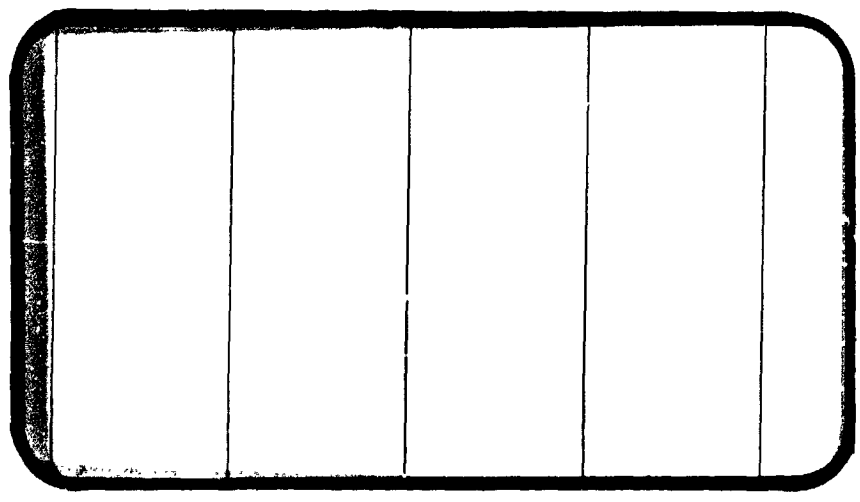


NASA CR
134412



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION



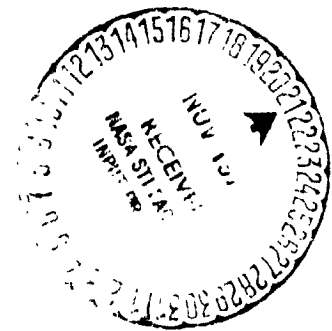
(NASA-CR-134412) AERODYNAMIC RESULTS OF
SUPPORT SYSTEM INTERFERENCE EFFECTS TESTS
CONDUCTED IN NASA/ARC 6 BY 6-FOOT
SUPERSONIC WIND TUNNEL USING A (Chrysler
Corp.) 553 p HC \$13.00

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SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT



JOHNSON SPACE CENTER
HOUSTON, TEXAS

DATA Management services
SPACE DIVISION  CHRYSLER CORPORATION

September, 1974

DMS-DR-2159
NASA CR-134,412

AERODYNAMIC RESULTS OF SUPPORT SYSTEM
INTERFERENCE EFFECTS TESTS CONDUCTED IN NASA/ARC 6-
BY 6-FOOT SUPERSONIC WIND TUNNEL USING AN 0.015-SCALE
MODEL OF THE CONFIGURATION 140A/B SSV ORBITER (OA59)

VOLUME II

By

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Prepared under NASA Contract Number NAS9-13247

By

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Chrysler Corporation Space Division
New Orleans, La. 70189

for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number: ARC 66-709
NASA Series Number: OA59
Model Number: 49-0 Mod.
Test Dates: March 13 through March 22, 1974
Occupancy Hours: 141

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AERODYNAMIC RESULTS OF SUPPORT SYSTEM
INTERFERENCE EFFECTS TESTS CONDUCTED IN NASA/ARC
6- BY 6-FOOT SUPERSONIC WIND TUNNEL USING AN 0.015-SCALE
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By John H. Campbell II and Willard R. Embury
Rockwell International Space Division

ABSTRACT

An experimental aerodynamic investigation (OA59) was conducted in the NASA/ARC 6- by 6-Foot Supersonic Wind Tunnel from 13 through 22 March 1974. The test article was an 0.015-scale Configuration 140A/B SSV Orbiter model (49-0). The primary objective of this investigation was to determine the extent aerodynamic simulation is compromised by sting base mounting with MPS nozzles removed.

Both a conventional sting (through the base) and an alternate model mounting system were utilized. The alternate mounting system consisted of a non-metric blade strut which approximated the vertical tail and entered the model through the upper aft section of its fuselage. The model was tested both in and out of the presence of a dummy sting with and without MPS nozzles when on the alternate mounting system. Data were obtained at Mach numbers from 0.6 through 2.0, a Reynolds number of 2.5 million per foot, angles of attack from -4 through 14 degrees, angles of sideslip from -15 through 15 degrees, elevon deflections of 0 and 15 degrees, and bodyflap deflections of -11.7, 0, and 16.3 degrees.

This report is published in two volumes. Volume I contains Data Figures 4 through 9. Volume II contains Data Figures 10 through 15 and the Tabulated Source Data.

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PLOT SCHEDULES

- A) CL, CD, CA, CLMFWD, CLMFT vs ALPHA, CN CL vs CLMFWD, CL vs CD
- B) CNT, CMTFWD, CMTAFT vs ALPHA, CNT, CLT vs CMTFWD, CLT vs CDT, CDF, CAF, CAB vs ALPHA
- C) CAV, CNV, CMVFW, CMVFT vs ALPHA
- D) CLT, CLV, CL, CDB, CDB, CD, CDF, CDT vs MACH
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- I) DCAV, DCAB, DCA, DCAF, DCAT vs ALPHA
- J) DCLT, DCLV, DCL, DCCB, DCDV, DCD, DCDF, DCDT vs MACH
- K) DCMTFW, DCMVFW, DCMFWD, DCMTAF, DCMVAF, DCMAFT, DCNT, DCNV, DCN vs MACH
- L) CBL, CYN, CY vs BETA
- M) DCBL, DCYN, DCY vs BETA

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
l_{REF}	LREF	reference length or wing mean aerodynamic chord; m, ft
S	SREF	wing area or reference area; m^2 , ft^2
	MRF	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_{Af}	CAF	forebody axial force coefficient, $C_A - C_{Ab}$
C_m	CIM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS l_{REF}}$
C_n	CYH	yawing-moment coefficient; $\frac{\text{yawing moment}}{qS b}$
C_l	CBL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qS b}$

Stability-Axis System

C_L	CL	lift coefficient; $\frac{\text{lift}}{qS}$
C_D	CD	drag coefficient; $\frac{\text{drag}}{qS}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_m	CIM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS l_{REF}}$
C_n	CLN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qS b}$
C_l	CBL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qS b}$
L/D	L/D	lift-to-drag ratio; C_L/C_D
L/D_f	L/Df	lift to forebody drag ratio; C_L/C_{Df}

NOMENCLATURE (Continued)
(Additions to Standard List)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
BOR		body of revolution
C_{D_V}	CDV	vertical tail base drag coefficient
C_{L_V}	CLV	vertical tail base lift coefficient
C_{m_V}	CMVFW	forward vertical tail base pitching-moment coefficient
C_{N_V}	CNV	vertical tail base normal-force coefficient
C_{A_V}	CAV	vertical tail base axial-force coefficient
ΔC_D	DCD	balance incremental tare drag coefficient
ΔC_L	DCL	balance incremental tare lift coefficient
ΔC_{m_f}	DCMFW	balance forward incremental tare pitching-moment coefficient
ΔC_N	DCN	balance incremental tare normal-force coefficient
ΔC_A	DCA	balance incremental tare axial-force coefficient
ΔC_Y	DCY	balance incremental tare side-force coefficient
ΔC_L	DCBL	balance incremental tare rolling-moment coefficient
ΔC_n	DCYN	balance incremental tare yawing-moment coefficient
$C_{P_{V1}}$	CPV1	base pressure coefficient on upper speed brake portion
$C_{P_{V2}}$	CPV2	base pressure coefficient on lower speed brake portion
$C_{P_{V3}}$	CPV3	base pressure coefficient on lower vertical tail portion
XV1		longitudinal distance from $0.65 l_B$ to centroid of area containing $C_{P_{V1}}$

NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
XV2		longitudinal distance from $0.65 \lambda_B$ to centroid of area containing C_{PV2}
XV3		longitudinal distance from $0.65 \lambda_B$ to centroid of area containing C_{PV3}
ZV1		vertical distance from 375" W.L. to centroid of area containing C_{PV1}
ZV2		vertical distance from 375" W.L. to centroid of area containing C_{PV2}
ZV3		vertical distance from 375" W.L. to centroid of area containing C_{PV3}
A _{V1}		area associated with pressure coefficient C_{PV1}
A _{V2}		area associated with pressure coefficient C_{PV2}
A _{V3}		area associated with pressure coefficient C_{PV3}
C _{PB(i)}		body base-pressure coefficient from body base orifice P _{B1,2...}
C _{PC1}		strut cavity-pressure coefficient from strut cavity orifice P _{C1}
C _{PC2}		sting cavity-pressure coefficient from sting cavity orifice P _{C2}
C _{PAi}		fuselage afterbody pressure coefficient
X ₀		Orbiter fuselage station, inches
Y ₀		Orbiter butt plane, inches
A _{Bi}		base area assigned to i th pressure, in ²

NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
C_{A_b}	CAB	model-body base axial-force coefficient
C_{D_f}	CDF	total forebody drag force coefficient
C_{D_b}	CDB	model body base drag-force coefficient
C_{m_f}	CLMFW	balance forward pitching-moment coefficient at 0.65 λ_B
C_{m_a}	CLMAFT	balance aft pitching-moment coefficient at 0.675 λ_B
$C_{m_{t_f}}$	CMTFWD	forward total pitching moment coefficient
$C_{m_{t_a}}$	CMTAFT	aft total pitching moment coefficient
$C_{m_{v_f}}$	CMVAFT	aft vertical tail base pitching moment coefficient
C_{L_t}	CLT	total lift-force coefficient
C_{D_t}	CDT	total drag-force coefficient
C_{N_t}	CNT	total normal-force coefficient
C_{A_f}	CAF	total forebody axial-force coefficient
C_{A_t}	CAT	total axial-force coefficient
ΔC_{L_t}	DCLT	incremental total lift-force coefficient
ΔC_{L_v}	DCLV	incremental vertical tail base lift force coefficient
ΔC_{D_b}	DCDB	incremental model body base drag force coefficient

NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
ΔC_{D_V}	DCDV	incremental vertical tail base drag force coefficient
ΔC_{D_f}	DCDF	incremental total forebody drag force coefficient
ΔC_{D_t}	DCDT	incremental total drag force coefficient
$\Delta C_{m_{t_f}}$	DCMTFW	incremental total forward pitching moment coefficient
$\Delta C_{m_{V_f}}$	DCMVFW	incremental forward vertical tail pitching moment coefficient
$\Delta C_{m_{t_a}}$	DCMTAF	incremental total aft pitching moment coefficient
$\Delta C_{m_{V_f}}$	DCMVAF	incremental aft vertical tail base pitching moment coefficient
ΔC_{m_a}	DCMAFT	incremental balance aft pitching moment coefficient
ΔC_{N_t}	DCNT	incremental total normal force coefficient
ΔC_{N_V}	DCNV	incremental vertical tail base normal-force coefficient
ΔC_{A_t}	DCAT	incremental total axial force coefficient
ΔC_{A_V}	DCAV	incremental vertical tail base axial-force coefficient
ΔC_{A_b}	DCAB	incremental model-body base axial-force coefficient
ΔC_{A_f}	DCAF	incremental total forebody axial-force coefficient
δ_{bf}	BDFLAP	bodyflap deflection angle, positive trailing edge down, degrees

NOMENCLATURE (Concluded)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
δ_e	ELEVON	elevon surface deflection angle, positive trailing edge down, degrees
Λ_U		sweepback angle of the speedbrake trailing edge, degrees
Λ_L		sweepback angle of lower part of the vertical tail, degrees
δ_{sb}	SPDBRK	speedbrake deflection angle, degrees

CONFIGURATIONS INVESTIGATED

Two support systems were tested. One was a Rockwell supplied blade-strut support which enters through the top of the model near the base, replacing the vertical tail as shown in figure 2b. The strut simulated the vertical tail (with a 24.92 degree speedbrake flare) to the extent that its span and profile closely matched. Because of stress considerations cross sections at various spanwise stations could not be matched. See figures 2d and 2e for comparisons. A (non-metric) dummy sting was located (via a stringer from the Ames sting which supports the blade-strut) in close proximity to the base. It simulated the first 20 inches of exposed sting downstream of the model base which exists for the case where the model is base mounted. Refer to figure 2a.

Control surface deflections tested were:

elevon: 0°, 15°

bodyflap: -11.7°, 0°, 16.3°

speedbrake: 24.92°

rudder: 0°

The basic Orbiter configurations are as follows:

$$O_{11A} = B_{26} C_9 E_{37} F_7 M_7 N_{24} N_{28} R_5 V_8 W_{116}, \text{ where}$$

<u>Component</u>	<u>Definition</u>
B ₂₆	Fuselage: forebody per Rockwell lines VL70-000143B; mid-body per lines -000200, -000205 and -006089; aft body per lines -000145, (Model drawing SS-A00147, Release 12)
C ₉	Canopy per Rockwell lines VL70-000143B (Model drawing SS-A00147, Release 12)

CONFIGURATIONS INVESTIGATED (Concluded)

- E₃₇ Alternate slotted elevons per Rockwell lines VL70-000200, -006089, -006092 and figure 4A of SAS/AERO/76-643, dated October 31, 1973 (Model drawing SS-A00147, Release 6).
- F₇ Body flap per Rockwell lines VL70-000145 (Model drawing SS-A00147, Release 12)
- M₇ OMS/RCS pods per Rockwell lines VL70-000145 (Model drawing SS-A00147, Release 12)
- N₂₄ MPS nozzles; contour per measurements made on Rockwell configuration control drawing VL70-0050030A; location per configuration control drawing VL70-000140A (Model drawing SS-A00147, Release 12)
- N₂₈ OMS nozzles: contour per model drawing SS-A00106, release 5; location per Rockwell configuration control drawing VL70-000140A (Model drawing SS-A00147, Release 12)
- R₅ Rudder per Rockwell lines VL70-000146A (Model drawing SS-A00148, Release 6)
- V₈ Vertical tail per Rockwell lines VL70-000146A (Model drawing SS-A00148, Release 6)
- W₁₁₆ Wing per Rockwell lines VL70-000200, -006089, and -006092 (Model drawing SS-A00148, Release 6)

INSTRUMENTATION

The Orbiter was mounted on the NASA/ARC 1.5-inch diameter Task MKIIE internal strain gage balance. The balance center was located at model station $X_0 = 15.989$, $Y_0 = 0.0$, and $Z_0 = 5.85$ inches.

A NASA/ARC dangleometer recorded BOR pitch angle. Predetermined sting deflection rates (due to load) were added to these to determine model α and β .

When the model was base mounted on the straight sting, there were five (5) base, two (2) cavity, two (2) top surface, and three (3) vertical tail trailing edge pressure orifices. All taps, except the cavity pressure, were built into the model skin with 0.043-inch O.D. stubs at the model base. The same number of pressure taps were used for both base mounted and blade strut model installations.

TEST FACILITY DESCRIPTION

The 6- by 6-Foot Wind Tunnel of the NASA Ames Research Center is a closed-circuit, variable pressure facility. The test section has a slotted floor and ceiling, allowing for continuous operation from Mach number 0.25 to 2.20 at stagnation pressures from 0.3 to 1.0 atmosphere for a stagnation temperature of 560°R. These conditions allow Reynolds number variation from 1 to 5 million per foot and a dynamic pressure range from 200 to 1000 pounds per square foot.

DATA REDUCTION

Standard NASA/ARC data reduction techniques were used with the following reference dimensions:

A_C	sting cavity area	0.0341 ft ²
b	reference wing span	1.171 ft
\bar{c}	reference M.A.C.	0.5935 ft
L_B	reference body length	1.613 ft
S	reference wing area	0.6053 ft ²
XMRP	longitudinal distance, model nose OML to moment reference center	12.6255 in
YMRP	lateral distance, plane of symmetry to moment reference center	0.0 in
ZMRP	vertical distance, FRP to moment reference center	-0.375 in

Fuselage and vertical tail base force coefficients were computed as follows:

$$C_{A_B} = - \sum_{i=1}^5 \frac{A_{Bi} C_{P_{Bi}}}{S} - \frac{A_C C_{P_C}}{S}$$

C_{A_B} = base axial-force coefficient

$$C_{A_V} = - \frac{\cos \Lambda_U}{S} (A_{V1} C_{P_{V1}} + A_{V2} C_{P_{V2}}) - \frac{\cos \Lambda_L A_{V3} C_{P_{V3}}}{S}$$

C_{A_V} = vertical tail base axial-force coefficient

$$C_{N_V} = \frac{\sin \Lambda_U}{S} (A_{V1} C_{P_{V1}} + A_{V2} C_{P_{V2}}) + \frac{\sin \Lambda_L}{S} (A_{V3} C_{P_{V3}})$$

DATA REDUCTION (Continued)

C_{N_V} = vertical tail base normal-force coefficient

$$C_{m_{V0.65}} \ell_B = - [A_{V1} C_{P_{V1}} (Z_{V1} \cos \Lambda_U + X_{V1} \sin \Lambda_U) + A_{V2} C_{P_{V2}} (Z_{V2} \cos \Lambda_U + X_{V2} \sin \Lambda_U) + A_{V3} C_{P_{V3}} (Z_{V3} \cos \Lambda_L + X_{V3} \sin \Lambda_L)] / \bar{c} S$$

where:

full - scale values

Symbol	Dimensions	All δ_{SB}	$\delta_{SB} = 25^\circ$	$\delta_{SB} = 55^\circ$	$\delta_{SB} = 85^\circ$
A_{V1}	ft ²		24.2	50.4	82.3
A_{V2}	ft ²		32.3	67.4	109.9
A_{V3}	ft ²		19.77	19.77	19.77
A_{B1}	ft	48.0			
A_{B2}	ft	89.3			
A_{B3}	ft	45.9			
A_{B4}	ft	78.2			
A_{B5}	ft	12.4			
A_{C2}	in ²	151.56			
X_{V1}	in	581.1			
X_{V2}	in	531.9			
X_{V3}	in	432.2			
Z_{V1}	in	351.0			
Z_{V2}	in	251.1			
Z_{V3}	in	165.7			
Λ_U	deg.	26° 15'			
Λ_L	deg.	63° 51'			

DATA REDUCTION (Concluded)

$$CD_v = CAV \cos \alpha + CNV \sin \alpha$$

$$CLV = CNV \cos \alpha - CAV \sin \alpha$$

$$CMVAFT = CMVFWD + (0.675 - 0.65) (l_B) CNV/\bar{c}$$

$$CLMAFT = CLMFWD + (0.675 - 0.65) (l_B) CN/\bar{c}$$

$$CDT = CD + CDV$$

$$CLT = CL + CLV$$

$$CAT = CA + CAV$$

$$CNT = CN + CNV$$

$$CMTFWD = CLMFWD + CMVFWD$$

$$CMTAFT = CLMAFT + CMVAFT$$

$$CAF = CAT - CAB$$

$$CDF = CAF \cos \alpha + CNT \sin \alpha$$

$$CDB = CDT - CDF$$

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TABLE II. (Concluded)

TEST: OAS9		DATE: 7057 TEST														
DATA SET IDENTIFIER	CONFIGURATION	SCHE.		CONTROL DEFLECTION			NO. OF RJNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)							TEST RUN NUMBERS	
		A	B	δ _{BE}	δ _{EG}	δ _{EG}		1.6	0.7	0.75	0.80	0.85	0.9	0.95		1.2
020	0m0 - N24	A	C	-11.7	25		123		122	121	120	119	118	117	116	
021							144		143	142			141	140	139	
022															138	
023							130		128		127		126	125	124	
024							137		135		134		133	132	131	
							150		149		148		147	146	145	

CPVIL 1 CPV2 1 CPV3 1
 A DATA SCHEDULES: A = -4, -2, 0, 2, 4, 6, 8, 10, 12, 14, 0 DEG; D = -5, -4, -3, -2, -1, -0.5, 0, 0.5, 3, 5, 0 DEG.
 COEFFICIENTS: IDVAR (1) IDVAR (2) NOV

TABLE III. - MODEL DIMENSIONAL DATA

*REVISED 4/24/74

MODEL COMPONENT: Body (B26)

GENERAL DESCRIPTION: Configuration J40 A/B Orbiter Fuselage

NOTE: B26 identical to B24 except underside of fuselage refaired to accept W116.

Model Scale = 0.015

Model Drawing No. SS-A00147

DRAWING NUMBER:

VL70-000193

VL70-000140A ; VL70-000140B

DIMENSIONS:

	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length (Body Fwd Sta $X_0 = 235$) - in.	<u>1293.3</u>	<u>19.400</u>
*Max. Width (at $X_0 = 1528.3$) - In.	<u>264.0</u>	<u>3.960</u>
Max. Depth (at $X_0 = 1464$) - in.	<u>250.0</u>	<u>3.75</u>
Fineness Ratio	<u>0.26357</u>	<u>0.26357</u>
Area - ft ²		
Max. Cross-Sectional	<u>340.88462</u>	<u>.07670</u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

TABLE III. - Continued.

*REVISED 4/24/74

MODEL COMPONENT: Canopy (C₉)

GENERAL DESCRIPTION: Configuration 140 A/B Orbiter Fuselage

Model Drawing No. SS-A00147

Model Scale = 0.015

DRAWING NUMBER

VL70-000140A
VL70-000143A

DIMENSION:

FULL SCALE

MODEL SCALE

* Length ($X_0=434.643$ to 578)

143.357

2.150

Max Width (@ $X_0=513.127$)

152.412

2.286

Max Depth (@ $X_0=485.0$)

25.000

0.375

Fineness Ratio

Area

Max Cross-Sectional

Planform

Wetted

Base

TABLE III. - Continued.

*REVISED 4/24/74

MODEL COMPONENT: ALTERNATE SLOTTED ELEVON - E₃₇

GENERAL DESCRIPTION: Configuration 140A/B Orbiter Elevon.

E₃₇ is a slotted version of E₂₆. Data is for one side.

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

DRAWING NUMBER: VL70-000200, -006089, -006092 and
Fig. 4A of SAS/AERO/76-643

<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	<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>10.056</u>
Hingeline	<u>0.00</u>	<u>0.00</u>
* Area Moment (Product of Area & c) I. ³	<u>1587.25</u>	<u>0.00536</u>
* Mean Aerodynamic Chord In.	<u>90.7</u>	<u>1.361</u>

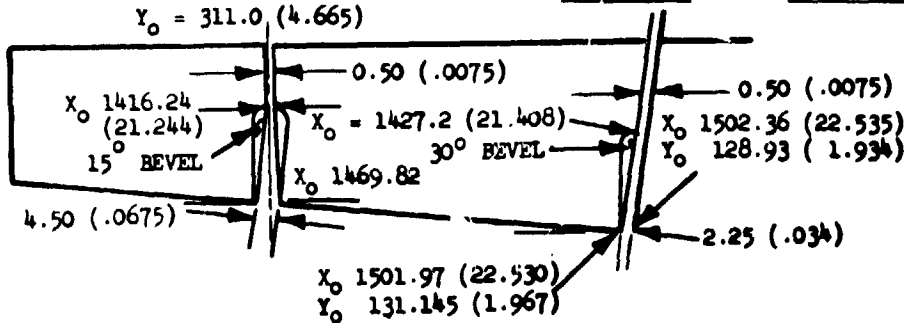


TABLE III. - Continued.

MODEL COMPONENT: Body Flap (F7)

GENERAL DESCRIPTION: Configuration 140 A/B Orbiter Body Flap

NOTE: Body flap has variable centerline deflection of +13.75° and
-14.25° from null position. Hinge line located at $X_0 = 1528.3$,

$Z_0 = 284.3$

Model Drawing No. SS-A00147

Model Scale = 0.015

DRAWING NUMBER

VL70-000140A, VL70-000145

<u>DIMENSION:</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length ($X_0=1520$ to $X_0=1613$) - IN.	<u>93.000</u>	<u>1.395</u>
Max Width - IN.	<u>262.000</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>150.5250</u>	<u>.0339</u>
Wetted	<u> </u>	<u> </u>
Base	<u>41.84722</u>	<u>.00941</u>

TABLE III. - Continued.

MODEL COMPONENT: OMS Pod (M7)

GENERAL DESCRIPTION: Configuration 140 A/B Orbiter OMS-Pod

Model Scale = 0.015

Model Drawing No. SS-A00147

DRAWING NUMBER VI70-000140A
VI70-000145

<u>DIMENSION:</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length (OMS 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		

TABLE III. - Continued.

MODEL DIMENSIONAL DATA

MODEL COMPONENT: MPG NOZZLES - N₂₄

GENERAL DESCRIPTION: Configuration 140A/R Orbiter MPS Nozzles

MODEL SCALE: 0.015

MODEL DRAWING: SS-A00147, RELEASE 12

DRAWING NUMBER: VL70-005030A, VL70-000140A

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
MACH NO.		
Length - In.		
Gimbal Point to Exit Plane	<u>157.0</u>	<u>2.355</u>
Throat to Exit Plane	<u>99.2</u>	<u>1.488</u>
Diameter - In.		
Exit	<u>91.000</u>	<u>1.410</u>
Throat	<u> </u>	<u> </u>
Inlet	<u> </u>	<u> </u>
Area - ft ²		
Exit	<u>45.16585</u>	<u>0.0102</u>
Throat	<u> </u>	<u> </u>
Gimbal Point (Station) - In.		
Upper Nozzle		
X	<u>1445.0</u>	<u>21.675</u>
Y	<u>0.0</u>	<u>0.0</u>
Z	<u>443.0</u>	<u>6.645</u>
Lower Nozzles		
X	<u>1468.16996</u>	<u>22.023</u>
Y	<u>53.0000</u>	<u>0.795</u>
Z	<u>342.63988</u>	<u>5.140</u>
Null Position - Deg.		
Upper Nozzle		
Pitch	<u>16°</u>	<u>16°</u>
Yaw	<u>0°</u>	<u>0°</u>
Lower Nozzle		
Pitch	<u>10°</u>	<u>10°</u>
Yaw	<u>3.5°</u>	<u>3.5°</u>

TABLE III. - Continued.

MODEL COMPONENT: OMS Nozzle (N₂₈)

GENERAL DESCRIPTION: Configuration 140 A/B Orbiter OMS Nozzle

MODEL SCALE = .015 Model Drawing No. SS-A00147

DRAWING NO. VL70-000140A

<u>DIMENSIONS</u>	<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.		
X	1518.0	22.77
Y	+ 88.0	1.32
Z	492.0 -	7.38
Null Position ~ deg.		
Pitch	15° 49'	15° 49'
Yaw (Outboard)	12° 17'	12° 17'

TABLE III. - Continued.

*REVISED 4/24/74

MODEL COMPONENT: Rudder (R₅)GENERAL DESCRIPTION: Configuration 140 A/B Orbiter RudderModel Scale =0.015Model Drawing No. SS-A00148DRAWING NUMBER: VL70-000095, VL70-000146A

<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	<u>91.585</u>	<u>1.374</u>
Outb'd equivalent chord	<u>50.833</u>	<u>0.762</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>
Tailing 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>.0021</u>
* Product of Area and Mean Chord - In.	<u>73.2</u>	<u>1.098</u>

TABLE III. - Continued.

*REVISED 4/24/74

MODEL COMPONENT: Vertical Tail (Vg)

GENERAL DESCRIPTION: Configuration 140 A/B Orbiter Vertical Tail

NOTE: Similar to V5 with radius on TE upper corner and LE lower corner
where vertical meets fuselage.

Model Scale = 0.015

Model Drawing No. SS-A00148

DRAWING NUMBER:

VL70-000140A
VL70-000146A

DIMENSIONS:

FULL-SCALE

MODEL SCALE

TOTAL DATA

Area (Theo) Ft ²	413.253	0.09298
Planform		
Span (Theo) In	315.720	4.73580
Aspect Ratio	1.675	1.675
Rate of Taper	0.507	0.507
Taper Ratio	0.40399	0.40399
Sweep Back Angles, degrees		
Leading Edge	45.00	45.00
*Trailing Edge	26.2	26.2
0.25 Element Line	41.130	41.130
Chords:		
Root (Theo) WP	268.500	4.02750
Tip (Theo) WP	108.470	1.62705
MAC	199.80756	2.99711
Fus. Sta. of .25 MAC	1463.50	21.95250
W. P. of .25 MAC	635.522	9.53283
B. L. of .25 MAC	0.00	0.00
Airfoil Section		
Leading Wedge Angle Deg	10.00	10.00
Trailing Wedge Angle Deg	14.920	14.920
Leading Edge Radius (Min) - IN.	2.00	0.0300
Void Area	13.17	0.00296
Blanketed Area	0.00	0.00

TABLE III. - Concluded.

REVISED 4/24/74

MODEL COMPONENT: WING-W₁₁₆

GENERAL DESCRIPTION: Configuration 140A/B Orbiter Wing

NOTE: Identical to W₁₁₁, except airfoil thickness. Dihedral angle is along trailing edge of wing.

MODEL SCALE: 0.015 MODEL DRAWING NO. 33-A00148

TEST NO. DWG. NO. VL70-000140B

DIMENSIONS: FULL-SCALE MODEL SCALE

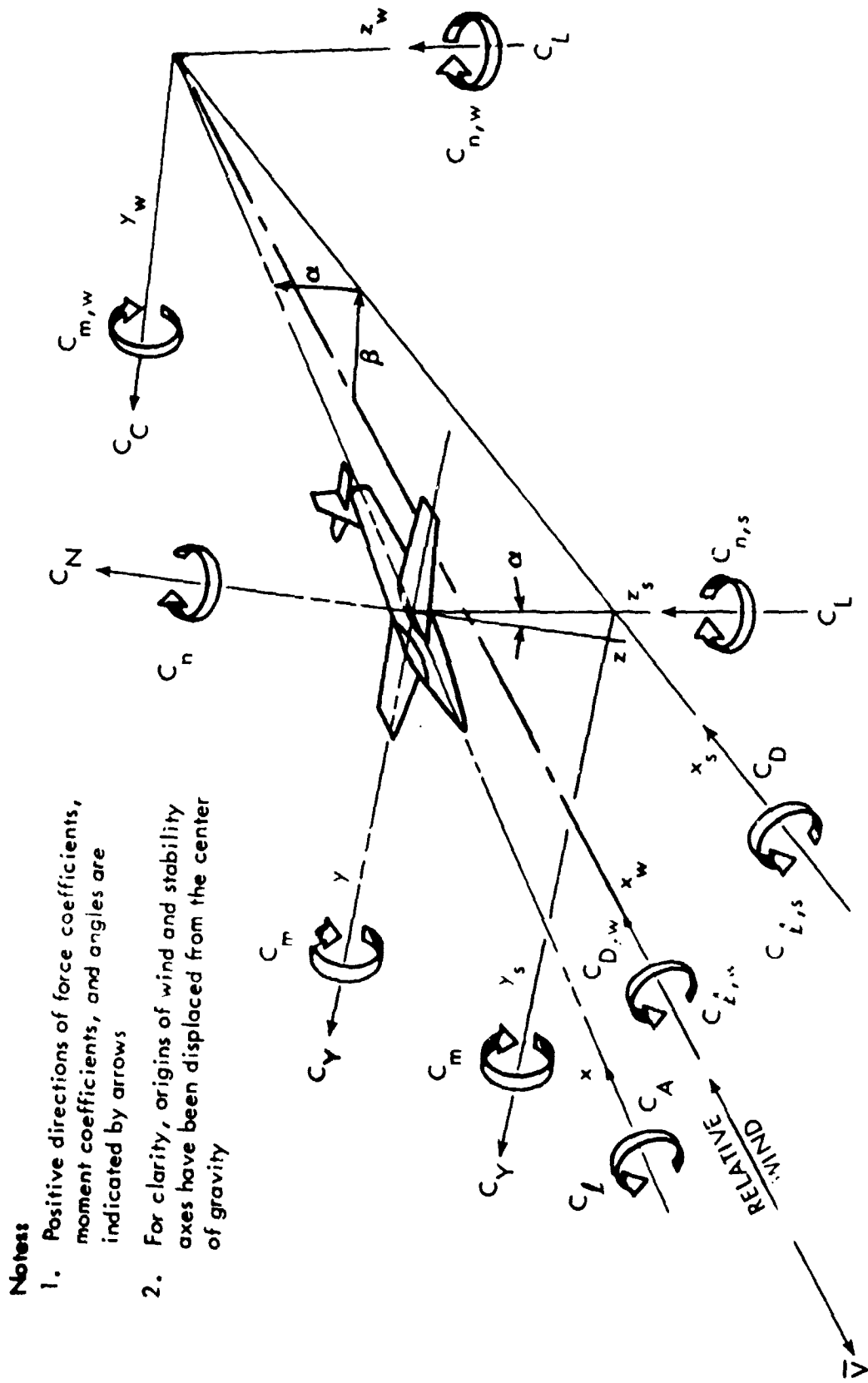
TOTAL DATA		
Area (Theo) Ft ²		
Planform	2690.00	0.6053
Span (Theo) In.	936.6816	14.050
Aspect Ratio	2.265	2.265
Rate of Taper	1.177	1.177
Taper Ratio	0.200	0.200
Dihedral Angle, degrees	3.500	3.500
Incidence Angle, degrees	0.500	0.500
Aerodynamic Twist, degrees	+ 3.000	+ 3.000
Sweep Back Angles, degrees		
Leading Edge	45.000	45.000
Trailing Edge	17.056	10.056
0.25 Element Line	35.209	35.209
Chords:		
Root (Theo) B.P.O.O.	689.2429	10.339
Tip, (Theo) B.P.	187.8486	2.038
MAC	474.8117	7.122
Fus. Sta. of .25 MAC	1126.83	16.902
W.P. of .25 MAC	290.58	4.359
B.L. of .25 MAC	182.13	2.732
EXPOSED DATA		
Area (Theo) Ft ²	1751.50	0.3941
Span, (Theo) In. BP108	720.68	10.810
Aspect Ratio	2.059	2.059
Taper Ratio	0.245	0.245
Chords		
Root JP108	562.09	8.431
Tip 1.00 $\frac{b}{z}$	137.85	2.06
MAC	392.83	5.892
Fus. Sta. of .25 MAC	1185.98	17.790
W.P. of .25 MAC	294.30	4.415
B.L. of .25 MAC	251.77	3.777
Airfoil Section (Rockwell Mod NASA)		
XXXX-64		
Root $\frac{b}{z}$ =	0.113	0.113
Tip $\frac{b}{z}$ =	0.12	0.12
Data for (1) of (2) Sides		
Leading Edge Cuff $\frac{2}{z}$	113.18	0.0255
Planform Area Ft ²	500.00	7.500
Leading Edge Intersects Fus M. L. @ Sta	1524.00	15.360
Leading Edge Intersects Wing @ Sta		

TABLE IV. DATASET COMBINATIONS USED TO OBTAIN INCREMENTAL DATA

RESULTING DATASET	MINUEND DATASET	SUBTRAHEND DATASET	RESULTING DATA	α	δe	δBF
Q,S,T,U,V,WER012	RER001	RER012	Nozzle increment	Vary	0	-11.7
3	RER003	RER013	+ sting interference	Vary	15	-11.7
4	RER005	RER014	tare	Vary	0	16.3
5	RER006	RER015	→	Vary	0	0
6	RER007	RER016		Vary	0	-11.7
1ER018	RER008	RER018		10	0	-11.7
Q,S,T,U,V,WER009	RER001	RER009	Sting interference	Vary	0	-11.7
1ER010	RER007	RER010	tare	0	0	-11.7
1ER011	RER008	RER011	→	10	0	-11.7
1,2,3ER019	RER019,12	RER001	Sting mounted	Vary	0	-11.7
20	RER020,13	RER003	nozzle-off data	Vary	15	-11.7
22	RER022,15	RER006	with corrections	Vary	0	0
23	RER023,14	RER005	applied	Vary	0	16.3
1ER024	RER024,18	RER008	→	10	0	-11.7

NOTE:

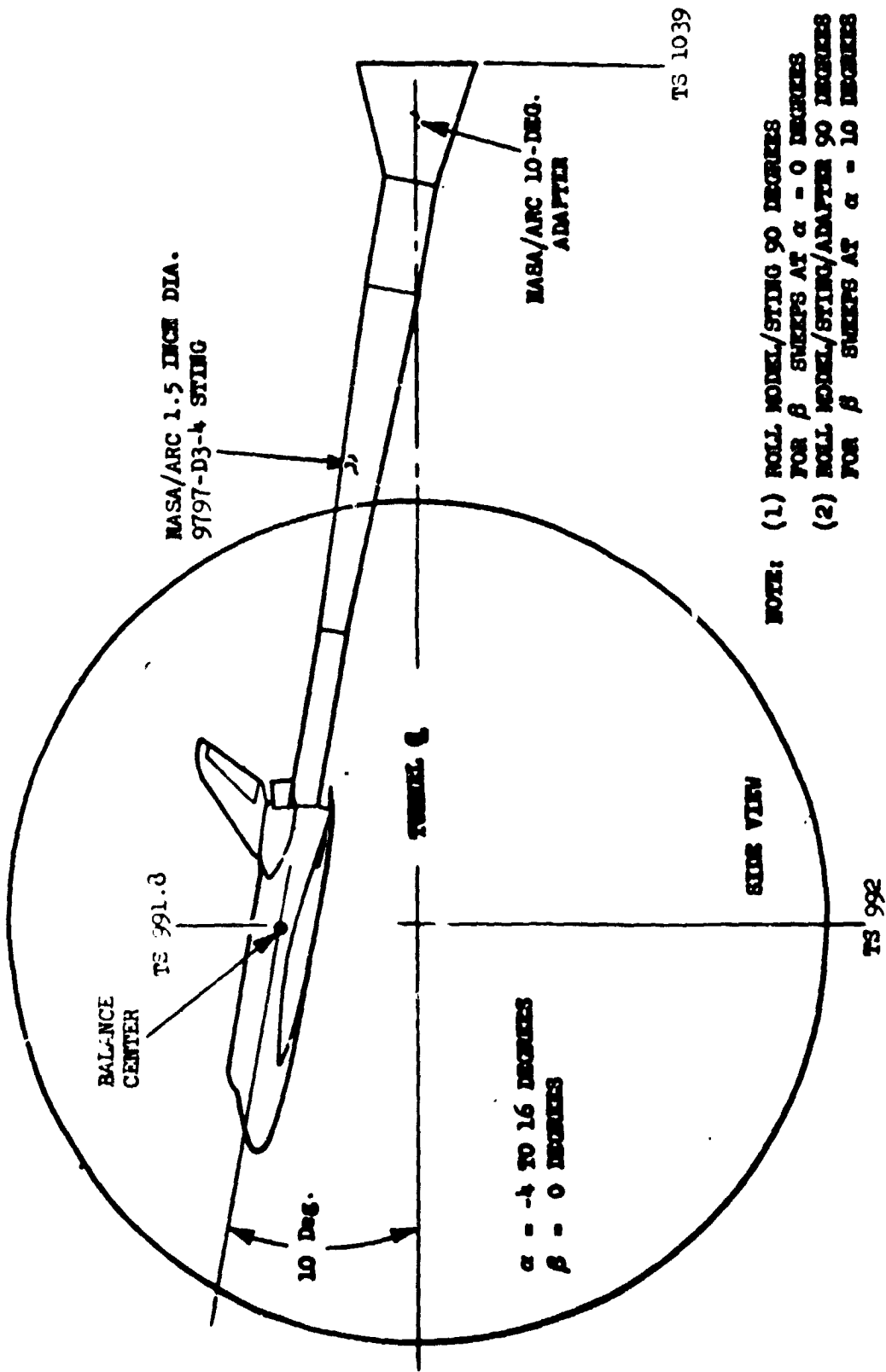
- VERTICAL TAIL WAS REPLACED BY A NON-METRIC BLADE STRUT FOR STRUT MOUNTING. INCREMENTAL VERTICAL TAIL FORCES WERE ESTIMATED FROM PRESSURES MEASURED IN THE SPEED BRAKE BASE REGION.
- [NOZZLE INCREMENT + STING INTERFERENCE TARE] = [MODEL + STRUT + DUMMY STING] - [MODEL + STRUT + NOZZLE]
- [STING INTERFERENCE TARE] = [MODEL + STRUT + DUMMY STING] - [MODEL + STRUT]
- [CORRECTED DATA] = [MODEL STING-MOUNTED] - [NOZZLE INCREMENT + STING INTERFERENCE TARE]



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

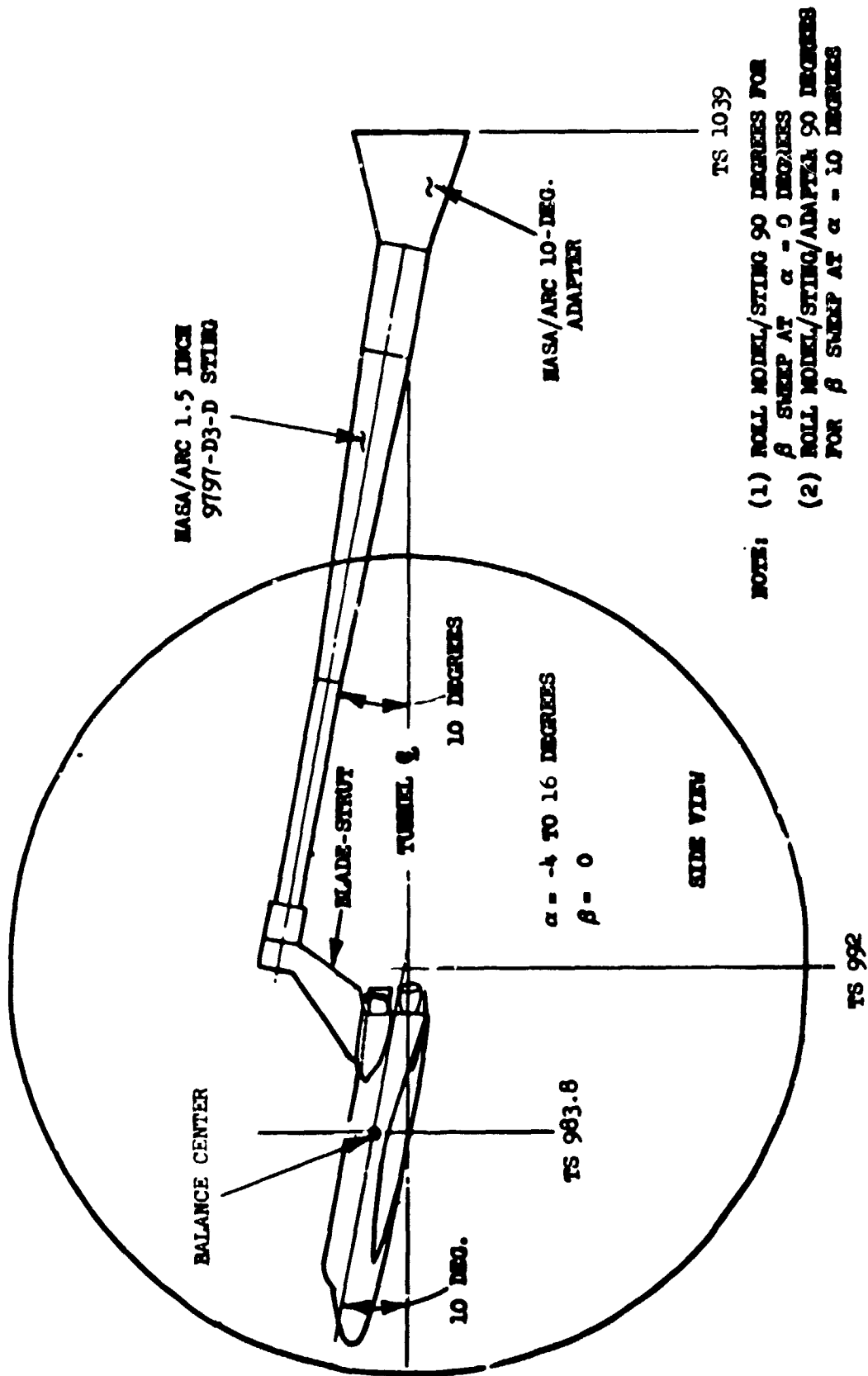
Figure 1. - Axis systems.



NOTE: (1) ROLL MODEL/STING 90 DEGREES
 FOR β SWEEPS AT $\alpha = 0$ DEGREES
 (2) ROLL MODEL/STING/ADAPTER 90 DEGREES
 FOR β SWEEPS AT $\alpha = 10$ DEGREES

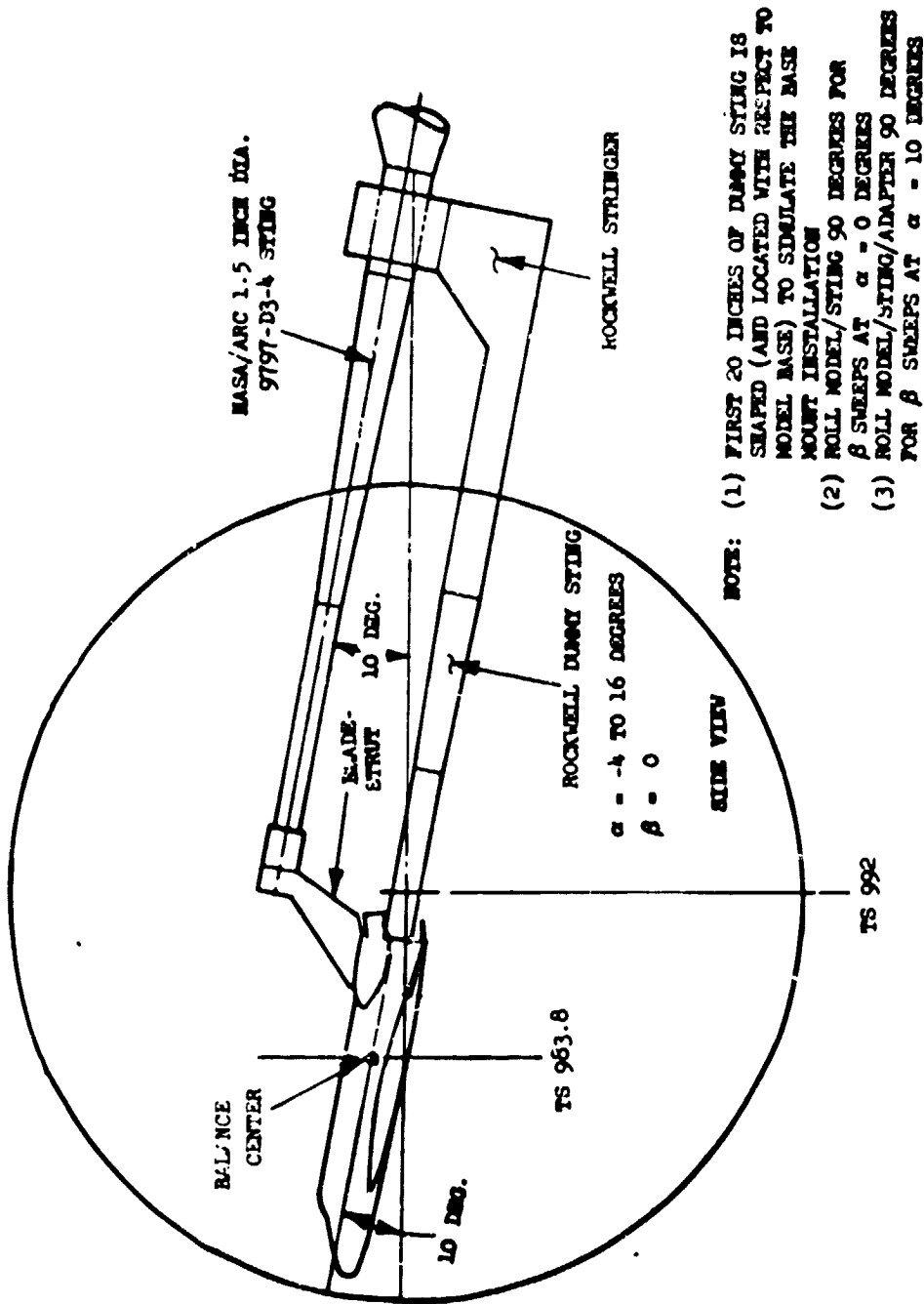
a. Base Mount Tunnel Installation for Test OA59

Figure 2. - Model sketches.



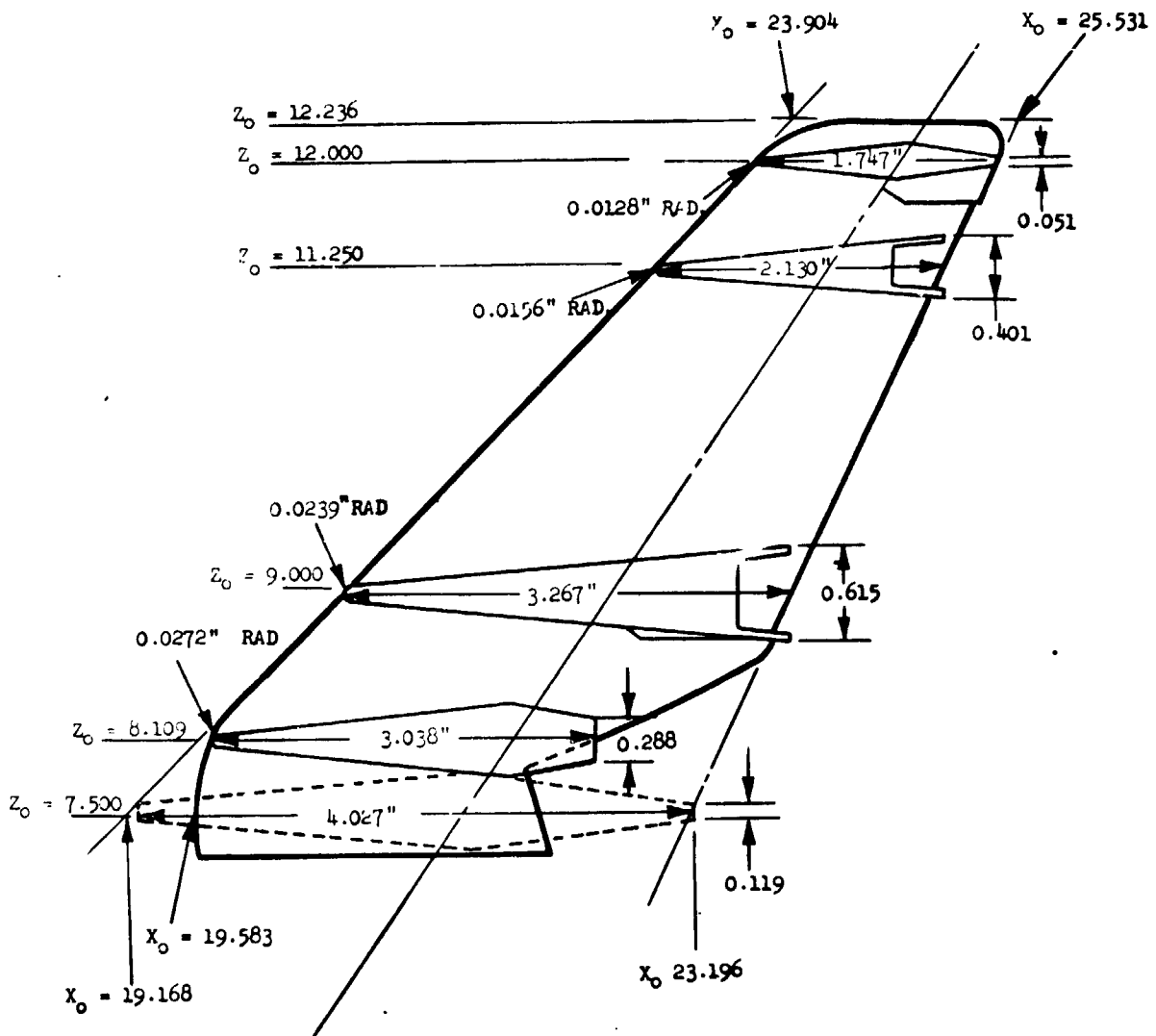
b. Blade-Strut Mount Tunnel Installation for Test OA59

Figure 2. - Continued.



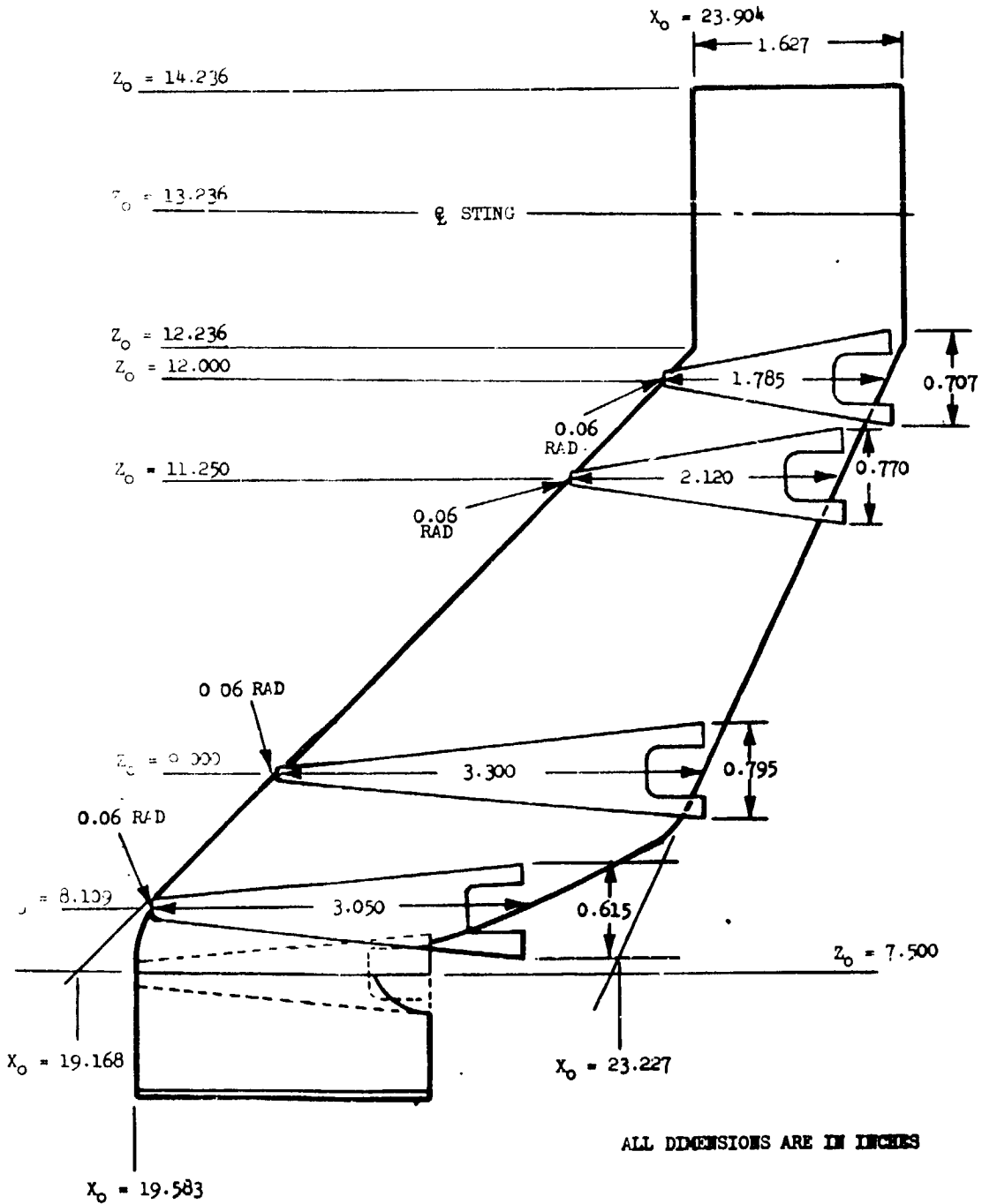
c. Blade-Mount Tunnel Installation with Dummy Sting for Test 0450

Figure 2. - Continued.



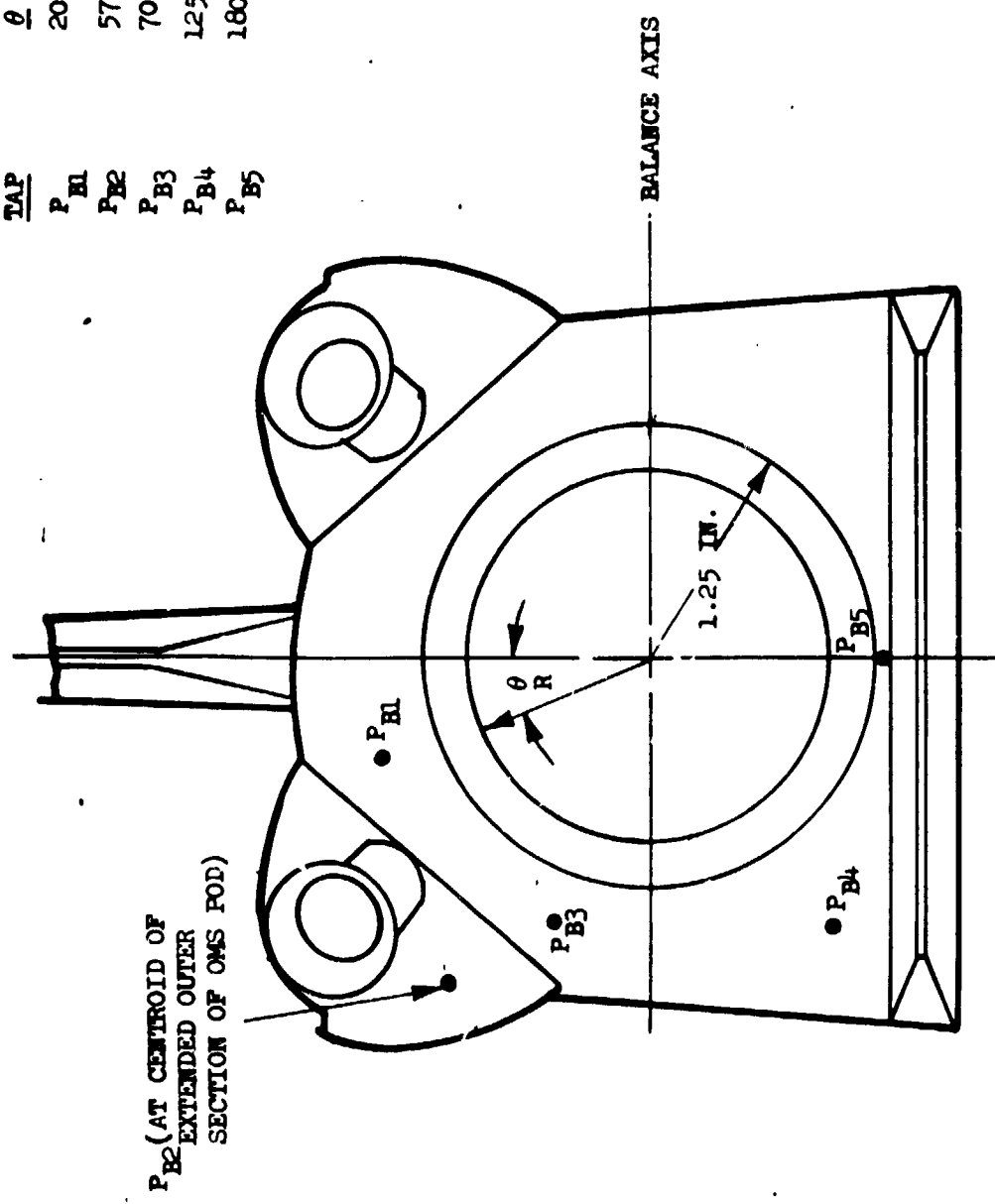
d. Vertical Tail Cross-Sections 24.92° Speed Brake

Figure 2. - Continued.

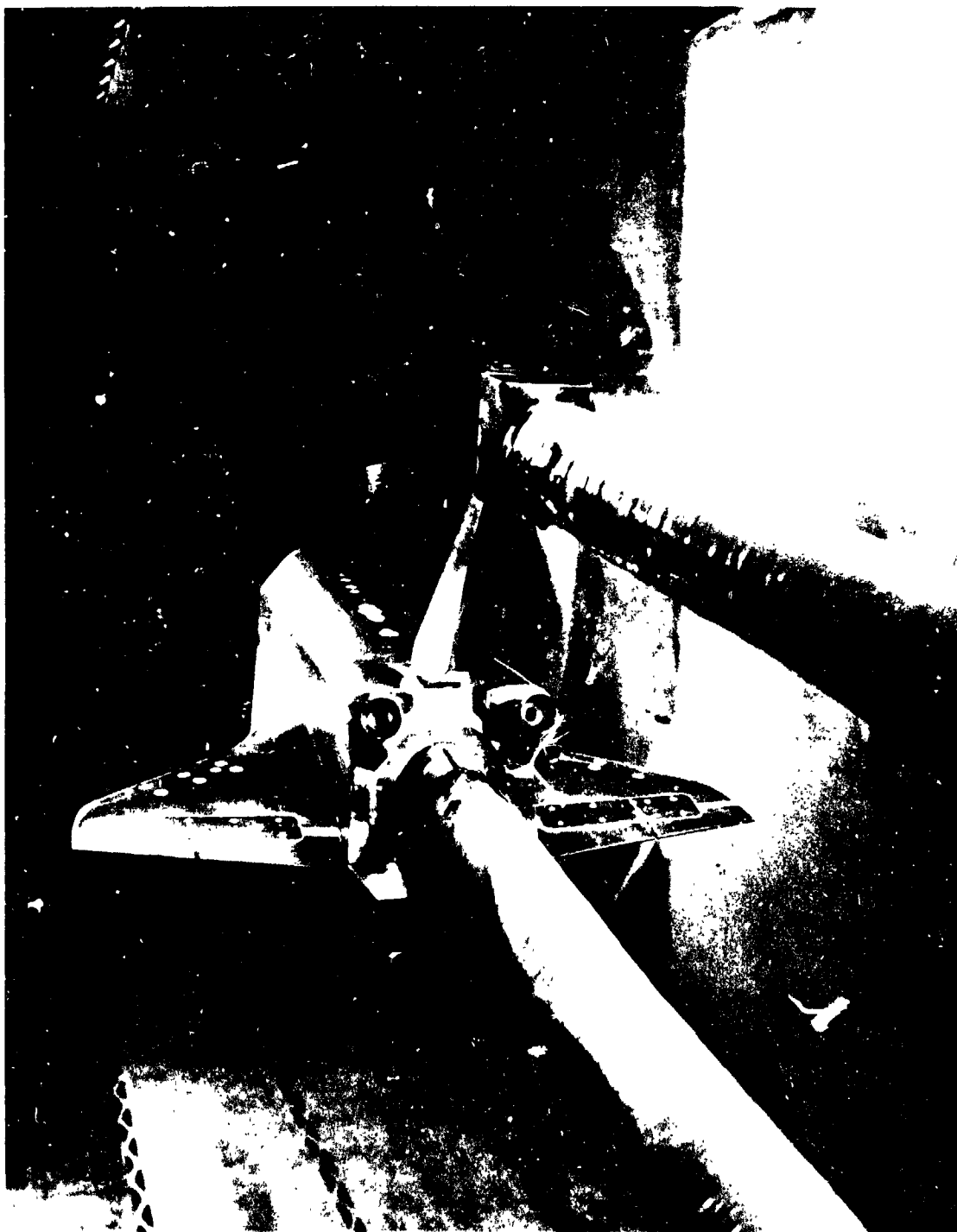


e. Blade-Strut used for Test OA59
Figure 2. - Continued.

TAP	θ	R
P _{B1}	20°	1.60 IN.
P _{B2}	57°	2.10 IN.
P _{B3}	70°	1.50 IN.
P _{B4}	125°	1.76 IN.
P _{B5}	180°	1.29 IN.

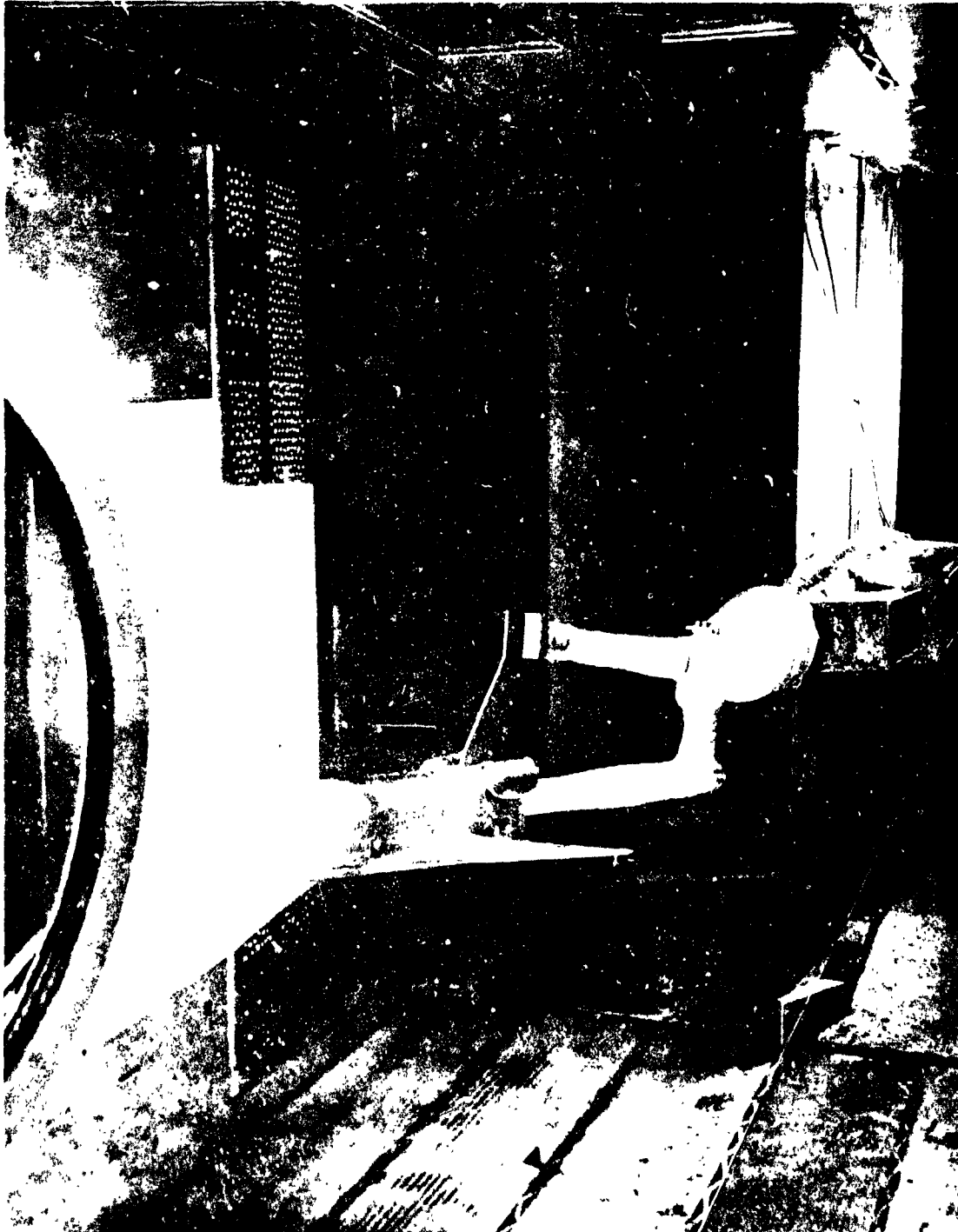


f. Base and Cavity Pressure Locations
Figure 2. - Concluded.



a. Rear 3/4 View

Figure 3. - Model I installation photographs.



b. Front 3/4 View

Figure 3. - Concluded.

DATA FIGURES
VOLUME II
FIGURES 10 - 15
(REFER TO VOLUME I
FOR FIGURES 4-9)

DATA SET SYMBOL CONFIGURATION DESCRIPTION

{ YER007 } ARC 66-709 DASS DA11A-(N24 RS V8)+STRUT+DUM STING

{ YER010 } ARC 66-709 DASS DA11A-(N24 RS V8)+STRUT

{ YER016 } ARC 66-709 DASS DA11A-(RS V8)+STRUT

{ YER017 } DATA NOT AVAILABLE

ALPHA ELEVON BOFLAP

.000 .000 -11.700

.000 .000 -11.700

.000 .000 -11.700

.000 .000 -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

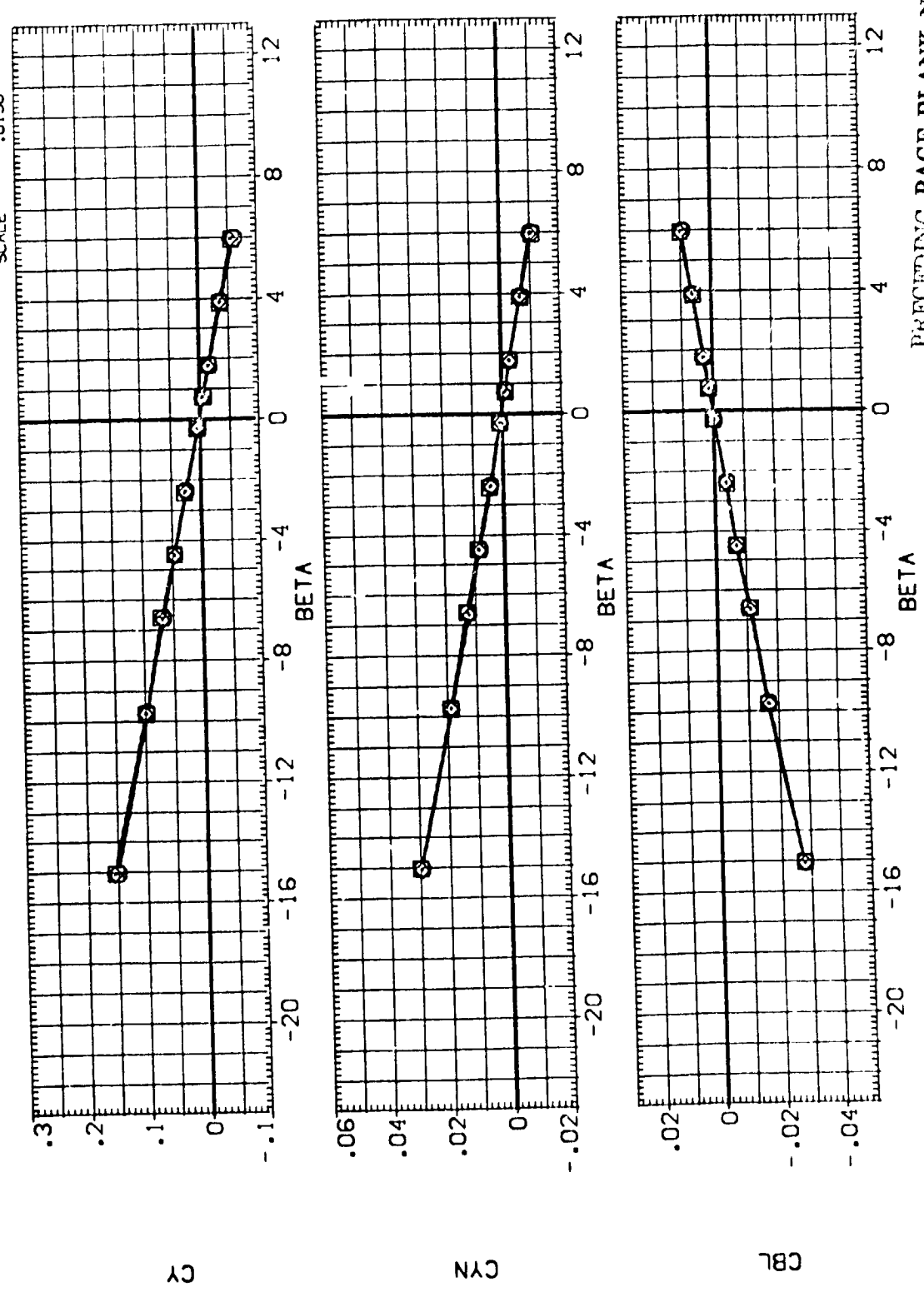


FIG. 10 TARE YAW RUNS AT ALPHA = 0.0 DEG.
 (A)MACH = .60

DATA SET SYMBOL: (YER007) (YER010) (YER016) (YER017)

CONFIGURATION DESCRIPTION: ARC 66-709 DASS9 DA11A-(N24 RS V8)+STRUT+DUM STING
 DATA NOT AVAILABLE
 ARC 66-709 DASS9 DA11A-(RS V8)+STRUT
 DATA NOT AVAILABLE

ALPHA: .000 .000 .000 .000

ELEVON: .000 .000 .000 .000

BOFLAP: -11.700 -11.700 -11.700 -11.700

REFERENCE INFORMATION: SREF: .6053 SO.FT.
 LREF: .5935 FT.
 BREF: 1.1710 FT.
 XMRP: 12.6255 IN.
 YMRP: .0000 IN.
 ZMRP: -.3750 IN.
 SCALE: .0150

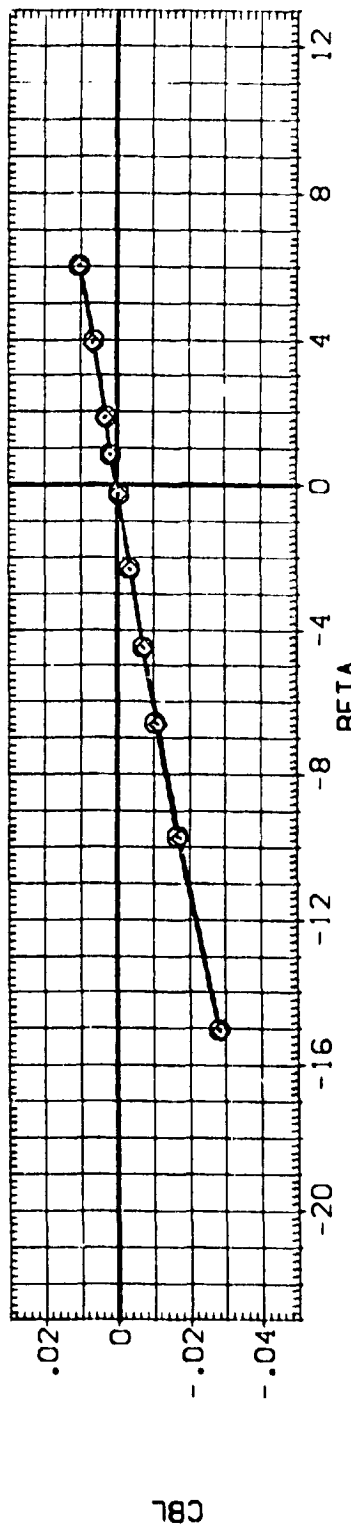
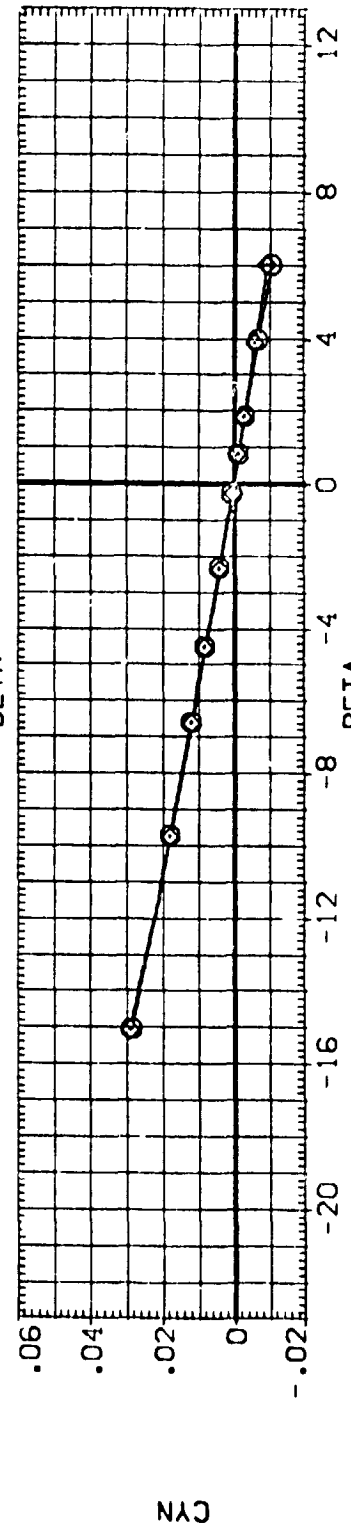
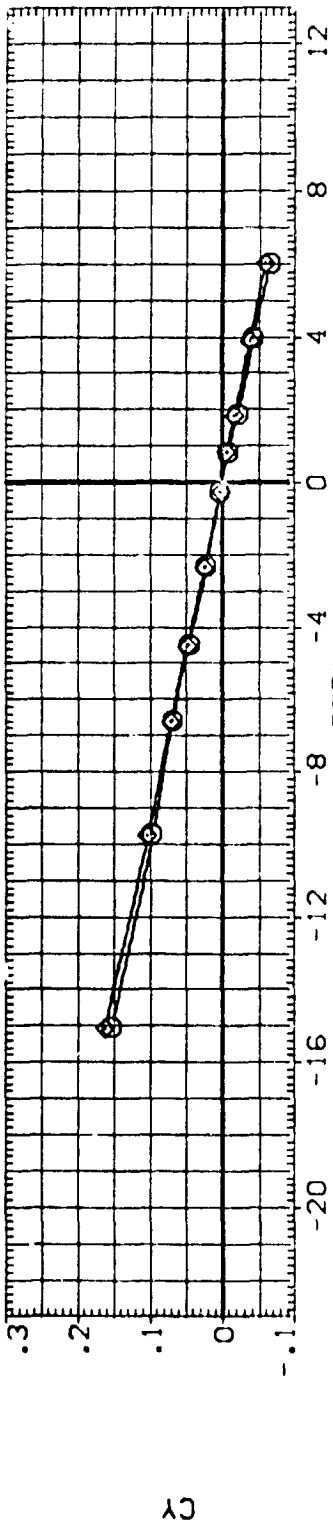


FIG. 10 TARE YAW RUNS AT ALPHA = 0.0 DEG.

(B)MACH = .70



DATA SET SYMBOL: (YER007) (YER010) (YER016) (YER017)

CONFIGURATION DESCRIPTION: ARC 66-709 DASS 0A11A-(N24 RS V8)+STRUT+DUM STING; ARC 66-709 DASS 0A11A-(N24 RS V8)+STRUT; ARC 66-709 DASS 0A11A-(RS V8)+STRUT; DATA NOT AVAILABLE

ALPHA: .000; ELEVON: .000; BOFLAP: -11.700

REFERENCE INFORMATION: SREF: 6053 SC.FT.; LREF: .5935 FT.; BREF: 1.1710 FT.; XMRP: 12.6255 IN.; YMRP: .0000 IN.; ZMRP: -.3750 IN.; SCALE: .0150

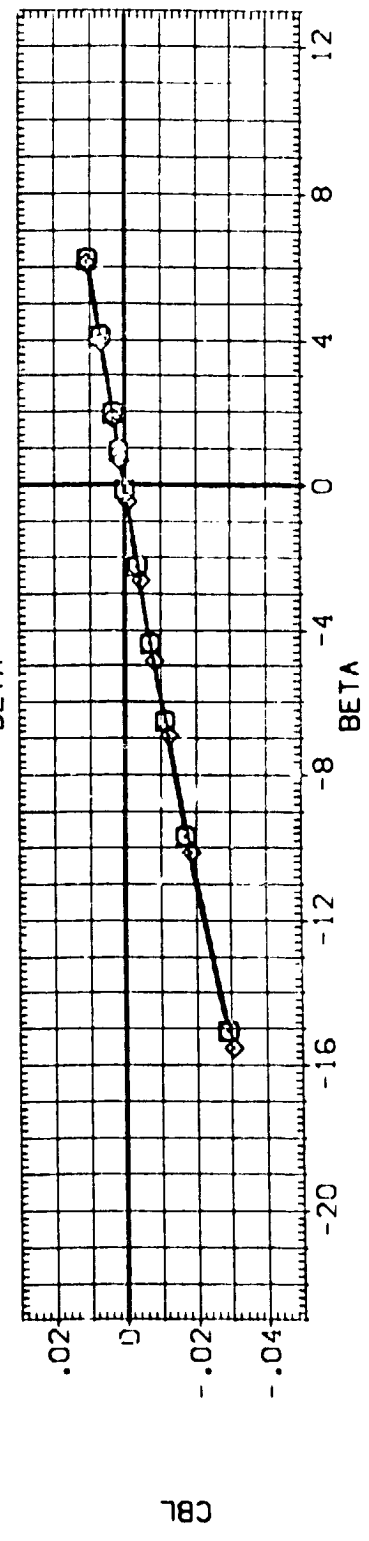
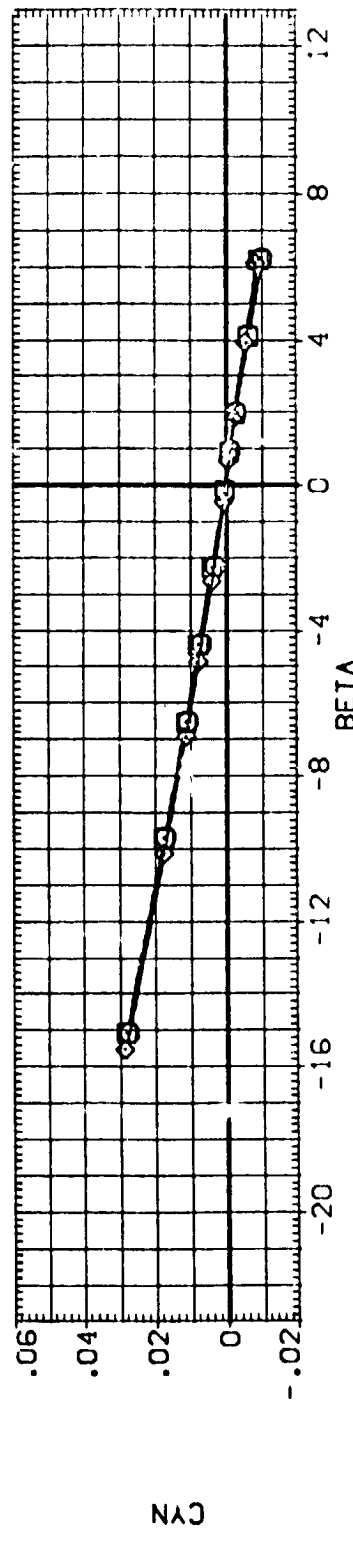
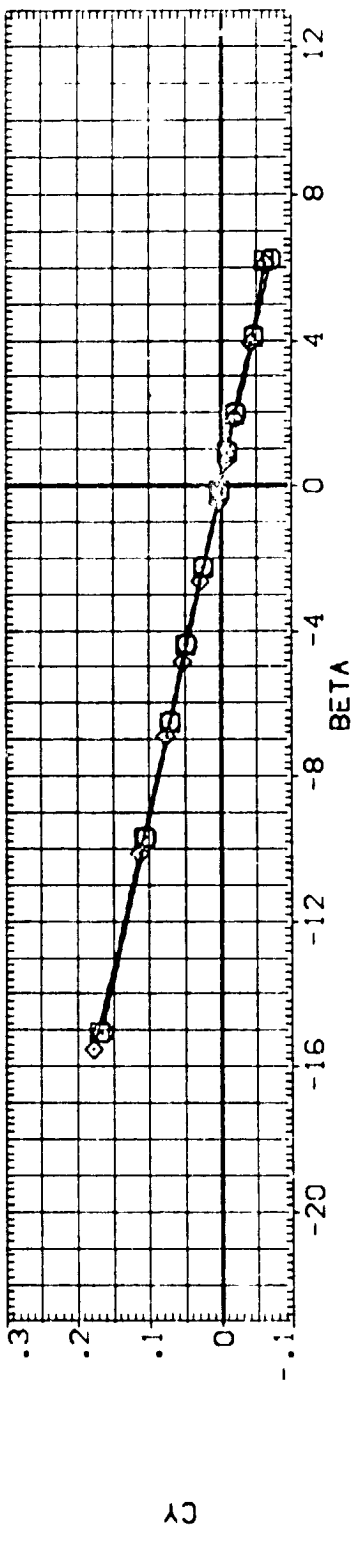


FIG. 10 TARE YAW RUNS AT ALPHA = 0.0 DEG.

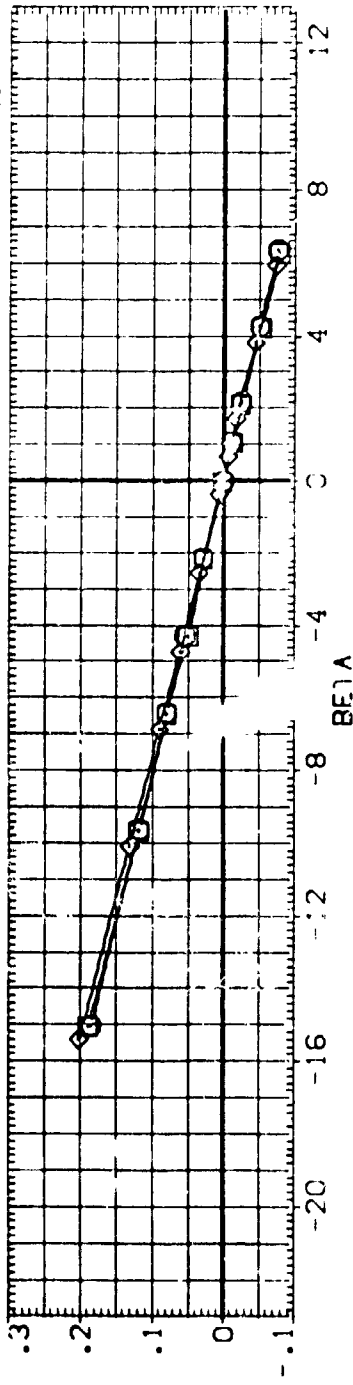
(C)MACH = .80

DATA SET SYMBOL (YER007) (YER010) (YER016) (YER017)

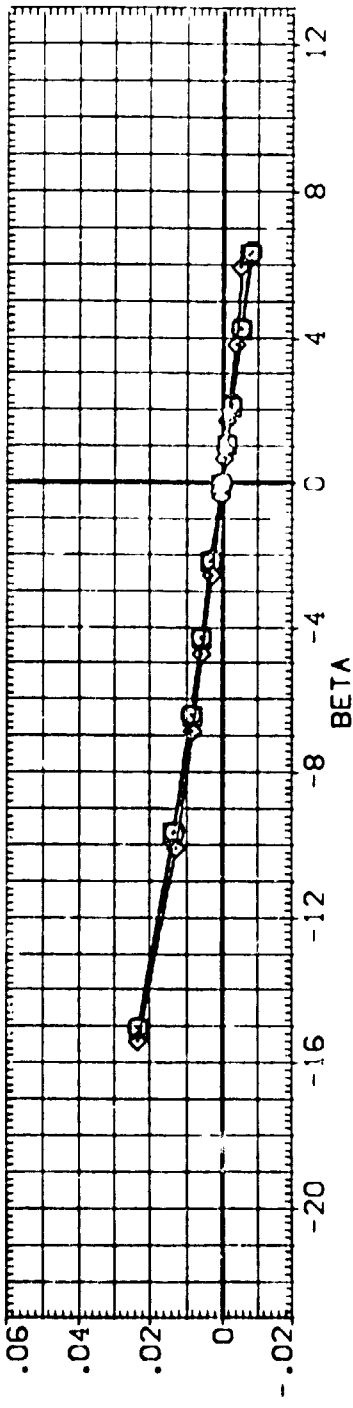
CONFIGURATION DESCRIPTION
 ARC 66-709 OASS CA11A-(N24 RS V8)*STRUT+DUM STING
 ARC 66-709 OASS CA11A-(N24 RS V8)*STRUT
 ARC 66-709 OASS CA11A-(RS V8)*STRUT
 DATA NOT AVAILABLE

ALPHA .000
 ELEVON .000
 BOFLAP -11.700

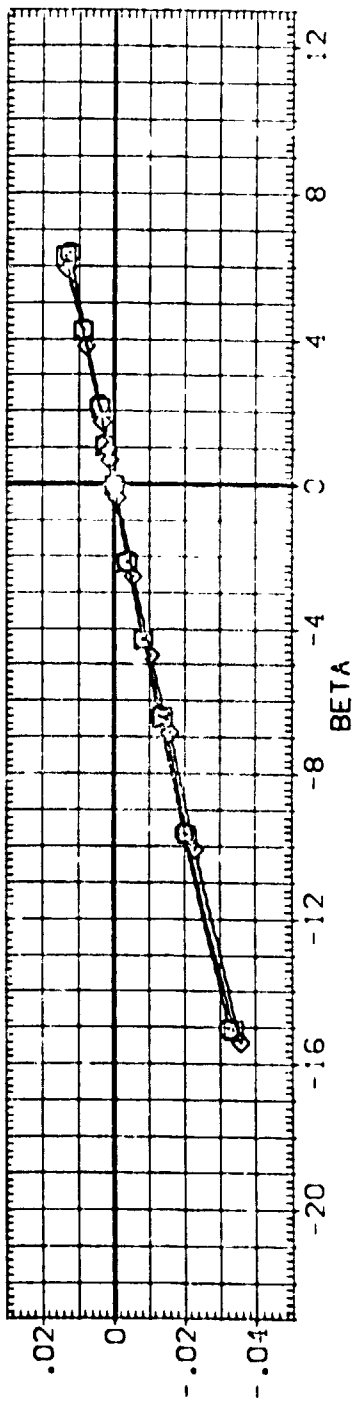
REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



CY



CYN



CBL

FIG. 10 TARE YAW RUNS AT ALPHA = 0.0 DEG.

(D)MACH = .90



DATA SET SYMBOL: (VER007) (VER010) (VER016) (VER017)
 CONFIGURATION DESCRIPTION: ARC 66-709 DASS DA11A-(N24 RS V8)+STRUT+DUM STAG; ARC 66-709 DASS DA11A-(N24 RS V8)+STRUT; ARC 66-709 DASS DA11A-(RS V8)+STRUT; ARC 66-709 DASS DA11A-(RS V8)+STRUT
 REFERENCE INFORMATION: SREF .6053 SC.FT.; LREF .5935 F.; BREF 1.110 F.; XMRP 12.6755 IN.; ZMRP .0000 IN.; SCALE .0150

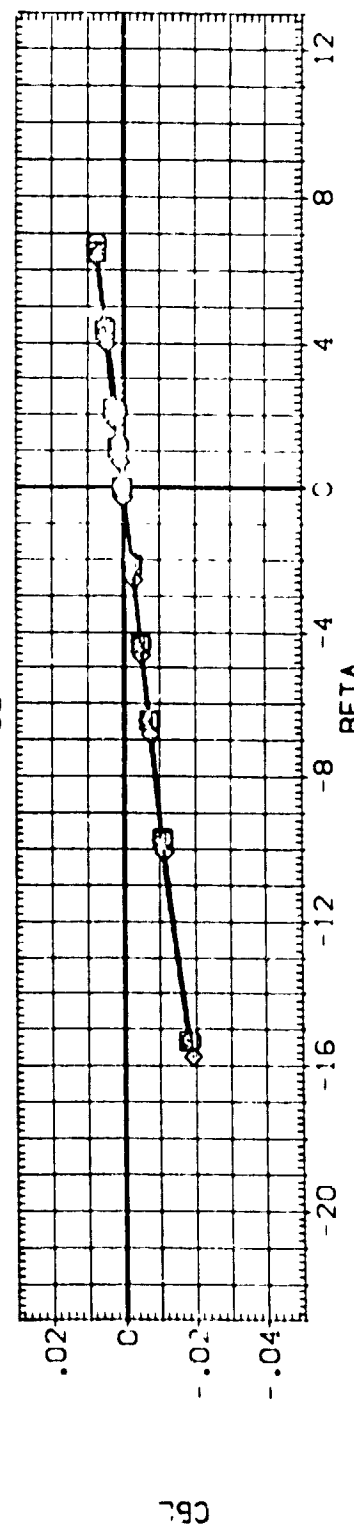
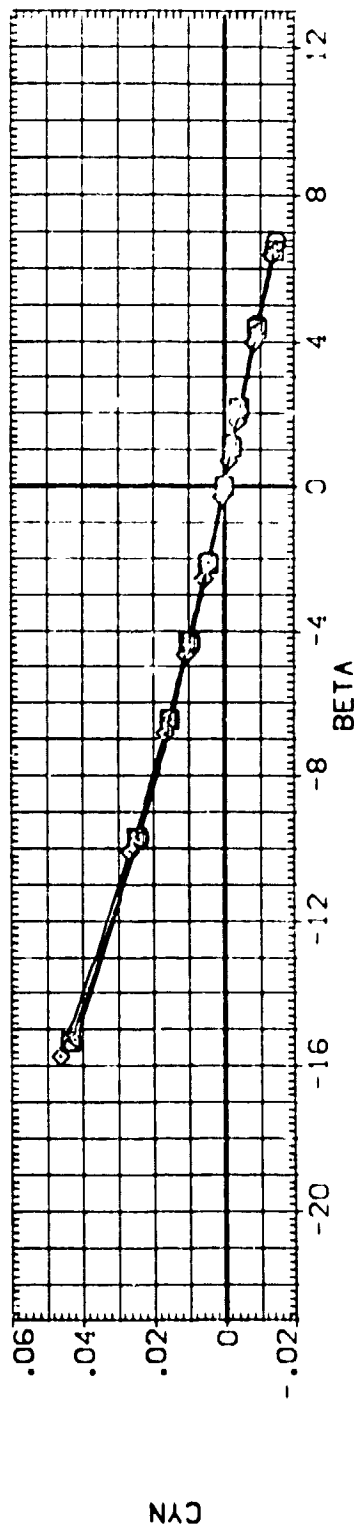
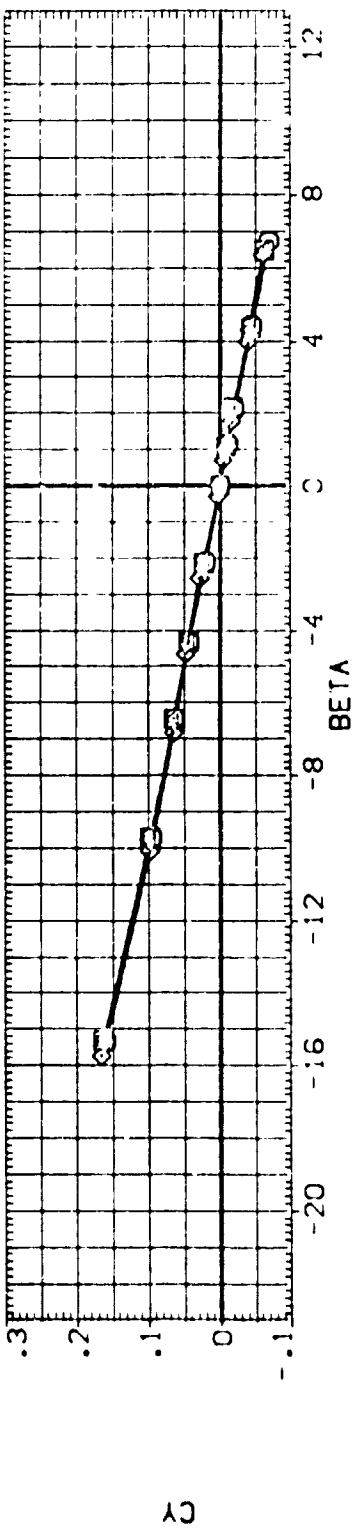


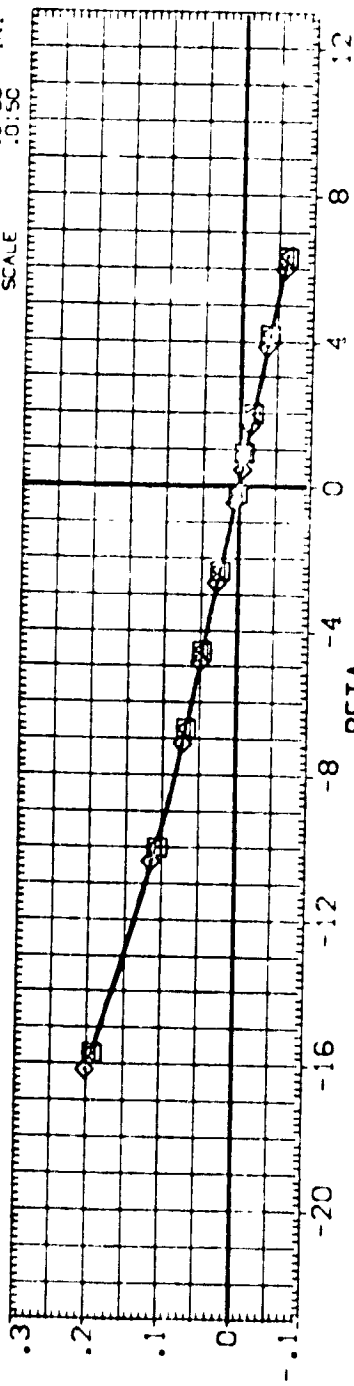
FIG. 10 TARE YAW RUNS AT ALPHA = 0.0 DEG.

(E)MAC = .20

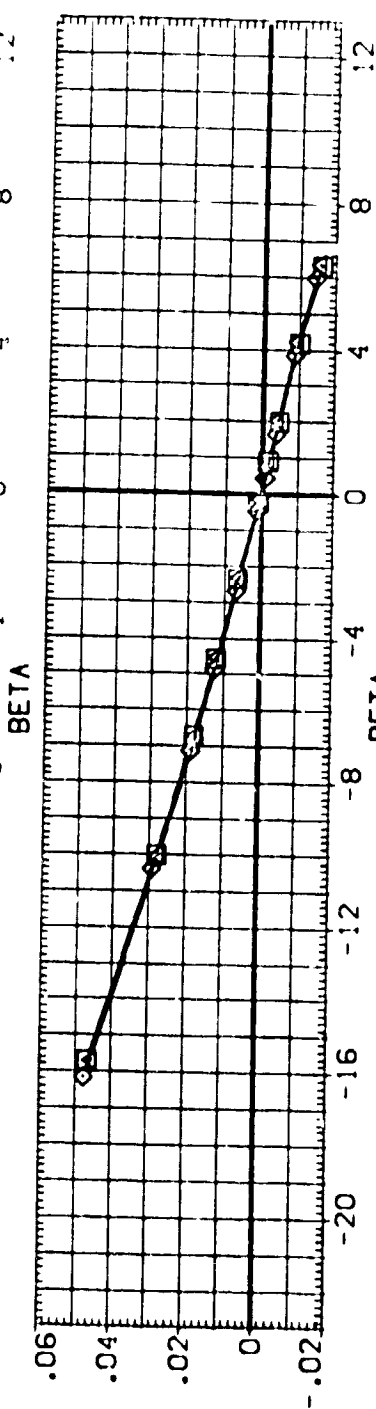
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (YER007) DATA NOT AVAILABLE
 (YER010) ARC 66-709 DA59 CA11A-(N24 RS V8)*STRUT
 (YER016) ARC 66-709 DA59 CA11A-(RS V8)*STRUT
 (YER017) ARC 66-709 DA59 CA11A-(RS V8)*STRUT

ALPHA ELEVON BOFLAP
 .000 .000 -11.700
 .000 .000 -11.700
 .000 .000 -11.700
 .000 .000 -11.700

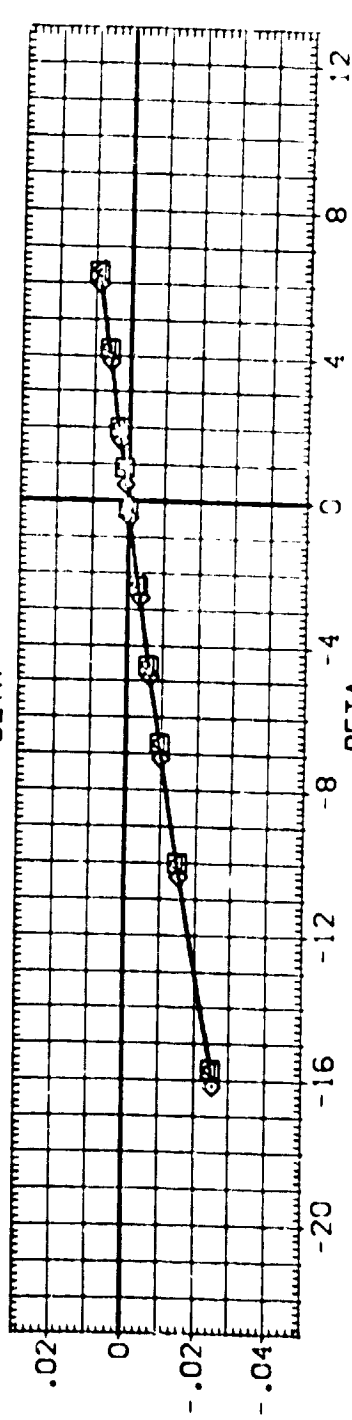
REFERENCE INFORMATION
 SREF .6053 50.FT.
 LREF .5936 FT.
 BRCE 1.1710 FT.
 YMRP 12.6755 IN.
 ZMRP .0000 IN.
 SCALE -.3750 IN.
 .0150



CY



CYN



CBL

FIG. 10 TARE YAW RUNS AT ALPHA = 0.0 DEG.

(M)MACH = 1.50



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	E: EVLN	BDF LAP	REFERENCE INFORMATION
(YER007)	ARC 66-709 DASS DA11A-(N24 RS V8)+STRUT+DUM STNG	.000	.000	-11:700	6053 SQ. FT.
(YER010)	ARC 66-709 DASS DA11A-(N24 RS V8)+STRUT	.000	.000	-11:700	5935
(YER016)	ARC 66-709 DASS DA11A-(RS V8)+STRUT	.000	.000	-11:700	11710
(YER017)	ARC 66-709 DASS DA11A-(RS V8)+STRUT	.000	.000	-11:700	126255
					.0000 IN.
					Z:RPD -3750 IN.
					SCALE 0:50

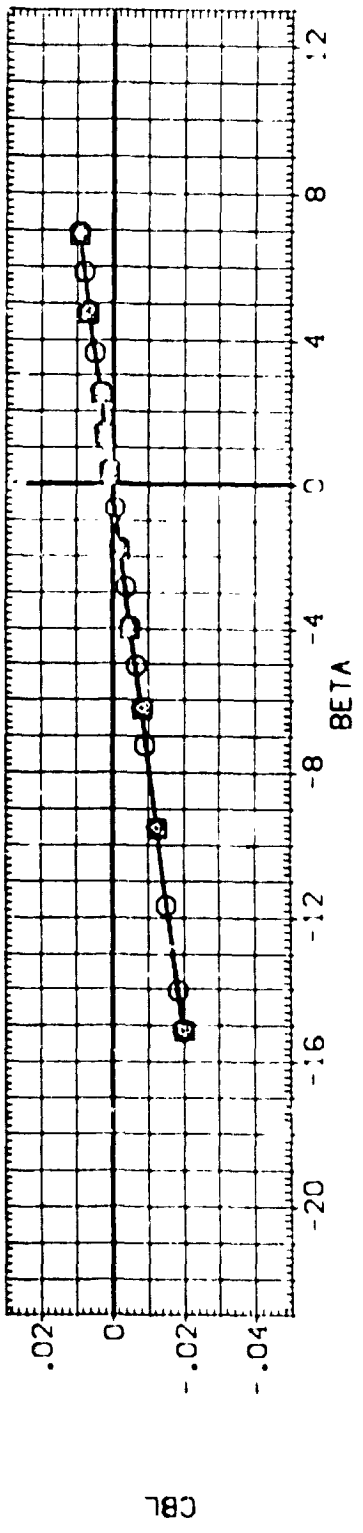
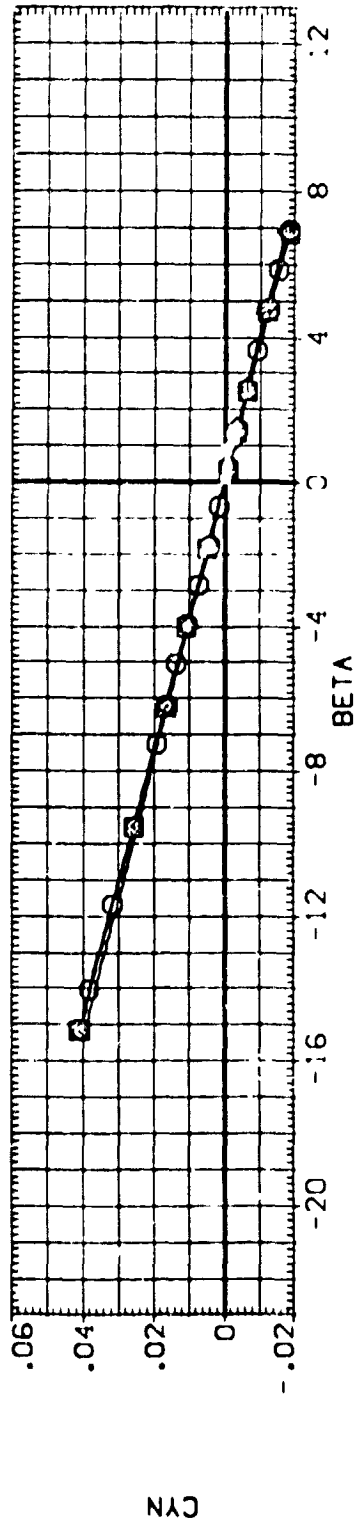
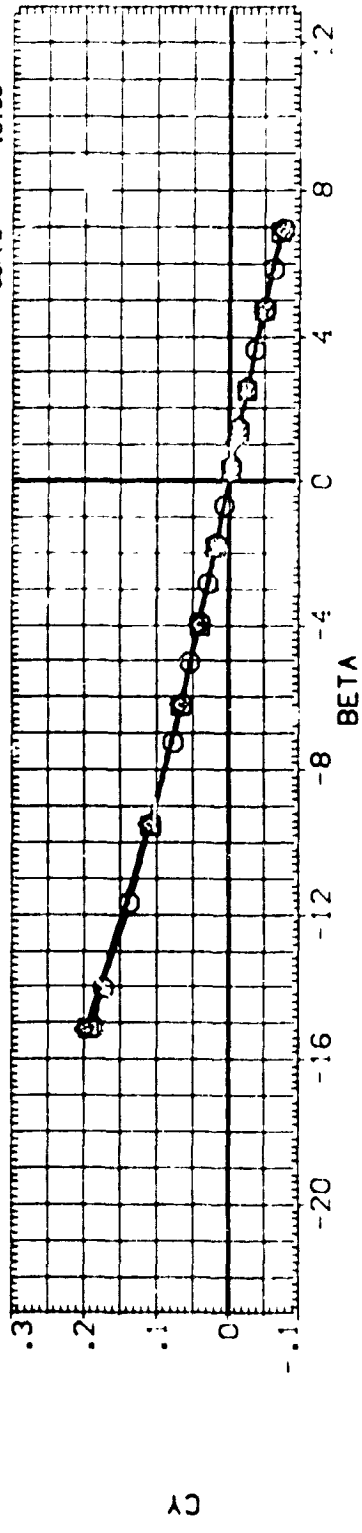


FIG. 10 TARE YAW RUNS AT ALPHA = 0.0 DEG.

(G)MACH = 2.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA ELEVATION BOFLAP

(VER008) ARC 66-709 DASS DALLA-(N24 RS V8)+STRUT+DUM STNG 10.000 000 000

(VER011) ARC 66-709 DASS DALLA-(N24 RS V8)+STRUT 10.000 000 000

(VER018) ARC 66-709 DASS DALLA-(RS V8)+STRUT 10.000 000 000

REFERENCE INFORMATION

SREF 6053 SQ.FT.

LREF 3535 FT.

BREF 1.7710 IN.

XREF 12.6255 IN.

YREF .0000 IN.

ZREF -3.7500 IN.

SCALE .0150

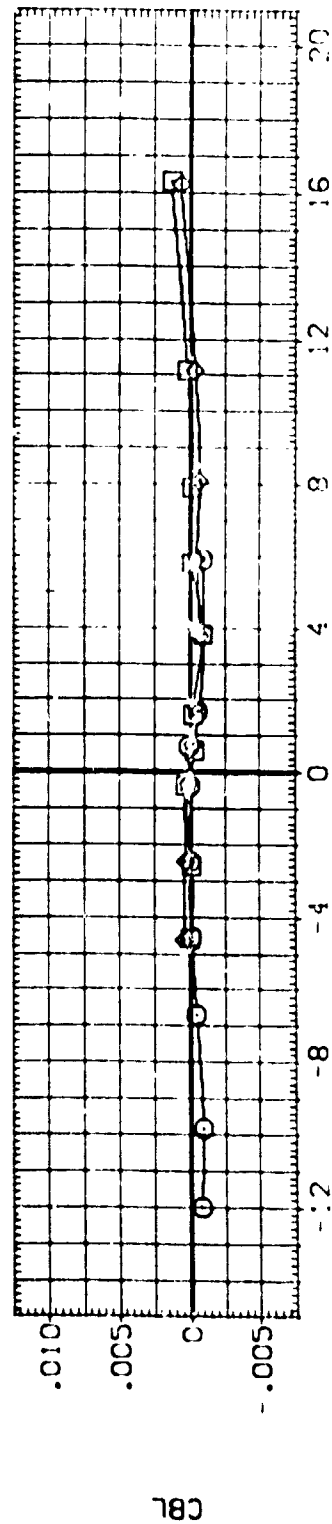
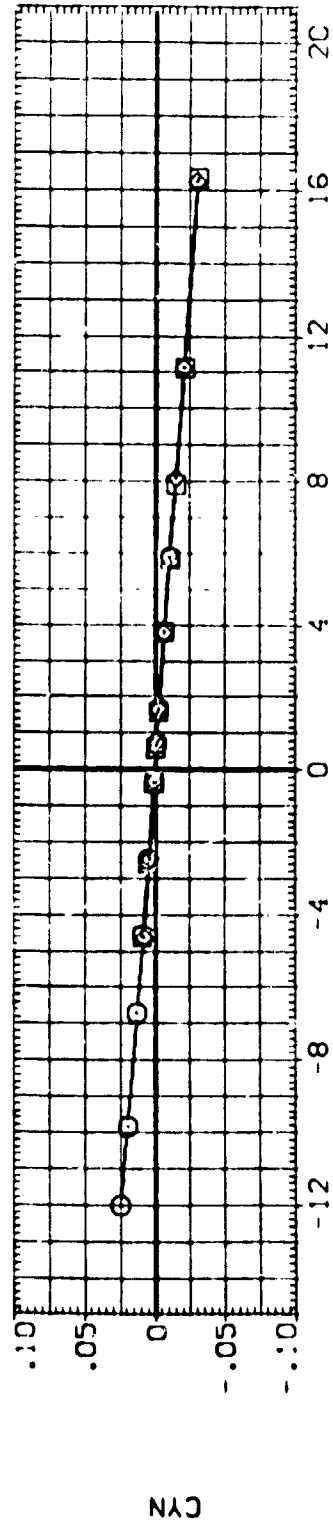
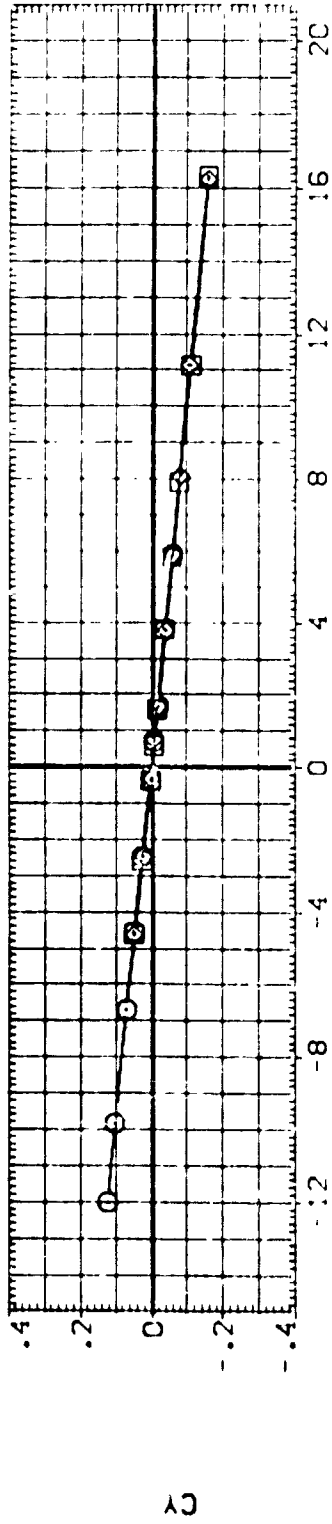


FIG. 11 TARE YAW RUNS AT ALPHA = 10.0 DEG.

(A)MACH = .60



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(YER008) ARC 66-709 DASS 0A11A-(N24 R5 V8)+STRUT+DUM STNG

(YER011) ARC 66-709 DASS 0A11A-(N24 R5 V8)+STRUT

(YER018) ARC 66-709 DASS 0A11A-(R5 V8)+STRUT

ALPHA ELEVON BOFLAP

10.000 .000 -11.700

10.000 .000 -11.700

10.000 .000 -11.700

REFERENCE INFORMATION

SREF .6053 50.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

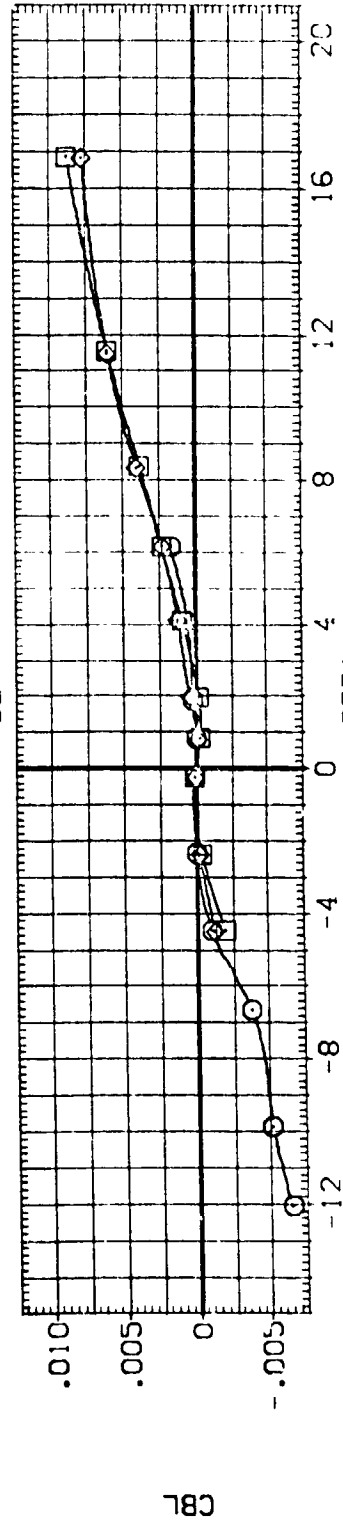
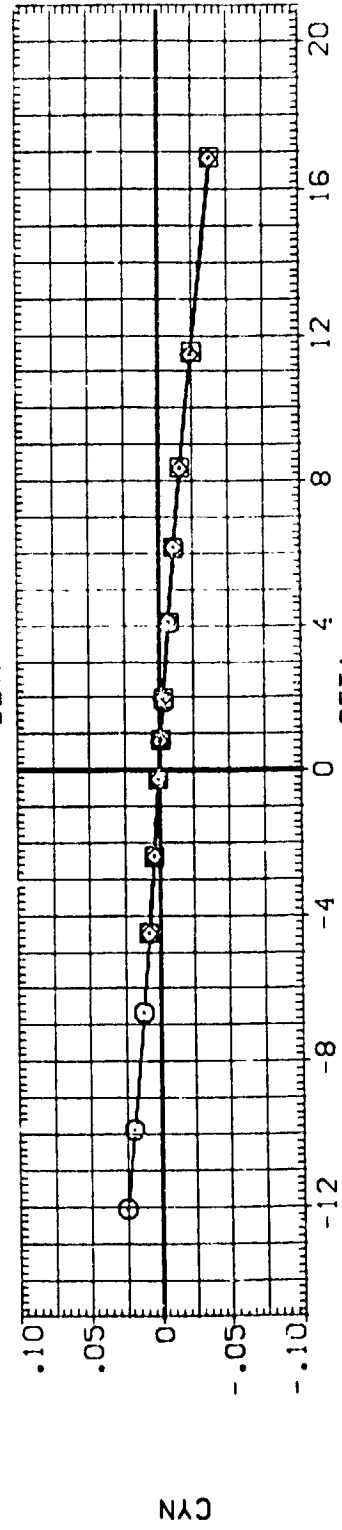
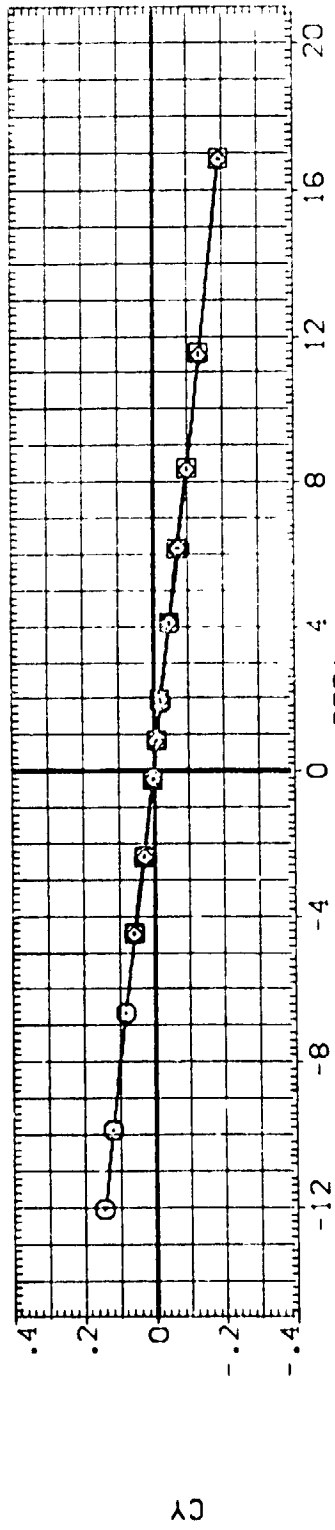


FIG. 11 TARE YAW RUNS AT ALPHA = 10.0 DEG.
(C)MACH = .80



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(YER008) ARC 66-709 0A59 0A11A-(N24 RS V8)+STRUT+DUM STNG

(YER011) ARC 66-709 0A59 0A11A-(N24 RS V8)+STRUT

(YER018) ARC 66-709 0A59 0A11A-(RS V8)+STRUT

ALPHA ELEVON BDFLAP

10.000 .000 -11.700

10.000 .000 -11.700

10.000 .000 -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5935 FT.

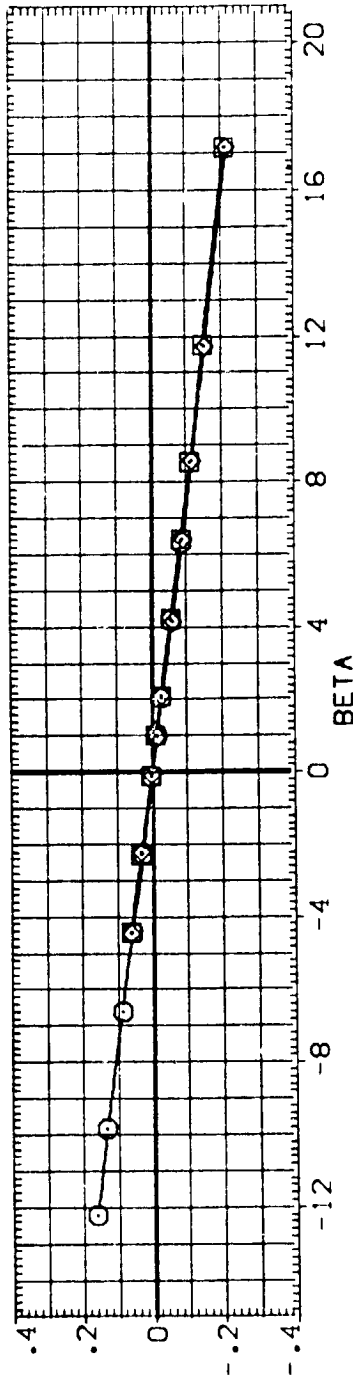
BREF 1.1710 FT.

XMRP 12.6255 IN.

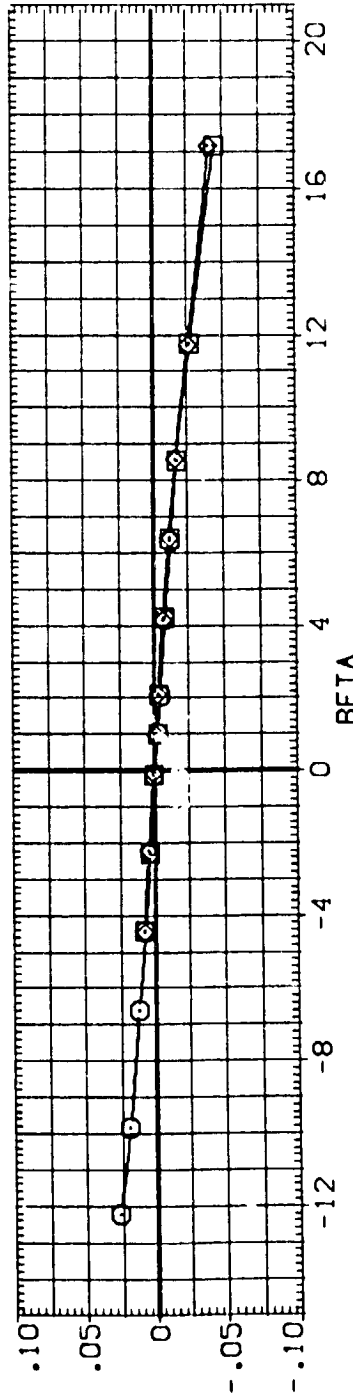
YMRP .0000 IN.

ZMRP -.3750 IN.

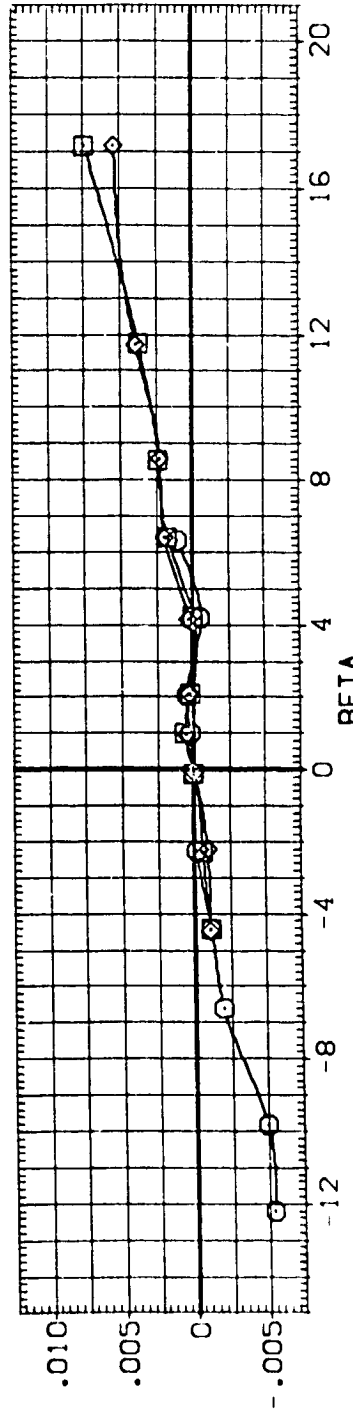
SCALE .0153



CY



CYN



CBL

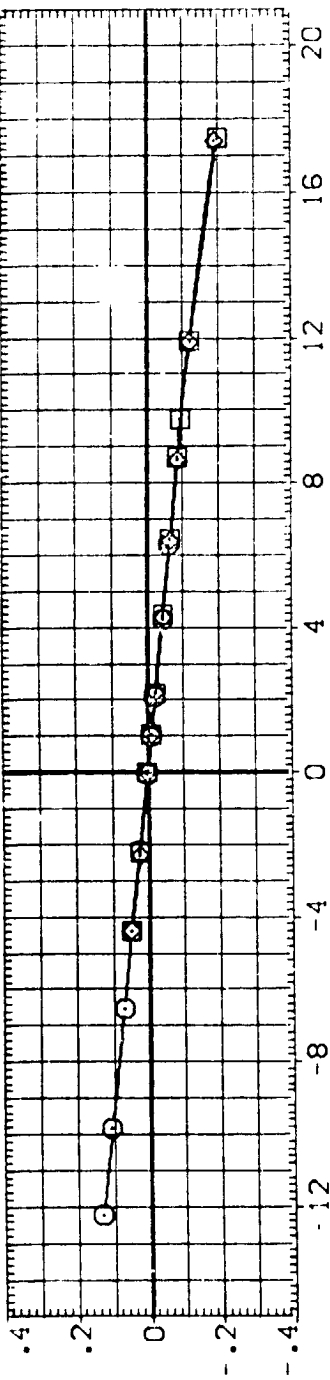
FIG. 11 TARE YAW RUNS AT ALPHA = 10.0 DEG.

(0)MACH = .90

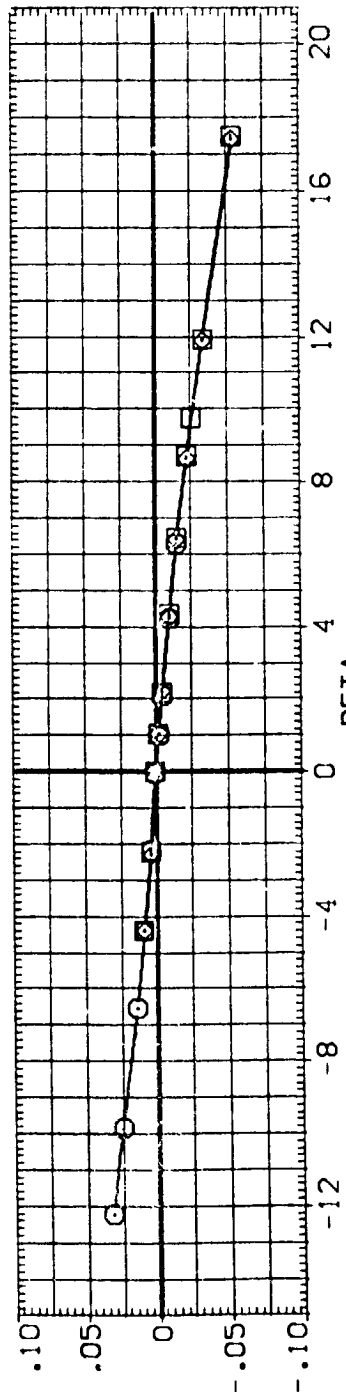
DATA SET SYMBOL
 (YER008)
 (YER011)
 (YER016)

CONFIGURATION DESCRIPTION
 ARC 66-709 OAS9 OAL1A-(N24 RS V8)+STRUT+DUM STING
 ARC 66-709 OAS9 OAL1A-(N24 RS V8)+STRUT
 ARC 66-709 OAS9 OAL1A-(RS V8)+STRUT

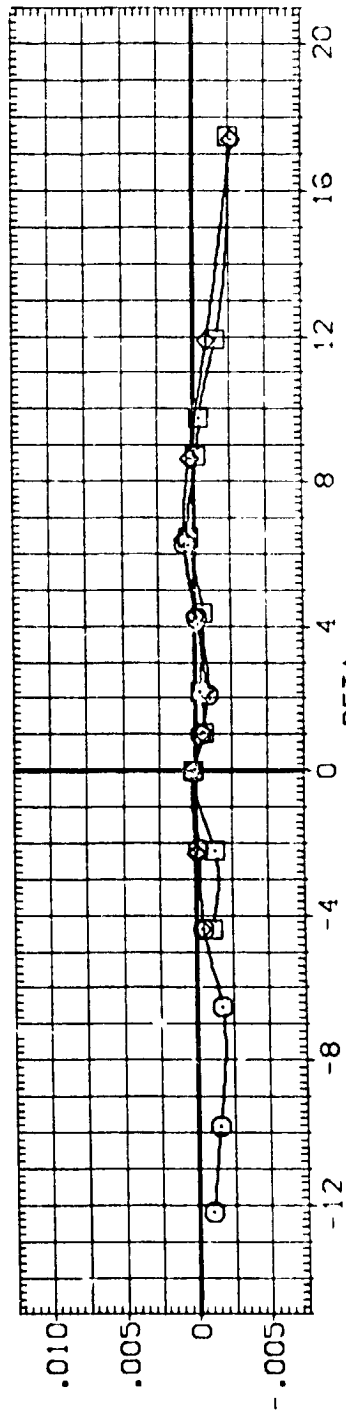
ALPHA ELEVATION BOFLAP
 10.000 .000 -11.700
 10.000 .000 -11.700
 10.000 .000 -11.700



CY



CYN



CBL

FIG. 11 TARE YAW RUNS AT ALPHA = 10.0 DEG.

(E)MACH = 1.20



DATA SET SYMBOL (YER008) (YER011) (YER018)

CONFIGURATION DESCRIPTION
 DATA NOT AVAILABLE
 ARC 66-709 OAS9 OAL11A-(N24 RS V8)+STRUT
 ARC 66-709 OAS9 OAL11A-(RS V8)+STRUT

ALPHA 10.000
 ELEVON .000
 BOFLAP -11.700

REFERENCE INFORMATION
 SREF -6053 SO.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

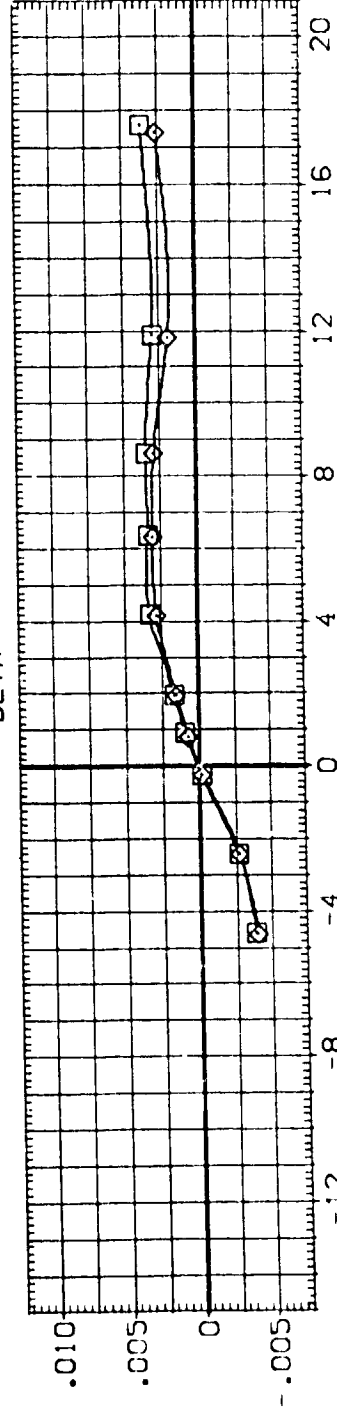
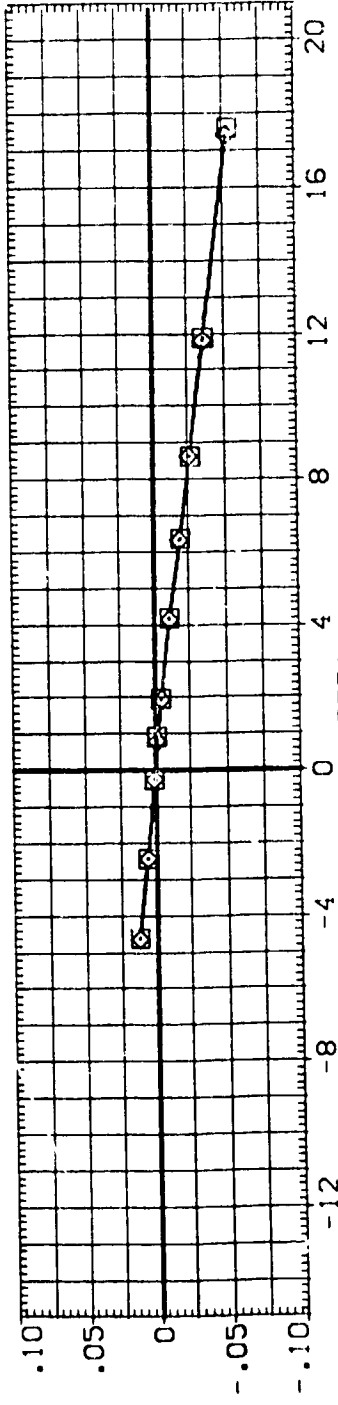
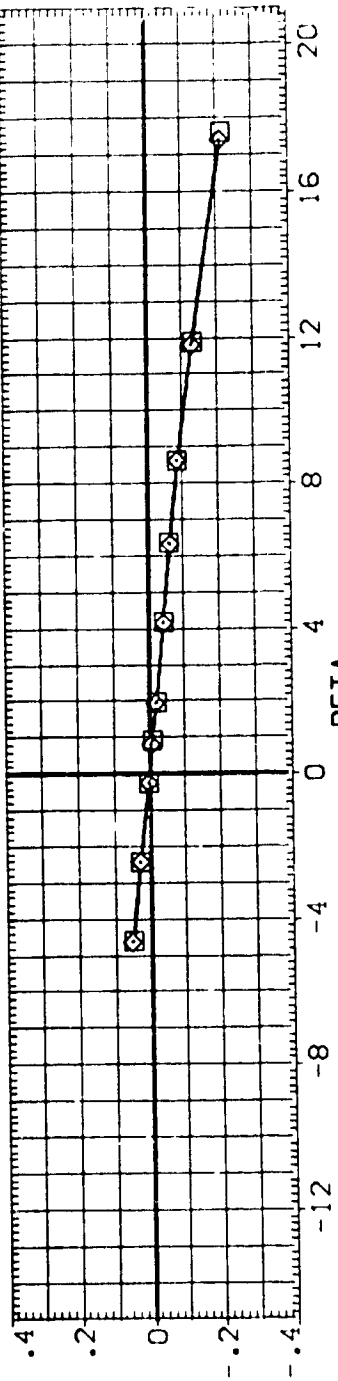


FIG. 11 TARE YAW RUNS AT ALPHA = 10.0 DEG.

(F)MACH = 1.50

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(YER008)
(YER011)
(YER018)

ARC 66-709 0A58 0A11A-(N24 RS V81)+STRUT+DUM STNG
ARC 66-709 0A59 0A11A-(N24 RS V81)+STRUT
ARC 66-709 0A59 0A11A-(RS V81)+STRUT

ALPHA 10.000
10.000
10.000

ELEV ON .000
.000
.000

BDF LAP -11.700
-11.700
-11.700

REFERENCE INFORMATION
SREF .6053 SQ.FT.
LREF .5935 F.
BREF 1.1710 F.
XMRP 12.6255 IN.
YMRP .0000 IN.
ZMRP .3750 IN.
SCALE .0150

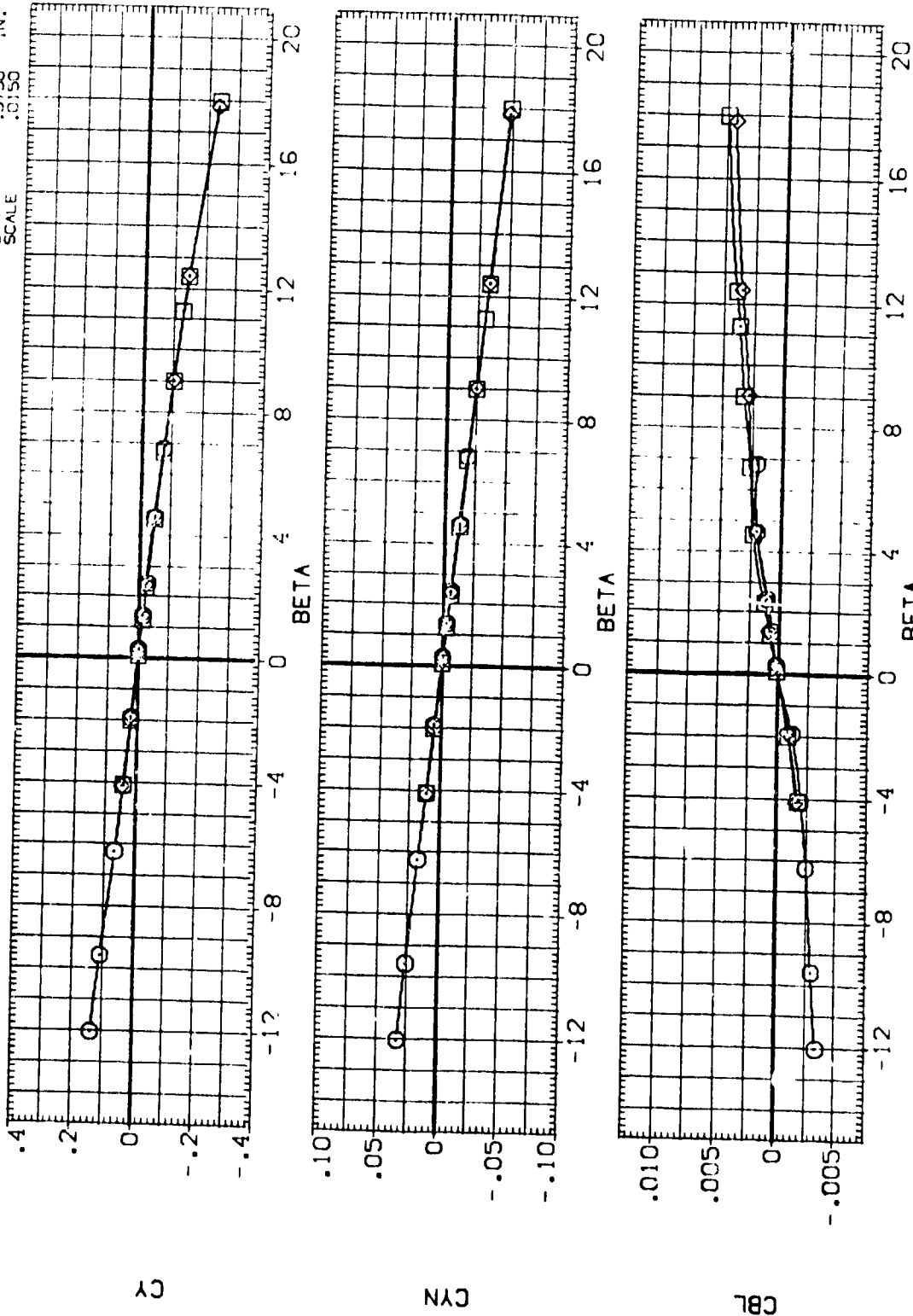


FIG. 11 TARE YAW RUNS AT ALPHA = 10.0 DEG.

(G)MACH = 2.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(1ER010) ARC 66-709 OAS9 OALIA-(N24 RS V8)+STRUT

(1ER011) ARC 66-709 OAS9 OALIA-(N24 RS V8)+STRUT

(1ER016) ARC 66-709 OAS9 OALIA-(RS V8)+STRUT

(1ER018) ARC 66-709 OAS9 OALIA-(RS V8)+STRUT

ALPHA ELEVON BOFLAP

.000 .000 -11.700

10.000 .000 -11.700

.000 .000 -11.700

10.000 .000 -11.700

REFERENCE INFORMATION

SREF 6053 SQ.FT.

LREF 5935 FT.

BREF 11710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

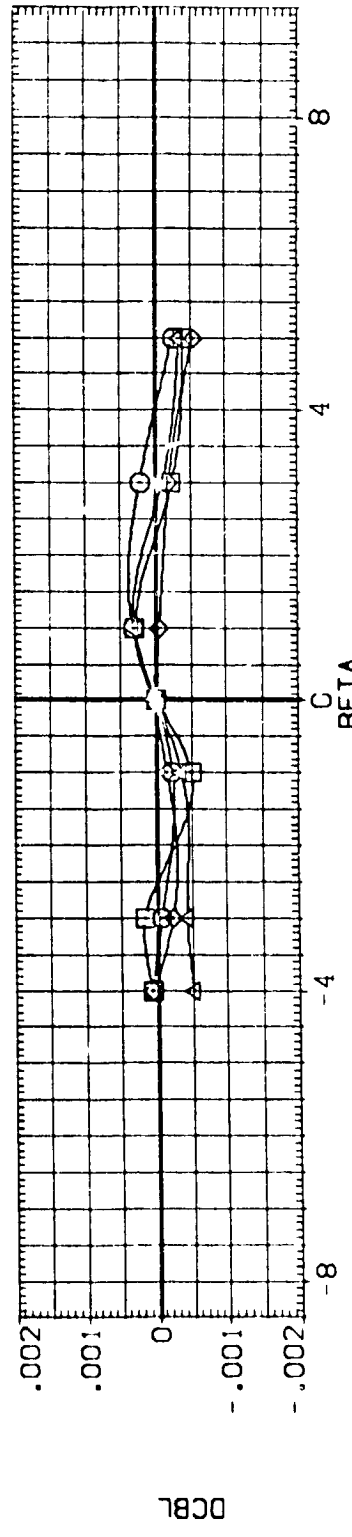
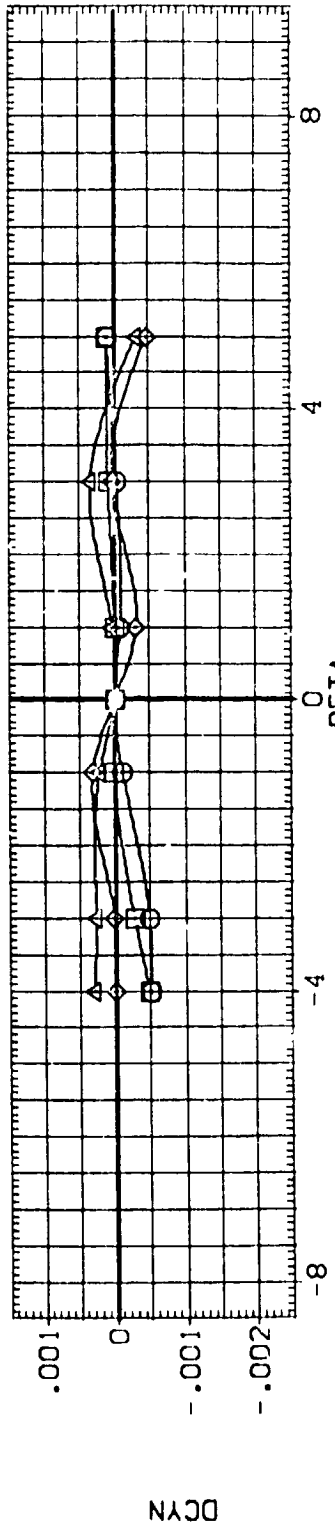
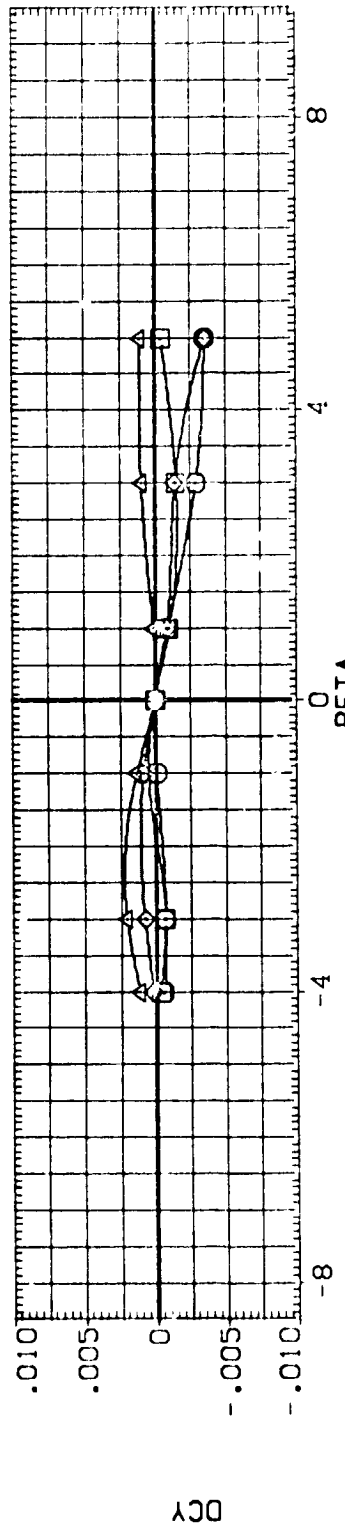


FIG. 12 YAW DATA TARES

(CAMAC) = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (1E010) DATA NOT AVAILABLE
 (1E011) ARC 66-709 OAS9 DA11A-(N24 RS V8)+STRUT
 (1E016) ARC 66-709 OAS9 DA11A-(RS V8)+STRUT
 (1E018) ARC 66-709 OAS9 DA11A-(RS V8)+STRUT

ALPHA E-EVON BDFLAP
 .000 .000 -11.700
 10.000 .000 -11.700
 .000 .000 -11.700
 10.000 .000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

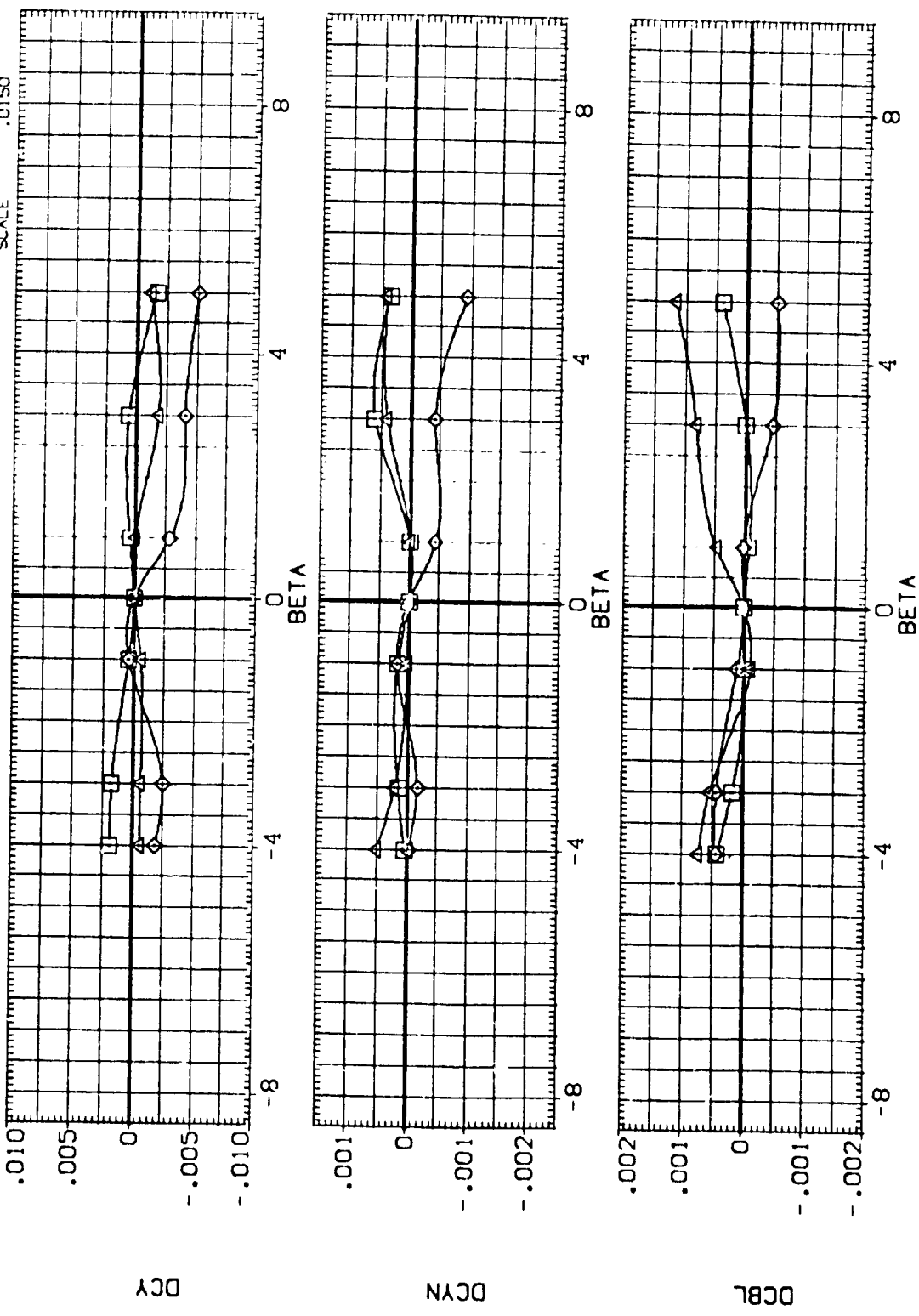


FIG. 12 YAW DATA TARES

(B)MACH = .70



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(IERO10) ARC 66-709 CAS9 CA11A-(N24 RS V8)+STRUT

(IERO11) ARC 66-709 CAS9 CA11A-(N24 RS V8)+STRUT

(IERO16) ARC 66-709 CAS9 CA11A-(RS V8)+STRUT

(IERO18) ARC 66-709 CAS9 CA11A-(RS V8)+STRUT

ALPHA ELEVON BDFLAP

.000 .000 -11.700

10.000 .000 -11.700

10.000 .000 -11.700

10.000 .000 -11.700

REFERENCE INFORMATION

SREF .6053 50.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

ZMRP .0000 IN.

SCALE -.3750 IN.

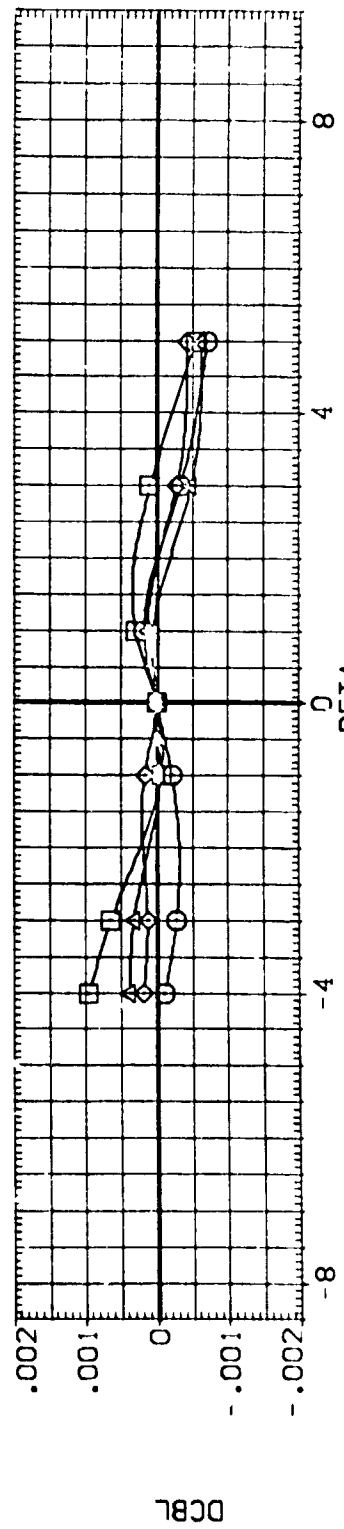
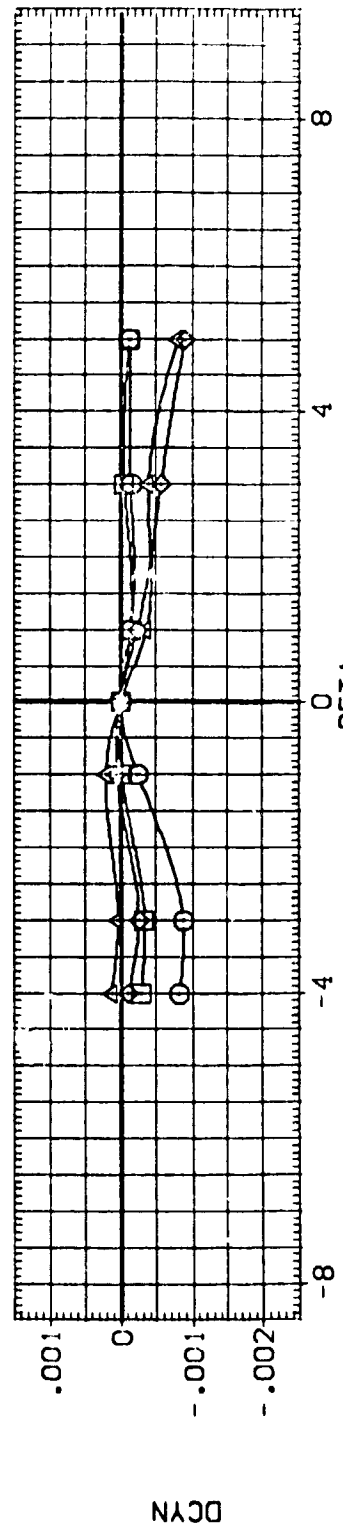
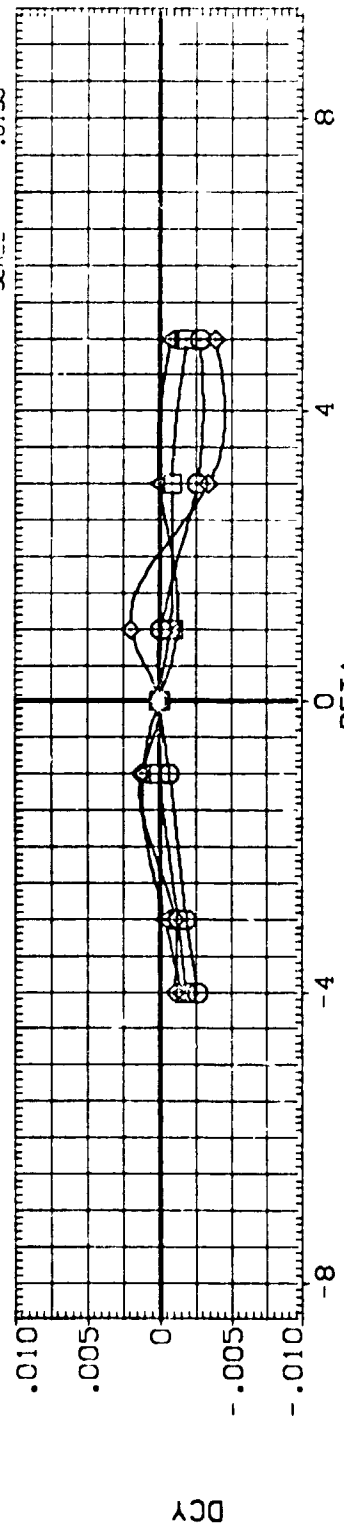


FIG. 12 YAW DATA TARES

(C)MAC = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(IERO10) ARC 66-709 DASS DA11A-(N24 RS V8)+STRUT

(IERO11) ARC 66-709 DASS DA11A-(N24 RS V8)+STRUT

(IERO16) ARC 66-709 DASS DA11A-(RS V8)+STRUT

(IERO18) ARC 66-709 DASS DA11A-(RS V8)+STRUT

ALPHA ELEVON BOFLAP

.000 .000 -11.700

10.000 .000 -11.700

10.000 .000 -11.700

REFERENCE INFORMATION

SREF .6053 SC.FT.

LREF .5935 F.T.

BREF 1.1710 F.T.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

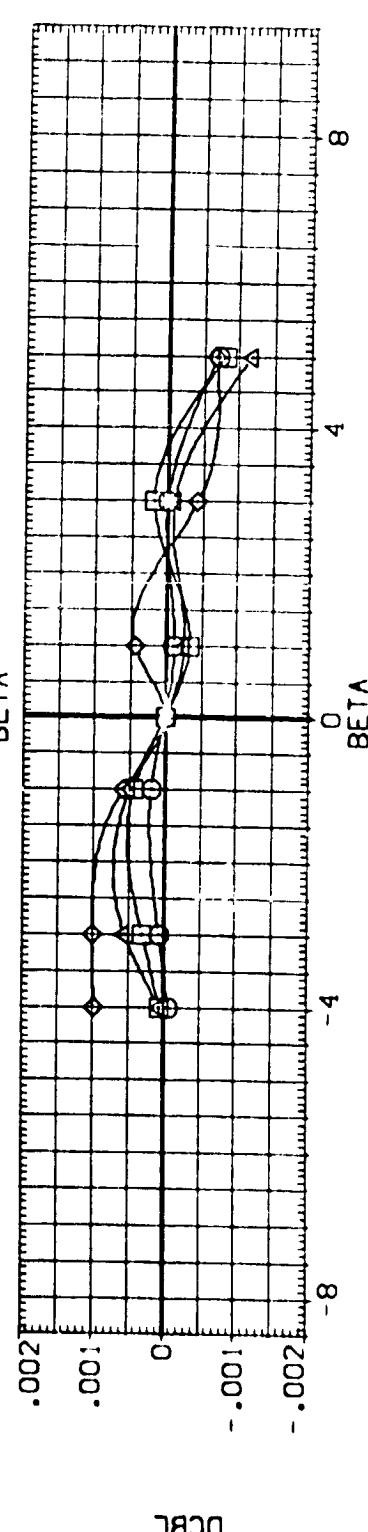
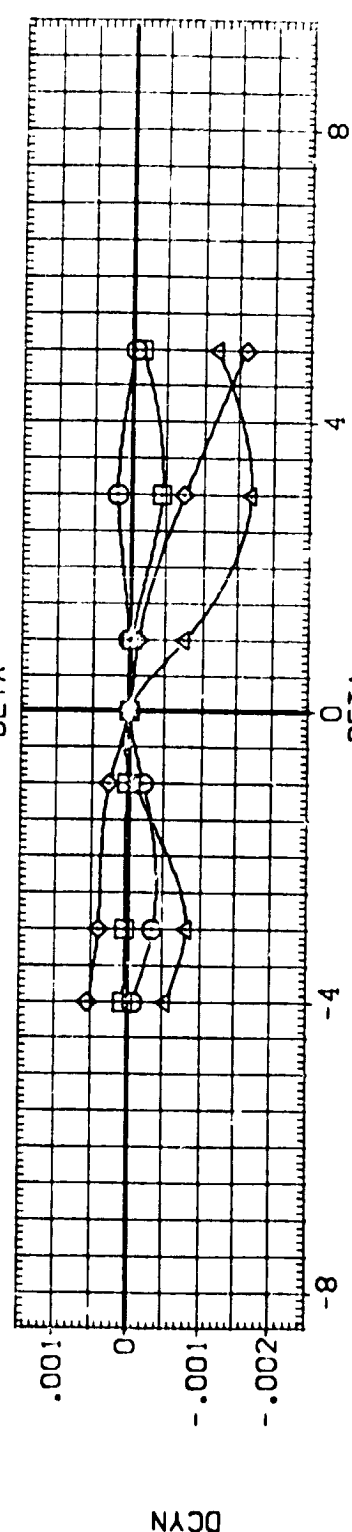
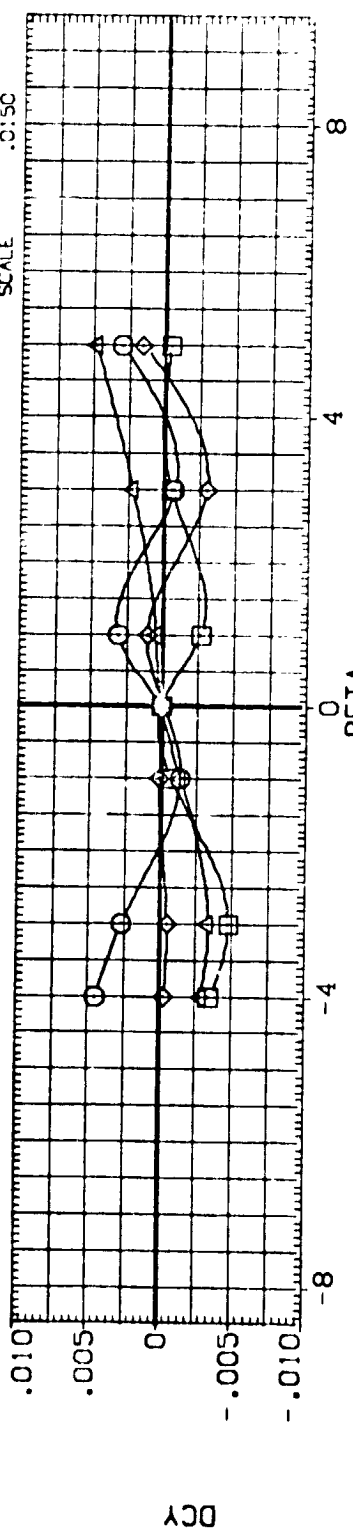


FIG. 12 YAW DATA TARES
(D)MAC: .90



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(:RC0:0) ARC 66-708 DASS 3A11A-(N24 RS V8)*STRUT

(:RC0:1) ARC 66-708 DASS 3A11A-(N24 RS V8)*STRUT

(:RC0:1) ARC 66-708 DASS 3A11A-(N24 RS V8)*STRUT

(:RC0:16) ARC 66-708 DASS 3A11A-(RS V8)*STRUT

(:RC0:18) ARC 66-708 DASS 3A11A-(RS V8)*STRUT

ALPHA ELEVON BOFLAP

.000 .000 -11.700

10.000 .000 -11.700

.000 .000 -11.700

10.000 .000 -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5935 FT.

BREF 1.7110 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

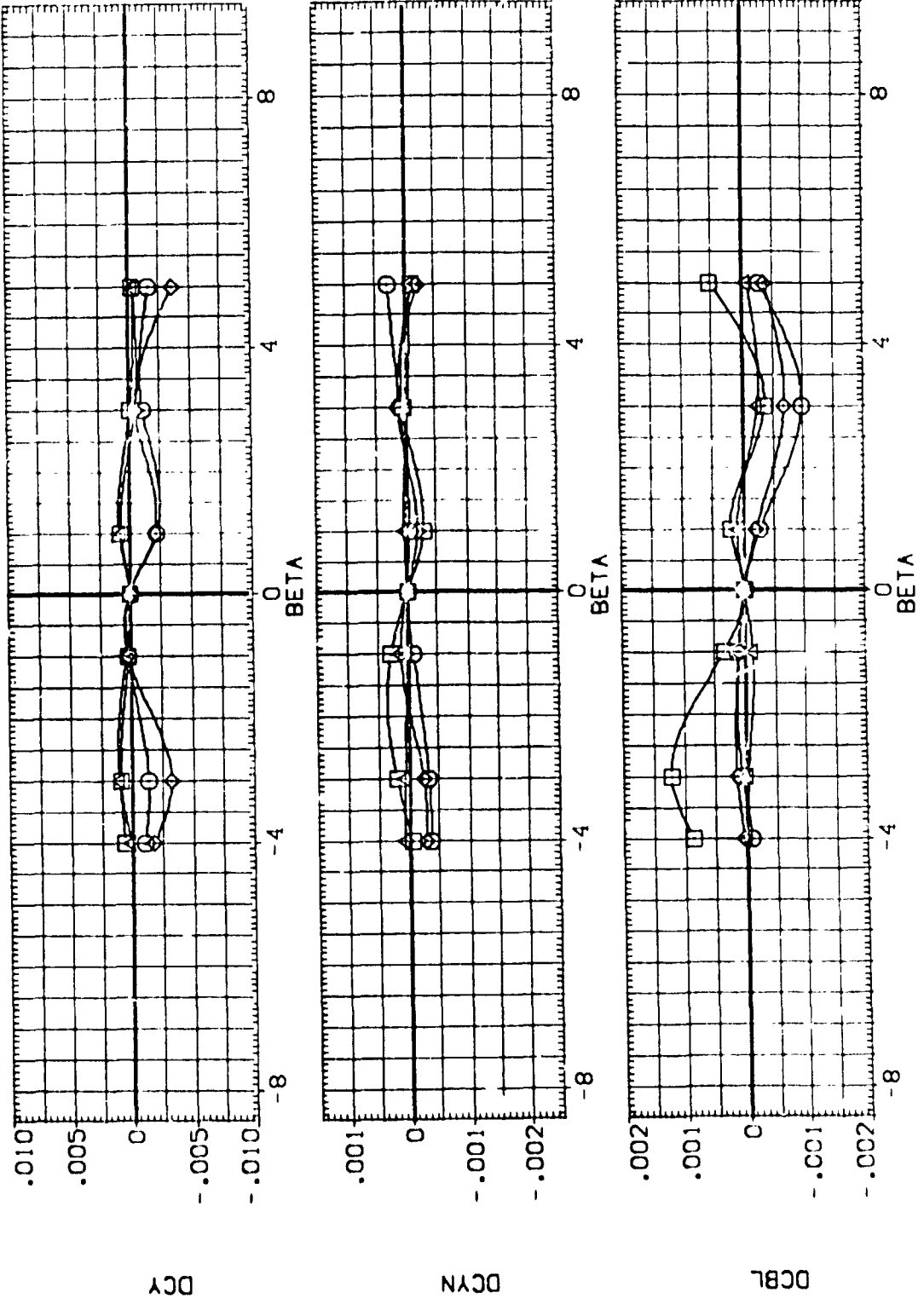


FIG. 12 YAW DATA TARES

(E)MAC = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ELEVON	BOFLAP	REFERENCE INFORMATION
(1)R010)	ARC 66-709 CAS9 D111A-(N24 R5 V8)+STRUT	.000	.000	-.11.700	SREF .6053 SQ.FT.
(1)R011)	ARC 66-709 CAS9 D111A-(N24 R5 V8)+STRUT	10.000	.000	-.11.700	LREF .5935 FT.
(1)R016)	ARC 66-709 CAS9 D111A-(R5 V8)+STRUT	.000	.000	-.11.700	BREF 1.1710 FT.
(1)R018)	ARC 66-709 CAS9 D111A-(R5 V8)+STRUT	10.000	.000	-.11.700	VMAP 12.6255 IN.
					ZMAP .0000 IN.
					SCALE .0150 IN.

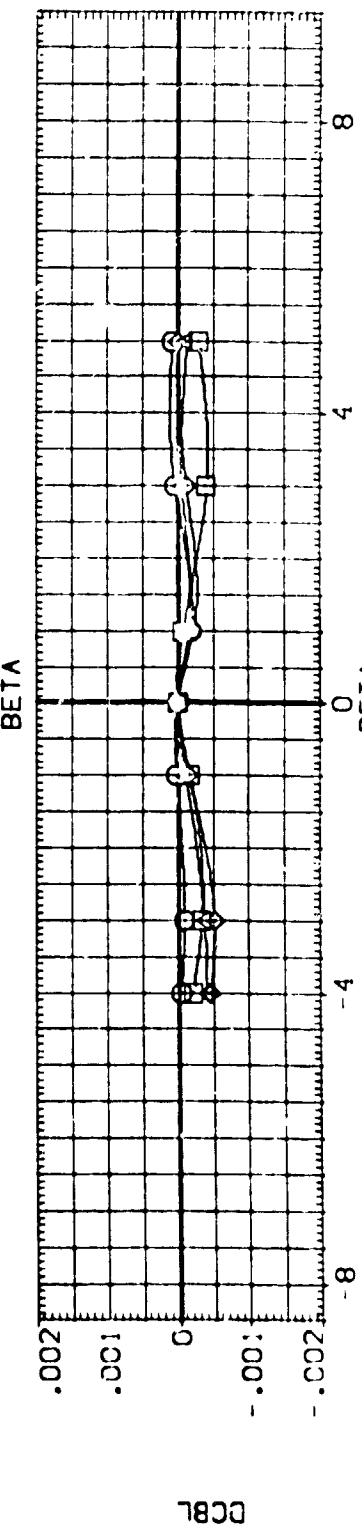
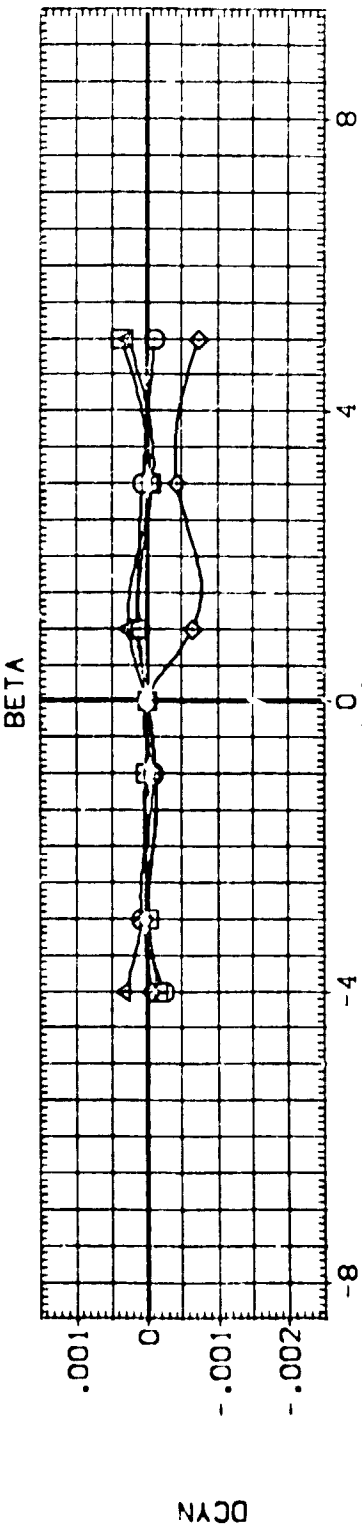
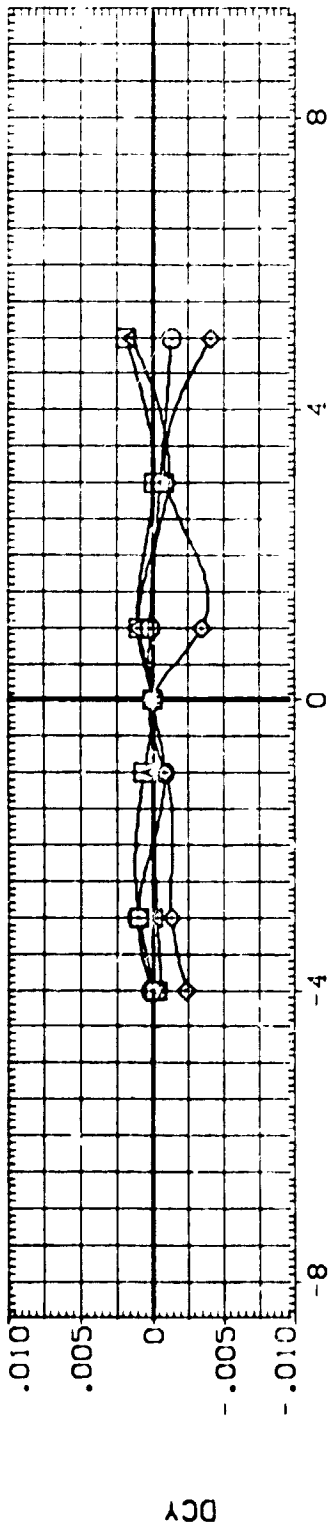


FIG. 12 YAW DATA TARES

(F)MAC: 2.00



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CERO19) ARC 66-709 OAS9 D111A-(N24)
 (CERO20) ARC 66-709 OAS9 D111A-(N24)
 (CERO19) ARC 66-709 OAS9 D111A-N24 (ADJUSTED FOR TARES)
 (CERO20) ARC 66-709 OAS9 D111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 50.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6755 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

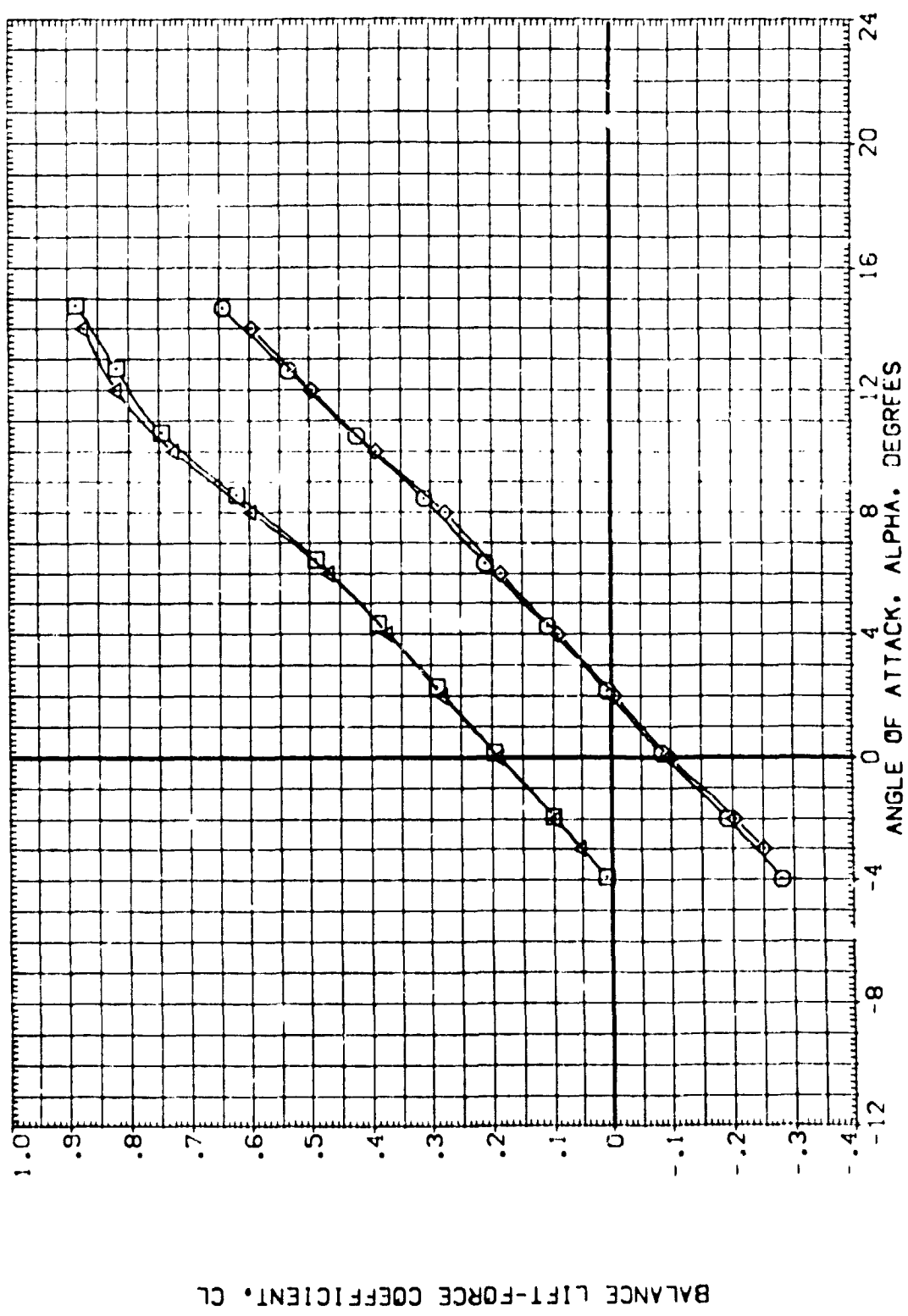


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CER019) ARC 66-709 OA59 OA11A-N24
 (CER020) ARC 66-709 OA59 OA11A-N24
 (CER019) ARC 66-709 OA59 O11A-N24 (ADJUSTED FOR TARES)
 (CER020) ARC 66-709 OA59 O11A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDF LAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF 63753 SQ.FT.
 REF 59365 FT.
 BRK 12 IN.
 XMRD 12 IN.
 YMRD 12 IN.
 ZMRD 12 IN.
 SCALE 0.50

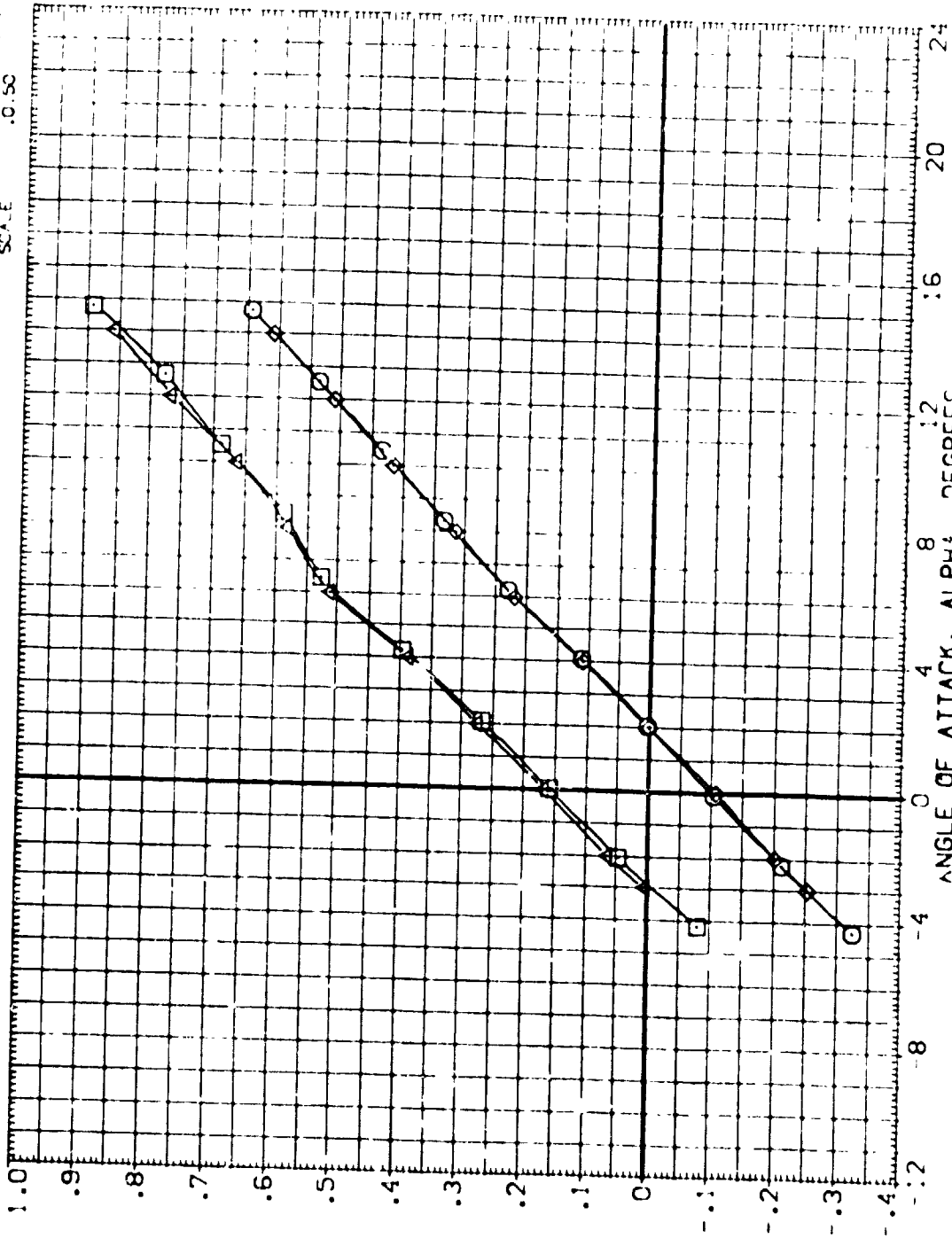


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

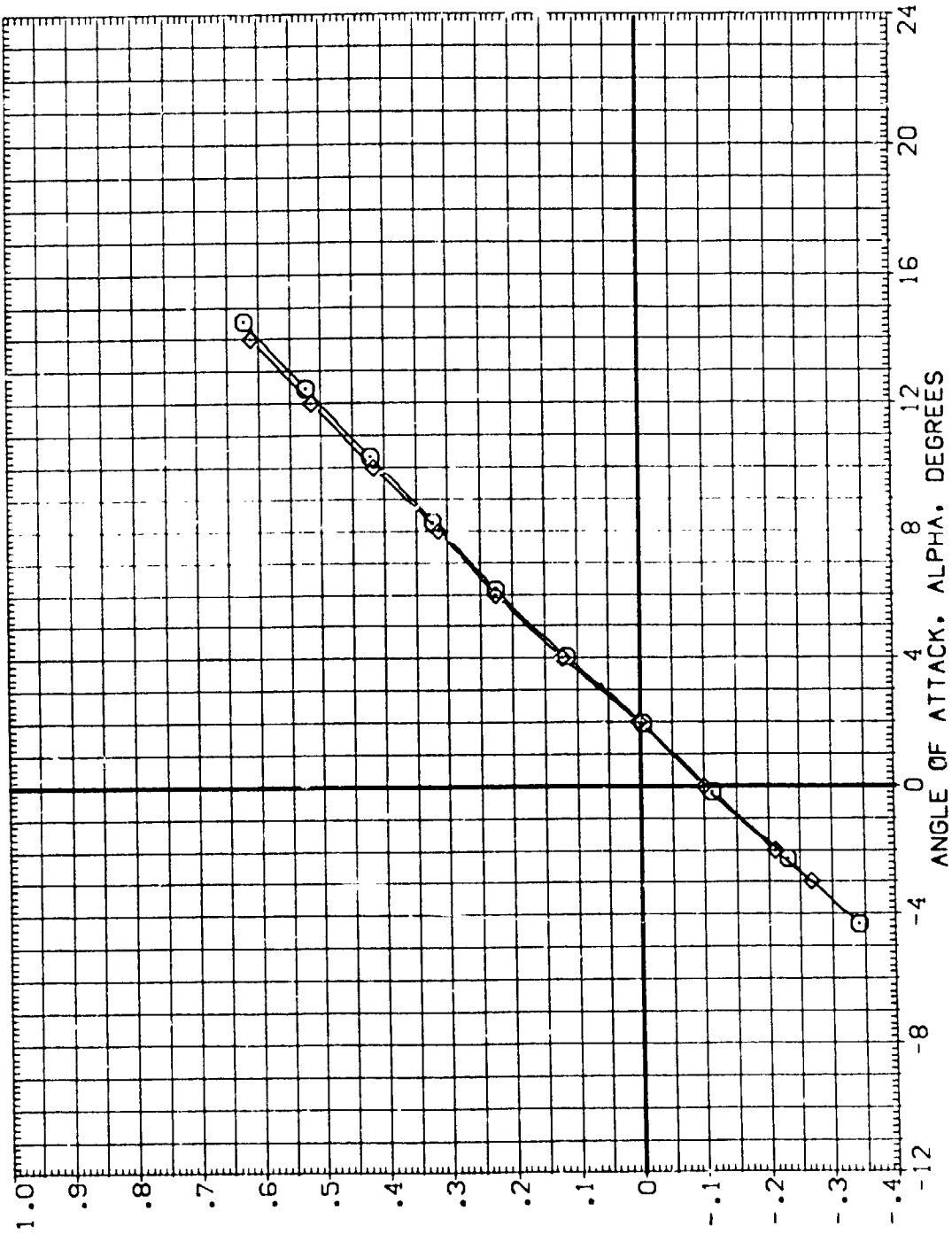
(B)M.C. = .80



REFERENCE INFORMATION
 SREF .6053 SO.FT.
 CREF .5935 FT.
 BRFP 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 .000 -11.700
 .000 .000 -11.700
 .000 .000 -11.700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CER019) ARC 66-709 OAS9 0A11A-(N24)
 (CER020) DATA NOT AVAILABLE
 (IER019) ARC 66-709 0759 0111A-N24 (ADJUST 3 FOR TARES)
 (IER020) DATA NOT AVAILABLE



BALANCE LIFT-FORCE COEFFICIENT, CL

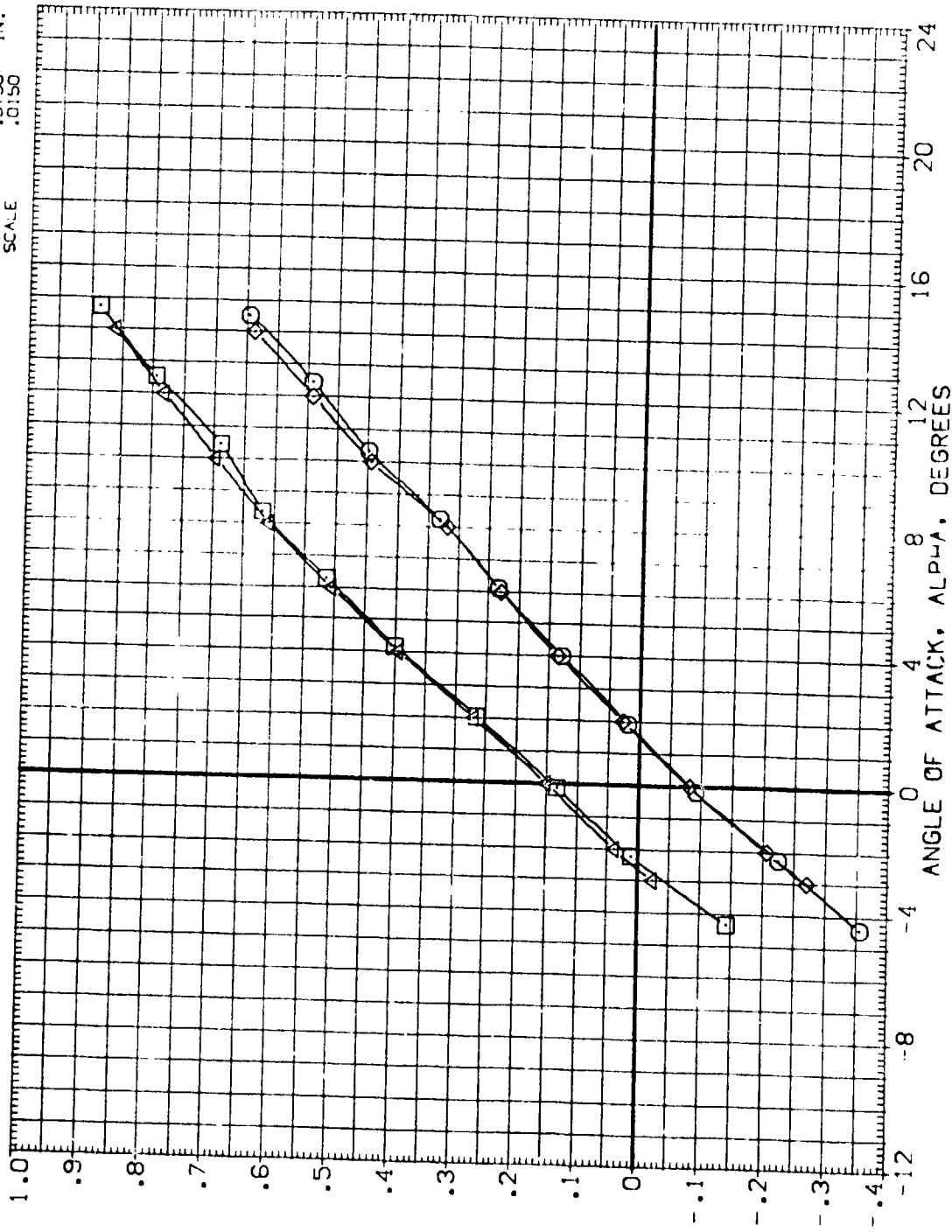
FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .85

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CERO19) □ ARC 66-709 DA59 O11A-(N24)
 (CERO20) ○ ARC 66-709 DA59 O11A-(N24)
 (CERO19) □ ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)
 (CERO20) ○ ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDF LAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.710 FT.
 XMRP 12.6755 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



BALANCE LIFT-FORCE COEFFICIENT, CL

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C)JMAC90



DATA SET SYMBOL
 (CFR019)
 (CFR020)
 (CFR019)
 (CFR020)

CONFIGURATION DESCRIPTION
 ARC 66-709 OAS9 0111A-(N24)
 DATA NOT AVAILABLE
 ARC 66-709 OAS9 0111A-N24 (ADJUSTED FOR TARES)
 DATA NOT AVAILABLE

BETA
 .000
 .000
 .000
 .000

ELEVON
 .000
 15.000
 .000
 15.000

BOFLAP
 -11.700
 -11.700
 -11.700
 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 YMRP 12.6235 IN.
 ZMRP .0000 IN.
 SCALE -.3750 IN.
 .0150

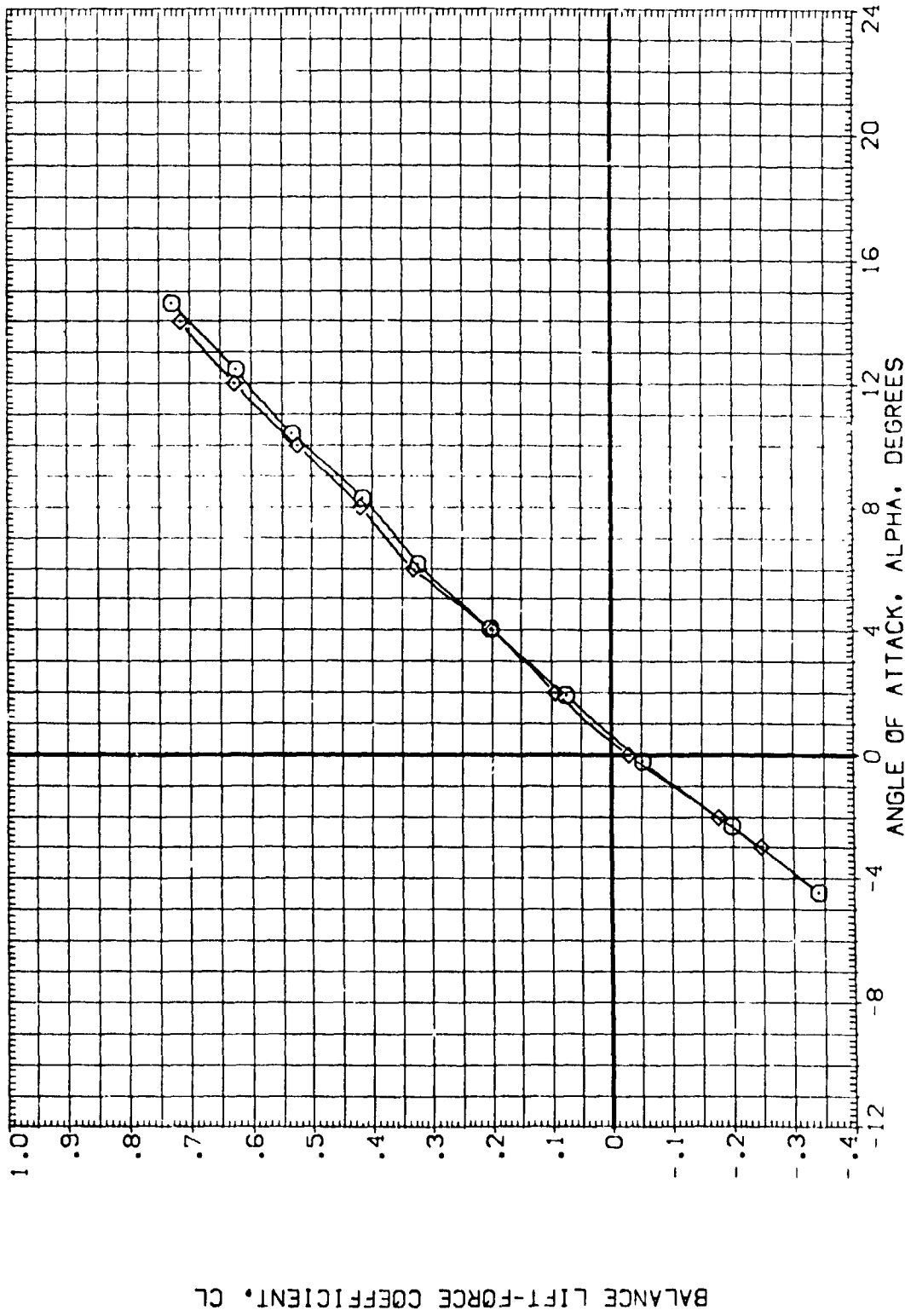


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C)MAG = .95

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 F.
 BRFL 1.2716 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 .000 -11.700
 .000 .000 -11.700
 .000 .000 -11.700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CERO19) O O ARC 66-709 DASS O11A-(N24)
 (CERO20) O X ARC 66-709 DASS O11A-(N24)
 (IERO19) X O ARC 66-709 DASS O11A-N24 (ADJUSTED FOR TARES)
 (IERO20) X X ARC 66-709 DASS O11A-N24 (ADJUSTED FOR TARES)

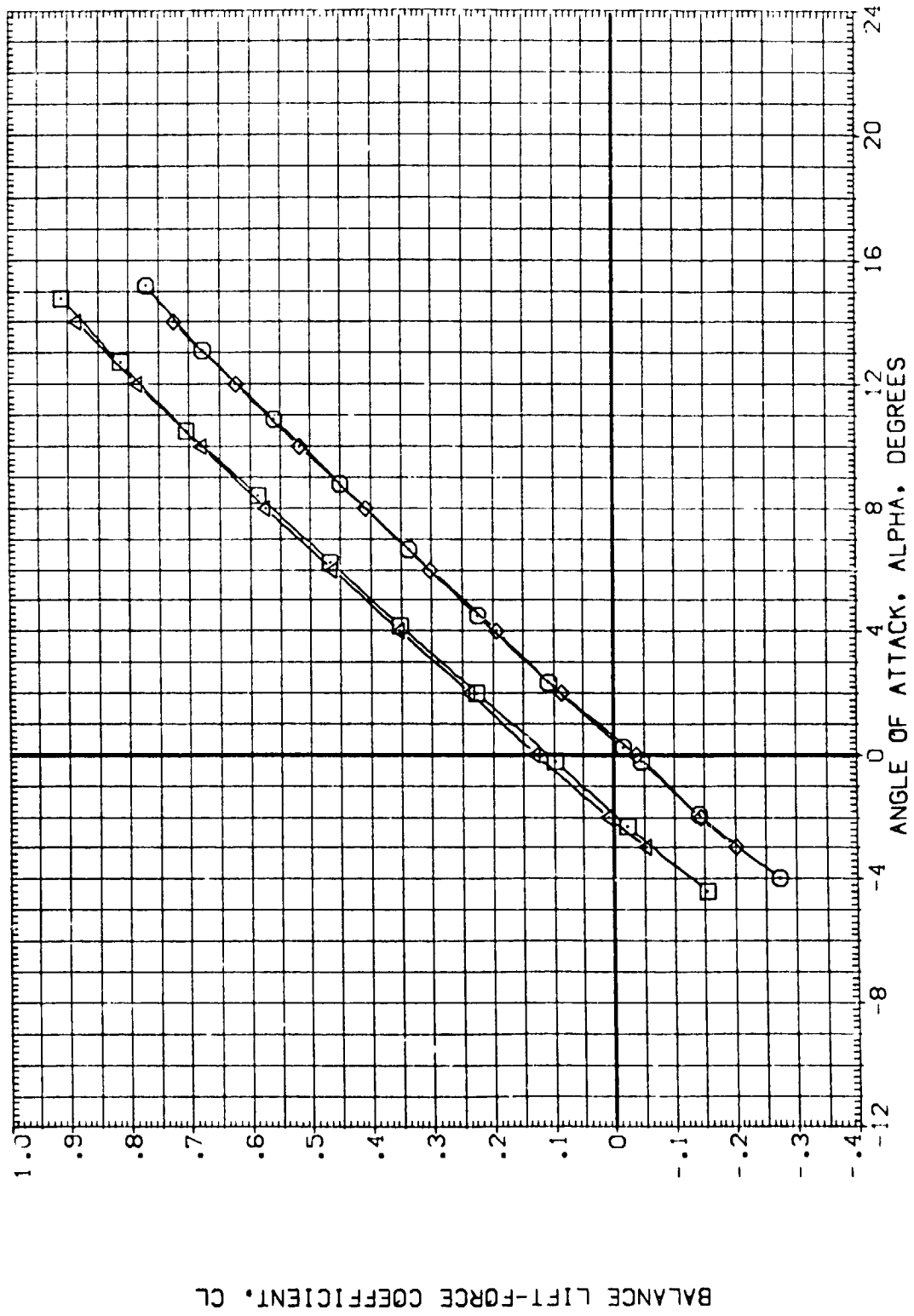


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(F)MACH = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(1ER019)	ARC 66-709 OAS9 O11A-N24	.000	.000	-11.700	SREF .6053 SO.FT.
(1ER020)	ARC 66-709 OAS9 O11A-N24	.000	15.000	-11.700	LPEF .5935 FT.
(1ER019)	ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	BREF 1.1710 FT.
(1ER020)	ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)	.000	15.000	-11.700	XMRP 12.6255 IN.
					YMRP .0000 IN.
					ZMRP -.3750 IN.
					SCALE .0150

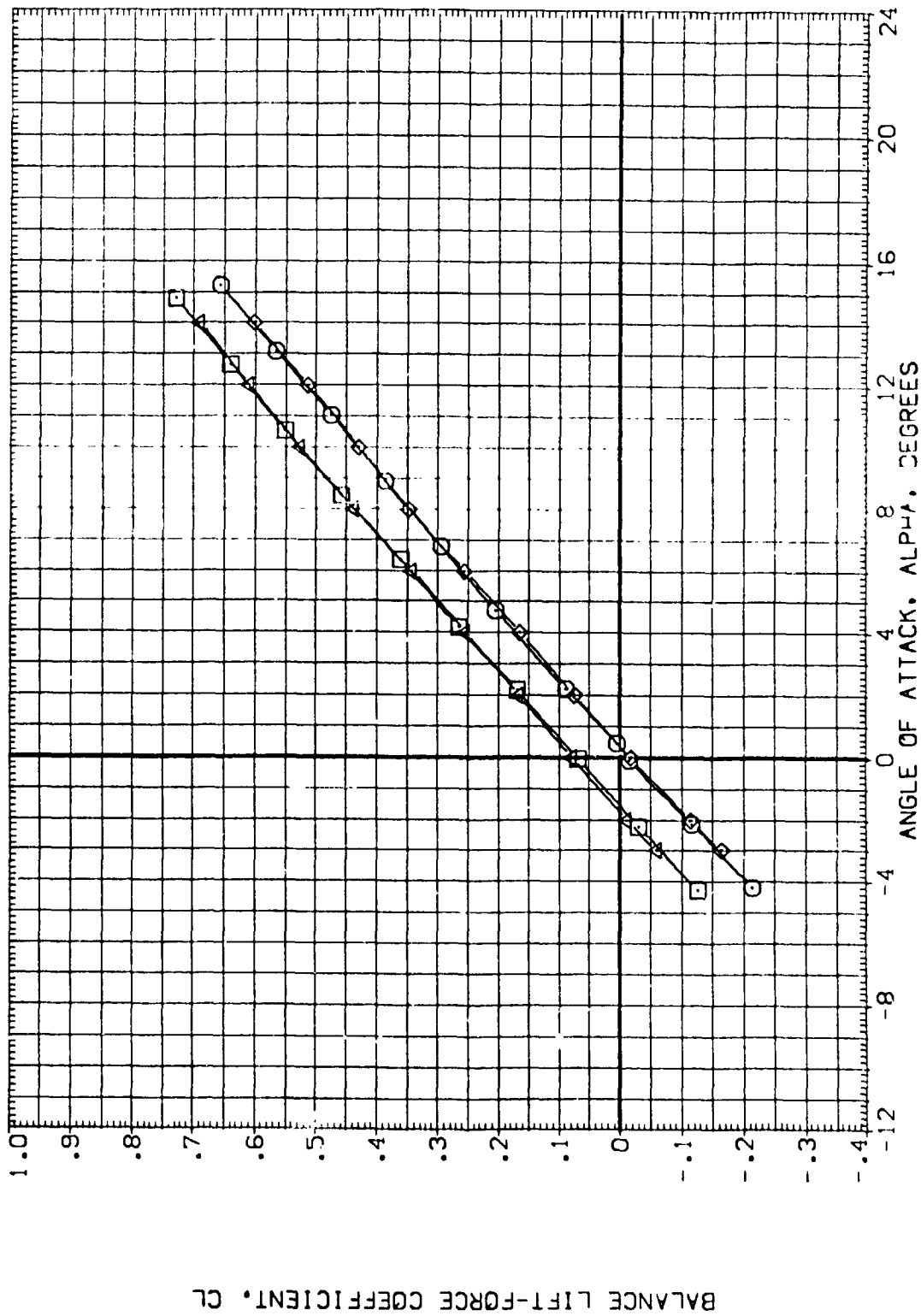


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.50

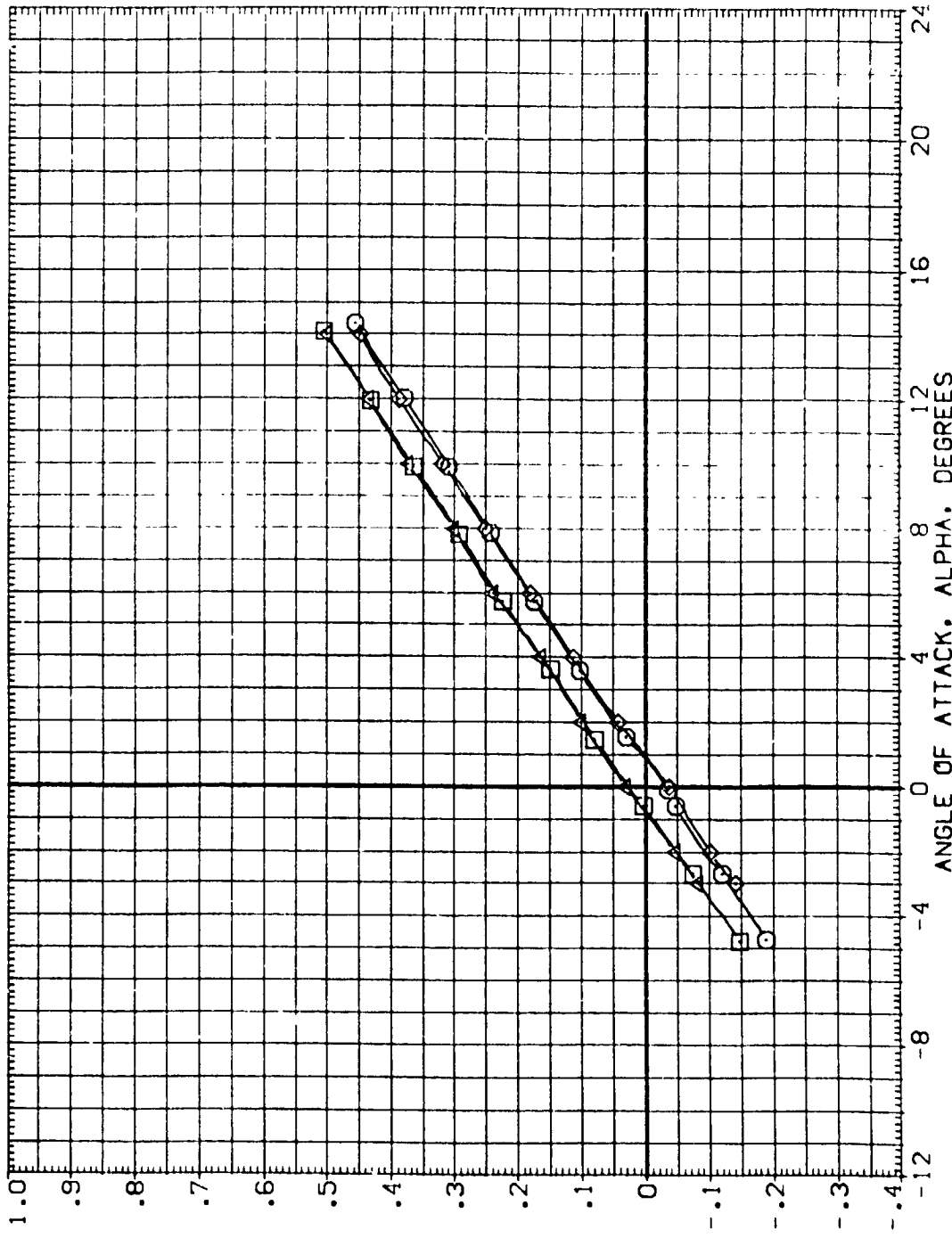
DATA SET SYMBOL
 (CERO19)
 (CERO20)
 (LERO19)
 (LERO20)

CONFIGURATION DESCRIPTION
 ARC 66-709 QAS5 O11A-(N24)
 ARC 66-709 QAS9 O11A-(N24)
 ARC 66-709 QAS9 O11A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 QAS9 O11A-N24 (ADJUSTED FOR TARES)

BETA
 .000
 .000
 .000
 .000

ELEVON BDFLAP
 .000 -11.700
 15.000 -11.700
 .000 -11.700
 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5936 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



BALANCE LIFT-FORCE COEFFICIENT, CL

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH = 2.00



REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6755 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA .000
 ELEVON .000
 BOFLAP -11.700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CERO19) [C] ARC 66-709 0A59 0A11A-(N24)
 (CERO20) [X] ARC 66-709 0A59 0A11A-(N24)
 (CERO19) [O] ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
 (CERO20) [X] ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

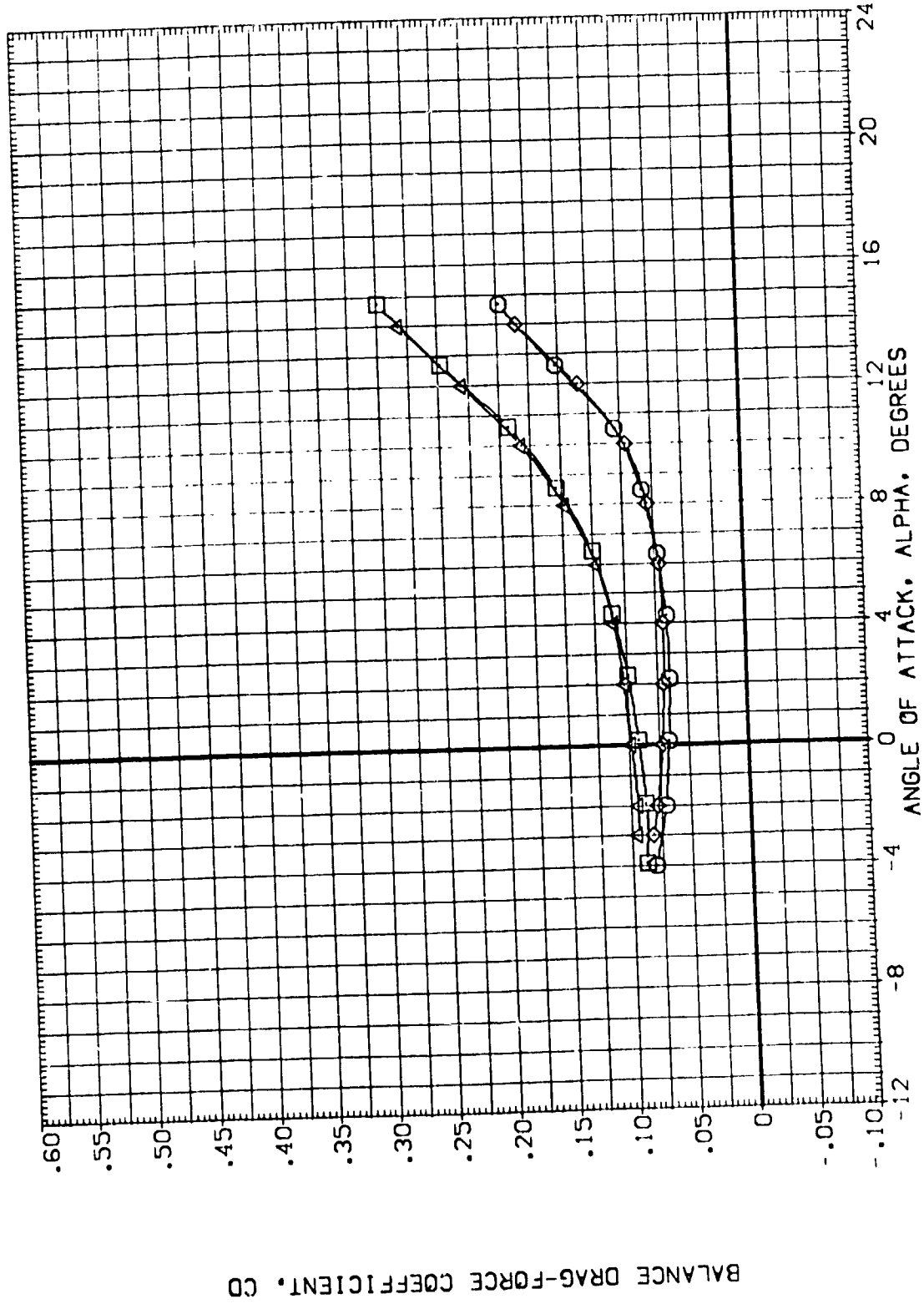


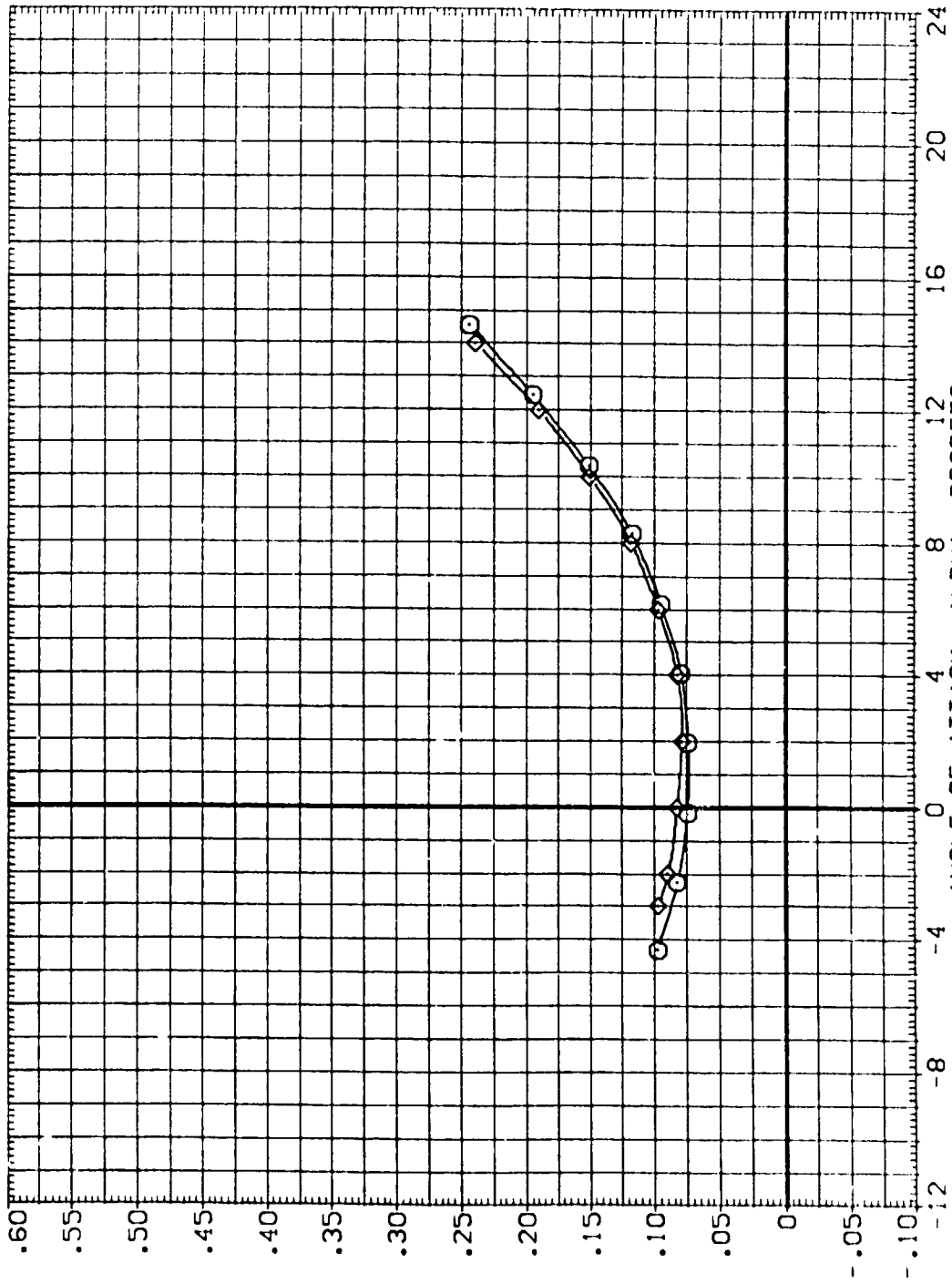
FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(A)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CER019) ARC 66-709 CAS9 0A11A-(N24)
 (CER020) DATA NOT AVAILABLE
 (LER019) ARC 66-709 CAS9 011A-N24 (ADJUSTED FOR TARES)
 (LER020) DATA NOT AVAILABLE

BETA ELEVON BDF LAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



BALANCE DRAG-FORCE COEFFICIENT, CD

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C)MAC: - .85

DATA SET SYMBOL
 (CER019)
 (CER020)
 (LER019)
 (LER020)

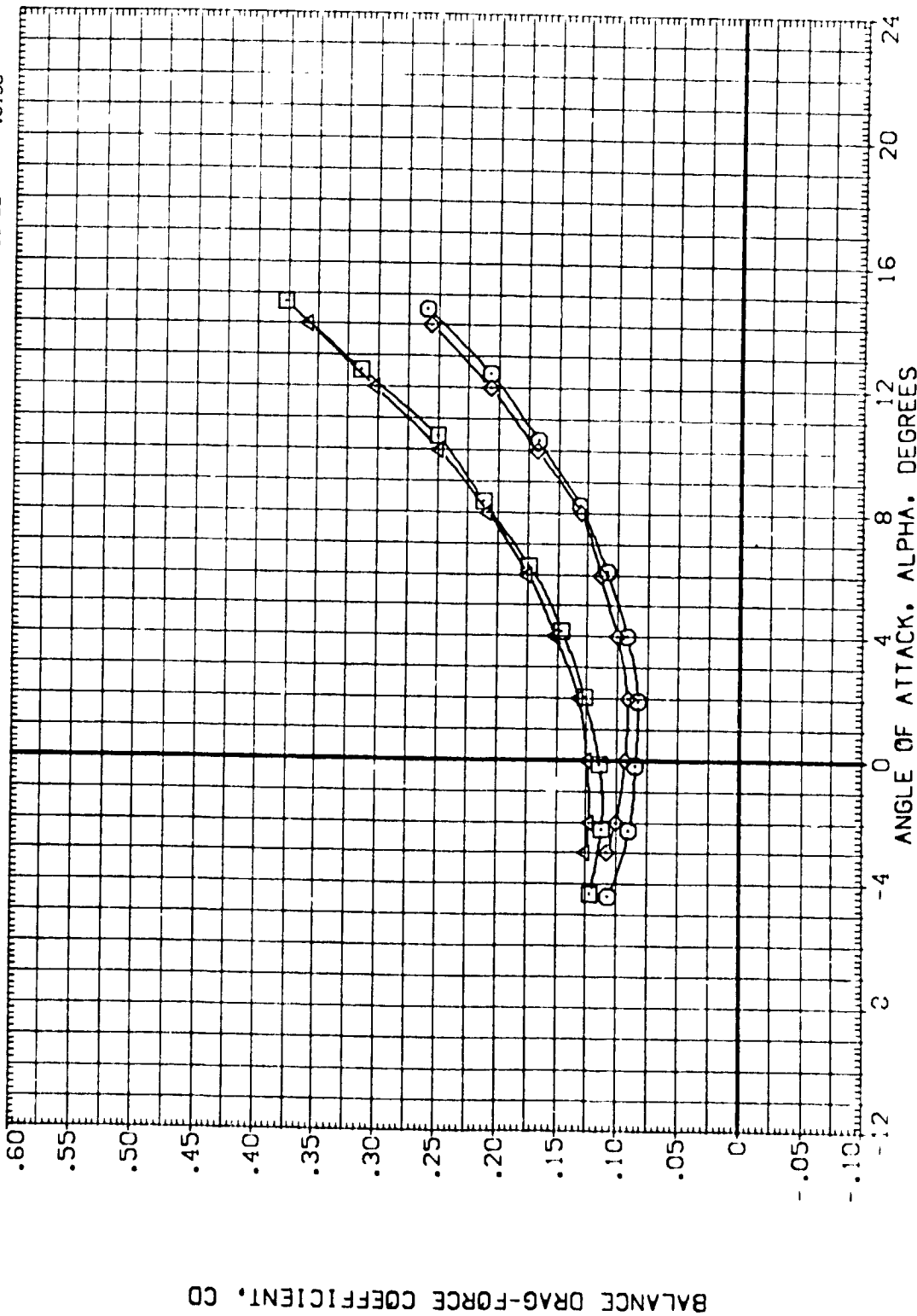
CONFIGURATION DESCRIPTION
 ARC 66-709 OAS9 O111A-N24
 ARC 66-709 OAS9 O111A-N24
 ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)

BETA
 .000
 .000
 .000

ELEVON
 .000
 15.000
 .000

BDFLAP
 -11.700
 -11.700
 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6735 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



BALANCE DRAG-FORCE COEFFICIENT, CD

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C)MAG. .90



DATA SET SYMBO. CONFIGURATION DESCRIPTION

(CER019) ARC 66-709 DASS 0A11A-(N24)

(CER020) DATA NOT AVAILABLE

(CER019) ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)

(CER020) DATA NOT AVAILABLE

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .9535 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

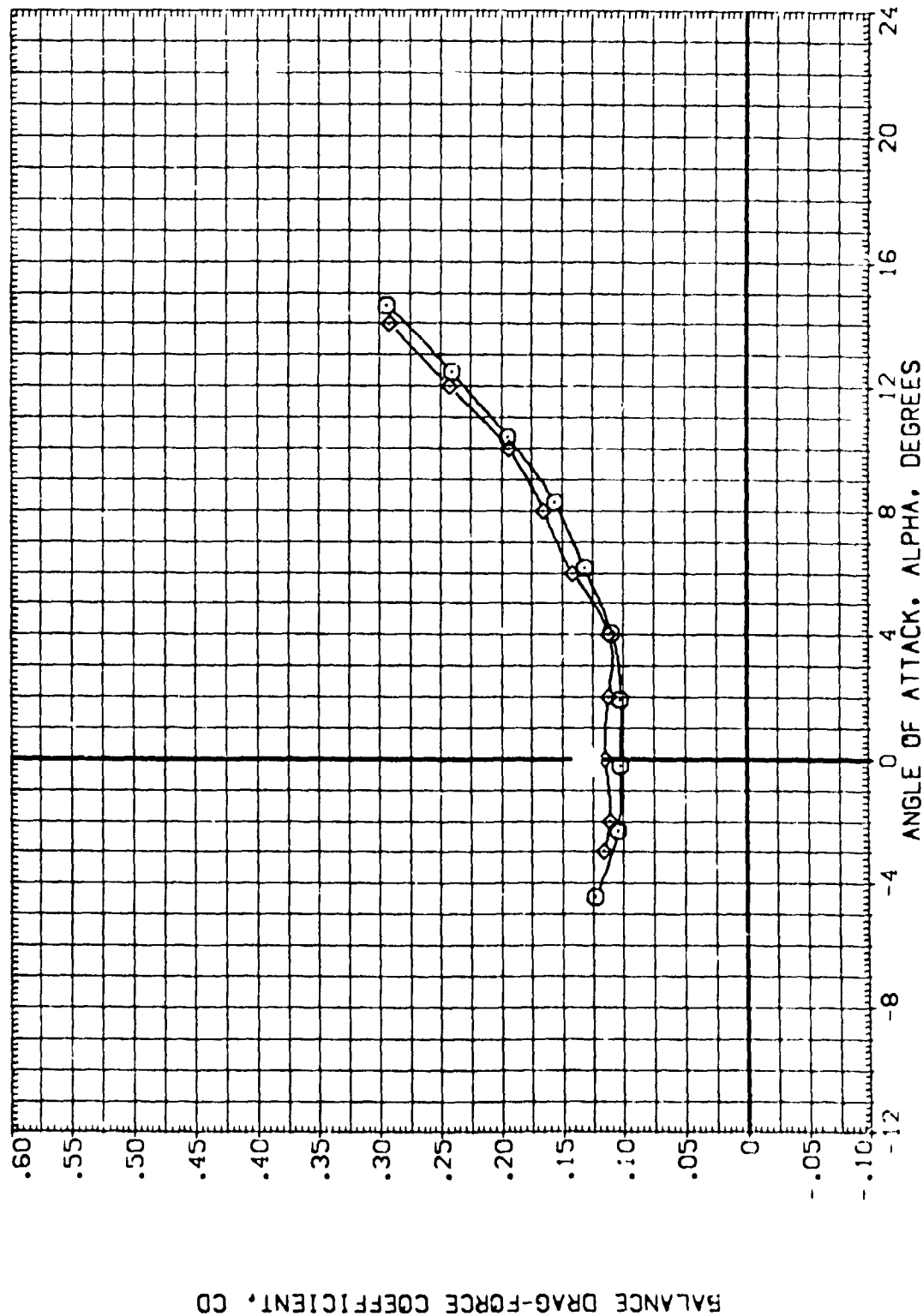


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(E)MACH = .95

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(CERO19)	ARC 66-709 DA59 DA11A-N24	.000	.000	-11.700	S'REF .6053 SO.FT.
(CERO20)	ARC 66-709 DA59 DA11A-N24	.000	15.000	-11.700	L'REF .5935 F.
(TERO19)	ARC 66-709 DA59 D11A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	B'REF 1.1710 F.
(TERO20)	ARC 66-709 DA59 D11A-N24 (ADJUSTED FOR TARES)	.000	15.000	-11.700	X'RRP 12.8258 IN.
					Y'RRP .0000 IN.
					Z'RRP -.3750 IN.
					SCALE .0150

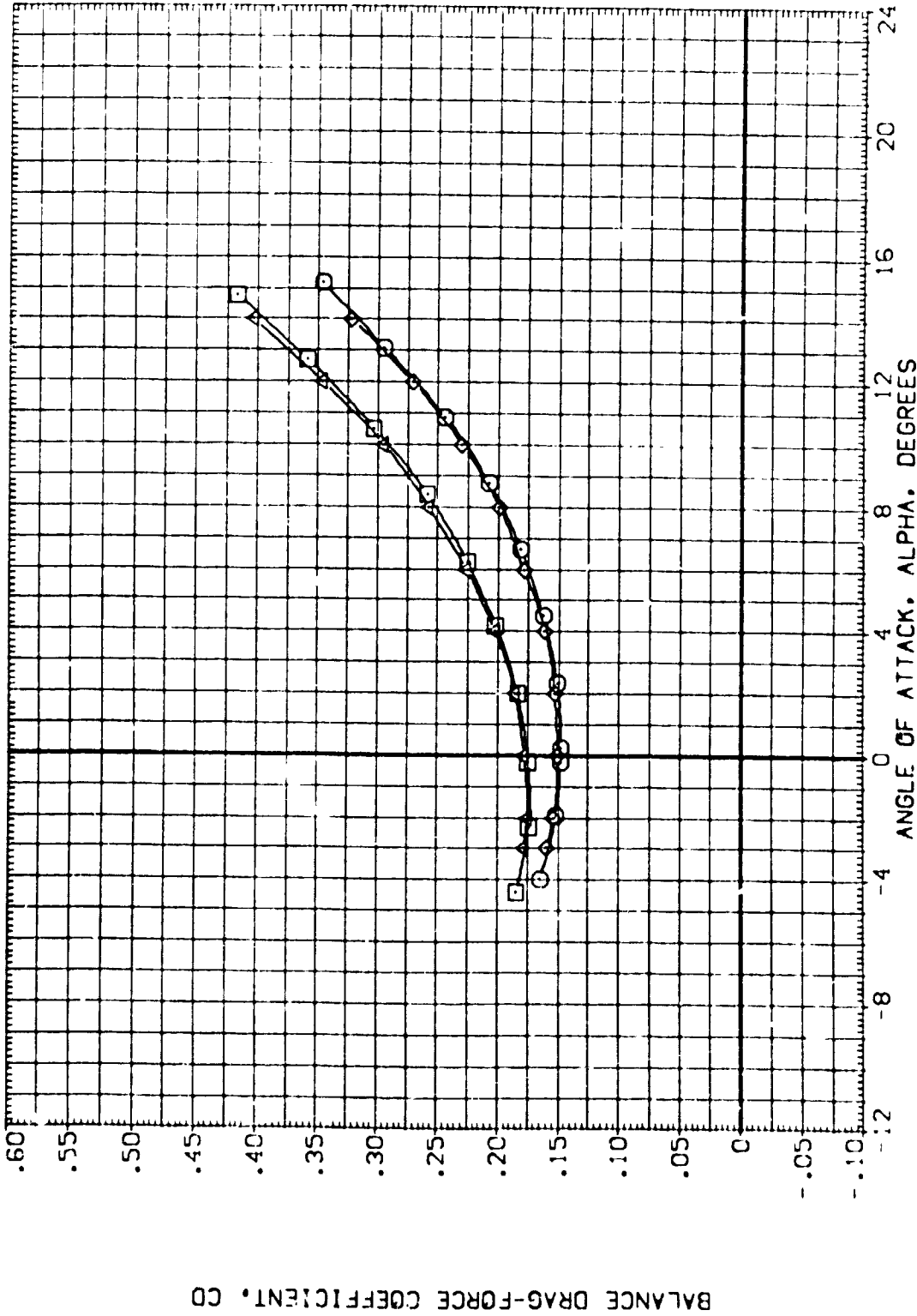


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(F)MACH 1.20



REFERENCE INFORMATION:
 SREF .6053 40.FT.
 LREF .5935 FT.
 BREF 1.1710 IN.
 XMRP -2.6255 IN.
 YMRP .0000 IN.
 ZMRP .3750 IN.
 SCALE .0150

BETA .000 BOFLAP
 .000 -11.700
 .000 15.000
 .000 -11.700
 .000 15.000
 .000 -11.700
 .000 15.000

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CER019) Q ARC 66-709 DA59 0111A-(N24)
 (CER020) X ARC 66-709 DA59 0111A-(N24)
 (CER019) X ARC 66-709 DA59 0111A-N24 (ADJUSTED FOR TARES)
 (CER020) X ARC 66-709 DA59 0111A-N24 (ADJUSTED FOR TARES)

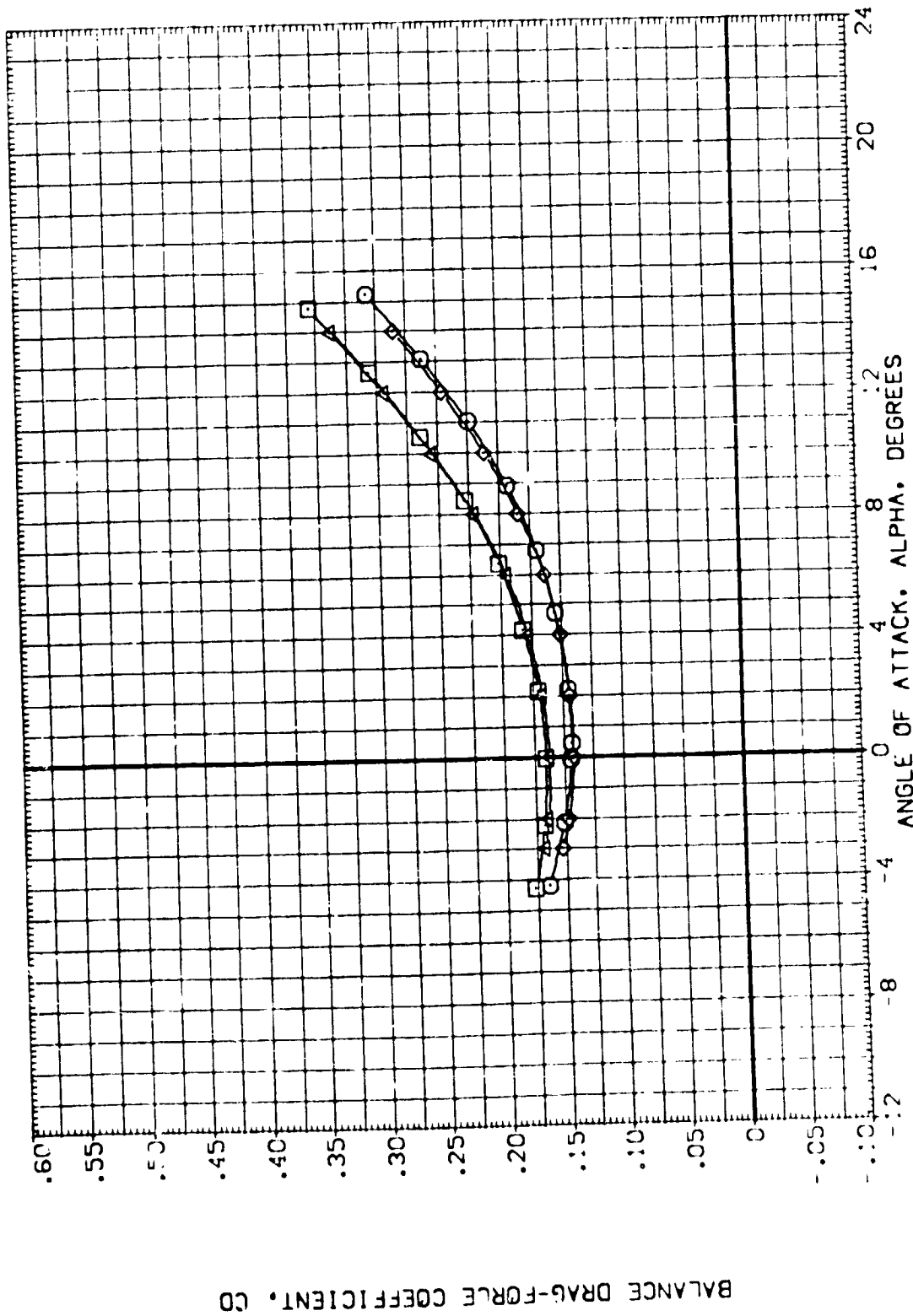


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CER019) O ARC 66-709 DASS O111A-N24
 (CER020) X ARC 66-709 DASS O111A-N24
 (HER019) O ARC 66-709 DASS O111A-N24 (ADJUSTED FOR TARES)
 (HER020) X ARC 66-709 DASS O111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BFLAP
 .000 .000
 .00 .15.000
 .000 .000
 .000 .15.000

REFERENCE INFORMATION
 SREF 6053 SQ.FT.
 LREF 5935 FT.
 BREF 11113 FT.
 XREF 12.6235 IN.
 YREF 6000 IN.
 ZREF 3750 IN.
 SCALE 0.150

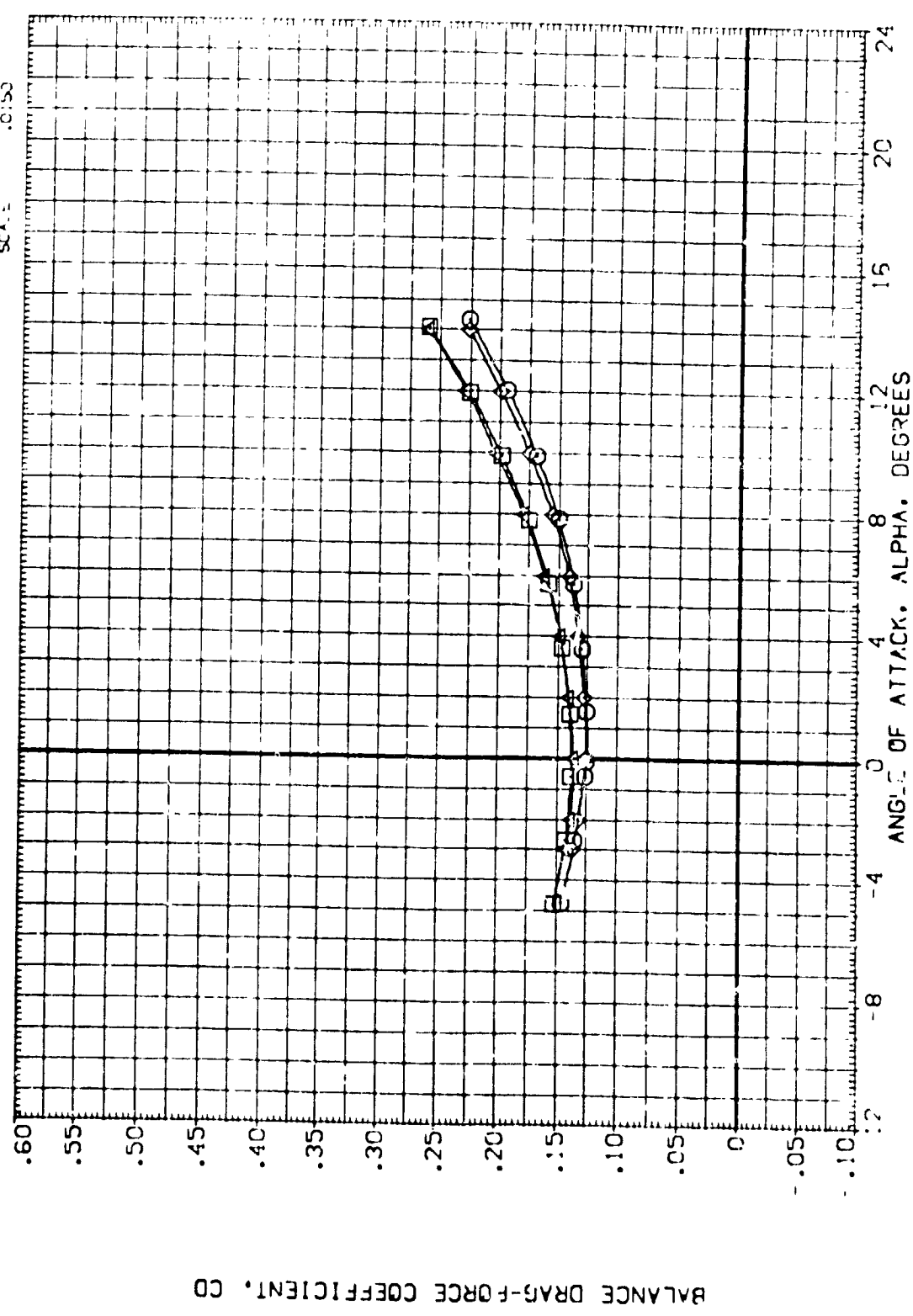


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

COMAC 2.00



DATA SET SYMBOL CONFIGURATION DESCRIPTION

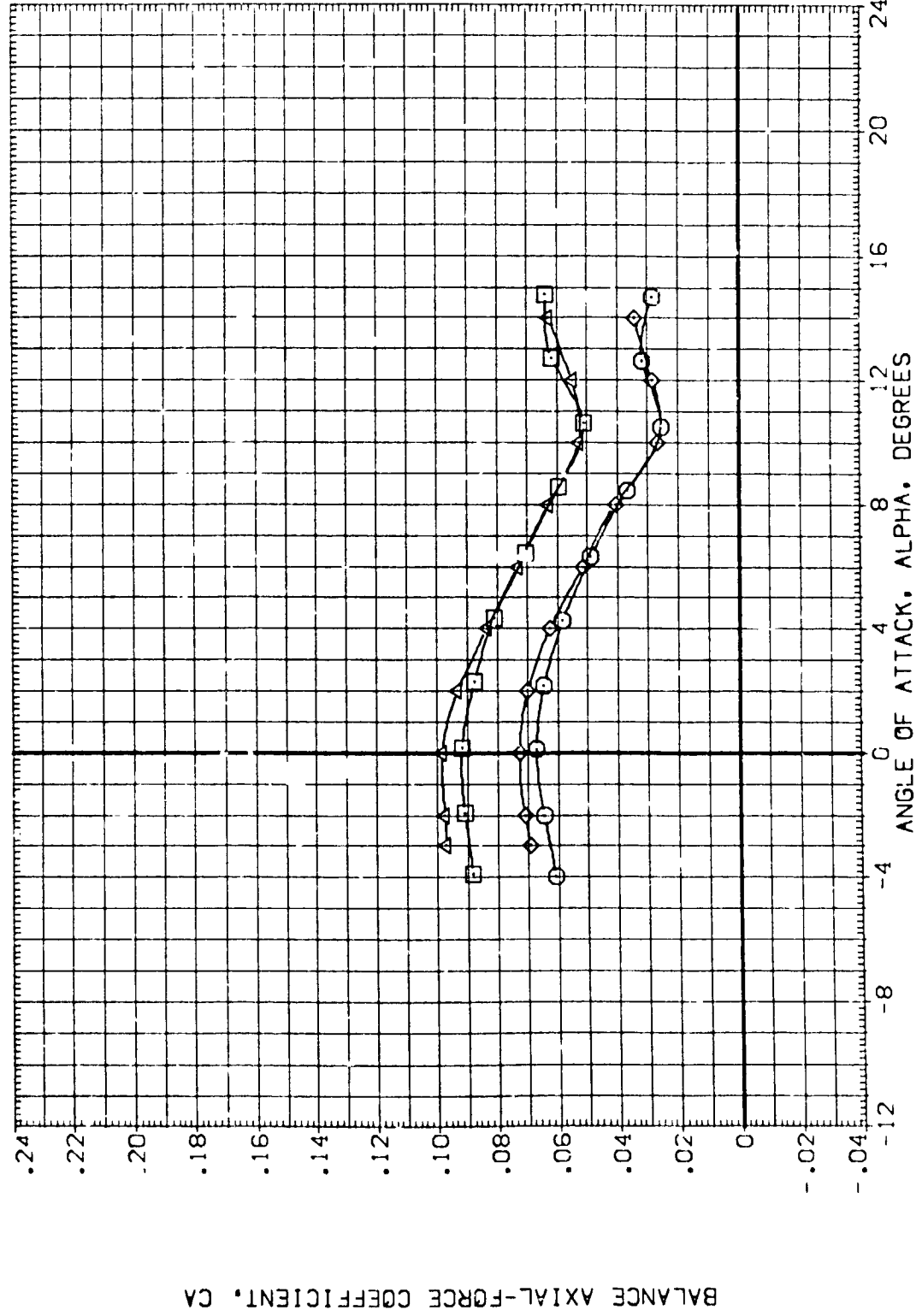
(CERO19)	ARC 66-709 DASS 0111A-(N24)
(CERO20)	ARC 66-709 DASS 0111A-(N24)
(CERO19)	ARC 66-709 DASS 0111A-N24 (ADJUSTED FOR TARES)
(LRC070)	ARC 66-709 DASS 0111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SG.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRRP	12.6755	IN.
YMRRP	.0000	IN.
ZMRRP	-.3750	IN.
SCALE	.0150	



BALANCE AXIAL-FORCE COEFFICIENT, CA

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(A)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(C00019) ARC 66-709 DASS 0A11A-(N24)

(C00020) ARC 66-709 DASS 0A11A-(N24)

(I00019) ARC 65-709 DASS 011A-N24 (ADJUSTED FOR TARES)

(I00020) ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF .6053 50.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

ZMRP .0000 IN.

SCALE -.3750 IN.

.0150

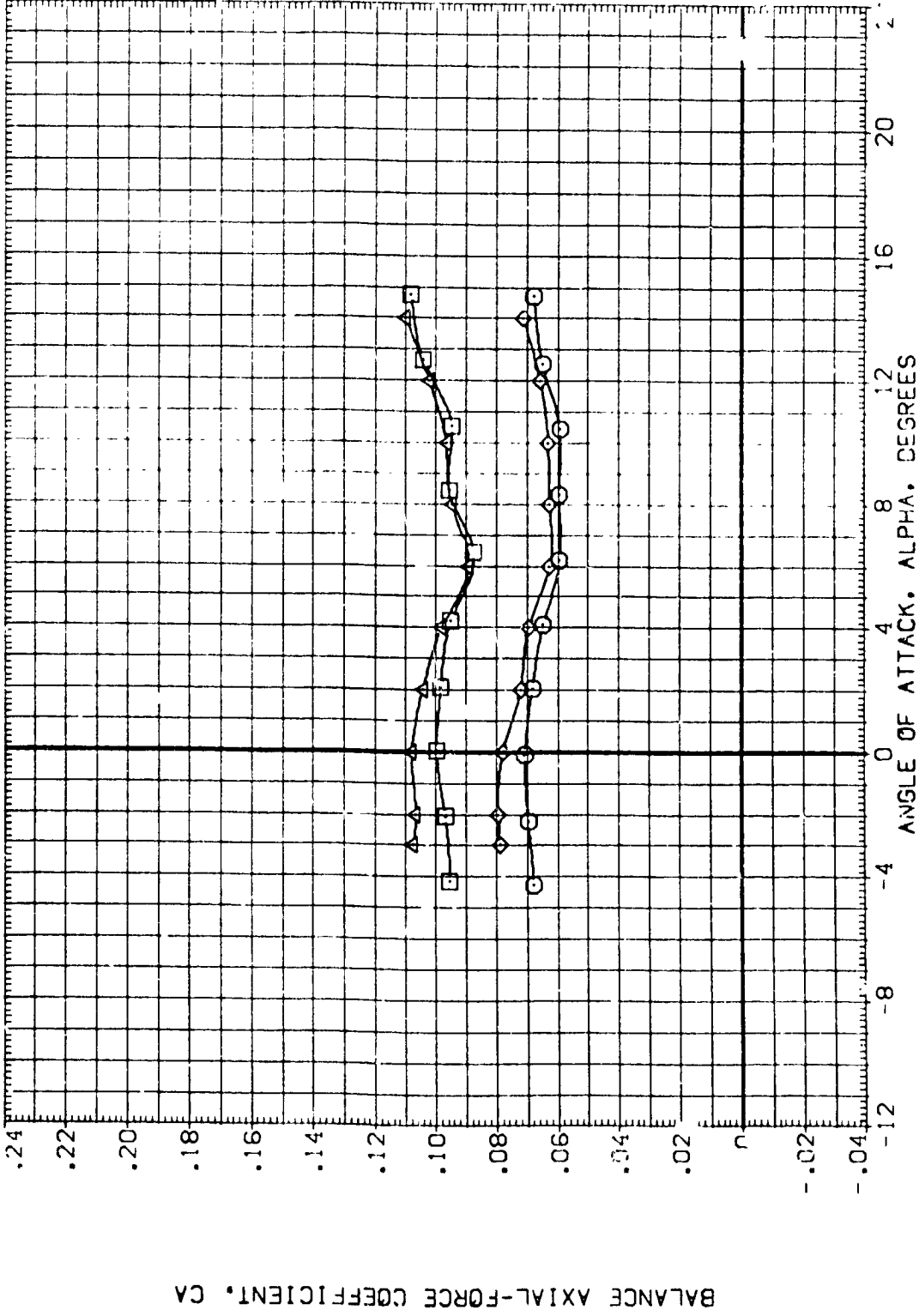


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

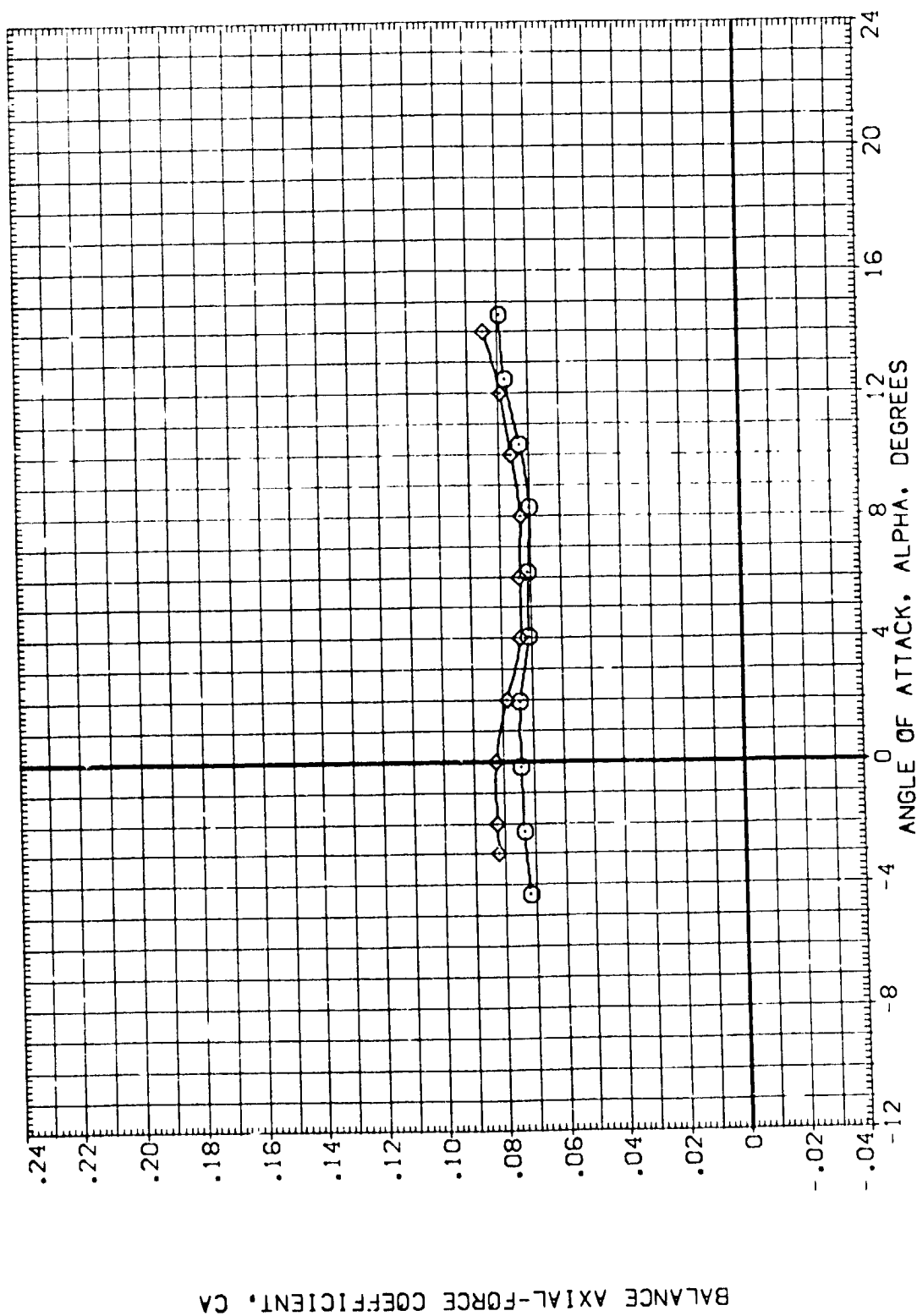
(B)MACH = .80



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CER019) ARC 66-709 DASS DA11A-(N24)
 (CER020) DATA NOT AVAILABLE
 (CER019) ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)
 (CER020) DATA NOT AVAILABLE

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



BALANCE AXIAL-FORCE COEFFICIENT, CA

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C)MAC+ = .85

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BDF/LAP	REFERENCE INFORMATION
(CERO19)	ARC 66-709 OAS9 O11A-(N24)	.000	.000	-11.700	SREF .6053 50.FT.
(CERO20)	ARC 66-709 OAS9 O11A-(N24)	.000	15.000	-11.700	LREF .5935 FT.
(CERO19)	ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	BREF 1.1710 FT.
(CERO20)	ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)	.000	15.000	-11.700	XMRP 12.6755 IN.
					ZMRP .0000 IN.
					SCALE -.3750 IN.

