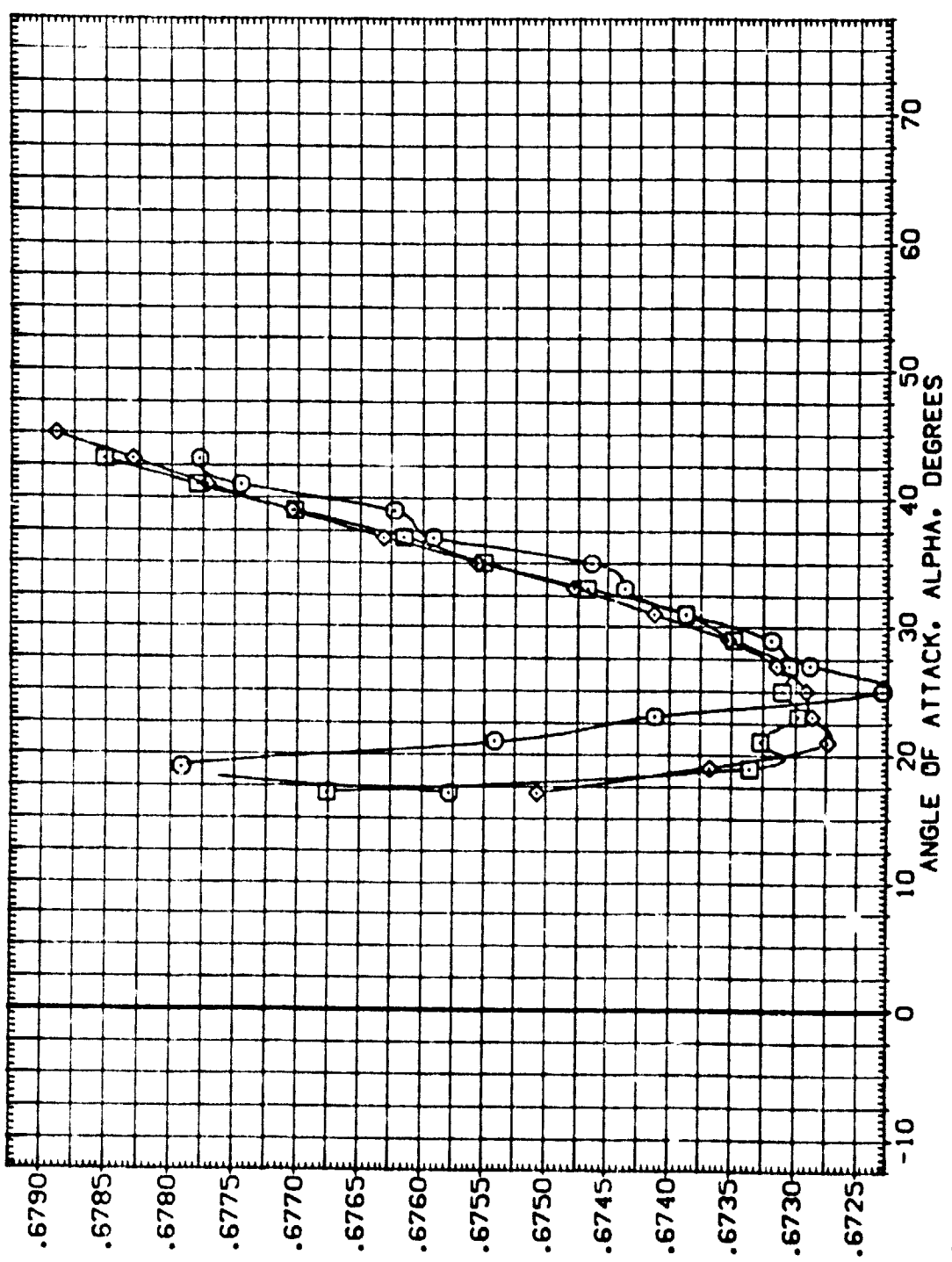


FIG. 24 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 0)

(A)MACH = 7.90

DATA SET SYMBOL: (CTW056) (CTW051) (CTW017)

CONFIGURATION DESCRIPTION:
 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116

RM/L .500
 1.860
 3.530

BOFLAP .000
 .000
 .000

ELV-L0 10.000
 10.000
 10.000

ELV-L1 10.000
 10.000
 10.000

REFERENCE INFORMATION

SREF 2690.0000 SQ.FT.
 LREF 474.8100 IN.
 BREF 536.6800 IN.
 XTRP 1076.6800 IN.
 YTRP .0000 IN.
 ZTRP 375.0000 IN.
 SCALE .0150

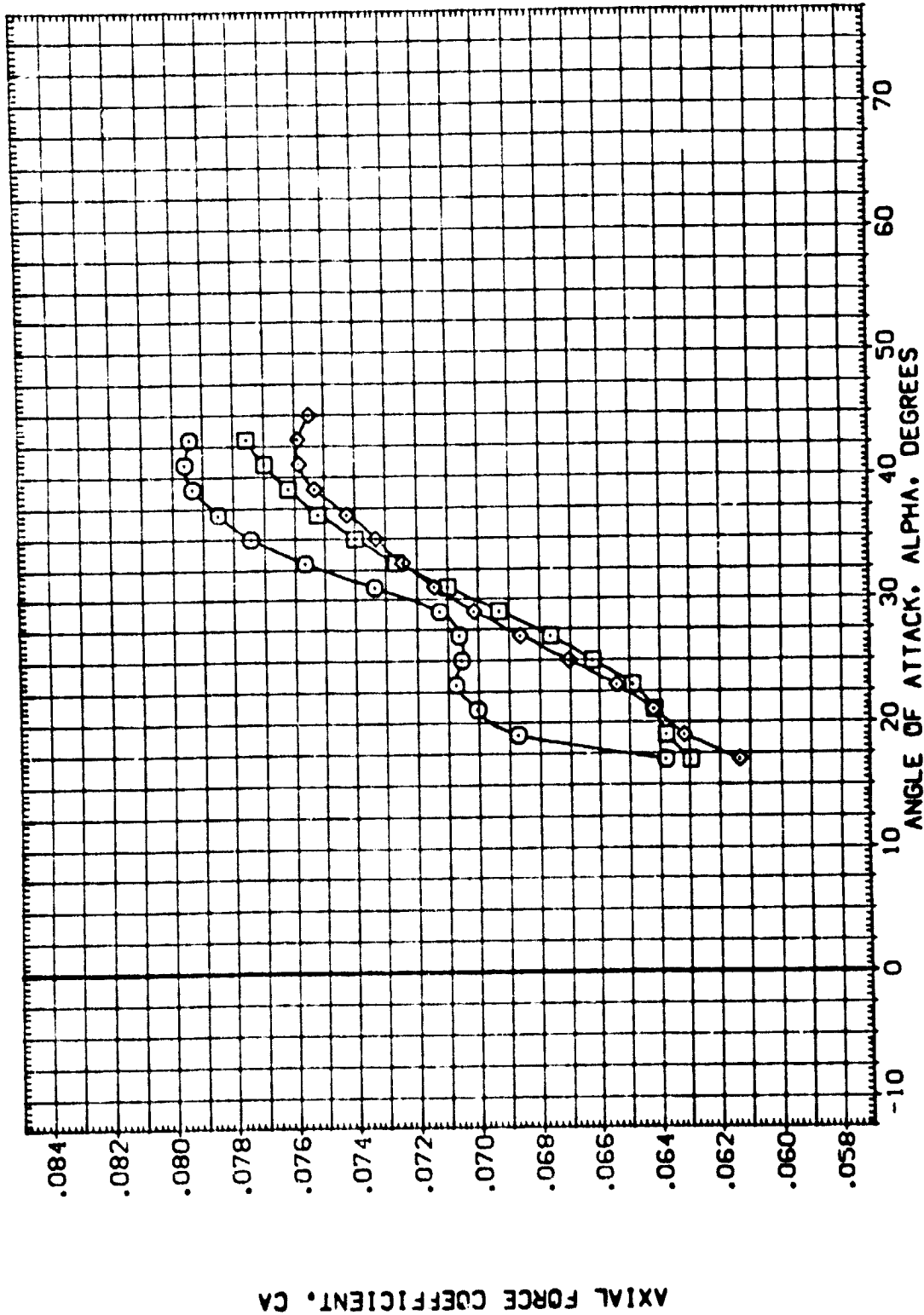


FIG. 24 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 0)

(A) MACH = 7.90

DATA SET SYMBOL: (C1V056) (C1V057) (C1V058) (C1V059) (C1V060) (C1V061) (C1V062) (C1V063) (C1V064) (C1V065) (C1V066) (C1V067) (C1V068) (C1V069) (C1V070) (C1V071) (C1V072) (C1V073) (C1V074) (C1V075) (C1V076) (C1V077) (C1V078) (C1V079) (C1V080) (C1V081) (C1V082) (C1V083) (C1V084) (C1V085) (C1V086) (C1V087) (C1V088) (C1V089) (C1V090) (C1V091) (C1V092) (C1V093) (C1V094) (C1V095) (C1V096) (C1V097) (C1V098) (C1V099) (C1V100)

CONFIGURATION DESCRIPTION: 0A79 826 C9 E43 F8 M16 N28 R5 V8 V116 0A79 826 C9 E43 F8 M16 N28 R5 V8 V116 0A79 826 C9 E43 F8 M16 N28 R5 V8 V116

RM/L: .500 .860 1.860 3.530

BD FLAP: .000 .000 .000 .000

ELV-L0: 10.000 10.000 10.000 10.000

ELV-L1: 10.000 10.000 10.000 10.000

REFERENCE INFORMATION: SREF 2690.0000 SQ.FT. LREF 474.8100 IN. DREF 936.6800 IN. XREF 1076.6800 IN. YREF 375.0000 IN. ZREF 375.0000 IN. SCALE .0150

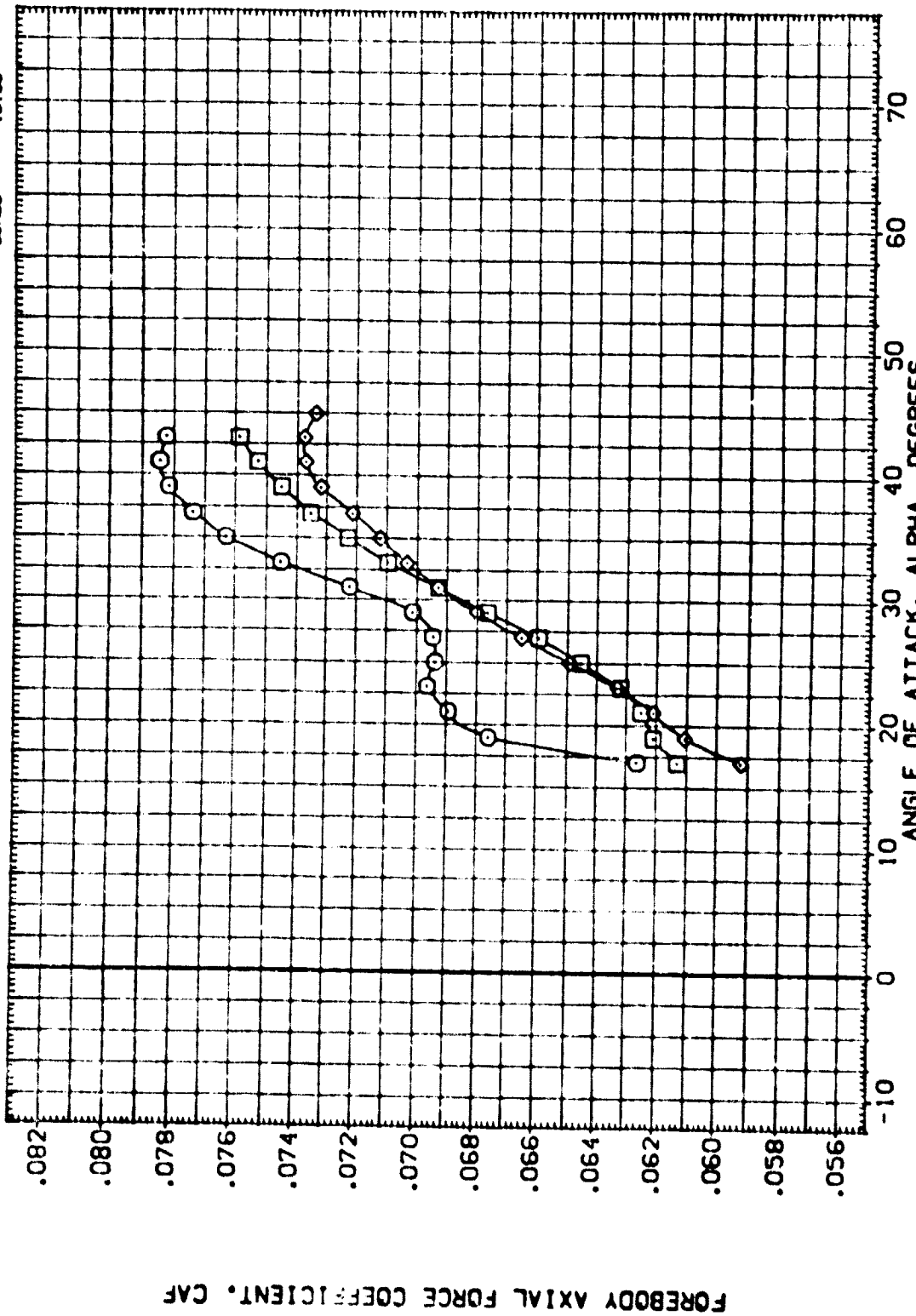


FIG. 24 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 0)

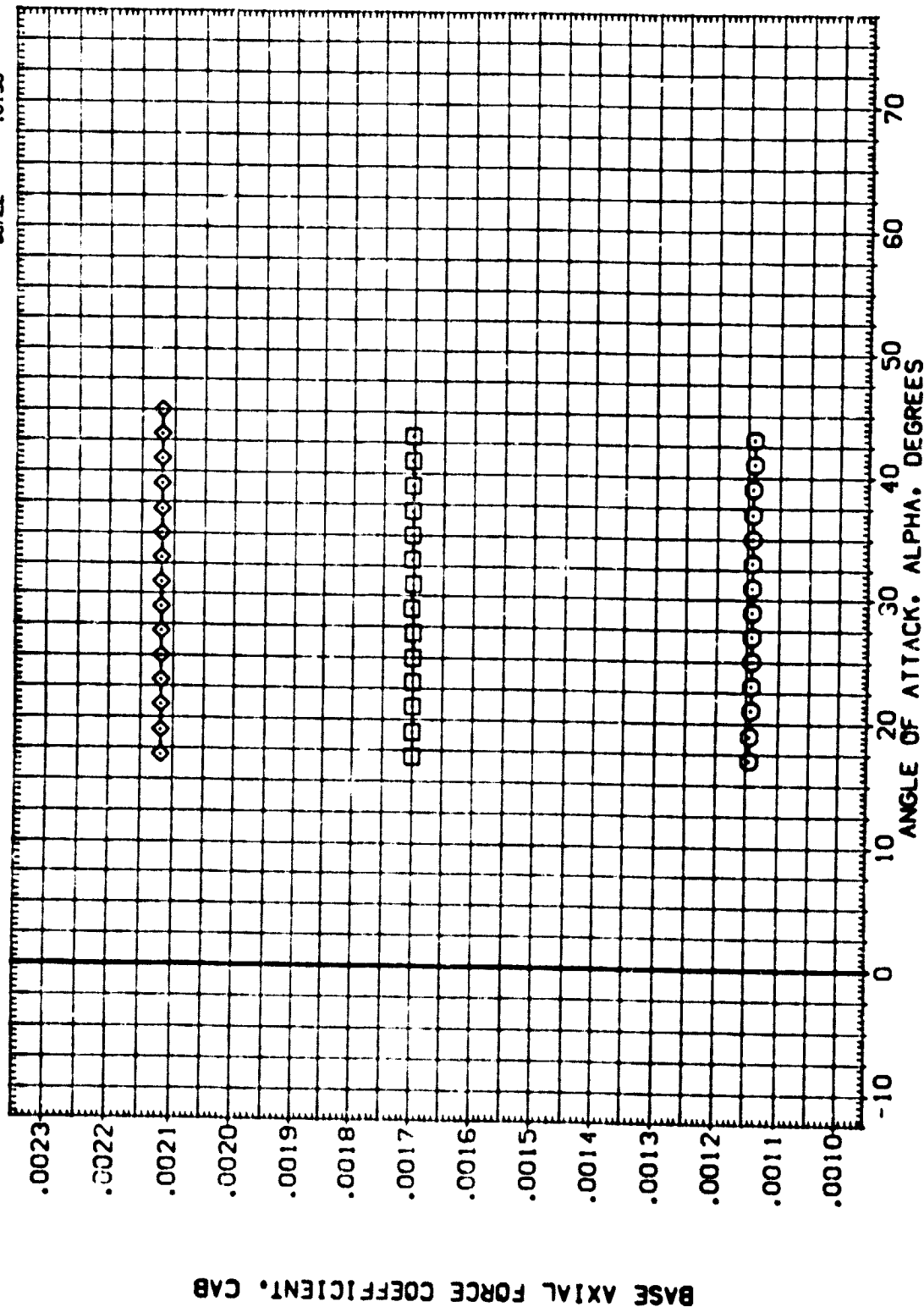
(A) MACH = 7.90

DATA SET SYMBOL
 (CTM056)
 (CTM051)
 (CTM017)

CONFIGURATION DESCRIPTION
 OA79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 OA79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 OA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

RVAL BOFLAP ELV-LD ELV-LI
 .500 .000 10.000 10.000
 1.650 .000 10.000 10.000
 3.530 .000 10.000 10.000

REFERENCE INFORMATION
 SREF 2690.0000 50. FT.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XREF 1076.6800 IN. X0
 YREF .0000 IN. Y0
 ZREF 375.0000 IN. Z0
 SCALE .0150



BASE AXIAL FORCE COEFFICIENT, CAB

FIG. 24 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 0)

(A) MACH = 7.90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RVL	BOFLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(CT10056)	0A79 B26 C9 E43 F8 H16 N28 R5 V8 V116	.500	.000	10.000	10.000	2690.0000 SQ.FT.
(CT10051)	0A79 B26 C9 E43 F8 H16 N28 R5 V8 V116	1.960	.000	10.000	10.000	474.8100 IN.
(CT10017)	0A79 B26 C9 E43 F8 H16 N28 R5 V8 V116	3.530	.000	10.000	10.000	936.6800 IN.
						1076.6800 IN.X0
						YMRP .0000 IN.Y0
						ZMRP .0000 IN.Z0
						SCALE .0150

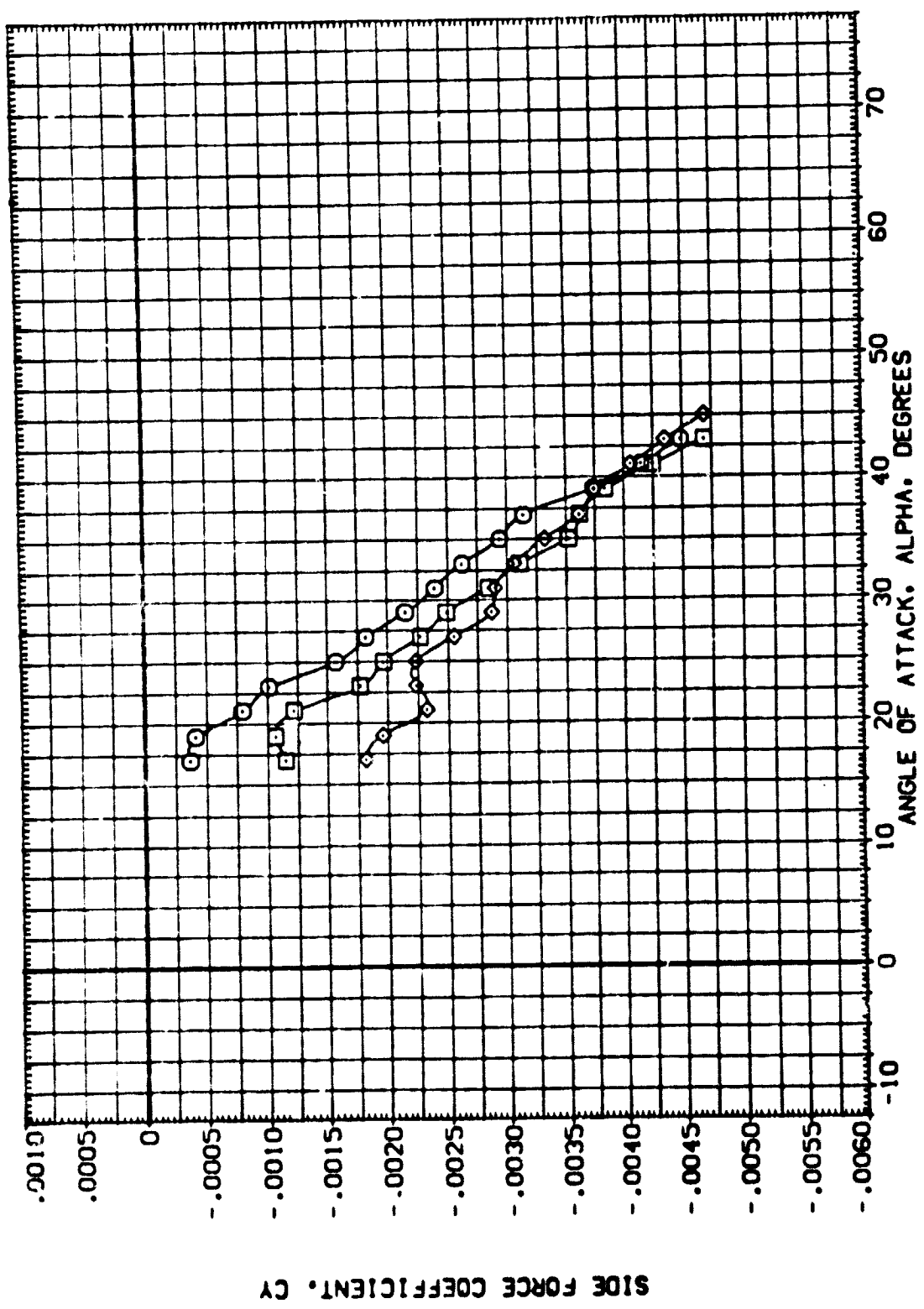


FIG. 24 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 0)

(A) MACH = 7.90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RVL	BOFLAP	ELV-L6	ELV-L1	REFERENCE INFORMATION
(ATW056)	0A79 B26 C9 E43 F8 M16 N28 P5 V8 V116	500	.000	10.000	10.000	SREF 2690.0000 SO.FT.
(ATW051)	0A79 B26 C9 E43 F8 M16 N28 P5 V8 V116	1.860	.000	10.000	10.000	LREF 474.8100 IN.
(ATW017)	0A79 B26 C9 E43 F8 M16 N28 P5 V8 V116	3.530	.000	10.000	10.000	BREF 936.6600 IN.X0
						XPRP 1076.6800 IN.Y0
						ZMRP 375.0000 IN.Z0
						SCALE .0150

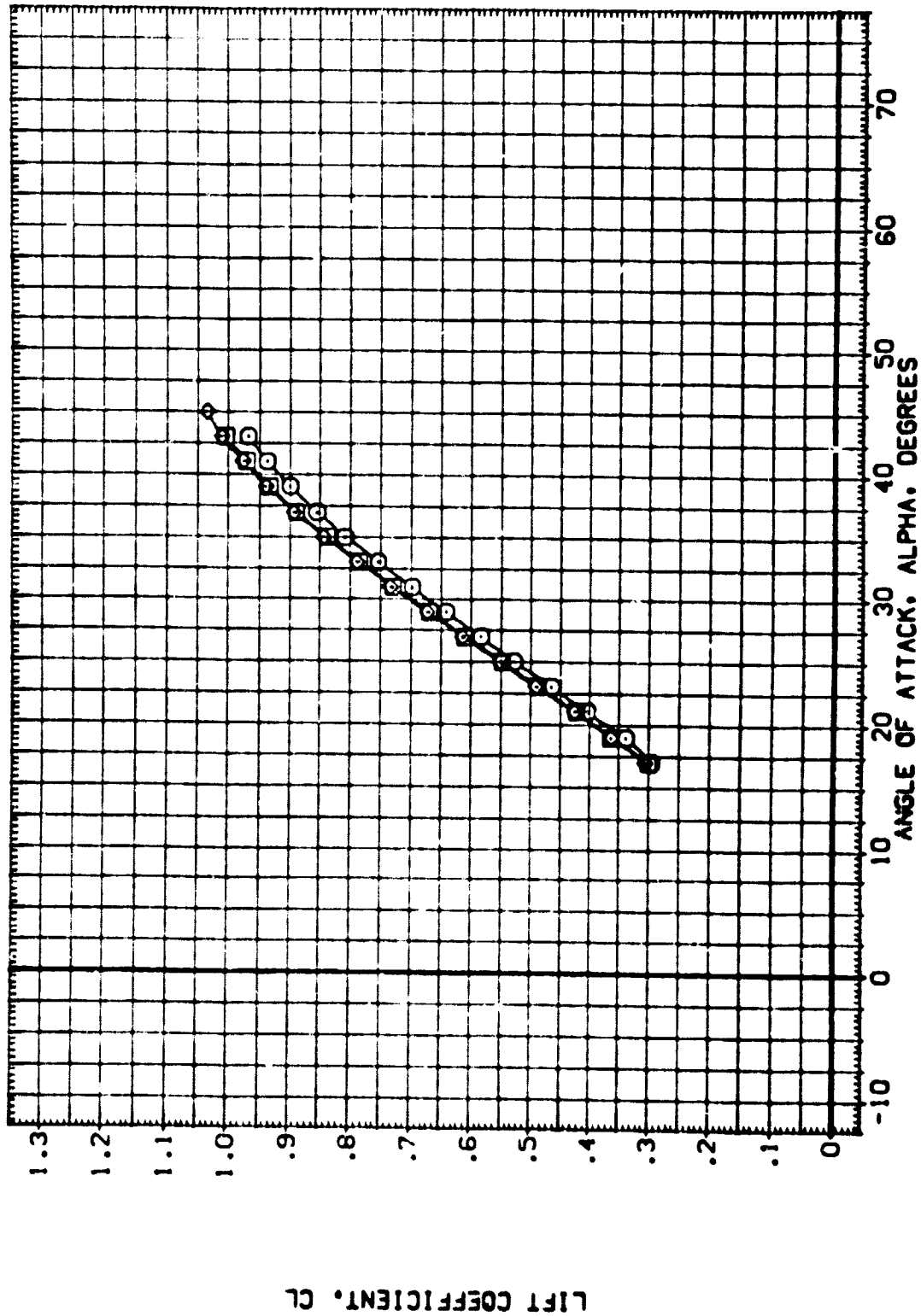


FIG. 24 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 0)

(A)MACH = 7.90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RM/L	BOFLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(AT4036)	0A79 826 C9 E43 F8 M16 NCB R5 V8 V116	.500	.000	10.000	10.000	SREF 2690.0000 SO.FT.
(AT4037)	0A79 826 C9 E43 F8 M16 NCB R5 V8 V116	1.860	.000	10.000	10.000	LREF 474.8100 IN.
(AT4017)	0A79 826 C9 E43 F8 M16 NCB R5 V8 V116	3.530	.000	10.000	10.000	BREF 936.6800 IN.
						XREF 1076.6800 IN. V8
						YREF .0000 IN. V8
						ZREF 375.0000 IN. V8
						SCALE .0150

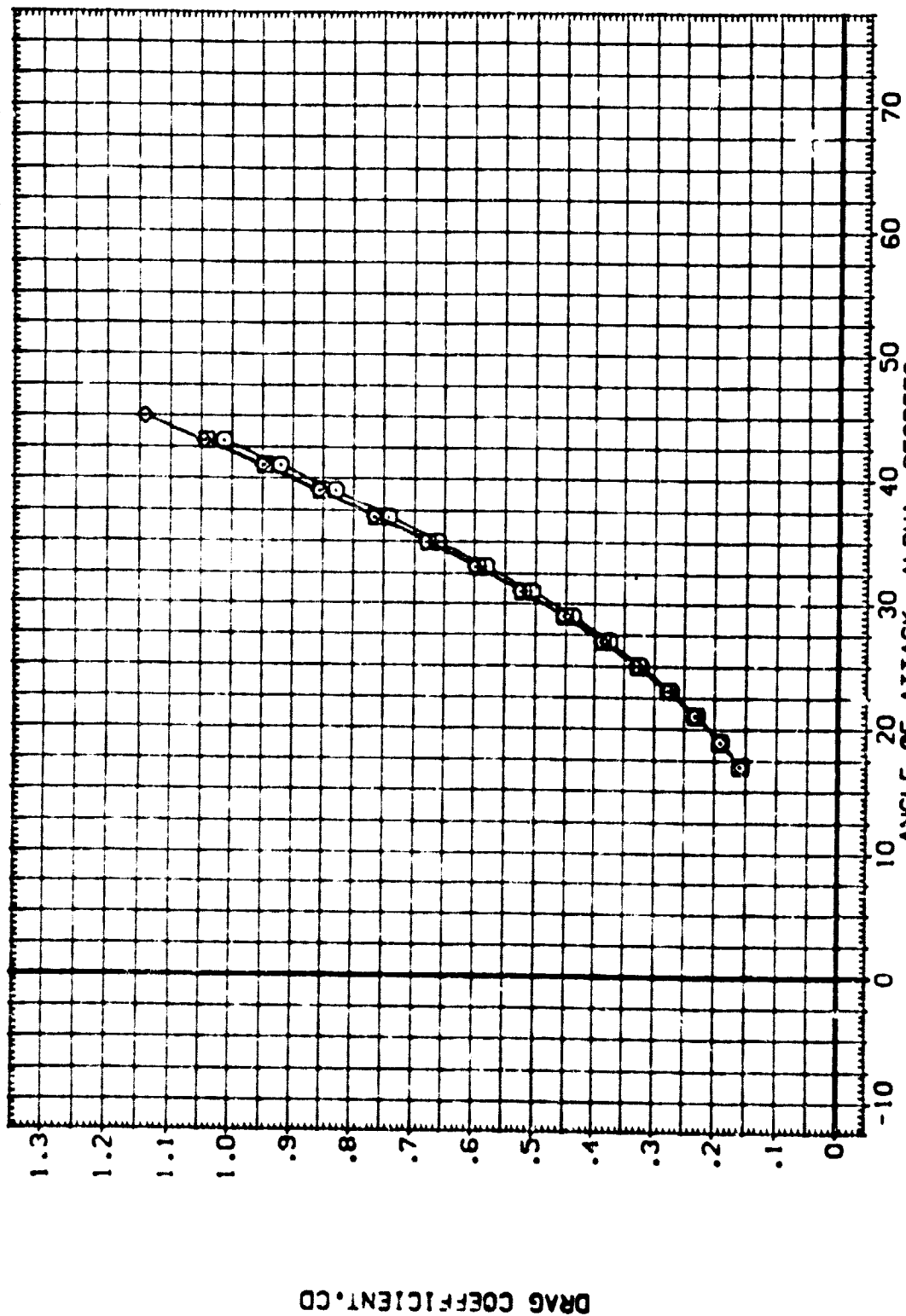


FIG. 24 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP= 0)
 (A)MACH = 7.90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RVL	BOFLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(ATW056)	0A79 826 C9 E43 FB H16 N28 RS V8 V116	.500	.000	10.000	10.000	2690.0000 50.FT.
(ATW051)	0A79 826 C9 E43 FB H16 N28 RS V8 V116	1.860	.000	10.000	10.000	474.8100 IN.
(ATW017)	0A79 826 C9 E43 FB H16 N28 RS V8 V116	3.530	.000	10.000	10.000	936.6800 IN.
						1076.6800 IN.X0
						YTRP .0000 IN.Y0
						ZTRP .0000 IN.Z0
						SCALE .0150

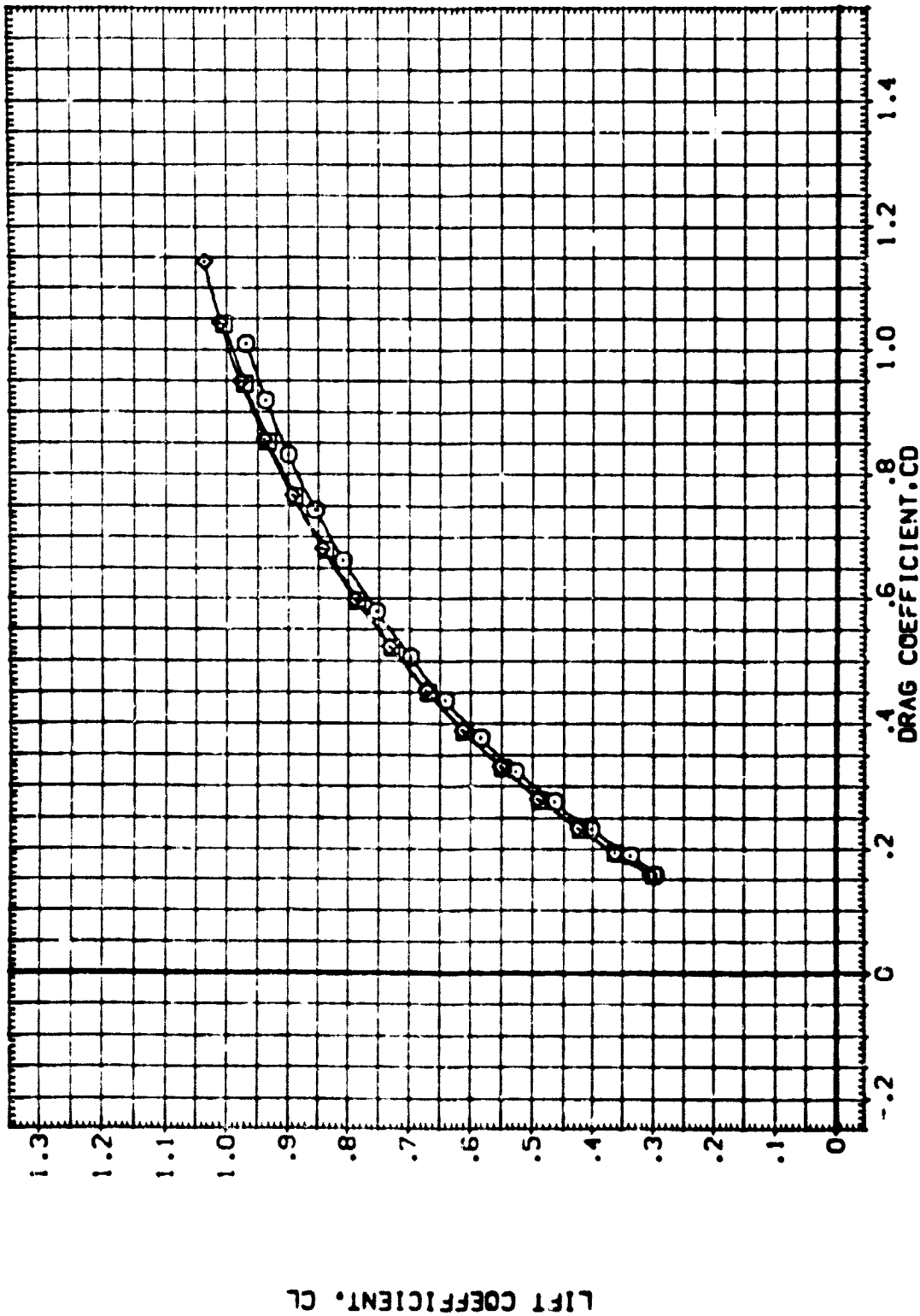


FIG. 24 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 0)
 (A) MACH = 7.50



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(ATV056) OA79 B26 C9 E43 F8 M15 N28 R5 V8 V116

(ATV051) OA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

(ATV017) OA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

RN/L BOFLAP ELV-L0 ELV-L1

500 .000 10.000 10.000

1.860 .000 10.000 10.000

3.530 .000 10.000 10.000

REFERENCE INFORMATION

SREF 2690.0000 SQ.FT.

LREF 474.8100 IN.

BREF 936.6900 IN.X0

XPRP 1076.6900 IN.Y0

YPRP 375.0000 IN.Z0

ZPRP .0150

SCALE

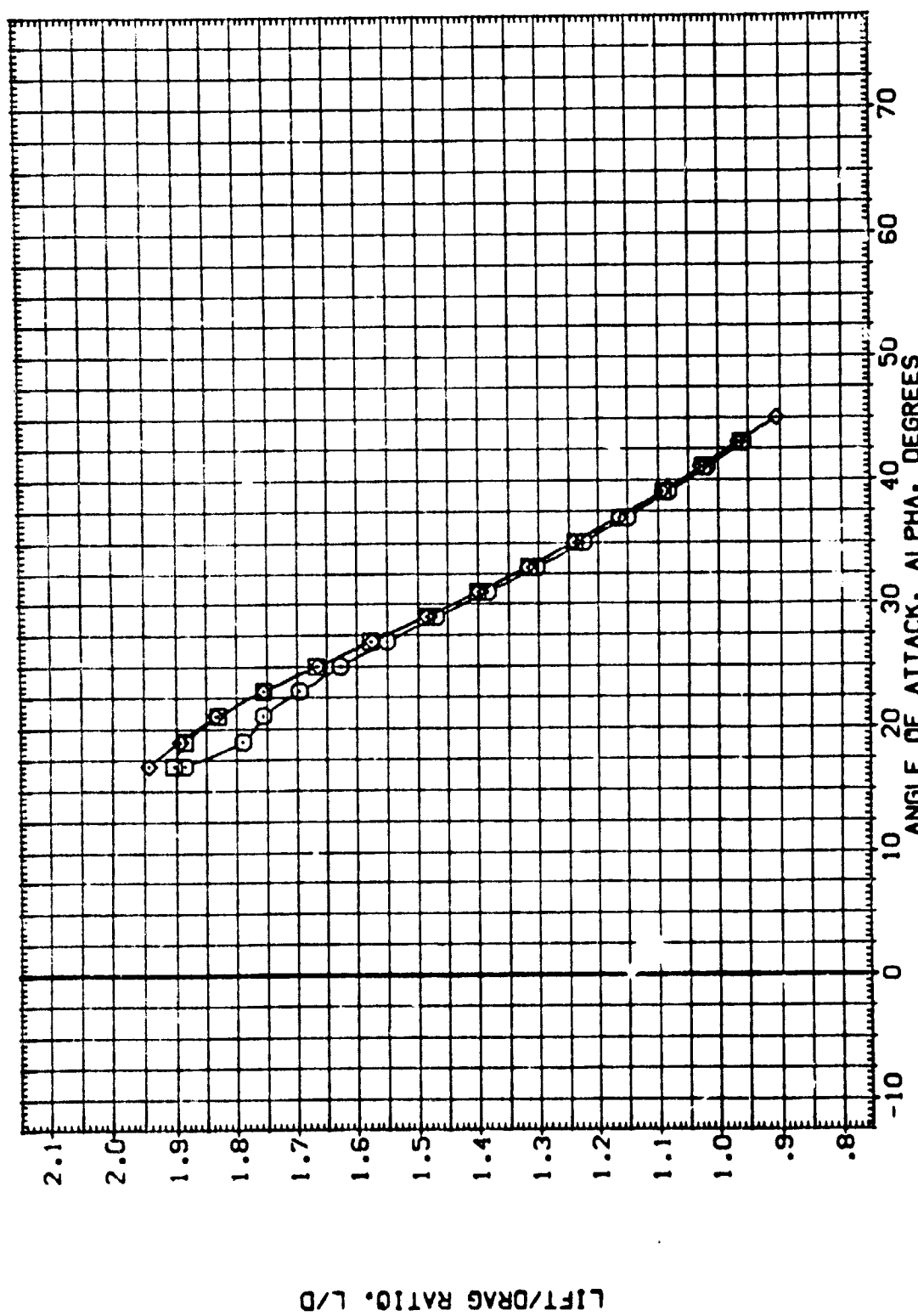


FIG. 24 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 0)

(A)MACH = 7.90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RMVL	BOFLAP	ELV-LD	ELV-LI	REFERENCE INFORMATION
(CIV051)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.500	.000	20.000	20.000	SREF 2690.0000 50.FI.
(CIV052)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	1.050	.000	20.000	20.000	LREF 474.8100 IN.
(CIV026)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	1.520	.000	20.000	20.000	MREF 836.8900 IN.
						YREF 1076.8900 IN.
						ZREF 375.0000 IN.
						SCALE .0150

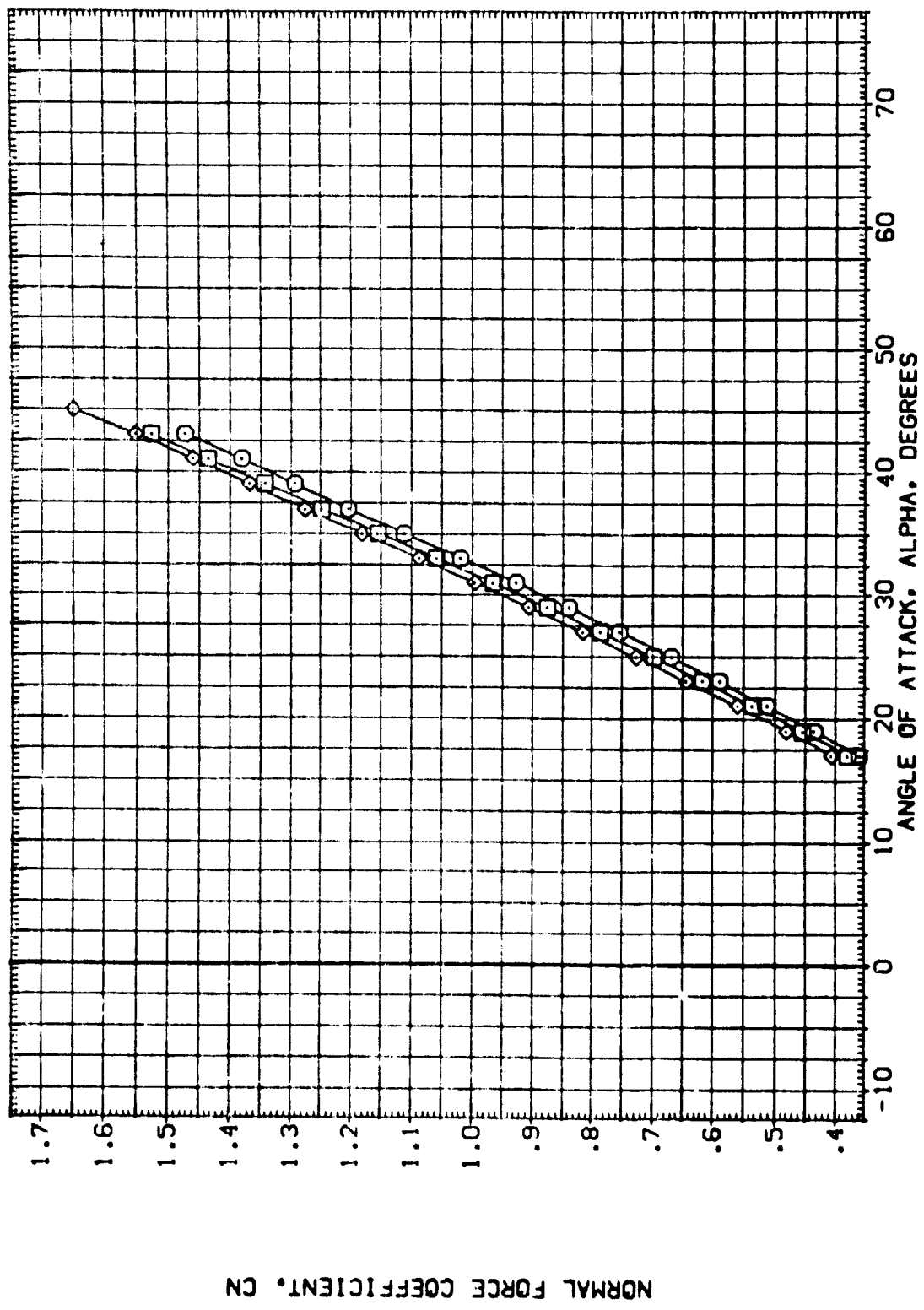


FIG. 25 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 0)
 (A) MACH = 7.90

PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH(FORWARD C. G.) CL(MFD)

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	BOFLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(CTV061)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.500	.000	20.000	20.000	SREF 2690.0000 SQ.FT.
(CTV052)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	1.060	.000	20.000	20.000	LREF 474.8100 IN.
(CTV020)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	3.530	.000	20.000	20.000	BREF 936.6600 IN.
						XPRP 1076.6800 IN.X0
						YMRP .0000 IN.Y0
						ZMRP 375.0000 IN.Z0
						SCALE .0150

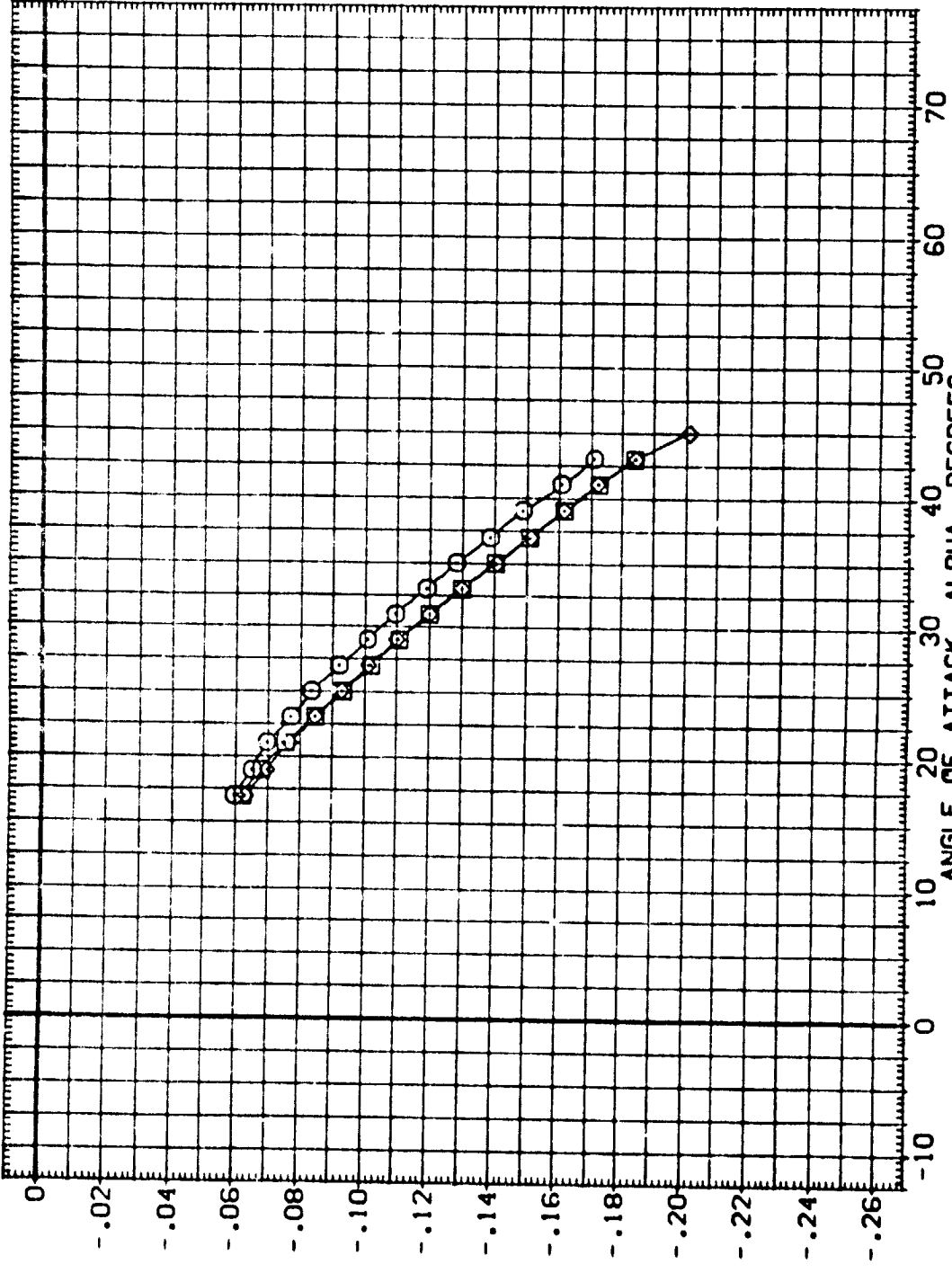


FIG. 25 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP= 0)

(A)MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION RMVL EOLAP ELV-LG ELV-LI REFERENCE INFORMATION

(C1V061)	DAY9 B26 C9 E43 F8 M16 N28 P5 V8 V116	.500	.000	20.000	20.000	SREF 2690.0000 SQ.FT.
(C1V052)	DAY9 B26 C9 E43 F8 M16 N29 P5 V8 V116	1.260	.000	20.000	20.000	LREF 474.8100 IN.
(C1V020)	DAY9 B26 C9 E43 F8 M16 N28 P5 V8 V116	3.530	.000	20.000	20.000	BREF 936.8600 IN.X0
						XTRP 1076.8600 IN.Y0
						YTRP .0000 IN.Z0
						SCALE 375 .0150

PITCHING MOMENT COEFFICIENT AT .675 BODY LENGTH(AFT C. G.) CLMAYT

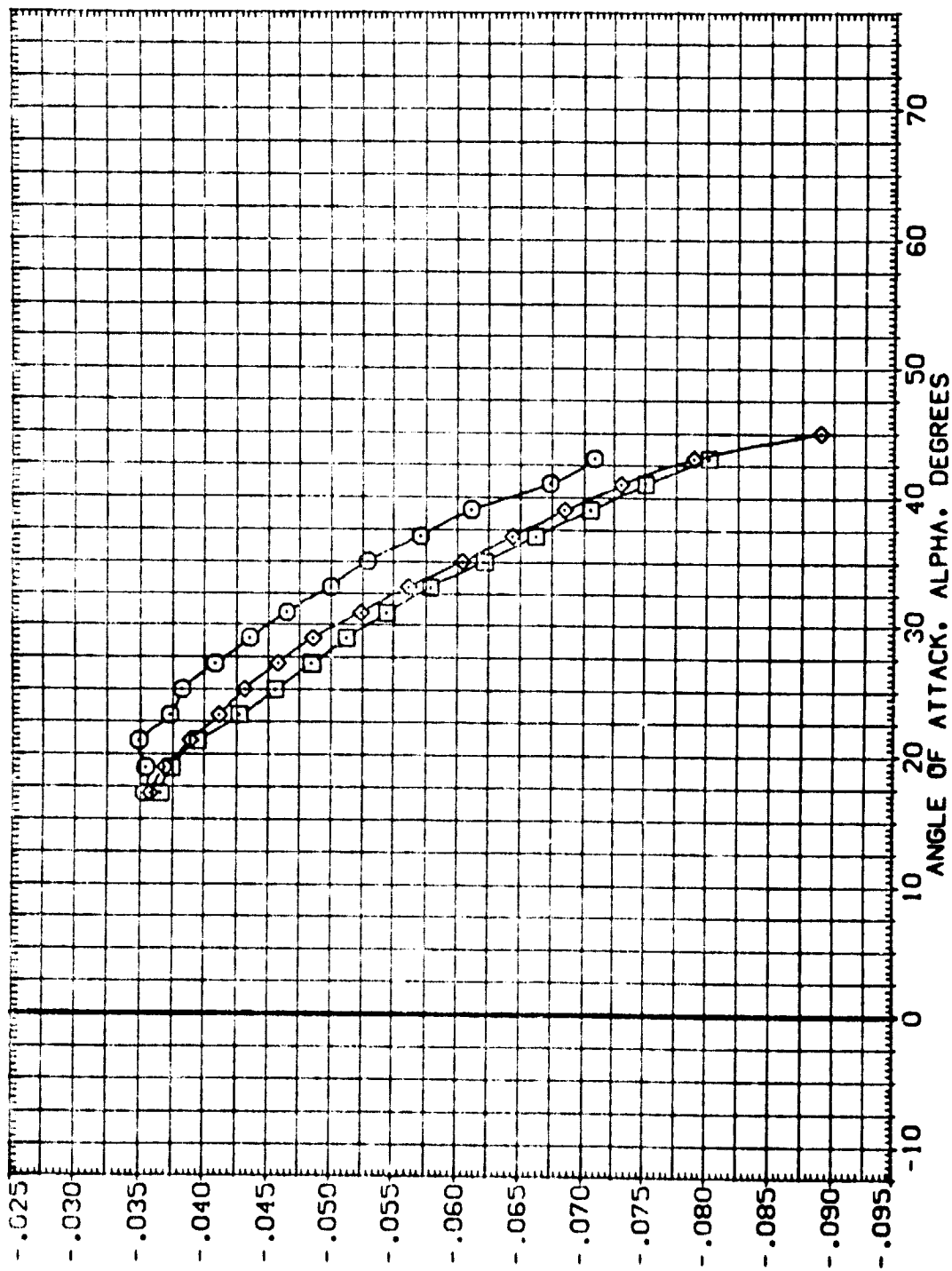


FIG. 25 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 0)

(A)MACH = 7.90

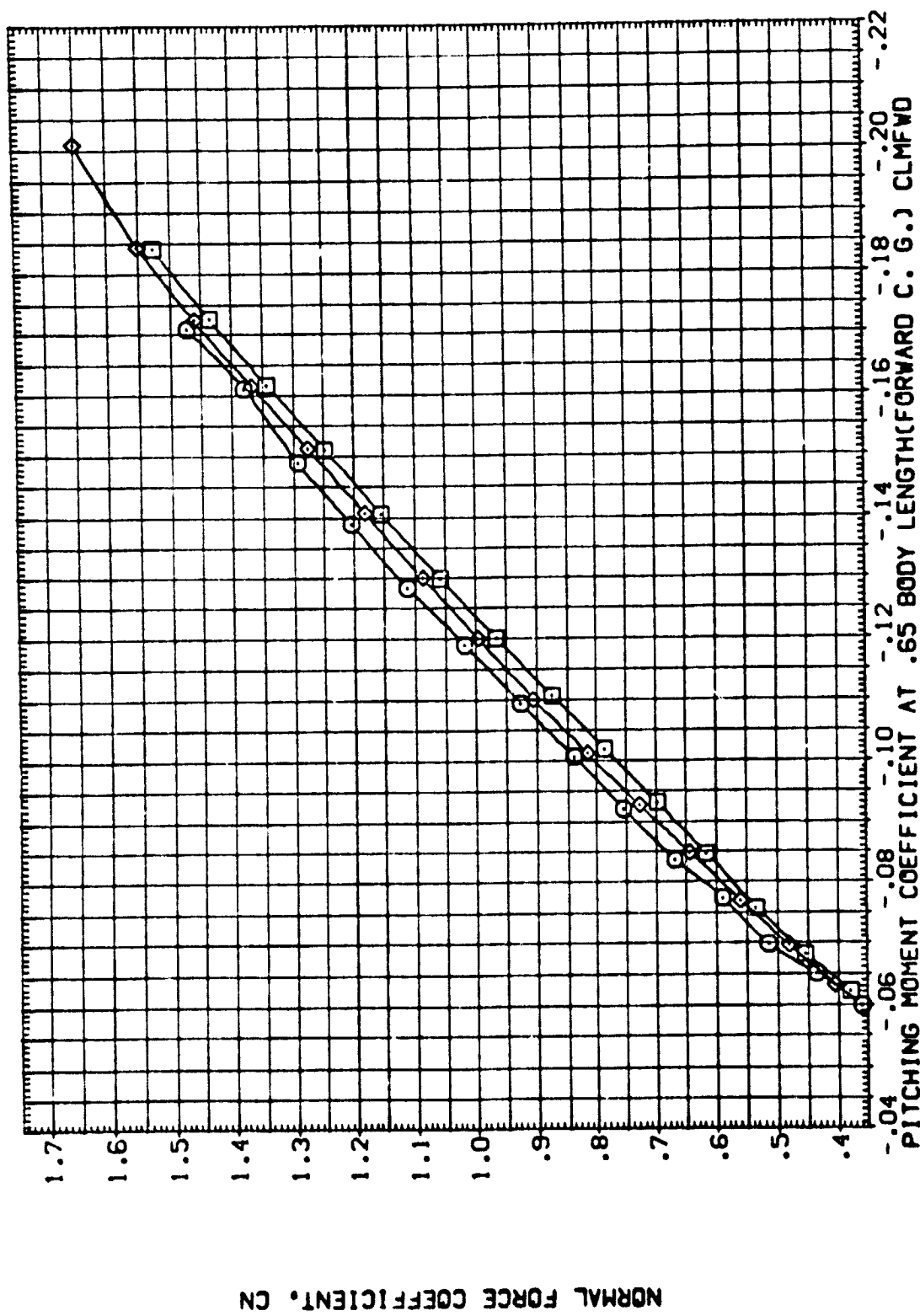


DATA SET SYMBOL: (C1M051) (C1M052) (C1M053)

CONFIGURATION DESCRIPTION:
 0A79 B26 C9 E43 F8 M16 N28 RS V8 V116
 0A79 B26 C9 E43 F8 M16 N28 RS V8 V116
 0A79 B26 C9 E43 F8 M16 N28 RS V8 V116

RV/L: .500, 1.860, 3.530
 BOFLAP: .000, .000, .000
 ELV-L0: 20.000, 20.000, 20.000
 ELV-L1: 20.000, 20.000, 20.000

REFERENCE INFORMATION:
 SREF: 2690.0000 SO.FT.
 LREF: 474.8100 IN.
 BREF: 936.6600 IN.
 XPRP: 1076.6800 IN.
 YMRP: .0000 IN.
 ZMRP: 375.0000 IN.
 SCALE: .0150



NORMAL FORCE COEFFICIENT, CN

FIG. 25 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 0)

(A)MACH = 7.90

DATA SET SYMBOL
 (CT10051)
 (CT10052)
 (CT10020)

CONFIGURATION DESCRIPTION
 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116

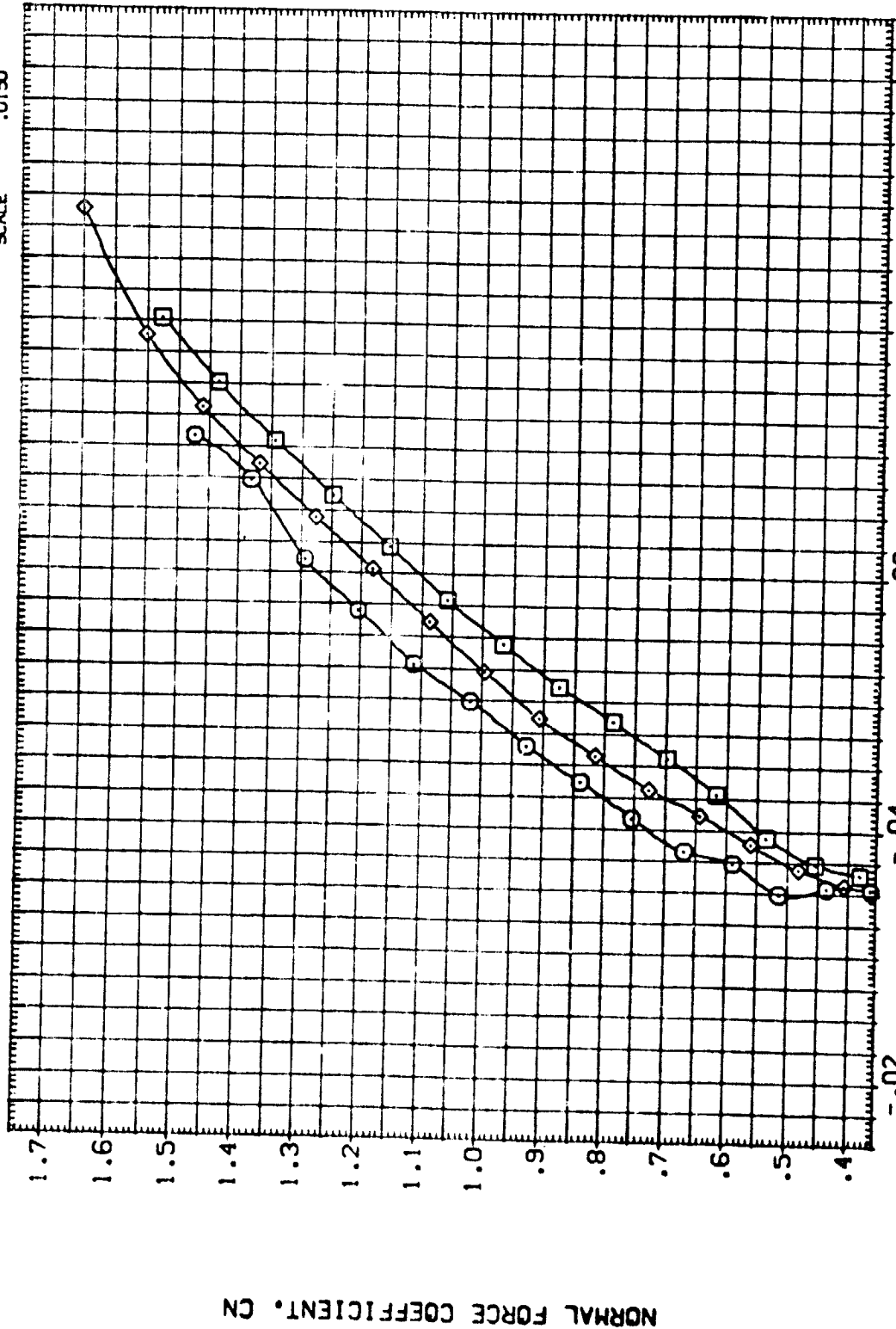
RVL
 .500
 1.850
 3.530

BOFLAP
 .000
 .000
 .000

ELV-L0
 20.000
 20.000
 20.000

ELV-L1
 20.000
 20.000
 20.000

REFERENCE INFORMATION
 SREF 2690.0000 50. FT.
 LREF 474.8100 IN.
 BREF 506.6800 IN.
 XPRP 1076.6900 IN. X0
 YPRP .0000 IN. Y0
 ZPRP 375.0000 IN. Z0
 SCALE .0150



NORMAL FORCE COEFFICIENT, CN

FIG. 25 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP= 0)
 (A)MACH = 7.90
 PITCHING MOMENT COEFFICIENT AT .675 BODY LENGTH(AFT C. G.) CLMFT
 -.10
 -.08
 -.06
 -.04



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(C1V051) □ 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116

(C1V052) ○ 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116

(C1V020) ◇ 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116

RVAL BDFLAP ELV-L0 ELV-L1

.500 .000 20.000 20.000

1.860 .000 20.000 20.000

3.530 .000 20.000 20.000

REFERENCE INFORMATION

SREF 2690.0000 50.FT.

