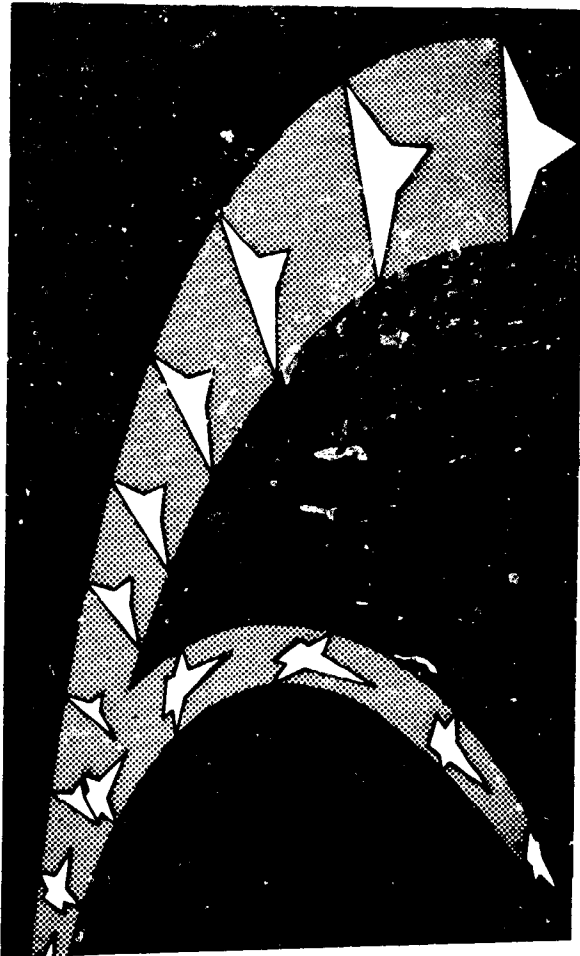


DMS-DR-1191
NASA CR-120,018
FEBRUARY 1972



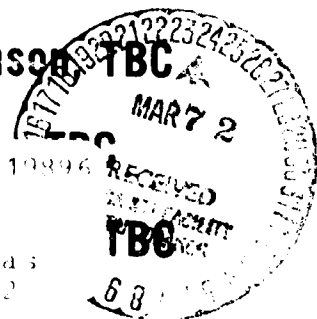
—SPACE SHUTTLE—

VERIFICATION OF TRANSITION REENTRY CORRIDOR AT HIGH ANGLES OF ATTACK AND DETERMINATION OF TRANSITION AERODYNAMIC CHARACTERISTICS AND SUBSONIC AERODYNAMIC CHARACTERISTICS AT LOW ANGLES OF ATTACK FOR THE BOEING H-32 BOOSTER

by

J. Houser, TBC

L. J. Johnson, TBC



Unclas

(NASA-CR-120,018) SPACE SHUTTLE:
VERIFICATION OF TRANSITION REENTRY CORRIDOR
AT HIGH ANGLES OF ATTACK AND DETERMINATION
OF TRANSITION AERODYNAMIC J. Houser, et al
(Chrysler Corp.) Feb. 1972 322
(NASA CR OR TMX OR AD NUMBER)

BOEING
TRANSONIC WIND TUNNEL

SADSAC SPACE SHUTTLE
AEROTHERMODYNAMIC
DATA MANAGEMENT SYSTEM

CONTRACT NAS8-4016
MARSHALL SPACE FLIGHT CENTER



THIS DOCUMENT SHOULD BE
REFERENCED AS NASA
CR-120,018

NASA Series Number: S-0619

DMS-DR-1191
CR-120,018
February, 1977

SADSAC/SPACE SHUTTLE
WIND TUNNEL TEST DATA REPORT

CONFIGURATION: 0.00667 Scale Boeing H-32 Booster

TEST PURPOSE: Verification of Transition Reentry Corridor at High Angles
of Attack; Transition Aerodynamics; Subsonic Aerodynamics
at Low Angles of Attack

TEST FACILITY: Boeing Transonic Wind Tunnel

TESTING AGENCY: The Boeing Company

TEST NO. & DATE: BTWT 1265; August 9 - 12, 1971

FACILITY COORDINATOR: Mr. W. Mayer

PROJECT ENGINEER(S): Mr. J. Houser
Mr. J. Johnson
Mr. M. Olye
Mr. W. Runciman

DATA MANAGEMENT SERVICES

LIAISON:

John Ford
for V. W. Sparks

DATA OPERATIONS:

Albert D. Martin
Albert D. Martin
Aero Thermo Data Group

RELEASE APPROVAL:

Albert D. Martin
for W. D. Kemp, Supervisor
Aero Thermo Data Group

CONTRACT NAS 8-4016

AMENDMENT 153

DRL 184-58

This report has been prepared by Chrysler Corporation Space Division under a Data Management Contract to the NASA. Chrysler assumes no responsibility for the data presented herein other than its display characteristics.

AGENCY COORDINATOR:

Mr. William Mayer
Orgn. 25580
Mail Stop 13-29
The Boeing Company
P. O. Box 3999
Seattle, Washington 98124

Phone: (206) 773-4424

PROJECT ENGINEERS:

Mr. J. Houser
Orgn. 35616
Mail Stop 86-22
The Boeing Company
P. O. Box 3999
Seattle, Washington 98124

Phone: (206) 773-2072

Mr. J. Johnson
Orgn. 25750
Mail Stop 13-29
The Boeing Company
P. O. Box 3999
Seattle, Washington 98124

Phone: (206) 655-4373

Mr. M. Olye
Orgn. 25664
Mail Stop 86-22
The Boeing Company
P. O. Box 3999
Seattle, Washington 98124

Phone: (206) 773-2072

Mr. W. Runciman
Orgn. 25750
Mail Stop 13-29
The Boeing Company
P. O. Box 3999
Seattle, Washington 98124

Phone: (206) 655-3657

SADSAC LIAISON:

Mr. V. W. Sparks
Department 4830
Chrysler Space Division
102 Wynn Drive
Huntsville, Alabama

Phone: (205) 895-1560

SADSAC OPERATIONS:

Mr. Albert D. Martin
Department 2780
Chrysler Space Division
P. O. Box 29200
New Orleans, Louisiana 70129

Phone: (504) 255-2304

A B S T R A C T

Experimental aerodynamic investigations were made in the Boeing Transonic Wind Tunnel on a 1/150-scale model of the Boeing H-32 Space Shuttle Booster Configuration during the period August 9 - 12, 1971. The purpose of the test was:

- a) to verify the transonic reentry corridor at high angles of attack;
- b) to determine the transonic aerodynamic characteristics; and
- c) to determine the subsonic aerodynamic characteristics at low angles of attack.

Data were obtained over a Mach number range from 0.3 to 1.1 at angles of attack from 0° to 86° , and at angles of sideslip from -4° to $+12^{\circ}$. Reynolds number varied from 1.8 to 3.8×10^6 per foot; dynamic pressure varied from 0.87 to 5.82 psi; and stagnation temperature varied from 100°F to 170°F .

Test variables included configuration buildup, horizontal stabilizer settings of 0° and -20° , elevator deflections of 0° and -30° , and wing spoiler settings of 60° .

TABLE OF CONTENTS

	<u>PAGE NUMBER</u>
LIST OF FIGURES	2
SUMMARY	3
NOMENCLATURE SUMMARY	4
CONFIGURATIONS INVESTIGATED	5
DATASET COLLATION SHEETS	6
TEST FACILITY DESCRIPTION	8
TEST CONDITIONS	9
DATA REDUCTION	11
SUMMARY DATA PLOT INDEX	13
FIGURES	14
MODEL COMPONENT DESCRIPTIONS	24
STANDARD NOMENCLATURE	31
TABULATED DATA LISTING	36
PLOTTED DATA	37

LIST OF FIGURES

<u>FIGURE NUMBER</u>	<u>TITLE</u>	<u>PAGE NUMBER</u>
1.	Axis Systems, Showing Direction and Sense of Force and Moment Coefficients, Angle of Attack, and Sideslip Angle	15
2.	Model Drawing (No. 25-56543) Showing Front, Plan, and Side Views	16
3.	Model Sting Mounting Systems	17
4.	Model Trip Strip Application Schemes	18
5.	Model Body Drawings	19
6.	Model Wing Drawings	20
7.	Model Spoiler Drawing	21
8.	Model Horizontal Tail Drawing	22
9.	Model Vertical Tail Drawing	23

S U M M A R Y

Experimental aerodynamic investigations were made in the Boeing Transonic Wind Tunnel on a 1/150 scale model of the Boeing H-38 Space Shuttle Booster Configuration for the purpose of:

- a. verifying the transonic reentry corridor at high angles of attack;
- b. determining transition aerodynamic characteristics; and
- c. determining subsonic aerodynamic characteristics at low angles of attack.

Data were obtained over a Mach number range from 0.3 to 1.1 at angles of attack from 0° to 86° , and at angles of sideslip from -4° to $+12^{\circ}$. Test variables included configuration buildup, horizontal stabilizer settings of 0° and -20° , elevator deflections of 0° and -30° , and wing spoiler setting of 60° .

SUMMARY OF SADSAC NOMENCLATURE - AERODYNAMIC FORCE AND MOMENT COEFFICIENTS

COEFFICIENT	COEFFICIENT NAME	SADSAC NOMENCLATURE		
		BODY AXIS	STABILITY AXIS	WIND AXIS
C_A	Total Axial Force	C_A	-	-
C_{AB}	Base Axial Force	C_{AB}	--	-
C_{AF}	Forebody Axial Force	C_{AF}	-	-
C_D	Total Drag Force	-	C_D	C_{DTOTL}
C_{DB}	Base Drag Force	-	C_{DB}	C_{DBASE}
C_{DF}	Forebody Drag Force	-	C_{DF}	C_{DFORE}
C_L	Lift Force	-	C_L	C_L
C_N	Normal Force	C_N	-	-
C_Y	Side Force	C_Y	C_Y	C_C
C_l	Rolling Moment	C_{BL}	C_{SL}	C_{WL}
C_m	Pitching Moment	C_{LM}	C_{LM}	C_{PM}
C_n	Yawing Moment	C_{YN}	C_{LN}	C_{LN}
L/D	Lift-To-Drag Force Ratio	-	L/D	C_L/C_D
L/D	Lift-To-Forebody Drag Force Ratio	-	L/DF	C_L/C_{DF}
N/A	Normal-To-Axial Force Ratio	N/A	-	-
N/A	Normal-To-Forebody Axial Force Ratio	C_N/C_{AF}	-	-

CONFIGURATIONS INVESTIGATED

Component Nomenclature

B ₈	Basic H-32 booster body with axisymmetric nose
B ₁₄	B ₈ with aft-body chines added
W ₄	Modified H-32 wing
H ₄	Horizontal stabilizer with elevator
V ₃	Vertical tail
S ₂	Wing spoiler

Dimensional data for these components are given on the component description forms.

Configurations Tested

B ₈	B ₈ W ₄ H ₄ V ₃
B ₈ W ₄ H ₄	B ₁₄ W ₄ H ₄ V ₃
B ₈ W ₄ V ₃	B ₈ W ₄ H ₄ V ₃ S ₂

The above configurations were tested with the following surface deflection angles where appropriate:

Stabilizer	0°, -20°
Elevator	0°, -30°
Spoiler	60°

TEST BTWT - 1265 DATA SET COLLATION SHEET

☐ PRETEST

☒ POSTTEST

DATA SET IDENTIFIER		CONFIGURATION	SCHD.		PARAMETERS/VALUES		NO. of RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)																			
			α	β	δs	δe		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
RD2051	B8W4H4V3	A	0°	-20°	0°		12	172		170		175	177	181	180	177	179	174	178	176	171						
011	B8			-	-		6	206				212			214		216	215	213	211	209						
041	B8W4H4V3			-20°	-30°		13	95		110		109	101	103	105	108	107	98	102	104	102	100					
061				0°	-30°		8	112				114			116		118	117	115	113	111						
071				0°	0°		13	109		200		191	193	198	197	193	196	195	194	192	190	188					
031	B8W4V3			-	-		8	102				104			106		108	107	105	103	101	99					
057	B8W4H4V3			-20°	0°		3	51				52			50												
059	B8W4H4V3						7	167				168			166		169	163	164	162							
169	B8W4H4						3					186			187						185						
044	B8W4H4V3			0°	-30°		3	79				78			77												
064					-30°		3	76				75			74												
074				0°	-30°		15	103	98	97	36	35	34	41	30	29	28	27	26	25	24						
073				0°	0°		5	54		57		56	55		53												
034	B8W4V3			-	-		15	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81					
134	B14W4H4V3			0°	0°		4	8		7		6			5												
108	B8W4H4V3S2						1					68															
103				0°			5	73		72		71	70		69												
102				+4°			5	67		66		65	64		63												
072	B8W4H4V3			+4°			5	62		61		60	59		58												
RD2075	B8W4H4V3			0°	B		6	17				16			15	14	13	12									

POSTTEST

COEFFICIENTS:

a of B

SCALING AS

αA: 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86
 αB: -4, -2, 0, 2, 4, 6, 8, 10, 12
 αD: 0, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30
 αE: 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36

1/2

NASA-MSC-144P

☐ PRETEST

☒ POSTTEST

[illegible]

IDPVAR(1) IDPVAR(2) NDPV

MASA-MSFC-MAF

TEST FACILITY DESCRIPTION

The Boeing Transonic Wind Tunnel is a closed return tunnel operating at Mach numbers up to 1.2. The 8' x 12' test section is slotted to minimize interference in the transonic test regime. Plenum pressures are controlled by re-entry doors downstream of the test section. Models are normally sting mounted on a strut with a nominal angle of attack range of $\pm 15^\circ$. The stagnation pressure is approximately atmospheric giving a maximum Reynolds number of 3.85×10^6 per foot at $M = 1.1$.

TEST CONDITIONS

The model was sting-mounted on the Boeing 6176C internal balance as shown in Figure 3, "AX 1202 I-2 Model Mounting System". Yaw runs at constant α were made by rolling the sting and model 90° . Pitch runs at 4° sideslip were made by pitching and rolling the sting in combination.

Grit-type trip strips were applied to the model for all runs in order to assure a turbulent boundary layer. A description of these trip strips is provided in Figure 4.

Base pressures were measured at four locations as shown in Figure . Balance cavity pressure was also measured. Corrections for base drag were made to the balance readings using these pressure measurements.

TEST CONDITIONS
TEST BTWT-1265

MACH NUMBER	REYNOLDS NUMBER per unit length	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)
0.30	1.8×10^6	0.87	var. 100°-170°
.45	2.5	1.81	
.475	2.6	1.99	
.50	2.7	2.17	
.525	2.8	2.35	
.55	2.9	2.53	
.575	3.0	2.72	
.60	3.1	2.91	
.65	3.2	3.28	
.70	3.2	3.64	
.75	3.3	3.99	
.80	3.4	4.33	
.85	3.5	4.64	
.90	3.6	4.93	
.95	3.7	5.19	
1.00	3.7	5.42	
1.05	3.8	5.64	
1.10	3.8	5.82	

BALANCE UTILIZED: BOEING 6176 C

CAPACITY:

NF 1000 LB
 SF 500 LB
 AF 130 LB
 PM 2000 IN-LB
 YM 800 IN-LB
 RM 800 IN-LB

ACCURACY:

COEFFICIENT
TOLERANCE:

COMMENTS:

DATA REDUCTION

Aerodynamic forces and moments acting on the model were measured with the Boeing 6176C six-component internal strain gage balance. Moment data were reduced about a reference c.g. located at model station 11.980, buttock line 0.0, and water line 2.433.

A. Basic Coefficients

The data were reduced to coefficient form as follows:

CL	C_L	$=$	$\frac{\text{Lift}}{qS}$	Stability Axes
CD	$C_{D'}$	$=$	$\frac{\text{Drag}}{qS}$	
CIM	$C_{m,s}$	$=$	$\frac{\text{Pitching Moment}}{qSc}$	
CLN	$C_{n,s}$	$=$	$\frac{\text{Yawing Moment}}{qSb}$	
CY	C_y	$=$	$\frac{\text{Side Force}}{qS}$	
CSL	$C_{l,s}$	$=$	$\frac{\text{Rolling Moment}}{qSb}$	
CN	C_N	$=$	$\frac{\text{Normal Force}}{qS}$	Body Axes
CA	C_A	$=$	$\frac{\text{Axial Force}}{qS}$	
CYN	C_n	$=$	$\frac{\text{Yawing Moment}}{qSt}$	
CBL	C_l	$=$	$\frac{\text{Rolling Moment}}{qSb}$	
CAB	C_{A_b}	$=$	$\left[\frac{P_\infty - P_{bavg}}{q} \right] \frac{A}{S} b. + \left[\frac{P_\infty - P_c}{q} \right] \frac{A_c}{S}$	

DATA REDUCTION
(Continued)

$$\text{CAF} \quad C_{A_f} = C_A - C_{A_b}$$

$$\text{CDF} \quad C_{D'_f} = C_{D'} - C_{D'_b} \quad \text{Stability Axes}$$

$$\text{CDB} \quad C_{D'_b} = C_{A_b} \cos \alpha$$

Where

- S = reference wing area, 31.36 in^2
- $\bar{C}$ = MAC, 2.24 in.
- b = span, 14.8 in.
- A_b = base area, 3.0 in^2
- A_c = cavity area, 2.544 in^2
- q = dynamic pressure in psi
- p_∞ = free stream static pressure in psi
- $p_{b_{\text{avg}}}$ = average of base pressures in psi
- p_c = cavity pressure in psi

Data sets prefixed with a V, i.e. VD2073, represent data obtained with alpha (α) increasing. Data sets prefixed with a W, i.e. WD2073, represent data obtained with alpha (α) decreasing from some high positive value.

SUMMARY DATA PLOT INDEX

TITLE	PLOTTED COEFFICIENTS SCHEDULE		CONDITIONS VARYING	PAGES
Effect of Horizontal Tail in Pitch	A		Configuration	1-45
Stabilizer-Elevator Effectiveness in Pitch	A		Horizontal Tail, Elevator Deflections	46-90
Effect of Aft Body in Pitch	A		Configuration	91-135
Effect of Leading Edge Spoiler in Pitch Beta = Zero Degrees	E		Configuration	136-165
Effect of Leading Edge Spoiler in Pitch Beta = +4.0 Degrees	B		Configuration	166-195
Leading Edge Spoilers in Side Slip Alpha = 25 Deg.	C			196-200
Effect of Vertical Tail in Side Slip	D		Configuration	201-236
Basic Configuration in Side Slip	D		Alpha	237-251
Stabilizer and Elevator Effectiveness at High Alpha	E		Configuration, Hor. Tail and Elevator Deflections	252-277
Body Alone at High Angles of Attack	E			278-281

PLOTTED COEFFICIENTS SCHEDULE:

- (A) CL vs. ALPHA, CL vs. CDF, CL vs. CIM
- (B) CBL, CYN, CY, CL, CIM vs. ALPHA
- CIM vs. CL
- (C) CBL, CYN, CY, CL, CIM vs. BETA
- (D) CBL, CYN, CY vs. BETA
- (E) CN, CIM vs. ALPHA

FIGURES

- 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.

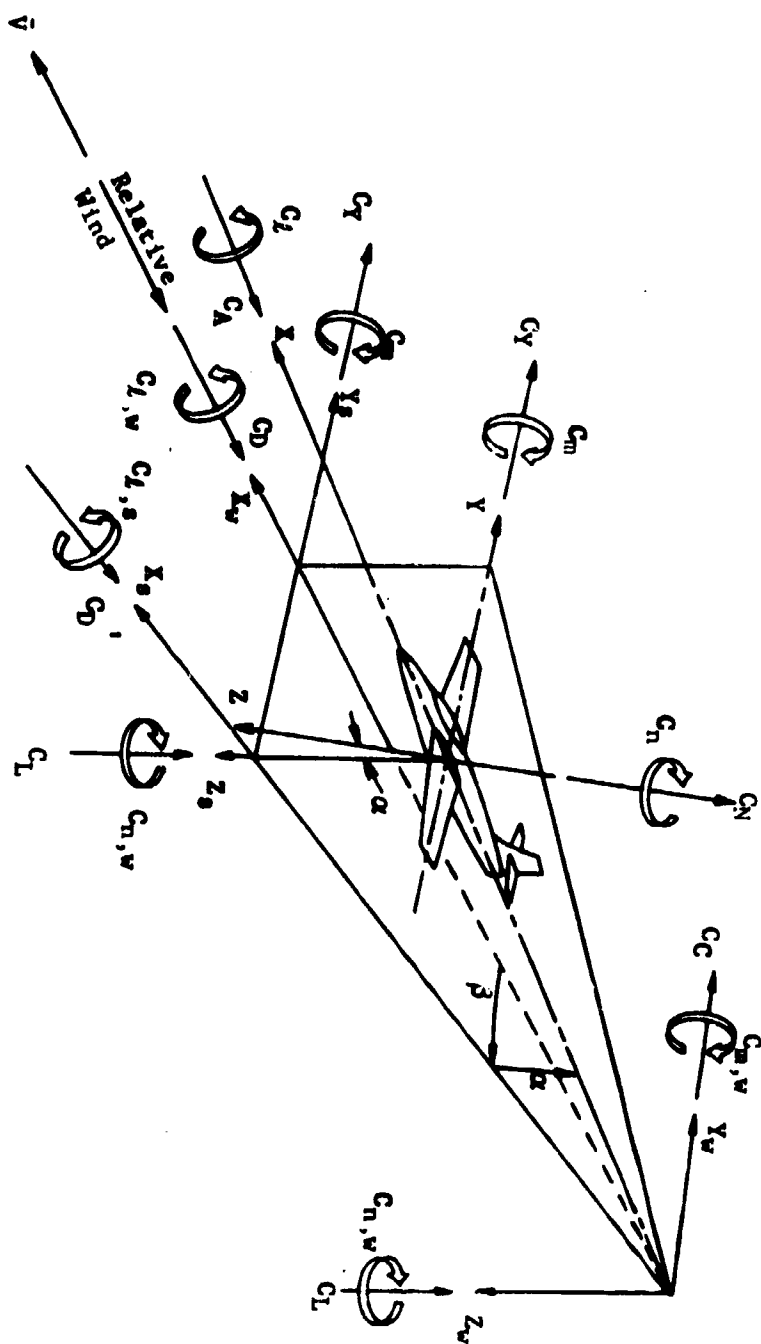


Figure 1. Axis systems, showing direction and sense of force and moment coefficients, angle of attack, and sideslip angle

AX-12021-2
 MODEL ASSEMBLY
 DRAWING 25-56543

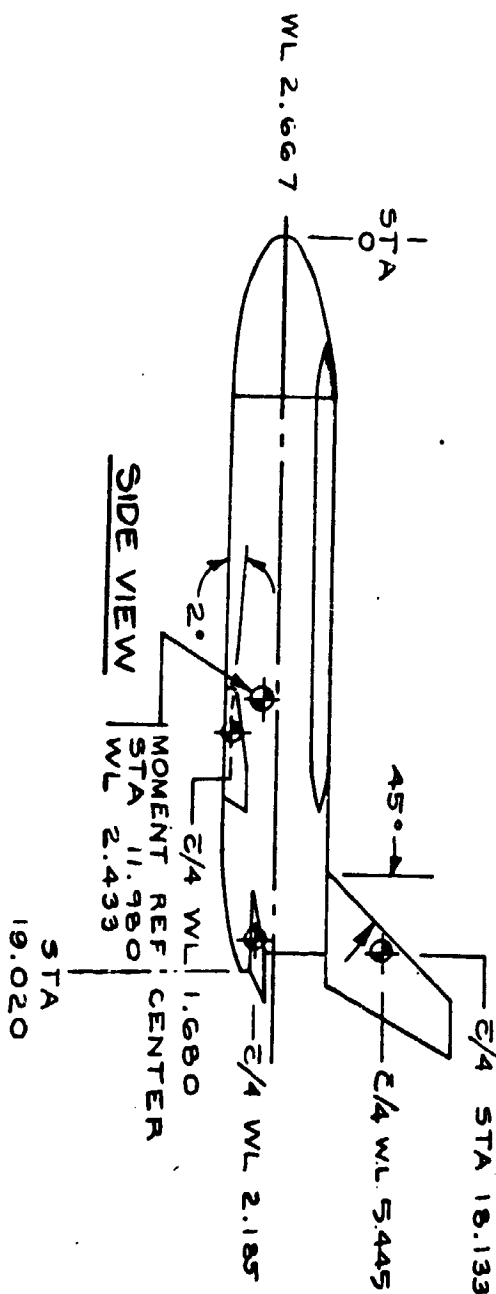
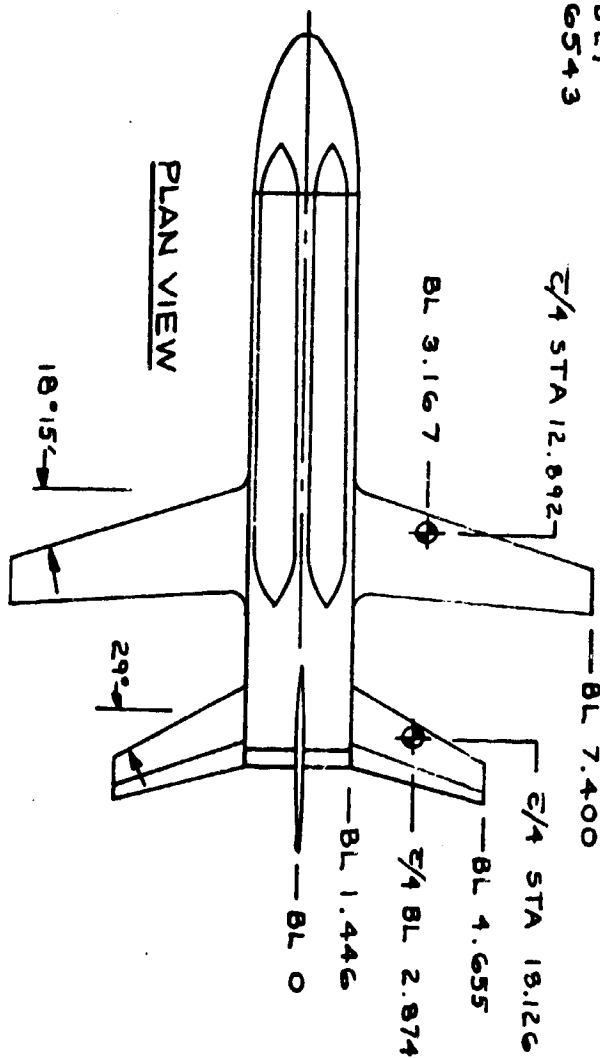
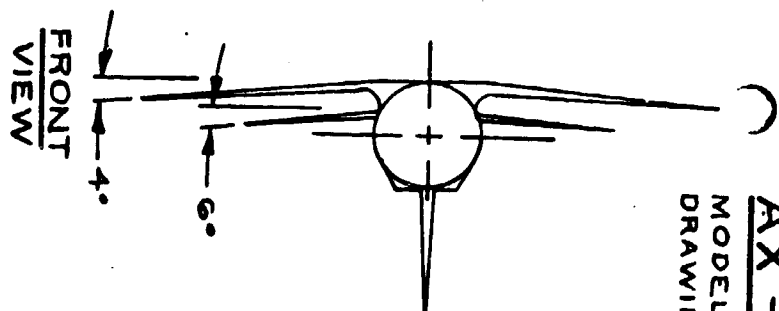


Figure 2.

AX 1202 I-2
MODEL MOUNTING SYSTEM

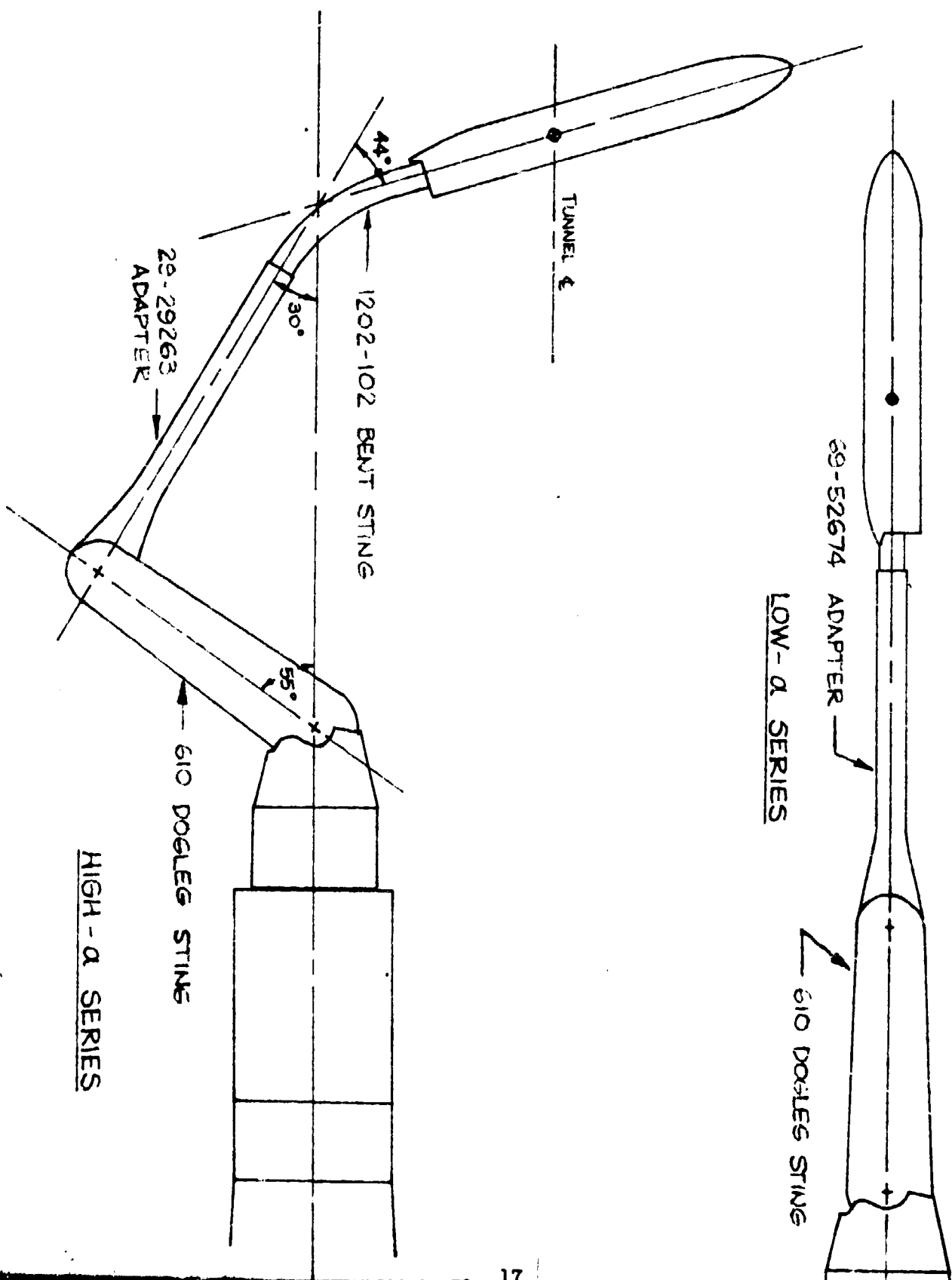
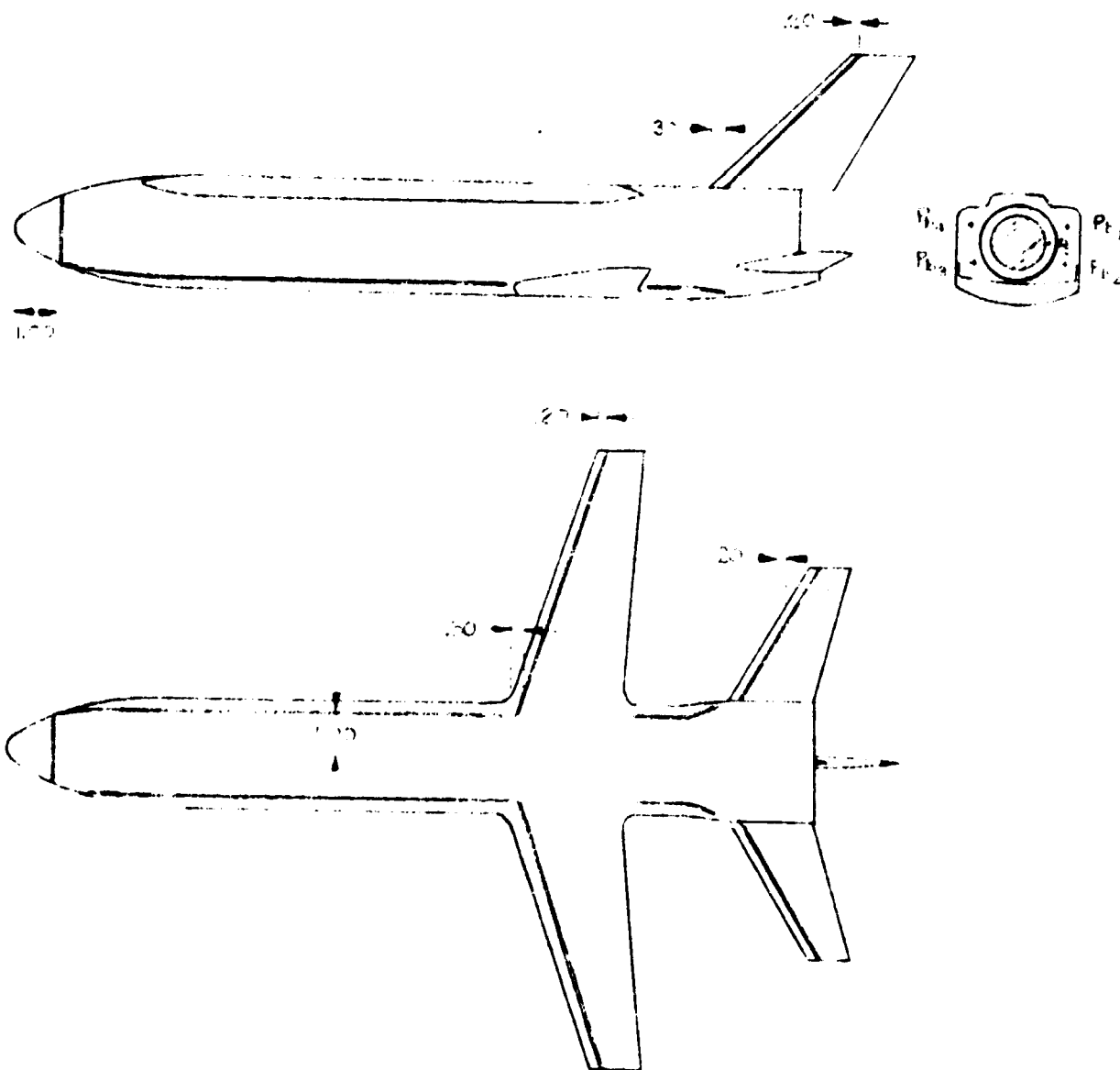


Figure 3.

AX 1202 I-2 TRIP STRIPS



FUSELAGE: # 100 GRIT, .10" WIDE, 120-150/IN.
WING, TAILS: # 120 GRIT, .10" WIDE, 120-150/IN.

Figure 4.

AX 1202 I-2
BODIES

REF: 1202-6 BODY
1202-12 NOSE

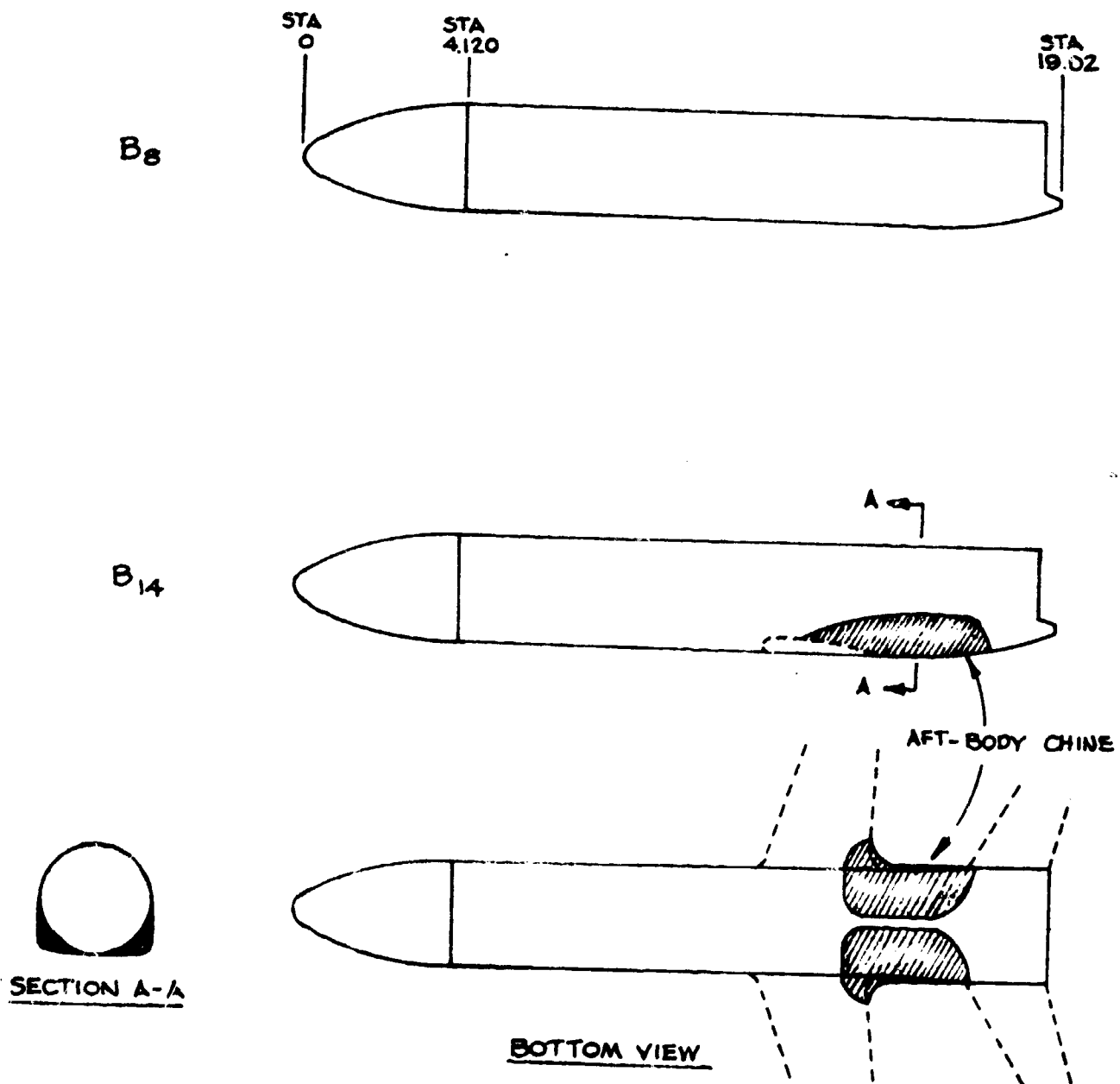


Figure 5.

AX-1202I-2
WING
REF 1202-11

20

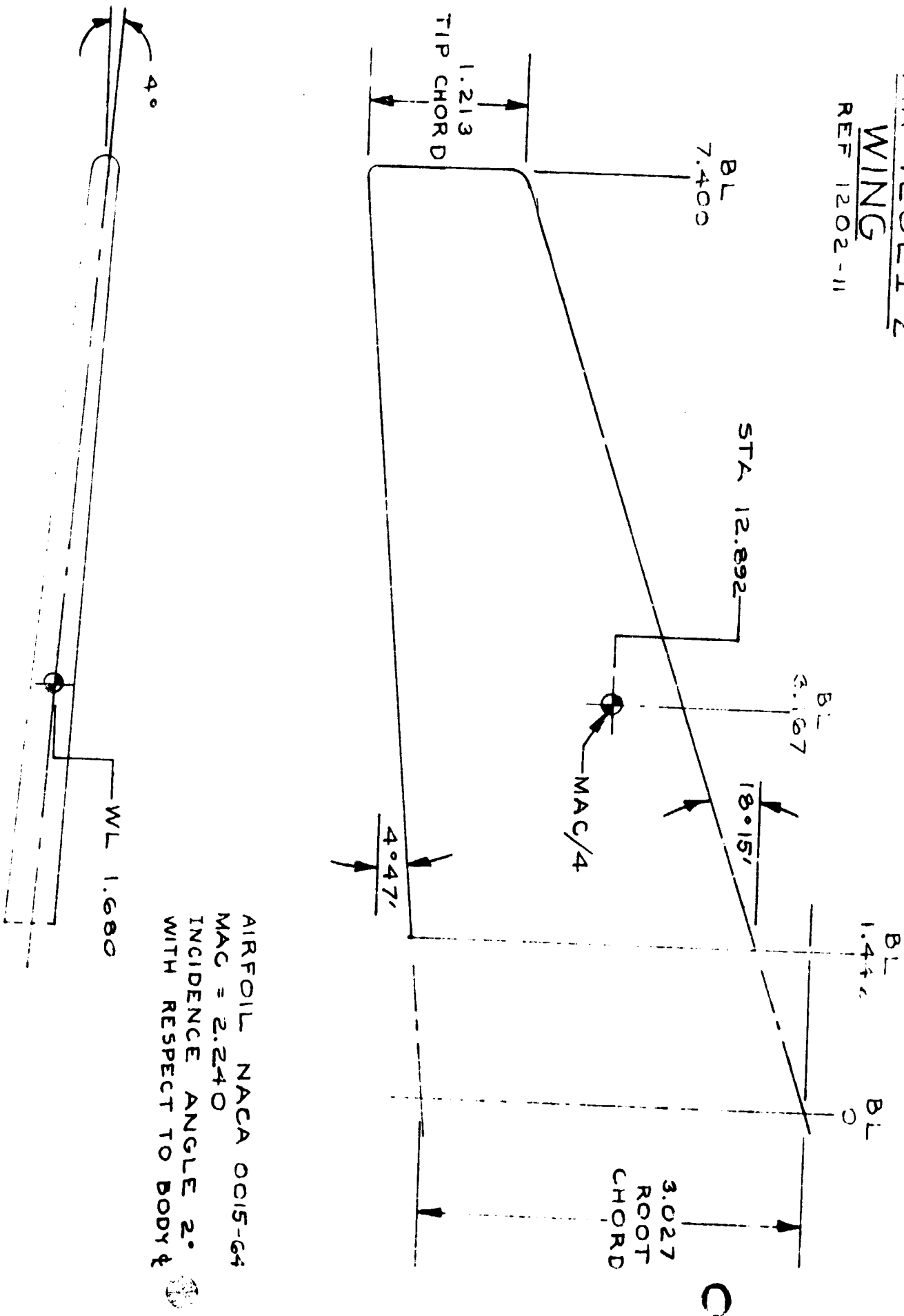


Figure 6.

AX-1202I-2
SPOILER
 REF 1202-12

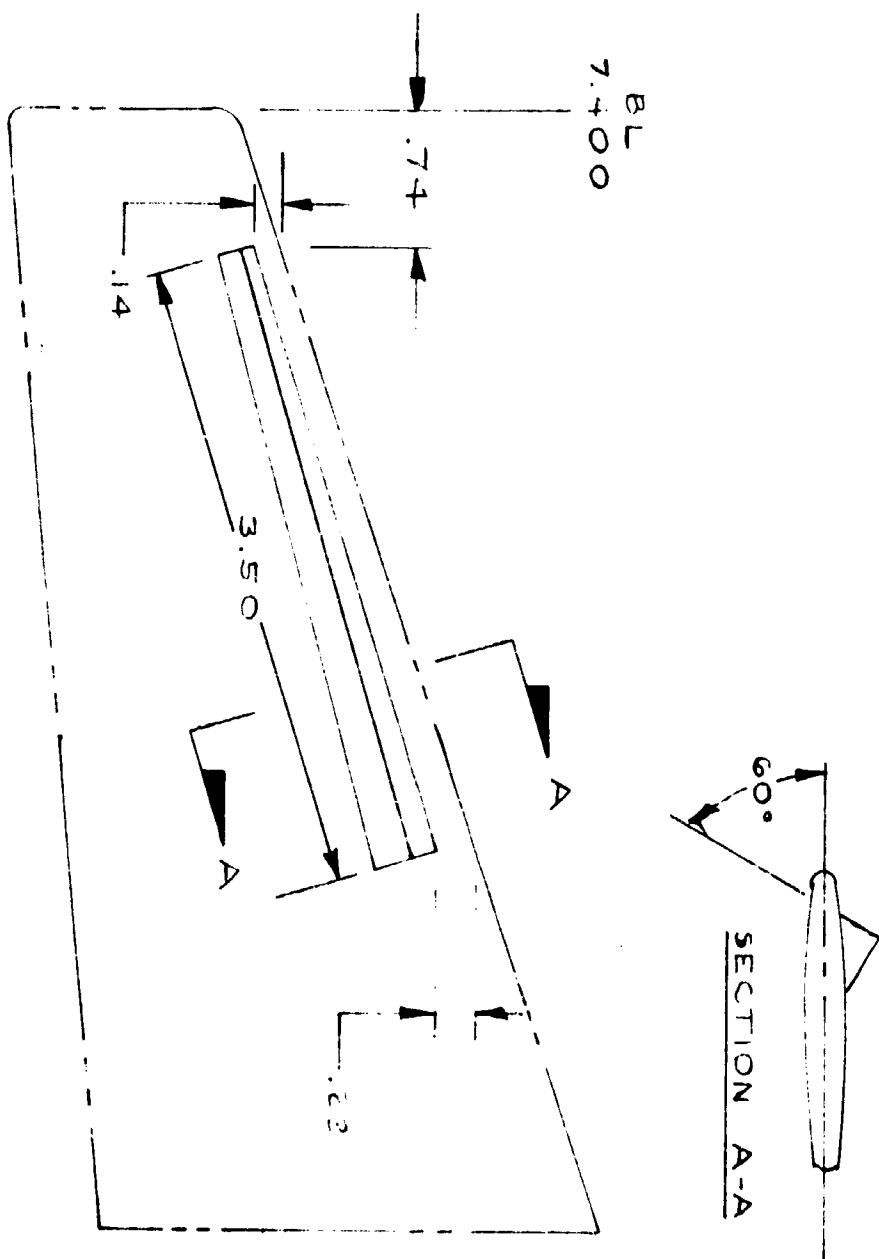


Figure 7.

AX-1202I-2

REF 1202-5

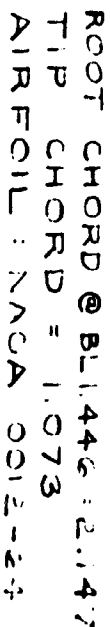
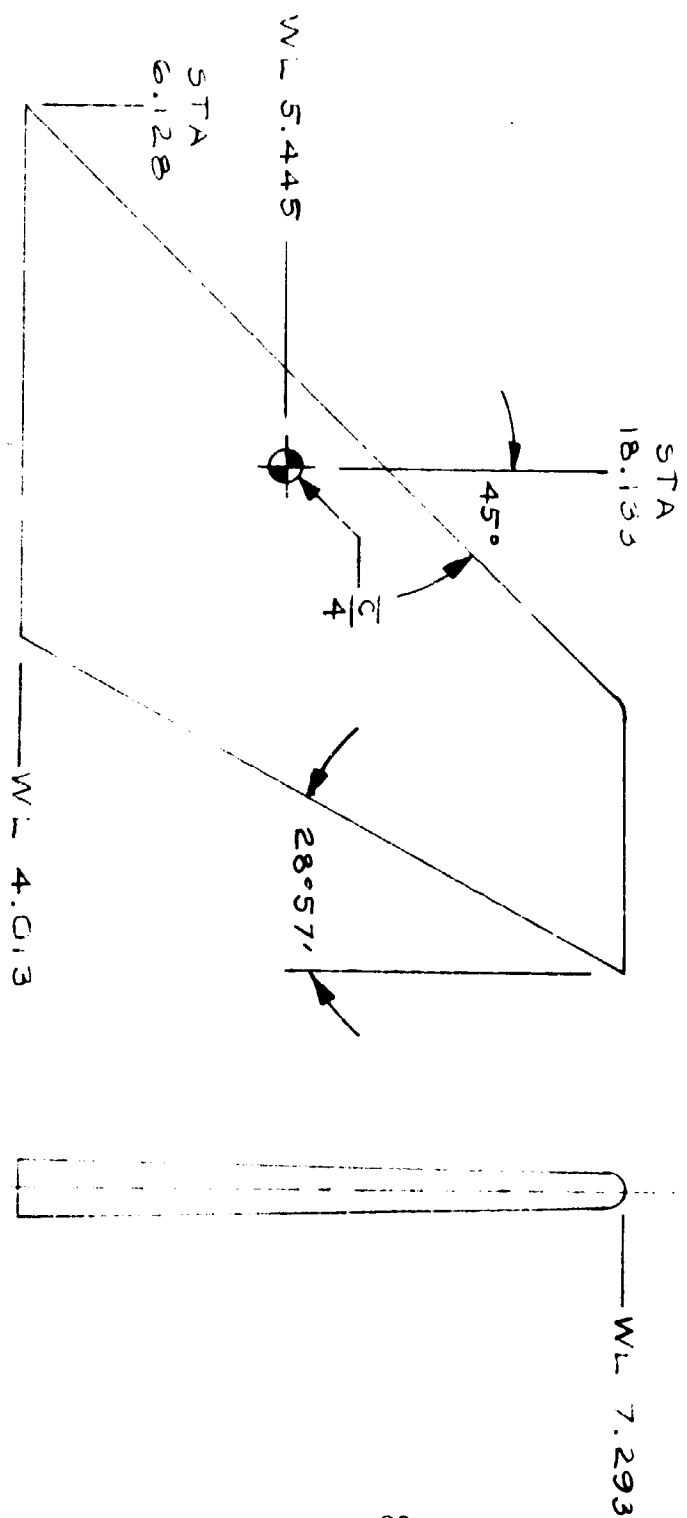


Figure 8.

AX-1202I-2
VERTICAL TAIL
REF 1202-8



TIP CHORD = 1.467
ROOT CHORD = 2.503
AIRFOIL : NACA 0012-64

Figure 9.

MODEL COMPONENT DESCRIPTIONS

MODEL COMPONENT: BODY - B8

GENERAL DESCRIPTION: Booster body based on Boeing
H-32 configuration, with axisymmetric nose

Full Scale: 164-10060

DRAWING NUMBER: Model S.O. 1202-6

DIMENSIONS:

	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length	<u>2853 in</u>	<u>19.02 in</u>
Max. Width	<u>434 in</u>	<u>2.892 in</u>
Max. Depth	<u>404 in</u>	<u>2.694 in</u>
Fineness Ratio	<u>7.05</u>	<u>7.06</u>
Area		
Max. Cross-Sectional	<u> </u>	<u>6.60 in²</u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

MODEL COMPONENT: BODY - B14

GENERAL DESCRIPTION: Same as B8 with aft body chines to
give approximately flat bottom and sides

DRAWING NUMBER: _____

DIMENSIONS:

	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length	_____	_____
Max. Width	_____	_____
Max. Depth	_____	_____
Fineness Ratio	_____	_____
Area		
Max. Cross-Sectional	_____	_____
Planform	_____	_____
Wetted	_____	_____
Base	_____	_____

MODEL COMPONENT: Wing - W4

GENERAL DESCRIPTION: Booster wing, based on H-32 configuration
Model 979-115, with wing sweep changed

Full Scale: 164-10060

DRAWING NUMBER: Model: S.O. 1202-11

DIMENSIONS:

FULL-SCALE

MODEL SCALE

TOTAL DATA

Area		
Planform	4900 ft ²	31.36 in ²
Wetted		
Span (equivalent)	185 ft	14.8 in
Aspect Ratio	7.0	7.0
Rate of Taper		
Taper Ratio	0.4	0.4
Dihedral Angle, degrees	4°	4°
Incidence Angle, degrees	2°	2°
Aerodynamic Twist, degrees	0°	0°
Toe-In Angle		
Cant Angle		
Sweep Back Angles, degrees		
Leading Edge	14°	18.25°
Trailing Edge	0°	4.78°
0.25 Element Line	11°	15.0°
Chords:		
Root (Wing Sta. 0.0)	453 in	3.02 in
Tip, (equivalent)	181 in	1.209 in
MAC	336 in	2.24 in
Fus. Sta. of .25 MAC	2912	12.852
W.P. of .25 MAC		
B.L. of .25 MAC		
Airfoil Section	477	3.18
Root	NACA 0015-64	NACA 0015-64
Tip	NACA 0015-64	NACA 0015-64

EXPOSED DATA

Area		
Span, (equivalent)		
Aspect Ratio		
Taper Ratio		
Chords		
Root		
Tip		
MAC		
Fus. Sta. of .25 MAC		
W.P. of .25 MAC		
B.L. of .25 MAC		

Full Scale: Nose is at BS 1000 ; ϕ is WL 400

Model: Nose is at BS 0 ; ϕ is WL 2.667

MODEL COMPONENT: Horizontal Tail - H4

GENERAL DESCRIPTION: Booster horizontal tail, based on
H-32 configuration, with adjustable incidence setting
and movable elevator

Full Scale: 164-10060

DRAWING NUMBER: Model: S.O. 1202-5

DIMENSIONS: (EXPOSED)

	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area	<u>1620 ft²</u>	<u>10.37 in²</u>
Span (equivalent)	<u>80.67 ft</u>	<u>6.45 in</u>
Inb'd equivalent chord	<u>322 in</u>	<u>2.15 in</u>
Outb'd equivalent chord	<u>161 in</u>	<u>1.07 in</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.297</u>	<u>0.30</u>
At Outb'd equiv. chord	<u>0.278</u>	<u>0.30</u>
Sweep Back Angles, degrees		
Leading Edge	<u>29°</u>	<u>29°</u>
Tailing Edge	<u>12.5°</u>	<u>12.5°</u>
Hingeline	<u>18°</u>	<u>18°</u>
Area Moment (Normal to hinge line)		<u>0.182 in³</u>
MAC	<u>251 in</u>	<u>1.67 in</u>
Body Sta. of .25 MAC	<u>3719</u>	<u>18.126</u>
Airfoil Section	NACA <u>0012-64</u>	NACA <u>0012-64</u>

MODEL COMPONENT: Vertical Tail - V₃

GENERAL DESCRIPTION: Booster vertical tail based on the
H-32 configuration — no rudder

Full Scale: 164-10060

DRAWING NUMBER: Model: S.O. 1202-8

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area	<u>1125 ft²</u>	<u>7.20 in</u>
Span (equivalent)	<u>41 ft</u>	<u>3.28 in</u>
Inb'd equivalent chord	<u>440 in</u>	<u>2.93 in</u>
Outb'd equivalent chord	<u>220 in</u>	<u>1.47 in</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.301</u>	<u>—</u>
At Outb'd equiv. chord	<u>0.333</u>	<u>—</u>
Sweep Back Angles, degrees		
Leading Edge	<u>45°</u>	<u>45°</u>
Tailing Edge	<u>19°</u>	<u>19°</u>
Hingeline	<u>34°</u>	<u>—</u>
Area Moment (Normal to hinge line)		
MAC	<u>344 in</u>	<u>2.293 in</u>
Body Sta. of .25 MAC	<u>3720</u>	<u>18.133</u>
Airfoil Section	<u>NACA 0012-64</u>	<u>NACA 0012-64</u>

MODEL COMPONENT: S2 - Spoiler

GENERAL DESCRIPTION: 10% chord spoiler located at 10%
chord line on wing W4

DRAWING NUMBER: Model: S.O. 1202-18

DIMENSIONS:

	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area (each side)	_____	<u>0.63 in²</u>
Span (~~equivalent~~) (each side)	_____	<u>3.35 in</u>
Inb'd equivalent chord	_____	<u>0.22 in</u>
Outb'd equivalent chord	_____	<u>0.14 in</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	_____	<u>0.10</u>
At Outb'd equiv. chord	_____	<u>0.10</u>
Sweep Back Angles, degrees		
Leading Edge	_____	<u>17°</u>
Tailing Edge @ 0° setting	_____	<u>15.7°</u>
Hingeline	_____	<u>17°</u>
Area Moment (Normal to hinge line)	_____	<u>0.057 in³</u>

NOMENCLATURE

(General)

<u>SYMBOL</u>	<u>SADSAC SYMBOL</u>	<u>DEFINITION</u>
α	ALPHA	angle of attack, angle between the projection of the wind X_w -axis on the body X, Z-plane and the body X-axis; degrees
β	BETA	sideslip angle, angle between the wind X_w -axis and the projection of this axis on the body X-Z-plane; degrees
ψ	PSI	yaw angle, angle of rotation about the body Z-axis, positive when the positive X-axis is rotated toward the positive Y-axis; degrees
ϕ	PHI	roll angle, angle of rotation about the body X-axis, positive when the positive Y-axis is rotated toward the positive Z-axis; degrees
ρ		air density; K_g/π^3 , slugs/ft ³
a		speed of sound; m/sec, ft/sec
V		speed of vehicle relative to surrounding atmosphere; m/sec, ft/sec
q	Q(Psi) Q(Psf)	dynamic pressure; $1/2\rho V^2$, psi, psf
M	MACH	Mach number; V/a
RN/L	RN/L	Reynolds number per unit length; million/ft
p		static pressure; psi
P		total pressure; psi
C_p	CP	pressure coefficient; $(p-p_\infty)/q$

NOMENCLATURE (Continued)

Reference & C. G. Definitions

<u>SYMBOL</u>	<u>SADSAC SYMBOL</u>	<u>DEFINITION</u>
S		wing area; m^2 , ft^2
S	SREF	reference area; m^2 , ft^2
$\bar{c}$		wing mean aerodynamic chord or reference chord; m, ft, in (see l_{ref} or LREF)
l_{ref}	LREF	reference length; m, ft, in.; (see $\bar{c}$)
b_{ref}	BREF	wing span or reference span; m, ft, in
A_b		base area; m^2 , ft^2 , in^2
c. g.		center of gravity
MRP	MRP	abbreviation for moment reference point
	XMRP	abbreviation for moment reference point on X-axis
	YMRP	abbreviation for moment reference point on Y-axis
	ZMRP	abbreviation for moment reference point on Z-axis

NOMENCLATURE (Continued)

Axis System General

<u>SYMBOL</u>	<u>DEFINITION</u>
F	force; F, lbs
M	moment; M, in-lb

<u>Subscript</u>	<u>Definition</u>
N	normal force
A	axial force
L	lift force
D	drag force
Y	force or moment about the Y axis
Z	moment about the Z axis
X	moment about the X axis
s	stability axis system
w	wind axis system
ref	reference conditions
∞	free stream conditions
t	total conditions
b	base

NOMENCLATURE (Continued)
Body & Stability Axis System

<u>SYMBOL</u>	<u>SADSAC SYMBOL</u>	<u>DEFINITION</u>
<u>Body Axis System</u>		
C_N	CN	normal force coefficient; F_N/qS
C_A	CA	axial force coefficient; F_A/qS
C_{A_b}	CAB	base axial force coefficient; $\begin{bmatrix} -1 \\ \end{bmatrix} \begin{bmatrix} (P_b - P_\infty)/q \end{bmatrix} (A_b/S)$
C_{A_f}	CAF	forebody axial force coefficient; $C_A - C_{A_b}$
C_n	CYN	yawing moment coefficient; $M_Z/qS b_{ref}$
C_l	CBL	rolling moment coefficient; $M_X/qS b_{ref}$
<u>Common to Both Axis Systems</u>		
C_m	CLM	pitching moment coefficient; $M_Y/qS l_{ref}$
C_y	CY	side force coefficient; F_Y/qS
<u>Stability Axis System</u>		
C_L	CL	lift force coefficient; F_L/qS
C_D	CD	drag force coefficient; F_D/qS
C_{D_b}	CDB	base drag coefficient
C_{D_f}	CDF	forebody drag coefficient; $C_D - C_{D_b}$
C_n	CLN	yawing moment coefficient; $M_{Z,s}/qS b_{ref}$
C_l	CSL	rolling moment coefficient; $M_{X,s}/qS b_{ref}$
L/D	L/D	lift-to-drag ratio; C_L/C_D
L/D_f	L/DF	lift to forebody drag ratio; C_L/C_{D_f}

NOMENCLATURE (Continued)

Surface Definitions

<u>SYMBOL</u>	<u>SADSAC SYMBOL</u>	<u>DEFINITION</u>
i_t	HORIZT	horizontal tail incidence; positive when trailing edge down; degrees
δ		symmetrical surface deflection angle; degrees; positive deflections are:
	AILRON	aileron - total aileron deflection; (left aileron - right aileron)/2
	CANARD	canard - trailing edge down
	ELEVON	elevon - trailing edge down
	ELEVTR	elevator - trailing edge down
	FLAP	flap - trailing edge down
	RUDDER	rudder - trailing edge to the left
	SPOILR	spoiler - trailing edge down
	TAB	tab - trailing edge down with respect to control surface
δ		antisymmetrical surface deflection angle, degrees; positive trailing edge down:
	AIL-L	left aileron - trailing edge down
	AIL-R	right aileron - trailing edge down
	ELVN-L	left elevon - trailing edge down
	ELVN-R	right elevon - trailing edge down
	SPLR-L	left spoiler - trailing edge down
	SPLR-R	right spoiler - trailing edge down

<u>SURFACE SUBSCRIPTS</u>	<u>DEFINITION</u>
a	aileron
b	base
c	canard
e	elevator or elevon
f	flap
r	rudder or ruddervator
s	spoiler
t	tail

TABULATED DATA LISTING

A tabulated data listing, consisting of all aero data sets, both original and those created in arriving at the plotted material to be presented subsequently, is available as an addendum to this report. The tabular listing is made up in two sections:

- (a) a brief summary list of all data sets containing the identifier, the descriptor, and the resident dependent variables.
- (b) a full list of all data sets containing all resident or selected aerodynamic coefficients of the data sets as well as the above mentioned information.

The listing is currently sent on limited distribution to the following organizations:

NASA AMES	Mr. V. Stevens
TBC	Mr. W. Mayer

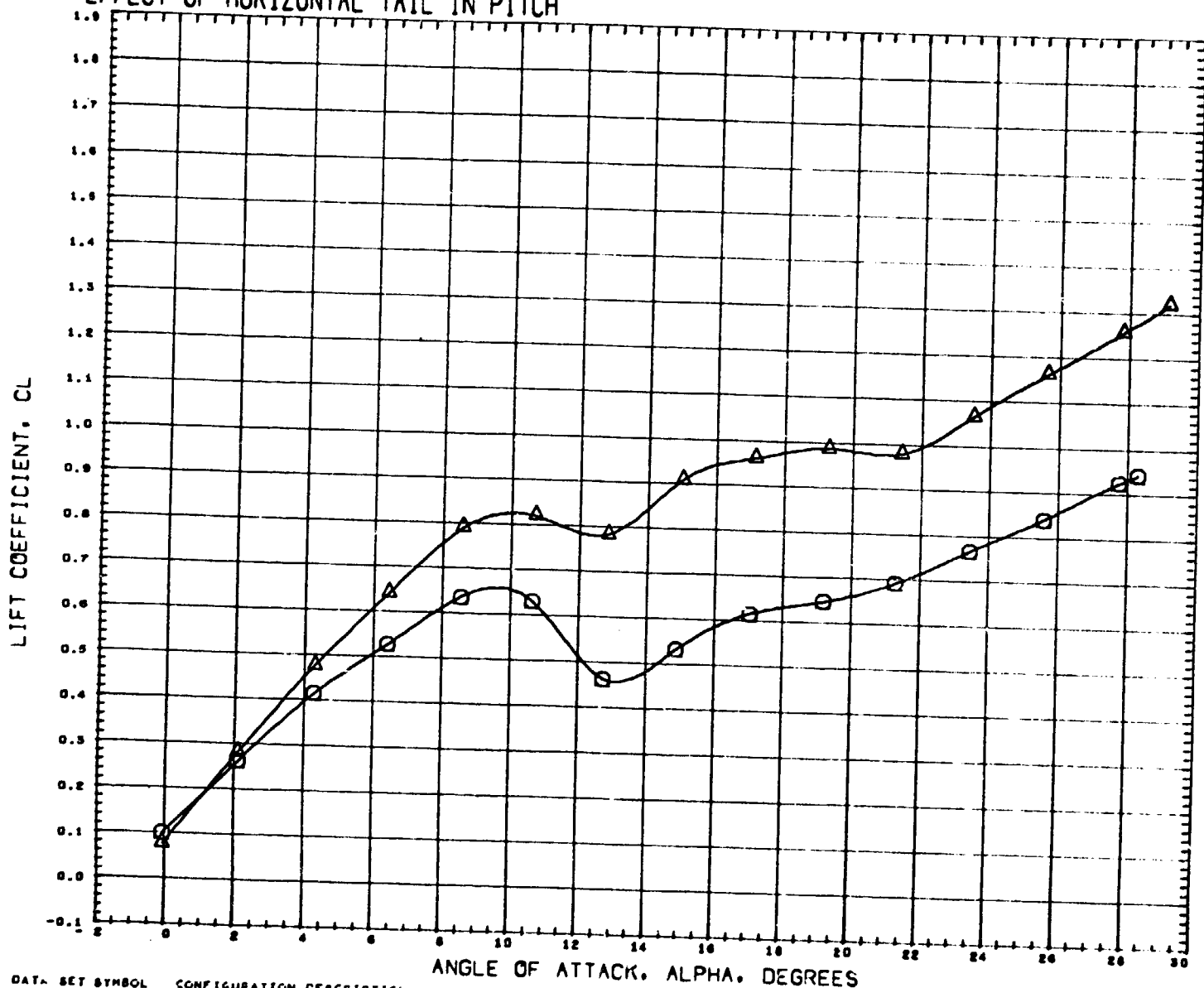
If copies of this listing are desired, please contact the above or the cognizant SADSAC personnel who, for this data, is:

Mr. Albert D. Martin
Department 2780
Chrysler Corporation Space Division
New Orleans, La. 70129

(504) 255-2304

P L O T T E D D A T A

EFFECT OF HORIZONTAL TAIL IN PITCH



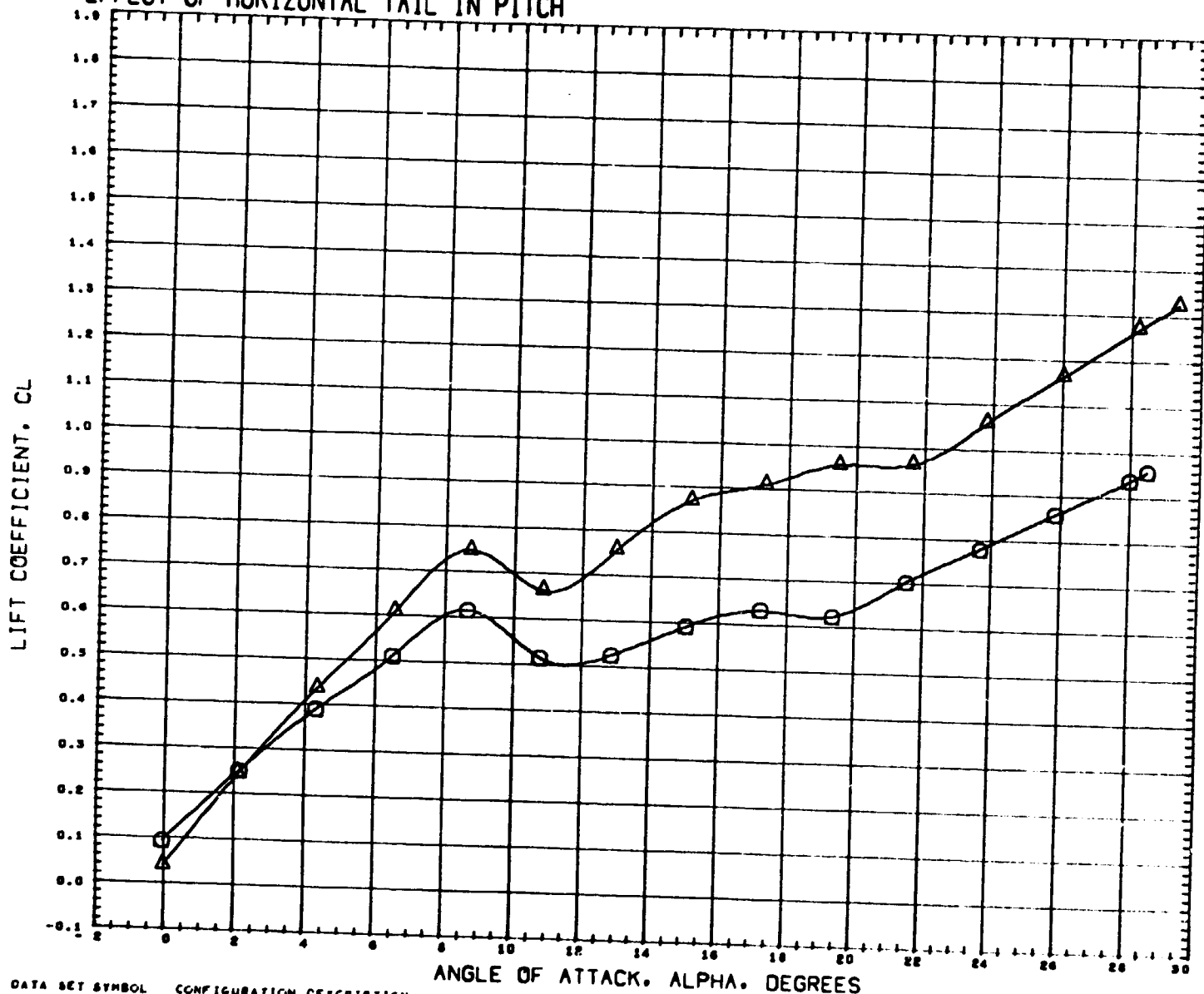
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC2034) BTWT-1265 BOEING N-32 BOOSTER B6W4V3
 (RC2074) BTWT-1265 BOEING N-32 BOOSTER B6W4M4V3

NTAIL ELEVTR SPOILR
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3603 SQ. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0087

MACH 0.299

EFFECT OF HORIZONTAL TAIL IN PITCH



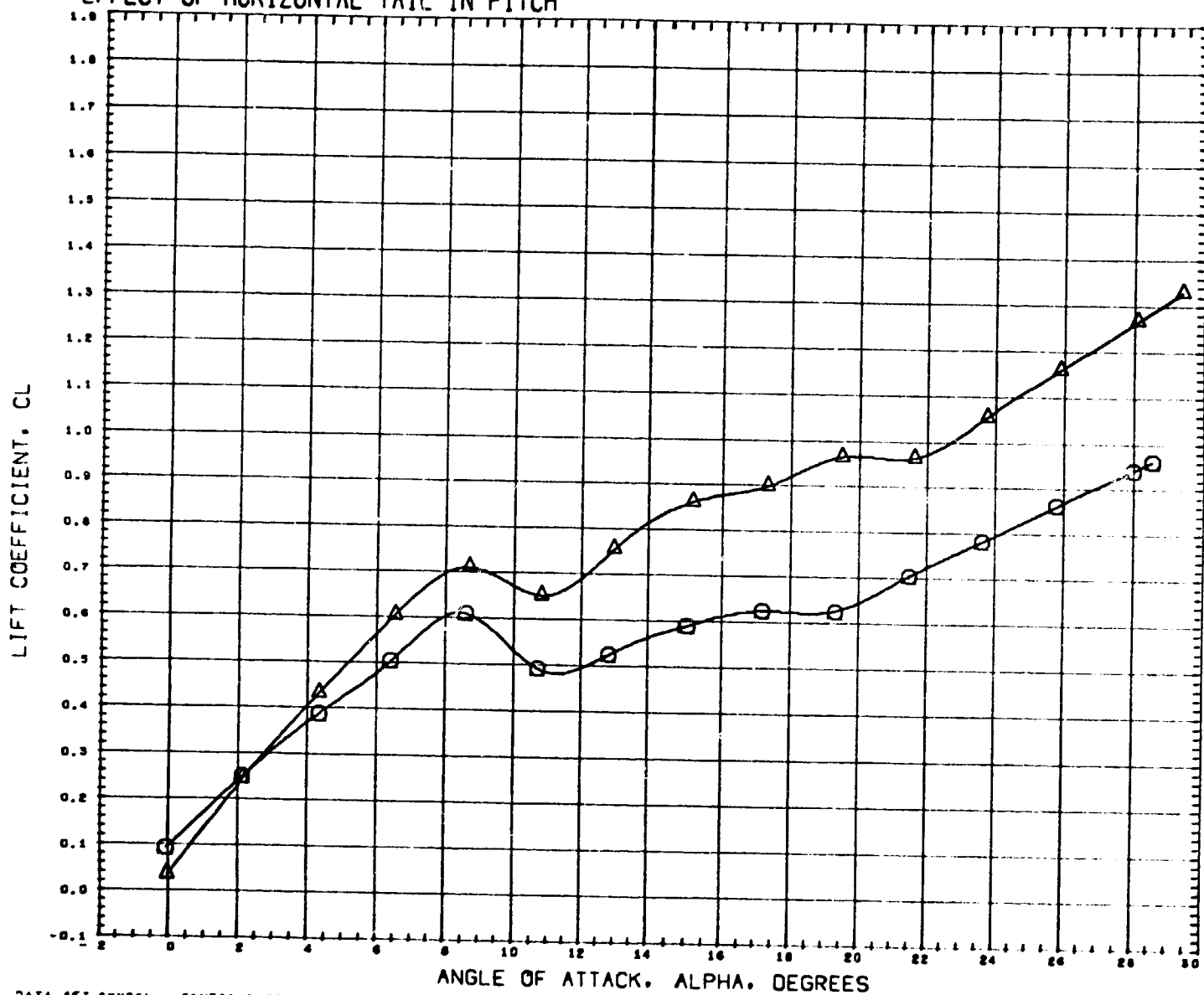
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02334) BTMT-1265 BOEING N-32 BOOSTER B8W4V3
 (R02374) BTMT-1265 BOEING N-32 BOOSTER B8W4H4V3

MTAIL ELEVTR SPOILR
 0.000 0.000

MACH 0.450

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9400 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

EFFECT OF HORIZONTAL TAIL IN PITCH



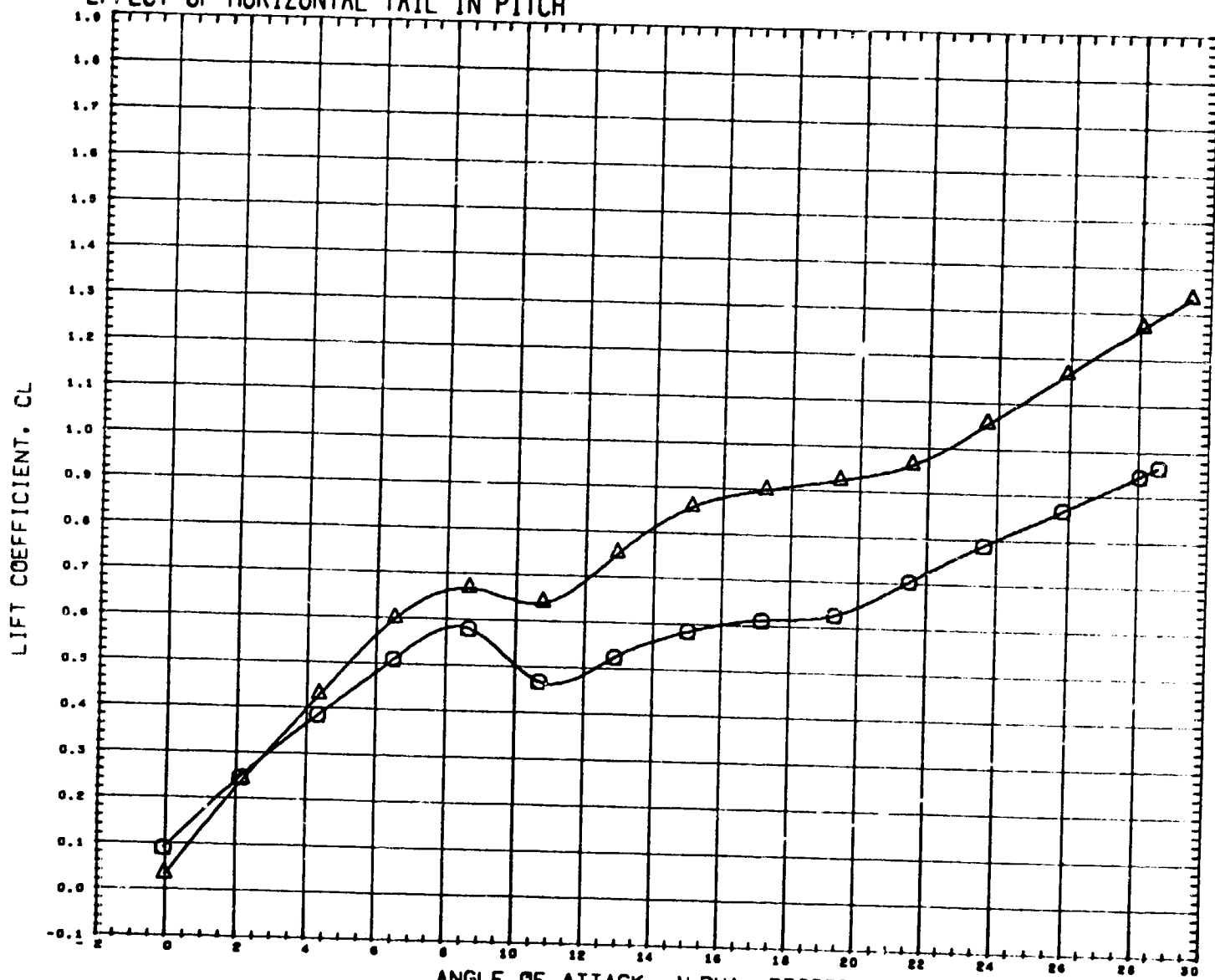
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02334) $\bigcirc$ BTWT-1265 BOEING H-32 BOOSTER B8W4V3
 (R02374) $\triangle$ BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3

MTAIL ELEVTR SPOILR
 0.500 0.000

REFERENCE INFORMATION
 SREF 31.3600 89. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.476

EFFECT OF HORIZONTAL TAIL IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(R02034) BTWT-1265 BOEING N-32 BOOSTER 88W4V3
 (R02074) BTWT-1265 BOEING N-32 BOOSTER 118W4H4V3

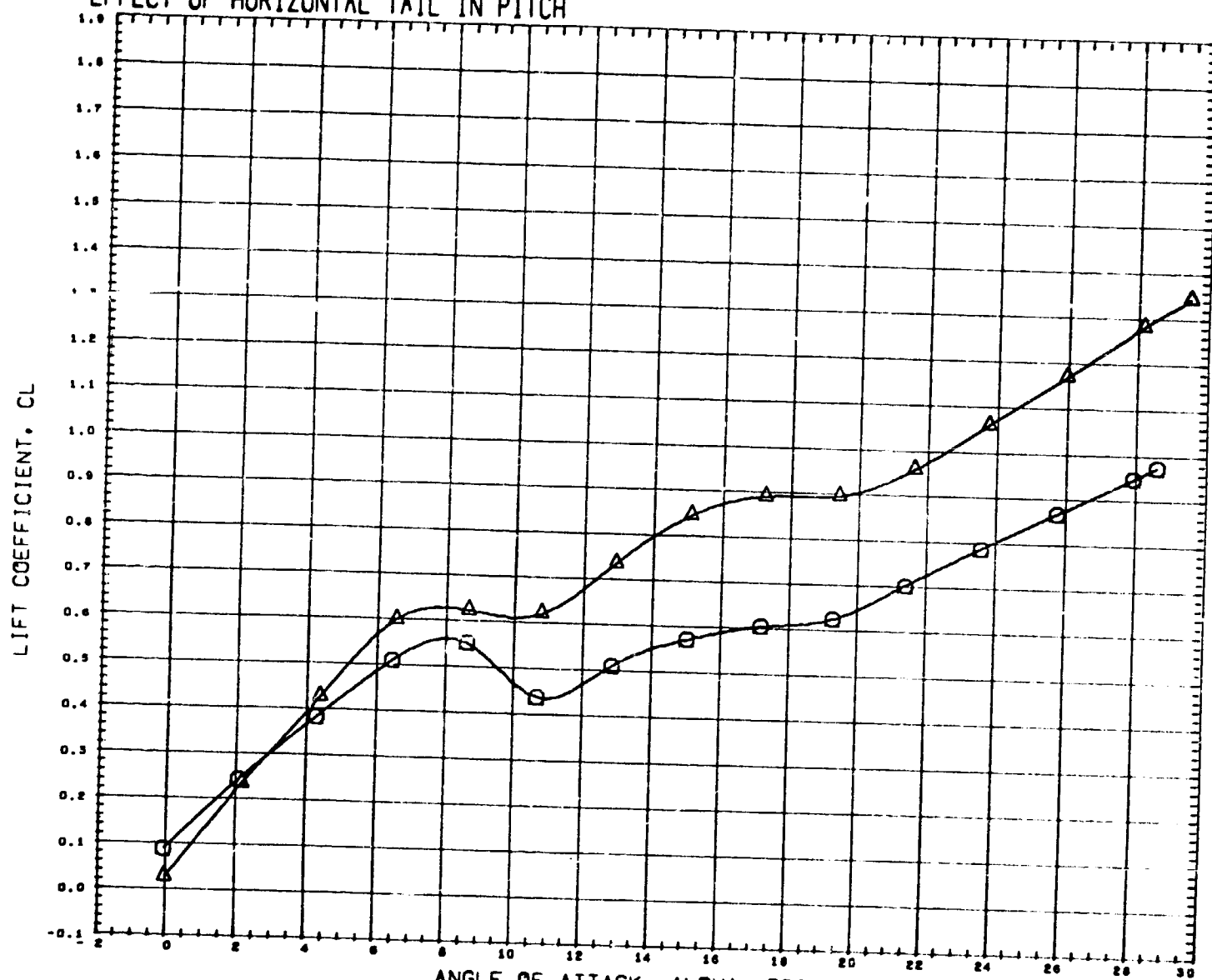
MTAIL ELEVTR SPOILR
 0.000 0.000

REFERENCE INFORMATION

SREF 31.3600 SQ. IN
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.489

EFFECT OF HORIZONTAL TAIL IN PITCH



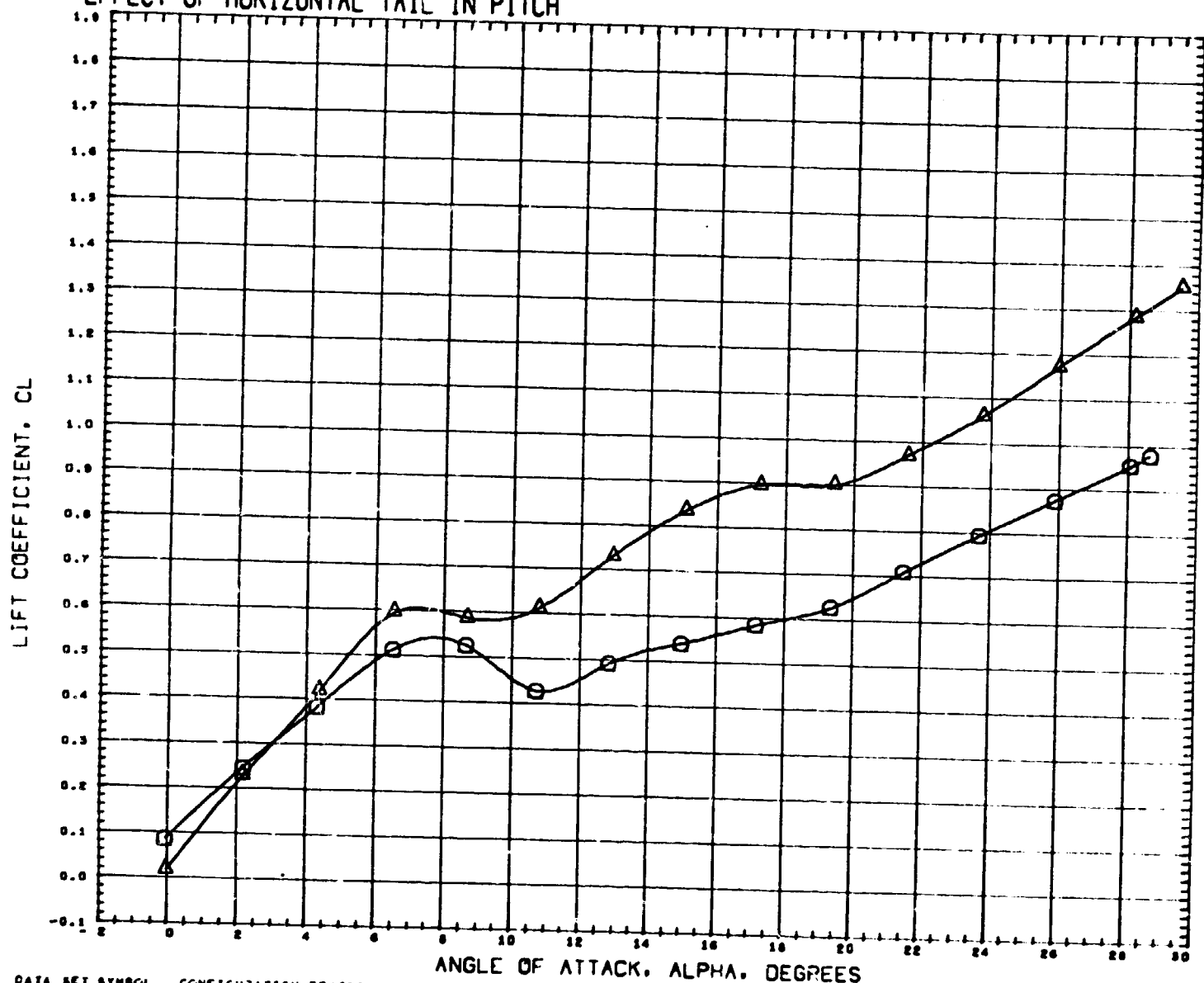
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02034) B1WT-1265 BOEING H-32 BOOSTER B8W4V3
 (R02074) B1WT-1265 BOEING H-32 BOOSTER B8W4H4V3

MTAIL ELEVTR SPOILR
 0.000 0.000

MACH 0.924

REFERENCE INFORMATION
 SREF 31.3600 SQ. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

EFFECT OF HORIZONTAL TAIL IN PITCH



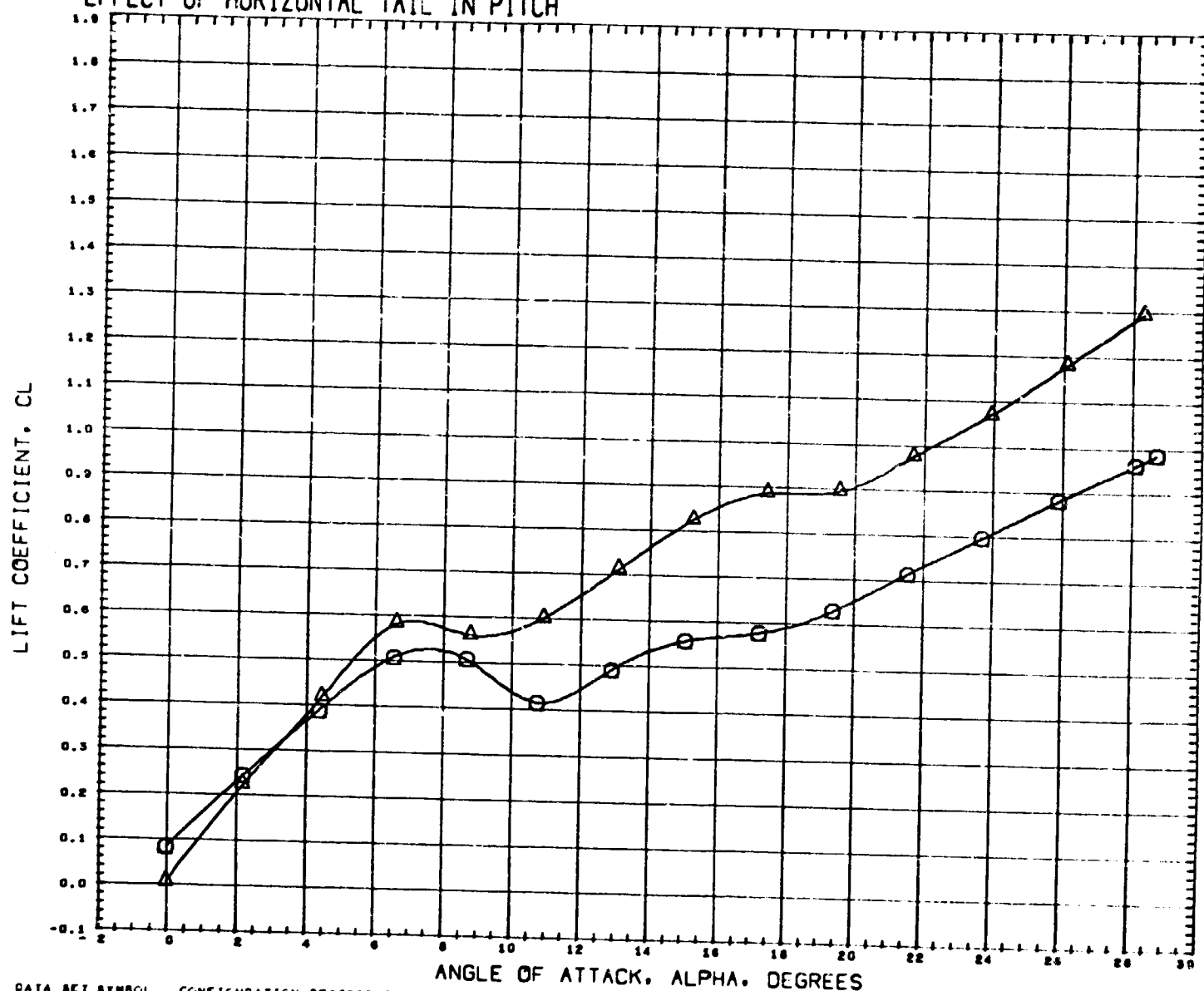
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02034) BTWT-1243 BOEING H-32 BOOSTER BW4V3
 (R02074) BTWT-1245 BOEING H-32 BOOSTER BW4H4V3

MTAIL ELEVTR SPOILR
 0.000 0.000

MACH 0.949

REFERENCE INFORMATION
 SREF 31.3600 SQ. IN
 LREF 2.2460 IN.
 BREF 14.6000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

EFFECT OF HORIZONTAL TAIL IN PITCH



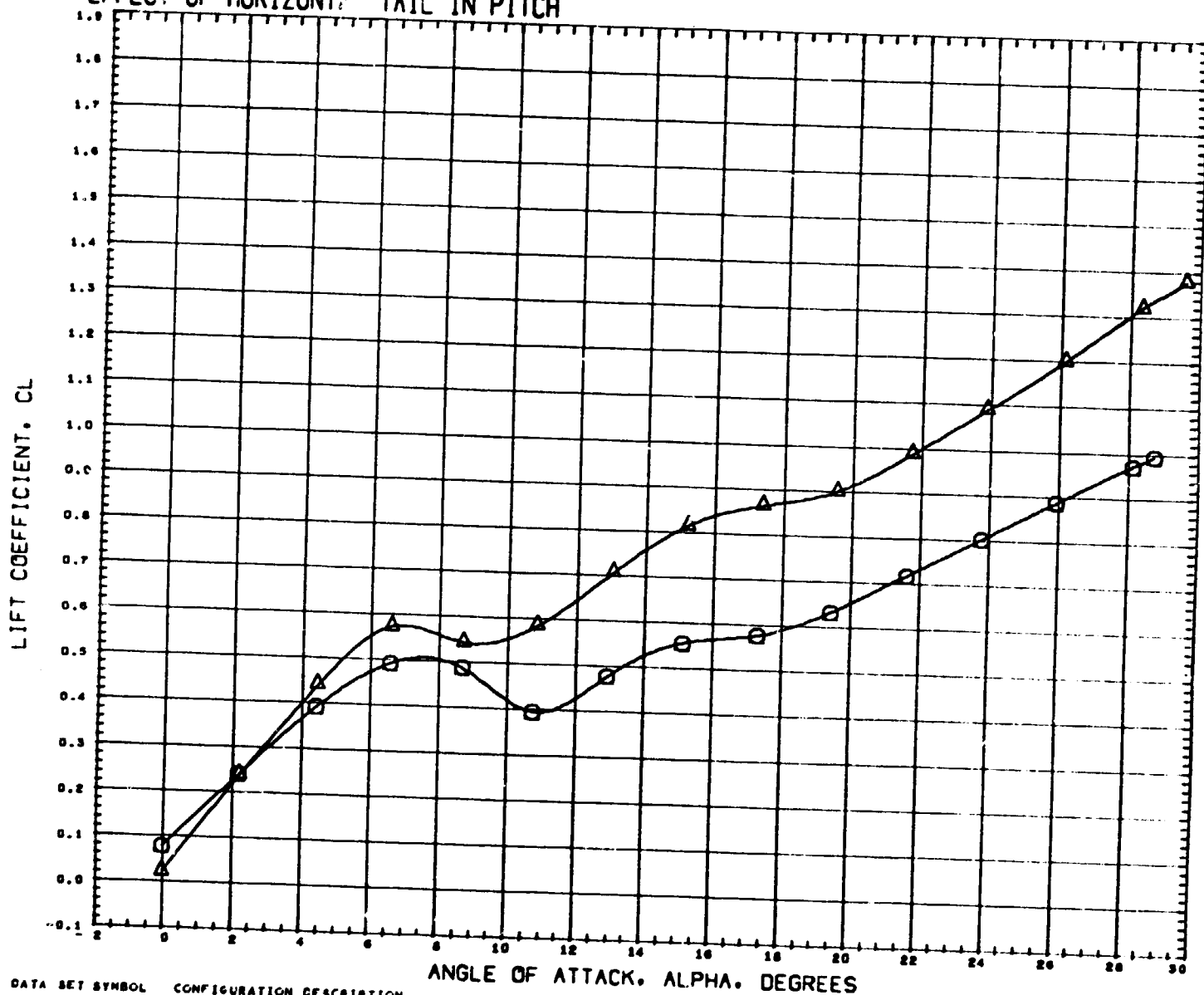
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RD2034) BTWT-1265 BOEING H-32 BOOSTER 88W4V3
 (RD2074) BTWT-1269 BOEING H-32 BOOSTER 88W4H4V3

MTAIL ELEVTR SPOILR
 0.000 0.000

MACH 0.975

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XHRP 11.9600 IN.
 YHRP 0.0000 IN.
 ZHRP 2.4330 IN.
 SCALE 0.0067

EFFECT OF HORIZONTAL TAIL IN PITCH



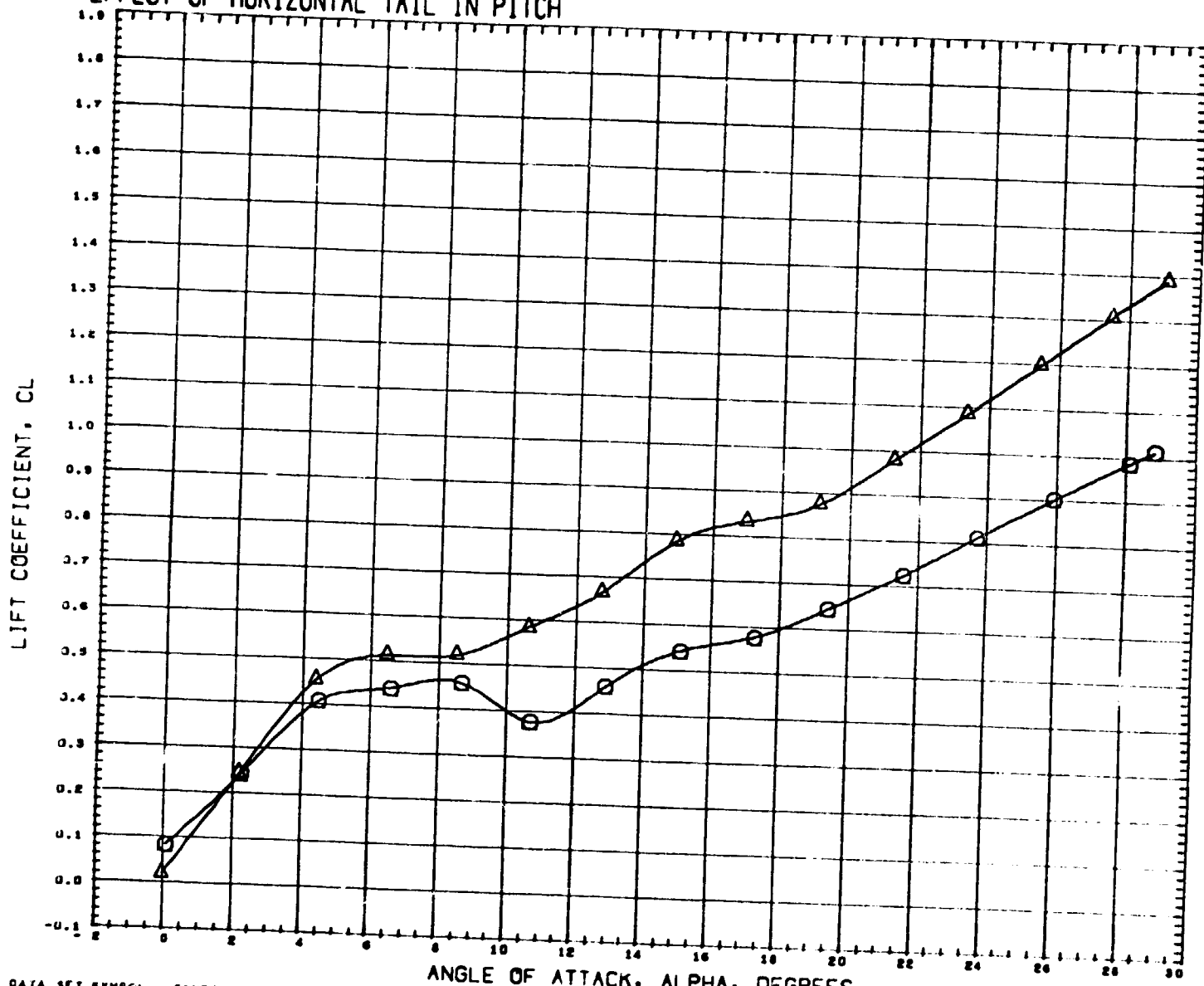
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RD2034) BTMT-1263 BOEING H-32 BOOSTER 88W4V3
 (RD2074) BTNT-1263 BOEING H-32 BOOSTER 88W4H4V3

NTAIL ELEVTR SPOILR
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 IN.
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0007