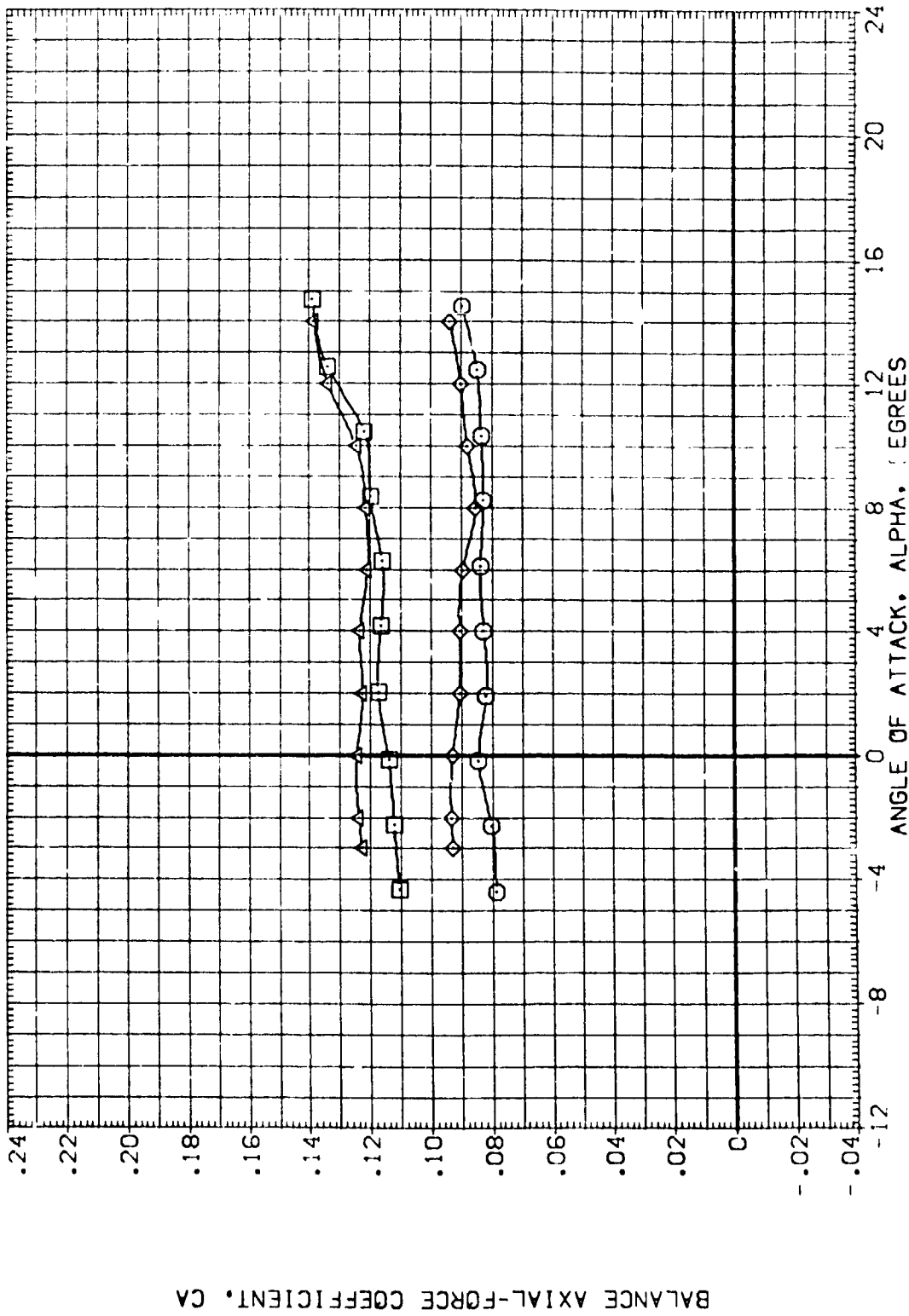


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

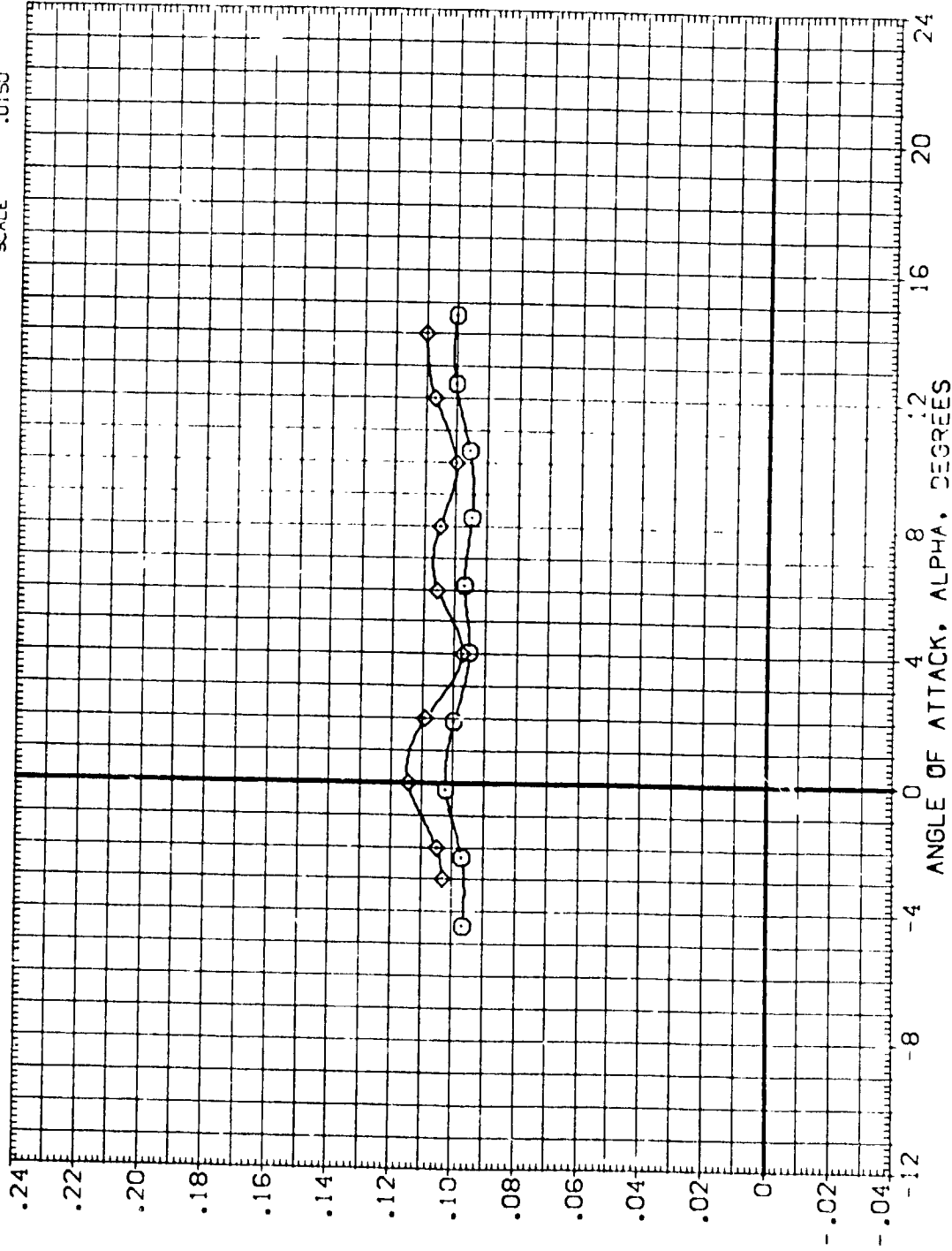
(O)MACH = .90



DATA SET SYMBOL CONFIGURATION DESCRIPTION:
 (CER019) ARC 66-709 OAS9 D111A-N24
 (CER020) DATA NOT AVAILABLE
 (FER019) ARC 66-709 OAS9 D111A-N24 (ADJUSTED FOR TARES)
 (FER020) DATA NOT AVAILABLE

BETA ELEVON SDF LAP
 .000 .000 .000
 .000 15.000 .000
 .000 .000 .000
 .000 15.000 .000

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5936 FT.
 BREF 1.1710 FT.
 YMRP 12.6255 IN.
 ZMRP .0000 IN.
 SCALE -.3750 IN.
 .0150



BALANCE AXIAL FORCE COEFFICIENT, CA

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(CER)ACH = .95

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019) O ARC 66-709 OAS9 O11A-N24

(CER020) X ARC 66-709 OAS9 O11A-N24

(TER019) O ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)

(TER020) X ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF -6053 50.FT.

LREF -5935 FT.

BREF 1.110 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

BALANCE AXIAL-FORCE COEFFICIENT, CA

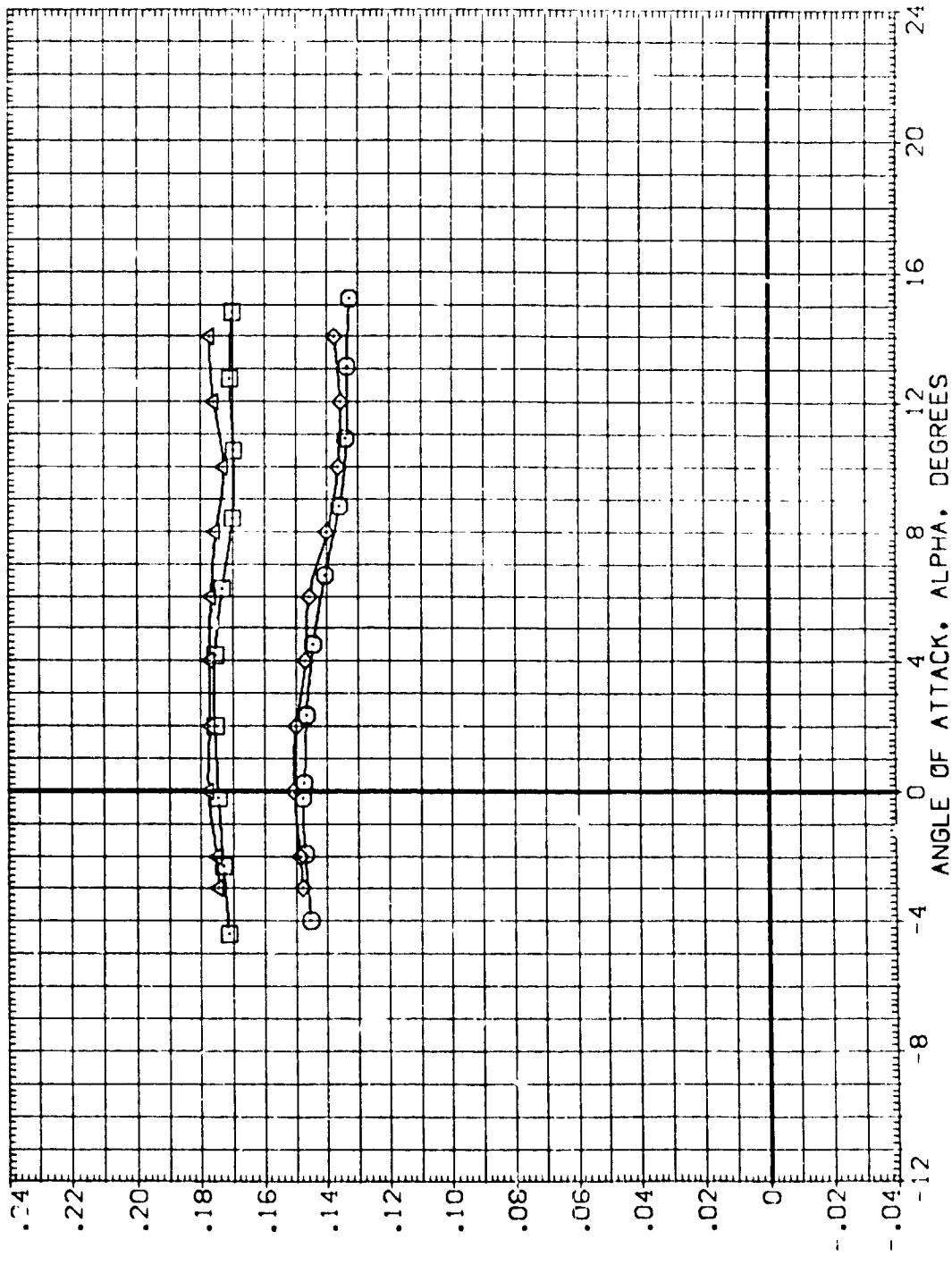


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(F)MAC-H = 1.20



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019)	ARC 66-70	QAS9	0A11A-(N24)
(CER020)	ARC 66-70M	QAS9	0A11A-(N24)
(1ER019)	ARC 66-70S	QAS9	011A-N24 (ADJUSTED FOR TARES)
(1ER020)	ARC 66-70S	QAS9	011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SO.FT.
LREF	.5936	FT.
BREF	1.1710	FT.
XMRP	12.6265	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

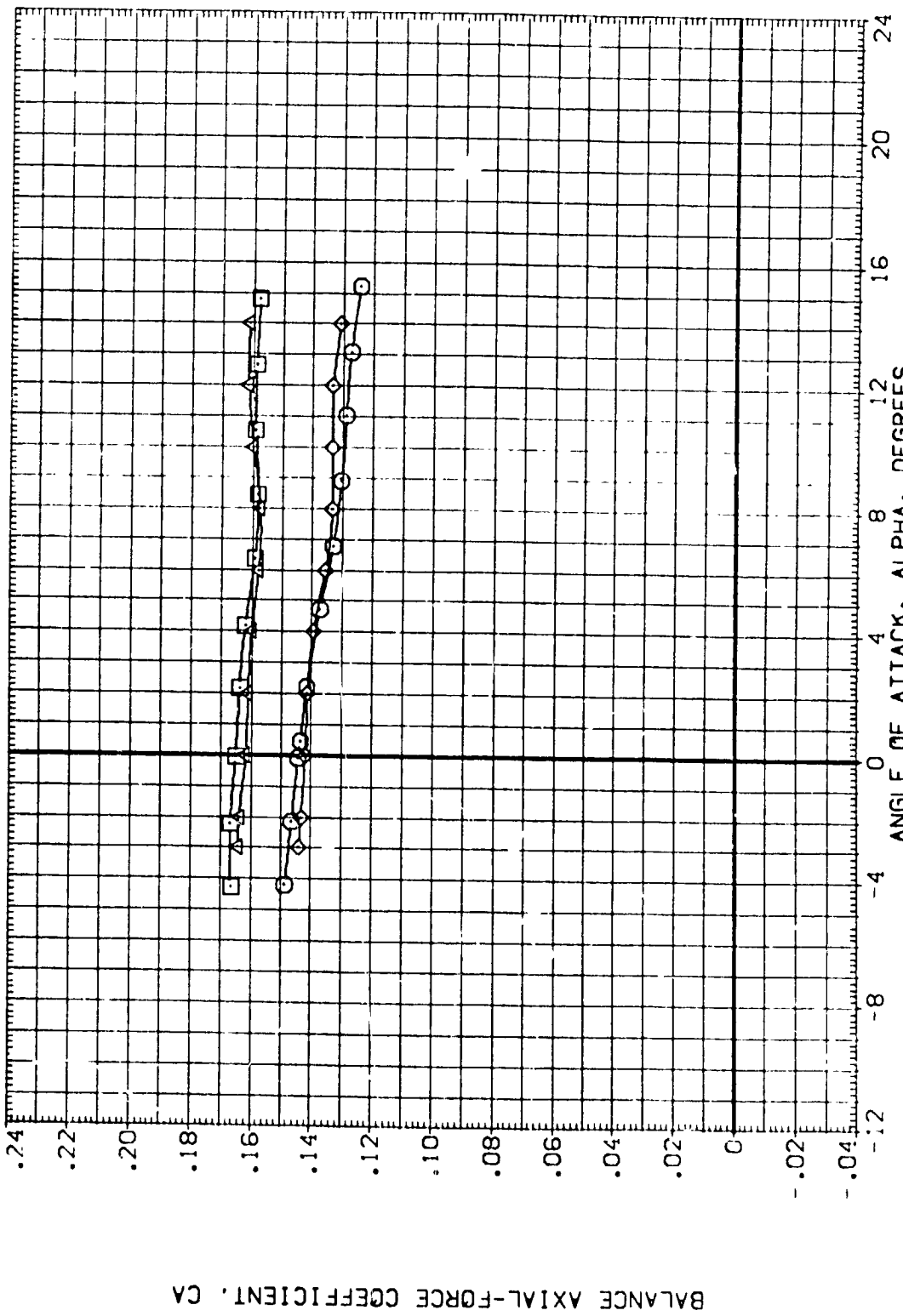


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(G)MAC = 1.50

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(CER019)	ARC 66-709 0A59 0A11A-(N24)	.000	.000	-11.700	SREF .6053 50.FT.
(CER020)	ARC 66-709 0A59 0A11A-(N24)	.000	15.000	-11.700	LREF .5935 FT.
(IER019)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	BREF 1.1710 FT.
(IER020)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	15.000	-11.700	XMXP 12.6255 IN.
					YMRP .0000 IN.
					ZMRP -.3750 IN.
					SCALE .0150

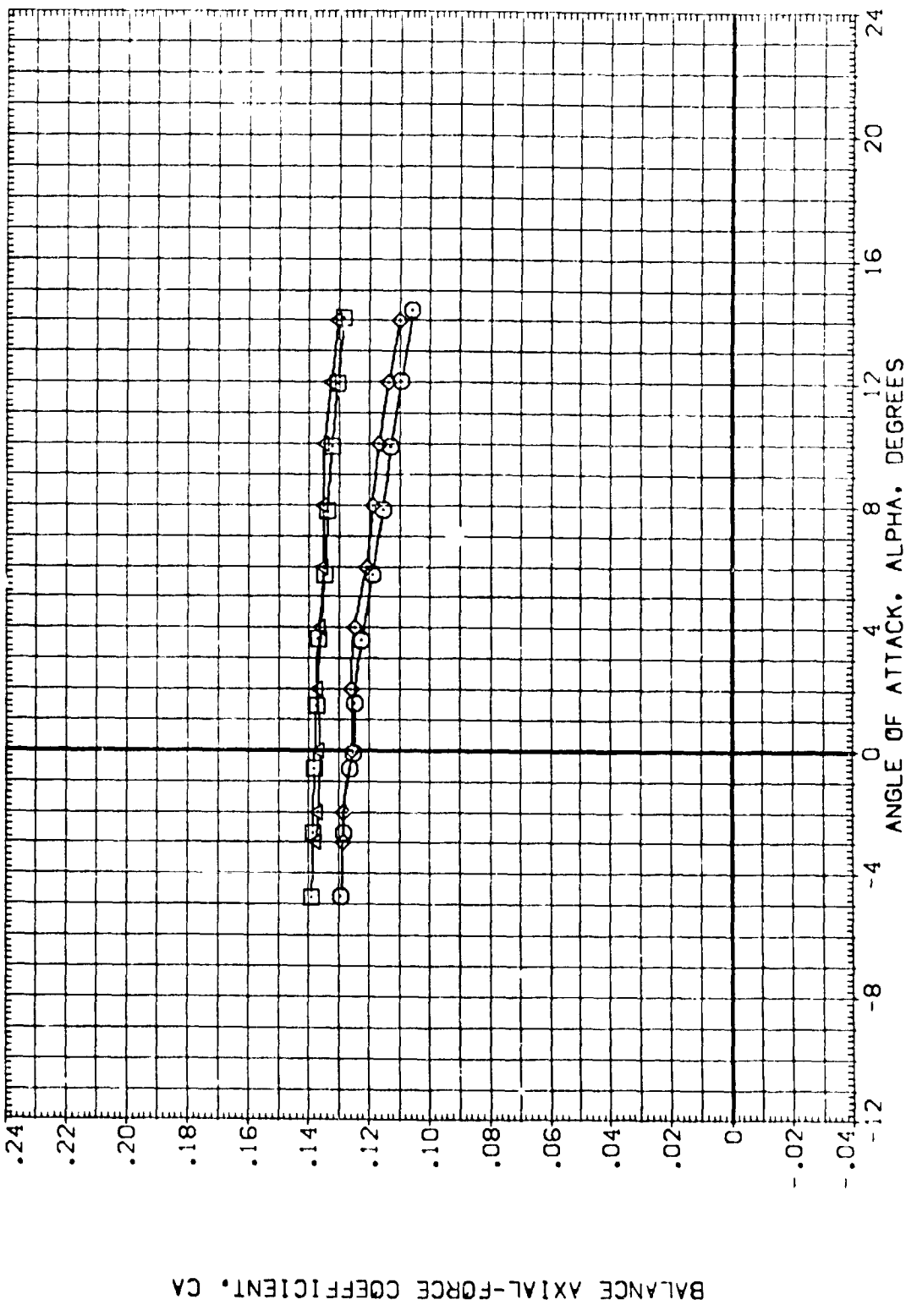


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH 2.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019)	ARC 66-709	QAS9	Q111A-(N24)
(CLR020)	ARC 66-709	QAS9	Q111A-(N24)
(LEP019)	ARC 66-709	QAS9	Q111A-N24 (ADJUSTED FOR TARES)
(LEP020)	ARC 66-709	QAS9	Q111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SO.FT.
LREF	.5935	FT.
BREF	1.1710	IN.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

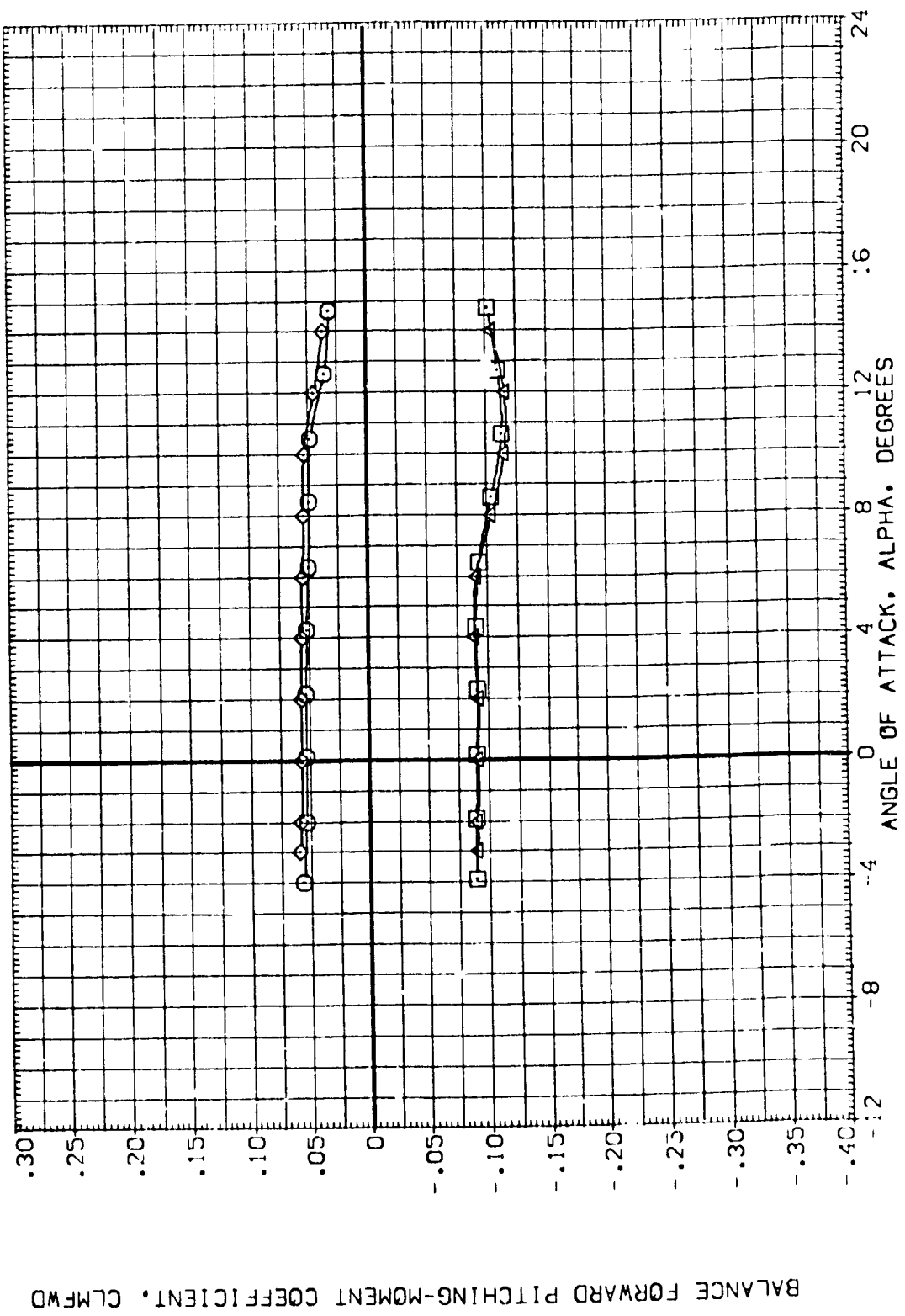


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

CAMAC .60

DATA SET SYMBOL CONF. GURATION DESCRIPTION

(CER019) O ARC 66-709 DASS DA11A-(N24)

(CER020) O ARC 66-709 DASS DA11A-(N24)

(IER019) X ARC 66-709 DASS O11A-N24 (ADJUSTED FOR TARES)

(IER020) X ARC 66-709 DASS O11A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF .6053 50.FT.

LREF .5935 FT.

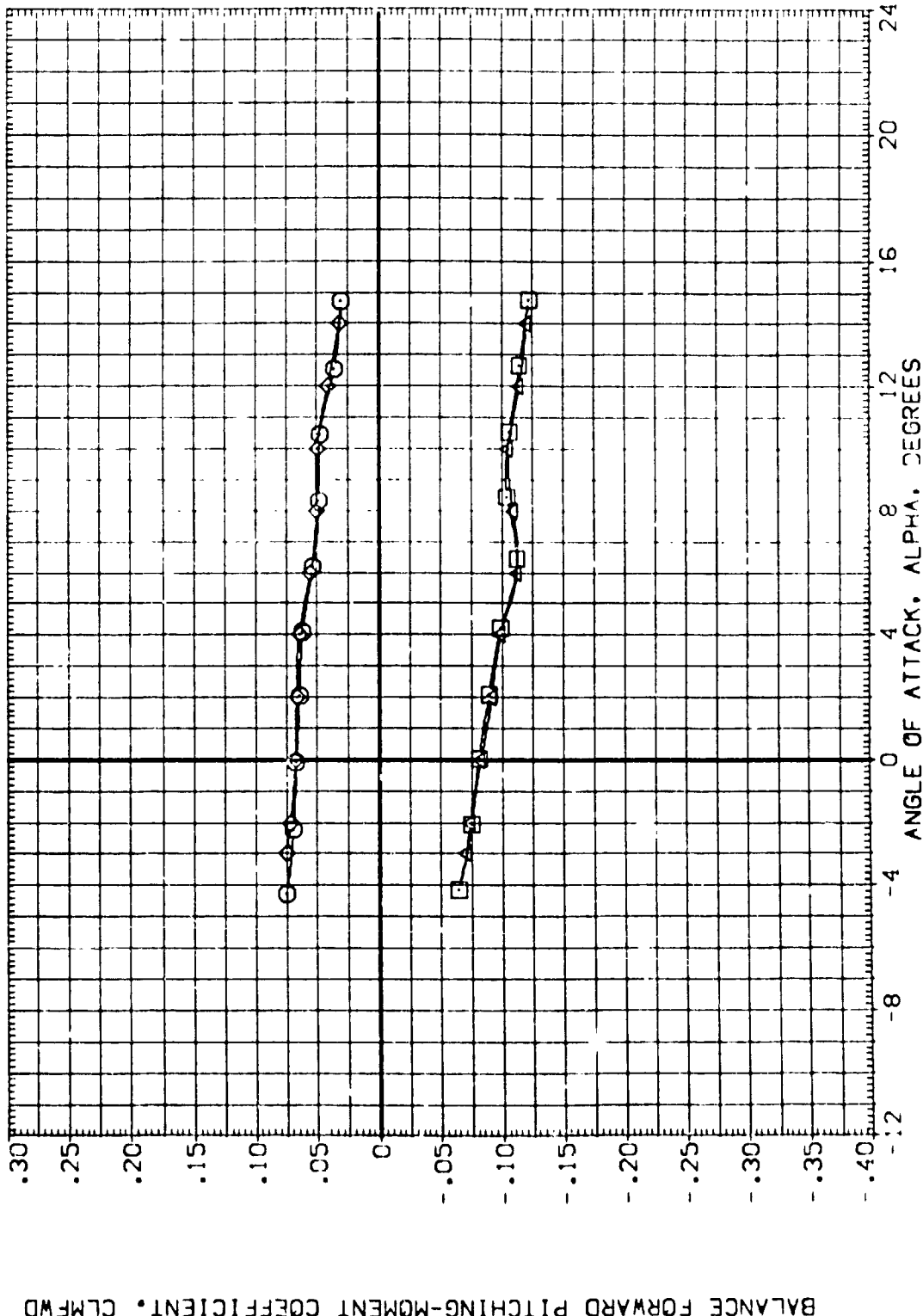
BREF 1.1710 FT. IN.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150



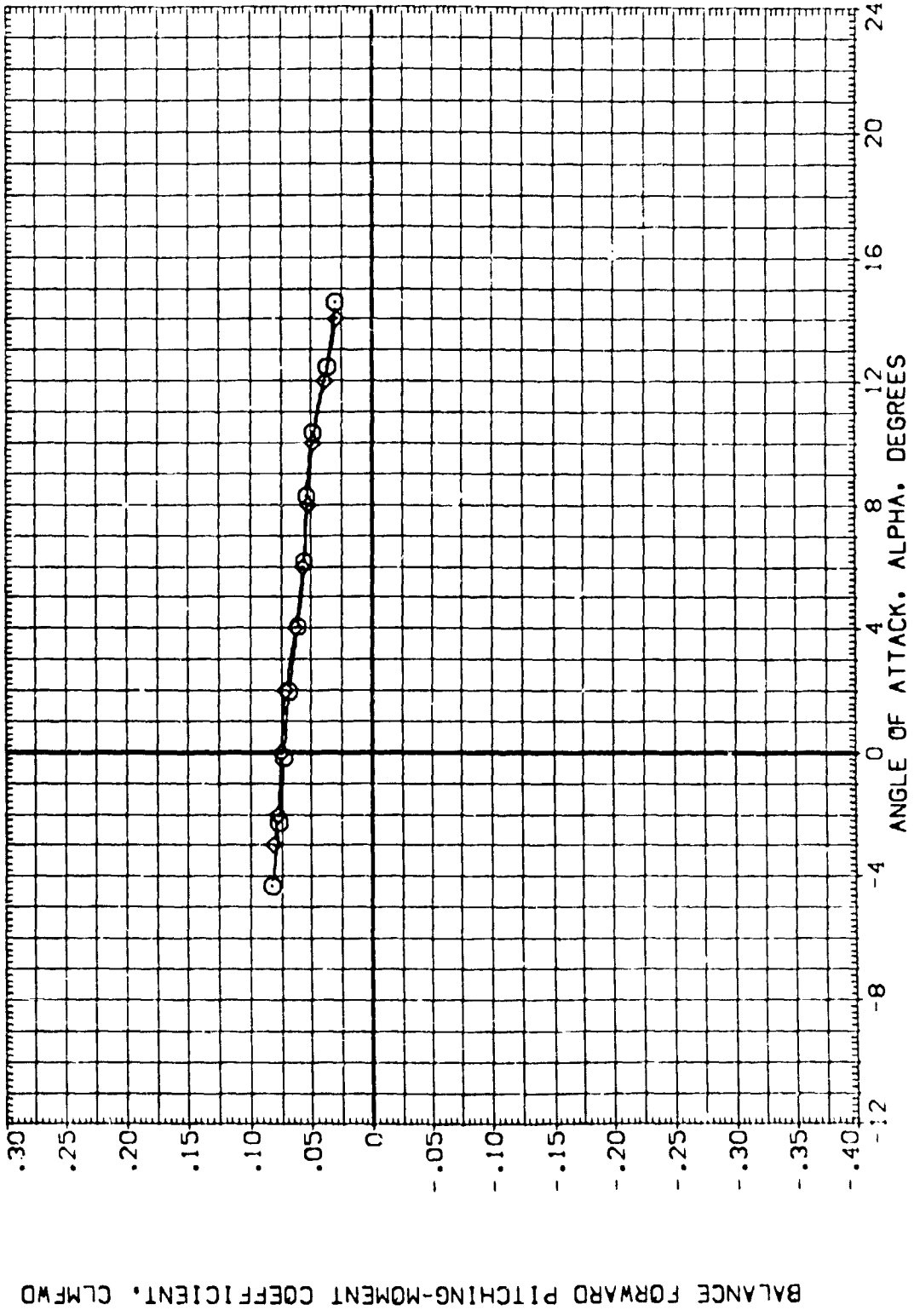
BALANCE FORWARD PITCHING-MOMENT COEFFICIENT, CLMFD

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CER019) ○ ARC 66-709 DASS DATA (N24)
 (CER020) □ DATA NOT AVAILABLE
 (FER019) △ ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)
 (FER020) × DATA NOT AVAILABLE

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 50.FT.
 LREF .5935 FT.
 BRREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



BALANCE FORWARD PITCHING-MOMENT COEFFICIENT, CLMFD

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C)MAC = .85

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019)	ARC 66-709 D459	0A11A-(N24)
(CER020)	ARC 66-709 D459	0A11A-(N24)
(IER019)	ARC 66-709 D459	011A-N24 (ADJUSTED FOR TARES)
(IER020)	ARC 66-709 D459	011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	.5935	FT.
BRE	1.1710	F.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

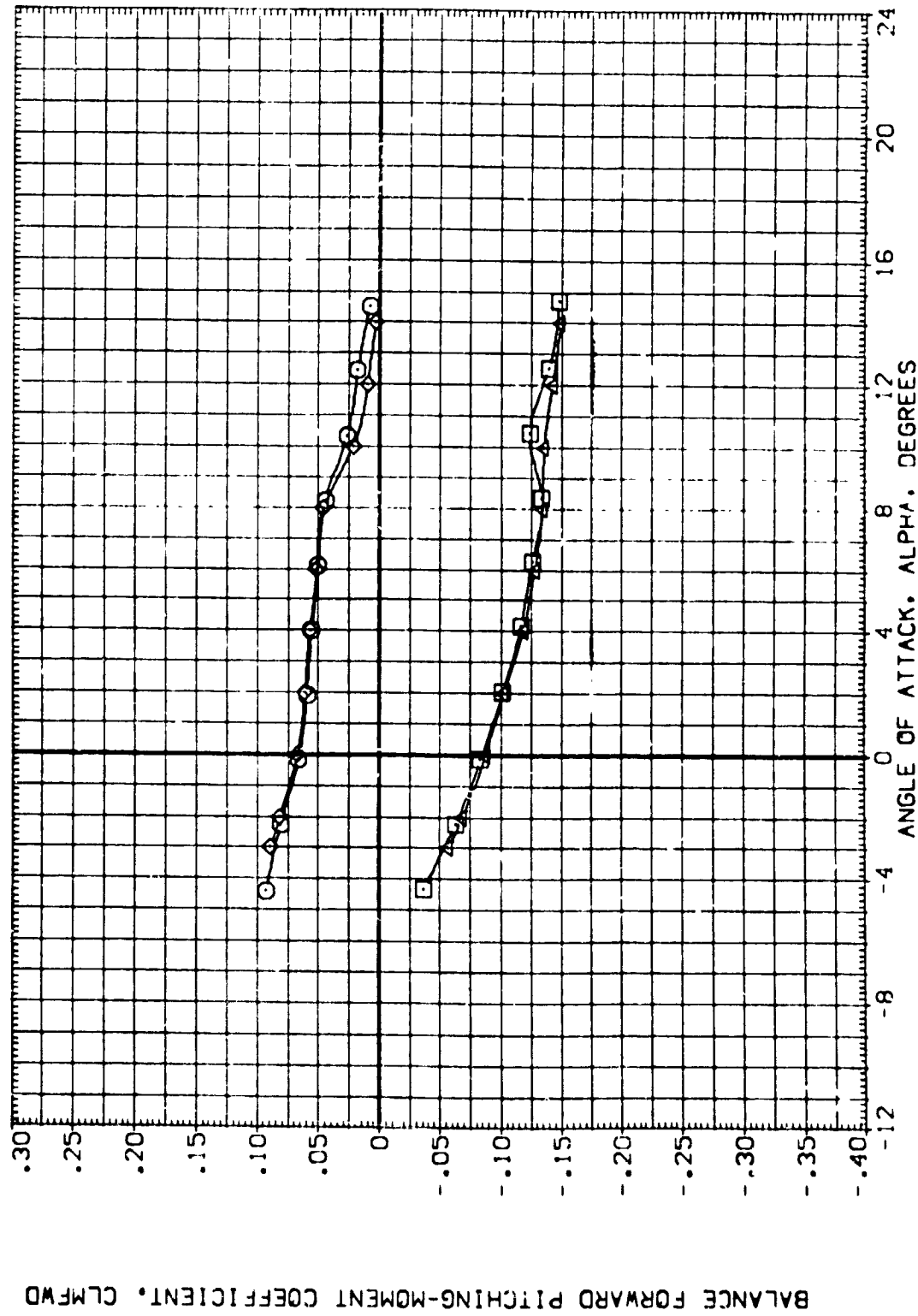


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(O)MACH = .90



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CER019) Q ARC 66-709 OA59 OA11A-(N24)
 (CER020) X DATA NOT AVAILABLE
 (CER019) X ARC 66-709 OA59 O11A-N24 (ADJUSTED FOR TARES)
 (CER020) X DATA NOT AVAILABLE

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 L-REF .5935 FT.
 BREF 1.1710 FT.
 XPROP 12.6755 IN.
 YPROP .0000 IN.
 ZPROP -3.50 IN.
 SCALE .0150

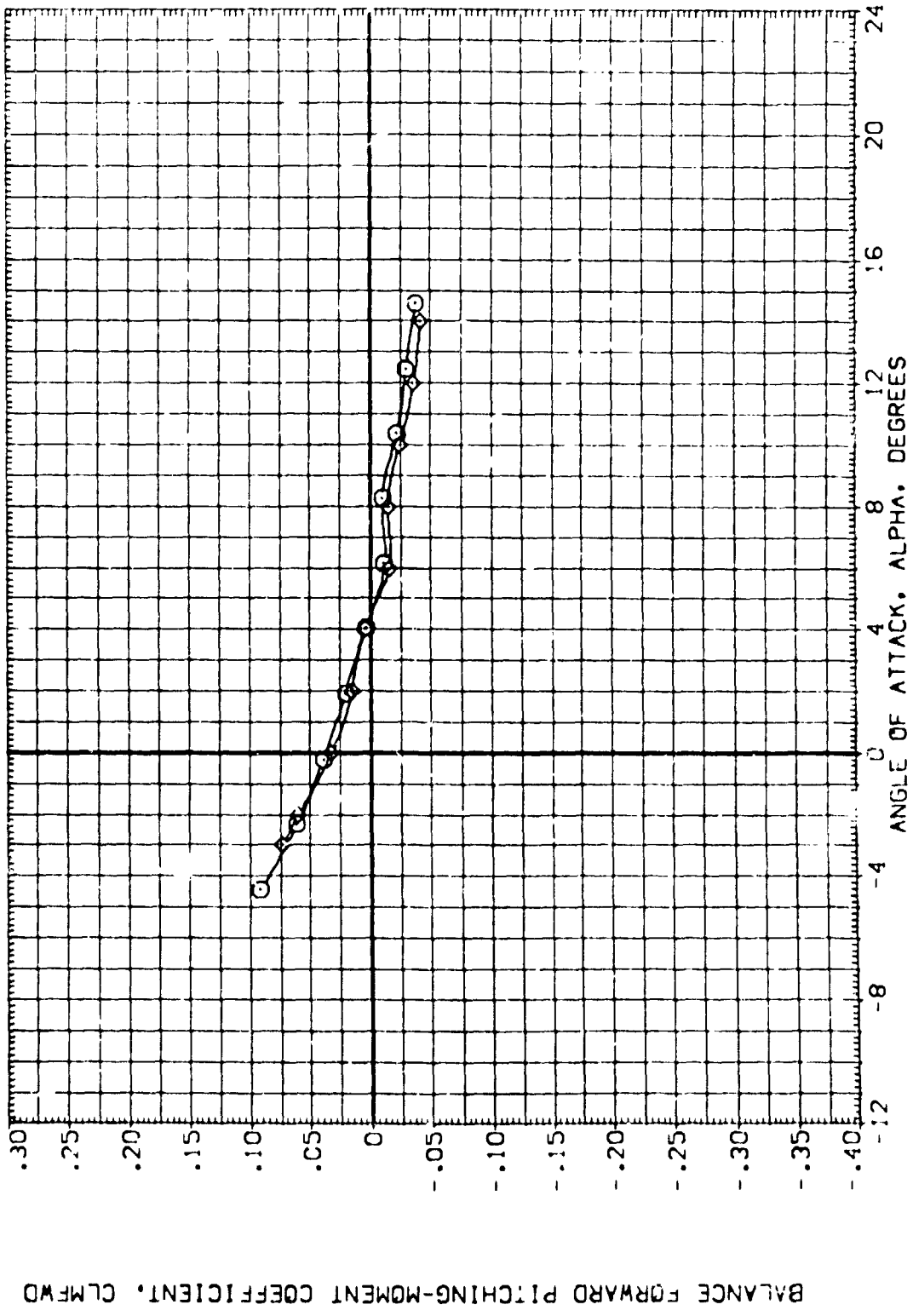


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(CER)MAC = .95

DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BOFLAP

(CER019) Q ARC 66-709 OAS9 O111A-(N24) .000 .000 -11.700

(CER020) X ARC 66-709 OAS9 O111A-(N24) .000 15.000 -11.700

(TER019) X ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES) .000 .000 -11.700

(TER020) X ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES) .000 15.000 -11.700

REFERENCE INFORMATION

SPECF .6053 SQ.FT.

LREF .5835 FT.

BREF 1.1710 IN.

XMRP 12.6250

YMRP .0000

ZMRP -.3750 IN.

SCALE .0150

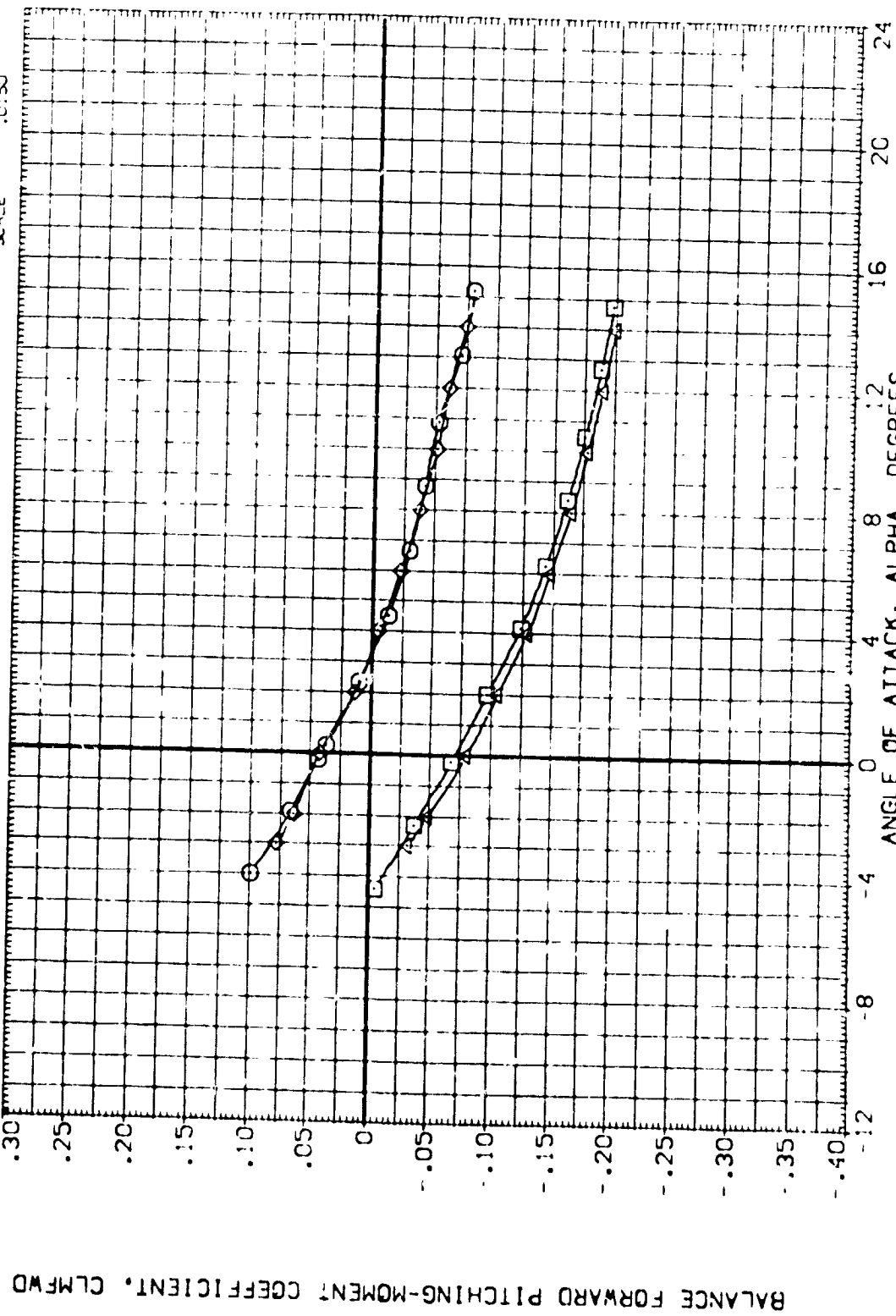


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES
(CF)MAC = 1.70



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019) ARC 66-709 OAS9 O111A-(N24)

(CER020) ARC 66-709 OAS9 O111A-(N24)

(CER019) ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)

(CER020) ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 .000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF 6053 50. FT.

LREF 5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .050

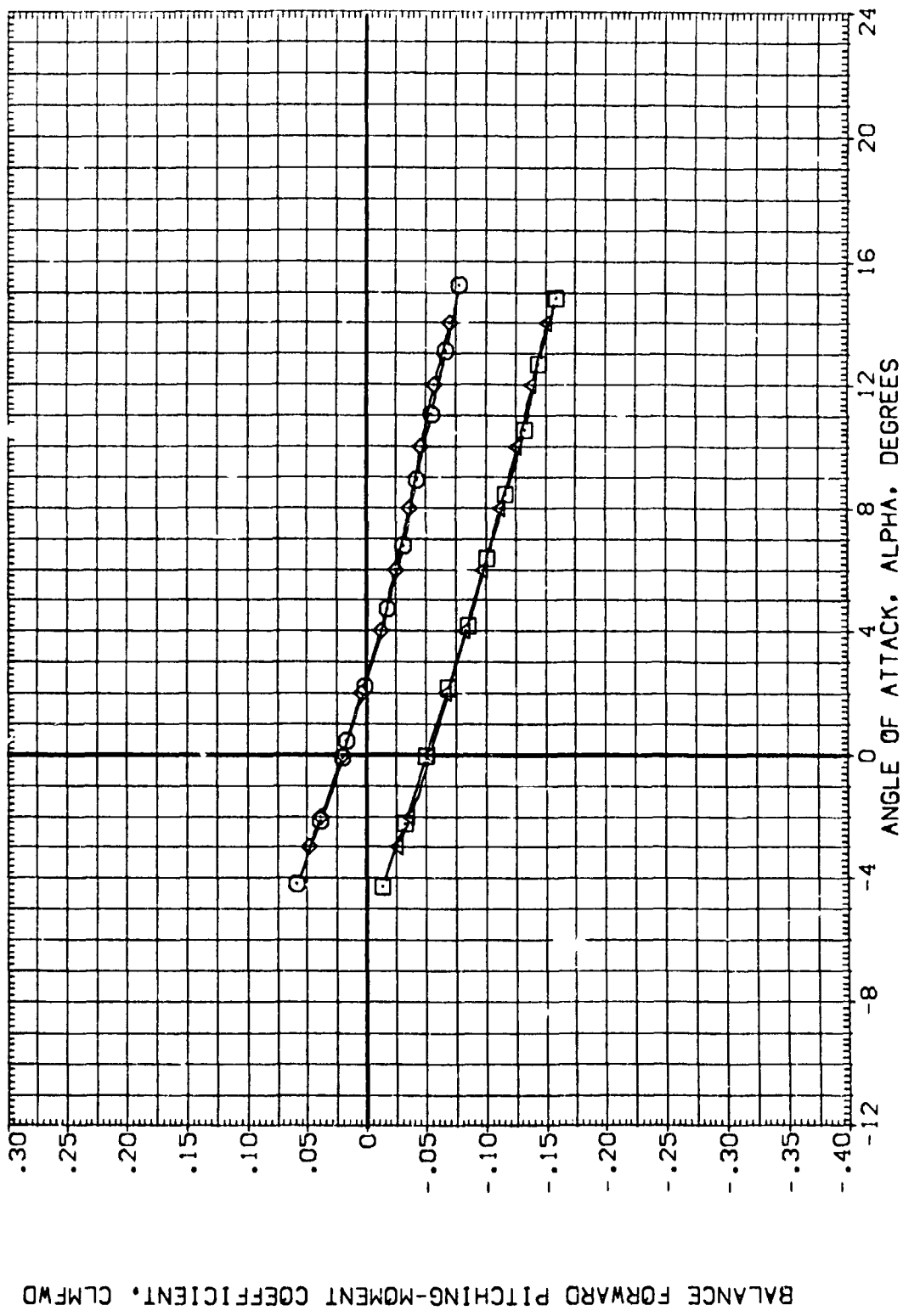


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.50

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019) O ARC 66-709 DA59 DA11A-(N24)

(CER020) X ARC 66-709 DA59 DA11A-(N24)

(1ER019) ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)

(1ER020) ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRRP 12.6255 IN.

YMRRP .0000 IN.

ZMRRP -.3750 IN.

SCALE .0150

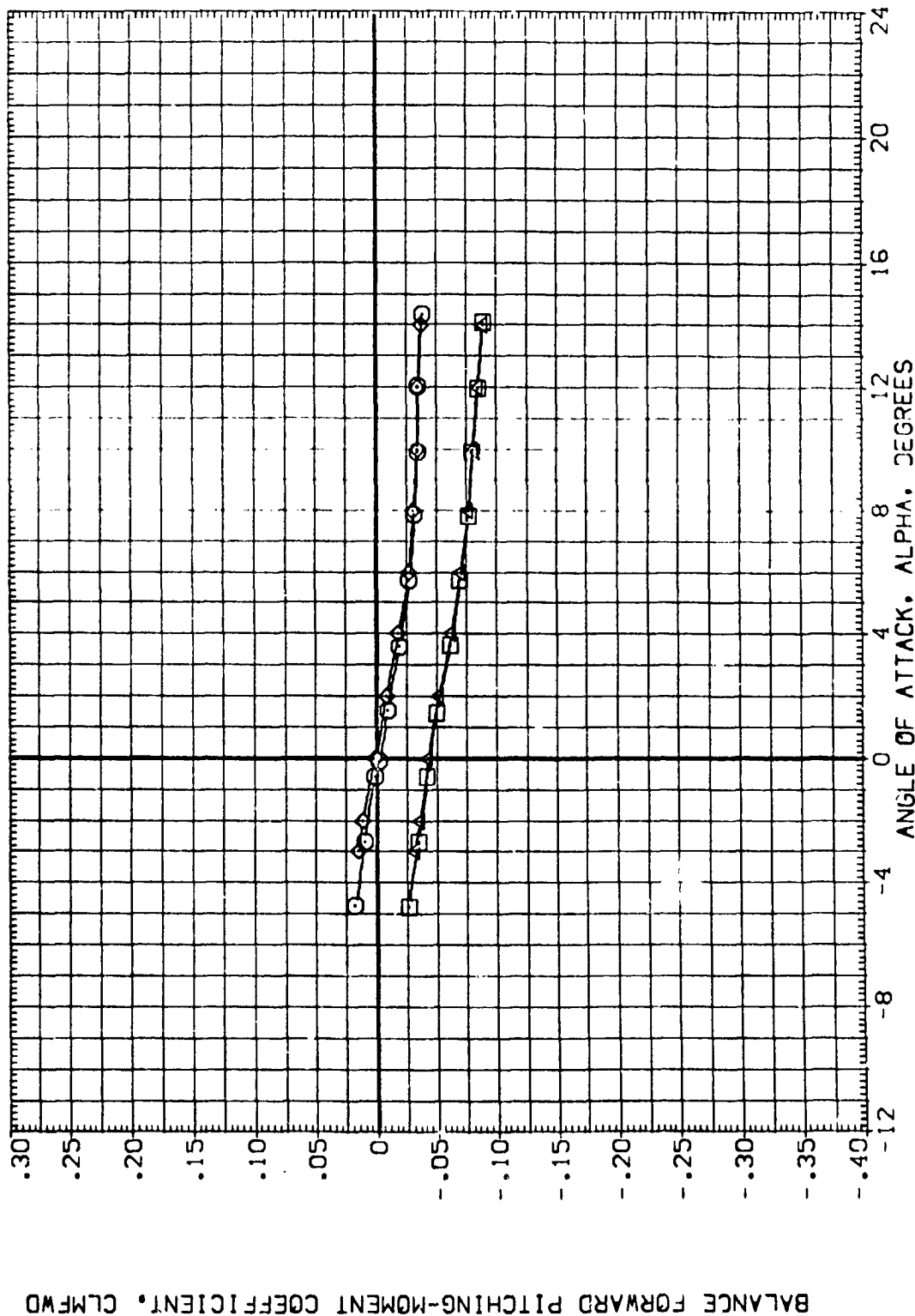


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(H)MACH = 2.00



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019)	ARC 66-709	QAS9	Q111A-(N24)
(CER020)	ARC 66-709	QAS9	Q111A-(N24)
(TER019)	ARC 66-709	QAS9	Q111A-N24 (ADJUSTED FOR TARES)
(TER020)	ARC 66-709	QAS9	Q111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDELAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

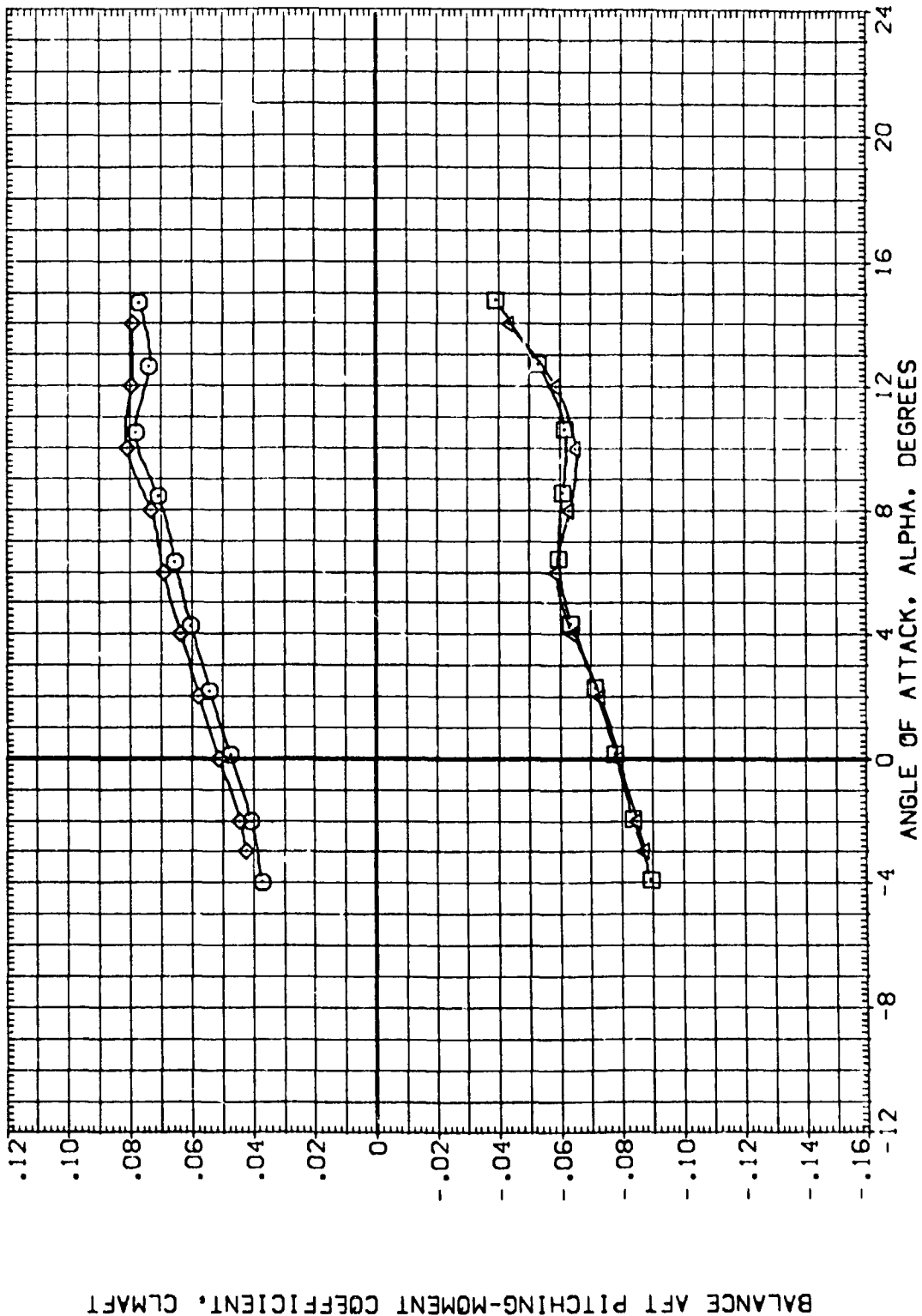


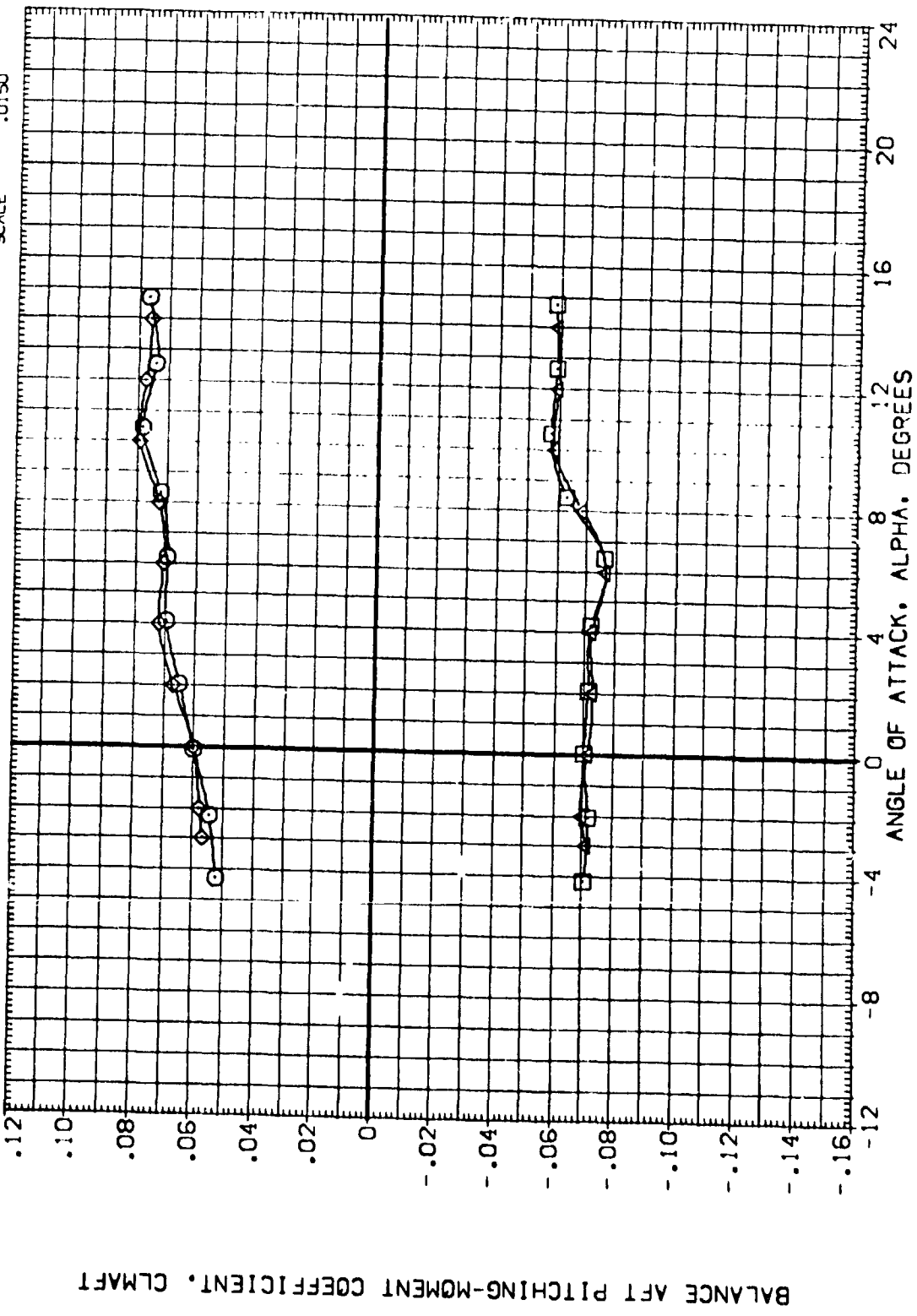
FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(A)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CER019) □ ARC 66-709 CAS9 0111A-(N24)
 (CER020) □ ARC 66-709 CAS9 0111A-(N24)
 (TER019) ⊗ ARC 66-709 CAS9 0111A-N24 (ADJUSTED FOR TARES)
 (TER020) ⊗ ARC 66-709 CAS9 0111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 50 FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



BALANCE AFT PITCHING-MOMENT COEFFICIENT, CLMAFT

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(B)MACH = .80



DATA SET SYMBOL: (CERO19)
 CONFIGURATION DESCRIPTION: ARC 66-709 OAS9 D11A-N24 (ADJUSTED FOR TARES)
 DATA NOT AVAILABLE
 DATA NOT AVAILABLE

BETA: .000
 ELEVON: .000
 BOFLAP: -11.700

REFERENCE INFORMATION:
 SREF: .6053 SQ. FT.
 LREF: .5935 FT.
 BREF: 1.1710 FT.
 XMRP: 12.6255 IN.
 YMRP: .0000 IN.
 ZMRP: -.3750 IN.
 SCALE: .0150

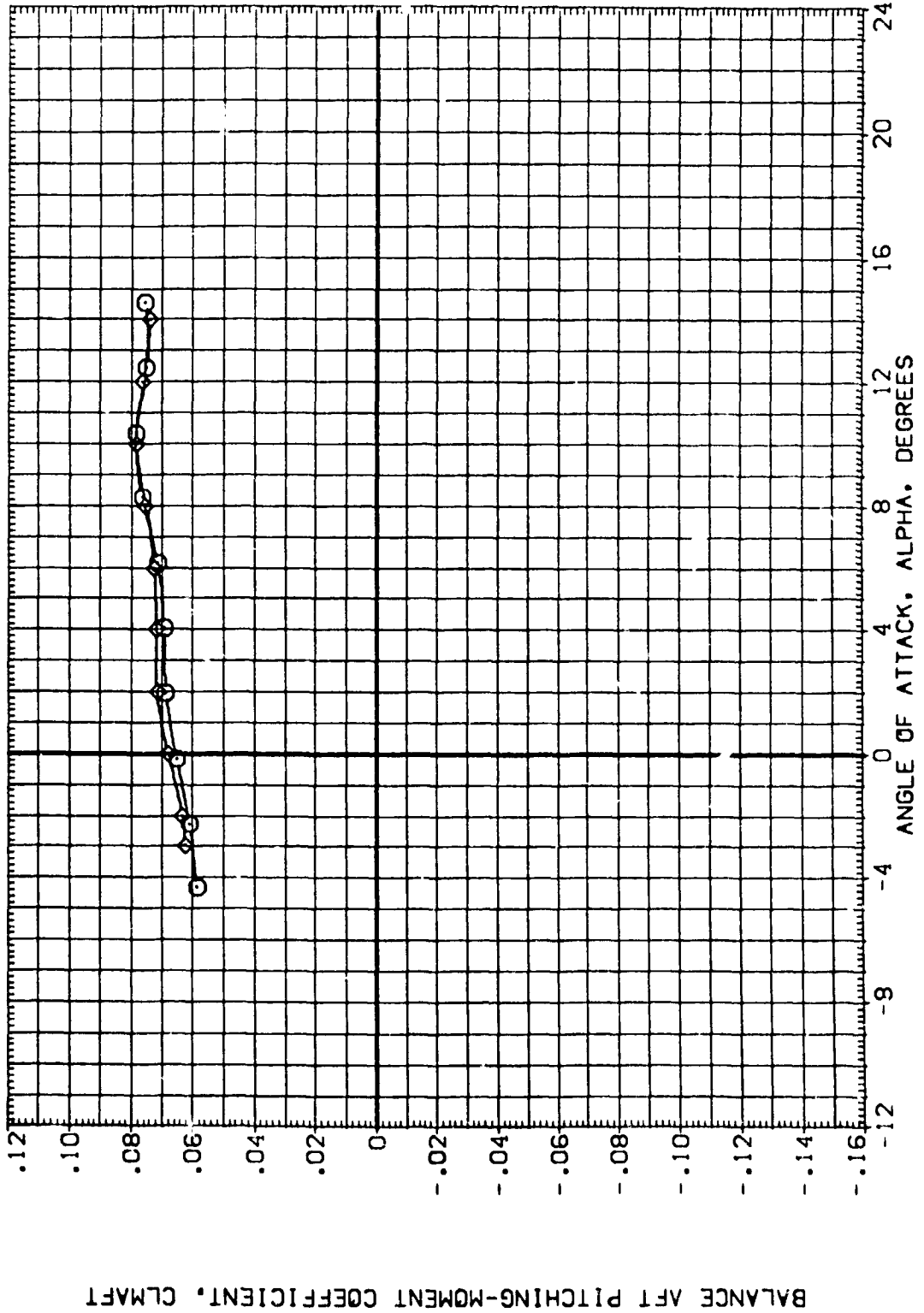


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .85

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019)	ARC 66-709 0A59	0A11A-(N24)
(CER020)	ARC 66-709 0A59	0A11A-(N24)
(IER019)	ARC 66-709 0A59	0I11A-N24 (ADJUSTED FOR TARES)
(IER020)	ARC 66-709 0A59	0I11A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	50.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

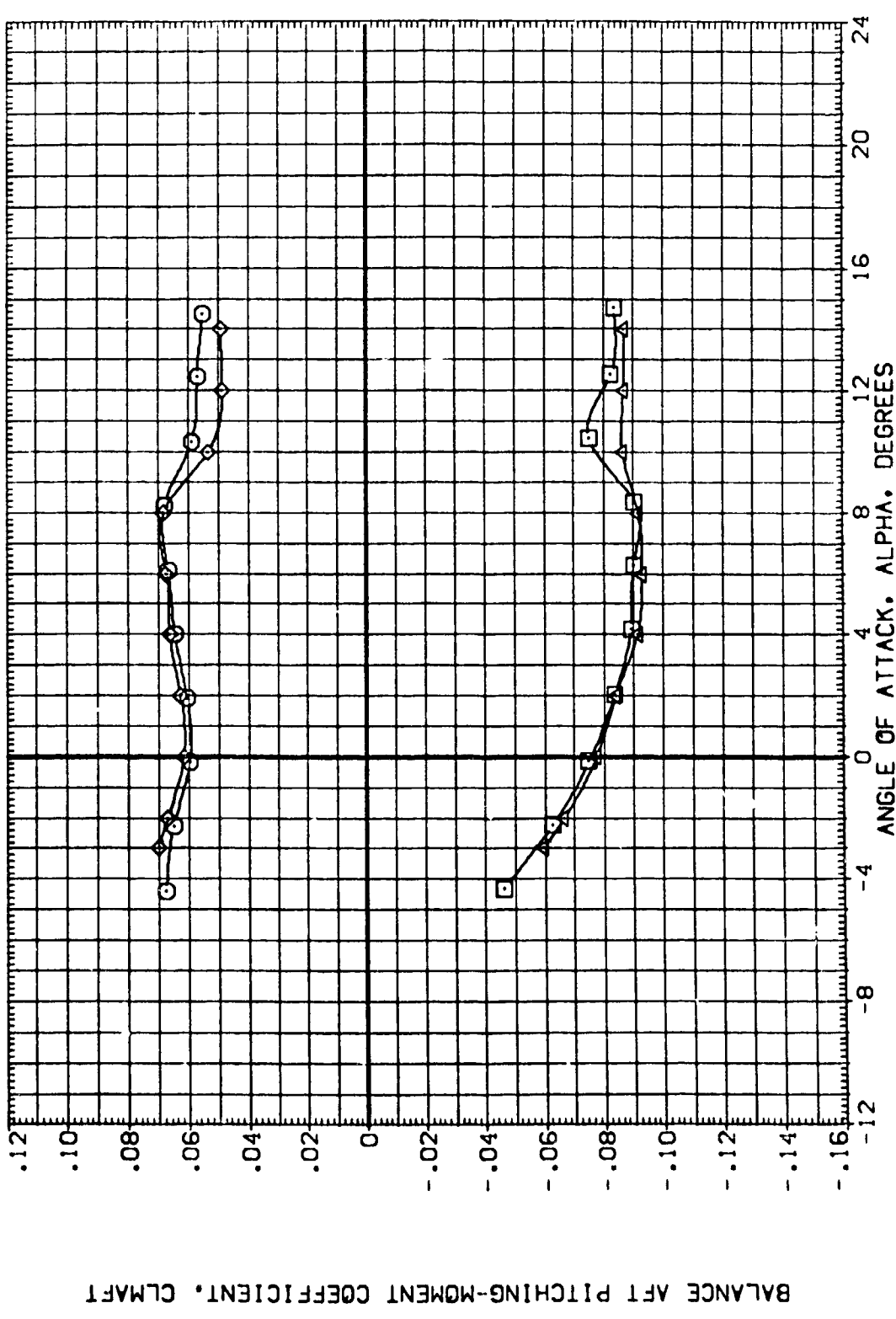


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES
(D)MACH = .90



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CERO19) ARC 66-709 0A59 0A11A-(N24)

(CERO20) ARC 66-709 0A59 0A11A-(N24)

(TERO19) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

(TERO20) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

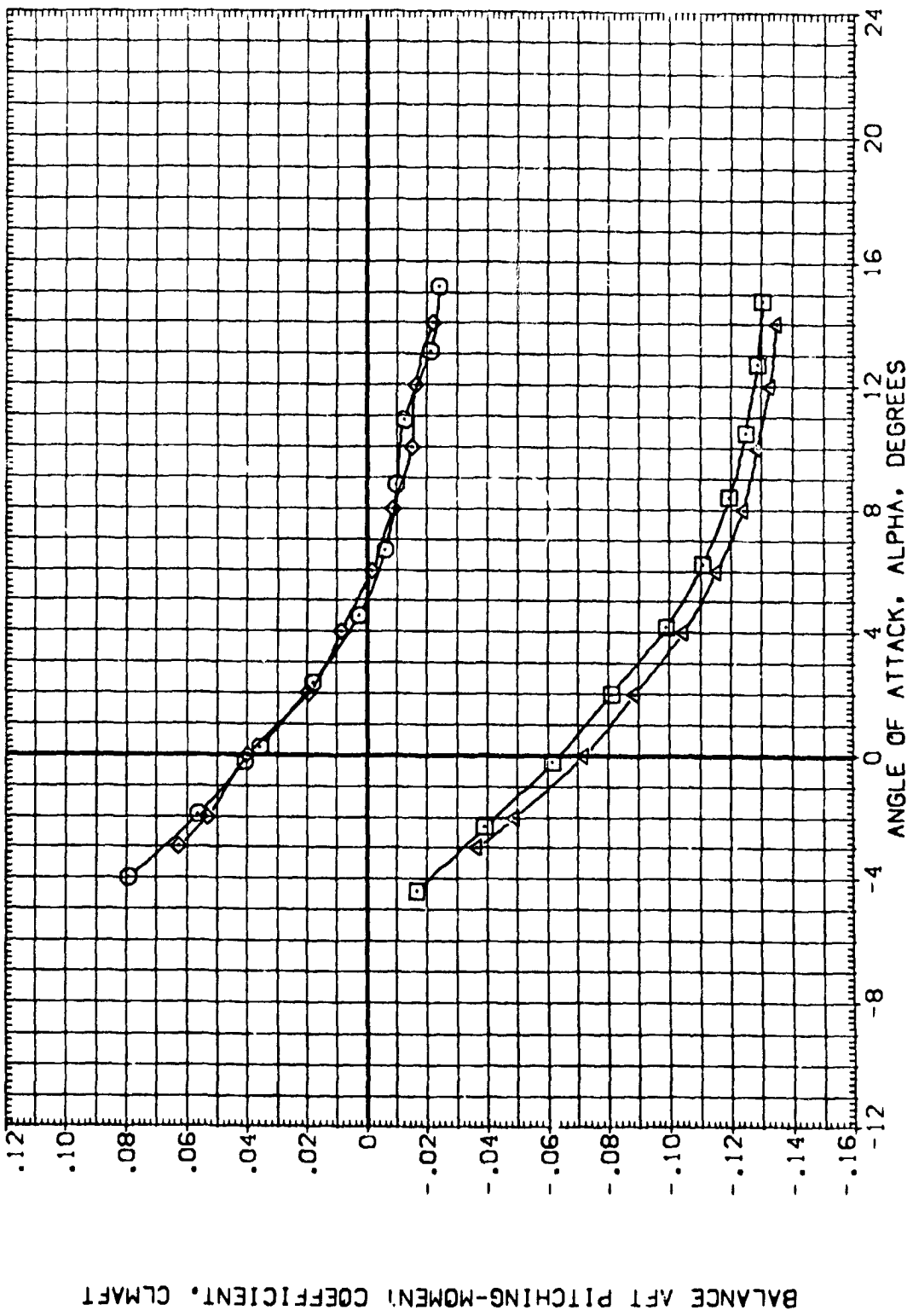


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(F)MACH = 1.20



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019)	ARC 66-709 DASS 0111A-(N24)
(CER020)	ARC 66-709 DASS 0111A-(N24)
(TER019)	ARC 66-709 DASS 0111A-N24 (ADJUSTED FOR TARES)
(TER020)	ARC 66-709 DASS 0111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SO.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

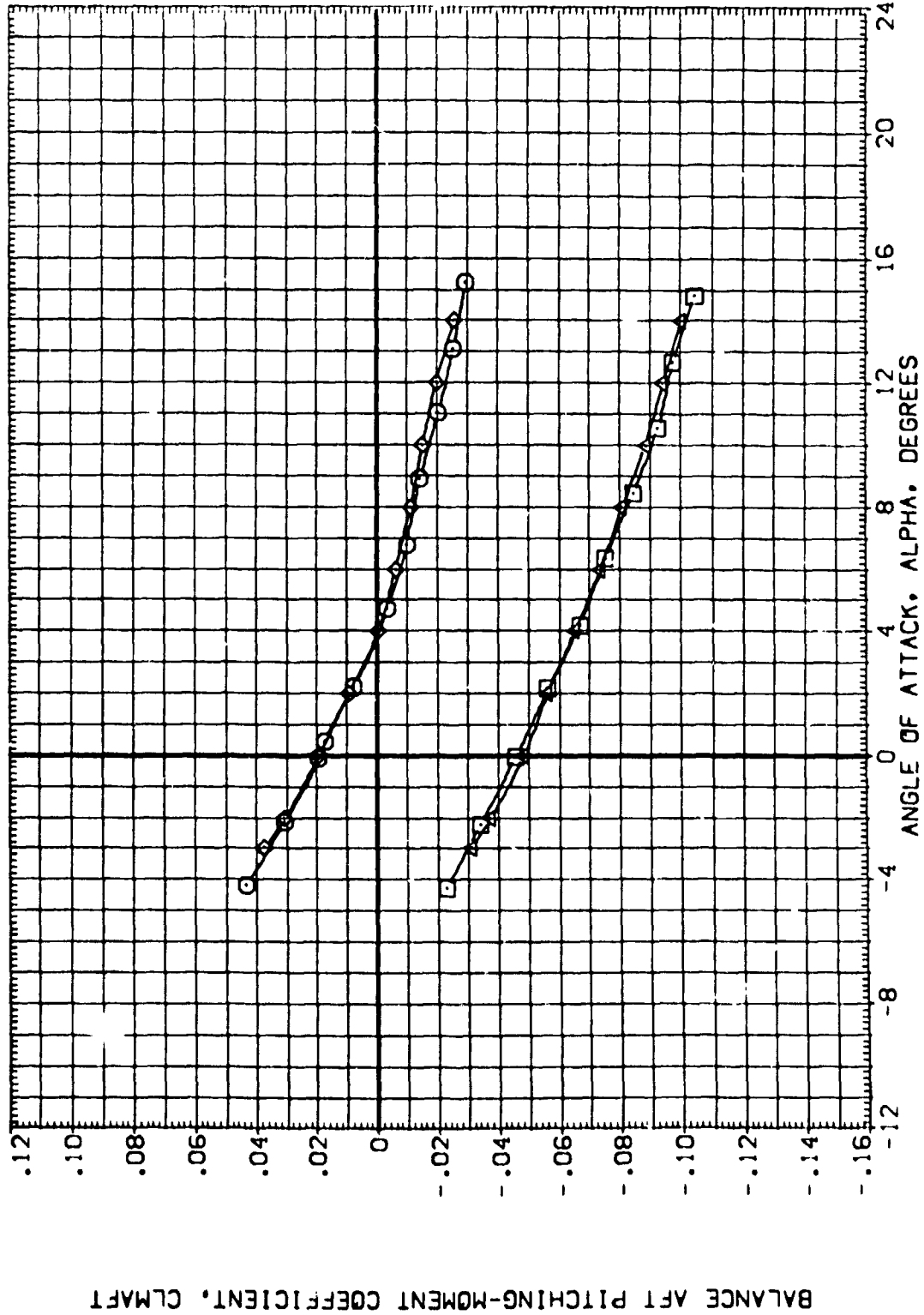


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.50

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019) ○ ARC 66-709 DASS 011A-(N24)

(CFR020) ⊗ ARC 66-709 DASS 011A-(N24)

(IER019) ○ ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)

(IER020) ⊗ ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF .6054 SO.FT.

LREF .5935 FT.

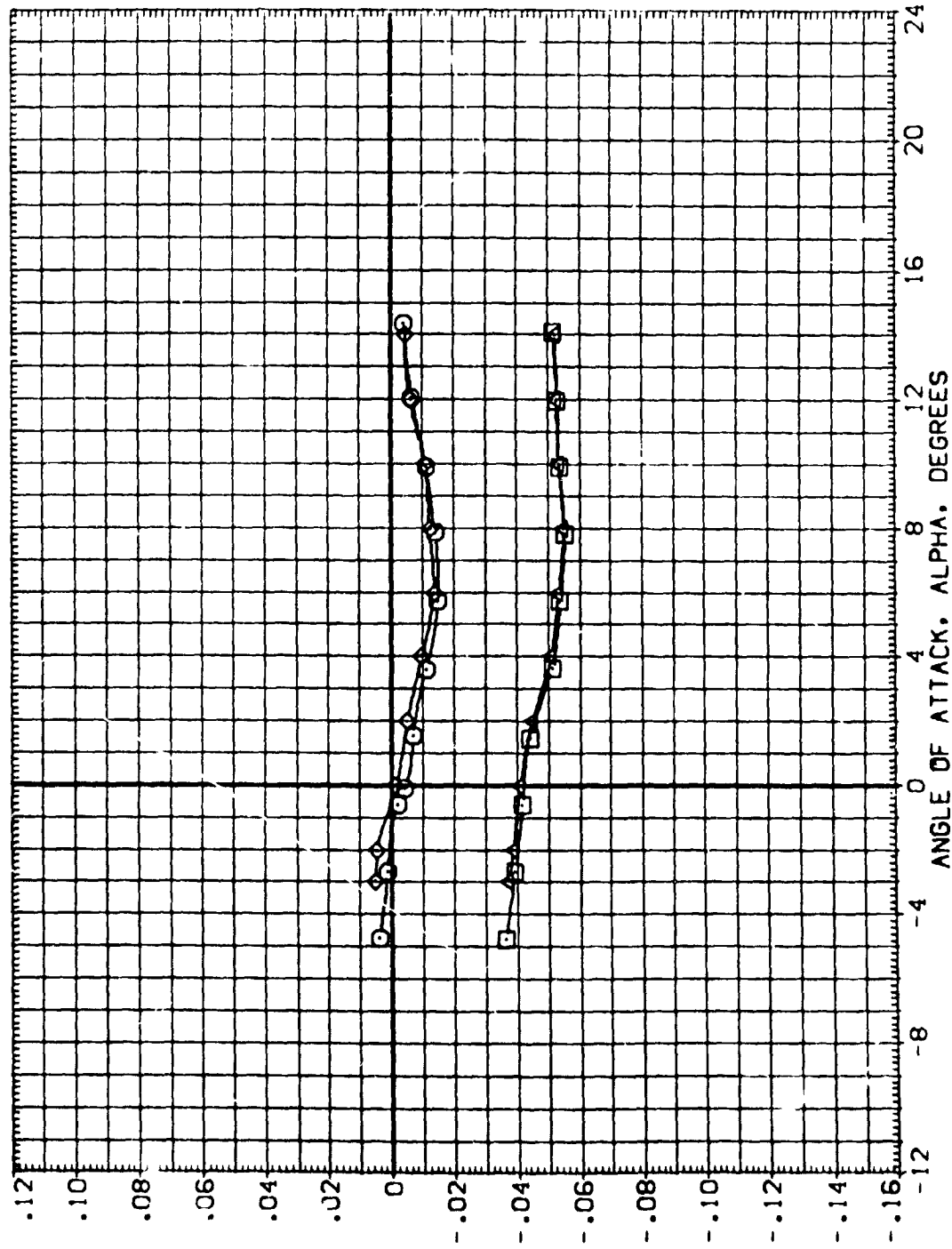
BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150



BALANCE AFT PITCHING-MOMENT COEFFICIENT, CMAFT

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(H)MACH = 2.00



DATA SET SYMBOL CONFIGURATION DESCRIPTION

ARC 66-709 QAS9 DA11A-(N24)
 ARC 66-709 QAS9 DA11A-(N24)
 ARC 66-709 QAS9 011A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 QAS9 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDF'LAP

REFERENCE INFORMATION

SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 YMRP 12.6265 IN.
 ZMRP .0000 IN.
 SCALE -.3750 IN.
 .0150

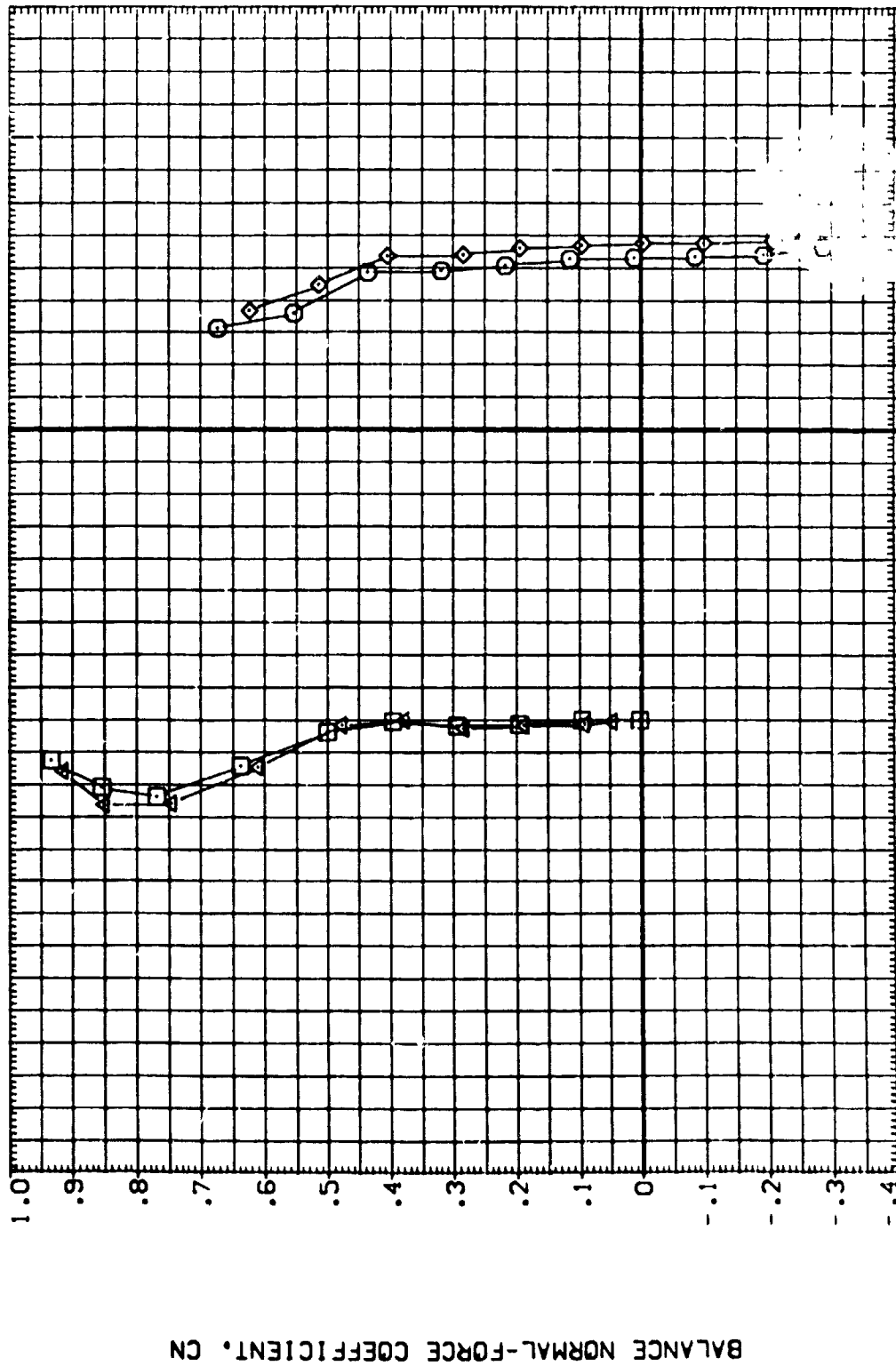


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(A)MACH = .60

DATA SET SYMBOL: (CER019) (CER020) (TER019) (TER020)

CONFIGURATION DESCRIPTION: ARC 66-709 DASS O111A-N24 (ADJUSTED FOR TARES) O111 N24 (ADJUSTED FOR TARES)

BETA: .000 .000 .000 .000

ELEVON: .000 15:000 15:000 15:000

BOFLAP: .000 .000 .000 .000

REFERENCE INFORMATION: SREF .6053 SQ.FT. LREF .5936 FT. BREF 1.1710 FT. XMRP 12.6255 IN. YMRP .0000 IN. ZMRP -.3750 IN. SCALE .0150

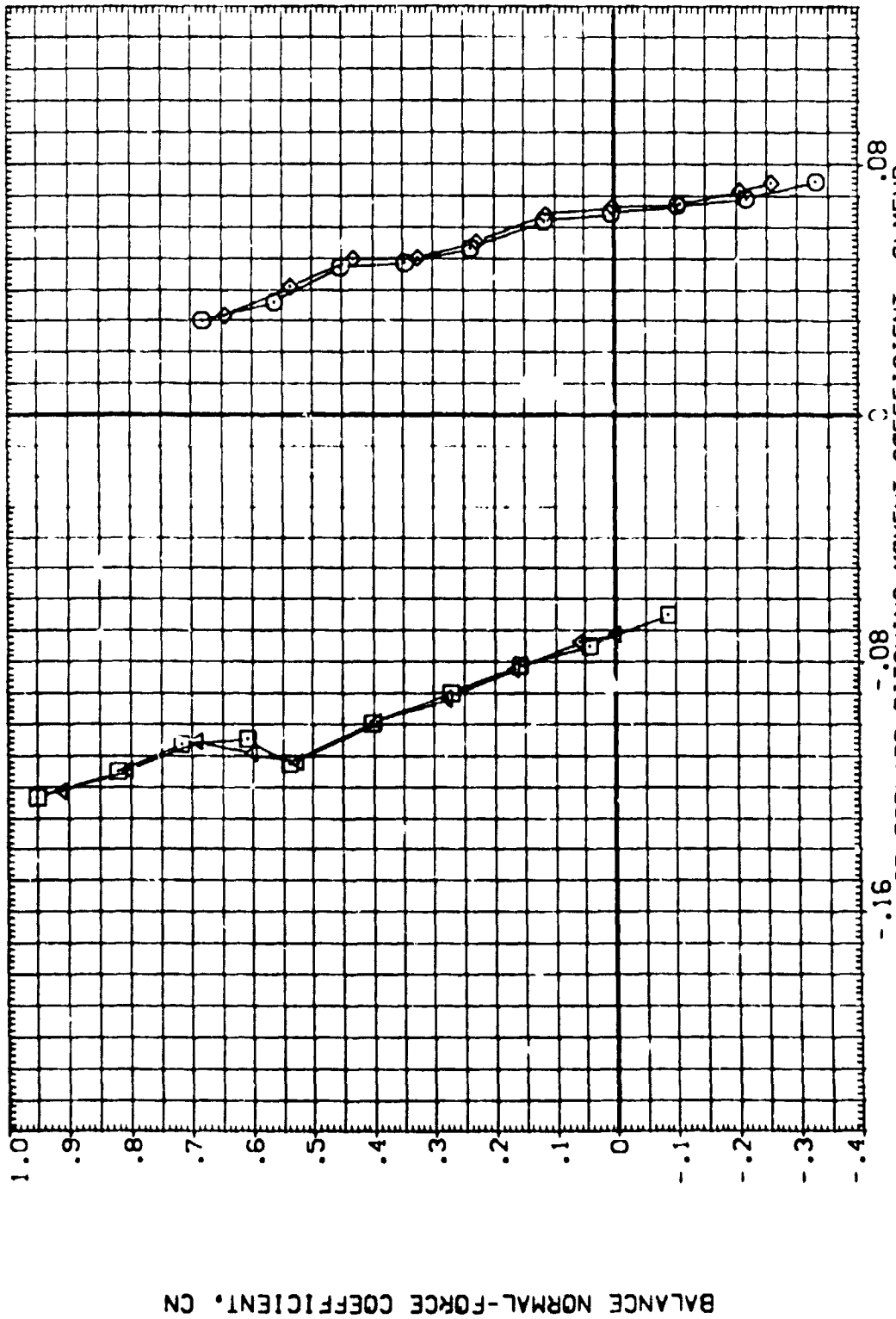


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(8)MACH = .80 PAGE 698



DATA SET SYMBOL: (CERO)S
 (CERO)O
 (CERO)S
 (CERO)O

CONFIGURATION DESCRIPTION
 ARC 66-709 DASS D111A-N24
 DATA NOT AVAILABLE
 ARC 66-709 DASS D111A-N24 (ADJUSTED FOR TARES)
 DATA NOT AVAILABLE

BETA: .000
 .000
 .000

ELEVON: .000
 15.000
 15.000

BDFLAP: -11.700
 -11.700
 -11.700

REFERENCE INFORMATION
 SREF: 6053 SQ. FT.
 LREF: 5936 FT.
 BREF: 11710 FT.
 XMRP: 12.6255 IN.
 YMRP: .0000 IN.
 ZMRP: -.3750 IN.
 SCALE: .0150

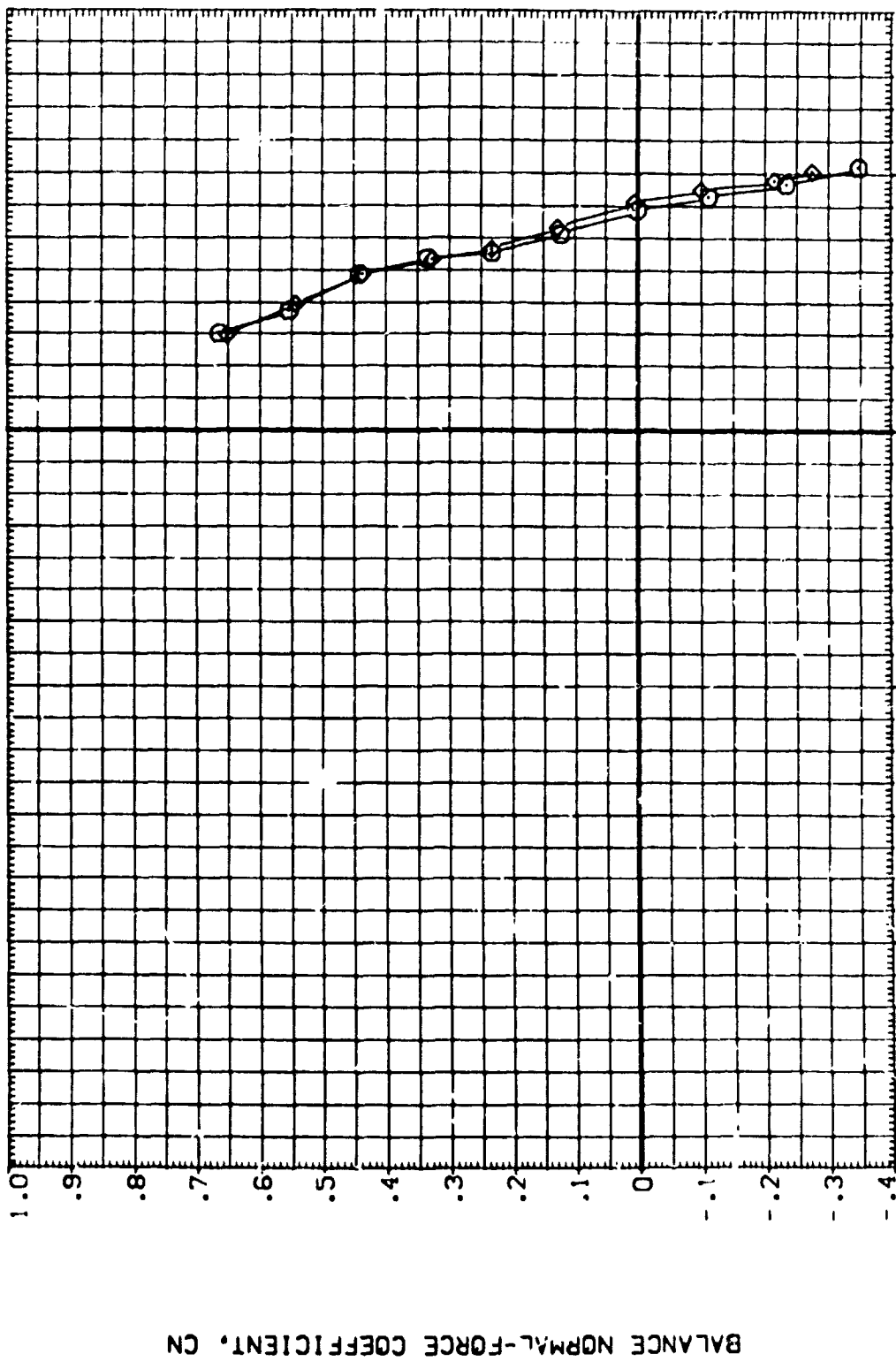


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .85

REFERENCE INFORMATION
 SREF 6053 50.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CER019) ARC 66-709 OAS9 O11A-(N24)
 (CER020) DATA NOT AVAILABLE
 (LER019) ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)
 (LER020) DATA NOT AVAILABLE

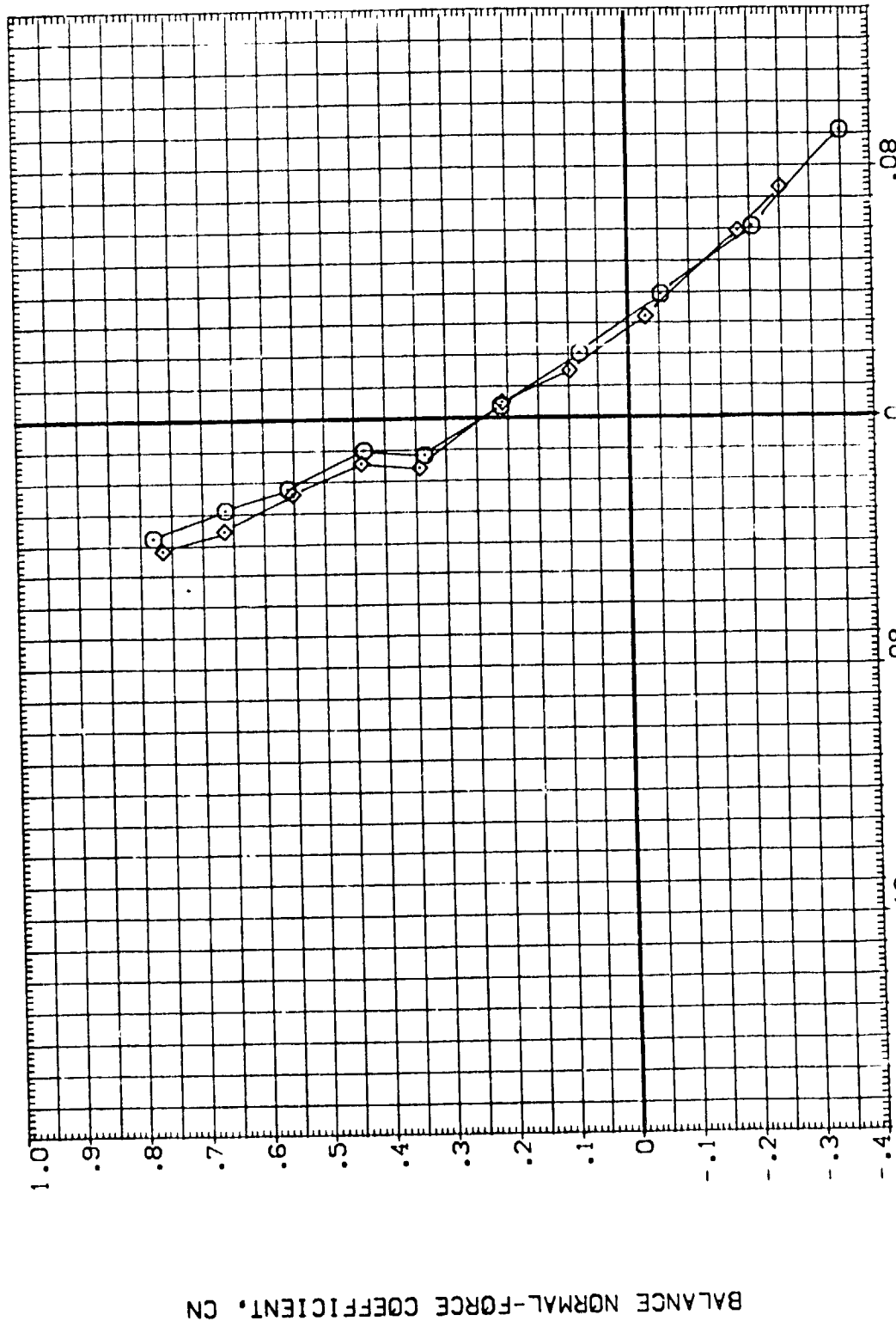


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES
 (E)MACH = .95

DATA SET SYMBOL
 (CER019)
 (CER020)
 (IER019)
 (IER020)

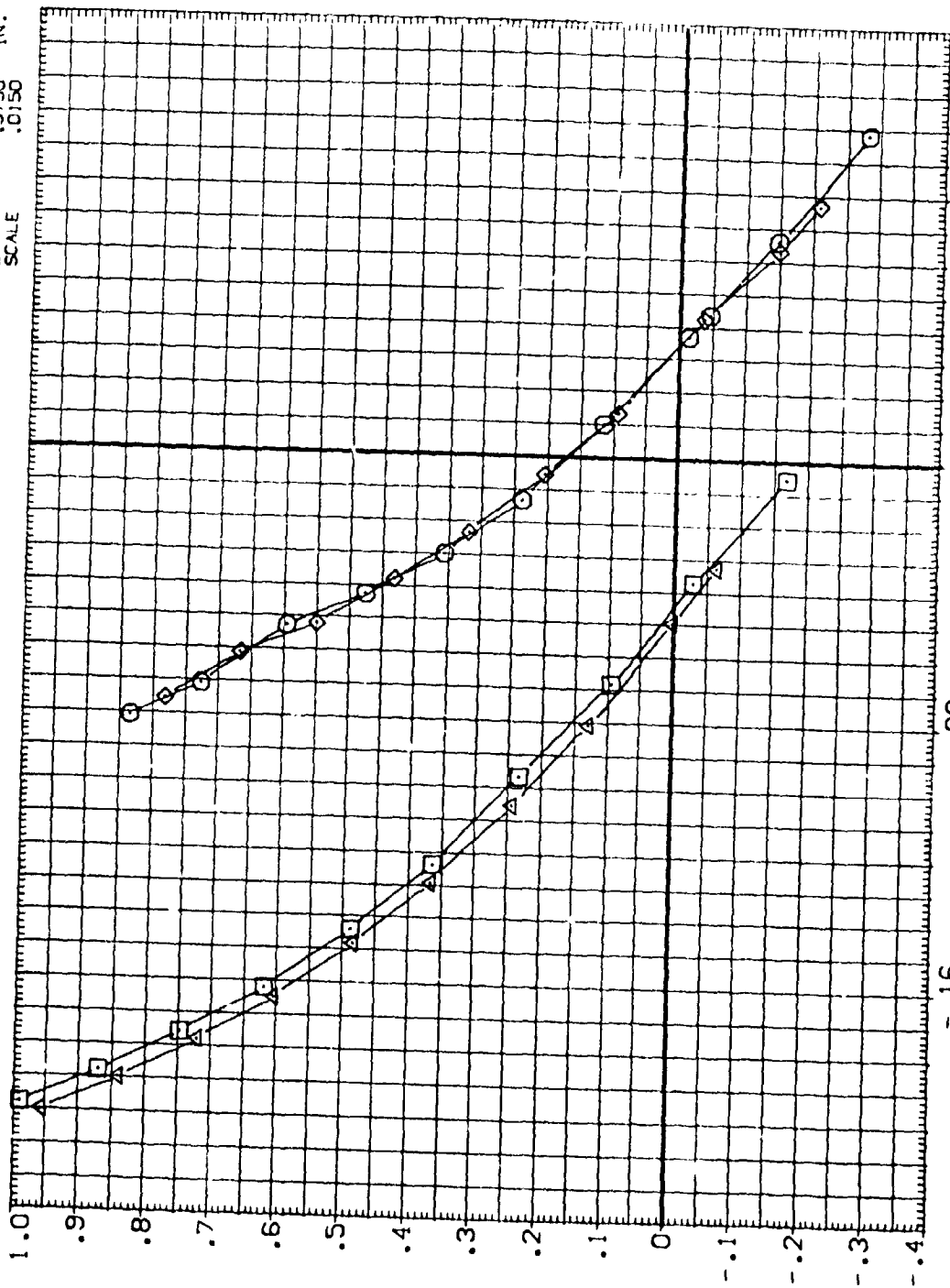
CONFIGURATION DESCRIPTION
 ARC 66-709 DASS 011A-(N24)
 ARC 66-709 DASS 011A-(N24)
 ARC 66-709 DASS 011A-(N24)
 ARC 66-709 DASS 011A-(N24)

BETA
 .000
 .000
 .000
 .000

ELEVON
 .000
 15.000
 .000
 15.000

BOFLAP
 -11.700
 -11.700
 -11.700
 -11.700

REFERENCE INFORMATION
 SREF .6053 SO.FT.
 LREF .5935 FT.
 BRFP 1.1710 FT.
 XMRP 12.6255 IN.
 ZMRP .0000 IN.
 SCALE -.3750 IN.



BALANCE NORMAL-FORCE COEFFICIENT, CN

BALANCE FORWARD PITCHING-MOMENT COEFFICIENT, CLMFWD
 FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(F)MACH = 1.20

DATA SET SYMBOLS CONFIGURATION DESCRIPTION

(CER019) ○ ARC 66-709 CA59 0A11A-(N24)

(CER020) ○ ARC 66-709 CA59 0A11A-(N24)

(1ER019) ⊗ ARC 66-709 CA59 011A-N24 (ADJUSTED FOR TARES)

(1ER020) ⊗ ARC 66-709 CA59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 15.300 -11.700

.000 .000 -11.700

.000 15.300 -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5935 FT.

BREF 1.173 FT.

XMRP 12.6755 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

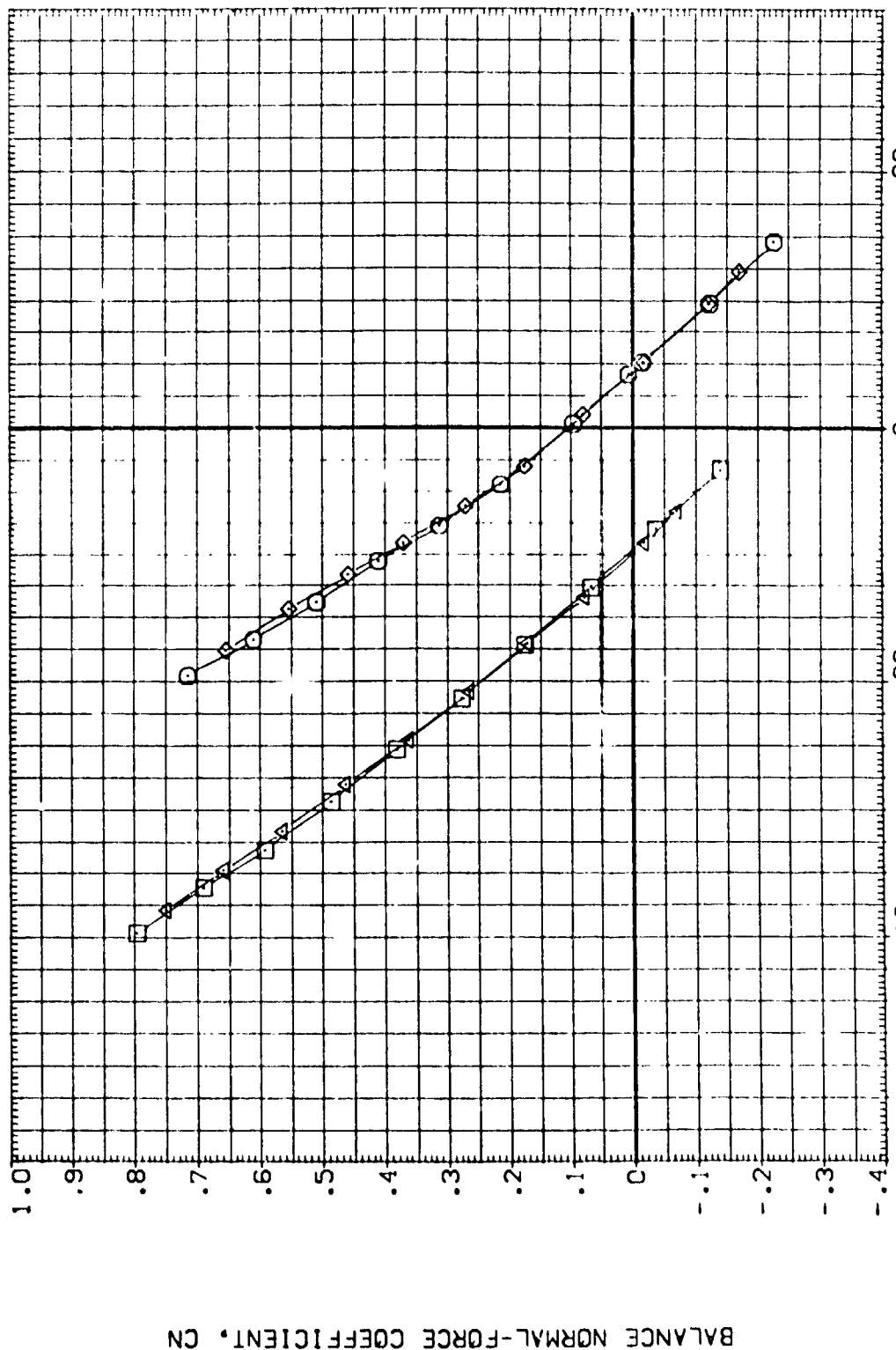


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.50

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BDF LAP	REFERENCE INFORMATION
(CER018)	ARC 66-709 DASS 0A11-(N24)	.000	.000	-11.700	SREF .6053 50.FT.
(CER020)	ARC 66-709 DASS 0A11A-(N24)	.000	15.000	-11.700	LREF .9935 FT.
(TER019)	ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	BREF 1.1710 FT.
(TER020)	ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)	.000	15.000	-11.700	XMRP 12.6255 IN.
					YMRP .0000 IN.
					ZMRP -.3750 IN.
					SCALE .0150

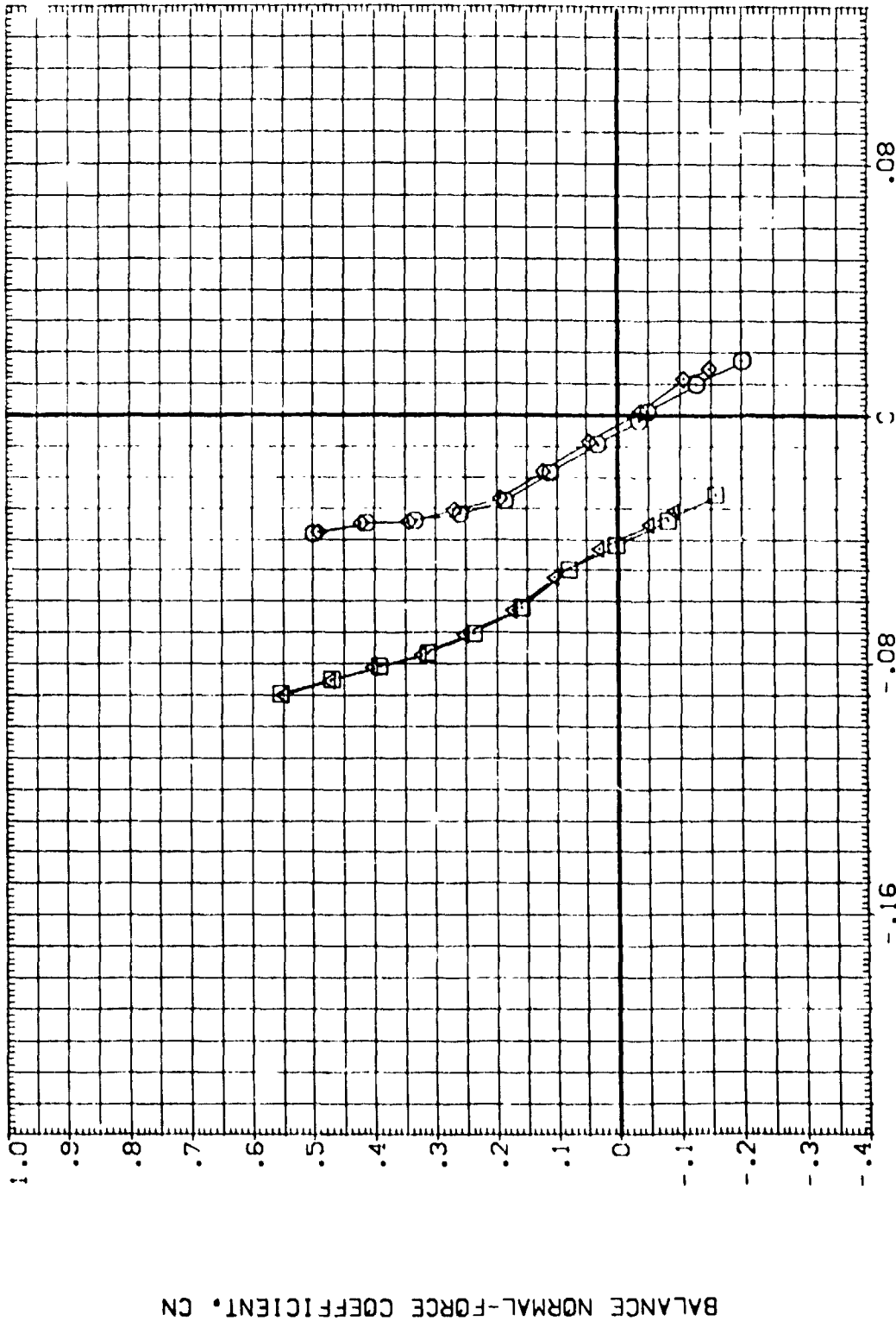


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(H)MACH = 2.00



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(:ER019)	ARC 66-709	QAS9	0111A-(N24)
(:ER020)	ARC 66-709	QAS9	0111A-(N24)
(:ER019)	ARC 66-709	QAS9	0111A-N24 (ADJUSTED FOR TARES)
(:ER020)	ARC 66-709	QAS9	0111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	50.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRD	12.6255	IN.
YMRD	.0000	IN.
ZMRD	-.3750	IN.
SCALE	.0:50	

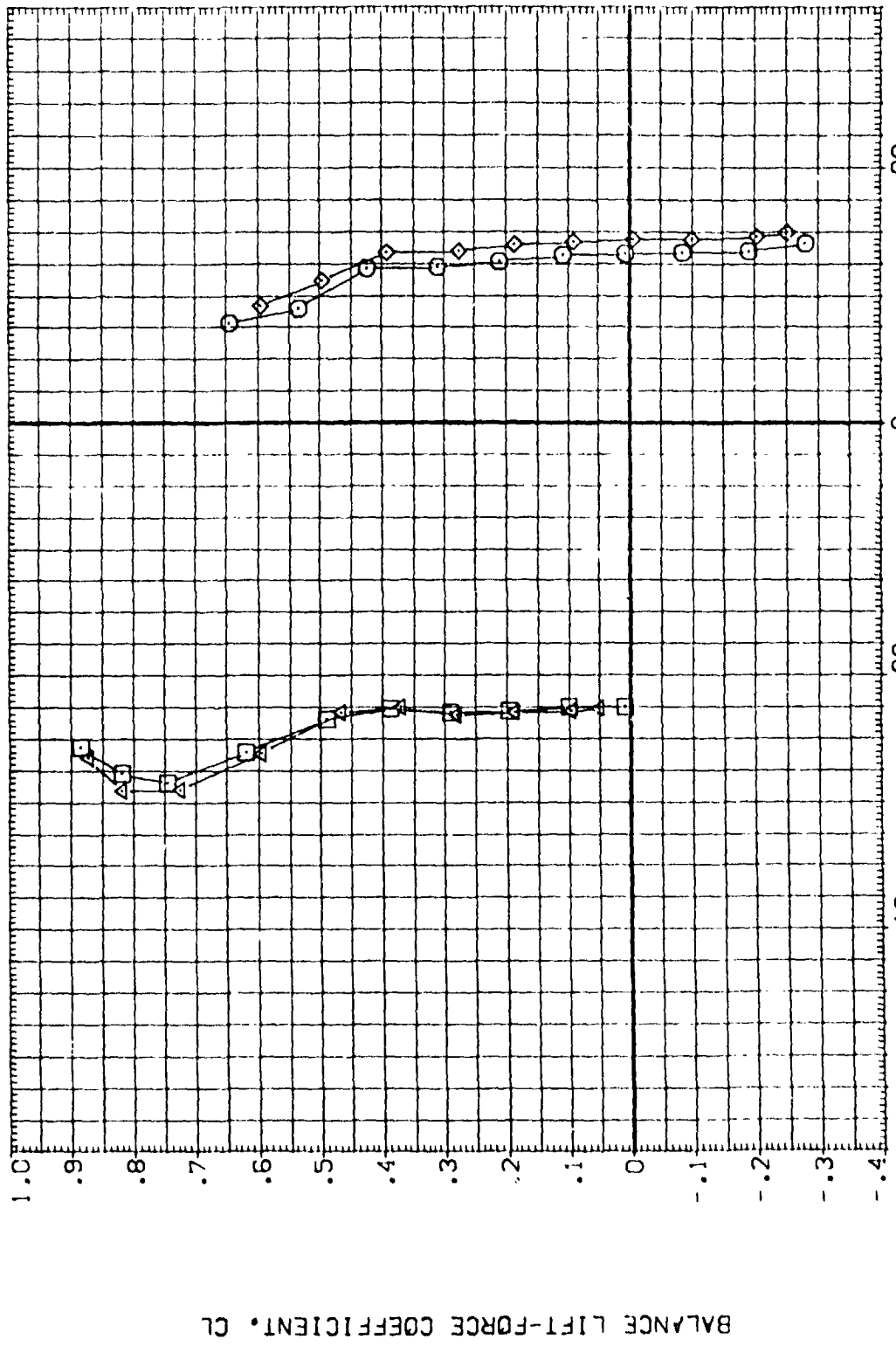


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019)	ARC 66-709 CAS9	0111A-(N24)
(CER020)	ARC 66-709 CAS9	0111A-(N24)
(1ER019)	ARC 66-709 CAS9	0111A-N24 (ADJUSTED FOR TARES)
(1ER020)	ARC 66-709 CAS9	0111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDF LAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	50. FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

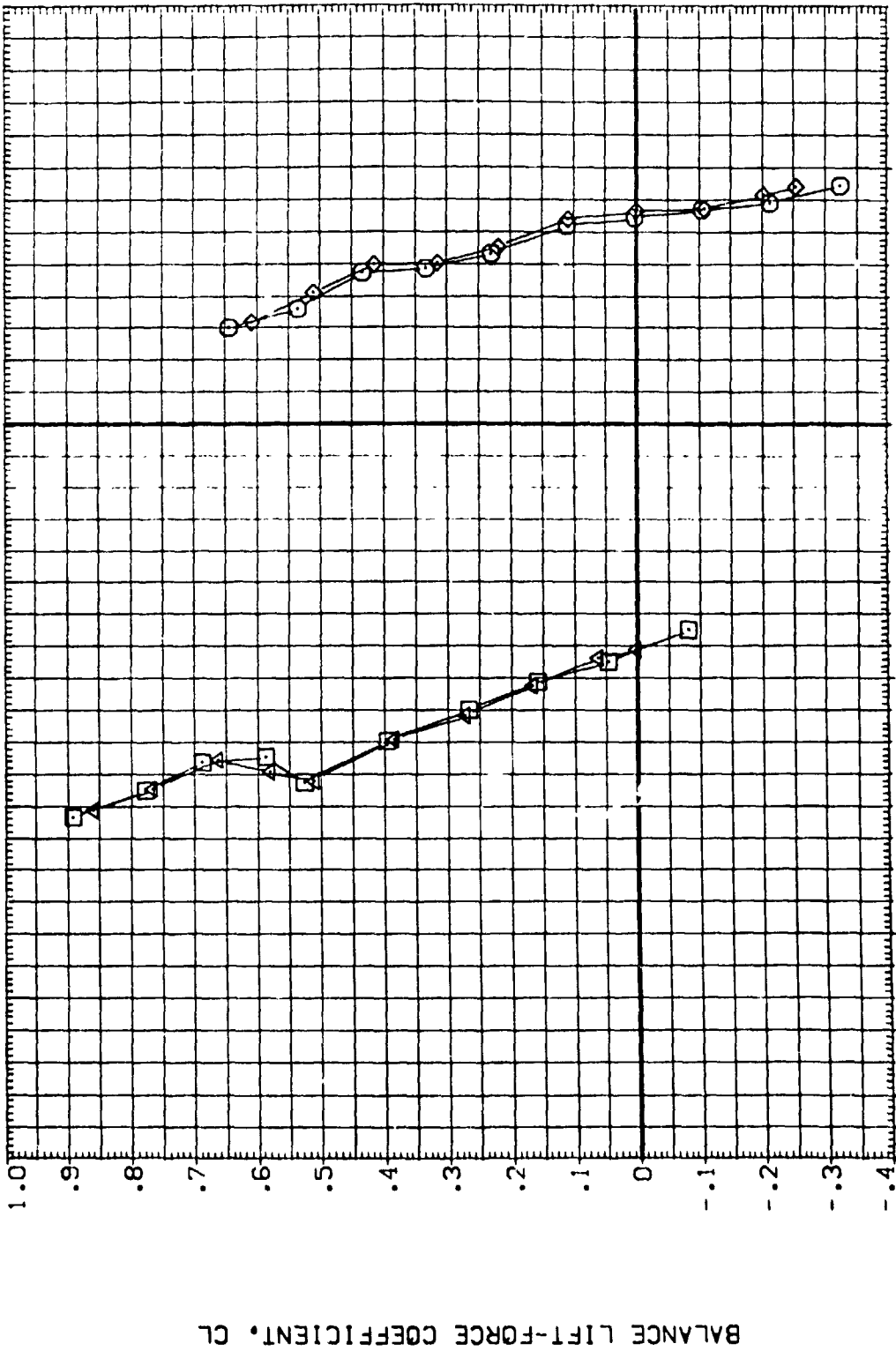


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES
 (B)MACH = .80



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019) ○ ARC 66-709 D459 D411A-(N24)
 (CER020) ○ DATA NOT AVAILABLE
 (IER019) × ARC 66-709 D459 D11A-N24 (ADJUSTED FOR TARES)
 (IER020) × DATA NOT AVAILABLE

BETA ELEVON BOFLAP

.000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

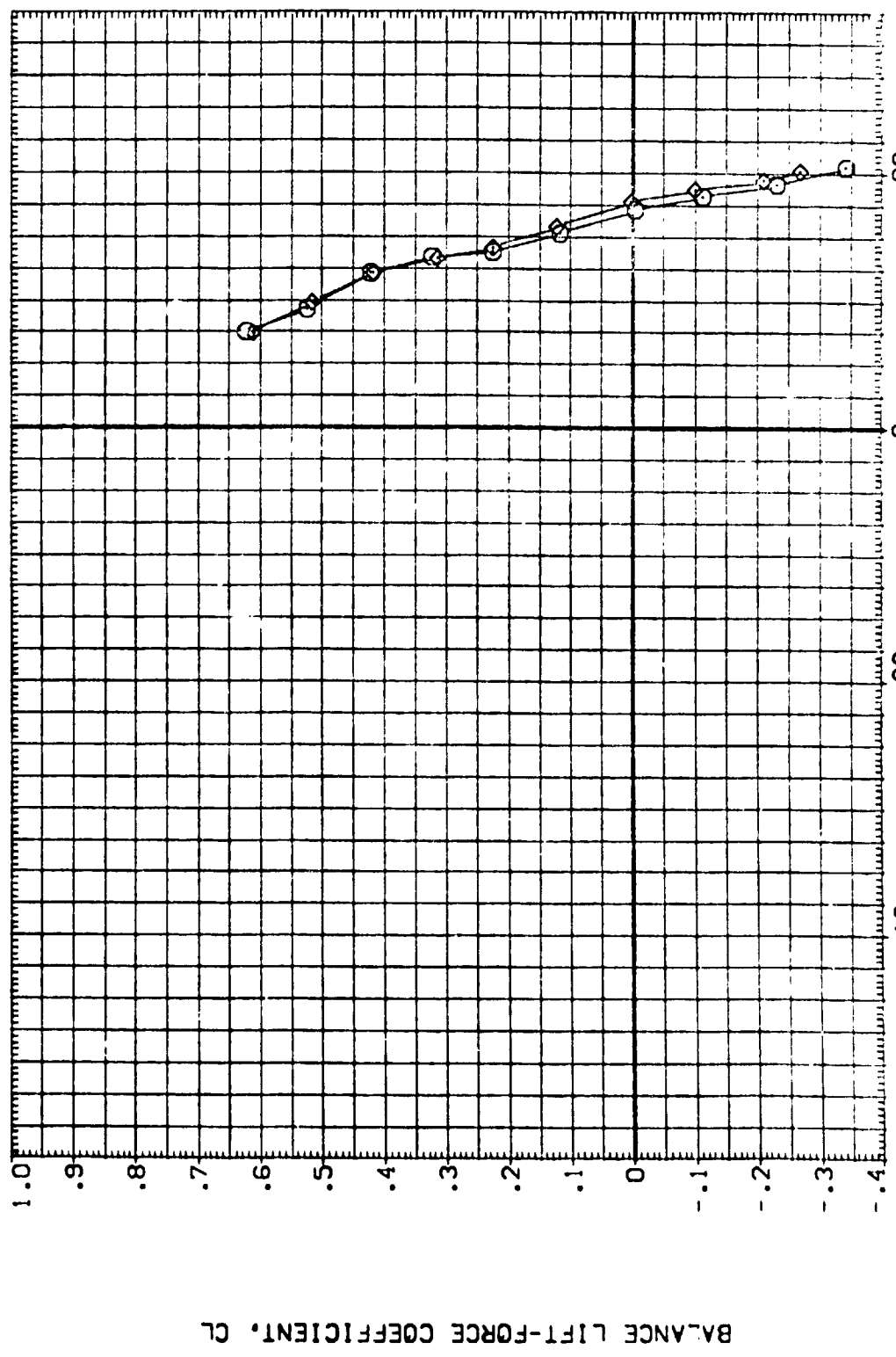


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019) Q ARC 66-709 DA59 CA11A-(N24)

(CER020) X ARC 66-709 DA59 CA11A-(N24)

(CER019) ARC 66-709 DA59 CA11A-N24 (ADJUSTED FOR TARES)

(CER020) ARC 66-709 DA59 CA11A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDFLAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF 6.253 SQ.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

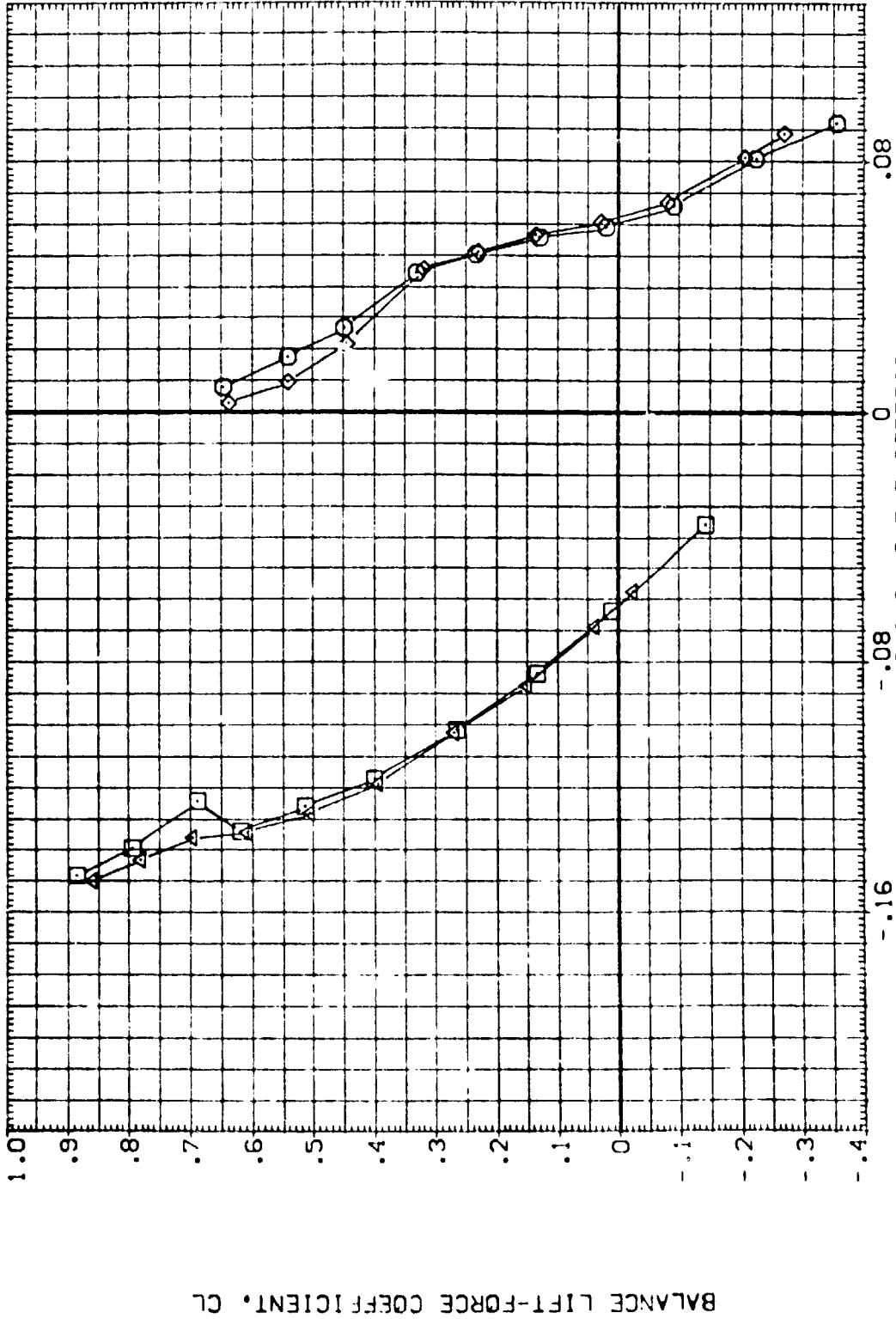


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

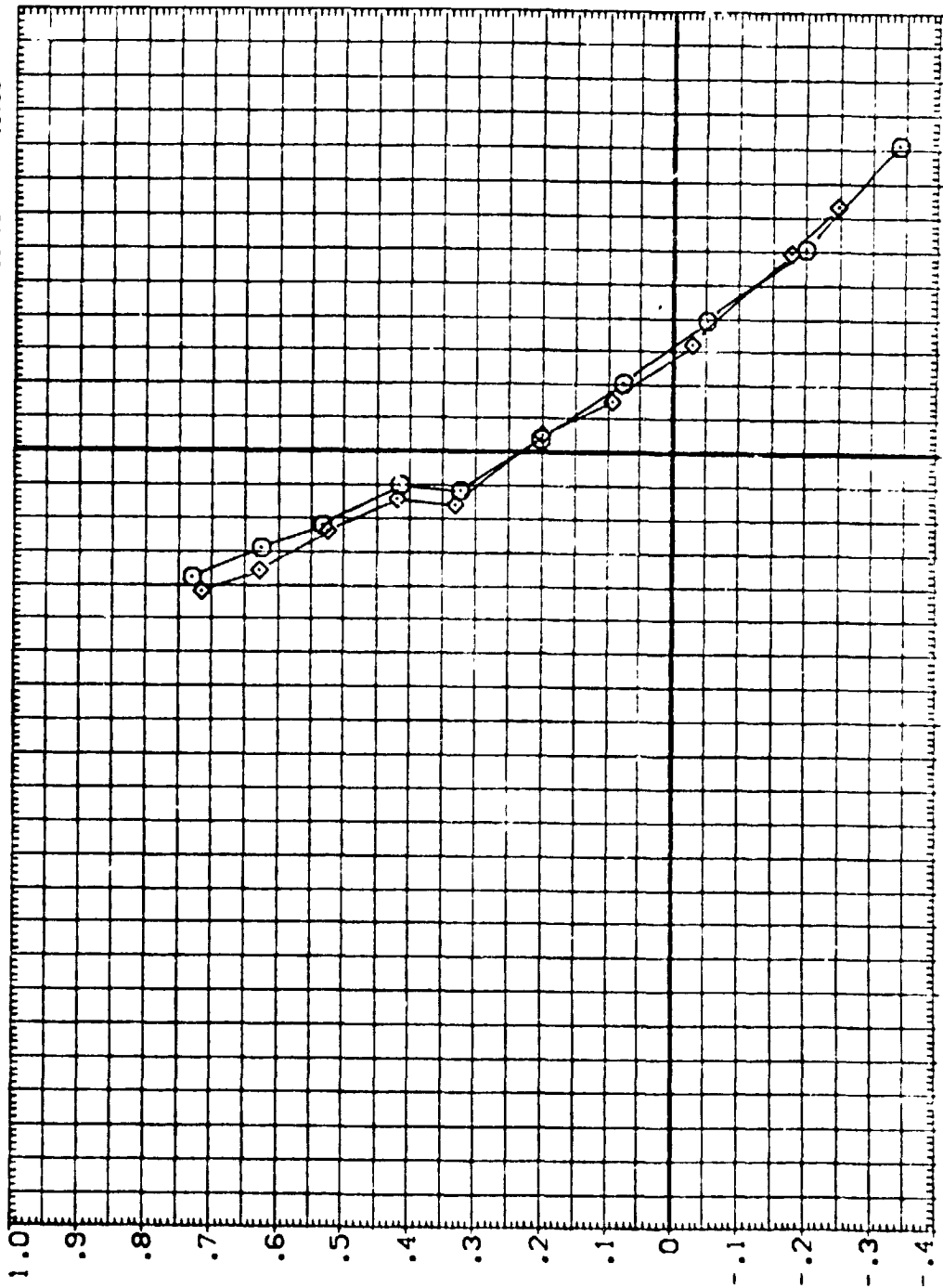
(D)MACH = .90



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CERO19) ARC 66-709 CAS9 CA11A-(N24)
 (CERO20) DATA NOT AVAILABLE
 (PERO19) ARC 66-709 CAS9 011A-N24 (ADJUSTED FOR TARES)
 (PERO20) DATA NOT AVAILABLE

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 50.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



BALANCE LIFT-FORCE COEFFICIENT, CL

BALANCE FORWARD PITCHING-MOMENT COEFFICIENT, CLMFW

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(E) MACH = .95

REFERENCE INFORMATION:
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BRFF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA .000 ELEVON 8DF LAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CERO19) ARC 66-709 GASS 0111A-(N24)
 (CERO20) ARC 66-709 GASS 0111A-(N24)
 (CERO19) ARC 66-709 GASS 0111A-N24 (ADJUSTED FOR TARES)
 (CERO20) ARC 66-709 GASS 0111A-N24 (ADJUSTED FOR TARES)

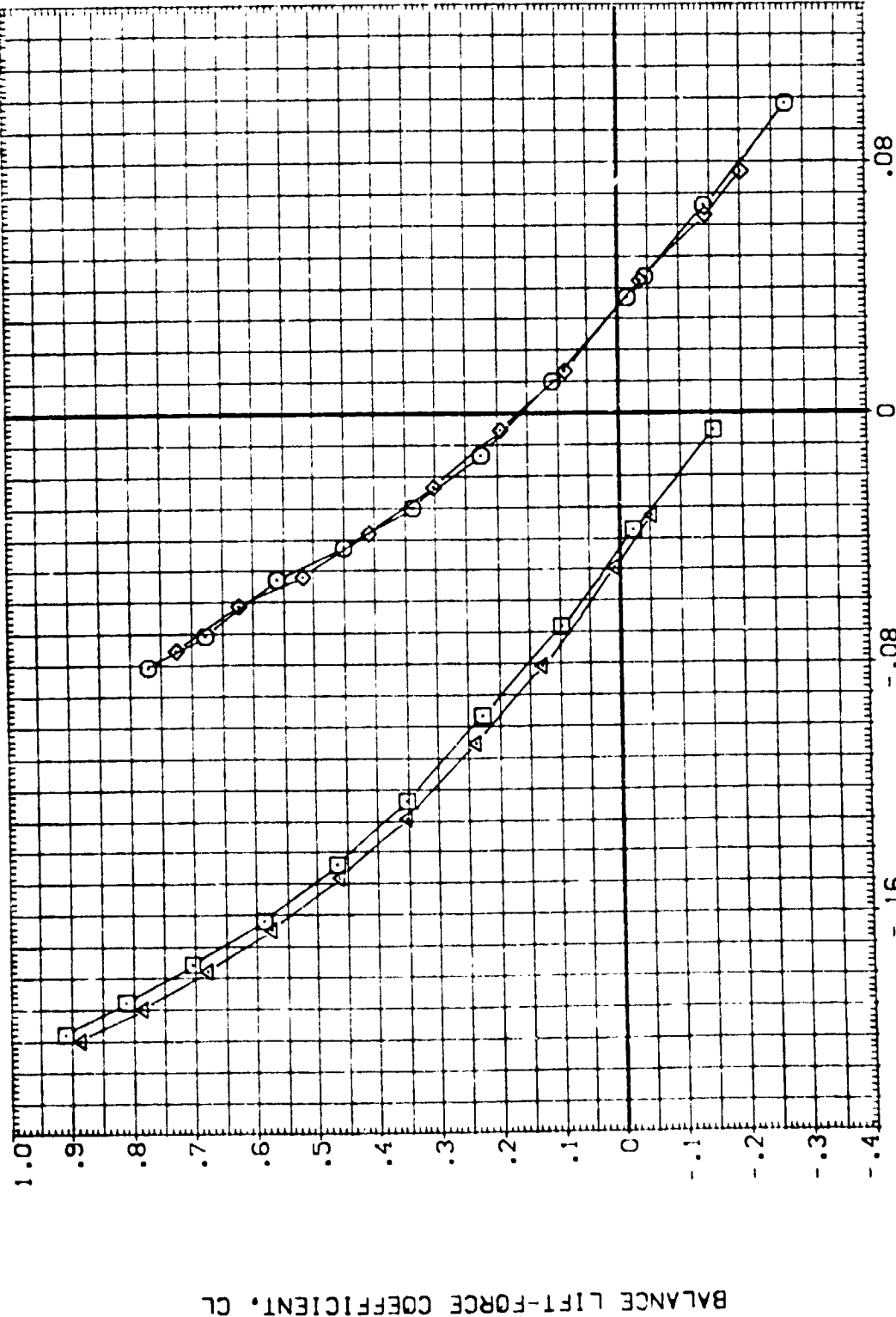


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(F)MACH = 1.20

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 15.000 -11.700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CER019) ARC 66-709 QAS9 0A11A-(N24)
 (CER020) ARC 66-709 QAS9 0A11A-(N24)
 (LER019) ARC 66-709 QAS9 011A-N24 (ADJUSTED FOR TARES)
 (LER020) ARC 66-709 QAS9 011A-N24 (ADJUSTED FOR TARES)

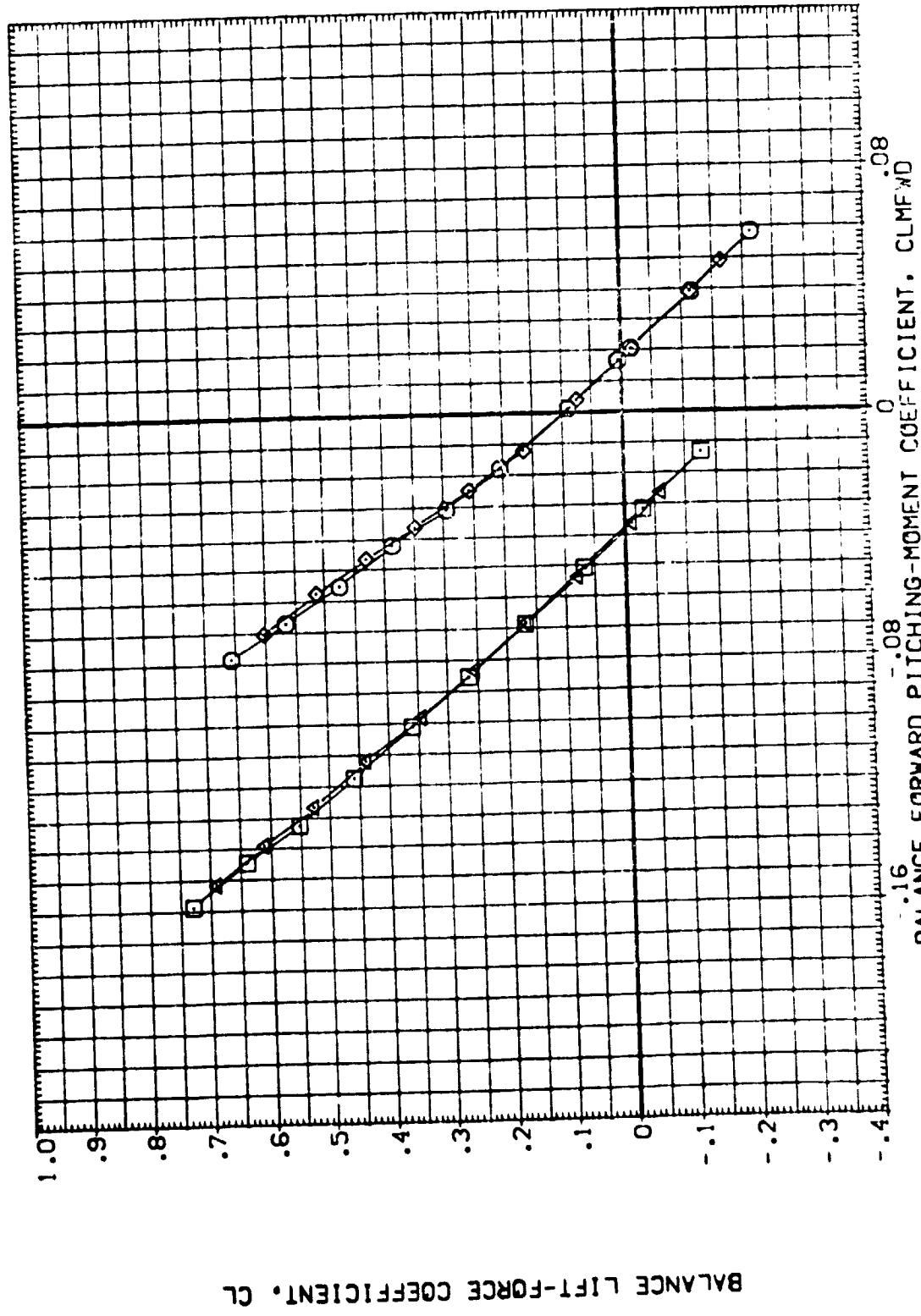


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

REFERENCE INFORMATION:
 SREF .6053 SC.F.
 LREF .5935 F.
 BREF .1710 F.
 YMRP 12.6255 IN.
 ZMRP .0000 IN.
 SCALE .0150

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CERD18) ARC 66-709 CAS9 0A11A-(N24)
 (CERD20) ARC 66-709 CAS9 0A11A-(N24)
 (CERD19) ARC 66-709 CAS9 611A-N24 (ADJUSTED FOR TARES)
 (CERD20) ARC 66-709 CAS9 611A-N24 (ADJUSTED FOR TARES)

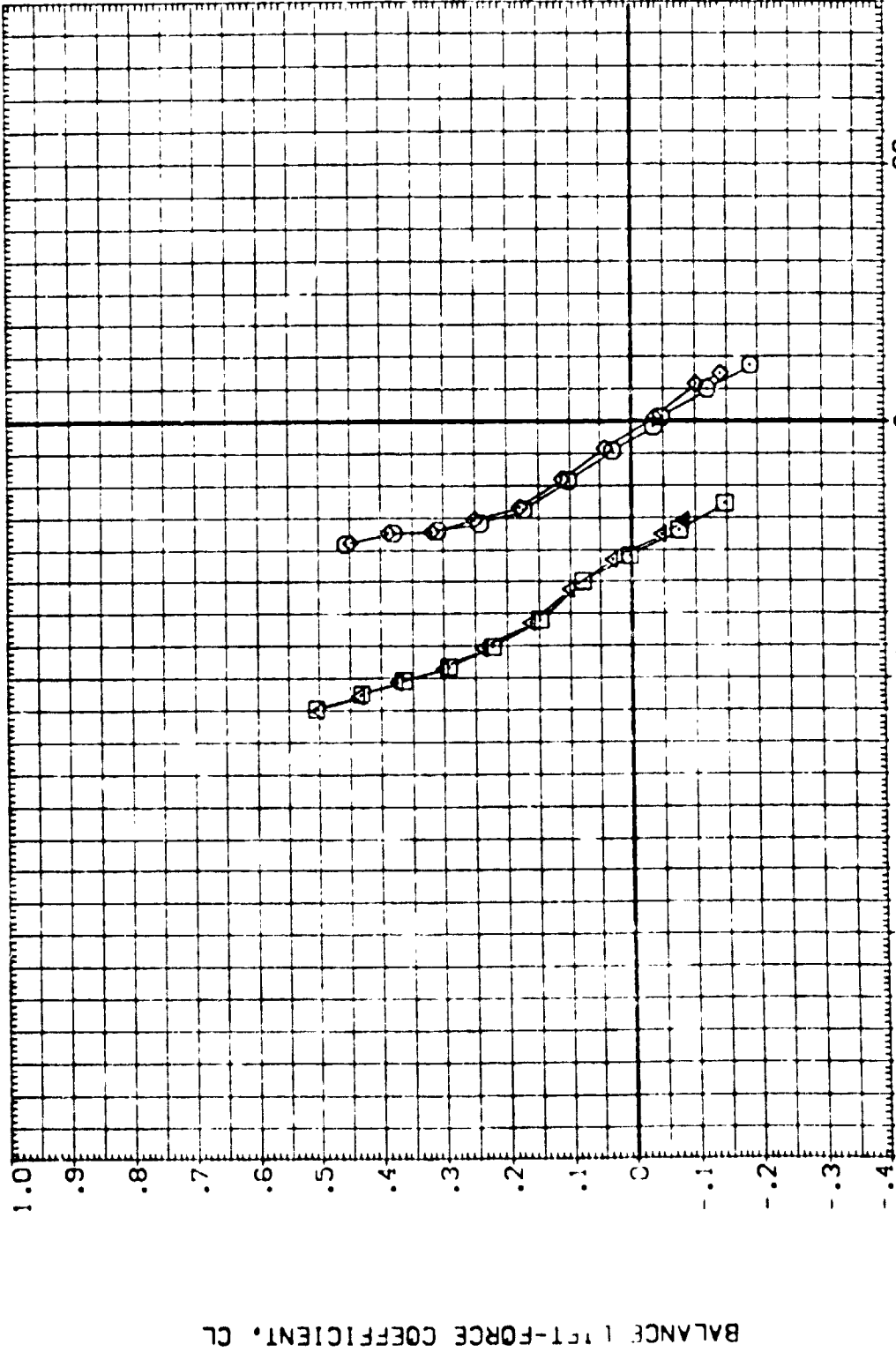


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES
 (H)MACH = 2.00



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CERO19)	ARC 66-709 CAS9	O111A-N24
(CERO20)	ARC 66-709 CAS9	O111A-N24
(LEO19)	ARC 66-709 CAJ9	O111A-N24 (ADJUSTED FOR TARES)
(LEO20)	ARC 66-709 CAS9	O111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDF LAP

.000	.000	-.700
.000	.500	-.700
.000	.000	-.700
.000	.500	-.700

REFERENCE INFORMATION

SREF	.5053	SC.FT.
UREF	.5925	FT.
BREF	1.1710	FT.
XMRP	12.6755	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

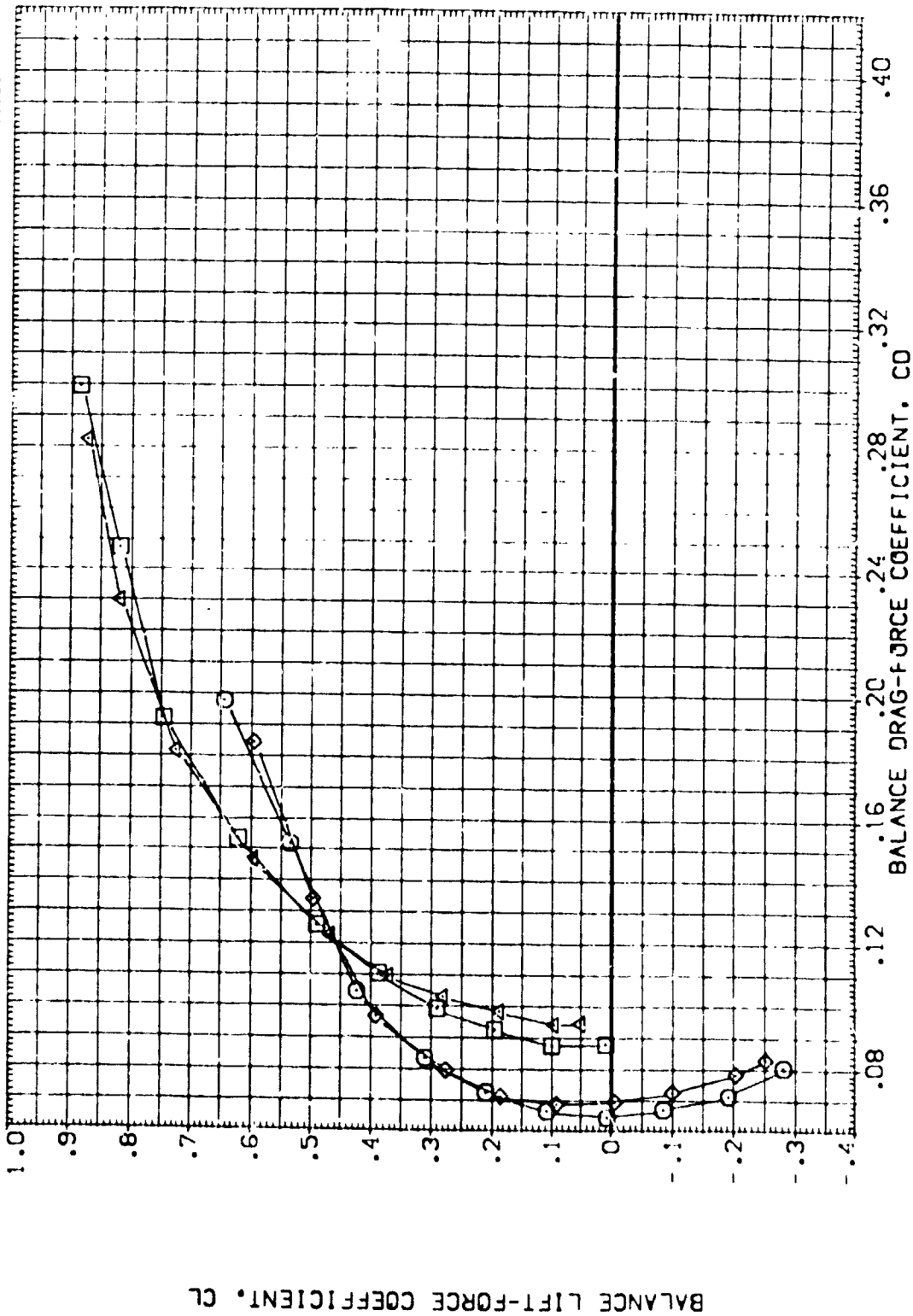


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(CER019)	ARC 66-709 DASS 0111A-(N24)	.000	.000	-11.700	SRC .6053 SQ.FT.
(CER020)	ARC 66-709 DASS 0111A-(P24)	.000	15.000	-11.700	LREF .5935 FT.
(LER019)	ARC 66-709 DASS 0111A-N24 (ADJUSTED FOR TARES)	.000	15.000	-11.700	BREF 1.1710 FT.
(LER020)	ARC 66-709 DASS 0111A-N24 (ADJUSTED FOR TARES)	.000	15.000	-11.700	XMRP 12.6255 IN.
					ZMRP .0000 IN.
					SCALE -.3750 IN.

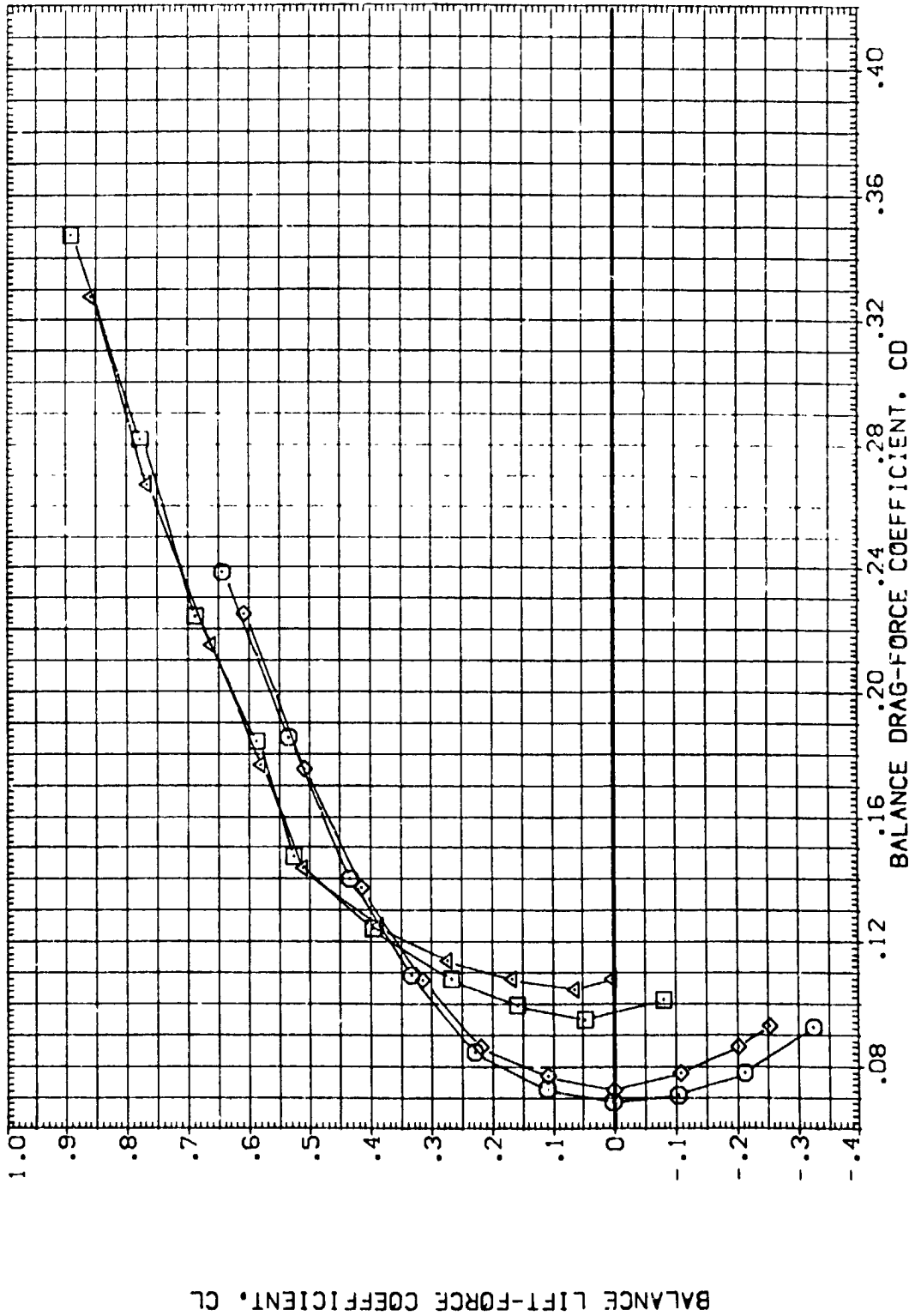


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(B)MACH = .80



REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA .000
 ELEVON .000
 BDFLAP -11.700
 15.000
 .000
 15.000
 -11.700
 -11.700
 -11.700

CONFIGURATION DESCRIPTION
 ARC 66-709 OAS9 O11A-N24
 DATA NOT AVAILABLE
 ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)
 DATA NOT AVAILABLE

DATA SET SYMBOL
 (CERO18)
 (CERO20)
 (CERO19)
 (CERO20)

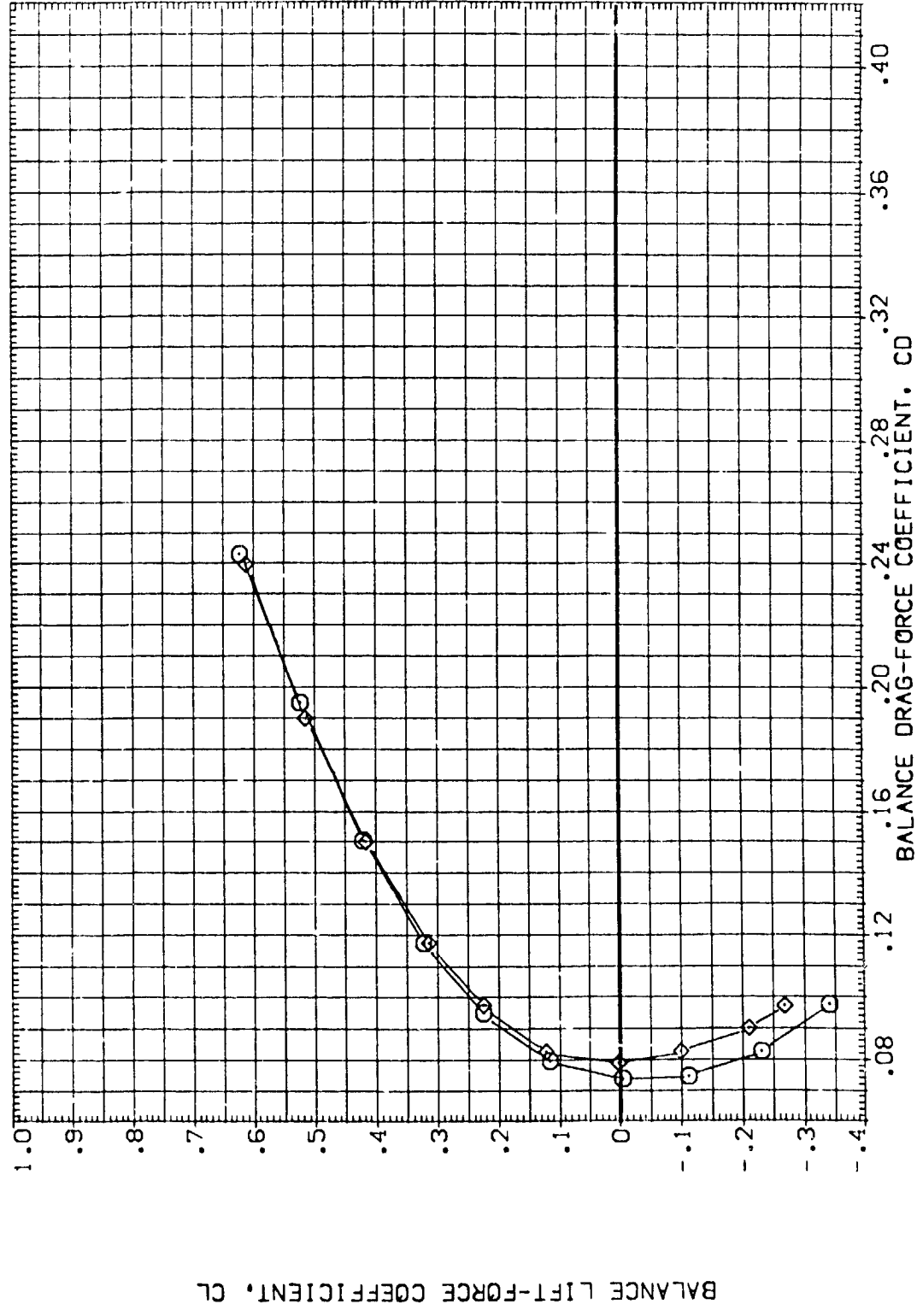


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .85

REFERENCE INFORMATION
 SREF .6053 50.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA .000
 ELEVON .000
 BDFLAP -11.700
 15.000 -11.700
 .000 -11.700
 15.000 -11.700

CONFIGURATION DESCRIPTION
 ARC 66-709 OAS9 O111A-N24
 OAS9 O111A-N24
 OAS9 O111A-N24 (ADJUSTED FOR TARES)
 OAS9 O111A-N24 (ADJUSTED FOR TARES)

DATA SET SYMBOL
 (CER019)
 (CER020)
 (CER019)
 (CER020)

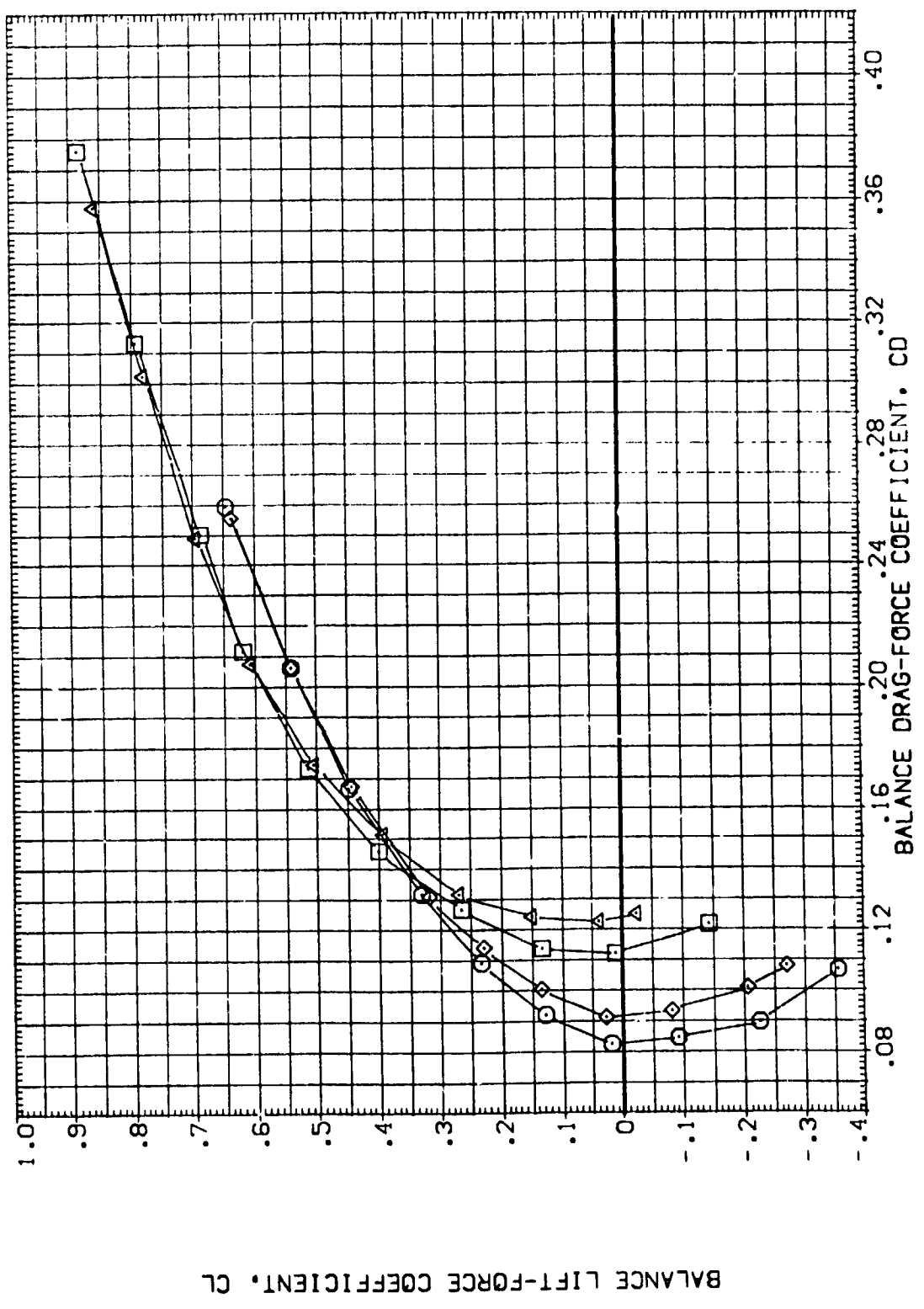


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(O)MACH = .90



REFERENCE INFORMATION
 SREF .6053 50.FT.
 LREF .5935 FT.
 BRREF 1.1710 FT. IN.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CER019) ARC 66-709 OAS9 O11A-(N24)
 (CER020) DATA NOT AVAILABLE
 (LER019) ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)
 (LER020) DATA NOT AVAILABLE

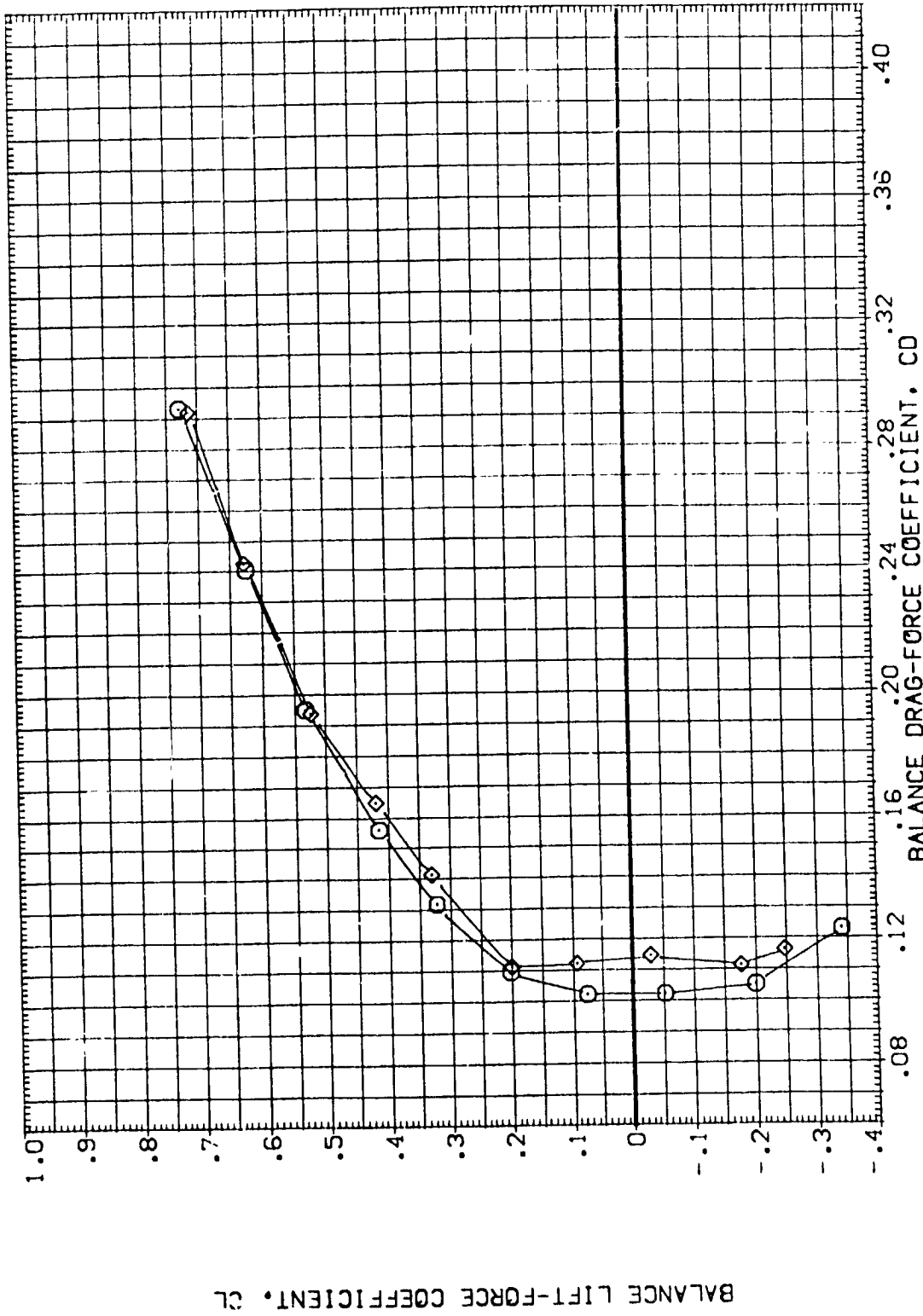


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(E)MACH = .95

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019)	ARC 66-709	DASS	0111A-(N24)
(CER020)	ARC 66-709	DASS	0111A-(N24)
(1ER019)	ARC 66-709	DASS	0111A-N24 (ADJUSTED FOR TARES)
(1ER020)	ARC 66-709	DASS	0111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDF LAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	.5935	FT.
BREF	1.1710	FT. IN.
XMRP	2.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

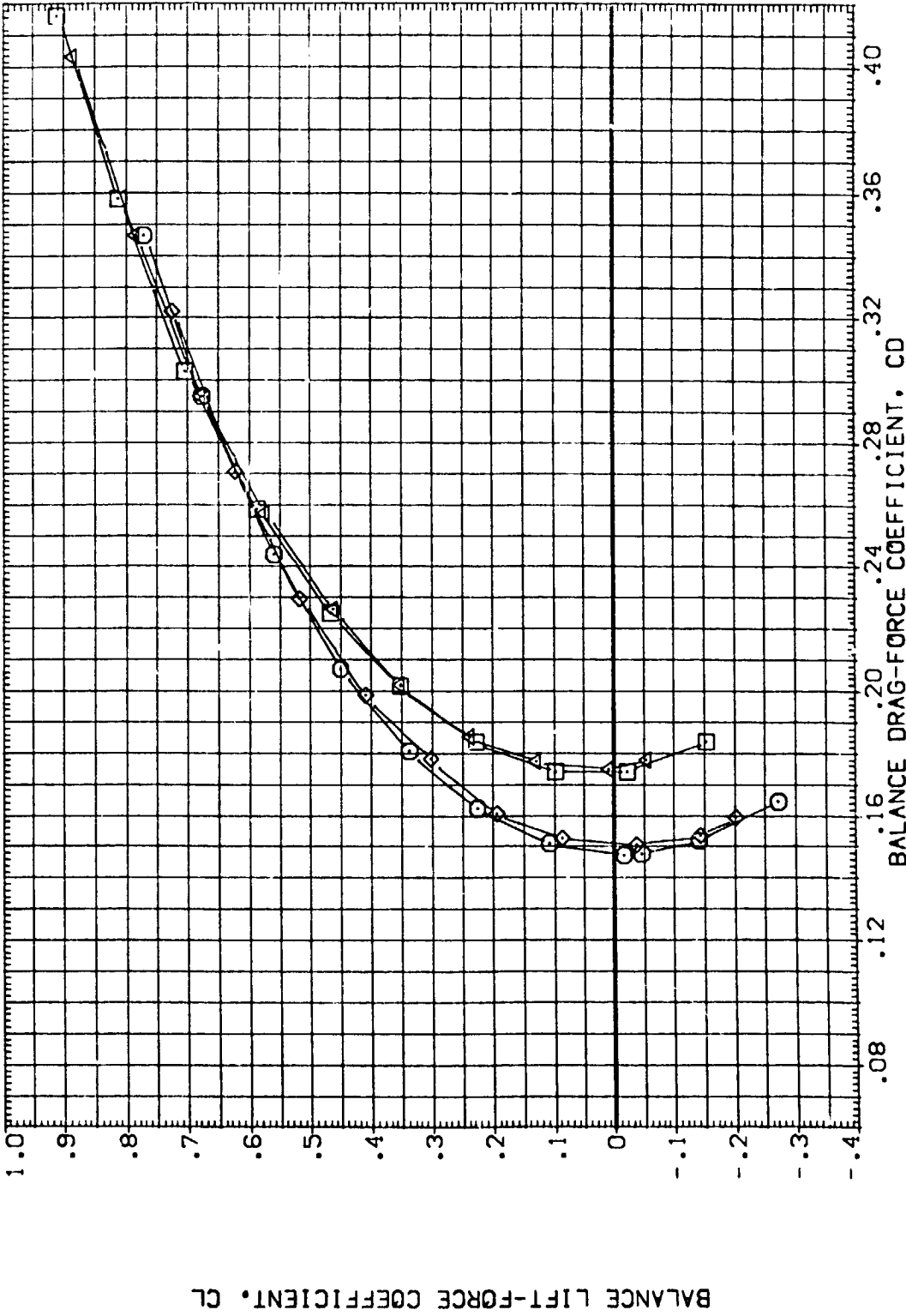


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(F)MACH = 1.20



REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA .000 BOFLAP
 ELEVON .000 -11.700
 15.000 -11.700
 .000 -11.700
 15.000 -11.700

CONFIGURATION DESCRIPTION
 ARC 66-709 QAS9 011A-N24
 ARC 66-709 QAS9 011A-N24
 ARC 66-709 QAS9 011A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 QAS9 011A-N24 (ADJUSTED FOR TARES)

DATA SET SYMBOL
 (CER019) □
 (CER020) ○
 (FER019) △
 (FER020) ◇

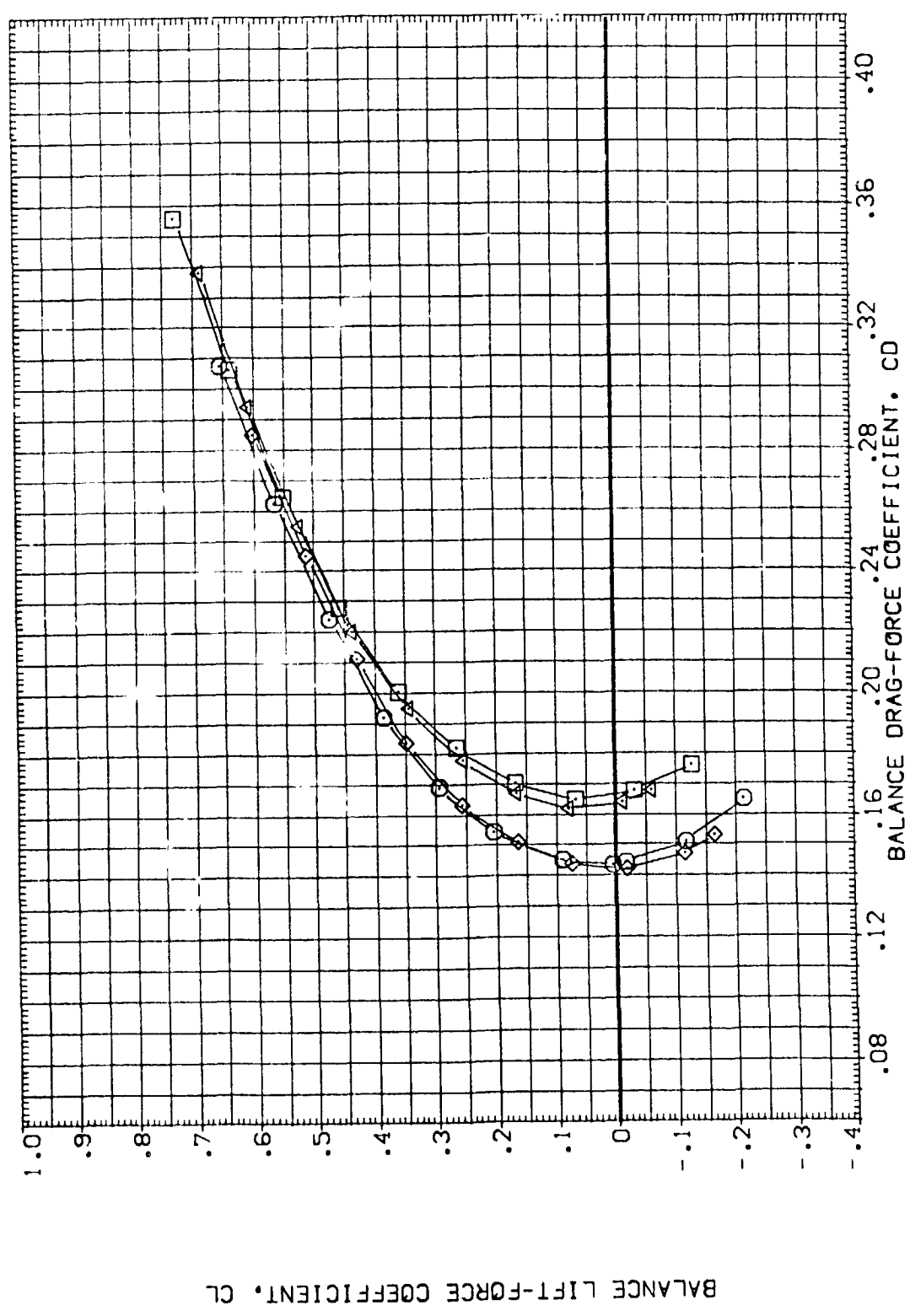


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.50

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(CER019)	ARC 66-709 DASS D11A-N24	.000	.000	-11.700	SREF .5053 SQ.FT.
(CER020)	ARC 66-709 DASS D11A-N24	.000	15.000	-11.700	LREF .5935 FT.
(IER019)	ARC 66-709 DASS D11A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	BREF 1.1710 FT. IN.
(IER020)	ARC 66-709 DASS D11A-N24 (ADJUSTED FOR TARES)	.000	15.000	-11.700	XMRRP 12.6295 IN.
					YMRRP .0000 IN.
					ZMRRP -.3750 IN.
					SCALE .0150

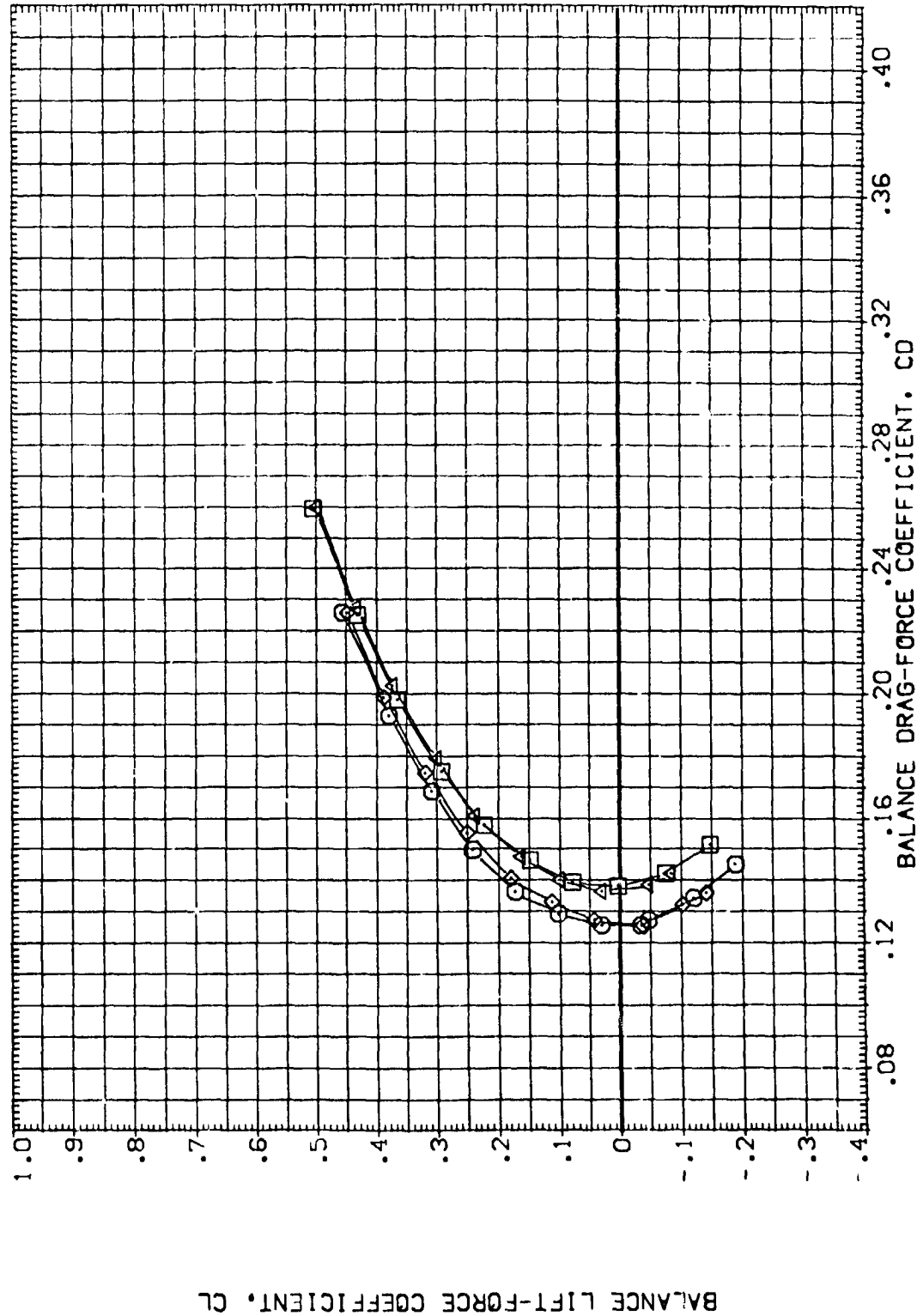


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(H)MACH = 2.00



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(GER019)	ARC 66-709 D459 D411A-(N24)	.000	.000	-11.700	SREF .6053 SQ.FT.
(GER020)	ARC 66-709 D459 D411A-(N24)	.000	15.300	-11.700	LREF .5335 FT.
(ZER019)	ARC 66-709 D459 D11A-N24 (ADJUSTED FOR TARES)	.000	.300	-11.700	BREF 1.1710 FT.
(ZER020)	ARC 66-709 D459 D11A-N24 (ADJUSTED FOR TARES)	.000	15.300	-11.700	XMRP 12.6255 IN.
					YMRP .0000 IN.
					ZMRP -.3750 IN.
					SCALE .0150

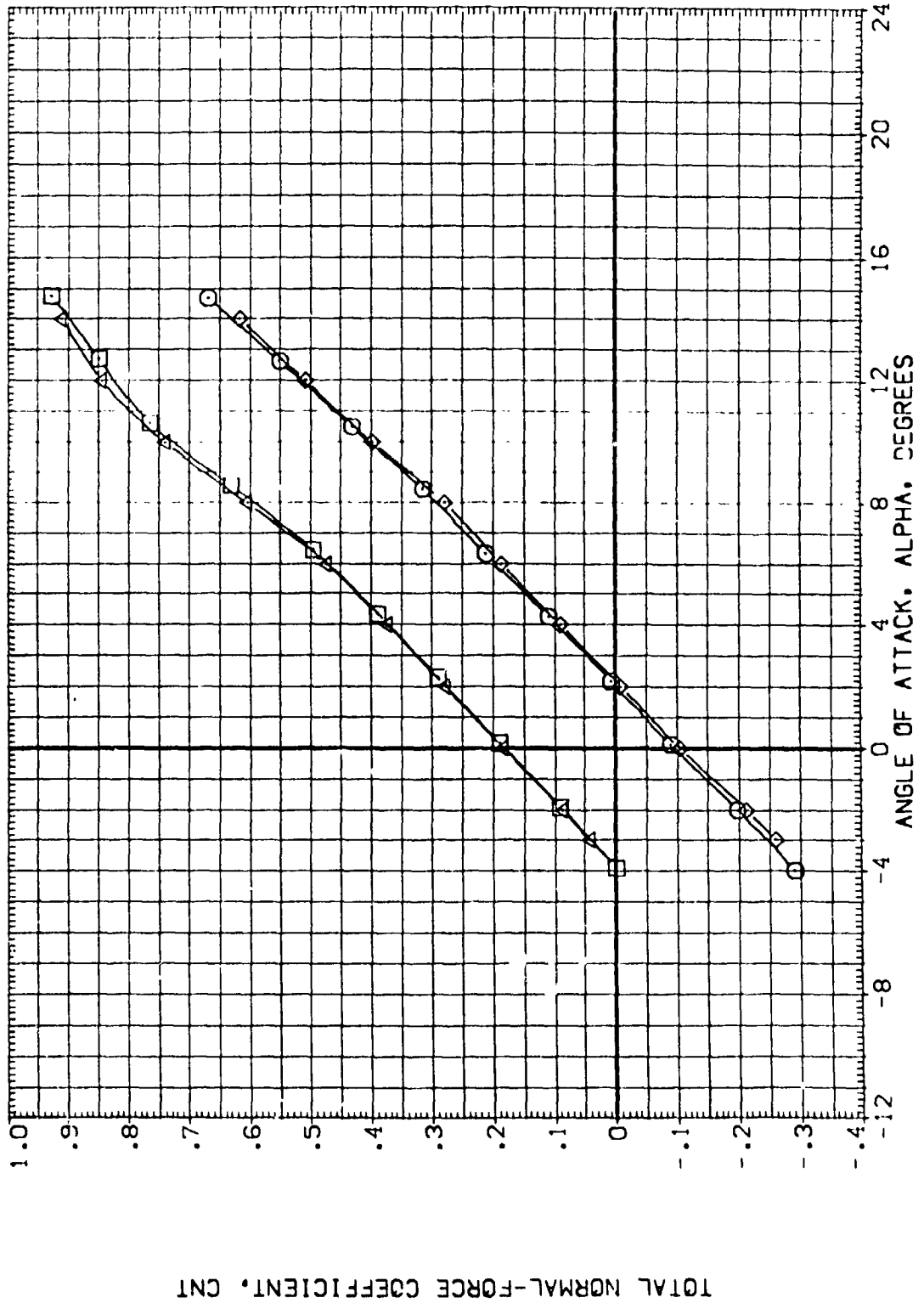


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (3E R019) [] ARC 66-709 DASS 011A-(N24)
 (3E R020) [] ARC 66-709 DASS 011A-(N24)
 (3E R019) [X] ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)
 (3E R020) [X] ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 .000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 F.
 BREF 1.1710 F.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

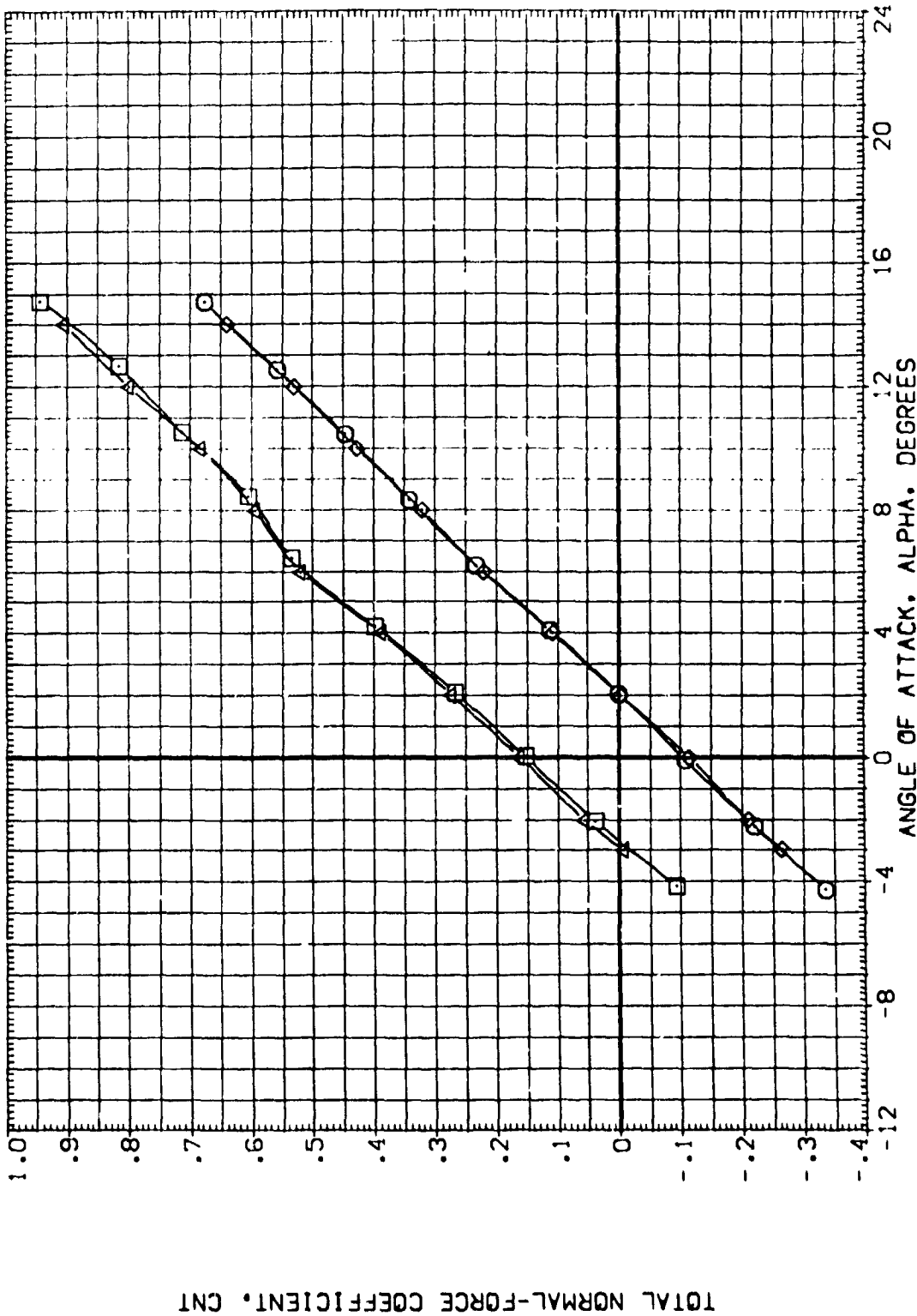


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(8)MACH = .80



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(01R019) ARC 66-709 OAS9 0111A-(N24)

(01R020) DATA NOT AVAILABLE

(02R019) ARC 66-709 OAS9 0111A-N24 (ADJUSTED FOR TARES)

(02R020) DATA NOT AVAILABLE

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF .6053 50. FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

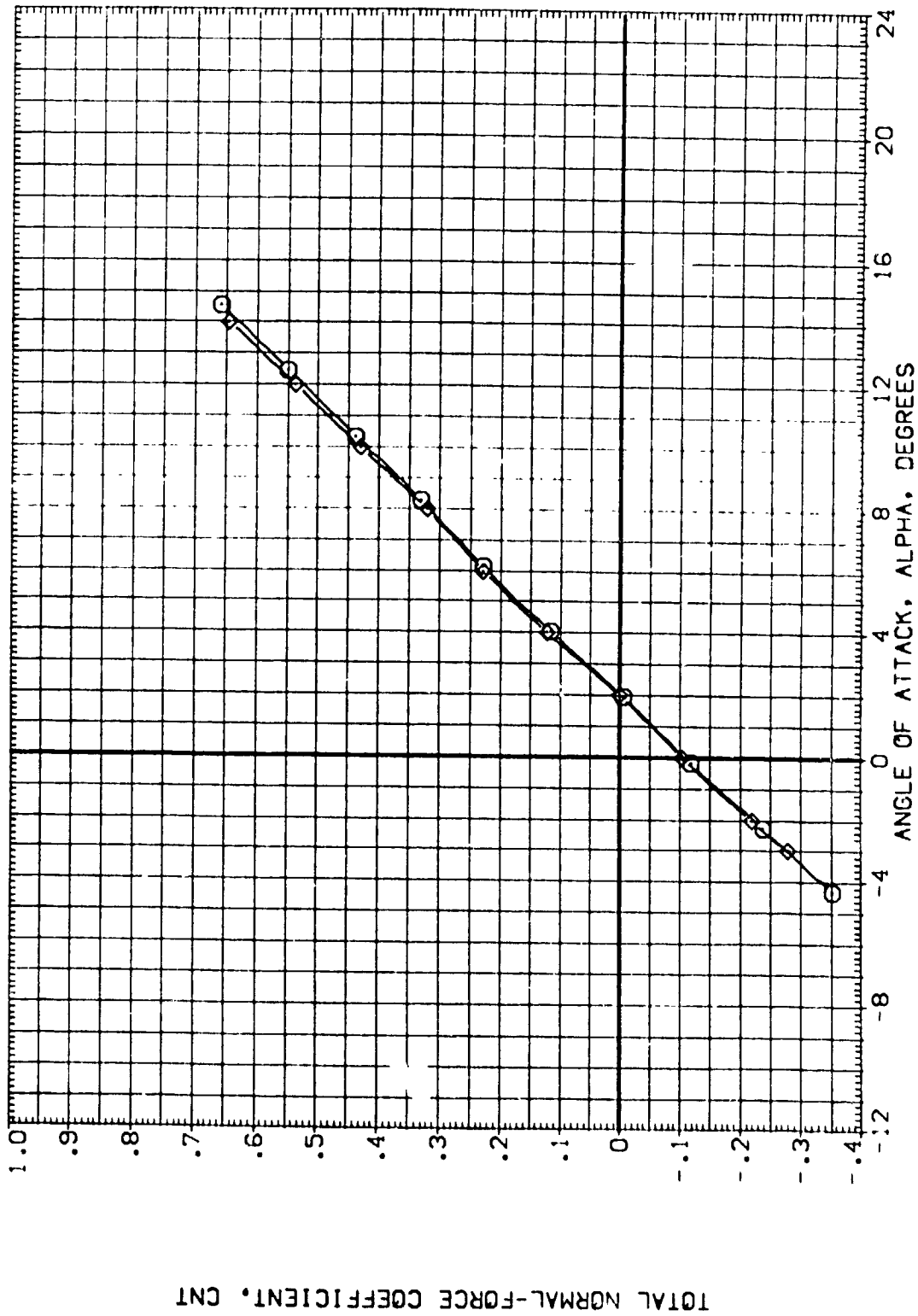


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .85

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA .000
 ELEVON .000
 BOFLAP -11.700
 15.000 -11.700
 .000 -11.700
 15.000 -11.700

CONFIGURATION DESCRIPTION
 ARC 66-709 DA59 0111A-N24
 ARC 66-709 DA59 0111A-N24
 ARC 66-709 DA59 0111A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 DA59 0111A-N24 (ADJUSTED FOR TARES)

DATA SET SYMBOL
 (GRO19) 
 (GRO70) 
 (GRO19) 
 (GRO20) 

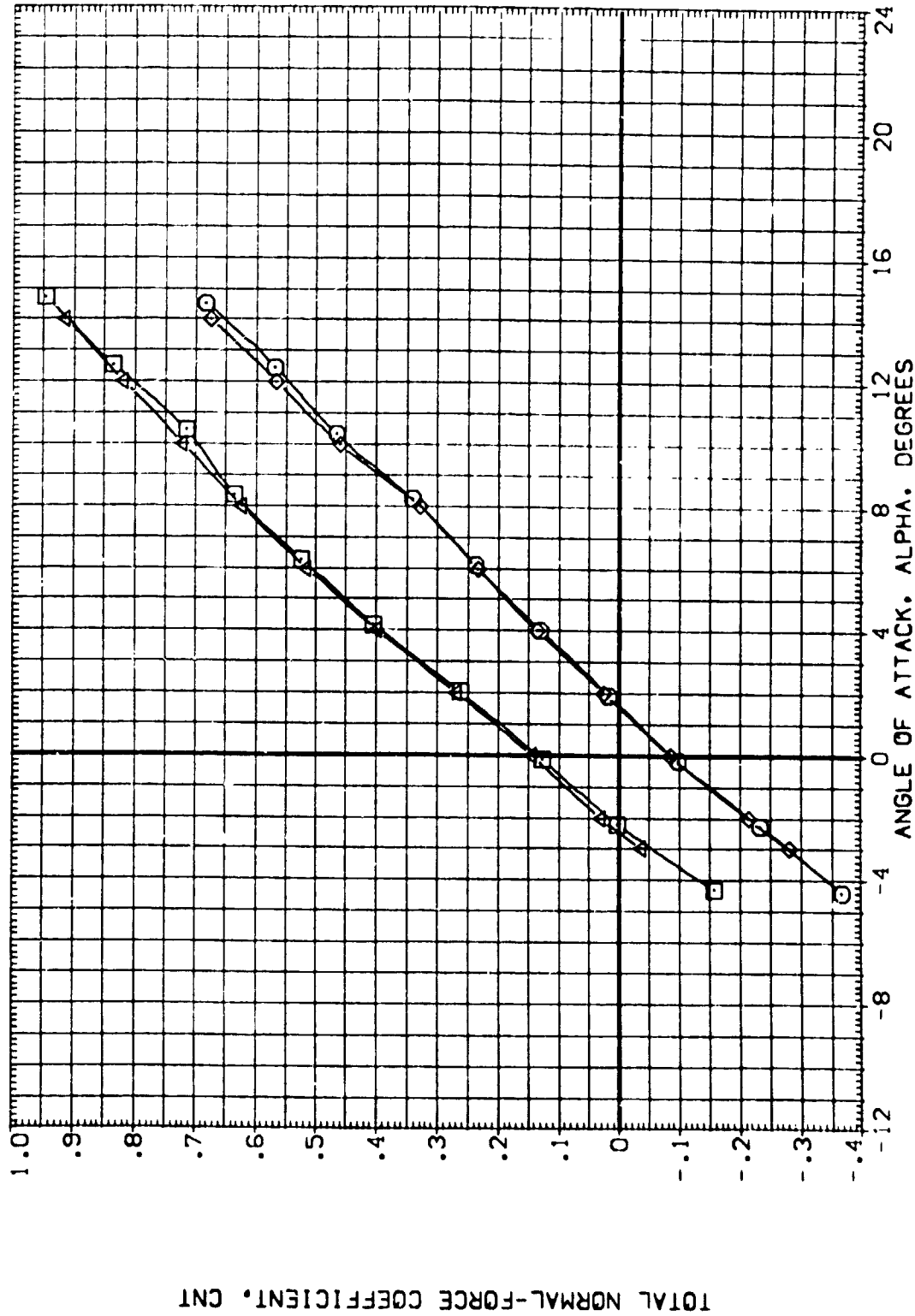


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(COM)MACH = .90



REFERENCE INFORMATION
 SREF 6053 SO.FT.
 LREF 5936 FT.
 BREF 1.710 FT.
 XMRP 12.623 IN.
 YMRP .000 IN.
 ZMRP .750 IN.
 SCALE .0150

BETA ELEVON BDF LAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (GE019) ARC 66-709 OAS9 D111A-(N24)
 (GE020) DATA NOT AVAILABLE
 (GE019) ARC 66-709 OAS9 D111A-N24 (ADJUSTED FOR TARES)
 (GE020) DATA NOT AVAILABLE

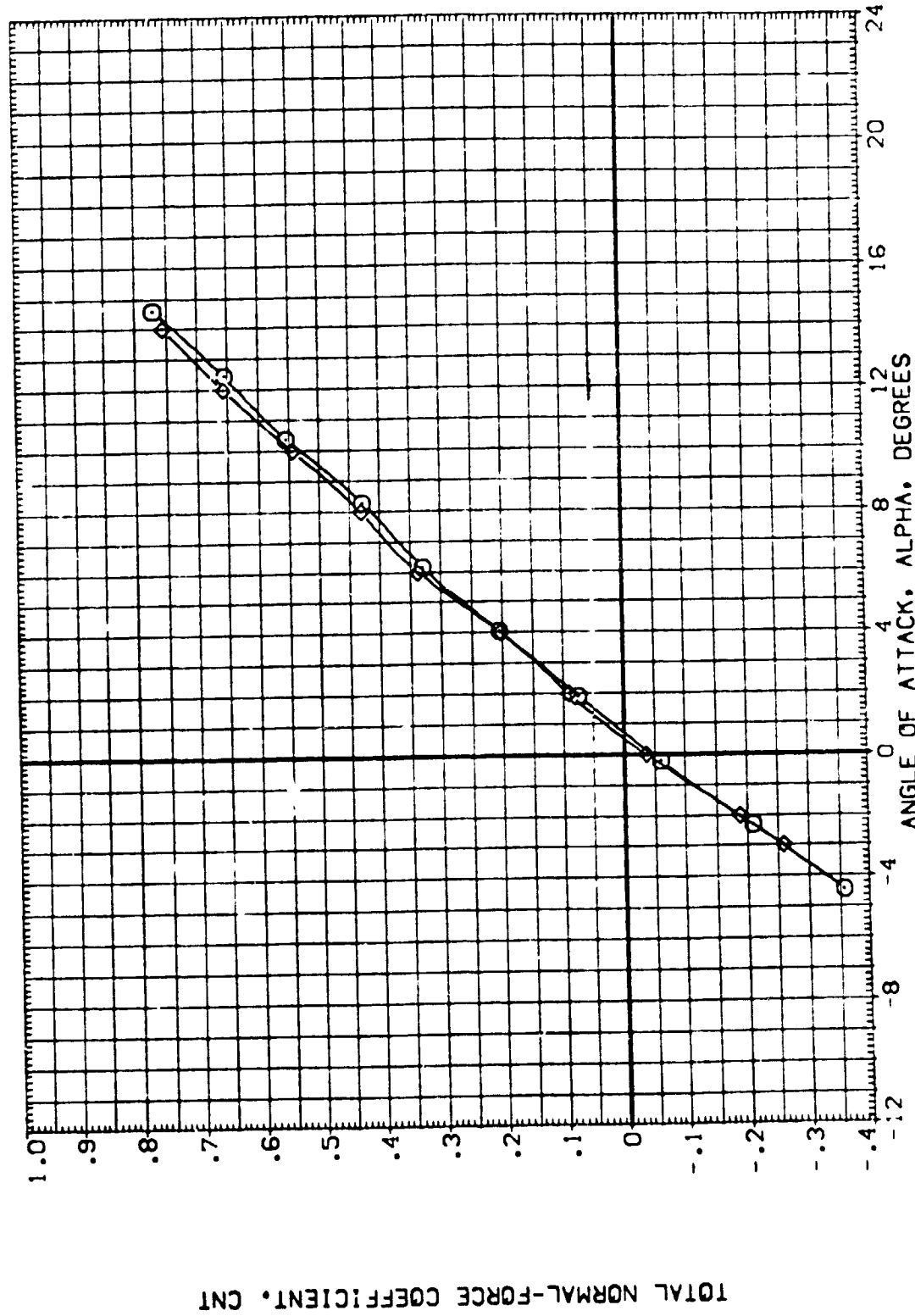


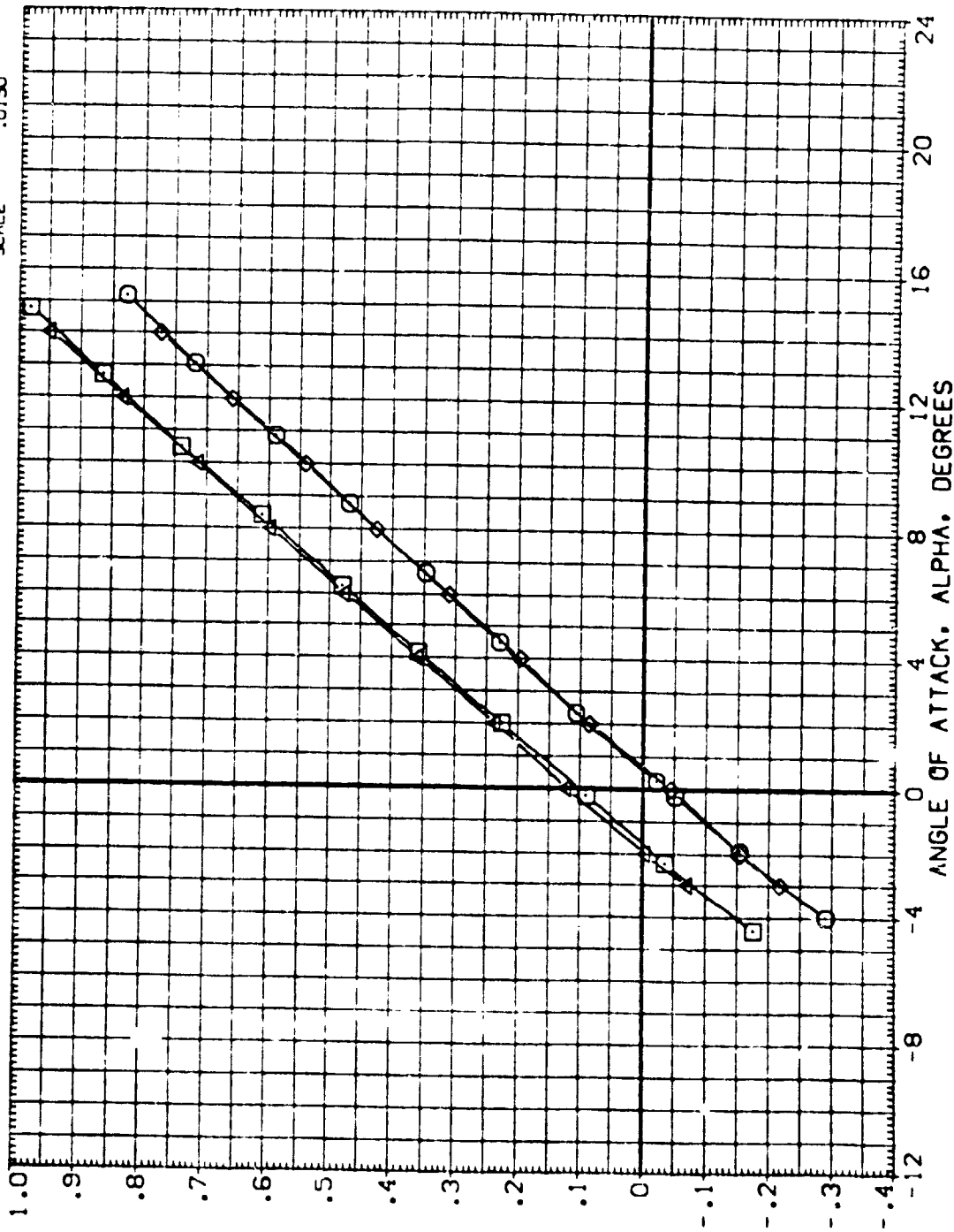
FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(E)MACH = .95

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (GER019) ARC 66-709 QAS9 0111A-(N24)
 (GER020) ARC 66-709 QAS9 0111A-(N24)
 (ZER019) ARC 66-709 QAS9 011A-N24 (ADJUSTED FOR TARES)
 (ZER020) ARC 66-709 QAS9 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5936 FT.
 BRFF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



TOTAL NORMAL-FORCE COEFFICIENT, CN_T

ANGLE OF ATTACK, ALPHA, DEGREES

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(F)MACH = 1.20



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GER019)	ARC 66-709	DASS	011A-N24
(GER020)	ARC 66-709	DASS	011A-N24
(3ER019)	ARC 66-709	DASS	011A-N24 (ADJUSTED FOR TARES)
(3ER020)	ARC 66-709	DASS	011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6093	SQ.FT.
LREF	.5935	FT.
BREF	1.1710	IN.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

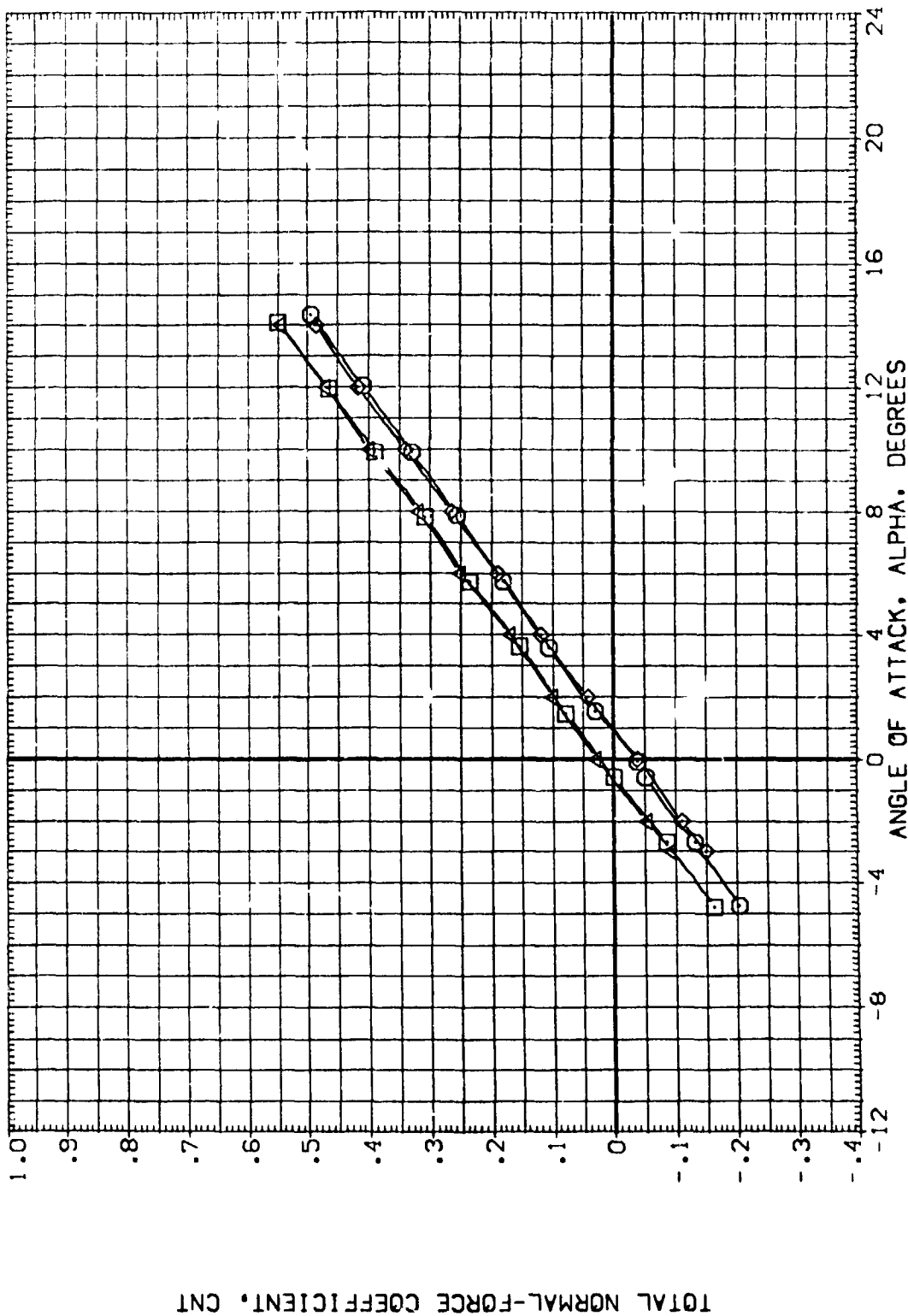


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH = 2.00



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GE R019)	ARC 66-709	QAS9	Q111A-(N24)
(GE R020)	ARC 66-709	QAS9	Q111A-(N24)
(3E R019)	ARC 66-709	QAS9	Q111A-N24 (ADJUSTED FOR TARES)
(3E R020)	ARC 66-709	QAS9	Q111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SO.FT.
LREF	.5976	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

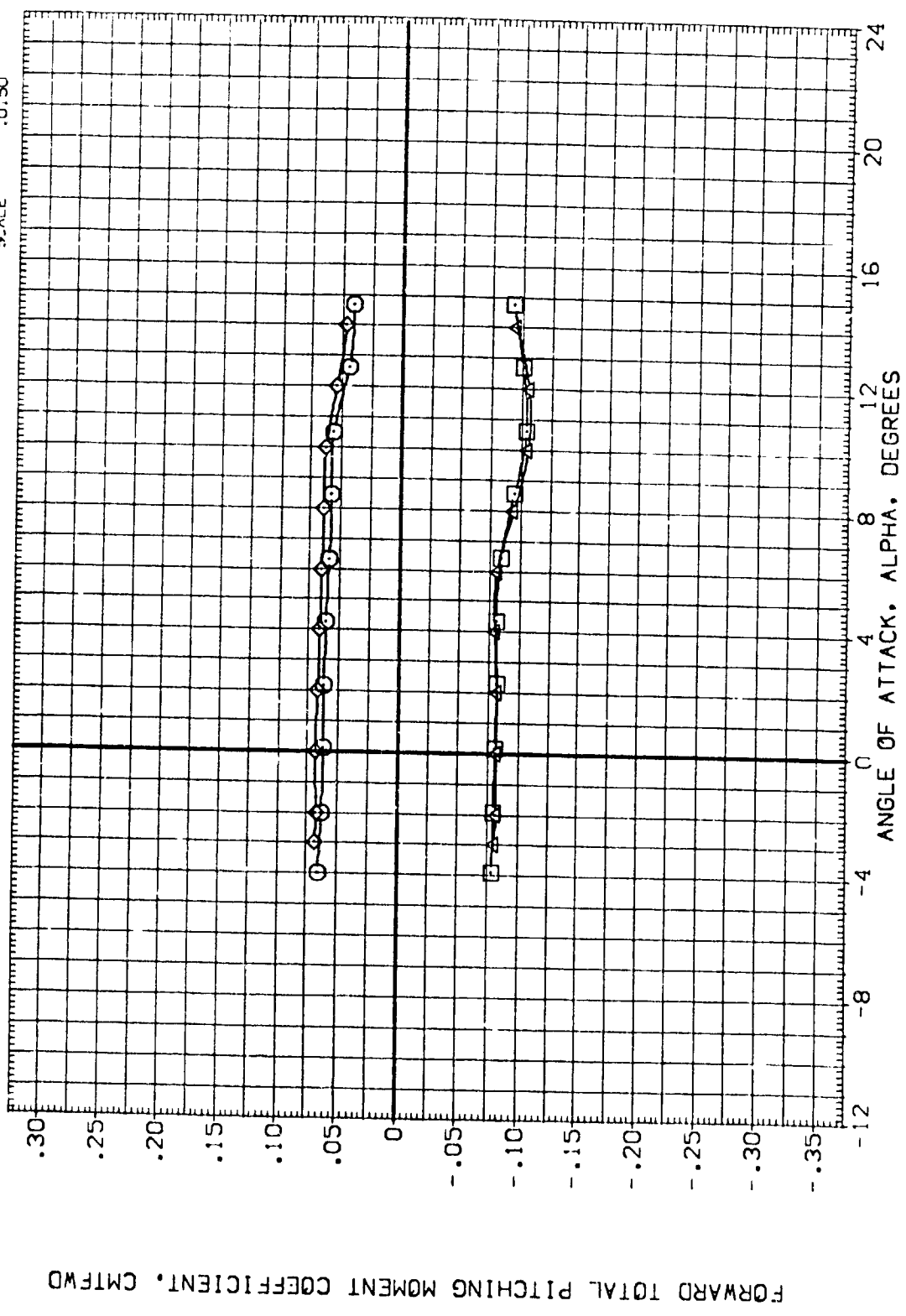


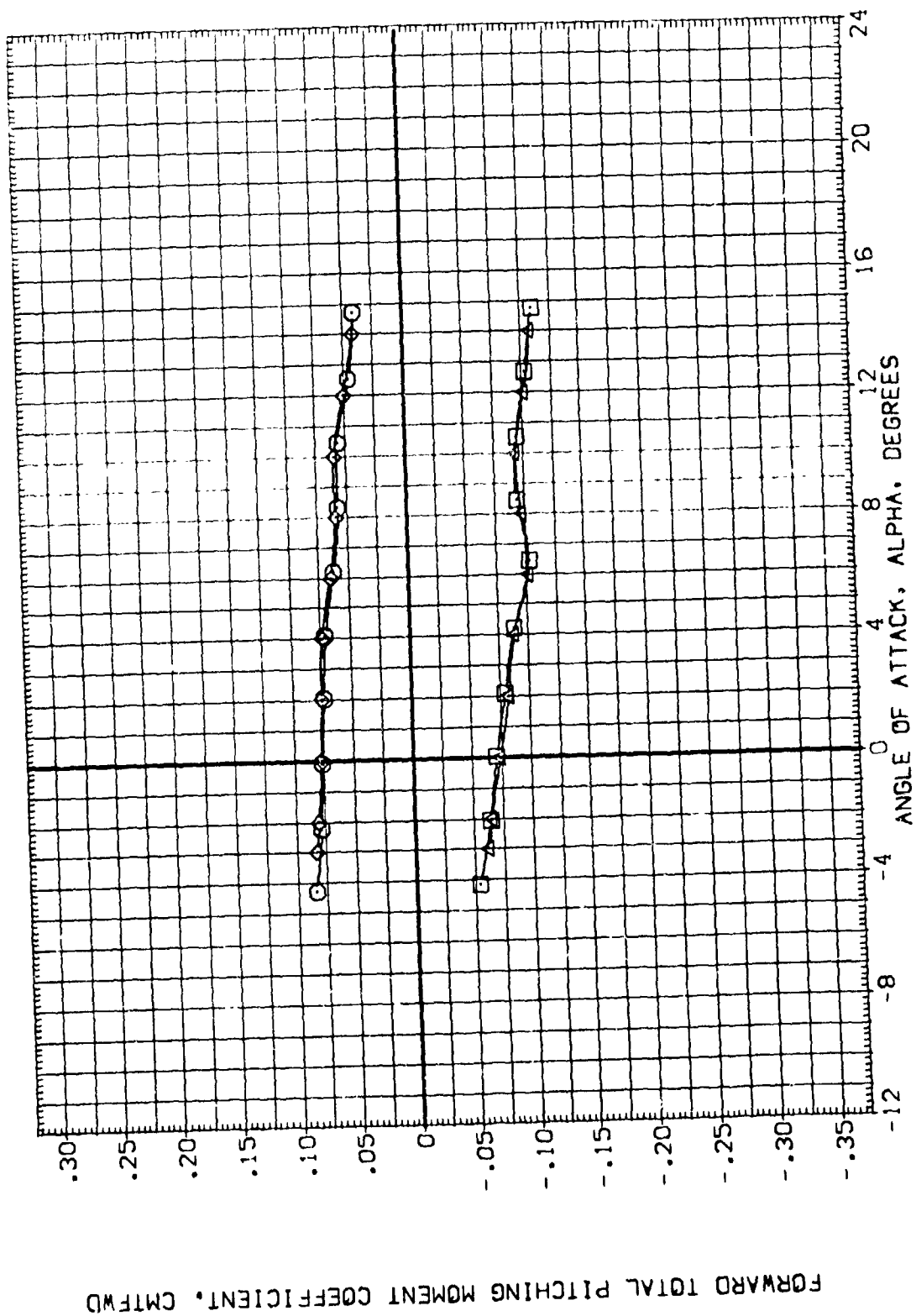
FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(A)MACH = .60

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.171C FT. IN.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.375C IN.
 SCALE .015C

BETA ELEVON BOX LAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (0E,019) [] ARC 66-709 0A59 011A-(N24)
 (0E,020) [] ARC 66-709 0A59 011A-(N24)
 (3E,019) [X] ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
 (3E,020) [X] ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)



FORWARD TOTAL PITCHING MOMENT COEFFICIENT, CMTFWD

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(B)MACH = .80



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GER019) ARC 66-709 DASS D111A-(N24)

(GER020) DATA NOT AVAILABLE

(3ER019) ARC 66-709 DASS D111A-N24 (ADJUSTED FOR TARES)

(3ER020) DATA NOT AVAILABLE

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 .500 -11.700

.000 .000 -11.700

.000 .500 -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5936 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

FORWARD TOTAL PITCHING MOMENT COEFFICIENT, CMTFWD

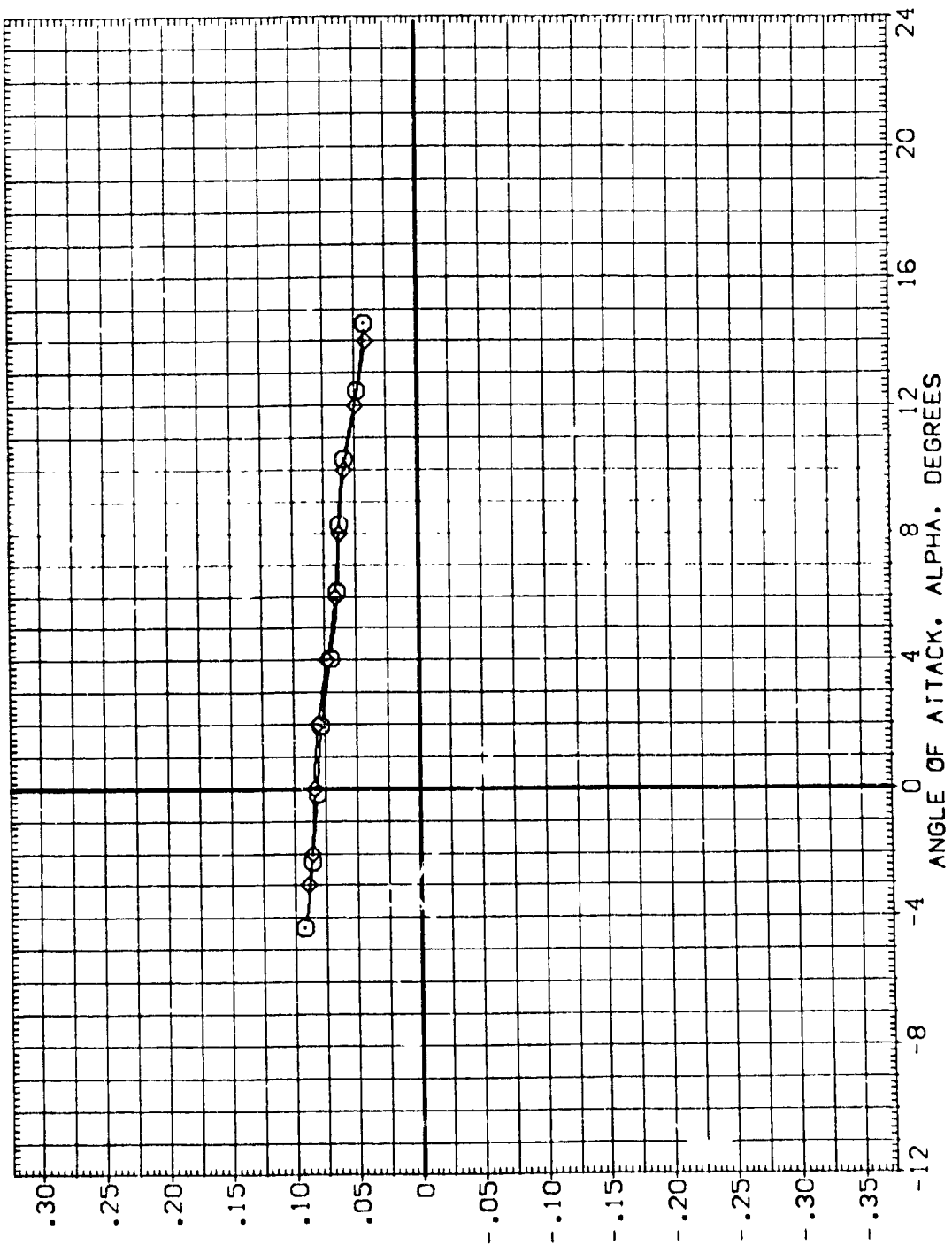


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(CJMACH) = .85

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(3E019) ARC 66-709 CA 3 CA11A-(N24)

(3E020) ARC 66-709 CA59 CA11A-(N24)

(3E019) ARC 66-709 CA59 O11A-N24 (ADJUSTED FOR TARES)

(3E020) ARC 66-709 CA59 O11A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDFLAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

FORWARD TOTAL PITCHING MOMENT COEFFICIENT, CMTFWD

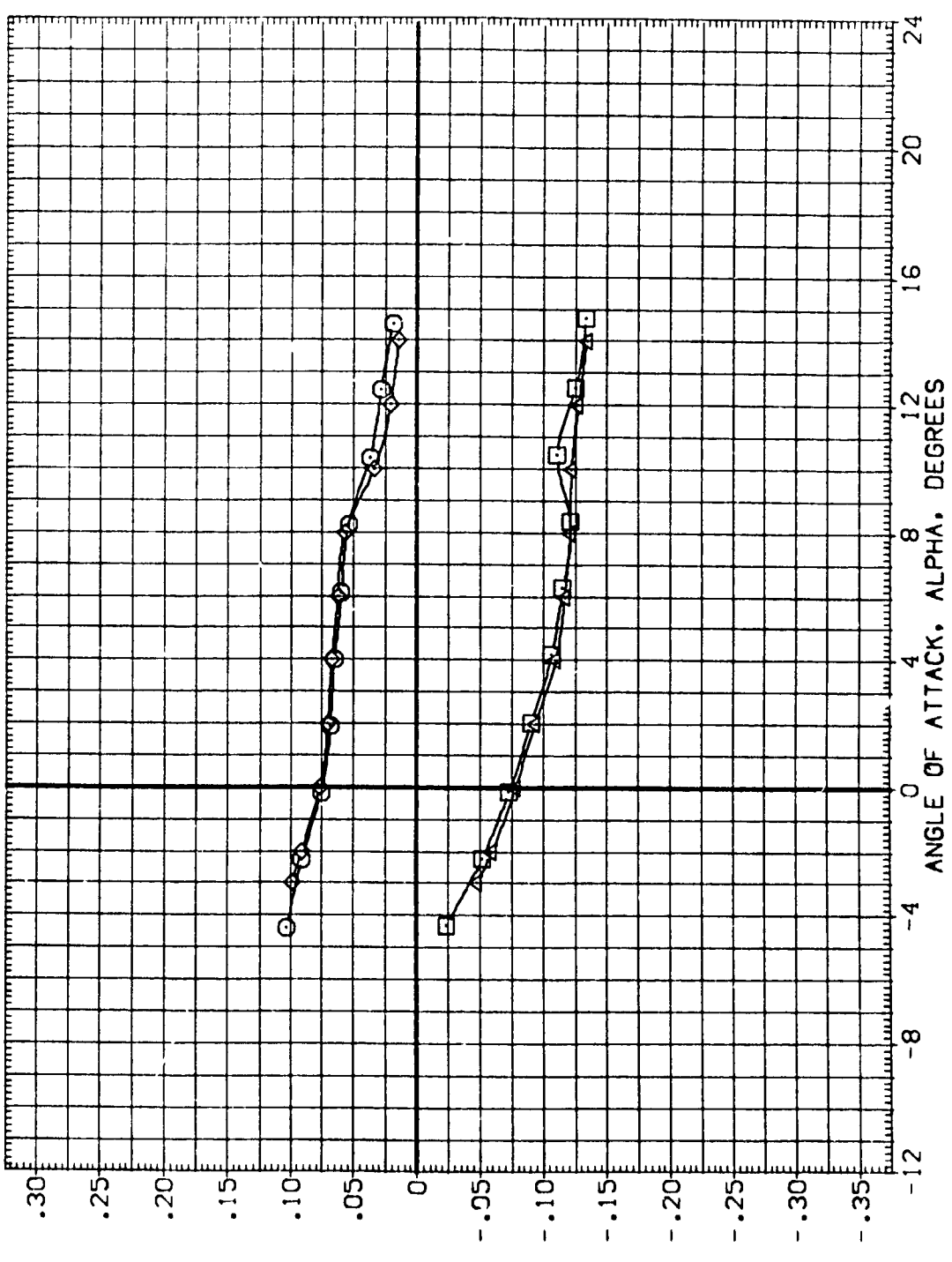


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(0)MACH = .90



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (GER019) ARC 66-709 DASS CA11A-N24
 (GER020) DATA NOT AVAILABLE
 (3ER019) ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)
 (3ER020) DATA NOT AVAILABLE

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SPREF .6053 SQ.FT.
 LREF .5935 FT.
 BRPF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

FORWARD TOTAL PITCHING MOMENT COEFFICIENT, CMFWD

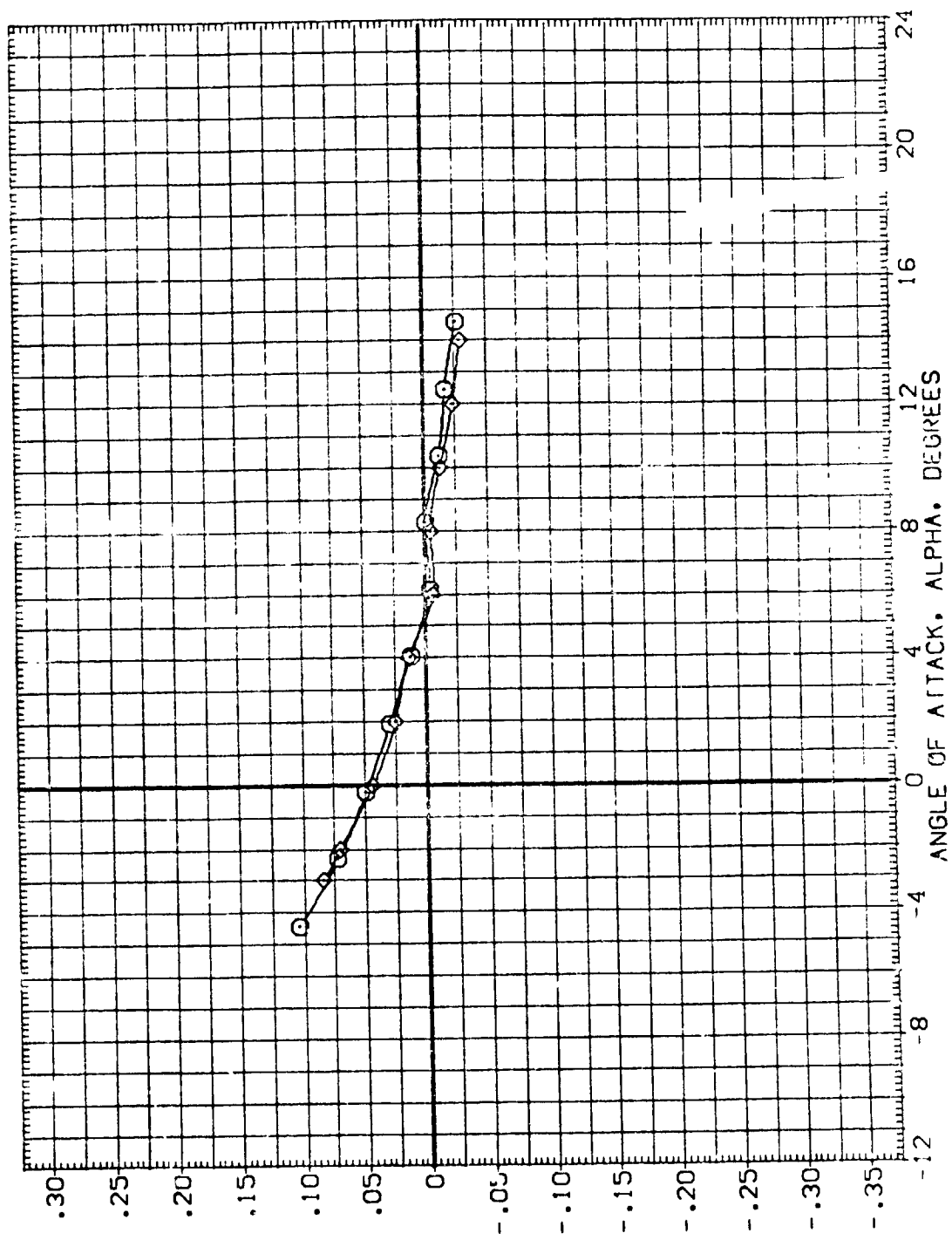


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(CMFWD) = .95

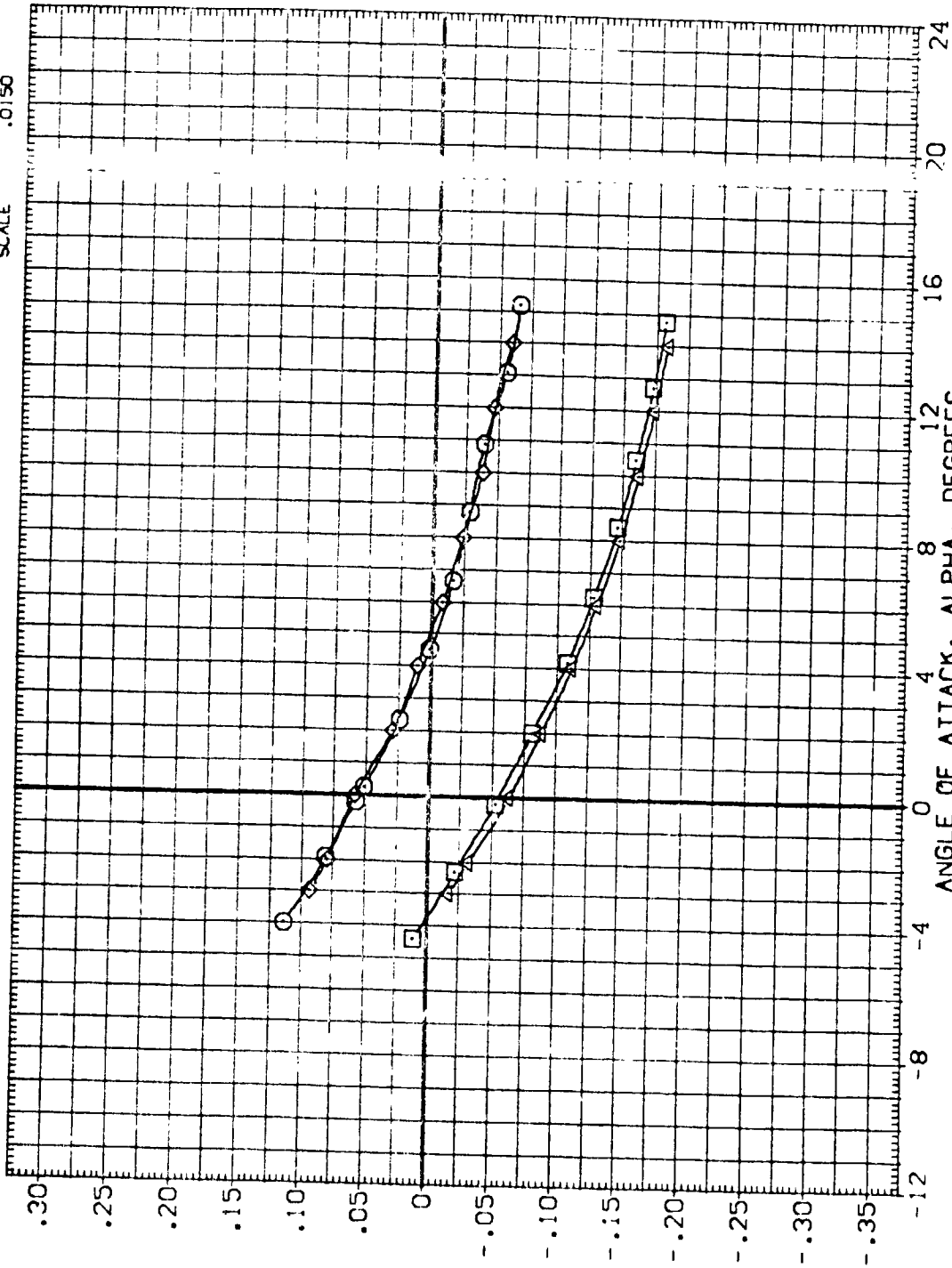
DATA SET SYMBOL
 (GER019)
 (GER020)
 (ZER019)
 (ZER020)

CONFIGURATION DESCRIPTION
 ARC 66-709 0A59 0A11A-(N24)
 ARC 66-709 0A59 0A11A-(N24)
 ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA
 .000
 .000
 .000
 .000

ELEVON BOFLAP
 .000 -11.700
 15.000 -11.700
 .000 -11.700
 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 IN.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



FORWARD TOTAL PITCHING MOMENT COEFFICIENT, CMFWD

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(F)MAC = 1.20



DATA SET SYMBOL: (GER019) (GER020) (ZER019) (ZER020)

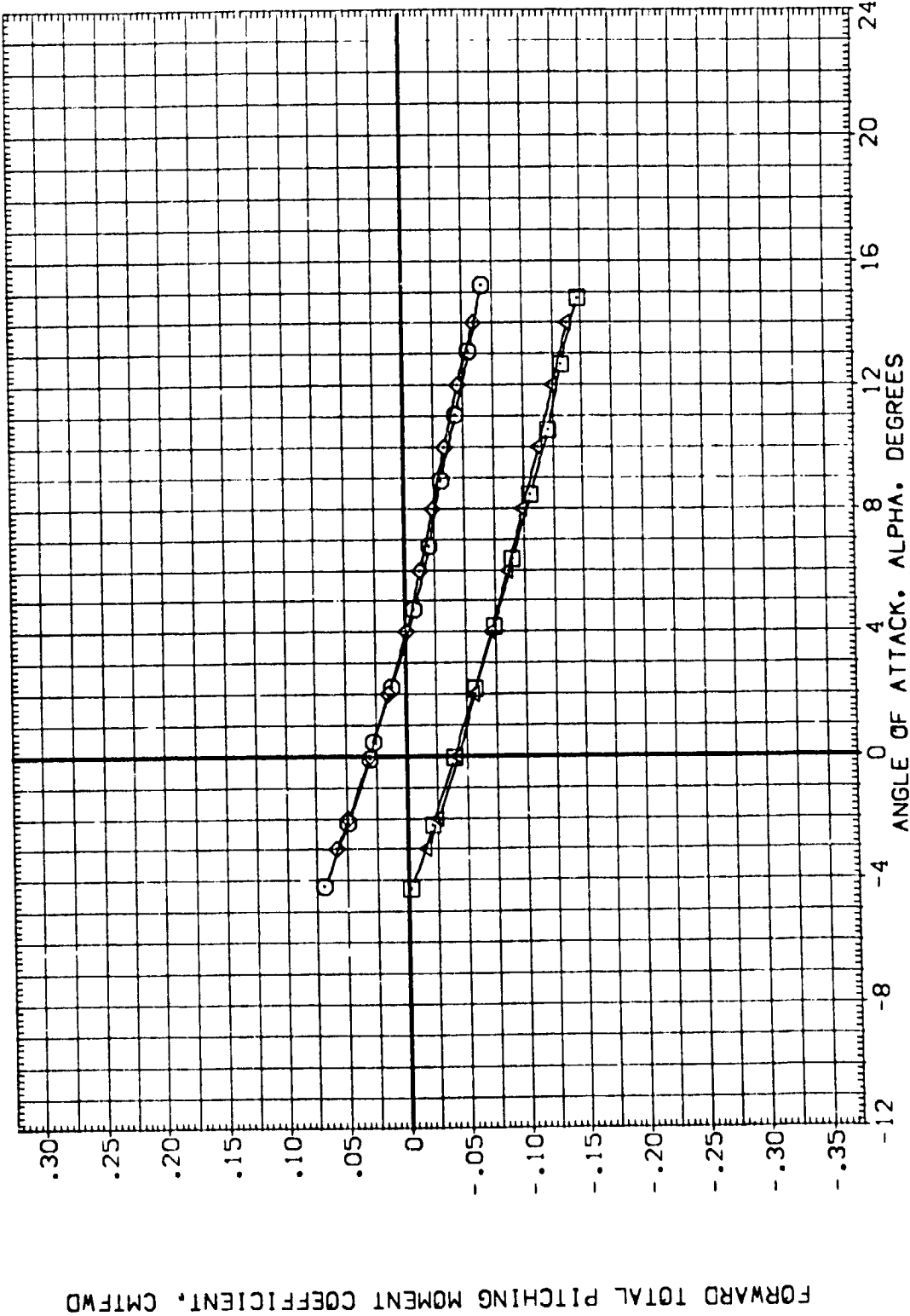
CONFIGURATION DESCRIPTION: ARC 66-709 DASS (N24) ARC 66-709 DASS (N24) ARC 66-709 DASS (ADJUSTED FOR TARES) ARC 66-709 DASS (ADJUSTED FOR TARES)

BETA: .000 .000 .000 .000

ELEVON: .000 15.000 .000 15.000

BOFLAP: -11.700 -11.700 -11.700 -11.700




REFERENCE INFORMATION: SREF .6053 SQ.FT. LREF .5935 FT. BREF 1.1710 FT. YMRP 12.6255 IN. ZMRP .0000 IN. SCALE -.3750 IN.