LREF 474.8100 IN.

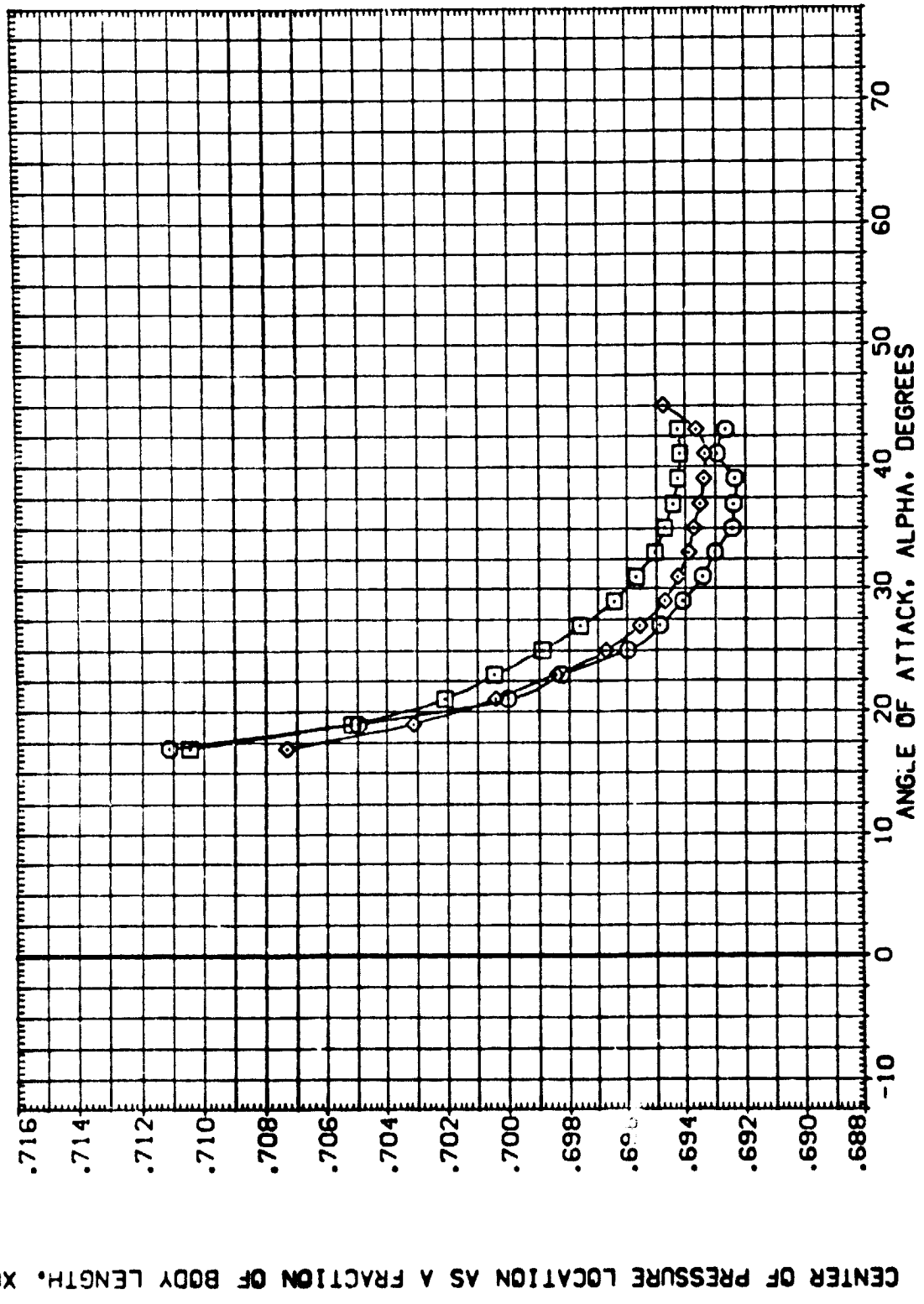
BREF 536.6800 IN.

XMRP 1076.6800 IN. X0

YMRP .0000 IN. Y0

ZMRP 375.0000 IN. Z0

SCALE .0150



CENTER OF PRESSURE LOCATION AS A FRACTION OF BODY LENGTH, XCP/L

FIG. 25 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 0)

(A)MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(C1V0S1) □ CA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

(C1V0S2) ○ CA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

(C1V0Z0) ◇ CA79 B26 C9 E43 F8 M16 N28 R5 V8 V116

REFERENCE INFORMATION

SREF 2690.0000 SQ.FT.

LREF 474.8100 IN.

BREF 936.6900 IN.

XMRP 1076.6900 IN. X0

YMRP .0000 IN. Y0

ZMRP 375.0000 IN. Z0

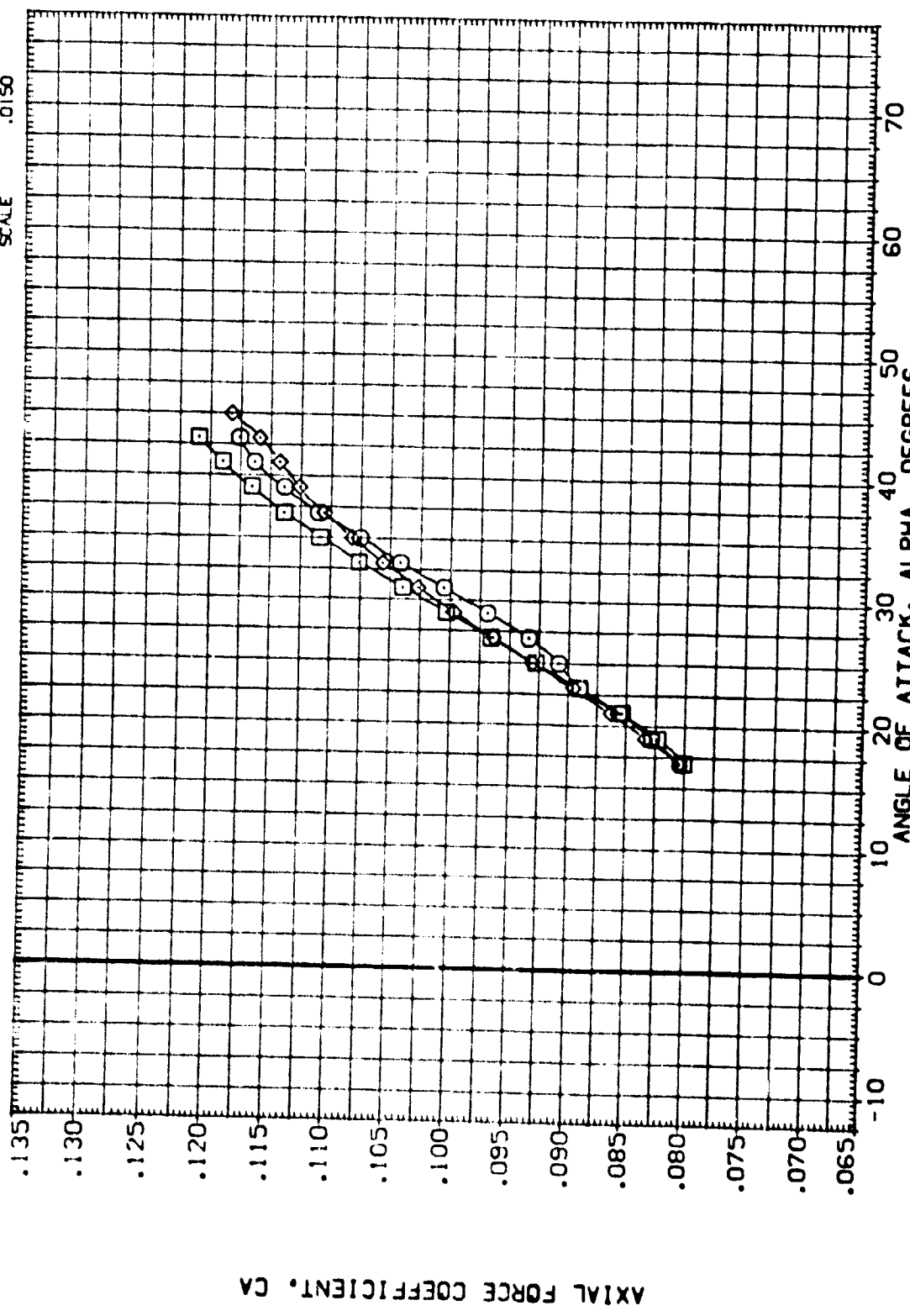
SCALE .0150

RAVL .500

BOFLAP .000

ELV-L0 20.000

ELV-L1 20.000



AXIAL FORCE COEFFICIENT, CA

FIG. 25 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 0)

(A)MACH = 7.90



DATA SET SYMBOL CONFIGURATION DESCRIPTION REFERENCE INFORMATION

(C1V051)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	SREF 2690.0000	50.FT.
(C1V052)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	LREF 474.8100	IN.
(C1V020)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	BREF 506.6800	IN.
		XPRP 1076.0000	IN. X0
		YPRP .0000	IN. Y0
		ZPRP 375.0000	IN. Z0
		SCALE .0150	

RVAL BDFLAP ELV-L0 ELV-L1

.500	.000	20.000	20.000
1.860	.000	20.000	20.000
3.530	.000	20.000	20.000

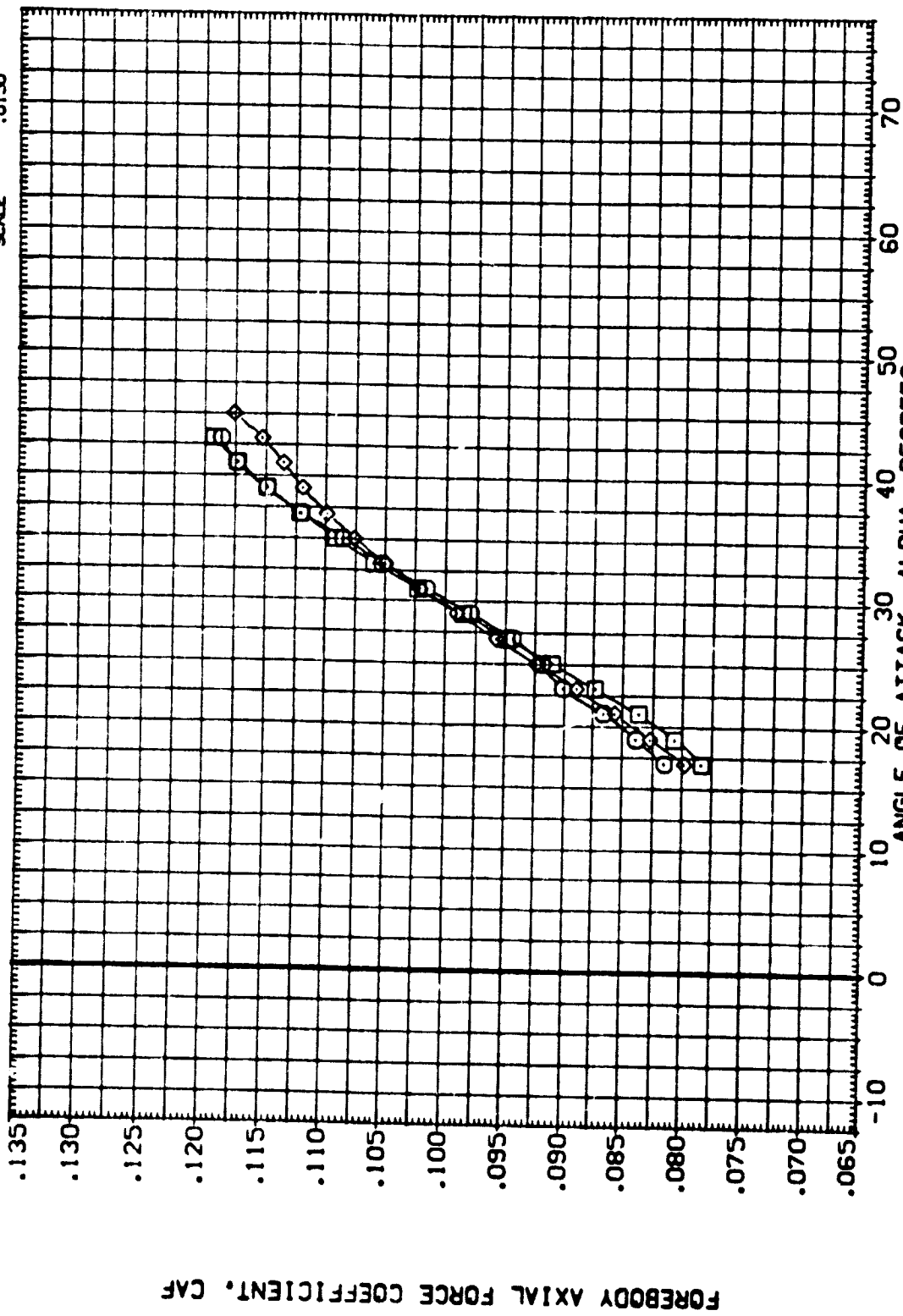


FIG. 25 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 0)
 (A)MACH = 7.90

DATA SET SYMBOL: (C1V051), (C1V052), (C1V020)

CONFIGURATION DESCRIPTION: DAY8 B26 CS E43 FB M16 N28 RS V8 V116, DAY9 B26 CS E43 FB M16 N28 RS V8 V116

RVL: .500, 1.860, 3.530

BDFLAP: .000, .000, .000

ELV-L0: 20.000, 20.000, 20.000

ELV-L1: 20.000, 20.000, 20.000

REFERENCE INFORMATION: SREF 2690.0000 SQ.FT., LREF 474.8100 IN., BREF 506.6800 IN., XREF 1076.0000 IN., YREF .0000 IN., ZREF 375.0000 IN., SCALE .0150

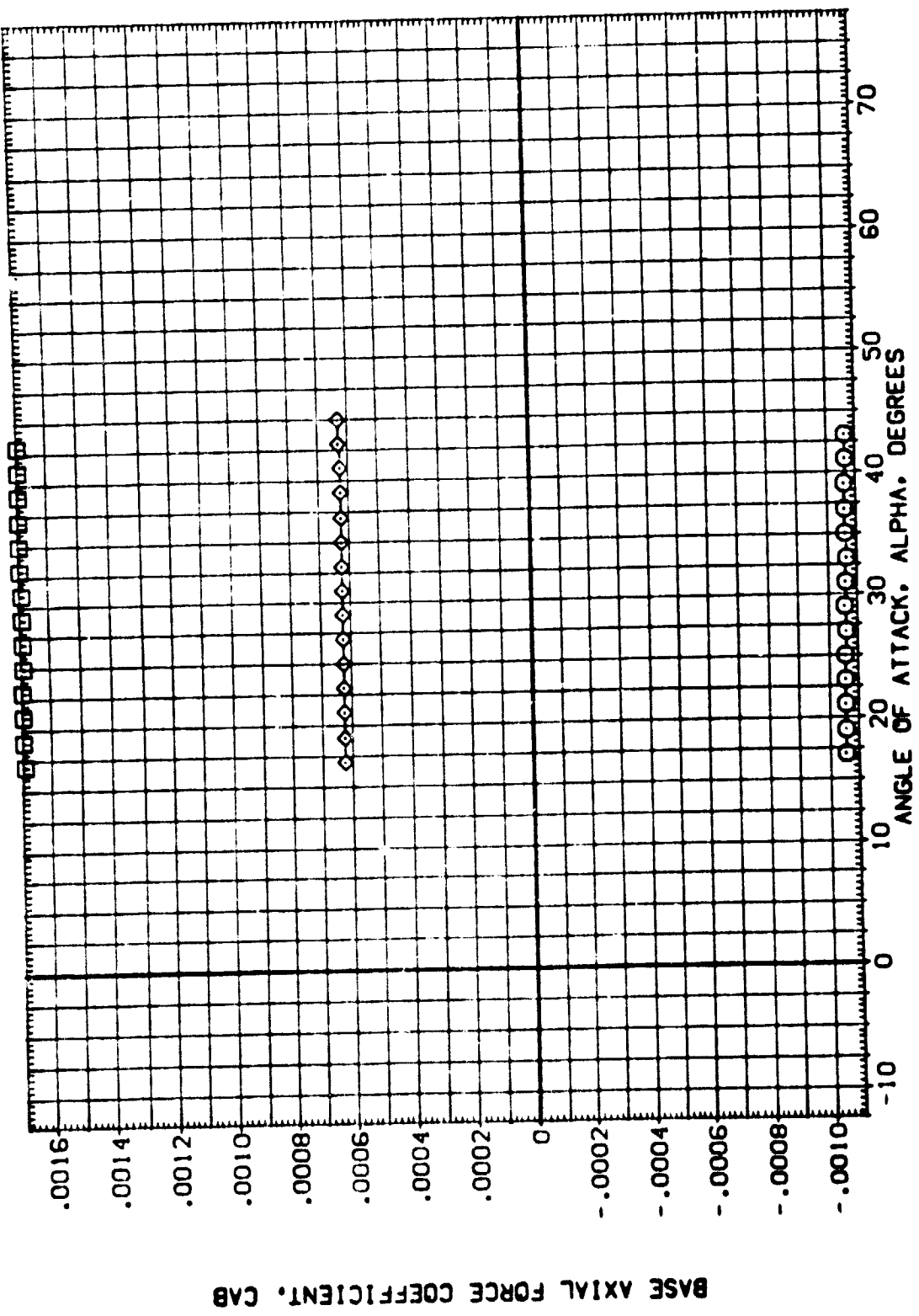


FIG. 25 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 0)

(A)MACH = 7.90



DATA SET SYMBOL: (C1V0S1), (C1V0S2), (C1V0Z0)

CONFIGURATION DESCRIPTION: DAY9 B06 C9 E43 F8 M16 N08 P5 V8 V116, DAY8 B06 C9 E43 F8 M16 N08 P5 V8 V116, DAY9 B26 C9 E43 F8 M16 N08 P5 V8 V116

RV/L: .500, 1.860, 3.530

BOFLAP: .000, .000, .000

ELV-L0: 20.000, 20.000, 20.000

ELV-L1: 20.000, 20.000, 20.000

REFERENCE INFORMATION: SREF 2690.0000 SO.FT. IN., LREF 474.8100 IN., BREF 936.6800 IN., XTRP 1076.6800 IN., YTRP .0000 IN., ZTRP 375.0000 IN., SCALE .0150

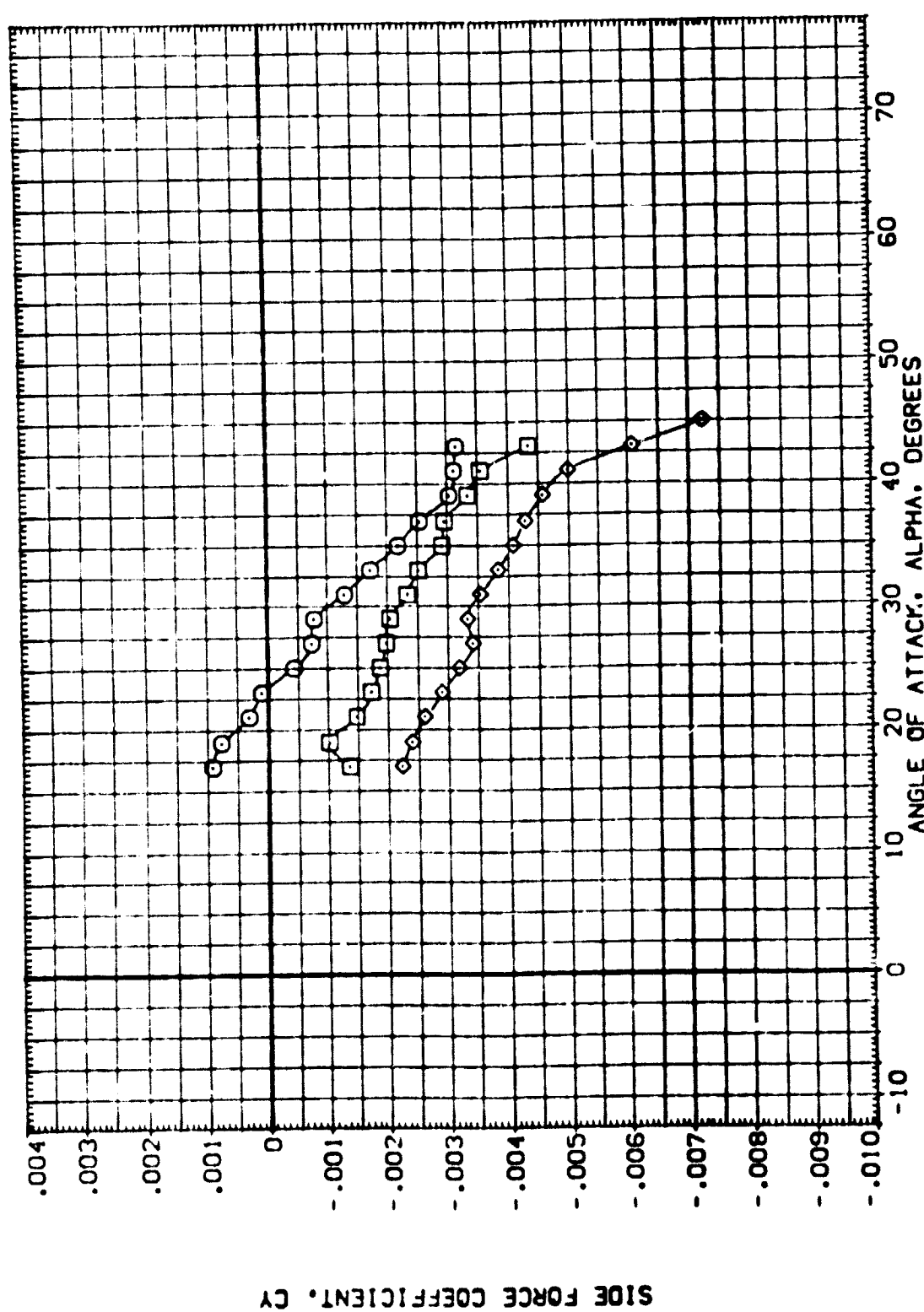


FIG. 25 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 0)
(A)MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(ATV051)	DATA B26 C9 E43 F8 M16 N28 R5 V8 V116
(ATV052)	DATA B26 C9 E43 F8 M16 N28 R5 V8 V116
(ATV020)	DATA B26 C9 E43 F8 M16 N28 R5 V8 V116

RMVL 500
1.860
3.530

BOFLAP .000
.000
.000

ELV-L0 20.000
20.000
20.000

ELV-L1 20.000
20.000
20.000

REFERENCE INFORMATION

SREF	2690.0000	50.FT.
LREF	174.8100	IN.
BREF	906.6300	IN. X0
YPRP	1076.6300	IN. Y0
ZPRP	375.0000	IN. Z0
SCALE	.0150	

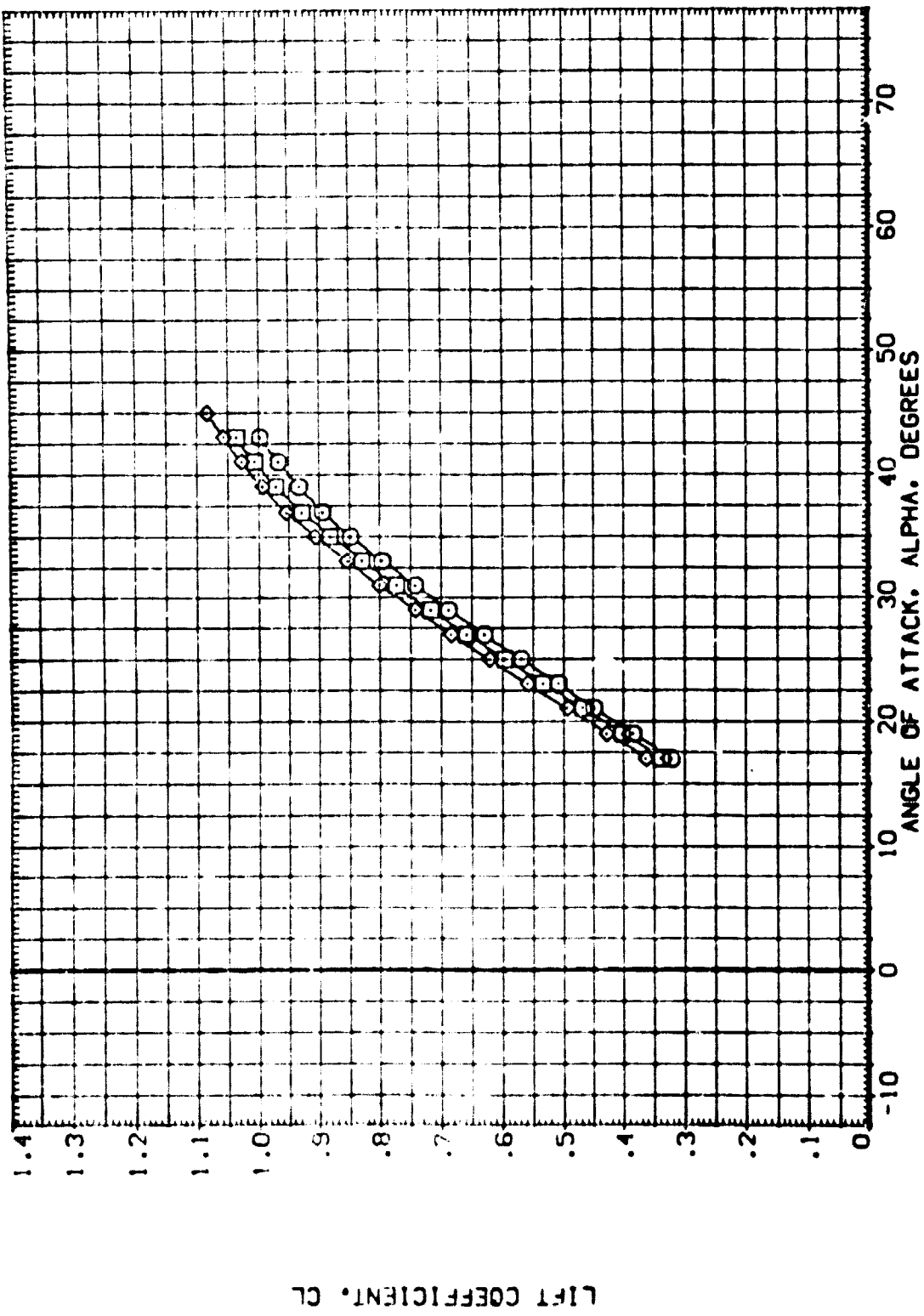


FIG. 25 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 0)

(M)MACH = 7.90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RVL	DELTA	ELV-L0	ELV-L1	REFERENCE INFORMATION
(A1V081)	CA79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.500	.000	20.000	20.000	SREF 2690.0000 SQ.FT.
(A1V082)	CA79 B26 C9 E43 F8 M16 N28 R5 V8 V116	1.860	.000	20.000	20.000	LREF 474.8100 IN.
(A1V020)	CA79 B26 C9 E43 F8 M16 N28 R5 V8 V116	3.530	.000	20.000	20.000	BREF 536.6800 IN.
						XREF 1076.6900 IN.
						YREF .0000 IN.
						ZREF 375.0000 IN.
						SCALE .0150

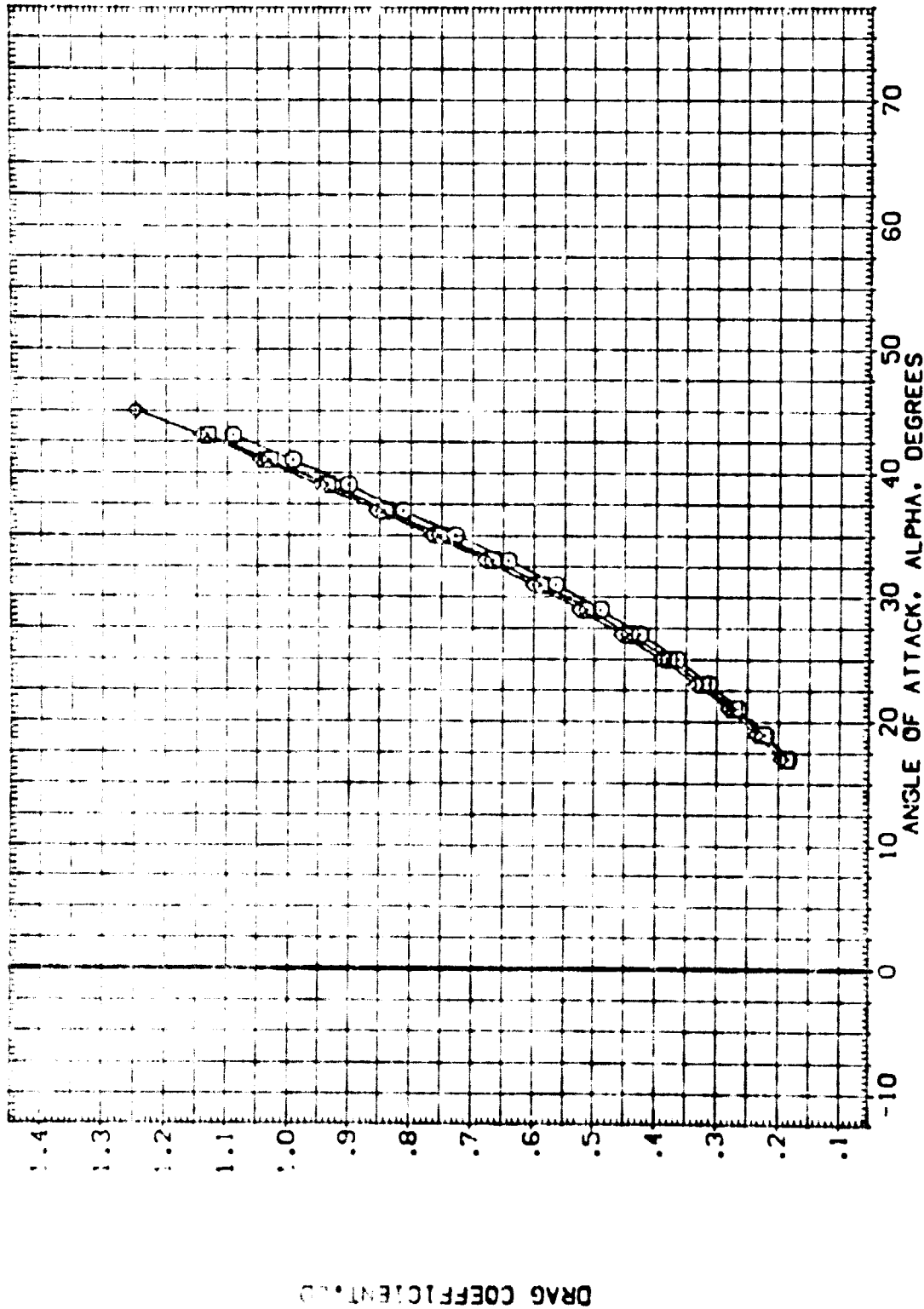


FIG. 25 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP= 0)

(A)MACH = 7.90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RVL	COLLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(ATV051)	DATA B06 C9 E43 FB M16 N08 R5 V8 M116	.500	.000	20.000	20.000	598F 2680.0000 50. FT.
(ATV052)	DATA B06 C9 E43 FB M16 N08 R5 V8 M116	1.000	.000	20.000	20.000	L21F 474.8100 IN.
(ATV053)	DATA B06 C9 E43 FB M16 N08 R5 V8 M116	3.500	.000	20.000	20.000	821F 926.5800 IN.
						N08P 1078.5800 IN. X0
						L0RP 11000 IN. Y0
						Z0RP 375.0000 IN. Z0
						SCALE .0150

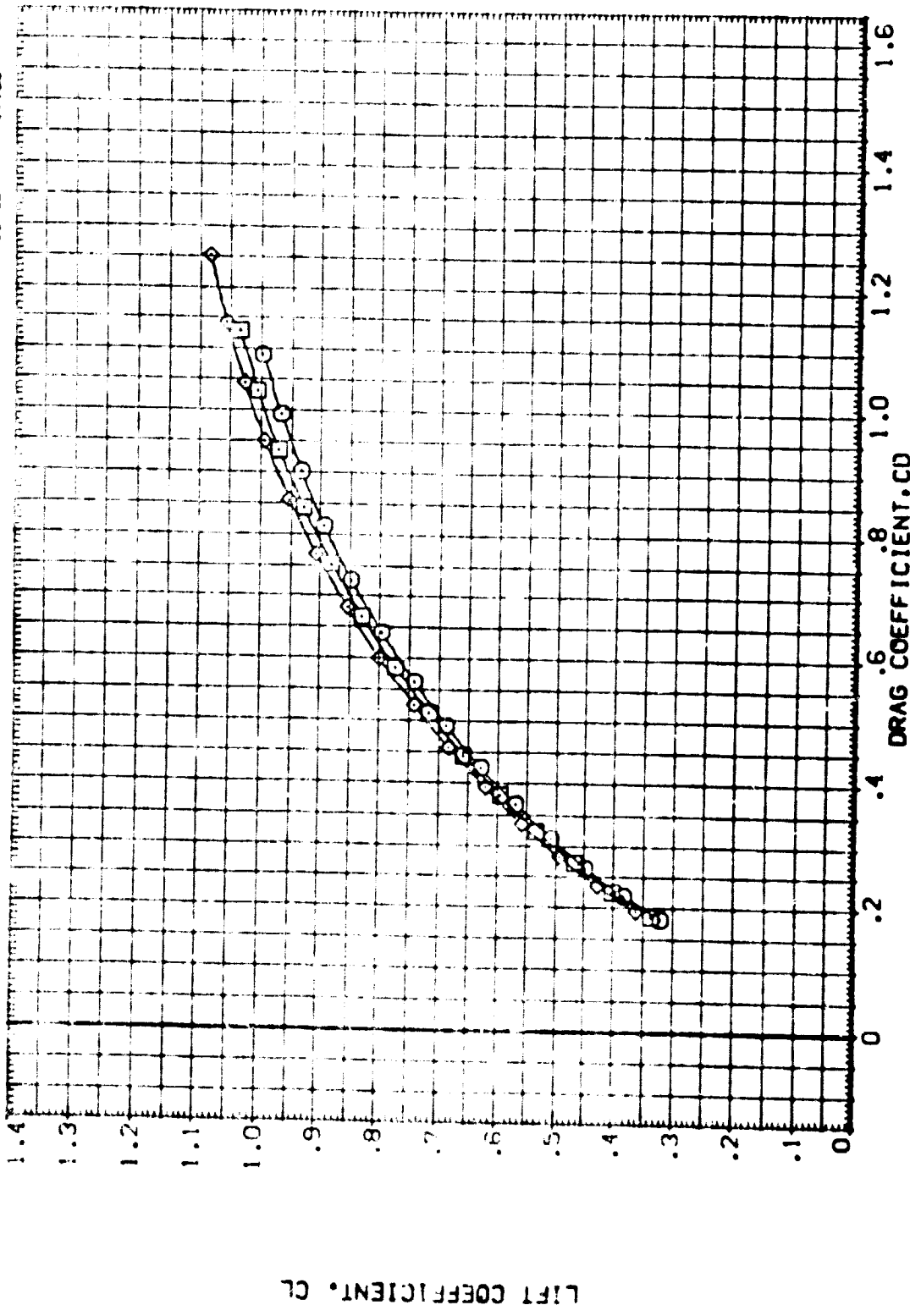


FIG. 25 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 0)
 (A)MACH = 7.90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	BOFLAP	ELV-L-0	ELV-L-1	REFERENCE INFORMATION
(ATV0611)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.500	.000	20.000	20.000	SREF 2630.0000 SQ.FT.
(ATV052)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	1.862	.000	20.000	20.000	LREF 474.8100 IN.
(ATV020)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	3.530	.000	20.000	20.000	BREF 936.6600 IN.
						XTRP 1076.6800 IN.X0
						YTRP .0000 IN.Y0
						ZTRP 375.0000 IN.Z0
						SCALE .0150

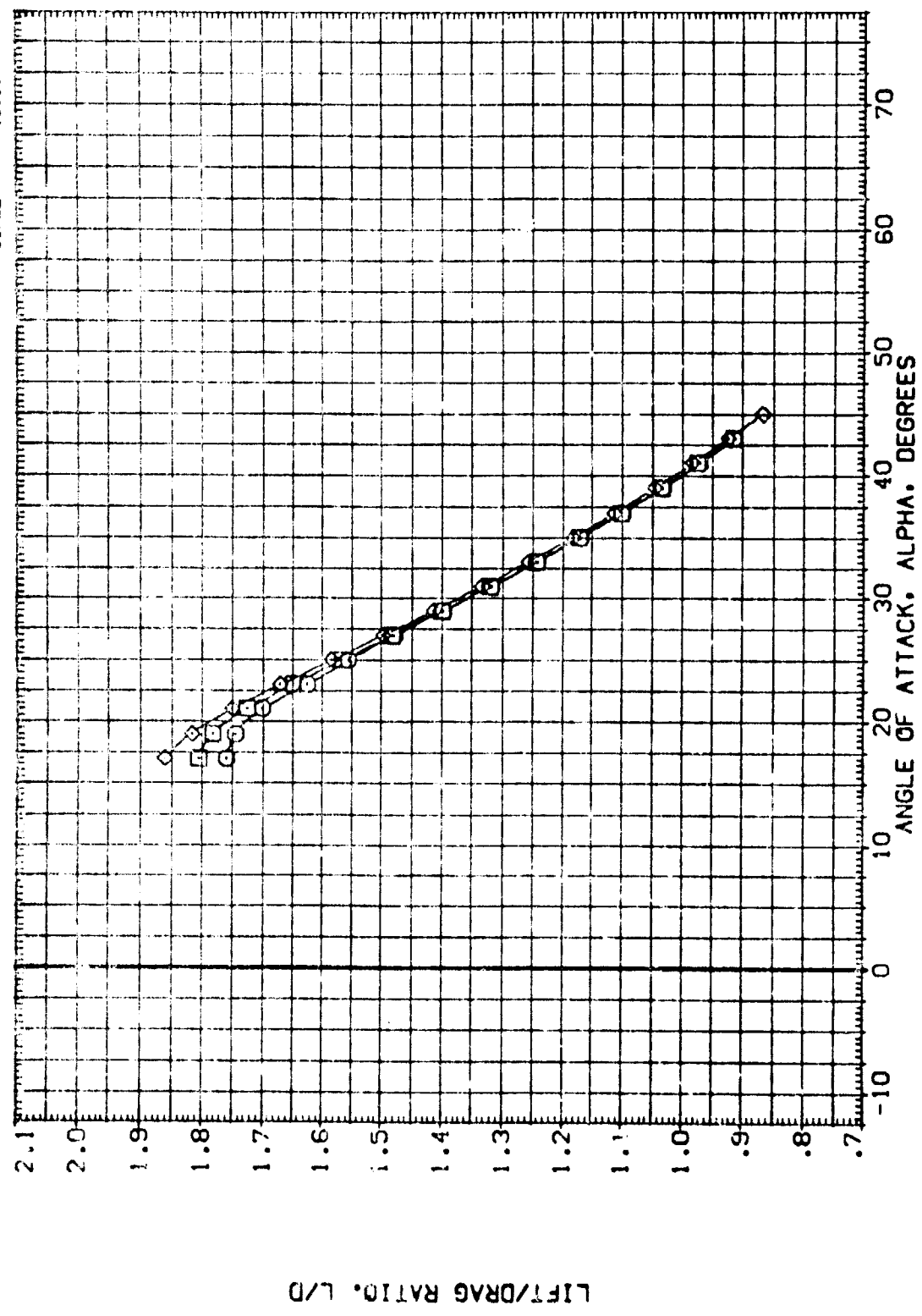


FIG. 25 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP= 0)

(A)MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(C1V062)	DAY8 B26 C9 E43 F8 H16 N28 R5 V8 V116
(C1V054)	DAY8 B26 C9 E43 F8 H16 N28 R5 V8 V116
(C1V025)	DAY9 B26 C9 E43 F8 H16 N28 R5 V8 V116

REFLAP ELV-L0 ELV-L1

.000	-40.000	-40.000
.000	-40.000	-40.000
.000	-40.000	-40.000

SCALE .0150

REFERENCE INFORMATION

SREF	2690.0000	50. FT.
LREF	474.8100	IN.
BREF	936.6800	IN. X0
XPRP	1076.6800	IN. X0
YPRP	.0000	IN. Y0
ZPRP	375.0000	IN. Z0

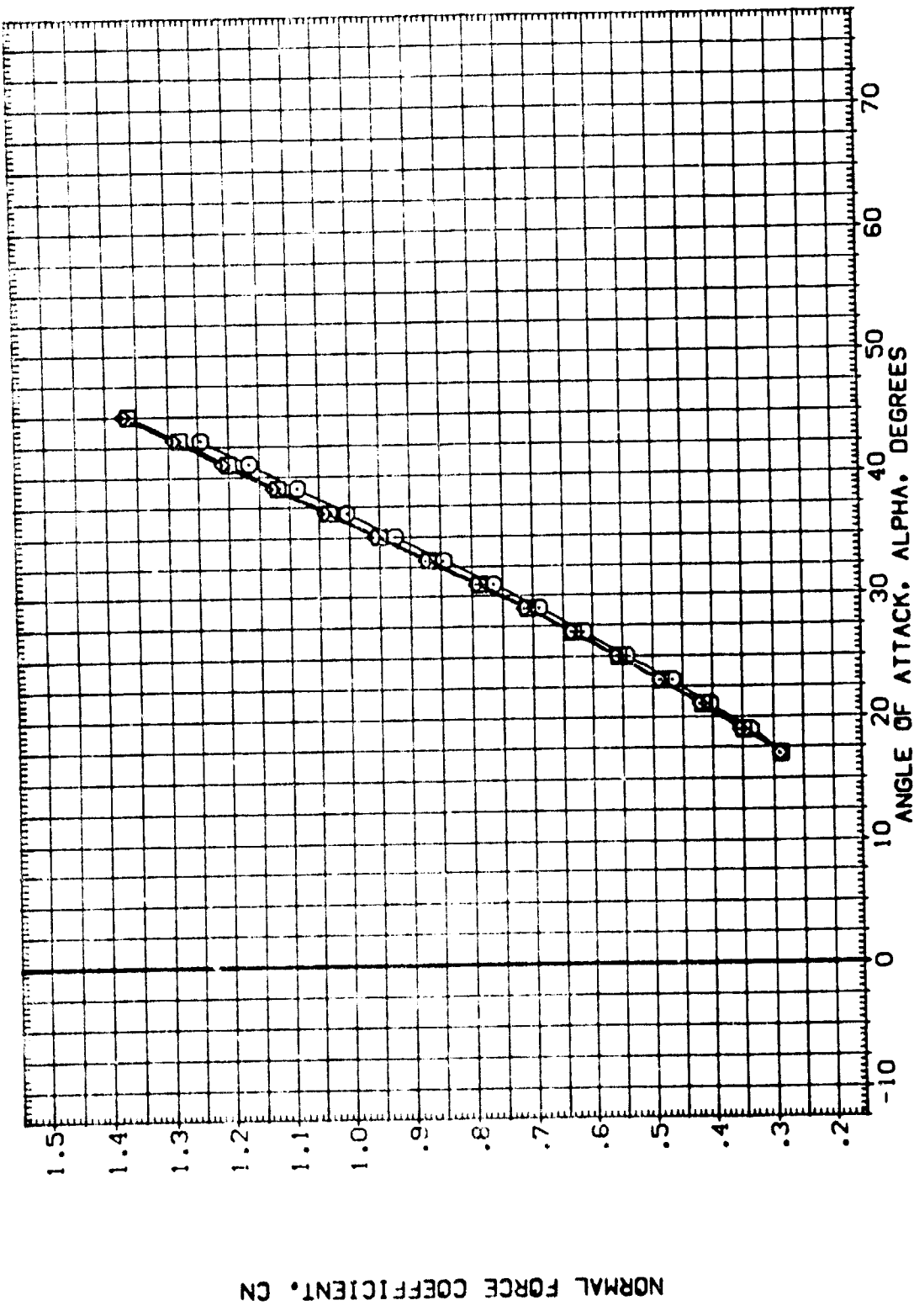


FIG. 26 REYNOLDS NUMBER EFFECTS (ELEVON = -40, BODY FLAP = 0)

(A)MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

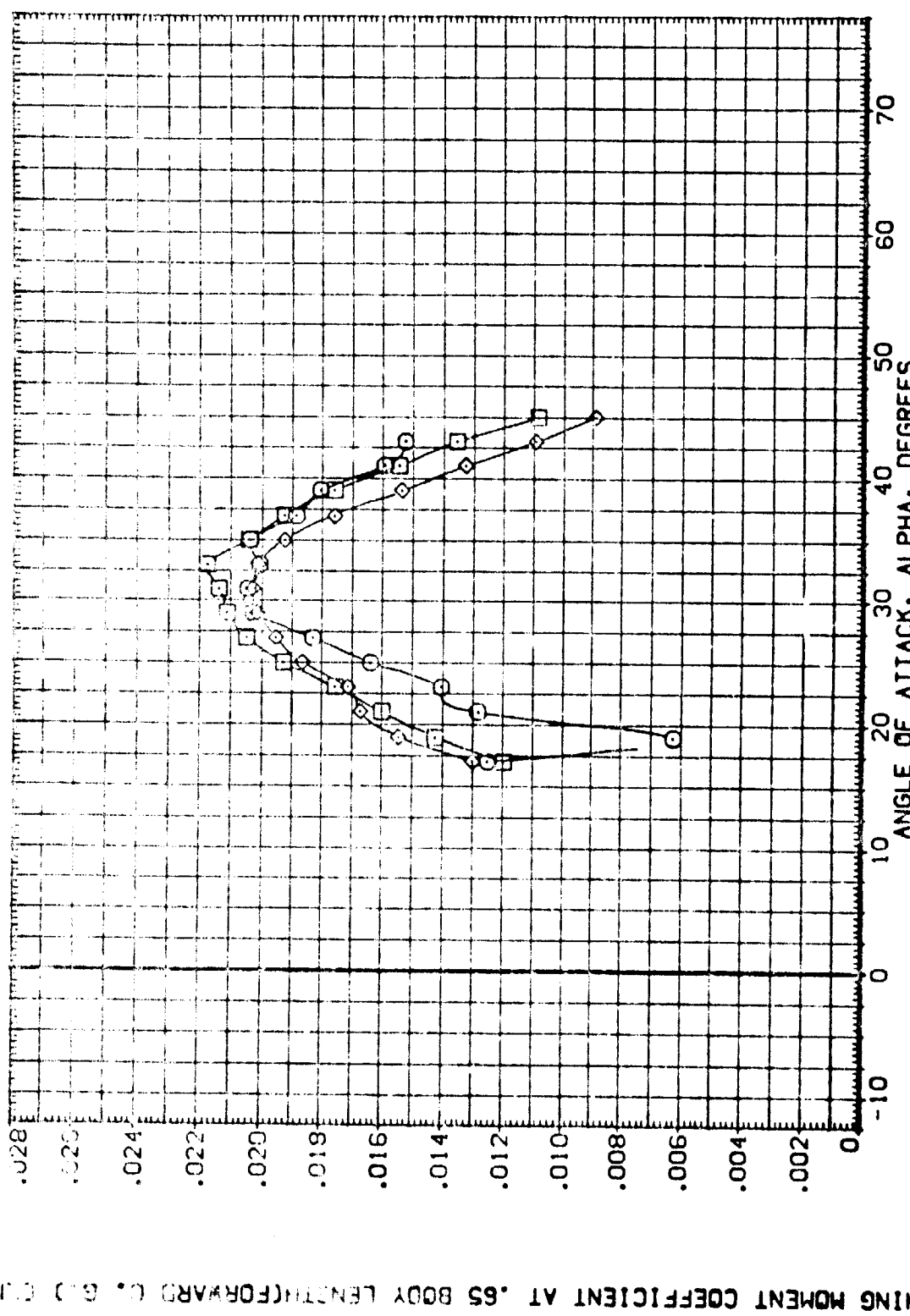
(C1V062)	QAY9	B26	C9	E43	F8	M16	N28	R5	V8	V116
(C1V054)	QAY9	B26	C9	E43	F8	M16	N28	RC	V8	V116
(C1V025)	QAY9	S25	C9	E43	F9	M16	N28	RS	V8	V116

RV/L BCLAP ELV-L0 ELV-L1

1.500	.000	-40.000	-40.000
1.860	.000	-40.000	-40.000
3.530	.000	-40.000	-40.000

REFERENCE INFORMATION

SREF	2690.0000	50.FT.
LREF	474.8100	IN.
BREF	936.6900	IN.
XTRP	1076.6900	IN.
YTRP	.0000	IN.
ZTRP	375.0000	IN.
SCALE	.0150	



PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH(FORWARD OF G.D) (CM/FWD)

FIG. 26 REYNOLDS NUMBER EFFECTS (ELEVON = -40, BODY FLAP = 0)
(A)MACH = 7.90

DATA SET SYMBOL: (CTV052) (CTV053) (CTV055)

CONFIGURATION DESCRIPTION:
 QA79 B26 C9 E43 F8 M16 N28 RS V8 V116
 QA79 B26 C9 E43 F8 M16 N28 RS V8 V116
 QA79 B26 C9 E43 F8 M16 N28 RS V8 V116

REFLAP: .000
 ELY-LO: -40.000
 ELY-LI: -40.000

RSVL: .500
 1.860
 3.930

REFERENCE INFORMATION:
 SREF: 2690.0000 SO.FT.
 LREF: 474.8100 IN.
 BREF: 936.6800 IN.
 XMRP: 1079.6800 IN.
 YMRP: .0000 IN.
 ZMRP: 375.0000 IN.
 SCALE: .0150

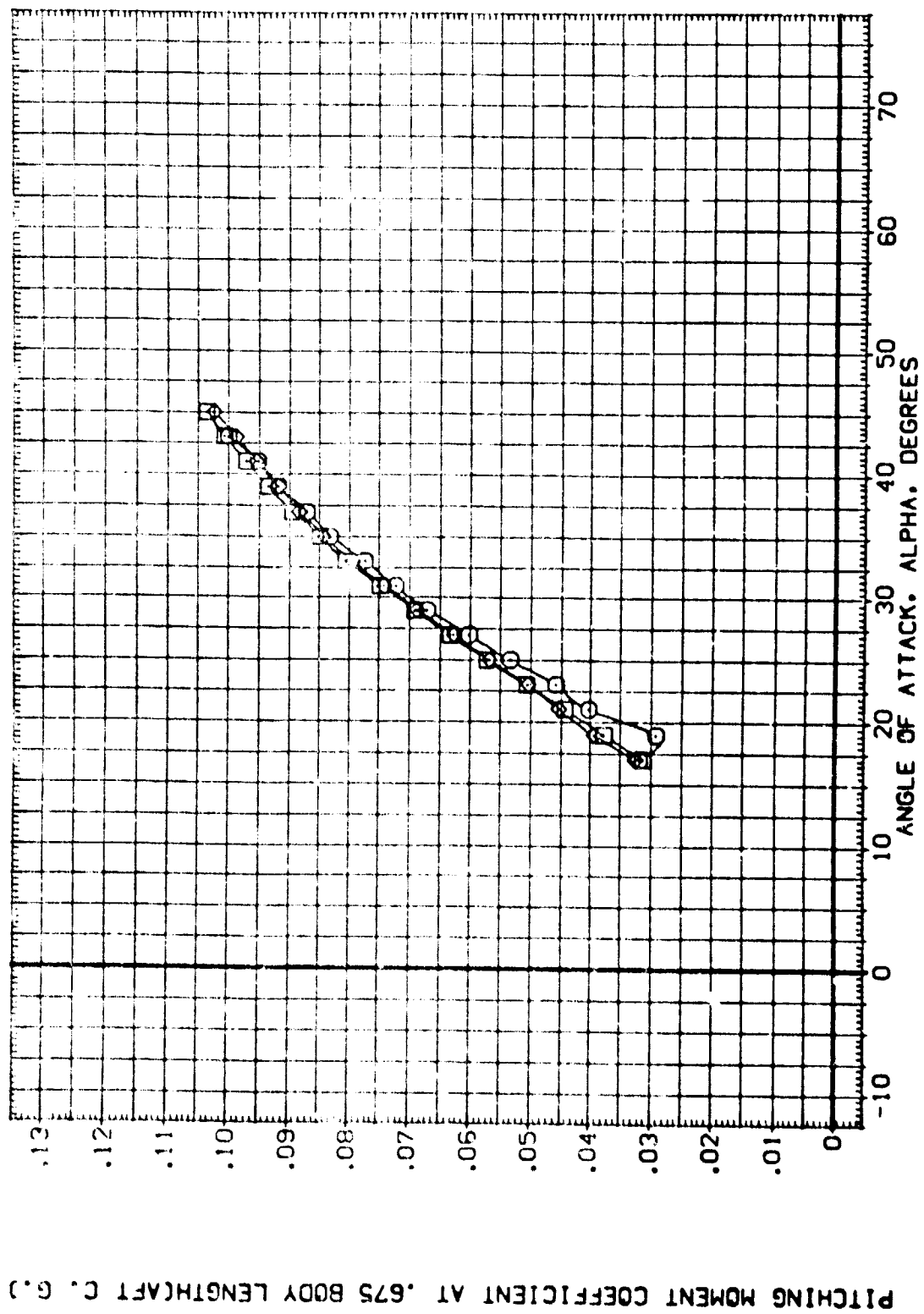


FIG. 26 REYNOLDS NUMBER EFFECTS (ELEVON = -40, BODY FLAP = 0)

(A)MACH = 7.90



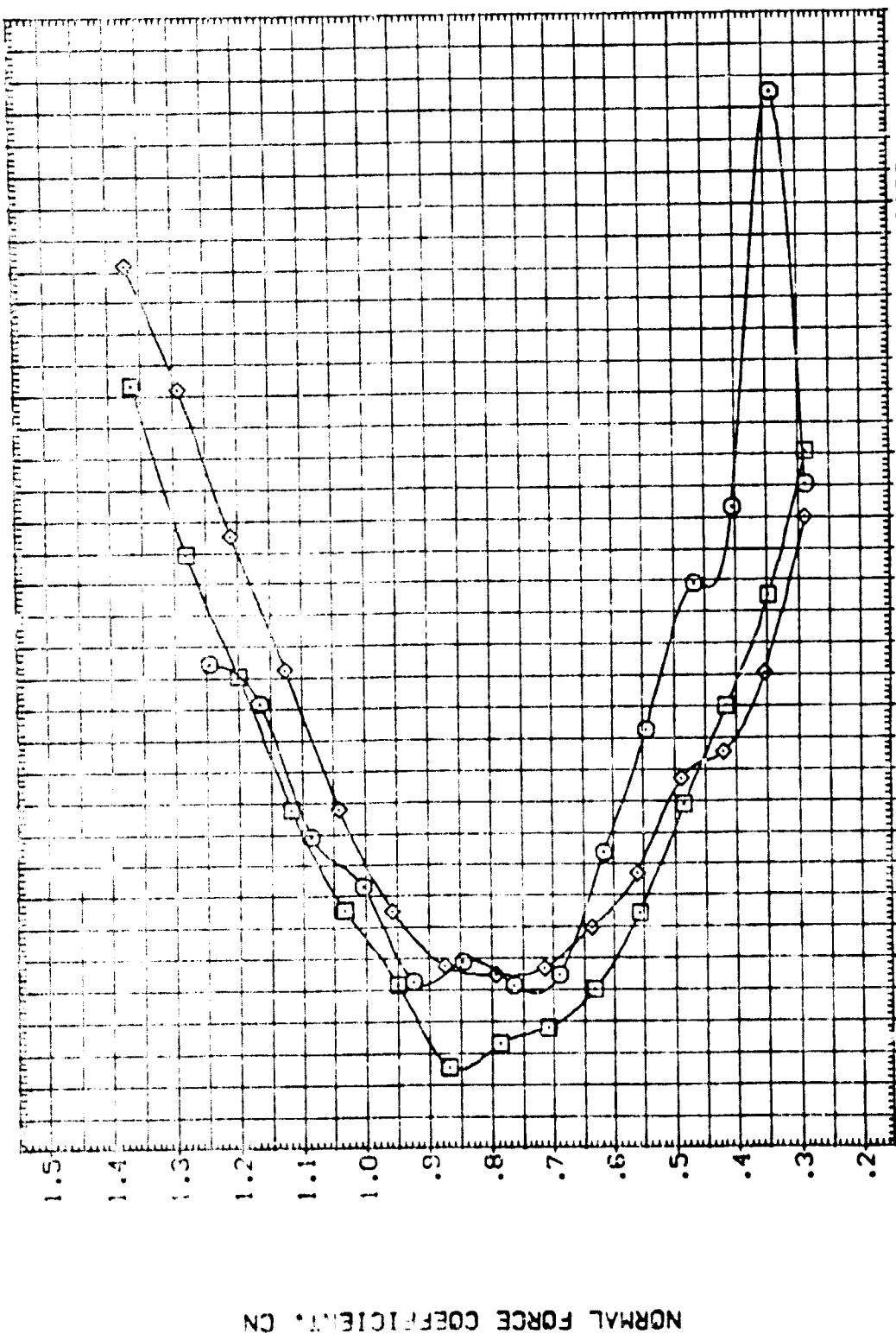
DATA SET SYMBOL
 (C1V052)
 (C1V054)
 (C1V055)

CONFIGURATION DESCRIPTION
 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116

RVL
 .500
 1.850
 3.530

REFLAP ELV-L0 ELV-L1
 .000 -40.000 -40.000
 .000 -40.000 -40.000
 .000 -40.000 -40.000

REFERENCE INFORMATION SQ.FT.
 SREF 2690.0000 IN.
 LREF 474.8100 IN.
 BREF 936.6800 IN.
 XTREF 1076.6900 IN.
 YREF .0000 IN.
 ZREF 375.0000 IN.
 SCALE .0150



PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH (FORWARD C. G.) CLMFWD
 .0200 .0160 .0080

FIG. 26 REYNOLDS NUMBER EFFECTS (ELEVON = -40, BODY FLAP = 0)

(A)MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CTM052) CA79 B26 C9 E43 F8 M16 N28 RS V8 V116

(CTM054) CA79 B26 C9 E43 F8 M16 N28 RS V8 V116

(CTM025) CA79 B26 C9 E43 F8 M16 N28 RS V8 V116

REFLAP BOFLAP ELV-L0 ELV-L1

 .000 .000 -40.000 -40.000

 .000 .000 -40.000 -40.000

 .000 .000 -40.000 -40.000

RM/L .33 .000 .000 .000

 1.860 .000 .000 .000

 3.530 .000 .000 .000

REFERENCE INFORMATION

SREF 2690.0000 50. FT.

LREF 474.8100 IN.

SREF 936.6800 IN.