MACH 0.000

EFFECT OF HORIZONTAL TAIL IN PITCH



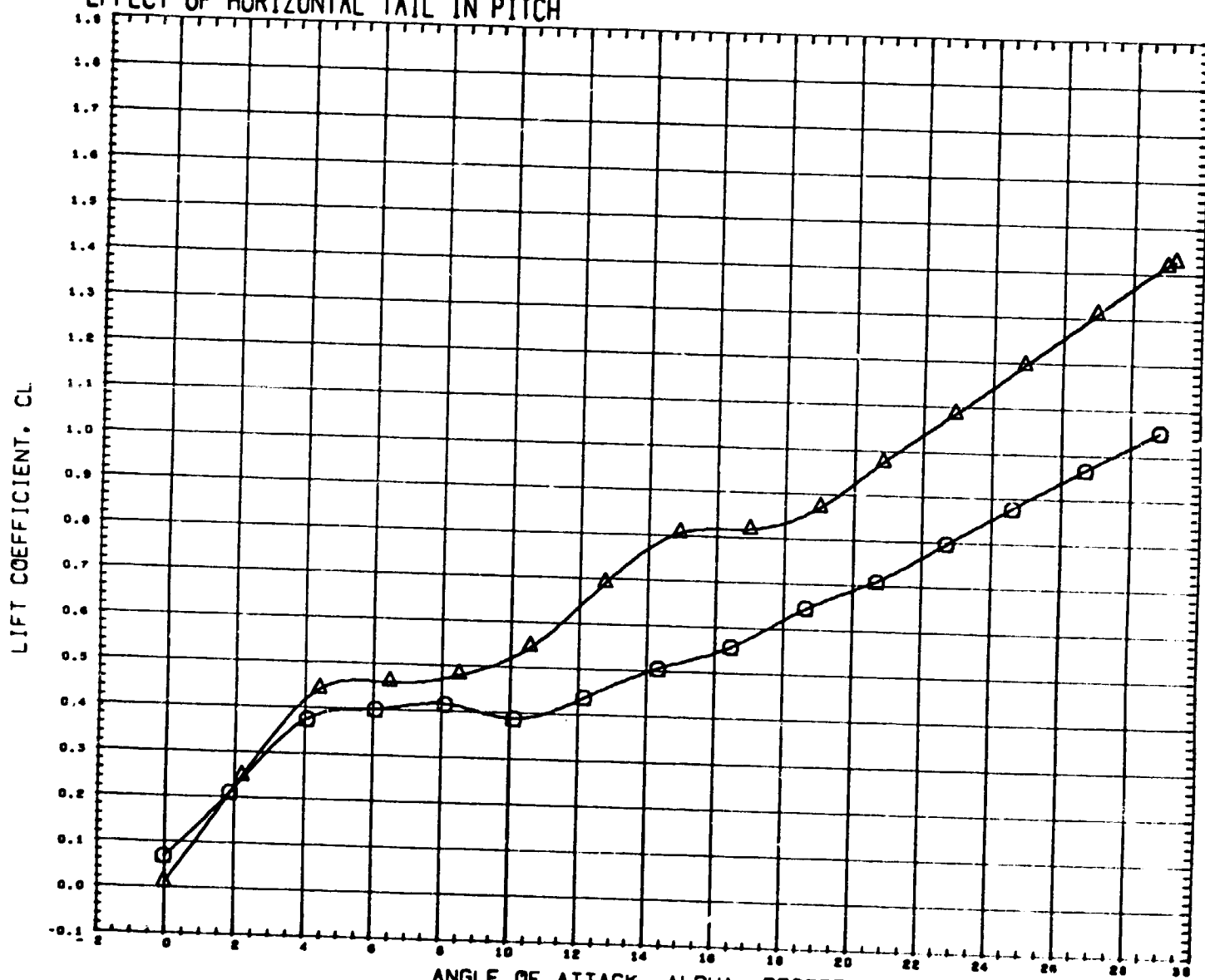
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02034) BTWT-1265 BOEING H-32 BOOSTER BW4V3
 (R02074) BTWT-1265 BOEING H-32 BOOSTER BW4H4V3

NTAIL ELEVTR SPOILR
 0.000 0.000

MACH 0.631

REFERENCE INFORMATION
 SREF 31.3600 90. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9400 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4350 IN.
 SCALE 0.0067

EFFECT OF HORIZONTAL TAIL IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC2034) 88W4V3 BOEING H-32 BOOSTER
 (RC2074) 88W4H4V3 BOEING H-32 BOOSTER

NTAIL ELEVTR SPOILR
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3603 80. IN
 LREF 2.2403 IN.
 BREF 14.0003 IN.
 XMRP 11.9803 IN.
 YMRP 0.0003 IN.
 ZMRP 2.4310 IN.
 SCALE 0.0007

MACH 0.700

EFFECT OF HORIZONTAL TAIL IN PITCH



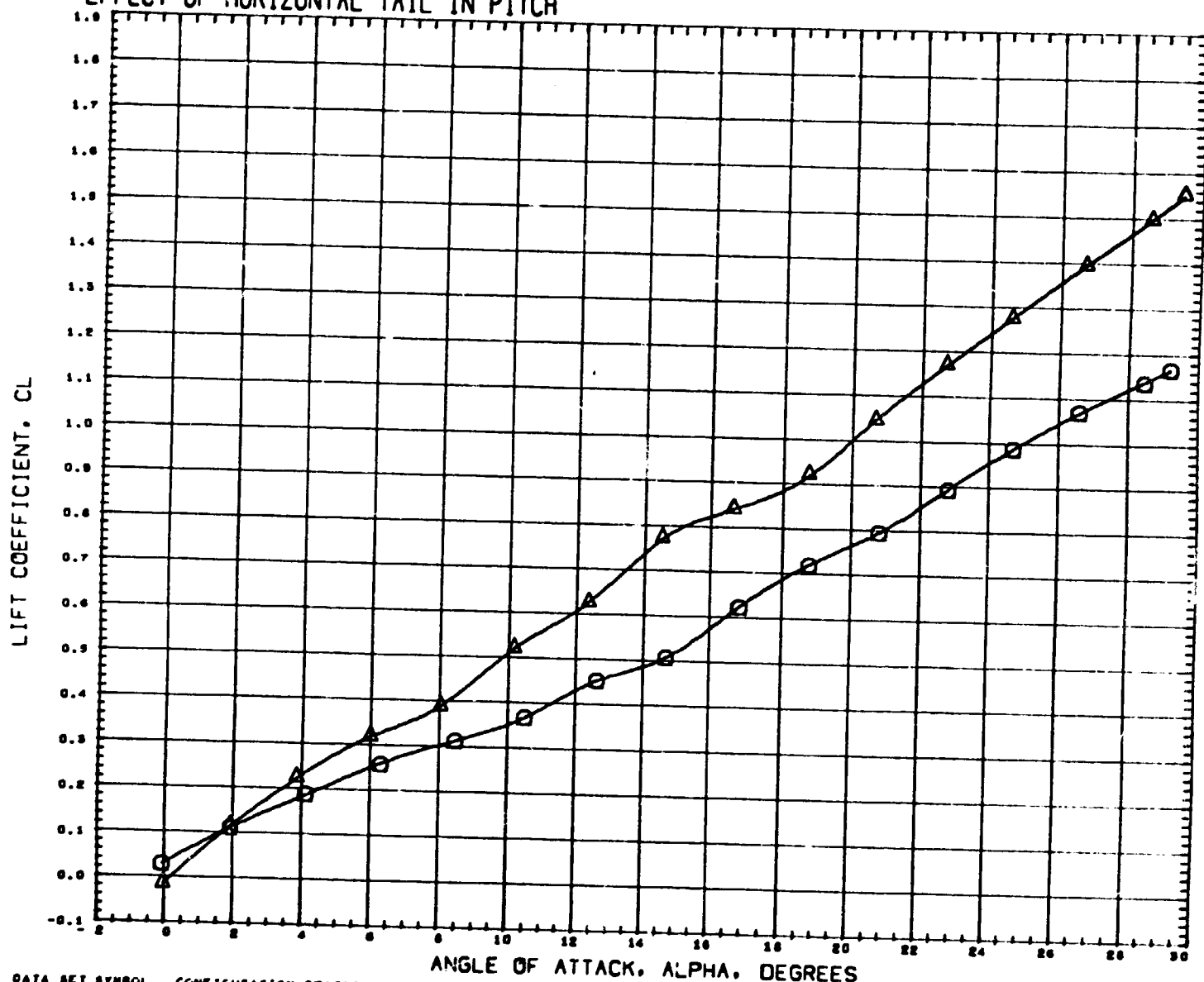
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RD034) BTWT-1265 BOEING N-32 BOOSTER B8W4V3
 (RD074) BTWT-1265 BOEING N-32 BOOSTER B8W4H4V3

MTAIL ELEVTR SPOILR
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 SQ. IN
 LREF 2.2400 IN.
 DREF 14.8000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4300 IN.
 SCALE 0.0067

MACH 0.790

EFFECT OF HORIZONTAL TAIL IN PITCH



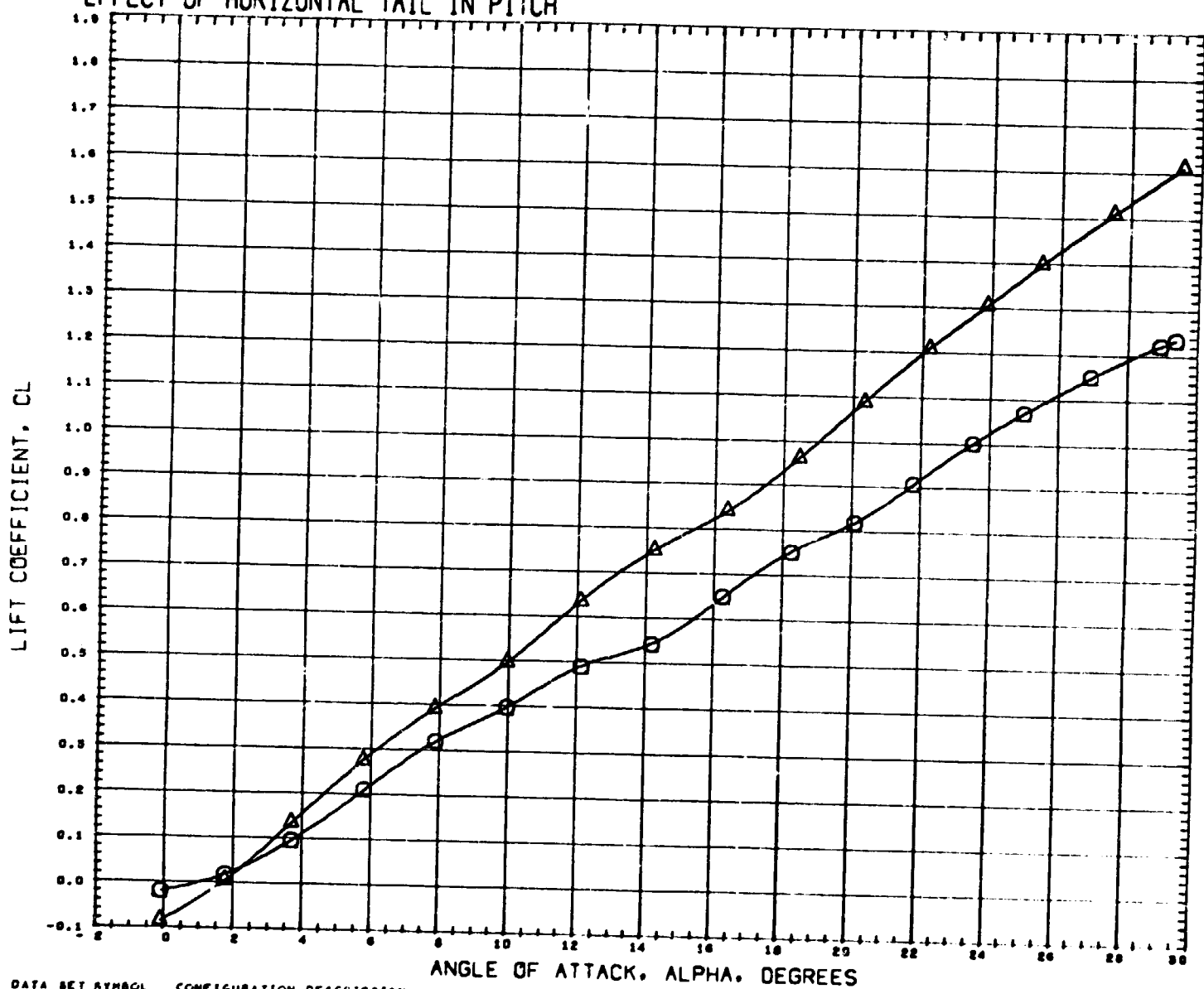
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RCE234) Q BTWT-1263 BOEING N-32 BOOSTER 88W4V3
 (RCE274) Q BTWT-1263 BOEING N-32 BOOSTER 88W4H4V3

NTAIL ELEVTR SPOILR
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3800 SQ. IN
 LREF 2.2400 IN.
 SREF 14.0000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0007

MACH 0.000

EFFECT OF HORIZONTAL TAIL IN PITCH



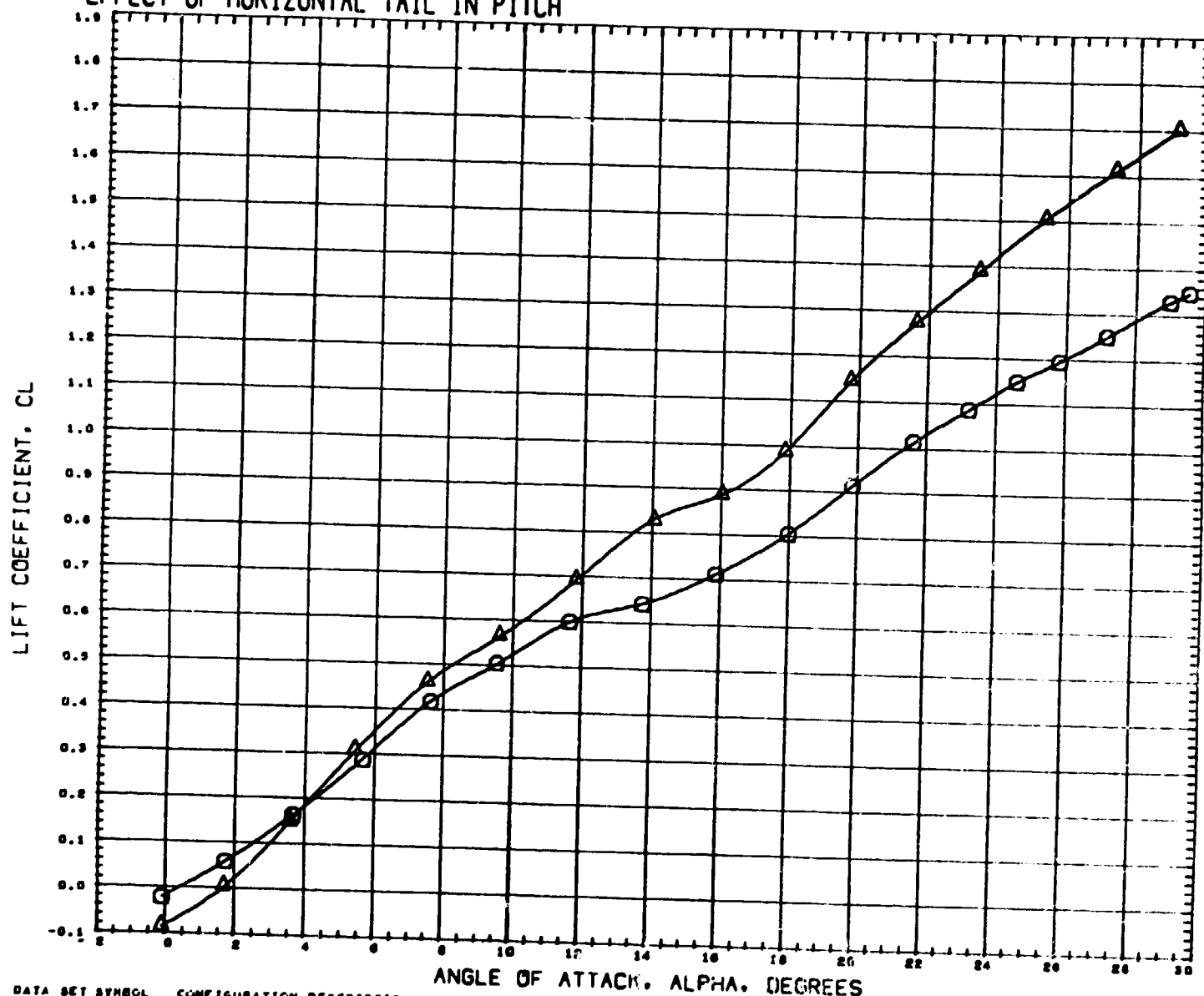
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R2334) BTWT-1263 BOEING N-32 BOOSTER BOW4V3
 (R2074) BTWT-1265 BOEING N-32 BOOSTER BOW4H4V3

NTAIL ELEVTR SPOILR
 0.000 0.000

REFERENCE INFORMATION
 SREF 51.5600 90. IN
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4530 IN.
 SCALE 0.0067

MACH 0.850

EFFECT OF HORIZONTAL TAIL IN PITCH



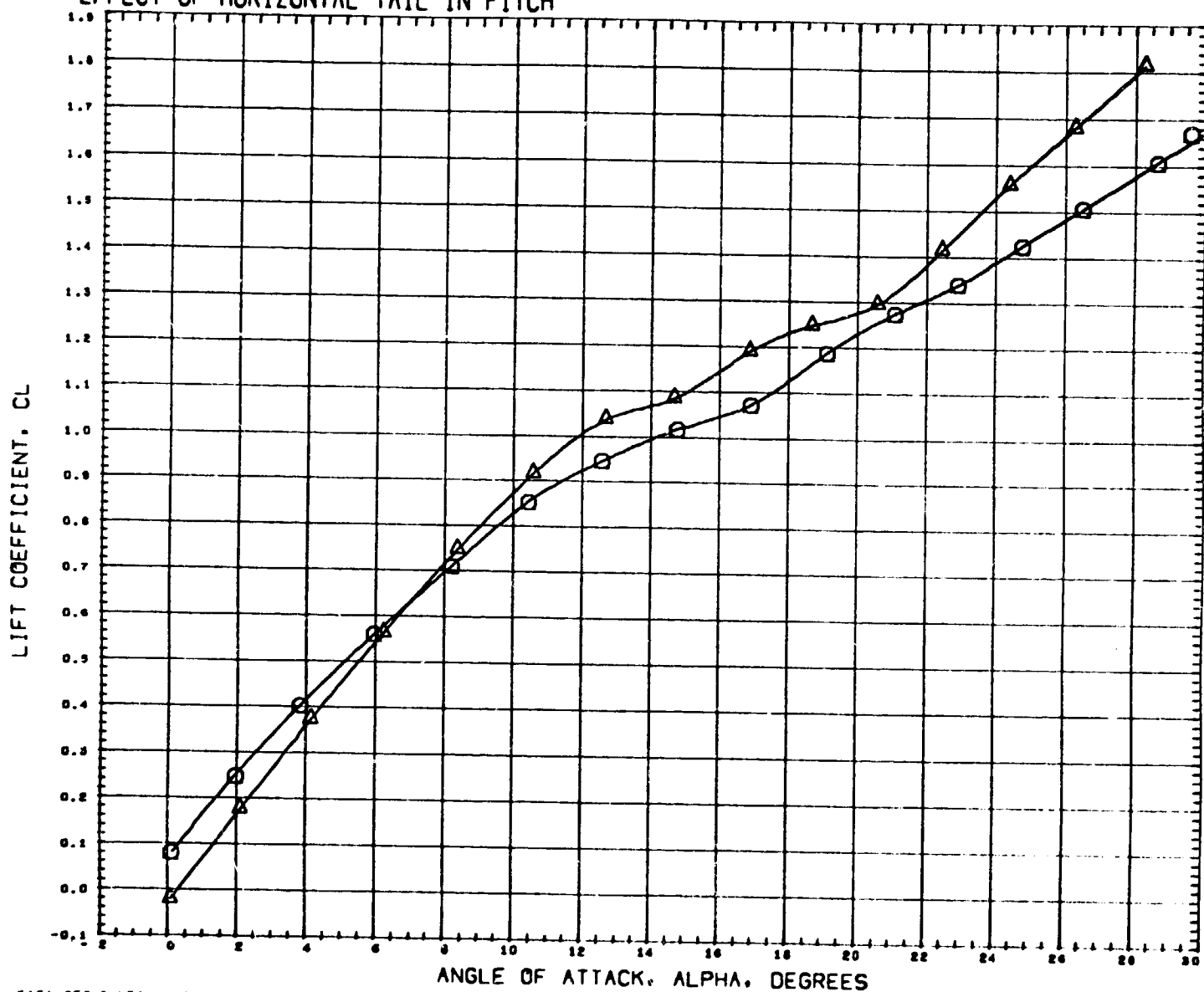
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC2034) BTMT-1265 BOEING N-32 BOOSTER 88W4V3
 (RC2074) BTMT-1265 BOEING N-32 BOOSTER 88W4H4V3

NTAIL ELEVTR SPOILR
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 88. IN
 LREF 2.2400 IN.
 MREF 14.6000 IN.
 XMRP 11.9600 IN.
 YMRP 0.6000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0007

MACH 0.899

EFFECT OF HORIZONTAL TAIL IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(AC2334) 88W4V3 BOEING H-32 BOOSTER
 (AC2374) 88W4H4V3 BOEING H-32 BOOSTER

HTAIL ELEVTR SPOILER

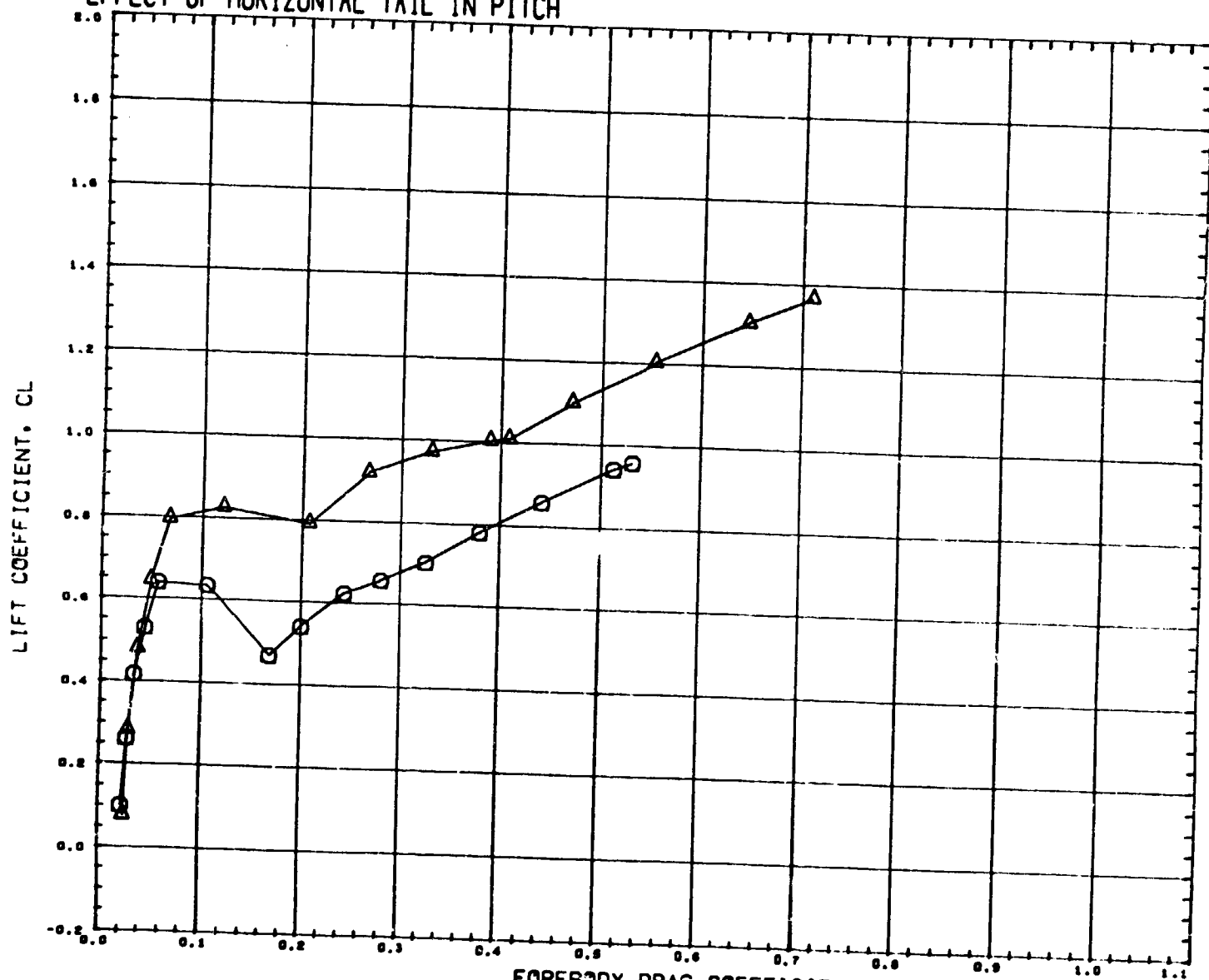
0.000 0.000

REFERENCE INFORMATION

SREF 31.5600 IN.
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.949

EFFECT OF HORIZONTAL TAIL IN PITCH



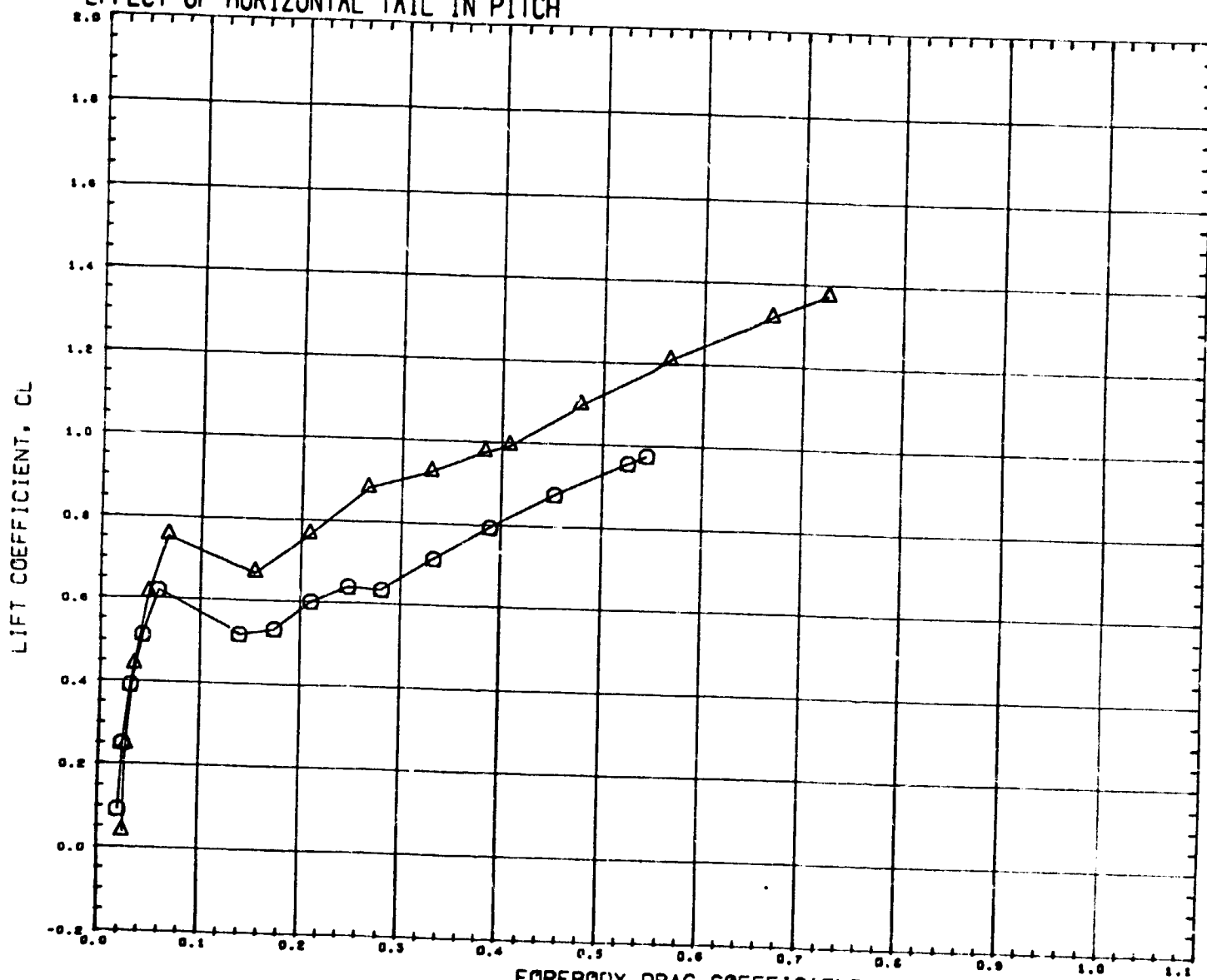
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (DC2034) BSW4V3
 (DC2074) BSW4H4V3

NTAIL 0.000
 ELEVR 0.000
 SPOILR

REFERENCE INFORMATION
 SREF 31.3600 IN.
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XMRP 11.9000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0007

MACH 0.299

EFFECT OF HORIZONTAL TAIL IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (DD2G34) BMT-1265 BOEING H-32 BOOSTER BBW4V3
 (CC2074) BMT-1265 BOEING H-32 BOOSTER BBW4H4V3

NTAIL ELEVTR SPOILR
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 SQ. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH U.450

EFFECT OF HORIZONTAL TAIL IN PITCH



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(002334) Δ	BTWT-1265 BOEING N-32 BOOSTER
(002074) $\circ$	BTWT-1263 BOEING N-32 BOOSTER

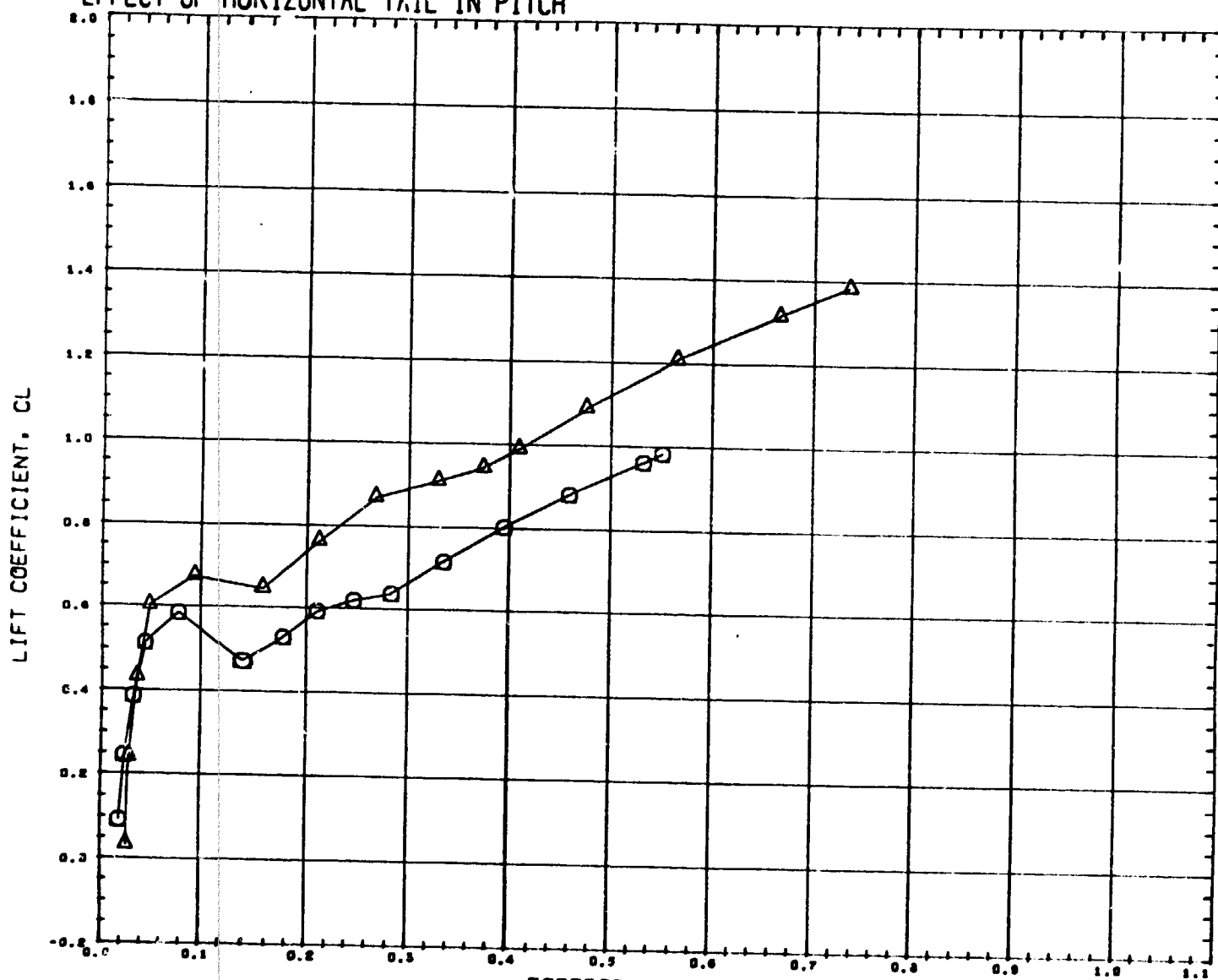
FOREBODY DRAG COEFFICIENT, COF

NTAIL	ELEVTR	SPOILR
0.000	0.000	

REFERENCE INFORMATION		
SRFP	31.3600	80. IN
LRFP	2.2400	IN.
SRFP	14.0000	IN.
XRFP	11.0000	IN.
YRFP	0.0000	IN.
ZRFP	2.4330	IN.
SCALE	0.0007	

MACH 0.476

EFFECT OF HORIZONTAL TAIL IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (002C34) BTWT-1265 BOEING N-32 BOOSTER 88M4V3
 (002C74) BTWT-1265 BOEING N-32 BOOSTER 88M4H4V3

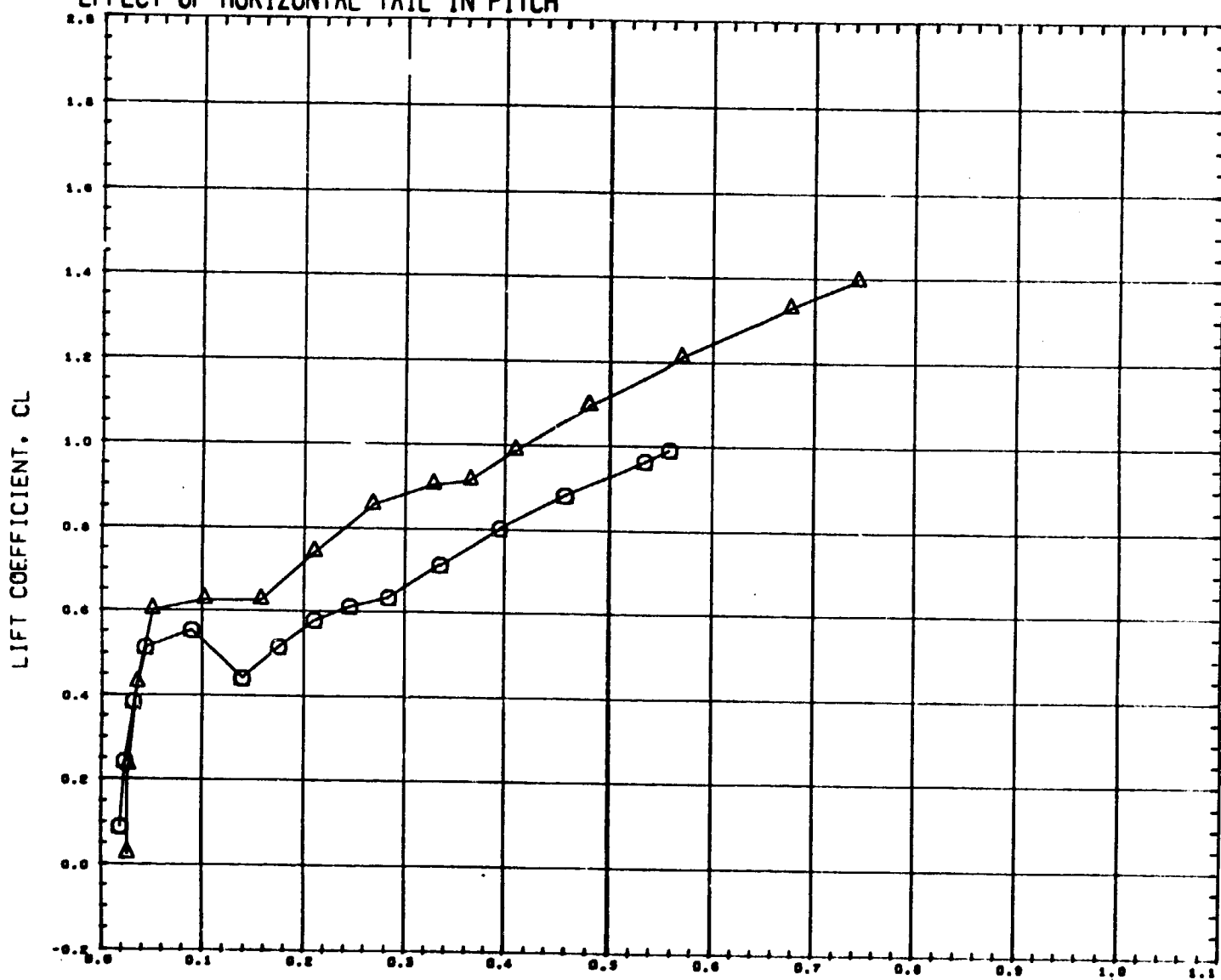
FOREBODY DRAG COEFFICIENT, CDF

HTAIL ELEVTR SPOILER
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 SREF 14.6000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0087

MACH 0.499

EFFECT OF HORIZONTAL TAIL IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(002034) STMT-1265 BOEING M-32 BOOSTER 88W4V3
 (002074) STMT-1265 BOEING M-32 BOOSTER 88W4H4V3

MTAIL ELEVTR SPOILR

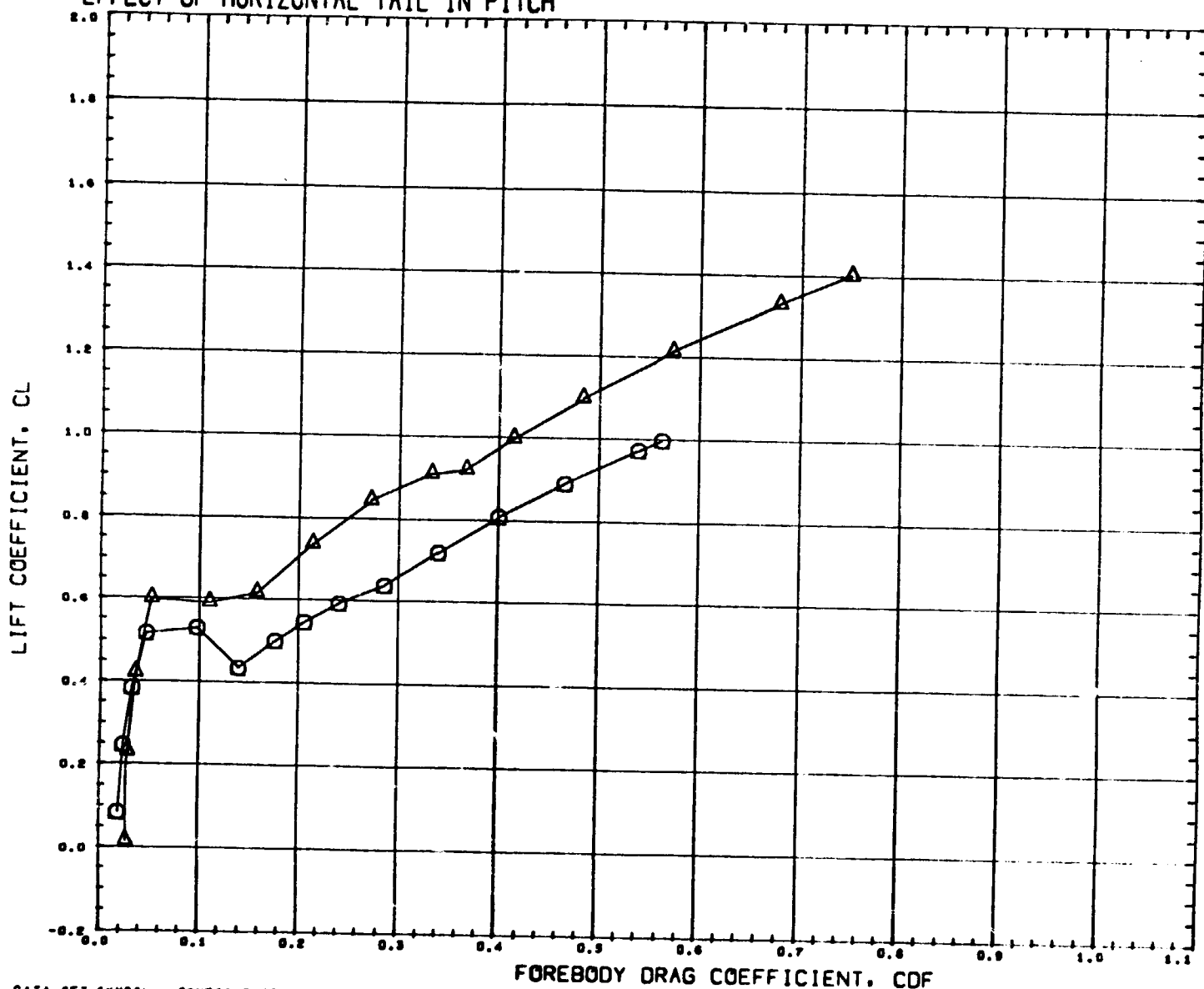
0.000 0.000

REFERENCE INFORMATION

SREF 31.3600 80. IN
 LREF 2.2400 IN.
 SREF 14.0000 IN.
 XMRP 11.0000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.1330 IN.
 SCALE 0.0007

MACH 0.924

EFFECT OF HORIZONTAL TAIL IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(CD2334) Δ BTMT-1265 BOEING H-32 BOOSTER BRW4V3
 (CD2374) $\circ$ BTMT-1265 BOEING H-32 BOOSTER BRW4H4V3

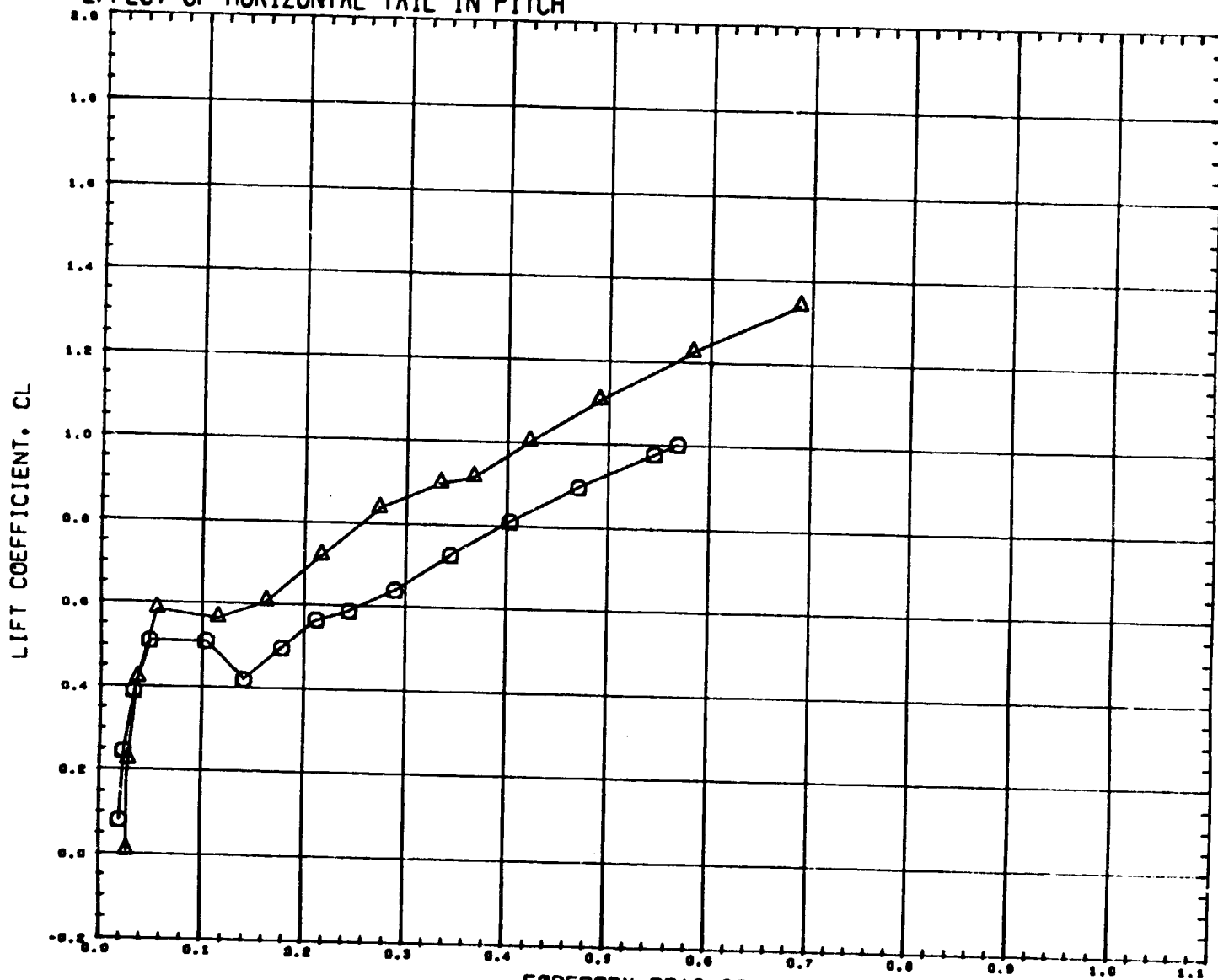
NTAIL ELEVTR SPOILR
 0.000 0.000

REFERENCE INFORMATION

SREF 31.3600 SQ. IN
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XMRP 11.9000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.949

EFFECT OF HORIZONTAL TAIL IN PITCH



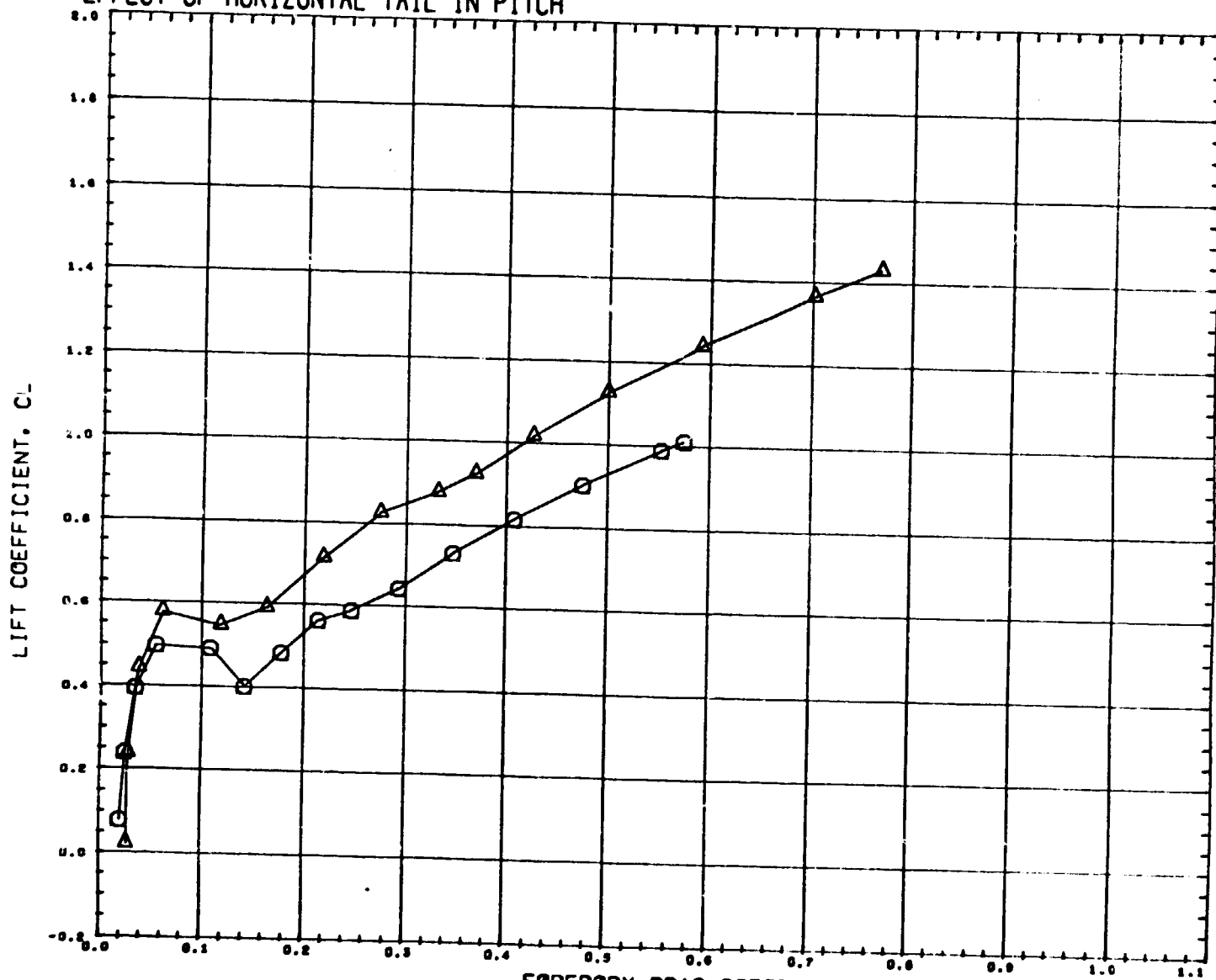
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(002034)	BTMT-1265 BOEING N-32 BOOSTER 88W4V3
(002074)	BTMT-1265 BOEING N-32 BOOSTER 88W4M4V3

NTAIL	ELEVTR	SPOILR
0.000	0.000	

REFERENCE INFORMATION		
SRFP	31.3600	80. IN
LRFP	2.2400	IN.
BRFP	14.0000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0007	

MACH 0.975

EFFECT OF HORIZONTAL TAIL IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (002134) $\odot$ BTWT-1265 BOEING N-32 BOOSTER 88W4V3
 (002674) $\triangle$ BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3

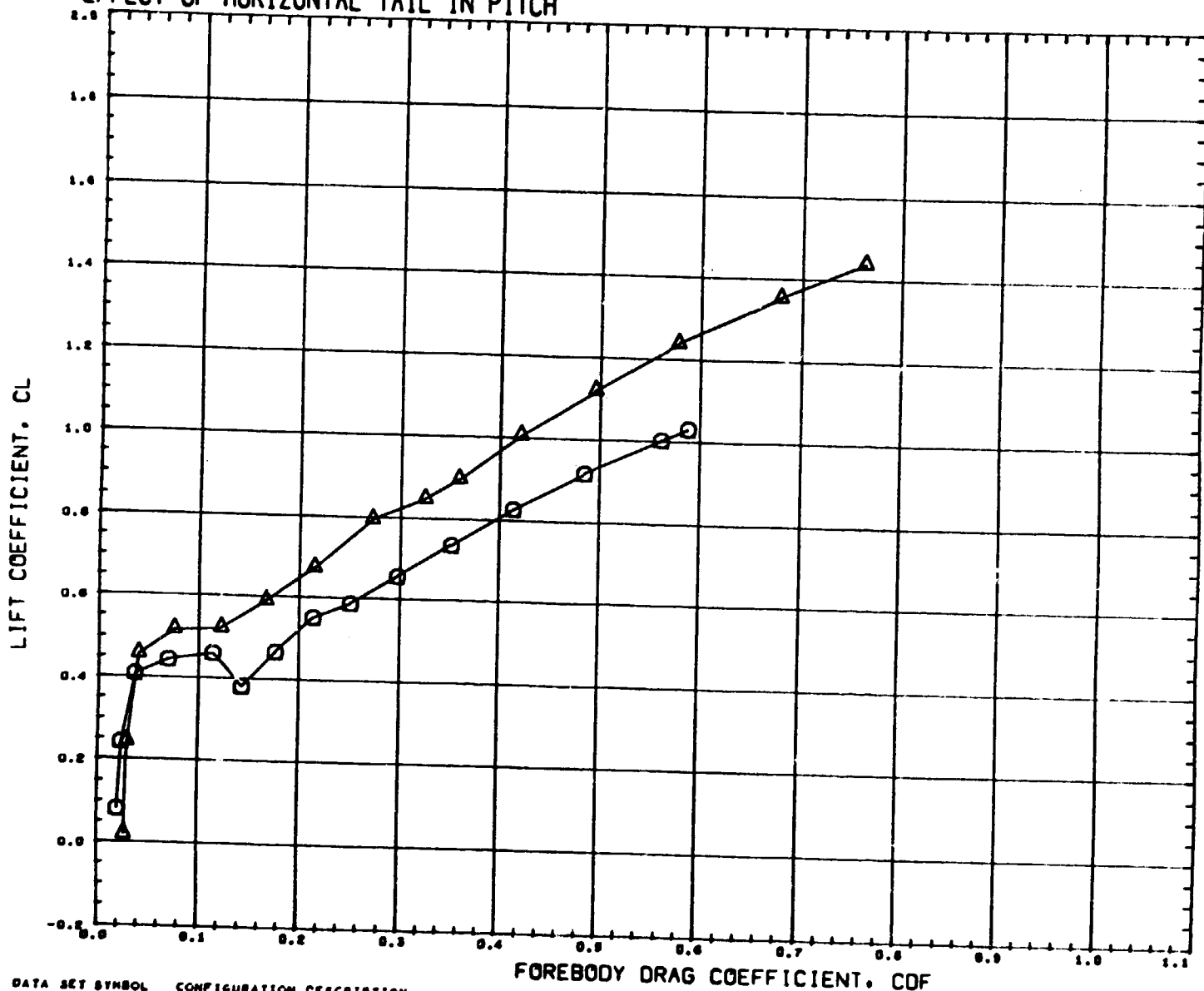
FOREBODY DRAG COEFFICIENT, CDF

NTAIL ELEVTR SPOILER
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.600

EFFECT OF HORIZONTAL TAIL IN PITCH



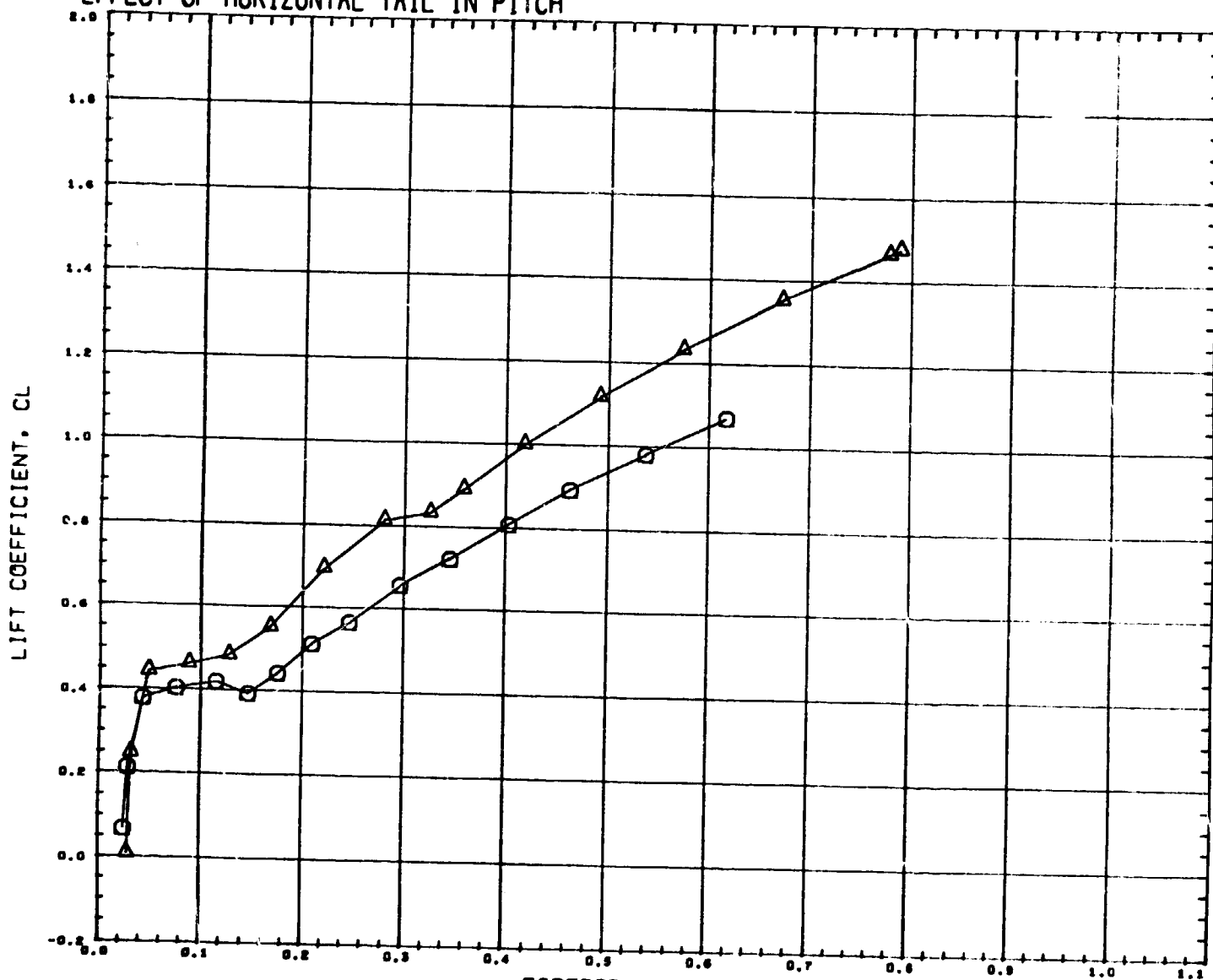
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(002034)	BTWT-1265 BOEING N-32 BOOSTER
(002074)	BTWT-1265 BOEING N-32 BOOSTER

NTAIL	ELEVTR	SPOILER
0.000	0.000	

REFERENCE INFORMATION		
SRFF	31.3600	sq. in.
LREF	2.2400	in.
DRFP	14.6000	in.
XMRP	11.9000	in.
YMRP	0.0000	in.
ZMRP	2.4330	in.
SCALE	0.0007	

NACM 0.691

EFFECT OF HORIZONTAL TAIL IN PITCH



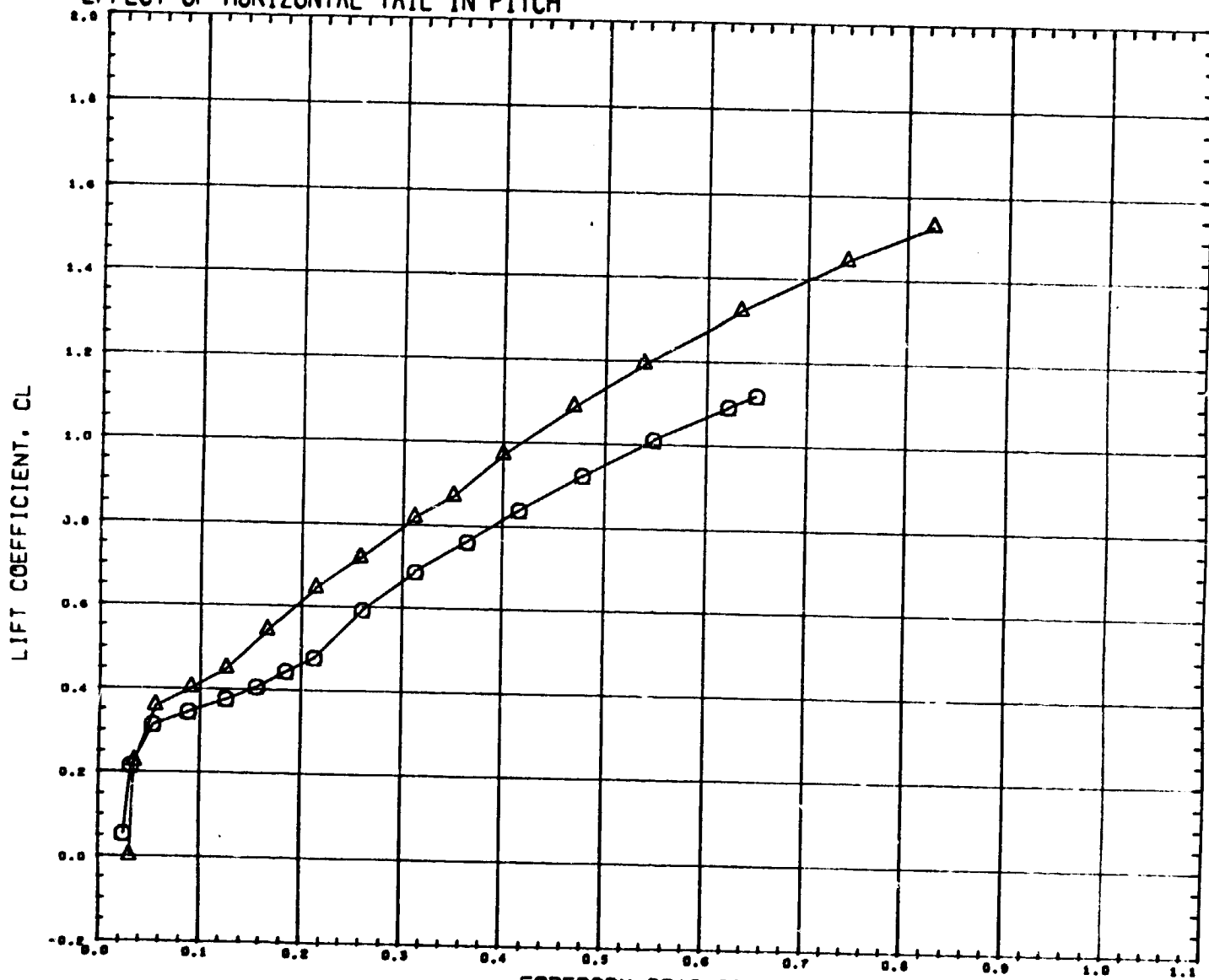
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(C02334) ○	BTWT-1265 BOEING N-32 BOOSTER B8W4V3
(C02374) △	BTWT-1265 BOEING N-32 BOOSTER B8W4H4V3

NTAIL	ELEVTR	SPOILR
0.000	0.000	

REFERENCE INFORMATION		
SREF	31.3600	sq. IN
LREF	2.2400	IN.
BREF	14.6000	IN.
XMRP	11.9600	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0007	

MACH 0.700

EFFECT OF HORIZONTAL TAIL IN PITCH



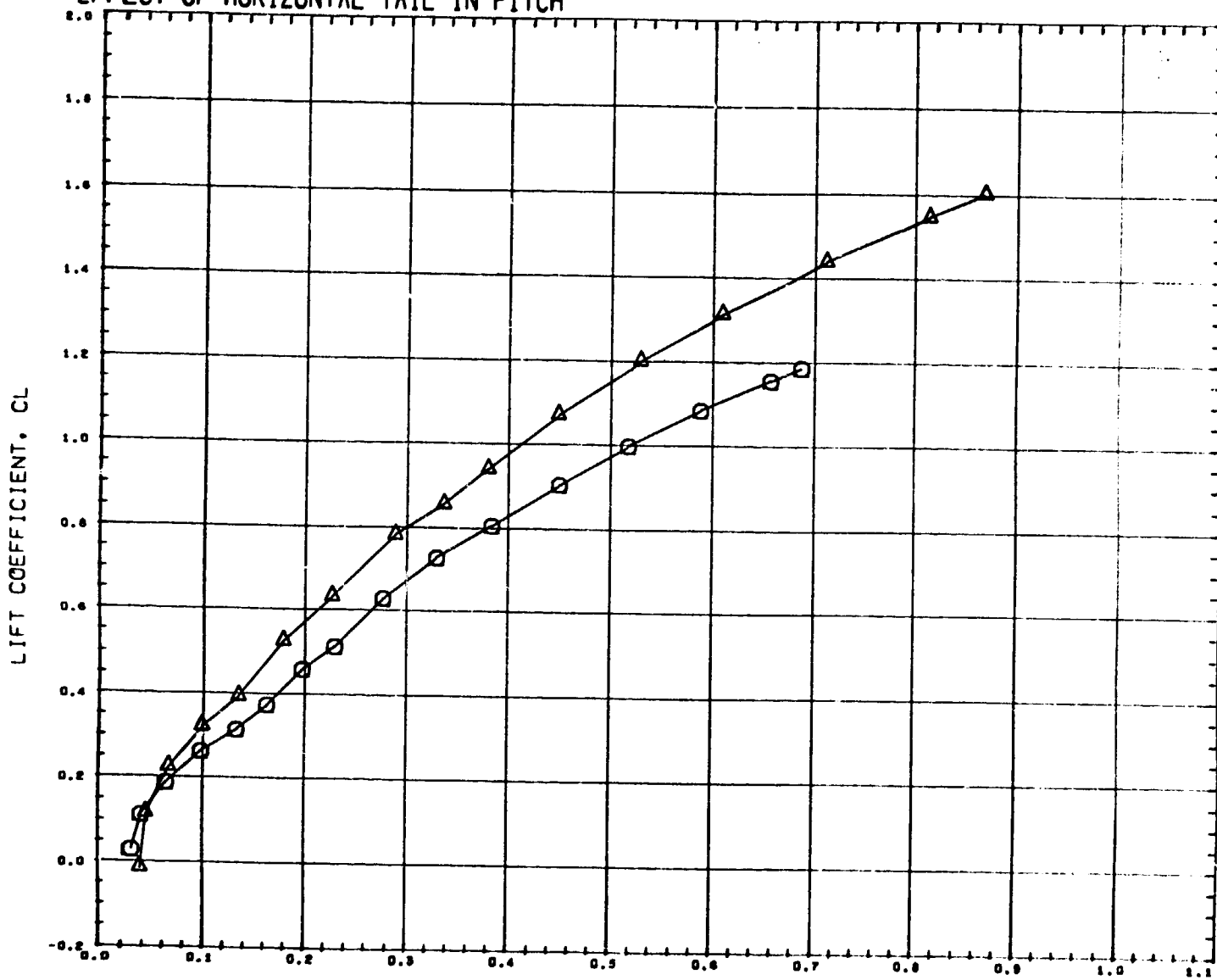
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	
(002014)	BTWT-1265 BOEING N-32 BOOSTER	88W4V3
(002014)	BTWT-1265 BOEING N-32 BOOSTER	88W4H4V3

NTAIL	ELEVTR	SPOILR
0.000	0.000	

REFERENCE INFORMATION		
BREF	31.3600	88. IN
LREF	2.2400	IN.
BREF	14.0000	IN.
XMRP	11.0000	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.000"	

NACH 0.750

EFFECT OF HORIZONTAL TAIL IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CD2334) BTWT-1265 BOEING M-32 BOOSTER 88W4V3
 (CD2074) BTWT-1265 BOEING M-32 BOOSTER 88W4H4V3

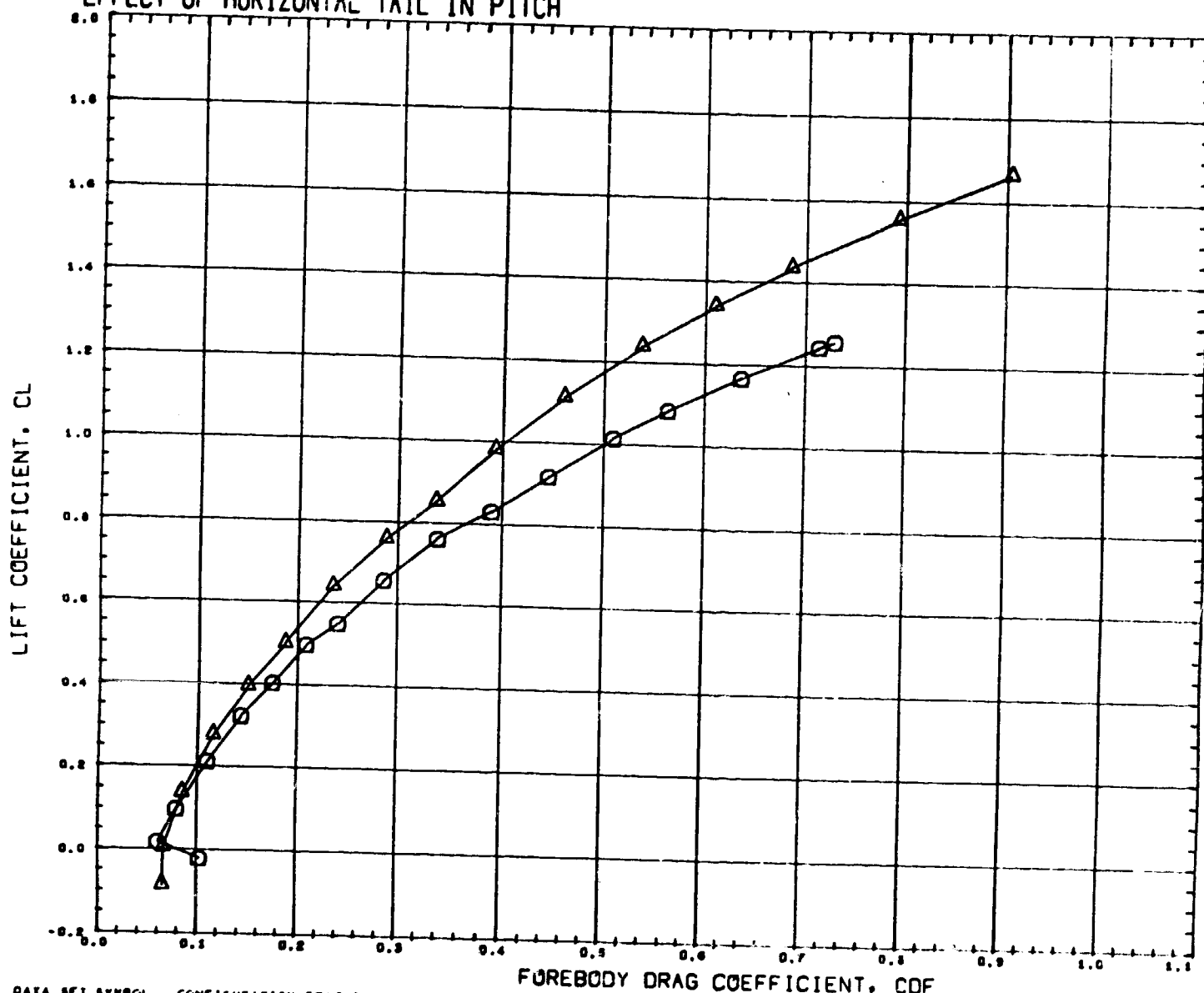
FOREBODY DRAG COEFFICIENT, CDF

MTAIL ELEVTR SPOILR
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 88. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4333 IN.
 SCALE 0.0067

MACH 2.800

EFFECT OF HORIZONTAL TAIL IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (002334) Q BTMT-1265 BOEING N-32 BOO: ER
 (002074) Q BTMT-1265 BOEING N-32 BOO: ER

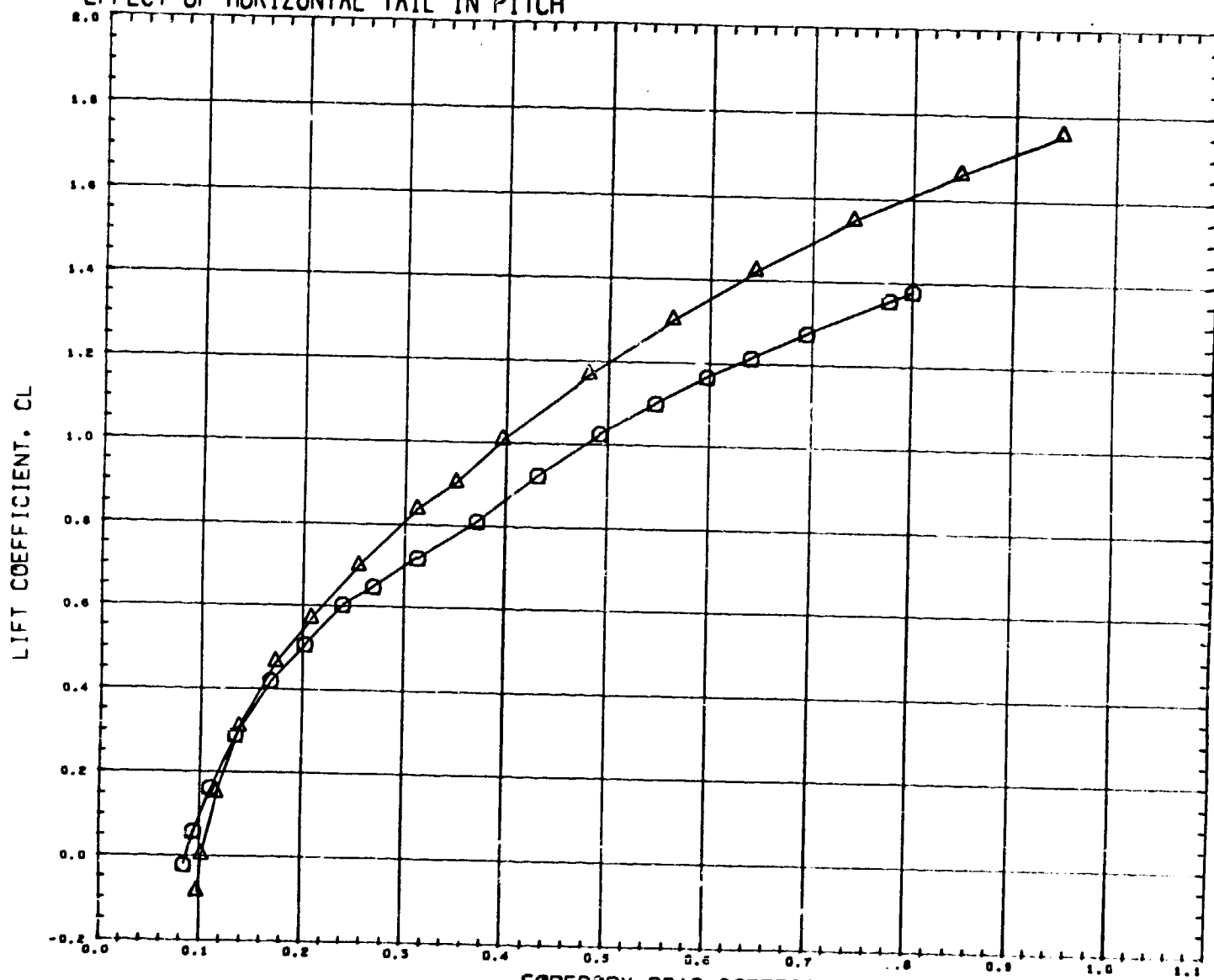
88W4V3
 88W4N4V3

NTAIL ELEVTR SPOILR
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 88. IN
 LREF 2.8400 IN.
 OREF 14.8000 IN.
 XHRP 11.9000 IN.
 YHRP 0.0000 IN.
 ZHRP 2.4330 IN.
 SCALE 0.0067

MACH 0.850

EFFECT OF HORIZONTAL TAIL IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(002034) 88W4V3 BOEING N-32 BOOSTER 88W4V3
 (002074) 88W4H4V3 BOEING N-32 BOOSTER 88W4H4V3

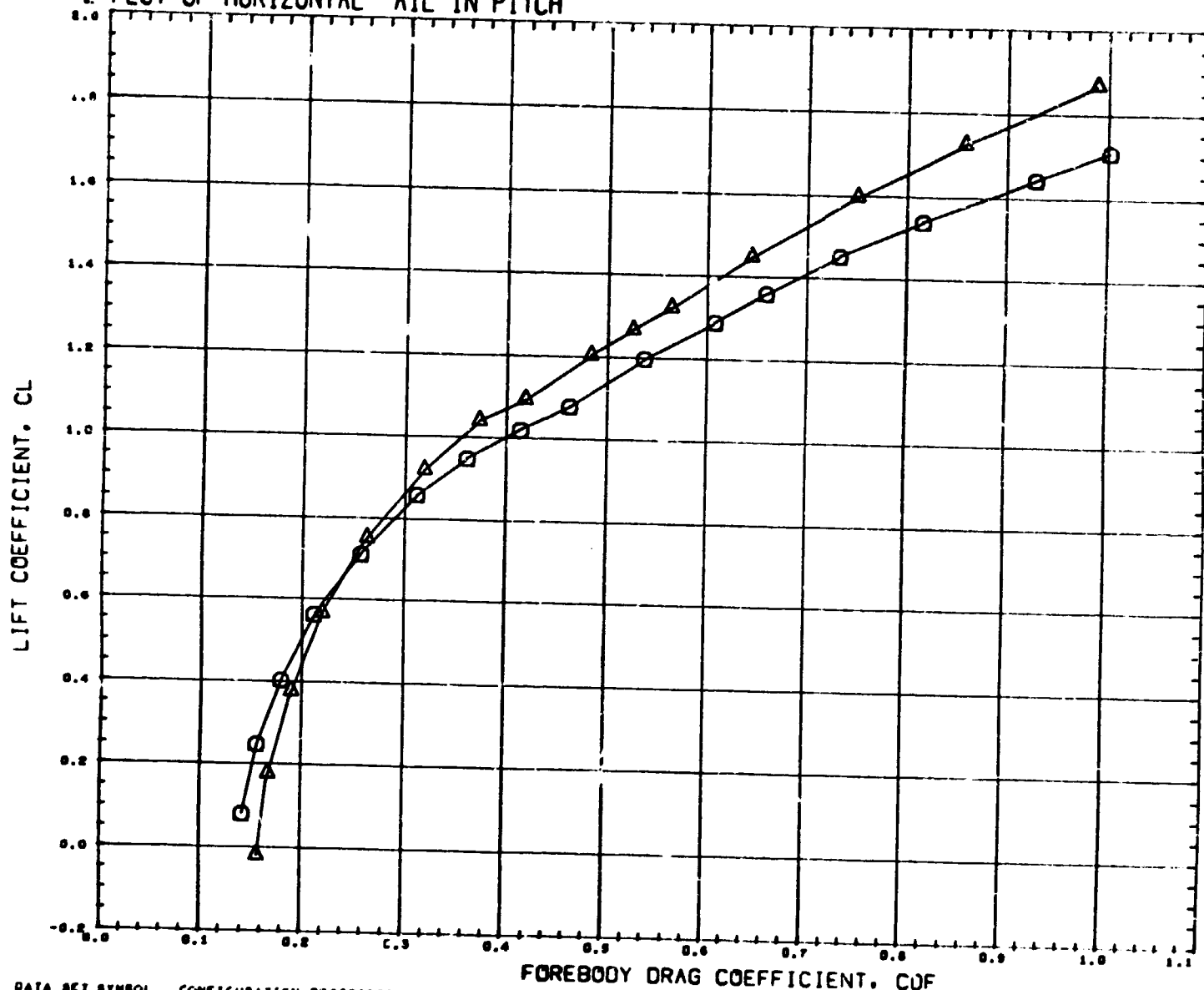
NTAIL ELEVTR SPOILR
 0.000 0.000

REFERENCE INFORMATION

SREF 31.3600 SQ. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.899

EFFECT OF HORIZONTAL TAIL IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (002034) Δ BTWT-1205 BOEING M-32 BOOSTER
 (002074) $\circ$ BTWT-1205 BOEING M-32 BOOSTER

BSW4V3
 BSW4H4V3

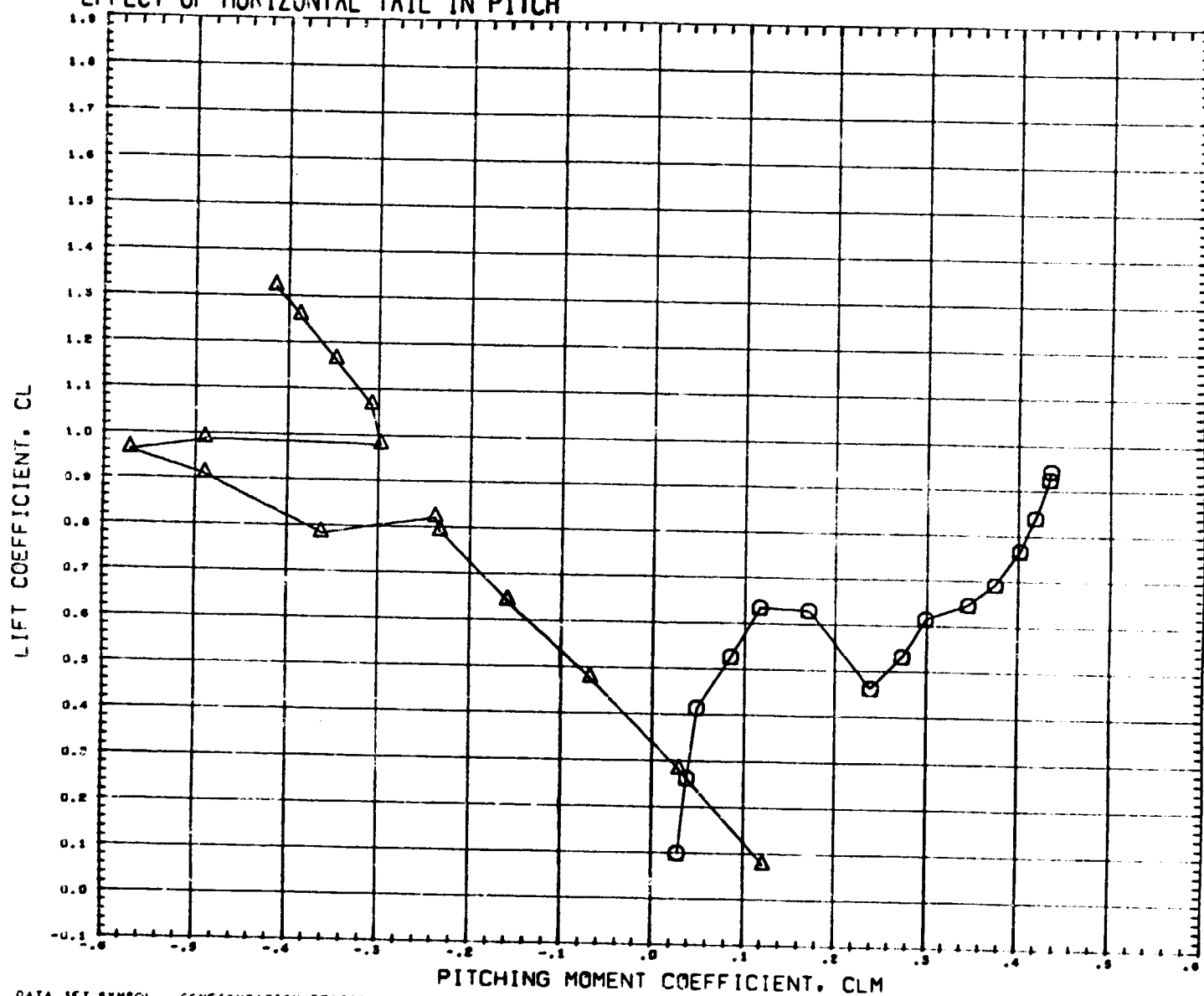
NTAIL ELEVTR SPOILR
 0.000 0.000

REFERENCE INFORMATION

SREF	31.3000	80. IN
LRFP	7.2400	IN.
SRFP	14.6000	IN.
XMRP	11.9000	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

MACH 0.949

EFFECT OF HORIZONTAL TAIL IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RC2G14) BTMT-1265 BOEING N-32 BOOSTER 88W4V5
(RC2G74) BTMT-1265 BOEING N-32 BOOSTER 88W4N4V5

HTAIL ELEVTR SPOILR

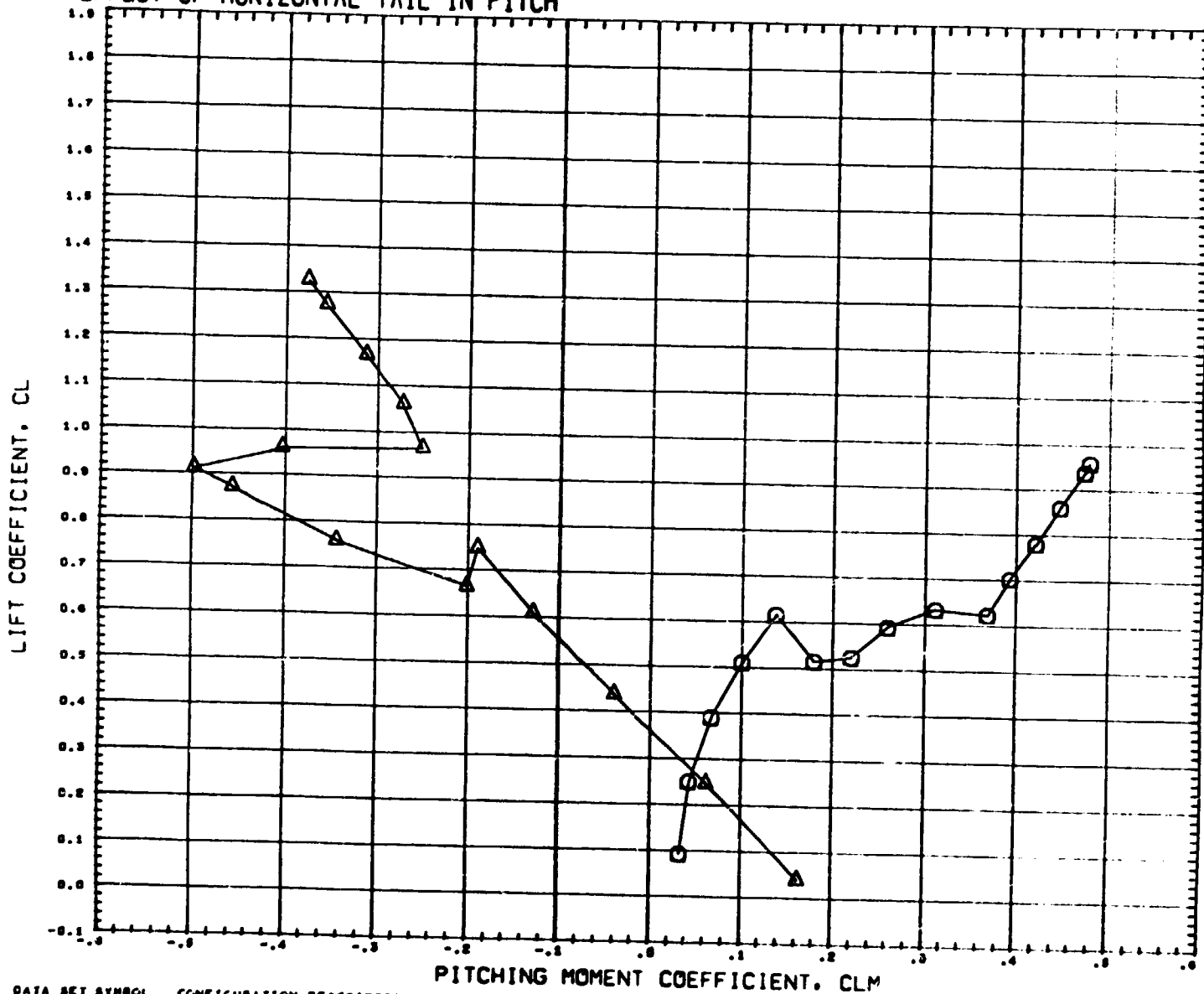
0.000 0.000

REFERENCE INFORMATION

SREF 31.3600 SQ. IN
LREF 2.2400 IN.
BREF 14.6000 IN.
XMRP 11.9600 IN.
YMRP 0.0000 IN.
ZMRP 2.4330 IN.
SCALE 0.0067

MACH 0.200

EFFECT OF HORIZONTAL TAIL IN PITCH



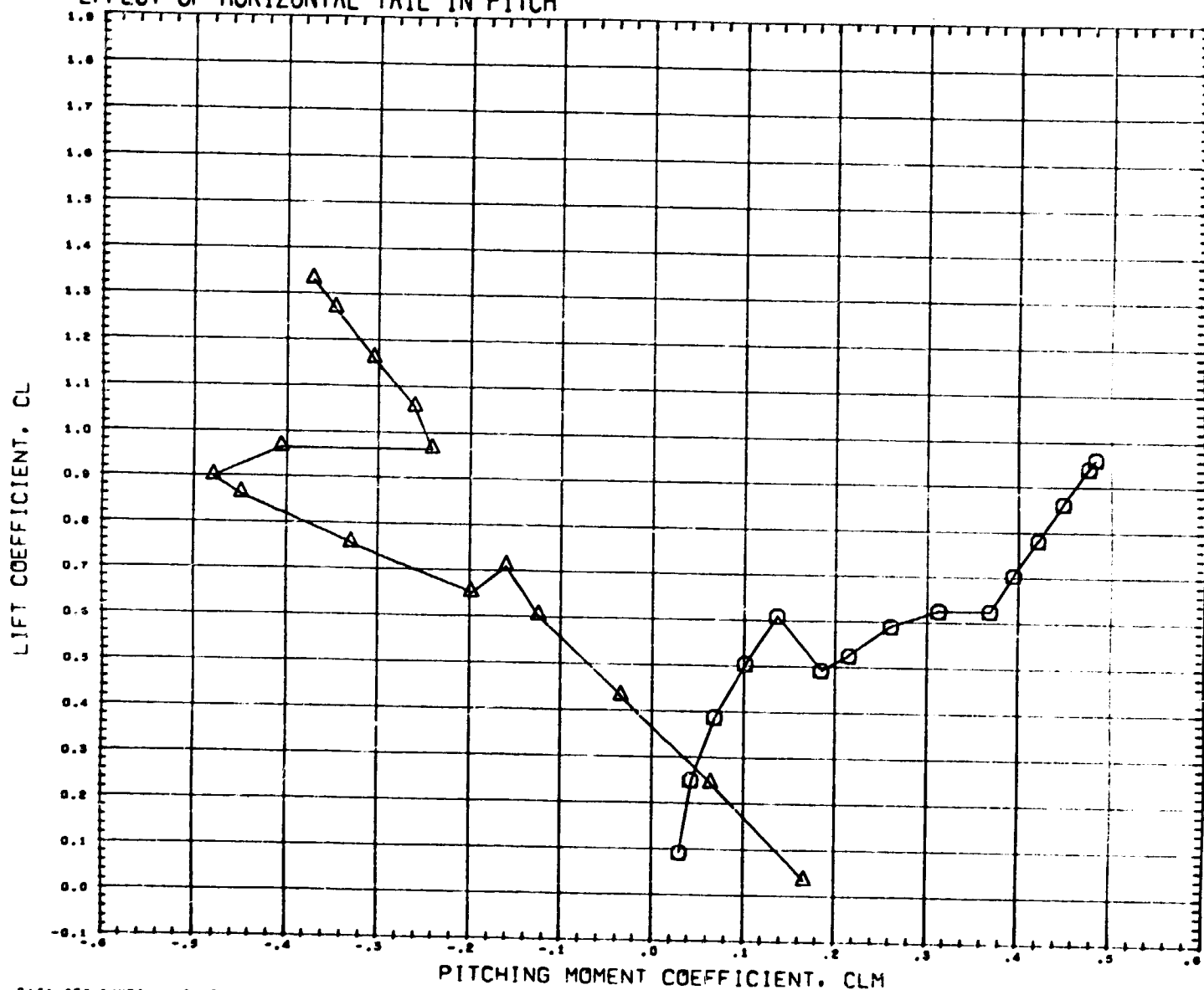
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(RDEC34)	BTWT-1265 BOEING N-32 BOOSTER
(RDEC74)	BTWT-1265 BOEING N-32 BOOSTER

NTAIL	ELEVTR	SPOILER
0.000	0.000	

REFERENCE INFORMATION	
SREF	31.3400 IN.
LREF	2.2400 IN.
BREF	14.0000 IN.
THRP	11.0000 IN.
THRP	0.0000 IN.
ZWRP	2.4330 IN.
SCALE	0.0007

NACN 0.450

EFFECT OF HORIZONTAL TAIL IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RC2034) BTWT-1265 BOEING N-32 BOOSTER 88W4V3
(RC2074) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3

NTAIL ELEVTR SPOILR

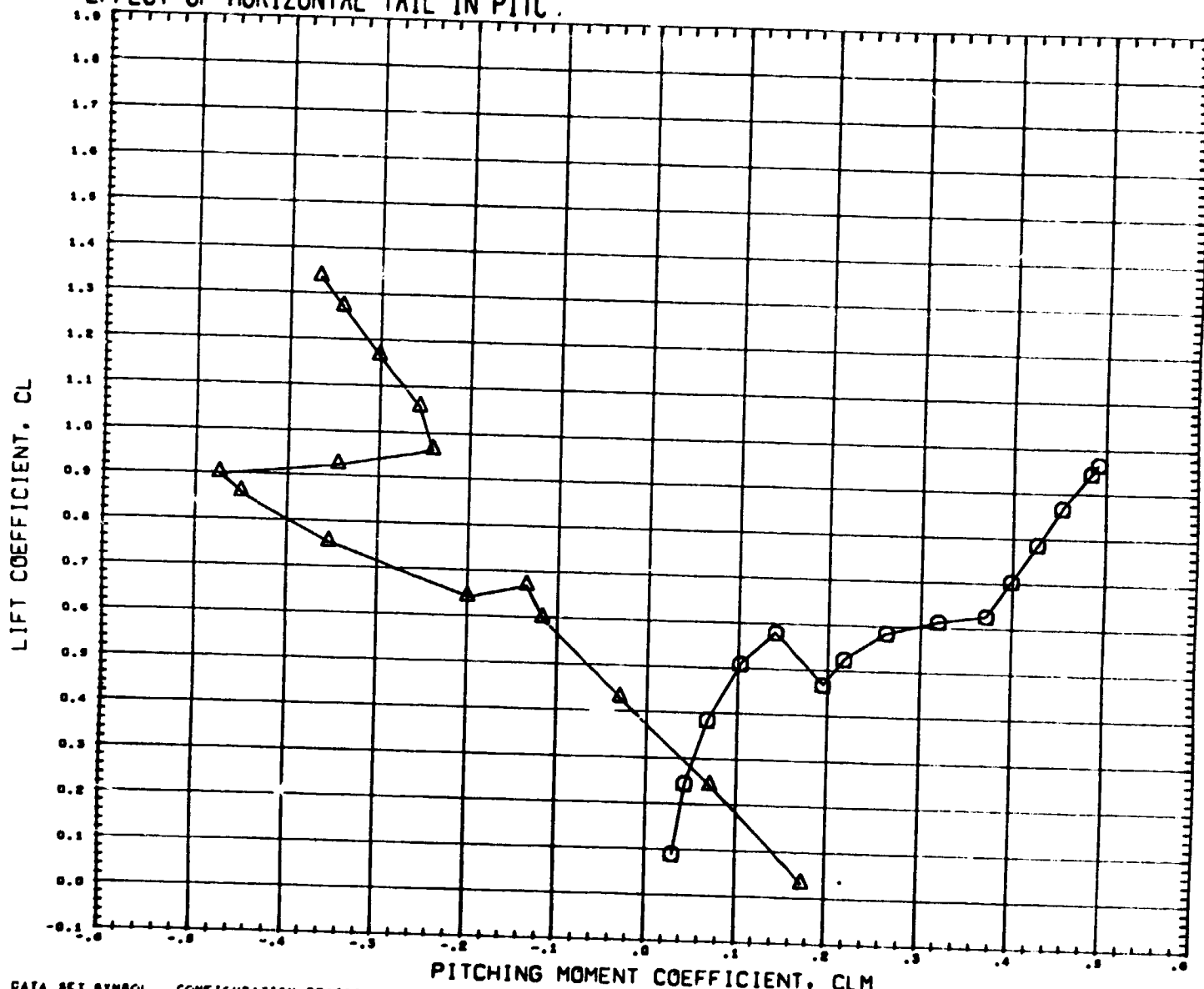
0.000 0.000

REFERENCE INFORMATION

SREF 31.3600 80. IN
LREF 2.8400 IN.
BREF 14.8000 IN.
XNRP 11.9800 IN.
YNRP 0.0000 IN.
ZNRP 2.4330 IN.
SCALE 0.0067

MACH 0.476

EFFECT OF HORIZONTAL TAIL IN PITCH



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(R02034)	BTMT-1265 BOEING N-32 BOOSTER 88W4V3
(R02074)	BTMT-1265 BOEING N-32 BOOSTER 88W4H4V3

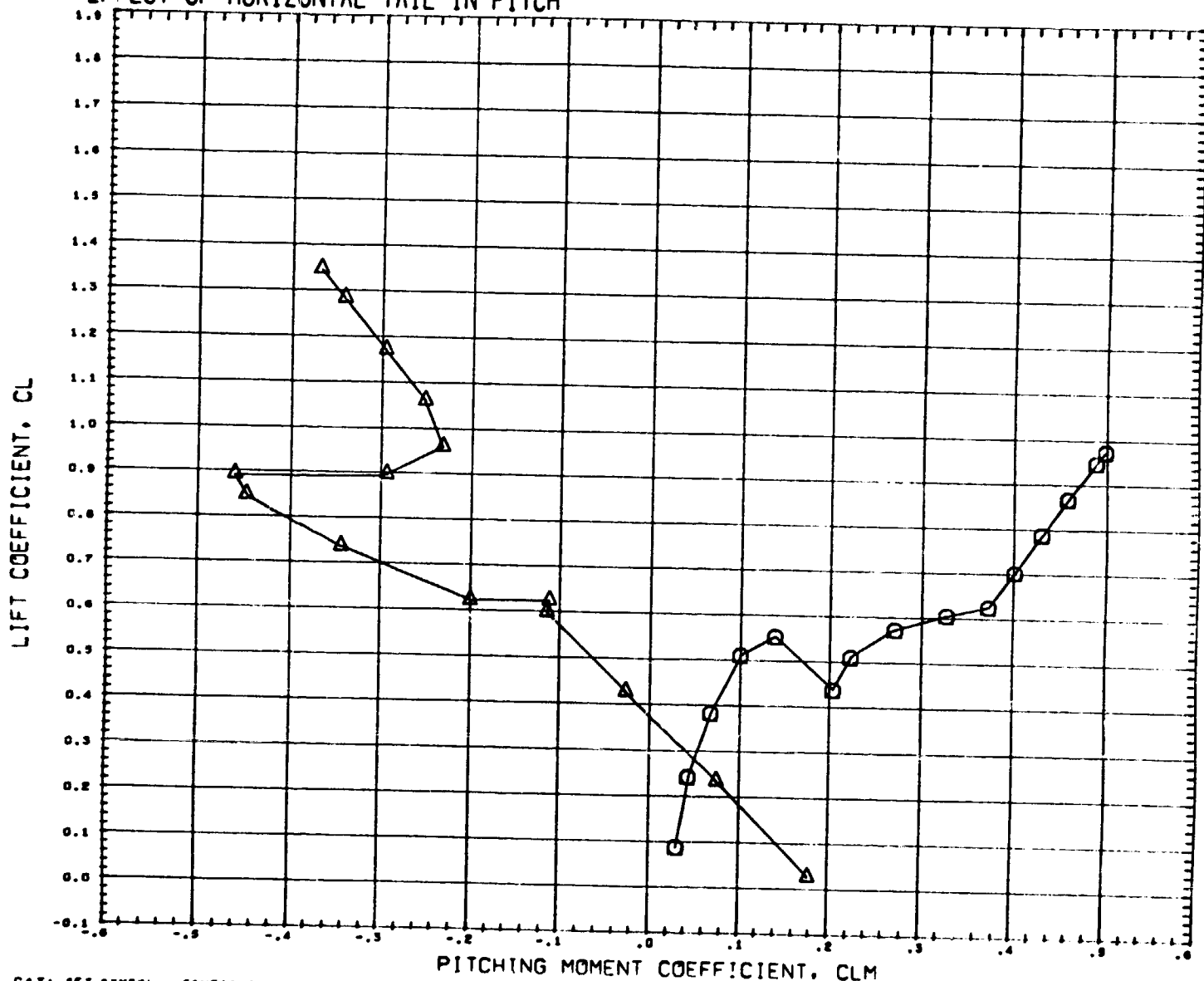
NTAIL	ELEVTR	SPOILER
0.000	0.000	

REFERENCE INFORMATION		
SRFP	31.3600	80. IN
LRFP	2.2400	IN.
DRFP	14.6000	IN.
TRFP	11.9000	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0007	