FORWARD TOTAL PITCHING MOMENT COEFFICIENT, C_{MFWD}

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.50

DATA SET SYMBOL
 (GER019) 
 (GER020) 
 (ZER019) 
 (ZER020) 

CONFIGURATION DESCRIPTION
 ARC 66-709 QAS9 O111A-(N24)
 ARC 66-709 QAS9 O111A-(N24)
 ARC 66-709 QAS9 O111A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 QAS9 O111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP
 .000 .000 ---1.700
 .000 15.000 ---1.700
 .000 .000 ---1.700
 .000 15.000 ---1.700

REFERENCE INFORMATION
 SREF .5053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

FORWARD TOTAL PITCHING MOMENT COEFFICIENT, CMTFWD

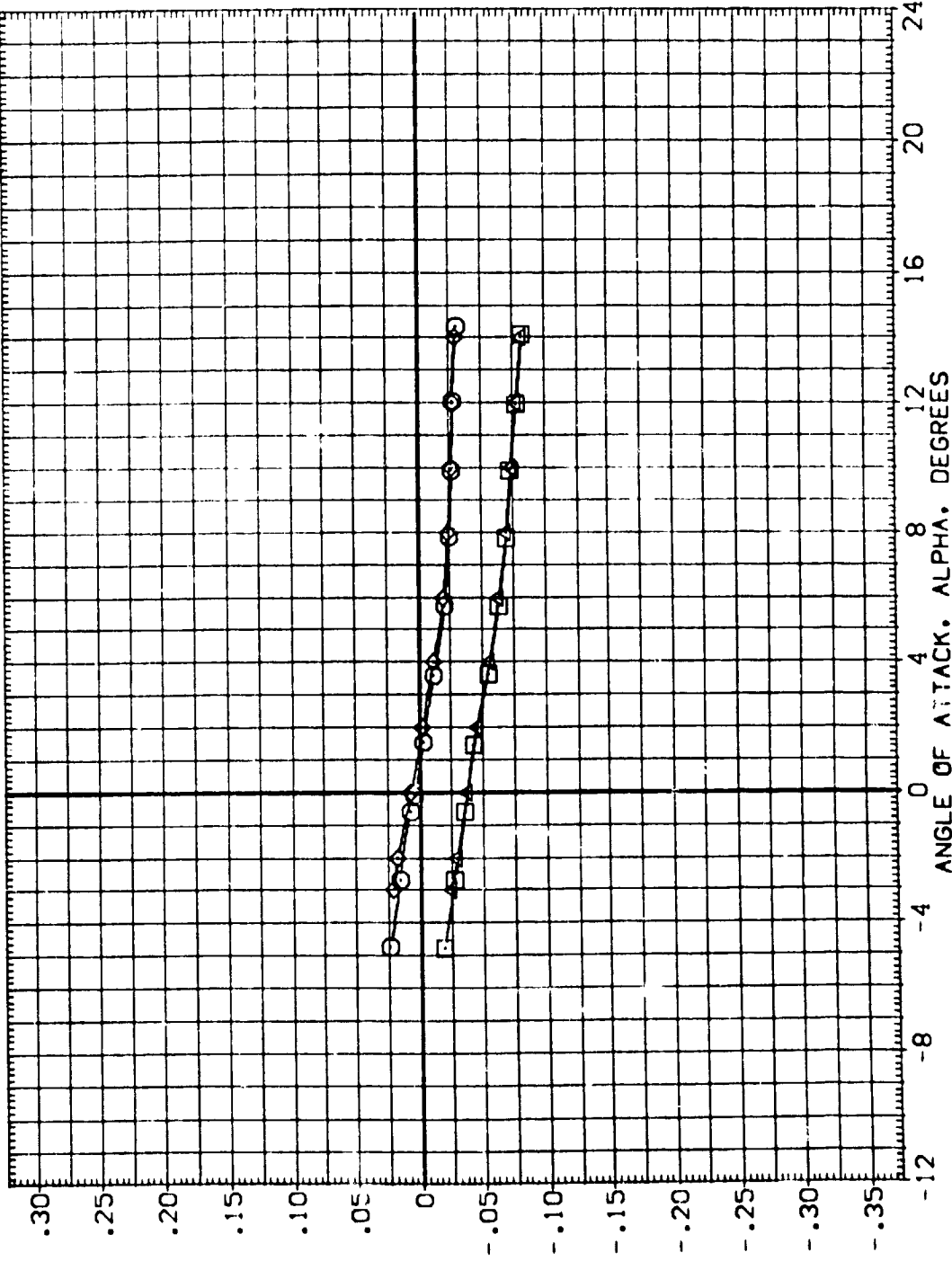


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

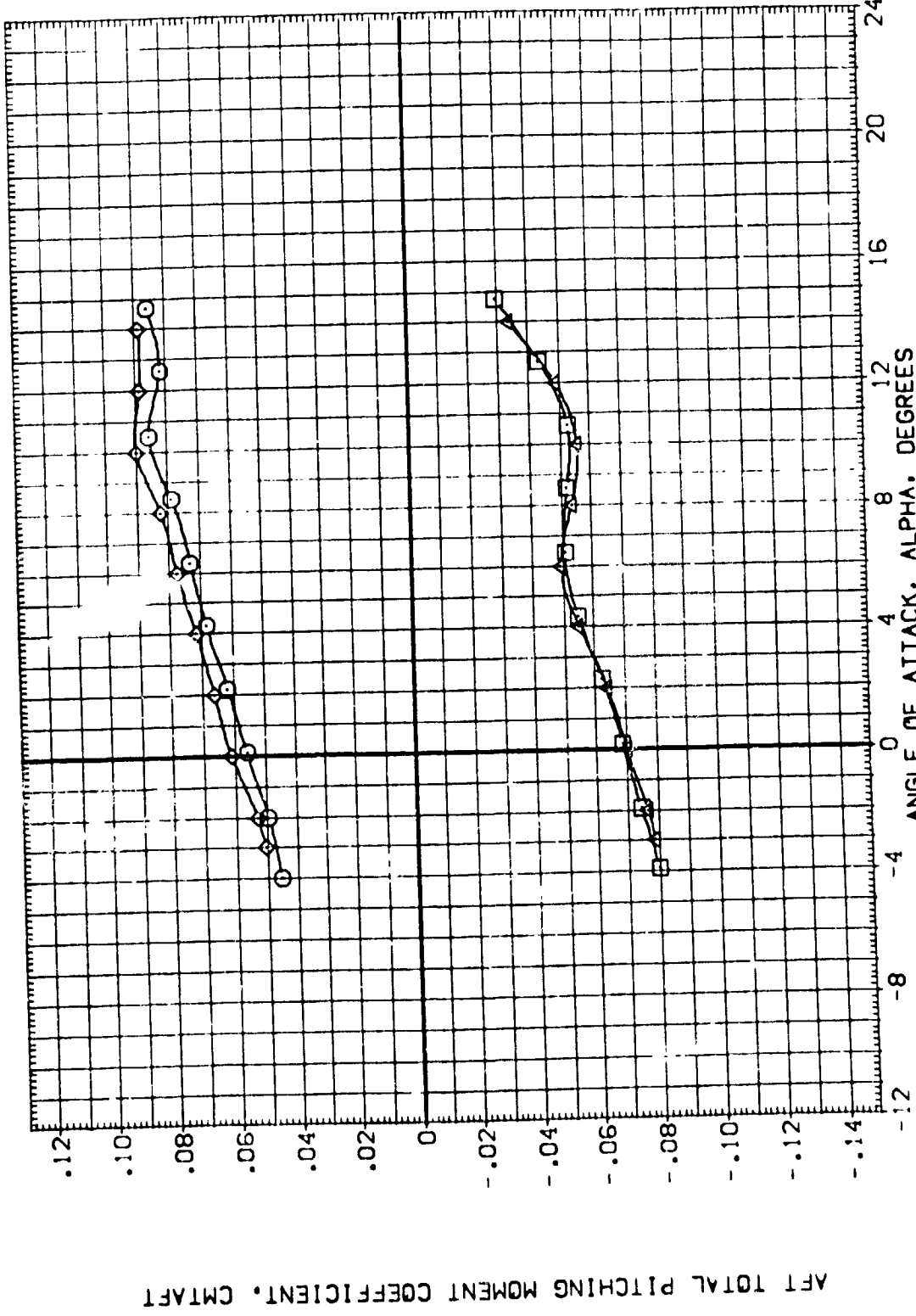
(H)MACH = 2.00



REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BRFP 1.1710 FT. IN.
 YMRP 12.6755 IN.
 ZMRP .0000 IN.
 SCALE .0150

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (GER019) [] ARC 66-709 0A59 011A-(N24)
 (GER020) [] ARC 66-709 0A59 011A-(N24)
 (ZER019) [X] ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
 (ZER020) [X] ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)



AFT TOTAL PITCHING MOMENT COEFFICIENT, CMAFT

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(A)MACH = .60

DATA SET SYMBOL (ZERO19) (ZERO20) (ZERO19) (ZERO20)

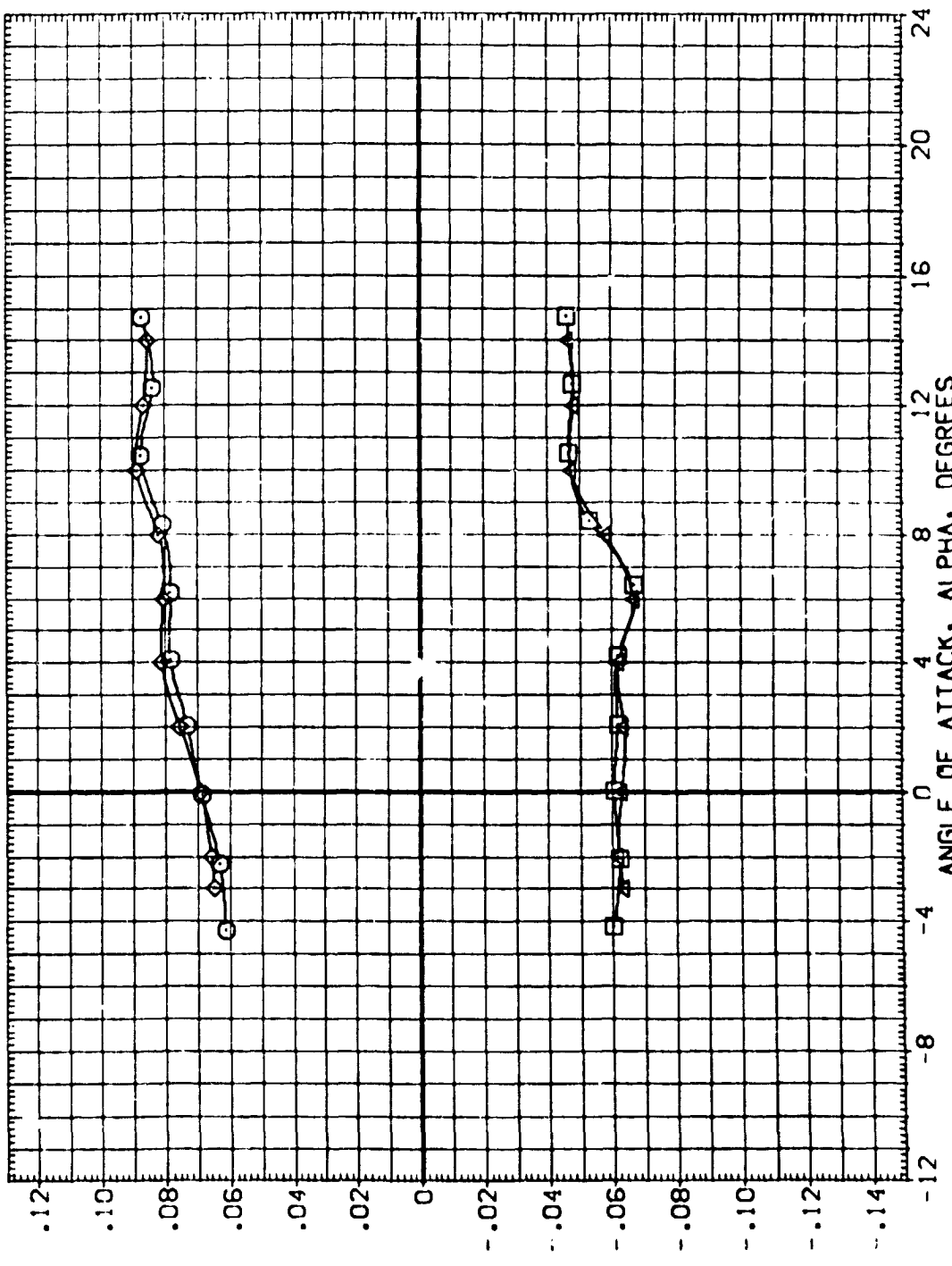
CONFIGURATION DESCRIPTION ARC 66-709 DA59 O111A-(N24) ARC 66-709 DA59 O111A-(N24) ARC 66-709 DA59 O111A-N24 (ADJUSTED FOR TARES) ARC 66-709 DA59 O111A-N24 (ADJUSTED FOR TARES)

BETA .000 .000 .000 .000

ELEVON .000 15.000 .000 15.000

BOFLAP -11.700 -11.700 -11.700 -11.700

REFERENCE INFORMATION SREF .6053 SQ.FT. LREF .5935 FT. BREF 1.1710 FT. XMRP 12.6255 IN. YMRP .0000 IN. ZMRP -.3750 IN. SCALE .0150



AFT TOTAL PITCHING MOMENT COEFFICIENT, CMTAFT

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(B)MACH = .80



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GE.R019) ARC 66-709 OAS9 DA11A-(N24)

(GE.R020) DATA NOT AVAILABLE

(3E.R019) ARC 66-709 OAS9 D11A-N24 (ADJUSTED FOR TARES)

(3E.R020) DATA NOT AVAILABLE

BETA .000

ELEVON .000

BOFLAP -11.700

.000 -11.700

.000 -11.700

.000 -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SC_E .0150

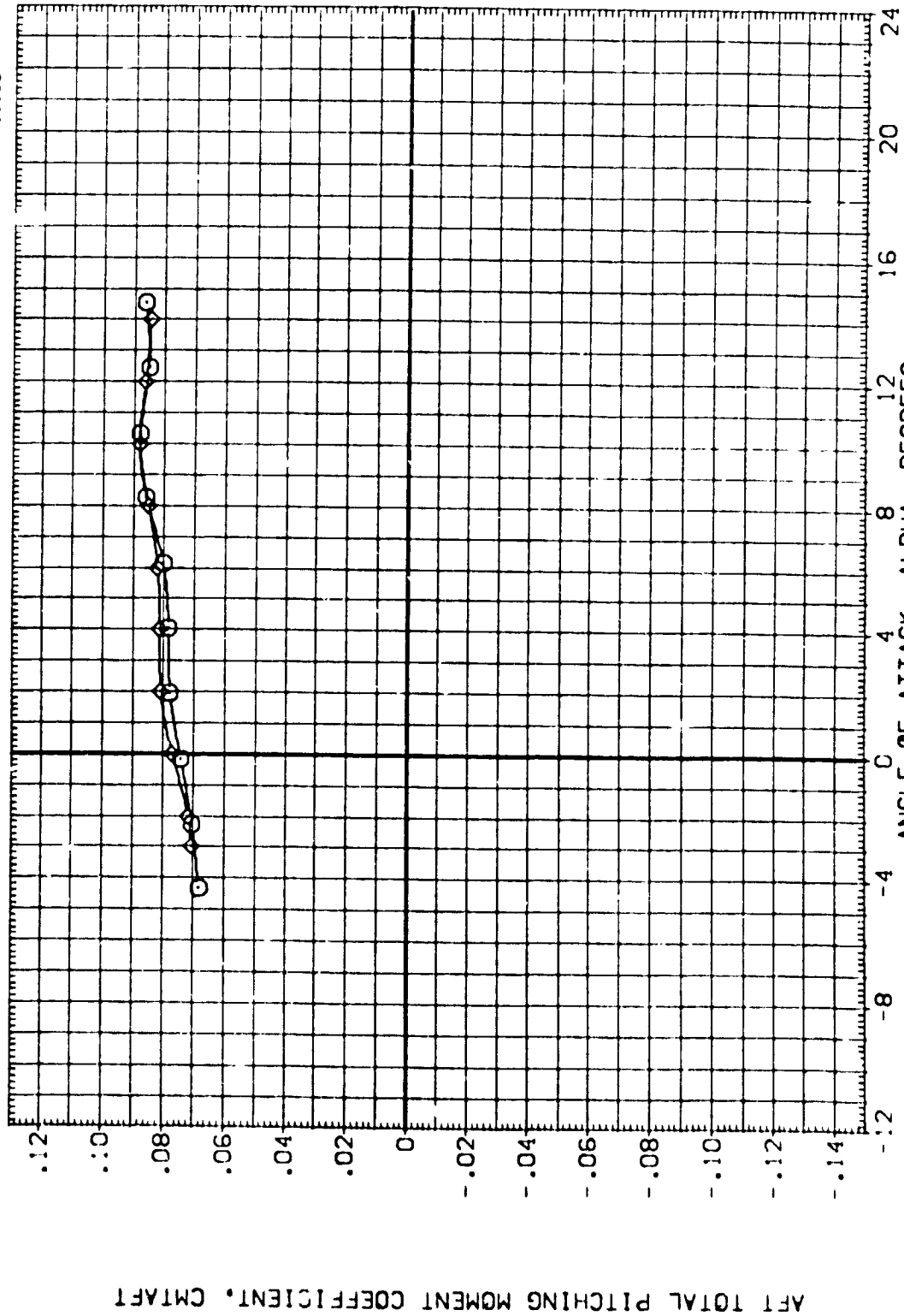


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .85

DATA SET SYMBOL: (GE R019), (GE R020), (GE R019), (GE R020)

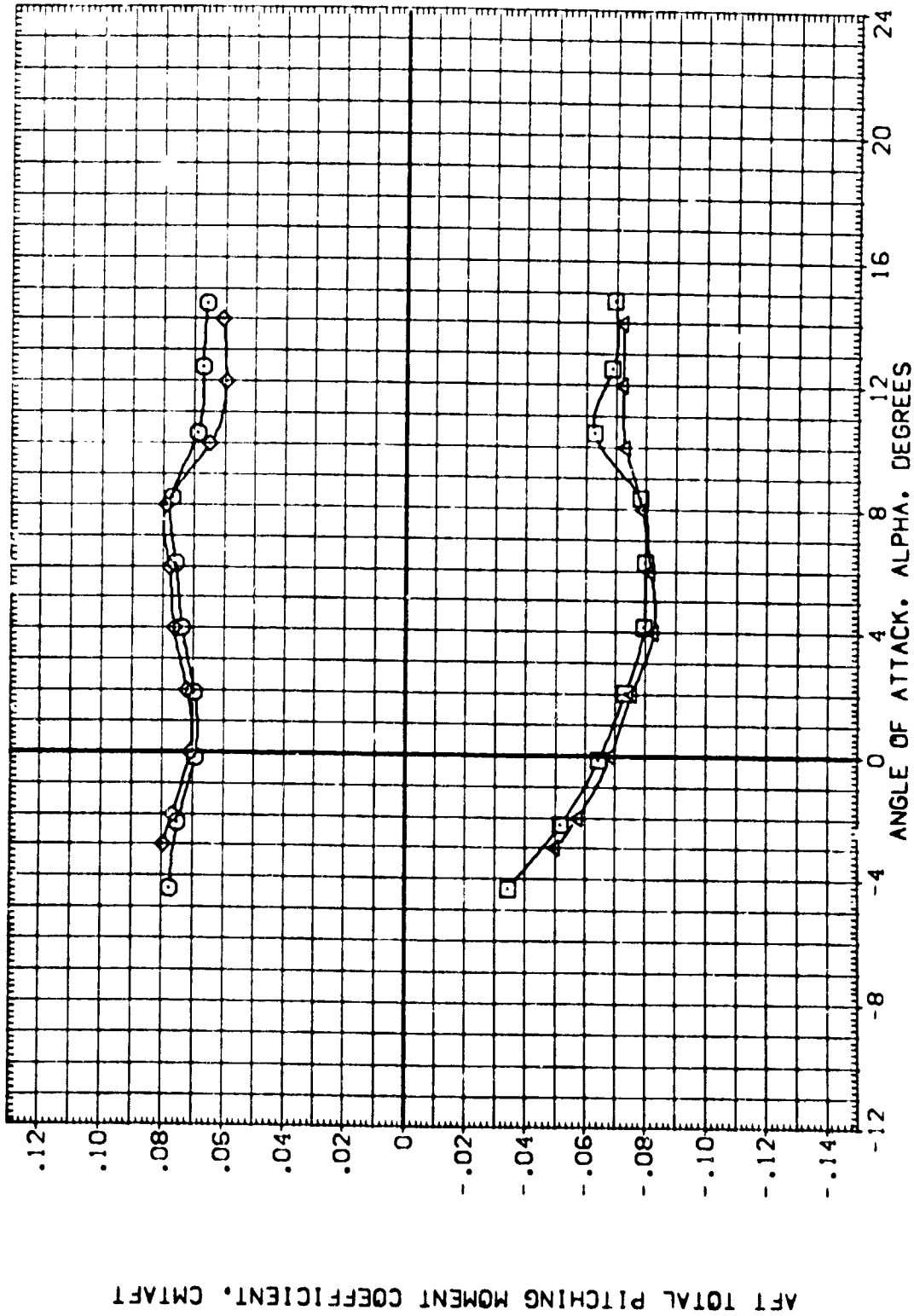
CONFIGURATION DESCRIPTION: ARC 66-709 GASS 0111A-N24, ARC 66-709 GASS 0111A-N24, ARC 66-709 GASS 0111A-N24, ARC 66-709 GASS 0111A-N24 (ADJUSTED FOR TARES), ARC 66-709 GASS 0111A-N24 (ADJUSTED FOR TARES)

BETA: .000, .000, .000, .000

ELEVON: .000, 15.000, .000, 15.000

80FLAP: -11.700, -11.700, -11.700, -11.700

REFERENCE INFORMATION: SREF: .6053 SO.FT., LREF: .5935 FT., BREF: 1.1710 FT., XMRP: 12.6265 IN., YMRP: .0000 IN., ZMRP: -.3750 IN., SCALE: .0150



AFT TOTAL PITCHING MOMENT COEFFICIENT, CMAFT

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(O)MACH = .90

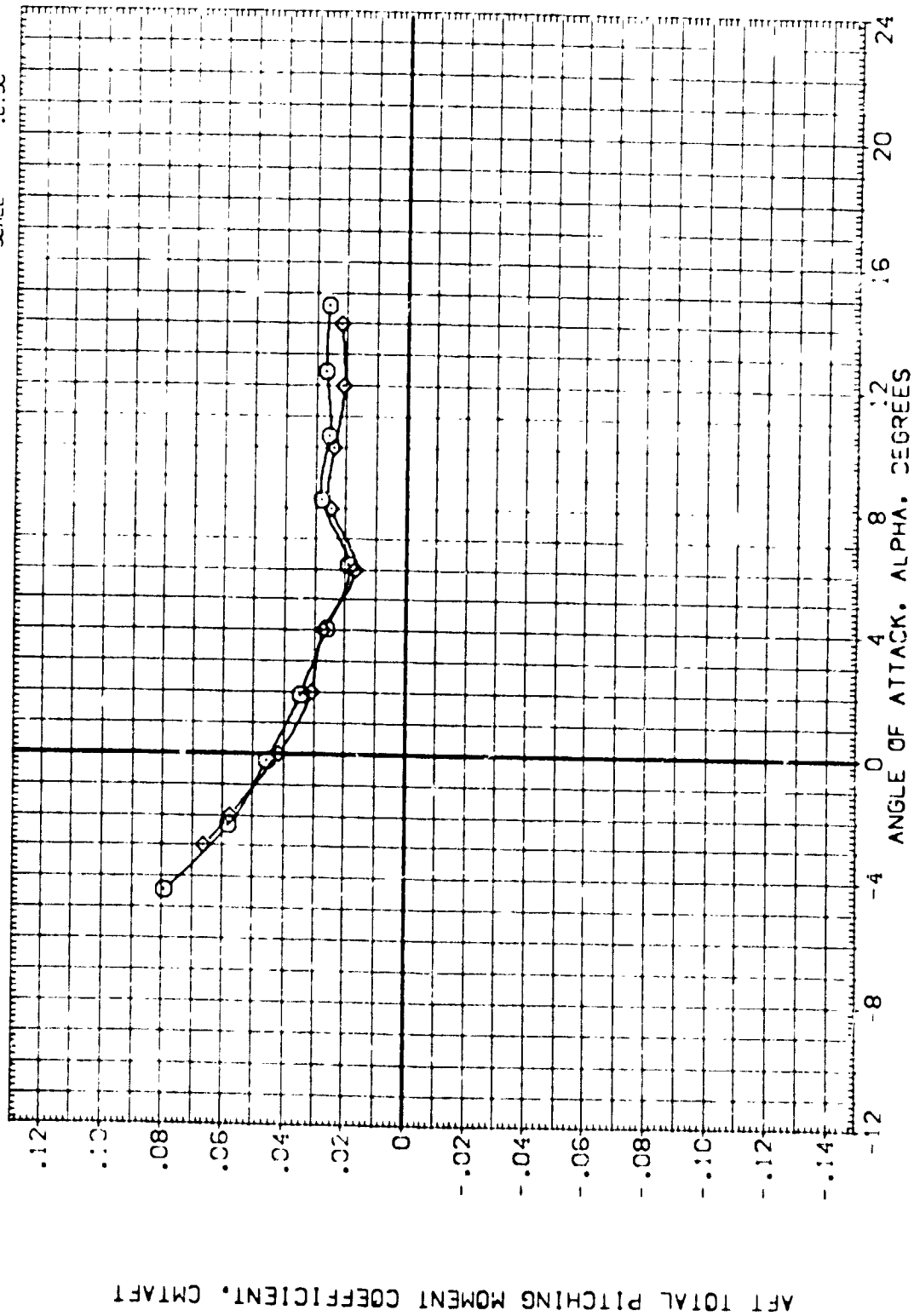


DATA SET SYMBOL
 (GE RC20)
 (GE RC20)
 (GE RC20)
 (GE RC20)

CONFIGURATION DESCRIPTION
 ARC 66-709 QAS9 0111A-N24
 DATA NOT AVAILABLE
 ARC 66-709 QAS9 0111A-N24 (ADJUSTED FOR TARES)
 DATA NOT AVAILABLE

BETA .000
 ELEVON .000
 BOFLAP -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5936 FT.
 BREF 1.1710 FT.
 XREF 12.0255 IN.
 YREF .0000 IN.
 ZREF -.3750 IN.
 SCALE .0150



AFT TOTAL PITCHING MOMENT COEFFICIENT, CMTAFT

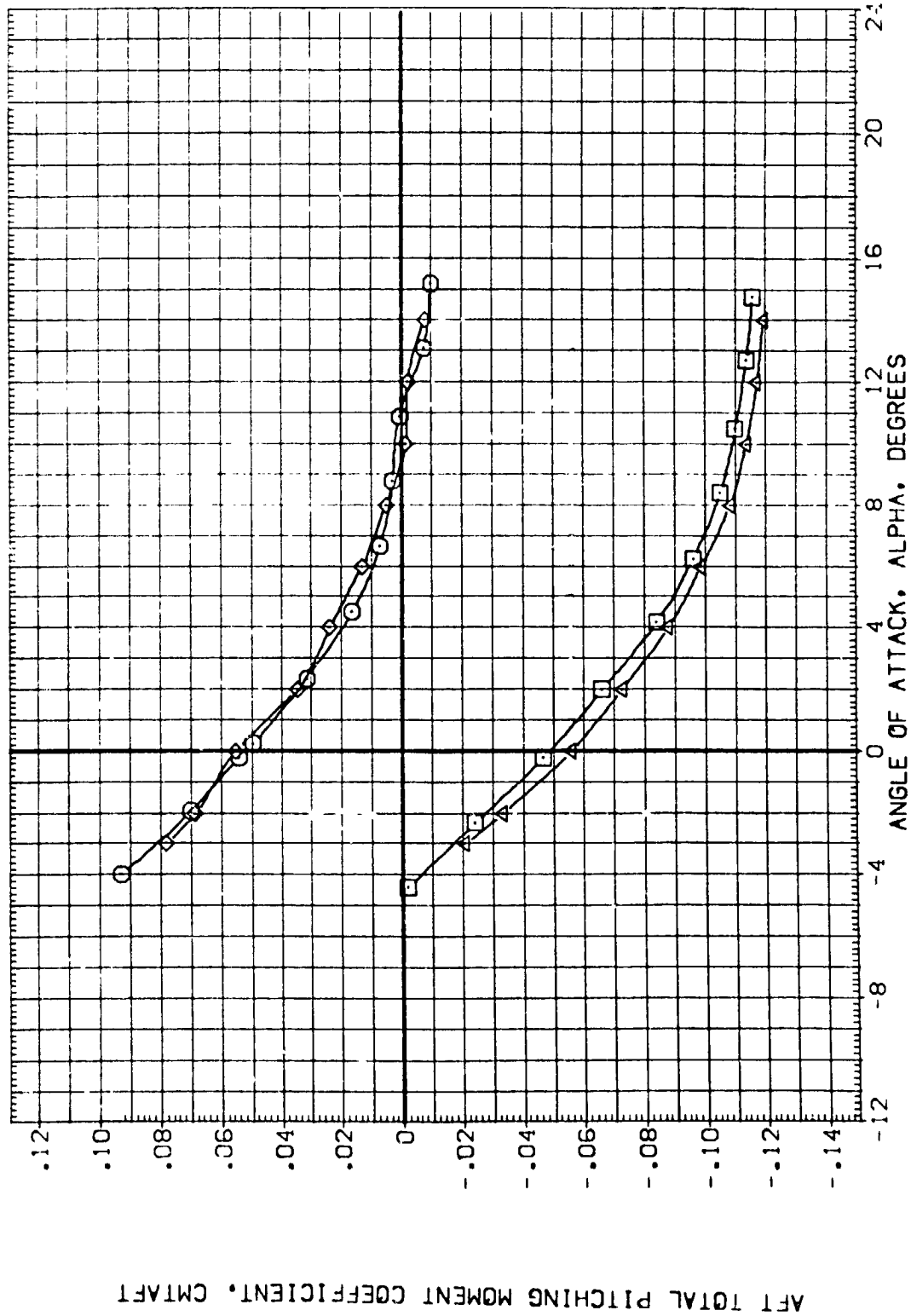
FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(E)MAC .95

DATA SET SYMBOL CONFIGURATION DESCRIPT, A
 (0ER019) ARC 66-709 0A59 0A11A-N24
 (3ER020) ARC 66-709 0A59 0A11A-N24
 (3ER019) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
 (3ER020) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BOFLAP

(GEO19) ARC 66-709 0A59 0A11A-N24 .000 .000 -11.700

(GEO20) ARC 66-709 0A59 0A11A-N24 .000 15.000 -11.700

(3E019) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES) .000 .000 -11.700

(3E020) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES) .000 15.000 -11.700

REFERENCE INFORMATION

SREF .8753 SQ.FT.

LREF .5575 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

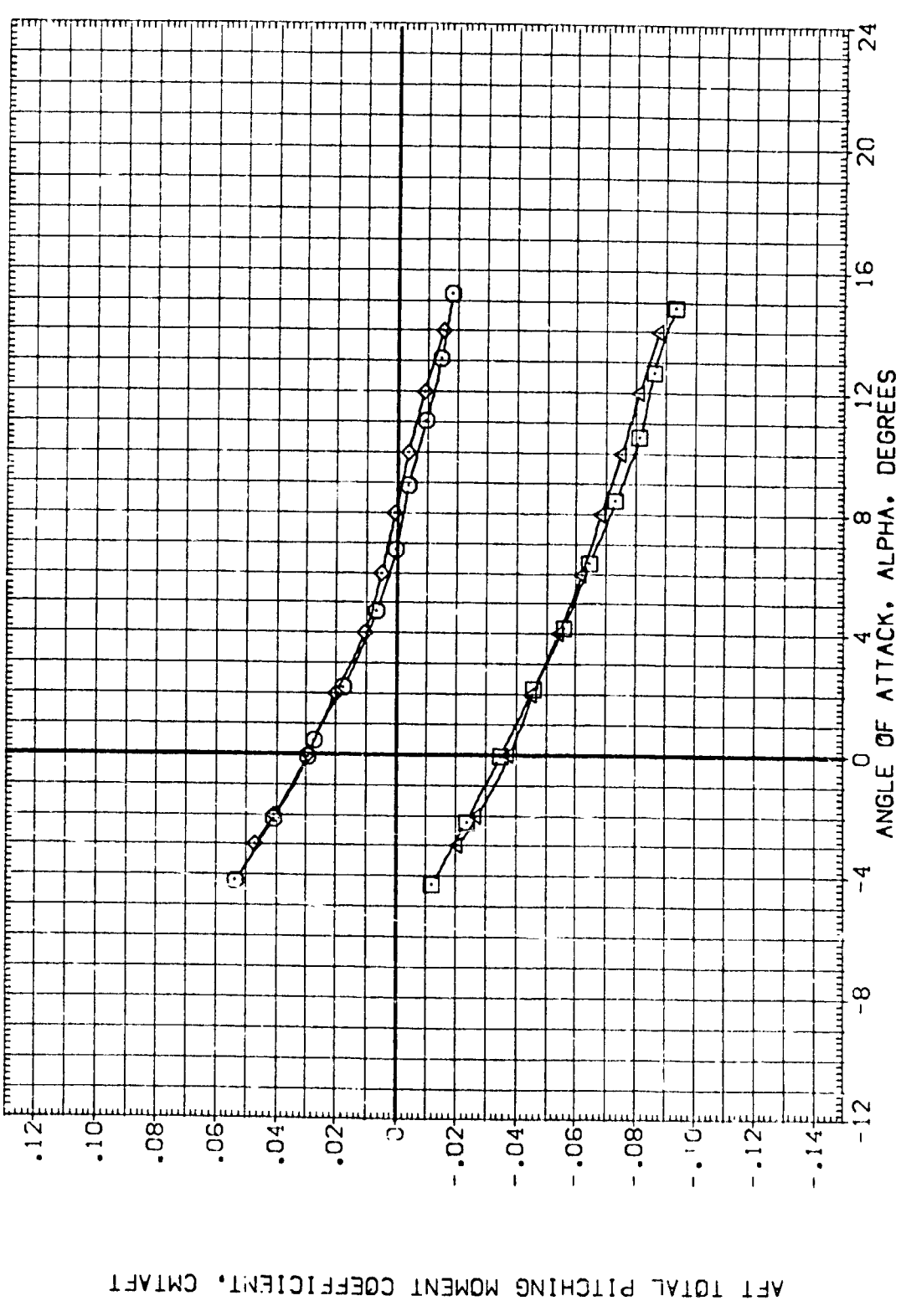


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.50

DATA SET SYMBOL

CONFIGURATION DESCRIPTION

BETA

ELEVON

SOFLAP

REFERENCE INFORMATION

SREF .6053 SO.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6755 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

.000
.000
.000
.000

.000
.000
.000
.000

ARC 66-709 OASS O111A-N24
 ARC 66-709 OASS O111A-N24
 ARC 66-709 OASS O111A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 OASS O111A-N24 (ADJUSTED FOR TARES)

(ZER019)
 (ZER020)
 (ZER019)
 (ZER020)

AFT TOTAL PITCHING MOMENT COEFFICIENT, CMATAFT

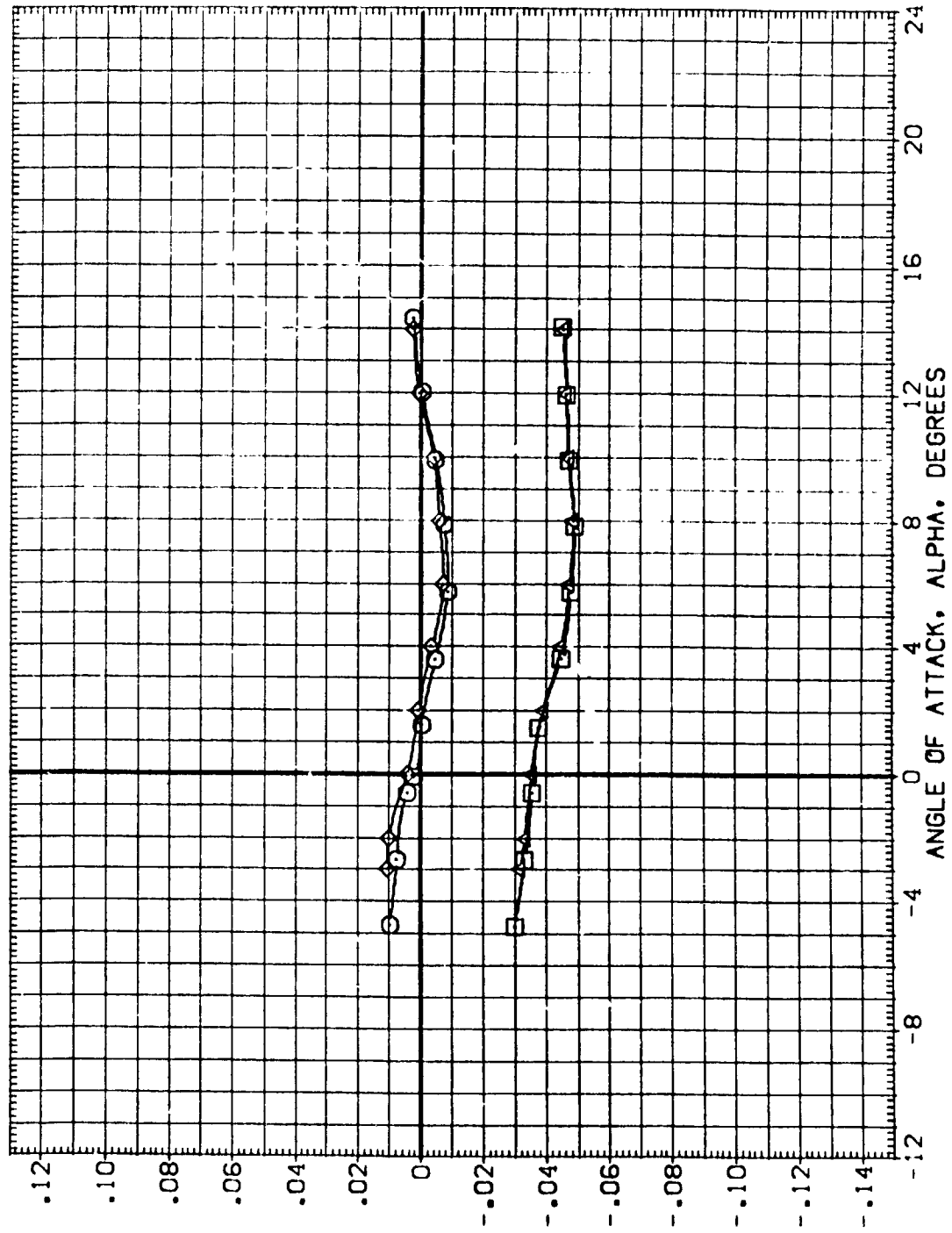


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(H)MACH = 2.00

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LRFF	.5935	FT.
BRFF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

BETA

ELEVON	.000
BDFLAP	-.11700
ELEVON	15.000
BDFLAP	-.11700
ELEVON	.000
BDFLAP	-.11700
ELEVON	15.000
BDFLAP	-.11700

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GER019)	ARC 66-709	DA59	DA11A-(N24)
(GER020)	ARC 66-709	DA59	DA11A-(N24)
(3ER019)	ARC 66-709	DA59	Q11A-N24 (ADJUSTED FOR TARES)
(3ER020)	ARC 66-709	DA59	Q11A-N24 (ADJUSTED FOR TARES)

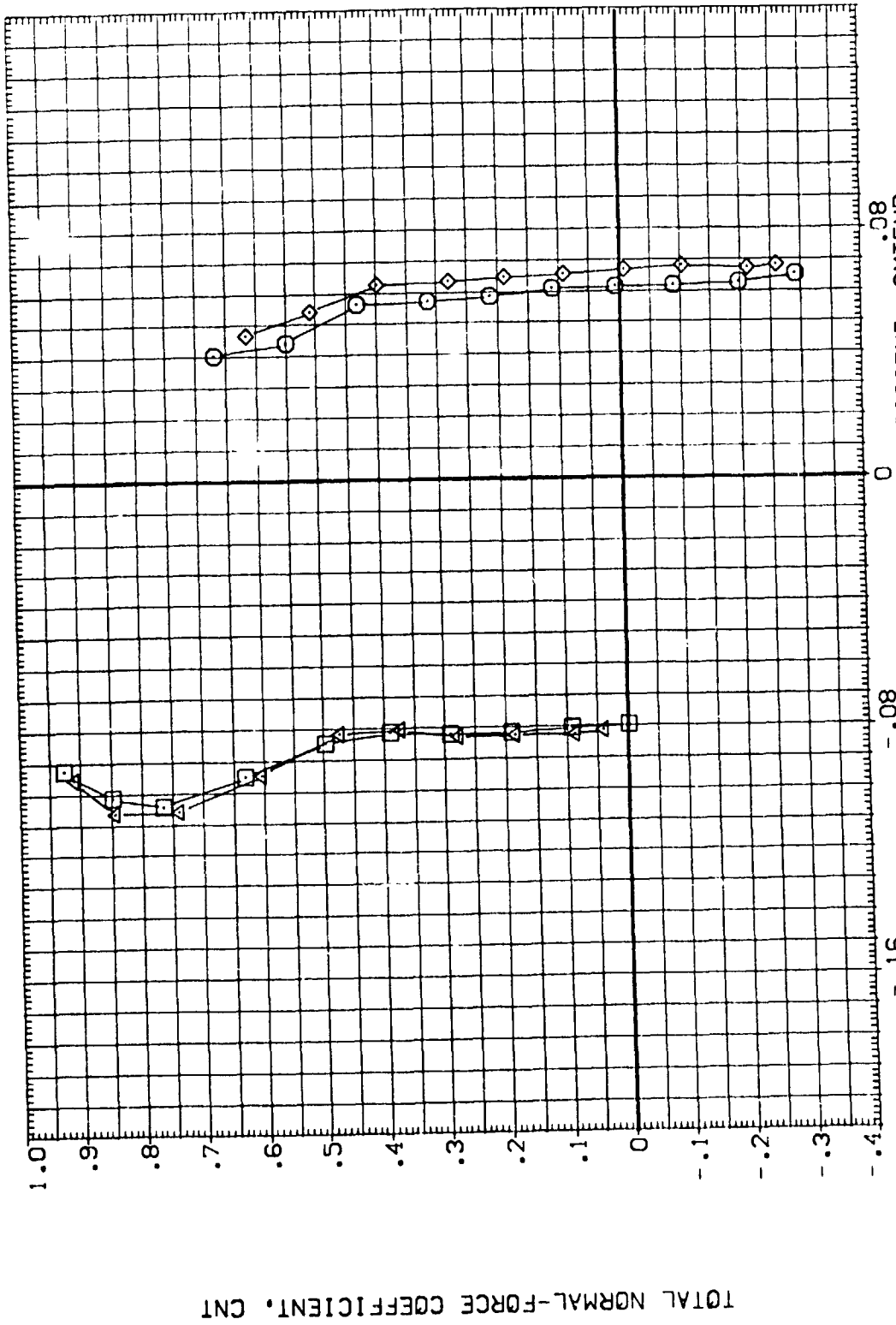


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BOFLAP

(GER019) ARC 66-708 QAS9 O111A-N24 .000 .000 -11.700

(GER020) ARC 66-708 QAS9 O111A-N24 .000 15.000 -11.700

(GER019) ARC 66-708 QAS9 O111A-N24 (ADJUSTED FOR TARES) .000 .000 -11.700

(GER020) ARC 66-708 QAS9 O111A-N24 (ADJUSTED FOR TARES) .000 15.000 -11.700

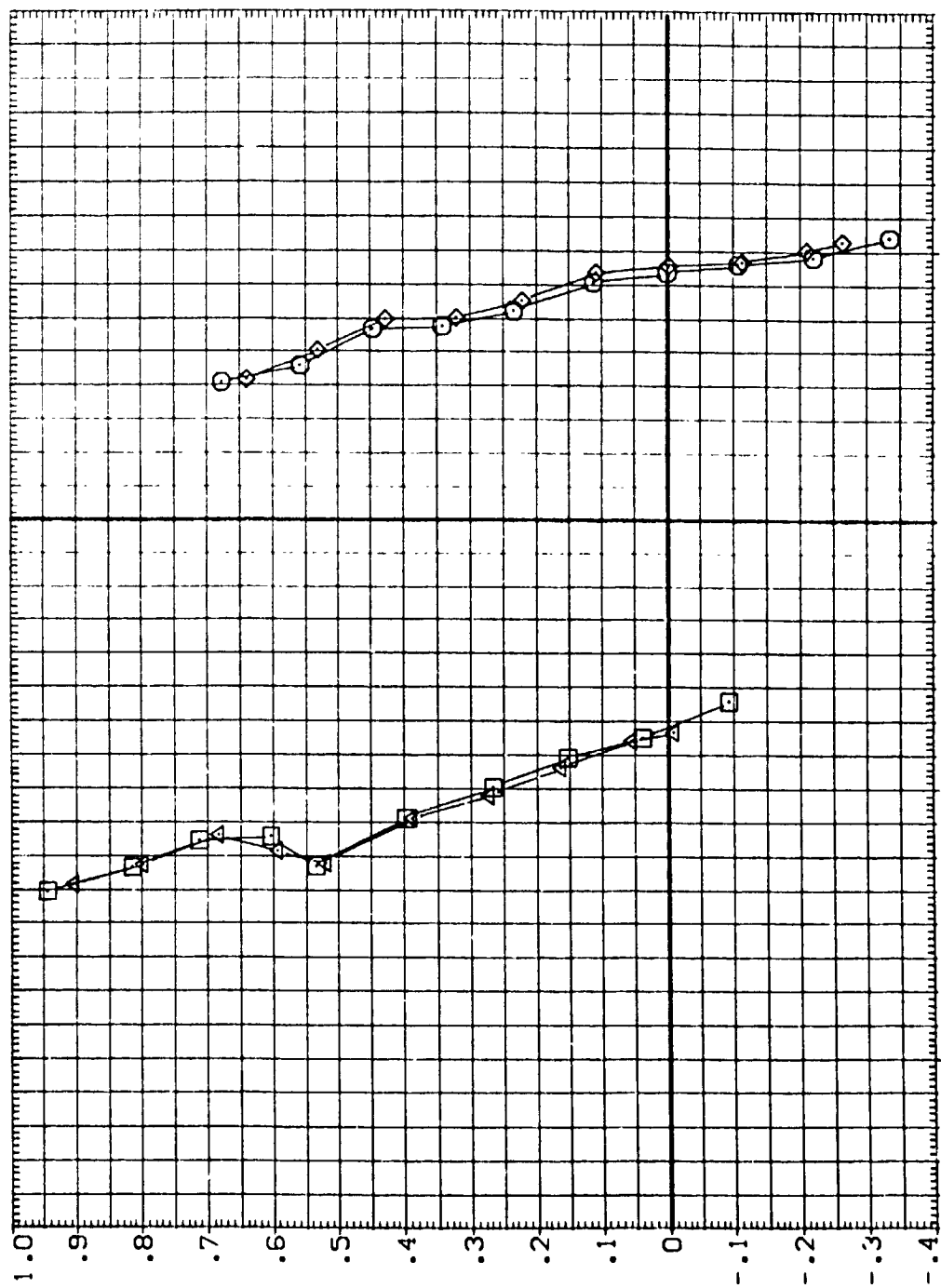


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES
 (B)MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(06R019) ARC 66-709 CASE 0A11A-(N24)

(06R020) DATA NOT AVAILABLE

(36R019) ARC 66-709 CASE 011A-N24 (ADJUSTED FOR TARES)

(36R020) DATA NOT AVAILABLE

BETA ELEVON BDFLAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

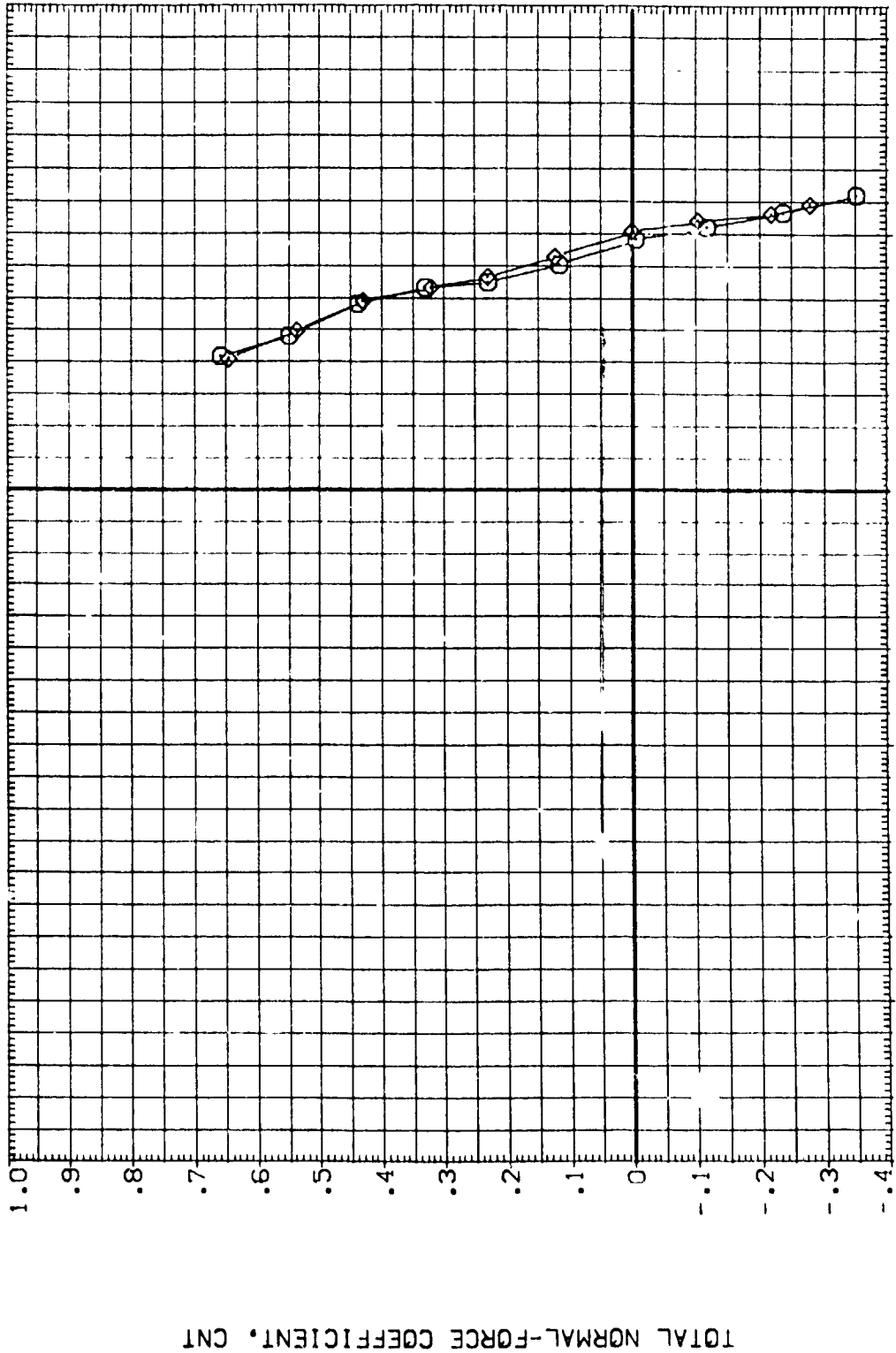


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(CJ)MACH = .85

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GER019) ARC 66-709 0A59 0A11A-(N24)

(GER020) ARC 66-709 0A59 0A11A-(N24)

(3ER019) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

(3ER020) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOCLAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF .8053 SQ.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

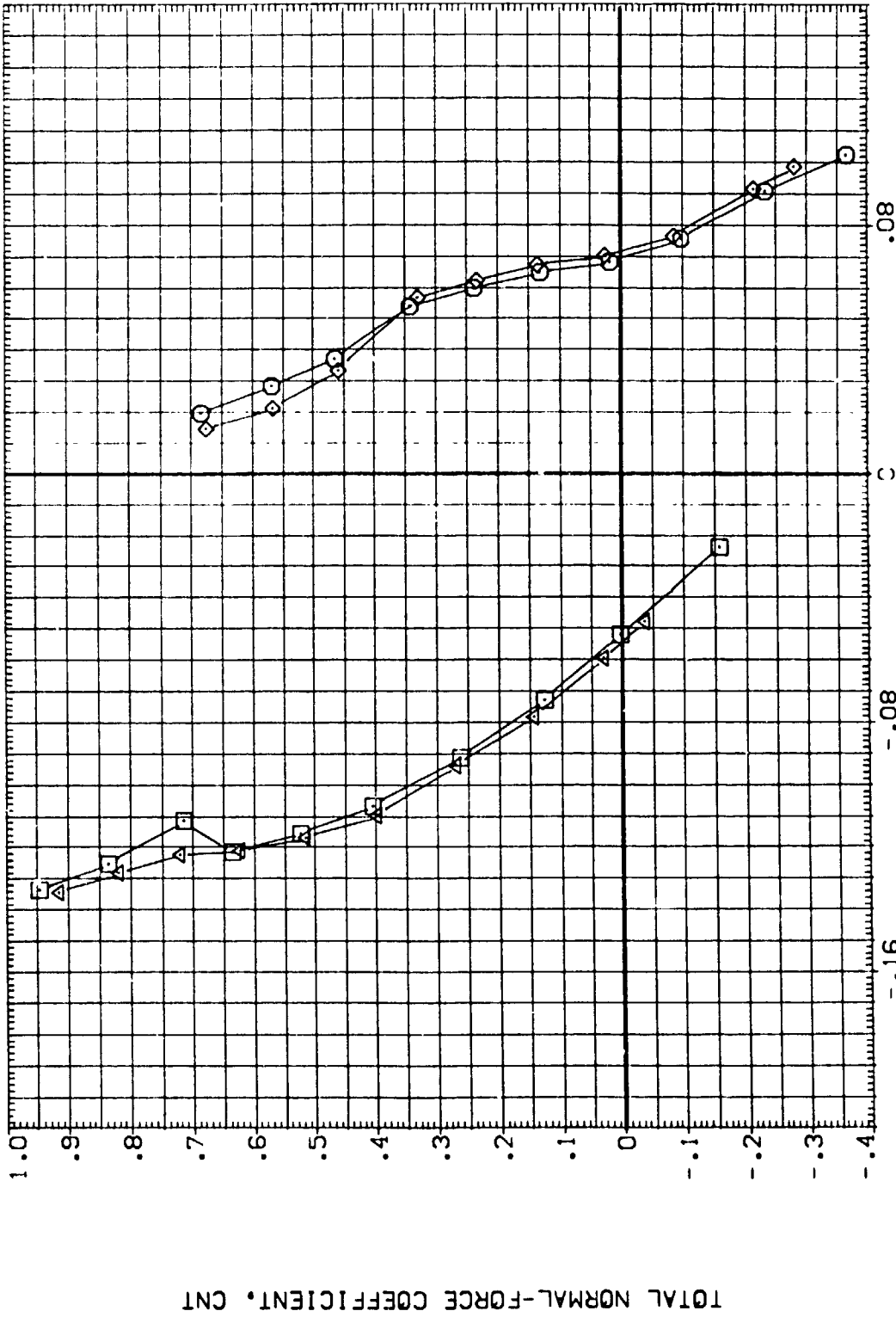


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(D)MACH = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GER019) ARC 66-709 DA59 DA11A-(N24)

(GER020) DATA NOT AVAILABLE

(3ER019) ARC 66-709 DA59 DA11A-N24 (ADJUSTED FOR TARES)

(3ER020) DATA NOT AVAILABLE

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5935 FT.

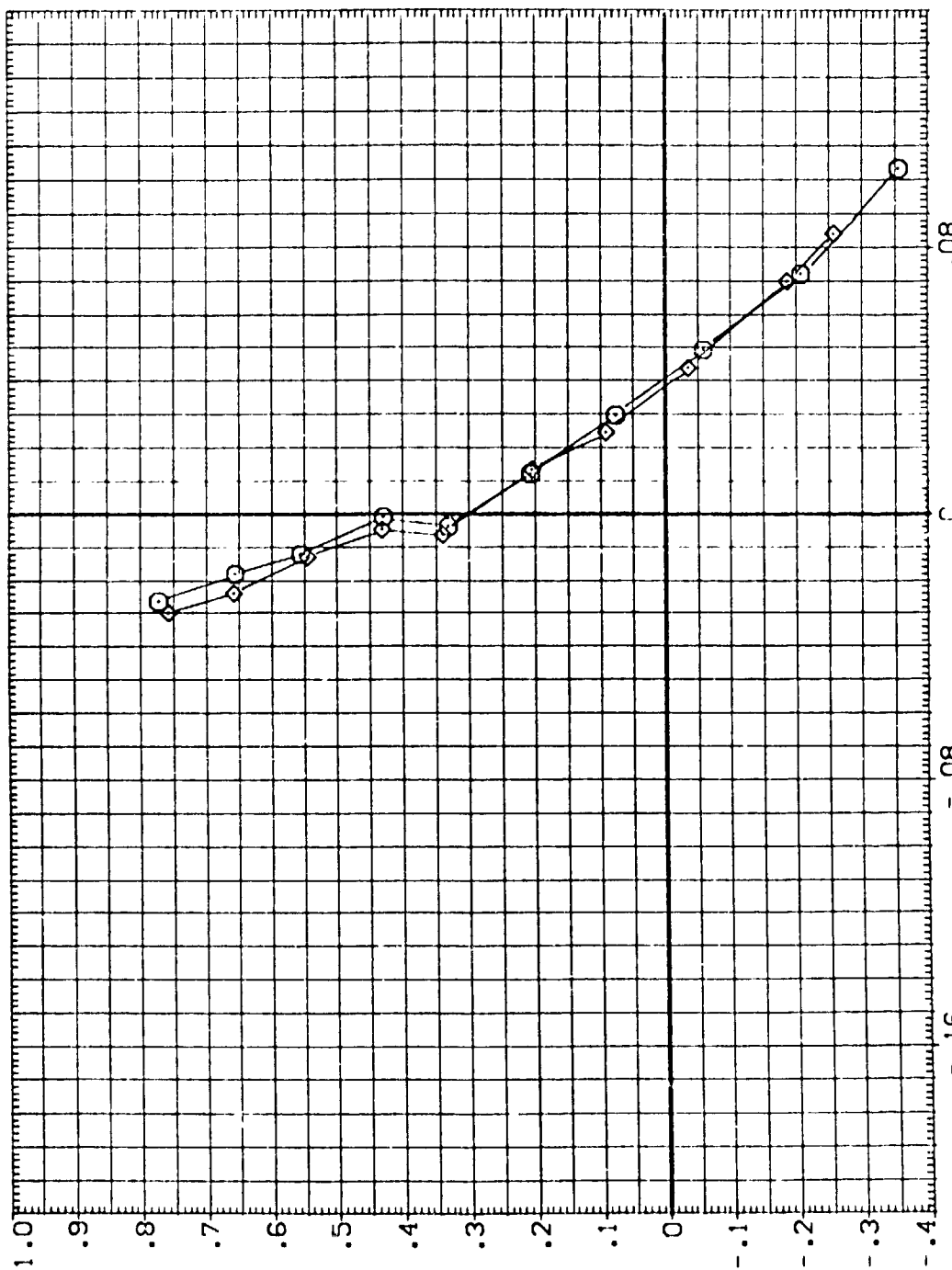
BREF 1.1710 FT.

XMRP 12.6255 IN.

ZMRP .0000 IN.

SCALE -.3750 IN.

 .0150



TOTAL NORMAL-FORCE COEFFICIENT, CNT

-.16 -.08 .08
 FORWARD TOTAL PITCHING MOMENT COEFFICIENT, CMTFWD

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(E)MACH = .95

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GER019)	ARC 66-709 QAS9	O111A-(N24)
(GER020)	ARC 66-709 QAS9	O111A-(N24)
(XER019)	ARC 66-709 QAS9	O111A-N24 (ADJUSTED FOR TARES)
(XER020)	ARC 66-709 QAS9	O111A-N24 (ADJUSTED FOR TARES)

BETA

.000	ELEVON	BOFLAP
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	50.FT.
LREF	.5636	FT.
XRREF	1.1710	FT.
YMRP	12.6255	IN.
ZMRP	.0000	IN.
SCALE	-.3750	IN.
	.0150	

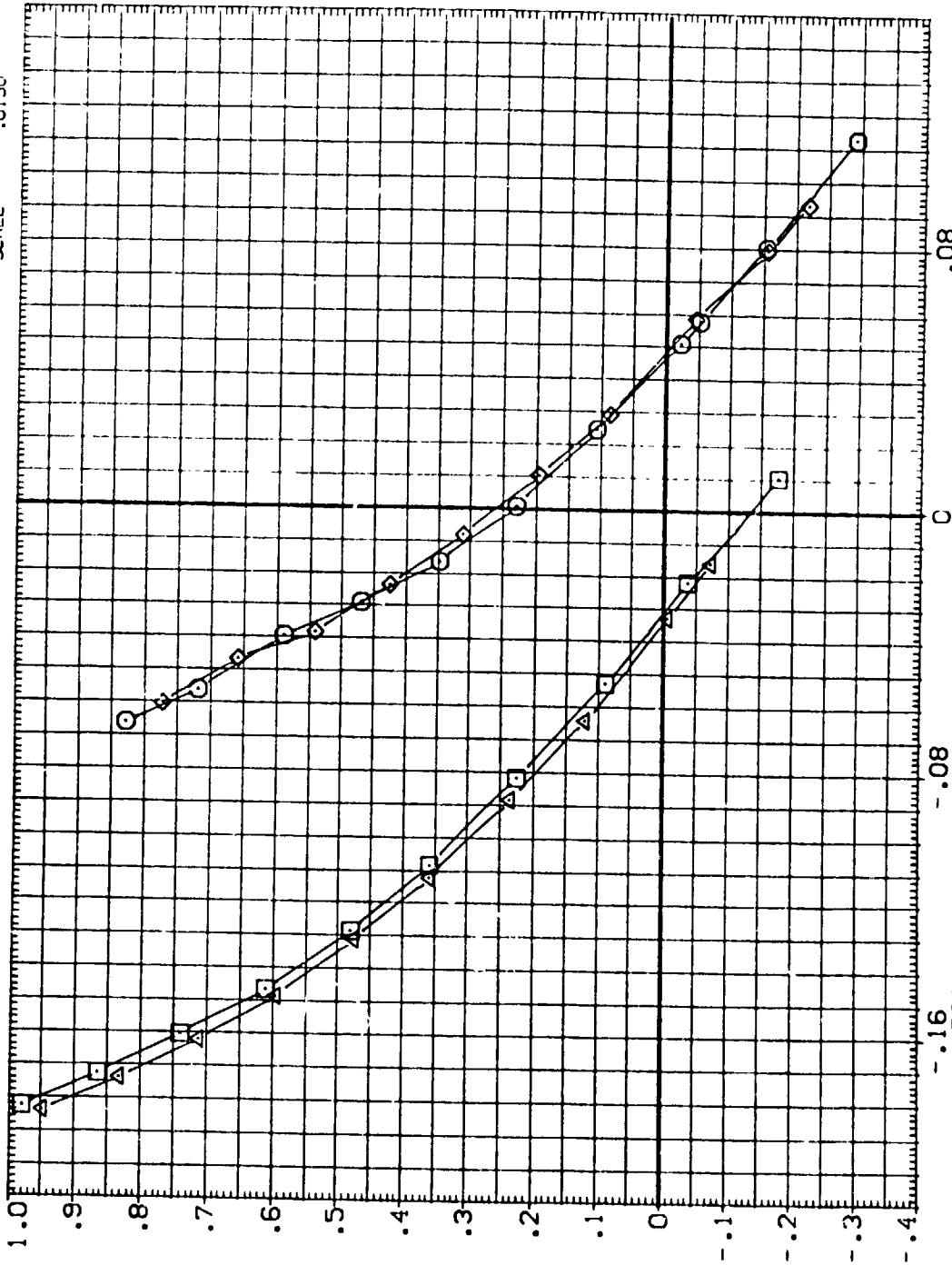


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH = 1.20



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(3E R019)	ARC 66-709 0A59	0A11A-(N24)
(3E R020)	ARC 66-709 0A59	0A11A-(N24)
(3E R019)	ARC 66-709 0A59	011A-N24 (ADJUSTED FOR TARES)
(3E R020)	ARC 66-709 0A59	011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	50.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

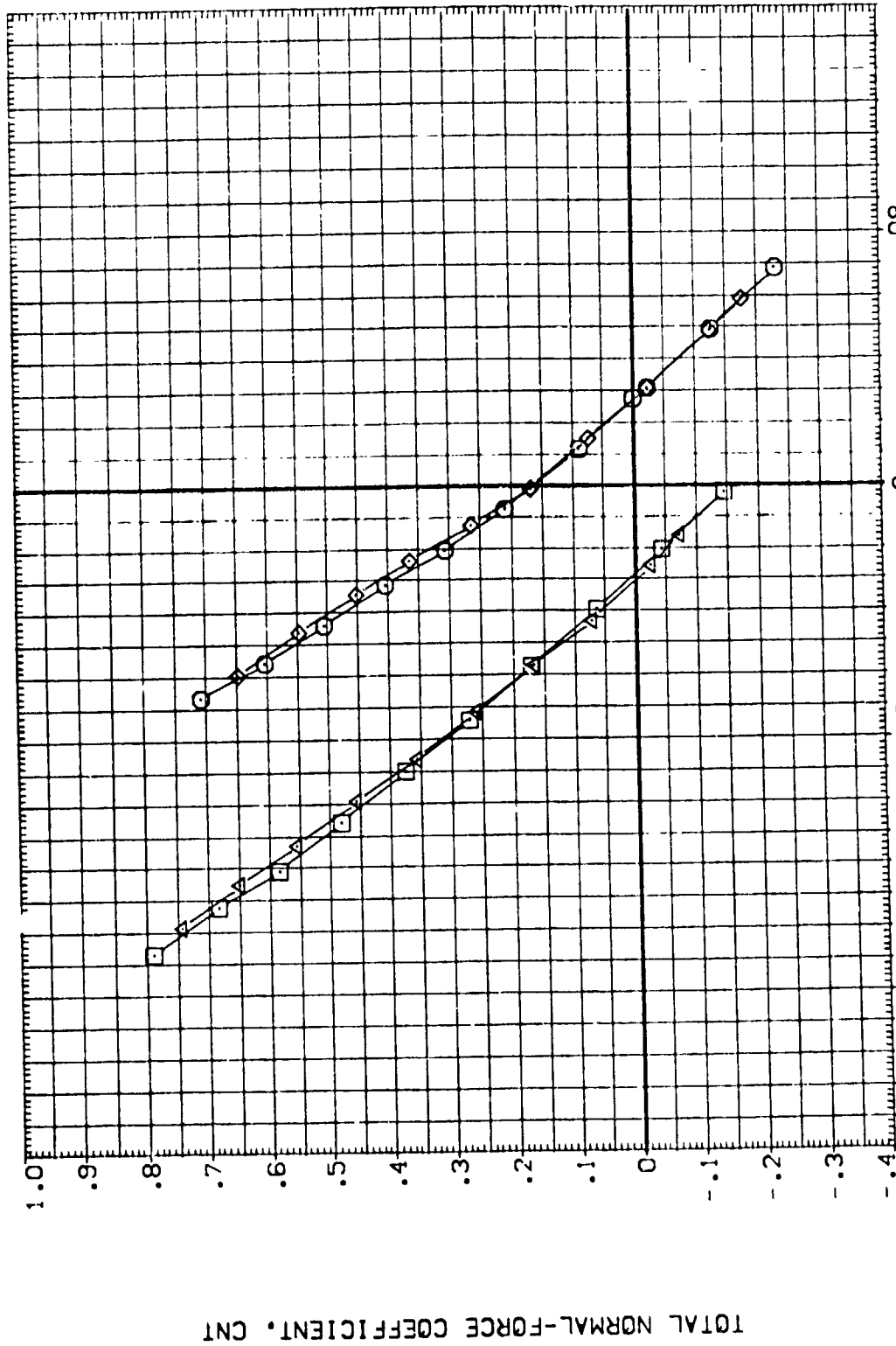


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.50

DATA SET SYMBOL: (GER019) (GER020) (GER021) (GER022)

CONFIGURATION DESCRIPTION:
 ARC 66-709 D459 D11A-N24
 ARC 66-709 D459 D11A-N24
 ARC 66-709 D459 D11A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 D459 D11A-N24 (ADJUSTED FOR TARES)

BETA: .000 .000 .000 .000

ELEVON: .000 15.000 .000 15.000

BOFLAP: -11.700 -11.700 -11.700 -11.700

REFERENCE INFORMATION:
 SREF .6053 50.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6755 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

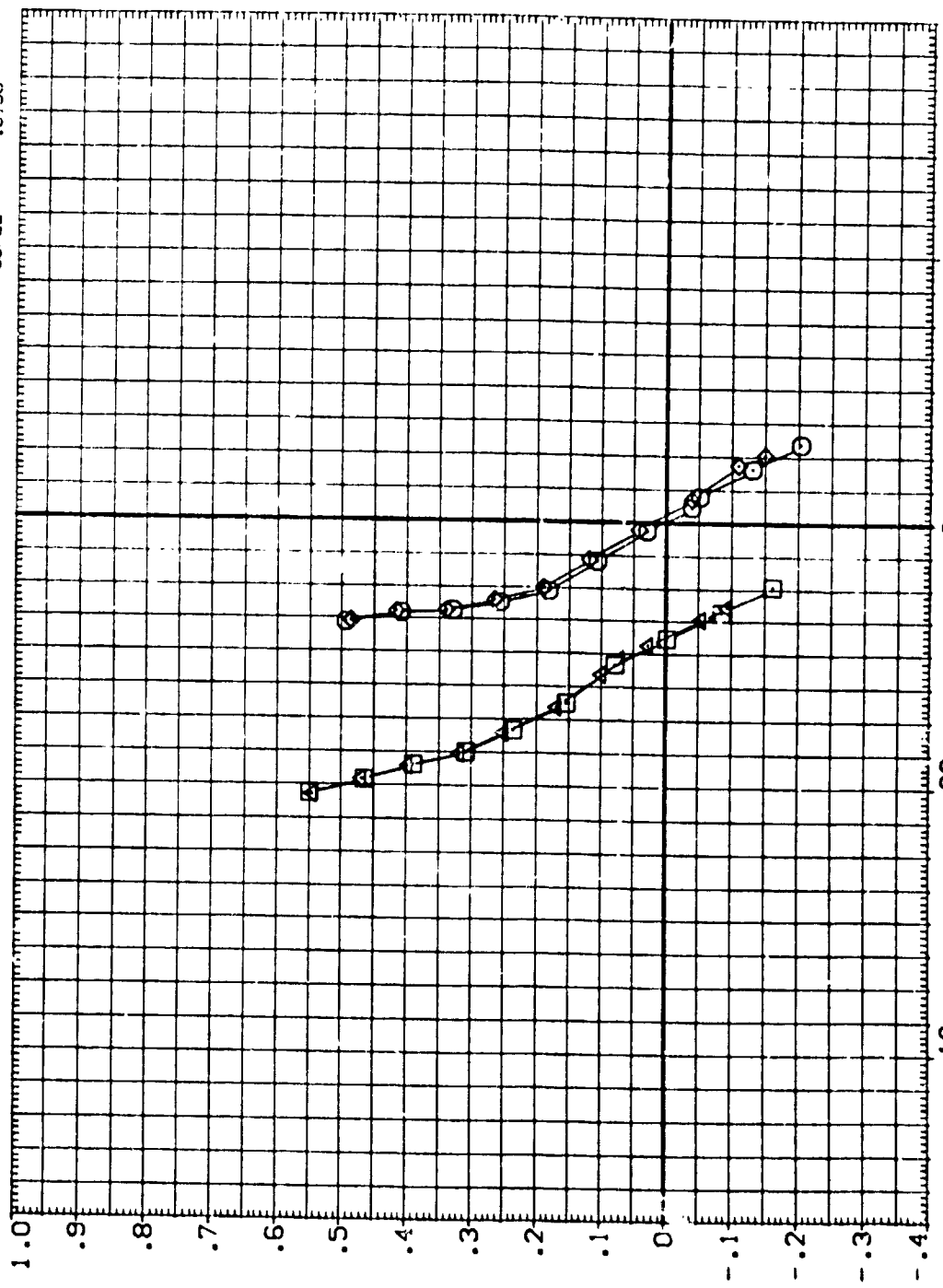


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(H)MACH = 2.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GER019)	ARC 66-709 0A59 0A11A-(N24)
(GER020)	ARC 66-709 0A59 0A11A-(N24)
(3ER019)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
(3ER020)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

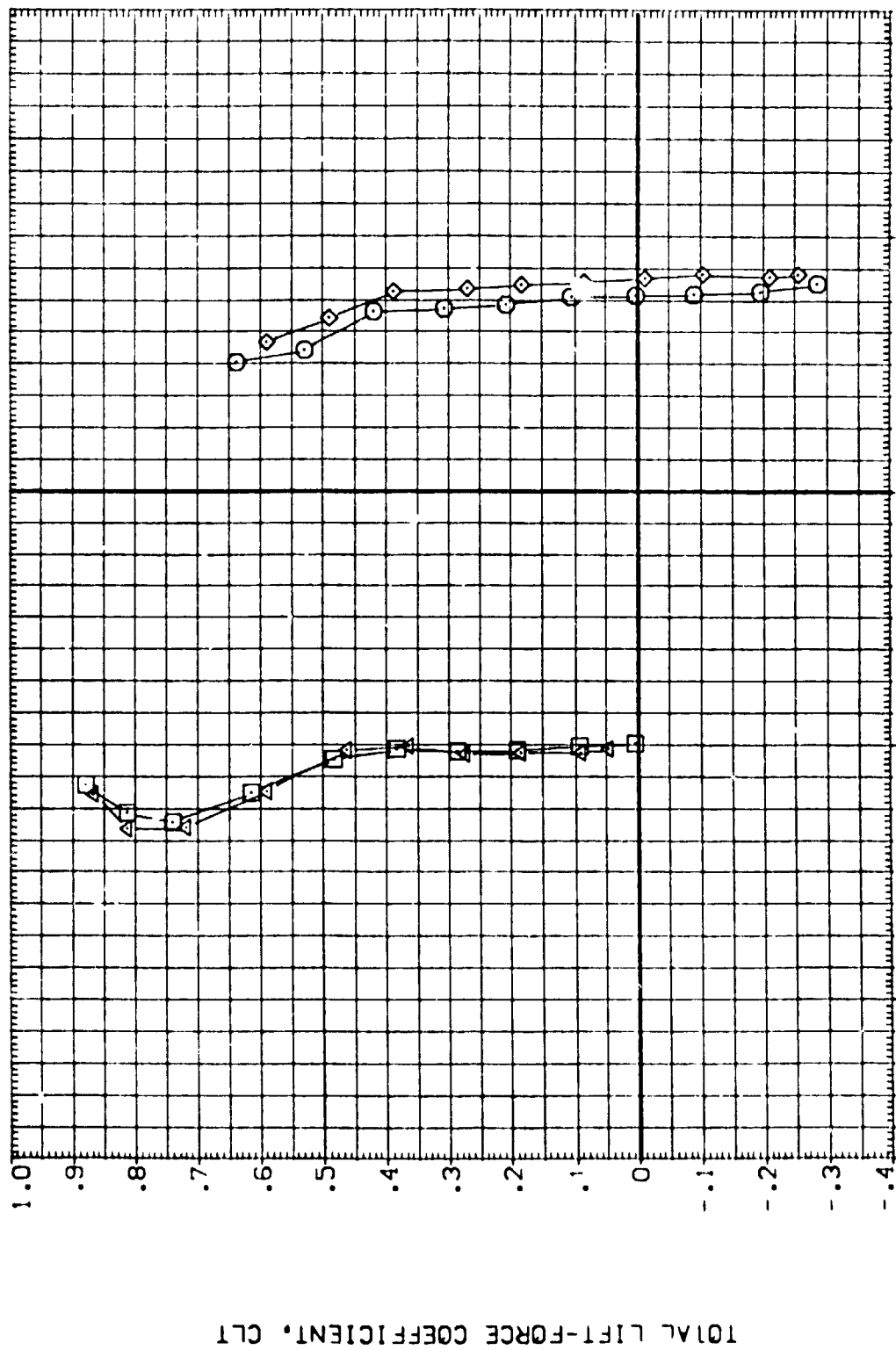


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(A)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (GE.R019) ○ ARC 66-709 0A59 0A11A-N24
 (GE.R020) ○ ARC 66-709 0A59 0A11A-N24
 (GE.R019) ⋈ ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
 (GE.R020) ⋈ ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP
 .000 0.00 -11.700
 .000 15.000 -11.700
 .000 0.000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.3710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

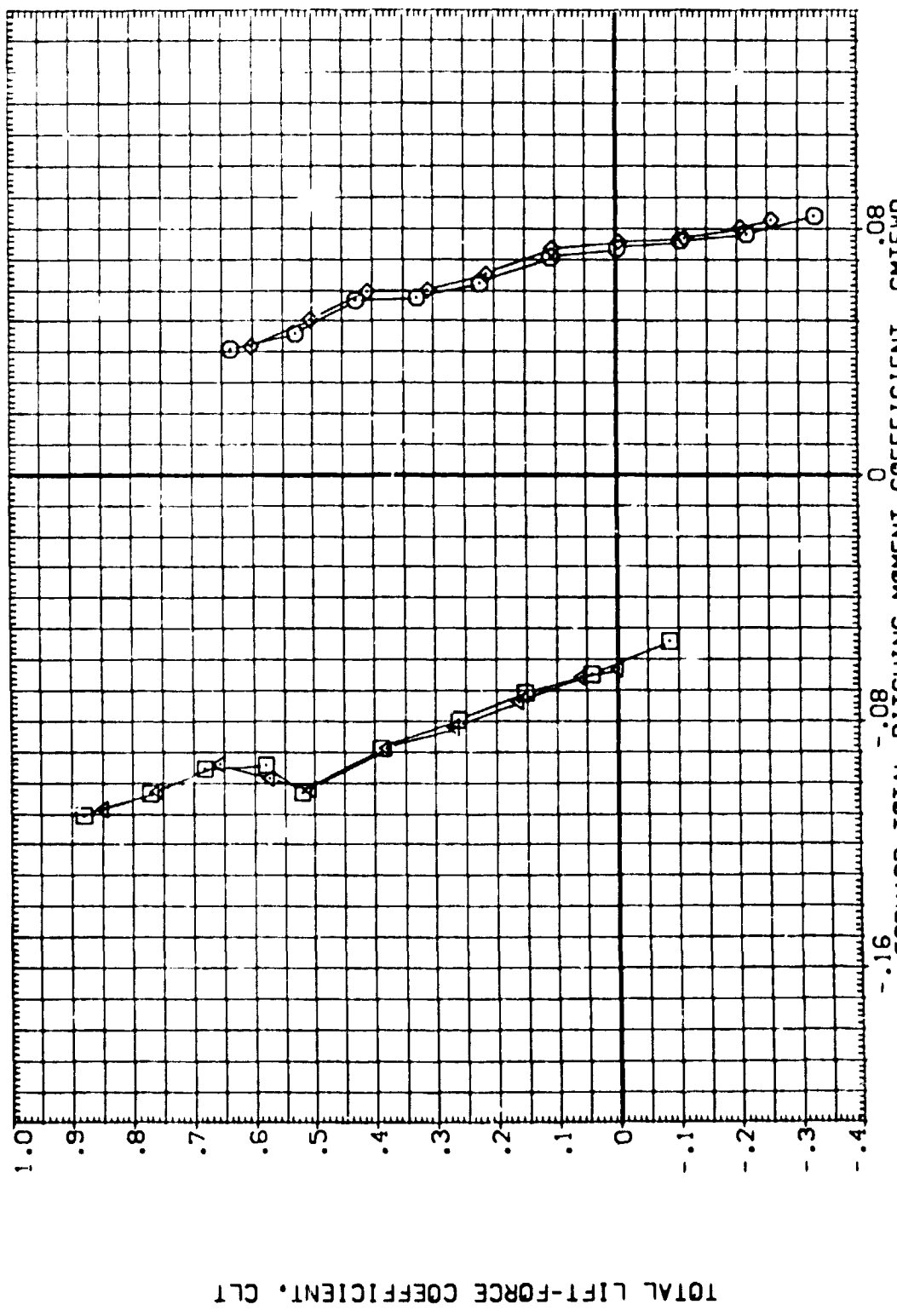


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES
 (B) MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (ZCRO19) ARC 66-709 OAS9 0111A-(N24)
 (ZCRO20) DATA NOT AVAILABLE
 (ZCRO19) ARC 66-709 OAS9 0111A-N24 (ADJUSTED FOR TARES)
 (ZCRO20) DATA NOT AVAILABLE

BETA ELEVON BDF/LAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BRFC 1.1710
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.31 IN.
 SCALE .01%

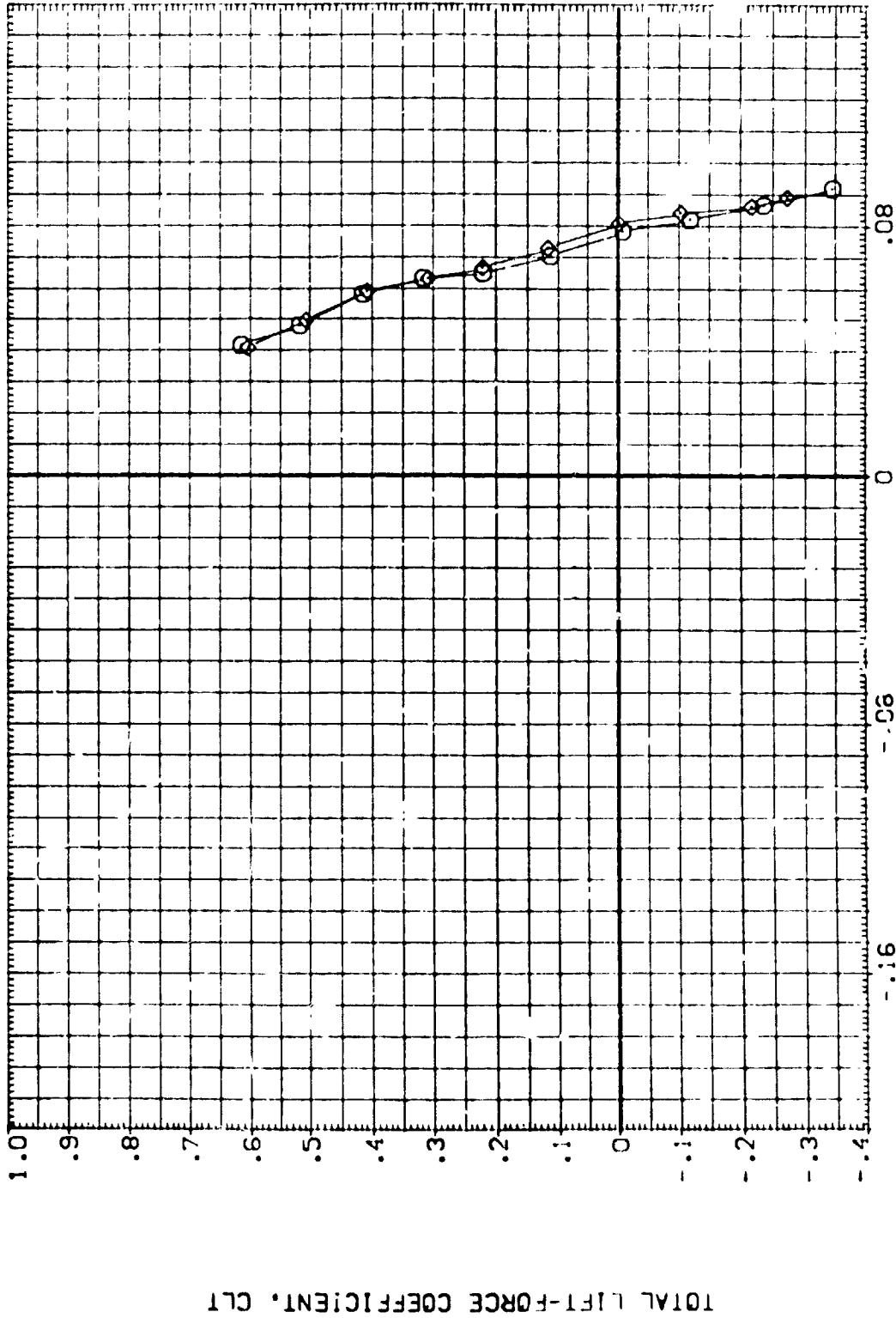


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .85

DATA SET SYMBOL	CONF	GLURATION	DESCRIPTION	BETA	ELEVON	BDFLAP	REFERENCE INFORMATION
{ 06R019 }	ARC	66-709	0A59	.000	.000	-11.700	SREF .6053 50.FT.
{ 06R020 }	ARC	66-709	0A59	.000	15.000	-11.700	LREF .5835 FT.
{ 36R019 }	ARC	66-709	0A59	.000	.000	-11.700	BREF 1.1713 FT.
{ 36R020 }	ARC	66-709	0A59	.000	15.000	-11.700	XMRP 12.6255 IN.
							ZMRP .0000 IN.
							SCALE .0150

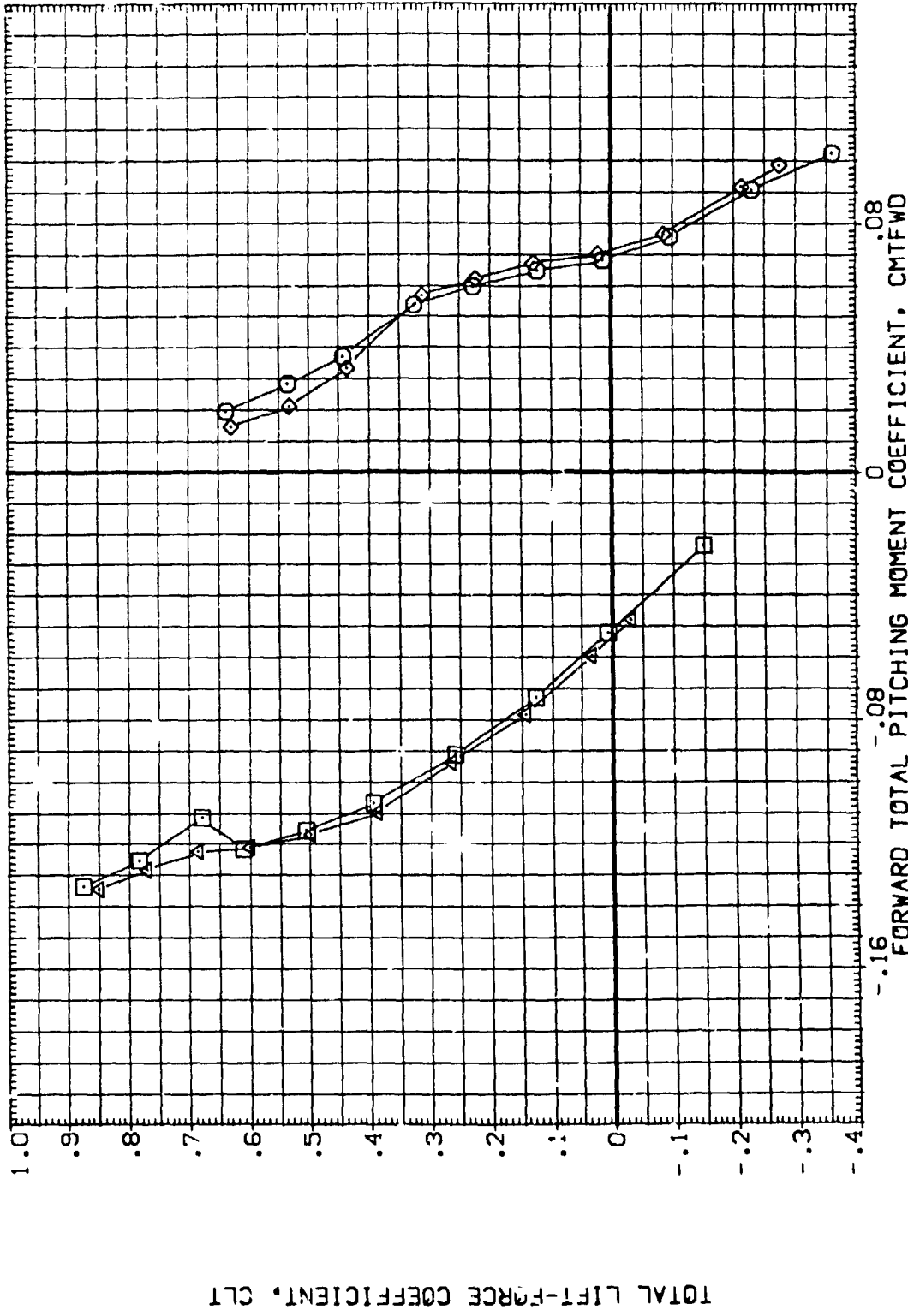


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(0)MACH = .90



DATA SET SYMBOL CONFIGURATION DESCRIPTION

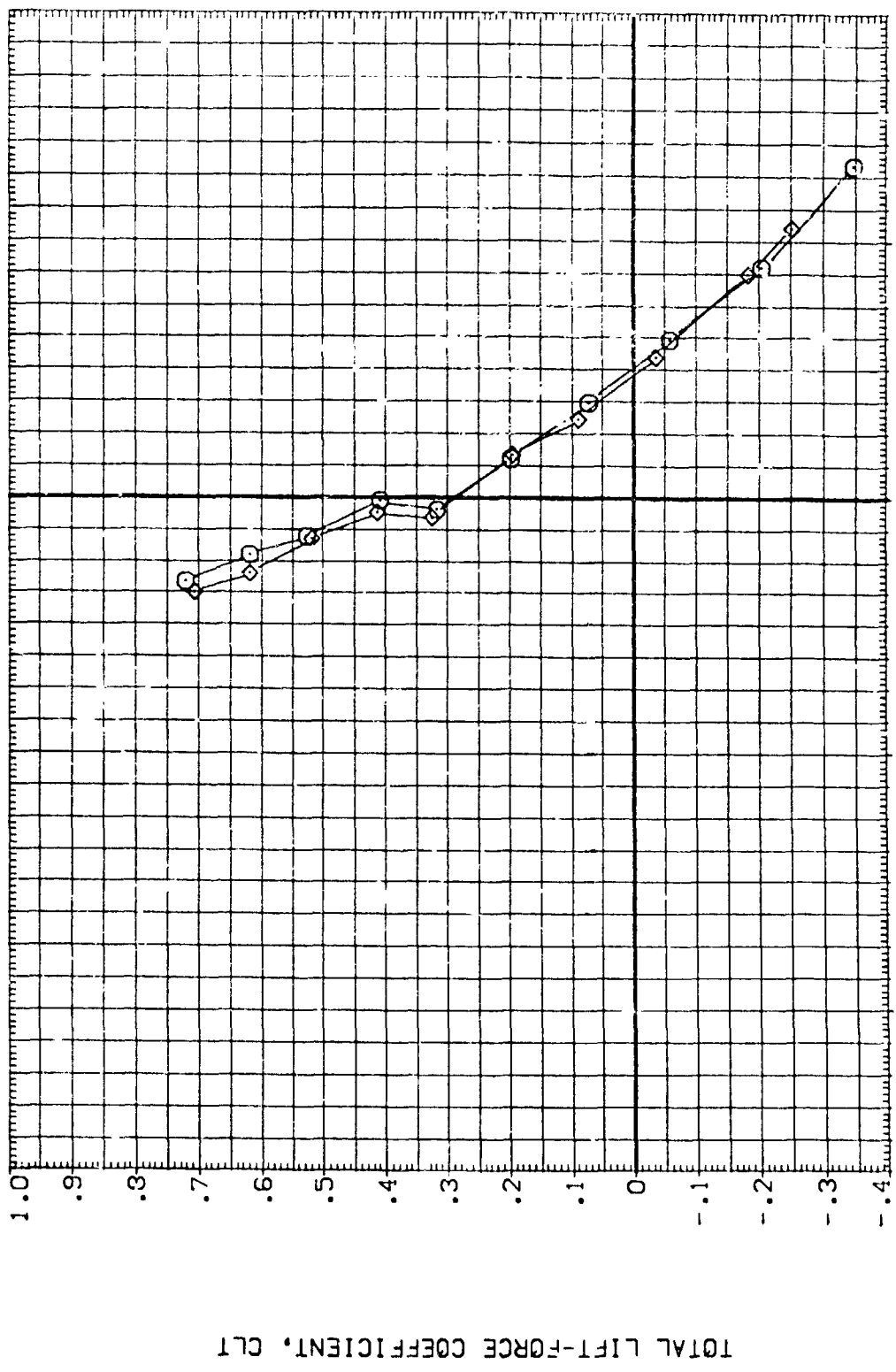
(GER019) ○ ARC 66-709 CAS9 0111A-(N24)
 (GER020) □ DATA NOT AVAILABLE
 (3ER019) ⊗ ARC 66-709 CAS9 0111A-N24 (ADJUSTED FOR TARES)
 (3ER020) ⊗ DATA NOT AVAILABLE

BETA ELEVON BOFLAP

0.000 15.000 -11.700
 0.000 15.000 -11.700
 0.000 15.000 -11.700
 0.000 15.000 -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



0.08
 0
 -0.08
 -0.16

FORWARD TOTAL PITCHING MOMENT COEFFICIENT, CMTFWD

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(E)MACH = .95

DATA SET SYMBOL (GER019) (GER020) (GER019) (GER020)

CONFIGURATION DESCRIPTION
 ARC 66-709 DASS 011A-N24
 ARC 66-709 DASS 011A-N24
 ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)

BETA .000 .000 .000 .000
 ELEVON .000 15.000 .000 15.000
 BOX LAP -11.700 -11.700 -11.700 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BRREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

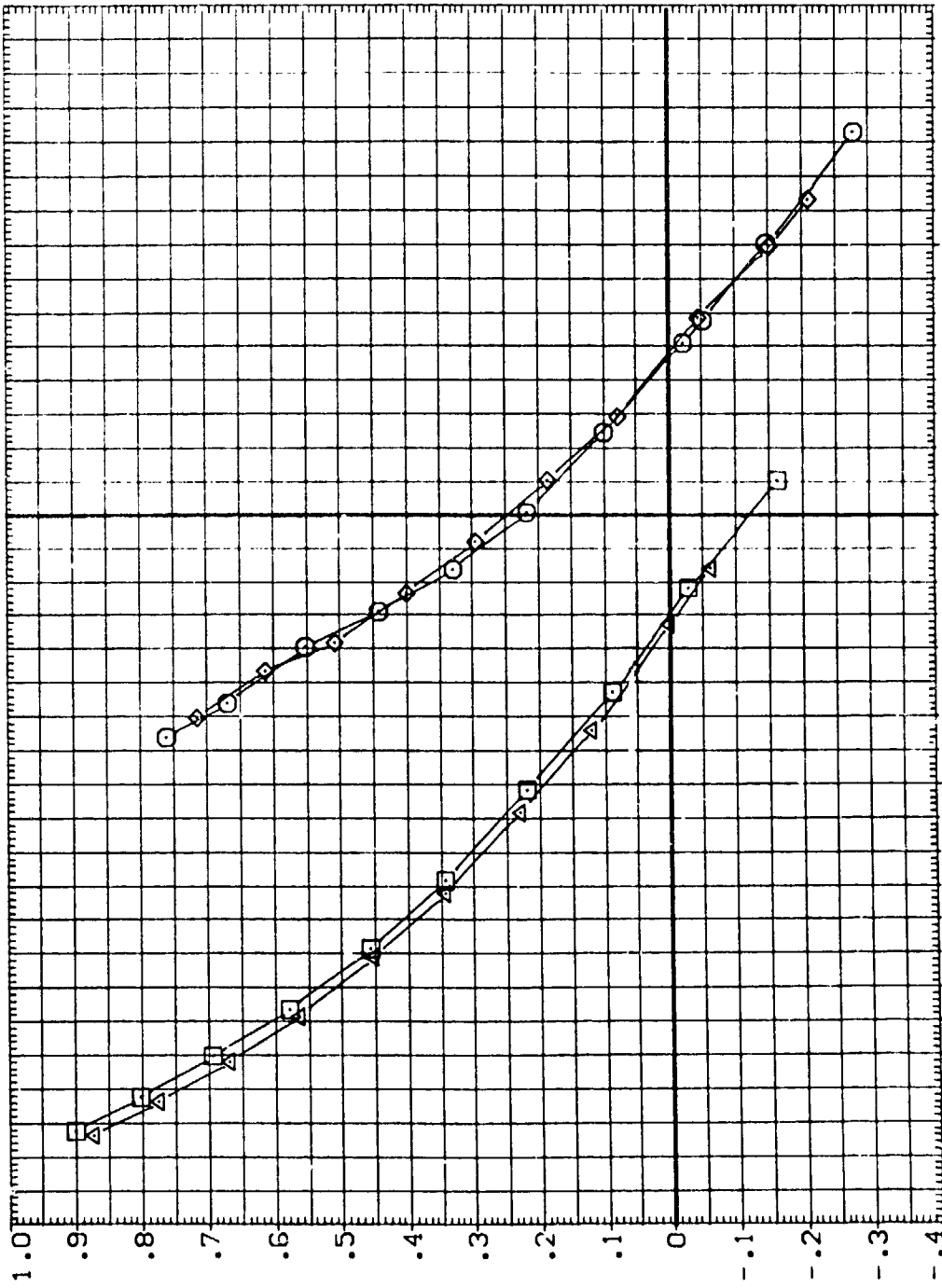


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GER019)	ARC 66-709 DASS 0A11A-(N24)
(GER020)	ARC 66-709 DASS 0A11A-(N24)
(GER019)	RC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)
(GER020)	ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SO.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
YMRP	12.6255	IN.
ZMRP	.0000	IN.
SCALE	-.3750	IN.
	.0150	

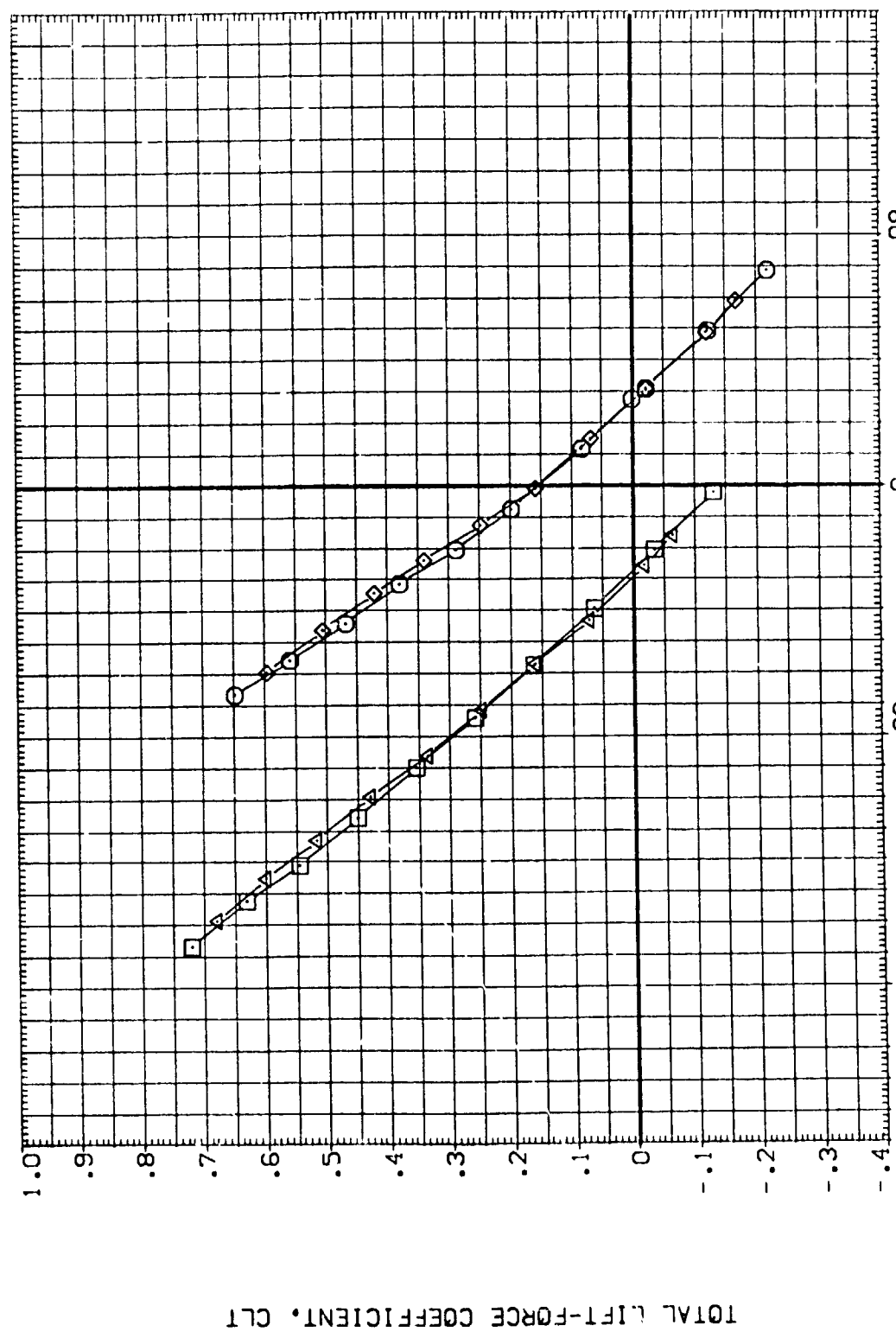


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

DATA SET SYMBOL
 (ZER019)
 (ZER020)
 (ZER019)
 (ZER020)

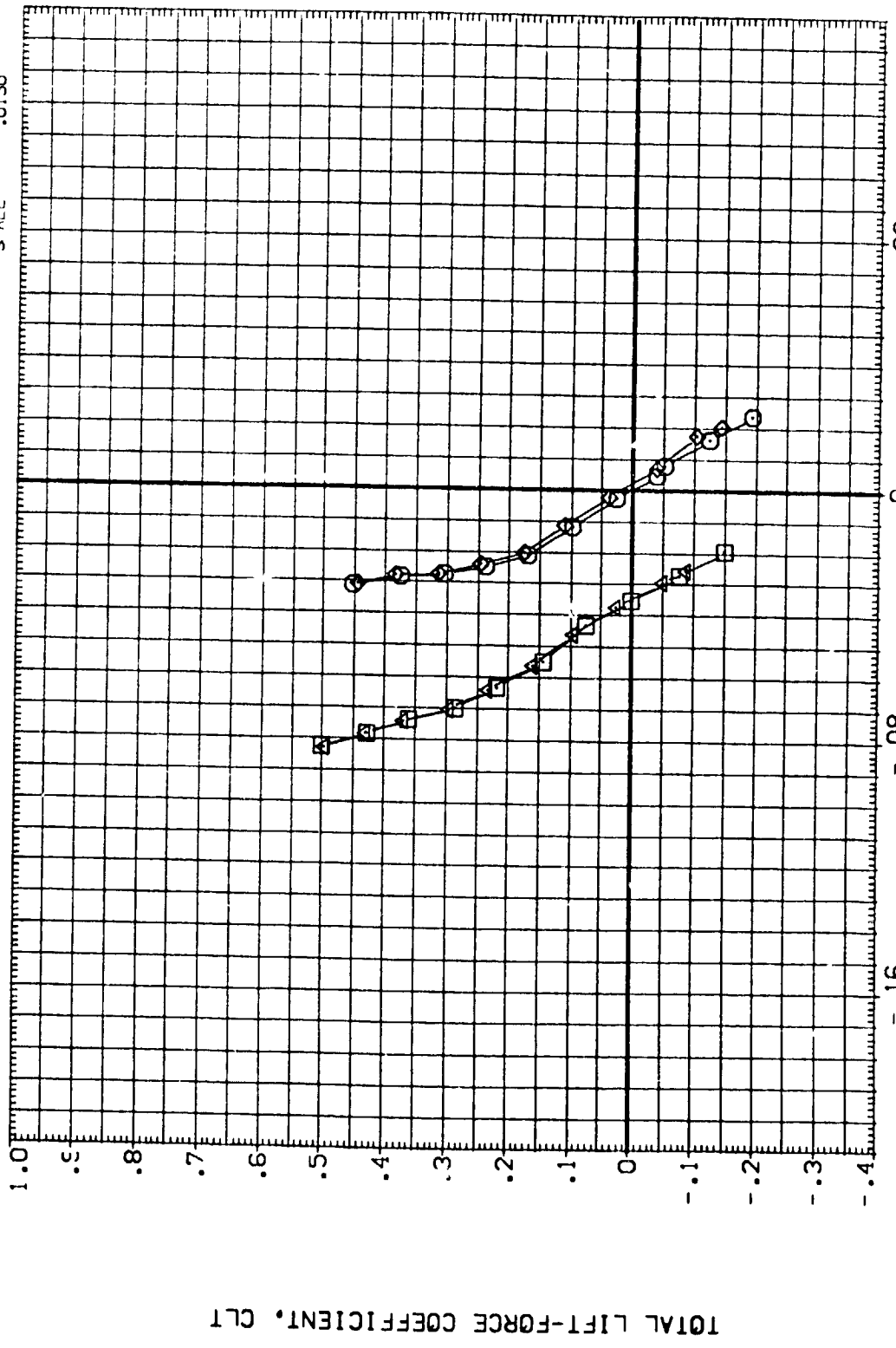
CONFIGURATION DESCRIPTION
 ARC 66-709 0A59 0A11A-(N24)
 ARC 66-709 0A59 0A11A-(N24)
 ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA
 .000
 .000
 .000
 .000

ELEVON
 .000
 15.000
 .000
 15.000

BDELAP
 -11.700
 -11.700
 -11.700
 -11.700

REFERENCE INFORMATION
 SREF 6053 SQ.FT.
 LREF 5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GER019) □ ARC 66-709 0A59 0A11A-(N24)

(GER020) ○ ARC 66-709 0A59 0A11A-(N24)

(3ER019) △ ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

(3ER020) ◇ ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

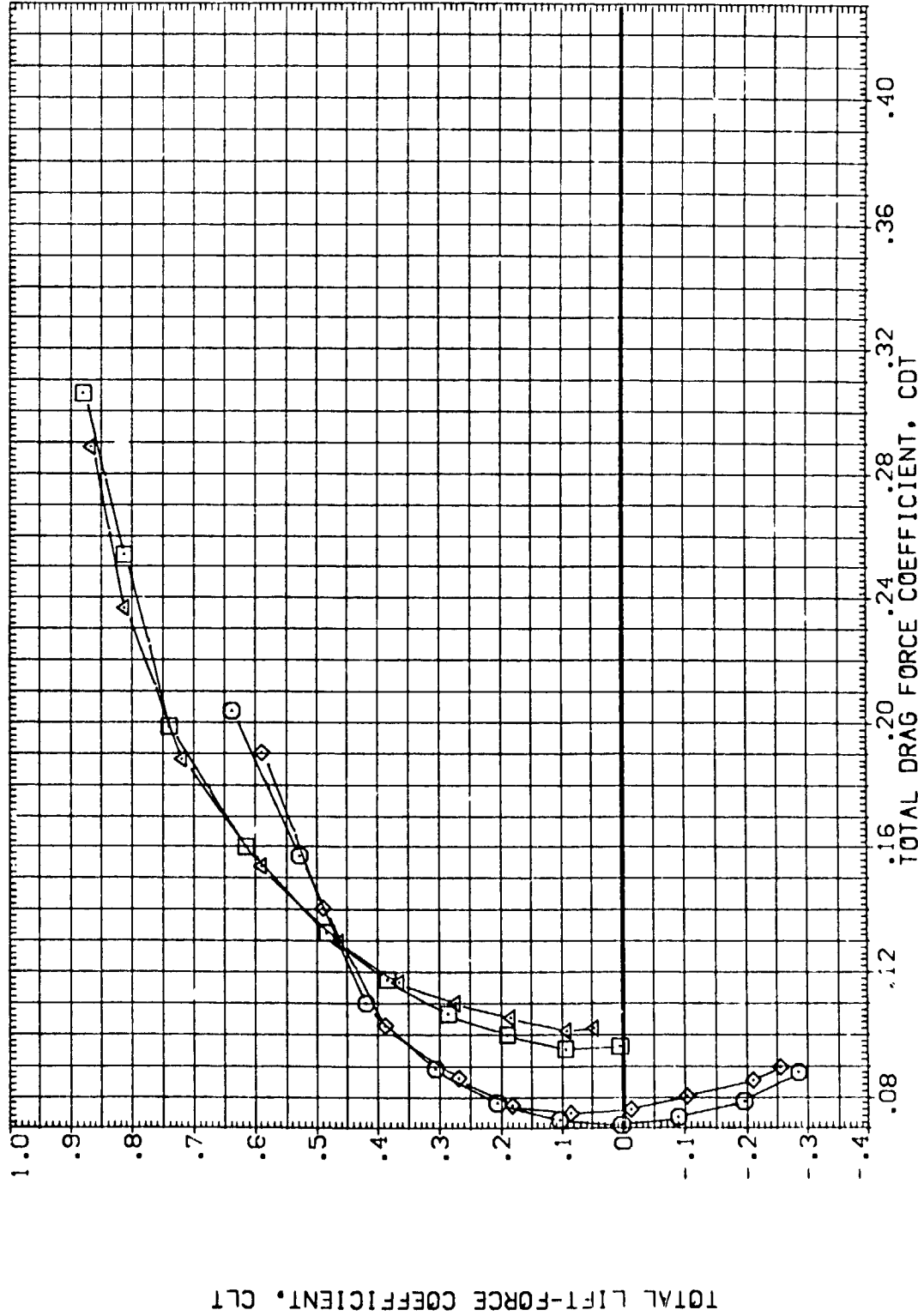


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(A)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(ZERO19) O ARC 66-709 OAS9 011A-N24

(ZERO20) X ARC 66-709 OAS9 011A-N24 (ADJUSTED FOR TARES)

(ZERO19) ARC 66-709 OAS9 011A-N24

(ZERO20) ARC 66-709 OAS9 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF .6053 50.FT.

LREF .5935 FT.

BREF 1.17.0 FT.

YMRP 12.6255 IN.

ZMRP .0000 IN.

SCALE -.3750 IN.

 .0150

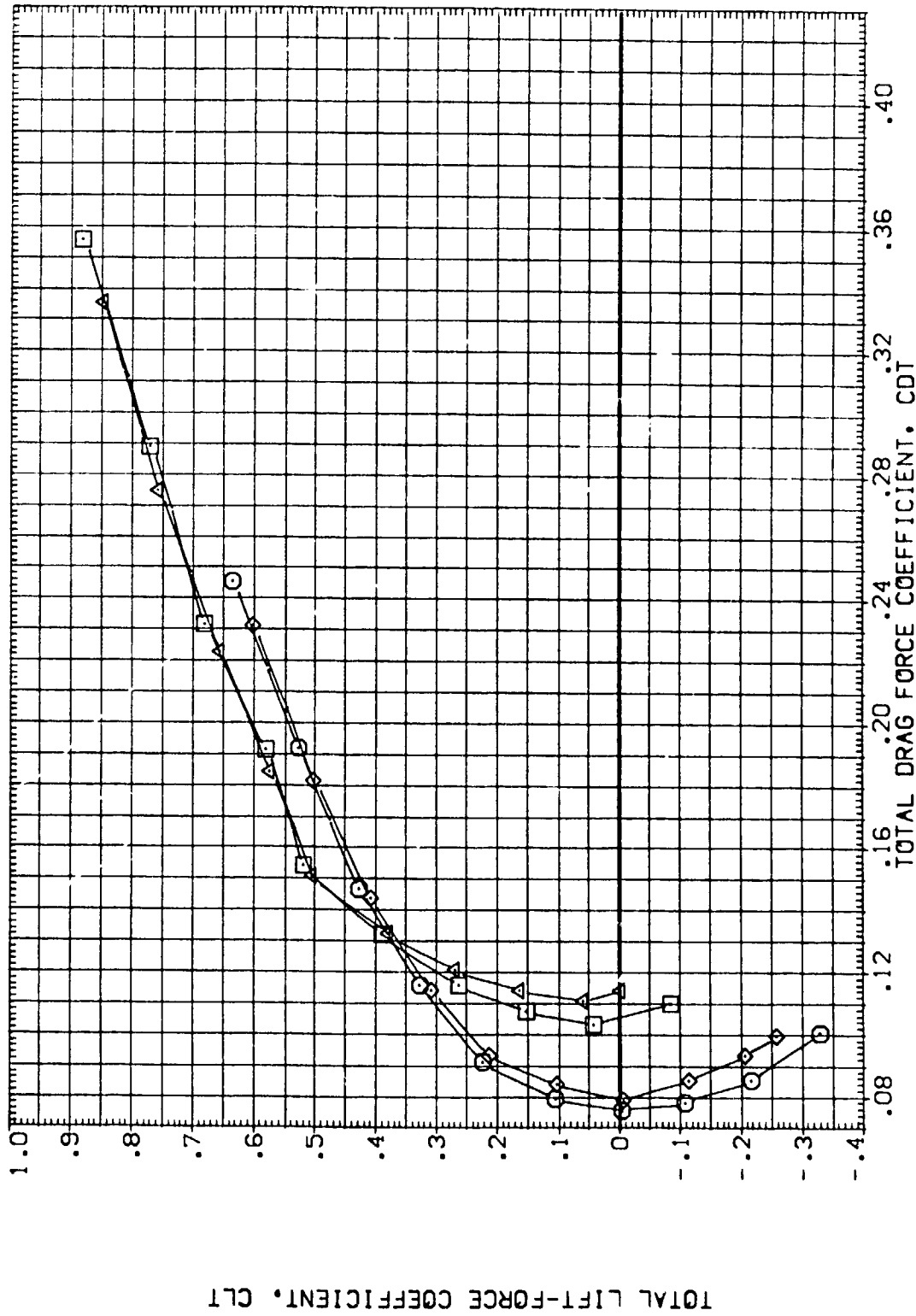


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(B)MACH = .80



REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5936 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (0ER019) ARC 66-709 DASS 0111A-N24
 (0ER020) DATA NOT AVAILABLE
 (3ER019) ARC 66-709 DASS 0111A-N24 (ADJUSTED FOR TARES)
 (3ER020) DATA NOT AVAILABLE

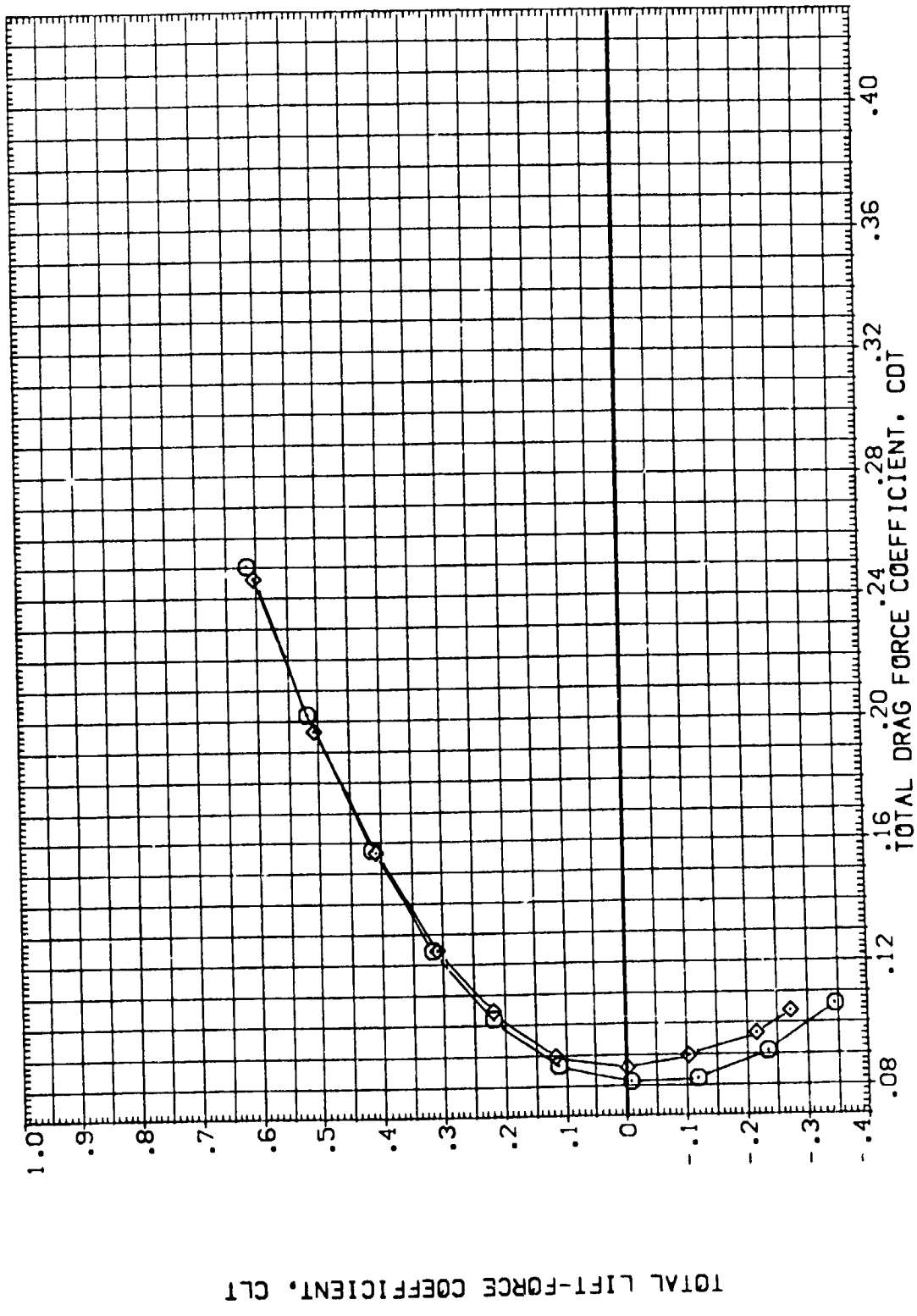


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .85

REFERENCE INFORMATION
 SREF .6053 50.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA .000 BOFLAP
 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

CONFIGURATION DESCRIPTION
 ARC 66-709 OAS9 O11A-(N24)
 ARC 66-709 OAS9 O11A-(N24)
 ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)

DATA SET SYMBOL
 (GERO19) □
 (GERO20) ○
 (ZERO19) △
 (ZERO20) ◇

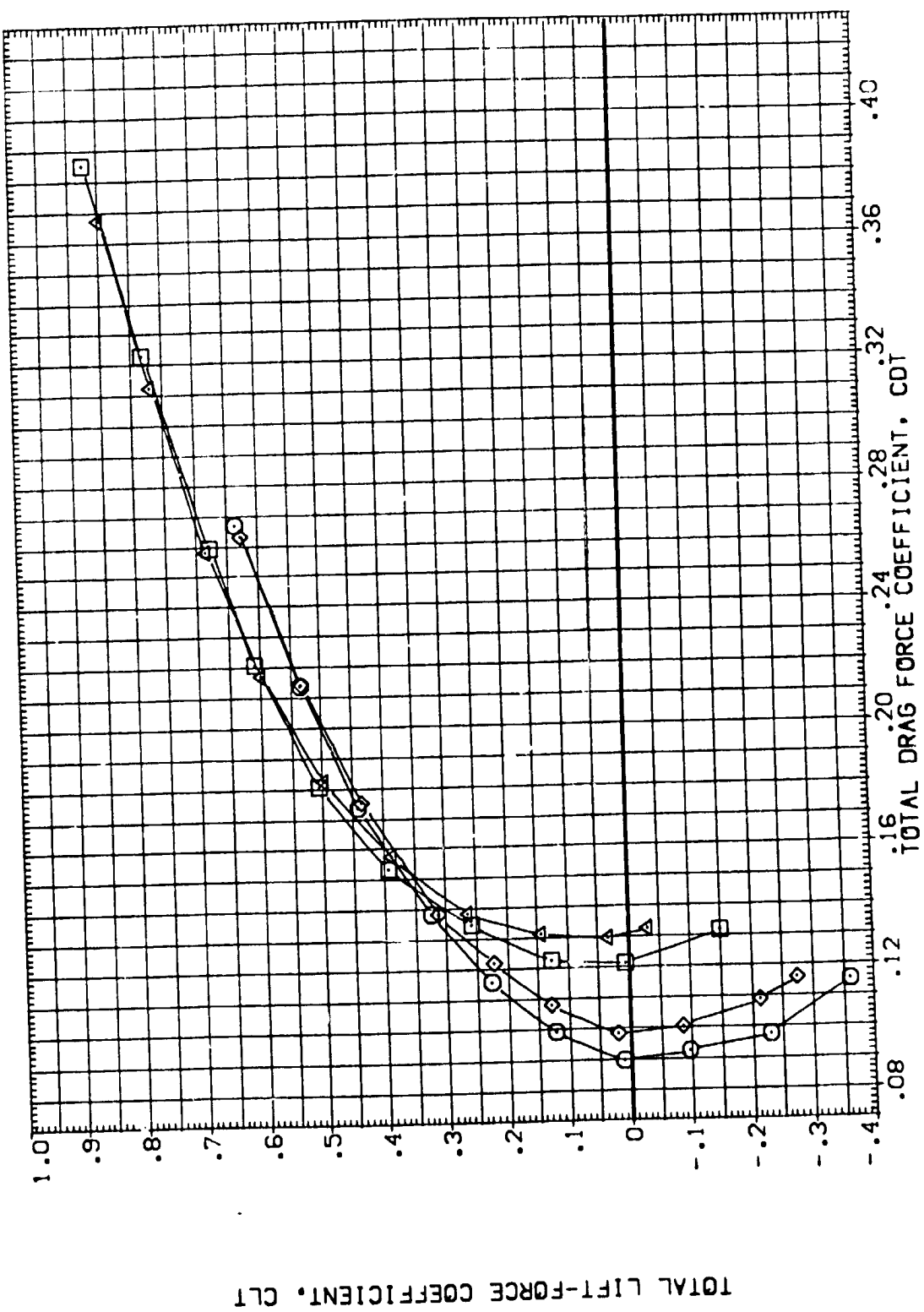


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES
 (D)MACH = .90

DATA SET SYMBL CONFIGURATION DESCRIPTION
 (ZER019) ARC 66-709 CASE 0A11A-(N24)
 (ZER020) DATA NOT AVAILABLE
 (ZER019) ARC 66-709 CASE 0111A-N24 (ADJUSTED FOR TARES)
 (ZER020) DATA NOT AVAILABLE

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 15.000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 50.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

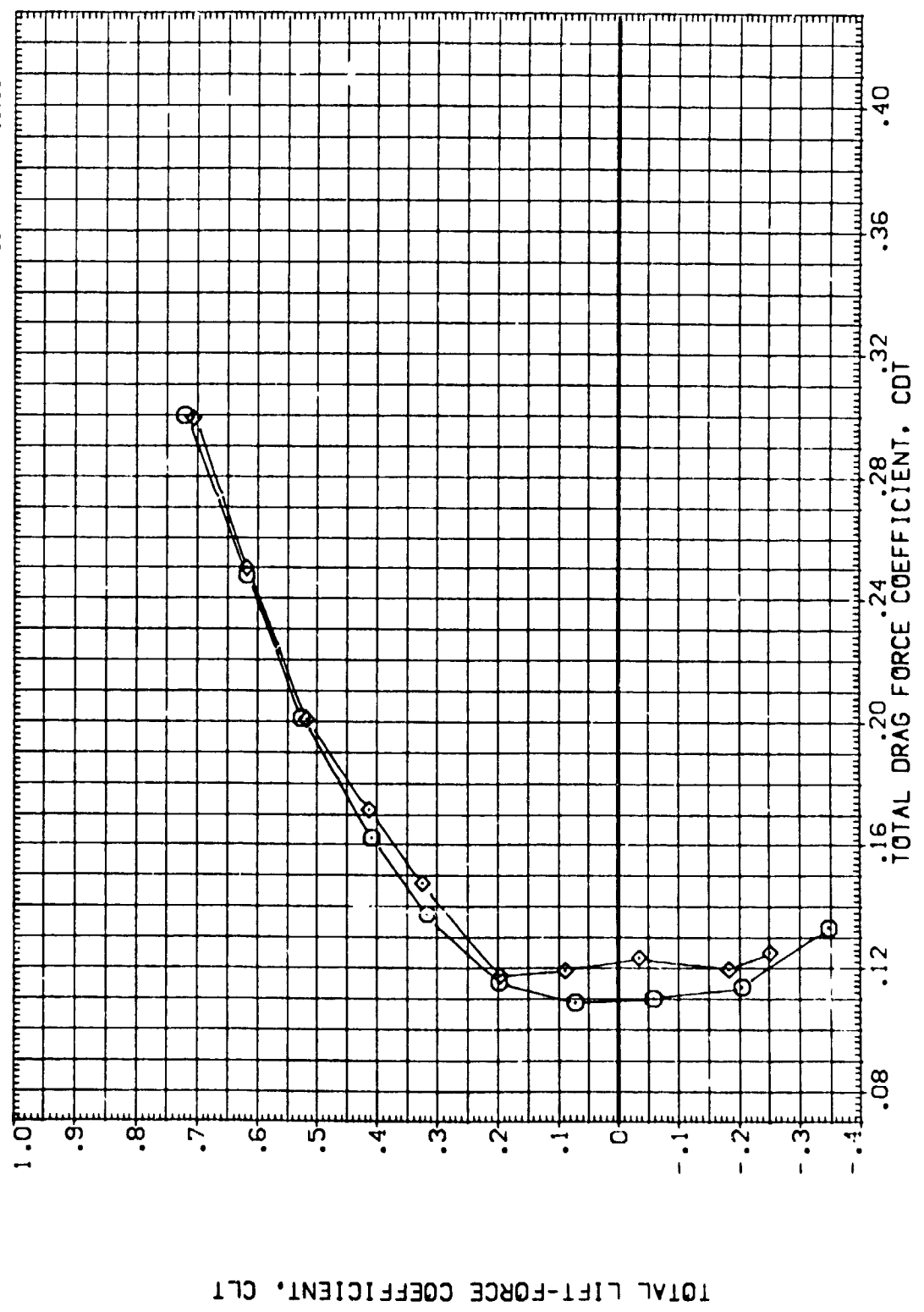


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(E)MACH = .95

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GE.R019) O ARC 66-709 OAS9 O111A-N24

(GE.R020) X ARC 66-709 OAS9 O111A-N24

(GE.R019) O ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)

(GE.R020) X ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 11.700

REFERENCE INFORMATION

SREF .6053 50.FT.

LREF .9935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

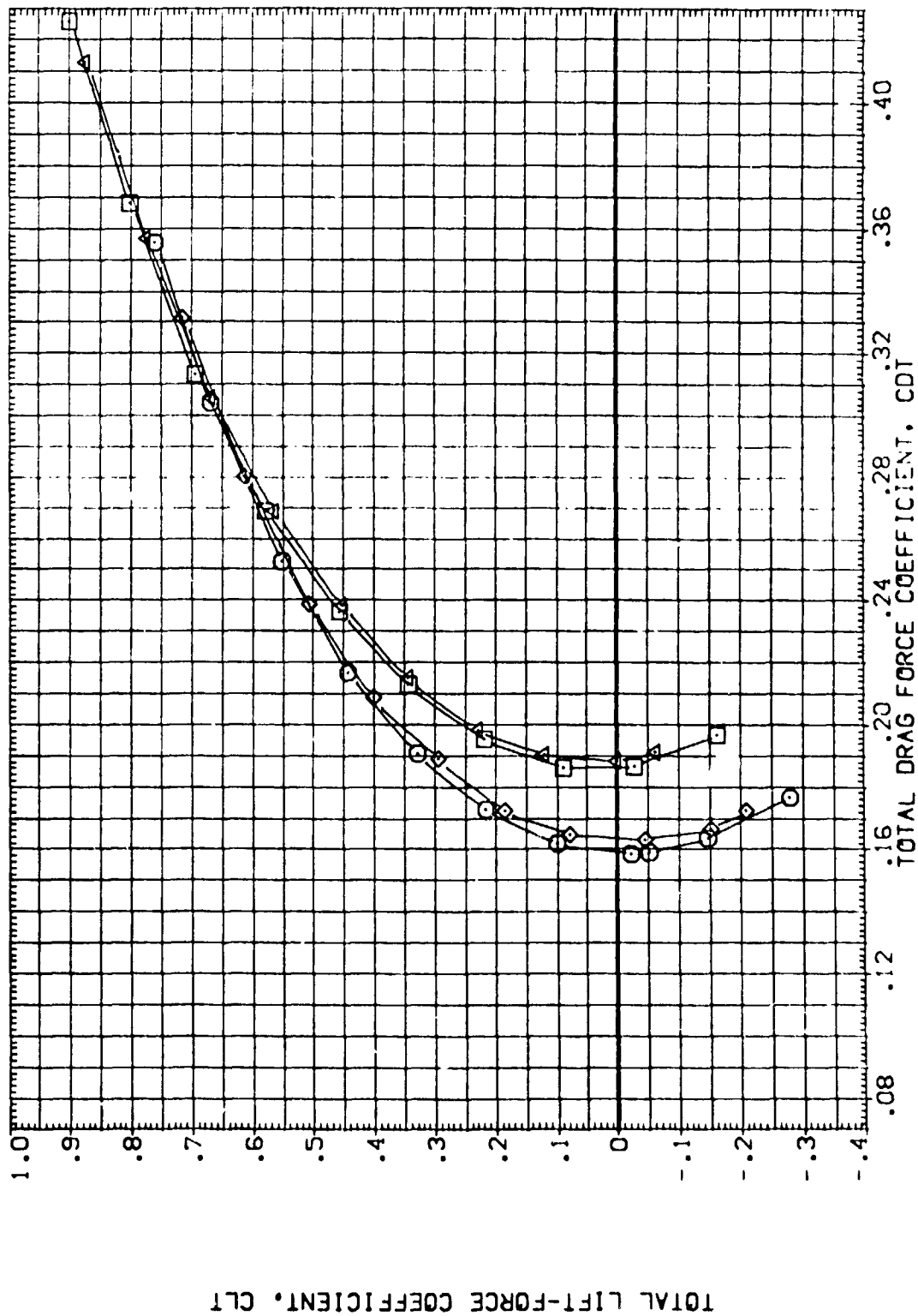


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BDF LAP	REFERENCE INFORMATION
(ZER019)	ARC 66-709 OAS9 O111A-N24	.000	.000	-11.700	SREF .6053 50.FT.
(ZER020)	ARC 66-709 OAS9 O111A-N24	.000	15.000	-11.700	LREF .5935 FT.
(ZER019)	ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	BREF 1.1710 FT. IN.
(ZER020)	ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)	.000	15.000	-11.700	XMRP 12.6255 IN.
					YMRP .0000 IN.
					ZMRP -.3750 IN.
					SCALE .0150

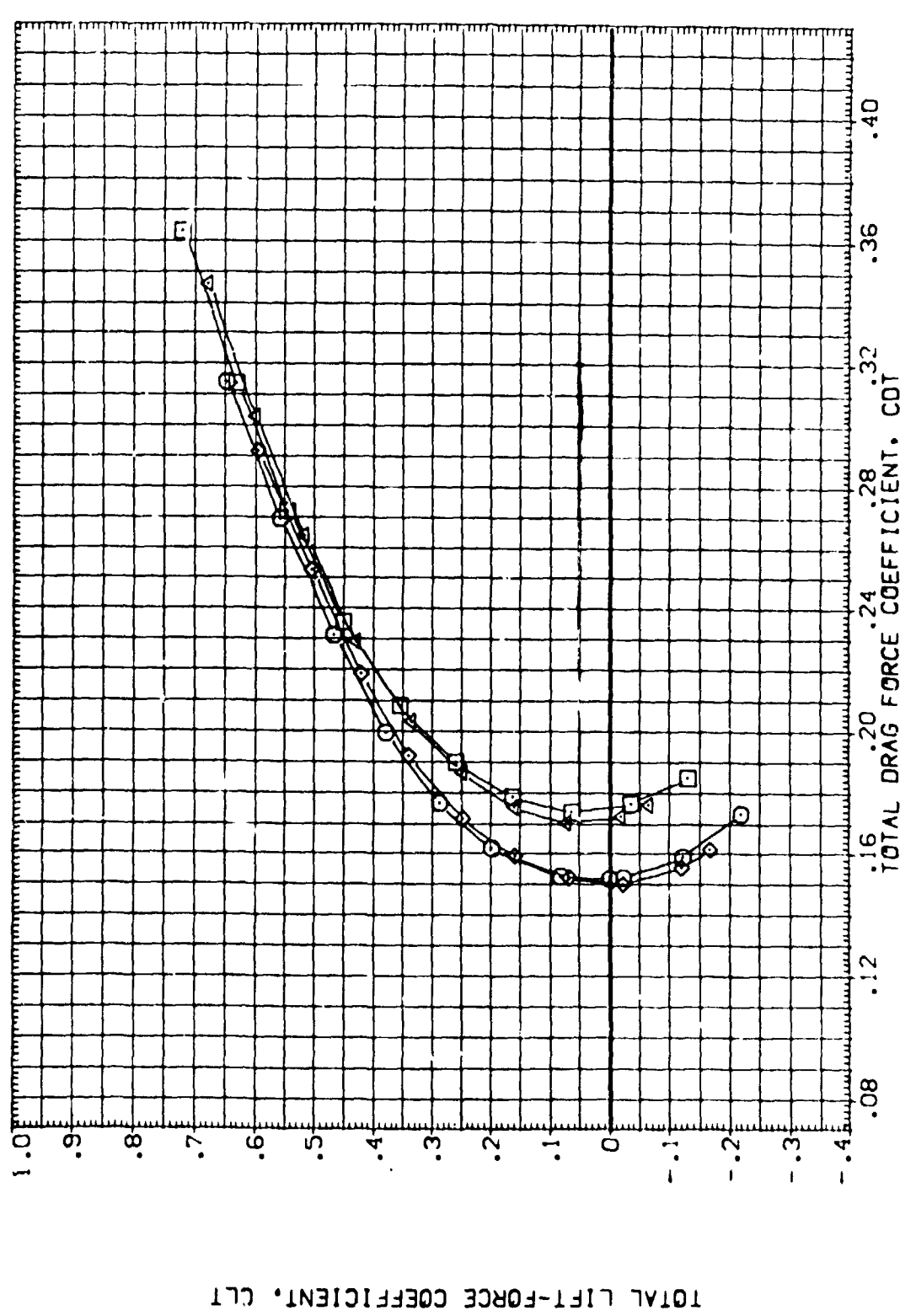


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.50

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GEO19)	ARC 66-709 DA59	011A-N24
(GEO20)	ARC 66-709 DA59	011A-N24
(GEO19)	ARC 66-709 DA59	011A-N24 (ADJUSTED FOR TARES)
(GEO20)	ARC 66-709 DA59	011A-N24 (ADJUSTED FOR TARES)

REFERENCE INFORMATION

SREF	.6053	SO.FT.
LREF	.5936	FT.
BREF	1.1710	FT.
XMRP	12.6235	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

BETA ELEVON BDFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

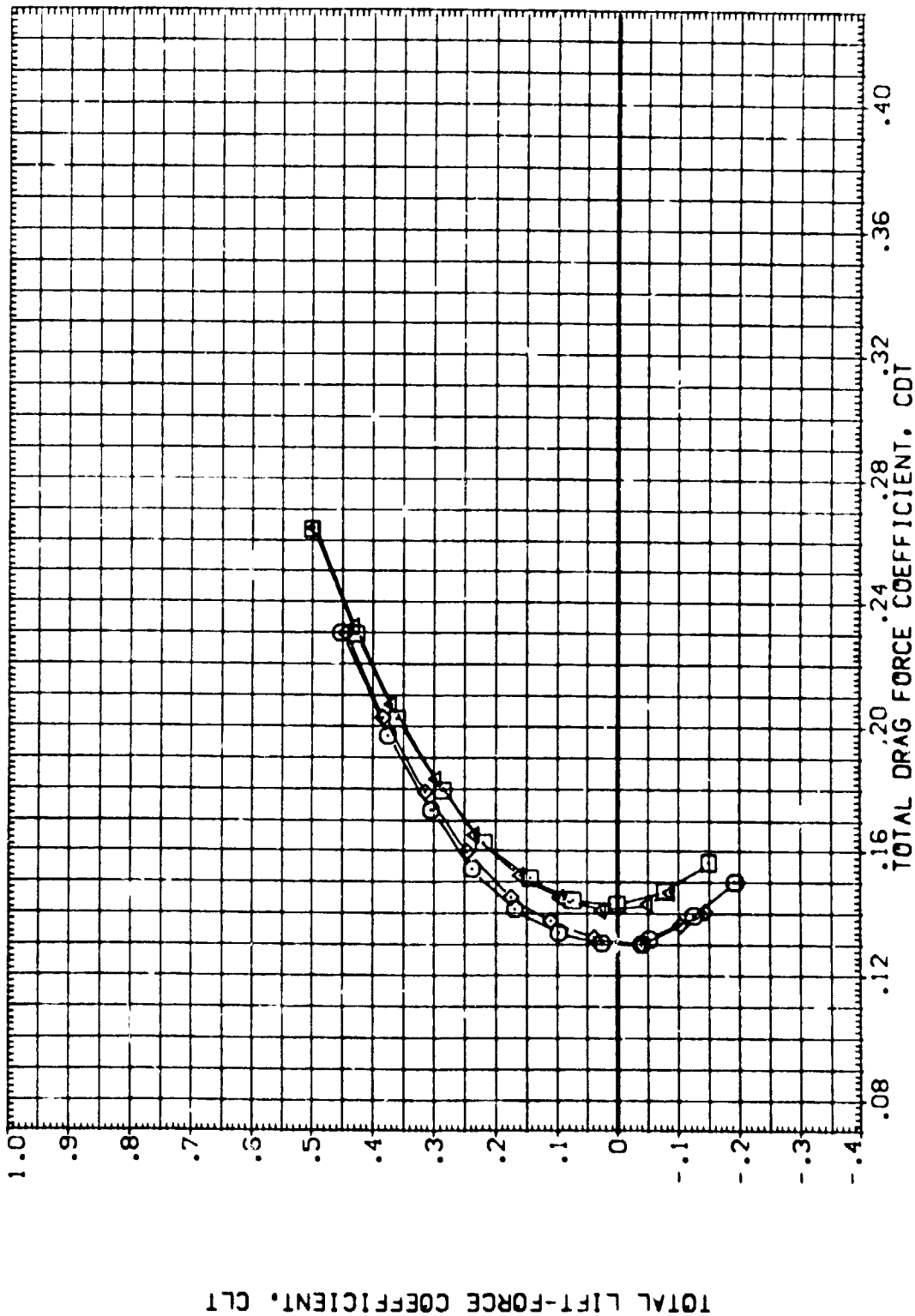


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH = 2.00



REFERENCE INFORMATION
 SREF .6053 50.FT.
 LREF .5931 FT.
 BREF 1.1710 IN.
 YHPP 12.6255 IN.
 ZHPP -.3750 IN.
 SCALE .0150

BETA .000
 ELEVON .000
 BDF LAP -11.700
 15.000 -11.700
 .000 -11.700
 15.000 -11.700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (ZERO19) ARC 65-709 0A59 0A11A-(N24)
 (ZERO20) ARC 65-709 0A59 0A11A-(N24)
 (ZERO19) ARC 65-709 0A59 011A-N24 (ADJUSTED FOR TARES)
 (ZERO20) ARC 65-709 0A59 011A-N24 (ADJUSTED FOR TARES)

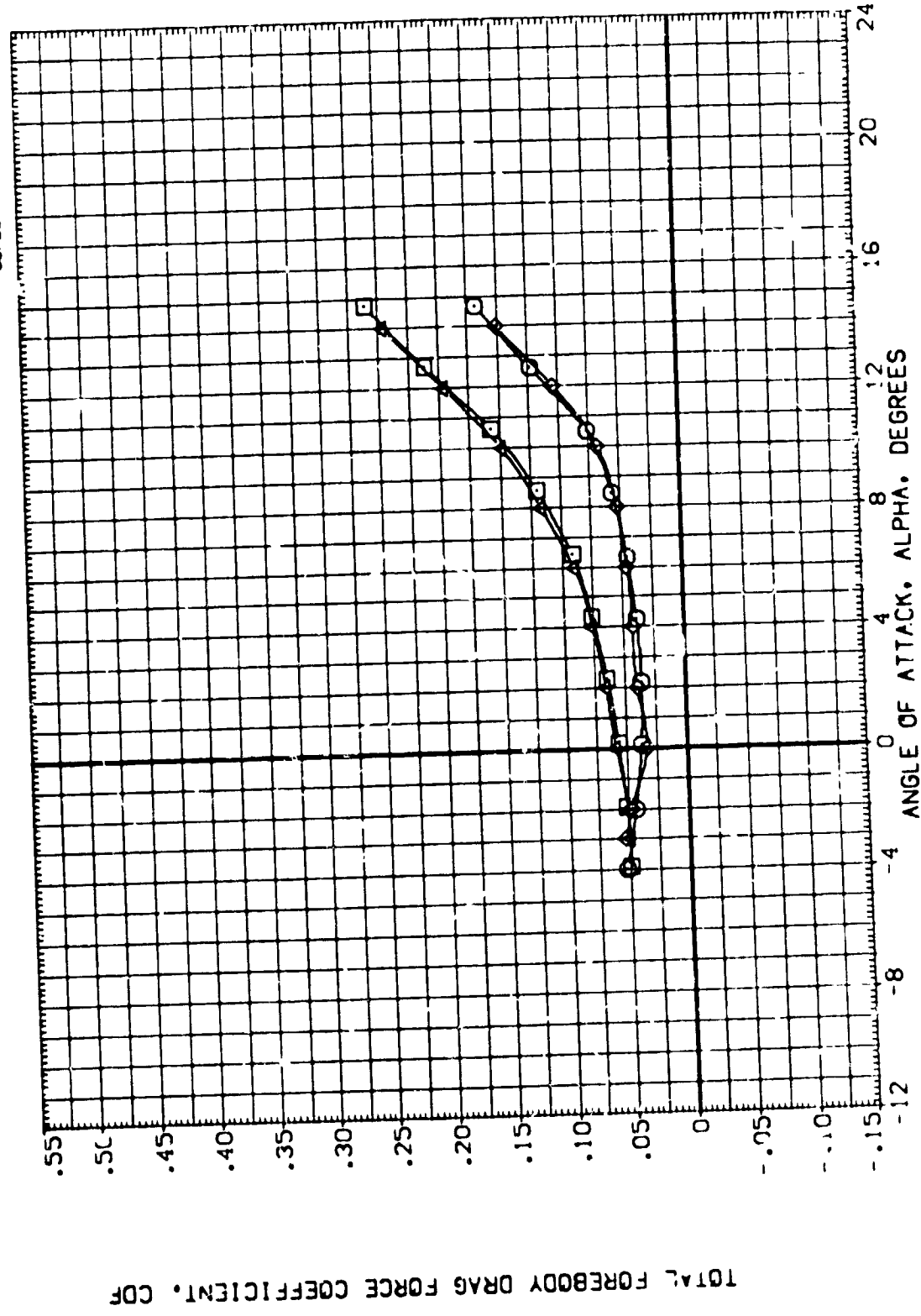


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(GER018)	ARC 66-709 0A59 0A11A-(N24)	.000	.300	-11.700	SREF .6053 SQ.FT.
(GER020)	ARC 66-709 0A59 0A11A-(N24)	.000	15.000	-11.700	LREF .5936 FT.
(GER019)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	BREF 1.1710 FT.
(GER021)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	15.000	-11.700	XMRP 12.6255 IN.
					YMRP .0000 IN.
					ZMRP -.3750 IN.
					SCALE .0150

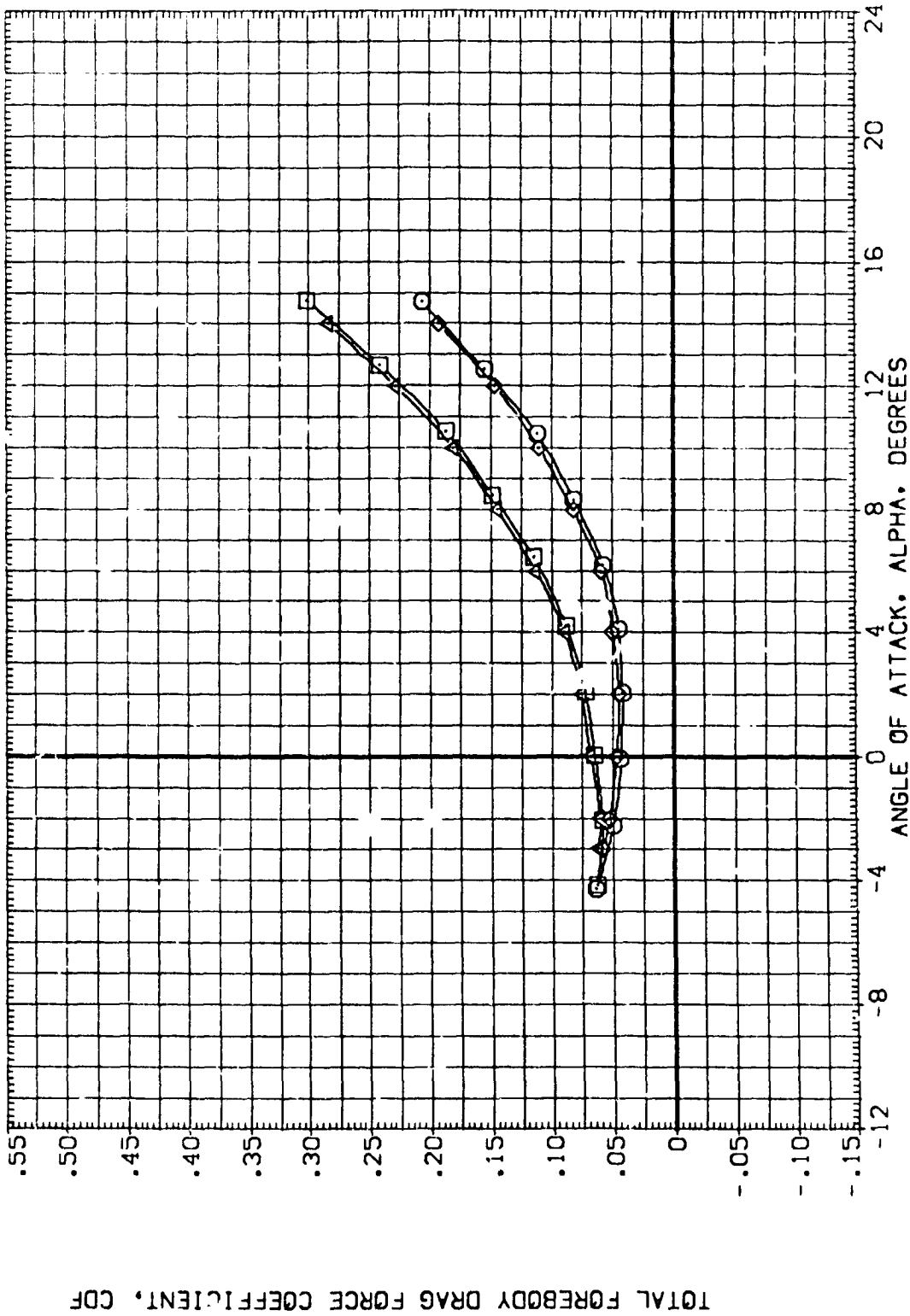


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(B)MACH = .80



DATA SET SYMBOL
 (GER019)
 (GER020)
 (JER019)
 (JER020)

CONFIGURATION DESCRIPTION
 ARC 66-709 DASS 0A11A-(N24)
 DATA NOT AVAILABLE
 ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)
 DATA NOT AVAILABLE

BETA
 .000
 .000
 .000
 .000

ELEVON
 .000
 15.000
 .000
 15.000

BOFLAP
 -11.700
 -11.700
 -11.700
 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

TOTAL FOREBODY DRAG FORCE COEFFICIENT, CDF

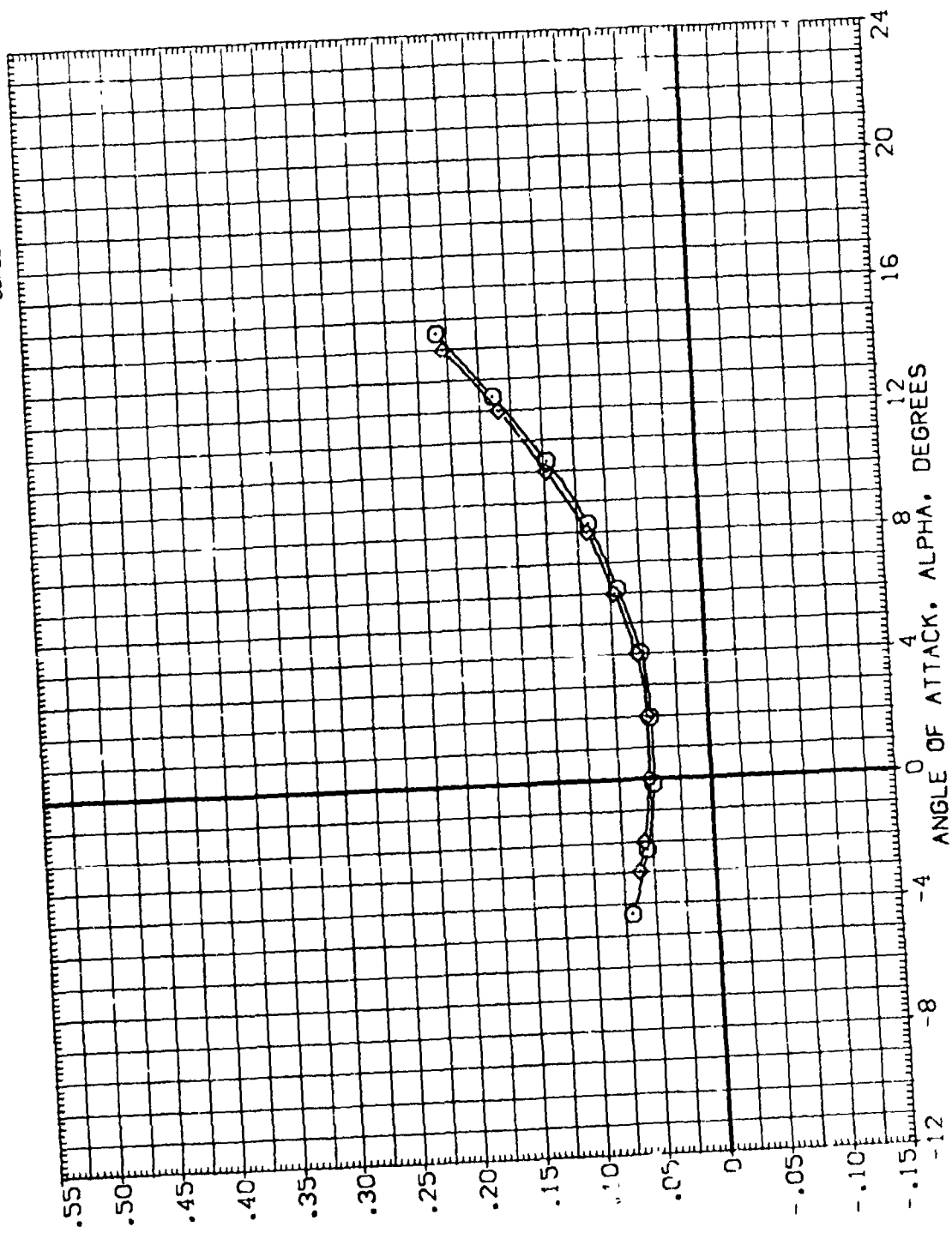


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C)MAG 1 = .85

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (GERO19) □ ARC 66-709 OAS9 O111A-(N24)
 (GERO20) ○ ARC 66-709 OAS9 O111A-(N24)
 (3ERO19) X ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)
 (3ERO20) ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

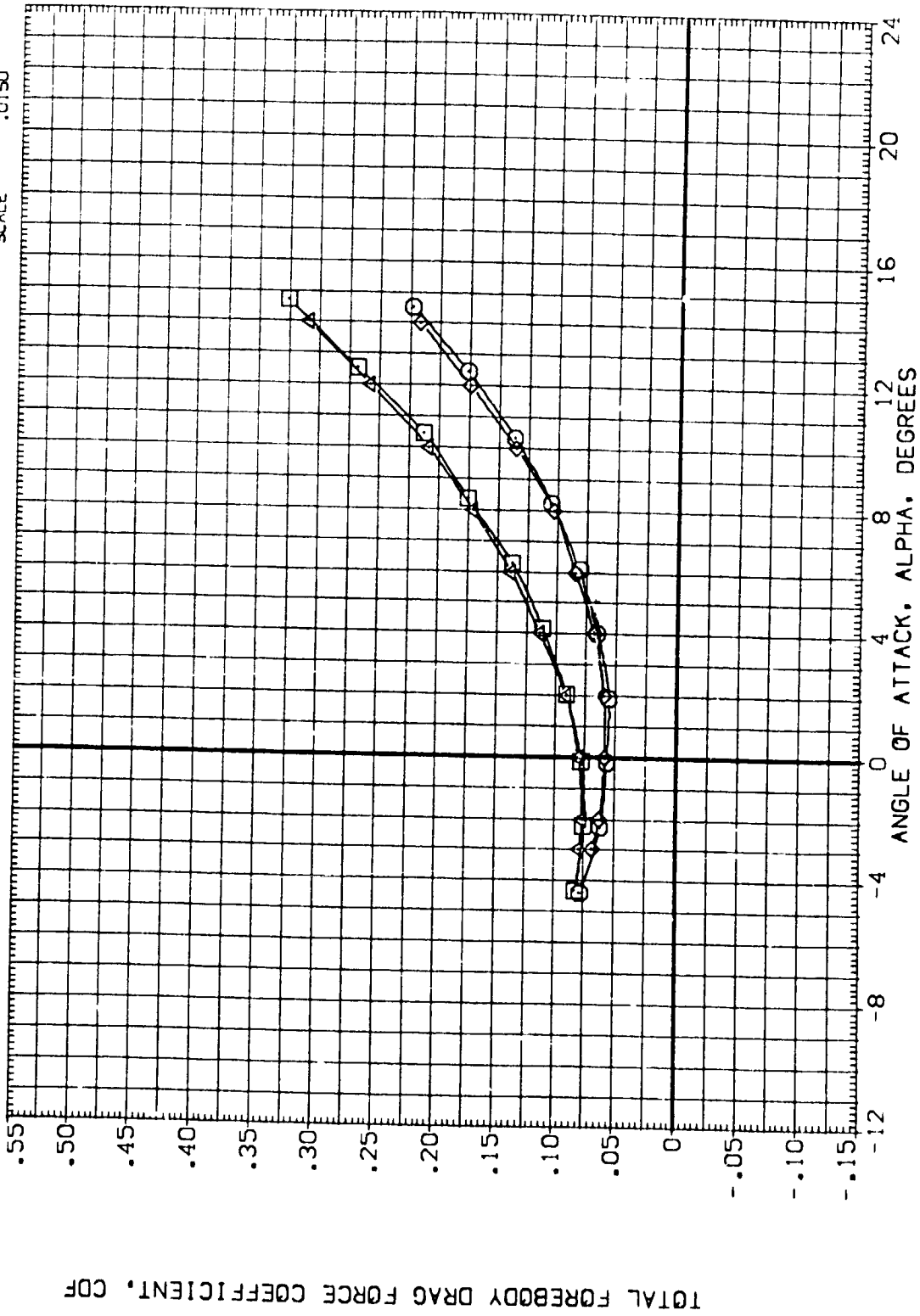


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(0)MACH = .90



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (GERO19) ARC 66-709 OAS9 OAI1A-(N24)
 (GERO20) DATA NOT AVAILABLE
 (XERO19) ARC 66-709 OAS9 OIIA-N24 (ADJUSTED FOR TARES)
 (XERO20) DATA NOT AVAILABLE

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

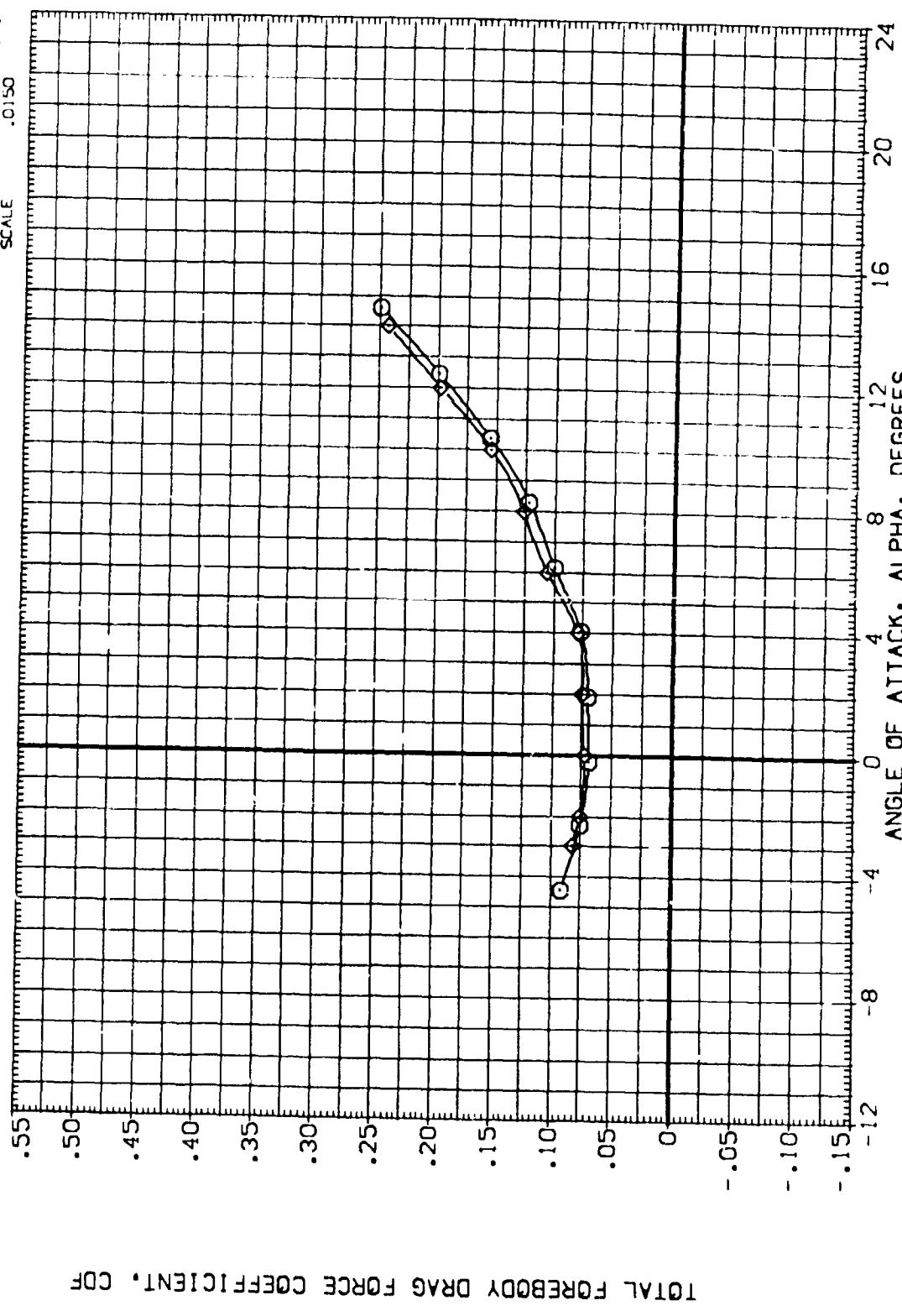


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .95

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GRO19) ARC 66-709 0A59 0A11A-(N24)

(GRO20) ARC 66-709 0A59 0A11A-(N24)

(ZRO19) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

(ZRO20) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDF LAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

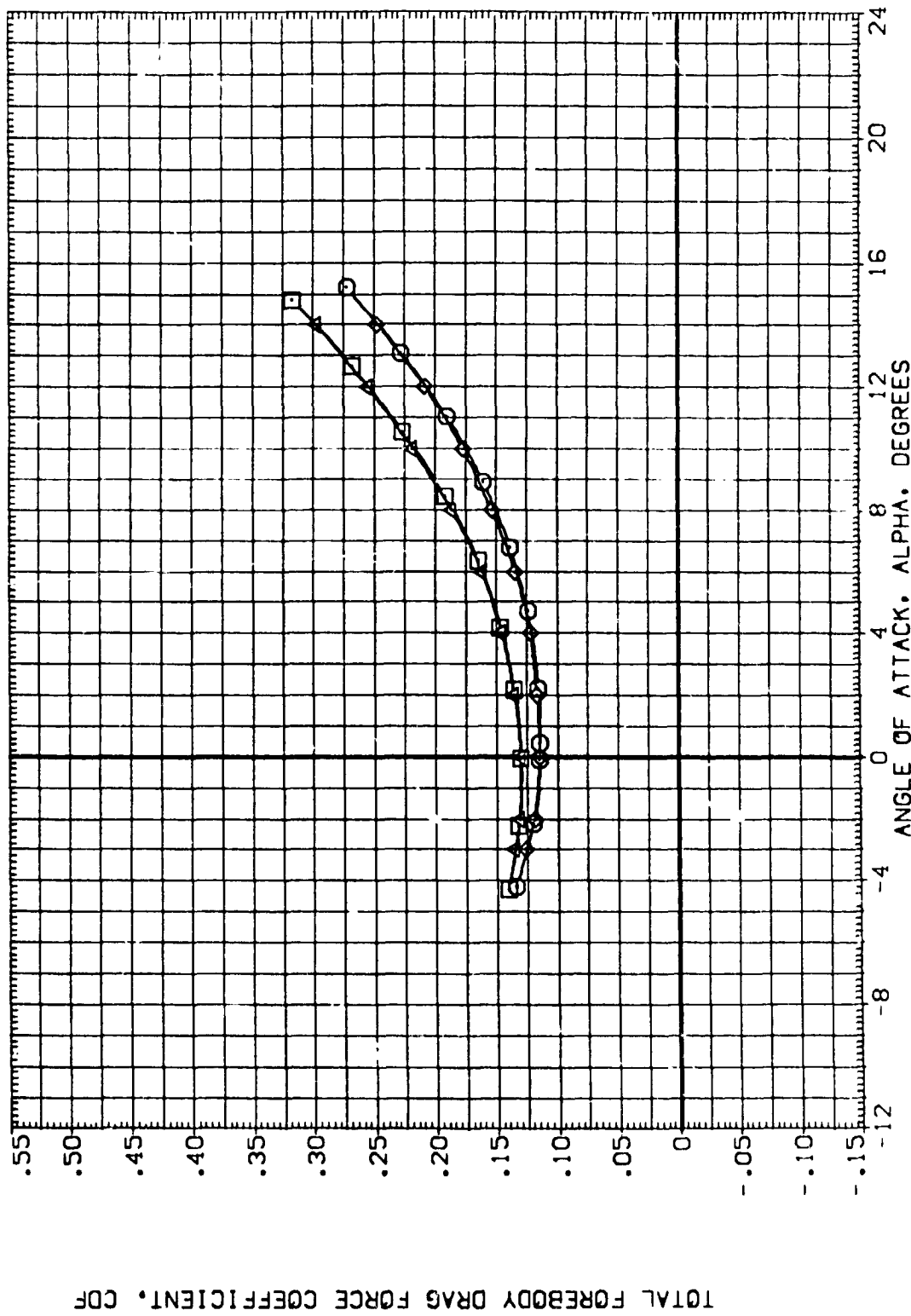


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES
(G)MACH = 1.50

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(ZER019)	ARC 66-709 DASS	011A-(N24)
(ZER020)	ARC 66-709 DASS	011A-(N24)
(ZER019)	ARC 66-709 DASS	011A-N24 (ADJUSTED FOR TARES)
(ZER020)	ARC 66-709 DASS	011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SO.FT.
LREF	.9535	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

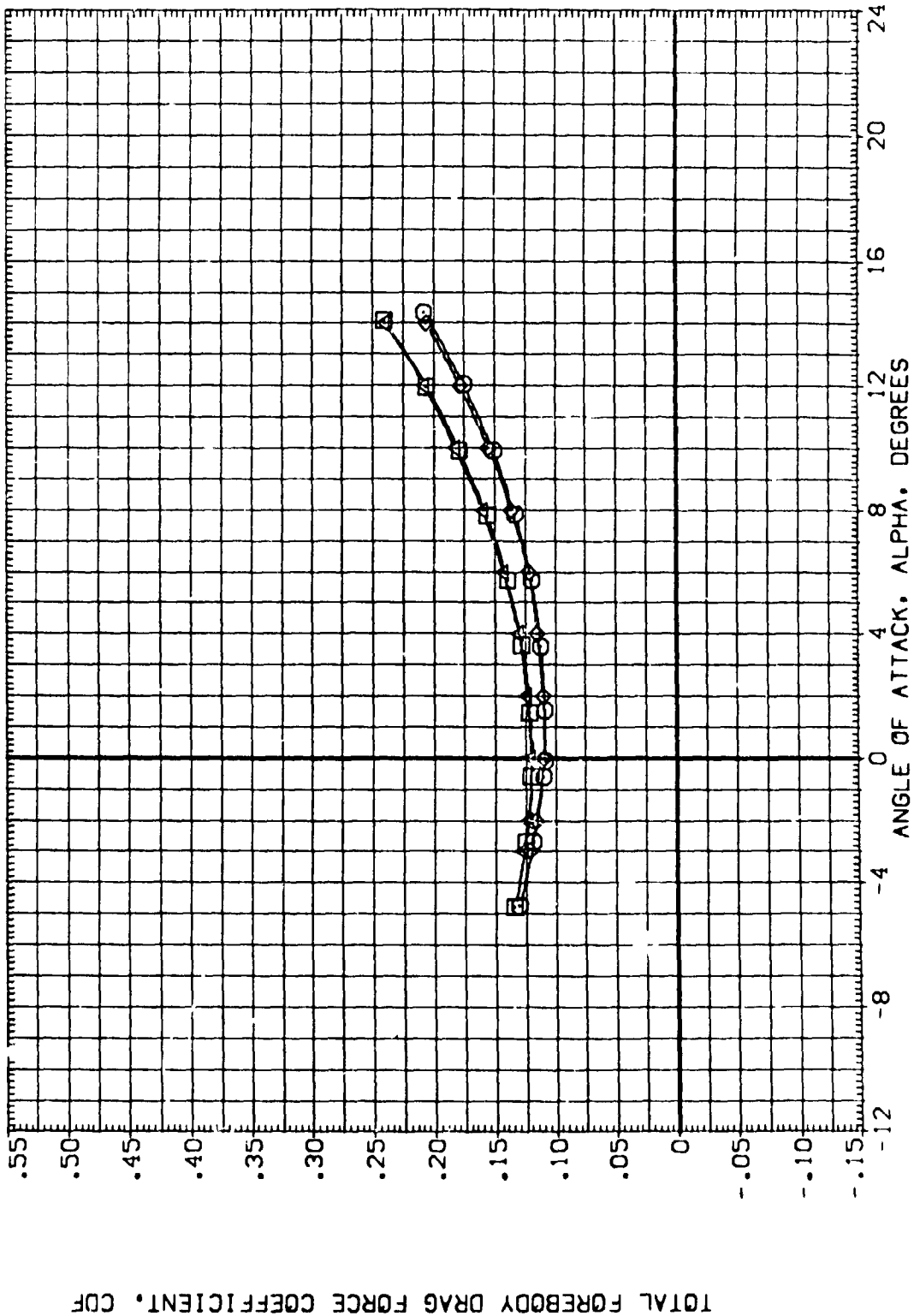


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(H)MACH = 2.00



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GE0019)	ARC 66-709 OAS9 O11A-(N24)
(GE0020)	ARC 66-709 OAS9 O11A-(N24)
(3EPJ19)	ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)
(3EP020)	ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	50.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
ZMRP	.0000	IN.
SCALE	-.3750	IN.
	.0150	

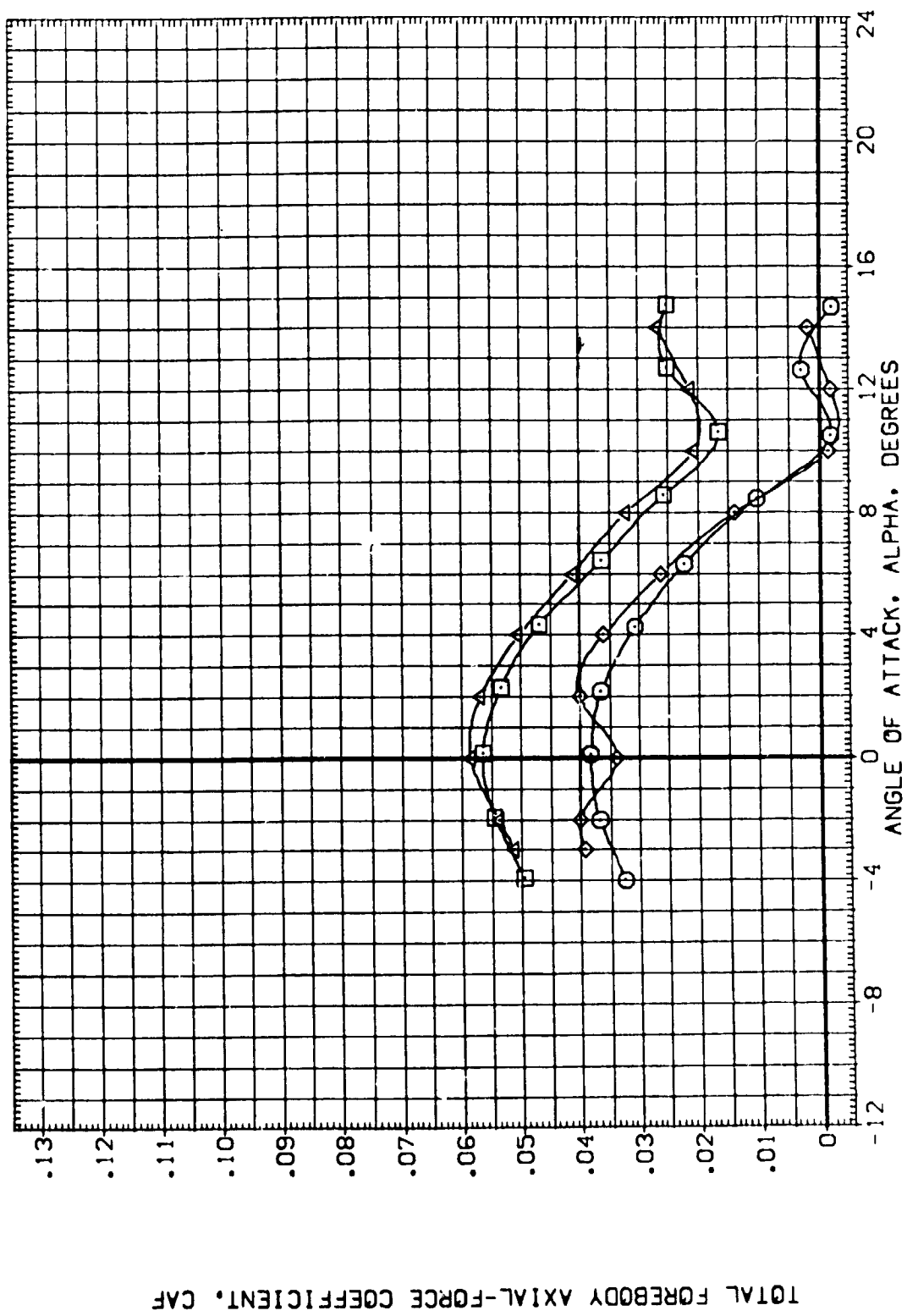


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(A) MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (GER019) ARC 66-709 0A59 0111A-(N24)
 (GER020) ARC 66-709 0A59 0111A-(N24)
 (3ER019) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
 (3ER020) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

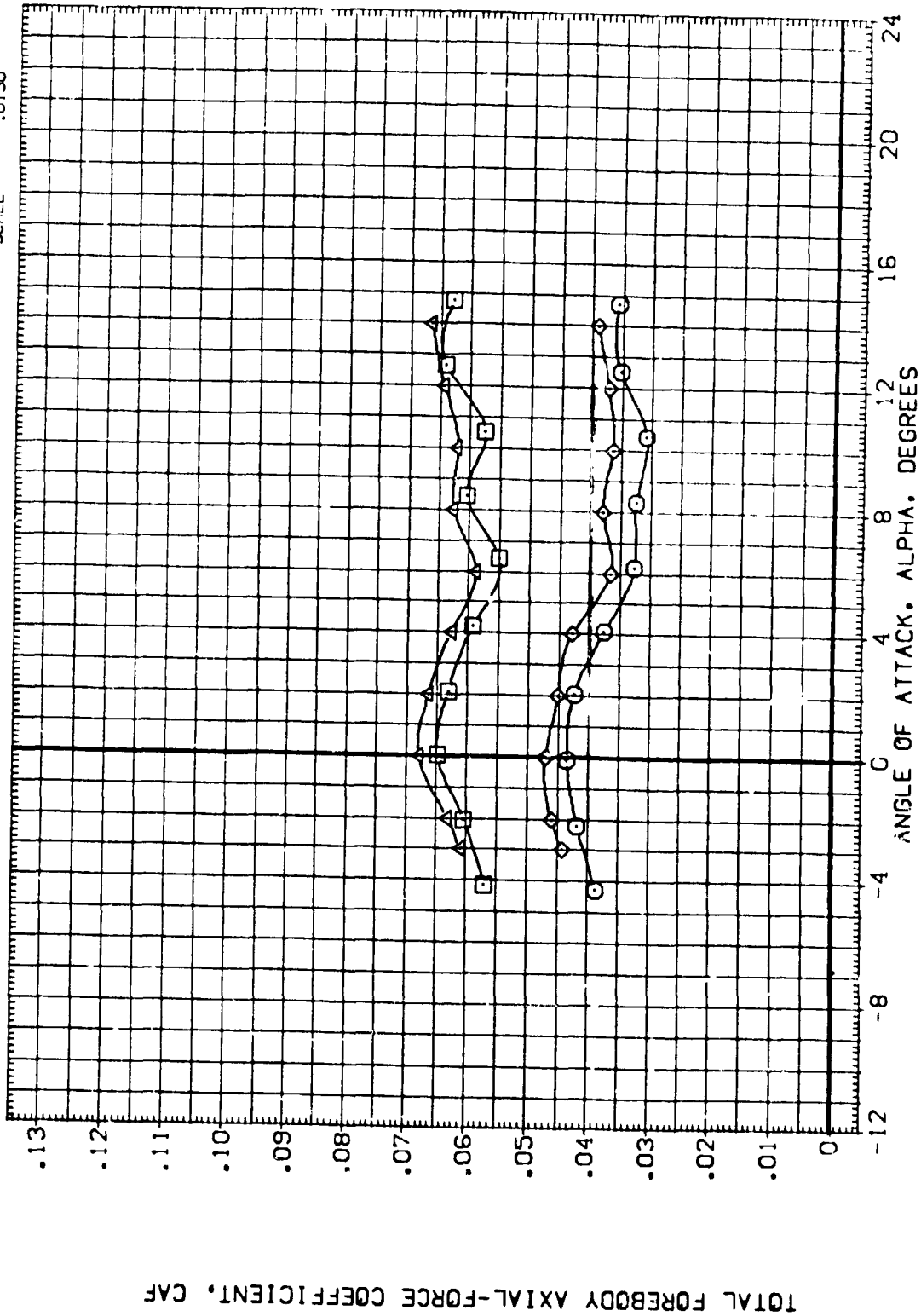


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(B)MACH = .80



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GER019) ARC 66-709 CASS D111A-N24

(GER070) DATA NOT AVAILABLE

(ZER019) ARC 66-709 CASS 011A-N24 (ADJUSTED FOR TARES)

(ZER020) DATA NOT AVAILABLE

BETA

ELEVON

BDF LAP

.000 -11.700

.000 -11.700

.000 -11.700

.000 -11.700

15.000

15.000

15.000

REFERENCE INFORMATION

SREF .6053 SQ.FT

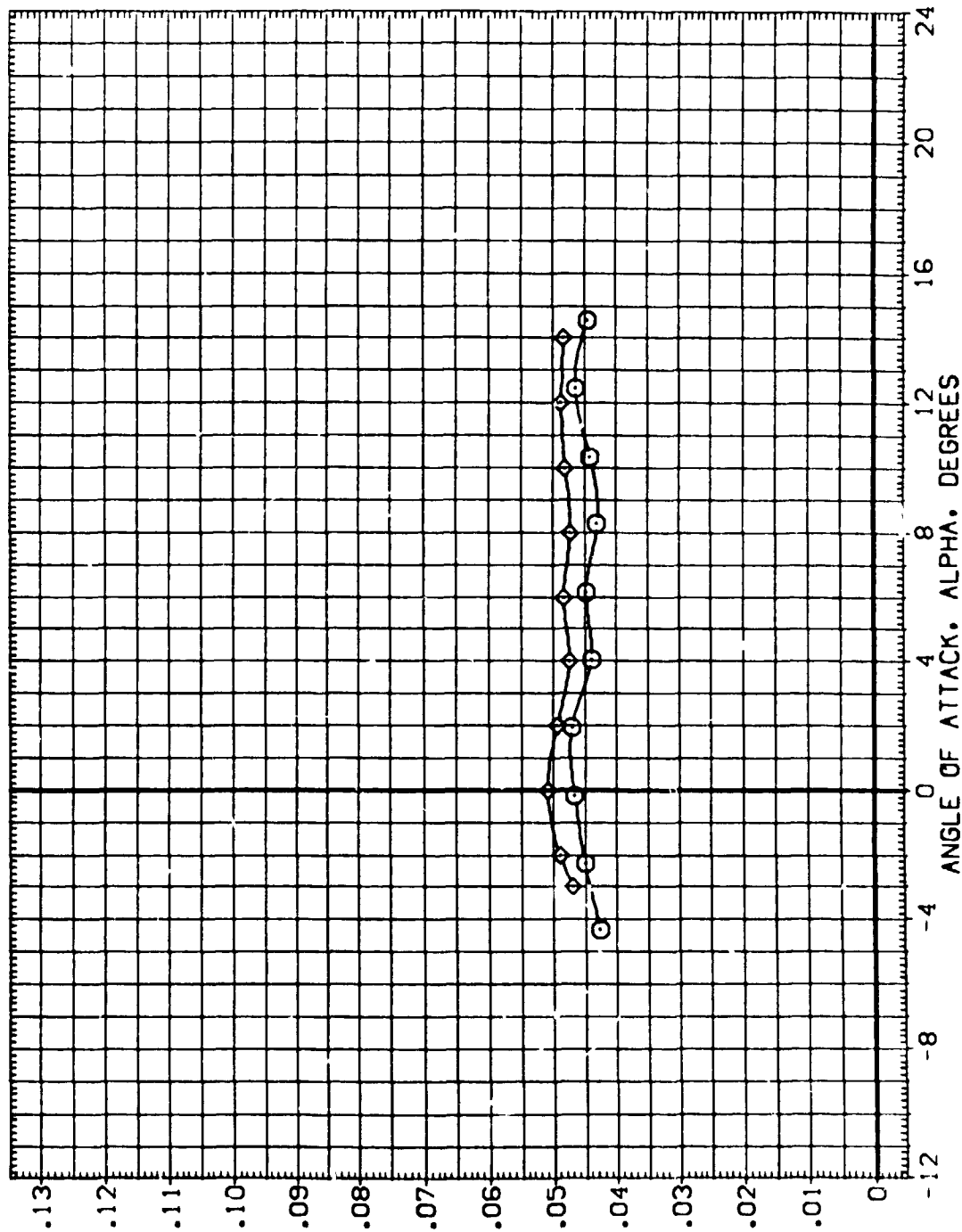
LREF .5935 FT.

BREF 1.1710 FT.

YMRP 12.6255 IN.

ZMRP .0000 IN.

SCALE -.3750 IN.



TOTAL FOREBODY AXIAL-FORCE COEFFICIENT, CAF

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .85

DATA SET SYMBOL CO. VIGRATION DESCRIPTION

(G6R019) Q ARC 66-709 CASS 0111A-(N24)

(G6R020) Q ARC 66-709 CASS 0111A-(N24)

(36R019) Q ARC 66-709 CASS 0111A-N24 (ADJUSTED FOR TARES)

(36R020) Q ARC 66-709 CASS 0111A-N24 (ADJUSTED FOR TARES)

BETA .000

ELEVON .000

BDFLAP -11.700

15.000

.000

.000

15.000

-11.700

REFERENCE INFORMATION

SREF .6053 50.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

ZMRP .0000 IN.

SCALE -.3750 IN.

TOTAL FOREBODY AXIAL-FORCE COEFFICIENT, CAF

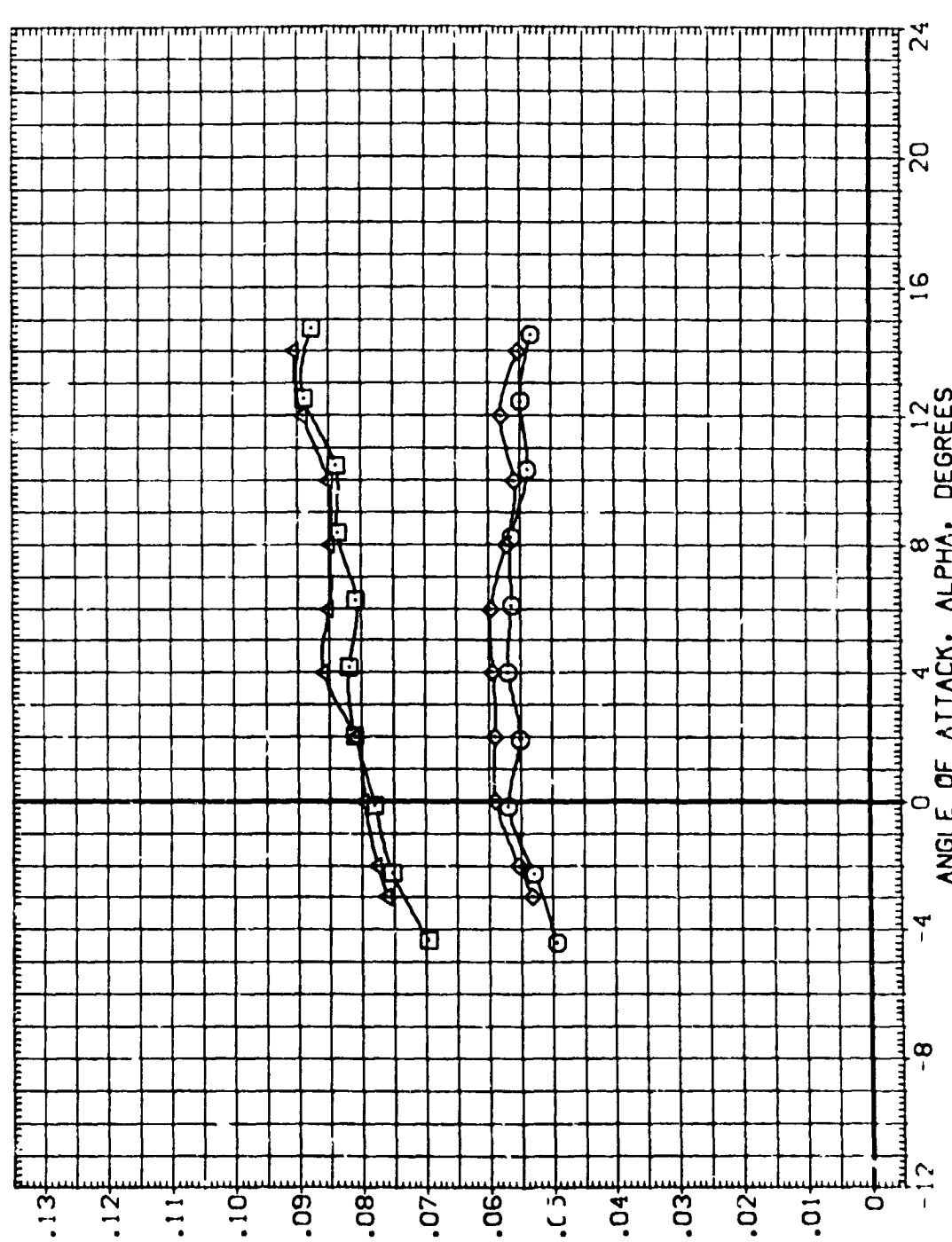


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

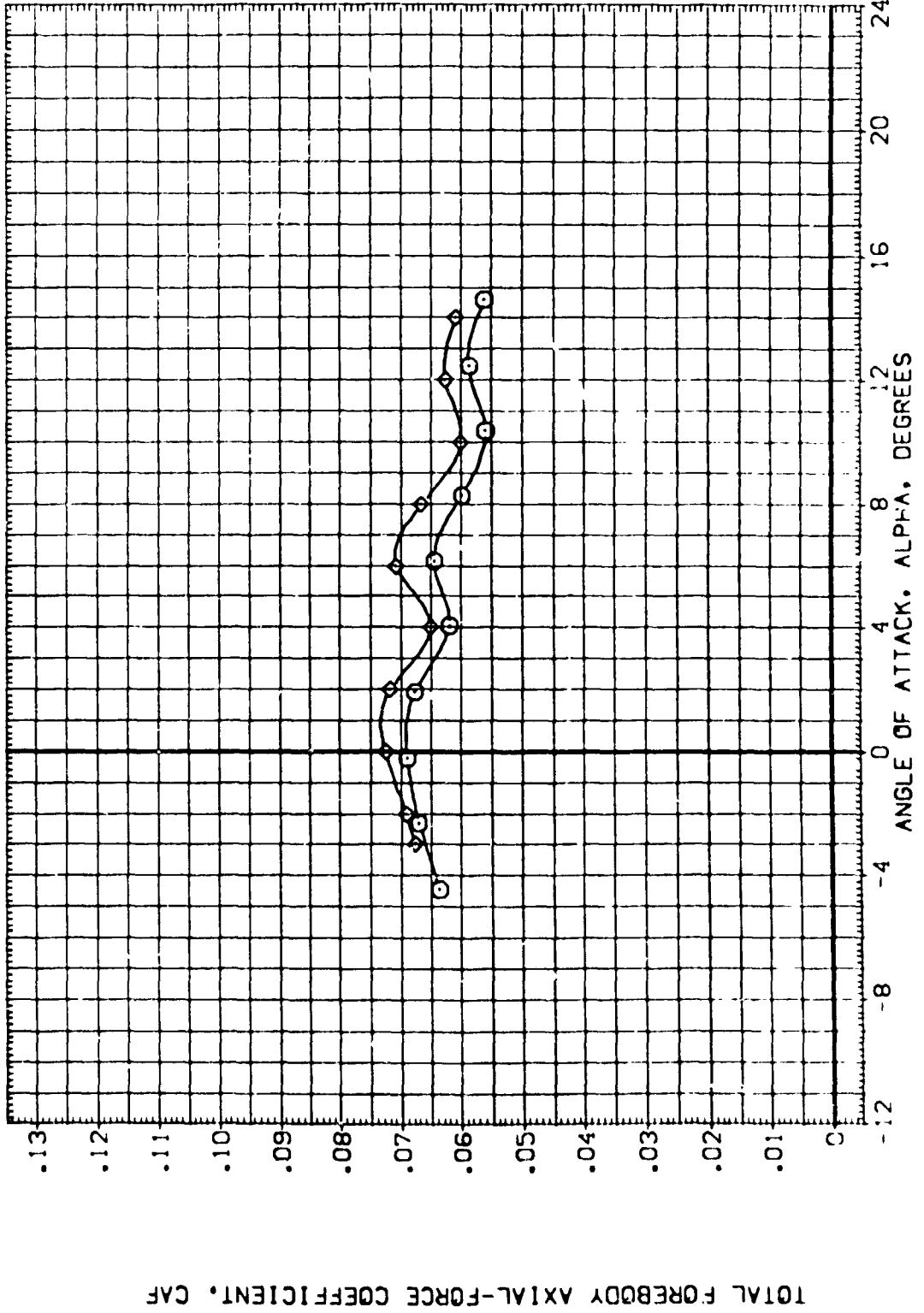
(COMAC) = .90



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (GER019) ARC 66-709 DASS D111A-(N24)
 (GER020) DATA NOT AVAILABLE
 (GER019) ARC 66-709 DASS D111A-N24 (ADJUSTED FOR TARES)
 (GER020) DATA NOT AVAILABLE

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 50.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRRP 12.6755 IN.
 YMRRP .0000 IN.
 ZMRRP -.3750 IN.
 SCALE .0150



TOTAL FOREBODY AXIAL-FORCE COEFFICIENT, CAF

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

DATA SET SYMBOL: (GRC19), (GR070), (GR019), (GR070)

CONFIGURATION DESCRIPTION: ARC 66-709 DASS, ARC 66-709 DASS, ARC 66-709 DASS, ARC 66-709 DASS

BETA: .000, .000, .000, .000

ELEVON: .000, 15.000, .000, 15.000

BOFLAP: -11.700, -11.700, -11.700, -11.700

REFERENCE INFORMATION: SREF .6053 50.FT., LREF .5935 FT., BRREF 1.1710 FT., XMRP 12.6255 IN., YMRP .0000 IN., ZMRP -.3750 IN., SCALE .0:50

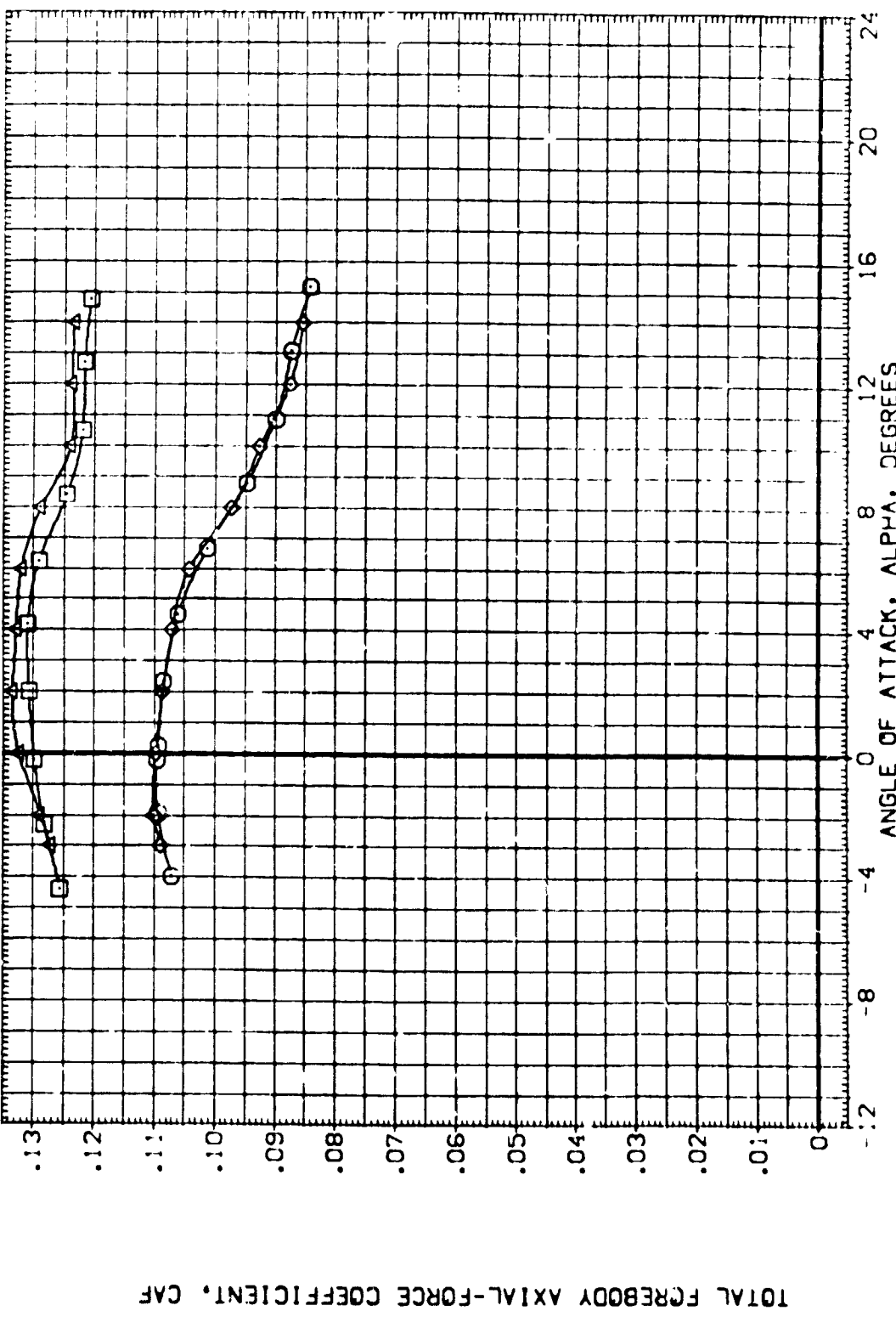


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(36019)	ARC 66-709	0A59	011A-(N24)
(36020)	ARC 66-709	0A59	011A-(N24)
(36019)	ARC 66-709	0A59	011A-N24 (ADJUSTED FOR TARES)
(36020)	ARC 66-709	0A59	011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6755	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

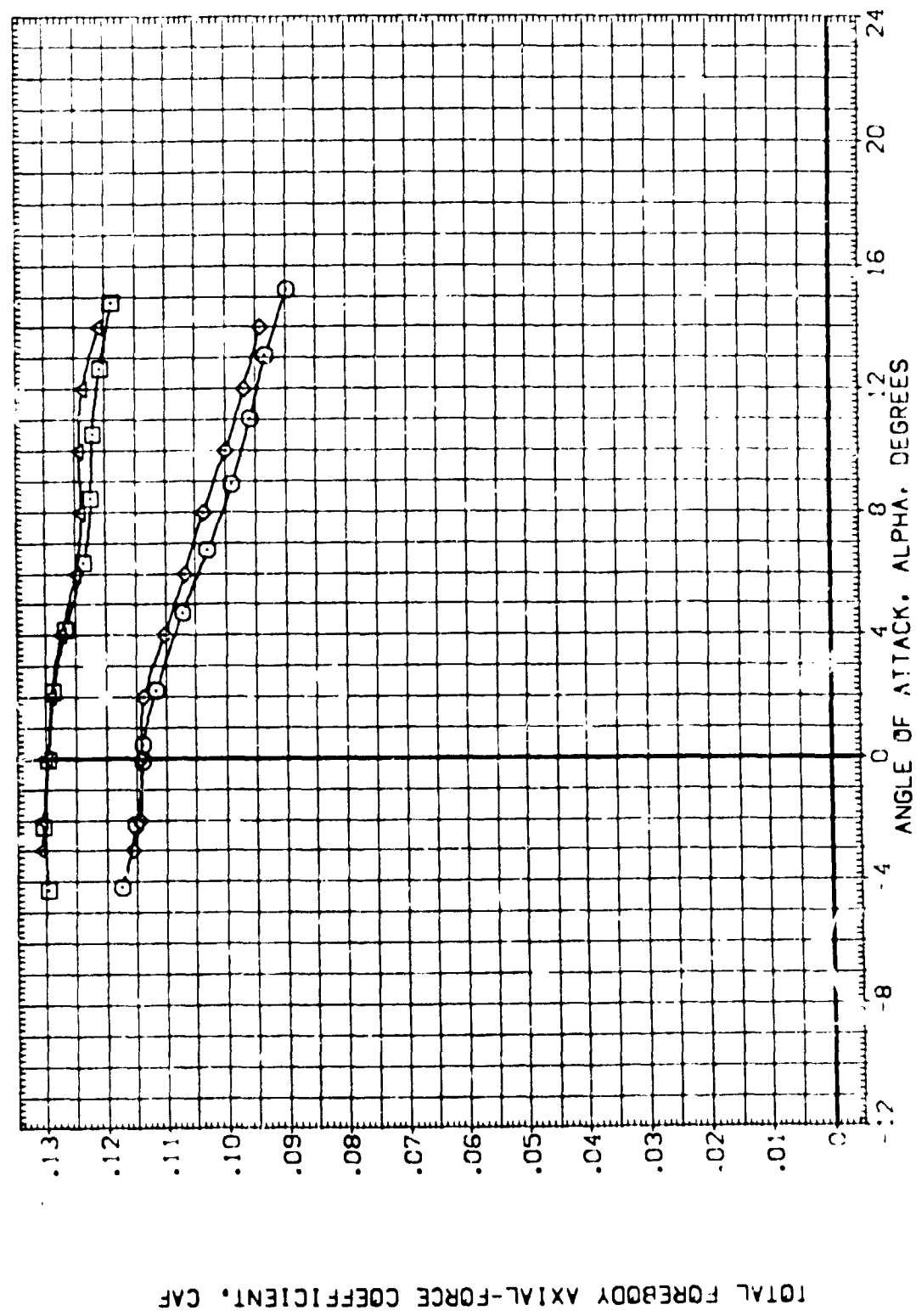


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(G)MAC 1.50

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (GE.R019) ARC 66-709 0A59 0111A-(N24)
 (GE.R020) ARC 66-709 0A59 0111A-(N24)
 (3E.R019) ARC 66-709 0A59 0111A-N24 (ADJUSTED FOR TARES)
 (3E.R020) ARC 66-709 0A59 0111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON 8DFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

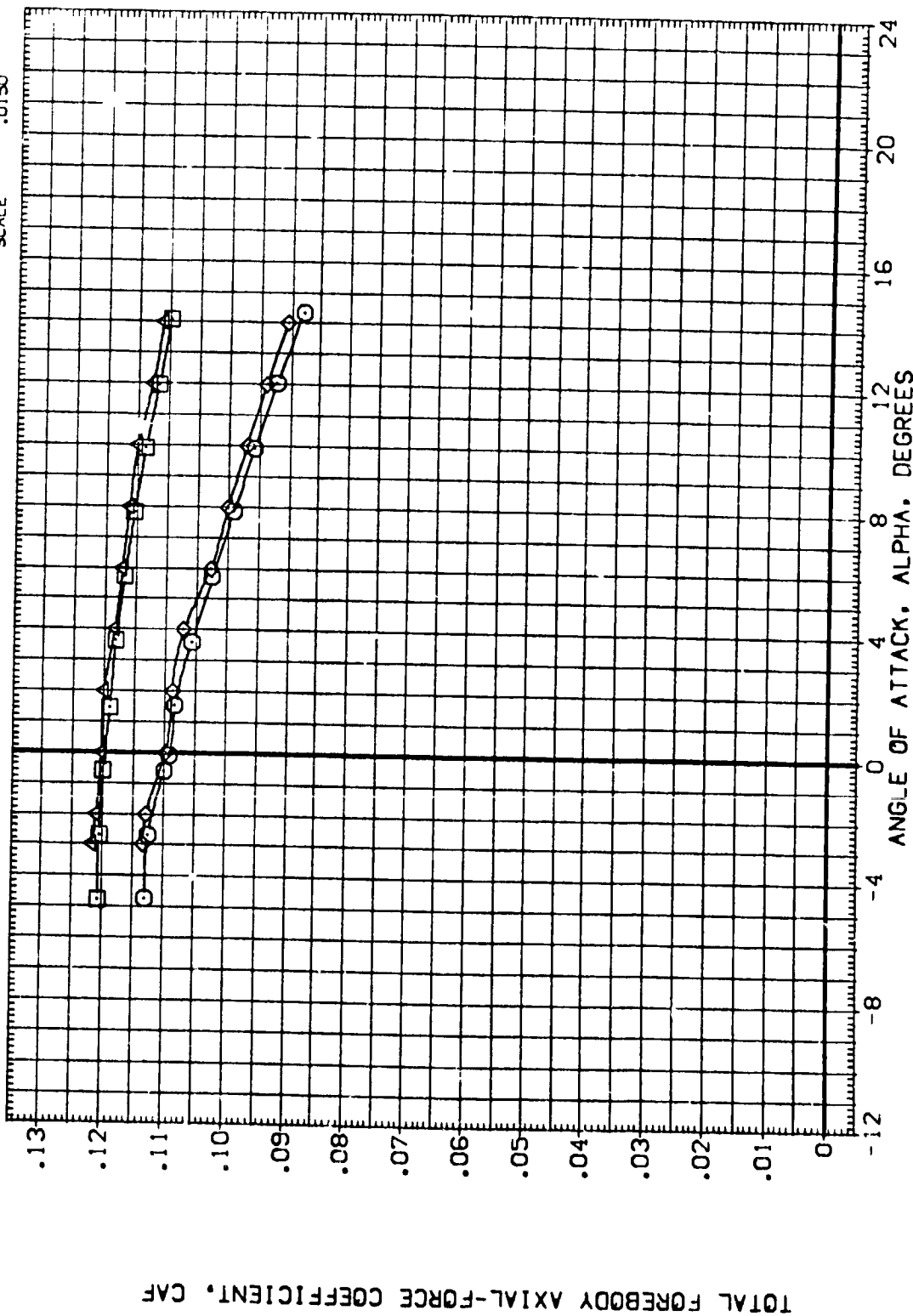


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(H)MACH = 2.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(ZERO19)	ARC 66-709	OASS	O111A-(N24)
(ZERO20)	ARC 66-709	OASS	O111A-(N24)
(ZERO19)	ARC 66-709	OASS	O111A-N24 (ADJUSTED FOR TARES)
(ZERO20)	ARC 66-709	OASS	O111A-N24 (ADJUSTED FOR TARES)

BETA

.000	ELEVON	BDFLAP
.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	50.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

MODEL-BODY BASE AXIAL-FORCE COEFFICIENT, CAB

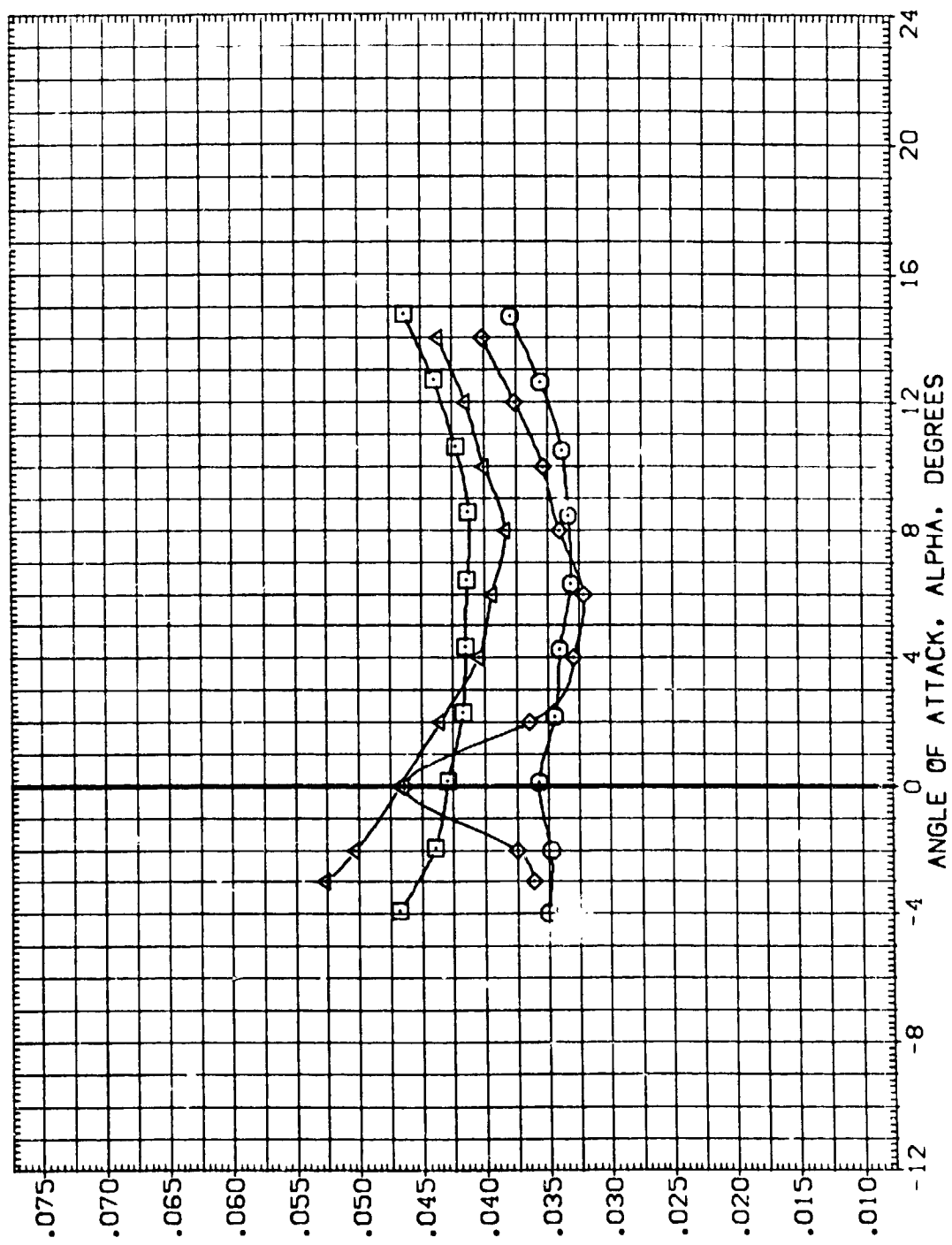


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(AJMACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION

{ 06R019 } □ ARC 66-709 DASS 0111A-(N24)

{ 06R020 } □ ARC 66-709 DASS 0111A-(N24)

{ 06R019 } ◊ ARC 66-709 DASS 0111A-N24 (ADJUSTED FOR TARES)

{ 06R020 } ◊ ARC 66-709 DASS 0111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

ZMRP .0000 IN.

SCALE -.3750 IN.

 .0150

MODEL-BODY BASE AXIAL-FORCE COEFFICIENT, CAB

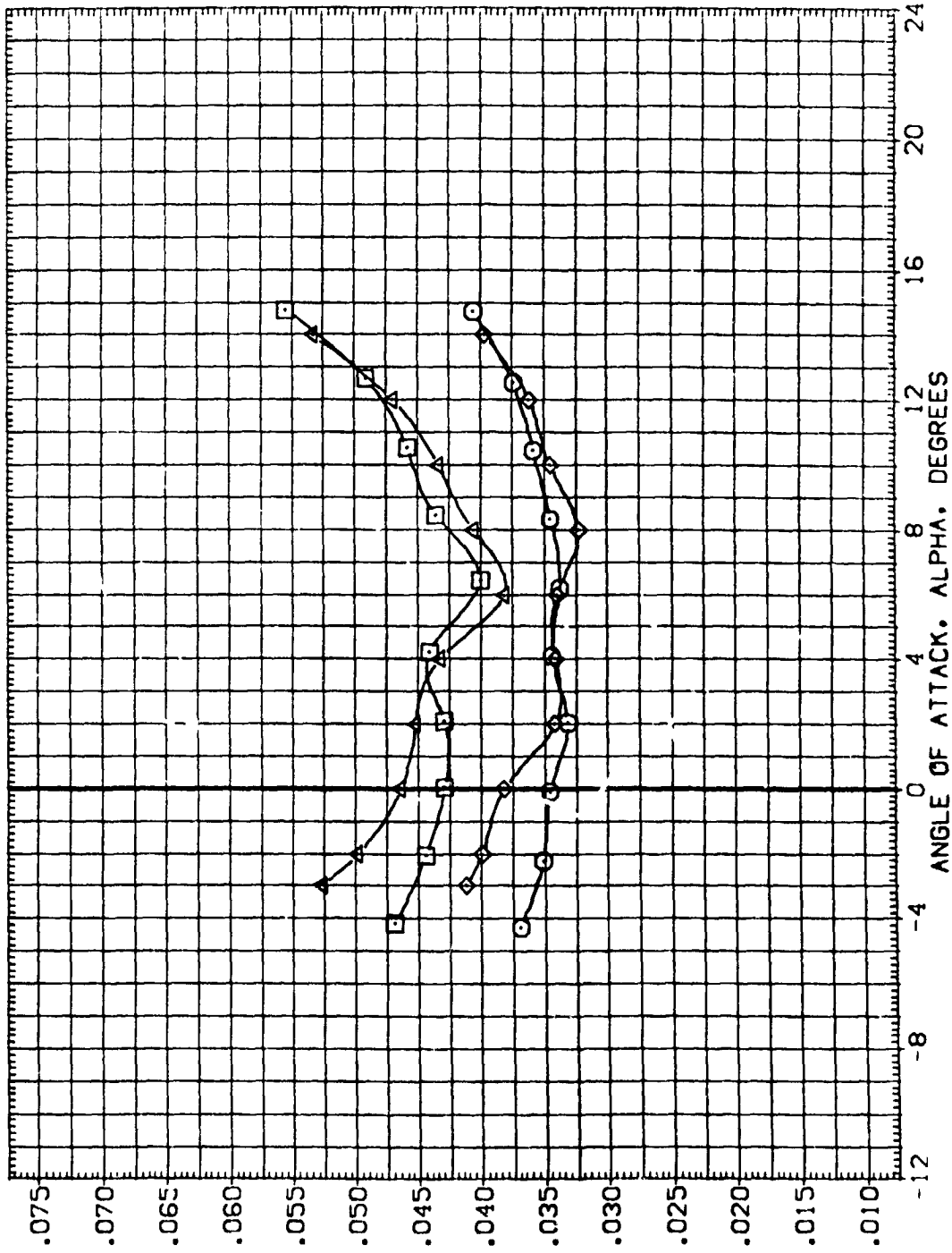


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(B)MAC: .80



DATA SET SYMBOL CONFIGURATION DESCRIPTION

{ 06R019 } ARC 66-709 CASE 0111A-N24

{ 06R020 } DATA NOT AVAILABLE

{ 06R019 } ARC 66-709 CASE 0111A-N24 (ADJUSTED FOR TARES)

{ 06R020 } DATA NOT AVAILABLE

BETA ELEVON BDFLAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

MODEL-BODY BASE AXIAL-FORCE COEFFICIENT, CAB

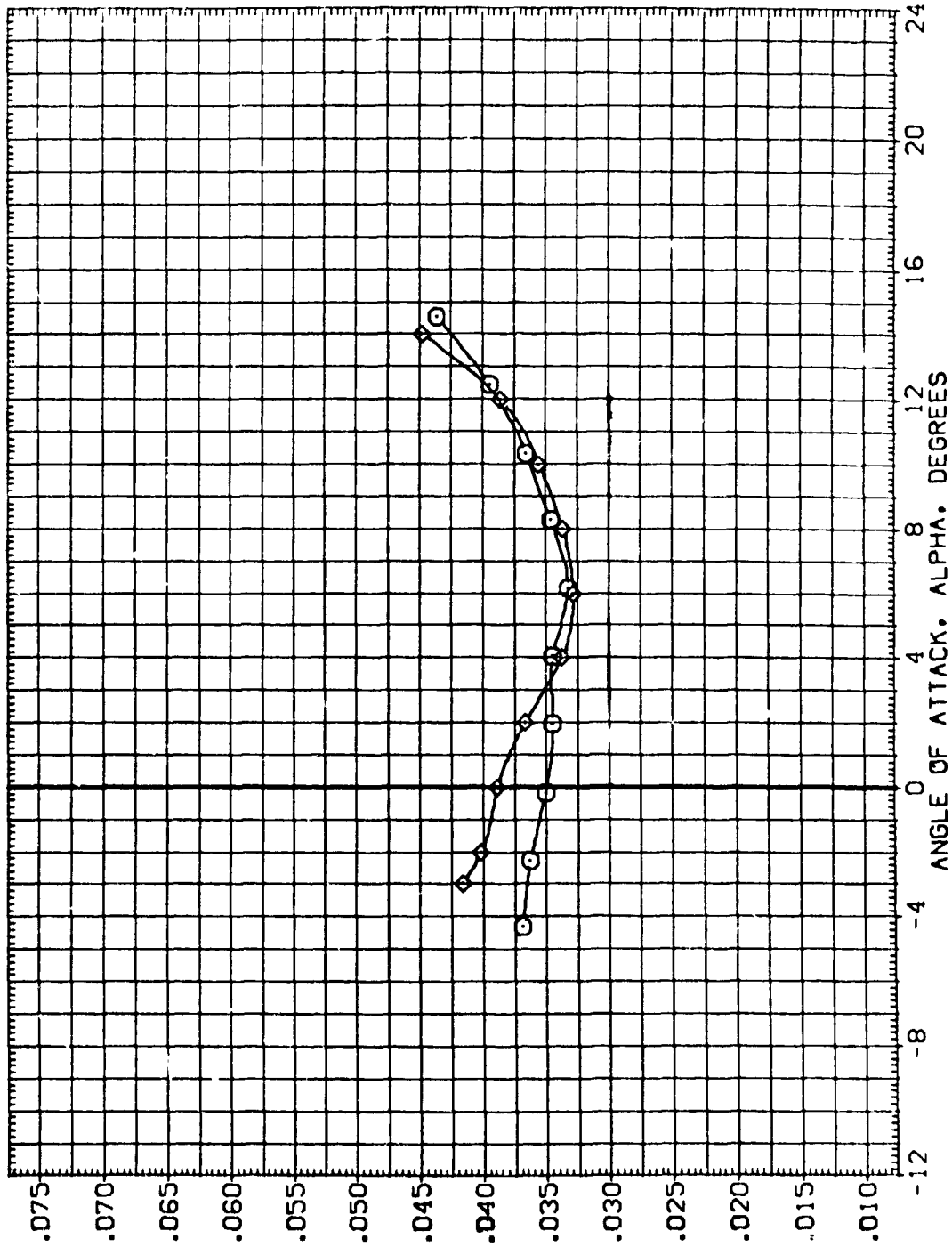


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

{C}MACH = .85

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GRC19) ARC 66-709 D459 O11A-(N24)

(GRC20) ARC 66-709 D459 O11A-(N24)

(ZRC19) ARC 66-709 D459 O11A-N24 (ADJUSTED FOR TARES)

(ZRC20) ARC 66-709 D459 O11A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5935 F.

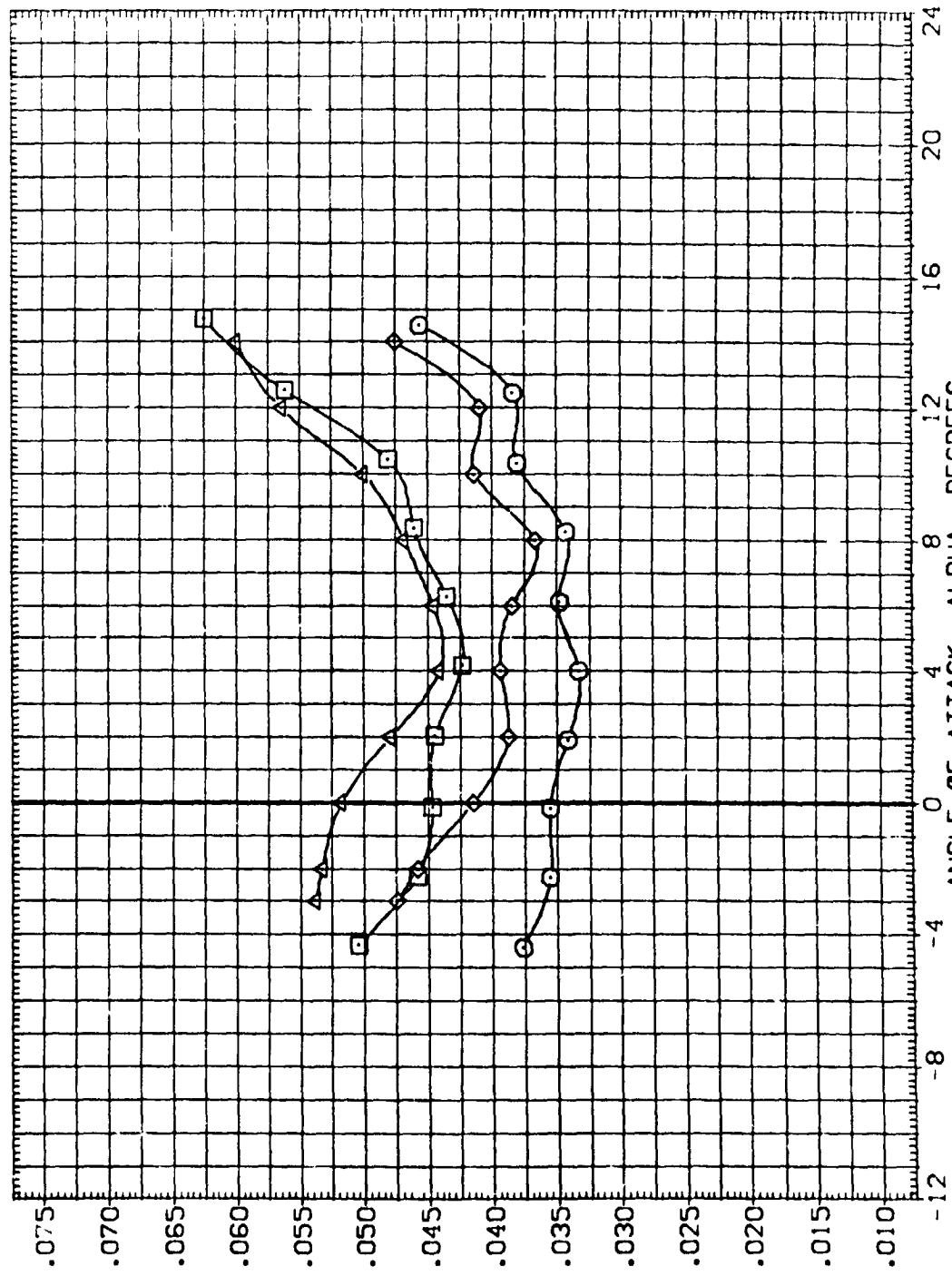
BREF 1.1710 F.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150



MODEL-BODY BASE AXIAL-FORCE COEFFICIENT, CAB

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(D)MACH = .90



DATA SET SYMBOL: (GE019) (GE020) (X019) (X020)

CONFIGURATION DESCRIPTION: ARC 66-709 DASS 011A-(N24) DATA NOT AVAILABLE ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES) DATA NOT AVAILABLE

BETA: .000 .000 .000 .000

ELEVON: .000 15.000 .000 15.000

BOFLAP: -11.700 -11.700 -11.700 -11.700

REFERENCE INFORMATION: SREF .6053 SQ. FT. LREF .5935 FT. BRFF 1.1710 FT. XMRP 12.6255 IN. YMRP .0000 IN. ZMRP -.3750 IN. SCALE .0150

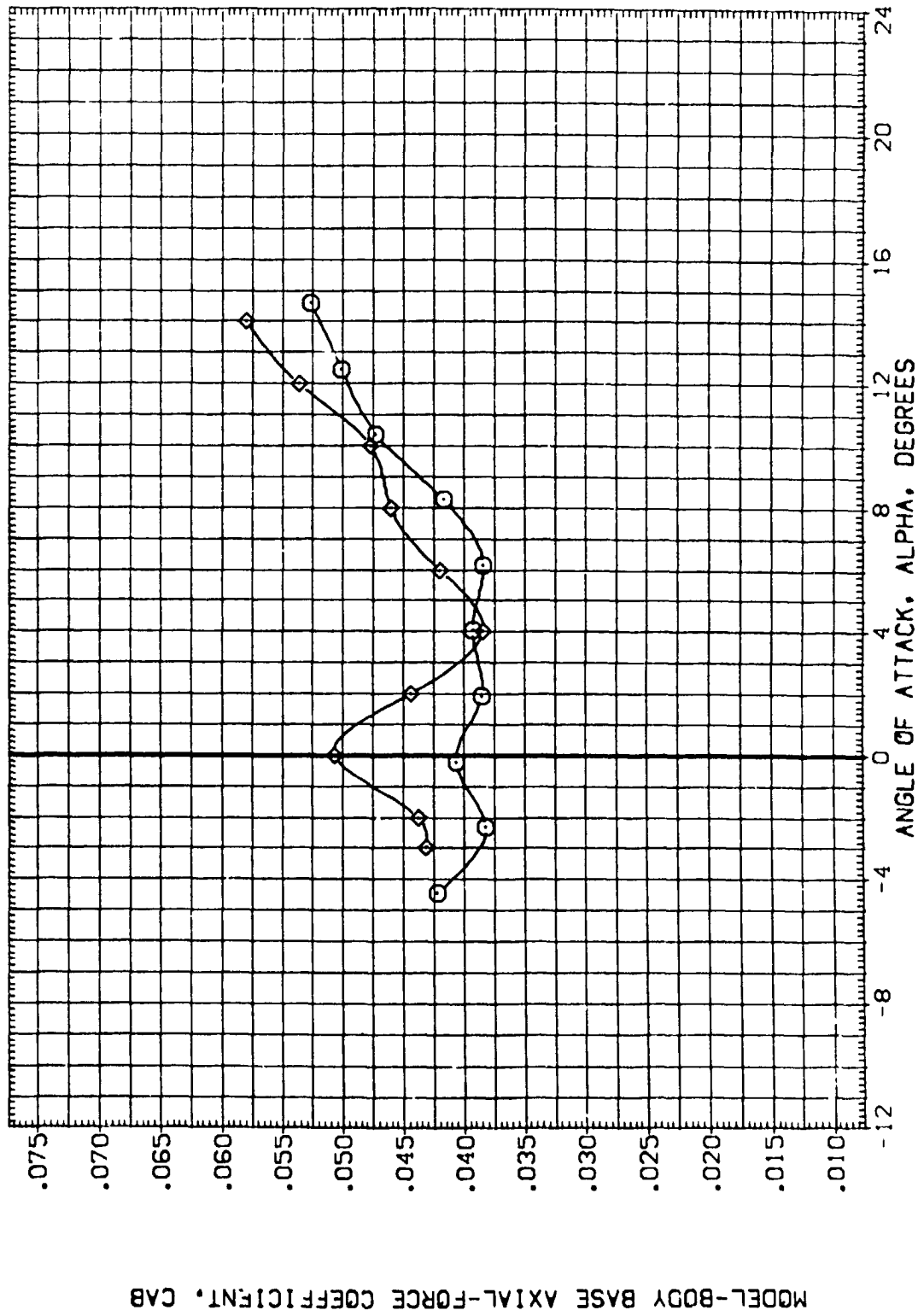


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .95

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (GER019) □ ARC 66-709 DASS 0111A-N24
 (GER020) □ ARC 66-709 DASS 0111A-N24
 (JER019) ◇ ARC 66-709 DASS 0111A-N24 (ADJUSTED FOR TARES)
 (JER020) ◇ ARC 66-709 DASS 0111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .3053 50.FT.
 LREF .5936 FT.
 BRREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

MODEL-BODY BASE AXIAL-FORCE COEFFICIENT, CAB

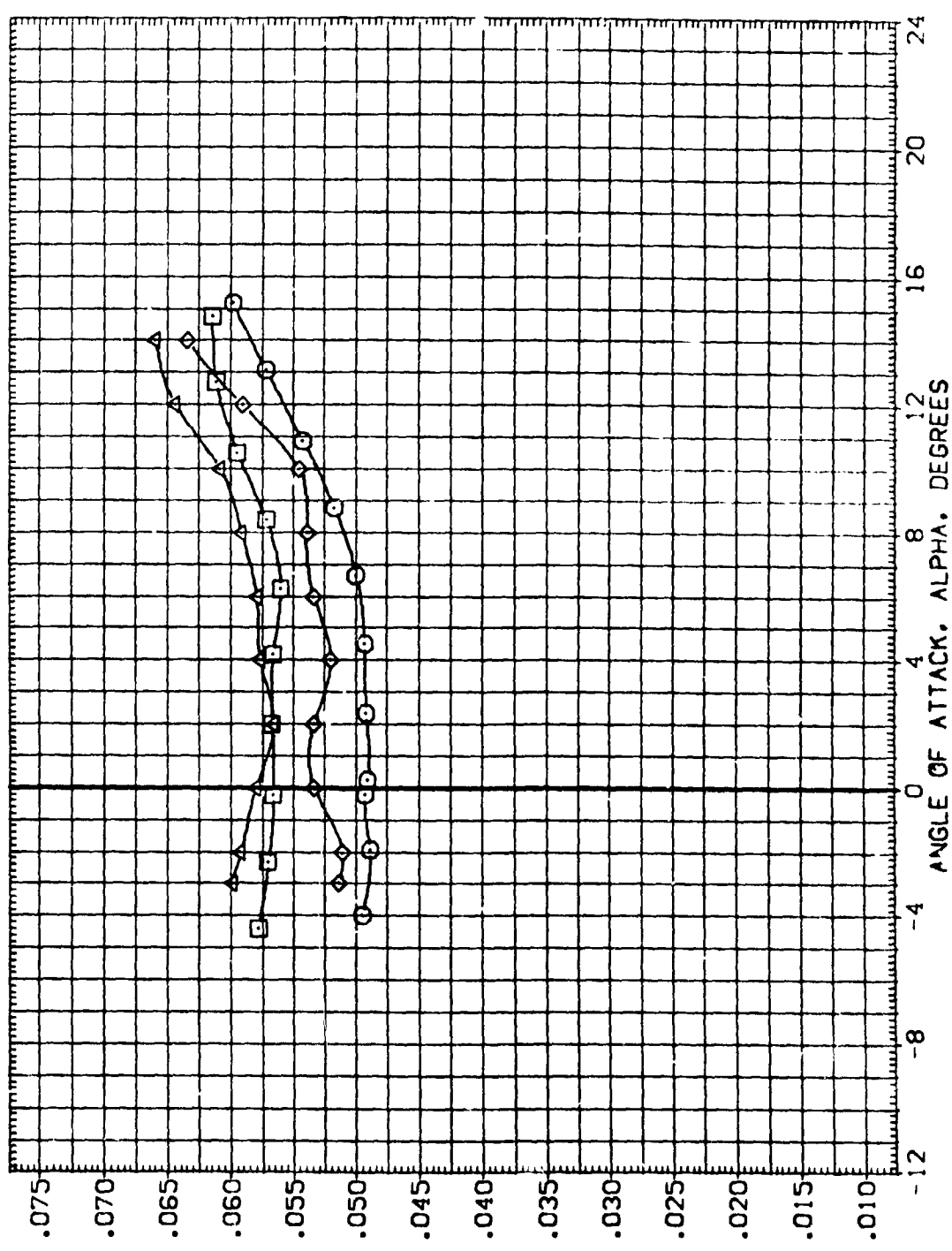


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(F)MACH - 1.20

DATA SET SYMBOL. CONFIGURATION DESCRIPTION

(GER019)	ARC 66-709 DASS DA11A-(N24)	BETA	ELEVON	BOFLAP
(GER020)	ARC 66-709 DASS DA11A-(N24)	.000	.000	-11.700
(ZER019)	ARC 66-709 DASS DA11A-(N24)	.000	15.000	-11.700
(ZER020)	ARC 66-709 DASS DA11A-(N24)	.000	.000	-11.700

REFERENCE INFORMATION

SREF	.8053	50.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

MODEL-BODY BASE AXIAL-FORCE COEFFICIENT, CAB

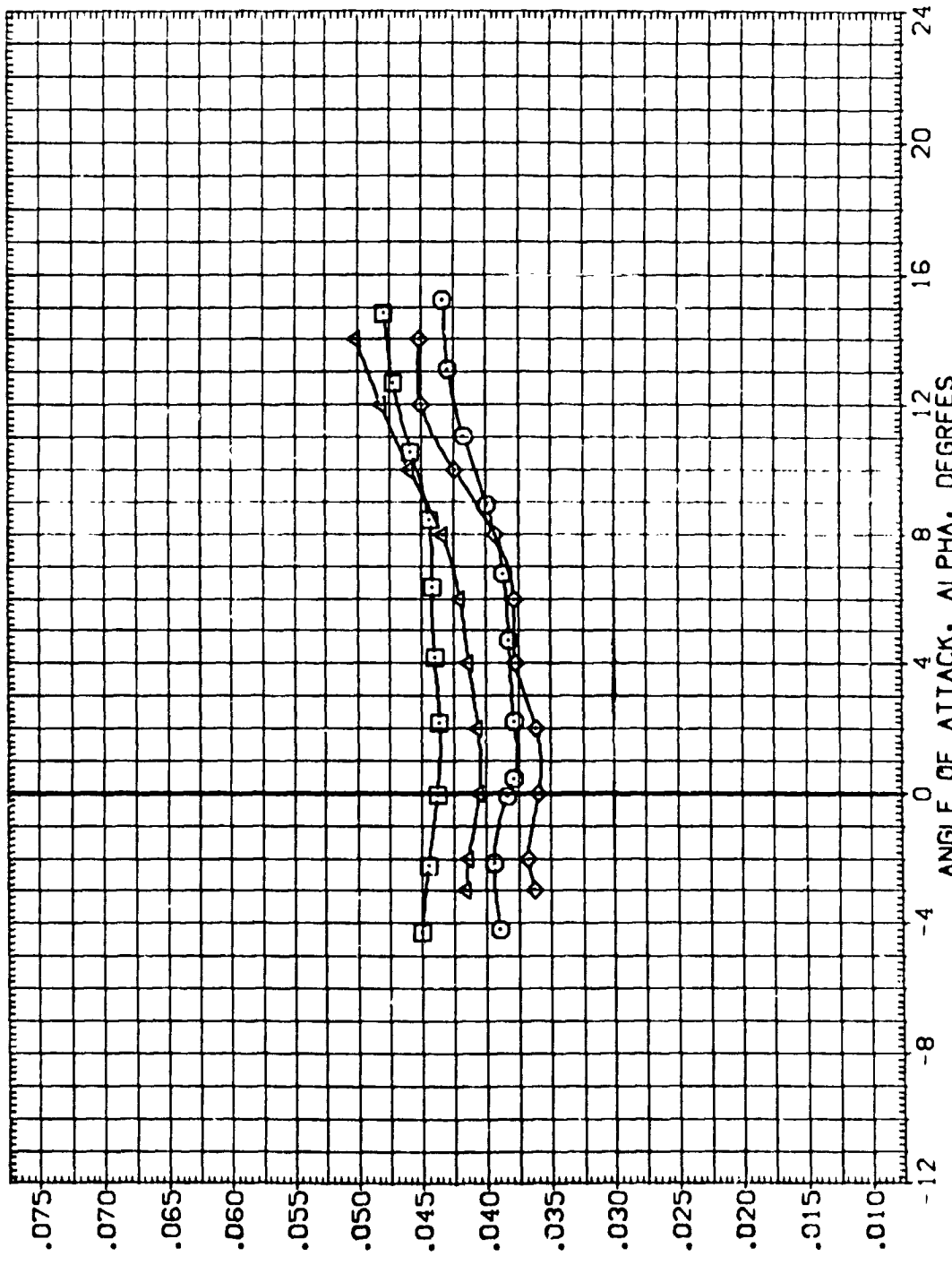


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.50

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(06R019)	ARC 66-709 0A59 0A11A-(N24)
(06R020)	ARC 66-709 0A59 0A11A-(N24)
(06R019)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
(06R020)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	-6053	SO.FT.
LREF	-5935	FT.
XMRP	1.1710	IN.
YMRP	12.6255	IN.
ZMRP	.0000	IN.
SCALE	-.3750	IN.
	.0150	

MODEL-BODY BASE AXIAL-FORCE COEFFICIENT, CAB

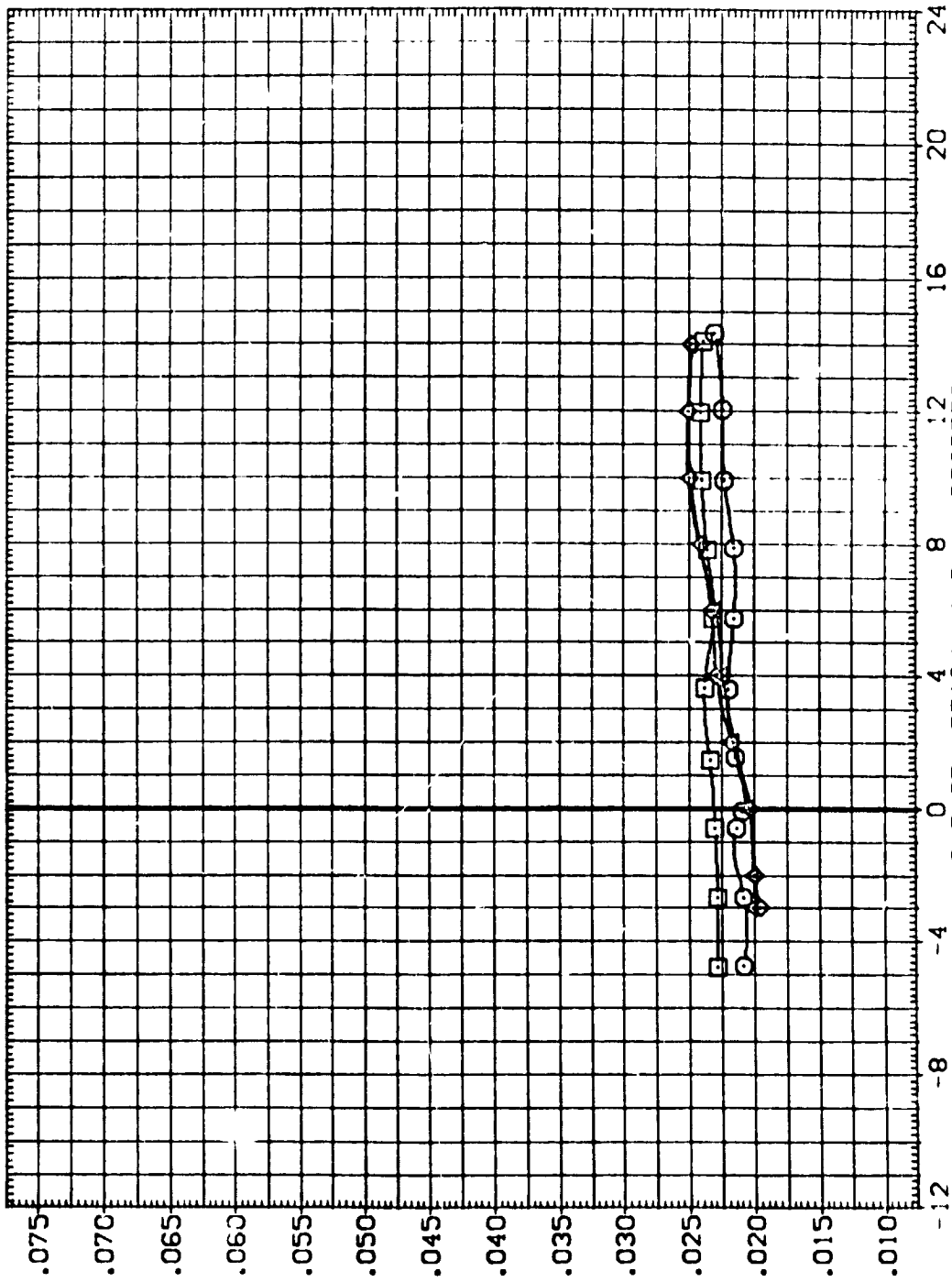


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES





(H)MACU 2.00

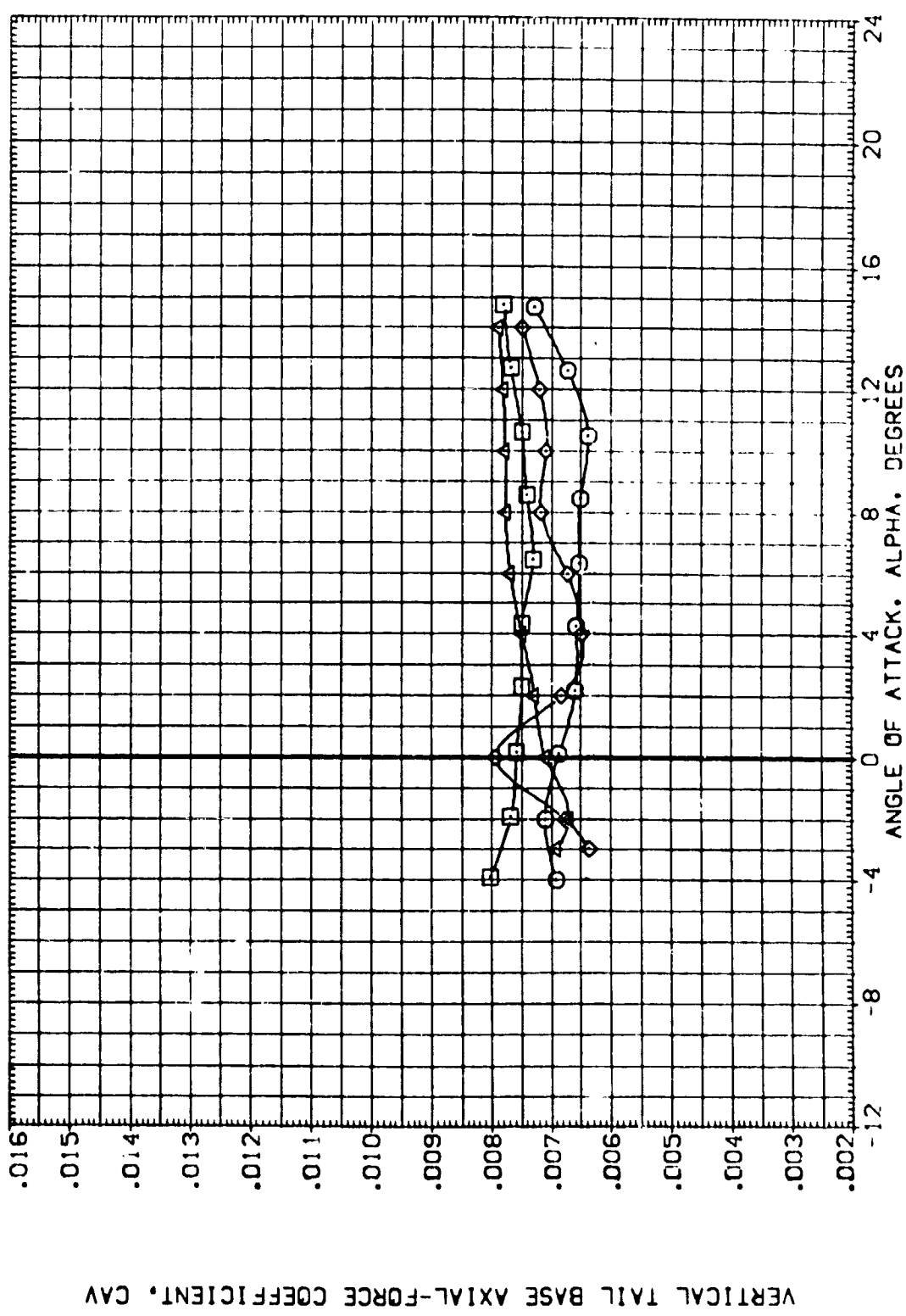


REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

CONFIGURATION DESCRIPTION
 ARC 66-709 OASS O11A-N24
 ARC 66-709 OASS O11A-N24
 ARC 66-709 OASS O11A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 OASS O11A-N24 (ADJUSTED FOR TARES)

DATA SET SYMBOL
 (BE.R019) 
 (BE.R020) 
 (ZE.R019) 
 (ZE.R020) 



VERTICAL TAIL BASE AXIAL-FORCE COEFFICIENT, CAV

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(A)MAC = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BDF LAP	REFERENCE INFORMATION
(BER019)	ARC 66-709 0A59 0A11A-N24	.000	.000	-11.700	SREF -6053 50.FT.
(BER020)	ARC 66-709 0A59 0A11A-N24	.000	15.000	-11.700	LREF .5935 FT.
(ZER019)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	BREF 1.1710 FT.
(ZER020)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	15.000	-11.700	XMRP 12.6255 IN.
					ZMRP .0000 IN.
					SCALE -.3750 IN.

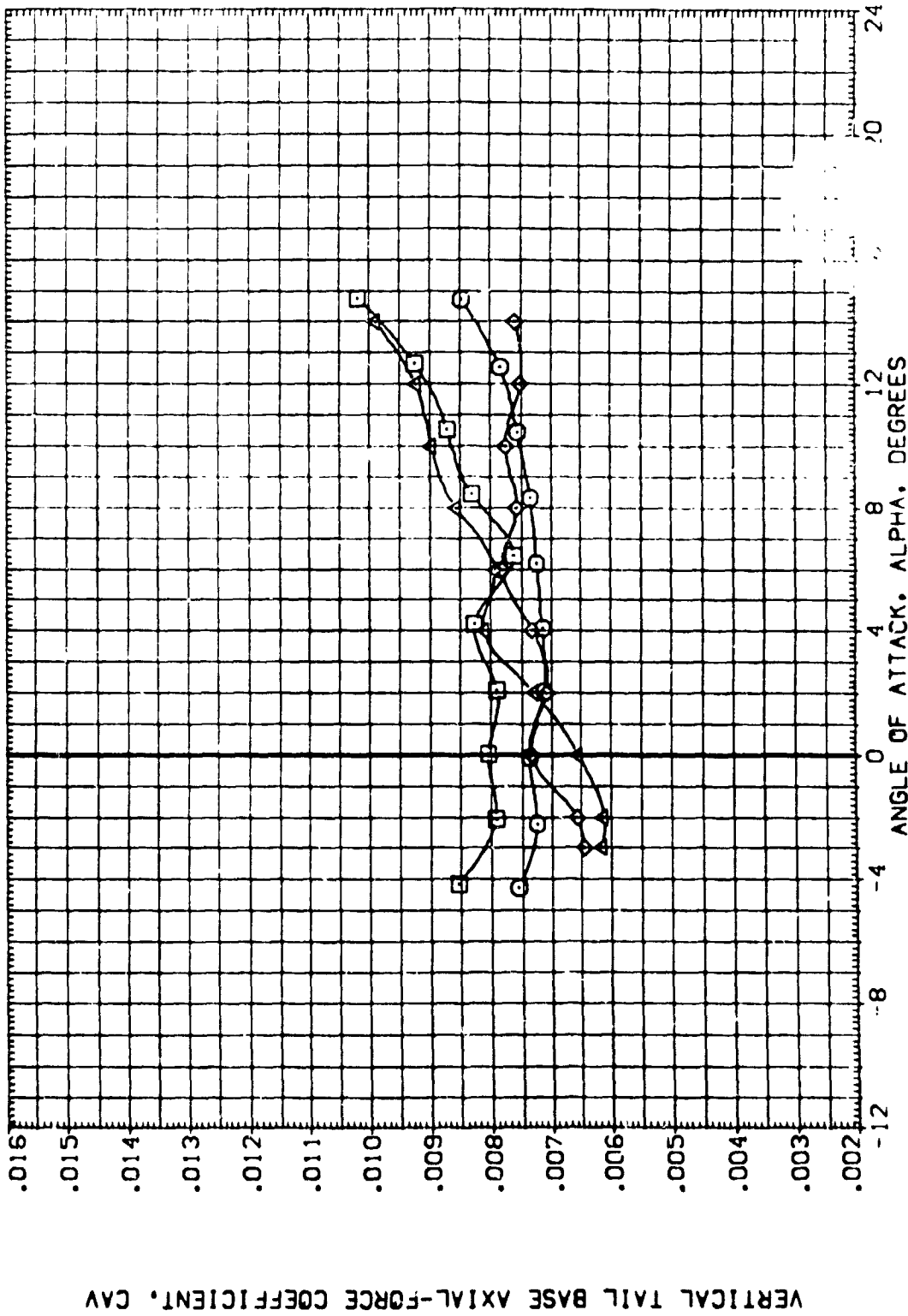


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(B)MACH = .80



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(BER019) ARC 66-709 QAS9 0111A-N24

(BER020) DATA NOT AVAILABLE

(ZER019) ARC 66-709 QAS9 0111A-N24 (ADJUSTED FOR TARES)

(ZER020) DATA NOT AVAILABLE

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5836 F²

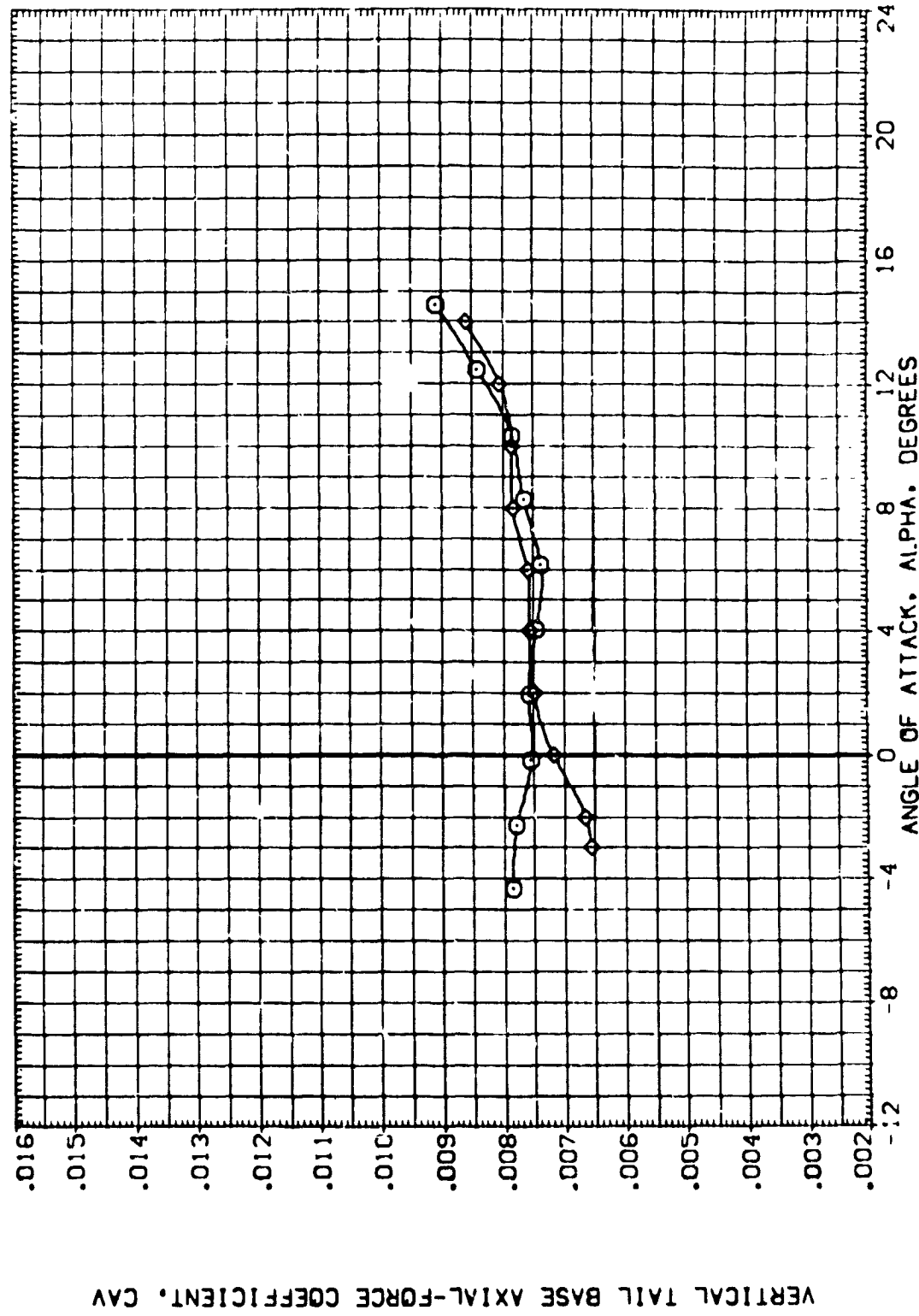
BREF 1.1710 F³

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.





SCALE .0150



VERTICAL TAIL BASE AXIAL-FORCE COEFFICIENT, CAV

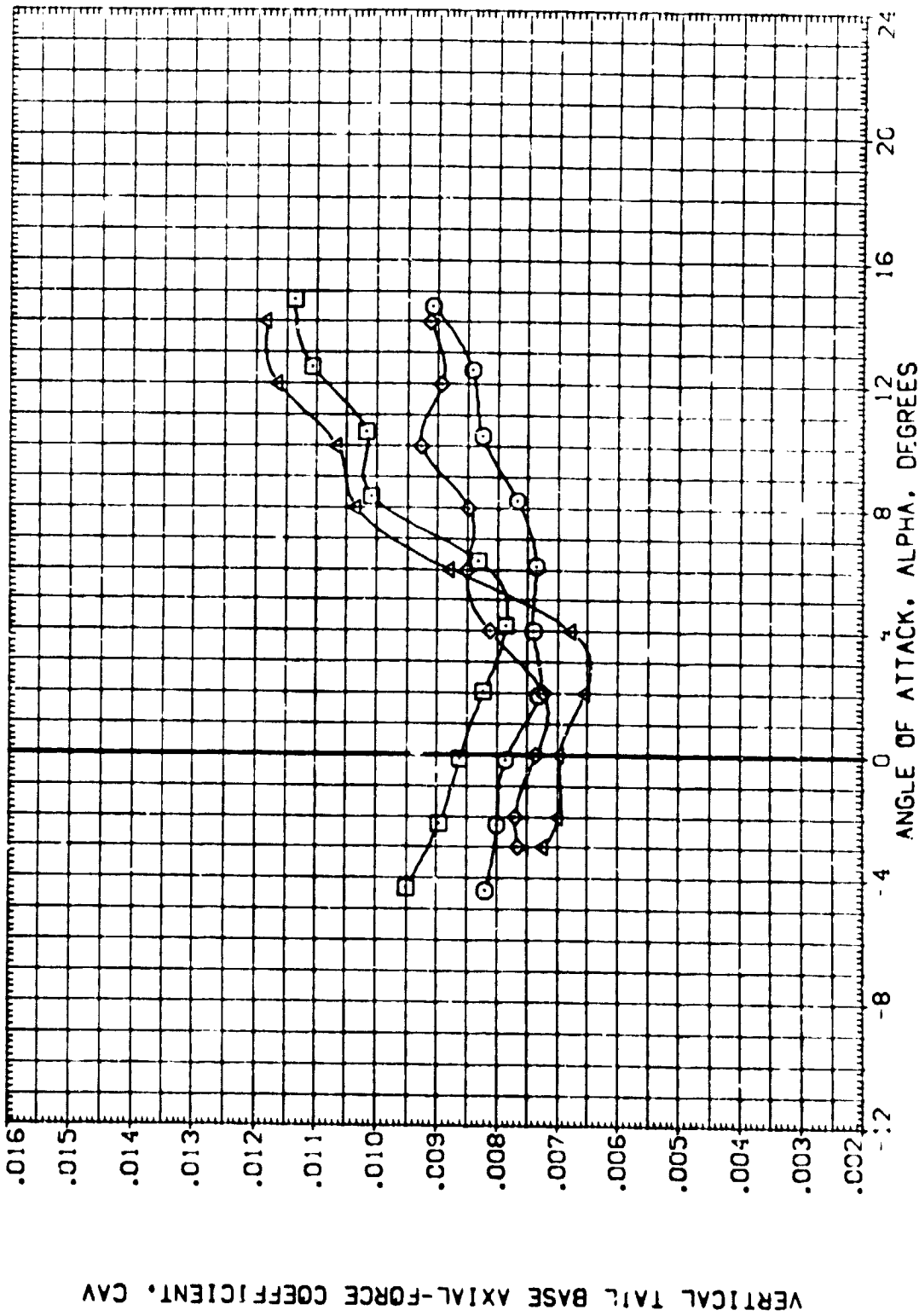
FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C) MAC = .85

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (BERO19)  ARC 66-709 DASS 0111A-N24
 (BERO20)  ARC 66-709 DASS 0111A-N24
 (ZERO19)  ARC 66-709 DASS 0111A-N24 (ADJUSTED FOR TARES)
 (ZERO20)  ARC 66-709 DASS 0111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDF/LAF
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF -6053 50.FT.
 LREF -5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6755 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



VERTICAL TAIL BASE AXIAL-FORCE COEFFICIENT, CAV

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(BER019) ○ ARC 66-709 DASS 0A11A-N24

(BER020) ○ DATA NOT AVAILABLE

(ZER019) ◇ ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)

(ZER020) ◇ DATA NOT AVAILABLE

BETA ELEVON BDF LAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF 6053 SQ.FT.

LREF 5936 FT.

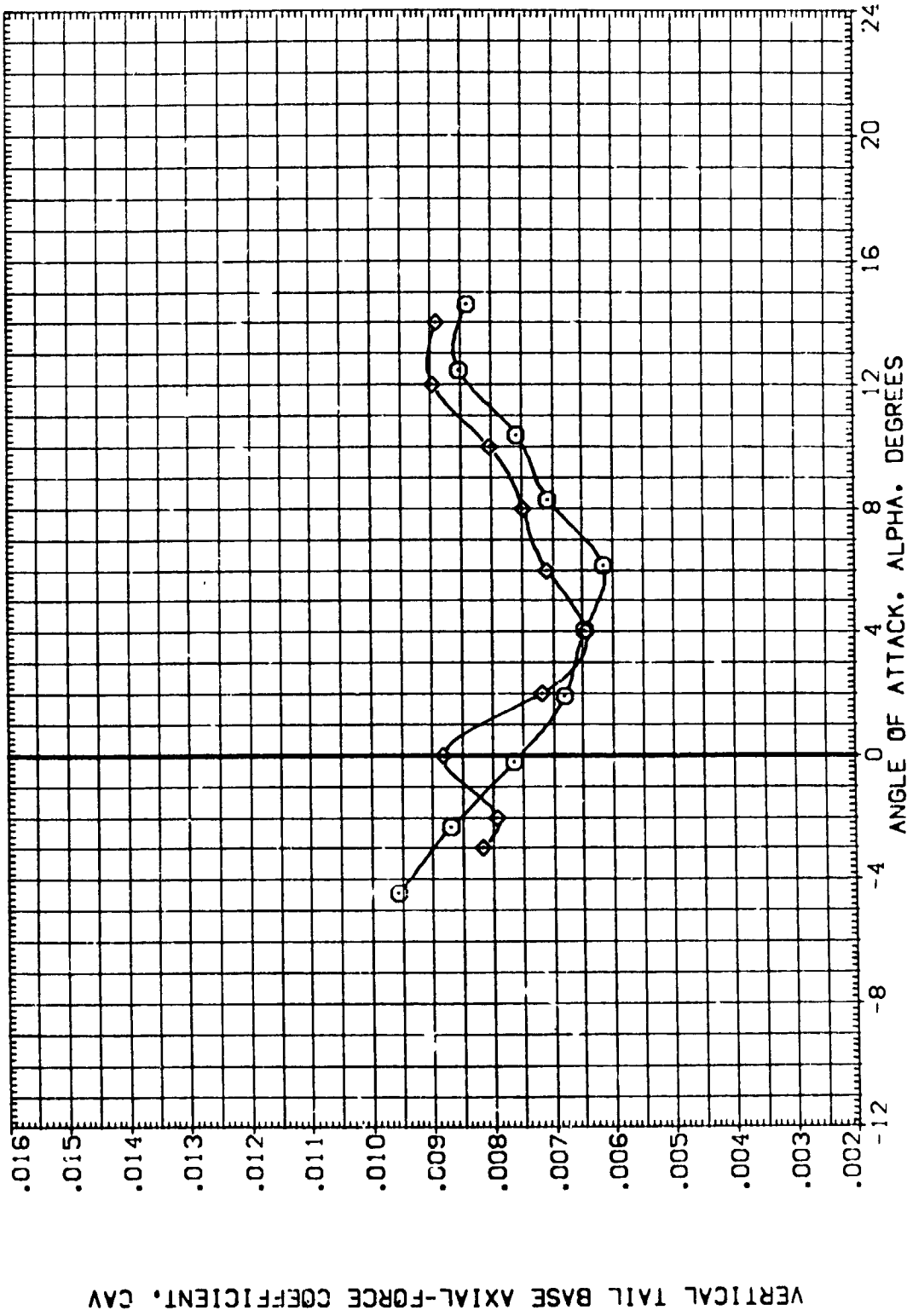
BREF 1.1710 FT.