XPRP 1076.6800 IN. X0

YPRP .0000 IN. Y0

ZPRP 375.0000 IN. Z0

SCALE .0150

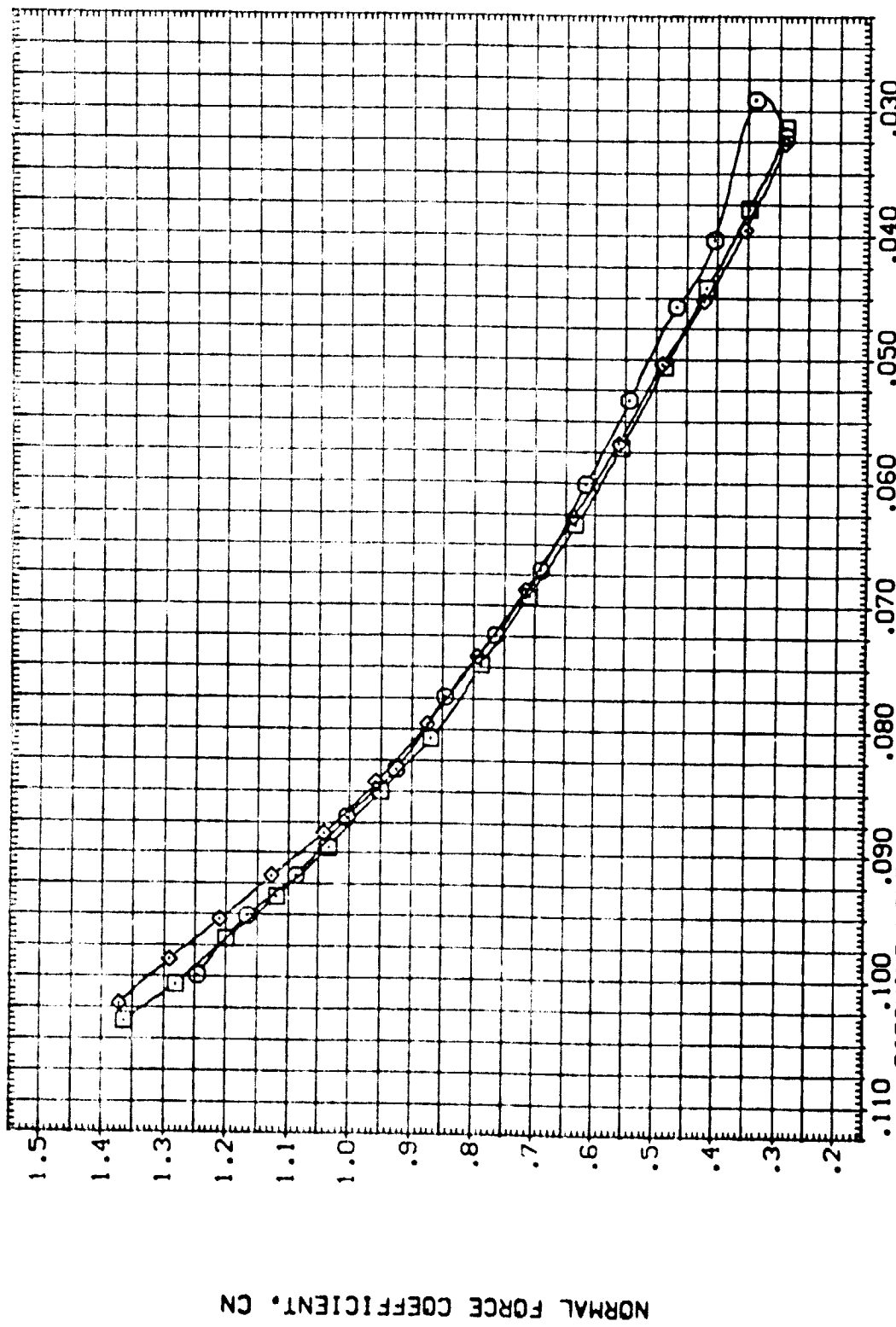


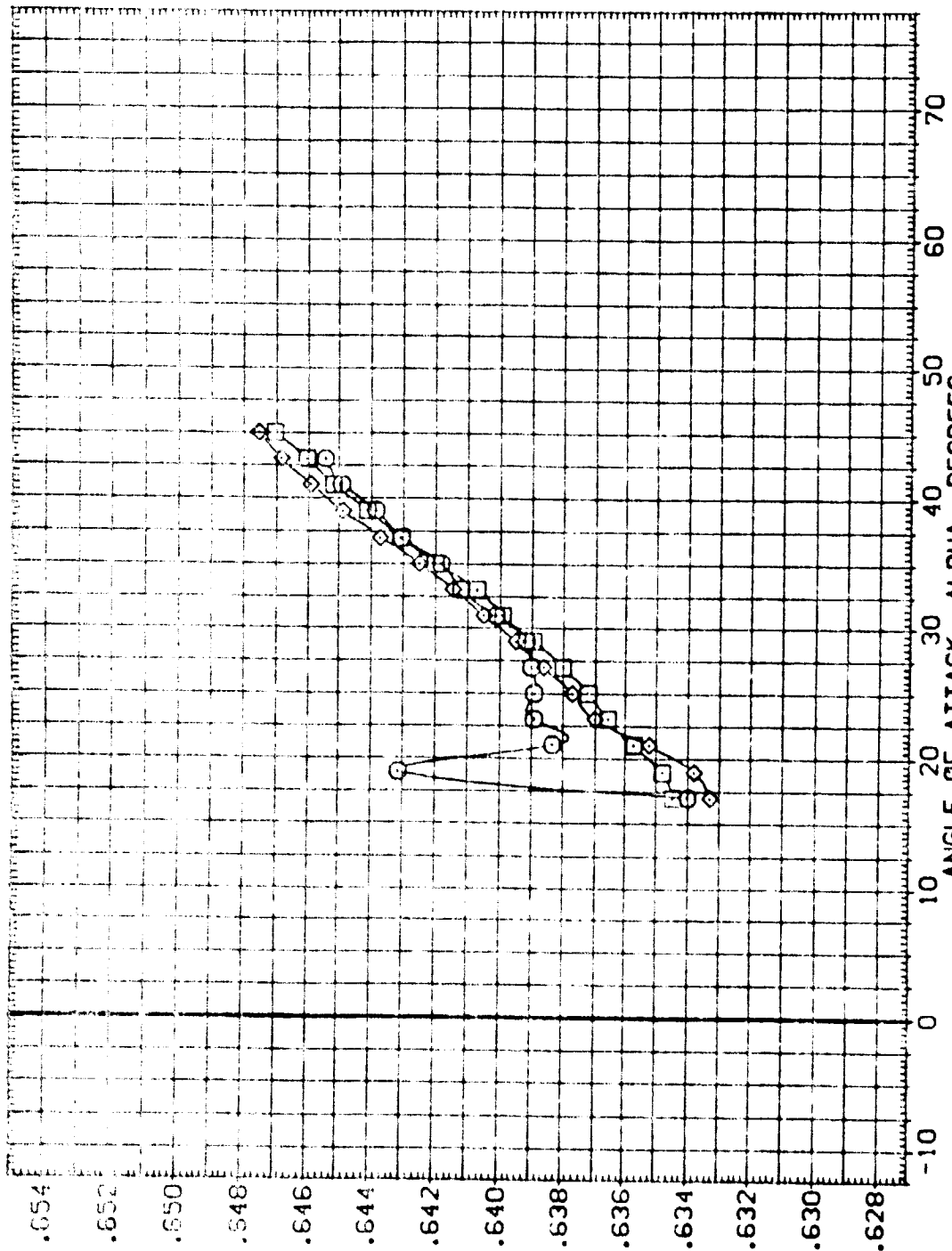
FIG. 26 REYNOLDS NUMBER EFFECTS (ELEVON = -40, BODY FLAP = 0)

(A) MACH = 7.90



DATA SET SYMBOL CONFIGURATION DESCRIPTION RVAL BDFLAP ELV-L0 ELV-L1 REFERENCE INFORMATION

Symbol	Configuration	Description	RVAL	BDFLAP	ELV-L0	ELV-L1	REF. INFO
(C1V062)	CA79 B26 C9 E43 F8 M16 N28 R5 V8 V116		.500	.000	-40.000	-40.000	2690.0000 SQ.FT.
(C1V054)	CA79 B26 C9 E43 F8 M16 N28 R5 V8 V116		1.260	.000	-40.000	-40.000	474.8100 IN.
(C1V025)	CA79 B26 C9 E43 F8 M16 N28 R5 V8 V116		3.530	.000	-40.000	-40.000	936.6800 IN.
							1076.6800 IN.X0
							.0000 IN.Y0
							375.0000 IN.Z0
							SCALE .0150



CENTER OF PRESSURE LOCATION AS A FRACTION OF BODY LENGTH, XCP/L

FIG. 26 REYNOLDS NUMBER EFFECTS (ELEVON = -40, BODY FLAP = 0)

(A)MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

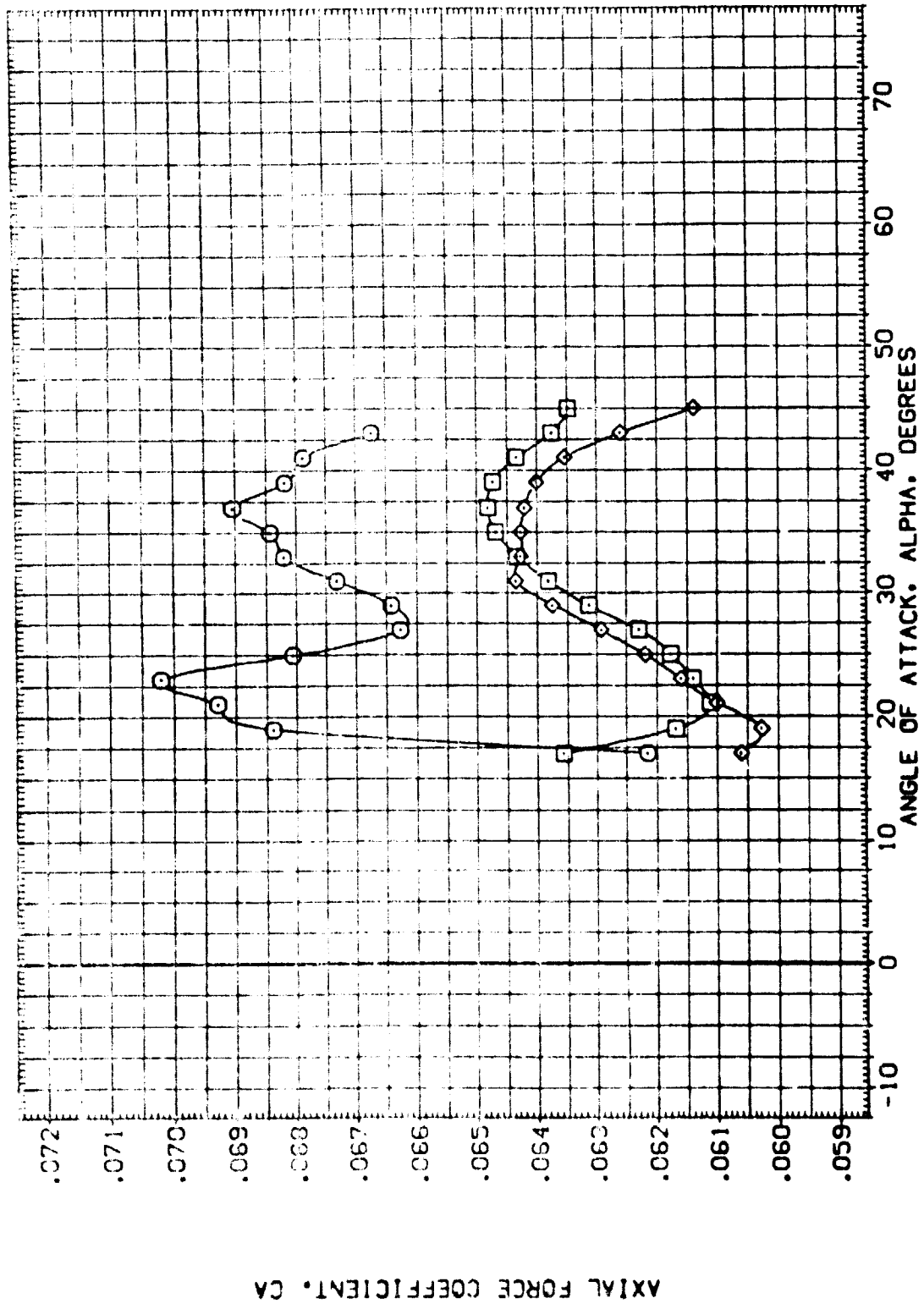
(CTV002)	0A79	826	C9	E43	FB	M16	N28	RS	V8	V116
(CTV004)	0A79	826	C9	E43	FB	M16	N28	RS	V8	V116
(CTV005)	0A79	826	C9	E43	FB	M16	N28	RS	V8	V116

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LINE	474.8100	IN.
PCRF	936.6900	IN.
XPRP	1076.5800	IN.
YPRP	575.0000	IN.
ZPRP	575.0000	IN.
SCALE	.0150	

RMV BUFLAP ELV-L0 ELV-L1

500	.000	-40.000	-40.000
1.860	.000	-40.000	-40.000
3.530	.000	-40.000	-40.000



AXIAL FORCE COEFFICIENT, CA

FIG. 26 REYNOLDS NUMBER EFFECTS (ELEVON = -40, BODY FLAP = 0)

CA/MACH = 7.90

DATA SET SYMBOL: (C1052) (C1054) (C1025)

CONFIGURATION DESCRIPTION:
 DAY8 B06 C9 E43 F8 M16 N08 R5 V8 V116
 DAY9 B26 C9 E43 F8 M16 N28 R5 V8 V116
 DAY9 B26 C9 E43 F8 M16 N28 R5 V8 V116

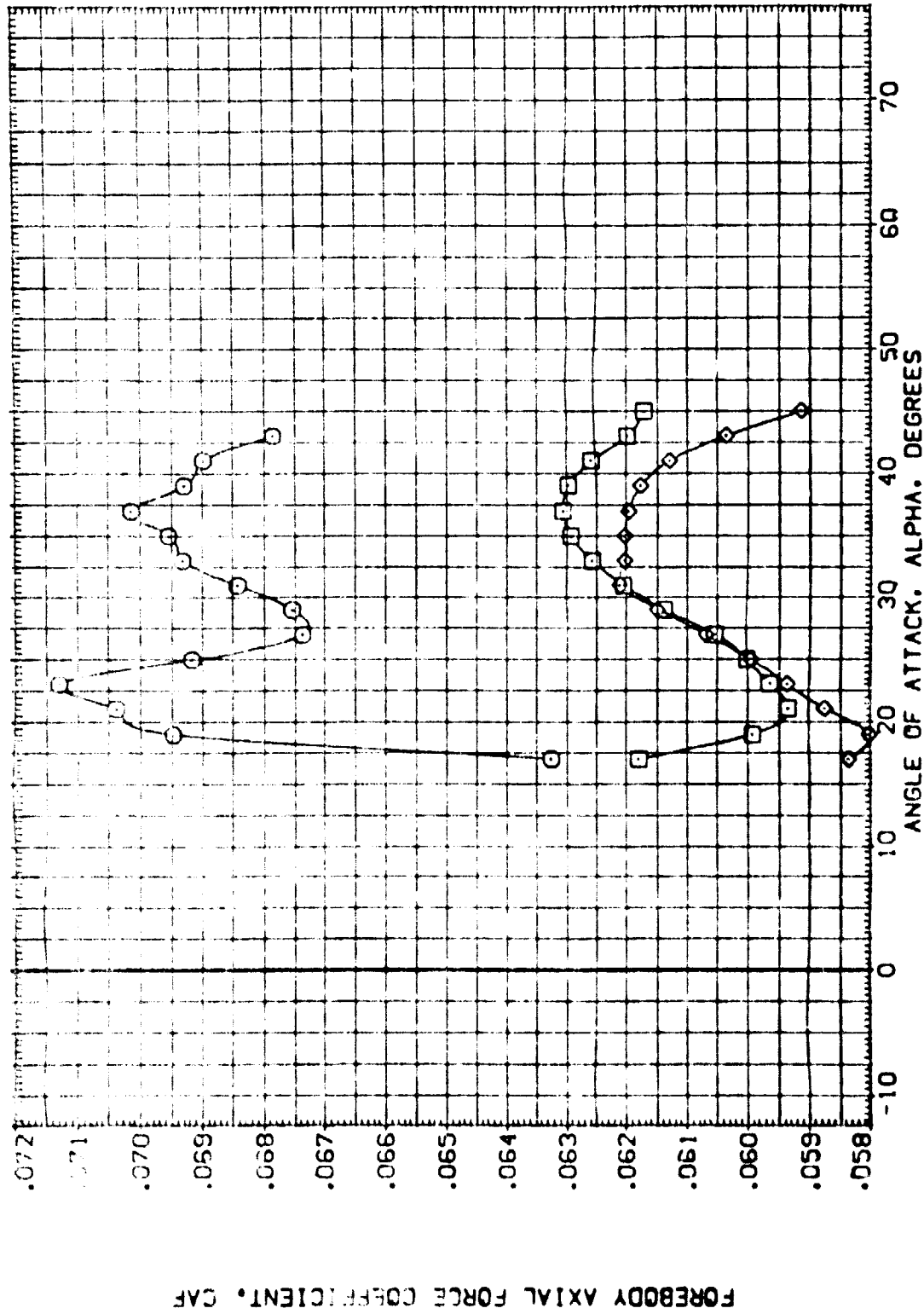
RVL: .500
 1.880
 3.530

BOFLAP: .000
 .000
 1.000

ELV-L0: -40.000
 -40.000
 -40.000

ELV-L1: -40.000
 -40.000
 -40.000

REFERENCE INFORMATION:
 SREF: 2690.0000 90.FT.
 LREF: 474.8100 IN.
 BREF: 936.6800 IN.X0
 XTRP: 1076.6800 IN.Y0
 YTRP: .0000 IN.Z0
 ZTRP: 375.0000 IN.Z0
 SCALE: .0150



FOREBODY AXIAL FORCE COEFFICIENT, CAF

FIG. 26 REYNOLDS NUMBER EFFECTS (ELEVON = -40, BODY FLAP = 0)

(A)MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

01-062	0	0A79	826	09	E43	F8	M16	N28	R5	V8	M116
01-063	0	0A79	826	09	E43	F8	M16	N28	R5	V8	M116
01-065	0	0A79	826	09	E43	F8	M16	N28	R5	V8	M116

REFERENCE INFORMATION:

SREF	2690.0000	SO.FT.
LBREF	474.8100	
BRREF	936.6900	
VRREF	1.751500	
VRREF	1.0000	
VRREF	375.0000	
SCALE	1.0150	

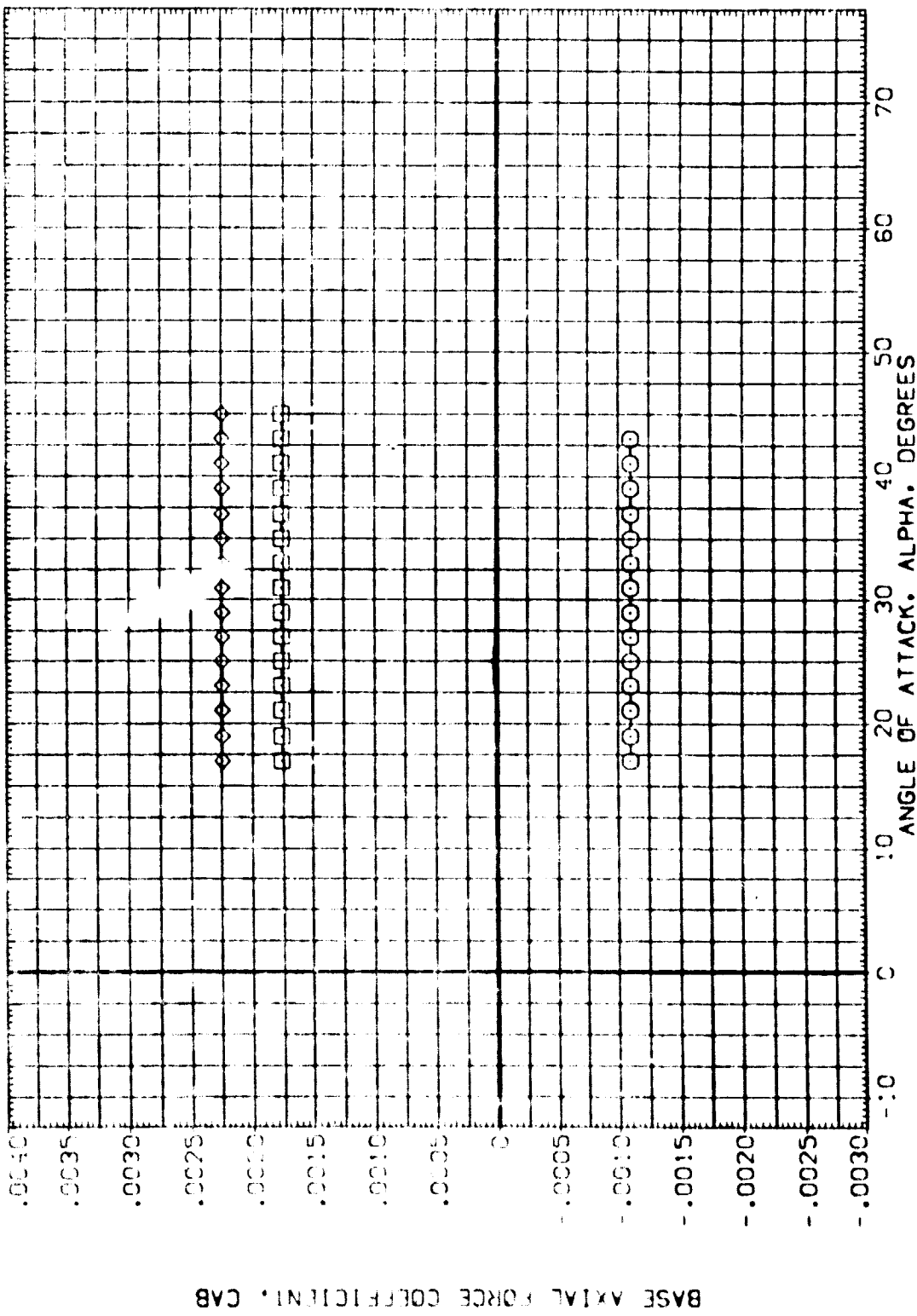


FIG. 26 REYNOLDS NUMBER EFFECTS (ELEVON = -40, BODY FLAP = 0)

(A)MACH = 7.90

REFERENCE INFORMATION
 SRP 2690.0000 SS.F.C.
 LAR 4.4.81.02
 BRK 936.8800
 YR20 1016.8800
 YR200 10000
 YR2000 375.0000
 SCALE 10150

R/V L BOFLAP ELY-UD ELY-UL
 .500 .000 -40.000 -40.000
 1.650 .000 -40.000 -40.000
 3.530 .000 -40.000 -40.000

DATA SYMBOL CONFIGURATION DESCRIPTION
 (C) 928 09 243 18 M16 N28 R5 18 V116
 (C) 929 09 243 18 M16 N28 R5 18 V116
 (C) 930 09 243 18 M16 N28 R5 18 V116
 (C) 931 09 243 18 M16 N28 R5 18 V116

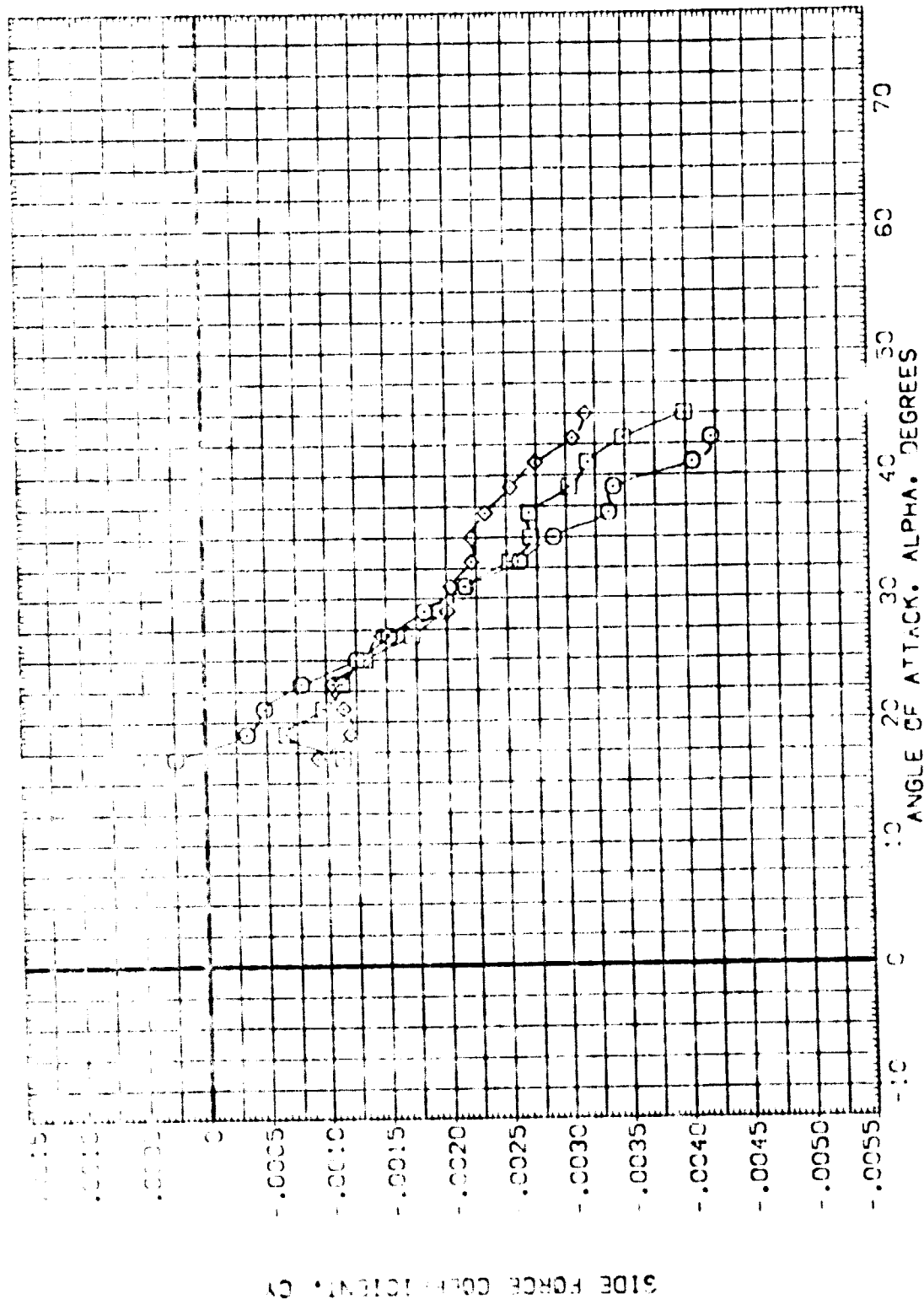


FIG. 26 REYNOLDS NUMBER EFFECTS (ELEVON = -40, BODY FLAP = 0)

REYNOLDS = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(A1052)	0479	936	C9	E43	F8	H16	N28	R5	V8	W116
(A1054)	0479	936	C9	E43	F8	H16	N28	R5	V8	W116
(A1055)	0479	936	C9	E43	F8	H16	N28	R5	V8	W116

REFERENCE INFORMATION

SCALE	20.90	00.00
SCALE	4.14	00.00
SCALE	936	00.00
SCALE	1.79	00.00
SCALE	375	00.00
SCALE	10.00	00.00

BOE LAP ELV-LO ELV-HI

500	000	140.000	140.000
1.800	000	140.000	140.000
3.590	000	140.000	140.000

R/V/L

500	000	140.000	140.000
1.800	000	140.000	140.000
3.590	000	140.000	140.000

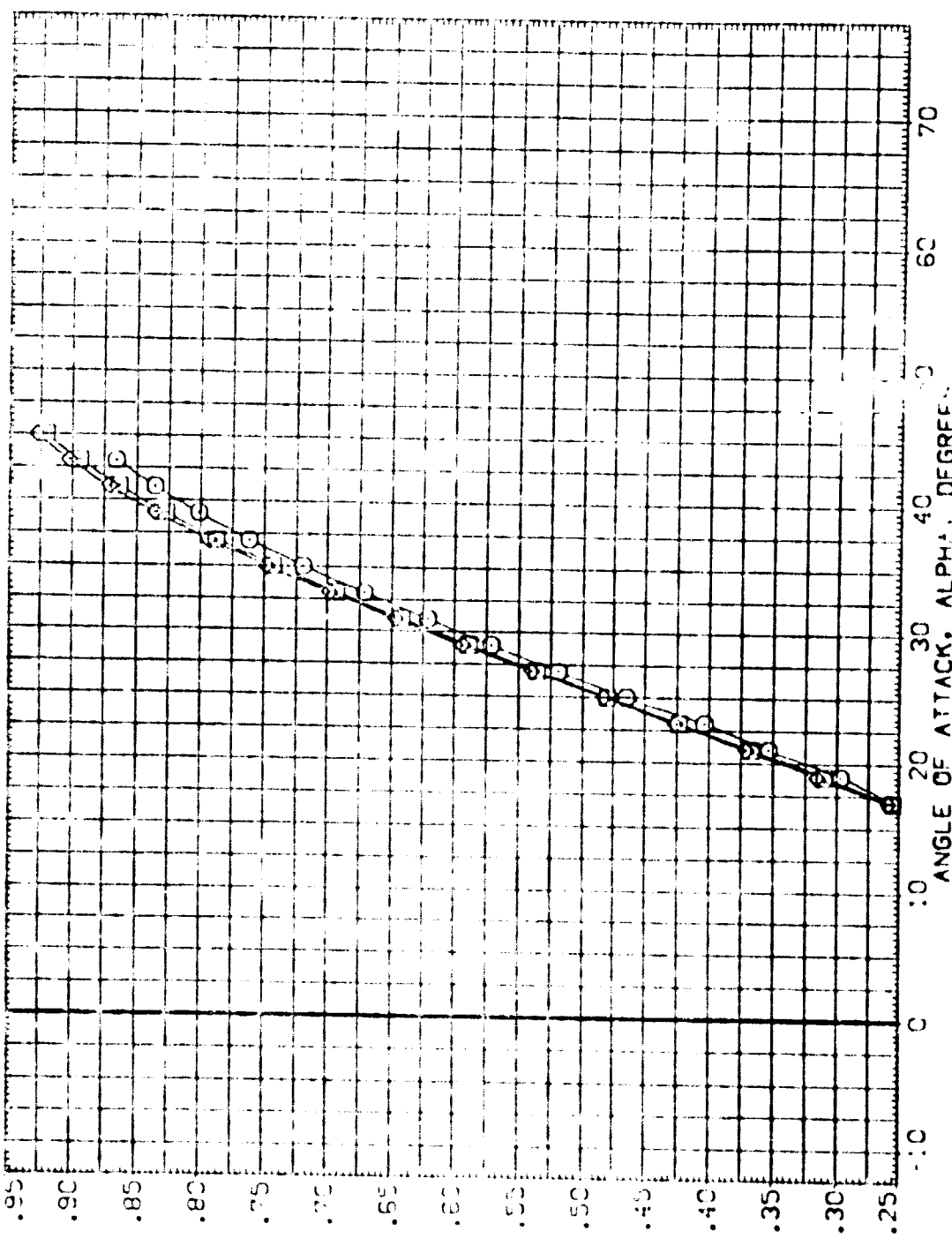


FIG. 26 REYNOLDS NUMBER EFFECTS (ELEVON = -40, BODY FLAP = 0)
 (A) MACH = 7.90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	BD FLAP	ELV-H0	ELV-H1	REFERENCE INFORMATION
(A) 062	0478 025 09 543 08 116 109 06 18 1116	.500	.000	-40.000	-40.000	SPE 2690.0000 SQ.FT.
(A) 074	0478 025 09 543 08 116 109 06 18 1116	1.850	.000	-40.000	-40.000	WAF 474.6100
(A) 075	0478 025 09 543 08 116 109 06 18 1116	3.530	.000	-40.000	-40.000	BOF 936.8800
						WVZ 1276.5800
						WVY 1276.5800
						WVZ 375.0000
						WVY 375.0000
						SCALE 10.750

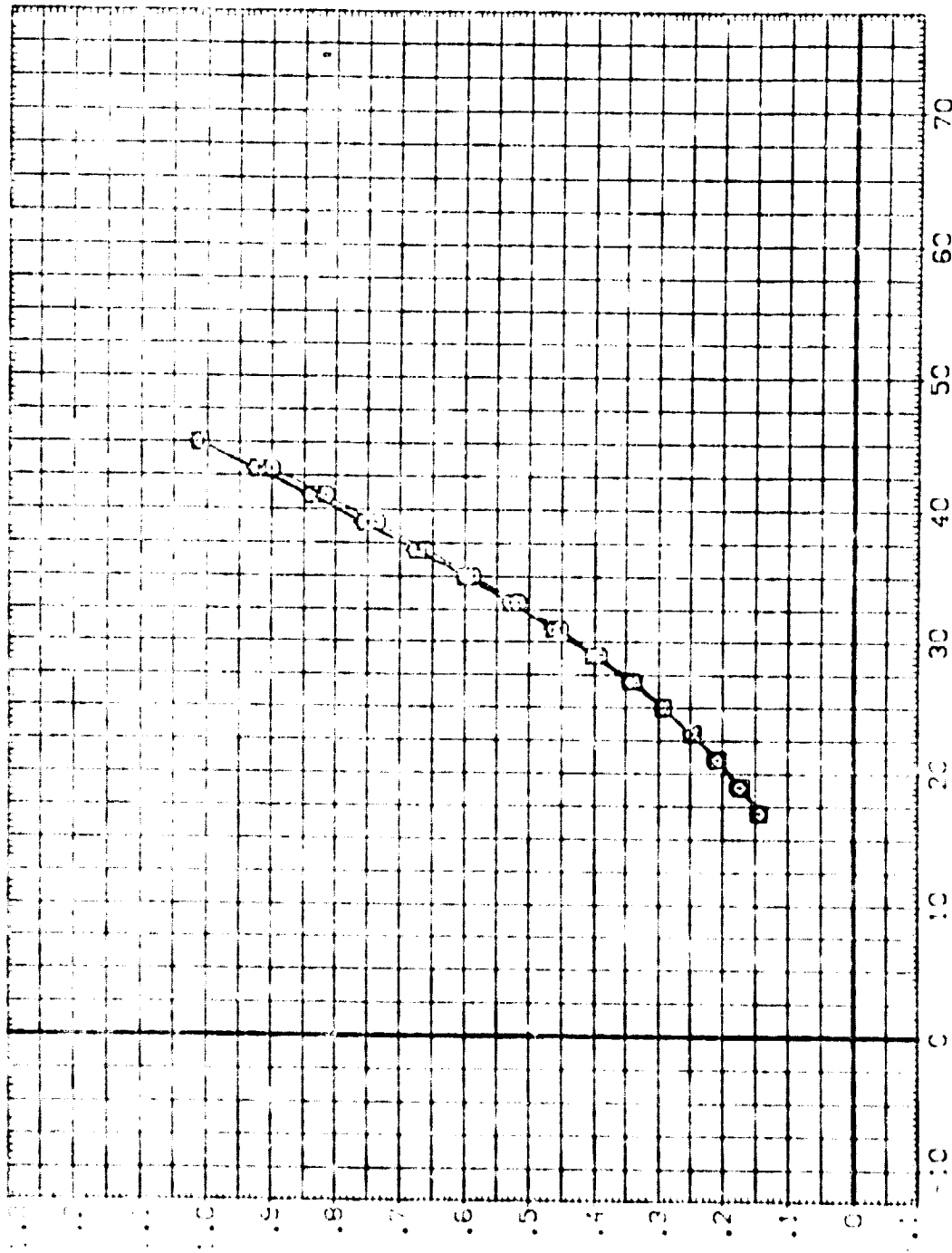


FIG. 26 REYNOLDS NUMBER EFFECTS (ELEVN = -40, BODY FLAP = 0)

(A) MACH 0.80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(A1002)	019	020	030	040	050	060	070	080	090	100
(A1003)	019	020	030	040	050	060	070	080	090	100
(A1004)	019	020	030	040	050	060	070	080	090	100

90° FLAP ELEV ELEV-CL

0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

RVL 500 1000 1500 2000

DIFFERENCE INFORMATION

5000	0.0000
1000	0.0000
500	0.0000
200	0.0000
100	0.0000
50	0.0000
25	0.0000
10	0.0000
5	0.0000
2	0.0000
1	0.0000

SCALE 375.0000

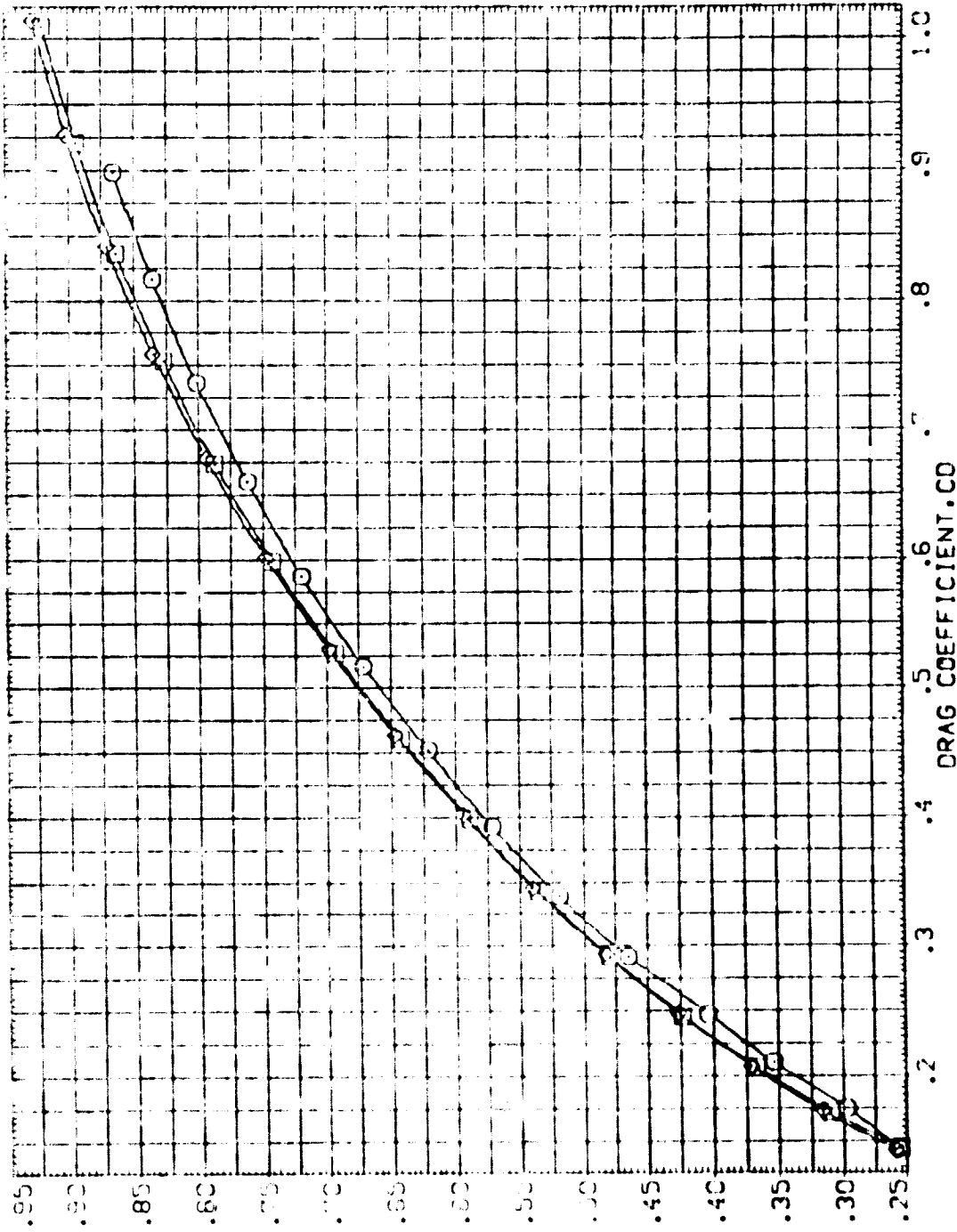


FIG. 26 REYNOLDS NUMBER EFFECTS (ELEVON = -40, BODY FLAP = 0)

(A)MACH = 7.90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	BOE LAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(A1V062)	0A79 B26 C9 E43 F8 M16 N28 P5 V8 Y116	.500	.000	-40.000	-40.000	SREF 2690.0000
(A1V054)	0A79 B26 C9 E43 F8 M16 N28 P5 V8 Y116	1.860	.000	-40.000	-40.000	LREF 474.8100
(A1V025)	0A79 B26 C9 E43 F8 M16 N28 P5 V8 Y116	3.530	.000	-40.000	-40.000	BREF 936.6800
						XPRD 1076.6800
						YMRD .0000
						ZMRD .0000
						SCALE .0150

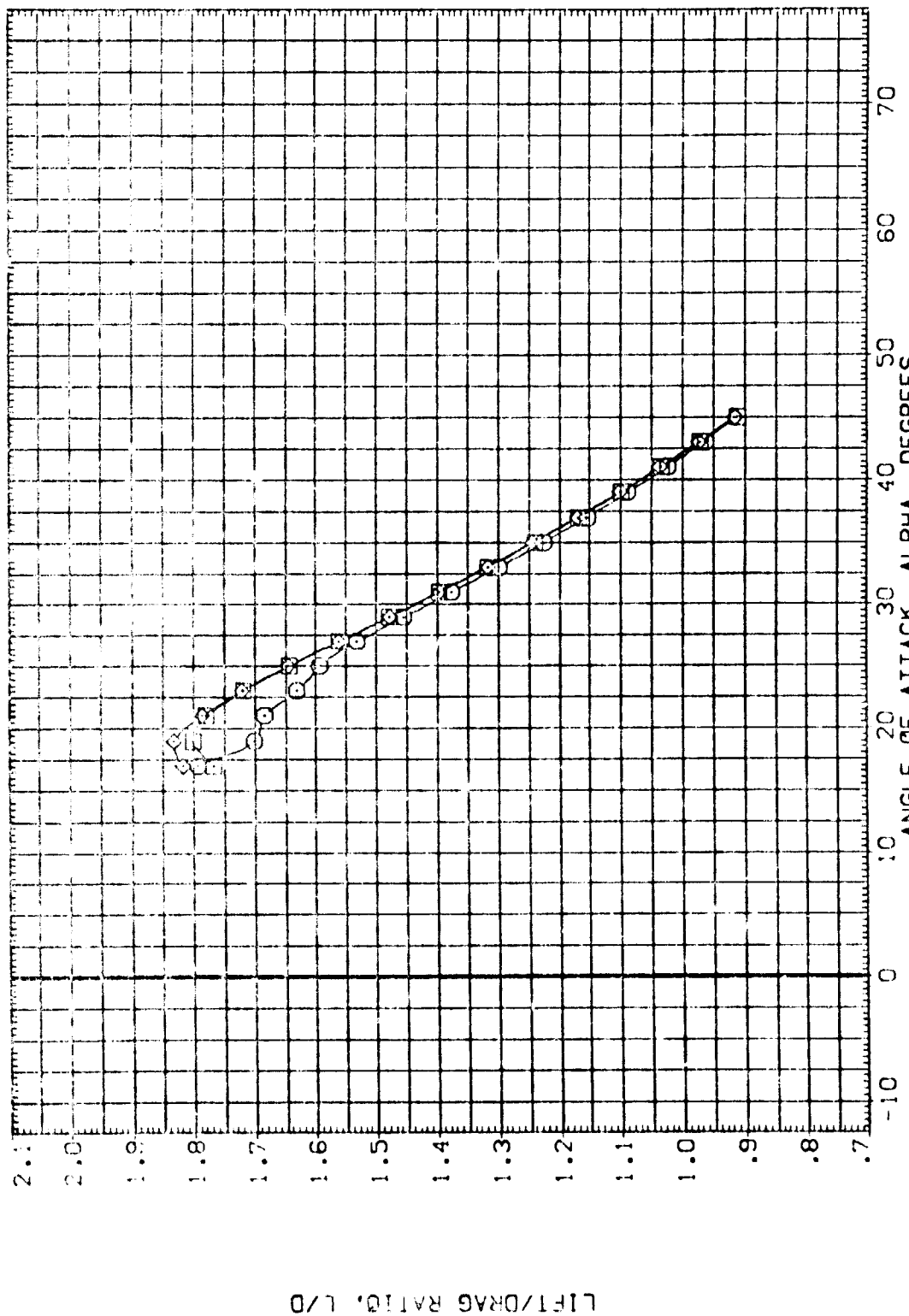


FIG. 26 REYNOLDS NUMBER EFFECTS (ELEVON = -40, BODY FLAP = 0)

(A)MACH = 7.9C

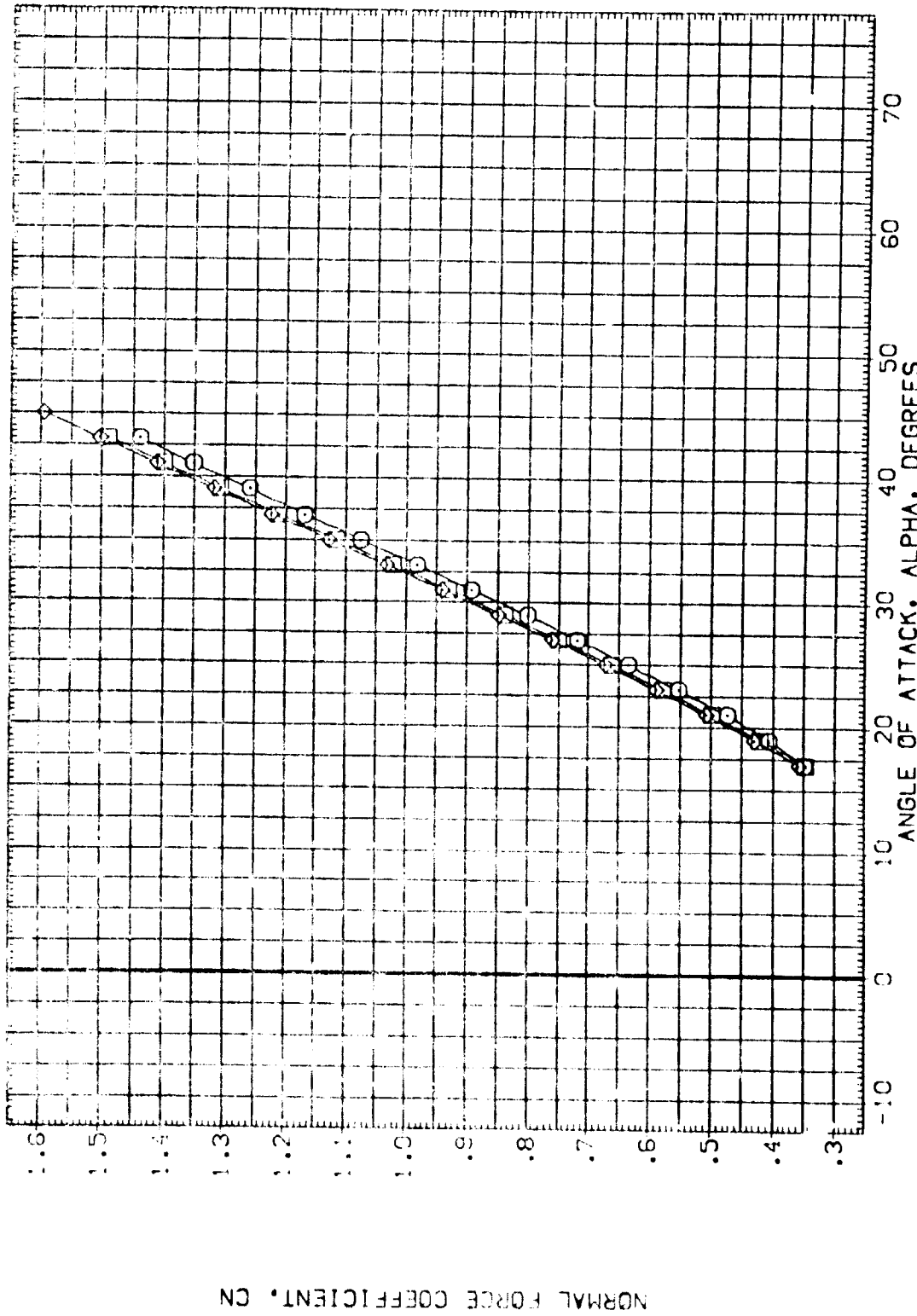
DATA SET SYMBOL: (C14055) (C14056) (C14057)

CONFIGURATION DESCRIPTION: 0A79 806 CS E43 FB M16 N08 PS V8 V11B
 0A79 806 CS E43 FB M16 N08 PS V8 V11B
 0A79 806 CS E43 FB M16 N28 RS V8 V11B

R/W/L: 1.500 16.300 10.000
 1.660 16.300 10.000
 3.530 16.300 10.000

ELV-L1: 0.000
 ELV-L0: 10.000
 ELV-L2: 10.000

REFERENCE INFORMATION: SREF 2690.0000 SO.FT. 50.000
 LREF 1741.8100
 BREF 936.6800
 XMRP 1075.5800
 YMRP 1075.5800
 ZMRP 375.0000
 SCALE 0.150



NORMAL FORCE COEFFICIENT, CN

FIG. 27 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 16.3)

(A)MACH = 7.90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RM/L	BOFLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(CTV055)	0A79 B26 C9 E43 F8 M16 N28 P5 V8 V116	500	6.300	10.000	10.000	SREF 2690.0000 SQ.FT.
(CTV050)	0A79 B26 C9 E43 F8 M16 N28 P5 V8 V116	1.860	6.300	10.000	10.000	LREF 474.8100 IN.
(CTV047)	0A79 B26 C9 E43 F8 M16 N28 P5 V8 V116	3.530	6.300	10.000	10.000	BREF 936.6800 IN.
						XMRP 1079.6800 IN.
						YMRP .0000 IN.
						ZMRP 375.0000 IN.
						SCALE .0150

PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH FORWARD C. G. (CMFWD)

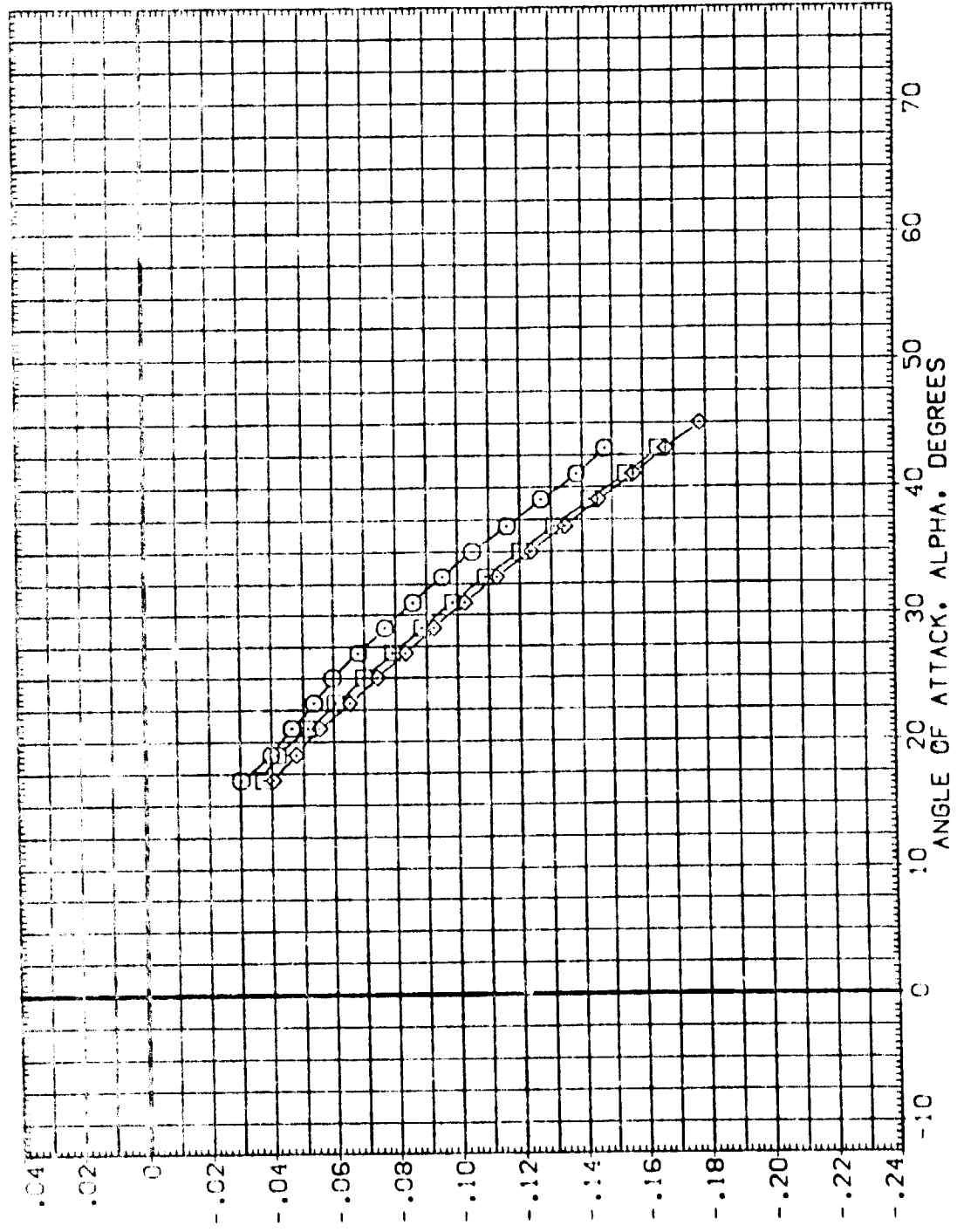
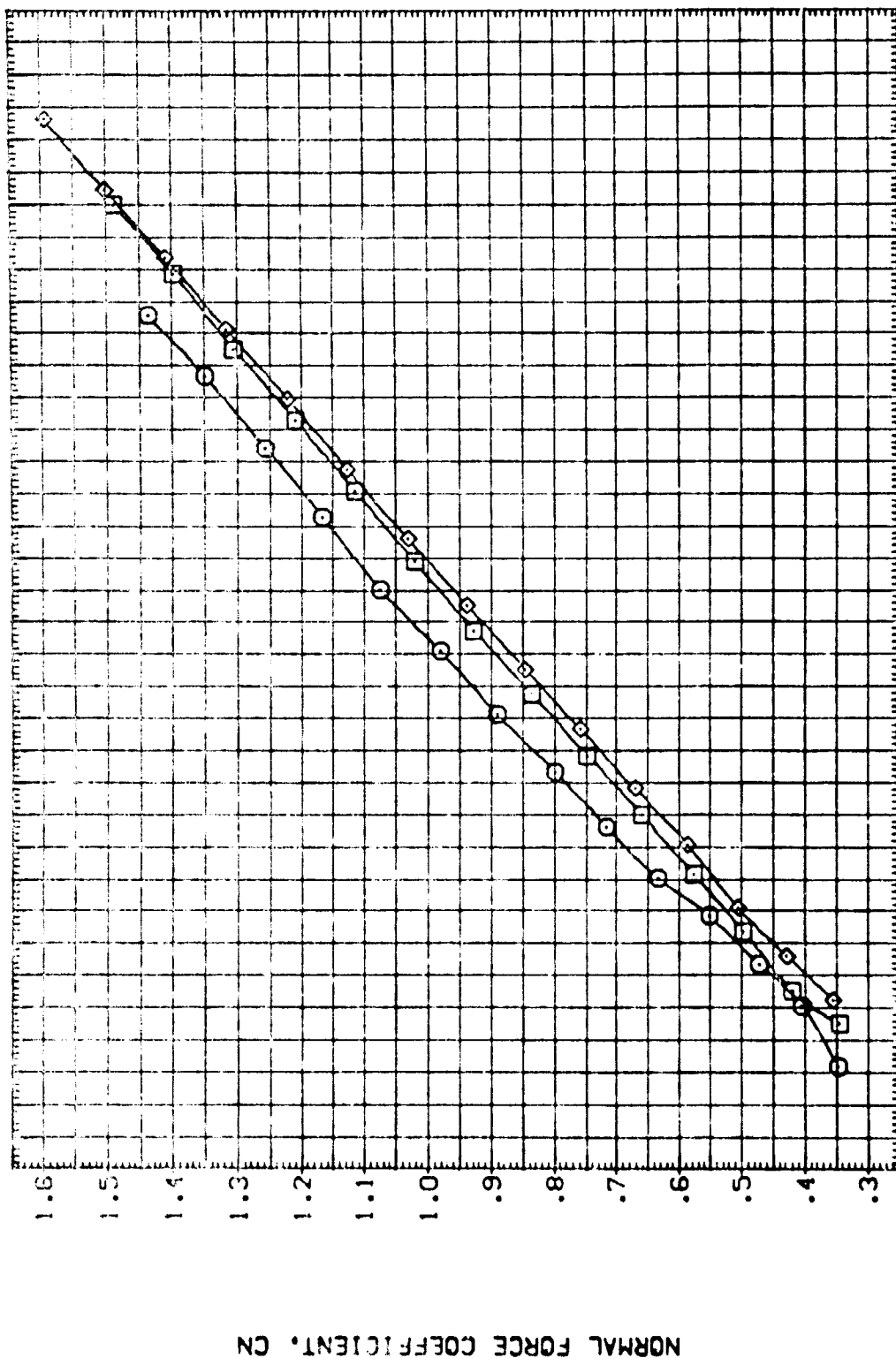


FIG. 27 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 16.3)

(A)MACH = 7.90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	BOFLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(C1V055)	0A79 B26 C9 E43 F8 H16 N28 RS V8 V116	.500	16.300	10.000	10.000	SREF 2690.0000 SO.FT.
(C1V050)	0A79 B26 C9 E43 F8 H16 N28 RS V8 V116	1.860	16.300	10.000	10.000	LREF 474.8100 IN.
(C1V047)	0A79 B26 C9 E43 F8 H16 N28 RS V8 V116	3.530	16.300	10.000	10.000	BREF 936.6800 IN.
						XTRP 1076.6800 IN.V8
						YTRP .0000 IN.V8
						ZTRP .0000 IN.Z6
						SCALE .0150



PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH(FORWARD C. G.) CLMFWD

FIG. 27 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 16.3)

(A)MACH = 7.90

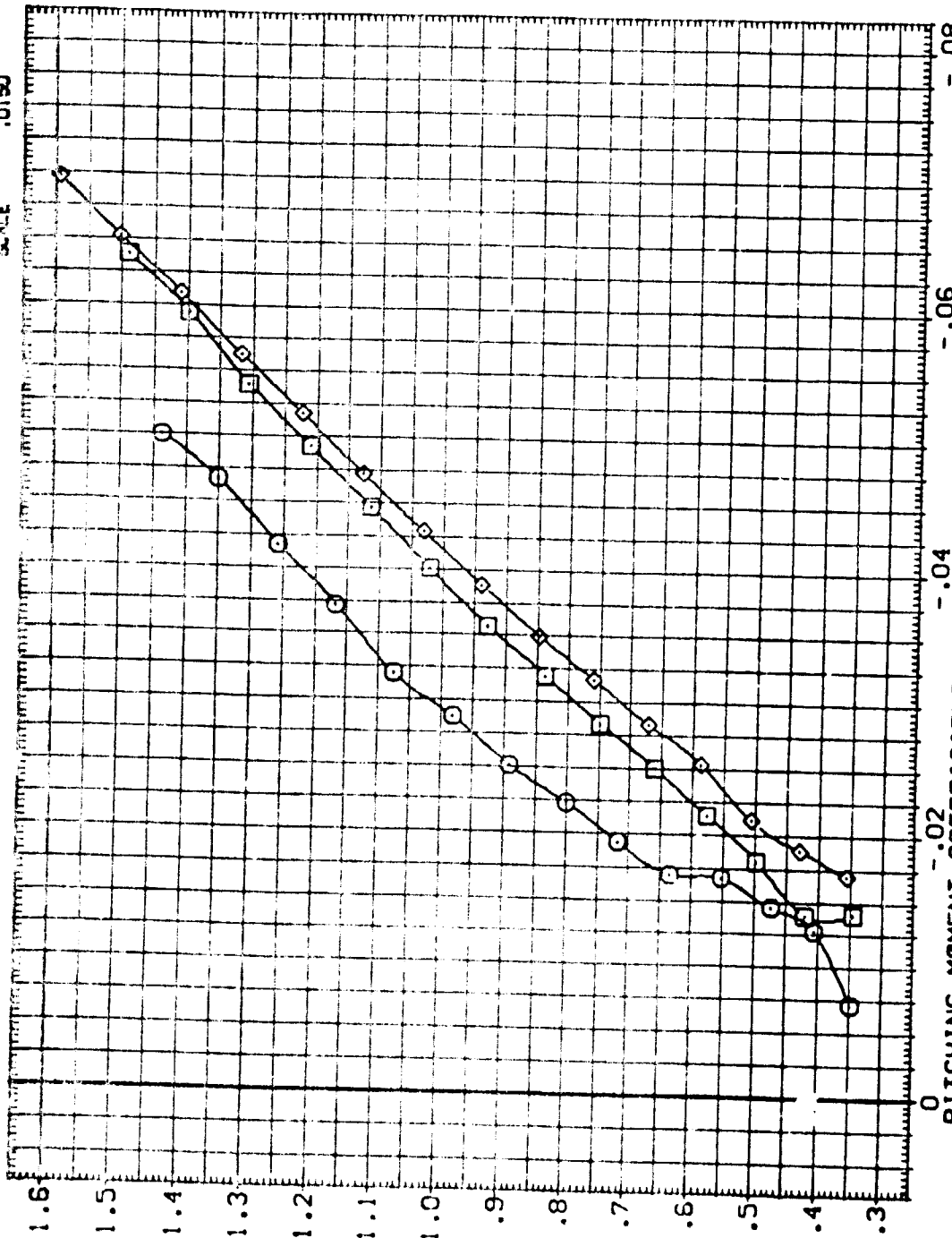
DATA SET SYMBOL
 (CIV055)
 (CIV050)
 (CIV047)

CONFIGURATION DESCRIPTION
 DAY9 B26 C9 E43 F8 M16 N28 P3 VS V116
 DAY9 B26 C9 E43 F8 M16 N28 P3 VS V116
 DAY9 B26 C9 E43 F8 M16 N28 P3 VS V116

INVL 1.500 10.000
 1.860 10.000
 2.130 10.000

BOFLAP 16.300 10.000
 16.300 10.000
 16.300 10.000

REFERENCE INFORMATION
 SPEC 2690.0000 50. FT.
 LREF 474.8100 IN.
 DRFF 936.6800 IN.
 X1 REF 1075.0000 IN.
 Y1 REF 0.0000 IN.
 Z1 REF 375.0000 IN.
 SCALE .0150



NORMAL FORCE COEFFICIENT, CN

PITCHING MOMENT COEFFICIENT AT .675 BODY LENGTH(AFT C. G.) CLMAFT
 .02 .04 .06 .08
 FIG. 27 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 16.3)
 (A)MACH = 7.90

DATA SET SYMBOL: (C1W055), (C1W056), (C1W059), (C1W0A7)

CONFIGURATION DESCRIPTION: DA79 B26 C9 E43 F8 M16 N23 R5 V8 V116, DA79 B26 C9 E43 F8 M16 N23 R5 V8 V116, DA79 B26 C9 E43 F8 M16 N23 R5 V8 V116

RVL: .500, 1.860, 3.530; BOFLAP: 16.300, 16.300, 16.300; ELV-L0: 10.000, 10.000, 10.000; ELV-L1: 10.000, 10.000, 10.000

REFERENCE INFORMATION: SREF: 2690.0000 SO.FT., LREF: 474.8100 IN., BREF: 936.6900 IN., XTRP: 1076.6900 IN., YTRP: .0000 IN., ZTRP: 375.0000 IN., SCALE: .0150