MACH 0.499

0

EFFECT OF HORIZONTAL TAIL IN PITCH



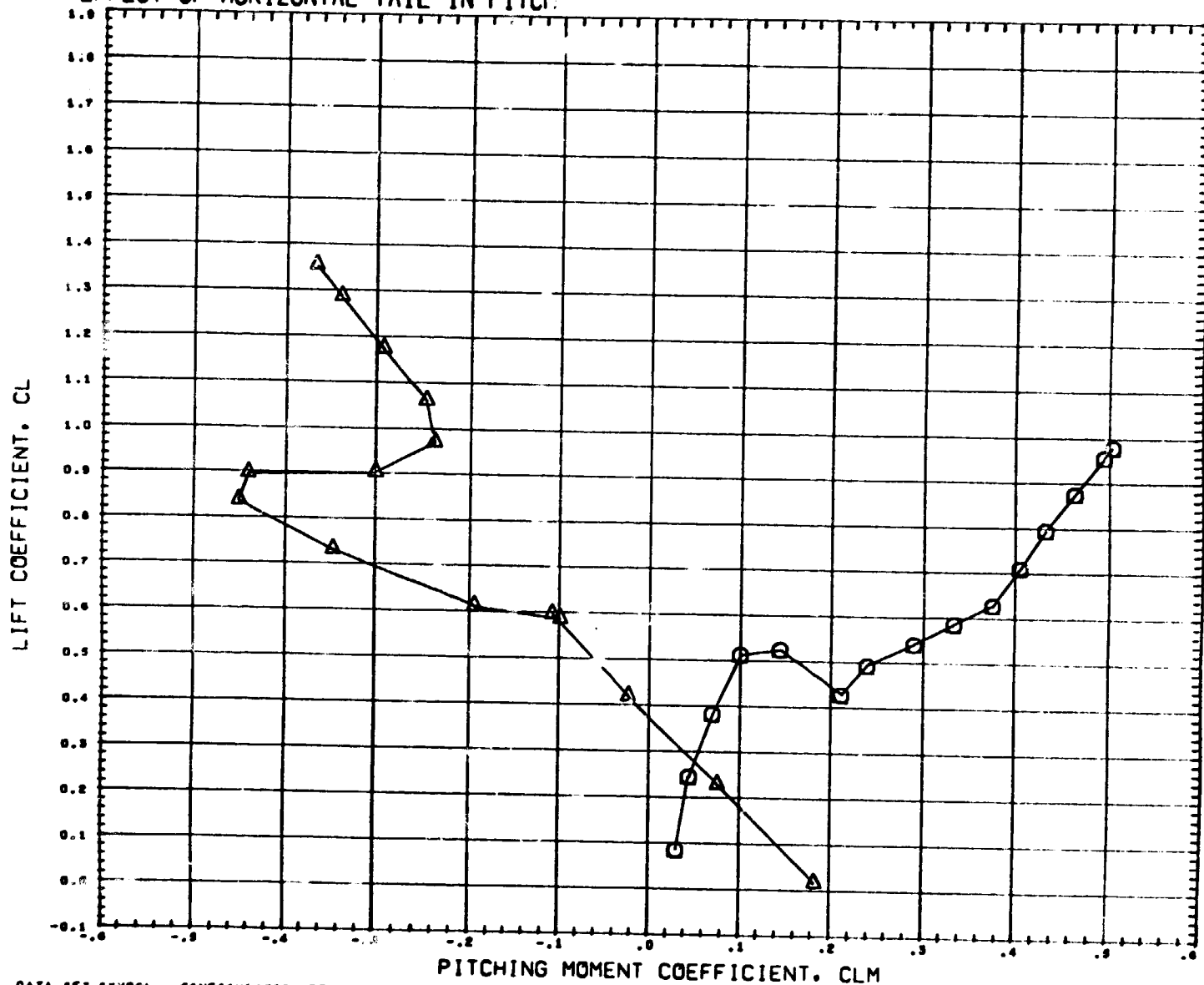
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (AC034) BTWT-1265 BOEING N-32 BOOSTER BBW4V3
 (AC2074) BTWT-1265 BOEING N-32 BOOSTER BBW4V3

MTAIL ELEVTR SPOILR
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 SQ. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XHRP 11.9000 IN.
 YHRP 0.0000 IN.
 ZHRP 2.4330 IN.
 SCALE 0.0067

MACH 0.924

EFFECT OF HORIZONTAL TAIL IN PITCH



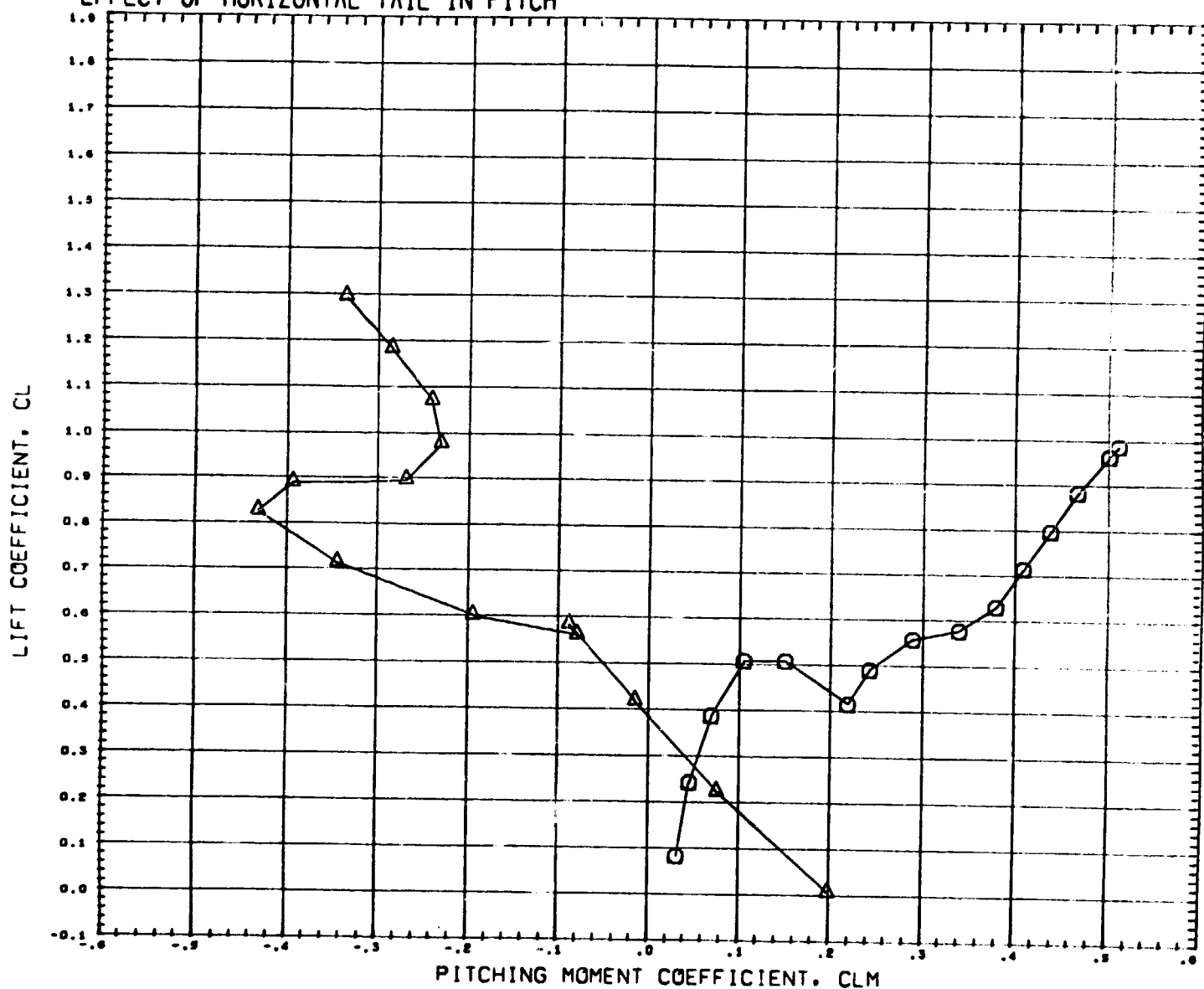
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RCE034) BTWT-1249 BOEING N-32 BOOSTER 88W4V3
 (RCE074) BTWT-1249 BOEING N-32 BOOSTER 88W4H4V3

HTAIL ELEVTR SPOILR
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3400 SQ. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.8800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.949

EFFECT OF HORIZONTAL TAIL IN PITCH



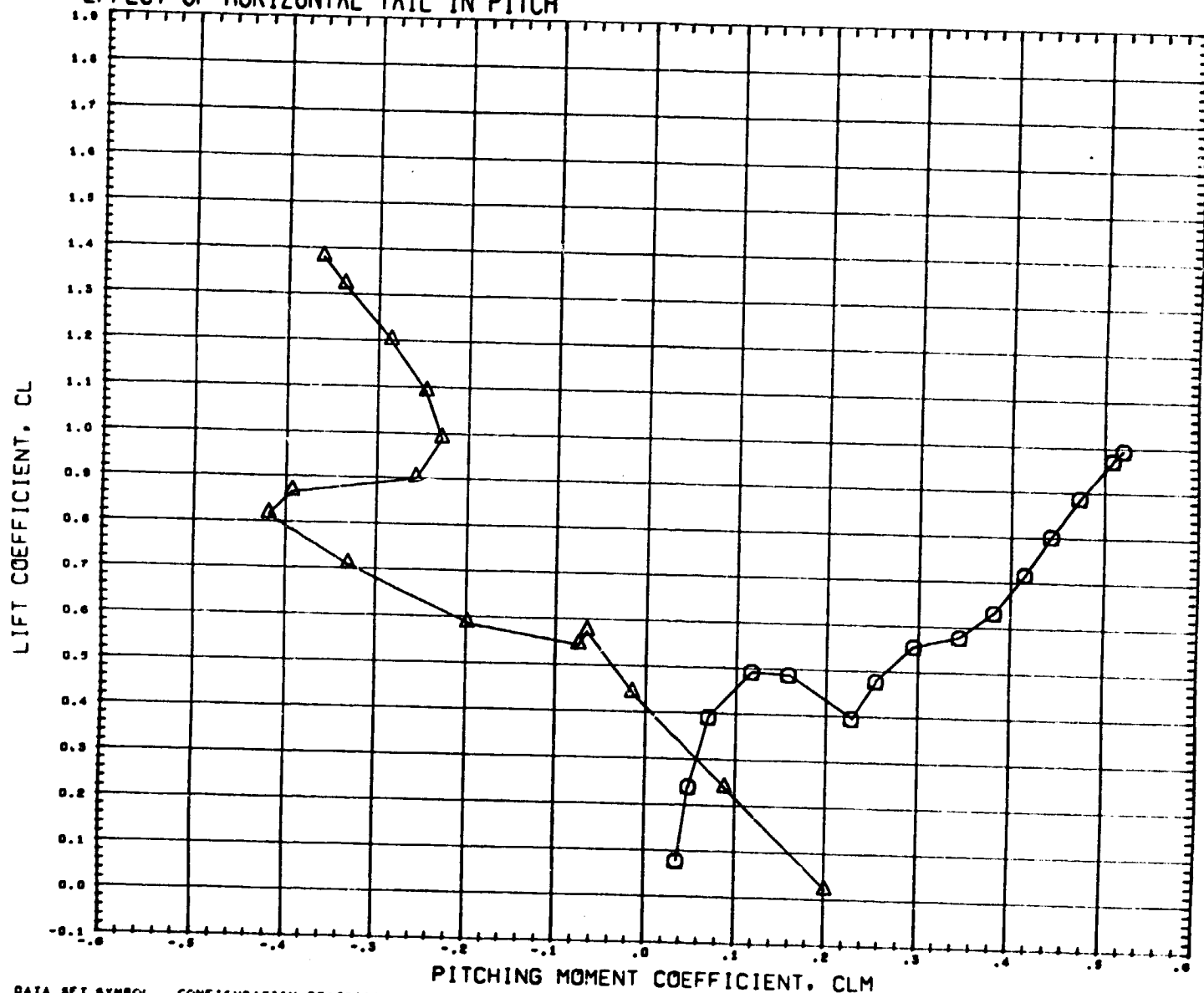
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RD2034) BTMT-1265 BOEING H-32 BOOSTER B8W4V3
 (RD2074) BTMT-1269 BOEING H-32 BOOSTER B8W4H4V3

HTAIL ELEVTR SPOILR
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 90. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0087

MACH 0.975

EFFECT OF HORIZONTAL TAIL IN PITCH



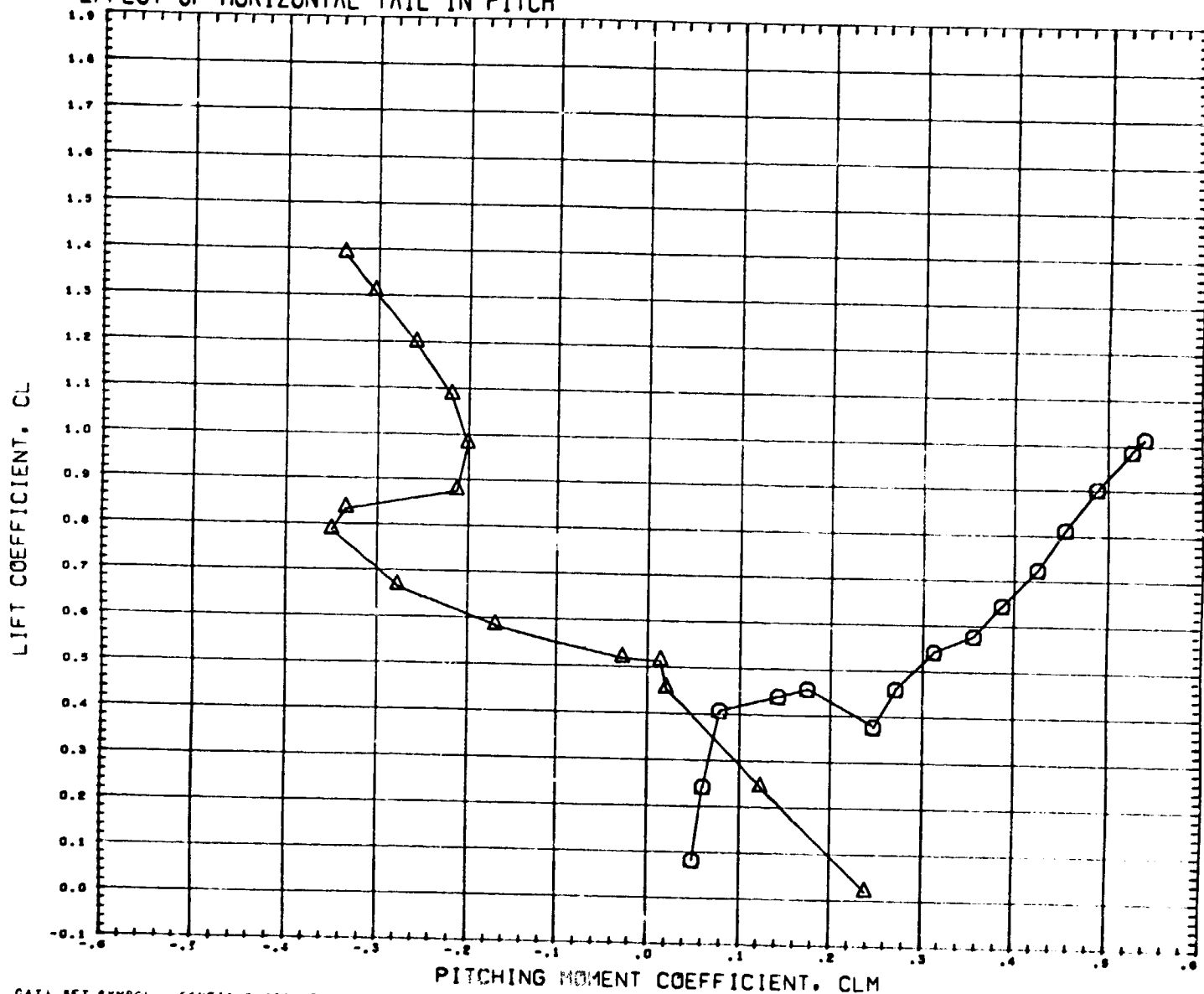
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02034) BTWT-1265 BOEING H-32 BOOSTER 88W4V3
 (R02074) BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3

NTAIL ELEVTR SPOILR
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 SREF 11.0000 IN.
 XMRP 11.0000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0087

MACH 0.600

EFFECT OF HORIZONTAL TAIL IN PITCH



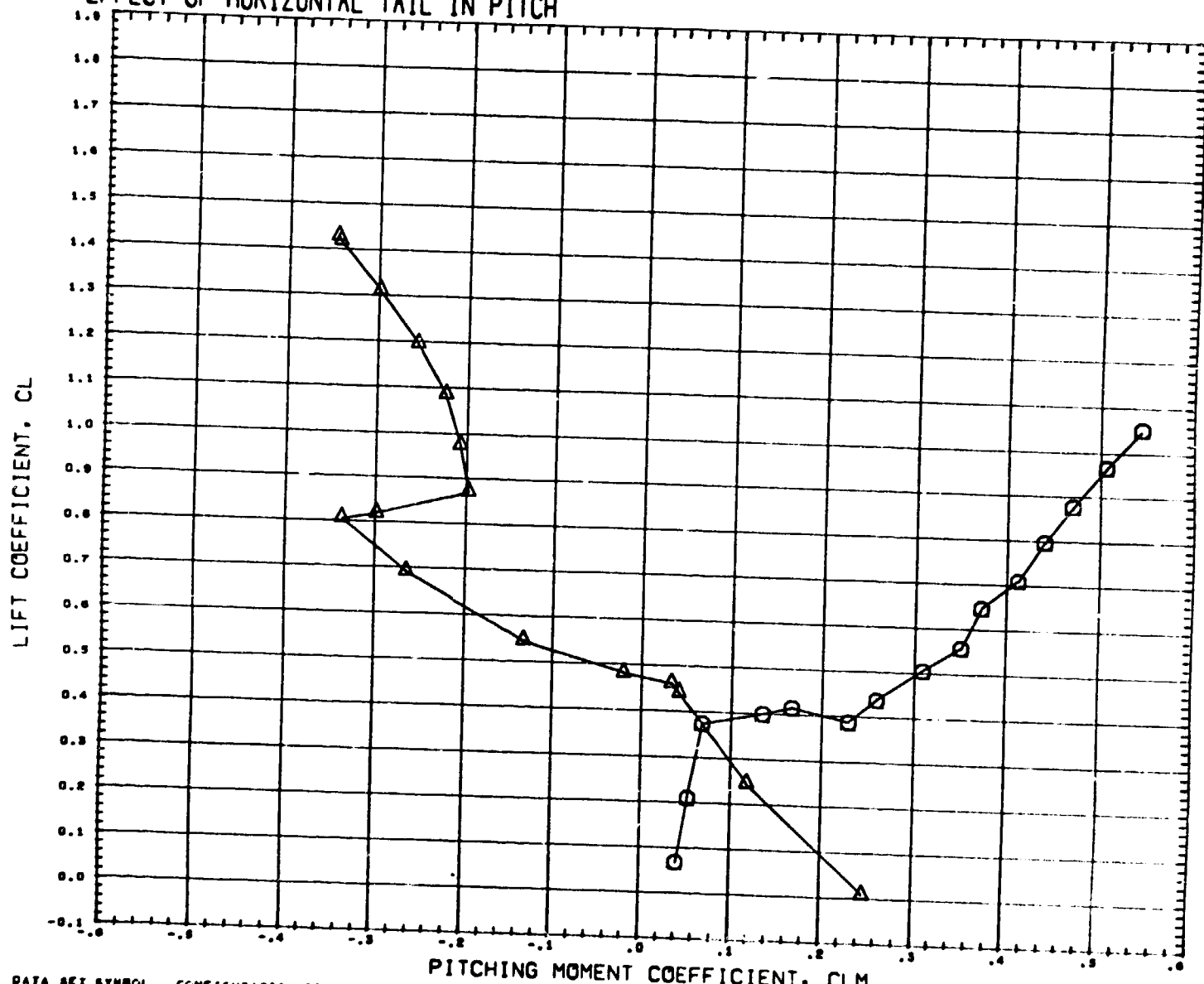
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RD2034) BTWT-1265 BOEING H-32 BOOSTER B6W4V3
 (RD2074) BTWT-1265 BOEING H-32 BOOSTER B6W4H4V3

MTAIL ELEVTR SPOILER
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 SQ. IN
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.651

EFFECT OF HORIZONTAL TAIL IN PITCH



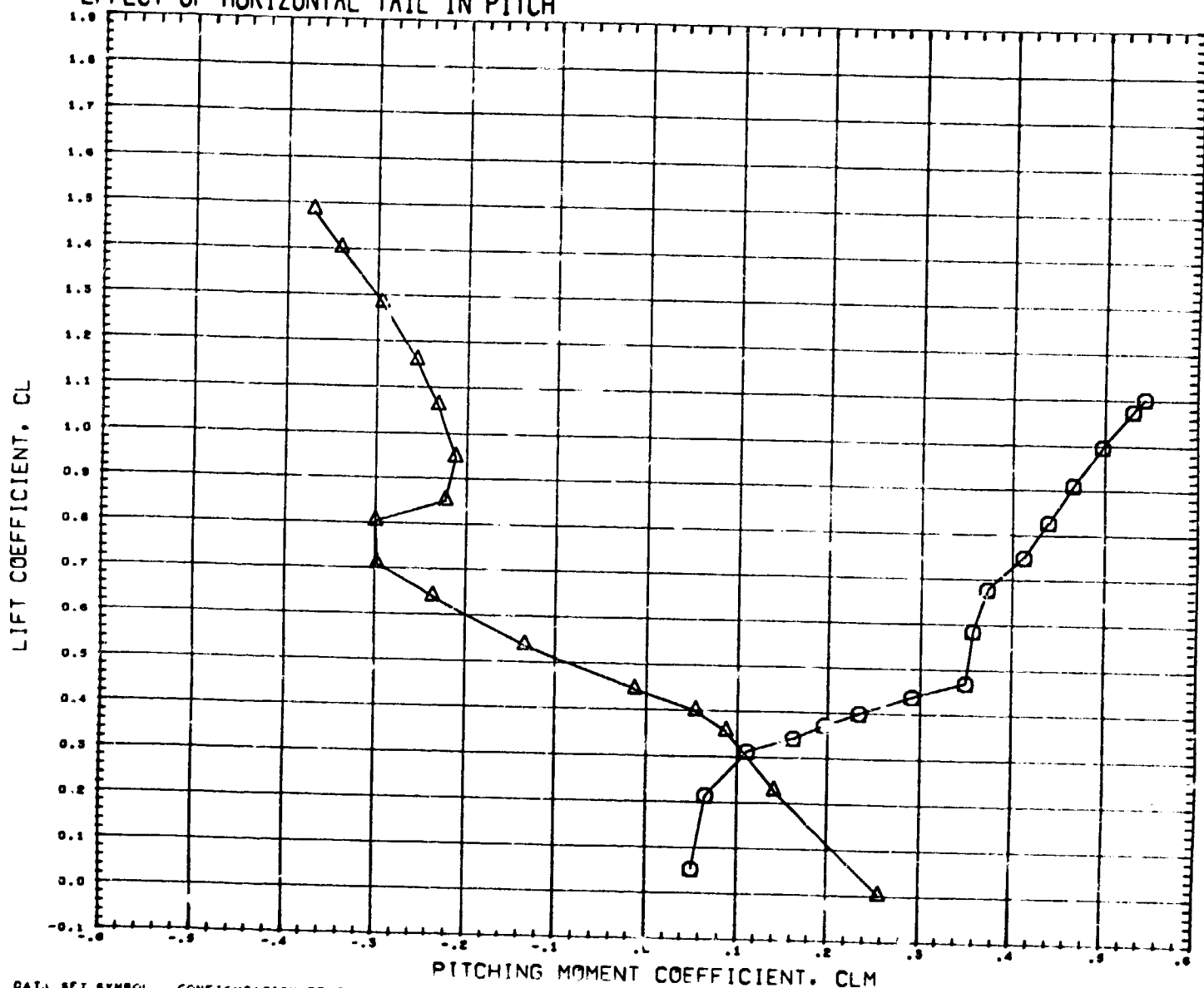
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02034) BTWT-1265 BOEING N-32 BOOSTER 88W4V3
 (R02074) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3

HTAIL ELEVTR SPOILER
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 88. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.700

EFFECT OF HORIZONTAL TAIL IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(AC:034) BTWT-1265 BOEING H-32 BOOSTER 88W4V2
(AC:074) BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3

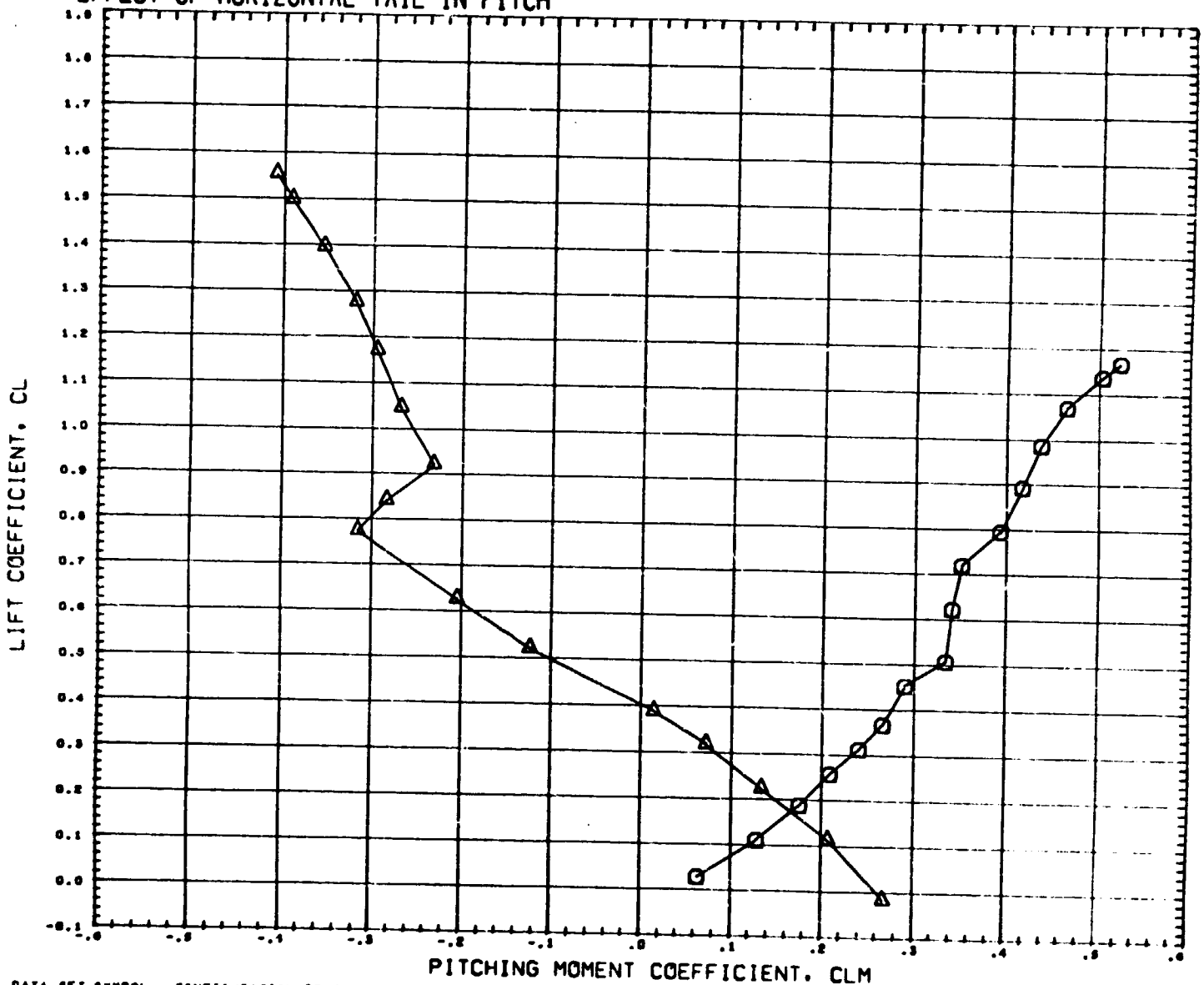
HTAIL ELEVTR STOILR
0.000 0.000

REFERENCE INFORMATION

SREF 31.3600 SQ. IN.
LREF 5.2400 IN.
SREF 14.8000 IN.
XMRP 11.9800 IN.
YMRP 0.0000 IN.
ZMRP 8.4350 IN.
SCALE 0.026

MACH 0.750

EFFECT OF HORIZONTAL TAIL IN PITCH



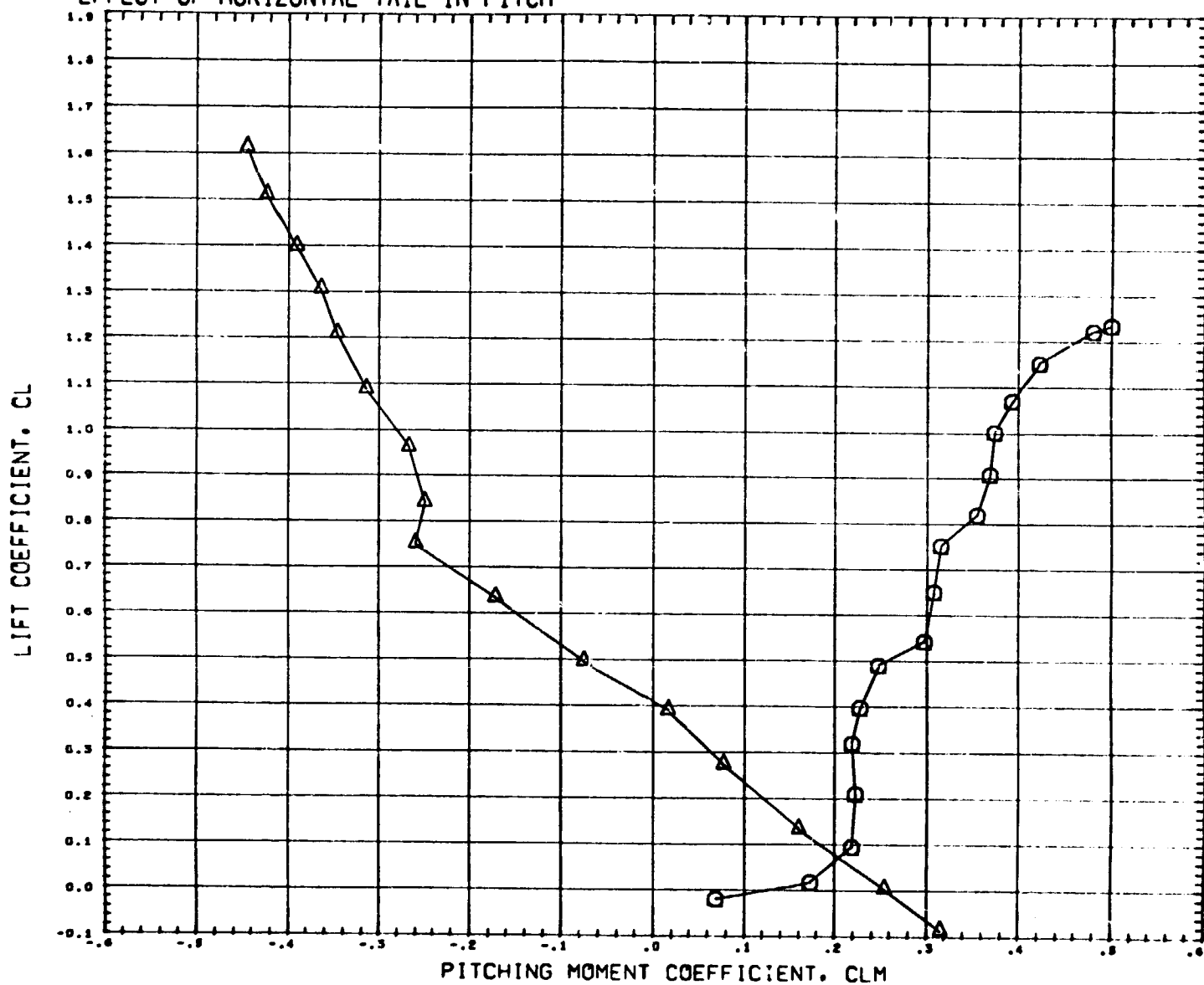
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02034) Q BTWT-1265 BOEING N-32 BOOSTER 80W4V3
 (R02074) Q BTWT-1263 BOEING N-32 BOOSTER 30W4N4V3

HTAIL ELEVTR SPOILR
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 50. IN
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XMRP 11.9000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

NACH 0.000

EFFECT OF HORIZONTAL TAIL IN PITCH



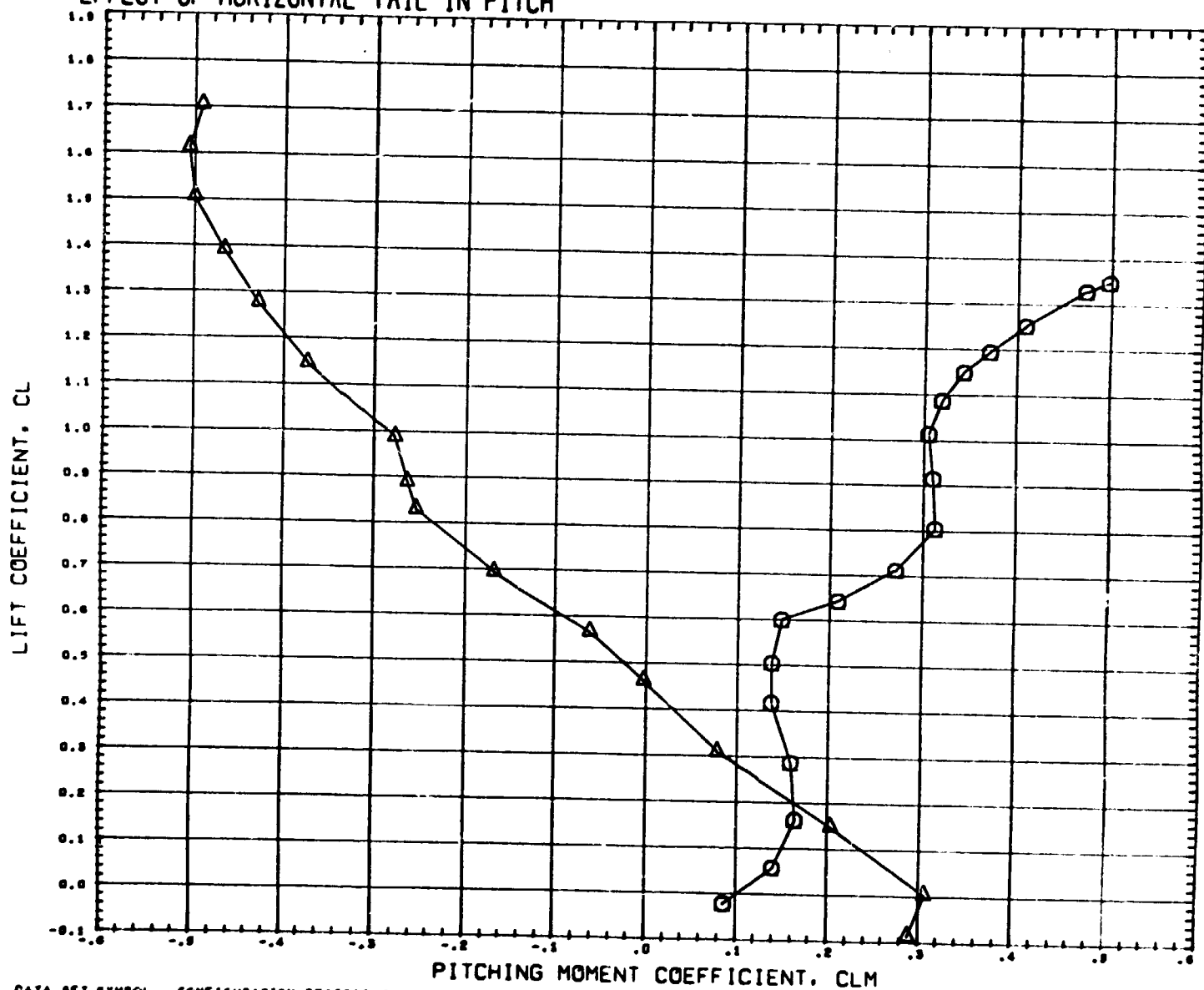
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(RC2034)	BTWT-1265 BOEING H-32 BOOSTER 88W4V3
(RC2074)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3

NTAIL	ELEVTR	SPOILR
0.000	0.000	

REFERENCE INFORMATION		
SREF	31.3600	88. IN
LREF	2.2400	IN.
BREF	14.8000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

MACH 0.850

EFFECT OF HORIZONTAL TAIL IN PITCH



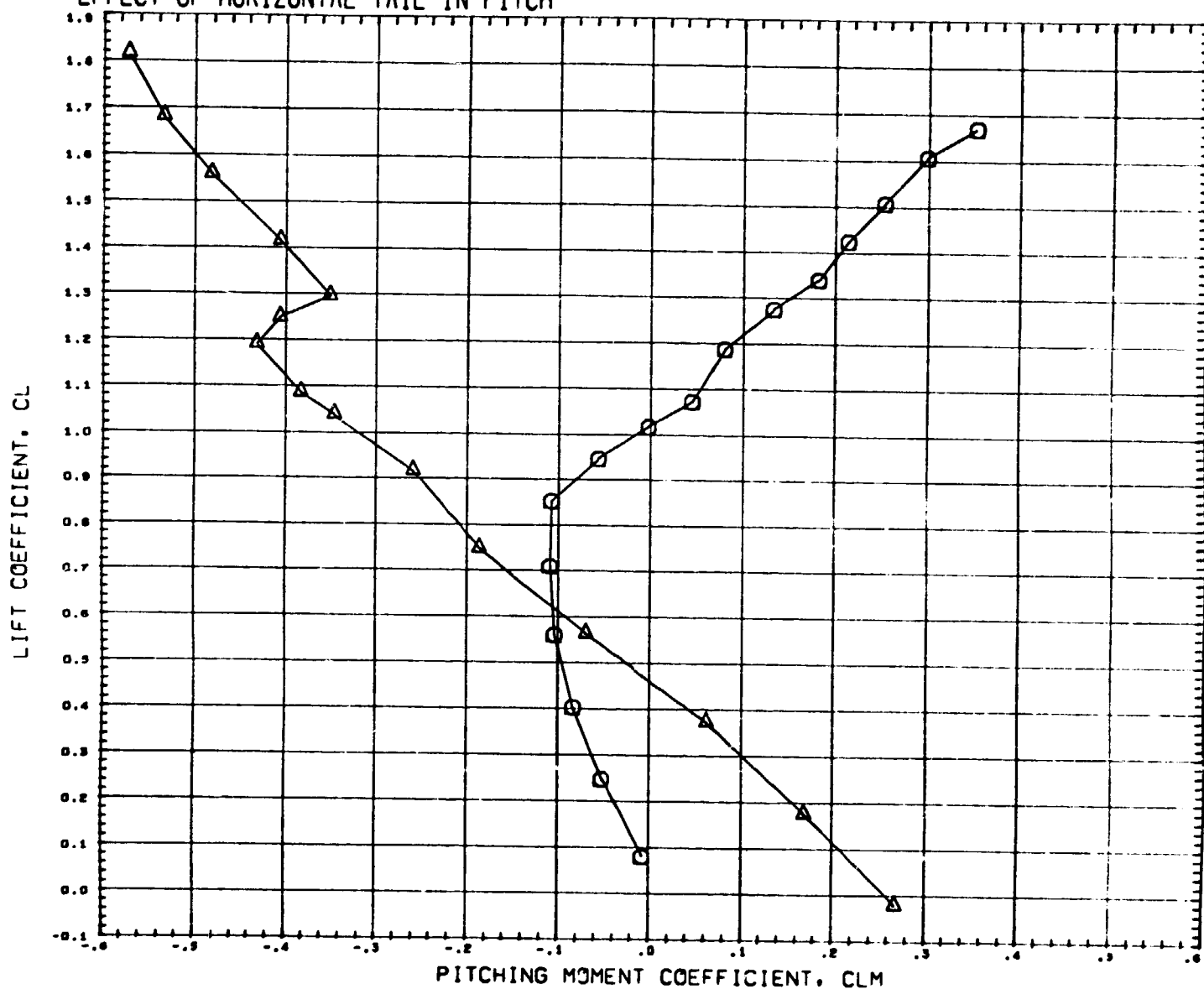
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RD2334) Q BTWT-1263 BOEING N-32 BOOSTER 88W4V3
 (RD2074) Q BTWT-1263 BOEING N-32 BOOSTER 88W4H4V3

MTAIL ELEVTR SPOILR
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.000

EFFECT OF HORIZONTAL TAIL IN PITCH



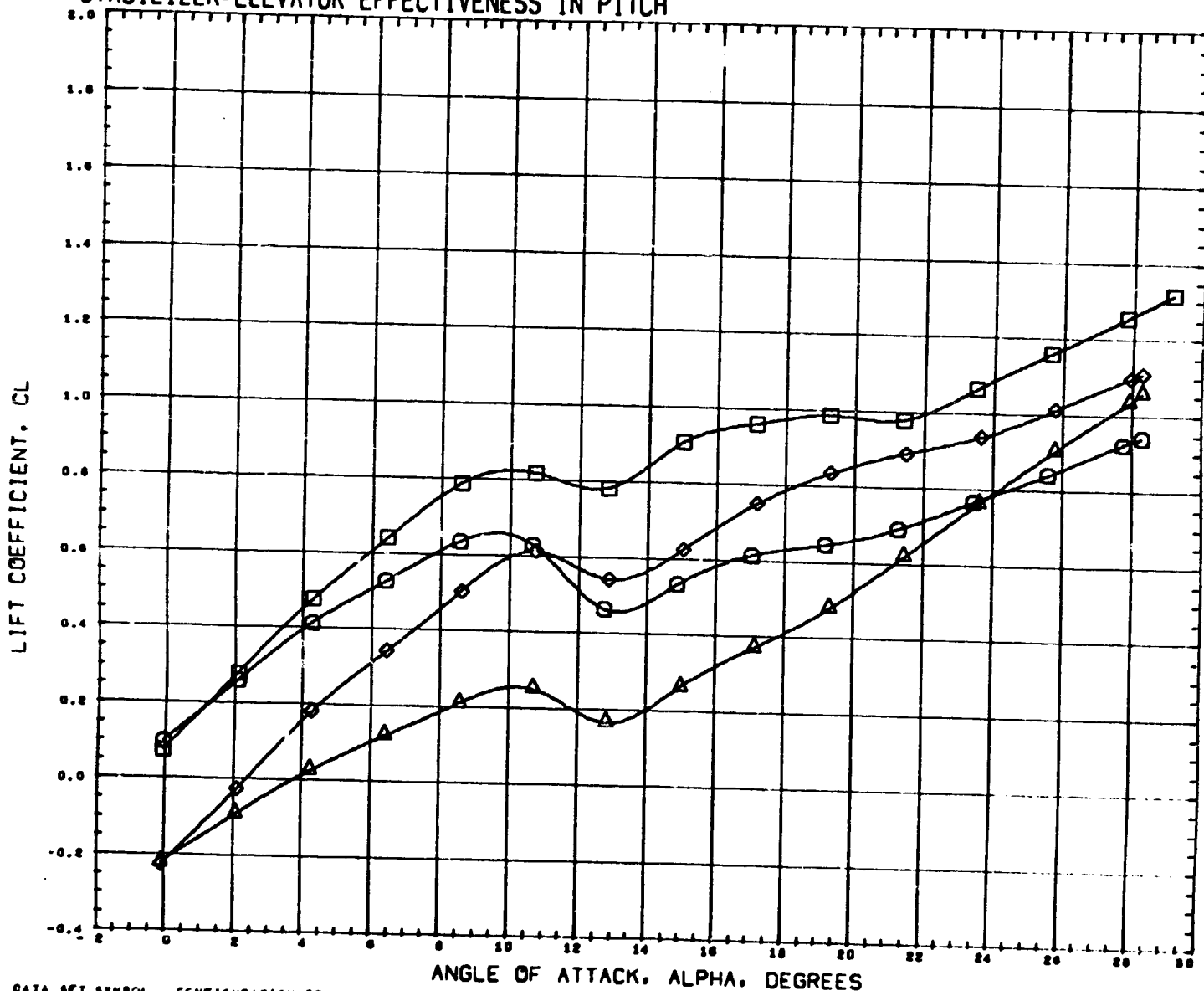
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC2034)  BTWT-1265 BOEING B-57D BOOSTER B8W4V3
 (RC2074)  BTWT-1265 BOEING B-57D BOOSTER B8W4H4V3

HTAIL ELEVTR SPOILR
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 30. IN
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.849

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(R02034) BTWT-1265 BOEING N-32 BOOSTER 88W4V3

(R02144) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3

(R02164) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3

(R02174) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3

NTAIL ELEVTR SPOILR

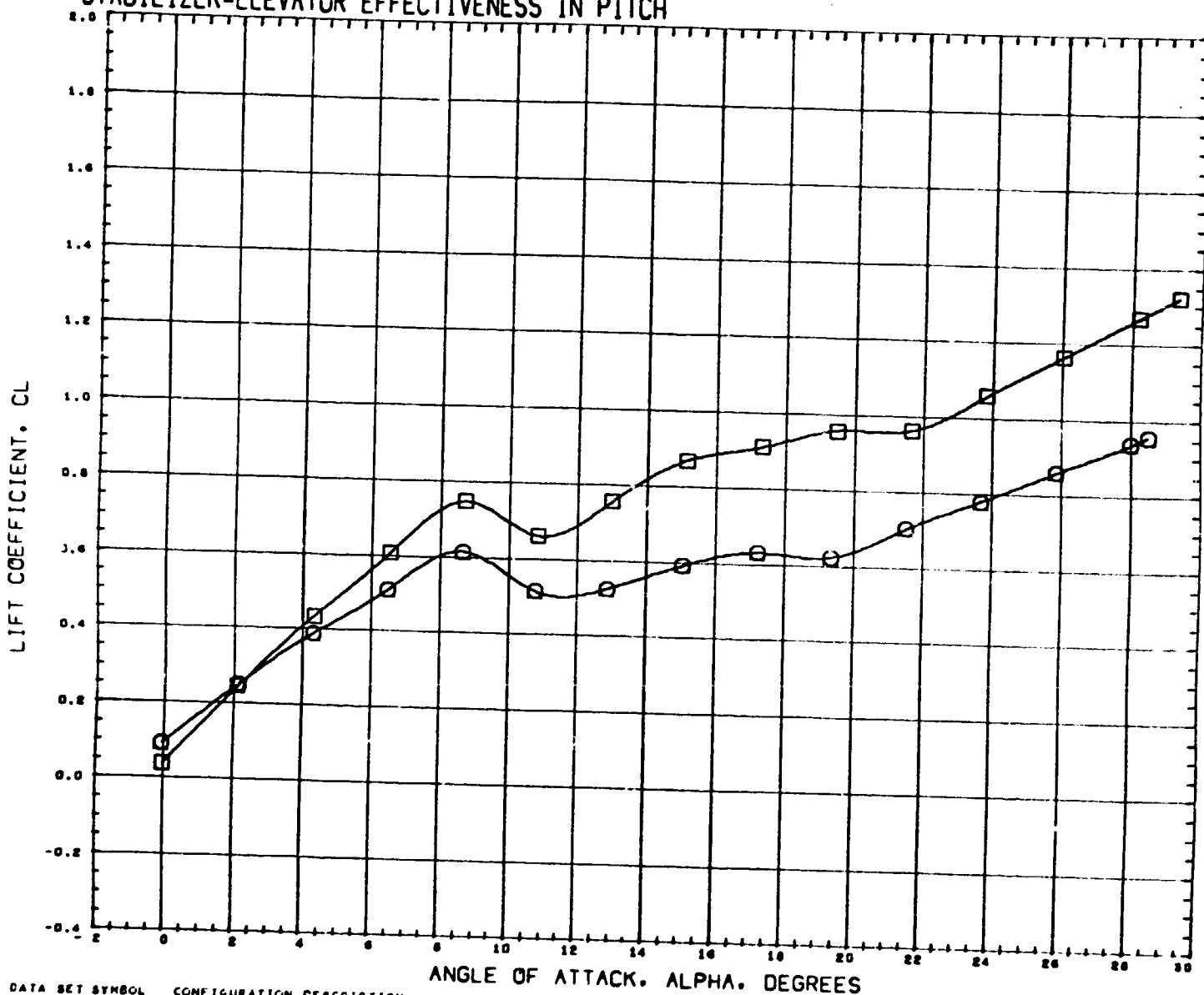
-20.000 -30.000
0.000 -30.000
0.000 0.000

REFERENCE INFORMATION

SREF 31.3600 50. IN
LREF 2.2400 IN.
SREF 14.6000 IN.
XMRP 11.9600 IN.
YMRP 0.0000 IN.
ZMRP 2.4330 IN.
SCALE 0.0007

MACH 0.299

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



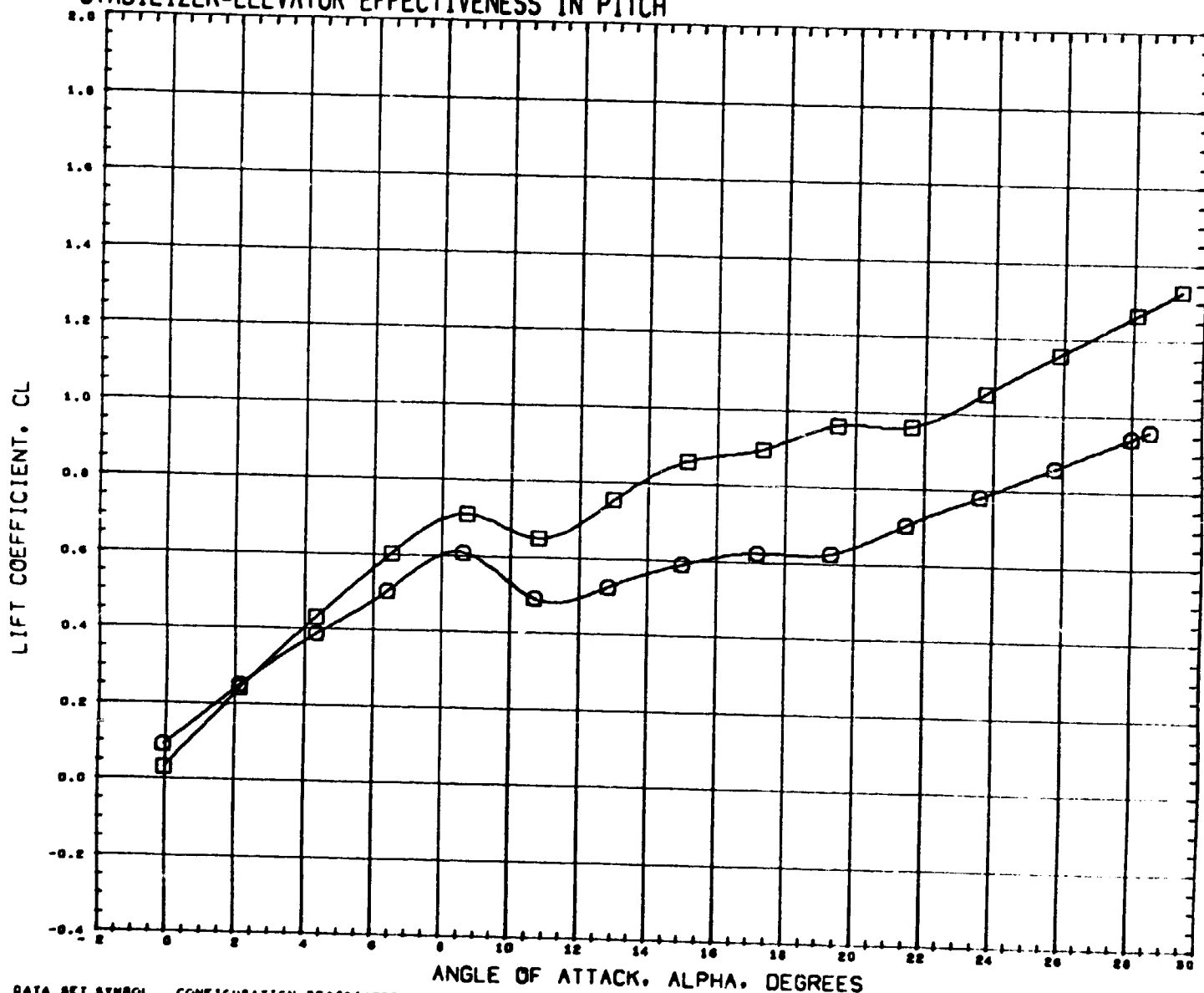
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC2034) BTWT-1265 BOEING M-32 BOOSTER 88W4V3
 (RC2044) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RC2064) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RC2074) BTWT-1265 BOEING M-32 BOOSTER 88W4H4V3

NTAIL ELEVTR SPOILR
 -20.000 -30.000
 3.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 88. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9400 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0007

MACH 0.450

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



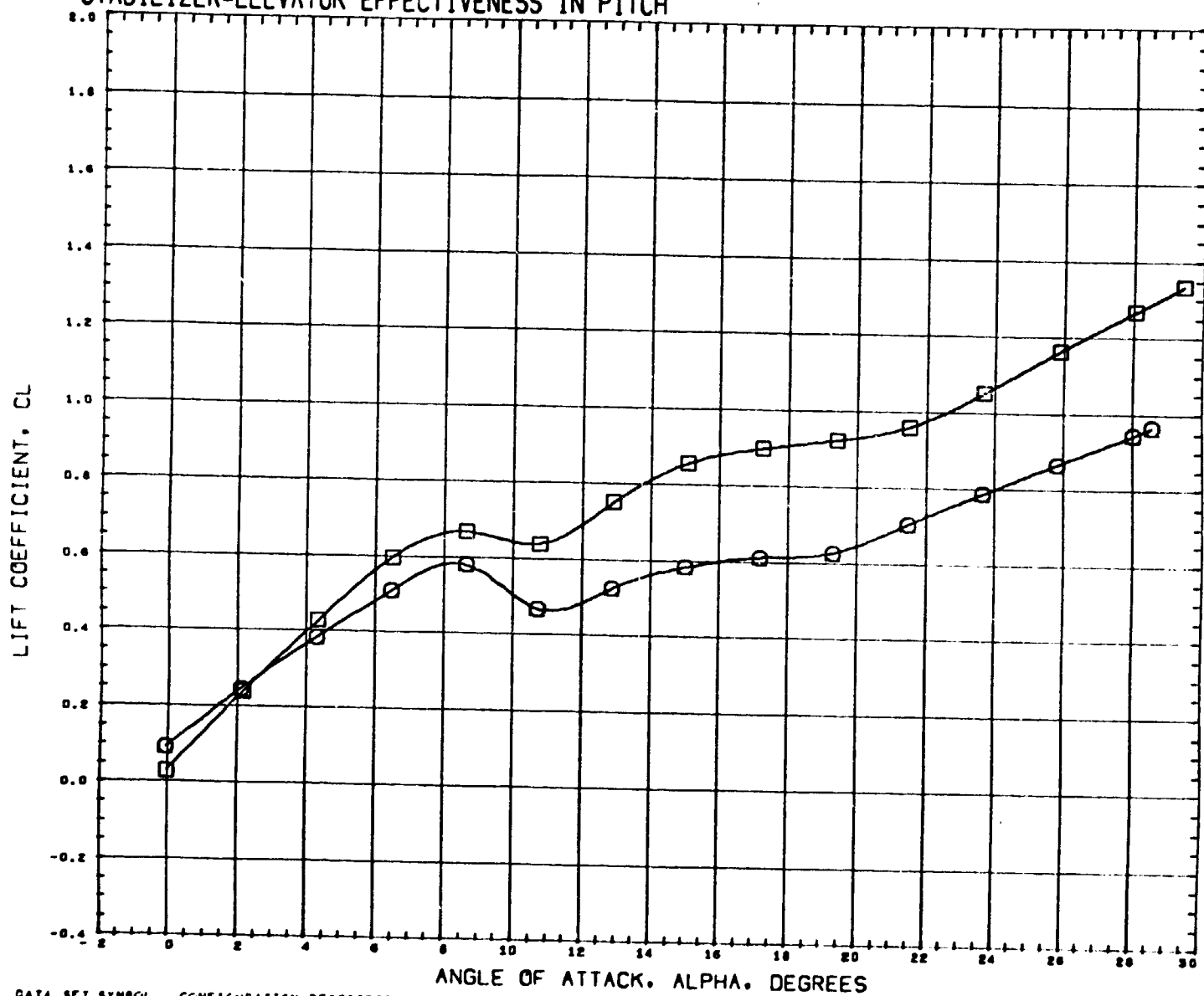
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RD2034) BTWT-1265 BOEING N-32 BOOSTER B8W4V3
 (RD2044) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RD2064) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RD2074) BTWT-1265 BOEING N-32 BOOSTER B8W4H4V3

HTAIL ELEVTR SPOILR
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 IN.
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0007

MACH 0.476

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



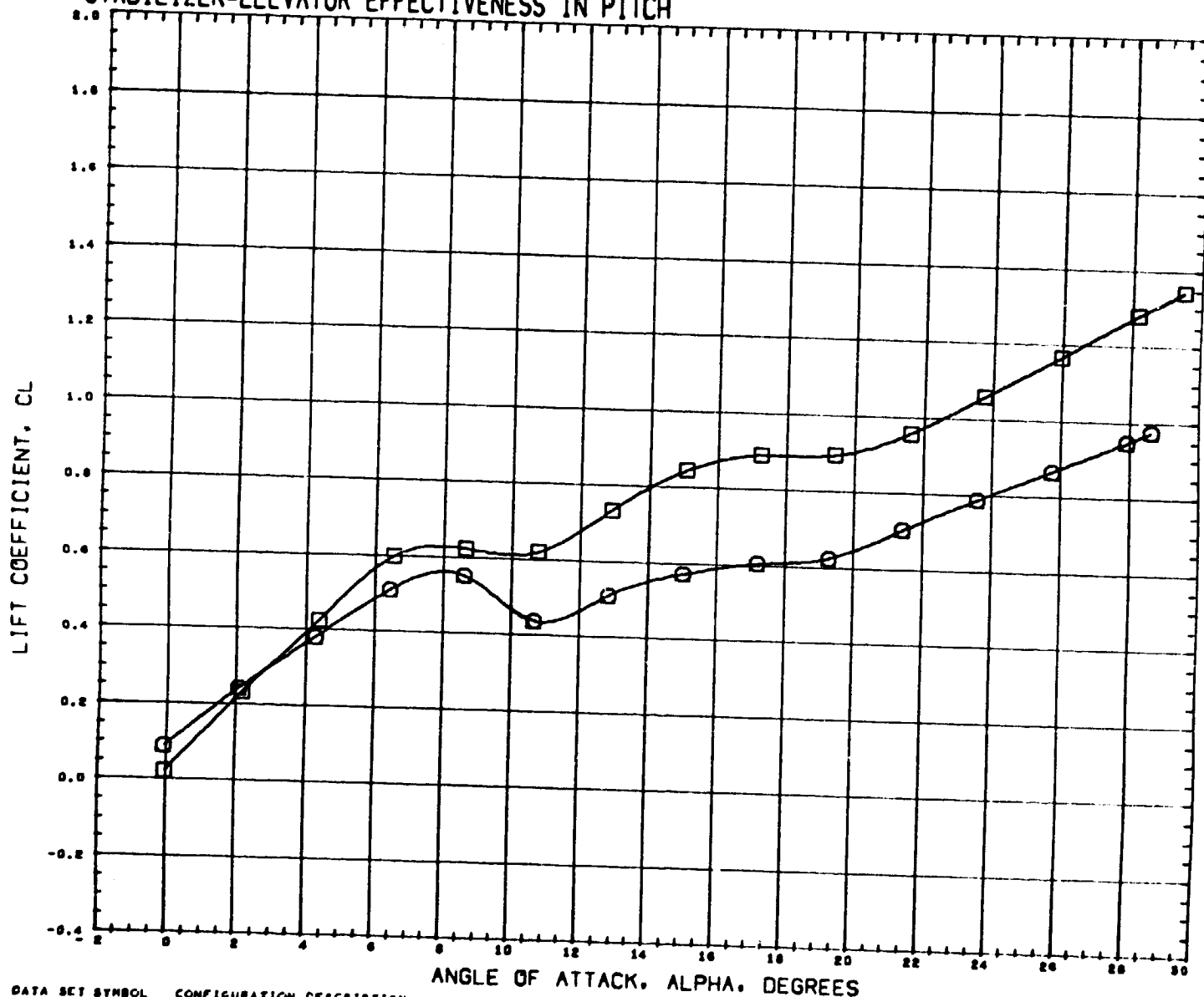
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC1034) STMT-1265 BOEING H-32 BOOSTER 88W4V3
 (RC2044) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RC2064) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RC2074) STMT-1265 BOEING H-32 BOOSTER 88W4H4V3

NTAIL ELEVTR SPOILR
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 51.3600 88. IN
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.489

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



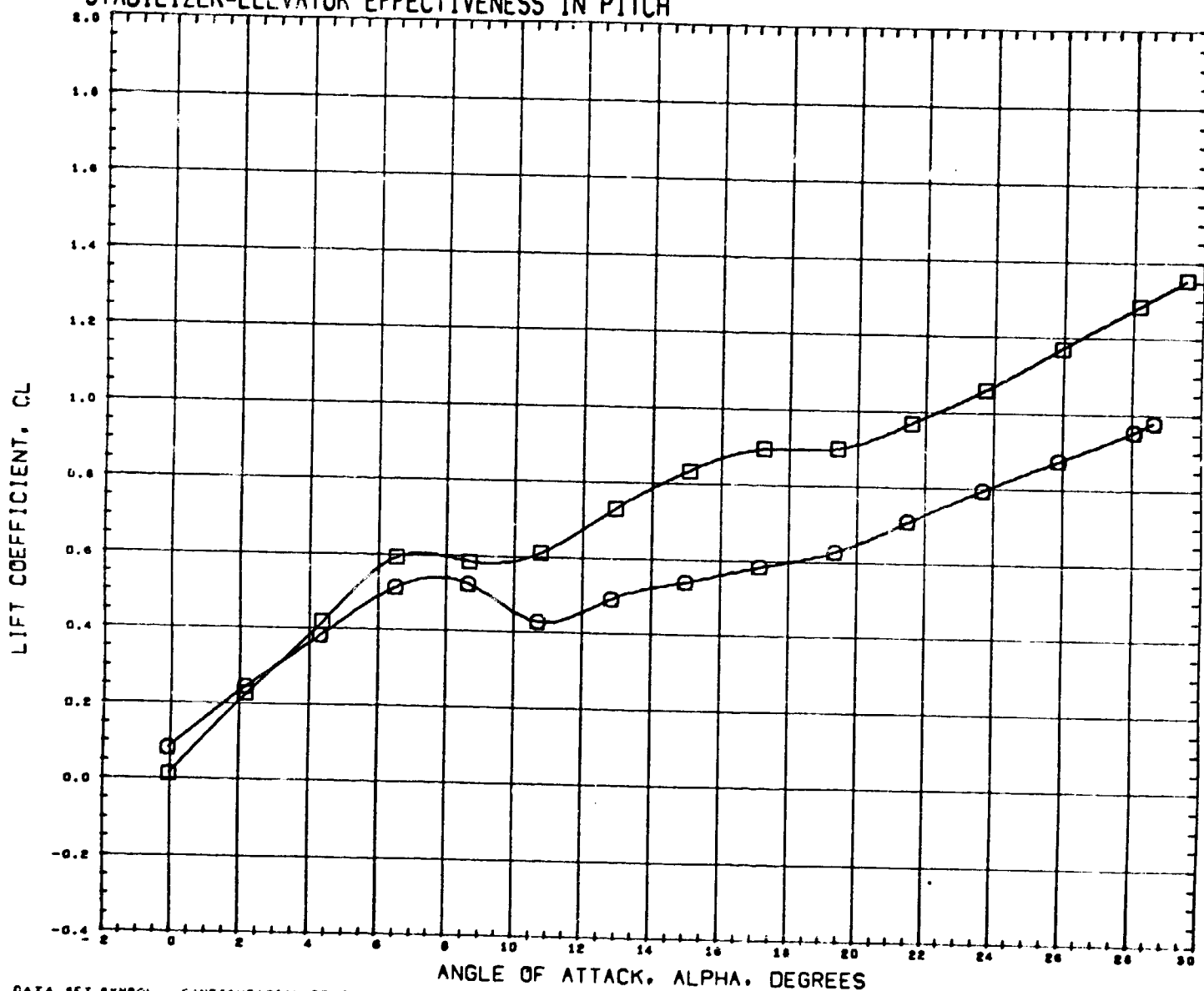
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R22034) BTWT-1265 BOEING N-32 BOOSTER 88W4V3
 (R22044) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (R22064) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (R22074) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3

HTAIL ELEVTR SPOILR
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 88. IN
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.924

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



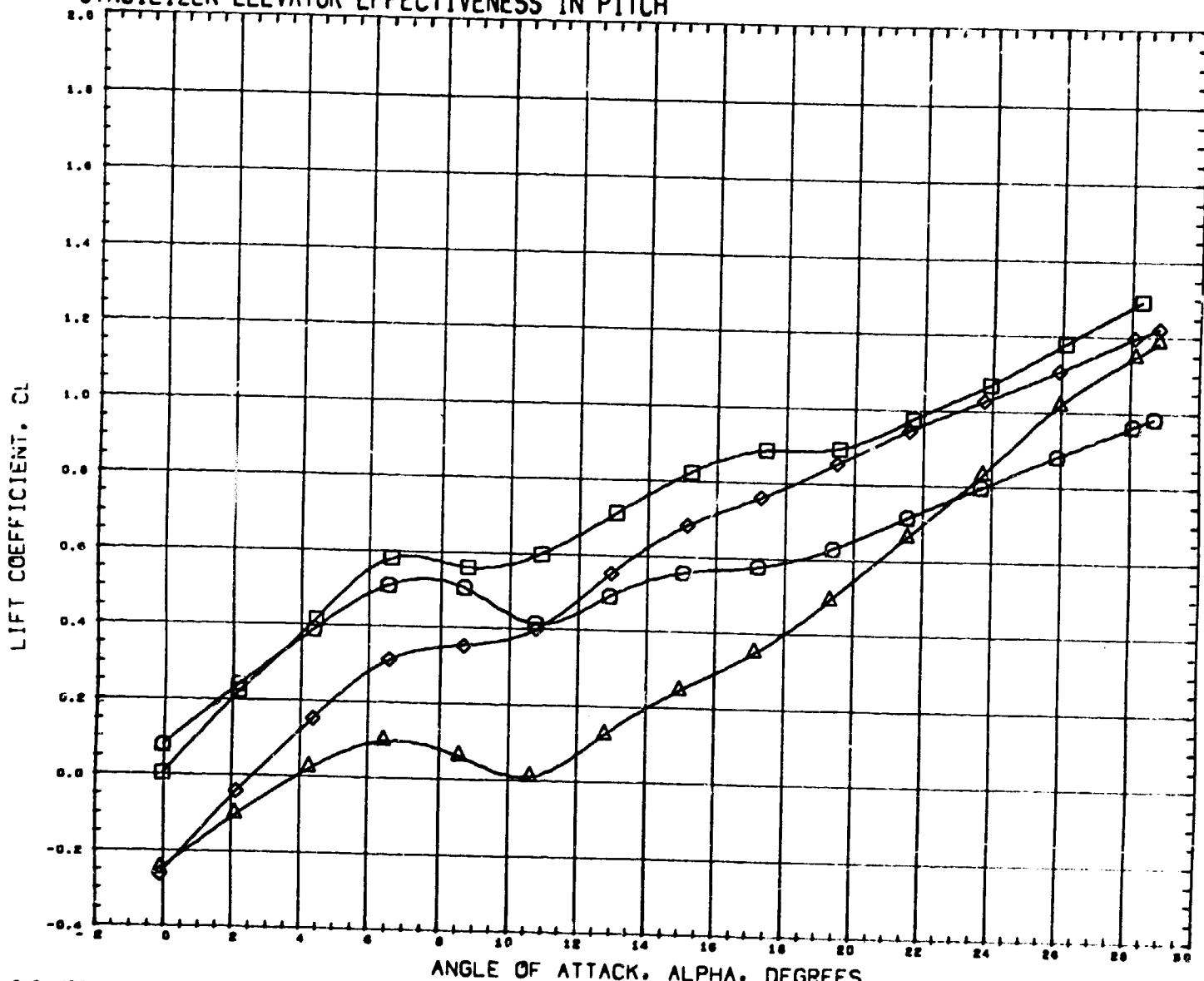
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC2034) STWT-1265 BOEING N-32 BOOSTER 88W4V3
 (RC2044) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RC2064) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RC2074) STWT-1265 BOEING N-32 BOOSTER 88W4H4V3

NTAIL ELEVTR SPOILR
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.5600 66. IN
 LREF 2.2400 IN.
 SREF 14.0000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.949

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH

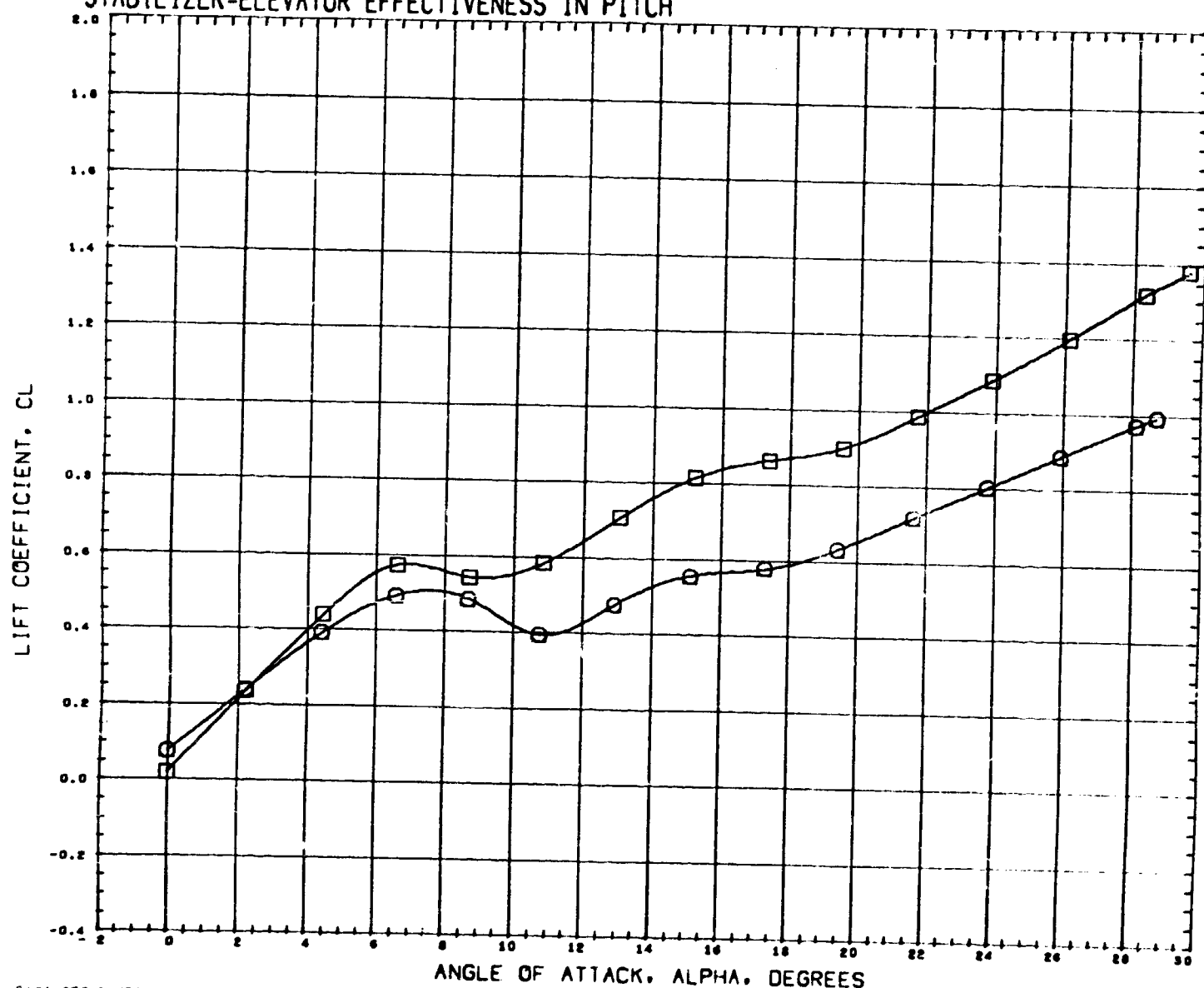


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILER
(RC2034)	BTMT-1265 BOEING H-32 BOOSTER 88W4V3	-20.000	-30.000	
(RC2044)	BTMT-1265 BOEING H-32 BOOSTER 88W4N4V3	0.000	-30.000	
(RC2064)	BTMT-1265 BOEING H-32 BOOSTER 88W4N4V3	0.000	0.000	
(RC2074)	BTMT-1265 BOEING H-32 BOOSTER 88W4N4V3			

MACH 0.575

REFERENCE INFORMATION		
REF	31.3600	82. IN
LRFP	2.2400	IN.
BREF	14.6000	IN.
XMRP	21.9877	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION

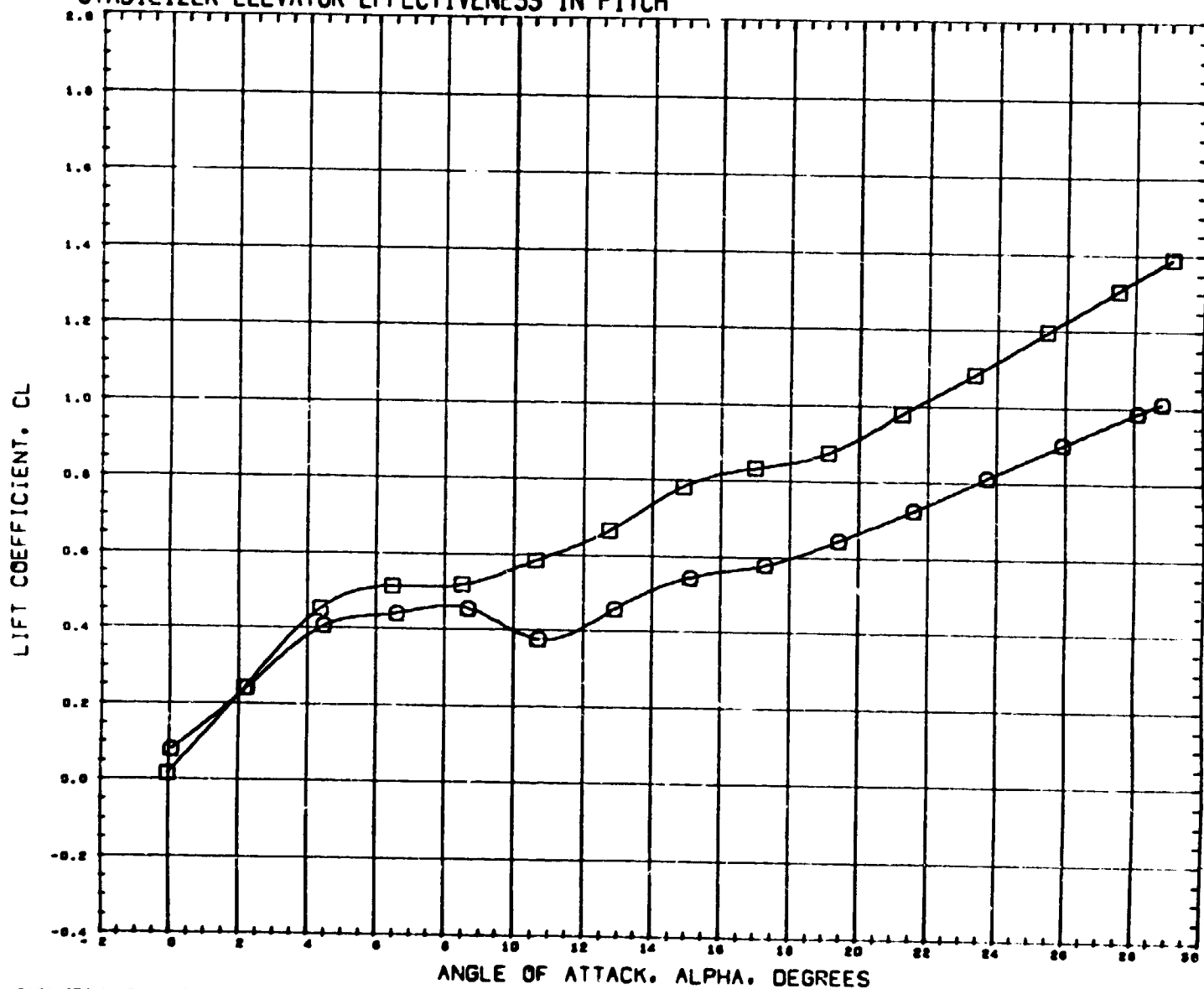
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MTAIL	ELEVTR	SPOILER
(RC2134)	BTWT-1265 BOEING N-32 BOOSTER 88W4V3	-20.000	-30.000	
(RC2144)	DATA NOT AVAILABLE FOR ALL CONDITIONS	0.000	-30.000	
(RC2164)	DATA NOT AVAILABLE FOR ALL CONDITIONS	0.000	0.000	
(RC2174)	BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3			

MACH 0.600

REFERENCE INFORMATION

SREF	31.3600	80. IN
LREF	2.2400	IN.
BREF	14.0000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



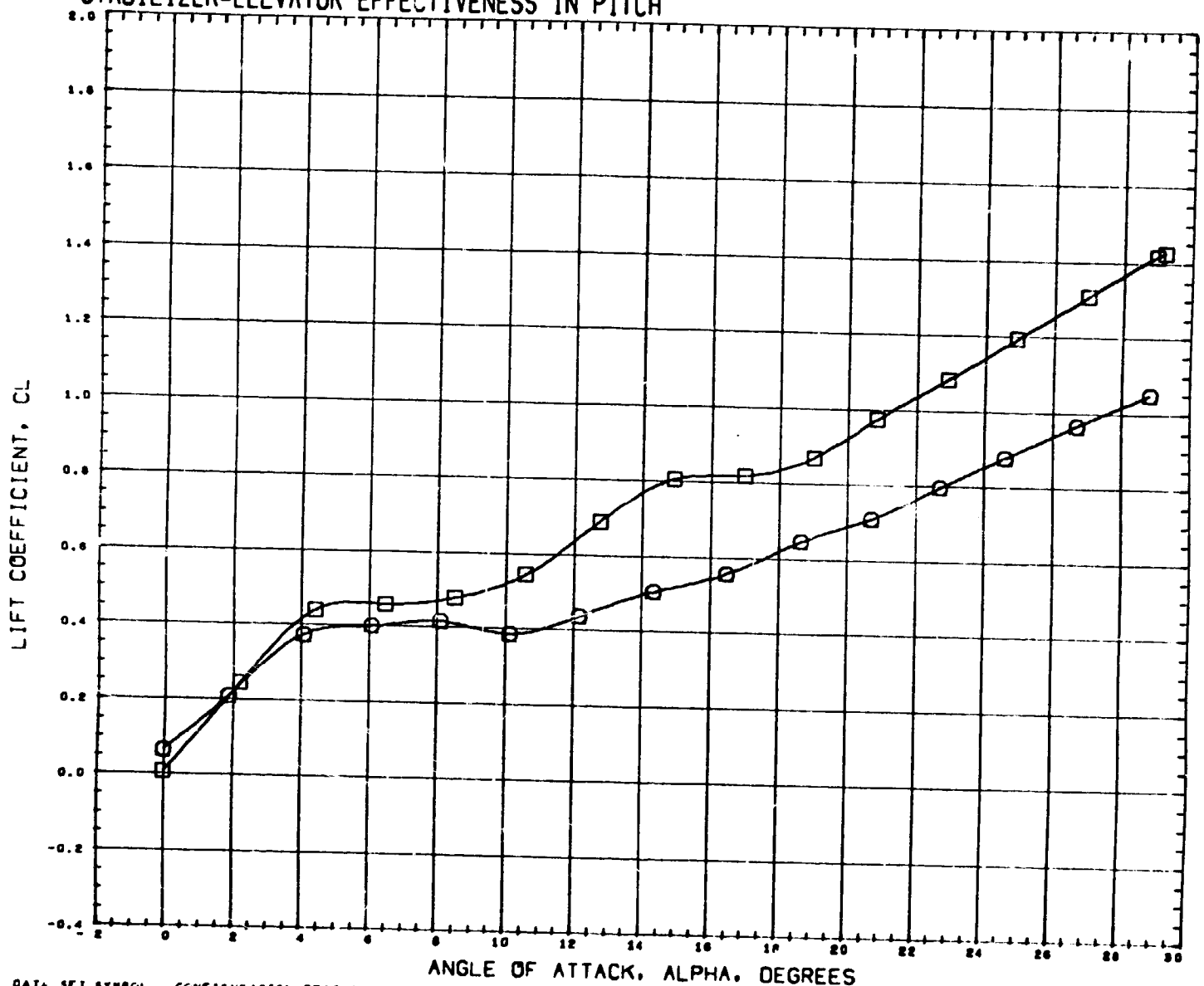
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(B8C034)	BTMT-1265 BOEING N-32 BOOSTER B8W4V3
(B8C044)	DATA NOT AVAILABLE FOR ALL CONDITIONS
(B8C064)	DATA NOT AVAILABLE FOR ALL CONDITIONS
(B8C074)	BTMT-1265 BOEING N-32 BOOSTER B8W4H4V3

NTAIL	ELEVTR	SFOILR
-20.000	-33.000	
0.000	-30.000	
0.000	0.000	

REFERENCE INFORMATION		
SREF	31.3000	50. IN
LREF	2.2400	IN.
BREF	14.8000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0007	

MACH 0.651

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



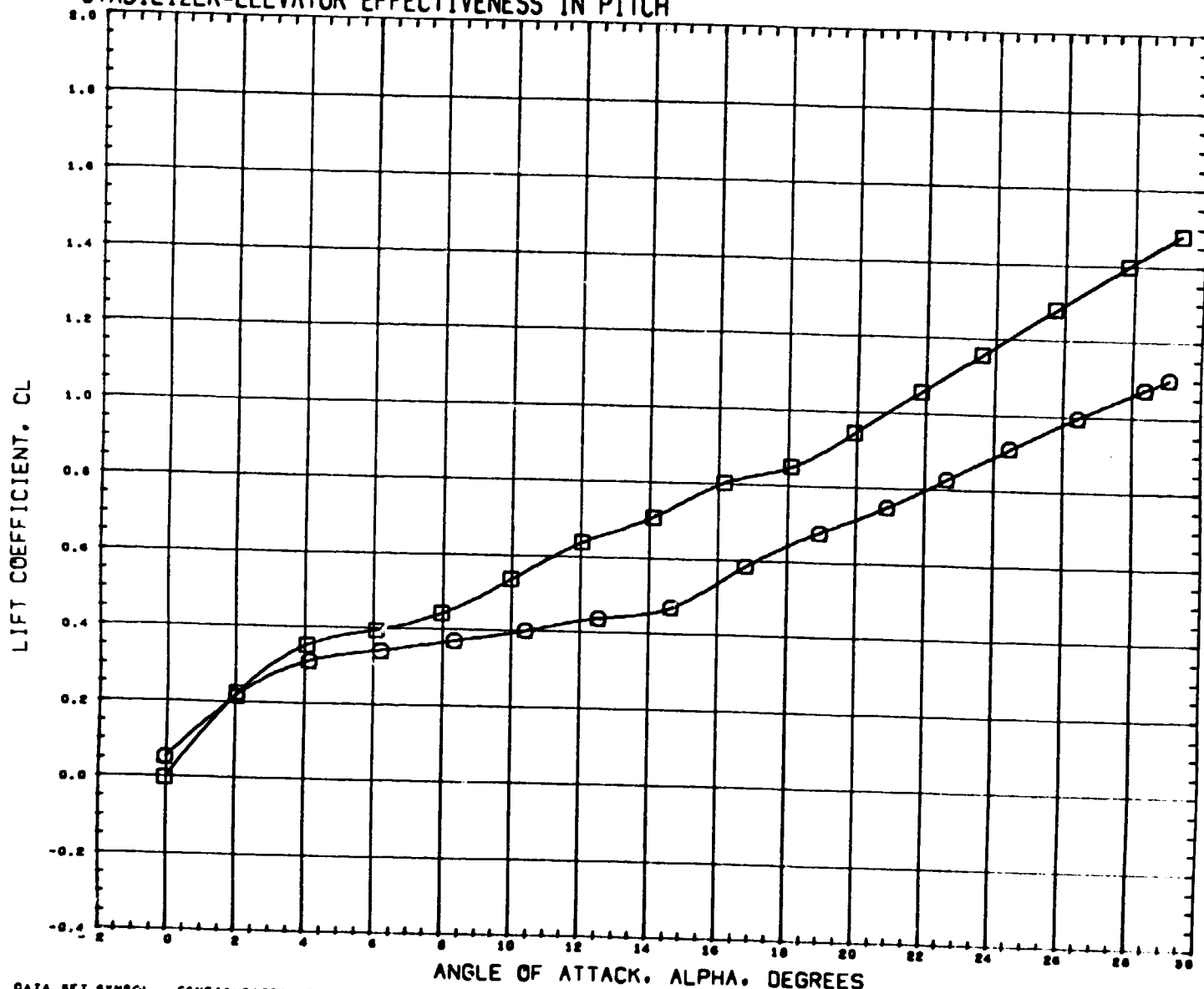
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RD2034) BTWT-1265 BOEING M-32 BOOSTER 88W4V3
 (RD2044) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RD2074) BTWT-1265 BOEING M-32 BOOSTER 88W4H4V3

NTAIL ELEVTA SPOILR
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3000 IN.
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

NACH 0.700

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



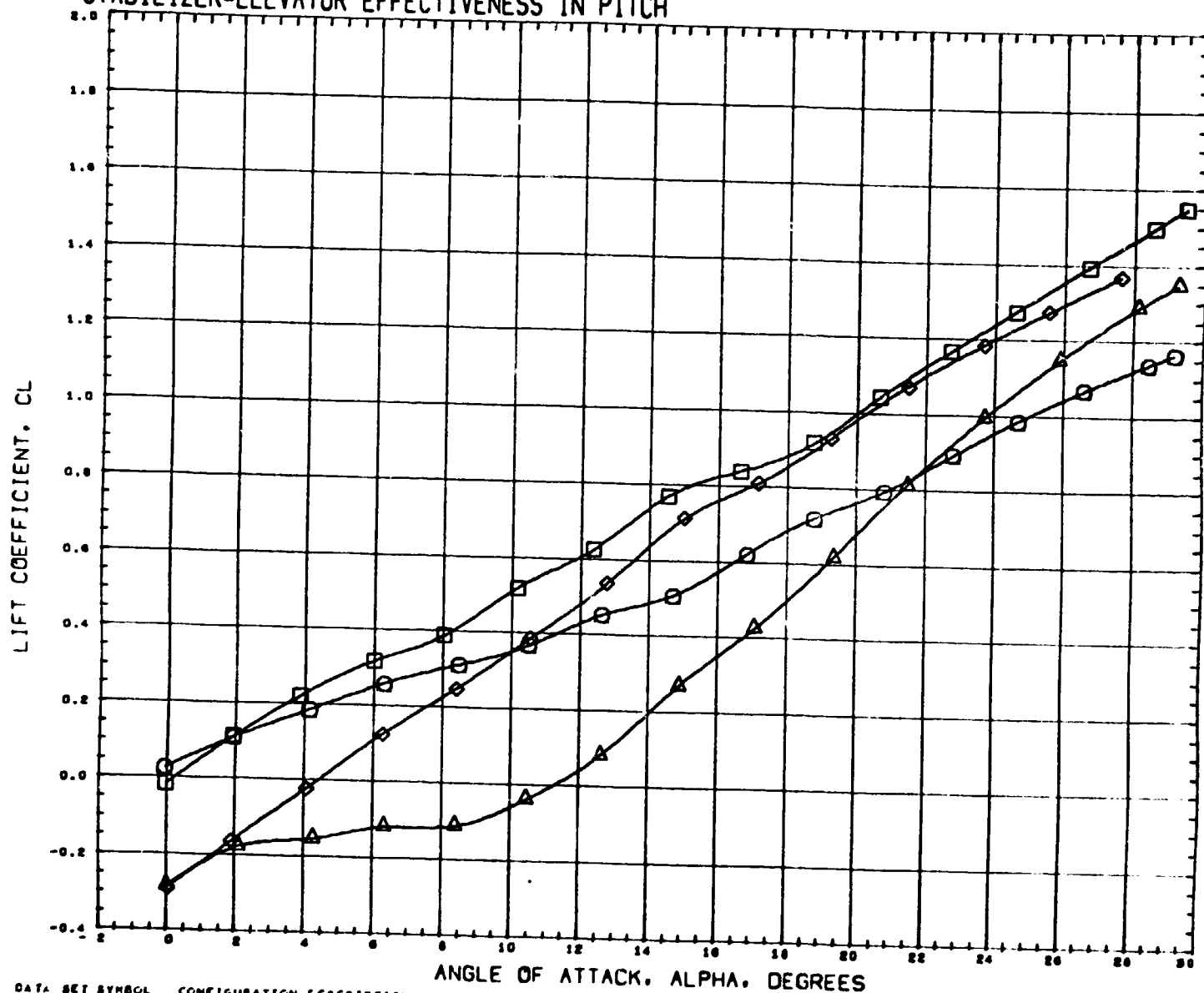
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02034) STNT-1265 BOEING N-32 BOOSTER 88W4V3
 (R02044) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (R02064) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (R02074) STNT-1265 BOEING N-32 BOOSTER 88W4H4V3

NTAIL ELEVTR SPOILR
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3000 IN.
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XMRP 11.9000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0007

MACH 0.750

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH

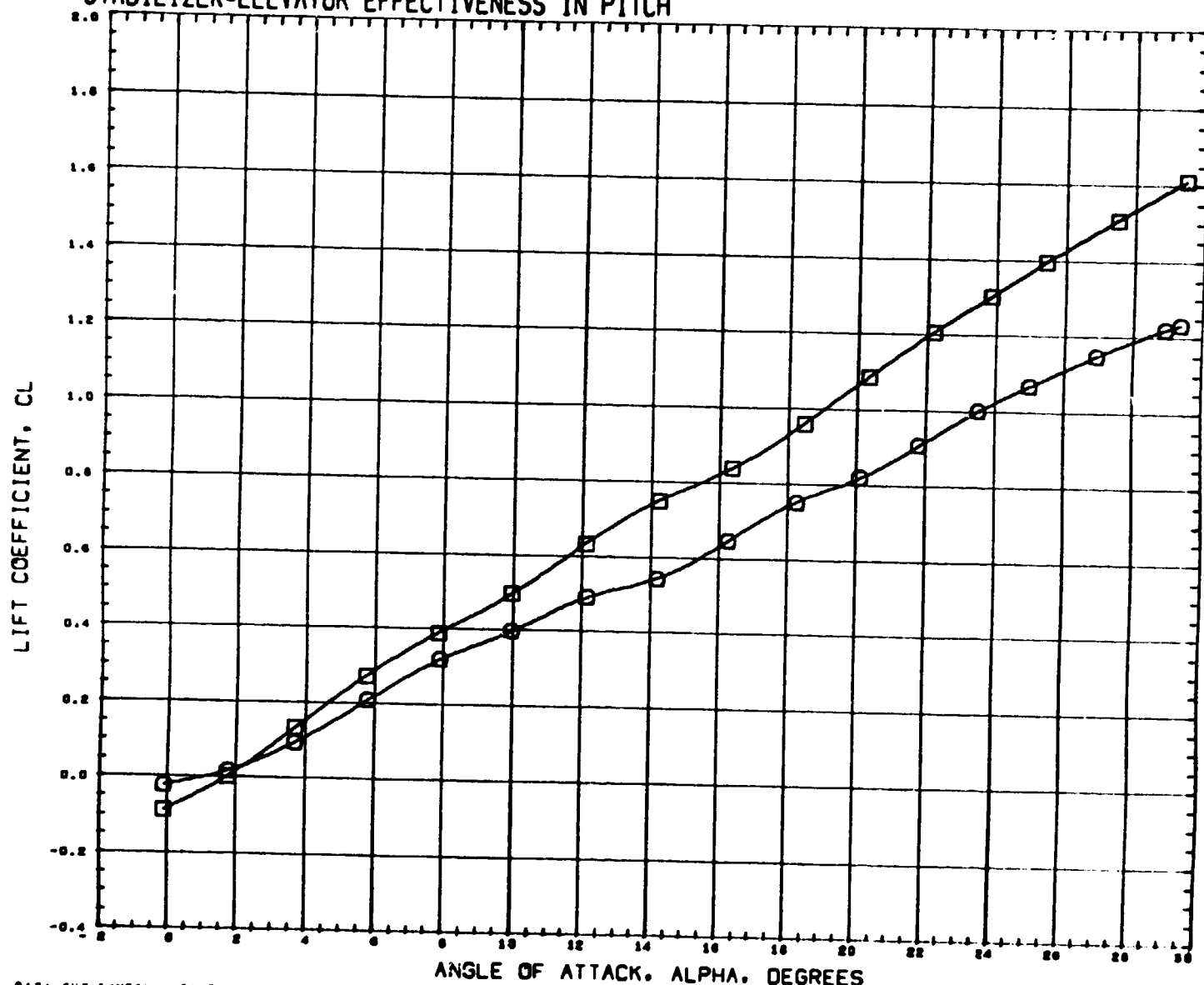


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILER
(RC2034)	BTWT-1265 BOEING H-32 BOOSTER 88W4V3	-20.000	-30.000	
(RC2044)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	0.000	-30.000	
(RC2074)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	0.000	0.000	

MACH 0.870

REFERENCE INFORMATION		
SREF	31.3600	80. IN
LREF	2.2400	IN.
BREF	14.0000	IN.
XMRP	13.9000	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0007	

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



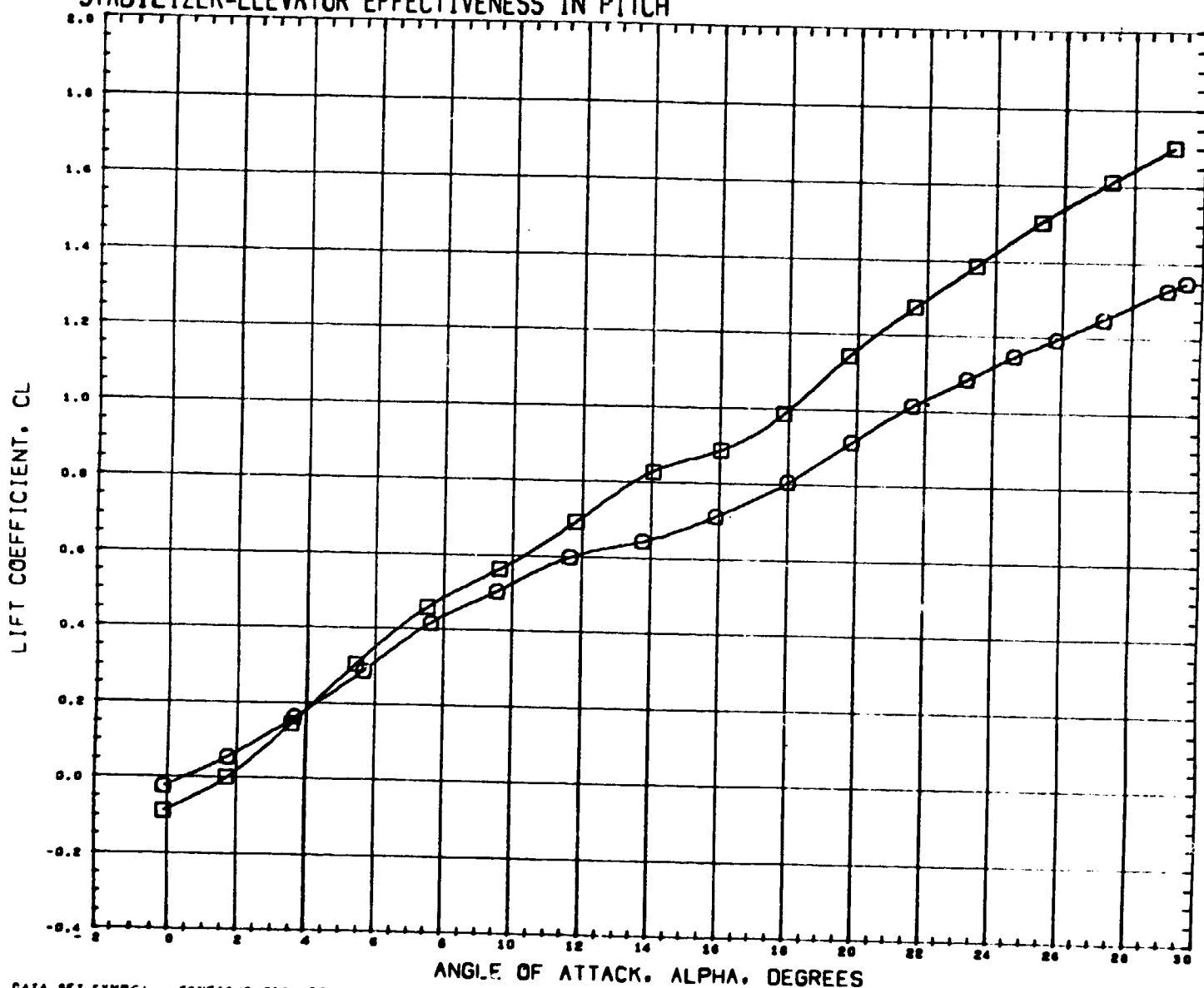
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02034) BTMT-1265 BOEING N-32 BOOSTER 88W4V3
 (R02044) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (R02064) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (R02074) BTMT-1265 BOEING N-32 BOOSTER 88W4H4V3