ZMRP 12.6255 IN.

ZMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150



VERTICAL TAIL BASE AXIAL-FORCE COEFFICIENT, CAV

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(E)MACH .95

DATA SET SYMBOL CONFIGURATION DESCRIPTION

{ 06018 }	ARC 66-709 DASS 011A-(N24)
{ 06020 }	ARC 66-709 DASS 011A-(N24)
{ 06019 }	ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)
{ 06020 }	ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	50. FT.
LREF	.5835	FT.
BREF	1.1710	FT. IN.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

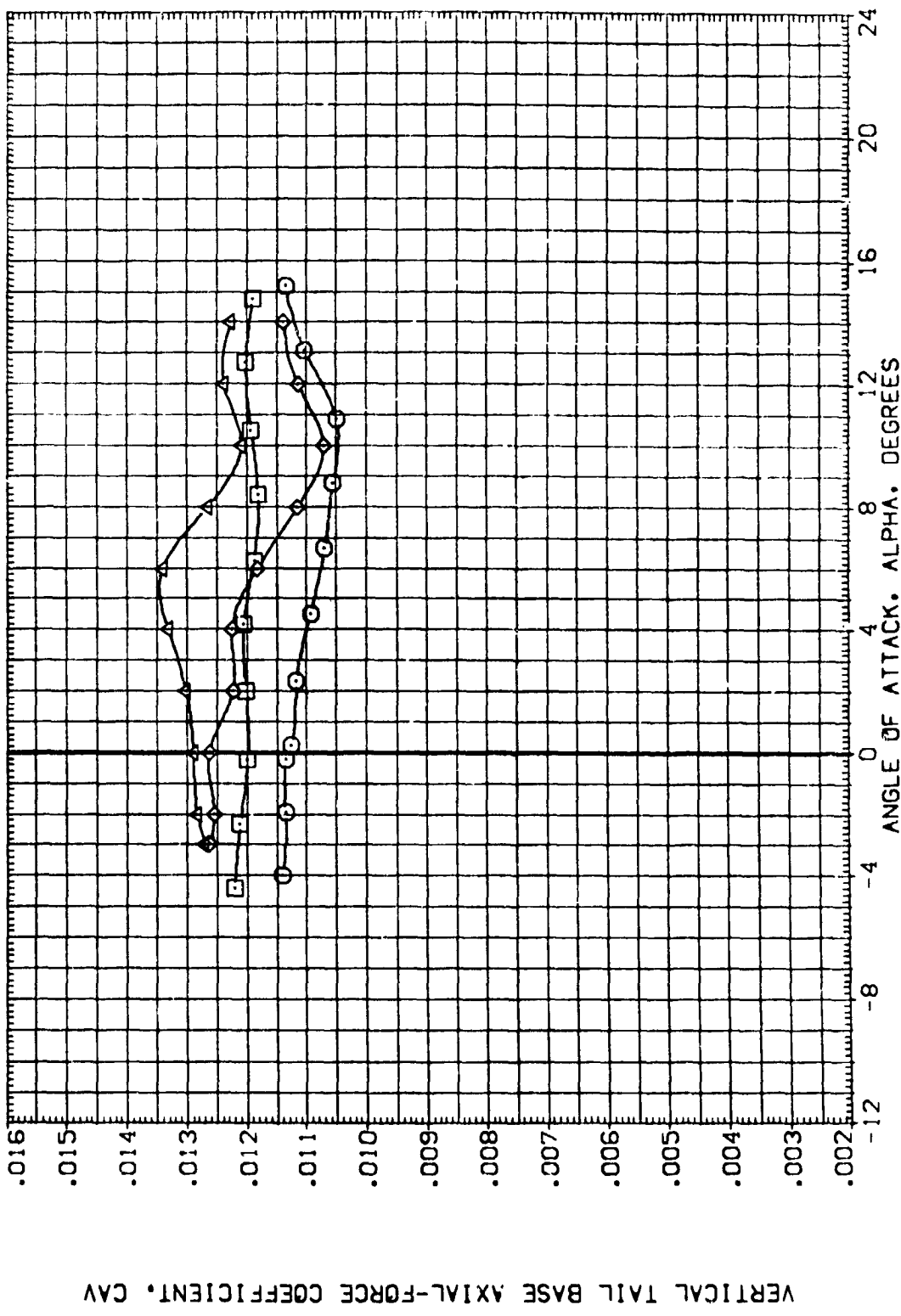


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(F)MACH = 1.20



DATA SET SYMBOL CONFIGURATION DESCRIPTION

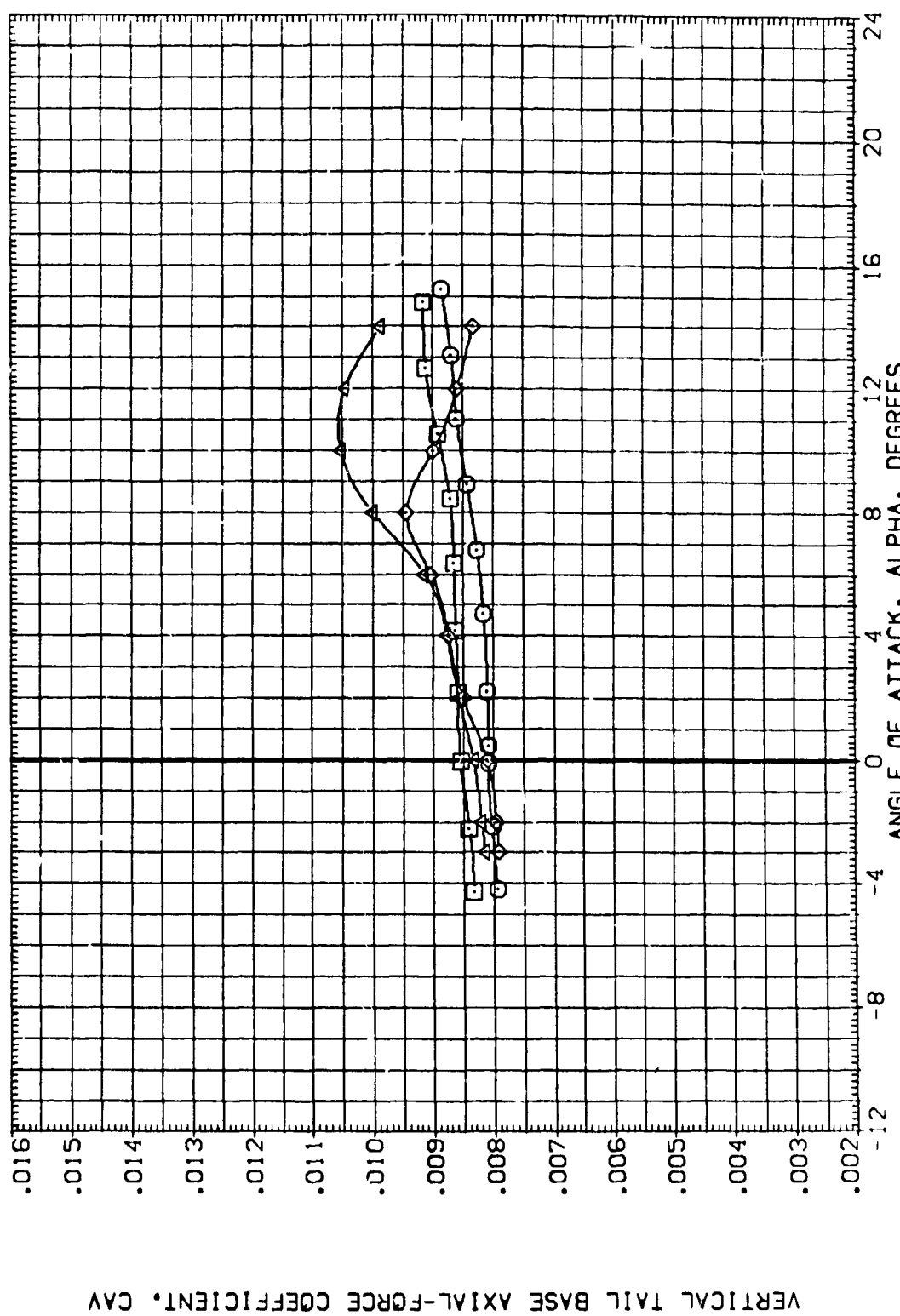
(BER019)	ARC 66-709 QAS9 0111A-(N24)
(BER020)	ARC 66-709 QAS9 0111A-(N24)
(ZER019)	ARC 66-709 QAS9 0111A-N24 (ADJUSTED FOR TARES)
(ZER020)	ARC 66-709 QAS9 0111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	.5935	F.
BREF	1.1710	F.
YMRP	12.6255	IN.
ZMRP	.0000	IN.
SCALE	-.3750	IN.
	.0150	



VERTICAL TAIL BASE AXIAL-FORCE COEFFICIENT, CAV

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.50

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (BERO19) □ ARC 66-709 0A59 0A11A-(N24)
 (BERO20) □ ARC 66-709 0A59 0A11A-(N24)
 (ZERO19) ⊗ ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
 (ZERO20) ⊗ ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDF LAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

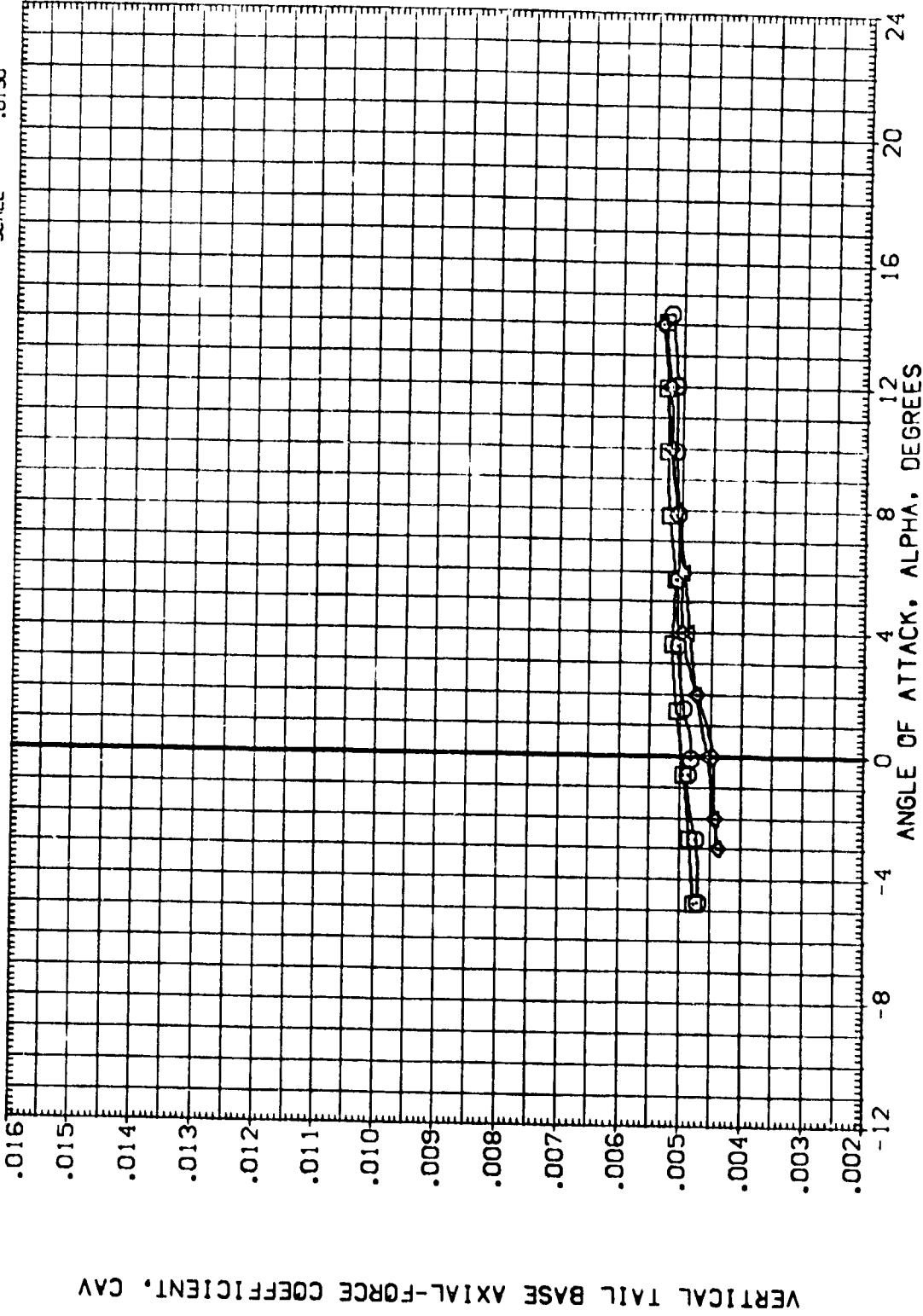


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH = 2.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (BER019) [] ARC 66-709 DA59 0A11A-(N24)
 (BER020) [] ARC 66-709 DA59 0A11A-(N24)
 (ZER019) [X] ARC 66-709 DA59 011A-N24 (ADJUSTED FOR TARES)
 (ZER020) [X] ARC 66-709 DA59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ
 LREF .5935 F
 BREF 1.1710 IN.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

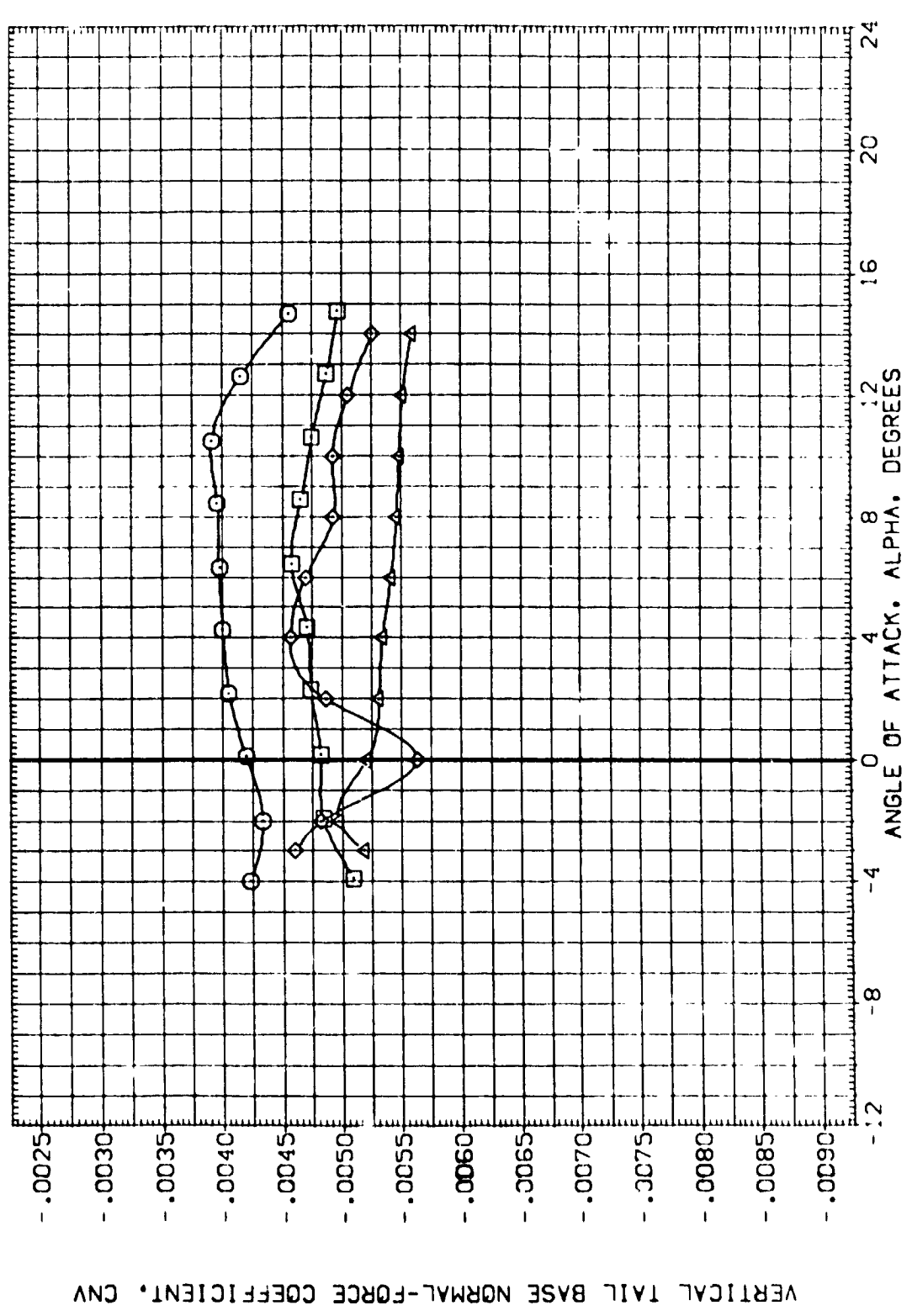


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(A)MAC = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(BER019)	ARC 66-709 DA59 DA11A-(N24)
(BER020)	ARC 66-709 DA59 DA11A-(N24)
(ZER019)	ARC 66-709 DA59 011A-N24 (ADJUSTED FOR TARES)
(ZER020)	ARC 66-709 DA59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BUFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	50. FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

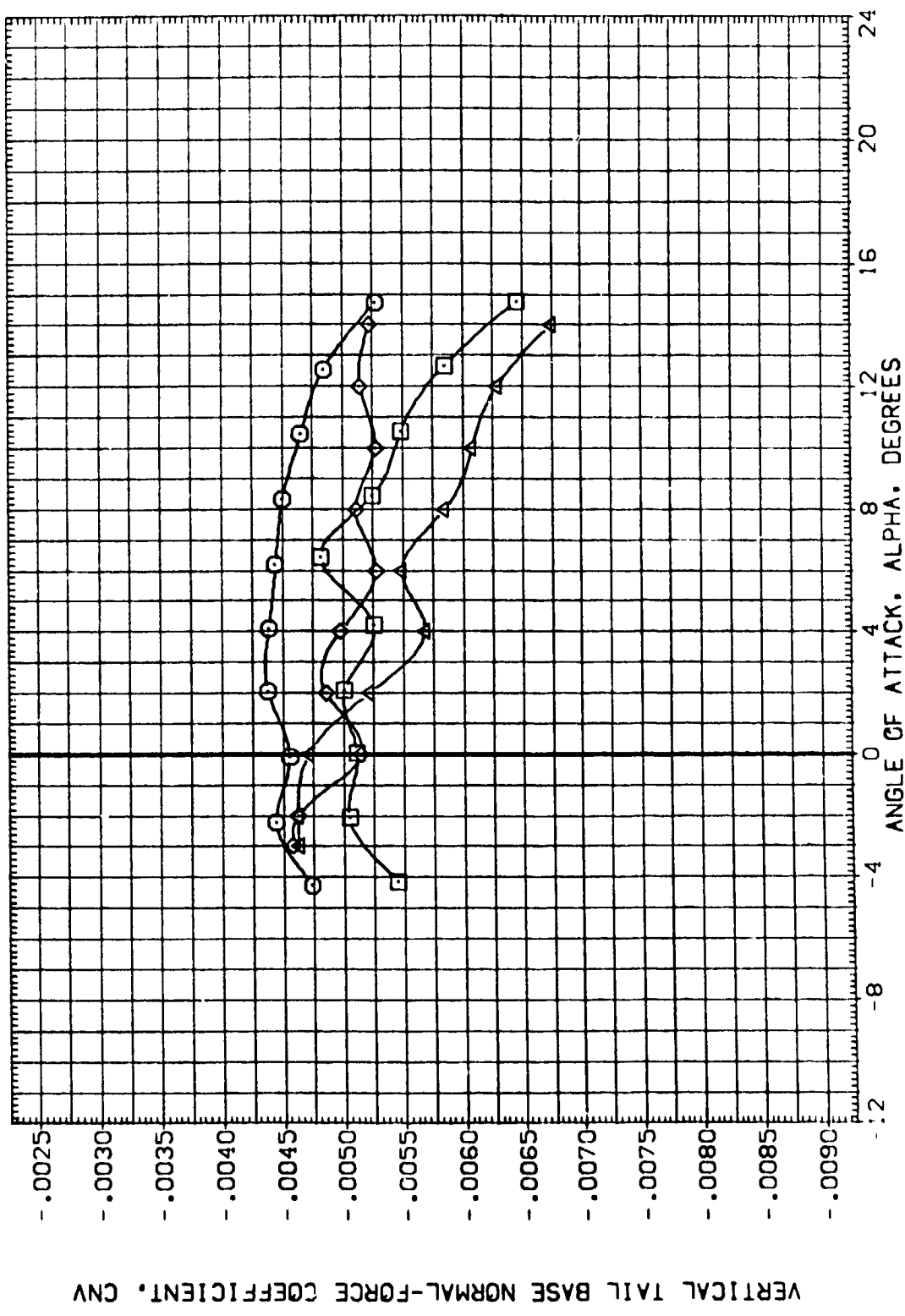


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(B) MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(BER019) ARC 66-709 QAS9 0111A-(N24)
 (BER020) DATA NOT AVAILABLE
 (ZER019) ARC 66-709 QAS9 0111A-N24 (ADJUSTED FOR TARES)
 (ZER020) DATA NOT AVAILABLE

BETA ELEVON BOFLAP

.000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.
 LREF .5935 FT.
 BRFF 1.1710 FT.
 XMRRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

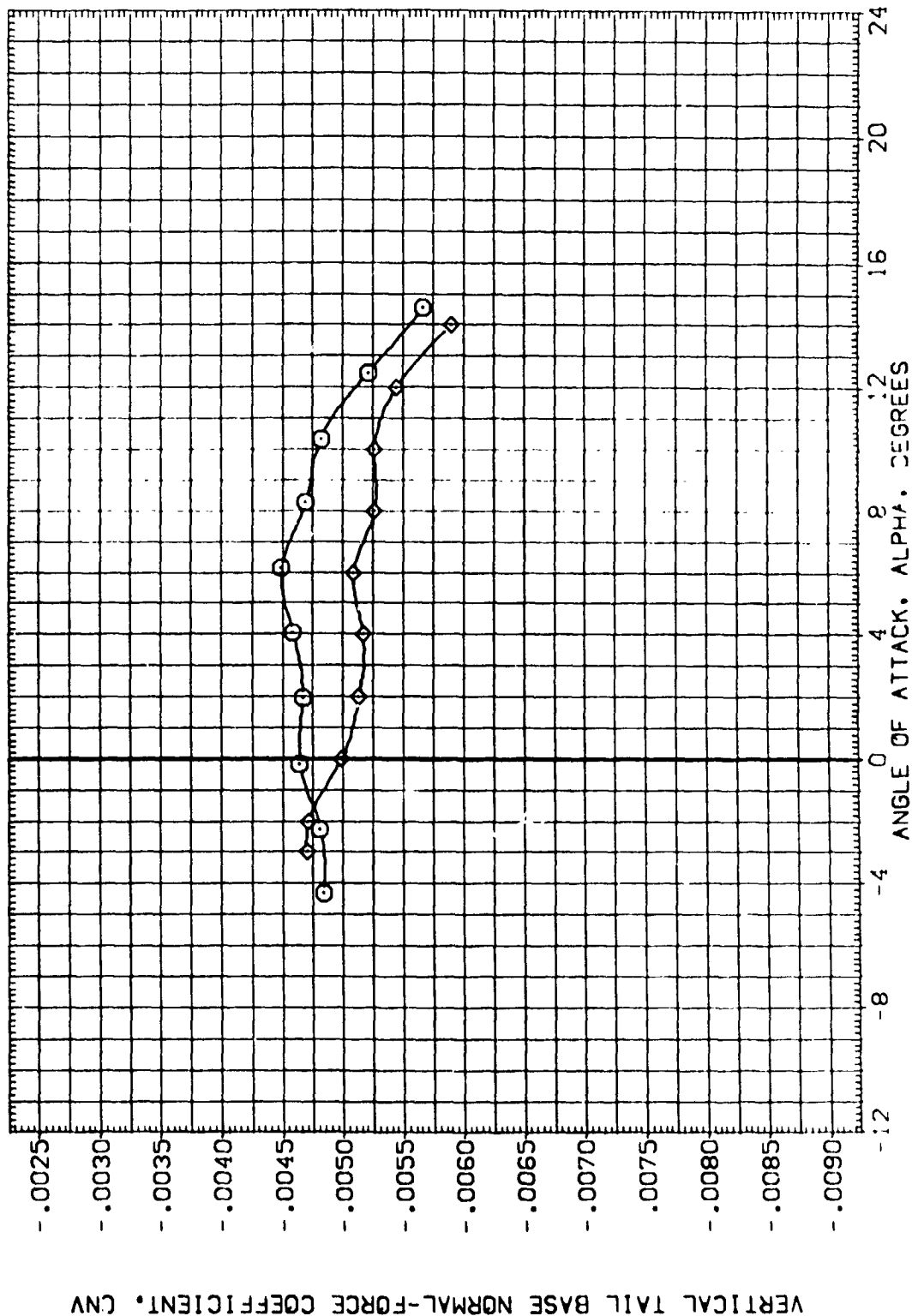


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C)MACI .85

REFERENCE INFORMATION
 SREF .6053 50.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (BE R019) [] ARC 66-709 DA59 DA11A-(N24)
 (BE R020) [] ARC 66-709 DA59 DA11A-(N24)
 (ZL R019) [X] ARC 66-709 DA59 011A-N24 (ADJUSTED FOR TARES)
 (ZL R020) [X] ARC 66-709 DA59 011A-N24 (ADJUSTED FOR TARES)

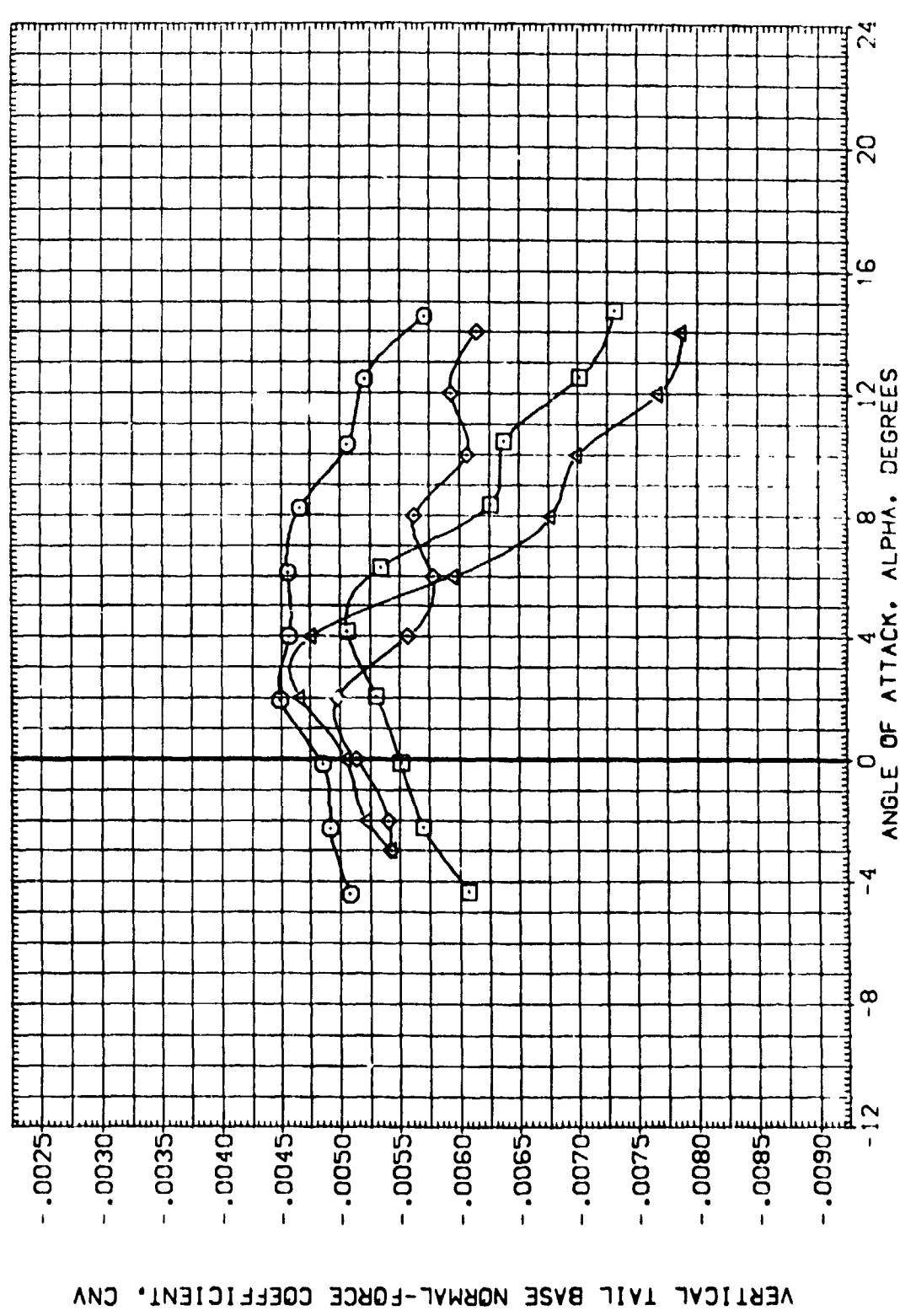


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(D)MACH .90



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (BF R019) ARC 66-709 DASS 0A11A-(N24)
 (BE R020) DATA NOT AVAILABLE
 (ZF R019) ARC 66-709 DASS 0I1A-N24 (ADJUSTED FOR TARES)
 (ZF R020) DATA NOT AVAILABLE

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LRREF .5935 FT.
 BRREF 1.1710 FT.
 XMRRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

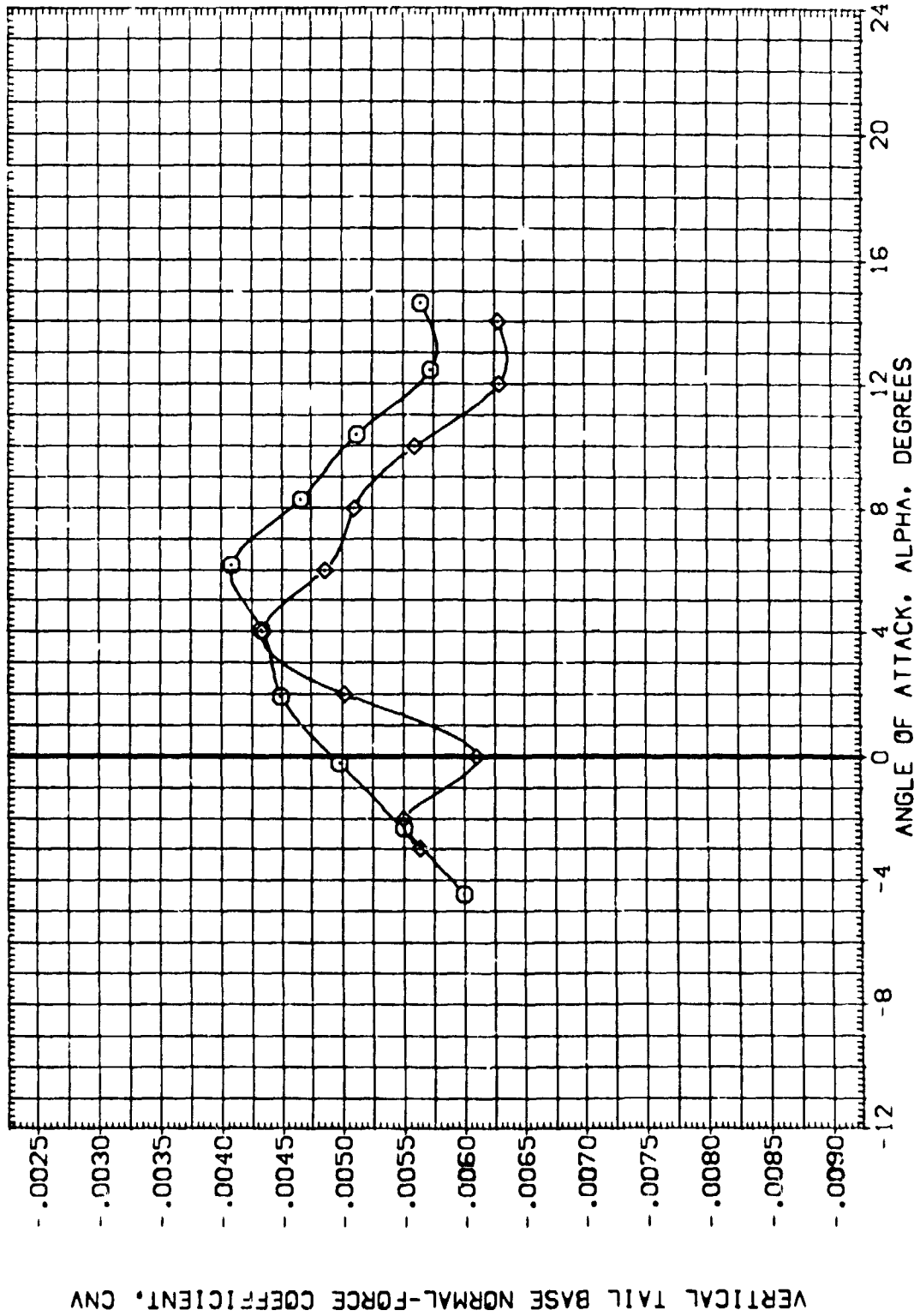


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(E)MACH .95

DATA SET SYMBO. CONFIGURATION DESCRIPTION

(BER019)	ARC 66-709 DASS	0111A-N24
(BER020)	ARC 66-709 DASS	0111A-N24
(ZER019)	ARC 66-709 DASS	0111A-N24 (ADJUSTED FOR TARES)
(ZER020)	ARC 66-709 DASS	0111A-N24 (ADJUSTED FOR TARES)

BETA

ELEVON	BOFLAP
.000	-11.700
.000	-11.700
.000	-11.700
.000	-11.700

REFERENCE INFORMATION

SREF	SO.FT.
LREF	FT.
BREF	FT.
XMRP	IN.
YMRP	IN.
ZMRP	IN.
SCALE	.0150

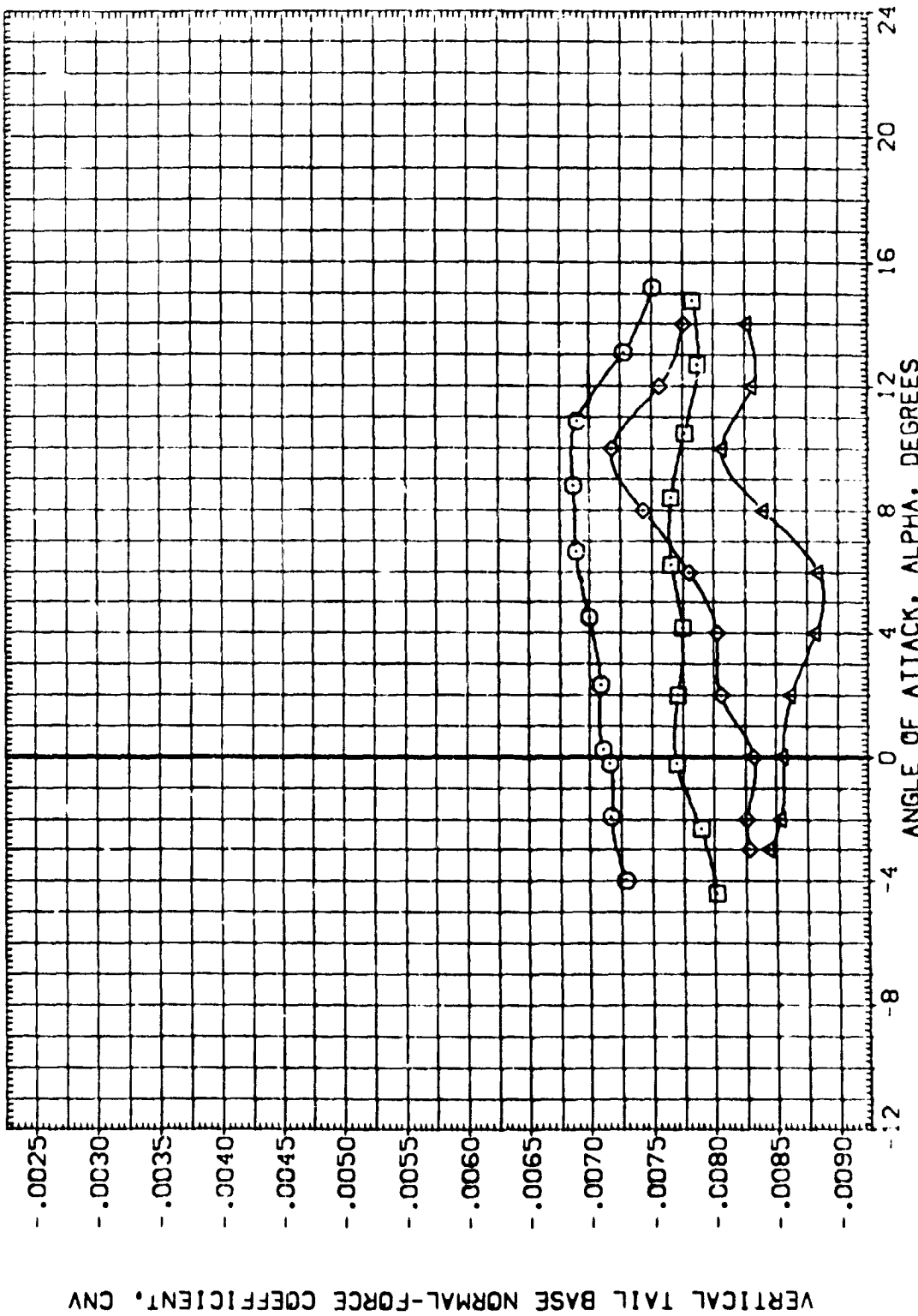


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(MACH = 1.20)



DATA S/LT SYMBOL CONFIGURATION DESCRIPTION

(B6R019)	ARC 66-709 DASS D111A-N24
(B6R020)	ARC 66-709 DASS D111A-N24
(Z6R019)	ARC 66-709 DASS D11A-N24 (ADJUSTED FOR TARES)
(Z6R020)	ARC 66-709 DASS D11A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDF LAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	50. FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMPP	12.6255	IN.
YMPP	.0000	IN.
ZMPP	-.3750	IN.
SCALE	.0150	

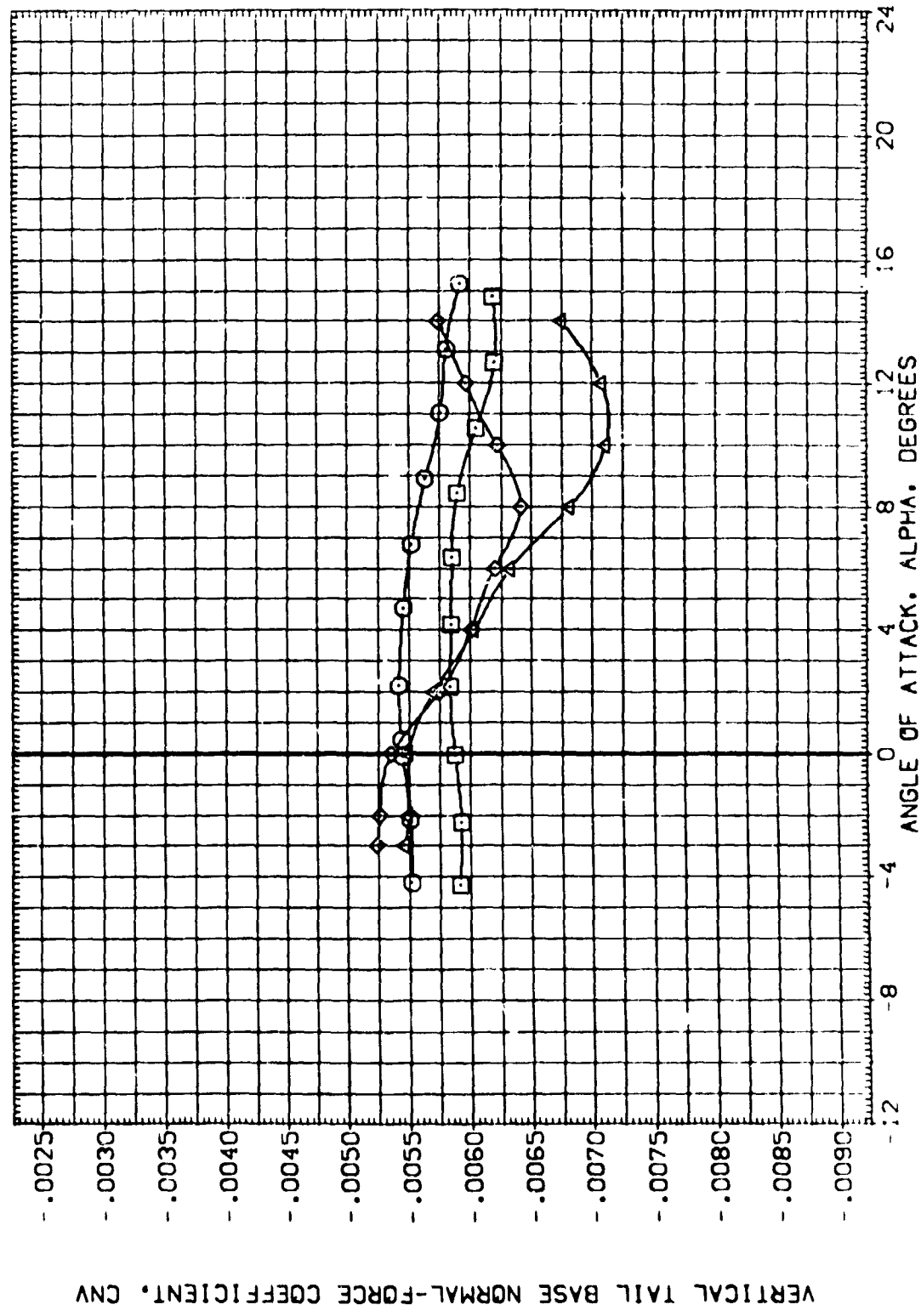


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(G)MAC 1.50

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (BER019) \square ARC 66-709 DA59 0111A-N24
 (BR020) \square ARC 66-709 DA59 0111A-N24
 (ZL019) \square ARC 66-709 DA59 0111A-N24 (ADJUSTED FOR TARES)
 (ZER020) \square ARC 66-709 DA59 0111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5975 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

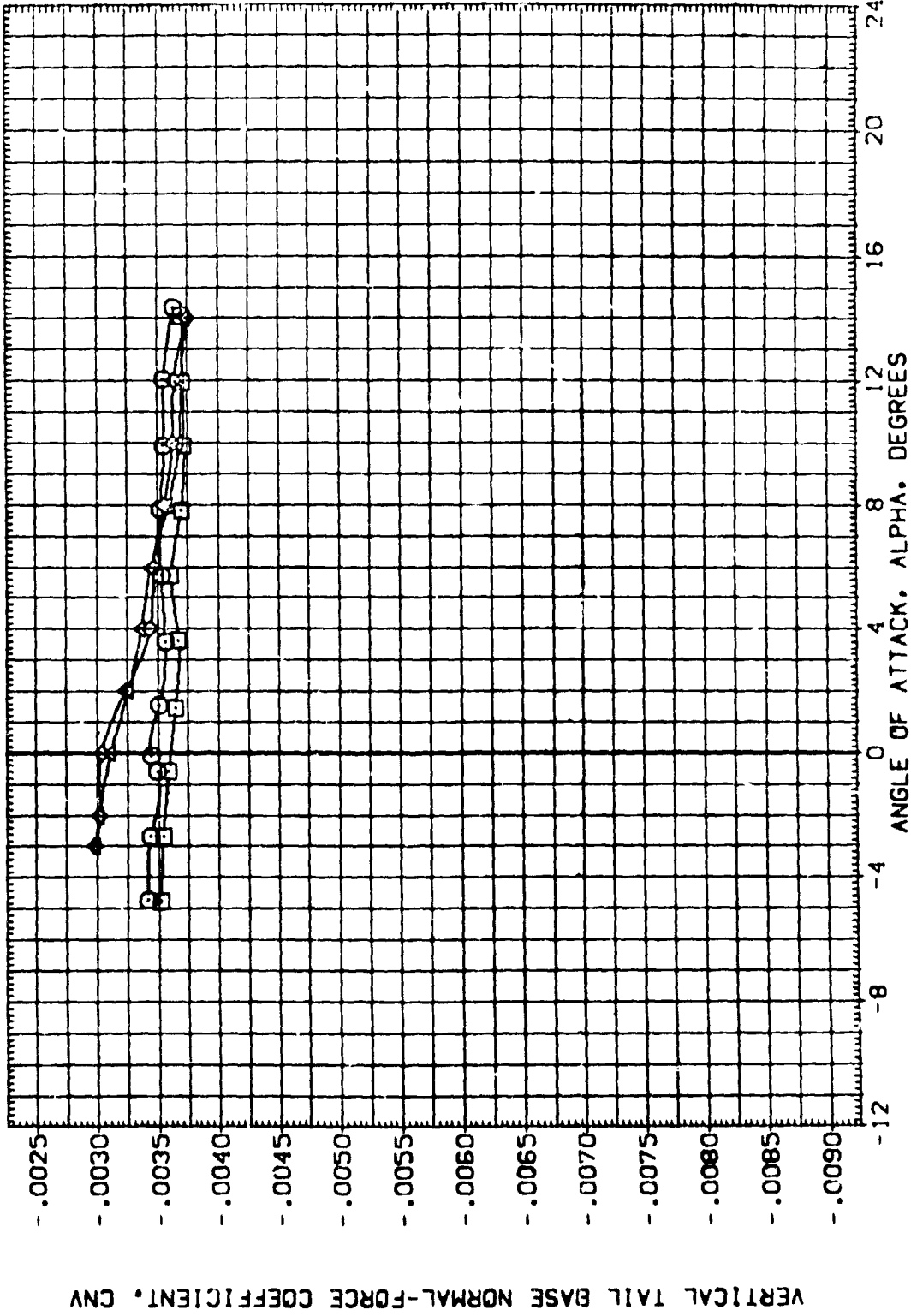


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH = 2.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(BER019)	ARC 66-709 DASS 011A-(N24)
(BER070)	ARC 66-709 DASS 011A-(N24)
(ZER019)	ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)
(ZER070)	ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	50.FT.
LREF	.5936	F.
BREF	1.1710	F.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

FORWARD VERTICAL TAIL BASE PITCHING MOMENT COEFFICIENT, CMFWD

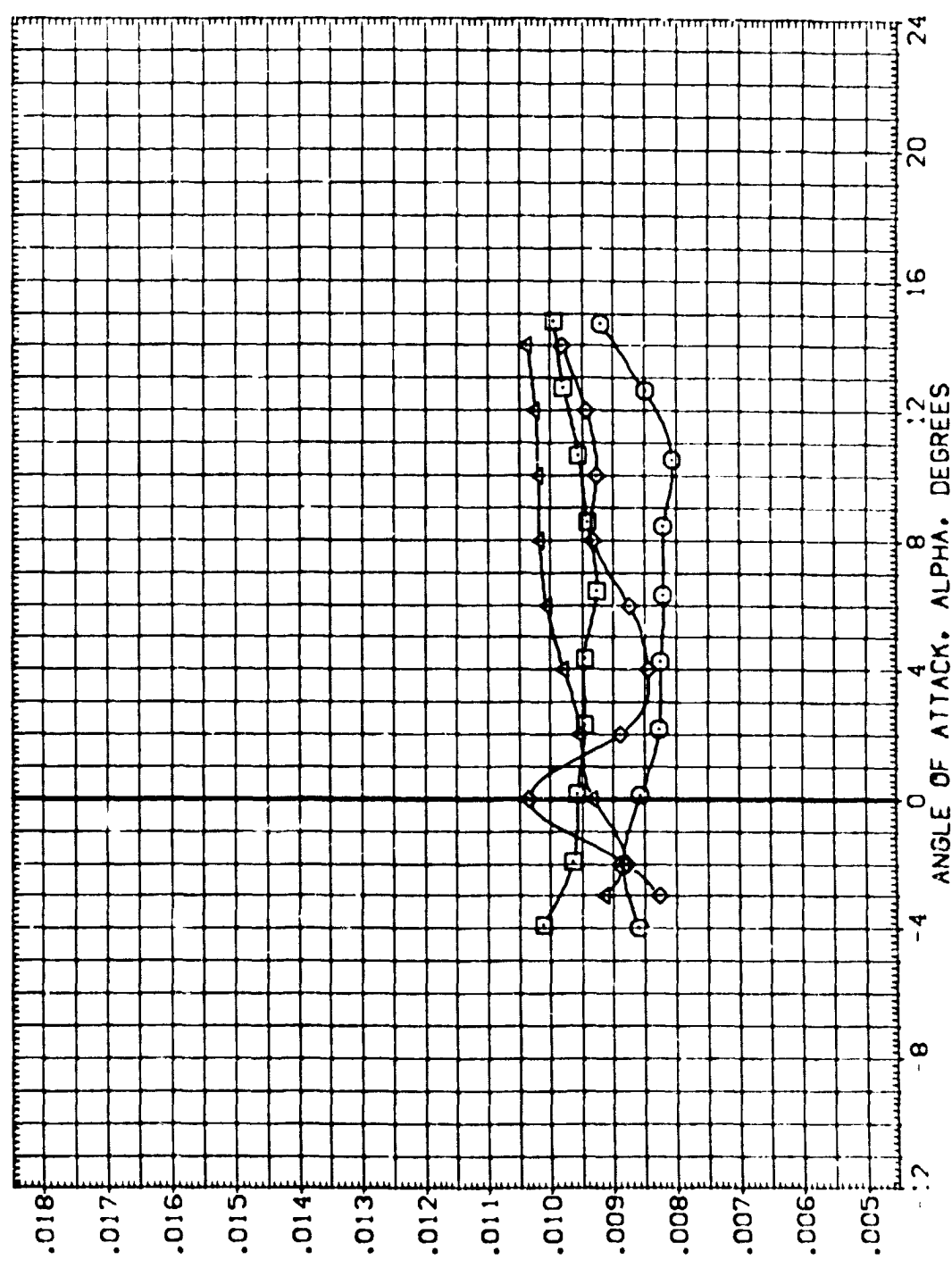


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(A) MAC = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(BE R019)	ARC 66-709 DA59	0111A-(N24)
(BE R020)	ARC 66-709 DA59	0111A-(N24)
(ZE R019)	ARC 66-709 DA59	0111A-N24 (ADJUSTED FOR TARES)
(ZE R020)	ARC 66-709 DA59	0111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDF LAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	50. FT.
LREF	.5936	FT.
BREF	1.1710	FT.
XMRD	12.6255	IN.
YMRD	.0000	IN.
ZMRD	-.3750	IN.
SCALE	.0150	

FORWARD VERTICAL TAIL BASE PITCHING MOMENT COEFFICIENT, CMFWD

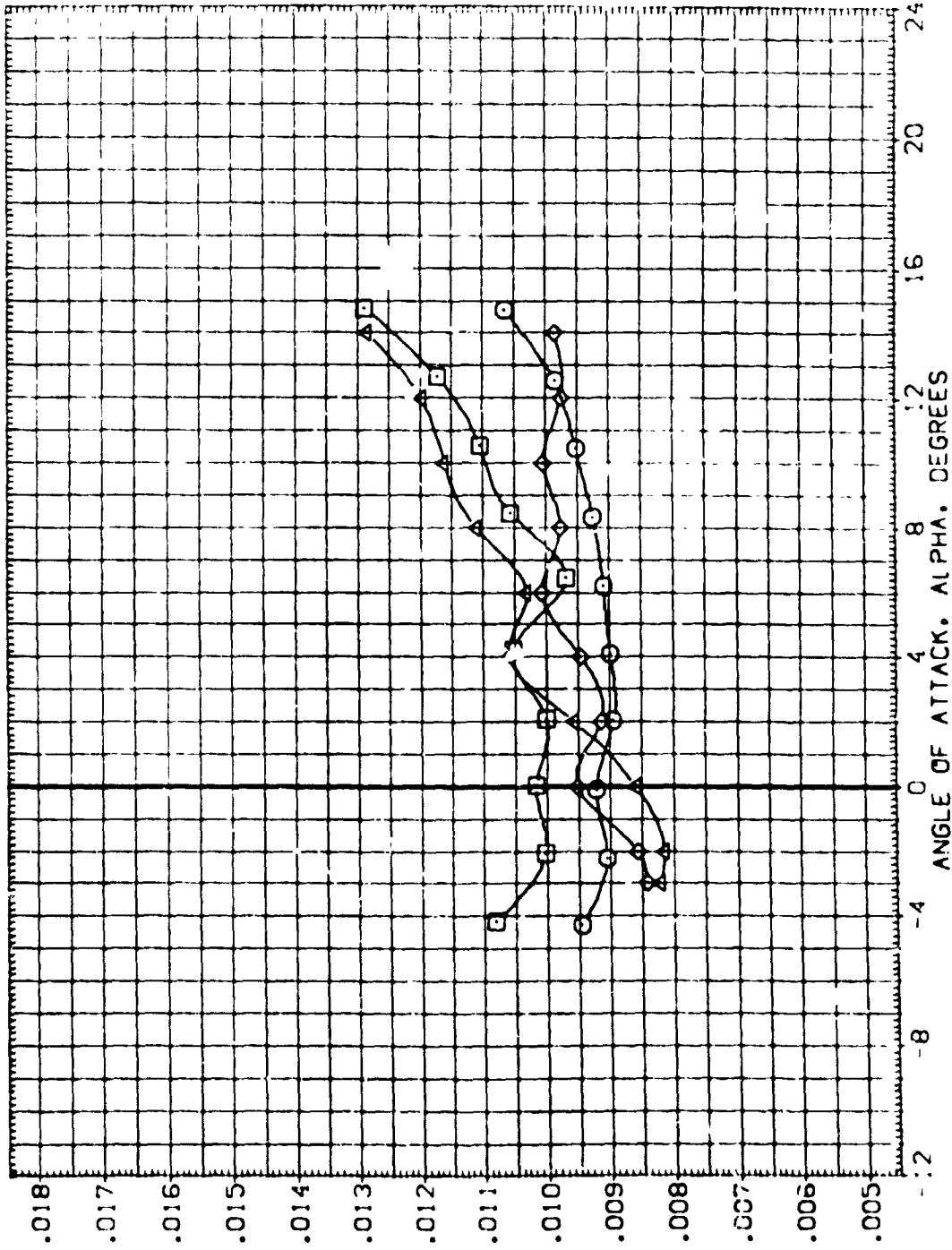


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

.80



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (BER019) ARC 66-709 DASS 0A11A-(N24)
 (BER020) DATA NOT AVAILABLE
 (ZER019) ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)
 (ZER020) DATA NOT AVAILABLE

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 50.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 YMRP 12.6255 IN.
 ZMRP .0000 IN.
 SCALE -.3750 IN.

FORWARD VERTICAL TAIL BASE PITCHING MOMENT COEFFICIENT, CMFW

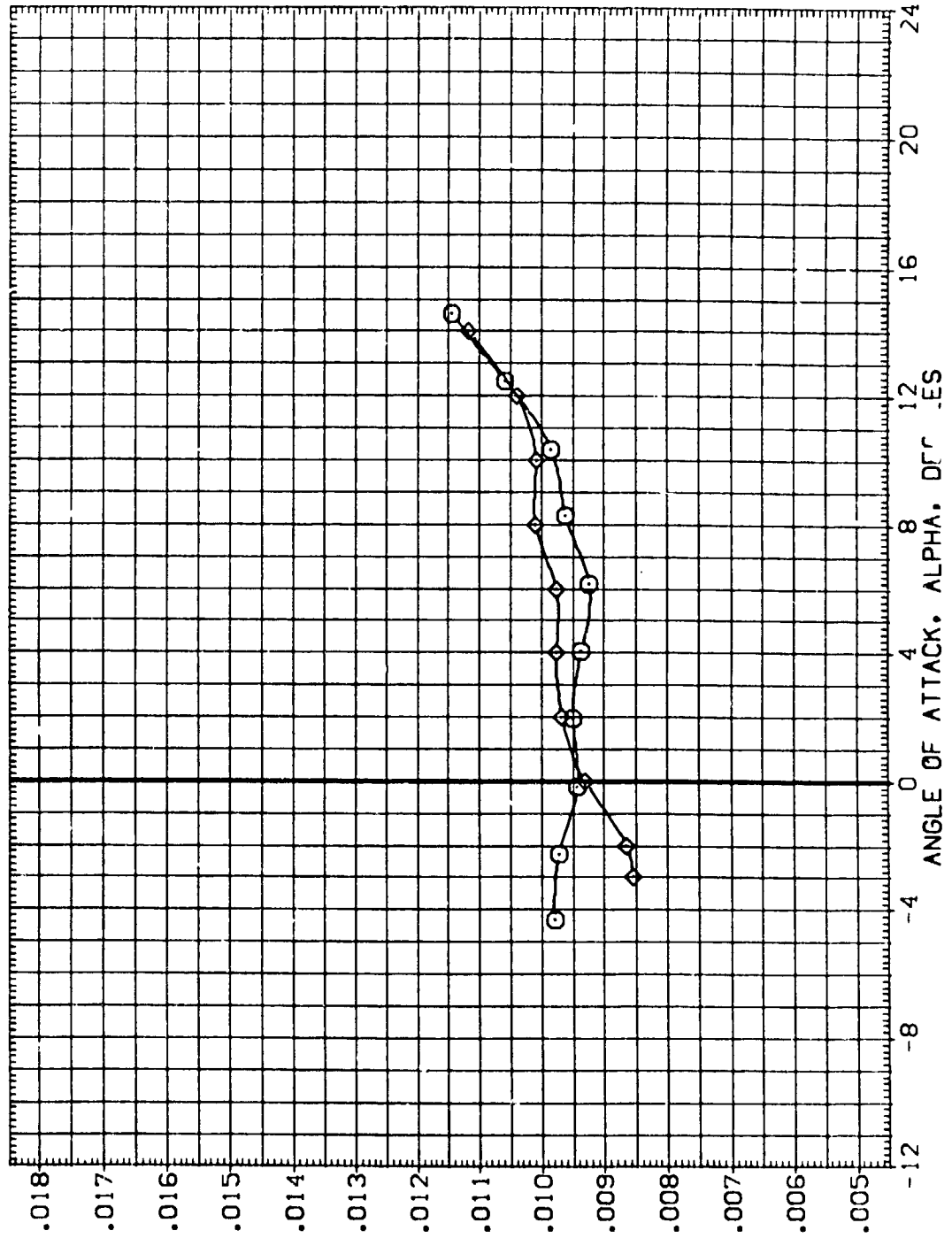


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .85

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(BER019)	ARC 66-709 OA59 0A11A-N24
(BER020)	ARC 66-709 OA59 0A11A-N24
(ZER019)	ARC 66-709 OA59 011A-N24 (ADJUSTED FOR TARES)
(ZER020)	ARC 66-709 OA59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SO.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

FORWARD VERTICAL TAIL BASE PITCHING MOMENT COEFFICIENT, CM/FWD

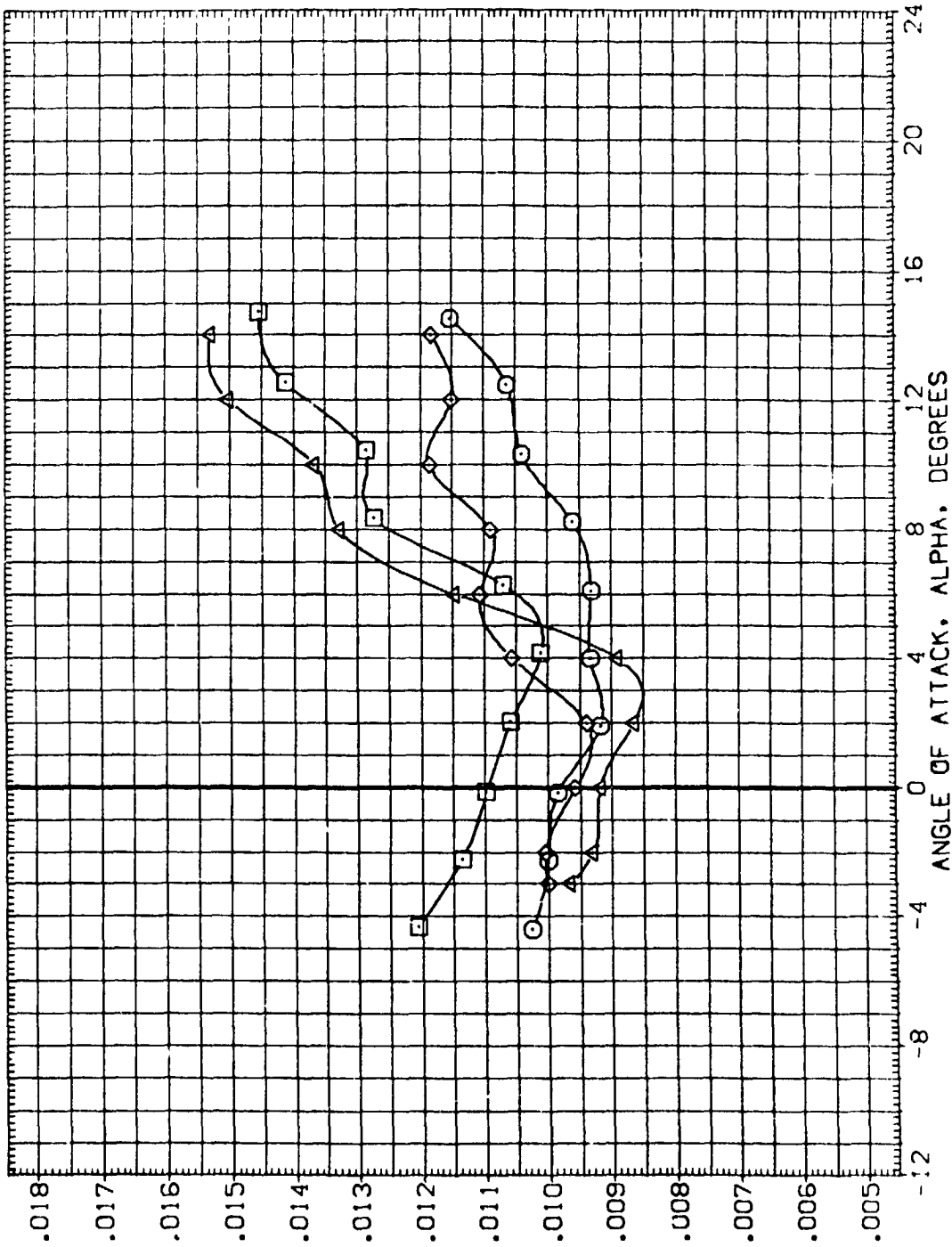


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 (BER019) ARC 66-709 DASS 0111A-(N24)
 (BER020) DATA NOT AVAILABLE
 (ZER019) ARC 66-709 DASS 0111A-N24 (ADJUSTED FOR TARES)
 (ZER020) DATA NOT AVAILABLE

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

FORWARD VERTICAL TAIL BASE PITCHING MOMENT COEFFICIENT, CMVFWD

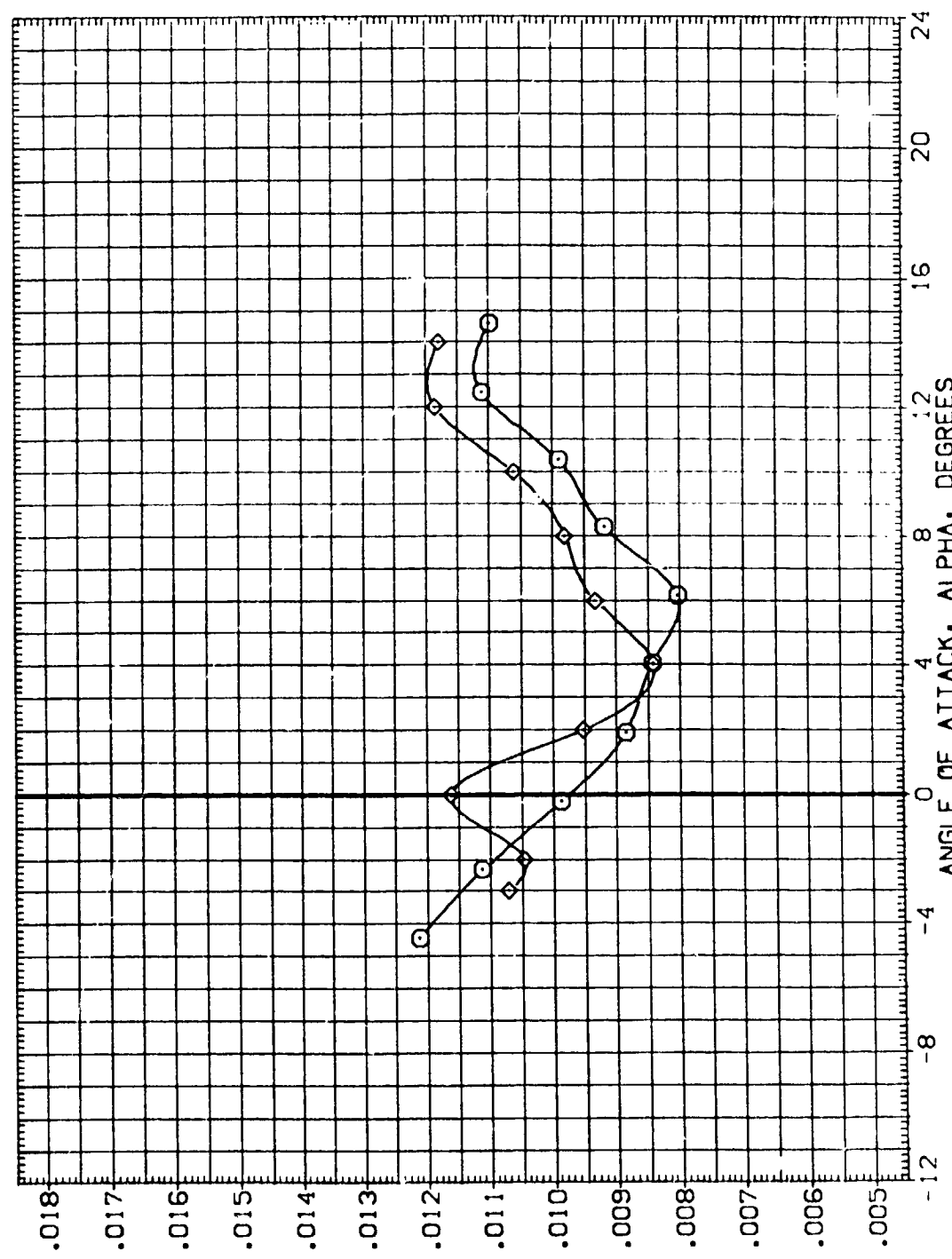


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(E)MAC = .95

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(BE019)	ARC 66-709	QAS9	0111A-(N24)
(BE020)	ARC 66-709	QAS9	0111A-(N24)
(ZE019)	ARC 66-709	QAS9	0111A-N24 (ADJUSTED FOR TARES)
(ZE020)	ARC 66-709	QAS9	0111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDF LAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

FORWARD VERTICAL TAIL BASE PITCHING MOMENT COEFFICIENT, CMFW/D

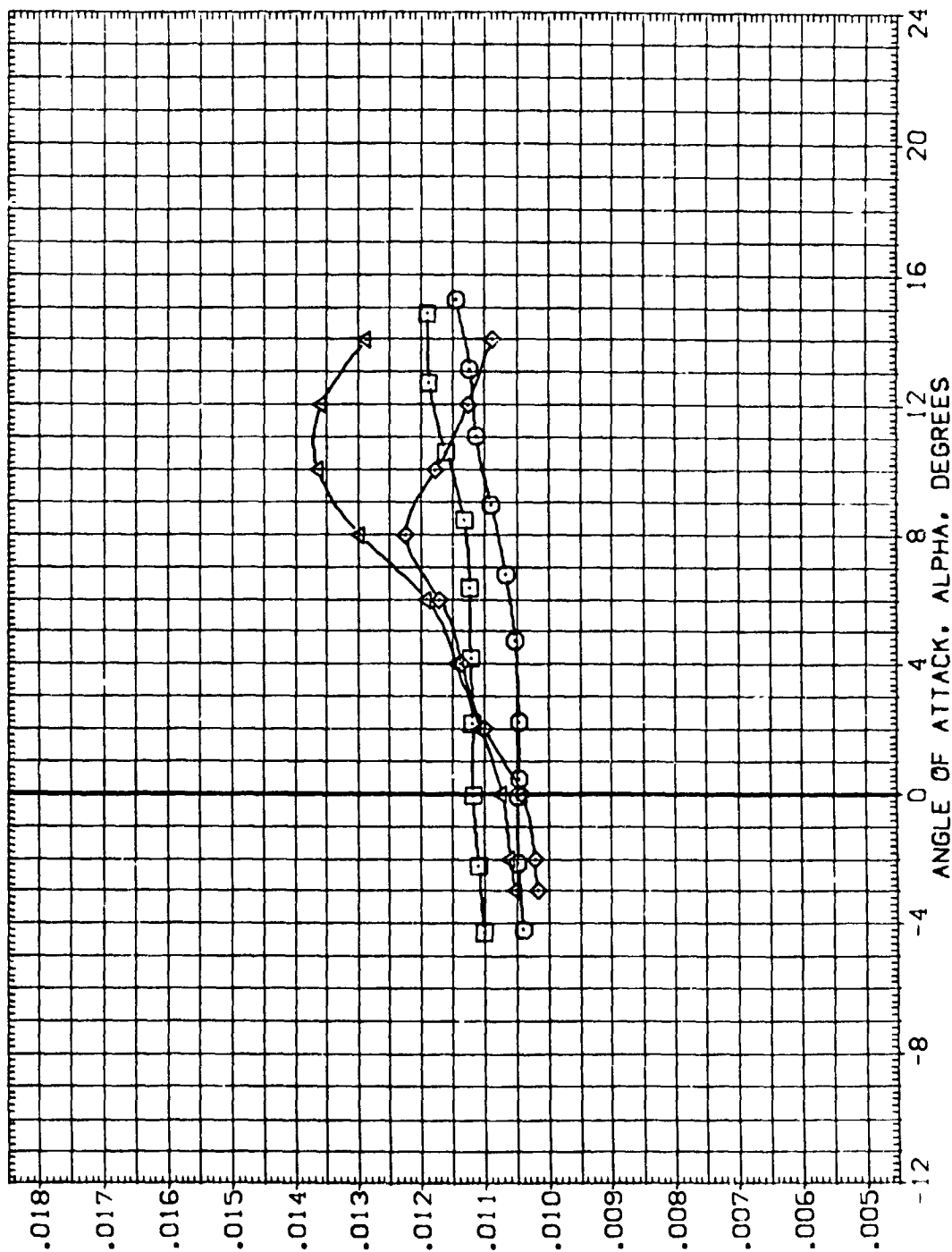


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.50

REFERENCE INFORMATION
 SREF .5053 SD.FT.
 LREF .5325 FT.
 BREF 1.1710 FT. IN.
 XMSP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA .000 ELEVON .000 BOFLAP -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

CONFIGURATION DESCRIPTION
 ARC 66-708 D459 O11A-(N24)
 ARC 66-708 D459 O11A-(N24)
 ARC 66-708 D459 O11A-N24 (ADJUSTED FOR TARES)
 ARC 66-708 D459 O11A-N24 (ADJUSTED FOR TARES)

DATA SET SYMBOL
 (BERO19) 
 (BERO20) 
 (ZERO19) 
 (ZERO20) 

FORWARD VERTICAL TAIL BASE PITCHING MOMENT COEFFICIENT, CMVFWD

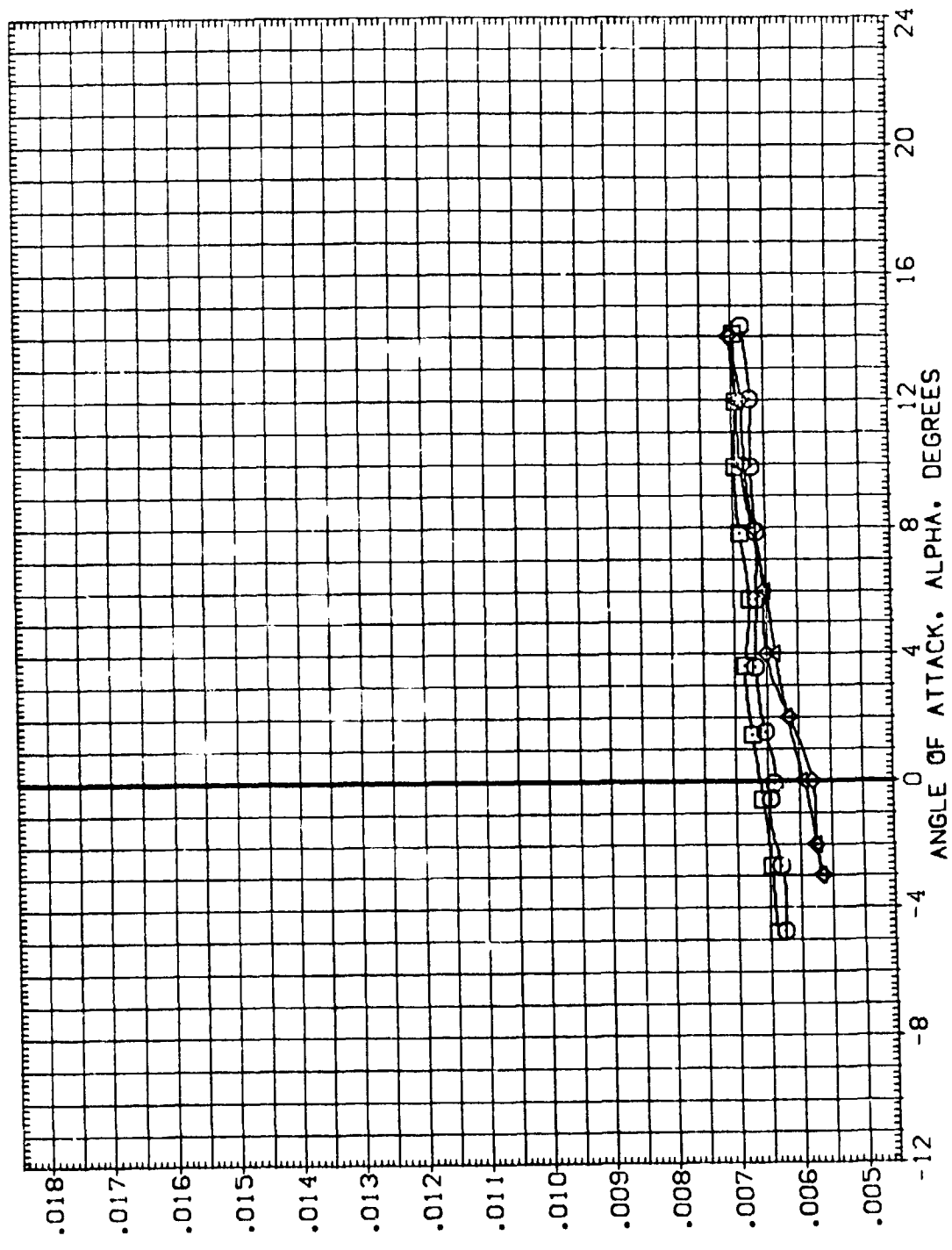


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(H)MACH = 2.00



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(BER019)	ARC 66-709 0A59 0A11A-(N24)
(BER020)	ARC 66-709 0A59 0A11A-(N24)
(ZER019)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
(ZER020)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
YMRP	12.6225	IN.
ZMRP	.0000	IN.
SCALE	-.3750	IN.
		.015C

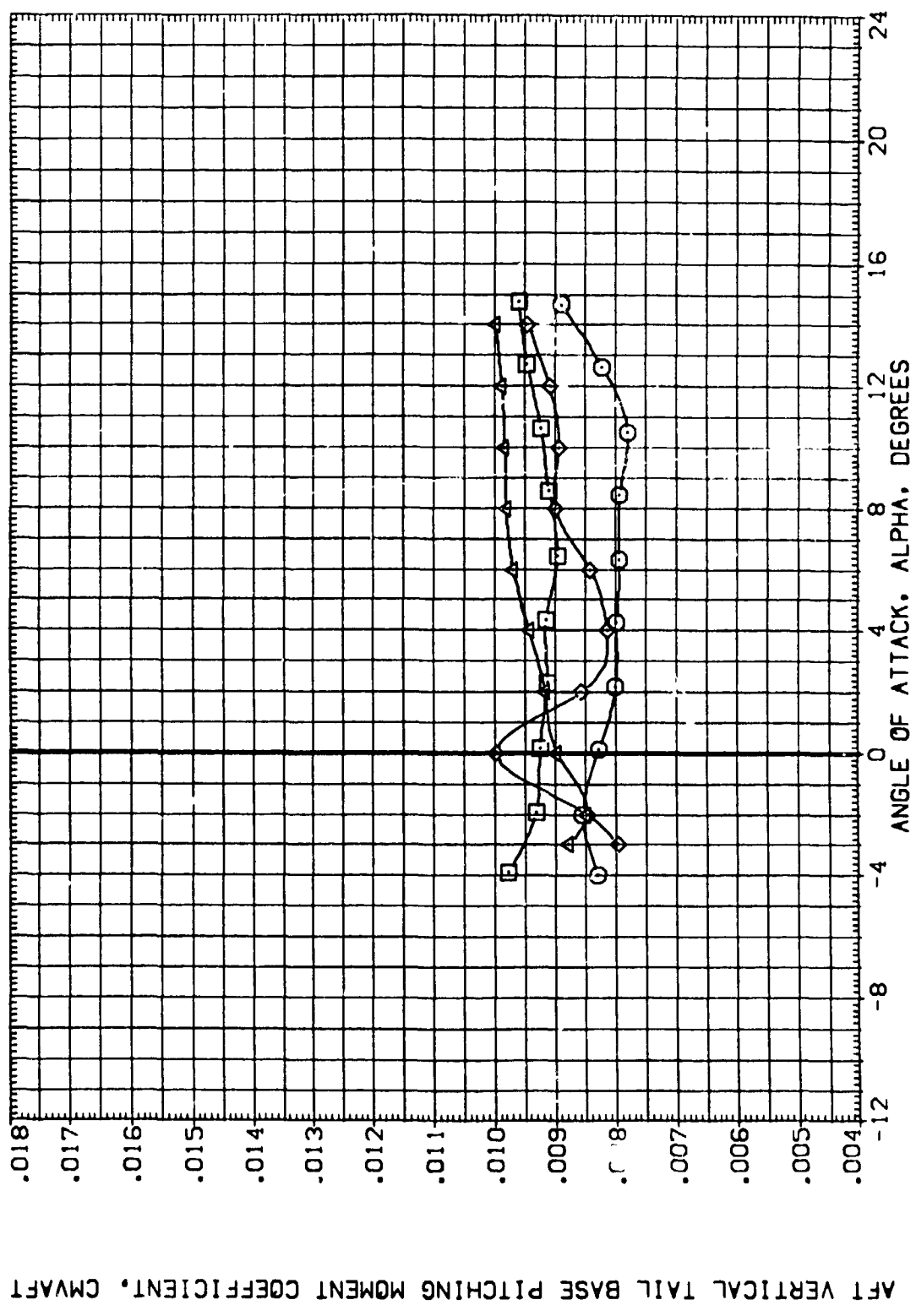


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(A)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(B)RC19) □ ARC 66-709 BASS 0111A-N24

(Z)RC20) ○ ARC 66-709 BASS 0111A-N24

(Z)RC19) △ ARC 66-709 BASS 0111A-N24 (ADJUSTED FOR TARES)

(Z)RC20) × ARC 66-709 BASS 0111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5936 FT.

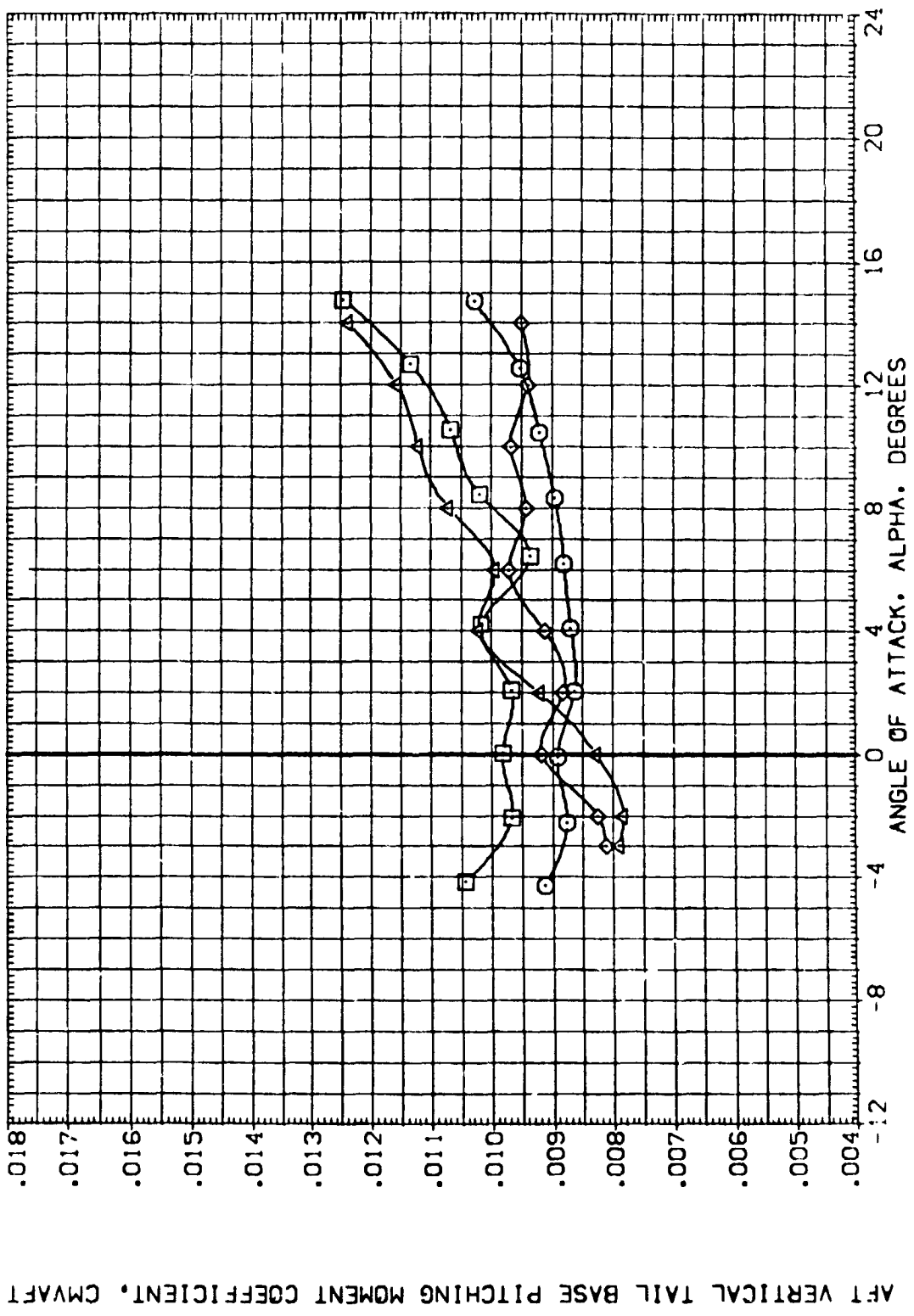
BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150



AFT VERTICAL TAIL BASE PITCHING MOMENT COEFFICIENT, CMVAFT

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(B)MACH = .80



REFERENCE INFORMATION
 SREF .6053 SO.FT.
 LREF .5935 F.
 BREF 1.1710 F.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA ELEVON BDFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

CONFIGURATION DESCRIPTION
 ARC 66-709 GASS D111A-N24
 DATA NOT AVAILABLE
 ARC 66-709 GASS D111A-N24 (ADJUSTED FOR TARES)
 DATA NOT AVAILABLE

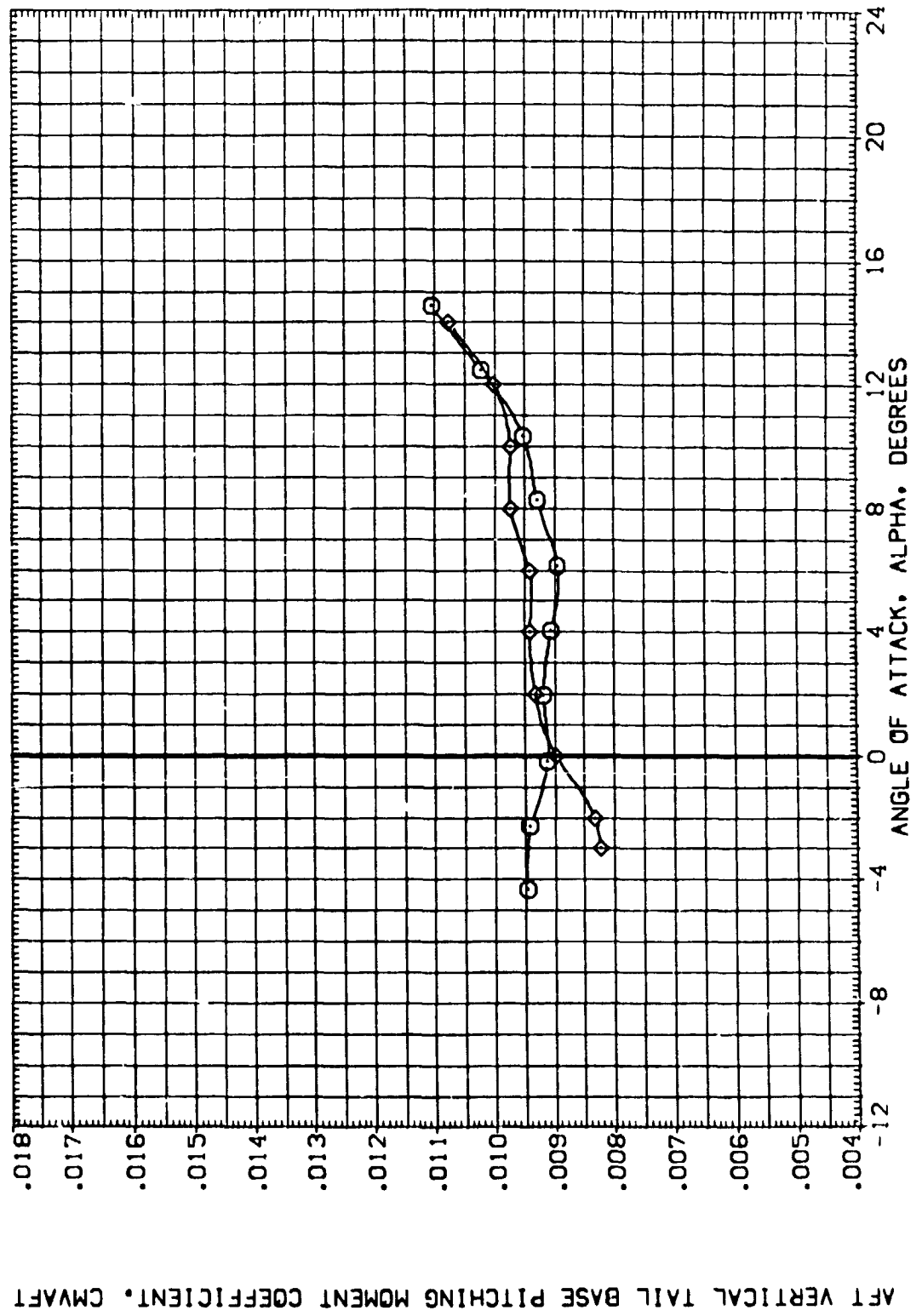


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .85

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(ZERO19)	ARC 66-709	BASE	O111A-N24
(ZERO20)	ARC 66-709	BASE	O111A-N24
(ZERO19)	ARC 66-709	BASE	O111A-N24 (ADJUSTED FOR TARES)
(ZERO20)	ARC 66-709	BASE	O111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDFLAP

.000	.000	-11.700
.000	15.000	-11.700
.000	.000	-11.700
.000	15.000	-11.700

REFERENCE INFORMATION

SREF	.6053	59. FT.
LREF	.5935	FT.
BRREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

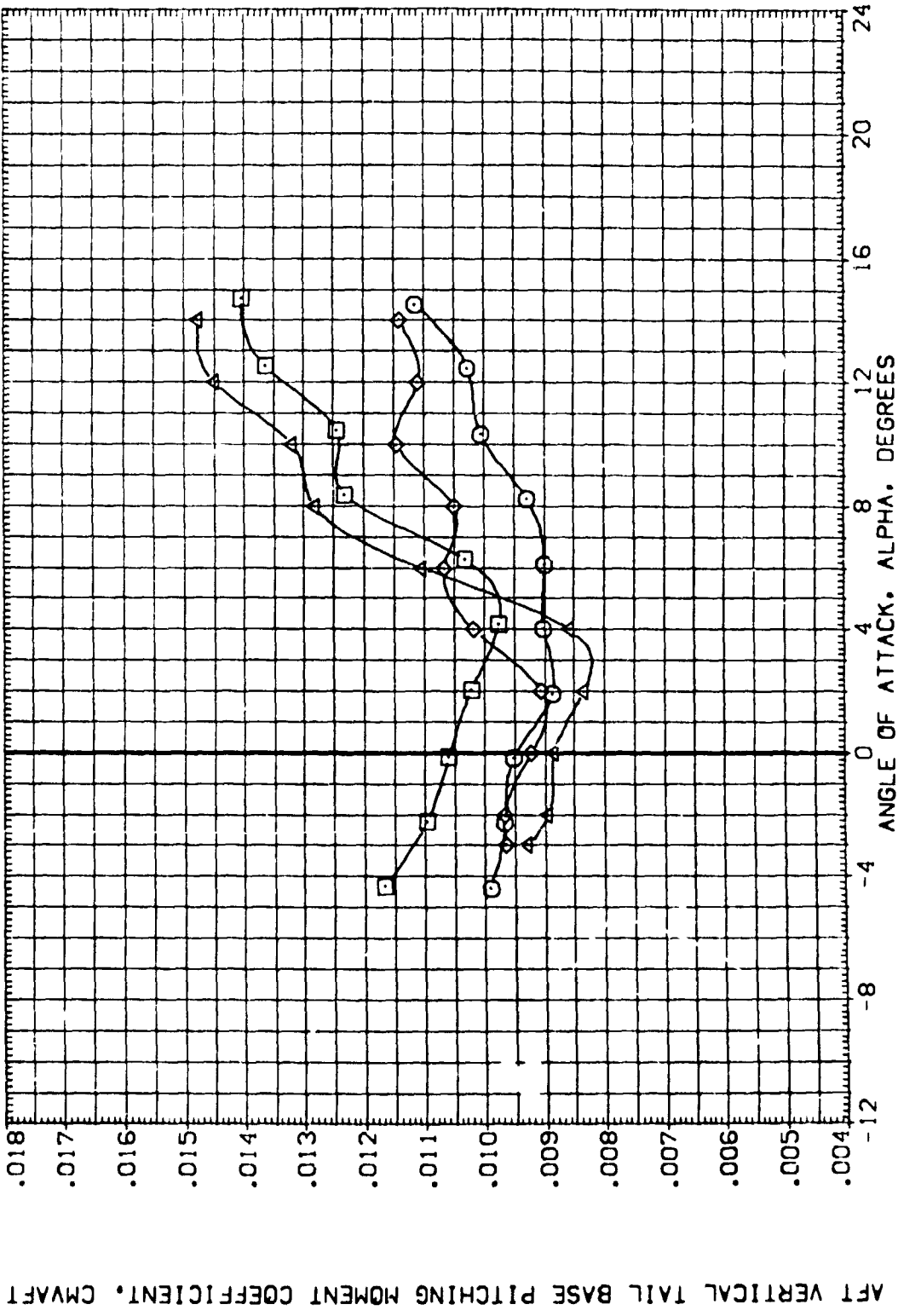


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(0)MACH = .90



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (BERG20) ARC 66-708 OAS9 D111A-N24
 (BERG20) DATA NOT AVAILABLE
 (ZER019) ARC 66-708 OAS9 D111A-N24 (ADJUSTED FOR TARES)
 (ZER020) DATA NOT AVAILABLE

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

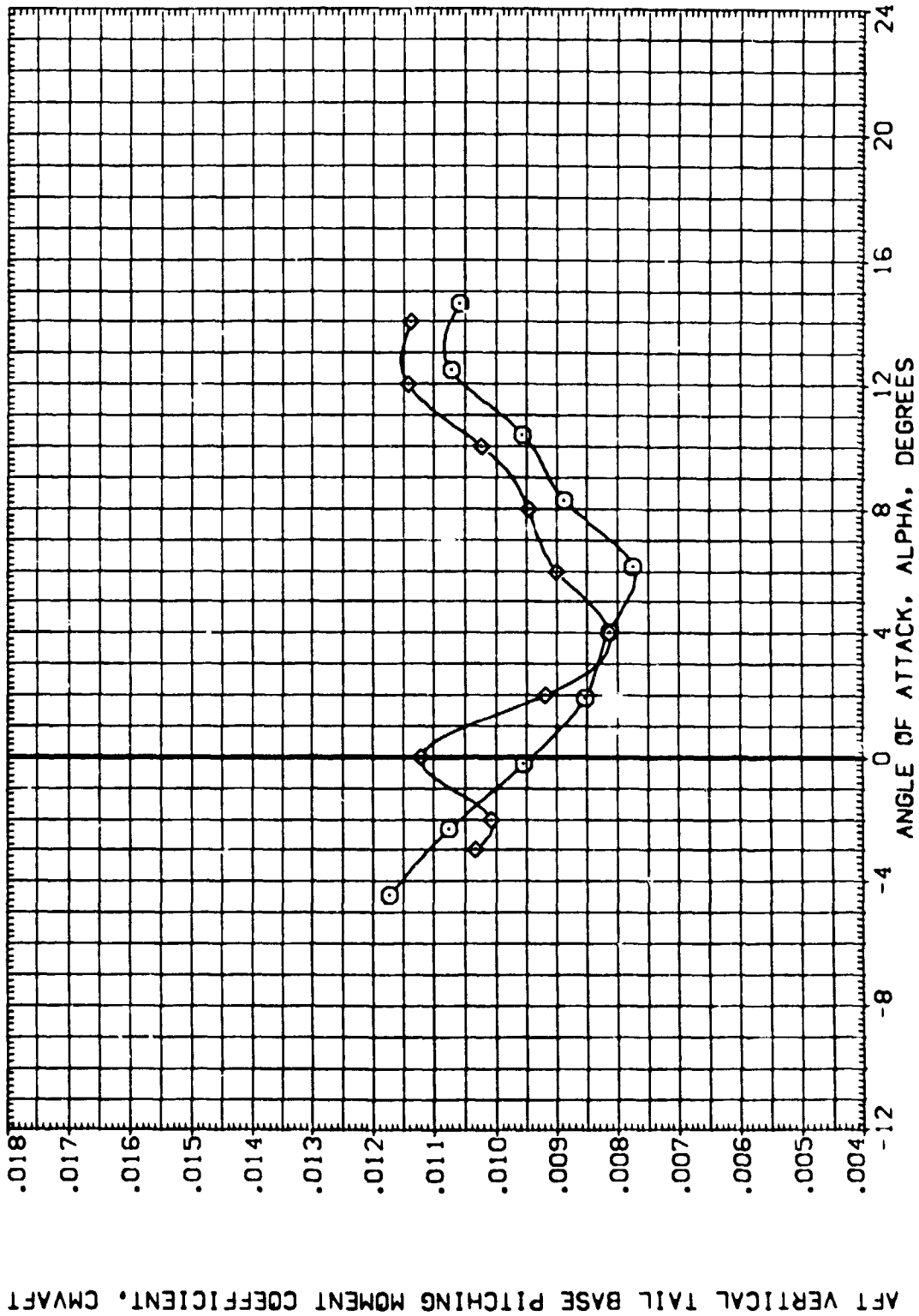


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .95

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (B6R019) □ ARC 66-709 0A59 0A11A-(N24)
 (B6R020) □ ARC 66-709 0A59 0A11A-(N24)
 (Z6R019) ⋈ ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
 (Z6R020) ⋈ ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDFLAP
 .000 .000 -11.700
 .000 15.000 -11.700
 .000 .000 -11.700
 .000 15.000 -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .9535 FT.
 BRFL 1.1710 IN.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

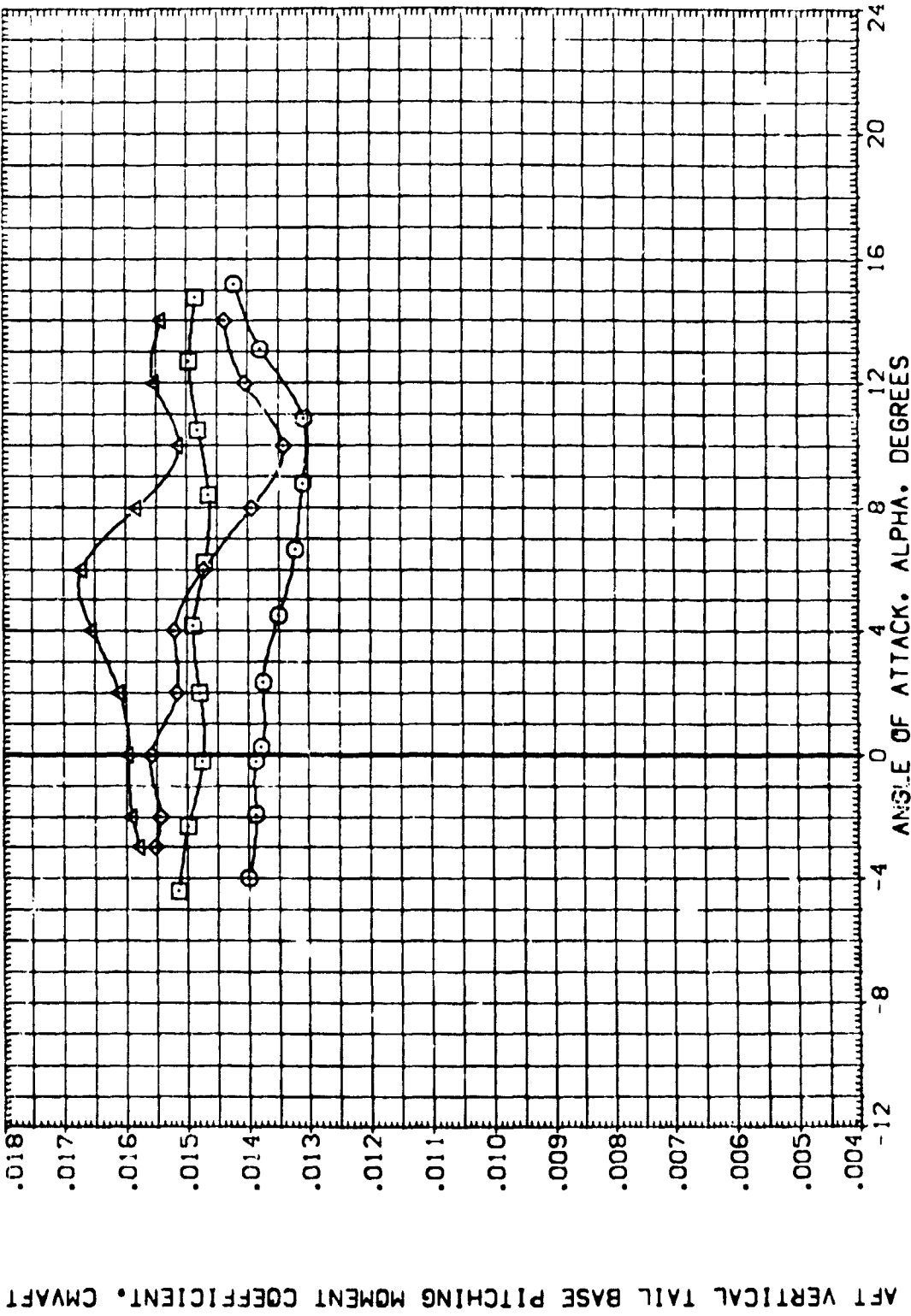


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(F)MACH = 1.20



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(BERD19) ARC 66-709 QAS9 0111A-N24

(BERD20) ARC 66-709 QAS9 0111A-N24

(ZERD19) ARC 66-709 QAS9 0111A-N24 (ADJUSTED FOR TARES)

(ZERD20) ARC 66-709 QAS9 0111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDF LAP

.000 .000 -11.700

.000 15.000 -11.700

.000 .000 -11.700

.000 15.000 -11.700

REFERENCE INFORMATION

SREF .6053 50.FT.

LREF .5936 FT.

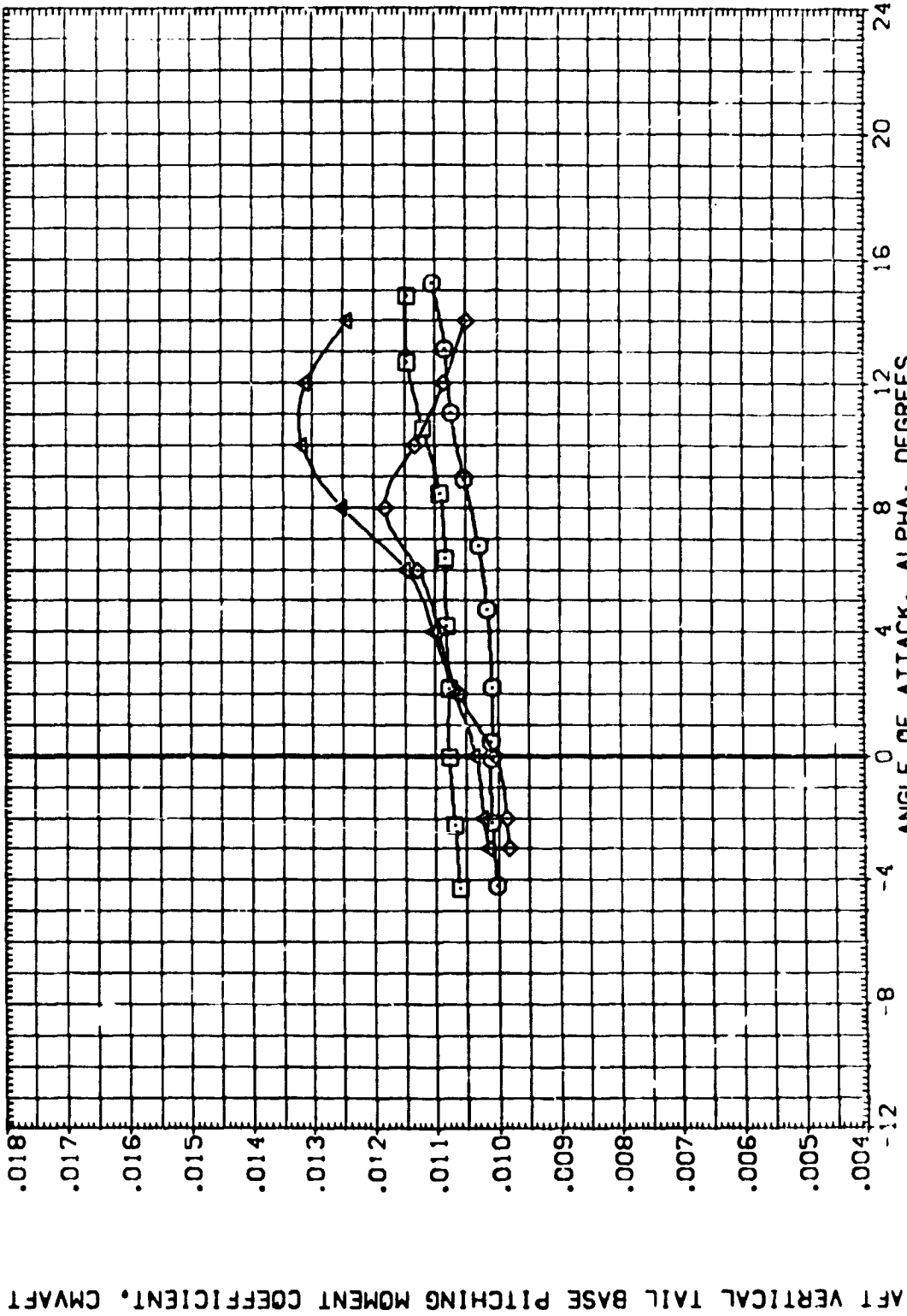
BREF 1.1710 FT.

XPRP 12.6255 IN.

YPRP .0000 IN.

ZPRP -.3750 IN.

SCALE .0150



AFT VERTICAL TAIL BASE PITCHING MOMENT COEFFICIENT, CMVAFT

FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.50

DATA SET SYMBOL: (B2018), (B2020), (B2019), (B2020)

CONFIGURATION DESCRIPTION: ARC 66-709 QAS9 O111A-N24, ARC 66-709 QAS9 O111A-N24, ARC 66-709 QAS9 O111A-N24 (ADJUSTED FOR TARES), ARC 66-709 QAS9 O111A-N24 (ADJUSTED FOR TARES)

BETA: .000, .000, .000, .000

ELEVON: .000, 15.000, .000, 15.000

BOFLAP: -11.700, -11.700, -11.700, -11.700

REFERENCE INFORMATION: SREF: 6053 SQ.FT., LREF: 5936 FT., BREF: 1.1710 FT., YMRP: 12.6255 IN., ZMRP: .0000 IN., SCALE: -.3750 IN., .0150

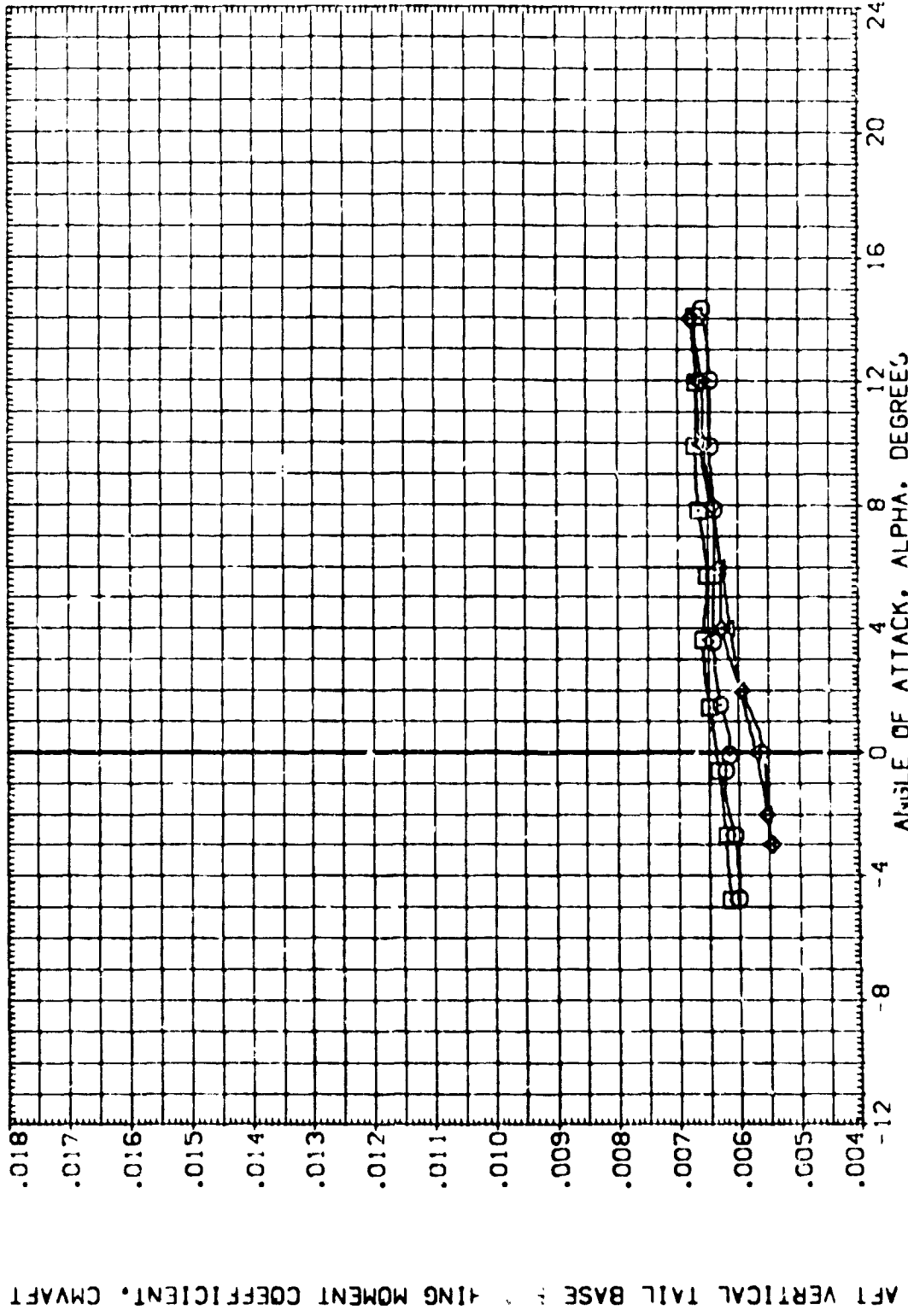


FIG. 13 ELEVON EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH = 2.00



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(CER019)	ARC 66-709 DA59 DA11A-(N24)	.000	.000	-11.700	SREF .6053 SQ.FT.
(CER022)	ARC 66-709 DA59 DA11A-(N24)	.000	.000	.000	LREF .5935 FT.
(CER023)	ARC 66-709 DA59 DA11A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(1ER019)	ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(1ER022)	ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	YMRP .0000 IN.
(1ER023)	ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

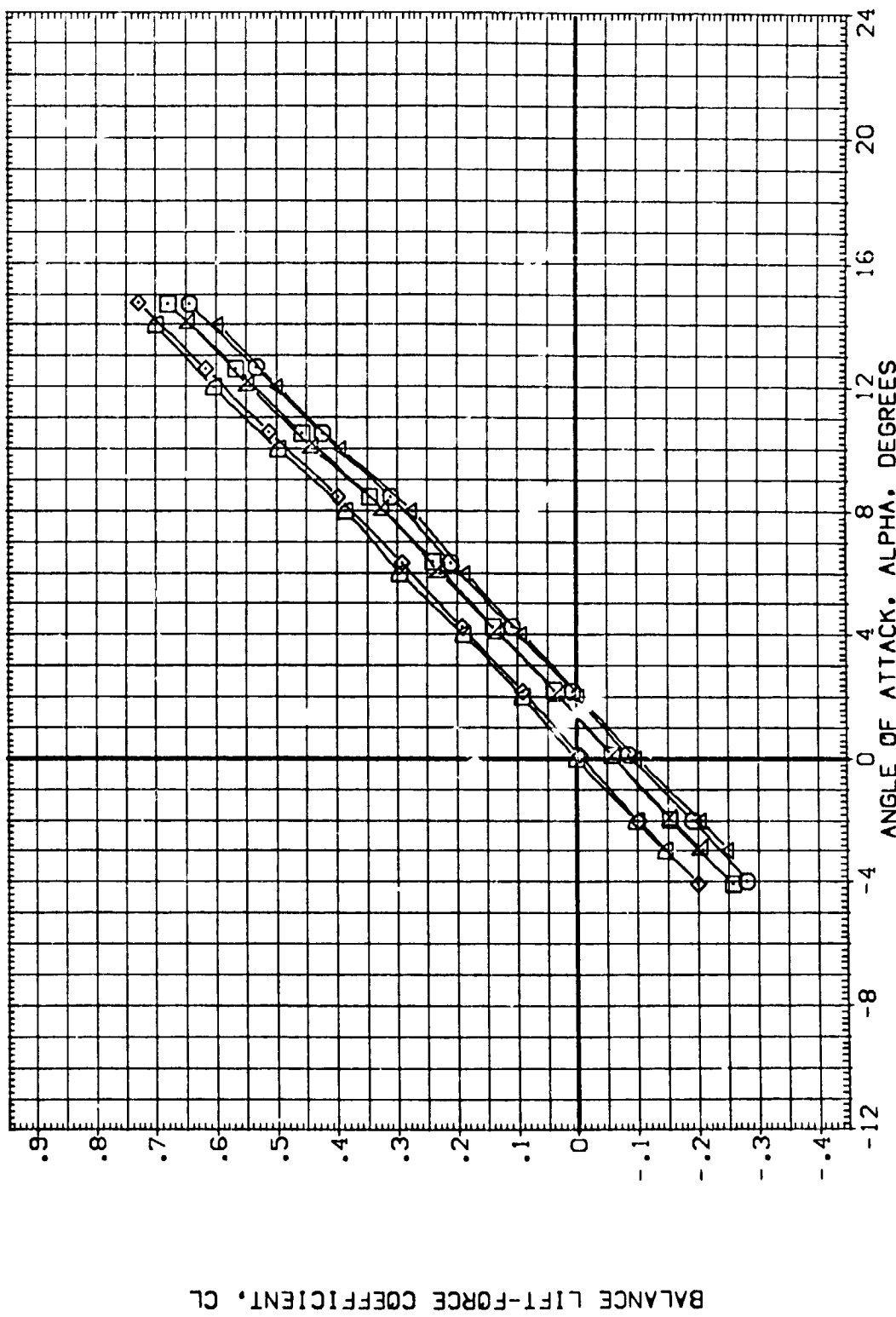


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(A)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CER019) DATA NOT AVAILABLE
 (CER022) ARC 66-709 OAS9 O111A-(N24)
 (CER023) ARC 66-709 OAS9 O111A-(N24)
 (1ER019) DATA NOT AVAILABLE
 (1ER022) DATA NOT AVAILABLE
 (1ER023) ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDFLAP
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3753 IN.
 SCALE .0150

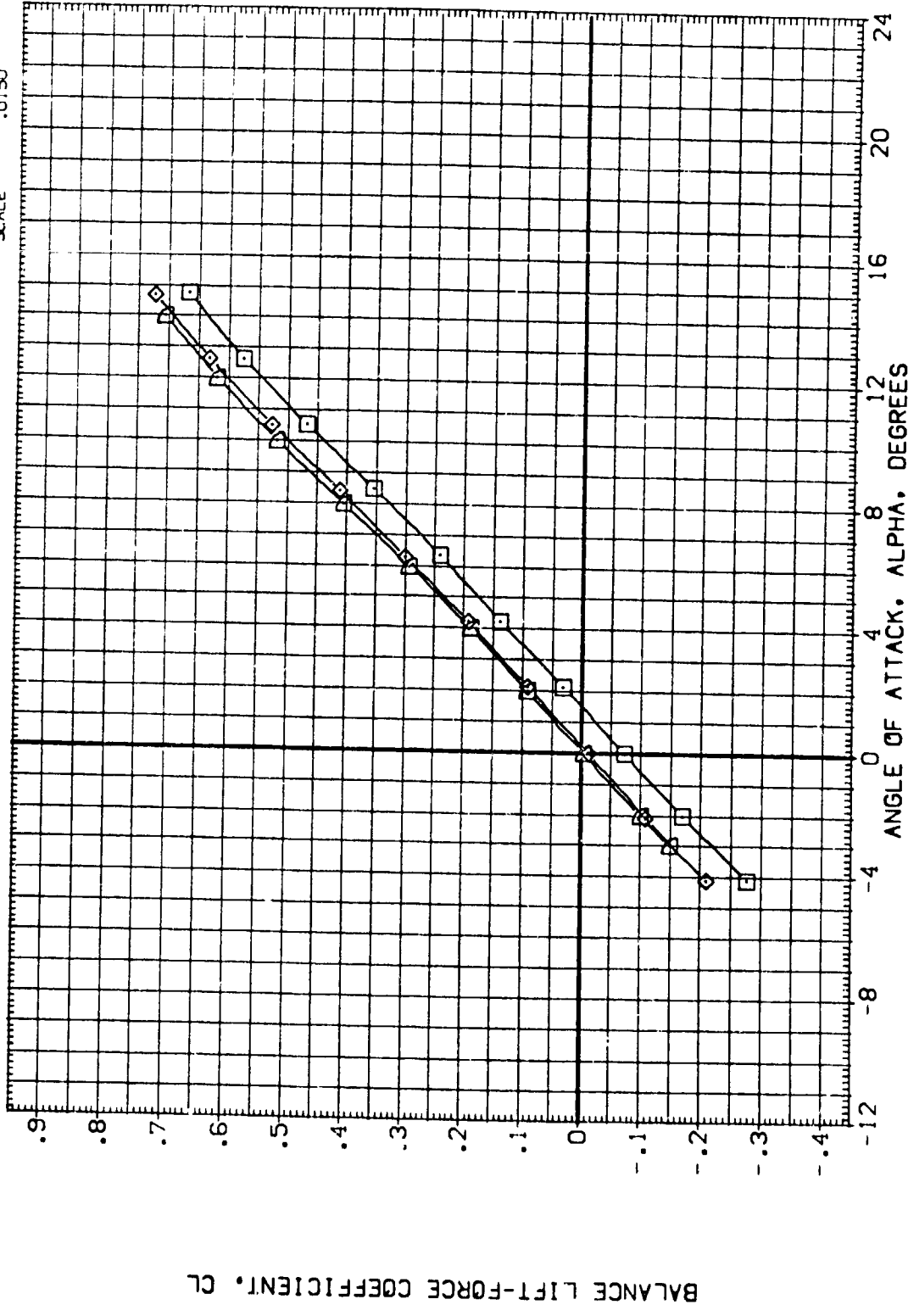


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(B)MACH = .70



DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BDF/LAP REFERENCE INFORMATION

(CERO19) ARC 66-709 OAS9 0111A-N24 .000 .000 -11.700 SREF .6053 SQ.FT.

(CERO22) ARC 66-709 OAS9 0111A-N24 .000 .000 .000 LREF .5935 FT.

(CERO23) ARC 66-709 OAS9 0111A-N24 .000 .000 16.300 BRREF 1.1710 FT.

(TERO19) ARC 66-709 OAS9 0111A-N24 (ADJUSTED FOR TARES) .000 .000 -11.700 XMRP 2.6255 IN.

(TERO22) DATA NOT AVAILABLE .000 .000 .000 YMRP .0000 IN.

(TERO23) ARC 66-709 OAS9 0111A-N24 (ADJUSTED FOR TARES) .000 .000 16.300 ZMRP -.3750 IN.

SCALE .0150

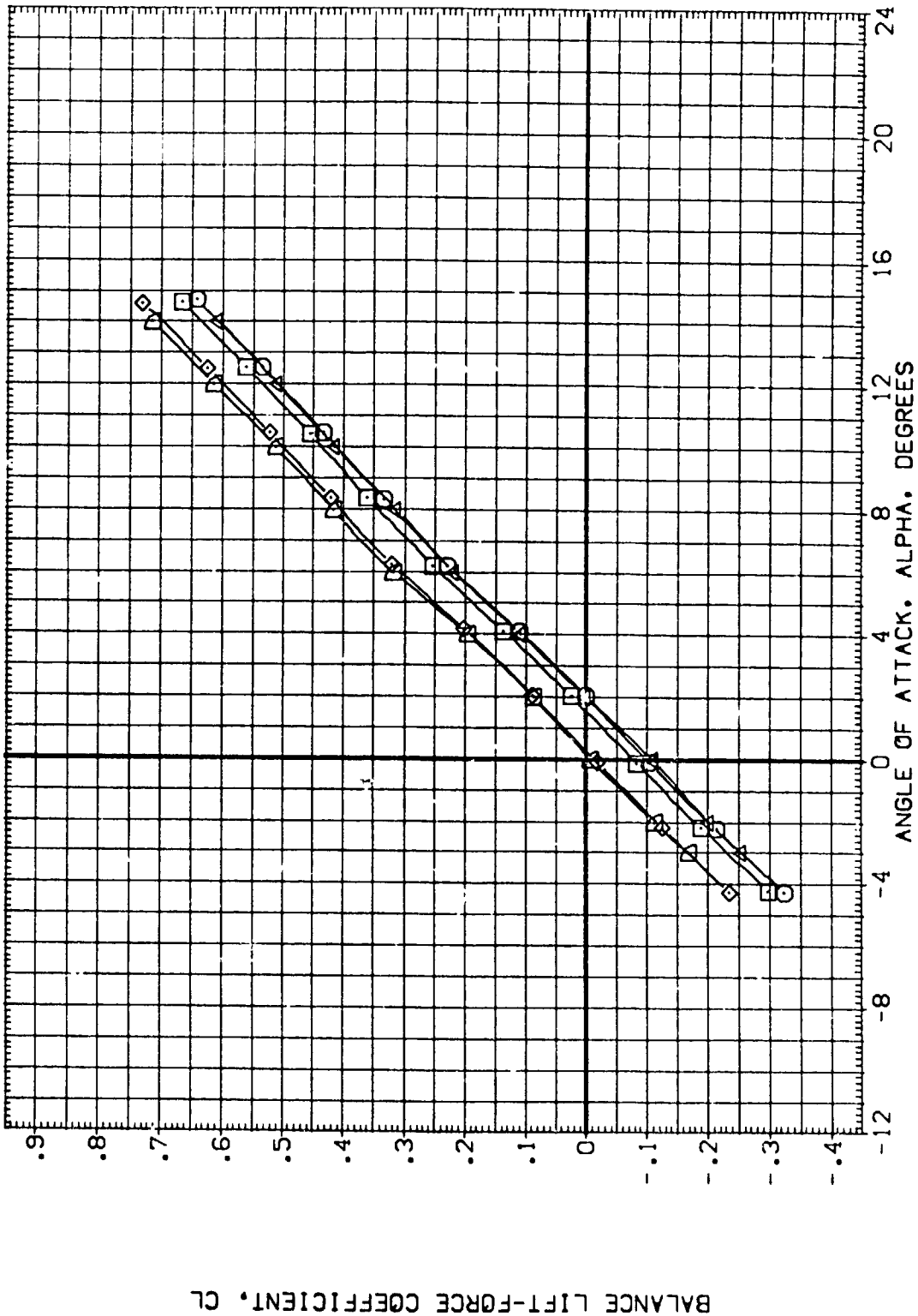


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .80

DATA SET SYMBOL: (CER019), (CER022), (CER023), (1ER019), (1ER022), (1ER023)

CONFIGURATION DESCRIPTION: ARC 66-709 OA59 OA11A-(N24), DATA NOT AVAILABLE, ARC 66-709 OA59 O11A-N24 (ADJUSTED FOR TARES), DATA NOT AVAILABLE

BETA: .000, .000, .000, .000, .000, .000, .000, .000

ELEVATION: .000, .000, .000, .000, .000, .000, .000, .000

BOFLAP: -11.700, .000, 16.300, -11.700, .000, .000, 16.300

REFERENCE INFORMATION: SREF: .6053 SO.FT., LREF: .5935 FT., BREF: 1.1710 FT., XMRP: 12.6255 IN., YMRP: .0000 IN., ZMRP: -.3750 IN., SCALE: .0150

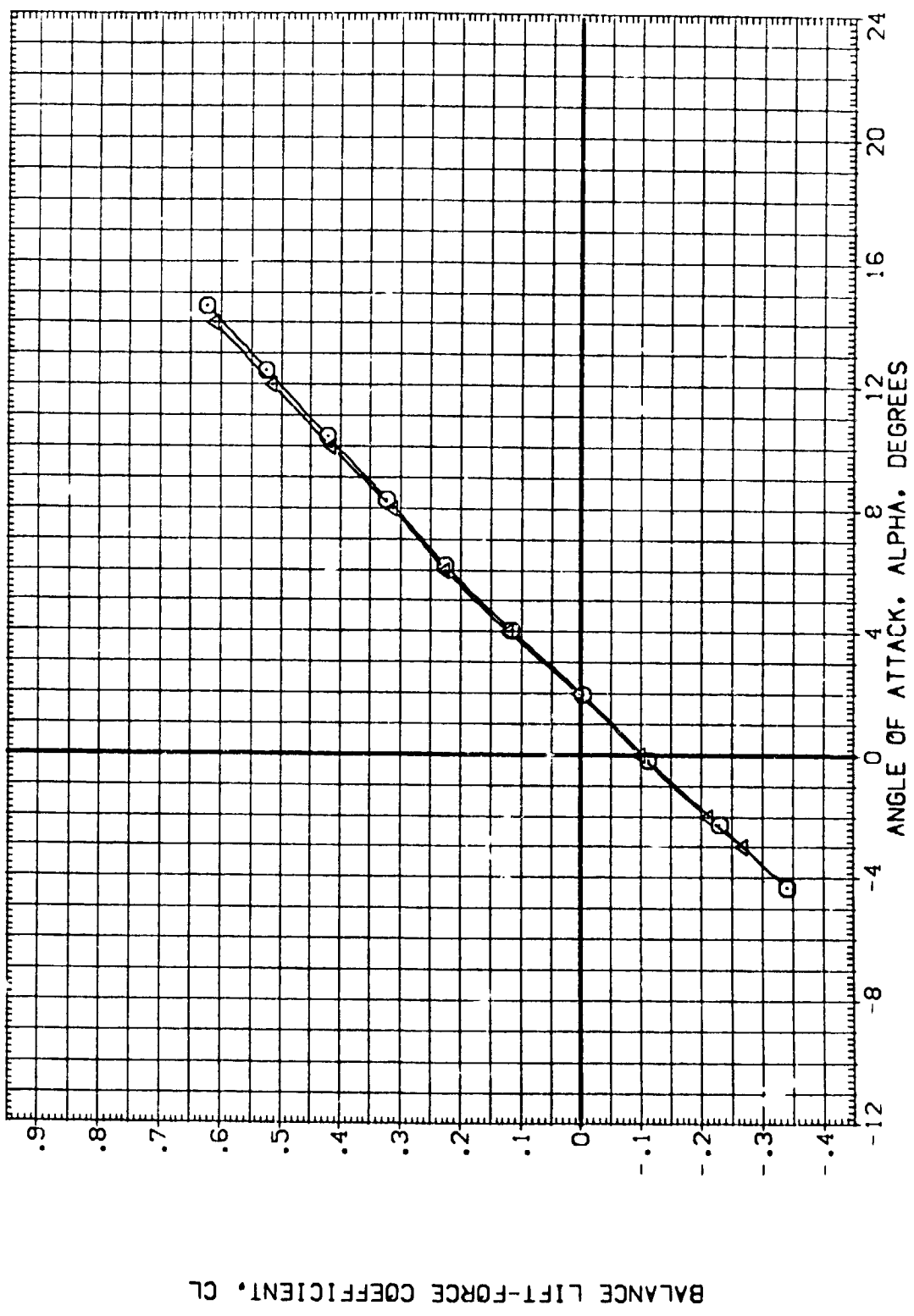


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(O)MACH = .85



DATA SET SYMBOL CONFIGURATION DESCRIPTION

{CER019} ARC 66-709 OAS9 0A11A-N24

{CER022} DATA NOT AVAILABLE

{CER023} DATA NOT AVAILABLE

{IER019} ARC 66-709 OAS9 0111A-N24 (ADJUSTED FOR TARES)

{IER022} DATA NOT AVAILABLE

{IER023} DATA NOT AVAILABLE

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

REFERENCE INFORMATION

SREF 6053 SQ.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

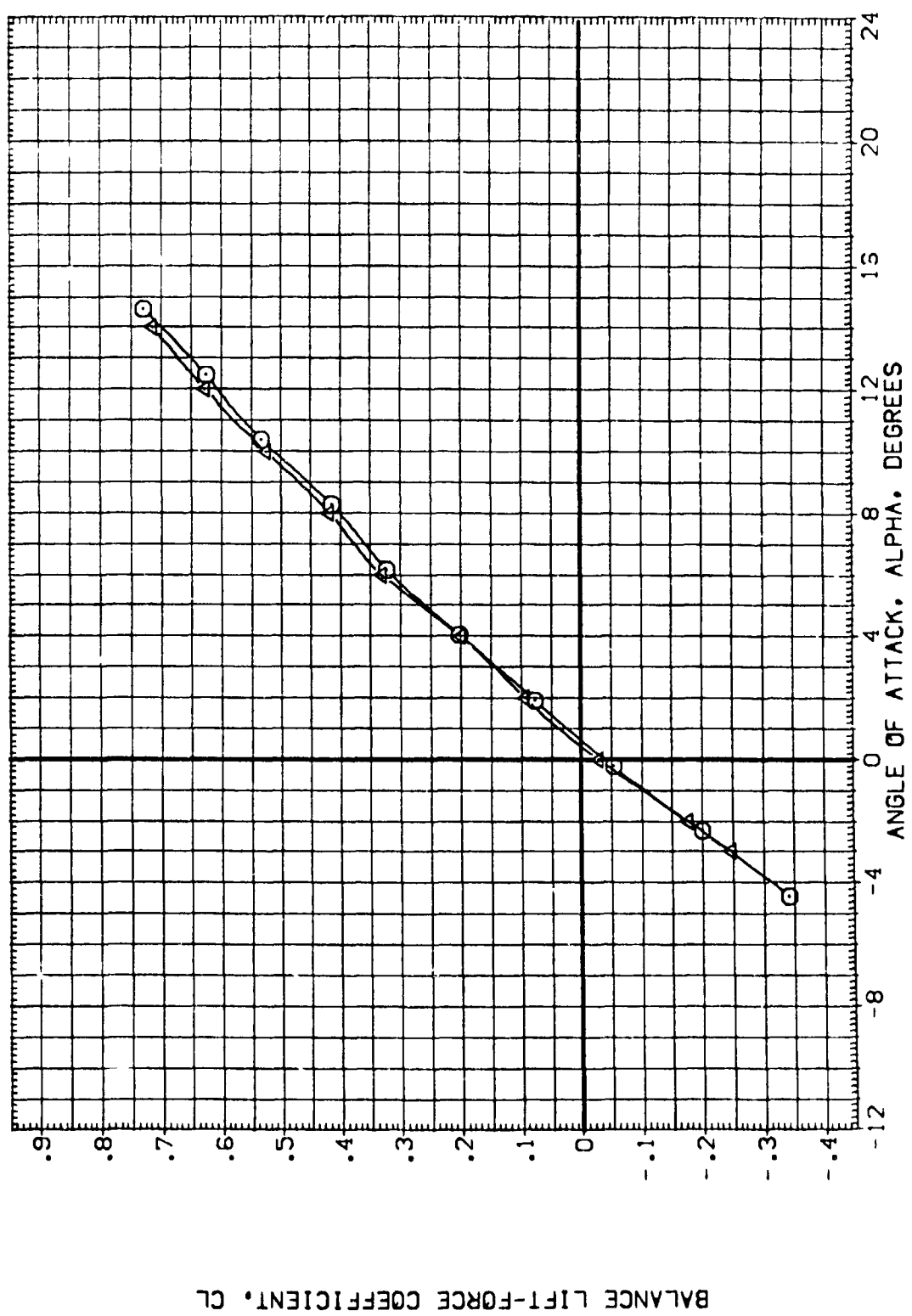


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(F)MACH = .95



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(CER019)	ARC 66-709 OAS9 O11A-(N24)	.000	.000	-11.700	SREF .6053 50.FT.
(CER022)	ARC 66-709 OAS9 O11A-(N24)	.000	.000	.000	LREF .5835 FT.
(CER023)	ARC 66-709 OAS9 O11A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(IER019)	ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(IER022)	ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	YMRP .0000 IN.
(IER023)	ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

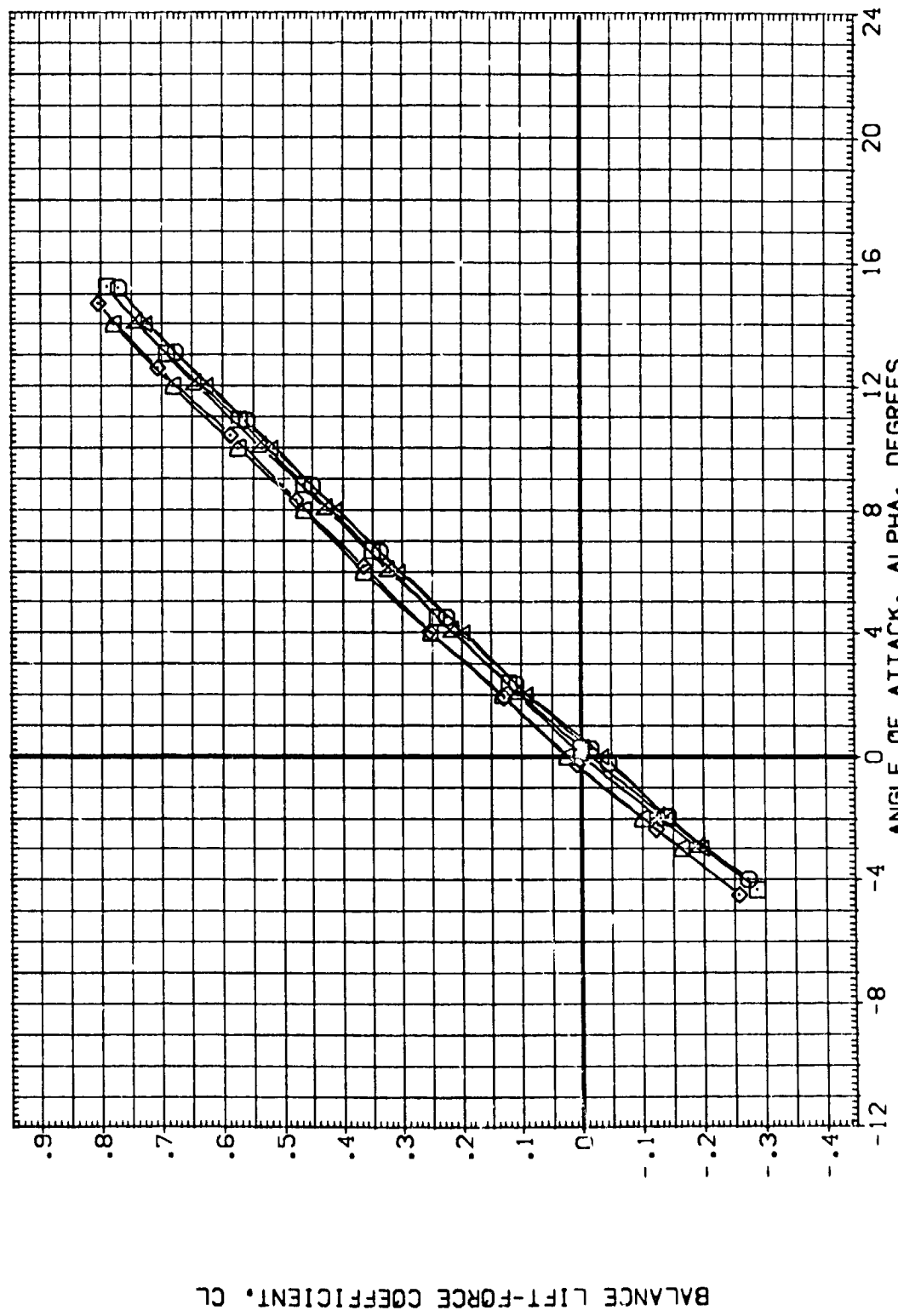


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION

{1ER019} ARC 66-709 OAS9 O111A-N24

{1ER022} ARC 66-709 OAS9 O111A-N24

{1ER023} ARC 66-709 OAS9 O111A-N24

{1ER019} ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)

{1ER022} DATA NOT AVAILABLE

{1ER023} ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5836 FT.

BREF .1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP .3750 IN.

SCALE .0150

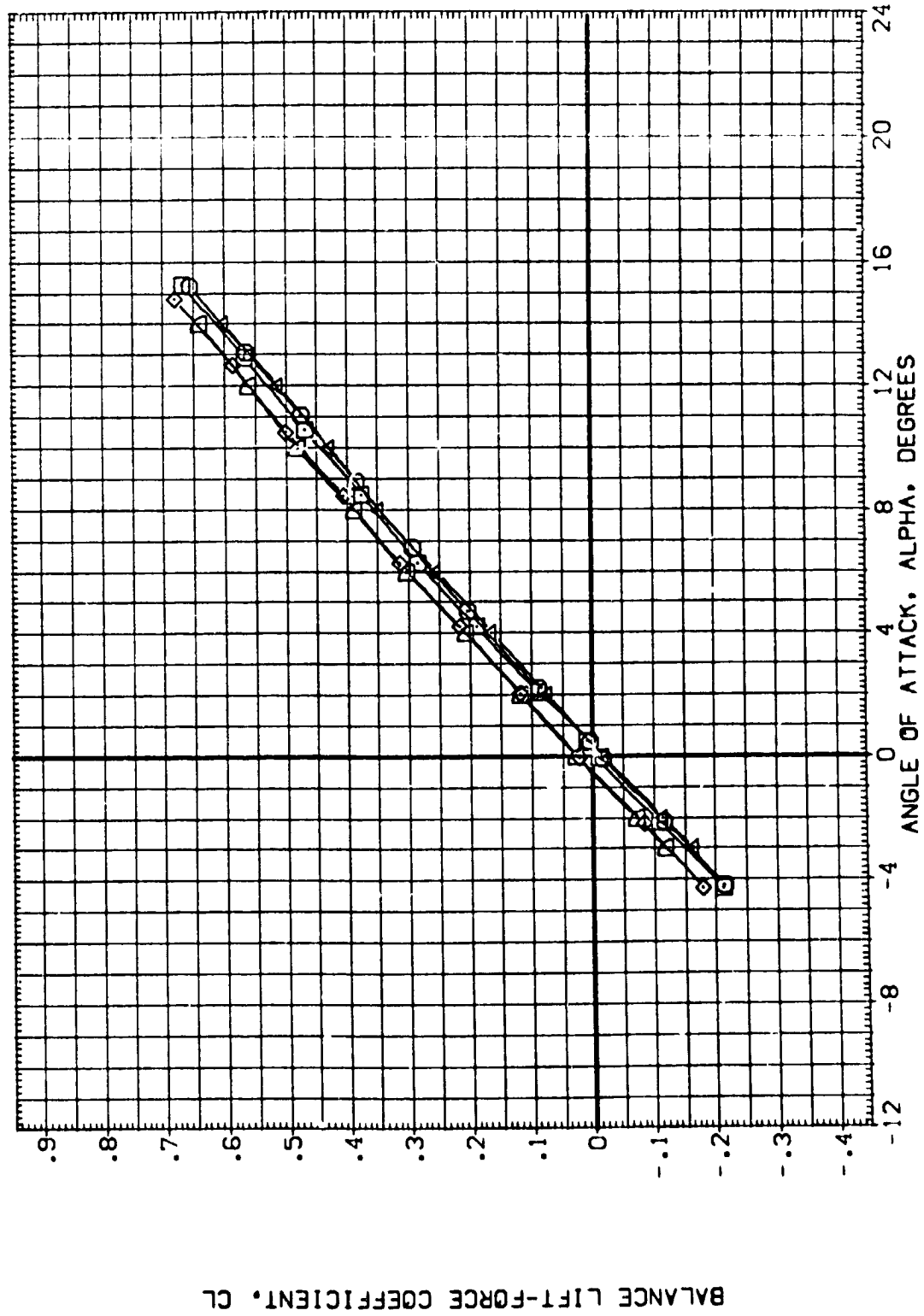


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(H)MACH = 1.50



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BDFLAP	REFERENCE INFORMATION
(1ER019)	ARC 66-709 0A59 0111A-(N24)	.000	.000	-11.700	SREF .8053 SQ.FT.
(1ER022)	ARC 66-709 0A59 0111A-(N24)	.000	.000	.000	LREF .5935 FT.
(1ER073)	ARC 66-709 0A59 0111A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(1ER019)	ARC 66-709 0A59 0111A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(1ER022)	ARC 66-709 0A59 0111A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	YMRP .0000 IN.
(1ER023)	ARC 66-709 0A59 0111A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

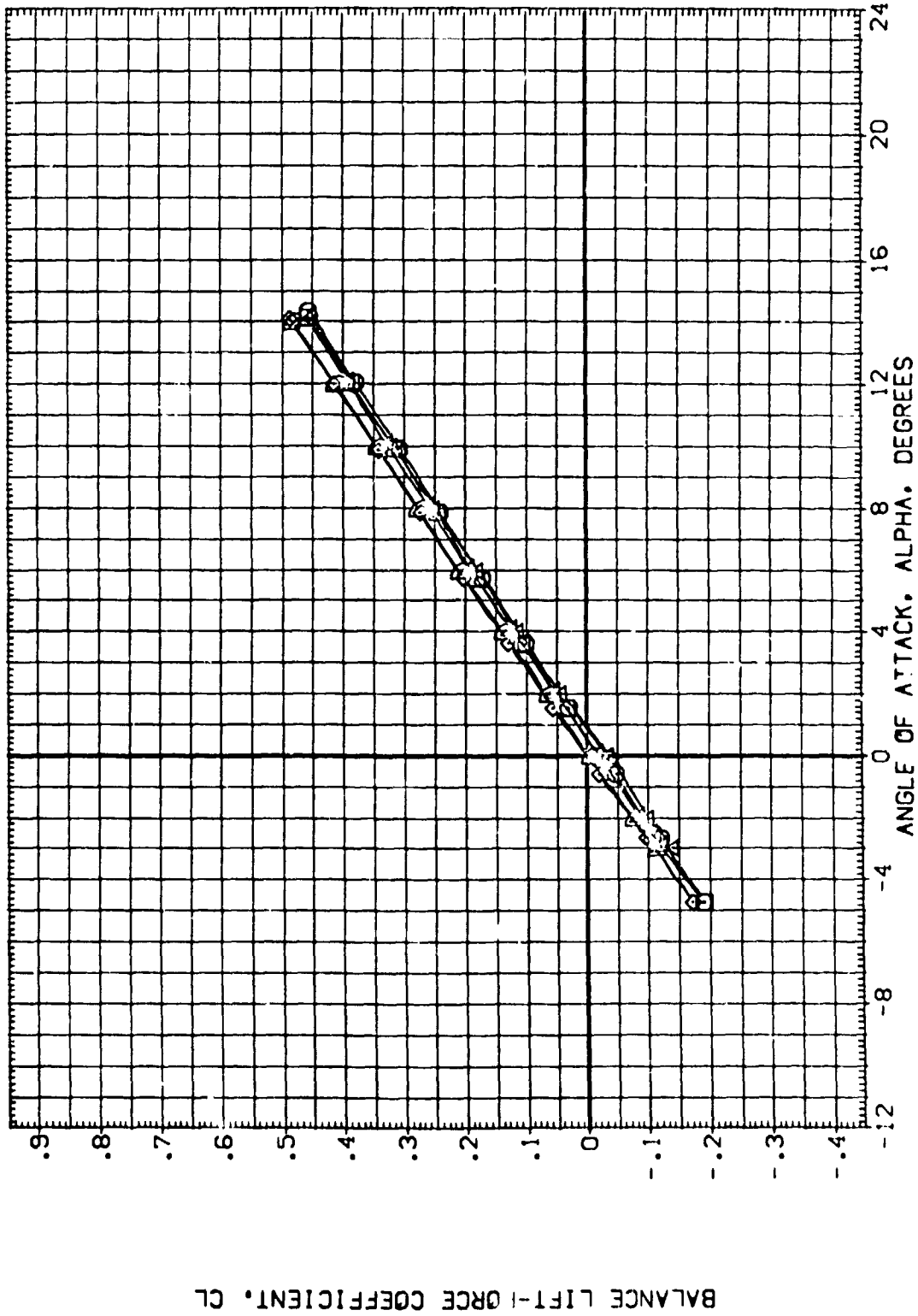


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(1)MACH = 2.00

DATA SET SYMBOL

CONFIGURATION DESCRIPTION

BETA

ELEVON

80FLAP

REFERENCE INFORMATION

SREF .6053 50.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6755 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

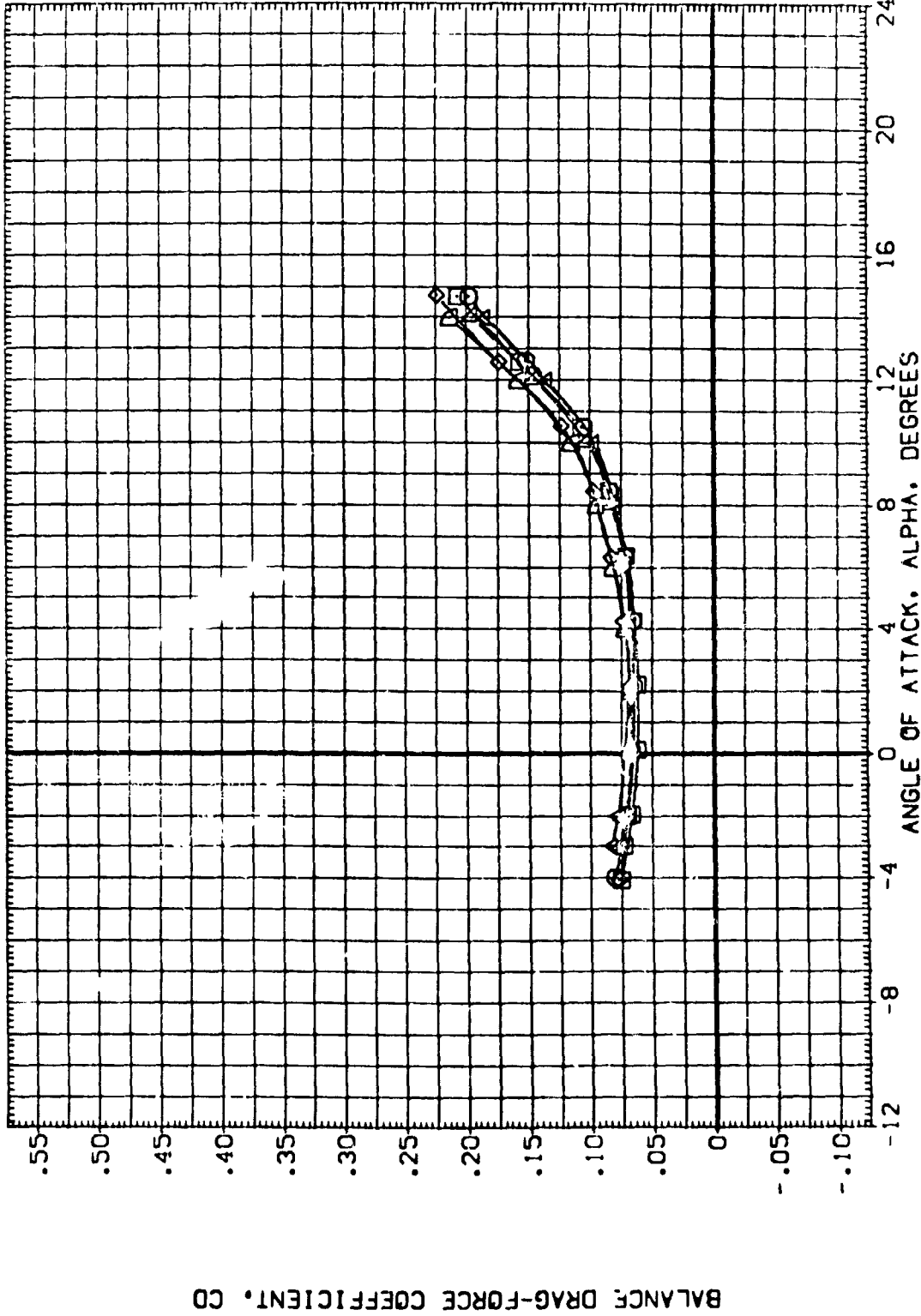


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(A)MACH = .60



DATA SET SYMBO. CONFIGURATION DESCRIPTION

(CER019) DATA NOT AVAILABLE

(CER022) ARC 66-709 OAS9 OA111A-(N24)

(CER023) ARC 66-709 OAS9 OA111A-(N24)

(1ER019) DATA NOT AVAILABLE

(1ER022) ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)

(1ER023)

BETA .000

ELEVON .000

BOFLAP -11.700

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5935 FT.

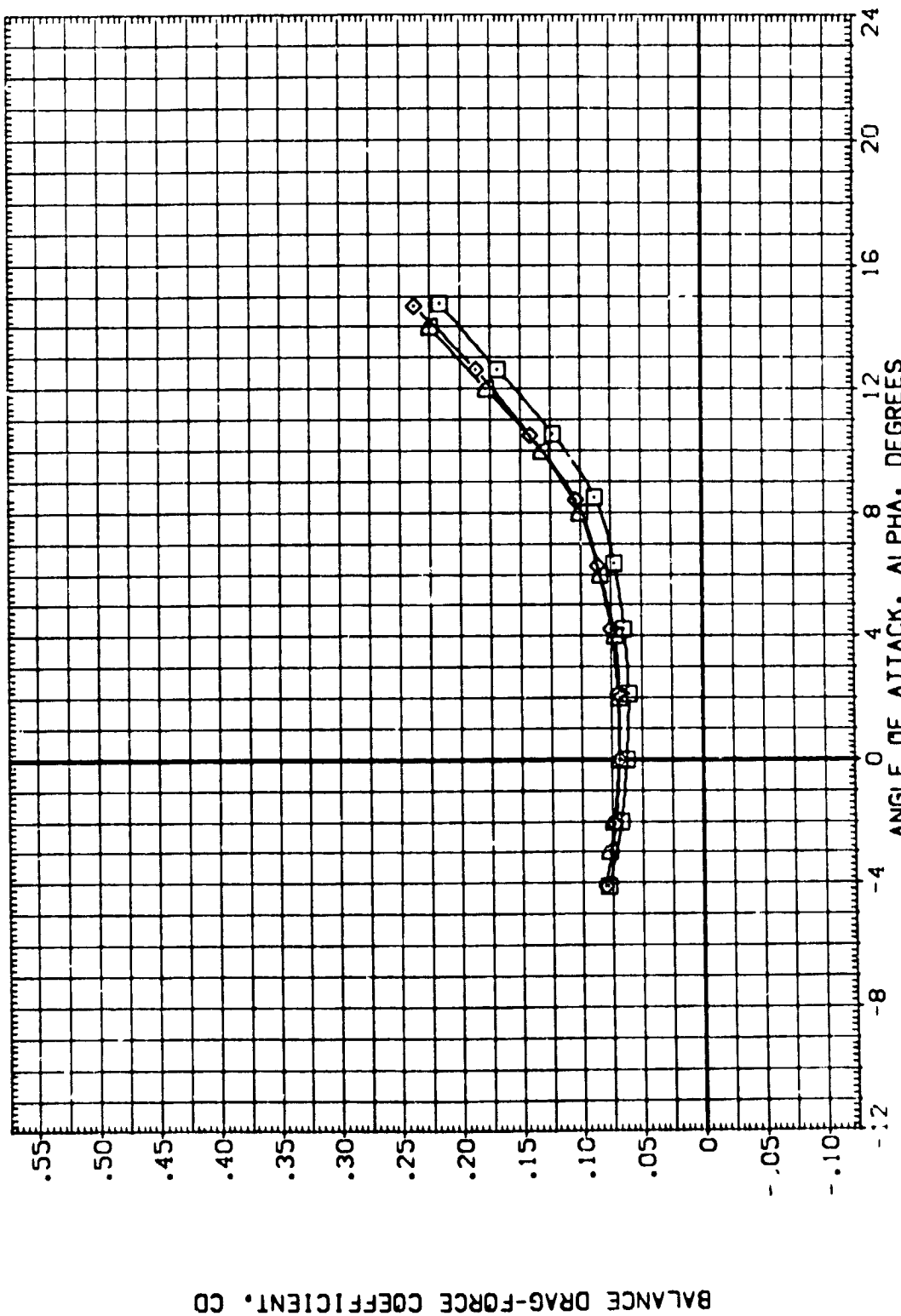
BREF 1.1710 FT. IN.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150



BALANCE DRAG-FORCE COEFFICIENT, CD

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(B)MACH = .70

DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BDFLAP REFERENCE INFORMATION

(1ER019)	ARC 66-709 0A59 0111A-N24	.000	.000	-11.700	SREF .6053 SO.FT.
(1ER022)	ARC 66-709 0A59 0111A-N24	.000	.000	.000	LREF .5976 FT.
(1ER023)	ARC 66-709 0A59 0111A-N24	.000	.000	16.300	BREF 1.1710 FT.
(1ER019)	ARC 66-709 0A59 0111A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP .2.6255 IN.
(1ER022)	DATA NOT AVAILABLE	.000	.000	.000	YMRP .0000 IN.
(1ER023)	ARC 66-709 0A59 0111A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

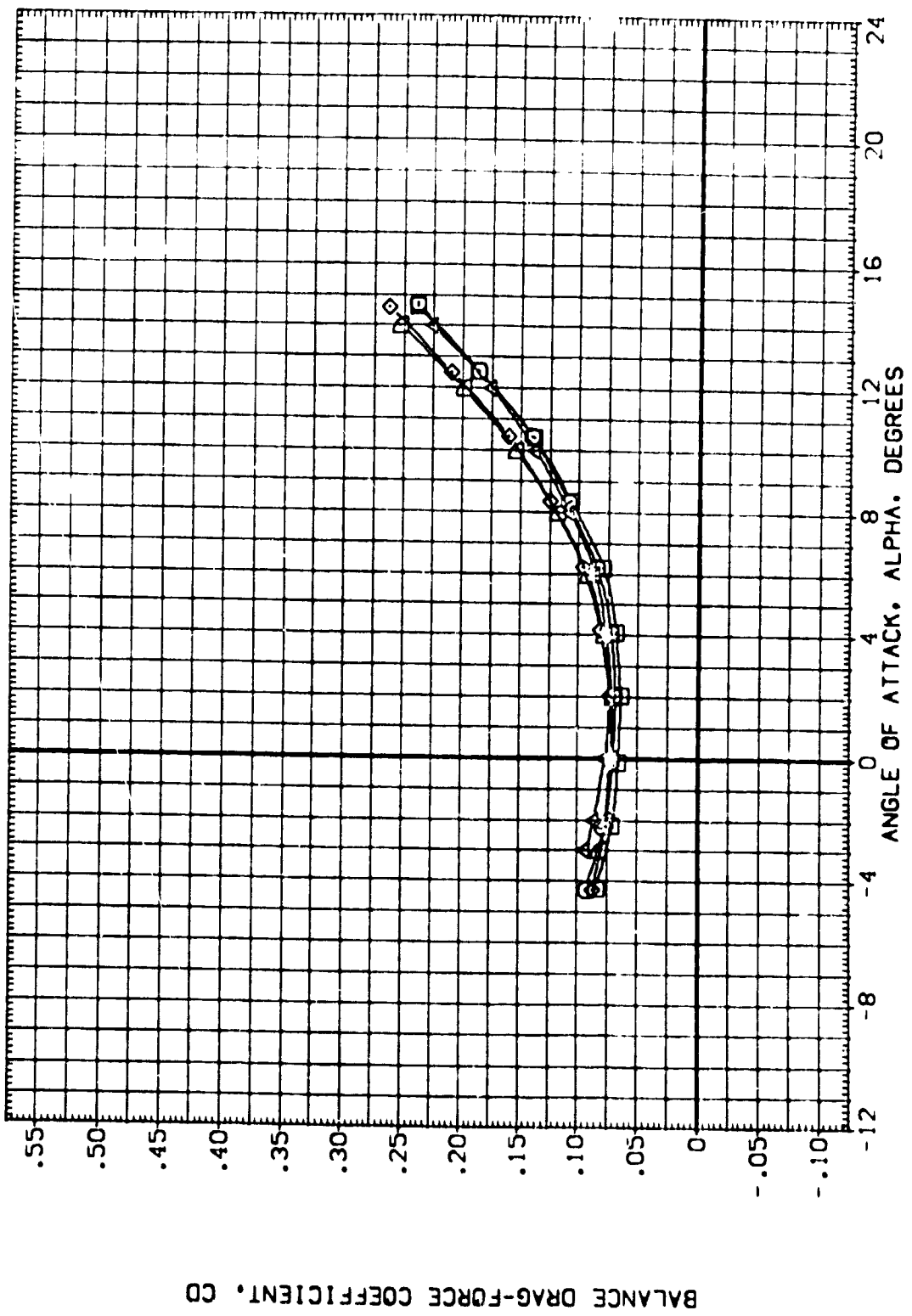


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019) ARC 66-709 OAS9 O111A-(N24)

(CER022) DATA NOT AVAILABLE

(CER023) DATA NOT AVAILABLE

(LER019) ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)

(LER022) DATA NOT AVAILABLE

(LER023) DATA NOT AVAILABLE

BETA .000

ELEVON .000

BOFLAP -11.700

.000

.000

.000

16.300

-11.700

.000

.000

.000

.000

.000

.000

16.300

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XPRP 12.6755 IN.

YPRP .0000 IN.

ZPRP -.3750 IN.

SCALE .0150

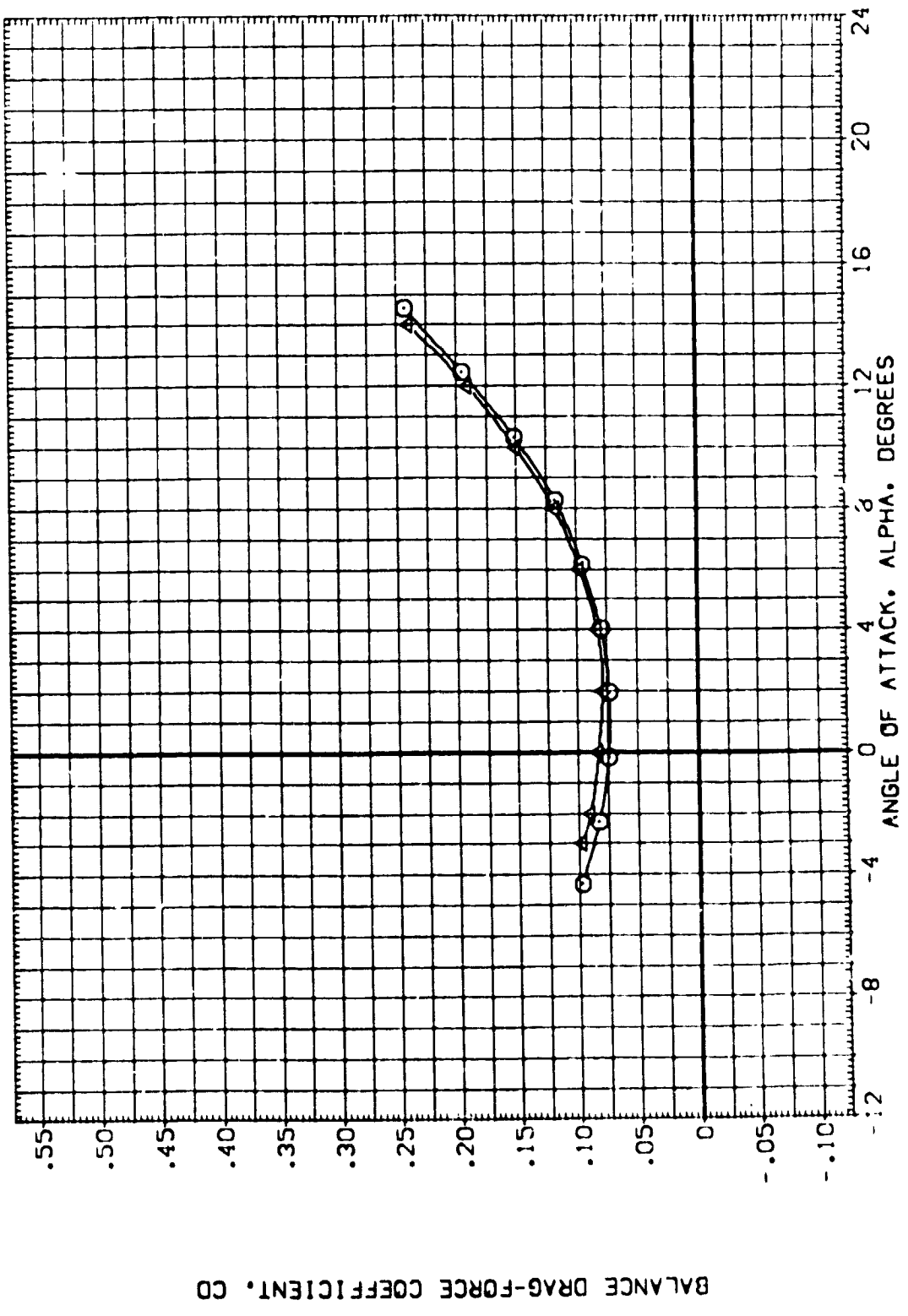


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

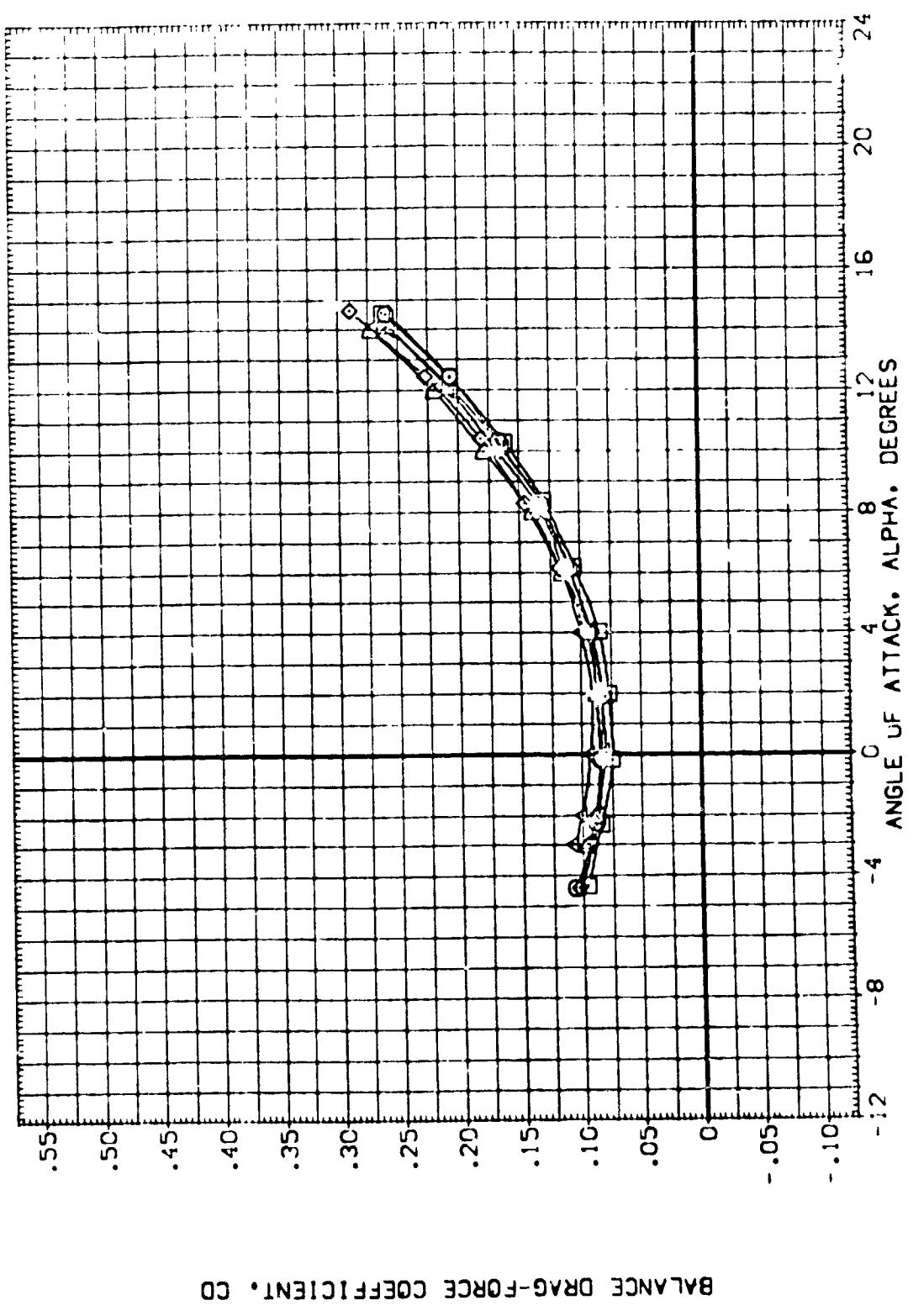
(C)MAG: .85

REFERENCE INFORMATION:
 SREF .6053 SQ.FT.
 LREF .9936 FT.
 BREF 1.1710 FT.
 XREF 12.6755 IN.
 YREF .0000 IN.
 ZREF .3750 IN.
 SCALE 0.50

BETA .000
 ELEVON .000
 BDFLAP -11.700

CONFIGURATION DESCRIPTION
 ARC 66-709 OAS9 O111A-N24
 ARC 66-709 OAS9 O111A-N24
 ARC 66-709 OAS9 O111A-N24
 ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)

DATA SET SYMBOL
 (CER019)
 (CER022)
 (CER023)
 (CER019)
 (CER022)
 (CER023)



BALANCE DRAG-FORCE COEFFICIENT, CD

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(E)MAC: .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(CER019)	ARC 66-709 QAS9 0111A-(N24)	.000	.000	-11.700	SREF .6053 SQ.FT.
(CER022)	DATA NOT AVAILABLE	.000	.000	.000	LREF .5935 FT.
(CER023)	DATA NOT AVAILABLE	.000	.000	16.300	BREF 1.1710 FT.
(1ER019)	ARC 66-709 QAS9 0111A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(1ER022)	DATA NOT AVAILABLE	.000	.000	.000	YMRP .0000 IN.
(1ER023)	DATA NOT AVAILABLE	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

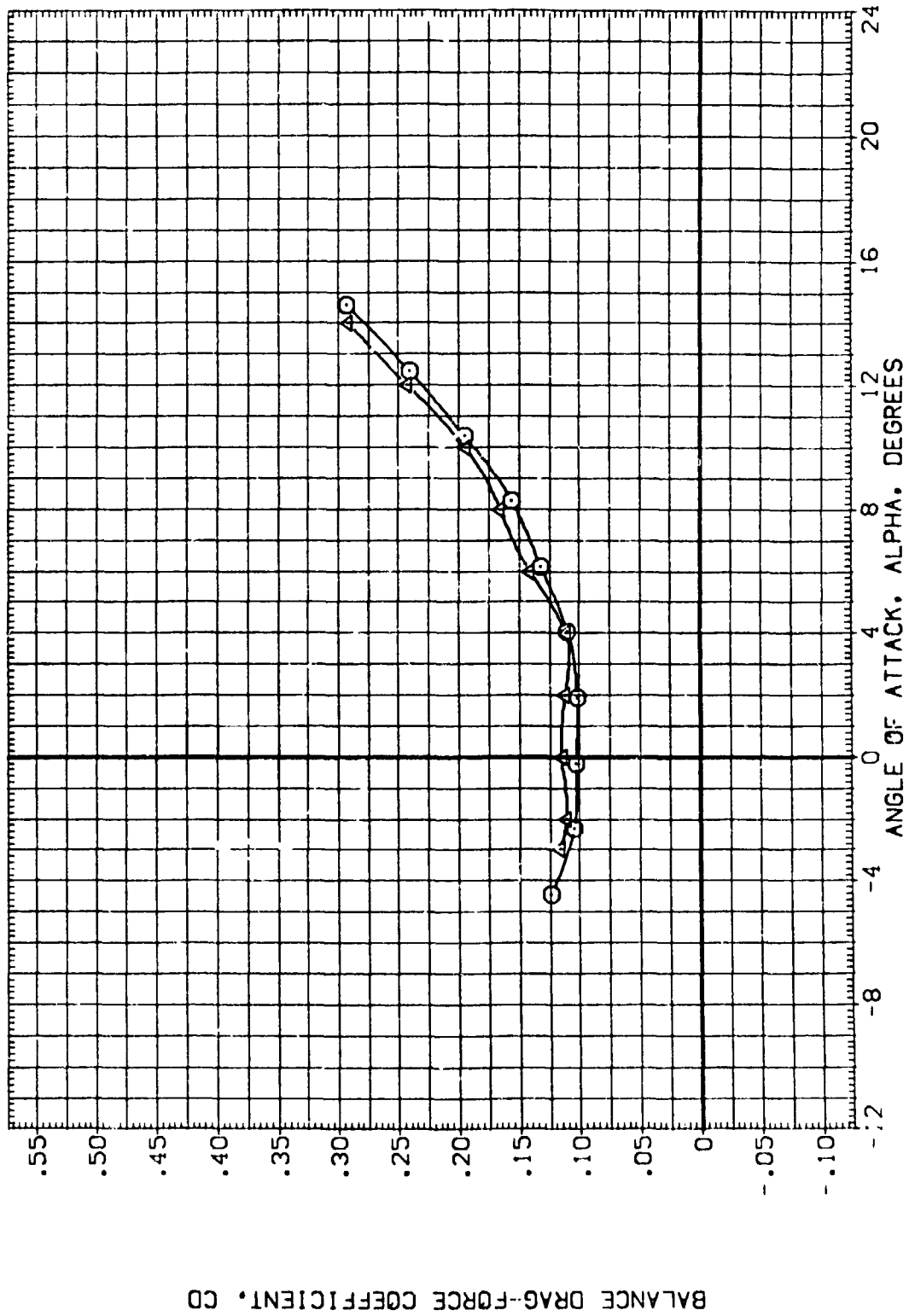


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(F)MACH = .95

DATA SET SYMBOL
 (CER019)
 (CER022)
 (CER023)
 (TER019)
 (TER022)
 (TER023)

CONFIGURATION DESCRIPTION
 ARC 66-709 DA59 O11A-(N24)
 ARC 66-709 DA59 O11A-(N24)
 ARC 66-709 DA59 O11A-(N24)
 ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)

BETA
 .000
 .000
 .000
 .000
 .000

ELEVON
 .000
 .000
 .000
 .000
 .000

BDFLAP
 -11.700
 16.300
 -11.700
 .000
 16.300

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BRREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

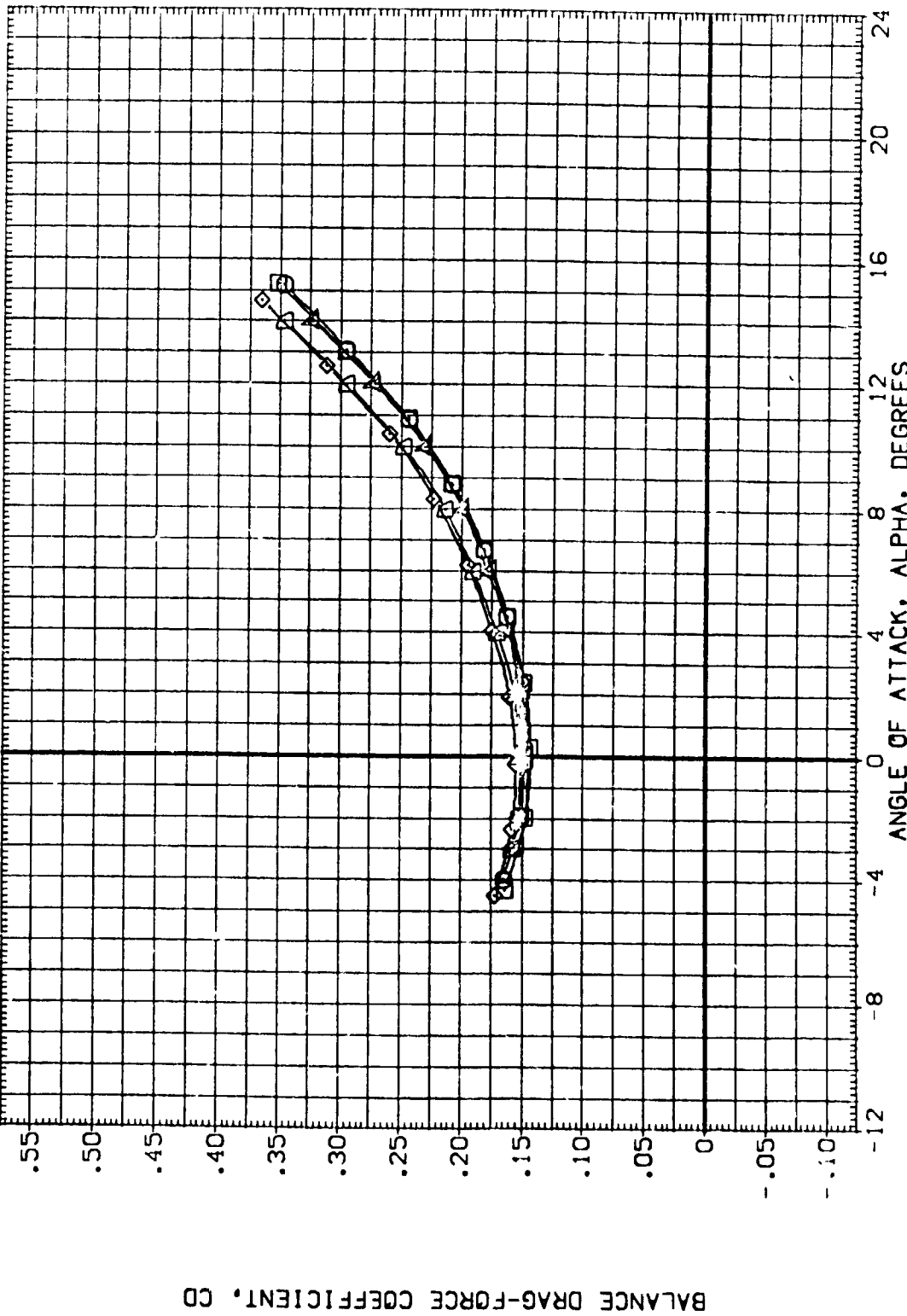


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(CER019)	ARC 66-709 0A59 0A11A-(N24)	.000	.000	-11.700	SREF .6053 SQ.FT.
(CER022)	ARC 66-709 0A59 0A11A-(N24)	.000	.000	.000	LREF .5935 FT.
(CER023)	ARC 66-709 0A59 0A11A-(N24)	.000	.000	16.300	BREF 1.1710 FT. IN.
(FER019)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(FER022)	DATA NOT AVAILABLE	.000	.000	.000	YMRP .0000 IN.
(FER023)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

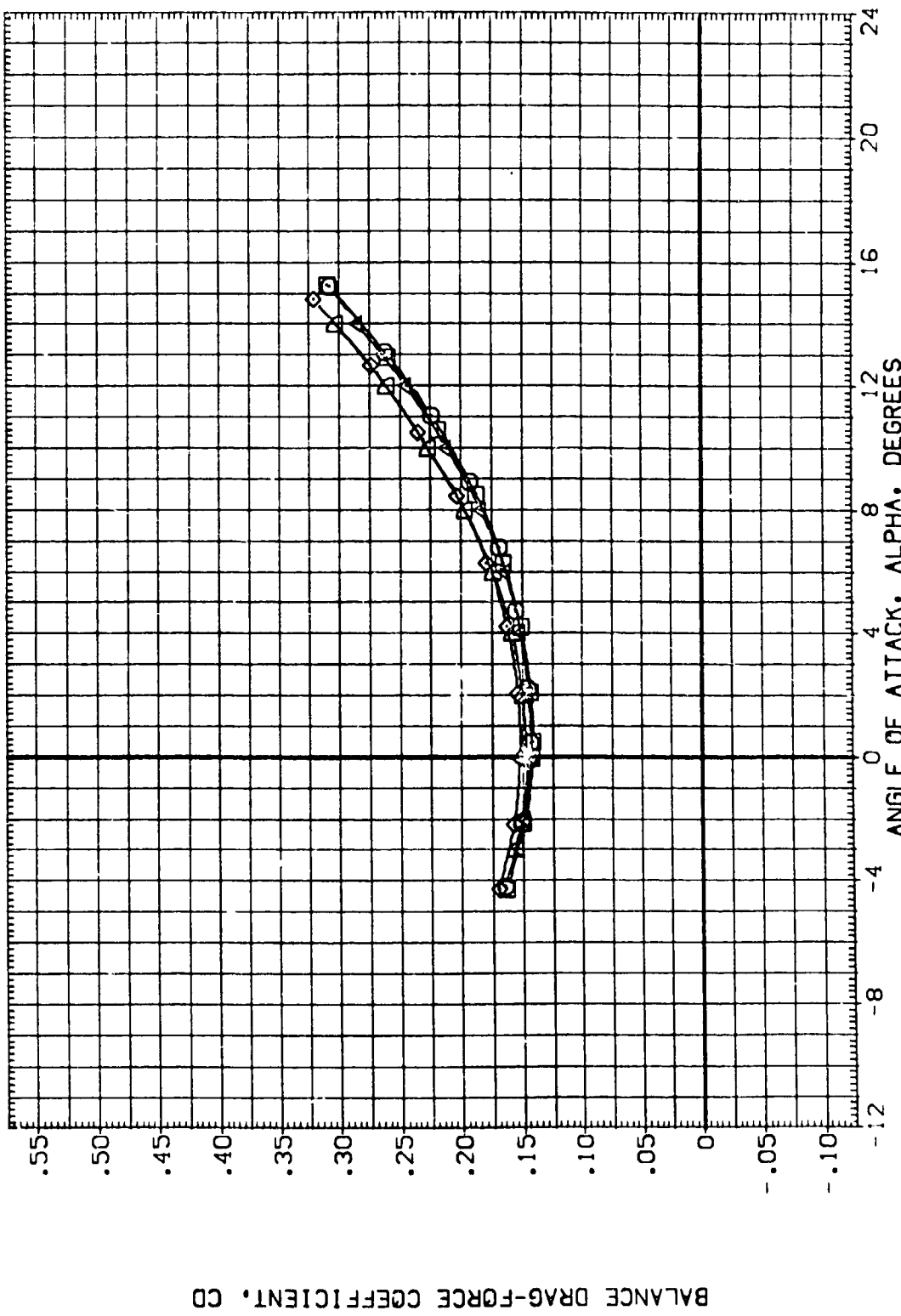


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(H)MAC = 1.50

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019)	ARC 66-709 DA59	011A-(N24)
(CER022)	ARC 66-709 DA59	011A-(N24)
(CER023)	ARC 66-709 DA59	011A-(N24)
(1ER019)	ARC 66-709 DA59	011A-N24 (ADJUSTED FOR TARES)
(1ER022)	ARC 66-709 DA59	011A-N24 (ADJUSTED FOR TARES)
(1ER023)	ARC 66-709 DA59	011A-N24 (ADJUSTED FOR TARES)

BETA

ELEVON	.000
BOFLAP	-11.700
SREF	.6053
LREF	.5935
BREF	1.1710
XMRP	12.6255
YMRP	.0000
ZMRP	-.3750
SCALE	.0150

REFERENCE INFORMATION

SREF	.6053	SO.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	IN.

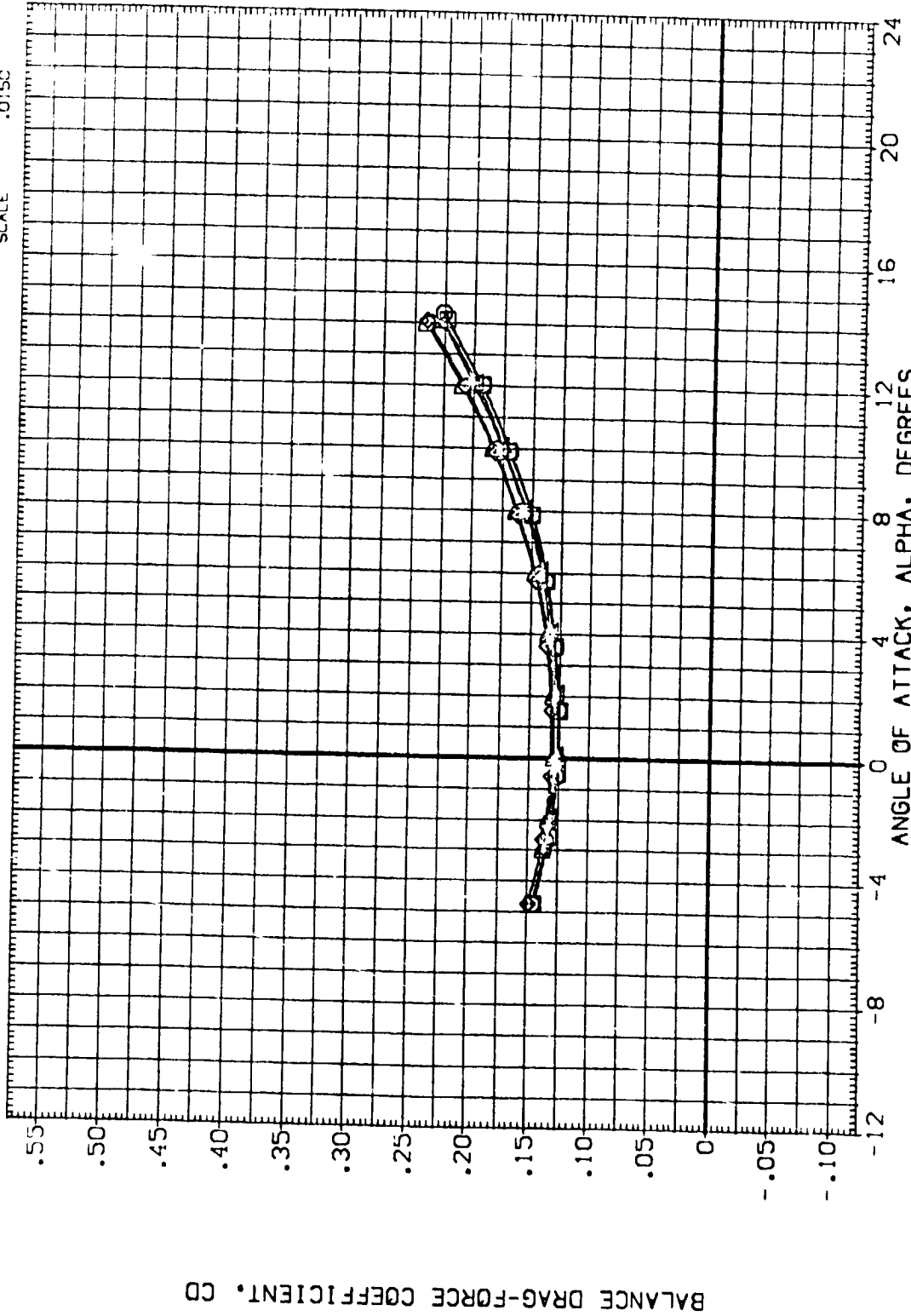


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(1)MACH = 2.00



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019)	ARC 66-709 0A59 0A11A-(N24)
(CER022)	ARC 66-709 0A59 0A11A-(N24)
(CER023)	ARC 66-709 0A59 0A11A-(N24)
(1ER019)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
(1ER022)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
(1ER023)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	.000	.000
.000	.000	16.300
.000	.000	-11.700
.000	.000	.000
.000	.000	16.300

REFERENCE INFORMATION

SREF	.6053	SO.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6295	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

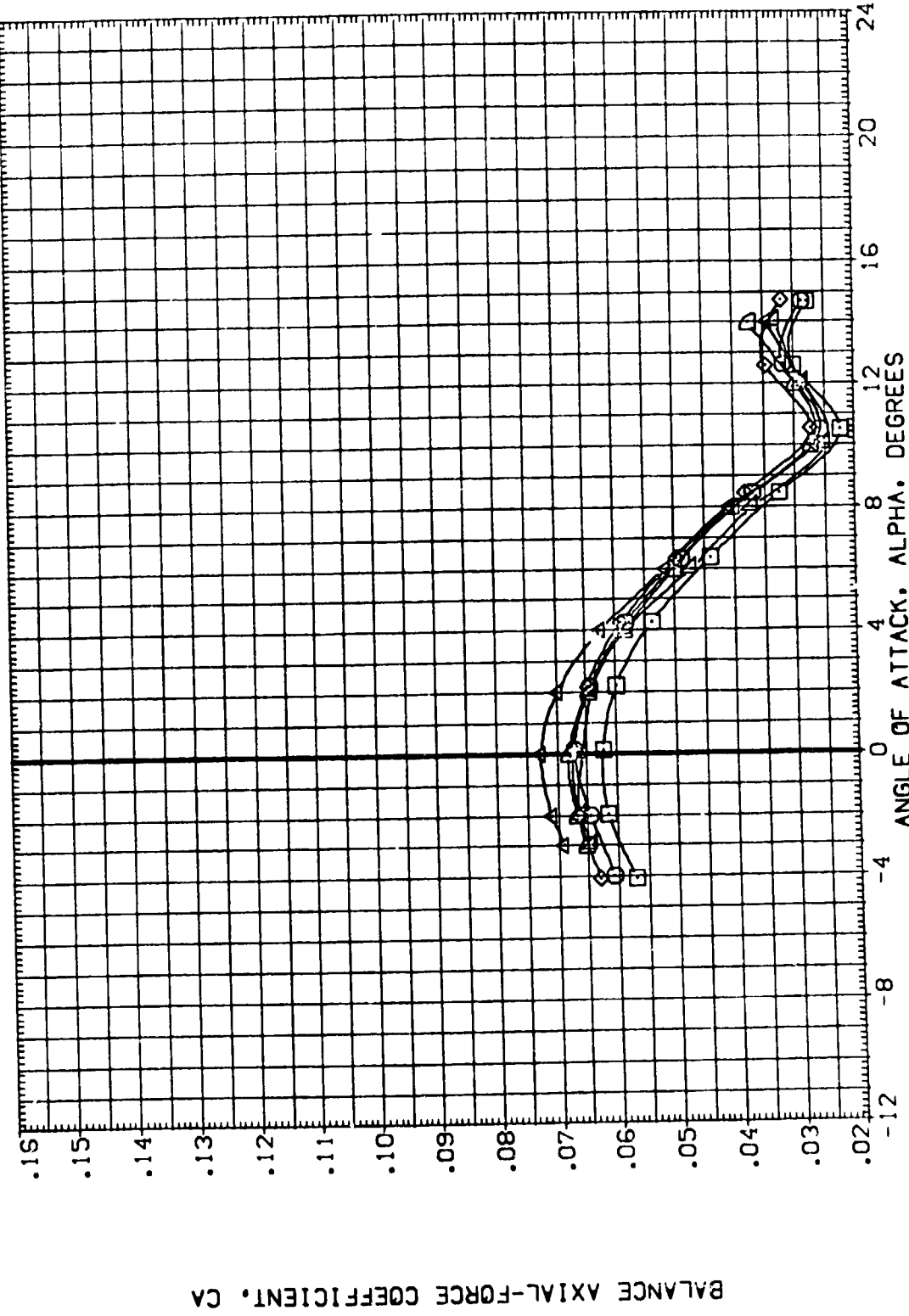


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(A)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019) DATA NOT AVAILABLE

(CER022) ARC 66-709 OAS9 0111A-(N24)

(CER023) ARC 66-709 OAS9 0111A-(N24)

(I-RO19) DATA NOT AVAILABLE

(I-RO22) DATA NOT AVAILABLE

(I-RO23) ARC 66-709 OAS9 0111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDF LAP

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

REFERENCE INFORMATION

SREF .6053 50.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

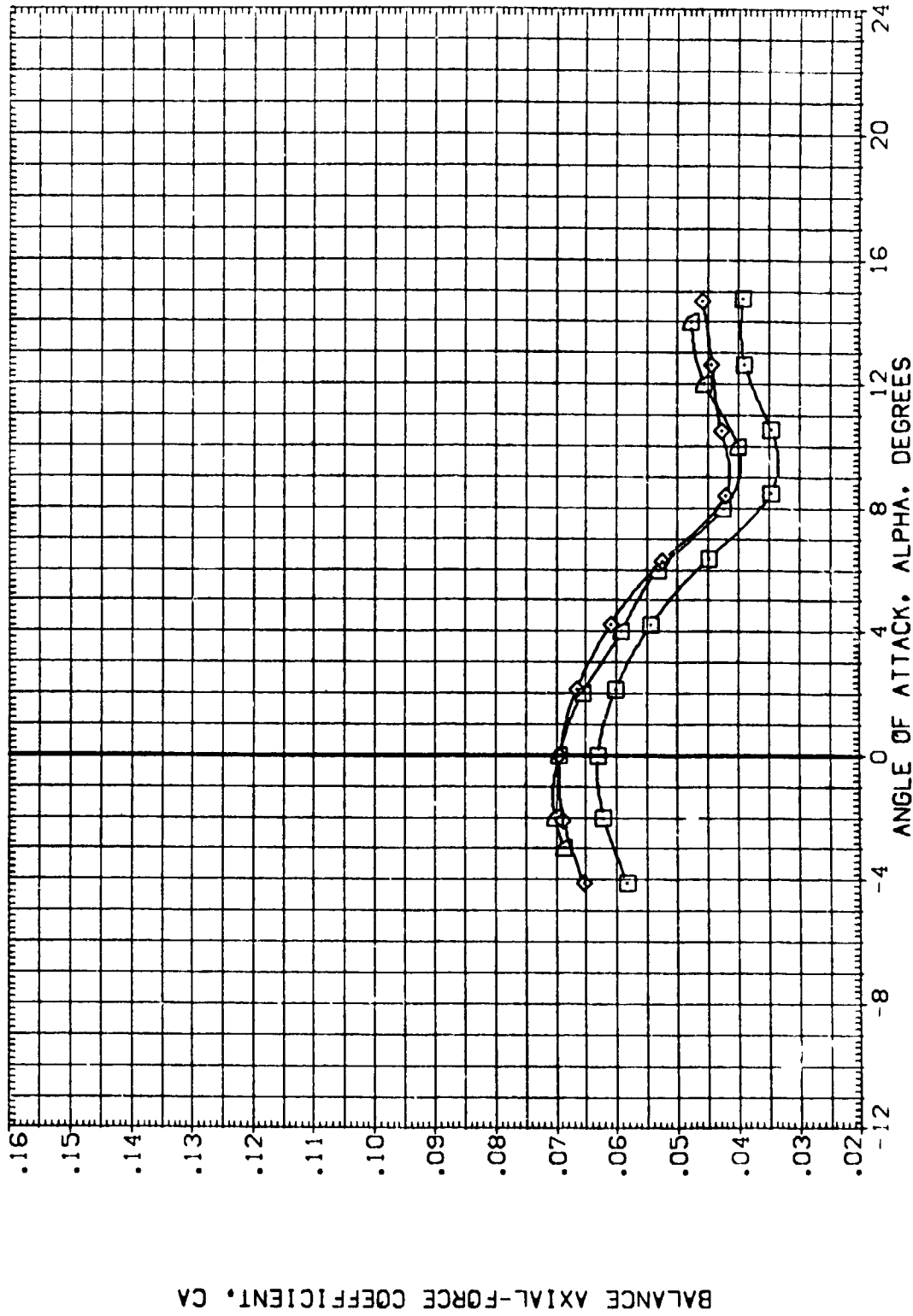


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

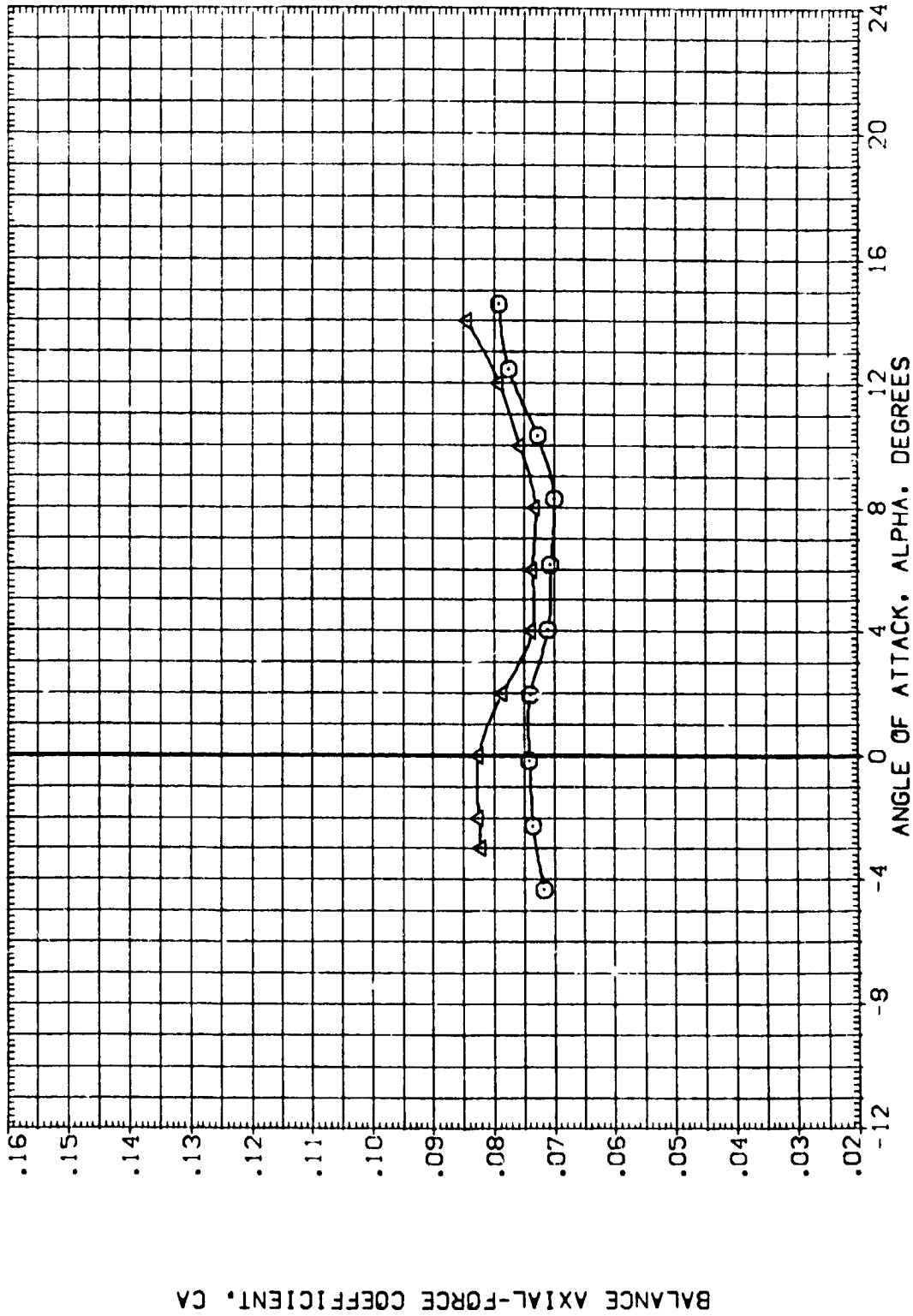
(B)MACH = .70



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CER019) ARC 66-709 OAS9 0A11A-(N24)
 (CER022) DATA NOT AVAILABLE
 (CER023) DATA NOT AVAILABLE
 (IER019) ARC 66-709 OAS9 011A-N24 (ADJUSTED FOR TARES)
 (IER022) DATA NOT AVAILABLE
 (IER023) DATA NOT AVAILABLE

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 .REF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



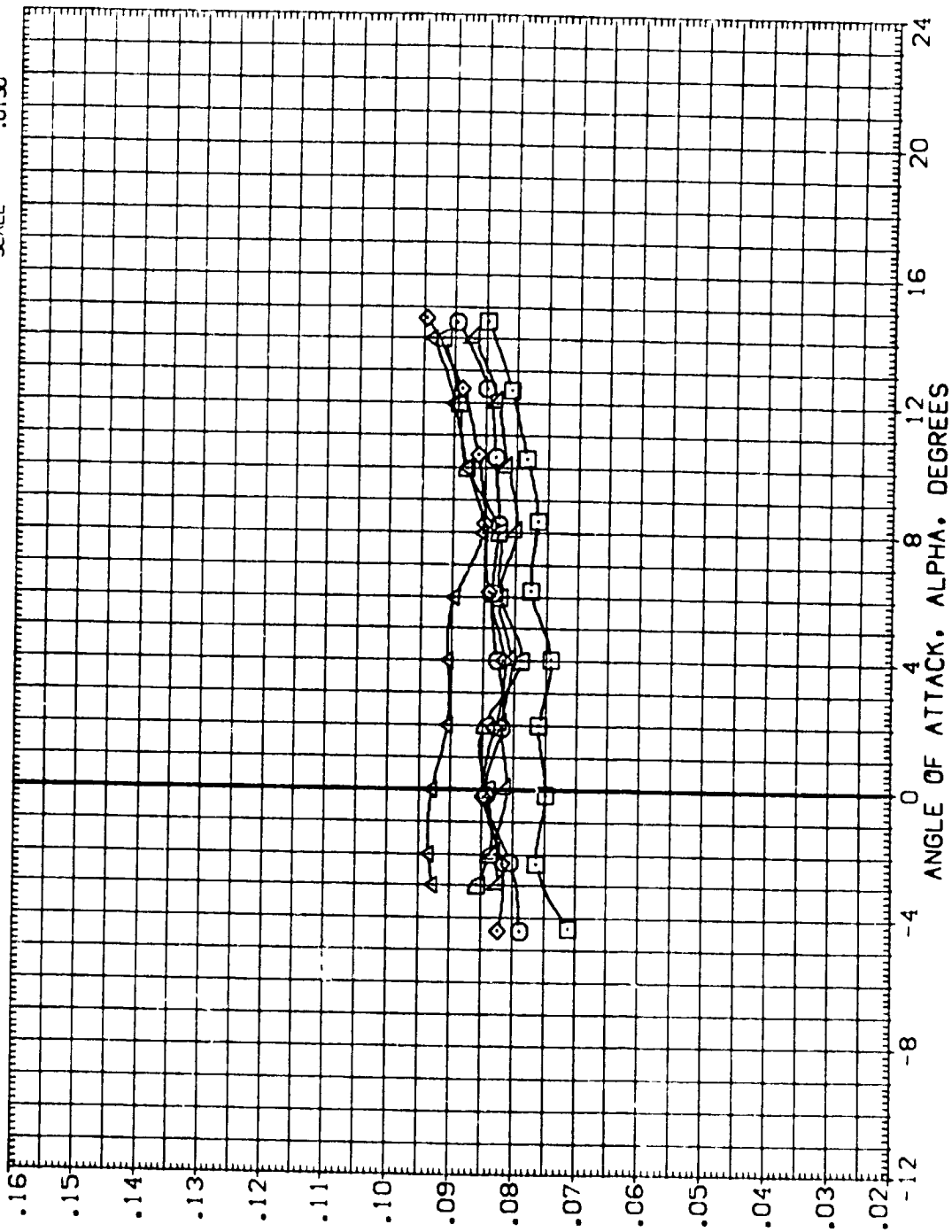
BALANCE AXIAL-FORCE COEFFICIENT, CA

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .85



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BDFLAP	REFERENCE INFORMATION
(CER019)	ARC 66-709 OAS9 O11A-N24	.000	.000	-11.700	SREF .6053 SO.FT.
(CER022)	ARC 66-709 OAS9 O11A-N24	.000	.000	.000	LREF .5935 FT.
(CER023)	ARC 66-709 OAS9 O11A-N24	.000	.000	16.300	BREF 1.1710 FT.
(1ER019)	ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(1ER022)	ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	YMRP .0000 IN.
(1ER023)	ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150



BALANCE AXIAL-FORCE COEFFICIENT, CA

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(E)MACI = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019) ARC 66-709 D459 0A11A-(N24)

(CER022) DATA NOT AVAILABLE

(CER023) DATA NOT AVAILABLE

(IER019) ARC 66-709 D459 011A-N24 (ADJUSTED FOR TARES)

(IER022) DATA NOT AVAILABLE

(IER023) DATA NOT AVAILABLE

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5835 FT.

BREF 1.1710 FT.

XMRP 12.6233 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

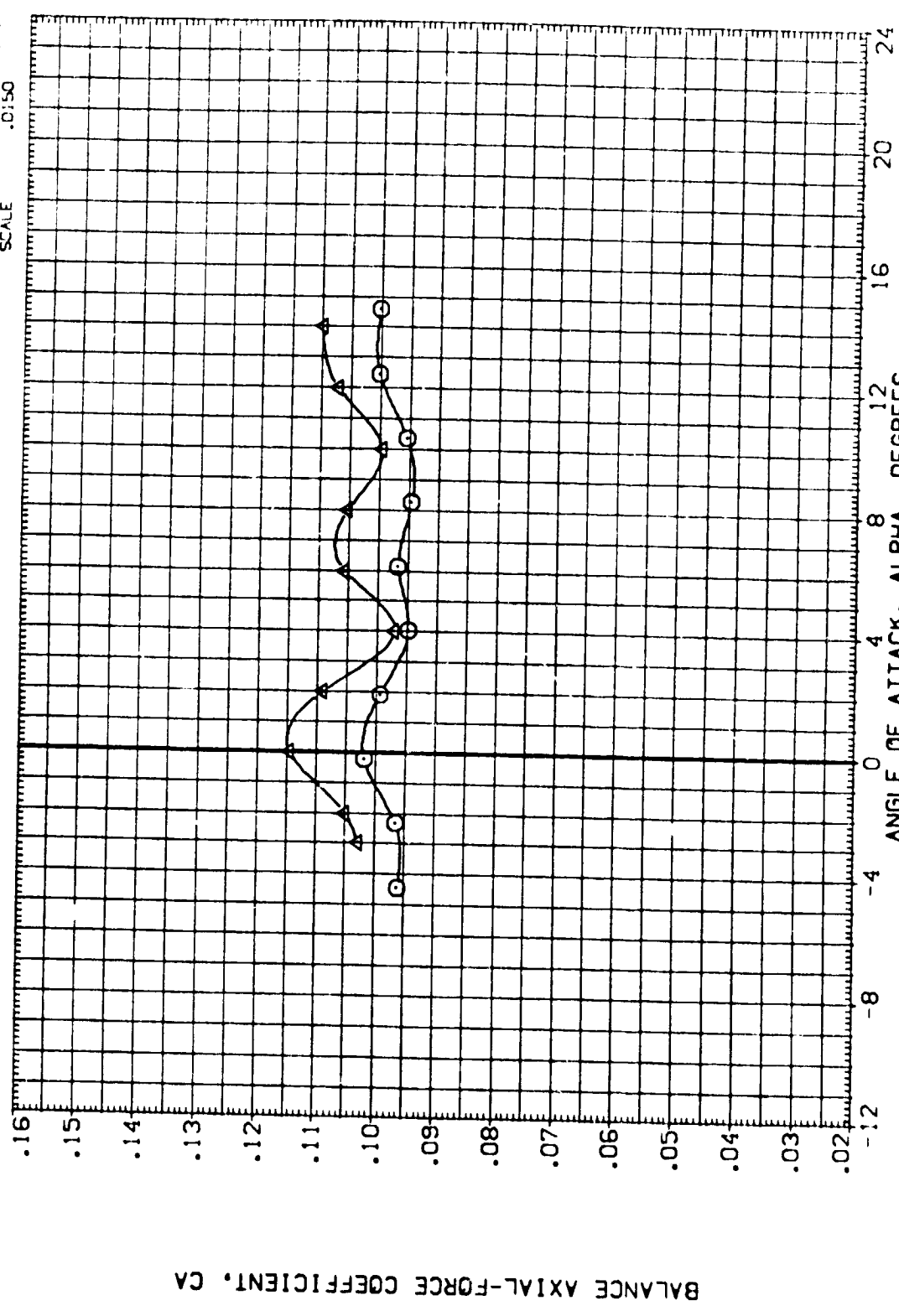


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(CF)MACH = .95



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEV/DN	BOF/LAP	REFERENCE INFORMATION
(CERO19)	ARC 66-709 DA59 DA11A-(N24)	.000	.000	-11.700	SREF .6053 SQ.FT.
(CERO22)	ARC 66-709 DA59 DA11A-(N24)	.000	.000	-11.700	LREF .5935 FT.
(CERO23)	ARC 66-709 DA59 DA11A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(CERO19)	ARC 66-709 DA59 DA11A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP .0000 IN.
(CERO22)	ARC 66-709 DA59 DA11A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	YMRP .3750 IN.
(CERO23)	ARC 66-709 DA59 DA11A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP .0150
					SCALE

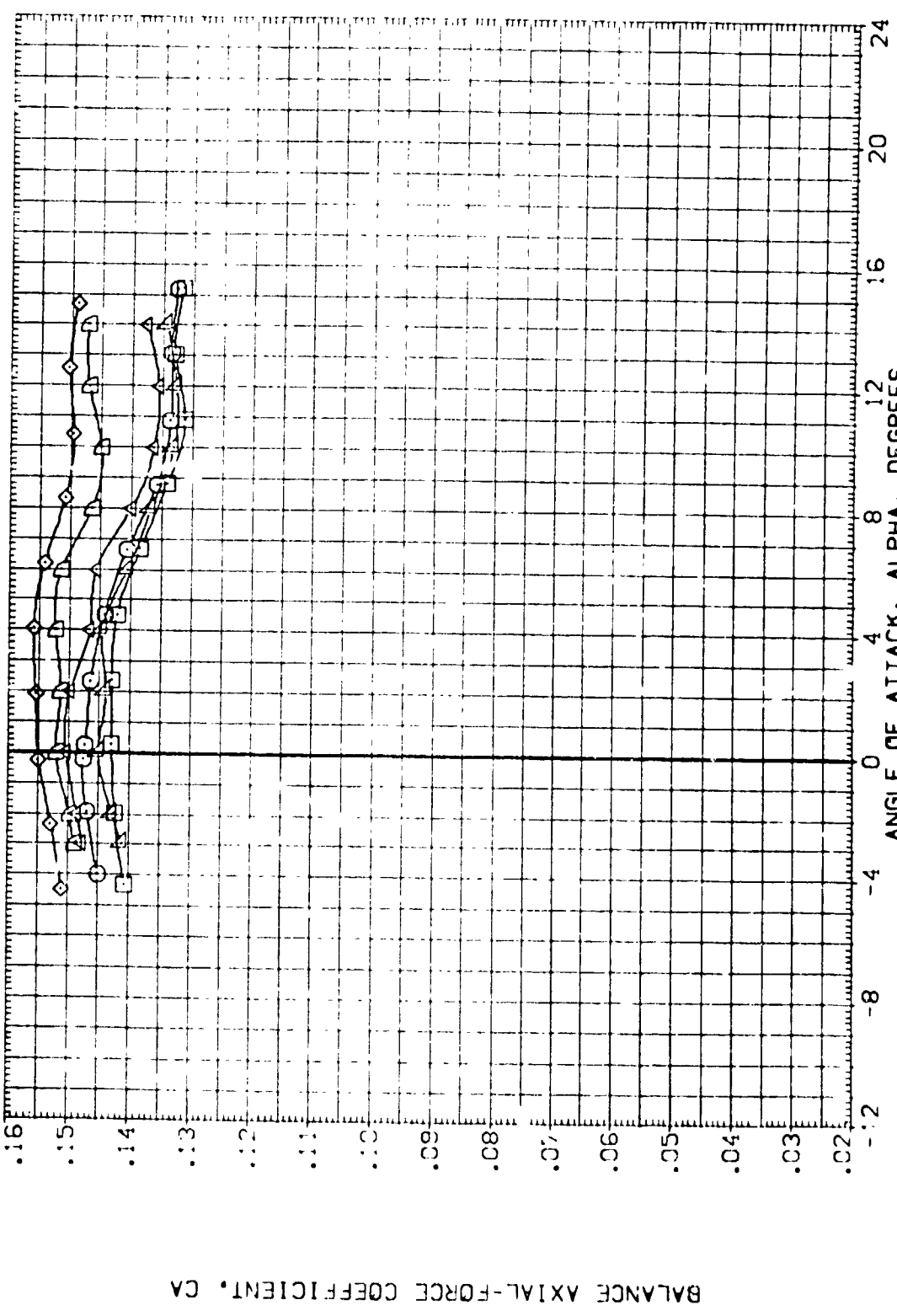


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CER019) ARC 66-708 BA59 0111A-(N24)
 (CER022) ARC 66-709 BA59 0111A-(N24)
 (CER023) ARC 66-709 BA59 0111A-(N24)
 (1ER019) ARC 66-709 BA59 0111A-N24 (ADJUSTED FOR TARES)
 (1ER022) DATA NOT AVAILABLE
 (1ER023) ARC 66-708 BA59 0111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

REFERENCE INFORMATION
 SREF .6059 SQ.FT.
 LREF .9535 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

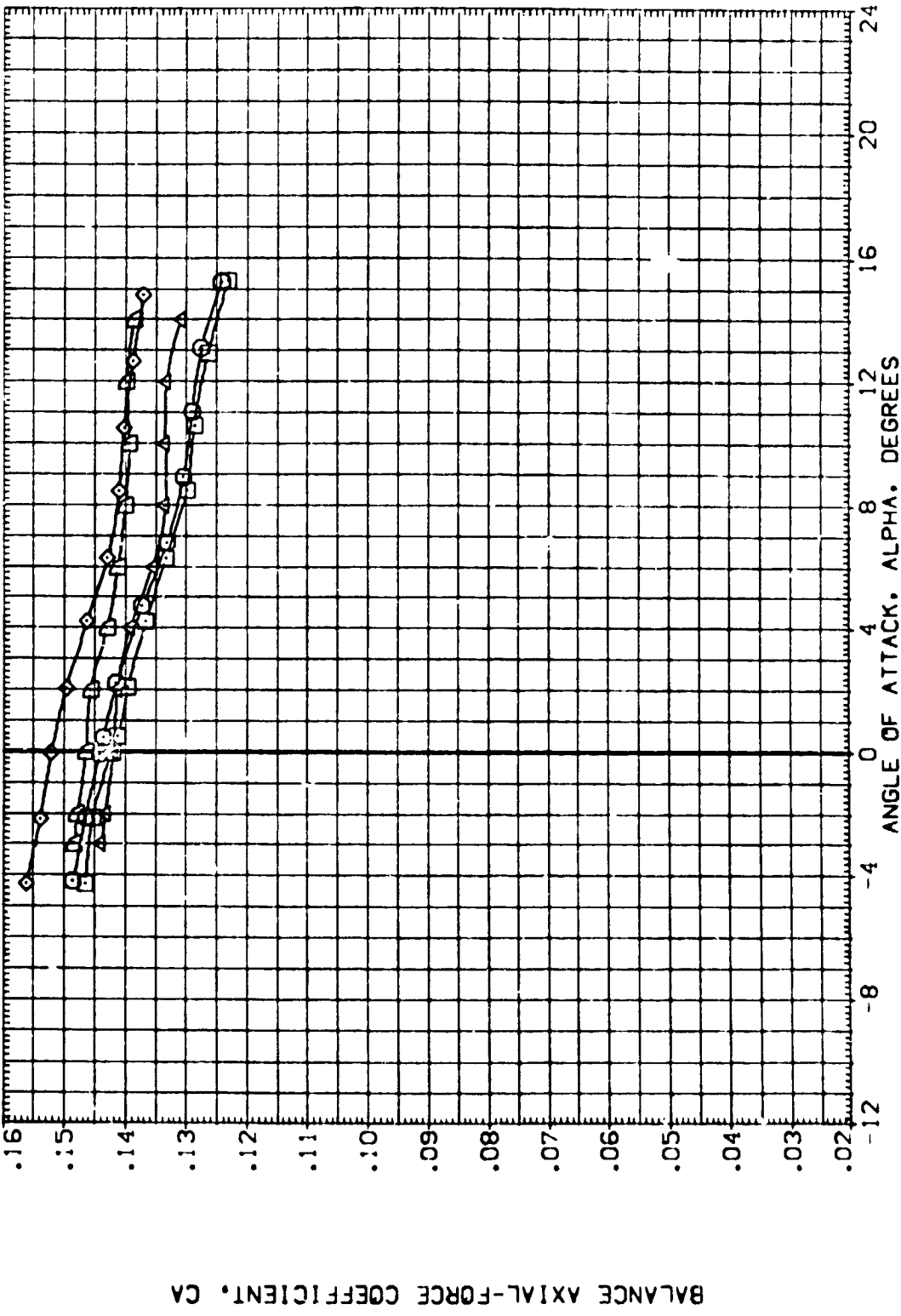


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH = 1.50

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(1ER019)	ARC 66-709 CAS9 O11A-N24
(1ER022)	ARC 66-709 CAS9 O11A-N24
(1ER023)	ARC 66-709 CAS9 O11A-N24
(1ER019)	ARC 66-709 CAS9 O11A-N24 (ADJUSTED FOR TARES)
(1ER022)	ARC 66-709 CAS9 O11A-N24 (ADJUSTED FOR TARES)
(1ER023)	ARC 66-709 CAS9 O11A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDFLAP

.000	.000	-11.700
.000	.000	.000
.000	.000	16.300
.000	.000	-11.700
.000	.000	.000
.000	.000	16.300

REFERENCE INFORMATION

SREF	.6053	SC.FT.
LREF	.5935	FT.
BREF	1.170	IN.
XREF	12.6255	IN.
YREF	.0000	IN.
ZREF	-.3750	IN.
SCALE	.0:50	

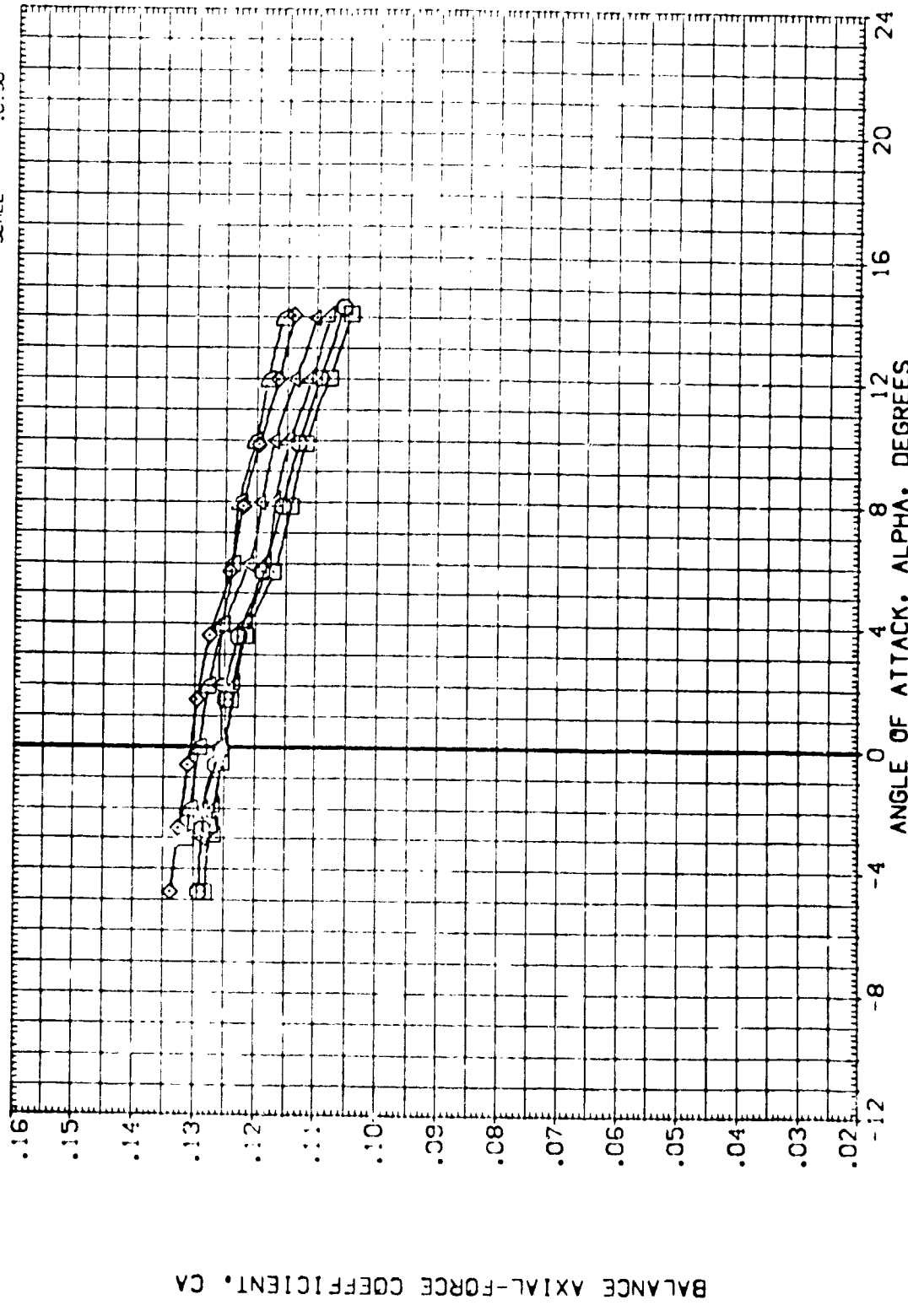


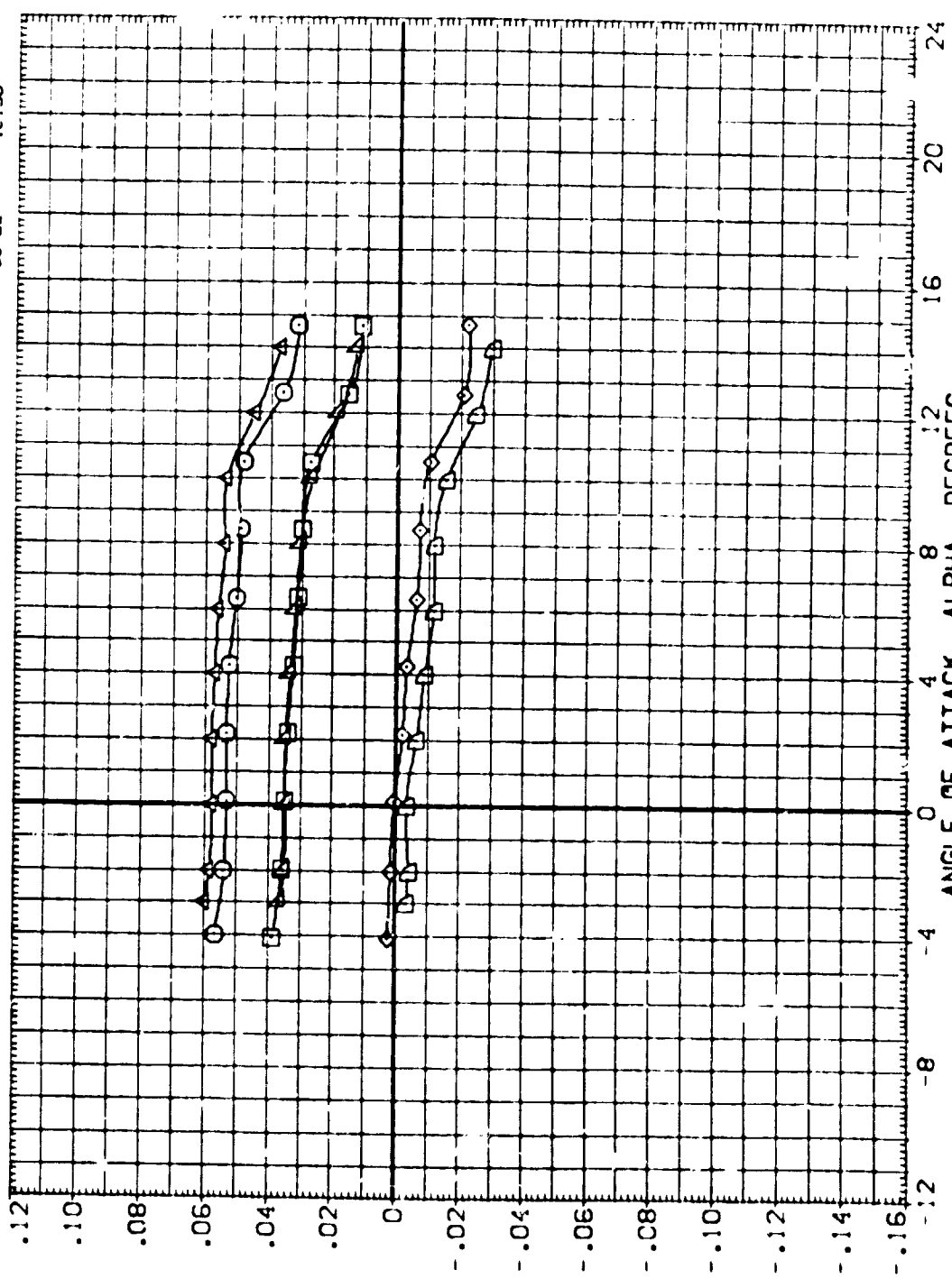
FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(1)MACH = 2.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CER019) ARC 65-709 0A59 0A11A-(N24)
 (CER022) ARC 66-709 0A59 0A11A-(N24)
 (CER023) ARC 66-709 0A59 0A11A-(N24)
 (TER019) ARC 65-709 0A59 011A-N24 (ADJUSTED FOR TARES)
 (TER022) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
 (TER023) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDF LAP
 .000 .000 -11.700
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 16.300

REFERENCE INFORMATION
 SREF .6053 50.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0:50



GALANCE FORWARD PITCHING-MOMENT COEFFICIENT, CLMFD

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(A)MACH = .60



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019) DATA NOT AVAILABLE

(CER022) ARC 66-709 CASE D111A-(N24)

(CER023) ARC 66-709 CASE D111A-(N24)

(1ER019) DATA NOT AVAILABLE

(1ER022) DATA NOT AVAILABLE

(1ER023) ARC 66-709 CASE D111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 .000 16.300

.000 .000 -11.700

.000 .000 16.300

REFERENC INFORMATION

SREF 6053 SQ.FT.

LREF 5935 FT.

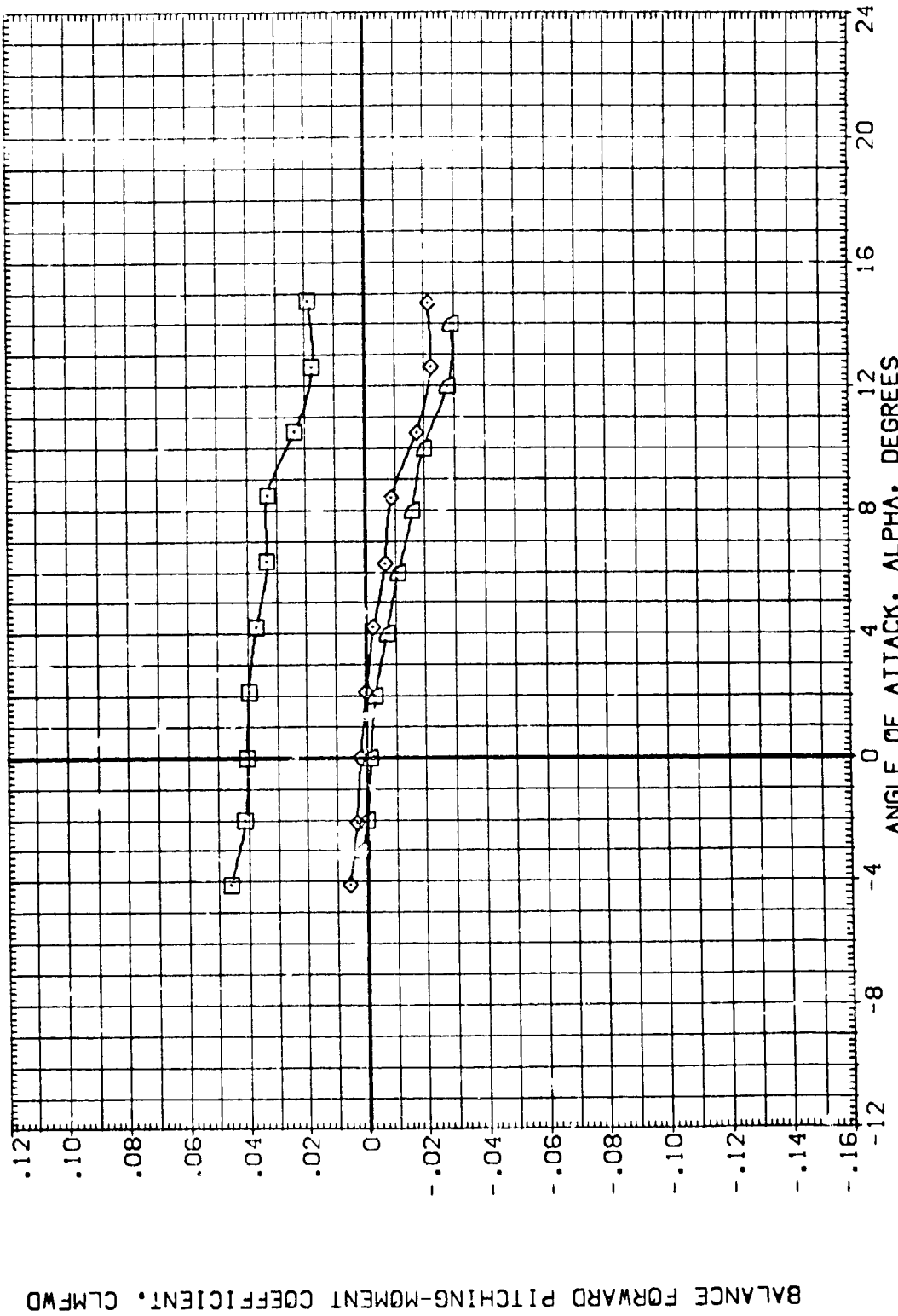
BREF 1.1710 FT. IN.

XMRP 2.6255 IN.

YMRP .0000 IN.

ZMRP .3750 IN.

SCALE .0150



BALANCE FORWARD PITCHING-MOMENT COEFFICIENT, CLMFW

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(B)MACH = .70

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CER019) ARC 66-709 DA59 011A-(N24)
 (CER022) ARC 66-709 DA59 011A-(N24)
 (CER023) ARC 66-709 DA59 011A-(N24)
 (IER019) ARC 66-709 DA59 011A-N24 (ADJUSTED FOR TARES)
 (IER022) DATA NOT AVAILABLE
 (IER023) ARC 66-709 DA59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

REFERENCE INFORMATION
 SREF 6053 SQ.FT.
 LREF .5935 FT.
 BRFL 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE 1:0.50

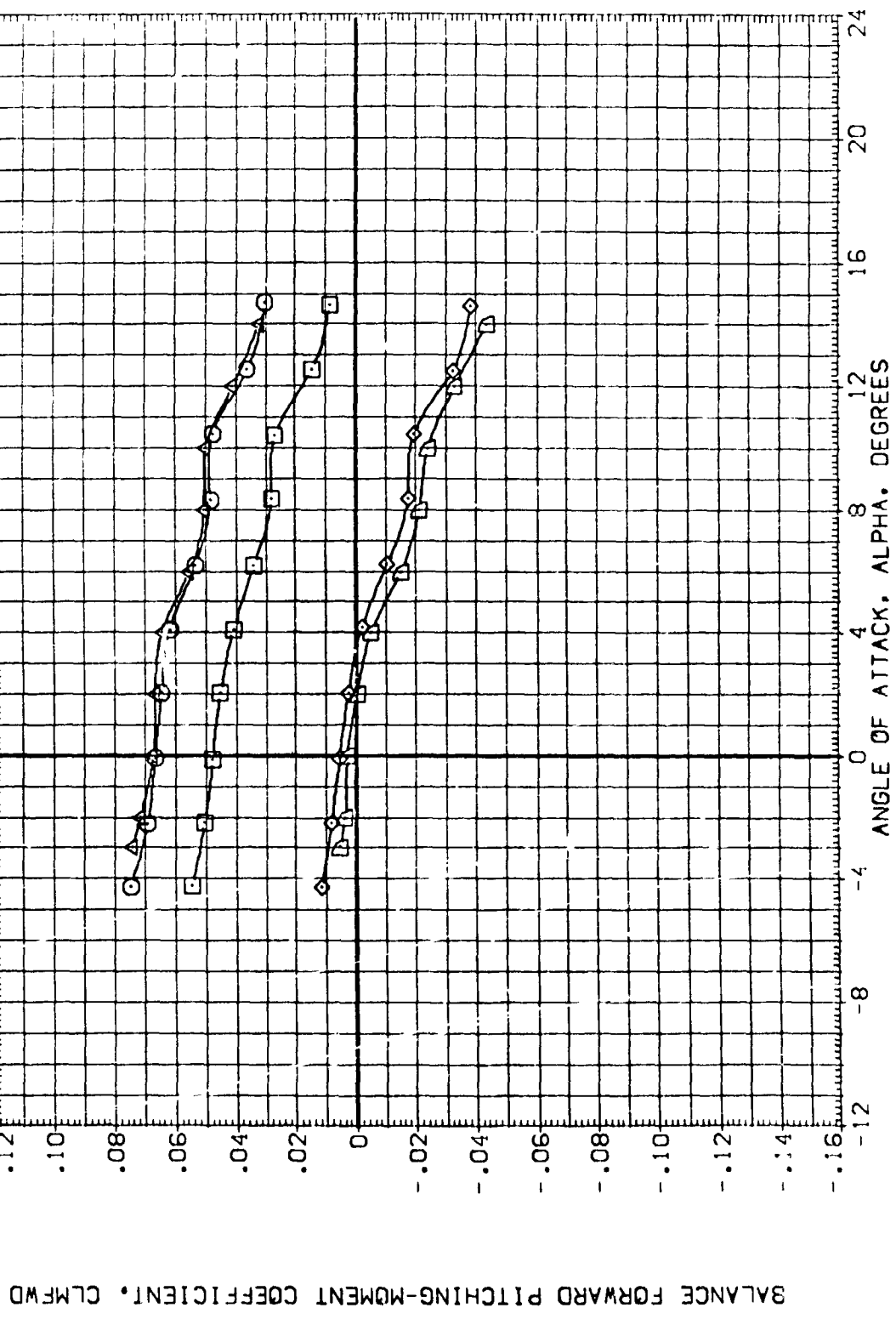


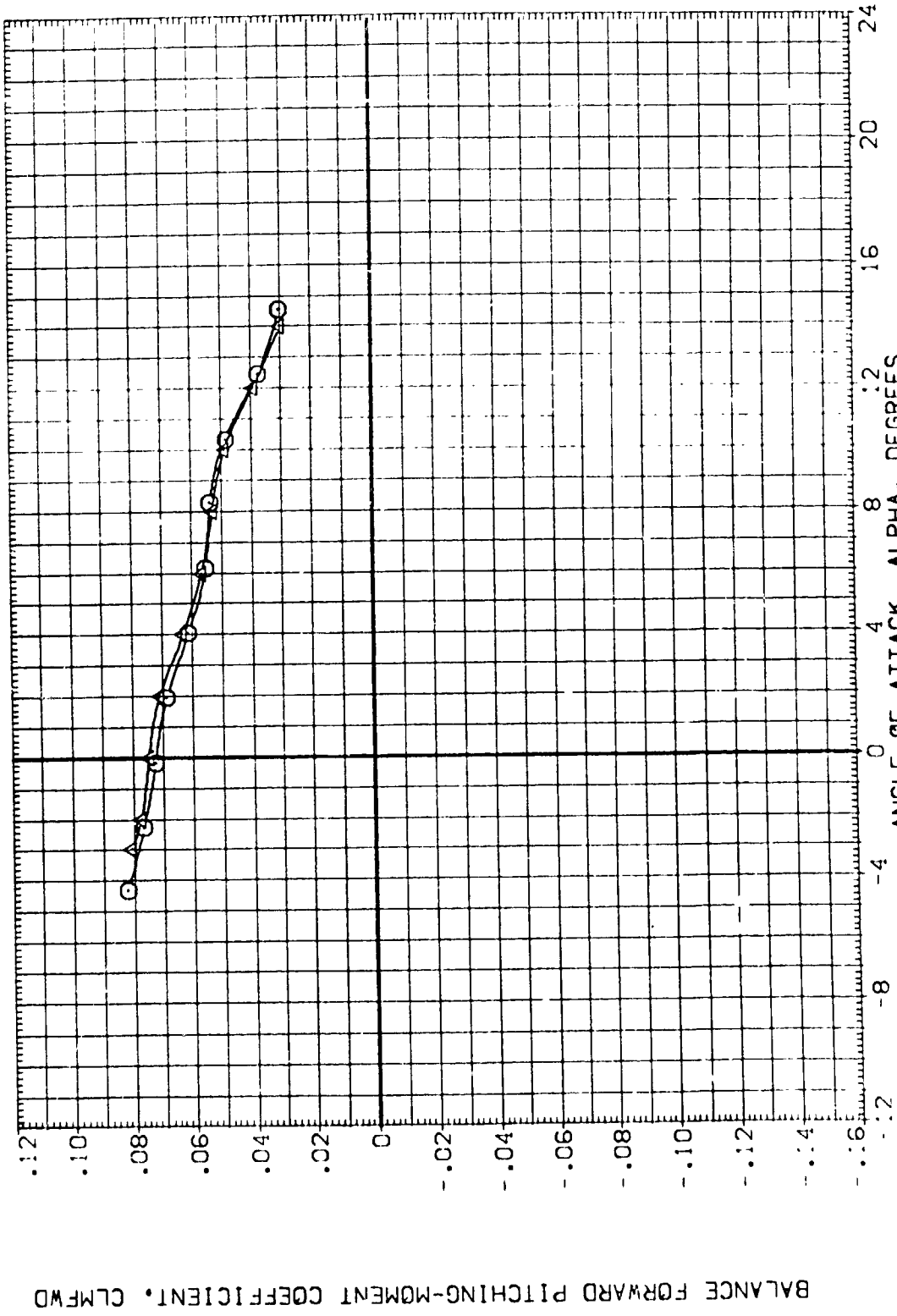
FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CER019) ARC 66-709 OAS9 0A11A-(N24)
 (CER022) DATA NOT AVAILABLE
 (CER023) DATA NOT AVAILABLE
 (LEP019) ARC 66-709 OAS9 011A-N24 (ADJUSTED FOR TARES)
 (LEP022) DATA NOT AVAILABLE
 (LEP023) DATA NOT AVAILABLE

BETA ELEVON SCFLAP
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMXP 12.6265 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



BALANCE FORWARD PITCHING-MOMENT COEFFICIENT, CLMFD

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CFR019) ARC 66-709 OAS9 0111A-(N24)
 (CFR022) DATA NOT AVAILABLE
 (CFR023) DATA NOT AVAILABLE
 (IFR019) ARC 66-709 OAS9 0111A-N24 (ADJUSTED FOR TARES)
 (IFR022) DATA NOT AVAILABLE
 (IFR023) DATA NOT AVAILABLE

BETA ELEVATION BOFLAP

.000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

REFERENCE INFORMATION

SPC: .6053 SQ.FT.
 LREF .5935 FT.
 BRFF 1.171C IN.
 XMRP 12.6235 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

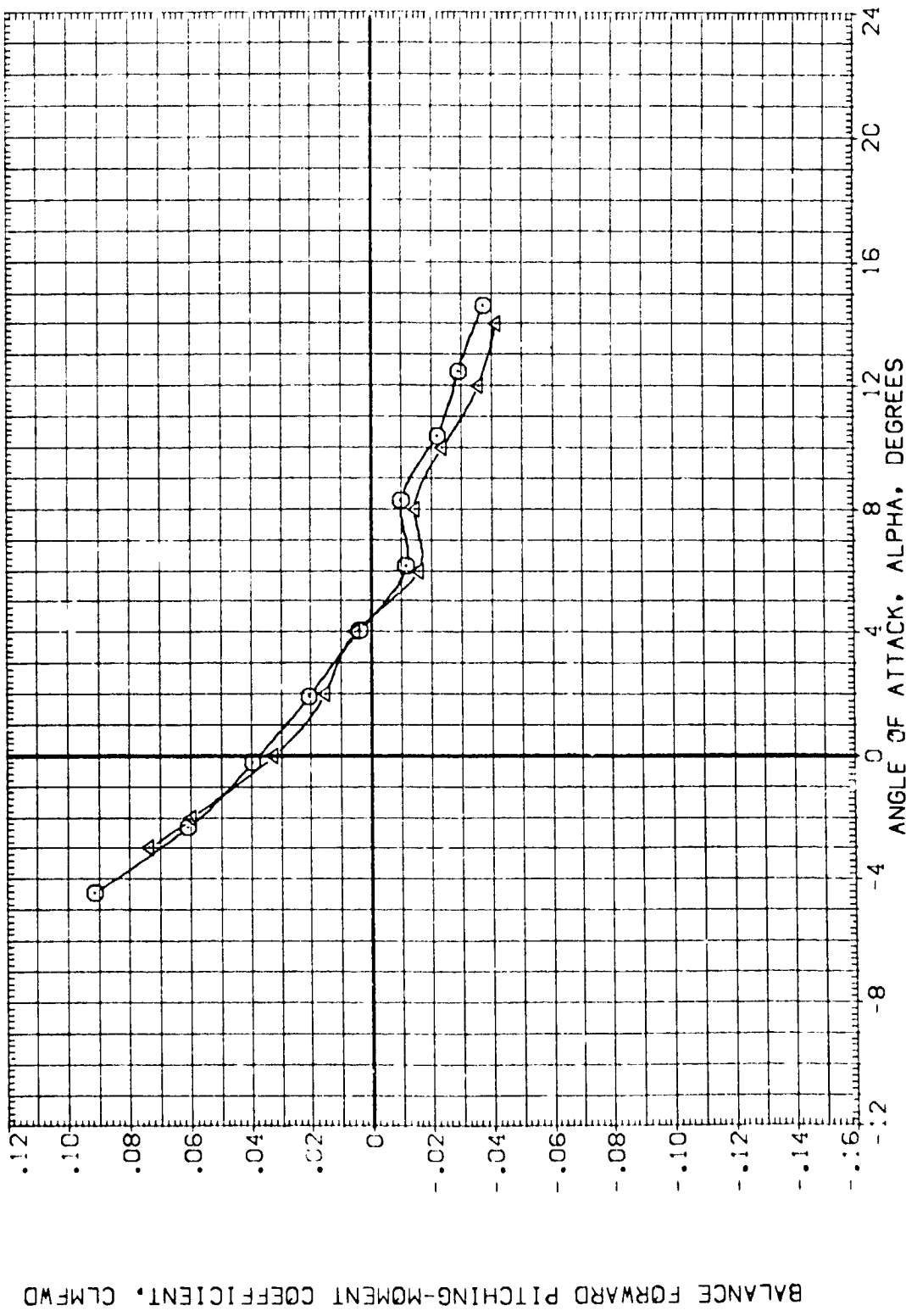


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

REFERENCE INFORMATION:
 SREF .6C53 SQ.FT.
 LREF .5936 FT.
 BRREF 1.1710 FT.
 XREF 12.6255 IN.
 YREF .0000 IN.
 ZREF -.3730 IN.
 SCALE .0150

BETA .000
 ELEVON .000
 SOFLAP -11.700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (1ER019) ARC 66-709 DA59 O11A-(N24)
 (1ER021) ARC 66-709 DA59 O11A-(N24)
 (1ER023) ARC 66-709 DA59 O11A-(N24)
 (1ER019) ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)
 (1ER021) ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)
 (1ER023) ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)

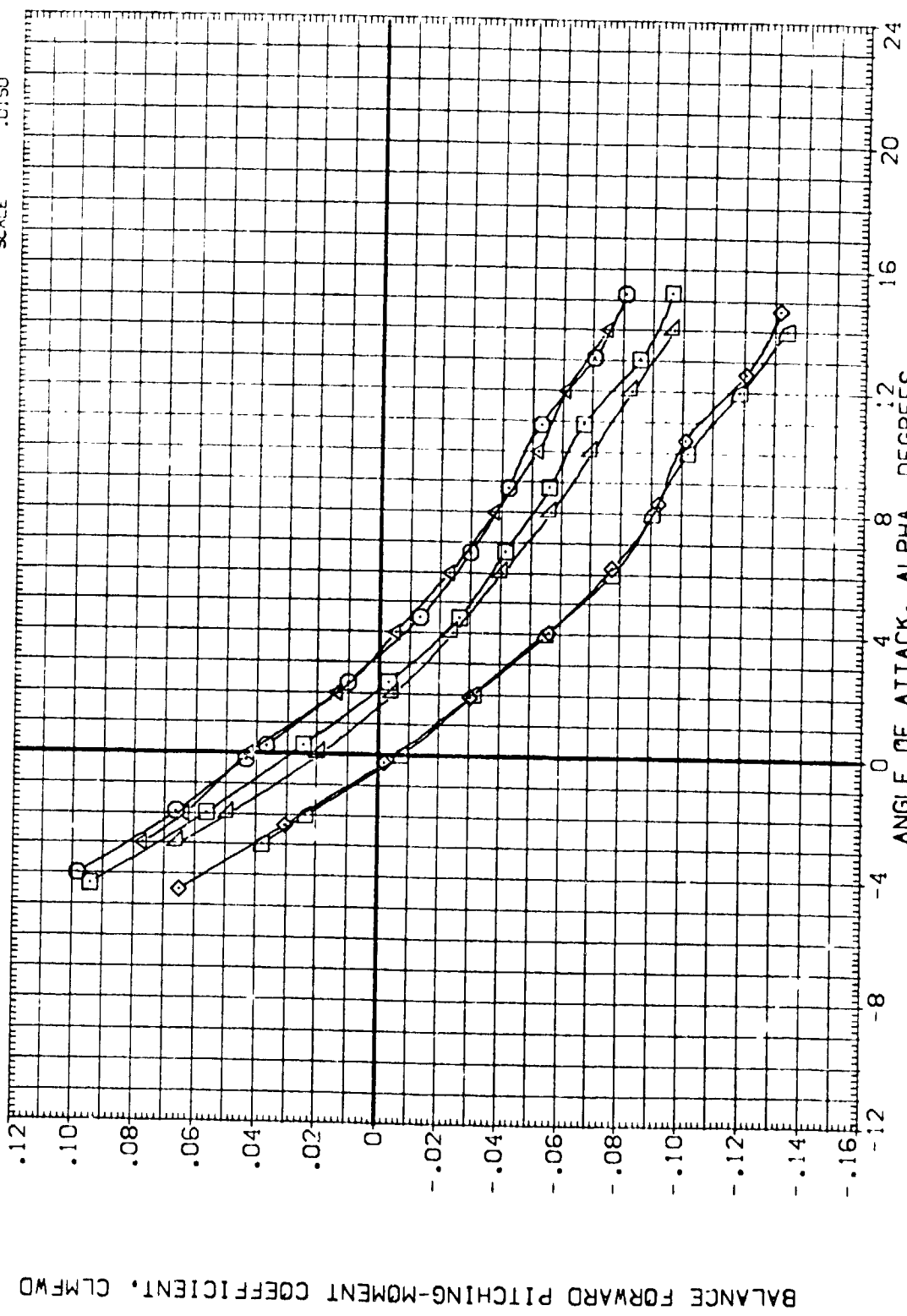


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES
 (G)MACH = 1.20



DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BOFLAP REFERENCE INFORMATION

(CER019) ARC 66-709 QAS9 O11A-N24 .000 .000 -11.700 SREF .6053 50. FT.

(CER022) ARC 66-709 QAS9 O11A-N24 .000 .000 .000 LREF .5935 FT.

(CER023) ARC 66-709 QAS9 O11A-N24 .000 .000 16.300 BRREF 1.1710 FT.

(CER019) ARC 66-709 QAS9 O11A-N24 (ADJUSTED FOR TARES) .000 .000 -11.700 XMRP 12.6255 IN.

(CER022) DATA NOT AVAILABLE .000 .000 .000 ZMRP .3750 IN.