CENTER OF PRESSURE LOCATION AS A FRACTION OF BODY LENGTH, XCP/L

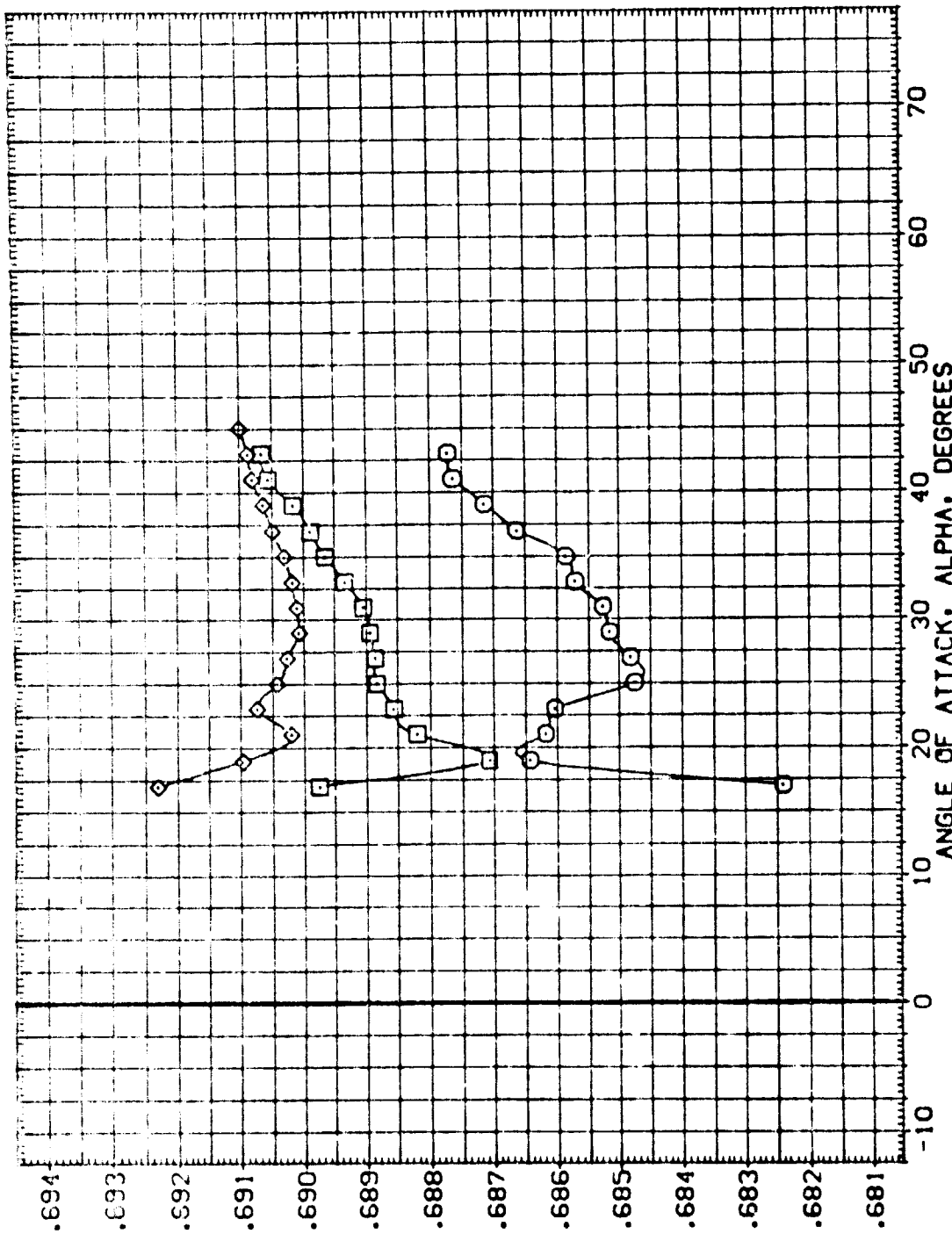


FIG. 27 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 16.3)

(A)MACH = 7.90

DATA SET SYMBOL (C1V055) (C1V050) (C1V047)

CONFIGURATION DESCRIPTION
 BA79 B26 CS E43 FB M16 N28 RS V8 V116
 BA79 B26 CS E43 FB M16 N28 RS V8 V116
 BA79 B26 CS E43 FB M16 N28 RS V8 V116

RM/L 1.500 1.860 3.530
 LE/FLAP 16.300 16.300 16.300
 FLV-HIG 10.000 10.000 10.000
 ELV-LI 10.000 10.000 10.000
 REFERENCE INFORMATION
 SREF 2690.0000 SO.FT.
 LREF 474.8100 IN.
 BREF 936.6600 IN.
 XREF 1076.6900 IN.X3
 YREF 1076.6900 IN.Y3
 ZREF 375.8000 IN.Z3
 SCALE .0150

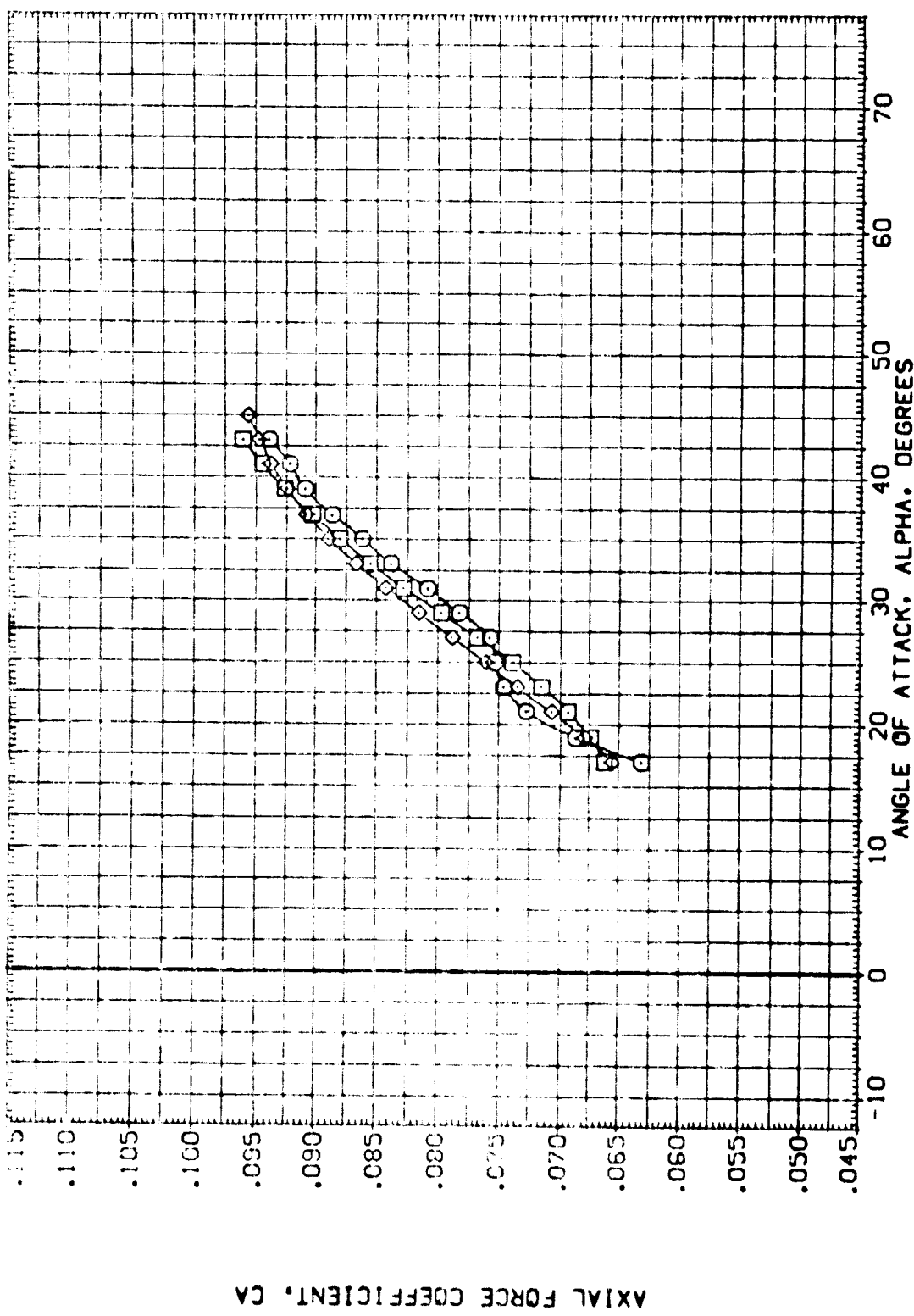


FIG. 27 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 16.3)
 (A)MACH = 7.90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	BOFLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(CTV055)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	500	16.300	10.000	10.000	2690.0000 SQ.FT.
(CTV050)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	1.860	16.300	10.000	10.000	474.8100 IN.
(CTV047)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	3.530	16.300	10.000	10.000	936.6800 IN.
						1076.6800 IN. X0
						Y1-RP .0000 IN. Y0
						Z1-RP .0000 IN. Z0
						SCALE .0150

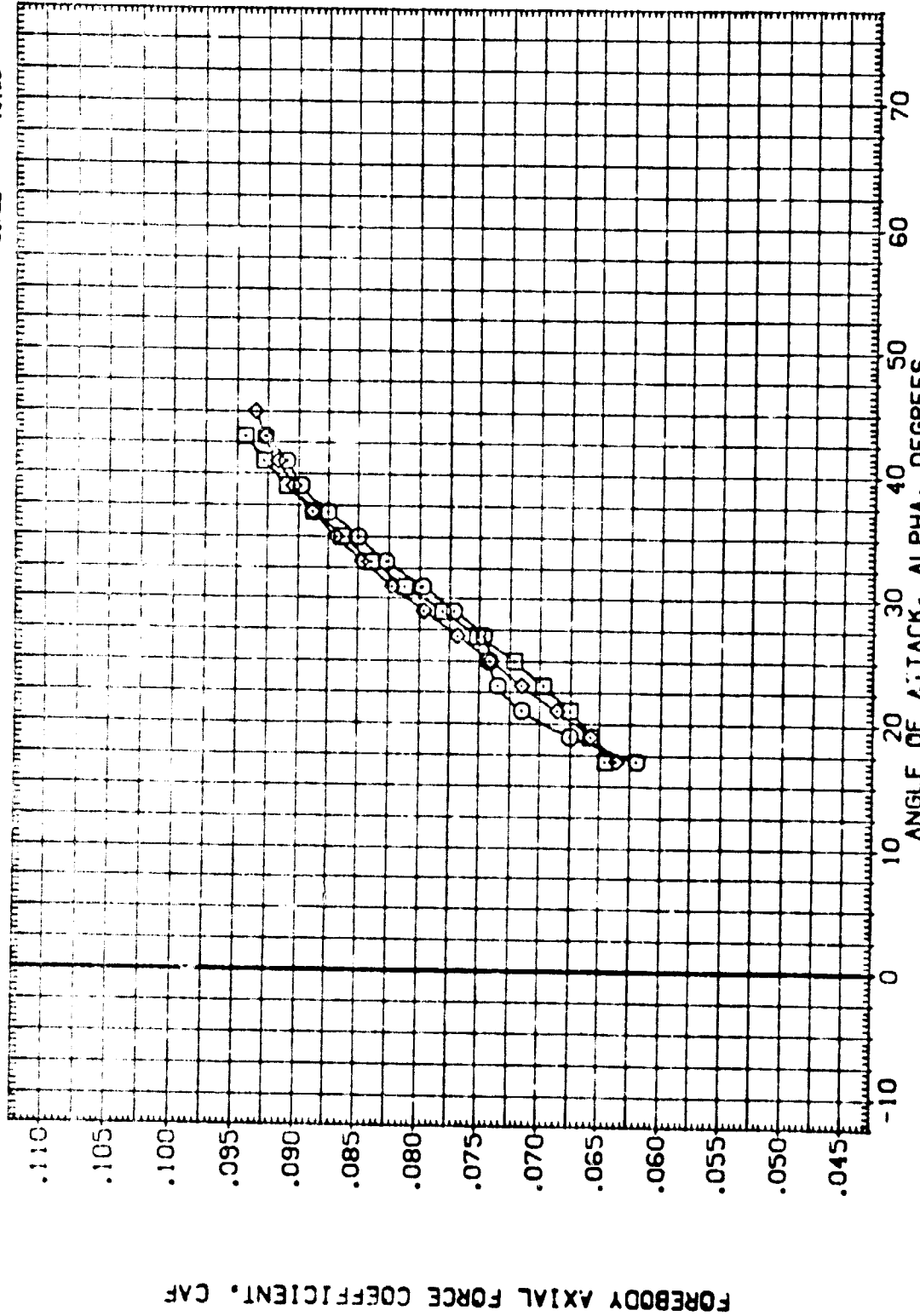





FIG. 27 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 16.3)

(A)MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CTV055)  Q479 B26 C9 E43 F8 H16 N28 RS V8 V116
 (CTV056)  Q479 B26 C9 E43 F8 H16 N28 RS V8 V116
 (CTV047)  Q479 B26 C9 E43 F8 H16 N28 RS V8 V116

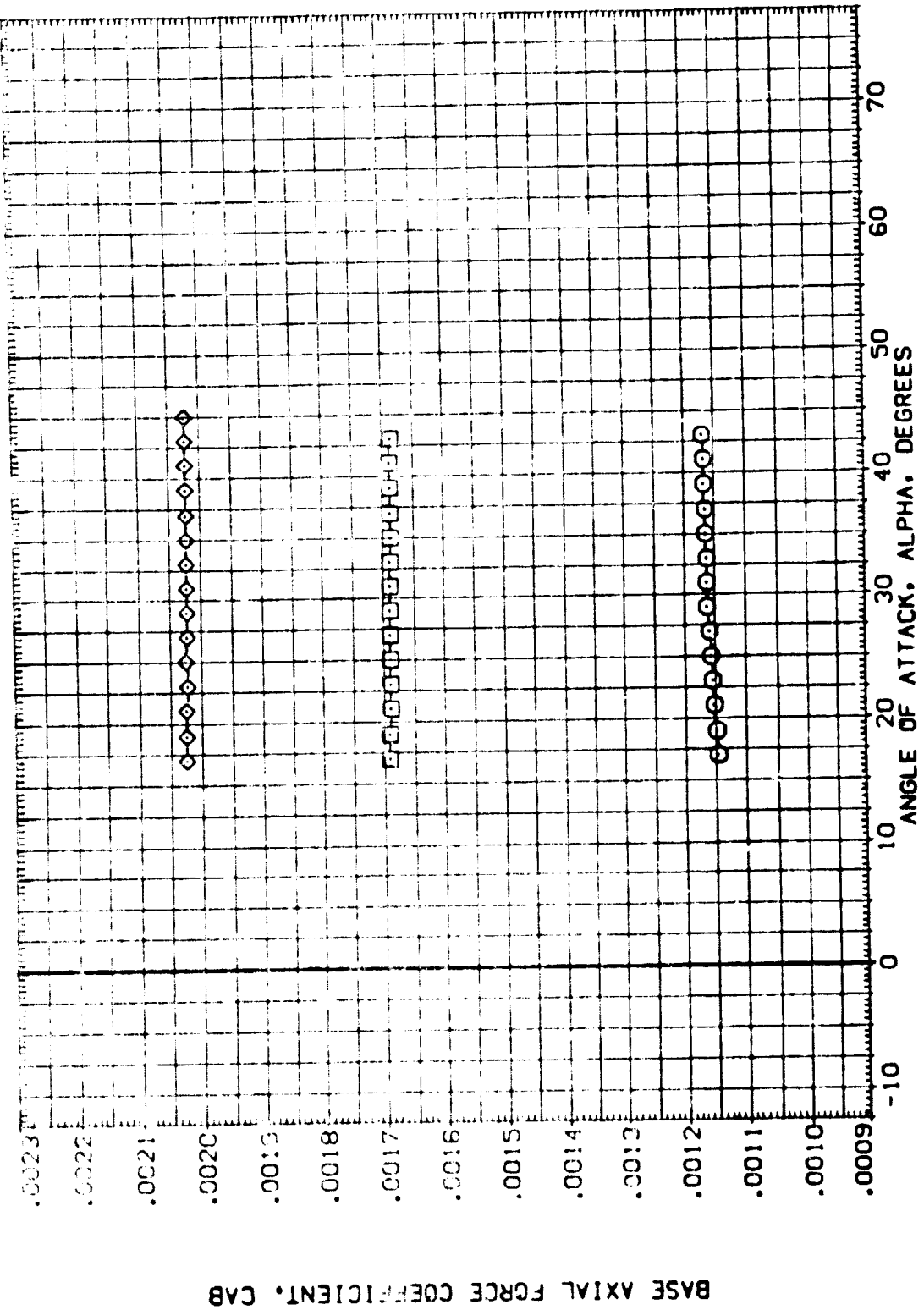
RVL 500
 1.850
 3.500

BOE LAP 16.500
 16.500
 16.500

ELV-H0 10.000
 10.000
 10.000

ELV-H1 10.000
 10.000
 10.000

REFERENCE INFORMATION
 SREF 2590.0000 SQ.FT.
 UNIT 474.8100 IN.
 DREF 936.8800 IN.
 XREF 1075.6300 IN.
 YREF 375.0000 IN.
 ZREF 10150 IN.
 SCALE



BASE AXIAL FORCE COEFFICIENT, CAB

FIG. 27 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 16.3)

(A)MACH = 7.90



DATA SET SYMBOL: (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24) (25) (26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37) (38) (39) (40) (41) (42) (43) (44) (45) (46) (47) (48) (49) (50) (51) (52) (53) (54) (55) (56) (57) (58) (59) (60) (61) (62) (63) (64) (65) (66) (67) (68) (69) (70) (71) (72) (73) (74) (75) (76) (77) (78) (79) (80) (81) (82) (83) (84) (85) (86) (87) (88) (89) (90) (91) (92) (93) (94) (95) (96) (97) (98) (99) (100)

CONFIGURATION DESCRIPTION: (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24) (25) (26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37) (38) (39) (40) (41) (42) (43) (44) (45) (46) (47) (48) (49) (50) (51) (52) (53) (54) (55) (56) (57) (58) (59) (60) (61) (62) (63) (64) (65) (66) (67) (68) (69) (70) (71) (72) (73) (74) (75) (76) (77) (78) (79) (80) (81) (82) (83) (84) (85) (86) (87) (88) (89) (90) (91) (92) (93) (94) (95) (96) (97) (98) (99) (100)

RMVL: .500
1.960
3.530

BOFLAP: 16.300
16.300
16.300

ELV-L1: 10.000
10.000
10.000

ELV-L0: 10.000
10.000
10.000

REFERENCE INFORMATION: SQ. FT.
2690.0000
474.8100
936.8600
1076.5970
375.0000
375.0150

SREF
LREF
BREF
XTRP
YTRP
ZTRP
SCALE

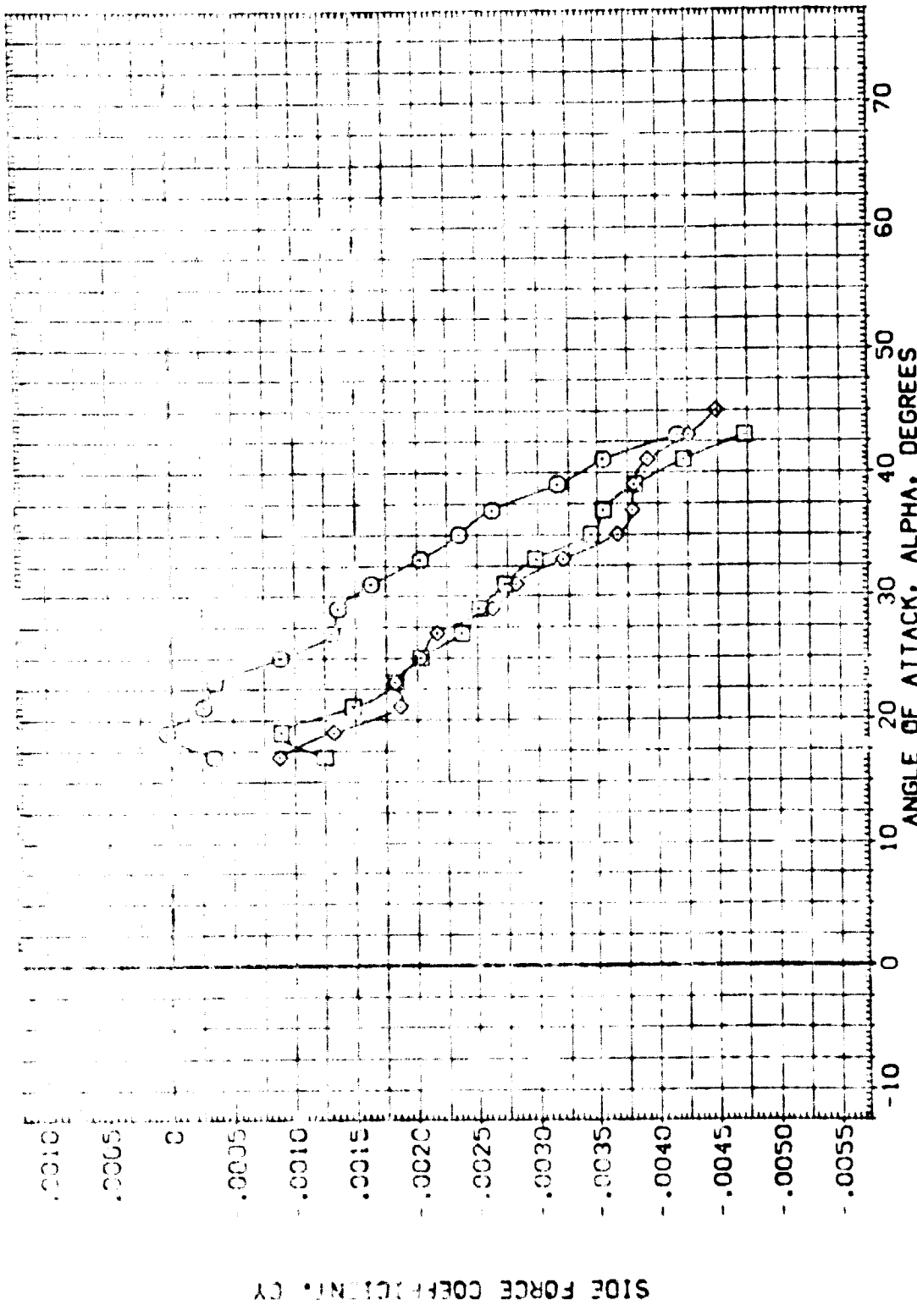


FIG. 27 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 16.3)

(A)MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(A1V055)	Q	CA 9	CS	E43	FB	M16	NC8	RS	V8	V116
(A1V056)	Q	CA 9	CS	E43	FB	M16	NC8	RS	V8	V116
(A1V057)	Q	CA 9	CS	E43	FB	M16	NC3	RS	V8	V116

REFLAP ELV-L0 ELV-L1

REFLAP	ELV-L0	ELV-L1
15.300	10.000	10.000
15.300	10.000	10.000
15.300	10.000	10.000

SCALE

SCALE	IN. X0	IN. X0
2690.0000	1076.0000	1076.0000
174.9100	375.0000	375.0000
26.9000	37.5000	37.5000

REFERENCE INFORMATION

REFLAP	ELV-L0	ELV-L1
15.300	10.000	10.000
15.300	10.000	10.000
15.300	10.000	10.000

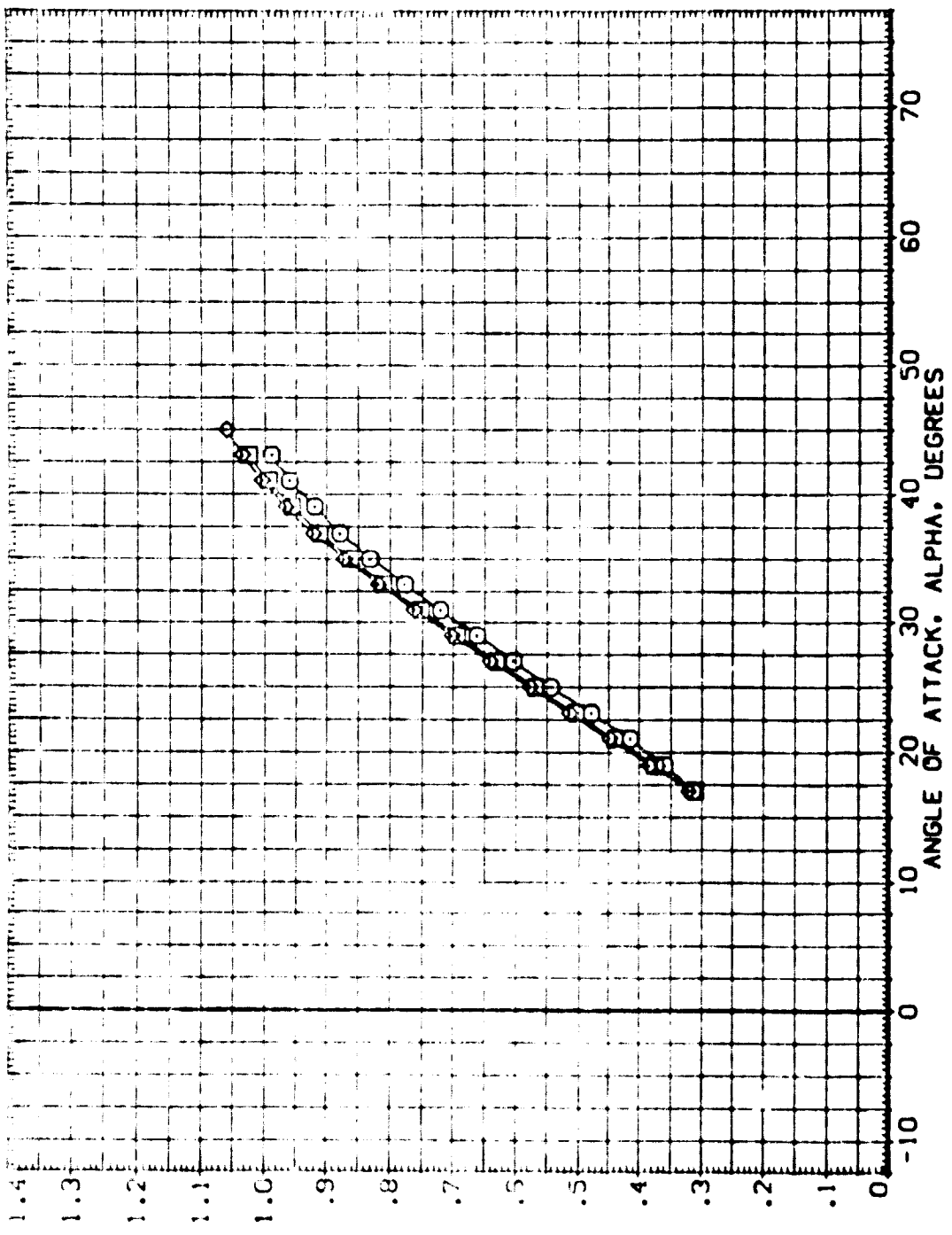


FIG. 27 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 16.3)

(A)MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 0A79 826 C9 E43 FB M16 N28 RS V8 V11S
 0A78 826 C9 E43 FB M16 N28 RS V8 V11S
 0A79 826 C9 E43 FB M16 N28 RS V8 V11S

REFLAP ELEV-L0 ELEV-L1
 16.300 10.000 10.000
 16.300 10.000 10.000
 16.300 10.000 10.000

PNVL
 .500
 1.060
 3.530

REFERENCE INFORMATION
 SREF 2630.0000 SQ.FT.
 LREF 474.8110 IN.
 BREF 936.6800 IN.
 XREF 1076.6700 IN.
 YREF 375.0000 IN.
 ZREF 375.0000 IN.
 SCALE .0150

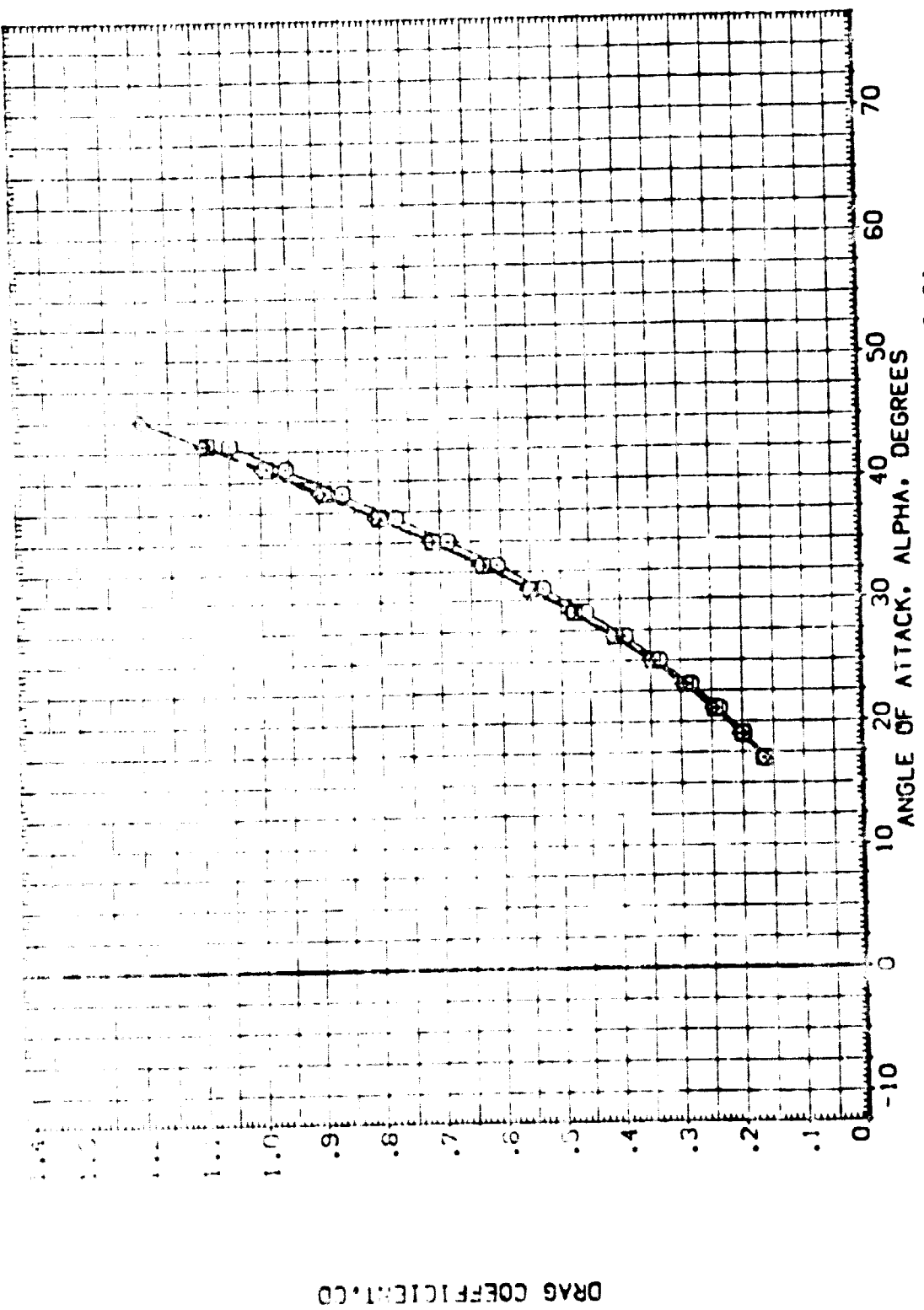


FIG. 27 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 16.3)

(A)MACH = 7.90

DATA SET SYMBOL: (A1055)
 (A1056)
 (A1057)

CONFIGURATION DESCRIPTION:
 QAY8 B06 C9 E43 FB M16 N08 P05 V08 V116
 QAY8 B06 C9 E43 FB M16 N08 P05 V08 V116
 QAY8 B06 C9 E43 FB M16 N08 P05 V08 V116

DVA: .500
 1.860
 3.530

ELEV-H: 10.000
 10.000
 10.000

ELEV-L: 10.000
 10.000
 10.000

REFERENCE INFORMATION:
 LREF: 2690.0000 SQ.FT.
 474.8100 IN.
 936.6400 IN.
 1075.0000 IN.
 1.00 IN.
 3.75 IN.
 SCALE: .0150

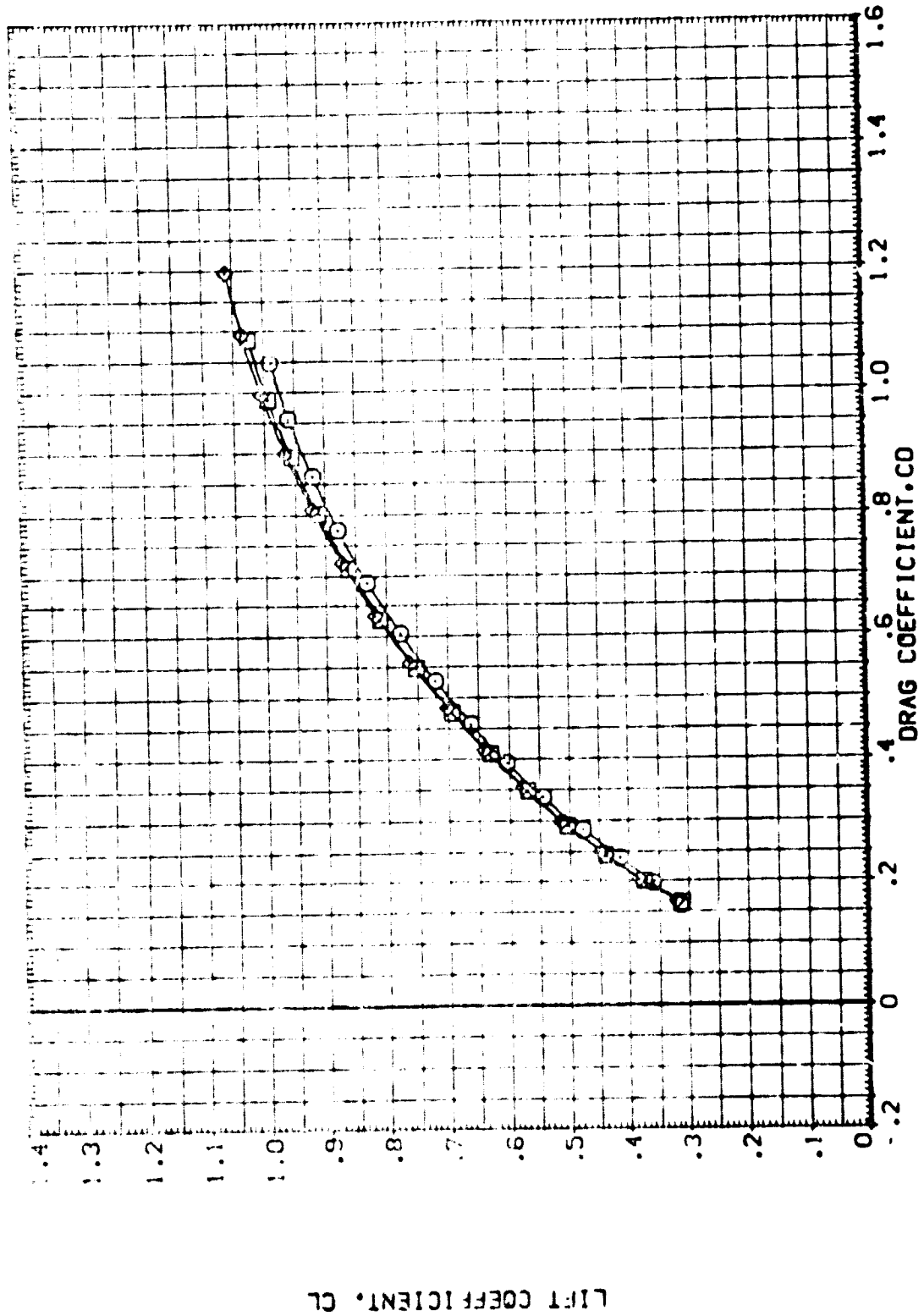


FIG. 27 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 16.3)

(A)MACH = 7.90



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(A1W055)	0A79 B26 C9 E43 F8 M16 N28 R5 VR V116
(A1W050)	0A79 B26 C9 E43 F8 M16 N28 R5 VR V116
(A1W047)	0A79 B26 C9 E43 F8 M16 N28 R5 VR V116

RVA EOLAP ELV-L0 ELV-L1

500	16.300	10.000	10.000
1.860	16.300	10.000	10.000
3.530	16.300	10.000	10.000

REFERENCE INFORMATION

SREF	2630.0000	SO.FT.
LREF	474.8100	IN.
BREF	936.6900	IN.
XMRP	1076.6900	IN.X0
YMRP	0.0000	IN.Y0
ZMRP	375.0000	IN.Z0
SCALE	.0150	

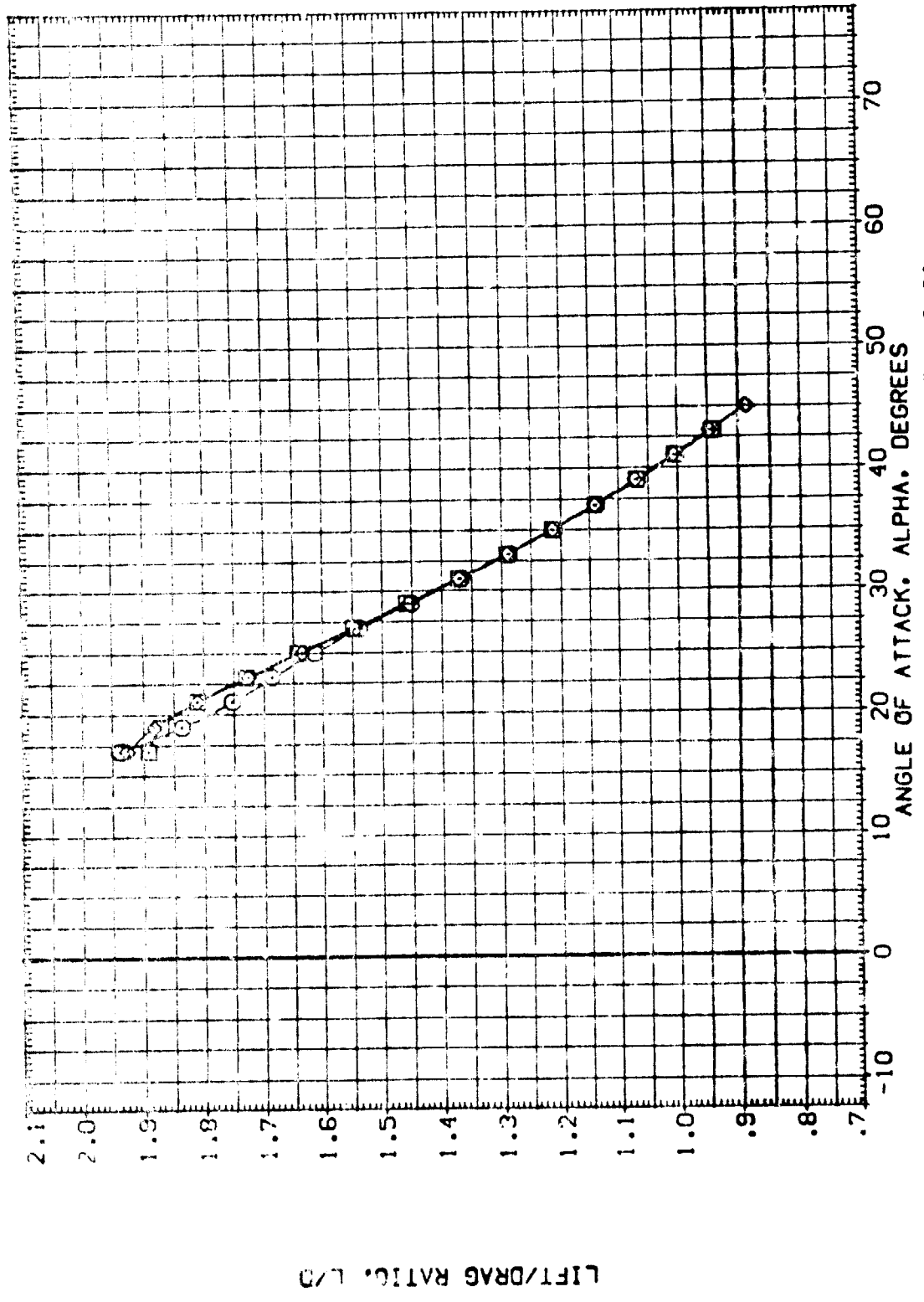


FIG. 27 REYNOLDS NUMBER EFFECTS (ELEVON = 10, BODY FLAP = 16.3)

(A)MACH = 7.90

DATA SET SYMBOL: (CTV050) (CTV053) (CTV021)

CONFIGURATION DESCRIPTION:
 OA79 B26 CS 543 FB M16 N28 RS V8 M116
 OA79 B26 CS 543 FB M16 N28 RS V8 M116
 OA79 B26 CS 543 FB M16 N23 RS VS M116

RVL: .500, 1.860, 3.530

BOFLAP: 16.300, 16.300, 16.300

ELV-L0: 20.000, 20.000, 20.000

ELV-L1: 20.000, 20.000, 20.000

REFERENCE INFORMATION:
 SREF: 2690.0000 SQ.FT.
 LREF: 474.3100 IN.
 XREF: 903.2300 IN.
 YREF: 1076.2900 IN.
 ZREF: 375.0000 IN.
 SCALE: .0150

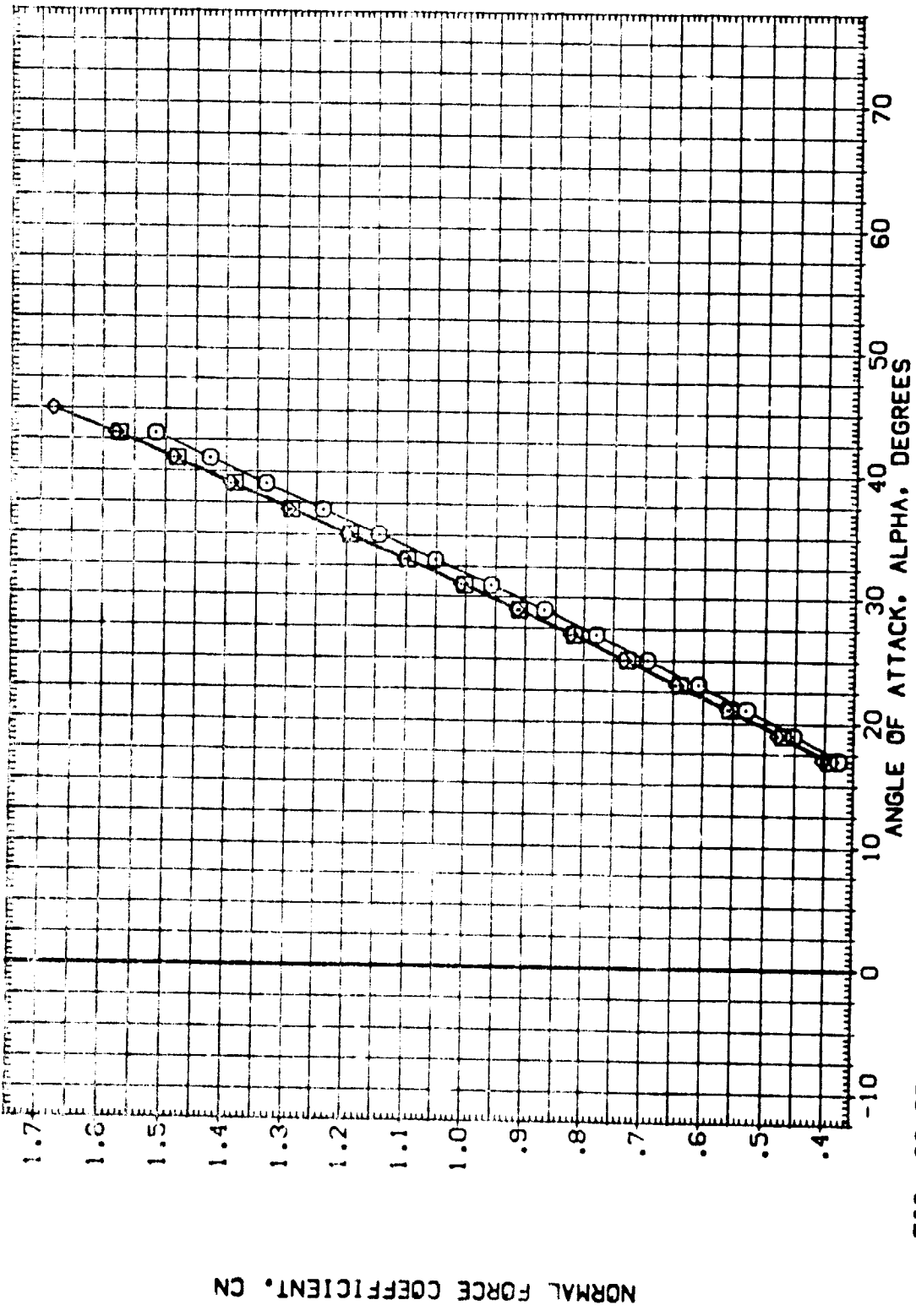


FIG. 28 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 16.3)
 (A)MACH = 7.90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	BOFLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(C14060)	CA78 B06 C9 E43 F6 M16 N08 P0 V8 V116	500	16.300	20.000	20.000	2690.0000 50.FT.
(C14053)	CA78 B06 C9 E43 F8 M16 N08 P0 V8 V116	1.860	16.300	20.000	20.000	474.8100 IN.
(C14021)	CA79 B06 C9 E43 F8 M16 N08 P0 V8 V116	3.530	16.300	20.000	20.000	335.0900 IN.
						1078.0300 IN. 73
						375.0000 IN. 20
						SCALE .0150

PITCHING MOMENT COEFFICIENT AT .65 BODY LENGTH FORWARD C. AND CL(MFWD)

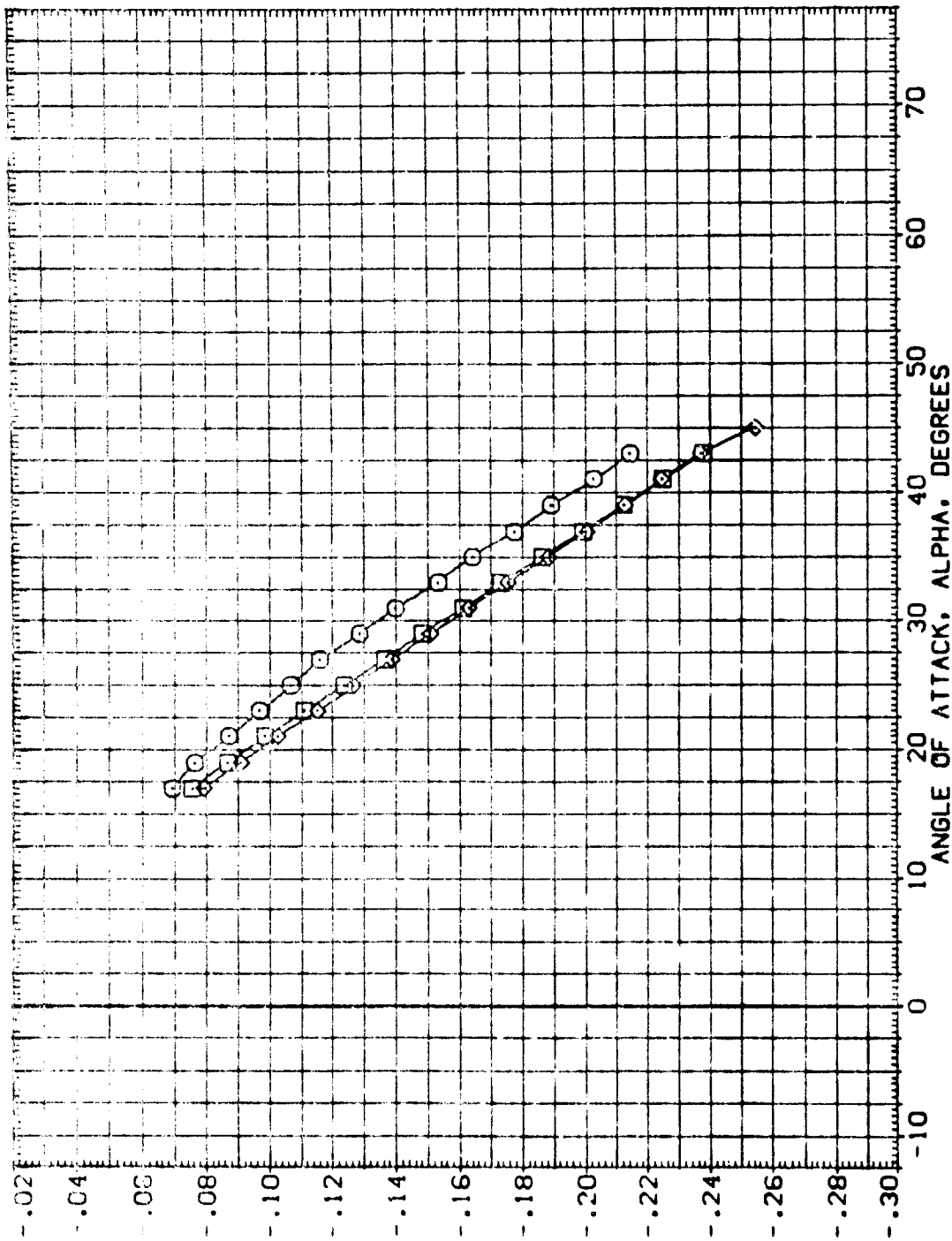


FIG. 28 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 16.3)

(A) MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CT10050)	0A79	806	C9	E43	F8	M16	N28	RS	V8	M116
(CT10053)	0A79	806	C9	E43	F8	M16	N28	RS	V8	M116
(CT10021)	0A79	806	C9	E43	F8	M16	N28	RS	V8	M116

RMFL 500
1.860
3.530

REFLAP 16.300
16.300
16.300

ELV-L0 20.000
20.000
20.000

ELV-L1 20.000
20.000
20.000

REFERENCE INFORMATION

SCALE	2890.0000	50.0 FT.
LINE	474.8100	IN.
ORIG	303.6000	IN.
ZTRP	1075.0000	IN.
ZTRP	1000.0000	IN.
SCALE	375.0000	IN.
SCALE	10150	

PITCHING MOMENT COEFFICIENT AT .675 BODY LENGTH(AFT C. G.) CLMFT

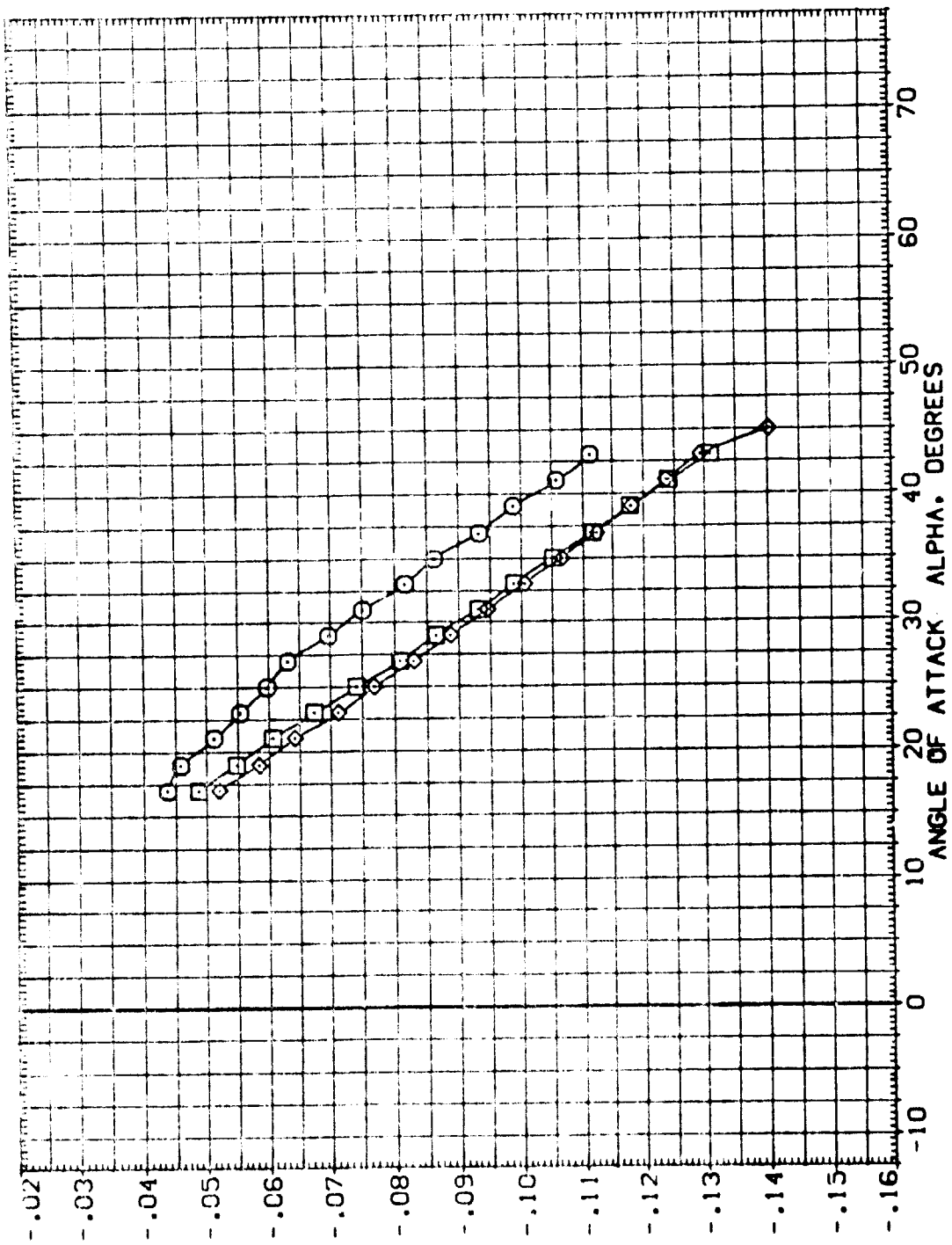


FIG. 28 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 16.3)

(A)MACH = 7.90



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(C1V050)	0A79 B25 C9 E43 F8 M16 N28 P5 V8 V116
(C1V053)	0A79 B26 C9 E43 F8 M16 N28 P5 V8 V116
(C1V021)	0A79 B26 C9 E43 F8 M16 N28 P5 V8 V116

RVL BOFLAP ELV-L0 ELV-L1

.500	18.300	20.000	20.000
1.860	16.300	20.000	20.000
3.530	16.300	20.000	20.000

REFERENCE INFORMATION

SREF	2690.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.8800	IN.
XTRP	1076.8800	IN.X0
YTRP	.0000	IN.Y0
ZTRP	375.0000	IN.Z0
SCALE	.0150	

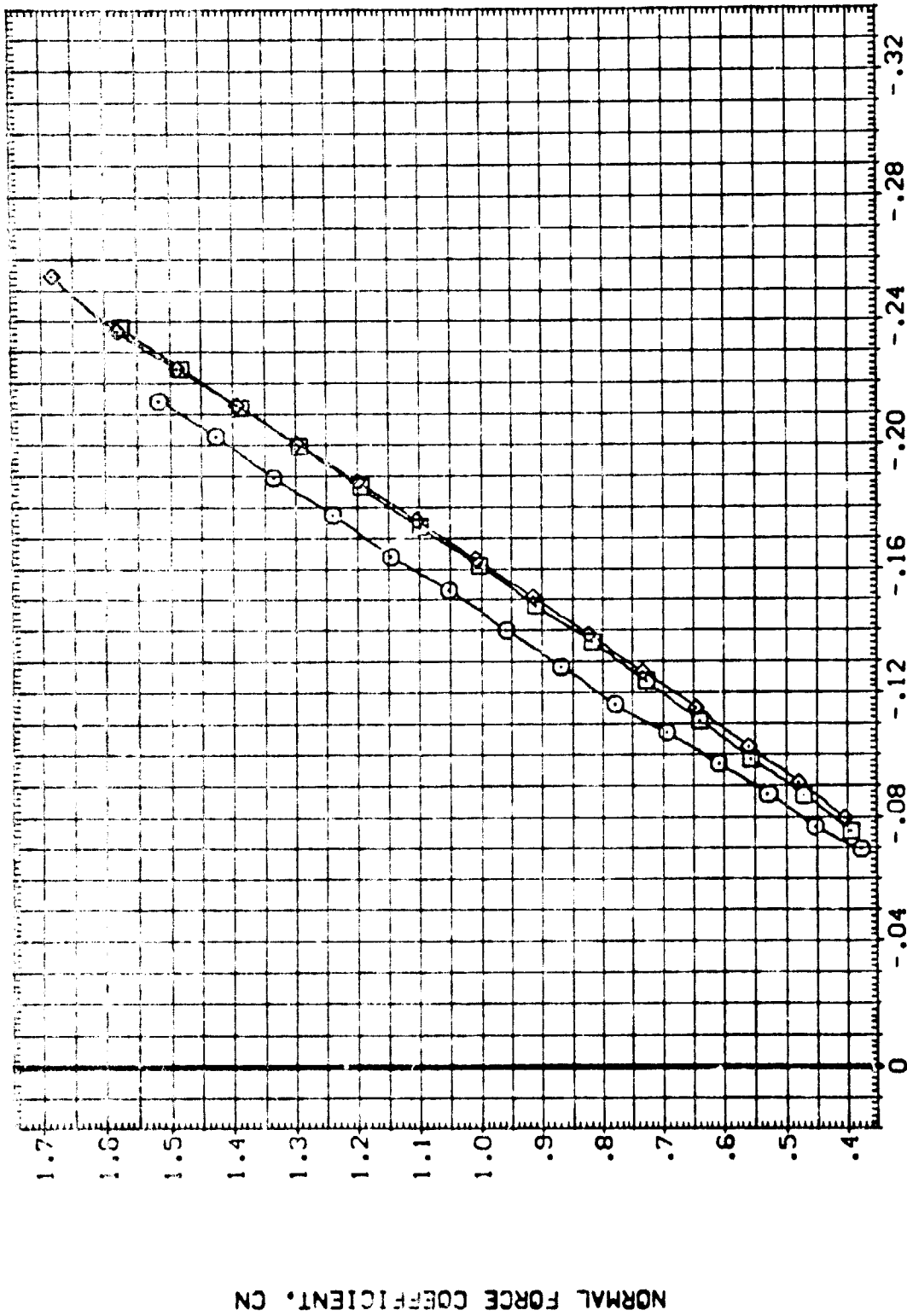


FIG. 28 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 16.3)

(A)MACH = 7.90

DATA SET SYMBOL
 (CT1050)
 (CT1053)
 (CT1021)

CONFIGURATION DESCRIPTION
 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116
 0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116

RVL .500
 1.660
 3.530

SOFLAP 16.300
 16.300
 16.300

ELV-L0 20.000
 20.000
 20.000

ELV-L1 20.000
 20.000
 20.000

REFERENCE INFORMATION
 2690.0000 50.FT.
 474.8100 IN.
 936.6300 IN.X0
 1076.4400 IN.X0
 .0000 IN.L0
 375.0000 IN.Z0
 .0150 SCALE

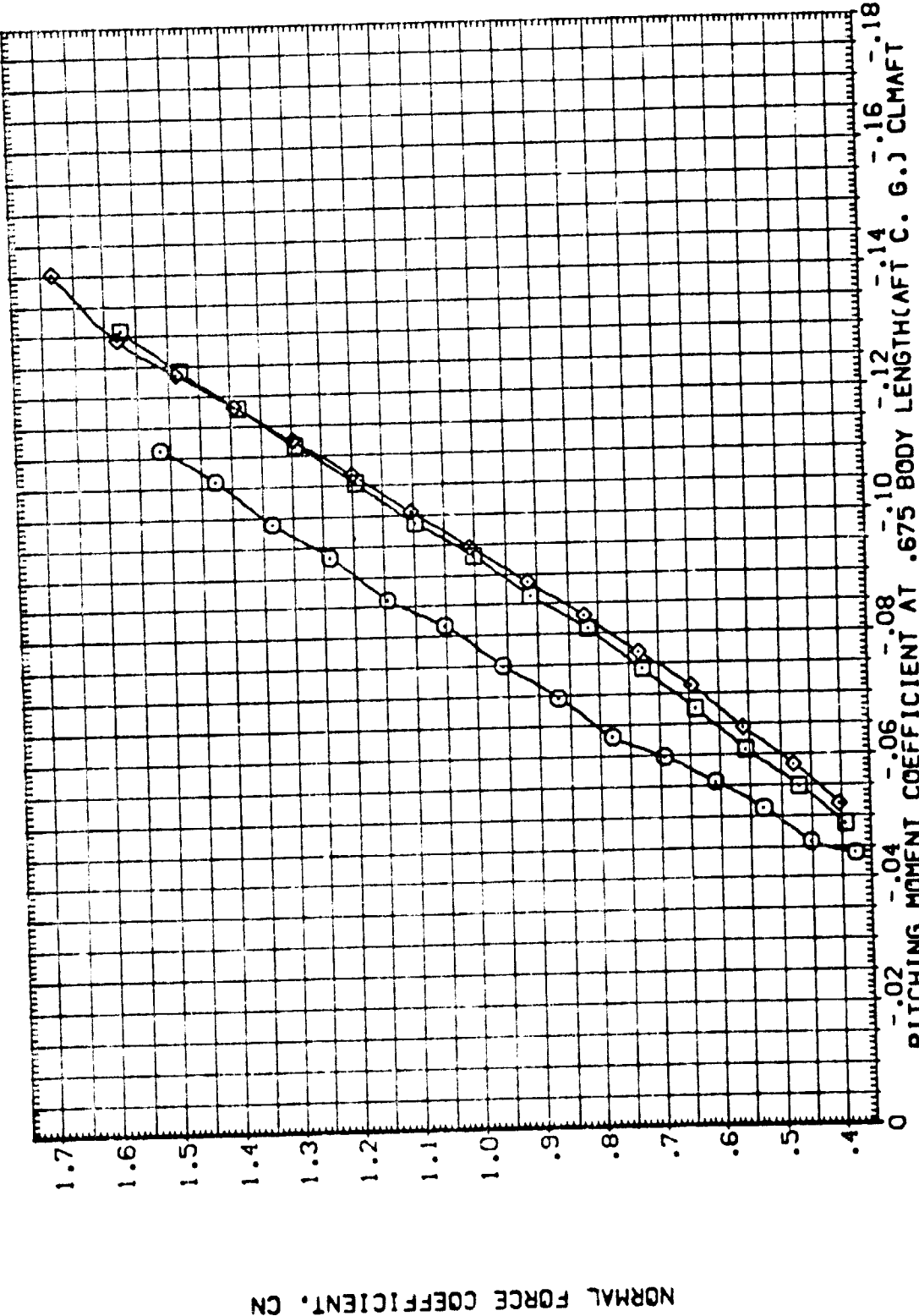
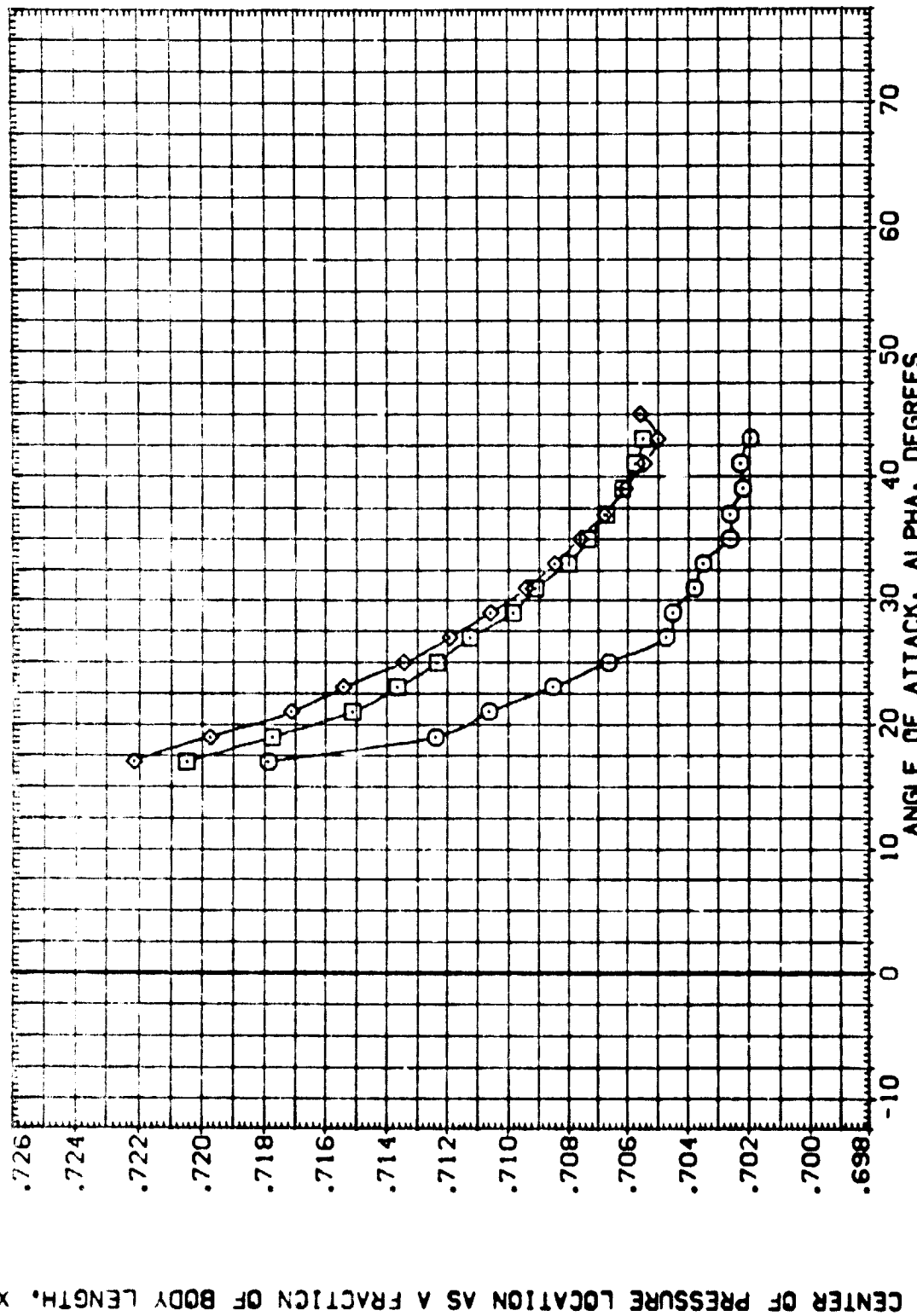