NTAIL ELEVTR SPOILR
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 60. IN
 LREF 2.2400 IN.
 QREF 14.0000 IN.
 XMRP 11.9000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.858

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



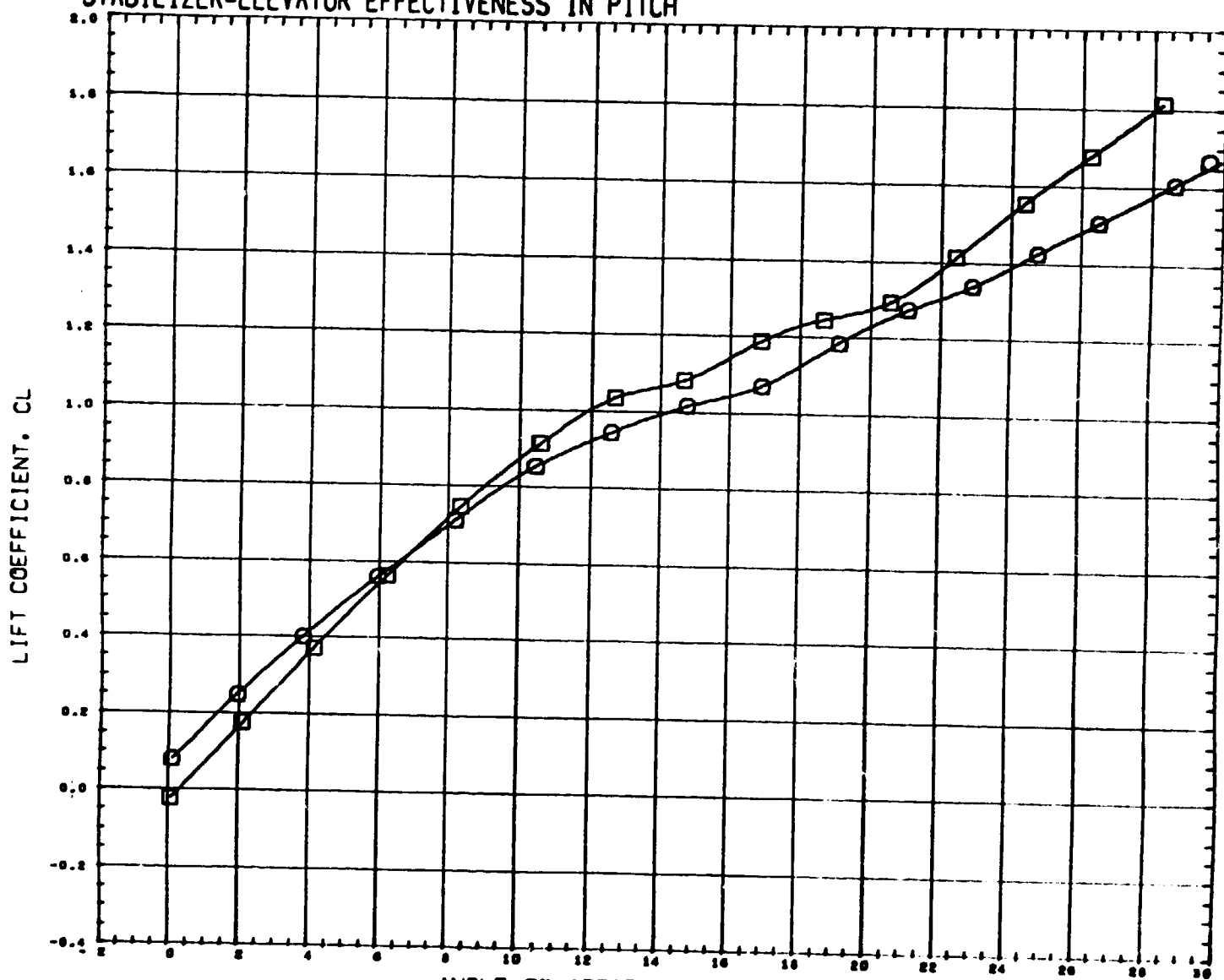
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02134) BTWT-1265 BOEING N-32 BOOSTER B0W4V3
 (R02144) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (R02164) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (R02074) BTWT-1265 BOEING N-32 BOOSTER B0W4H4V3

NTAIL ELEVTR SPOILR
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XMRP 11.0000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4350 IN.
 SCALE 0.0067

MACH 0.899

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



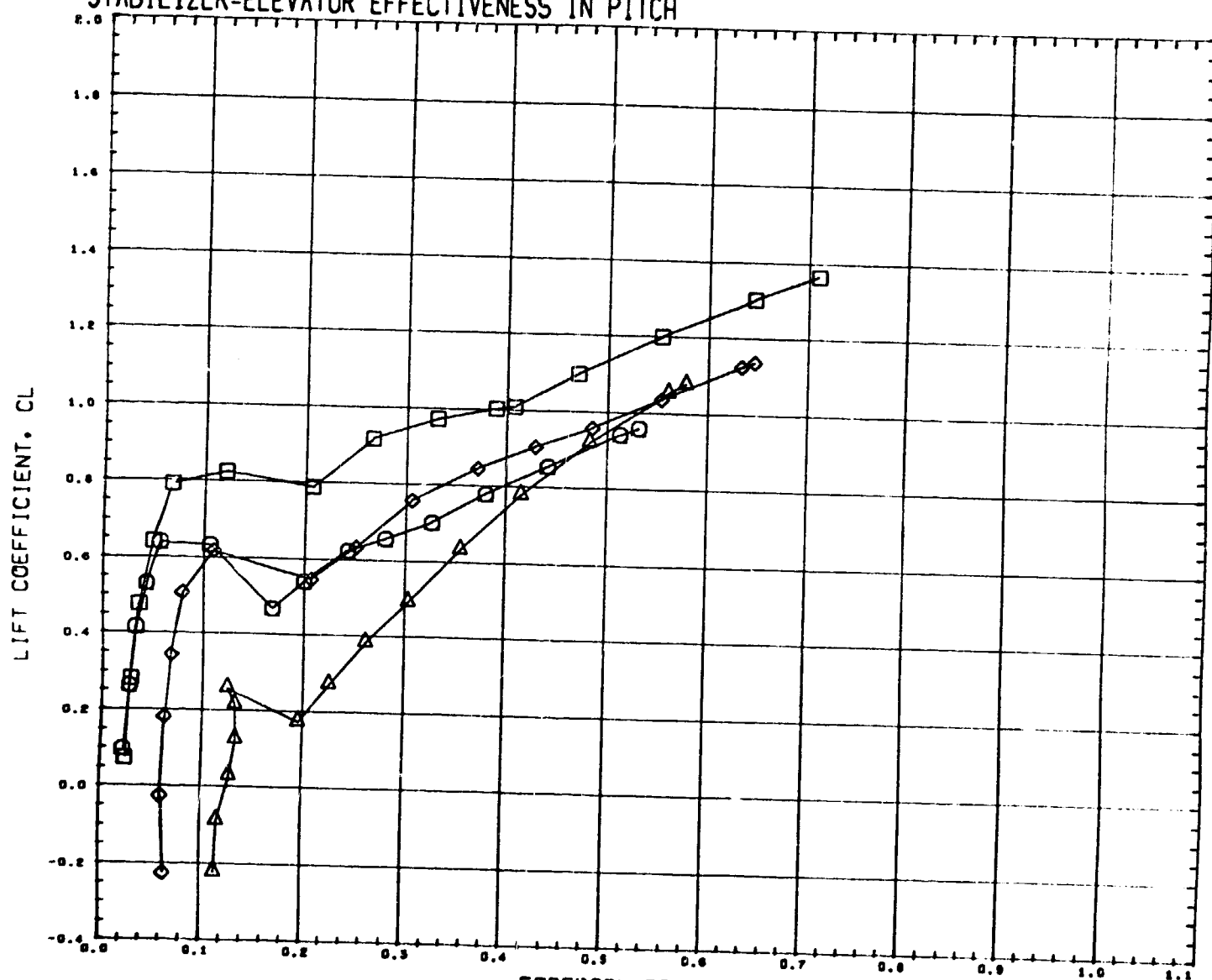
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (802034) BTMT-1285 BOEING N-32 BOOSTER 88W4V3
 (802044) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (802064) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (802074) BTMT-1285 BOEING N-32 BOOSTER 88W4H4V3

NTAIL ELEVTR SPOILER
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3400 IN.
 LREF 2.2400 IN.
 SREF 14.0000 IN.
 XREF 11.0000 IN.
 YREF 0.0000 IN.
 ZREF 2.4333 IN.
 SCALE 0.0007

MACH 0.949

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(DD2034)	BTMT-1265	BOEING H-32 BOOSTER	80W4V3
(DD2044)	BTMT-1265	BOEING H-32 BOOSTER	80W4H4V3
(DD2064)	BTMT-1265	BOEING H-32 BOOSTER	80W4H4V3
(DD2074)	BTMT-1265	BOEING H-32 BOOSTER	80W4H4V3

MACH 0.299

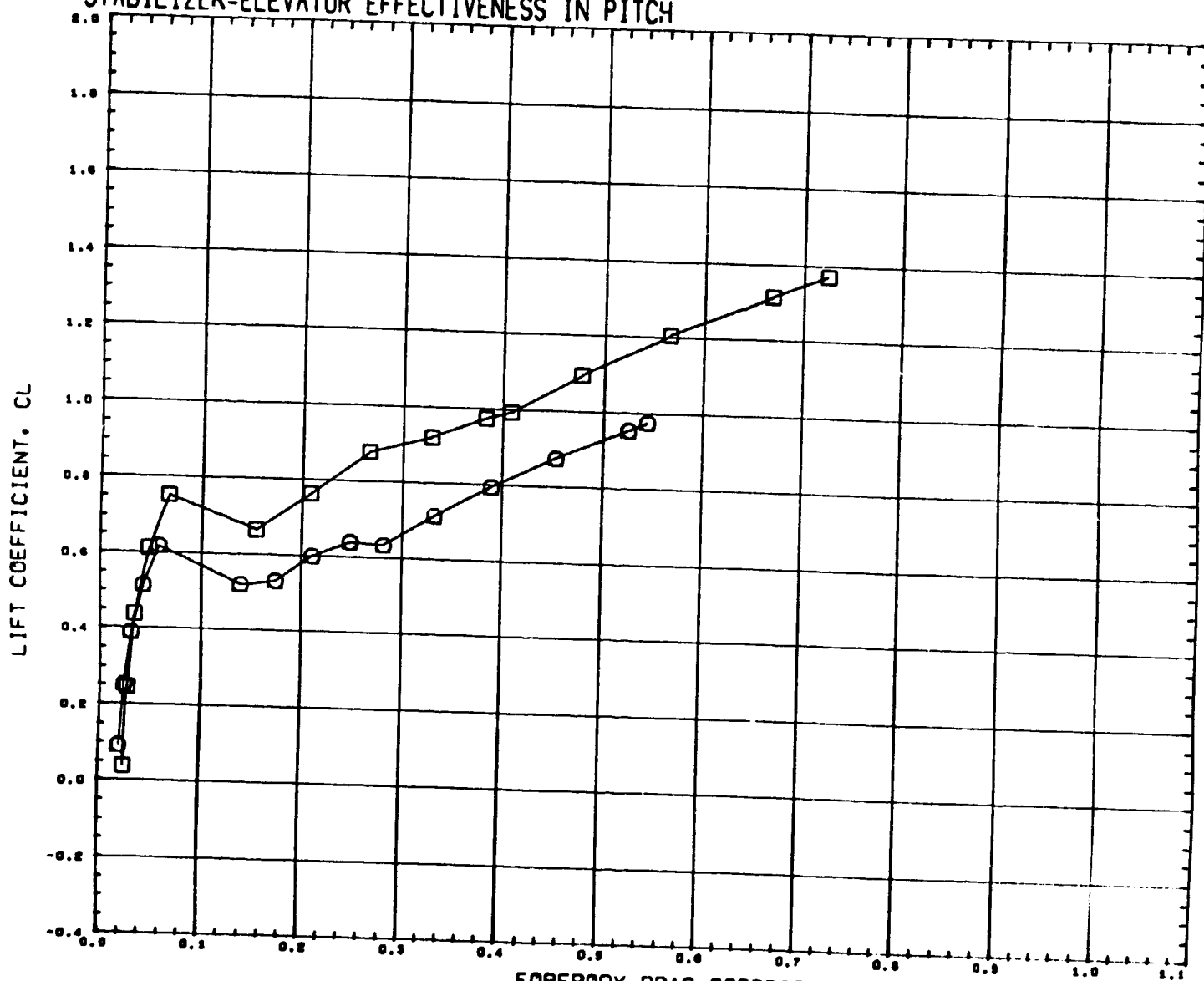
FOREBODY DRAG COEFFICIENT, CDF

MTAIL	ELEVTR	SPOILR
-20.000	-30.000	
0.000	-30.000	
0.000	0.000	

REFERENCE INFORMATION

SREF	31.3600	80. IN
LREF	2.2400	IN.
BREF	14.6000	IN.
XMRP	11.9000	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (C02034) STWT-1265 BOEING N-32 BOOSTER 88W4V3
 (C02044) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (C02064) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (C02074) STWT-1265 BOEING N-32 BOOSTER 88W4H4V3

MACH 0.450

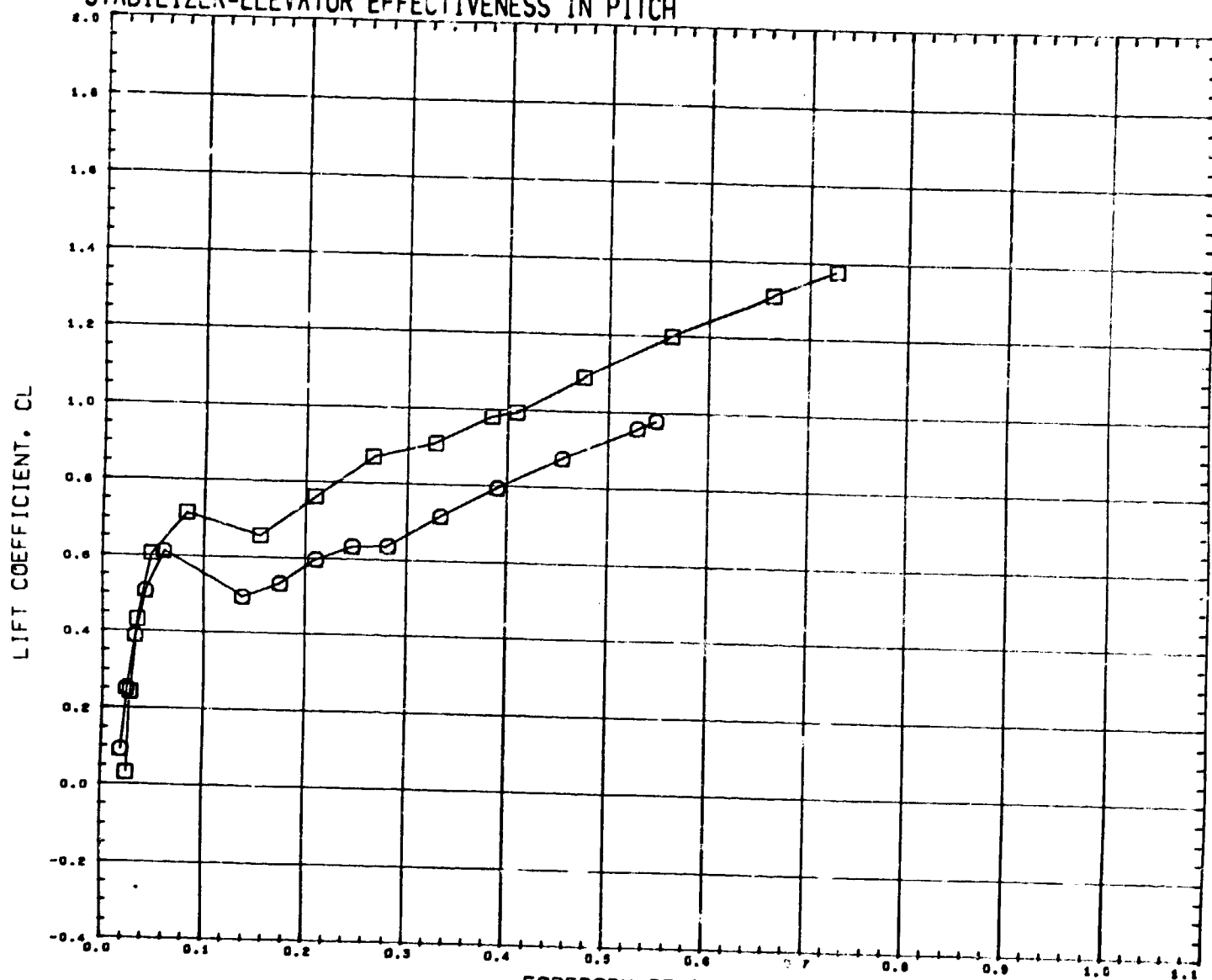
FOREBODY DRAG COEFFICIENT, COF

NTAIL ELEVTR SPOILR

-20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 88. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.8000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0007

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (002334) BTMT-1265 BOEING M-32 BOOSTER B8W4V3
 (002344) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (002364) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (002374) BTMT-1265 BOEING M-32 BOOSTER B8W4H4V3

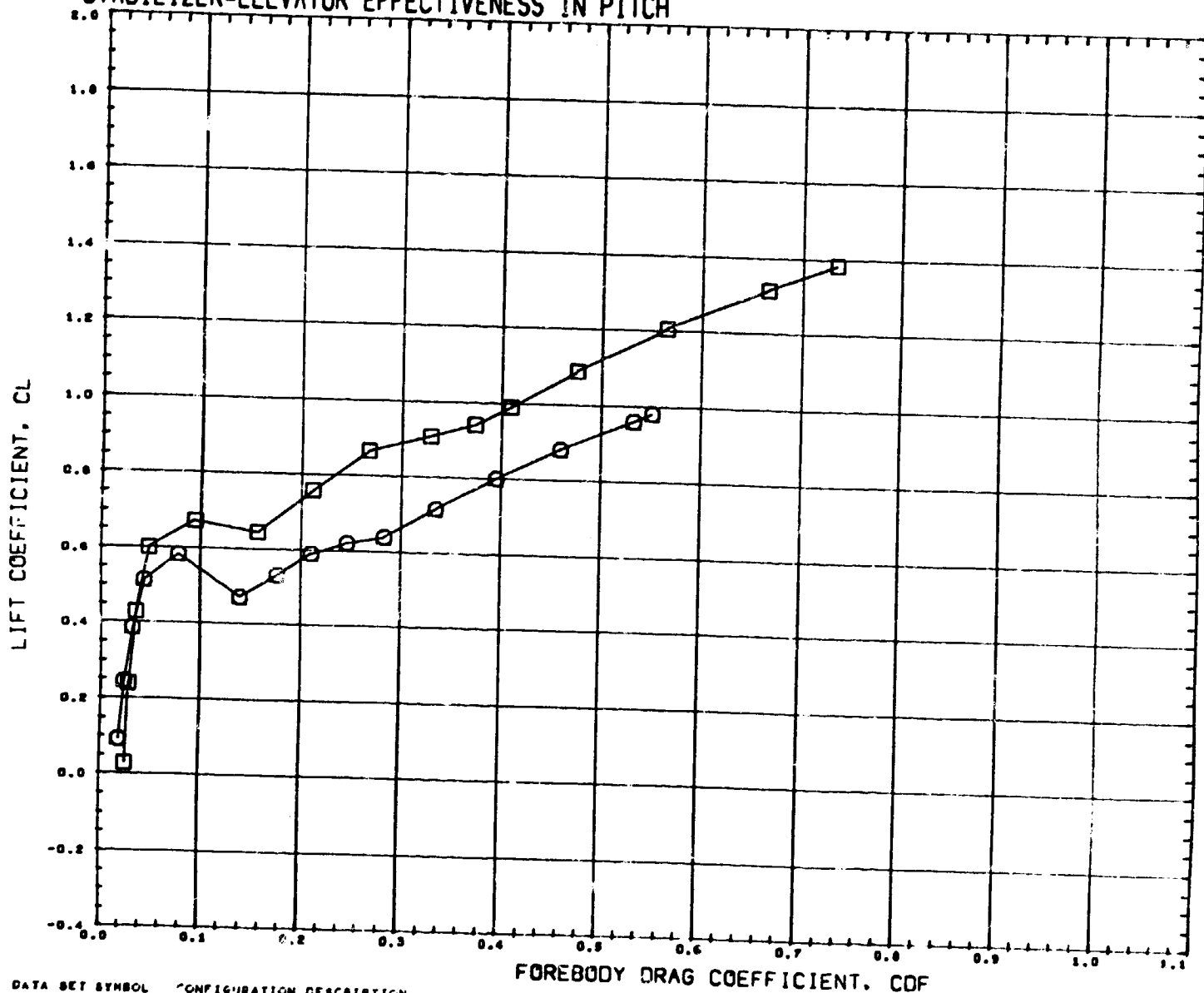
MACH 0.476

FOREBODY DRAG COEFFICIENT, COF

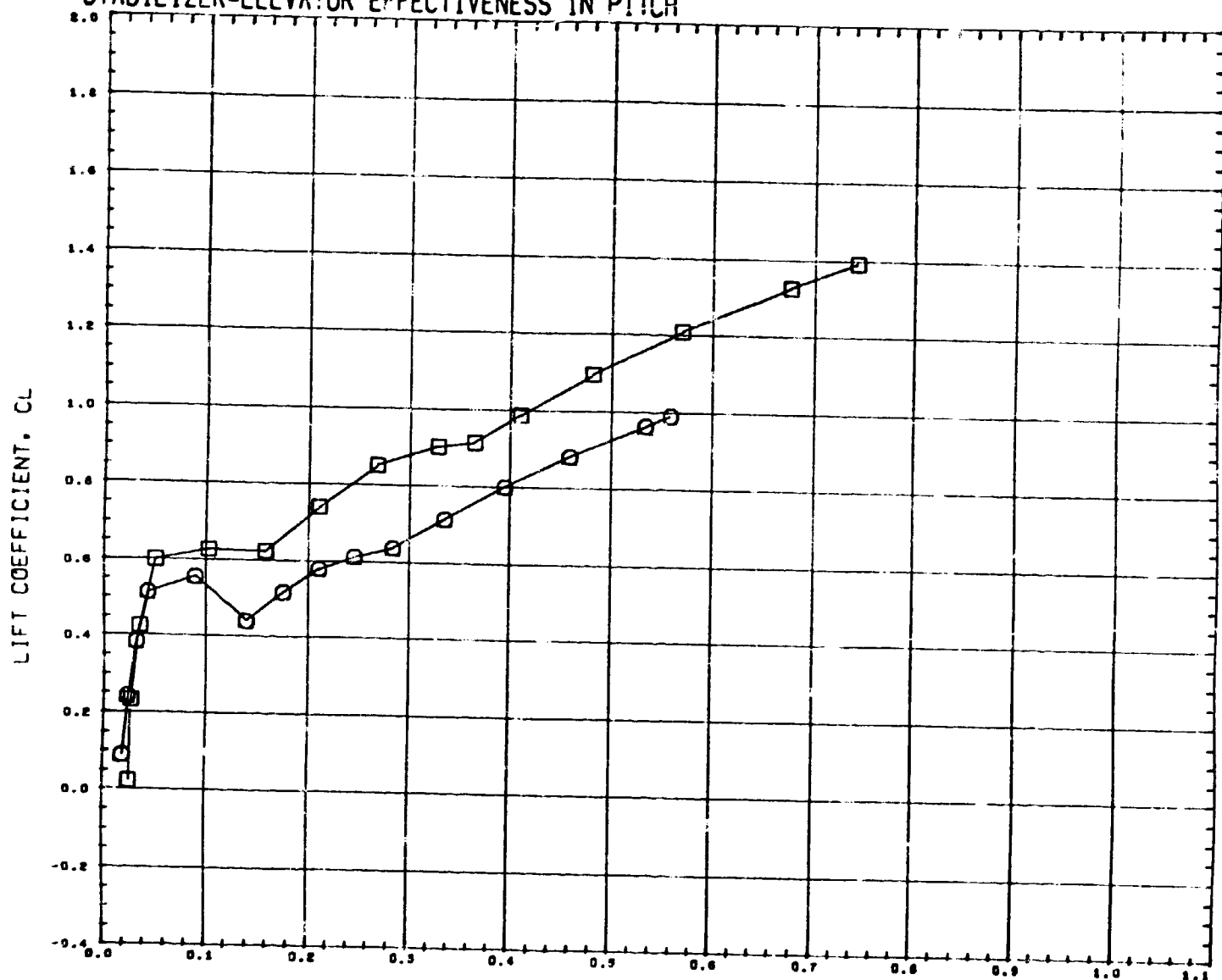
NTAIL	ELEVTR	SPOILER
-20.000	-30.000	
0.000	-30.000	
0.000	0.000	

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 BREF 11.6000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



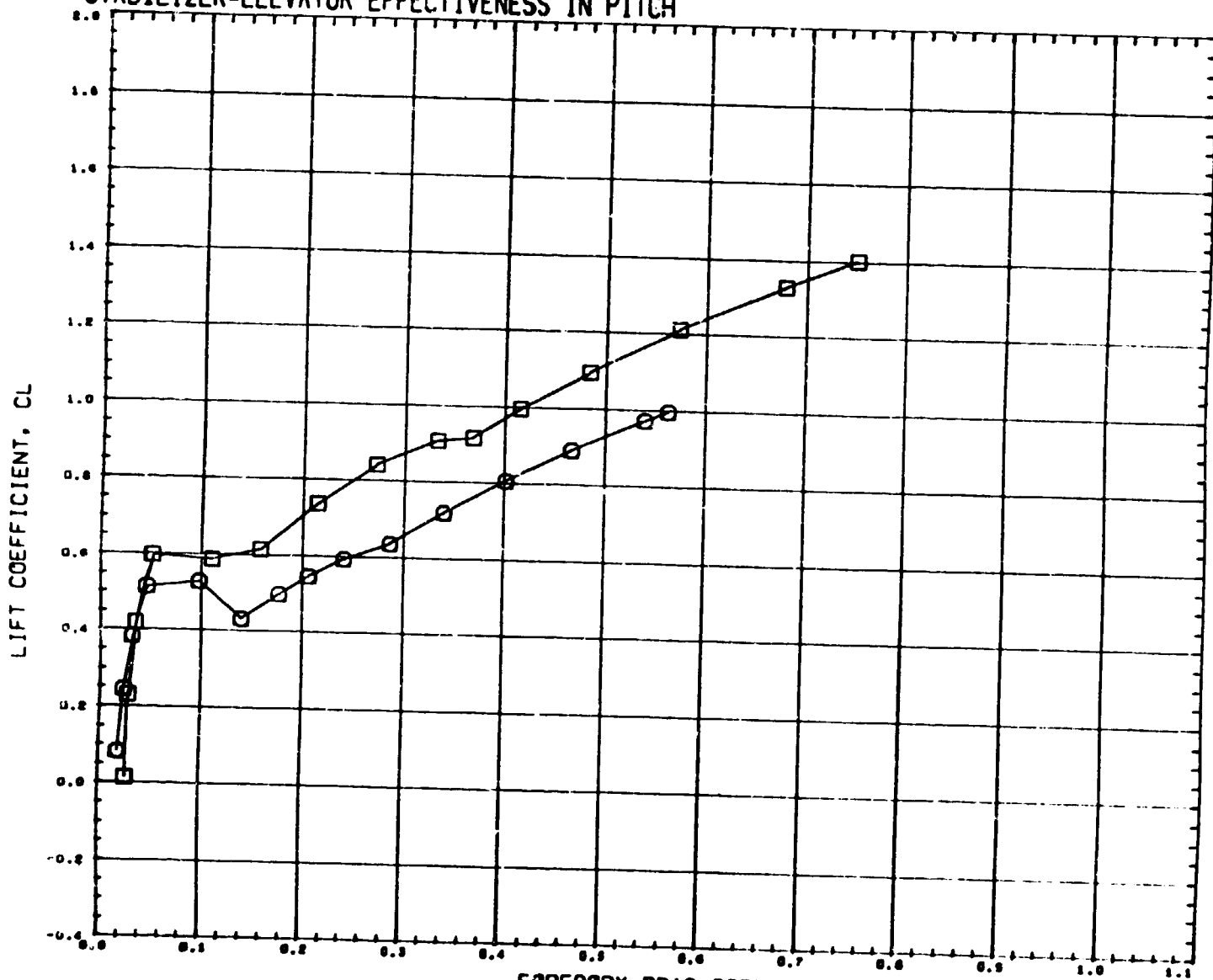
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CC2034) BTWT-1265 BOEING H-32 BOOSTER B8W4V3
 (CC2044) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (CC2064) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (CC2074) BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3

NTAIL ELEVTR SPOILER
 -2.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 IN.
 LREF 2.2400 IN.
 GREF 14.8000 IN.
 XNRP 11.9000 IN.
 YNRP 0.0000 IN.
 ZNRP 2.4333 IN.
 SCALE 0.0067

MACH 0.924

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



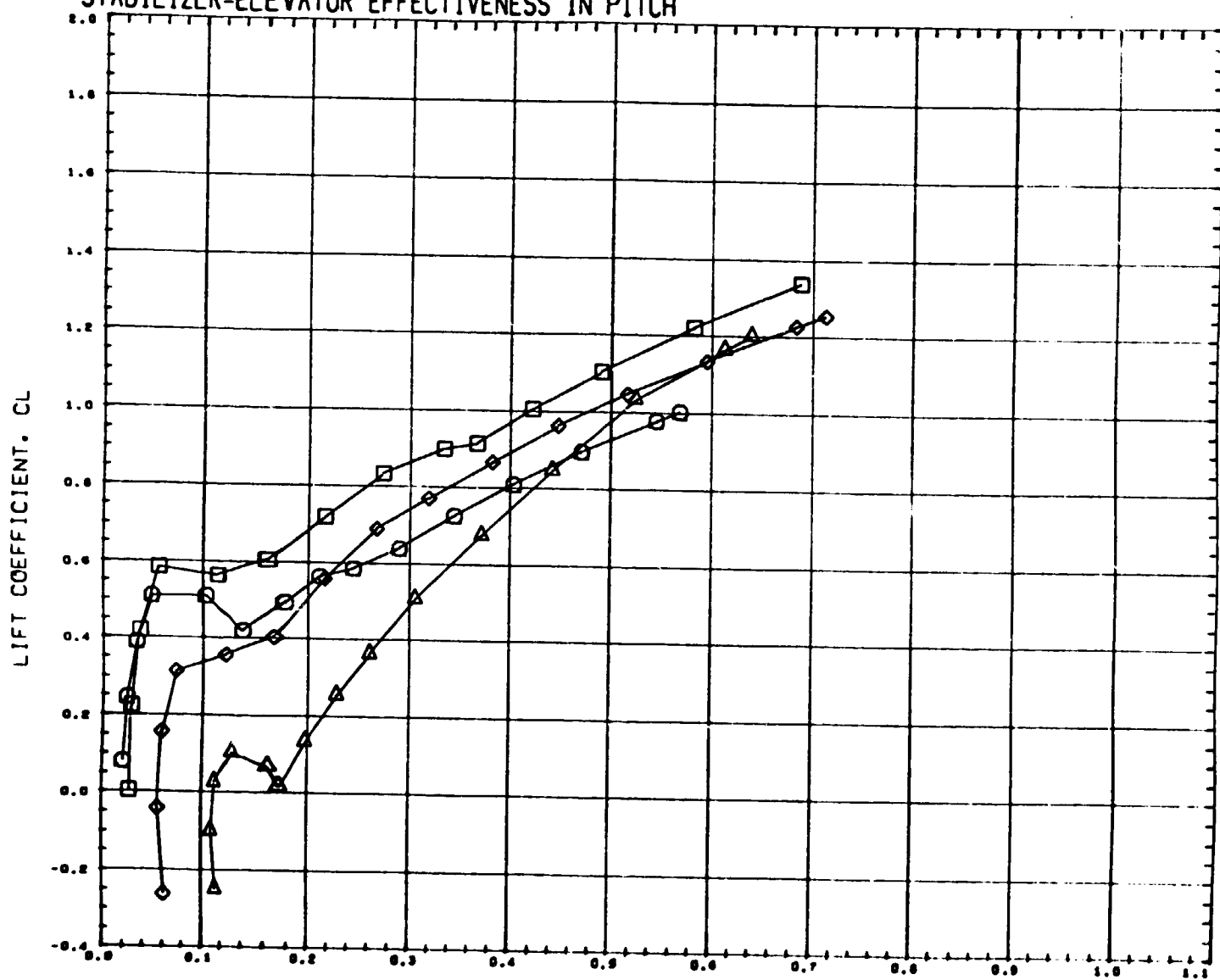
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (002034) BTWT-1265 BOEING N-32 BOOSTER 88W4V3
 (002044) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (002064) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (002074) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3

NTAIL ELEVTR SPOILR
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 60. IN
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

NACH 0.949

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



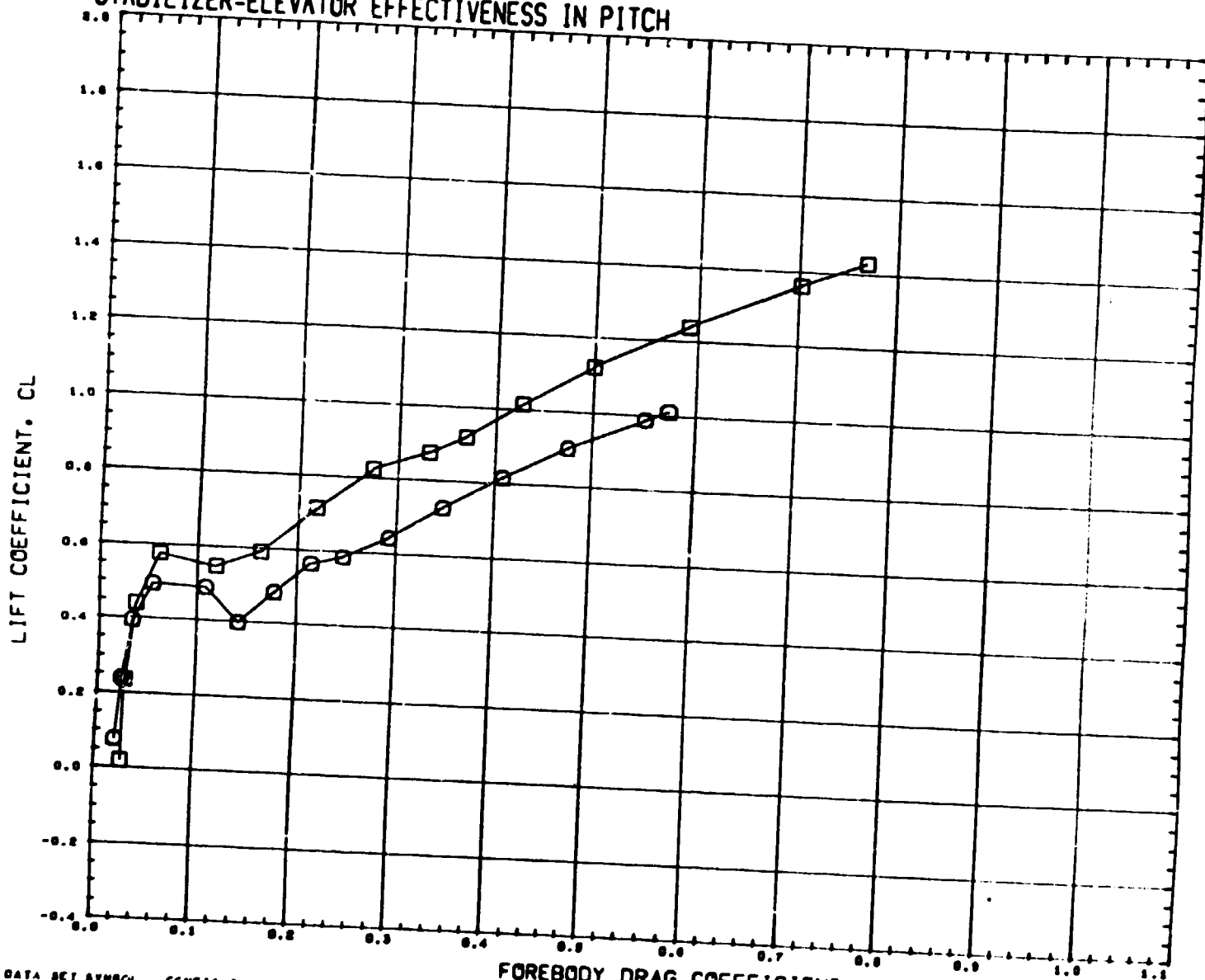
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(002334)	BTMT-1249 BOEING N-32 BOOSTER 88W4V3
(002344)	BTMT-1249 BOEING N-32 BOOSTER 88W4H4V3
(002364)	BTMT-1249 BOEING N-32 BOOSTER 88W4H4V3
(002374)	BTMT-1249 BOEING N-32 BOOSTER 88W4H4V3

MTAIL	ELEVTR	SPOILR
-20.000	-30.000	
0.000	-30.000	
0.000	0.000	

REFERENCE INFORMATION		
SREF	31.3600	88. IN
LREF	2.8400	IN.
QREF	14.0000	IN.
YNRP	11.0000	IN.
YNRP	0.0000	IN.
YNRP	8.4330	IN.
SCALE	0.0067	

MACH 0.975

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (002034) STWT-1263 BOEING N-32 BOOSTER 88W4V3
 (002044) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (002064) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (002074) STWT-1263 BOEING N-32 BOOSTER 88W4H4V3

MACH 0.000

FOREBODY DRAG COEFFICIENT, CDF

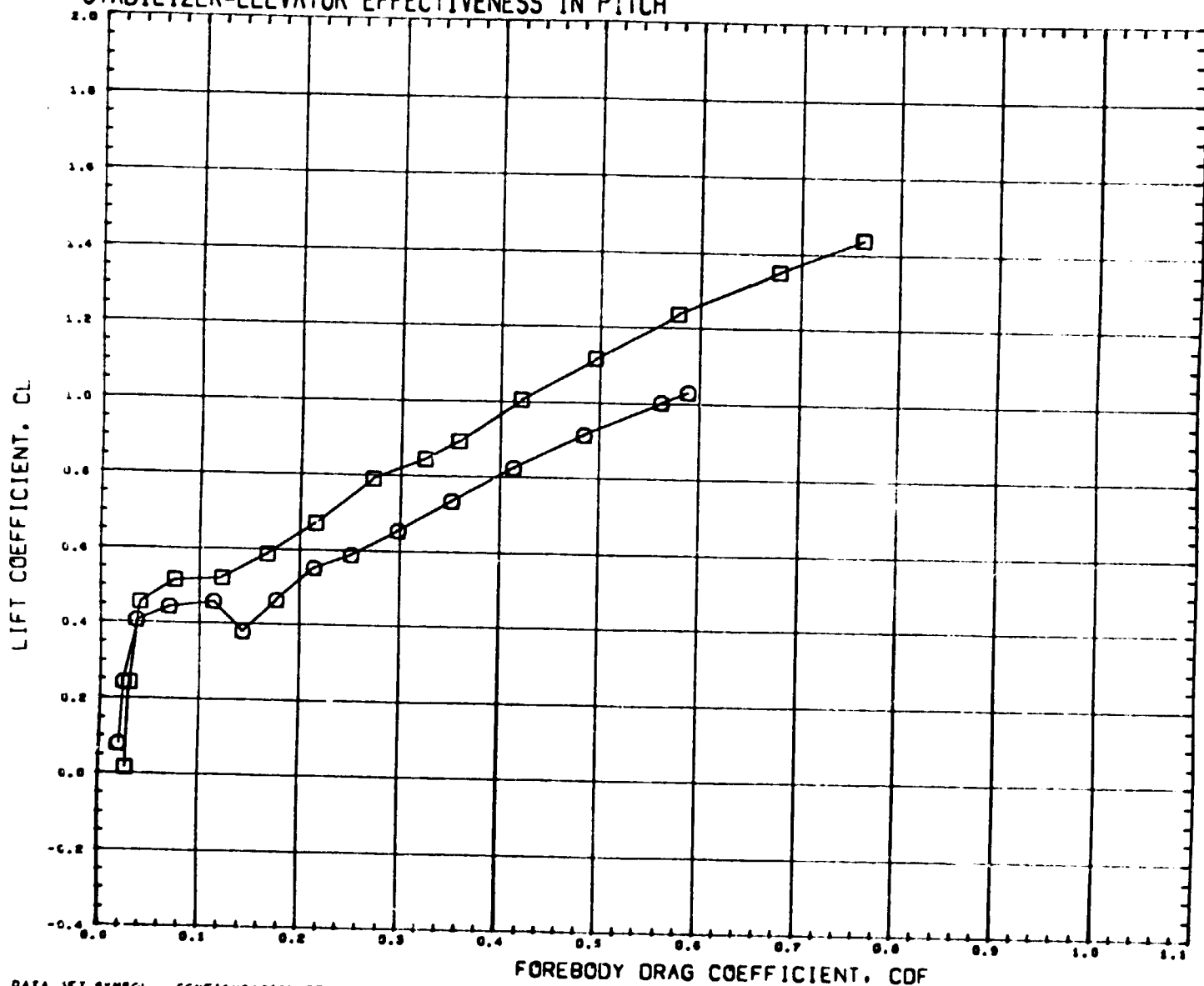
NTAIL ELEVTR SPOILR

-20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION

SREF 31.3000 80. IN
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XREF 11.0000 IN.
 YREF 0.0000 IN.
 ZREF 2.4330 IN.
 SCALE 0.0007

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



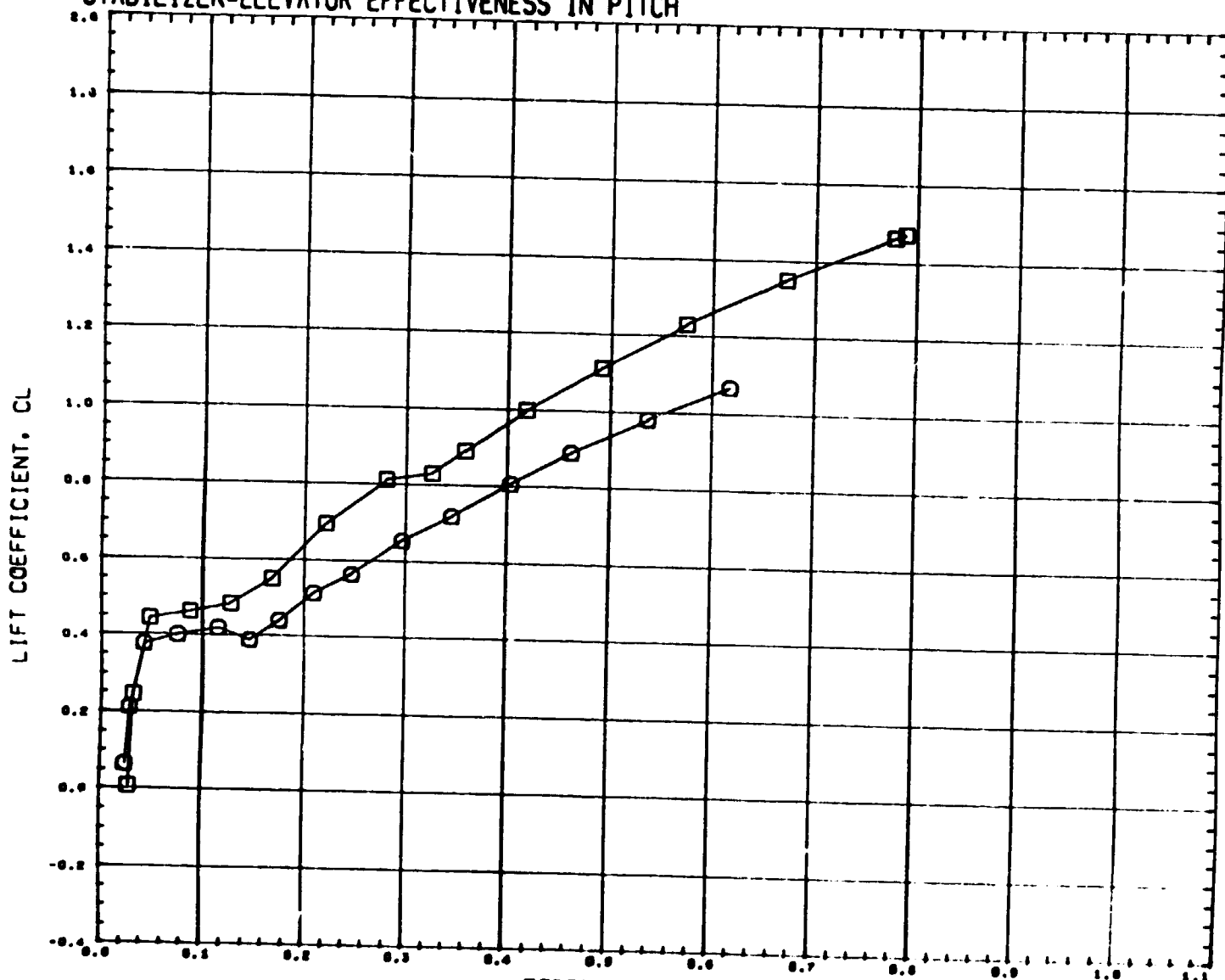
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CC2014) STWT-1265 BOEING H-32 BOOSTER 88W4V3
 (CC2014) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (CC2014) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (CC2014) STWT-1265 BOEING H-32 BOOSTER 88W4N4V3

MTAIL ELEVTR SPOILER
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0007

MACH 0.851

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (002034) STMT-1265 BOEING N-32 BOOSTER 88W4V3
 (002044) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (002064) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (002074) STMT-1265 BOEING N-32 BOOSTER 88W4H4V3

MACH 0.788

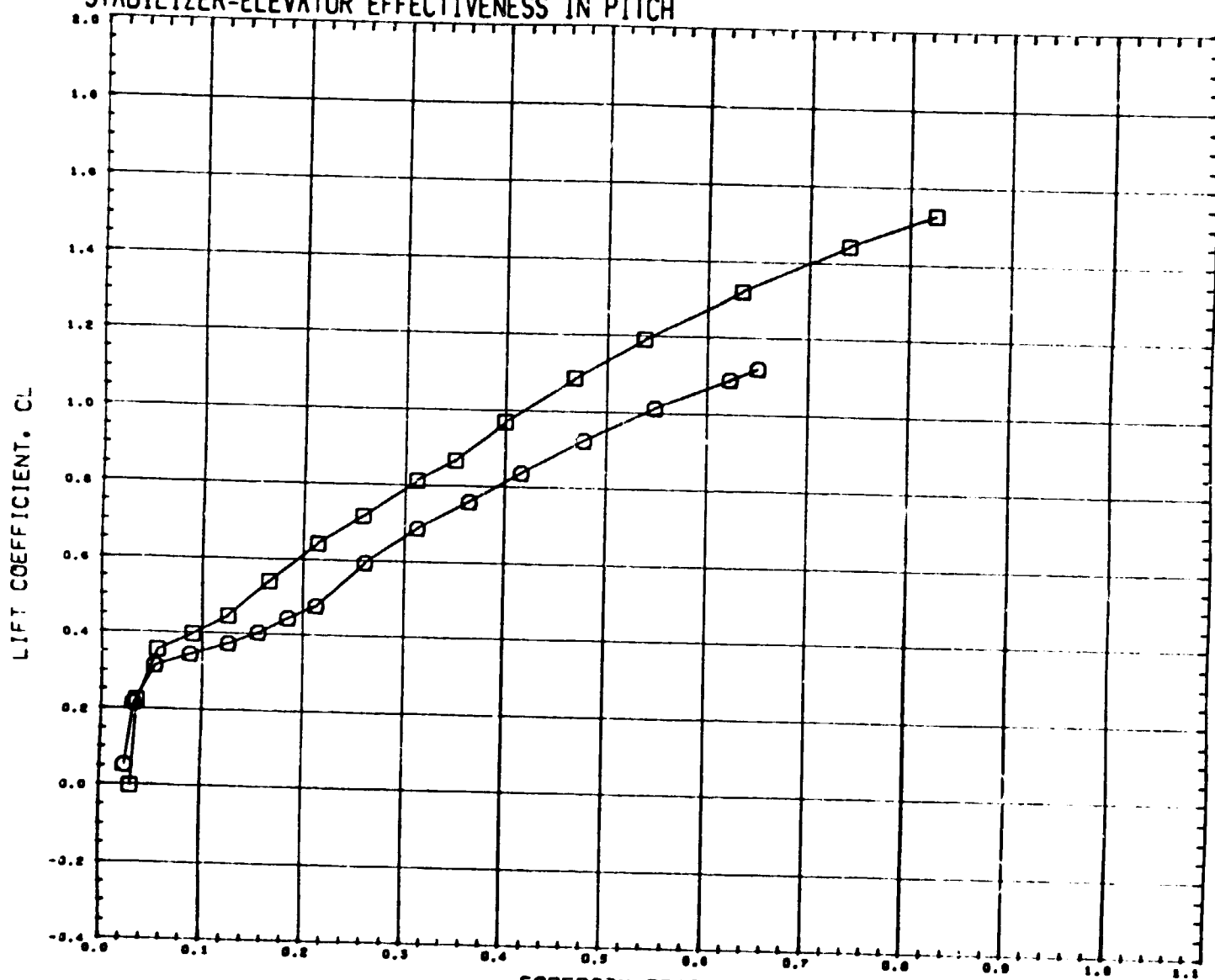
FOREBODY DRAG COEFFICIENT, CDF

NTAIL	ELEVTR	SPOILR
-20.000	-30.000	
0.000	-30.000	
0.000	0.000	

REFERENCE INFORMATION

SREF	31.3600	80. IN
LRFP	2.2400	IN.
SRFP	14.8000	IN.
XMRP	11.9000	IN.
YMRP	0.0500	IN.
ZMRP	2.4330	IN.
SCALE	0.0007	

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (00434) BTWT-1265 BOEING B-52 BOOSTER 88W4V3
 (00444) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (00454) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (00464) BTWT-1265 BOEING B-52 BOOSTER 88W4H4V3

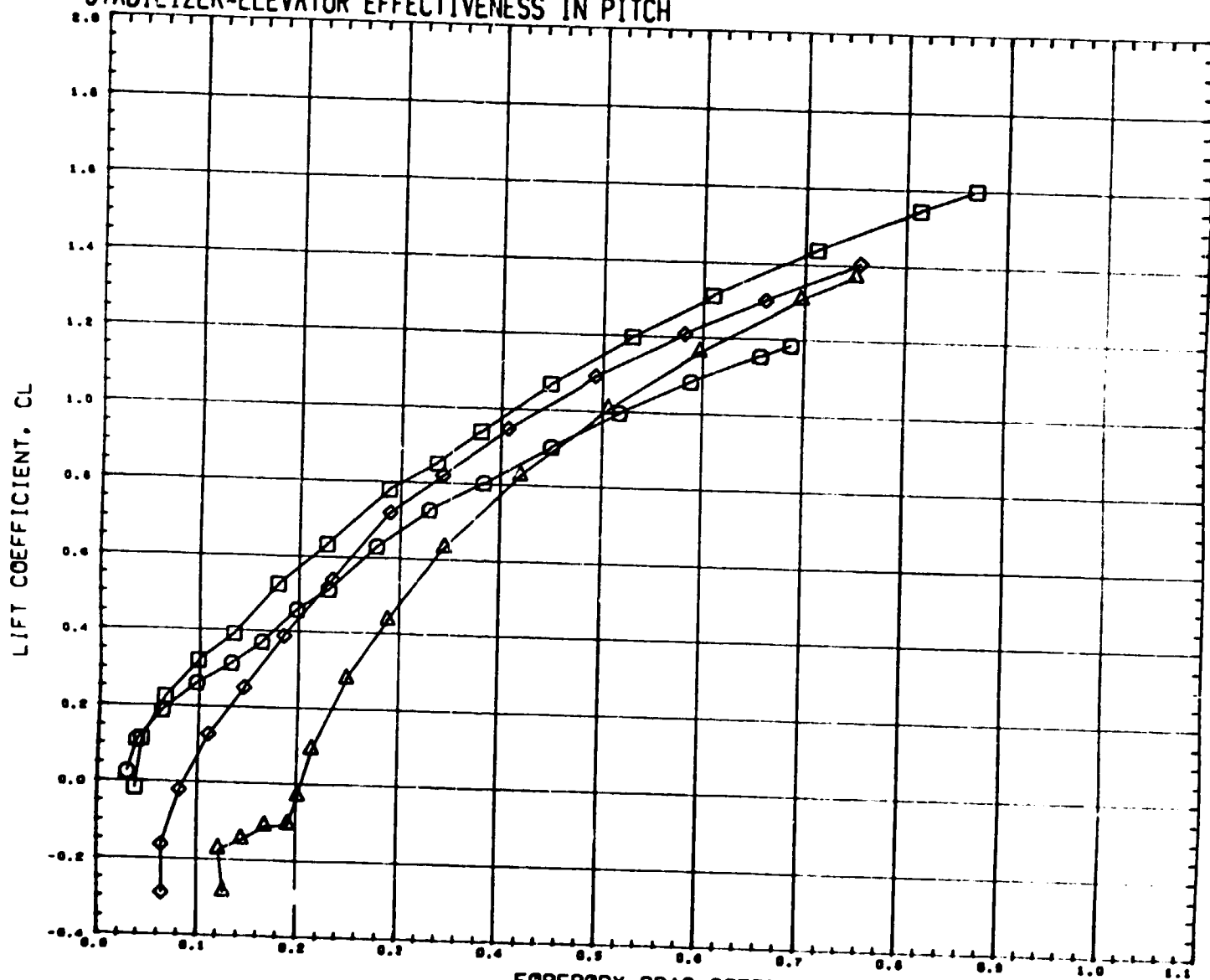
MACH 0.750

FOREBODY DRAG COEFFICIENT, CDF

NTAIL	ELEVTR	SPOILER
-20.000	-30.000	
0.000	-30.000	
0.000	0.000	

REFERENCE INFORMATION
 SREF 31.3400 88. IN
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XMRP 11.0000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0007

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(002034)	BTMT-1265 BOEING N-32 BOOSTER
(002044)	BTMT-1265 BOEING N-32 BOOSTER
(002064)	BTMT-1265 BOEING N-32 BOOSTER
(002074)	BTMT-1265 BOEING N-32 BOOSTER

BTMT-1265
BTMT-1265
BTMT-1265
BTMT-1265

FOREBODY DRAG COEFFICIENT, CDF

NTAIL ELEVTR SPOILR

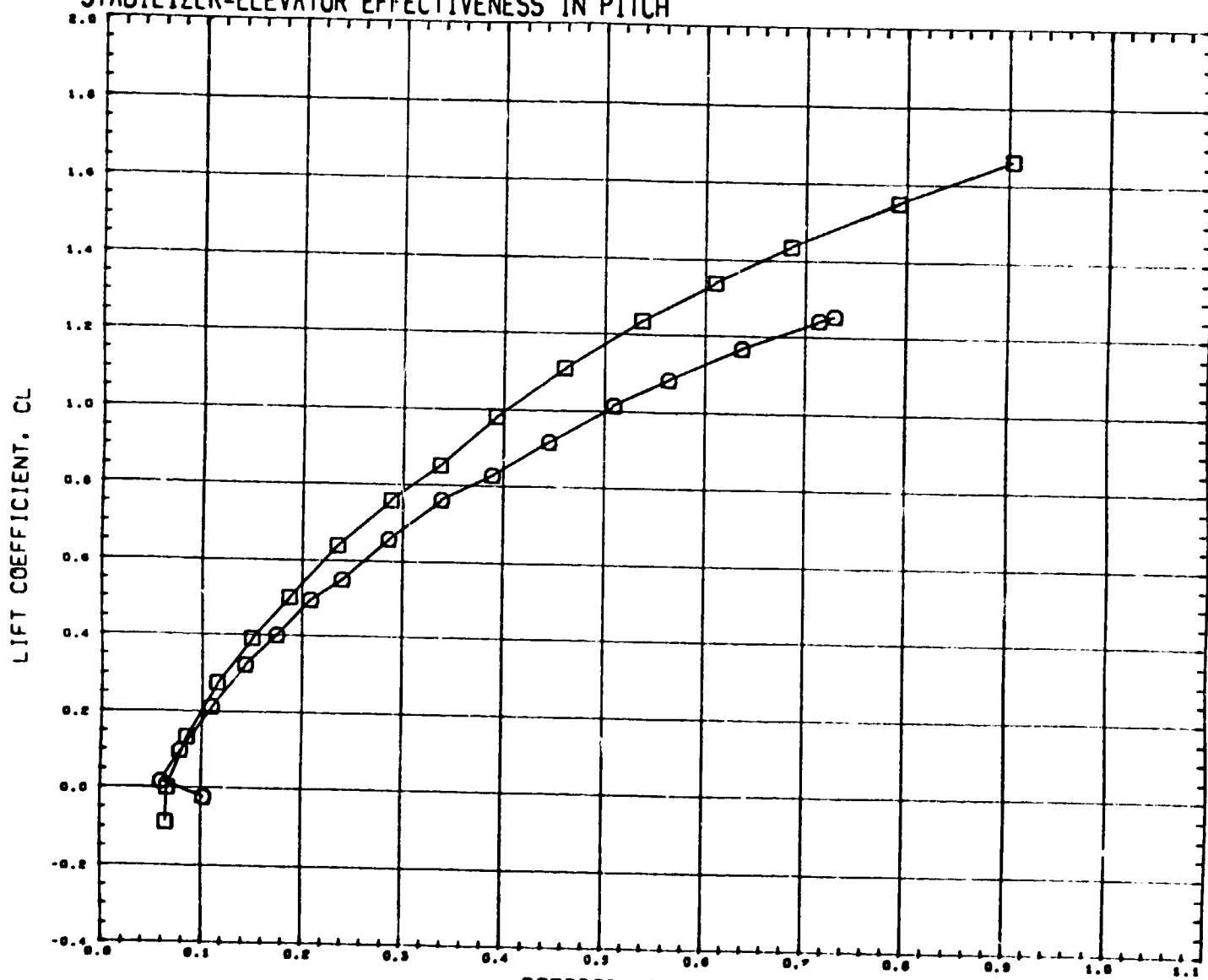
-20.000	-30.000
0.000	-30.000
0.000	0.000

REFERENCE INFORMATION

SREF	31.3600	00. IN
LREF	2.2400	IN.
BREF	14.6000	IN.
THRP	11.9600	IN.
THRP	0.0000	IN.
THRP	2.4330	IN.
SCALE	0.0000	

MACH 0.000

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(CCZ014)	BTNT-1263 BOEING N-32 BOOSTER 88W4V3
(CCZ014)	DATA NOT AVAILABLE FOR ALL CONDITIONS
(CCZ064)	DATA NOT AVAILABLE FOR ALL CONDITIONS
(CCZ074)	BTNT-1263 BOEING N-32 BOOSTER 88W4V3

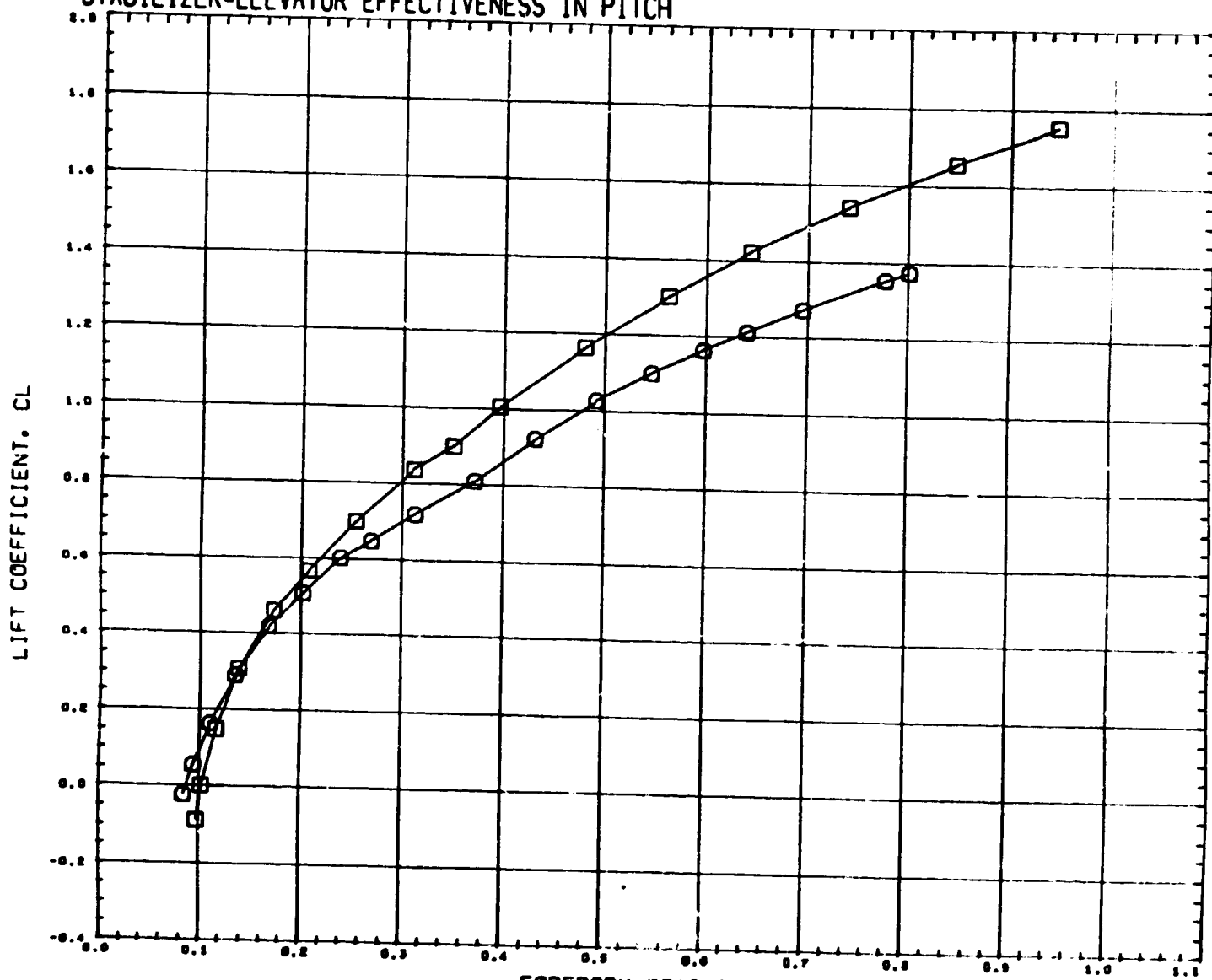
MACH 0.050

FOREBODY DRAG COEFFICIENT, CDF

NTAIL	ELEVTR	SPOILER
-20.000	-30.000	
0.000	-30.000	
0.000	0.000	

REFERENCE INFORMATION		
SREF	31.3400	80. IN
LREF	2.2400	IN.
SREF	14.6000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0000	

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



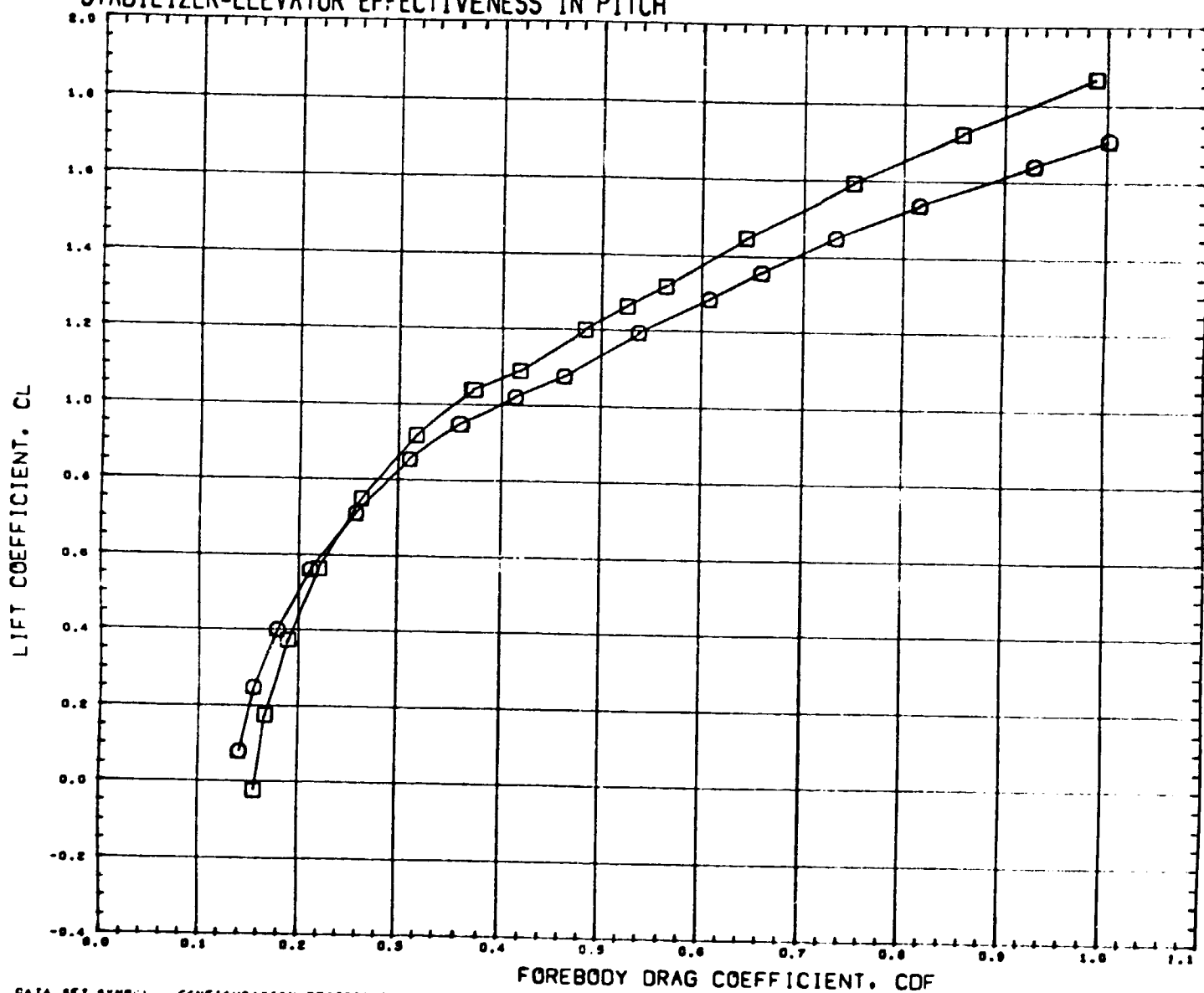
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(002034)	BTNT-1269 BOEING N-32 BOOSTER 88W4V3
(002044)	DATA NOT AVAILABLE FOR ALL CONDITIONS
(002064)	DATA NOT AVAILABLE FOR ALL CONDITIONS
(002074)	BTNT-1269 BOEING N-32 BOOSTER 88W4N4V3

MTAIL	ELEVTR	SPOILR
-20.000	-30.000	
0.000	-30.000	
0.000	0.000	

REFERENCE INFORMATION		
SRF	31.3603	80. IN
LRP	2.2403	IN.
BRP	14.0003	IN.
YMRP	11.9003	IN.
YMRP	0.0003	IN.
ZMRP	2.4333	IN.
SCALE	0.0007	

MACH 0.099

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



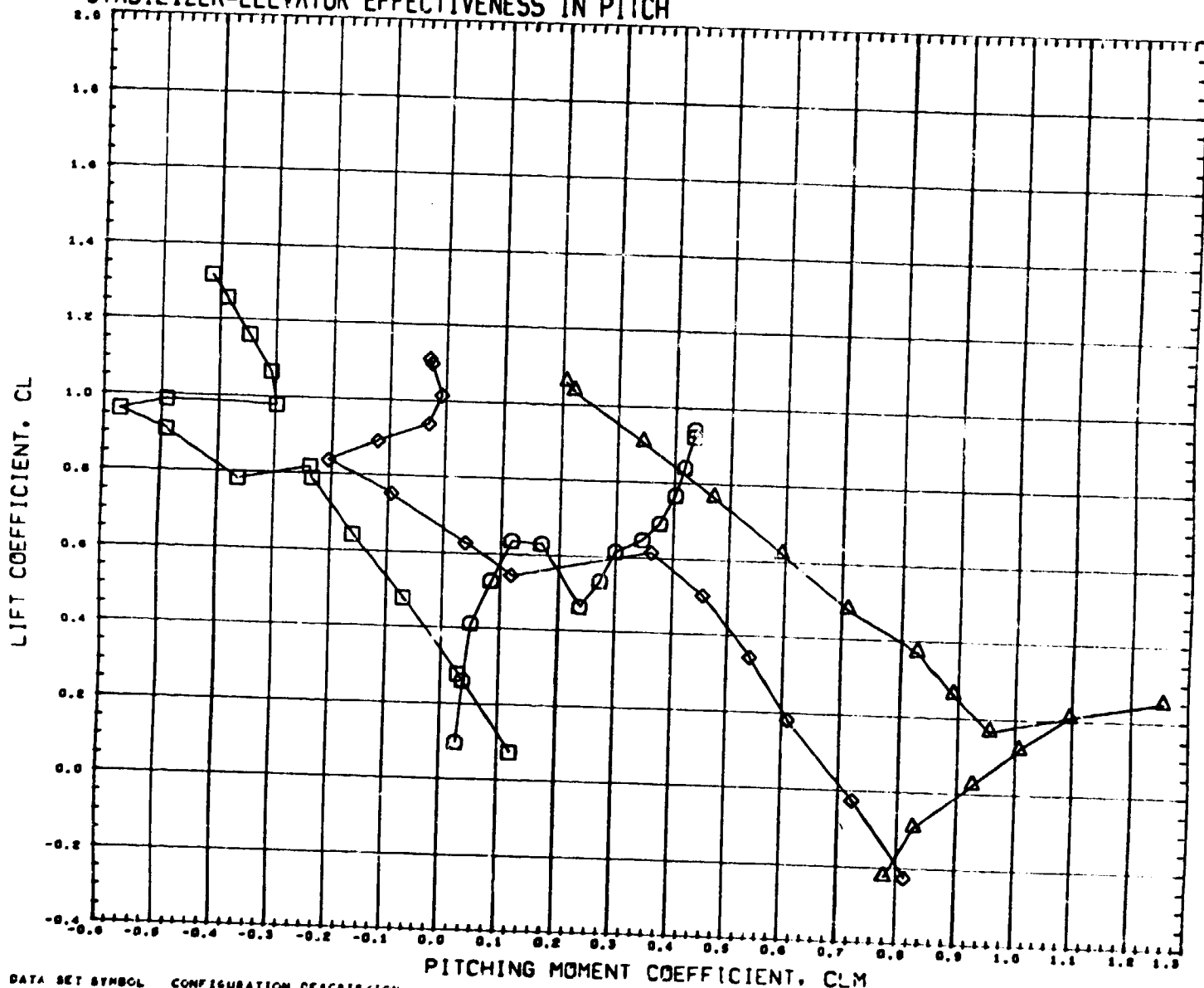
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (002034) BTW1-1245 BOEING N-32 BOOSTER 88W4V3
 (002144) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (002164) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (002174) BTW1-1241 BOEING N-32 BOOSTER 88W4V3

MTAIL ELEVTR SPOILR
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 LREF 31.3600 IN.
 LREF 2.2400 IN.
 SREF 14.6000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0007

MACH 0.949

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



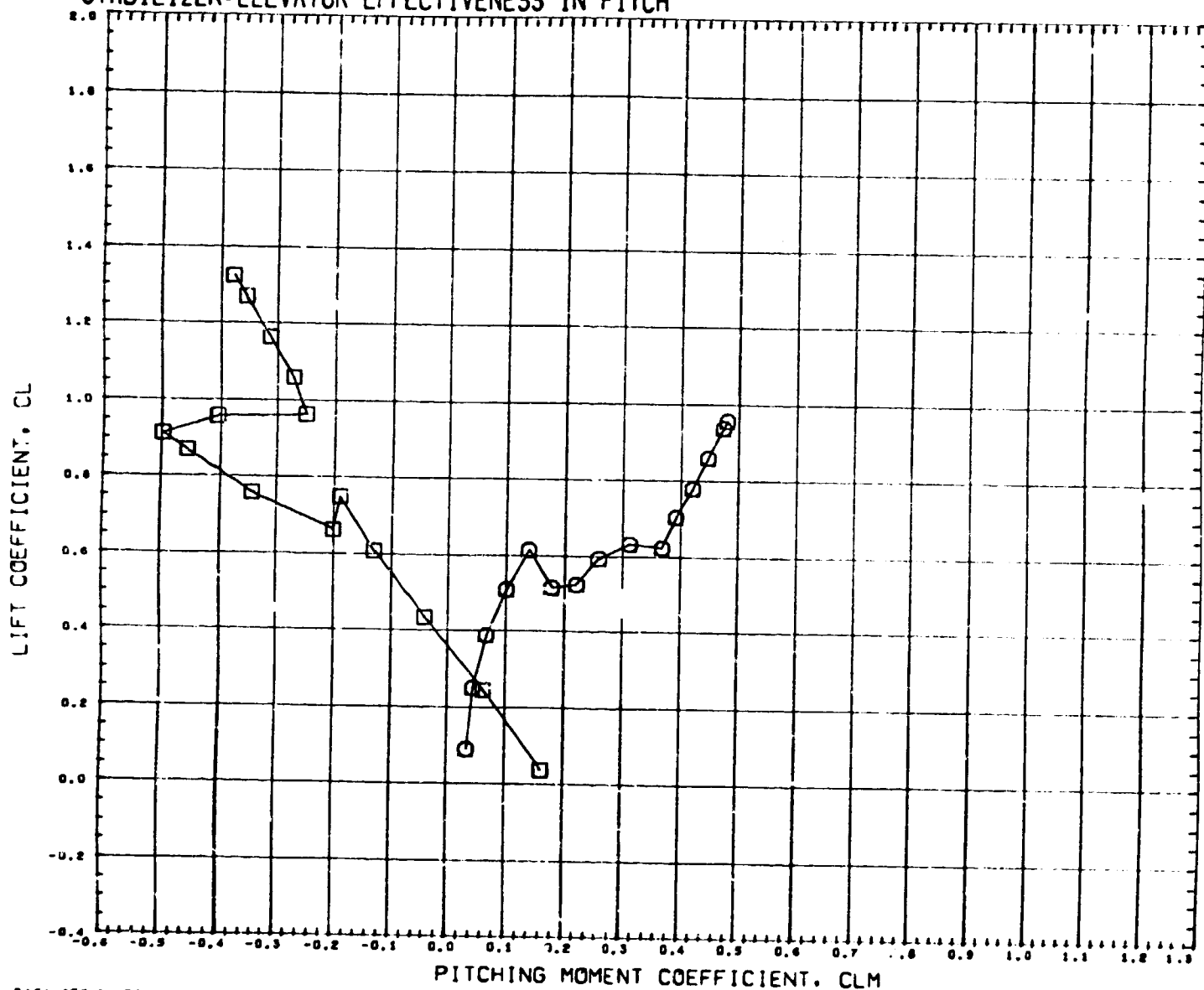
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02034) BTWT-1265 BOEING H-32 BOOSTER 88W4V3
 (R02044) BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3
 (R02064) BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3
 (R02074) BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3

MTAIL ELEVTR SPOILR
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3400 80. IN
 LREF 2.2400 IN.
 SREF 14.0000 IN.
 XMAP 11.9800 IN.
 YMAP 0.0000 IN.
 ZMAP 2.4330 IN.
 SCALE 0.0007

MACH 0.299

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



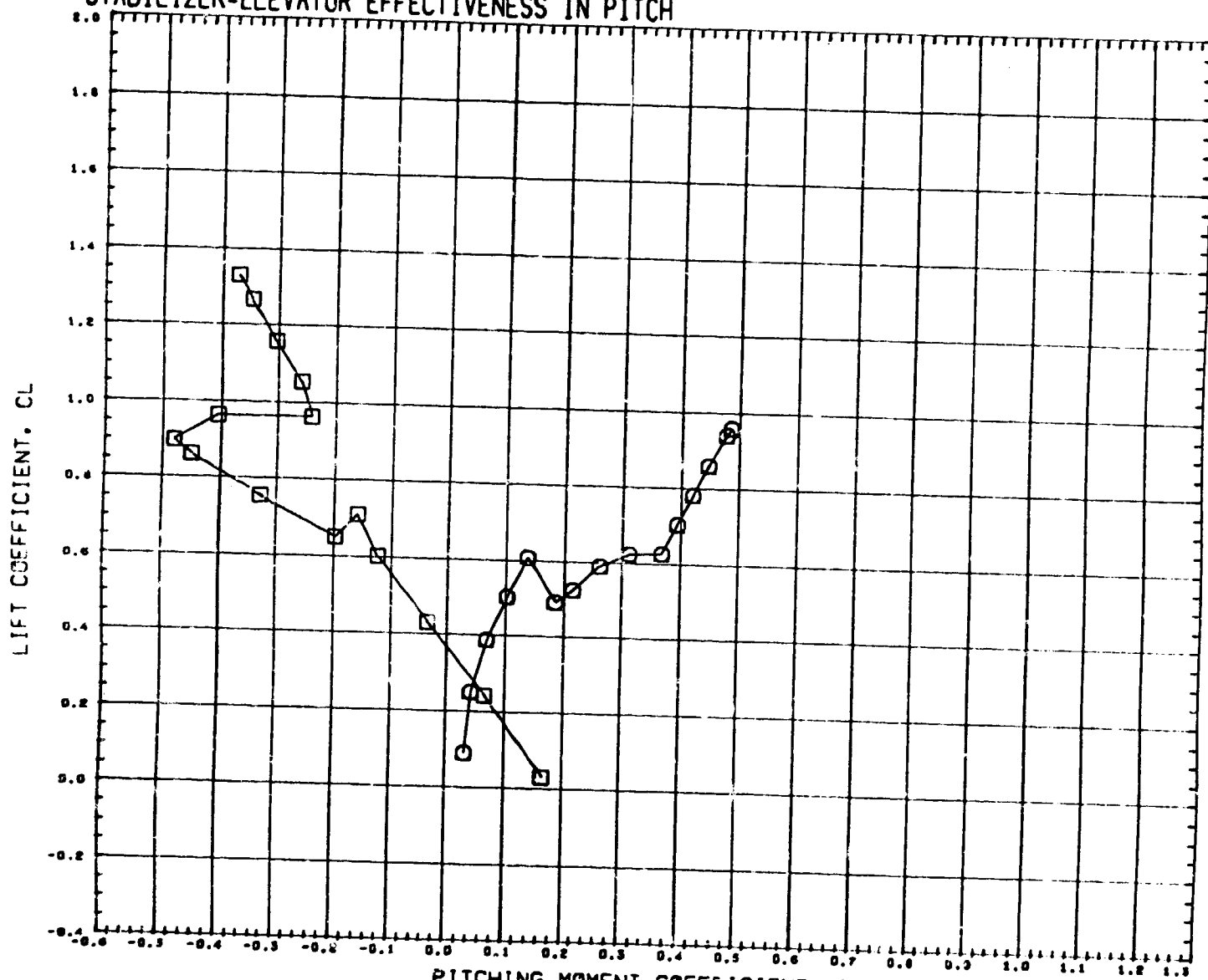
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC2334) BTMT-1265 BOEING H-32 BOOSTER 88W4V3
 (RC2344) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RC2364) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RC2374) BTMT-1265 BOEING H-32 BOOSTER 88W4H4V3

HTAIL ELEVTR SPOILR
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 88. IN
 LREF 2.2400 IN.
 SREF 14.6000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

RACH 0.450

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



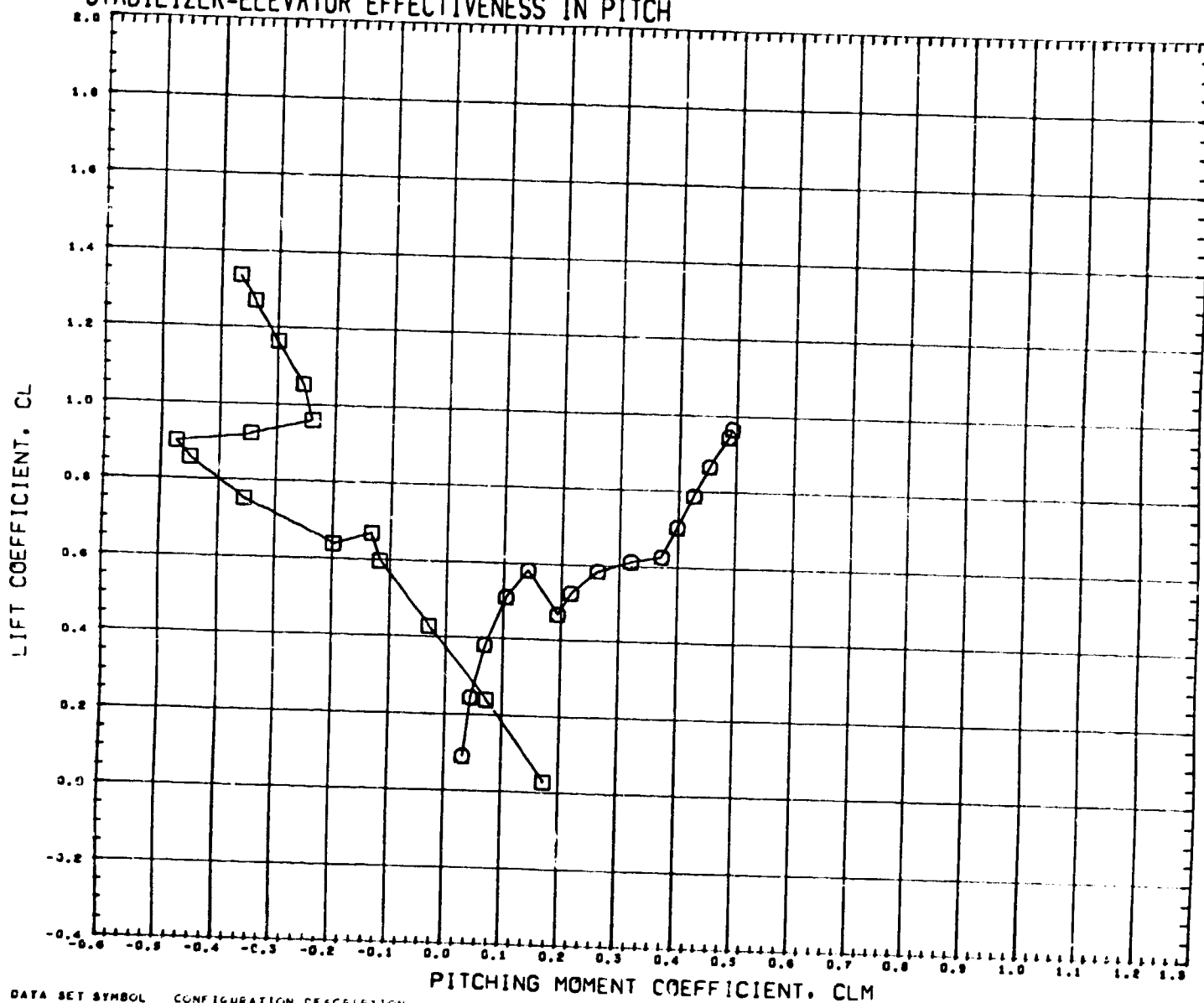
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC2034) STWT-1265 BOEING N-32 BOOSTER BSW4V3
 (RC2044) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RC2064) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RC2074) STWT-1265 BOEING N-32 BOOSTER BSW4N4V3

NTAIL ELEVTN POILR
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 sq. in.
 LREF 2.2400 in.
 BREF 14.6000 in.
 XWRP 11.9400 in.
 YWRP 0.0000 in.
 ZWRP 2.4330 in.
 SCALE 0.0067

MACH 0.476

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



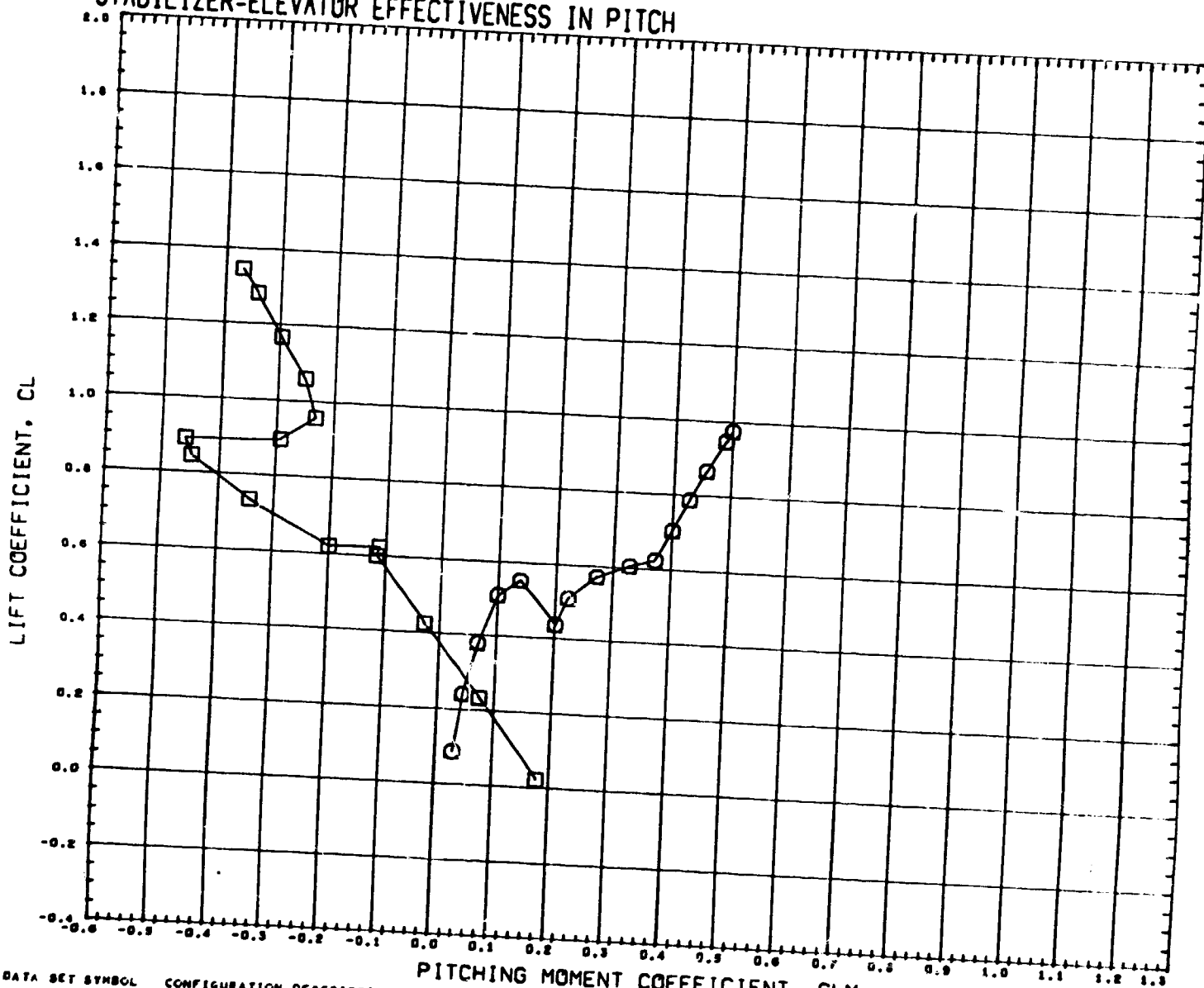
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC2G34) BTWT-1265 BOEING N-32 BOOSTER 88W4V3
 (RC2G44) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RC2G64) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RC2G74) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3

HTAIL ELEVTR SPOILR
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0087

MACH 0.499

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



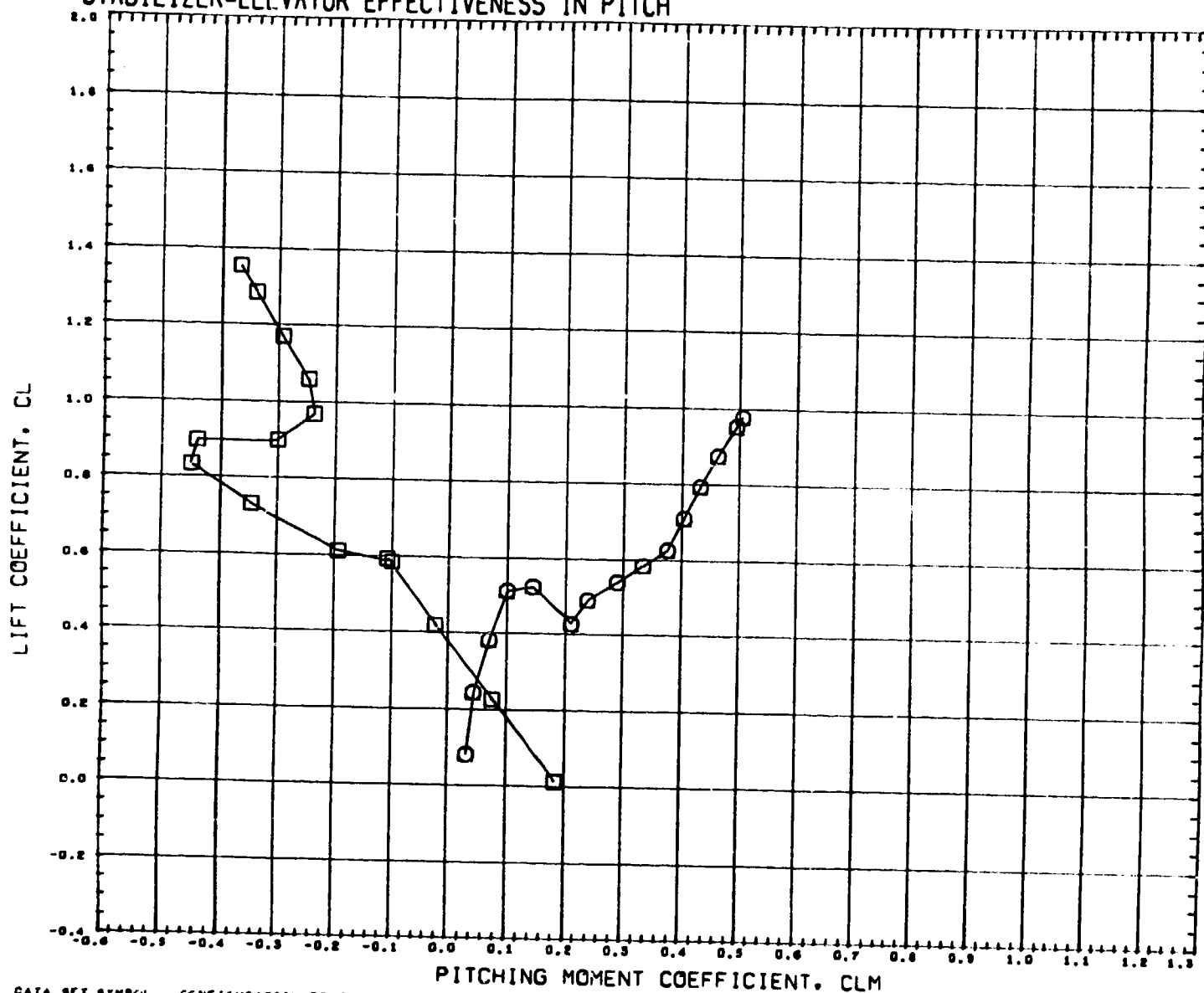
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC2034) STWT-1265 BOEING N-32 BOOSTER B8W4V3
 (RC2044) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RC2064) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RC2074) STWT-1265 BOEING N-32 BOOSTER B8W4M4V3

MTAIL ELEVTR SPOILR
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 SQ. IN
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4333 IN.
 SCALE 0.0067

MACH 0.924

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD2034) STWT-1265 BOEING H-32 BOOSTER 88W4V3

(RD2044) DATA NOT AVAILABLE FOR ALL CONDITIONS

(RD2064) DATA NOT AVAILABLE FOR ALL CONDITIONS

(RD2074) STWT-1265 BOEING H-32 BOOSTER 88W4H4V3

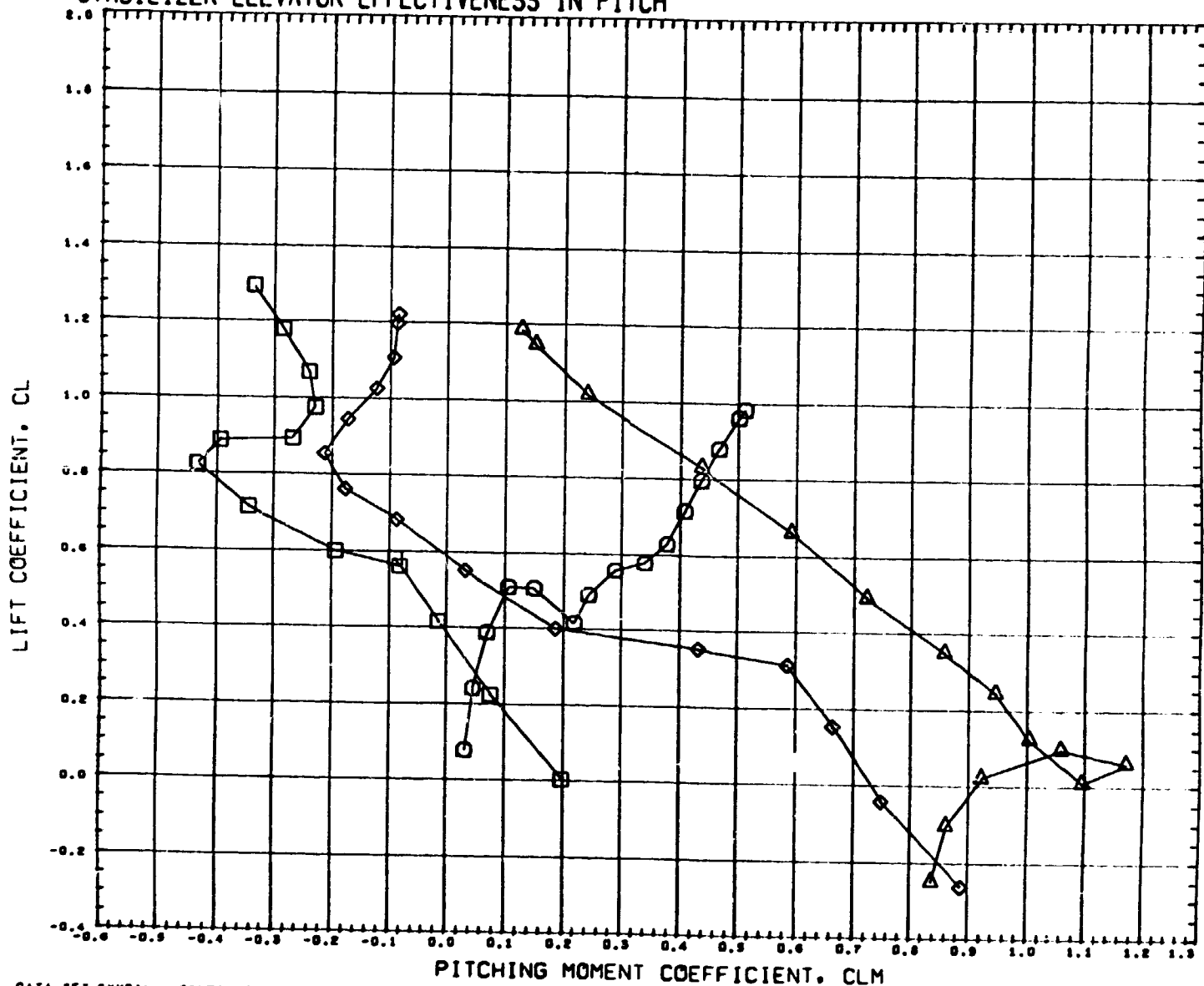
HTAIL	ELEVTR	SPOILER
-20.000	-30.000	
0.000	-30.000	
0.000	0.000	

REFERENCE INFORMATION

BREF	31.3600	88. IN
LREF	2.2400	IN.
BREF	14.8000	IN.
XMRP	11.8000	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