(CER023) ARC 66-709 QAS9 O11A-N24 (ADJUSTED FOR TARES) .000 .000 16.300 SCALE .0150

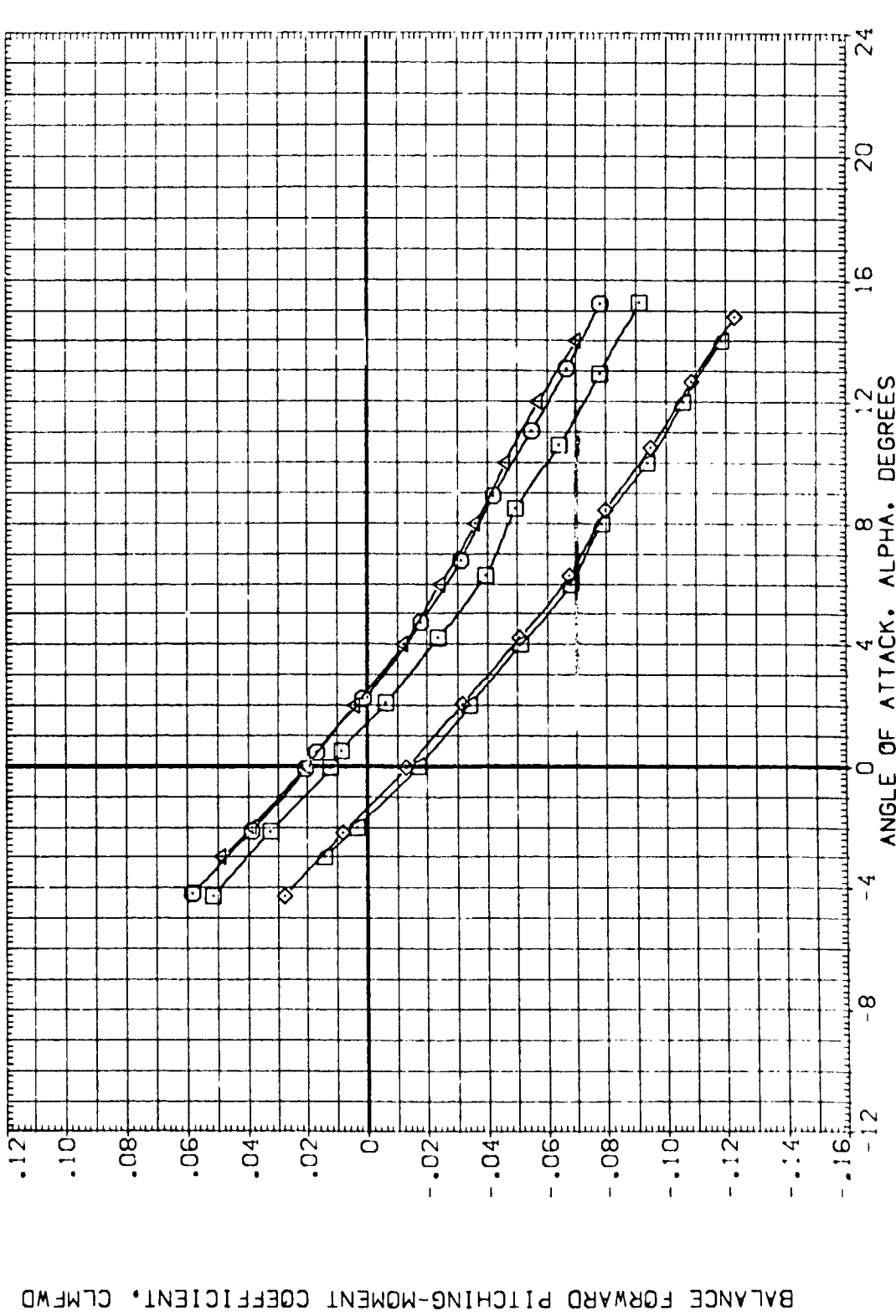


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

CHUMACH 1.50

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019)	ARC 66-709 0A59 0A11A-(N24)
(CER022)	ARC 66-709 0A59 0A11A-(N24)
(CER023)	ARC 66-709 0A59 0A11A-(N24)
(CER019)	ARC 66-709 0A59 0A11A-(N24)
(CER022)	ARC 66-709 0A59 0A11A-(N24)
(CER023)	ARC 66-709 0A59 0A11A-(N24)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	.000	.000
.000	.000	16.300
.000	.000	-11.700
.000	.000	.000
.000	.000	16.300

REFERENCE INFORMATION

SREF	.6053	SO.F.T.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

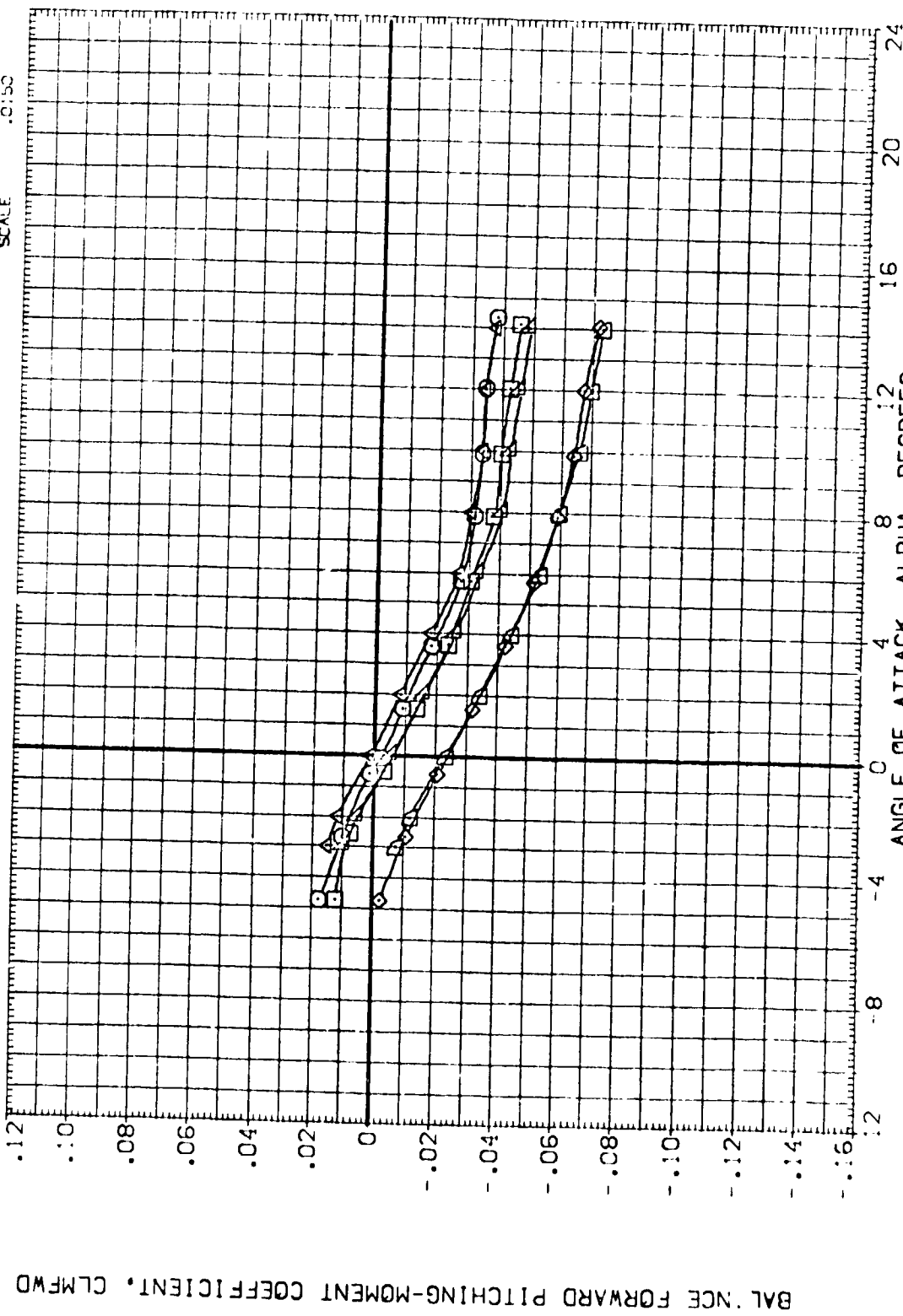


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(C)MAG - 2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOF LAP	REFERENCE INFORMATION
(1) RC(3)	ARC 66-709 CA59 O11A-N24	.000	.000	-11.700	SREF .6053 SQ.FT.
(2) RC(3)	ARC 66-709 CA59 O11A-N24	.000	.000	-11.700	LREF .5935 FT.
(3) RC(3)	ARC 66-709 CA59 O11A-N24	.000	.000	16.300	BREF 1.1710 FT.
(4) RC(3)	ARC 66-709 CA59 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6265 IN.
(5) RC(3)	ARC 66-709 CA59 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	ZMRP .0000 IN.
(6) RC(3)	ARC 66-709 CA59 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	SCALE .0150

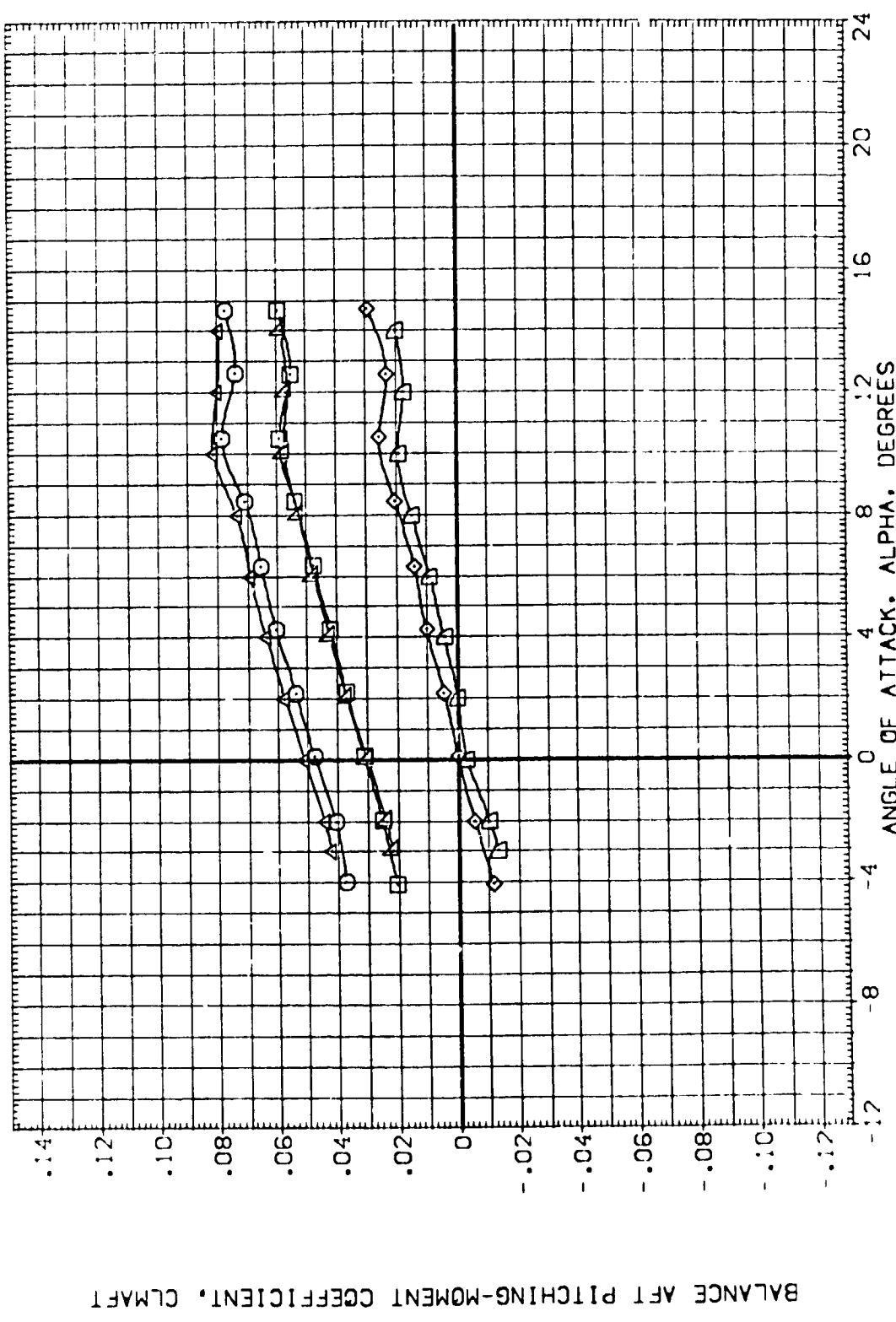


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

CAMAC 0.60

DATA SET SYMBOLS: CONFIGURATION DESCRIPTION

{CFR019} DATA NOT AVAILABLE

{CFR022} ARC 66-709 QAS9 Q111A-(N24)

{CFR023} ARC 66-709 QAS9 Q111A-(N24)

{IFR019} DATA NOT AVAILABLE

{IFR022} DATA NOT AVAILABLE

{IFR023} ARC 66-709 QAS9 Q111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

.000 .000 .000

.000 .000 .000

.000 .000 16.300

REFERENCE INFORMATION

SREF 50.3 50.FT.

LREF .593 59.3 FT.

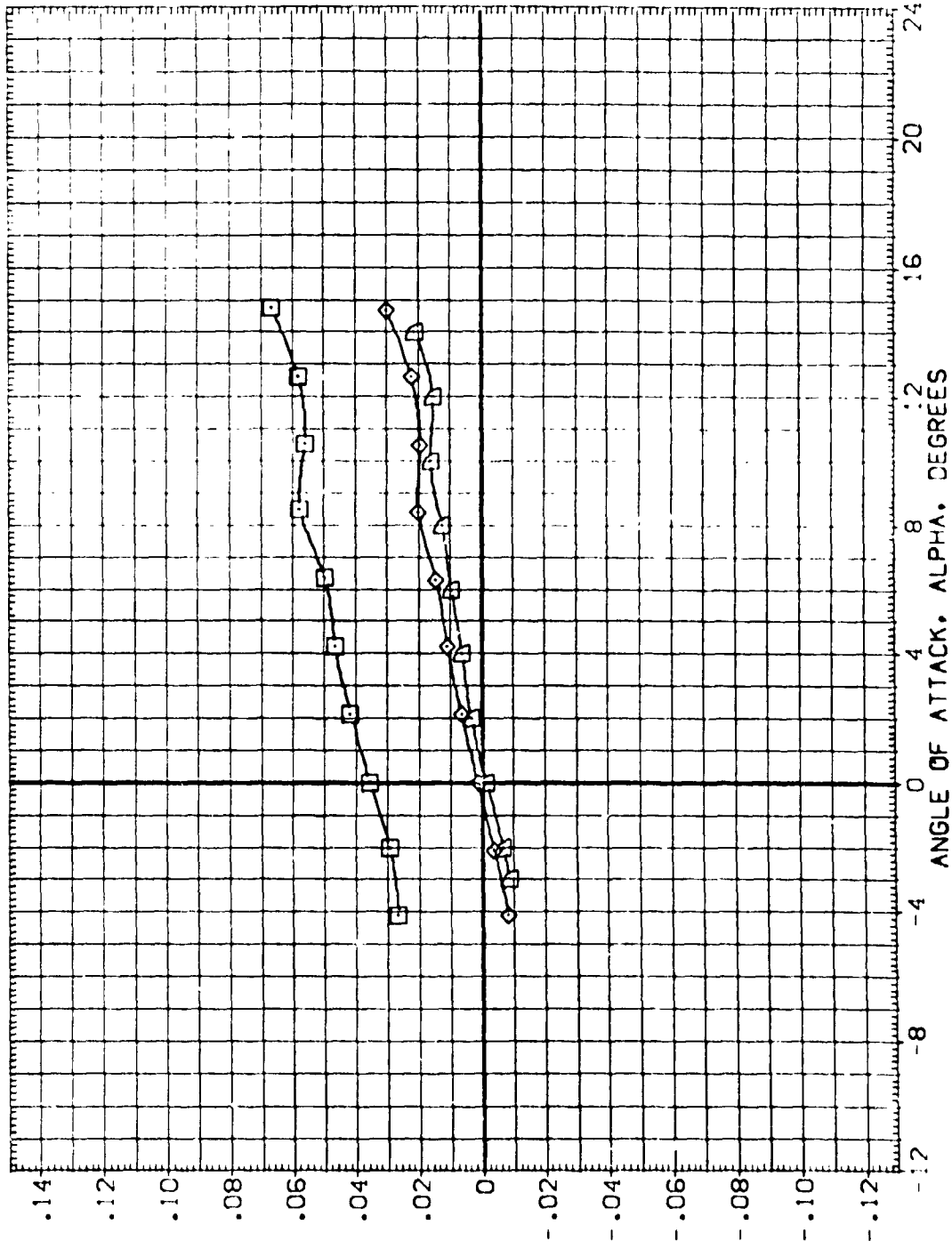
BREF 1.171 1.171 FT. IN.

XMPP 12.6255 12.6255 IN.

YMPP .0000 .0000 IN.

ZMPP -3.750 -3.750 IN.

SCALE .0150



BALANCE AFT PITCHING-MOMENT COEFFICIENT, CMAFT

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(C)R019) ARC 66-709 DASS O11A-(N24)

(C)R022) ARC 66-709 DASS O11A-(N24)

(C)R023) ARC 66-709 DASS O11A-(N24)

(C)R019) ARC 66-709 DASS O11A-N24 (ADJUSTED FOR TARES)

(C)R022) DATA NOT AVAILABLE

(C)R023) ARC 66-709 DASS O11A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 .000 .000

.000 .000 .000

.000 .000 .000

.000 .000 .000

.000 .000 .000

.000 .000 .000

.000 .000 .000

.000 .000 .000

.000 .000 .000

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6755 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

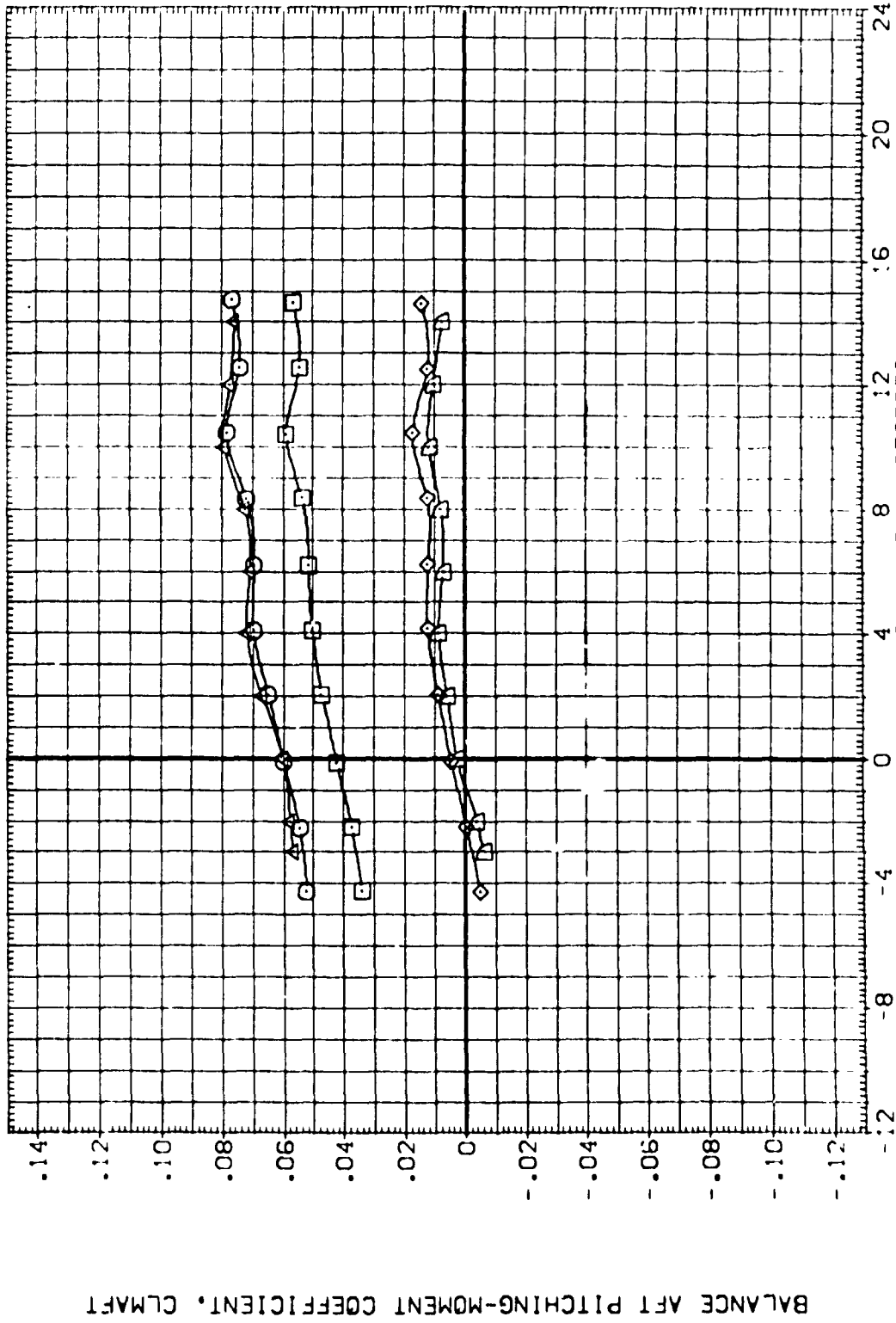




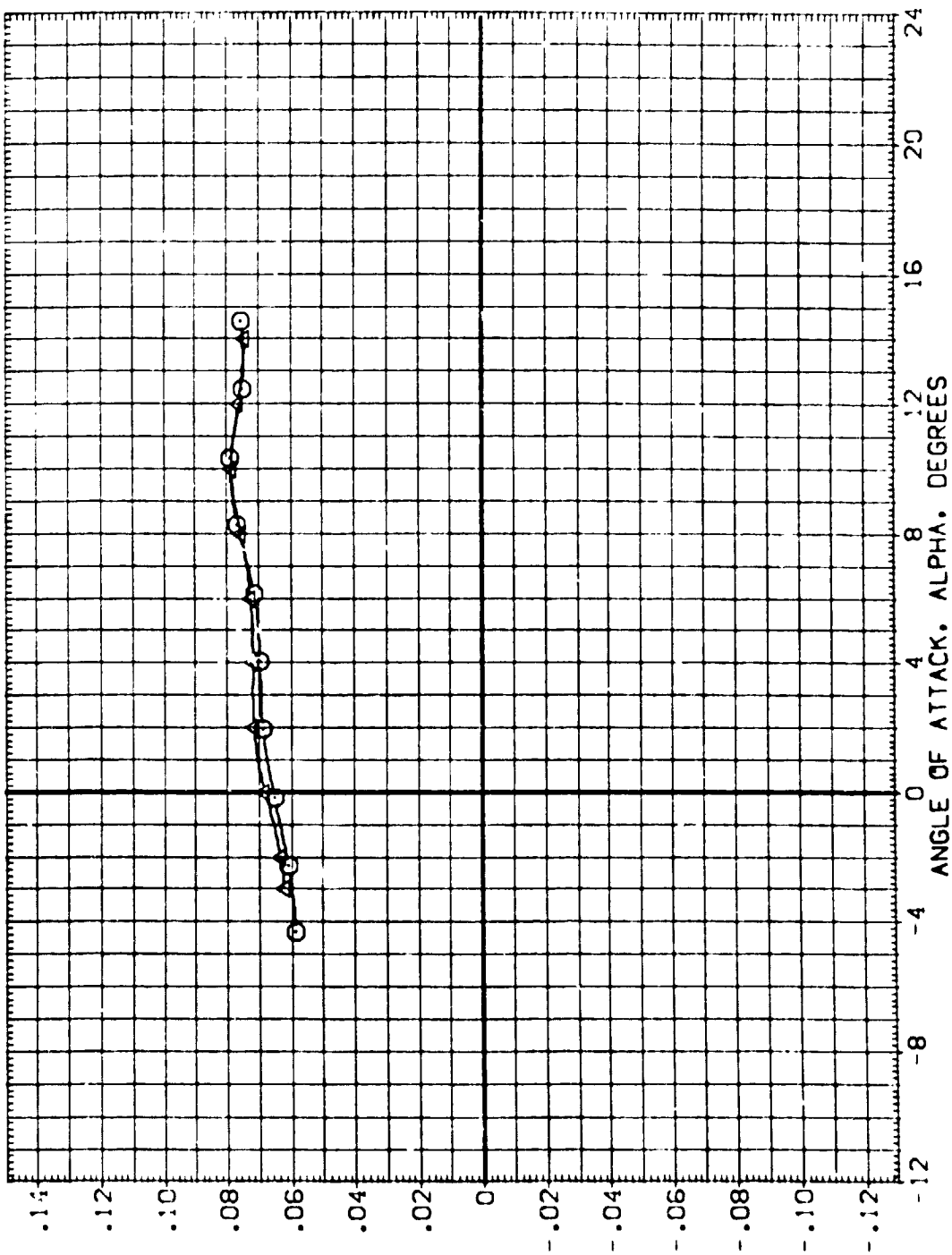


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

DATA SET SYMBOL:    
 (CER019) ARC 66-709 DASS 0111A-(N24)
 (CER022) DATA NOT AVAILABLE
 (CER023) DATA NOT AVAILABLE
 (CER019) ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)
 (CER022) DATA NOT AVAILABLE
 (CER023) DATA NOT AVAILABLE

BETA .000
 ELEVON .000
 BDF LAP -11.700

REFERENCE INFORMATION
 SREF .6053 SQ. FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6735 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



BALANCE AFT PITCHING-MOMENT COEFFICIENT, CMAFT

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(C)MAC: .85



DATA SET SYMBOL
 (CERO19)
 (CERO22)
 (CERO23)
 (LERO19)
 (LERO22)
 (LERO23)

CONF IGURATION DESCRIPTION
 ARC 66-709 OAS9 O11A-(N24)
 ARC 66-709 OAS9 O11A-(N24)
 ARC 66-709 OAS9 O11A-(N24)
 ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)

BETA
 .000
 .000
 .000
 .000
 .000
 .000

ELEVON
 .000
 .000
 .000
 .000
 .000
 .000

BDF LAP
 -11.700
 .000
 16.300
 -11.700
 .000
 16.300

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5936 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

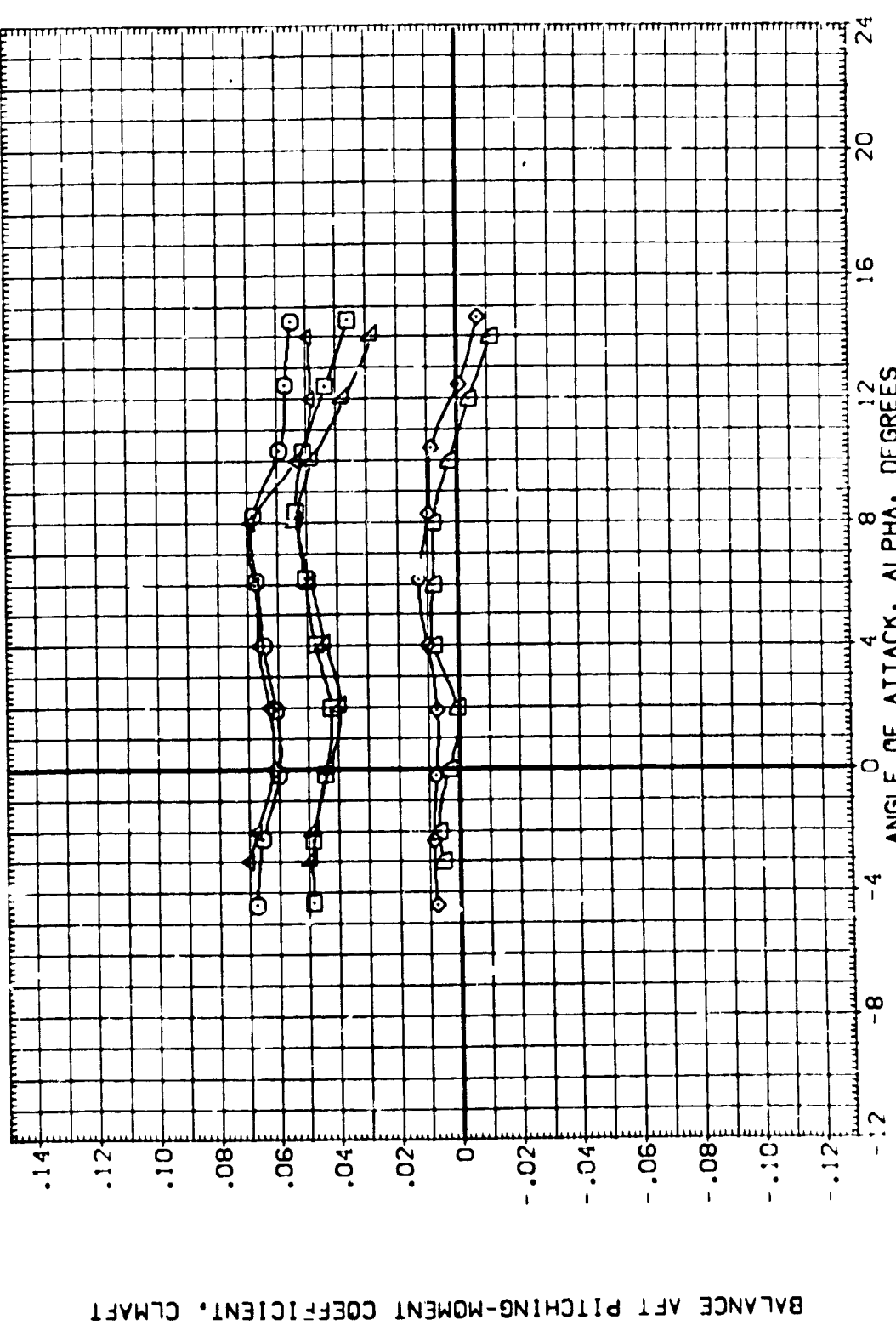


FIG. 4 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(C)MAG: .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	BET.	ELEVON	BOCLAP	REFERENCE INFORMATION
(CER019)	□	ARC 66-709 DASS C11A-(N24)	.000	.000	-11.700	SREF .6053 SQ.FT.
(CER022)	○	ARC 66-709 DASS C11A-(N24)	.000	.000	.000	LREF .5936 FT.
(CER023)	△	ARC 66-709 DASS C11A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(CER019)	◇	ARC 66-709 DASS C11A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(CER022)	○	ARC 66-709 DASS C11A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	YMRP .0000 IN.
(CER023)	△	ARC 66-709 DASS C11A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
						SCALE .0150

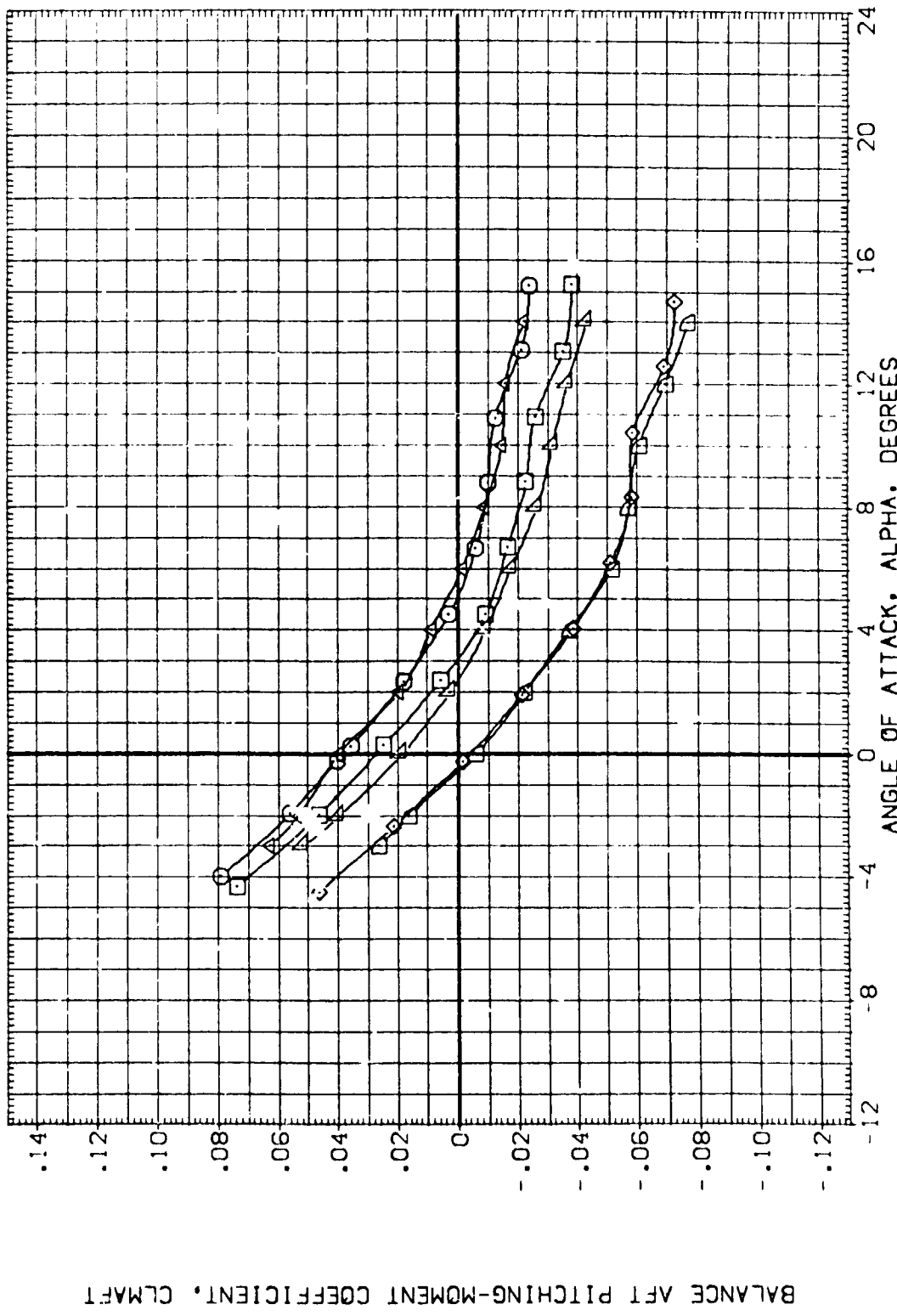


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BOFLAP REFERENCE INFORMATION

(SER019) ARC 66-709 0A59 0111A-(N24) .000 .000 -11.700 .6059 50.FT.

(SER022) ARC 66-709 0A59 0111A-(N24) .000 .000 .000 .5935 FT.

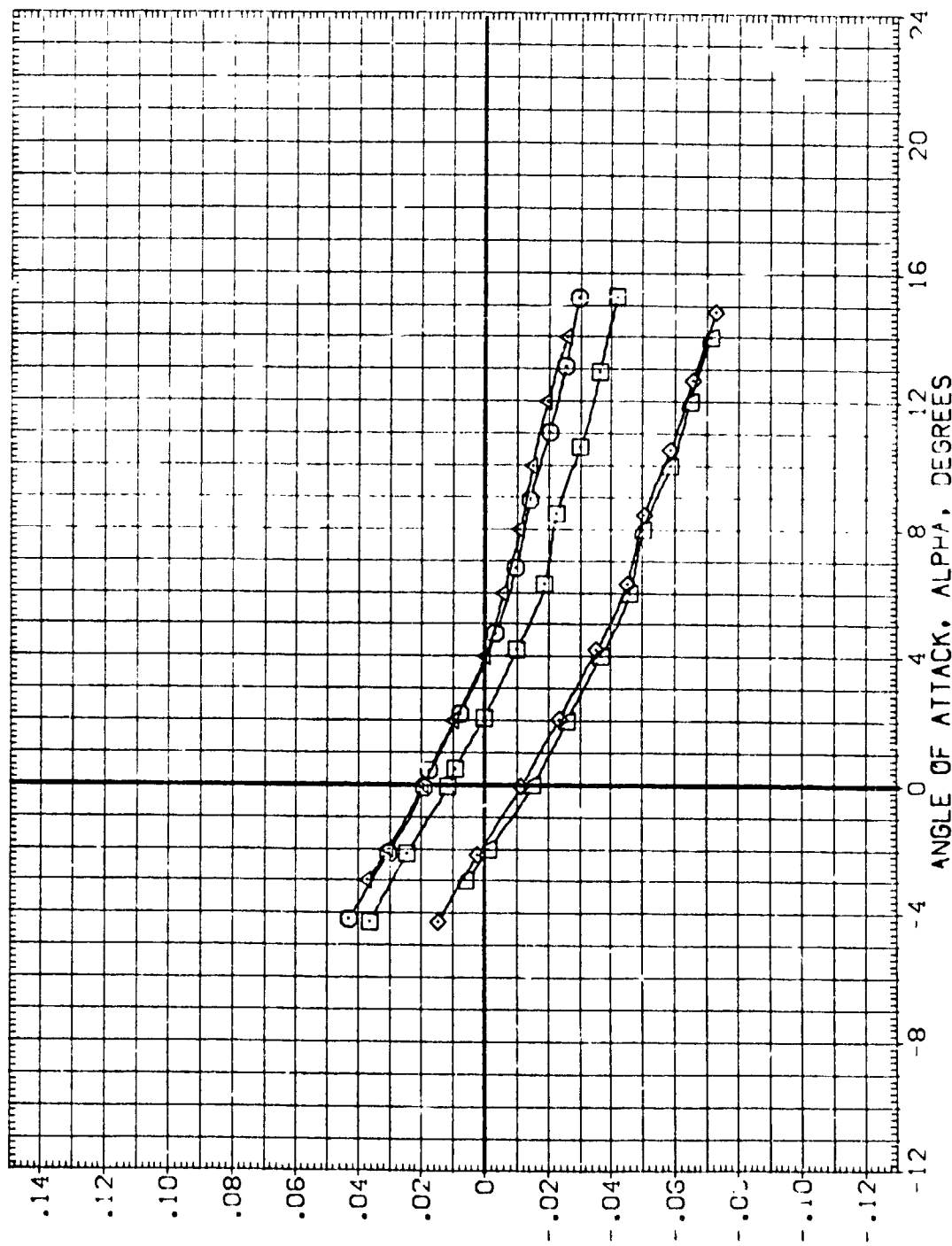
(SER023) ARC 66-709 0A59 0111A-(N24) .000 .000 16.300 1.1710 FT.

(SER019) ARC 66-709 0A59 0111A-N24 (ADJUSTED FOR TARES) .000 .000 -11.700 12.6255 IN.

(SER022) DATA NOT AVAILABLE .000 .000 .000 .0000 IN.

(SER023) ARC 66-709 0A59 0111A-N24 (ADJUSTED FOR TARES) .000 .000 16.300 -3.750 IN.

SCALE .0150



BALANCE AFT PITCHING-MOMENT COEFFICIENT, CMAFT

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH = 1.50



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(CER019)	ARC 66-709 0A59 0A11A-(N24)	.000	.000	-11.700	SREF 50.53 SO.FT.
(CER022)	ARC 66-709 0A59 0A11A-(N24)	.000	.000	.000	LREF .5935 FT.
(CER023)	ARC 66-709 0A59 0A11A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(TER019)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XIRP 12.6255 IN.
(TER022)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	YIRP .0000 IN.
(TER023)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZIRP -.3750 IN.
					SCALE .0150

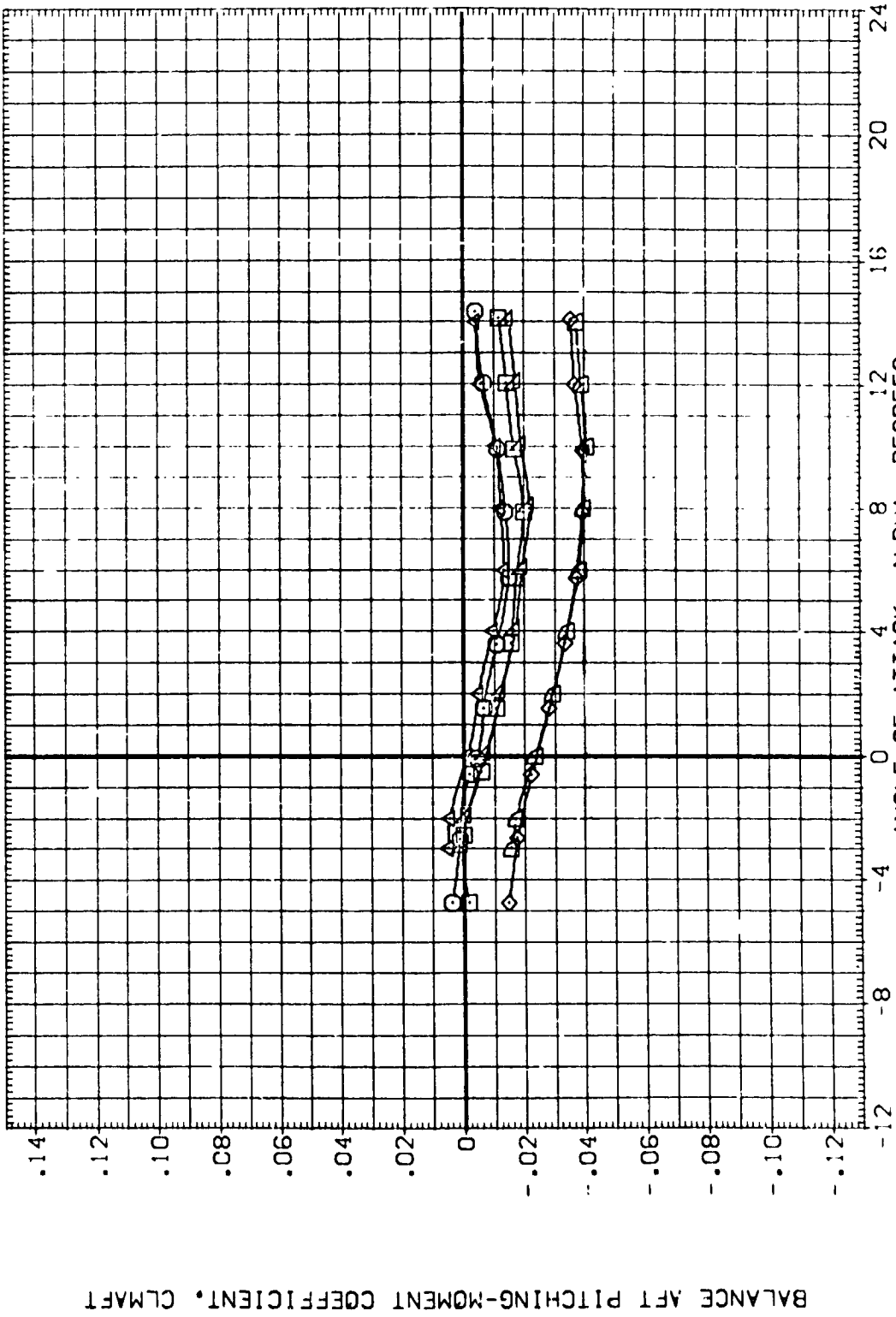


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(1)MAC = 2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(CER019)	ARC 66-709 QAS9 O11A-(N24)	.000	.000	-11.700	SREF 6053 50.FT.
(CER022)	ARC 66-709 QAS9 O11A-(N24)	.000	.000	.000	LREF .5935 FT.
(CER023)	ARC 66-709 QAS9 O11A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(CER019)	ARC 66-709 QAS9 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(CER022)	ARC 66-709 QAS9 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	YMRP .0000 IN.
(CER023)	ARC 66-709 QAS9 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE 0:50

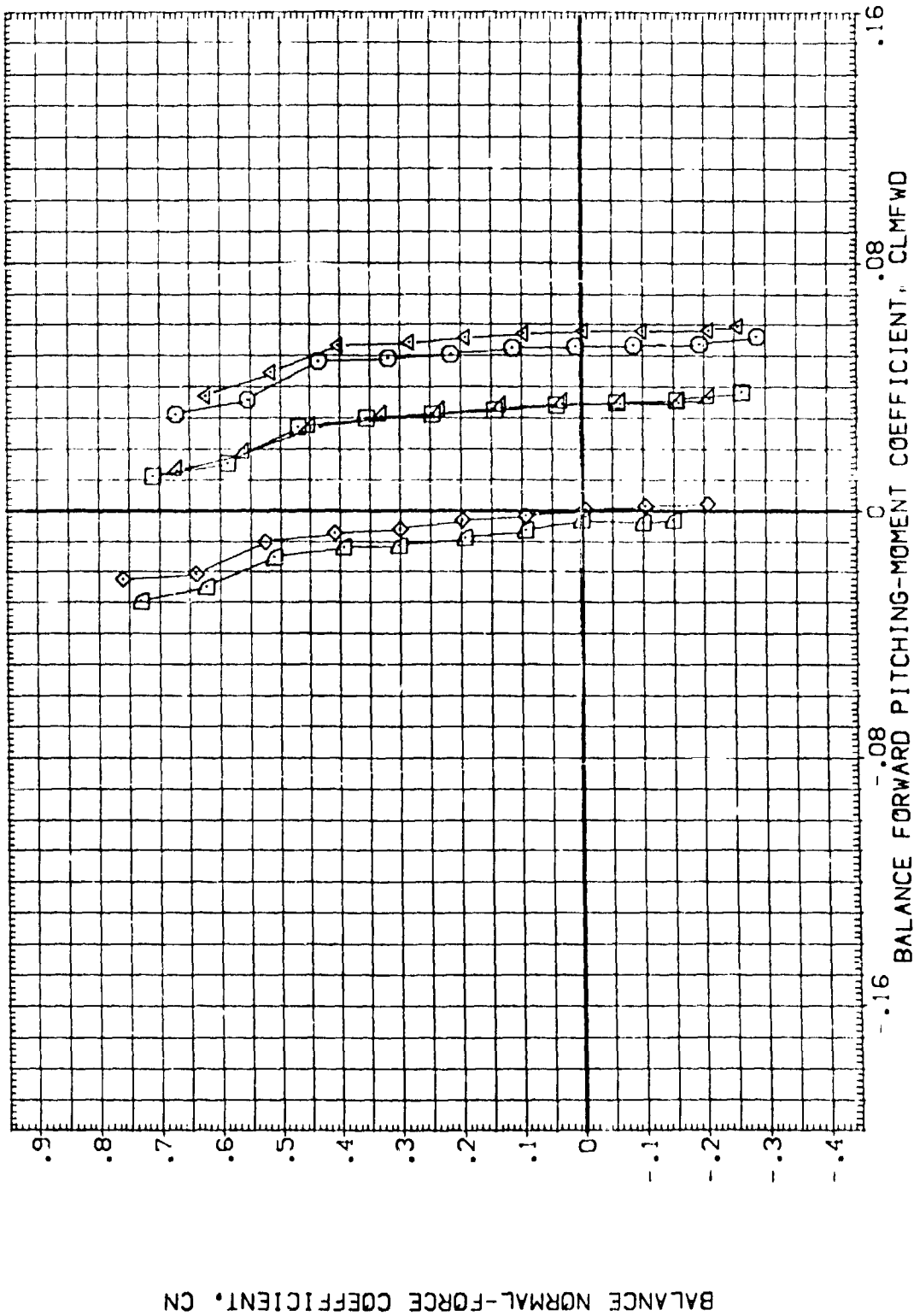


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(A)MACH = .60

DATA SET SYMBOL: [CER019] [CER022] [CER023] [CER019] [CER022] [CER023]
 CONFIGURATION DESCRIPTION:
 ARC 66-709 OAS9 O111A-N24
 ARC 66-709 OAS9 O111A-N24
 ARC 66-709 OAS9 O111A-N24
 ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)
 DATA NOT AVAILABLE
 ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)

BETA: .000 .000 .000 .000 .000 .000
 ELEVON: .000 .000 .000 .000 .000 .000
 BOF LAP: -11.000 .000 .000 .000 .000 .000
 REFERENCE INFORMATION:
 SREF: .6053 SQ. FT.
 LREF: .5535 FT.
 BREF: 1.1710 FT. IN.
 XMRP: 12.6255 IN.
 YMRP: .0000 IN.
 ZMRP: -.3750 IN.
 SCALE: .0150

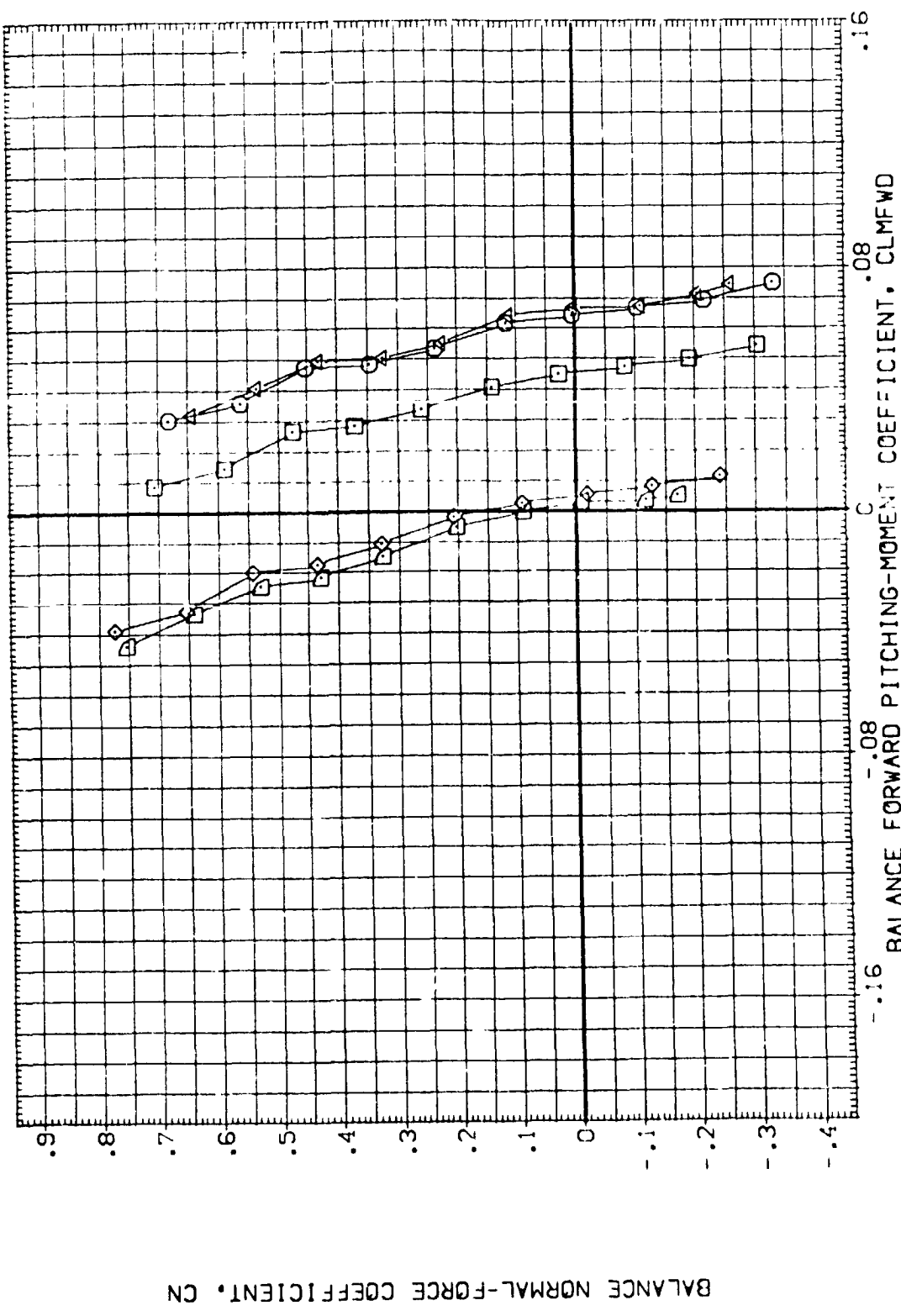


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .80



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019) ARC 66-709 OAS9 0111A-(N24)

(CER022) DATA NOT AVAILABLE

(CER023) DATA NOT AVAILABLE

(1EER019) ARC 66-709 OAS9 0111A-N24 (ADJUSTED FOR TARES)

(1EER022) DATA NOT AVAILABLE

(1EER023) DATA NOT AVAILABLE

BETA ELEVON BODY LAP

.000 .000 -11 700

.000 .000 000

.000 .000 16 300

.000 .000 -11 700

.000 .000 000

.000 .000 16 300

REFERENCE INFORMATION

SREF .6053 50.FT.

LREF .5935 FT.

BREF 1.1710 FT.

YMRP 12.6255 IN.

ZMRP .0000 IN.

SCALE -.3750 IN.

.0150

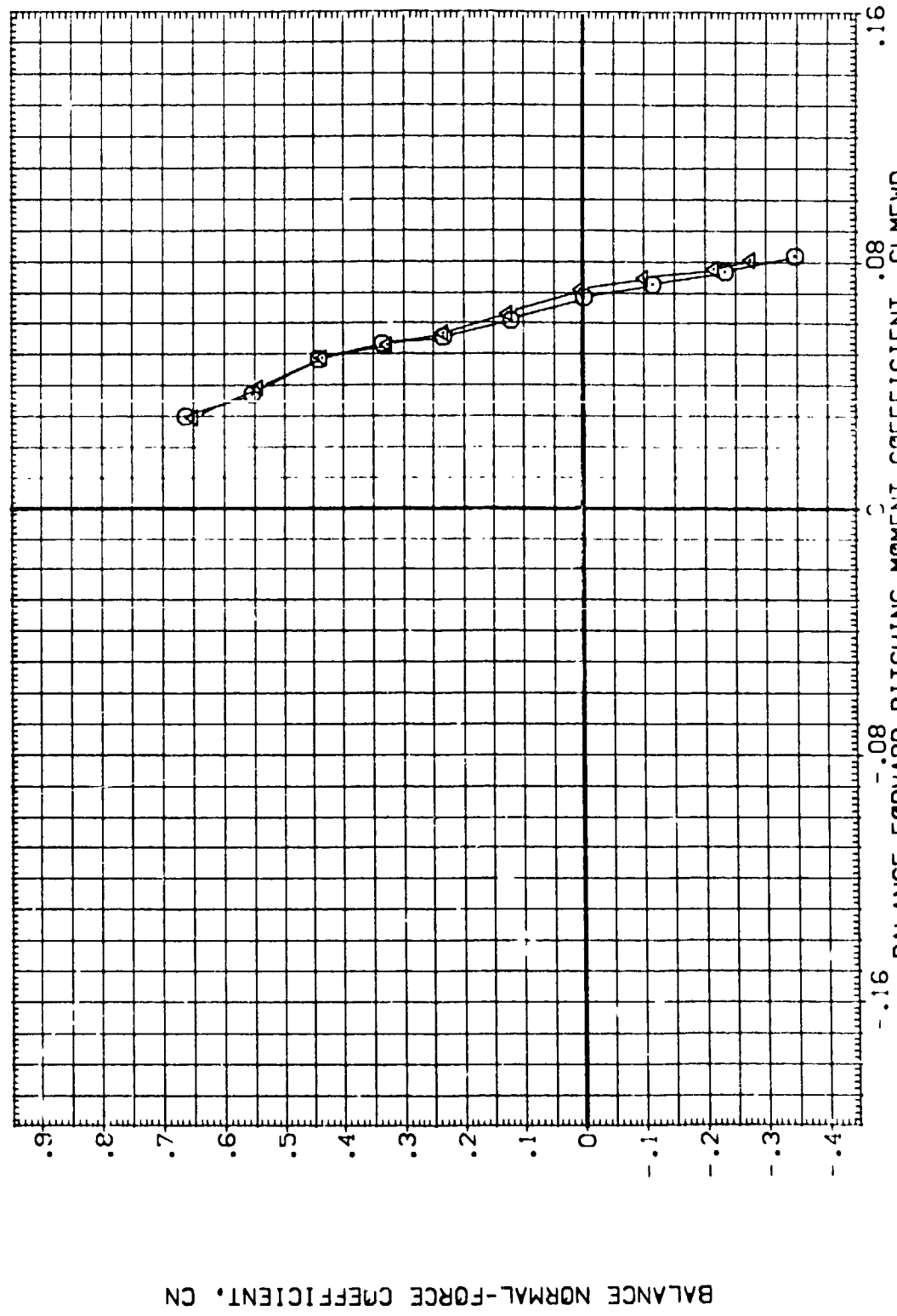


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(0)MACH = .85

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019) ARC 66-709 OAS9 0A11A-(N24)

(CER022) DATA NOT AVAILABLE

(CER023) DATA NOT AVAILABLE

(1ER019) ARC 66-709 OAS9 011A-N24 (ADJUSTED FOR TARES)

(1ER022) DATA NOT AVAILABLE

(1ER023) DATA NOT AVAILABLE

BETA ELEVON BCFLAP

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

REFERENCE INFORMATION

SREF 6053 SQ.FT.

LREF 5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

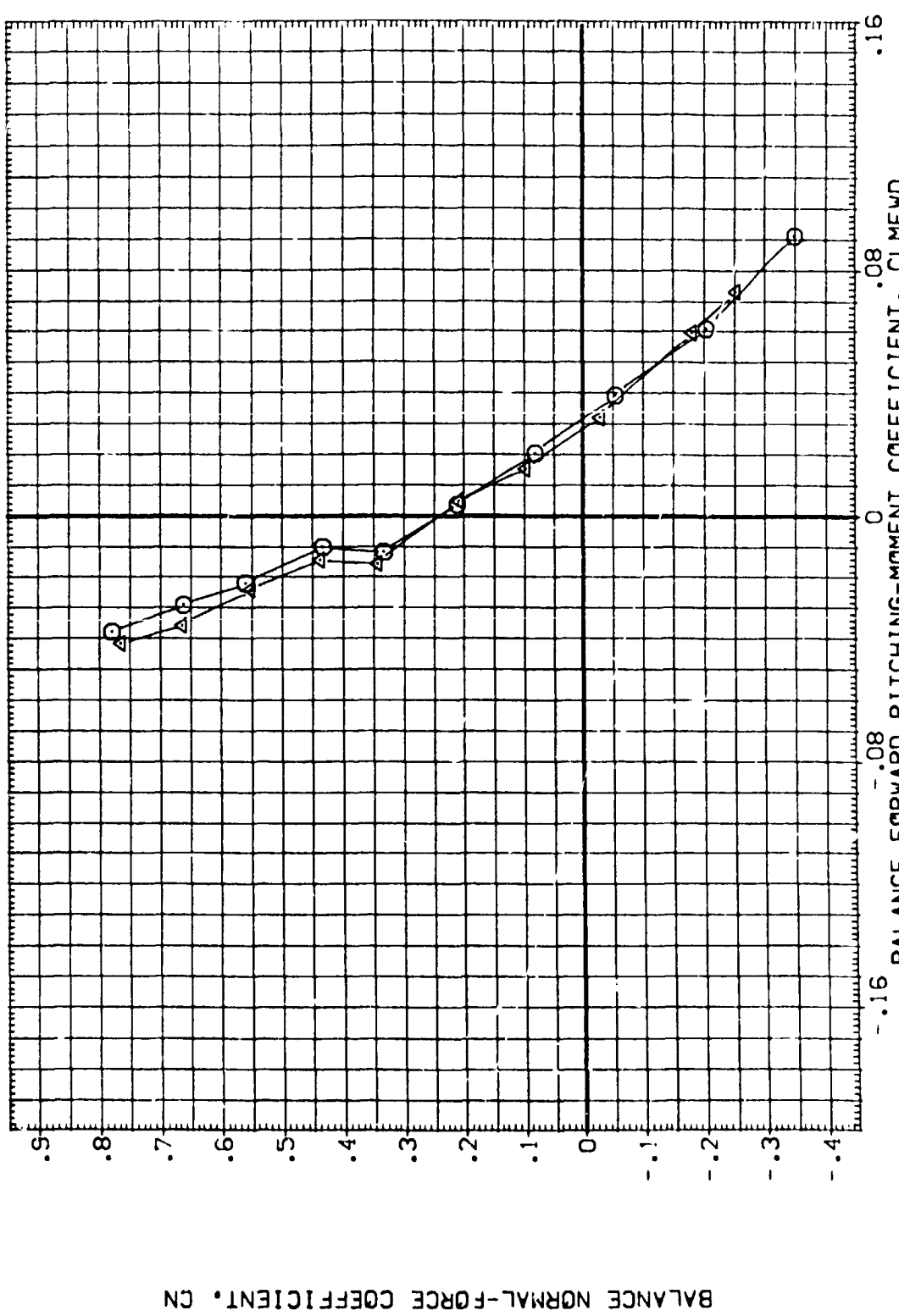


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

DATA SET SYMBOL
 (CER019)
 (CER022)
 (CER023)
 (CER019)
 (CER022)
 (CER023)

CONFIGURATION DESCRIPTION
 ARC 66-709 OAS9 O111A-(N24)
 ARC 66-709 OAS9 O111A-(N24)
 ARC 66-709 OAS9 O111A-(N24)
 ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)

BETA .000
 ELEVON .000
 BOFLAP -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5535 FT.
 BRLE 1.1710 FT.
 XMRP 12.6295 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

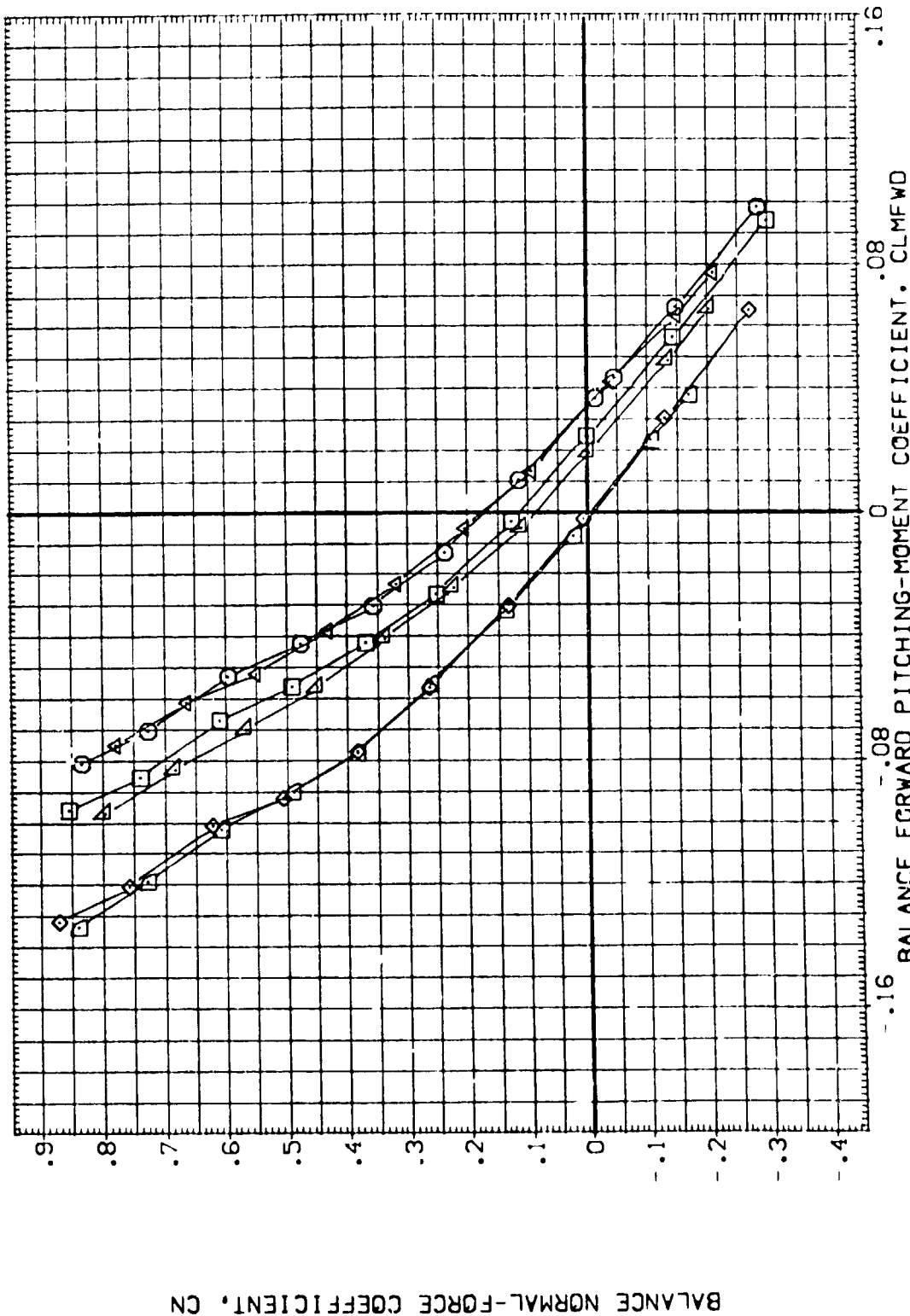


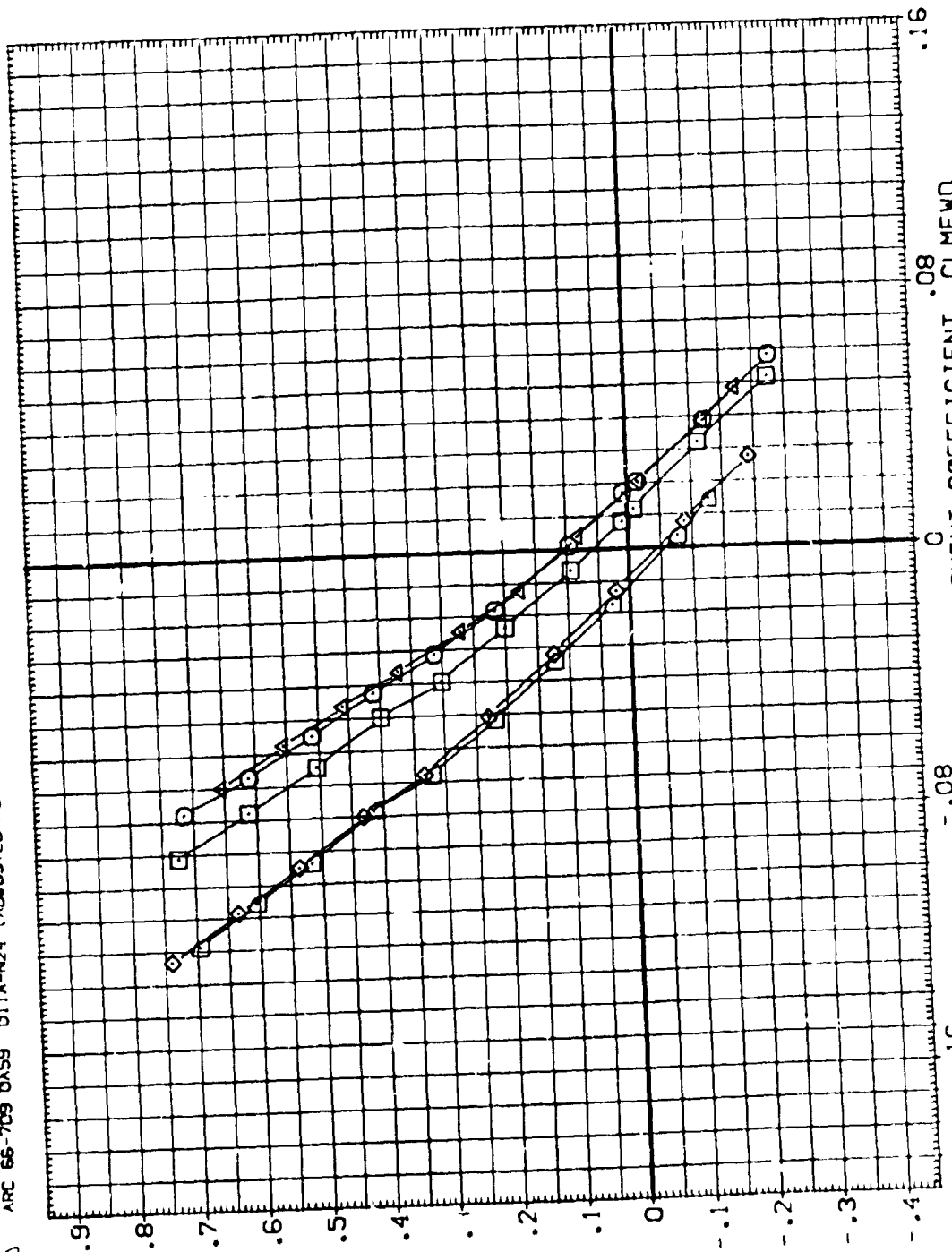
FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES
 (G)MACH = 1.20

REFERENCE INFORMATION
 SREF .6053 SO.FT.
 LREF .5935 FT.
 BREF 1.1710 FT. IN.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA .000
 ELEVON .000 BOFLAP
 .000 -11.700
 .000 .000
 .000 16.300
 .000 -11.700
 .000 .000
 .000 16.300

CONFIGURATION DESCRIPTION
 ARC 66-709 OA59 O111A-(N24)
 ARC 66-709 OA59 O111A-(N24)
 ARC 66-709 OA59 O111A-(N24)
 ARC 66-709 OA59 O111A-N24 (ADJUSTED FOR TARES)
 DATA NOT AVAILABLE
 ARC 66-709 OA59 O111A-N24 (ADJUSTED FOR TARES)

DATA SET SYMBOL
 (CER019)
 (CER022)
 (CER023)
 (LFR019)
 (LFR022)
 (LFR023)



BALANCE NORMAL-FORCE COEFFICIENT, CN

BALANCE FORWARD PITCHING-MOMENT COEFFICIENT, CLMFW

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(H)MAC 1.50

DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BDF LAP

(CER019) ARC 66-709 D459 D11A-N24 .000 .000 -11.700

(CER022) ARC 66-709 D459 D11A-N24 .000 .000 .000

(CER023) ARC 66-709 D459 D11A-N24 .000 .000 .000

(PER019) ARC 66-709 D459 D11A-N24 (ADJUSTED FOR TARES) .000 .000 .000

(PER022) ARC 66-709 D459 D11A-N24 (ADJUSTED FOR TARES) .000 .000 .000

(PER023) ARC 66-709 D459 D11A-N24 (ADJUSTED FOR TARES) .000 .000 .000

REFERENCE INFORMATION:
 SREF .6053 SQ.FT.
 LREF .5936 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

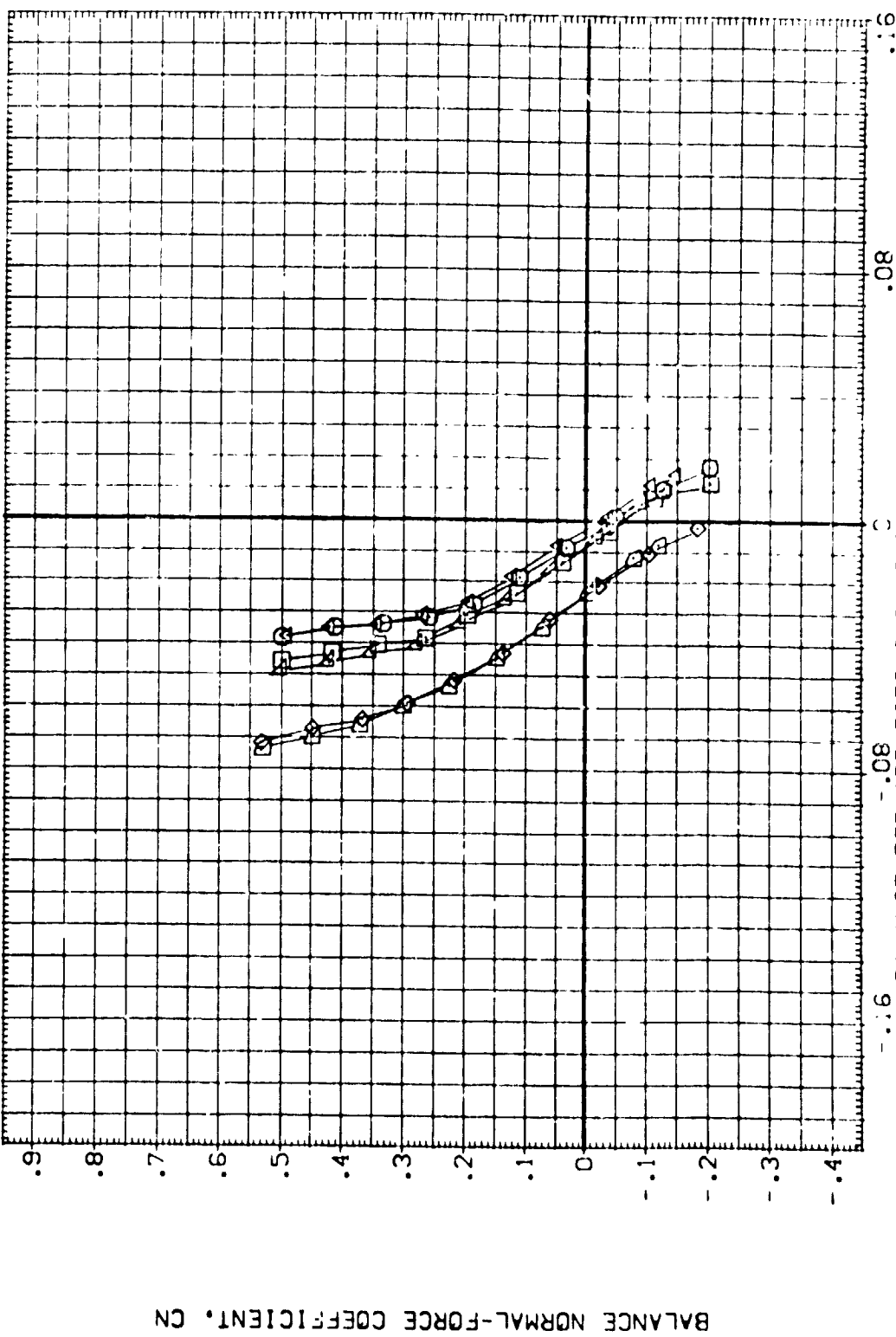


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

MACH = 2.00



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019) ARC 66-709 DA59 CA11A-(N24)

(CER022) ARC 66-709 DA59 CA11A-(N24)

(CER023) ARC 66-709 DA59 CA11A-(N24)

(FER019) ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)

(FER022) ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)

(FER023) ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 .000 16.300

.000 .000 -11.700

.000 .000 16.300

REFERENCE INFORMATION

SREF .6053 SC.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

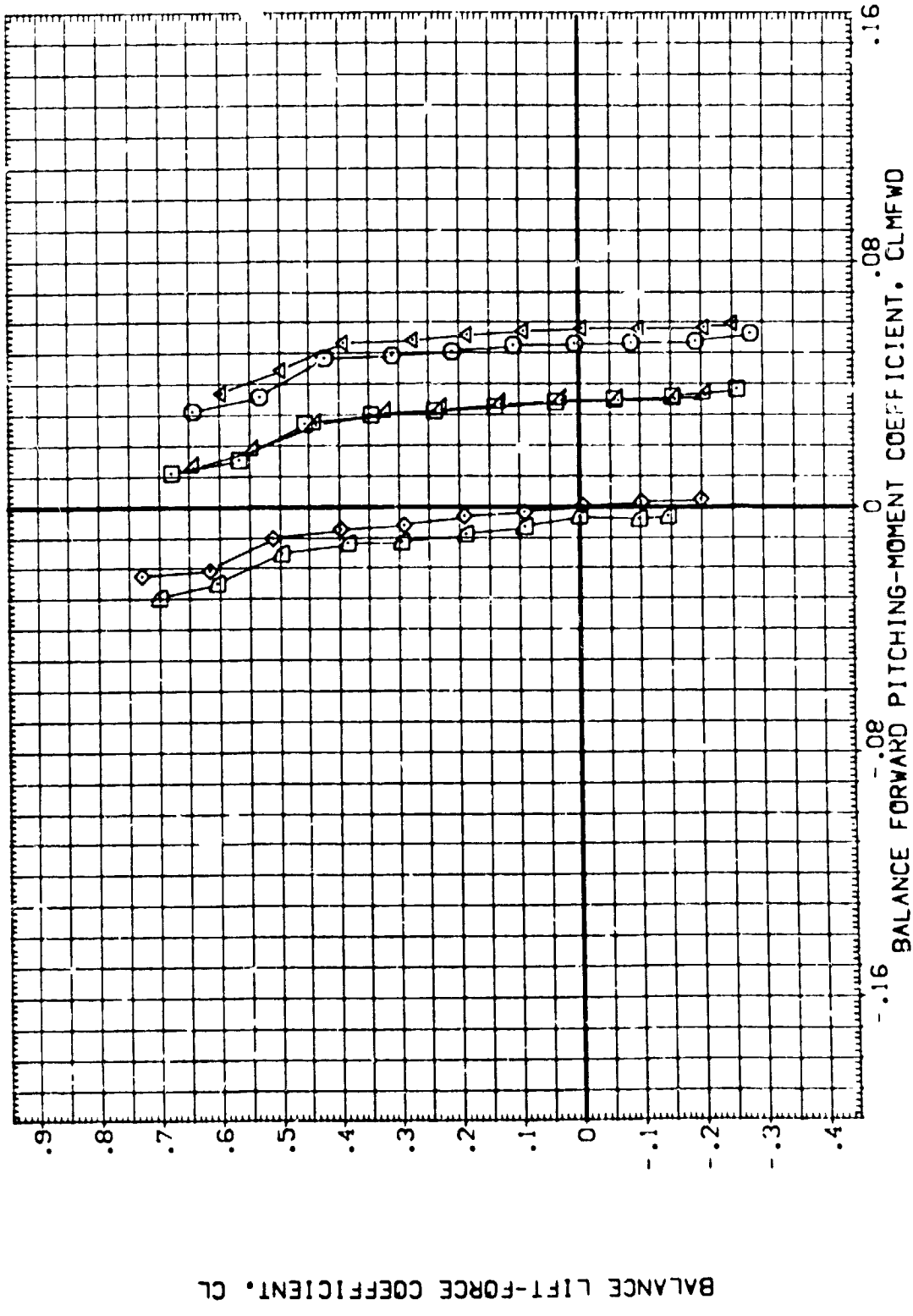


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CER019) DATA NOT AVAILABLE
 (CER027) ARC 66-709 OAS9 DAI11A-(N24)
 (CER073) ARC 66-709 OAS9 DAI11A-(N24)
 (TER019) DATA NOT AVAILABLE
 (TER027) DATA NOT AVAILABLE
 (TER033) ARC 66-709 OAS9 OI11A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDFLAP
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

REFERENCE INFORMATION
 SREF 6053 SQ.FT.
 LREF 5935 FT.
 BREF 1.7710 IN.
 XPRP 12.6235 IN.
 YPRP .0000 IN.
 ZPRP -3.750 IN.
 SCALE .0150

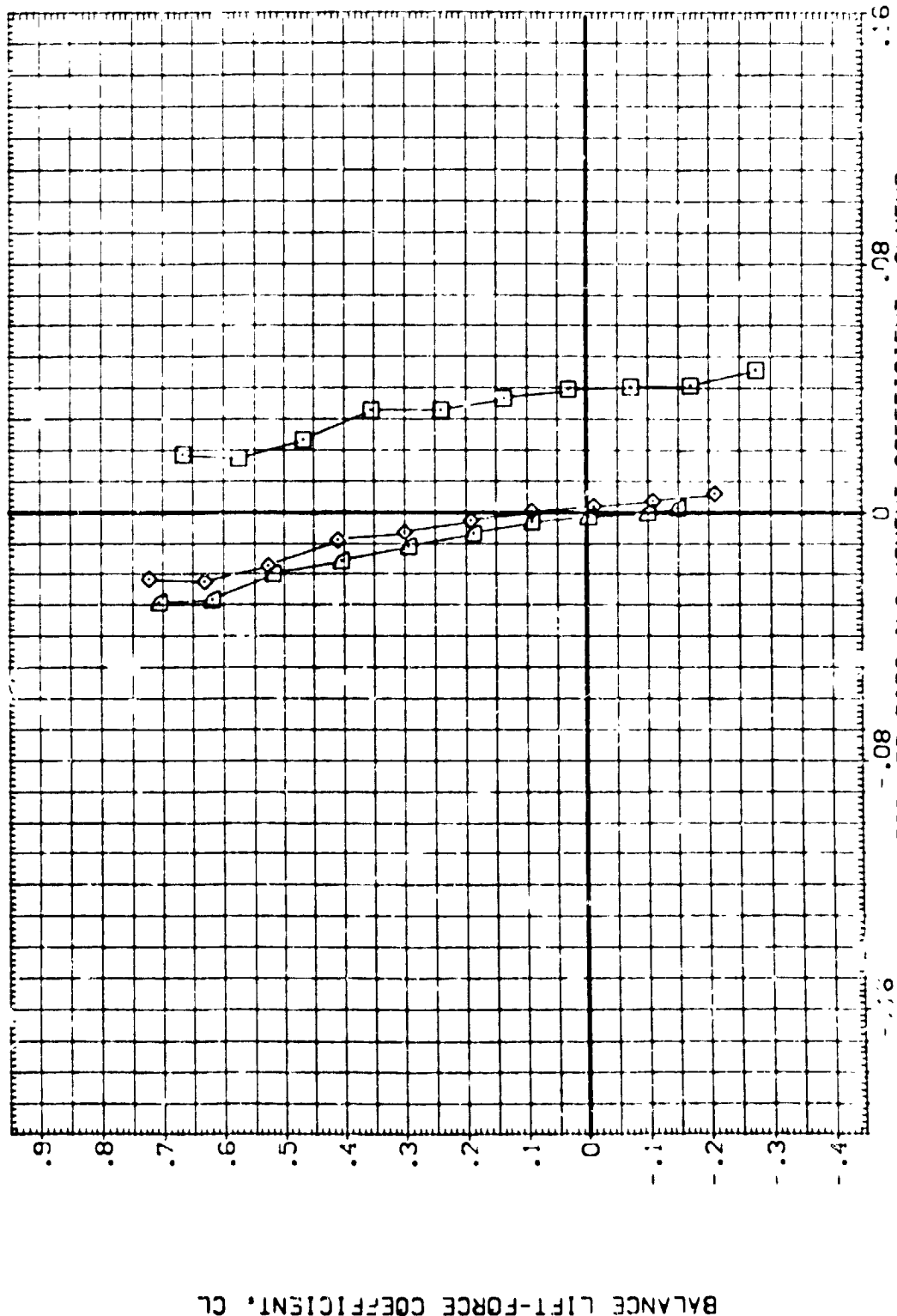


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019) ARC 66-709 DASS D11A-(N24)

(CER022) ARC 66-709 DASS D11A-(N24)

(CER023) ARC 66-709 DASS D11A-(N24)

(CER019) ARC 66-709 DASS D11A-N24 (ADJUSTED FOR TARES)

(CER022) DATA NOT AVAILABLE

(CER023) ARC 66-709 DASS D11A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5935 FT.

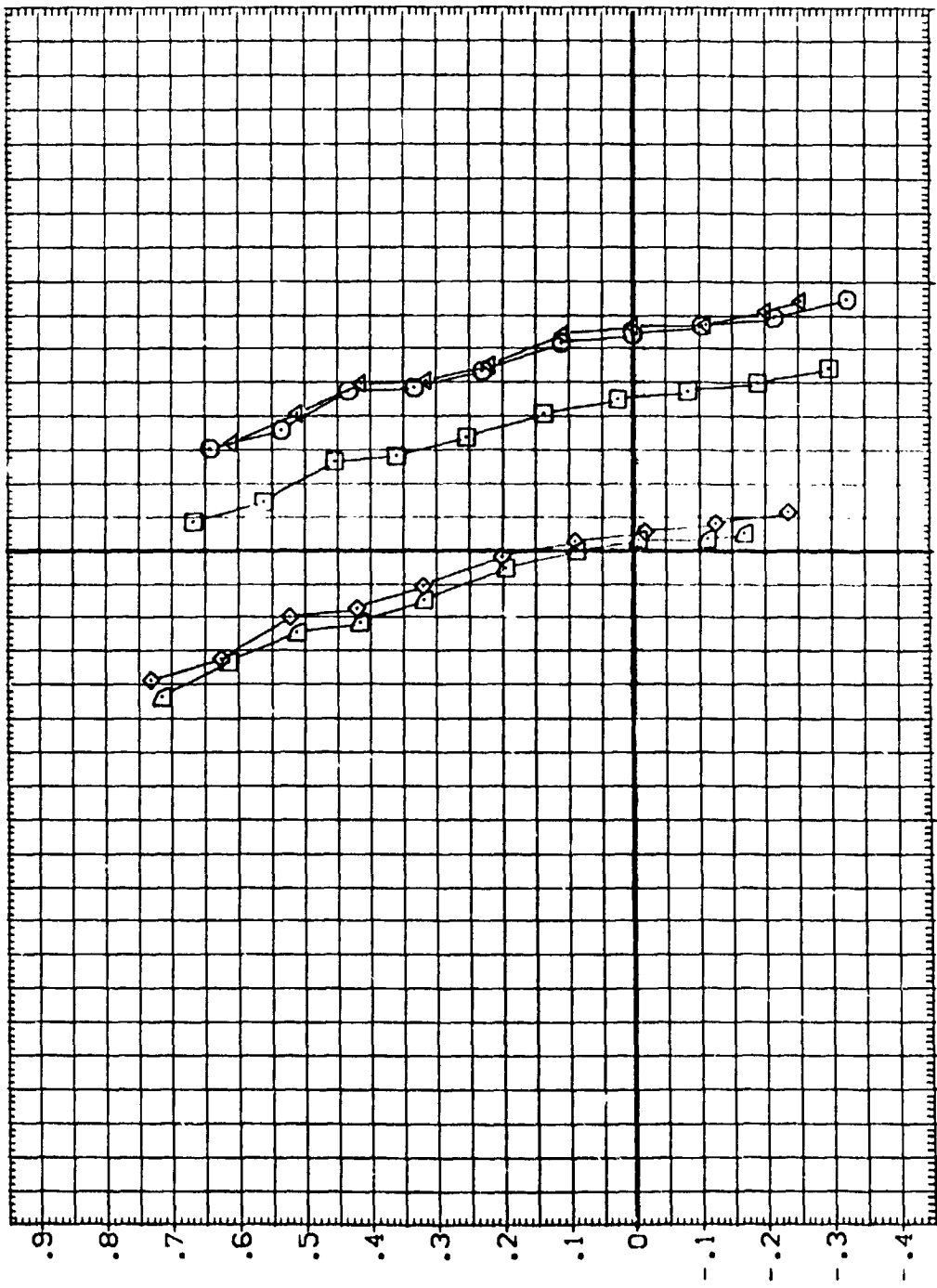
BREF 1.1710 FT.

XMRRP 12.6255 IN.

YMRRP .0000 IN.

ZMRRP -.3750 IN.

SCALE .1 50



BALANCE LIFT-FORCE COEFFICIENT, CL

BALANCE FORWARD PITCHING-MOMENT COEFFICIENT, CLMFW

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BOFLAP REFERENCE INFORMATION

(CER019) ARC 66-709 QAS9 O11A-N24 .000 .000 -11.700 SREF .6053 50.FT.

(CER022) ARC 66-709 QAS9 O11A-N24 .000 .000 .000 LREF .5936 FT.

(CER023) ARC 66-709 QAS9 O11A-N24 .000 .000 16.300 BRFF 1.1710 FT.

(LEP019) ARC 66-709 QAS9 O11A-N24 (ADJUSTED FOR TARES) .000 .000 -11.700 YMRP 12.6255 IN.

(LEP022) ARC 66-709 QAS9 O11A-N24 (ADJUSTED FOR TARES) .000 .000 .000 ZMRP .0000 IN.

(LEP023) ARC 66-709 QAS9 O11A-N24 (ADJUSTED FOR TARES) .000 .000 16.300 SCALE .0150

DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BOFLAP

(CER019) ARC 66-709 QAS9 O11A-N24 .000 .000 -11.700

(CER022) ARC 66-709 QAS9 O11A-N24 .000 .000 .000

(CER023) ARC 66-709 QAS9 O11A-N24 .000 .000 16.300

(LEP019) ARC 66-709 QAS9 O11A-N24 (ADJUSTED FOR TARES) .000 .000 -11.700

(LEP022) ARC 66-709 QAS9 O11A-N24 (ADJUSTED FOR TARES) .000 .000 .000

(LEP023) ARC 66-709 QAS9 O11A-N24 (ADJUSTED FOR TARES) .000 .000 16.300

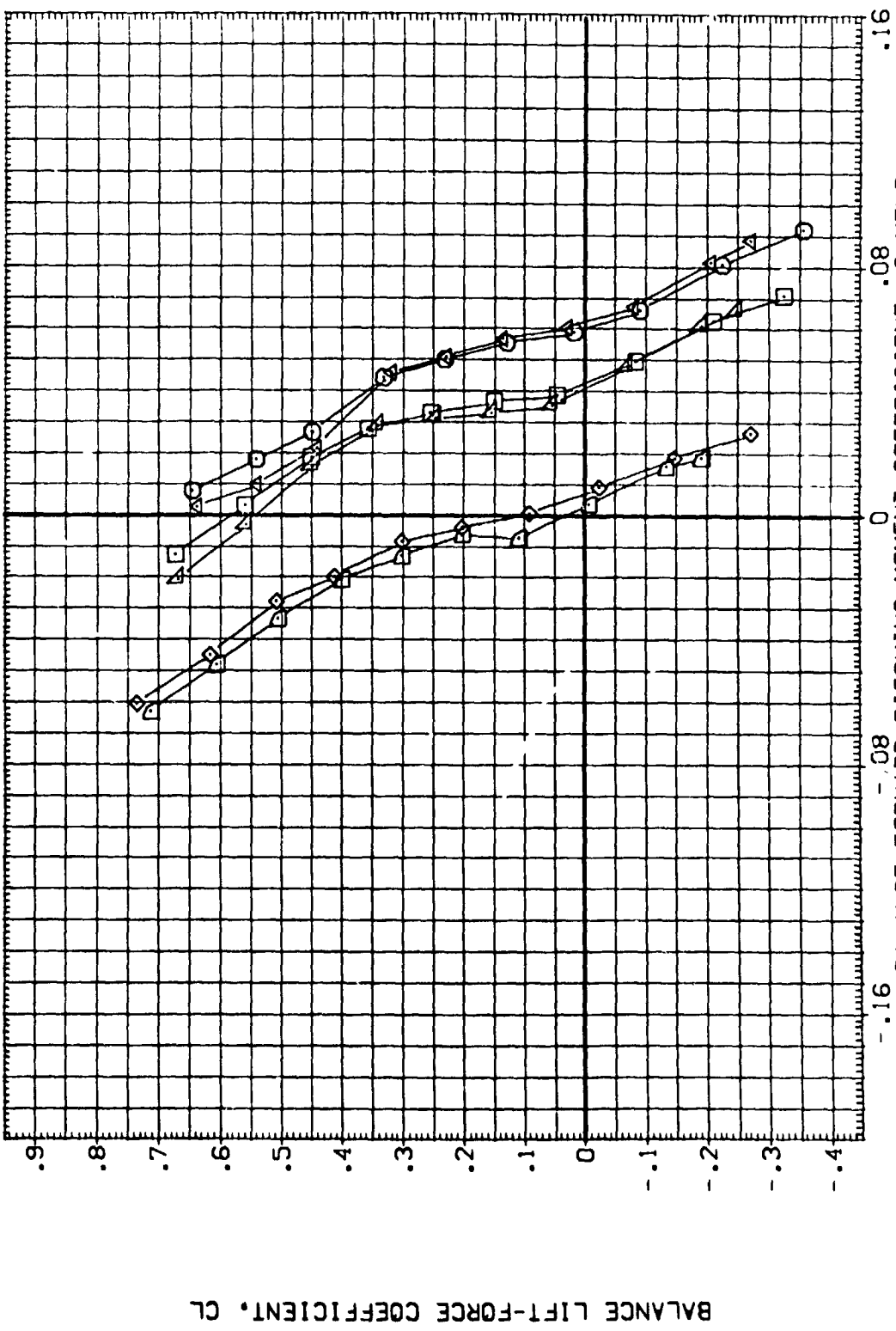


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .90

DATA SET SYMBOL: (CER019), (CER022), (CER023), (TER019), (TER022), (TER023)

CONFIGURATION DESCRIPTION: ARC 66-709 OAS9 D111A-(N24), DATA NOT AVAILABLE, ARC 66-709 OAS9 D111A-N24 (ADJUSTED FOR TARES), DATA NOT AVAILABLE

BETA: .000, .000, .000, .000, .000, .000
 ELEVATION: .000, .000, .000, .000, .000, .000
 BOFLAP: -11.700, .000, 16.300, -11.700, .000, 16.300

REFERENCE INFORMATION: SREF: .6053 SQ.FT., LREF: .5935 FT., BREF: 1.1710 F., XMRP: 12.6255 IN., YMRP: .0000 IN., ZMRP: -.3750 IN., SCALE: .0150

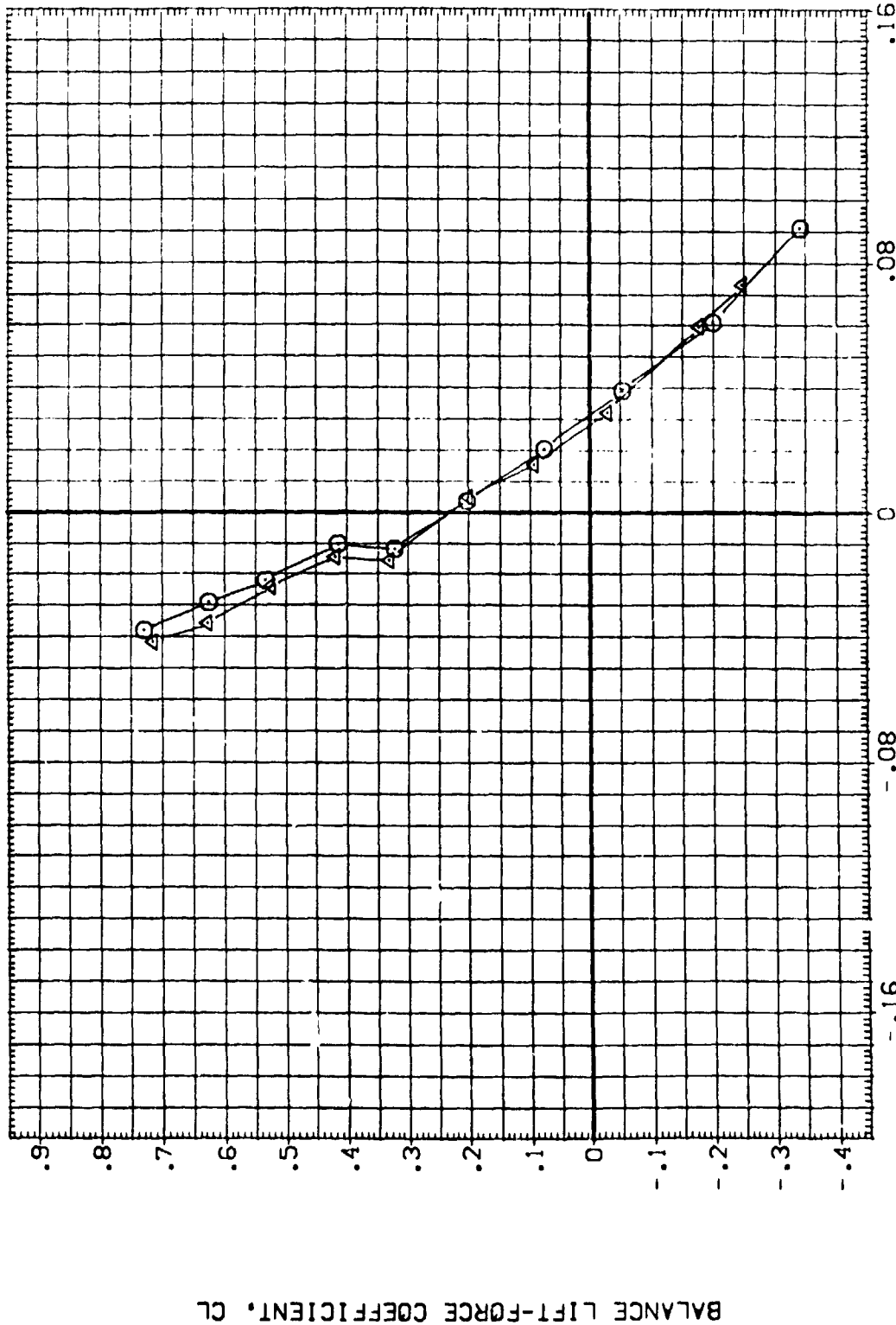


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES (F)MACH = .95

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVATION	BOFLAP	REFERENCE INFORMATION
{CER019}	ARC 66-709 0A59 0A11A-(N24)	.000	.000	-11.700	SREF .6053 SQ.FT.
{CER022}	ARC 66-709 0A59 0A11A-(N24)	.000	.000	.000	LREF .5935 FT.
{CER023}	ARC 66-709 0A59 0A11A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
{IER019}	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	YMRP 12.6255 IN.
{IER022}	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	ZMRP .0000 IN.
{IER023}	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	SCALE .0150

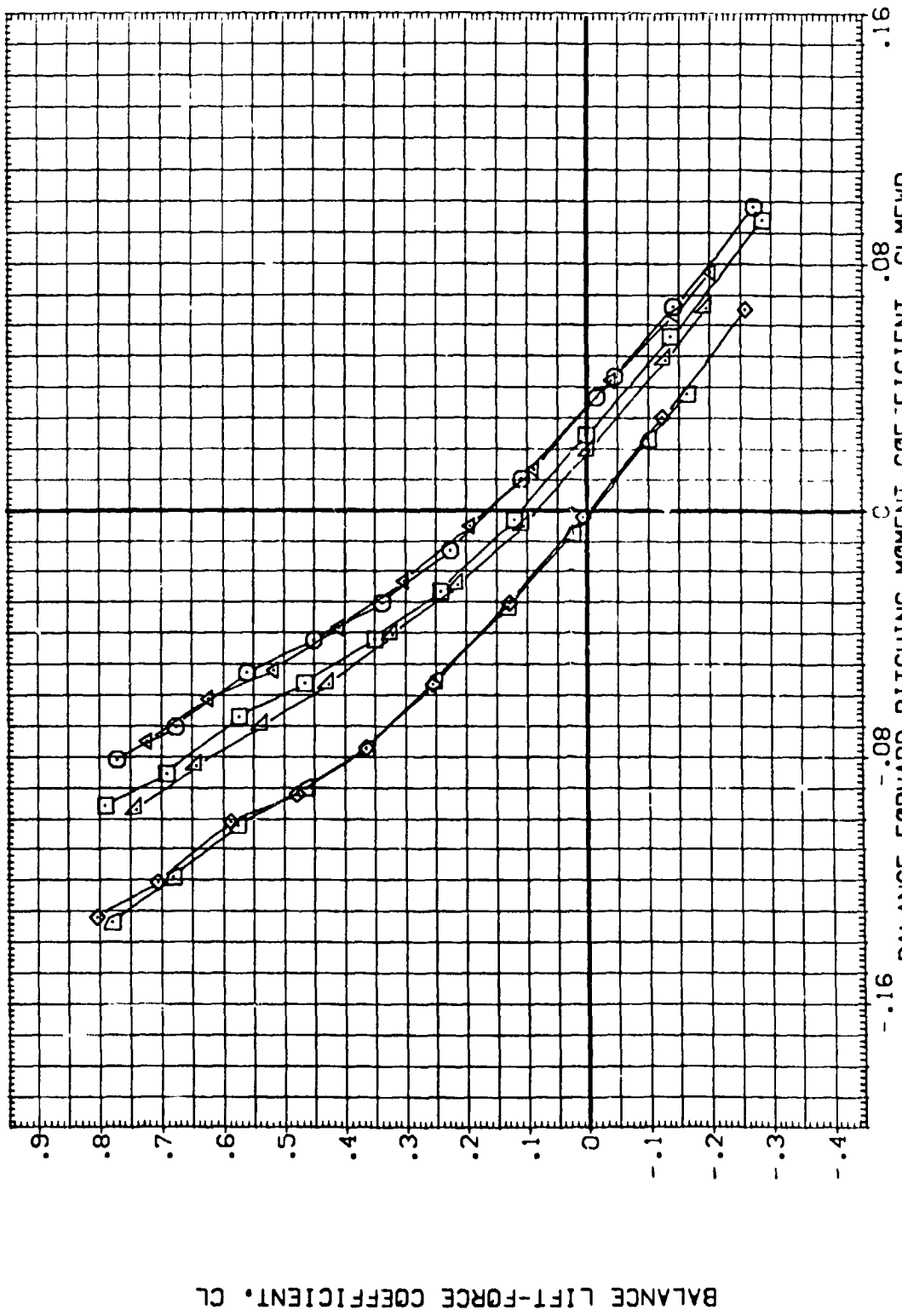


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.20

DATA SET SYMBOL
 (CER019)
 (CER022)
 (CER023)
 (IER019)
 (IER022)
 (IER023)

CONFIGURATION DESCRIPTION
 ARC 66-709 OAS9 0111A-N24
 ARC 66-709 OAS9 0111A-N24
 ARC 66-709 OAS9 0111A-N24
 ARC 66-709 OAS9 0111A-N24
 DATA NOT AVAILABLE
 ARC 66-709 OAS9 0111A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 OAS9 0111A-N24 (ADJUSTED FOR TARES)

BETA
 .000
 .000
 .000
 .000
 .000
 .000
 .000

ELEVON
 .000
 .000
 .000
 .000
 .000
 .000
 .000

BDF LAP
 -11.700
 .000
 .000
 16.300
 -11.700
 .000
 16.300

REFERENCE INFORMATION
 SREF 50. FT.
 LREF 5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

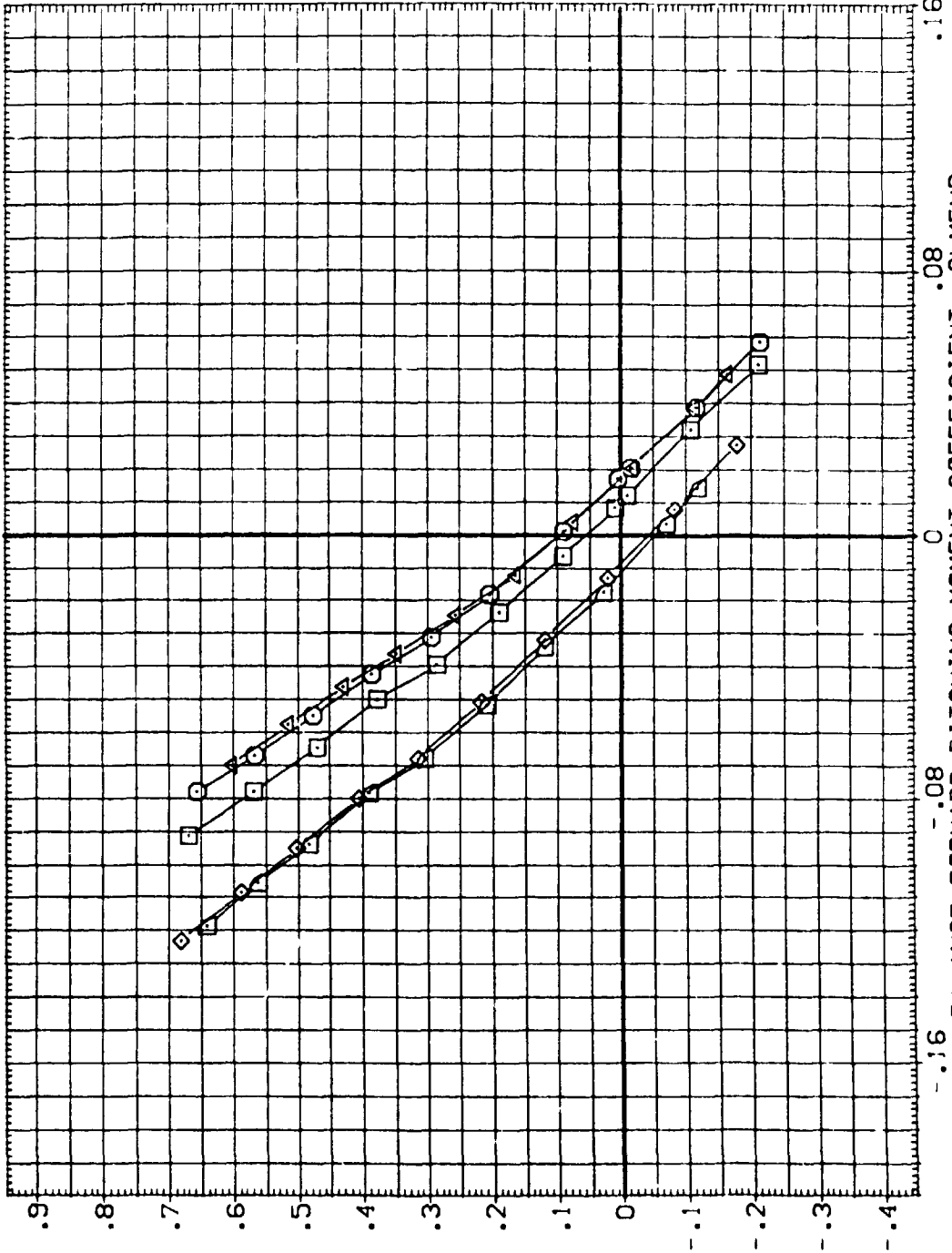


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BDFLAP	REFERENCE INFORMATION
(CER019)	ARC 66-709 OAS9 O111A-(N24)	.000	.000	-11.700	SREF .6053 SQ.FT.
(CER022)	ARC 66-709 OAS9 O111A-(N24)	.000	.000	.000	LREF .5935 FT.
(CER023)	ARC 66-709 OAS9 O111A-(N24)	.000	.000	16.300	BREF 1.1710 F.
(1ER019)	ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XTRP 12.6255 IN.
(1ER022)	ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	ZTRP .0000 IN.
(1ER023)	ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	SCALE .0150

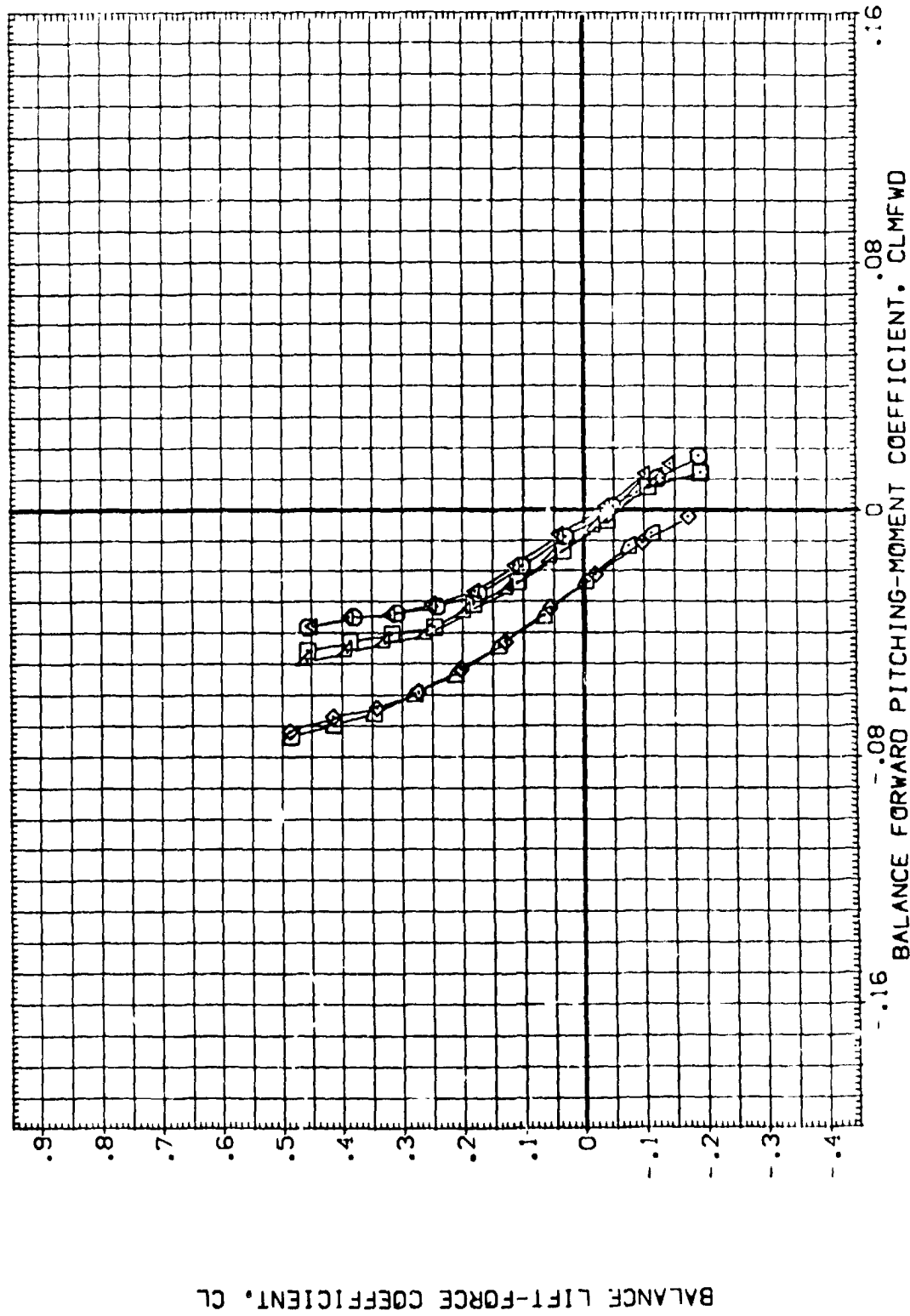


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019)	ARC 66-709	QAS9	Q11A-(N24)
(CER022)	ARC 66-709	QAS9	Q11A-(N24)
(CER023)	ARC 66-709	QAS9	Q11A-(N24)
(CER019)	ARC 66-709	QAS9	Q11A-N24 (ADJUSTED FOR TARES)
(CER022)	ARC 66-709	QAS9	Q11A-N24 (ADJUSTED FOR TARES)
(CER023)	ARC 66-709	QAS9	Q11A-N24 (ADJUSTED FOR TARES)

BETA ELEVATION BOFLAP

.000	.000	-11.700
.000	.000	.000
.000	.000	16.300
.000	.000	-11.700
.000	.000	.000
.000	.000	16.300

REFERENCE INFORMATION

SREF	.6053	50.F.T.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

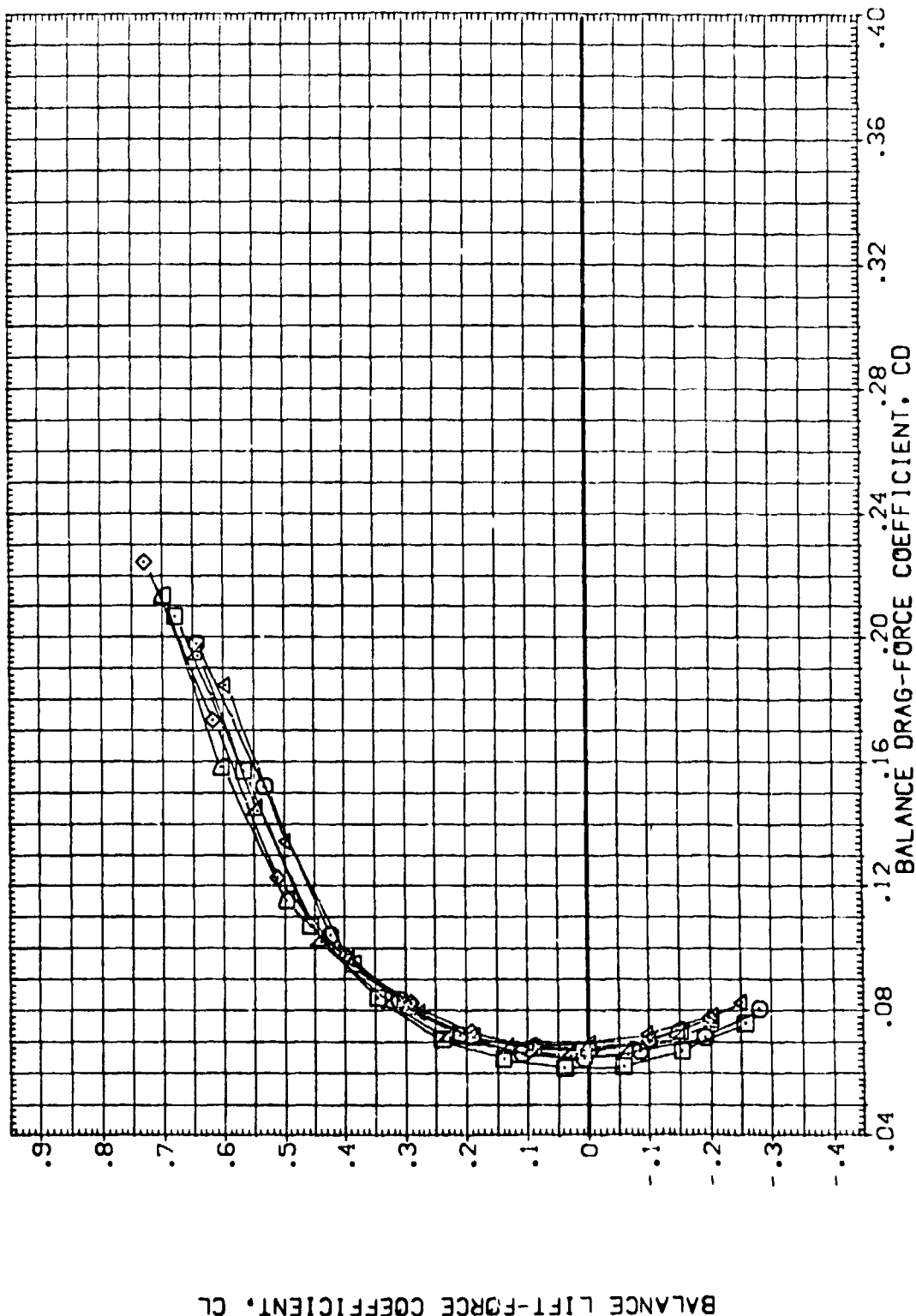


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(A)MACH = .60



DATA SET SYMBOL: (CER019), (CER022), (CER023), (1ER019), (1ER022), (1ER023)

CONFIGURATION DESCRIPTION: DATA NOT AVAILABLE, ARC 66-709 OAS9 OA11A-(N24), ARC 66-709 OAS9 OA11A-(N24), DATA NOT AVAILABLE, DATA NOT AVAILABLE, ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)

BETA: .000, .000, .000, .000, .000, .000

ELEVON: .000, .000, .000, .000, .000, .000

BOFLAP: -11.700, .000, 16.300, -11.700, .000, 16.300

REFERENCE INFORMATION: SREF: .6053 SQ.FT., LREF: .5935 FT., BREF: 1.1710 FT., YMRP: 12.6255 IN., ZMRP: .0000 IN., SCALE: -.3750 IN.

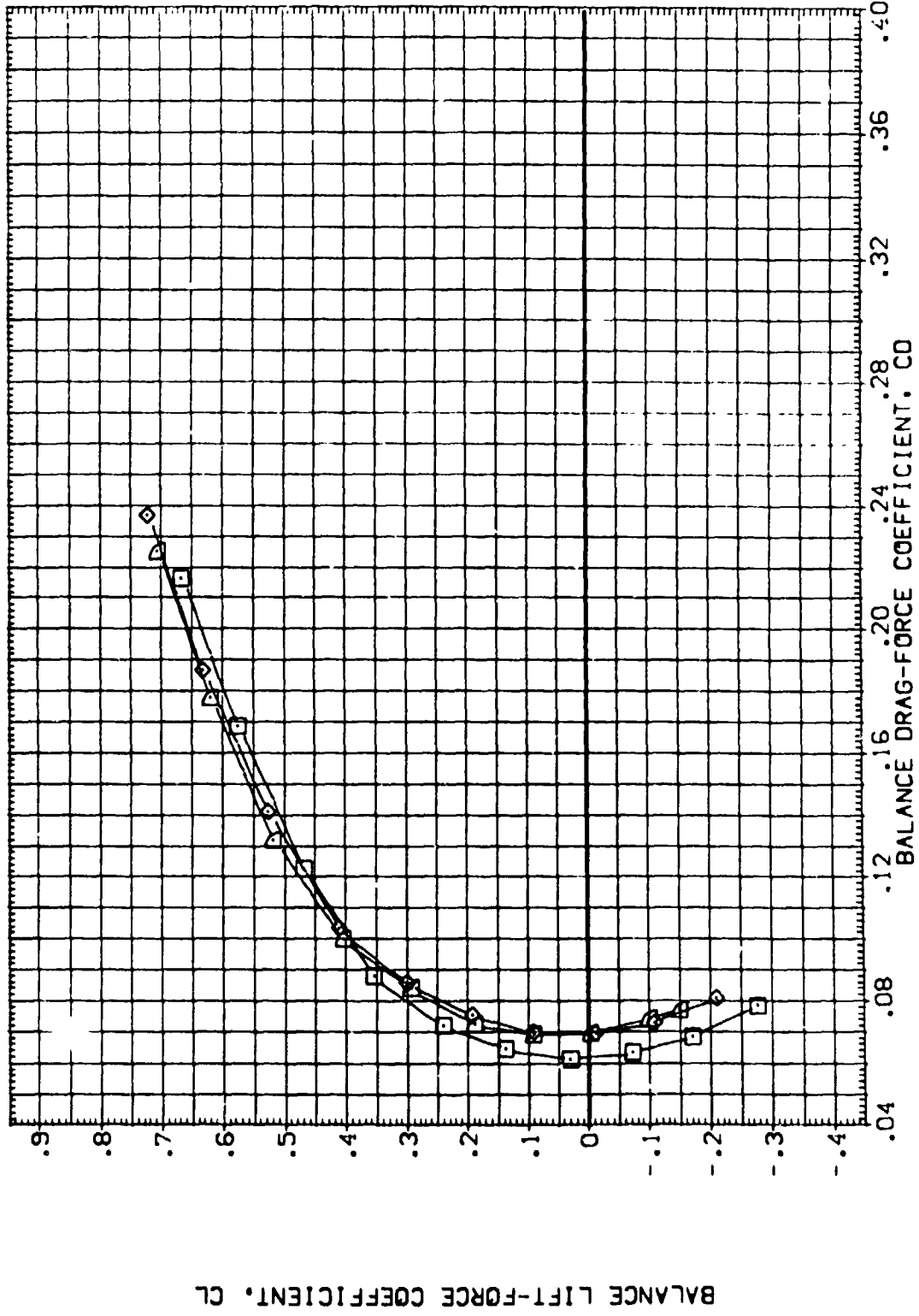


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(3)MACH = .70

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CER019) ARC 65-709 0A59 011A-N24

(CER022) ARC 65-709 0A59 011A-N24

(CER023) ARC 65-709 0A59 011A-N24

(HER019) ARC 65-709 0A59 011A-N24 (ADJUSTED FOR TARES)

(HER022) DATA NOT AVAILABLE

(HER023) ARC 65-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDF/LAP

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

REFERENCE INFORMATION

SREF .6053 50.FT.

LREF .3935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

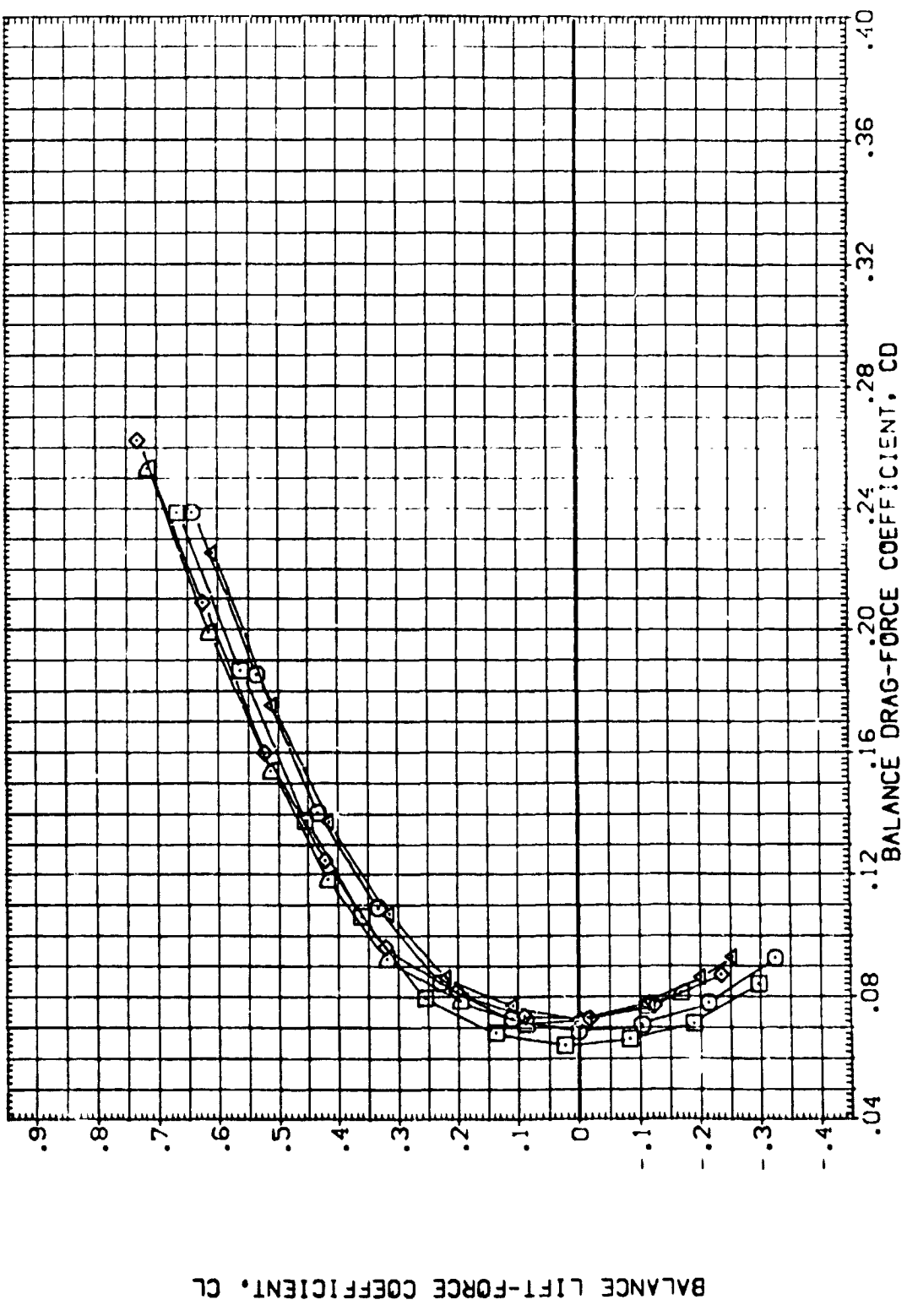


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(CJMACH = .80



REFERENCE INFORMATION
 SREF -6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6755 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA ELEVON BDFLAP
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CER019) ARC 66-709 QAS9 0111A-(N24)
 (CER022) DATA NOT AVAILABLE
 (CER023) DATA NOT AVAILABLE
 (FER019) ARC 66-709 QAS9 011A-N24 (ADJUSTED FOR TARES)
 (FER022) DATA NOT AVAILABLE
 (FER023) DATA NOT AVAILABLE

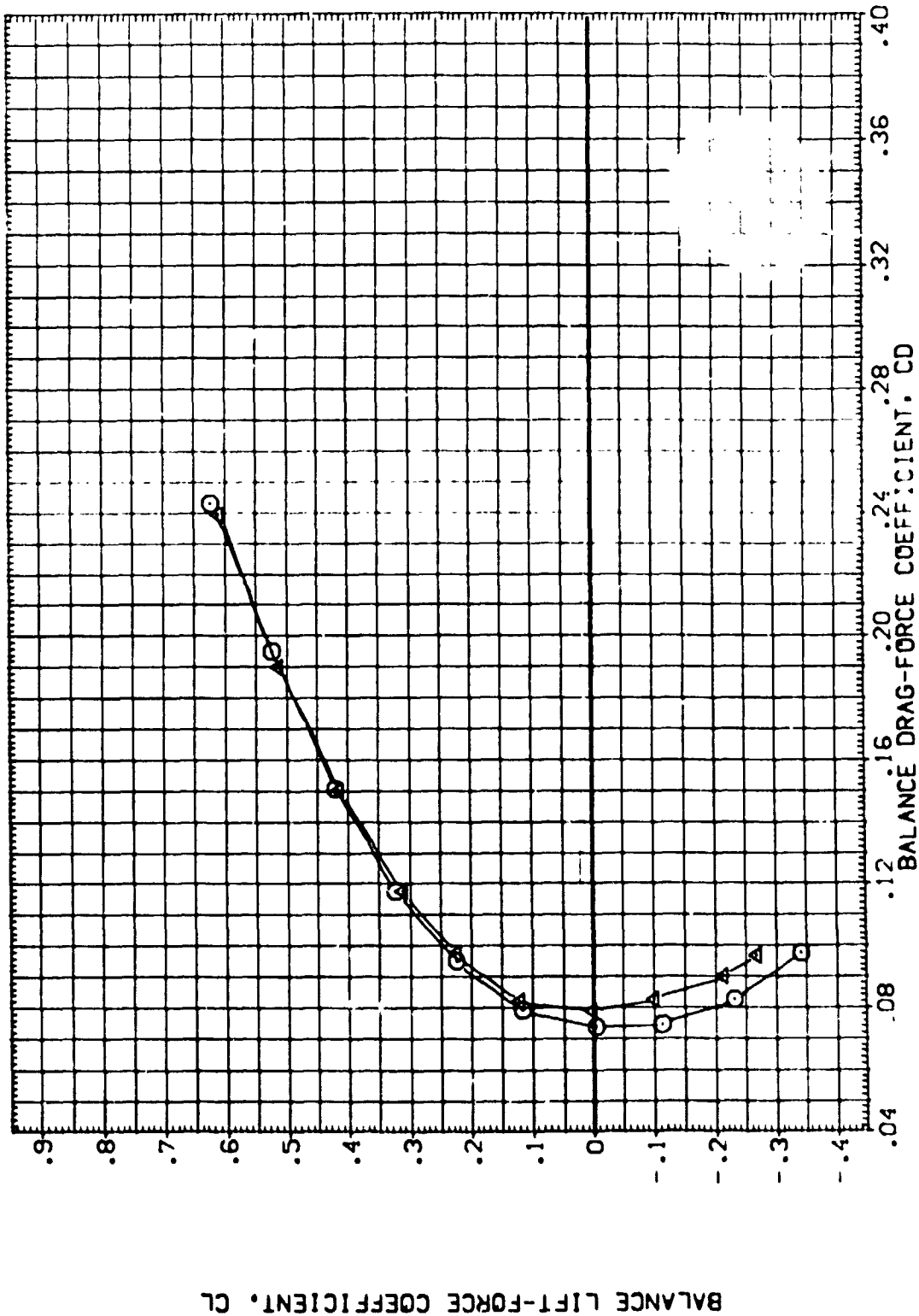








FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(D)MACH .85

REFERENCE INFORMATION
 SREF .6053 SC.FT.
 LREF .5935 FT.
 BREF 1.1710 IN.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE

BETA ELEVON BOFLAP
 .000 -11.700
 .000 .000
 .000 16.300
 .000 -11.700
 .000 .000
 .000 16.300

CONFIGURATION DESCRIPTION
 ARC 66-709 0A59 011A-(N24)
 ARC 66-709 0A59 011A-(N24)
 ARC 66-709 0A59 011A-(N24)
 ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

DATA SET SYMBOL
 (CER019) 
 (CER022) 
 (CER023) 
 (FER019) 
 (FER022) 
 (FER023) 

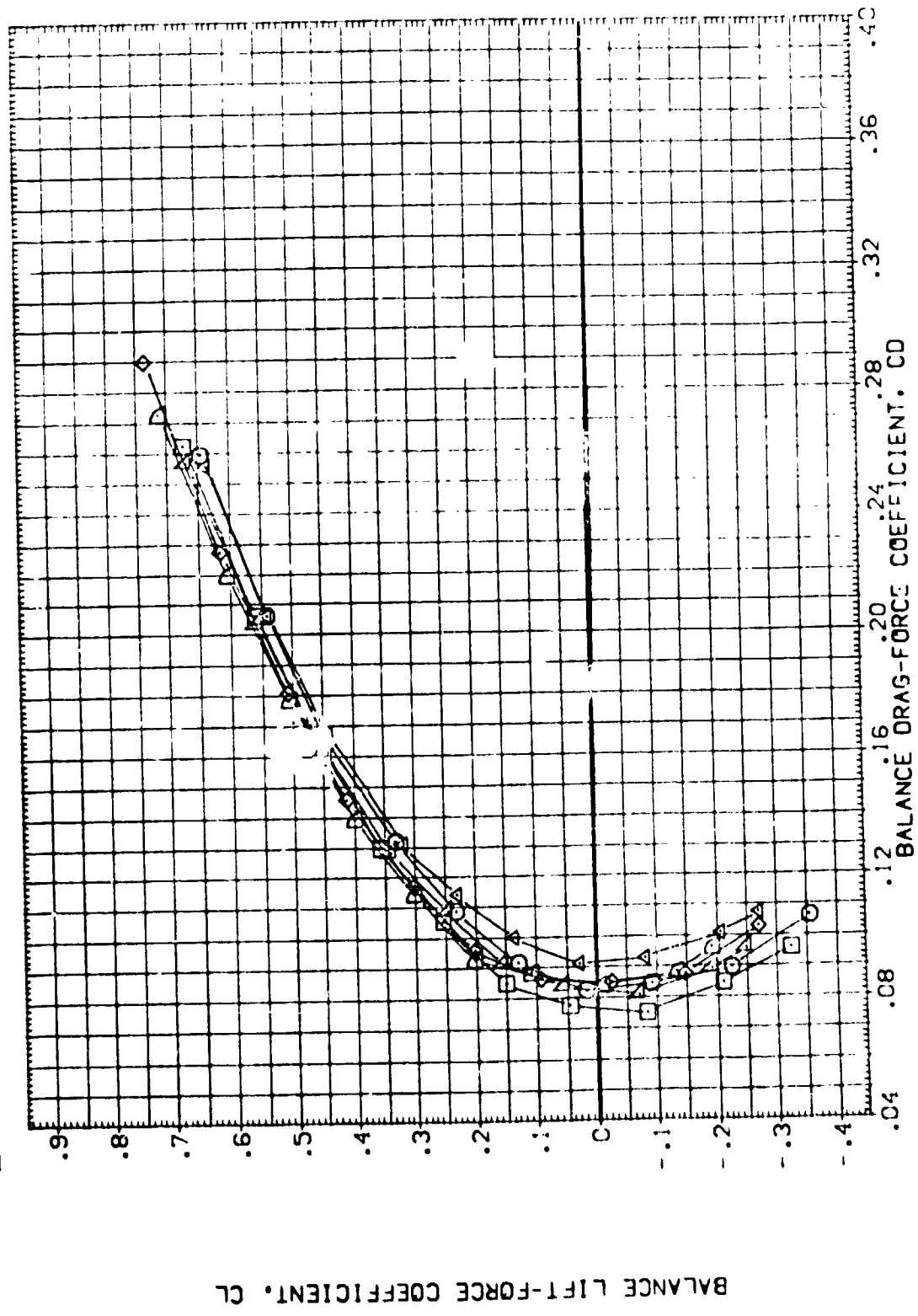


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(E)MAC- .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(CER019)	ARC 66-709 OA59 OA11A-(N24)	.000	.000	-11.700	SREF .6053 SQ.FT.
(CER022)	ARC 66-709 OA59 OA11A-(N24)	.000	.000	-11.700	LREF .9535 FT.
(CER023)	ARC 66-709 OA59 OA11A-(N24)	.000	.000	16.300	BREF 1.1710 FT. IN.
(1ER019)	ARC 66-709 OA59 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(1ER022)	ARC 66-709 OA59 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	ZMRP .0000 IN.
(1ER023)	ARC 66-709 OA59 O11A-N24 (ADJUSTED FOR TARES)	.200	.000	16.300	SCALE -.3750 IN.

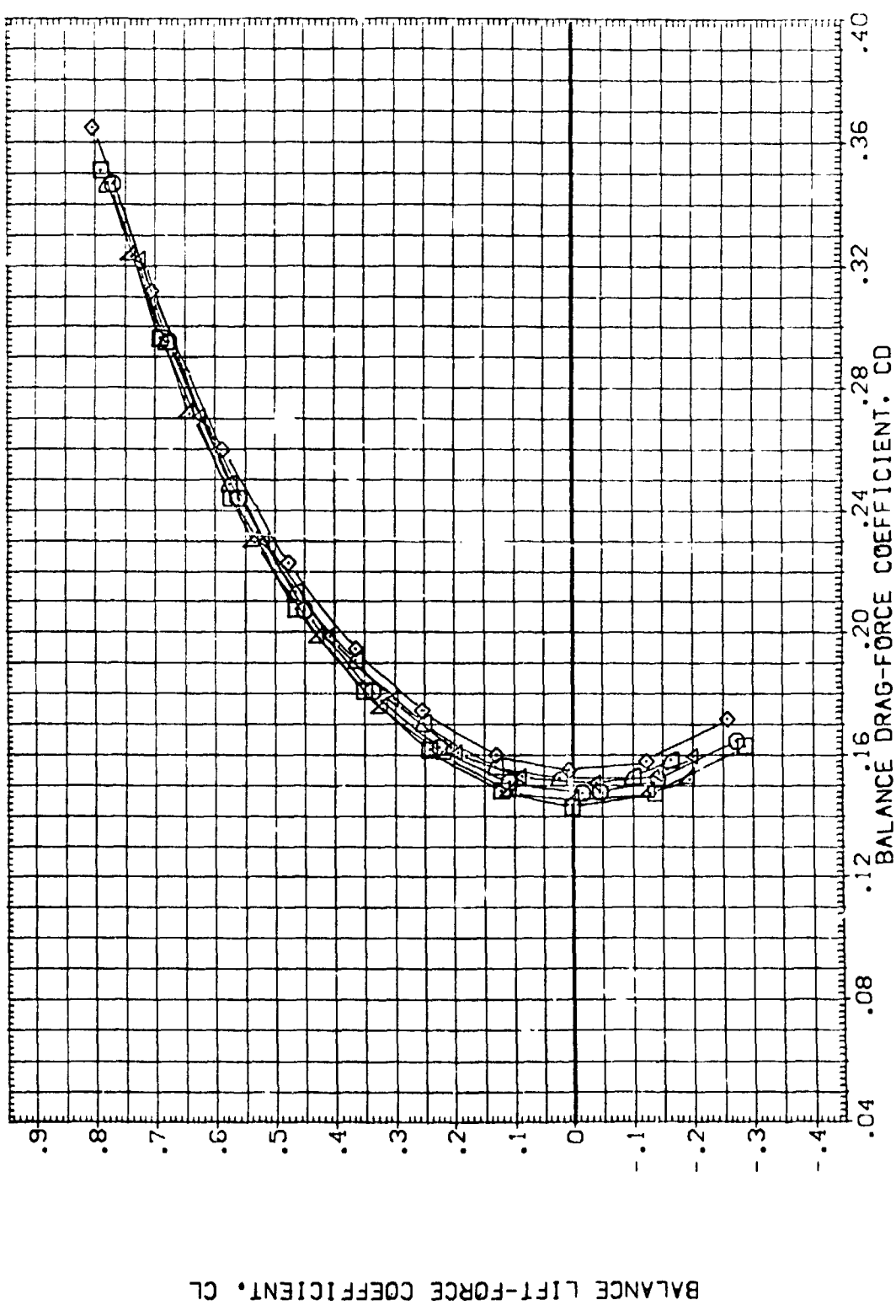


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(CER019)	ARC 66-709 0A59 0A11A-(N24)	.000	.000	-11.700	SREF .6053 SO.FT.
(CER022)	ARC 66-709 0A59 0A11A-(N24)	.000	.000	.000	LREF .5936 FT.
(CER023)	ARC 66-709 0A59 0A11A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(CER019)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6235 IN.
(CER022)	DATA NOT AVAILABLE	.000	.000	.000	YMRP .0000 IN.
(CER023)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

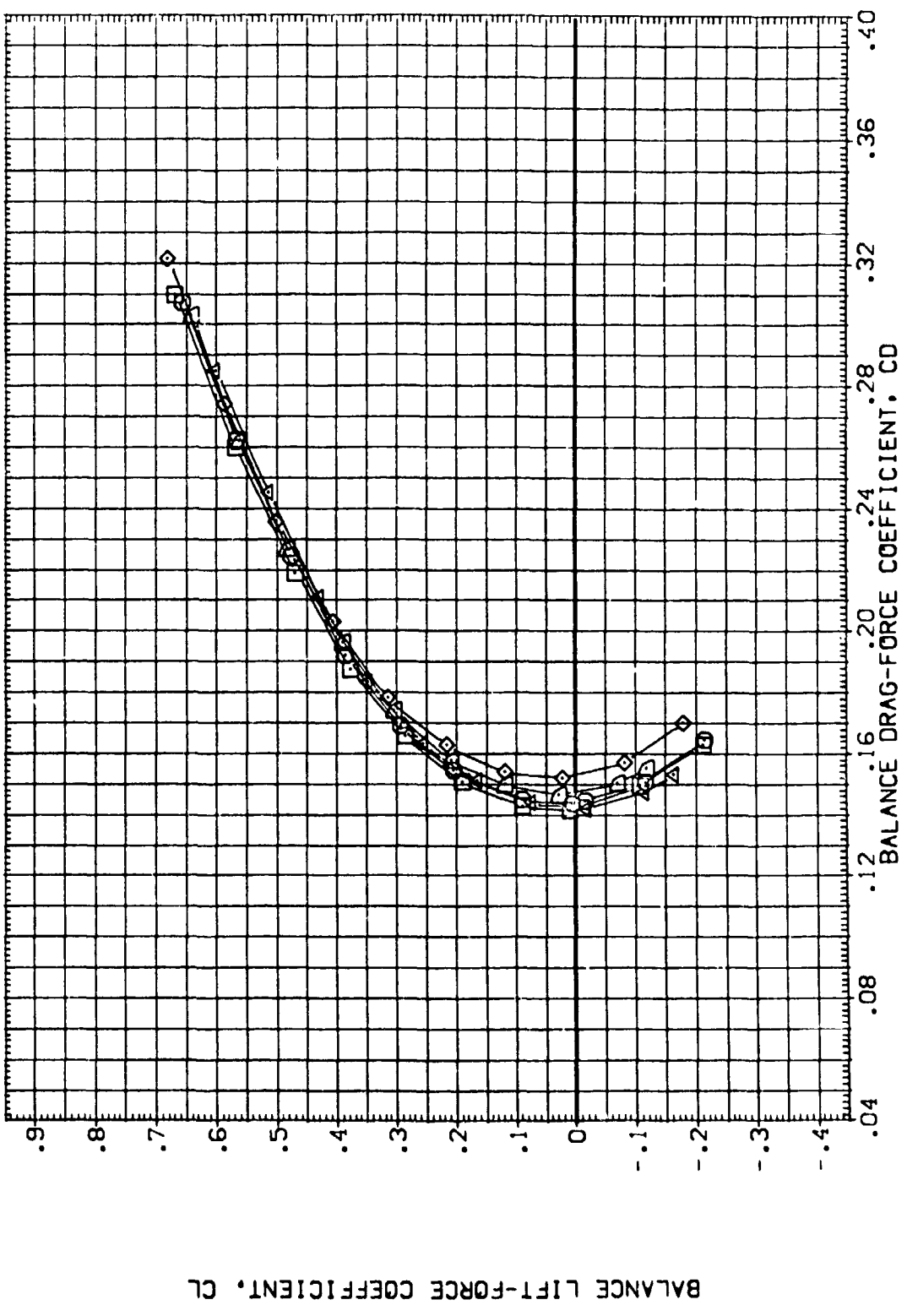


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(H)MACH = 1.50

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVATION	BOFLAP	REFERENCE INFORMATION
(1ER019)	ARC 66-709 0A59 0A11A-(N24)	.000	.000	-11.700	SREF .5053 SQ.FT.
(1ER022)	ARC 66-709 0A59 0A11A-(N24)	.000	.000	.000	LREF .5935 FT.
(1ER023)	ARC 66-709 0A59 0A11A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(1ER019)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6755 IN.
(1ER022)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	ZMRP .0000 IN.
(1ER023)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	SCALE -.3750 IN.

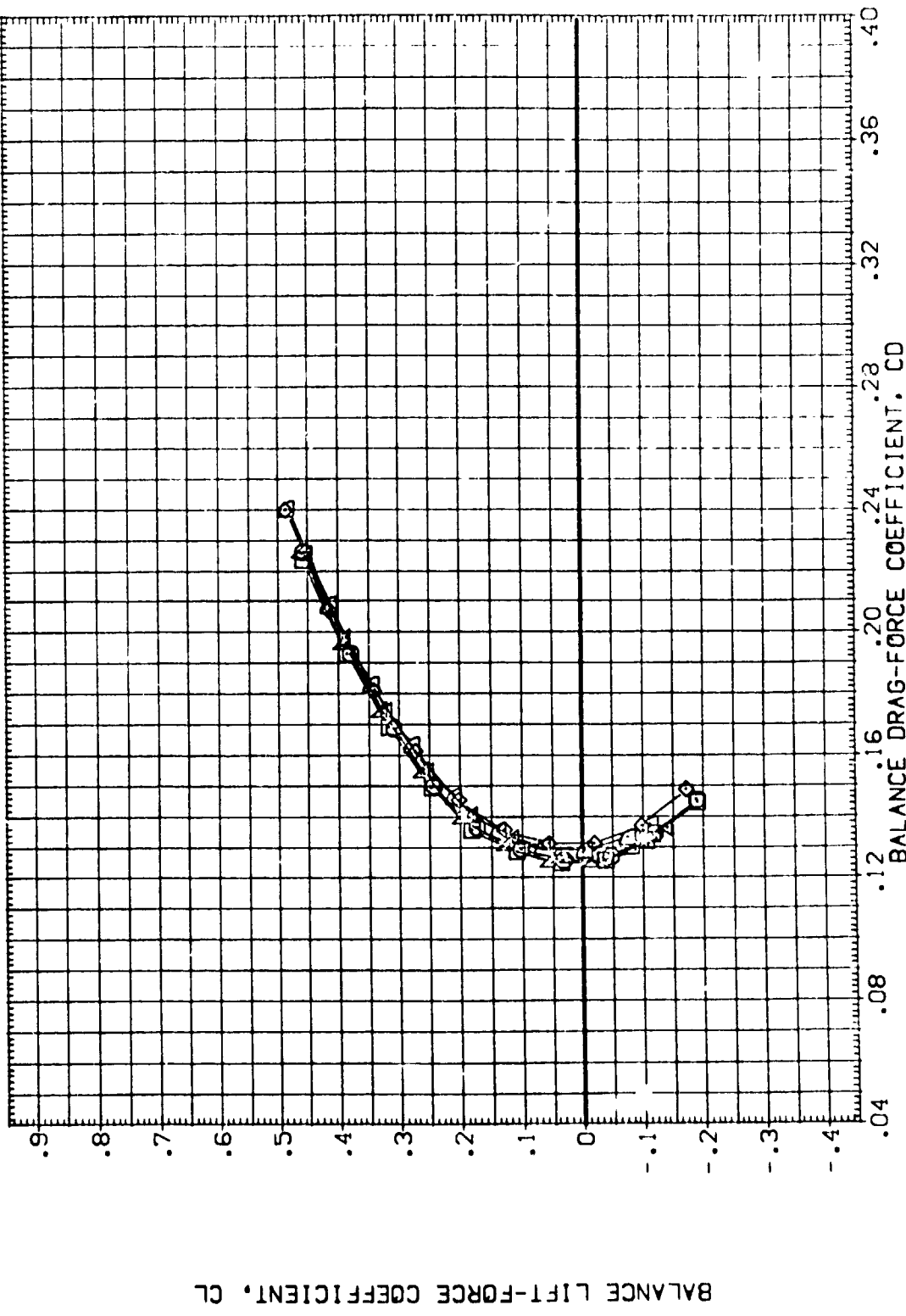


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

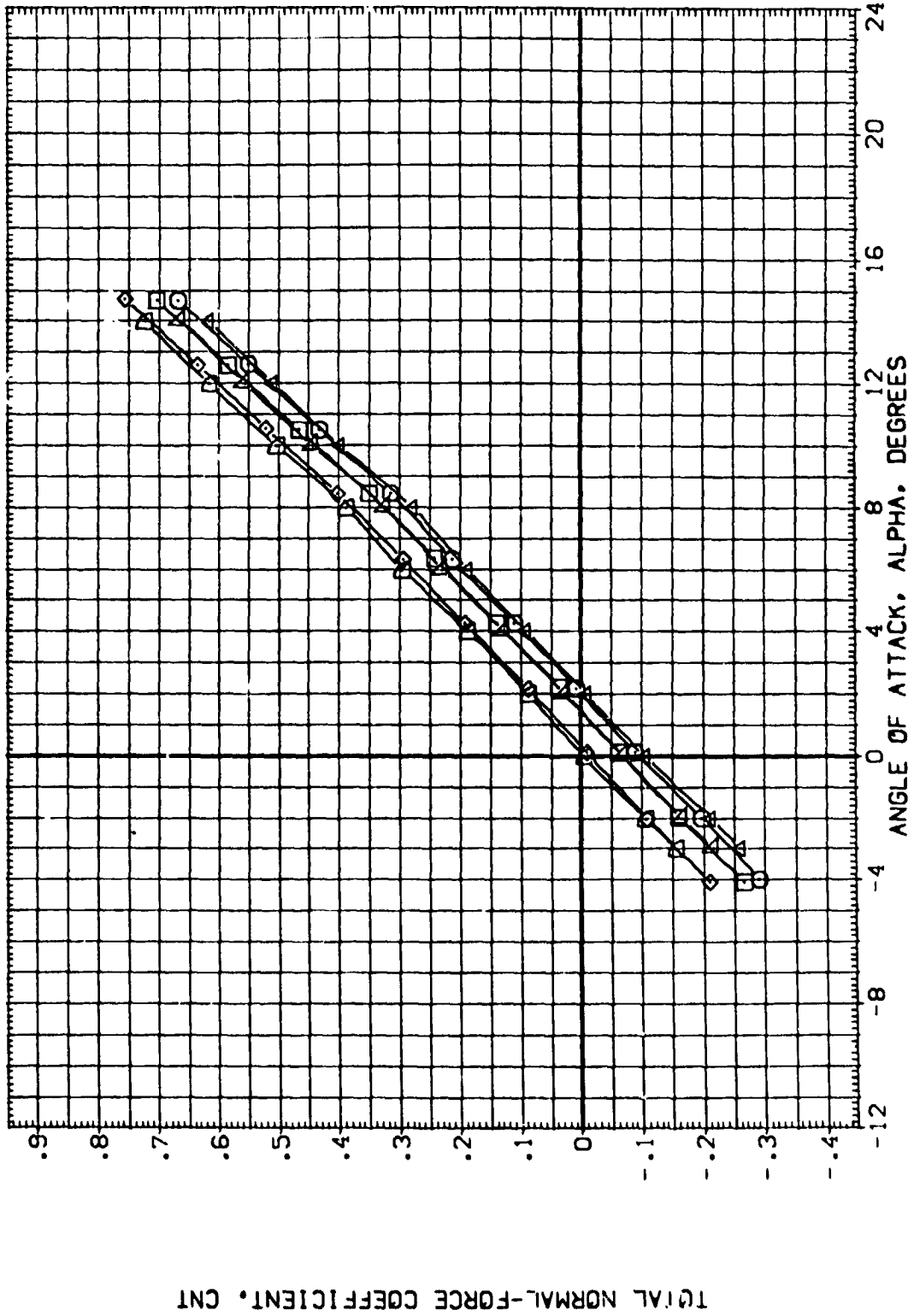
(1)MACH = 2.00

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA .000
 ELEVON .000
 BDFLAP -11.700

CONFIGURATION DESCRIPTION
 ARC 66-709 DA59 CA11A-(N24)
 ARC 66-709 DA59 CA11A-(N24)
 ARC 66-709 DA59 CA11A-(N24)
 ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)

DATA SET SYMBOL
 (GER019) □
 (GER022) ○
 (GER023) △
 (ZER019) ×
 (ZER022) ◇
 (ZER023) ▽



TOTAL NORMAL-FORCE COEFFICIENT, CN

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(A)MACH = .60

DATA SET SYMBOL. CONFIGURATION DESCRIPTION
 (GE019) DATA NOT AVAILABLE
 (GE022) ARC 66-709 CASE DA11A-(N24)
 (GE073) ARC 66-709 CASE DA11A-(N24)
 (X019) DATA NOT AVAILABLE
 (X022) DATA NOT AVAILABLE
 (X023) ARC 66-709 CASE 011A-N24 (ADJUSTED FOR TARES)

BETA .000
 ELEVON .000
 BOFLAP -11.700

BETA .000
 ELEVON .000
 BOFLAP .000

BETA .000
 ELEVON .000
 BOFLAP 16.300

BETA .000
 ELEVON .000
 BOFLAP -11.700

BETA .000
 ELEVON .000
 BOFLAP 16.300

REFERENCE INFORMATION ON
 SREF .6053 59. FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

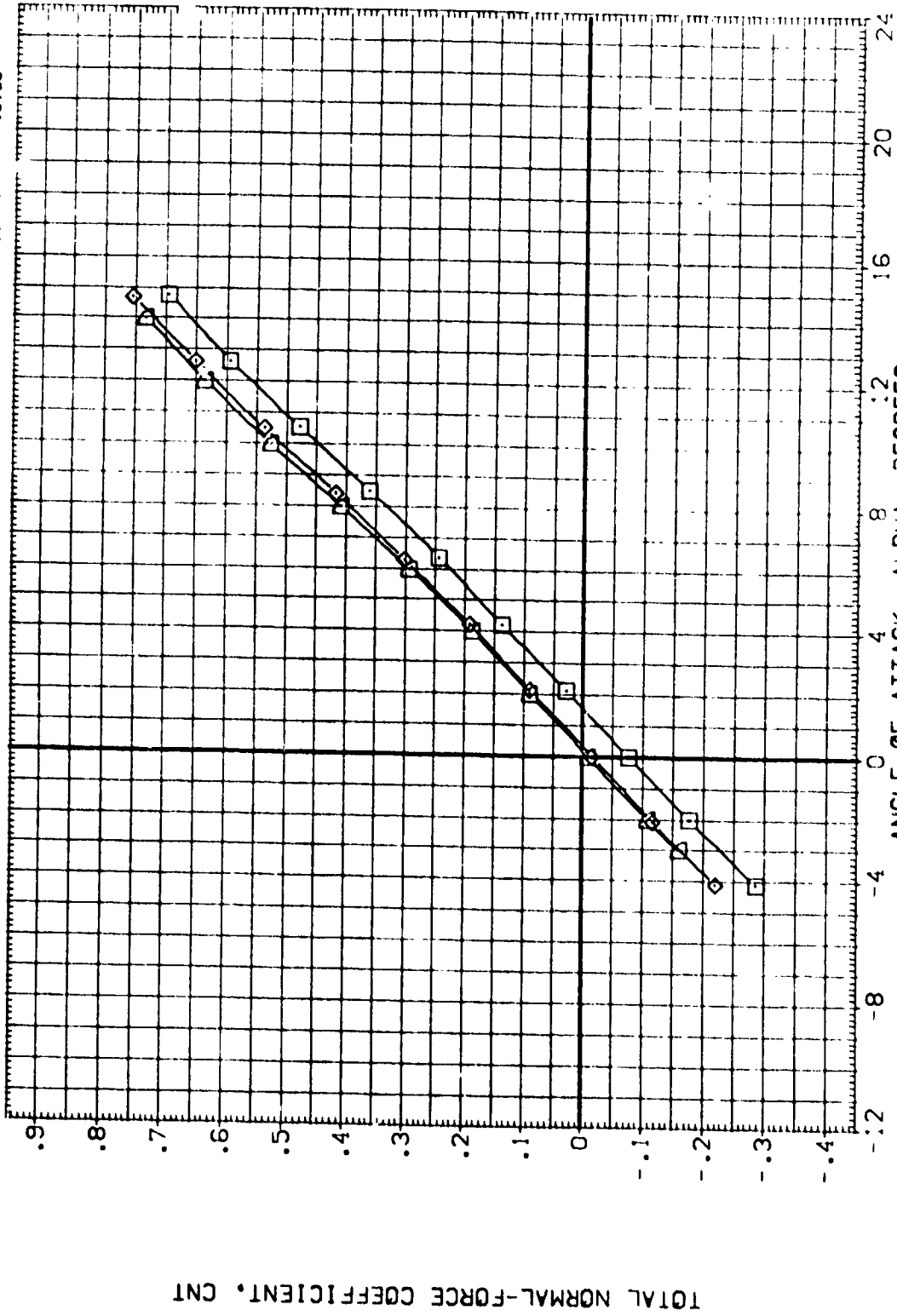


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(3)MACH = .70

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(0E R019) ARC 66-709 CAS9 011A-(N24)

(0E R022) ARC 66-709 CAS9 011A-(N24)

(0E R023) ARC 66-709 CAS9 011A-(N24)

(3E R019) ARC 66-709 CAS9 011A-N24 (ADJUSTED FOR TARES)

(3E R022) DATA NOT AVAILABLE

(3E R023) ARC 66-709 CAS9 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDF LAP

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

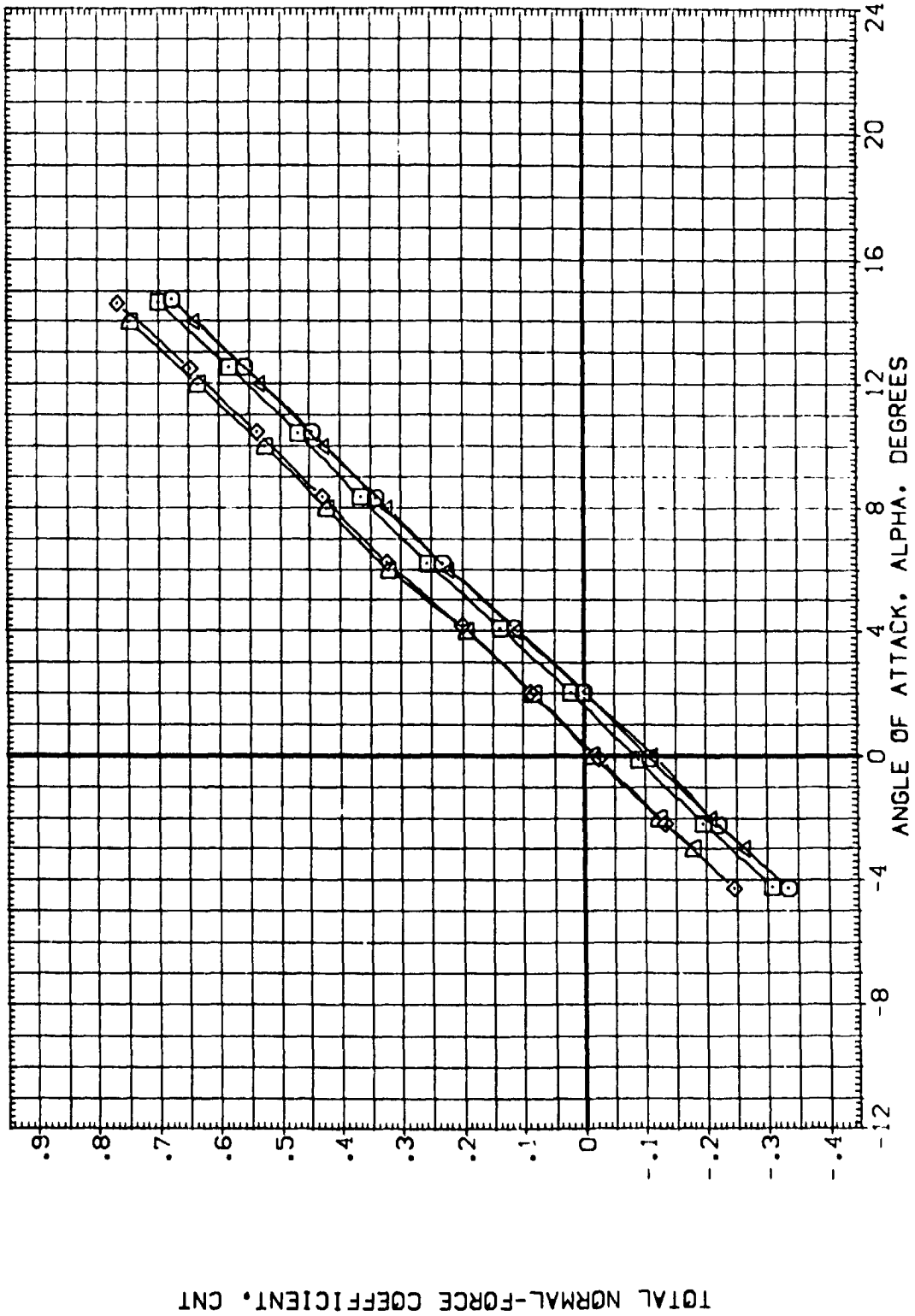


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .80

DATA SET SYMBOL: (ZFR019), (ZFR022), (ZFR023), (ZFR019), (ZFR022), (ZFR023)

CONFIGURATION DESCRIPTION: ARC 66-709 CAS9 D111A-N24, DATA NOT AVAILABLE, ARC 66-709 CAS9 D111A-N24 (ADJUSTED FOR TARES), DATA NOT AVAILABLE

BETA: .000, .000, .000, .000, .000, .000

ELEVON: .000, .000, .000, .000, .000, .000

EDFLAP: -11.700, .000, 16.300, -11.700, .000, 16.300

REFERENCE INFORMATION: SREF .6053 SQ.FT., LREF .5935 FT., BREF 1.1710 FT., XMRP 12.6255 IN., YMRP .0000 IN., ZMRP -.3750 IN., SCALE .0150

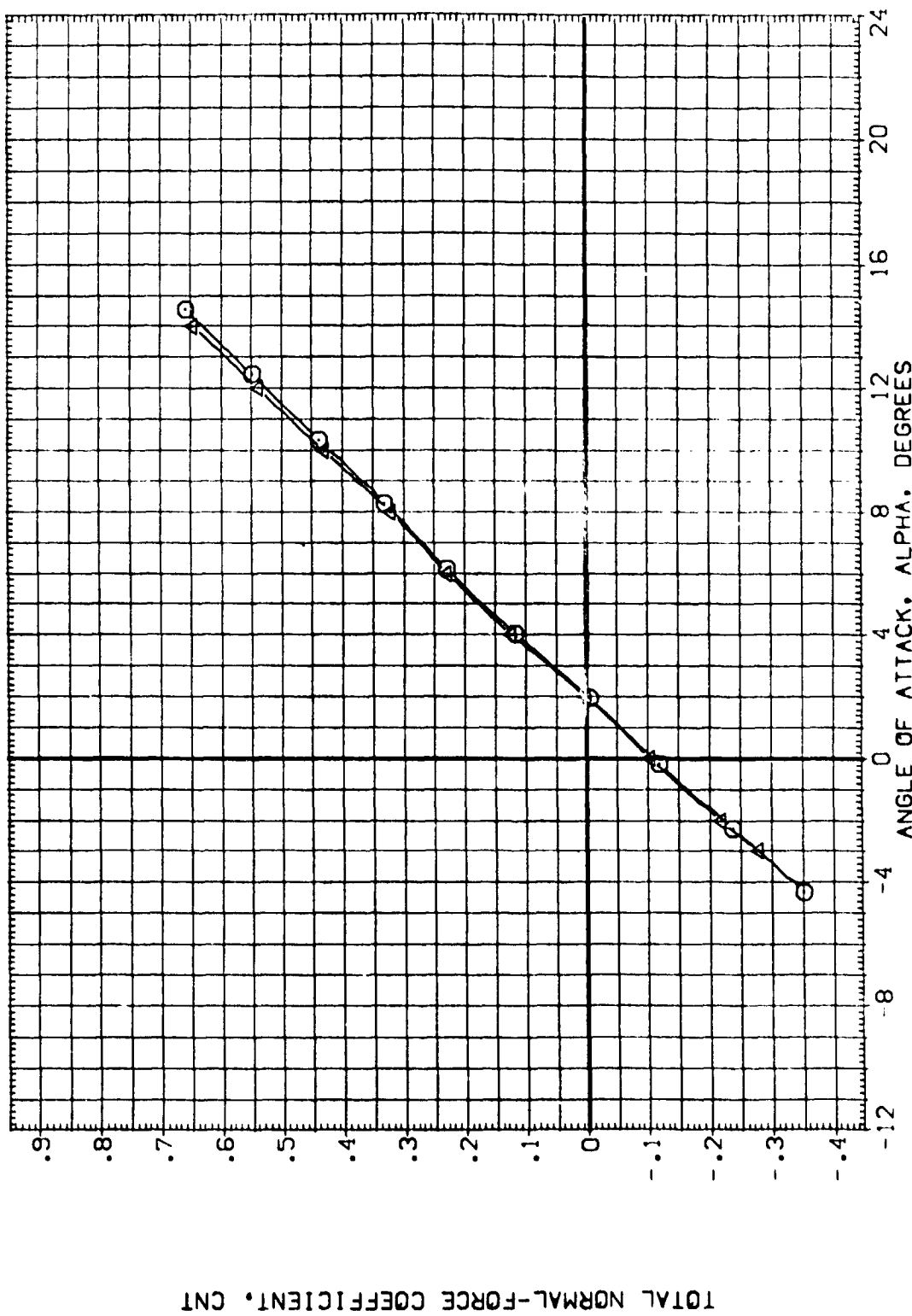


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES
(0)MACH = .85



DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BOFLAP

(GER019) ARC 66-709 DA59 CA11A-(N24) .000 .000 -11.700
 (GER022) ARC 66-709 DA59 CA11A-(N24) .000 .000 .000
 (GER023) ARC 66-709 DA59 CA11A-(N24) .000 .000 16.300
 (XER019) ARC 66-709 DA59 CA11A-N24 (ADJUSTED FOR TARES) .000 .000 -11.700
 (XER022) ARC 66-709 DA59 CA11A-N24 (ADJUSTED FOR TARES) .000 .000 .000
 (XER023) ARC 66-709 DA59 CA11A-N24 (ADJUSTED FOR TARES) .000 .000 16.300

REFERENCE INFORMATION

SREF .6053 SQ.FT.
 LREF .5935 FT.
 BRREF 1.1710 FT. IN.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

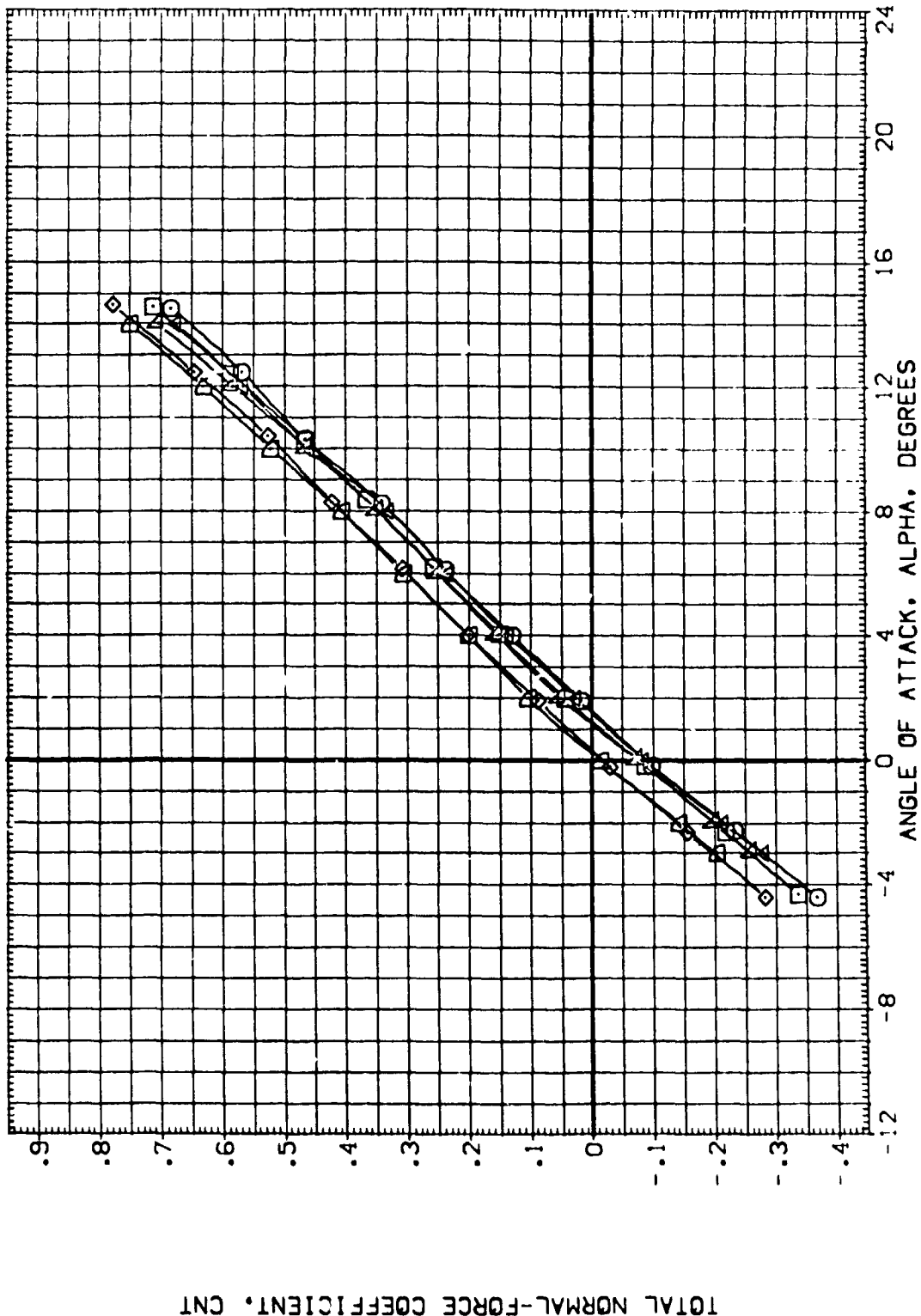


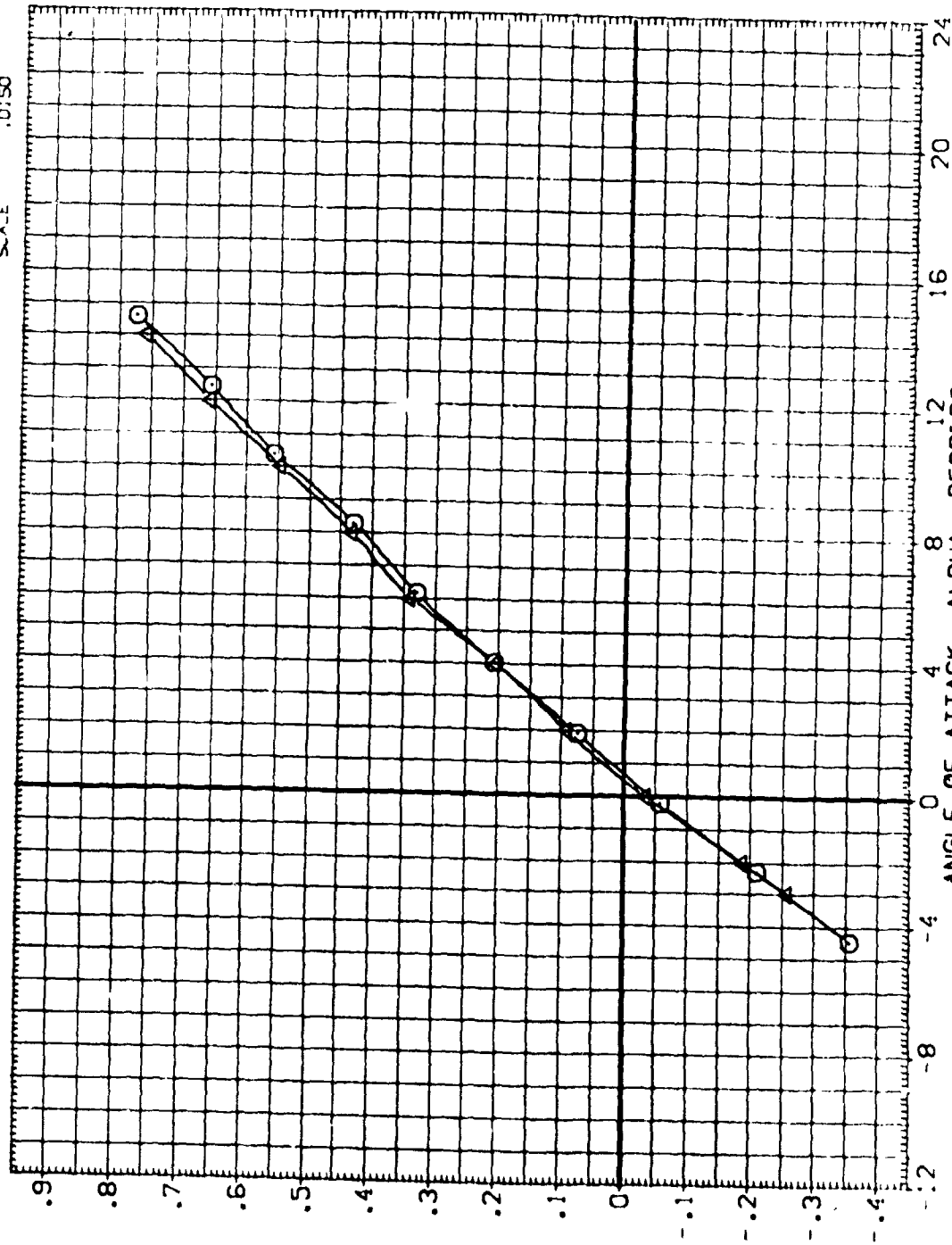
FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(E)MACH .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (GER019) ARC 66-709 DASS Q111A-N24
 (GER022) DATA NOT AVAILABLE
 (GER023) DATA NOT AVAILABLE
 (3ER019) ARC 66-709 DASS Q111A-N24 (ADJUSTED FOR TARES)
 (3ER022) DATA NOT AVAILABLE
 (3ER023) DATA NOT AVAILABLE

BETA .000
 ELEVON .000
 BOFLAP -11.700

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BRREF 1.1710 FT.
 XMRP 12.6755 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0750



TOTAL NORMAL-FORCE COEFFICIENT, CnT

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(F)MAG .95



REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BRREF 1.1710 IN.
 XMRP 12.6256 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA .000
 ELEVON .000
 BDFLAP -11.700

CONFIGURATION DESCRIPTION
 ARC 66-709 QAS9 O11A-(N24)
 ARC 66-709 QAS9 O11A-(N24)
 ARC 66-709 QAS9 O11A-(N24)
 ARC 66-709 QAS9 O11A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 QAS9 O11A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 QAS9 O11A-N24 (ADJUSTED FOR TARES)

DATA SET SYMBOL
 (X R019)
 (X R022)
 (X R023)
 (X R019)
 (X R022)
 (X R023)

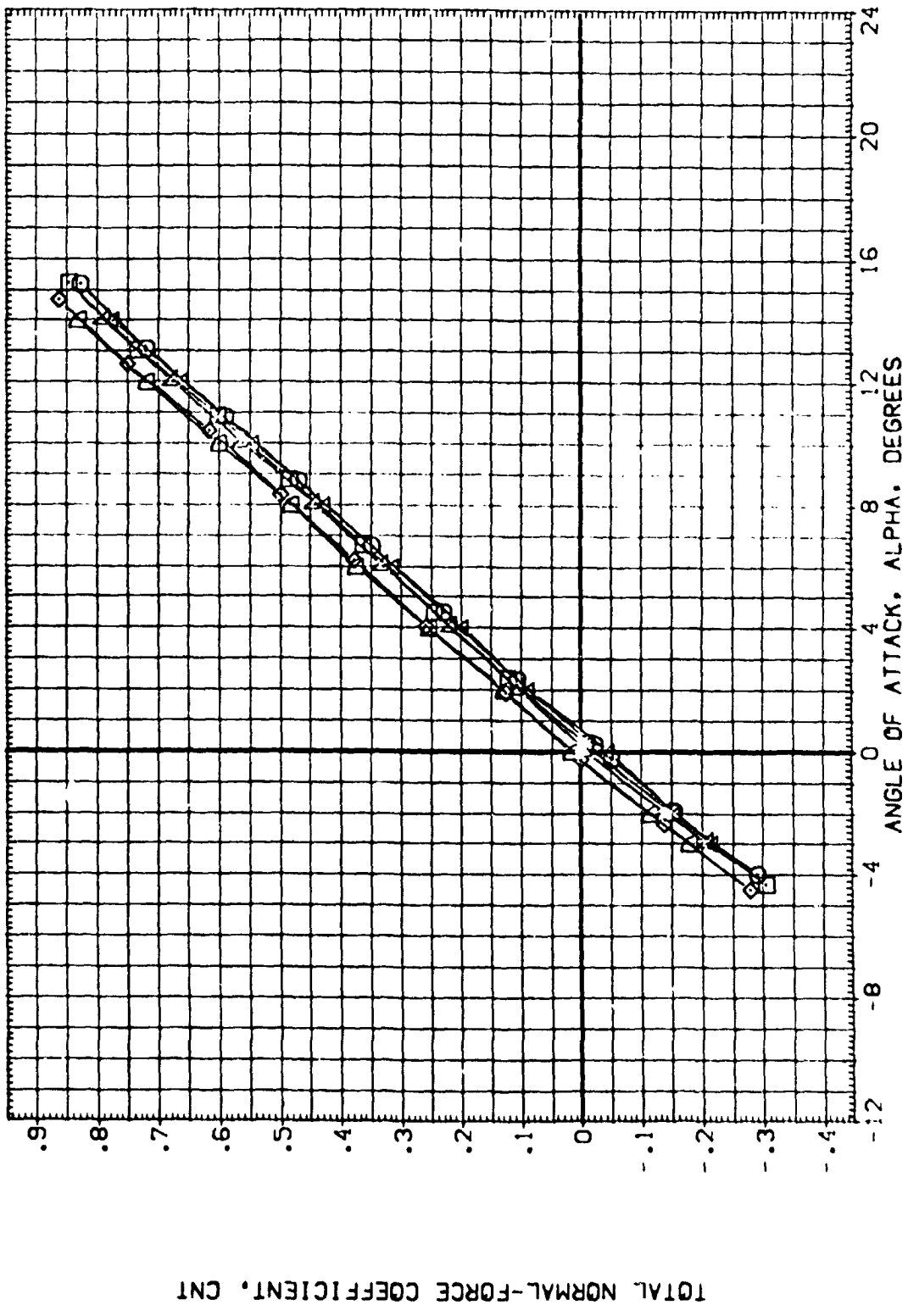


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(G)MAC = 1.20

DATA SET SYMBOL: (GER019), (GER022), (GER023), (XER019), (XER022), (XER023)
 CONFIGURATION DESCRIPTION: ARC 66-709 DA59 O11A-(N24), ARC 66-709 DA59 O11A-(N24), ARC 66-709 DA59 O11A-(N24), ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES), DATA NOT AVAILABLE, ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)
 BETA: .000, .000, .000, .000, .000, .000
 ELEVON: .000, .000, .000, .000, .000, .000
 BOFLAP: -11.700, .000, 16.300, -11.700, .000, 16.300
 REFERENCE INFORMATION: SREF .6053 50.FT., LREF .5935 FT., BREF 1.1710 FT., XMRP 12.6255 IN., YMRP .0000 IN., ZMRP -.3750 IN., SCALE .0150

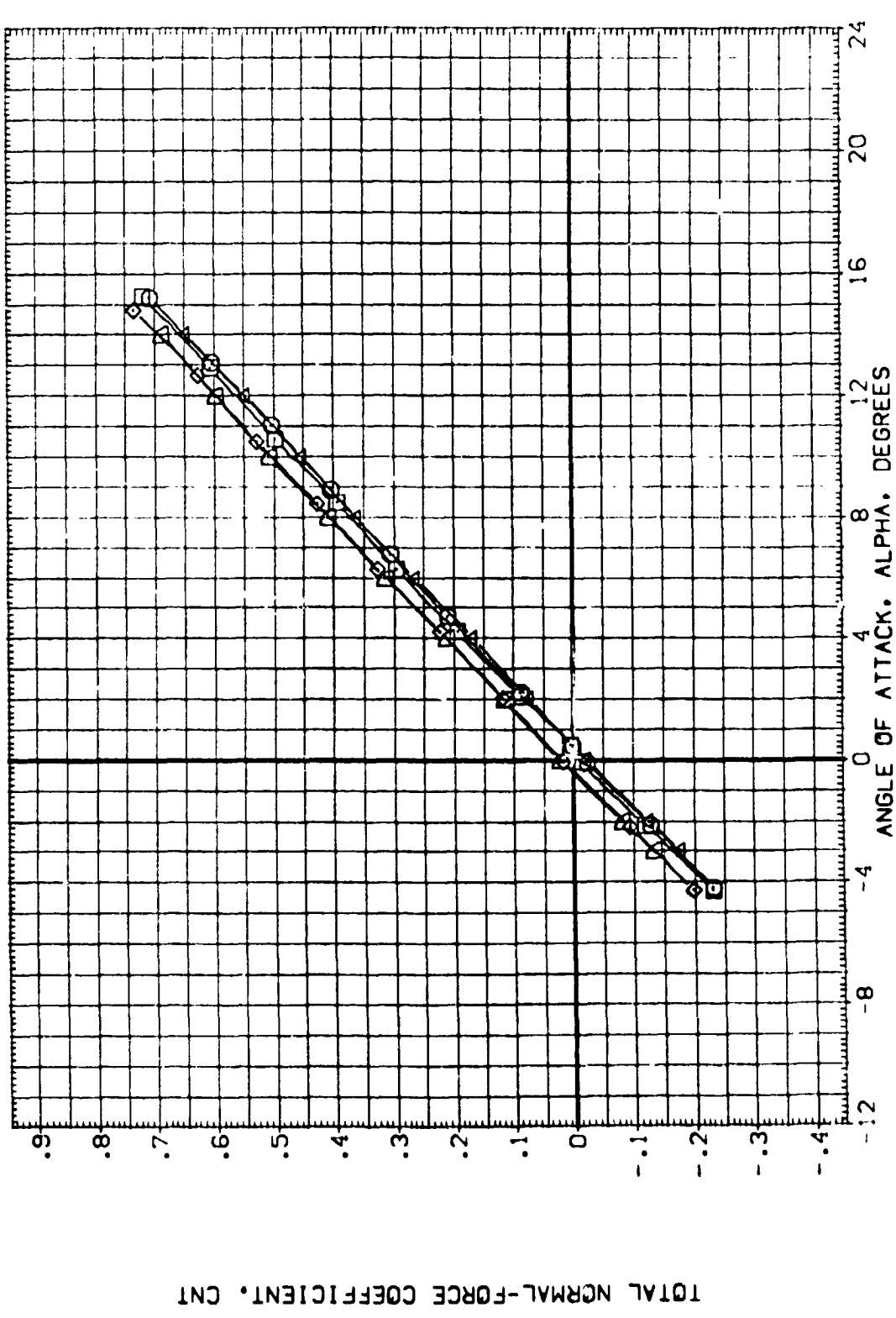


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH = 1.50



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BDF LAP	REFERENCE INFORMATION
(GE RD19)	ARC 66-709 DA59 O11A-(N24)	.000	.000	-11.700	SREF .6053 60.FT.
(GE RD17)	ARC 66-709 DA59 O11A-(N24)	.000	.000	.000	LREF .5935 FT.
(GE RD13)	ARC 66-709 DA59 O11A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(GE RD19)	ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(GE RD17)	ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	YMRP .0000 IN.
(GE RD13)	ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					S SCALE .0150

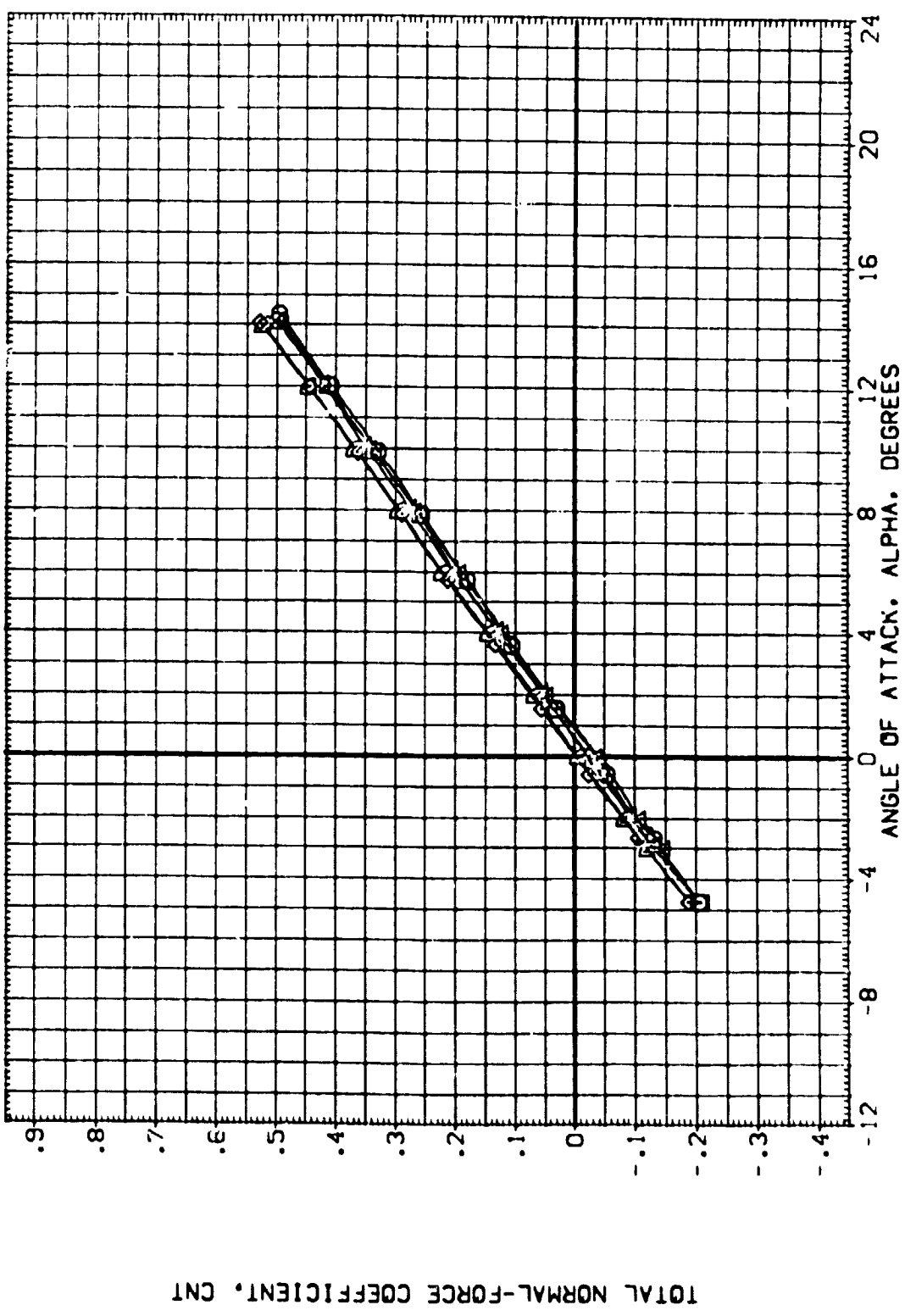


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH = 2.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GERD19)	ARC 66-708 DA59	011A-N24
(GERD22)	ARC 66-708 DA59	011A-N24
(GERD73)	ARC 66-709 DA59	011A-N24 (ADJUSTED FOR TARES)
(ZERD19)	ARC 66-709 DA59	011A-N24 (ADJUSTED FOR TARES)
(ZERD22)	ARC 66-709 DA59	011A-N24 (ADJUSTED FOR TARES)
(ZERD73)	ARC 66-709 DA59	011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	.000	.000
.000	.000	16.300
.000	.000	-11.700
.000	.000	.000
.000	.000	16.300

REFERENCE INFORMATION

SREF	.8053	SQ. FT.
LREF	.5936	FT.
BREF	1.1710	FT. IN.
XMRP	12.6295	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

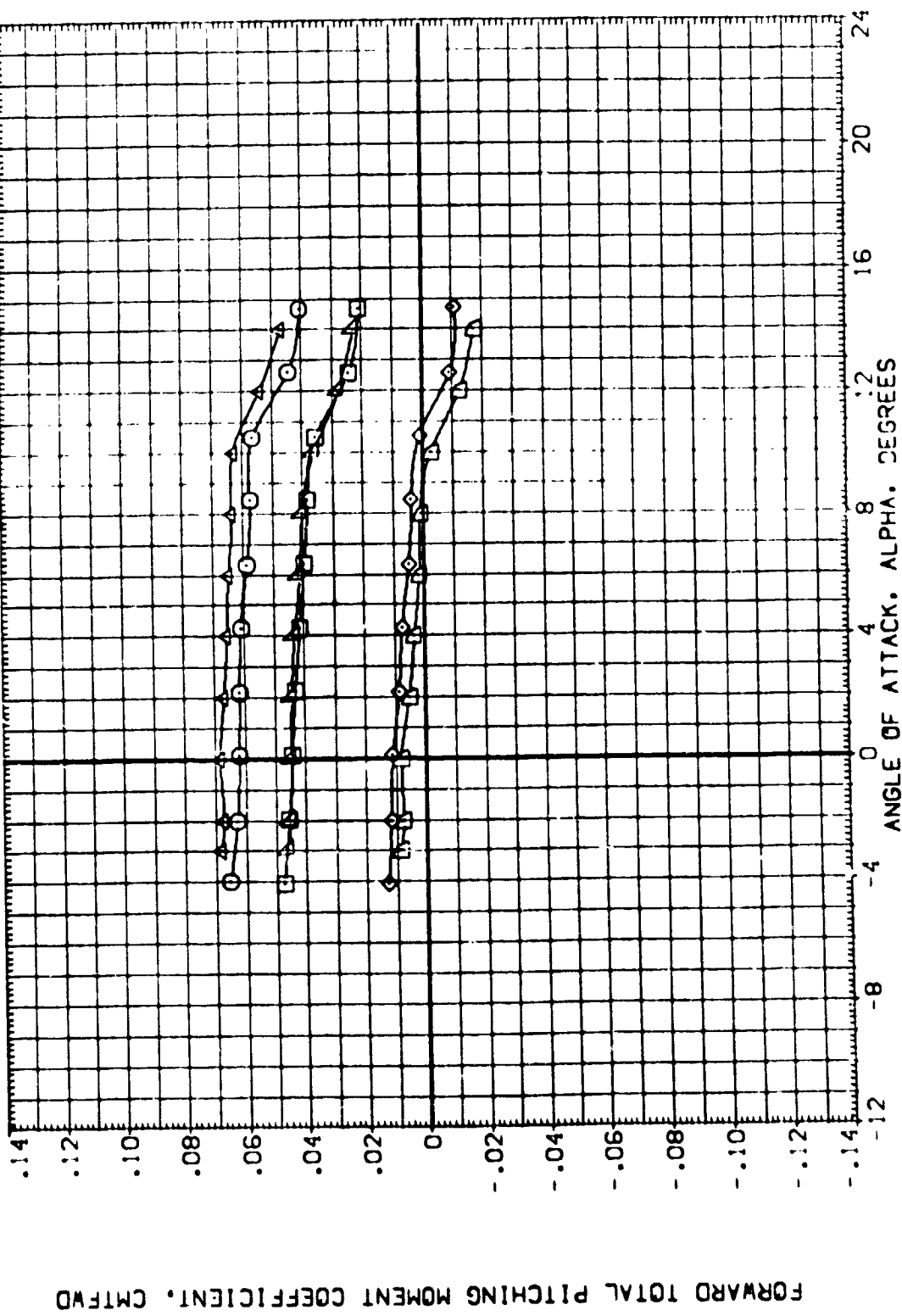


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

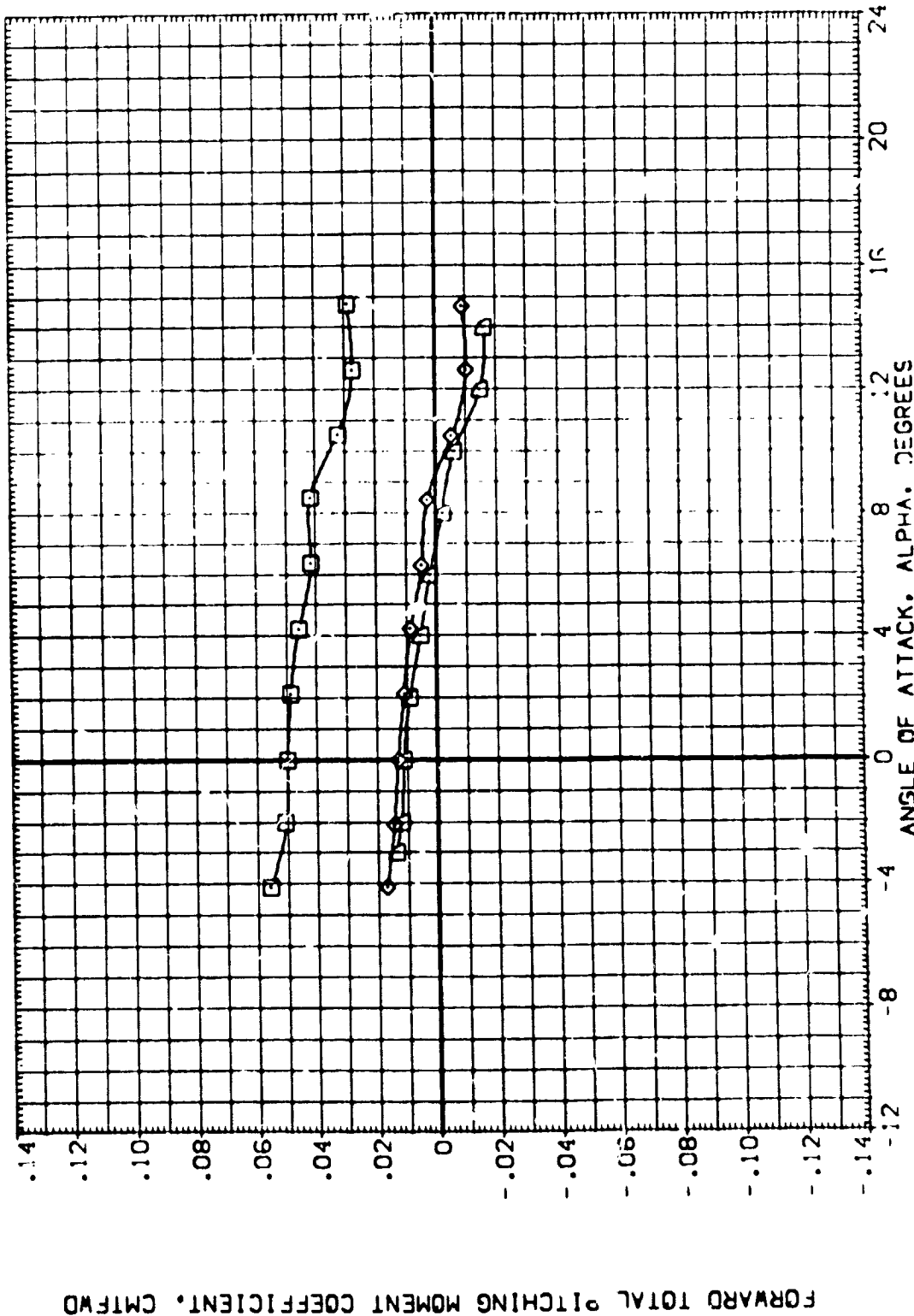
(A)MACH = .60



REFERENCE INFORMATION:
 STREF .6053 50. FT.
 LREF .5935 FT.
 BRFF 1.1710 FT.
 YMRP 12.6255 IN.
 ZMRP .0000 IN.
 SCALE -.3750 IN.
 .0:50

BETA .000
 ELEVON .000
 BODY LAP -11.700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (GE R019) DATA NOT AVAILABLE
 (GE R022) ARC 66-709 OAS9 O11A-(N24)
 (GE R023) ARC 66-709 OAS9 O11A-(N24)
 (X R019) DATA NOT AVAILABLE
 (X R022) DATA NOT AVAILABLE
 (X R023) ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)



FORWARD TOTAL PITCHING MOMENT COEFFICIENT, CMTFWD

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(B)MAC .70

DATA SET SYMBOL CONFIGURATION DESCRIPTION

ARC 66-709 DASS 011A-(N24)
 ARC 66-709 DASS 011A-(N24)
 ARC 66-709 DASS 011A-(N24) (ADJUSTED FOR TARES)
 DATA NOT AVAILABLE
 ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

REFERENCE INFORMATION

SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6235 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

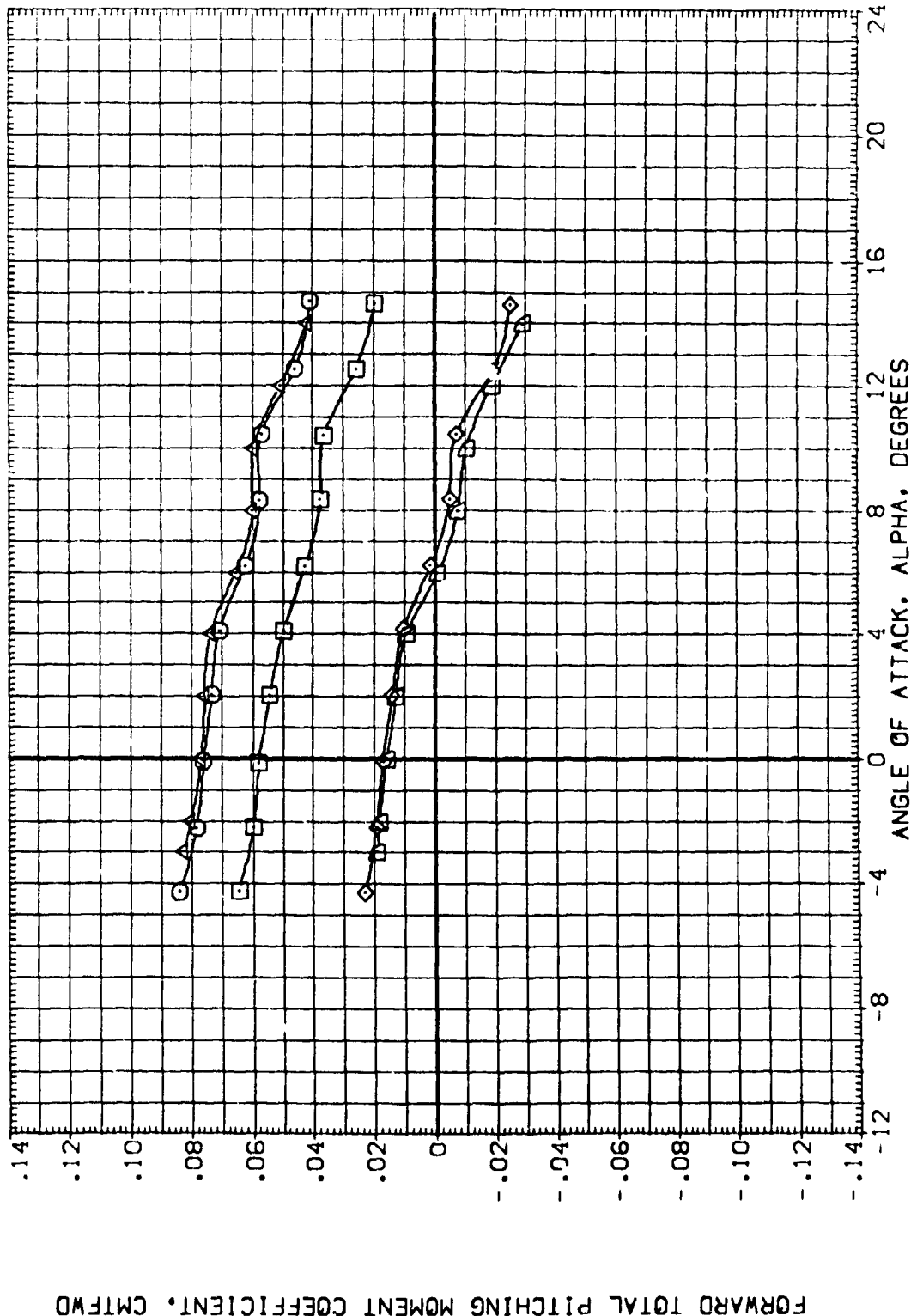


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GER019) ARC 66-709 DASS 0111A-(N24)

(GER022) DATA NOT AVAILABLE

(GER023) DATA NOT AVAILABLE

(3ER019) ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)

(3ER022) DATA NOT AVAILABLE

(3ER023) DATA NOT AVAILABLE

BETA ELEVON BOFI AP

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

REFERENCE INFORMATION

SREF 6053 50.FT.

LREF .5935 FT.

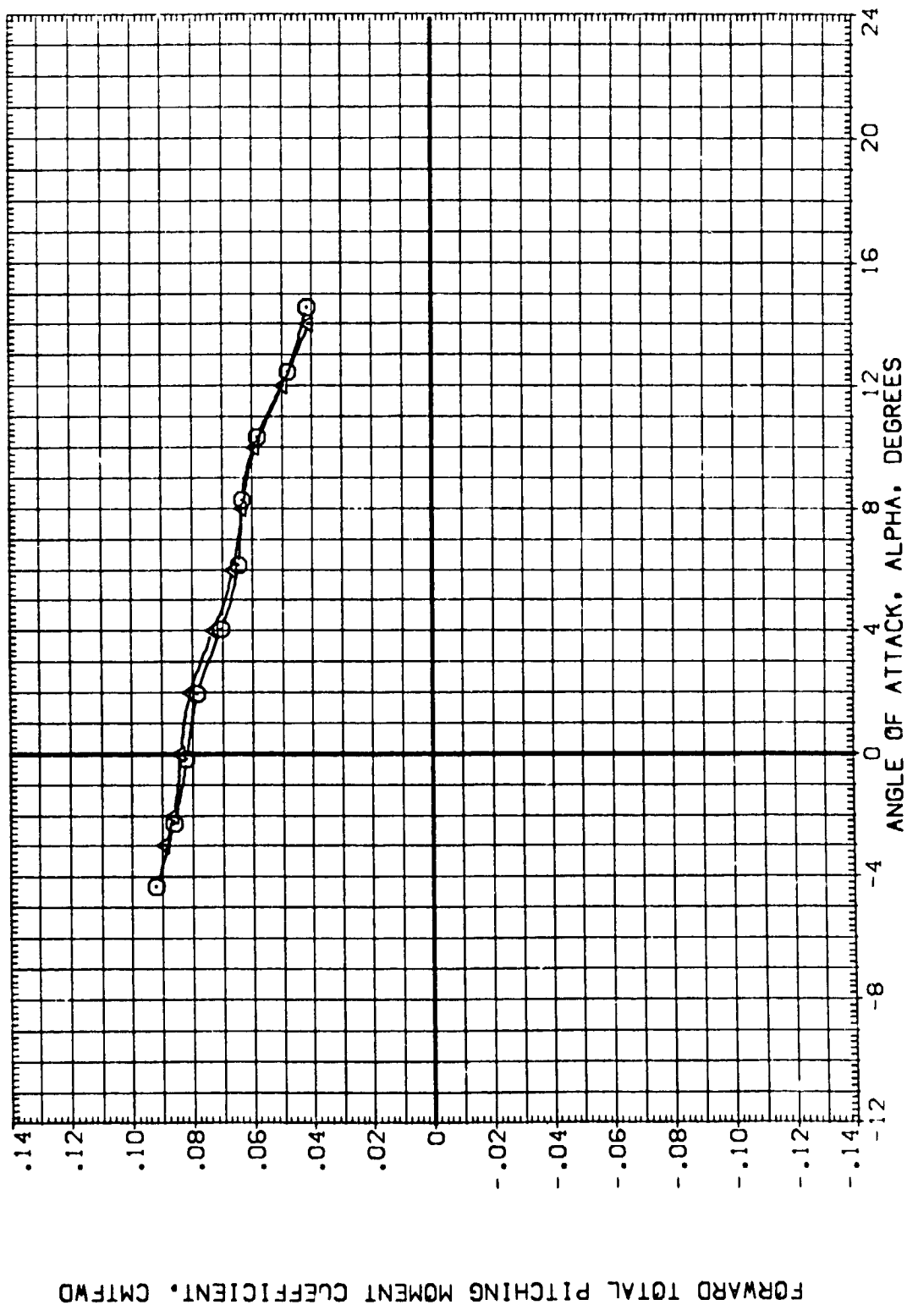
BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150



FORWARD TOTAL PITCHING MOMENT COEFFICIENT, CMTFWD

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(0)MACH = .85

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVATION	BOFLAP	REFERENCE INFORMATION
(GER019)	ARC 66-709 0A59 0A11A-(N24)	.000	.000	-11.700	SREF .6053 SQ.FT.
(GER022)	ARC 66-709 0A59 0A11A-(N24)	.000	.000	.000	LREF .5535 FT.
(GER023)	ARC 66-709 0A59 0A11A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(3ER019)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(3ER022)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	YMRP .0000 IN.
(3ER023)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

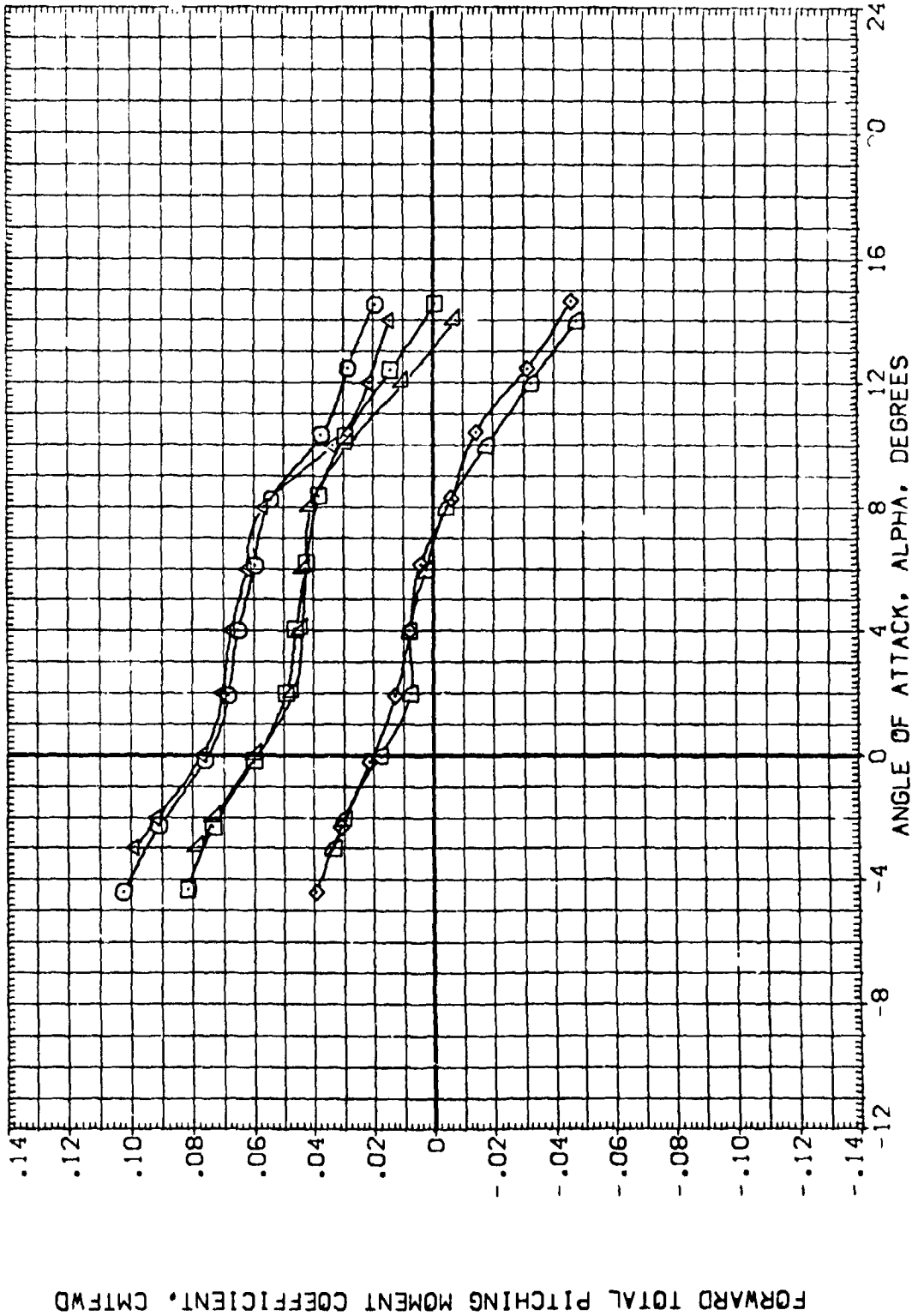


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

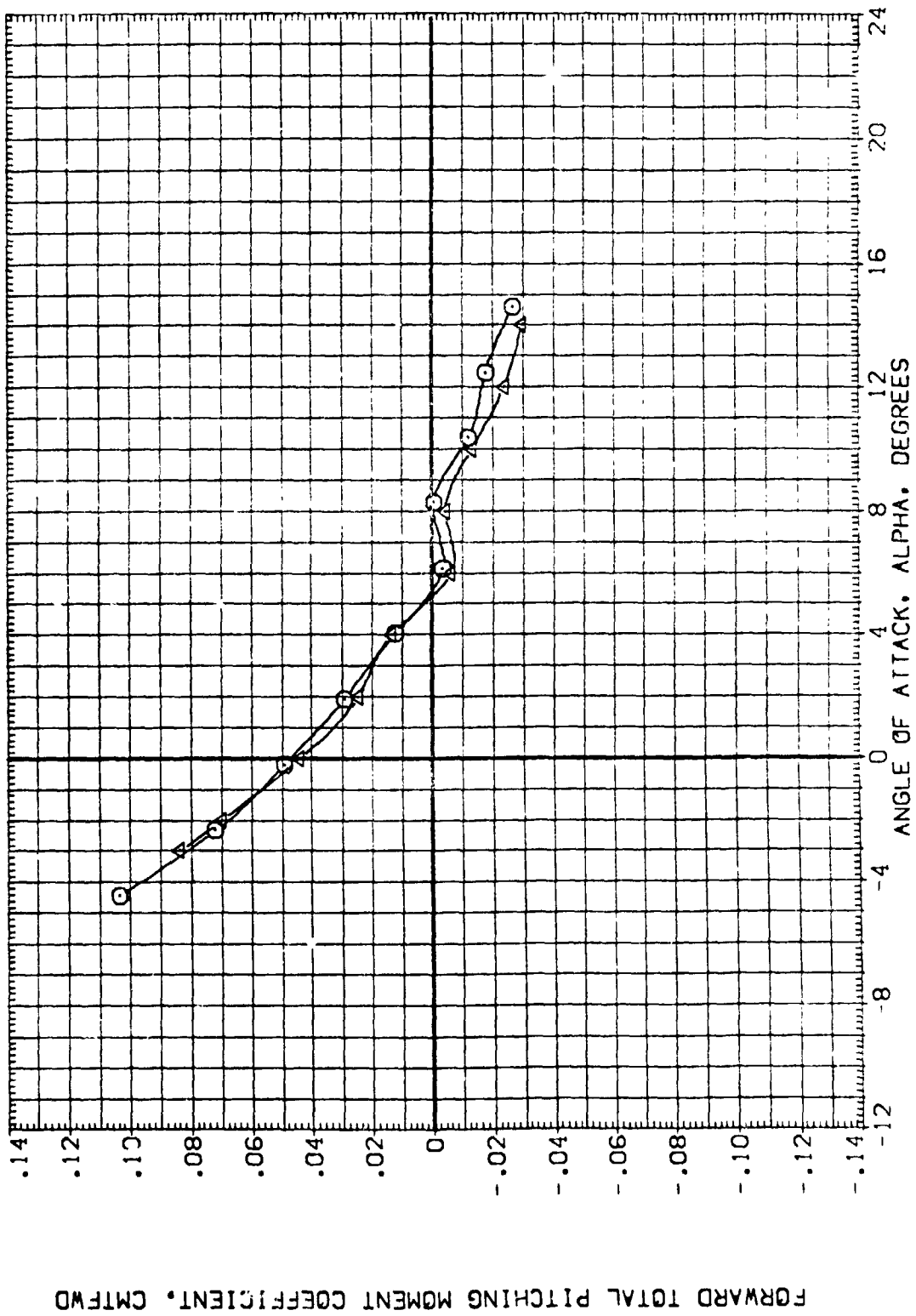
(E)MACH = .90



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (GER019) ARC 66-709 OAS9 OAI1A-(N24)
 (GER022) DATA NOT AVAILABLE
 (GER023) DATA NOT AVAILABLE
 (ZER019) ARC 66-709 OAS9 OI1A-N24 (ADJUSTED FOR TARES)
 (ZER022) DATA NOT AVAILABLE
 (ZER023) DATA NOT AVAILABLE

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

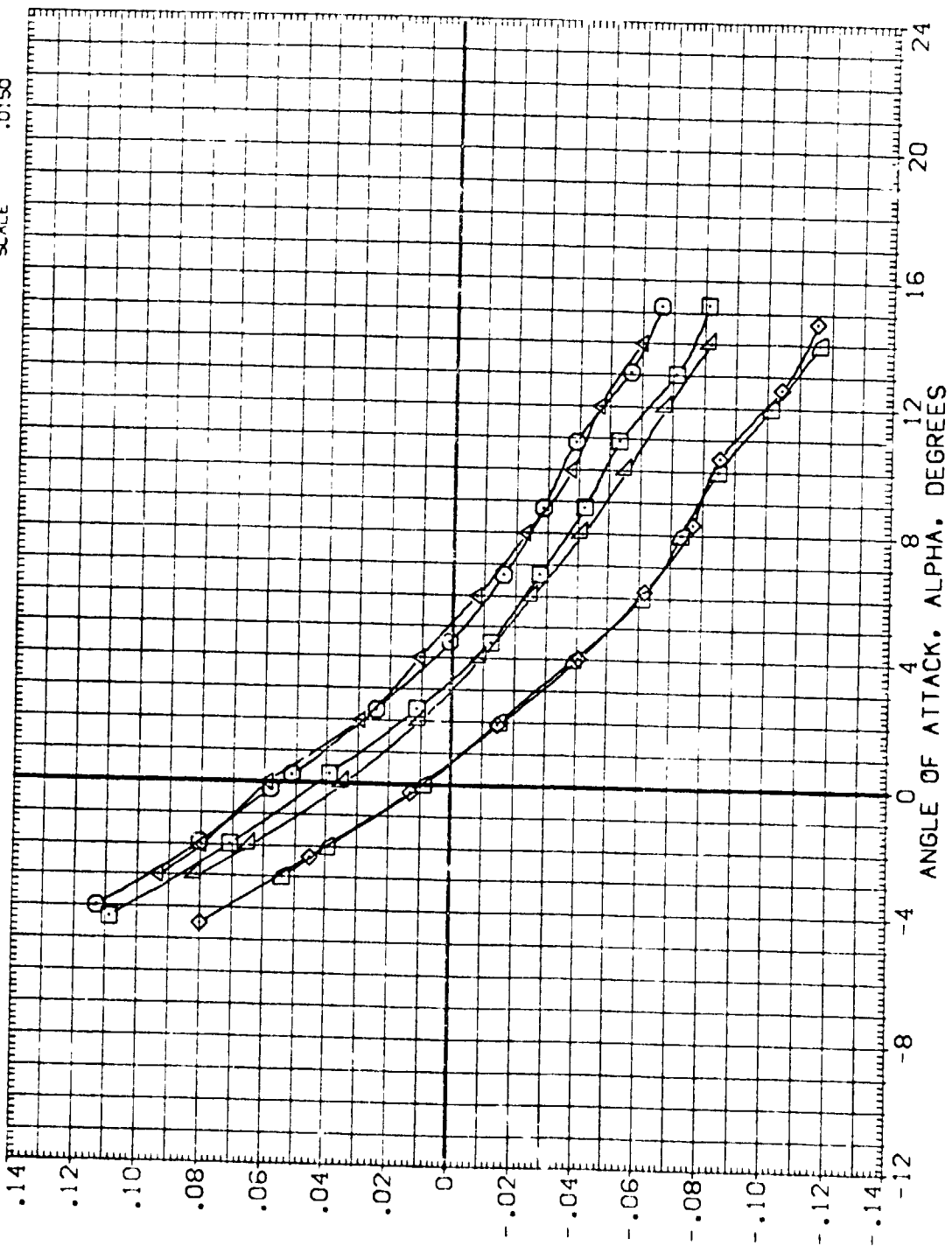
REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BRFP 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



FORWARD TOTAL PITCHING MOMENT COEFFICIENT, CMTFWD

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BDF LAP	REFERENCE INFORMATION
(GE:RO19)	ARC 66-709 GAS9 0111A-(N24)	.000	.000	-11.700	SREF .6053 50.FT.
(GE:RO22)	ARC 66-709 GAS9 0111A-(N24)	.000	.000	.000	LREF .5935 FT.
(GE:RO23)	ARC 66-709 GAS9 0111A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(GE:RO19)	ARC 66-709 GAS9 011A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(GE:RO22)	ARC 66-709 GAS9 011A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	ZMRP .0000 IN.
(GE:RO23)	ARC 66-709 GAS9 011A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	SCALE .0150



FORWARD TOTAL PITCHING MOMENT COEFFICIENT, CMTFWD

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.20



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GER019) ARC 66-709 0A59 011A-(N24)

(GER022) ARC 66-709 0A59 011A-(N24)

(GER023) ARC 66-709 0A59 011A-(N24)

(GER019) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

(GER022) DATA NOT AVAILABLE

(GER023) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

REFERENCE INFORMATION

SREF .6053 50.FT.

LREF .5935 FT.

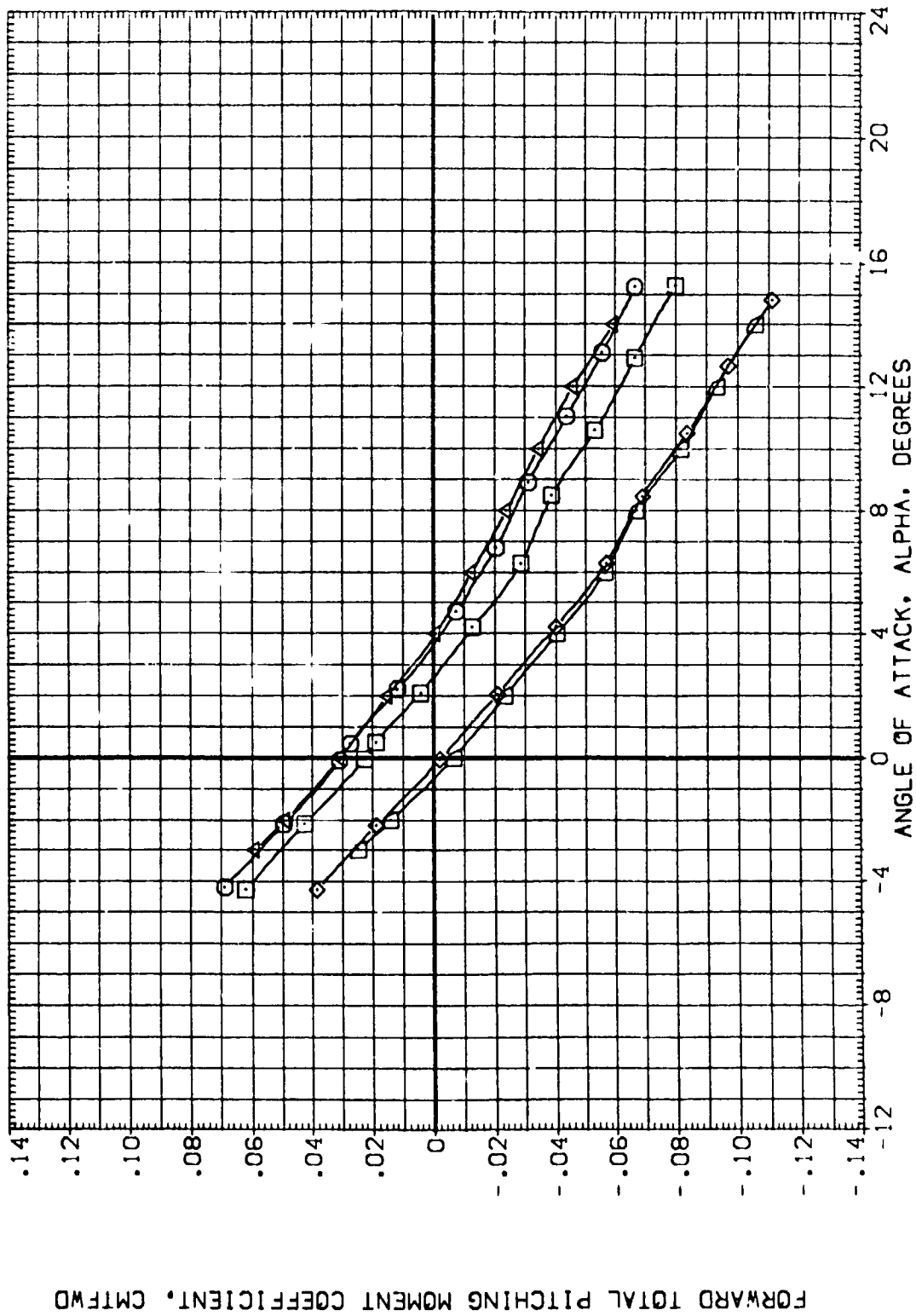
BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150



FORWARD TOTAL PITCHING MOMENT COEFFICIENT, CMTFWD

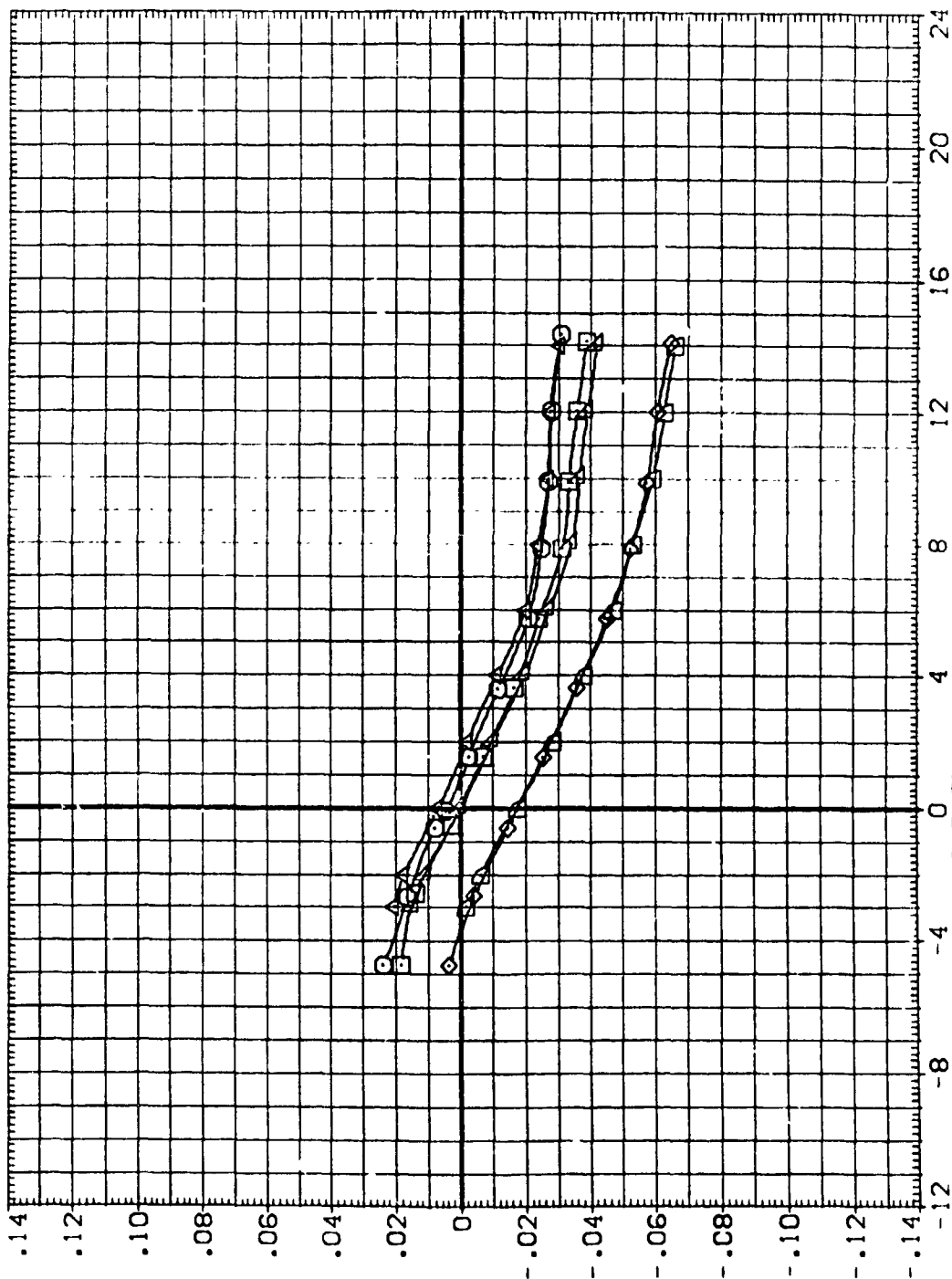
FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(M)MAC = 1.50

DATA SET SYMBOL: (GE.R019), (GE.R022), (GE.R023), (X.R019), (X.R022), (X.R023)
 CONFIGURATION DESCRIPTION: ARC 66-709 OAS9 O11A-(N24), ARC 66-709 OAS9 O11A-(N24), ARC 66-709 OAS9 O11A-(N24), ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES), ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES), ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)

BETA: .000, .000, .000, .000, .000, .000
 ELEVON: .000, .000, .000, .000, .000, .000
 BDF LAP: -11.700, .000, .000, 16.300, -11.700, 16.300

REFERENCE INFORMATION: SREF: .6053 SO.FT., LREF: .5935 FT., BREF: 1.1710 Ft. IN., XHRP: 12.6235 IN., YHRP: .0000 IN., ZHRP: -.3750 IN., SCALE: .0150



FORWARD TOTAL PITCHING MOMENT COEFFICIENT, CM TWD

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(1) MACH = 2.00



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GER019)	ARC 66-709 OAS9 0111A-(N24)
(GER022)	ARC 66-709 OAS9 0111A-(N24)
(GER023)	ARC 66-709 OAS9 0111A-(N24)
(3ER019)	ARC 66-709 OAS9 011A-N24 (ADJUSTED FOR TARES)
(3ER022)	ARC 66-709 OAS9 011A-N24 (ADJUSTED FOR TARES)
(3ER023)	ARC 66-709 OAS9 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDELAP

.000	.000	-11.700
.000	.000	.000
.000	.000	16.300
.000	.000	-11.700
.000	.000	.000
.000	.000	16.300

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

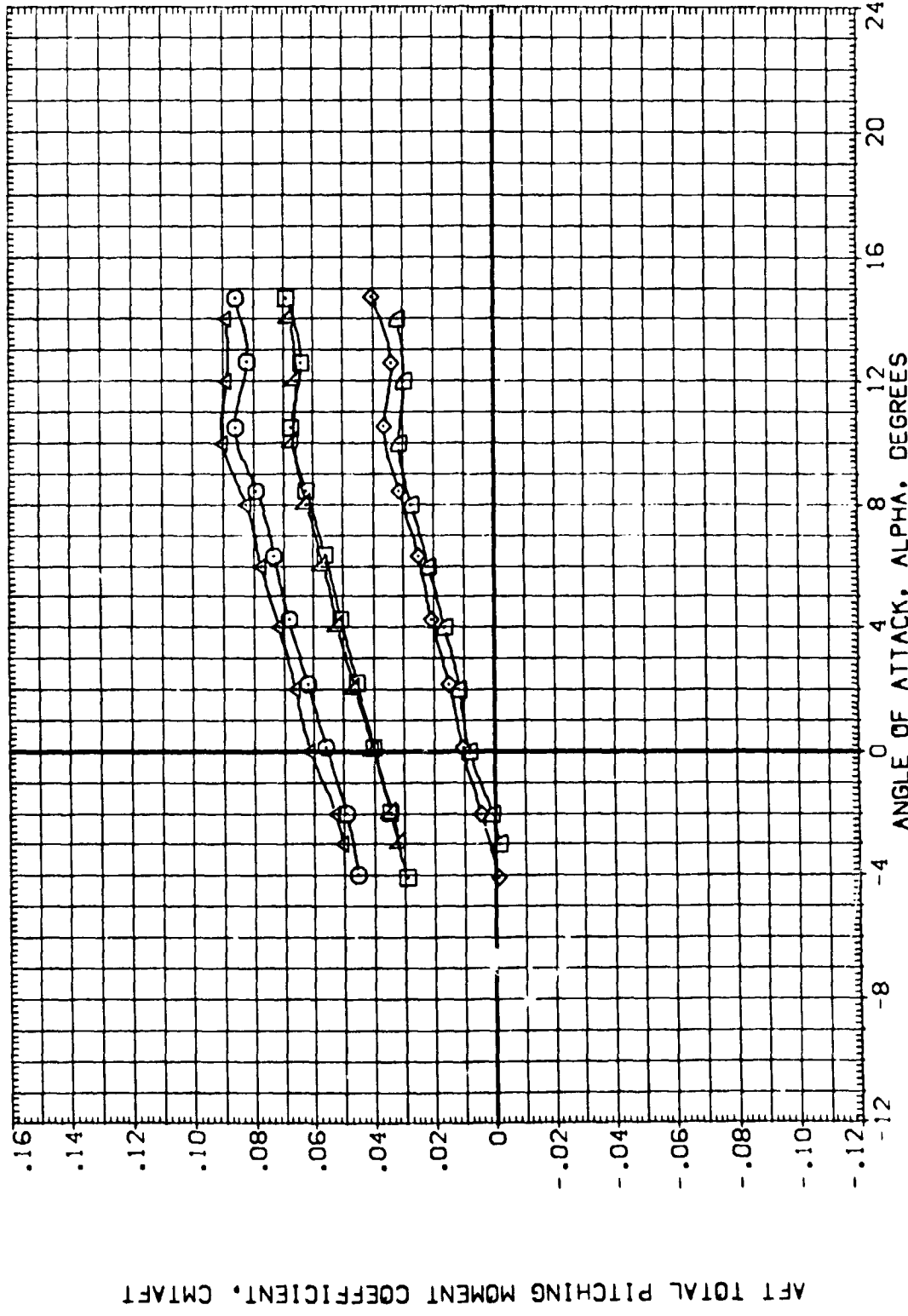


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(A)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GER019) DATA NOT AVAILABLE

(GER022) ARC 66-709 D459 D411A-(N24)

(GER023) ARC 66-709 D459 D411A-(N24)

(XRO19) DATA NOT AVAILABLE

(XRO22) DATA NOT AVAILABLE

(XRO23) ARC 66-709 D459 D11A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

REFERENCE INFORMATION

SREF 6053 SQ.FT.

LREF 5935 FT.

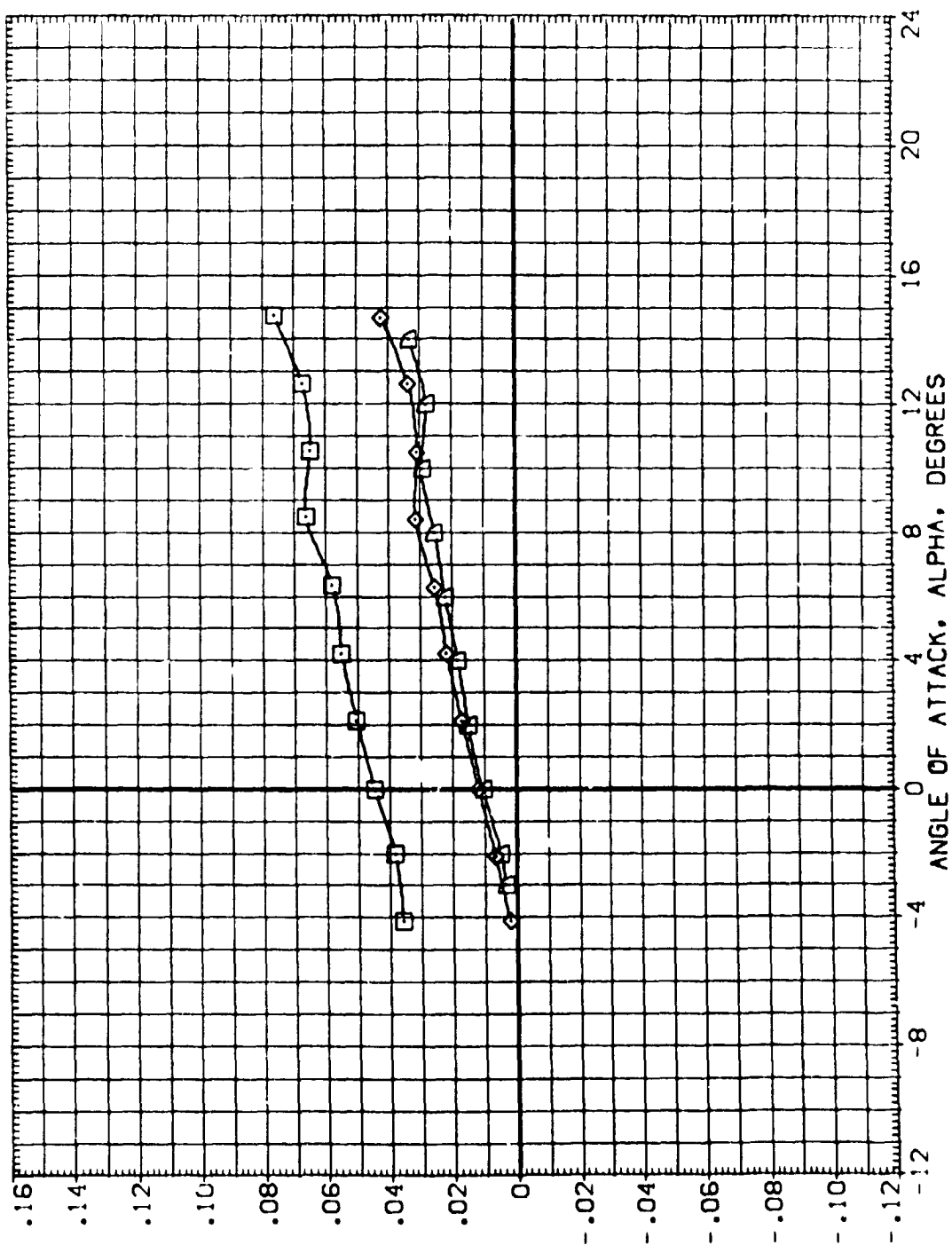
BREF 1.1710 FT. IN.

XMRP 12.6755 IN.

YMRP .0000 IN.

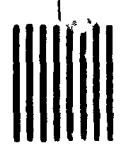
ZMRP -3.750 IN.

SCALE .0150



AFT TOTAL PITCHING MOMENT COEFFICIENT, CMAFT

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES
(B)MACH = .70



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVATION	BOFLAP	REFERENCE INFORMATION
(GE019)	ARC 66-709 0A59 0111A-(N24)	.000	.000	-11.700	SREF .6053 SQ.FT.
(GE022)	ARC 66-709 0A59 0111A-(N24)	.000	.000	.000	LREF .5935 FT.
(GE023)	ARC 66-709 0A59 0111A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(GE019)	ARC 66-709 0A59 0111A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(GE022)	ARC 66-709 0A59 0111A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	YMRP .0000 IN.
(GE023)	ARC 66-709 0A59 0111A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

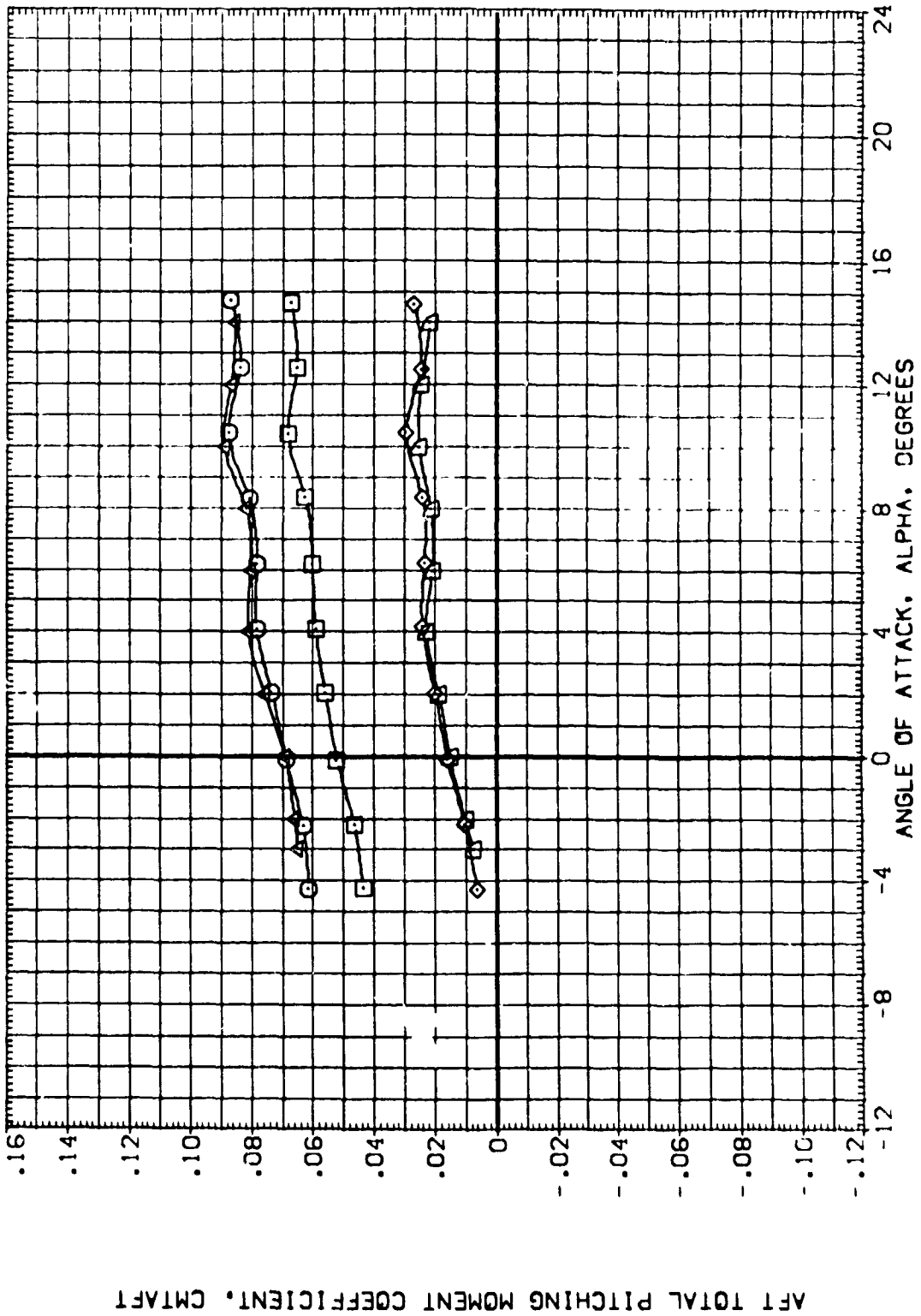


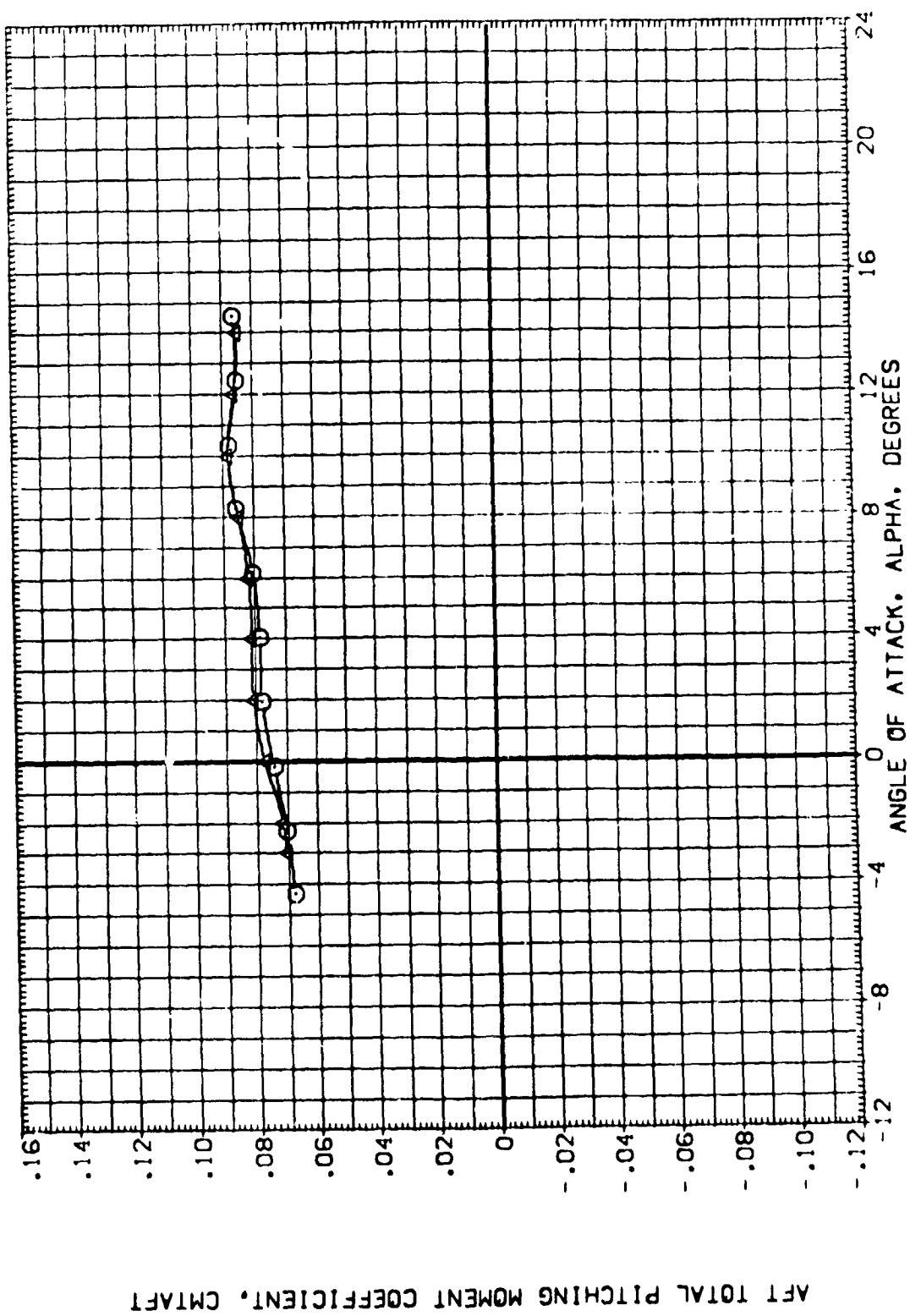
FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .80

REFERENCE INFORMATION
 SREF .5053 SQ.F.T.
 LREF .5935 FT.
 BRREF 1.1710 FT.
 XHRP 12.6255 IN.
 YHRP .0000 IN.
 ZHRP -.3750 IN.
 SCALE .0150

BETA ELEVON BDFLAP
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (GER019) ARC 66-709 QAS9 Q111A-N24
 (GER022) DATA NOT AVAILABLE
 (GER023) DATA NOT AVAILABLE
 (GER019) ARC 66-709 QAS9 Q111A-N24 (ADJUSTED FOR TARES)
 (GER022) DATA NOT AVAILABLE
 (GER023) DATA NOT AVAILABLE



AFT TOTAL PITCHING MOMENT COEFFICIENT, CMAFT

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(0)MACH = .85



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (GE R019) ARC 66-709 OAS9 D111A-N04
 (GE R022) DATA NOT AVAILABLE
 (GE R023) DATA NOT AVAILABLE
 (X R019) ARC 66-709 OAS9 D111A-N04 (ADJUSTED FOR TARES)
 (X R022) DATA NOT AVAILABLE
 (X R023) DATA NOT AVAILABLE

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5835 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

AFT TOTAL PITCHING MOMENT COEFFICIENT, CMTAFT

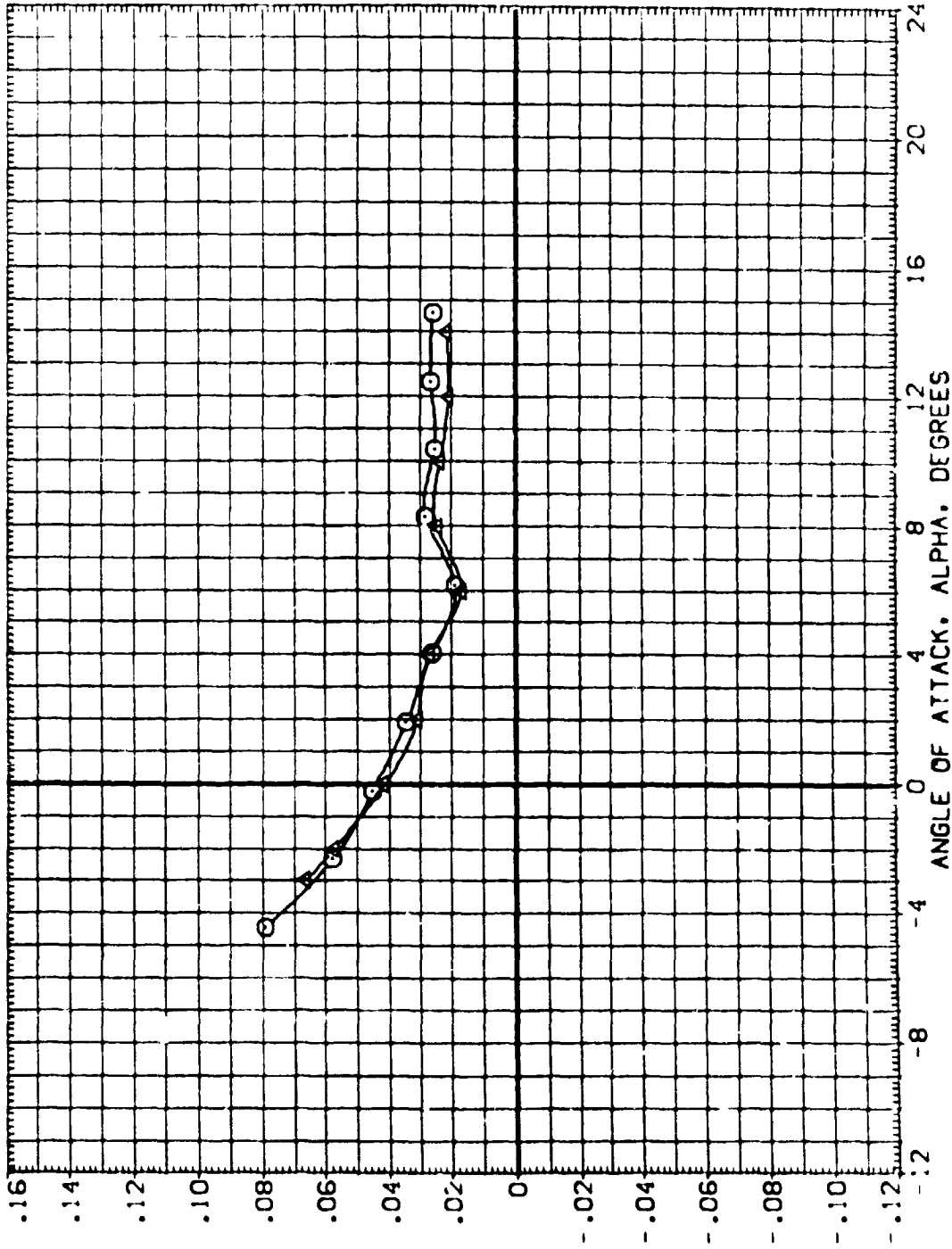


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(F)MACH = .95



DATA SET SYMBOL
 (G)R019
 (G)R022
 (G)R073
 (G)R019
 (G)R022
 (G)R073

CONFIGURATION DESCRIPTION
 ARC 66-709 DA59 DA11A-(N24)
 ARC 66-709 DA59 DA11A-(N24)
 ARC 66-709 DA59 DA11A-(N24)
 ARC 66-709 DA59 DA11A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 DA59 DA11A-N24 (ADJUSTED FOR TARES)

BETA
 .000
 .000
 .000
 .000
 .000
 .000

ELEVON
 .000
 .000
 .000
 .000
 .000
 .000

BOFLAP
 -11.700
 .000
 16.300
 -11.700
 .000
 16.300

REFERENCE INFORMATION
 SREF .6253 SQ.FT.
 LREF .5935 FT.
 BRKF 1.1710 FT.
 XMRD 12.6255 IN.
 YMRD .0000 IN.
 ZMRD -.3750 IN.
 SCALE .0150

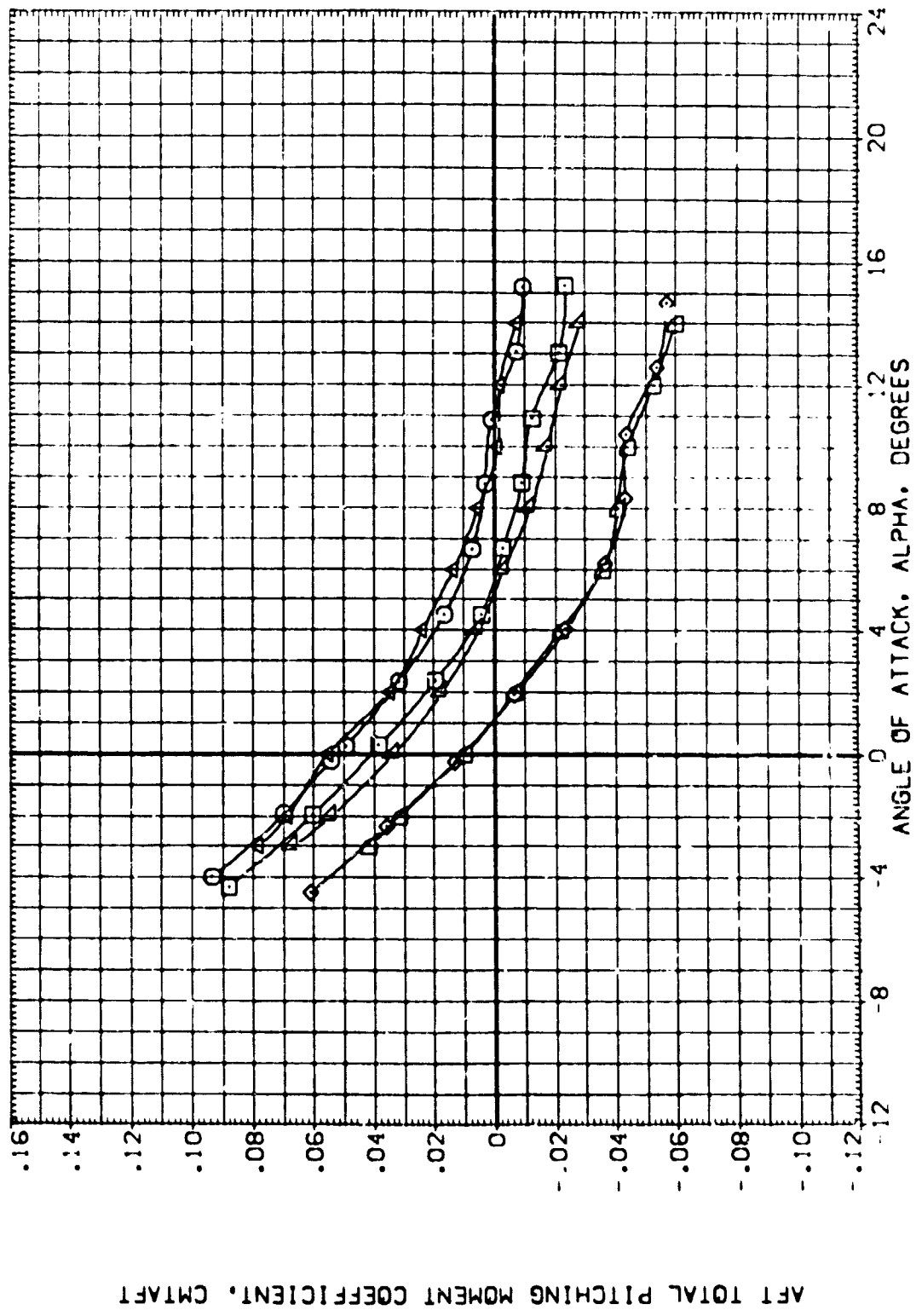


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(G)MAC = 1.20

DATA SET SYMBOL
 (GER019)
 (GER022)
 (GER023)
 (GER019)
 (GER022)
 (GER023)

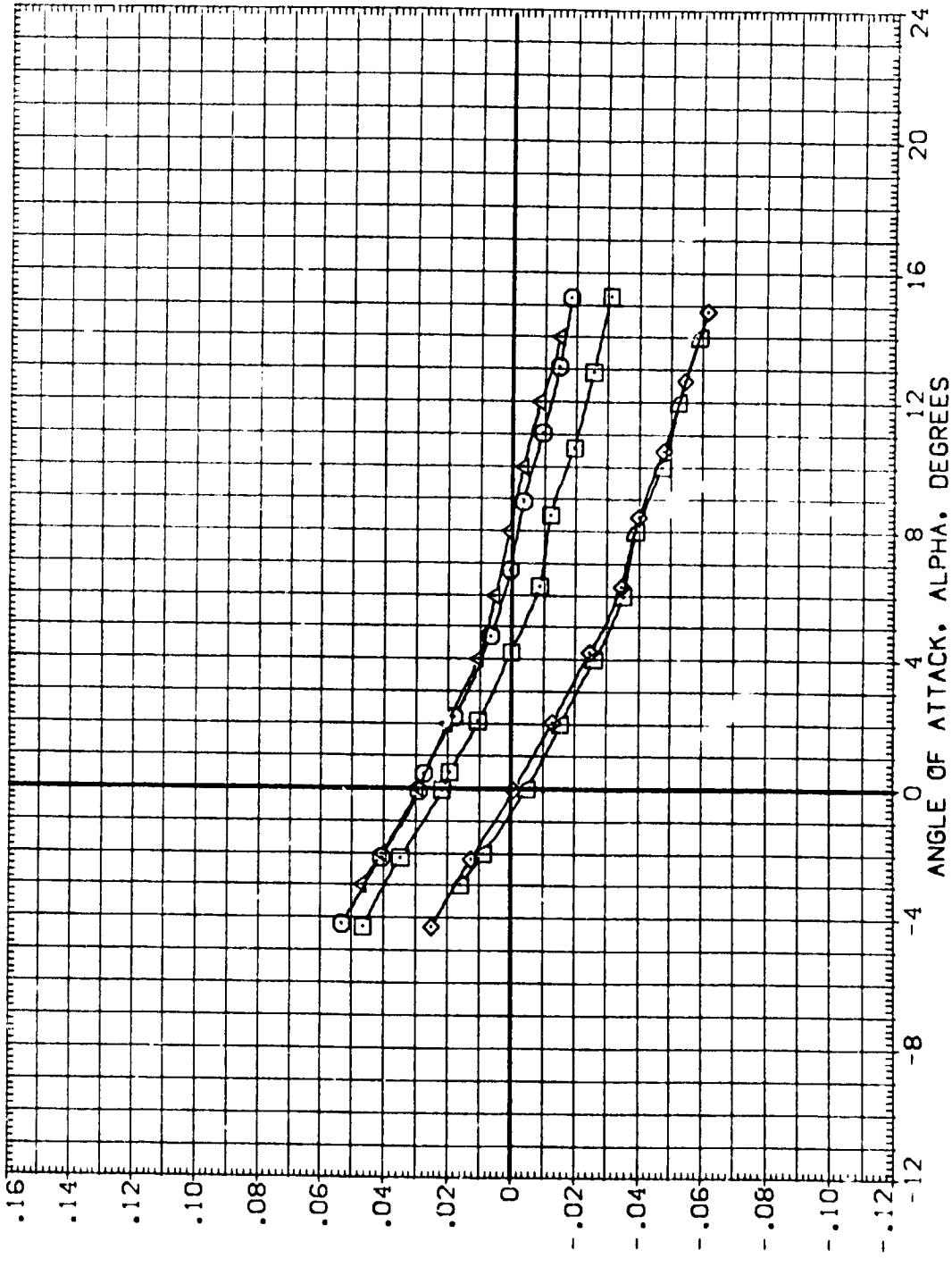
CONFIGURATION DESCRIPTION
 ARC 66-709 0A59 011A-(N24)
 ARC 66-709 0A59 011A-(N24)
 ARC 66-709 0A59 011A-(N24)
 ARC 66-709 0A59 011A-(N24)
 DATA NOT AVAILABLE
 ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA
 .000
 .000
 .000
 .000
 .000
 .000
 .000

ELEVON
 .000
 .000
 .000
 .000
 .000
 .000
 .000

BOFLAP
 -11.700
 .000
 .000
 16.300
 -11.700
 .000
 16.300

REFERENCE INFORMATION
 SREF .6053 30.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



AFT TOTAL PITCHING MOMENT COEFFICIENT, CM1AFT

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(H)MACH = 1.50

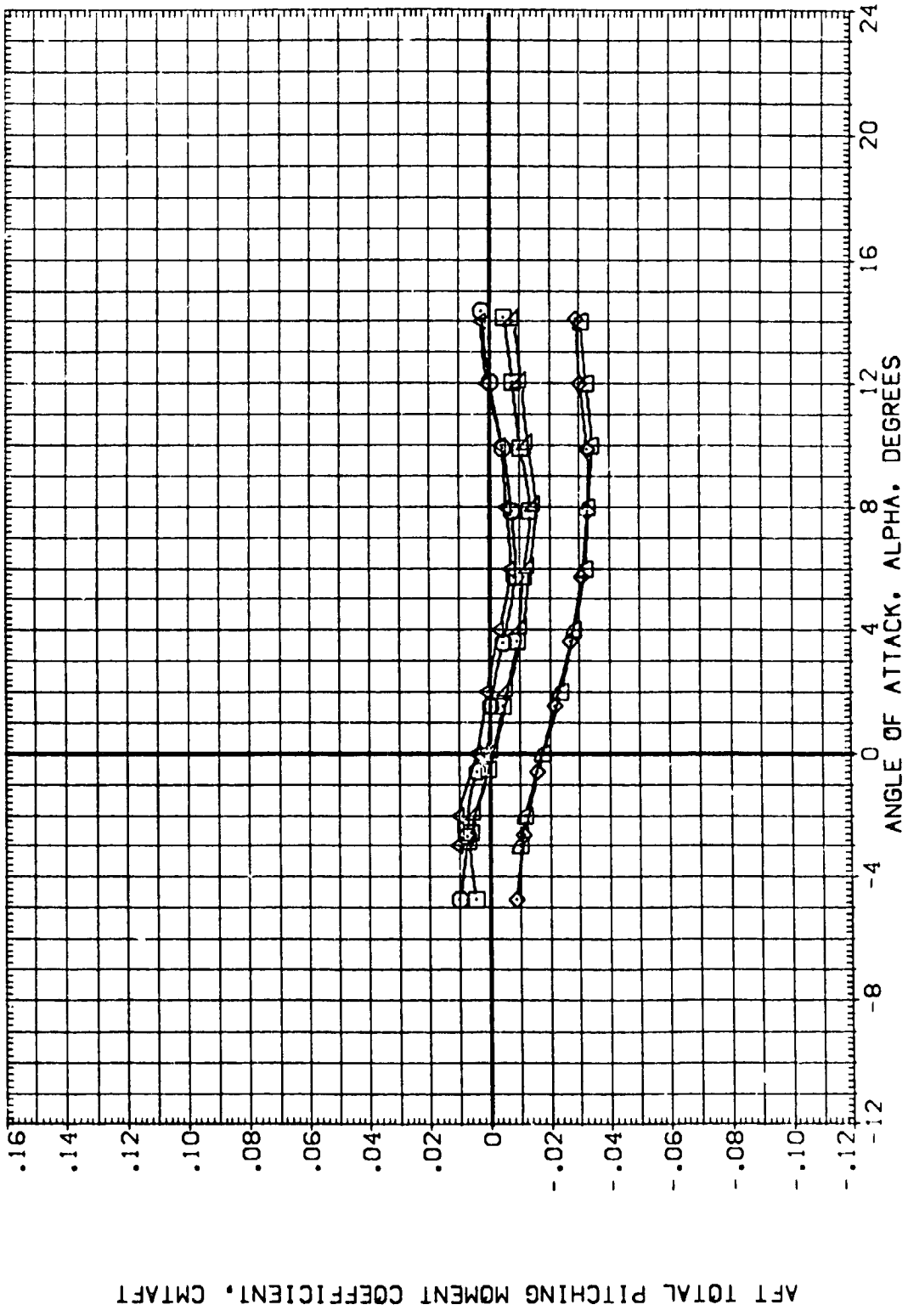


REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA ELEVON BDFLAP
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

CONFIGURATION DESCRIPTION
 ARC 66-709 DA59 OA11A-(N24)
 ARC 66-709 DA59 OA11A-(N24)
 ARC 66-709 DA59 OA11A-(N24)
 ARC 66-709 DA59 OA11A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 DA59 OA11A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 DA59 OA11A-N24 (ADJUSTED FOR TARES)

DATA SET SYMBOL
 (GER019) □
 (GER022) ○
 (GER023) ×
 (ZER019) △
 (ZER022) ◇
 (ZER023) ▲



AFT TOTAL PITCHING MOMENT COEFFICIENT, CMTAFT

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(IJMACH) 2.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GER019)	ARC 66-709	QA59	0111A-(N24)
(GER022)	ARC 66-709	QA59	0111A-(N24)
(GER023)	ARC 66-709	QA59	0111A-(N24)
(ZER019)	ARC 66-709	QA59	0111A-N24 (ADJUSTED FOR TARES)
(ZER022)	ARC 66-709	QA59	0111A-N24 (ADJUSTED FOR TARES)
(ZER023)	ARC 66-709	QA59	0111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	.000	.000
.000	.000	16.300
.000	.000	-11.700
.000	.000	.000
.000	.000	16.300

REFERENCE INFORMATION

SREF	.6053	50. FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

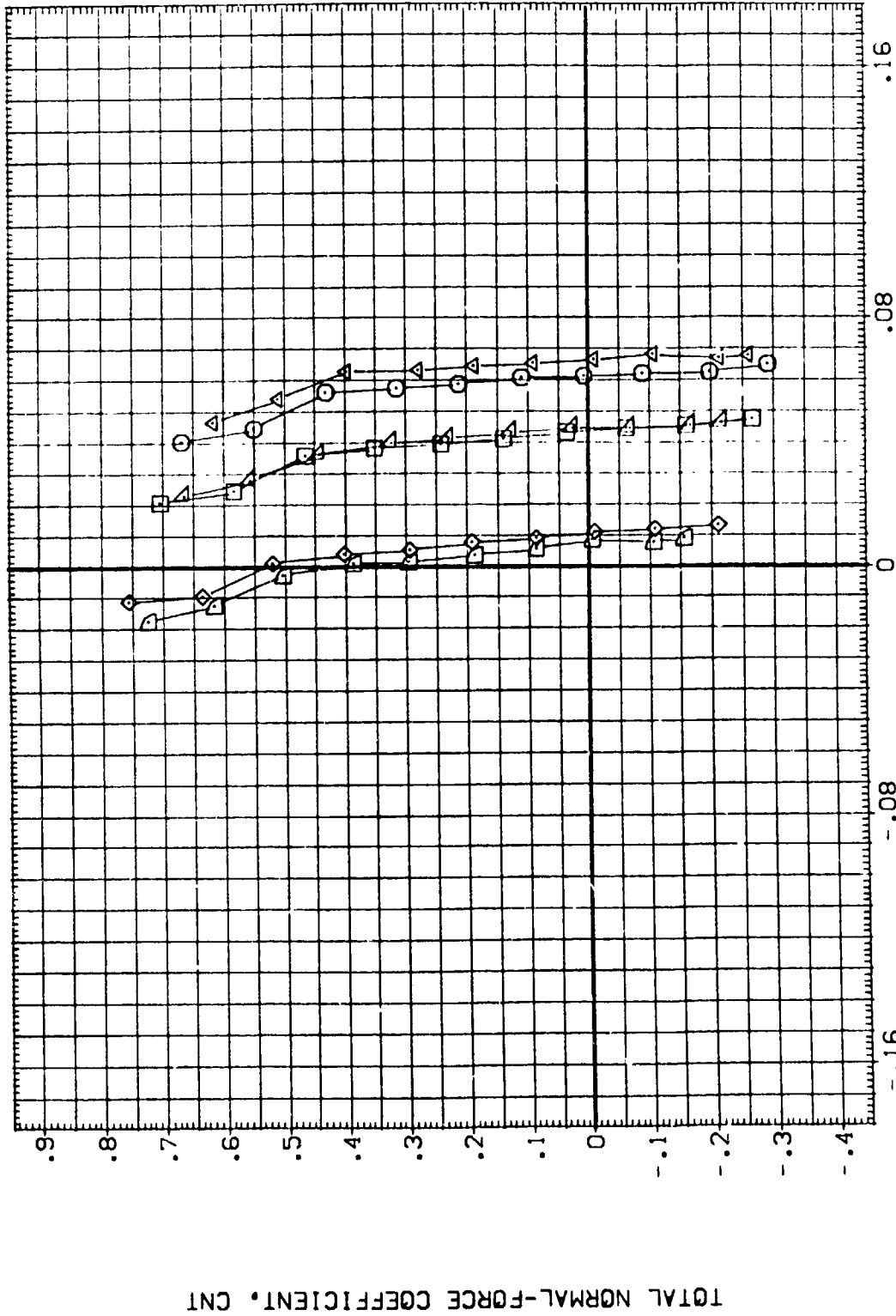


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(A)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GER019) DATA NOT AVAILABLE
 (GER022) ARC 66-709 CLASS DA11A-(N24)
 (GER023) ARC 66-709 CLASS DA11A-(N24)
 (3ER019) DATA NOT AVAILABLE
 (3ER022) DATA NOT AVAILABLE
 (3ER023) ARC 66-709 CLASS 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

REFERENCE INFORMATION

SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

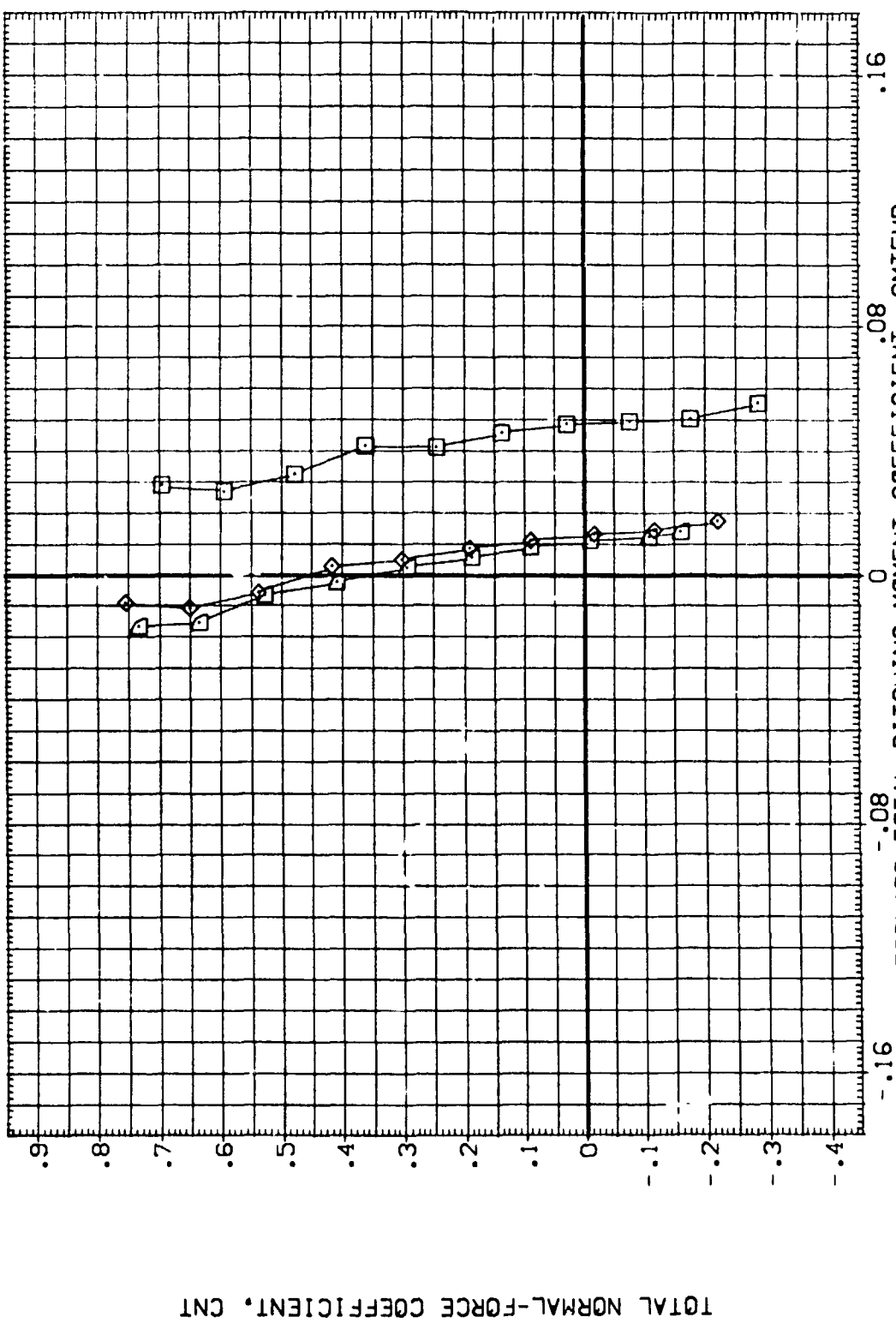


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(8)MACH = .70

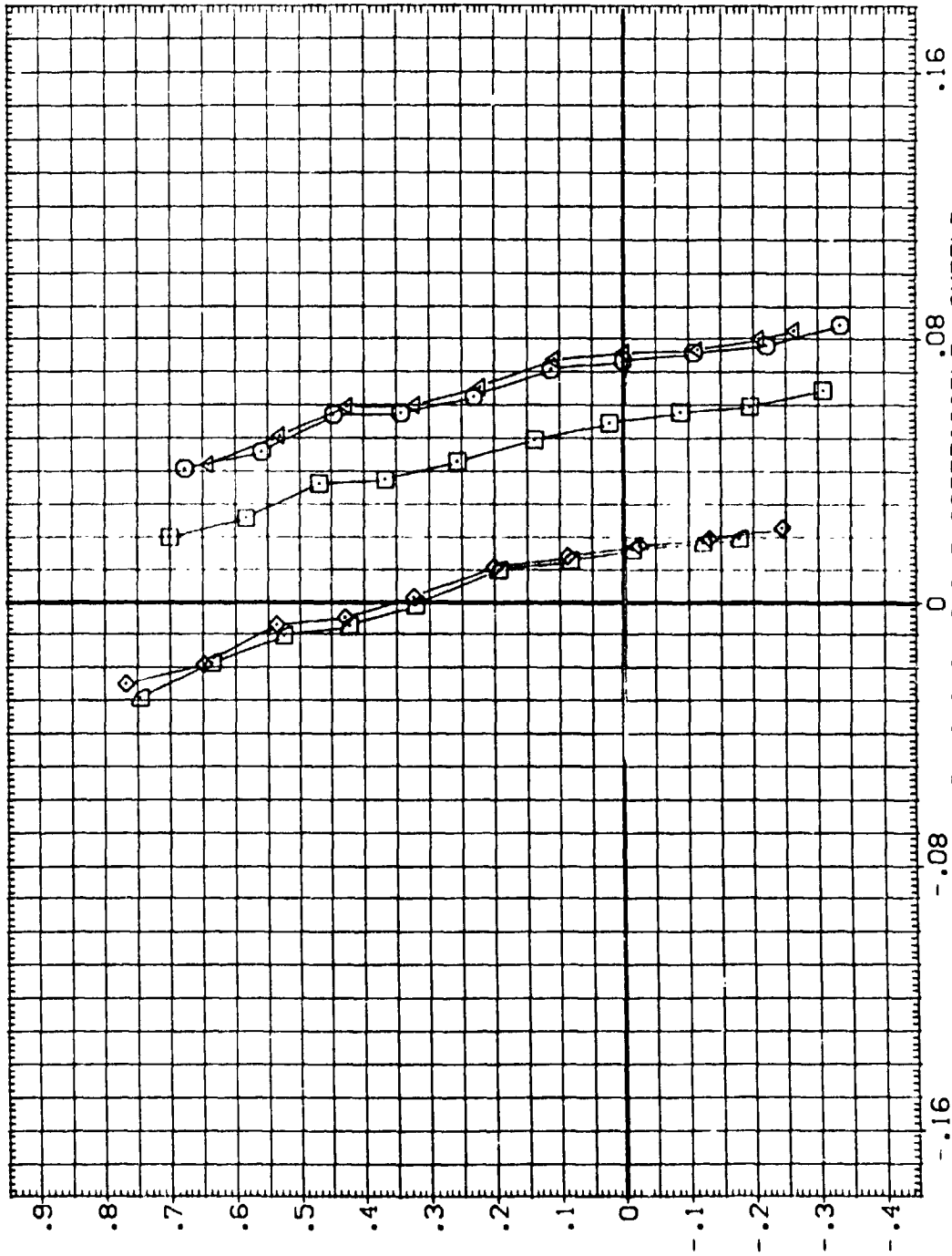
DATA SET SYMBOL
 (3E R019)
 (3E R022)
 (3E R023)
 (3E R019)
 (3E R022)

CONFIGURATION DESCRIPTION
 ARC 66-709 OAS9 O11A-(N24)
 ARC 66-709 OAS9 O11A-(N24)
 ARC 66-709 OAS9 O11A-(N24)
 ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)
 DATA NOT AVAILABLE
 ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)

BETA
 .000
 .000
 .000
 .000
 .000
 .000

ELEVON BDFLAP
 .000 -11.700
 .300 .000
 .000 16.300
 .000 -11.700
 .000 .000
 .000 16.300

REFERENCE INFORMATION
 SREF .6053 SG.FT.
 LREF .5935 FT.
 BRFP 1.1710 F.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



TOTAL NORMAL-FORCE COEFFICIENT, CNI

FORWARD TOTAL PITCHING MOMENT COEFFICIENT, CMTFWD

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .80

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DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BODY FLAP REFERENCE INFORMATION

(GE)R019 ARC 66-709 0A59 011A-N24 .000 .000 -11.700 SREF .6053 SQ.FT.