FIG. 28 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 16.3)

(A)MACH = 7.90

DATA SET SYMBOL CONFIGURATION DESCRIPTION R/VL BODY FLAP ELV-L0 ELV-L1 REFERENCE INFORMATION

(C1V060)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.500	16.300	20.000	20.000	SREF 2650.0000 SQ.FT.
(C1V063)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	1.650	16.300	20.000	20.000	LREF 474.8100 IN.
(C1V021)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	3.530	16.300	20.000	20.000	BREF 936.6900 IN. X0
						YMP 1076.6900 IN. Y0
						ZMP 375.0000 IN. Z0
						SCALE .0150



CENTER OF PRESSURE LOCATION AS A FRACTION OF BODY LENGTH, XCP/L

FIG. 28 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 16.3)

(A)MACH = 7.90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BOFLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(C1V060)	CA79 B26 C9 E43 F8 H16 N28 P5 V8 V116	16.300	20.000	20.000	2690.0000
(C1V059)	CA79 B26 C9 E43 F8 H16 N28 P5 V8 V116	16.300	20.000	20.000	474.8100
(C1V021)	CA79 B26 C9 E43 F8 H16 N28 P5 V8 V116	16.300	20.000	20.000	936.6800
					1076.0000
					Y TOP
					Z TOP
					SCALE
					.0150

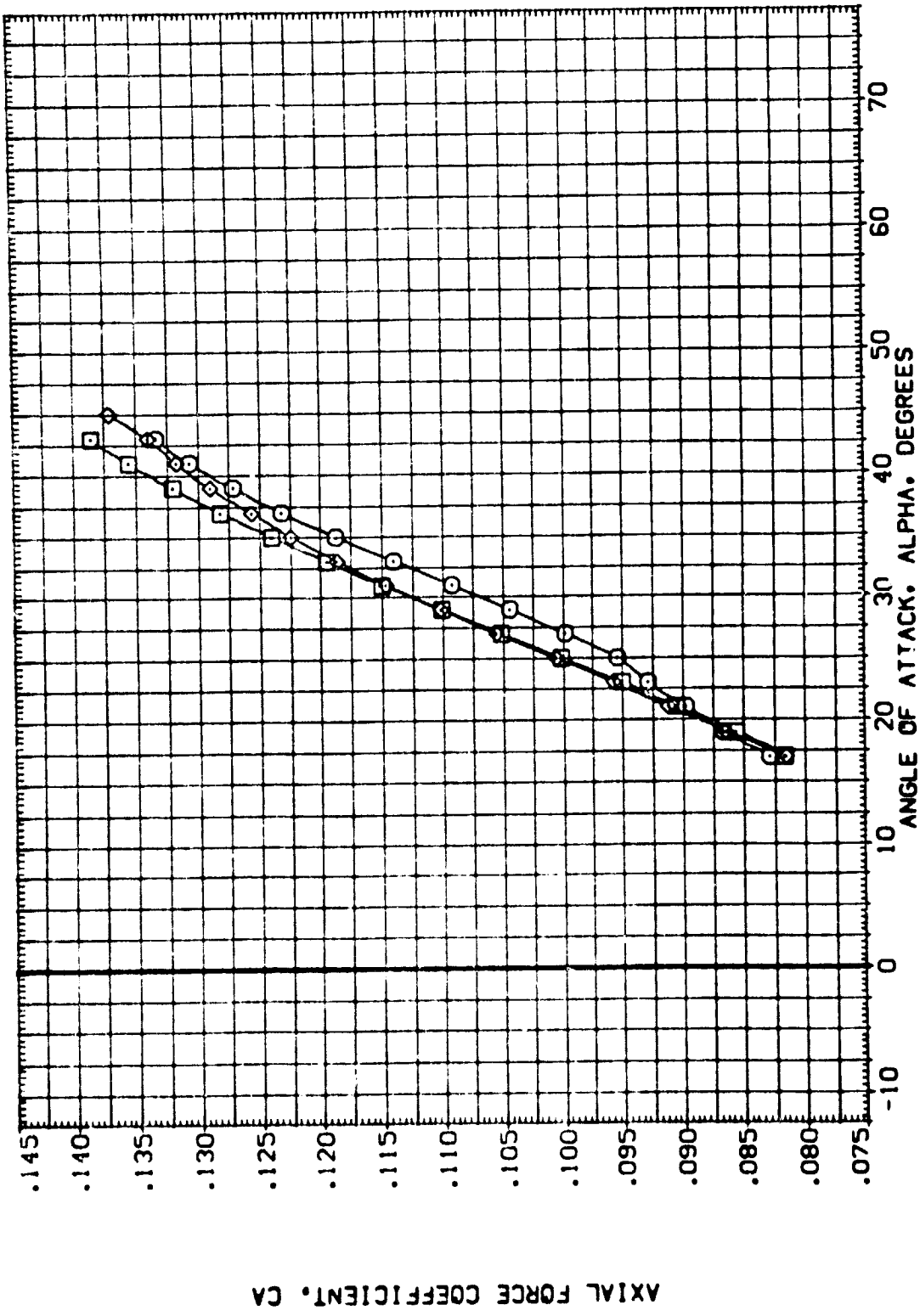


FIG. 28 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 16.3)

(A)MACH = 7.90



DATA SET SYMBOL CONFIGURATION DESCRIPTION

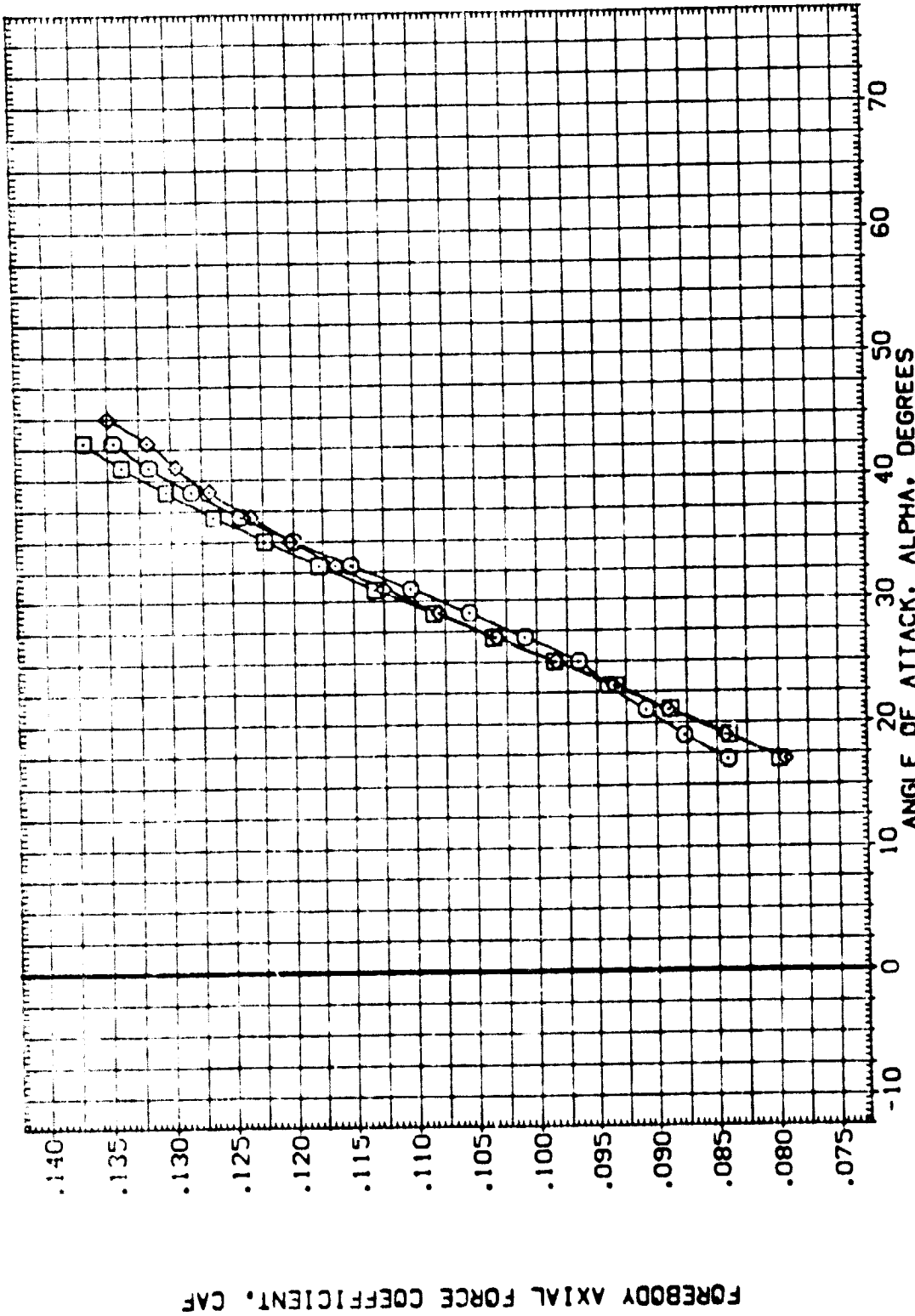
(C1V060)	0A79	826	C9	E43	F8	M16	N28	R5	V8	V116
(C1V063)	0A79	826	C9	E43	F8	M16	N28	R5	V8	V116
(C1V021)	0A79	876	C9	E43	F8	M16	N28	R5	V8	V116

RVL BDFLAP ELV-L0 ELV-L1

.500	16.300	20.000	20.000
1.860	16.300	20.000	20.000
3.530	16.300	20.000	20.000

REFERENCE INFORMATION

SREF	2690.0000	SO, FT.
LREF	474.8100	IN.
BREF	536.5900	IN.
XTRP	1076.6900	IN.
YTRP	.0000	IN.
ZTRP	375.0000	IN.
SCALE	.0150	



FOREBODY AXIAL FORCE COEFFICIENT, CAF

FIG. 28 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 16.3)

(A)MACH = 7.90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RVL	3DFLAP	ELV-LO	ELV-LI	REFERENCE	INFORMATION
(CIV060)	DAY8 B26 C9 E43 F8 M16 N28 P5 V8 V116	.500	16.300	20.000	20.000	SREF	2690.0000 SQ.FT.
(CIV053)	DAY8 B26 C9 E43 F8 M16 N28 P5 V8 V116	1.660	16.300	20.000	20.000	LREF	474.8100 IN.
(CIV021)	DAY8 B26 C9 E43 F8 M16 N28 P5 V8 V116	3.530	16.300	20.000	20.000	BREF	936.6800 IN.
						X-RP	1076.6900 IN.X0
						Y-RP	.0000 IN.Y0
						Z-RP	375.0000 IN.Z0
						SCALE	.0150

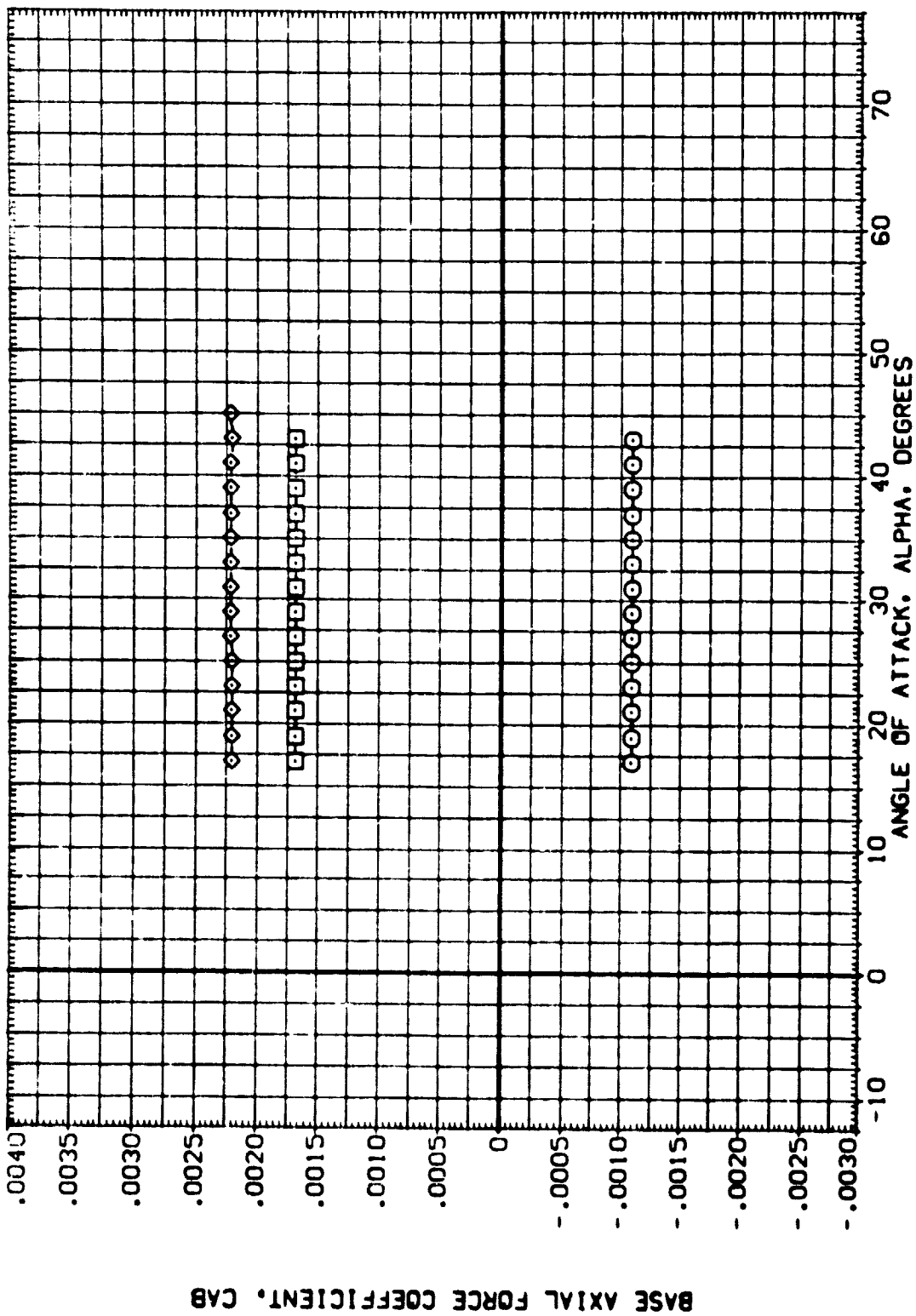


FIG. 28 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 16.3)

(A)MACH = 7.90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	REYNOLDS NUMBER	BD FLAP	ELEV-L0	ELEV-L1	REFERENCE INFORMATION
(CTV060)	0A79 826 C9 E43 FB M16 N28 RS V8 V116	500	16.300	20.000	20.000	SREF 2630.0000 50.FT.
(CTV061)	0A79 826 C9 E43 FB M16 N28 RS V8 V116	1,860	16.300	20.000	20.000	LREF 474.8100 IN.
(CTV062)	0A79 826 C9 E43 FB M16 N28 RS V8 V116	3,530	16.300	20.000	20.000	BREF 956.6800 IN.
						XREF 1076.6800 IN. X0
						ZREF .0000 IN. Z0
						ZREF 375.0000 IN. Z0
						SCALE .0150

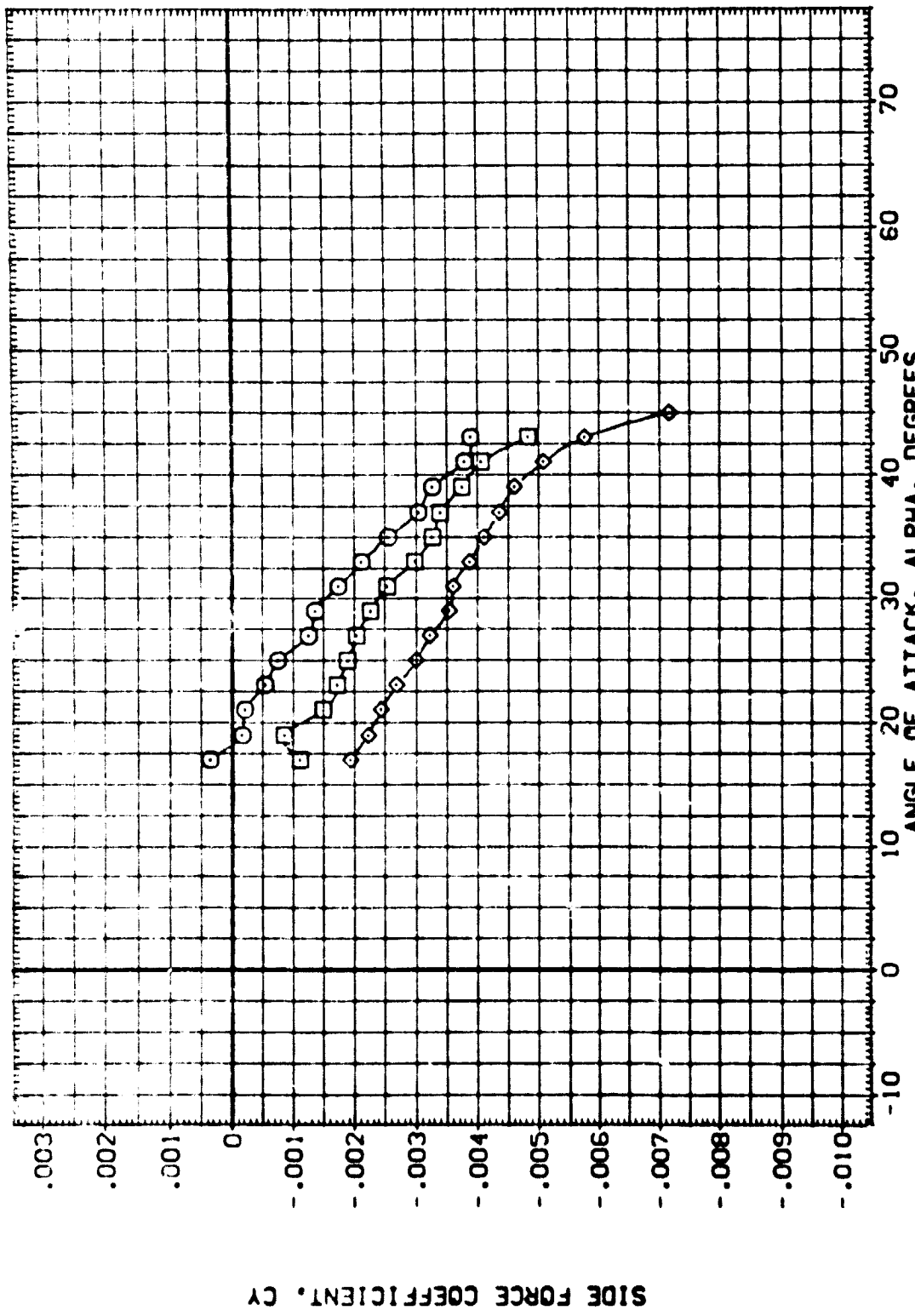


FIG. 28 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 16.3)

(A) MACH = 7.90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RNVL	BD FLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(ATV050)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	.500	16.300	20.000	20.000	SREF 2630.0000 SQ.FT.
(ATV053)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	1.860	16.300	20.000	20.000	LREF 474.8100 IN.
(ATV021)	0A79 B26 C9 E43 F8 M16 N28 R5 V8 V116	3.530	16.300	20.000	20.000	BREF 936.6600 IN.
						XPRP 1076.0000 IN.X0
						YPRP .0000 IN.Y0
						ZPRP .0000 IN.Z0
						SCALE .0150

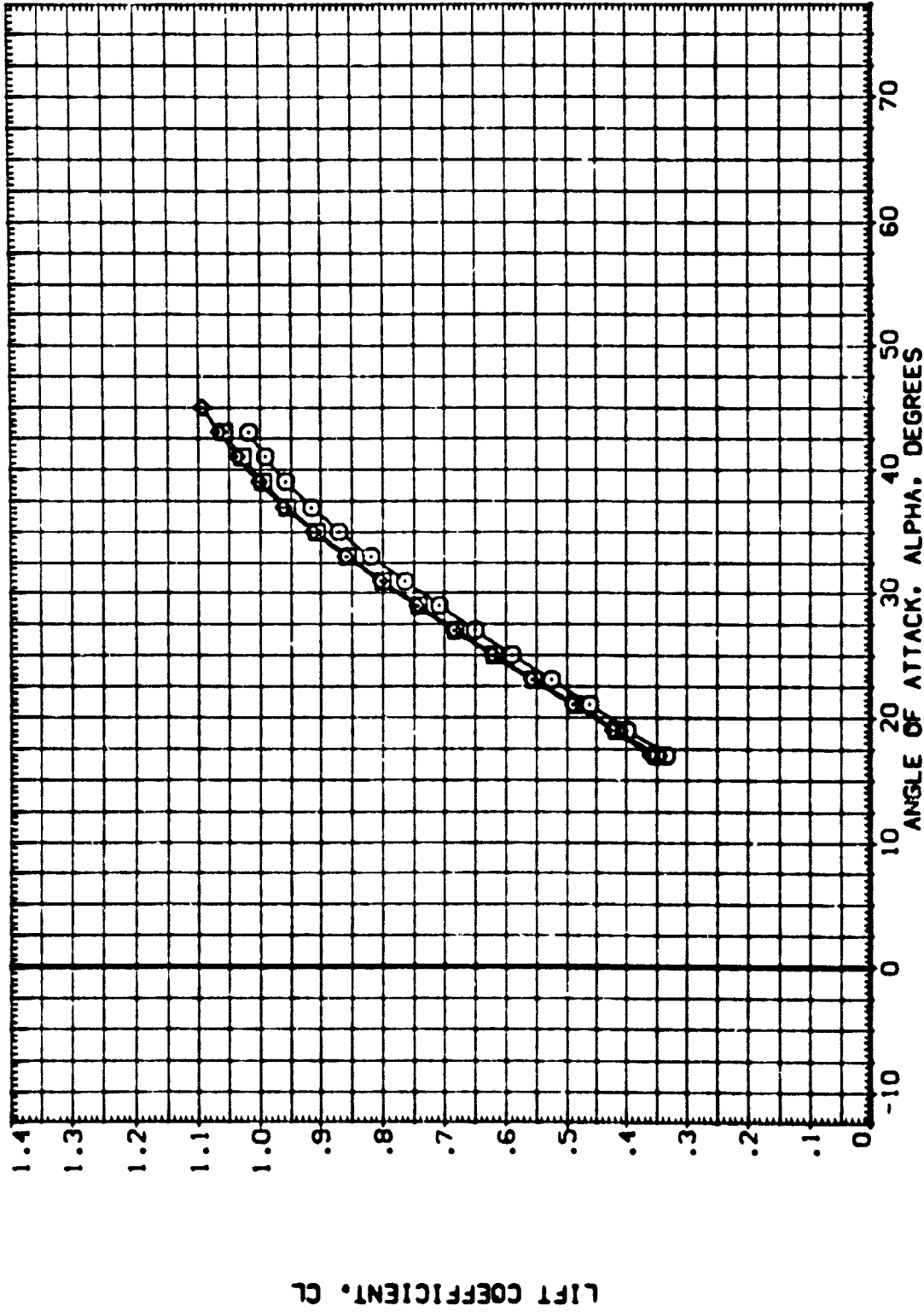


FIG. 28 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 16.3)

(A) MACH = 7.90



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(ATV060)	Q	Q479	B26	C9	E43	F8	M16	N28	R5	V8	V116
(ATV053)	Q	Q479	B26	C9	E43	F8	M16	N28	R5	V8	V116
(ATV021)	Q	Q479	B26	C9	E43	F8	M16	N28	R5	V8	V116

RMVL 500
1.0650
3.530

BD FLAP 16.300
16.300
16.300

ELV-L0 20.000
20.000
20.000

ELV-L1 20.000
20.000
20.000

REFERENCE INFORMATION

SREF	2650.0000	SQ.FT.
LREF	474.8100	IN.
BREF	936.2800	IN.
XTRP	1076.6800	IN.
YTRP	0.0000	IN.
ZTRP	375.0000	IN.
SCALE	.0150	

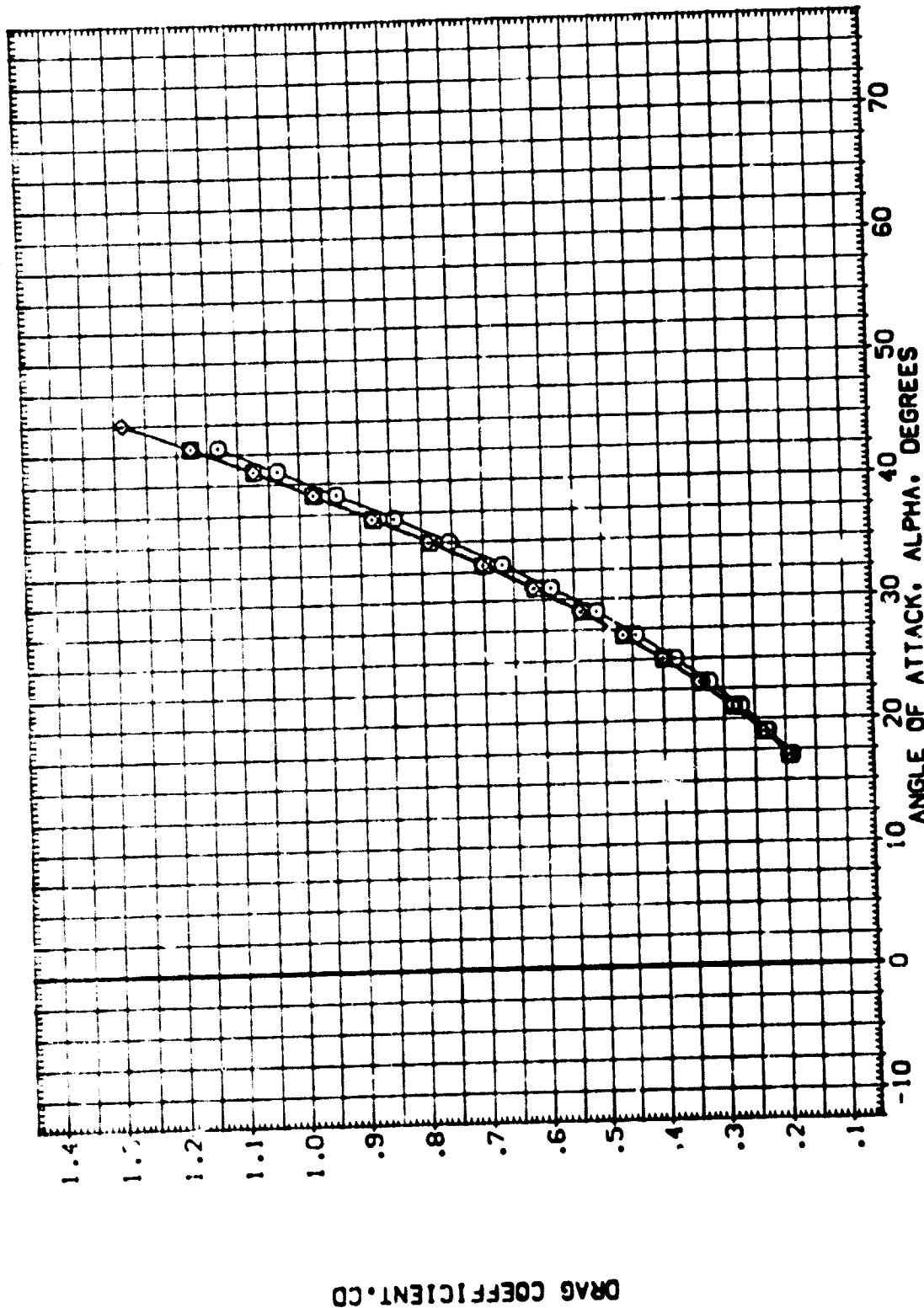


FIG. 28 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 16.3)

(A)MACH = 7.90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RM/L	BD/FLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(ATV050)	0A79 B26 C3 E43 FB M16 N08 R5 V8 V116	.500	16:300	20.000	20.000	2690.0000 50. FT.
(ATV053)	0A79 B26 C3 E43 FB M16 N08 R5 V8 V116	1.850	16:300	20.000	20.000	474.8100 IN.
(ATV021)	0A79 B26 C3 E43 FB M16 N08 R5 V8 V116	3.530	16:300	20.000	20.000	536.6900 IN.
						1076.6800 IN. X8
						YREF .0000 IN. Y8
						ZREF .0000 IN. Z8
						SCALE .0150

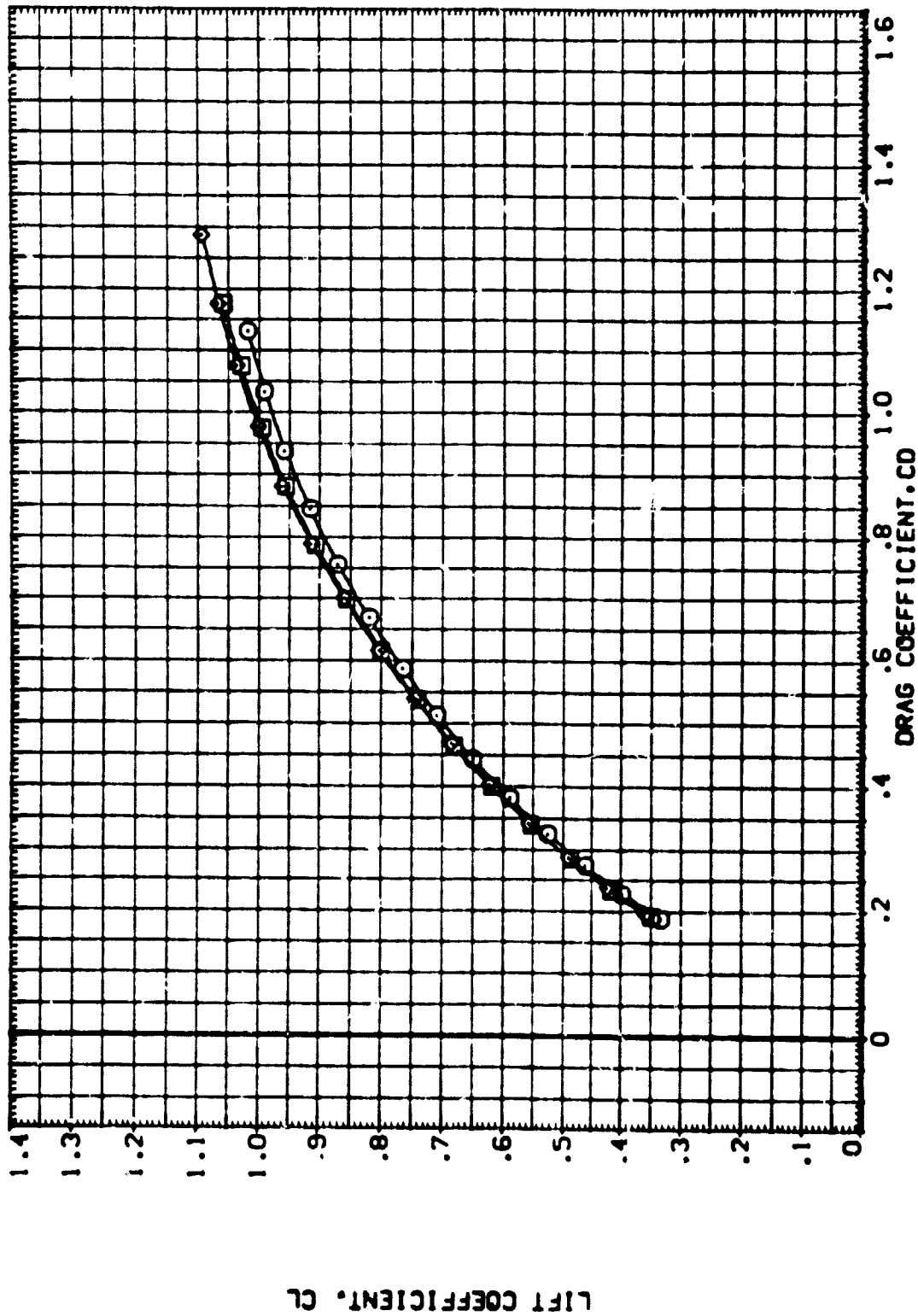


FIG. 28 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 16.3)

(*) MACH = 7.90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RVL	BDFLAP	ELV-L0	ELV-L1	REFERENCE INFORMATION
(ATW050)	CA79 B26 C9 E43 F8 M1 N28 R5 V8 V116	.500	16.300	20.000	20.000	SREF 2650.0000 SO.FT.
(ATW053)	CA79 B26 C9 E43 F8 M1 N28 R5 V9 V116	1.850	16.300	20.000	20.000	LREF 474.810' IN.
(ATW021)	CA79 B26 C9 E43 F8 M16 N28 R5 V8 V116	3.530	16.300	20.000	20.000	BREF 936.680' IN.
						XMRP 1076.6800 IN.X0
						YMRP .0000 IN.Y0
						ZMRP 375.0000 IN.Z0
						SCALE .0150

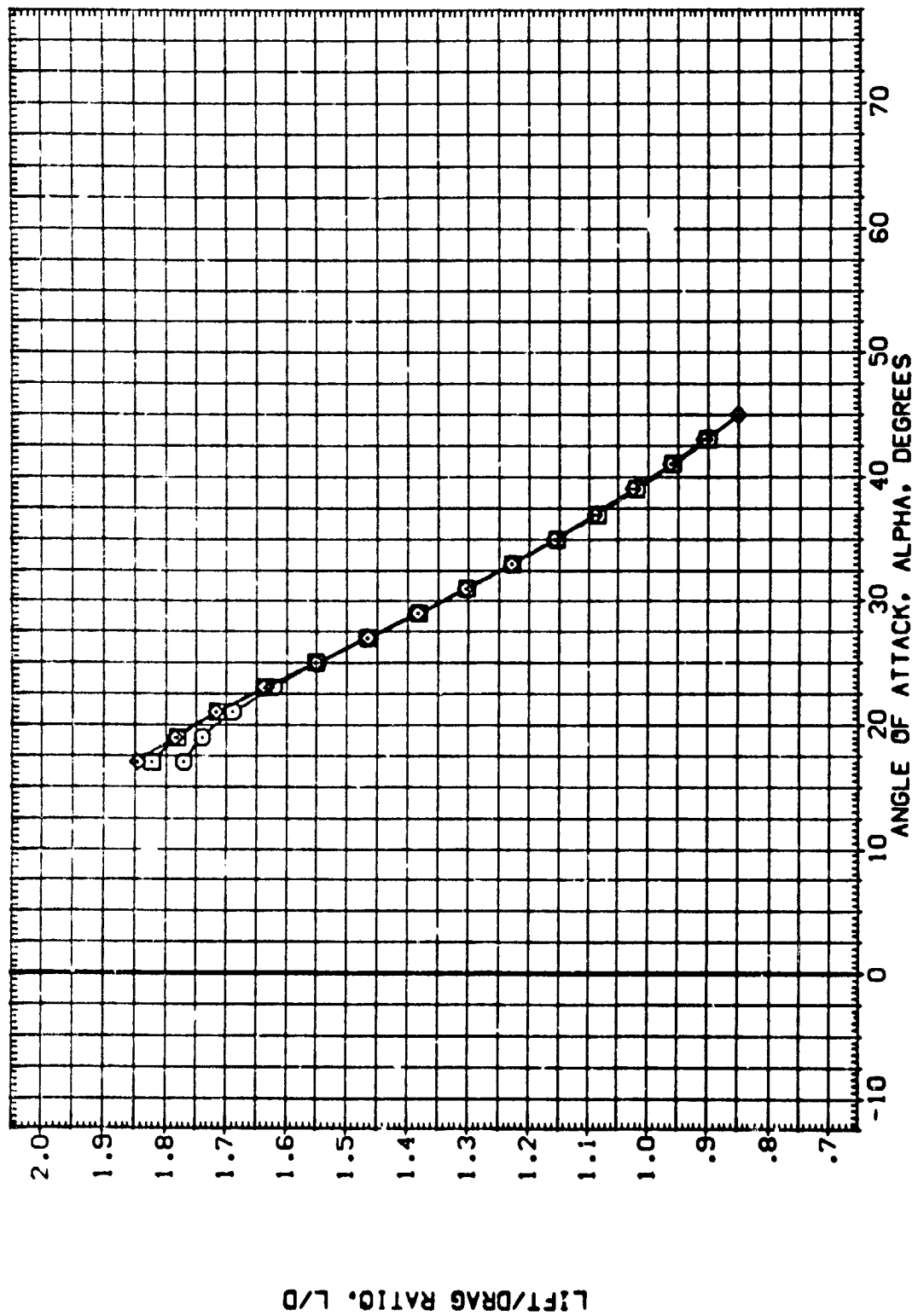


FIG. 28 REYNOLDS NUMBER EFFECTS (ELEVON = 20, BODY FLAP = 16.3)

(A)MACH = 7.90

APPENDIX
TABULATED SOURCE DATA

Tabulations or plotted data are available on request from
Data Management Services

CA79 026 C9 E43 F8 M16 M26 R5 V8 M16

RTWD031 (18 OCT 74)

REFERENCE DATA

SREF = 2000.0000 90.FT. XMRP = 1076.0000 IN.20
 LREF = 474.0100 IN. YMRP = .0000 IN.20
 DREF = 936.0000 IN. ZMRP = 373.0000 IN.20
 SCALE = .0190

PARAMETRIC DATA

BETA = .0001 ELV-LO = .0000
 ELV-LI = .0001 ELV-RI = .0000
 ELV-RO = .0001 BDFLAP = .0000
 SFDRMK = 55.0000 RUOGER = .0000
 RW/L = 3.330

RUN NO. 1067 0 RW/L = 3.34 GRADIENT INTERVAL = 15.00/ 25.00

MACH	ALPHA	CN	CAF	CLMF	CT	CYN	CBL	CAB	XCP/L	CLF	COF
0.000	17.000	.31011	-.03353	-.00335	-.00006	.00017	-.00034	.00223	.65406	.28091	-.14186
0.000	19.000	.37510	-.03361	-.00291	-.00104	.00009	-.00037	.00223	.63272	.33723	-.17502
0.000	21.000	.44447	-.03402	-.00267	-.00147	.00011	-.00051	.00223	.63225	.39559	-.20972
0.000	23.000	.51668	-.03406	-.00164	-.00100	.00020	-.00055	.00223	.63319	.45407	-.25172
0.000	25.000	.59332	-.03413	-.00163	-.00117	.00005	-.00056	.00223	.63393	.51486	-.29980
0.000	27.000	.67303	-.03520	-.00099	-.00157	.00017	-.00075	.00223	.63536	.57533	-.35009
0.000	29.000	.75635	-.03644	-.01378	-.00104	.00022	-.00080	.00223	.63661	.63413	-.41605
0.000	31.000	.84232	-.03747	-.01789	-.00197	-.00003	-.00068	.00223	.63772	.69241	-.48308
0.000	33.000	.92911	-.03725	-.02260	-.00006	-.00006	-.00064	.00223	.63894	.74804	-.55404
0.000	35.000	1.01540	-.03623	-.02630	-.00271	-.00020	-.00064	.00223	.64014	.80196	-.63010
0.000	37.000	1.10900	-.03552	-.03496	-.00268	-.00026	-.00064	.00223	.64151	.85292	-.71224
0.000	39.000	1.20000	-.03494	-.04203	-.00268	-.00032	-.00067	.00223	.64280	.90842	-.79822
0.000	41.000	1.29000	-.03406	-.04954	-.00300	-.00029	-.00074	.00223	.64404	.96664	-.88759
0.000	43.000	1.38000	-.03275	-.05713	-.00311	-.00014	-.00079	.00223	.64515	.97363	-.97998
0.000	45.000	1.46900	-.03106	-.06515	-.00331	-.00007	-.00083	.00223	.64623	1.00290	1.07520
GRADIENT		.33541	.00007	-.00036	-.00012	-.00001	-.00003	.00000	.00001	.02927	-.01973

ORIGINAL PAGE IS OF POOR QUALITY

CA79 B26 C9 E43 F8 M16 N28 R5 V8 W116

(RTM002) (18 OCT 74)

REFERENCE DATA

SREF = 2090.0000 94.00 FT. ZMRP = 1076.0000 IN. NO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BRFP = 936.6670 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0190

RUN NO. 110/ 0 RIN/L = 3.53 GRADIENT INTERVAL = -5.00/ 5.00

MAON	BETA	CN	CAF	CLMF	CY	CYN	CBL	CAB	KCP/L	CLF	COF
0.000	-3.003	.42968	.05737	-.00381	.04024	.00639	.00630	.00230	.63314	.38282	.20338
0.000	-3.039	.43357	.05998	-.00393	.02376	.00425	.00354	.00229	.63321	.38091	.20330
0.000	-1.014	.43337	.05537	-.00364	.00742	.00162	.00068	.00221	.63298	.38098	.20278
0.000	.029	.43392	.05557	-.00334	-.00114	.00028	-.00070	.00219	.63271	.38739	.20322
0.000	1.035	.43356	.05335	-.00361	-.00849	-.00092	-.00192	.00220	.63311	.38716	.20285
0.000	3.000	.43325	.05582	-.00419	-.02464	-.00351	-.00464	.00222	.63343	.39672	.20315
0.000	5.120	.43313	.05721	-.00399	-.04293	-.00374	-.00758	.00223	.63327	.38807	.20490
GRADIENT		-.00004	-.00002	.00005	-.00786	-.00126	-.00132	-.00001	.00004	-.00002	-.00005

CA79 B26 C9 E43 F8 M16 N28 R5 V8 W116

(RTM003) (18 OCT 74)

REFERENCE DATA

SREF = 2090.0000 94.00 FT. ZMRP = 1076.0000 IN. NO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BRFP = 936.6670 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0190

RUN NO. 111/ 0 RIN/L = 3.53 GRADIENT INTERVAL = -5.00/ 5.00

MAON	BETA	CN	CAF	CLMF	CY	CYN	CBL	CAB	KCP/L	CLF	COF
0.000	-3.009	.80076	.09072	-.01819	.03076	.00621	.00171	.00165	.65769	.70921	.49131
0.000	-3.034	.85541	.09528	-.01880	.01538	.00363	.00377	.00185	.65791	.71425	.49192
0.000	-1.021	.86763	.05986	-.01899	.00097	.00060	-.00005	.00180	.65797	.71647	.49252
0.000	.005	.86939	.05542	-.01907	-.00645	-.00054	-.00206	.00176	.65799	.71732	.49257
0.000	1.024	.86837	.05331	-.01903	-.01361	-.00192	-.00395	.00175	.65798	.71734	.49290
0.000	3.065	.86682	.05378	-.01863	-.02817	-.00477	-.00170	.00177	.65783	.71554	.49207
0.000	5.096	.86414	.05758	-.01823	-.04375	-.00734	-.01157	.00171	.65768	.71243	.49244
GRADIENT		.00021	-.00015	.00002	-.00712	-.00117	-.00188	-.00001	-.00001	.00003	.00002

PARAMETRIC DATA

ALPHA = 30.000 ELV-LO = .000
 ELV-LI = .000 ELV-RI = .000
 ELV-RO = .000 BOFLAP = .000
 SPOBRK = 55.000 RUDDER = .000
 RIN/L = 3.530



CA 79 826 C9 E43 F8 M16 N28 R5 V8 M16

(RTM034) (18 OCT 74)

REFERENCE DATA

XREF = 2000.0000 30. FT. XMRP = 1076.6000 IN. NO
 YREF = 474.8100 IN. YMRP = .0000 IN. YO
 ZREF = 936.6000 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0190

PARAMETRIC DATA

ALPHA = 20.000 ELV-LO = .000
 ELV-LI = .000 ELV-RI = .000
 ELV-RO = .000 BDFLAP = .000
 SPOBRK = 55.000 RUDDER = -10.000
 RM/L = 3.530

RUN NO. 112/ 0 RM/L = 3.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CAF	CLMF	CY	CYN	CBL	CAB	KCP/L	CLF	COF
0.000	-5.106	.42943	.05617	-.00363	-.03921	.00662	.07606	.07233	.65315	.38303	.20291
0.000	-3.100	.42992	.05518	-.01367	.02331	.00456	.00342	.07234	.65302	.38363	.20137
0.000	-1.049	.43143	.05532	-.07272	.00634	.00213	.00031	.07225	.65220	.38514	.20214
0.000	-.026	.43299	.05540	-.07276	-.00148	.00089	-.00084	.07222	.65222	.38616	.20264
0.000	1.003	.43231	.05489	-.07342	-.00900	-.00064	-.00200	.07220	.65279	.38614	.20198
0.000	3.056	.43190	.05554	-.07308	-.02520	-.00332	-.00472	.07225	.65290	.38559	.20234
0.000	5.066	.43140	.05723	-.07193	-.04322	-.00536	-.00771	.07228	.65193	.38447	.20367
	GRADIENT	.00033	.00003	.00005	-.00784	-.00129	-.00131	-.00002	-.00005	.00031	.00013

CA 79 826 C9 E43 F8 M16 N28 R5 V8 M16

(RTM035) (18 OCT 74)

REFERENCE DATA

XREF = 2000.0000 30. FT. XMRP = 1076.6000 IN. NO
 YREF = 474.8100 IN. YMRP = .0000 IN. YO
 ZREF = 936.6000 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0190

PARAMETRIC DATA

ALPHA = 30.000 ELV-LO = .000
 ELV-LI = .000 ELV-RI = .000
 ELV-RO = .000 BDFLAP = .000
 SPOBRK = 55.000 RUDDER = -10.000
 RM/L = 3.530

RUN NO. 113/ 0 RM/L = 3.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CAF	CLMF	CY	CYN	CBL	CAB	KCP/L	CLF	COF
0.000	-3.099	.86103	.05631	-.01815	.02981	.00651	.00763	.00184	.65767	.71057	.48932
0.000	-3.014	.86516	.05524	-.01846	.01421	.00360	.00360	.00184	.65777	.71477	.49055
0.000	-1.011	.86726	.05476	-.01837	.00017	.00105	-.00010	.00183	.65771	.71670	.49140
0.000	.009	.86775	.05470	-.01831	-.00732	-.00031	-.00213	.00180	.65768	.71712	.49165
0.000	1.037	.86766	.05478	-.01812	-.01420	-.00170	-.00404	.00179	.65760	.71699	.49100
0.000	3.048	.86584	.05527	-.01757	-.02836	-.00490	-.00779	.00179	.65738	.71515	.49121
0.000	5.099	.86248	.05631	-.01671	-.04404	-.00710	-.01166	.00176	.65704	.71119	.49032
	GRADIENT	.00012	.00004	.00014	-.00703	-.00136	-.00187	-.00001	-.00004	.00017	.00011

ORIGINAL PAGE IS OF POOR QUALITY

REFERENCE DATA

WAVE = 2093.0000 50.0 FT. WAVE = 1076.0000 IN. MO
 LREF = 474.0100 IN. YREF = .0000 IN. YO
 BREF = 936.0000 IN. ZREF = 375.0000 IN. ZO
 SCALE = .0191

RUN NO. 1147 0 RM/L = 3.55 GRADIENT INTERVAL = 15.00/ 25.00

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
 ELV-L1 = .000 ELV-R1 = .000
 ELV-R0 = .000 BDFLAP = .000
 SPOORR = 55.000 RUDDER = .000
 RM/L = 3.550

MAOH	ALPHA	CN	CAF	CLMF	CY	CYN	CBL	CAB	KCP/L	CLF	COF
0.000	17.000	.32391	.03247	-.00332	-.00065	.00010	-.00044	.00181	.65308	.29442	.14488
0.000	19.000	.36762	.03316	-.00367	-.00118	.00001	-.00048	.00181	.65337	.34920	.17646
0.000	21.000	.45674	.03378	-.00399	-.00147	-.00007	-.00050	.00181	.65311	.40713	.21369
0.000	23.000	.53744	.03445	-.00432	-.00167	-.00010	-.00054	.00181	.65337	.46700	.25738
0.000	25.000	.61996	.03514	-.00475	-.00175	-.00011	-.00061	.00181	.65429	.52589	.30807
0.000	27.000	.68372	.03578	-.00519	-.00203	-.00028	-.00069	.00181	.65325	.58365	.36101
0.000	29.000	.76843	.03623	-.01361	-.00231	-.00076	-.00078	.00181	.65643	.64492	.42172
0.000	31.000	.83318	.03663	-.01830	-.00243	-.00078	-.00086	.00181	.65781	.70215	.48797
0.000	33.000	.94131	.03700	-.02395	-.00269	-.00078	-.00087	.00181	.65928	.75941	.56048
0.000	35.000	1.03100	.03714	-.03034	-.00286	-.00018	-.00087	.00181	.66082	.81173	.63815
0.000	37.000	1.12100	.03666	-.03666	-.00309	-.00027	-.00089	.00181	.66205	.86165	.72049
0.000	39.000	1.21210	.03621	-.04402	-.00320	-.00036	-.00093	.00181	.66328	.90661	.80649
0.000	41.000	1.30190	.03525	-.05140	-.00335	-.00036	-.00093	.00181	.66445	.94630	.89582
0.000	43.000	1.39190	.03418	-.05913	-.00369	-.00031	-.00104	.00181	.66556	.98071	.98800
0.000	45.000	1.47990	.03271	-.06719	-.00401	-.00020	-.00112	.00181	.66663	1.00920	1.08370
0.000	GRADIENT	.03335	.00000	-.00000	-.00000	-.00000	-.00000	.00000	.00000	.00000	.00000



CA 75 828 CB E43 F8 M7 488 85 28 W116

(RTMDD9) (18 OCT 74)

REFERENCE DATA

BREF = 2000.0000 50. FT. WARP = 10/6.0000 IN. 10
 LREF = 474.8100 IN. YARP = .0000 IN. 10
 SREF = 930.0000 IN. ZARP = 3/4.0000 IN. 20
 SCALE = .7197

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
 ELV-L1 = .000 ELV-R1 = .000
 ELV-R0 = .000 BDFLAP = .000
 SPOBR = 58.000 RUDDER = .000
 RM/L = 3.530

RUN NO. 117/0 RM/L = 3.51 GRADIENT INTERVAL = 15.00/ 25.00

MACH	ALPHA	CN	CLAF	CLMF	CY	CYN	COB	CAB	KCP/L	CLF	COF
0.000	17.000	.31200	-.05345	-.02463	-.00201	.00022	-.00046	.00226	.65530	.20340	.14284
0.000	19.000	.37757	-.05303	-.02410	-.00224	.00017	-.00053	.00229	.65306	.33947	.17382
0.000	21.000	.44797	-.05246	-.02344	-.00241	.00010	-.00057	.00229	.65349	.39807	.21114
0.000	23.000	.52714	-.05196	-.02278	-.00257	.00011	-.00067	.00229	.65332	.45732	.25383
0.000	25.000	.60576	-.05157	-.02194	-.00274	.00003	-.00066	.00229	.65418	.51543	.30214
0.000	27.000	.67977	-.05108	-.02109	-.00290	.00003	-.00076	.00229	.65518	.57679	.35699
0.000	29.000	.75055	-.05050	-.02025	-.00315	.00000	-.00080	.00229	.65625	.63603	.41716
0.000	31.000	.81345	-.05007	-.01939	-.00338	-.00007	-.00089	.00229	.65749	.69364	.48325
0.000	33.000	.87109	-.05035	-.01857	-.00330	-.00009	-.00089	.00229	.65893	.75731	.55564
0.000	35.000	1.02270	-.05135	-.01759	-.00313	-.00007	-.00094	.00229	.66031	.82472	.63348
0.000	37.000	1.11200	-.05275	-.01697	-.00287	-.00007	-.00100	.00229	.66169	.89439	.71525
0.000	39.000	1.27393	-.05603	-.01422	-.00241	-.00002	-.00102	.00229	.66295	.96955	.80159
0.000	41.000	1.49370	-.05617	-.01115	-.00142	-.00009	-.00107	.00229	.66418	.93953	.89114
0.000	43.000	1.38307	-.05970	-.01074	-.00142	-.00009	-.00111	.00229	.66533	.97445	.98400
0.000	45.000	1.47297	-.05379	-.00655	-.00146	-.00018	-.00116	.00229	.66631	1.00320	1.07930
0.000	GA-DIEMT	.03544	.00727	-.00726	-.00010	-.00002	-.00003	.00000	-.00013	.00000	.00000



REFERENCE DATA
 MACH = 2.000, 2.000 20-FT. WARP = 1076.6000 IN. NO
 REF = 474.8100 IN. YARP = .0000 IN. YO
 REF = 930.6000 IN. ZARP = 375.0000 IN. ZO
 SCALE = .0100

RUN NO. 1187 U RWL = 3.31 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CM	CAF	CLAF	CY	CYN	CBL	CAB	KCP/L	CLF	COF
0.771	-5.177	-43569	-03973	-07376	.03973	.00748	.07340	.07231	.65977	.36979	.20381
0.771	-3.767	-43616	-03487	-07355	.02271	.00482	.07373	.07230	.65287	.36988	.20303
0.771	-1.023	-43656	-03456	-07335	.00636	.00213	.07367	.07222	.65271	.36925	.20314
0.771	-.073	-43726	-03456	-07345	-.00102	.00732	-.07347	.07222	.65282	.36988	.20343
0.771	1.033	-43631	-03431	-07359	-.00337	-.00116	-.07372	.07222	.65293	.36977	.20293
0.771	3.084	-43632	-03456	-07353	-.02491	-.00379	-.07459	.07225	.65320	.36971	.20309
0.771	5.173	-43732	-03531	-07363	-.04237	-.00656	-.07734	.07226	.65310	.36971	.20433
GRADIENT		.07771	-.07772	-.07777	-.00768	-.00142	-.00134	-.07771	.07776	.07771	-.00000

REFERENCE DATA
 MACH = 2.000, 2.000 20-FT. WARP = 1076.6000 IN. NO
 REF = 474.8100 IN. YARP = .0000 IN. YO
 REF = 930.6000 IN. ZARP = 375.0000 IN. ZO
 SCALE = .0100

RUN NO. 1187 U RWL = 3.32 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CM	CAF	CLAF	CY	CYN	CBL	CAB	KCP/L	CLF	COF
0.771	-5.093	-66092	-03465	-01821	.02972	.00679	.07373	.07181	.65765	.71802	.49158
0.771	-3.024	-66063	-03456	-01833	.01403	.00336	.07366	.07180	.65775	.71876	.49237
0.771	-1.021	-67104	-03432	-01876	-.00006	.00087	-.00008	.07178	.65784	.72012	.49378
0.771	.073	-67131	-03403	-01896	-.00755	-.00048	-.00112	.07175	.65792	.72047	.49297
0.771	1.049	-67171	-03403	-01893	-.01163	-.00412	-.00412	.07174	.65792	.72022	.49280
0.771	3.075	-68039	-03463	-01843	-.02942	-.00463	-.00778	.07172	.65772	.71778	.49177
0.771	5.127	-68061	-03466	-01829	-.04496	-.00749	-.01175	.07171	.65769	.71515	.49076
GRADIENT		-.07719	-.07774	.07773	-.00714	-.00133	-.00169	-.07771	-.07773	-.07771	-.00013

CA 75 826 C9 E43 F8 W7 N88 R5 V8 W116

OADR 828 C9 E43 F8 H16 H88 R5 W8 M16

(RTD12) (10 OCT 74)

REFERENCE DATA

BEP = 2000.0000 80. FT. WWP = 1076.6000 IN. 20
 LRP = 474.8100 IN. WWP = .0000 IN. 70
 BEP = 936.6000 IN. WWP = 375.0000 IN. 20
 SCALE = .0100

PARAMETRIC DATA

BETA = .0000 ELV-LO = .0000
 ELV-L1 = .0000 ELV-R1 = .0000
 ELV-R0 = .0000 80PLAP = -11.0000
 SPOOR = 33.0000 RUDCOR = .0000
 RM/L = 3.330

RUN NO. 123/ 0 RM/L = 3.34 GRADIENT INTERVAL = 15.00/ 25.00

NOCH	ALPHA	CM	CAF	CLAF	CY	CYM	CSL	CAB	KCP/L	CLF	COF
0.000	17.000	33083	.05436	.00460	-.00202	.00013	-.00049	.00217	.64465	.30042	.14093
0.000	19.000	39376	.05433	.00356	-.00218	.00002	-.00033	.00217	.64465	.33389	.17933
0.000	21.000	45669	.05430	.00330	-.00233	-.00006	-.00035	.00217	.64364	.40935	.21580
0.000	23.000	52031	.05490	.00335	-.00239	-.00018	-.00031	.00217	.64743	.46689	.25782
0.000	25.000	60312	.05536	.00399	-.00235	-.00025	-.00037	.00217	.64869	.52913	.30391
0.000	27.000	68324	.05599	.00325	-.00241	-.00034	-.00065	.00217	.64970	.58335	.36037
0.000	29.000	76465	.05633	.00195	-.00260	-.00025	-.00083	.00217	.65084	.64147	.41998
0.000	31.000	84667	.05645	-.00126	-.00271	-.00024	-.00095	.00217	.65219	.69666	.48445
0.000	33.000	93230	.05638	-.00020	-.00287	-.00018	-.00107	.00217	.65354	.75119	.55503
0.000	35.000	1.02780	.05679	-.01402	-.00321	-.00013	-.00114	.00217	.65497	.80475	.63148
0.000	37.000	1.11723	.05562	-.01933	-.00361	-.00009	-.00117	.00217	.65639	.85321	.71238
0.000	39.000	1.20760	.05528	-.02547	-.00371	-.00028	-.00109	.00217	.65772	.89823	.79830
0.000	41.000	1.29773	.05438	-.03176	-.00393	-.00033	-.00114	.00217	.65906	.93791	.88737
0.000	43.000	1.38793	.05315	-.03824	-.00403	-.00032	-.00120	.00217	.66033	.97196	.97901
0.000	45.000	1.46690	.05166	-.04462	-.00427	-.00023	-.00124	.00217	.66111	1.00070	1.07380
0.000	GRADIENT	.05030	.00337	-.00037	-.00004	-.00005	-.00001	.00000	.00000	.00000	.01962

TABULATED SOURCE DATA - (CAL)

DATE 10 MAR 75

CALC 826 CR 643 FO H16 N28 R5 VS W418

PARAMETRIC DATA
 BETA = .000 ELV-LO = .000
 ELV-LI = .000 ELV-HI = .000
 ELV-RO = .000 BDFLAP = 18.970
 SPOORR = 55.000 RUGGER = .000
 RML = 3.550

REFERENCE DATA
 WELP = 1000.0000 50.0 FT. CORP = 10.00 60.00 IN. RO
 VAMP = 4.4 0.000 IN. VAMP = .0000 IN. VC
 DATE = 030 0000 IN. ZAMP = 3.5 0.000 IN. ZC
 SCALE = .0150