MACH 0.949

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



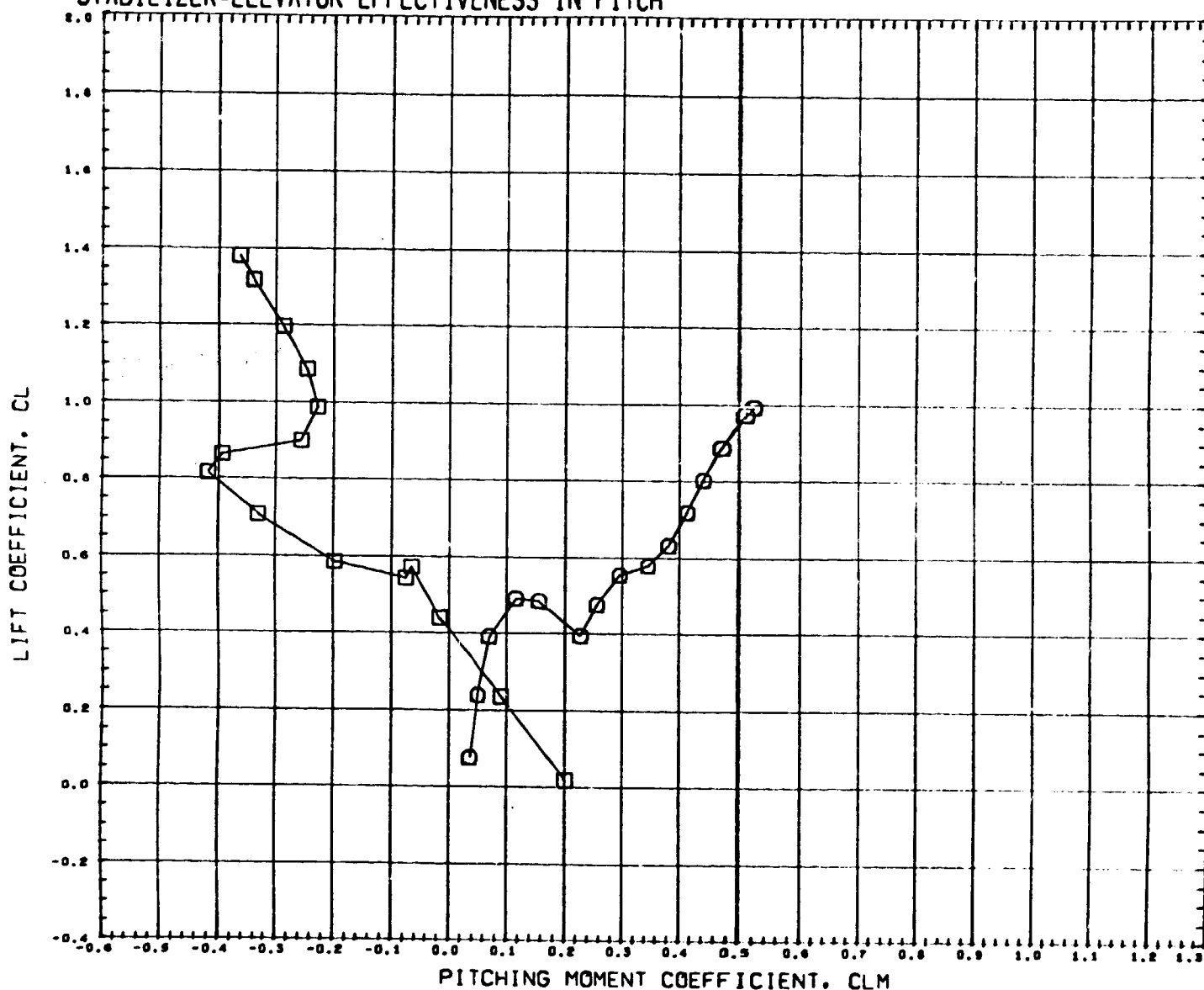
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(RC2034)	BTMT-1265 BOEING H-32 BOOSTER 88W4V3
(RC2044)	BTMT-1265 BOEING H-32 BOOSTER 88W4H4V3
(RC2064)	BTMT-1265 BOEING H-32 BOOSTER 88W4H4V3
(RC2074)	BTMT-1265 BOEING H-32 BOOSTER 88W4H4V3

HTAIL	ELEVTR	SPOILER
-20.000	-30.000	
0.000	-30.000	
0.000	0.000	

REFERENCE INFORMATION		
SREF	31.3600	80. IN
LREF	2.2400	IN.
JREF	14.9000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.8087	

MACH 0.575

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



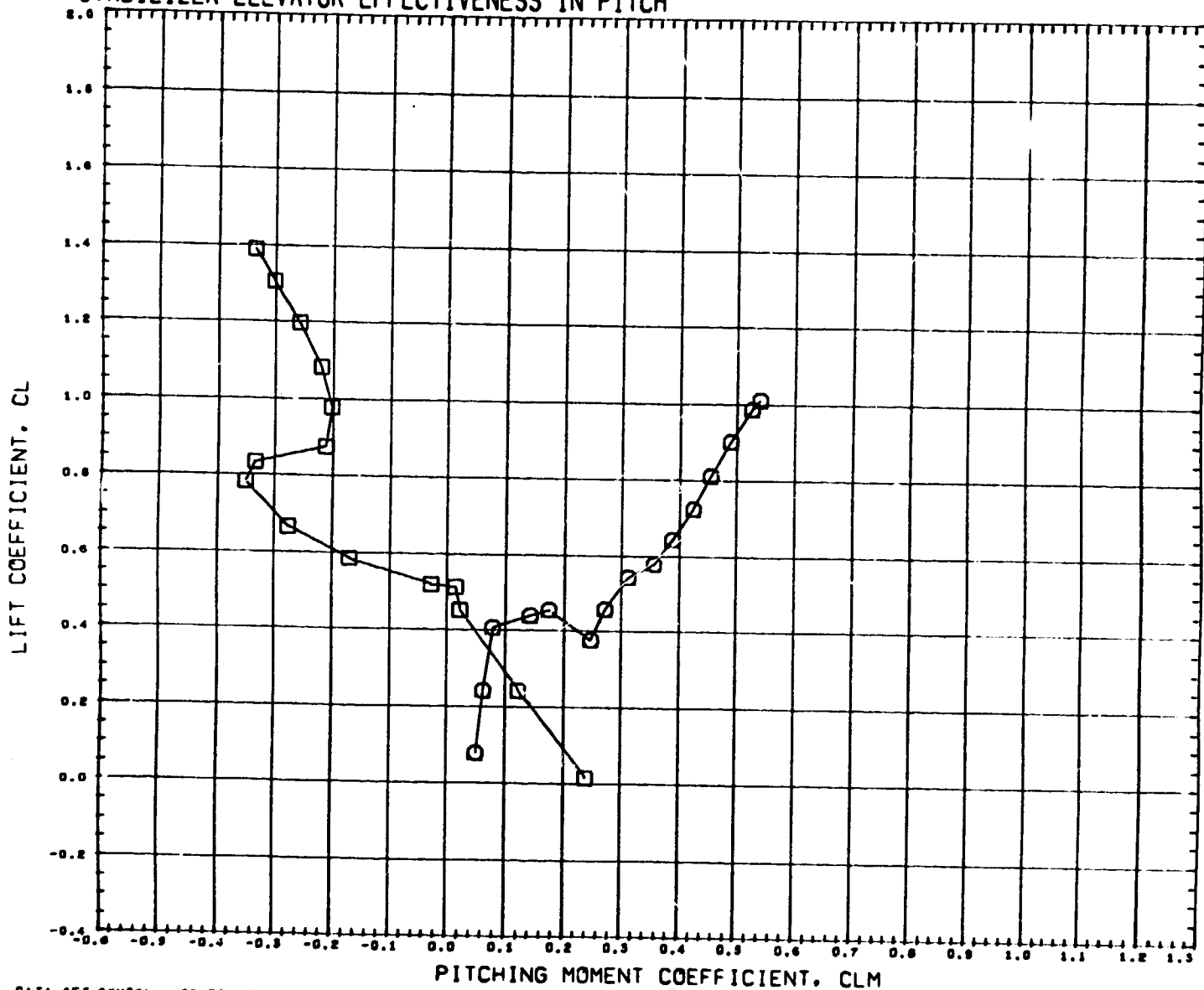
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RD2034) STW-1265 BOEING N-32 BOOSTER 88W4V3
 (RD2044) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RD2064) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RD2074) STW-1265 BOEING N-32 BOOSTER 88W4H4V3

NTAIL ELEVTR SPOILR
 -20.000 -35.000
 0.000 -35.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 88. IN
 LREF 8.2403 IN.
 SREF 14.8000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.800

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



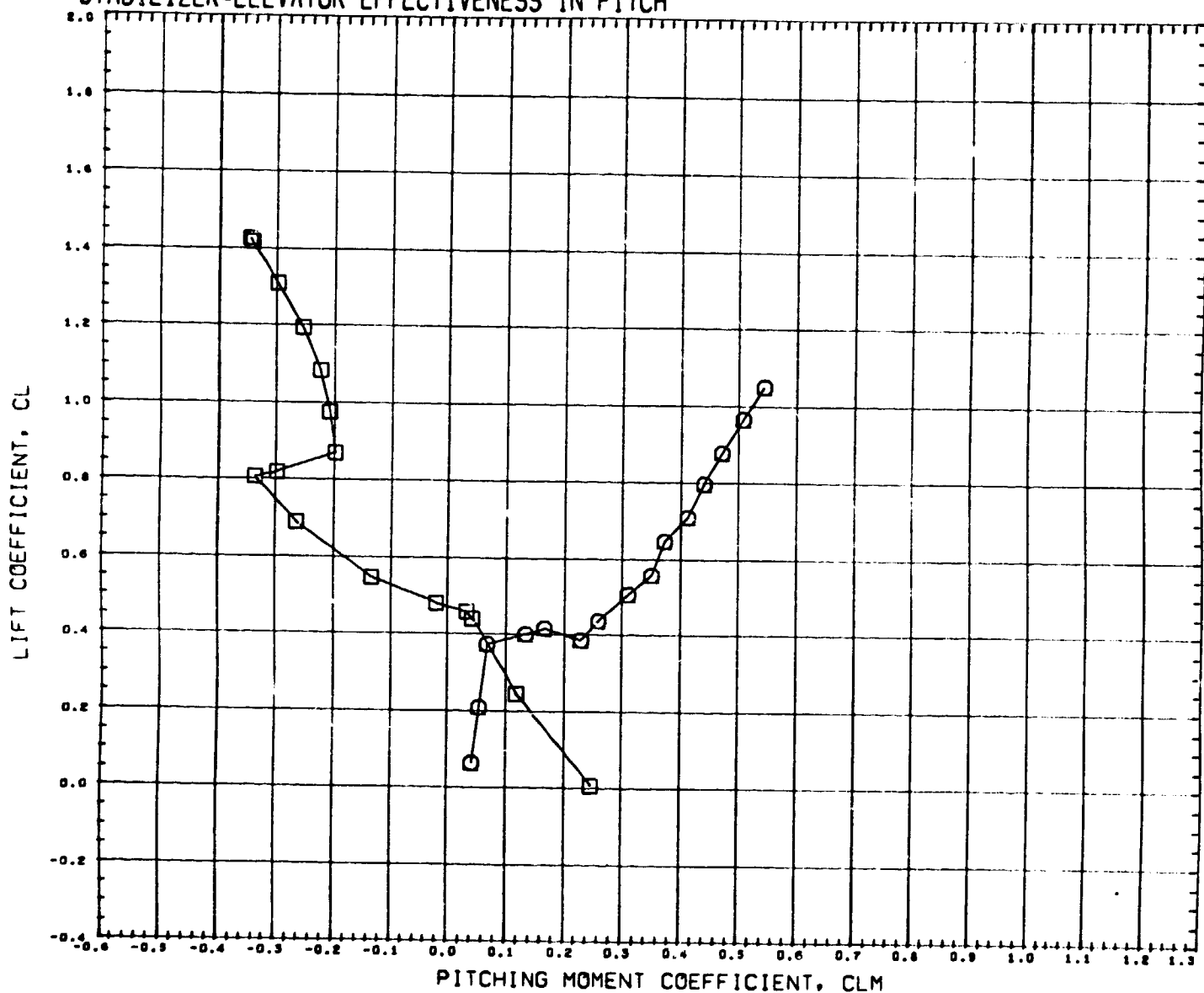
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RCE034) BTMT-1265 BOEING M-32 BOOSTER 88W4V3
 (RCE044) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RCE064) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RCE074) BTMT-1265 BOEING M-32 BOOSTER 88W4H4V3

HTAIL ELEVTR SPOILR
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 SQ. IN
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.651

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



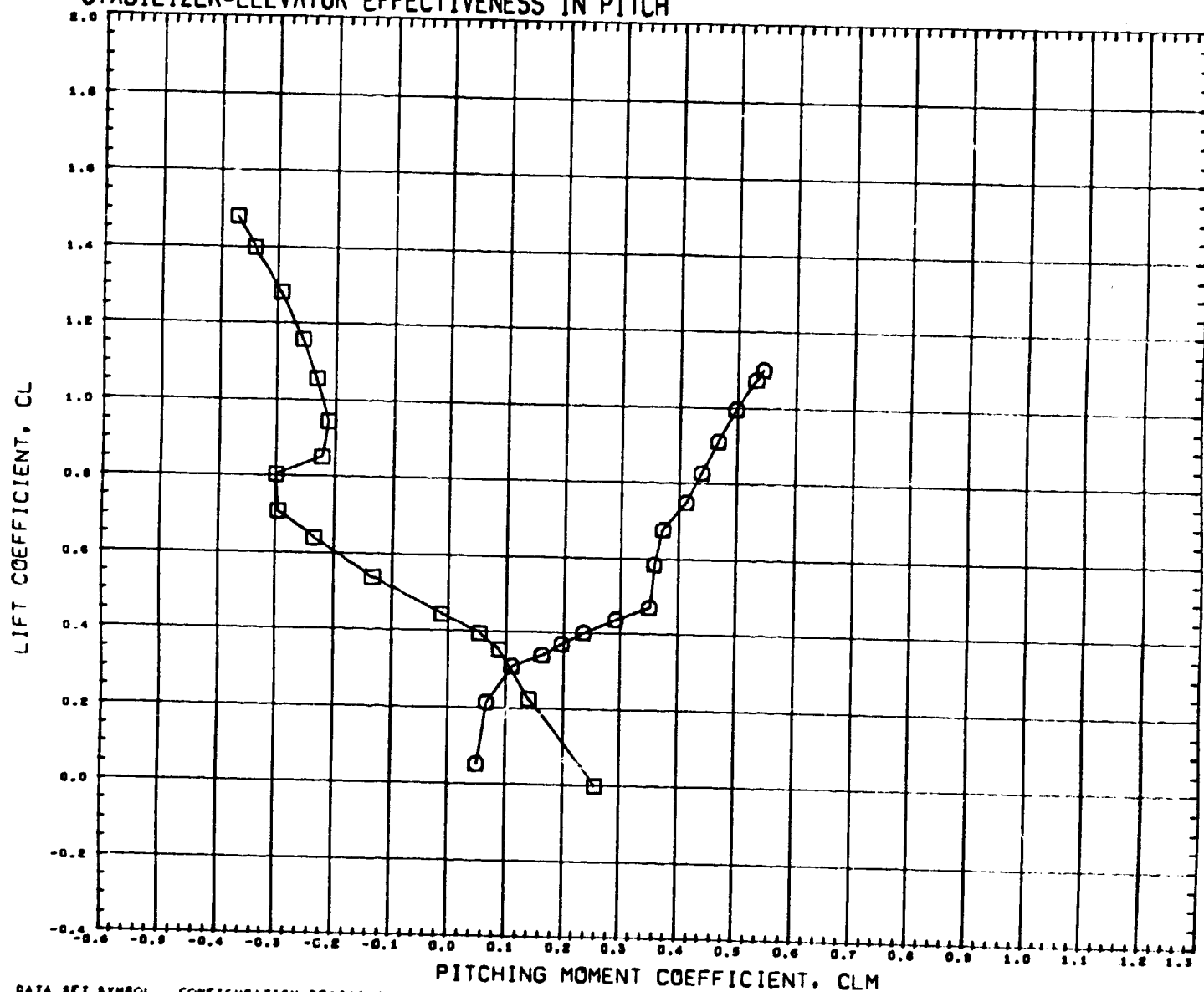
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02134) BTWT-1265 BOEING H-32 BOOSTER B8W4V3
 (R02144) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (R02164) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (R02074) BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3

HTAIL ELEVTR SPOILR
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XNRP 11.8000 IN.
 YNRP 0.0000 IN.
 ZNRP 2.4330 IN.
 SCALE 0.0067

MACH 0.700

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



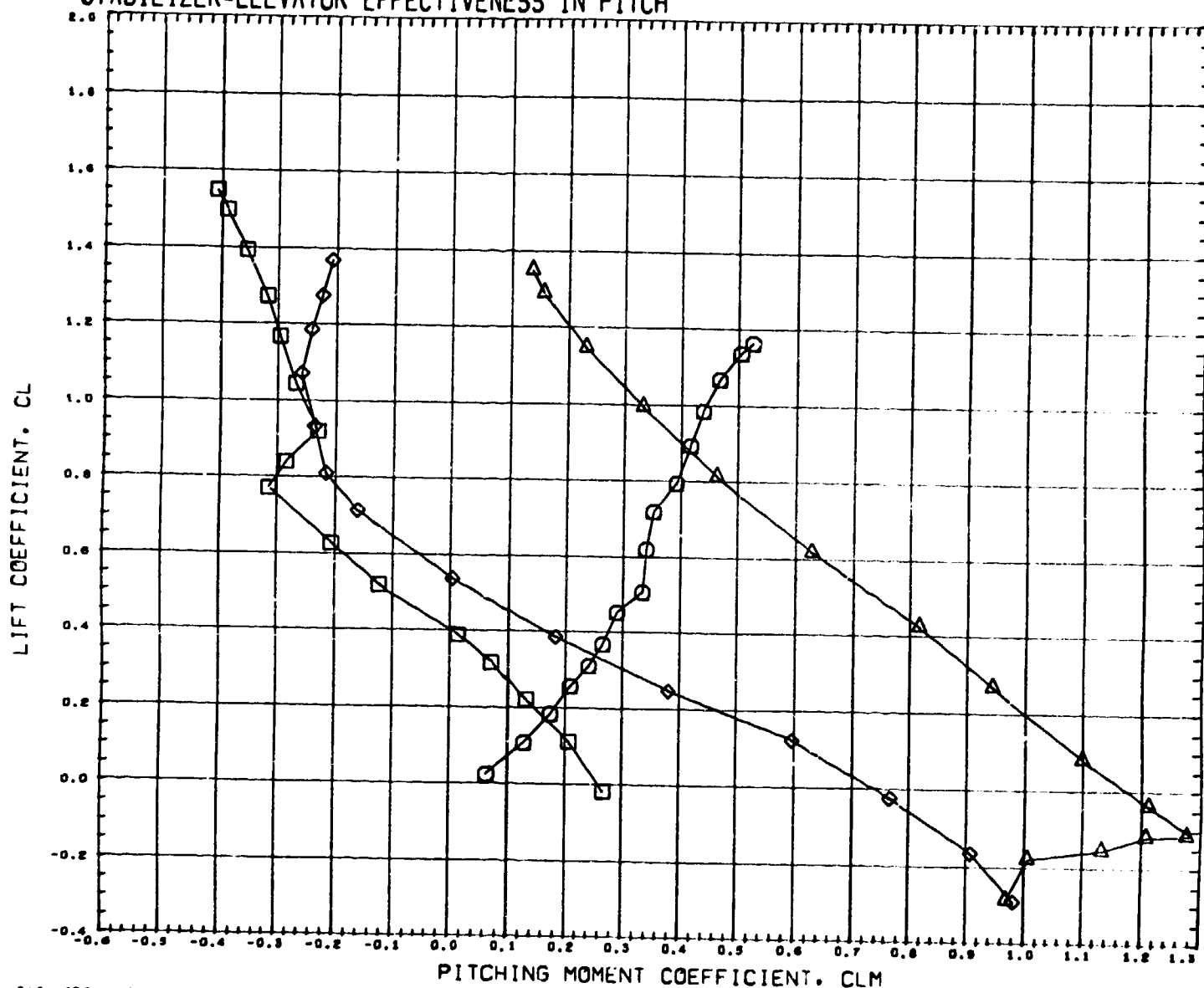
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02034) BTWT-1265 BOEING N-32 BOOSTER B8W4V3
 (R02044) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (R02064) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (R02074) BTWT-1265 BOEING N-32 BOOSTER B8W4H4V3

NTAIL ELEVTR SPOILR
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 IN.
 LREF 2.2400 IN.
 SREF 14.4000 IN.
 XREF 11.9800 IN.
 YREF 0.0000 IN.
 ZREF 2.4330 IN.
 SCALE 0.0067

MACH 0.750

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



DAT. SET SYMBOL CONFIGURATION DESCRIPTION
 (RD: 034) BTWT-1265 BOEING H-32 BOOSTER
 (RD: 044) BTWT-1265 BOEING H-32 BOOSTER
 (RD: 064) BTWT-1265 BOEING H-32 BOOSTER
 (RD: 074) BTWT-1265 BOEING H-32 BOOSTER

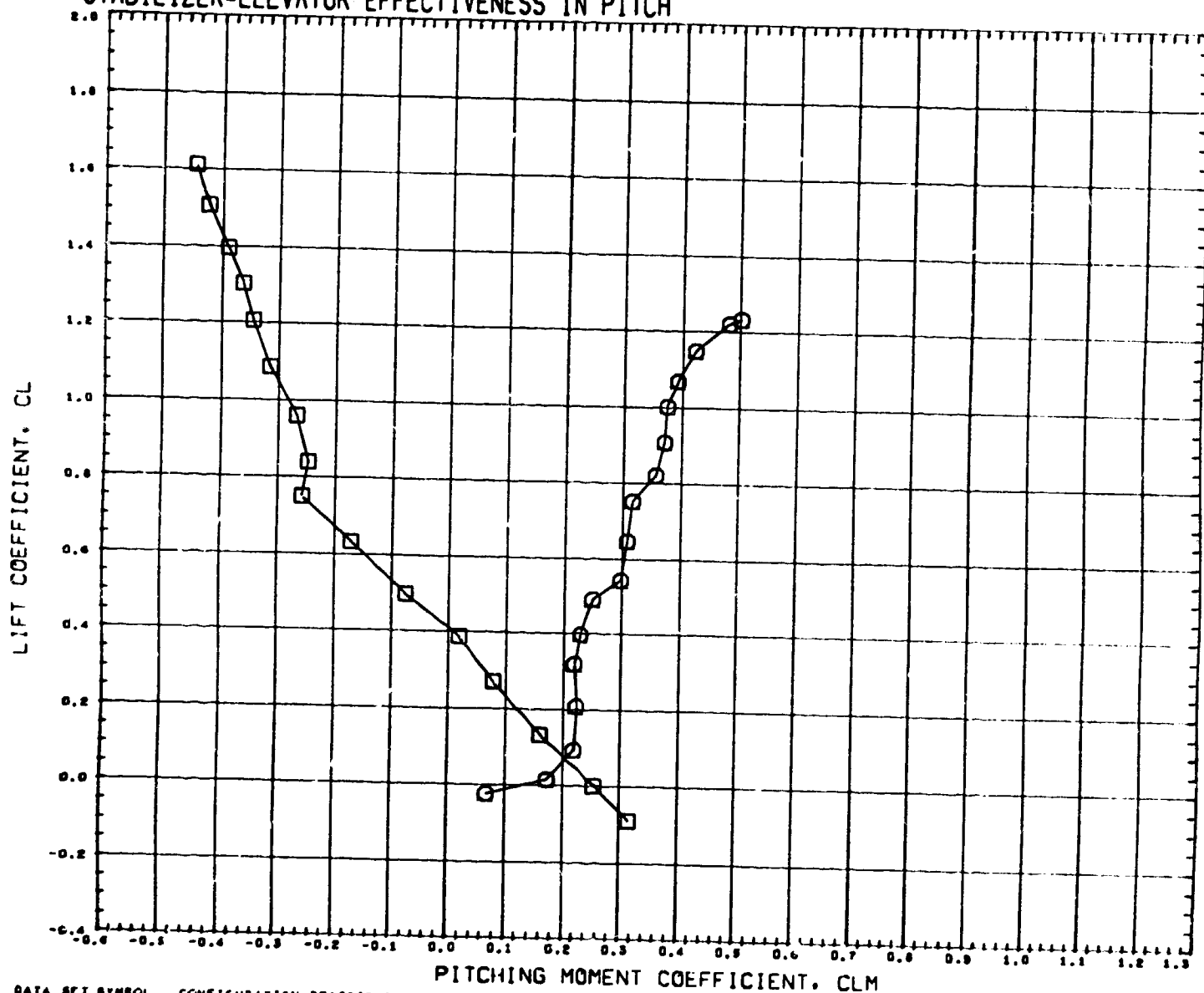
PITCHING MOMENT COEFFICIENT, CLM

HTAIL ELEVTR SPOILER
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 IN.
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0057

MACH 0.600

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



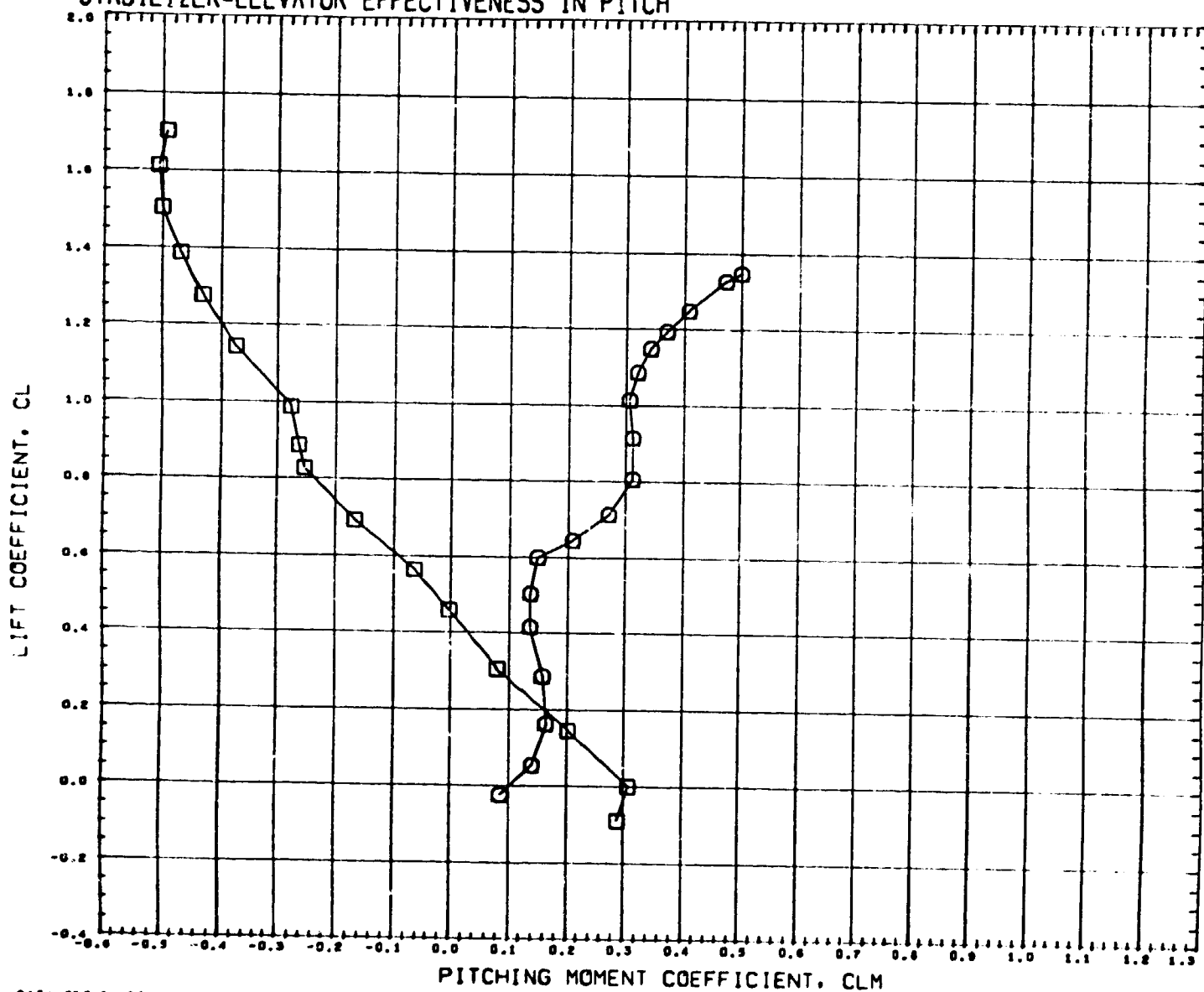
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC2034) BTWT-1265 BOEING N-32 BOOSTER 88W4V3
 (RC2044) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RC2064) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RC2074) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V5

MINIL ELEVTR SPOILR
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3000 IN.
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XREF 11.9800 IN.
 YREF 0.0000 IN.
 ZREF 2.4330 IN.
 SCALE 0.0007

MACH 0.850

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



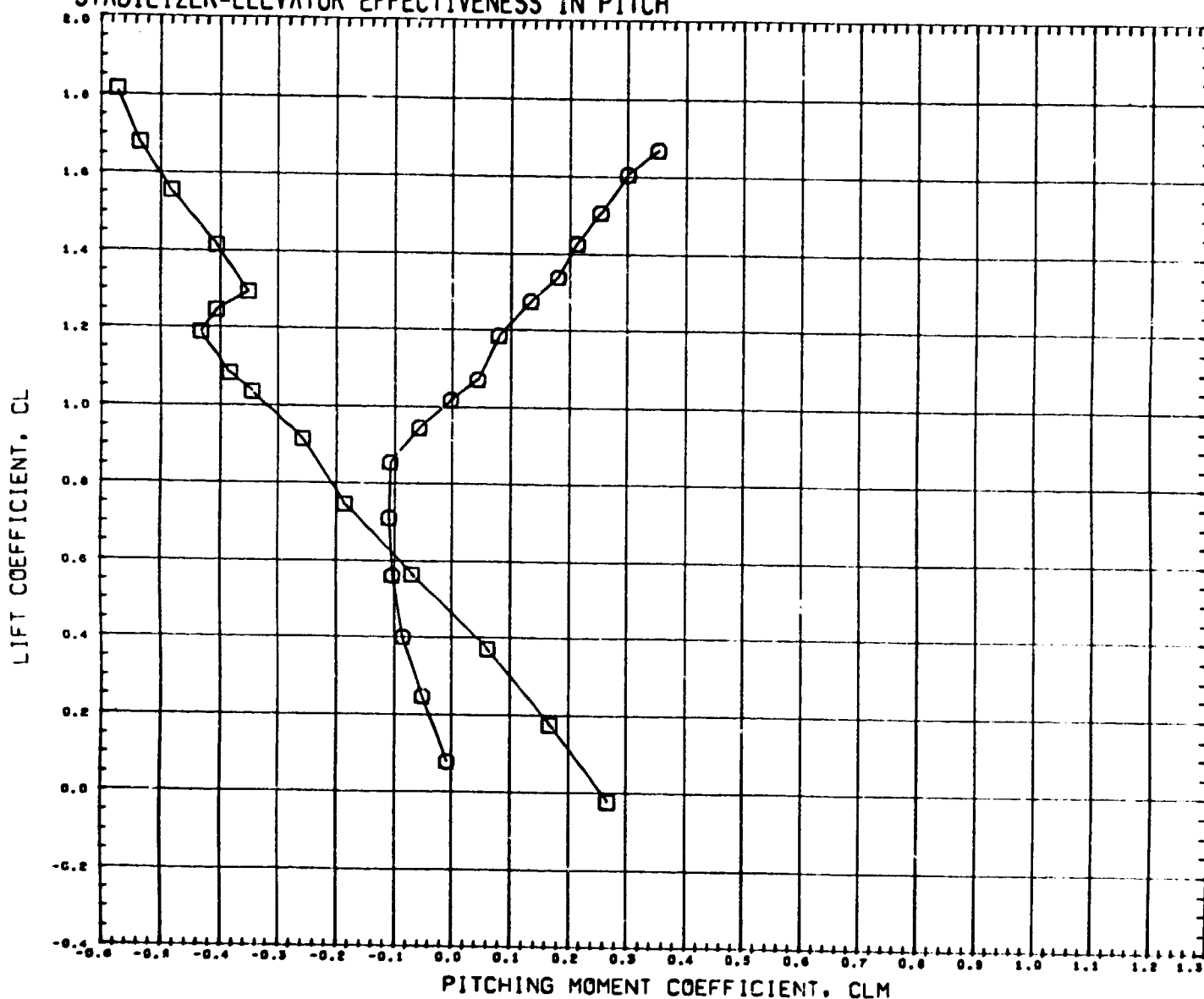
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC-034) STMT-1265 BOEING H-32 BOOSTER 88W4V3
 (RC-044) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RC-064) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RC-074) STMT-1265 BOEING H-32 BOOSTER 88W4H4V3

HTAIL ELEVTR SPOILR
 -20.000 -30.000
 0.300 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 SQ. IN
 LREF 2.8400 IN.
 SREF 14.8000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.888

STABILIZER-ELEVATOR EFFECTIVENESS IN PITCH



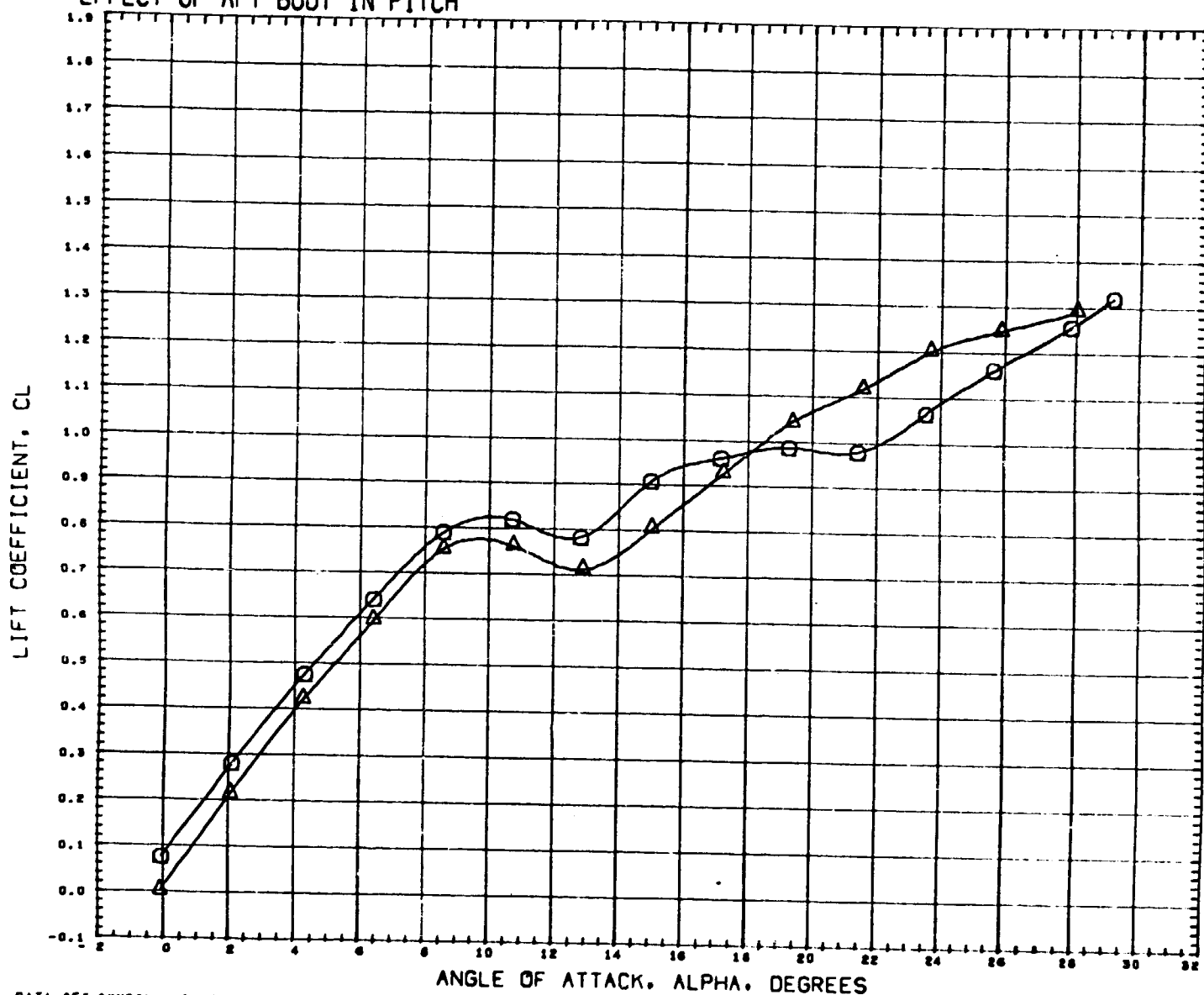
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RG2034) BTMT-1265 BOEING H-32 BOOSTER B8W4V3
 (RG2044) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RG2064) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RG2074) BTMT-1265 BOEING H-32 BOOSTER B8W4H4V3

MTAIL ELEVTR SPOILR
 -20.000 -30.000
 0.000 -30.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 98. IN
 LREF 2.8400 IN.
 BREF 14.6000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.949

EFFECT OF AFT BODY IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RC2374) $\bigcirc$ BTMT-1265 BOEING N-32 BOOSTER B0W4H4V3
 (RC2134) $\triangle$ BTMT-1265 BOEING N-32 BOOSTER B14W4H4V3

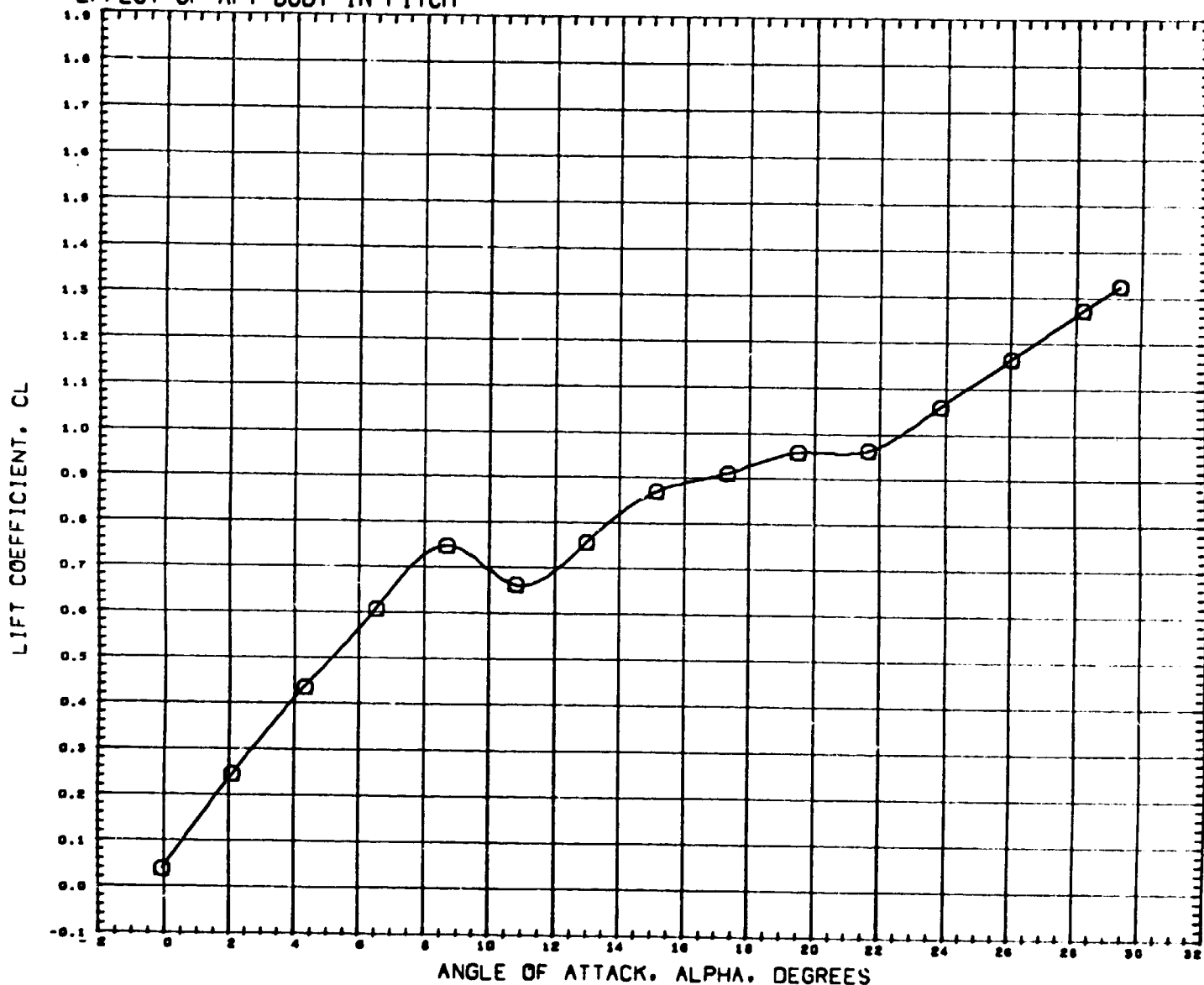
MTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION

SREF 31.3600 80. IN
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.312

EFFECT OF AFT BODY IN PITCH



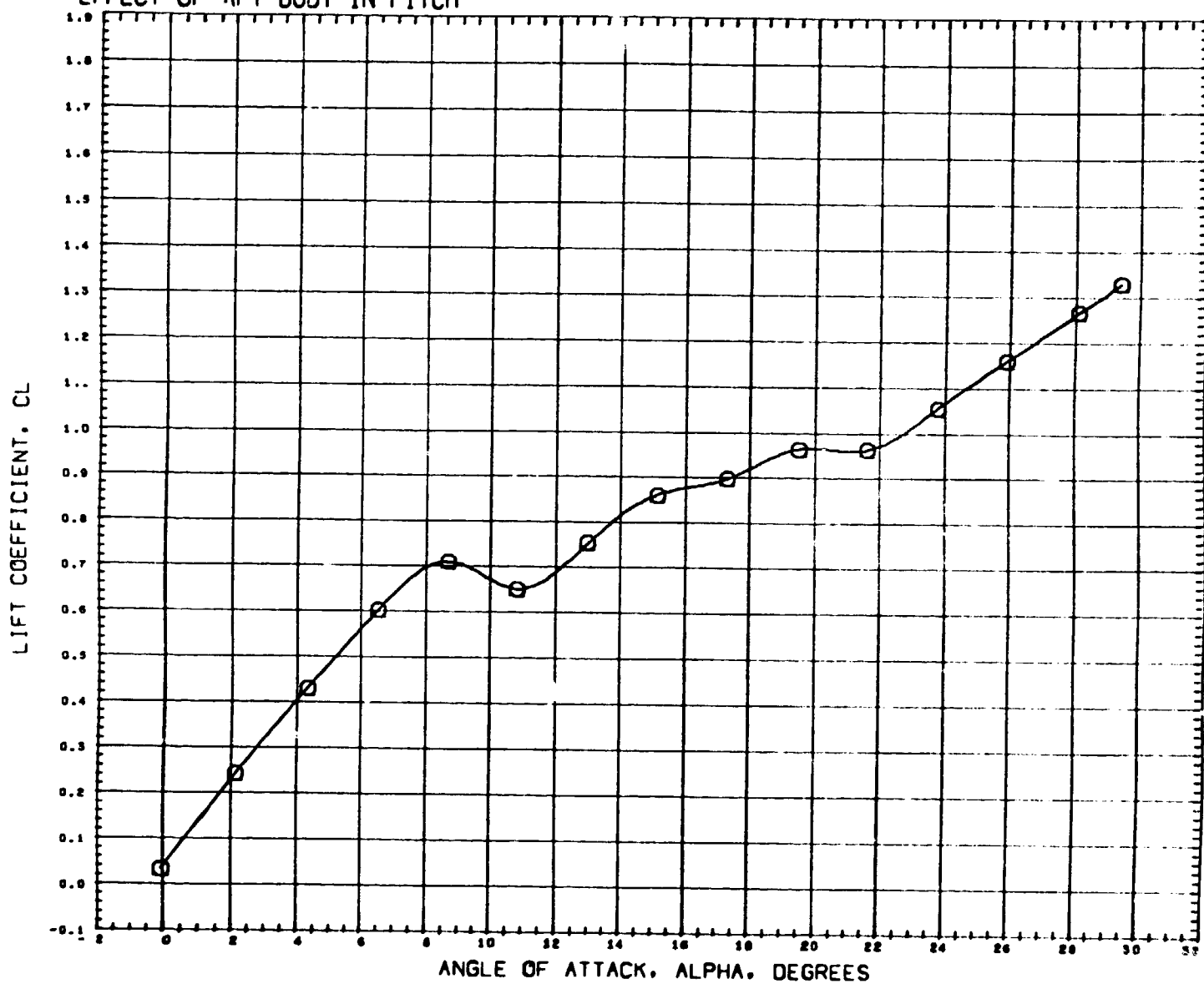
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02074) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (R02134) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 86. IN
 LREF 2.2460 IN.
 BREF 14.8000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.491

EFFECT OF AFT BODY IN PITCH



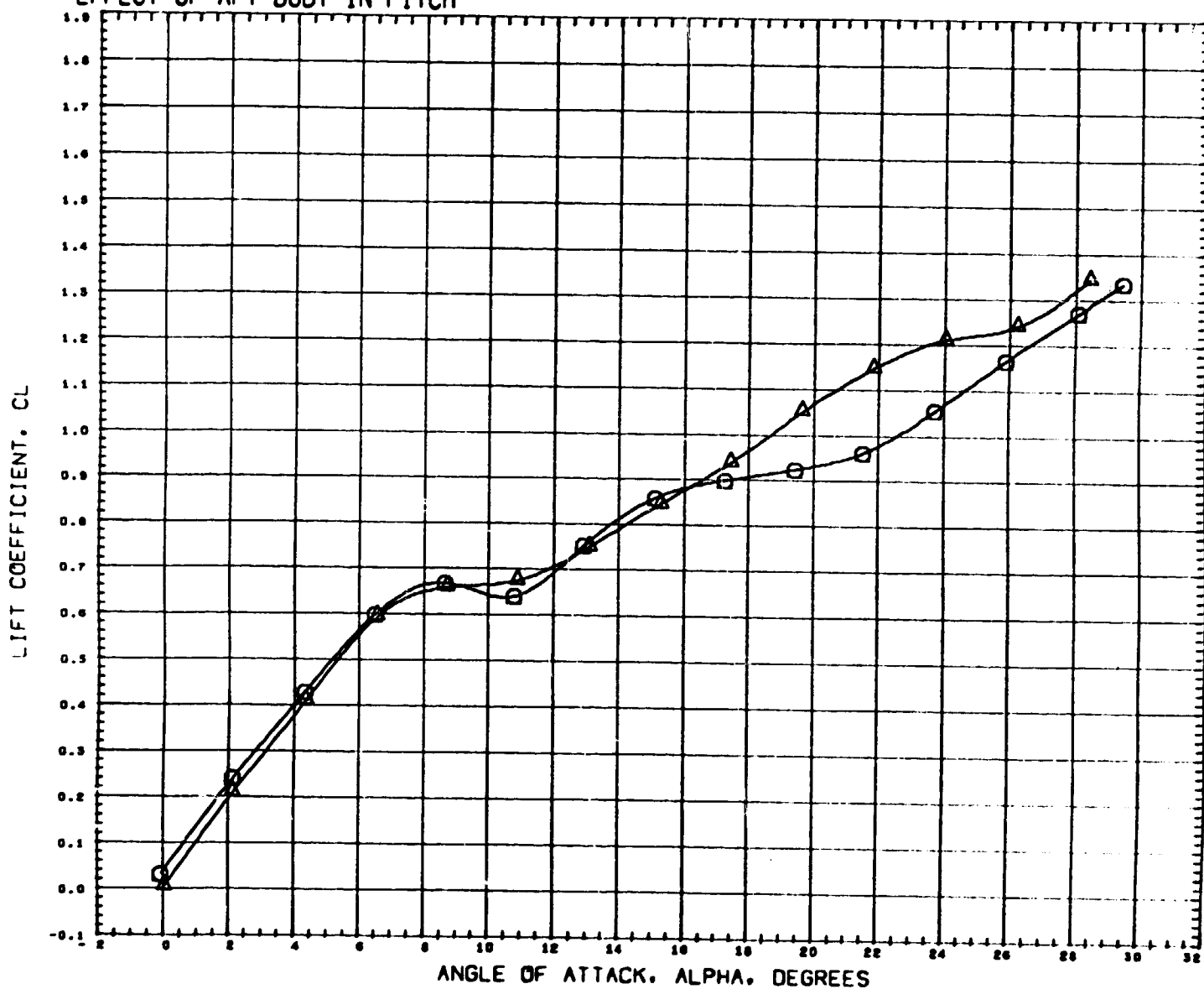
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RQ2074) BTMT-1265 BOEING H-32 BOOSTER B8W4H4V3
 (RQ2134) DATA NOT AVAILABLE FOR ALL CONDITIONS

MTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 IN.
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.474

EFFECT OF AFT BODY IN PITCH



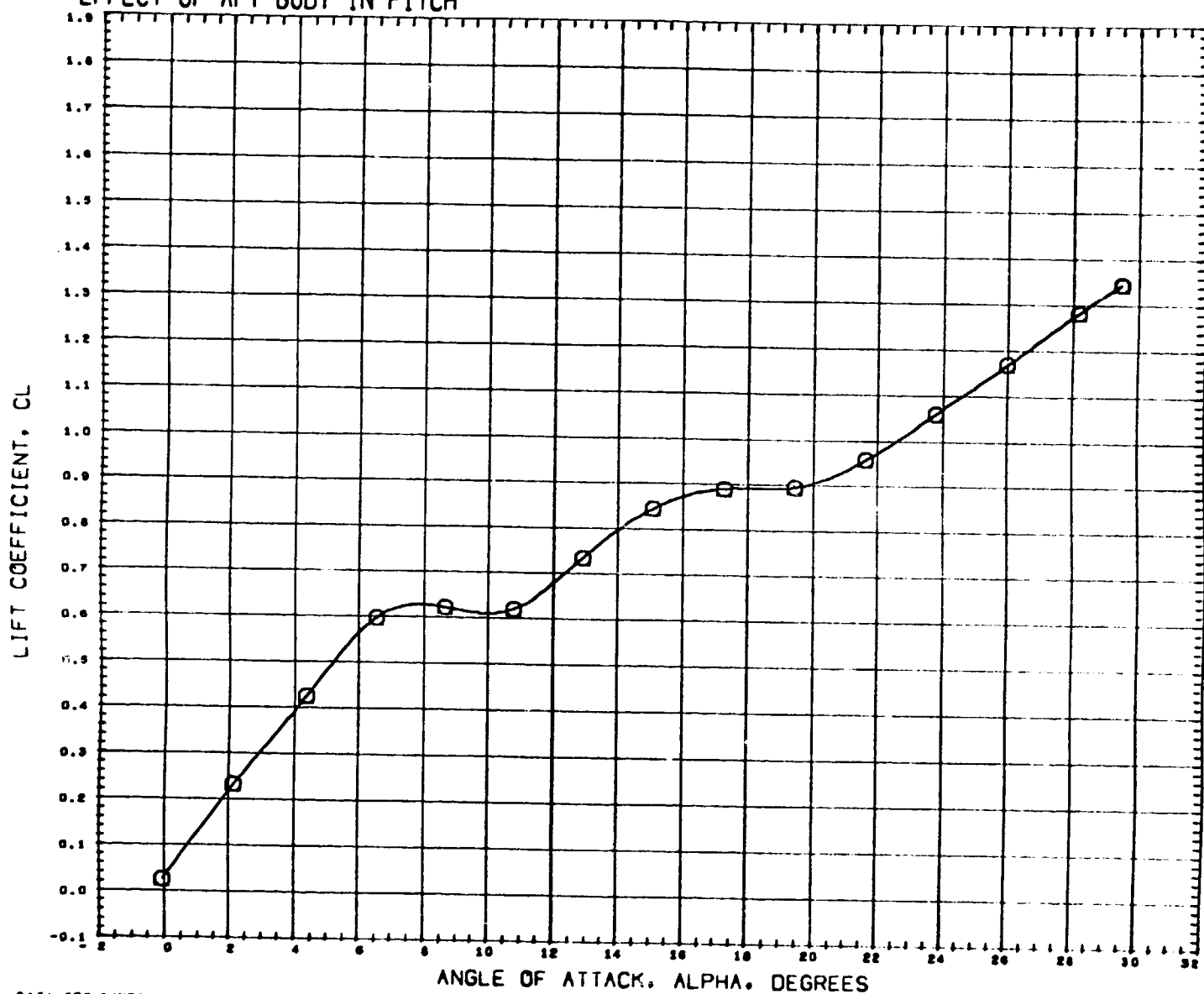
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02074) BTWT-1265 BOEING M-32 BOOSTER B8W4H4V3
 (R02134) BTWT-1265 BOEING M-32 BOOSTER B14W4H4V3

MTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3000 30. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.900

EFFECT OF AFT BODY IN PITCH



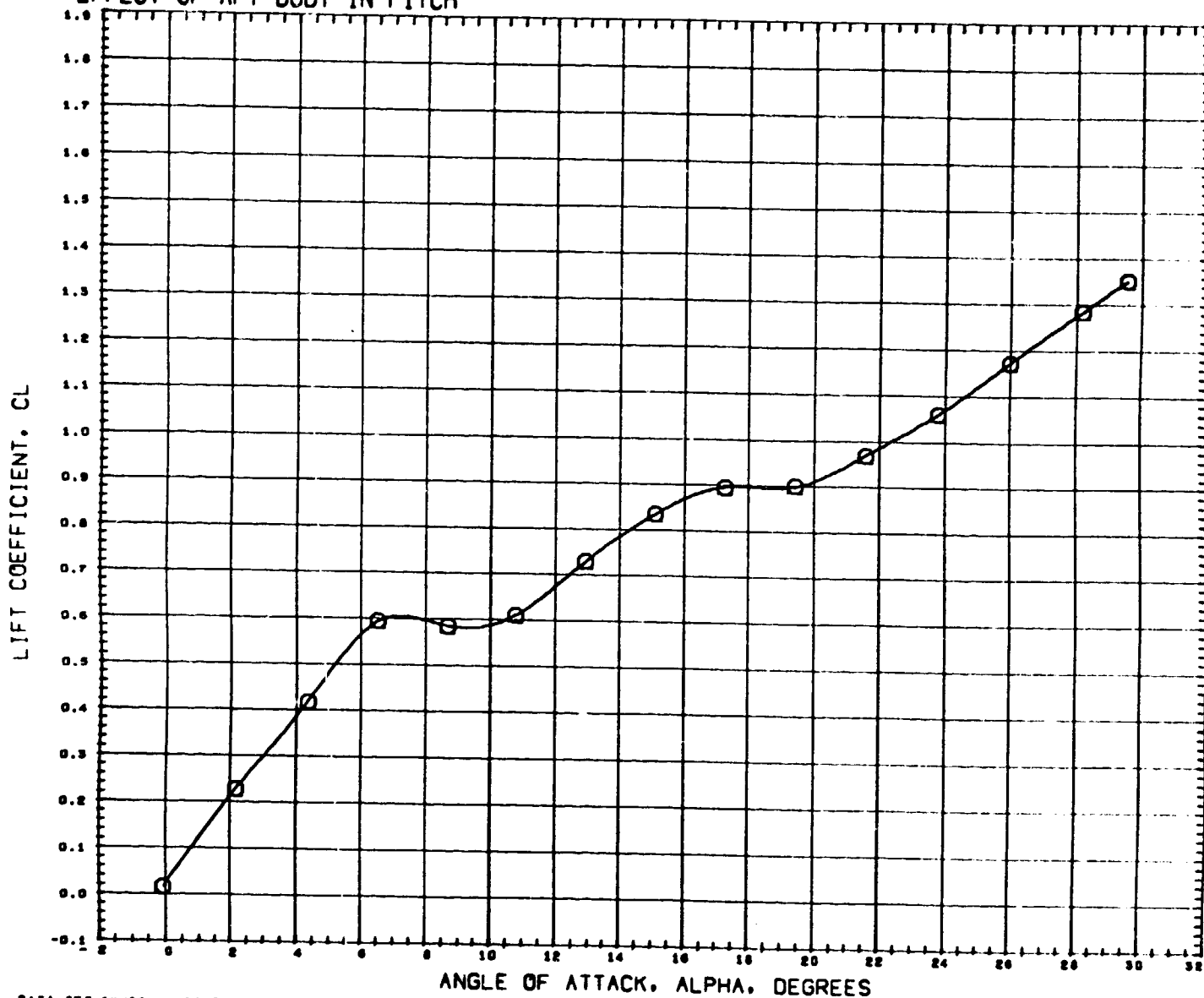
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC074) 8TWT-1265 BOEING H-32 BOOSTER 88W4H4V3
 (RC2134) DATA NOT AVAILABLE FOR ALL CONDITIONS

MTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.926

EFFECT OF AFT BODY IN PITCH



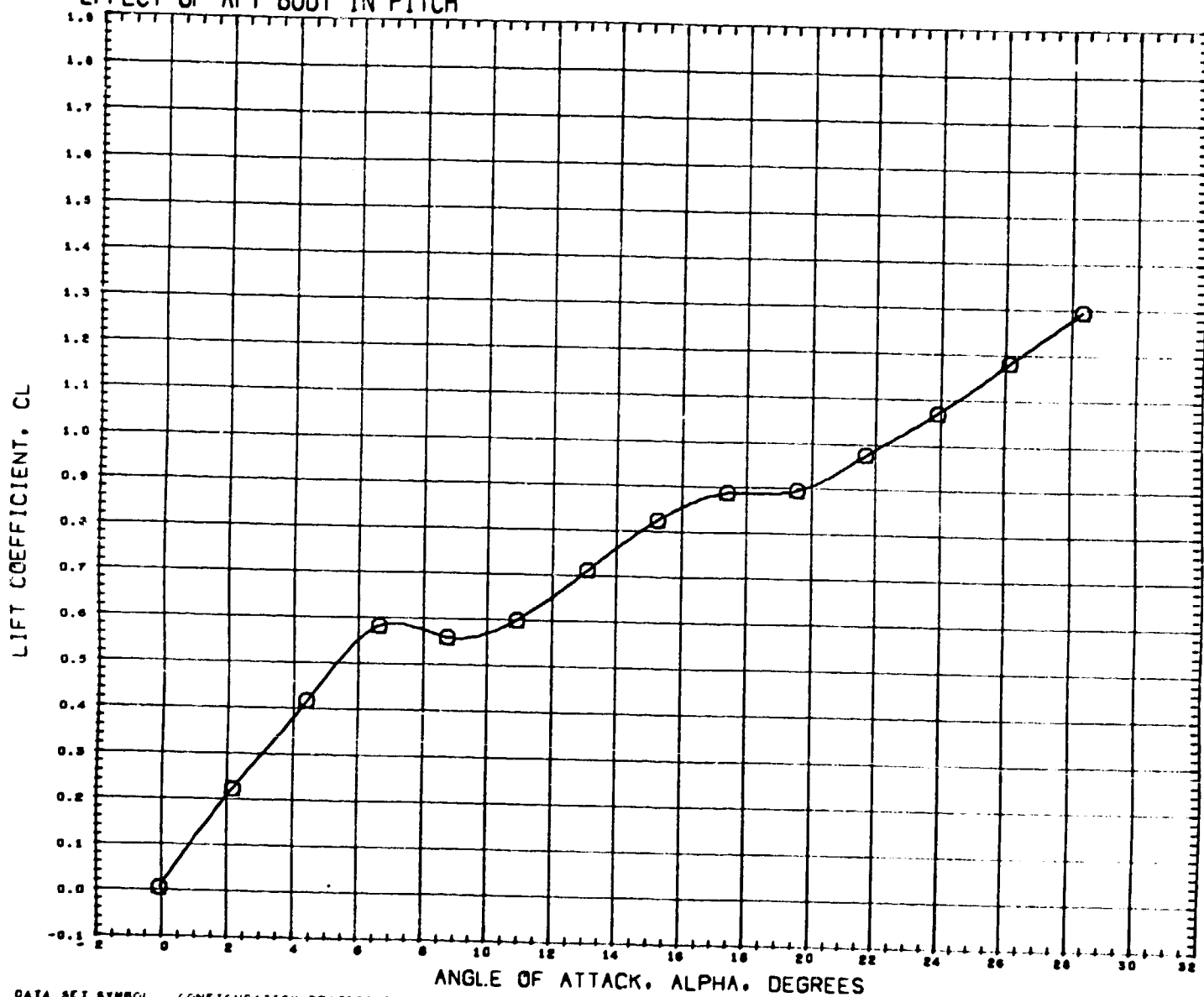
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RD2074)  BTWT-1265 BOEING N-12 BOOSTER 88W4H4V3
 (RD2134) DATA NOT AVAILABLE FOR ALL CONDITIONS

MTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 SQ. IN
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.349

EFFECT OF AFT BODY IN PITCH



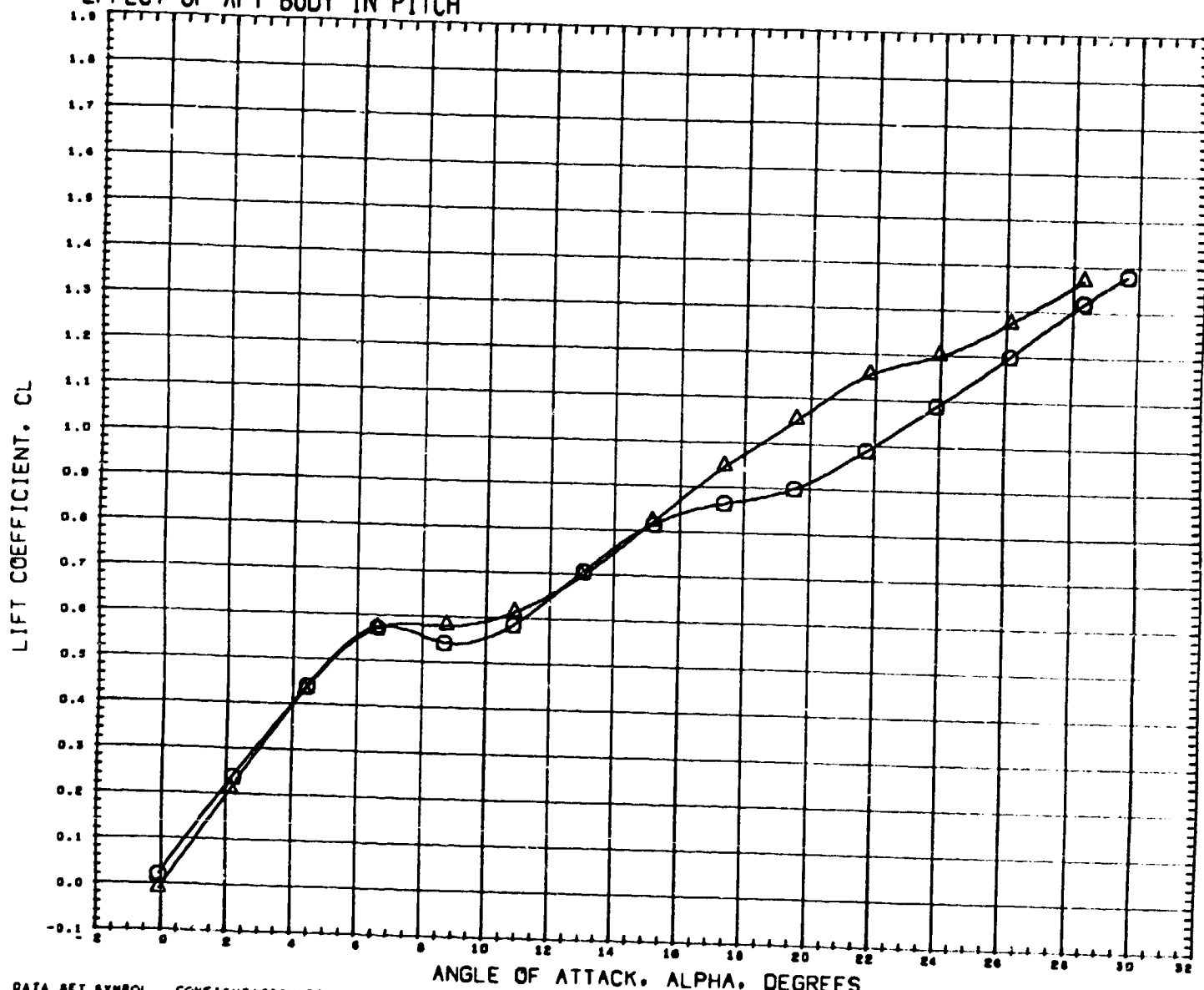
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02074) BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3
 (R02134) DATA NOT AVAILABLE FOR ALL CONDITIONS

MTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 SQ. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0007

MACH 0.973

EFFECT OF AFT BODY IN PITCH



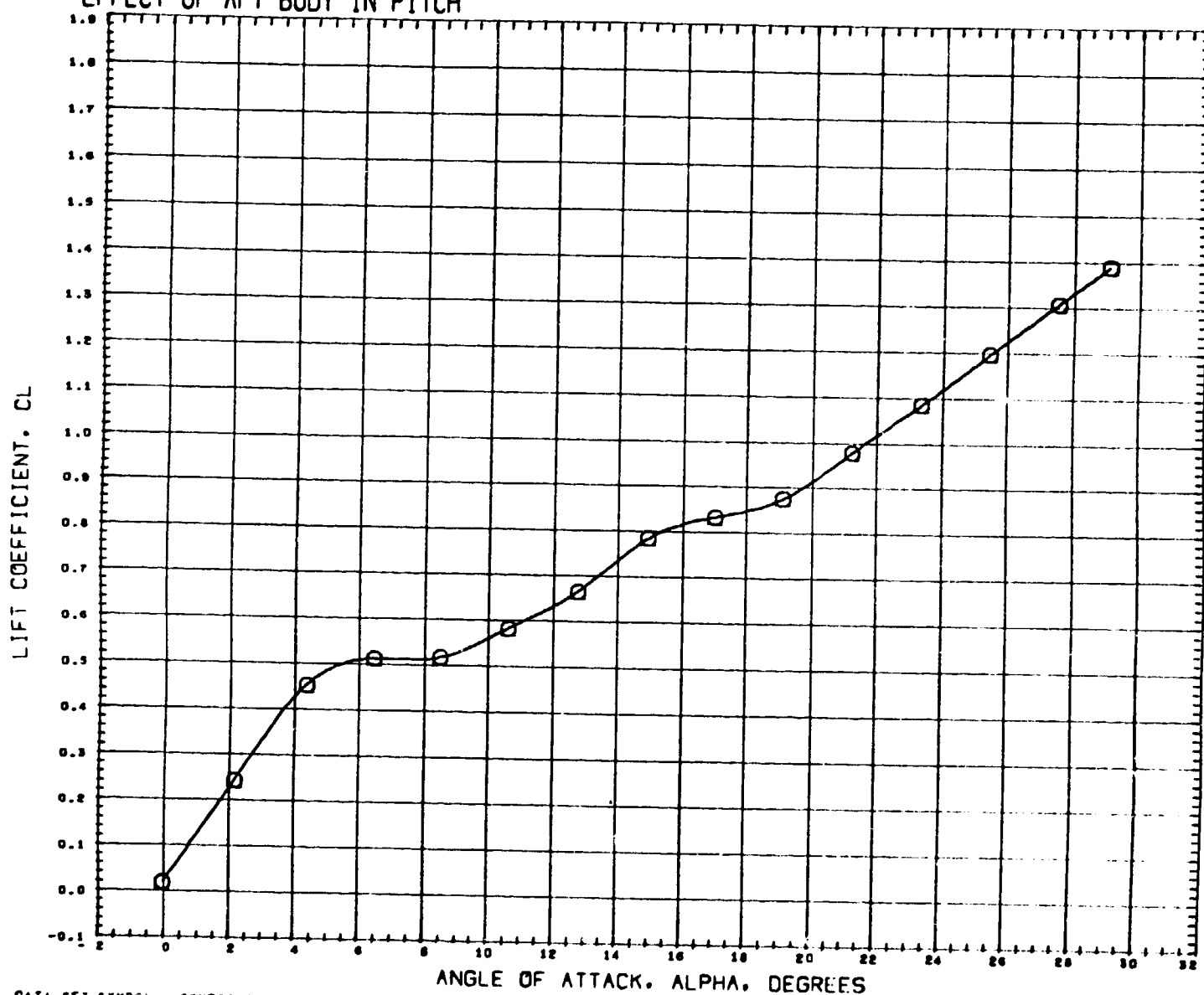
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02674) BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3
 (R02134) BTWT-1263 BOEING H-32 BOOSTER B14W4H4V3

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

MACH 0.600

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

EFFECT OF AFT BODY IN PITCH



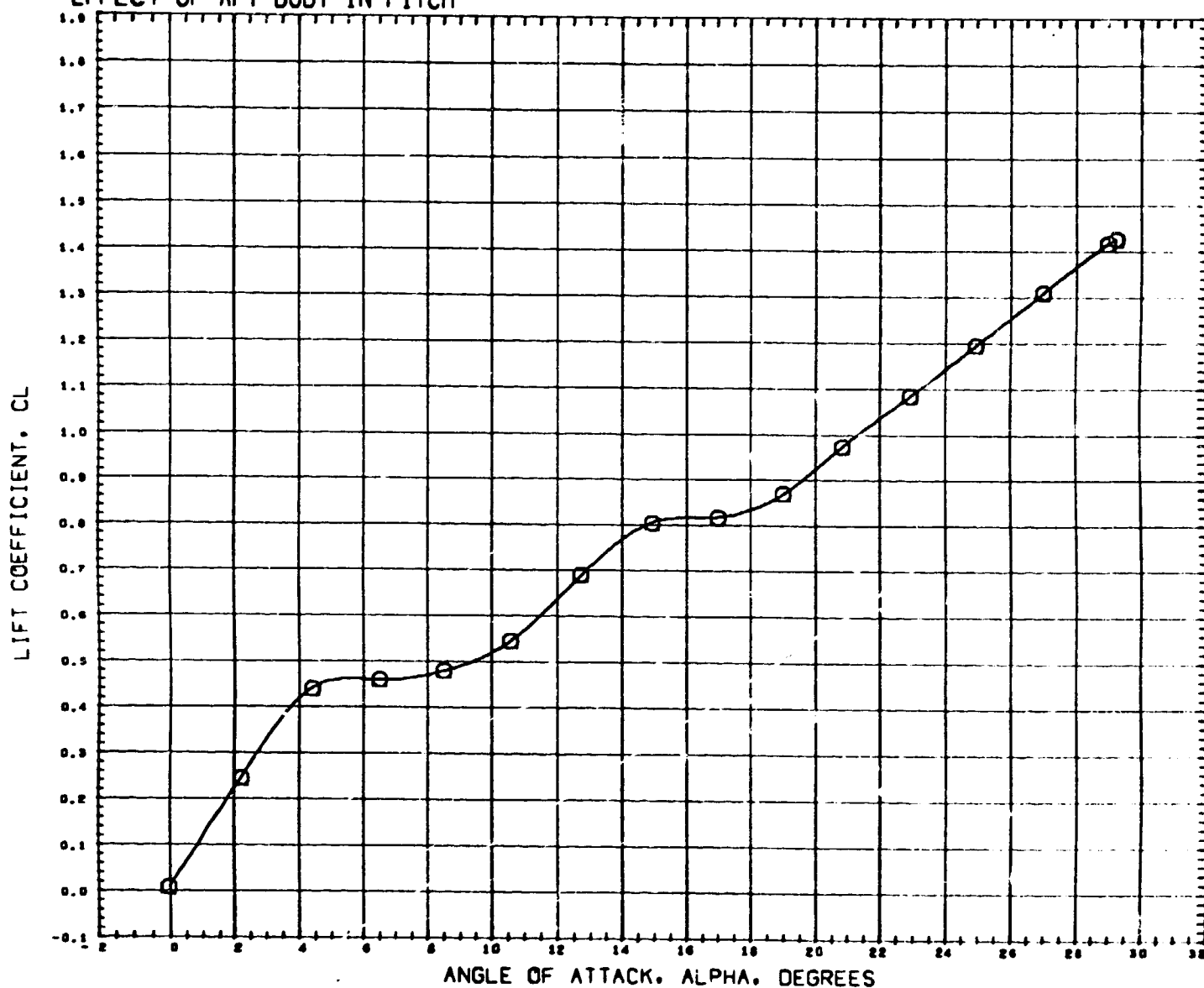
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RD2074) BTWT-1265 BOEING M-32 BOOSTER B8W4H4V3
 (RD2154) DATA NOT AVAILABLE FOR ALL CONDITIONS

MTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 88. IN
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.850

EFFECT OF AFT BODY IN PITCH



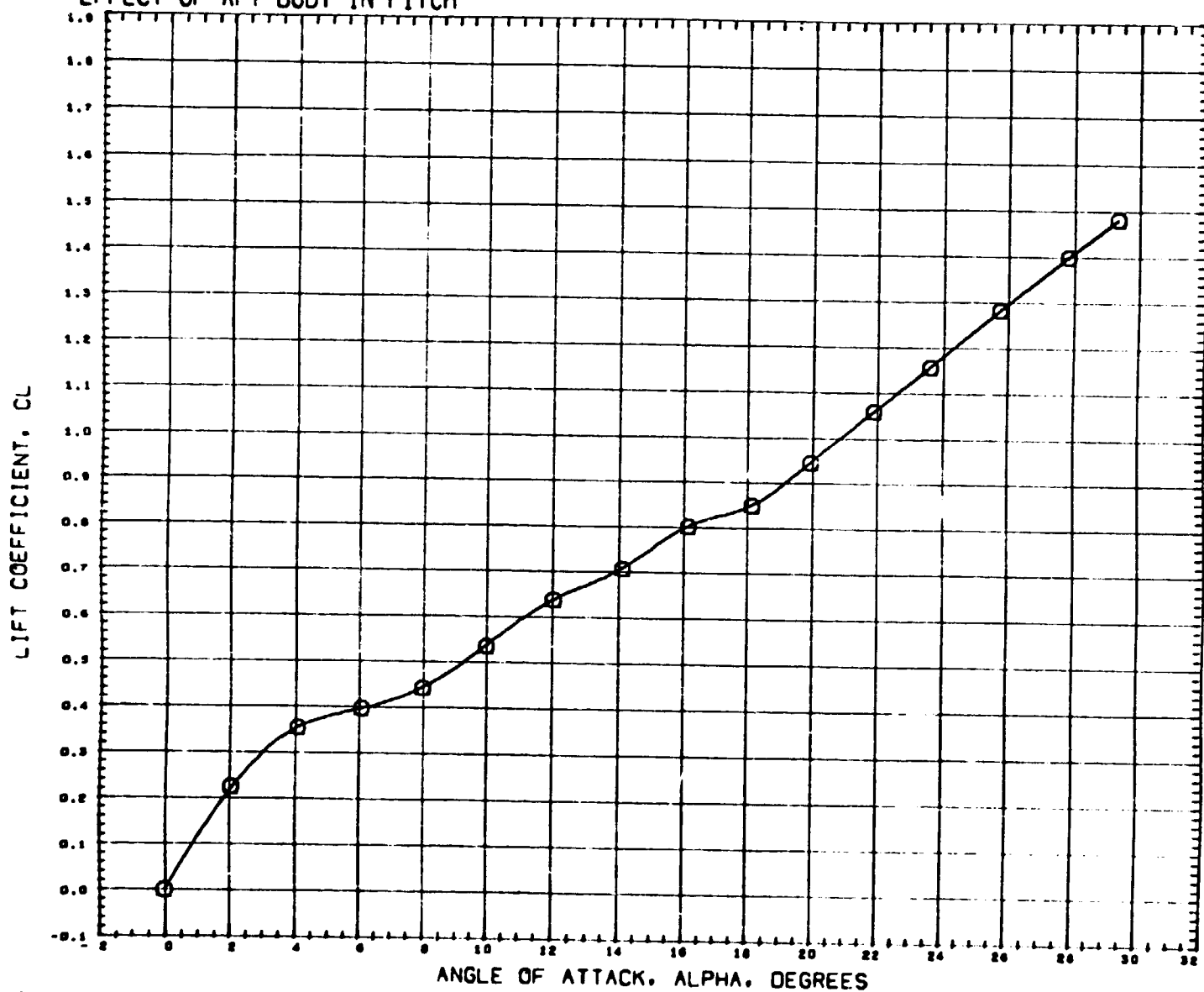
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RDR074) BTWT-1265 BOEING H-32 BOOSTER 88M4H4V3
 (RDR134) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 N.
 BREF 14.8000 IN.
 XHRP 11.9000 IN.
 YHRP 0.0000 IN.
 ZHRP 2.4330 IN.
 SCALE 0.0067

MACH 0.700

EFFECT OF AFT BODY IN PITCH



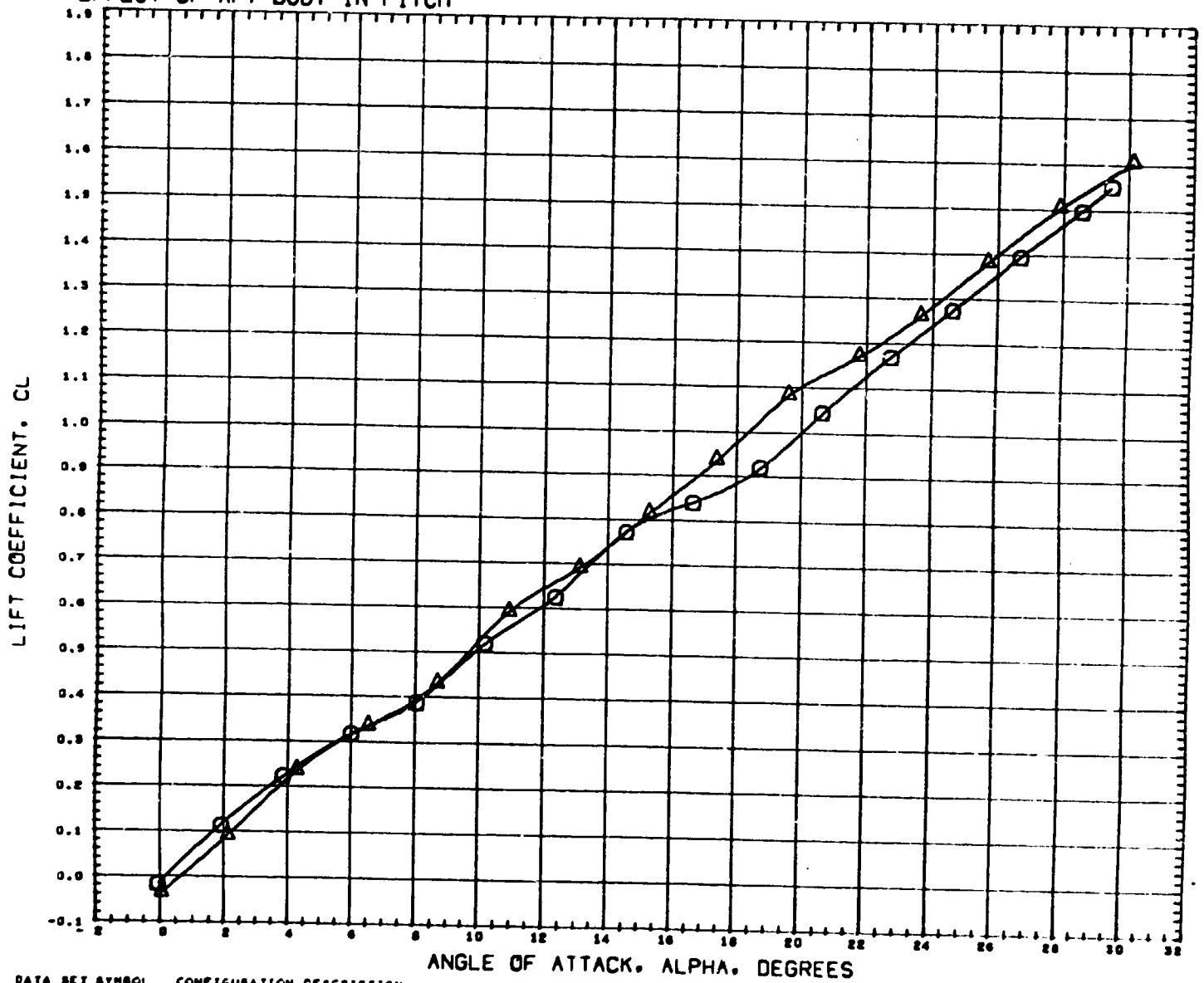
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02-174) BTMT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (R02-34) DATA NOT AVAILABLE FOR ALL CONDITIONS

MTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 SQ. IN
 LREF 2.2400 IN.
 DREF 14.0000 IN.
 XHRP 11.9800 IN.
 YHRP 0.0000 IN.
 ZHRP 2.4330 IN.
 SCALE 0.0067

MACH 0.750

EFFECT OF AFT BODY IN PITCH



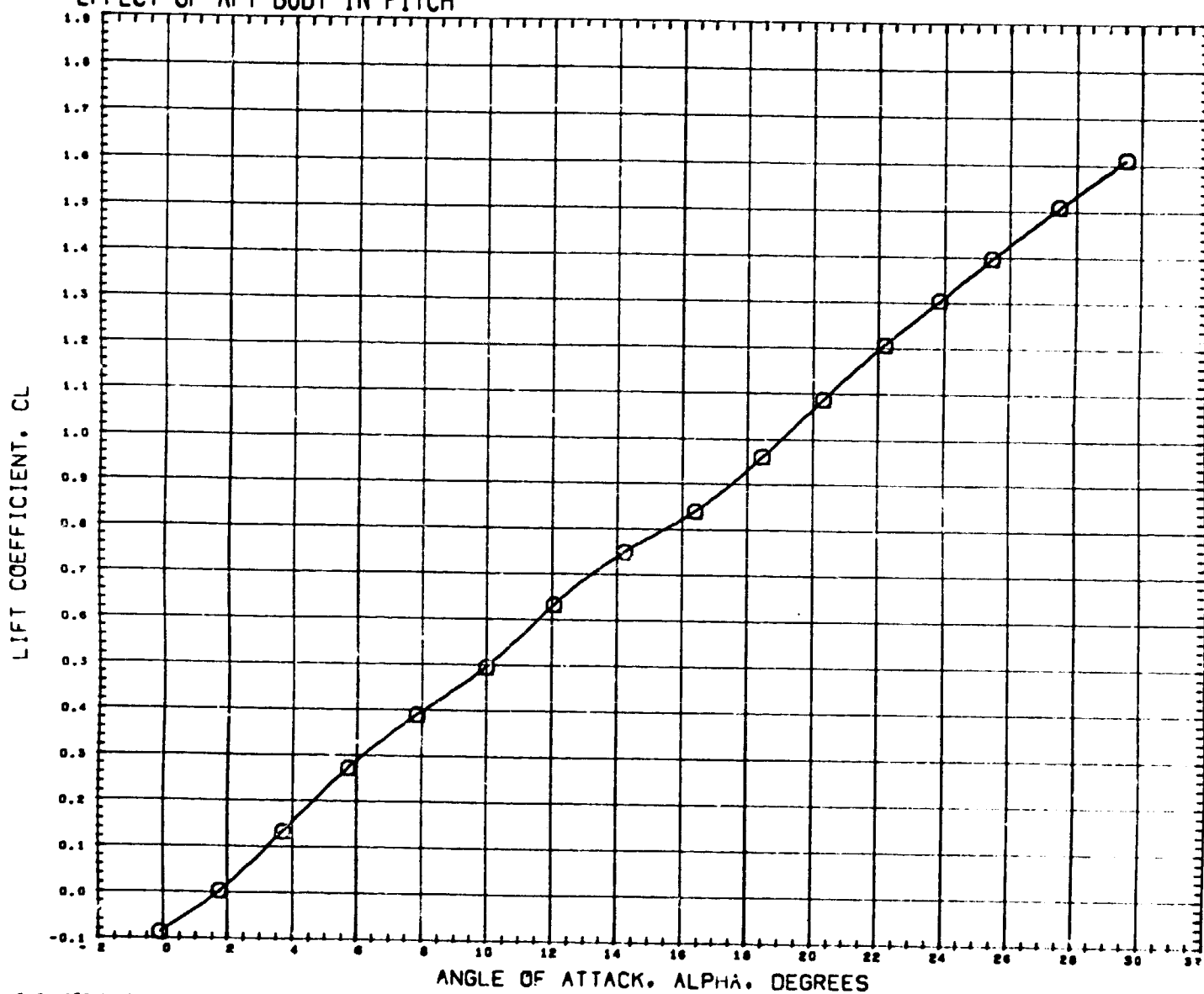
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(R02074)	B14M4H4V3
(R02134)	B14M4H4V3

MTAIL	ELEVTR	SPOILR
0.000	0.000	
0.000	0.000	

MACH 0.000

REFERENCE INFORMATION	
SREF	31.3600 IN.
LREF	8.2400 IN.
BREF	14.8000 IN.
XMRP	11.9000 IN.
YMRP	0.0000 IN.
ZMRP	2.4390 IN.
SCALE	0.0007

EFFECT OF AFT BODY IN PITCH



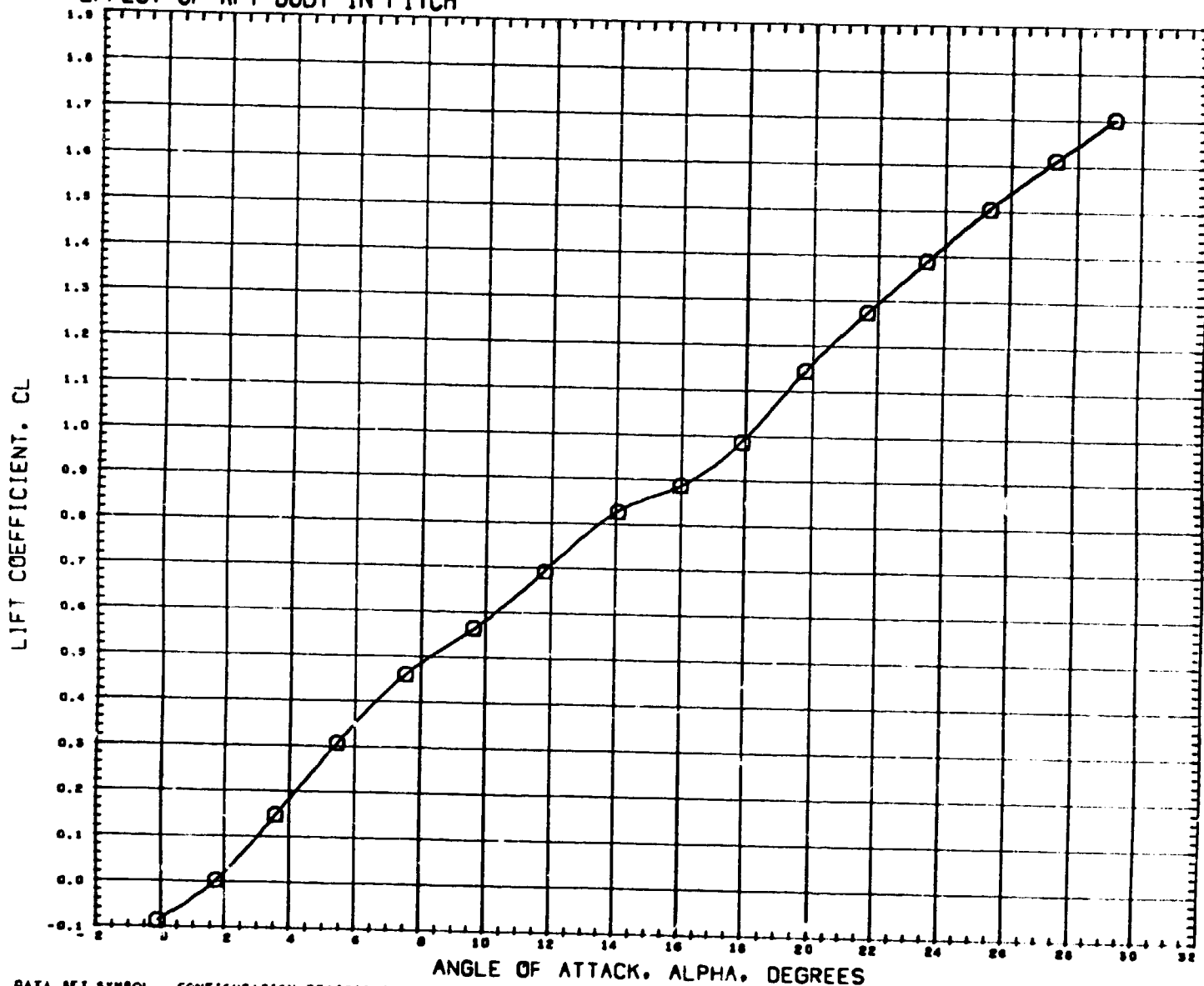
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC2074) BTWT-1265 BOEING M-52 BOOSTER B0W4H4V3
 (RC2134) DATA NOT AVAILABLE FOR ALL CONDITIONS

HTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LRE 2.2400 IN.
 BREF 14.0000 IN.
 XMRP 11.9000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.849

EFFECT OF AFT BODY IN PITCH



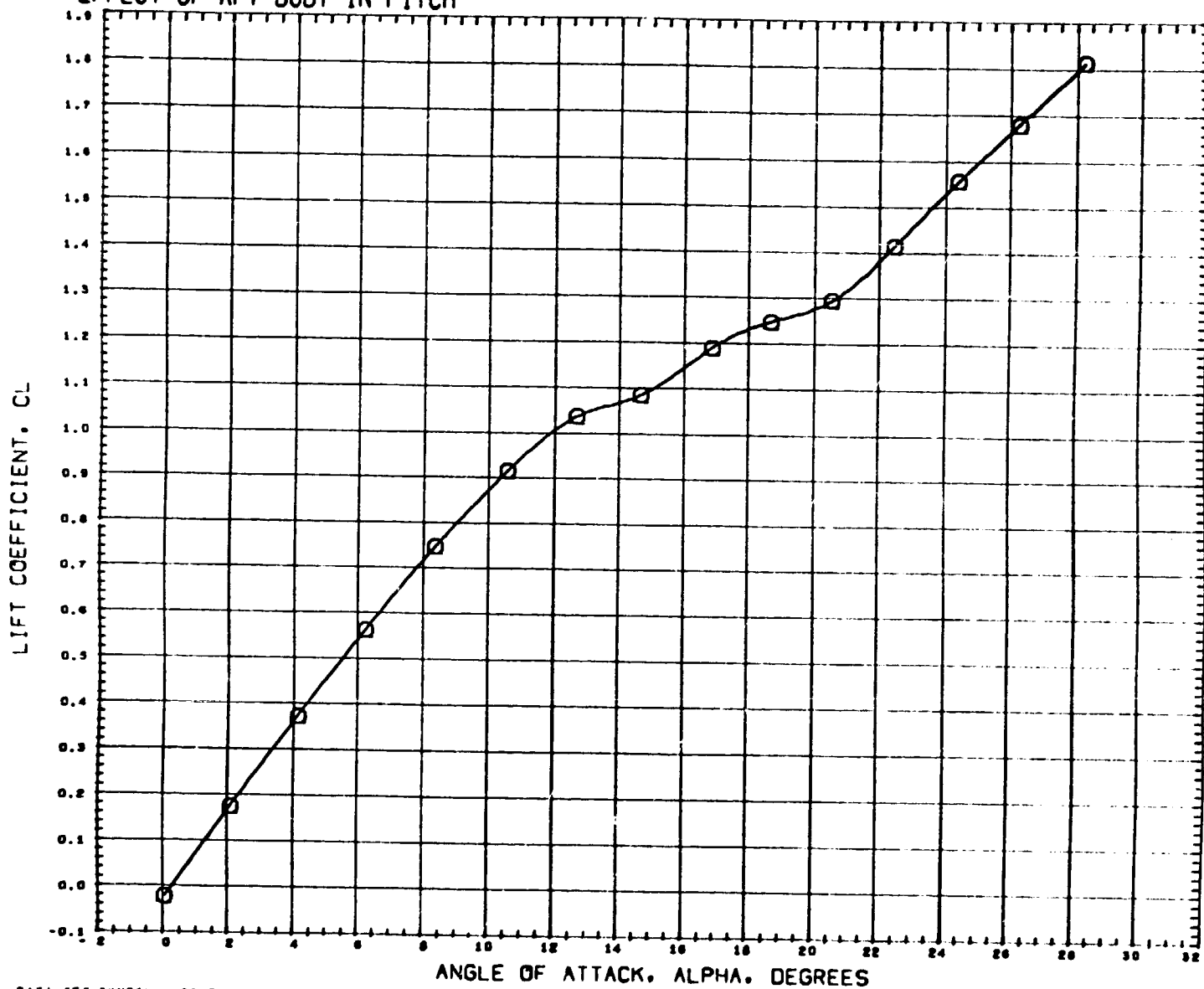
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RD2074) BTWT-1265 BOEING N-32 BOOSTER 88W4H4Y3
 (RD2134) DAT: NOT AVAILABLE FOR ALL CONDITIONS

HTAIL ELEVTR SPOILS
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 50. IN
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XMRP 11.0000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.000

EFFECT OF AFT BODY IN PITCH



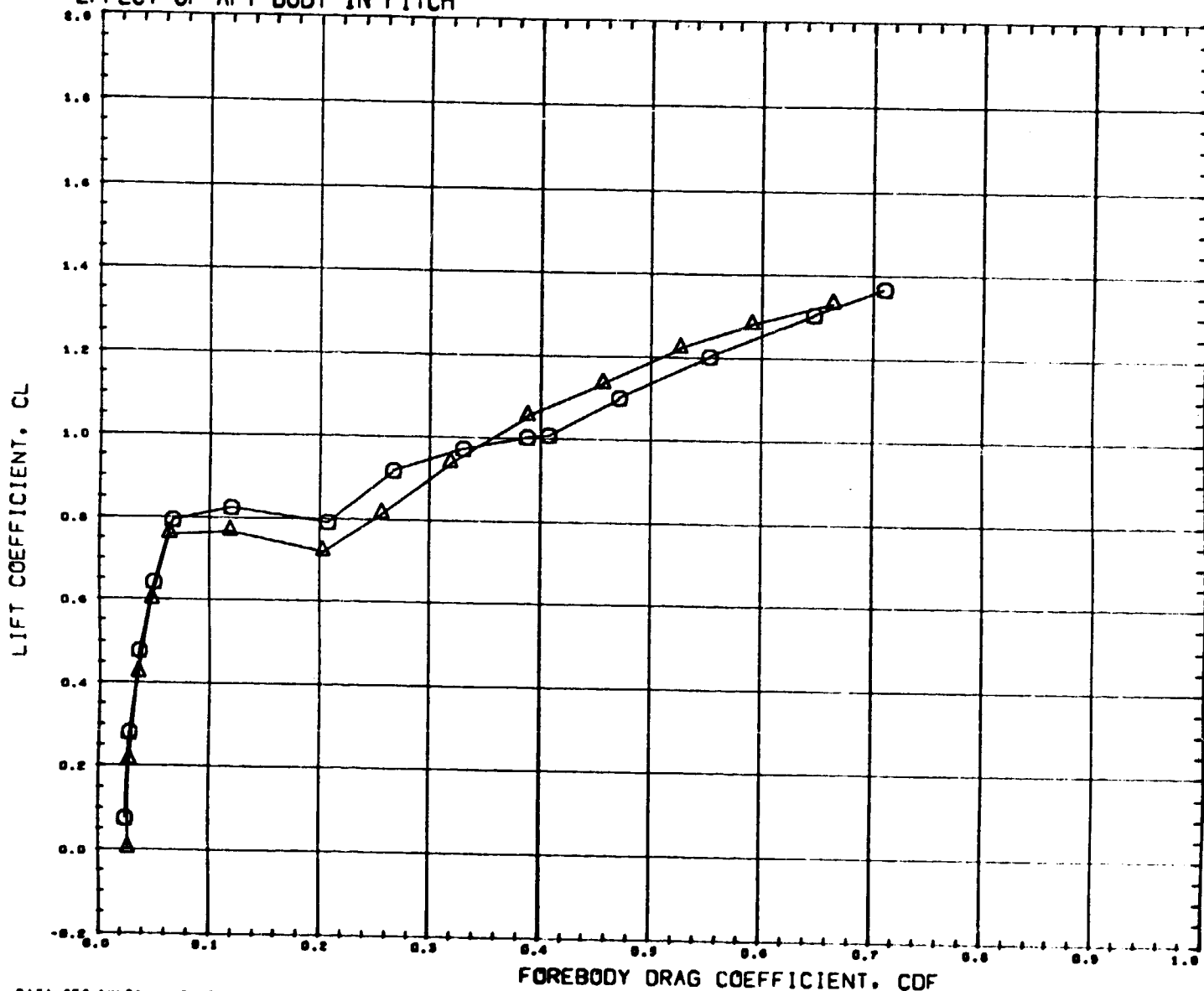
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02174) STMT-1265 BOEING M-32 BOOSTER 88W4H4V3
 (R02134) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 IN.
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XNRP 11.0600 IN.
 YNRP 0.0000 IN.
 ZNRP 2.4330 IN.
 SCALE 0.0067

MACH 0.950

EFFECT OF AFT BODY IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (DD2074) BTWT-1263 BOEING M-32 BOOSTER
 (CC2134) BTWT-1265 BOEING M-32 BOOSTER

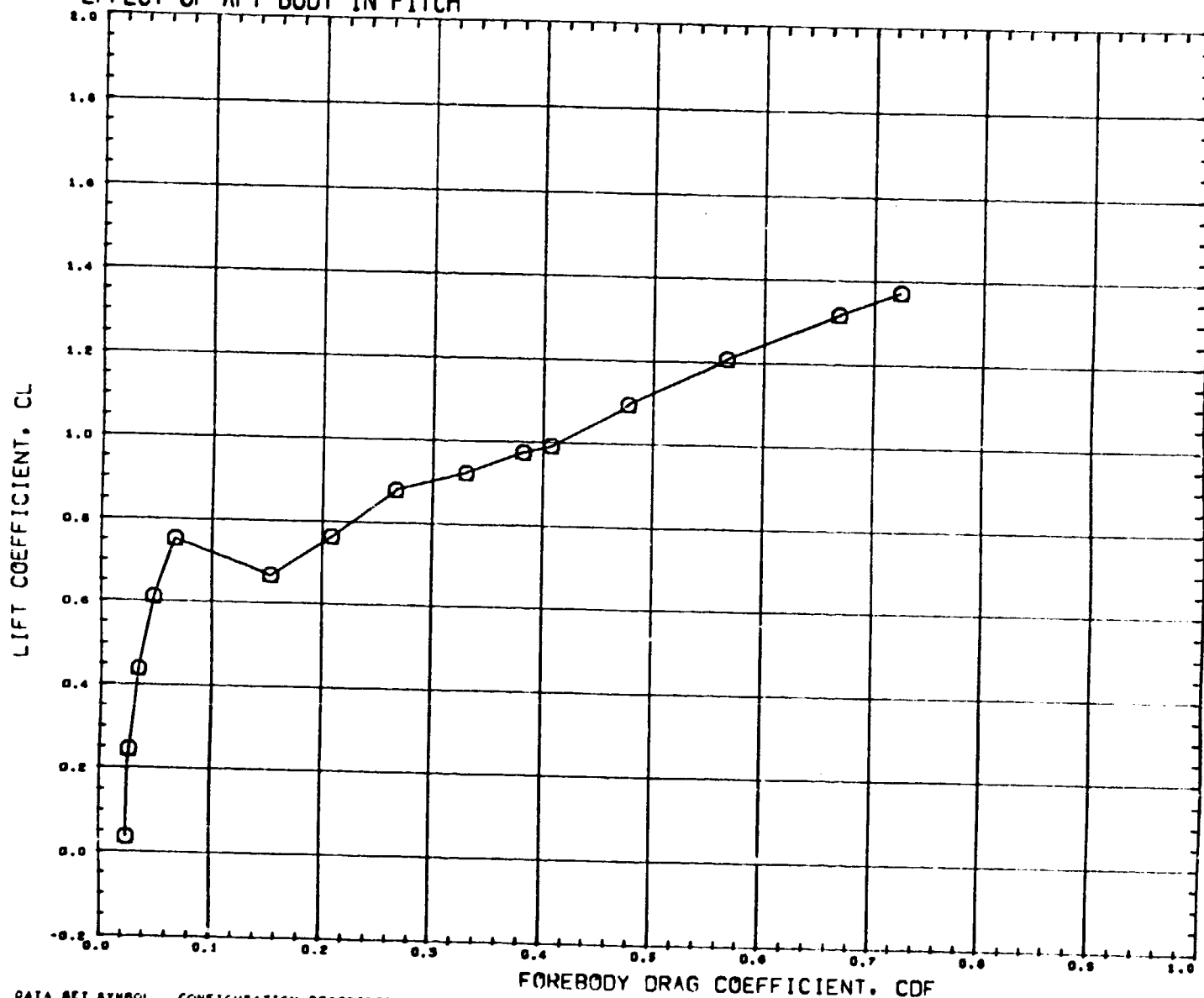
80W4H4V3
 814W4H4V3

NTAIL CLEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 50. IN
 LREF 8.2400 IN.
 OREF 14.8000 IN.
 XWRP 11.9400 IN.
 YWRP 0.0000 IN.
 ZWRP 8.4330 IN.
 SCALE 0.0067