(GE)R022 ARC 66-709 0A59 011A-N24 .000 .000 .000 LRREF .5935 FT.

(GE)R023 ARC 66-709 0A59 011A-N24 .000 .000 16.300 BRREF 1.1710 FT. IN.

(3E)R019 ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES) .000 .000 -11.700 XMRP 12.6255 IN.

(3E)R022 ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES) .000 .000 .000 ZMRP -.3750 IN.

(3E)R023 ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES) .000 .000 16.300 SCALE .0150

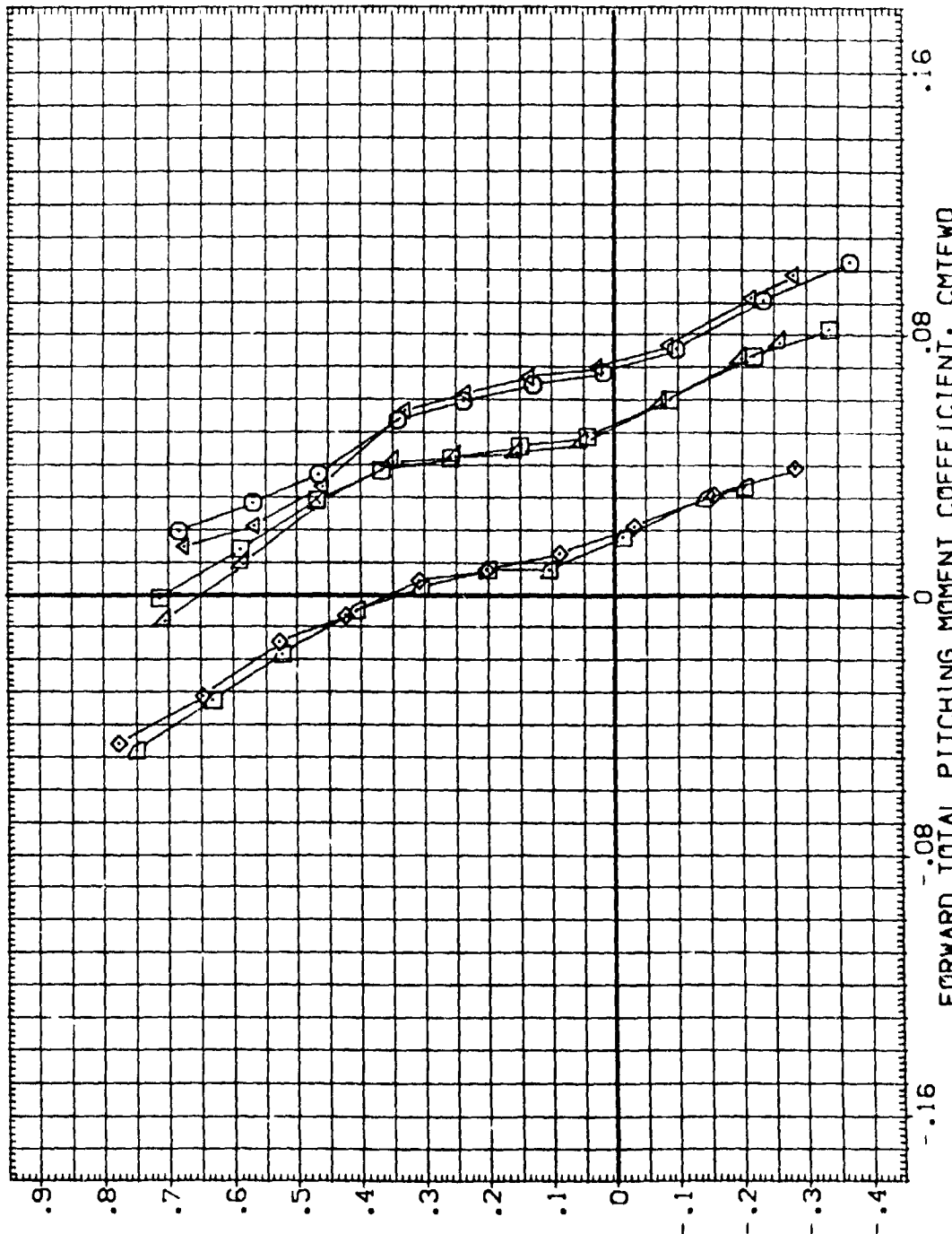


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES
(E)MACH = .90



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(3E:R019) ARC 66-709 QAS9 0111A-N24

(3E:R022) DATA NOT AVAILABLE

(3E:R023) DATA NOT AVAILABLE

(3E:R019) ARC 66-709 QAS9 0111A-N24 (ADJUSTED FOR TARES)

(3E:R022) DATA NOT AVAILABLE

(3E:R023) DATA NOT AVAILABLE

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

REFERENCE INFORMATION

SREF .5053 SQ.FT.

LREF .5935 FT.

XMRP 1.1710 FT.

YMRP 12.6255 IN.

ZMRP .0000 IN.

SCALE -.3750 IN.

 .0150

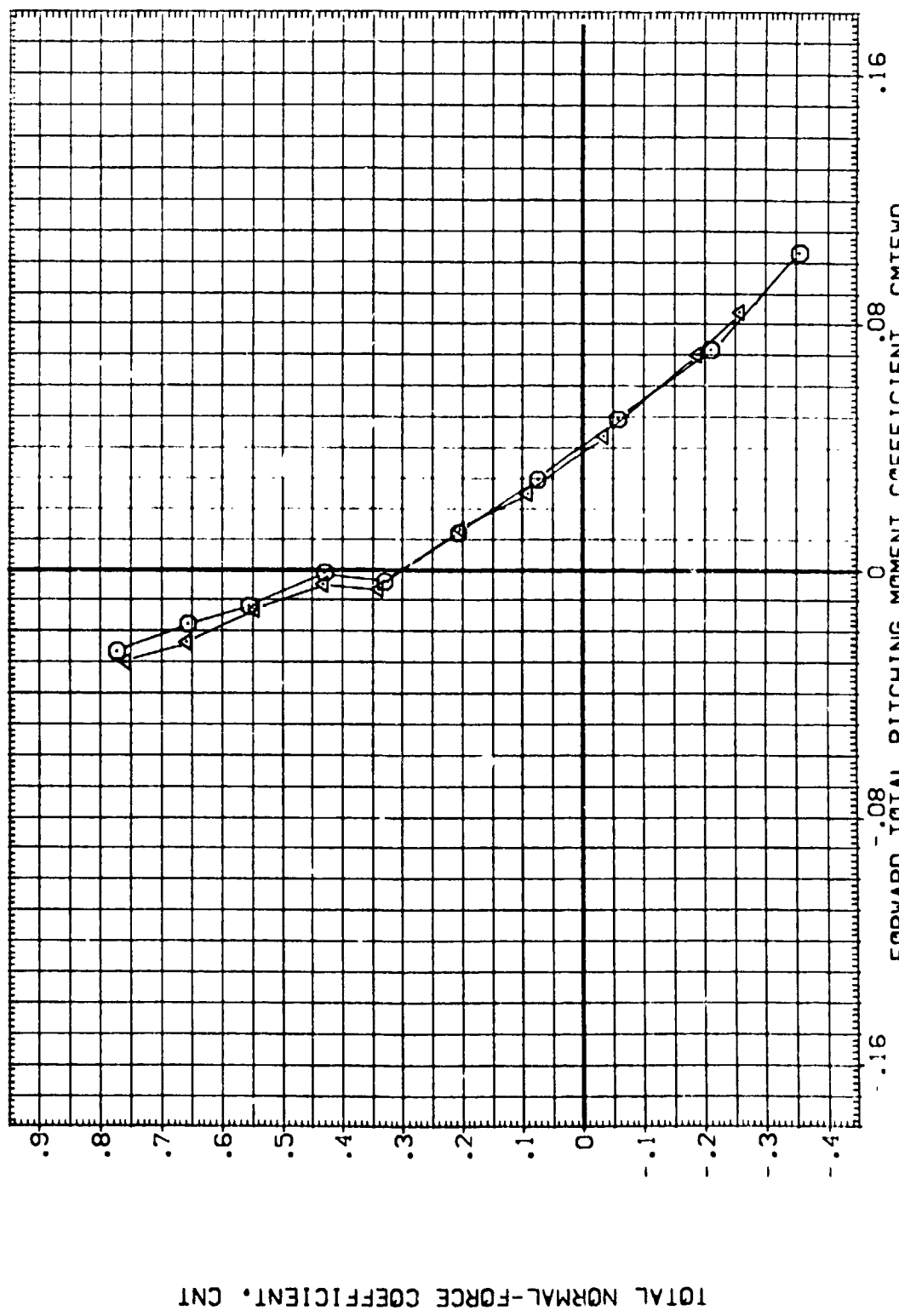


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TAPES

(F)MACH = .95

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(GER019)	ARC 66-709 DASS DA11A-(N24)	.000	.000	-11.700	SREF .6053 SQ.FT.
(GER022)	ARC 66-709 DASS DA11A-(N24)	.000	.000	.000	LREF .5935 FT.
(GER023)	ARC 66-709 DASS DA11A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(XER019)	ARC 66-709 DASS DA11A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(XER022)	ARC 66-709 DASS DA11A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	YMRP .0000 IN.
(XER023)	ARC 66-709 DASS DA11A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

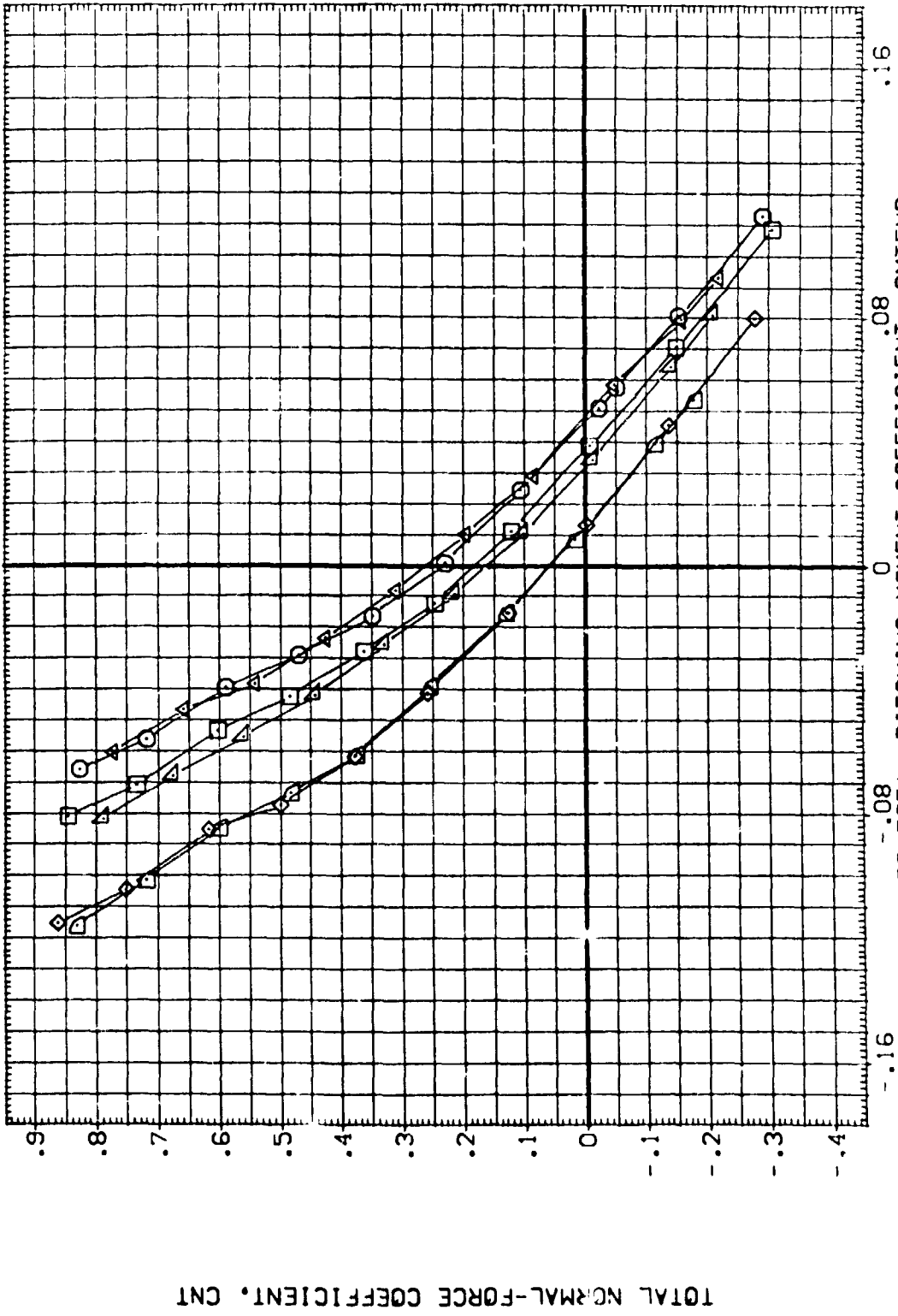


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH: 1.20



DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BDFLAP

(GER019) ARC 66-709 0A59 0A11A-(N24) .000 .000 -11.700
 (GER022) ARC 66-709 0A59 0A11A-(N24) .000 .000 .000
 (GER023) ARC 66-709 0A59 0A11A-(N24) .000 .000 16.300
 (GER019) ARC 66-709 0A59 0A11A-N24 (ADJUSTED FOR TARES) .000 .000 -11.700
 (GER022) DATA NOT AVAILABLE .000 .000 .000
 (GER023) ARC 66-709 0A59 0A11A-N24 (ADJUSTED FOR TARES) .000 .000 16.300

REFERENCE INFORMATION

SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

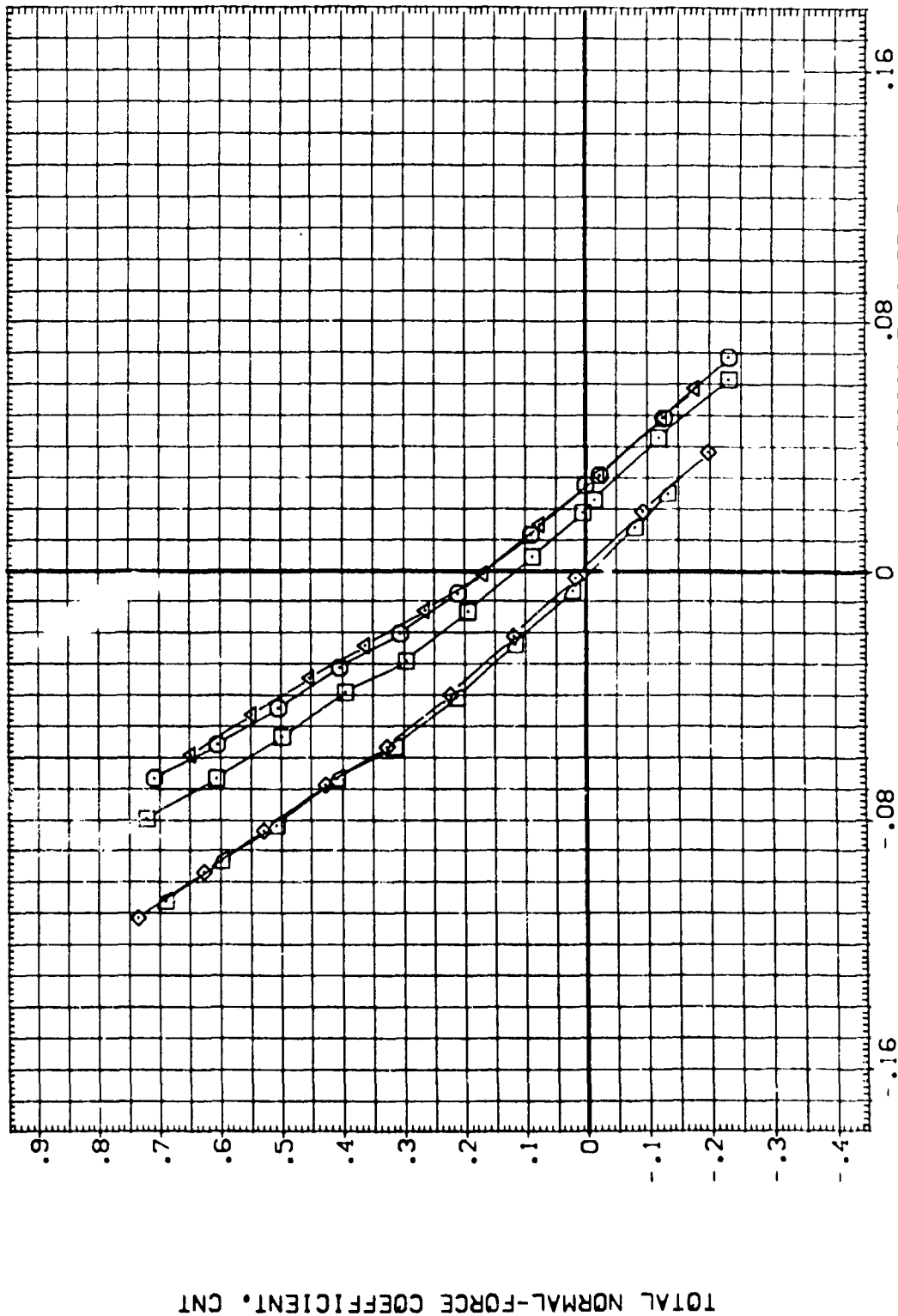


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(H)MACH = 1.50

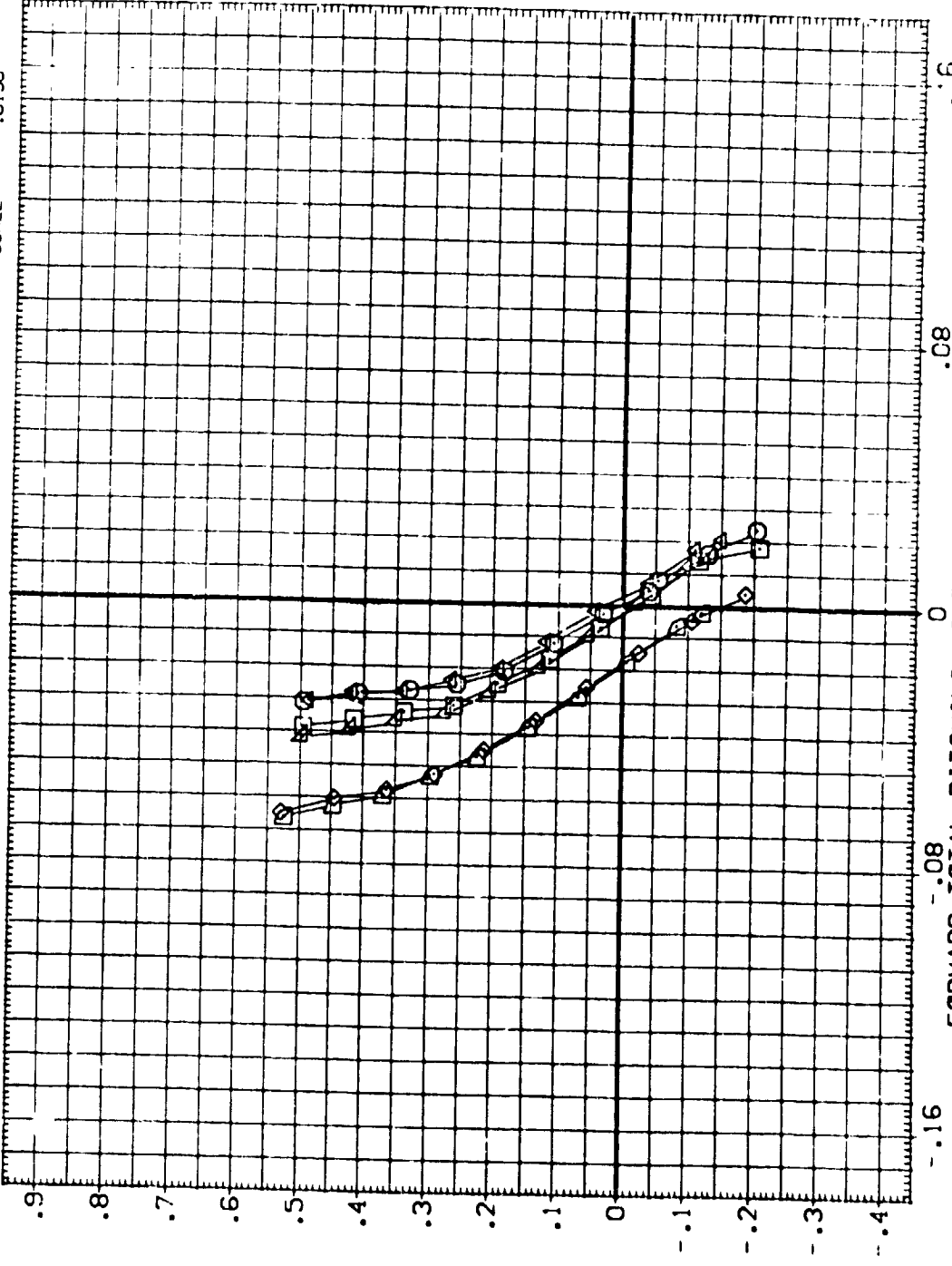
DATA SET SYMBOL
 (GER019)
 (GER022)
 (GER023)
 (ZER019)
 (ZER022)
 (ZER023)

CONFIGURATION DESCRIPTION
 ARC 66-709 OAS9 O111A-N24
 ARC 66-709 OAS9 O111A-N24
 ARC 66-709 OAS9 O111A-N24
 ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)

BETA
 .000
 .000
 .000
 .000
 .000
 .000

ELEVATION
 .000
 .000
 .000
 .000
 .000
 .000

REFERENCE INFORMATION
 SREF .6053 50.FT.
 LREF .5936 FT.
 BREF 1.1710 FT.
 XMRP 12.6755 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



TOTAL NORMAL-FORCE COEFFICIENT, CNI

FORWARD TOTAL PITCHING MOMENT COEFFICIENT, CMTFWD

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

CIJMACH = 2.00



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(0EPO19)	ARC 66-709 GASS C111A-(N24)	.000	.000	-11.700	SREF .6053 SQ.FT.
(0EPO22)	ARC 66-709 GASS C111A-(N24)	.000	.000	.000	LREF .5935 FT.
(0EPO23)	ARC 66-709 GASS C111A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(0EPO19)	ARC 66-709 GASS C111A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(0EPO22)	ARC 66-709 GASS C111A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	YMRP .0000 IN.
(0EPO23)	ARC 66-709 GASS C111A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

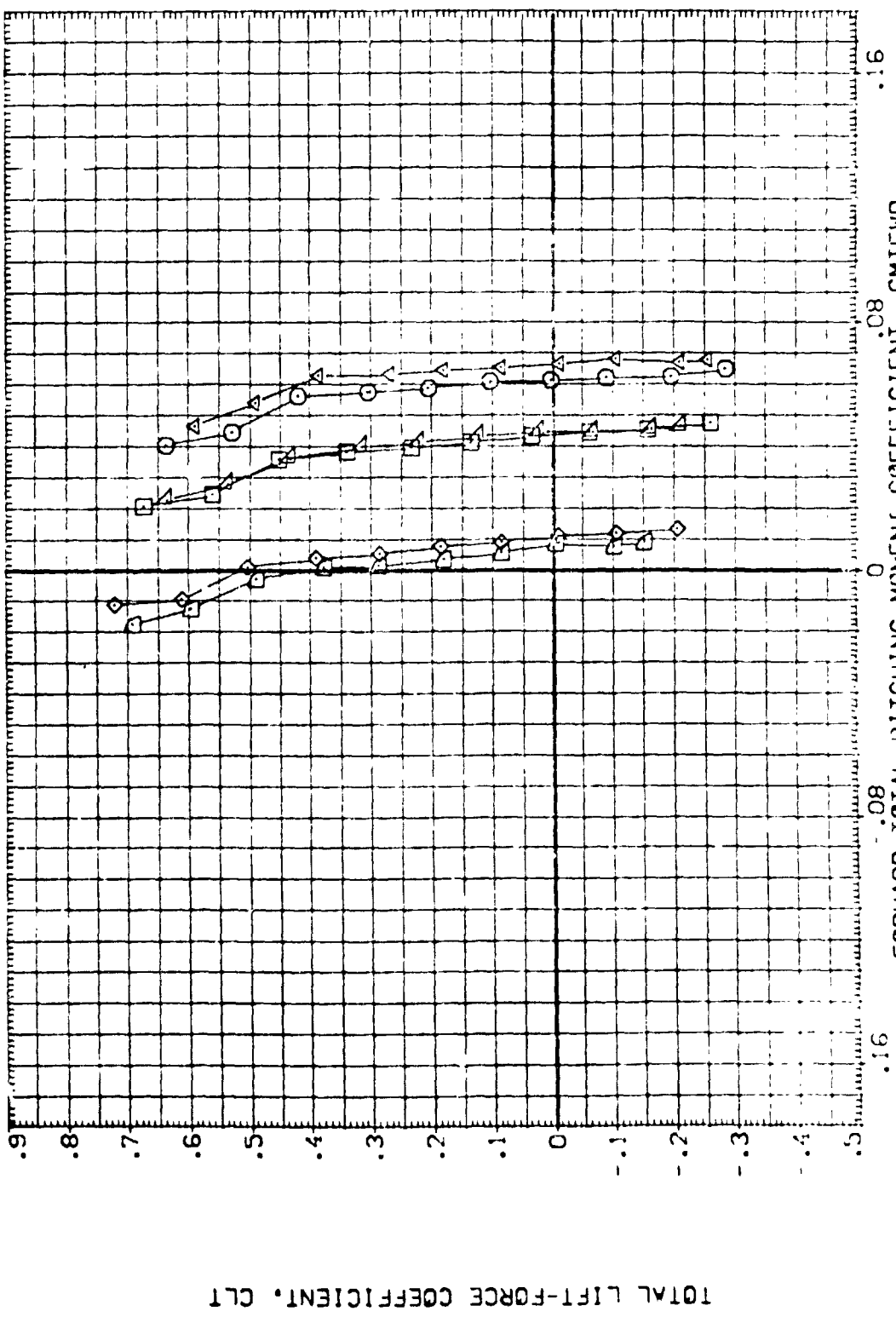


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

REFERENCE INFORMATION
 SREF .5053 50.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6755 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA .000
 ELEVON .000
 BDFLAP -11.700

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (C) RC019) ARC 66-709 D459 011A-(N24)
 (C) RC021) ARC 66-708 D459 011A-(N24)
 (C) RC023) ARC 66-709 D459 011A-(N24)
 (C) RC019) ARC 66-709 D459 011A-N24 (ADJUSTED FOR TARES)
 (C) RC021) DATA NOT AVAILABLE
 (C) RC023) ARC 66-709 D459 011A-N24 (ADJUSTED FOR TARES)

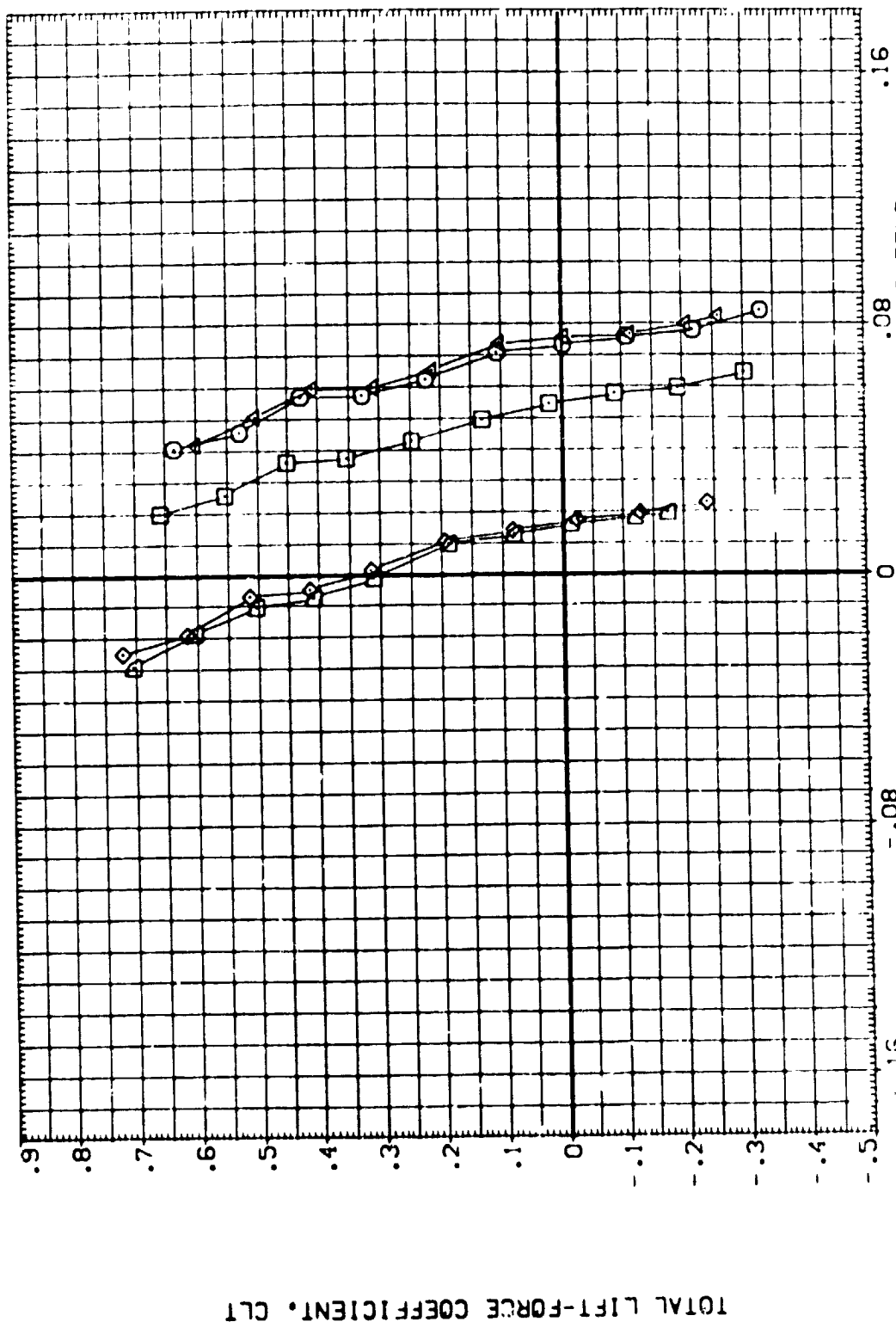


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BDF LAP REFERENCE INFORMATION

(GER019)	ARC 66-709 QAS9 0A11A-(N24)	.000	.000	-11.700	SREF .6053 SQ. FT.
(GER022)	DATA NOT AVAILABLE	.000	.000	.000	LREF .5935 FT.
(GER023)	DATA NOT AVAILABLE	.000	.000	16.300	BREF 1.1710 FT.
(ZER019)	ARC 66-709 QAS9 011A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(ZER022)	DATA NOT AVAILABLE	.000	.000	.000	YMRP .0000 IN.
(ZER023)	DATA NOT AVAILABLE	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

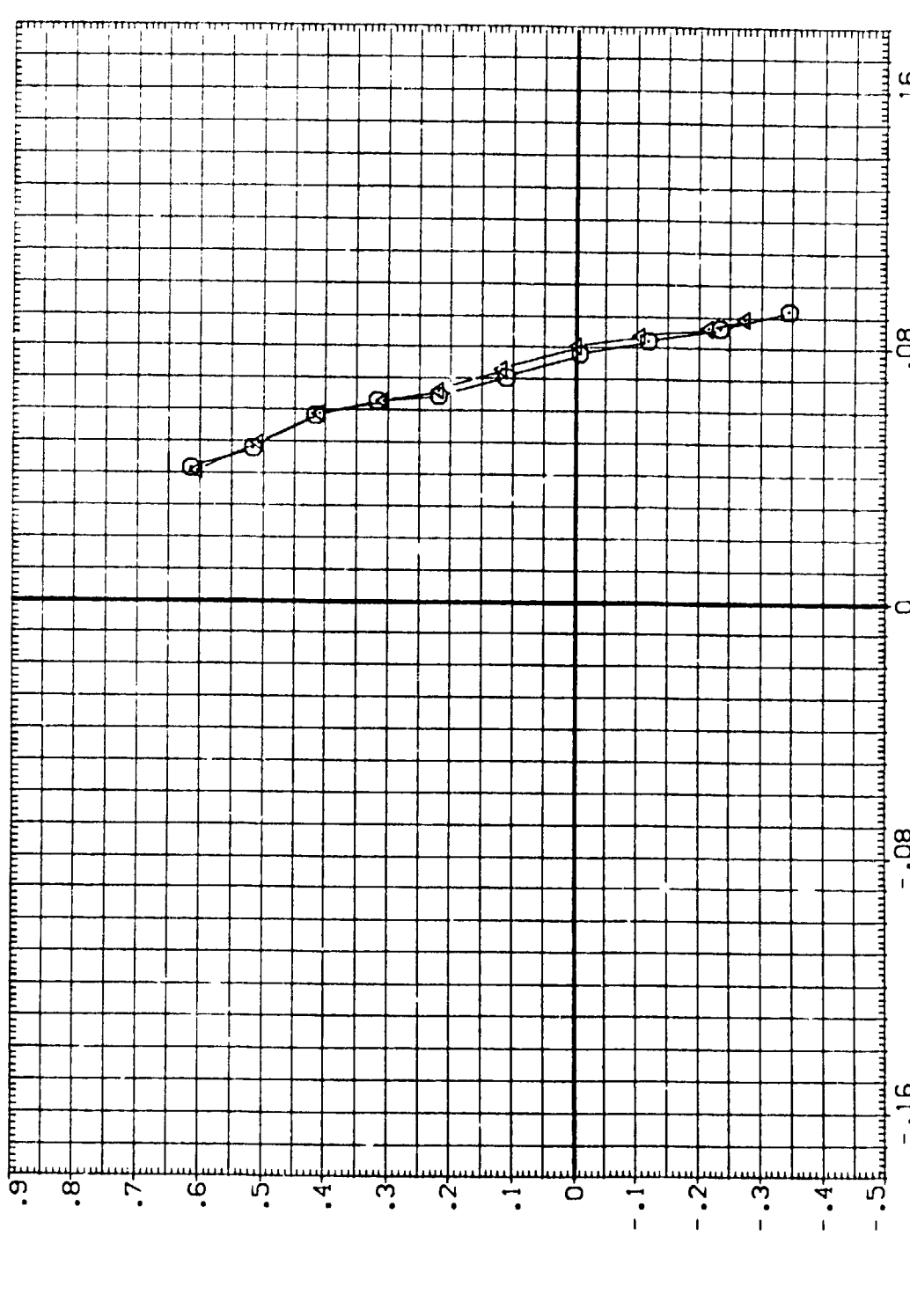


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

COJ MACH = .85

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GER019)	ARC 66-709 0A59 0A11A-(N24)
(GER022)	ARC 66-709 0A59 0A11A-(N24)
(GER023)	ARC 66-709 0A59 0A11A-(N24)
(GER019)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
(GER022)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
(GER023)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	.000	.000
.000	.000	16.300
.030	.000	-11.700
.000	.000	.000
.000	.000	16.300

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	.3535	FT.
BREF	1.1710	FT.
YMRP	12.6255	IN.
ZMRP	.0500	IN.
SCALE	-.3750	IN.
	.0150	

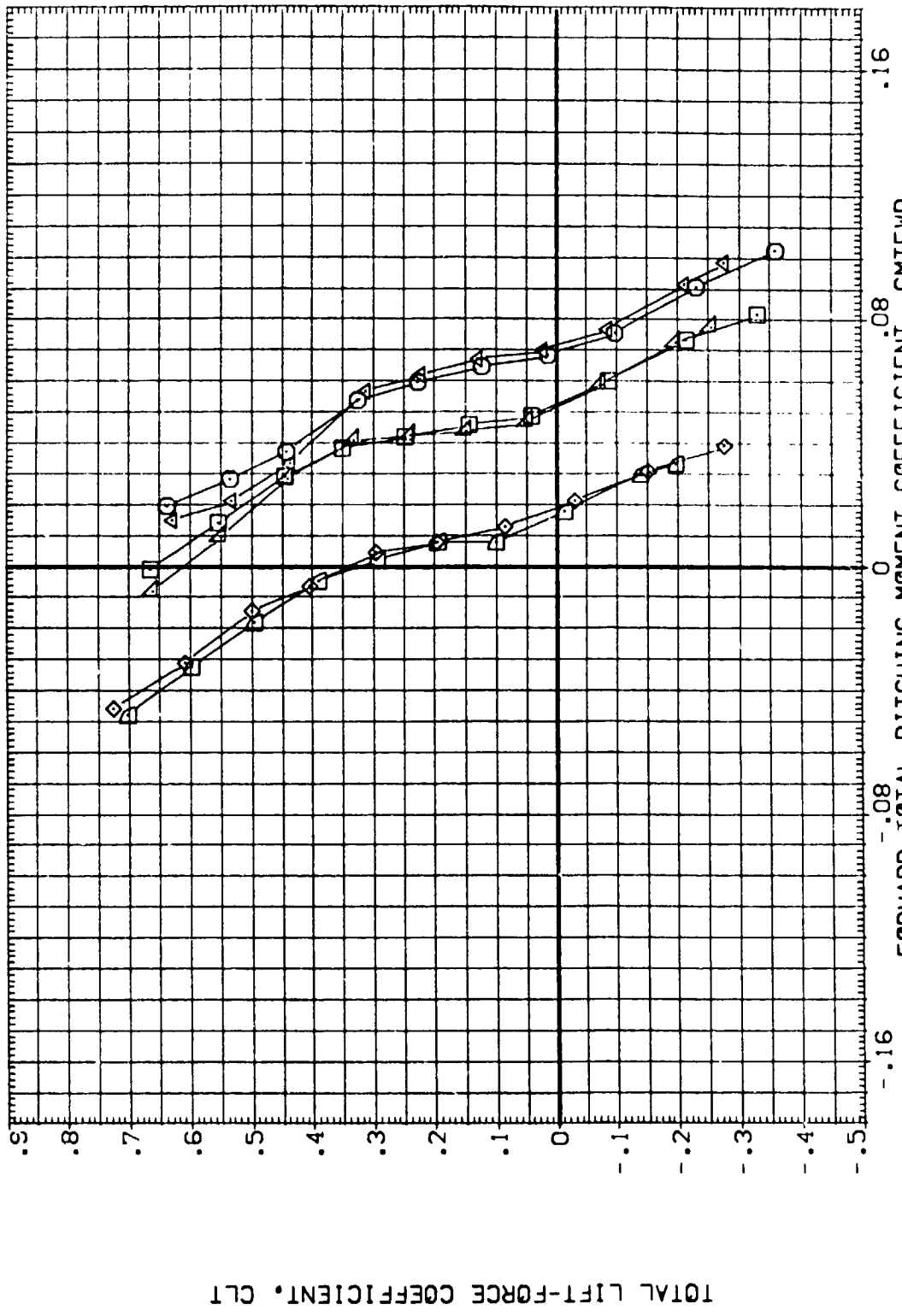


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(E)MACH = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (GE R019) ARC 66-709 D459 D411A-(N24)
 (GE R022) DATA NOT AVAILABLE
 (GE R023) DATA NOT AVAILABLE
 (3E R019) ARC 66-709 D459 D11A-N24 (ADJUSTED FOR TARE)
 (3E R022) DATA NOT AVAILABLE
 (3E R023) DATA NOT AVAILABLE

BETA ELEVON BOFLAP
 .000 -11.700
 .000 .000
 .000 .000
 .000 16.300
 .000 -11.700
 .000 .000
 .000 16.300

REFERENCE INFORMATION
 SREF .6033 50.FT.
 LREF .5935 FT.
 BRFP 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

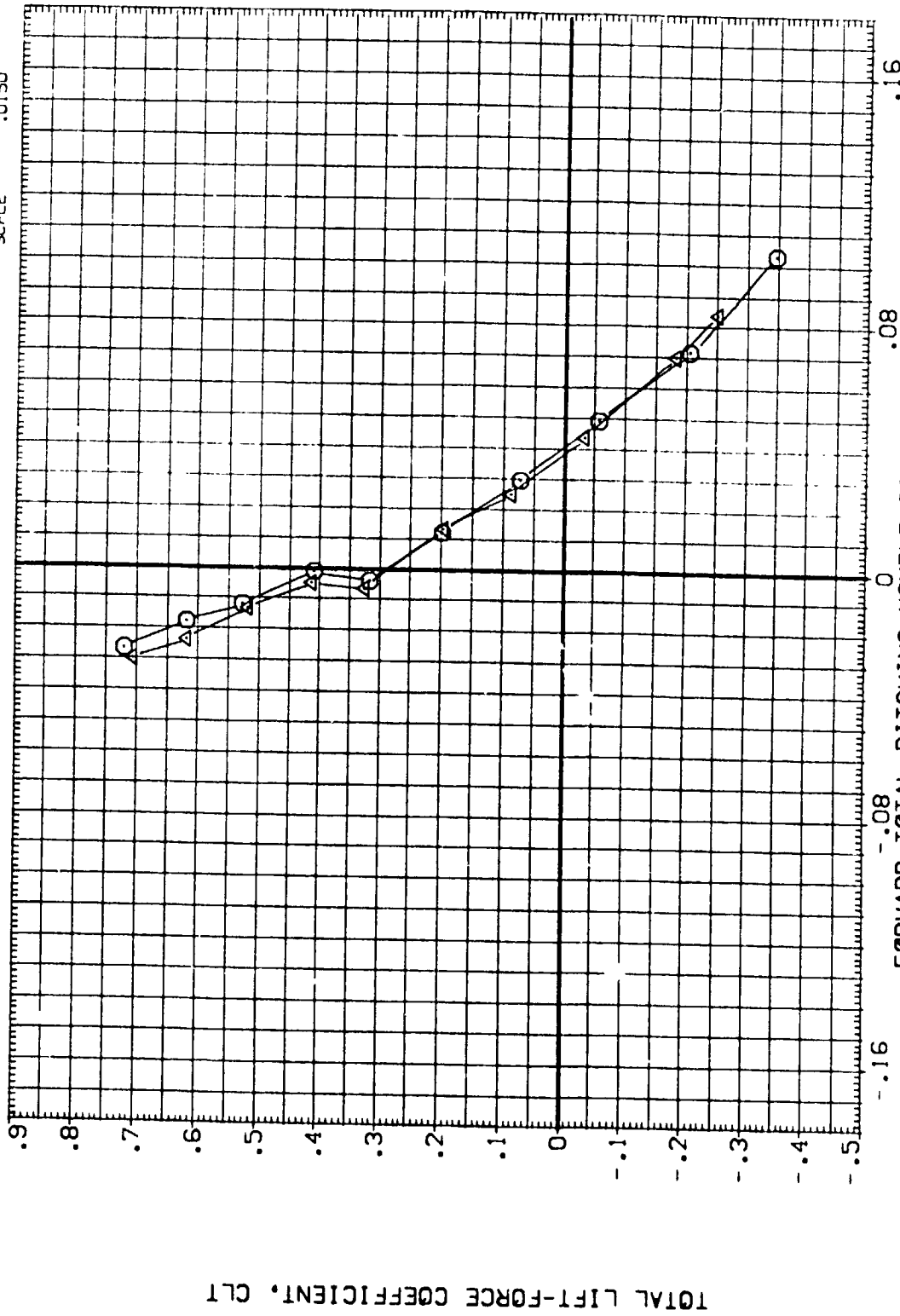


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .95

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(GER019)	ARC 66-709 DASS DA11A-(N24)	.000	.000	-11.700	SREF .6053 SQ.FT.
(GER022)	ARC 66-709 DASS DA11A-(N24)	.000	.000	.000	LREF .5935 FT.
(GER023)	ARC 66-709 DASS DA11A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(GER019)	ARC 66-709 DASS DA11A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(GER022)	ARC 66-709 DASS DA11A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	YMRP .0000 IN.
(GER023)	ARC 66-709 DASS DA11A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

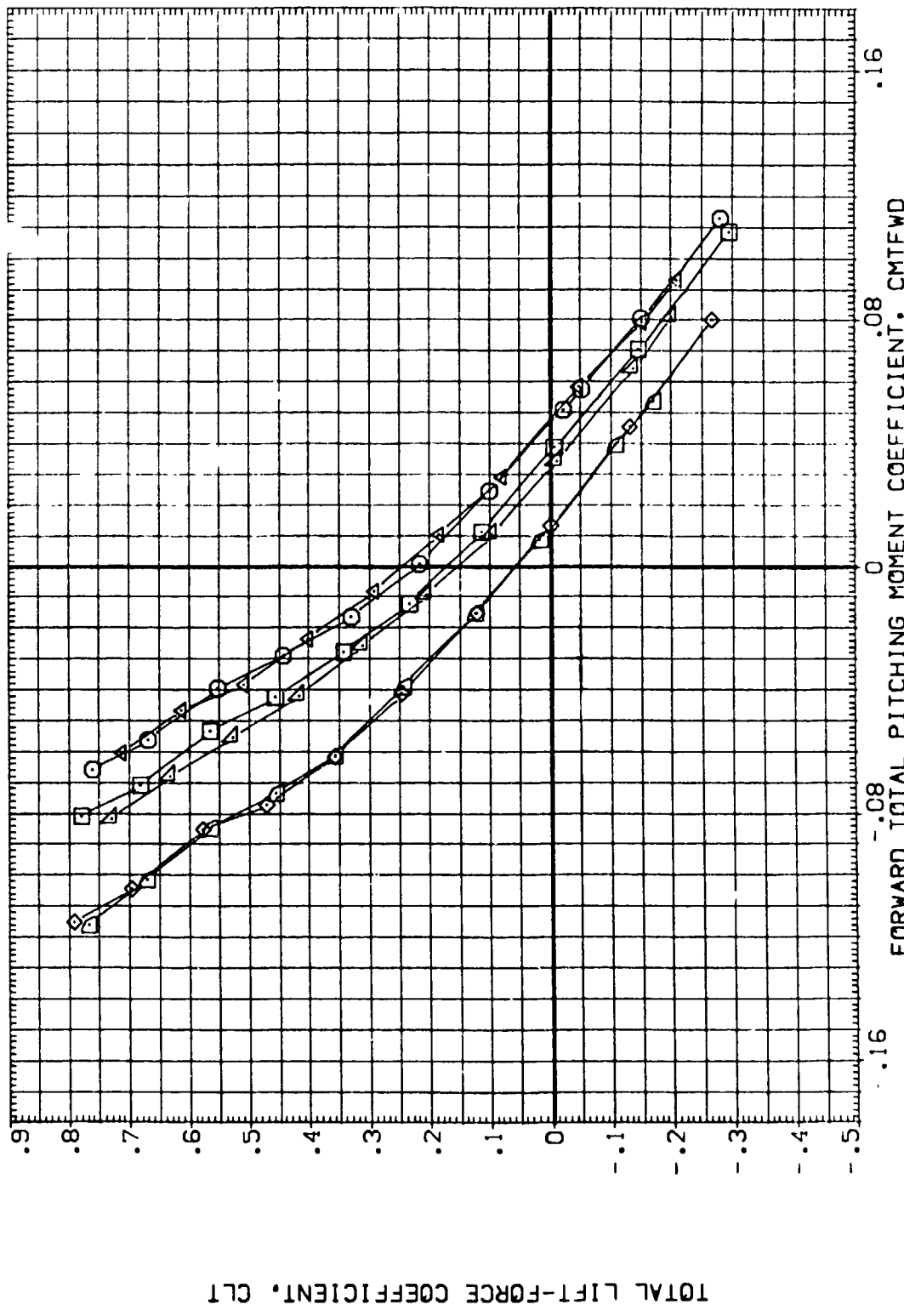


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(GE R019)	ARC 66-709 OAS9 D111A-N24	.000	.000	-11.700	SREF .6053 SQ.FT.
(GE R022)	ARC 66-709 OAS9 D111A-N24	.000	.000	.000	LREF .5935 FT.
(GE R023)	ARC 66-709 OAS9 D111A-N24	.000	.000	16.300	BREF 1.1710 FT.
(GE R019)	ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(GE R022)	ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	YMRP .0000 IN.
(GE R023)	ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

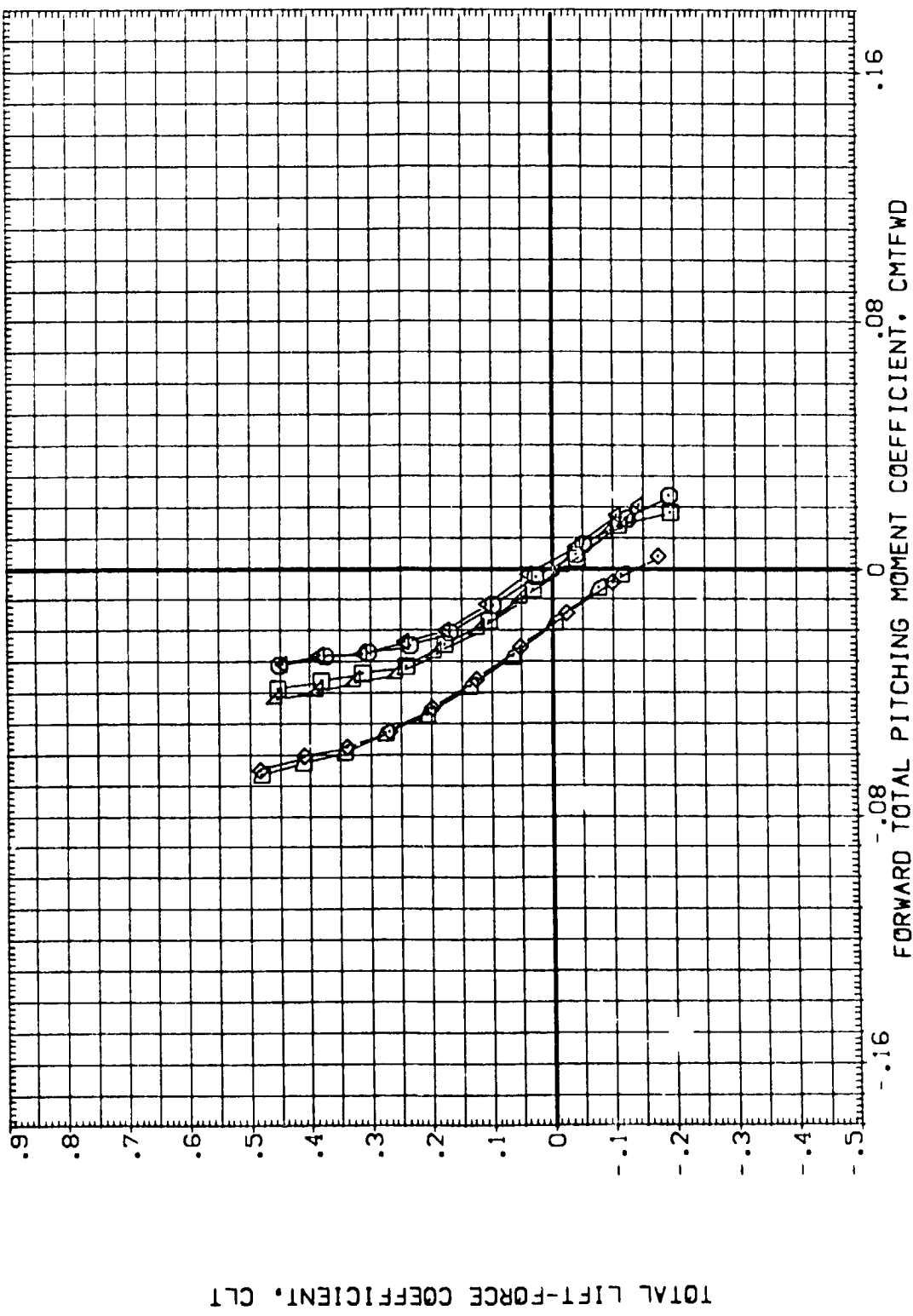


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES
MACH = 2.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(3E R019)	ARC 66-709 D459 D411A-(N24)
(3E R022)	ARC 66-709 D459 D411A-(N24)
(3E R023)	ARC 66-709 D459 D411A-(N24)
(3E R019)	ARC 66-709 D459 O11A-N24 (ADJUSTED FOR TARES)
(3E R022)	ARC 66-709 D459 O11A-N24 (ADJUSTED FOR TARES)
(3E R023)	ARC 66-709 D459 O11A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	.000	.000
.000	.000	16.300
.000	.000	-11.700
.000	.000	.000
.000	.000	16.300

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

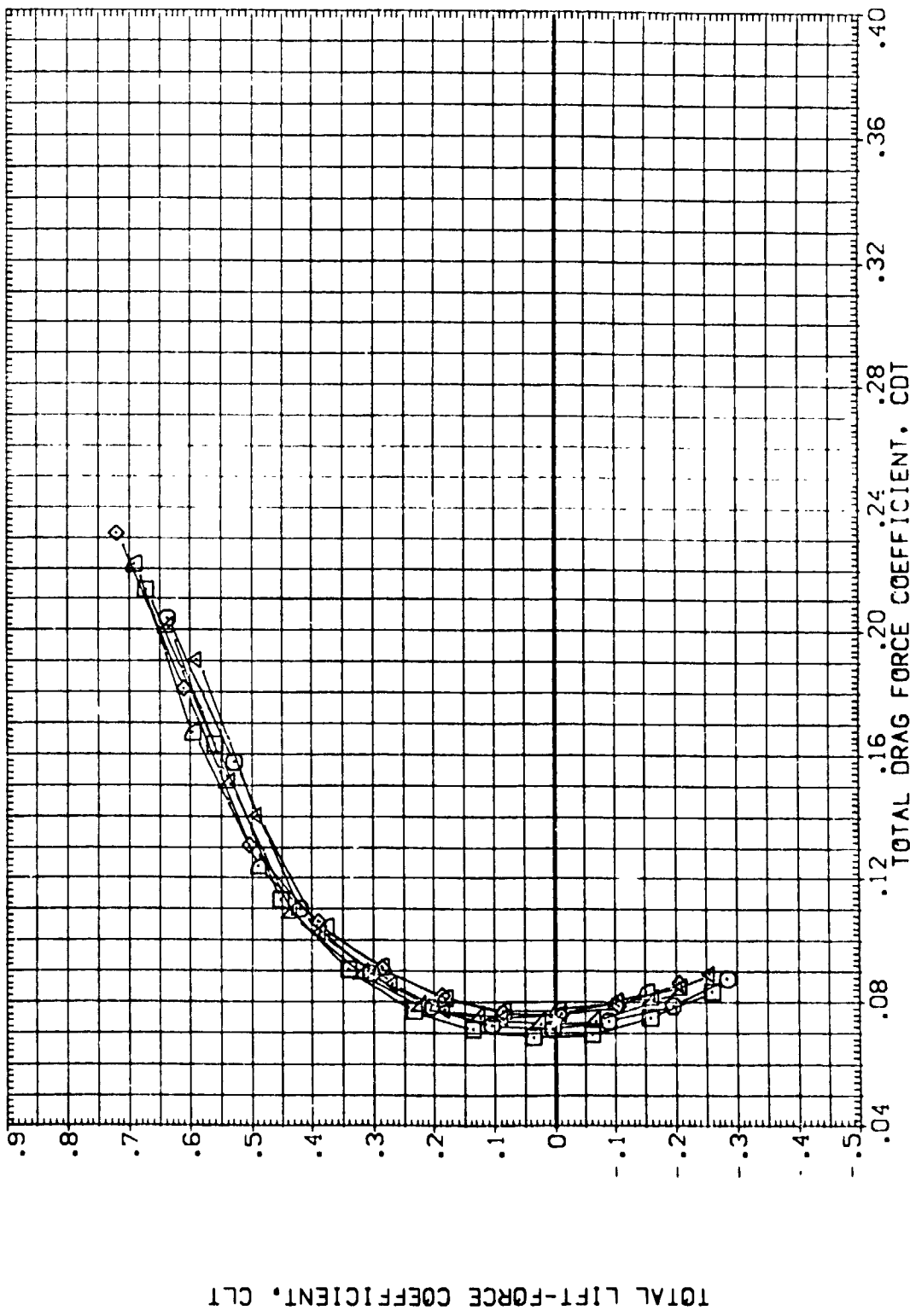


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(A) MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(GER019)	DATA NOT AVAILABLE	.000	.000	-11.700	SREF .6053 SQ.FT.
(GER022)	ARC 66-709 DASS DA11A-(N24)	.000	.000	.000	LREF .5935 FT.
(GER023)	ARC 66-709 DASS DA11A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(GER019)	DATA NOT AVAILABLE	.000	.000	-11.700	XMRP 12.6255 IN.
(GER022)	DATA NOT AVAILABLE	.000	.000	.000	YMRP .0000 IN.
(GER023)	ARC 66-709 DASS DA11A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

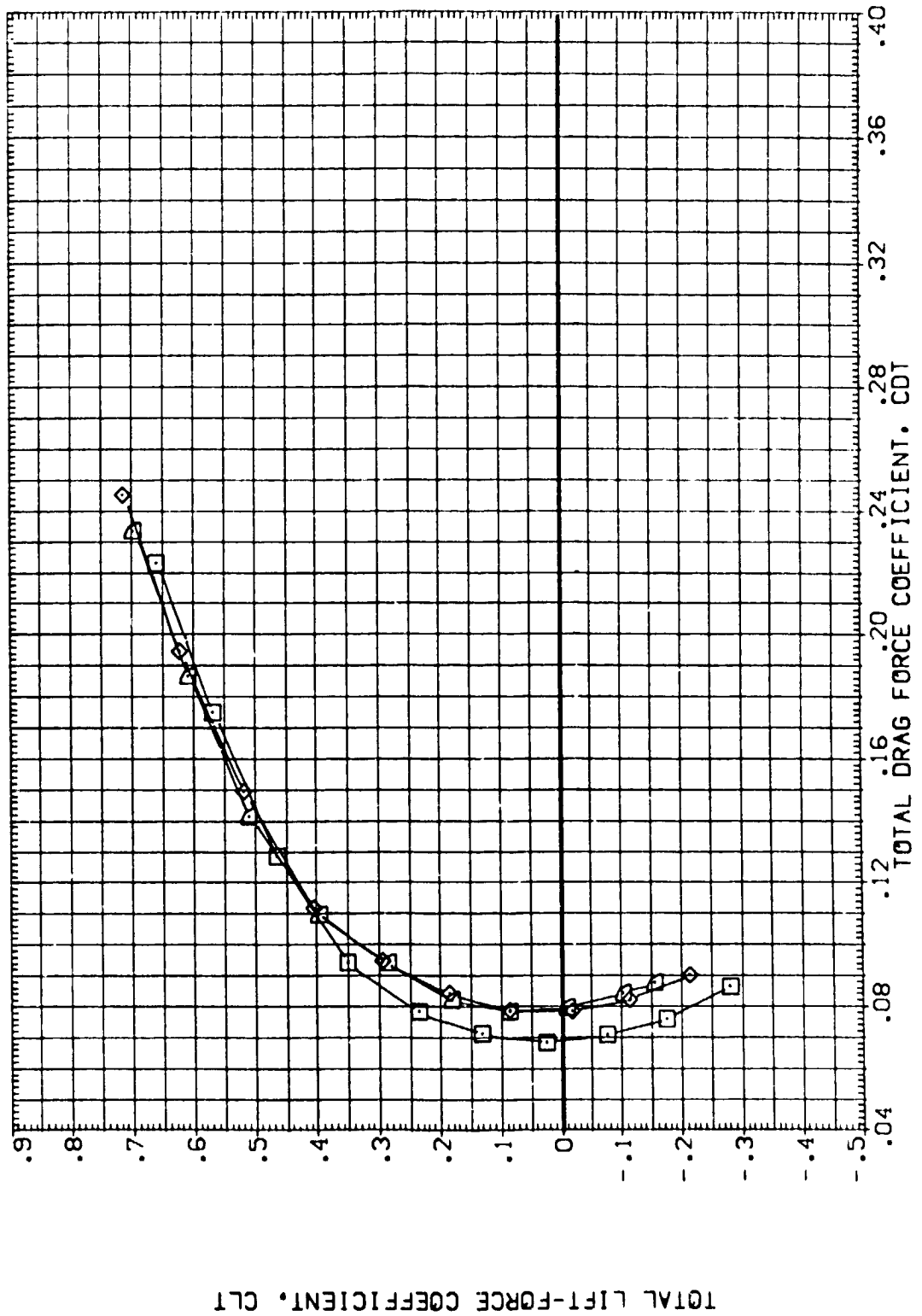


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(B)MACH = .70

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(GE-RO19)	ARC 66-709 QAS9 0111A-N24	.000	.000	-11.700	SREF .6053 SQ.FT.
(GE-RO22)	DATA NOT AVAILABLE	.000	.000	.000	LREF .5935 FT.
(GE-RO23)	DATA NOT AVAILABLE	.000	.000	16.300	BREF 1.1710 FT.
(GE-RO19)	ARC 66-709 QAS9 0111A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(GE-RO22)	DATA NOT AVAILABLE	.000	.000	.000	YMRP .0000 IN.
(GE-RO23)	DATA NOT AVAILABLE	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

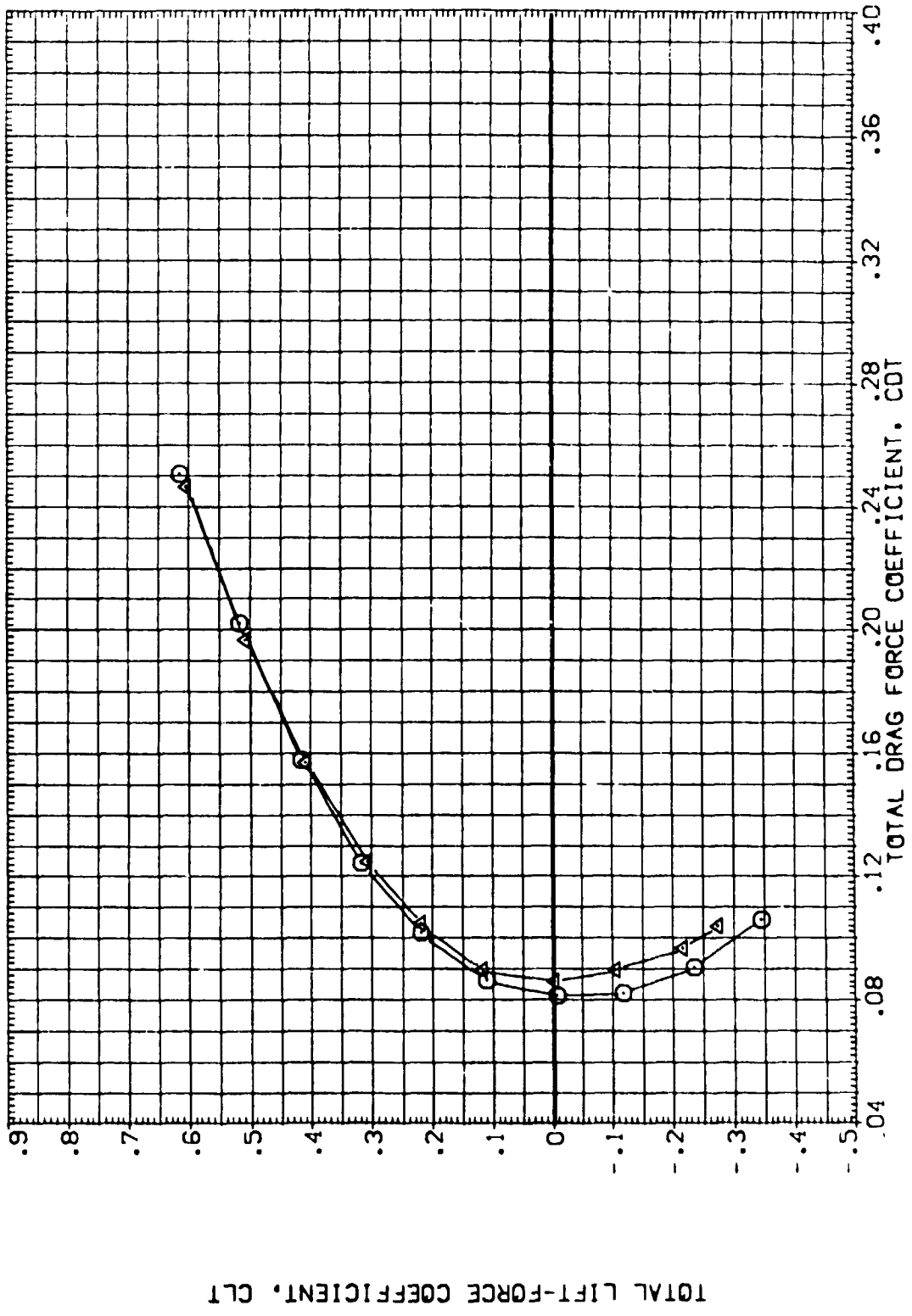


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(D)MACII = .85

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(GER019)	ARC 66-709 DASS DA11A-(N24)	.000	.000	-11.700	SREF .6053 SQ.FT.
(GER022)	ARC 66-70J DASS DA11A-(N24)	.000	.000	.000	LREF .5995 FT.
(GER023)	ARC 66-709 DASS DA11A-(N24)	.000	.000	16.300	BREF 1.1710 FT.IN.
(GER019)	ARC 66-709 DASS O11A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	XMRP 12.6255 IN.
(GER022)	ARC 66-709 DASS O11A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	YMRP .0000 IN.
(GER023)	ARC 66-709 DASS O11A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

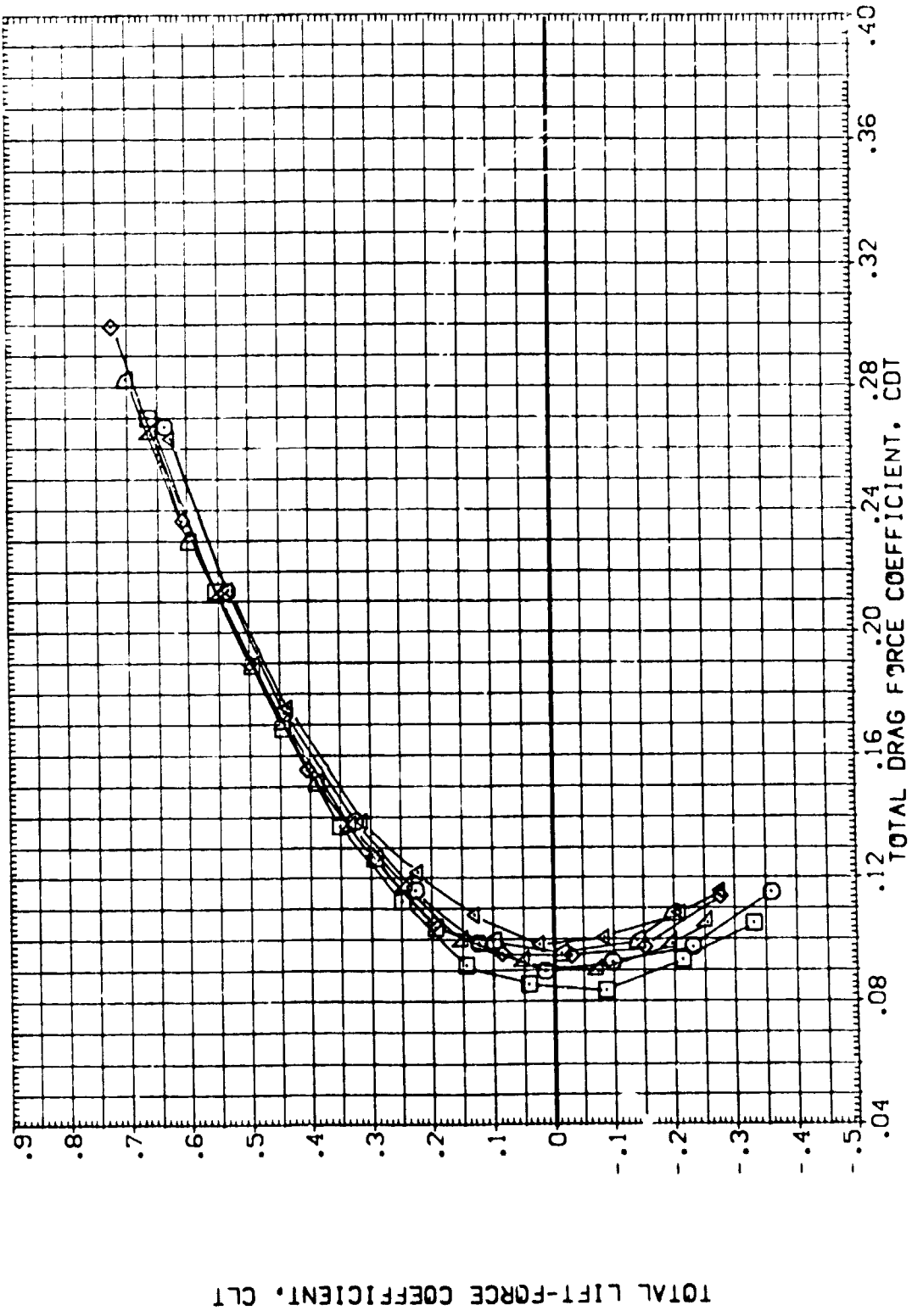


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(E)MACH .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(GER019)	ARC 66-709 QAS9 0111A-(N24)	.000	.000	-11.700	SREF 6053 50. FT.
(GER022)	DATA NOT AVAILABLE	.000	.000	.000	LREF 5926 FT.
(GER023)	DATA NOT AVAILABLE	.000	.000	16.300	BREF 1.1710 FT.
(GER019)	ARC 66-709 QAS9 0111A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(GER022)	DATA NOT AVAILABLE	.000	.000	.000	YMRP .0000 IN.
(GER023)	DATA NOT AVAILABLE	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

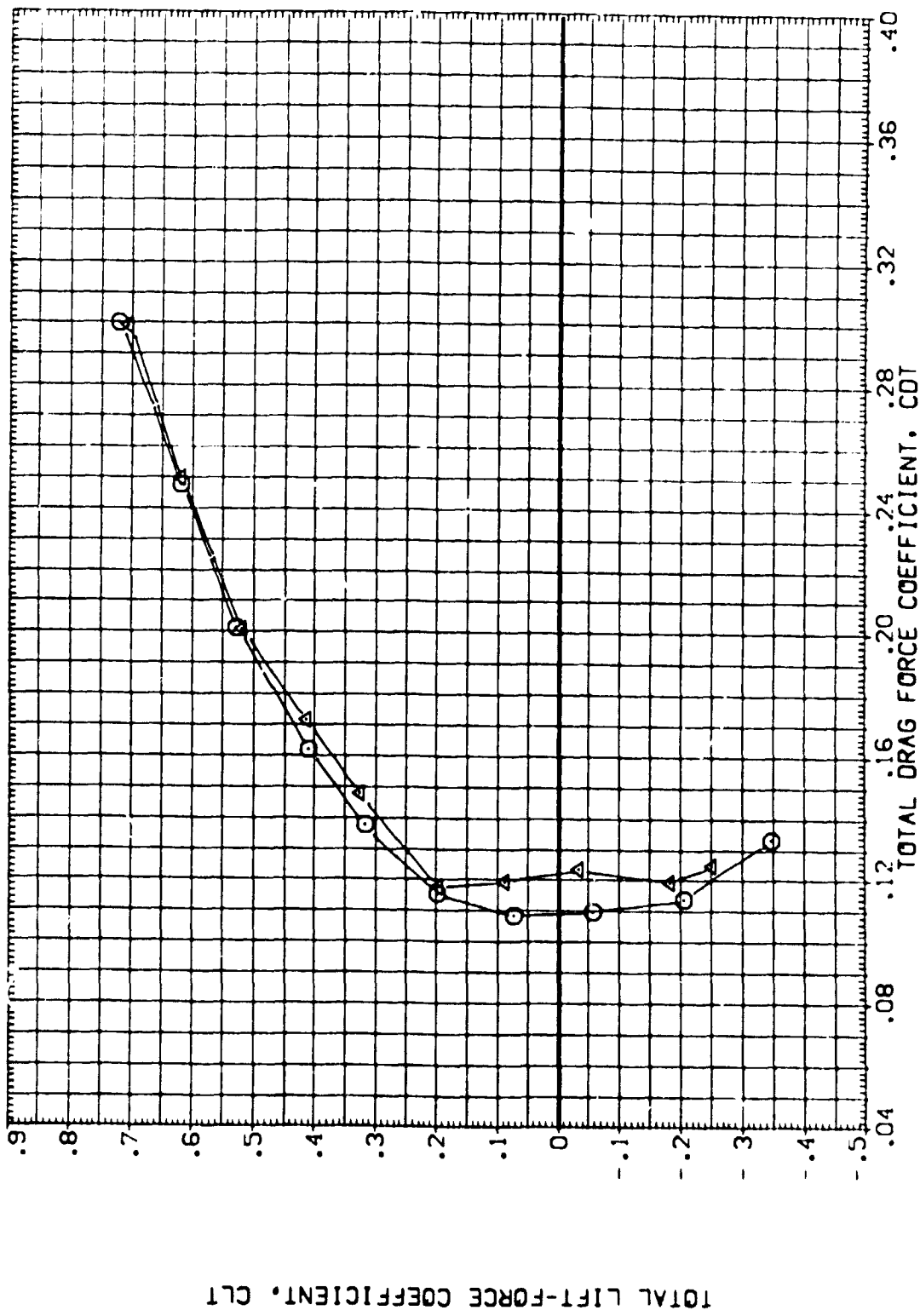


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(F)MACH = .95

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(GE R019)	ARC 66-705 D459 O11A-(N24)	.000	.000	-11.700	SREF .6053 50.FT.
(GE R022)	ARC 66-708 D459 O11A-(N24)	.000	.000	-11.700	LREF .5835 FT.
(GE R023)	ARC 66-709 D459 O11A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(3E R019)	ARC 66-705 D459 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(3E R022)	ARC 66-708 D459 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	YMRP .0000 IN.
(3E R023)	ARC 66-709 D459 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

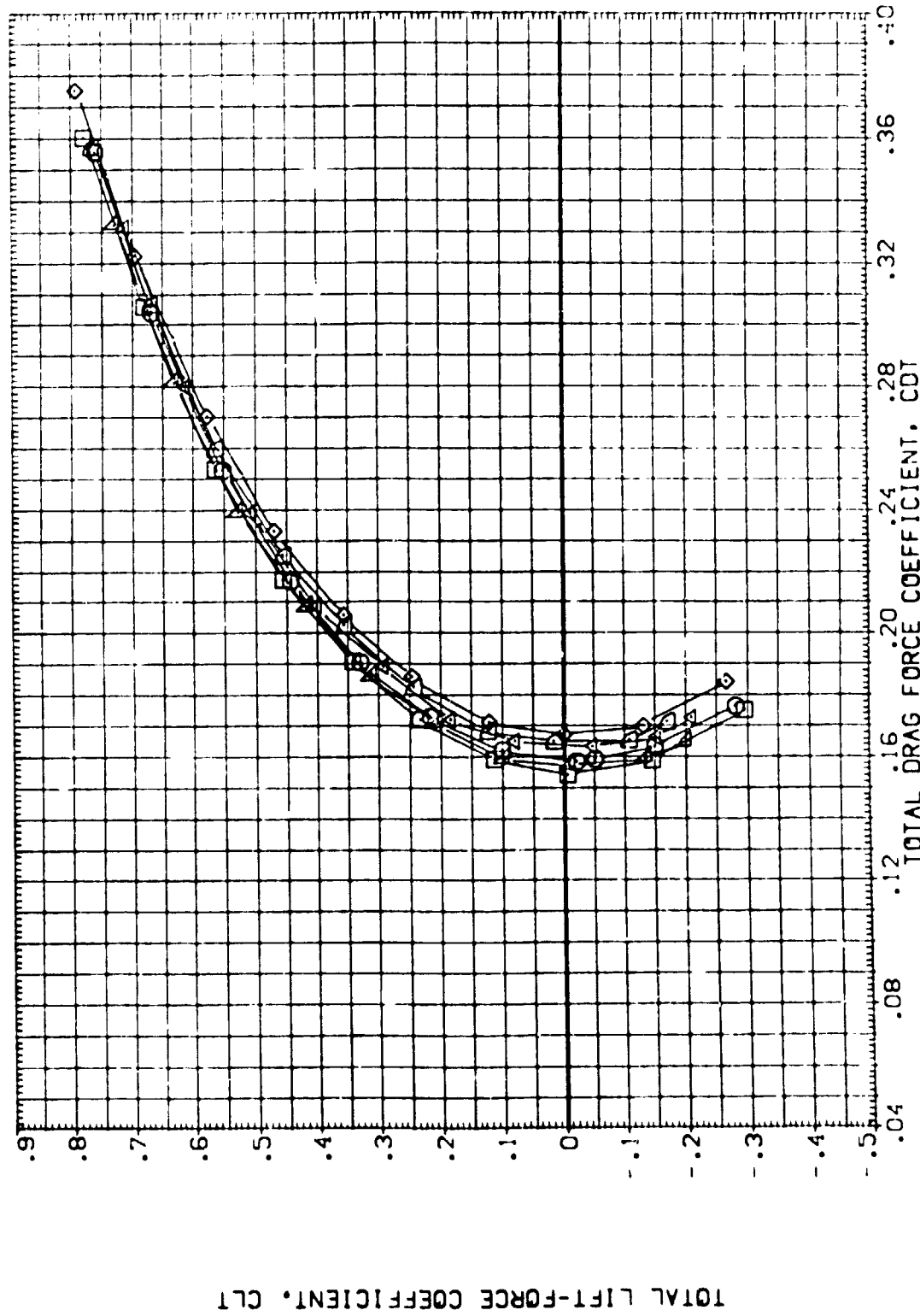


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOF LAP	REFERENCE INFORMATION
(GE R019)	ARC 66-709 D459 D111A-(N24)	.000	.000	-11.700	SREF .6053 SQ.FT.
(GE R022)	ARC 66-709 D459 D111A-(N24)	.000	.000	.000	LREF .5935 FT.
(GE R073)	ARC 66-709 D459 D111A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(GE R019)	ARC 66-709 D459 D111A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(GE R022)	DATA NOT AVAILABLE	.000	.000	.000	YMRP .0000 IN.
(GE R073)	ARC 66-709 D459 D111A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3150 IN.
					SCALE .0150

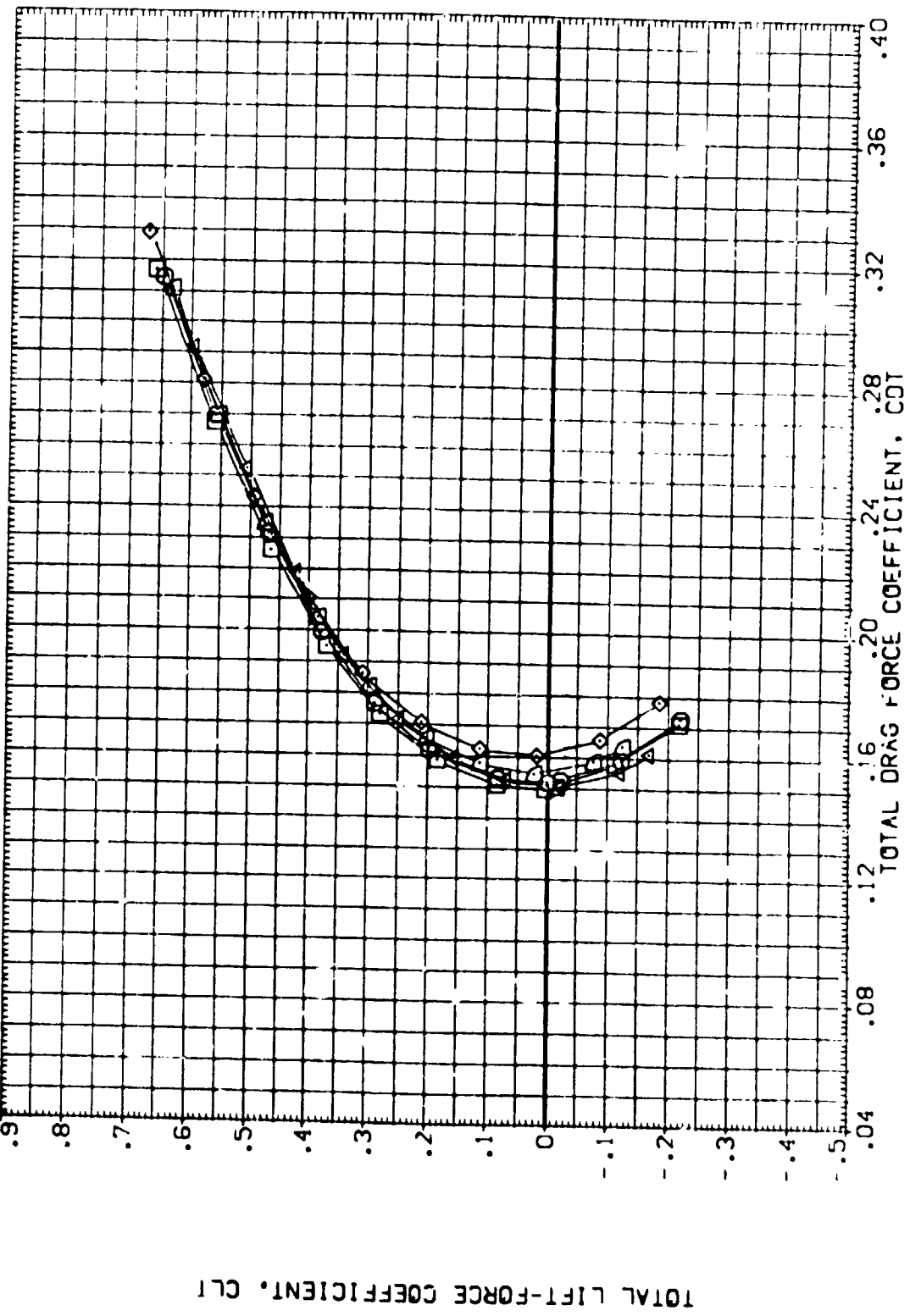


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

CHOMAC = 1.50

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GER019)	ARC 66-709 DA59 DA11A-(N24)
(GER022)	ARC 66-709 DA59 DA11A-(N24)
(GER023)	ARC 66-709 DA59 DA11A-(N24)
(GER019)	ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)
(GER022)	ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)
(GER023)	ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	.000	.000
.000	.000	16.300
.000	.000	-11.700
.000	.000	.000
.000	.000	16.300

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	.5935	FT.
BREF	1.710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

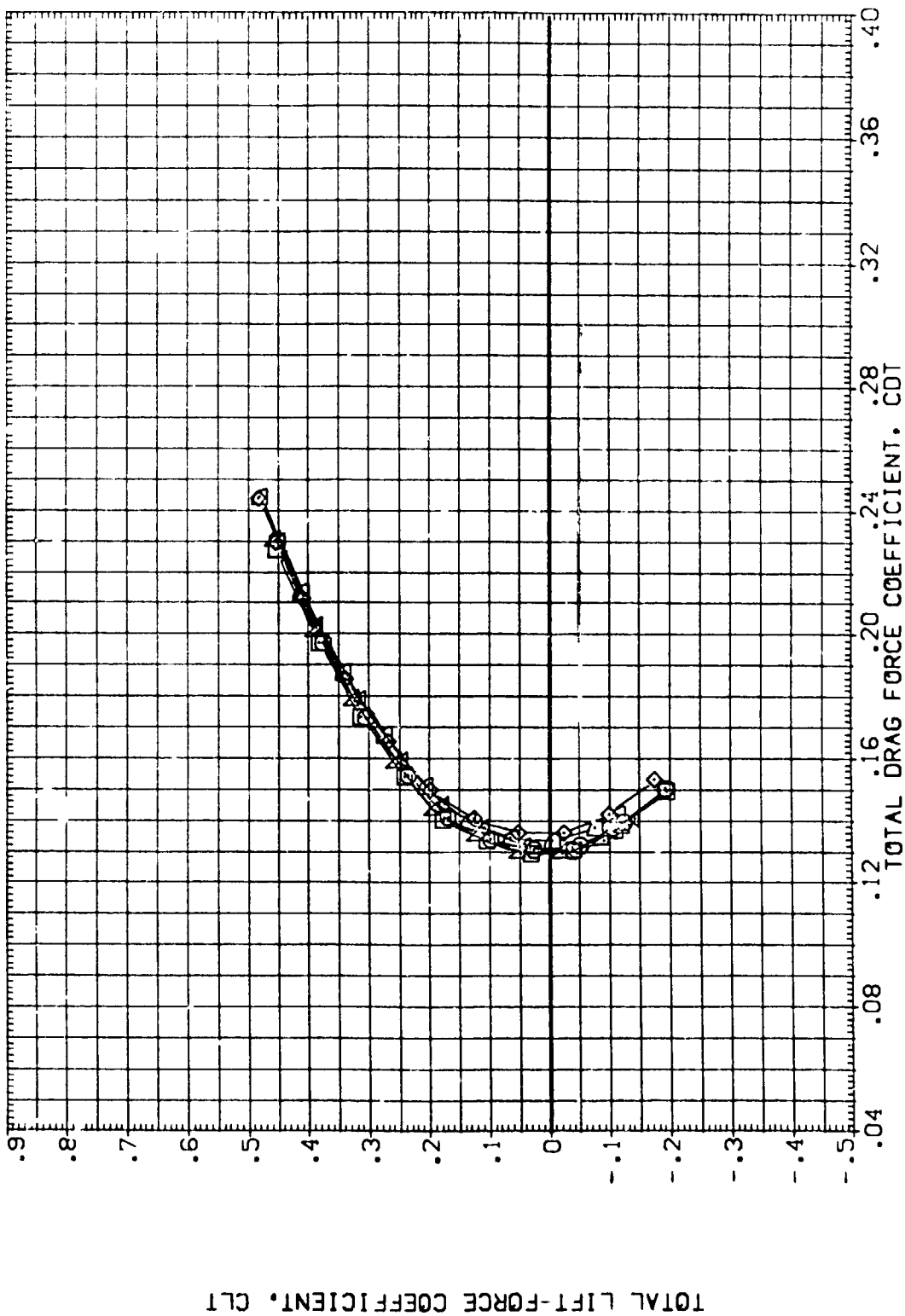


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(1)MACH = 2.00



DATA SET SYMBOL CONFIGURATION DESCRIPTION

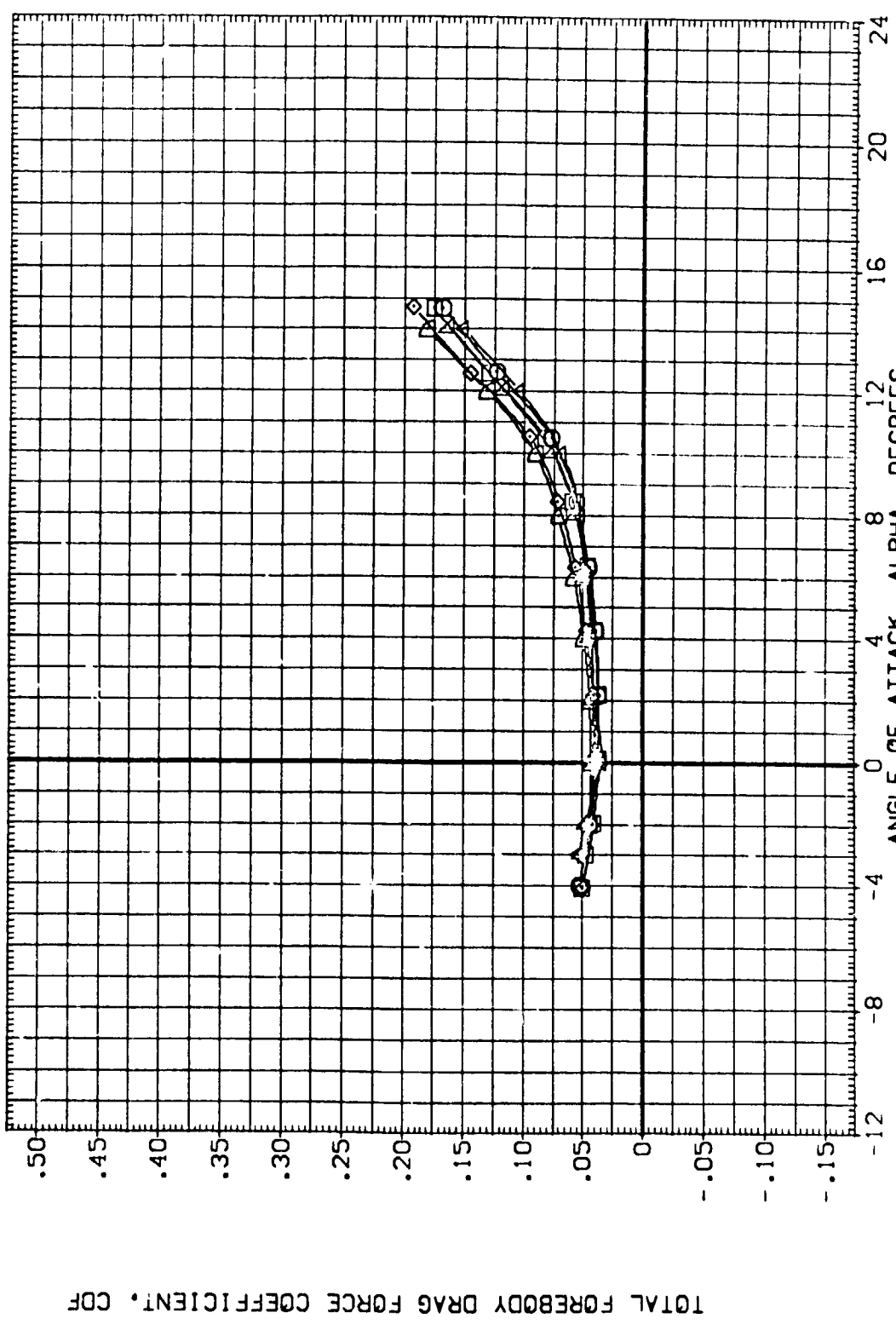
(3E.R019)	ARC 66-709 OAS9 011A-N24
(3E.R022)	ARC 66-709 OAS9 011A-N24
(3E.R019)	ARC 66-709 OAS9 011A-N24 (ADJUSTED FOR TARES)
(3E.R022)	ARC 66-709 OAS9 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	.000	.000
.000	.000	16.300
.000	.000	-11.700
.000	.000	.000
.000	.000	16.300

REFERENCE INFORMATION

SREF	.6053	SG.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	



TOTAL FOREBODY DRAG FORCE COEFFICIENT, CDF

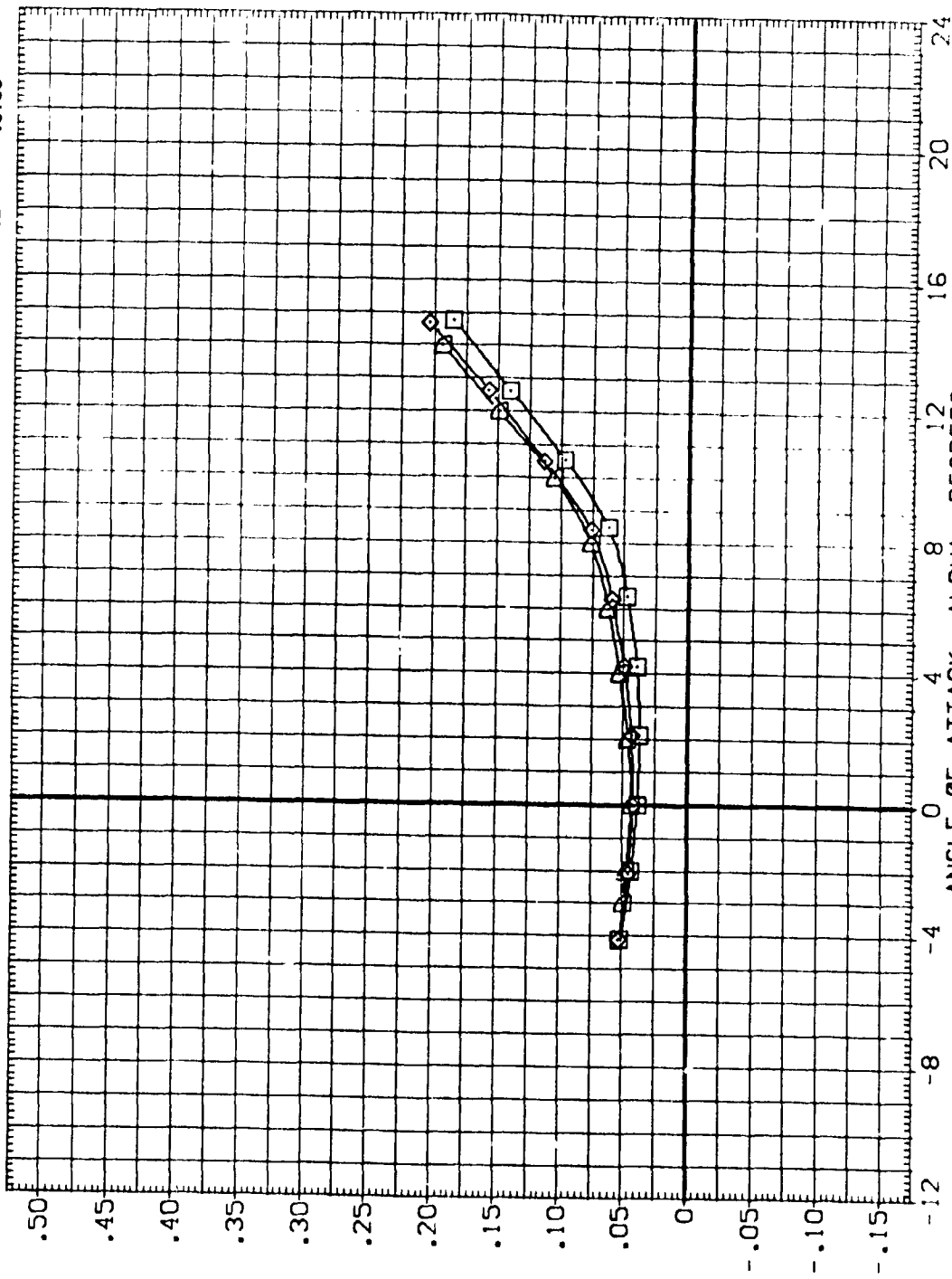
FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(AJMAC) = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (GER019) DATA NOT AVAILABLE
 (GER022) ARC 66-709 BA59 0111A-(N24)
 (GER023) ARC 66-709 BA59 0111A-(N24)
 (3ER019) DATA NOT AVAILABLE
 (3ER022) DATA NOT AVAILABLE
 (3ER023) ARC 66-709 BA59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDF LAP
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 XMRP 1.1710 IN.
 YMRP 12.6255 IN.
 ZMRP .0000 IN.
 SCALE -.3750 IN.
 .C150



TOTAL FOREBODY DRAG FORCE COEFFICIENT, CDF

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(B)MACH = .70



DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BOFLAP
 (GER019) ARC 66-709 0A59 0A11A-(N24) .000 .000 -11.700
 (GER022) ARC 66-709 0A59 0A11A-(N24) .000 .000 .000
 (GER023) ARC 66-709 0A59 0A11A-(N24) .000 .000 16.300
 (GER019) ARC 66-709 0A59 0A11A-(N24) .000 .000 -11.700
 (GER022) DATA NOT AVAILABLE .000 .000 .000
 (GER023) ARC 66-709 0A59 0A11A-N24 (ADJUSTED FOR TARES) .000 .000 16.300

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5836 FT.
 CREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (GER019) ARC 66-709 0A59 0A11A-(N24)
 (GER022) ARC 66-709 0A59 0A11A-(N24)
 (GER023) ARC 66-709 0A59 0A11A-(N24)
 (GER019) ARC 66-709 0A59 0A11A-(N24) (ADJUSTED FOR TARES)
 (GER022) DATA NOT AVAILABLE
 (GER023) ARC 66-709 0A59 0A11A-N24 (ADJUSTED FOR TARES)

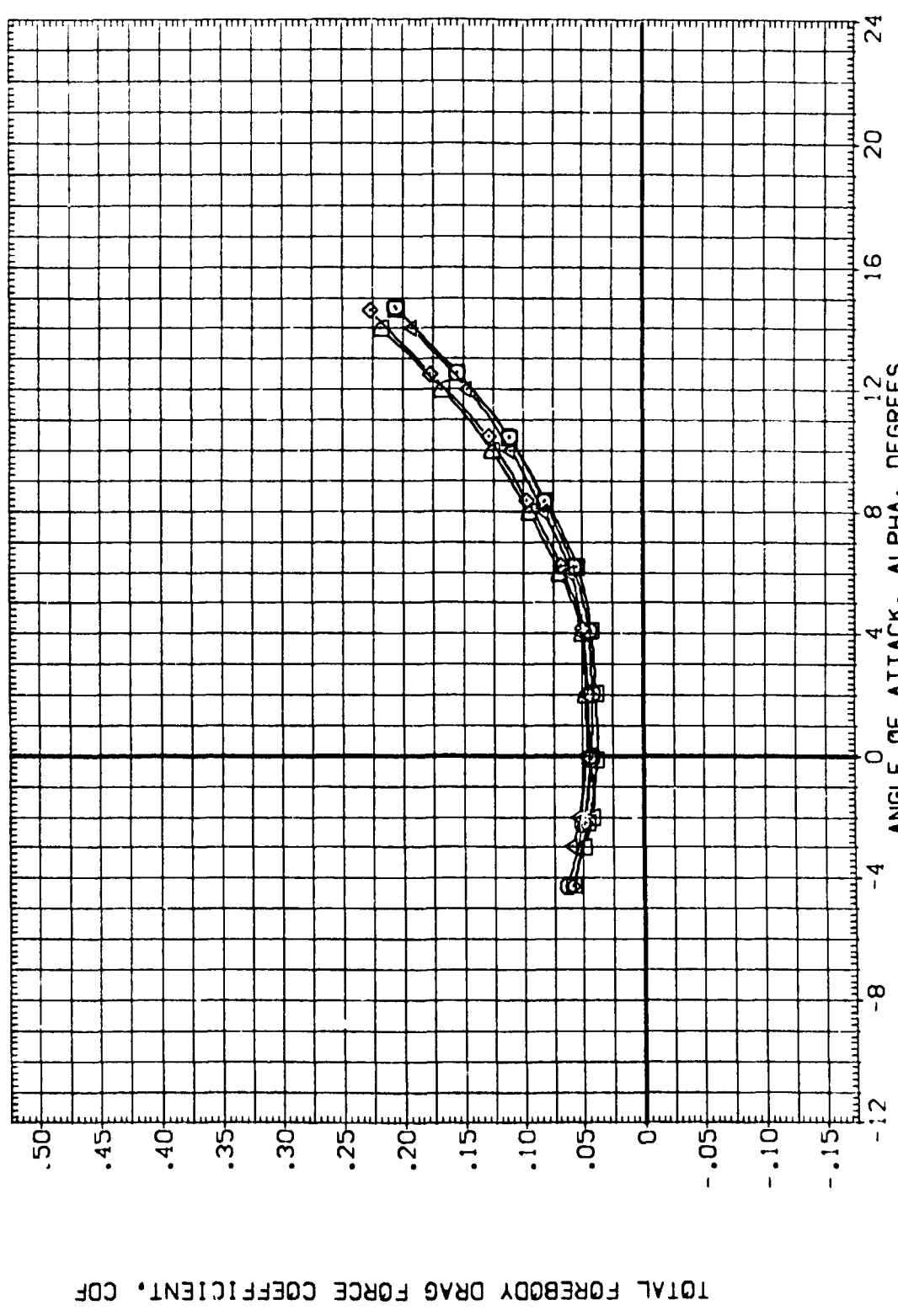


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .80

DATA SET SYMBOL
 (GER019)
 (GER022)
 (GER023)
 (GER019)
 (GER022)
 (GER023)

CONFIGURATION DESCRIPTION
 ARC 66-709 BASS 0111A-N24
 DATA NOT AVAILABLE
 DATA NOT AVAILABLE
 ARC 66-709 BASS 0111A-N24 (ADJUSTED FOR TARES)
 DATA NOT AVAILABLE
 DATA NOT AVAILABLE

BETA
 .000
 .000
 .000
 .000
 .000
 .000

ELEVON
 .000
 .000
 .000
 .000
 .000
 .000

BDF LAP
 -11.700
 .000
 16.300
 -11.700
 .000
 16.300

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 F.T.
 BREF 1.1710 F.T.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

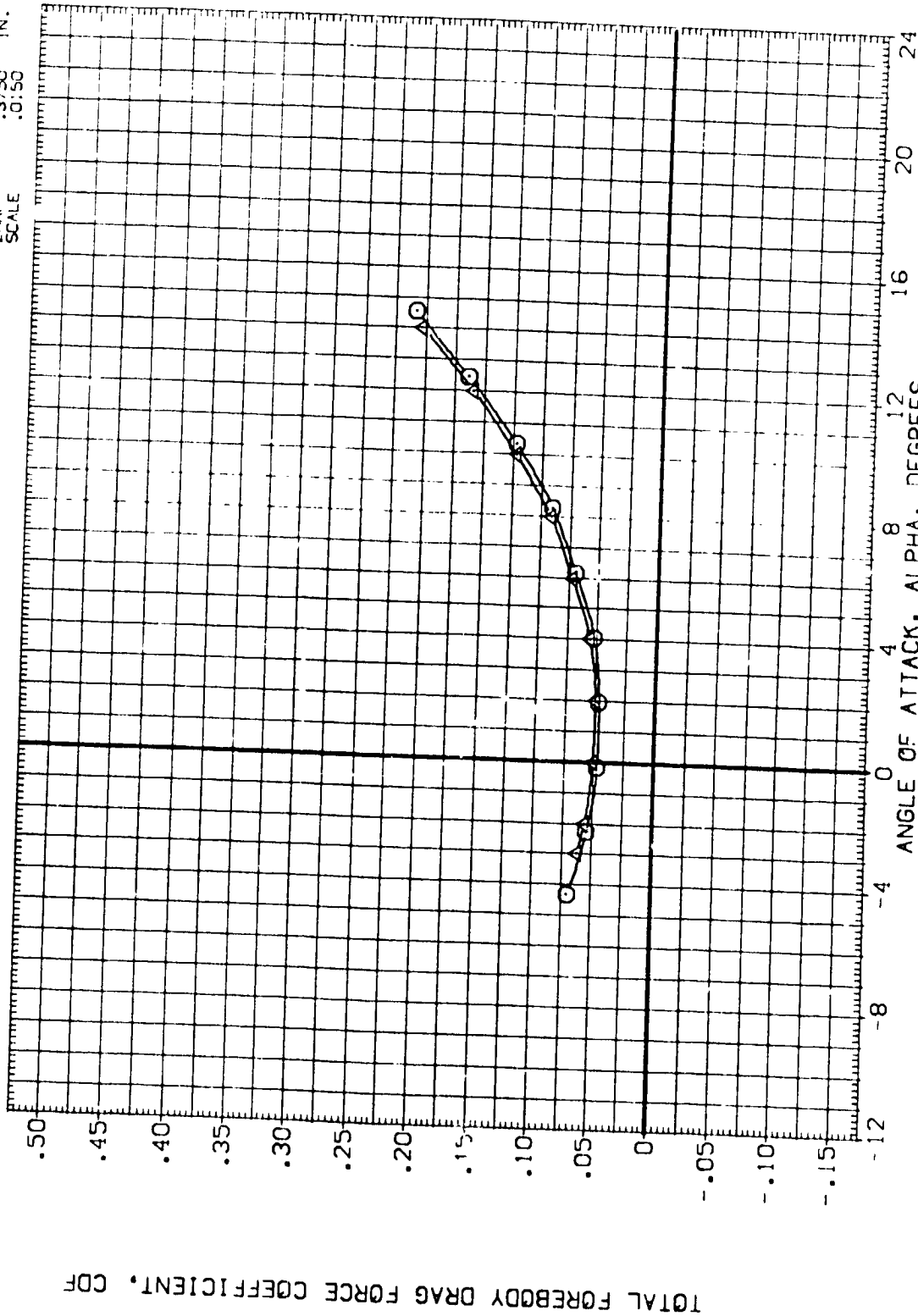


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(0)MACH - .85



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GE)R019)	ARC 66-709	0A59	0A11A-(N24)
(GE)R022)	ARC 66-709	0A59	0A11A-(N24)
(GE)R023)	ARC 66-709	0A59	0A11A-(N24)
(3E)R019)	ARC 66-709	0A59	0A11A-(N24) (ADJUSTED FOR TARES)
(3E)R022)	ARC 66-709	0A59	0A11A-(N24) (ADJUSTED FOR TARES)
(3E)R023)	ARC 66-709	0A59	0A11A-(N24) (ADJUSTED FOR TARES)

BETA

.000	ELEVON	BOFLAP
.000	.000	-11.700
.000	.000	.000
.000	.000	16.300
.000	.000	-11.700
.000	.000	.000
.000	.000	16.300

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6755	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

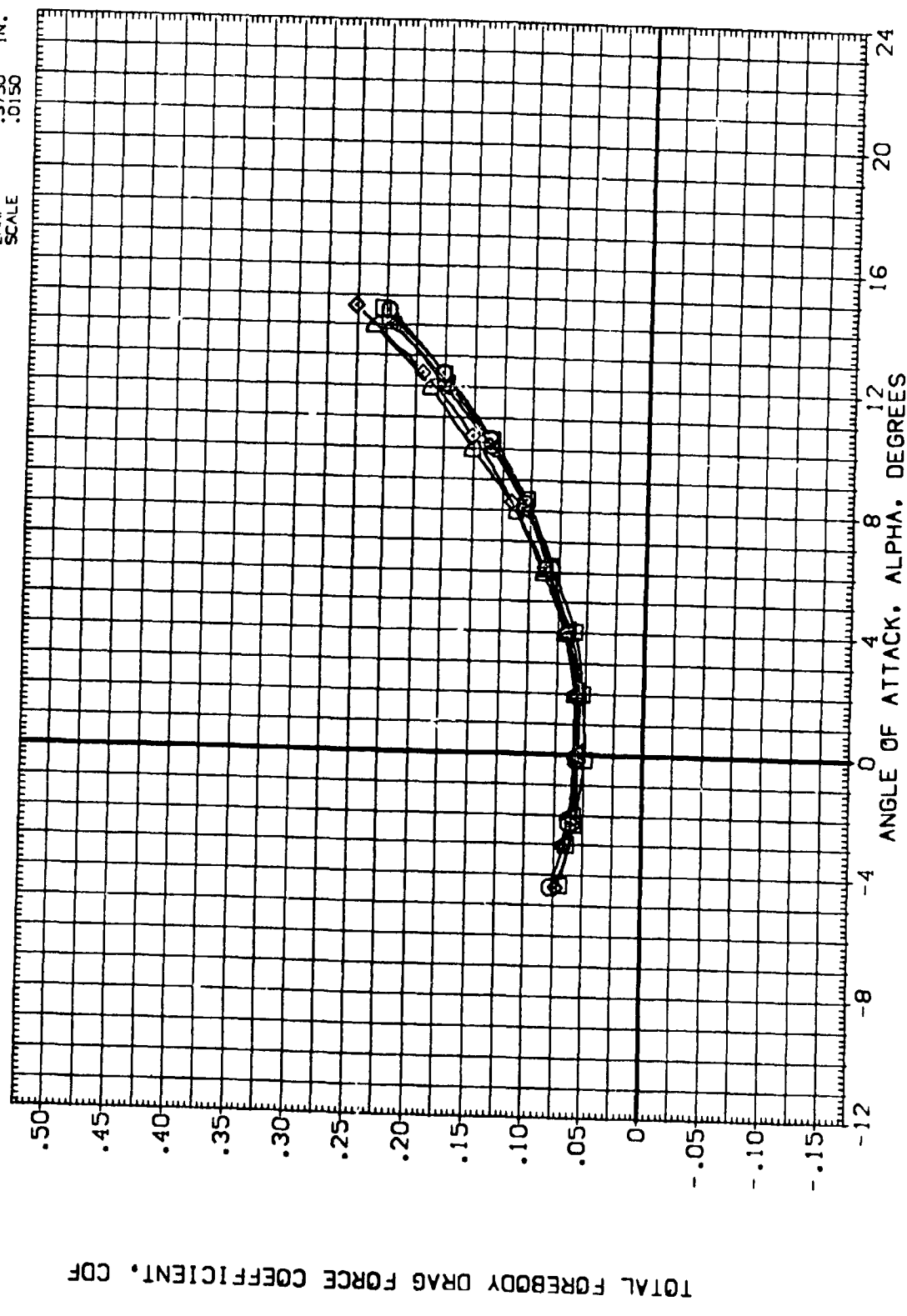


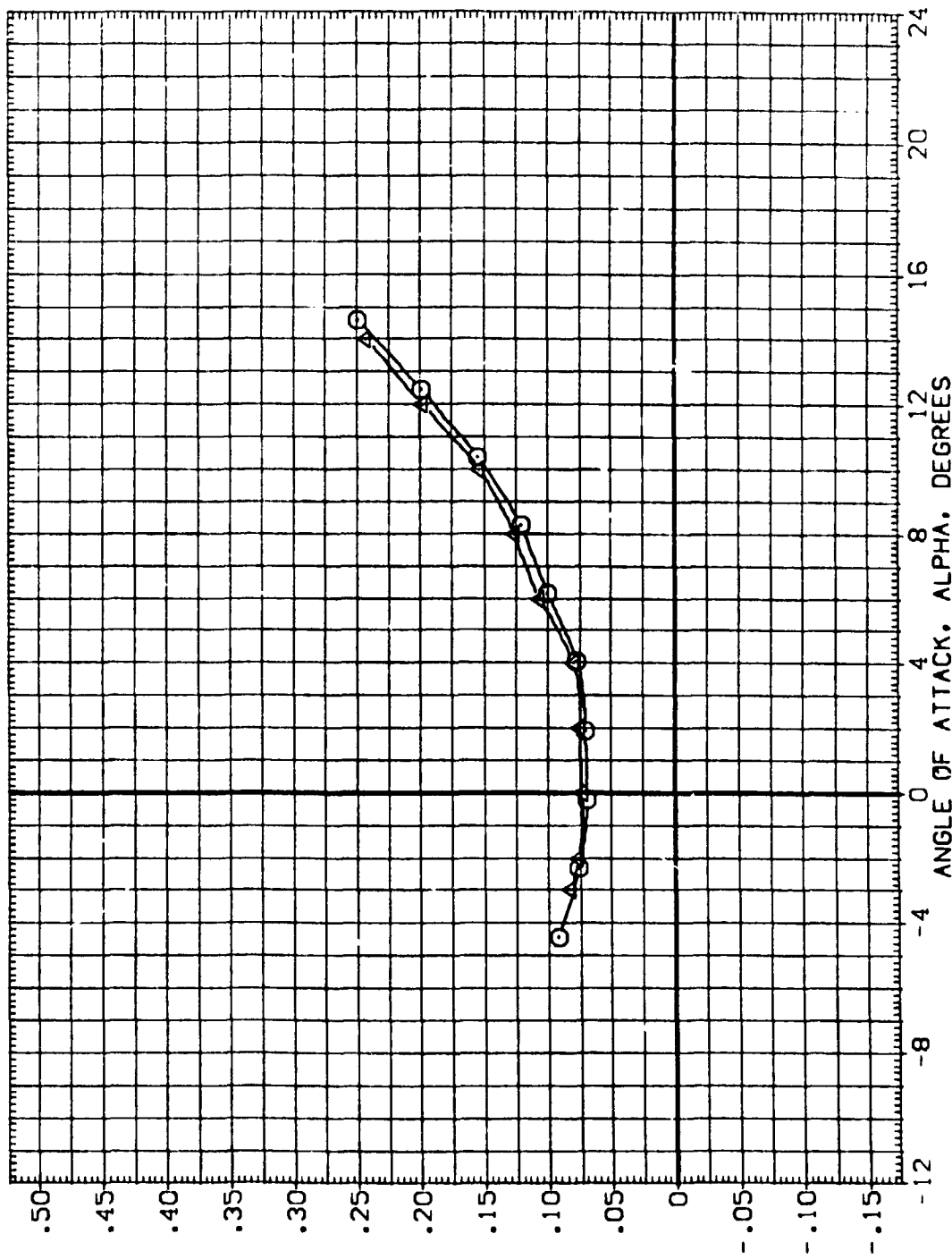
FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (0E019) ARC 66-709 0A59 0A11A-(N24)
 (0E022) DATA NOT AVAILABLE
 (0E023) DATA NOT AVAILABLE
 (3E019) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
 (3E022) DATA NOT AVAILABLE
 (3E023) DATA NOT AVAILABLE

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

REFERENCE INFORMATION:
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BRP 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150



TOTAL FOREBODY DRAG FORCE COEFFICIENT, CDF

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(F)MACH = .95



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(3E:R019)	ARC 66-709	OASS	O11A-(N24)
(3E:R022)	ARC 66-709	OASS	O11A-(N24)
(3E:R023)	ARC 66-709	OASS	O11A-(N24)
(3E:R019)	ARC 66-709	OASS	O11A-N24 (ADJUSTED FOR TARES)
(3E:R022)	ARC 66-709	OASS	O11A-N24 (ADJUSTED FOR TARES)
(3E:R023)	ARC 66-709	OASS	O11A-N24 (ADJUSTED FOR TARES)

REFERENCE INFORMATION

SREF	.6053	50.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

BETA ELEVON BOFLAP

BETA	.000	-11.700
ELEVON	.000	.000
BOFLAP	.000	16.300
	.000	-11.700
	.000	.000
	.000	16.300

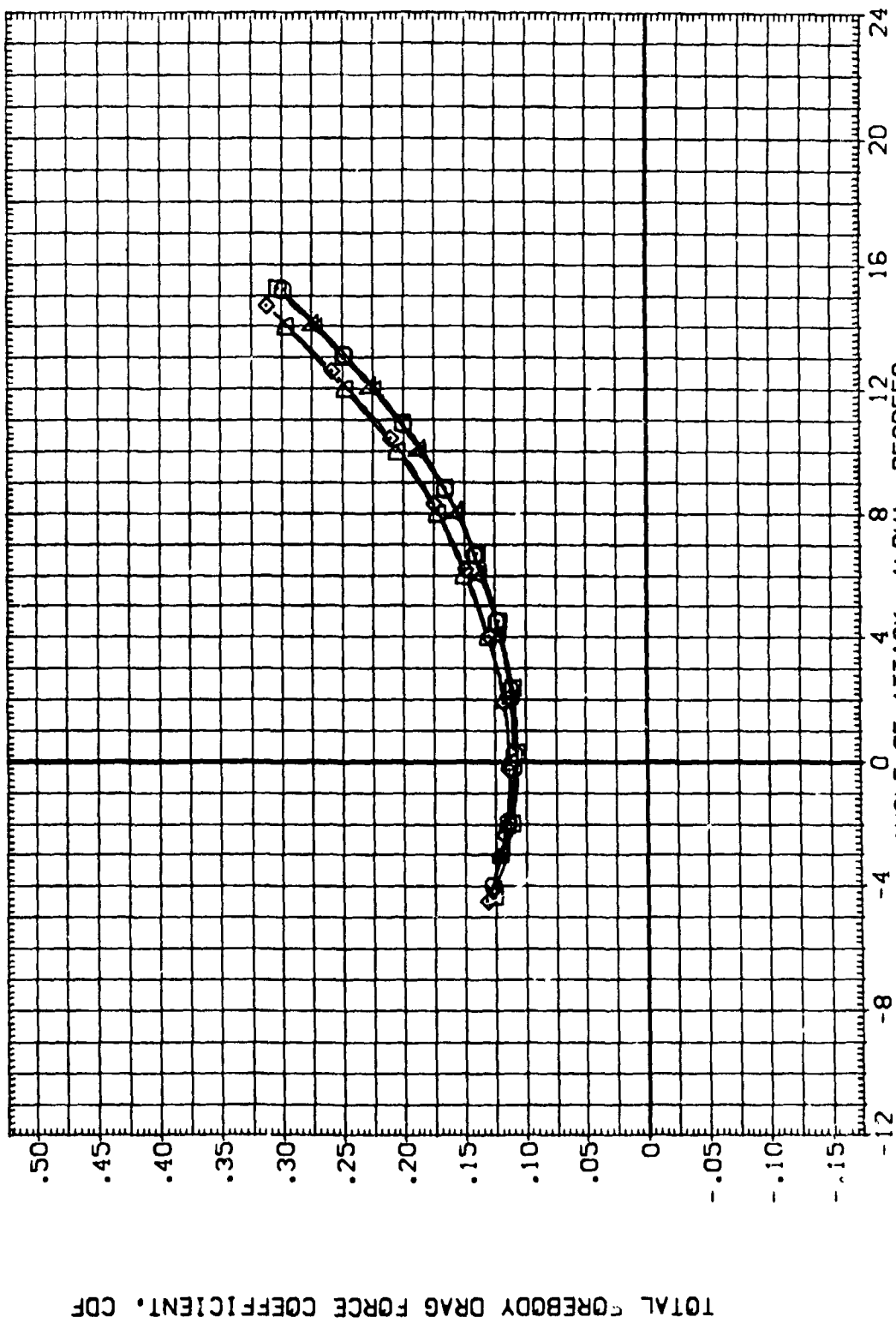


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(GJMACH = 1.20

DATA SET SYMBOL

(GER019)
(GER022)
(GER023)
(SER019)
(SER022)
(SER023)

CONFIGURATION DESCRIPTION

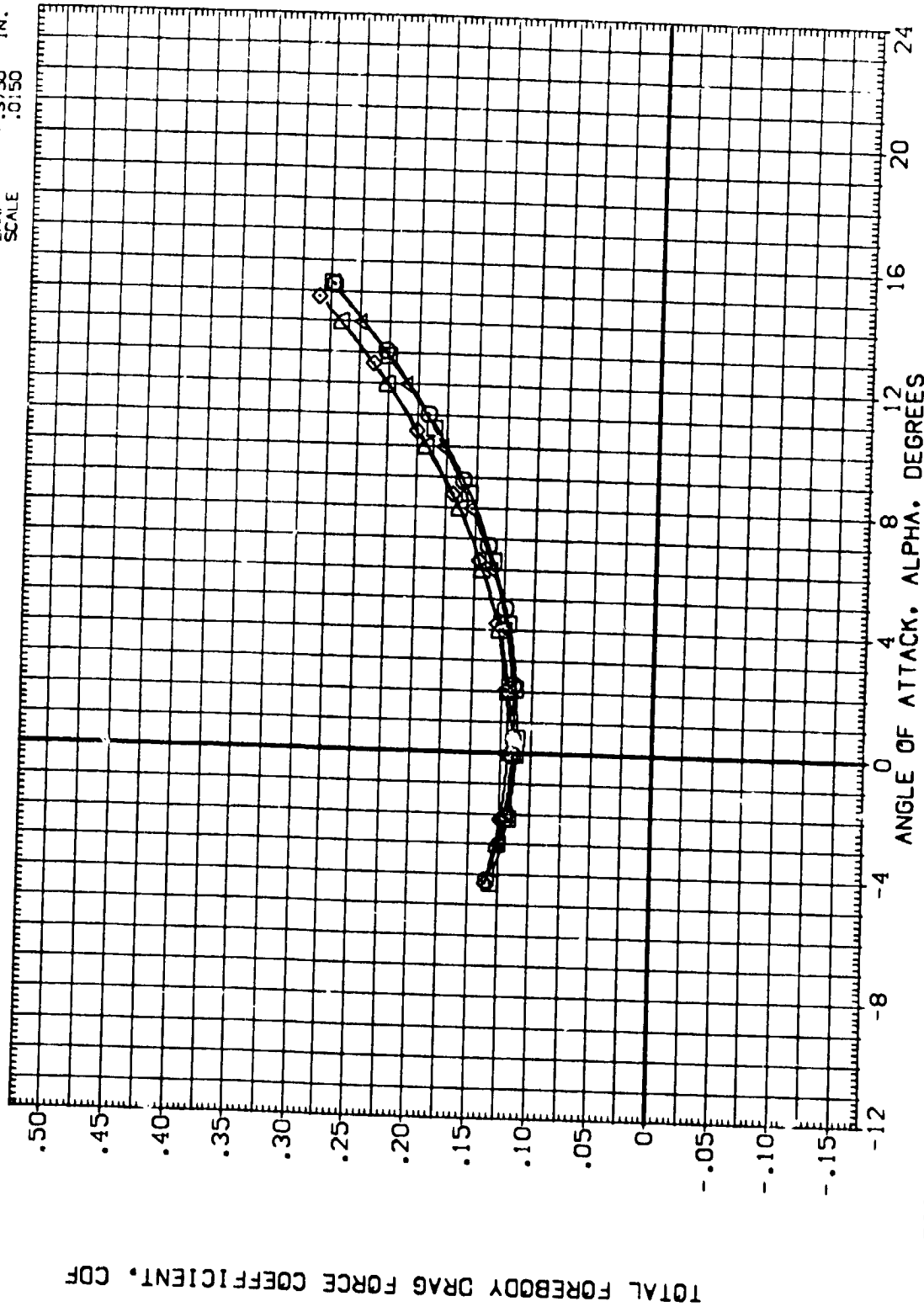
ARC 66-709 DASS 011A-(N24)
ARC 66-709 DASS 011A-(N24)
ARC 66-709 DASS 011A-(N24)
ARC 66-709 DASS 011A-(N24)
DATA NOT AVAILABLE
ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)
ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)

BETA .000
.000
.000
.000
.000
.000
.000

ELEVON .000
.000
.000
.000
.000
.000
.000

BOFLAP -11.700
-11.700
16.300
-11.700
.000
16.300

REFERENCE INFORMATION
SREF .8059 SQ.F.
LREF .5935 FT.
BREF 1.1710 FT.
XMRP 12.6255 IN.
YMRP .0000 IN.
ZMRP -.3750 IN.
SCALE .0150



TOTAL FOREBODY DRAG FORCE COEFFICIENT, CDF

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH = 1.50



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BDFLAP	REFERENCE INFORMATION
(GER019)	ARC 66-709 0A59 011A-(N24)	.000	.000	-11.700	SREF .6053 SQ.FT.
(GER022)	ARC 66-709 0A59 011A-(N24)	.000	.000	.000	LREF .5935 FT.
(GER073)	ARC 66-709 0A59 011A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(GER019)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(GER022)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	YMRP .0000 IN.
(GER073)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

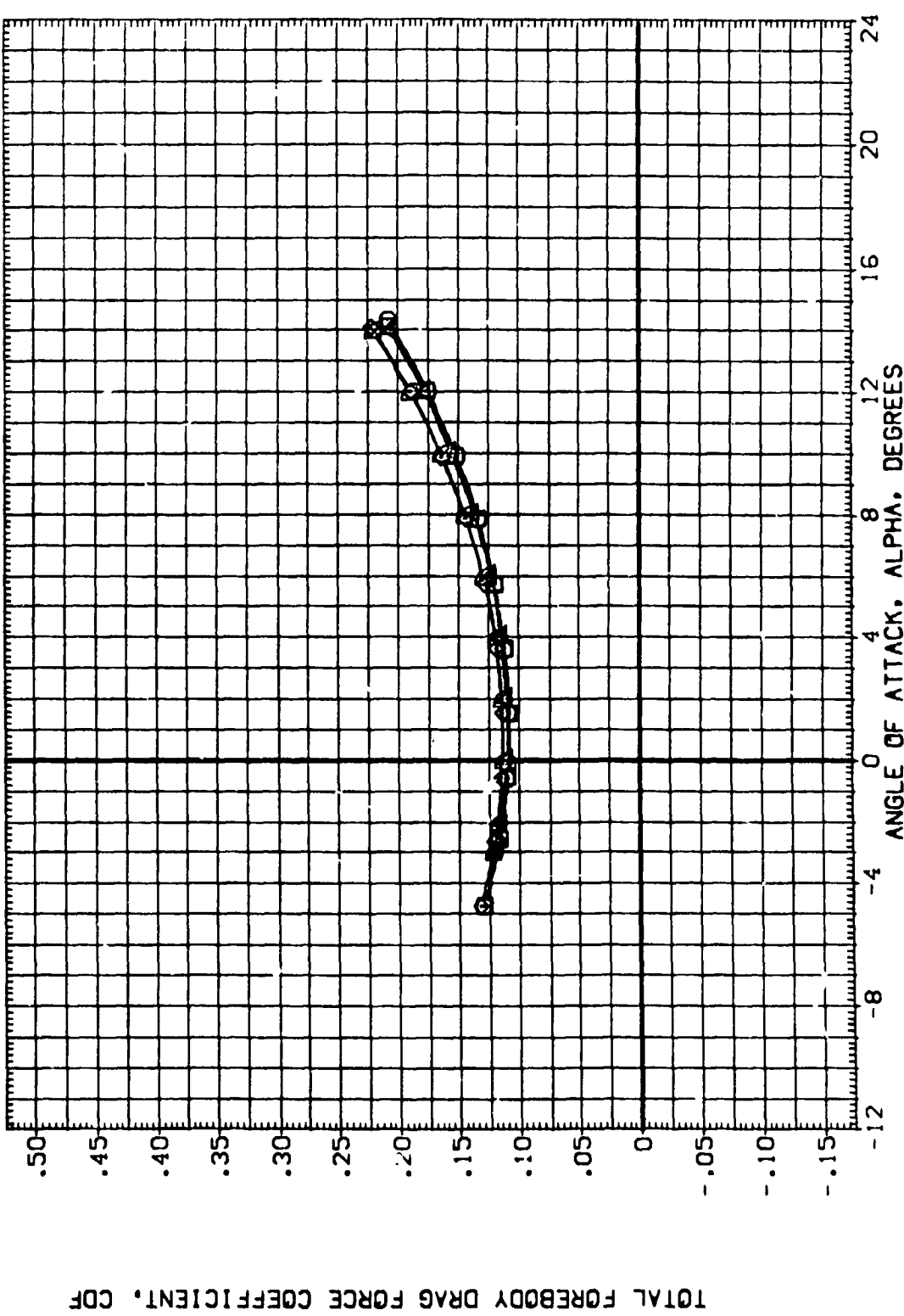


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(1)MACH = 2.00

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
(3ER019)	ARC 66-708 0A59 0111A-N24	.000	.000	-11.700	SREF .6053 SQ.FT.
(3ER022)	ARC 66-709 0A59 0111A-N24	.000	.000	-11.700	LREF .9536 FT.
(3ER023)	ARC 66-709 0A59 0111A-N24	.000	.000	16.300	BREF 1.1710 FT.
(3ER019)	ARC 66-709 0A59 0111A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(3ER022)	ARC 66-709 0A59 0111A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	YMRP .0000 IN.
(3ER023)	ARC 66-709 0A59 0111A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

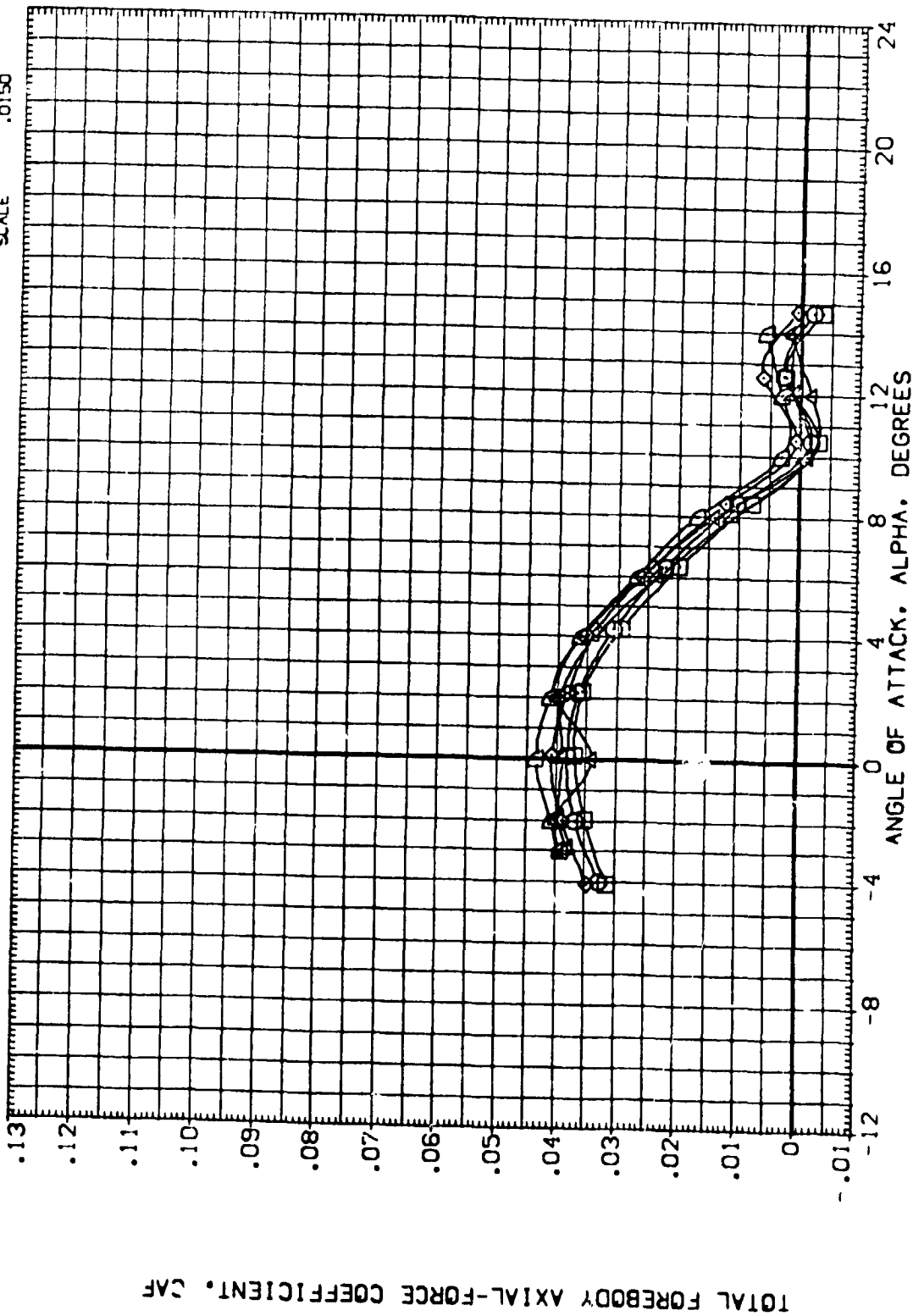
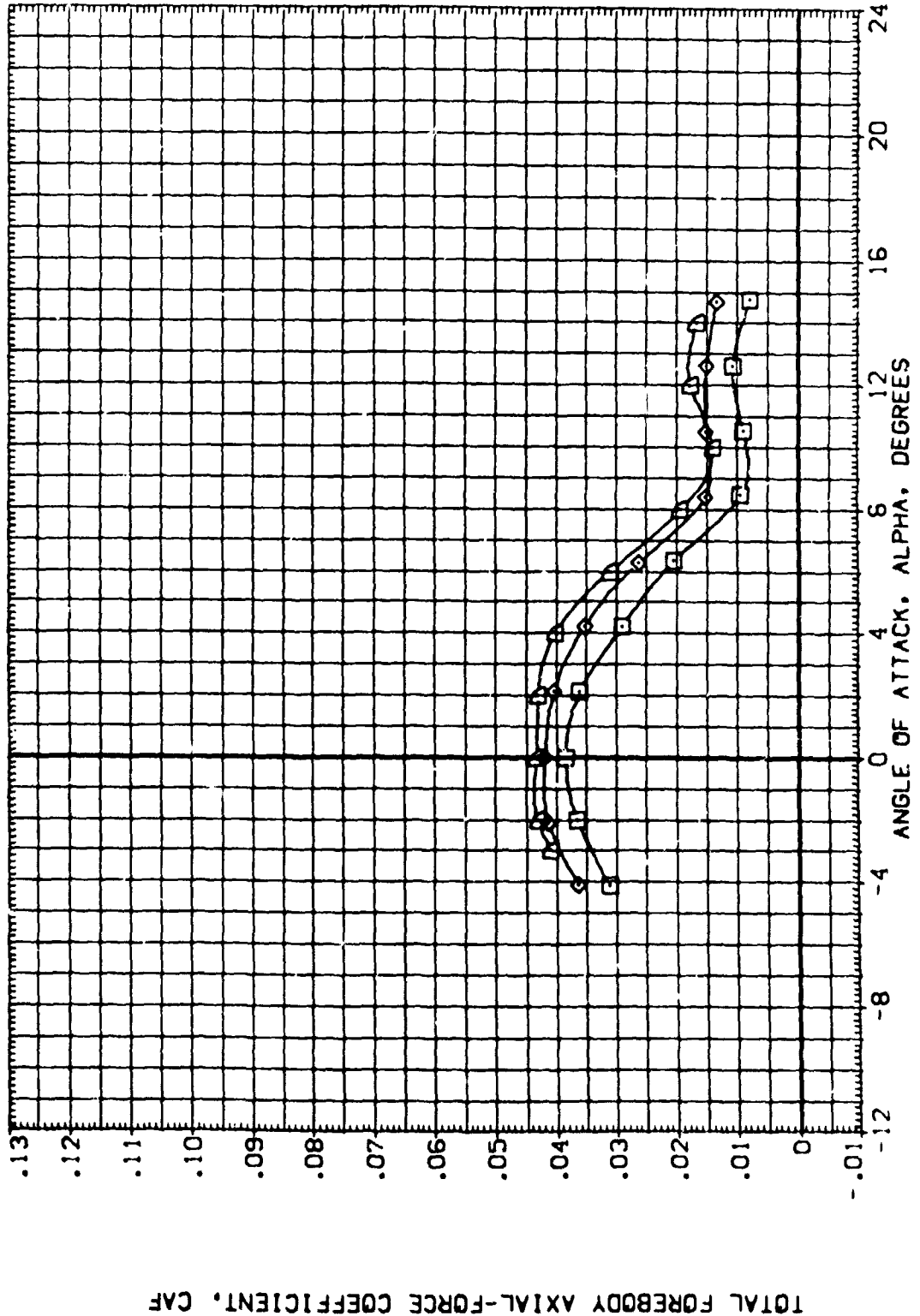


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(A) MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BD FLAP	REFERENCE INFORMATION
(ZER019)	DATA NOT AVAILABLE	.000	.000	-11.700	SREF .6053 SQ.FT.
(ZER022)	ARC 66-709 CAS9 DA11A-IN24	.000	.000	.000	LREF .5936 FT.
(ZER023)	ARC 66-709 CAS9 DA11A-IN24	.000	.000	16.300	BREF 1.1710 FT.
(ZER019)	DATA NOT AVAILABLE	.000	.000	-11.700	XTRP 12.6235 IN.
(ZER022)	DATA NOT AVAILABLE	.000	.000	.000	ZTRP .0000 IN.
(ZER023)	ARC 66-709 CAS9 DA11A-IN24 (ADJUSTED FOR TARES)	.000	.000	16.300	SCALE -.3750 IN.



TOTAL FOREBODY AXIAL-FORCE COEFFICIENT, CAF

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(B)MACH = .70

DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BOFLAP REFERENCE INFORMATION
 (GE R019) ARC 66-709 0A59 0A11A-(N24) .000 .000 -11.700 SREF .6053 SC.FT.
 (GE R022) ARC 66-709 0A59 0A11A-(N24) .000 .000 -11.700 LREF .5936 FT.
 (GE R023) ARC 66-709 0A59 0A11A-(N24) .000 .000 -16.300 XMRP 1.1710 FT. IN.
 (X R019) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES) .000 .000 -11.700 YMRP .0000 IN.
 (X R022) DATA NOT AVAILABLE .000 .000 -11.700 ZMRP .3750 IN.
 (X R023) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES) .000 .000 -16.300 SCALE .0150

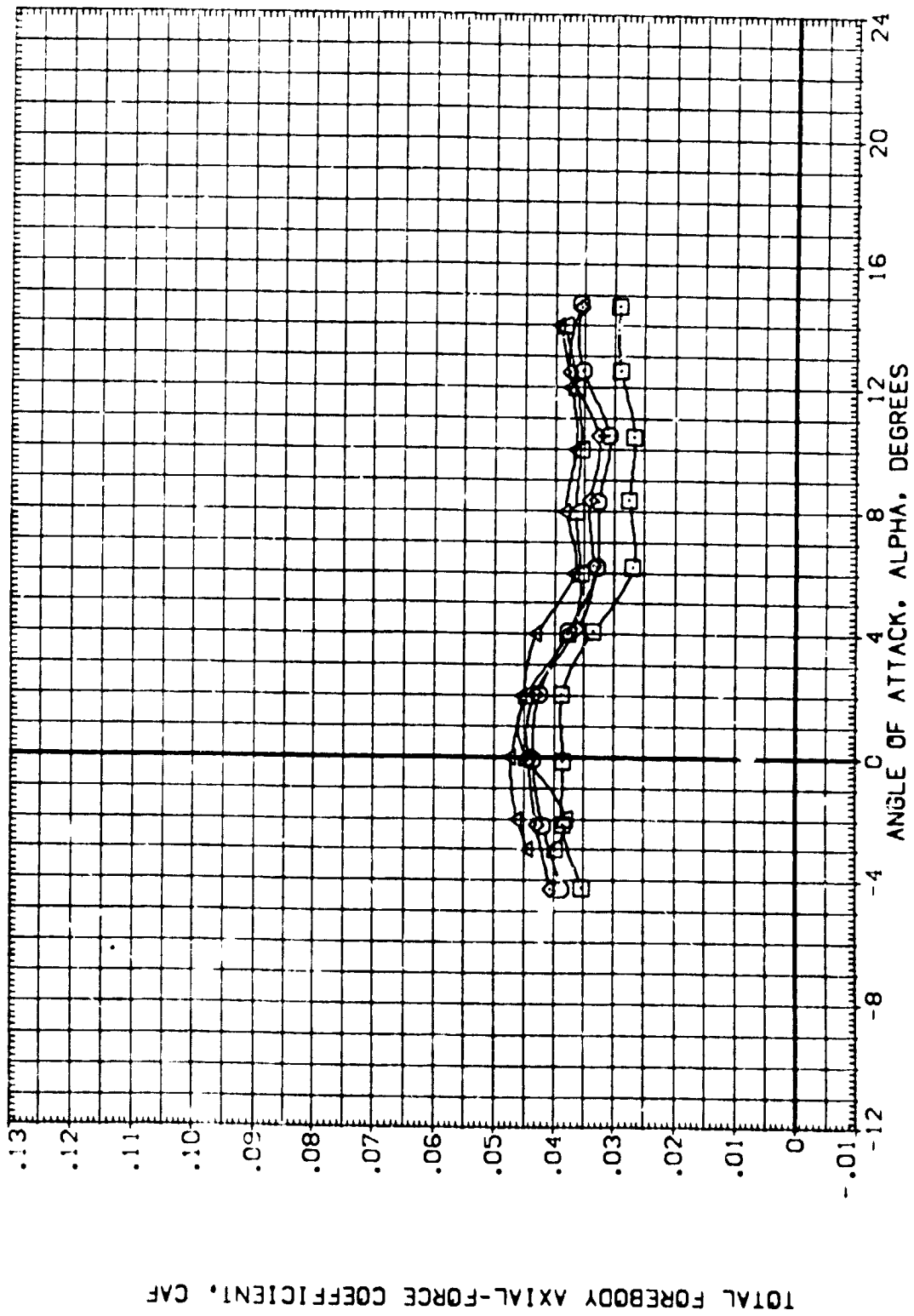


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .80



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GE:R019) ARC 66-709 OAS9 0111A-N24

(GE:R022) DATA NOT AVAILABLE

(GE:R023) DATA NOT AVAILABLE

(X:R019) ARC 66-709 OAS9 0111A-N24 (ADJUSTED FOR TARES)

(X:R022) DATA NOT AVAILABLE

(X:R023) DATA NOT AVAILABLE

BETA ELEVON BDF LAP

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

REFERENCE INFORMATION

SREF .6053 SO.FT.

LREF .5975 FT.

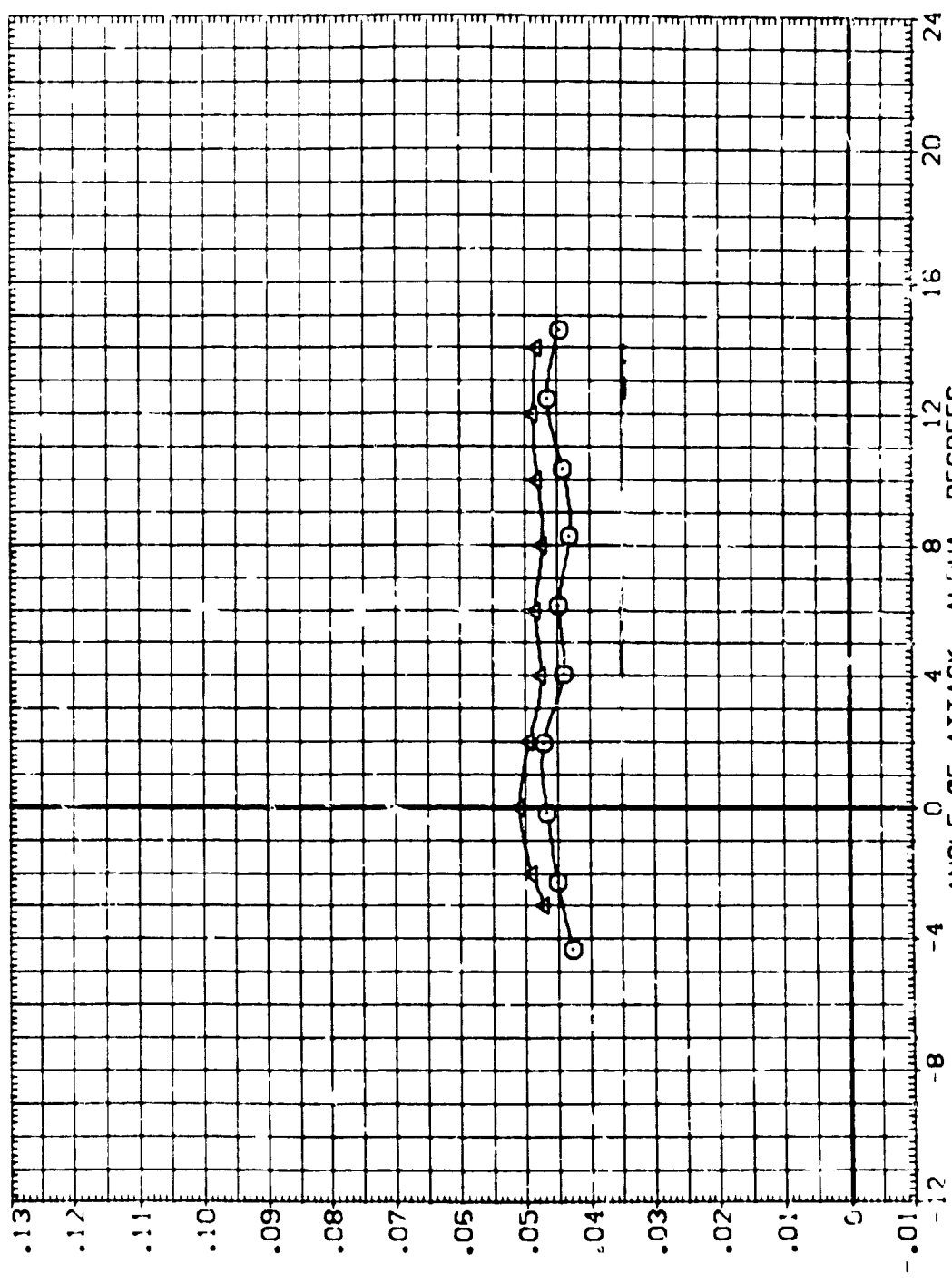
BREF 1.1710 FT.

XMRP 12.6235 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150



TOTAL FOREBODY AXIAL-FORCE COEFFICIENT, C_{AF}

FIG. 14 BODY FLAP EFFECT: VENEWS WITH/WITHOUT TARES

(O) MACH = .85

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GERD19)	ARC 66-709	QAS9	0111A-N24
(GERD22)	ARC 66-709	QAS9	0111A-N24
(GERD23)	ARC 66-709	QAS9	0111A-N24
(3ERD19)	ARC 66-709	QAS9	0111A-N24 (ADJUSTED FOR TARES)
(3ERD22)	ARC 66-709	QAS9	0111A-N24 (ADJUSTED FOR TARES)
(3ERD23)	ARC 66-709	QAS9	0111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BDF LAP

.000	.000	-11.700
.000	.000	.000
.000	.000	.000
.000	.000	16.300
.000	.000	-11.700
.000	.000	.000
.000	.000	16.300

REFERENCE INFORMATION

SREF	.6053	50. FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

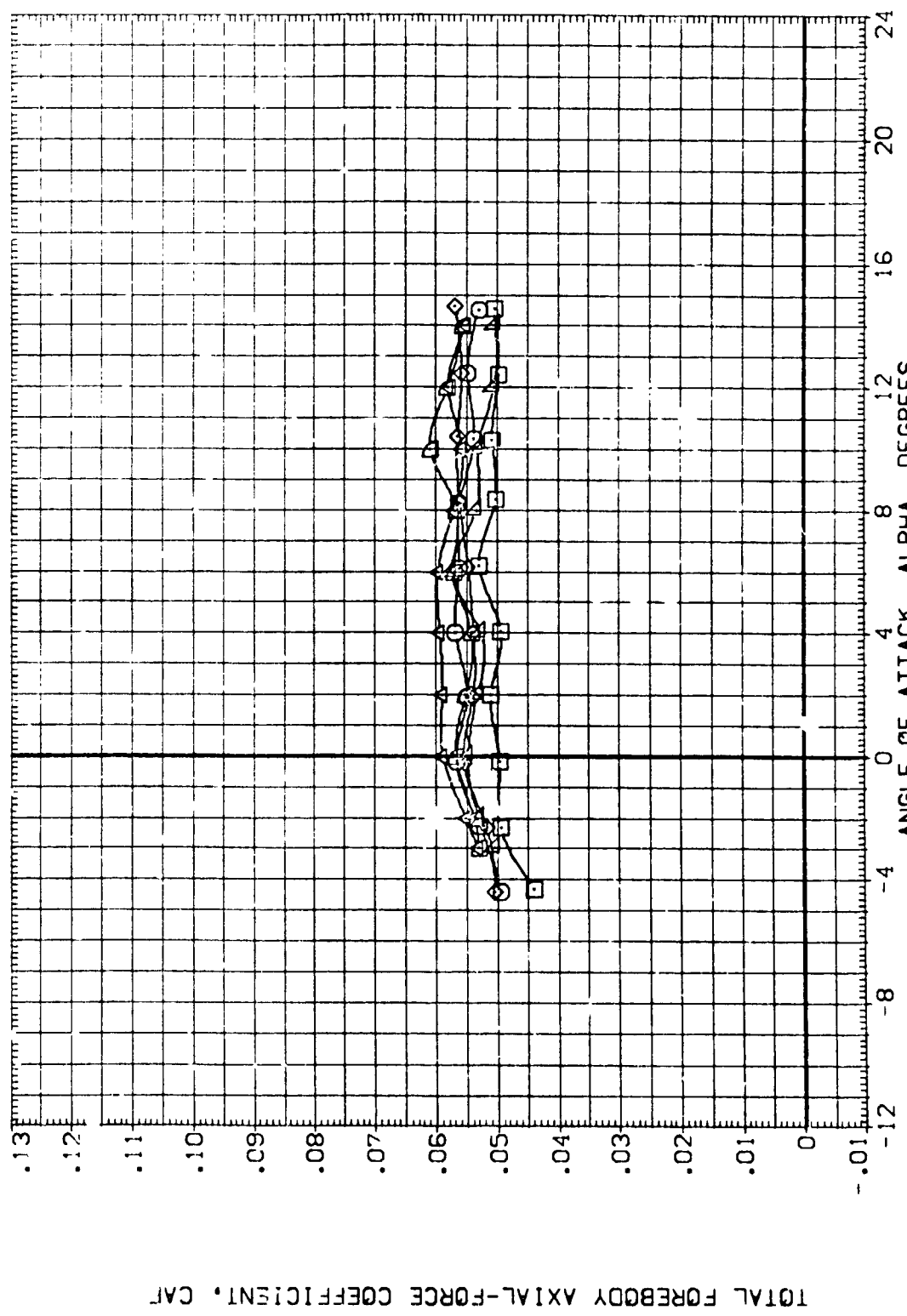


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

CDMACH = .90



DATA SET SYMBOL CONFIGURATION DESCRIPTION

{ 3E:R019 } ARC 66-709 CAS9 0A11A-(N24)

{ 3E:R022 } DATA NOT AVAILABLE

{ 3E:R023 } DATA NOT AVAILABLE

{ 3E:R019 } ARC 66-709 CAS9 011A-N24 (ADJUSTED FOR TARES)

{ 3E:R022 } DATA NOT AVAILABLE

{ 3E:R023 } DATA NOT AVAILABLE

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

REFERENCE INFORMATION

SREF .6053 59. FT.

LREF .5935 FT.

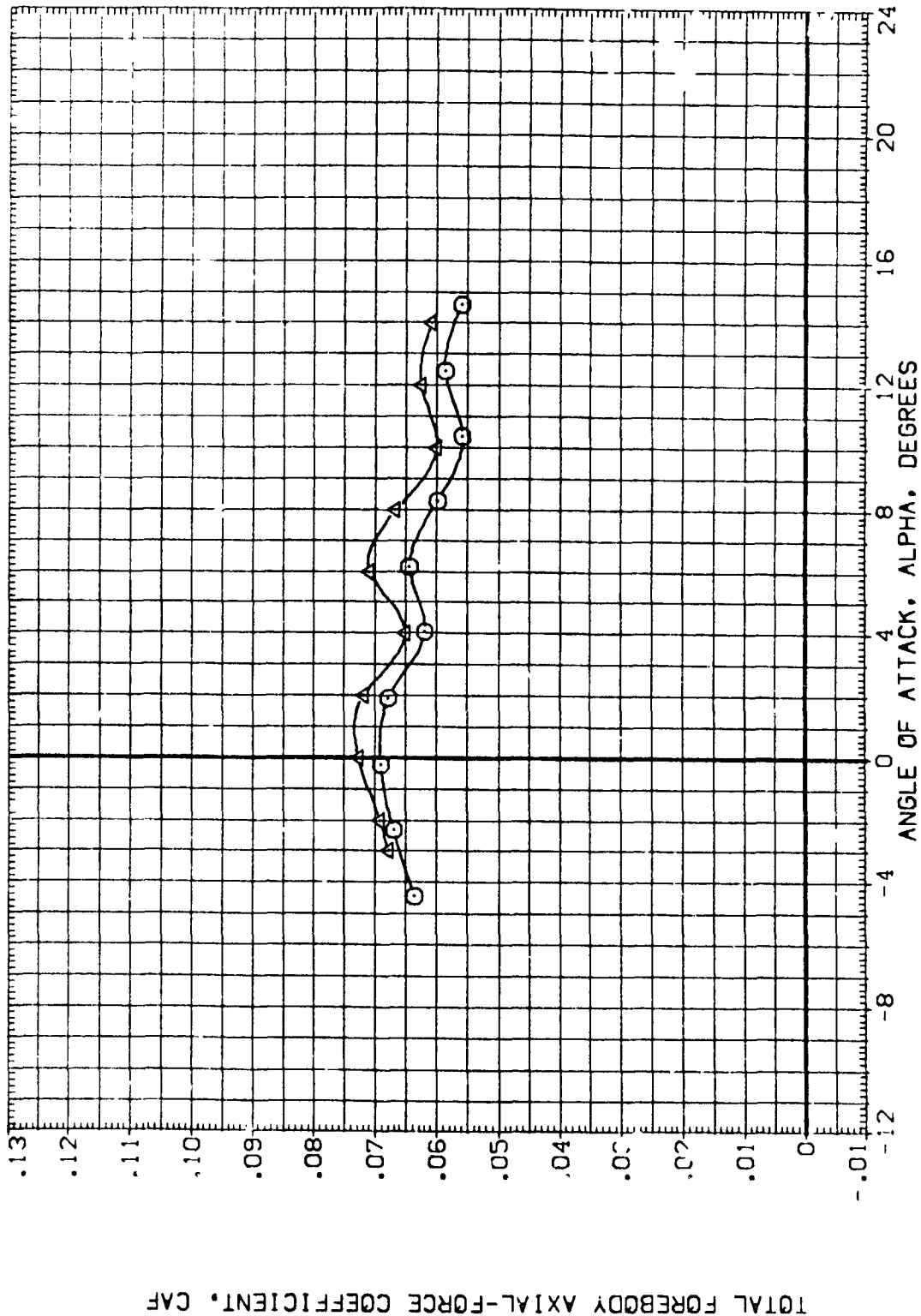
BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

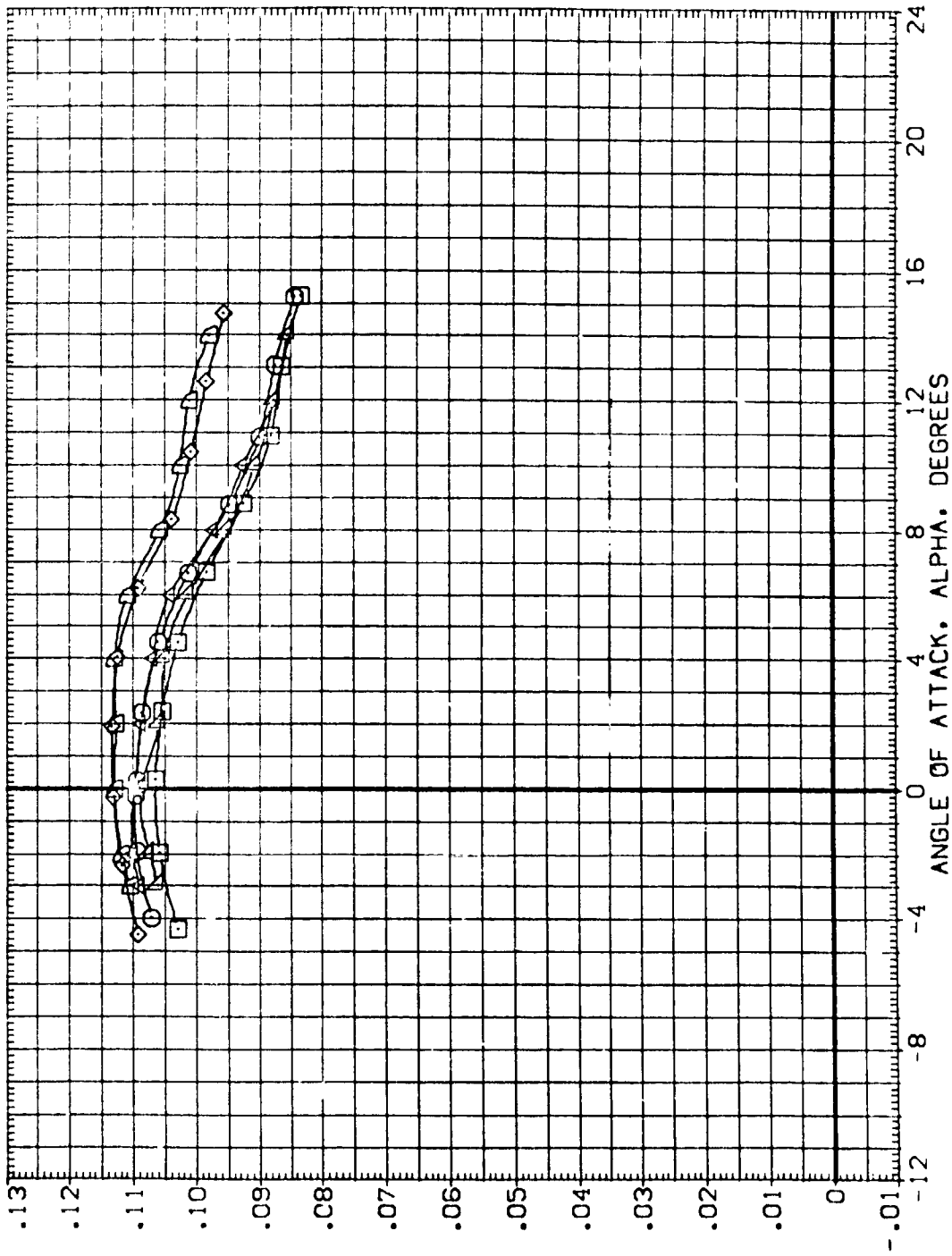


TOTAL FOREBODY AXIAL-FORCE COEFFICIENT, CAF

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .95

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BDF LAP	REFERENCE INFORMATION
(GFR019)	ARC 66-709 CA59 O11A-(N24)	.000	.000	-11.700	SREF .6053 SQ.FT.
(GFR022)	ARC 66-709 CA59 O11A-(N24)	.000	.000	.000	LREF .5935 F.
(GFR023)	ARC 66-709 CA59 O11A-(N24)	.000	.000	16.300	BREF 1.1710 F.
(GFR019)	ARC 66-709 CA59 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(GFR022)	ARC 66-709 CA59 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	YMRP .0000 IN.
(GFR023)	ARC 66-709 CA59 O11A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -3.150 IN.
					SCALE .0150



TOTAL FOREBODY AXIAL-FORCE COEFFICIENT, CAF

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.20



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (GER019) ARC 66-709 OAS9 O111A-(N24)
 (GER022) ARC 66-709 OAS9 O111A-(N24)
 (GER023) ARC 66-709 OAS9 O111A-(N24)
 (3ER019) ARC 66-709 OAS9 O111A-(N24)
 (3ER022) ARC 66-709 OAS9 O111A-(N24)
 (3ER023) DATA NOT AVAILABLE
 ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)
 O111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 16.300

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

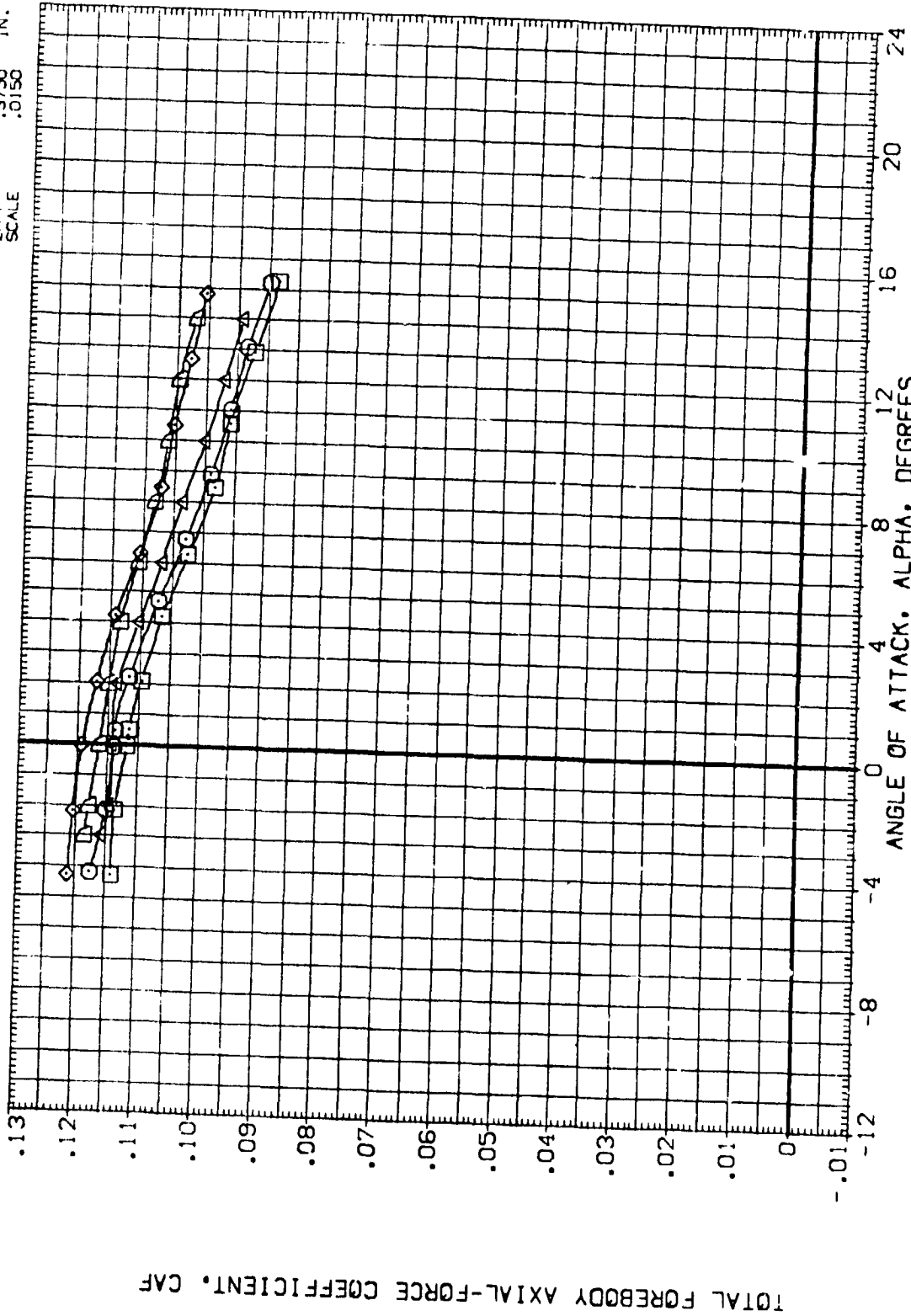


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH = 1.50

REFERENCE INFORMATION

SREF	.6053	SO.FI.
LREF	.5935	FT.
BREF	1.1717	FT. IN.
XMRP	12.6255	IN.
ZMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

BETA

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

ELEVON

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

BOFLAP

-11.700
.000
16.300
-11.700
.000
16.300

CONFIGURATION DESCRIPTION

ARC 66-708	DA59	O111A-(N24)
ARC 66-709	DA59	O111A-(N24)
ARC 66-709	DA59	O111A-(N24)
ARC 66-709	DA59	O111A-N24 (ADJUSTED FOR TARES)
ARC 66-709	DA59	O111A-N24 (ADJUSTED FOR TARES)
ARC 66-709	DA59	O111A-N24 (ADJUSTED FOR TARES)

DATA SET SYMBOL

(GER019)
(GER022)
(GER023)
(ZER019)
(ZER022)
(ZER023)

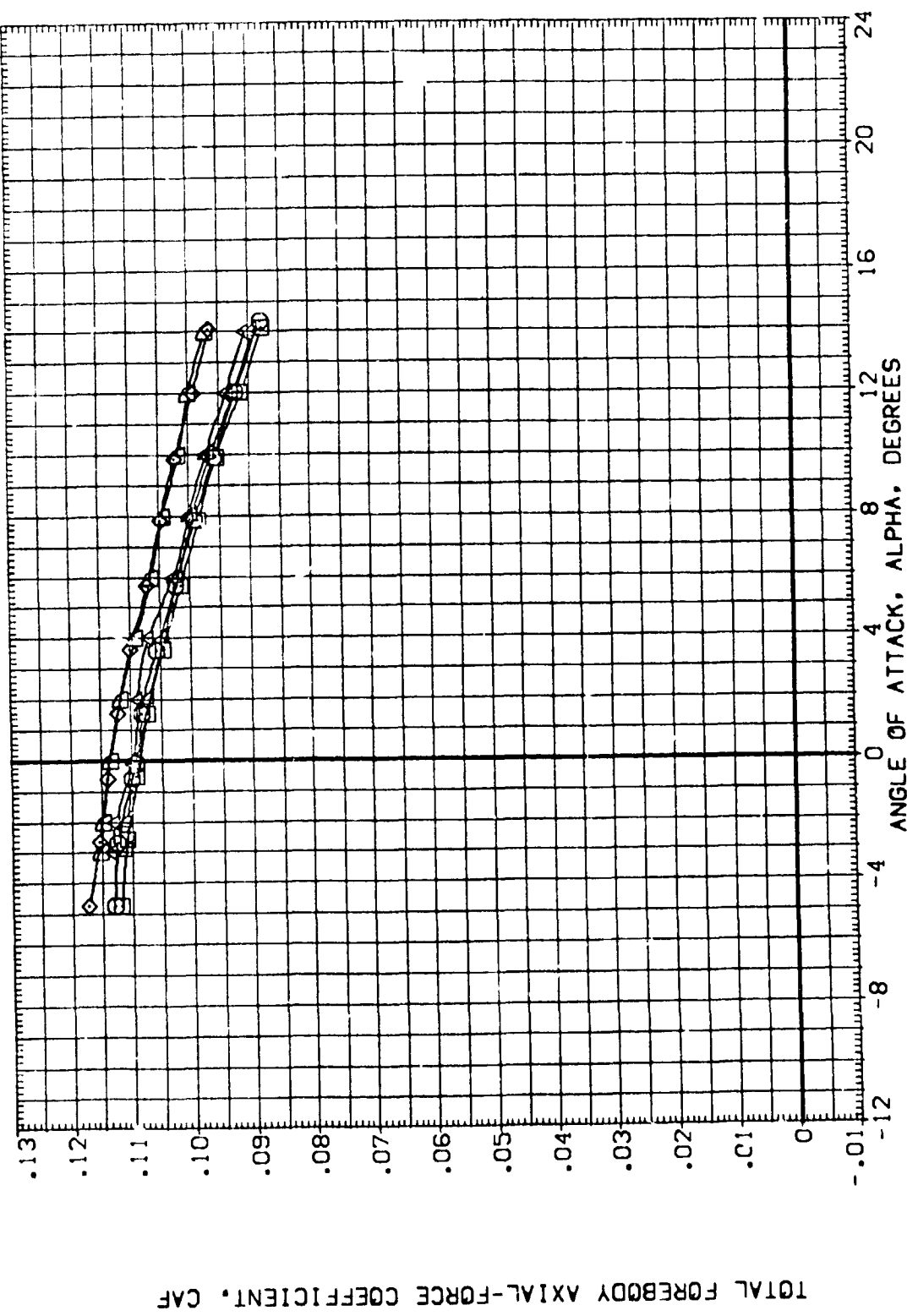


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(1)MACH = 2.00



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(GER019)	ARC 66-709 DA59	CA11A-(N24)
(GER022)	ARC 66-709 DA59	CA11A-(N24)
(GER023)	ARC 66-709 DA59	CA11A-(N24)
(ZER019)	ARC 66-709 DA59	O11A-N24 (ADJUSTED FOR TARES)
(ZER022)	ARC 66-709 DA59	O11A-N24 (ADJUSTED FOR TARES)
(ZER023)	ARC 66-709 DA59	O11A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	.000	.000
.000	.000	16.300
.000	.000	-11.700
.000	.000	.000
.000	.000	16.300

REFERENCE INFORMATION

SREF	.6053	50.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

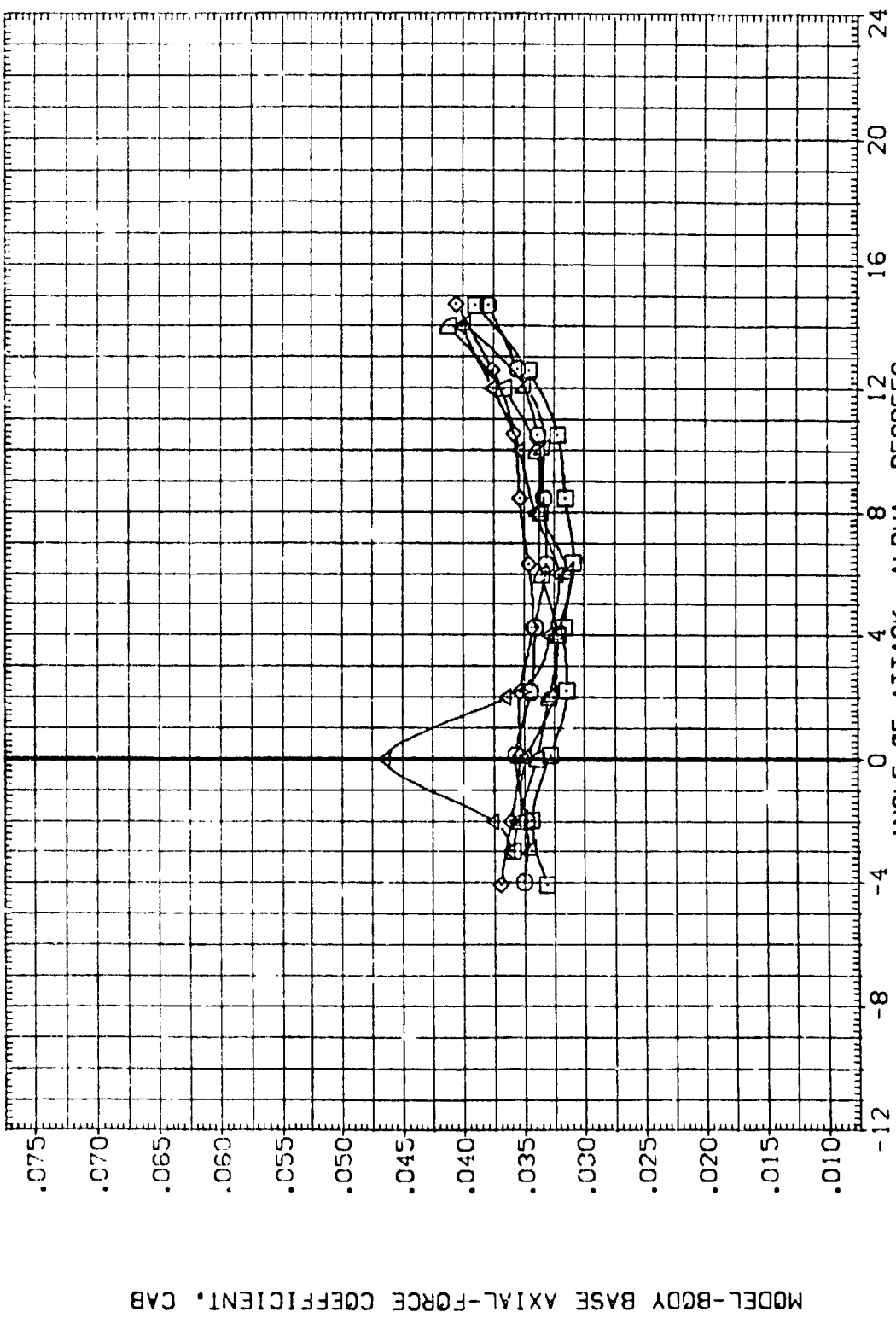


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(A)MACH = .60

MODEL-BODY BASE AXIAL-FORCE COEFFICIENT, CAB

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVATION	BDF LAP	REFERENCE INFORMATION
(3E019)	ARC 66-709 CAS9 011A-(N24)	.000	.000	-11.700	SREF .6053 SQ.FT.
(3E027)	ARC 66-709 CAS9 011A-(N24)	.000	.000	.000	LREF .5935 FT.
(3E023)	ARC 66-709 CAS9 011A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(3E019)	ARC 66-709 CAS9 011A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(3E022)	DATA NOT AVAILABLE	.000	.000	.000	YMRP .0000 IN.
(3E023)	ARC 66-709 CAS9 011A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

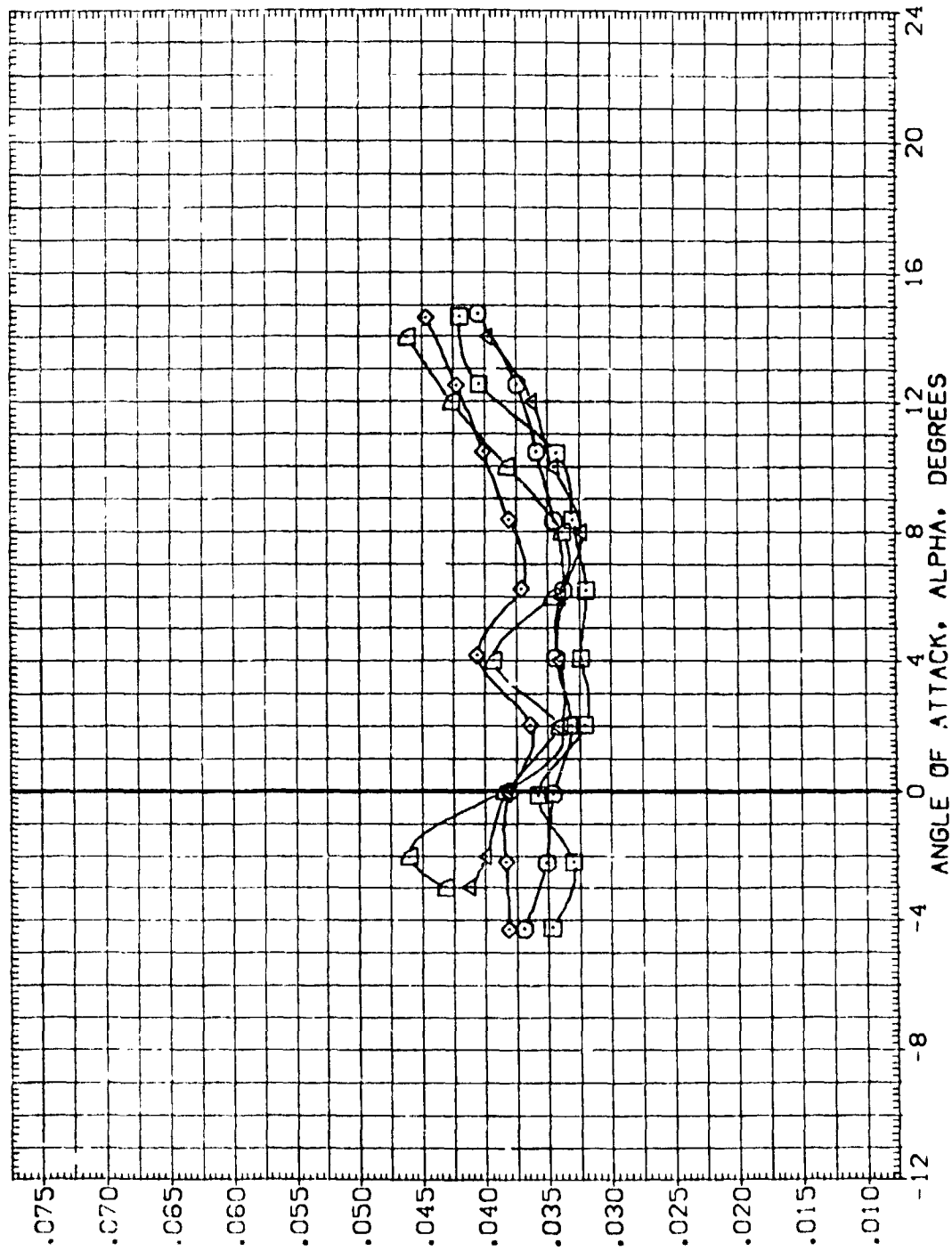


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(06R019) ARC 66-709 OAS9 0111A-N24
 (06R022) DATA NOT AVAILABLE
 (06R023) DATA NOT AVAILABLE
 (06R019) ARC 66-709 OAS9 0111A-N24 (ADJUSTED FOR TARES)
 (06R022) DATA NOT AVAILABLE
 (06R023) DATA NOT AVAILABLE

BETA ELEVON BOFLAP

.000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

REFERENCE INFORMATION

SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.5265 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

MODEL-BODY BASE AXIAL-FORCE COEFFICIENT, CAB

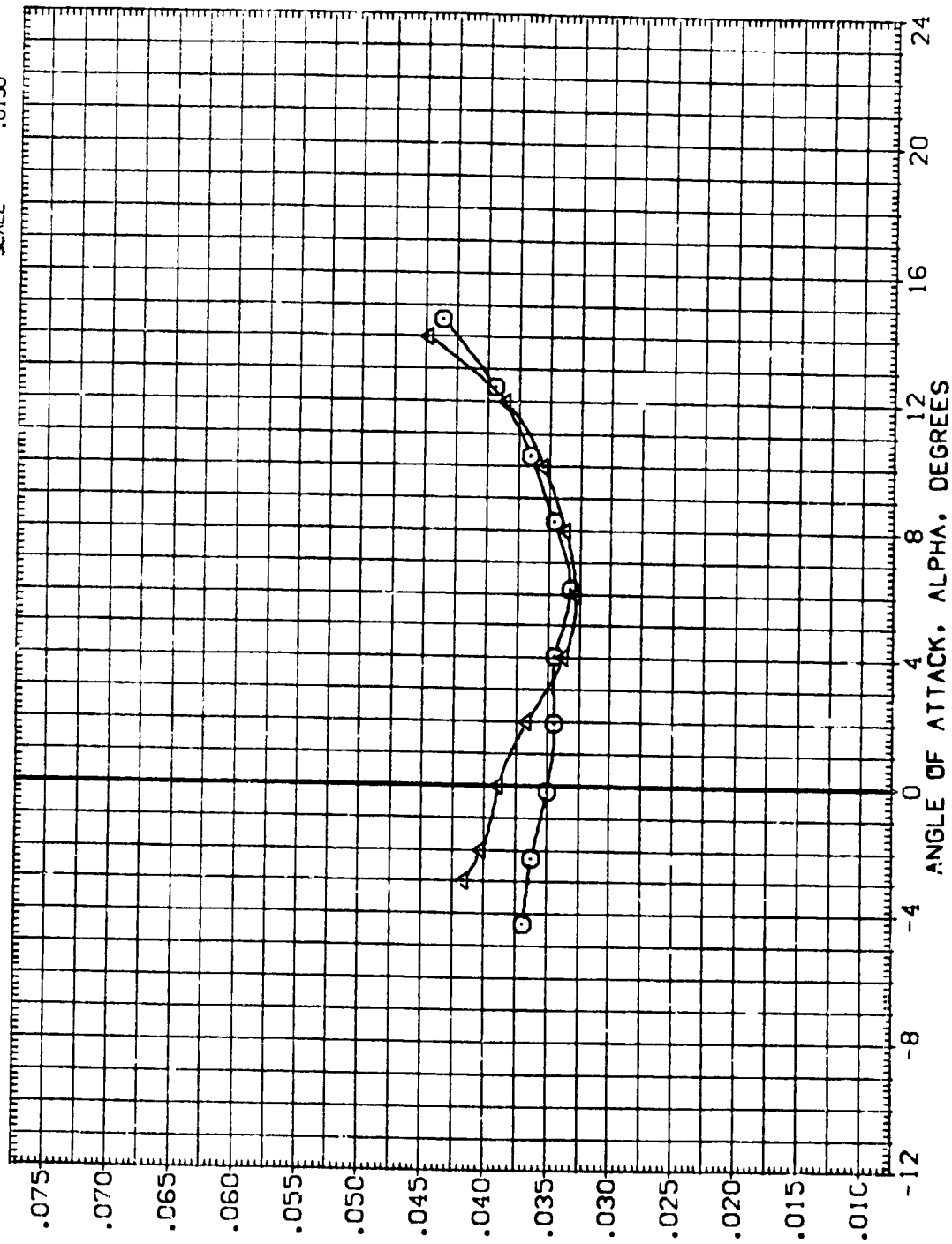


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(O)MACH = .85



MODEL-BODY BASE AXIAL-FORCE COEFFICIENT, C_{AB}

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BOFLAP	REFERENCE INFORMATION
{ 3E:RO19 }	ARC 66-709 CAS9 0111A-(N24)	.000	.000	-11.700	SREF .6053 SQ.FT.
{ 3E:RO22 }	ARC 66-709 CAS9 0111A-(N24)	.000	.000	.000	LREF .5876 FT.
{ 3E:RO23 }	ARC 66-709 CAS9 0111A-(N24)	.000	.000	.000	BREF 1.1710 FT.
{ 3E:RO19 }	ARC 66-709 CAS9 0111A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
{ 3E:RO22 }	ARC 66-709 CAS9 0111A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	YMRP .0000 IN.
{ 3E:RO23 }	ARC 66-709 CAS9 0111A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	ZMRP -.3750 IN.
					SCALE .0150

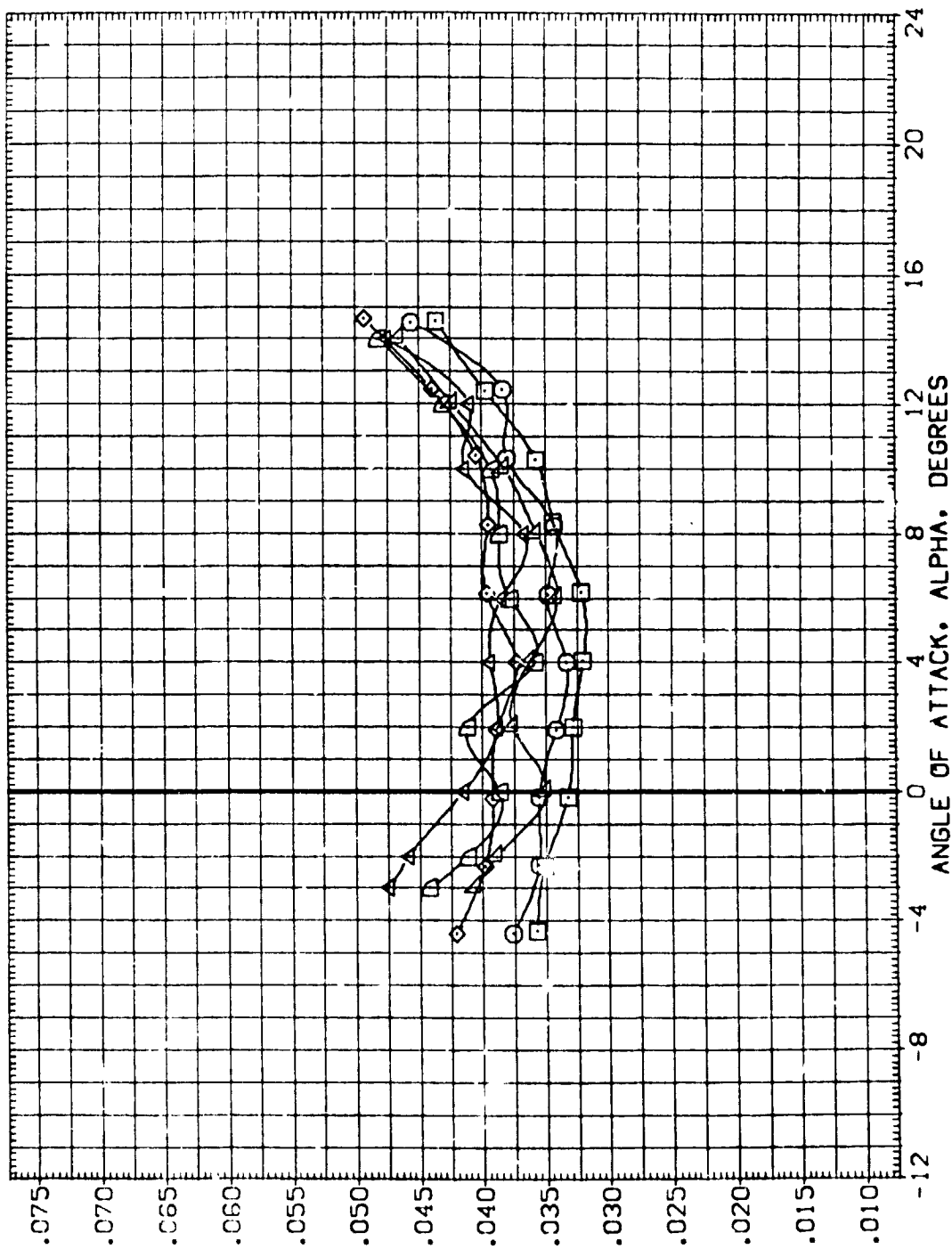


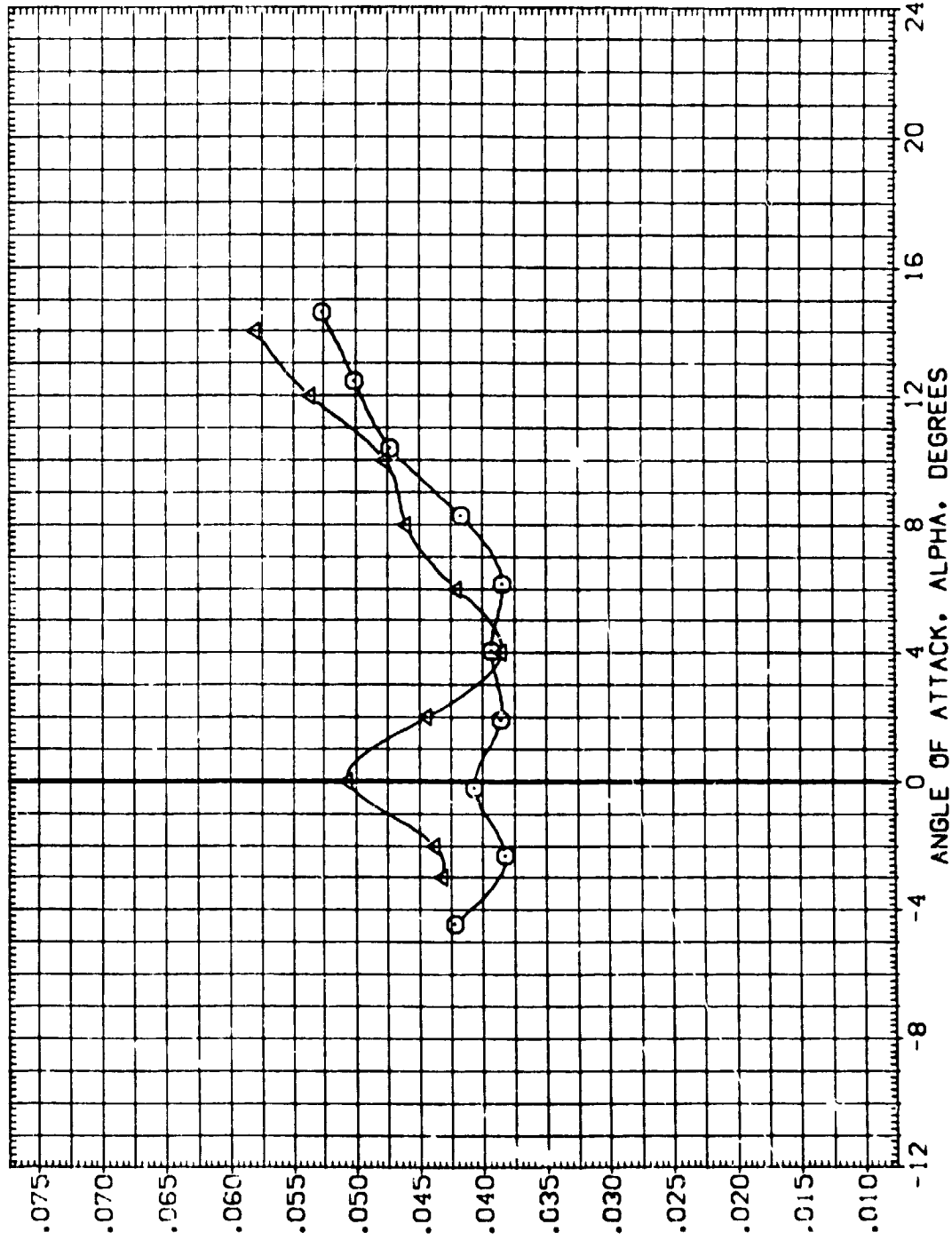
FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(C_E)MACH = .90

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (ZER019) ARC 66-709 (AS9 D111A-N24)
 (ZER022) DATA NOT AVAILABLE
 (ZER023) DATA NOT AVAILABLE
 (ZER019) ARC 66-709 (AS9 D111A-N24 (ADJUSTED FOR TARES)
 (ZER022) DATA NOT AVAILABLE
 (ZER023) DATA NOT AVAILABLE



MODEL-BODY BASE AXIAL-FORCE COEFFICIENT, CAB

FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(F)MACH = .95



MODEL-3BODY BASE AXIAL-FORCE COEFFICIENT, CAB

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BETA	ELEVON	BDFLAP	REFERENCE INFORMATION
(GE R019)	ARC 66-709 CAS9 0111A-N24	.000	.000	-11.700	SREF .6053 50. FT.
(GE R022)	ARC 66-709 CAS9 0111A-N24	.000	.000	.000	LREF .5935 FT.
(GE R023)	ARC 66-709 CAS9 0111A-N24	.000	.000	16.300	BREF 1.1710 FT.
(X R019)	ARC 66-709 CAS9 0111A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6755 IN.
(X R022)	ARC 66-709 CAS9 0111A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	YMRP .0000 IN.
(X R023)	ARC 66-709 CAS9 0111A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

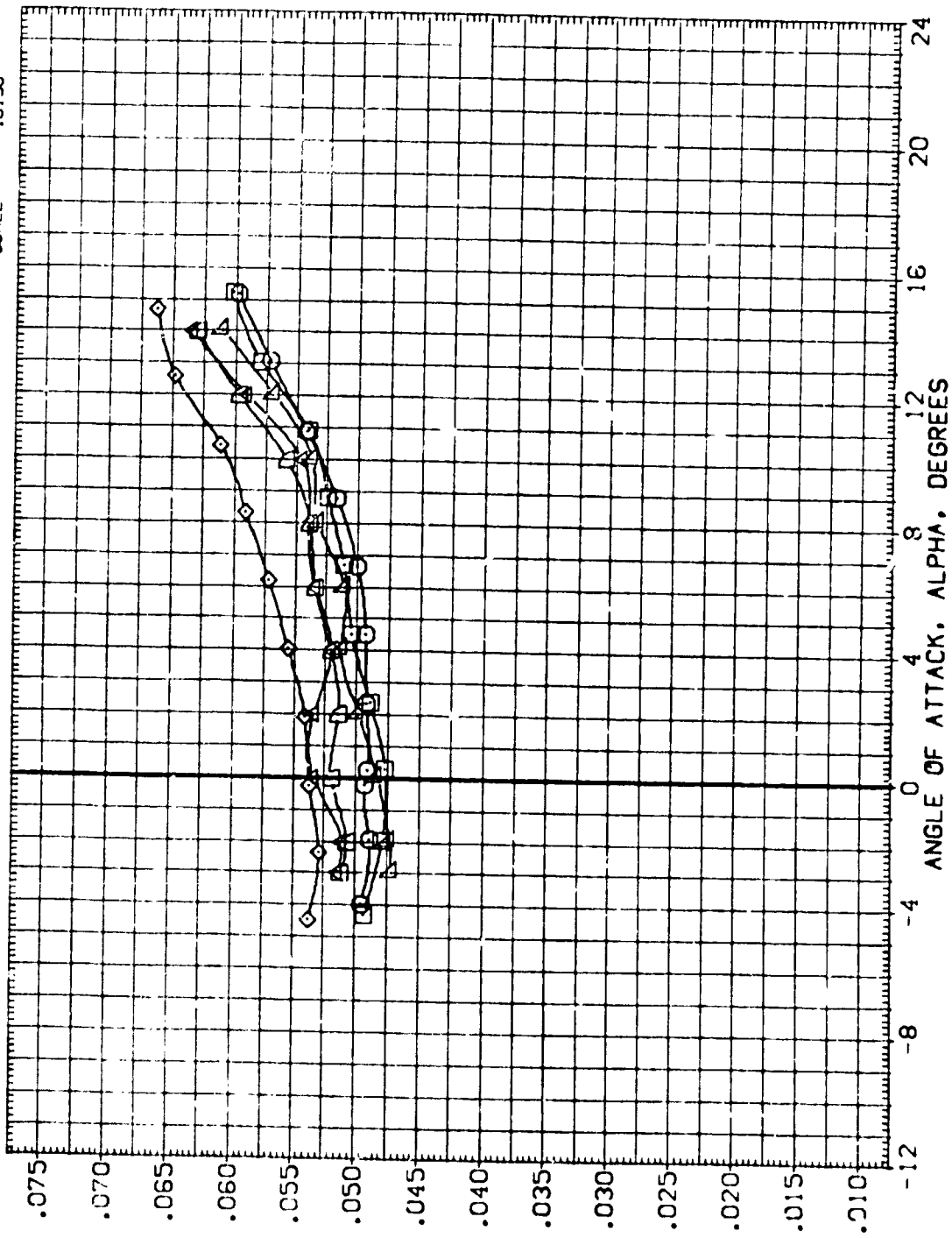


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.20

DATA SET SYMBOL
 (3E.R019) □
 (3E.R022) ○
 (3E.R023) △
 (3E.R019) ◇
 (3E.R022) ☆

CONFIGURATION DESCRIPTION
 ARC 66-709 CAS9 011A-N24
 ARC 66-709 CAS9 011A-N24
 ARC 66-709 CAS9 011A-N24
 ARC 66-709 CAS9 011A-N24
 DATA NOT AVAILABLE
 ARC 66-709 CAS9 011A-N24 (ADJUSTED FOR TARES)

BETA
 .000
 .000
 .000
 .000
 .000
 .000
 .000

ELEVATION
 .000
 .000
 .000
 .000
 .000
 .000
 .000

BOFLAP
 -11.700
 .000
 16.300
 -11.700
 .000
 16.300

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

MODEL-BODY BASE AXIAL-FORCE COEFFICIENT, CAB

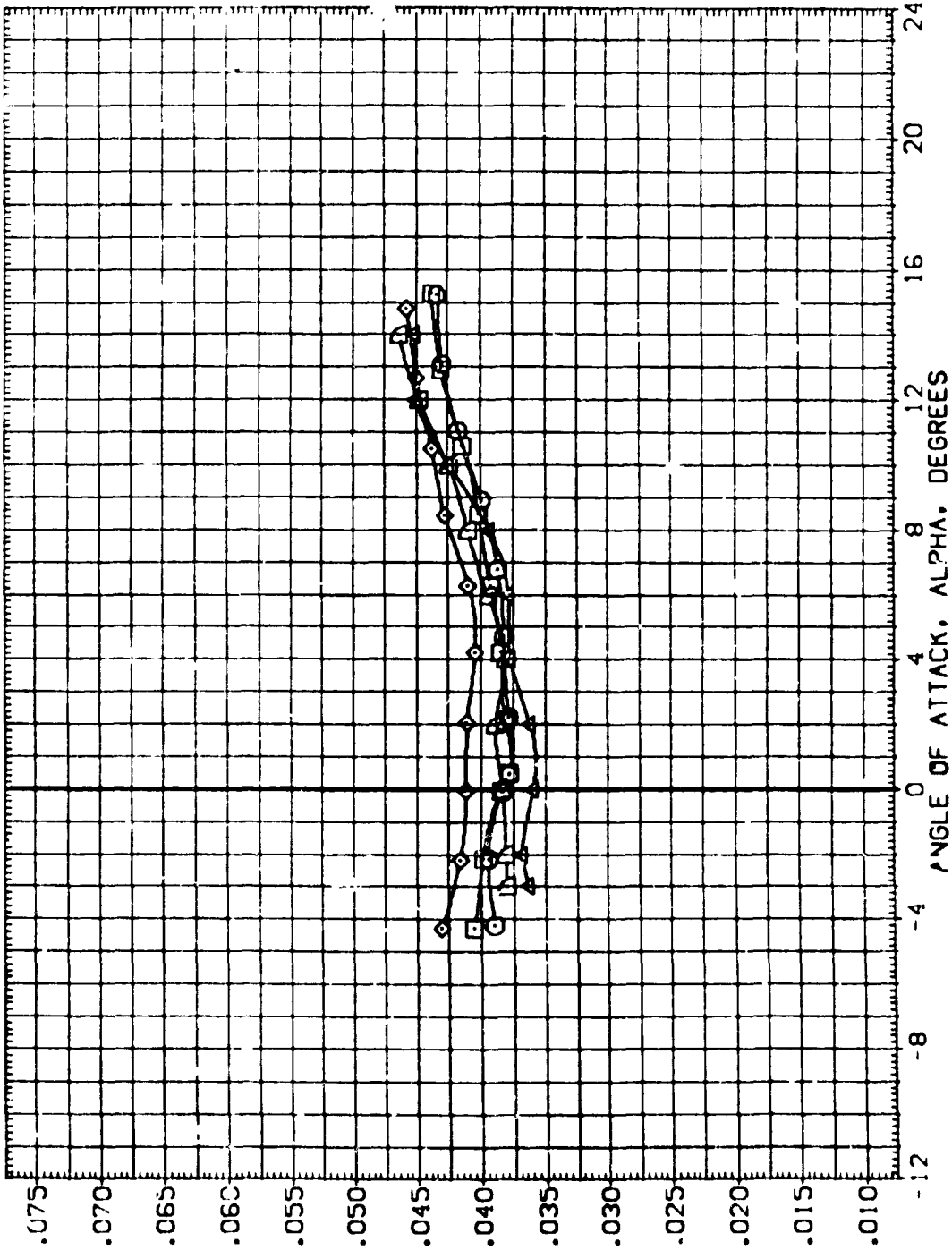


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH = 1.50



DATA SET SYMBOL

(GE0019)	ARC 66-705	QAS9	0111A-(N24)
(GE0022)	ARC 66-709	QAS9	0111A-(N24)
(GE0023)	ARC 66-709	QAS9	0111A-(N24)
(GE0019)	ARC 66-709	QAS9	011A-N24 (ADJUSTED FOR TARES)
(GE0022)	ARC 66-709	QAS9	011A-N24 (ADJUSTED FOR TARES)
(GE0023)	ARC 66-709	QAS9	011A-N24 (ADJUSTED FOR TARES)

CONFIGURATION DESCRIPTION

ARC 66-705	QAS9	0111A-(N24)
ARC 66-709	QAS9	0111A-(N24)
ARC 66-709	QAS9	0111A-(N24)
ARC 66-709	QAS9	011A-N24 (ADJUSTED FOR TARES)
ARC 66-709	QAS9	011A-N24 (ADJUSTED FOR TARES)
ARC 66-709	QAS9	011A-N24 (ADJUSTED FOR TARES)

BETA

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

ELEVON

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

BOFLAP

-11.700
.000
16.300
-11.700
.000
16.300

REFERENCE INFORMATION

SREF	.6053	SO, FT.
LREF	.5975	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	.3750	IN.
SCALE	.0150	

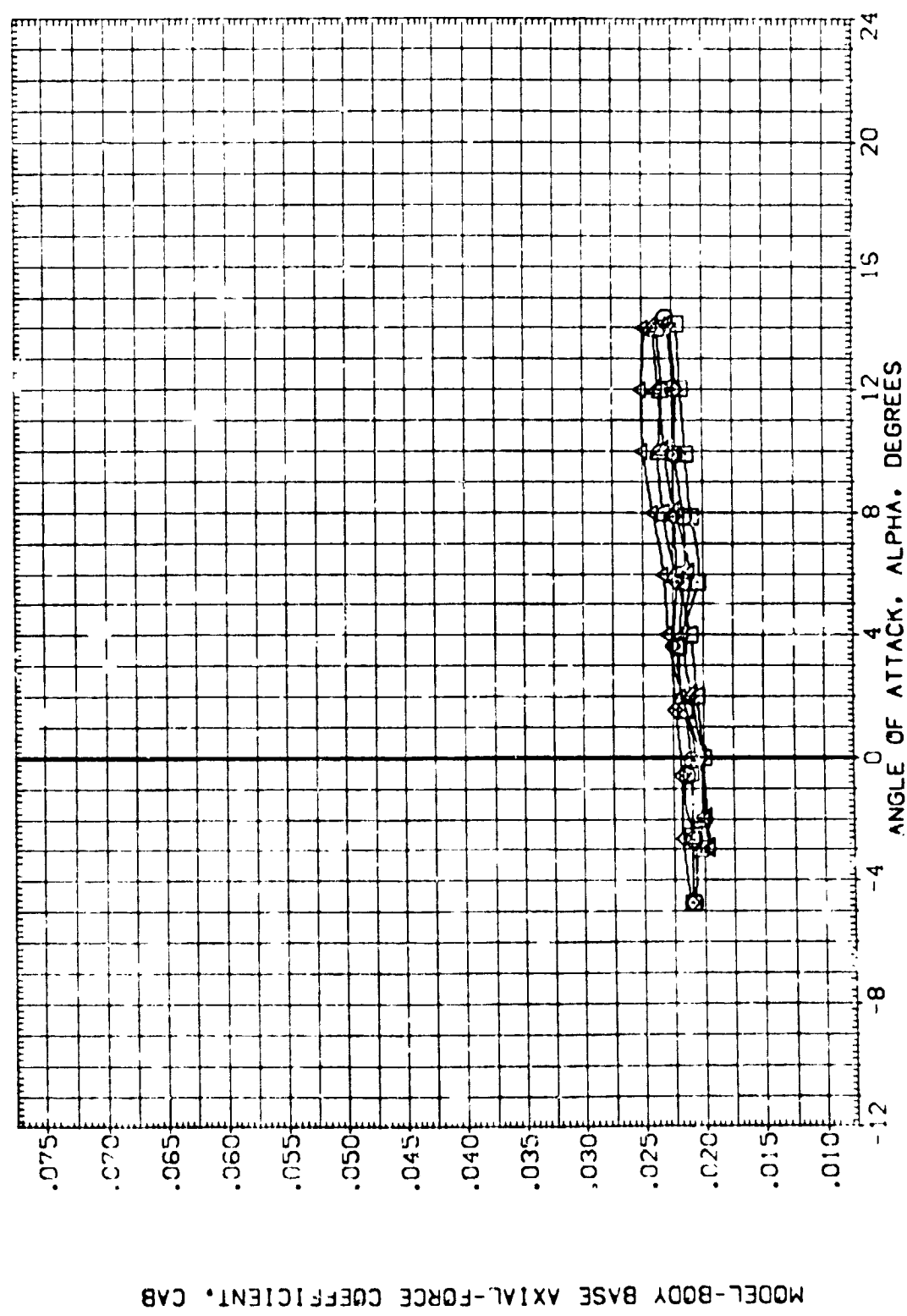


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

() MACH = 2.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(BERO19) ARC 66-709 0A59 011A-(N24)

(BERO22) ARC 66-709 0A59 011A-(N24)

(BERO23) ARC 66-709 0A59 011A-(N24)

(ZERO19) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

(ZERO22) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

(ZERO23) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

REFERENCE INFORMATION

SREF .6053 50.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

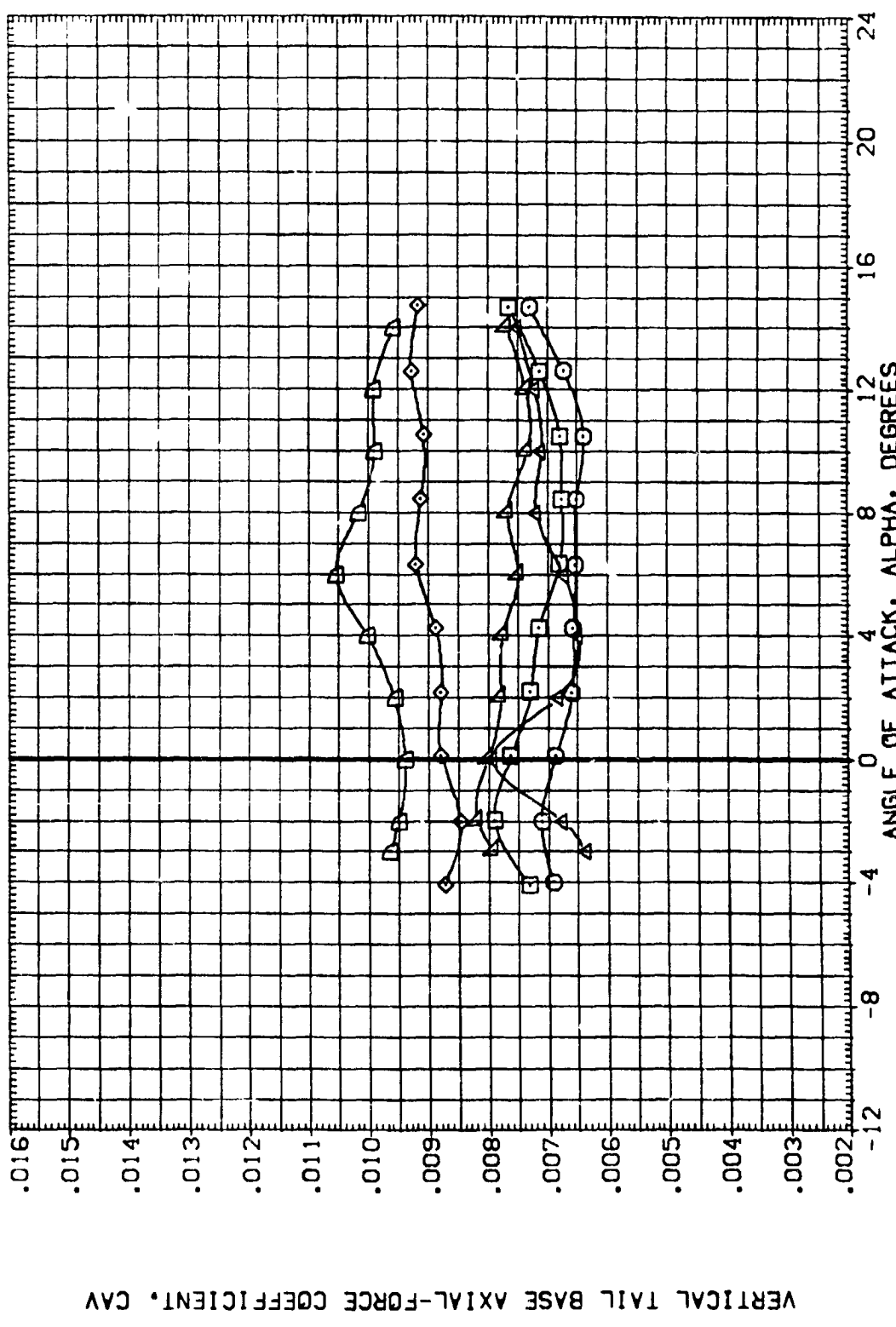


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES
 (A)MACH = .60



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(BER019) DATA NOT AVAILABLE

(BER022) ARC 66-709 0A59 0A11A-(N24)

(BER023) ARC 66-709 0A59 0A11A-(N24)

(ZER019) DATA NOT AVAILABLE

(ZER022) DATA NOT AVAILABLE

(ZER023) ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON SOFLAP

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

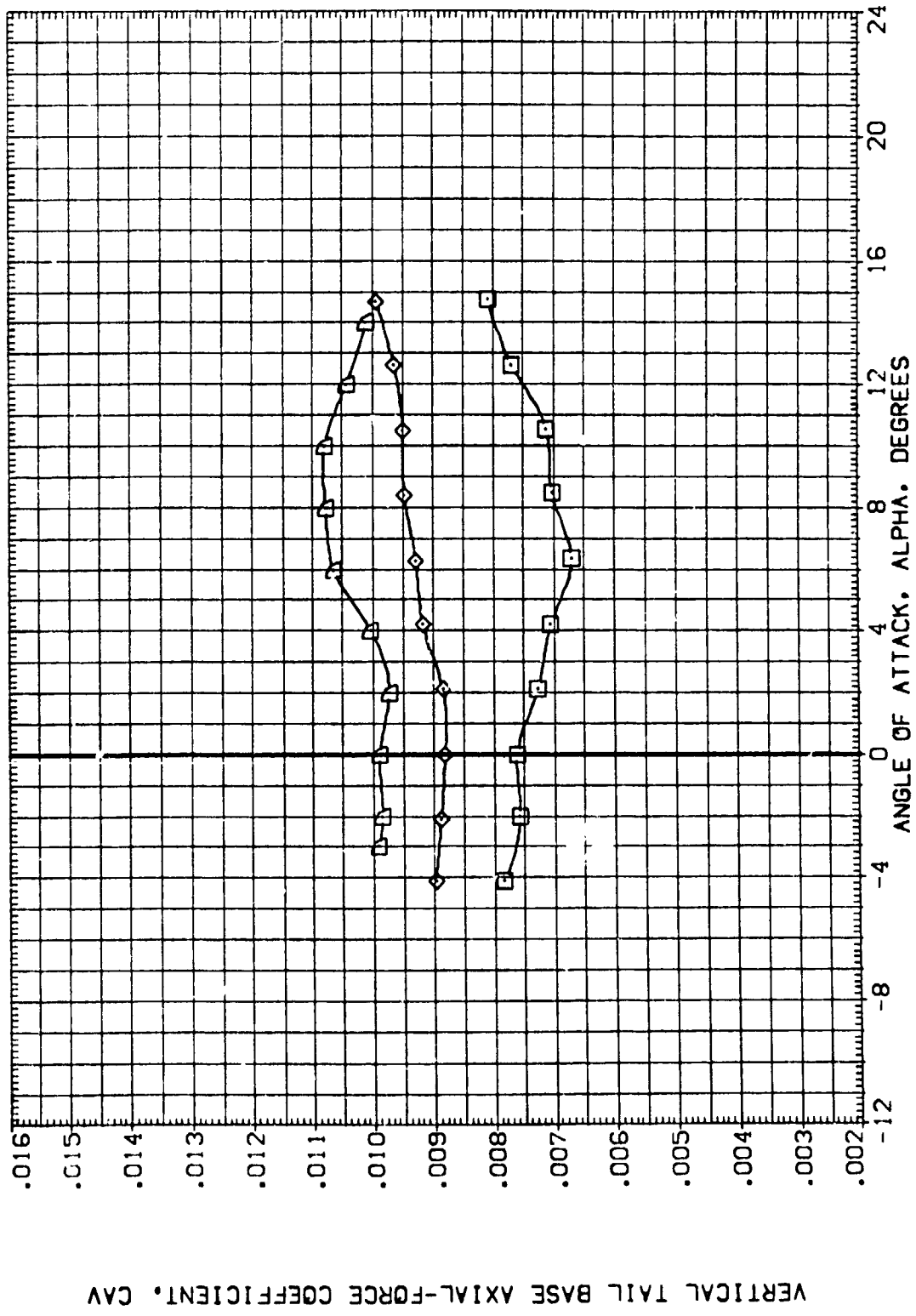


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(B)MACH = .70

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (BER019) ARC 66-709 DASS 011A-(N24)
 (BER022) ARC 66-709 DASS 011A-(N24)
 (BER023) ARC 66-709 DASS 011A-(N24)
 (ZER019) ARC 66-709 DASS 011A-(N24) (ADJUSTED FOR TARES)
 (ZER022) DATA NOT AVAILABLE
 (ZER023) ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 .000 -11.700
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 -11.700
 .000 .000 16.300

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BRREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

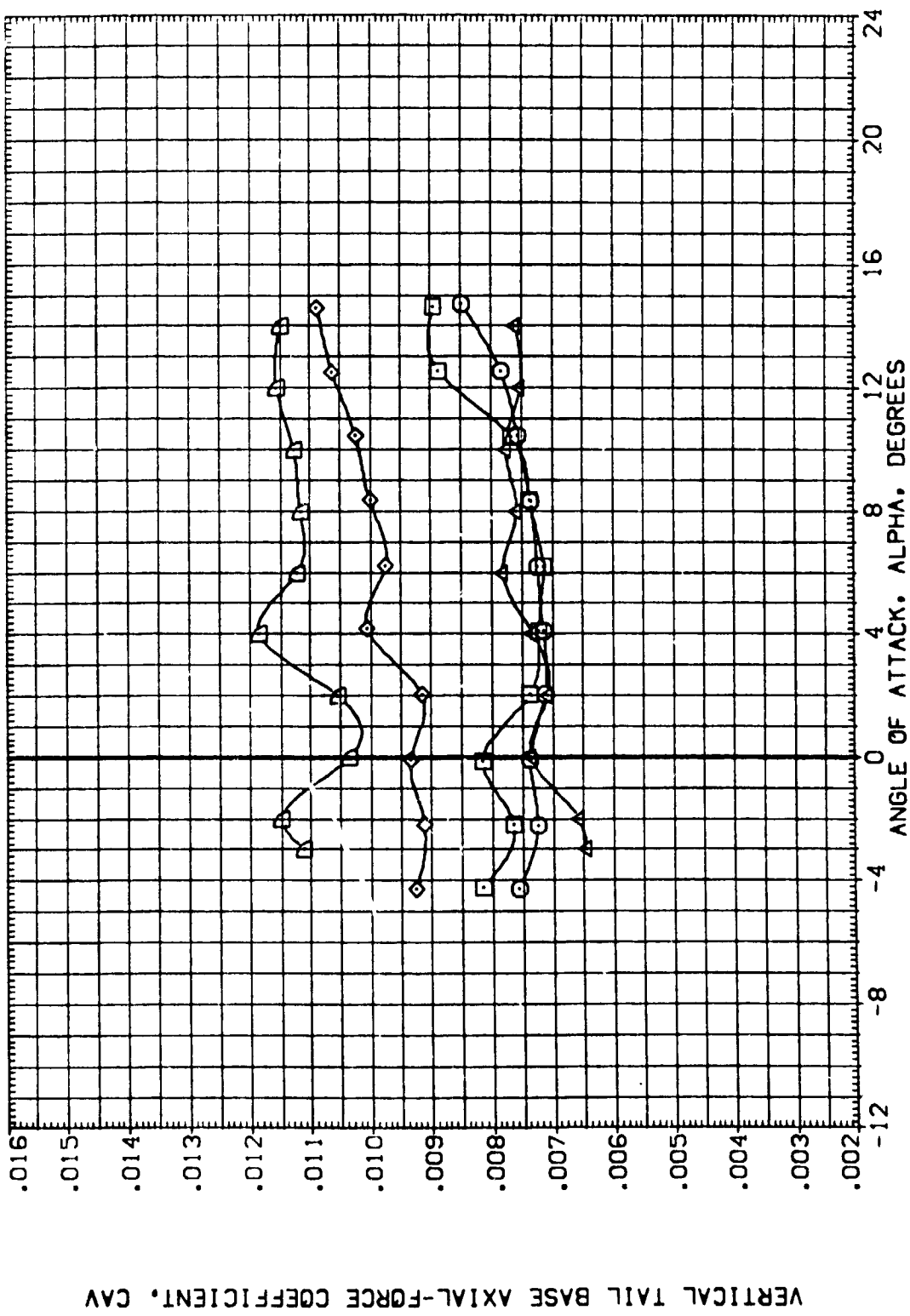
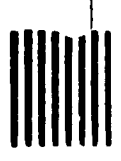


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(BER019) ARC 66-709 OASS DA11A-(N24)
 (BER022) DATA NOT AVAILABLE
 (BER023) DATA NOT AVAILABLE
 (ZER019) ARC 66-709 OASS 011A-N24 (ADJUSTED FOR TARES)
 (ZER022) DATA NOT AVAILABLE
 (ZER023) DATA NOT AVAILABLE

BETA ELEVON BOFLAP

.000 .000 -11.700
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 16.300

REFERENCE INFORMATION

SREF .6053 SQ.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

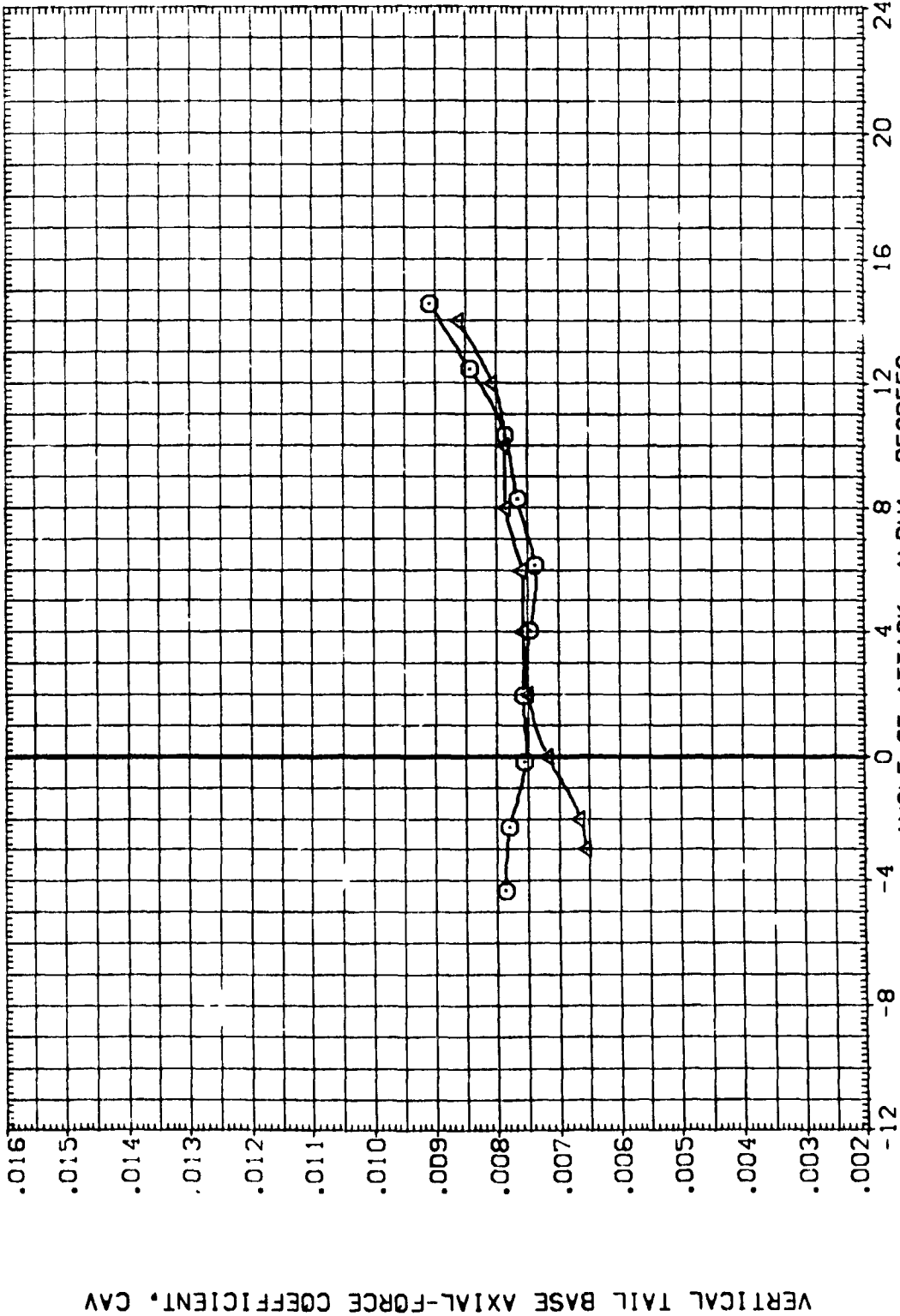


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(0)MACH = .85

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(BFR019) ARC 66-709 QAS9 0111A-N24

(BFR022) DATA NOT AVAILABLE

(BFR023) DATA NOT AVAILABLE

(ZFR019) ARC 66-709 QAS9 0111A-N24 (ADJUSTED FOR TARES)

(ZFR022) DATA NOT AVAILABLE

(ZFR023) DATA NOT AVAILABLE

BETA ELEVON BDFLAP

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5935 FT.

BREF 1.1710 FT.

YMRP 12.6255 IN.

ZMRP .0000 IN.

SCALE -.3750 IN.

 .0150

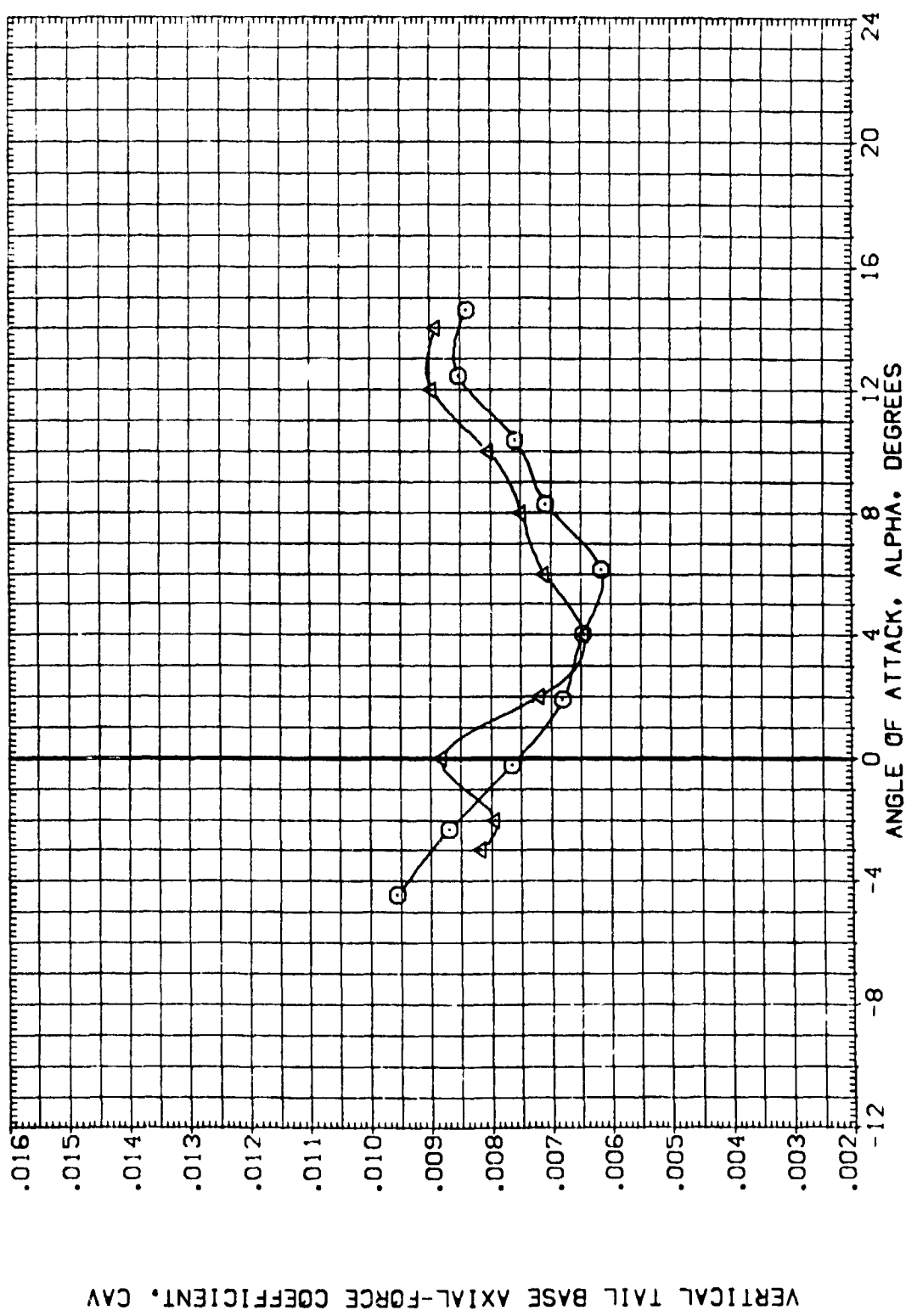


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(F)MACH = .95

DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BOFLAP REFERENCE INFORMATION

(BER019) ARC 66-709 DASS 011A-(N24) .000 .000 -11.700 SREF .5053 50.FT.

(BER022) ARC 66-709 DASS 011A-(N24) .000 .000 -11.700 LREF .5935 FT.

(BER023) ARC 66-709 DASS 011A-(N24) .000 .000 16.300 BREF 1.1710 FT.

(ZER019) ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES) .000 .000 -11.700 XMRP 12.6255 IN.

(ZER022) ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES) .000 .000 -11.700 YMRP .0000 IN.

(ZER023) ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES) .000 .000 16.300 ZMRP -.3750 IN.

SCALE .0150

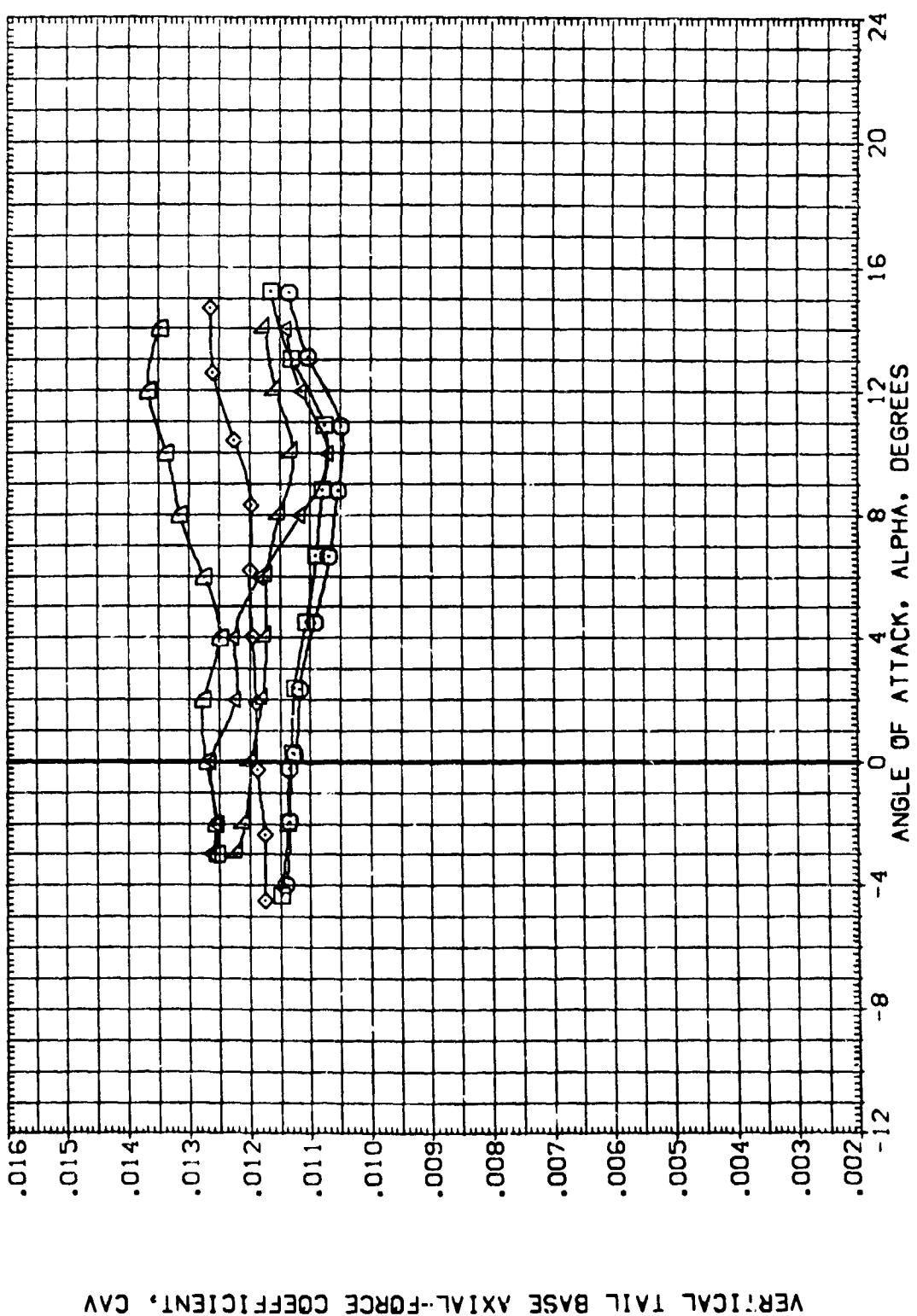


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.20



DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVATION BDF LAP REFERENCE INFORMATION

(BER019)	ARC 66-709 0A59 0A11A-(N24)	.000	.000	-11.700	SREF .6053 SQ.FT.
(BER022)	ARC 66-709 0A59 0A11A-(N24)	.000	.000	.000	LREF .5936 FT.
(BER023)	ARC 66-709 0A59 0A11A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(ZER019)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(ZER022)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	.000	YMRP .0000 IN.
(ZER023)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.