RUN NO. 1216 RML = 3.55 GRADIENT INTERVAL = 15.00/25.00

WELP	ALPHA	CM	CAF	CLAF	CT	CTM	CSL	CAB	KCPAL	CLF	CRF
0.000	17.000	1.32535	0.05781	-0.01538	-0.00000	-0.00000	-0.00000	0.00000	0.00000	0.00000	0.00000
0.000	19.000	1.39531	0.09072	-0.02208	0.00126	-0.00056	-0.00056	0.00216	0.00117	0.35455	0.18451
0.000	21.000	1.46537	0.12363	-0.02886	0.00252	-0.00112	-0.00112	0.00432	0.00235	0.41438	0.22411
0.000	23.000	1.53543	0.15654	-0.03564	0.00378	-0.00168	-0.00168	0.00648	0.00350	0.47875	0.27032
0.000	25.000	1.60549	0.18935	-0.04242	0.00504	-0.00224	-0.00224	0.00864	0.00465	0.49731	0.32233
0.000	27.000	1.67555	0.22216	-0.04920	0.00630	-0.00280	-0.00280	0.01080	0.00580	0.50227	0.38027
0.000	29.000	1.74561	0.25497	-0.05598	0.00756	-0.00336	-0.00336	0.01296	0.00697	0.56193	0.43353
0.000	31.000	1.81567	0.28778	-0.06276	0.00882	-0.00392	-0.00392	0.01512	0.00814	0.72044	0.51239
0.000	33.000	1.88573	0.32059	-0.06954	0.01008	-0.00448	-0.00448	0.01728	0.00931	0.75044	0.58665
0.000	35.000	1.95579	0.35340	-0.07632	0.01134	-0.00504	-0.00504	0.01944	0.01048	0.75044	0.66607
0.000	37.000	2.02585	0.38621	-0.08310	0.01260	-0.00560	-0.00560	0.02160	0.01165	0.80725	0.71151
0.000	39.000	2.09591	0.41902	-0.08988	0.01386	-0.00616	-0.00616	0.02376	0.01282	0.82725	0.80755
0.000	41.000	2.16597	0.45183	-0.09666	0.01512	-0.00672	-0.00672	0.02592	0.01399	0.92725	0.93379
0.000	43.000	2.23603	0.48464	-0.10344	0.01638	-0.00728	-0.00728	0.02808	0.01516	0.99761	1.02790
0.000	45.000	2.30609	0.51745	-0.11022	0.01764	-0.00784	-0.00784	0.03024	0.01633	1.02970	1.12590
0.000	47.000	2.37615	0.55026	-0.11700	0.01890	-0.00840	-0.00840	0.03240	0.01750	1.02970	1.23149
0.000	49.000	2.44621	0.58307	-0.12378	0.02016	-0.00896	-0.00896	0.03456	0.01867	0.99082	0.99082

ON 75 026 CG 043 PG 016 N00 03 10 0116

(RTM014) (10 OCT 74)

REFERENCE DATA

WAVE = 0.000, 0.000 20.000, 0.000
 WAVE = 0.000, 0.000 20.000, 0.000
 WAVE = 0.000, 0.000 20.000, 0.000
 WAVE = 0.000, 0.000 20.000, 0.000
 WAVE = 0.000, 0.000 20.000, 0.000

PARAMETRIC DATA

BETA = 0.000 ELV-LO = 0.000
 ELV-HI = 0.000 ELV-RI = -20.000
 ELV-RO = -20.000 RDLAP = 0.000
 SPOBCK = 55.000 RUDDER = 0.000
 RWL = 5.500

RUN NO. 1227 0 RWL = 3.56 GRADIENT INTERVAL = 15.00/ 25.00

WAVE	ALPHA	CN	CAF	CLMF	CY	CYN	CBL	CAN	XCP/L	CLF	COF
0.000	17.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	18.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	19.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	20.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	21.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	22.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	23.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	24.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	25.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	26.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	27.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	28.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	29.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	30.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	31.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	32.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	33.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	34.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	35.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	36.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	37.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	38.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	39.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	40.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	41.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	42.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	43.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	44.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	45.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	46.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	47.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	48.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	49.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	50.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000



CAPB B26 C0 E03 F0 M16 M00 R03 W0 M16

(RTM015) (10 OCT 74)

REFERENCE DATA

MREF = 2000.0000 00.00. MGRP = 1076.6000 IN. M0
 LREF = 474.8100 14. VGRP = .0000 IN. V0
 BREF = 936.6000 14. ZGRP = 375.0000 IN. Z0
 SCALE = .0100

PARAMETRIC DATA

BETA = .0000 ELV-CO = -20.0000
 ELV-LI = -20.0000 ELV-RI = -20.0000
 ELV-RO = -20.0000 R0FLAP = .0000
 SPOKER = 55.0000 RUCOOR = .0000
 RIVL = 3.5000

RUN NO. 1237 0 RIVL = 3.55 GRADIENT INTERVAL = 15.00/ 25.00

MACH	ALPHA	CN	CAP	CLAP	CV	CVA	CBL	CAB	KCP/L	CLF	CDP
0.000	17.000	.29300	.05501	.00706	-.00000	.00010	.00014	.00215	.60000	.26662	.13000
0.000	18.000	.33741	.05609	.01006	-.00001	.00020	.00020	.00215	.63931	.31000	.16000
0.000	21.000	.42409	.05625	.01121	-.00001	.00021	.00035	.00215	.63927	.37000	.20000
0.000	23.000	.48612	.05626	.01250	-.00000	.00036	.00046	.00215	.64035	.43000	.24000
0.000	25.000	.54000	.05664	.01376	-.00000	.00045	.00046	.00215	.64131	.49000	.29000
0.000	27.000	.64430	.05705	.01400	-.00000	.00046	.00045	.00215	.64200	.54000	.34000
0.000	29.000	.72200	.05732	.01500	-.00000	.00045	.00045	.00215	.64215	.60000	.40000
0.000	31.000	.80315	.05774	.01676	-.00000	.00045	.00041	.00215	.64000	.65000	.46000
0.000	33.000	.88500	.05743	.01815	-.00000	.00041	.00032	.00215	.64000	.71000	.53000
0.000	35.000	.97000	.05602	.01992	-.00000	.00043	.00031	.00215	.64000	.76242	.60000
0.000	37.000	1.05700	.05637	.02165	-.00000	.00043	.00029	.00215	.64000	.81000	.68000
0.000	39.000	1.14200	.05570	.02337	-.00000	.00042	.00036	.00215	.64000	.85000	.76000
0.000	41.000	1.22700	.05442	.02513	-.00000	.00040	.00035	.00215	.64000	.89000	.84000
0.000	43.000	1.31200	.05265	.02685	-.00000	.00040	.00035	.00215	.65000	.92000	.93000
0.000	45.000	1.39600	.05104	.02853	-.00000	.00039	.00035	.00215	.65000	.95000	1.02000
0.000	47.000	1.48000	.04911	.03017	-.00000	.00037	.00034	.00215	.65000	.98000	1.10000
0.000	49.000	1.56400	.04701	.03177	-.00000	.00037	.00034	.00215	.65000	1.01000	1.18000

DATE 19 MAR 79

TABULATED SOURCE DATA - CAT9

PAGE 13

CAT9 826 CS 643 PG HIS NEG RS VS M16

(RTND017) (18 OCT 74)

REFERENCE DATA

MEF = 2897.0000 90. FT. YMP = 1076.8000 IN. MO
 LRF = 474.8100 IN. YMP = .0000 IN. VO
 BRF = 936.8000 IN. ZMP = 379.0000 IN. ZO
 SCALE = .0197

PARAMETRIC DATA

BETA = .000 ELV-LO = 10.000
 ELV-LI = 10.000 ELV-RI = 10.000
 ELV-RO = 10.000 8DFLAP = .000
 SPOBRK = 55.000 RUDDER = .000
 RW/L = 3.530

RUN NO. 123/ 0 RW/L = 3.52 GRADIENT INTERVAL = 15.00/ 25.00

WCON	ALPHA	CN	CAF	CLMF	CY	CYN	CSL	CAB	XCP/L	CLF	CDF
0.000	17.000	3.4017	-.05922	-.02330	-.00181	.00077	-.00126	.00212	.67907	.30799	.15809
0.000	19.000	-.00663	-.06105	-.02630	-.00195	.00076	-.00140	.00212	.67368	.36480	.19011
0.000	21.000	-.48154	-.08211	-.02991	-.00232	.00078	-.00146	.00212	.67274	.42730	.23055
0.000	23.000	-.58047	-.06330	-.03496	-.00223	.00082	-.00151	.00212	.67266	.49118	.27726
0.000	25.000	-.64025	-.06469	-.04004	-.00223	.00064	-.00168	.00212	.67291	.55284	.32940
0.000	27.000	-.72341	-.06648	-.04569	-.00255	.00069	-.00182	.00212	.67314	.61436	.38766
0.000	29.000	-.80955	-.06901	-.05197	-.00286	.00066	-.00200	.00212	.67353	.67907	.45196
0.000	31.000	-.89773	-.06928	-.05909	-.00289	.00094	-.00210	.00212	.67413	.73380	.52174
0.000	33.000	-.98844	-.07335	-.06680	-.00307	.00121	-.00229	.00212	.67476	.79066	.59734
0.000	35.000	1.08190	-.07123	-.07537	-.00332	.00142	-.00243	.00212	.67556	.84905	.67866
0.000	37.000	1.17900	-.07213	-.08490	-.00361	.00156	-.00251	.00212	.67632	.89497	.76472
0.000	39.000	1.26790	-.07320	-.09349	-.00375	.00154	-.00251	.00212	.67705	.93924	.85477
0.000	41.000	1.34840	-.07370	-.10290	-.00376	.00156	-.00258	.00212	.67772	.97839	.94815
0.000	43.000	1.43140	-.07374	-.11196	-.00366	.00188	-.00266	.00212	.67830	1.01120	1.04380
0.000	45.000	1.53950	-.07337	-.12125	-.00346	.00183	-.00270	.00212	.67890	1.03670	1.14040
GRADIENT		-.03770	-.00068	-.00211	-.00006	-.00002	-.00005	-.00000	-.00002	-.00001	.00169

ORIGINAL PAGE IS
OF HIGH QUALITY

CA 75 826 C9 E43 F8 M16 M20 R5 V8 M16

(RTN018) (18 OCT 74)

REFERENCE DATA

SREF = 2890.0000 28.FT. WREF = 1076.6600 1M.20
 LREF = 474.8100 1M. YREF = .0000 1M.10
 BREF = 936.6600 1M. ZREF = 375.0000 1M.20
 SCALE = .0100

PARAMETRIC DATA

ALPHA = .000 ELV-LO = 15.000
 ELV-LI = 10.000 ELV-RI = 15.000
 ELV-RO = 10.000 BOFLAP = .000
 SPOBOK = 55.000 RUDDER = .000
 RWL = 3.500

RUN NO. 126/ 0 RWL = 3.52 GRADIENT INTERVAL = -3.00/ 5.00

INCH	BETA	CM	CAP	CLWF	CT	CTN	CBL	CAB	KCP/L	CLP	PDF
0.000	-5.094	.91331	.04895	-.05699	.02996	.00767	.00690	.00145	.67368	.74919	.52700
0.000	-3.010	.91665	.04675	-.05978	.01434	.00484	.00240	.00143	.67391	.75205	.52778
0.000	-1.025	.91867	.04765	-.06005	.00766	.00210	-.00121	.00147	.67397	.75496	.52780
0.000	.074	.91808	.04699	-.05997	-.00667	.00094	-.00324	.00147	.67393	.75546	.52737
0.000	1.031	.91820	.04660	-.05993	-.01394	-.00049	-.00321	.00145	.67393	.75521	.52732
0.000	3.089	.91634	.04726	-.05922	-.02832	-.00335	-.00002	.00142	.67370	.75309	.52636
0.000	5.122	.91242	.04640	-.05810	-.04384	-.00579	-.01303	.00141	.67335	.74910	.52538
GRADIENT	-.00000	-.00000	-.00000	.00000	-.00000	-.00133	-.00186	-.00000	-.00000	.00004	-.00025



CA 75 B28 C9 E43 F8 M16 M28 R5 V8 M16

(RTM019) (18 OCT 74)

REFERENCE DATA

MEF = 2690.0000 36.00 FT. MSEP = 1076.6000 IN. MO
 LREF = 474.8100 IN. YSEP = .0000 IN. YO
 BREF = 936.6900 IN. ZSEP = 379.0000 IN. ZO
 SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELV-LO = 20.000
 ELV-LI = 20.000 ELV-RI = 20.000
 ELV-RO = 20.000 BDFLAP = .000
 SPOBWK = 55.000 RUDDER = .000
 RM/L = 3.530

RUN NO. 127/ 0 RM/L = 3.53 GRADIENT INTERVAL = 15.00/ 25.00

MOON	ALPHA	CN	CAF	CLMF	CY	CYM	CEB	CAB	XCP/L	CLF	CLF	CDF
0.000	17.000	-30561	.07756	-.06443	-.00180	.00110	-.02163	.00216	.71135	.34809	.34809	.16691
0.000	19.000	-49905	.09105	-.07064	-.00214	.00116	-.00177	.00216	.70667	.40763	.40763	.22609
0.000	21.000	-54166	.08345	-.07753	-.00253	.00121	-.00190	.00216	.70256	.47978	.47978	.27202
0.000	23.000	-62186	.06698	-.06592	-.00280	.00130	-.00206	.00216	.70073	.53044	.53044	.32305
0.000	25.000	-70373	.05047	-.09351	-.00306	.00148	-.00230	.00216	.69866	.60137	.60137	.38024
0.000	27.000	-79189	.06423	-.10217	-.00332	.00157	-.00246	.00216	.69739	.66263	.66263	.44335
0.000	29.000	-88794	.08780	-.11108	-.00365	.00169	-.00263	.00216	.69631	.72937	.72937	.51262
0.000	31.000	-97241	.11112	-.12070	-.00378	.00183	-.00273	.00216	.69550	.78144	.78144	.58751
0.000	33.000	-106000	.13384	-.13061	-.00398	.00219	-.00279	.00216	.69501	.83730	.83730	.66736
0.000	35.000	-116069	.15649	-.14088	-.00429	.00240	-.00289	.00216	.69457	.88983	.88983	.75307
0.000	37.000	-125370	.16890	-.15132	-.00466	.00251	-.00295	.00216	.69427	.93701	.93701	.84244
0.000	39.000	-134910	.18111	-.16138	-.00489	.00253	-.00299	.00216	.69393	.97652	.97652	.93336
0.000	41.000	-144290	.19278	-.17168	-.00532	.00270	-.00319	.00216	.69370	1.01970	1.01970	1.03180
0.000	43.000	-153370	.20422	-.18261	-.00567	.00297	-.00337	.00216	.69367	1.04520	1.04520	1.13090
0.000	45.000	-163310	.21508	-.19895	-.00608	.00390	-.00363	.00216	.69469	1.07420	1.07420	1.23820
0.000	GRADIENT	-.00315	.00199	-.00366	-.00016	.00005	-.00078	-.00000	-.00157	.03207	.03207	.02418

ORIGINAL PAGE IS CONTAINED IN REFERENCE MATERIAL

OA79 826 C9 E43 F8 M16 M28 R3 W8 M16

(UTM020) (18 OCT 74)

REFERENCE DATA

REF = 2000.0000 30.00 FT. XREF = 1076.0000 IN. NO
 LREF = 474.8100 IN. YREF = .0000 IN. VO
 BREF = 930.0000 IN. ZREF = 375.0000 IN. ZO
 SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELV-LO = 20.000
 ELV-LI = 20.000 ELV-RI = 20.000
 ELV-RO = 20.000 BDFLAP = .000
 SPOORR = 55.000 RLOOER = .000
 RM/L = 3.500

RUN NO. 128/ 0 RM/L = 3.50 GRADIENT INTERVAL = 15.00/ 25.00

INCH	ALPHA	CM	CAF	CLMF	CY	CYN	ORL	CAB	KCP/L	CLF	COF
0.000	17.000	.47302	.07879	-.06319	-.02222	.02145	-.02197	.02063	.70732	.36399	-.19472
0.000	19.000	.40264	.08273	-.06933	-.02239	.02151	-.02212	.02063	.70315	.42732	.23470
0.000	21.000	.34064	.08567	-.07095	-.02261	.02152	-.02222	.02063	.70043	.49270	.28709
0.000	23.000	.28423	.08894	-.08091	-.02290	.02169	-.02243	.02063	.69842	.55829	.33360
0.000	25.000	.23082	.09234	-.09264	-.02319	.02187	-.02266	.02063	.69671	.62133	.38162
0.000	27.000	.18166	.09575	-.10114	-.02342	.02208	-.02284	.02063	.69555	.68331	.42982
0.000	29.000	.13459	.09903	-.11038	-.02363	.02222	-.02293	.02063	.69471	.74316	.47817
0.000	31.000	.09003	.10211	-.11997	-.02385	.02240	-.02304	.02063	.69425	.80116	.52517
0.000	33.000	.04800	.10499	-.13010	-.02404	.02263	-.02314	.02063	.69390	.85563	.56997
0.000	35.000	.11627	.10781	-.14073	-.02429	.02275	-.02322	.02063	.69371	.90707	.76651
0.000	37.000	1.27840	.10997	-.15115	-.02450	.02276	-.02322	.02063	.69350	.95320	.85599
0.000	39.000	1.36870	.11196	-.16160	-.02466	.02286	-.02329	.02063	.69338	.99321	.94035
0.000	41.000	1.40060	.11355	-.17232	-.02483	.02295	-.02329	.02063	.69334	1.02780	1.04390
0.000	43.000	1.52210	.11529	-.18436	-.02498	.02303	-.02343	.02063	.69364	1.05650	1.14290
0.000	45.000	1.69160	.11737	-.20106	-.02504	.02413	-.02363	.02063	.69476	1.08470	1.25030
GRADIENT	.04034	.02137	.02137	-.02371	-.02312	.02375	-.02378	.02375	-.02130	.03227	.02464

(RTM021) (10 OCT 74)

OADR 826 C9 E43 F8 H16 N28 R5 V8 M16

PARAMETRIC DATA

BETA = .000 ELV-LO = 80.000
 ELV-L1 = 20.000 ELV-R1 = 80.000
 ELV-R0 = 20.000 BDFLAP = 16.000
 SPOBRK = 55.000 RUDDER = .000
 RWL = 3.530

REFERENCE DATA

MAP = 2000.000 60.FT. MAP = 1076.6600 IN. X0
 LREF = 474.8100 IN. YREF = .0000 IN. Y0
 WREF = 936.6000 IN. ZREF = 379.0000 IN. Z0
 SCALE = .0100

RUN NO. 1897 0 RWL = 3.55 GRADIENT INTERVAL = 15.00/ 25.00

WACH	ALPHA	CN	CAF	CLMF	CY	CYN	CBL	CAB	KCP/L	CLP	COF
0.000	17.000	.40325	.07936	-.07923	-.00193	.00133	-.00175	.00221	.72219	.36242	.19381
0.000	19.000	.47828	.08424	-.09083	-.00222	.00144	-.00191	.00221	.71976	.42460	.23536
0.000	21.000	.56108	.09074	-.10247	-.00244	.00144	-.00199	.00221	.71709	.49191	.28421
0.000	23.000	.64593	.09356	-.11308	-.00269	.00181	-.00223	.00221	.71345	.55799	.33852
0.000	25.000	.73363	.09836	-.12672	-.00301	.00172	-.00247	.00221	.71346	.62331	.39921
0.000	27.000	.82362	.10333	-.13984	-.00322	.00182	-.00259	.00221	.71193	.68693	.46000
0.000	29.000	.91482	.10799	-.15085	-.00334	.00203	-.00273	.00221	.71036	.74777	.53796
0.000	31.000	1.00860	.11246	-.16008	-.00361	.00213	-.00277	.00221	.70939	.80690	.61599
0.000	33.000	1.10420	.11645	-.16761	-.00387	.00236	-.00283	.00221	.70843	.86264	.69903
0.000	35.000	1.20260	.12023	-.17332	-.00411	.00257	-.00287	.00221	.70762	.91476	.78750
0.000	37.000	1.30310	.12353	-.17760	-.00436	.00279	-.00292	.00221	.70681	.96188	.87950
0.000	39.000	1.40760	.12661	-.18061	-.00460	.00266	-.00294	.00221	.70611	1.00260	.97526
0.000	41.000	1.51600	.12934	-.18246	-.00480	.00279	-.00310	.00221	.70549	1.03770	1.07370
0.000	43.000	1.62800	.13187	-.18369	-.00506	.00298	-.00349	.00221	.70502	1.06700	1.17530
0.000	45.000	1.74300	.13371	-.18460	-.00531	.00314	-.00398	.00221	.70456	1.09460	1.28350
0.000	GRADIENT	.04142	.00237	-.00396	-.00013	.00004	-.00000	.00000	-.00109	.03275	.02370

PAGE 15
CHECK QUALITY

0479 B26 C9 E43 F8 M16 M88 R3 48 W416

INTWZER) (18 OCT 74)

REFERENCE DATA

BOP = 2093.0723 86.57. WHP = 1076.8673 14.30
 LWP = 474.8103 14. WHP = .0723 14.10
 BWP = 936.6673 14. WHP = 373.0723 14.20
 SCALE = .0197

PARAMETRIC DATA

BETA = .000 ELV-LO = 20.000
 ELV-LI = 20.000 ELV-HI = .000
 ELV-RO = .000 BOP-LAP = .000
 SPOBOK = 53.000 RUDOKR = .000
 RWL = 3.330

RUN NO. 137/ 0 RWL = 3.36 GRADIENT INTERVAL = 15.00/ 25.00

MOCH	ALPHA	CH	CAF	CLAF	CY	CYN	COL	CAB	XCP/L	CLF	COF
0.000	17.000	.34978	.06396	-.07346	.00207	-.07364	.00928	.07207	.68202	.31979	-.16343
0.000	19.000	.41976	.06399	-.03432	.00196	-.07449	.01036	.07207	.67997	.37540	.19906
0.000	21.000	.49794	.06822	-.03904	.00207	-.07979	.01142	.07207	.67915	.43368	.23982
0.000	23.000	.56864	.06978	-.04322	.00222	-.07362	.01233	.07207	.67786	.49617	.28642
0.000	25.000	.64029	.07136	-.04811	.00239	-.07642	.01311	.07207	.67720	.55730	.33804
0.000	27.000	.71147	.07331	-.05339	.00229	-.07692	.01366	.07207	.67676	.61837	.39739
0.000	29.000	.81640	.07324	-.05947	.00194	-.07730	.01431	.07207	.67671	.67756	.46181
0.000	31.000	.92490	.07680	-.06653	.00176	-.07771	.01518	.07207	.67696	.73610	.53189
0.000	33.000	.99336	.07812	-.07383	.00152	-.07810	.01636	.07207	.67720	.79240	.60774
0.000	35.000	1.08760	.07919	-.08218	.00128	-.07834	.01684	.07207	.67772	.84547	.68867
0.000	37.000	1.18760	.08016	-.09137	.00110	-.07896	.01723	.07207	.67815	.89480	.77453
0.000	39.000	1.27230	.08110	-.09898	.00093	-.07951	.01723	.07207	.67854	.93789	.86384
0.000	41.000	1.34470	.08149	-.10779	.00055	-.07988	.01790	.07207	.67898	.97649	.95683
0.000	43.000	1.43520	.08130	-.11732	-.00032	-.07913	.01772	.07207	.67931	1.02080	1.05190
0.000	45.000	1.54070	.08100	-.12666	-.00063	-.07863	.01800	.07207	.68012	1.07390	1.15040
GRADIENT		.03730	.00093	-.07220	.00035	-.07032	.00048	-.00000	-.00000	.00019	.02191



CA 79 826 CS E43 F6 W16 M26 R5 W6 W116

REFERENCE DATA
 BREF = 2997.0773 50. FT. WARP = 1376.6000 IN. X0
 LREF = 474.6173 IN. YARP = .0773 IN. Y0
 SREF = 936.6073 IN. ZARP = 375.0773 IN. Z0
 SCALE = .0197

PARAMETRIC DATA
 BETA = .0773 ELV-LO = -10.0773
 ELV-L1 = -10.0773 ELV-R1 = -10.0773
 ELV-R0 = -10.0773 BDFLAP = .0773
 SPOORR = 55.0773 RUDDER = .0773
 RM/L = 3.333

RUN NO. 131/ 0 RM/L = 3.34 GRADIENT INTERVAL = 15.00/ 25.00

NOON	ALPHA	CM	CAF	CLWF	CY	CYN	CBL	CAB	KCP/L	CLF	COF
0.0773	17.0773	.97276	.03482	.00973	-.00133	.00004	.00004	.00205	.64379	.27350	.14376
0.0773	19.0773	.98240	.03404	.00965	-.00144	-.00008	.00009	.00205	.64394	.32441	.17097
0.0773	21.0773	.93516	.03526	.00964	-.00143	-.00025	.00024	.00205	.64407	.38459	.20682
0.0773	23.0773	.90496	.03544	.00971	-.00161	-.00042	.00036	.00205	.64471	.44315	.24834
0.0773	25.0773	.87836	.03572	.00969	-.00169	-.00049	.00033	.00205	.64553	.50263	.29073
0.0773	27.0773	.85996	.03609	.00942	-.00168	-.00053	.00030	.00205	.64630	.55920	.34778
0.0773	29.0773	.83973	.03690	.00909	-.00203	-.00047	.00020	.00205	.64746	.61571	.40590
0.0773	31.0773	.81799	.03645	.00976	-.00213	-.00052	.00016	.00205	.64853	.67208	.46968
0.0773	33.0773	.79197	.03562	.00901	-.00233	-.00039	-.00005	.00205	.64958	.72566	.53780
0.0773	35.0773	.80051	.03515	.00926	-.00235	-.00034	-.00009	.00205	.65090	.77811	.61216
0.0773	37.0773	1.07627	.03453	-.00975	-.00255	-.00034	-.00006	.00205	.65230	.82670	.69125
0.0773	39.0773	1.16480	.03509	-.01244	-.00256	-.00057	.00008	.00205	.65385	.87116	.77479
0.0773	41.0773	1.25197	.03263	-.01771	-.00276	-.00063	.00007	.00205	.65512	.91033	.86106
0.0773	43.0773	1.33873	.03093	-.02328	-.00304	-.00057	-.00002	.00205	.65632	.94436	.95026
0.0773	45.0773	1.42480	.02896	-.02897	-.00343	-.00043	-.00007	.00205	.65740	.97275	1.04270
0.0773	GRADIENT	.03471	.00025	-.00005	-.00005	-.00007	.00004	-.00000	.00021	.02866	.01930

CA79 828 C9 E43 F8 M16 M28 M5 M8 M16

(RTM284) (10 OCT 74)

REFERENCE DATA

BREF = 2000.0000 90-FT. WARP = 1076.8823 IN. 20
 LREF = 474.8173 IN. YARP = .0723 IN. 70
 BREF = 938.6073 IN. ZARP = 379.0000 IN. 20
 SCALE = .0175

PARAMETRIC DATA

BETA = .0000 ELV-LO = -10.0000
 ELV-LI = -10.0000 ELV-RI = 10.0000
 ELV-RO = 10.0000 BOP-LAP = .0000
 SPOKES = 55.0000 RUDDER = .0000
 RM/L = 3.330

RUN NO. 132/ 0 RM/L = 3.34 GRADIENT INTERVAL = 15.00/ 25.00

MMON	ALPHA	CM	CAF	CLM ²	CY	CYN	CBL	CAB	XCP/L	CLF	COF
0.000	17.000	32323	0.9679	-0.01033	-0.02887	0.0138	-0.00991	0.02003	0.66188	0.29251	0.14881
0.000	19.000	30743	0.9802	-0.01086	-0.03326	0.0170	-0.00672	0.02003	0.68111	0.30229	0.18197
0.000	21.000	49982	0.9922	-0.01380	-0.03354	0.0182	-0.00750	0.02003	0.68377	0.40787	0.22000
0.000	23.000	83536	0.9993	-0.01826	-0.03402	0.0203	-0.00836	0.02003	0.66107	0.46937	0.26436
0.000	25.000	81231	0.6113	-0.01944	-0.03436	0.0241	-0.00933	0.02003	0.66159	0.52882	0.31409
0.000	27.000	60380	0.6221	-0.02270	-0.03479	0.0272	-0.01031	0.02003	0.66194	0.58976	0.37031
0.000	29.000	77743	0.6342	-0.02669	-0.03514	0.0311	-0.01131	0.02003	0.66234	0.64921	0.43238
0.000	31.000	88272	0.6437	-0.03143	-0.03534	0.0336	-0.01221	0.02003	0.66332	0.70635	0.49351
0.000	33.000	94983	0.6453	-0.03632	-0.03569	0.0390	-0.01329	0.02003	0.66406	0.76147	0.57145
0.000	35.000	1.00000	0.6472	-0.04267	-0.03596	0.0439	-0.01427	0.02003	0.66501	0.81468	0.64945
0.000	37.000	1.10000	0.6497	-0.04976	-0.03626	0.0481	-0.01503	0.02003	0.66611	0.86384	0.73229
0.000	39.000	1.22180	0.6523	-0.05702	-0.03644	0.0502	-0.01562	0.02003	0.66779	0.90826	0.81946
0.000	41.000	1.31170	0.6503	-0.06432	-0.03665	0.0533	-0.01622	0.02003	0.66902	0.94727	0.90985
0.000	43.000	1.07000	0.6440	-0.07191	-0.03716	0.0579	-0.01683	0.02003	0.66881	0.98036	1.00290
0.000	45.000	1.00000	0.6348	-0.07971	-0.03717	0.0518	-0.01735	0.02003	0.66862	1.00800	1.09780
GRADIENT		0.3613	0.0000	-0.0316	-0.03719	0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000

CA 75 026 C9 E43 F8 H16 N28 R3 W8 M16

(UTM025) (18 OCT 74)

REFERENCE DATA

REF = 2000.0000 00.00 FT. ZMRP = 1076.6000 IN. 20
 LREF = 474.0100 IN. YMRP = .0000 IN. 20
 BRFP = 936.0000 IN. ZMRP = 373.0000 IN. 20
 SCALE = .0100

PARAMETRIC DATA

BETA = .0000 ELV-LO = -60.0000
 ELV-L1 = -60.0000 ELV-R1 = -60.0000
 ELV-R0 = -60.0000 80FLAP = .0000
 SPOBRK = 55.0000 RUDDER ? .0000
 RWL = 3.5000

RUN NO. 1337 0 RWL = 3.56 GRADIENT INTERVAL = 15.00/ 25.00

MACH	ALPHA	CN	CAF	CLMF	CY	CYN	CBL	CAB	KCP/L	CLF	CDP
0.000	17.000	28005	0.5036	0.1300	-0.0002	0.0014	0.0045	0.0224	.63329	.29037	1.4032
0.000	19.000	33456	0.5074	0.1347	-0.0120	0.0000	0.0054	0.0224	.63301	.31635	1.7031
0.000	21.000	40738	0.5076	0.1073	-0.0115	-0.0030	0.0070	0.0224	.63323	.37140	2.0351
0.000	23.000	48989	0.5030	0.1714	-0.0104	-0.0047	0.0076	0.0224	.63609	.42720	2.4504
0.000	25.000	58276	0.5006	0.1066	-0.0133	-0.0050	0.0077	0.0224	.63768	.48408	2.9100
0.000	27.000	63607	0.5070	0.1931	-0.0147	-0.0060	0.0081	0.0224	.63863	.53990	3.4321
0.000	29.000	71426	0.6180	0.2017	-0.0201	-0.0076	0.0076	0.0224	.63931	.59409	4.0007
0.000	31.000	79337	0.6210	0.2027	-0.0205	-0.0084	0.0084	0.0224	.64030	.64807	4.6185
0.000	33.000	87456	0.6203	0.2013	-0.0222	-0.0092	0.0075	0.0224	.64144	.69900	5.2834
0.000	35.000	95793	0.6232	0.1824	-0.0222	-0.0096	0.0075	0.0224	.64252	.74913	6.0226
0.000	37.000	1.04220	0.6196	0.1781	-0.0234	-0.0105	0.0076	0.0224	.64370	.79871	6.7671
0.000	39.000	1.12800	0.6177	0.1536	-0.0234	-0.0109	0.0093	0.0224	.64490	.84836	7.5675
0.000	41.000	1.21600	0.6130	0.1324	-0.0275	-0.0106	0.0099	0.0224	.64509	.89700	8.3990
0.000	43.000	1.30610	0.6033	0.1069	-0.0307	-0.0107	0.0100	0.0224	.64502	.94505	9.2537
0.000	45.000	1.37740	0.5913	0.0891	-0.0310	-0.0102	0.0095	0.0224	.64733	.99332	1.01300
0.000	GRADIENT	0.3404	0.7723	0.7703	-0.0303	-0.0099	0.0094	-0.0300	.00000	.00001	.01003

GA70 RES CO E43 F0 H45 N00 R5 W0 M10

(M10206) (10 OCT 74)

REFERENCE DATA

BRDF = 2600.0000 90.07
 LAMP = 474.0100 1m. YRFP = 1076.0000 1m.20
 BRDF = 016.0000 1m. YRFP = 378.0000 1m.20
 SCALE = .7197

PARAMETRIC DATA

BETA = .000
 BLV-LO = -10.000
 BLV-LI = -40.000
 BLV-RI = -40.000
 BLV-RO = -10.000
 BOFLAP = .000
 SPOBRK = 35.000
 RUDDER = .000
 RINVL = 3.500

RUN NO. 1347 0 RINVL = 3.57 GRADIENT INTERVAL = 15.00/ 25.00

WCH	ALPHA	CH	CAF	CLAF	CY	CYN	COL	CAS	KCP/L	CLF	COF
0.000	17.000	.29795	.05916	.00706	-.00112	.00006	.00023	.00215	.64112	.26640	.13074
0.000	19.000	.34011	.05426	.00700	-.00135	-.00020	.00020	.00215	.63996	.32217	.17044
0.000	21.000	.42017	.05006	.01073	-.00133	-.00035	.00042	.00215	.64081	.37740	.20377
0.000	23.000	.49794	.05002	.01159	-.00100	-.00046	.00045	.00215	.64132	.43615	.24037
0.000	25.000	.57030	.05156	.01276	-.00176	-.00048	.00041	.00215	.64164	.49276	.29333
0.000	27.000	.64613	.05016	.01343	-.00201	-.00033	.00040	.00215	.64225	.54929	.34510
0.000	29.000	.72444	.05000	.01348	-.00200	-.00048	.00037	.00215	.64306	.60306	.40271
0.000	31.000	.79476	.05000	.01290	-.00243	-.00036	.00041	.00215	.64397	.65930	.46530
0.000	33.000	.86017	.05020	.01222	-.00252	-.00041	.00026	.00215	.64484	.71172	.53270
0.000	35.000	.91664	.05000	.01034	-.00261	-.00033	.00024	.00215	.64600	.76202	.60371
0.000	37.000	1.05690	.05006	.00763	-.00281	-.00042	.00031	.00215	.64726	.80800	.68332
0.000	39.000	1.18190	.05076	.00464	-.00304	-.00036	.00040	.00215	.64842	.85040	.76420
0.000	41.000	1.22760	.05000	.00149	-.00316	-.00044	.00043	.00215	.64947	.88825	.84911
0.000	43.000	1.31790	.05000	-.00165	-.00335	-.00042	.00043	.00215	.65036	.91995	.93566
0.000	45.000	1.34290	.05002	-.00320	-.00348	-.00040	.00040	.00215	.65129	.94336	1.02360
GRADIENT		.03420	.00027	.00067	-.00008	-.00007	.00003	-.00000	.00000	.00014	-.01910



DATE 19 MAR 75
TABULATED SOURCE DATA - CAP
CALC 826 CO G43 F6 M16 M88 R3 V8 M16

RTNDRZ7 (16 OCT 74)

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
ELV-L1 = -.000 ELV-R1 = -.000
ELV-R0 = .000 BOFLAP = .000
SPOBOK = 55.000 RUDDER = .000
RWL = 3.530

REFERENCE DATA

WARP = 2.000, 0.000 90, 27.1. WARP = 10/16, 0.000 14, 20
LREF = 474, 0.170 14, 1. WARP = .0000 14, 20
WREF = 936, 0.070 14, 1. WARP = 3/16, 0.000 14, 20
SCALE = .0197

RUN NO. 133/ 0 RWL = 3.56 GRADIENT INTERVAL = 15.00/ 25.00

WARP	ALPHA	CH	CAP	CLMP	CY	CYN	COL	CAB	KCP/L	CLF	COF
0.770	17.770	.30380	.03580	.07373	-.00126	.00210	-.00008	.00210	.64531	.27348	.14191
0.771	18.770	.30833	.03610	.07646	-.00157	-.00003	-.00010	.00210	.64343	.33093	.17329
0.772	21.770	.33496	.04655	.07596	-.00145	-.00008	-.00002	.00210	.64404	.30590	.20867
0.773	23.770	.37073	.05714	.07629	-.00100	-.00042	-.00003	.00210	.64532	.44436	.29070
0.774	25.770	.40657	.05700	.07642	-.00100	-.00041	-.00011	.00210	.64502	.50076	.29760
0.775	27.770	.44245	.05672	.07650	-.00096	-.00045	-.00015	.00210	.64637	.55051	.33040
0.776	29.770	.47833	.05649	.07651	-.00097	-.00044	-.00016	.00210	.64715	.61406	.40004
0.777	31.770	.51421	.05613	.07657	-.00092	-.00037	-.00017	.00210	.64817	.69076	.47234
0.778	33.770	.55009	.05571	.07644	-.00084	-.00024	-.00042	.00210	.64891	.77322	.54709
0.779	35.770	.58597	.05512	.07635	-.00079	-.00017	-.00045	.00210	.65034	.77322	.61482
0.780	37.770	.62185	.05432	.07635	-.00073	-.00011	-.00039	.00210	.65113	.80059	.69376
0.781	39.770	.65773	.05332	.07636	-.00065	-.00004	-.00031	.00210	.65217	.86241	.77596
0.782	41.770	.69361	.05204	.07631	-.00056	-.00003	-.00031	.00210	.65314	.89966	.86137
0.783	43.770	.72949	.05057	.07628	-.00048	-.00004	-.00032	.00210	.65401	.93132	.94910
0.784	45.770	.76537	.04897	.07626	-.00040	-.00005	-.00033	.00210	.65489	.95767	1.03980
0.785	47.770	.80125	.04726	.07626	-.00032	-.00007	-.00033	.00200	.65576	.98402	.01943
0.786	49.770	.83713	.04546	.07626	-.00024	-.00007	-.00033	.00200	.65663	.00000	.00000

GRADIENT

CA 70 000 CO 043 70 000 000 05 00 0010

RTNDS00 (10 OCT 74)

REFERENCE DATA

SLOP = 0.0000000 90.00 FT. WARP = 10.0000000 10.00
 LOP = 0.0000000 10.00 FT. WARP = 10.0000000 10.00
 SLOP = 0.0000000 10.00 FT. WARP = 10.0000000 10.00
 SCALE = 0.0000000 10.00

PARAMETRIC DATA

BETA = 0.000 ELV-LO = 0.000
 ELV-L1 = 10.000 ELV-R1 = 10.000
 ELV-RO = 0.000 SLOPLAP = 0.000
 SLOPERR = 0.000 NUMBER = 0.000
 RWL = 3.300

RUN NO. 1367 0 RWL = 3.36 GRADIENT INTERVAL = 15.00/ 25.00

WCH	ALPHA	CA	CAF	CLMP	CY	CYM	COL	CAS	KCP/L	CLF	COF
0.000	17.000	0.3141	0.0000	-0.0143	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000
0.000	18.000	0.2311	0.0000	-0.0143	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000
0.000	21.000	0.0721	0.0000	-0.0143	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000
0.000	23.000	0.4817	0.0000	-0.0143	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000
0.000	25.000	0.8275	0.0000	-0.0143	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000
0.000	27.000	0.7936	0.0000	-0.0143	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000
0.000	29.000	0.6429	0.0000	-0.0143	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000
0.000	31.000	0.8145	0.0000	-0.0143	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000
0.000	33.000	0.7144	0.0000	-0.0143	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000
0.000	35.000	1.0450	0.0000	-0.0143	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000
0.000	37.000	1.1560	0.0000	-0.0143	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000
0.000	39.000	1.2400	0.0000	-0.0143	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000
0.000	41.000	1.3000	0.0000	-0.0143	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000
0.000	43.000	1.4300	0.0000	-0.0143	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000
0.000	45.000	1.5100	0.0000	-0.0143	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000
0.000	GRADIENT	0.0000	0.0000	-0.0143	0.0000	-0.0000	-0.0000	0.0000	0.0000	0.0000	0.0000



CA79 025 C0 643 F0 M16 M00 R5 W0 M16

(RTM030) (10 OCT 74)

REFERENCE DATA

MEY = 2000.0000 90.FT. MRP = 1076.6000 IN.MO
 LRF = 474.6100 IN. YMRP = .0000 IN.YO
 BRF = 936.6000 IN. ZMRP = 375.0000 IN.ZO
 SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
 ELV-LI = -20.000 ELV-RI = -20.000
 ELV-RO = .000 BOP-LAP = .000
 SPOBNA = 55.000 RLOOER = .000
 RIVL = 3.333

RUN NO. 130/ 0 RIVL = 3.33 GRADIENT INTERVAL = 15.00/ 25.00

MAON	ALPHA	CN	CAP	CLWF	CT	CYN	CBL	CAB	KCP/L	CLF	COF
0.000	17.000	.30312	.03595	.02190	-.02118	-.00005	-.00020	.00213	.64756	.27543	.14271
0.000	19.000	.37037	-.05613	.00345	-.00126	-.00004	-.00018	.00213	.64644	.33192	-.17387
0.000	21.000	.43844	.03699	.00395	-.00145	-.00024	-.00010	.00213	.64657	.30890	.21033
0.000	23.000	.51090	-.05736	.00343	-.00141	-.00035	-.00005	.00213	.64742	.44786	-.25244
0.000	25.000	.58326	.03782	.00340	-.00150	-.00036	-.00015	.00213	.64776	.50599	.29975
0.000	27.000	.66266	-.05831	.00266	-.00187	-.00036	-.00023	.00213	.64942	.56416	-.35290
0.000	29.000	.74293	.03693	.00146	-.00205	-.00029	-.00033	.00213	.64918	.62120	.41174
0.000	31.000	.82477	-.05916	-.00028	-.00223	-.00034	-.00037	.00213	.65003	.67690	-.47590
0.000	33.000	.90870	.03688	-.00249	-.00246	-.00018	-.00037	.00213	.65092	.73004	.54429
0.000	35.000	.99672	-.05846	-.00172	-.00266	-.00013	-.00061	.00213	.65202	.78294	-.61958
0.000	37.000	1.08390	.03615	-.01025	-.00287	-.00013	-.00054	.00213	.65339	.83061	.69872
0.000	39.000	1.17140	-.05759	-.01439	-.00300	-.00031	-.00090	.00213	.65444	.87410	-.78194
0.000	41.000	1.25170	.03654	-.01990	-.00309	-.00035	-.00090	.00213	.65562	.91208	.86777
0.000	43.000	1.34390	-.05909	-.02392	-.00326	-.00032	-.00105	.00213	.65647	.94528	-.95680
0.000	45.000	1.42880	.03333	-.02919	-.00346	-.00027	-.00105	.00213	.65744	.97249	1.04790
GRADIENT		.03974	-.00025	.00015	-.00005	-.00006	.00001	-.00000	.00007	.02885	-.01964



(RTM031) (10 OCT 74)

CA 79 B26 CB E43 F6 M16 N28 R5 V8 M16

REFERENCE DATA

SREF = 2607.0770 DG.FT. WMRP = 1076.6070 IN.MO
 LREF = 474.6170 IN. YMRP = .0000 IN.YO
 OREF = 936.6070 IN. ZMRP = 375.0770 IN.ZO
 SCALE = .0191

PARAMETRIC DATA

BETA = .0770 ELV-LO = -5.0770
 ELV-LI = -20.0770 ELV-RI = -20.0770
 ELV-RO = -5.0770 BDFLAP = .0770
 SPOBRK = 55.0770 RLOOER = .0770
 RM/L = 3.330

RUN NO. 139/ 0 RM/L = 3.35 GRADIENT INTERVAL = 15.00/ 25.00

MACH	ALPHA	CN	CAP	CLMF	CY	CYN	CSL	CAB	KCP/L	CLF	COF
0.077	17.077	.30107	.05580	.00377	-.00103	.00004	-.00011	.00213	.64328	.27238	.14141
0.077	19.077	.36724	.05563	.00364	-.00112	-.00008	-.00026	.00213	.64422	.32912	.17217
0.077	21.077	.43453	.05608	.00638	-.00123	-.00028	.00002	.00213	.64448	.38937	.20808
0.077	23.077	.50643	.05681	.00671	-.00145	-.00042	.00008	.00213	.64501	.44875	.24999
0.077	25.077	.58729	.05694	.00700	-.00161	-.00043	.00001	.00213	.64546	.50186	.29685
0.077	27.077	.65743	.05790	.00691	-.00189	-.00043	-.00004	.00213	.64673	.55976	.34932
0.077	29.077	.73687	.05788	.00676	-.00210	-.00042	-.00010	.00213	.64688	.61624	.40777
0.077	31.077	.81742	.05610	.00467	-.00228	-.00045	-.00016	.00213	.64784	.67075	.47080
0.077	33.077	.90116	.05751	.00294	-.00242	-.00034	-.00036	.00213	.64871	.72445	.53904
0.077	35.077	.98743	.05694	-.00020	-.00259	-.00028	-.00043	.00213	.64999	.77619	.61301
0.077	37.077	1.07420	.05697	-.00395	-.00274	-.00030	-.00037	.00213	.65127	.82466	.69216
0.077	39.077	1.16190	.05586	-.00615	-.00284	-.00047	-.00031	.00213	.65290	.86779	.77487
0.077	41.077	1.24857	.05471	-.01277	-.00305	-.00053	-.00034	.00213	.65368	.90639	.86041
0.077	43.077	1.33380	.05309	-.01726	-.00317	-.00053	-.00039	.00213	.65468	.93915	.94837
0.077	45.077	1.41870	.05108	-.02199	-.00336	-.00048	-.00040	.00213	.65562	.96708	1.03930
0.077	GRADIENT	.03481	.00018	.00038	-.00007	-.00006	-.00002	-.00000	.00006	.02870	.01944

C479 826 CS 843 PS M16 N85 RS 16 M116

(UTM033) (18 OCT 74)

REFERENCE DATA

BREF = 2000.0000 80-FT. WARP = 1076.6000 IN. MO
 LREF = 474.8170 IN. WARP = .0000 IN. YO
 BREF = 936.6070 IN. WARP = 373.0000 IN. ZO
 SCALE = .0120

PARAMETRIC DATA

BETA = .000 ELV-LO = 10.000
 ELV-LI = .000 ELV-RI = .000
 ELV-RO = 10.000 8DPLAP = .000
 SPOERR = 55.000 RUDDER = .000
 RMVL = 3.500

RUN NO. 1417 0 RMVL = 3.54 GRADIENT INTERVAL = 15.00/ 25.00

MACH	ALPHA	CN	CAF	CLMP	CY	CYN	CNL	CAB	KCP/L	CLF	COF
8.000	17.000	.3290	.05782	-.01155	-.00093	.00047	-.00102	.00210	.66298	.29284	.14968
8.000	18.000	.36936	.05895	-.01309	-.00109	.00039	-.00112	.00210	.66225	.34896	.18250
8.000	21.000	.48265	.05946	-.01501	-.00138	.00039	-.00115	.00210	.66182	.41062	.22131
8.000	23.000	.55913	.06027	-.01601	-.00160	.00028	-.00121	.00210	.66218	.47273	.26614
8.000	25.000	.61635	.06134	-.02105	-.00185	.00027	-.00139	.00210	.66246	.53266	.31807
8.000	27.000	.69756	.06234	-.02429	-.00214	.00030	-.00157	.00210	.66272	.59322	.37223
8.000	29.000	.78100	.06336	-.02880	-.00253	.00043	-.00176	.00210	.66347	.65336	.43405
8.000	31.000	.86727	.06427	-.03400	-.00285	.00048	-.00189	.00210	.66434	.71040	.50159
8.000	33.000	.95571	.06487	-.03980	-.00302	.00069	-.00215	.00210	.66516	.76832	.57442
8.000	35.000	1.04690	.06461	-.04662	-.00302	.00074	-.00221	.00209	.66637	.82051	.65340
8.000	37.000	1.13880	.06493	-.05441	-.00335	.00076	-.00228	.00210	.66750	.87041	.73721
8.000	39.000	1.23000	.06504	-.06183	-.00342	.00085	-.00236	.00210	.66841	.91499	.82464
8.000	41.000	1.32130	.06453	-.06983	-.00354	.00085	-.00246	.00210	.66931	.95445	.91554
8.000	43.000	1.41080	.06375	-.07762	-.00367	.00076	-.00254	.00210	.67017	.98815	1.00880
8.000	45.000	1.49910	.06282	-.08582	-.00410	.00069	-.00260	.00210	.67099	1.01940	1.10490
8.000	GRADIENT	.03674	.00045	-.00180	-.00012	-.00003	-.00004	-.00000	-.00008	.00017	.00082

CA 75 828 CS E43 FS M16 A28 RS VS M16

(RTN034) (18 OCT 74)

REFERENCE DATA

REF = 2097.0000 26-FT. WHP = 1076.0000 IN. RO
 LREF = 474.8100 IN. YHP = .0000 IN. 10
 BREF = 936.0000 IN. ZHP = 379.0000 IN. 20
 SCALE = .0150

PARAMETRIC DATA

BETA = .000 ELV-LO = -10.000
 ELV-LI = .000 ELV-RI = .000
 ELV-RO = -10.000 BOFLAP = .000
 SPOBAR = 95.000 RUDDER = .000
 RW/L = 3.550

RUN NO. 1427 0 RW/L = 3.55 GRADIENT INTERVAL = 15.00/ 25.00

MACH	ALPHA	CN	CAF	CLWF	CY	CYN	CBL	CAB	XCP/L	CLF	COF
0.770	17.000	.30790	.05326	-.00091	-.00107	-.00013	-.00009	.00202	.62047	-.27829	.14287
0.770	19.000	.37273	.05509	-.00003	-.00112	-.00004	-.00003	.00202	.64985	-.33423	.17419
0.770	21.000	.44252	.05624	-.00016	-.00136	-.00010	-.00003	.00202	.67000	-.39251	.21091
0.770	23.000	.51990	.05649	-.00141	-.00167	-.00031	.00009	.00202	.67990	-.45272	.25354
0.770	25.000	.59172	.05697	-.00288	-.00196	-.00032	.00001	.00202	.65169	-.51220	.30179
0.770	27.000	.67017	.05737	-.00468	-.00217	-.00038	-.00004	.00202	.63247	-.57108	.35537
0.770	29.000	.75229	.05790	-.00728	-.00243	-.00035	-.00013	.00202	.63247	-.62969	.41536
0.770	31.000	.83594	.05824	-.01073	-.00251	-.00038	-.00017	.00202	.63463	-.68643	.48029
0.770	33.000	.92189	.05756	-.01493	-.00268	-.00026	-.00034	.00202	.65571	-.74181	.55037
0.770	35.000	1.01110	.05731	-.01996	-.00277	-.00026	-.00036	.00202	.65710	-.79333	.62607
0.770	37.000	1.10390	.05716	-.02606	-.00310	-.00033	-.00036	.00202	.65863	-.84488	.70811
0.770	39.000	1.19790	.05655	-.03240	-.00316	-.00049	-.00034	.00202	.65993	-.89558	.79313
0.770	41.000	1.27950	.05555	-.03935	-.00326	-.00056	-.00041	.00202	.66124	-.92918	.88132
0.770	43.000	1.36810	.05413	-.04674	-.00339	-.00049	-.00052	.00202	.66250	-.96363	.97262
0.770	45.000	1.45560	.05243	-.05338	-.00358	-.00036	-.00058	.00202	.66342	-.99216	1.06630
GRADIENT		.03554	.00020	-.00031	-.00012	-.00006	.00002	-.00000	.00017	.00932	-.01985

CA75 226 CB E43 FB M16 M85 RS W8 M16

(RTND035) (18 OCT 74)

REFERENCE DATA

SREF = 2000.0000 90.00 FT. XREF = 1076.6000 IN. NO
 LREF = 874.0100 IN. YREF = .0000 IN. YO
 BREF = 936.6000 IN. ZREF = 375.0000 IN. ZO
 SCALE = .0100

PARAMETRIC DATA

ALPHA = 30.000 ELV-LO = -10.000
 ELV-L1 = .000 ELV-R1 = .000
 ELV-RO = -10.000 BDFLAP = .000
 SPOBRK = 55.000 RUDDER = .000
 RM/L = 3.500

RUN NO. 143/ 0 RM/L = 3.53 GRADIENT INTERVAL = -5.00/ 5.00

WAOH	BETA	CH	CAF	CLMF	CY	CYN	CLN	CAB	ICP/L	CLF	COF
0.000	-5.179	.00000	.03628	-.01033	.03039	.00626	.00831	.00125	.65433	.71016	.49205
0.000	-3.049	.00479	.03600	-.01068	-.01512	.00339	.00449	.00144	.65447	.71273	.49183
0.000	-1.335	.00433	.03552	-.01070	.00099	.00034	.00085	.00190	.65447	.71374	.49099
0.000	-.005	.00375	.03447	-.01035	-.00845	-.00000	-.00131	.00153	.65433	.71390	.48970
0.000	1.076	.00340	.03416	-.01029	-.01366	-.00205	-.00322	.00149	.65430	.71345	.48927
0.000	3.047	.00096	.03437	-.01009	-.00927	-.00192	-.00162	.00153	.65425	.71128	.48816
0.000	5.065	.00797	.03536	-.00967	-.04356	-.00172	-.01067	.00151	.65407	.70909	.48746
GRADIENT	-.00032	-.00043	-.00043	.00011	-.00712	-.00138	-.00188	.00001	-.00004	-.00023	-.00062

(INTD36) (18 OCT 74)

CA79 B26 C0 E43 F0 H16 M00 R5 V0 W16

PARAMETRIC DATA

BETA = .000 ELV-LO = 10.000
 ELV-LI = .000 ELV-RI = .000
 ELV-RO = -10.000 BOPLAP = .000
 SPOBCK = 35.000 RUDDOR = .000
 RM/L = 3.330

REFERENCE DATA

WHP = 2000.0000 90.00 FT. WHP = 1076.0000 14.00
 LREF = 474.0100 14. WHP = .0000 14.70
 SREF = 936.0000 14. WHP = 375.0000 14.20
 SCALE = .0193

RUN NO. 1447 0 RM/L = 3.48 GRADIENT INTERVAL = 15.00/ 25.00

WACH	ALPHA	CM	CAF	CLMF	CY	CYM	CBL	CAB	XCP/L	CLF	COF
0.000	17.000	.31540	.05079	-.00328	-.00090	-.00061	.00282	.00207	.65003	.20522	.14505
0.000	19.000	.30175	.05006	-.00340	-.00086	-.00062	.00302	.00207	.65439	.34244	.17004
0.000	21.000	.45101	.05750	-.00601	-.00139	-.00091	.00342	.00207	.63470	.40117	.21967
0.000	23.000	.52807	.05020	-.00773	-.00156	-.00114	.00383	.00207	.65530	.46140	.25920
0.000	25.000	.60334	.05070	-.00901	-.00151	-.00143	.00422	.00207	.65500	.52107	.30123
0.000	27.000	.60319	.05932	-.01267	-.00146	-.00164	.00460	.00207	.65673	.58179	.36302
0.000	29.000	.76300	.06031	-.01613	-.00173	-.00185	.00496	.00207	.63764	.64062	.42406
0.000	31.000	.85127	.06109	-.02034	-.00207	-.00195	.00527	.00207	.65073	.69022	.49003
0.000	33.000	.93904	.06145	-.02562	-.00236	-.00195	.00551	.00207	.65995	.75007	.56297
0.000	35.000	1.02090	.06116	-.03162	-.00274	-.00204	.00560	.00207	.66122	.80773	.64025
0.000	37.000	1.11000	.06106	-.03823	-.00297	-.00222	.00607	.00207	.66240	.85700	.72271
0.000	39.000	1.21020	.06082	-.04522	-.00329	-.00239	.00633	.00207	.66367	.90222	.80891
0.000	41.000	1.30000	.06001	-.05252	-.00385	-.00250	.00682	.00207	.66470	.94215	.89032
0.000	43.000	1.39020	.05902	-.05975	-.00434	-.00273	.00684	.00207	.66575	.97505	.99042
0.000	45.000	1.47010	.05740	-.06756	-.00493	-.00280	.00699	.00207	.66674	1.00480	1.08500
GRADIENT		.03001	.00734	-.00060	-.00004	-.00010	.00000	-.00000	.00000	.00000	.00000

OAPN 826 CO E43 FO H16 N88 R5 W8 W416

(ATN037) (18 OCT 74)

REFERENCE DATA

WREF = 8007.0000 90.07.
 LREF = 474.8100 IN.
 WREF = 934.4000 IN.
 SCALE = .0150

WREF = 1076.6000 IN. RO
 WREF = .0000 IN. YO
 WREF = 375.0000 IN. ZO

PARAMETRIC DATA

BETA = .000
 ELV-LI = -10.000
 ELV-RI = -10.000
 ELV-RO = -20.000
 SPOBRK = 55.000
 RUDGER = .000
 RM/L = 3.930

RUN NO. 145/ 0 RM/L = 3.91 GRADIENT INTERVAL = 15.00/ 25.00

MOON	ALPHA	CN	CAF	CLMF	CT	CYM	CEB	CAB	XCP/L	CLF	COF
0.000	17.000	30326	.05516	.07399	-.00048	-.00008	.02161	.00207	.64531	.27390	.14143
0.000	18.000	34726	.05569	.07352	-.00068	-.00023	.02188	.00207	.64434	.32912	.17222
0.000	21.000	43523	.05990	.07641	-.00101	-.00035	.02217	.00207	.64447	.36626	.20823
0.000	23.000	50726	.05632	.07667	-.00131	-.00045	.02249	.00207	.64905	.44495	.29003
0.000	27.000	58156	.05656	.07826	-.00141	-.00061	.02277	.00207	.64954	.50316	.29707
0.000	29.000	73966	.05738	.07336	-.00146	-.00074	.02304	.00207	.64691	.56197	.39014
0.000	31.000	82286	.05787	.07403	-.00175	-.00080	.02331	.00207	.64790	.61910	.40878
0.000	33.000	90755	.05790	.07072	-.00197	-.00087	.02365	.00207	.64905	.67553	.47341
0.000	35.000	99455	.05716	.07437	-.00225	-.00086	.02390	.00207	.65020	.72960	.54264
0.000	37.000	1.08240	.05629	.07267	-.00254	-.00088	.02418	.00207	.65133	.78190	.61727
0.000	39.000	1.16970	.05521	.07334	-.00279	-.00094	.02446	.00207	.65266	.83054	.69653
0.000	41.000	1.25680	.05396	.07265	-.00299	-.00109	.02461	.00207	.65411	.87432	.77905
0.000	43.000	1.34420	.05233	.07259	-.00331	-.00116	.02500	.00207	.65544	.91315	.86529
0.000	45.000	1.42990	.05040	.07279	-.00333	-.00114	.02590	.00207	.65647	.94756	.95498
GRADIENT		.03483	.07017	.07032	-.00012	-.00006	.02015	.00000	.65759	.97543	1.04670
									.00008	.02872	.01946

REFERENCE DATA
 RUN NO. 1487 0 RM/L = 3.55 GRADIENT INTERVAL = 15.00/ 25.00
 BREF = 2890.0000 80.00 FT. WHP = 1076.6000 IN.10
 LREF = 474.81000 IN. WHP = .0000 IN.10
 BREF = 936.6000 IN. WHP = 375.0000 IN.20
 SCALE = .7197

ALPHA	CA	CAF	CLAF	CY	CYN	CBL	CAB	XCP/L	CLF	COF
0.000	17.000	.03543	.00136	-.00000	-.00000	.00007	.00209	.64821	.27926	.14298
0.000	19.000	.03604	.00290	-.00090	-.00022	.00010	.00209	.64701	.33390	.17424
0.000	21.000	.03647	.00356	-.00136	-.00033	.00013	.00209	.64774	.39120	.21066
0.000	23.000	.03666	.00449	-.00183	-.00040	.00018	.00209	.64811	.45051	.25280
0.000	25.000	.03701	.00524	-.00215	-.00052	.00017	.00209	.64912	.50977	.30061
0.000	27.000	.03729	.00634	-.00281	-.00062	.00015	.00209	.65020	.56906	.35425
0.000	29.000	.03794	.00727	-.00310	-.00064	.00010	.00209	.65124	.62767	.41417
0.000	31.000	.03870	.00875	-.00334	-.00071	.00011	.00209	.65243	.68440	.47971
0.000	33.000	.03923	.00957	-.00367	-.00065	.00006	.00209	.65374	.73889	.55000
0.000	35.000	.03936	.01032	-.00288	-.00062	-.00006	.00209	.65514	.79215	.62591
0.000	37.000	.03960	.01170	-.00325	-.00062	-.00009	.00209	.65644	.84097	.70596
0.000	39.000	.03993	.01330	-.00317	-.00067	-.00013	.00209	.65777	.88582	.79037
0.000	41.000	.04004	.01511	-.00314	-.00070	-.00016	.00209	.65902	.92476	.87813
0.000	43.000	.04072	.016817	-.00337	-.00061	-.00023	.00209	.66023	.95900	.96910
0.000	45.000	.04090	.018495	-.00346	-.00052	-.00026	.00209	.66123	.98726	1.06230
0.000	GRADIENT	.03816	.00000	-.00000	-.00000	.00001	.00000	.00000	.00000	.01909

REFERENCE DATA
 RUN NO. 1477 0 RM/L = 3.54 GRADIENT INTERVAL = 15.00/ 25.00
 BREF = 2890.0000 80.00 FT. WHP = 1076.6000 IN.10
 LREF = 474.81000 IN. WHP = .0000 IN.10
 BREF = 936.6000 IN. WHP = 375.0000 IN.20
 SCALE = .7197

ALPHA	CA	CAF	CLAF	CY	CYN	CBL	CAB	XCP/L	CLF	COF
0.000	17.000	.03543	.00136	-.00000	-.00000	.00007	.00209	.64821	.27926	.14298
0.000	19.000	.03604	.00290	-.00090	-.00022	.00010	.00209	.64701	.33390	.17424
0.000	21.000	.03647	.00356	-.00136	-.00033	.00013	.00209	.64774	.39120	.21066
0.000	23.000	.03666	.00449	-.00183	-.00040	.00018	.00209	.64811	.45051	.25280
0.000	25.000	.03701	.00524	-.00215	-.00052	.00017	.00209	.64912	.50977	.30061
0.000	27.000	.03729	.00634	-.00281	-.00062	.00015	.00209	.65020	.56906	.35425
0.000	29.000	.03794	.00727	-.00310	-.00064	.00010	.00209	.65124	.62767	.41417
0.000	31.000	.03870	.00875	-.00334	-.00071	.00011	.00209	.65243	.68440	.47971
0.000	33.000	.03923	.00957	-.00367	-.00065	.00006	.00209	.65374	.73889	.55000
0.000	35.000	.03936	.01032	-.00288	-.00062	-.00006	.00209	.65514	.79215	.62591
0.000	37.000	.03960	.01170	-.00325	-.00062	-.00009	.00209	.65644	.84097	.70596
0.000	39.000	.03993	.01330	-.00317	-.00067	-.00013	.00209	.65777	.88582	.79037
0.000	41.000	.04004	.01511	-.00314	-.00070	-.00016	.00209	.65902	.92476	.87813
0.000	43.000	.04072	.016817	-.00337	-.00061	-.00023	.00209	.66023	.95900	.96910
0.000	45.000	.04090	.018495	-.00346	-.00052	-.00026	.00209	.66123	.98726	1.06230
0.000	GRADIENT	.03816	.00000	-.00000	-.00000	.00001	.00000	.00000	.00000	.01909