MACH 0.312

EFFECT OF AFT BODY IN PITCH



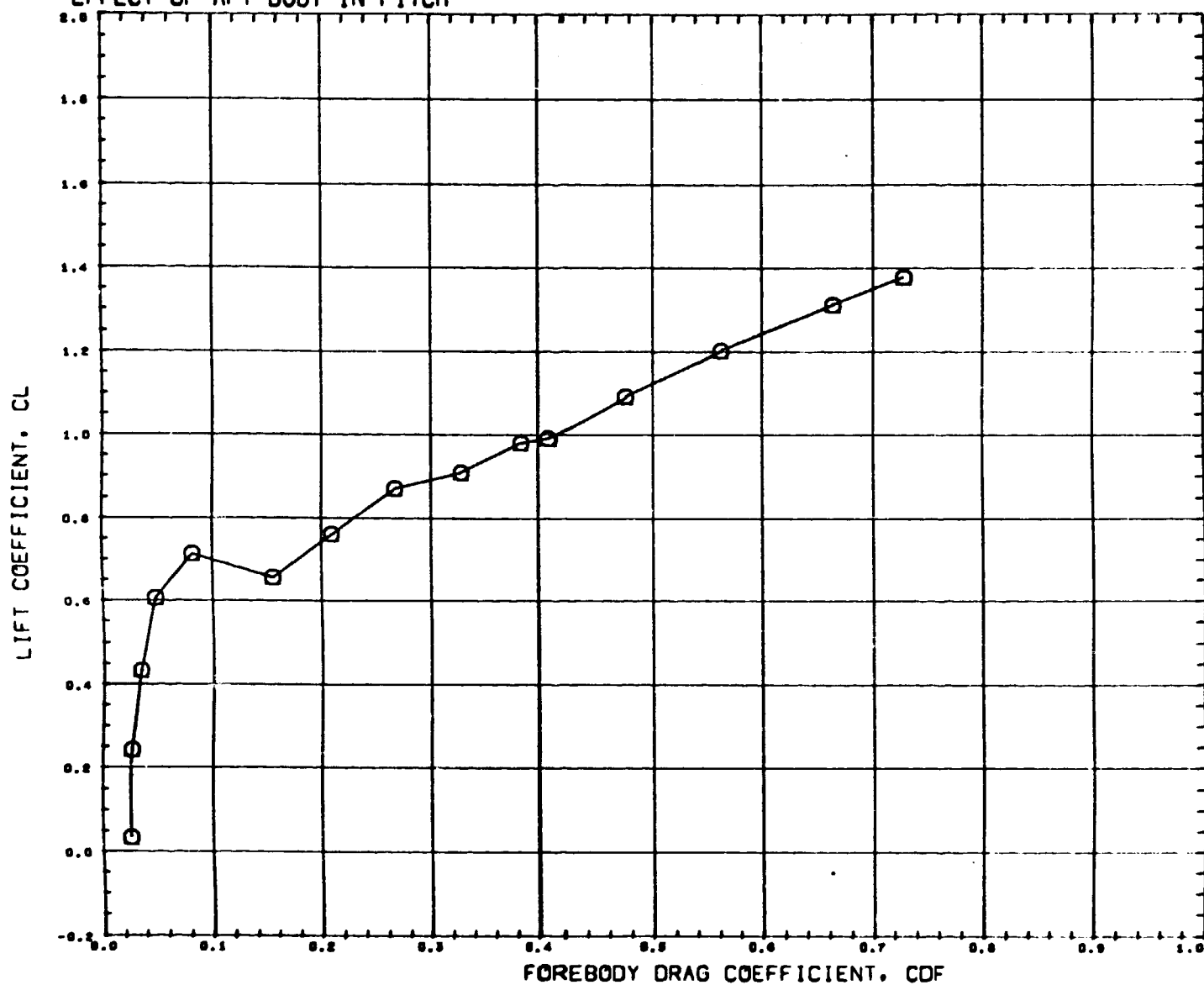
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (001074) BTMT-1265 BOEING M-32 BOOSTER 88W4H4V3
 (002134) DATA NOT AVAILABLE FOR ALL CONDITIONS

HTAIL ELEVTR SPOILP
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.451

EFFECT OF AFT BODY IN PITCH



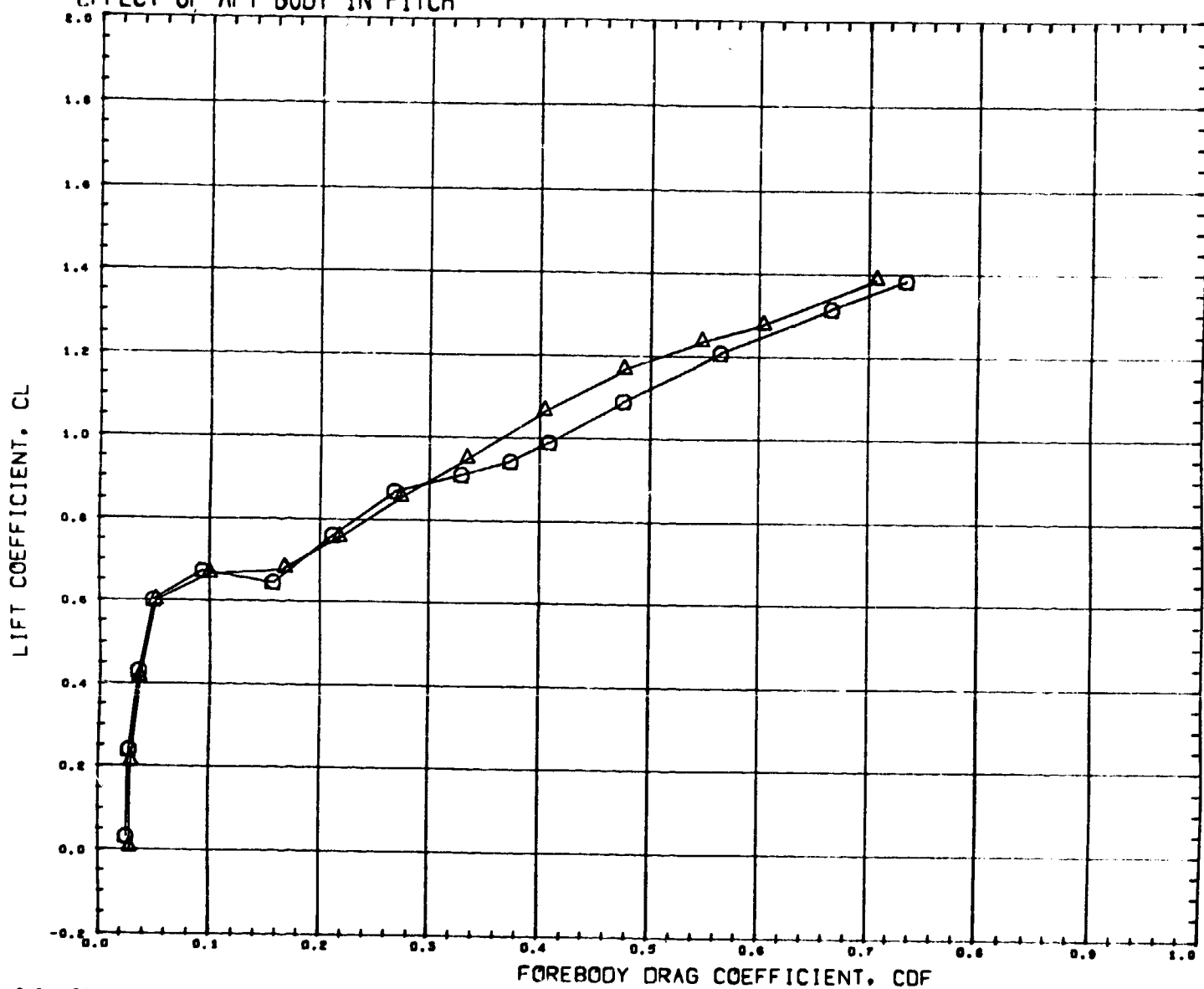
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (002074) BWT-1265 BOEING N-32 BOOSTER B6W4H4V3
 (002134) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3400 SQ. IN
 LREF 2.8400 IN.
 BREF 14.8000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0007

MACH 0.474

EFFECT OF AFT BODY IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(002074) BTWT-1265 BOEING N-32 BOOSTER B8W4H4V3
(002134) BTWT-1265 BOEING N-32 BOOSTER B14W4H4V3

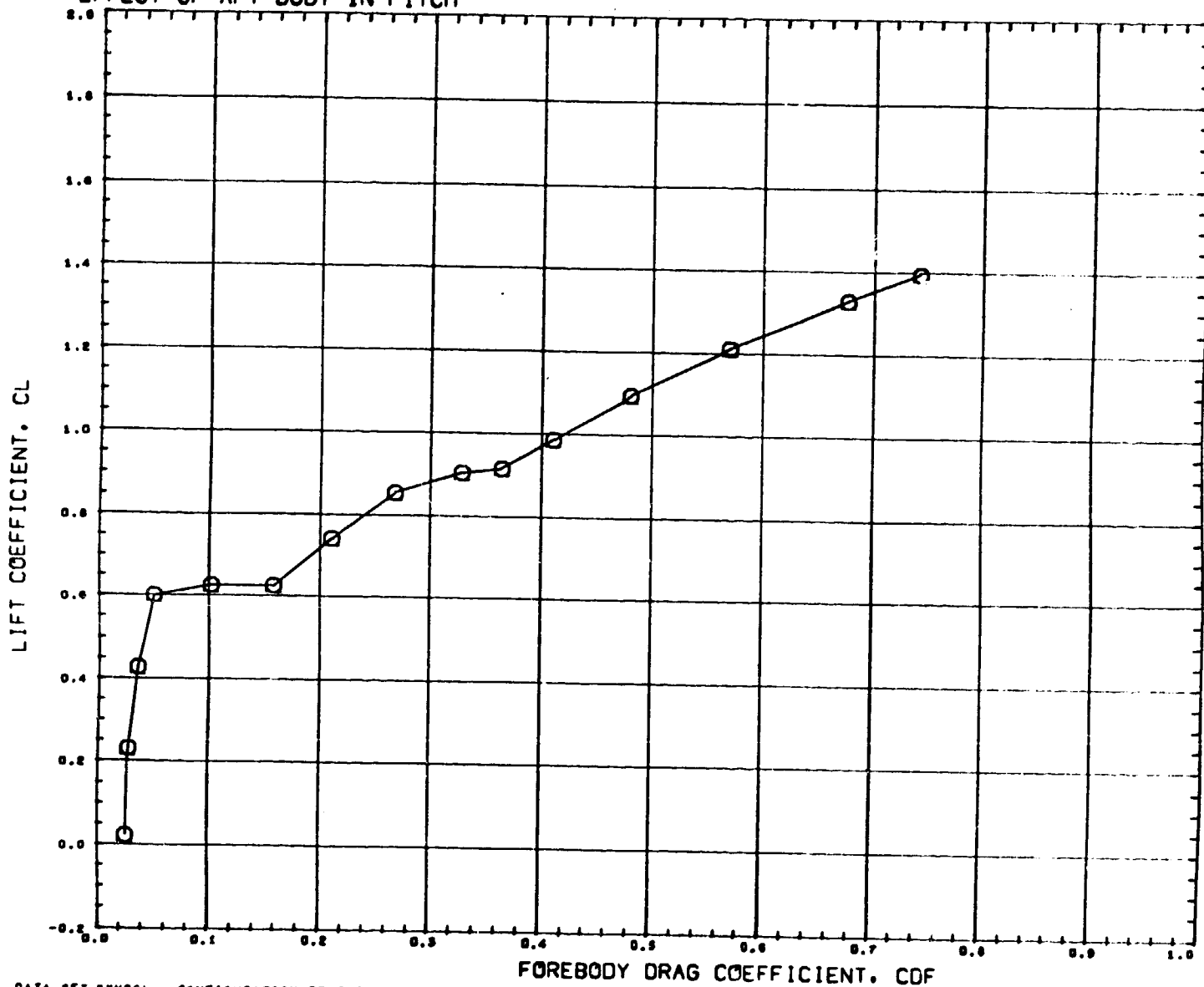
NTAIL ELEVTR SPOILR
0.000 0.000
0.000 0.000

REFERENCE INFORMATION

SREF 31.3600 80. IN
LREF 2.2400 IN.
BREF 14.8000 IN.
XMRP 11.9800 IN.
YMRP 0.0000 IN.
ZMRP 2.4330 IN.
SCALE 0.0067

MACH 0.900

EFFECT OF AFT BODY IN PITCH



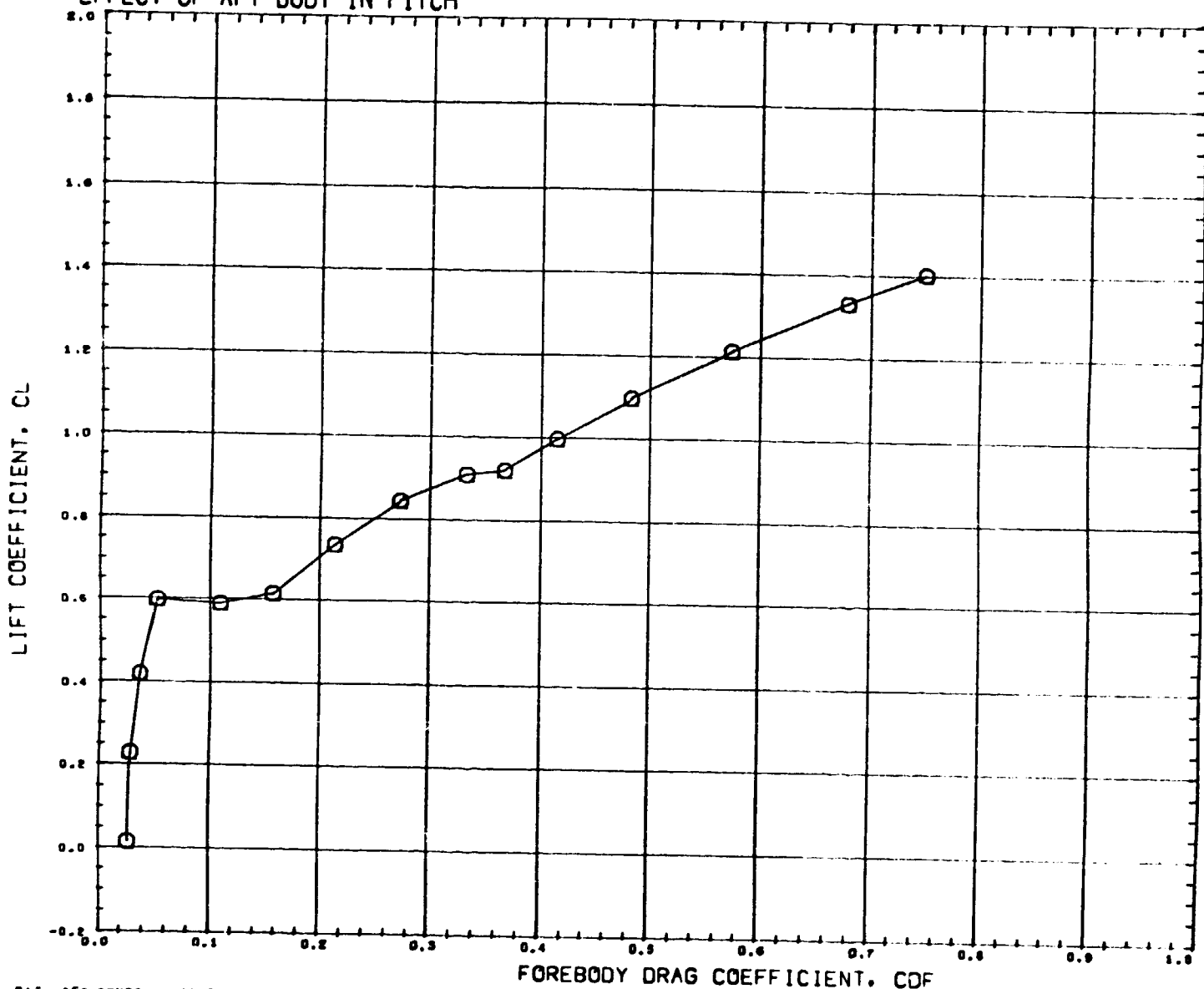
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (002074) 8YMT-1265 BOEING M-32 BOOSTER 86W4H4V3
 (002134) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 88. IN
 LREF 2.2400 IN.
 OREF 14.6000 IN.
 YMRP 31.9400 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0007

MACH 0.526

EFFECT OF AFT BODY IN PITCH



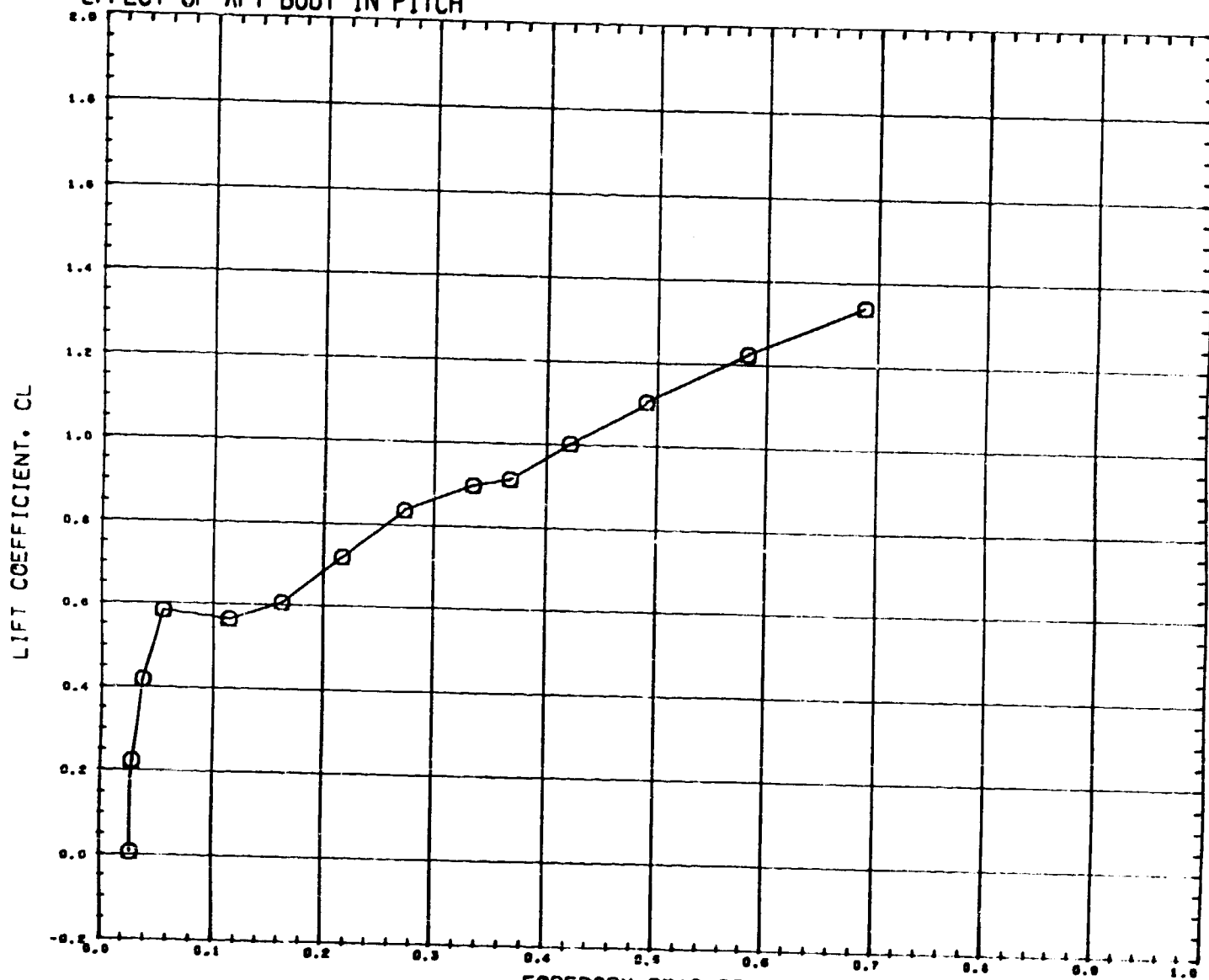
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (CC1074) BTMT-1265 BOEING M-32 BOOSTER 88W4H4V3
 (CC2134) DATA NOT AVAILABLE FOR ALL CONDITIONS

MTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XNRP 11.9800 IN.
 YNRP 0.0000 IN.
 ZNRP 2.4330 IN.
 SCALE 0.0067

MACH 0.948

EFFECT OF AFT BODY IN PITCH



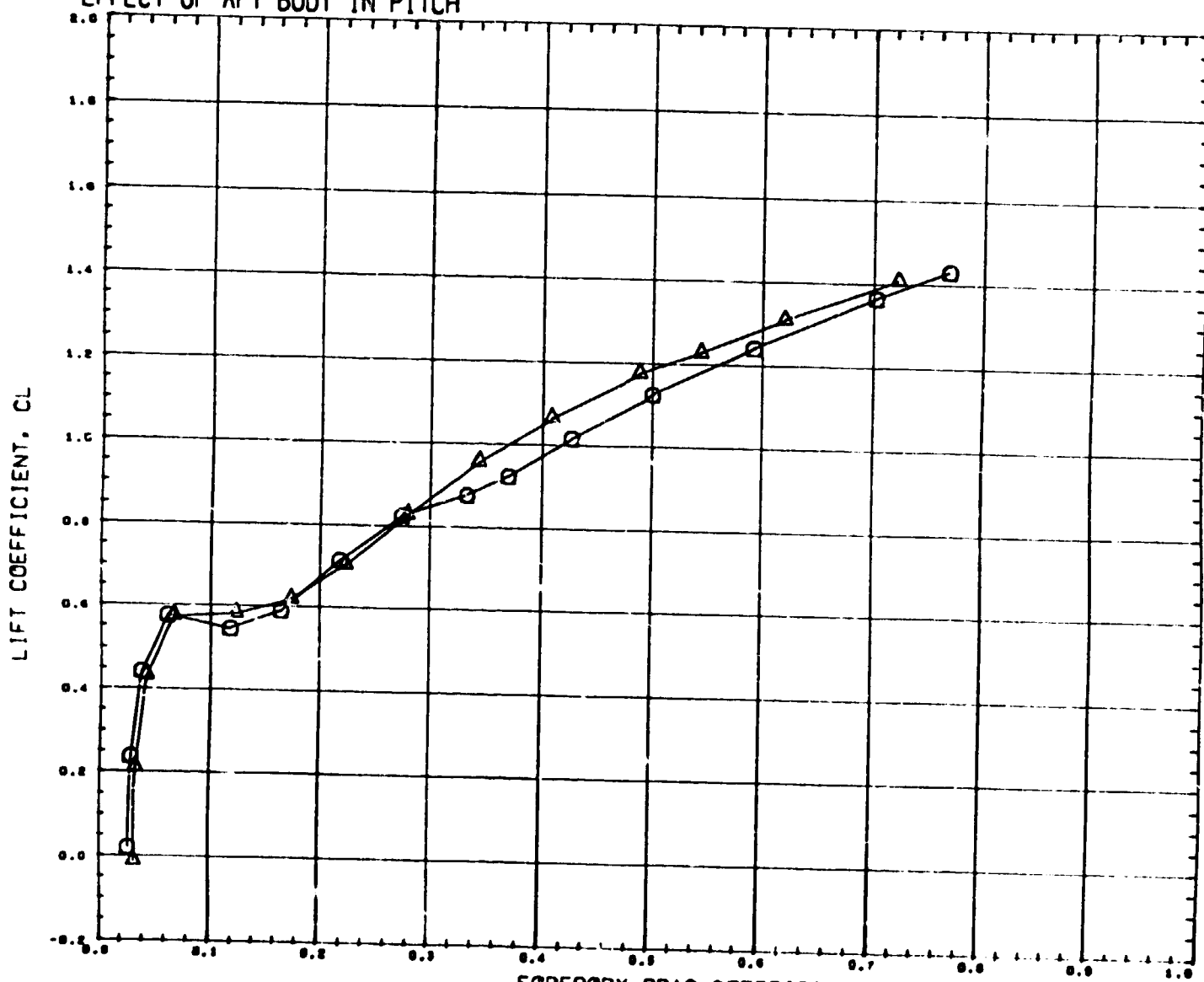
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (DD2074) BTM1-1245 BOEING H-32 BOOSTER B6W4H4V3
 (DD2134) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.975

EFFECT OF AFT BODY IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(002174) 81W3-1265 BOEING N-32 BOOSTER 81W4H4V3
(002174) 81W4-1265 BOEING N-32 BOOSTER 81W4H4V3

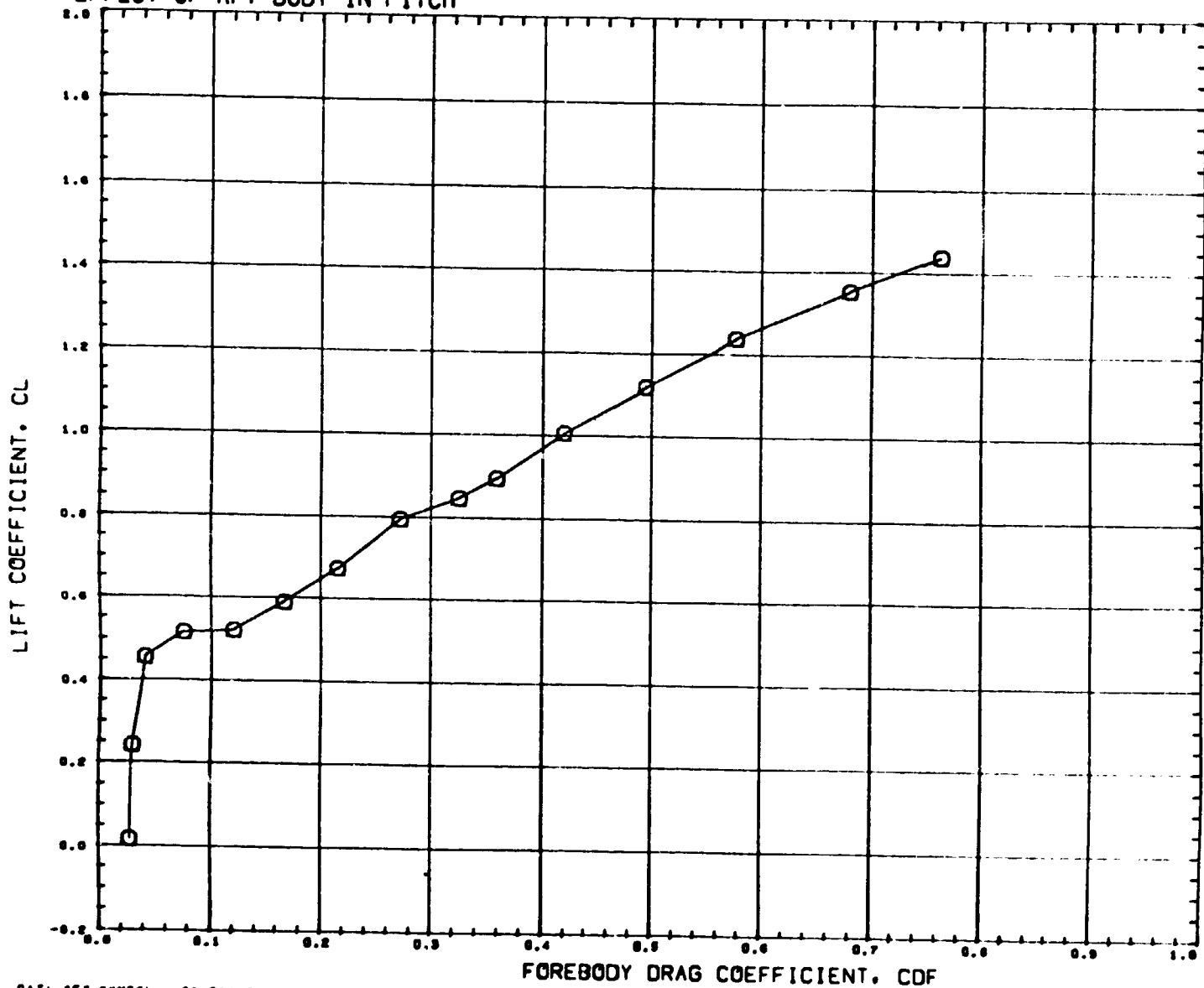
NTAIL ELEVTR SPOILR
0.000 0.000
0.000 0.000

REFERENCE INFORMATION

SREF 31.3600 IN.
LREF 2.2400 IN.
BREF 14.6000 IN.
TREF 11.9800 IN.
YREF 0.0700 IN.
ZREF 2.4330 IN.
SCALE 0.0007

MACH 0.600

EFFECT OF AFT BODY IN PITCH



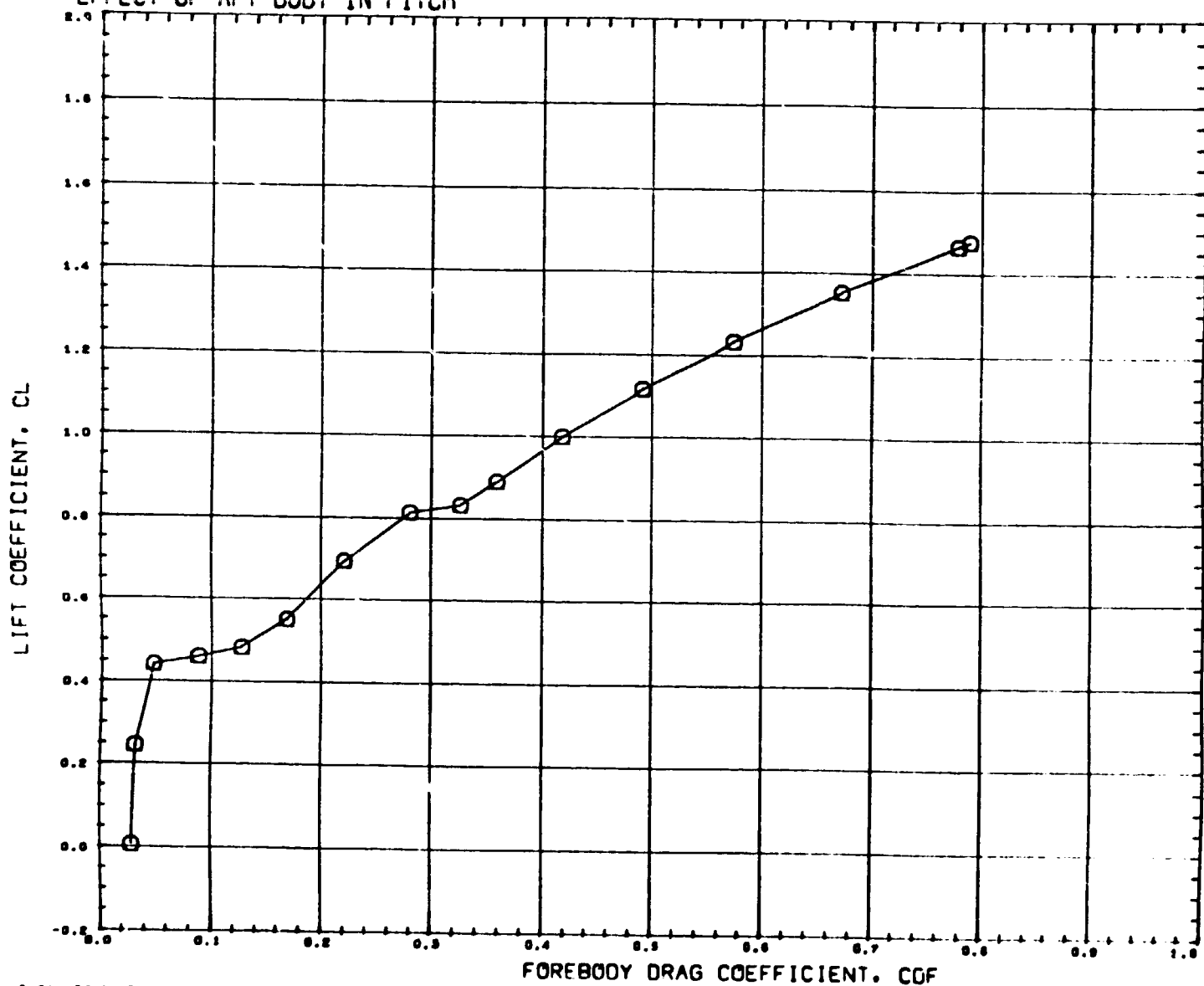
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (002074) BTW-1265 BOEING B-32 BOMBER 88W4H4V3
 (002134) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTB SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 IN.
 LREF 2.2400 IN.
 OREF 14.0000 IN.
 XWRP 11.0000 IN.
 YWRP 0.0000 IN.
 ZWRP 2.4330 IN.
 SCALE 0.0007

MACH 0.690

EFFECT OF AFT BODY IN PITCH



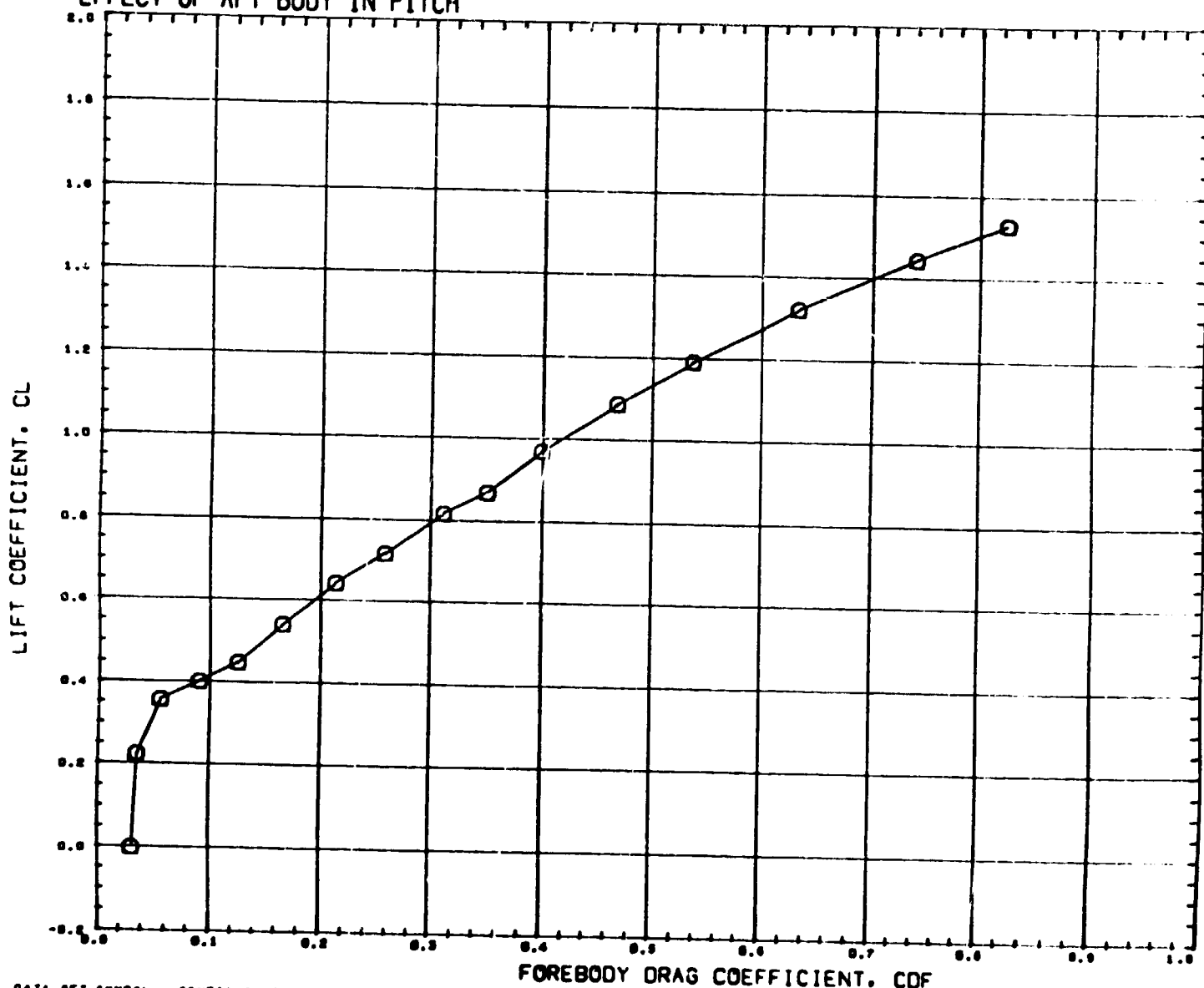
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (002674) 8 B747-100 BOEING N-32 BOOSTER 88W4M4V3
 (002134) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTR SPOILER
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3400 80. IN
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 HREF 11.0000 IN.
 VREF 0.0000 IN.
 ZREF 2.4330 IN.
 SCALE 0.0007

MACH 0.700

EFFECT OF AFT BODY IN PITCH



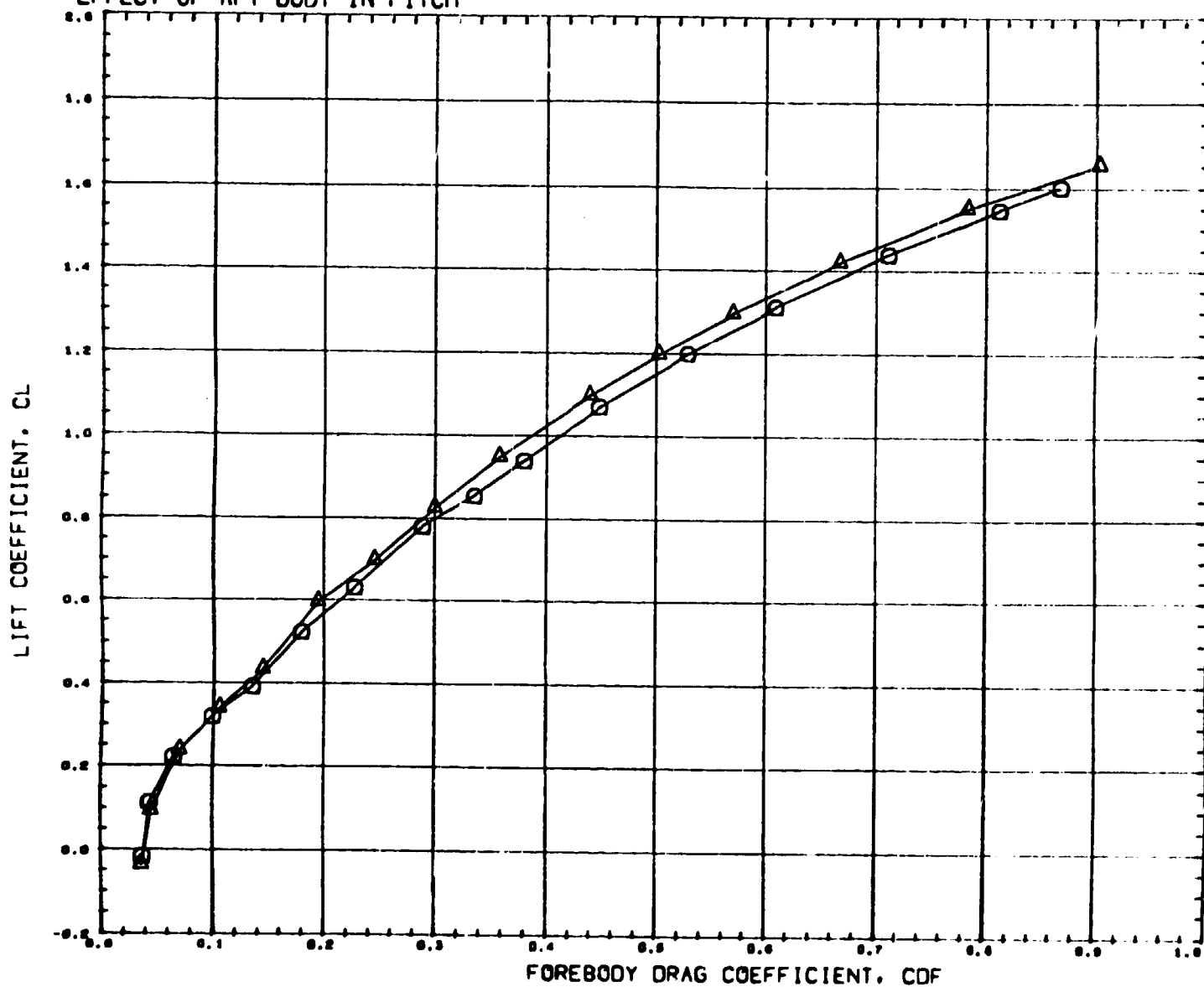
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (002074) B-57D-1265 BOEING H-32 BOOSTER 0014M4V3
 (002134) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SHEP 31.3000 IN.
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 SREF 11.0000 IN.
 YREF 0.0000 IN.
 ZREF 2.4330 IN.
 SCALE 0.0007

MACH 0.750

EFFECT OF AFT BODY IN PITCH



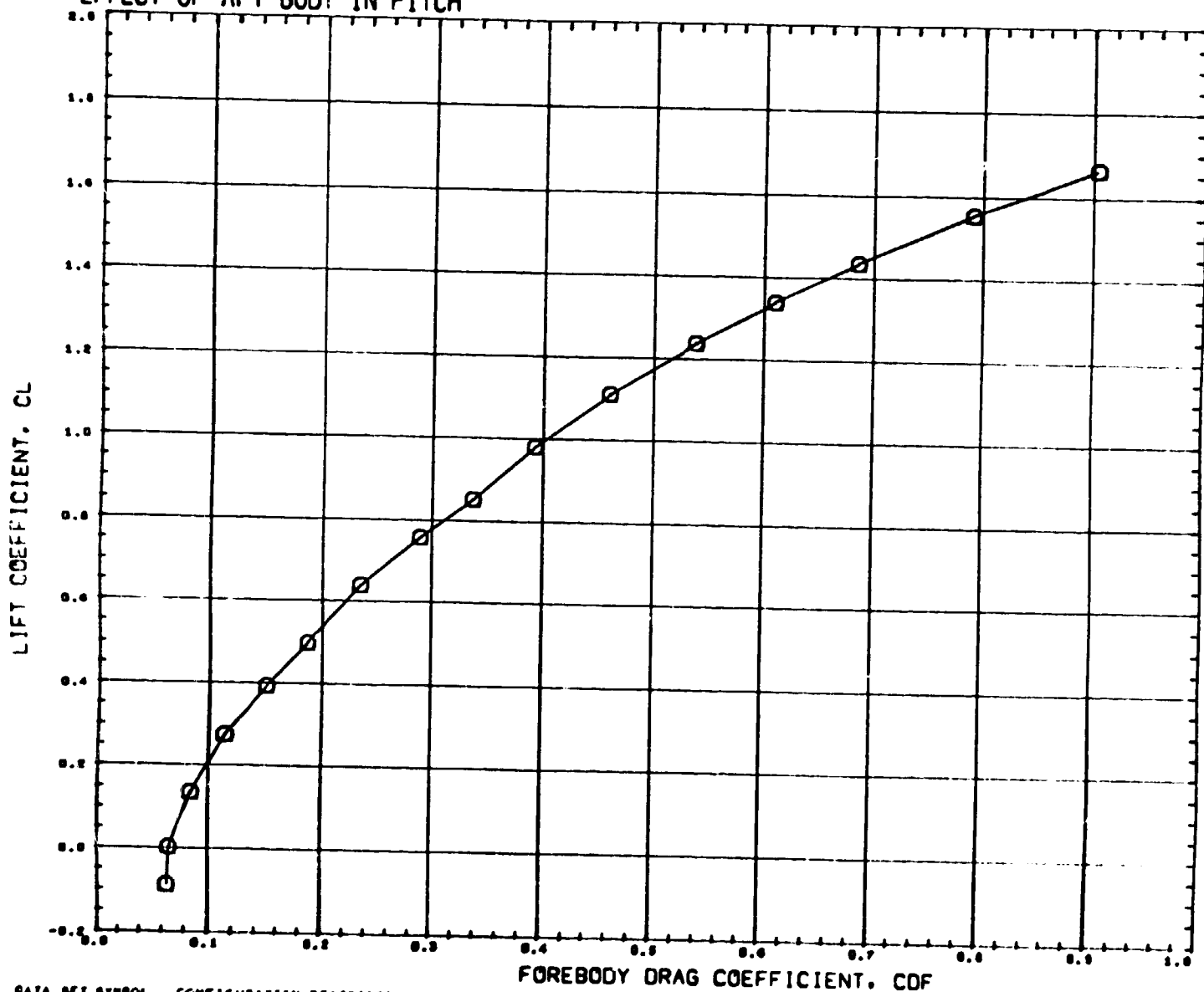
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(002374) $\circ$	B1W1-1265 BOEING N-32 BOOSTER B8W4N4V3
(002134) Δ	B1W1-1265 BOEING N-32 BOOSTER B14M4N4V3

HTAIL	ELEVTR	SPOILER
0.000	0.000	
0.000	0.000	

REFERENCE INFORMATION		
REF	31.3600	80. IN
REF	2.2400	IN.
REF	14.0000	IN.
REF	11.0000	IN.
REF	0.0000	IN.
REF	2.4330	IN.
SCALE	0.0007	

MACH 0.000

EFFECT OF AFT BODY IN PITCH



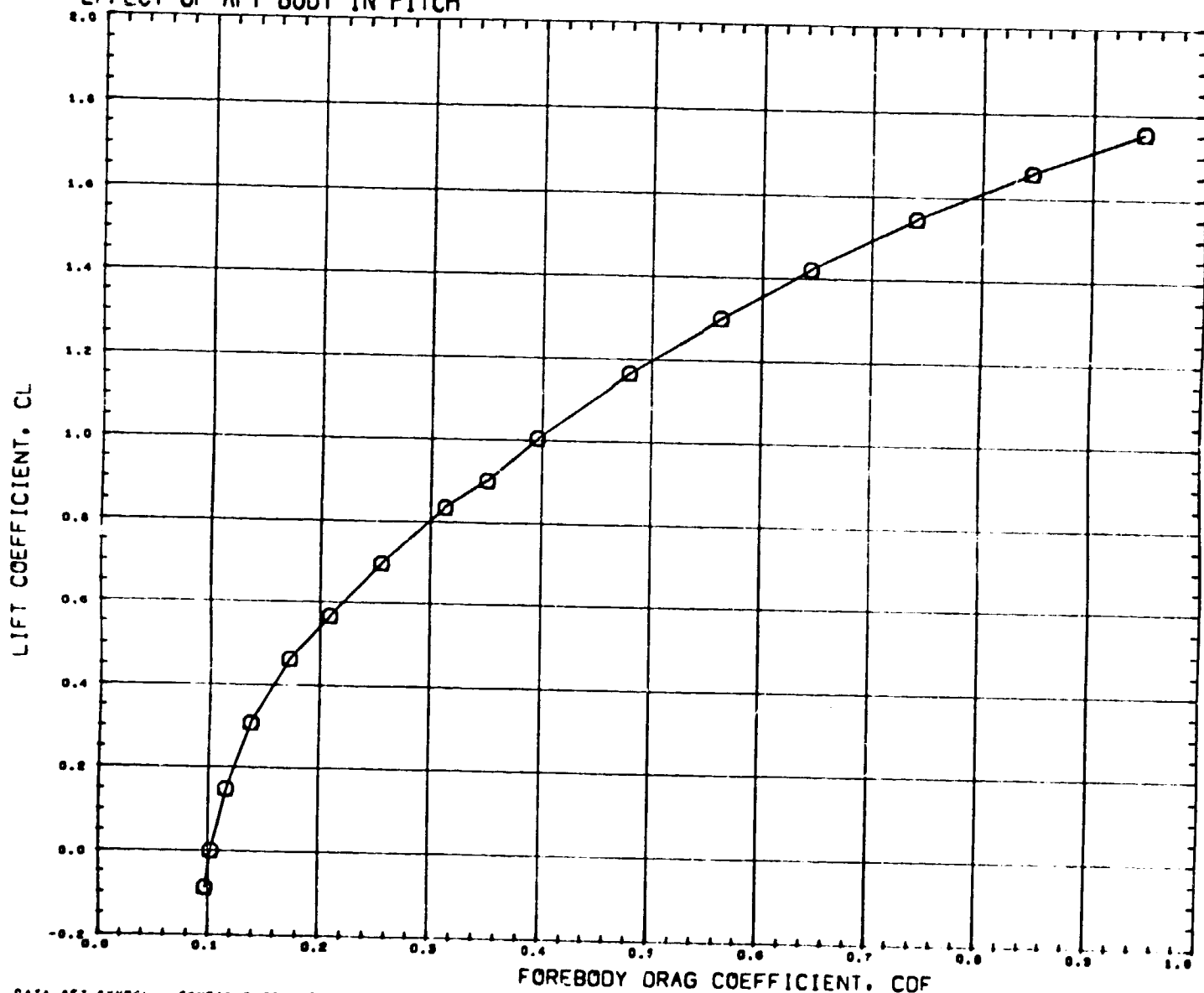
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (000074) STMT-1245 BOEING B-52 BOOSTER BOW4M4V3
 (000134) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3000 80. IN
 LREF 2.2400 IN.
 DREF 14.0000 IN.
 XMRP 11.0000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4310 IN.
 SCALE 0.0007

MACH 0.849

EFFECT OF AFT BODY IN PITCH



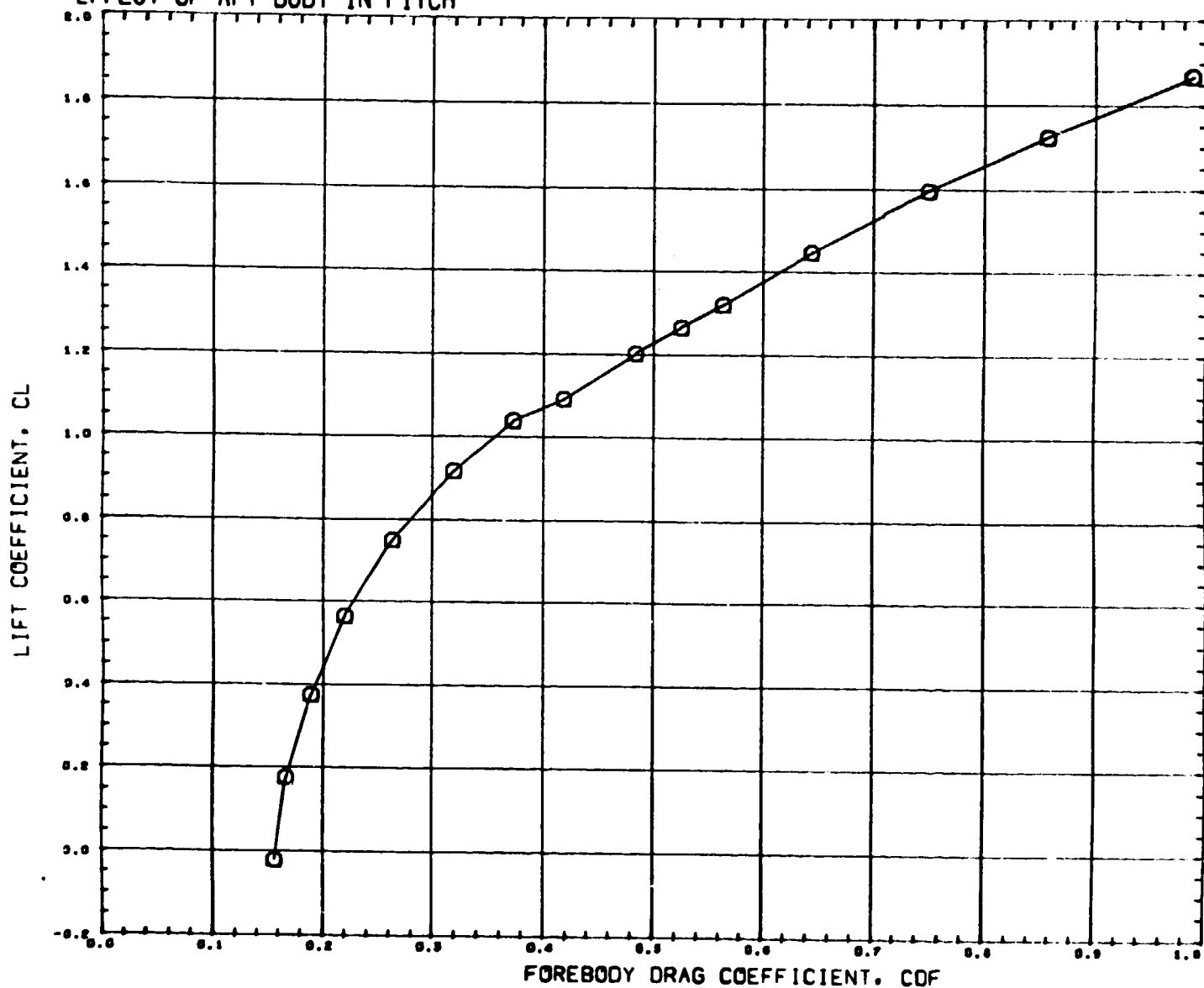
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (DCR074) B-52H-1265 BOEING B-52H BOOSTER 88W4H4V3
 (DCR034) DATA NOT AVAILABLE FOR ALL CONDITIONS

MTAIL ELEVTR SPOILER
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3400 IN.
 LREF 2.2400 IN.
 OREF 14.0000 IN.
 XNRP 11.0000 IN.
 YNRP 0.0000 IN.
 ZNRP 8.4330 IN.
 SCALE 0.0007

MACH 0.000

EFFECT OF AFT BODY IN PITCH



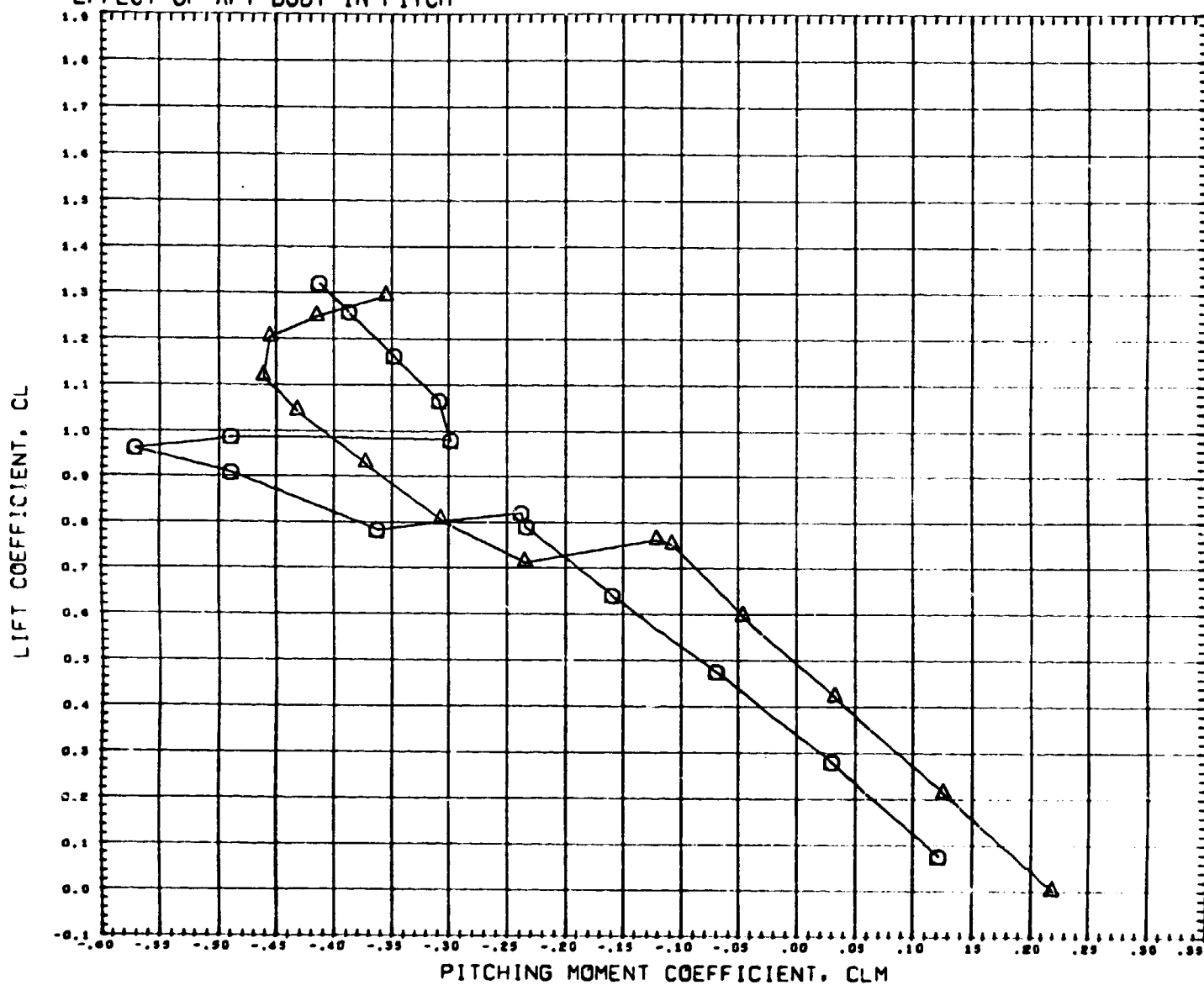
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (002074) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (002194) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3400 IN.
 LREF 2.2400 IN.
 OREF 14.0000 IN.
 XREF 11.0000 IN.
 YREF 0.0000 IN.
 ZREF 2.4338 IN.
 SCALE 0.0007

MACH 0.990

EFFECT OF AFT BODY IN PITCH



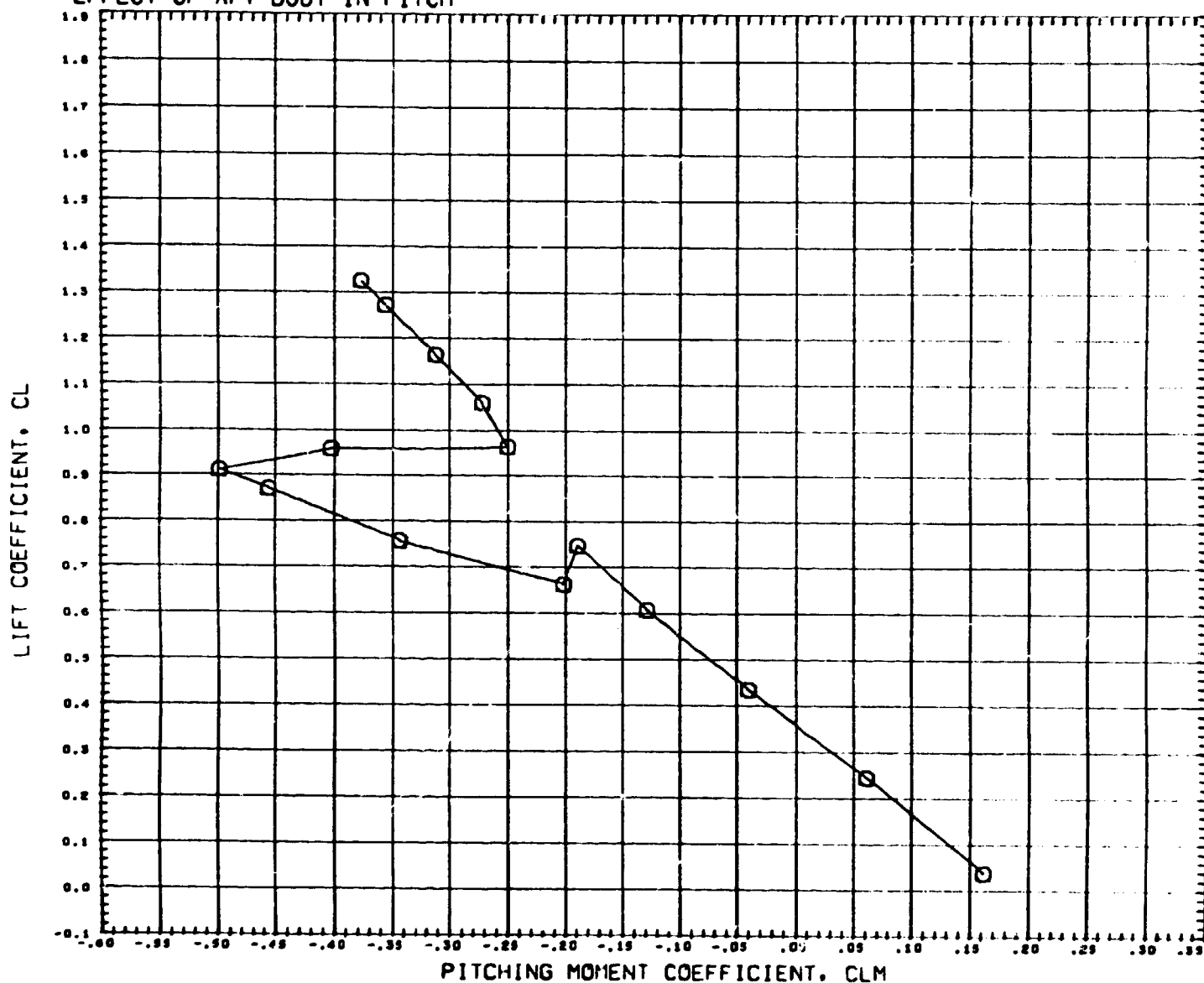
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(RC074)	BTWT-1265 BOEING M-32 BOOSTER 80W4H4V3
(RC2134)	BTWT-1265 BOEING M-32 BOOSTER 814W4H4V3

NTAIL	ELEVTR	SPOILR
0.000	0.000	
0.000	0.000	

REFERENCE INFORMATION		
SREF	31.3000	80. IN
LREF	8.2400	IN.
BREF	14.8000	IN.
THRP	11.8000	IN.
THRP	0.0000	IN.
ZHRP	2.4330	IN.
SCALE	0.0067	

MACH 0.912

EFFECT OF AFT BODY IN PITCH



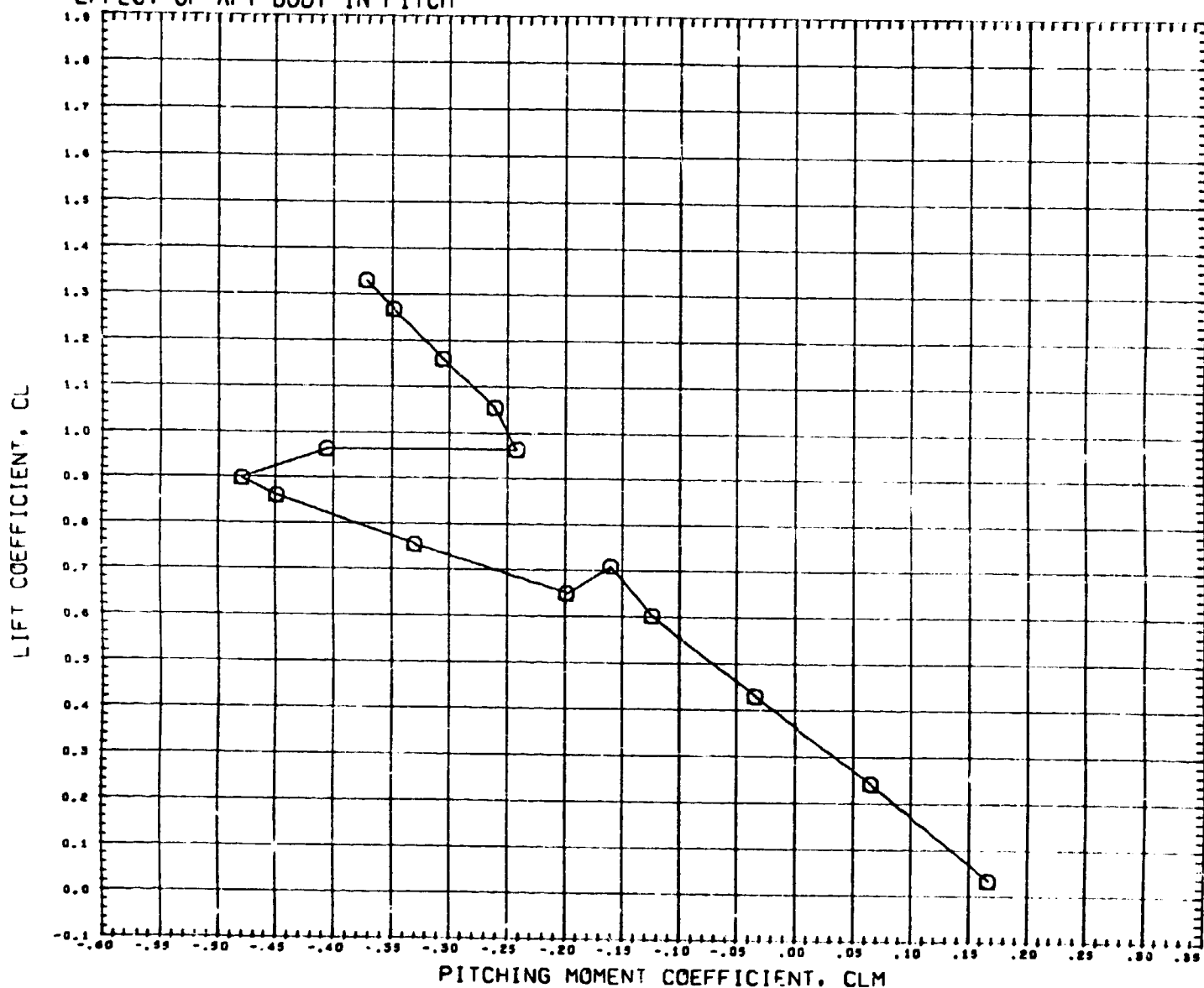
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RG2074) BTMT-1265 BOEING H-32 BOOSTER 38W4H4V3
 (RG2134) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 IN.
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.451

EFFECT OF AFT BODY IN PITCH



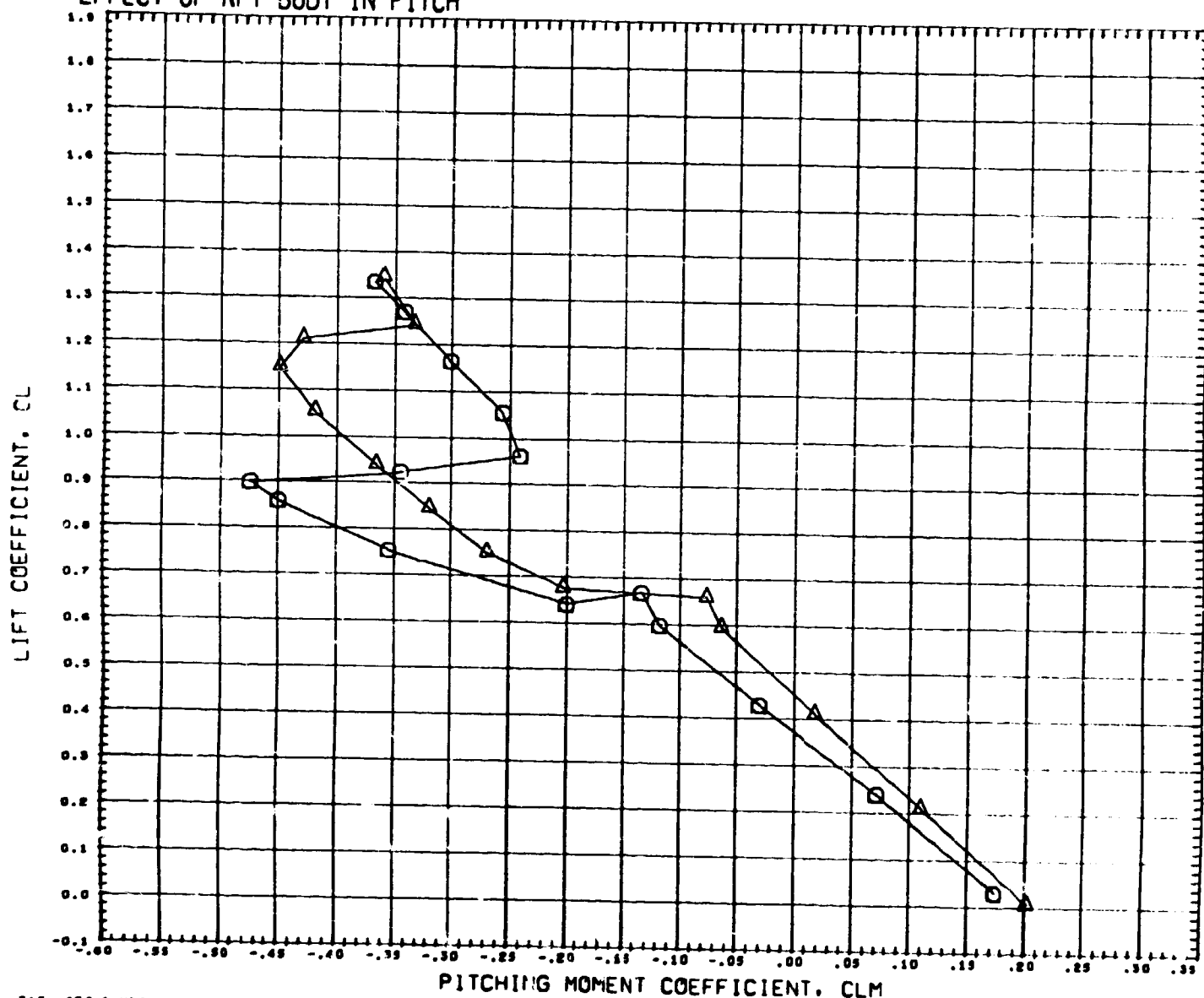
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC074) 8 BTWT-1265 BOEING M-32 BOOSTER 88W4H4V3
 (RC2134) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 50. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

RACM 0.474

EFFECT OF AFT BODY IN PITCH



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD2074) 814W4N4V3
(RD2134) 80W4N4V3

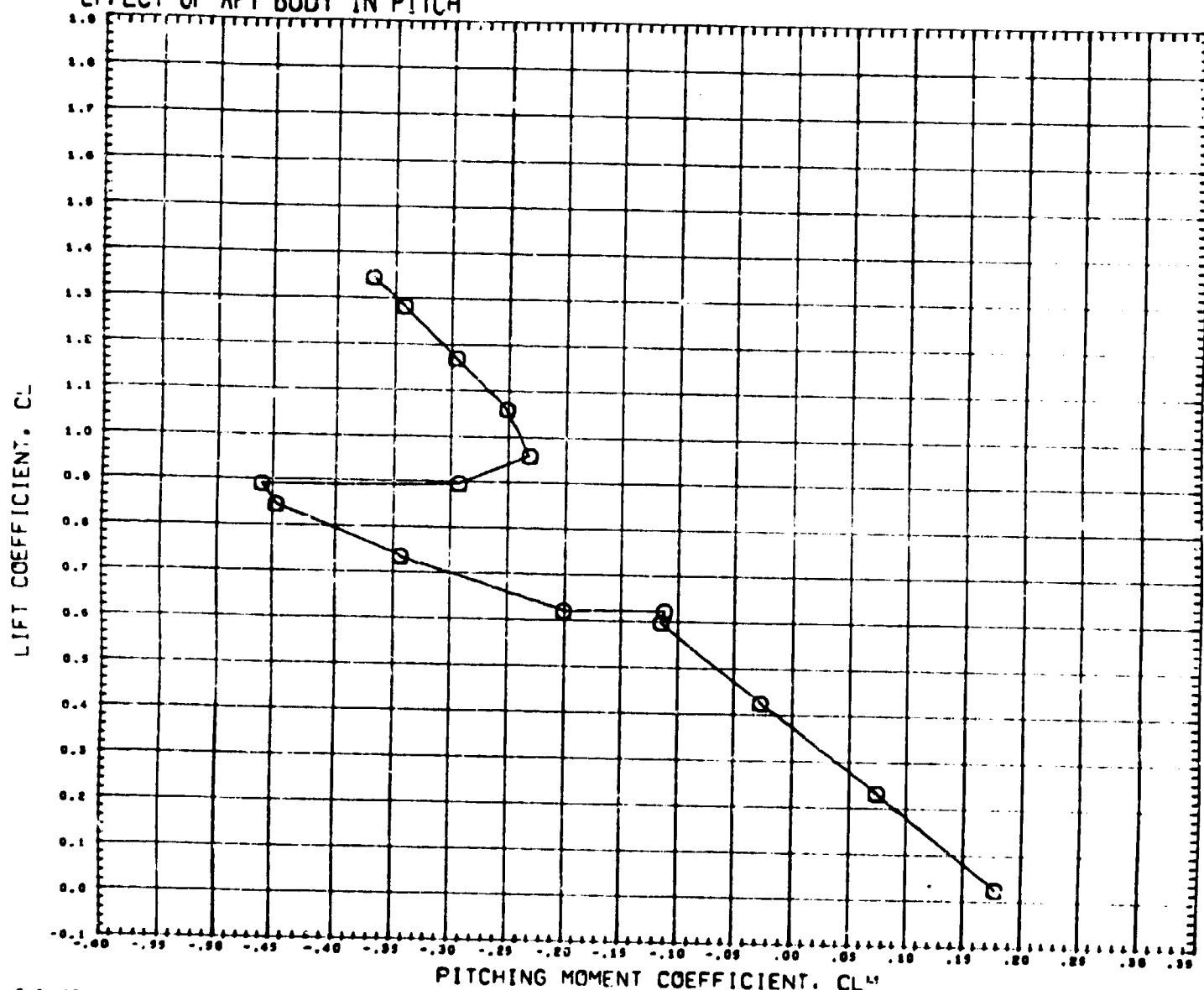
NTAIL ELEVTR SPOILR
0.000 0.000
0.100 0.000

REFERENCE INFORMATION

SREF 31.3600 sq. in.
LREF 2.2400 in.
BREF 14.6000 in.
YMRP 11.9800 in.
YMRP 0.0000 in.
ZMRP 2.4330 in.
SCALE 0.0067

MACH 6.500

EFFECT OF AFT BODY IN PITCH



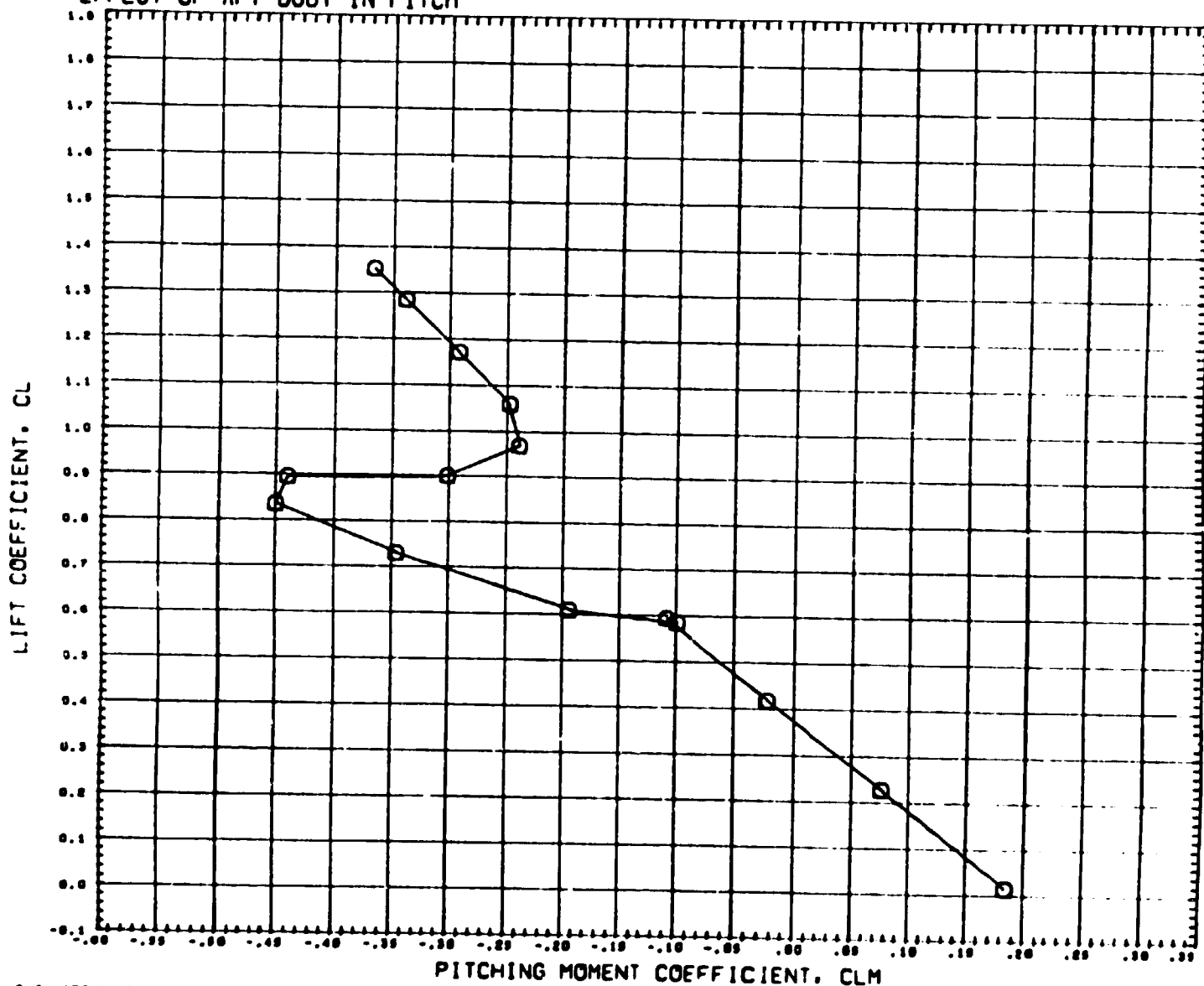
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02074) BTM-1265 BOEING N-32 BOOSTER 84W44V3
 (R02134) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTR S-DLR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.9000 IN.
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XREF 11.0000 IN.
 YREF 0.0000 IN.
 ZREF 2.4330 IN.
 SCALE 0.0007

RACH 0.920

EFFECT OF AFT BODY IN PITCH



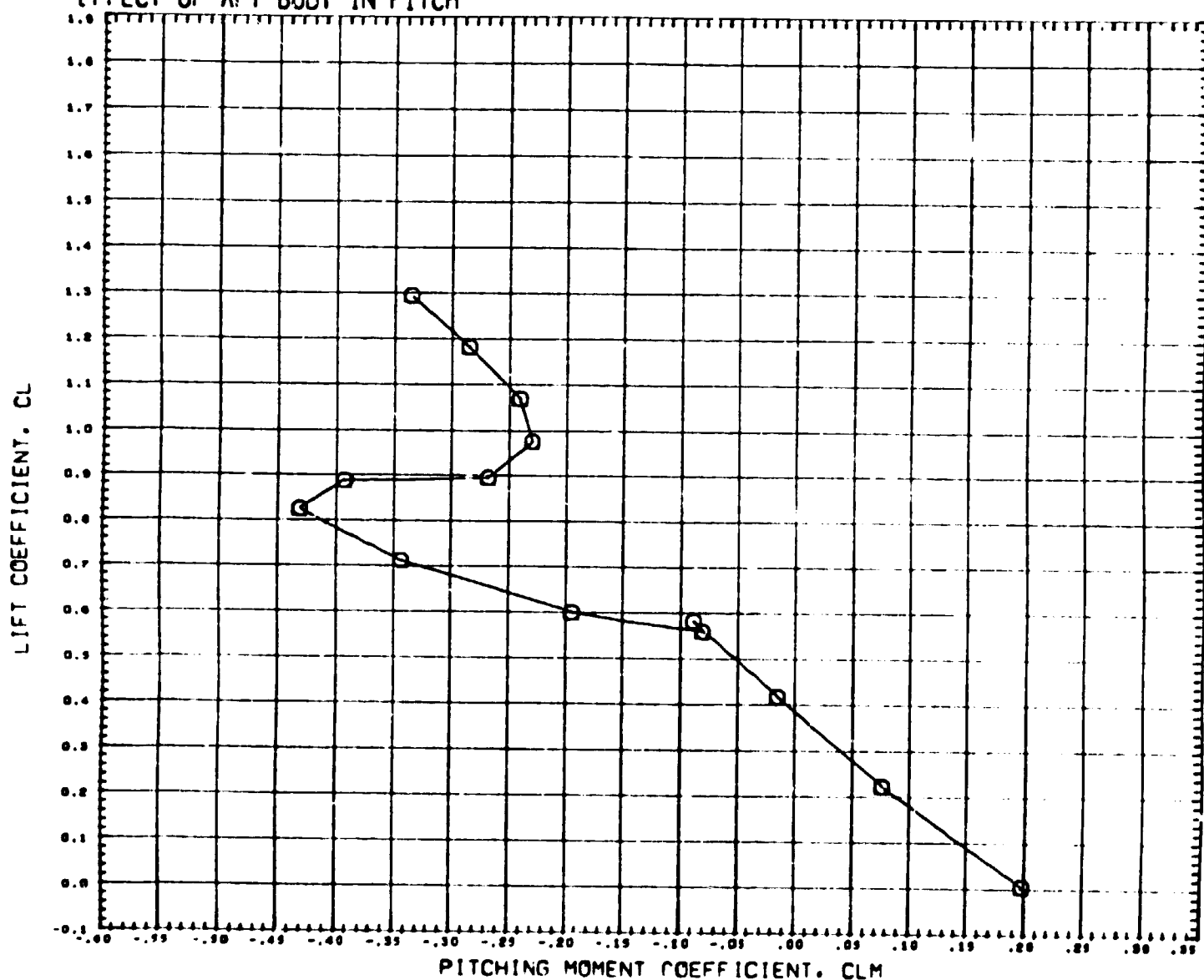
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (805374) 8 BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (805134) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL CLEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3000 80. IN
 LREF 2.2400 IN.
 SREF 14.0000 IN.
 WREF 11.0000 IN.
 TREF 0.0000 IN.
 WREF 2.4330 IN.
 SCALE 0.0007

MACH 0.140

EFFECT OF AFT BODY IN PITCH



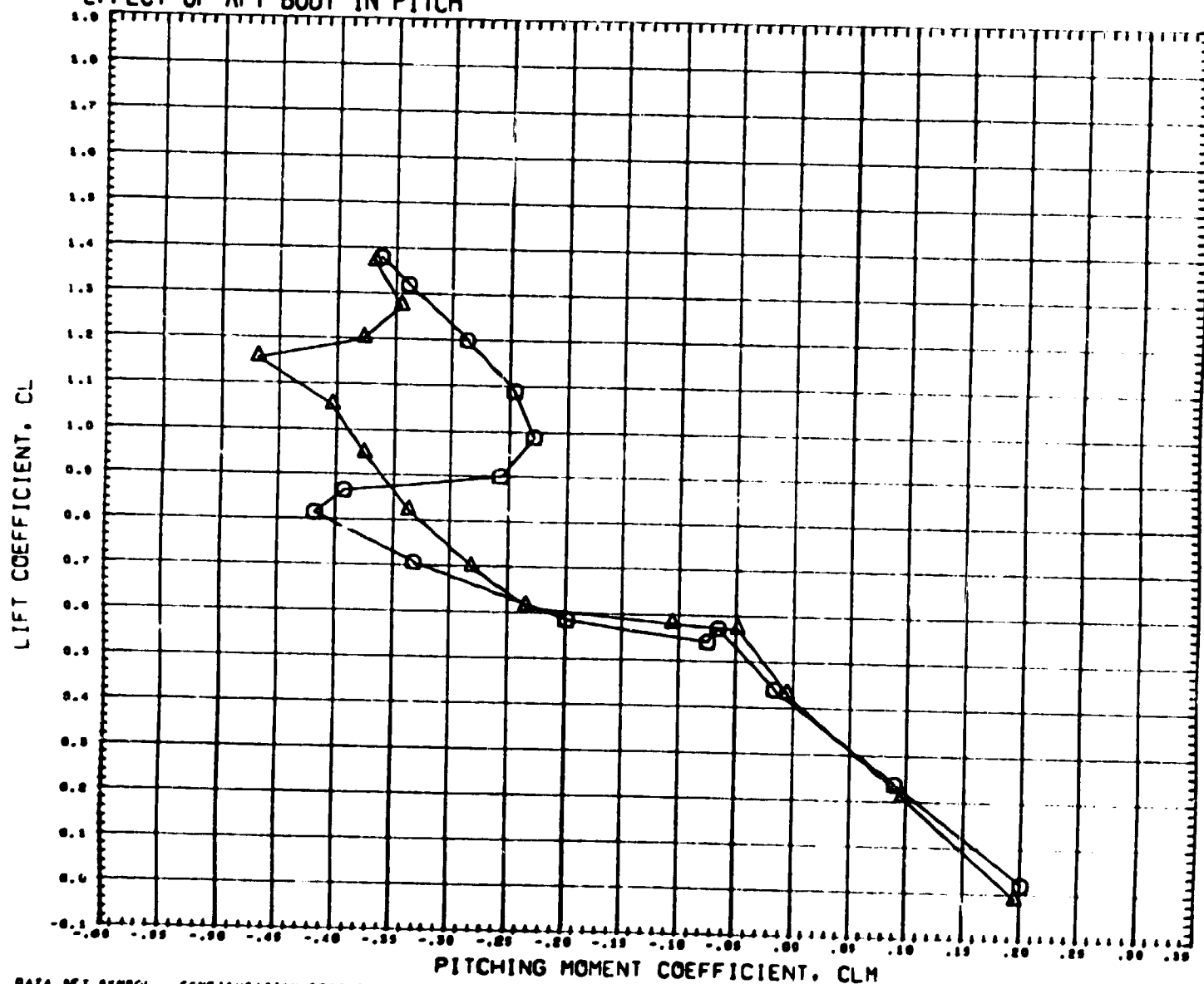
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02074) 8 STWT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (R02134) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3603 80. IN
 LREF 8.8403 IN.
 OREF 14.0003 IN.
 XREF 11.0003 IN.
 YREF 0.0003 IN.
 ZREF 8.4330 IN.
 SCALE 0.0007

MACH 0.975

EFFECT OF AFT BODY IN PITCH



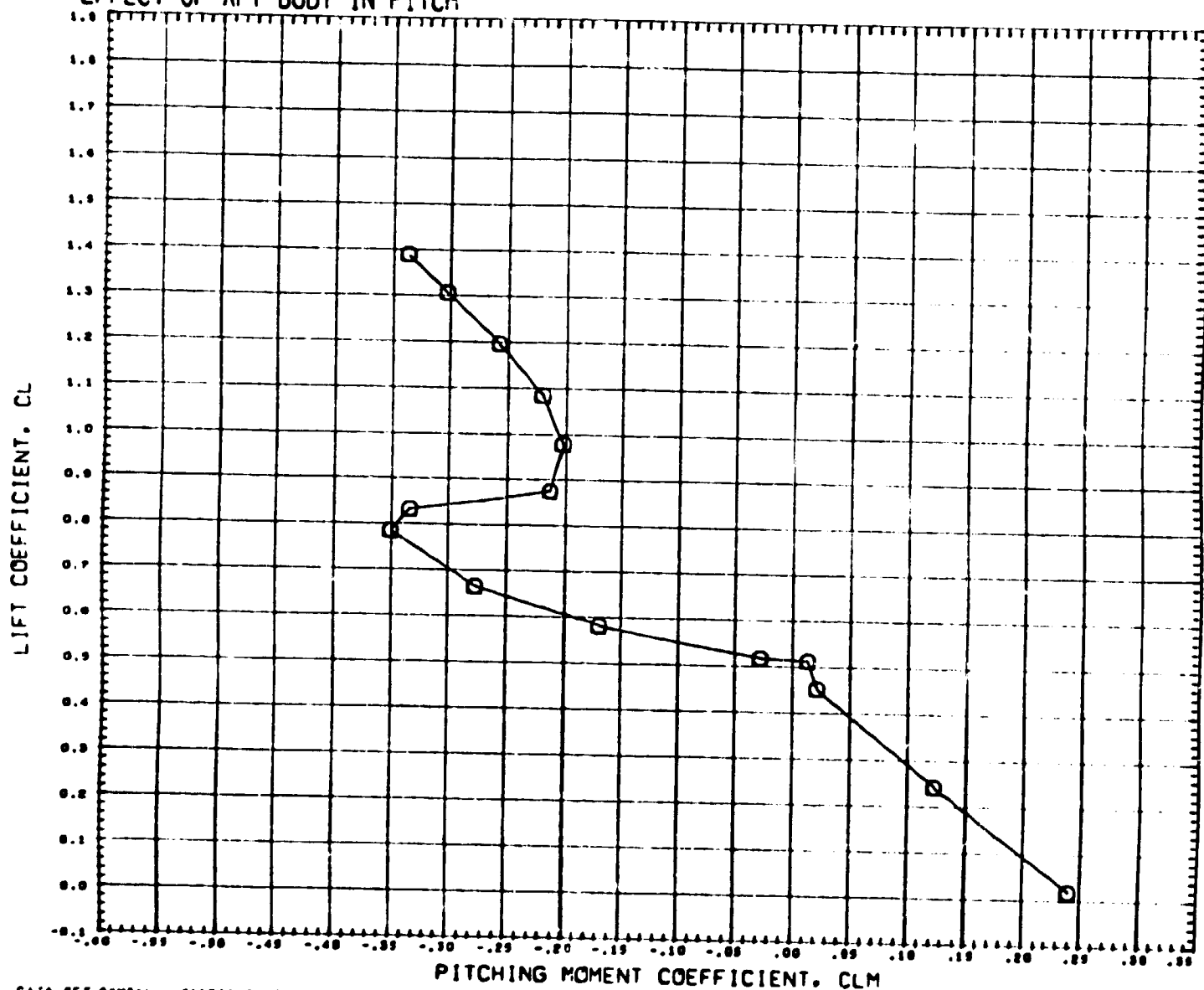
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(R02074)	BTMT-1265 BOEING N-32 BOOSTER 80M4H4V3
(R02134)	BTMT-1265 BOEING N-32 BOOSTER 814M4H4V3

NTAIL	ELEVTR	SPOILR
0.000	0.000	0.000
0.000	0.000	0.000

MACH 0.000

REFERENCE INFORMATION		
DRP	31.3000	00. IN
LREP	2.2400	14. IN
SRP	14.0000	14. IN
TRP	11.0000	14. IN
THP	0.0000	14. IN
THP	2.4350	14. IN
SCALE	0.0007	

EFFECT OF AFT BODY IN PITCH



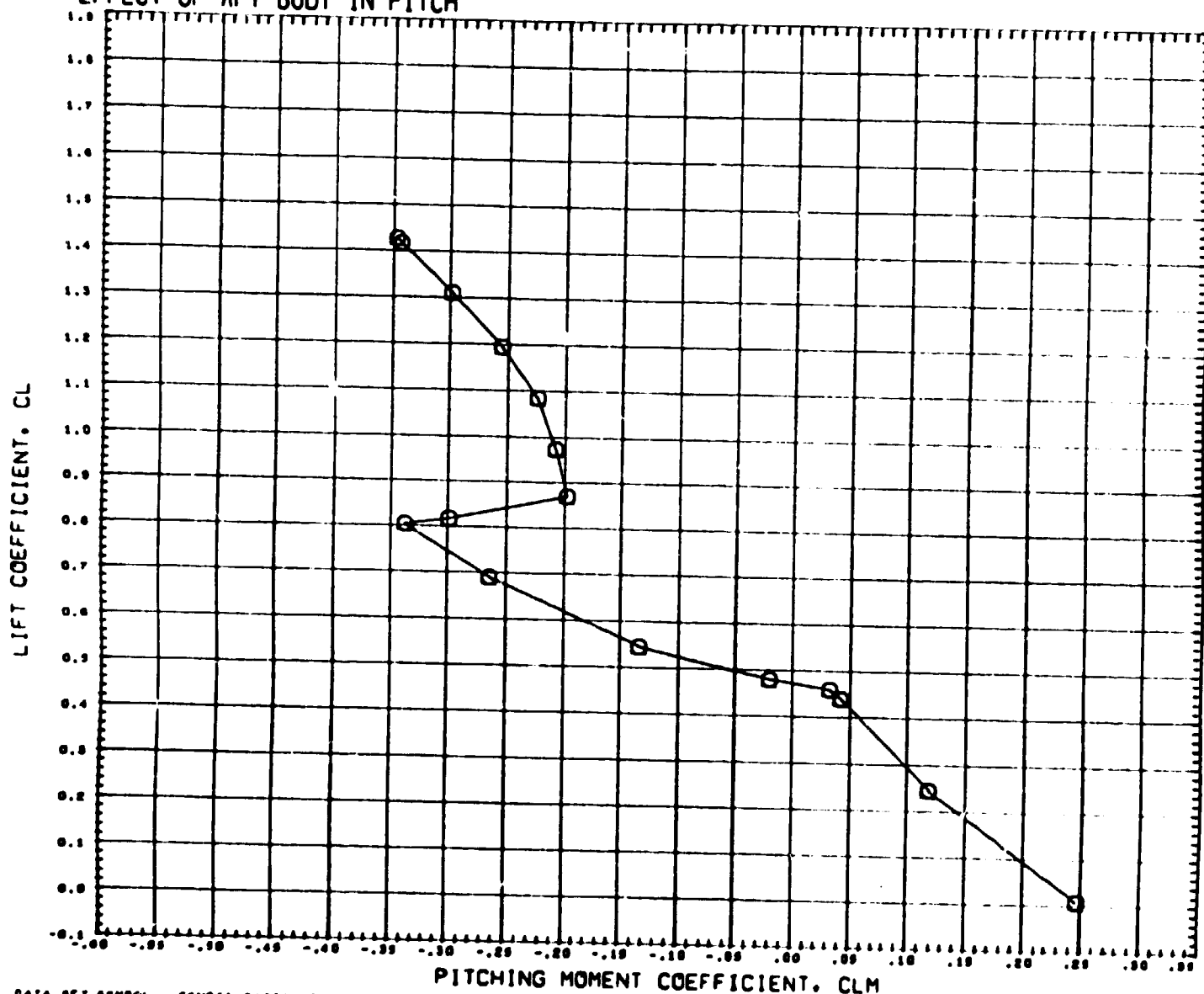
DATA REF SYMBOL: CONFIGURATION DESCRIPTION
 (BL2074) B-57D-1265 BOEING M-32 BOOSTER 00M4H4V3
 (BL2134) DATA NOT AVAILABLE FOR ALL CONDITIONS

MACH ELEVATION SPOILER
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3400 50. IN
 LREF 8.2400 IN.
 BREF 14.0000 IN.
 YMAP 11.0000 IN.
 ZMAP 0.0000 IN.
 ZMAP 8.4330 IN.
 SCALE 0.0007

MACH 0.050

EFFECT OF AFT BODY IN PITCH



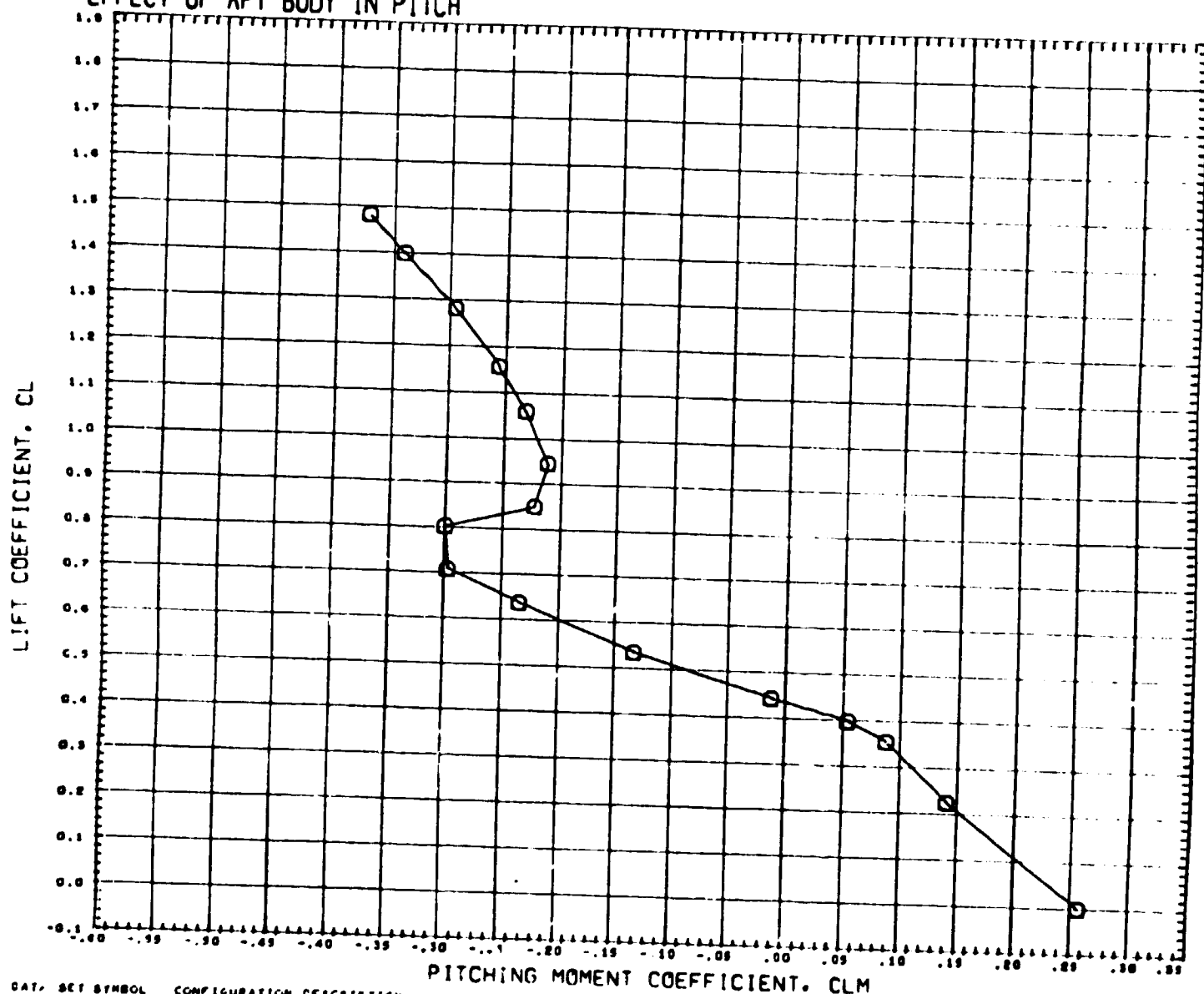
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (1002074) BMT-1205 BOEING B-52 BOOSTER BSM4N4V3
 (1002134) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3000 80. IN
 LREF 2.2400 IN.
 SREF 14.0000 IN.
 XMRP 11.9000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0007