SCALE .0150

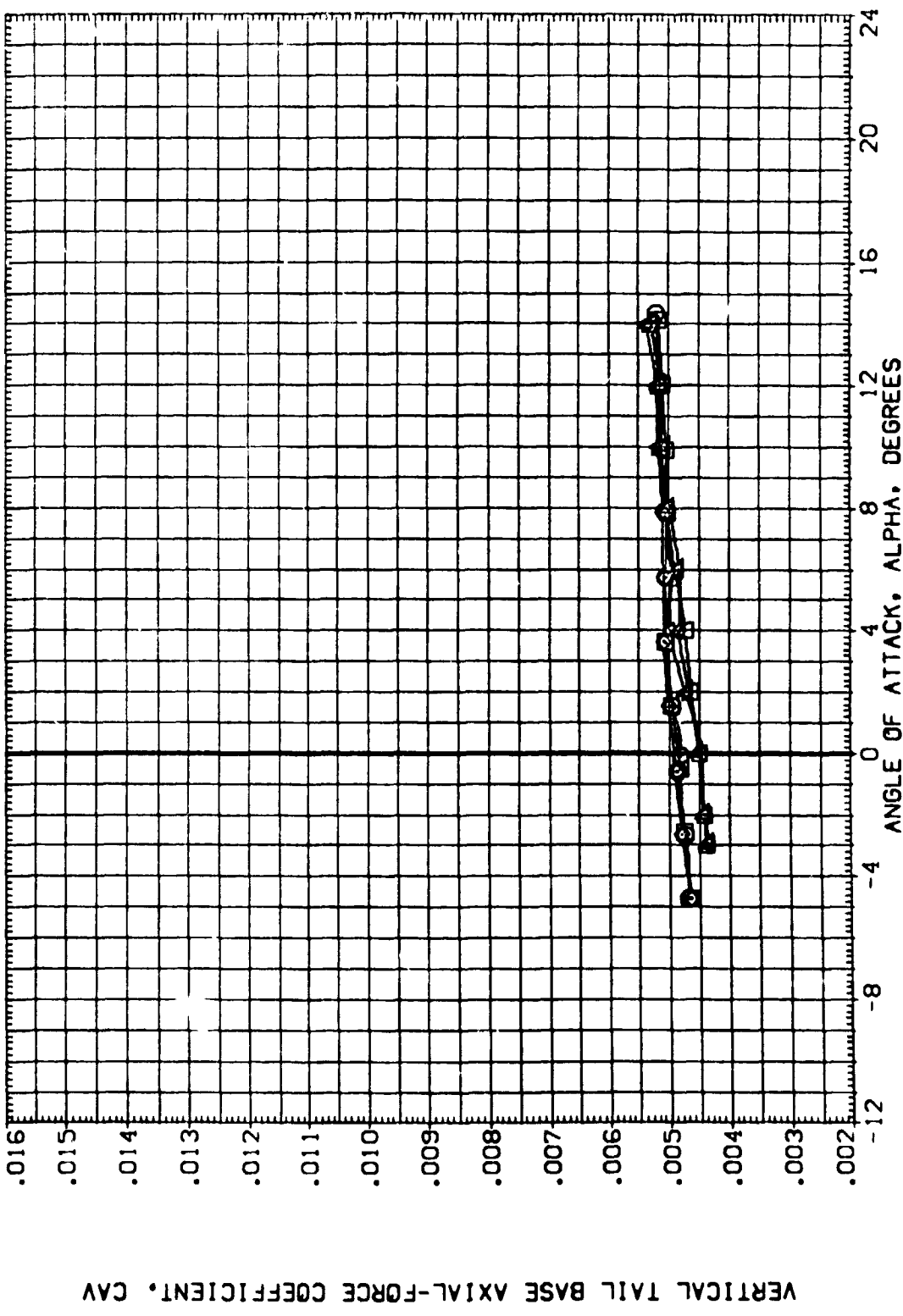


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(1)MACH = 2.00



REFERENCE INFORMATION ON

SREF	.6053	ST.FT.
LREF	.5935	F.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

BETA	.000	ELEVON	.000	BOFLAP	-11.700
	.000		.000		.000
	.000		.000		16.300
	.000		.000		-11.700
	.000		.000		.000
	.000		.000		16.300

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(BER019)	ARC 66-709 OA59 CA11A-(N24)
(BER022)	ARC 66-709 OA59 CA11A-(N24)
(BER023)	ARC 66-709 OA59 CA11A-(N24)
(ZER019)	ARC 66-709 OA59 O11A-N24 (ADJUSTED FOR TARES)
(ZER022)	ARC 66-709 OA59 O11A-N24 (ADJUSTED FOR TARES)
(ZER023)	ARC 66-709 OA59 O11A-N24 (ADJUSTED FOR TARES)

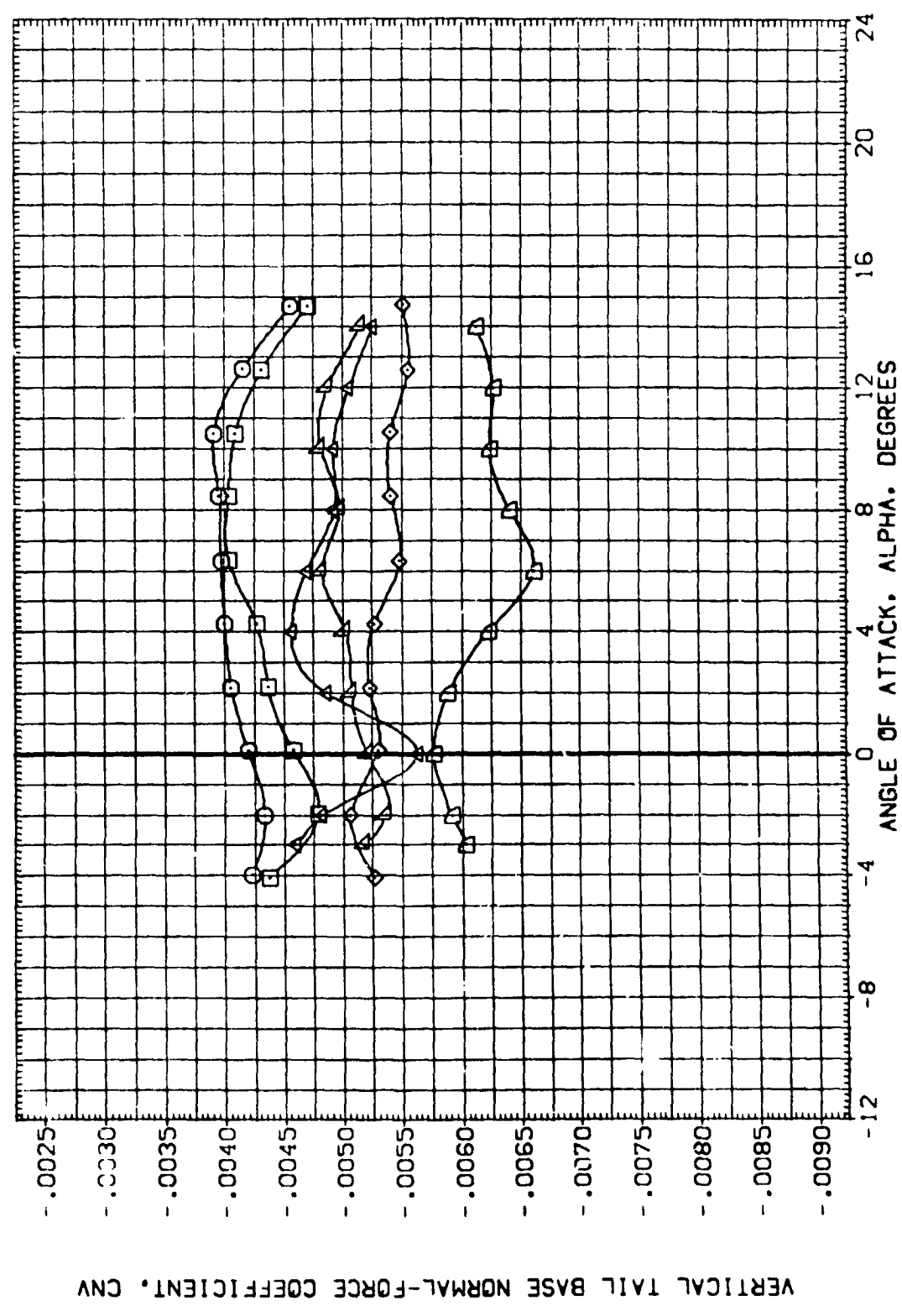


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(A)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (BER019) DATA NOT AVAILABLE
 (BER022) ARC 66-709 CAS9 0111A-(N24)
 (BER023) ARC 66-709 CAS9 0111A-(N21)
 (ZER019) DATA NOT AVAILABLE
 (ZER022) DATA NOT AVAILABLE
 (ZER023) ARC 66-709 CAS9 0111A-N24 (ADJUSTED FOR TARES)

BETA ELF-MON BDF-LAP
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

REFERENCE INFORMATION
 SREF .6053 50.FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

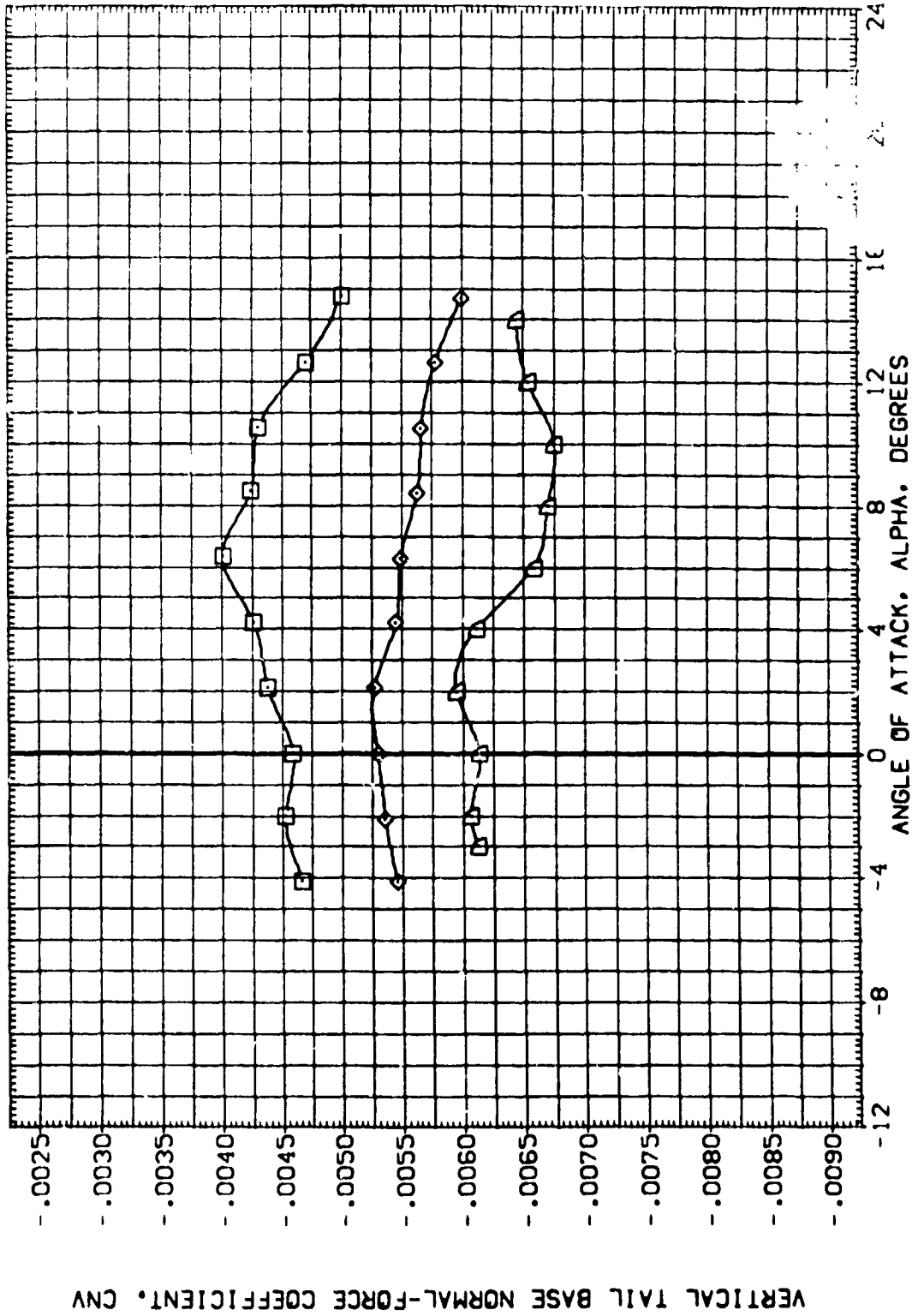


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(8)MACH = .70



DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BOFLAP REFERENCE INFORMATION

(BE.R019) ARC 66-709 CAS9 0111A-N24 .000 .000 -11.700 SREF .6053 SQ.FT.

(BE.R022) ARC 66-709 CAS9 0111A-N24 .000 .000 .000 LREF .5935 FT.

(BE.R023) ARC 66-709 CAS9 0111A-N24 .000 .000 16.300 BREF 1.1710 FT.

(X.R019) ARC 66-709 CAS9 0111A-N24 (ADJUSTED FOR TARES) .000 .000 -11.700 XMRP 12.6255 IN.

(X.R022) DATA NOT AVAILABLE .000 .000 .000 ZMRP .0000 IN.

(X.R023) ARC 66-709 CAS9 0111A-N24 (ADJUSTED FOR TARES) .000 .000 16.300 ZMRP -.3750 IN.

SCALE .0150

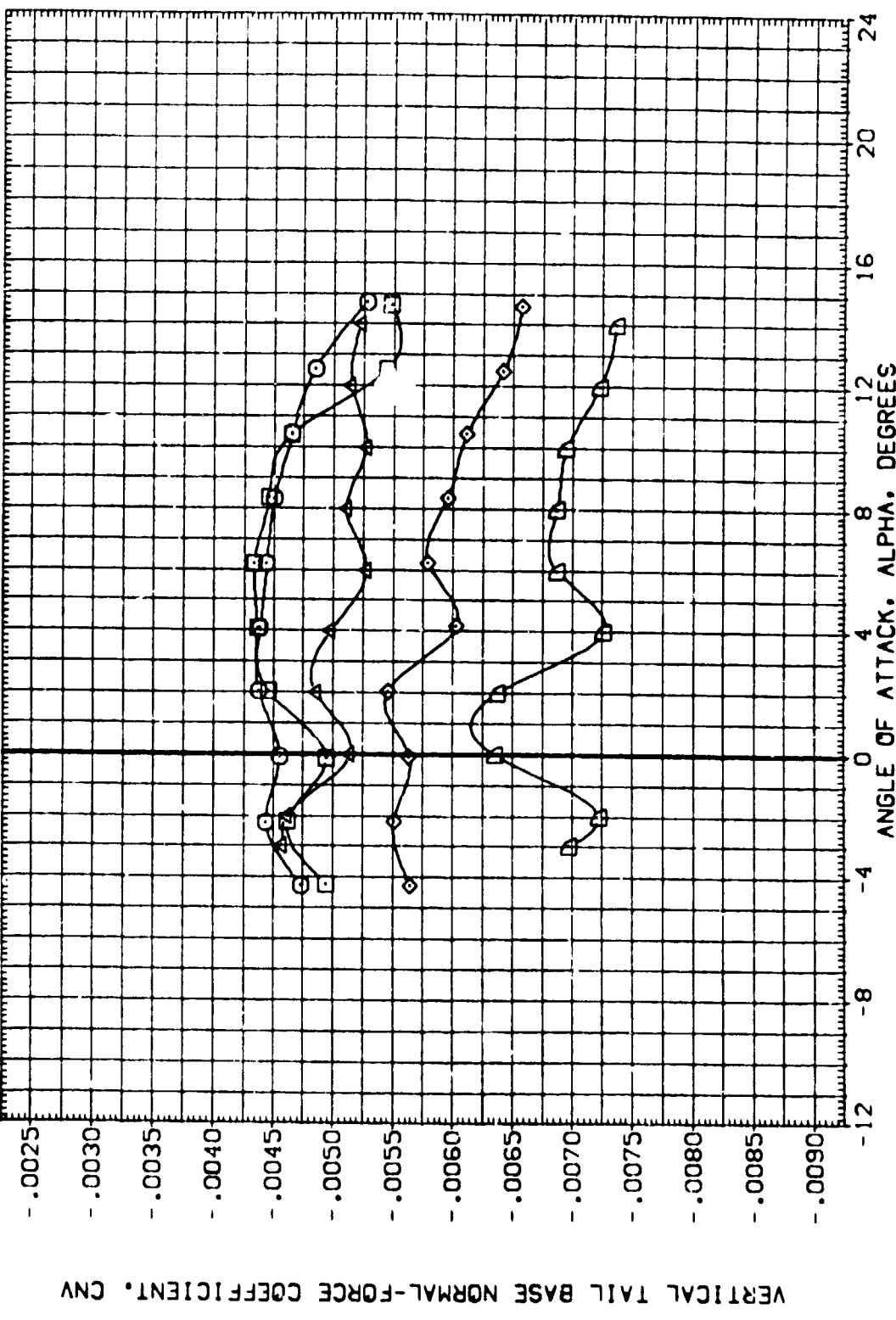


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .80

REFERENCE INFORMATION
 SREF .6053 SQ. FT.
 LREF .5935 FT.
 BRPF 1.1710 FT. IN.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

CONFIGURATION DESCRIPTION
 ARC 66-708 GASS Q11A-(N24)
 DATA NOT AVAILABLE
 DATA NOT AVAILABLE
 ARC 66-708 GASS Q11A-N24 (ADJUSTED FOR TARES)
 DATA NOT AVAILABLE
 DATA NOT AVAILABLE

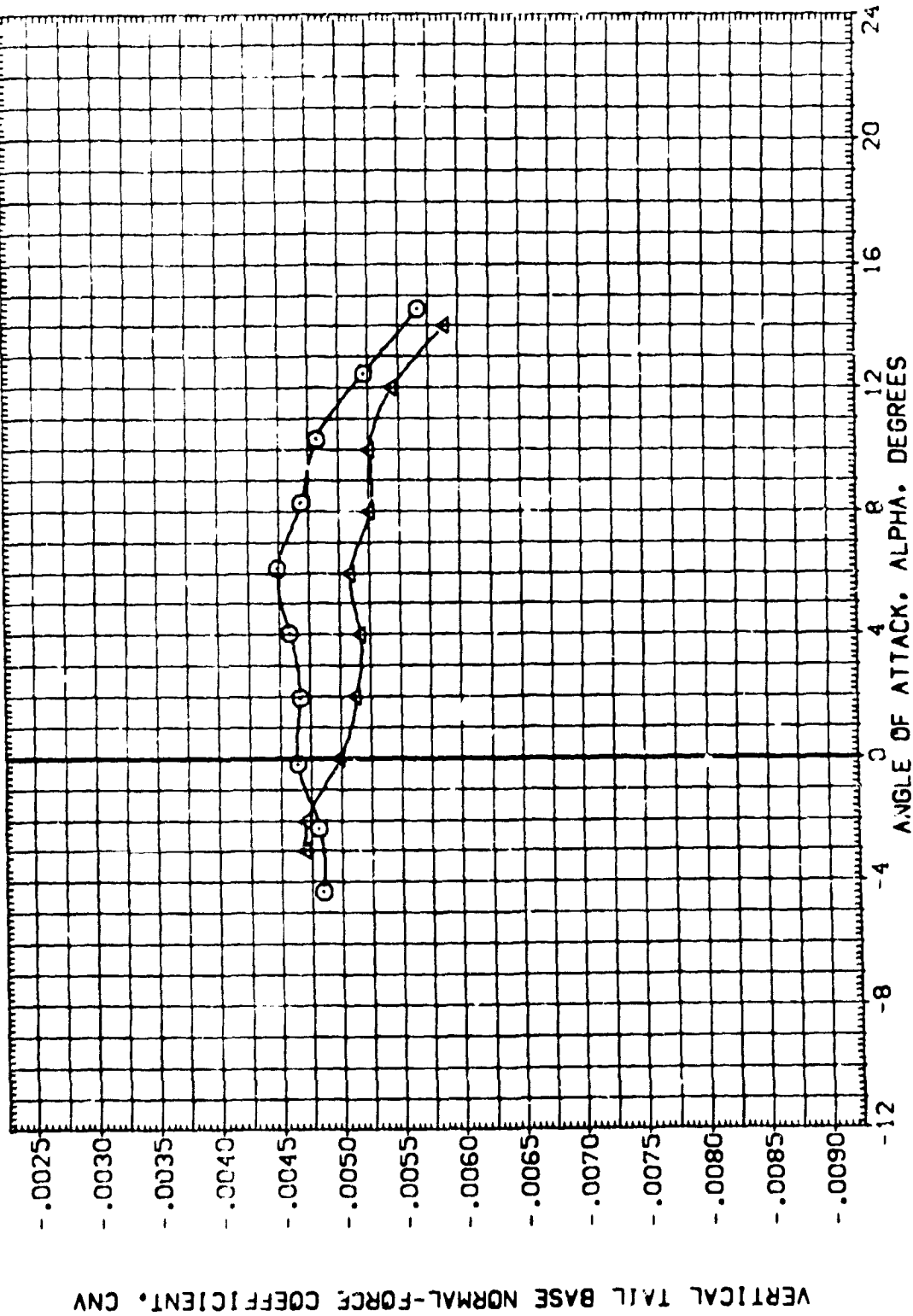


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES
 (0)MACH = .85



REFERENCE INFORMATION
 SREF .6053 SO.FT.
 LREF .9535 FT.
 BRFP 1.1710 IN.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

CONFIGURATION DESCRIPTION
 ARC 66-709 OAS9 O11A-(N24)
 ARC 66-709 OAS9 O11A-(N24)
 ARC 66-709 OAS9 O11A-(N24)
 ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 OAS9 O11A-N24 (ADJUSTED FOR TARES)

DATA SET SYMBOL
 (BER019) 
 (BER022) 
 (BER023) 
 (ZER019) 
 (ZER022) 
 (ZER023) 

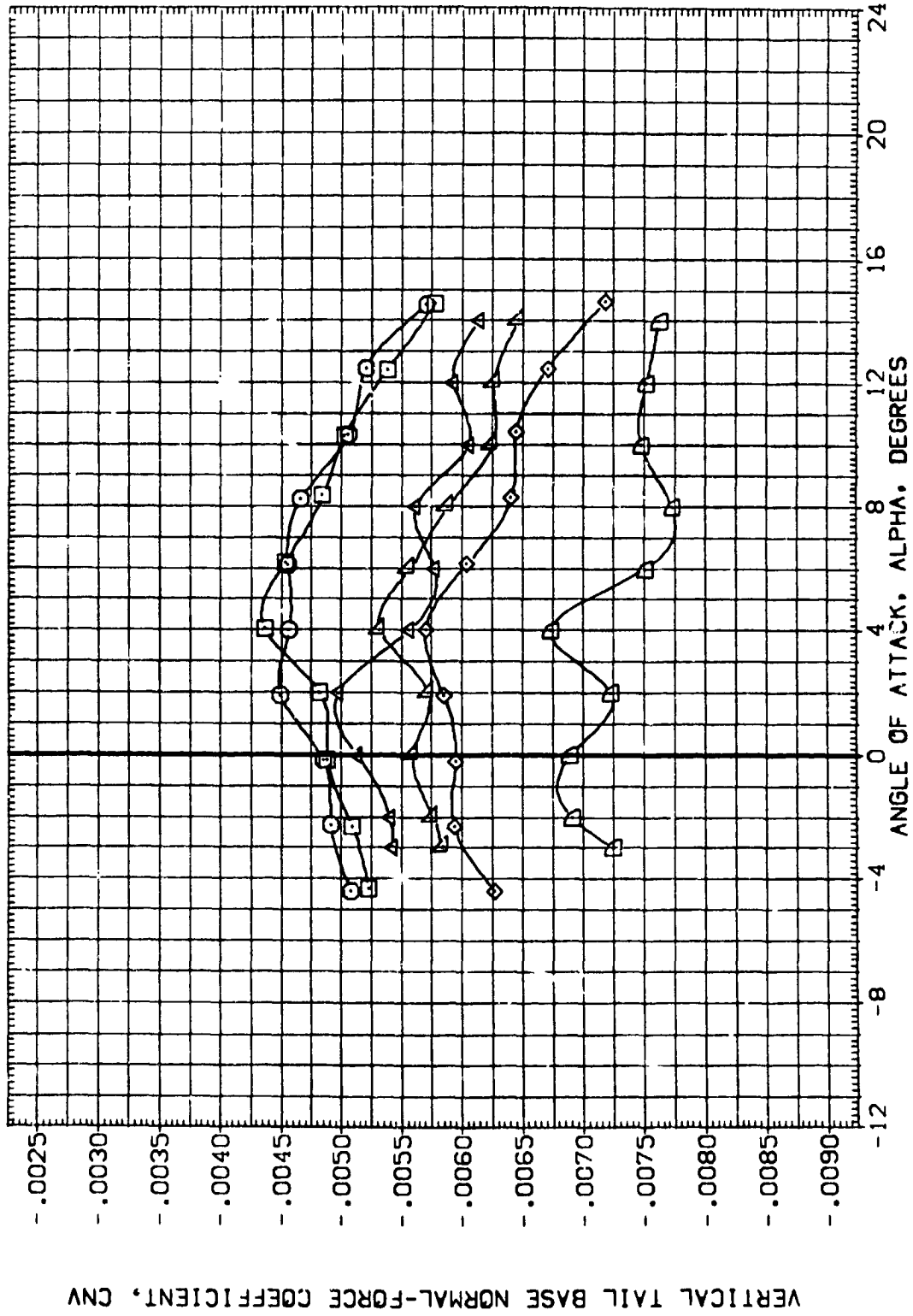


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(E)MACH = .90

DATA SET SYMBOL: (BER019) (BER022) (BER023) (ZER019) (ZER022) (ZER023)

CONFIGURATION DESCRIPTION: ARC 66-709 OAS9 O111A-N24 (ADJUSTED FOR TARES)

REFERENCE INFORMATION: SREF .6053 SQ.FT. LREF .5935 FT. BREF 1.1710 FT. YMRP 12.6255 IN. ZMRP .0000 IN. SCALE -.3750 IN.

BETA: .000
ELEVON: .000
BOFLAP: -11.700

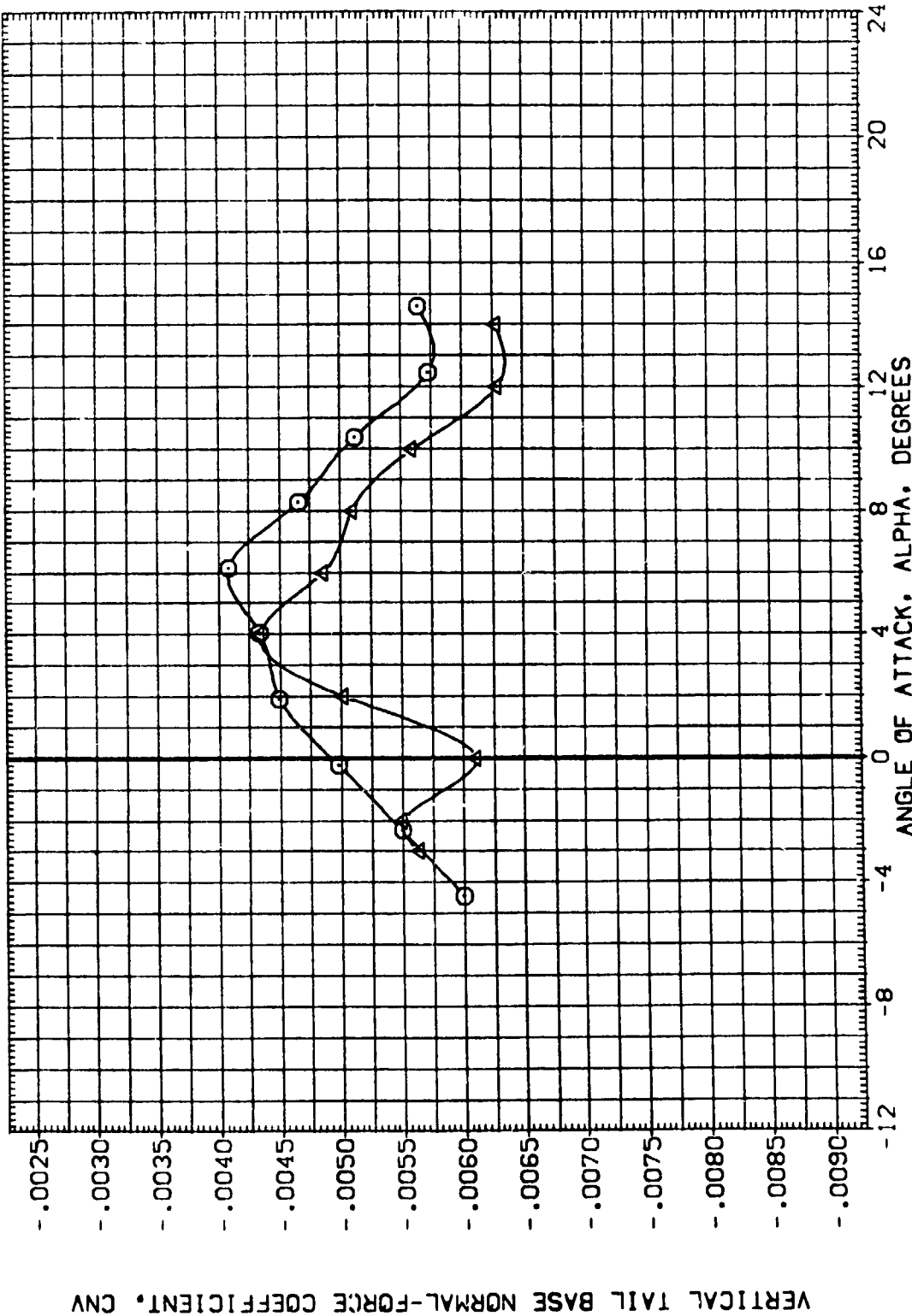


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .95



REFERENCE INFORMATION

SREF	.6053	50.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

BETA

BETA	.000
ELEVON	.000
BDFLAP	-11.700

CONFIGURATION DESCRIPTION

ARC 66-709	0A59	0A11A-(N24)
ARC 66-709	0A59	0A11A-(N24)
ARC 66-709	0A59	0A11A-(N24)
ARC 66-709	0A59	011A-N24 (ADJUSTED FOR TARES)
ARC 66-709	0A59	011A-N24 (ADJUSTED FOR TARES)
ARC 66-709	0A59	011A-N24 (ADJUSTED FOR TARES)

DATA SET SYMBOL

(BER019)	□
(BER022)	○
(BER023)	△
(ZER019)	◇
(ZER022)	□
(ZER023)	△

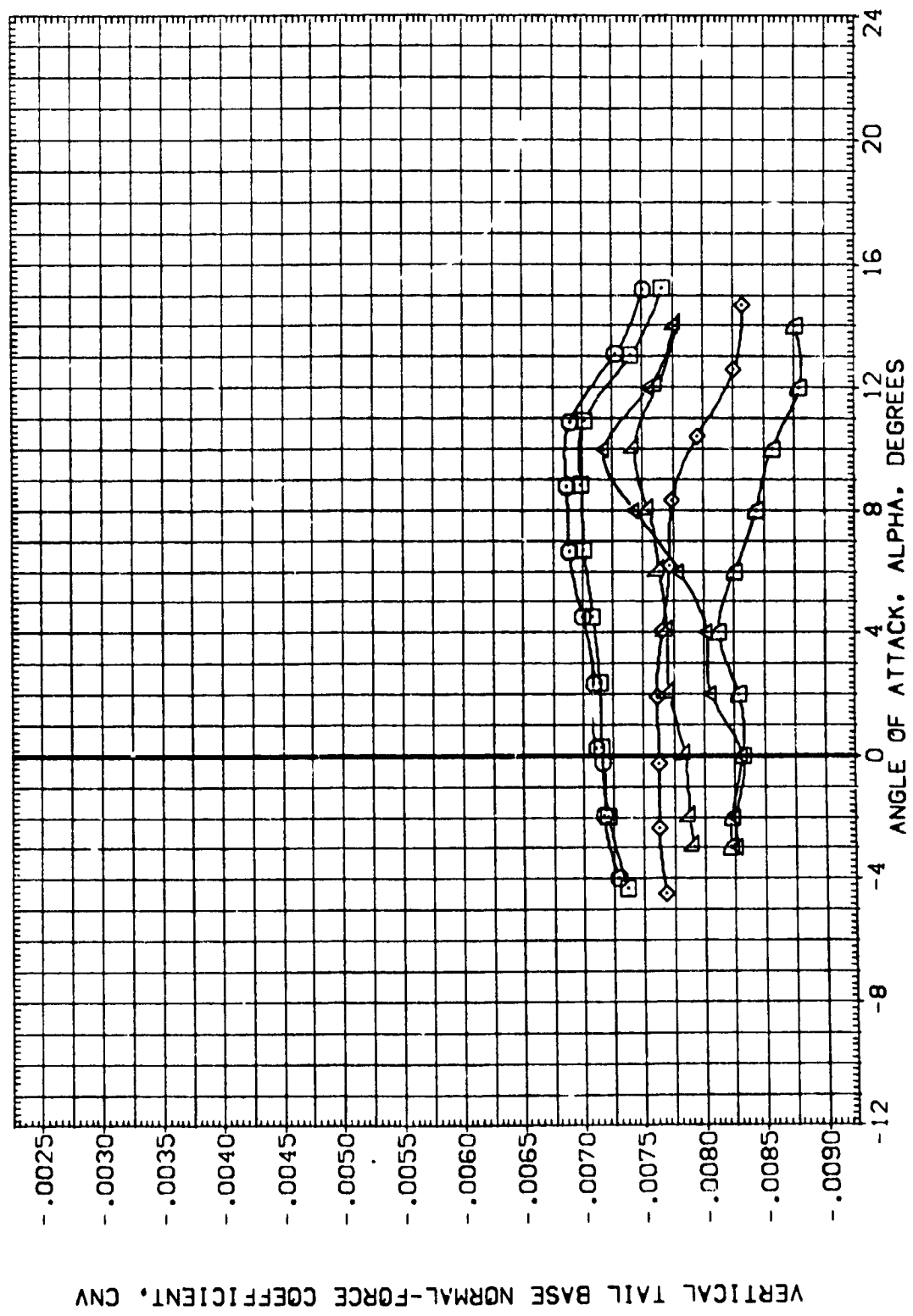


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BOFLAP REFERENCE INFORMATION

(BER019)	ARC 66-709 0A59 0A11A-(N24)	.000	.000	-11.700	SREF .6053 SQ.FT.
(BER022)	ARC 66-709 0A59 0A11A-(N24)	.000	.000	-11.700	LREF .9535 FT.
(BER023)	ARC 66-709 0A59 0A11A-(N24)	.000	.000	16.300	BREF 1.1710 FT.
(ZER019)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6255 IN.
(ZER022)	DATA NOT AVAILABLE	.000	.000	.000	YMRP .0000 IN.
(ZER023)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

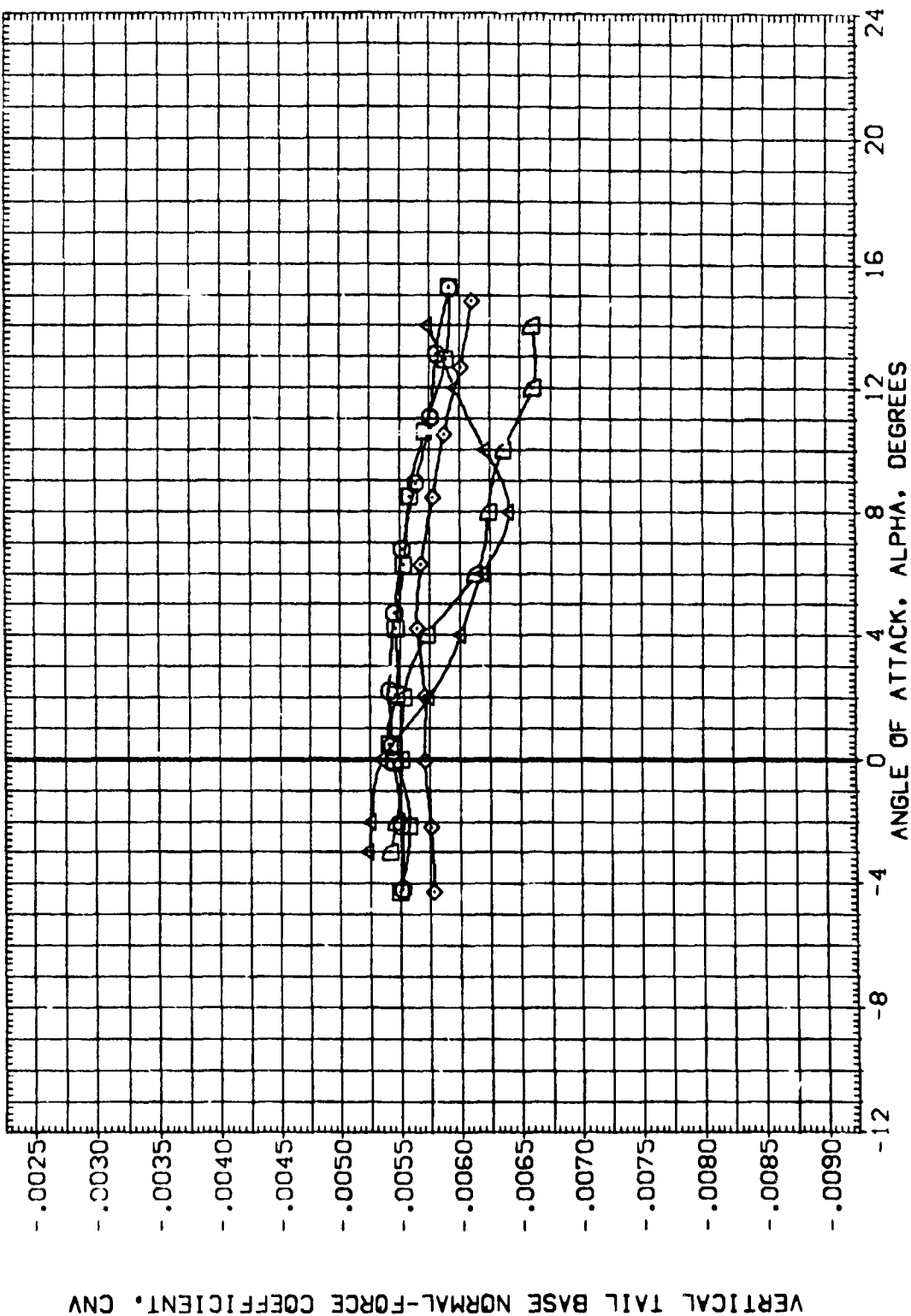


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH = 1.50



REFERENCE INFORMATION

SREF	.6053	FT.
LREF	.5935	FT.
BREF	1.1710	IN.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

BETA	.000
ELEVON	.000
BOFLAP	-11.700
	.000
	.000
	16.300
	-11.700
	.000
	.000
	16.300

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(BER019)	ARC 66-709 0A59 0A11A-(N24)
(BER022)	ARC 66-709 0A59 0A11A-(N24)
(BER023)	ARC 66-709 0A59 0A11A-(N24)
(ZER019)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
(ZER022)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
(ZER023)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

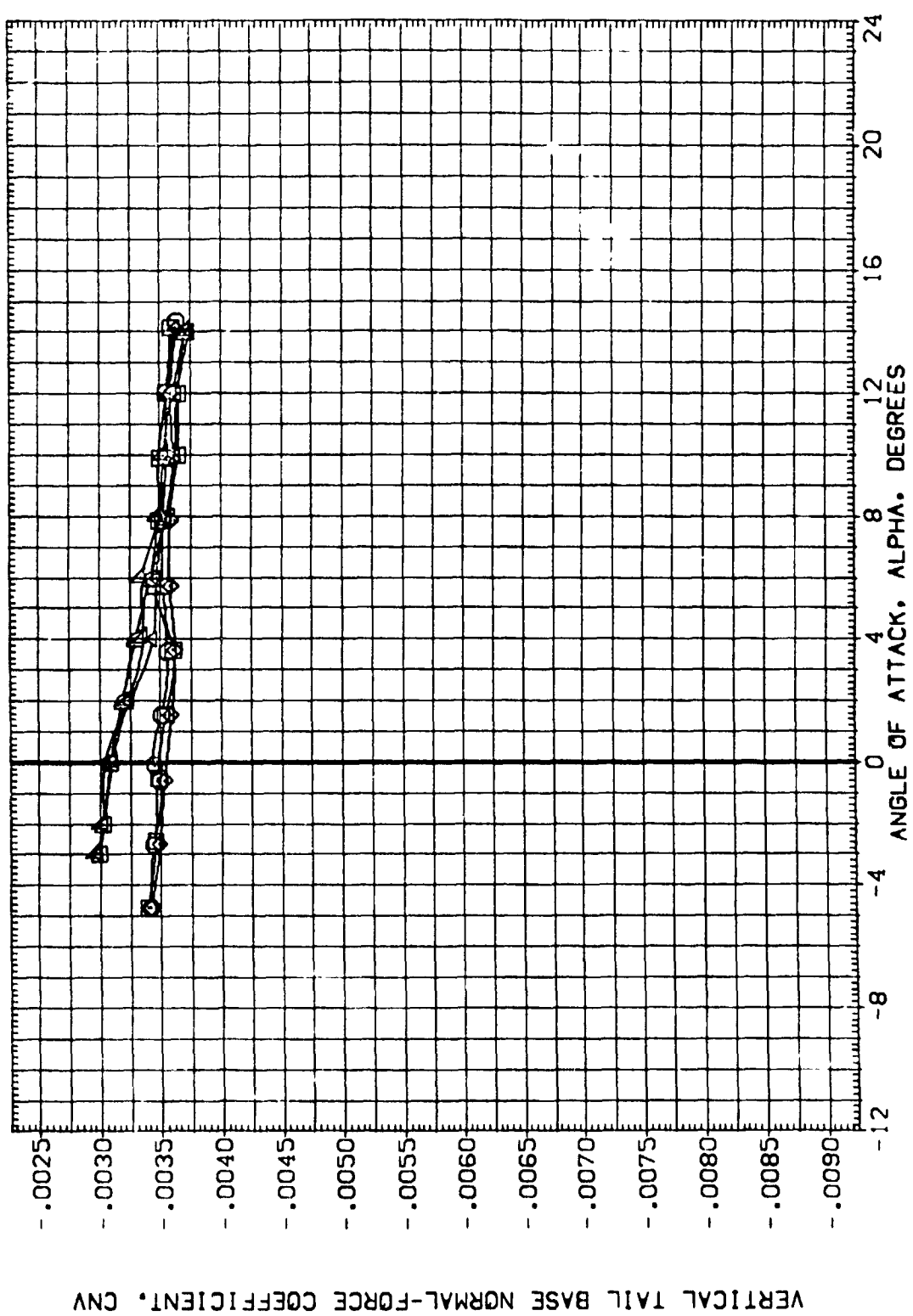


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES
 (1)MACH = 2.00

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(BE019) ARC 66-709 D459 011A-(N24)

(BE022) ARC 66-709 D459 011A-(N24)

(BE023) ARC 66-709 D459 011A-(N24)

(ZER019) ARC 66-709 D459 011A-N24 (ADJUSTED FOR TARES)

(ZER022) DATA NOT AVAILABLE

(ZER023) ARC 66-709 D459 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

REFERENCE INFORMATION

SREF .6053 SQ.FT.

LREF .5936 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

FORWARD VERTICAL TAIL BASE PITCHING MOMENT COEFFICIENT, CMFWD

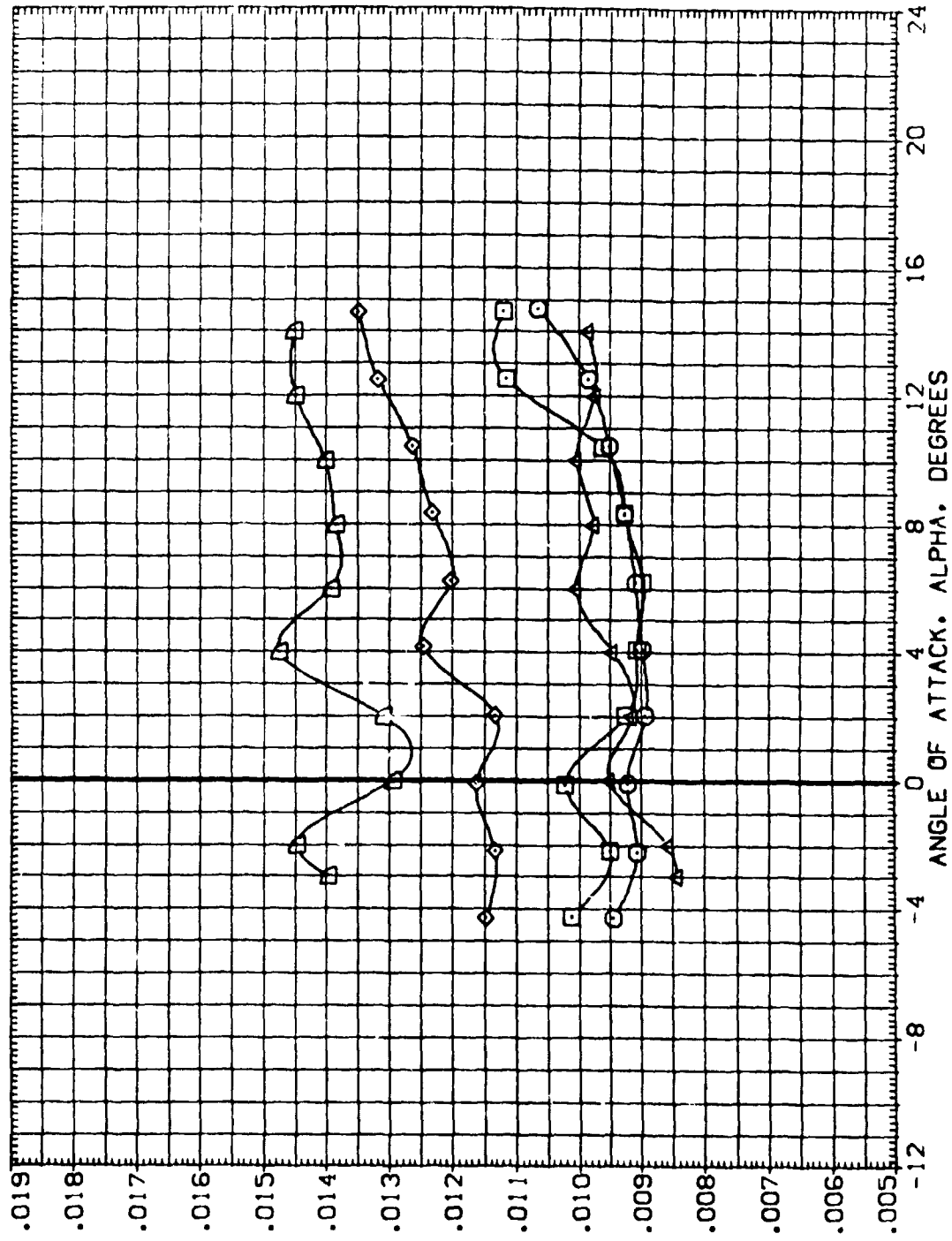


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(C)MACH = .80



DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BOFLAP REFERENCE INFORMATION
 (BER019) ARC 66-709 QAS9 0111A-(N24) .000 .000 -11.700 SREF .6053 SO.FT.
 (BER022) DATA NOT AVAILABLE .000 .000 .000 LREF .5936 FT.
 (BER023) DATA NOT AVAILABLE .000 .000 16.300 BRFF 1.1710 FT.
 (ZER019) ARC 66-709 QAS9 0111A-N24 (ADJUSTED FOR TARES) .000 .000 -11.700 YMRP 12.6255 IN.
 (ZER022) DATA NOT AVAILABLE .000 .000 .000 ZMRP .0000 IN.
 (ZER023) DATA NOT AVAILABLE .000 .000 16.300 SCALE .0150 IN.

FORWARD VERTICAL TAIL BASE PITCHING MOMENT COEFFICIENT, CMFWD

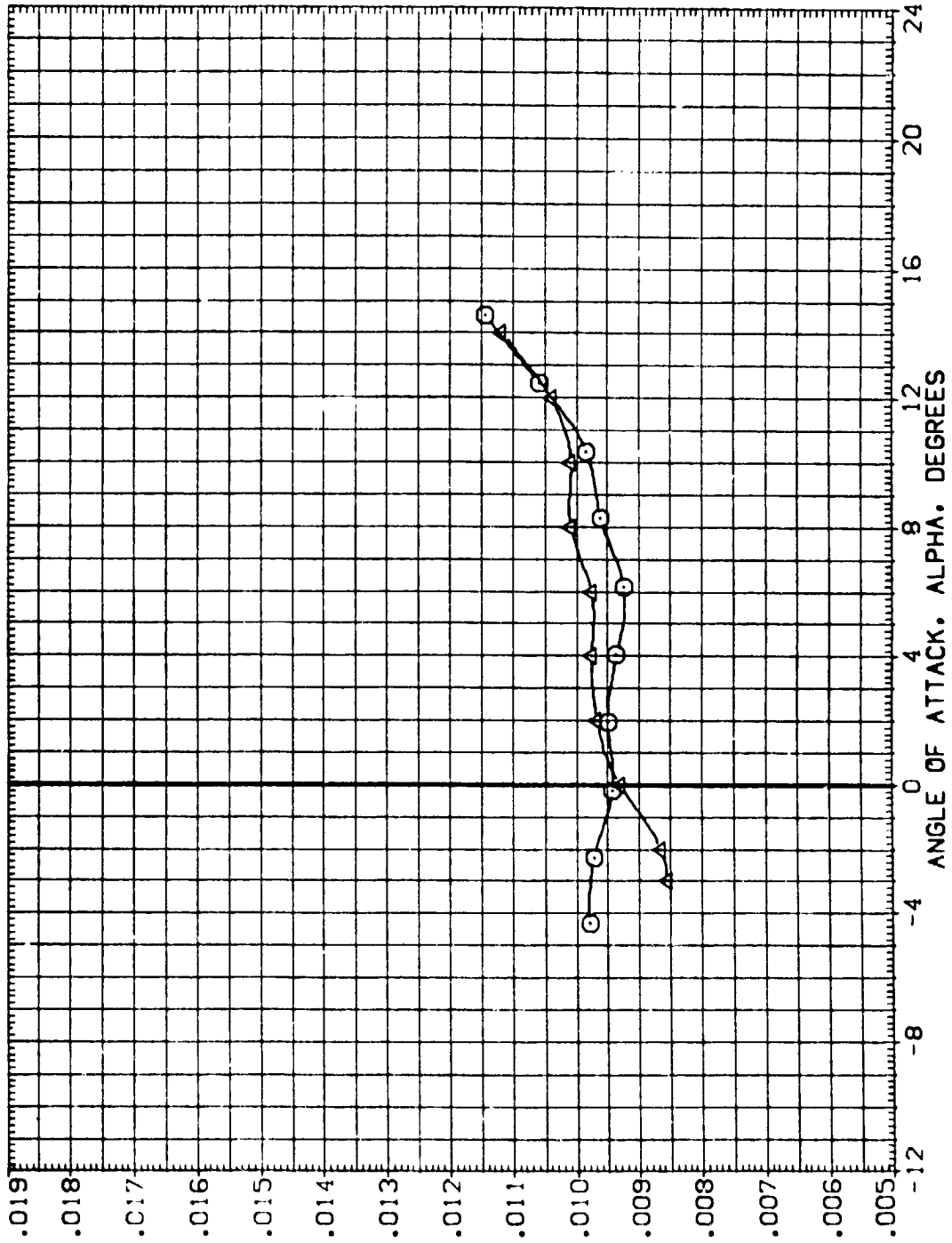


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(O)MACH = .85

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5936 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

CONFIGURATION DESCRIPTION
 ARC 66-709 DASS D111A-N24
 ARC 66-709 DASS D111A-N24
 ARC 66-709 DASS D111A-N24
 ARC 66-709 DASS D111A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 DASS D111A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 DASS D111A-N24 (ADJUSTED FOR TARES)

DATA SET SYMBOL
 (BER019) □
 (BER022) ○
 (BER023) △
 (ZER019) □
 (ZER022) ○
 (ZER023) △

FORWARD VERTICAL TAIL BASE PITCHING MOMENT COEFFICIENT, CMWF0

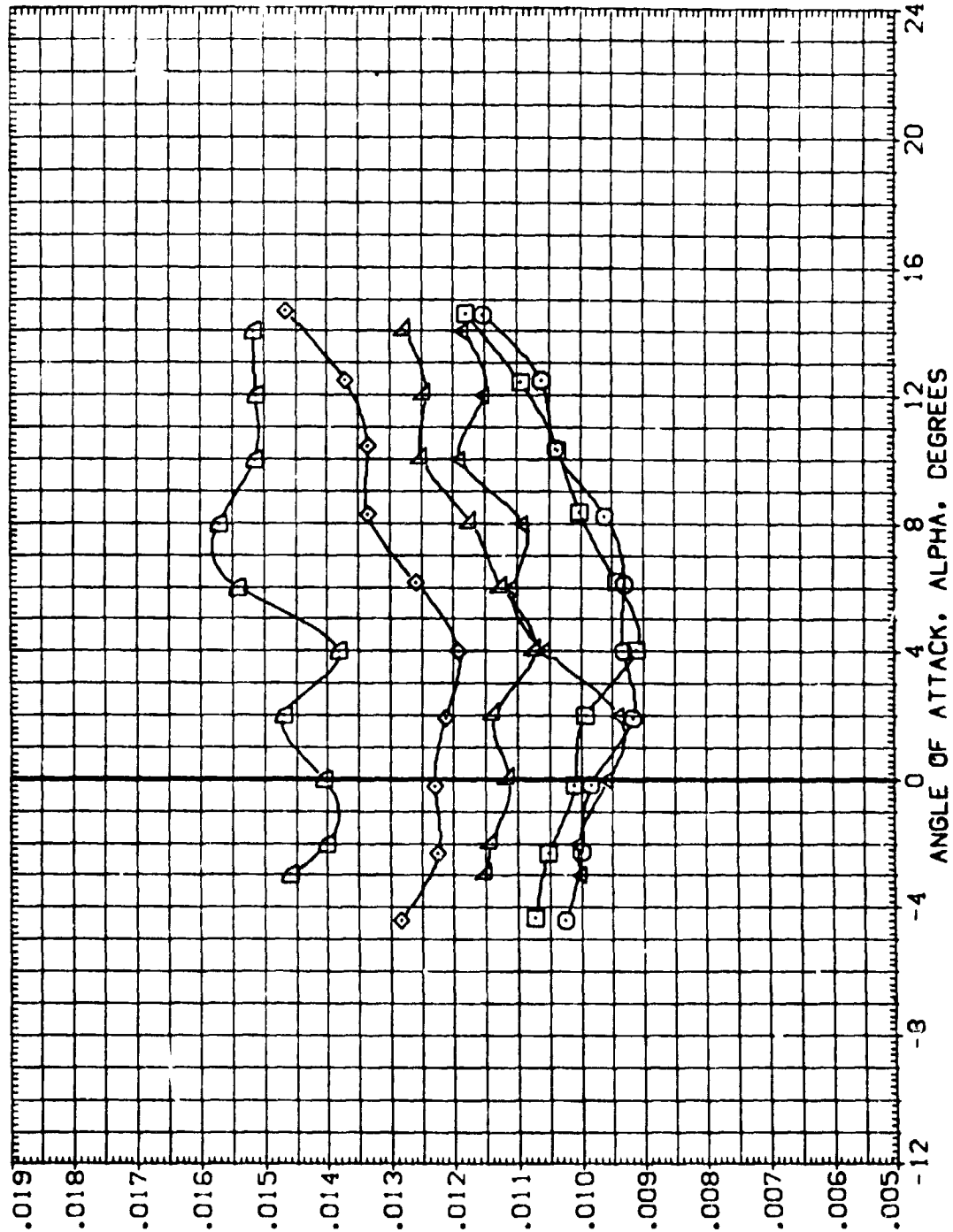


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(E)MACH = .90



DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BOFLAP REFERENCE INFORMATION

(BER019)	ARC 66-709 OAS9 0111A-(N24)	.000	.000	-11.700	SREF .6053 SO.FT.
(BER022)	DATA NOT AVAILABLE	.000	.000	.000	LREF .5936 FT.
(BER023)	DATA NOT AVAILABLE	.000	.000	16.300	BREF 1.1710 FT.
(ZER019)	ARC 66-709 OAS9 0111A-N24 (ADJUSTED FOR TARES)	.000	.000	-11.700	XMRP 12.6265 IN.
(ZER022)	DATA NOT AVAILABLE	.000	.000	.000	YMRP .0000 IN.
(ZER023)	DATA NOT AVAILABLE	.000	.000	16.300	ZMRP -.3750 IN.
					SCALE .0150

FORWARD VERTICAL TAIL BASE PITCHING MOMENT COEFFICIENT, CMFWFD

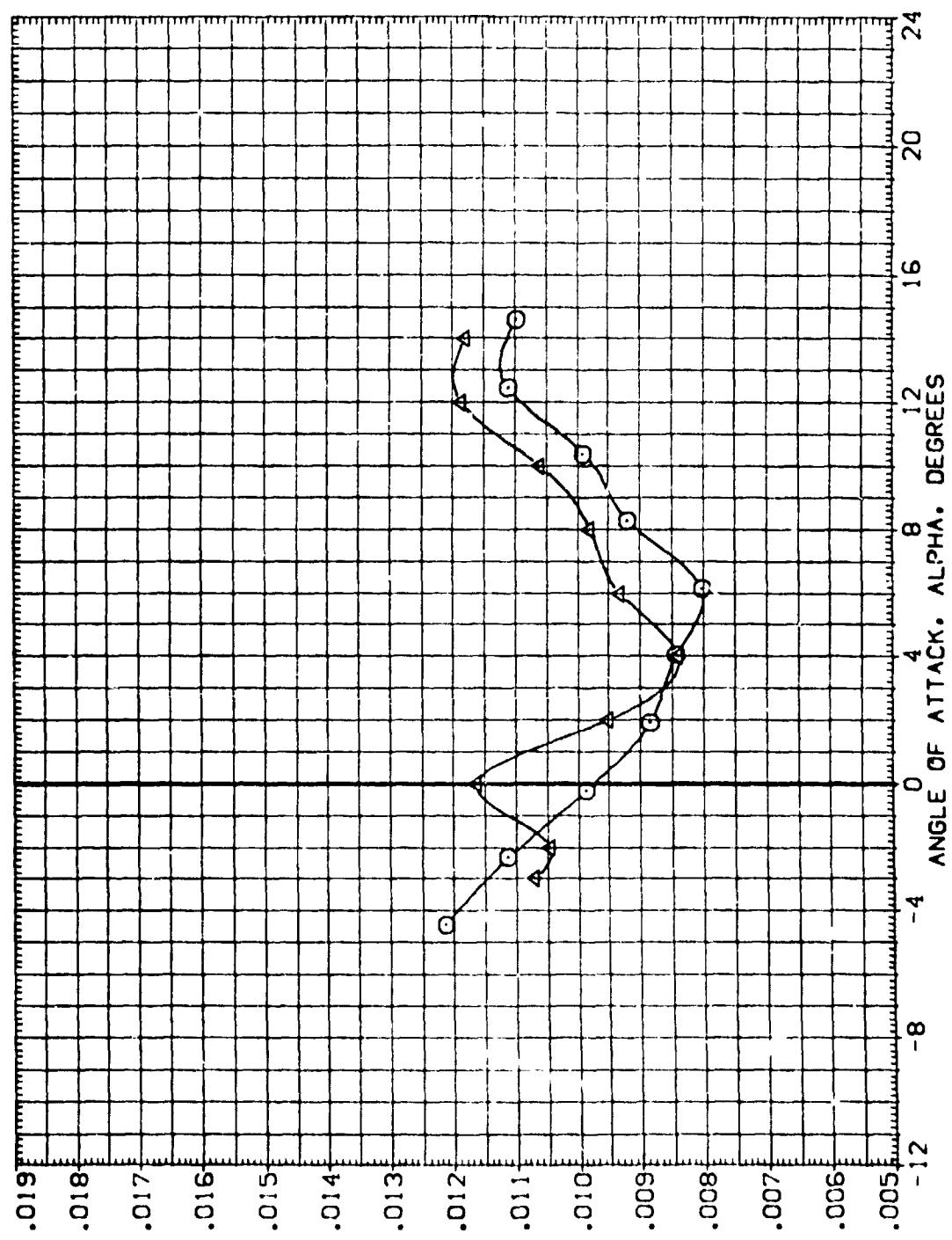


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(F)MACH = .95

DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON EDF LAP REFERENCE INFORMATION

(BER019) ARC 67-709 QAS9 O111A-N24 .000 .000 -11.700 SREF .6053 50.FT.

(BER022) ARC 66-709 QAS9 O111A-N24 .000 .000 .000 BREF .5935 FT.

(BER023) ARC 66-709 QAS9 O111A-N24 .000 .000 16.300 BREF 1.1710 FT.

(ZER019) ARC 66-709 QAS9 O111A-N24 (ADJUSTED FOR TARES) .000 .000 -11.700 XMRP 12.6255 IN.

(ZER022) ARC 66-709 QAS9 O111A-N24 (ADJUSTED FOR TARES) .000 .000 .000 YMRP .0000 IN.

(ZER023) ARC 66-709 QAS9 O111A-N24 (ADJUSTED FOR TARES) .000 .000 16.300 ZMRP -.3750 IN.

SCALE .0150

FORWARD VERTICAL TAIL BASE PITCHING MOMENT COEFFICIENT, CMFWFD

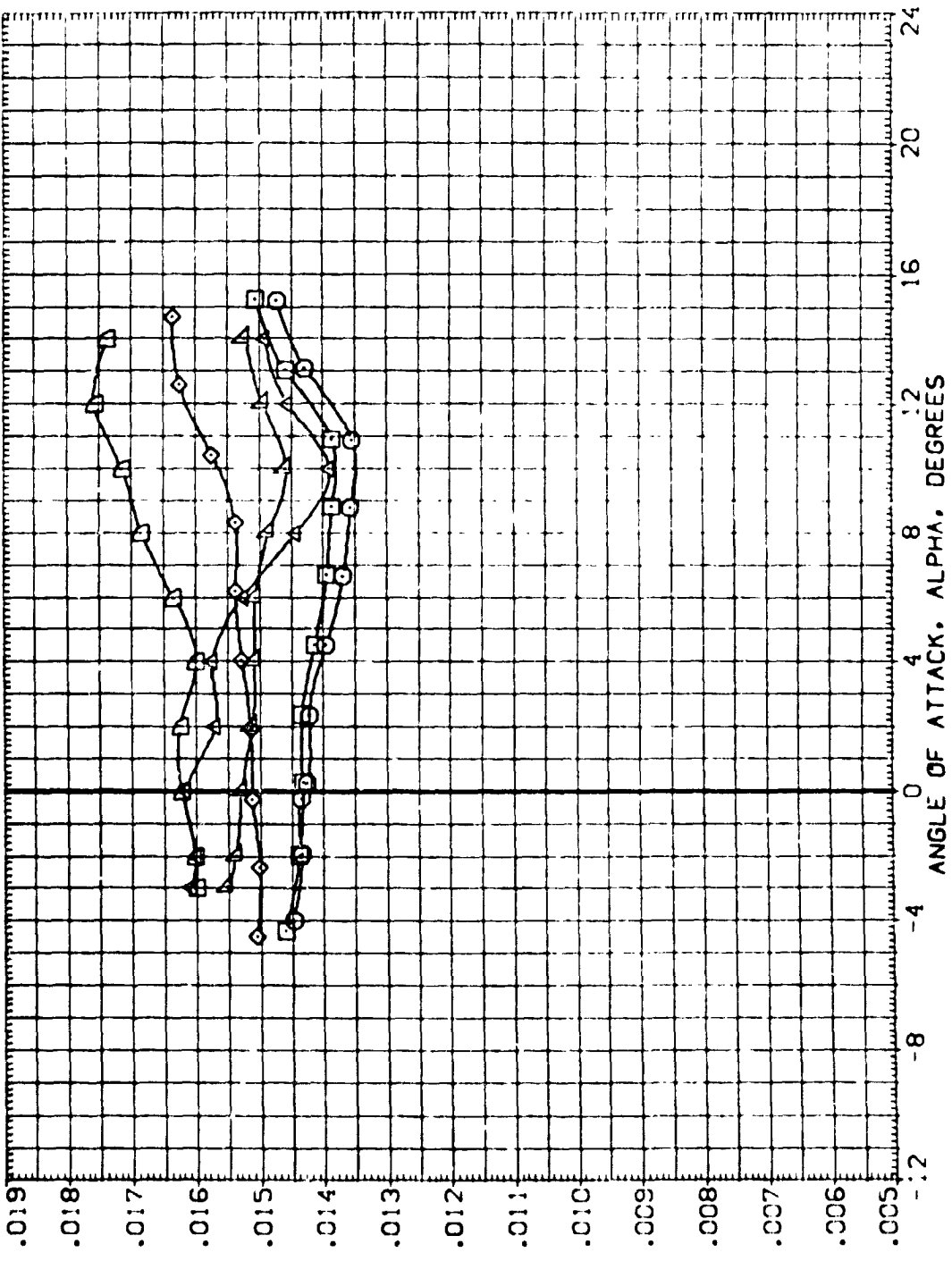


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES
(G)MAC = 1.20



DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BDFLAP REFERENCE INFORMATION

(BE019) ARC 66-709 DA59 O11A-(N24) .000 .000 -11.700 SREF .6053 50.F.T.

(BE022) ARC 66-709 DA59 O11A-(N24) .000 .000 .000 LREF .5935 FT.

(BE023) ARC 66-709 DA59 O11A-(N24) .000 .000 16.300 BREF 1.1710 IN.

(BE019) ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES) .000 .000 -11.700 XREF 12.6755 IN.

(BE022) DATA NOT AVAILABLE .000 .000 .000 YREF .0000 IN.

(BE023) ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES) .000 .000 16.300 ZREF -.3750 IN.

(BE023) SCALE .0150

FORWARD VERTICAL TAIL JACOBI PITCHING MOMENT COEFFICIENT, CMFW

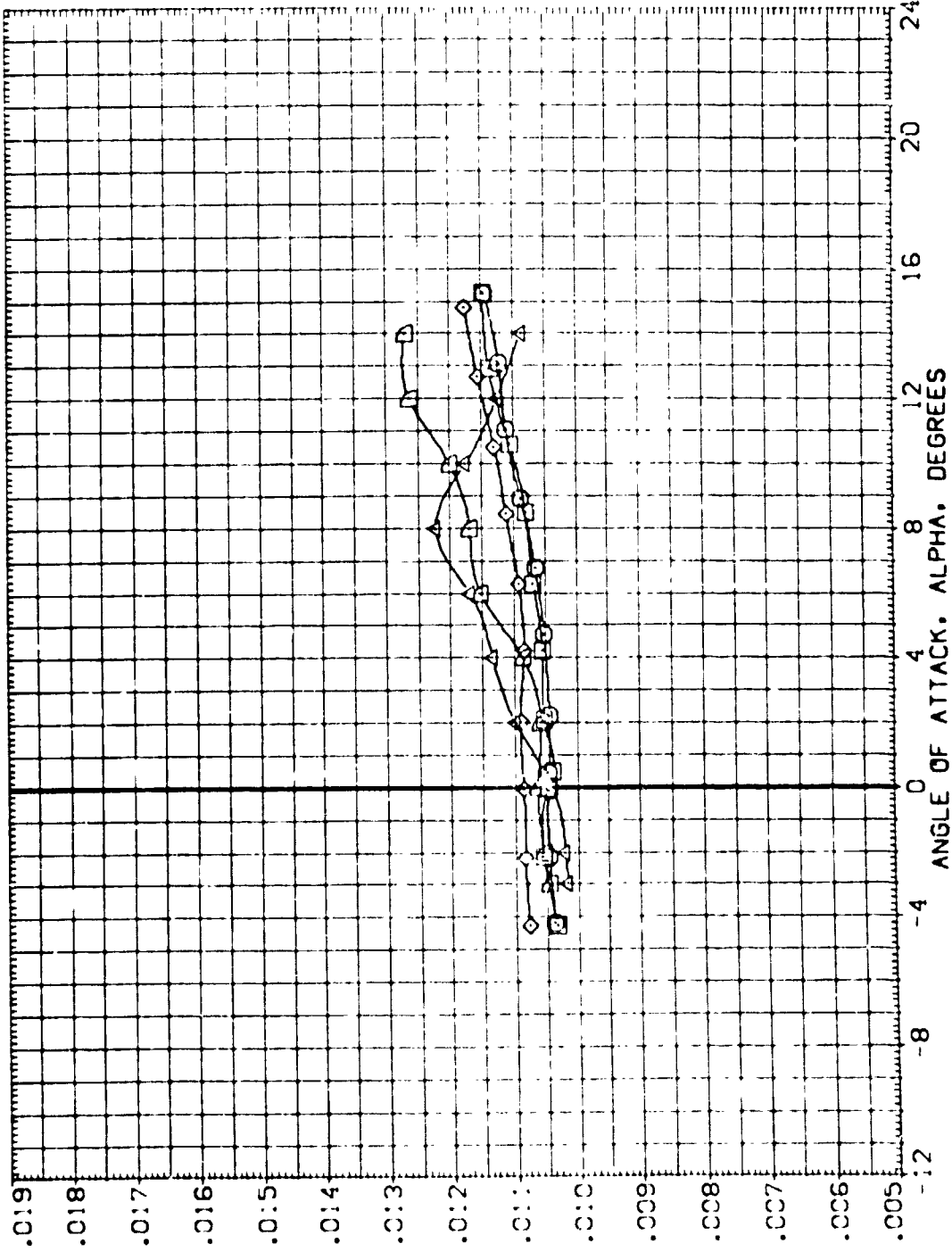


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

MAC - 1.50

DATA SET SYMBOL
 (BE R019)
 (BE R022)
 (BE R023)
 (X R019)
 (X R022)
 (X R023)

CONFIGURATION DESCRIPTION
 ARC 66-709 DASS O111A-(N24)
 ARC 66-709 DASS O111A-(N24)
 ARC 66-709 DASS O111A-(N24)
 ARC 66-709 DASS O111A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 DASS O111A-N24 (ADJUSTED FOR TARES)
 ARC 66-709 DASS O111A-N24 (ADJUSTED FOR TARES)

BETA .000
 .000
 .000
 .000
 .000
 .000

ELEVON .000
 .000
 .000
 .000
 .000
 .000

BOFLAP -11.700
 .000
 16.300
 -11.700
 .000
 16.300

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .9535 FT.
 BRFP 1.1710 FT.
 XMRP 12.6755 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

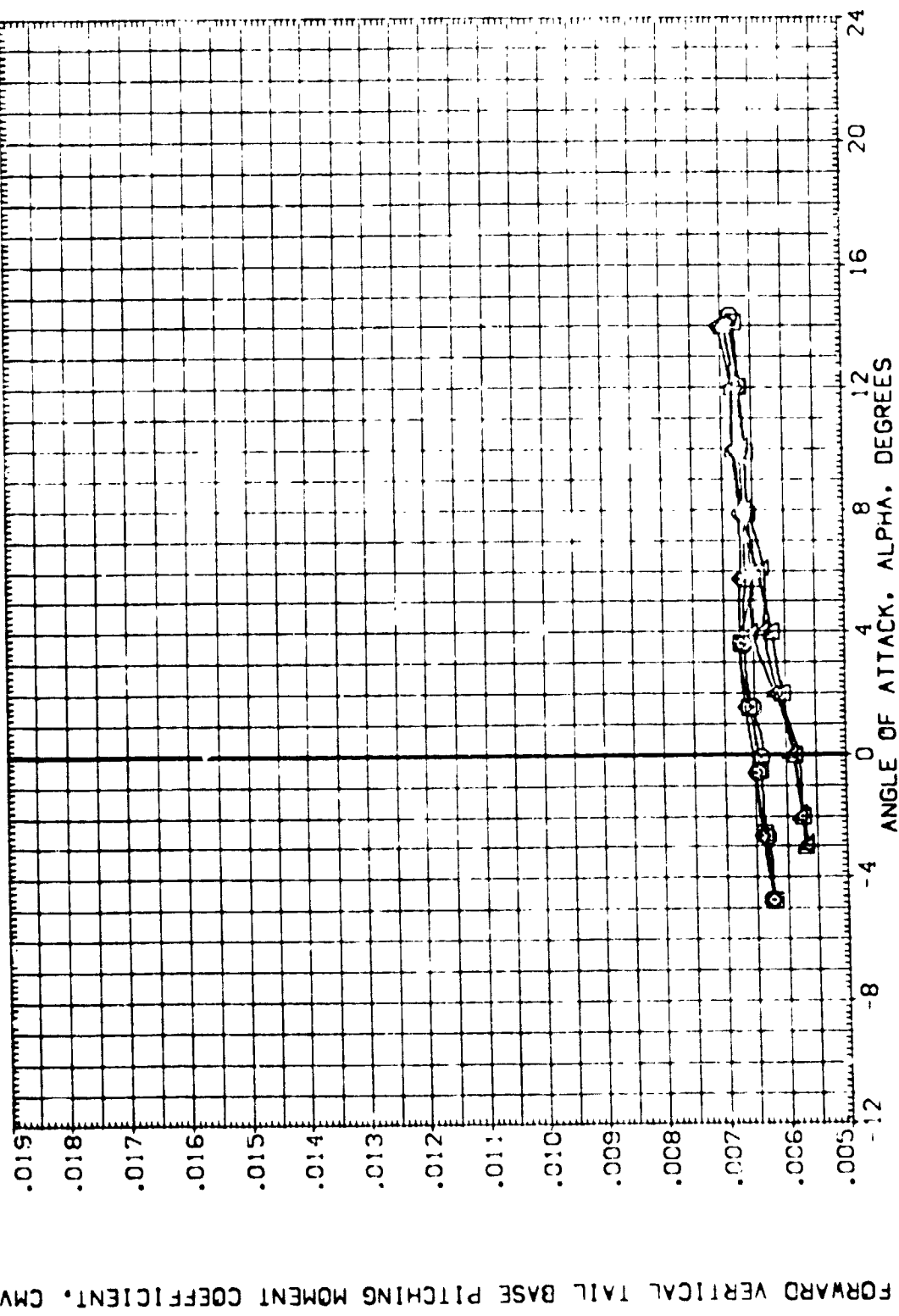


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(1)MAC = 2.00



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(BE:R019)	ARC 66-709	QAS9	O111A-(N24)
(BE:R022)	ARC 66-709	QAS9	O111A-(N24)
(BE:R023)	ARC 66-709	QAS9	O111A-(N24)
(ZL:R019)	ARC 66-709	QAS9	O111A-N24 (ADJUSTED FOR TARES)
(ZL:R022)	ARC 66-709	QAS9	O111A-N24 (ADJUSTED FOR TARES)
(ZL:R023)	ARC 66-709	QAS9	O111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	.000	.000
.000	.000	16.300
.000	.000	-11.700
.000	.000	.000
.000	.000	16.300

REFERENCE INFORMATION

SREF	.6053	50.FT.
LREF	.5935	F.
BREF	1.1710	F.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

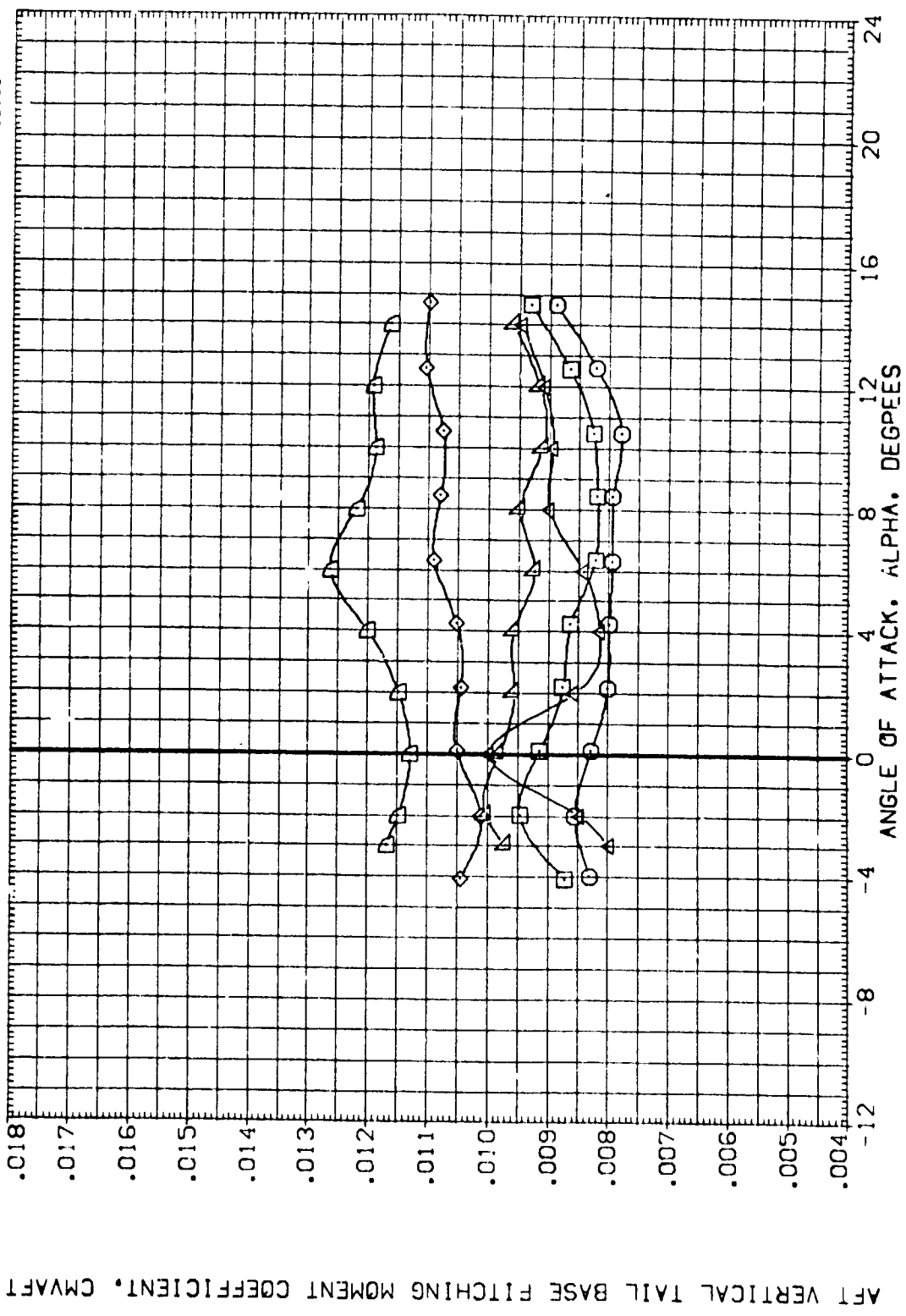


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(BER019) DATA NOT AVAILABLE

(BER022) ARC 66-709 DASS9 DAI11A-(N24)

(BER023) ARC 66-709 DASS9 DAI11A-(N24)

(ZER019) DATA NOT AVAILABLE

(ZER022) DATA NOT AVAILABLE

(ZER023) ARC 66-709 DASS9 DAI11A-N24 (ADJUSTED FOR TARES)

BETA ELC/VON BOFLAP

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

.000 .000 -11.700

.000 .000 .000

.000 .000 16.300

REFERENCE INFORMATION

SREF 6053 50.FT.

LREF .5935 FT.

BREF 1.1710 FT.

XMRP 12.6255 IN.

YMRP .0000 IN.

ZMRP -.3750 IN.

SCALE .0150

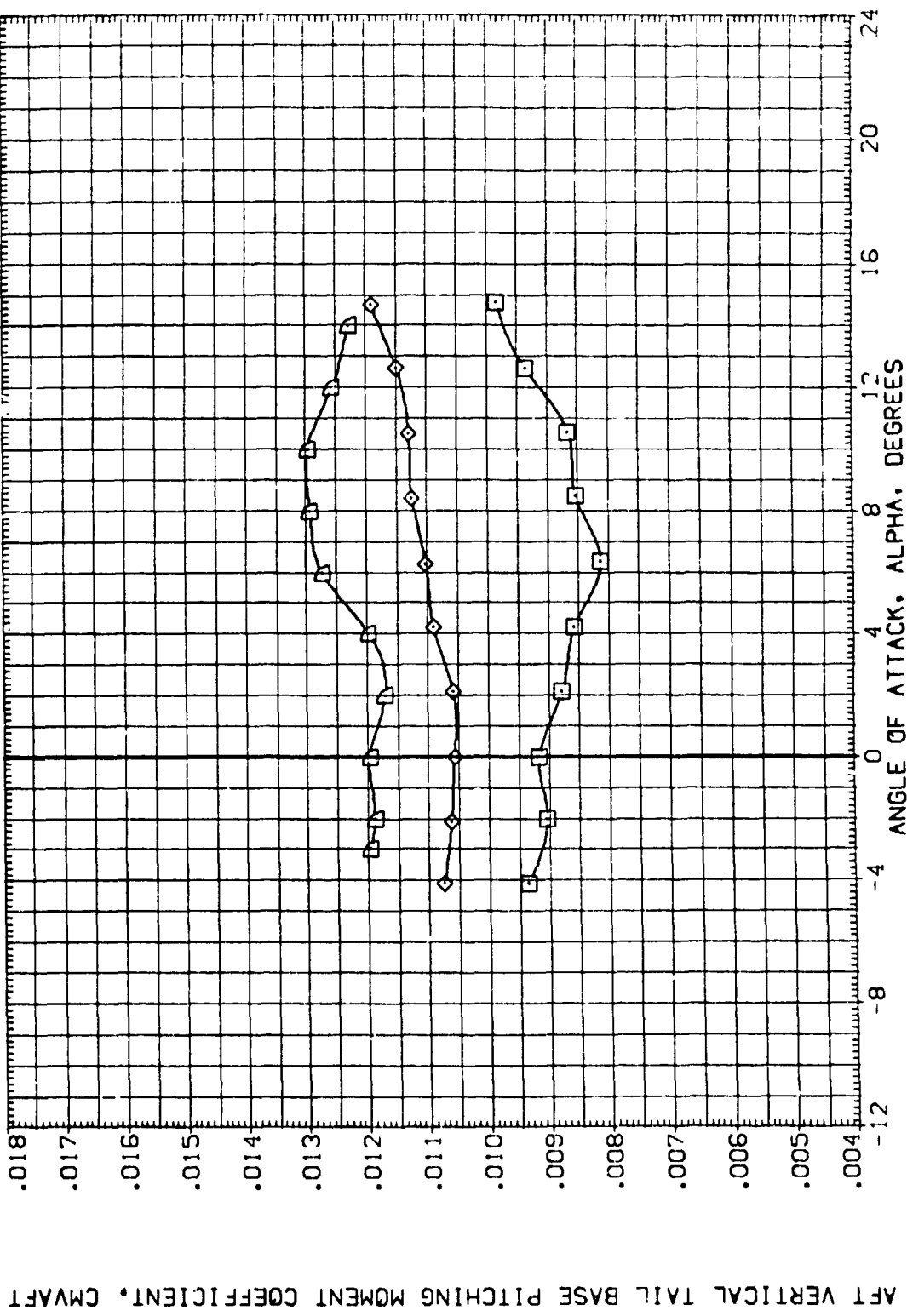


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(B)MACH = .70



DATA SET SYMBD. CONFIGURATION DESCRIPTION

(BER019)	ARC 66-709 0A59 0A11A-(N24)
(BER022)	ARC 66-709 0A59 0A11A-(N24)
(BER023)	ARC 66-709 0A59 0A11A-(N24)
(ZER019)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)
(ZER022)	DATA NOT AVAILABLE
(ZER023)	ARC 66-709 0A59 011A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	.000	.000
.000	.000	16.300
.000	.000	-11.700
.000	.000	.000
.000	.000	16.300

REFERENCE INFORMATION

SREF	.6053	SO.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

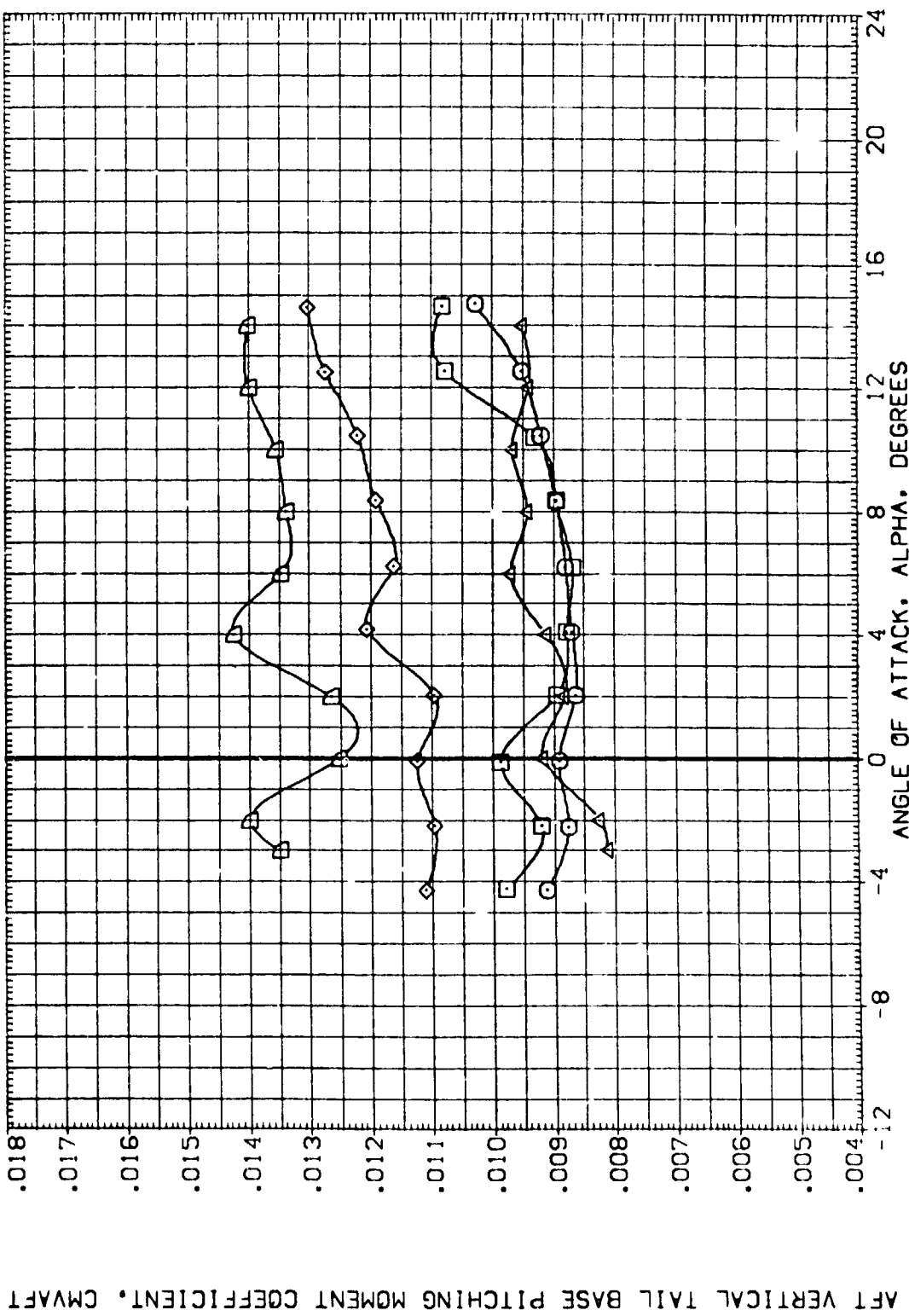


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (BER019) ARC 66-709 DASS DATA-(N24)
 (BER022) DATA NOT AVAILABLE
 (BER023) DATA NOT AVAILABLE
 (ZER019) ARC 66-709 DASS 011A-N24 (ADJUSTED FOR TARES)
 (ZER022) DATA NOT AVAILABLE
 (ZER023) DATA NOT AVAILABLE

BETA ELEVON BOFLAP
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300
 .000 .000 -11.700
 .000 .000 .000
 .000 .000 16.300

REFERENCE INFORMATION
 SREF .6053 SQ.FT.
 LREF .5935 FT.
 BRFP 1.1710 FT. IN.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

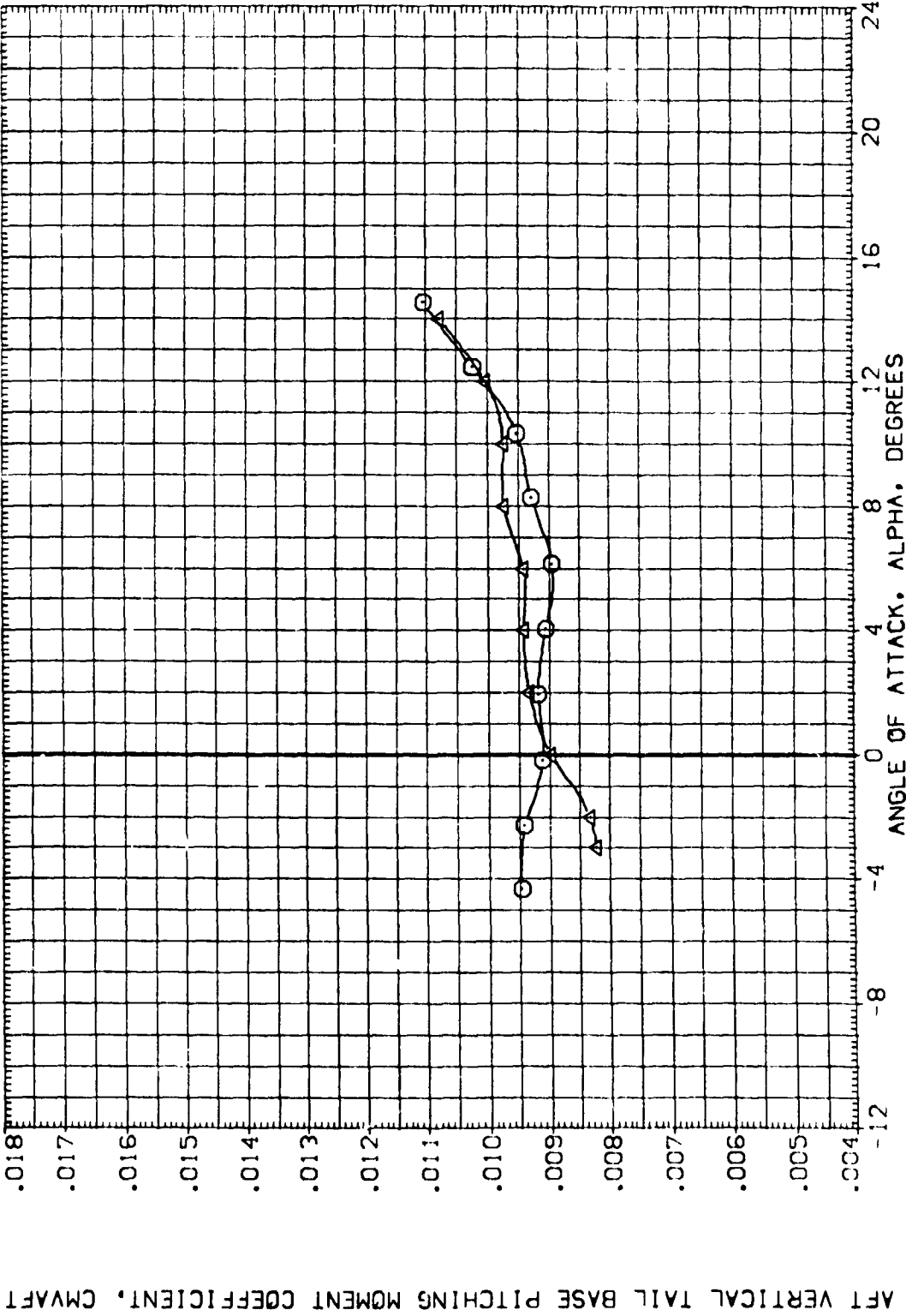


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(D)MAC .85



DATA SET SY: BOL

CONFIGURATION	DESCRIPTION
ARC 66-709 QA59	011A-(N24)
ARC 66-709 QA59	011A-(N24)
ARC 66-709 QA59	011A-(N24)
ARC 66-709 QA59	011A-N24 (ADJUSTED FOR TARES)
ARC 66-709 QA59	011A-N24 (ADJUSTED FOR TARES)

BETA

BETA	ELEVON	BDF LAP
.000	.000	-11.700
.000	.000	.000
.000	.000	16.300
.000	.000	-11.700
.000	.000	.000
.000	.000	16.300

REFERENCE INFORMATION

PARAMETER	VALUE	UNIT
SREF	.6053	50.FT.
LREF	.5935	FT.
BREF	1.1710	FT. IN.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

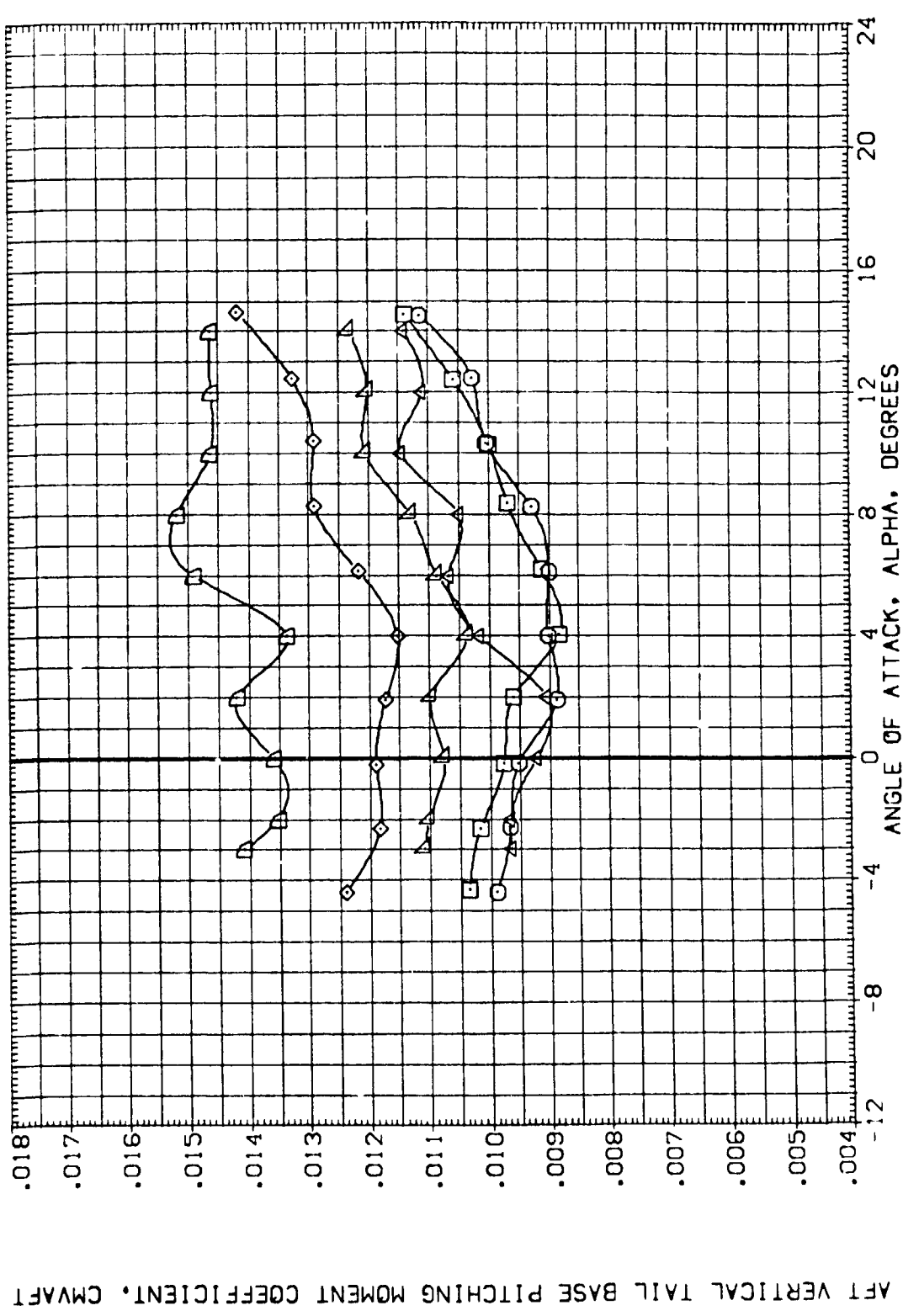


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(EJMAC) = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(BER019)	ARC 66-709 DA59 GA11A-(N24)
(BER022)	ARC 66-709 DA59 GA11A-(N24)
(BER023)	ARC 66-709 DA59 GA11A-(N24)
(ZER019)	ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)
(ZER022)	ARC 66-709 DA59 O11A-N24 (ADJUSTED FOR TARES)
(ZER023)	ARC 66-709 DA59 O11A-N24 (ADJUSTED FPP TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	.000	.000
.000	.000	16.300
.000	.000	-11.700
.000	.000	.000
.000	.000	16.300

REFERENCE INFORMATION

SREF	.6053	SQ.FT.
LREF	.5935	FT.
BREF	1.1710	FT.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

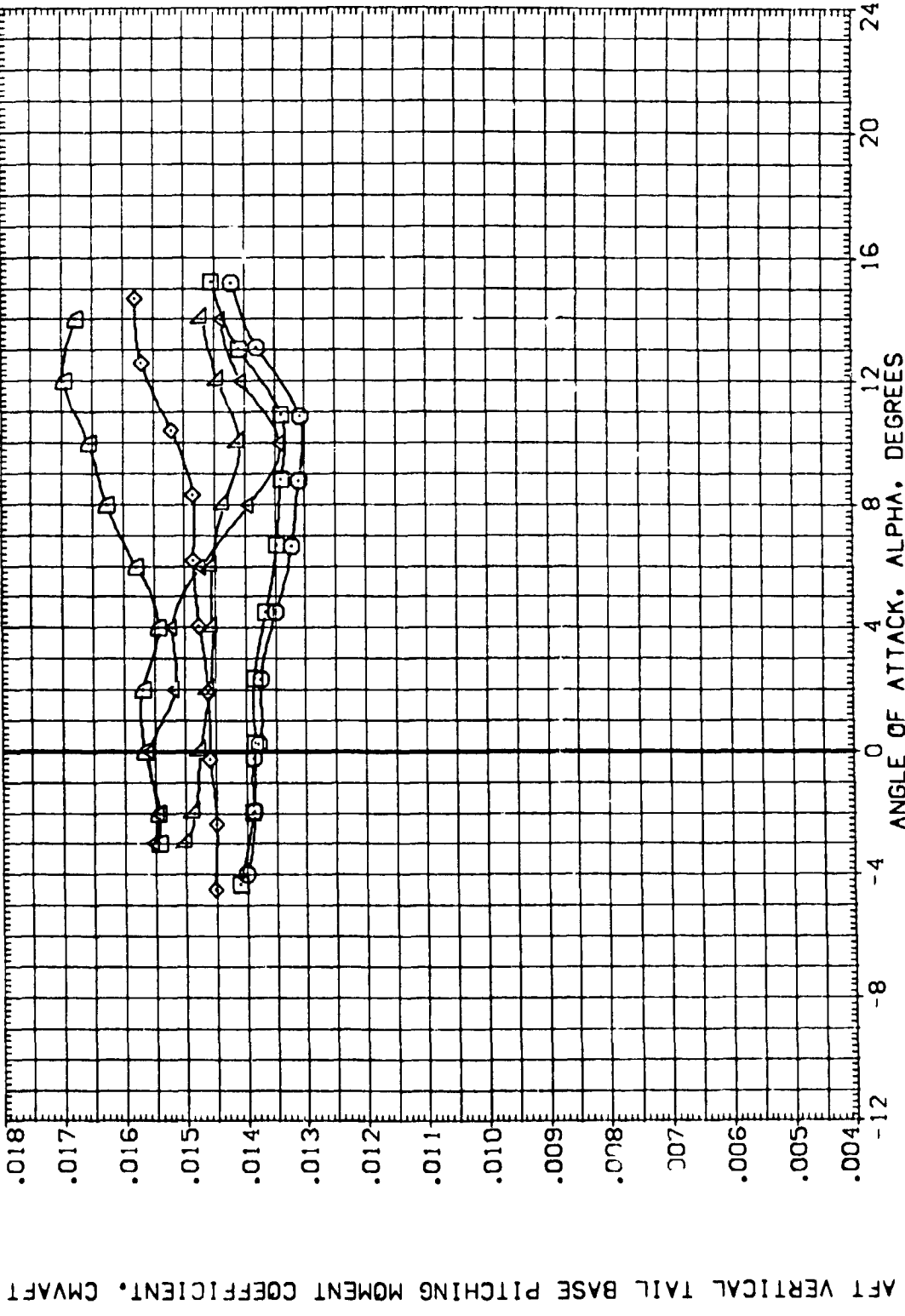


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(G)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION BETA ELEVON BDF/FLAP REFERENCE INFORMATION

(BER019) ARC 66-709 OA59 O11A-N24 .000 .000 -11.700 SREF 6053 50.FT.

(BER022) ARC 66-709 OA59 O11A-N24 .000 .000 -11.700 LREF .5925 FT.

(BER023) ARC 66-709 OA59 O11A-N24 .000 .000 16.300 BRREF 1.1710 FT.

(ZER019) ARC 66-709 OA59 O11A-N24 (ADJUSTED FOR TARES) .000 .000 -11.700 XMRP 12.6235 IN.

(ZER022) DATA NOT AVAILABLE .000 .000 .000 YMRP .0000 IN.

(ZER023) ARC 66-709 OA59 O11A-N24 (ADJUSTED FOR TARES) .000 .000 16.300 ZMRP -.3750 IN.

SCALE .0150

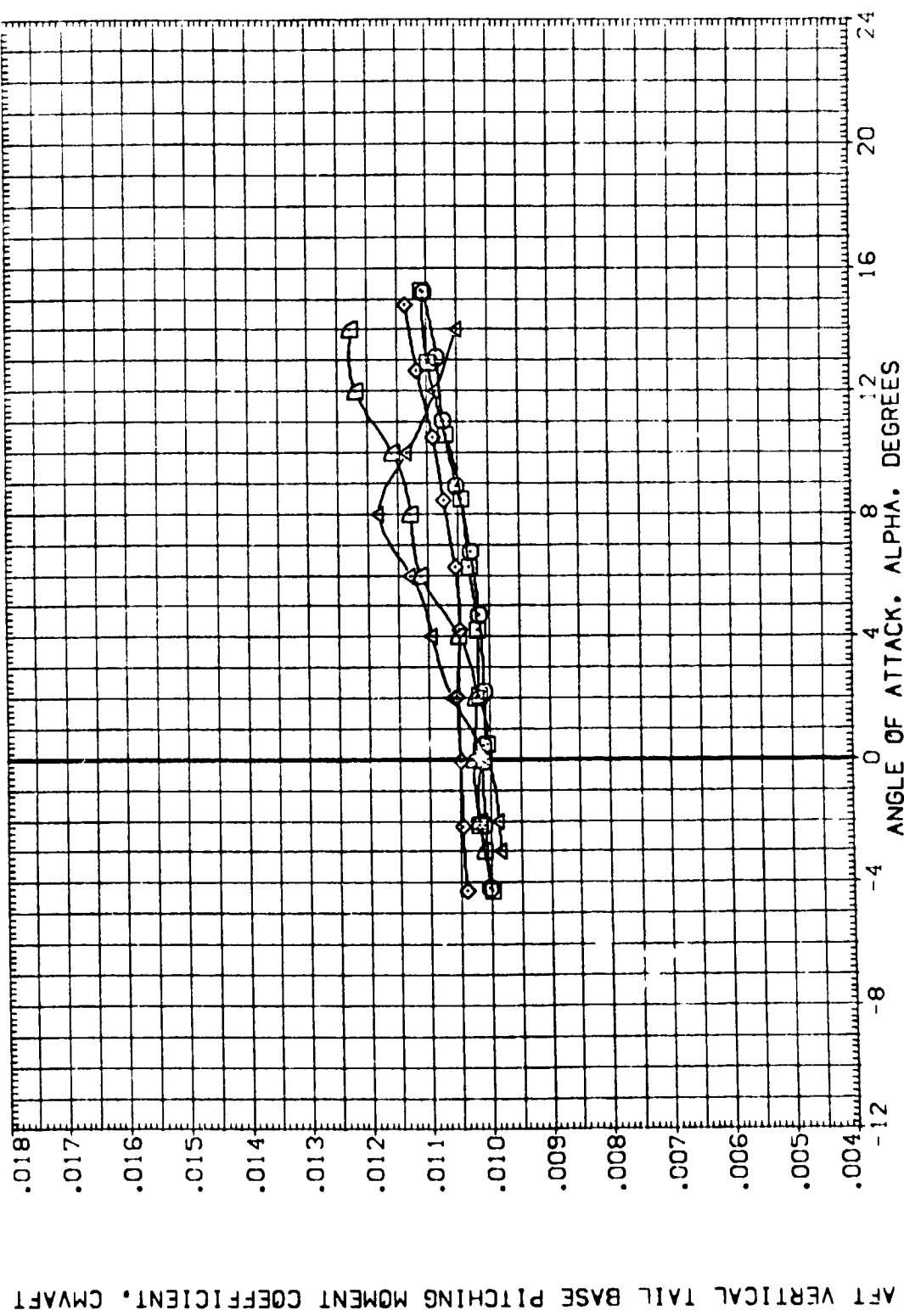


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(M)MACH = 1.50



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(BER019)	ARC 66-709 DASS 0111A-(N24)
(BER022)	ARC 66-709 DASS 0111A-(N24)
(ZER019)	ARC 66-709 DASS 0111A-N24 (ADJUSTED FOR TARES)
(ZER022)	ARC 66-709 DASS 0111A-N24 (ADJUSTED FOR TARES)

BETA ELEVON BOFLAP

.000	.000	-11.700
.000	.000	.000
.000	.000	16.300
.000	.000	-11.700
.000	.000	.000
.000	.000	16.300

REFERENCE INFORMATION

SREF	.6053	SO, FT.
LREF	.5936	FT.
BREF	1.1710	FT.
XMRP	12.6235	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

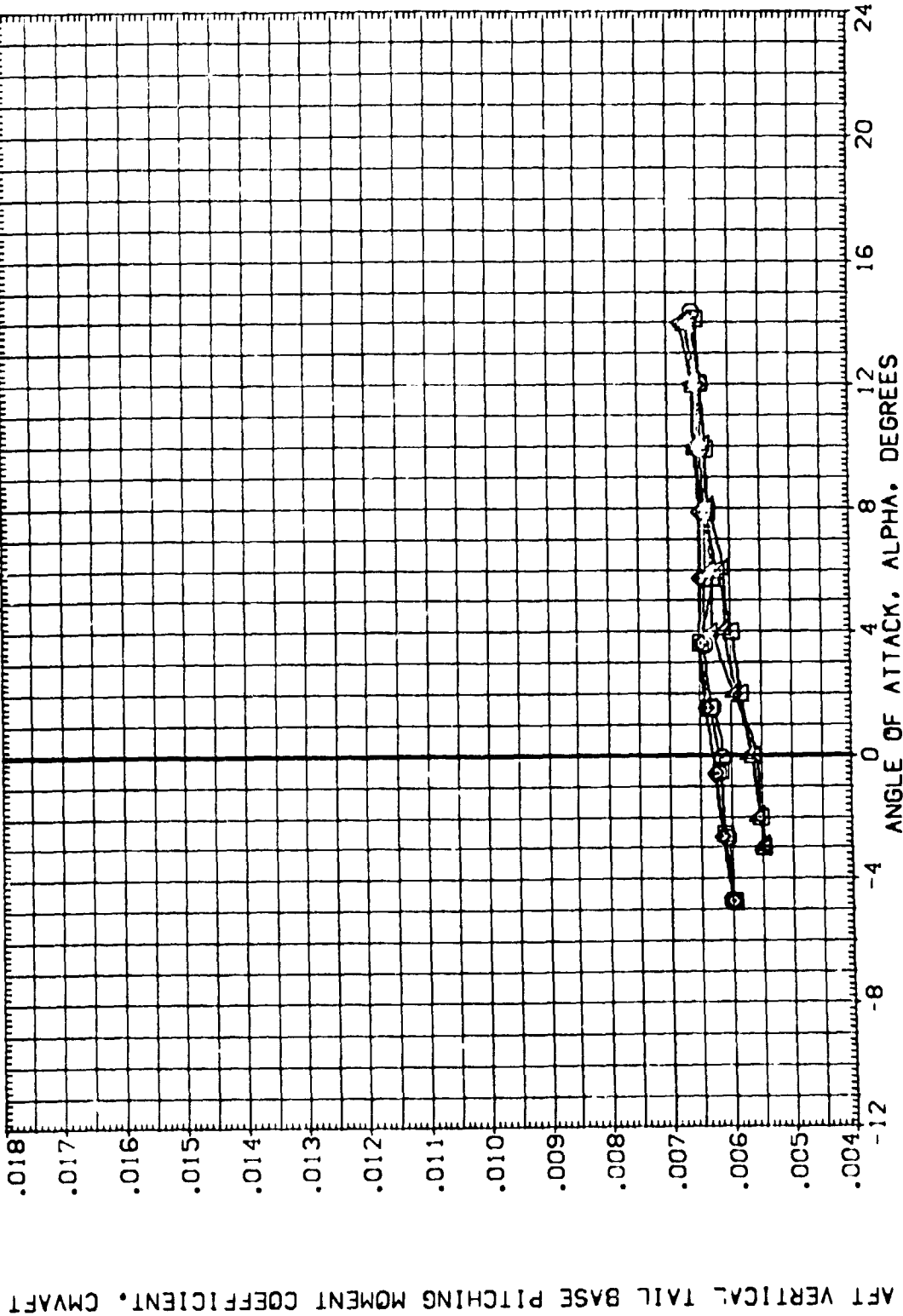


FIG. 14 BODY FLAP EFFECTIVENESS WITH/WITHOUT TARES

(1)MACH = 2.00

DATA SET SYMBOL (4ER024) (1ER024) □

CONFIGURATION DESCRIPTION
 ARC 66-709 OA59 011A-N24
 ARC 66-709 OA59 011A-N24 (ADJUSTED FOR TARES)

ALPHA 10.000
 ELEVON .000
 BOFLAP -11.700

REFERENCE INFORMATION
 SREF .6053 50 FT.
 LREF .5935 FT.
 BREF 1.1710 FT.
 XMRP 12.6255 IN.
 YMRP .0000 IN.
 ZMRP -.3750 IN.
 SCALE .0150

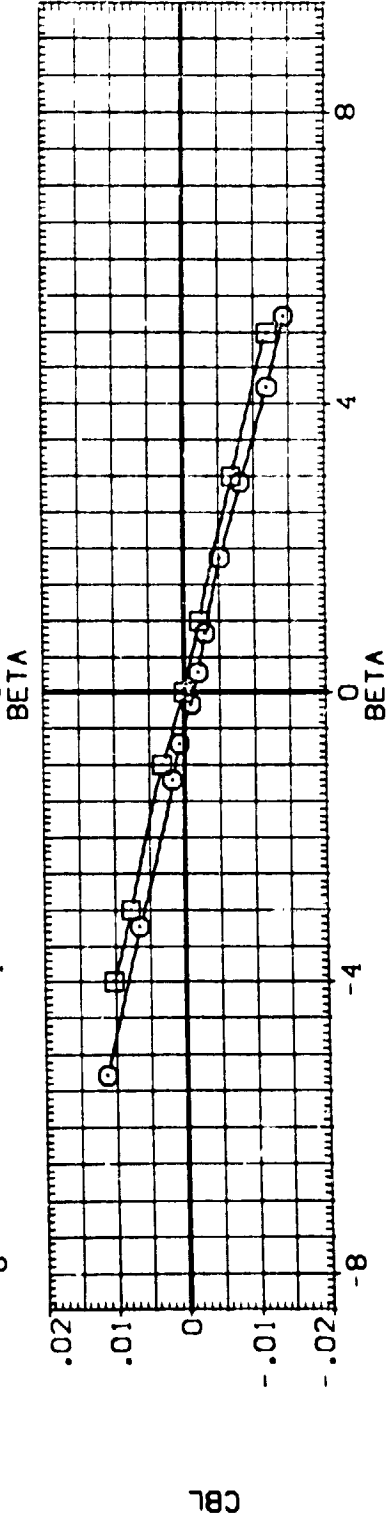
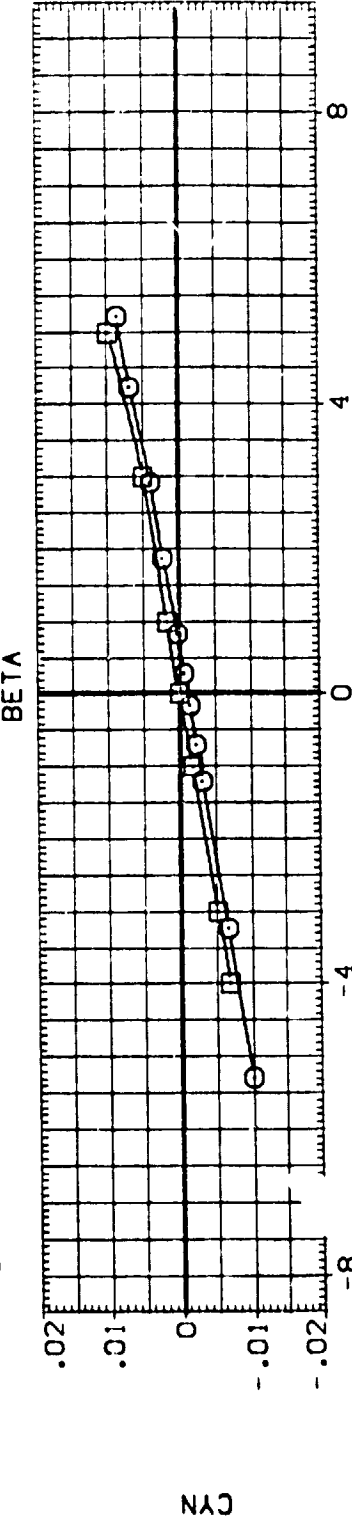
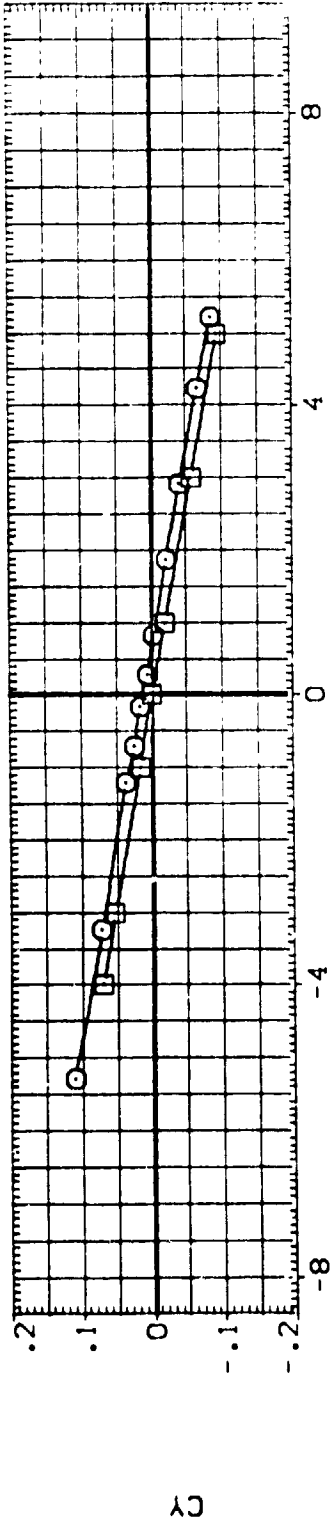


FIG. 15 YAW DATA WITH/WITHOUT TARES

(A)MACH = .60

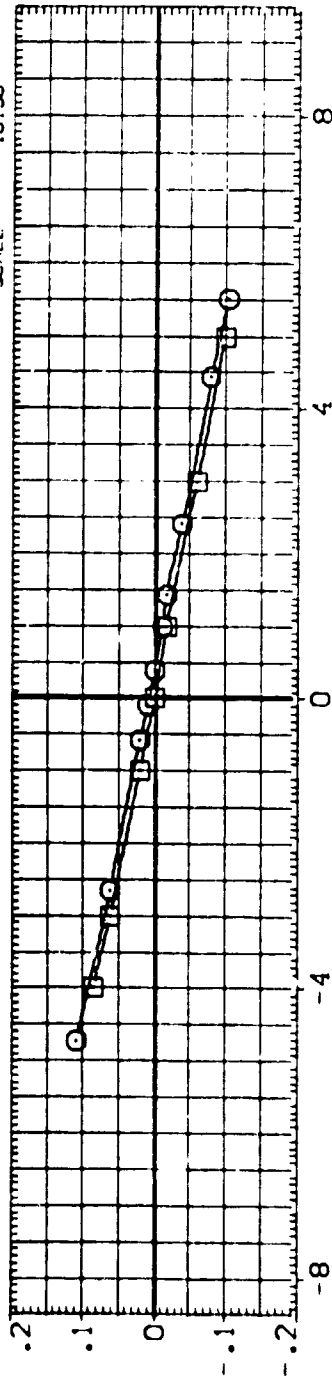


DATA SET SYMBOL: (4LR024) (1LR024)

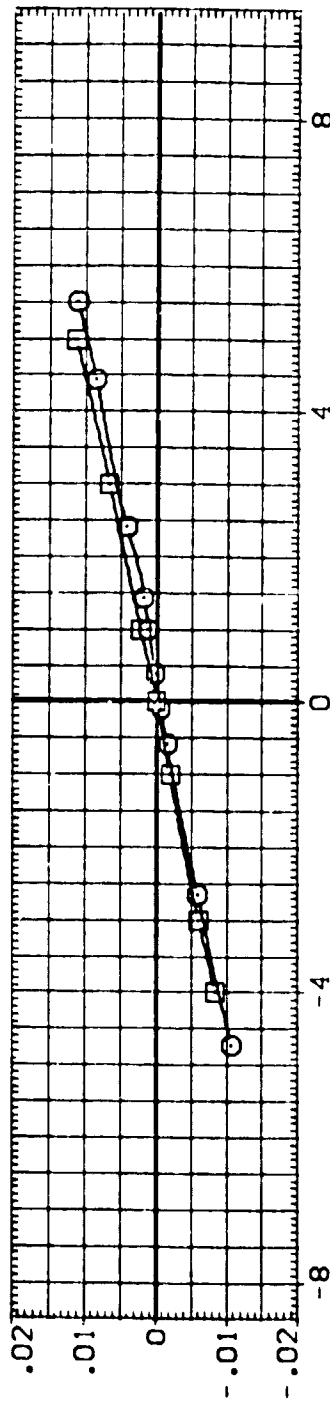
CONFIGURATION DESCRIPTION:
 ARC 66-709 QAS9 0111A-(N24)
 ARC 66-709 QAS9 0111A-N24 (ADJUSTED FOR TARES)

ALPHA: 10.000
 ELEVON: .000
 BDFLAP: -11.700

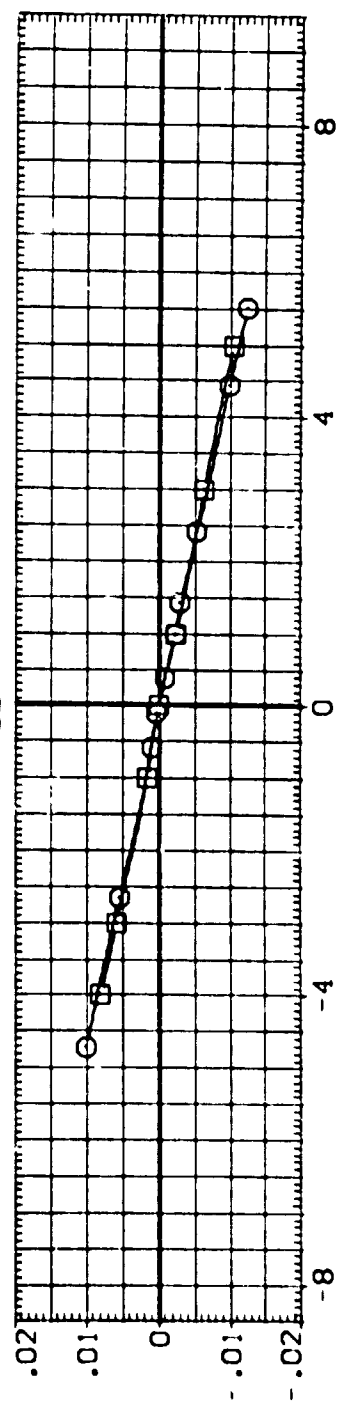
REFERENCE INFORMATION:
 SREF: .6053 50.FT.
 LREF: .5935 FT.
 BREF: 1.1710 FT.
 XMRP: 12.6255 IN.
 YMRP: .0000 IN.
 ZMRP: -.3750 IN.
 SCALE: .0150



CY



CYN



CBL

FIG. 15 YAW DATA WITH/WITHOUT TARES

(B)MACH = .80

DATA SET SYMBOL: (4ER024) (1ER024)

CONFIGURATION DESCRIPTION:
 ARC 66-709 OAS9 011A-N24
 ARC 66-709 OAS9 011A-N24 (ADJUSTED FOR TARES)

ALPHA: 10.000
 ELEVON: .000
 BOFLAP: .000 -11.700

REFERENCE INFORMATION:
 SREF: .6053 SQ.FT.
 LREF: .5936 FT.
 BRFF: 1.1710 FT.
 XMRP: 12.6255 IN.
 YMRP: .0000 IN.
 ZMRP: -.3750 IN.
 SCALE: .0133

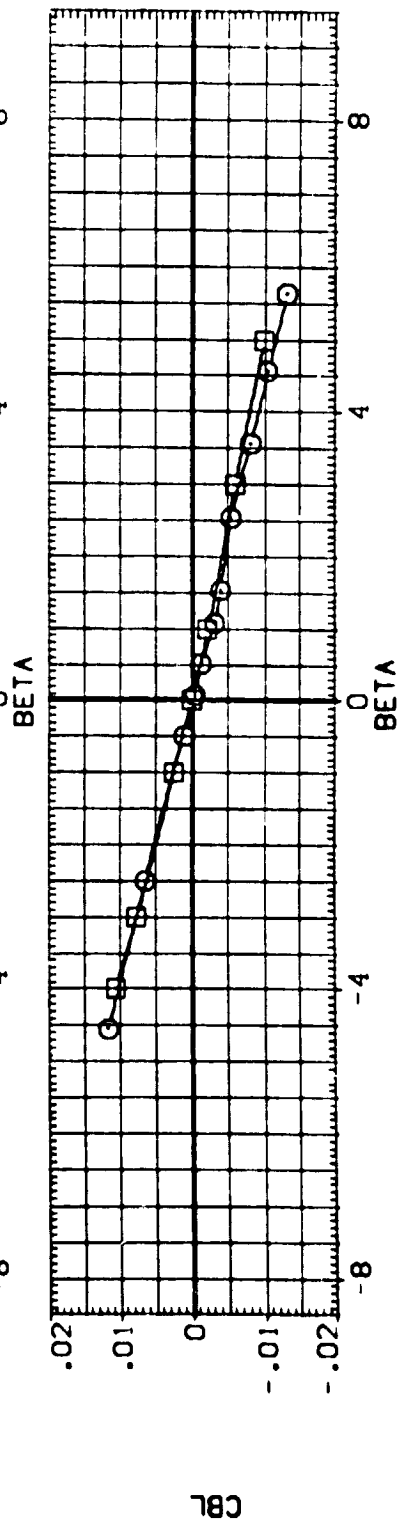
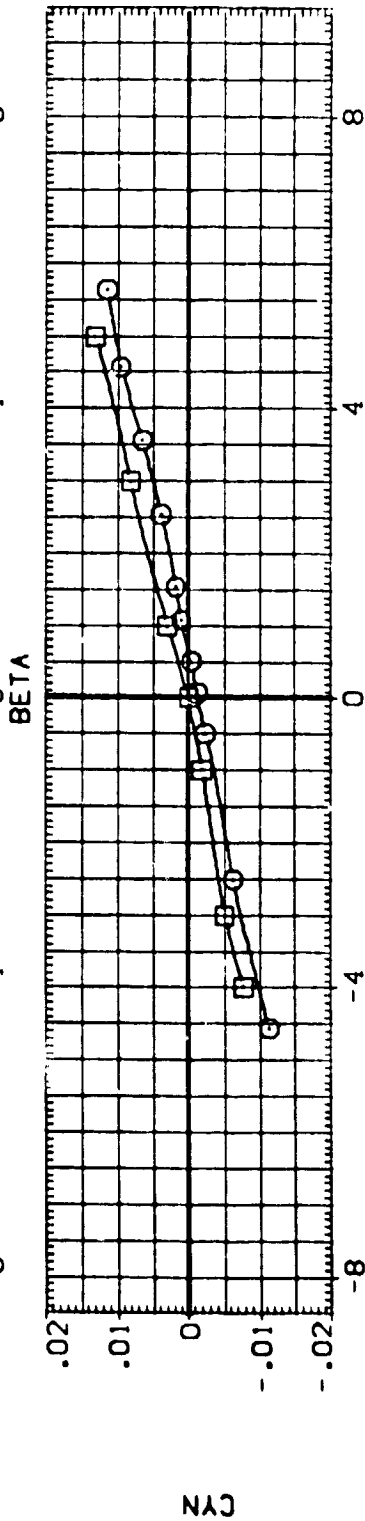
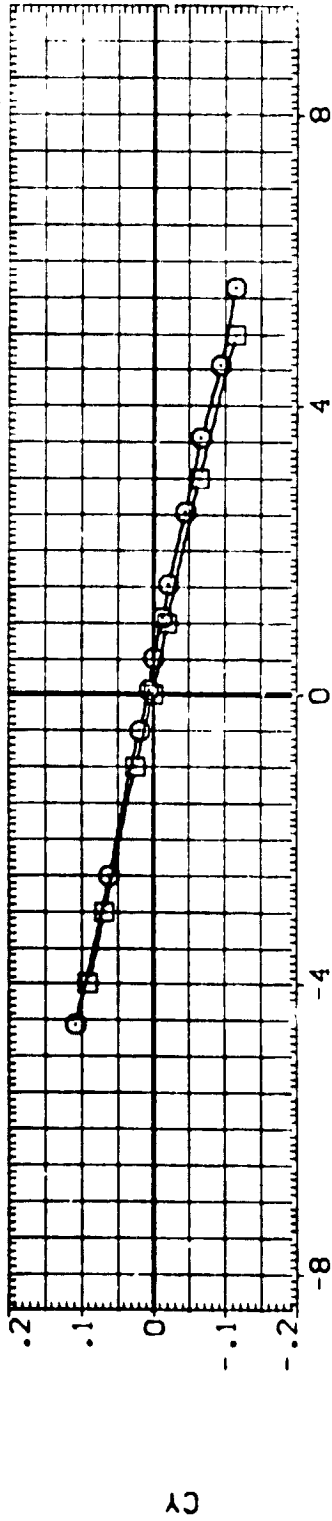


FIG. 15 YAW DATA WITH/WITHOUT TARES
 (C)MACH = .90



DATA SET SYMBOL: (4ER024) (1ER024)

CONFIGURATION DESCRIPTION:
 ARC 66-709 0A59 0A11A-(N24)
 ARC 66-709 0A59 0A11A-N24 (ADJUSTED FOR TARES)

ALPHA: 10.000
 ELEVON: .000
 BOFLAP: .000 -11.700

REFERENCE INFORMATION:
 SREF: .6053 50.FT.
 LREF: .5936 FT.
 BREF: 1.1710 FT.
 XMRP: 12.6255 IN.
 YMRP: .0000 IN.
 ZMRP: -.3750 IN.
 SCALE: .0150

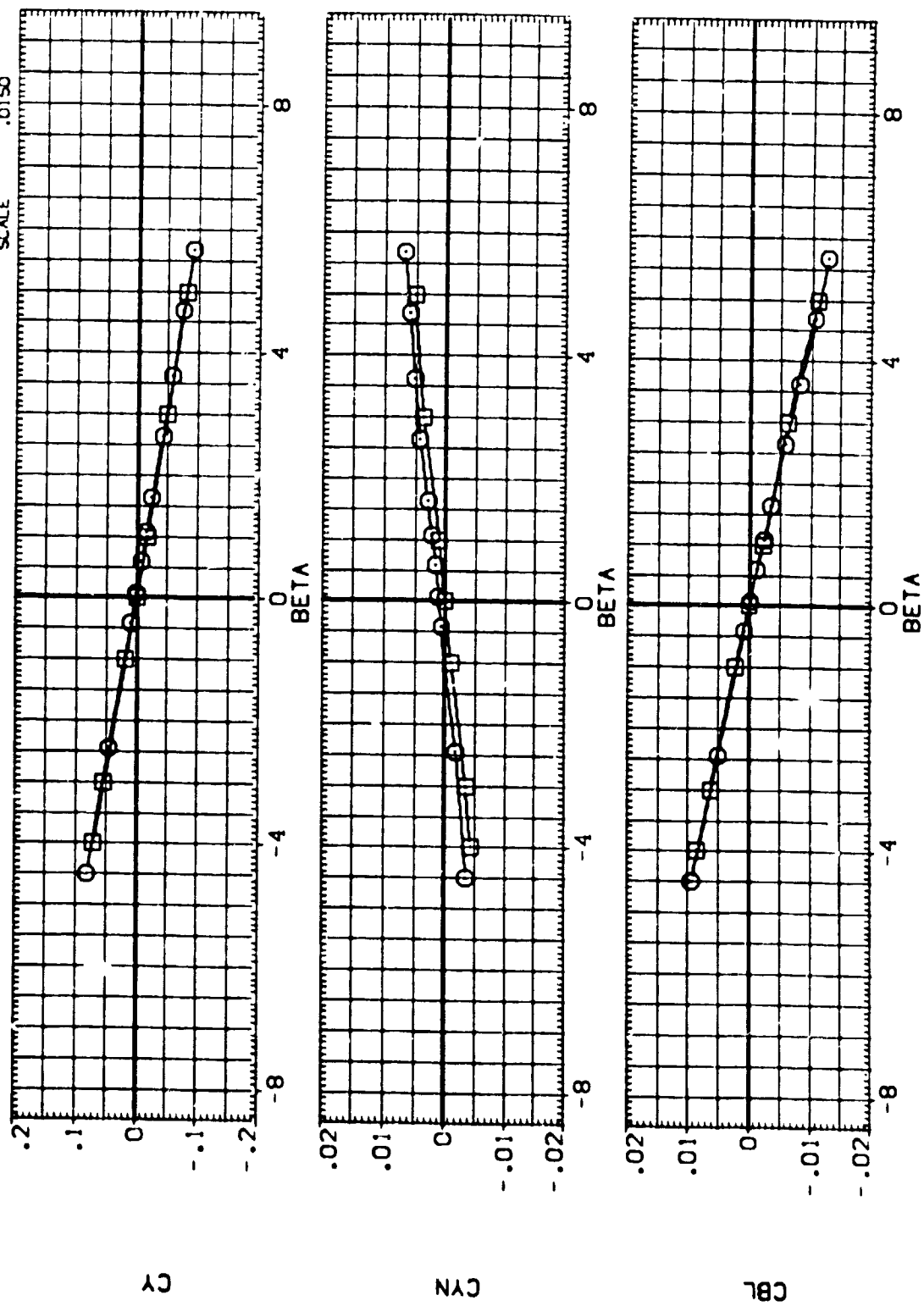



FIG. 15 YAW DATA WITH/WITHOUT TARES

(O)MAC = 1.20

DATA SET SYMBOL: (4E024)
 (1E024)  CONFIGURATION DESCRIPTION: ARC 66-708 BASS DATA-(N24)
 DATA NOT AVAILABLE

ALPHA: 10.000
 ELEVON: .000
 BDFLAP: -11.700

REFERENCE INFORMATION:
 SREF: .6053 50. FT.
 LREF: .5935 FT.
 BREF: 1.1710 FT.
 XMRP: 12.6255 IN.
 YMRP: .0000 IN.
 ZMRP: -.3750 IN.
 SCALE: .0150

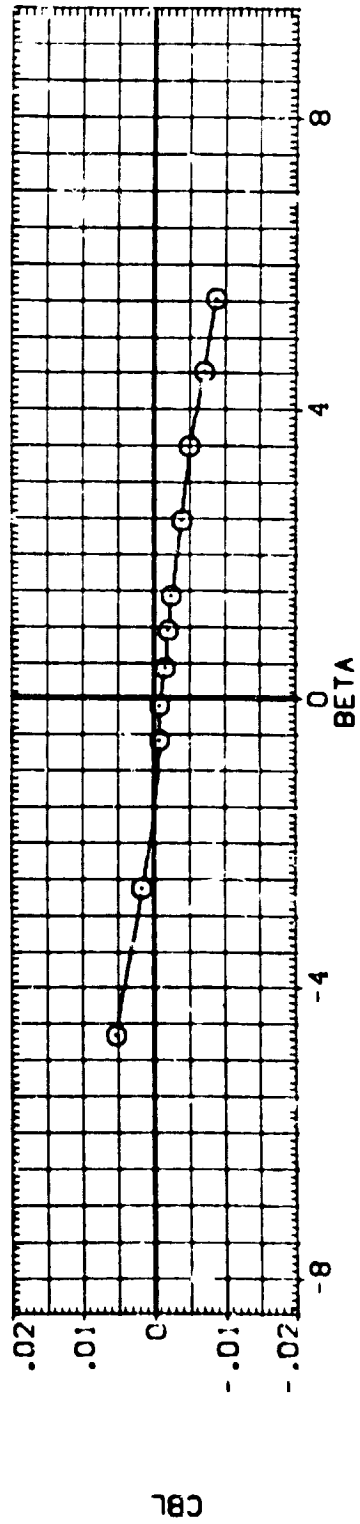
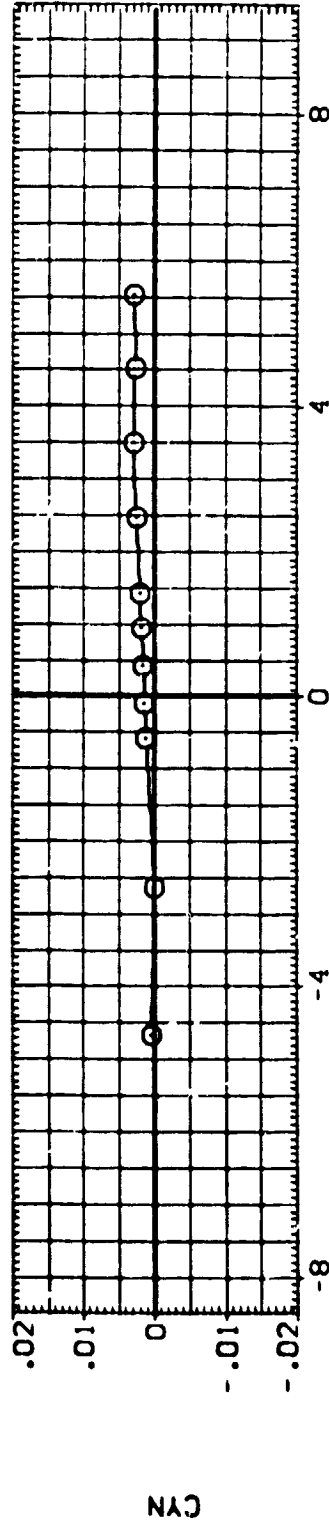
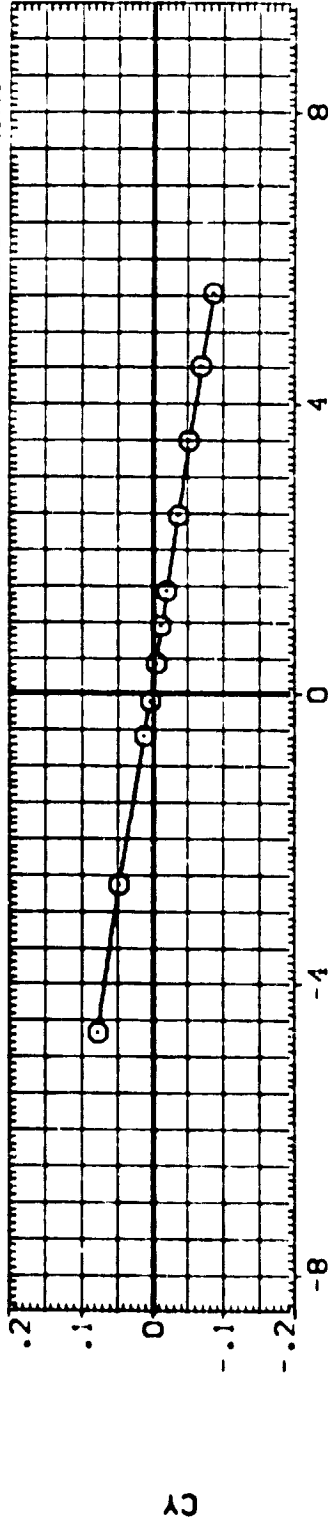


FIG. 15 YAW DATA WITH/WITHOUT TARES

(E)MACH = 1.50



DATA SET SYMBOL: (1ER024) (1ER024)

CONFIGURATION DESCRIPTION: ARC 66-709 GASS 0111A-N24 (ADJUSTED FOR TARES)

ALPHA: 10.000

ELEVATION: .000

BD FLAP: -11.700

REFERENCE INFORMATION:

SREF	.6053	SO.FT.
LREF	.5935	FT.
BREF	1.1710	IN.
XMRP	12.6255	IN.
YMRP	.0000	IN.
ZMRP	-.3750	IN.
SCALE	.0150	

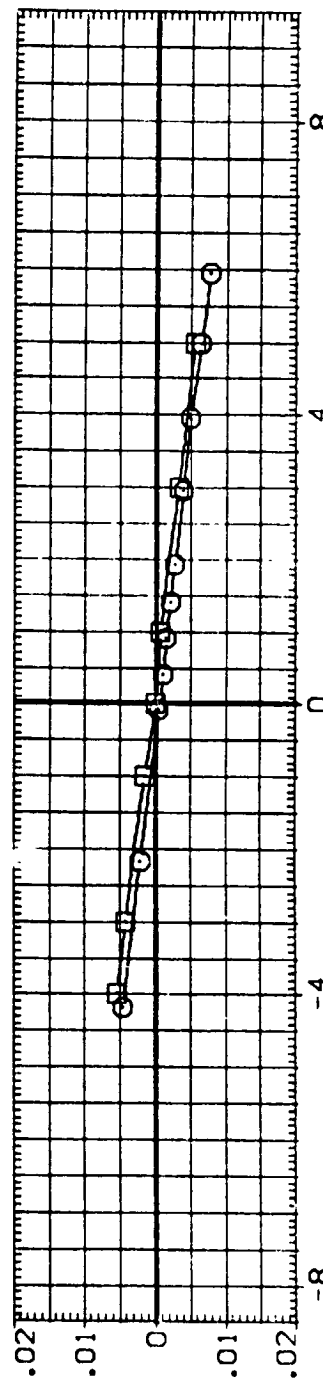
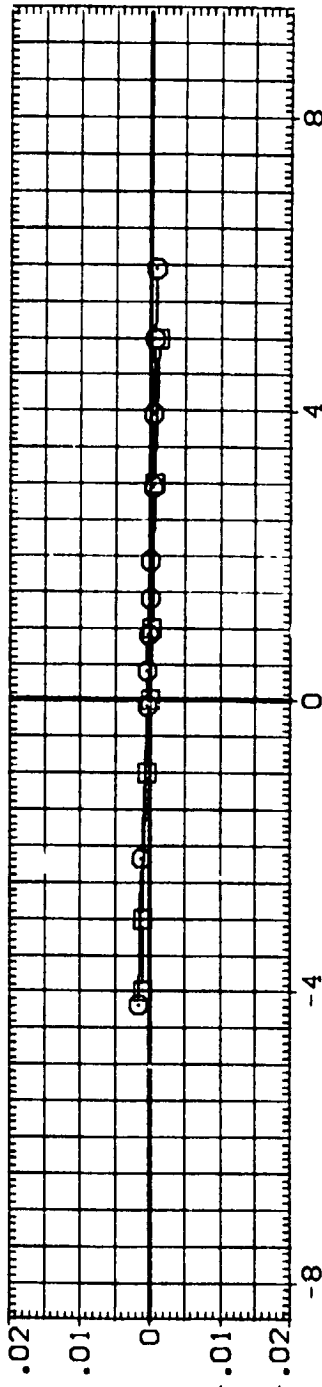
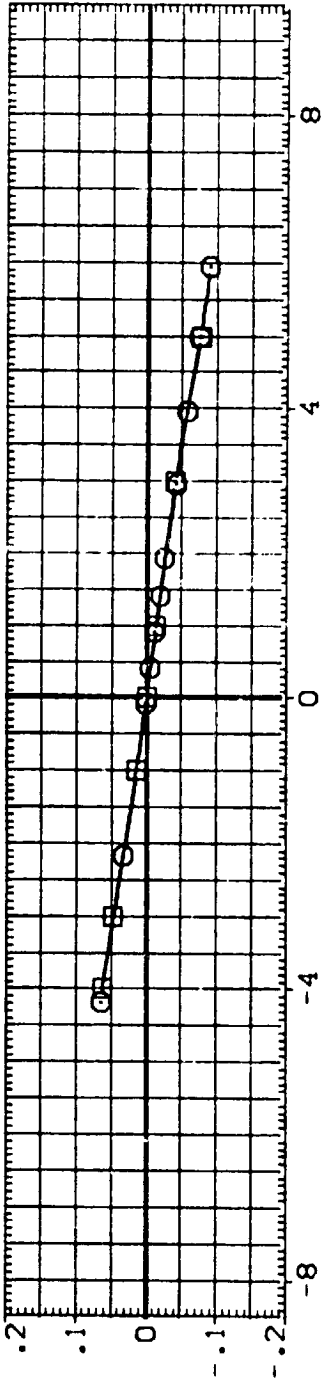


FIG. 15 YAW DATA WITH/WITHOUT TARES

(F)MACH = 2.00

APPENDIX
TABULATED SOURCE DATA

Tabulations of plotted data are available on request from
Data Management Services

DATE 20 AUG 74 OAS9 TABULATED SOURCE DATA

ARC 66-709 OAS9 OAL1A-(M24 R5 V0)*STRUT*GUM STNG (AERD01) (23 APR 74)

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BCFLAP = -11.700

REFERENCE DATA

SECF = .6033 SQ.FT. XMRP = 12.6255 IN.
LREF = .5935 FT. YMRP = .0500 IN.
OREF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0150

RUN NO. 36/ 0 RN/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.599	-4.580	-4.5210	-3.6920	-2.0670
.600	-2.480	-4.1530	-3.4710	-1.9640
.600	-.320	-4.0310	-3.4600	-2.0010
.603	1.830	-3.0860	-3.1560	-1.7180
.600	3.930	-3.8400	-3.3220	-1.7770
.602	6.070	-3.6960	-3.2300	-1.7260
.602	8.250	-3.2990	-2.9850	-1.5880
.602	10.410	-3.1130	-2.9650	-1.5790
.602	12.540	-2.9840	-2.9060	-1.6830
.600	14.740	-2.9420	-2.8730	-1.9430
	GRADIENT	.00763	.00495	.00388

RUN NO. 6/ 0 RN/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.655	-4.710	-4.2820	-3.4230	-2.0870
.700	-2.570	-4.1030	-3.3110	-2.0540
.698	-.430	-3.7560	-3.1160	-1.9300
.699	1.720	-3.3840	-3.2470	-1.9390
.697	3.860	-3.7680	-3.0760	-1.7650
.699	6.010	-3.6290	-3.1260	-1.7750
.700	8.240	-3.4700	-3.2180	-1.8250
.701	10.370	-3.3790	-3.2890	-1.8640
.700	12.550	-3.3380	-3.3260	-2.0610
.700	14.710	-3.3260	-3.4690	-2.3750
	GRADIENT	.00580	.00353	.00334

RUN NO. 5/ 0 RN/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.748	-4.800	-4.1380	-3.4690	-2.2970
.752	-2.700	-3.8990	-3.3040	-2.1780
.751	-.490	-3.7760	-3.2980	-2.1240
.748	1.770	-3.6730	-3.1230	-1.9390
.750	3.830	-3.3780	-3.2700	-2.0150
.751	6.000	-3.5630	-3.1600	-1.7890
.750	8.240	-3.3470	-3.3610	-1.8790
.748	10.380	-3.3960	-3.3540	-1.9230
.748	12.580	-3.3980	-3.4770	-2.1290
.750	14.690	-3.3350	-3.6670	-2.4320
	GRADIENT	.00432	.00270	.00362

ARC 88-709 OAS9 OAS11A-IN24 R5 V8)*STRUT+CUM STNG (AER001) (25 APR 74)

REFERENCE DATA

SREF = .6535 58.FT. XMRP = 12.6255 IN.
 LREF = .5935 FT. THRP = .0090 IN.
 BRFP = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .5150

BETA = .000 ELEVOM = .000
 BDFLAP = -11.700

PARAMETRIC DATA

RUN NO. 35/ 0 RN/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.799	-4.950	-.39960	-.34430	-.23410
.801	-2.810	-.38340	-.35010	-.22990
.801	-.600	-.39330	-.33510	-.22550
.802	1.630	-.37090	-.33100	-.21100
.801	3.880	-.36930	-.33420	-.20100
.801	6.010	-.35930	-.33010	-.18970
.799	8.240	-.35370	-.34720	-.19640
.797	10.410	-.35110	-.35740	-.20710
.800	12.600	-.34670	-.36050	-.22300
.800	14.740	-.34530	-.37060	-.24830
	GRADIENT	.00331	.00178	.00386

RUN NO. 3/ 0 RN/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.848	-4.980	-.41030	-.36430	-.24630
.850	-2.870	-.40580	-.37580	-.25640
.850	-.660	-.38560	-.35640	-.23600
.857	1.590	-.36800	-.36560	-.22190
.849	3.850	-.39430	-.37110	-.21360
.850	5.970	-.37980	-.37060	-.20900
.848	8.170	-.37470	-.37620	-.21320
.849	10.300	-.36810	-.37730	-.22130
.850	12.510	-.36390	-.39110	-.24640
.849	14.750	-.36350	-.39650	-.26410
	GRADIENT	.00223	-.00016	.00452

RUN NO. 34/ 0 RN/L = 2.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.896	-5.050	-.41410	-.40000	-.25950
.901	-2.830	-.37310	-.38740	-.24370
.897	-.680	-.36960	-.37020	-.23520
.898	1.650	-.34960	-.34480	-.23030
.900	3.810	-.32490	-.29330	-.20410
.899	5.960	-.33270	-.29760	-.19260
.900	8.200	-.36090	-.36610	-.20310
.899	10.340	-.34340	-.38000	-.22390
.897	12.500	-.37220	-.39440	-.24490
.900	14.770	-.37750	-.41940	-.26740
	GRADIENT	.00741	.01335	.00554



ARC 66-709 0A59 0A11A-(M24 R5 V8)*STRUT*DOWN STING (AER001) (25 APR 74)

REFERENCE DATA

SREF = .8033 38.FT. XMRP = 12.8233 IN.
 LREF = .5935 FT. YMRP = .0000 IN.
 ORF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

BETA = .090 ELEVON = .000
 BDFLAP = -11.700

RUN NO. 1/ 0 RM/L = 2.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.955	-5.120	-.49650	-.52380	-.33140
.951	-2.940	-.44830	-.47020	-.30770
.952	-.610	-.41730	-.43290	-.29990
.950	1.630	-.39390	-.38100	-.27210
.950	3.900	-.41450	-.39350	-.31500
.951	5.980	-.40670	-.37430	-.25320
.948	8.230	-.44050	-.40690	-.26160
.953	10.440	-.42940	-.42280	-.27490
.951	12.600	-.44490	-.44700	-.30720
.947	14.800	-.46320	-.45290	-.34810
	GRADIENT	.00524	.01240	.00025

RUN NO. 33/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.207	-4.040	-.40650	-.49510	-.35790
1.201	-2.890	-.41630	-.50020	-.34040
1.202	-.520	-.39690	-.45680	-.32720
1.201	1.700	-.39000	-.43070	-.32640
1.201	3.960	-.34250	-.36000	-.34050
1.205	6.100	-.26200	-.30400	-.34720
1.201	8.390	-.24530	-.28370	-.35780
1.197	10.650	-.25280	-.29730	-.37890
1.201	12.860	-.24420	-.29570	-.37770
1.195	15.160	-.27270	-.33250	-.41500
	GRADIENT	.00779	.01685	.00211

RUN NO. 32/ 0 RM/L = 2.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.500	-4.820	-.29420	-.36750	-.37780
1.503	-2.710	-.30340	-.37720	-.36830
1.500	-.410	-.31760	-.39030	-.35980
1.498	1.610	-.31360	-.38480	-.32460
1.498	4.060	-.30720	-.35990	-.30320
1.499	6.210	-.29830	-.33040	-.30660
1.498	8.490	-.24540	-.29090	-.31290
1.500	10.840	-.24370	-.28880	-.32270
1.500	12.830	-.24570	-.29320	-.34270
1.499	15.060	-.24660	-.29350	-.33160
	GRADIENT	-.00162	.00036	.00868

ARC 66-709 OAS9 0A11A-(M2A R5 V0)*STRUT+DUM STNG (AER001) (29 APR 74)

REFERENCE DATA

XREF = .6533 58.FT. XMRP = 12.8235 IN.
 YREF = .5935 FT. YMRP = .0000 IN.
 ZREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

BETA = .000 ELEVON = .000
 BDFLAF = -11.700

RUN NO. 31/ 0 RN/L = 2.45 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
2.001	-5.210	-1.6740	-.20770	-.24940
1.996	-3.130	-1.17790	-.21500	-.23370
1.998	-.970	-.18570	-.22100	-.23590
1.997	1.240	-.19500	-.22740	-.23820
1.995	3.400	-.19690	-.22770	-.23360
1.999	5.560	-.20140	-.23390	-.23270
2.001	7.690	-.20170	-.23450	-.23360
2.001	9.820	-.20170	-.23620	-.23990
2.001	12.040	-.20010	-.23680	-.23960
2.001	14.190	-.19540	-.23590	-.24090
	GRADIENT	-.00304	-.00204	-.00509



DATE 29 AUG 74 OAS9 TABULATED SOURCE DATA

ARC 66-709 OAS9 OAS1A-(MR4 R5 V6)*STRUT*OUM STMG (AER002) (25 APR 74)

REFERENCE DATA

SREF = .6033 58-FT. XMRP = 12.6255 IN. BETA = .000 ELEVOM = .000
 LREF = .5935 FT. YMRP = .0000 IN. BCFLAP = -11.700
 BREF = 1.1710 FT. ZMRP = -.3750 IN. SCALE = .0150

PARAMETRIC DATA

RUN NO. 7/ 0 RM/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.600	-4.560	-4.4050	-3.5790	-1.9890
.601	-2.480	-4.1790	-3.4100	-1.9360
.599	-3.350	-4.0970	-3.3210	-1.9570
.598	1.790	-3.9640	-3.2910	-1.8530
.601	3.960	-3.8580	-3.2160	-1.7720
.601	6.070	-3.7190	-3.2800	-1.7260
.599	6.280	-3.6640	-3.2620	-1.7980
.600	10.355	-3.3190	-3.1300	-1.7640
.600	12.520	-3.2920	-3.1540	-2.0050
.600	14.720	-3.1010	-3.0990	-2.1530
	GRADIENT	.00614	.00396	.00243

RUN NO. 4/ 0 RM/L = 2.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.603	-4.070	-4.1770	-3.4770	-2.2340
.799	-2.790	-3.9020	-3.4510	-2.2780
.602	-.590	-3.8190	-3.3400	-2.2000
.601	1.610	-3.8350	-3.2670	-2.1030
.602	3.850	-3.8140	-3.3910	-2.5420
.600	6.030	-3.6770	-3.3620	-1.9190
.799	6.210	-3.6880	-3.6400	-2.0740
.799	10.430	-3.4920	-3.5240	-2.0450
.799	12.520	-3.5040	-3.7200	-2.3120
.799	14.690	-3.4570	-3.7630	-2.5210
	GRADIENT	.00360	.00162	.00360

RUN NO. 2/ 0 RM/L = 2.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.698	-5.130	-3.9570	-3.8630	-2.5050
.901	-2.920	-3.9240	-4.0420	-2.5630
.901	-.690	-3.8020	-3.8440	-2.5230
.901	1.610	-3.6660	-3.5100	-2.3480
.900	3.810	-3.5170	-3.1330	-2.2800
.900	5.940	-3.4930	-3.0990	-2.0060
.902	6.160	-3.8500	-3.9160	-2.3570
.901	10.310	-3.7640	-3.8790	-2.2790
.900	12.480	-3.7150	-4.0130	-2.5090
.698	14.690	-3.9440	-4.3340	-2.8430
	GRADIENT	.00603	.01334	.00483

0439 TABULATED SOURCE DATA (AER502) (29 APR 74)

ARC 88-709 0439 0411A-(M24 R5 V8)*STRUT+DUM STMG

PARAMETRIC DATA
 BETA = .005 ELEVON = .000
 BCFLAP = -11.700

REFEREN.E DATA
 SREF = .0033 38.FT. XMRP = 12.6233 IN.
 LREF = .0033 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

RUN NO. 0/ 0 RN/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.199	-5.090	-.41540	-.51310	-.38060
1.201	-2.940	-.40870	-.49170	-.33230
1.201	-.680	-.41260	-.47550	-.33920
1.200	1.620	-.40100	-.44220	-.34610
1.203	3.800	-.36370	-.38370	-.35500
1.202	6.050	-.27880	-.32370	-.36320
1.201	8.290	-.25810	-.30090	-.37840
1.199	10.550	-.24180	-.28760	-.37270
1.196	12.780	-.25660	-.30670	-.39480
1.201	15.010	-.28100	-.33740	-.42080
	GRADIENT	-.00647	.01583	-.00333



ARC 66-709 OAS9 OAL1A-(M24 R5 V03)*STRUT*OUM STNG

PARAMETRIC DATA

BETA = .000 ELEVON = 15.000
 BDFLAP = -11.700

REFERENCE DATA

SREF = .6033 36.FT. XMRP = 12.6255 IM.
 LREF = .5933 37.FT. YMRP = .0000 IM.
 BREF = 1.1710 FT. ZMRP = -.3750 IM.
 SCALE = .0150

RUN NO. 30/ 0 RM/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.602	-4.340	-4.4550	-4.0590	-.25190
.600	-2.250	-4.4550	-3.9330	-.26060
.603	-.020	-4.3190	-3.6930	-.24860
.602	2.130	-4.2330	-3.6670	-.24110
.600	4.240	-4.0600	-3.5900	-.22910
.601	6.350	-3.9750	-3.4910	-.21930
.600	8.570	-3.8190	-3.3020	-.22870
.601	10.730	-3.7150	-3.4130	-.22960
.602	12.630	-3.6440	-3.5200	-.24420
.600	15.000	-3.5960	-3.5630	-.26330
	GRADIENT	.00590	.00552	.00303

RUN NO. 29/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.700	-4.430	-4.4550	-3.9920	-.27810
.700	-2.260	-4.2280	-3.7200	-.26490
.700	-.190	-4.0460	-3.5300	-.25470
.702	2.120	-4.0370	-3.4690	-.24730
.702	4.220	-3.9100	-3.3320	-.22660
.700	6.340	-3.9420	-3.4360	-.22660
.699	8.640	-3.7660	-3.5650	-.23710
.700	10.690	-3.7410	-3.7170	-.25165
.701	12.630	-3.6600	-3.7170	-.26110
.699	15.030	-3.7640	-4.0090	-.29380
	GRADIENT	.00589	.00723	.00554

RUN NO. 26/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.799	-4.590	-4.3140	-4.2170	-.30540
.799	-2.480	-4.0940	-3.9650	-.29020
.801	-.360	-4.1730	-3.6520	-.27310
.798	1.140	-4.0320	-3.7600	-.28770
.800	1.930	-3.8600	-3.5630	-.26530
.801	4.120	-4.0130	-3.7110	-.26380
.800	6.330	-4.0030	-3.6320	-.26420
.799	8.530	-3.9600	-3.9200	-.26760
.798	10.710	-3.9520	-4.0630	-.28020
.799	12.620	-3.9610	-4.2040	-.30030
.796	15.540	-4.1090	-4.4360	-.32910
	GRADIENT	.00418	.00643	.00490

ARC 08-709 QAS9 0A11A-(N24 E5 V0)+STRUT+DUM 9TN

(AER003) (25 APR 74)

REFERENCE DATA

XREF = .6033 SQ.FT. XMRP = 12.6255 IN.
 LREF = .5935 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0100

BETA = .000 ELEVON = 19.000
 BSFLAP = -11.700

PARAMETRIC DATA

RUN NO. 27/ 0 RM/L = 2.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.899	-4.640	-4.45080	-4.46640	-3.31190
.901	-2.570	-4.35060	-4.35560	-3.21600
.900	-4.430	-4.40540	-3.94200	-3.09800
.901	1.910	-4.40030	3.69800	-3.07750
.900	4.110	-3.80280	120	-2.99700
.901	6.270	-3.77790	0.60	-2.84300
.902	8.510	-4.45130	-4.4	-3.21200
.897	10.650	-4.45420	-4.9	-3.28200
.902	12.860	-4.46900	-5.0530	-3.45800
.900	14.990	-5.0430	-5.5430	-3.79700
	GRADIENT	.00742	.01359	.00359

RUN NO. 28/ 0 RM/L = 2.91 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.201	-5.010	-4.7670	-5.5620	-4.7240
1.202	-2.760	-4.5740	-5.6160	-4.2770
1.202	-1.520	-4.4990	-5.2390	-3.9870
1.199	1.620	-4.4500	-4.9390	-3.7730
1.200	4.060	-4.0600	-3.130	-3.7740
1.198	6.320	-3.3650	-3.7540	-3.8930
1.198	8.590	-3.0900	-3.6050	-4.0100
1.199	10.610	-3.0380	-3.5550	-4.2420
1.199	13.090	-2.9930	-3.5280	-4.3540
1.199	15.290	-3.0610	-3.5660	-4.6230
	GRADIENT	.00688	.01842	.00756

RUN NO. 25/ 0 RM/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.902	-4.670	-3.1150	-3.7300	-4.1070
1.903	-2.610	-3.2310	-3.8320	-4.0320
1.902	-1.460	-3.3000	-3.9410	-4.0340
1.902	1.620	-3.3240	-4.0120	-3.8640
1.902	4.060	-3.3060	-3.9490	-3.4350
1.499	6.310	-3.2370	-3.7090	-3.3410
1.900	8.520	-2.8760	-3.2960	-3.3400
1.499	10.710	-2.7300	-3.2000	-3.4690
1.498	12.930	-2.7610	-3.2470	-3.8440
1.498	15.220	-2.2630	-3.1530	-3.6120
	GRADIENT	-.00226	-.00280	.00687



(AERD03) (25 APR 74)

ARC 66-709 0459 0411A-(MR4 R3 V8)*STRUT*OUM STNG

REFERENCE DATA

XREF = .0033 50. FT. XMRP = 12.6255 IN.
 YREF = .5935 FT. YMRP = .5000 IN.
 ZREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

BETA = .000 ELEVOM = 15.000
 SOFLAP = -11.700

RUN NO. 24/ 0 RM/L = 2.43 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.999	-5.170	-17410	-21030	-26300
1.997	-3.190	-18320	-21720	-26670
1.997	-.890	-19050	-22350	-26770
1.997	1.310	-19970	-22670	-26960
1.997	3.460	-20490	-23470	-26740
1.996	5.690	-20680	-23740	-26130
1.999	7.790	-20910	-23810	-25430
2.002	9.980	-20860	-24000	-24910
2.005	11.970	-20370	-23790	-24390
2.005	14.170	-19880	-23060	-24360
	GRADIENT	-.00336	-.00261	-.00018

ARC 86-709 OASD CALLIA-IN24 75 V81-STRUT+DUM STNG (AER004) (23 APR 74)

REFERENCE DATA

XREF = .6533 SA.FT. YMRP = 12.6255 IN.
 LREF = .3935 FT. YMRP = .0500 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0190

PARAMETRIC DATA

BETA = .500 ELEVON = 15.000
 BCFLAP = -11.750

RUN NO. 12/ 0 RM/L = 2.56 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.803	-4.320	-45360	-41120	-28690
.598	-2.170	-43960	-41040	-28700
.601	-1.100	-43210	-37350	-23180
.603	2.040	-42030	-37100	-24180
.600	4.220	-45170	-35560	-22840
.597	6.360	-39580	-33370	-22440
.600	8.470	-38410	-34830	-22730
.600	10.630	-36860	-35110	-23370
.601	12.790	-35810	-35700	-24360
.599	14.950	-35460	-36310	-26300
	GRADIENT	.00361	.00706	.00480

RUN NO. 11/ 0 RM/L = 2.33 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.699	-4.430	-43410	-39410	-27450
.700	-2.270	-41910	-37140	-25630
.699	-1.140	-41900	-36020	-26070
.703	2.010	-39360	-34800	-26560
.702	4.160	-40010	-34630	-24010
.694	6.300	-39210	-35820	-23800
.699	8.430	-38030	-35190	-23840
.703	10.600	-37180	-36410	-24280
.702	12.790	-36660	-37130	-25800
.699	14.950	-37230	-39030	-28970
	GRADIENT	.00603	.00350	.00747

RUN NO. 10/ 0 RM/L = 2.31 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.601	-4.630	-42460	-40420	-29640
.604	-2.460	-41770	-40030	-29800
.603	-1.260	-40670	-37190	-27960
.603	1.920	-39370	-36320	-27340
.799	4.190	-39800	-35430	-25320
.601	6.300	-40270	-38100	-25970
.601	8.450	-40050	-39030	-26690
.601	10.720	-38800	-40180	-27470
.600	12.870	-40280	-43130	-30530
.601	14.940	-40860	-44030	-31690
	GRADIENT	.00330	.00612	.00487



ARC 66-759 0439 04114-IN24 R3 V0)STRUT+DUM STNG

(AER004) (25 APR 74)

REFERENCE DATA

XREF = .6533 50.FT. XREF = 12.8233 IM.
 YREF = .9033 FT. YREF = .0300 IM.
 ZREF = 1.1710 FT. ZREF = -.3750 IM.
 SCALE = .0130

PARAMETRIC DATA

BETA = .050 ELEVOM = 15.000
 BCFLAP = -11.700

RUN NO. 97 0 RM/L = 2.48 GRADIENT INTERVAL = -5.00/ 3.00

MACH	ALPMA	CPV1	CPV2	CPV3
.900	-4.820	-4.4740	-4.6530	-3.3260
.906	-2.660	-4.2700	-4.4740	-3.2450
.903	-4.430	-4.1920	-4.5080	-3.1900
.952	1.950	-3.7880	-3.6080	-2.9190
.899	4.080	-3.7490	-3.3670	-2.8330
.894	6.220	-3.9680	-4.0360	-2.8260
.897	8.450	-4.2370	-4.6520	-3.0720
.902	10.580	-4.3700	-4.6470	-3.1670
.903	12.730	-4.6260	-5.1080	-3.4510
.903	14.970	-4.6770	-5.1100	-3.5240
	GRADIENT	.00864	.01339	.05656

ARC 66-709 QAS9 QAS11A-(M24 R3 V0)-STRUTADUM SING (AERODS) (25 APR 74)

PARAMETRIC DATA

BETA = .000 ELEVOM = .000
RDFLAF = 16.300

REFERENCE DATA

REF 1 .0533 30. FT. YREF = 12.6235 IN.
REF 2 .5935 30. FT. YREF = .0500 IN.
REF 3 1.1710 30. FT. ZREF = -.3750 IN.
SCALE 5 -.0190

RUN NO. 16/ U RM/L = 2.82 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.600	-4.910	-.47510	-.51660	-.27440
.598	-2.430	-.44200	-.51290	-.25490
.602	-.310	-.44720	-.51360	-.26530
.600	1.910	-.43750	-.51560	-.27020
.601	3.980	-.42370	-.49670	-.25510
.601	6.190	-.40160	-.49140	-.23140
.602	8.230	-.40070	-.48840	-.23390
.601	10.400	-.39350	-.47840	-.23940
.601	12.320	-.38400	-.47150	-.23390
.602	14.660	-.38390	-.47400	-.24350
	GRADIENT	.00502	-.00197	-.00437

RUN NO. 15/ G RM/L = 2.83 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.702	-4.660	-.47510	-.51970	-.29420
.699	2.540	-.44360	-.51740	-.28590
.700	-.390	-.43000	-.51060	-.27230
.702	1.760	-.43380	-.50770	-.26150
.701	3.900	-.44660	-.50960	-.25680
.668	6.100	-.42170	-.49650	-.23580
.702	8.260	-.40630	-.49480	-.24170
.699	10.430	-.40600	-.47650	-.23520
.704	12.670	-.41460	-.50390	-.23400
.701	14.740	-.42490	-.50330	-.26670
	GRADIENT	.00210	-.00140	-.00463

RUN NO. 14/ J RM/L = 2.84 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.800	-4.860	-.47440	-.52890	-.31550
.801	-2.760	-.47490	-.51840	-.29420
.802	-.340	-.48200	-.53390	-.29330
.801	1.620	-.47230	-.52970	-.27830
.800	3.760	-.46060	-.53420	-.26260
.797	5.940	-.44840	-.53140	-.25540
.799	8.120	-.44350	-.52640	-.25620
.799	10.360	-.44340	-.53260	-.26260
.788	12.490	-.44170	-.53130	-.26400
.800	14.700	-.44120	-.54440	-.28460
	GRADIENT	.00140	-.00102	-.00361



ARC 66-759 OAS9 OAL1A-IN24 K5 V01-STRUT+CUM STMG (AER003) (25 APR 74)

REFERENCE DATA

XREF # = .6033 90.FT. XMRP = 12.6255 IN.
 LREF # = .5933 FT. YMRP = .0000 IN.
 BREF # = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

BETA = .000 ELEVON = .000
 BDFLAP = 16.300

RUN NO. 13/ 0 RN/L = 2.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.900	-5.000	-4.6930	-5.3630	-3.4460
.902	-2.830	-4.8150	-5.3740	-3.2520
.901	-6.640	-4.7790	-5.4030	-3.1440
.898	1.550	-4.7230	-5.2110	-2.9680
.902	3.860	-4.8360	-5.2860	-2.9070
.899	5.980	-4.7210	-5.3170	-2.8090
.901	8.170	-4.6850	-5.5810	-2.7080
.901	10.320	-4.8150	-5.6330	-2.9010
.899	12.460	-5.5620	-5.9250	-3.0090
.900	14.670	-5.0770	-5.9800	-3.1230
GRADIENT		-.00090	-.00159	.00615

RUN NO. 16/ 0 RN/L = 2.33 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.201	-2.890	-4.3910	-5.3660	-3.8660
1.200	-7.700	-4.3160	-5.5130	-3.7140
1.202	1.590	-4.2820	-4.7980	-3.7030
1.200	3.770	-4.2540	-4.6230	-3.8200
1.201	6.050	-5.8200	-4.0120	-3.9390
1.200	8.310	-3.2160	-3.6620	-4.1260
1.202	10.530	-3.1240	-3.5530	-4.2890
1.190	12.780	-3.0390	-3.5180	-4.4980
1.198	14.990	-3.1130	-3.5930	-4.6060
GRADIENT		.00200	-.01152	.00567

RUN NO. 17/ 0 RN/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.500	-4.790	-3.0090	-3.7210	-3.8990
1.500	-2.670	-3.9840	-3.8230	-3.7830
1.497	-4.450	-3.2240	-3.9490	-3.6990
1.498	1.760	-3.2860	-4.0130	-3.6280
1.500	4.900	-3.2440	-3.9830	-3.4110
1.499	6.190	-3.1330	-3.6940	-3.1560
1.500	8.360	-3.1100	-3.3070	-3.1650
1.500	10.590	-2.9400	-3.3390	-3.2510
1.499	12.740	-2.6720	-3.1420	-3.4160
1.501	14.980	-2.2420	-3.0410	-3.4440
GRADIENT		-.00305	-.00323	.00514

DATE 20 AUG 74 OAS9 TABULATED SOURCE DATA

(AER005) (25 APR 74)

ARC 66-709 OAS9 OAL11A-IN24 R5 V81*STRUT*COM STNG

PARAMETRIC DATA

BETA = .050 ELEVOM = .000
BDFLAP = 16.300

REFERENCE DATA

SREF = .0533 58.FT. XMRP = 12.6255 IN.
LREF = .5955 FT. YMRP = .0000 IN.
BREF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0150

RUN NO. 23/ 0 RN/L = 2.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
2.003	-5.220	-1.17300	-2.1130	-.25690
2.003	-3.260	-1.17770	-2.1480	-.25750
2.004	-1.010	-1.18710	-2.2210	-.25890
2.003	1.320	-1.19690	-2.2720	-.26110
2.004	3.250	-1.20320	-2.3340	-.26330
2.003	5.300	-1.20480	-2.3680	-.25690
2.003	7.730	-1.20390	-2.3640	-.24630
2.003	9.880	-1.20490	-2.3840	-.24010
2.001	12.090	-1.20210	-2.3740	-.23750
2.001	14.250	-1.19850	-2.3640	-.24540
	GRADIENT	-.003396	-.00278	-.00089



ARC 66-709 0459 0411A-(N24 R5 V8)*STRUT+CUM STMG (AER006) (25 APR 74)

REFERENCE DATA

BREF = .0535 1/8 FT. XMRP = 12.6255 IN.
 LREF = .5835 FT. YMRP = .0055 IN.
 ORF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

BETA = .050 ELEVON = .000
 BDFLAP = .050

RUN NO. 20/ 0 RN/L = 2.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.601	-4.620	-4.3950	-4.6400	-4.23700
.601	-2.490	-4.2590	-4.4360	-4.22370
.601	-1.140	-4.1190	-4.2760	-4.21250
.601	1.770	-4.0430	-4.1520	-4.20690
.601	3.940	-3.9870	-4.1330	-4.20290
.601	6.030	-3.9300	-4.1370	-4.19460
.601	8.230	-3.9590	-3.9470	-4.18370
.599	10.360	-3.9430	-4.0000	-4.19590
.599	12.480	-3.9510	-3.8540	-4.20810
.599	14.670	-3.9090	-3.7630	-4.22370
	GRADIENT	.00585	.00607	.00426

RUN NO. 19/ 0 RN/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.900	-5.130	-4.6 80	-4.9620	-4.28700
.901	-2.920	-4.150	-4.6790	-4.26370
.899	-1.660	-4.3240	-4.5490	-4.26350
.901	1.490	-4.3160	-4.5060	-4.25580
.899	3.720	-4.1230	-4.2620	-4.24170
.903	5.890	-4.0310	-4.1720	-4.22860
.901	8.130	-4.2500	-4.46190	-4.21700
.902	10.290	-4.0370	-4.4140	-4.22180
.899	12.420	-4.1190	-4.46130	-4.25250
.901	14.640	-4.2550	-4.49540	-4.27060
	GRADIENT	.00401	.00587	.00361

RUN NO. 22/ 0 RN/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.198	-5.040	-4.3590	-4.54010	-4.46670
1.202	-2.920	-4.2120	-4.51500	-4.35880
1.202	-1.680	-4.1680	-4.49370	-4.33790
1.200	1.570	-4.0950	-4.46290	-4.34120
1.201	3.950	-3.9830	-4.41510	-4.35190
1.203	6.060	-3.9160	-4.34590	-4.36520
1.201	8.320	-4.28170	-4.31980	-4.37580
1.197	10.590	-4.27000	-4.31930	-4.38420
1.199	12.730	-4.26750	-4.31880	-4.40940
1.197	15.010	-4.26900	-4.33010	-4.43380
	GRADIENT	.00556	.01449	.00072

(AERD06) (25 APR 74)

ARC 66-709 0459 0411A-(N24 R5 V8)-STRUT-CUM STING

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BCFLAP = .000

REFERENCE DATA

SREF = .6055 98.FT. YMRP = 12.6255 IN.
LREF = .5935 FT. YMRP = .0000 IN.
BREF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0150

RUN NO. 21/ 0 RM/L = 2.44 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
2.001	-5.310	-1.6720	-.20830	-.24790
2.000	-3.170	-.17560	-.21620	-.25040
1.996	-1.010	-.16470	-.22220	-.25250
2.000	1.150	-.19420	-.22780	-.25550
1.999	3.290	-.20000	-.23310	-.25690
1.999	5.460	-.20130	-.23630	-.25170
1.999	7.650	-.20100	-.23670	-.24930
1.997	9.790	-.20300	-.23980	-.23710
1.997	11.950	-.20130	-.23950	-.23680
1.997	14.110	-.19680	-.23740	-.23710
	GRADIENT	-.00384	-.00261	-.00102



ARC 68-709 0A59 0A11A-(M24 R5 Y6)+STRUT+DUM STNG (AER007) (25 APR 74)

PARAMETRIC DATA

ALPHA = .000 ELEVON = .000
 BOFLAP = -11.700

REFERENCE DATA

SREF = -.6033 98.FT. XMRP = 12.6235 IN.
 LREF = -.5935 FT. YMRP = .0000 IN.
 ORF = 1.1710 FT. ZMRP = -.3730 IN.
 SCALE = .0150

RUN NO. 42/ 0 RM/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.599	-15.020	-58630	-29330	-39040
.600	-9.700	-43760	-42600	-31480
.601	-6.590	-37640	-42070	-25940
.601	-4.480	-38980	-41830	-24220
.600	-2.350	-39720	-43120	-22810
.602	-.270	-41560	-36950	-19980
.600	.810	-41510	-34610	-19320
.601	1.820	-40330	-35430	-21200
.601	3.910	-40300	-36250	-25070
.595	6.000	-36880	-38970	-25660
	GRADIENT	-.00227	.00713	.00064

RUN NO. 41/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.698	-15.040	-52630	-25560	-41330
.701	-9.720	-45450	-40840	-33320
.700	-6.560	-38620	-40920	-25830
.696	-4.470	-37640	-42460	-24410
.700	-2.510	-39510	-42620	-22330
.700	-.290	-39480	-36940	-21190
.700	.840	-40170	-34550	-21110
.701	1.900	-39740	-35080	-22270
.700	3.970	-38580	-37270	-24670
.701	6.050	-36120	-43010	-29100
	GRADIENT	-.00103	.00916	.00027

RUN NO. 40/ 0 RM/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.800	-15.070	-46530	-27310	-44500
.799	-9.670	-46920	-41010	-33930
.800	-6.470	-37020	-39470	-26600
.799	-4.350	-37750	-42730	-25190
.800	-2.220	-39640	-43050	-23340
.801	-.150	-41060	-37950	-23010
.800	.980	-37820	-37540	-22290
.801	2.020	-39800	-38350	-22860
.600	4.150	-37320	-41170	-26500
.602	6.230	-36530	-42390	-29820
	GRADIENT	.00060	-.00418	-.00063

ARC 66-709 0A59 0A11A-IN24 R5 V81+STREUT+DUM+STMG (AER007) (25 APR 74)

REFERENCE DATA

SREF = 6053 SQ.FT. XMRP = 12.6255 IN.
LREF = 5935 FT. YMRP = .0000 IN.
BREF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0150

PARAMETRIC DATA

ALPHA = .000 ELEVON = .000
BDFLAP = -11.700

RUN NO. 39/ 0 RN/L = 2.45 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.897	-15.030	-.46920	-.29690	-.46680
.898	-9.630	-.46970	-.42140	-.37370
.900	-6.410	-.36300	-.39320	-.29680
.900	-4.260	-.38340	-.43160	-.27310
.900	-2.150	-.40740	-.42630	-.25000
.897	.000	-.38960	-.39430	-.25830
.900	1.100	-.39370	-.42400	-.25630
.899	2.170	-.39590	-.43100	-.26410
.899	4.260	-.39290	-.46330	-.30000
.899	6.360	-.37010	-.42270	-.31210
	GRADIENT	-.00534	-.00303	-.00285

RUN NO. 38/ 0 RN/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
1.200	-15.320	-.48790	-.50080	-.42840
1.199	-9.700	-.47110	-.50270	-.38260
1.200	-6.440	-.44090	-.51150	-.37300
1.200	-4.300	-.42830	-.50610	-.38390
1.198	-2.110	-.41260	-.47490	-.33010
1.198	.050	-.39660	-.44410	-.30940
1.195	1.180	-.40690	-.45980	-.32390
1.202	2.140	-.41480	-.47630	-.33600
1.200	4.450	-.43110	-.49280	-.35600
1.202	6.740	-.45210	-.51020	-.37960
	GRADIENT	-.00018	.00149	.00072



DATE 29 AUG 74 OAS9 TABULATED SOURCE DATA

ARC 66-709 OAS9 OALIA-IN24 R3 70) *STRUT-DUM STNG (AER007) (29 APR 74)

PARAMETRIC DATA

ALPHA = .000 ELEVON = .000
 BDFLAP = -11.700

REFERENCE DATA

XREF = .0033 30.FT. XMRP = 12.0233 IN.
 YREF = .9933 FT. YMRP = .0000 IN.
 ZREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

RUN NO. 37/ 0 RN/L = 2.44 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
2.001	-15.130	-21830	-22480	-29710
2.001	-14.030	-21310	-22770	-29650
2.001	-11.890	-19850	-22360	-29170
2.001	-9.530	-19290	-22480	-28550
2.003	-7.230	-18360	-22870	-27400
2.003	-6.190	-18620	-23010	-26900
2.003	-5.040	-16650	-23080	-26550
2.003	-3.930	-19220	-23050	-26180
2.003	-2.830	-19520	-22830	-26070
2.003	-1.760	-19510	-22830	-25550
2.003	-.650	-19220	-22470	-25630
2.003	.430	-19180	-22560	-25980
2.003	1.460	-19430	-22590	-25830
2.000	2.560	-20290	-22940	-26070
2.005	3.640	-20230	-22610	-26230
1.998	4.770	-20680	-23230	-26660
2.005	5.860	-20520	-23490	-26690
2.003	6.950	-20580	-24170	-27300
	GRADIENT	-0.0163	-0.0006	-0.0036

ARC 66-709 OAS9 OAL1A-(M24 R5 V8)-STRUT*0UM STNG (AER000) (25 APR 74)

REFERENCE DATA

XREF = .8033 SQ.FT. XMRP = 12.6255 IN.
 LREF = .5935 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

ALPHA = 15.500 ELEVON = .500
 BDFLAP = -11.700

RUN NO. 46/ 0 RN/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.602	-12.000	-4.5350	-3.2970	-.32940
.598	-9.830	-3.6230	-3.1350	-.30690
.599	-6.690	-3.0190	-2.9210	-.25980
.600	-4.560	-3.1970	-3.2080	-.22680
.600	-2.470	-3.4190	-3.5710	-.20700
.600	-.370	-3.3970	-3.3100	-.18870
.599	.710	-3.4180	-3.2010	-.18240
.600	1.700	-3.3280	-3.1240	-.18080
.600	3.800	-3.5390	-3.4030	-.22910
.597	5.810	-3.1080	-3.2430	-.26150
	GRADIENT	-.00286	-.00021	-.00116

RUN NO. 47/ 0 RN/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.701	-12.030	-4.1010	-2.7300	-.33580
.698	-9.630	-3.6570	-3.2350	-.31670
.700	-6.660	-3.0770	-3.0430	-.26460
.700	-4.550	-3.1940	-3.1670	-.23520
.700	-2.420	-3.3210	-3.4490	-.20700
.701	-.310	-3.4570	-3.4710	-.19670
.700	.760	-3.4510	-3.3020	-.19090
.701	1.790	-3.3490	-3.1240	-.19340
.701	3.890	-3.4320	-3.1770	-.25030
.699	5.980	-3.2730	-3.1420	-.26370
	GRADIENT	-.00254	-.00135	-.00133

RUN NO. 48/ 0 RN/L = 2.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.798	-12.060	-3.6680	-2.7160	-.37760
.601	-9.870	-4.0430	-3.4290	-.36220
.801	-6.640	-3.1840	-3.0850	-.28210
.797	-4.490	-3.3520	-3.3420	-.24640
.600	-2.320	-3.4560	-3.7940	-.22320
.799	-.210	-3.3360	-3.7190	-.21480
.800	.860	-3.3490	-3.6560	-.21370
.800	1.880	-3.4820	-3.3760	-.21470
.800	4.070	-3.2730	-3.2120	-.22350
.803	6.130	-3.1800	-2.8370	-.27450
	GRADIENT	-.00012	-.00387	-.00280



ARC 66-709 0439 0411A-(M24 R5 V6)-STRUT-DUM STNG (AER000) (25 APR 74)

REFERENCE DATA

XREF = .6533 38.FT. XMRP = 12.6235 IN.
LREF = .3935 FT. YMRP = .0000 IN.
BREF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = -.0150

PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .009
BDFLAP = -11.700

RUN NO. 43/ 0 RM/L = 2.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.901	-12.200	-.41920	-.30300	-.41090
.895	-9.810	-.38370	-.28750	-.36800
.902	-6.800	-.33640	-.32040	-.28300
.901	-4.420	-.35140	-.37610	-.26700
.900	-2.240	-.35480	-.38820	-.23890
.901	-.120	-.37780	-.41030	-.24710
.902	1.000	-.36410	-.40170	-.23970
.900	2.050	-.36840	-.39180	-.23950
.900	4.190	-.34410	-.36640	-.25460
.901	6.340	-.32130	-.30950	-.26490
	GRADIENT	-.00606	.00042	.00130

RUN NO. 44/ 0 RM/L = 2.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
1.199	-12.230	-.46140	-.47130	-.42750
1.201	-9.840	-.38660	-.39530	-.41110
1.199	-6.540	-.34530	-.36190	-.38650
1.200	-4.380	-.33480	-.34410	-.38950
1.201	-2.170	-.32270	-.34780	-.39010
1.199	-.040	-.26870	-.31060	-.38710
1.199	1.030	-.26290	-.30700	-.39030
1.198	2.110	-.25860	-.30160	-.39560
1.202	4.250	-.30410	-.32860	-.38890
1.201	6.300	-.33710	-.33330	-.40720
	GRADIENT	-.00838	.00387	-.00029

RUN NO. 43/ 0 RM/L = 2.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
1.998	-12.030	-.25040	-.26530	-.26110
2.007	-9.580	-.25410	-.26680	-.28000
2.005	-6.230	-.23500	-.25160	-.26300
2.001	-4.080	-.22210	-.24580	-.24950
1.999	-1.900	-.21130	-.23990	-.23980
1.999	.280	-.20460	-.24050	-.23700
2.001	1.390	-.19840	-.24120	-.23140
2.002	2.430	-.19980	-.24480	-.23460
2.004	4.600	-.21170	-.25030	-.24140
2.006	6.810	-.22870	-.25890	-.26150
	GRADIENT	-.00169	-.00056	-.00119

ARC 66-709 OASB OALIA-(M24 R5 V8)*STRUT

PARAMETRIC DATA

BETA = .000 ELEVOM = .000
 BCFLAP = -11.700

REFERENCE DATA

SRFP = .0033 SQ.FT. XMRP = 12.8255 IN.
 LRFP = .9935 FT. YMRP = .0000 IN.
 BRFP = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

RUN NO. 84/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

M: H	ALPHA	CPV1	CPV2	CPV3
.600	-4.040	-.39880	-.36110	-.23660
.598	-1.950	-.37730	-.33790	-.22700
.598	-.160	-.36110	-.34860	-.20920
.601	2.510	-.37410	-.36550	-.20800
.602	4.450	-.35640	-.36730	-.20810
.601	6.480	-.34265	-.36600	-.20130
.602	8.700	-.33370	-.36820	-.20450
.601	10.910	-.31800	-.35010	-.21040
.599	13.020	-.31410	-.33610	-.22830
.600	15.220	-.30360	-.32890	-.24720
	GRADIENT	.00413	-.00095	.00337

RUN NO. 83/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.800	-4.330	-.35430	-.32850	-.26900
.800	-2.140	-.35700	-.31850	-.23960
.801	.060	-.36480	-.33990	-.23460
.803	.370	-.36670	-.34020	-.22940
.801	2.590	-.34650	-.33590	-.21060
.800	4.720	-.35790	-.37640	-.22570
.803	6.980	-.34800	-.38240	-.21845
.801	9.180	-.34180	-.37590	-.22220
.800	11.340	-.34080	-.37290	-.23970
.800	13.570	-.33600	-.35910	-.26390
.799	15.810	-.34040	-.35800	-.29850
	GRADIENT	.00016	-.00493	.00510

RUN NO. 82/ 0 RM/L = 2.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.897	-4.510	-.30880	-.29470	-.26200
.901	-2.380	-.33410	-.29790	-.25320
.900	-.190	-.34450	-.31260	-.24720
.901	2.020	-.34470	-.30680	-.22860
.900	4.230	-.33630	-.31820	-.23290
.900	6.460	-.34960	-.36360	-.24320
.900	10.950	-.38365	-.42770	-.26820
.898	13.160	-.38940	-.43430	-.29620
.898	15.470	-.41020	-.44120	-.31870
	GRADIENT	-.00299	-.00255	.00378



REFERENCE DATA
 XREF = .0033 50.FT. XMRP = 12.8255 IN.
 YREF = .5935 FT. YMRP = .0000 IN.
 ZREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA
 BETA = .000 ELEVON = .000
 BDFLAP = -11.700

RUN NO. 81/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.202	-4.670	-4.4760	-5.4760	-3.8900
1.200	-2.020	-4.2970	-5.1740	-2.9390
1.202	.010	-4.2140	-4.8670	-3.3640
1.204	.300	-4.2610	-4.8980	-3.7190
1.199	2.550	-4.0390	-4.4510	-3.3640
1.198	4.780	-3.4090	-3.6720	-3.7690
1.200	7.060	-2.6770	-3.2140	-3.8420
1.202	9.390	-2.6330	-3.1480	-3.9930
1.199	11.550	-2.5350	-3.0150	-4.1250
1.200	13.850	-2.5660	-3.0650	-4.4770
1.199	16.070	-2.3550	-2.8750	-4.4700
	GRADIENT	.01011	.01834	-.00137

RUN NO. 80/ 0 RM/L = 2.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.502	-4.030	-3.0140	-3.7100	-3.6600
1.500	-2.000	-3.1200	-3.6280	-3.6560
1.499	.110	-3.2030	-3.5270	-3.5310
1.500	.500	-3.1880	-3.5240	-3.4480
1.500	2.740	-3.0950	-3.4070	-3.1550
1.499	4.930	-3.0310	-3.3510	-3.1050
1.499	7.140	-2.4320	-2.8730	-3.1660
1.500	9.410	-2.2710	-2.7080	-3.2670
1.500	11.650	-2.2570	-2.8210	-3.4550
1.499	13.860	-2.1490	-2.6710	-3.5570
1.499	16.110	-2.1020	-2.6600	-3.5970
	GRADIENT	-.00015	.00157	-.00726

DATE 20 AUG 74

QAS9 TABULATED SOURCE DATA
ARC 66-709 QAS9 0A11A-(M24 R5 V8)-STRET

(AER099) (25 APR 74)

PARAMETRIC DATA

BETA = .000 ELEVOM = .000
BDFLAP = -11.700

REFERENCE DATA

SRFP = .0033 SQ.FT. XMRP = 12.6233 IN.
LRFP = .3939 FT. YMRP = .0000 IN.
BRFP = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0150

RUN NO. 79/ 0 RM/L = 2.44 GRADIENT INTERVAL = -3.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.993	-4.750	-1.6620	-2.0870	-2.2845
1.991	-2.580	-1.7570	-2.1710	-2.4320
1.996	-4.450	-1.8120	-2.2180	-2.4690
1.998	-0.30	-1.8890	-2.2930	-2.4770
1.999	1.740	-1.9030	-2.2840	-2.4290
1.999	4.210	-1.9890	-2.3290	-2.4690
1.999	6.420	-2.0510	-2.3900	-2.5430
1.998	8.650	-2.0540	-2.3950	-2.4820
1.996	10.830	-2.0680	-2.4290	-2.5030
1.996	12.990	-2.0520	-2.4270	-2.4965
1.996	13.190	-2.0360	-2.4410	-2.5300
	GRADIENT	-0.0364	-0.0264	-0.0079



0459 TABULATED SOURCE DATA
ARC 66-708 0459 0411A-(ME4 B5 V81)STRUT

(AERO10) (25 APR 74)

PARAMETRIC DATA

ALPHA = .000 ELEVON = .000
BCFLAP = -11.70.

REFERENCE DATA

REF = .0033 80.FT. IREF = 12.6233 IN.
LREF = .5033 FT. IREF = .0000 IN.
REF = 1.1710 FT. IREF = -.3730 IN.
SCALE = .0130

RUN NO. 66/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.600	-15.010	-.60560	-.44630	-.39210
.601	-9.760	-.39740	-.43630	-.36410
.600	-6.390	-.33240	-.42890	-.34410
.601	-4.490	-.34020	-.40270	-.28810
.602	-2.420	-.35870	-.38990	-.26960
.601	-.300	-.37040	-.36370	-.21710
.601	.750	-.38250	-.36700	-.22050
.600	1.790	-.36870	-.37830	-.23770
.596	3.060	-.35940	-.40600	-.26110
.600	5.930	-.33440	-.40780	-.30820
	GRADIENT	-.00273	.00066	.00268

RUN NO. 67/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.798	-15.080	-.46180	-.38340	-.42960
.799	-9.690	-.44620	-.47860	-.38860
.799	-6.320	-.35540	-.42340	-.35500
.801	-4.390	-.35140	-.42230	-.30920
.802	-2.260	-.35330	-.39980	-.26180
.798	-.140	-.37680	-.34630	-.23300
.800	.930	-.35720	-.35640	-.24640
.801	1.980	-.34880	-.38300	-.26130
.800	4.110	-.36640	-.41010	-.30010
.801	6.180	-.34280	-.40430	-.33660
	GRADIENT	-.00113	.00260	.00236

RUN NO. 66/ 0 RM/L = 2.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.902	-15.070	-.49230	-.36100	-.45120
.898	-9.680	-.46390	-.46920	-.40230
.909	-6.430	-.36970	-.41770	-.36830
.900	-4.310	-.37490	-.43740	-.33330
.902	-2.170	-.35930	-.39860	-.28460
.901	-.030	-.34050	-.30540	-.23130
.902	1.030	-.34330	-.34600	-.27180
.900	2.080	-.36760	-.39300	-.28940
.902	4.210	-.37870	-.43740	-.33270
.902	6.300	-.37260	-.42400	-.37360
	GRADIENT	-.00033	.00123	.00033

ARC 66-799 0459 0411A-(M24 83 98)*STRET

(AER010) (23 APR 74)

REFERENCE DATA

REF = .6533 50-FT. ZMRP = 12.0233 IN.
 LREF = .3933 30-FT. ZMRP = .0000 IN.
 SREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

ALPHA = .000 ELEVON = .000
 BDFLAP = -11.700

PARAMETRIC DATA

RUN NO. 63/ 0 RM/L = 2.32 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
1.199	-15.310	-.42290	-.43560	-.39780
1.202	-9.720	-.41440	-.45290	-.35570
1.199	-6.460	-.46830	-.52810	-.34870
1.200	-4.300	-.43290	-.52410	-.34360
1.200	-2.120	-.41240	-.49350	-.32190
1.200	.010	-.36980	-.45070	-.32080
1.199	1.110	-.40000	-.47620	-.32080
1.200	2.170	-.41330	-.50470	-.32330
1.200	4.330	-.44020	-.52310	-.34910
1.199	6.470	-.46440	-.53490	-.34730
	GRADIENT	-.00047	-.00007	-.00044

RUN NO. 64/ 0 RM/L = 2.44 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
1.499	-15.990	-.32700	-.36430	-.36330
1.499	-10.000	-.29770	-.36440	-.36040
1.499	-6.680	-.31080	-.40230	-.35890
1.500	-4.520	-.31770	-.40070	-.34680
1.500	-2.340	-.32760	-.39970	-.34470
1.500	-.210	-.32550	-.39200	-.34270
1.500	.920	-.32660	-.39560	-.34640
1.500	2.010	-.33930	-.39870	-.35190
1.500	4.160	-.33490	-.40190	-.34340
1.500	6.340	-.33370	-.40860	-.36330
	GRADIENT	-.00202	-.00001	.00016

RUN NO. 65/ 0 RM/L = 2.43 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
1.9.4	-15.130	-.21350	-.22580	-.29970
1.997	-9.530	-.18740	-.22090	-.28170
1.997	-6.240	-.18140	-.22640	-.28360
1.997	-4.000	-.18360	-.22320	-.28290
1.997	-1.830	-.18730	-.22210	-.24140
1.997	.340	-.18300	-.22070	-.24240
1.997	1.370	-.16760	-.22310	-.24260
2.002	2.530	-.19080	-.22120	-.24290
1.997	4.730	-.19800	-.22370	-.23450
1.994	6.650	-.20340	-.24110	-.27020
	GRADIENT	-.00123	.00014	-.00014



ARC 66-709 OAS9 OA11A-(IN24 RS V8)+STRU

(AER011) (25 APR 74)

REFERENCE DATA

XREF = .6033 50.FT. ZMRP = 12.6255 IN.
 LREF = .5933 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

ALPHA = 10.000 ELEVOM = .000
 BDFLAP = -11.700

RUN NO. 62/ 0 RM/L = 2.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.600	-4.610	-3.0050	-3.3530	-.25240
.599	-2.570	-.31520	-.56630	-.22440
.601	-.380	-.31820	-.36300	-.20690
.601	.600	-.32360	-.36330	-.20760
.601	1.610	-.31590	-.35700	-.21390
.601	3.620	-.31950	-.36350	-.25200
.600	5.630	-.29350	-.32370	-.31900
.599	7.900	-.30980	-.32760	-.37450
.600	11.130	-.45440	-.43310	-.42350
.602	16.320	-.44340	-.46630	-.57490
	GRADIENT	-.00197	-.00231	-.00091

RUN NO. 61/ 0 RM/L = 2.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.701	-4.530	-3.0970	-3.4230	-.4880
.701	-2.390	-.31390	-.35350	-.22380
.699	-.340	-.32400	-.36550	-.21820
.700	.760	-.32610	-.35900	-.21420
.700	1.820	-.30690	-.35020	-.21610
.699	3.920	-.31250	-.35390	-.25690
.699	6.040	-.30350	-.31570	-.36190
.700	8.130	-.31110	-.33860	-.38120
.699	11.340	-.47510	-.38910	-.40510
.701	16.600	-.44750	-.47800	-.59180
	GRADIENT	-.00026	-.00103	-.06190

RUN NO. 60/ 0 RM/L = 2.55 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.600	-4.490	-3.1610	-3.4690	-.25820
.600	-2.360	-.33050	-.37770	-.24280
.602	-.250	-.31460	-.35130	-.21300
.600	.850	-.31800	-.35340	-.21740
.798	1.960	-.32480	-.35850	-.22140
.798	4.090	-.30990	-.35040	-.24770
.600	6.160	-.26590	-.29640	-.26750
.799	8.390	-.30160	-.27790	-.29770
.601	11.560	-.42160	-.33560	-.38880
.603	16.870	-.40310	-.43490	-.55600
	GRADIENT	-.00064	-.00061	-.00227

ARC 66-708 OAS9 OAS11A-(IN24 R5 V8)*STRUT

(AERD11) (25 APR 74)

REFERENCE DATA

SREF = .6933 50.FT. XMRP = 12.6255 IN.
 LREF = .5935 FT. YMRP = .0050 IN.
 BRFP = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000
 BDFLAP = -11.700

RUN NO. 59/ 0 RM/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00

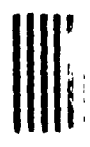
MACH	BETA	CPV1	CPV2	CPV3
.900	-4.410	-3.3410	-3.3840	-2.9400
.901	-2.280	-3.3760	-4.2400	-2.6690
.894	-1.120	-3.3580	-4.0950	-2.6500
.900	1.020	-2.6710	-4.0790	-2.4770
.899	2.100	-3.6370	-4.0410	-2.5800
.900	4.250	-3.3960	-3.9050	-2.7800
.902	6.400	-3.1470	-3.1070	-2.7120
.900	8.540	-3.0870	-2.6540	-2.9290
.900	11.760	-3.3470	-2.6960	-3.3330
.899	17.170	-3.3980	-3.6280	-4.1340
	GRADIENT	.00086	.00157	.00230

RUN NO. 58/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
1.203	-4.370	-3.3740	-3.4540	-3.37240
1.202	-2.210	-2.6760	-3.2940	-3.37820
1.202	-0.010	-2.9020	-2.9430	-3.9110
1.201	1.030	-2.6870	-3.1940	-3.9280
1.201	2.170	-3.0030	-3.4920	-3.8680
1.202	4.360	-3.4480	-3.6090	-3.8170
1.201	6.470	-3.5400	-3.7170	-3.8820
1.201	8.710	-3.6560	-3.8130	-3.8270
1.203	9.760	-3.7090	-3.8470	-3.7760
1.201	11.920	-4.0460	-4.0200	-3.8810
1.199	17.500	-4.2510	-3.7050	-3.37440
	GRADIENT	-.00060	-.00199	-.00142

RUN NO. 57/ 0 RM/L = 2.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
1.501	-4.590	-2.2850	-3.3380	-3.4380
1.498	-2.410	-2.7450	-3.3360	-3.5330
1.500	-1.240	-2.3760	-2.9970	-3.4410
1.501	.910	-2.3570	-2.9910	-3.3760
1.502	1.990	-2.3820	-3.0500	-3.3050
1.502	4.200	-2.6340	-3.3390	-3.2190
1.502	6.390	-2.6600	-3.3580	-3.2720
1.502	8.630	-3.1120	-3.3160	-3.4030
1.502	11.900	-3.2770	-3.7120	-3.33440
1.503	17.610	-3.0180	-3.5420	-3.3510
	GRADIENT	.00232	.00115	.00299



ARC 68-709 OAS9 OAS11A-IN24 RS V8)+STRUT

REFERENCE DATA
 XMRP = 12.6255 IN. ALPHA = 15.090 ELEVON = .000
 YMRP = .0900 IN. BDFLAP = -11.700
 ZMRP = -.3750 IN.
 SCALE = .0150

RUN NO. 56/ D RN/L = 2.45 GRADIENT INTERVAL = -5.00/ 5.00

PARAMETRIC DATA

MACH	BETA	CPV1	CPV2	CPV3
2.000	-4.790	-21180	-23340	-24890
2.000	-1.990	-20330	-24560	-24340
2.000	.090	-19540	-24510	-24340
2.000	1.270	-18640	-24670	-23990
1.999	2.290	-18190	-24810	-24200
2.000	4.510	-18650	-25150	-24970
2.000	6.690	-21370	-26050	-26090
2.000	9.010	-23930	-26920	-26930
2.000	11.270	-24040	-27320	-26660
2.000	12.410	-24140	-26770	-26280
2.003	18.020	-23740	-25560	-27970
	GRADIENT	.00355	.00009	.00010

ARC 66-709 OAS9 OALIA-(R5 V0)+STRUT

(AERD12) (29 APR 74)

REFERENCE DATA

SREF = .6953 39.FT. XMRP = 12.6255 IN.
 LREF = .5935 FT. YMRP = .0000 IN.
 BREF = 1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

BETA = .500 ELEVON = .000
 BCFLAP = -11.700

PARAMETRIC DATA

RUN NO. 94/ 0 RN/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.601	-4.140	-3.4450	-3.2300	-3.3670
.601	-2.080	-3.3660	-3.2800	-3.2970
.602	.160	-3.8710	-3.9060	-3.7610
.600	2.240	-3.1720	-3.3340	-3.3070
.600	4.360	-3.1670	-3.4390	-3.30140
.601	6.530	-3.0620	-3.4850	-3.29240
.601	8.660	-3.0200	-3.3870	-3.26870
.601	10.870	-2.8130	-3.3270	-3.29410
.602	12.980	-2.7010	-3.1670	-3.31020
.601	15.180	-2.6790	-2.8840	-3.31820
	GRADIENT	.00345	-.00237	-.00461

RUN NO. 93/ 0 RN/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.700	-4.300	-3.2030	-2.2280	-3.3850
.701	-2.160	-3.2430	-3.0310	-3.2110
.700	.010	-3.2660	-3.1280	-3.30630
.699	2.200	-3.2540	-3.1880	-2.9930
.700	4.340	-3.1590	-3.3630	-3.30290
.701	6.510	-3.1470	-3.4760	-2.8720
.701	8.710	-3.0360	-3.4890	-2.8730
.701	10.880	-2.9560	-3.4550	-3.0090
.702	13.050	-2.8580	-3.2360	-3.1330
.700	15.250	-2.8560	-3.1160	-3.3450
	GRADIENT	.00036	-.00290	-.00430

RUN NO. 92/ 0 RN/L = 2.53 GRADIENT INTERVAL = -5.55/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.749	-4.400	-3.2060	-2.2970	-3.33780
.752	-2.200	-3.2610	-3.0310	-3.2800
.749	-.030	-3.3100	-3.1500	-3.31290
.751	2.170	-3.3230	-3.3790	-3.1780
.751	4.290	-3.1110	-3.3020	-2.9560
.750	6.500	-3.2220	-3.5080	-2.8860
.752	8.770	-3.0960	-3.5420	-2.9510
.751	10.910	-2.9860	-3.4910	-3.0550
.750	13.090	-2.9480	-3.2980	-3.1775
.750	15.320	-2.9200	-3.3970	-3.4670
	GRADIENT	.00037	-.00469	-.00432



(AERD12) (25 APR 74)

ARC 66-709 0459 0411A-(R5 Y8)+STRUT

PARAMETRIC DATA

BETA = .000 ELEVOM = .000
BCFLAP = -11.700

REFERENCE DATA

SREF = .6033 38.FT. XMRP = 12.6255 IN.
LREF = .5935 FT. YMRP = .0000 IN.
BREF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0150

RUN NO. 91/ 0 RN/L = 2.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.800	-4.530	-3.0910	-.29530	-.33370
.801	-2.290	-3.1690	-.29990	-.32850
.800	-.120	-3.2850	-.33900	-.33870
.800	2.060	-3.1800	-.33160	-.30960
.798	4.270	-3.3040	-.35040	-.30150
.801	6.490	-3.2850	-.37240	-.29940
.801	8.660	-3.1460	-.36690	-.29960
.802	10.860	-3.1790	-.37030	-.32160
.801	13.030	-.29210	-.32250	-.31370
.801	15.300	-3.1540	-.33370	-.36240
GRADIENT -.00199 -.00646 .00562				

RUN NO. 90/ 0 RN/L = 2.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.850	-4.600	-3.1600	-.31990	-.38240
.850	-2.370	-3.0670	-.30240	-.34840
.851	-.210	-3.2860	-.32660	-.33670
.851	2.020	-3.4230	-.36410	-.32350
.851	4.230	-3.4630	-.38440	-.31810
.851	6.390	-3.4640	-.38330	-.30760
.849	8.650	-3.4130	-.38830	-.31130
.849	10.850	-3.2770	-.37100	-.31530
.849	13.010	-3.2710	-.36510	-.34690
.849	15.280	-3.3000	-.35640	-.36960
GRADIENT -.00418 -.00946 .00696				

RUN NO. 89/ 0 RN/L = 2.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.901	-4.690	-3.1460	-.33150	-.39660
.900	-2.440	-3.3000	-.34210	-.37560
.902	-.210	-3.2050	-.33150	-.34980
.902	2.040	-3.0860	-.32480	-.33360
.900	4.220	-3.1580	-.33210	-.32990
.901	6.430	-3.3120	-.36680	-.32290
.900	8.630	-3.6540	-.41810	-.31500
.900	10.880	-3.5990	-.43310	-.33260
.900	13.010	-3.6650	-.40850	-.34600
.901	15.300	-3.9250	-.42460	-.37640
GRADIENT .00083 .00072 .00787				

(AER012) (23 APR 74)

ARC 66-799 0A59 0A11A-(R5 V8)+STRUT

REFERENCE DATA

SREF = .6033 SQ.FT. XMRP = 12.8255 IN.
 LREF = .5935 FT. YMRP = .0000 IN.
 BRP = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

BETA = .000 ELEVON = .000
 BDFLAP = -11.750

RUN NO. 88/ 0 RM/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.932	-4.670	-.48640	-.54840	-.43220
.948	-2.440	-.37070	-.40460	-.38230
.951	-.240	-.45870	-.46430	-.40540
.950	2.080	-.39980	-.39010	-.34500
.948	4.370	-.41310	-.39320	-.31500
.951	6.560	-.43700	-.42600	-.31480
.950	8.700	-.44740	-.44060	-.31590
.951	10.930	-.44640	-.44790	-.34220
.951	13.130	-.46040	-.47040	-.39700
.952	15.390	-.45750	-.44640	-.42760
	GRADIENT	.00521	.01437	.01206

RUN NO. 87/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.201	-4.600	-.43380	-.62660	-.43470
1.202	-2.350	-.41730	-.57190	-.43290
1.202	-.130	-.40750	-.53330	-.43360
1.202	2.070	-.39540	-.46540	-.42070
1.202	4.320	-.36970	-.41340	-.42190
1.202	6.670	-.27980	-.33710	-.41840
1.198	8.870	-.24970	-.30570	-.41140
1.198	11.080	-.25350	-.31010	-.42580
1.200	13.360	-.25650	-.30840	-.44310
1.201	15.370	-.24890	-.30410	-.44360
	GRADIENT	.00675	.02305	.00170

RUN NO. 86/ 0 RM/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.499	-4.350	-.29110	-.38710	-.31220
1.500	-2.050	-.29990	-.39640	-.32330
1.501	.110	-.31150	-.40430	-.33460
1.499	.500	-.31240	-.40650	-.33740
1.499	2.690	-.31610	-.40980	-.35130
1.498	4.930	-.29940	-.39750	-.36270
1.498	7.220	-.29320	-.37830	-.37000
1.498	9.400	-.26140	-.31960	-.37370
1.497	11.600	-.23940	-.28850	-.37730
1.496	13.970	-.22290	-.26950	-.36950
1.498	16.060	-.21650	-.26770	-.36950
	GRADIENT	-.00142	-.05149	-.00354



ARC 68-799 0A59 0A11A-(RS V8)*STRUT

(AER012) (25 APR 74)

REFERENCE DATA

XREF = -6033 98.FT. XMRP = 12.6235 IN.
 YREF = -5835 FT. YMRP = -0000 IN.
 ZREF = 1.1710 FT. ZMRP = -3.750 IN.
 SCALE = .0150

PARAMETRIC DATA

BETA = .900 ELEVON = .000
 BDFLAP = -11.700

RUN NO. 65/ 0 RM/L = 2.45 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.997	-4.640	-1.15190	-2.20830	-1.19250
2.005	-2.700	-1.15650	-2.21240	-1.19790
2.002	-3.550	-1.16340	-2.21780	-2.20560
1.999	1.690	-1.17750	-2.22580	-2.21900
1.999	3.890	-1.18660	-2.23170	-2.23680
1.996	6.040	-1.19650	-2.23730	-2.24800
1.996	8.170	-2.0140	-2.23870	-2.24700
1.999	10.360	-2.0430	-2.24020	-2.24560
1.999	12.610	-2.0460	-2.24210	-2.24560
1.999	14.880	-2.0650	-2.24320	-2.25260
	GRADIENT	-0.08414	-0.00276	-0.00303

ARC 66-759 OAS9 OAL1A-(R5 V8)*STRUT
 BETA = .000 ELEVON = 15.050
 BDFLAP = -11.700

REFERENCE DATA
 XREF = .6033 90.FT. XMRP = 12.6255 IN.
 YREF = .5935 FT. YMRP = .9000 IN.
 ZREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA
 RUN NO. 115/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.600	-3.910	-3.5510	-3.5960	-4.2140
.601	-1.790	-3.4540	-3.3450	-3.6080
.601	.370	-3.4810	-3.5150	-3.7580
.601	2.460	-3.3750	-3.7090	-3.7530
.601	4.590	-3.4430	-3.7080	-3.5210
.600	6.780	-3.5240	-3.8140	-3.5280
.599	8.940	-3.3800	-3.7250	-3.5610
.600	11.190	-3.2760	-3.6010	-3.5210
.601	13.570	-3.2440	-3.5960	-3.6920
.601	15.590	-3.3150	-3.5150	-3.8770
	GRADIENT	.00139	-.00276	.00678

RUN NO. 114/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.698	-4.040	-3.4370	-3.2960	-4.1560
.698	-1.910	-3.1510	-3.1590	-3.6620
.699	.290	-3.3110	-3.0880	-3.6110
.700	2.410	-3.3550	-3.5370	-3.6340
.701	4.620	-3.3640	-3.6940	-3.5870
.699	6.800	-3.5640	-3.6350	-3.5640
.701	9.050	-3.4960	-3.6570	-3.5650
.700	11.190	-3.5900	-3.9570	-3.6430
.700	13.420	-3.5500	-3.7790	-3.7410
.697	15.610	-3.6790	-3.6190	-4.1040
	GRADIENT	-.00028	-.00451	.00631

RUN NO. 113/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.600	-4.250	-3.0420	-3.0550	-4.2320
.601	-2.020	-2.9560	-2.7400	-3.6820
.601	.150	-3.0430	-2.9650	-3.6350
.601	2.370	-3.1940	-3.2830	-3.6650
.600	4.370	-3.3290	-3.3760	-3.6530
.601	6.770	-3.6490	-4.1130	-3.6860
.600	8.990	-3.7870	-4.2320	-3.6690
.600	11.090	-3.7600	-4.1730	-3.7930
.601	13.280	-3.8460	-4.2230	-4.0580
.600	15.540	-3.9890	-4.2690	-4.3390
	GRADIENT	-.00550	-.00882	.00534



REFERENCE DATA
 XMRP = 12.6255 IN.
 YMRP = .0000 IN.
 ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA
 BETA = .000 ELEVOM = 15.086
 BDFLAP = -11.700

RUN NO. 112/ 0 RM/L = 2.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.900	-4.430	-.32830	-.36990	-.46930
.903	-2.210	-.29930	-.31690	-.42920
.902	.000	-.29190	-.30140	-.38500
.901	2.280	-.29110	-.28510	-.34500
.902	4.470	-.30700	-.30450	-.35020
.901	6.720	-.40690	-.42840	-.38050
.899	8.920	-.44330	-.51260	-.40310
.902	11.100	-.46800	-.52680	-.41520
.901	13.340	-.48110	-.54750	-.43340
.900	15.530	-.49000	-.55860	-.45980
	GRADIENT	-.00210	-.00730	-.01447

RUN NO. 111/ 0 RM/L = 2.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.196	-4.550	-.46270	-.61500	-.47360
1.202	-2.310	-.45240	-.60210	-.47690
1.202	-.110	-.44430	-.58300	-.47600
1.199	2.290	-.43640	-.55390	-.46190
1.196	4.520	-.41860	-.49340	-.47170
1.202	6.730	-.39650	-.42240	-.47530
1.199	9.090	-.31970	-.36970	-.46100
1.200	11.310	-.30920	-.36060	-.47850
1.200	13.580	-.31260	-.36360	-.49620
1.199	15.830	-.29350	-.34650	-.46610
	GRADIENT	-.00449	-.01283	-.00093

RUN NO. 110/ 0 RM/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.500	-4.330	-.29820	-.36800	-.32640
1.500	-2.140	-.31050	-.39850	-.33040
1.500	.110	-.31970	-.40750	-.34730
1.498	2.270	-.32960	-.41630	-.36020
1.499	4.580	-.32040	-.41370	-.37490
1.499	6.710	-.32010	-.41700	-.36430
1.502	8.970	-.32850	-.42220	-.39380
1.501	11.230	-.33200	-.40820	-.40170
1.500	13.460	-.31150	-.37840	-.40530
1.501	15.750	-.23890	-.28830	-.39620
	GRADIENT	-.00284	-.00310	-.00535

(AERU13) (25 APR 74

ARC 66-709 0439 0411A-(R5 V8)*STRTU

PARAMETRIC DATA

BETA = .000 ELEVON = 15.00
BCFLAP = -11.700

REFERENCE DATA

SREF = .6033 30-FT. YMRP = 12.6255 IN.
LREF = .3933 FT. YMRP = .0000 IN.
BREF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0150

RUN NO. 109/ 0 RN/L = 2.45 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
2.001	-4.660	-1.1247	-.20980	-.19460
2.001	-2.650	-.16010	-.21460	-.20060
2.001	-.540	-.16790	-.22030	-.20680
2.001	1.600	-.17650	-.22590	-.21960
2.001	3.910	-.18520	-.23090	-.23480
1.998	6.010	-.19380	-.23520	-.24460
2.001	8.140	-.19910	-.23980	-.24490
2.003	10.380	-.20370	-.24030	-.24330
2.001	12.480	-.20280	-.24090	-.23920
2.001	14.670	-.20450	-.24340	-.23020
	GRADIENT	-.00385	-.00244	-.00458



ARC 68-709 OAS9 Oa11A-(R5 V8)*STRUT

(AER014) (25 APR 74)

REFERENCE DATA

SREF = .6033 36.FT. XMRP = 12.6233 IN.
 LREF = .5933 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

BETA = .000 ELEVON = .000
 BOFLAP = 16.300

RUN NO. 101/ 0 RM/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.602	-3.970	-.40920	-.57670	-.33690
.600	-1.080	-.47390	-.56240	-.32290
.601	.270	-.46340	-.54670	-.29330
.598	2.360	-.45200	-.53720	-.30400
.598	4.480	-.42860	-.57830	-.31310
.599	6.630	-.41280	-.57270	-.33220
.600	8.720	-.38730	-.53150	-.32730
.599	10.680	-.36330	-.53260	-.32730
.600	13.040	-.37940	-.50340	-.31710
.599	15.200	-.37510	-.47690	-.34240
	GRADIENT	.00677	.00010	.00315

RUN NO. 100/ 0 RM/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.698	-3.710	-.49010	-.57130	-.34050
.701	-1.630	-.48830	-.55670	-.32930
.702	.930	-.47960	-.57220	-.32970
.701	2.690	-.46580	-.56430	-.30210
.698	4.900	-.44210	-.54380	-.31190
.698	7.030	-.43400	-.58400	-.32890
.699	9.240	-.41590	-.56870	-.32720
.699	11.40	-.41540	-.53120	-.32280
.700	13.570	-.40910	-.52750	-.33810
.699	15.760	-.40320	-.48660	-.36440
	GRADIENT	.00552	-.00144	.00391

RUN NO. 99/ 0 RM/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.801	-3.900	-.51540	-.58110	-.35340
.801	-1.750	-.56220	-.64450	-.46280
.801	.440	-.50820	-.58360	-.32360
.801	2.660	-.51470	-.63720	-.33080
.801	4.850	-.49680	-.63760	-.32940
.801	7.030	-.47090	-.60930	-.32390
.798	9.190	-.46260	-.59890	-.33150
.798	11.410	-.47100	-.58910	-.33300
.799	13.620	-.46320	-.56910	-.36790
.799	15.790	-.45860	-.54130	-.39860
	GRADIENT	.00368	-.00482	.00367

ARC 66-709 0A39 0A11A-(R5 V8)+STRUT

(AERD14) (25 APR 74)

REFERENCE DATA

XREF = .6033 30.FT. XMRP = 12.8255 IN.
 LREF = .5933 FT. YMRP = .0000 IN.
 ORFP = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

BETA = .000 ELEVON = .000
 BFLAP = 16.300

RUN NO. 98/ 0 RM/L = 2.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.903	-4.580	-.51960	-.61190	-.41280
.900	-2.290	-.53300	-.61370	-.39840
.901	.045	-.52650	-.60610	-.37540
.902	.370	-.53880	-.62960	-.38950
.898	2.470	-.52350	-.62370	-.35930
.899	4.760	-.51640	-.63330	-.34890
.900	6.950	-.53180	-.66700	-.33240
.898	9.110	-.50310	-.64790	-.33900
.900	11.320	-.53290	-.66720	-.36460
.897	13.550	-.51700	-.6.020	-.37590
.899	15.610	-.53320	-.63790	-.42330
	GRADIENT	-.00062	-.00409	-.00697

RUN NO. 97/ 0 RM/L = 2.51 GRADIENT INTERVAL = -5.00/ 9.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.202	-4.630	-.44360	-.61990	-.43180
1.200	-2.420	-.42930	-.59880	-.42330
1.200	-.170	-.42810	-.6520	-.42690
1.202	2.110	-.42660	-.54000	-.42260
1.201	4.340	-.41500	-.48840	-.42660
1.200	6.570	-.39850	-.43660	-.43050
1.199	8.860	-.39100	-.41690	-.43900
1.199	11.090	-.38420	-.40290	-.44470
1.203	13.330	-.35750	-.38640	-.45060
1.198	15.600	-.33460	-.38380	-.46290
	GRADIENT	-.00266	-.01432	-.00256

RUN NO. 96/ 0 RM/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.300	-4.350	-.29260	-.38950	-.31440
1.301	-2.190	-.30230	-.39640	-.32420
1.300	.050	-.31230	-.40620	-.33600
1.300	2.230	-.30760	-.40280	-.34670
1.499	4.460	-.30770	-.40430	-.36190
1.300	6.710	-.30310	-.39500	-.37570
1.498	8.900	-.29750	-.37970	-.37280
1.497	11.120	-.30190	-.37500	-.37670
1.502	13.330	-.30440	-.35010	-.37620
1.498	15.570	-.26460	-.31470	-.36740
	GRADIENT	-.00161	-.00199	-.00333



(AER014) (25 APR 74)

ARC 00-700 0459 0411A-(05 V6)*STRUT

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BCFLAP = 16.300

REFERENCE DATA

UREF = .0033 36.FT. ZMRP = 12.0255 IM.
LREF = .9033 FT. YMRP = .0000 IM.
UREF = 1.1710 FT. ZMRP = -.3750 IM.
SCALE = .0150

RUN NO. 03/ 0 RN/L = 2.47 GRADIENT INTERVAL = -9.00/ 9.00

MACH	ALPHA	CPV1	CPV2	CPV3
2.000	-4.780	-1.19100	-2.0770	-1.19250
2.003	-2.060	-1.18950	-2.1460	-1.19040
2.006	-.840	-1.18700	-2.1930	-1.20500
2.000	1.020	-1.17900	-2.2300	-2.1670
1.997	3.040	-1.16420	-2.2010	-2.2240
1.997	5.970	-1.19350	-2.3430	-2.4340
1.997	6.150	-2.0060	-2.3740	-1.9490
2.003	10.330	-2.0370	-2.3950	-2.4500
1.997	12.510	-2.0320	-2.3900	-2.4370
1.997	14.740	-2.0280	-2.4020	-2.2050
	GRADIENT	-1.00309	-1.00251	-1.00456

PARAMETRIC DATA

BETA = .000 ELEVOM = .000
CDFLAP = .000

REFERENCE DATA

AREF = .0033 30.FT. RMRP = 12.0233 IN.
LREF = .0033 30.FT. TMRP = .0000 IN.
SREF = 1.1710 30.FT. ZMRP = -.3730 IN.
SCALE = .0137

RUN NO. 106/ G RM/L = 2.52 GRADIENT INTERVAL = -3.00/ 3.00

MACH	ALPHA	CPV1	CPV2	CPV3
.599	-4.170	-41000	-46620	-31640
.599	-2.050	-40890	-45090	-31470
.601	.100	-39910	-44090	-29790
.599	2.240	-39040	-44010	-29760
.600	4.400	-38570	-44310	-28850
.600	6.620	-37470	-45020	-28360
.600	8.890	-35780	-44240	-28750
.605	10.640	-34230	-41870	-28940
.600	13.000	-33070	-39660	-30810
.600	15.170	-31670	-37210	-31670
	GRADIENT	.00313	.00265	.00340

RUN NO. 107/ G RM/L = 2.53 GRADIENT INTERVAL = -3.00/ 3.00

MACH	ALPHA	CPV1	CPV2	CPV3
.700	-4.280	-41080	-47400	-34240
.700	-2.130	-40970	-46060	-32590
.702	.060	-41530	-46410	-30920
.701	2.170	-39490	-43570	-29480
.700	4.360	-40090	-45570	-29370
.699	6.510	-38450	-45930	-28320
.699	8.730	-38180	-43210	-28890
.702	10.920	-35920	-43480	-28480
.699	13.050	-35030	-4.460	-31190
.699	15.260	-34310	-40010	-33650
	GRADIENT	.00233	.00233	.00377

RUN NO. 106/ C RM/L = 2.53 GRADIENT INTERVAL = -3.00/ 3.00

MACH	ALPHA	CPV1	CPV2	CPV3
.799	-4.470	-43640	-47850	-34720
.801	-2.260	-42960	-46910	-33450
.802	-.120	-41620	-45510	-30920
.801	2.140	-43930	-48700	-31140
.800	4.290	-41020	-48370	-29455
.799	6.470	-42645	-51020	-29830
.799	8.680	-47000	-49010	-29480
.798	10.860	-49990	-47510	-30860
.801	13.030	-37830	-46280	-32655
.799	15.260	-36020	-44250	-36030
	GRADIENT	.00119	.00149	.00395

ARC 68-109 OAS9 OAS11A-(R3 V8)*STRUT

(AERO15) (25 APR 74)

REFERENCE DATA

SREF = .605- 98-FT. XMRP = 12.6255 IN.
 LREF = .5935 FT. YMRP = .0000 IN.
 BRE. = 1.710 FT ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

BETA = .000 ELEVON = .000
 R-FLAP = .000

RUN NO. 103/ 0 RN/L = 2.46 GRADIENT INTERVAL = -.5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.898	-4.710	-.45350	-.48970	-.35990
.900	-2.390	-.43950	-.48960	-.34970
.899	-.210	-.44300	-.48650	-.33710
.895	2.040	-.45040	-.49580	-.33740
.901	4.260	-.43920	-.48530	-.31510
.902	6.390	-.44340	-.50380	-.30290
.898	8.640	-.45190	-.53840	-.31050
.899	10.860	-.46260	-.51120	-.31480
.902	13.000	-.44850	-.50680	-.33920
.899	15.280	-.45050	-.51510	-.36300
	GRADIENT	.00116	.00011	.00455

RUN NO. 104/ 0 RN/L = 2.50 GRADIENT INTERVAL = -.5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.199	-4.670	-.42530	-.63030	-.41490
1.200	-2.420	-.41450	-.56500	-.41070
1.203	-.210	-.40730	-.53310	-.41010
1.202	2.040	-.40030	-.48680	-.40580
1.204	4.280	-.38420	-.41440	-.41160
1.202	6.52	-.34170	-.36380	-.40970
1.201	8.780	-.30910	-.34080	-.41720
1.198	11.020	-.30010	-.33960	-.42230
1.204	13.290	-.28150	-.33340	-.44720
1.203	15.500	-.26140	-.30320	-.43730
	GRADIENT	-.00431	.02058	-.00051

RUN NO. 103/ 0 RN/L = 2.48 GRADIENT INTERVAL = -.5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.501	-4.470	-.28650	-.38480	-.30350
1.500	-2.240	-.29630	-.39580	-.31900
1.500	.030	-.30620	-.40440	-.33180
1.498	2.180	-.30510	-.40420	-.34370
1.498	4.420	-.29620	-.38660	-.35480
1.498	6.600	-.28950	-.38030	-.36170
1.498	8.850	-.29100	-.37940	-.36710
1.498	11.040	-.26090	-.31890	-.37260
1.498	13.290	-.21760	-.26460	-.36160
1.497	15.510	-.21560	-.26330	-.35930
	GRADIENT	-.00128	-.00055	-.00355

(AERD13) (23 APR 74)

ARC 68-708 OAS9 OALLA-(R5 V6)STRUT

REFERENCE DATA

SREF = -.6033 SQ.FT.
 LREF = .5933 FT.
 ORF = 1.1710 FT.
 SCALE = .0150

XMRP = 12.6235 IN.
 YMRP = -.0000 IN.
 ZMRP = -.3730 IN.