REFERENCE DATA
 RUN NO. 1477 0 RM/L = 3.54 GRADIENT INTERVAL = 15.00/ 25.00
 BREF = 2890.0000 80.00 FT. WHP = 1076.6000 IN.10
 LREF = 474.81000 IN. WHP = .0000 IN.10
 BREF = 936.6000 IN. WHP = 375.0000 IN.20
 SCALE = .7197

ALPHA	CA	CAF	CLAF	CY	CYN	CBL	CAB	XCP/L	CLF	COF
0.000	17.000	.03543	.00136	-.00000	-.00000	.00007	.00209	.64821	.27926	.14298
0.000	19.000	.03604	.00290	-.00090	-.00022	.00010	.00209	.64701	.33390	.17424
0.000	21.000	.03647	.00356	-.00136	-.00033	.00013	.00209	.64774	.39120	.21066
0.000	23.000	.03666	.00449	-.00183	-.00040	.00018	.00209	.64811	.45051	.25280
0.000	25.000	.03701	.00524	-.00215	-.00052	.00017	.00209	.64912	.50977	.30061
0.000	27.000	.03729	.00634	-.00281	-.00062	.00015	.00209	.65020	.56906	.35425
0.000	29.000	.03794	.00727	-.00310	-.00064	.00010	.00209	.65124	.62767	.41417
0.000	31.000	.03870	.00875	-.00334	-.00071	.00011	.00209	.65243	.68440	.47971
0.000	33.000	.03923	.00957	-.00367	-.00065	.00006	.00209	.65374	.73889	.55000
0.000	35.000	.03936	.01032	-.00288	-.00062	-.00006	.00209	.65514	.79215	.62591
0.000	37.000	.03960	.01170	-.00325	-.00062	-.00009	.00209	.65644	.84097	.70596
0.000	39.000	.03993	.01330	-.00317	-.00067	-.00013	.00209	.65777	.88582	.79037
0.000	41.000	.04004	.01511	-.00314	-.00070	-.00016	.00209	.65902	.92476	.87813
0.000	43.000	.04072	.016817	-.00337	-.00061	-.00023	.00209	.66023	.95900	.96910
0.000	45.000	.04090	.018495	-.00346	-.00052	-.00026	.00209	.66123	.98726	1.06230
0.000	GRADIENT	.03816	.00000	-.00000	-.00000	.00001	.00000	.00000	.00000	.01909

RTN(40) (10 OCT 74)

CA 75 800 CB E43 FB H40 H00 RS W0 M10

PARAMETRIC DATA

BETA = .000
 B.V.-L1 = .000
 B.V.-R1 = .000
 B.V.-R0 = .000
 BOP-LAP = .000
 BPOBKA = 55.000
 BPODOR = .000
 BPOVL = 1.000

REFERENCE DATA

8007 = 2000.0000 IN. FT.
 8008 = 474.8100 IN.
 8009 = 930.0000 IN.
 SCALE = .0191

RUN NO. 1407 0 RMVL = 1.74 GRADIENT INTERVAL = 19.00/ 25.00

WACH	ALPHA	CM	CAF	CLAF	CY	CYN	CBL	CAB	MCP/L	CLF	COF
7.003	17.000	3.0716	-.00000	-.00000	-.00000	-.00000	-.00000	.00102	.65993	.27076	.14934
7.003	18.000	3.7025	-.00000	-.00000	-.00000	-.00000	-.00000	.00102	.65232	.33930	.17642
7.003	21.000	4.4375	-.00000	-.00000	-.00000	-.00000	-.00000	.00102	.65999	.39307	.21210
7.003	23.000	5.1725	-.00000	-.00000	-.00000	-.00000	-.00000	.00102	.65377	.45423	.25433
7.003	25.000	5.9075	-.00000	-.00000	-.00000	-.00000	-.00000	.00102	.65469	.51340	.30214
7.003	27.000	6.6425	-.00000	-.00000	-.00000	-.00000	-.00000	.00102	.65845	.57342	.35643
7.003	29.000	7.3775	-.00000	-.00000	-.00000	-.00000	-.00000	.00102	.65648	.63166	.41620
7.003	31.000	8.1125	-.00000	-.00000	-.00000	-.00000	-.00000	.00102	.65754	.68938	.48220
7.003	33.000	8.8475	-.00000	-.00000	-.00000	-.00000	-.00000	.00102	.65002	.74479	.55369
7.003	35.000	9.5825	-.00000	-.00000	-.00000	-.00000	-.00000	.00102	.68016	.79866	.63204
7.003	37.000	1.03625	-.00000	-.00000	-.00000	-.00000	-.00000	.00102	.66190	.84815	.71296
7.003	39.000	1.18990	-.00000	-.00000	-.00000	-.00000	-.00000	.00102	.66279	.89200	.79006
7.003	41.000	1.34355	-.00000	-.00000	-.00000	-.00000	-.00000	.00102	.66407	.93191	.86696
7.003	43.000	1.49720	-.00000	-.00000	-.00000	-.00000	-.00000	.00102	.66522	.96572	.94910
7.003	45.000	1.65085	-.00000	-.00000	-.00000	-.00000	-.00000	.00000	-.00000	-.00000	.01950

CA 79 026 CS 643 FS W16 M28 R5 W8 W16 PTOM/PAUSE (RTM0411) (18 OCT 74)

BETA = .077 ELV-LO = .077
 ELV-LI = .077 ELV-RI = .077
 ELV-RO = .077 BDFLAP = .077
 SPOBKR = 55.077 RLODER = .077
 RN/L = 1.087

BETA = .077 ELV-LO = .077
 ELV-LI = .077 ELV-RI = .077
 ELV-RO = .077 BDFLAP = .077
 SPOBKR = 55.077 RLODER = .077
 RN/L = 1.087

BETA = .077 ELV-LO = .077
 ELV-LI = .077 ELV-RI = .077
 ELV-RO = .077 BDFLAP = .077
 SPOBKR = 55.077 RLODER = .077
 RN/L = 1.087

BETA = .077 ELV-LO = .077
 ELV-LI = .077 ELV-RI = .077
 ELV-RO = .077 BDFLAP = .077
 SPOBKR = 55.077 RLODER = .077
 RN/L = 1.087

BETA = .077 ELV-LO = .077
 ELV-LI = .077 ELV-RI = .077
 ELV-RO = .077 BDFLAP = .077
 SPOBKR = 55.077 RLODER = .077
 RN/L = 1.087

RUN NO. 1407 0 RN/L = 1.76 GRADIENT INTERVAL = 19.00/ 83.00

WACH	ALPHA	CM	CAF	CLMF	CY	CYM	CBL	CAB	HCP/L	CLF	COF
7.000	13.903	27346	.05761	-.07423	-.03760	.07325	-.07313	.07199	.65336	.24796	.12881
7.000	19.171	34923	.05729	-.07261	-.03107	.07770	-.07320	.07201	.65233	.34884	.18194
7.000	23.280	33692	.05743	-.07174	-.02117	.07773	-.07323	.07196	.65336	.47234	.26341
7.000	27.340	27177	.05827	-.07113	-.02215	.07777	-.07329	.07168	.65322	.59662	.37406
7.000	31.417	18720	.05936	-.07016	-.02257	.07771	-.07336	.07133	.65736	.71593	.51687
7.000	35.533	11560	.05921	-.07047	-.02208	.07713	-.07335	.07109	.68732	.82720	.66352
7.000	39.622	12436	.05836	-.06475	-.02329	.07732	-.07332	.07383	.66317	.92340	.83035
7.000	43.728	14290	.05680	-.06120	-.02311	.07711	-.07333	.07343	.66375	.99114	1.02670
7.000	47.846	14834	.05596	-.06680	-.02432	.07734	-.07333	.07325	.66648	1.03990	1.09070
7.000	GRADIENT	.03477	.07770	-.07312	-.07314	-.07773	-.07773	-.07770	-.07328	.02940	.01793

ORIGINAL PAGE IS OF POOR QUALITY

GAP B26 C9 C43 F8 M16 M28 R5 W8 W16 SEALED GAP

URTU421 (18 OCT 74)

REFERENCE DATA

BERT = 2090.0000 IN. FT. ZMRP = 1076.6000 IN. MO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 SREF = 936.6000 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELV-LO = -20.000
 ELV-LI = -20.000 ELV-HI = -20.000
 ELV-RO = -20.000 BOFLAP = .000
 SPOORR = 55.000 RLOOER = .000
 RML = 3.333

RUN NO. 1377 RML = 3.99 GRADIENT INTERVAL = 15.00/ 25.00

WACH	ALPHA	CM	CAP	CLMF	CY	CYM	CBL	CAB	KCP/L	CLF	COF
0.000	17.000	.20075	.05611	.00742	-.00333	-.00009	.00007	.00208	.64070	.26882	.14080
0.000	19.000	.38039	.05664	.00742	-.00333	-.00009	.00017	.00208	.63982	.32251	.17095
0.000	21.000	.42775	.05687	.01135	-.00116	-.00035	.00023	.00208	.63995	.37894	.20167
0.000	23.000	.49872	.05693	.01267	-.00137	-.00052	.00036	.00208	.64054	.43683	.24727
0.000	25.000	.57180	.05744	.01339	-.00147	-.00059	.00036	.00208	.64126	.49395	.29371
0.000	27.000	.64615	.05783	.01335	-.00171	-.00066	.00037	.00208	.64221	.55125	.34578
0.000	29.000	.72492	.05846	.01373	-.00214	-.00081	.00031	.00208	.64296	.60744	.40355
0.000	31.000	.80758	.05892	.01294	-.00235	-.00071	.00033	.00208	.64401	.66189	.46644
0.000	33.000	.89099	.05976	.01182	-.00249	-.00073	.00029	.00208	.64403	.71938	.53480
0.000	35.000	.97570	.05932	.00948	-.00284	-.00065	.00021	.00208	.64634	.76568	.60757
0.000	37.000	1.06120	.05775	.01689	-.00307	-.00071	.00017	.00208	.64753	.81272	.68474
0.000	39.000	1.14710	.05662	.01368	-.00317	-.00072	.00019	.00208	.64874	.85981	.76588
0.000	41.000	1.23280	.05527	.00995	-.00330	-.00074	.00010	.00208	.64995	.89399	.85036
0.000	43.000	1.31870	.05352	-.00379	-.00360	-.00073	.00005	.00207	.65098	.92743	.93802
0.000	45.000	1.40520	.05142	-.00785	-.00389	-.00068	-.00002	.00208	.65198	.95524	1.02800
GRADIENT		.05428	.00015	.00074	-.00015	-.00006	-.00004	.00000	.00000	.00000	.00000

ORIGINAL PAGE IS OF POOR QUALITY

DATE 19 MAR 76

TABULATED SOURCE DATA - ON 79

(RTM043) (18 OCT 74)

ON 79 826 CB E43 F6 M16 M85 M8 W116

PARAMETRIC DATA

BETA = .0000 ELV-LO = .0000
 ELV-L1 = .0000 ELV-R1 = .0000
 ELV-R0 = .0000 BOFLAP = .0000
 SPORAK = 55.000 RUDDER = .0000
 RWL = 3.550

REFERENCE DATA

WAVE = 2000.0000 90 FT. WAVE = 1076.0000 14.80
 WAVE = 474.0173 14. WAVE = .0000 14.10
 WAVE = 016.0000 14. WAVE = 575.0000 14.20
 SCALE = .1129

RUN NO. 1567 0 RWL = 3.55 GRADIENT INTERVAL = 15.000 29.00

MACH	ALPHA	CM	CAP	CLMP	CY	CYN	CM	CAB	KCP/L	CLF	CDF
0.000	17.000	-.35715	.05972	-.01637	-.00060	-.00003	-.00016	.00211	.63487	.29064	-.14640
0.000	18.000	-.36150	.05608	-.02054	-.00063	-.00014	-.00015	.00211	.65619	.34210	-.17795
0.000	19.000	-.36600	.05354	-.02605	-.00065	-.00017	-.00015	.00211	.68476	.40845	-.21551
0.000	20.000	-.37150	.05207	-.03242	-.00065	-.00018	-.00015	.00211	.68572	.46735	-.25929
0.000	21.000	-.37775	.05151	-.03947	-.00064	-.00019	-.00015	.00211	.65641	.52605	-.30809
0.000	22.000	-.38450	.05178	-.04710	-.00061	-.00020	-.00015	.00211	.65744	.58774	-.35327
0.000	23.000	-.39175	.05267	-.05531	-.00058	-.00021	-.00015	.00211	.65048	.64774	-.42490
0.000	24.000	-.40000	.05400	-.06400	-.00053	-.00022	-.00015	.00211	.62199	.71000	-.49179
0.000	25.000	-.40925	.05579	-.07379	-.00047	-.00023	-.00015	.00211	.62399	.76236	-.56411
0.000	26.000	-.41950	.05800	-.08450	-.00040	-.00024	-.00015	.00211	.62443	.81718	-.64303
0.000	27.000	-.43075	.06072	-.09622	-.00032	-.00025	-.00015	.00211	.62374	.86741	-.72546
0.000	28.000	-.44300	.06400	-.10895	-.00024	-.00026	-.00015	.00211	.62148	.91318	-.81187
0.000	29.000	-.45625	.06775	-.12267	-.00016	-.00027	-.00015	.00211	.62620	.95382	-.90266
0.000	30.000	-.47050	.07200	-.13740	-.00008	-.00028	-.00015	.00211	.62732	.98887	-.99703
0.000	31.000	-.48575	.07675	-.15313	-.00000	-.00029	-.00015	.00211	.62644	1.01790	1.09320
0.000	32.000	-.50200	.08200	-.16986	-.00008	-.00030	-.00015	.00211	.62313	.99009	1.19284
0.000	33.000	-.51925	.08775	-.18759	-.00016	-.00031	-.00015	.00211	.61786	.95313	
0.000	34.000	-.53750	.09400	-.20632	-.00024	-.00032	-.00015	.00211	.61000	.90887	
0.000	35.000	-.55675	.10075	-.22605	-.00032	-.00033	-.00015	.00211	.60000	.85732	
0.000	36.000	-.57700	.10800	-.24678	-.00040	-.00034	-.00015	.00211	.58848	.79987	
0.000	37.000	-.59825	.11575	-.26851	-.00048	-.00035	-.00015	.00211	.57574	.73732	
0.000	38.000	-.62050	.12400	-.29124	-.00056	-.00036	-.00015	.00211	.56148	.67087	
0.000	39.000	-.64375	.13275	-.31597	-.00064	-.00037	-.00015	.00211	.54620	.60087	
0.000	40.000	-.66800	.14200	-.34270	-.00072	-.00038	-.00015	.00211	.52948	.52732	
0.000	41.000	-.69325	.15175	-.37043	-.00080	-.00039	-.00015	.00211	.51174	.45087	
0.000	42.000	-.71950	.16200	-.39916	-.00088	-.00040	-.00015	.00211	.49348	.37232	
0.000	43.000	-.74675	.17275	-.42889	-.00096	-.00041	-.00015	.00211	.47474	.29287	
0.000	44.000	-.77500	.18400	-.45962	-.00104	-.00042	-.00015	.00211	.45548	.21232	
0.000	45.000	-.80425	.19575	-.49135	-.00112	-.00043	-.00015	.00211	.43574	.13087	
0.000	46.000	-.83450	.20800	-.52408	-.00120	-.00044	-.00015	.00211	.41548	.04832	
0.000	47.000	-.86575	.22075	-.55781	-.00128	-.00045	-.00015	.00211	.39474	-.03587	
0.000	48.000	-.89800	.23400	-.59254	-.00136	-.00046	-.00015	.00211	.37348	-.11232	
0.000	49.000	-.93125	.24775	-.62827	-.00144	-.00047	-.00015	.00211	.35174	-.18787	
0.000	50.000	-.96650	.26200	-.66500	-.00152	-.00048	-.00015	.00211	.32948	-.26232	
0.000	51.000	-.10075	.27675	-.70273	-.00160	-.00049	-.00015	.00211	.30674	-.33487	
0.000	52.000	-.11600	.29200	-.74146	-.00168	-.00050	-.00015	.00211	.28348	-.40632	
0.000	53.000	-.13175	.30775	-.78119	-.00176	-.00051	-.00015	.00211	.25974	-.47687	
0.000	54.000	-.14800	.32400	-.82192	-.00184	-.00052	-.00015	.00211	.23548	-.54632	
0.000	55.000	-.16475	.34075	-.86365	-.00192	-.00053	-.00015	.00211	.21074	-.61487	
0.000	56.000	-.18200	.35800	-.90638	-.00200	-.00054	-.00015	.00211	.18548	-.68232	
0.000	57.000	-.20075	.37575	-.95011	-.00208	-.00055	-.00015	.00211	.15974	-.74887	
0.000	58.000	-.22000	.39400	-.99484	-.00216	-.00056	-.00015	.00211	.13348	-.81432	
0.000	59.000	-.24075	.41275	-.10457	-.00224	-.00057	-.00015	.00211	.10674	-.87887	
0.000	60.000	-.26200	.43200	-.11530	-.00232	-.00058	-.00015	.00211	.07948	-.94232	
0.000	61.000	-.28475	.45175	-.12703	-.00240	-.00059	-.00015	.00211	.05174	-.1.00487	
0.000	62.000	-.30800	.47200	-.13976	-.00248	-.00060	-.00015	.00211	.02348	-.1.06732	
0.000	63.000	-.33275	.49375	-.15349	-.00256	-.00061	-.00015	.00211	-.00474	-.1.12987	
0.000	64.000	-.35800	.51600	-.16822	-.00264	-.00062	-.00015	.00211	-.03148	-.1.19232	
0.000	65.000	-.38375	.53975	-.18395	-.00272	-.00063	-.00015	.00211	-.05774	-.1.25487	
0.000	66.000	-.41000	.56500	-.20068	-.00280	-.00064	-.00015	.00211	-.08348	-.1.31732	
0.000	67.000	-.43775	.59175	-.21841	-.00288	-.00065	-.00015	.00211	-.10874	-.1.37987	
0.000	68.000	-.46600	.61900	-.23714	-.00296	-.00066	-.00015	.00211	-.13348	-.1.44232	
0.000	69.000	-.49575	.64775	-.25687	-.00304	-.00067	-.00015	.00211	-.15774	-.1.50487	
0.000	70.000	-.52600	.67800	-.27760	-.00312	-.00068	-.00015	.00211	-.18148	-.1.56732	
0.000	71.000	-.55775	.70975	-.29933	-.00320	-.00069	-.00015	.00211	-.20474	-.1.62987	
0.000	72.000	-.59000	.74200	-.32206	-.00328	-.00070	-.00015	.00211	-.22748	-.1.69232	
0.000	73.000	-.62375	.77575	-.34579	-.00336	-.00071	-.00015	.00211	-.24974	-.1.75487	
0.000	74.000	-.65800	.81000	-.37052	-.00344	-.00072	-.00015	.00211	-.27148	-.1.81732	
0.000	75.000	-.69375	.84575	-.39625	-.00352	-.00073	-.00015	.00211	-.29274	-.1.87987	
0.000	76.000	-.73000	.88200	-.42298	-.00360	-.00074	-.00015	.00211	-.31348	-.1.94232	
0.000	77.000	-.76775	.91975	-.45071	-.00368	-.00075	-.00015	.00211	-.33374	-.1.00487	
0.000	78.000	-.80600	.95800	-.47944	-.00376	-.00076	-.00015	.00211	-.35348	-.1.06732	
0.000	79.000	-.84575	.99775	-.50917	-.00384	-.00077	-.00015	.00211	-.37274	-.1.12987	
0.000	80.000	-.88600	.10375	-.54090	-.00392	-.00078	-.00015	.00211	-.39148	-.1.19232	
0.000	81.000	-.92775	.11000	-.57363	-.00400	-.00079	-.00015	.00211	-.40974	-.1.25487	
0.000	82.000	-.97000	.11725	-.60736	-.00408	-.00080	-.00015	.00211	-.42748	-.1.31732	
0.000	83.000	-.10175	.12550	-.64209	-.00416	-.00081	-.00015	.00211	-.44474	-.1.37987	
0.000	84.000	-.11400	.13475	-.67782	-.00424	-.00082	-.00015	.00211	-.46148	-.1.44232	
0.000	85.000	-.12775	.14500	-.71455	-.00432	-.00083	-.00015	.00211	-.47774	-.1.50487	
0.000	86.000	-.14200	.15625	-.75228	-.00440	-.00084	-.00015	.00211	-.49348	-.1.56732	
0.000	87.000	-.15775	.16850	-.79101	-.00448	-.00085	-.00015	.00211	-.50874	-.1.62987	
0.000	88.000	-.17400	.18175	-.83074	-.00456	-.00086	-.00015	.00211	-.52348	-.1.69232	
0.000	89.000	-.19175	.19600	-.87147	-.00464	-.00087	-.00015	.00211	-.53774	-.1.75487	
0.000	90.000	-.21000	.21125	-.91320	-.00472	-.00088	-.00015	.00211	-.55148	-.1.81732	
0.000	91.000	-.22975	.22750	-.95693	-.00480	-.00089	-.00015	.00211	-.56474	-.1.87987	
0.000	92.000	-.25000	.24475	-.10066	-.00488	-.00090	-.00015	.00211	-.57748	-.1.94232	
0.000	93.000	-.27175	.26300	-.14539	-.00496	-.00091	-.00015	.00211	-.58974	-.2.00487	
0.000	94.000	-.29500	.28225	-.19112	-.00504	-.00092	-.00015	.00211	-.60148	-.2.06732	
0.000	95.000	-.31975	.30250	-.23785	-.00512	-.00093	-.00015	.00211	-.61274	-.2.12987	
0.000	96.000	-.34500	.32375	-.28558	-.00520	-.00094	-.00015	.00211	-.62348	-.2.19232	
0.000	97.000	-.37175	.34600	-.33431	-.00528	-.00095	-.00015	.00211	-.63374	-.2.25487	
0.000	98.000	-.39900	.36925	-.38404	-.00536	-.00096	-.00015	.00211	-.64348	-.2.31732	
0.000	99.000	-.42775	.39350	-.43477	-.00544	-.00097	-.00015	.00211	-.65274	-.2.37987	
0.000	100.000	-.45700	.41875	-.48650	-.00552	-.00098	-.00015	.00211	-.66148	-.2.44232	
0.000	101.000	-.48775	.44500	-.53923	-.00560	-.00099	-.00015	.00211	-.66974	-.2.50487	
0.000	102.000	-.51900	.47225	-.59296	-.00568	-.00100	-.00015	.00211	-.67748	-.2.56732	
0.000	103.000	-.55175	.50050	-.64769	-.00576	-.00101	-.00015	.00211	-.68474	-.2.62987	
0.000	104.000	-.58600	.52975	-.70342	-.00584	-.00102	-.00015	.00211	-.69148	-.2.69232	
0.000	105.000	-.62175	.56000	-.76015	-.00592	-.00103	-.00015	.00211	-.69774	-.2.75487	
0.000	106.000	-.65800	.59125	-.81788	-.00600	-.00104	-.00015	.00211	-.70348	-.2.81732	
0.000	107.000	-.									

ON 75 085 CO E43 FO M16 N00 RS VS M116

URTWD444 (18 OCT 74)

REFERENCE DATA

MWP = 2007.0773 80.071, MWP = 1576.8073 14.30
 LOP = 474.8173 14., MWP = .0773 14.30
 MWP = 916.8073 14., MWP = 373.0773 14.30
 SCALE = .0197

PARAMETRIC DATA

BETA = .0773 ELV-LO = .0773
 ELV-LI = .0773 ELV-R1 = .0773
 ELV-R0 = .0773 BDFLAP = .0773
 SPOKES = 23.0773 RUDOCK = .0773
 RM/L = 3.337

RUN NO. 1907 0 RM/L = 3.36 GRADIENT INTERVAL = 13.00/ 23.00

MOON	ALPHA	CN	CAF	CLAP	CT	CVM	COL	CAB	KCP/L	CLF	COF
0.0773	17.0773	31493	03422	-03348	-00233	-00008	-00204	.65627	.28932	.14392	
0.0773	19.0773	34744	03443	-03276	-00013	-00002	.00204	.63477	.34106	.17572	
0.0773	21.0773	42733	03332	-03168	-00018	-00003	.00204	.63432	.40071	.21329	
0.0773	23.0773	52326	03399	-03136	-00034	-00009	.00204	.63392	.46153	.23677	
0.0773	25.0773	60243	03643	-03097	-00033	-00009	.00204	.63358	.52210	.27375	
0.0773	27.0773	66233	03691	-03119	-00042	-00005	.00204	.63532	.58230	.30737	
0.0773	29.0773	70576	03748	-03156	-00045	-00004	.00204	.63744	.64189	.42132	
0.0773	31.0773	83136	03799	-03187	-00049	-00007	.00204	.63873	.69808	.48019	
0.0773	33.0773	93947	03843	-03243	-00049	-00009	.00204	.63873	.75872	.50164	
0.0773	35.0773	1.03133	03846	-03312	-00045	-00014	.00204	.64110	.81030	.53875	
0.0773	37.0773	1.12073	03811	-03374	-00033	-00017	.00204	.66231	.86079	.72069	
0.0773	39.0773	1.21187	03797	-03431	-00044	-00013	.00204	.66356	.90349	.81724	
0.0773	41.0773	1.30187	03672	-03486	-00059	-00013	.00204	.66475	.94330	.89669	
0.0773	43.0773	1.39143	03573	-03526	-00067	-00016	.00204	.66376	.97937	.96969	
0.0773	45.0773	1.47983	03453	-03537	-00033	-00018	.00204	.66683	1.00780	1.08497	
GRADIENT		03399	00028	-00049	-00011	-00006	-00002	-00006	.02067	.02024	



(RTM043) (18 OCT 74)

DATE 18 MAR 75

CAPM 028 CB E43 PB H18 NR0 RS 180 M416

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
 ELV-LI = .000 ELV-RI = .000
 ELV-NO = .000 BDFLAP = .000
 S-SORAK = 85.000 RUDDER = .000
 RML = 3.500

REFERENCE DATA

DATE = 2001.0000 34.000 TEMP = 10/16.00 31 IM.00
 CRP = 0/4.0100 IM. TEMP = .0000 14.00
 BRP = 0/35.00 31 IM. ZMP = 3/18.00 31 IM. 20
 SCA-Z = .0150

RUN NO 10071 RML = 3.54 GRADIENT INTERVAL = 15.00/ 25.00

NO	ALPHA	CH	CAP	CLMP	CT	CVM	CBN	CAB	KCPAL	CLF	COF
0.001	17.000	0.31030	0.35752	-0.00103	-0.00112	-0.00112	-0.00112	0.00200	0.5107	0.20334	1.4603
0.002	18.000	0.30711	0.35754	-0.00146	-0.00094	-0.00094	-0.00094	0.00200	0.5129	0.34124	1.7835
0.003	21.000	0.31224	0.35721	-0.00227	-0.00111	-0.00111	-0.00111	0.00200	0.5255	0.0070	2.1512
0.004	23.000	0.32014	0.35729	-0.00350	-0.00120	-0.00120	-0.00120	0.00200	0.5374	0.40194	2.5027
0.005	25.000	0.33211	0.35773	-0.00500	-0.00139	-0.00139	-0.00139	0.00200	0.5437	0.22200	3.0725
0.006	27.000	0.34825	0.35815	-0.00700	-0.00164	-0.00164	-0.00164	0.00200	0.5500	0.30243	3.6191
0.007	29.000	0.36807	0.35861	-0.01000	-0.00214	-0.00214	-0.00214	0.00200	0.5565	0.42221	4.2322
0.008	31.000	0.39256	0.35902	-0.01400	-0.00284	-0.00284	-0.00284	0.00200	0.5630	0.59071	4.9561
0.009	33.000	0.42120	0.35944	-0.01900	-0.00377	-0.00377	-0.00377	0.00200	0.5696	0.81044	5.8146
0.010	35.000	0.45430	0.35981	-0.02500	-0.00492	-0.00492	-0.00492	0.00200	0.5764	1.08069	6.8369
0.011	37.000	0.49200	0.36011	-0.03200	-0.00634	-0.00634	-0.00634	0.00200	0.5833	1.41004	8.1104
0.012	39.000	0.53430	0.36031	-0.04000	-0.00800	-0.00800	-0.00800	0.00200	0.5903	1.80000	9.6500
0.013	41.000	0.58100	0.36041	-0.04900	-0.01000	-0.01000	-0.01000	0.00200	0.5974	2.26000	11.4600
0.014	43.000	0.63200	0.36041	-0.05900	-0.01300	-0.01300	-0.01300	0.00200	0.6045	2.80000	13.5000
0.015	45.000	0.68700	0.36031	-0.07000	-0.01700	-0.01700	-0.01700	0.00200	0.6116	3.42000	15.8200
0.016	47.000	0.74600	0.36011	-0.08200	-0.02200	-0.02200	-0.02200	0.00200	0.6187	4.13000	18.4300
0.017	49.000	0.80900	0.35981	-0.09500	-0.02800	-0.02800	-0.02800	0.00200	0.6258	4.93000	21.3300
0.018	51.000	0.87600	0.35941	-0.10900	-0.03500	-0.03500	-0.03500	0.00200	0.6329	5.83000	24.5300
0.019	53.000	0.94700	0.35891	-0.12400	-0.04300	-0.04300	-0.04300	0.00200	0.6400	6.83000	28.0300
0.020	55.000	1.02200	0.35831	-0.14000	-0.05200	-0.05200	-0.05200	0.00200	0.6471	7.93000	31.8300
0.021	57.000	1.10100	0.35761	-0.15700	-0.06200	-0.06200	-0.06200	0.00200	0.6542	9.13000	35.9300
0.022	59.000	1.18400	0.35681	-0.17500	-0.07300	-0.07300	-0.07300	0.00200	0.6613	1.04000	40.3300
0.023	61.000	1.27100	0.35591	-0.19400	-0.08500	-0.08500	-0.08500	0.00200	0.6684	1.15000	45.0300
0.024	63.000	1.36200	0.35491	-0.21400	-0.09800	-0.09800	-0.09800	0.00200	0.6755	1.27000	50.0300
0.025	65.000	1.45700	0.35381	-0.23500	-0.11200	-0.11200	-0.11200	0.00200	0.6826	1.40000	55.3300
0.026	67.000	1.55600	0.35261	-0.25700	-0.12700	-0.12700	-0.12700	0.00200	0.6897	1.54000	60.9300
0.027	69.000	1.65900	0.35131	-0.28000	-0.14300	-0.14300	-0.14300	0.00200	0.6968	1.69000	66.8300
0.028	71.000	1.76600	0.35001	-0.30400	-0.16000	-0.16000	-0.16000	0.00200	0.7039	1.85000	72.9300
0.029	73.000	1.87700	0.34861	-0.32900	-0.17800	-0.17800	-0.17800	0.00200	0.7110	2.02000	79.3300
0.030	75.000	1.99200	0.34711	-0.35500	-0.19700	-0.19700	-0.19700	0.00200	0.7181	2.20000	86.0300
0.031	77.000	2.11100	0.34551	-0.38200	-0.21700	-0.21700	-0.21700	0.00200	0.7252	2.39000	93.0300
0.032	79.000	2.23400	0.34381	-0.41000	-0.23800	-0.23800	-0.23800	0.00200	0.7323	2.59000	100.3300
0.033	81.000	2.36100	0.34201	-0.43900	-0.26000	-0.26000	-0.26000	0.00200	0.7394	2.80000	107.9300
0.034	83.000	2.49200	0.34011	-0.46900	-0.28300	-0.28300	-0.28300	0.00200	0.7465	3.02000	115.8300
0.035	85.000	2.62700	0.33811	-0.50000	-0.30700	-0.30700	-0.30700	0.00200	0.7536	3.25000	124.0300
0.036	87.000	2.76600	0.33601	-0.53200	-0.33200	-0.33200	-0.33200	0.00200	0.7607	3.49000	132.5300
0.037	89.000	2.90900	0.33381	-0.56500	-0.35800	-0.35800	-0.35800	0.00200	0.7678	3.74000	141.3300
0.038	91.000	3.05600	0.33151	-0.60000	-0.38500	-0.38500	-0.38500	0.00200	0.7749	4.00000	150.4300
0.039	93.000	3.20700	0.32911	-0.63600	-0.41300	-0.41300	-0.41300	0.00200	0.7820	4.27000	159.8300
0.040	95.000	3.36200	0.32661	-0.67300	-0.44200	-0.44200	-0.44200	0.00200	0.7891	4.55000	169.5300
0.041	97.000	3.52100	0.32401	-0.71100	-0.47200	-0.47200	-0.47200	0.00200	0.7962	4.84000	179.5300
0.042	99.000	3.68400	0.32131	-0.75000	-0.50300	-0.50300	-0.50300	0.00200	0.8033	5.14000	189.8300
0.043	101.000	3.85100	0.31851	-0.79000	-0.53500	-0.53500	-0.53500	0.00200	0.8104	5.45000	200.4300
0.044	103.000	4.02200	0.31561	-0.83100	-0.56800	-0.56800	-0.56800	0.00200	0.8175	5.77000	211.3300
0.045	105.000	4.19700	0.31261	-0.87300	-0.60200	-0.60200	-0.60200	0.00200	0.8246	6.10000	222.5300
0.046	107.000	4.37600	0.30951	-0.91600	-0.63700	-0.63700	-0.63700	0.00200	0.8317	6.44000	234.0300
0.047	109.000	4.55900	0.30631	-0.96000	-0.67300	-0.67300	-0.67300	0.00200	0.8388	6.79000	245.8300
0.048	111.000	4.74600	0.30301	-1.00500	-0.71000	-0.71000	-0.71000	0.00200	0.8459	7.15000	257.9300
0.049	113.000	4.93700	0.29961	-1.05100	-0.74800	-0.74800	-0.74800	0.00200	0.8530	7.52000	270.3300
0.050	115.000	5.13200	0.29611	-1.09800	-0.78700	-0.78700	-0.78700	0.00200	0.8601	7.90000	283.0300
0.051	117.000	5.33100	0.29251	-1.14600	-0.82700	-0.82700	-0.82700	0.00200	0.8672	8.29000	296.0300
0.052	119.000	5.53400	0.28881	-1.19500	-0.86800	-0.86800	-0.86800	0.00200	0.8743	8.69000	309.3300
0.053	121.000	5.74100	0.28501	-1.24500	-0.91000	-0.91000	-0.91000	0.00200	0.8814	9.10000	322.9300
0.054	123.000	5.95200	0.28111	-1.29600	-0.95300	-0.95300	-0.95300	0.00200	0.8885	9.52000	336.8300
0.055	125.000	6.16700	0.27711	-1.34800	-1.00700	-1.00700	-1.00700	0.00200	0.8956	9.95000	351.0300
0.056	127.000	6.38600	0.27301	-1.40100	-1.06200	-1.06200	-1.06200	0.00200	0.9027	1.04000	365.5300
0.057	129.000	6.60900	0.26881	-1.45500	-1.11800	-1.11800	-1.11800	0.00200	0.9098	1.13000	380.3300
0.058	131.000	6.83600	0.26451	-1.51000	-1.17500	-1.17500	-1.17500	0.00200	0.9169	1.22000	395.4300
0.059	133.000	7.06700	0.26011	-1.56600	-1.23300	-1.23300	-1.23300	0.00200	0.9240	1.31000	410.8300
0.060	135.000	7.30200	0.25561	-1.62300	-1.29200	-1.29200	-1.29200	0.00200	0.9311	1.40000	426.5300
0.061	137.000	7.54100	0.25101	-1.68100	-1.35200	-1.35200	-1.35200	0.00200	0.9382	1.49000	442.5300
0.062	139.000	7.78400	0.24631	-1.74000	-1.41300	-1.41300	-1.41300	0.00200	0.9453	1.58000	458.8300
0.063	141.000	8.03100	0.24151	-1.80000	-1.47500	-1.47500	-1.47500	0.00200	0.9524	1.67000	475.4300
0.064	143.000	8.28200	0.23661	-1.86100	-1.53800	-1.53800	-1.53800	0.00200	0.9595	1.76000	492.3300
0.065	145.000	8.53700	0.23161	-1.92300	-1.60200	-1.60200	-1.60200	0.00200	0.9666	1.85000	509.5300
0.066	147.000	8.79600	0.22651	-1.98600	-1.66700	-1.66700	-1.66700	0.00200	0.9737	1.94000	527.0300
0.067	149.000	9.05900	0.22131	-2.05000	-1.73300	-1.73300	-1.73300	0.00200	0.9808	2.03000	544.8300
0.068	151.000	9.32600	0.21601	-2.11500	-1.80000	-1.80000	-1.80000	0.00200	0.9879	2.12000	562.9300
0.069	153.000	9.59700	0.21061	-2.18100	-1.86800	-1.86800	-1.86800	0.00200	0.9950	2.21000	581.3300
0.070	155.000	9.87200	0.20511	-2.24800	-1.93700	-1.93700	-1.93700	0.00200	1.0021	2.30000	599.9300
0.071	157.000	10.15100	0.19951	-2.31600	-2.00700	-2.00700	-2.00700	0.00200	1.0092	2.39000	618.7300
0.072	159.000	10.43400	0.19381	-2.38500	-2.07800	-2.07800	-2.07800	0.00200	1.0163	2.48000	637.7300
0.073	161.000	10.72100	0.18801	-2.45500	-2.15000	-2.15000	-2.15000	0.00200	1.0234	2.57000	656.9300
0.074	163.000	11.01200	0.18211	-2.52600	-2.22300	-2.22300	-2.22300	0.00200	1.0305	2.66000	676.3300
0.075	165.000	11.30700	0.17611	-2.59800	-2.29700	-2.29700	-2.29700	0.00200	1.0376	2.75000	695.9300
0.076	167.000	11.60600	0.17001	-2.67100	-2.37200	-2.37200	-2.37200	0.00200	1.0447	2.84000	715.7300
0.077	169.000	11.90900	0.16381	-2.74500	-2.44800	-2.44800	-2.44800	0.00200	1.0518	2.93000	735.7300
0.078	171.000	12.21600	0.15751	-2.82000	-2.52500	-2.52500	-2.52500	0.00200	1.0589	3.02000	755.9300
0.079	173.000	12.52700	0.15111	-2.89600	-2.60300	-2.60300	-2.60300	0.00200	1.0660	3.11000	776.3300
0.080	175.000	12.84200									

(RTWDAY) (10 OCT 74)

TABULATED SOURCE DATA - CA79

CA79 B26 C9 E43 F0 M16 N26 R5 V0 W116

DATE 10 MAR 75

PARAMETRIC DATA

BETA = .0770 ELV-LO = 10.000
 ELV-LI = 10.000 ELV-RI = 10.000
 ELV-RO = 10.000 BDFLAP = 16.300
 SPOBRK = 55.000 RUDDER = .000
 RW/L = 3.535

REFERENCE DATA

SREF = 2690.0000 50. FT. XMRP = 1076.6600 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 BREF = 936.6000 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0100

RUN NO. 1627 D RW/L = 3.55 GRADIENT INTERVAL = 15.00/ 25.00

MACH	ALPHA	CN	CAF	CLMF	CY	CYN	CSL	CAB	XCF/L	CLF	CDF
0.077	17.000	.35635	.06354	-.04111	-.00007	.00061	-.00125	.00202	.69232	.32220	.16495
0.077	19.000	.42914	.06562	-.04791	-.00132	.00051	-.00132	.00202	.69097	.30424	.20191
0.077	21.000	.50725	.06655	-.05550	-.00186	.00035	-.00148	.00202	.69021	.44899	.24578
0.077	23.000	.58841	.07142	-.06532	-.00182	.00044	-.00159	.00202	.69074	.51372	.29565
0.077	25.000	.67239	.07403	-.07476	-.00203	.00046	-.00174	.00202	.69043	.57811	.35126
0.077	27.000	.75974	.07676	-.08325	-.00217	.00045	-.00184	.00202	.69026	.64147	.41299
0.077	29.000	.84793	.07959	-.09258	-.00231	.00045	-.00193	.00202	.69008	.70503	.48070
0.077	31.000	.93945	.08223	-.10255	-.00282	.00066	-.00210	.00202	.69012	.76291	.55433
0.077	33.000	1.03240	.08472	-.11298	-.00321	.00075	-.00220	.00202	.69018	.81969	.63333
0.077	35.000	1.12770	.08695	-.12379	-.00367	.00093	-.00238	.00202	.69031	.87592	.71807
0.077	37.000	1.22290	.08876	-.13484	-.00379	.00097	-.00242	.00202	.69049	.92321	.80684
0.077	39.000	1.31720	.09036	-.14579	-.00380	.00106	-.00244	.00202	.69064	.96683	.89920
0.077	41.000	1.41100	.09167	-.15675	-.00392	.00106	-.00246	.00202	.69080	1.00470	.99486
0.077	43.000	1.50280	.09272	-.16724	-.00425	.00121	-.00251	.00202	.69087	1.03580	1.09270
0.077	45.000	1.59520	.09355	-.17807	-.00449	.00135	-.00255	.00202	.69100	1.06180	1.19410
0.077	GRADIENT	.03957	.00133	-.00416	-.00014	-.00002	-.00006	-.00000	-.00000	.03206	.02332

ORIGINAL PAGE IS OF POOR QUALITY

C479 826 C9 E43 F8 H16 H28 R5 V8 M116

(UNTR048) (18 OCT 74)

REFERENCE DATA

BREF = 2000.0000 90.FT. XDRP = 1076.0000 IN.XO
 LREF = 474.8100 IN. YMRP = .0000 IN.YO
 BREF = 936.6000 IN. ZMRP = 375.0000 IN.ZO
 SCALE = .0100

PARAMETRIC DATA

BETA = .0000 ELV-LO = .0000
 ELV-LI = .0000 ELV-HI = .0000
 ELV-RO = .0000 BDFLAP = -11.7000
 SPOWRK = 55.0000 RUDDER = .0000
 RMVL = 1.860

RUN NO. 197/ 0 RMVL = 1.81 GRADIENT INTERVAL = 15.00/ 25.00

MAOH	ALPHA	CN	CAF	CLMF	CY	CYN	COL	CAB	XCP/L	CLF	COF
7.980	17.000	.30378	.03780	-.00245	-.00081	.00029	-.00025	.00170	.65283	.27557	.14449
7.980	19.000	.37362	.05009	-.00066	-.00134	-.00002	-.00021	.00170	.65054	.33970	.17467
7.980	21.000	.44148	.05636	-.00024	-.00139	-.00004	-.00024	.00170	.64969	.39196	.21083
7.980	23.000	.51323	.05662	-.00085	-.00167	-.00009	-.00022	.00170	.65051	.45031	.25266
7.980	25.000	.58899	.05692	-.00176	-.00195	-.00014	-.00024	.00170	.65100	.50939	.30034
7.980	27.000	.66755	.05717	-.00253	-.00212	-.00020	-.00027	.00170	.65130	.56883	.35400
7.980	29.000	.74763	.05762	-.00464	-.00220	-.00027	-.00029	.00170	.65220	.62596	.41266
7.980	31.000	.83181	.05804	-.00783	-.00228	-.00035	-.00035	.00170	.65336	.68310	.47817
7.980	33.000	.91825	.05837	-.01162	-.00268	-.00040	-.00040	.00170	.65457	.73832	.54907
7.980	35.000	1.00630	.05822	-.01642	-.00285	-.00045	-.00045	.00170	.65592	.79090	.62487
7.980	37.000	1.09580	.05812	-.02141	-.00296	-.00039	-.00039	.00170	.65711	.84005	.70379
7.980	39.000	1.18410	.05748	-.02696	-.00327	-.00040	-.00039	.00170	.65830	.88475	.78986
7.980	41.000	1.27280	.05677	-.03311	-.00346	-.00040	-.00040	.00170	.65949	.92317	.87773
7.980	43.000	1.36040	.05582	-.03964	-.00366	-.00038	-.00040	.00170	.66065	.95686	.96861
7.980	GRADIENT	.03326	-.00004	.00006	-.00013	-.00005	.00000	-.00000	-.00016	.02915	-.01948

CAT9 026 C9 E43 F8 M16 M28 R3 V8 M16

(RTM049) (18 OCT 74)

REFERENCE DATA

SREF = 2000.0000 50. FT. ZMRP = 1076.5000 IN. MO
 LREF = 474.5100 IN. YMRP = .0000 IN. YO
 ORLE = 936.5000 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .01291

PARAMETRIC DATA

BETA = .0000 ELV-LO = .0000
 ELV-LI = .0000 ELV-RI = .0000
 ELV-RO = .0000 BDFLAP = 16.5000
 SPOBRK = 55.0000 RUDDER = .0000
 RML = 1.060

RUN NO. 1517 0 RML = 1.93 GRADIENT INTERVAL = 15.000/ 25.000

MACH	ALPHA	CM	CAF	CLWF	CV	CUN	CBL	CAD	KSP/L	CLF	COF
7.997	17.000	.32791	.05990	-.01734	-.03106	.00019	-.00026	.00171	.56976	.28949	.15073
7.997	19.000	.39114	.08720	-.01992	-.03032	.00003	-.00021	.00171	.65853	.35223	.18426
7.997	21.000	.46496	.09788	-.02344	-.02978	-.00004	-.00021	.00171	.67033	.41226	.22346
7.997	23.000	.54079	.05244	-.03123	-.02922	-.00013	-.00020	.00171	.67115	.47340	.26878
7.997	25.000	.62787	.06378	-.03707	-.02914	-.00014	-.00025	.00171	.67187	.53574	.32019
7.997	27.000	.70358	.06340	-.04343	-.02911	-.00017	-.00032	.00171	.67262	.59720	.37769
7.997	29.000	.76835	.06712	-.04985	-.02914	-.00016	-.00037	.00171	.67317	.65714	.44100
7.997	31.000	.81553	.06860	-.05677	-.02923	-.00019	-.00044	.00171	.67378	.71513	.50974
7.997	33.000	.86585	.07014	-.06444	-.02923	-.00011	-.00052	.00171	.67447	.77183	.58486
7.997	35.000	1.05690	.07120	-.07284	-.02983	-.00007	-.00059	.00171	.67521	.82493	.66433
7.997	37.000	1.14890	.07270	-.08136	-.02929	-.00026	-.00053	.00171	.67598	.87414	.74911
7.997	39.000	1.24020	.07291	-.09012	-.02918	-.00029	-.00052	.00171	.67666	.91794	.83715
7.997	41.000	1.33080	.07336	-.09917	-.02938	-.00033	-.00052	.00171	.67734	.95620	.92844
7.997	43.000	1.42170	.07374	-.10820	-.02937	-.00031	-.00053	.00171	.67794	.98878	1.02290
7.997	45.000	1.51400	.07354	-.11724	-.02938	-.00004	-.00000	-.00000	.67850	1.01778	1.11817

GRADIENT

CAP 826 CB E43 F0 M16 M26 R3 V6 M16

(RTN050) (18 OCT 74)

REFERENCE DATA

BSEP = 2000.0000 80. FT. ZMRP = 1076.0000 IN. MO
 LSEP = 474.8100 IN. YMRP = .0000 IN. VC
 OSEP = 936.0000 IN. ZMRP = 378.0000 IN. ZO
 SCALE = .0100

PARAMETRIC DATA

BETA = .000 ELV-LO = 10.000
 ELV-LI = 10.000 ELV-RI = 10.000
 ELV-RO = 10.000 BDFLAP = 18.000
 SPDRK = 99.000 RUDDOR = .000
 RM/L = 1.800

RUN NO. 1527 0 RM/L = 1.86 GRADIENT INTERVAL = 15.00/ 25.00

MMON	ALPHA	CN	CAP	CLMF	CV	CYN	COL	CAB	XCP/L	CLF	CLF	CDF
7.900	17.000	.3432	.06435	-.03746	-.00124	.00041	-.00046	.00169	.60079	.31145	.16278	
7.900	18.000	.41900	.08575	-.04245	-.00209	.00037	-.00096	.00169	.60739	.37352	.19884	
7.900	21.000	.49790	.06790	-.05184	-.00147	.00027	-.00101	.00169	.60821	.44064	.24145	
7.900	23.000	.57819	.06970	-.06774	-.00182	.00031	-.00110	.00169	.60956	.50499	.29007	
7.900	25.000	.66170	.07209	-.06999	-.00203	.00033	-.00121	.00169	.60883	.56924	.34498	
7.900	27.000	.74827	.07506	-.07922	-.00237	.00034	-.00135	.00169	.60997	.63264	.40659	
7.900	29.000	.83661	.07804	-.08976	-.00282	.00037	-.00148	.00169	.60895	.69388	.47383	
7.900	31.000	.92825	.08114	-.10941	-.00275	.00047	-.00164	.00169	.60904	.75368	.54763	
7.900	33.000	1.02190	.08369	-.10941	-.00298	.00055	-.00176	.00169	.60934	.81083	.62661	
7.900	35.000	1.11370	.08638	-.12746	-.00344	.00065	-.00192	.00169	.60965	.86438	.71070	
7.900	37.000	1.21090	.08868	-.13190	-.00355	.00057	-.00188	.00169	.60999	.91336	.79930	
7.900	39.000	1.32480	.09087	-.14266	-.00381	.00081	-.00193	.00169	.60915	.95686	.89177	
7.900	41.000	1.39760	.09270	-.15435	-.00422	.00065	-.00198	.00169	.60956	.99382	.98679	
7.900	43.000	1.48980	.09433	-.16497	-.00472	.00071	-.00204	.00169	.60967	1.02310	1.08490	
GRADIENT		.03935	.00095	-.00417	-.00013	-.00001	-.00004	-.00000	-.00002	.03225	.02279	



DATE 19 MAR 75
TABULATED SOURCE DATA - CA79
CA79 B26 C9 E43 F8 H16 M28 R5 V8 W116

URTW031 (18 OCT 74)

REFERENCE DATA
SREF = 2001.0000 90. FT. WARP = 10/16.0000 IN. RO
LREF = 1/4.0100 IN. YARP = .0000 IN. TO
BREF = 930.0000 IN. ZARP = 5/15.0000 IN. ZO
SCALE = .0150

PARAMETRIC DATA
BETA = .0000 ELV-LO = 10.0000
ELV-LI = 10.0000 ELV-RI = 10.0000
ELV-RO = 10.0000 BDFLAP = .0000
SPORAK = 55.0000 RUDDER = .0000
RM/L = 1.0000

RUN NO. 1337 0 RM/L = 1.04 GRADIENT INTERVAL = 15.00/25.00

MAON	ALPHA	CN	CAF	CLMF	CY	CTN	CBL	CAB	XCF/L	CLF	COF
7.987	17.000	.33976	.06128	-.02434	-.00115	.00040	-.00097	.00170	.67676	.30059	.15590
7.987	19.000	.07324	.06206	-.02384	-.00107	.00027	-.00096	.00170	.67335	.36296	.19063
7.987	21.000	.47782	.06290	-.00734	-.00122	.00031	-.00109	.00170	.67327	.42350	.22951
7.987	23.000	.35574	.06320	-.03495	-.00177	.00028	-.00119	.00170	.67298	.48667	.27532
7.987	25.000	.63518	.06432	-.04914	-.00196	.00032	-.00128	.00170	.67310	.54840	.32691
7.987	27.000	.71869	.06592	-.04921	-.00227	.00034	-.00140	.00170	.67305	.61060	.38510
7.987	29.000	.80363	.06761	-.05151	-.00249	.00036	-.00150	.00170	.67349	.67027	.44884
7.987	31.000	.89232	.06928	-.05312	-.00274	.00045	-.00163	.00170	.67388	.72936	.51907
7.987	33.000	.98340	.07097	-.06617	-.00312	.00054	-.00175	.00170	.67467	.78610	.59512
7.987	35.000	1.07627	.07251	-.07485	-.00353	.00061	-.00187	.00170	.67551	.84005	.67649
7.987	37.000	1.16907	.07351	-.08341	-.00393	.00053	-.00183	.00170	.67616	.89990	.76263
7.987	39.000	1.26190	.07448	-.09284	-.00438	.00055	-.00187	.00170	.67703	.93256	.85103
7.987	41.000	1.35267	.07529	-.10247	-.00484	.00060	-.00192	.00170	.67780	.97142	.94421
7.987	43.000	1.44400	.07585	-.11223	-.00546	.00065	-.00195	.00170	.67852	1.00433	1.04030
7.987	0.000	.00000	.00000	-.00000	-.00000	.00000	-.00000	-.00000	-.00000	-.00000	-.02133

CA 79 B26 C9 E43 F6 M16 M28 R5 W8 M16

(RTM032) (18 OCT 74)

REFERENCE DATA

REF = 2697.0777 96.07. WMP = 1076.6077 IN.XO
 LREF = 474.8177 IN. YMP = .0777 IN.YO
 BREF = 936.6077 IN. ZMP = 375.0777 IN.ZO
 SCALE = .0197

PARAMETRIC DATA

BETA = .0777 ELV-LO = 20.0777
 ELV-LI = 20.0777 ELV-RI = 20.0777
 ELV-RO = 20.0777 BOFLAP = .0777
 SPOBRK = 55.0777 RUDDER = .0777
 RM/L = 1.667

RUN NO. 1347 0 RM/L = 1.66 GRADIENT INTERVAL = 15.00/ 25.00

MACH	ALPHA	CN	CAF	CLMF	CY	CYN	CBL	CAB	XCP/L	CLF	PDF
7.987	17.077	.3779	.0787	-.08217	-.07133	-.07133	-.07142	.07169	.71047	.33820	.18327
7.987	19.077	.4336	.08181	-.08616	-.07101	-.07101	-.07047	.07169	.70319	.40263	.22369
7.987	21.077	.5318	.08371	-.07576	-.07148	-.07029	-.07062	.07169	.70209	.46868	.26957
7.987	23.077	.6184	.08731	-.07462	-.07172	-.07027	-.07065	.07169	.70146	.53277	.32099
7.987	25.077	.6993	.09798	-.07306	-.07187	-.07022	-.07068	.07169	.69888	.59536	.37871
7.987	27.077	.7667	.09483	-.07193	-.07197	-.07018	-.07075	.07169	.69739	.65792	.44166
7.987	29.077	.87497	.09659	-.07064	-.07203	-.07014	-.07076	.07169	.69644	.71747	.51042
7.987	31.077	.96372	.10232	-.07110	-.07233	-.07018	-.07181	.07169	.69368	.77978	.58579
7.987	33.077	1.09910	.10396	-.07290	-.07253	-.07018	-.07187	.07169	.69375	.83754	.66570
7.987	35.077	1.15470	.10916	-.07054	-.07291	-.07011	-.07182	.07169	.69473	.88268	.75131
7.987	37.077	1.24050	.11216	-.07174	-.07296	-.07003	-.07083	.07169	.69443	.92963	.84097
7.987	39.077	1.34240	.11488	-.07171	-.07336	-.07007	-.07093	.07169	.69423	.97992	.93406
7.987	41.077	1.43530	.11728	-.07287	-.07358	-.07007	-.07082	.07169	.69417	1.02630	1.03020
7.987	43.077	1.52770	.11927	-.07402	-.07436	-.07021	-.07101	.07169	.69423	1.07397	1.12910
GRADIENT		.07029	.07149	-.07351	-.07079	-.07001	-.07073	.07070	-.07140	.03222	.02413

DATE 19 MAR 75

TABULATED SOURCE DATA - CAV

CAV 826 C9 E43 F8 M16 N28 R3 W3 M16

PAGE 47

(RTM033) (18 OCT 74)

REFERENCE DATA

WHP = 2400.0000 96.00 FT. WHP = 1076.6800 1M.RO
 CRF = 474.8100 1M. YHP = .0000 1M.YO
 WCF = 936.6800 1M. ZHP = 375.0000 1M.ZO
 SCALE = .0100

PARAMETRIC DATA

BETA = .0000 ELV-LO = 20.0000
 ELV-LI = 20.0000 ELV-RI = 20.0000
 ELV-RO = 20.0000 BDFLAP = 16.0000
 SPOBAR = 55.0000 RLOODR = .0000
 RML = 1.0000

RUN NO. 1337 0 RML = 1.06 GRADIENT INTERVAL = 15.00/ 25.00

WASH	ALPHA	CM	CAF	CLWF	CY	CYN	CBL	CAS	KCP/L	CLF	CDF
7.000	17.000	3.8234	-0.7993	-0.7532	-0.0111	.00049	-0.00073	.00160	.02049	.33202	.19121
7.000	18.000	4.4310	0.6396	-0.6669	-0.0087	.00043	-0.00078	.00160	.01775	-41.716	.23243
7.000	21.000	5.5310	0.6885	-0.6844	-0.0149	.00042	-0.00084	.00160	.01515	.48639	.28188
7.000	23.000	6.6078	0.6334	-1.1102	-0.0173	.00044	-0.00086	.00160	.01366	.53338	.33629
7.000	25.000	7.2890	0.6047	-1.2367	-0.0189	.00040	-0.00095	.00160	.01234	.61863	.39712
7.000	27.000	8.1848	1.0349	-1.3641	-0.0204	.00036	-0.00096	.00160	.01124	.68229	.46379
7.000	29.000	9.0806	1.0647	-1.4818	-0.0227	.00039	-0.00100	.00160	.01064	.74319	.53397
7.000	31.000	1.0720	1.1130	-1.6114	-0.0234	.00044	-0.00104	.00160	.00978	.80075	.61333
7.000	33.000	1.0989	1.1788	-1.7343	-0.0297	.00047	-0.00105	.00160	.00799	.85740	.69736
7.000	35.000	1.1951	1.2231	-1.8952	-0.0328	.00049	-0.00107	.00160	.00734	.90885	.78569
7.000	37.000	1.2820	1.2654	-2.0575	-0.0340	.00059	-0.00105	.00160	.00673	.95599	.87883
7.000	39.000	1.3670	1.3141	-2.2124	-0.0375	.00046	-0.00110	.00160	.00620	.99990	.97426
7.000	41.000	1.4819	1.3593	-2.2484	-0.0407	.00057	-0.00113	.00160	.00575	1.03090	1.07330
7.000	43.000	1.5787	1.3691	-2.2903	-0.0485	.00076	-0.00122	.00160	.00550	-0.05920	1.17900
7.000	0.000	0.0000	0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000
7.000	0.000	0.0000	0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000

GRADIENT

CA 75 828 C9 E43 F8 M16 N88 R3 W8 W16

(RTM034) (10 OCT 74)

REFERENCE DATA

SREF = 2000.0000 80. FT. XGRP = 1076.6000 IN. NO
 LREF = 474.8100 IN. YGRP = .0000 IN. YO
 BREF = 936.6000 IN. ZGRP = 375.0000 IN. ZO
 SCALE = .0191

PARAMETRIC DATA

BETA = .000 ELV-LO = -40.000
 ELV-L1 = -40.000 ELV-R1 = -40.000
 ELV-RO = -40.000 BOFLAP = .000
 SPOBRK = 55.000 RUDDER = .000
 RWL = 1.860

RUN NO. 156/0 RWL = 1.87 GRADIENT INTERVAL = 15.00/ 25.00

MACH	ALPHA	CM	CAF	CLMF	CY	CYN	CBL	CAB	KCP/L	CLF	CDF
7.000	17.000	.28079	.06179	-.01193	-.00113	.00023	.00039	.00176	.63449	.29352	.14274
7.000	18.000	.34787	.09992	-.01423	-.00267	.00005	.00042	.00176	.63481	.30934	.16989
7.000	21.000	.41071	.09935	-.01670	-.00798	-.00002	.00045	.00176	.63574	.36711	.20450
7.000	23.000	.48556	.09965	-.01757	-.00113	-.00010	.00090	.00176	.63656	.42366	.24463
7.000	25.000	.55772	.08701	-.01928	-.00133	-.00019	.00151	.00176	.63718	.48010	.29009
7.000	27.000	.63103	.08755	-.02749	-.00172	-.00019	.00190	.00176	.63797	.53847	.34079
7.000	29.000	.71781	.08139	-.02117	-.00194	-.00018	.00190	.00176	.63894	.58929	.39684
7.000	31.000	.78687	.08273	-.02136	-.00215	-.00020	.00151	.00175	.63942	.64252	.45843
7.000	33.000	.86841	.08236	-.02173	-.00253	-.00016	.00147	.00175	.64071	.69423	.52545
7.000	35.000	.93183	.08292	-.02742	-.00271	-.00029	.00151	.00175	.64202	.74279	.59692
7.000	37.000	1.03430	.08376	-.01923	-.00270	-.00036	.00153	.00175	.64308	.78808	.67282
7.000	39.000	1.11710	.08297	-.01761	-.00304	-.00046	.00153	.00175	.64412	.82851	.75194
7.000	41.000	1.19900	.08238	-.01548	-.00319	-.00056	.00156	.00175	.64518	.86447	.83447
7.000	43.000	1.28151	.08198	-.01353	-.00349	-.00062	.00162	.00175	.64674	.89492	.91928
7.000	45.000	1.36592	.08171	-.01082	-.00400	-.00079	.00164	.00175	.64731	.92156	1.00890
7.000	45.000	1.36592	.08171	-.00791	-.00474	-.00075	.00162	-.00000	.00736	.02817	.01847



DATE 10 MAR 75

TABULATED SOURCE DATA - QALN

(RTMDS7) (18 OCT 74)

CAV 020 (9 CAS FO M16 A00 AS VO M16

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
 ELV-LI = .000 ELV-RI = .000
 ELV-RO = .000 BDFLAP = .000
 S-BURST = 55.000 RUDDER = .000
 RML = .000

REFERENCE DATA

WARP = 2000.0000 50.00 FT. WARP = 1170.0000 10.00
 WARP = 474.0000 10.00 WARP = .0000 10.00
 WARP = 510.0000 10.00 WARP = 575.0000 10.00
 WARP = .0000