MACH 0.700

EFFECT OF AFT BODY IN PITCH



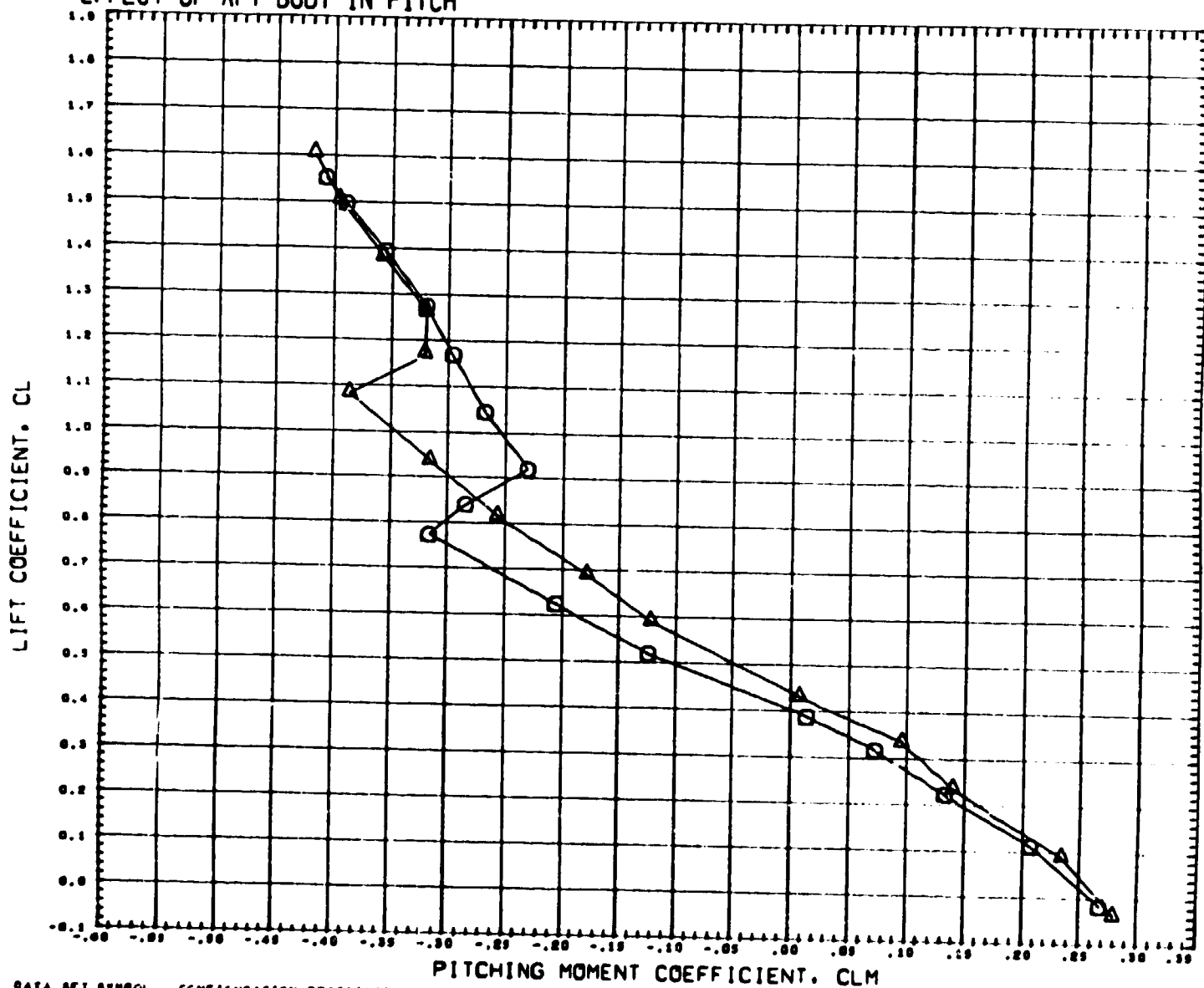
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R00074) R BTWT-1265 BOEING N-32 BOOSTER 88W4N4V3
 (R02134) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTR SPOILER
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3400 60. IN
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XREF 11.0000 IN.
 YREF 0.0000 IN.
 ZREF 1.4330 IN.
 SCALE 0.0007

RACH 0.750

EFFECT OF AFT BODY IN PITCH



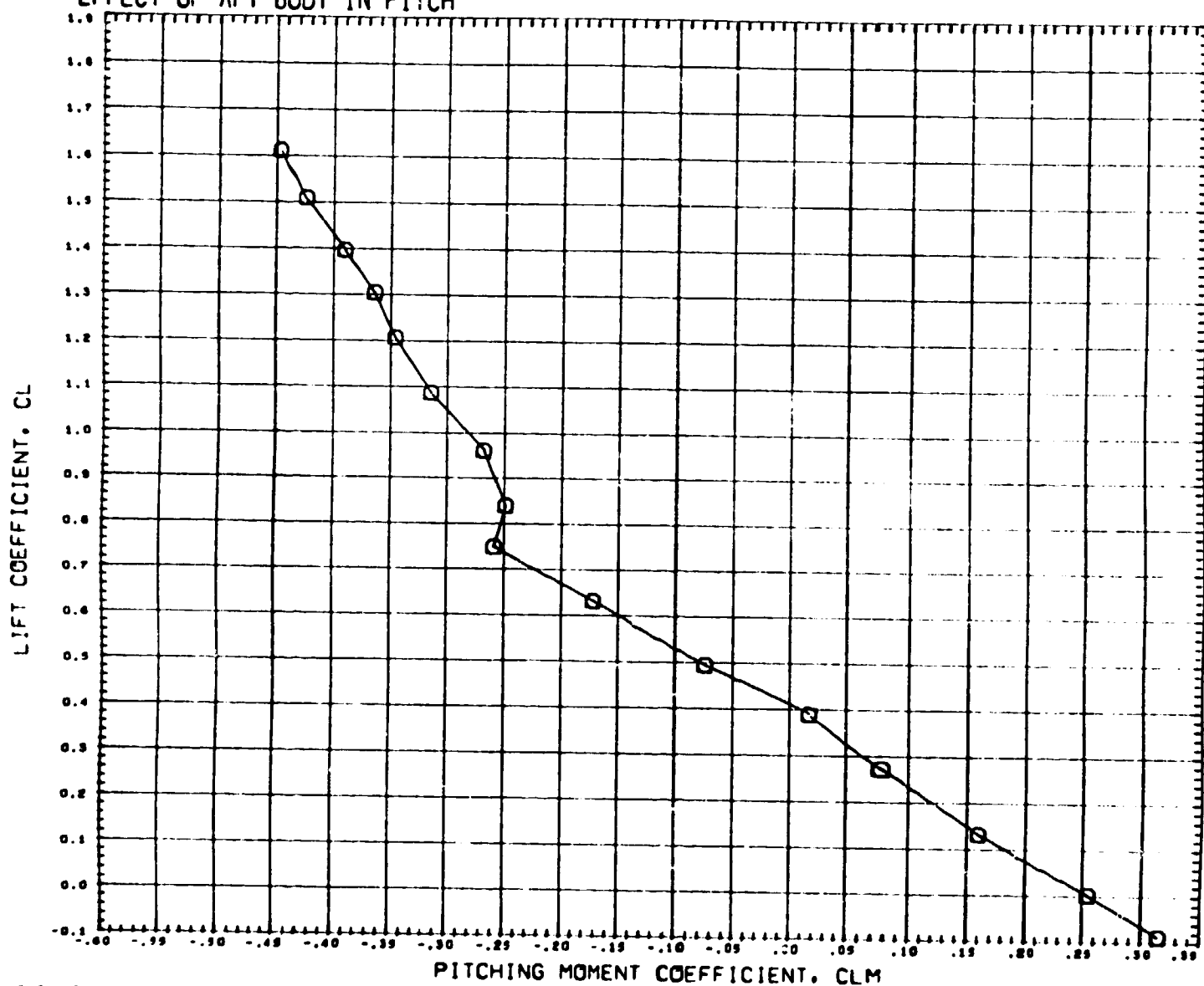
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02074) Q STMT-1205 BOEING N-32 BOOSTER 80M4M4V3
 (R02134) Q STMT-1205 BOEING N-32 BOOSTER 814M4M4V3

MTAIL ELEVTA SPOILER
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 88. IN
 LREF 2.2400 IN.
 OREF 14.0000 IN.
 XMRP 11.0000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0007

RACH 0.000

EFFECT OF AFT BODY IN PITCH



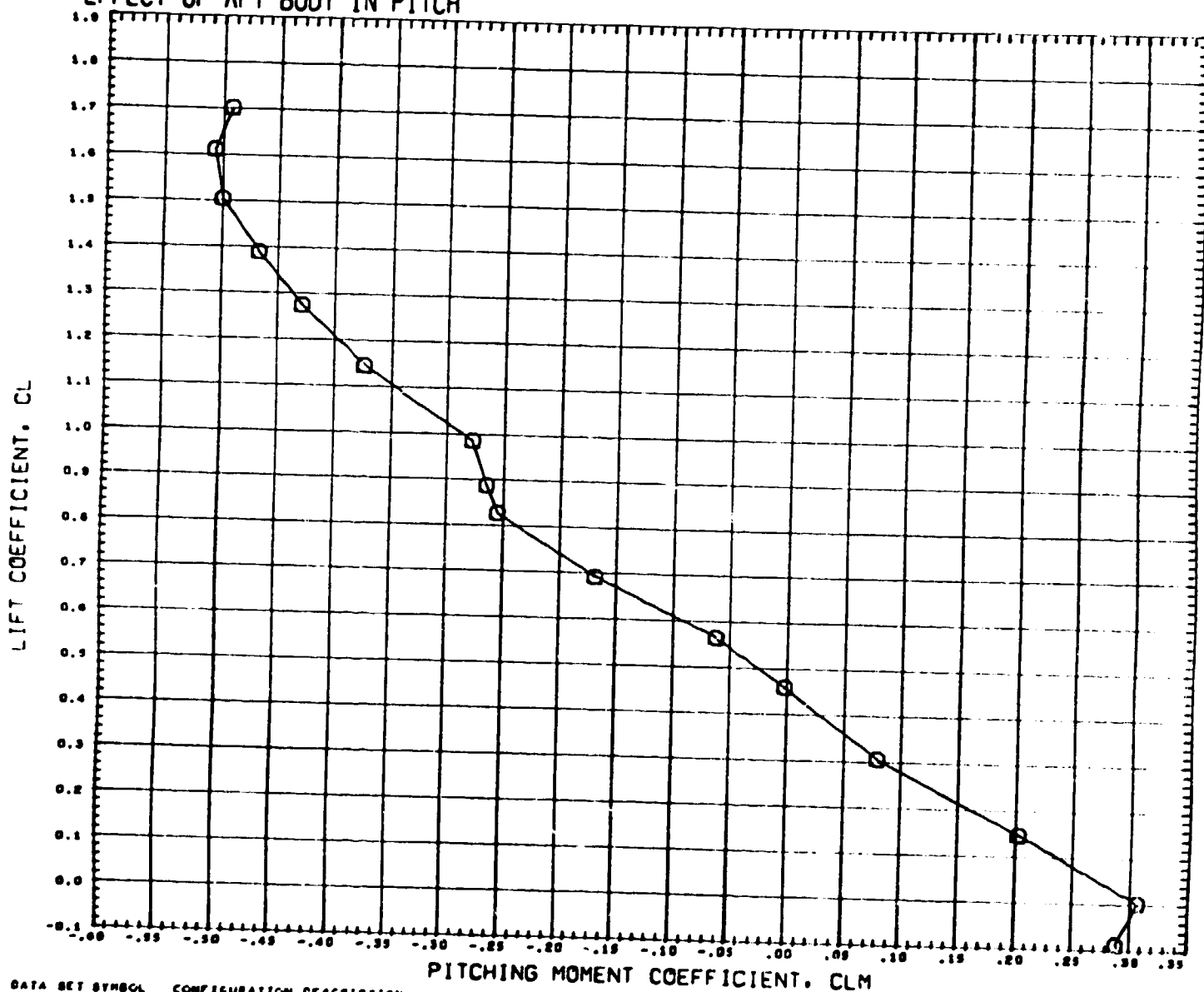
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02374) Q BTMT-1269 BOEING N-32 BOOSTER 80W4M4V3
 (R02134) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.9000 80. IN
 LREF 2.2400 IN.
 BREF 10.0000 IN.
 XREF 11.9000 IN.
 YREF 0.0000 IN.
 ZREF 2.4330 IN.
 SCALE 0.0007

WACH 0.040

EFFECT OF AFT BODY IN PITCH



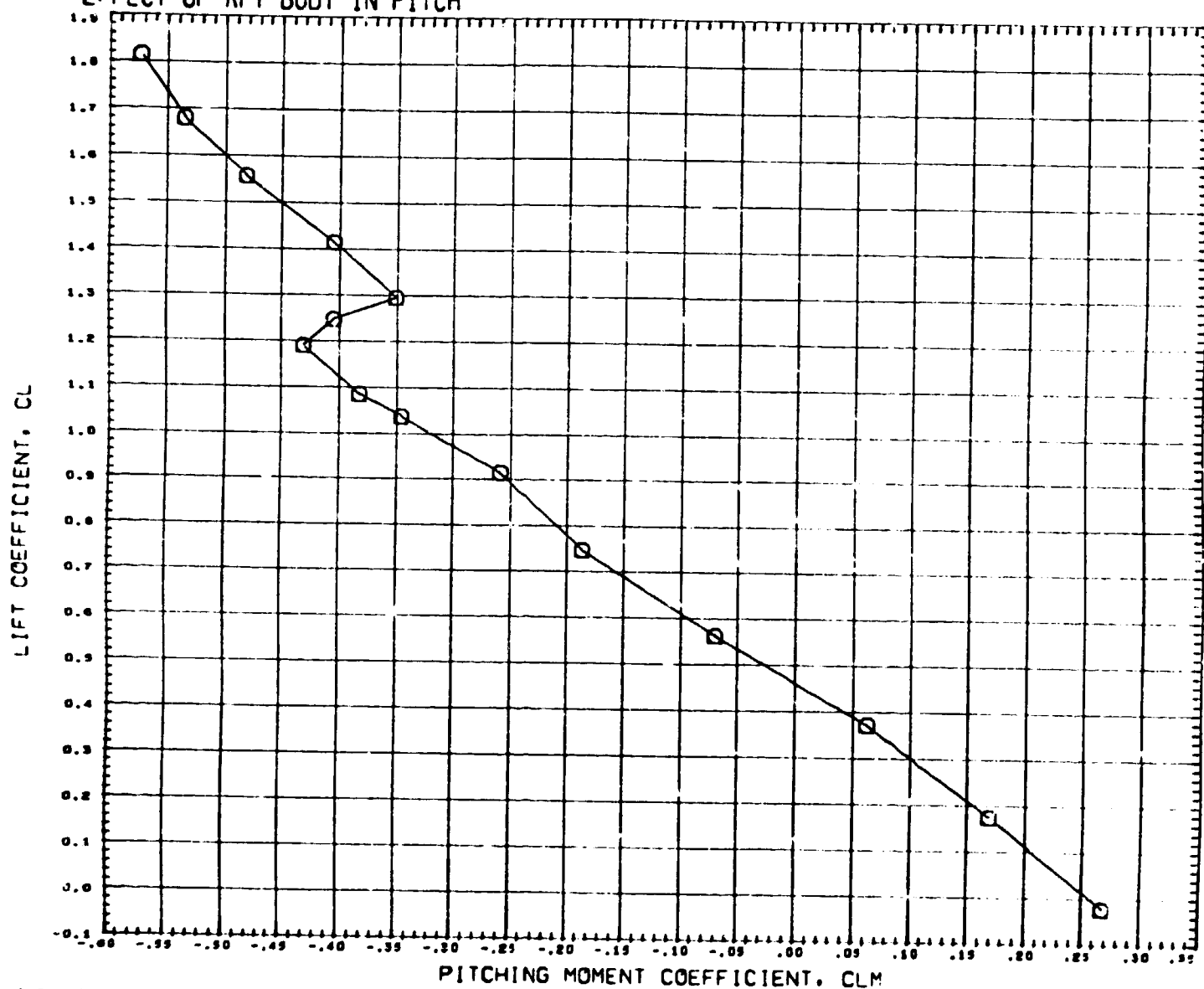
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (802074) Q BTW-1269 BOEING N-32 BOOSTER 80M4H4V3
 (802134) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 51.3000 80. IN
 LREF 2.2400 IN.
 QREF 14.0000 IN.
 XREF 11.0000 IN.
 YREF 0.0000 IN.
 ZREF 2.4330 IN.
 SCALE 0.0007

MACH 0.890

EFFECT OF AFT BODY IN PITCH



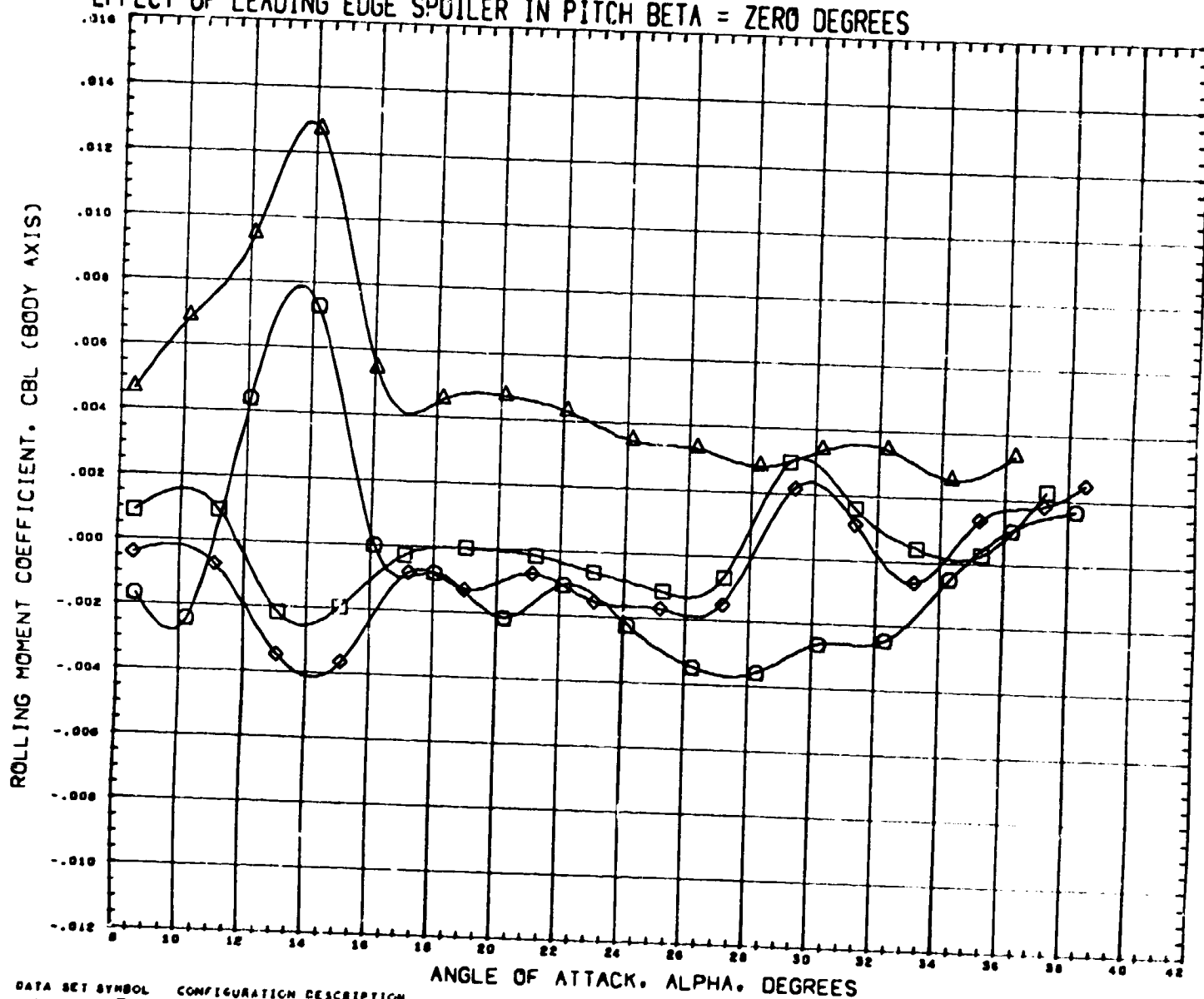
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02174) BTMT-1265 BOEING M-32 BOOSTER 88W4H4V3
 (R02134) DATA NOT AVAILABLE FOR ALL CONDITIONS

HTAIL ELEVATOR SPOILER
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 IN.
 LREF 2.2400 IN.
 OREF 14.0000 IN.
 XMR 11.0000 IN.
 YMR 0.0000 IN.
 ZMR 2.4320 IN.
 SCALE 0.0007

MACH 0.950

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(V02173)	BTWT-1265	BOEING N-32 BOOSTER	88W4H4V3
(V02173)	BTWT-1265	BOEING N-32 BOOSTER	88W4H4V3
(V02103)	BTWT-1265	BOEING N-32 BOOSTER	88W4H4V3S2
(V02103)	BTWT-1265	BOEING N-32 BOOSTER	88W4H4V3S2

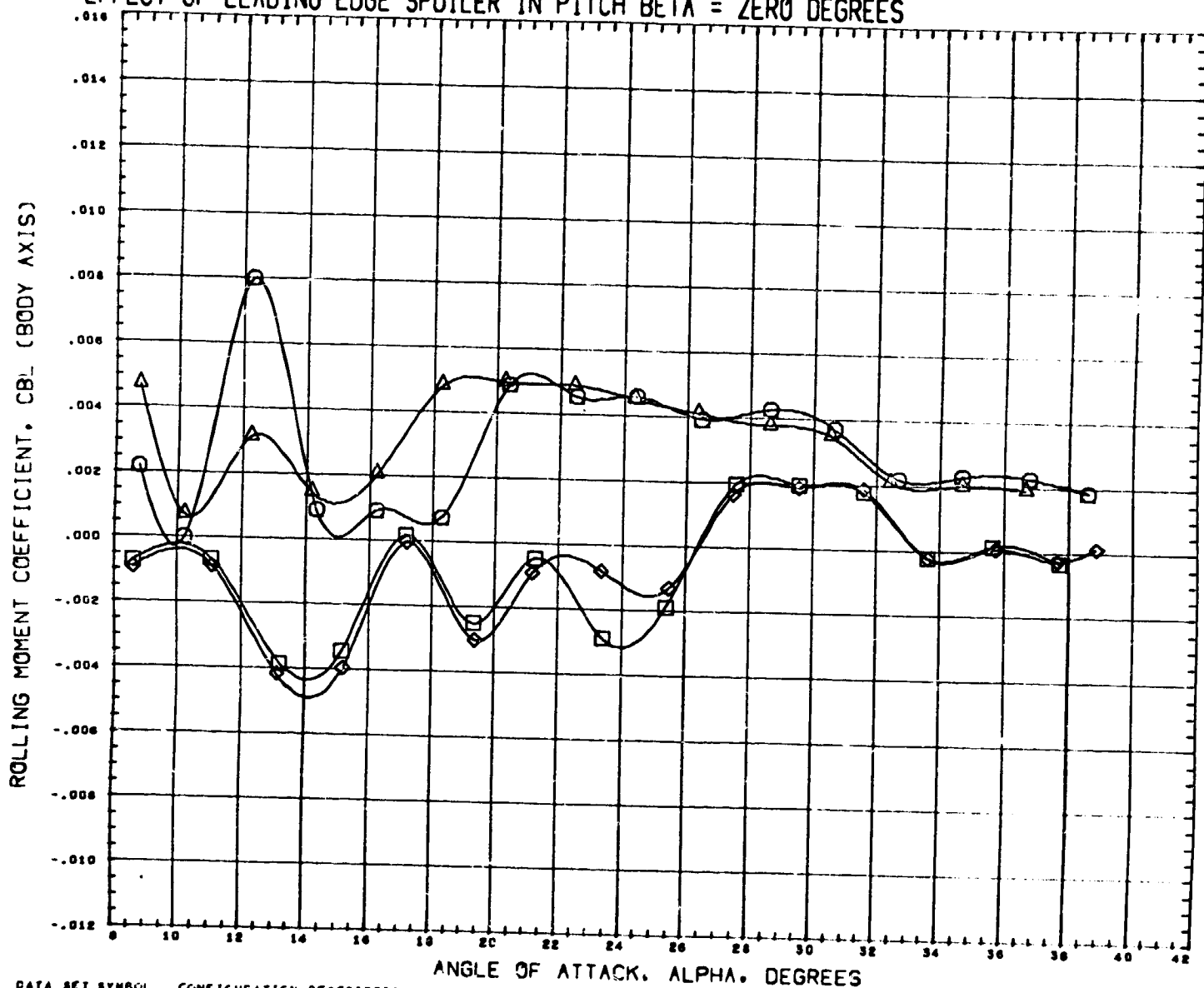
NTAIL	ELEVTR	SPOILR
0.000	0.000	
0.000	0.000	
0.000	0.000	60.000
0.000	0.000	60.000

REFERENCE INFORMATION

SREF	31.3600	80. IN
LREF	2.2400	IN.
BREF	14.8000	IN.
XMRP	11.9600	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0007	

MACH 0.299

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (VD2073) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (VD2073) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (VD2103) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3S2
 (VD2103) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3S2

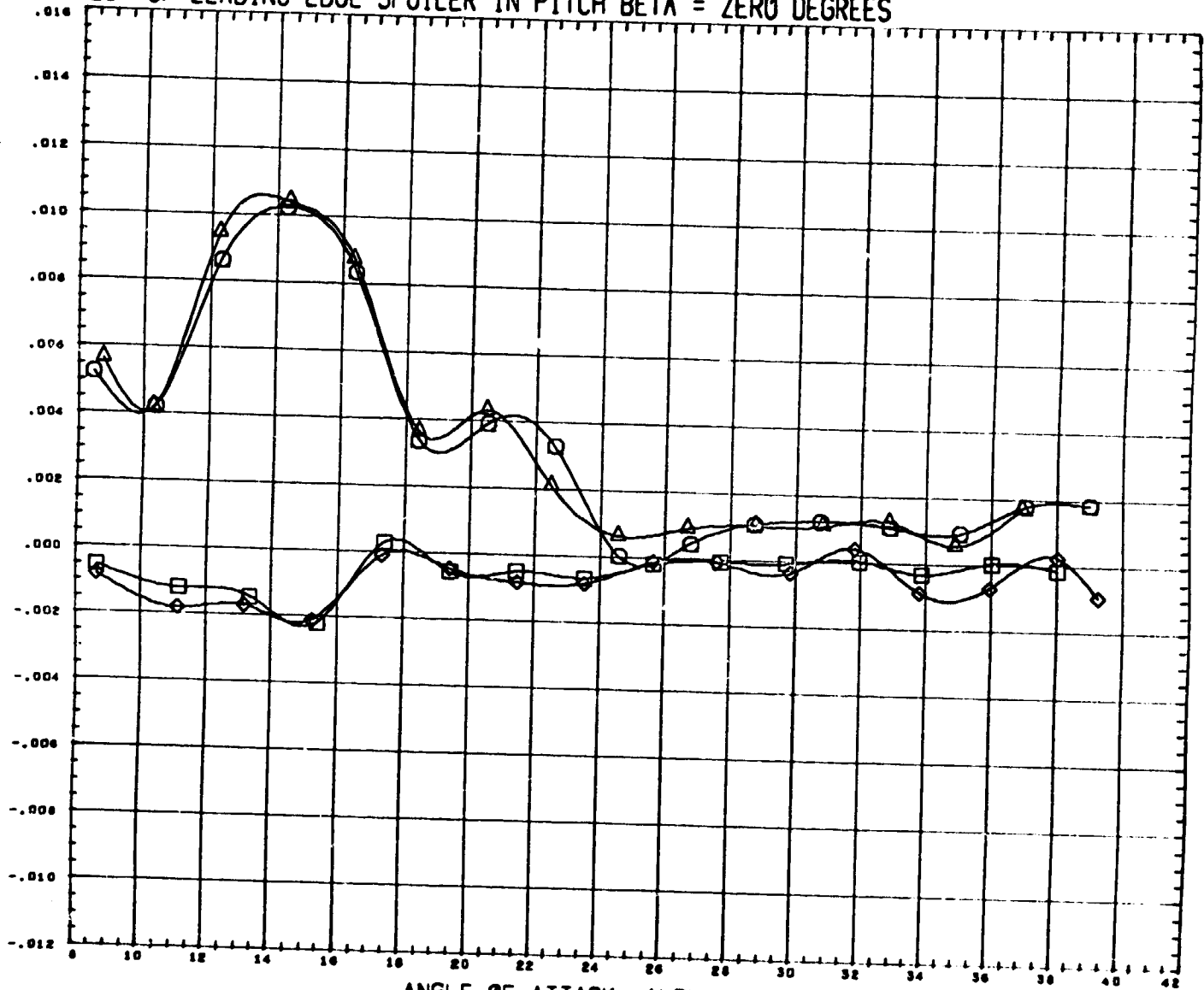
HTAIL ELEVTR SPOILR
 0.700 0.000
 0.000 0.000
 0.000 0.000 60.000
 0.000 0.000 60.000

REFERENCE INFORMATION
 SREF 31.5600 50. IN
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.500

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES

ROLLING MOMENT COEFFICIENT, CBL (BODY AXIS)



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(VD2073)	BTMT-1265	BOEING H-32 BOOSTER	B8W4H4V3
(VD2073)	BTMT-1265	BOEING H-32 BOOSTER	B8W4H4V3
(VD2103)	BTMT-1265	BOEING H-32 BOOSTER	B8W4H4V3S2
(VD2103)	BTMT-1265	BOEING H-32 BOOSTER	B8W4H4V3S2

ANGLE OF ATTACK, ALPHA, DEGREES

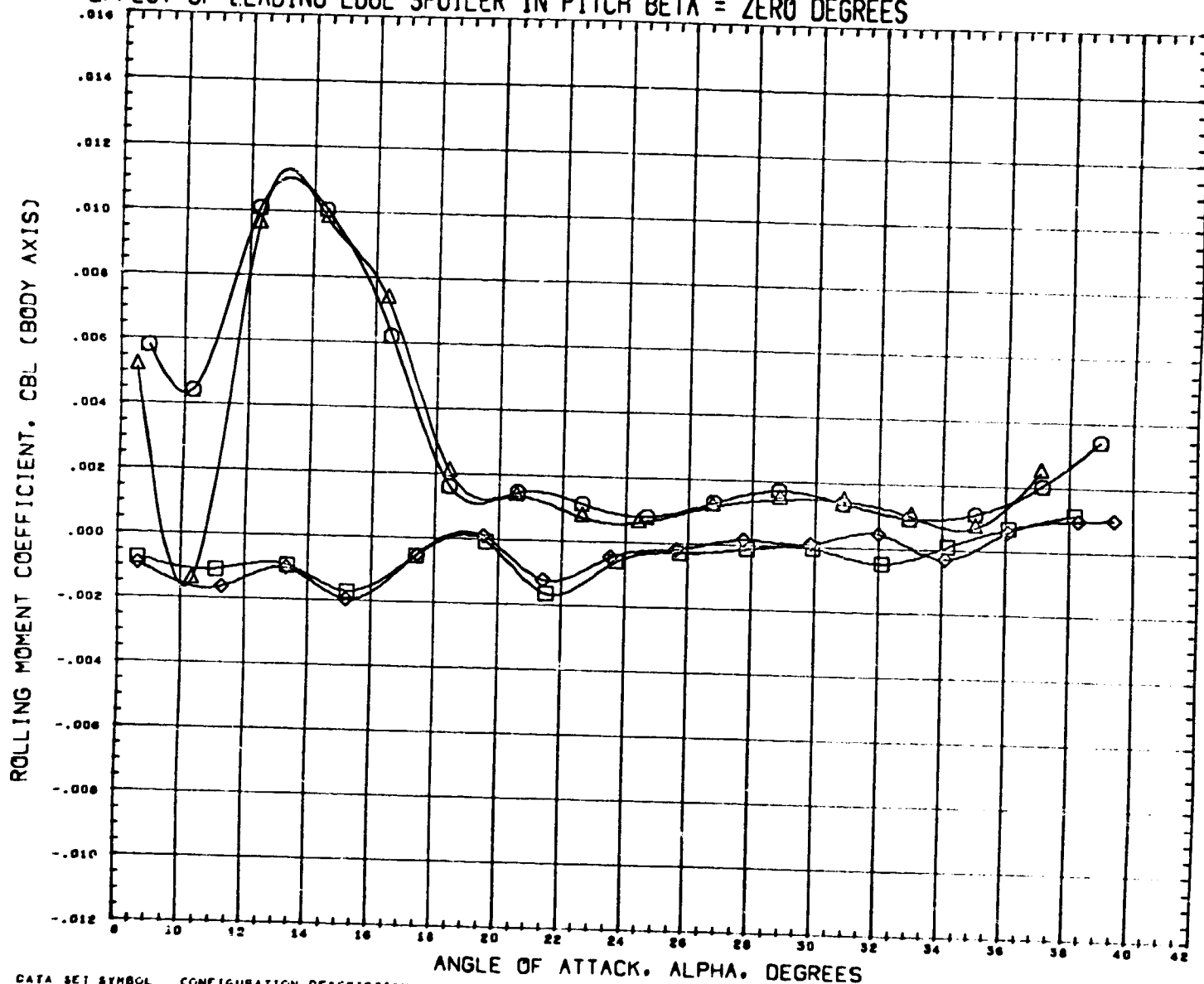
MTAIL	ELEVTR	SPOILR
0.000	0.000	
0.000	0.000	
0.000	0.000	60.000
0.000	0.000	60.000

REFERENCE INFORMATION

SREF	31.3600	sq. in
LREF	2.2400	in.
BREF	14.0000	in.
XMRP	11.9800	in.
YMRP	0.0000	in.
ZMRP	2.4330	in.
SCALE	0.0067	

NACH 0.599

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(VD2273)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3
(VD2273)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3
(VD2103)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3S2
(VD2103)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3S2

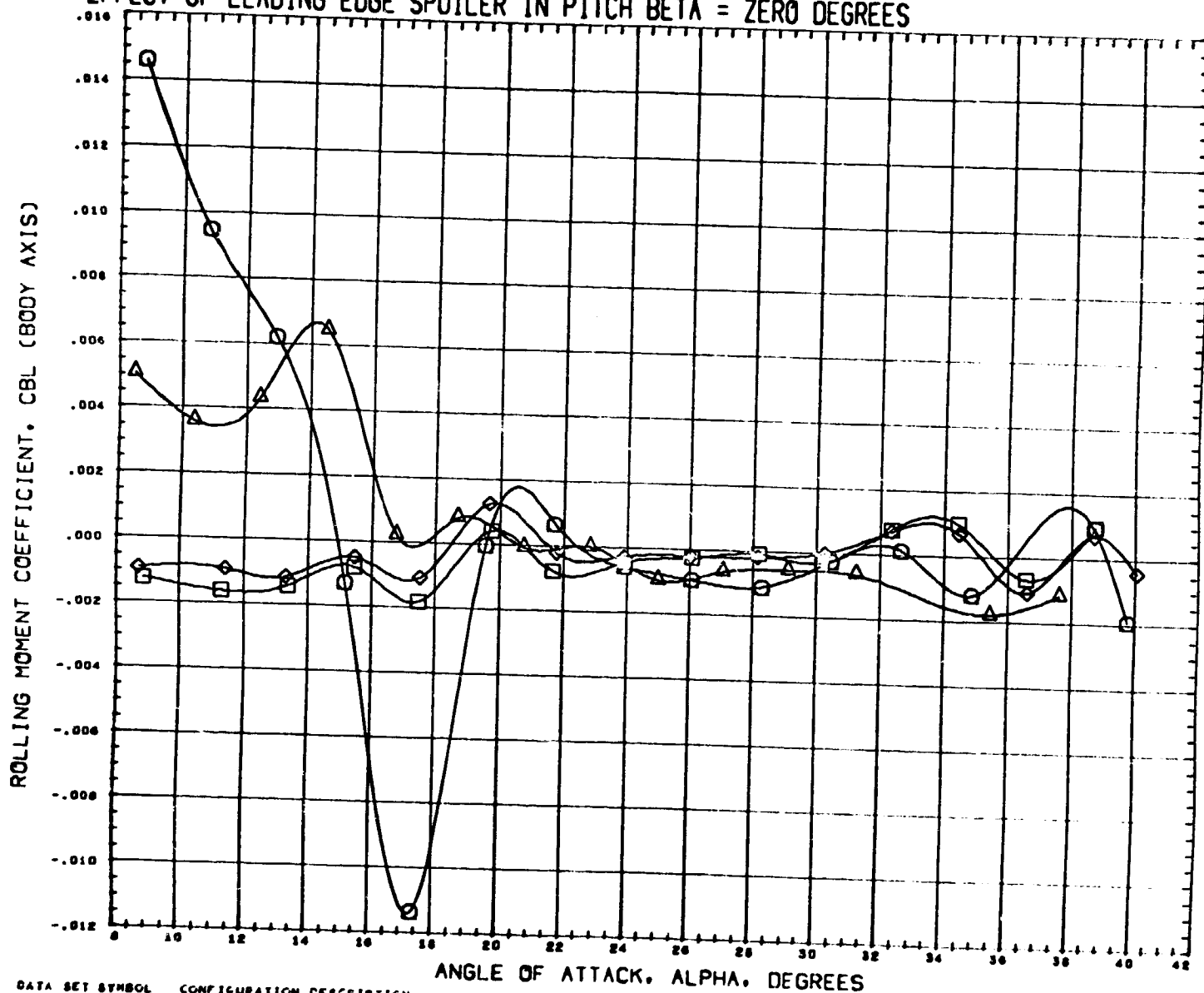
ANGLE OF ATTACK, ALPHA, DEGREES

MTAIL	ELEVTR	SPOILR
0.000	0.000	
0.000	0.000	
0.000	0.000	60.000
0.000	0.000	60.000

REFERENCE INFORMATION		
SREF	31.3603	SQ. IN
LREF	2.2403	IN.
BREF	14.0000	IN.
XMRP	11.9003	IN.
YMRP	0.0003	IN.
ZMRP	2.4333	IN.
SCALE	0.0067	

NACM 0.630

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(V02073)	BTWT-1265	BOEING N-32 BOOSTER	80W4H4V3
(V02073)	BTWT-1265	BOEING N-32 BOOSTER	80W4H4V3
(V02103)	BTWT-1265	BOEING N-32 BOOSTER	80W4H4V3S2
(V02103)	BTWT-1265	BOEING N-32 BOOSTER	80W4H4V3S2

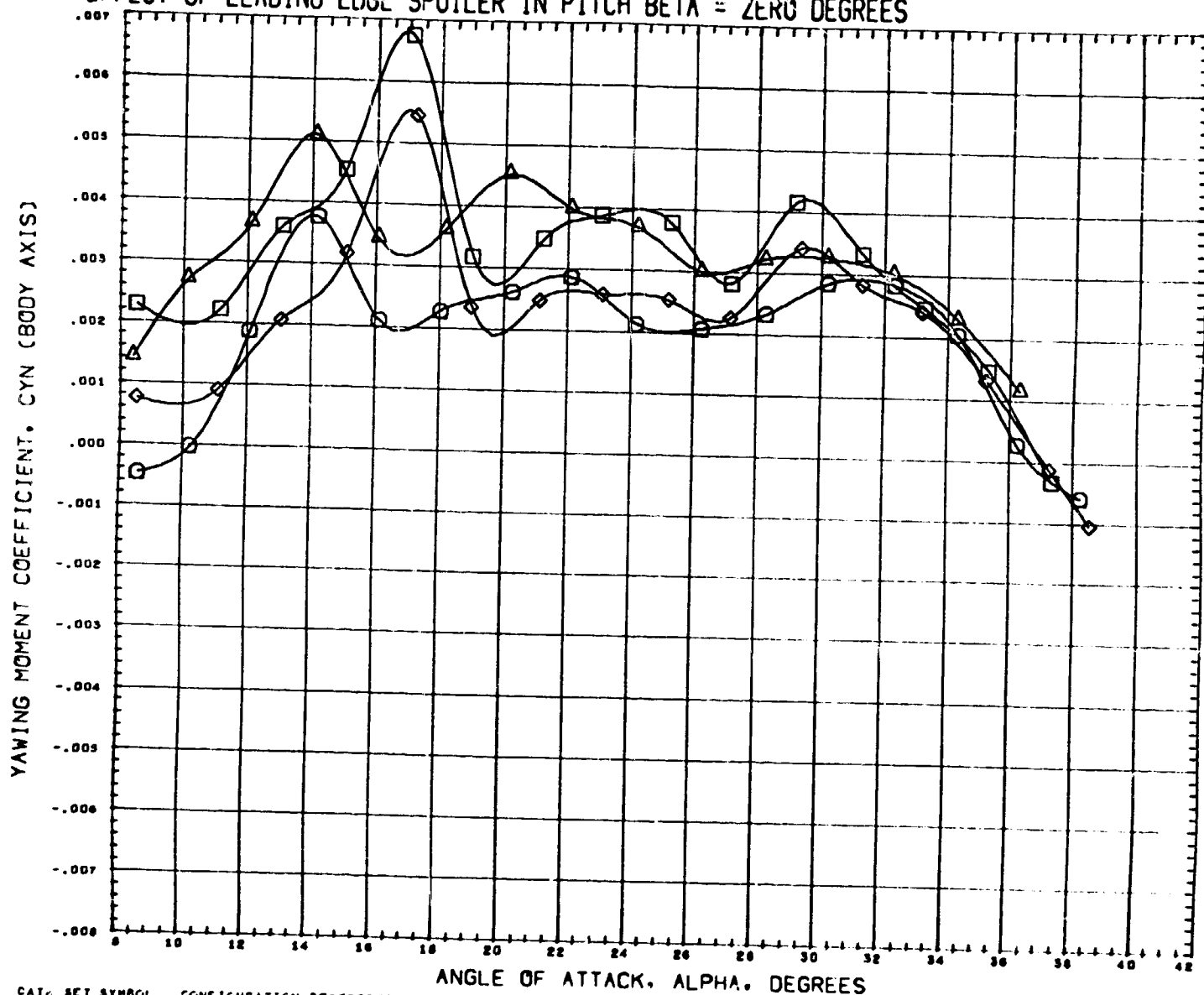
MTAIL	ELEVTR	SPOILR
0.000	0.000	
0.000	0.000	
0.000	0.000	60.000
0.000	0.000	60.000

REFERENCE INFORMATION

SREF	31.3600	60. IN
LREF	2.2400	IN.
BREF	14.6000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0007	

MACH 0.000

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(VC073)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3
(VC073)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3
(VC2103)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3S2
(VC2103)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3S2

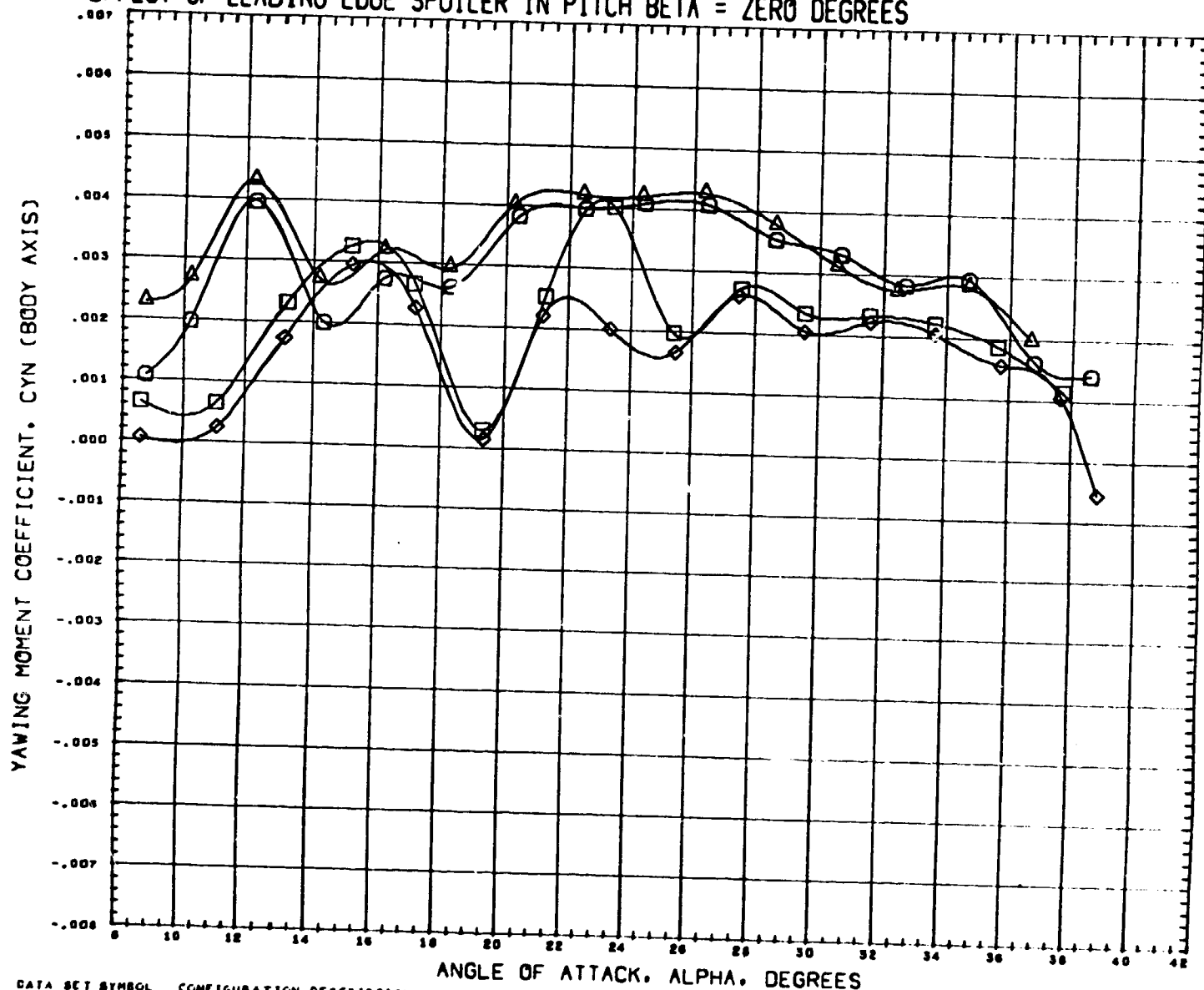
ANGLE OF ATTACK, ALPHA, DEGREES

HTAIL	ELEVTR	SPOILR
0.000	0.000	
0.000	0.000	
0.000	0.000	60.000
0.000	0.000	60.000

REFERENCE INFORMATION	
BREF	31.3600 IN.
LREF	2.2400 IN.
BREF	14.8000 IN.
ZMRP	11.0000 IN.
YMRP	0.0000 IN.
ZMRP	2.4330 IN.
SCALE	0.0007

MACH 0.299

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



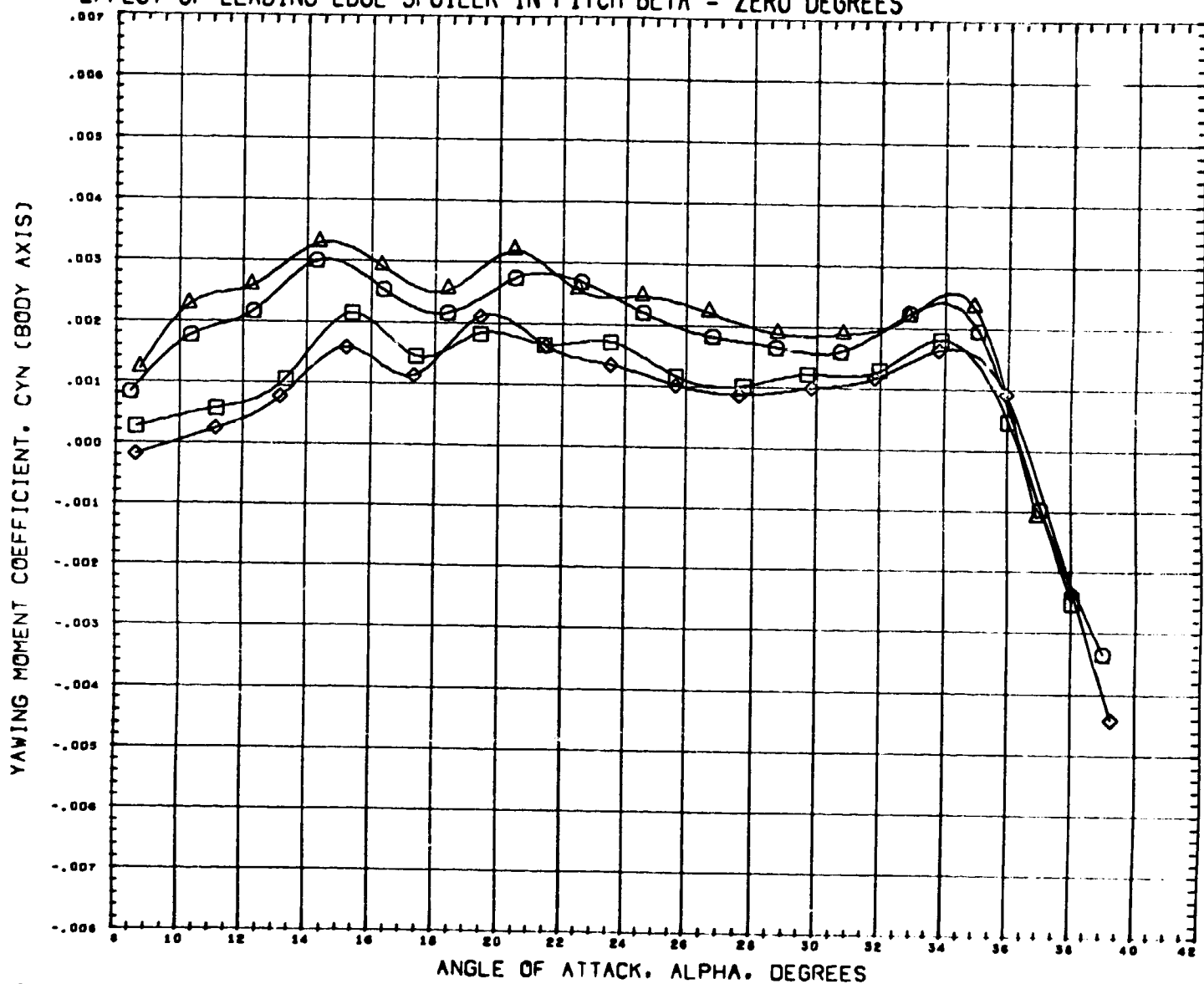
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(VC2073)	BTMT-1265 BOEING H-32 BOOSTER 80W4H4V3
(VC2073)	BTMT-1265 BOEING H-32 BOOSTER 80W4H4V3
(VC2103)	BTMT-1265 BOEING H-32 BOOSTER 80W4H4V3S2
(VC2103)	BTMT-1265 BOEING H-32 BOOSTER 80W4H4V3S2

NTAIL	ELEVTR	SPOILR
0.000	0.000	
0.000	0.000	
0.000	0.000	60.000
0.000	0.000	60.000

REFERENCE INFORMATION		
SREF	31.3600	58. IN
LREF	2.2400	IN.
BREF	14.8000	IN.
XNRP	11.9800	IN.
YNRP	0.0000	IN.
ZNRP	2.4330	IN.
SCALE	0.0067	

MACH 0.500

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(VC2073) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3

MTAIL 0.000 ELEVTR 0.000 SPOILR 0.000

(VC2073) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3

MTAIL 0.000 ELEVTR 0.000 SPOILR 0.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 60.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

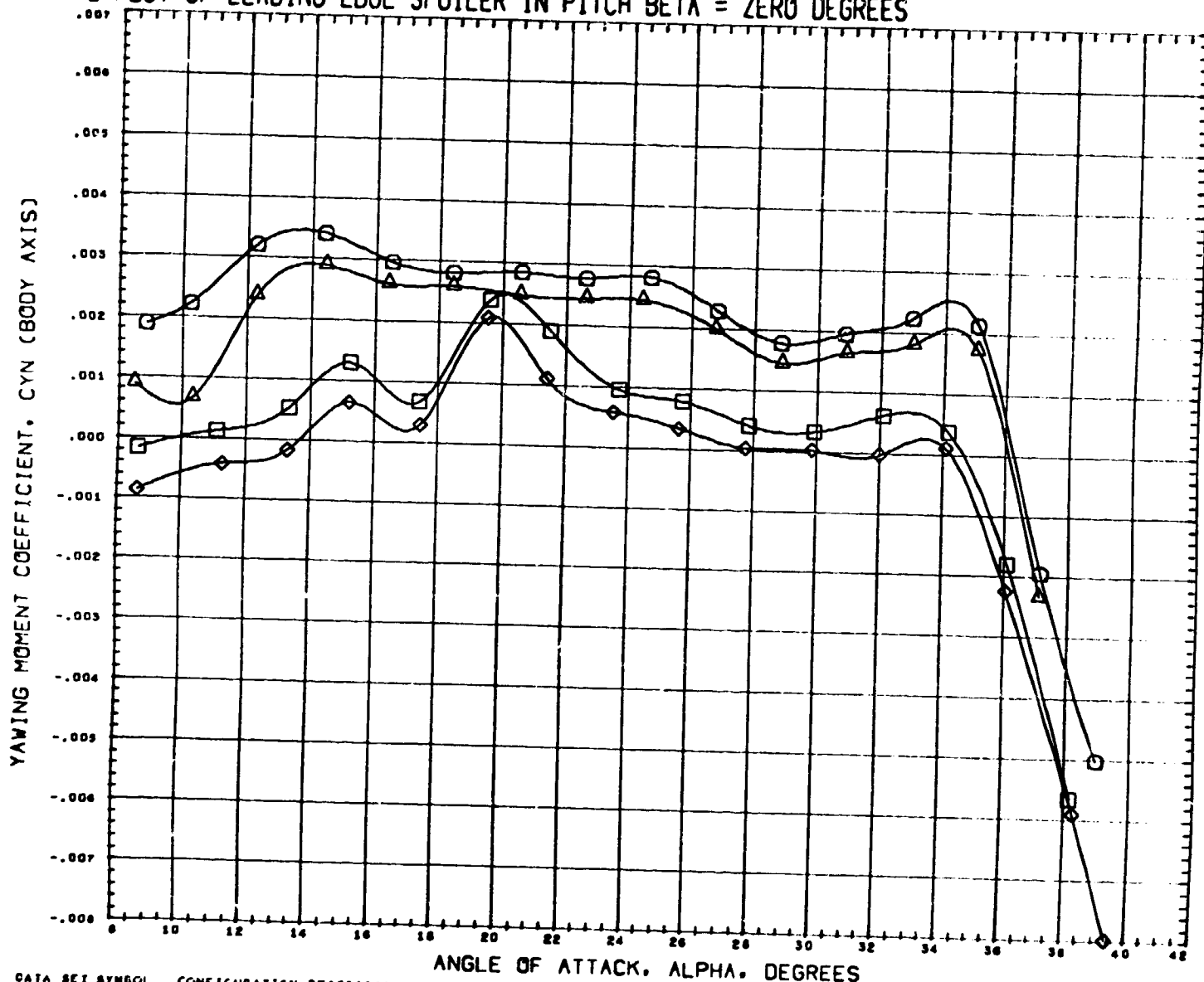
80W4H4V3S2

MTAIL 0.000 ELEVTR 0.000 SPOILR 80.000

(VC2103) BTWT-1265

BOEING H-32 BOOSTER

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



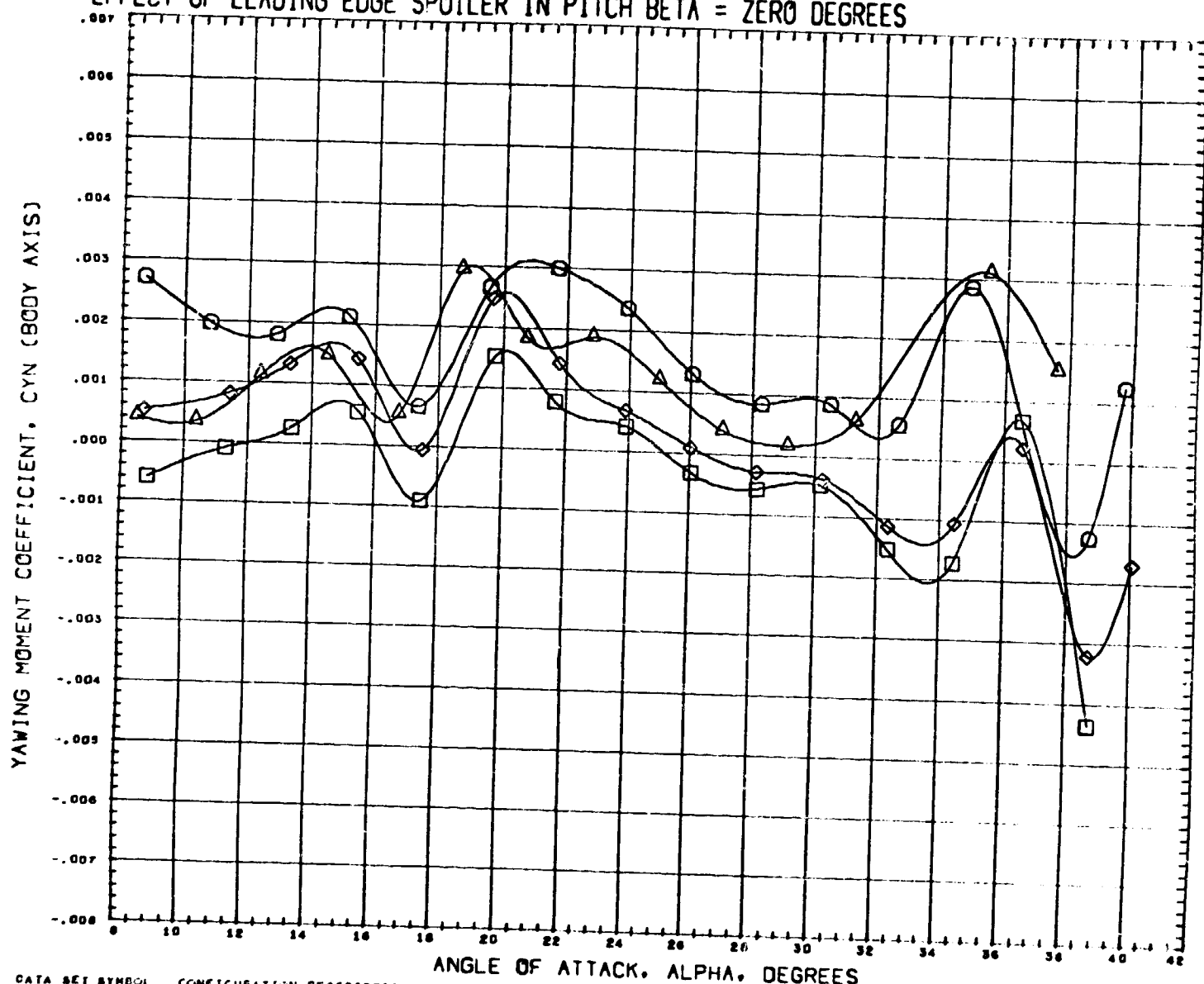
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(V02073)	BTMT-1265 BOEING N-32 BOOSTER 88W4H4V3
(V02075)	BTMT-1265 BOEING N-32 BOOSTER 88W4H4V3
(V02103)	BTMT-1265 BOEING N-32 BOOSTER 88W4H4V3S2
(V02105)	BTMT-1265 BOEING N-32 BOOSTER 88W4H4V3S2

HTAIL	ELEVTR	SPOILR
0.000	0.000	0.000
0.000	0.000	0.000
0.000	0.000	60.000
0.000	0.000	60.000

REFERENCE INFORMATION		
SREF	31.3600	30. IN
LREF	2.2400	IN.
BREF	14.8000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

MACH 0.650

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (VC2073) BTWT-1265 BOEING M-32 BOOSTER
 (VC2073) BTWT-1265 BOEING M-32 BOOSTER
 (VC2103) BTWT-1265 BOEING M-32 BOOSTER
 (VC2103) BTWT-1265 BOEING M-32 BOOSTER

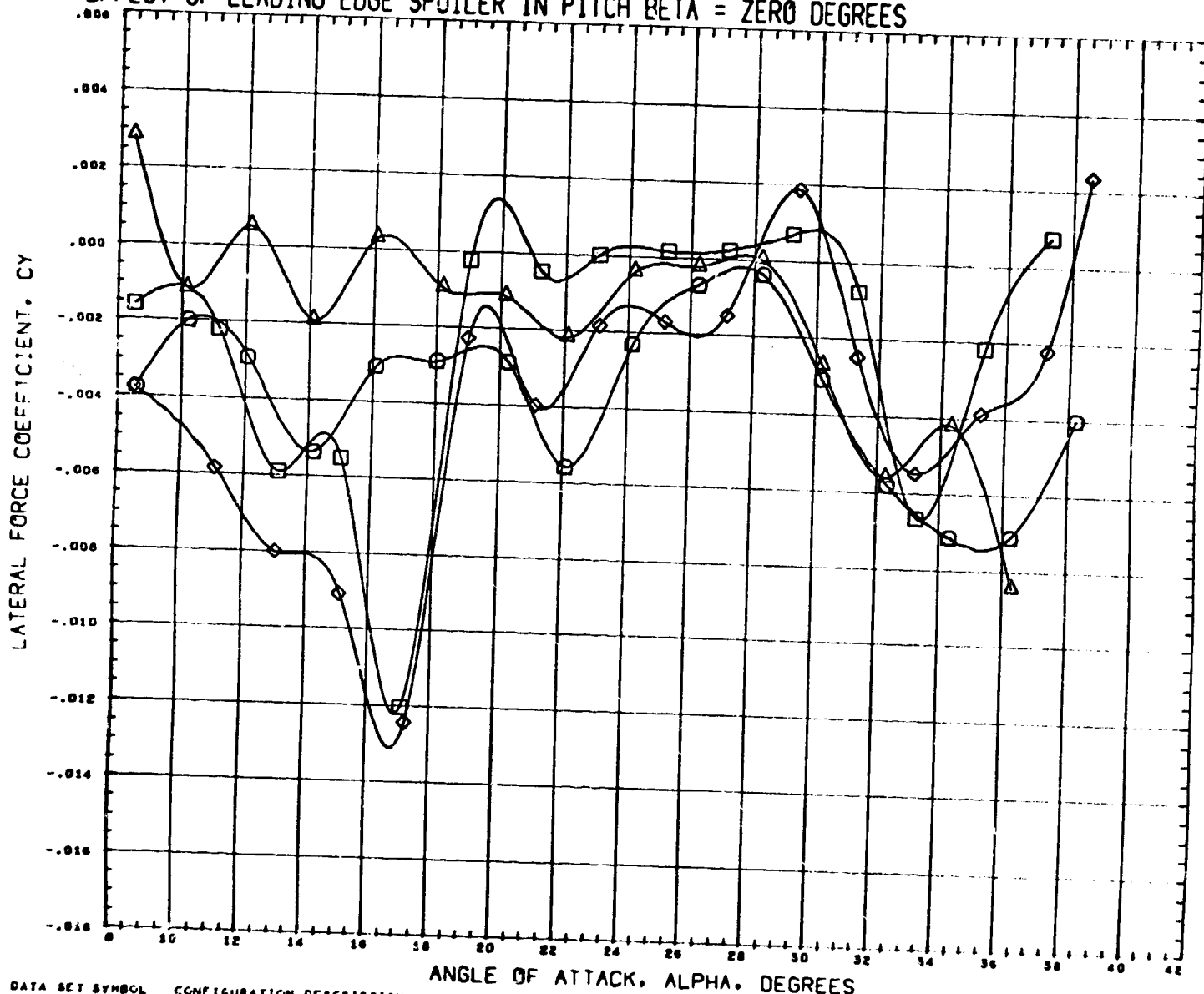
ANGLE OF ATTACK, ALPHA, DEGREES

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000
 0.000 0.000 60.000
 0.000 0.000 60.000

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.800

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



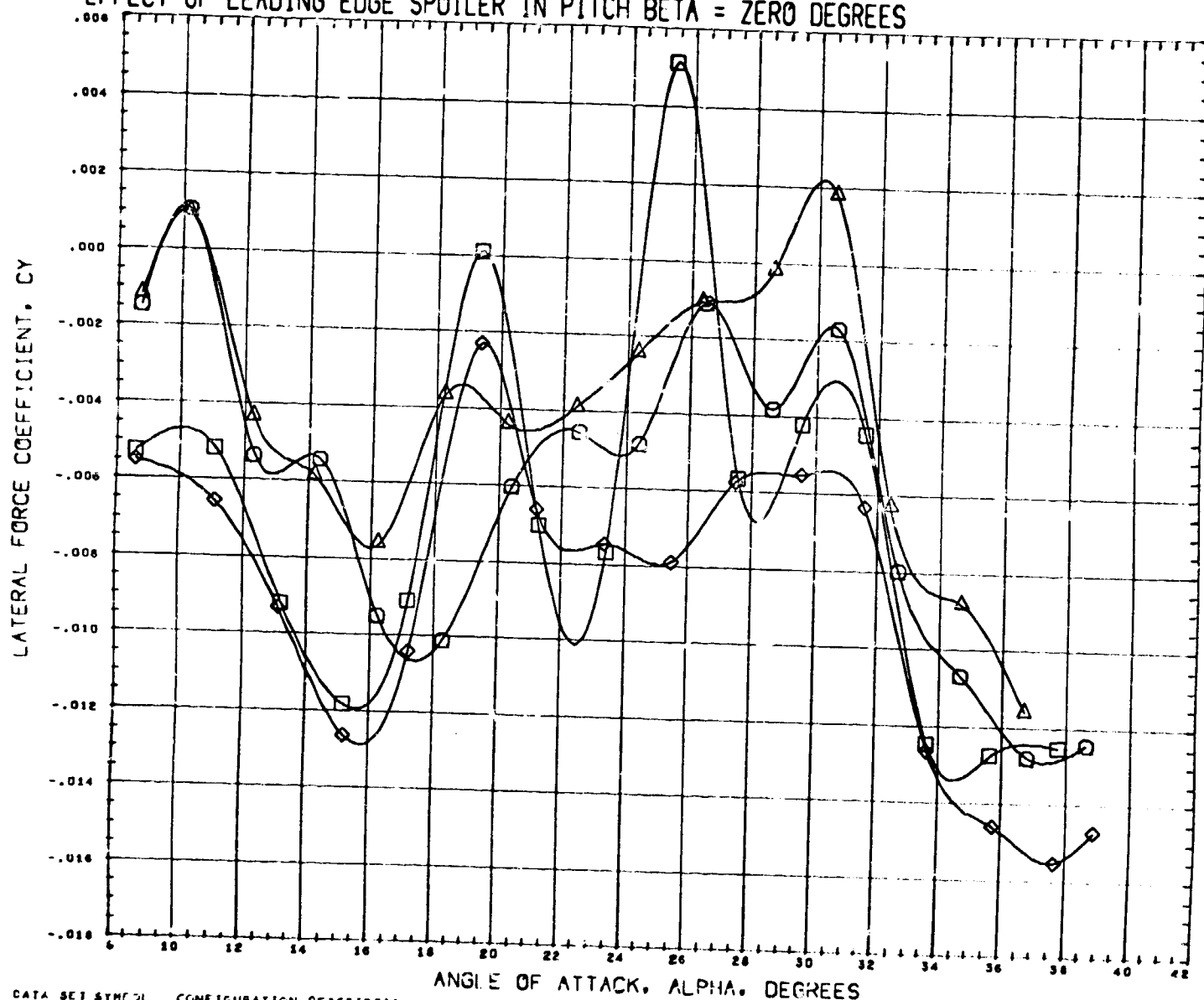
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(VDR273)	BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3
(VDR273)	BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3
(VDR103)	BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3S2
(VDR103)	BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3S2

MACH 0.299

NTAIL	ELEVTR	SPOILR
0.000	0.000	
0.000	0.000	
0.000	0.000	60.000
0.000	0.000	60.000

REFERENCE INFORMATION		
SREF	31.3600	88. IN
LREF	2.2400	IN.
BREF	14.8000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(V02073)	BTWT-1265	BOEING H-32 BOOSTER	B8W4H4V3
(V02073)	BTWT-1265	BOEING H-32 BOOSTER	B8W4H4V3
(V02103)	BTWT-1265	BOEING H-32 BOOSTER	B8W4H4V3S2
(V02103)	BTWT-1265	BOEING H-32 BOOSTER	B8W4H4V3S2

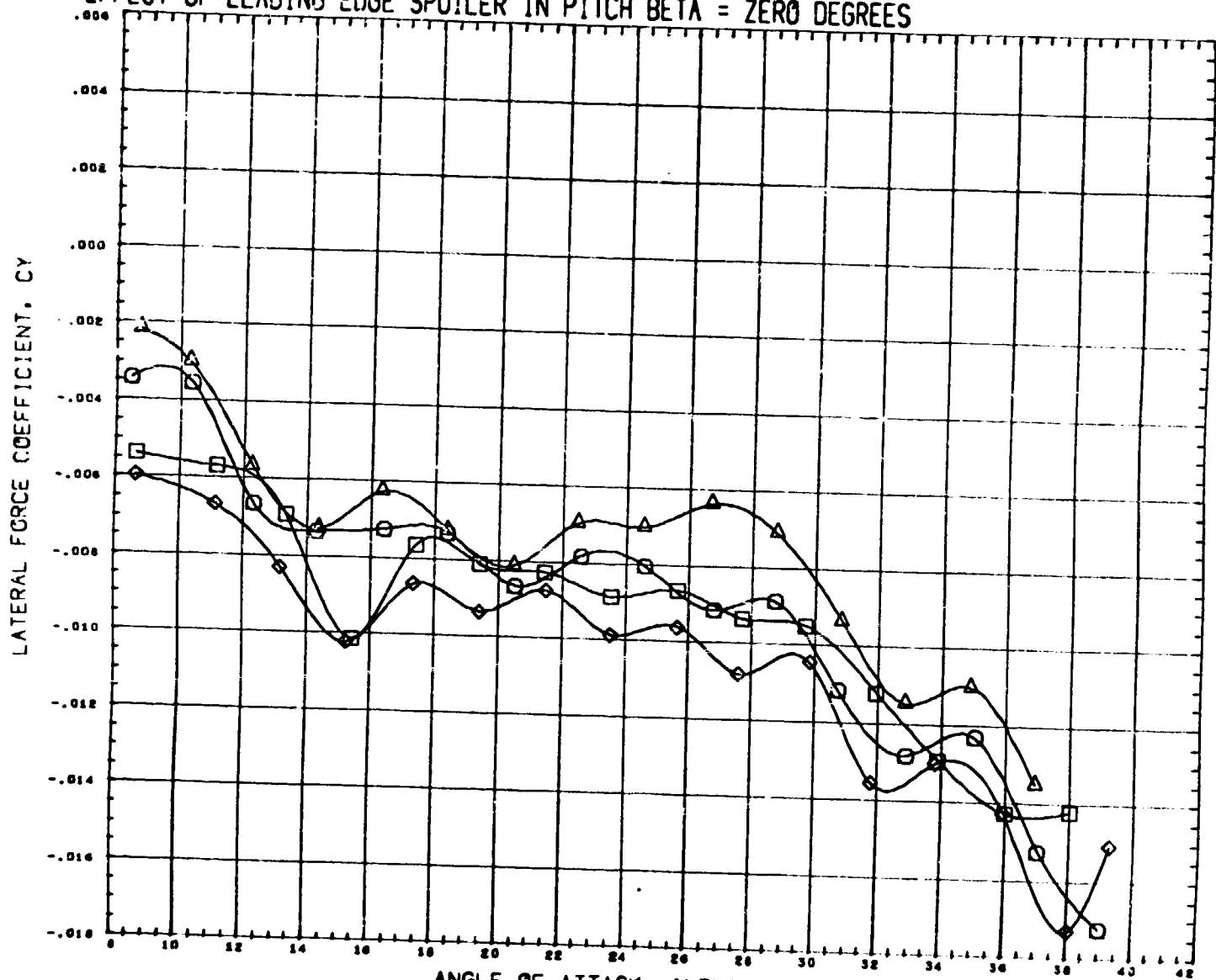
MTAIL	ELEVTR	SPOILER
0.000	0.000	
0.000	0.000	
0.000	0.000	60.000
0.000	0.000	60.000

REFERENCE INFORMATION

SREF	31.3600	IN
LREF	2.2400	IN.
BREF	14.8000	IN.
XNRP	11.9800	IN.
YNRP	0.0000	IN.
ZNRP	2.4330	IN.
SCALE	0.0067	

MACH 0.900

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES

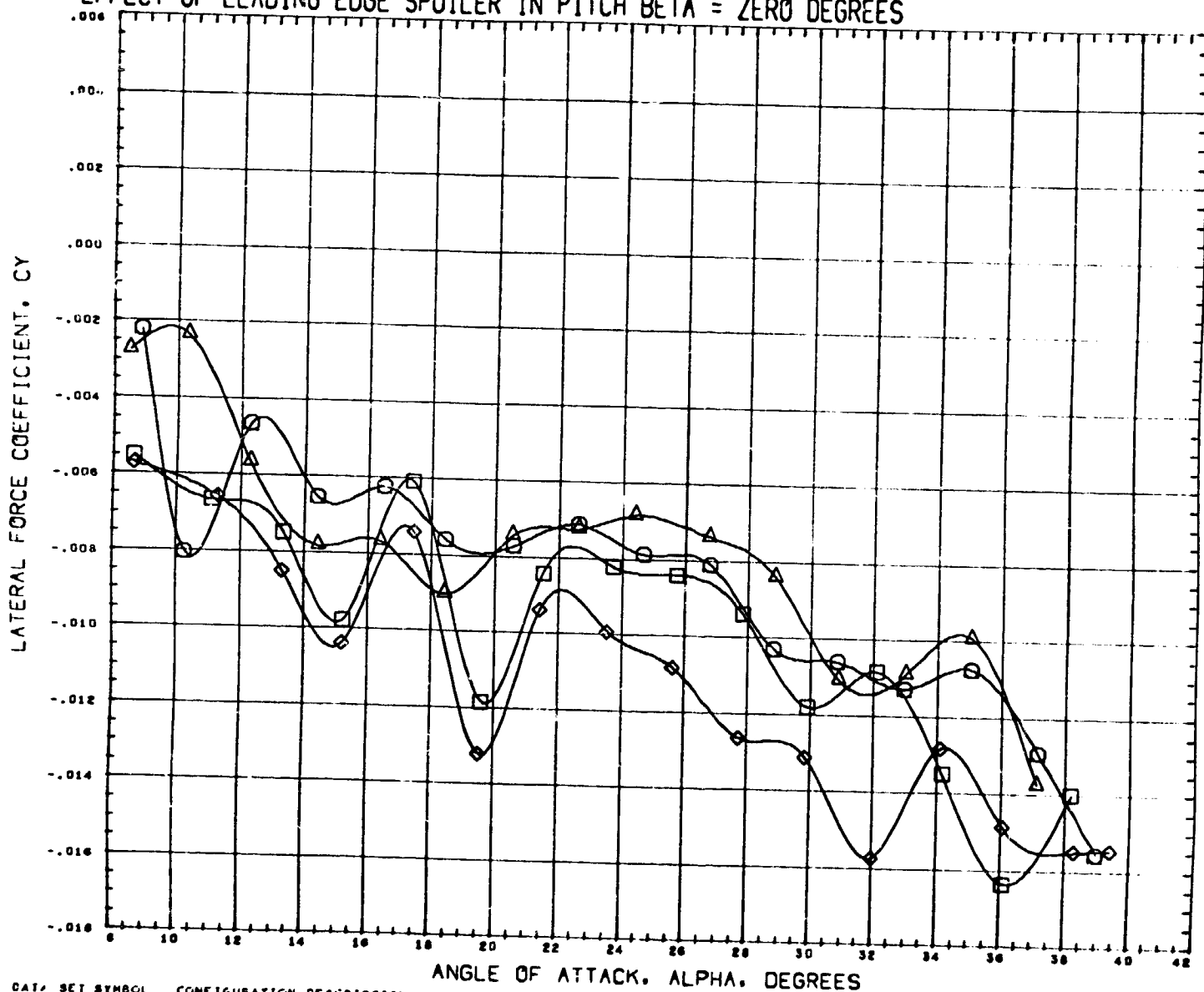


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILR
(VCE073)	BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3	0.000	0.000	
(MCE073)	BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3	0.000	0.000	
(VCE103)	BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3S2	0.000	0.000	60.000
(MCE103)	BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3S2	0.000	0.000	60.000

MACH 0.999

REFERENCE INFORMATION		
SREF	31.3600	sq. IN
LREF	2.2400	IN.
BREF	14.0000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(VD1073)	BTWT-1265	BOEING H-32 BOOSTER	B8W4H4V3
(VD2073)	BTWT-1265	BOEING H-32 BOOSTER	B8W4H4V3
(VD2103)	BTWT-1265	BOEING H-32 BOOSTER	B8W4H4V3S2
(VD2103)	BTWT-1265	BOEING H-32 BOOSTER	B8W4H4V3S2

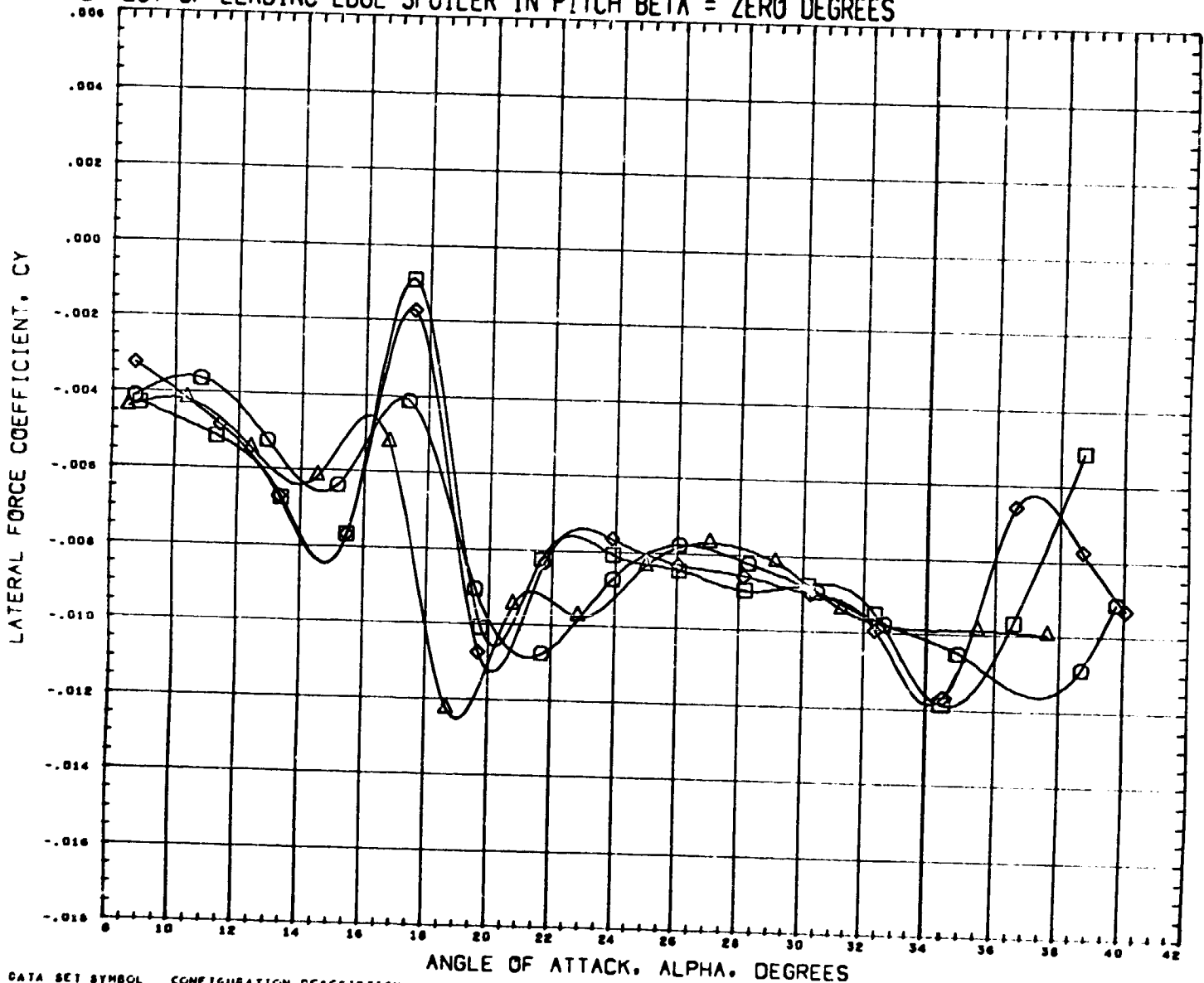
HTAIL	ELEVTR	SPOILR
0.000	0.000	
0.000	0.000	
0.000	0.000	60.000
0.000	0.000	60.000

REFERENCE INFORMATION

SREF	31.3600	80. IN
LREF	2.2400	IN.
QREF	14.8000	IN.
XMRP	11.6000	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

MACH 0.650

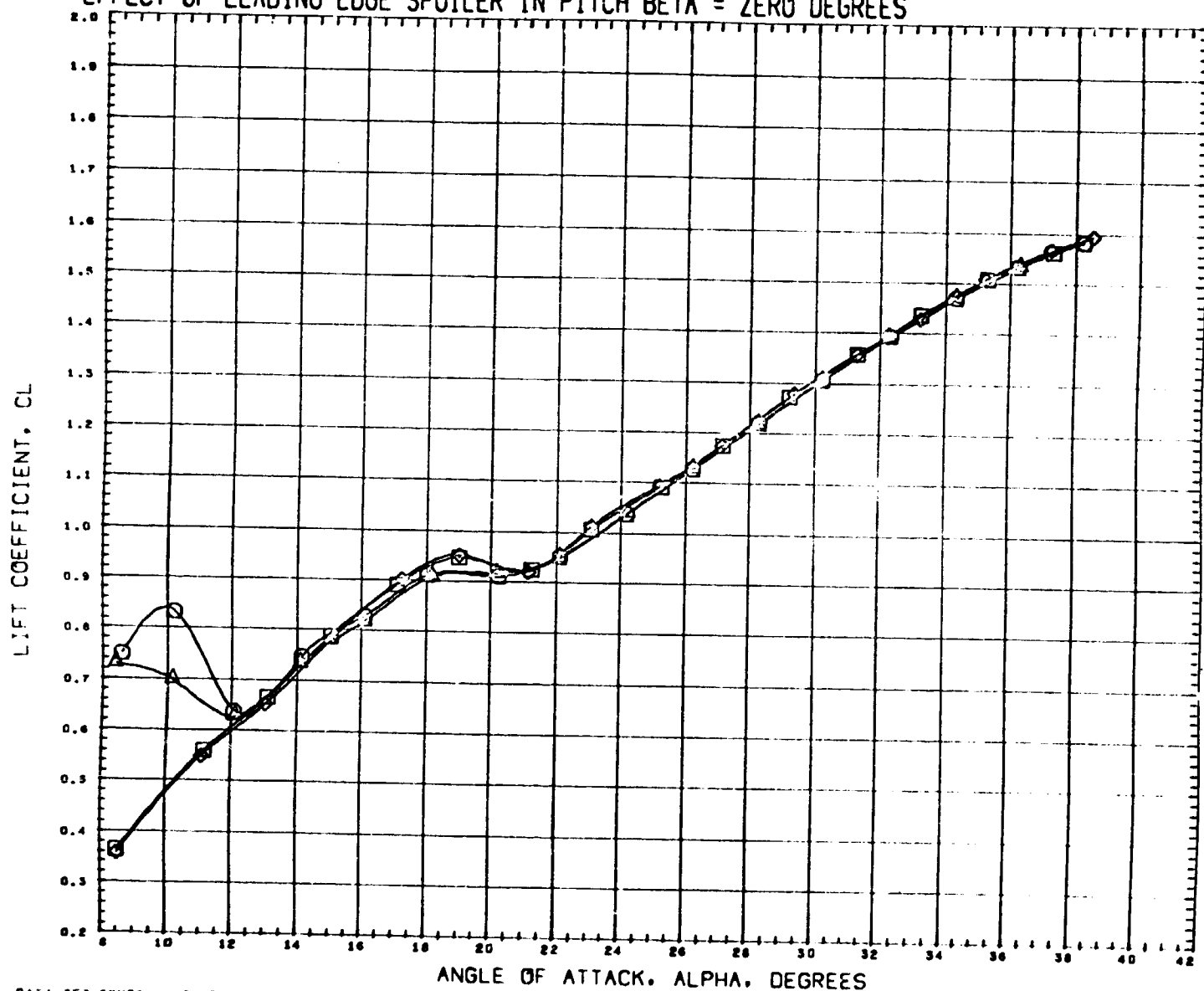
EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILR	REFERENCE INFORMATION	
(V02073)	BTMT-1265 BOEING H-32 BOOSTER 88W4H4V3	0.000	0.000		SREF	31.3600 88. IN
(V02073)	BTMT-1265 BOEING H-32 BOOSTER 88W4H4V3	0.000	0.000		LREF	2.2400 IN.
(V02103)	BTMT-1265 BOEING H-32 BOOSTER 88W4H4V3S2	0.000	0.000	40.000	SREF	14.6000 IN.
(V02103)	BTMT-1265 BOEING H-32 BOOSTER 88W4H4V3S2	0.000	0.000	40.000	XMRP	11.9800 IN.
					ZMRP	0.0000 IN.
					ZMRP	2.4330 IN.
					SCALE	0.0067

MACH 0.600

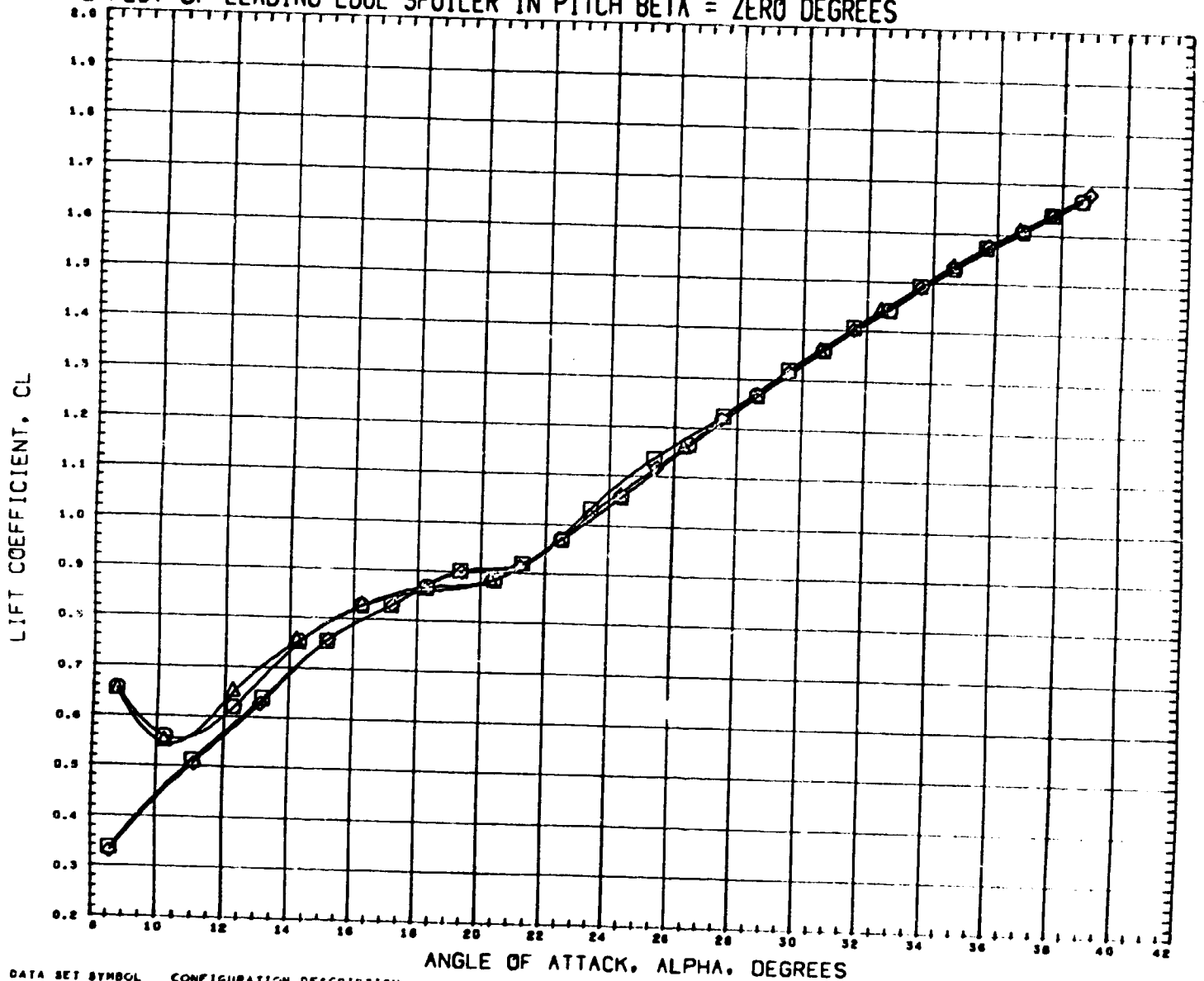
EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HTAIL	ELEVTR	SPOILER	REFERENCE INFORMATION	
(VC2073)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	0.000	0.000		SREF	31.3000 80. IN
(VC2073)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	0.000	0.000		LREF	2.2400 IN.
(VC2103)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3S2	0.000	0.000	60.000	BREF	14.8000 IN.
(VC2103)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3S2	0.000	0.000	60.000	XMRP	11.9600 IN.
					YMRP	0.0000 IN.
					ZMRP	2.4330 IN.
					SCALE	0.0067

MACH 0.299

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(VD2073)	BTWT-1263 BOEING H-32 BOOSTER
(VD2073)	BTWT-1263 BOEING H-32 BOOSTER
(VD2103)	BTWT-1263 BOEING H-32 BOOSTER
(VD2103)	BTWT-1263 BOEING H-32 BOOSTER

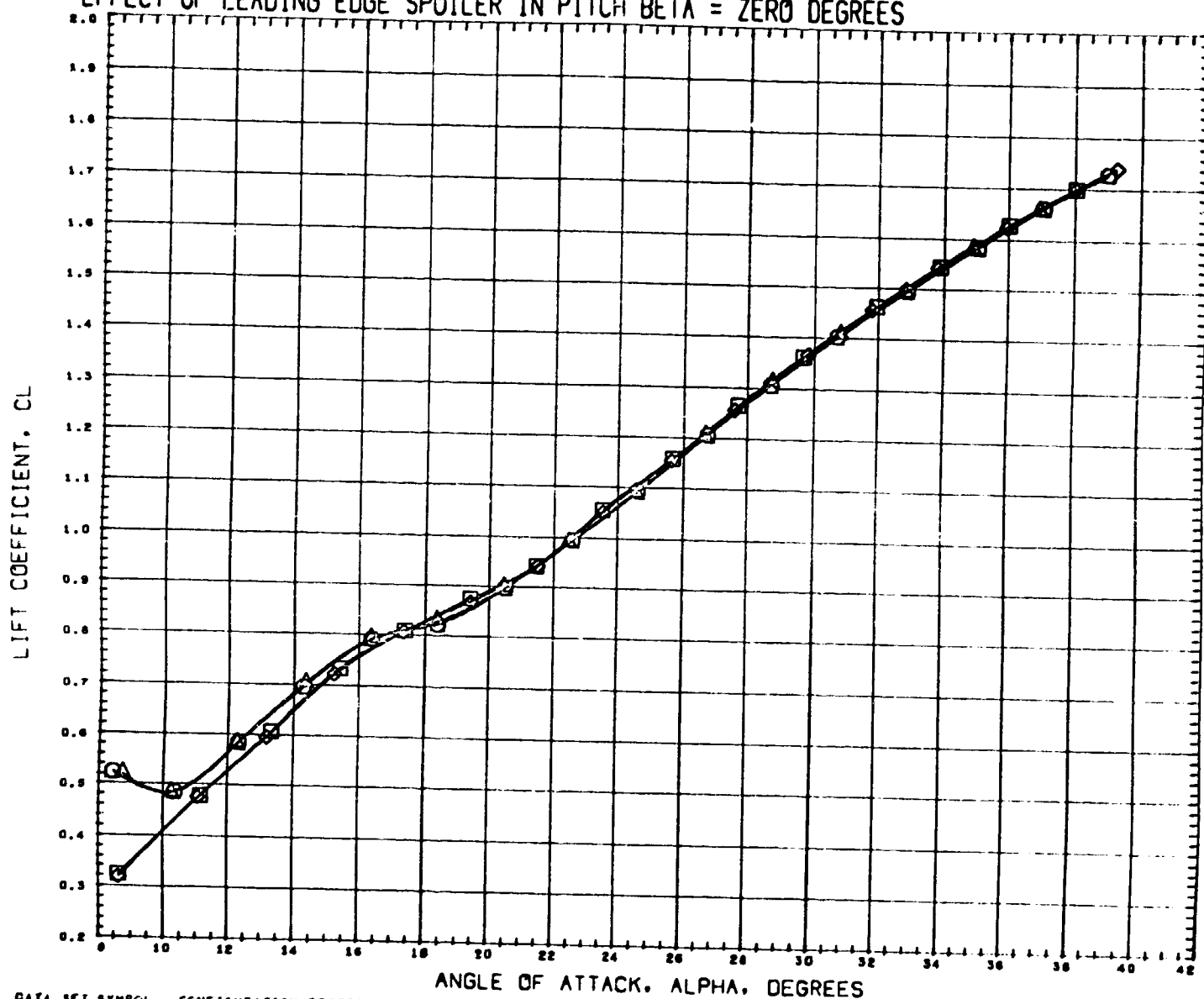
ANGLE OF ATTACK, ALPHA, DEGREES

HTAIL	ELEVTR	SPOILR
0.000	0.000	
0.000	0.000	
0.000	0.000	60.000
0.000	0.000	60.000

REFERENCE INFORMATION		
SREF	31.3600	50. IN
LREF	2.2400	IN.
BREF	14.0000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

MACH 0.900

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(VC073)	BTWT-1265	BOEING H-32 BOOSTER	88W4H4V3
(VC073)	BTWT-1265	BOEING H-32 BOOSTER	88W4H4V3
(VC103)	BTWT-1265	BOEING H-32 BOOSTER	88W4H4V3S2
(VC103)	BTWT-1265	BOEING H-32 BOOSTER	88W4H4V3S2

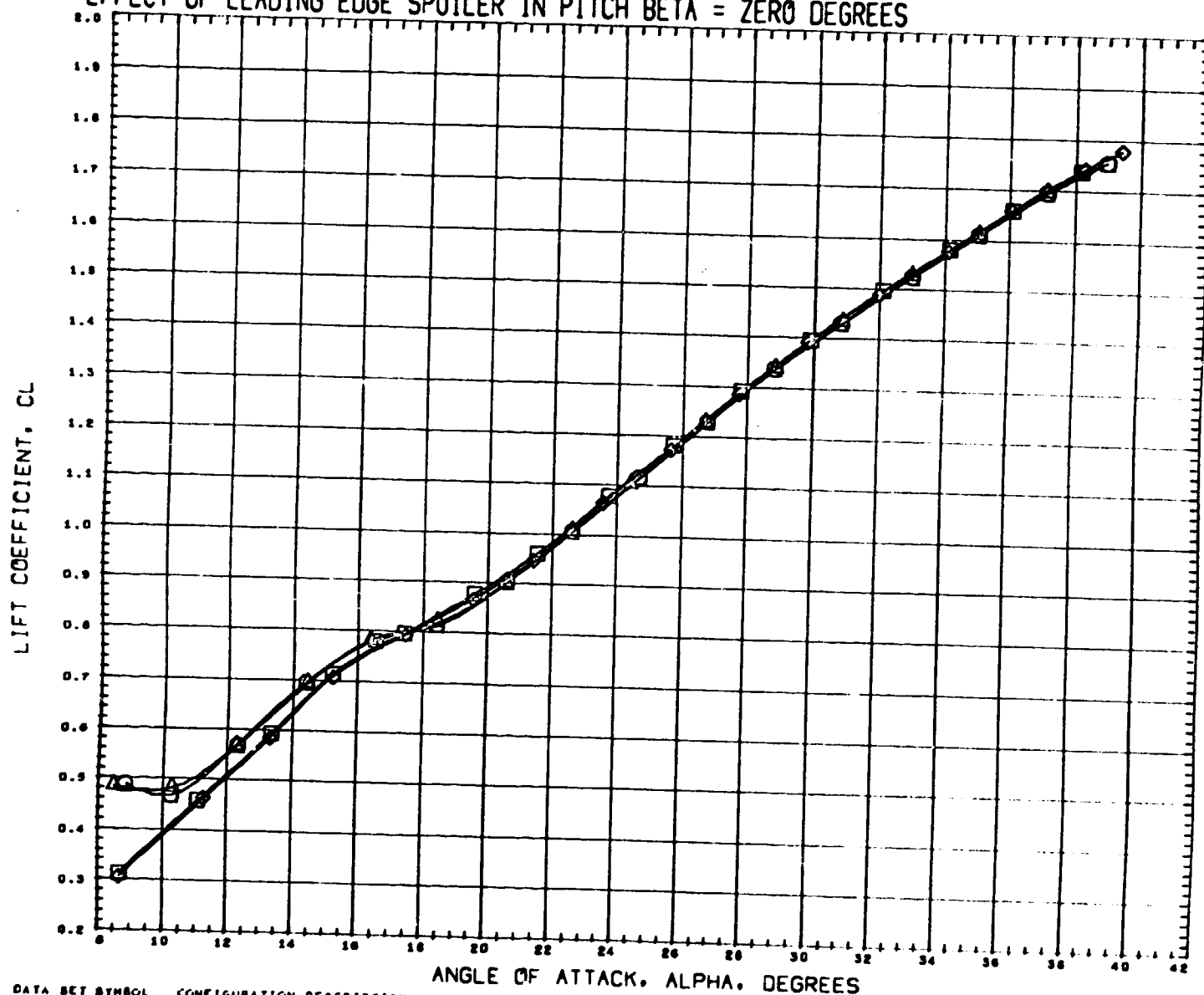
MTAIL	ELEVTR	SPOILR
0.000	0.000	
0.000	0.000	
0.000	0.000	60.000
0.000	0.000	40.000