PARAMETRIC DATA

BETA = .000 ELEVOM = .000
 BOFLAP = .000

RUN NO. 102/ 0 RM/L = 2.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
2.005	-4.890	-1.14910	-2.0740	-1.18970
2.006	-2.890	-1.15470	-2.1060	-1.19530
2.001	-.590	-1.16510	-2.1830	-2.0470
2.001	1.580	-1.17470	-2.2460	-2.1710
2.001	3.760	-.18270	-2.2990	-2.3160
2.001	5.940	-1.19050	-2.3290	-2.2410
2.001	8.070	-1.19590	-2.3370	-2.24160
1.999	10.270	-2.0070	-2.3930	-2.2380
1.999	12.440	-2.0060	-2.24100	-2.24290
1.999	14.700	-2.0260	-2.24270	-2.25090
	GRADIENT	-.00404	-.00273	.05490



ARC 68-709 0A59 0A11A-(N24 BB V0)+STREUT

(AERD16) (13 JUN 74)

REFERENCE DATA

SRFP = -.0053 86.FT. XMRP = 12.6255 IN.
 LREF = .5955 FT. YMRP = .0000 IN.
 BRFP = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

ALPHA = .000 ELEVON = .000
 BDFLAP = -11.700

PARAMETRIC DATA

RUN NO. 78/ 0 RM/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.600	-15.370	-.63740	-.45400	-.44910
.599	-9.770	-.46370	-.49750	-.43000
.600	-6.670	-.35950	-.43040	-.40869
.600	-4.500	-.34770	-.41700	-.38550
.600	-2.390	-.32540	-.35490	-.35030
.598	-.300	-.32960	-.34890	-.32076
.598	.710	-.34670	-.35490	-.32130
.598	1.770	-.35270	-.35910	-.31650
.598	3.910	-.34790	-.40310	-.35640
.599	5.930	-.33520	-.41810	-.37690
	GRADIENT	-.00140	.00150	.00375

RUN NO. 77/ 0 RM/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.698	-15.050	-.58120	-.43300	-.46820
.703	-9.740	-.46850	-.50480	-.43740
.702	-6.620	-.36280	-.43640	-.41280
.702	-4.510	-.35220	-.41050	-.38330
.702	-2.340	-.33820	-.35900	-.33210
.701	-.260	-.32040	-.31530	-.30400
.702	.850	-.33240	-.33780	-.31770
.701	1.850	-.33900	-.33170	-.31070
.701	3.900	-.34720	-.38780	-.35460
.701	6.010	-.36180	-.42500	-.39250
	GRADIENT	-.00059	.00306	.00413

RUN NO. 76/ 0 RM/L = 2.55 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.799	-15.510	-.51190	-.47580	-.52860
.801	-10.130	-.52520	-.53370	-.45609
.798	-6.890	-.37510	-.45280	-.41720
.802	-4.870	-.34860	-.41860	-.38950
.801	-2.650	-.34320	-.37910	-.35090
.799	-.450	-.32020	-.32930	-.31420
.800	.660	-.34140	-.37410	-.35030
.803	.900	-.34780	-.37890	-.34300
.799	1.860	-.34170	-.36720	-.32560
.797	3.950	-.34860	-.40990	-.36705
.802	6.120	-.36790	-.45560	-.41820
	GRADIENT	-.00011	.00159	.00302

(AER018) (13 JUN 74)

ARC 66-759 0459 0411A-IN24 RS V81+STRUT

PARAMETRIC DATA

ALPHA = .000 ELEVON = .000
BDFLAP = -11.700

REFERENCE DATA

SREF = .8953 SQ.FT. XMRP = 12.6255 IN.
LREF = .5935 FT. YMRP = .0000 IN.
ORF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0150

RUN NO. 73/ 0 RN/L = 2.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.901	-15.420	-.57770	-.49330	-.57150
.899	-10.070	-.55520	-.58880	-.50130
.899	-6.870	-.39350	-.48130	-.44940
.899	-4.740	-.36930	-.46080	-.42190
.904	-2.540	-.37010	-.40880	-.37770
.901	-.380	-.34370	-.35080	-.35820
.899	.680	-.35020	-.36680	-.35860
.903	.920	-.35330	-.37140	-.35300
.900	1.700	-.35830	-.38450	-.34610
.900	3.830	-.38420	-.44840	-.38490
.905	5.960	-.38660	-.47560	-.42390
	GRADIENT	-.00029	.00381	.00557

RUN NO. 74/ 0 RN/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
1.200	-15.730	-.49180	-.52350	-.47160
1.201	-10.090	-.49410	-.59510	-.45100
1.199	-6.830	-.47020	-.58960	-.43900
1.201	-4.650	-.45580	-.55910	-.42230
1.203	-2.550	-.41980	-.52590	-.41110
1.199	-.310	-.41060	-.51880	-.39870
1.201	.730	-.39810	-.51310	-.40160
1.203	1.820	-.40390	-.51100	-.40270
1.201	3.990	-.44330	-.52840	-.41180
1.202	6.360	-.46680	-.56490	-.42540
	GRADIENT	.00235	.00373	.00148

RUN NO. 73/ 0 RN/L = 2.50 GRADIENT INTERVAL = -5.00/ 3.00

MACH	BETA	CPV1	CPV2	CPV3
1.499	-16.140	-.36370	-.40980	-.36210
1.500	-10.400	-.30350	-.42580	-.34900
1.499	-7.130	-.28050	-.42100	-.34130
1.500	-4.660	-.28010	-.40020	-.33000
1.500	-2.690	-.32080	-.38010	-.31920
1.500	-.470	-.32430	-.39420	-.32980
1.500	.480	-.31080	-.40390	-.33480
1.500	1.690	-.32370	-.39390	-.33110
1.500	3.850	-.29370	-.37760	-.32640
1.502	5.990	-.30840	-.39850	-.33650
	GRADIENT	-.00141	.00117	-.00034

ARC 66-709 OAS9 OAI1A-(IN24 R5 V6)+STRUT

PARAMETRIC DATA

ALPHA = .000 ELEVON = .080
 BDFLAP = -11.700

REFERENCE DATA

SREF = .6033 36-FT. XMRP = 12.6235 IN.
 LREF = .5935 FT. YMRP = .0000 IN.
 PREF = 1.1710 FT. ZMRP = -.3730 IN.
 SCALE = .0130

RUN NO. 72/ 0 RM/L = 2.45 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
1.997	-15.190	-.20710	-.22610	-.26960
2.002	-9.310	-.18030	-.21940	-.24960
1.998	-6.190	-.17140	-.21710	-.23720
1.998	-3.960	-.17090	-.21650	-.22460
2.001	-1.720	-.17320	-.21680	-.21370
2.001	.450	-.16730	-.21710	-.20780
2.000	1.100	-.17190	-.21680	-.20330
2.001	1.340	-.17410	-.21720	-.20300
1.998	2.640	-.17910	-.21880	-.20910
2.001	4.800	-.18480	-.22000	-.21340
2.001	6.930	-.19080	-.22670	-.22230
	GRADIENT	-.00145	-.00019	.00126

ARC 66-709 0459 CA11A-(IN24 R5 V8)-STRUT

(AER017) (13 JUN 74)

REFERENCE DATA

XREF = .0033 50.FT. XMRP = 12.6255 IN.
 LREF = .5935 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

ALPHA = .000 ELEVON = .000
 DCFLAP = -11.700

PARAMETRIC DATA

RUN NO. 71/ 0 RN/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
1.198	-15.260	-4.5160	-4.7620	-4.6990
1.198	-9.740	-4.7750	-5.8270	-4.4920
1.198	-6.450	-4.6490	-5.8140	-4.3810
1.201	-4.280	-4.5510	-5.5990	-4.2460
1.201	-2.140	-4.2140	-5.5790	-4.0590
1.201	.020	-4.0130	-5.1810	-4.0390
1.200	1.150	-4.0270	-5.2710	-4.1010
1.202	2.190	-4.1530	-5.2300	-4.0360
1.199	4.330	-4.6180	-5.5250	-4.2470
1.200	6.470	-4.6170	-5.8080	-4.2640
	GRADIENT	-.00023	.00157	.00014

RUN NO. 70/ 0 RN/L = 2.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
1.500	-15.710	-3.5930	-4.0920	-3.6330
1.499	-10.020	-3.0670	-4.2600	-3.5240
1.500	-6.710	-2.8010	-4.1790	-3.4050
1.500	-4.530	-2.7800	-3.9110	-3.2930
1.500	-2.320	-3.1780	-3.8350	-3.1940
1.499	-1.120	-3.5140	-3.9900	-3.3350
1.499	.960	-3.1880	-4.0260	-3.3750
1.500	2.060	-3.1720	-3.8960	-3.3010
1.502	4.210	-3.0830	-3.8090	-3.2880
1.501	6.380	-3.2500	-3.9860	-3.4150
	GRADIENT	-.00293	.00038	-.00059

RUN NO. 69/ 0 RN/L = 2.42 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
1.999	-15.140	-2.0840	-2.2740	-2.26570
1.999	-9.500	-1.8490	-2.2150	-2.2535
2.001	-6.210	-1.7400	-2.1830	-2.2395
2.001	-3.970	-1.7200	-2.1700	-2.2355
1.999	-1.810	-1.7460	-2.1870	-2.1580
1.999	.380	-1.6990	-2.1940	-2.0810
1.998	1.480	-1.7730	-2.1940	-2.0690
2.001	2.550	-1.7875	-2.1880	-2.0655
2.006	4.700	-1.8600	-2.2090	-2.1610
2.004	6.890	-1.9330	-2.2840	-2.2495
	GRADIENT	-.00147	-.00036	.00137



ARC 86-709 OAS9 OAS11A-(M24 R5 V6)-STRUT

(AERO18) (13 JUN 74)

REFERENCE DATA

SREF = .6033 30.FT. YMRP = 12.6255 IN.
 LREF = .5935 30.FT. YMRP = .0000 IN.
 BRP = 1.3300 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

ALPHA = 10.000 ELEVOM = .000
 BDFLAP = -11.700

RUN NO. 55/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.601	-4.620	-.28540	-.36180	-.32710
.603	-2.450	-.28420	-.34140	-.29830
.600	-.340	-.28170	-.33110	-.28950
.599	.770	-.28740	-.33370	-.29020
.600	1.700	-.28540	-.34420	-.28490
.599	3.790	-.29440	-.37750	-.31840
.599	5.890	-.28950	-.33000	-.34770
.599	8.090	-.32740	-.33620	-.37170
.599	11.180	-.47890	-.38700	-.38320
.599	16.250	-.44460	-.51980	-.56220
	GRADIENT	-.00091	-.00117	.00176

RUN NO. 54/ 0 RM/L = 2.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.698	-4.570	-.30260	-.37170	-.33650
.697	-2.390	-.29120	-.33680	-.29960
.696	-.280	-.29780	-.33560	-.29400
.696	.720	-.29370	-.34730	-.29520
.697	1.640	-.29320	-.34780	-.30030
.696	3.680	-.30050	-.36920	-.31970
.699	5.990	-.29750	-.33180	-.36660
.698	8.100	-.32100	-.32170	-.37180
.697	11.280	-.49640	-.38850	-.40650
.697	16.510	-.45650	-.53650	-.57265
	GRADIENT	.00014	-.00013	.00186

RUN NO. 53/ 0 RM/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.798	-4.520	-.31010	-.36170	-.33510
.802	-2.360	-.31290	-.37060	-.32350
.800	-.230	-.30470	-.34770	-.30320
.799	.790	-.31690	-.36490	-.31430
.798	1.980	-.31620	-.37300	-.31620
.798	4.120	-.31000	-.37420	-.33250
.795	6.150	-.29710	-.32800	-.33740
.799	8.340	-.32640	-.33290	-.39190
.799	11.490	-.48990	-.39000	-.46260
.797	16.640	-.45340	-.53690	-.57320
	GRADIENT	-.00025	-.00125	.00069

(AERD18) (13 JUN 74)

ARC 66-709 QAS9 OAL11A-(IN24 R5 V0)+STRUT

REFERENCE DATA

SREF = .6033 38.FT. XMRP = 12.6233 IN.
 LREF = .5935 FT. YMRP = .0000 IN.
 ORF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

ALPHA = 10.000 ELEVON = .000
 BDFLAP = -11.700

PARAMETRIC DATA

RUN NO. 52/ 0 RN/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.900	-4.480	-3.5600	-4.1740	-3.6070
.905	-2.230	-3.8090	-4.3370	-3.4260
.903	-.090	-3.8690	-4.3740	-3.3730
.902	.960	-3.8930	-4.3610	-3.3250
.901	2.080	-3.6270	-4.3390	-3.3700
.901	4.170	-3.7440	-4.3360	-3.3340
.901	6.430	-3.5100	-3.7660	-3.7140
.901	8.570	-3.7540	-3.4800	-.4010
.897	11.740	-4.0780	-3.3970	-4.4180
.899	17.150	-4.3320	-4.3270	-3.5420
GRADIENT		-.00119	-.00159	-.00121

RUN NO. 51/ 0 RN/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
1.200	-4.400	-3.4070	-3.6510	-4.3710
1.201	-2.280	-2.6940	-3.2340	-4.2550
1.198	-.010	-2.5250	-3.0860	-4.2710
1.196	1.040	-2.7350	-3.3190	-4.3000
1.199	2.210	-2.9460	-3.5220	-4.2430
1.201	4.270	-3.3200	-3.9160	-4.1910
1.202	6.400	-3.6630	-4.1150	-4.2570
1.203	8.610	-3.7950	-4.1480	-4.3600
1.204	11.880	-4.4520	-4.5370	-4.3150
1.197	17.430	-4.7630	-4.3935	-4.8060
GRADIENT		-.00156	-.00334	-.00160

RUN NO. 50/ 0 RN/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
1.501	-4.630	-2.6150	-2.8930	-3.6840
1.502	-2.430	-2.4620	-2.9150	-3.7440
1.502	-.230	-2.4660	-3.0310	-3.7670
1.501	.810	-2.5120	-3.1580	-3.7480
1.501	1.930	-2.3140	-2.8420	-3.5390
1.502	4.160	-2.8130	-3.2650	-3.5600
1.502	6.330	-2.7720	-3.3340	-3.5410
1.502	8.610	-2.7060	-3.1010	-3.6420
1.502	11.810	-3.3450	-4.4370	-3.5240
1.502	17.430	-3.3990	-3.3910	-3.7670
GRADIENT		-.00109	-.00368	-.00187



DATE 29 AUG 74

0A59 TABULATED SOURCE DATA

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ARC 66-709 0A59 0A11A-(M24 R3 V0)*STRUT

(AERO10) (13 JUN 74)

REFERENCE DATA

XREF = .6533 90.FT. XMRP = 12.6255 IN.
 LREF = .5933 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

ALPHA = 10.000 ELEVON = .000
 SDFLAP = -11.700

PARAMETRIC DATA

RUN NO. 49/ 0 RM/L = 2.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
2.001	-4.130	-.21460	-.24430	-.25200
2.006	-1.060	-.29770	-.23070	-.24870
2.001	.290	-.20100	-.24160	-.24390
1.998	1.400	-.19010	-.24490	-.25110
1.998	2.410	-.19570	-.24540	-.24490
1.998	4.670	-.20450	-.24000	-.24500
1.998	9.050	-.23140	-.23730	-.23980
1.998	12.430	-.23060	-.26390	-.25410
1.998	17.060	-.23470	-.24770	-.27160
	GRADIENT	.00156	-.00065	.00056

ARC 66-709 QAS9 OAS1A-(M24)

(AERO19) (13 JUN 74)

REFERENCE DATA

SREF = .0023 T. XMRP = 12.6235 IN.
 LREF = .5933 YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

BETA = .000 ELEVON = .000
 BCFAP = -11.700 SPCBRK = 25.000

PARAMETRIC DATA

RUN NO. 123/ 0 RN/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.596	-4.000	-.24460	-.40760	-.16670
.595	-2.000	-.26110	-.41190	-.16890
.595	.100	-.26040	-.39070	-.18610
.597	2.170	-.26680	-.36180	-.18370
.597	4.260	-.28090	-.35130	-.15550
.597	6.310	-.28210	-.34770	-.15310
.597	8.430	-.29080	-.34070	-.13140
.597	10.480	-.26690	-.32830	-.15550
.596	12.620	-.28910	-.35610	-.16930
.596	14.670	-.29300	-.39670	-.19460
	GRADIENT	-.00378	.00789	.00134

RUN NO. 122/ 0 RN/L = 2.55 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.601	-4.270	-.25640	-.44660	-.20380
.602	-2.230	-.28030	-.40870	-.17630
.600	-.080	-.27930	-.41750	-.16640
.600	2.060	-.28810	-.39100	-.17480
.601	4.100	-.29930	-.38580	-.17460
.602	6.200	-.30100	-.39240	-.17700
.603	8.330	-.31260	-.39410	-.17820
.600	10.480	-.31430	-.40980	-.18650
.602	12.550	-.31600	-.42870	-.19840
.601	14.710	-.32020	-.47890	-.22150
	GRADIENT	-.00444	.00661	.00285

RUN NO. 121/ 0 RN/L = 2.90 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.650	-4.320	-.28840	-.43300	-.15690
.650	-2.280	-.28540	-.44850	-.19680
.650	-.170	-.28800	-.42450	-.18870
.650	1.960	-.29870	-.47070	-.18930
.652	4.050	-.30200	-.46820	-.18580
.650	6.130	-.30770	-.46030	-.17400
.649	8.290	-.31480	-.41700	-.16680
.649	10.330	-.31770	-.43120	-.19140
.648	12.460	-.32430	-.46490	-.21470
.649	14.560	-.33220	-.50600	-.24000
	GRADIENT	-.00213	.00560	.00142



ARC 66-70° OAS9 OA11A-(M24)

(AER019) (15 JUN 74)

REFERENCE DATA

XREF = .6033 94.FT. YMRP = 12.6255 IN.
 LREF = .5933 FT. YMRP = .0000 IN.
 ORF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0130

PARAMETRIC DATA

BETA = .000 ELEVOM = .000
 BCFLAP = -11.700 SPOBRK = 25.000

RUN NO. 120/ 0 RM/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.901	-4.400	-.29850	-.47220	-.21390
.896	-2.270	-.30100	-.45660	-.19610
.900	-.160	-.30420	-.44100	-.19680
.902	1.930	-.29870	-.39780	-.18180
.899	4.020	-.30740	-.39940	-.18630
.900	6.100	-.32390	-.38220	-.18810
.901	8.260	-.31910	-.41760	-.17890
.900	10.320	-.34740	-.44460	-.20060
.899	12.460	-.35400	-.45160	-.21200
.902	14.530	-.38280	-.48030	-.24890
	GRADIENT	-.00074	.00971	.00302

RUN NO. 119/ 0 RM/L = 2.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.931	-4.460	-.40910	-.50090	-.26030
.932	-2.330	-.39670	-.43550	-.24400
.931	-.210	-.34370	-.37860	-.24280
.931	1.930	-.31030	-.32870	-.23060
.931	4.060	-.28830	-.31260	-.23310
.932	6.150	-.28790	-.29080	-.1260
.949	8.280	-.32580	-.33940	-.23760
.949	10.390	-.33160	-.36830	-.20030
.930	12.450	-.37310	-.41640	-.30890
.930	14.610	-.37610	-.40480	-.36490
	GRADIENT	-.01540	.02269	-.00319

RUN NO. 118/ 0 RM/L = 2.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.200	-3.980	-.44770	-.62000	-.33360
1.201	-1.950	-.44120	-.62330	-.31940
1.199	-.220	-.44880	-.61900	-.31700
1.202	.240	-.45100	-.61130	-.31430
1.202	2.350	-.47180	-.58630	-.31840
1.202	4.510	-.46060	-.57120	-.32330
1.200	6.650	-.45120	-.53390	-.32730
1.200	8.800	-.44970	-.53900	-.33720
1.202	10.890	-.44950	-.55040	-.34860
1.199	13.110	-.47790	-.53180	-.37230
1.201	15.190	-.49820	-.56380	-.38630
	GRADIENT	-.00269	.00634	-.00116

(AER019) (13 JUN 74)

ARC 66-709 QAS9 0A111A-(M24)

PARAMETRIC DATA

REFERENCE DATA

XREF = .6533 30.FT. XMRP = 12 8255 IM.
 LREF = .5933 FT. YMRP = .0000 IM.
 BREF = 1.1710 FT. ZMRP = -.3750 IM.
 SCALE = .0150

BETA = .000 ELEVOM = .000
 BCFLAP = -11.700 SFCBRK = 25.000

RUN NO. 117/ 0 RM/L = 2.45 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.500	-4.200	-3.0320	-4.0630	-3.2490
1.499	-2.150	-3.1110	-4.1600	-3.1430
1.500	-.070	-3.1620	-4.2390	-2.9310
1.501	-.460	-3.1590	-4.2430	-2.9290
1.500	2.220	-3.1530	-4.2710	-2.8830
1.500	4.710	-3.1540	-4.3230	-2.8970
1.499	6.760	-3.2170	-4.3610	-2.9290
1.497	8.690	-3.3340	-4.4130	-2.9870
1.498	11.050	-3.4460	-4.4330	-3.0650
1.499	13.110	-3.4280	-4.4560	-3.0860
1.498	15.250	-3.5130	-4.4930	-3.1340
	GRADIENT	-.00110	-.00266	-.00432

RUN NO. 116/ 0 RM/L = 2.43 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
2.004	-4.740	-1.7350	-2.3450	-2.2480
1.999	-2.700	-1.8010	-2.3660	-2.2260
1.997	-.610	-1.8620	-2.4270	-2.2130
2.006	-.110	-1.8720	-2.4070	-2.1750
2.000	1.540	-1.9430	-2.4590	-2.1760
1.997	3.600	-2.0020	-2.5230	-2.1660
1.998	5.710	-2.0200	-2.5430	-2.0800
2.001	7.650	-2.0900	-2.5530	-2.0830
2.003	9.920	-2.0230	-2.5660	-2.0970
2.003	12.030	-1.9960	-2.6040	-2.0970
2.001	14.370	-2.0330	-2.6330	-2.1610
	GRADIENT	-.00302	-.00212	-.00105



(AEROS) (13 JUN 74)

ARC 66-759 0459 0411A-IN24)

PARAMETRIC DATA

BETA = .000 ELEVOM = 15.000
 SDFLAP = -11.700 SPOBRK = 25.000

REFERENCE DATA

SREF = .6035 36.FT. XMP = 12.8255 IN.
 LREF = .3935 36.FT. YMP = .0000 IN.
 BREF = 1.1710 FT. ZMP = -.3750 IN.
 SCALE = .015C

RUN NO. 144/ 0 RM/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.594	-3.890	-28640	-45940	-23020
.600	-1.920	-27340	-44260	-21230
.595	.150	-27870	-42860	-21770
.600	2.300	-27810	-42260	-21080
.596	4.350	-29700	-41040	-20390
.598	6.450	-30970	-38720	-19540
.604	8.560	-31660	-36870	-20250
.600	10.650	-31860	-35290	-21190
.600	12.700	-31860	-40860	-21620
.598	14.760	-31960	-41560	-22550
	GRADIENT	-.00127	.00569	.00260

RUN NO. 145/ 0 RM/L = 2.32 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.798	-4.160	-31760	-47760	-25030
.798	-2.050	-28180	-4400	-23000
.600	.020	-30260	-44800	-23290
.798	2.090	-31080	-43030	-22900
.603	4.210	-33740	-44230	-23800
.796	6.440	-31520	-40620	-21410
.802	8.460	-34400	-44250	-23270
.798	10.550	-33910	-44550	-24090
.600	12.680	-37210	-50030	-26060
.601	14.790	-40150	-55560	-29090
	GRADIENT	-.00266	.00403	.00142

RUN NO. 142/ 0 RM/L = 2.56 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.906	-4.320	-37100	-51800	-28080
.904	-2.210	-33240	-46790	-25650
.906	.150	-34860	-46140	-23380
.909	2.030	-36840	-40920	-23280
.701	4.190	-35050	-39200	-24080
.899	6.280	-37100	-41690	-25120
.901	8.360	-42240	-54050	-23990
.897	10.440	-41500	-54940	-27540
.899	12.540	-46080	-57090	-31580
.903	14.750	-46160	-58880	-34620
	GRADIENT	.00116	.01562	.00402

ARC 64-709 OAS9 0A11A-(IN24)

(AERO20) (13 JUN 74)

REFERENCE DATA

BREF = .0033 30.FT. XMRP = 12.6255 IN.
 LREF = .0033 30.FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .015C

PARAMETRIC DATA

BETA = .000 ELEVOM = 19.000
 DDFLAP = -11.700 SPDBEK = 29.000

RUN NO. 141/ 0 RM/L = 2.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.193	-4.410	-48790	-84550	-40480
1.197	-2.310	-48150	-64300	-38760
1.192	-2.210	-47960	-64610	-36560
1.200	2.050	-48340	-64060	-36120
1.200	4.180	-50670	-62730	-36470
1.199	6.240	-50380	-61410	-36320
1.196	8.410	-49880	-61000	-36970
1.197	10.510	-50480	-61190	-38140
1.197	12.700	-51010	-61140	-39970
1.191	14.790	-51370	-59640	-39930
	GRADIENT	-.00196	.00171	.00493

RUN NO. 140/ 0 RM/L = 2.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.501	-4.290	-32860	-41470	-36570
1.500	-2.210	-33180	-42160	-36050
1.498	-0.330	-34390	-43390	-33510
1.499	2.150	-34560	-43860	-32440
1.497	4.160	-34650	-44300	-32180
1.500	6.340	-34480	-44830	-32090
1.500	8.460	-34540	-45120	-32340
1.499	10.560	-33500	-46050	-33430
1.497	12.630	-34430	-46490	-34410
1.494	14.810	-36620	-47290	-35720
	GRADIENT	-.01229	-.00346	.00583

RUN NO. 138/ 0 RM/L = 2.39 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
2.000	-4.770	-17990	-23430	-23770
2.000	-2.690	-18540	-23030	-23360
2.000	-.610	-19200	-22480	-23390
2.000	1.470	-20060	-22090	-23170
2.000	3.650	-20730	-21370	-22900
2.000	5.710	-20600	-20390	-22970
1.997	7.820	-20960	-20810	-22690
1.997	9.910	-20910	-20210	-22840
1.997	11.990	-20770	-20470	-22530
1.998	14.110	-20060	-20840	-22940
	GRADIENT	-.00333	-.00223	.00682



(AER021) (13 JUN 74)

ARC 68-709 OAS9 OAI1A-(M24)

REFERENCE DATA

XREF = .6033 50.FT. XMRP = 12.6255 IN.
 LREF = .5935 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

BETA = .000 ELEVON = 15.000
 BOFLAP = -11.700 SPDBRK = 25.000

RUN NO. 136/ 0 RM/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
2.005	-4.720	-.17940	-.23370	-.23930
1.997	-2.660	-.16570	-.23870	-.23530
1.999	-.370	-.19040	-.24300	-.23120
1.999	1.520	-.19970	-.24650	-.23060
1.999	3.680	-.20490	-.25200	-.22500
1.999	5.730	-.20650	-.25530	-.21750
1.999	7.870	-.20700	-.25730	-.21990
1.997	9.910	-.20700	-.26140	-.22220
1.996	12.020	-.20630	-.26390	-.22010
1.996	14.090	-.20790	-.26660	-.21750
	GRADIENT	-.00310	-.00202	.00156

ARC 68-709 OAS9 OAS11A-(M24)

(AERD22) (13 J 74)

REFERENCE DATA

SREF = .6033 96.FT. XHRP = 12.6233 IN.
 LREF = .5933 FT. YHRP = .0000 IN.
 ORF = 1.1710 FT. ZHRP = -.3750 IN.
 SCALE = .0130

PARAMETRIC DATA

BETA = .000 ELEVON = .000
 BDFLAP = .000 SPOBRK = 23.000

RUN NO. 130/ 0 RM/L = 2.52 GRADIENT INTERVAL = -5.00/ 9.00

MACH	ALPHA	CPV1	CPV2	CPV3
.600	-4.080	-.25650	-.43840	-.15650
.599	-1.980	-.28390	-.46450	-.18040
.600	.110	-.29150	-.43680	-.16710
.599	2.210	-.29040	-.40970	-.15770
.600	4.270	-.31090	-.38260	-.15200
.600	6.340	-.30700	-.35800	-.13940
.600	8.450	-.30580	-.33430	-.14290
.600	10.480	-.30900	-.32400	-.15080
.598	12.600	-.31820	-.37180	-.16420
.600	14.690	-.32680	-.40580	-.18990
	GRADIENT	-.00352	.00796	.00131

RUN NO. 129/ 0 RM/L = 2.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.701	-4.090	-.29230	-.45670	-.16310
.701	-2.020	-.27960	-.44170	-.16250
.700	.000	-.30090	-.42800	-.17020
.701	2.130	-.30270	-.39680	-.16080
.701	4.230	-.31540	-.36890	-.15980
.699	6.360	-.30480	-.35010	-.14280
.699	8.490	-.31480	-.36770	-.15740
.701	10.550	-.31560	-.37480	-.16100
.700	12.650	-.33590	-.40440	-.18490
.699	14.770	-.32930	-.44100	-.20500
	GRADIENT	-.00331	.01036	.00643

RUN NO. 128/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.800	-4.220	-.30260	-.47160	-.18780
.800	-2.170	-.29660	-.43500	-.17220
.800	-.120	-.34480	-.44120	-.18660
.801	2.040	-.32380	-.39060	-.16650
.800	4.110	-.32030	-.38060	-.16240
.801	6.200	-.31160	-.37980	-.16420
.802	8.350	-.32840	-.38560	-.16880
.801	10.410	-.33380	-.40790	-.17560
.801	12.540	-.37300	-.47610	-.21780
.800	14.630	-.35220	-.49930	-.21670
	GRADIENT	-.00297	.01087	.00272



REFERENCE DATA

BREF = .0033 80.FT. XMRP = 12.8255 IN.
 LREF = .9033 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

BETA = .000 ELEVON = .000
 BDFLAP = .000 SPOBRK = 25.000

PARAMETRIC DATA

RUN NO. 127/ 0 RN/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.901	-4.330	-.32590	-.49480	-.19630
.900	-2.330	-.34280	-.46610	-.19030
.902	-.180	-.35240	-.42260	-.18780
.900	2.000	-.35400	-.40520	-.19130
.900	4.050	-.33380	-.37330	-.16010
.900	6.200	-.31700	-.41440	-.16280
.900	8.360	-.33480	-.43730	-.18070
.899	10.500	-.34300	-.44960	-.19400
.899	12.430	-.36560	-.46110	-.22440
.901	14.570	-.38910	-.50530	-.23590
	GRADIENT	-.00127	.01436	.00356

RUN NO. 128/ 0 RN/L = 2.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.197	-4.320	-.45000	-.62380	-.34280
1.200	-1.990	-.44080	-.62540	-.32360
1.200	-.270	-.45310	-.61310	-.31850
1.199	2.380	-.47700	-.58950	-.32130
1.198	4.530	-.46750	-.57650	-.32810
1.198	6.690	-.46170	-.56450	-.33060
1.199	8.810	-.46210	-.55280	-.33680
1.199	10.920	-.46180	-.54790	-.34560
1.200	13.040	-.48670	-.57100	-.37060
1.199	15.220	-.50660	-.58210	-.38930
	GRADIENT	-.00320	.00564	.00149

RUN NO. 129/ 0 RN/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.504	-4.280	-.30380	-.40650	-.32370
1.499	-2.130	-.31270	-.41720	-.32210
1.498	-.040	-.31580	-.42550	-.29317
1.503	.480	-.31390	-.42240	-.29180
1.498	2.100	-.31720	-.42960	-.29210
1.500	4.210	-.31750	-.43220	-.29570
1.500	6.290	-.32430	-.43830	-.29305
1.500	8.500	-.33180	-.43900	-.29390
1.498	10.590	-.34140	-.44780	-.30040
1.498	12.930	-.34970	-.45940	-.31390
1.487	15.260	-.35720	-.46150	-.31140
	GRADIENT	-.00150	-.00309	.00462

ARC 66-709 OAS9 0A11A-(M24)

(AER022) (13 JUN 74)

REFERENCE DATA

XREF = .6033 36.FT. XMRP = 12.6255 IN.
 YREF = .5933 FT. YMRP = .0000 IN.
 ZREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

BETA = .000 ELEVOM = .000
 BDFLAP = .000 SPCBRK = 25.000

PARAMETRIC DATA

RUN NO. 124/ 0 RM/L = 2.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.998	-4.750	-1.17310	-2.3270	-2.2220
2.000	-2.560	-1.16210	-2.3700	-2.2450
2.004	-.530	-1.16720	-2.3990	-2.22160
2.003	1.530	-1.19600	-2.27500	-2.22800
2.003	3.620	-2.20270	-2.25100	-2.22280
2.004	5.740	-1.19730	-2.24980	-2.20340
2.002	7.850	-1.19890	-2.25440	-2.20500
2.001	9.920	-1.19890	-2.25730	-2.20360
1.999	12.030	-1.19960	-2.26140	-2.20900
1.999	14.160	-2.0160	-2.26450	-2.21070
	GRADIENT	-0.00332	-0.00216	.00006



ARC 68-709 0459 0411A-IN24)

(AER023) (13 JUN 74)

REFERENCE DATA

REF = .6035 36.FT. ZMRP = 12.6255 IN.
 LREF = .5935 FT. ZMRP = .0000 IN.
 REF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

BETA = .000 ELEVOM = .000
 SCFLAP = 16.300 SPOBRK = 83.000

PARAMETRIC DATA

RUN NO. 137/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.602	-4.050	-.30710	-.52100	-.19490
.601	-2.010	-.30580	-.50130	-.17960
.600	.100	-.31250	-.52250	-.19400
.600	2.170	-.30570	-.53050	-.18160
.601	4.250	-.29570	-.54770	-.17940
.600	6.310	-.29670	-.57200	-.19010
.601	8.440	-.29650	-.56610	-.18420
.599	10.550	-.30270	-.55770	-.18610
.600	12.600	-.31650	-.56400	-.19700
.600	14.710	-.34650	-.53020	-.19910
	GRADIENT	.00110	-.00399	.00139

RUN NO. 136/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.699	-4.120	-.31650	-.53170	-.20810
.701	-2.080	-.32050	-.52320	-.19790
.701	.000	-.33750	-.50620	-.19190
.700	2.110	-.33820	-.51130	-.18280
.702	4.220	-.32330	-.53120	-.18750
.700	6.270	-.32210	-.56530	-.18270
.700	8.400	-.32610	-.57840	-.19230
.700	10.500	-.32780	-.57620	-.19670
.699	12.630	-.34170	-.57640	-.20640
.700	14.690	-.36760	-.57870	-.22230
	GRADIENT	-.02149	-.00133	.00269

RUN NO. 135/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.798	-4.260	-.32760	-.54660	-.21860
.800	-2.170	-.34940	-.52140	-.20470
.800	-.090	-.36680	-.52920	-.20710
.801	2.060	-.35490	-.52310	-.19510
.803	4.160	-.36140	-.52220	-.21660
.801	6.240	-.35770	-.57620	-.19890
.800	8.350	-.35600	-.59990	-.20540
.801	10.440	-.37190	-.60570	-.21540
.802	12.510	-.39090	-.62090	-.23770
.801	14.620	-.39790	-.63650	-.24480
	GRADIENT	-.00333	-.00337	.00588

ARC 66-759 0459 0411A-(M24)

(AER023) (13 JUN 74)

REFERENCE DATA

XREF = .6033 28.FT. YMRP = 12.6255 IN.
 LREF = .9935 FT. YMRP = .0000 IN.
 SREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

BETA = .000 ELEVOM = .000
 BCFLAP = 16.300 SPDBPK = 25.000

RUN NO. 134/ 0 RM/L = 2.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
.900	-4.390	-.40110	-.57690	-.24400
.900	-2.310	-.39130	-.55180	-.22000
.901	-.200	-.40530	-.54320	-.22040
.899	1.910	-.41120	-.52330	-.21650
.899	4.030	-.41080	-.51680	-.20120
.900	6.140	-.42430	-.55370	-.21520
.901	8.270	-.41580	-.62360	-.21950
.899	10.400	-.41310	-.62010	-.22840
.900	12.470	-.42370	-.62420	-.25550
.900	14.650	-.47640	-.63660	-.28710
	GRADIENT	-.00187	.00715	.00423

RUN NO. 133/ 0 RM/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.199	-4.470	-.46320	-.62700	-.36620
1.202	-2.350	-.46190	-.63220	-.36850
1.200	-.250	-.48760	-.64250	-.35790
1.201	1.910	-.47710	-.63690	-.35250
1.199	4.060	-.50670	-.62170	-.35520
1.199	6.170	-.51370	-.61860	-.36260
1.200	8.330	-.51310	-.61410	-.37100
1.200	10.430	-.52540	-.62420	-.38820
1.199	12.560	-.54130	-.63660	-.41440
1.200	14.700	-.54510	-.63370	-.42490
	GRADIENT	-.00461	.00020	.00329

RUN NO. 132/ 0 RM/L = 2.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
1.502	-4.260	-.32090	-.41130	-.35280
1.500	-2.190	-.32510	-.42000	-.34630
1.500	-.050	-.32940	-.42760	-.32370
1.499	2.060	-.33260	-.43260	-.31790
1.501	4.220	-.32970	-.43750	-.30590
1.500	6.290	-.33230	-.44220	-.30550
1.499	8.440	-.33910	-.44790	-.31190
1.501	10.520	-.34460	-.45490	-.31750
1.501	12.660	-.35410	-.46370	-.32320
1.500	14.800	-.36240	-.47120	-.32830
	GRADIENT	-.00116	-.00306	.00552



(AER023) (13 JUN 74)

ARC 66-709 0499 0411A-(M24)

PARAMETRIC DATA

BETA = .000 ELEVOM = .000
BGFLAP = 16.300 SPOBRK = 29.000

REFERENCE DATA

SAEF = .0055 36.FT. XMRP = 12.6255 IN.
LREF = .9935 FT. YMRP = .0000 IN.
BREF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0150

RUN NO. 131/ 0 RM/L = 2.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CPV1	CPV2	CPV3
2.002	-4.740	-1.17460	-.25130	-.22770
2.000	-2.680	-1.18270	-.23730	-.22920
2.000	-.600	-1.19920	-.24190	-.22770
2.000	1.540	-1.19790	-.24790	-.22590
1.997	3.620	-1.20310	-.25150	-.22420
1.996	5.740	-1.20430	-.25430	-.21550
2.000	7.850	-1.20350	-.25650	-.21420
2.000	9.890	-1.20270	-.25910	-.21610
2.000	12.020	-1.20030	-.26140	-.21320
2.000	14.110	-1.20440	-.26680	-.21320
	GRADIENT	-.00345	-.00244	.00049

ARC 66-708 0459 0411A-(ME24)

(AER024) (13 JUN 74)

REFERENCE DATA

XREF = .0533 36.FT. XMRP = 12.8233 IN.
 YREF = .5033 FT. YMRP = .0000 IN.
 ZREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

ALPHA = 10.000 ELEVOM = .000
 BCFLAP = -11.700 SPDBRK = 25.000

RUN NO. 150/ 0 RM/L = 2.51 GRADIENT INTERVAL = -5.00 5.00

MACH	BETA	CPV1	CPV2	CPV3
.600	-5.290	-2.4820	-2.8260	-1.6650
.599	-3.240	-2.3320	-2.7240	-1.6670
.598	-1.210	-2.2000	-3.3000	-1.6150
.600	-.700	-.2750	-.3330	-.16270
.600	-.150	-.28260	-.34360	-.16420
.600	.290	-.27810	-.33970	-.16450
.601	.830	-.27990	-.34330	-.17110
.599	1.980	-.28240	-.32770	-.16910
.600	2.910	-.27030	-.31870	-.16200
.601	4.240	-.26260	-.31170	-.17290
.599	5.230	-.26660	-.32260	-.17620
	GRADIENT	-.00241	-.00254	-.00074

RUN NO. 149/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.797	-4.730	-.25470	-.30620	-.18650
.801	-2.650	-.29090	-.37440	-.18860
.800	-.580	-.29760	-.39190	-.18780
.799	-.100	-.29960	-.36810	-.16980
.799	.390	-.30490	-.38510	-.19010
.799	.990	-.30590	-.36830	-.18960
.800	1.430	-.31020	-.38440	-.18920
.799	2.410	-.31360	-.38200	-.18970
.800	4.440	-.27750	-.34290	-.19330
.799	5.520	-.29530	-.33800	-.20360
	GRADIENT	-.00330	-.00389	-.00560



ARC 66-709 0A39 0A11A-(M24)

(AER024) (13 JUN 74)

REFERENCE DATA

XREF = .0033 36.FT. XMRP = 12.6235 IN.
 YREF = .0035 FT. YMRP = .0000 IN.
 ZREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

ALPHA = 10.000 ELEVOM = .000
 SCFLAP = -11.700 SPOBRK = 25.080

RUN NO. 146/ 0 RM/L = 2.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
.900	-4.560	-3.0960	-3.5600	-2.1740
.897	-2.510	-3.1650	-3.9010	-1.9590
.902	-.490	-3.3610	-.42130	-2.0100
.900	.080	-3.3930	-.42320	-.20350
.902	.510	-3.3020	.42910	-.20430
.898	1.040	-3.3610	-.42880	-.20820
.901	1.540	-3.3140	-.41060	-.19740
.900	2.550	-3.3730	-.41490	-.21050
.900	3.370	-3.1380	-.39840	-.21120
.900	4.560	-3.1160	-.37310	-.20670
.901	5.630	-3.3260	-.38010	-.23150
	GRADIENT	-.00047	-.00247	-.00010

RUN NO. 147/ 0 RM/L = 2.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
1.198	-4.300	-4.0650	-.45070	-.34610
1.199	-2.440	-4.3690	-.49110	-.34280
1.199	-.410	-4.1690	-.46550	-.33260
1.200	.040	-4.1230	-.46320	-.33315
1.200	.600	-4.0920	-.45970	-.33130
1.200	1.060	-4.0340	-.45480	-.32620
1.200	1.640	-3.9940	-.45310	-.33060
1.200	2.640	-3.9610	-.45060	-.33070
1.198	3.630	-3.9790	-.44680	-.33770
1.198	4.690	-3.8500	-.41460	-.33560
1.199	5.670	-3.6940	-.41980	-.35170
	GRADIENT	.00362	-.00447	.00137

ARC 66-709 OAS9 OAL11A-(M24)

(AER024) (13 JUN 74)

REFERENCE DATA

SREF = .6533 56.FT. XMRP = 12.6233 IN.
 LREF = .3933 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000
 BCFLAP = -11.700 SPDBRK = 23.000

RUN NO. 146/ 0 RM/L = 2.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
1.500	-4.650	-.34290	-.41350	-.30290
1.497	-2.620	-.34810	-.42140	-.30970
1.496	-.370	-.33820	-.44750	-.31315
1.496	-.100	-.33610	-.44790	-.31370
1.499	.420	-.33460	-.44670	-.31220
1.497	.960	-.33000	-.44260	-.31060
1.496	1.440	-.33670	-.44060	-.30840
1.496	2.480	-.33420	-.43600	-.30280
1.498	3.500	-.33970	-.41630	-.30460
1.500	4.920	-.34460	-.41930	-.30785
1.500	5.930	-.35490	-.42490	-.31097
	GRADIENT	.00049	-.00034	.00020

RUN NO. 145/ 0 RM/L = 2.44 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CPV1	CPV2	CPV3
2.002	-4.180	-.21630	-.26300	-.21910
2.002	-2.170	-.21270	-.26170	-.22520
2.000	-.080	-.20360	-.26100	-.22220
1.997	.400	-.20330	-.26130	-.22330
1.997	.910	-.20140	-.26220	-.22300
1.993	1.420	-.20110	-.26430	-.22230
1.996	1.930	-.20160	-.26330	-.22090
1.999	2.960	-.20490	-.26470	-.22360
2.004	3.960	-.20650	-.26210	-.22320
2.001	5.000	-.21270	-.26330	-.22370
2.001	5.960	-.21690	-.26330	-.23345
	GRADIENT	.00080	-.00013	-.00069



ARC 66-709 QASS 0411A-(IN24 83 V8)*STRUT*QUM BTMS

(REERO1) (25 APR 74)

REFERENCE DATA

BREF = .6033 80.FT. ZMRP = 12.6255 IN.
 LREF = .5933 FT. ZMRP = .0000 IN.
 QREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .6158

PARAMETRIC DATA

BETA = .000 ELEVOM = .000
 BDPLAP = -11.700

RUN NO. 36/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CM	CA	CLMFLD	CY	CYN	CBL	CL	CD	CAB
.598	-4.380	-32860	.06470	.05200	.00370	-.00020	.00090	-.32240	.09070	-.05040
.600	-2.480	-21980	.07020	.04990	.00250	-.00020	.00060	-.21650	.07970	-.04820
.604	-1.320	-11900	.07250	.04850	.00120	-.00020	.00090	-.11860	.07320	-.04770
.605	1.630	-.02040	.07110	.04860	.00070	-.00020	.00090	-.02270	.07040	-.04570
.606	3.830	.07960	.06400	.04910	.00150	-.00010	.00100	.07510	.07130	-.04610
.602	6.070	.19150	.05800	.04610	.00220	-.00020	.00110	.18450	.07800	-.04490
.602	8.250	.30370	.04520	.04650	.00400	.00000	.00130	.29400	.06840	-.04110
.602	10.410	.41660	.03290	.04410	.00570	-.00050	.00180	.40400	.10770	-.04060
.602	12.540	.54670	.03610	.03160	.00570	-.00030	.00160	.52590	.15390	-.04210
.600	14.740	.67100	.03290	.02570	.00650	-.00080	.00140	.64050	.20250	-.04540
GRADIENT		.04764	.00016	-.00033	-.00029	.00001	.00032	.04635	-.00226	-.00052

RUN NO. 67/ 0 RM/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CM	CA	CLMFLD	CY	CYN	CBL	CL	CD	CAB
.605	-4.710	-35400	.06850	.06160	-.00180	-.00040	.00070	-.34720	.09730	-.04960
.700	-2.370	-24490	.07200	.05930	-.00100	-.00040	.00060	-.24140	.08290	-.04620
.698	-4.590	-13710	.07400	.05530	-.00280	-.00050	.00080	-.13660	.07500	-.04540
.689	1.720	-.03190	.07420	.05560	-.00200	-.00030	.00080	-.03410	.07320	-.04750
.697	3.890	.07590	.06850	.05550	-.00220	-.00040	.00080	.07110	.07350	-.04570
.699	6.010	.18300	.06040	.05100	-.00150	-.00040	.00080	.17570	.09080	-.04420
.700	8.240	.30290	.04820	.04860	-.00080	-.00020	.00080	.29280	.09220	-.04220
.701	10.370	.43010	.04430	.04020	-.00050	-.00030	.00080	.41310	.12110	-.04250
.700	12.550	.54400	.04690	.03560	.00040	-.00050	.00120	.52080	.16110	-.04520
.700	14.710	.66810	.04600	.03170	.00080	-.00080	.00090	.63450	.21110	-.04520
GRADIENT		.04987	.00010	-.00093	-.00006	.00009	.00002	.04862	-.00266	-.00054

RUN NO. 57/ 0 RM/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CM	CA	CLMFLD	CY	CYN	CBL	CL	CD	CAB
.748	-4.800	-36900	.06940	.06700	-.00100	-.00040	.00040	-.36190	.10000	-.04940
.752	-2.700	-25630	.07380	.06480	-.00080	-.00030	.00060	-.25450	.08590	-.04750
.751	-4.890	-14460	.07550	.06110	-.00090	-.00030	.00060	-.14420	.07870	-.04630
.746	1.770	-.03010	.07460	.05880	-.00170	-.00040	.00100	-.03240	.07360	-.04470
.750	3.830	.07530	.07140	.05830	-.00110	-.00030	.00080	.07040	.07620	-.04720
.751	6.060	.19470	.06160	.05340	-.00060	-.00020	.00100	.18700	.08190	-.04440
.756	8.240	.31690	.05160	.04980	-.00140	-.00020	.00110	.30620	.09670	-.04380
.746	10.360	.43480	.05400	.04270	-.00080	-.00040	.00120	.41800	.13150	-.04410
.746	12.580	.54660	.05330	.03600	.00050	-.00060	.00120	.52140	.17310	-.04640
.756	14.690	.66570	.05370	.03210	.00040	-.00080	.00090	.62980	.22270	-.04630
GRADIENT		.05139	.00023	-.00108	-.00003	.00000	.00000	.05901	-.00275	-.00033

QAS9 TABULATED SOURCE DATA

AEC 66-788 QAS9 QAS14-(MCS 25 V6)+STRUT+SUM 37MG (REPROD) (25 APR 76)

BETA = -.000 ELEVON = .000
OCFLAP = -11.700

PARAMETRIC DATA

REFERENCE DATA

SREF = .0033 30-FT. XMRP = 12.0255 IN.
LREF = .1935 FT. YMRP = .0000 IN.
ORZF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0130

RUN NO. 33/ 0 RM/L = 2.33 GRADIENT INTERVAL = -5.00/ 9.00

MACH	ALPHA	CM	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.709	-4.950	-36890	.07310	.07360	-.00450	-.00020	.00070	-.38110	-.10630	.03000
.801	-2.910	-27080	.07460	.07040	.00280	-.00030	.00030	-.26680	.08760	.04650
.901	-.600	-14860	.07740	.06810	.00100	-.00030	.00080	-.14800	.07900	.04600
.002	1.630	-.03320	.07780	.06300	.00120	-.00030	.00060	-.03740	.07860	.04320
.001	3.660	.06010	.07230	.06190	.00170	-.00040	.00090	.07500	.07760	.04470
.001	6.010	.20330	.06340	.03310	.00220	-.00010	.00120	.19730	.08620	.04320
.709	6.240	.33450	.06200	.04600	.00430	.00000	.00290	.32220	.10930	.04410
.707	10.410	.43920	.06190	.04430	.00390	-.00030	.00160	.42070	.14030	.04540
.800	12.600	.55830	.06420	.03470	.00480	-.00080	.00260	.57700	.18640	.04680
.800	14.740	.67490	.06930	.02790	.00510	-.00070	.00230	.73870	.23870	.04900
GRADIENT		.03309	.00009	-.00148	-.00032	-.00002	.00002	.03169	-.00306	-.00054

RUN NO. 3/ 0 RM/L = 2.49 GRADIENT INTERVAL = -5.00/ 9.00

MACH	ALPHA	CM	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.848	-6.960	-40760	.07910	.08300	-.00080	-.00060	.00030	-.39940	-.11420	.04990
.856	-6.670	-39390	.08020	.08280	-.00080	-.00050	.00070	-.28960	.09460	.04870
.896	-.600	-16790	.08160	.07620	-.00100	-.00040	.00090	-.18680	.09230	.04730
.896	1.390	-.04440	.08160	.07120	-.00090	-.00040	.00080	-.04670	.08030	.04530
.848	3.690	.06110	.07890	.06490	-.00030	-.00030	.00100	.07370	.08420	.04590
.856	3.970	.20390	.07710	.05660	.00040	-.00030	.00110	.19460	.09790	.04490
.848	6.170	.31790	.07680	.03460	.00020	-.00040	.00120	.30380	.12120	.04480
.848	10.300	.42660	.07570	.04930	-.00020	-.00060	.00130	.40620	.15080	.04330
.896	12.310	.54260	.08320	.03610	-.00060	-.00120	.00130	.51170	.19800	.04610
.848	14.700	.65970	.08240	.02900	.00170	-.00120	.00210	.61720	.24710	.05000
GRADIENT		.03549	.00004	-.00239	.00002	.00003	.00005	.03394	-.00334	-.00051

RUN NO. 34/ 0 RM/L = 2.46 GRADIENT INTERVAL = -5.00/ 9.00

MACH	ALPHA	CM	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.896	-8.090	-43270	.08310	.10130	.00390	-.00040	.00070	-.42370	-.12090	.05090
.801	-2.930	-29350	.08700	.09160	.00340	-.00030	.00060	-.28080	.10140	.04460
.807	-.600	-13760	.08820	.07460	.00160	-.00020	.00130	-.15630	.09000	.04530
.806	1.650	-.03220	.08800	.06670	.00130	-.00020	.00100	-.02370	.08010	.04460
.806	3.810	.19300	.08930	.05900	.00160	-.00030	.00110	.09680	.08690	.04310
.809	3.960	.21790	.08910	.03600	.00340	-.00020	.00090	.29740	.11120	.04270
.806	6.290	.34640	.08860	.04370	.00300	-.00040	.00160	.33220	.13750	.04130
.809	10.340	.43740	.08760	.03540	.00300	-.00060	.00160	.43420	.16830	.04160
.807	12.300	.56460	.08020	.02410	.00790	-.00170	.00390	.53190	.21020	.04590
.806	14.770	.69230	.08300	.01640	.00900	-.00110	.00070	.64580	.26640	.04640
GRADIENT		.03948	.00047	-.00487	-.00026	-.00000	.00003	.03786	-.00069	-.00023



(HER001) (25 APR 74)

REFERENCE DATA

BREF = .0033 50-FT. YMRP = 12.0233 IM.
 LREF = .5033 FT. YMRP = .0000 IM.
 BREF = 1.1710 FT. YMRP = -.3750 IM.
 SCALE = .0150

PARAMETRIC DATA

BETA = .000 ELEVON = .000
 BDFLAP = -11.700

RUN NO. 1/ 0 RM/L = 2.48 GRADIENT INTERVAL = -5.00/ 9.00

MACH	ALPHA	CN	CA	CLMFD	CY	CYM	CBL	CL	CD	CAB
.955	-5.120	-42160	.10360	.11030	.00090	-.00020	.00050	-41070	-14080	.03390
.951	-2.940	-27100	.10270	.07980	.00090	-.00030	.00100	-.26340	.17630	.03070
.952	-.610	-10620	.10430	.05190	-.00010	-.00040	.00090	-.10510	.10540	.04920
.950	1.430	.03130	.10030	.03770	.00020	-.00030	.00040	-.02840	.10120	.04390
.950	3.900	.18400	.10640	.01180	.00000	-.00030	.00060	.17630	.11860	.03200
.951	9.900	.29700	.10290	.00490	.00030	-.00030	.00070	.28460	.13330	.04650
.948	6.230	.41450	.09920	-.00180	.00030	-.00040	.00040	.39610	.15750	.04740
.953	10.440	.54720	.10370	-.01320	.00210	-.00020	-.00020	.51930	.20110	.03420
.951	12.600	.66000	.10350	-.02440	.00430	.00080	.00030	.62160	.24490	.03400
.947	14.900	.78770	.10650	-.03700	.00620	.00020	-.00030	.73440	.30420	.03870
GRADIENT	.06603	.00031	-.00949	-.00011	-.00003	-.00007	-.00004	.06410	.00008	.00002

RUN NO. 33/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 9.00

MACH	ALPHA	CN	CA	CLMFD	CY	CYM	CBL	CL	CD	CAB
1.207	-4.040	-29120	.13080	.06530	.00070	-.00020	.00080	-.28120	-15100	.04900
1.201	-2.090	-21610	.13210	.07170	.00130	-.00010	.00090	-.21110	-14300	.04980
1.202	-.320	-03370	.13600	.02980	.00020	-.00000	.00030	-.03250	.13630	.03030
1.201	1.700	.07980	.13620	.00470	-.00020	.00000	.00030	.07170	.13830	.04960
1.201	3.960	.21590	.13800	-.02440	.00020	.00060	.00040	.20360	.15260	.03270
1.201	6.100	.33940	.13690	-.04320	.00010	.00010	.00050	.32290	.17220	.03440
1.201	8.390	.46520	.13270	-.05400	.00070	.00020	.00180	.44090	.19910	.03350
1.197	10.650	.59140	.12870	-.06110	.00050	.00050	.00170	.53740	.23580	.03800
1.201	12.600	.72590	.12960	-.06320	.00110	.00060	.00020	.67860	.28790	.03760
1.195	15.160	.84850	.12470	-.09010	.00110	.00020	.00070	.78630	.34230	.06080
GRADIENT	.06366	.00089	-.01394	-.00013	.00002	-.00004	-.00004	.06117	.00009	.00033

RUN NO. 32/ 0 RM/L = 2.50 GRADIENT INTERVAL = 5.00/ 9.00

MACH	ALPHA	CN	CA	CLMFD	CY	CYM	CBL	CL	CD	CAB
1.900	-4.620	-24060	.15630	.04170	.00040	-.00000	.00060	-.23630	-15670	.04320
1.903	-2.710	-14210	.13590	.06000	.00150	-.00070	.00070	-.13550	-14290	.04260
1.900	-.410	-.02610	.13520	.00430	.00030	-.00000	.00060	-.52710	.15510	.04230
1.696	1.610	.06080	.13320	-.01500	.00030	.00010	.00020	.07660	.13570	.04310
1.498	4.060	.19290	.12960	-.03200	.00020	.00020	.00030	.18320	.14290	.04290
1.499	6.210	.29600	.12670	-.04830	.00010	.00020	.00070	.28340	.16170	.04430
1.497	8.490	.40300	.12340	-.06010	.00060	.00030	.00120	.38120	.18170	.04380
1.906	10.840	.50910	.12090	-.07250	.00340	.00060	.00100	.47410	.21210	.04660
1.900	12.630	.61070	.11930	-.08550	.00090	.00060	.00090	.56990	.23210	.04730
1.689	15.060	.71730	.11700	-.09860	.00310	.00040	.00080	.66230	.25940	.04860
GRADIENT	.04983	-.00072	-.00837	-.00009	.00006	-.00003	-.00003	.04718	-.00133	.00002

ARC 66-T09 QASS QASS1A-(M24 R3 V8)-STRUT+DUM STNG (REROD.) (25 APR 74)

REFERENCE DATA

XREF = -6033 50.FT. XMRP = 12.6255 IN.
 LREF = -5933 FT. YMRP = -0000 IN.
 ZREF = 1.1710 FT. ZMRP = -3750 IN.
 SCALE = .0150

PARAMETRIC DATA

BETA = .000 ELEVON = .000
 BDFLAP = -11.700

RUN NO. 31/ 0 RN/L = 2.45 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
2.001	-5.210	-2.21990	.11620	.00240	.00230	.00110	-.06020	-.20030	.13760	.02230
1.996	-3.130	-1.13780	.11800	-.00480	.00360	.00110	-.09090	-.13120	.12530	.02340
1.998	-.970	-.03700	.11710	-.01300	.00190	.00100	-.00950	-.05500	.11010	.02380
1.997	1.240	.02360	.11520	-.02170	.00260	.00090	-.00740	.02570	.11970	.02440
1.999	3.400	.10350	.11220	-.03160	.00270	.00060	-.07020	.09860	.11030	.02440
1.999	5.580	.16560	.11030	-.03810	.00230	.00060	-.06920	.17410	.12770	.02430
2.001	7.690	.26210	.10740	-.04380	.00330	.00090	-.00030	.24530	.14150	.02390
2.001	9.820	.33740	.10510	-.04560	.00270	.00070	-.00030	.31460	.16110	.02430
2.001	12.040	.41860	.10200	-.04600	.00340	.00060	.00010	.38610	.18710	.02480
2.001	14.190	.50320	.09880	-.04980	.00320	.00080	.00010	.46360	.21960	.02370
2.001	GRADIENT	.03728	-.00089	-.00409	-.00019	-.00007	.00605	.03522	-.00107	.00017



REFERENCE DATA
 SREF = .0033 50-FT. XMRP = 12.6235 IN. BETA = .000 ELEVOM = .000
 LREF = .5935 FT. YMRP = .0000 IN. SOFLAP = -11.700
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0130

PARAMETRIC DATA

RUN NO. 7/ 0 RM/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.800	-4.560	-.33140	.06510	.05330	-.00100	-.00020	.00070	-.32310	-.09120	.04840
.801	-2.480	-.22700	.07000	.04980	-.00250	-.00040	.00080	-.22370	.07970	.04820
.599	-.350	-.12510	.07260	.05010	-.00090	-.00020	.00100	-.12470	.07340	.04650
.598	1.790	-.02430	.07190	.04940	-.00260	-.00040	.00190	-.02650	.07110	.04660
.601	3.960	.08020	.06700	.04930	-.07150	-.00020	.00100	.07340	.07240	.04590
.601	6.070	.18760	.05810	.04730	-.00080	-.00030	.00070	.18040	.07760	.04450
.599	8.260	.29510	.04580	.04530	-.00060	-.00030	.00090	.28550	.08780	.04520
.600	10.350	.40910	.03400	.04540	-.00170	-.00050	.00090	.39630	.10690	.04390
.600	12.520	.53710	.03620	.03360	.00010	.00000	.00160	.51650	.15170	.04630
.600	14.720	.66240	.03530	.02650	.00220	-.00020	.0 30	.63160	.20250	.04640
GRADIENT		.04814	.00026	-.00039	-.00005	.00000	.00004	.04684	-.00216	-.00031

RUN NO. 4/ 0 RM/L = 2.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.803	-4.670	-.30890	.07470	.07630	.00020	-.00040	.00040	-.38120	.10750	.05030
.799	-2.790	-.26800	.07550	.07070	-.00230	-.00070	.00060	-.26460	.08840	.04700
.802	-.590	-.15530	.06780	.06780	-.00060	-.00030	.00080	-.15450	.07930	.04650
.801	1.610	-.03950	.07710	.06530	-.00200	-.00060	.00070	-.04170	.07590	.04550
.802	3.850	.07610	.07390	.06190	-.00110	-.00030	.00110	.07150	.07880	.04610
.800	6.030	.20060	.06540	.05430	-.06010	-.00030	.00130	.19280	.08620	.04380
.799	8.210	.32620	.06320	.04820	-.00070	-.00050	.00090	.31380	.10910	.04320
.799	10.430	.43650	.06320	.04560	-.00020	-.00040	.00170	.41780	.14120	.04520
.799	12.520	.54890	.06880	.03520	.00060	-.00070	.00300	.52090	.18610	.04770
.799	14.690	.66760	.06880	.02690	-.00010	-.00080	.00210	.62850	.23590	.04670
GRADIENT		.05503	-.00000	-.00156	-.00010	.00001	.00007	.05158	-.00318	-.00045

RUN NO. 2/ 0 RM/L = 2.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.898	-5.130	-.43770	.08420	.10220	.00160	-.00060	.00030	-.42640	.12590	.04910
.901	-2.920	-.30190	.08720	.09270	-.00050	-.00050	.00060	-.29710	.10250	.04630
.901	-.690	-.18430	.08900	.07860	-.00170	-.00060	.00080	-.18320	.09100	.04720
.901	1.610	-.02320	.09100	.06730	-.00130	-.00050	.00070	-.02570	.09030	.04640
.900	3.810	.09410	.08980	.06260	-.00020	-.00030	.00070	.08790	.09590	.04650
.900	5.940	.20990	.08950	.05690	-.00060	-.00030	.00040	.19930	.11080	.04460
.902	8.160	.34270	.08900	.04320	-.00030	-.00060	.00070	.32660	.13670	.04560
.901	10.310	.44190	.08630	.03640	.00020	-.00060	.00120	.41690	.16650	.04410
.900	12.480	.56350	.09150	.02120	.00320	-.00020	.00220	.53230	.21160	.04650
.899	14.690	.68490	.09430	.01140	.00210	-.00190	.00130	.63880	.26490	.05160
GRADIENT		.05911	.00044	-.00452	-.00006	.00003	.00001	.05748	-.00092	-.00028

DATE 29 AUG 74 OAS9 TABULATED SOURCE DATA

PARAMETRIC DATA

BETA = .000 ELEVOM = .000
BCFLAP = -11.700

REFERENCE DATA

SREF Z .6033 50.FT. XMRP = 12.6255 IN.
LREF Z .5935 FT. YMRP = .0000 IN.
BREF Z 1.1710 FT. ZMRP = -.3750 IN.
SCALE Z .0150

RUN NO. 8/0 RM/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMPWD	C1	CYN	CBL	CL	CD	CAB
1.199	-5.090	-35230	.12920	.09370	.00010	.00010	.00125	-.33940	.15990	.05080
1.201	-2.940	-21310	.13210	.06880	-.00110	.00020	.00080	-.20600	.14290	.04910
1.201	-.660	-.06730	.13570	.03350	-.00110	.00000	.00540	-.06570	.13640	.05190
1.200	1.620	.07560	.13800	.00110	-.00030	.00000	.00040	.07170	.14010	.05300
1.203	3.600	.20140	.13840	-.02220	-.00130	.00010	.00660	.19180	.15150	.05420
1.202	6.050	.35010	.13790	-.04320	-.00040	.00030	.00040	.31385	.17190	.05630
1.201	8.290	.45500	.13460	-.09620	-.00200	.00020	.00080	.43590	.19870	.05770
1.199	10.550	.57380	.12960	-.06150	-.00030	.00030	.00130	.54040	.23240	.05640
1.198	12.780	.71030	.12830	-.07430	-.00160	.00100	.00230	.66430	.28230	.05960
1.201	15.010	.83170	.12800	-.08651	-.00420	.00190	.00280	.77020	.33910	.06180
	GRADIENT	.06155	.00094	-.01337	-.00003	-.00001	-.00053	.05911	.00130	.00073

DATE 29 AUG 74 OAS9 TABULATED SOURCE DATA

ARC 66-709 OAS9 OAS11A-(M24 R5 V8)*STRJIT+DUM STMG (RER003) (23 APR 74)

REFERENCE DATA

SREF = .6033 98.FT. XMRP = 12.6255 IM. BETA = .000 ELEVOM = 19.000
 LREF = .9933 FT. YMRP = .0000 IM. BDFLAP = -11.700
 SREF = 1.1710 FT. ZMRP = -.3750 IM.
 SCALE = .0150

PARAMETRIC DATA

RUN NO. 30/ 0 RN/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.602	-4.340	-.02460	.09330	-.10020	.0140	.00020	.00180	-.01730	.09690	.05680
.600	-2.230	.07820	.10040	-.10050	-.00070	.00020	.00180	.08200	.09720	.05690
.603	-.020	.16360	.10150	-.09980	.00010	.00000	.00170	.18390	.16150	.05630
.602	2.130	.28200	.09820	-.10020	-.00020	.00010	.00150	.27820	.10870	.05600
.600	4.240	.36190	.09200	-.09810	-.00070	.00000	.00170	.37400	.11990	.05530
.601	6.350	.48780	.08170	-.10020	-.00070	.00000	.00230	.47580	.13320	.05420
.600	8.370	.61670	.07010	-.10610	-.00020	.00010	.00150	.59940	.16120	.05480
.601	10.790	.76130	.06050	-.12000	.00190	.00000	.00190	.73680	.20120	.05380
.602	12.630	.84960	.06870	-.11970	.00320	-.00030	.00230	.81310	.25560	.05680
.600	15.000	.94600	.07290	-.11510	.00340	.00000	.00110	.89300	.31320	.05920
GRADIENT		.04720	-.00041	.00021	-.00024	-.00002	-.00002	.04544	.00267	-.00016

RUN NO. 28/ 0 RN/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.700	-4.430	-.06190	.09900	-.06840	.00040	.00030	.00220	-.05400	.10350	.05920
.700	-2.260	.04620	.10230	-.09290	.00010	.00010	.00170	.05020	.10040	.05770
.700	-.190	.15590	.10450	-.09470	-.00040	.00000	.00190	.15620	.10400	.05710
.702	2.120	.27650	.10310	-.09740	-.00040	.00010	.00200	.27240	.11320	.05740
.702	4.220	.38010	.09560	-.09800	-.00150	-.00020	.00160	.37210	.12330	.05480
.700	6.340	.49650	.08630	-.10430	-.00110	-.00010	.00220	.46590	.14080	.05480
.699	8.640	.62240	.07630	-.11840	-.00100	.00000	.00120	.63350	.17350	.05410
.700	10.690	.75030	.06410	-.11540	.00280	-.00030	.00140	.70200	.21810	.05580
.701	12.630	.84470	.06360	-.11840	-.00090	-.00030	.00490	.80500	.26930	.05710
.699	15.030	.94600	.06530	-.11290	.00310	-.00050	-.00080	.89150	.32760	.06080
GRADIENT		.05140	-.00028	-.00109	-.00020	-.00005	-.00004	.04956	.00242	-.00042

RUN NO. 26/ 0 RN/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.799	-4.590	-.12600	.10410	-.06670	-.00060	.00040	.00200	-.11730	.11360	.06000
.799	-2.460	-.00600	.10550	-.07690	-.00230	-.00010	.00210	-.00140	.10370	.05710
.801	-.360	.11830	.11030	-.08330	-.00250	-.00010	.00210	.11990	.10950	.05770
.798	-.140	.13370	.10940	-.08340	-.00060	.00000	.00230	.13400	.10910	.05720
.800	1.930	.24390	.10820	-.09130	-.00160	-.00020	.00210	.24010	.11630	.05590
.801	4.120	.37990	.10440	-.10070	-.00160	-.00020	.00190	.37140	.13150	.05620
.800	6.350	.52450	.10000	-.11660	-.00230	-.00010	.00210	.51030	.15740	.05530
.799	8.530	.61360	.10150	-.11130	-.00010	-.00040	.00000	.59200	.19140	.05510
.799	10.710	.71810	.10130	-.11240	-.00080	-.00020	.00170	.68670	.23290	.05620
.799	12.620	.81390	.10630	-.11690	-.00240	-.00010	.00770	.77160	.28660	.05870
.798	15.040	.93490	.11150	-.12840	-.00020	-.00060	.00260	.89320	.33540	.06270
GRADIENT		.05760	.00515	-.00377	-.00056	-.00006	-.00001	.05584	.00212	-.00040

ARC 66-709 QAS9 QAS11A-(M24 RS V8)*STRUT*DOM STMG

(RECORDS) (25 APR 74)

REFERENCE DATA

BREF = .6033 56.FT. XMRP = 12.6235 IN.
LREF = .5935 FT. YMRP = .0000 IN.
BREF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0150

BETA = .000 ELEVOM = 15.000
SCFLAP = -11.700

PARAMETRIC DATA

RUN NO. 27/ 0 RN/L = 2.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.699	-4.840	-2.0880	.11680	-.03950	-.00410	.00080	.00170	-.19820	.13400	-.08320
.901	-2.370	-.04800	.11800	-.06300	-.00160	.00040	.00170	-.04270	.12000	.03950
.900	-.430	.09920	.12230	-.08140	-.00290	-.00020	.00150	.10010	.12160	-.05670
.901	1.910	.24750	.12760	-.09750	-.00240	.00000	.00160	.24280	.13560	.05670
.900	4.110	.39340	.12850	-.11500	-.00270	.00020	.00170	.38320	.15630	-.05660
.901	6.270	.51910	.12580	-.12650	-.00240	-.00010	.00130	.50220	.18180	.05600
.902	6.510	.64580	.12580	-.13690	-.00230	.00000	.00100	.61990	.22000	-.05540
.907	10.850	.72440	.12660	-.12660	-.00260	.00000	.00100	.68650	.25830	.05610
.902	12.860	.84850	.13510	-.14310	-.00200	-.00060	.00330	.79720	.32060	-.06070
.900	14.990	.96680	.14170	-.15280	-.00020	-.00050	.00090	.89720	.38690	-.06730
GRADIENT		.06700	.00148	-.00829	.00009	-.00007	-.00000	-.06471	.00271	-.00044

RUN NO. 26/ 0 RN/L = 2.31 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
1.201	-5.010	-.22150	.15640	-.01170	-.00160	.00020	.00060	-.20700	.17520	-.05910
1.202	-2.780	-.06690	.15960	-.04410	-.00190	.00050	.00060	-.06110	.16280	-.06840
1.202	-.320	.06670	.16220	-.07310	-.00200	.00020	.00070	.06810	.16160	.05910
1.199	1.820	.21670	.16450	-.10390	-.00290	.00000	.00050	.21130	.17150	-.03950
1.200	4.060	.35570	.16680	-.13230	-.00340	.00000	.00070	.34300	.19170	.06050
1.198	6.320	.49750	.16800	-.15710	-.00350	.00010	.00090	.47590	.22170	-.06210
1.198	8.590	.63210	.16450	-.17420	-.00280	-.00010	.00110	.60050	.25710	.06250
1.199	10.810	.77270	.16560	-.19080	-.00340	.00020	.00130	.72790	.30760	-.06480
1.199	13.090	.90000	.16510	-.20180	-.00260	.00000	.00120	.85920	.36470	.06530
1.199	15.290	1.02100	.16760	-.20820	-.00230	.00000	.00060	.94090	.43090	-.06750
GRADIENT		.06245	.00106	-.01296	-.00024	-.00007	.00000	-.05946	.00423	-.00029

RUN NO. 25/ 0 RN/L = 2.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
1.502	-4.870	-.15380	.15260	-.03170	-.00080	.00080	.00020	-.14090	.16460	-.04820
1.503	-2.610	-.05400	.15420	-.04650	-.00160	.00060	.00020	-.04690	.15650	-.04760
1.502	-.480	.04970	.15490	-.06580	-.00200	.00060	.00030	.05090	.15450	.04710
1.502	1.820	.16540	.15420	-.08550	-.00030	.00000	.00020	.16940	.15940	-.04710
1.502	4.060	.27940	.15290	-.10410	-.00010	.00000	-.00030	.26790	.17230	.04710
1.499	6.310	.39150	.15170	-.12110	.00110	.00020	.00020	.37240	.19380	-.04820
1.500	8.520	.49820	.15090	-.13790	-.00200	.00050	.00060	.47040	.22310	.04920
1.499	10.710	.60680	.15140	-.15270	-.00310	.00030	.00040	.56810	.26160	-.05030
1.498	12.930	.71120	.15130	-.16660	-.00240	.00020	.00070	.65930	.30660	.05140
1.498	15.220	.82770	.14940	-.18080	-.00140	.00000	.00070	.75940	.36150	-.05120
GRADIENT		.04981	.00002	-.00631	.00013	-.00003	-.00005	-.04883	.00087	-.00012



ARC 66-709 0459 0411A-(M24 R5 V0)-STRUT+DUM STMG (BER003) (25 APR 74)

REFERENCE DATA

SREF = .6033 96.FT. YMRP = 12.6255 IM.
 LREF = .5935 FT. YMRP = .0000 IM.
 BREF = 1.1710 FT. ZMRP = -.3750 IM.
 SCALE = .0150

PARAMETRIC DATA

BETA = .000 ELEVON = 15.000
 BDFLAP = -11.700

RUN NO. 24/ 0 RM/L = 2.43 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CM	CA	CLMPW0	CY	CYN	CBL	CL	CD	CAB
1.999	-5.170	-16140	.12760	-.04030	.00130	.00120	-.00040	-.14920	.14160	.02550
1.997	-3.190	-08680	.12840	-.04790	.00060	.00100	-.00060	-.07950	.13300	.02620
1.997	-.890	-.00080	.12920	-.05650	-.00040	.00060	-.00070	.00130	.12920	.02610
1.997	1.310	.08070	.12860	-.06460	.00030	.00050	-.00060	.07770	.13040	.02630
1.997	3.460	.16050	.12840	-.07470	.00000	.00060	-.00050	.15250	.13760	.02620
1.996	5.690	.24300	.12710	-.08280	-.00010	.00070	-.00060	.22920	.15060	.02570
1.999	7.790	.31400	.12480	-.08810	-.00020	.00070	-.00050	.29420	.16620	.02550
2.002	9.980	.39730	.12410	-.09260	.00010	.00060	-.00040	.36970	.19110	.02590
2.005	11.970	.47620	.12320	-.09610	-.00010	.00040	-.00010	.44030	.21930	.02600
2.005	14.170	.56510	.12130	-.10110	.00170	.00070	-.00030	.51820	.25600	.02630
GRADIENT		.03717	-.00003	-.00400	-.00008	-.00002	.00002	.03467	.00069	.00001

REFERENCE DATA

XREF = .0033 90.FT. XMRP = 12.6255 IN.
 YREF = .5935 FT. YMRP = .0000 IN.
 ZREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

BETA = .000 ELEVOM = 15.000
 BDFLAP = -11.700

RUN NO. 12/ 0 RM/L = 2.56 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.605	-4.320	-.01280	.09660	-.09970	.00160	.00010	.00160	-.00520	.09730	.03770
.598	-2.170	-.08860	.10090	-.10000	.00040	.00000	.00170	.09240	-.09740	.03770
.601	-.100	-.16360	.10220	-.10000	.00090	.00000	.00180	.18360	.10190	.03670
.603	2.040	-.28290	.09890	-.09950	.00040	.00000	.00150	.27920	-.10690	.03690
.600	4.220	-.38280	.09160	-.09750	.00010	-.00010	.00160	.37500	.11950	.03450
.597	6.360	-.49170	.08150	-.10020	.00060	-.00020	.00170	.47970	.13550	.03480
.600	8.470	-.60950	.07070	-.10520	.00060	-.00020	.00100	.59240	.15970	.03440
.603	10.650	-.75950	.06010	-.11960	.00090	-.00040	.00107	.73530	.19950	.03390
.601	12.790	-.85160	.06950	-.11020	.00240	-.00080	.00110	.81510	.25650	.03610
.599	14.950	-.94430	.07280	-.11590	.00150	-.00040	.00020	.89360	.31390	.03620
GRADIENT		.04627	-.00057	.00025	-.00014	-.00002	-.00001	.04449	.00263	-.00034

RUN NO. 11/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.608	-4.450	-.05070	.10040	-.08970	.00140	.00040	.00200	-.04270	.10410	.03910
.700	-2.270	-.05760	.10340	-.09290	.00110	.00010	.00170	.06160	.10110	.05620
.698	-.140	-.16450	.10570	-.09520	.00060	.00000	.00190	.16480	.10530	.03740
.703	2.010	-.27150	.10250	-.09750	.00050	.00000	.00190	.28770	.11200	.05660
.702	4.160	-.38040	.09630	-.09820	.00080	-.00010	.00190	.37240	.12370	.03560
.694	6.380	-.56410	.08590	-.10330	.00090	-.00020	.00220	.49150	.14140	.03470
.699	8.530	-.64330	.07720	-.11620	.00030	.00000	.00130	.62470	.17170	.03380
.703	10.680	-.73280	.06510	-.11610	.00160	.00010	.00330	.70410	.21930	.03500
.702	12.790	-.83990	.06390	-.11860	.00030	-.00050	.00370	.80050	.26770	.03680
.699	14.950	-.93750	.06570	-.11070	.00220	-.00050	-.00020	.88350	.32460	.03980
GRADIENT		.05003	-.00042	-.00100	-.00006	-.00005	-.00000	.04820	.00233	-.00029

RUN NO. 10/ 0 RM/L = 2.51 GRADIENT INTERVAL = -3.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.601	-4.630	-.11440	.10320	-.06740	-.00050	.00030	.00190	-.10570	.11210	.03890
.604	-2.460	-.00690	.10690	-.07640	-.00040	.00010	.00220	.01350	.10640	.03710
.603	-.260	-.13300	.11630	-.08390	-.00130	.00000	.00220	.13350	.10970	.03620
.605	1.920	-.25900	.11000	-.09160	-.00180	-.00020	.00260	.25120	.11850	.03630
.709	4.190	-.38670	.10450	-.10020	-.00010	.00000	.00190	.37890	.13250	.03560
.601	6.360	-.53390	.10080	-.11630	.00040	.00000	.00190	.51940	.15950	.03530
.601	8.450	-.61520	.10330	-.11200	.00010	-.00030	.00176	.59330	.19260	.03580
.601	10.720	-.72510	.10230	-.11250	.00010	-.00010	.00230	.69340	.23540	.03520
.600	12.870	-.82430	.10930	-.11910	-.00020	-.00010	.00810	.77920	.29020	.03940
.601	14.940	-.94360	.11050	-.12320	.00170	-.00030	.00270	.88340	.35010	.06180
GRADIENT		.05669	.00025	-.00367	-.00003	-.00006	.00002	.05473	.00241	-.00034

ARC 66-709 0459 0411A-(N24 R5 V8)*STRUT*SUM STNG
 REFERENCE DATA
 XMRP = 12.8255 IN. BETA = .000 ELEVOM = 15.000
 YMRP = .0050 IN. SDFLAP = -11.750
 ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

RUN NO. 9/ 0 RN/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLWFO	CY	CYN	CBL	CL	CD	CAB
.900	-4.820	-1.8750	.11600	-.04290	-.00130	.00090	.00220	-.17710	.13130	.06110
.906	-2.660	-.03990	.12050	-.06310	-.00200	-.00060	.00180	-.03420	.12220	-.06070
.903	-.430	.10720	.12500	-.08160	-.00140	.00000	.00160	.10810	.12220	-.03830
.902	1.950	.25740	.12250	-.09660	-.00110	-.00010	.00180	.25310	.13120	-.05460
.899	4.080	.39380	.12590	-.11210	-.00030	.00010	.00170	.36390	.15360	-.05370
.894	6.220	.51490	.12180	-.12210	-.00090	-.00090	.00140	.49870	.17690	-.05320
.897	6.450	.64350	.12240	-.13440	-.00280	.00040	.00350	.61830	.21560	-.05430
.902	10.580	.71930	.12620	-.12370	-.00150	.00010	.00140	.68390	.23600	-.05490
.903	12.750	.83980	.13380	-.13980	-.00130	-.00070	.00300	.78960	.31550	-.05880
.903	14.970	.95070	.13720	-.14430	.00150	-.00060	.00120	.88290	.37810	-.05140
	GRADIENT	.06514	.00097	-.00766	.00013	-.00010	-.00004	.06288	.00240	-.00076

ARC 66-709 0459 0411A-(M24 R5 V01)STEUR*0UM SYNG (IRER005) (25 APR 74)

REFERENCE DATA

SREF = .0033 50-FT. XMR = 12.8233 IM.
LREF = .5935 FT. YMRP = .0000 IM.
BREF = 1.1710 FT. ZMRP = -.3750 IM.
SCALE = .0150

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BCFLAP = 16.300

RUN NO. 16/ 0 RM/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CM	CA	CLMFWO	CY	CYN	CBL	CL	CO	CAB
.000	-4.510	-23180	.06420	.00110	-.00190	-.00030	.00060	-.24390	.08360	-.04030
.001	-2.430	-14690	.06940	.00000	-.00110	-.00030	.00040	-.14540	.07560	-.04690
.002	-.310	-.04920	.07110	-.00120	-.00220	-.00050	.00080	-.04080	.07140	-.04570
.000	1.910	.05970	.06920	-.00370	-.00110	-.00040	.00070	.05440	.07110	-.04500
.001	3.080	.15940	.06300	-.00380	-.00090	-.00060	.00060	-.15460	.07390	-.04330
.001	6.190	.26490	.05290	-.00390	-.00040	-.00080	.00080	.23770	.06110	-.04230
.002	8.230	.37600	.04160	-.00710	-.00140	-.00030	.00030	-.26620	.09310	-.04290
.001	10.400	.49290	.03010	-.00970	-.00180	-.00080	.00120	.4730	.11650	-.04380
.001	12.820	.61870	.03500	-.02100	-.00040	-.00020	.00130	.16830	.22060	-.04430
.002	14.060	.73980	.03430	-.02630	-.00140	-.00080	.00100	.70700	.22060	-.04660
GRADIENT		.04020	-.00012	-.00063	.00008	-.00000	.00001	.04694	-.00114	-.00036

RUN NO. 15/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CM	CA	CLMFWO	CY	CYN	CBL	CL	CO	CAB
.702	-4.060	-27600	.06080	.00430	-.00120	-.00070	.00040	-.27930	.09100	-.05070
.000	-2.340	-15130	.07090	.00230	-.00030	-.00030	.00030	-.15620	.07600	-.04650
.700	-.390	-.03790	.07330	.00110	-.00110	-.00040	.00060	-.03740	.07390	-.04660
.702	1.760	.05030	.07170	-.00130	-.00090	-.00060	.00060	.04030	.07320	-.04640
.701	3.900	.15970	.06630	-.00260	-.00140	-.00030	.00070	.15380	.07690	-.04660
.000	6.100	.27100	.03390	-.00600	-.00240	-.00070	.00070	-.26430	.08430	-.04330
.702	8.260	.38970	.04450	-.00760	-.00160	-.00060	.00070	.37930	.10000	-.04340
.000	10.430	.51100	.04240	-.01000	-.00230	-.00100	.00030	.49490	.13480	-.04260
.704	12.670	.63880	.04900	-.02370	-.00040	-.00060	.00130	.81320	.18390	-.04640
.701	14.740	.75410	.04740	-.02730	-.00070	-.00080	.00030	.71720	.23770	-.05040
GRADIENT		.03036	-.00020	-.00103	-.00004	-.00002	.00004	.04924	-.00154	-.00039

RUN NO. 14/ 0 RM/L = 2.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CM	CA	CLMFWO	CY	CYN	CBL	CL	CO	CAB
.000	-4.060	-.30230	.07410	.01250	.000	-.00030	.00030	-.29490	.09940	-.03190
.001	-2.760	-.18990	.07640	.00990	-.000	-.00060	.00040	-.18200	.08320	-.05000
.002	-.580	-.07810	.07840	.00610	-.00250	-.00060	.00040	-.07130	.07910	-.04610
.001	1.620	.04370	.07630	.00290	-.00290	-.00070	.00030	-.04330	.07760	-.04720
.000	3.760	.15630	.07060	-.00090	-.00120	-.00070	.00030	.15340	.08080	-.04540
.707	5.940	.28120	.06330	-.00730	-.00090	-.00060	.00040	-.27310	.09210	-.04470
.700	8.190	.41010	.06190	-.01720	-.00140	-.00040	.00100	.39710	.11970	-.04390
.700	10.360	.52000	.06120	-.02040	-.00130	-.00060	.00120	.50950	.13360	-.04365
.700	12.480	.63190	.06360	-.03210	-.00100	-.00080	.00030	.62240	.20080	-.04710
.000	14.700	.76270	.07020	-.04110	-.00200	-.00110	.00250	.72950	.26150	-.05230
GRADIENT		.05332	-.00033	-.00133	-.00022	-.00002	.00002	.05199	-.00297	-.00073



ARC 66-709 OAS9 OAS11A-IN24 R3 V03+STREUT+OUM STMS (RE0003)

REFERENCE DATA
 SREF = .0033 38. FT. ZMRP = 12.8253 IM. BETA = .000 ELEVOM = .000
 LREF = .5933 FT. ZMRP = .0000 IM. BDFLAP = 16.300
 SREF = 1.1710 FT. ZMRP = -.3730 IM.
 SCALE = .0130

PARAMETRIC DATA

RUN NO. 13/ 0 RM/L = 2.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYL	CYN	CBL	CL	CD	CAB
.900	-3.000	-3.4680	-0.8610	.03340	.00040	.00030	-.00040	-.00030	-.33000	.11600	.03440
.902	-2.830	-2.1310	-0.6750	.02370	.00090	.00040	-.00040	.00040	-.21030	.09000	.03280
.901	-.640	-.08210	-.09020	.01470	-.00120	.00060	-.00060	.00060	-.08100	.09120	.03230
.898	1.330	.04450	.06970	.00300	-.00060	.00030	-.00030	.00030	.04210	.09090	.03020
.902	3.060	.16060	.09010	-.00310	.00010	.00070	-.00070	.00070	.17410	.10210	.04990
.899	5.900	.29060	.06710	-.00810	-.00050	.00080	-.00080	.00080	.27990	.11690	.04820
.901	8.170	.41090	.08630	-.01900	.00130	.00030	-.00030	.00030	.39430	.14360	.04640
.901	10.320	.51670	.06360	-.02810	.00010	.00070	-.00070	.00060	.49300	.17670	.04660
.899	12.480	.64350	.09030	-.04610	.00410	.00220	-.00220	.00310	.60690	.22700	.05090
.900	14.670	.76700	.09410	-.03600	.00480	-.00240	-.00240	.00190	.71810	.28930	.03930
GRADIENT		.03947	.00046	-.00442	-.00026	-.00002	-.00002	.00006	-.05777	-.00155	-.00032

RUN NO. 16/ 0 RM/L = 2.33 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYL	CYN	CBL	CL	CD	CAB
1.201	-2.890	-1.7610	.13830	.02970	.00030	.00030	.00030	.00130	-.16900	.14500	.03330
1.200	-.700	-.03020	.13980	-.00760	.00050	.00060	.00060	.00060	-.02630	.14010	.03480
1.202	1.590	.11280	.14370	-.04080	.00030	.00010	.00010	.00070	.10880	.14680	.03660
1.200	3.770	.24680	.14830	-.06680	.00010	.00020	.00020	.00060	.23670	.16220	.03940
1.201	6.050	.37960	.14700	-.09110	.00030	.00010	.00010	.00030	.36200	.16620	.06190
1.200	8.310	.51030	.14390	-.10750	.00200	.00040	.00040	.00140	.46300	.21610	.06470
1.202	10.330	.62660	.14310	-.11460	.00030	.00030	.00030	.00140	.58990	.25320	.06370
1.199	12.780	.76690	.14210	-.12980	.00050	.00000	.00000	.00370	.71650	.30820	.06800
1.198	14.890	.88730	.14190	-.14065	.00080	.00100	.00100	.00210	.82040	.36660	.06630
GRADIENT		.06340	.00132	-.01476	-.00006	-.00002	-.00002	-.00007	.06092	.00262	.00098

RUN NO. 17/ 0 RM/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYL	CYN	CBL	CL	CD	CAB
1.900	-4.790	-.22140	.14200	.01270	.00220	.00070	.00070	.00030	-.20880	.16000	.04580
1.900	-2.870	-.11490	.14190	-.00300	.00010	.00060	.00060	.00040	-.10020	.14670	.04370
1.497	-.430	-.00280	.14040	-.02340	-.00030	.00040	.00040	.00030	-.00130	.14030	.04330
1.496	1.760	.10620	.13860	-.04600	-.00010	.00030	.00030	.00030	.10390	.14190	.04310
1.900	4.000	.21950	.13720	-.06600	.00030	.00030	.00030	.00050	.29940	.13220	.04460
1.499	6.190	.32770	.13420	-.08350	-.00030	.00020	.00020	.00060	.31130	.16870	.04500
1.900	8.360	.43060	.13200	-.09810	-.00040	.00020	.00020	.00100	.40685	.19330	.04640
1.900	10.390	.53650	.13190	-.11130	-.01040	.00040	.00040	.00360	.50320	.22790	.04770
1.499	12.740	.64420	.12940	-.12940	.00020	.00020	.00020	.00060	.59980	.26930	.04610
1.901	14.980	.75650	.12750	-.14060	.00130	.00030	.00030	.00110	.69790	.31680	.04800
GRADIENT		.03020	-.00037	-.00952	-.00018	-.00005	-.00005	-.00000	.04764	-.00091	-.00013

ARC 60-709 0439 0411A-(M24 R3 V8)-STREUT-DUM STMS (RENU03) (23 APR 74)

REFERENCE DATA

REF : .0033 90.FT. HMP = 12.6233 IN.
 LREF : .0033 FT. YMP = .0000 IN.
 REF : 1.1710 FT. ZMP = -.3730 IN.
 SCALE : .3130

PARAMETRIC DATA

BETA = .000 ELEVON = .000
 CDPLAP = 16.300

RUN NO. 23/ 0 RM/L = 2.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWG	CT	CYN	CBL	CL	CD	CAB
2.003	-3.220	-.19320	.12110	-.01360	.00410	.00120	.00000	-.16340	.13830	.02390
2.003	-3.260	-.12010	.12150	-.02230	.00350	.00120	.00010	-.12100	.12070	.02380
2.004	-1.010	-.03740	.12060	-.03300	.00360	.00110	.00010	-.03350	.12120	.02450
2.003	1.320	.05280	.11930	-.04330	.03320	.00100	.00020	.05010	.12070	.02300
2.004	3.250	.12600	.11660	-.02280	.00360	.00100	.00010	.11900	.12360	.02340
2.003	5.500	.20630	.11600	-.06260	.00360	.00100	.00020	.19620	.13540	.02460
2.003	7.730	.28940	.11380	-.07030	.00300	.00090	.00030	.27150	.13170	.02430
2.003	9.600	.37060	.11180	-.07380	.00310	.00090	.00030	.34390	.17370	.02440
2.001	12.090	.45500	.10640	-.07790	.00450	.00110	.00030	.42220	.20130	.02470
2.001	14.250	.54120	.10630	-.04370	.00420	.00090	.00030	.49840	.23620	.02340
GRADIENT		.03901	-.00046	-.00463	.00001	-.00003	.00001	.03666	-.00049	.00024



REFERENCE DATA
 QREF = .0033 90.FT. XMRP = 12.6233 IN.
 LREF = .5935 FT. YMRP = .0000 IN.
 QREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA
 BETA = .000 ELEVOM = .000
 DCPLAP = .000

RUN NO. 22/ 0 RM/L = 2.34 GRADIENT INTERVAL = -5.00/ 9.00

MACH	ALPHA	CN	CA	CLMFD	CY	CYN	CBL	CL	CD	CAB
.801	-4.828	-3.1070	.05940	-.03640	-.00190	-.00000	.00060	-.30300	-.04330	-.04710
.801	-2.490	-1.9990	.06440	-.03440	-.00340	-.00030	.00050	-.19890	-.07300	-.04390
.801	-.340	-.0990	.06700	-.03250	-.00160	-.00020	.00080	-.09920	-.06760	-.04370
.801	1.770	.00110	.06370	-.03210	-.00110	-.00010	.00090	-.00100	-.06370	-.04290
.801	3.940	.10780	.05990	-.03030	-.00120	-.00010	.00110	-.10340	-.06720	-.04190
.801	6.030	.20680	.05100	-.02910	-.00170	-.00030	.00070	-.20030	-.07250	-.04080
.801	8.230	.32300	.03870	-.02630	-.00040	-.00020	.00100	-.31410	-.08430	-.03870
.999	10.360	.43590	.02640	-.02700	-.00120	-.00070	.00130	-.42400	-.10440	-.04070
.999	12.480	.56530	.03000	-.01510	-.00010	-.00000	.00170	-.54350	-.13140	-.04330
.999	14.870	.68920	.03090	-.00810	-.00170	-.00100	.00140	-.65890	-.20440	-.04340
GRADIENT		.04855	.00011	-.00070	.00017	-.00000	.00007	-.04737	-.00194	-.00065

RUN NO. 19/ 0 RM/L = 2.31 GRADIENT INTERVAL = -5.00/ 9.00

MACH	ALPHA	CN	CA	CLMFD	CY	CYN	CBL	CL	CD	CAB
.900	-3.130	-4.0840	.07030	-.08190	.00130	-.00020	.00070	-.39980	-.11450	-.04970
.801	-2.820	-2.7370	.07890	-.07110	.00030	-.00010	.00080	-.27130	-.08250	-.04300
.809	-.660	-1.3230	.08110	-.05870	.00060	-.00010	.00100	-.13190	-.08270	-.04320
.801	1.490	-.00610	.08190	-.04810	-.00100	-.00030	.00070	-.00820	-.08170	-.04330
.809	3.720	.12010	.07900	-.03990	.00030	-.00010	.00070	-.11470	-.08670	-.04090
.903	5.390	.23630	.07990	-.03490	.00010	-.00030	.00040	-.22910	-.10400	-.04170
.901	6.130	.35990	.07910	-.02620	.00090	-.00040	.00030	-.34910	-.12920	-.04910
.902	10.290	.48320	.07980	-.01970	.00030	-.00030	.00130	-.44150	-.16130	-.04120
.809	12.420	.57480	.08380	-.00630	.00380	-.00210	.00320	-.54330	-.20390	-.04490
.901	14.840	.70130	.08360	-.00720	.00310	-.00200	.00130	-.63690	-.26010	-.04630
GRADIENT		.05954	.00011	-.00472	-.00210	-.00001	-.00003	-.05906	-.00084	-.00075

RUN NO. 22/ 0 RM/L = 2.31 GRADIENT INTERVAL = -5.00/ 9.00

MACH	ALPHA	CN	CA	CLMFD	CY	CYN	CBL	CL	CD	CAB
1.108	-3.040	-3.3550	.12600	-.09610	-.00060	-.00010	.00120	-.34310	-.15870	-.05260
1.202	-2.820	-2.1070	.12000	-.08300	-.00120	-.00010	.00190	-.20390	-.13660	-.05040
1.202	-.680	-.06950	.12970	-.03080	-.00160	-.00010	.00080	-.06600	-.13050	-.05070
1.208	1.370	.07470	.13190	-.00090	-.00210	-.00020	.00070	-.07100	-.13390	-.05100
1.201	3.990	.22120	.13350	-.03160	-.00210	-.00010	.00040	-.21190	-.14840	-.05330
1.203	6.060	.34220	.13440	-.03310	-.00150	-.00000	.00030	-.32610	-.16980	-.05630
1.201	8.320	.46840	.13020	-.06380	-.00040	-.00010	.00110	-.44480	-.19650	-.05710
1.187	10.390	.58990	.12640	-.07090	-.00030	-.00030	.00140	-.53660	-.23270	-.05870
1.108	12.730	.72370	.12750	-.06990	-.00060	-.00000	.00040	-.67790	-.28380	-.06110
1.187	15.010	.83240	.12990	-.10140	-.00040	-.00040	.00140	-.79570	-.34240	-.06270
GRADIENT		.06298	.00082	-.01390	-.00014	-.00000	-.00012	-.06039	-.00146	-.00040

ARC 80-709 OASS OALLA- (M24 R3 V8) STREUT-DUM STMG (RER006) (25 APR 74)

REFERENCE DATA

SREP = -0693 96.FT. YMRP = 12.6233 IM.
 LREF = -3933 FT. YMRP = .0500 IM.
 SREP = 1.1710 FT. ZMRP = -.3750 IM.
 SCALE = .0130

PARAMETRIC DATA

BETA = .000 ELEVOM = .000
 BDFLAP = .000

RUN NO. 217 0 RM/L = 2.44 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMPWD	CY	CYN	CBL	CL	CO	CAB
2.001	-9.310	-21950	.11740	-.00080	.00310	.00120	-.00030	-.20770	.13720	.02230
2.000	-3.175	-13920	.11810	-.00730	.00170	.00120	-.00030	-.13240	.12360	.02290
1.999	-1.010	-.05820	.11580	-.01370	.00000	.00110	-.00010	-.03420	.11680	.02360
2.000	1.150	.02670	.11430	-.02360	.00070	.00100	.00000	.02440	.11500	.02410
1.999	3.280	.10600	.11310	-.03480	.00190	.00090	-.00020	.09930	.11900	.02450
1.999	9.460	.18760	.11000	-.04250	.00300	.00080	-.00010	.17630	.12740	.02400
1.999	7.650	.26300	.10700	-.04770	.00060	.00080	-.00010	.24640	.14110	.02370
1.997	9.790	.34070	.10420	-.05080	.00130	.00070	.00010	.31800	.16060	.02410
1.997	11.950	.42280	.10120	-.05370	.00280	.00090	.00020	.39260	.18660	.02450
1.997	14.110	.50760	.09790	-.05640	.00290	.00080	.00030	.46840	.21860	.02310
GRADIENT		.03600	-.00076	-.00429	.00006	-.00005	.00062	.03392	-.00101	.00025



ARC 66-705 OAS5 OAS1A-IM24 (M2 25 V0)*STRUT*DUM STMG
 PARAMETRIC DATA
 ALPHA = .000 ELEVON = .000
 BOFLAP = -11.700

REFERENCE DATA

WREF = .0033 34-FT. ZMRP = 12.0233 IN.
 LREF = .0033 34-FT. YMRP = .0000 IN.
 ZREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0133

RUN NO. 42/ 0 RM/L = 2.49 GRADIENT INTERVAL = -1.00/ 3.00

MACH	BETA	CM	CA	CLMFMG	CY	CYM	CBL	CL	CD	CAB
.599	-15.020	-.04620	.06920	.03260	.13000	-.02800	-.02690	-.06610	.06940	.03990
.600	-9.700	-.09240	.07110	.04400	.09700	-.01780	-.01690	-.09230	.07180	.05160
.601	-4.390	-.09270	.07170	.04840	.08700	-.01160	-.01030	-.09230	.07190	.04630
.601	-4.480	-.09040	.07230	.05170	.08430	-.00750	-.00630	-.07270	.07270	.04760
.600	-2.330	-.09120	.07310	.05320	.08270	-.00340	-.00330	-.09110	.07320	.04770
.602	-.270	-.08780	.07390	.05350	.08360	-.00010	.00030	-.07490	.07490	.04790
.600	.010	-.08580	.07290	.05490	.08290	-.00200	.00200	-.08370	.07300	.04780
.601	1.020	-.08390	.07270	.05300	.08160	-.00360	.00340	-.08380	.07280	.04740
.601	3.910	-.08330	.07240	.05340	.08030	-.00750	.00670	-.08350	.07330	.04620
.595	6.000	-.08000	.07030	.05150	.07630	-.01140	.00990	-.08070	.07040	.04670
GRADIENT		.00077	.00006	.00029	-.01000	-.00177	.00139	.00077	.00003	.00004

RUN NO. 41/ 0 RM/L = 2.33 GRADIENT INTERVAL = -3.00 3.00

MACH	BETA	CM	CA	CLMFMG	CY	CYM	CBL	CL	CD	CAB
.600	-15.040	-.10150	.07280	.03740	.13610	.02630	-.02730	-.10130	.07300	.06320
.701	-9.720	-.10250	.07340	.05040	.09870	-.01740	-.01630	-.10230	.07360	.05210
.700	-6.500	-.10220	.07230	.05340	.07040	-.01150	-.01020	-.10210	.07330	.04930
.698	-4.470	-.10030	.07440	.05800	.04640	-.00760	-.00660	-.10040	.07430	.04770
.700	-2.310	-.09940	.07400	.05940	.02470	-.00330	-.00300	-.09930	.07420	.04730
.700	-.230	-.09960	.07330	.05800	.00310	.00010	.00010	-.09940	.07340	.04770
.700	.040	-.09650	.07440	.06010	-.00630	-.00180	.00200	-.09670	.07490	.04790
.701	1.900	-.09740	.07360	.06030	-.01930	-.00360	.00340	-.09720	.07370	.04730
.700	3.970	-.09300	.07430	.05910	-.03990	-.00730	.00640	-.09370	.07460	.04770
.701	6.030	-.09440	.07260	.05860	-.06370	-.01110	.01070	-.09430	.07270	.05140
GRADIENT		.00037	.00008	.00017	-.01044	-.00175	.00134	.00037	.00007	.00001

RUN NO. 40/ 0 RM/L = 2.32 GRADIENT INTERVAL = -3.00/ 3.00

MACH	BETA	CM	CA	CLMFMG	CY	CYM	CBL	CL	CD	CAB
.600	-15.070	-.12930	.06300	.04890	.15510	.02870	-.02890	-.12930	.06330	.08000
.700	-9.670	-.11920	.07660	.06040	.10490	.01620	-.01710	-.11950	.07390	.03400
.600	-6.470	-.11900	.07600	.06350	.08900	.01020	-.01090	-.11950	.07900	.03640
.700	-4.330	-.11750	.07760	.06740	.07190	-.00630	-.00690	-.11730	.07790	.04660
.600	-2.220	-.11340	.07670	.06830	.02390	.00260	-.00340	-.11320	.07690	.04610
.601	-.136	-.11300	.07630	.07030	.00230	-.00040	.00010	-.11330	.07660	.04660
.600	.000	-.11050	.07690	.06980	-.00650	-.00200	.00200	-.11030	.07710	.04900
.601	1.020	-.11100	.07600	.06900	-.02100	-.00330	.00330	-.11060	.07670	.04640
.600	4.130	-.11100	.07760	.06960	-.04670	-.00720	.00690	-.11080	.07790	.04760
.602	6.230	-.11060	.07370	.06870	-.06990	-.01100	.01040	-.11040	.07390	.05110
GRADIENT		.00077	.00007	.00028	-.01099	-.00156	.00163	.00077	.00006	-.00011

ARC 66-709 0459 0A11A-(M24 R5 V8)*STRUT*DOM STNG

(RER007) (25 APR 74)

REFERENCE DATA

SREF = .6053 32.FT. XMRP = 12.6255 IN.
 LREF = .5935 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

ALPHA = .000 ELEVON = .000
 BDFLAP = -11.700

PARAMETRIC DATA

RUN NO. 39/ 0 RM/L = 2.45 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMPWD	CY	CYN	CBL	CL	CD	CAB
.897	-15.030	-1.1450	.10090	.05290	.18380	.02230	-.03230	-.14420	.10140	.06940
.898	-9.630	-.12270	.09650	.06660	.11850	.01260	-.02010	-.12240	.09660	.05820
.900	-6.410	-.11670	.09260	.07290	.07840	.00800	-.01300	-.11650	.09290	.03210
.900	-4.260	-.10630	.09220	.07470	.05420	.00460	-.00640	-.10610	.09240	.05110
.900	-2.150	-.10840	.09200	.07640	.02790	.00190	-.00380	-.10630	.09220	.04750
.897	.000	-.10760	.08970	.07890	.00040	-.00070	.00010	-.10740	.08990	.04860
.900	1.100	-.10370	.09080	.07730	-.05140	-.00200	.00220	-.10350	.09100	.04720
.899	2.170	-.10120	.09190	.07710	-.02610	-.00330	.00400	-.10110	.08200	.04860
.899	4.260	-.10410	.08770	.07680	-.05060	-.00610	.00850	-.10400	.06780	.04780
.899	6.360	-.10670	.08910	.07330	-.07650	-.00920	.01230	-.10660	.06930	.05110
GRADIENT		.00076	-.00041	.00023	-.01232	-.00126	.00195	.00075	-.00043	-.00028

RUN NO. 38/ 0 RM/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMPWD	CY	CYN	CBL	CL	CD	CAB
1.200	-19.320	-.06410	.13520	.02340	.16030	.04370	-.01780	-.06390	.13530	.08270
1.199	-9.700	-.03960	.13680	.02600	.09340	.02450	-.01000	-.03950	.13690	.03710
1.200	-6.440	-.02940	.13640	.02380	.06450	.01340	-.00670	-.02930	.13650	.03490
1.200	-4.300	-.02680	.13670	.02500	.04390	.00990	-.00400	-.02670	.13670	.03400
1.198	-2.110	-.01690	.13410	.02320	.02140	.00470	-.00140	-.01680	.13410	.03120
1.196	.050	-.01480	.13330	.02430	.00090	.00030	.00110	-.01480	.13330	.04850
1.195	1.180	-.01690	.13470	.02440	-.01120	-.00200	.00210	-.01690	.13470	.04960
1.202	2.140	-.01730	.13530	.02320	-.02070	-.00410	.00270	-.01730	.13530	.03090
1.200	4.450	-.01480	.13540	.02370	-.04550	-.00900	.00570	-.01480	.13540	.03100
1.202	6.740	-.01840	.13660	.02650	-.06810	-.00920	.00820	-.01830	.13660	.03390
GRADIENT		.00118	-.00007	.00005	-.01014	-.00214	.00108	.00117	-.00007	-.00031



ARC 66-709 OAS9 OA11A-IN24 R9 V8)*STRUT*DUM STNG

PARAMETRIC DATA

ALPHA = .000 ELEVON = .000
 BOFLAP = -11.700

REFERENCE DATA

SREF = .6033 SB.FT. XMRP = 12.6255 IN.
 LREF = .5935 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

RUN NO. 37/ 0 RN/L = 2.44 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMFWO	CY	CYM	CBL	CL	CD	CAB
2.001	-15.130	-.04260	.11650	-.02800	.16910	-.04190	-.02020	-.04240	.11660	-.02850
2.001	-14.930	-.04870	.11710	-.03240	.17440	-.03910	-.01890	-.04840	.11720	-.02670
2.001	-11.690	-.03650	.11720	-.03030	.13730	-.03240	-.01560	-.03630	.11730	-.02690
2.001	-9.530	-.02600	.11710	-.02710	.10960	-.02680	-.01290	-.02580	.11720	-.02650
2.003	-7.230	-.02130	.11680	-.02460	.07840	-.02000	-.00970	-.02110	.11680	-.02380
2.003	-6.190	-.02070	.11700	-.02210	.06620	-.01720	-.00860	-.02060	.11700	-.02360
2.003	-5.040	-.01810	.11740	-.02160	.03400	-.01450	-.00700	-.01800	.11740	-.02360
2.003	-3.930	-.01780	.11750	-.01890	.04040	-.01110	-.00350	-.01760	.11750	-.02350
2.003	-2.830	-.01620	.11790	-.01910	.02990	-.00840	-.00410	-.01610	.11790	-.02330
2.003	-1.760	-.01720	.11730	-.01770	.01700	-.00520	-.00250	-.01710	.11730	-.02490
2.003	-.650	-.01530	.11750	-.01700	.00790	-.00270	-.00120	-.01520	.11750	-.02420
2.003	.430	-.01760	.11720	-.01730	-.00300	-.00010	.00040	-.01740	.11730	-.02440
2.003	1.460	-.01360	.11760	-.01720	-.01420	-.00270	.00160	-.01350	.11760	-.02430
2.000	2.560	-.01700	.11680	-.01790	-.02310	-.00350	.00310	-.01680	.11680	-.02460
2.005	3.640	-.01260	.11730	-.01810	-.03740	-.00840	.00460	-.01250	.11730	-.02420
1.998	4.770	-.01590	.11660	-.01900	-.03080	-.01160	.00620	-.01580	.11660	-.02460
2.005	5.860	-.01220	.11620	-.02000	-.06160	-.01400	.00740	-.01210	.11630	-.02430
2.003	6.950	-.01510	.11570	-.02150	-.07650	-.01730	.00880	-.01490	.11570	-.02470
	GRADIENT	.00031	-.00010	.00003	-.01036	-.00259	.00134	.00031	-.00010	-.00011

ARC 68-709 0A59 0A11A-(N24 R5 V8)*STRUT*DUN STNG (RER000) (25 APR 74)

REFERENCE DATA

BREF = .0033 98.FT. XMRP = 12.6255 IN. ALPHA = 10.000 ELEVON = .000
LREF = .5035 FT. YMRP = .0000 IN. BDFLAP = -11.700
SREF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0150

PARAMETRIC DATA

RUN NO. 467 0 RM/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

Table with columns: MACH, BETA, CN, CA, CLMFWO, CY, CYN, C^L, C^L, CL, CD, CAB. Contains data for runs 700-707.

RUN NO. 477 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

Table with columns: MACH, BETA, CN, CA, CLMFWO, CY, CYN, C^L, C^L, CL, CD, CAB. Contains data for runs 701-708.

RUN NO. 487 0 RM/L = 2.54 GRADIENT INTERVAL = -5.00/ 5.00

Table with columns: MACH, BETA, CN, CA, CLMFWO, CY, CYN, C^L, C^L, CL, CD, CAB. Contains data for runs 709-716.



DATE 29 AUG 74 OAS9 TABULATED SOURCE DATA

ARC 66-709 OAS9 0A11A-(IN24 R5 V8)*STRUT*0UM STNG

ALPHA = 10.000 ELEVOM = .000
BDFLAP = -11.700

REFERENCE DATA

SREF = .6033 50.FT. ZMRP = 12.6235 IN.
LREF = .5933 FT. ZMRP = .0000 IN.
BREF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0150

RUN NO. 45/ 0 RM/L = 2.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.901	-12.200	.49020	.09840	.02880	.15980	.02570	-.00440	.48300	.16870	.06050
.995	-9.810	.49690	.09880	.03000	.13220	.01770	-.00390	.46950	.19040	.05660
.902	-6.600	.49160	.09370	.03170	.06890	.01080	-.00100	.48530	.18430	.04980
.901	-4.420	.48740	.09140	.03330	.05870	.00630	-.00020	.46160	.18120	.04750
.900	-2.240	.48780	.08870	.03580	.02810	.00240	-.00080	.46250	.17860	.04460
.901	-1.120	.50870	.08850	.02900	.00300	-.00100	.00100	.46300	.18250	.04710
.902	1.000	.50500	.08820	.02950	-.01260	-.00340	.00120	.47940	.18150	.04420
.900	2.050	.49790	.08680	.03250	-.02620	-.00550	.00140	.47270	.17870	.04500
.900	4.190	.49750	.08940	.03580	-.05250	-.00930	.00040	.47170	.18110	.04670
.901	6.340	.49320	.08660	.03010	-.08440	-.01370	.00200	.46780	.17950	.04870
GRADIENT		.00153	-.00026	-.00017	-.01291	-.00182	.00009	.00156	.00901	-.00009

RUN NO. 44/ 0 RM/L = 2.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
1.199	-12.230	.59720	.12540	-.04770	.12600	.03250	-.00010	.56190	.23600	.05920
1.201	-9.873	.61120	.12910	-.03500	.10080	.02540	-.00060	.57490	.24450	.05910
1.199	-6.540	.61430	.12880	-.03650	.06660	.01500	-.00080	.57600	.24470	.05870
1.200	-4.380	.62030	.12660	-.06140	.04400	.00930	.00040	.58420	.24370	.05850
1.201	-2.170	.62710	.12890	-.06560	.02080	.00460	.00070	.59050	.24740	.05940
1.199	-.040	.63230	.12900	-.06710	-.00310	.00070	.00100	.59550	.24850	.05960
1.199	1.030	.62660	.12940	-.06560	-.01310	-.00170	.00050	.58990	.24780	.05990
1.198	2.110	.62450	.12930	-.06390	-.02400	-.00400	.00000	.58790	.24720	.05940
1.202	4.230	.62120	.13000	-.06450	-.04660	-.00900	.00070	.58450	.24720	.05930
1.201	6.300	.61660	.13110	-.06440	-.06490	-.01450	.00160	.58190	.24760	.06110
GRADIENT		-.00000	.00034	-.00023	-.01049	-.00209	-.00001	-.00006	.00033	.00009

RUN NO. 45/ 0 RM/L = 2.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
1.996	-12.030	.58490	.10380	-.05420	.13420	.03220	-.00350	.35880	.17360	.02680
2.007	-9.580	.59300	.10360	-.03320	.10450	.02580	-.00310	.35670	.17500	.02690
2.005	-6.230	.57530	.10490	-.04880	.06230	.01730	-.00260	.34940	.17240	.02580
2.001	-4.080	.57400	.10470	-.04750	.03870	.01140	-.00210	.34810	.17230	.02550
1.999	-1.900	.57680	.10330	-.04770	.01670	.00540	-.00130	.35070	.17340	.02560
1.999	-.280	.57620	.10560	-.04750	-.00450	.00060	.00010	.35010	.17380	.02510
2.001	1.390	.57840	.10600	-.04780	-.01540	-.00360	.00050	.35210	.17440	.02520
2.002	2.430	.57870	.10370	-.04840	-.02690	-.00670	.00090	.35250	.17410	.02540
2.004	4.600	.58020	.10350	-.05010	-.04770	-.01240	.00190	.35400	.17420	.02540
2.006	6.810	.57950	.10400	-.05130	-.07430	-.01810	.00200	.35360	.17260	.02640
GRADIENT		.00067	.00010	-.00026	-.00997	-.00275	.00047	.00563	.00022	-.00002

PARAMETRIC DATA

ARC 66-709 0459 0411A-IN24 R5 V61+STRUT

(RECORD) (25 APR 74)

REFERENCE DATA

SREF = .6053 56-FT. ZMRP = 12.6255 IN.
 LREF = .5935 FT. ZMRP = .0000 IN.
 BREF = 1.3710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

BETA = .000 ELEVON = .000
 BDFLAP = -11.700

RUN NO. 84/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFD	CY	CYN	CBL	CL	CD	CAB
.600	-4.040	-32650	.07310	.05680	.00270	-.00030	.00050	-.32250	.09610	.05350
.598	-1.950	-21680	.07650	.05590	.00170	-.00020	.00120	-.21610	.08390	.05320
.596	.180	-11700	.07800	.05470	.00130	-.00010	.00120	-.11720	.07770	.05110
.601	2.310	-01520	.07420	.05590	-.00040	-.00010	.00110	-.01820	.07350	.05070
.602	4.450	.08920	.06790	.05490	-.00060	.00000	.00140	.08370	.07460	.04820
.601	6.480	.19130	.05650	.05370	-.00080	.00000	.00110	.18370	.07780	.04560
.602	8.700	.30290	.04350	.05290	-.00020	-.00010	.00070	.29260	.08880	.04490
.601	10.910	.44690	.03220	.04610	.00250	-.00080	.00160	.43260	.11610	.04480
.599	13.020	.56930	.03820	.03590	.00160	-.00030	.00170	.54610	.16540	.04790
.600	15.220	.68890	.03700	.03180	.00090	-.00070	-.00010	.65500	.21650	.05120
GRADIENT		.04691	-.00060	-.00016	-.00037	.00003	.00008	.04756	-.00251	-.00080

RUN NO. 83/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFD	CY	CYN	CBL	CL	CD	CAB
.600	-4.330	-37530	.06230	.07740	.00360	-.00020	.00080	-.36880	.11090	.03740
.600	-2.140	-25290	.06580	.07270	.00260	-.00020	.00070	-.24960	.09320	.05340
.601	.060	-13730	.06380	.07130	.00180	-.00010	.00110	-.13740	.08360	.05270
.603	.370	-11570	.06360	.07080	.00130	-.00010	.00100	-.11630	.08290	.05140
.601	2.590	-00300	.07940	.06770	.00060	.00000	.00110	-.00660	.07920	.04700
.600	4.720	.11190	.07500	.06530	-.00030	.00000	.00120	.10550	.08200	.04720
.603	6.980	.24660	.06590	.05640	.00010	.00020	.00160	.23680	.09540	.04450
.601	9.180	.37630	.06610	.04960	.00090	-.00030	.00190	.36090	.12530	.04470
.600	11.340	.49180	.06770	.04550	.00090	-.00040	.00250	.46890	.16310	.04700
.600	13.570	.61770	.07120	.03370	.00070	-.00070	.00160	.58370	.21420	.05080
.799	15.810	.74090	.07300	.02580	.00030	-.00090	.00120	.69300	.27210	.05530
GRADIENT		.03364	-.00160	-.00128	-.00042	.00003	.00005	.55213	-.00311	-.00120

RUN NO. 82/ 0 RM/L = 2.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFD	CY	CYN	CBL	CL	CD	CAB
.697	-4.510	-42110	.09270	.10370	.00300	-.00040	.00060	-.41250	.12560	.05650
.901	-2.380	-28680	.09720	.09510	.00150	-.00030	.00090	-.28240	.10910	.05670
.900	-.190	-14650	.09620	.08130	.00100	-.00020	.00120	-.14620	.09870	.05360
.901	2.020	-00810	.09640	.06910	.00050	-.00010	.00150	-.01150	.08600	.05200
.900	4.230	.10900	.09360	.06410	-.00050	.00010	.00200	.15160	.10340	.05120
.900	6.460	.23130	.09450	.05900	.00040	-.00020	.00190	.21820	.12000	.04700
.900	10.930	.49990	.09330	.02630	.00150	-.00110	.00260	.47310	.18600	.04820
.896	13.160	.62580	.09710	.01190	.00610	-.00260	.00190	.76160	.23690	.05220
.899	15.470	.75670	.09890	.00070	.00230	-.00200	.00110	.70280	.29720	.05590
GRADIENT		.06117	.00022	-.00481	-.00037	.00005	.00016	.05936	-.00261	-.00070



PARAMETRIC DATA

BETA = .000 ELEVOM = .000
BOFLAP = -11.700

REFERENCE DATA

SREF = .653 36.FT. XMRP = 12.6255 IN.
LREF = .5935 FT. YMRP = .0000 IN.
SREF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0150

RUN NO. 81/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CM	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
1.202	-4.670	-3.5150	.13180	.09640	-.00100	.00020	.00130	-.35960	-.19800	.05340
1.200	-2.020	-1.6460	.13290	.08150	-.00020	-.00020	.00080	-.17970	.13930	.05250
1.202	.010	-.04710	.13730	.02810	.00000	.00030	.00090	-.04710	.13730	.05460
1.204	.300	-.02250	.14040	.02290	-.00050	.00000	.00090	-.02320	.14030	.05630
1.199	2.550	.10800	.13760	-.00090	.00010	.00010	.00100	-.10170	.14240	.05450
1.198	4.780	.24070	.13910	-.02570	-.00080	.00000	.00090	-.22630	.15870	.05720
1.200	7.060	.39700	.13640	-.04740	-.00090	.00000	.00130	.37730	.16420	.05760
1.202	9.390	.51960	.13250	-.05820	-.00110	.00020	.00200	.49100	.21560	.05920
1.199	11.550	.63210	.13000	-.06970	-.00150	.00100	.00210	.61280	.25800	.05990
1.200	13.850	.76470	.13160	-.08750	-.00360	.00080	.00270	.73040	.31560	.06450
1.199	16.070	.90310	.13000	-.09460	-.00320	.00060	.00190	.83180	.37490	.06560
GRADIENT		.06295	.00085	-.01307	-.00017	-.00001	-.00003	.06041	-.00003	.00041

RUN NO. 80/ 0 RM/L = 2.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CM	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
1.502	-4.030	-2.2660	.13310	.03770	-.00040	.00060	.00120	-.21660	-.14870	.04120
1.500	-2.000	-1.2510	.13330	.02100	-.00100	.00060	.00080	-.12030	.13760	.04170
1.499	.110	-.01930	.13290	.00190	-.00020	.00070	.00040	-.01950	.13250	.04160
1.500	.500	.00550	.13260	-.00190	-.00130	.00060	.00070	.00230	.13260	.04180
1.500	2.740	.11250	.13120	-.01980	-.00050	.00050	.00060	.10610	.13640	.04240
1.499	4.930	.21800	.12870	-.03570	-.00020	.00030	.00070	.20620	.14700	.04360
1.499	7.140	.34230	.12670	-.05140	-.00040	.00040	-.00060	.32390	.16830	.04520
1.500	9.410	.44480	.12450	-.06190	-.00100	.00020	.00020	.41850	.19550	.04630
1.500	11.650	.54930	.12410	-.07460	-.00110	-.00030	-.00050	.51290	.23250	.04870
1.499	13.880	.65680	.12220	-.09030	-.00050	.00000	.00000	.60830	.27720	.04960
1.499	16.110	.76610	.11800	-.10010	-.00150	.00020	.00070	.70330	.33590	.05000
GRADIENT		.04973	-.00049	-.00628	.00004	-.00006	-.00055	.04732	-.00016	.00024

DATE 29 AUG 74 OAS9 TABULATED SOURCE DATA

ARC 66-709 OAS9 OAL1A-(M24 R5 V8)+STRUT

(IRER009) (29 APR 74)

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BDFLAP = -11.700

REFERENCE DATA

XREF = .6933 38.FT. XMRP = 12.8253 IN.
LREF = .5935 FT. YMRP = .0000 IN.
BREF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0150

RUN NO. 79/ 0 RN/L = 2.44 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CM	CA	CLMPWD	CY	CYN	CBL	CL	CD	CAB
1.993	-4.730	-21440	-11780	.00440	.00190	.00110	-.00030	-.20390	.13310	.02180
1.991	-2.580	-13260	.11660	-.00170	.00040	.00080	-.00020	-.12720	.12250	.02250
1.996	-.430	-.04670	.11500	-.01090	-.00020	.00080	-.00010	-.04780	.11540	.02290
1.998	-.030	-.03420	.11480	-.01360	.00120	.00060	-.00010	-.03420	.11480	.02390
1.999	1.740	.03750	.11450	-.02200	.00010	.00070	.00060	.03400	.11560	.02380
1.999	4.210	.12940	.11340	-.03180	-.00020	.00030	.00000	.12080	.12260	.02500
1.999	6.420	.20800	.11100	-.03800	.00010	.00040	-.00010	.19430	.13330	.02570
1.999	8.630	.29740	.10910	-.04370	-.00030	.00020	.00010	.27760	.15270	.02580
1.996	10.830	.35210	.10680	-.04660	-.00060	.00010	.00010	.35520	.17670	.02700
1.996	12.990	.46387	.10430	-.04830	-.00020	.00020	.00020	.42850	.20590	.02740
1.996	15.190	.55070	.10060	-.05150	.00010	.00000	.00030	.50510	.24140	.02810
1.996	GRADIENT	.03862	-.00049	-.00416	-.00020	-.00008	.00004	.03650	-.00143	.00035



ARC 66-709 0459 0411A-(R24 R3 V8) STREUT

(RER010) (25 APR 74)

REFERENCE DATA

BREF = .0033 90.FT. YMRP = 12.6255 IN.
LREF = .0035 FT. YMRP = .0000 IN.
BREF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0150

ALPHA = .000 ELEVON = .000
BDFLAP = -11.700

PARAMETRIC DATA

RUN NO. 61/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMPWD	CY	CYN	CBL	CL	CD	CAB
.600	-15.010	-.09200	.07200	-.03510	.15190	.02960	-.02660	-.05260	.07820	.06360
.601	-9.760	-.09400	.07410	-.04360	.09490	.01850	-.01610	-.09390	.07430	.03360
.600	-6.390	-.09610	.07480	-.05120	.06640	.01260	-.01060	-.09600	.07500	.05250
.601	-4.490	-.09760	.07590	-.05360	.04450	.00640	-.00650	-.09760	.07600	.05080
.602	-2.420	-.09820	.07790	-.05650	.02380	.00430	-.00330	-.09810	.07800	.03310
.601	-.300	-.09820	.07640	-.05730	.00150	.00030	-.00030	-.09610	.07850	.03160
.601	1.750	-.09630	.07850	-.05760	-.00770	-.00150	-.00160	-.09620	.07860	.05260
.600	1.790	-.09450	.07720	-.05900	-.01670	-.00310	-.00320	-.09440	.07730	.05100
.596	3.660	-.09170	.07690	-.05620	-.03680	-.00710	-.00670	-.09160	.07700	.05260
.600	5.950	-.08770	.07520	-.05350	-.01150	-.01110	-.01060	-.08760	.07530	.05130
	GRADIENT	.00075	.00009	.00026	-.00373	-.00184	.00157	.00072	.00008	.00009

RUN NO. 67/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMPWD	CY	CYN	CBL	CL	CD	CAB
.796	-15.060	-.13060	.08590	-.04990	.16750	.02600	-.02920	-.13040	.08620	.06990
.799	-9.690	-.12050	.08260	-.06110	.10450	.01710	-.01660	-.12030	.08290	.03700
.799	-6.520	-.11870	.08230	-.06860	.07090	.01110	-.01080	-.11650	.08250	.05280
.801	-4.390	-.11690	.08270	-.06920	.04980	.00760	-.00660	-.11680	.08290	.05240
.802	-2.260	-.11620	.08370	-.07200	.02480	.00390	-.00290	-.11600	.08400	.05090
.798	-.140	-.11490	.08350	-.07210	.00150	.00030	-.00030	-.11470	.08370	.05210
.800	.930	-.11310	.08360	-.07230	-.00880	-.00130	.00210	-.11290	.08360	.05190
.801	1.900	-.11310	.08430	-.07240	-.01900	-.00280	.00380	-.11300	.08450	.05140
.800	4.110	-.11270	.08280	-.07210	-.04610	-.00670	.00760	-.11260	.08300	.05256
.801	6.190	-.10770	.07970	-.06970	-.06170	-.00960	.01140	-.10760	.07990	.05190
	GRADIENT	.00056	.00004	.00030	-.01108	-.00166	.00166	.00056	.00004	.00003

RUN NO. 66/ 0 RM/L = 2.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMPWD	CY	CYN	CBL	CL	CD	CAB
.902	-19.070	-.14740	.10650	-.05390	.19050	.02260	-.03310	-.14710	.10880	.07450
.900	-9.660	-.12530	.10040	-.06770	.11960	.01340	-.02040	-.12510	.10070	.06190
.900	-6.490	-.11530	.10010	-.07260	.08030	.00820	-.01350	-.11510	.10030	.05340
.900	-4.310	-.10860	.09680	-.07580	.05160	.00550	-.00810	-.10840	.09900	.05350
.902	-2.170	-.10360	.10080	-.07780	.02900	.00300	-.00370	-.10360	.10100	.05279
.901	-.030	-.10320	.09940	-.07910	.00210	.00000	.00040	-.10300	.09960	.05390
.902	1.050	-.09660	.10220	-.07710	-.01270	-.00130	.00260	-.09840	.10240	.05260
.900	2.080	-.10350	.09610	-.07960	-.02310	-.00260	.00420	-.10340	.09630	.05200
.902	4.210	-.10270	.09610	-.07670	-.05120	-.00350	.00910	-.10260	.09630	.05230
.902	6.300	-.10200	.09670	-.07440	-.07640	-.00780	.01420	-.10180	.09680	.05350
	GRADIENT	.00077	-.00013	.00015	-.01213	-.00130	.00199	.00076	-.00013	-.00014

DATE 29 AUG 74 OAS9 TABULATED SOURCE DATA

(RER010) (25 APR 74)

ARC 66-709 OAS9 OAL11A-(IN24 R5 V8)+STRUT

PARAMETRIC DATA

ALPHA = .000 ELEVON = .000
EDFLAP = -11.700

REFERENCE DATA

BREF = .0033 30.FT. XMRP = 12.6255 IN.
LREF = .5935 FT. YMRP = .0000 IN.
BREF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0150

RUN NO. 65/ 0 RM/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CM	CA	CLMPWD	CY	CYN	CBL	CL	CD	CAB
1.199	-15.310	-0.6610	-13.480	0.2530	.16140	.04350	-.01740	-.06960	-.13490	.06090
1.202	-9.720	-0.4340	-13.650	0.2810	.09450	.02900	-.01030	-.04330	-.13660	-.05430
1.199	-6.480	-0.3400	-13.530	0.2860	.06140	.01590	-.00650	-.03390	-.13530	-.05150
1.200	-4.300	-0.3000	-13.560	0.2780	.04150	.01040	-.00400	-.02990	-.13560	-.04980
1.200	-2.120	-0.2630	-13.580	0.2730	.01920	.00510	-.00170	-.02620	-.13580	-.04890
1.200	.010	-0.2250	-13.630	0.2670	-.00190	.00050	.00090	-.02250	-.13630	-.04670
1.199	1.110	-0.2180	-13.620	0.2670	-.01130	-.00170	-.02180	-.02180	-.13620	-.04860
1.200	2.170	-0.2370	-13.590	0.2750	-.00400	.00360	-.02370	-.02370	-.13600	-.04830
1.200	4.350	-0.2130	-13.660	0.2830	-.04850	-.00690	-.02120	-.02120	-.13660	-.04820
1.199	6.470	-0.2440	-13.430	0.3080	-.06500	-.01400	-.00830	-.02430	-.13430	-.04930
	GRADIENT	.00096	.00006	.00004	-.01005	-.00221	.00115	.00096	-.00008	-.00016

RUN NO. 64/ 0 RM/L = 2.44 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CM	CA	CLMPWD	CY	CYN	CBL	CL	CD	CAB
1.499	-15.690	-0.6530	-12.920	-.01020	.19010	.04660	-.02480	-.06500	-.12930	-.04930
1.499	-10.000	-0.3610	-13.110	-.00110	.10530	.02810	-.01500	-.03590	-.13120	-.04590
1.499	-6.680	-0.2640	-13.250	.00190	.06650	.01820	-.00970	-.02820	-.13250	-.04390
1.500	-4.550	-0.2410	-13.320	.00340	.04540	.01210	-.00640	-.02400	-.13320	-.04280
1.500	-2.340	-0.2270	-13.330	.00370	.02360	.00640	-.00310	-.02260	-.13330	-.04160
1.500	-.210	-0.1670	-13.330	.00360	.00120	.00080	-.00020	-.01860	-.13330	-.04190
1.500	.920	-0.2040	-13.290	.00360	-.00660	-.00160	-.00130	-.02030	-.13300	-.04160
1.500	2.010	-0.1680	-13.330	.00440	-.02030	-.00430	-.00290	-.01870	-.13350	-.04210
1.500	4.180	-0.1600	-13.240	.00370	-.04150	-.00970	-.00540	-.01790	-.13240	-.04190
1.500	6.340	-0.1970	-13.220	.00330	-.06320	-.01570	-.00900	-.01960	-.13220	-.04260
	GRADIENT	.00072	-.00007	.00005	-.00997	-.00249	.00139	.00072	-.00007	-.00010

RUN NO. 63/ 0 RM/L = 2.43 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CM	CA	CLMPWD	CY	CYN	CBL	CL	CD	CAB
1.994	-15.130	-0.5910	-11.750	-.03360	.19230	.04220	-.02030	-.05670	-.11770	-.02770
1.997	-9.530	-0.3300	-11.760	-.02710	.10650	.02660	-.01260	-.03260	-.11760	-.02610
1.997	-6.240	-0.2300	-11.740	-.02130	.06400	.01780	-.00850	-.02490	-.11740	-.02460
1.997	-4.000	-0.2320	-11.740	-.01930	.03830	.01170	-.00540	-.02310	-.11740	-.02400
1.997	-1.630	-0.2080	-11.740	-.01640	.01670	.00560	-.00260	-.02070	-.11750	-.02320
1.997	.340	-0.1940	-11.670	-.01590	-.00430	.00030	-.00040	-.01930	-.11670	-.02270
1.997	1.370	-0.1610	-11.700	-.01520	-.01600	-.00250	.00190	-.01900	-.11710	-.02300
2.002	2.530	-0.1610	-11.780	-.01560	-.02700	-.00540	.00320	-.01800	-.11760	-.02270
1.997	4.730	-0.1770	-11.660	-.01690	-.05120	-.01110	-.00620	-.01760	-.11660	-.02330
1.994	6.890	-0.1640	-11.740	-.01930	-.07430	-.01720	-.00890	-.01830	-.11750	-.02470
	GRADIENT	.00063	-.00006	.00013	-.01023	-.00261	.00133	.00063	-.00006	-.00009

PARAMETRIC DATA

REF = .0033 50.FT. YMRP = 12.8255 IN. ALPHA = 10.000 ELEVON = .000
 LREF = .3935 FT. YMRP = .0000 IN. SCFLAP = -11.700
 BREF = 1.1710 FT. YMRP = -.3750 IN.
 SCALE = .0130

RUN NO. 62/ 0 RM/L = 2.34 GRADIENT INTERVAL = -5.00/ 3.00

MACH	BETA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.600	-4.610	.45140	.02830	.04760	-.00760	-.00070	-.00070	.43650	.11070	.04350
.599	-2.570	.45020	.02960	.04900	-.00360	-.00080	-.00080	.43720	.11170	.04380
.601	-3.380	.44700	.02900	.04770	-.00330	-.00060	-.00060	.43410	.11030	.04460
.601	.620	.44680	.02910	.04690	-.00320	-.00100	-.00100	.43360	.11060	.04480
.601	1.610	.44720	.02820	.04740	-.01470	-.00380	-.00030	.43440	.10980	.04310
.601	3.67	.44510	.02760	.04580	-.03660	-.00800	-.00160	.43250	.10890	.04480
.600	-	.44490	.02810	.04080	-.03760	-.01180	-.00680	.43220	.10910	.04670
.599	7.900	.44800	.02960	.03920	-.07730	-.01390	-.00980	.43300	.11090	.04940
.600	11.130	.44150	.03230	.03660	-.11020	-.02230	-.00930	.42810	.11230	.05370
.602	16.320	.42760	.04170	.02990	-.15570	-.03170	-.00960	.41260	.11910	.06860
GRADIENT		-.00076	-.00010	-.00028	-.01006	-.00186	-.00059	-.00072	-.00023	.00009

RUN NO. 61/ 0 RM/L = 2.34 GRADIENT INTERVAL = -5.00/ 3.00

MACH	BETA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.701	-4.330	.47020	.04760	.04160	.05080	.00640	-.00160	.43320	.13400	.04600
.701	-2.390	.46860	.04490	.04250	.02390	.00230	-.00090	.43020	.13060	.04490
.699	-3.40	.46900	.04460	.04360	.00360	-.00040	-.00070	.43260	.13080	.04350
.700	.760	.46560	.04430	.04230	-.00710	-.00160	-.00030	.44950	.12980	.04490
.700	1.820	.46770	.04380	.04210	-.01920	-.00330	-.00010	.43150	.12970	.04470
.699	3.920	.46900	.04300	.04130	-.04060	-.00740	-.00030	.43290	.12910	.04320
.699	6.040	.46930	.04180	.03900	-.06180	-.01100	-.00030	.43360	.12800	.04670
.700	8.130	.47010	.04140	.03420	-.08460	-.01310	.00170	.43450	.12770	.04960
.699	11.340	.45290	.04270	.03610	-.11540	-.02130	.00160	.43720	.12560	.05690
.701	16.600	.43580	.04930	.03230	-.16930	-.03370	.00270	.41930	.12890	.07120
GRADIENT		-.00011	-.00049	-.00005	-.01079	-.00137	.00051	-.00002	-.00052	-.00009

RUN NO. 60/ 0 RM/L = 2.35 GRADIENT INTERVAL = -5.00/ 3.00

MACH	BETA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.600	-6.490	.47980	.06470	.04240	.05330	.00720	-.00130	.43920	.13330	.04630
.600	-2.360	.47830	.06600	.04540	.02800	.00350	.00030	.43730	.13430	.04530
.602	-2.250	.47280	.06420	.04650	.00190	-.00020	.00080	.43230	.13140	.04270
.600	.830	.47070	.06400	.04550	-.01060	-.00190	.00040	.43590	.13070	.04340
.799	1.920	.47330	.06310	.04540	-.02180	-.00360	.00050	.43320	.13040	.04370
.799	4.090	.47080	.06280	.04250	-.04860	-.00600	.00160	.43260	.14930	.04420
.600	6.180	.47280	.06400	.03930	-.07110	-.01200	.00300	.43280	.15110	.04480
.799	8.390	.47330	.06480	.03560	-.09790	-.01680	.00490	.43290	.15170	.04840
.601	11.360	.46460	.06930	.03360	-.13400	-.02480	.00670	.42430	.15060	.05390
.603	16.670	.43200	.06740	.03520	-.19030	-.03880	.00940	.41200	.14630	.06930
GRADIENT		-.00113	-.00033	.00093	-.01200	-.00173	.00027	-.00103	-.00036	-.00028

(RE011) (28 APR 74

QASB TABULATED SOURCE DATA

AEC 66-709 QASB OASIA-(NEA 85 VA)-STRUT

PARAMETRIC DATA

ALPHA = 10.000 ELEVOM = .000
BCFLAP = -11.700

REFERENCE DATA

SREF = .0033 80-FT. YMEP = 12.0255 IM.
LREF = .0035 FT. YMEP = .0000 IM.
BREF = 1.1710 FT. ZMEP = -.3750 IM.
SCALE = .0100

MACH	BETA	CM	CA	CLMFGD	CY	CYM	CBL	CL	CD	CAB
.900	-4.410	.49970	.09340	.02820	-.03970	-.00400	-.00060	.47320	-1.0580	.04970
.901	-2.280	.50200	.09090	.03140	-.00220	-.00510	-.00510	.47600	-1.0370	.04720
.904	-.120	.48680	.08680	.03640	.00110	-.00120	.00050	.46340	-1.1900	.04800
.900	1.020	.48920	.09740	.02910	-.01180	-.00360	.00110	.47330	-1.0260	.04750
.909	2.100	.50310	.08920	.02920	-.02640	-.00340	.00570	.47750	-1.0230	.04680
.908	4.230	.51060	.08100	.02370	-.03570	-.00940	.00550	.48440	-1.0550	.04770
.902	6.400	.50150	.09190	.02400	-.08400	-.01360	-.00230	.47530	-1.0450	.04710
.900	6.540	.48890	.09170	.02790	-.11270	-.01820	.00290	.46400	-1.0200	.05010
.900	11.760	.47430	.09360	.02770	-.14730	-.02790	.00430	.44840	-1.0090	.03460
.909	17.170	.48350	.09350	.02950	-.21170	-.04320	.00790	.39980	-1.1740	.06950
GRADIENT	.00101	-.00030	-.00030	-.00030	-.01326	-.00177	.00015	.00105	-.00010	-.00021

MACH	BETA	CM	CA	CLMFGD	CY	CYM	CBL	CL	CD	CAB
1.203	-4.370	.62400	.12830	-.06330	.04370	.00930	.00020	.58740	-.24660	.05610
1.202	-2.210	.62820	.13000	-.06640	.02060	.00420	.00000	.59120	-.24910	.03760
1.202	-.010	.63040	.13120	-.06990	-.00310	.00050	.00140	.59310	-.25070	.03670
1.201	1.050	.62820	.13020	-.06740	-.01360	-.00160	.00570	.58920	-.24880	.03660
1.201	2.170	.62320	.13010	-.06750	-.02490	-.00420	.00590	.58620	-.24650	.03730
1.202	4.360	.61660	.12930	-.06610	-.04650	-.00940	.00570	.58030	-.24590	.03630
1.201	6.470	.61370	.12920	-.06390	-.06620	-.01490	.00170	.57720	-.24520	.03620
1.201	8.710	.61000	.12810	-.06140	-.08470	-.02250	.00110	.57390	-.24320	.03590
1.203	9.760	.60860	.12730	-.06020	-.09610	-.02350	.00590	.57060	-.24200	.03460
1.201	11.920	.59830	.12450	-.05810	-.12190	-.03350	-.00020	.56320	-.23730	.03540
1.199	17.500	.57610	.12120	-.05170	-.20010	-.05340	-.00120	.54620	-.22970	.03870
GRADIENT	-.00076	.00010	-.00031	-.00036	-.01036	-.00209	.00009	-.00171	-.00008	.00003

MACH	BETA	CM	CA	CLMFGD	CY	CYM	CBL	CL	CD	CAB
1.501	-4.590	.92370	.12550	-.07030	.04770	.01190	-.00360	.49240	-.22160	.04710
1.498	-2.410	.92480	.12470	-.07020	.02370	.00340	-.00190	.49130	-.22280	.04830
1.500	-.240	.92430	.12540	-.07130	.00190	.00000	.00060	.49070	-.22310	.04950
1.501	.910	.92280	.12510	-.07140	-.00800	-.00260	.00180	.48940	-.22250	.04890
1.502	1.890	.92040	.12430	-.06980	-.02130	-.00350	.00250	.48710	-.22120	.04780
1.502	4.800	.91640	.12220	-.06630	-.04270	-.01160	.00410	.48370	-.21830	.04590
1.502	6.390	.91560	.12090	-.06490	-.06290	-.01940	.00420	.48310	-.21600	.04330
1.502	8.030	.91200	.11910	-.06630	-.08650	-.02860	.00430	.48080	-.21450	.04490
1.502	11.900	.91240	.11540	-.06890	-.13070	-.05810	.00380	.48110	-.21070	.04300
1.502	17.610	.89590	.11320	-.06940	-.21610	-.09370	.00490	.46510	-.20710	.03090
GRADIENT	-.00102	-.00011	-.00014	-.00014	-.01033	-.00262	.00003	-.00034	-.00012	-.00012



(REGR011) (25 APR 74)

ARC 66-709 0459 04114-(IN24 R3 V8)STRUT

PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000
 BDFLAP = -11.700

REFERENCE DATA

BREF = .0033 90-FT. TRMP = 12.8233 IN.
 LBREF = -0.3335 FT. TRMP = .0000 IN.
 RBREF = 1.1710 FT. TRMP = -.3750 IN.
 SCALE = .0150

RUN N.J. 56/ 0 RM/L = 2.45 GRADIENT INTERVAL = -9.00/ 9.00

MACH	BETA	CM	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
2.000	-4.090	.37710	.10840	-.04880	.03910	.01130	-.00210	.35080	.17460	-.02680
2.000	-1.990	.37490	.10820	-.04810	.01630	.00330	-.00120	.34870	.17400	-.02710
2.000	.090	.37430	.10840	-.04820	-.00270	-.00020	-.00020	.34820	.17410	-.02710
2.000	1.270	.37420	.10660	-.04900	-.01310	-.00330	.00040	.34790	.17420	-.02730
1.999	2.290	.37200	.10660	-.04890	-.02330	-.00630	.00100	.34870	.17430	-.02730
2.000	4.310	.37380	.10370	-.04960	-.04820	-.01260	.00200	.34960	.17350	-.02710
2.000	6.690	.37370	.10490	-.05210	-.07330	-.01800	.00230	.34970	.17260	-.02690
2.000	9.010	.37770	.10430	-.05370	-.10230	-.02400	.00290	.35180	.17250	-.02770
2.000	11.270	.37940	.10320	-.05710	-.13010	-.03030	.00340	.35370	.17170	-.02760
2.000	12.410	.37680	.10280	-.05870	-.14330	-.03360	.00370	.35320	.17120	-.02810
2.003	16.020	.35940	.10300	-.05890	-.23790	-.04640	.00460	.33410	.16760	-.03090
	GRADIENT	-.00013	-.00004	-.00014	-.01006	-.00279	.00048	-.00013	-.00008	.00003

ARC 66-709 0459 0411A-(R5 Y0)*STRUT

(RERG12) (23 APR 74)

REFERENCE DATA

REF = -0.033 86.FT. EIMP = 12.6255 IN.
 LREF = -2.000 00.FT. YMRP = -0.000 00 IN.
 SREF = 1.1710 FT. ZMRP = -0.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

BETA = .000 ELEVOM = .000
 SDFLAP = -11.700

RUN NO. 94/ 0 RM/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYM	CBL	CL	CD	CAB
.601	-4.140	-3.1830	.07230	.05810	.00100	-0.0030	.00060	-3.1820	.03520	.03240
.601	-2.080	-2.1430	.07730	.03400	.00040	-0.0020	.00030	-2.1140	.08300	.05060
.602	.180	-1.0370	.07400	.05280	-0.0090	-0.0030	.00070	-1.0390	.07770	.05780
.600	2.240	-0.0710	.07530	.05310	-0.0190	-0.0030	.00070	-0.1090	.07490	.04630
.600	4.360	.09640	.06750	.05290	-0.0160	-0.0020	.00100	.09100	.07460	.04310
.601	6.530	.20100	.03680	.05090	-0.0110	-0.0030	.00080	.19730	.07970	.04320
.601	8.660	.31110	.04310	.05160	-0.0030	-0.0020	.00020	.30110	.08950	.04200
.601	10.870	.44100	.03080	.04660	.00170	-0.0110	.00100	.42730	.11340	.04260
.602	12.800	.56300	.03730	.03480	.00000	-0.0040	.00130	.54030	.16290	.04380
.601	15.160	.68020	.03650	.03130	.00070	-0.0080	-0.0010	.64690	.21310	.04870
GRADIENT		.04862	-0.0054	-0.0034	-0.0035	.00000	.00005	.04727	-0.0241	-0.00088

RUN NO. 93/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYM	CBL	CL	CD	CAB
.798	-4.300	-3.3900	.07710	.06410	.00270	-0.0010	.00090	-3.3230	.10230	.03370
.701	-2.180	-2.2560	.07960	.06010	.00140	-0.0010	.00030	-2.2030	.08800	.03070
.790	.010	-1.1870	.06050	.05870	.00030	-0.0020	.00090	-1.1670	.08030	.04640
.600	2.200	-0.0920	.07700	.05840	-0.0020	-0.0010	.00110	-0.1220	.07650	.04720
.700	4.340	.09740	.07040	.05730	-0.05110	-0.0010	.00130	.09170	.07760	.04540
.701	6.510	.21410	.03930	.05360	-0.0110	-0.0010	.00070	.20660	.08320	.04230
.701	8.770	.33350	.04650	.05240	.00030	-0.0030	.00080	.32270	.09640	.04090
.701	10.890	.46230	.04690	.04900	.00210	-0.0110	.00110	.44510	.13330	.04340
.702	13.050	.57710	.04980	.03670	-0.0030	-0.0060	.00200	.55100	.17880	.04570
.700	15.230	.68740	.03000	.03670	.00140	-0.0090	-0.0010	.63010	.22900	.03030
GRADIENT		.05024	-0.0074	-0.0071	-0.0041	.00000	.00005	.04881	-0.0281	-0.00093

RUN NO. 92/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYM	CBL	CL	CC	CAB
.749	-4.400	-3.5000	.07960	.06930	.00400	.00000	.00100	-3.4290	.10620	.03330
.792	-2.280	-2.3200	.08290	.06560	.00770	-0.0010	.00110	-2.2860	.09180	.03100
.749	.030	-1.1200	.08290	.06220	.00220	-0.0020	.00140	-1.1200	.08930	.04930
.791	2.170	-0.1120	.08000	.06150	.00130	-0.0000	.00130	-0.1420	.07930	.04730
.791	4.290	.10030	.07240	.05900	-0.0010	-0.0010	.00130	.03480	.07980	.04410
.790	6.300	.22380	.06180	.05670	.00210	-0.0020	.00140	.21940	.08670	.04300
.792	8.470	.36020	.03320	.04720	.00290	-0.0020	.00200	.34780	.10730	.04140
.791	10.810	.48030	.03670	.04320	.00290	-0.0040	.00190	.44910	.14430	.04340
.790	13.090	.58730	.03910	.03630	.00300	-0.0020	.00240	.58660	.19060	.04660
.790	15.320	.70260	.06030	.03860	.00210	-0.0090	-0.0020	.66160	.24400	.03100
GRADIENT		.05158	-0.0078	-0.0016	-0.0033	.00000	.00006	.04911	-0.00300	-0.00102

ARC 06-709 0439 CASIA-(85 V0)-STRUT

ARC 06-709 0439 CASIA-(85 V0)-STRUT

ARC 06-709 0439 CASIA-(85 V0)-STRUT

PARAMETRIC DATA

BETA = .000 ELEVOM = .000
BOFLAP = -11.700

REFERENCE DATA

REF = .0033 50-FT. ZMRP = 12.6233 IN.
LREF = .3033 FT. ZMRP = .0000 IN.
BREF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0190

MACH	ALPHA	CM	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
.800	-4.330	-37370	.06310	.07740	.00510	.00000	.00080	-.36600	-.11230	-.05520
.801	-2.290	-24280	.06300	.06320	.00320	.00000	.00140	-.23920	.09460	.01130
.800	-.120	-13350	.06350	.06620	.00250	.00010	.00130	-.13330	.08580	.04070
.800	2.090	-11180	.06070	.06660	.00170	.00010	.00120	-.01470	.08020	.04000
.798	4.270	-10460	.07370	.06280	.00230	.00020	.00140	-.09670	.08320	.04430
.801	6.410	-23480	.06740	.06430	.00270	.00040	.00180	.22370	.09330	.04300
.801	8.080	-33360	.06670	.04730	.00440	.00020	.00190	.33930	.11930	.04230
.802	10.060	-46660	.06760	.04330	.00530	.00000	.00240	.44360	.15430	.04350
.801	13.030	-58330	.07270	.03360	.00310	.00040	.00210	.53190	.20230	.04630
.801	15.300	-70960	.07430	.02850	.00390	.00080	.00230	.66490	.25090	.05380
GRADIENT	.05411	-.00087	-.00160	-.00032	.00001	.00003	.00003	.05237	-.00331	.06123

RUN NO.	91/0	RM/L	2.34	GRADIENT INTERVAL	-5.00/	5.00
800	.000	-.37370	.06310	.07740	.00510	.00000
801	-.24280	.06300	.06320	.00320	.00000	.00140
800	-13350	.06350	.06620	.00250	.00010	.00130
800	-11180	.06070	.06660	.00170	.00010	.00120
798	-10460	.07370	.06280	.00230	.00020	.00140
801	-23480	.06740	.06430	.00270	.00040	.00180
801	-33360	.06670	.04730	.00440	.00020	.00190
802	-46660	.06760	.04330	.00530	.00000	.00240
801	-58330	.07270	.03360	.00310	.00040	.00210
801	-70960	.07430	.02850	.00390	.00080	.00230
GRADIENT	.05411	-.00087	-.00160	-.00032	.00001	.00003

MACH	ALPHA	CM	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
.800	-4.600	-39700	.09020	.09100	.00500	.00000	.00110	-.36830	.12170	.05720
.800	-2.370	-26340	.06940	.06320	.00360	.00000	.00110	-.25931	.10030	.05290
.801	-.210	-13610	.09030	.07730	.00130	.00010	.00130	-.13780	.09100	.05090
.801	2.280	-10130	.06600	.07290	.00260	.00000	.00140	-.02030	.08330	.04750
.801	4.230	-11230	.06180	.06340	.00200	.00030	.00120	.10600	.08990	.04490
.801	6.390	-23260	.06030	.03676	.00270	.00040	.00280	.22220	.10370	.04600
.800	8.690	-34830	.07990	.03330	.00390	.00020	.00180	.33240	.13140	.04400
.800	10.630	-46640	.07240	.04610	.00430	.00020	.00200	.44310	.16610	.04310
.800	13.010	-58240	.06740	.03290	.00490	.00100	.00260	.54780	.21630	.04970
.800	15.280	-71330	.06740	.02360	.00260	.00090	.00180	.66707	.27270	.05420
GRADIENT	.03736	-.00092	-.00279	-.00033	.00003	.00003	.00002	.05370	-.00336	-.00136

RUN NO.	90/0	RM/L	2.30	GRADIENT INTERVAL	-5.00/	5.00
800	.000	-39700	.09020	.09100	.00500	.00000
800	-26340	.06940	.06320	.00360	.00000	.00110
801	-13610	.09030	.07730	.00130	.00010	.00130
801	-10130	.06600	.07290	.00260	.00000	.00140
801	-11230	.06180	.06340	.00200	.00030	.00120
801	-23260	.07990	.03330	.00390	.00020	.00180
800	-34830	.07240	.04610	.00430	.00020	.00200
800	-46640	.06740	.03290	.00490	.00100	.00260
800	-58240	.06740	.02360	.00260	.00090	.00180
800	-71330	.06740	.02360	.00260	.00090	.00180
GRADIENT	.03736	-.00092	-.00279	-.00033	.00003	.00003

MACH	ALPHA	CM	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
.801	-4.600	-41930	.11900	.10630	.00360	.00010	.00100	-.40600	.13560	.05000
.800	-2.440	-28670	.10000	.09280	.00380	.00010	.00130	-.26420	.11140	.05350
.802	-.210	-12420	.09830	.07710	.00250	.00010	.00150	-.12380	.09880	.05280
.800	2.640	-10120	.09920	.06590	.00230	.00030	.00200	.00670	.09930	.04920
.800	4.220	-13180	.09760	.05960	.00270	.00060	.00250	.12435	.10710	.04690
.801	6.430	-24710	.09370	.03370	.00310	.00010	.00250	.23490	.12180	.04370
.800	8.630	-37760	.09120	.03900	.00390	.00020	.00240	.33960	.14680	.04400
.800	10.800	-50210	.09360	.02230	.00460	.00020	.00270	.47330	.18190	.04620
.800	13.010	-61730	.08490	.01120	.00400	.00030	.00260	.57650	.23330	.04990
.801	15.300	-73260	.10000	-.00340	.00260	.00190	.00190	.69960	.29300	.05160
GRADIENT	.04139	.00002	-.00340	-.00036	.00003	.00003	.00017	.05972	-.00261	-.00110

RUN NO.	99/0	RM/L	2.47	GRADIENT INTERVAL	-5.00/	5.00
801	.000	-41930	.11900	.10630	.00360	.00010
800	-28670	.10000	.09280	.00380	.00010	.00130
802	-12420	.09830	.07710	.00250	.00010	.00150
800	-10120	.09920	.06590	.00230	.00030	.00200
800	-13180	.09760	.05960	.00270	.00060	.00250
801	-24710	.09370	.03370	.00310	.00010	.00250
800	-37760	.09120	.03900	.00390	.00020	.00240
800	-50210	.09360	.02230	.00460	.00020	.00270
800	-61730	.08490	.01120	.00400	.00030	.00260
801	-73260	.10000	-.00340	.00260	.00190	.00190
GRADIENT	.04139	.00002	-.00340	-.00036	.00003	.00017

REFERENCE DATA

SREF = .6033 SA-FT. YMRP = 12.6255 IN.
 LREF = .5935 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

BETA = .000 ELEVON = .000
 BDFLAP = -11.700

PARAMETRIC DATA

RUN NO. 88/ 0 RN/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.952	-4.670	-.39150	.11040	.10480	.00610	-.00030	.00140	-.38120	.14190	-.09980
.948	-2.440	-.23795	.11040	.07670	.00460	.00030	.00170	-.23300	.12040	.05500
.951	-.240	-.07370	.11560	.04490	.00360	.00020	.00160	-.07320	.11590	.05830
.950	2.080	.07500	.11090	-.02770	.00280	.00000	.00190	.07090	.11360	.05250
.946	4.370	.21330	.10890	-.01070	.00290	.00020	.00200	.20440	.12490	.05120
.951	6.580	.35170	.11280	-.00430	.00240	.00100	.00260	.33650	.15240	.05060
.950	8.700	.45670	.10810	-.00810	.00340	.00190	.00300	.43500	.17600	.05500
.951	10.930	.58710	.10810	-.02050	.04400	.00120	.00200	.55600	.21740	.05500
.951	13.130	.71450	.11420	-.03660	.00650	.00110	.00180	.66990	.27350	.06120
.952	15.390	.84330	.11500	-.04770	.00840	.00150	.00060	.78440	.33520	.06500
GRADIENT		.06734	-.00012	-.01048	-.00036	-.00002	.00006	.06525	-.00178	-.00087

RUN NO. 87/ 0 RN/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
1.501	-4.600	-.32670	.13210	.09360	.00230	.00040	.00220	-.31510	.15790	.05300
1.502	-2.350	-.17610	.13480	.05950	.00300	.00040	.00140	-.17240	.14200	.05820
1.502	-.130	-.03660	.13900	.02840	.00260	.00040	.00120	-.03620	.13910	.05400
1.502	2.070	.09960	.13970	-.00020	.00280	.00020	.00120	.09450	.14320	.05400
1.502	4.320	.23190	.14020	-.02480	.00330	.00020	.00130	.22060	.15730	.05590
1.502	6.670	.37150	.14000	-.04690	.00400	.00030	.00130	.35270	.18210	.05950
1.508	8.870	.49380	.13320	-.05630	.00210	.00020	.00140	.46730	.20780	.05810
1.508	11.080	.62090	.13130	-.06760	.00090	.00100	.00230	.58410	.24610	.06010
1.500	13.360	.75920	.13190	-.08430	.00040	.00080	.00310	.70820	.30370	.06300
1.501	15.570	.87470	.13310	-.09560	.00040	.00110	.00260	.80690	.36300	.06660
GRADIENT		.06266	.00095	-.01328	.00008	-.00003	-.00009	.06012	-.00000	.00034

RUN NO. 86/ 0 RN/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
1.499	-4.350	-.23110	.13210	.04010	.00260	.00110	.00140	-.22040	.14930	.03870
1.500	-2.050	-.11440	.13270	.01960	.00165	.00100	.00110	-.10960	.13670	.03940
1.501	.110	-.00370	.13280	.00000	.00280	.00100	.00100	-.00660	.13280	.04030
1.499	.500	.01420	.13290	-.00340	.00170	.00090	.00130	.01300	.13300	.04050
1.499	2.890	.11660	.13190	-.02120	.00170	.00080	.00090	.11230	.13730	.04190
1.498	4.930	.22890	.12920	-.03780	.00220	.00090	.00070	.21690	.14840	.04290
1.498	7.220	.34660	.12660	-.05210	.00220	.00090	.00030	.32590	.16910	.04480
1.498	9.400	.44830	.12570	-.06310	.00170	.00080	.00040	.41980	.19690	.04740
1.497	11.600	.54950	.12530	-.07480	.00430	.00010	-.00060	.51310	.23330	.04970
1.496	13.970	.66680	.12320	-.08960	.00340	.00040	.00050	.61740	.28060	.05020
1.496	16.060	.76740	.11920	-.10030	.00170	.00070	.00110	.70450	.32690	.05010
GRADIENT		.04949	-.00028	-.00843	-.00003	-.00003	-.00007	.04706	-.00006	.00047



ARC 66-709 OAS9 OAL1A-(RS V8)*STRUT

PARAMETRIC DATA

BETA = .000 ELEVON = .000
 BDFLAP = -11.700
 XMRP = 12.6255 IN.
 YMRP = .0000 IN.
 ZMRP = -.3750 IN.
 SCALE = .0150

RUN NO. 85/ 0 RN/L = 2.45 GRADIENT INTERVAL = -5.00/ 5.00

REFERENCE DATA

MACH	ALPHA	CN	CA	CLMFD	CY	CYN	CBL	CL	CD	CAB
1.997	-4.840	-2.0910	.11510	.00400	.00610	.00140	.00000	-.19850	.13330	.02150
2.003	-5.700	-1.3060	.11750	-.00240	.00470	.00130	.00000	-.12310	.12350	.02200
2.002	-5.350	-.04670	.11700	-.01060	.00410	.00110	.00000	-.04360	.11740	.02290
1.999	1.690	.03620	.11540	-.02100	.00360	.00100	.00020	.03270	.11640	.02420
1.999	3.890	.12130	.11460	-.03080	.00320	.00100	.00020	.11330	.12260	.02520
1.996	6.040	.20250	.11250	-.03610	.00230	.00080	.00010	.18960	.13320	.02610
1.996	8.170	.28450	.11060	-.04360	.00230	.00060	.00030	.26590	.14990	.02660
1.999	10.360	.36480	.10640	-.04650	.00180	.00060	.00030	.33930	.17220	.02700
1.999	12.610	.43020	.10510	-.04630	.00230	.00040	.00040	.41640	.20090	.02750
1.999	14.660	.53600	.10140	-.05130	.00300	.00040	.00070	.49200	.23570	.02760
1.999	GRADIENT	.03789	-.00024	-.00404	-.00032	-.00005	.00003	.03376	-.00129	.00044

DATE 09 AUG 74

0439 TABULATED SOURCE DATA

ARC 66-709 0439 0411A-(RS V6)+STRUT

(RER013) (25 APR 74

PARAMETRIC DATA

BETA = .000 ELEVON = 19.000
BDFLAP = -11.700

REFERENCE DATA

SRF = .0033 50.FT. XMRP = 12.6255 IN.
LRF = .5935 FT. YMRP = .0500 IN.
BRF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0150

MACH	ALPHA	CN	CA	CLMPWD	CY	CYN	CBL	CL	CD	CAB
.600	-3.910	.00190	.10500	-.10110	-.00090	.00030	.00190	-.00910	.10460	-.06500
.601	-1.790	.10000	.10770	-.10140	-.00040	.00020	.00210	.10330	.10450	.06260
.601	.370	.20270	.10730	-.10070	-.00090	.00010	.00200	.20200	.10870	-.05950
.601	2.480	.29970	.10140	-.10080	-.00210	.00010	.00190	.29510	.11420	.03710
.601	4.590	.39820	.09090	-.09690	-.00190	.00000	.00230	.38970	.12250	.05340
.600	6.760	.51350	.08060	-.10110	-.00390	.00000	.00240	.50050	.13990	.03210
.599	8.940	.65520	.06930	-.11270	-.00300	-.00010	.00220	.63670	.16930	.03200
.600	11.190	.80230	.06010	-.12460	-.00170	-.00020	.00240	.77540	.21470	.03260
.601	13.370	.88970	.06810	-.11940	-.00200	-.00030	.00190	.84980	.27190	.03550
.601	15.590	.97480	.07440	-.11210	-.00320	-.00030	.00220	.91690	.33370	.03920
	GRADIENT	.04670	-.00162	.00042	-.00034	-.00003	.00003	-.04465	.00214	-.00136

RUN NO. 115/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMPWD	CY	CYN	CBL	CL	CD	CAB
.600	-4.040	-.03940	.10780	-.09280	.00000	.00030	.00190	-.03170	.11040	-.06650
.600	-1.910	.07960	.11140	-.09220	.00040	.00020	.00220	.06320	.10870	.06250
.600	.290	.18660	.11090	-.09630	-.00120	.00010	.00250	.18610	.11180	-.05990
.700	2.410	.29500	.10540	-.09990	-.00220	.00020	.00230	.28730	.11780	.03720
.701	4.620	.40720	.09640	-.09940	-.00180	.00000	.00240	.39610	.12890	.03290
.699	6.800	.53150	.08430	-.10760	-.00190	.00000	.00260	.51780	.14660	.03270
.701	9.050	.64620	.07630	-.12450	-.00320	.00000	.00240	.66560	.16340	.03200
.700	11.190	.75900	.08420	-.11580	-.00140	.00000	.00230	.72830	.22950	.03350
.700	13.420	.80020	.08490	-.11760	-.00340	-.00020	.00340	.81640	.28690	.03630
.697	15.610	.97560	.08690	-.10800	-.00090	-.00070	-.00100	.91620	.34630	.06140
	GRADIENT	.05109	-.00133	-.00092	-.00029	-.00003	.00003	-.04915	.00212	-.00150

RUN NO. 114/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMPWD	CY	CYN	CBL	CL	CD	CAB
.600	-4.250	-.10110	.11440	-.07070	.00060	.00040	.00220	-.09230	.12160	-.06680
.601	-2.020	.03520	.11680	-.07820	-.00010	.00020	.00210	.03930	.11550	.06290
.601	.150	.15940	.11760	-.08550	-.00010	.00010	.00280	.15910	.11800	-.06030
.601	2.370	.27940	.11300	-.09320	-.00130	.00010	.00290	.27450	.12440	.05780
.600	4.570	.41430	.10530	-.10460	-.00190	.00010	.00300	.40460	.13800	.05430
.601	6.770	.55660	.10090	-.11920	-.00380	.00030	.00380	.54080	.16580	.05320
.600	8.990	.63460	.10360	-.11210	-.00230	-.00010	.00320	.61060	.20150	.05330
.600	11.090	.74750	.10350	-.11310	-.00280	.00000	.00350	.71160	.24540	.05500
.601	13.260	.85690	.11290	-.12300	-.00240	-.00020	.00320	.80620	.30650	.05980
.600	15.540	.99520	.11230	-.12690	-.00200	-.00030	.00260	.92870	.37490	.06350
	GRADIENT	.05768	-.00100	-.00385	-.00028	-.00003	.00011	-.05379	.00189	-.00137

RUN NO. 113/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00



DATE 29 AUG 74 OAS9 TABULATED SOURCE DATA

(RER013) (25 APR 74)

ARC 68-709 OAS9 0A11A-(R5 V6)*STRUT

PARAMETRIC DATA

BETA = .000 ELEVON = 15.000
BDFLAP = -11.700

REF = .0033 90.FT. THRP = 12.6255 IN.
LREF = .5935 FT. THRP = .0000 IN.
BREF = 1.1710 FT. ZHRP = -.3750 IN.
SCALE = .0150

RUN NO. 112/ 0 RM/L = 2.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.900	-4.430	-1.16000	.12770	-.04790	.00030	.00110	.00170	-.14960	.13970	.06710
.903	-2.210	-.00990	.13090	-.06910	-.00020	.00060	.00220	-.00480	.13120	.06650
.902	.000	-.13440	.13310	-.08710	-.00030	.00063	.00220	.13440	.13310	.06410
.901	2.280	-.27860	.13490	-.10230	-.00070	.00040	.00260	.14590	.14590	.06220
.902	4.470	-.42240	.13590	-.12120	-.00350	.00080	.00300	.16840	.16840	.05990
.901	6.720	-.55230	.12470	-.13100	-.00290	.00100	.00310	.19240	.19240	.05690
.899	8.920	-.67360	.12810	-.13960	-.00420	.00060	.00360	.23590	.23590	.05700
.902	11.100	-.77200	.13200	-.14040	-.00280	.00020	.00340	.27820	.27820	.06010
.901	13.340	-.86010	.13830	-.15010	-.00150	-.00030	.00210	.33760	.33760	.06240
.900	15.530	1.00900	.1150	-.15840	-.00300	-.00010	.00180	.40660	.40660	.06660
GRADIENT		.06920	.00091	-.00896	-.00076	-.00004	.00013	.06272	.00323	-.00084

RUN NO. 111/ 0 RM/L = 2.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
1.198	-4.550	-.17230	.15970	-.02220	.00000	.00130	.00130	-.15910	.17290	.06220
1.202	-2.310	-.03010	.16150	-.05690	.00140	.00080	.00110	-.02350	.16260	.06080
1.202	-.110	.11210	.16540	-.06800	.00200	.00060	.00150	.11240	.16320	.06060
1.199	2.290	-.25720	.16640	-.11830	.00030	.00070	.00150	.25030	.17630	.05950
1.198	4.520	-.39850	.16930	-.14530	-.00130	.00030	.00190	.38190	.20000	.06230
1.202	6.730	-.53110	.17130	-.16700	-.00200	.00030	.00140	.50740	.23240	.06420
1.199	9.090	-.67220	.16840	-.18430	-.00120	.00040	.00170	.63710	.27240	.06500
1.200	11.310	-.80660	.16960	-.19900	-.00180	.00040	.00150	.73770	.32480	.06780
1.200	13.580	-.94070	.17220	-.20960	-.00180	.00040	.00220	.87400	.38830	.07050
1.199	15.850	1.05500	.17180	-.21080	-.00220	.00080	.00180	.96750	.45330	.07110
GRADIENT		.06265	.00106	-.01347	-.00017	-.00009	.00004	.05961	.00301	-.00005

RUN NO. 110/ 0 RM/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
1.300	-4.330	-.13080	.15080	-.03450	.00180	.00160	.00150	-.11880	.16020	.04480
1.300	-2.140	-.02320	.15190	-.05480	.00180	.00120	.00110	-.01750	.15260	.04450
1.300	.110	.08630	.15200	-.07370	.00110	.00120	.00120	.08600	.15210	.04490
1.498	2.270	-.19200	.15160	-.09030	.00110	.00120	.00090	.18590	.15910	.04440
1.499	4.580	-.30330	.15080	-.10790	.00060	.0010	.00080	.29030	.17450	.04500
1.498	6.710	-.40930	.14990	-.12340	.00040	.00090	.00070	.38890	.19670	.04630
1.502	8.970	-.51930	.15090	-.13880	-.00010	.00070	.00080	.48940	.23000	.04920
1.501	11.230	-.62980	.13340	-.15370	-.00070	.00060	.00060	.58790	.27310	.05160
1.500	13.460	-.73540	.15400	-.16820	.00010	.00070	.00100	.67930	.32090	.05370
1.501	15.750	-.84830	.15270	-.18240	-.00110	.00040	.00120	.77500	.37720	.05460
GRADIENT		.04872	-.00001	-.00820	-.00012	-.00004	-.00007	.04595	.00159	-.00001

REFERENCE DATA PARAMETRIC DATA

SREF = .6033 58.FT. YMRP = 12.6255 IN. BETA = .000 ELEVOM = 19.000
 LREF = .5935 FT. YMRP = .0000 IN. BCFLAP = -11.700
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

RUN NO. 109 / 0 RN/L = 2.45 GRADIENT INTERVAL = -5.00 / 5.50

MACH	ALPHA	CM	CA	CLMFWD	CY	CYN	CBL	CL	CD	CAB
2.001	-4.860	-14780	.12650	-.03940	.00620	.00210	.00010	-.13660	.13660	.02320
2.001	-2.650	-.06480	.12710	-.04850	.00350	.00160	.00010	-.05890	.12990	.02330
2.001	-.540	.01560	.12700	-.05650	.00320	.00140	.00020	.01670	.12690	.02320
2.001	1.600	.09490	.12760	-.06580	.00370	.00150	.00030	.09130	.13040	.02400
2.001	3.910	.17900	.12750	-.07560	.00270	.00130	.00040	.16990	.13940	.02460
1.998	6.010	.23730	.12730	-.08310	.00260	.00110	.00030	.24260	.15360	.02540
2.001	6.140	.33140	.12630	-.08890	.00220	.00110	.00060	.31020	.17190	.02620
2.003	10.360	.41850	.12670	-.09380	.00230	.00080	.00060	.38690	.19990	.02710
2.001	12.480	.49650	.12310	-.09790	.00160	.00070	.00080	.46070	.23010	.02730
2.001	14.670	.58790	.12330	-.10400	.00160	.00060	.00100	.53750	.26020	.02760
2.001	GRADIENT	.03732	.00012	-.00411	-.00031	-.00006	.00504	.03502	.00011	.00016



DATE 29 AUG 74 OAS9 TABULATED SOURCE DATA

(HER014) (25 APR 74)

ARC 66-709 OAS9 OA11A-(R? V8)*STRUT

PARAMETRIC DATA

SREF = .6033 50.FT. YMRP = 12.6235 IN. BETA = .000 ELEVOM = .000
 LREF = .5935 FT. YMRP = .0000 IN. BDFLAP = 16.300
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

RUN NO. 101/ 0 RN/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CM	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
.602	-3.970	-22020	.06670	-.00320	.00470	-.00040	.00140	-.21500	-.06180	.04720
.600	-1.680	-.11850	.07050	-.00350	.00310	-.00020	.00140	-.11610	.07440	.04590
.601	.270	-.10180	.07160	-.00340	.00330	-.00040	.00170	-.01120	.07160	.04400
.599	2.360	.08770	.06750	-.00690	.00580	-.00040	.00180	.08490	.07110	.04220
.598	4.480	.19440	.05930	-.00990	.00520	-.00060	.00170	.18920	.07430	.04090
.599	6.650	.30510	.04960	-.01200	.00540	-.00040	.00160	.29730	.06450	.04150
.600	8.720	.40950	.03820	-.01200	.00400	-.00050	.00110	.39890	.09990	.04120
.599	10.880	.53910	.02700	-.01890	.00610	-.00100	.00210	.52430	.12830	.04260
.600	13.040	.66190	.03640	-.03000	.00550	-.00070	.00210	.63660	.18480	.04560
.599	15.200	.77870	.03830	-.03330	.00430	-.00100	.00220	.74140	.24120	.05060
GRADIENT		.04896	-.00084	-.00079	.00008	-.00003	.00095	.04775	-.00087	-.00077

RUN NO. 100/ 0 RN/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CM	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
.698	-3.710	-22000	.07000	.00140	.00510	-.00020	.00140	-.21590	-.06410	.04630
.701	-1.630	-.11000	.07350	-.00180	.00270	-.00040	.00150	-.10790	.07660	.04660
.702	.530	-.00560	.07320	-.00280	.00440	-.00010	.00160	-.00630	.07320	.04630
.701	2.690	.10440	.06790	-.00580	.00490	-.00050	.00190	.10110	.07280	.04230
.698	4.900	.21640	.06010	-.00890	.00360	-.00060	.00160	.21050	.07630	.04060
.699	7.030	.33270	.05030	-.01280	.00420	-.00030	.00140	.32400	.09070	.04090
.699	9.240	.46260	.03940	-.01770	.00520	-.00040	.00140	.45020	.11310	.04180
.700	11.400	.59300	.04440	-.02660	.00470	-.00040	.00210	.56280	.15880	.04410
.700	13.570	.70320	.04820	-.03240	.00450	-.00070	.00230	.67420	.21230	.04790
.699	15.760	.81000	.03320	-.03220	.00530	-.00090	.00150	.76510	.27123	.05400
GRADIENT		.05047	-.00119	-.00114	-.00004	-.00004	.00094	.04921	-.00070	-.00092

RUN NO. 99/ 0 RN/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CM	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
.601	-3.900	-22480	.07560	.00820	.00500	-.00040	.00110	-.24230	-.09230	.05130
.601	-1.750	-.12960	.07780	.00420	.00440	-.00020	.00140	-.12720	.08170	.05670
.601	.440	-.01280	.07740	.00210	.00270	-.00040	.00140	-.01340	.07730	.04640
.601	2.660	.10130	.07140	-.00190	.00400	-.00030	.00160	.09790	.07610	.04500
.601	4.850	.22610	.06560	-.00750	.00390	-.00040	.00140	.21980	.06440	.04300
.601	7.030	.35790	.05930	-.01840	.00330	-.00020	.00220	.34790	.10270	.04160
.798	9.190	.47290	.06080	-.02400	.00360	-.00050	.00220	.43710	.13550	.04330
.798	11.410	.58710	.06300	-.03000	.00370	-.00050	.00296	.56300	.17790	.04610
.799	13.620	.71440	.04350	-.04350	.00330	-.00100	.00330	.67750	.23760	.05180
.799	15.790	.84070	.07490	-.05060	.00430	-.00120	.00210	.78860	.30080	.05710
GRADIENT		.05382	-.00121	-.00172	-.00012	-.00001	.00004	.05245	-.00097	-.00129

(RER014) (25 APR 74)

ARC 66-709 OAS5 OAL11A-(R5 V8)-STRUT

PARAMETRIC DATA

BETA = .000 ELEVON = .000
BDFLAP = 16.300

REFERENCE DATA

SREF = .8033 SQ.FT. XMRP = 12.8255 IN.
LREF = .5935 FT. YMRP = .0000 IN.
BREF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0150

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.903	-4.580	-3.2750	.06700	.03120	.00420	-.00010	.00080	-.31950	.11290	.05630
.900	-2.290	-1.6570	.09080	.02090	.00340	-.00030	.00120	-.18150	.09820	.05520
.901	.040	-.03620	.09040	.00710	-.00320	-.00030	.00120	-.03630	.09040	.05150
.902	.370	-.01150	.09390	.00260	.00360	-.00020	.00170	-.01210	.09390	.05350
.898	2.470	.10730	.08860	-.00460	-.00360	-.00040	.00290	.10340	.09310	.05070
.899	4.760	.25020	.08650	-.00930	.00250	-.00040	.00250	.22220	.10530	.04770
.900	6.950	.34800	.08460	-.01690	.00190	-.00110	.00270	.33600	.12620	.04570
.898	9.110	.46220	.08460	-.02580	.00300	-.00070	.00590	.44290	.15680	.04610
.900	11.320	.59560	.08960	-.04490	.00450	-.00160	.00320	.56630	.20490	.04950
.897	13.350	.71390	.09100	-.05790	.00670	-.00240	.00250	.67270	.25580	.05310
.899	15.810	.87630	.09950	-.08280	.00320	-.00150	.00110	.81610	.33440	.06090
	GRADIENT	.06014	-.00012	-.00457	-.00013	-.00003	.00018	-.05845	-.00068	-.00092

RUN NO. 58/ 0 RM/L = 2.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
1.202	-4.830	-.28680	.13110	.05200	.00360	.00020	.00150	-.27530	.15360	.09270
1.200	-2.420	-1.4370	.13390	.01970	.00140	-.00020	.00170	-.13000	.15980	.05180
1.200	.170	.00630	.13770	-.01760	.00240	-.00010	.00140	.006670	.13760	.05330
1.202	2.110	.14260	.14050	-.04790	.00350	.00010	.00120	.13740	.14570	.05440
1.201	4.340	.26370	.14320	-.07480	.00230	-.00010	.00130	.27210	.16430	.05660
1.200	6.370	.41730	.14340	-.09670	.00290	-.00020	.00150	.39820	.19020	.05870
1.199	8.860	.54330	.13990	-.10950	.00230	-.00010	.00150	.51550	.22190	.06000
1.199	11.090	.67090	.13880	-.12190	-.00050	.00100	.00270	.63170	.26520	.06170
1.203	13.350	.80380	.14030	-.13900	-.00300	.00140	.00390	.74970	.32210	.06490
1.198	15.800	.93080	.13840	-.14970	-.00160	.00120	.00250	.85930	.38370	.06630
	GRADIENT	.06352	.00137	-.01429	-.00004	-.00003	-.00054	.06098	.00120	-.00047

RUN NO. 97/ 0 RM/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
1.900	-4.350	-1.9920	.13450	.00940	.00350	.00100	.00140	-.18840	.14920	.03950
1.901	-2.190	-.08810	.13340	-.01170	.00360	.00100	.00130	-.08280	.13870	.03990
1.900	.050	.02540	.13430	-.03360	.00350	.00100	.00120	.02530	.13430	.04030
1.900	2.230	.13260	.13430	-.05300	.00290	.00090	.00090	.12730	.13930	.04110
1.499	4.460	.24380	.13330	-.07250	.00230	.00070	.00100	.23260	.15180	.04250
1.900	6.710	.39530	.13190	-.08910	.00230	.00070	.00040	.33750	.17230	.04400
1.498	8.900	.45910	.13070	-.10280	.00250	.00060	.00060	.43330	.20020	.04550
1.497	11.120	.56850	.13080	-.11780	.00290	.00010	.00040	.53260	.23790	.04750
1.902	13.330	.68800	.12860	-.13110	.00450	-.00040	-.00040	.62010	.28010	.04870
1.498	15.370	.79220	.12730	-.14890	.00210	-.00020	.00020	.72890	.33930	.04670
	GRADIENT	.05021	-.00016	-.00931	-.00003	-.00003	-.00055	.54774	.05027	-.00033

RUN NO. 96/ 0 RM/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00



0499 TABULATED SOURCE DATA

ARC 86-709 0499 0411A-(85 V8)*STRUT

(RER014) (85 APR 74)

PARAMETRIC DATA

REF = .6033 30.FT. ZMRP = 12.6255 IN.
 LREF = .5933 FT. ZMRP = -.0000 IN.
 REF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

BETA = .000 ELEVON = .000
 BDFLAP = 16.300

RUN NO. 95/ 0 RM/L = 2.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFD	CY	CYN	CBL	CL	CD	CAB
2.000	-4.760	-1.0750	.11950	-.01590	.00560	.00110	.00000	-.17690	.13470	.02230
2.003	-2.680	-1.1720	.12010	-.02310	.00430	.00100	.00000	-.10140	.12500	.02260
2.000	-.540	-.02230	.11900	-.03360	.00390	.00090	.00000	-.02120	.11960	.02290
2.000	1.620	.05990	.11800	-.04460	.00380	.00080	.00010	.05660	.11960	.02330
1.997	3.840	.14540	.11670	-.05310	.00370	.00070	.00020	.13750	.12610	.02400
1.997	9.970	.22550	.11550	-.06530	.00360	.00070	.00020	.21230	.13830	.02470
1.997	6.150	.30480	.11430	-.07130	.00360	.00050	.00030	.29750	.15660	.02540
2.003	10.330	.38840	.11200	-.07630	.00390	.00050	.00040	.36200	.17960	.02570
1.997	12.510	.47410	.10990	-.08140	.00310	.00010	.00030	.43900	.21000	.02610
1.997	14.740	.56320	.10730	-.08700	.00440	.00010	.00070	.51740	.24710	.02670
GRADIENT		.03857	-.00036	-.00468	-.00021	-.00005	.00002	.03651	-.00103	.00019

ARC 66-709 QASS OASS- (RS V8)+STRUT

(RERDIS) (25 APR 74)

REFERENCE DATA

BREF = .6033 30.FT. ZMRP = 12.6255 IN.
 LBREF = .5935 FT. YMRP = .0000 IN.
 SBREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0130

BETA = .000 ELEVOM = .000
 BDFLAP = .000

PARAMETRIC DATA

RUN NO. 106/ 0 RM/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.599	-4.170	-2.8840	.06430	.03560	.00040	-.00100	.00950	-.28290	.05510	.04710
.598	-2.050	-.16250	.06990	.03290	-.00060	-.00090	.00090	-.17990	.07640	.04580
.601	-.100	-.07970	.07050	.03190	-.00170	-.00090	.00090	-.07990	.07050	.04540
.599	2.240	.02410	.06660	.03210	-.00260	-.00080	.00100	.02140	.06950	.04360
.600	4.400	.13190	.06110	.03070	-.00320	-.00090	.00100	.12680	.07110	.04170
.600	6.620	.24040	.04910	.02890	-.00230	-.00100	.00080	.23310	.07640	.04100
.600	8.690	.34560	.03740	.02600	-.00090	-.00090	.00000	.33600	.08910	.04110
.600	10.840	.47560	.02660	.02340	-.00010	-.00160	.00160	.46020	.11520	.04220
.600	13.000	.60040	.03360	.01300	-.00020	-.00100	.00190	.57750	.16780	.04550
.600	15.170	.71500	.03290	.00920	-.00110	-.00130	-.00020	.64150	.21680	.04690
GRADIENT		.04867	-.00056	-.00049	-.00043	.00001	.00005	.04763	-.00163	-.00061

RUN NO. 107/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.700	-4.280	-3.0960	.06840	.04430	.00110	-.00090	.00070	-.30390	.09140	.05050
.700	-2.130	-.19480	.07130	.03900	-.00030	-.00080	.00080	-.19200	.07850	.04720
.702	.080	-.08510	.07270	.03800	-.00110	-.00080	.00040	-.06520	.06040	.04630
.701	2.170	.01760	.06910	.03710	-.00260	-.00090	.00080	.01520	.06970	.04410
.700	4.360	.12650	.06180	.03490	-.00320	-.00090	.00100	.12140	.07120	.04230
.700	6.310	.24040	.05080	.03150	-.00260	-.00090	.00090	.23310	.07780	.04030
.699	8.750	.36400	.04020	.02920	-.00250	-.00090	.00060	.35370	.09500	.04090
.702	10.920	.49470	.03990	.01960	-.00030	-.00150	.00090	.47810	.13290	.04240
.699	13.030	.60830	.04360	.01280	-.00290	-.00110	.00220	.56270	.18000	.04650
.699	15.260	.71980	.04480	.01380	-.00100	-.00160	-.00110	.68260	.23270	.05040
GRADIENT		.05029	-.00071	-.00096	-.00050	-.00000	.00003	.04902	-.00228	-.00090

RUN NO. 106/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.789	-4.470	-3.4110	.07220	.05470	.00130	-.00080	.00050	-.33440	.09860	.05060
.601	-2.260	-.21680	.07430	.05030	.00090	-.00070	.00050	-.21570	.06280	.04760
.600	-.180	-.10130	.07500	.04640	-.00080	-.00080	.00090	-.16120	.07520	.04540
.601	2.140	.01420	.07170	.04560	-.00170	-.00070	.00070	.01150	.07220	.04520
.600	4.290	.13050	.06460	.04040	-.00260	-.00070	.00090	.12530	.07410	.04090
.789	6.470	.26120	.05940	.03170	-.00170	-.00070	.00110	.25300	.08750	.04120
.789	6.660	.37750	.05690	.02530	-.00120	-.00110	.00120	.36450	.11320	.04160
.786	10.660	.49100	.02260	.02260	-.00140	-.00090	.00200	.47120	.14990	.04570
.601	13.030	.60930	.06490	.01020	-.00030	-.00130	.00230	.57900	.20050	.04730
.789	15.260	.75420	.06670	.00480	-.00090	-.00150	.00120	.69080	.23760	.05250
GRADIENT		.05566	-.00081	-.00132	-.00047	.00001	.00005	.05230	-.00272	-.00101



DATE 29 AUG 74 OAS9 TABULATED SOURCE DATA

(SER013) (25 APR 74)

ARC #6 798 OAS9 OALIA-(R3 V8)+STREUT

PARAMETRIC DATA

BETA = .000 ELEVON = .000
SDFLAP = .000

REFERENCE DATA

SREF = .0033 88.FT. XMRP = 12.0255 IN.
LREF = .5935 FT. YMRP = .0000 IN.
BREF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0150

RUN NO. 103/ 0 RM/L = 2.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.899	-4.710	-.39080	.08500	.08080	.00150	-.00070	.00010	-.38250	.11680	.03230
.900	-2.390	-.24370	.08560	.06640	.00060	-.00080	.00070	-.23990	.09370	.05010
.899	-.210	-.10360	.08800	.05960	-.00050	-.00080	.00100	-.10330	.06840	.04670
.899	2.040	.03230	.08700	.04210	-.00190	-.00070	.00140	.02940	.08810	.04730
.901	4.260	.15710	.08550	.05470	-.00090	-.00040	.00190	.13030	.09690	.04490
.902	6.390	.28760	.08320	.03220	-.00030	-.00090	.00210	.25640	.11440	.04340
.899	6.840	.38740	.08100	.02360	-.00050	-.00100	.00150	.37090	.13830	.04170
.899	10.660	.50640	.08360	.01070	.00060	-.00150	.00230	.48200	.17750	.04530
.902	13.000	.63260	.08770	-.00940	.00100	-.00250	.00060	.59660	.22780	.04860
.899	15.260	.76810	.09000	-.02170	.00110	-.00230	.00110	.71730	.28920	.05350
GRADIENT		.06134	.00011	-.00350	-.00033	.00003	.00019	.05968	-.00213	-.00080

RUN NO. 104/ 0 RM/L = 2.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
1.199	-4.670	-.32160	.12480	.08400	.00060	.00030	.00130	-.31040	.15060	.04910
1.200	-2.420	-.17110	.12770	.04870	-.00040	.1020	.00110	-.16560	.13480	.04940
1.203	-.210	-.02730	.13240	.01480	-.00070	.00010	.00090	-.02690	.13250	.03130
1.202	2.040	.10950	.13320	-.01410	.00030	.00000	.00090	.10470	.13700	.03240
1.204	4.260	.24090	.13550	-.03820	-.00060	.00000	.00080	.23010	.15310	.03470
1.202	6.320	.37280	.13390	-.05980	-.00150	.00000	.00090	.35510	.17540	.03690
1.201	8.780	.49610	.13040	-.07130	-.00120	-.00010	.00090	.47230	.20490	.03870
1.198	11.020	.62870	.12720	-.08220	-.00240	.00080	.00190	.59080	.24400	.03950
1.204	13.290	.76090	.12910	-.10070	-.00100	.00020	.00200	.71090	.30060	.06360
1.200	15.500	.88060	.12650	-.10840	-.00360	.00060	.00220	.81470	.35730	.06330
GRADIENT		.06286	.00120	-.01374	-.00010	-.00004	-.00005	.06043	.00032	.00063

RUN NO. 105/ 0 RM/L = 2.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
1.501	-4.470	-.22750	.12850	.03320	.00100	.00110	.00120	-.21680	.14580	.03670
1.500	-2.240	-.11550	.12880	.01200	.00000	.00100	.00100	-.11040	.13320	.03610
1.500	.030	.00060	.12900	-.00450	.00050	.00100	.00080	.00550	.12900	.03930
1.498	2.180	.10370	.12850	-.02710	.00130	.00080	.00070	.09870	.13240	.04050
1.498	4.420	.21270	.12670	-.04410	.00090	.00060	.00060	.20230	.14270	.04160
1.498	6.600	.32160	.12430	-.05910	.00010	.00060	.00020	.30540	.16030	.04320
1.488	8.850	.42250	.12260	-.07020	-.00030	.00030	.00030	.39860	.18620	.04350
1.498	11.040	.52420	.12290	-.08160	-.00020	.00030	.00030	.49090	.22100	.04820
1.498	13.290	.63320	.12120	-.09630	.00070	-.00010	-.00040	.58400	.26350	.04880
1.487	15.510	.74510	.11750	-.10990	-.00050	.00040	.00070	.68650	.31230	.04900
GRADIENT		.04954	-.00018	-.00873	-.00003	-.00003	-.00007	.04718	-.00032	.00033

DATE 20 AUG 74

ARC 66-709 0439 0411A-(R5 V0)+STRUT

(RER019) (29 APR 74)

PARAMETRIC DATA

BETA = .000 ELEVOM = .000
BDFLAP = .000

REFERENCE DATA

SREF = .6033 94-FT. YMRP = 12.6235 IM.
LREF = .3935 FT. YMRP = .0050 IM.
BREF = 1.1710 FT. ZMRP = -.3750 IM.
SCALE = .0150

RUN NO. 102/ 0 RN/L = 2.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMPWD	CY	CYN	CBL	CL	CD	CAB
2.003	-4.890	-2.0280	.11610	-.00150	.00440	.00140	-.00010	-.19210	-.13300	.02090
2.004	-2.690	-.12190	.11640	-.00910	.00230	.00100	-.00020	-.11630	.12200	.02140
2.001	-.390	-.03970	.11510	-.01750	.00170	.00090	.00010	-.03650	.11550	.02240
2.001	1.560	.04220	.11390	-.02760	.00210	.00070	.00030	.03910	.11500	.02330
2.001	3.760	.12480	.11260	-.03760	.00130	.00060	.00020	.11720	.12030	.02400
2.001	5.940	.20610	.11070	-.04560	.00110	.00060	.00010	.13350	.13140	.02440
2.001	8.070	.28370	.10880	-.05070	.00210	.00060	.00020	.28570	.14750	.02490
1.999	10.270	.36410	.10600	-.05410	.00080	.00040	.00020	.33940	.16920	.02370
1.999	12.440	.44500	.10320	-.05730	.00070	.00040	.00030	.41230	.19660	.02630
1.999	14.700	.53600	.10000	-.06020	.00070	.00030	.00060	.49310	.23270	.02710
GRADIENT		.03798	-.00044	-.00421	-.00030	-.00009	.00064	.03588	-.00148	.00034

ARC 66-709 QASS QALIA-(RS VD)-STRUT

(REORIG) (25 APR 74)

REFERENCE DATA

BREF = .0033 50.FT. ZMRP = 12.6233 IM.
 LBREF = .0033 FT. YMRP = .0003 IM.
 BREF = 1.1710 FT. ZMRP = -.3750 IM.
 SCALE = .0130

PARAMETRIC DATA

ALPHA = .000 ELEVOM = .000
 SDFLAP = -11.700

RUN NO. 76/ 0 RM/L = 2.32 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CM	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.600	-15.070	-1.0480	.07200	.03170	.15510	.02930	-.02360	-1.0460	.07220	.06400
.700	-8.770	-1.0710	.07500	.04240	.09600	.01630	-.01310	-1.0700	.07520	.05330
.800	-6.670	-1.0740	.07570	.04800	.06600	.01190	-.00930	-1.0730	.07590	.05280
.900	-4.500	-1.0430	.07690	.03080	.04430	.00600	-.00320	-1.0640	.07710	.05270
.000	-2.390	-1.0810	.07710	.03340	.02230	.00390	-.00170	-1.0600	.07720	.05130
.100	-.300	-1.0450	.07770	.03350	.00160	.00030	-.00160	-1.0640	.07790	.04930
.200	.710	-1.0330	.07770	.03600	-.00670	-.00100	.00340	-1.0520	.07780	.04980
.300	1.770	-1.0320	.07630	.03610	-.01690	-.00300	.00300	-1.0310	.07670	.05010
.400	3.910	-1.0230	.07640	.03460	-.03400	-.00660	.00830	-1.0220	.07650	.05160
.500	6.930	-1.0940	.07260	.03260	-.05640	-.01610	.01220	-.09930	.07270	.05010
GRADIENT	.00082	-.00006	.00052	-.00071	-.00173	.00163	-.00007	-.00019		

RUN NO. 77/ 0 RM/L = 2.32 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CM	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.600	-15.050	-1.1760	.07480	.03900	.16100	.02890	-.02550	-1.1740	.07490	.06550
.700	-9.740	-1.1510	.07740	.03030	.10100	.01740	-.01560	-1.1500	.07760	.05610
.800	-6.620	-1.1690	.07630	.03410	.06890	.01150	-.00930	-1.1470	.07650	.05370
.900	-4.510	-1.1630	.07620	.03630	.04830	.00770	-.00560	-1.1610	.07640	.05260
.000	-2.340	-1.1610	.06060	.03910	.02310	.00380	-.00190	-1.1600	.06080	.05220
.100	-.260	-1.1390	.07420	.04060	.00080	.00010	.00160	-1.1360	.07450	.04970
.200	.850	-1.1430	.07910	.04060	-.00800	-.00130	.00330	-1.1410	.07930	.04890
.300	1.850	-1.1460	.07930	.04100	-.01890	-.00310	.00300	-1.1440	.07970	.04970
.400	3.900	-1.0910	.07660	.04030	-.03910	-.00640	.00840	-1.0890	.07680	.05050
.500	6.010	-1.0410	.07330	.03900	-.06060	-.00990	.01240	-.10790	.07350	.05090
GRADIENT	.00073	-.00001	.00048	-.01011	-.00167	.00166	-.00001	-.00074		

RUN NO. 76/ 0 RM/L = 2.33 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CM	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.700	-15.910	-1.1330	.06930	.04390	.17690	.02820	-.02430	-1.1300	.06930	.07230
.800	-10.130	-1.1670	.06330	.03600	.11300	.01720	-.01660	-1.1260	.06300	.05840
.900	-6.690	-1.1420	.06330	.03370	.07620	.01110	-.01040	-1.1240	.06360	.05430
.000	-4.670	-1.1430	.06300	.03450	.03450	.00760	-.00630	-1.1240	.06330	.05260
.100	-2.650	-1.1270	.06490	.03300	.02960	.00400	-.00240	-1.1220	.06320	.05150
.200	-.430	-1.1230	.06300	.03440	.00440	.00040	.00130	-1.1220	.06410	.05030
.300	.860	-1.1270	.06410	.03300	-.00360	-.00090	.00330	-1.1220	.06440	.05090
.400	1.900	-1.1260	.06420	.03300	-.00940	-.00120	.00360	-1.1230	.06430	.05140
.500	3.960	-1.1120	.06270	.03400	-.01620	-.00250	.00320	-1.1100	.06300	.04910
.600	6.010	-1.1610	.06140	.03630	-.04130	-.00590	.00860	-1.1390	.06160	.04990
GRADIENT	0.120	-1.1660	.06230	.03600	-.06200	-.00870	.01290	-1.1650	.06260	.05470
GRADIENT	.00071	-.00020	.00026	-.01079	-.00131	.00169	-.00021	-.00021		

A4C 66-709 0439 0411A-(IBS V8)*STRUT

(RECORD) (25 APR 74

PARAMETRIC DATA

ALPHA = .000 ELEVOM = .001
BCFLAP = -11.700

REFERENCE DATA

BREF = .6033 36.FT. TMRP = 12.6233 IN.
LREF = .5933 FT. TMRP = .0000 IN.
BREF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0150

MACH	BETA	CN	CA	CLMPWD	CY	CYN	CBL	CL	CD	CAB
.991	-15.426	-13230	-10910	.03100	.20300	.02350	-.03300	-.13200	-10960	-.07930
.999	-10.070	-12810	-10350	.06280	.13330	.01320	-.02060	-.12590	-10360	-.06340
.999	-6.670	-11750	-10170	.06030	.09140	.00850	-.01330	-.11730	-10190	-.03770
.999	-4.740	-11260	-10110	.07190	.06240	.00590	-.00800	-.11230	-10130	-.05630
.994	-2.340	-10290	-10400	.07290	.03360	.00310	-.00310	-.10270	-10420	-.04470
.991	-.380	-10200	-10400	.07480	.00660	.00070	-.00170	-.10180	-10420	-.05430
.999	.680	-10390	-10220	.07360	-.00360	-.00030	.00380	-.10580	-10240	-.03380
.993	.920	-10000	-10240	.07420	-.00490	-.00060	.00400	-.09980	-10260	-.05420
.990	1.700	-10410	-09970	.07640	-.01360	-.00120	.00370	-.10380	-09990	-.03110
.990	3.630	-10290	-09980	.07330	-.04330	-.00350	-.01640	-.10270	-10000	-.05200
.996	8.900	-09750	-10330	.06370	-.07130	-.00500	-.01370	-.09740	-10330	-.03700
GRADIENT	.00093	-.00026	-.00046	.00046	-.01234	-.00109	.00213	.00092	-.00026	-.00093

MACH	BETA	CN	CA	CLMPWD	CY	CYN	CBL	CL	CD	CAB
1.000	-13.730	-07870	-13490	.02880	.16690	.04720	-.01690	-.07640	-13310	-.06280
1.001	-10.090	-04790	-13720	.02900	.09920	.02750	-.00860	-.04780	-13720	-.05840
1.001	-6.630	-03370	-13770	.02600	.06630	.01770	-.03320	-.03360	-13770	-.05320
1.001	-4.630	-03030	-13790	.02660	.04810	.01180	-.00290	-.03020	-13800	-.05400
1.003	-2.350	-02360	-13730	.02340	.02920	.00660	-.00960	-.02330	-13750	-.05340
1.000	-.310	-02230	-13610	.02360	.00430	.00160	-.00210	-.02230	-13610	-.05000
1.001	.730	-02190	-13580	.02620	-.00410	-.00020	.00330	-.02190	-13580	-.04960
1.003	1.620	-02280	-13660	.02660	-.01630	-.00280	.00440	-.02270	-13660	-.05090
1.001	3.990	-02280	-13620	.02650	-.03600	-.00730	-.00700	-.02280	-13620	-.05230
1.002	6.360	-02410	-13740	.02990	-.03890	-.01240	-.00960	-.02410	-13740	-.05320
GRADIENT	.00046	-.00004	-.00021	.00021	-.01004	-.00220	.00115	.00043	-.00003	-.00032

MACH	BETA	CN	CA	CLMPWD	CY	CYN	CBL	CL	CD	CAB
1.000	-16.140	-07110	-12800	-.00390	.20290	.04760	-.02450	-.07680	-12820	-.04430
1.010	-10.400	-04100	-13220	-.00010	.11350	.02920	-.01470	-.04580	-13220	-.04350
1.000	-7.130	-03290	-13350	.00290	.07480	.01880	-.00940	-.03270	-13350	-.04350
1.000	-4.660	-02390	-13420	.00440	.05170	.01240	-.00390	-.02580	-13420	-.04180
1.000	-2.690	-02480	-13350	.00470	.02990	.00870	-.00300	-.02450	-13390	-.04110
1.000	-.470	-02220	-13270	.00340	.00650	.00120	-.00620	-.02210	-13270	-.04050
1.000	.460	-02170	-13240	.00370	-.00200	-.00080	.00146	-.02160	-13250	-.03960
1.000	1.690	-01990	-13260	.00320	-.01420	-.00360	-.00320	-.01980	-13260	-.03990
1.000	3.890	-02030	-13380	.00370	-.03320	-.00880	-.00620	-.02040	-13360	-.04060
1.002	8.900	-02060	-13270	.00310	-.05630	-.01430	-.00940	-.02050	-13280	-.04040
GRADIENT	.00072	-.00010	-.00019	.00019	-.01005	-.00242	.00139	.00072	-.00010	-.00010

DATE 28 AUG 74 QAS9 TABULATED SOURCE DATA

(RER018) (25 APR 74

ARC 66-7C9 QAS9 0411A-(R5 Y0)STRET

REF = .0033 30-FT. YMP = 12.0233 IN. ALPHA = .000 ELEVOM = .000
 LREF = .0033 FT. YMP = .0000 IN. BCFLAP = -11.700
 BREF = 1.1710 FT. ZMP = -.3750 IN.
 SCALE = .0150

REFERENCE DATA

PARAMETRIC DATA

RUN NO. 72/ 0 RM/L = 2.45 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CM	CA	CLMWD	CY	CYN	CBL	CL	CB	CAB
1.007	-15.100	-0.4200	-11930	-0.02950	-18750	-0.4160	-0.01940	-0.06170	-11840	-0.02320
2.002	-9.310	-0.3680	-11920	-0.02380	-10870	-0.2650	-0.01210	-0.03660	-11920	-0.02310
1.008	-6.190	-0.2610	-11810	-0.01900	-0.6610	-0.1730	-0.00760	-0.02390	-11810	-0.02440
1.008	-3.900	-0.2620	-11810	-0.01700	-0.4090	-0.1110	-0.00430	-0.02610	-11810	-0.02400
2.001	-1.720	-0.2410	-11920	-0.01430	-0.1700	-0.0330	-0.00170	-0.02400	-11920	-0.02310
2.001	.450	-0.2140	-11800	-0.01340	-0.06420	-0.0010	-0.00100	-0.02120	-11800	-0.02290
2.000	1.100	-0.0200	-11760	-0.01340	-0.00930	-0.00140	-0.00200	-0.02070	-11760	-0.02290
2.001	1.540	-0.0290	-11810	-0.01420	-0.01540	-0.00260	-0.00230	-0.02260	-11810	-0.02300
1.008	2.640	-0.0210	-11760	-0.01300	-0.02770	-0.00360	-0.00390	-0.02110	-11760	-0.02320
2.001	4.800	-0.0210	-11720	-0.01460	-0.04920	-0.0110	-0.00680	-0.02160	-11730	-0.02320
2.001	6.930	-0.0220	-11680	-0.01730	-0.07390	-0.01660	-0.00940	-0.02190	-11680	-0.02360
	GRADIENT	.00055	-0.00010	.00027	-0.01023	-0.00232	.00129	.00055	-0.00010	-0.00008

ARC 66-709 OAS9 GA11A-(R5 V8)+STRUT

(RER017) (25 APR 74)

REFERENCE DATA

SREF = .6033 58-FT. XMRP = 12.6255 IN.
 LREF = .5935 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

ALPHA = .000 ELEVON = .000
 BDFLAP = -11.700

RUN NO. 71/ 0 RN/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMFWD	CY	CYN	CBL	CL	CD	CAB
1.196	-15.260	-.06830	.13500	.02820	.16190	.04250	-.01650	-.06830	.13510	.06310
1.196	-9.740	-.04260	.13690	.02910	.03680	.02480	-.00940	-.04250	.13690	.05830
1.198	-6.450	-.03100	.13770	.02800	.06280	.01540	-.00580	-.03090	.13770	.05230
1.201	-4.280	-.02860	.13770	.02710	.04320	.01020	-.00360	-.02670	.13770	.05440
1.201	-2.140	-.02430	.13670	.02610	.02090	.00530	-.00110	-.02420	.13670	.05290
1.201	.020	-.02160	.13580	.02540	-.00070	.00070	.00120	-.02150	.13580	.05030
1.200	1.150	-.02060	.13610	.02600	-.01230	.00250	.00250	-.02060	.13610	.05050
1.202	2.190	-.02060	.13700	.02690	-.02330	.00400	.00360	-.02060	.13700	.05140
1.199	4.330	-.02260	.13660	.02610	-.04410	.00850	.00610	-.02260	.13660	.05360
1.200	6.470	-.02130	.13710	.03020	-.06410	.01320	.00890	-.02130	.13710	.05370
GRADIENT		.00060	.00007	.00011	-.01006	-.00216	.00112	.00059	.00007	-.00016

RUN NO. 70/ 0 RN/L = 2.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMFWD	CY	CYN	CBL	CL	CD	CAB
1.500	-15.710	-.06930	.12810	-.00640	.13360	.04580	-.02450	-.06890	.12830	.04570
1.499	-10.020	-.03620	.13160	.00110	.10770	.02770	-.01470	-.03800	.13170	.04580
1.500	-6.710	-.02870	.13250	.00400	.06790	.01770	-.00940	-.02850	.13250	.04300
1.500	-4.530	-.02510	.13370	.00380	.04370	.01170	-.00610	-.02490	.13370	.04190
1.500	-2.320	-.02280	.13310	.00410	.02380	.00610	-.00310	-.02260	.13310	.04110
1.499	-.120	-.01970	.13200	.00460	.00140	.00070	.00020	-.01960	.13200	.04010
1.499	.860	-.02110	.13210	.00470	-.00890	.00160	.00140	-.02100	.13210	.03990
1.500	2.060	-.02010	.13280	.00470	-.02080	-.00410	.00320	-.02000	.13280	.04010
1.502	4.210	-.02000	.13300	.00480	-.04130	.00940	.00610	-.01990	.13300	.04680
1.501	6.360	-.01930	.13180	.00480	-.06400	.01530	.00900	-.01920	.13180	.04100
GRADIENT		.00059	-.00009	.00012	-.00999	-.00240	.00140	.00057	-.00009	-.00018

RUN NO. 89/ 0 RN/L = 2.42 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMFWD	CY	CYN	CBL	CL	CD	CAB
1.899	-15.140	-.06050	.11760	-.03020	.19540	.04040	-.01970	-.06020	.11780	.02530
1.898	-9.500	-.03470	.11760	-.02470	.10890	.02570	-.01240	-.03450	.11770	.02570
2.001	-6.210	-.02540	.11720	-.02000	.06610	.01730	-.00820	-.02520	.11720	.02460
2.001	-3.970	-.02260	.11820	-.01740	.04000	.01130	-.00520	-.02250	.11820	.02410
1.899	-1.610	-.02190	.11760	-.01560	.01610	.00560	-.00230	-.02170	.11760	.02350
1.899	.360	-.02060	.11770	-.01330	-.00550	.00020	.00060	-.02040	.11780	.02340
1.898	1.460	-.02060	.11810	-.01310	-.01740	.00260	.00210	-.02050	.11810	.02350
2.001	2.550	-.02010	.11780	-.01330	-.02840	.00530	.00360	-.02000	.11780	.02310
2.006	4.700	-.01640	.11690	-.01690	-.05010	.01030	.00630	-.01830	.11690	.02340
2.004	6.690	-.01910	.11650	-.01860	-.07800	.01600	.00920	-.01900	.11660	.02400
GRADIENT		.00046	-.00010	.00008	-.01036	-.00251	.00133	.00046	-.00010	-.00008

(RER010) (23 APR 74)

ARC 68-709 OAS9 0A11A-(R5 Y0)*STRUT

PARAMETRIC DATA

ALPHA = 10.000 ELEVOM = .000
BDCLAP = -11.700

REFERENCE DATA

3REF = .6033 30.FT. YMRP = 12.6235 IN.
LREF = .5935 FT. YMRP = .0000 IN.
BREF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0150

RUN NO. 53/ 0 RN/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.801	-4.620	.45360	.02990	.04580	.04920	.00700	.00000	.44040	.11270	.04480
.803	-2.450	.45320	.02930	.04590	.02580	.00300	-.00010	.44010	.11200	.04420
.800	-.340	.44720	.02860	.04690	.00430	-.00060	-.00030	.43420	.11130	.04200
.599	.770	.44700	.02870	.04550	-.00380	-.00230	-.00070	.43410	.11010	.04290
.830	1.700	.44640	.02740	.04310	-.01680	-.00410	-.00110	.43380	.10870	.04220
.599	3.790	.44490	.02770	.04440	-.03620	-.00780	-.00120	.43230	.10870	.04430
.599	5.690	.44680	.03060	.03980	-.05860	-.01120	-.00090	.43360	.11200	.04810
.599	8.090	.44330	.03120	.03730	-.07840	-.01580	-.00110	.43210	.11220	.05130
.599	11.160	.43860	.03310	.03570	-.10550	-.02150	-.00080	.42520	.11280	.05440
.599	16.250	.42850	.04150	.02840	-.15350	-.03100	-.00020	.41370	.11910	.06830
GRADIENT		-.00117	-.00029	-.00017	-.01016	-.00175	-.00016	-.00109	-.00034	-.00012

RUN NO. 54/ 0 RN/L = 2.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.898	-4.570	.47310	.04770	.04090	.05210	.00580	-.00100	.45810	.13480	.04600
.897	-2.390	.47320	.04540	.04270	.02640	.00240	-.00040	.45670	.13210	.04380
.896	-.280	.46950	.04410	.04190	.00190	-.00040	.00020	.45330	.13020	.04320
.896	.720	.46800	.04410	.04150	-.00830	-.00160	.00010	.45180	.12980	.04290
.89	1.640	.46770	.04470	.04050	-.01870	-.00330	.00000	.45140	.13040	.04410
.896	3.680	.46320	.04330	.03950	-.04060	-.00730	-.00020	.44920	.12840	.04440
.899	5.990	.47350	.04390	.03900	-.06390	-.01090	.00000	.45720	.13070	.04860
.896	8.100	.46610	.04350	.03420	-.08440	-.01470	.00090	.45000	.12880	.05020
.897	11.280	.45610	.04440	.03600	-.11440	-.02090	.00100	.44010	.12770	.05750
.897	16.510	.43820	.05240	.03210	-.16870	-.03310	.00200	.41920	.13160	.07160
GRADIENT		-.00121	-.00046	-.00022	-.01094	-.00150	.00010	-.00111	-.00070	-.00016

RUN NO. 53/ 0 RN/L = 2.31 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
.798	-4.520	.46300	.06330	.04290	.05680	.00660	-.00070	.46430	.15470	.04680
.802	-2.360	.48020	.06330	.04430	.02800	.00320	.00040	.45960	.15380	.04560
.800	-.230	.47610	.06430	.04500	.00240	-.00030	.00070	.45170	.15200	.04390
.799	.790	.47870	.06450	.04510	-.00810	-.00160	.00050	.45630	.15230	.04540
.796	1.960	.47290	.06340	.04410	-.02180	-.00370	.00100	.45260	.15040	.04460
.796	4.120	.47310	.06410	.04130	-.04730	-.00740	.00180	.43480	.15150	.04350
.795	6.150	.47390	.06310	.03680	-.07300	-.01150	.00290	.45390	.15020	.04720
.799	8.340	.47310	.06650	.03550	-.09840	-.01650	.00460	.45440	.15380	.05120
.799	11.490	.46090	.06610	.03290	-.13200	-.02450	.00860	.44060	.15160	.06470
.797	16.840	.42950	.07110	.03360	-.18990	-.03770	.00830	.40900	.14930	.07640
GRADIENT		-.00125	-.00020	-.00013	-.01196	-.00163	.00025	-.00119	-.00045	-.00016

ARC 66-709 0A59 0A11A-(R5 V8)*STRET

(RER010) (25 APR 74)

REFERENCE DATA

SREF = .0033 SQ.FT. XMRP = 12.6255 IN.
 LREF = .5935 FT. YMRP = .0500 IN.
 BRP = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000
 BCFLAP = -11.705

RUN NO. 52/ 0 RN/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
.900	-4.480	.52290	.09630	.01790	.06320	.00560	-.00030	.49540	.19320	.05180
.900	-2.230	.51950	.09280	.02300	.03200	.00200	-.00020	.49270	.18910	.04870
.903	-.090	.52760	.09410	.01490	.00350	-.00220	.00070	.50040	.19190	.04900
.902	.980	.52280	.09220	.01900	-.01170	-.00370	.00120	.49610	.18910	.04840
.901	2.080	.52020	.09070	.02130	-.02610	-.00510	.00100	.49380	.18710	.04740
.901	4.170	.52330	.09350	.01790	-.05670	-.00900	.00100	.49830	.19080	.04970
.901	6.430	.52180	.09420	.01520	-.08670	-.01390	.00270	.49470	.19080	.05180
.901	8.570	.51420	.09750	.01540	-.11270	-.01860	.00300	.48670	.19240	.05340
.897	11.740	.47980	.09590	.02740	-.14990	-.02770	.00470	.45340	.18400	.05910
.899	17.150	.44370	.10150	.02650	-.21320	-.04280	.00610	.41700	.16230	.07480
GRADIENT		.00024	-.00038	-.00007	-.01379	-.00168	.00019	.00031	-.00034	-.00027

RUN NO. 51/ 0 RN/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
1.200	-4.400	.62320	.12780	-.06240	.04500	.00910	.00010	.58680	.24570	.05870
1.201	-2.280	.62940	.13000	-.06730	.02120	.00460	.00070	.59240	.24920	.06100
1.198	-.010	.63070	.13020	-.06680	-.00300	.00050	.00090	.59370	.24960	.06070
1.198	1.040	.62380	.12960	-.06500	-.01350	-.00190	.00030	.58700	.24750	.06090
1.199	2.210	.62160	.12920	-.06460	-.02490	-.00430	.00010	.58500	.24660	.05990
1.201	4.270	.61700	.12800	-.06390	-.04520	-.00920	.00070	.58080	.24450	.05890
1.202	6.400	.60950	.12780	-.06260	-.06750	-.01470	.00150	.57350	.24270	.05760
1.203	8.610	.60660	.12790	-.06090	-.08770	-.02130	.00110	.57060	.24220	.05770
1.204	11.860	.59300	.12310	-.05460	-.11980	-.03290	-.00010	.55830	.23470	.05340
1.197	17.430	.57180	.11700	-.04610	-.19420	-.05350	-.00190	.53280	.22430	.05640
GRADIENT		-.00091	-.00081	-.00000	-.01039	-.00208	-.00001	-.00088	-.00022	-.00001

RUN NO. 50/ 0 RN/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
1.501	-4.630	.52310	.12370	-.06970	.04970	.01130	-.00300	.49000	.22110	.04690
1.502	-2.430	.52320	.12440	-.07070	.02690	.00550	-.00170	.48990	.22190	.04810
1.502	-.250	.52320	.12510	-.07140	.00150	.00000	.00080	.48980	.22260	.04890
1.501	.610	.52310	.12510	-.07130	-.00840	-.00240	.00170	.48970	.22260	.04860
1.501	1.930	.51940	.12440	-.07010	-.02130	-.00520	.00250	.48610	.22110	.04770
1.502	4.160	.51480	.12250	-.06880	-.04290	-.01160	.00380	.48210	.21820	.04520
1.502	6.330	.51010	.12070	-.06700	-.06480	-.01900	.00400	.47790	.21550	.04420
1.502	8.610	.50780	.11940	-.06600	-.08790	-.02650	.00390	.47560	.21370	.04420
1.502	11.810	.50640	.11420	-.06790	-.12870	-.03610	.00290	.47350	.20830	.04260
1.502	17.430	.49210	.11440	-.06750	-.21110	-.05290	.00360	.46160	.20350	.04890
GRADIENT		-.00087	-.00009	.00009	-.01064	-.00236	.00082	-.00084	-.00127	-.00015

DATE 29 AUG 74 OAS9 TABULATED SOURCE DATA

ARC 66-709 OAS9 OAL11A-(RS V8)+STRUT

(REK018) (29 APR 74)

REFERENCE DATA

SREF = .6033 38.FT. XMRP = 12.8255 IN.
 LREF = .5935 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000
 BDFLAP = -11.700

RUN NO. 49/ 0 RN/L = 2.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CM	CA	CLMFD	CT	CYN	CSL	CL	CD	CAB
2.001	-4.130	.3700	.1030	-.04690	.04090	.01140	-.00180	-.34470	.17260	-.02740
2.006	-1.860	.37730	.10750	-.04780	.01730	.00560	-.00110	.33060	.17560	.02700
2.001	.290	.37620	.10770	-.04770	-.00360	-.00050	.00000	.34970	.17560	.02670
1.998	1.400	.37640	.10830	-.04820	-.01540	-.00370	.00060	.34960	.17630	.02730
1.998	2.410	.37630	.10770	-.04840	-.02470	-.00640	.00090	.34970	.17570	.02720
1.998	4.670	.37560	.10650	-.04900	-.04840	-.01260	.00190	.34930	.17430	.02700
1.998	9.050	.38040	.10390	-.05310	-.10230	-.02400	.00260	.35410	.17460	.02750
1.998	12.430	.38080	.10400	-.05680	-.14580	-.03340	.00330	.35490	.17280	.02770
1.998	17.860	.35850	.10460	-.05660	-.23300	-.04750	.00410	.33310	.16890	.02930
	GRADIENT	.00041	.00010	-.00022	-.01009	-.00275	.00043	.00038	.00017	-.00002

ARC 66-709 0459 0A11A-(R24)

(RER019) (13 JUN 74)

REFERENCE DATA

SREF = .6033 98-FT. YMRP = 12.6255 IN.
 LREF = .5935 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. YMRP = -.3750 IN.
 SCALE = .0190

PARAMETRIC DATA

BETA = .000 ELEVON = .000
 BCFLAF = -11.700 SPOBRK = 25.000

RUN NO. 123/ 0 RN/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
.596	-4.000	-28740	.06060	.05660	.00470	.00000	.00040	-.28240	.06050	.03500
.595	-2.000	-19440	.06450	.03390	.00340	.00050	.00050	-.19200	.07130	.03480
.595	.100	-.08350	.06700	.03340	.00290	.00000	.00000	-.08560	.06690	.03370
.597	2.170	.01030	.06430	.03320	.00260	.00000	.00080	.00790	.06460	.03440
.597	4.260	.11310	.05810	.03260	.00340	-.00030	.00090	.10850	.06630	.03400
.597	6.310	.21620	.04880	.03050	.00330	-.00030	.00080	.20950	.07220	.03310
.597	8.430	.31920	.03690	.04920	.00630	-.00050	.00070	.31030	.08330	.03330
.597	10.480	.43600	.02530	.04840	.00980	-.00100	.00150	.42410	.10440	.03380
.598	12.620	.55380	.03160	.03600	.01110	-.00090	.00180	.53350	.15180	.03350
.596	14.870	.67270	.02890	.03130	.01320	-.00130	.00110	.64360	.19800	.03790
GRADIENT		.04861	-.00026	-.00042	-.00016	-.00003	.00006	.04745	-.00169	-.00012

RUN NO. 122/ 0 RN/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
.801	-4.270	-33200	.06790	.07470	.00450	-.00010	.00030	-.32610	.09240	.03690
.802	-2.230	-21460	.06960	.06920	.00310	-.00010	.00040	-.21370	.07800	.03510
.800	-.090	-13350	.07060	.06680	.00310	-.00010	.00060	-.10340	.07080	.03450
.800	2.060	.00440	.06840	.06430	.00350	-.00030	.00080	.00190	.06860	.03310
.801	4.100	.11330	.06470	.06180	.00270	-.00030	.00080	.11040	.07270	.03430
.802	6.200	.23650	.05920	.03330	.00320	-.00010	.00130	.22870	.08440	.03370
.803	8.330	.34590	.05960	.04840	.05690	.00120	.00120	.33360	.10910	.03440
.800	10.460	.45210	.05910	.04750	.00960	-.00070	.00170	.43390	.14020	.03580
.802	12.550	.56180	.06490	.03690	.01150	-.00120	.00250	.53420	.18540	.03740
.801	14.710	.66170	.06780	.03030	.01260	-.00130	.00190	.64220	.23870	.04050
GRADIENT		.05304	-.00036	-.00145	-.00015	-.00003	.00007	.05176	-.00232	-.00034

RUN NO. 121/ 0 RN/L = 2.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
.850	-4.320	-34820	.07150	.08210	.00410	-.00010	.00010	-.34180	.09760	.03680
.850	-2.280	-23370	.07340	.06670	.00290	-.00010	.00040	-.23560	.08260	.03620
.850	-.170	-11310	.07400	.06290	.00290	-.00010	.00050	-.11290	.07440	.03590
.850	1.960	-.00010	.07390	.06860	.00290	-.00020	.00060	-.05260	.07380	.03440
.852	4.030	.12110	.07090	.06110	.00310	-.00030	.00100	.11580	.07930	.03440
.850	6.130	.23330	.07050	.05540	.00340	-.00010	.00170	.22450	.09500	.03320
.849	8.290	.33590	.06990	.03360	.00700	-.00040	.00130	.32230	.11760	.03460
.849	10.330	.44240	.07270	.04840	.00990	-.00100	.00140	.42220	.15080	.03655
.848	12.480	.55340	.07740	.03730	.01140	-.00130	.00270	.52370	.19500	.03940
.849	14.560	.66330	.07910	.03020	.01300	-.00140	.00180	.62220	.24330	.04360
GRADIENT		.05587	-.00003	-.00239	-.00009	-.00002	.00010	.05449	-.00215	-.00031

ARC 66-709 OAS9 0A111A-(M24)

REFERENCE DATA

SRLF = .0033 30.FT. XMRP = 12.8255 IN.
 LREF = .9935 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

BETA = .000 ELEVON = .005
 BDFLAP = -11.700 SPDERK = 25.000

PARAMETRIC DATA

RUN NO. 120/ 0 RN/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
.901	-4.400	-3.6340	.07880	-.09210	.00370	-.00010	.00010	-.35620	.10630	.03760
.898	-2.270	-.22900	.08030	.08070	.00380	-.00020	.00050	-.22570	.08940	.03550
.900	-1.160	-.09200	.08440	.06590	.00230	-.00010	.00040	-.09170	.08460	.03550
.902	1.930	.02140	.08180	.05910	.00310	-.00030	.00070	.01680	.08240	.03410
.899	4.020	-.13420	.08270	.05550	.00390	-.00040	.00060	-.12810	.09190	.03330
.900	6.100	.24240	.08370	.05030	.00430	-.00040	.00150	.23220	.10900	.03480
.901	8.260	.34700	.08270	.04430	.00740	-.00060	.00090	.33160	.13170	.03420
.900	10.320	.47110	.08340	.02680	.01070	-.00160	.00120	.44850	.16640	.03800
.899	12.480	.57320	.08470	.01780	.01550	-.00270	.00190	.54130	.20650	.03850
.902	14.530	.66920	.08950	.00790	.01420	-.00230	.00140	.64470	.25960	.04560
GRADIENT		.03921	.00044	-.00451	-.00001	-.00003	.00006	-.05766	-.00173	-.00048

RUN NO. 119/ 0 RN/L = 2.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
.951	-4.460	-3.5150	.09810	-.09120	.00290	.00020	.00040	-.34300	.12320	.04220
.952	-2.330	-.20390	.09650	.06080	.00250	.00000	.00040	-.19980	.10480	.03820
.951	-1.210	-.05280	.10200	.03930	.00180	-.00010	.00060	-.05240	.10220	.04060
.951	1.930	.07970	.09840	.02060	.00190	-.00010	.00060	.07630	.10200	.03850
.951	4.760	.20980	.09480	.00370	.00420	-.00030	.00080	.20250	.10940	.03930
.952	6.770	.33460	.09660	-.01180	.00370	-.00040	.00130	.32230	.13190	.03840
.949	8.280	.43360	.09450	-.01010	.00370	-.00000	.00110	.41540	.15590	.04170
.949	10.390	.55980	.09550	-.02200	.00680	-.00020	.00100	.53330	.19490	.04730
.950	12.450	.66230	.10020	-.02900	.00770	-.00270	.00220	.62510	.24060	.05970
.950	14.810	.77900	.10020	-.03760	.01210	-.00620	.00120	.72850	.29350	.05270
GRADIENT		.06602	.00001	-.01010	.00009	-.00007	.00005	-.06418	-.00143	-.00026

RUN NO. 116/ 0 RN/L = 2.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
1.200	-3.980	-.28470	.14510	.09840	.00280	-.00010	.00010	-.27400	.16450	.04930
1.201	-1.950	-.14690	.14700	.06610	.00180	.00000	.00060	-.14180	.15190	.04690
1.199	-.220	-.04500	.14760	.04340	.00170	.00010	.00060	-.04440	.14770	.04930
1.202	.240	-.01440	.14730	.03670	.00050	-.00030	.00070	-.01500	.14720	.04910
1.202	2.350	.11320	.14650	.01020	.00060	.00030	.00070	.10710	.15100	.04920
1.200	4.510	.23680	.14430	-.01330	.00230	.00000	.00090	.22450	.16250	.04930
1.200	6.650	.35580	.14060	-.04020	.00310	.00000	.00020	.33720	.18080	.05000
1.200	8.600	.47670	.13590	-.05250	.00410	-.00010	.00030	.45030	.20730	.05170
1.202	10.690	.59570	.13370	-.05290	.00510	-.00040	.00050	.55970	.24390	.05420
1.199	13.110	.72670	.13360	-.07060	.00580	-.00010	.00180	.67740	.29500	.05720
1.201	15.190	.83430	.13270	-.08080	.00700	-.00010	.00170	.77030	.34670	.05980
GRADIENT		.06118	-.00011	-.01310	-.00010	.00002	.00008	-.05851	-.00013	-.00000

REFERENCE DATA
 SREF = .6033 SQ.FT. XMRP = 12.8255 IN.
 LREF = .5935 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA
 BETA = .000 ELEVON = .000
 BDFLAP = -11.700 SPDBRK = 25.000

RUN NO. 117/ 0 RN/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00

MACM	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
1.500	-4.200	-22660	.14850	.05840	.00430	.00030	.00020	-.21510	.16470	.03890
1.499	-2.130	-12210	.14650	.05680	.00270	.00000	.00040	-.11660	.15990	.03940
1.500	-.070	-.01670	.14420	.02040	.00220	.00010	.00030	-.01660	.14430	.03830
1.501	.480	.00650	.14360	.01690	.00210	.00030	.00030	.00030	.14370	.03780
1.500	2.220	.09470	.14140	.00120	.00310	.00010	.00040	.00910	.14500	.03780
1.500	4.710	.21510	.13720	-.01800	.00400	.00000	.00060	.20310	.15440	.03820
1.499	6.760	.31260	.13320	-.03110	.00400	.00030	-.00020	.29470	.16900	.03860
1.497	8.890	.41060	.13040	-.04220	.00400	.00030	.00040	.38550	.19220	.03990
1.498	11.750	.50980	.12890	-.05510	.00620	.00030	-.00040	.47560	.22420	.04170
1.499	13.110	.61000	.12740	-.06700	.00720	.00030	-.00100	.56520	.26230	.04290
1.498	15.230	.71370	.12410	-.07810	.00830	.00030	.00070	.65600	.30740	.04330
GRADIENT		.04960	-.00125	-.00858	-.00001	-.00002	.00004	.04698	-.00116	-.00014

RUN NO. 116/ 0 RN/L = 2.43 GRADIENT INTERVAL = -5.00/ 5.00

MACM	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
2.004	-4.740	-20130	.12910	.01750	.00470	.00040	.00010	-.19000	.14530	.02080
1.999	-2.700	-12690	.12860	.01000	.00370	.00040	.00010	-.12070	.13440	.02080
1.997	-.610	-.04890	.12650	.00130	.00390	.00020	.00010	-.04760	.12700	.02140
2.006	-.110	-.03560	.12530	-.00180	.00420	.00030	.00010	-.03530	.12540	.02090
2.000	1.540	.03310	.12480	-.00910	.00360	.00020	.00020	.02970	.12570	.02150
1.997	3.600	.10960	.12260	-.01850	.00440	.00010	.00010	.10160	.12920	.02200
1.998	5.710	.18430	.11890	-.02750	.00540	.00010	.00010	.17160	.13660	.02160
2.001	7.850	.25690	.11560	-.03160	.00390	.00010	.00010	.24070	.14980	.02160
2.003	9.920	.33290	.11300	-.03380	.00560	.00020	.00020	.30840	.16860	.02230
2.003	12.030	.41240	.10950	-.03480	.00620	.00030	.00030	.38030	.19300	.02240
2.001	14.370	.49860	.10570	-.03800	.00790	.00020	.00040	.45680	.22610	.02300
GRADIENT		.03732	-.00081	-.00436	-.00003	-.00004	.00000	.03501	-.00200	.00014



ARC 66-709 0A59 0A11A-(M24)

(REMOVED) (13 JUN 74)

REFERENCE DATA

SREF = .0033 38.FT. XZRP = 12.6255 IN.
 LREF = .3933 FT. YMRP = .0090 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

BETA = .000 ELEVOM = 15.000
 BDFLAP = -11.700 SPOBRK = 25.000

RUN NO. 144/ 0 RM/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMPWD	CY	CYN	CBL	CL	CD	CAB
.594	-3.090	.00360	.08020	-.08980	-.00170	-.00030	.00050	.00980	.06780	.04680
.600	-1.920	.09540	.09080	-.09010	-.01150	.00010	.00050	.09840	.08750	.04400
.599	.150	.19490	.09180	-.09110	-.00020	-.00060	.00060	.19470	.09230	.04290
.600	2.300	.29410	.08750	-.09150	.00010	-.00030	.00070	.29040	.09920	.04170
.598	4.350	.39550	.08080	-.09060	.00000	-.00030	.00070	.38920	.11060	.04150
.598	6.430	.50080	.07030	-.09380	.00080	-.00050	.00080	.46970	.12590	.04130
.600	8.560	.63620	.05950	-.10430	.00070	-.00050	.00150	.62030	.15360	.04120
.600	10.630	.76910	.05120	-.11400	.00280	-.00090	.00100	.74640	.19220	.04220
.600	12.700	.89370	.06130	-.11190	.00600	-.00180	-.00020	.81930	.24750	.04400
.598	14.780	.93310	.06350	-.10250	.00440	-.00130	.00120	.88610	.29950	.04630
GRADIENT		.04746	-.00088	-.00014	.00024	-.00008	.00003	.04585	.00278	-.00062

RUN NO. 143/ 0 RM/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMPWD	CY	CYN	CBL	CL	CD	CAB
.799	-4.160	-.08710	.09520	-.06490	-.00670	.00030	.00010	-.08000	.10120	.04680
.796	-2.050	.04340	.09680	-.07480	-.00540	-.00010	.00030	.04680	.09510	.04440
.800	.020	.15720	.09960	-.08100	-.00390	-.00040	.00080	.15710	.09960	.04290
.798	2.090	.27120	.09820	-.08980	-.00280	-.00060	.00080	.26740	.10600	.04290
.803	4.210	.40340	.09490	-.09950	-.00290	-.00060	.00080	.39540	.12420	.04410
.798	6.440	.53820	.08740	-.11270	-.00250	-.00060	.00080	.52500	.14720	.04000
.802	8.480	.60840	.09560	-.10460	-.00130	-.00090	.00150	.68770	.18400	.04350
.799	10.550	.71730	.09460	-.10640	-.00120	-.00100	.00240	.68790	.22440	.04390
.800	12.680	.82080	.10400	-.11510	-.00070	-.00100	.00480	.77770	.28160	.04910
.801	14.790	.95060	.10820	-.12330	.00300	-.00150	.00170	.89140	.34730	.05550
GRADIENT		.05790	.00004	-.00403	.00049	-.00011	.00009	.05611	.00282	-.00034

RUN NO. 142/ 0 RM/L = 2.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMPWD	CY	CYN	CBL	CL	CD	CAB
.806	-4.320	-.15250	.11060	-.03590	-.00660	.00080	-.00030	-.14370	.12180	.05050
.804	-2.210	.00750	.11230	-.06340	-.00520	.00030	.00000	.01160	.11200	.04590
.806	.150	.13140	.11490	-.08380	-.00400	-.00009	.00000	.13170	.11370	.04470
.809	2.030	.26810	.11730	-.10170	-.00390	-.00010	.00050	.26380	.12670	.04450
.901	4.190	.40910	.11640	-.11170	-.00350	-.00020	.00050	.39950	.14600	.04230
.899	6.280	.52880	.11600	-.12810	-.00650	.00040	.00210	.51290	.17310	.04350
.901	8.380	.64170	.11970	-.13410	-.00340	-.00010	.00150	.61750	.21160	.04610
.897	10.440	.72160	.12170	-.12410	-.00260	-.00060	.00230	.68770	.25540	.04800
.899	12.540	.84250	.13390	-.13950	.00020	-.00110	.00080	.79340	.31360	.05610
.803	14.730	.93500	.13880	-.14820	.00140	-.00110	.00050	.88640	.37640	.08250
GRADIENT		.06508	.00078	-.00943	.00035	-.00011	.00008	.06295	.00299	-.00084

ARC 66-709 OAS9 0A11A-(N24)

(RER020) (13 JUN 74)

REFERENCE DATA

SREF = .6033 30.FT. ZMRP = 12.6255 IN.
 LREF = .5935 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

BETA = .050 ELEVON = 15.000
 BCFLAP = -11.700 SPCBAR = 25.000

RUN NO. 141/ 0 RM/L = 2.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
1.193	-4.410	-1.1680	.17120	-.00540	-.00480	.00070	-.00050	-.15490	.18370	.05780
1.197	-2.310	-.02910	.17300	-.03740	-.00390	.00010	-.00050	-.02210	.17410	.03700
1.199	-.210	-.09550	.17450	-.06820	-.00330	.00000	-.00020	-.09810	.17420	.05860
1.200	2.000	.23220	.17550	-.09680	-.00390	.00000	.00010	-.22800	.18350	.05870
1.200	4.180	.36590	.17550	-.12390	-.00400	.00000	.00020	-.35210	.20170	.05860
1.199	6.240	.48840	.17320	-.14400	-.00410	.00000	.00020	-.46680	.22530	.05800
1.198	8.410	.61830	.17000	-.16160	-.00250	-.00040	.00030	-.58680	.25860	.05720
1.197	10.510	.74700	.16950	-.17570	-.00300	-.00040	.00070	-.70390	.30300	.05940
1.197	12.700	.87230	.17080	-.18800	-.00230	-.00030	.00080	-.81340	.35840	.06110
1.191	14.790	.98900	.17010	-.19780	-.00200	.00000	.00060	-.91190	.41660	.06140
GRADIENT		.06190	.00051	-.01379	.00007	-.00007	.00009	-.05872	.00214	-.00012

RUN NO. 140/ 0 RM/L = 2.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
1.301	-4.290	-1.1910	.16630	-.01330	-.00060	.00060	-.00030	-.12830	.17630	.04500
1.300	-2.210	-.03670	.16650	-.03180	-.00050	.00040	-.00040	-.03020	.16780	.04450
1.498	-.030	.06840	.16500	-.05030	.00060	.00010	-.00020	-.06850	.16500	.04360
1.499	2.150	.17320	.16380	-.06850	.00030	.00000	-.00010	-.16900	.17030	.04360
1.497	4.180	.27720	.16210	-.08550	-.00050	.00020	-.00020	-.26480	.18190	.04400
1.500	6.340	.36150	.15920	-.10120	-.00040	.00010	-.00040	-.36160	.20040	.04420
1.500	8.460	.48700	.15800	-.11740	-.00060	.00010	-.00040	-.45850	.22790	.04440
1.499	10.560	.59120	.15890	-.13260	-.00060	.00000	-.00030	-.55200	.26450	.04580
1.497	12.690	.69000	.15880	-.14440	-.00010	.00010	-.00010	-.63820	.30650	.04720
1.494	14.810	.79820	.15760	-.15880	-.00030	.00010	.00010	-.72950	.35590	.04790
GRADIENT		.04903	-.00052	-.00080	.00005	-.00006	.00002	-.04695	.00064	-.00014

RUN NO. 139/ 0 RM/L = 2.39 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
2.000	-4.770	-1.1910	.13880	-.02550	.00160	.00030	-.00020	-.14700	.13150	.02280
2.000	-2.690	-.06080	.13850	-.03990	.00040	.00040	-.00020	-.07430	.14220	.02280
2.000	-.810	.00200	.13810	-.04200	.00180	.00030	-.00020	-.00340	.13610	.02350
2.000	1.470	.08110	.13740	-.04980	.00200	.00020	-.00010	-.07760	.13950	.02340
2.000	3.850	.15890	.13680	-.06190	.00230	.00030	.00000	-.14790	.14650	.02380
2.000	5.710	.23800	.13480	-.07020	.00180	.00020	-.00010	-.22340	.15780	.02310
1.997	7.820	.31170	.13380	-.07670	.00220	.00040	-.00010	-.29560	.17500	.02380
1.997	9.910	.39300	.13240	-.08060	.00230	.00040	.00000	-.36430	.19300	.02450
1.997	11.980	.46990	.13050	-.08510	.00230	.00040	.00040	-.43260	.22320	.02410
1.996	14.110	.55330	.12840	-.08950	.00270	.00040	.00030	-.50330	.25940	.02390
GRADIENT		.03780	-.00024	-.00423	.00007	-.00001	.00002	-.00059	.00012	.00012

ARC 66-709 OAS9 OAL11A-(M24)

REFERENCE DATA
 SREF = .5033 38-FT. XMRP = 12.8255 IN.
 LREF = .9935 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

BETA = .000 ELEVOM = 15.000
 BDFLAP = -11.700 SPDBRK = 25.000

RUN NO. 136/ 0 RN/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CM	CA	CLMFM0	CY	CYN	CBL	CL	CD	CAB
2.005	-4.720	-1.4990	.13990	-.02670	.00330	.00030	.00010	-.13790	.13170	.02300
1.997	-2.660	-.06700	.13950	-.03490	.00440	.00050	-.00010	-.06050	.14250	.02310
1.999	-.370	.01170	.13930	-.04300	.00430	.00030	.00000	.01310	.13920	.02300
1.998	1.320	-.08000	.13850	-.05280	.00460	.00040	.00000	.08430	.14080	.02350
1.996	3.680	.16920	.13780	-.06270	.00410	.00030	.00010	.16000	.14840	.02380
1.999	5.730	.24470	.13600	-.07140	.00490	.00020	.00010	.22990	.15970	.02340
1.999	7.870	.32270	.13500	-.07770	.00440	.00030	.00020	.30120	.17790	.02350
1.997	8.910	.39510	.13330	-.08180	.00490	.00040	.00020	.36630	.19930	.02400
1.996	12.020	.47590	.13130	-.08660	.00490	.00030	.00040	.43820	.22750	.02420
1.996	14.090	.55620	.12930	-.09040	.00560	.00050	.00060	.50990	.26120	.02400
	GRADIENT	.03780	-.00025	-.00429	-.00010	-.00002	.00000	.03530	-.00038	.00010

ARC 66-708 0459 0411A-(M24)

(RER022) 3 JUN 74

REFERENCE DATA

SREF = .6033 56-FT. INRP = 12.6255 IN.
 LREF = .5935 FT. YMRP = .0000 IN.
 SREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0130

BETA = .000 ELEVON = .000
 BDFLAP = .000 SPOBRK = 25.000

PARAMETRIC DATA

RUN NO. 130/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
.600	-4.080	-2.6220	.03710	-.03640	.00420	.00080	.00080	-.25750	-.07560	.03310
.599	-1.980	-1.5590	.06130	-.03580	.00410	.00050	.00050	-.15370	.06680	-.03430
.600	.110	-.05770	.06220	-.03500	.00440	.00050	.00100	-.05760	.06210	.03280
.599	2.210	.04110	.05990	-.03410	.00380	.00050	.00120	-.03870	.06150	-.03140
.600	4.270	.14410	.05390	-.03240	.00330	.00040	.00160	.13970	.06450	.03160
.600	6.340	.24330	.04400	-.03120	.02660	.00020	.00160	.23890	.07080	-.03090
.600	8.450	.35480	.03230	-.02990	.05870	.00000	.00160	.34820	.08430	.03150
.600	10.480	.46870	.02220	-.02720	.10100	-.00060	.00220	.45680	.10710	-.03210
.598	12.600	.58630	.02990	-.02590	.15110	-.00050	.00210	.56570	.13710	.03460
.600	14.690	.70970	.02770	-.01130	.01470	-.00050	.00190	.67940	.25670	-.03890
GRADIENT		.04833	-.00038	-.00066	.00009	-.00004	.00010	.04724	-.00132	-.00028

RUN NO. 129/ 0 RM/L = 2.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
.701	-4.090	-2.0240	.03820	-.04590	-.00120	.00010	-.00010	-.27760	.07820	.03480
.70	-2.020	-1.17310	.06210	-.04110	.00100	.00010	.00020	-.17980	.06810	.03310
.700	.000	-.07190	.06510	-.04030	.00080	-.00010	.00040	-.07190	.06310	.03230
.701	2.130	.03210	.03950	-.03900	.00090	-.00010	.00060	.02980	.06120	.03130
.701	4.230	.14060	.05440	-.03690	.00170	-.00030	.00070	.13620	.06460	.03240
.701	6.360	.24700	.04490	-.03300	.00260	-.00050	.00070	.24050	.07200	.03120
.699	8.490	.36160	.03460	-.03280	.00470	-.00060	.00070	.35550	.08810	.03230
.701	10.530	.48310	.03460	-.02340	.00730	-.00150	.00120	.46880	.12250	.03270
.700	12.650	.59740	.03890	-.01750	.00930	-.00100	.00180	.57440	.16870	.03800
.699	14.770	.70020	.03920	-.01880	.01090	-.00110	.00210	.66710	.21650	.03930
GRADIENT		.05056	-.00047	-.00094	.00004	-.00005	.00010	.04945	-.00163	-.00032

RUN NO. 128/ 0 RM/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
.600	-4.220	-3.0430	.06180	.04450	.00270	-.00010	.00000	-.29890	.08410	.03470
.600	-2.170	-1.9110	.06380	-.05050	.01130	-.00010	.00040	-.18830	.07100	.03300
.600	-.120	-.08320	.06590	-.04780	.00120	-.00020	.00050	-.08350	.06600	.03570
.601	2.040	.02720	.06320	-.04320	.01160	-.00030	.00050	.22500	.06410	.03200
.600	4.110	.14110	.05840	-.04070	.00180	-.00030	.00060	.13680	.06830	.03230
.601	6.200	.26040	.05160	-.03380	.00220	-.00040	.00050	.25330	.07950	.03190
.602	8.330	.37160	.05310	-.02830	.00010	-.00100	.00100	.36050	.10650	.03300
.601	10.410	.47350	.05320	-.02670	.00650	-.00100	.00130	.45610	.13790	.03420
.601	12.540	.58810	.06030	-.01450	.00770	-.00110	.00210	.56100	.18670	.04940
.600	14.630	.70350	.06730	-.00860	.01060	-.00130	.00150	.66690	.23850	.04200
GRADIENT		.05314	-.00036	-.00157	-.00007	-.00005	.00000	.05196	-.00184	-.00028



REFERENCE DATA
 BREF = .6933 36-FT. ZNEP = 12.8233 IN.
 LREF = .9933 36-FT. ZNEP = .0000 IN.
 BREF = 1.1719 36-FT. ZNEP = -.3730 IN.
 SCALE = .0150

BETA = .000 ELEVON = .000
 BDFLAP = .000 SPCBRK = 25.000

RUN NO. 127/ 0 RN/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFO	CY	CYN	CBL	CL	CD	CAB
.901	-4.330	-.33260	.07100	.07100	.00100	-.00010	.00000	-.32630	.09390	.03370
.900	-2.330	-.21280	.07610	.06280	.00170	-.00030	.00040	-.20930	.08470	.03510
.902	-.180	-.08230	.07460	.04990	.00100	-.00020	.00030	-.08230	.07310	.03320
.900	2.000	.04640	.07590	.03900	.00110	-.00030	.00050	.04370	.07760	.03280
.900	4.030	.15430	.07410	.03680	.00230	-.00040	.00080	.14880	.08480	.03200
.900	6.200	.26330	.07740	.03280	.00130	-.00060	.00130	.23340	.10540	.03210
.900	8.360	.37160	.07650	.02810	.00350	-.00110	.00660	.35630	.12970	.03430
.699	10.300	.47340	.07620	.01890	.00720	-.00150	.0110	.45180	.16160	.03570
.699	12.430	.59160	.08080	.00310	.01270	-.00270	.0130	.56030	.20630	.03970
.901	14.370	.71730	.08470	-.01280	.01280	-.00230	.0110	.67310	.26240	.04360
GRADIENT		.05838	.00028	-.00438	.00011	-.00003	.00008	.05716	-.00138	-.00046

RUN NO. 126/ 0 RN/L = 2.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFO	CY	CYN	CBL	CL	C	CAB
1.197	-4.320	-.30010	.14070	.09420	.00170	-.00020	-.00030	-.28860	.16290	.04930
1.200	-1.990	-.14290	.14240	.05620	.00020	-.00010	.00040	-.13790	.14720	.04790
1.200	-.270	.00060	.14290	.02440	-.00060	.00020	.00040	.00000	.14290	.04770
1.199	2.380	.12660	.14300	-.00310	-.00020	.00010	.00040	.12060	.14810	.04890
1.198	4.330	.22260	.14220	-.02660	.00130	-.00020	.00050	.24080	.16170	.05040
1.198	6.690	.37000	.13650	-.04180	.00080	-.00010	-.00020	.35130	.18070	.05110
1.198	8.810	.49100	.13410	-.05620	.00290	-.00060	.00000	.46480	.20780	.05240
1.198	10.920	.60890	.13130	-.06720	.00300	-.00030	.00070	.57310	.24420	.05400
1.200	13.040	.73990	.13300	-.08560	.00390	-.00030	.00180	.69080	.29630	.05790
1.199	15.220	.89420	.13170	-.09610	.00440	-.00020	.00180	.78970	.35120	.06020
GRADIENT		.06235	.00017	-.01365	-.00006	.00001	.00009	.05972	-.00012	.00014

RUN NO. 125/ 0 RN/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFO	CY	CYN	CBL	CL	CO	CAB
1.304	-4.280	-.22460	.14650	.09160	.00170	.00020	.00060	-.21320	.16290	.04030
1.499	-2.130	-.11260	.14330	.03220	.00120	-.00010	.00010	-.10730	.14940	.03980
1.498	-.040	-.00060	.14220	.01220	.00070	.00020	.00030	-.05830	.14220	.03840
1.303	.480	.00960	.14130	.00640	.00070	.00010	.00010	.00970	.14140	.03780
1.498	2.100	.09320	.13960	-.00620	.00030	.00010	.00020	.08800	.14290	.03810
1.300	4.210	.20000	.13660	-.02370	.00170	-.00010	.00030	.18930	.15990	.03840
1.300	6.290	.30220	.13330	-.03960	.00160	.00000	.00000	.28370	.18360	.03920
1.300	8.500	.40260	.12990	-.04990	.00180	.00000	.00010	.37720	.18760	.04010
1.498	10.390	.50260	.12860	-.06440	.00320	.00000	-.00020	.47640	.21880	.04130
1.488	12.830	.61200	.12630	-.07900	.00540	-.00060	-.00130	.56820	.25070	.04300
1.497	15.280	.72800	.12310	-.09130	.00430	.00010	.00060	.66790	.31500	.04380
GRADIENT		.04972	-.00120	-.00681	-.00004	-.00002	.00003	.04713	-.00131	-.00029

PARAMETRIC DATA

ARC 88-705 0439 (ALLIA-(M24)

(REGR22) (13 JUN 74)

REFERENCE DATA

BREF = .0033 80.FT. YMRP = 12.6233 IN.
 LREF = .0033 80.FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0130

PARAMETER DATA

BETA = .000 ELEVOM = .000
 BCFLAP = .000 SPOBRK = 23.000

RUN NO. 1247 0 RM/L = 2.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CM	CA	CLMFC	CY	CYN	CBL	CL	CC	CAB
1.000	-4.750	-20390	-12610	.01220	.00410	.00030	.00000	-.19280	.14450	.090
2.000	-2.560	-11190	-12710	.00760	.00320	.00010	.00000	-.10610	.13190	.02100
2.004	-.930	-.03900	-12330	-.00330	.00310	.00000	.00000	-.03780	.12370	.02100
2.003	1.530	.03790	-12380	-.01360	.00370	.00000	.00000	.03460	.12470	.02150
2.003	3.620	.11460	-12160	-.02360	.00420	-.00010	.00010	.10670	.12860	.02200
2.004	5.740	.19460	-11690	-.03060	.00460	-.00020	.00000	.16190	.13900	.02040
2.002	7.830	.26490	-11430	-.03800	.00460	-.00010	.00000	.24680	.14940	.02090
2.001	9.920	.34220	-11180	-.04610	.00520	-.00010	.00000	.31780	.16910	.02160
1.999	12.030	.41830	-10600	-.04290	.00540	.00000	.00020	.39670	.19260	.02160
1.998	14.160	.49870	-10430	-.04370	.00580	.00010	.00030	.45800	.22340	.02210
GRADIENT		.03778	-.00078	-.00445	.00003	-.00004	.00001	.03350	-.00168	.00013



ARC 86-709 0459 0411A-1M24)

(REMOVED) (13 JUN 74)

REFERENCE DATA

SREF = .6933 56. FT. ZMRP = 22.1233 IN.
 LREF = .9933 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3759 IN.
 SCALE = .0130

PARAMETRIC DATA

ZETA = .000 ELEVON = .000
 BOFLAP = 16.300 SPDBRK = 25.000

RUN NO. 137/ 0 RN/L = 2.53 GRADIENT INTERVAL = -9.00/ 9.00

MACH	ALPHA	CM	CA	CLMFM0	CY	CYN	CBL	CL	CD	CAB
.002	-4.030	-2.0350	.06300	-.00220	.00230	.00080	.00030	-.20030	.07730	.03700
.001	-2.010	-1.0120	.06650	.03140	.00300	.00070	.00060	-.10080	.07010	.03610
.000	1.000	-.00400	.06720	.00040	.00290	.00030	.00030	-.00490	.06720	.03330
.000	2.170	.09250	.06470	-.00190	.00290	.00040	.00060	-.09000	.06820	.03330
.001	4.250	.19690	.03900	-.00320	.00380	.00040	.00100	.19200	.07340	.03430
.000	6.310	.30000	.04970	-.00610	.00400	.00020	.00110	.29270	.08250	.03480
.001	8.440	.40420	.03820	-.00710	.00400	-.00020	.00060	.39810	.09770	.03330
.000	10.550	.52460	.02720	-.01020	.00660	-.00060	.00170	.51070	.12280	.03360
.000	12.600	.64010	.03460	-.02070	.00890	-.00080	.00150	.61710	.17340	.03760
.000	14.710	.76160	.03190	-.02230	.01030	-.00090	.00120	.72850	.22420	.04030
GRADIENT		.04815	-.00247	-.00066	.00014	-.00009	.00006	-.00046	-.00030	-.00030

RUN NO. 136/ 0 RN/L = 2.53 GRADIENT INTERVAL = -9.00/ 9.00

MACH	ALPHA	CM	CA	CLMFM0	CY	CYN	CBL	CL	CD	CAB
.000	-4.110	-2.1170	.06540	.00610	.00340	.00070	.00030	-.21040	.08090	.03610
.001	-2.090	-1.1120	.06800	.00360	.00290	.00060	.00060	-.10870	.07280	.03640
.001	.000	-.01130	.06940	.00210	.00270	.00060	.00070	-.01130	.06940	.03630
.000	2.110	.09310	.06660	-.00010	.00310	.00040	.00110	.09060	.06990	.03510
.002	4.220	.19730	.06100	-.00280	.00340	.00020	.00090	.19220	.07330	.03480
.000	6.270	.30750	.05260	-.00640	.00430	.00000	.00100	.29990	.06580	.03390
.000	8.400	.42240	.04210	-.00870	.00630	-.00040	.00090	.41170	.10340	.03630
.000	10.500	.54260	.04260	-.01730	.00830	-.00060	.00120	.52370	.14100	.03710
.000	12.630	.65640	.04430	-.02240	.00980	-.00090	.00150	.63090	.18670	.03690
.000	14.690	.75960	.04390	-.02190	.01150	-.00110	.00210	.72310	.23710	.04230
GRADIENT		.04937	-.00011	-.00100	.00002	-.00006	.00006	-.00013	-.00066	-.00036

RUN NO. 135/ 0 RN/L = 2.53 GRADIENT INTERVAL = -9.00/ 9.00

MACH	ALPHA	CM	CA	CLMFM0	CY	CYN	CBL	CL	CD	CAB
.000	-4.260	-2.2110	.06930	.01140	.00110	.00060	.00030	-.23330	.08700	.03610
.000	-2.170	-1.1270	.07210	.00810	.00410	.00040	.00040	-.12430	.07690	.03630
.000	1.000	-.01410	.07290	.00370	.00360	.00040	.00080	-.01800	.07290	.03690
.001	2.060	.09200	.07030	-.00000	.00300	.00030	.00100	.00940	.07360	.03630
.001	4.160	.20620	.06670	-.00190	.00430	.00000	.00100	.20090	.08130	.03460
.001	6.240	.32930	.06090	-.01030	.00480	.00020	.00140	.32100	.09620	.03710
.000	8.350	.43370	.06210	-.01730	.00760	-.00070	.00100	.42260	.12480	.03690
.001	10.440	.54290	.06250	-.01960	.00890	-.00090	.00230	.52260	.15960	.04010
.002	12.510	.65490	.06690	-.03240	.00870	-.00070	.00230	.62400	.20500	.04220
.001	14.620	.77260	.07940	-.03990	.01130	-.00100	.00200	.73030	.26230	.04470
GRADIENT		.05206	-.00033	-.00110	-.00009	-.00006	.00006	-.00014	-.00067	-.00014

ARC 88-705 OAS9 0A11A-(M24)

(RER023) (13 JUN 74)

REFERENCE DATA

SREF = .6033 98.FT. XMRP = 12.6255 IN.
 LREF = .5935 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .6150

BETA = .000 ELEVON = .000
 BDFLAP = 16.300 SFDDBK = 25.000

PARAMETRIC DATA

RUN NO. 134/ 0 RN/L = 2.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
.900	-4.390	-2.27810	.08220	-.02650	.00340	.00070	.00060	-.27100	-.10320	.04210
.900	-2.310	-.115000	.08170	.00410	.00040	.00000	.00080	-.14660	.08770	-.03960
.901	-.200	-.02370	.08470	.00890	.00360	.00030	.00090	-.02340	.08480	.03910
.899	1.910	.09320	.08300	.00070	.00340	.00020	.00100	.09040	.08610	.03860
.899	4.030	.20790	.08160	-.09400	.00360	-.00020	.00110	.20170	.09600	.03730
.900	6.140	.31400	.08420	-.09830	.00620	-.00040	.00180	.30320	.11730	.03960
.901	8.270	.42910	.08490	-.09170	.00740	-.00040	.00120	.41240	.14570	.03950
.899	10.400	.53220	.08610	-.06780	.00870	-.00090	.00190	.50790	.18060	.04040
.900	12.470	.65170	.08880	-.04500	.01490	-.00230	.00220	.61720	.22740	.04400
.900	14.650	.78520	.09450	-.06550	.01390	-.00200	.00100	.73570	.29010	.04930
GRADIENT		.05770	.00000	-.00375	.00018	-.00009	.00006	-.05614	-.00075	-.00050

RUN NO. 133/ 0 RN/L = 2.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
1.139	-4.470	-2.27160	.15110	-.06500	.00300	.00030	.00050	-.25900	-.17100	.05370
1.202	-2.350	-.12950	.15290	.03030	.00230	.00050	.00070	-.12310	.15800	-.03290
1.200	-.250	.00640	.15000	-.00210	.00170	.00050	.00080	.00710	.15500	.05370
1.201	1.910	.13300	.15550	-.03040	.00260	.00030	.00100	.12760	.15980	.05410
1.199	4.060	.26540	.15600	-.05650	.00310	.00040	.00100	.25360	.17440	.05350
1.199	6.170	.38480	.15450	-.07730	.00300	.00060	.00070	.36600	.19480	.05710
1.200	8.330	.50600	.15090	-.09240	.00330	.00030	.00040	.47880	.22260	.05900
1.200	10.430	.62330	.14960	-.10110	.00390	.00000	.00090	.58600	.25990	.06110
1.199	12.580	.73760	.15040	-.12070	.00490	.00030	.00190	.70670	.31180	.06480
1.200	14.700	.87080	.14910	-.13180	.00480	.00100	.00290	.80440	.36520	.06620
GRADIENT		.06268	.00058	-.01424	.00002	-.00001	.00006	-.05985	.00034	-.00023

RUN NO. 132/ 0 RN/L = 2.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
1.502	-4.260	-.19170	.15610	-.02770	.00370	.00080	.00080	-.17950	.16990	.04300
1.500	-2.190	-.08780	.15390	.00800	.00320	.00070	.00070	-.08190	.15720	.04160
1.500	-.050	.02250	.15210	-.01300	.00310	.00060	.00080	.02270	.15210	.04110
1.499	2.060	.12400	.14970	-.03190	.00340	.00030	.00090	.11850	.15410	.04100
1.501	4.220	.22890	.14620	-.05590	.00370	.00060	.00100	.21750	.16270	.04040
1.500	6.290	.33290	.14290	-.06780	.00380	.00070	.00060	.31530	.17850	.04090
1.499	8.440	.43270	.14110	-.08000	.00450	.00070	.00070	.40730	.20310	.04270
1.501	10.520	.53480	.14030	-.09510	.00510	.00040	.00050	.50020	.23570	.04380
1.501	12.660	.63740	.13880	-.10860	.00610	-.00020	.00070	.58650	.27410	.04500
1.500	14.800	.74080	.13710	-.12330	.00620	.00080	.00080	.68110	.32170	.04570
GRADIENT		.04964	-.00113	-.00929	.00001	-.00003	.00003	-.04888	-.00081	-.00037



ARC 88-709 OAS3 CALLIA-(N24)

REFERENCE DATA

SREF = .6033 SA.FT. XMRP = 12.6255 IN.
 LREF = .5933 FT. YMRP = .0500 IN.
 BRFP = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

BETA = .000 ELEVON = .000
 BDFLAP = 16.300 SPDBRK = 25.000

RUN NO. 131/ 0 RN/L = 2.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CN	CA	CLMPD	CY	CYN	CBL	CL	CD	CAB
2.002	-4.740	-1.18420	-13370	-0.0230	.00390	.00080	.00040	-1.17250	.14650	.02110
2.000	-2.660	-1.10330	.13240	-0.01070	.00330	.00070	.00050	-0.09700	.13710	.02170
2.000	-.600	-.02110	.13100	-0.02100	.00340	.00080	.00050	-0.01970	.13120	.02180
2.000	1.540	.05870	.12950	-0.03210	.00330	.00080	.00050	.05520	.13100	.02230
1.997	3.620	.13660	.12740	-0.04270	.00870	.00060	.00060	-0.12830	.13580	.02230
1.998	5.740	.21640	.12410	-0.03180	.00640	.00060	.00070	.20290	.14510	.02220
2.001	7.850	.29300	.12210	-0.05920	.00710	.00060	.00070	.27360	.16100	.02240
2.001	9.890	.36760	.11950	-0.06420	.00730	.00070	.00070	.34170	.18090	.02240
2.000	12.020	.44870	.11630	-0.06730	.00790	.00070	.00100	.41460	.20720	.02220
2.000	14.110	.53130	.11390	-0.07180	.00820	.00080	.00120	.48750	.24000	.02280
	GRADIENT	.03841	-.00074	-.00489	.00008	-.00001	.00002	.03603	-.00150	.00016

(RER024) (13 JUN 74)

ARC 66-709 0A39 0A11A-(N24)

PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000
BCFLAP = -11.700 SPDBRK = 25.000

REFERENCE DATA

SREF = .8033 SQ.FT. XMRP = 12.8255 IN.
LREF = .5935 FT. YMRP = .0000 IN.
ORF = 1.1710 FT. ZMRP = -.3750 IN.
SCALE = .0150

MACH	BETA	CN	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
.600	-3.290	.44450	.02420	.04390	.11000	-.01020	.01110	.43300	.10320	-.03640
.599	-3.240	.44050	.02540	.04670	.07130	-.00670	.00630	.42890	.10360	.03320
.599	-1.210	.44010	.02600	.04940	.03330	.04150	.00330	.42840	.10410	.03570
.600	-.700	.44150	.02570	.04970	.02460	-.00240	.00050	.42980	.10410	.03490
.600	-.150	.44040	.02620	.05030	.01630	-.00150	-.00110	.42860	.10430	.03530
.600	.290	.44050	.02560	.04990	.00620	-.00060	-.00210	.42890	.10380	.03440
.601	.850	.44140	.02530	.04910	-.00340	.00010	-.00320	.42980	.10360	.03460
.599	1.880	.44430	.02500	.04870	-.02140	.00210	-.00540	.43280	.10380	.03430
.600	2.910	.44380	.02380	.04660	-.04090	.00380	-.00830	.43250	.10260	.03400
.601	4.240	.44670	.02270	.04460	-.06480	.00670	-.01190	.43550	.10210	.03470
.599	5.230	.45230	.02170	.04330	-.08350	.00350	-.01430	.44120	.10210	.03380
	GRADIENT	.00088	-.00040	-.00040	-.01826	.00177	-.00240	.00095	-.00024	-.00016

RUN NO. 150/ 0 RN/L = 2.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
.797	-4.730	.46570	.05720	.04120	.10780	-.01070	.00990	.44780	.14010	.03760
.801	-2.650	.46490	.05820	.04440	.06190	-.00590	.00540	.44680	.14090	.03670
.800	-.580	.46390	.05930	.04650	.02000	-.00170	.00100	.44560	.14180	.03600
.799	-.100	.46510	.05850	.04700	.00960	-.00080	.00030	.44690	.14120	.03560
.799	.390	.46320	.05750	.04640	-.00030	.00010	-.00100	.44320	.13990	.03520
.799	.990	.46570	.05790	.04700	-.01080	.00120	-.00230	.44770	.14080	.03560
.800	1.430	.46450	.05870	.04640	-.01700	.00170	-.00510	.44630	.14140	.03530
.799	2.410	.46550	.05780	.04560	-.03890	.00410	-.00540	.44750	.14060	.03600
.800	4.440	.46650	.05560	.04340	-.07910	.00850	-.00990	.44880	.13870	.03540
.799	5.520	.46930	.05590	.04030	-.10360	.01100	-.01240	.45160	.13950	.03730
	GRADIENT	.00008	-.00013	.00029	-.02022	.00205	-.00215	.00010	-.00011	-.00023

RUN NO. 149/ 0 RN/L = 2.53 GRADIENT INTERVAL = -5.00/ 5.00



ARC 66-709 OAS9 0A11A-IN24

(RER024) (13 JUN 74)

REFERENCE DATA

SREF = .6033 30.FT. XMRP = 12.6255 IN.
 LREF = .5935 FT. YMRP = .0000 IN.
 BREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

PARAMETRIC DATA

ALPHA = 10.000 ELEVOM = .000
 BOFLAP = -11.700 SPOBRK = 25.000

RUN NO. 148/ 0 RN/L = 2.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
.900	-4.580	.48280	.08520	.02470	.10810	-.01130	.01160	.45930	.17100	.04090
.897	-2.510	.47450	.08390	.03310	.06110	-.00640	.00640	.45150	.16810	.03760
.902	-.490	.49490	.08410	.02560	.01850	-.00250	.00100	.47150	.17220	.03780
.900	.080	.49750	.08470	.02330	-.00380	-.00130	-.00060	.47400	.17350	.03750
.902	.510	.49200	.08390	.02600	-.00010	-.00060	-.00140	.46880	.17140	.03800
.898	1.030	.48950	.08310	.02670	-.01410	.00100	-.00320	.46640	.17020	.03620
.901	1.540	.48740	.08210	.02810	-.02240	.00180	-.00410	.46480	.16870	.03600
.900	2.550	.49130	.08260	.02730	-.04460	.00390	-.00360	.46830	.17000	.03700
.900	3.570	.49380	.08120	.02480	-.06640	.00640	-.00820	.47100	.16910	.03620
.900	4.580	.48610	.08260	.03010	-.09250	.00940	-.01060	.46360	.16710	.03710
.901	5.630	.48760	.08160	.02600	-.11380	.01140	-.01330	.46490	.16820	.03910
	GRADIENT	.00107	-.00049	.00006	-.02153	.00220	-.00242	.00114	-.00028	-.00040

RUN NO. 147/ 0 RN/L = 2.54 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMFWC	CY	CYN	CBL	CL	CD	CAB
1.198	-4.300	.58550	.13190	-.05130	.07930	-.00370	.00930	.55140	.23680	.05370
1.199	-2.440	.58450	.13140	-.05160	.04540	-.00190	.00490	.55060	.23610	.05250
1.199	-.410	.58960	.13130	-.05320	.00870	.00060	.00070	.55560	.23700	.05220
1.200	.080	.58840	.13090	-.05290	.00050	.00110	-.00030	.55450	.23630	.05250
1.200	.600	.58920	.13050	-.05160	-.00760	.00150	-.00130	.55540	.23620	.05180
1.200	1.080	.58850	.13020	-.05170	-.01980	.00220	-.00260	.55470	.23570	.05160
1.200	1.640	.58590	.13000	-.05100	-.02420	.00290	-.00370	.55250	.23500	.05180
1.200	2.640	.58440	.13030	-.04950	-.04170	.00420	-.00590	.55070	.23500	.05130
1.198	3.630	.58320	.13070	-.04930	-.05820	.00510	-.00820	.54950	.23510	.05250
1.198	4.690	.58300	.13100	-.04910	-.07410	.00590	-.01080	.54920	.23550	.05270
1.199	5.670	.58090	.13220	-.04870	-.09150	.00680	-.01280	.54750	.23620	.05400
	GRADIENT	-.00031	-.00014	.00033	-.01681	.00109	-.00217	-.00027	-.00020	-.00012

(RER024) (13 JUN 74)

ARC 86-769 0A59 0A11A-(N24)

PARAMETRIC DATA

REFERENCE DATA

SREF = .6533 50. FT. YMRP = 12.6255 IN.
 LREF = .5933 FT. YMRP = .0000 IN.
 GREF = 1.1710 FT. ZMRP = -.3750 IN.
 SCALE = .0150

ALPHA = 10.000 ELEVON = .000
 BDFLAP = -11.700 SFCBRK = 25.000

RUN NO. 146/ 0 RN/L = 2.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
1.500	-4.650	.48700	.13010	-.03280	.07820	.00040	.00320	-.45520	.21650	-.04260
1.497	-2.620	.49260	.13160	-.03200	.04710	-.00010	.00150	.46030	.21900	.04320
1.498	-.570	.49240	.13130	-.03360	.01140	.00110	-.00090	.46030	.21860	.04290
1.498	-.100	.49420	.13100	-.03350	.00350	.00130	-.00100	.46210	.21870	.04280
1.499	.420	.49470	.13080	-.03400	-.00440	.00150	-.00170	.46260	.21860	-.04240
1.497	.980	.49720	.13060	-.03300	-.01250	.00180	-.00220	.46510	.21890	-.04260
1.498	1.440	.49560	.13030	-.03360	-.01930	.00200	-.00270	.46360	.21830	-.04210
1.498	2.480	.49440	.13020	-.03300	-.03610	.00250	-.00400	.46230	.21800	-.04180
1.498	3.500	.49220	.13030	-.03330	-.05190	.00290	-.00320	.46030	.21770	-.04180
1.500	4.520	.49050	.13010	-.03340	-.06850	.00270	-.00710	.45870	.21710	-.04210
1.500	5.530	.49150	.13010	-.03160	-.08440	.00280	-.00880	.45970	.21730	-.04220
GRADIENT		.01739	-.00000	-.00009	-.01987	.00034	-.00125	.00040	-.00001	-.00013

RUN NO. 145/ 0 RN/L = 2.44 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CN	CA	CLMFWO	CY	CYN	CBL	CL	CD	CAB
2.002	-4.180	.35800	.11290	-.03620	.06440	.00150	.00450	.33190	.17530	-.02380
2.002	-2.170	.35580	.11340	-.03610	.03250	.00110	.00290	.32960	.17550	.02390
2.000	-.080	.35620	.11220	-.03530	.00090	.00030	-.00060	.33030	.17430	-.02290
1.997	.400	.35400	.11180	-.03590	-.00490	.00030	-.00120	.32820	.17350	.02310
1.997	.910	.35800	.11280	-.03650	-.01230	.00020	-.00160	.33190	.17530	-.02320
1.993	1.420	.35490	.11350	-.03730	-.01900	.00000	-.00210	.32880	.17530	.02390
1.996	1.930	.35760	.11420	-.03680	-.02690	-.00010	-.00280	.33130	.17650	-.02450
1.999	2.960	.35780	.11400	-.03700	-.04170	-.00050	-.00410	.33150	.17640	.02440
2.004	3.960	.35670	.11330	-.03670	-.05650	-.00060	-.00520	.33060	.17550	-.02420
2.001	5.000	.36140	.11260	-.03530	-.07450	-.00080	-.00660	.33530	.17560	.02430
2.001	5.960	.35940	.11230	-.03640	-.08840	-.00090	-.00790	.33340	.17500	-.02470
GRADIENT		.00028	.00005	-.00003	-.01486	-.00026	-.00119	.00027	.00010	.00009