RUN NO. 1057 (3) RML = (9) GRADIENT INTERVAL = 15.000 25.000

WACH	ALPHA	CM	CAP	CLMP	CT	CTM	CBL	CAB	XCP/L	CLF	COF
1.000	17.000	15.000	16456	-10720	-10000	.00000	.00000	.00000	.65000	.26000	.14974
1.000	18.000	15.000	16710	-11000	-10000	.00000	.00000	.00000	.65340	.31000	.17000
1.000	19.000	15.000	16964	-11280	-10000	.00000	.00000	.00000	.65770	.30000	.21000
1.000	20.000	15.000	17218	-11560	-10000	.00000	.00000	.00000	.66200	.43100	.25000
1.000	21.000	15.000	17472	-11840	-10000	.00000	.00000	.00000	.66630	.49770	.30000
1.000	22.000	15.000	17726	-12120	-10000	.00000	.00000	.00000	.67060	.55420	.35000
1.000	23.000	15.000	17980	-12400	-10000	.00000	.00000	.00000	.67490	.61340	.41000
1.000	24.000	15.000	18234	-12680	-10000	.00000	.00000	.00000	.67920	.66700	.47000
1.000	25.000	15.000	18488	-12960	-10000	.00000	.00000	.00000	.68350	.72000	.54000
1.000	26.000	15.000	18742	-13240	-10000	.00000	.00000	.00000	.68780	.77300	.62000
1.000	27.000	15.000	19000	-13520	-10000	.00000	.00000	.00000	.69210	.82600	.70000
1.000	28.000	15.000	19254	-13800	-10000	.00000	.00000	.00000	.69640	.88000	.78000
1.000	29.000	15.000	19508	-14080	-10000	.00000	.00000	.00000	.70070	.93400	.87000
1.000	30.000	15.000	19762	-14360	-10000	.00000	.00000	.00000	.70500	.98800	.96000
1.000	31.000	15.000	20016	-14640	-10000	.00000	.00000	.00000	.70930	.10260	.10000
1.000	32.000	15.000	20270	-14920	-10000	.00000	.00000	.00000	.71360	.00000	.00000
1.000	33.000	15.000	20524	-15200	-10000	.00000	.00000	.00000	.71790	.00000	.00000
1.000	34.000	15.000	20778	-15480	-10000	.00000	.00000	.00000	.72220	.00000	.00000
1.000	35.000	15.000	21032	-15760	-10000	.00000	.00000	.00000	.72650	.00000	.00000
1.000	36.000	15.000	21286	-16040	-10000	.00000	.00000	.00000	.73080	.00000	.00000
1.000	37.000	15.000	21540	-16320	-10000	.00000	.00000	.00000	.73510	.00000	.00000
1.000	38.000	15.000	21794	-16600	-10000	.00000	.00000	.00000	.73940	.00000	.00000
1.000	39.000	15.000	22048	-16880	-10000	.00000	.00000	.00000	.74370	.00000	.00000
1.000	40.000	15.000	22302	-17160	-10000	.00000	.00000	.00000	.74800	.00000	.00000
1.000	41.000	15.000	22556	-17440	-10000	.00000	.00000	.00000	.75230	.00000	.00000
1.000	42.000	15.000	22810	-17720	-10000	.00000	.00000	.00000	.75660	.00000	.00000
1.000	43.000	15.000	23064	-18000	-10000	.00000	.00000	.00000	.76090	.00000	.00000
1.000	44.000	15.000	23318	-18280	-10000	.00000	.00000	.00000	.76520	.00000	.00000
1.000	45.000	15.000	23572	-18560	-10000	.00000	.00000	.00000	.76950	.00000	.00000
1.000	46.000	15.000	23826	-18840	-10000	.00000	.00000	.00000	.77380	.00000	.00000
1.000	47.000	15.000	24080	-19120	-10000	.00000	.00000	.00000	.77810	.00000	.00000
1.000	48.000	15.000	24334	-19400	-10000	.00000	.00000	.00000	.78240	.00000	.00000
1.000	49.000	15.000	24588	-19680	-10000	.00000	.00000	.00000	.78670	.00000	.00000
1.000	50.000	15.000	24842	-19960	-10000	.00000	.00000	.00000	.79100	.00000	.00000
1.000	51.000	15.000	25096	-20240	-10000	.00000	.00000	.00000	.79530	.00000	.00000
1.000	52.000	15.000	25350	-20520	-10000	.00000	.00000	.00000	.79960	.00000	.00000
1.000	53.000	15.000	25604	-20800	-10000	.00000	.00000	.00000	.80390	.00000	.00000
1.000	54.000	15.000	25858	-21080	-10000	.00000	.00000	.00000	.80820	.00000	.00000
1.000	55.000	15.000	26112	-21360	-10000	.00000	.00000	.00000	.81250	.00000	.00000
1.000	56.000	15.000	26366	-21640	-10000	.00000	.00000	.00000	.81680	.00000	.00000
1.000	57.000	15.000	26620	-21920	-10000	.00000	.00000	.00000	.82110	.00000	.00000
1.000	58.000	15.000	26874	-22200	-10000	.00000	.00000	.00000	.82540	.00000	.00000
1.000	59.000	15.000	27128	-22480	-10000	.00000	.00000	.00000	.82970	.00000	.00000
1.000	60.000	15.000	27382	-22760	-10000	.00000	.00000	.00000	.83400	.00000	.00000
1.000	61.000	15.000	27636	-23040	-10000	.00000	.00000	.00000	.83830	.00000	.00000
1.000	62.000	15.000	27890	-23320	-10000	.00000	.00000	.00000	.84260	.00000	.00000
1.000	63.000	15.000	28144	-23600	-10000	.00000	.00000	.00000	.84690	.00000	.00000
1.000	64.000	15.000	28398	-23880	-10000	.00000	.00000	.00000	.85120	.00000	.00000
1.000	65.000	15.000	28652	-24160	-10000	.00000	.00000	.00000	.85550	.00000	.00000
1.000	66.000	15.000	28906	-24440	-10000	.00000	.00000	.00000	.85980	.00000	.00000
1.000	67.000	15.000	29160	-24720	-10000	.00000	.00000	.00000	.86410	.00000	.00000
1.000	68.000	15.000	29414	-25000	-10000	.00000	.00000	.00000	.86840	.00000	.00000
1.000	69.000	15.000	29668	-25280	-10000	.00000	.00000	.00000	.87270	.00000	.00000
1.000	70.000	15.000	29922	-25560	-10000	.00000	.00000	.00000	.87700	.00000	.00000
1.000	71.000	15.000	30176	-25840	-10000	.00000	.00000	.00000	.88130	.00000	.00000
1.000	72.000	15.000	30430	-26120	-10000	.00000	.00000	.00000	.88560	.00000	.00000
1.000	73.000	15.000	30684	-26400	-10000	.00000	.00000	.00000	.88990	.00000	.00000
1.000	74.000	15.000	30938	-26680	-10000	.00000	.00000	.00000	.89420	.00000	.00000
1.000	75.000	15.000	31192	-26960	-10000	.00000	.00000	.00000	.89850	.00000	.00000
1.000	76.000	15.000	31446	-27240	-10000	.00000	.00000	.00000	.90280	.00000	.00000
1.000	77.000	15.000	31700	-27520	-10000	.00000	.00000	.00000	.90710	.00000	.00000
1.000	78.000	15.000	31954	-27800	-10000	.00000	.00000	.00000	.91140	.00000	.00000
1.000	79.000	15.000	32208	-28080	-10000	.00000	.00000	.00000	.91570	.00000	.00000
1.000	80.000	15.000	32462	-28360	-10000	.00000	.00000	.00000	.92000	.00000	.00000
1.000	81.000	15.000	32716	-28640	-10000	.00000	.00000	.00000	.92430	.00000	.00000
1.000	82.000	15.000	32970	-28920	-10000	.00000	.00000	.00000	.92860	.00000	.00000
1.000	83.000	15.000	33224	-29200	-10000	.00000	.00000	.00000	.93290	.00000	.00000
1.000	84.000	15.000	33478	-29480	-10000	.00000	.00000	.00000	.93720	.00000	.00000
1.000	85.000	15.000	33732	-29760	-10000	.00000	.00000	.00000	.94150	.00000	.00000
1.000	86.000	15.000	33986	-30040	-10000	.00000	.00000	.00000	.94580	.00000	.00000
1.000	87.000	15.000	34240	-30320	-10000	.00000	.00000	.00000	.95010	.00000	.00000
1.000	88.000	15.000	34494	-30600	-10000	.00000	.00000	.00000	.95440	.00000	.00000
1.000	89.000	15.000	34748	-30880	-10000	.00000	.00000	.00000	.95870	.00000	.00000
1.000	90.000	15.000	35002	-31160	-10000	.00000	.00000	.00000	.96300	.00000	.00000
1.000	91.000	15.000	35256	-31440	-10000	.00000	.00000	.00000	.96730	.00000	.00000
1.000	92.000	15.000	35510	-31720	-10000	.00000	.00000	.00000	.97160	.00000	.00000
1.000	93.000	15.000	35764	-32000	-10000	.00000	.00000	.00000	.97590	.00000	.00000
1.000	94.000	15.000	36018	-32280	-10000	.00000	.00000	.00000	.98020	.00000	.00000
1.000	95.000	15.000	36272	-32560	-10000	.00000	.00000	.00000	.98450	.00000	.00000
1.000	96.000	15.000	36526	-32840	-10000	.00000	.00000	.00000	.98880	.00000	.00000
1.000	97.000	15.000	36780	-33120	-10000	.00000	.00000	.00000	.99310	.00000	.00000
1.000	98.000	15.000	37034	-33400	-10000	.00000	.00000	.00000	.99740	.00000	.00000
1.000	99.000	15.000	37288	-33680	-10000	.00000	.00000	.00000	.10170	.00000	.00000
1.000	100.000	15.000	37542	-33960	-10000	.00000	.00000	.00000	.10600	.00000	.00000

GRADIENT

CA 75 828 CB E43 F0 M16 M20 R5 W0 M16

RTM036) (16 OCT 74)

REFERENCE DATA

BREF = 2003.0000 90.00
 LREF = 474.0100 14.00
 BREF = 936.0000 14.00
 SCALE = .0100

PARAMETRIC DATA

BETA = .000
 ELV-L1 = .000
 ELV-L2 = .000
 ELV-R1 = .000
 ELV-R2 = .000
 SPOBEM = 33.000
 SPODER = .000
 RM/L = .000

RUN NO. 1667 3 RM/L = .000 GRADIENT INTERVAL = 15.00/ 25.00

MECH	ALPHA	CM	CAF	CLAF	CV	CVM	CEL	CAB	KCP/L	CLF	COF
1.000	17.000	20020	0.0014	-0.02413	-0.00337	0.00003	0.00004	-0.00071	0.67966	0.26960	0.13457
1.000	19.000	30702	0.00270	-0.01753	-0.00320	0.00006	0.00014	-0.00071	0.66070	0.35035	0.18817
1.000	21.000	40330	0.00406	-0.02496	-0.00332	0.00007	0.00014	-0.00071	0.67030	0.30337	0.22366
1.000	23.000	51639	0.00990	-0.03233	-0.00336	0.00010	0.00014	-0.00071	0.67230	0.44021	0.26620
1.000	25.000	67133	0.00533	-0.03367	-0.00303	0.00013	0.00012	-0.00071	0.67030	0.51331	0.31391
1.000	26.000	84934	0.00994	-0.03843	-0.00301	0.00017	0.00012	-0.00071	0.67177	0.57403	0.36086
1.000	27.000	10315	0.01337	-0.04355	-0.00327	0.00020	0.00014	-0.00071	0.67195	0.63333	0.41153
1.000	31.000	14466	0.01991	-0.05144	-0.00357	0.00026	0.00016	-0.00071	0.67187	0.60073	0.49773
1.000	33.000	18370	0.02591	-0.05791	-0.00396	0.00029	0.00016	-0.00071	0.67216	0.74314	0.57017
1.000	35.000	22440	0.03423	-0.06316	-0.00441	0.00036	0.00011	-0.00071	0.67335	0.79655	0.64039
1.000	37.000	26791	0.04562	-0.07111	-0.00493	0.00043	0.00013	-0.00072	0.67413	0.84296	0.72990
1.000	39.000	31391	0.05941	-0.08203	-0.00562	0.00052	0.00017	-0.00071	0.67534	0.88744	0.81566
1.000	41.000	36333	0.07633	-0.09594	-0.00632	0.00062	0.00018	-0.00072	0.67551	0.92639	0.91691
1.000	43.000	41720	0.09691	-0.11323	-0.00716	0.00074	0.00021	-0.00071	0.67699	0.95493	0.95537
1.000	45.000	47636	0.12023	-0.13101	-0.00813	0.00088	0.00023	-0.00071	0.67856	0.92937	0.92704



(RTM090) (10 OCT 74)

OADR 026 C9 E43 F0 M16 N20 R3 W0 M16

PARAMETRIC DATA

BETA = .070 ELV-LO = .070
 ELV-LI = .070 ELV-HI = .070
 ELV-RO = .070 BOFLAP = -11.070
 SPOOR = 55.070 RUDDER = .070
 RWL = .570

REFERENCE DATA

WREF = 2000.0000 IN. WREF = 1076.6073 IN. RO
 CRFP = 674.8179 IN. WREF = .0000 IN. VO
 WREF = 916.6073 IN. WREF = 375.0000 IN. ZO
 SCALE = 1.180

RUN NO. 1077 0 RWL = .97 GRADIENT INTERVAL = 15.00/ 25.00

WACH	ALPHA	CM	CAF	CLMF	CV	CYN	CRK	CAB	KCP/L	CL	COF
1.071	17.070	20.722	0.6417	-0.0455	0.07143	-0.07070	0.07070	-0.07092	0.64070	0.26347	0.14827
1.072	19.070	3.7416	0.6032	-0.0727	-0.07244	-0.07071	0.07070	-0.07092	0.65220	0.33407	0.17904
1.073	21.070	4.9082	0.6174	-0.07120	-0.07036	-0.07074	0.07070	-0.07092	0.65197	0.30756	0.21406
1.074	23.070	5.7634	0.6271	-0.07348	-0.07033	-0.07076	0.07070	-0.07092	0.65249	0.41199	0.25537
1.075	25.070	5.7293	0.6329	-0.07366	-0.07034	-0.07071	0.07070	-0.07092	0.65361	0.49180	0.30131
1.076	27.070	6.4792	0.6339	-0.07339	-0.07033	-0.07071	0.07070	-0.07092	0.65367	0.54832	0.35063
1.077	29.070	7.2641	0.6377	-0.07073	-0.07114	-0.07072	0.07071	-0.07092	0.65407	0.60442	0.40793
1.078	31.070	8.0763	0.6423	-0.07134	-0.07147	-0.07072	0.07070	-0.07092	0.65311	0.66073	0.47155
1.079	33.070	8.9313	0.6497	-0.07151	-0.07172	-0.07073	0.07070	-0.07093	0.65393	0.71300	0.54101
1.080	35.070	9.7406	0.6492	-0.07156	-0.07213	-0.07073	0.07070	-0.07093	0.65693	0.76542	0.61320
1.081	37.070	1.06600	0.6315	-0.07227	-0.07263	-0.07074	0.07070	-0.07093	0.65761	0.81290	0.69390
1.082	39.070	1.15707	0.6444	-0.07077	-0.07291	-0.07074	0.07070	-0.07092	0.65924	0.85333	0.77448
1.083	41.070	1.23793	0.6347	-0.07317	-0.07344	-0.07075	0.07070	-0.07093	0.65986	0.89256	0.85999
1.084	43.070	1.32220	0.6214	-0.07166	-0.07368	-0.07075	0.07070	-0.07093	0.66126	0.92461	0.94718
1.085	45.070	0.03416	0.7722	0.07073	-0.07379	-0.07072	0.07070	-0.07093	0.07043	0.02070	0.01913

CA 75 B2: CS E43 FS M16 NSB RS WS M16

(RTNDED) (18 OCT 74)

REFERENCE DATA

BREF = 2000.0000 SQ.FT. XMRP = 1076.0000 IN. MO
 LREF = 474.0100 IN. YMRP = .0000 IN. YO
 BREF = 936.0000 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0193

PARAMETRIC DATA

BETA = .000 ELV-LO = 20.000
 ELV-LI = 20.000 ELV-RI = 20.000
 ELV-RO = 20.000 BDFLAP = 16.000
 SPOBRK = 55.000 RUOBER = .000
 RNVL = .000

RUN NO. 100/ 0 RNVL = .50 GRADIENT INTERVAL = 15.00/ 25.00

MAOH	ALPHA	CN	CAF	CLWF	CY	CYN	CBL	CAB	XCP/L	CLF	CDF
7.977	17.077	.37528	.06403	-.06925	.00036	.00024	-.00066	-.00109	.71787	.33431	.19008
7.977	19.077	.42054	.08775	-.07644	-.00016	.00026	-.00070	-.00109	.71239	.39742	.22985
7.977	21.077	.52028	.09285	-.08719	-.00020	.00022	-.00087	-.00109	.71052	.48063	.27413
7.977	23.077	.60949	.09406	-.09694	-.00035	.00019	-.00066	-.00109	.70848	.52429	.32473
7.977	25.077	.69366	.09653	-.10697	-.00076	.00017	-.00062	-.00109	.70666	.58788	.38064
7.977	27.077	.76101	.10090	-.11621	-.00126	.00011	-.00061	-.00109	.70470	.65006	.44448
7.977	29.077	.86715	.10551	-.12856	-.00136	.00006	-.00058	-.00109	.70430	.70728	.51268
7.977	31.077	.95748	.11035	-.14010	-.00174	.00003	-.00055	-.00109	.70379	.76387	.58771
7.977	33.077	1.05213	.11521	-.15316	-.00213	.00004	-.00054	-.00109	.70332	.81962	.66964
7.977	35.077	1.14697	.11991	-.16413	-.00256	.00006	-.00052	-.00109	.70261	.87068	.75804
7.977	37.077	1.23977	.12430	-.17755	-.00304	.00003	-.00051	-.00109	.70264	.91530	.84536
7.977	39.077	1.33377	.12827	-.18947	-.00327	.00001	-.00057	-.00109	.70220	.95576	.93903
7.977	41.077	1.42610	.13179	-.20286	-.00360	-.00003	-.00046	-.00109	.70229	.98982	1.03510
7.977	43.077	1.51687	.13457	-.21437	-.00390	-.00006	-.00036	-.00109	.70194	1.01740	1.13270
7.977	45.077	.03979	.00156	-.00479	-.00015	-.00001	-.00001	-.00000	-.00132	.03170	.02361

ORIGINAL PAGE IS OF POOR QUALITY



(RTM061) (18 OCT 74)

CAV9 828 C9 E43 F8 M16 M28 R5 V8 M116

REFERENCE DATA

SREF = 2490.0000 SQ.FT. ZMRP = 1276.6000 IN.XO
 LREF = 674.8100 IN. TMRP = .0000 IN.YO
 BREF = 936.6000 IN. ZMRP = 373.0000 IN.ZO
 SCALE = .0150

PARAMETRIC DATA

BETA = .000 ELV-LO = 80.000
 ELV-LI = 20.000 ELV-RI = 20.000
 ELV-RO = 20.000 BOFLAP = .000
 SPOBRK = 55.000 RUGGER = .000
 RNU' = .970

RUN NO. 1697 D RML = .50 GRADIENT INTERVAL = 15.00/ 25.00

MOCH	ALPHA	CM	CAF	CLMF	CY	CYN	CBL	CAB	KCP/L	CLF	CDF
1.973	17.000	1.3990	.08150	-.05980	.00044	-.00070	-.00106	-.00106	.71111	.32034	.18318
1.973	19.000	.43439	.08394	-.06493	.00040	-.00071	-.00105	-.00105	.71499	.38340	.22079
1.973	21.000	.31328	.08657	-.06978	.00039	-.00071	-.00106	-.00106	.69999	.44817	.26477
1.973	23.000	.28998	.09032	-.07737	.00031	-.00072	-.00106	-.00106	.66825	.50734	.31324
1.973	25.000	.66949	.09186	-.08373	.00029	-.00069	-.00106	-.00106	.69398	.56795	.36619
1.973	27.000	.73422	.09434	-.09207	.00025	-.00069	-.00106	-.00106	.69487	.62918	.42647
1.973	29.000	.83864	.09789	-.10356	.00023	-.00063	-.00106	-.00106	.69407	.68803	.49219
1.973	31.000	.92622	.10156	-.10939	.00020	-.00057	-.00106	-.00106	.69341	.74161	.56411
1.973	33.000	1.01600	.10526	-.11937	.00015	-.00053	-.00106	-.00106	.69299	.79644	.64272
1.973	35.000	1.11290	.10956	-.12843	.00016	-.00053	-.00106	-.00106	.69243	.84990	.72695
1.973	37.000	1.20410	.11207	-.13800	.00016	-.00052	-.00106	-.00106	.69237	.89422	.81417
1.973	39.000	1.29290	.11489	-.14897	.00014	-.00055	-.00106	-.00106	.69234	.93290	.90296
1.973	41.000	1.38090	.11756	-.16116	.00019	-.00054	-.00106	-.00106	.69290	.96488	.99426
1.973	43.000	1.47200	.11966	-.17488	.00032	-.00040	-.00106	-.00106	.69264	.99615	1.09120
GRADIENT		.03872	.00134	-.00301	-.00017	-.00002	.00000	-.00000	-.00185	.03097	.02293

ORIGINAL PAGE IS OF POOR QUALITY



CA75 826 C9 E43 F8 M16 N28 R5 W8 M16

(RTM062) (18 OCT 74)

REFERENCE DATA

SREF = 2000.0000 30.FT. ZORP = 1376.6000 IN.RO
 LREF = 474.8100 IN. YORP = .0000 IN.YO
 BREF = 936.6000 IN. ZORP = 375.0000 IN.ZO
 SCALE = .0150

PARAMETRIC DATA

BETA = .000 ELV-LO = -40.000
 ELV-L1 = -40.000 ELV-R1 = -40.000
 ELV-RO = -40.000 BDFLAP = .000
 SPOBRK = 55.000 RUDDER = .000
 RM/L = .000

RUN NO. 170/0 RM/L = .51 GRADIENT INTERVAL = 15.00/ 25.00

MACH	ALPHA	CN	CAF	CLMF	CY	CYM	CSL	CAB	XCP/L	CLF	COF
7.970	17.000	.28790	.06324	.01249	.00024	-.00023	.00034	-.00110	.63401	.25873	.14482
7.970	19.000	.33685	.06949	.01625	-.00035	-.00027	.00039	-.00110	.64314	.29587	.17537
7.970	21.000	.40494	.07739	.01283	-.00049	-.00035	.00043	-.00110	.63831	.35282	.21084
7.970	23.000	.46769	.07131	.01406	-.00080	-.00036	.00044	-.00110	.63690	.40265	.24636
7.970	25.000	.54462	.06916	.01637	-.00125	-.00035	.00044	-.00110	.63890	.46436	.29285
7.970	27.000	.61553	.06737	.01833	-.00153	-.00037	.00045	-.00110	.63900	.51786	.33948
7.970	29.000	.68966	.06753	.02127	-.00182	-.00043	.00050	-.00110	.63914	.57045	.39341
7.970	31.000	.76523	.06842	.02343	-.00217	-.00047	.00052	-.00110	.64013	.62069	.45277
7.970	33.000	.84482	.06931	.02705	-.00262	-.00050	.00056	-.00110	.64122	.67078	.51824
7.970	35.000	.92562	.06953	.02737	-.00293	-.00053	.00059	-.00110	.64185	.71834	.58787
7.970	37.000	1.01533	.07115	.03185	-.00336	-.00061	.00061	-.00110	.64303	.76164	.66132
7.970	39.000	1.08590	.06929	.01874	-.00340	-.00064	.00064	-.00110	.64384	.80033	.73725
7.970	41.000	1.16590	.06937	.01532	-.00407	-.00074	.00066	-.00110	.64492	.83470	.81697
7.970	43.000	1.24540	.06794	.01526	-.00422	-.00077	.00066	-.00110	.64544	.86487	.89926
GRADIENT		.03222	.00066	.00078	-.00017	-.00002	.00001	.00000	.00028	.02610	.01847



(RTN063) (10 OCT 74)

TABULATED SOURCE DATA - CALN

DATA B26 C9 E43 F8 M16 N28 R5 V8 W116

DATE 19 MAR 75

PARAMETRIC DATA

BETA = .000 ELY-LO = .000
 ELY-LI = -40.000 ELY-RI = -40.000
 ELY-RO = -20.000 BOFLAP = .000
 SPOK = 55.000 RUDDER = .000
 RWL = 3.500

REFERENCE DATA

WAVE = 2.000(777) 34.0 FT. CRP = 176.68(7) IN. KO
 LREE = 474.81(7) IN. YMRP = .000(0) IN. TO
 DATE = 936.00(7) IN. ZMRP = 375.00(7) IN. LO
 SCALE = .0150

RUN NO. 1717 0 RWL = 3.50 GRADIENT INTERVAL = 15.00 25.00

WAVE	ALPHA	CN	CAF	CLMF	CI	CYN	COI	CAB	KCF/L	CLF	COF
0.000	1.0000	29051	.05610	.000749	-.00047	.00012	.00019	.00214	.64062	.20977	.14093
0.000	1.0000	36240	.05635	.00076	-.00048	.00013	.000136	.00214	.63996	.2432	.17148
0.000	21.000	42914	.05669	.00116	-.00078	.00019	.00159	.00214	.64031	.39022	.27699
0.000	23.000	49933	.05747	.00216	-.00141	.00038	.00318	.00214	.64093	.43718	.24800
0.000	25.000	57264	.05802	.00337	-.00209	.00049	.00294	.00214	.64150	.49447	.29460
0.000	27.000	64847	.05871	.00455	-.00302	.00054	.00220	.00214	.64221	.55114	.34671
0.000	29.000	72722	.05940	.00565	-.00415	.00059	.00262	.00214	.64301	.60724	.40431
0.000	31.000	80757	.06022	.00672	-.00517	.00067	.00289	.00214	.64391	.66121	.46755
0.000	33.000	89039	.06107	.00775	-.00623	.00076	.00311	.00214	.64491	.71365	.53589
0.000	35.000	97452	.06194	.00873	-.00733	.00081	.00334	.00214	.64674	.76397	.60864
0.000	37.000	1.05997	.06283	.00967	-.00847	.00085	.00359	.00214	.64714	.80990	.68575
0.000	39.000	1.14410	.06375	.01054	-.00974	.00091	.00382	.00214	.64818	.85153	.76645
0.000	41.000	1.22897	.06469	.01134	-.01116	.00097	.00403	.00214	.64921	.88950	.85197
0.000	43.000	1.31270	.06564	.01207	-.01267	.00106	.00421	.00214	.65016	.92051	.93787
0.000	45.000	1.39587	.06661	.01274	-.01436	.00116	.00421	.00214	.65101	.94692	1.02670
0.000	0.000	.03426	.00000	.00000	-.00000	.00000	.00000	-.00000	.00000	.00000	.00000

FOR QUALITY

CA/S B26 C9 E43 F6 H16 N28 R3 V8 W416

(RTM063) (18 OCT 74)

REFERENCE DATA

MEF = 2697.0000 30. FT. WARP = 1276.6000 IN. NO
 LREF = 474.8177 IN. YARP = .0000 IN. TO
 BREF = 936.6073 IN. ZARP = 315.0000 IN. TO
 SCALE = .0149

PARAMETRIC DATA

BETA = .000 ELV-LO = .000
 ELV-LI = .000 ELV-RI = .000
 ELV-RO = -20.000 SOFLAP = .000
 SPOBANK = 55.000 RUDDER = .000
 RM/L = 3.330

RUN NO. 172/0 RM/L = 3.32 GRADIENT INTERVAL = 15.00/25.00

MACH	ALPHA	CN	CAF	CLWF	CY	CYN	CBL	CAB	KCP/L	CLF	CDF
8.000	17.000	.32690	.05973	.07181	-.00046	.00000	.00000	.00214	.64869	.27740	.14236
8.000	19.000	.37177	.05560	.07186	-.00054	-.00007	.00000	.00214	.64871	.33341	.17361
8.000	21.000	.40734	.05305	.07248	-.00083	-.00019	.00000	.00214	.64781	.39126	.21001
8.000	23.000	.43357	.05074	.07129	-.00125	-.00034	.00111	.00214	.64896	.45085	.25223
8.000	25.000	.46939	.04633	.07019	-.00131	-.00039	.00118	.00214	.64977	.51036	.30014
8.000	27.000	.50614	.04073	.07158	-.00133	-.00044	.00126	.00214	.65077	.56956	.35388
8.000	29.000	.54439	.03379	.07394	-.00173	-.00042	.00131	.00214	.65194	.62770	.41333
8.000	31.000	.58349	.02562	.07692	-.00208	-.00044	.00145	.00213	.65296	.68475	.47866
8.000	33.000	.61973	.01797	.07957	-.00229	-.00049	.00160	.00213	.65432	.73983	.54946
8.000	35.000	.65900	.01112	.08112	-.00262	-.00040	.00169	.00213	.65573	.79301	.62559
8.000	37.000	.69743	.00514	.08274	-.00274	-.00044	.00181	.00213	.65701	.84229	.70569
8.000	39.000	.73576	.00047	.08273	-.00287	-.00048	.00193	.00213	.65837	.89658	.78969
8.000	41.000	.77520	-.00041	.08365	-.00280	-.00051	.00211	.00213	.65963	.92635	.87776
8.000	43.000	.81620	-.00332	-.04176	-.00292	-.00058	.00222	.00213	.66033	.96725	.96835
8.000	45.000	.85975	-.01147	-.04458	-.00313	-.00057	.00227	.00213	.66199	.98947	1.06220
GRADIENT		.73334	.00015	-.00009	-.00012	-.00006	.00007	-.00000	.00014	.00017	.01971



(RTWJ66) (18 OCT 74)

GA/9 B26 C9 E43 F8 M16 R29 R3 V8 W16

PARAMETRIC DATA
 BETA = .000 ELY-LO = .000
 ELY-LI = -20.000 ELY-RI = -20.000
 ELY-RO = -10.000 RDELAP = .000
 SPOBAR = 55.000 RLOOR = .000
 RW/L = 3.530

REFERENCE DATA
 SREF = 2690.0000 SQ. FT. YARP = 1076.6670 IN. MO
 LREF = 474.8100 IN. YARP = .0000 IN. YO
 BREF = 936.6670 IN. ZARP = 575.0000 IN. ZO
 SCALE = .0100

RUN NO. 17370 RW/L = 3.52 GRADIENT INTERVAL = 15.00/25.00

MAON	ALPHA	CM	CAF	CLMP	CF	CYN	CBL	CAB	XCP/L	CLF	CDF
0.000	17.000	.50179	.05547	.07498	-.00031	-.00031	.00052	.00214	.64381	.27238	.14128
0.000	19.000	.36901	.05582	.07079	-.00067	-.00016	.00068	.00214	.64232	.32656	.17181
0.000	21.000	.43222	.05614	.07065	-.00099	-.00028	.00091	.00214	.64231	.38340	.20730
0.000	23.000	.50390	.05627	.07092	-.00117	-.00044	.00099	.00214	.64330	.44186	.24868
0.000	25.000	.57764	.05664	.07034	-.00132	-.00057	.00106	.00214	.64394	.49958	.29545
0.000	27.000	.65438	.05699	.07022	-.00159	-.00070	.00115	.00214	.64472	.55717	.34786
0.000	29.000	.73361	.05753	.07065	-.00176	-.00086	.00120	.00214	.64556	.61374	.40598
0.000	31.000	.81517	.05810	.07115	-.00196	-.00109	.00134	.00214	.64668	.66881	.46964
0.000	33.000	.89914	.05870	.07153	-.00220	-.00136	.00142	.00214	.64781	.72244	.53843
0.000	35.000	.98328	.05934	.07185	-.00245	-.00167	.00145	.00214	.64900	.77409	.61227
0.000	37.000	1.07110	.05994	.07245	-.00272	-.00200	.00150	.00214	.65022	.82120	.68999
0.000	39.000	1.15780	.05583	-.070461	-.00293	-.00233	.00156	.00214	.65138	.86461	.77199
0.000	41.000	1.24400	.05452	-.070327	-.00321	-.00261	.00163	.00214	.65251	.90310	.85750
0.000	43.000	1.32920	.05288	-.07075	-.00335	-.00286	.00169	.00214	.65357	.93803	.94516
0.000	45.000	1.41340	.05093	-.07180	-.00367	-.00311	.00173	.00214	.65461	.96345	1.03550
0.000	.03453	.00014	.00014	.00014	-.00011	-.00006	.00007	-.00000	.00005	.02847	.01927

ORIGINAL PAGE IS
OF POOR QUALITY

CA 79 B26 C9 E43 F0 H16 N89 R5 W8 W116

(RTMOR7) (18 OCT 74)

REFERENCE DATA

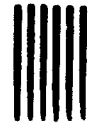
BREF = 2603.0773 90.77. THRP = 1576.6073 IM.80
 LREF = 474.8173 IM. THRP = .0073 IM.70
 MREF = 936.6273 IM. THRP = 373.0073 IM.20
 SCALE = .0193

PARAMETRIC DATA

BETA = .000 ELV-LO = -10.000
 ELV-L1 = -20.000 ELV-RI = -20.000
 ELV-RO = -30.000 BDFLAP = .000
 SPOBKK = 55.000 RUDDER = .000
 RN/L = 3.330

RUN NO. 1747 0 RN/L = 3.33 GRADIENT INTERVAL = 15.00/ 25.00

MOON	ALPHA	CM	CAF	CLMF	CY	CYN	CBL	CAB	KCP/L	CLF	CDF
0.000	17.000	.29043	.05597	.07811	-.00041	.00028	.00110	.00213	.63989	.26999	.14107
0.000	19.000	.36228	.05660	.01044	-.00051	.00007	.00122	.00213	.63926	.32412	.17147
0.000	21.000	.42697	.05741	.01174	-.00083	-.00004	.00136	.00213	.63976	.37798	.20658
0.000	23.000	.49095	.05729	.01307	-.00107	-.00026	.00155	.00213	.64025	.43690	.24768
0.000	25.000	.57178	.05772	.01391	-.00105	-.00026	.00164	.00213	.64094	.49381	.29396
0.000	27.000	.64811	.05809	.01430	-.00138	-.00029	.00176	.00213	.64178	.55110	.34598
0.000	29.000	.72656	.05871	.01407	-.00161	-.00026	.00187	.00213	.64278	.60709	.40364
0.000	31.000	.80701	.05934	.01324	-.00194	-.00037	.00206	.00213	.64357	.66118	.46650
0.000	33.000	.88866	.05939	.01197	-.00215	-.00036	.00220	.00213	.64496	.71378	.53436
0.000	35.000	.97493	.05993	.01037	-.00244	-.00030	.00231	.00213	.64611	.76446	.60723
0.000	37.000	1.05987	.05822	.00744	-.00273	-.00028	.00245	.00213	.64733	.81132	.68427
0.000	39.000	1.14501	.05721	.00434	-.00278	-.00032	.00260	.00213	.64852	.85437	.76546
0.000	41.000	1.23041	.05595	.00089	-.00291	-.00034	.00280	.00213	.64965	.89210	.84949
0.000	43.000	1.31540	.05425	-.00271	-.00309	-.00032	.00301	.00213	.65068	.92502	.93678
0.000	45.000	1.39957	.05223	-.00677	-.00341	-.00027	.00322	.00213	.65173	.95185	1.02573
GRADIENT		.05417	.05021	.00071	-.00000	-.00007	.00007	-.00000	.00015	.02802	-.01910



DATE 19 MAR 73
TABULATED SOURCE DATA - CAV
CAV 026 CO E43 FO M16 NR0 R3 V0 M16

(RTN068) (18 OCT 74)

REFERENCE DATA

SLES = 2000.0000 30.00 FT. SURF = 1376.6000 IM.RO
LRES = 474.9100 IM. TMRP = .0000 IM.YO
MRES = 936.0000 IM. ZMRP = 373.0000 IM.ZO
SCALE = 11.97

PARAMETRIC DATA

BETA = .0000 ELV-LO = -10.0000
ELV-LI = -10.0000 ELV-HI = -30.0000
ELV-RO = -30.0000 BDFLAP = .0000
SPORR = 55.0000 RUBBER = .0000
RWL = 3.550

RUN NO. 1757 D RWL = 3.52 GRADIENT INTERVAL = 15.00/25.00

WACH	ALPHA	CM	CAF	CLMF	CY	CYN	COL	CAB	XCP/L	CLF	COF
0.000	17.000	200.97	0.3633	0.1779	-0.00047	0.00029	0.0133	0.0214	0.4026	0.20899	0.14114
0.000	18.000	361.06	0.3676	0.1736	-0.00036	0.00017	0.0130	0.0214	0.3962	0.32291	0.17122
0.000	21.000	420.63	0.3699	0.1711	-0.00015	0.00001	0.0100	0.0214	0.3983	0.37992	0.20680
0.000	23.000	499.32	0.3721	0.1243	-0.00072	-0.00024	0.0209	0.0214	0.4071	0.43727	0.24776
0.000	25.000	571.82	0.3754	0.1280	-0.00065	-0.00031	0.0229	0.0214	0.4161	0.49393	0.29381
0.000	27.000	640.72	0.3803	0.1329	-0.00075	-0.00036	0.0251	0.0214	0.4235	0.55103	0.34592
0.000	29.000	720.65	0.3864	0.1376	-0.00091	-0.00035	0.0276	0.0214	0.4329	0.60711	0.40350
0.000	31.000	807.99	0.3926	0.1210	-0.00110	-0.00035	0.0310	0.0214	0.4440	0.66172	0.46674
0.000	33.000	897.36	0.3990	0.1091	-0.00136	-0.00047	0.0343	0.0214	0.4540	0.71430	0.53475
0.000	35.000	979.49	0.3931	0.0860	-0.00146	-0.00044	0.0374	0.0214	0.4667	0.76523	0.60786
0.000	37.000	1.070.00	0.3836	0.0599	-0.00154	-0.00040	0.0410	0.0214	0.4784	0.81195	0.68492
0.000	39.000	1.140.00	0.3742	0.0290	-0.00149	-0.00030	0.0449	0.0214	0.4902	0.85436	0.76589
0.000	41.000	1.231.97	0.3626	0.0000	-0.00133	-0.00064	0.0493	0.0214	0.5014	0.89249	0.85030
0.000	43.000	1.316.00	0.3481	0.0000	-0.00149	-0.00063	0.0535	0.0214	0.5122	0.92513	0.93764
0.000	45.000	1.399.00	0.3293	0.0000	-0.00154	-0.00050	0.0577	0.0214	0.5224	0.95243	1.02730
0.000	GRADIENT	0.3425	0.0014	0.00163	-0.00003	-0.00008	0.0012	0.0000	0.0019	0.02021	0.01979

DATE 19 MAR 75

TABULATED SOURCE DATA - OAP

PAGE 02

OAP 826 C9 E43 F8 M16 A88 R3 V8 W116

(RTW000) (18 OCT 74)

REFERENCE DATA

SREF = 2001.0000 MO.FT. WREF = 1076.0000 IN. NO
 LREF = 074.0100 IN. YREF = .0000 IN. NO
 MREF = 036.0000 IN. ZREF = 375.0000 IN. NO
 SCALE = .0197

PARAMETRIC DATA

BETA = .0000 ELV-LO = 10.0000
 ELV-LI = -10.0000 ELV-HI = -10.0000
 ELV-RO = -10.0000 BOFLAP = .0000
 SPODRK = 55.0000 RUDDER = .0000
 RM/L = 3.5330

RUN NO. 176/ 0 RM/L = 3.53 GRADIENT INTERVAL = 15.00/ 25.00

WAOH	ALPHA	CM	CAF	CLMF	CY	CYN	CYL	CAB	XCP/L	CLF	COF
0.000	17.000	37201	03556	00074	-00026	-00032	00198	00212	64897	27890	14325
0.000	18.000	37197	03531	00276	-00035	-00037	00236	00212	64783	33390	17397
0.000	21.000	37063	03603	00297	-00073	-00071	00277	00212	64779	39325	21060
0.000	23.000	31531	03691	00211	-00091	-00097	00316	00212	64837	49045	25303
0.000	25.000	36879	03727	00124	-00092	-00111	00346	00212	64912	57879	30045
0.000	27.000	46657	03775	00006	-00106	-00126	00373	00212	64997	56770	35407
0.000	29.000	74712	03831	00082	-00129	-00131	00400	00212	65080	62510	41321
0.000	31.000	83796	03890	00078	-00135	-00147	00433	00212	65080	68194	47847
0.000	33.000	91598	03946	00178	-00155	-00159	00460	00212	65193	73610	54832
0.000	35.000	107320	03995	00178	-00159	-00159	00460	00212	65374	78824	62330
0.000	37.000	109160	03846	00191	-00139	-00181	00478	00212	65428	83701	69311
0.000	39.000	117933	03781	00157	-001260	-00173	00492	00212	65593	88179	76660
0.000	41.000	126713	03562	00157	-001262	-00186	00525	00212	65668	91994	83329
0.000	43.000	135490	03409	00131	-001311	-00204	00542	00212	65778	95371	90331
0.000	45.000	144177	03229	00138	-001348	-00206	00555	00212	65869	98196	96330
GRADIENT		03597	00022	00003	-00009	-00010	00567	00212	00000	00000	00000
							00719	-00000	00000	02888	01967



C/M 828 C 1 E43 FO M16 AGO AS VP W116

(RTWDJN) (18 OCT 74)

REFERENCE DATA

WAVE # 2003.0000 NO. FT. WAMP # 1076.6000 IN. KG
 WAVE # 474.0100 IN. WAMP # .0000 IN. YO
 WAVE # 936.6000 IN. WAMP # 375.0000 IN. ZO
 SCALE # .0001

PARAMETRIC DATA

BETA # .0000 ELV-LO # -5.0000
 ELV-LI # -5.0000 ELV-RI # 5.0000
 ELV-RO # 5.0000 BDELAP # .0000
 SFDRBK # 55.0000 RUDDER # .0000
 RINCL # 3.550

RUN NO: 17770 RINCL # 3.55 GRADIENT INTERVAL # 30/ 25.00

WAVE	ALPHA	CM	CAF	CLWF	CY	CFM	CEB	CAS	FCP/L	CLF	CFD
0.000	17.000	31070	03580	-00134	-00132	00031	-00028	00000	05512	08779	14634
0.000	18.000	30334	03674	-00140	-00167	00046	-00028	00000	05439	04421	17779
0.000	21.000	48290	03715	-00146	-00215	00051	-00037	00000	05363	00234	21566
0.000	23.000	32636	03753	-00156	-00256	00053	-00043	00000	05374	06203	25063
0.000	25.000	00361	03802	-00162	-00277	00061	-00046	00000	05353	02294	30760
0.000	27.000	66349	03859	-00169	-00298	00075	-00052	00000	05349	08239	36290
0.000	29.000	76644	03932	-00174	-00341	00092	-00059	00000	05334	04158	42346
0.000	31.000	03102	04023	-00179	-00365	00107	-00061	00000	05343	06912	49036
0.000	33.000	03926	04056	-00185	-00395	00116	-00064	00000	05352	07573	56233
0.000	35.000	10209	04039	-00189	-00427	00144	-00072	00000	06074	08785	63938
0.000	37.000	11109	04071	-00191	-00454	00163	-00079	00000	06192	05712	72103
0.000	39.000	12097	04044	-00197	-00487	00183	-00083	00000	06306	09026	80659
0.000	41.000	12900	04062	-00199	-00444	00196	-00067	00000	06413	04149	89609
0.000	43.000	13069	04066	-00203	-00450	00224	-00090	00000	06524	07457	98765
0.000	45.000	14750	04031	-00207	-00472	00249	-00093	00000	06678	10039	108310
		GRADIENT	03571	-00216	-00477	00271	-00092	00000	06798	02937	02018

CM75 825 CS 843 PS M16 MS8 RS W8 M116

(RTN071) (19 OCT 74)

REFERENCE DATA

MCF = 8000.0000 96.00 FT. ZMRP = 1076.60000 IN. MO
 LREF = 674.81000 IN. YMRP = .0000 IN. TO
 MREF = 936.60000 IN. ZMRP = 375.00000 IN. 20
 SCALE = .0100

PARAMETRIC DATA

BETA = .0000 ELV-LO = .0000
 ELV-LI = .0000 ELV-HI = .0000
 ELV-RO = .0000 SDFLAP = .0000
 SPOBKR = 85.0000 RUDDER = .0000
 RM/L = 3.5000

RUN NO. 1767 0 RM/L = 3.51 GRADIENT INTERVAL = 15.00/ 25.00

MMON	ALPHA	CM	CAP	CLW	CY	CYN	CSL	CAB	KCP/L	CLF	COF
0.000	17.000	.31484	.03377	-.07453	-.00093	.00003	-.07075	.02110	.65515	.28338	.14347
0.000	18.000	.30748	.03432	-.07339	-.00026	-.00002	-.07202	.02110	.65523	.34237	.17523
0.000	21.000	.60093	.03913	-.07379	-.00147	-.00012	-.07096	.02110	.63298	.47032	.21262
0.000	23.000	.32379	.03537	-.07393	-.00179	-.00039	-.07101	.02110	.63340	.48743	.25581
0.000	25.000	.07713	.03286	-.07167	-.00162	-.00032	-.07110	.02110	.63402	.52332	.30476
0.000	27.000	.60711	.03426	-.07314	-.00174	-.00039	-.07126	.02110	.63485	.58744	.35893
0.000	29.000	.78261	.03600	-.07280	-.00215	-.00043	-.07143	.02110	.63599	.63946	.41440
0.000	31.000	.84796	.03747	-.07167	-.00242	-.00037	-.07157	.02110	.63716	.69724	.48599
0.000	33.000	.93491	.03780	-.07248	-.00231	-.00034	-.07176	.02110	.63836	.75281	.57767
0.000	35.000	1.02480	.03753	-.07278	-.00265	-.00028	-.07191	.02110	.63971	.80644	.63491
0.000	37.000	1.11520	.03793	-.07343	-.00298	-.00014	-.07211	.02110	.64133	.85627	.71609
0.000	39.000	1.20520	.03636	-.07424	-.00319	-.00012	-.07221	.02110	.64277	.90118	.80223
0.000	41.000	1.29520	.03540	-.07472	-.00327	-.00011	-.07230	.02110	.64339	.94111	.89131
0.000	43.000	1.38453	.03423	-.07442	-.00361	.00026	-.07241	.02110	.64449	.97544	.98376
0.000	45.000	1.47241	.03276	-.07427	-.00393	.00023	-.07247	.02110	.64533	1.00410	1.07880
GRADIENT		.03327	-.07393	-.00004	-.00000	-.00004	-.00004	-.00000	-.00000	.02941	-.02011

DATE 19 MAR 75
 TABULATED SOURCE DATA - CAVO
 DATA 026 TO 043 FOR HIS AND AS VS W110

(RTM/75) (10 OCT 74)

PARAMETRIC DATA
 BETA = .713 ELV-CO = .770
 ELV-L1 = .777 ELV-R1 = .777
 ELV-RO = .777 BULCAP = .770
 S-CORR = 25.777 RUGGER = -27.777
 R/VL = 3.531

REFERENCE DATA
 WHP = 1007.777 34.1% WHP = 1076.777 34.1%
 WHP = 1076.777 34.1% WHP = 1076.777 34.1%
 WHP = 1076.777 34.1% WHP = 1076.777 34.1%
 WHP = 1076.777 34.1% WHP = 1076.777 34.1%

RUN NO. 1027 (1) R/VL = 3.532 GRADIENT INTERVAL = 13.777 25.777

WHP	ALPHA	CM	CAF	CLMP	CV	CVN	CBL	CAB	ACP/L	CLF	COF
0.777	17.777	.31334	.03451	-.07311	-.01242	.07136	-.07149	.0215	.65331	.20390	.14300
0.777	18.777	.31510	.03530	-.07348	-.01252	.07110	-.07144	.0215	.65328	.33578	.17347
0.777	19.777	.31687	.03609	-.07385	-.01261	.07084	-.07135	.0215	.65325	.47151	.21370
0.777	20.777	.31864	.03688	-.07422	-.01270	.07058	-.07127	.0215	.65314	.45962	.25016
0.777	21.777	.32041	.03767	-.07459	-.01279	.07032	-.07118	.0215	.65303	.51876	.27423
0.777	22.777	.32218	.03846	-.07496	-.01288	.07006	-.07109	.0215	.65292	.57889	.30002
0.777	23.777	.32395	.03925	-.07533	-.01297	.06980	-.07100	.0215	.65281	.62811	.41932
0.777	24.777	.32572	.04004	-.07570	-.01306	.06954	-.07091	.0215	.65270	.69764	.48330
0.777	25.777	.32749	.04083	-.07607	-.01315	.06928	-.07082	.0215	.65259	.75147	.55750
0.777	26.777	.32926	.04162	-.07644	-.01324	.06902	-.07073	.0215	.65248	.81374	.63450
0.777	27.777	.33103	.04241	-.07681	-.01333	.06876	-.07064	.0215	.65237	.87101	.71621
0.777	28.777	.33280	.04320	-.07718	-.01342	.06850	-.07055	.0215	.65226	.89957	.80103
0.777	29.777	.33457	.04399	-.07755	-.01351	.06824	-.07046	.0215	.65215	.93930	.89162
0.777	30.777	.33634	.04478	-.07792	-.01360	.06798	-.07037	.0215	.65204	.97348	.99371
0.777	31.777	.33811	.04557	-.07829	-.01369	.06772	-.07028	.0215	.65193	.99319	1.17021
0.777	32.777	.33988	.04636	-.07866	-.01378	.06746	-.07019	.0215	.65182	.99532	1.37065
0.777	33.777	.34165	.04715	-.07903	-.01387	.06720	-.07010	.0215	.65171	.97773	.02278
0.777	34.777	.34342	.04794	-.07940	-.01396	.06694	-.07001	.0215	.65160	.93300	.02278
0.777	35.777	.34519	.04873	-.07977	-.01405	.06668	-.06992	.0215	.65149	.86449	.02278
0.777	36.777	.34696	.04952	-.08014	-.01414	.06642	-.06983	.0215	.65138	.66336	.02278
0.777	37.777	.34873	.05031	-.08051	-.01423	.06616	-.06974	.0215	.65127	.46449	.02278
0.777	38.777	.35050	.05110	-.08088	-.01432	.06590	-.06965	.0215	.65116	.26449	.02278
0.777	39.777	.35227	.05189	-.08125	-.01441	.06564	-.06956	.0215	.65105	.06449	.02278
0.777	40.777	.35404	.05268	-.08162	-.01450	.06538	-.06947	.0215	.65094	.02278	.02278
0.777	41.777	.35581	.05347	-.08199	-.01459	.06512	-.06938	.0215	.65083	.02278	.02278
0.777	42.777	.35758	.05426	-.08236	-.01468	.06486	-.06929	.0215	.65072	.02278	.02278
0.777	43.777	.35935	.05505	-.08273	-.01477	.06460	-.06920	.0215	.65061	.02278	.02278
0.777	44.777	.36112	.05584	-.08310	-.01486	.06434	-.06911	.0215	.65050	.02278	.02278
0.777	45.777	.36289	.05663	-.08347	-.01495	.06408	-.06902	.0215	.65039	.02278	.02278
0.777	46.777	.36466	.05742	-.08384	-.01504	.06382	-.06893	.0215	.65028	.02278	.02278
0.777	47.777	.36643	.05821	-.08421	-.01513	.06356	-.06884	.0215	.65017	.02278	.02278
0.777	48.777	.36820	.05900	-.08458	-.01522	.06330	-.06875	.0215	.65006	.02278	.02278
0.777	49.777	.36997	.05979	-.08495	-.01531	.06304	-.06866	.0215	.64995	.02278	.02278
0.777	50.777	.37174	.06058	-.08532	-.01540	.06278	-.06857	.0215	.64984	.02278	.02278
0.777	51.777	.37351	.06137	-.08569	-.01549	.06252	-.06848	.0215	.64973	.02278	.02278
0.777	52.777	.37528	.06216	-.08606	-.01558	.06226	-.06839	.0215	.64962	.02278	.02278
0.777	53.777	.37705	.06295	-.08643	-.01567	.06200	-.06830	.0215	.64951	.02278	.02278
0.777	54.777	.37882	.06374	-.08680	-.01576	.06174	-.06821	.0215	.64940	.02278	.02278
0.777	55.777	.38059	.06453	-.08717	-.01585	.06148	-.06812	.0215	.64929	.02278	.02278
0.777	56.777	.38236	.06532	-.08754	-.01594	.06122	-.06803	.0215	.64918	.02278	.02278
0.777	57.777	.38413	.06611	-.08791	-.01603	.06096	-.06794	.0215	.64907	.02278	.02278
0.777	58.777	.38590	.06690	-.08828	-.01612	.06070	-.06785	.0215	.64896	.02278	.02278
0.777	59.777	.38767	.06769	-.08865	-.01621	.06044	-.06776	.0215	.64885	.02278	.02278
0.777	60.777	.38944	.06848	-.08902	-.01630	.06018	-.06767	.0215	.64874	.02278	.02278
0.777	61.777	.39121	.06927	-.08939	-.01639	.05992	-.06758	.0215	.64863	.02278	.02278
0.777	62.777	.39298	.07006	-.08976	-.01648	.05966	-.06749	.0215	.64852	.02278	.02278
0.777	63.777	.39475	.07085	-.09013	-.01657	.05940	-.06740	.0215	.64841	.02278	.02278
0.777	64.777	.39652	.07164	-.09050	-.01666	.05914	-.06731	.0215	.64830	.02278	.02278
0.777	65.777	.39829	.07243	-.09087	-.01675	.05888	-.06722	.0215	.64819	.02278	.02278
0.777	66.777	.40006	.07322	-.09124	-.01684	.05862	-.06713	.0215	.64808	.02278	.02278
0.777	67.777	.40183	.07401	-.09161	-.01693	.05836	-.06704	.0215	.64797	.02278	.02278
0.777	68.777	.40360	.07480	-.09198	-.01702	.05810	-.06695	.0215	.64786	.02278	.02278
0.777	69.777	.40537	.07559	-.09235	-.01711	.05784	-.06686	.0215	.64775	.02278	.02278
0.777	70.777	.40714	.07638	-.09272	-.01720	.05758	-.06677	.0215	.64764	.02278	.02278
0.777	71.777	.40891	.07717	-.09309	-.01729	.05732	-.06668	.0215	.64753	.02278	.02278
0.777	72.777	.41068	.07796	-.09346	-.01738	.05706	-.06659	.0215	.64742	.02278	.02278
0.777	73.777	.41245	.07875	-.09383	-.01747	.05680	-.06650	.0215	.64731	.02278	.02278
0.777	74.777	.41422	.07954	-.09420	-.01756	.05654	-.06641	.0215	.64720	.02278	.02278
0.777	75.777	.41599	.08033	-.09457	-.01765	.05628	-.06632	.0215	.64709	.02278	.02278
0.777	76.777	.41776	.08112	-.09494	-.01774	.05602	-.06623	.0215	.64698	.02278	.02278
0.777	77.777	.41953	.08191	-.09531	-.01783	.05576	-.06614	.0215	.64687	.02278	.02278
0.777	78.777	.42130	.08270	-.09568	-.01792	.05550	-.06605	.0215	.64676	.02278	.02278
0.777	79.777	.42307	.08349	-.09605	-.01801	.05524	-.06596	.0215	.64665	.02278	.02278
0.777	80.777	.42484	.08428	-.09642	-.01810	.05498	-.06587	.0215	.64654	.02278	.02278
0.777	81.777	.42661	.08507	-.09679	-.01819	.05472	-.06578	.0215	.64643	.02278	.02278
0.777	82.777	.42838	.08586	-.09716	-.01828	.05446	-.06569	.0215	.64632	.02278	.02278
0.777	83.777	.43015	.08665	-.09753	-.01837	.05420	-.06560	.0215	.64621	.02278	.02278
0.777	84.777	.43192	.08744	-.09790	-.01846	.05394	-.06551	.0215	.64610	.02278	.02278
0.777	85.777	.43369	.08823	-.09827	-.01855	.05368	-.06542	.0215	.64599	.02278	.02278
0.777	86.777	.43546	.08902	-.09864	-.01864	.05342	-.06533	.0215	.64588	.02278	.02278
0.777	87.777	.43723	.08981	-.09901	-.01873	.05316	-.06524	.0215	.64577	.02278	.02278
0.777	88.777	.43900	.09060	-.09938	-.01882	.05290	-.06515	.0215	.64566	.02278	.02278
0.777	89.777	.44077	.09139	-.09975	-.01891	.05264	-.06506	.0215	.64555	.02278	.02278
0.777	90.777	.44254	.09218	-.10012	-.01900	.05238	-.06497	.0215	.64544	.02278	.02278
0.777	91.777	.44431	.09297	-.10049	-.01909	.05212	-.06488	.0215	.64533	.02278	.02278
0.777	92.777	.44608	.09376	-.10086	-.01918	.05186	-.06479	.0215	.64522	.02278	.02278
0.777	93.777	.44785	.09455	-.10123	-.01927	.05160	-.06470	.0215	.64511	.02278	.02278
0.777	94.777	.44962	.09534	-.10160	-.01936	.05134	-.06461	.0215	.64500	.02278	.02278
0.777	95.777	.45139	.09613	-.10197	-.01945	.05108	-.06452	.0215	.64489	.02278	.02278
0.777	96.777	.45316	.09692	-.10234	-.01954	.05082	-.06443	.0215	.64478	.02278	.02278
0.777	97.777	.45493	.09771	-.10271	-.01963	.05056	-.06434	.0215	.64467	.02278	.02278
0.777	98.777	.45670	.09850	-.10308	-.01972	.05030	-.06425	.0215	.64456	.02278	.02278
0.777	99.777	.45847	.09929	-.10345	-.01981	.05004	-.06416	.0215	.64445	.02278	.02278
0.777	100.777	.46024	.10008	-.10382	-.01990	.04978	-.06407	.0215	.64434	.02278	.02278
0.777	101.777	.46201	.10087	-.10419	-.01999	.04952	-.06398	.0215	.64423	.02278	.02278
0.777	102.777	.46378	.10166	-.10456	-.02008	.04926	-.06389	.0215	.64412	.02278	.02278
0.777	103.777	.46555	.10245	-.10493	-.02017	.04900	-.06380	.0215	.64401	.02278	.02278
0.777	104.777	.46732	.10324	-.10530	-.02026	.04874	-.06371	.0215	.64390	.02278	.02278
0.777	105.777	.46909	.10403	-.10567	-.02035	.04848	-.06362	.0215	.64379	.02278	.02278
0.777	106.777	.47086	.10482	-.10604	-.02044	.04822	-.06353	.0215	.64368	.02278	.02278
0.777	107.777	.47263	.10561	-.10641	-.02053	.04796	-.06344	.0215	.64357	.02278	.02278
0.777</											

CA79 B26 C9 E43 F8 M16 N28 R5 V8 M16

(RTM076) (18 OCT 74)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. YMRP = 1076.0000 IN.XO
LREF = 474.8100 IN. YMRP = .0000 IN.YO
BREF = 936.0000 IN. ZMRP = 375.0000 IN.ZO
SCALE = .0191

PARAMETRIC DATA

ALPHA = 20.0000 ELV-LO = .0000
ELV-LI = .0000 ELV-RI = .0000
ELV-RO = .0000 BDFLAP = .0000
SPOBRK = -25.0000 RUDDER = -20.0000
RN/L = 3.330

RUN NO. 1837 C RN/L = 3.51 GRADIENT INTERVAL = -5.00/ 5.00

MAOM	BETA	CN	CAF	CLMF	CY	CYN	CBL	CAB	XCP/L	CLF	CDF
0.000	-5.087	.43412	.05720	-.07423	.03794	.00780	.00308	.00217	.65347	.38738	.20470
0.000	-5.134	.42747	.05618	-.07368	.02281	.00515	.00269	.00224	.65321	.38186	.20002
0.000	-5.019	.43498	.05801	-.07302	.00664	.00240	-.00000	.00218	.65244	.38825	.20396
0.000	.002	.43489	.05597	-.07259	-.00166	.00109	-.00135	.00213	.65207	.38819	.20389
0.000	1.032	.43416	.05521	-.07243	-.00929	-.00032	-.00263	.00213	.65194	.38778	.20294
0.000	3.087	.43336	.05589	-.07235	-.02525	-.00306	-.00328	.00215	.65187	.38682	.20321
0.000	5.127	.43299	.05774	-.07156	-.04315	-.00526	-.00317	.00215	.65120	.38581	.20485
GRADIENT		.07283	-.07228	.00225	-.00773	-.00132	-.00128	-.00002	-.00000	.00000	.00042

CA79 B26 C9 E43 F8 M16 N28 R5 V8 M16

(RTM077) (18 OCT 74)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. YMRP = 1076.0000 IN.XO
LREF = 474.8100 IN. YMRP = .0000 IN.YO
BREF = 936.0000 IN. ZMRP = 375.0000 IN.ZO
SCALE = .0191

PARAMETRIC DATA

ALPHA = 30.0000 ELV-LO = .0000
ELV-LI = .0000 ELV-RI = .0000
ELV-RO = .0000 BDFLAP = .0000
SPOBRK = -25.0000 RUDDER = -20.0000
RN/L = 3.330

RUN NO. 1847 D RN/L = 3.53 GRADIENT INTERVAL = -5.00/ 5.00

MAOM	BETA	CN	CAF	CLMF	CY	CYN	CBL	CAB	XCP/L	CLF	CDF
0.000	-5.086	.86615	.05708	-.07702	.02835	.00711	.00833	.00163	.65715	.71455	.49283
0.000	-5.070	.86928	.05603	-.07737	.01356	.00400	.00254	.00159	.65727	.71775	.49358
0.000	-.988	.87037	.05512	-.07706	-.00034	.00117	-.00116	.00180	.65713	.71927	.49354
0.000	.032	.87032	.05454	-.07656	-.00743	-.00072	-.00323	.00161	.65692	.71933	.49294
0.000	1.044	.87024	.05469	-.07640	-.01435	-.00142	-.00306	.00161	.65685	.71916	.49307
0.000	3.078	.86872	.05513	-.07621	-.02832	-.00435	-.00374	.00160	.65678	.71780	.49272
0.000	5.086	.86599	.05674	-.07577	-.04362	-.00689	-.01251	.00159	.65662	.71437	.49277
GRADIENT		.07010	-.07013	.00221	-.00692	-.00136	-.00186	.00000	-.00000	-.00000	-.00015