REFERENCE INFORMATION

SREF	31.3800	88. IN
LREF	2.2400	IN.
BREF	14.8000	IN.
YMRP	11.9800	IN.
ZMRP	0.0000	IN.
SCALE	2.4330	IN.
	0.0007	

MACH 0.999

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



DATA SET	SYMBOL	CONFIGURATION DESCRIPTION
(VD2073)	◇	BTWT-1265 BOEING H-32 BOOSTER
(VD2073)	□	BTWT-1265 BOEING H-32 BOOSTER
(VD2103)	△	BTWT-1265 BOEING H-32 BOOSTER
(VD2103)	□	BTWT-1265 BOEING H-32 BOOSTER

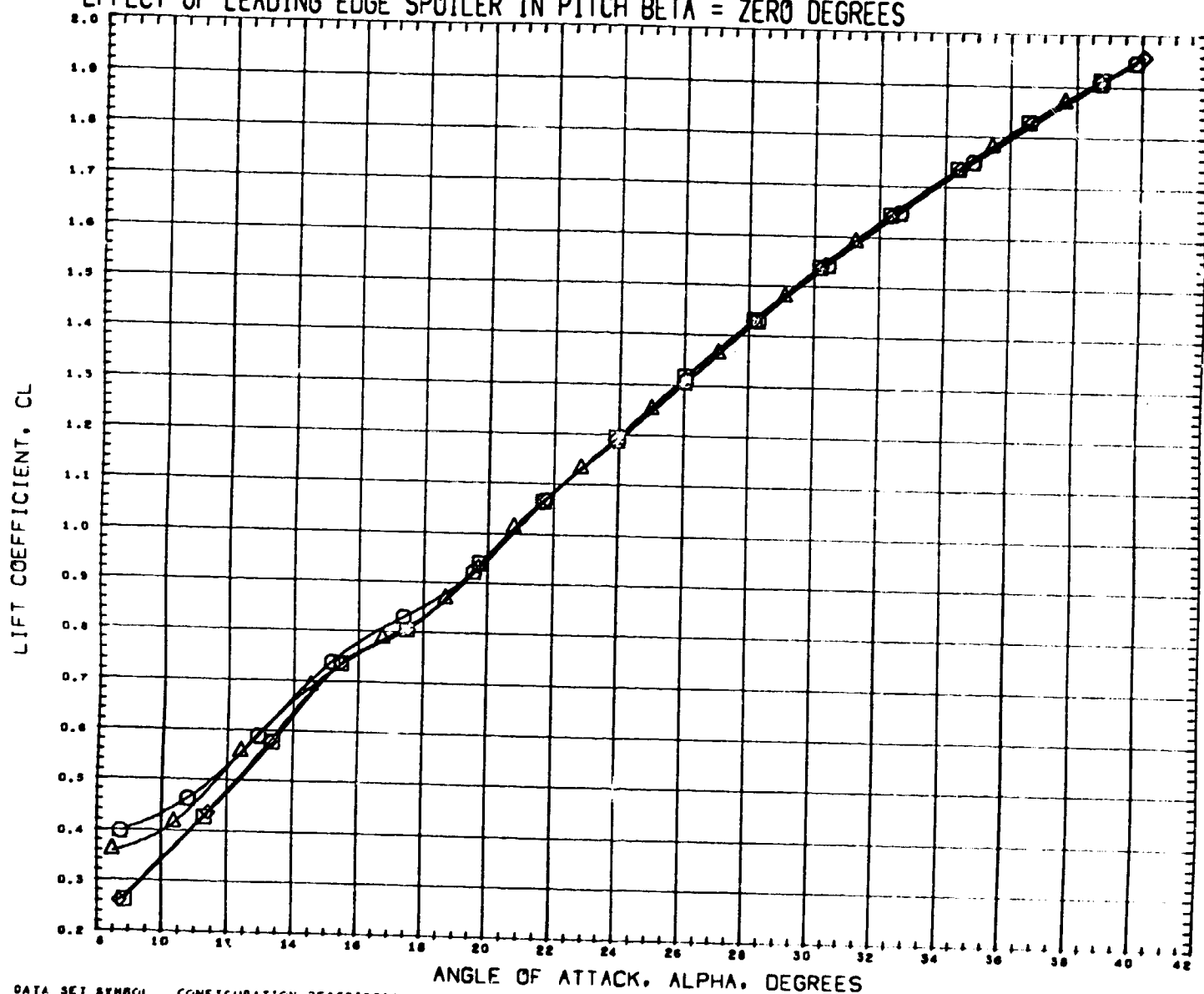
ANGLE OF ATTACK, ALPHA, DEGREES

NTAIL	ELEVTR	SPOILR
0.000	0.000	
0.000	0.000	
0.000	0.000	60.000
0.000	0.000	60.000

REFERENCE INFORMATION	
SREF	31.3600 IN.
LREF	2.2400 IN.
BREF	14.8000 IN.
XMRP	11.9800 IN.
YMRP	0.0000 IN.
ZMRP	2.4330 IN.
SCALE	0.0007

MACH 0.650

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(VC2073)	BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3
(WC2073)	BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3
(VC2103)	BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3S2
(WC2103)	BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3S2

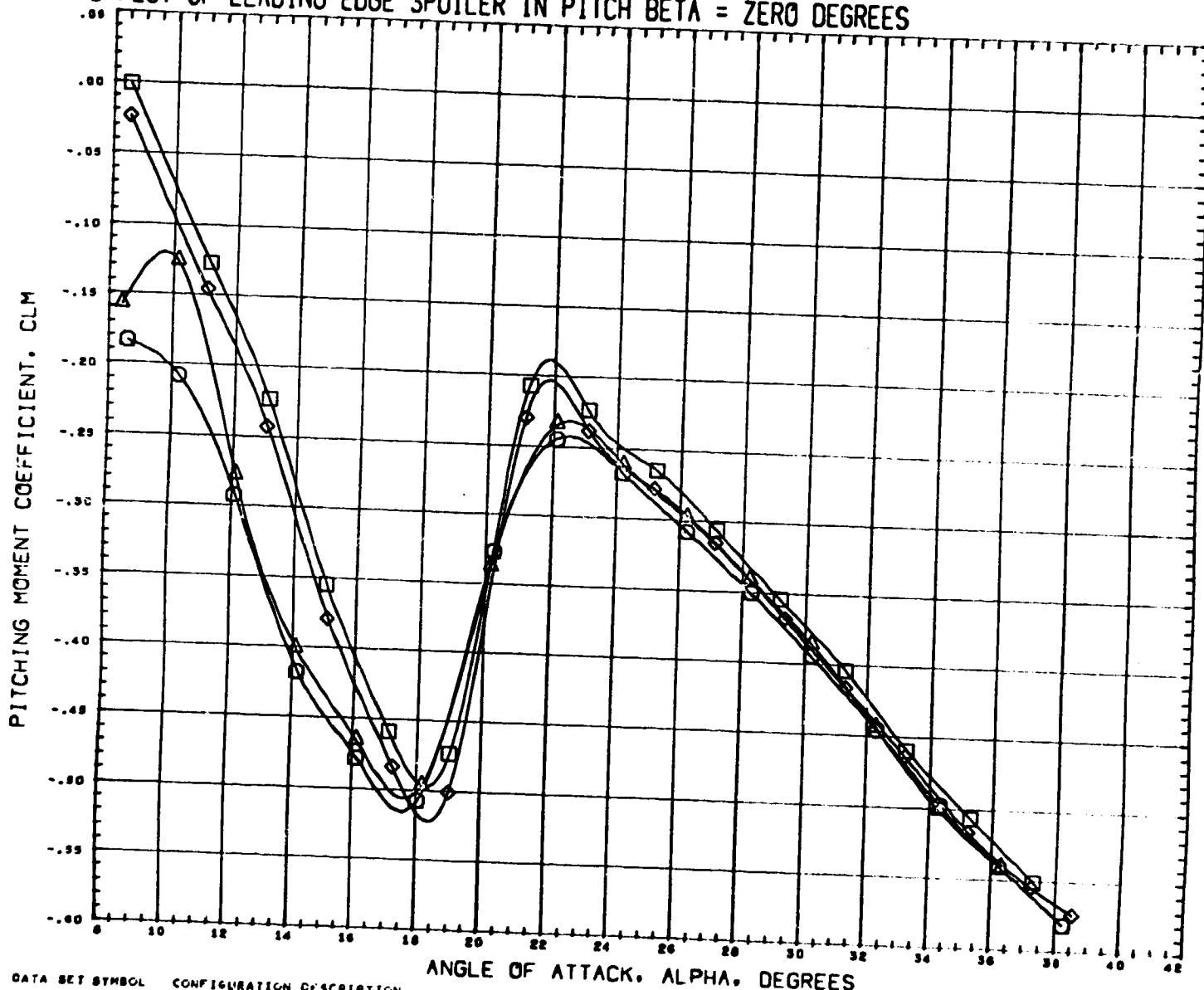
ANGLE OF ATTACK, ALPHA, DEGREES

MTAIL	ELEVTR	SPOILER
0.000	0.000	
0.000	0.000	
0.000	0.000	60.000
0.000	0.000	60.000

REFERENCE INFORMATION		
SREF	31.3600	sq. IN
LREF	2.2400	IN.
BREF	14.0000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.4333	IN.
SCALE	0.0067	

MACH 0.000

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(VC2073)	BTWT-1265 BOEING H-32 BOOSTER
(MC2073)	BTWT-1265 BOEING H-32 BOOSTER
(VC2103)	BTWT-1265 BOEING H-32 BOOSTER
(MC2103)	BTWT-1265 BOEING H-32 BOOSTER

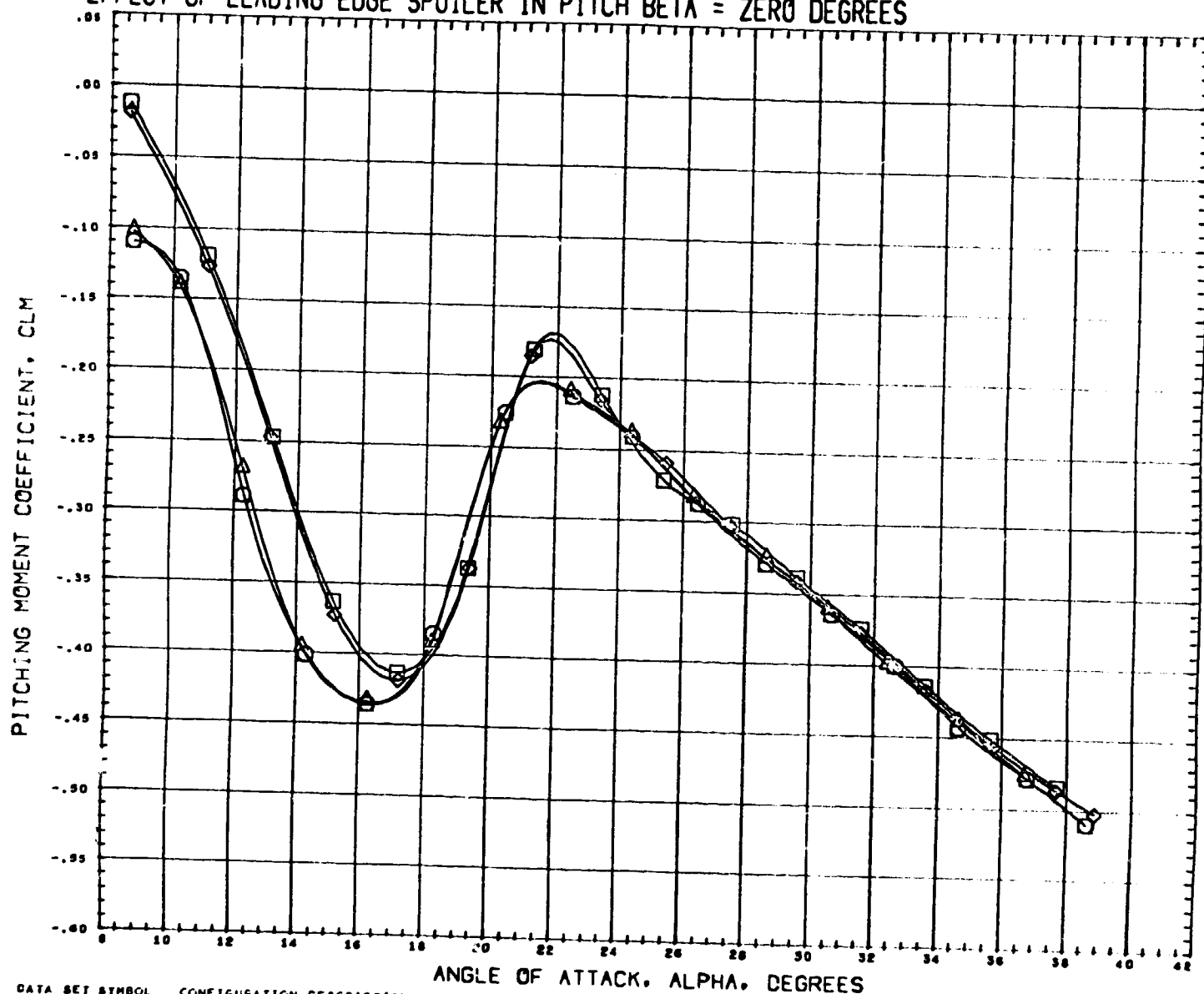
ANGLE OF ATTACK, ALPHA, DEGREES

MTAIL	ELEVTR	SPOILR
0.000	0.000	0.000
0.000	0.000	0.000
0.000	0.000	60.000
0.000	0.000	60.000

REFERENCE INFORMATION		
BREF	31.3600	50. IN
LREF	2.2400	IN.
BREF	14.8000	IN.
XNRP	11.9400	IN.
YNRP	0.0000	IN.
ZNRP	2.4330	IN.
SCALE	0.0067	

NACH 0.299

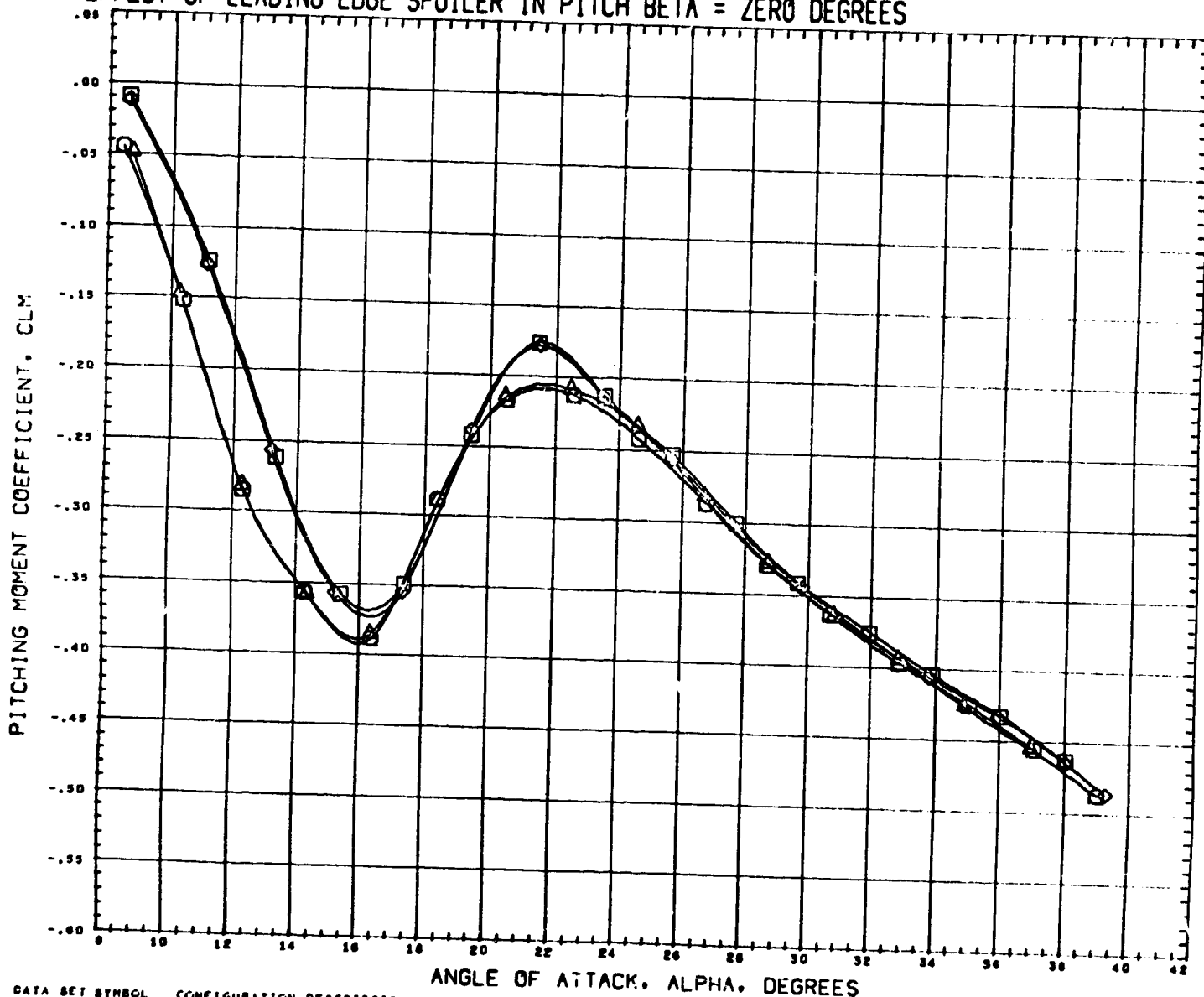
EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HTAIL	ELEVTR	SPOILR	REFERENCE INFORMATION
(VD2073)	8TWT-1265 BOEING M-32 BOOSTER 88W4H4V3	0.000	0.000		SREF 31.3400 80. IN
(VD2073)	8TWT-1265 BOEING M-32 BOOSTER 88W4H4V3	0.000	0.000		LREF 2.2400 IN.
(VD2103)	8TWT-1265 BOEING M-32 BOOSTER 88W4H4V3S2	0.000	0.000	60.000	BREF 14.0000 IN.
(MC2103)	8TWT-1265 BOEING M-32 BOOSTER 88W4H4V3S2	0.000	0.000	60.000	XMRP 11.9800 IN.
					YMRP 0.0000 IN.
					ZMRP 2.4330 IN.
					SCALE 0.0067

MACH 0.900

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (VC2073) Δ BTWT-1265 BOEING M-32 BOOSTER B8W4H4V3
 (VC2073) $\square$ BTWT-1265 BOEING M-32 BOOSTER B8W4H4V3
 (VC2103) Δ BTWT-1265 BOEING M-32 BOOSTER B8W4H4V3S2
 (VC2103) $\square$ BTWT-1265 BOEING M-32 BOOSTER B8W4H4V3S2

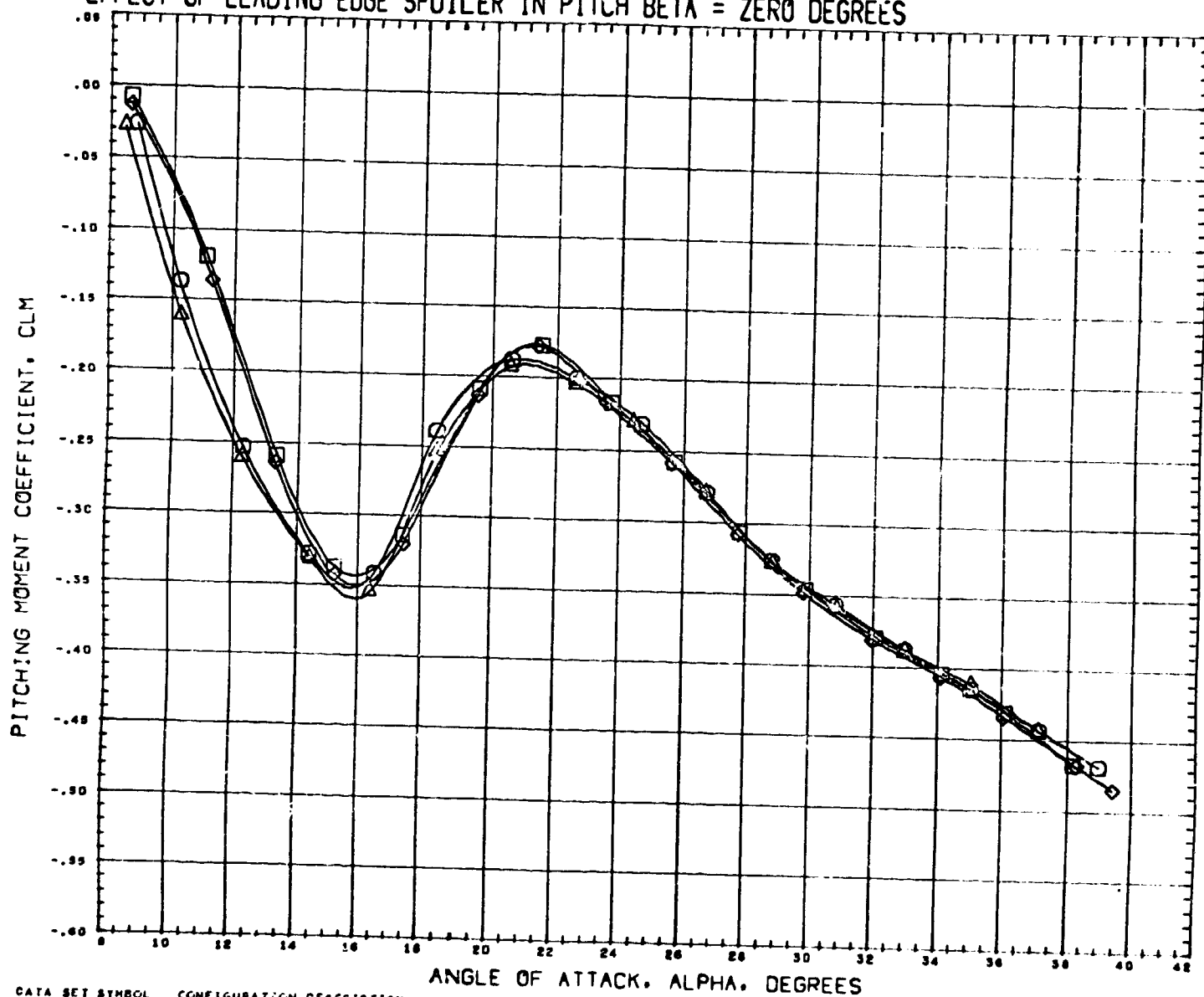
MACH 0.599

ANGLE OF ATTACK, ALPHA, DEGREES

MTAIL	ELEVTR	SPOILR
0.000	0.000	0.000
0.000	0.000	60.000
0.000	0.000	80.000

REFERENCE INFORMATION
 SREF 31.3600 60. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES

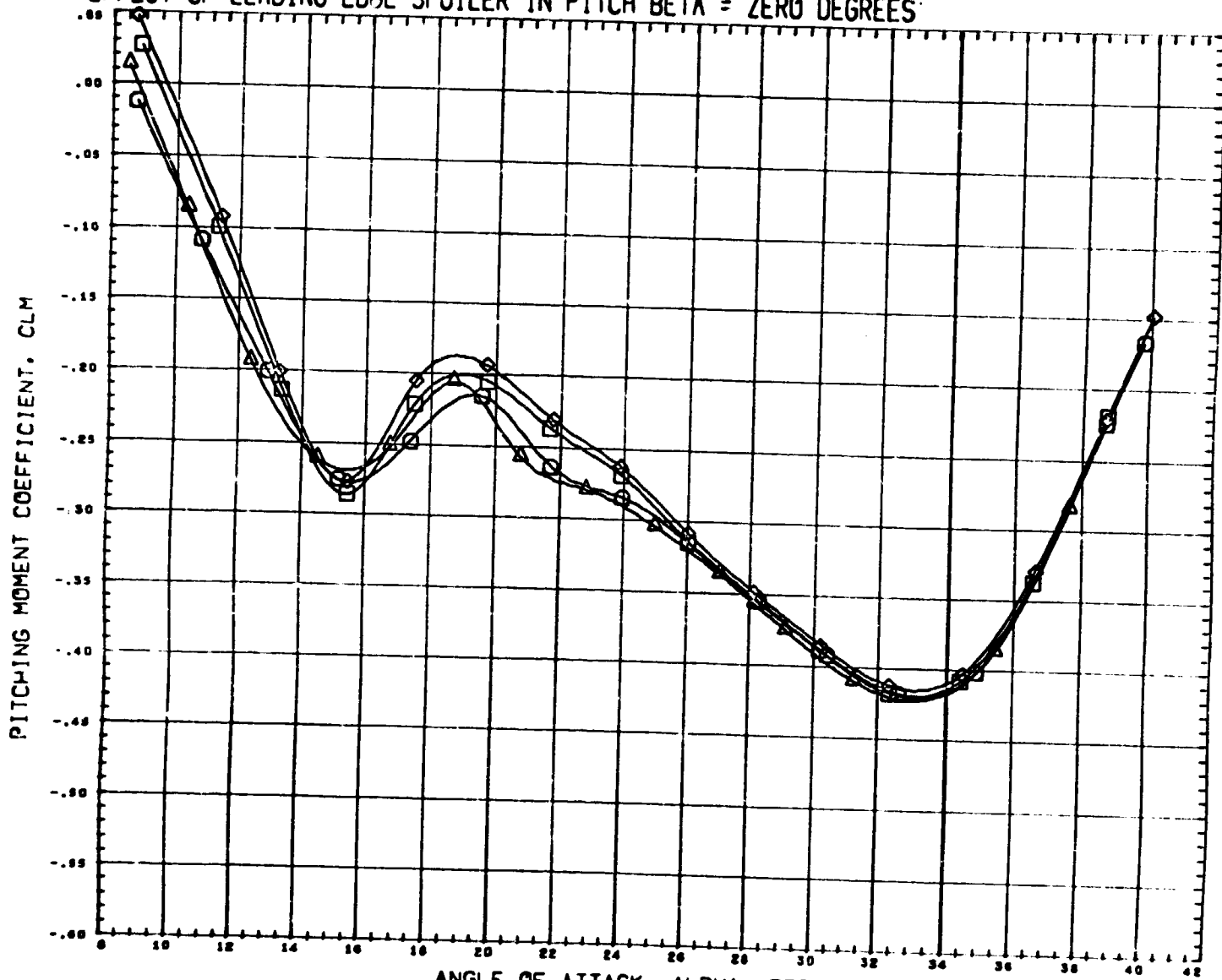


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HTAIL	ELEVTR	SPOILR
(WD2073)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	0.000	0.000	
(WD2073)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	0.000	0.000	
(WD2103)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3S2	0.000	0.000	60.000
(WD2103)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3S2	0.000	0.000	60.000

MACH 0.650

REFERENCE INFORMATION		
SREF	31.3600	Sq. IN
LREF	2.2400	IN.
BREF	14.6000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

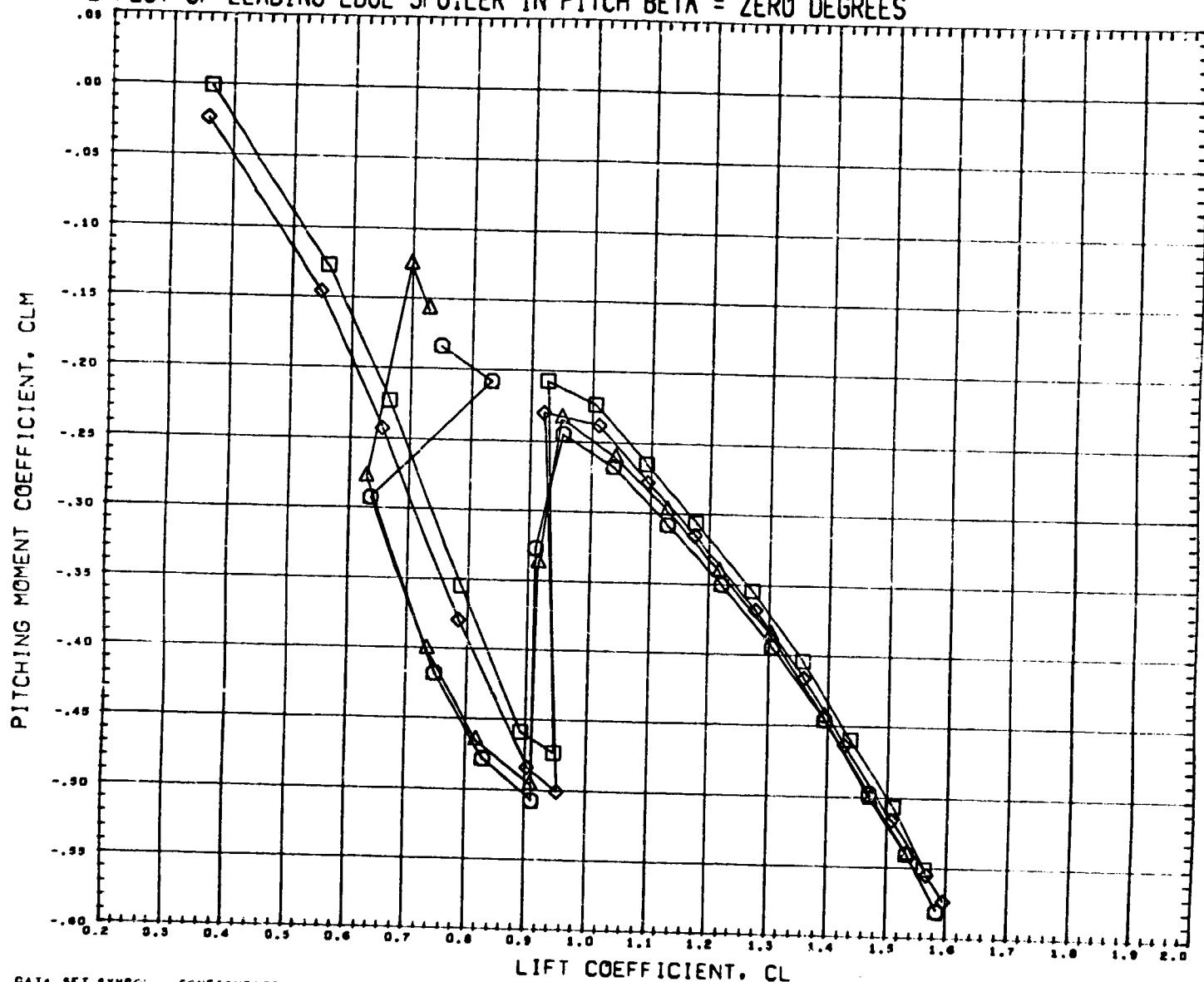
EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILR	REFERENCE INFORMATION
(V02373)	BTWT-1265 BOEING N-32 BOOSTER 88W4M4V3	0.000	0.000		SREF 31.3400 80. IN
(V02373)	BTWT-1265 BOEING N-32 BOOSTER 88W4M4V3	0.000	0.000		LREF 2.2400 IN.
(V02103)	BTWT-1265 BOEING N-32 BOOSTER 88W4M4V3S2	0.000	0.000	60.000	SREF 14.8000 IN.
(V02103)	BTWT-1265 BOEING N-32 BOOSTER 88W4M4V3S2	0.000	0.000	60.000	XMRP 11.9800 IN.
					YMRP 0.0000 IN.
					ZMRP 2.4330 IN.
					SCALE 0.0067

MACH 0.800

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES

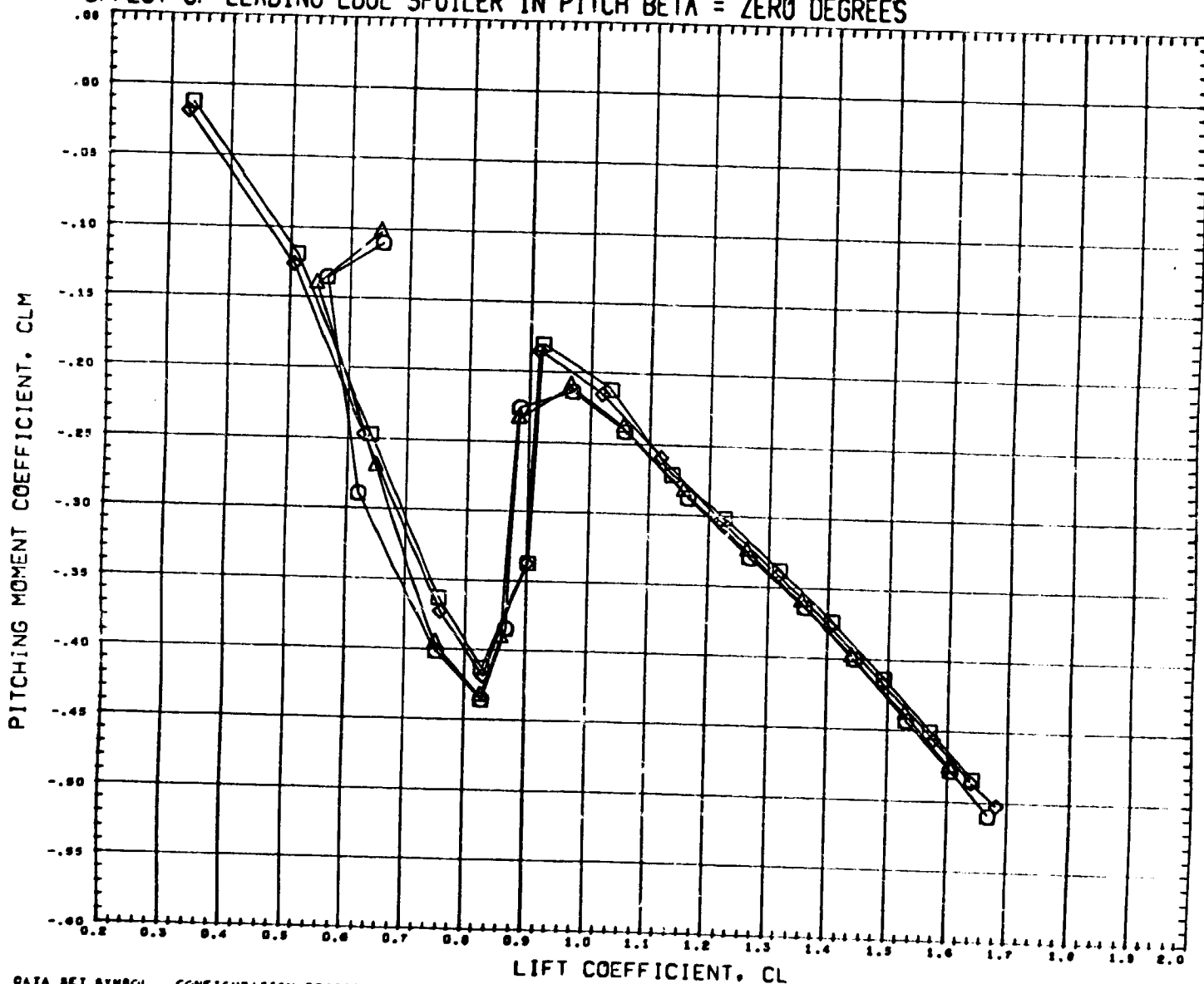


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MTAIL	ELEVTR	SPOILR
(VD2073)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	0.000	0.000	
(WD2073)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	0.000	0.000	
(VD2103)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3S2	0.000	0.000	60.000
(WD2103)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3S2	0.000	0.000	60.000

MACH 0.290

REFERENCE INFORMATION		
SREF	31.3600	80. IN
LREF	2.2400	IN.
BREF	14.6000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES

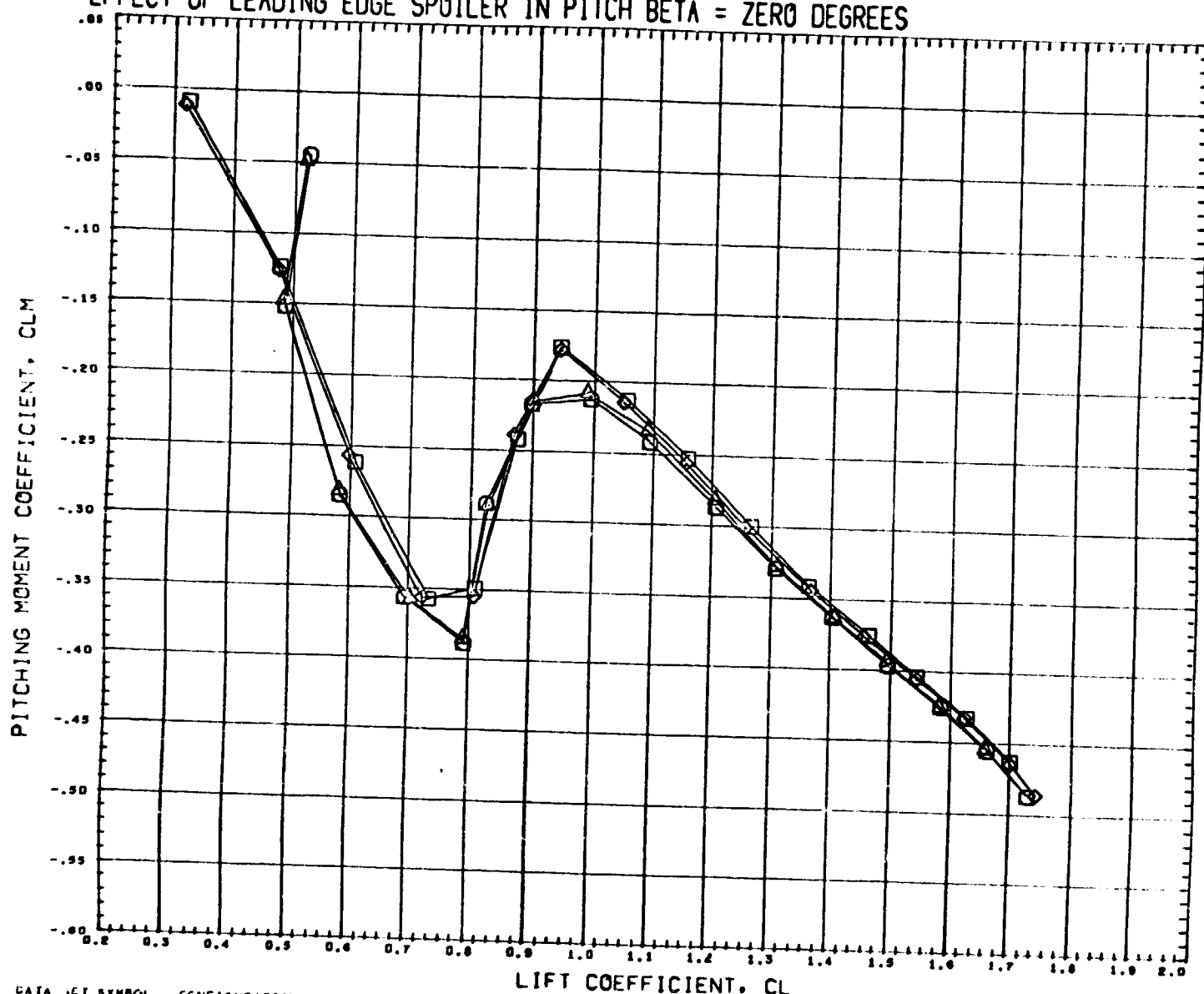


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILR
(V02073)	BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3	0.000	0.000	
(V02073)	BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3	0.000	0.000	
(V02103)	BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3S2	0.000	0.000	60.000
(V02103)	BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3S2	0.000	0.000	60.000

MACH 0.900

REFERENCE INFORMATION		
SREF	31.3400	80. IN
LREF	2.2400	IN.
BREF	14.0000	IN.
XMRP	11.9600	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0087	

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



DATA SET SYMBOL CONFIGURATION DESCRIPTION

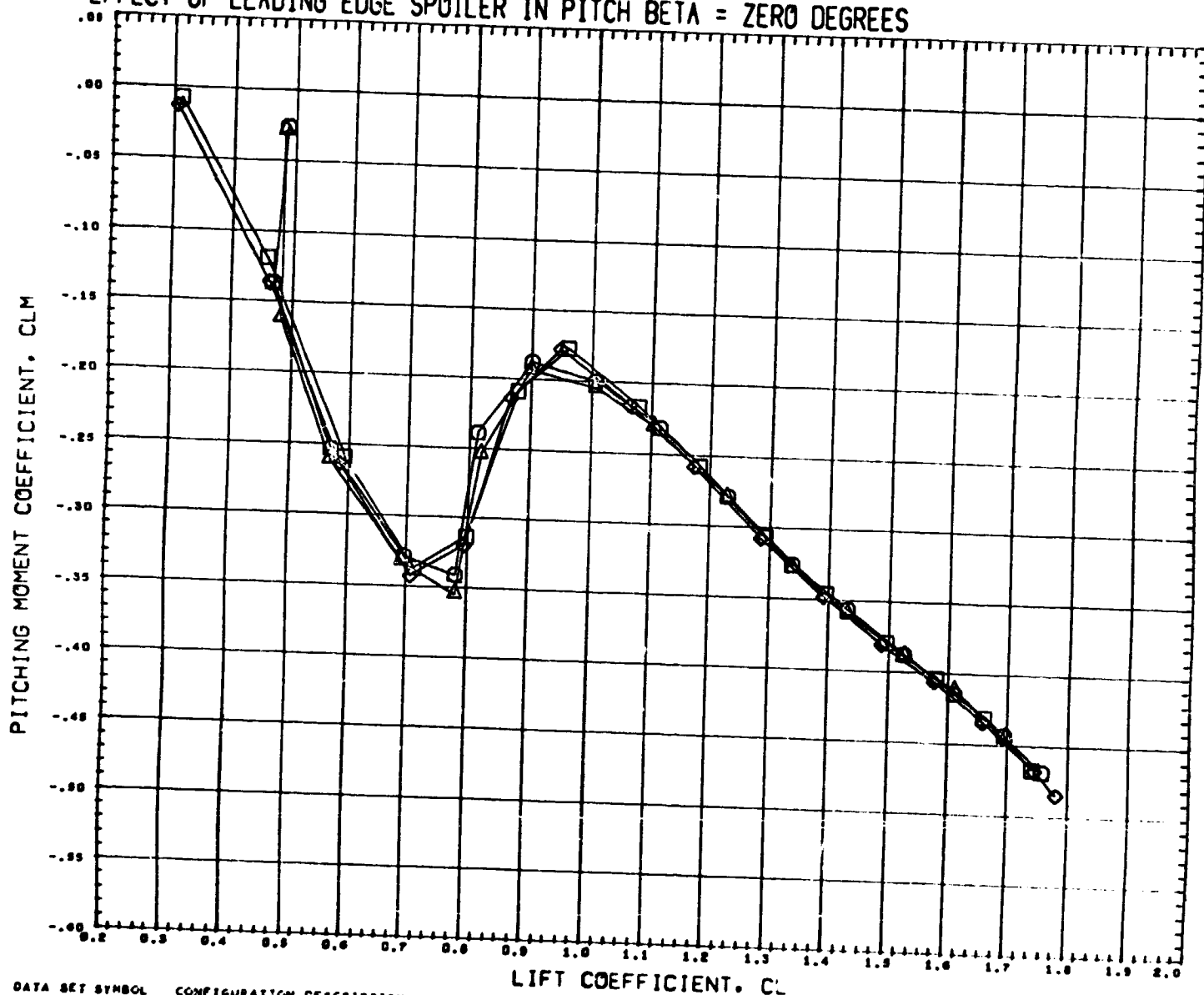
(VD2013) BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3
 (VD2013) BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3
 (VD2103) BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3S2
 (VD2103) BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3S2

HTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000
 0.000 0.000 60.000
 0.000 0.000 60.000

REFERENCE INFORMATION
 SREF 31.3600 SQ. IN
 LREF 7.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.999

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES



DATA SET SYMBOL CONFIGURATION DESCRIPTION

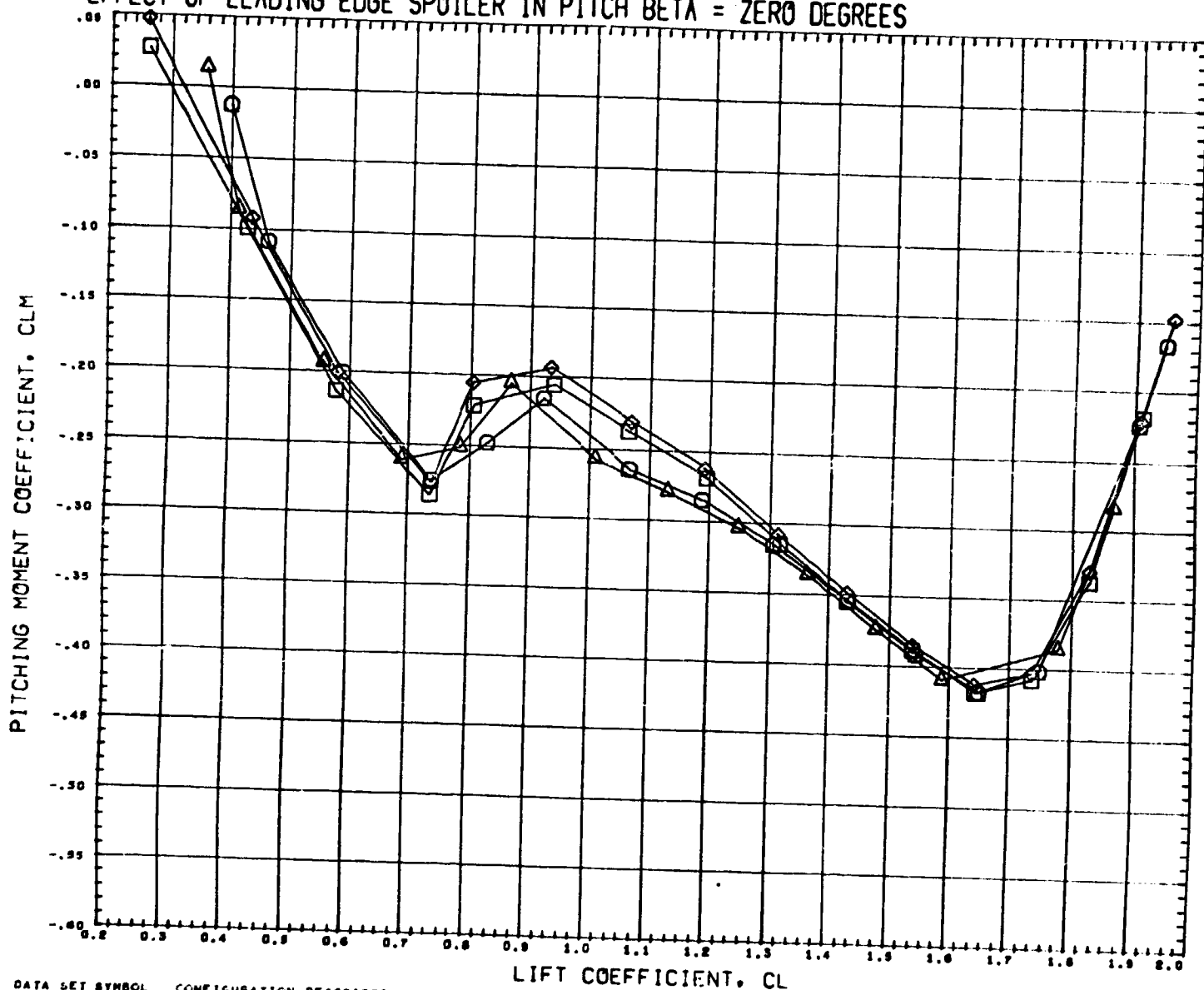
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	BTWT-1265	BOEING H-32 BOOSTER	88W4H4V3	MTAIL	ELEVTR	SPOILR
(V02073)	BTWT-1265 BOEING H-32 BOOSTER	88W4H4V3	0.000	0.000	0.000	0.000	0.000
(V02073)	BTWT-1265 BOEING H-32 BOOSTER	88W4H4V3	0.000	0.000	0.000	0.000	0.000
(V02103)	BTWT-1265 BOEING H-32 BOOSTER	88W4H4V3S2	0.000	0.000	0.000	0.000	0.000
(V02103)	BTWT-1265 BOEING H-32 BOOSTER	88W4H4V3S2	0.000	0.000	0.000	0.000	0.000

MACH 0.650

REFERENCE INFORMATION

SRF	31.3600	sq. in
LRP	2.2400	in.
SRF	14.8000	in.
YMRP	11.9000	in.
YMRP	0.0000	in.
ZMRP	2.4330	in.
SCALE	0.0007	

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = ZERO DEGREES

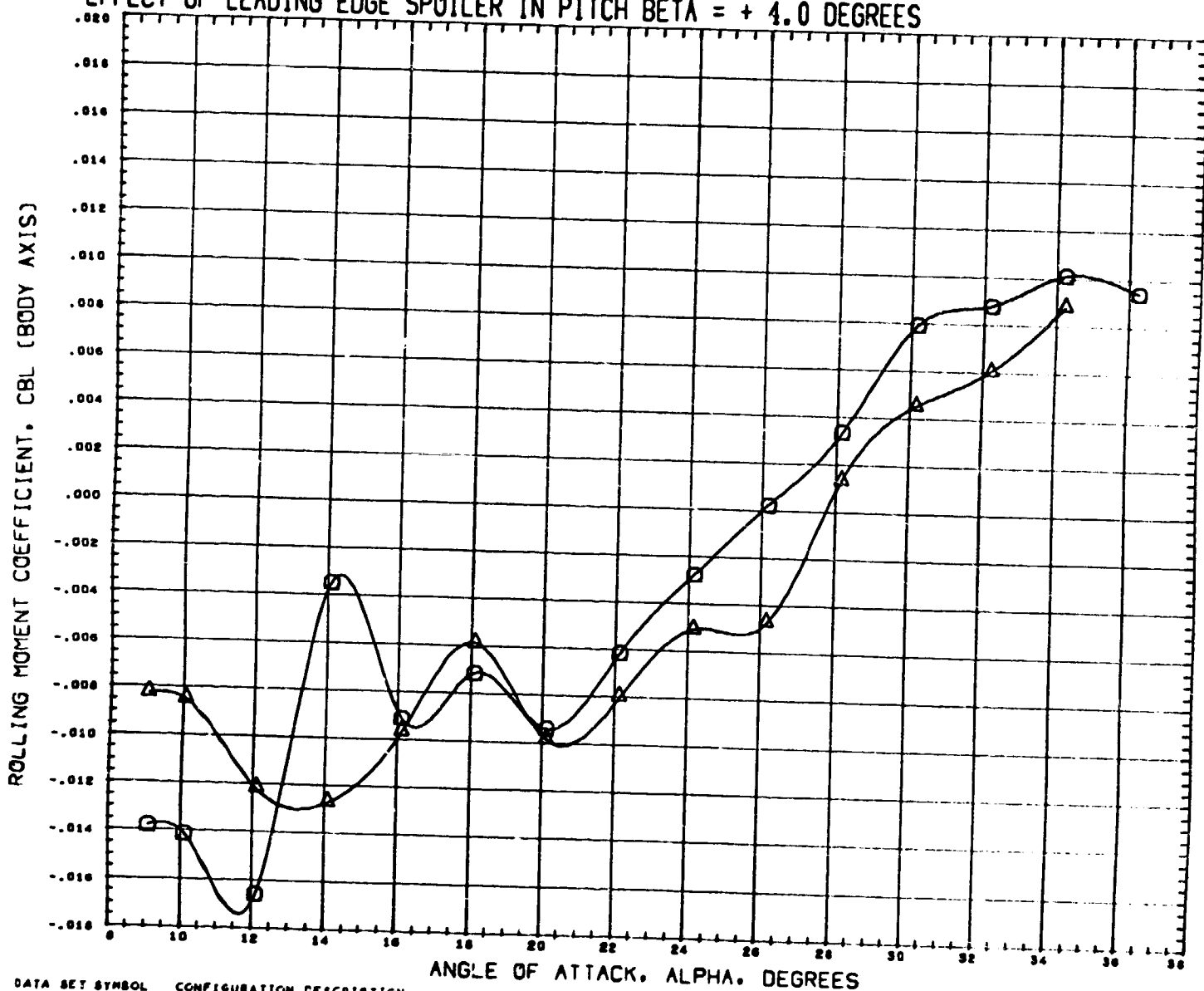


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MTAIL	ELEVTR	SPOILR
(VD2073)	BTMT-1265 BOEING N-32 BOOSTER B8W4H4V3	0.000	0.000	
(WD2073)	BTMT-1265 BOEING N-32 BOOSTER B8W4H4V3	0.000	0.000	
(VD2103)	BTMT-1265 BOEING N-32 BOOSTER B8W4H4V3S2	0.000	0.000	60.000
(WD2103)	BTMT-1265 BOEING N-32 BOOSTER B8W4H4V3S2	0.000	0.000	60.000

MACH 0.800

REFERENCE INFORMATION		
BREF	31.3600	sq. in
LREF	2.2400	in.
BREF	14.6000	in.
XMRP	11.9600	in.
YMRP	0.0000	in.
ZMRP	2.4330	in.
SCALE	0.0067	

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES



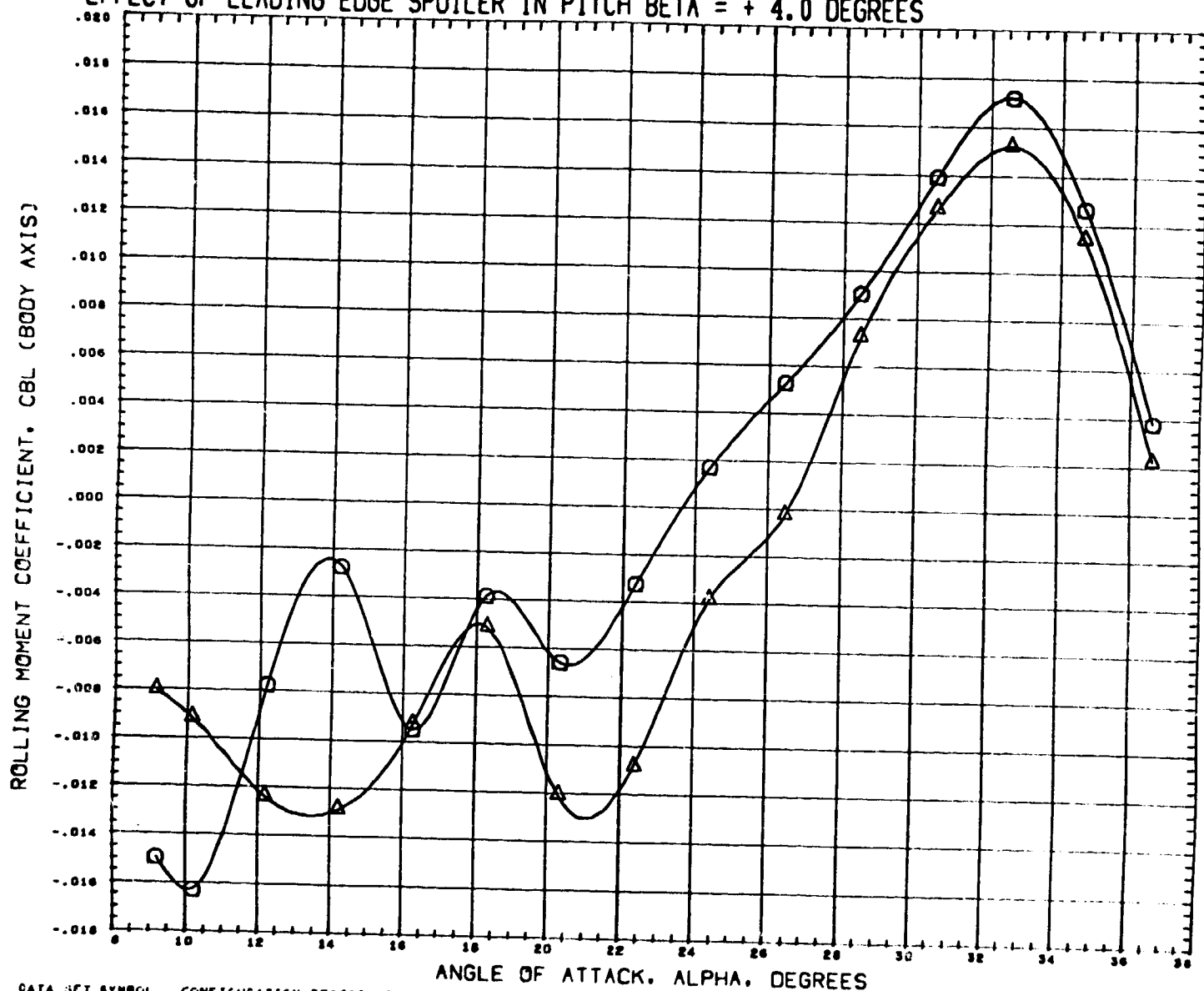
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02072) BTMT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (R02102) BTMT-1265 BOEING N-32 BOOSTER 88W4H4V3S2

MTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000 60.000

REFERENCE INFORMATION
 SREF 31.3600 30. IN
 LREF 2.2400 IN.
 OREF 14.8000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.300

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES



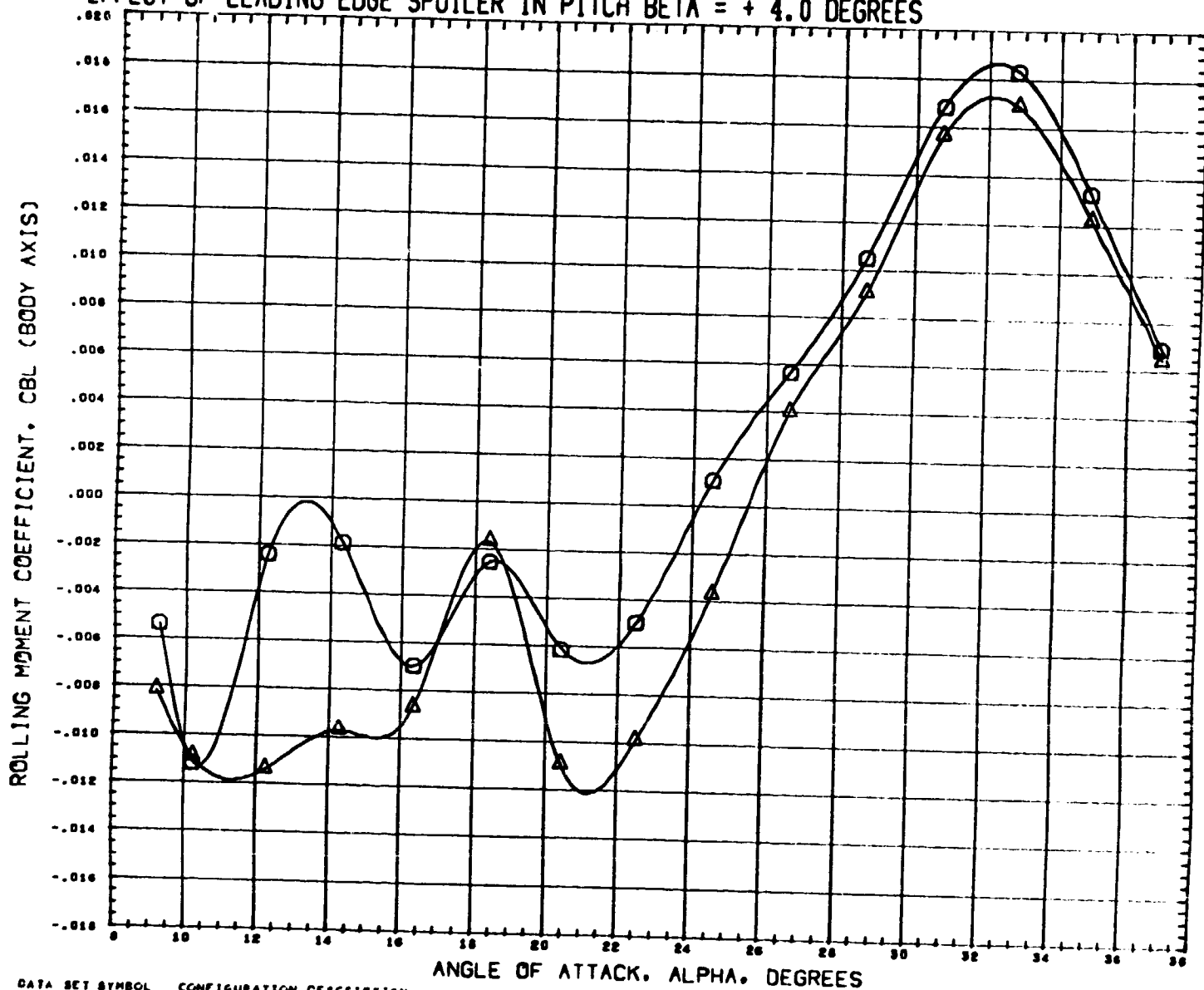
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R020'2) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (R02102) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V382

HTAIL ELEVTR SPOILR
 0.000 0.000 40.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 89. IN
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.999

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES



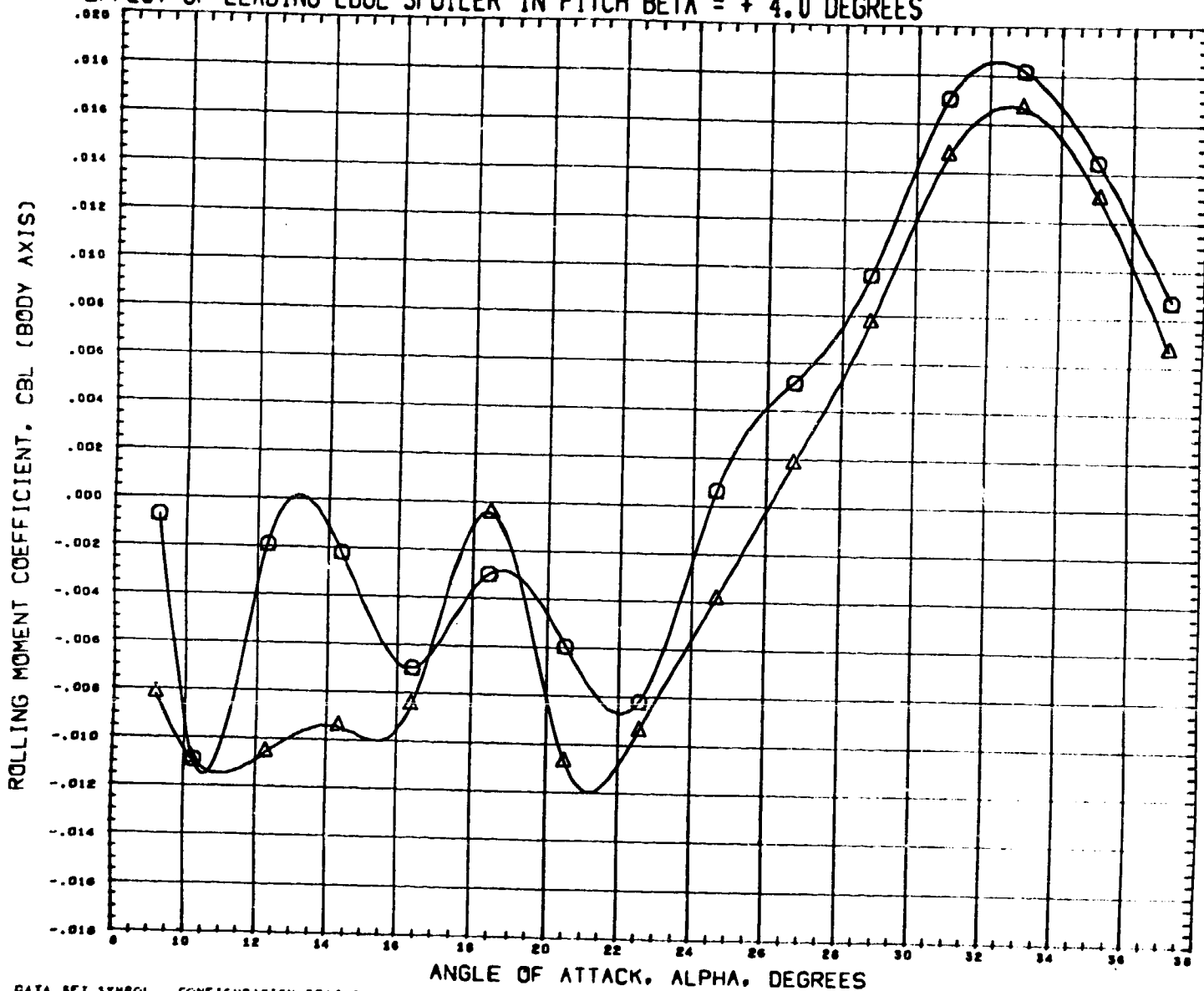
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC2072) Q BTWT-1265 BOEING H-32 BOOSTER 88N4H4V3
 (RC2102) Q BTWT-1265 BOEING H-32 BOOSTER 88N4H4V3S2

MTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000 60.000

REFERENCE INFORMATION
 SREF 31.3800 50. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.001

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RC2072) BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3
 (RC2102) BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3S2

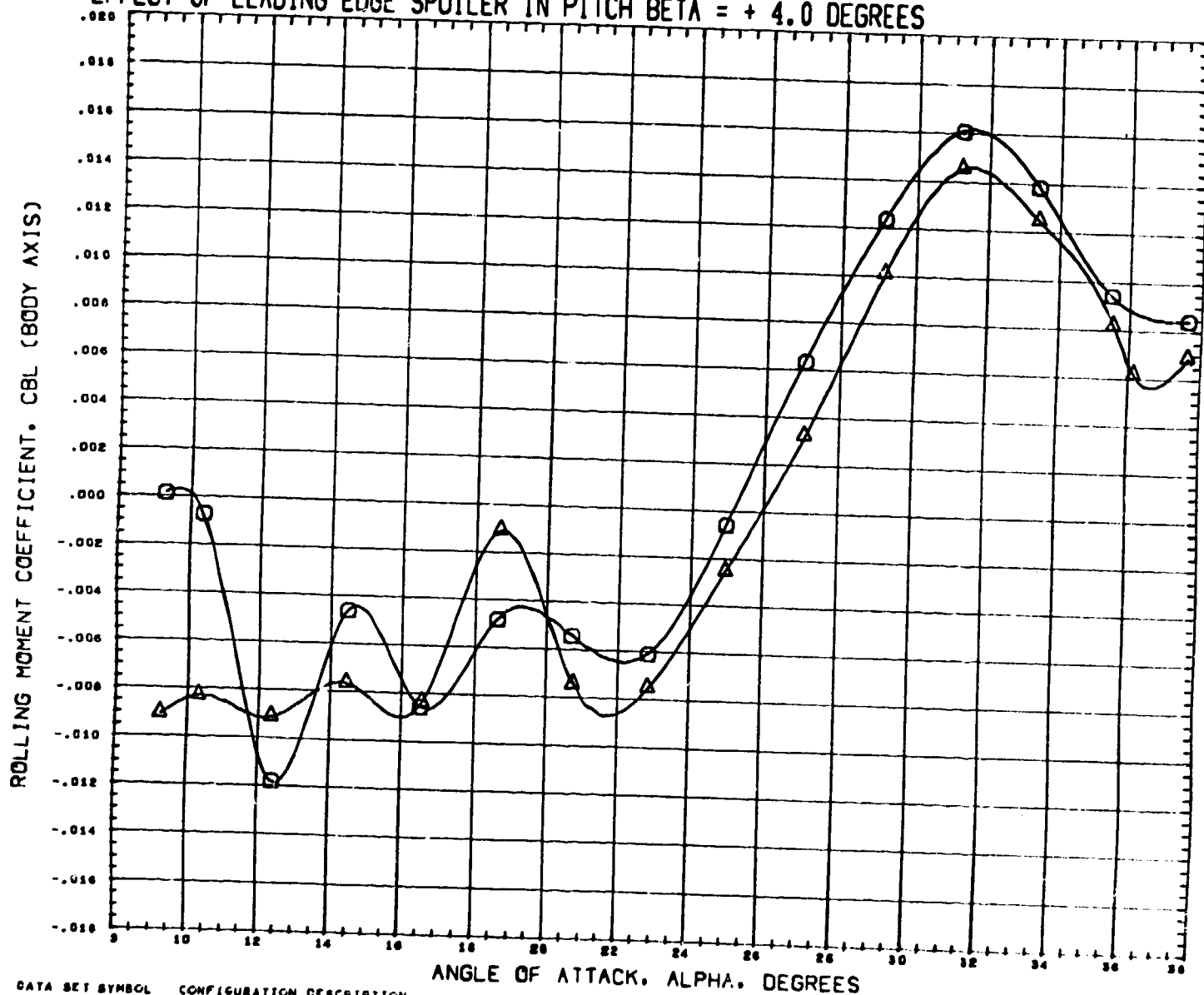
NTAIL ELEVTR SPOILR
 0.000 0.000 0.000
 0.000 0.000 60.000

REFERENCE INFORMATION

SREF 31.3600 88. IN
 LREF 2.2400 IN.
 SREF 14.0000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.651

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02072) BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3
 (R02102) BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3S2

NTAIL ELEVTR SPOILR
 0.000 0.000 0.000
 0.000 0.000 60.000

REFERENCE INFORMATION
 SREF 51.3600 IN.
 LREF 8.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 8.4330 IN.
 SCALE 0.0067

MACH 0.800

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES

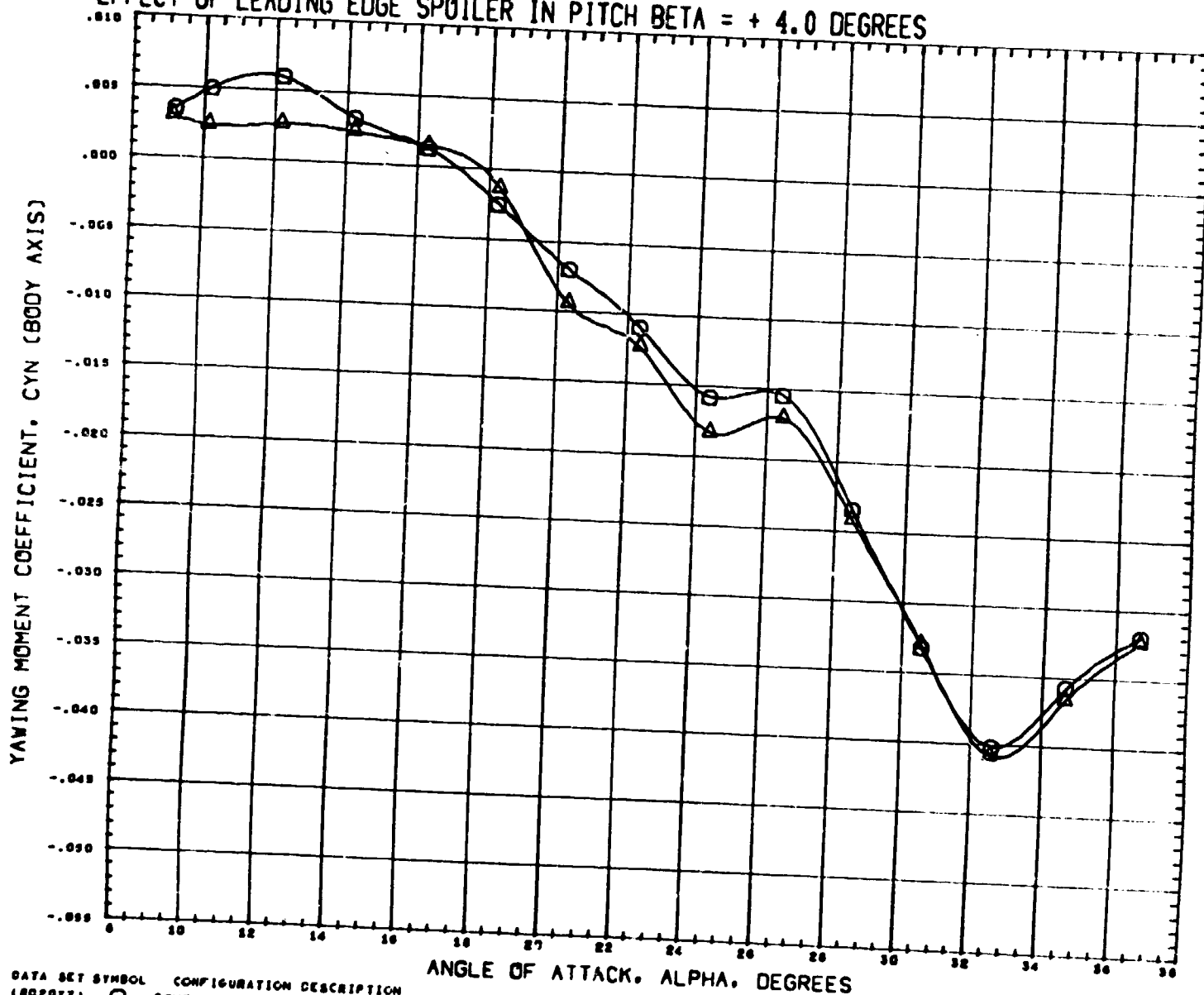


DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC207Z) BTWT-1265 BOEING H-32 BOOSTER
 (RC210Z) BTWT-1265 BOEING H-32 BOOSTER

MACH 0.300

REFERENCE INFORMATION
 SREF 31.3600 IN.
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES



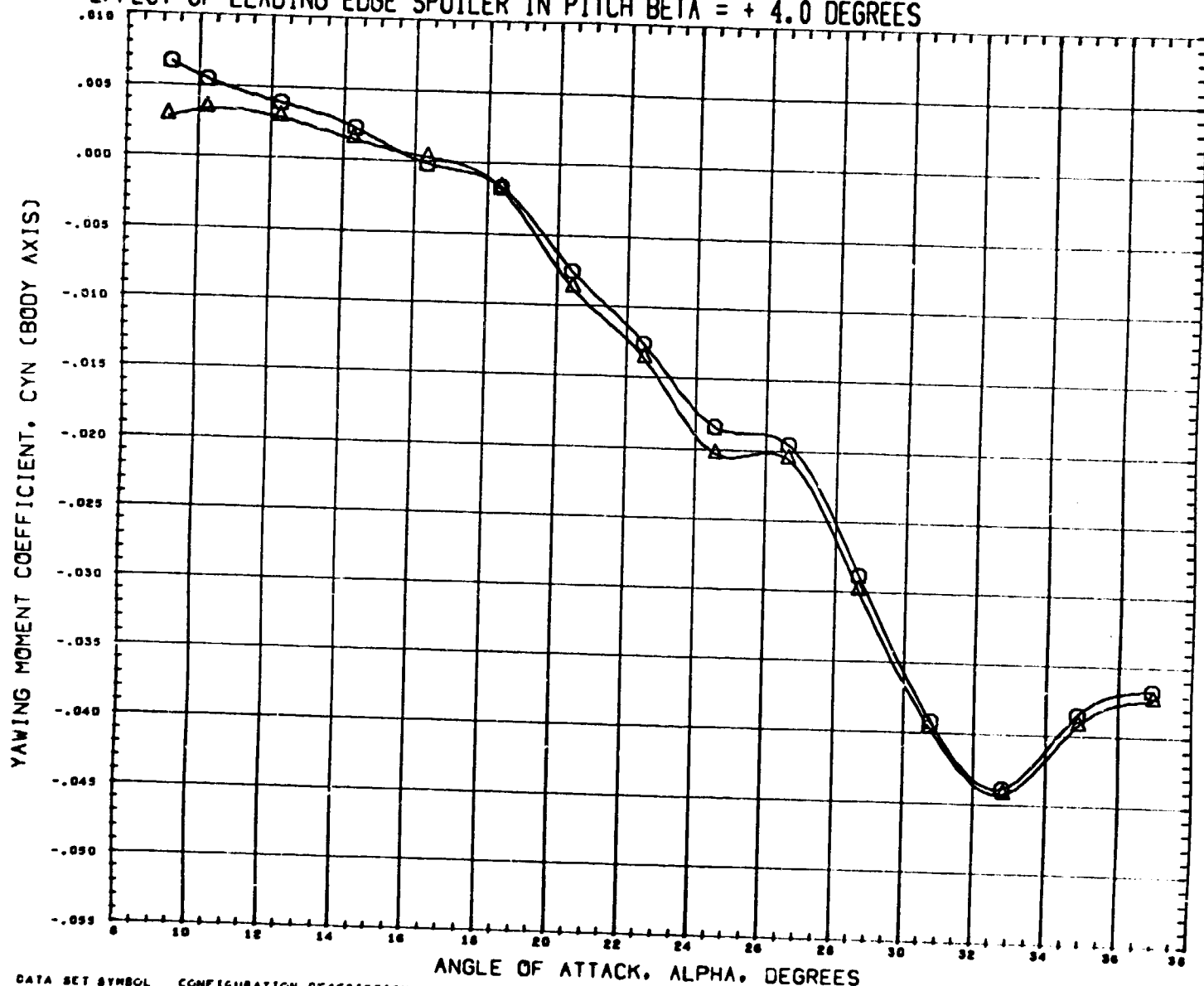
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02072) 8 BTWT-1203 BOEING N-32 BOOSTER 88W4H4V3
 (R02102) 8 BTWT-1203 BOEING N-32 BOOSTER 88W4H4V3S2

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000 60.000

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XREF 11.0600 IN.
 YREF 0.0000 IN.
 ZREF 2.4330 IN.
 SCALE 0.0067

MACH 0.900

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(R02072) Δ BTMT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (R02102) Δ BTMT-1265 BOEING N-32 BOOSTER 88W4H4V352

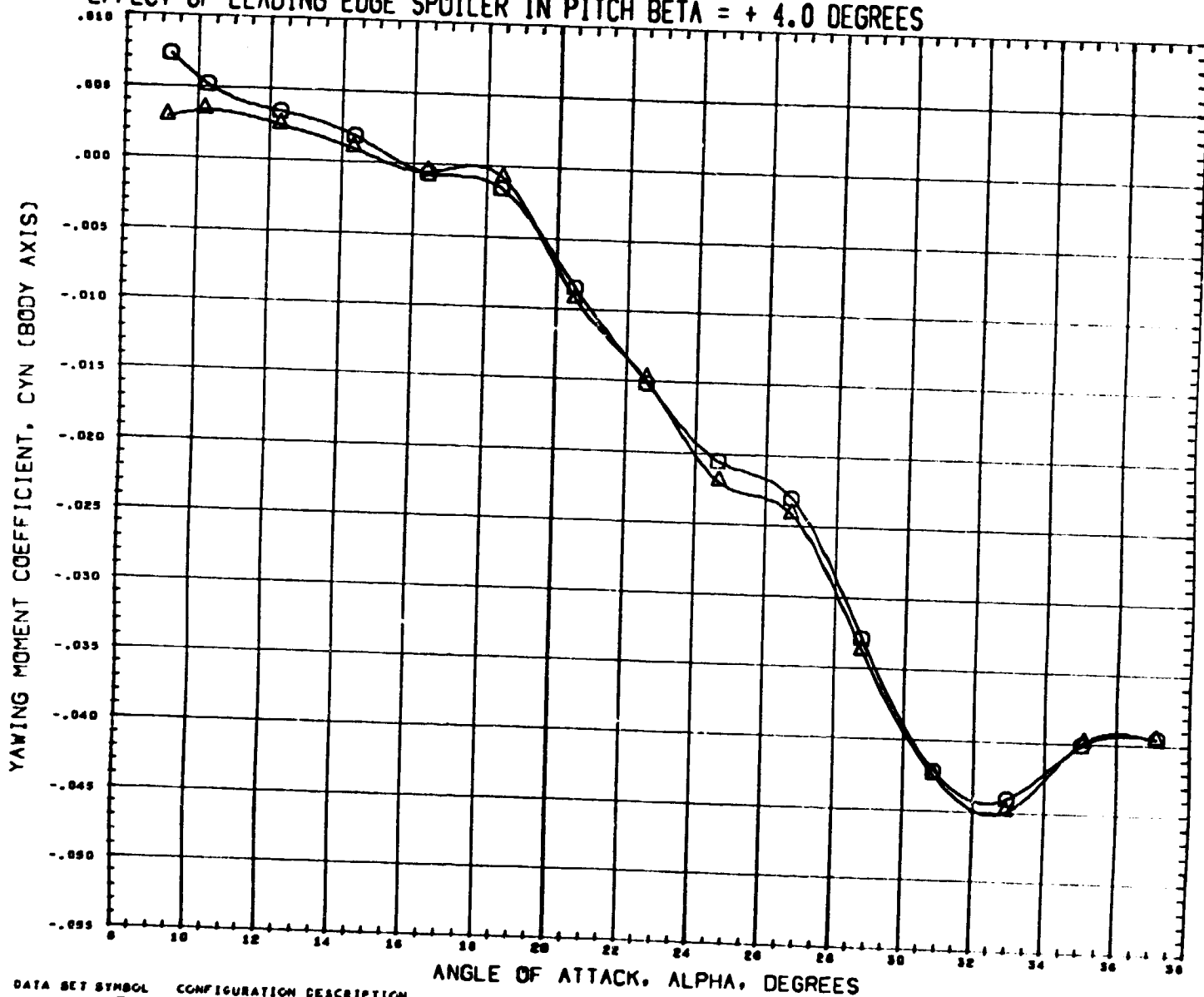
HTAIL ELEVTR SPOILR
 0.000 0.000 0.000
 0.000 0.000 40.000

REFERENCE INFORMATION

SREF 31.3600 88. IN
 LREF 2.2400 IN.
 SREF 14.0000 IN.
 XMAP 11.9800 IN.
 YMAP 0.0000 IN.
 ZMAP 2.4330 IN.
 SCALE 0.0067

MACH 0.601

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES



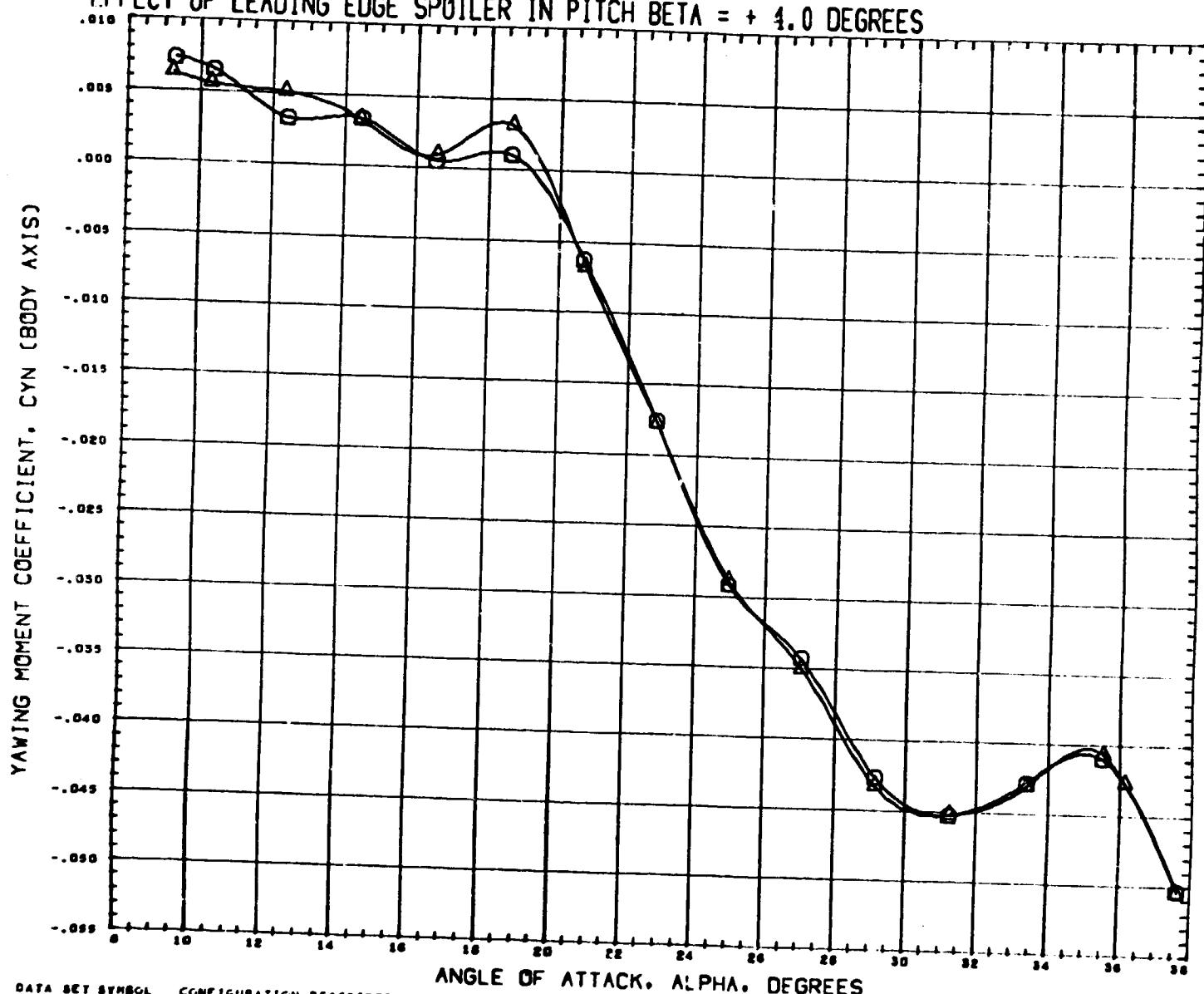
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC2072) BTWY-1265 BOEING N-32 BOOSTER BOW4N4V3
 (RC2102) BTWT-1265 BOEING N-32 BOOSTER BOW4N4V3S2

NTAIL ELEVTB SPOILR
 0.000 0.000 60.000
 0.000 0.000 60.000

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 OREF 14.8900 IN.
 XNRP 11.9600 IN.
 YNRP 0.0000 IN.
 ZNRP 2.4330 IN.
 SCALE 0.0067

MACH 0.051

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES



DATA SET SYMBOL CONFIGURATION DESCRIPTION

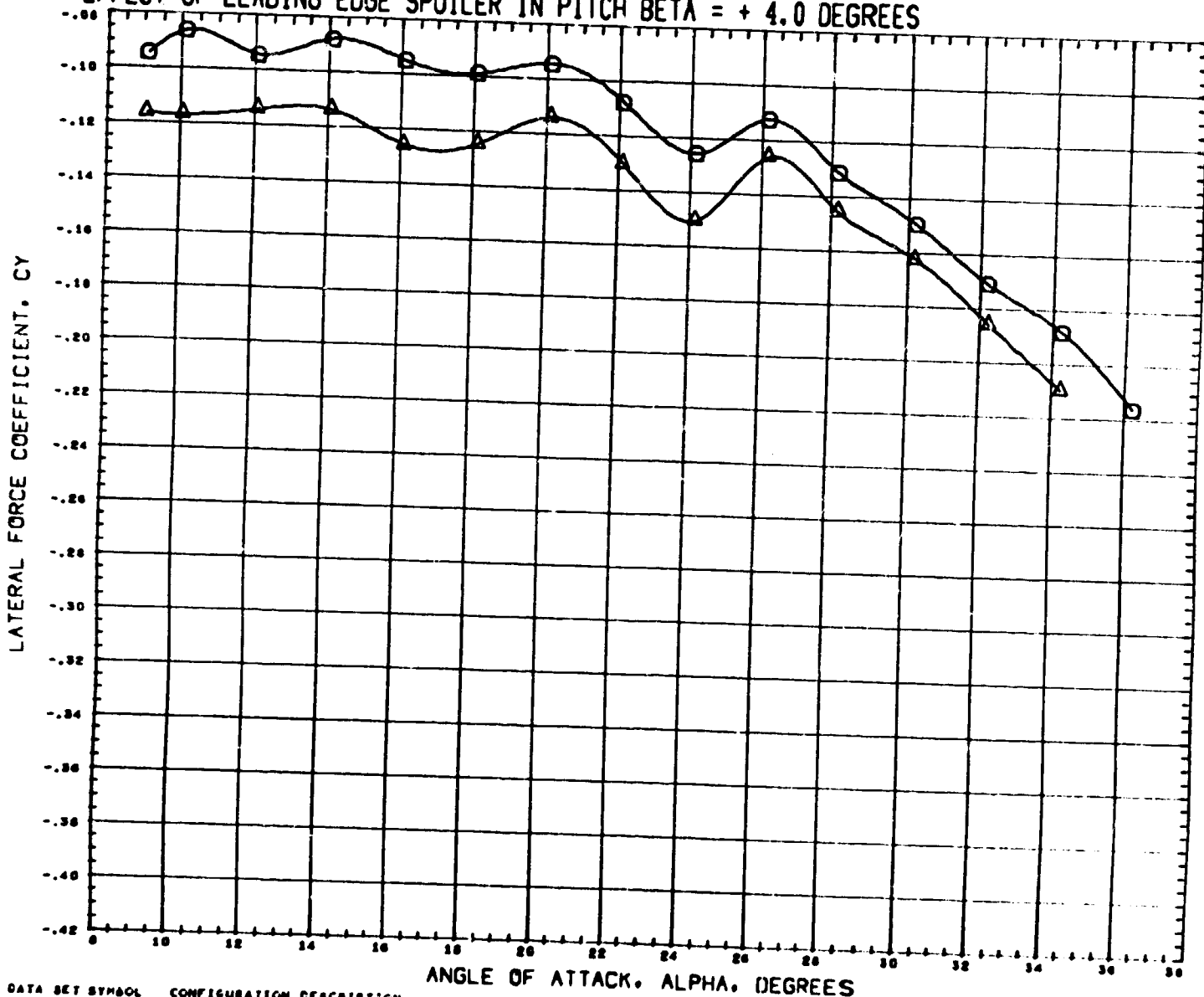
(R02072)  BTMT-1265 BOEING N-32 BOOSTER 88W4H4V3
(R02102)  BTMT-1265 BOEING N-32 BOOSTER 88W4H4V3S2

NTAIL ELEVTR SPOILR
0.000 0.000
0.000 0.000 60.000

REFERENCE INFORMATION
SREF 31.3600 60. IN
LREF 2.2400 IN.
BREF 14.8000 IN.
XMRP 11.9000 IN.
YMRP 0.0000 IN.
ZMRP 2.4330 IN.
SCALE 0.0067

MACH 0.800

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES



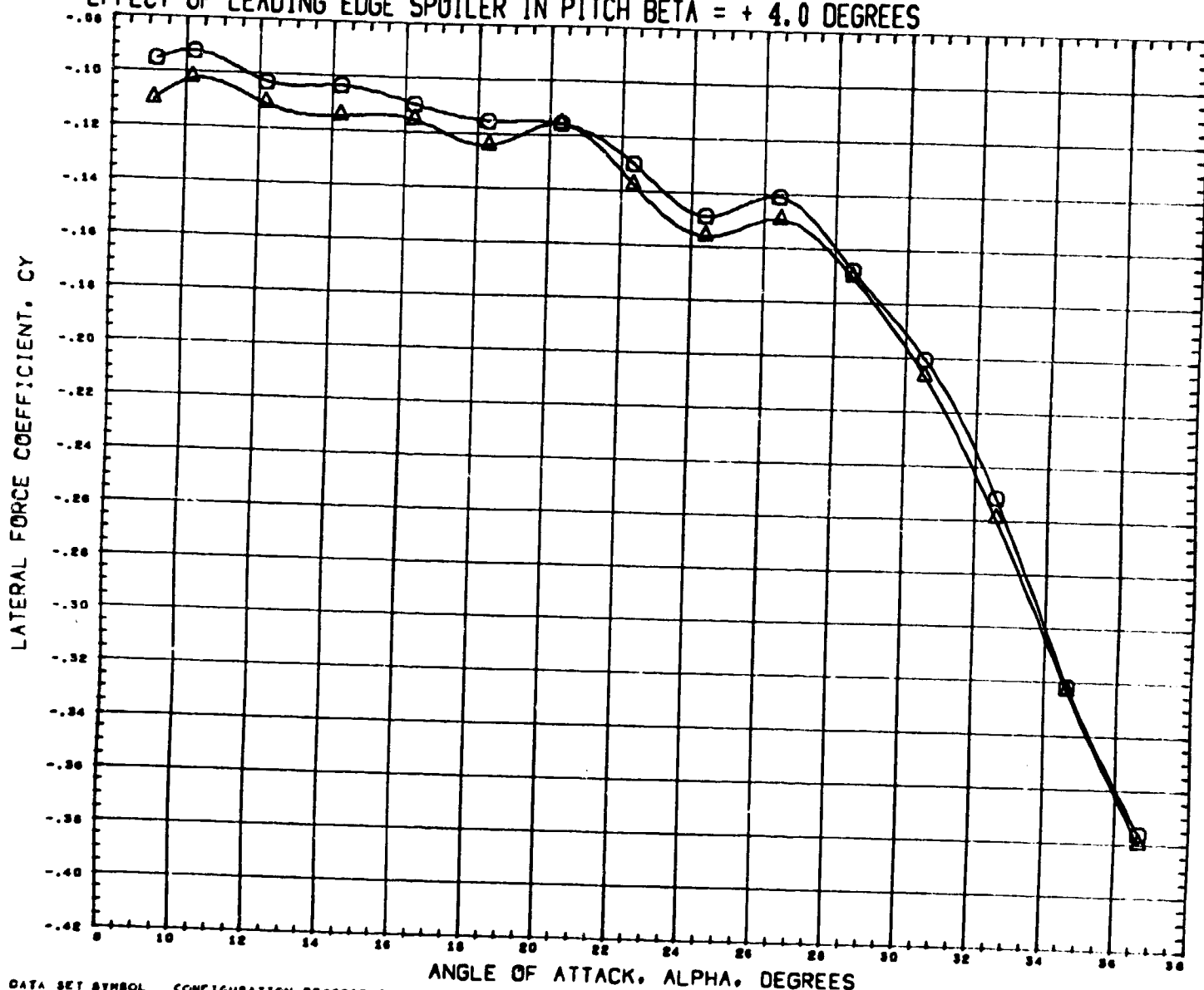
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02072) Q BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (R02102) Q BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3S2

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000 40.000

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XREF 11.0000 IN.
 YREF 0.0000 IN.
 ZREF 2.4330 IN.
 SCALE 0.0007

MACH 0.309

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES



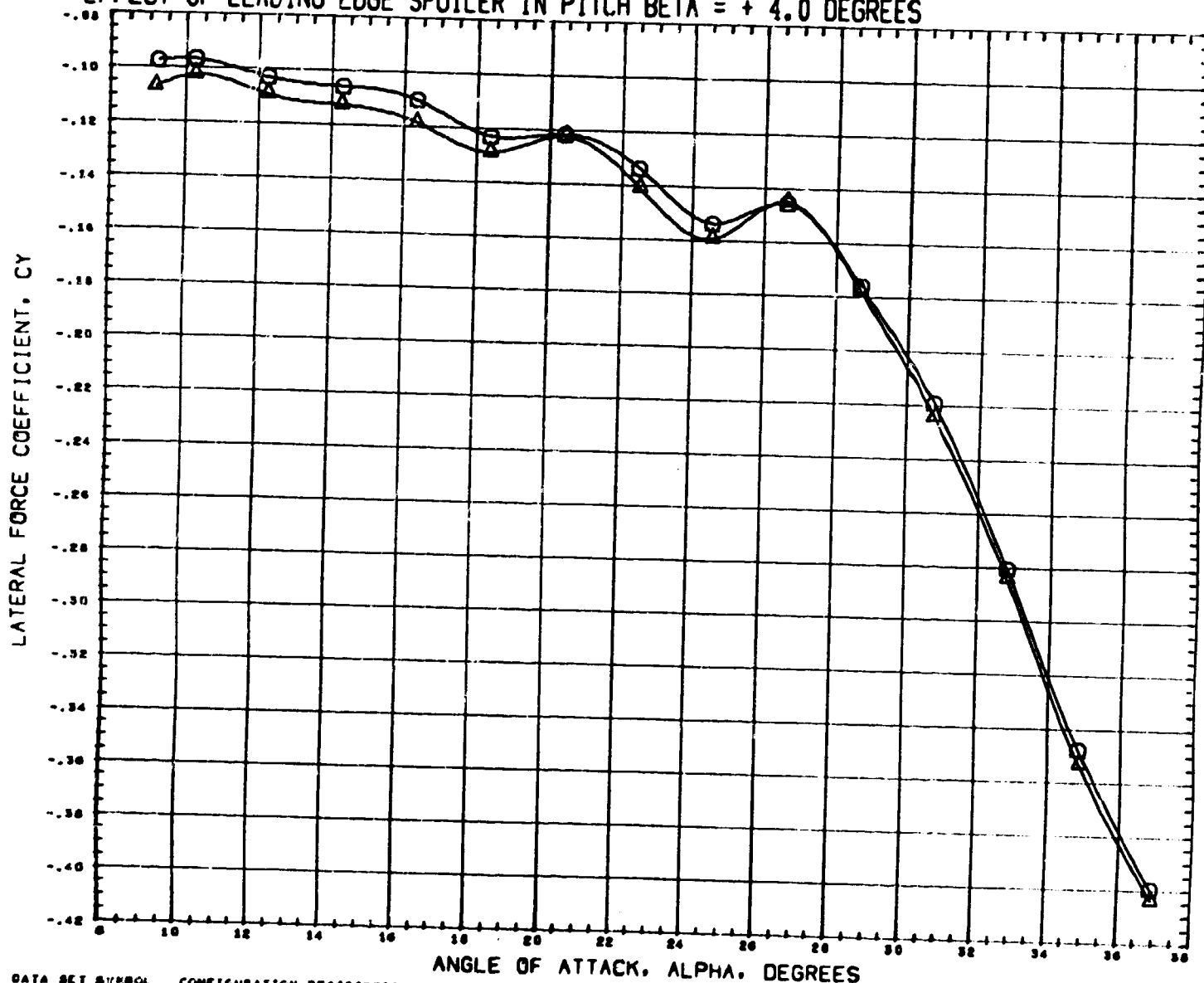
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RD2072) BTWT-12C5 BOEING N-32 BOOSTER 88W4M4V3
 (RD2102) BTWT-12C5 BOEING N-32 BOOSTER 88W4M4V382

NTAIL ELEVTR SPOILR
 0.000 0.000 0.000
 0.000 0.000 60.000

REFERENCE INFORMATION
 SREF 31.3403 88. IN
 LREF 2.2400 IN.
 BREF 14.0003 IN.
 XMRP 11.0003 IN.
 YMRP 0.0003 IN.
 ZMRP 2.4333 IN.
 SCALE 0.0067

MACH 0.900

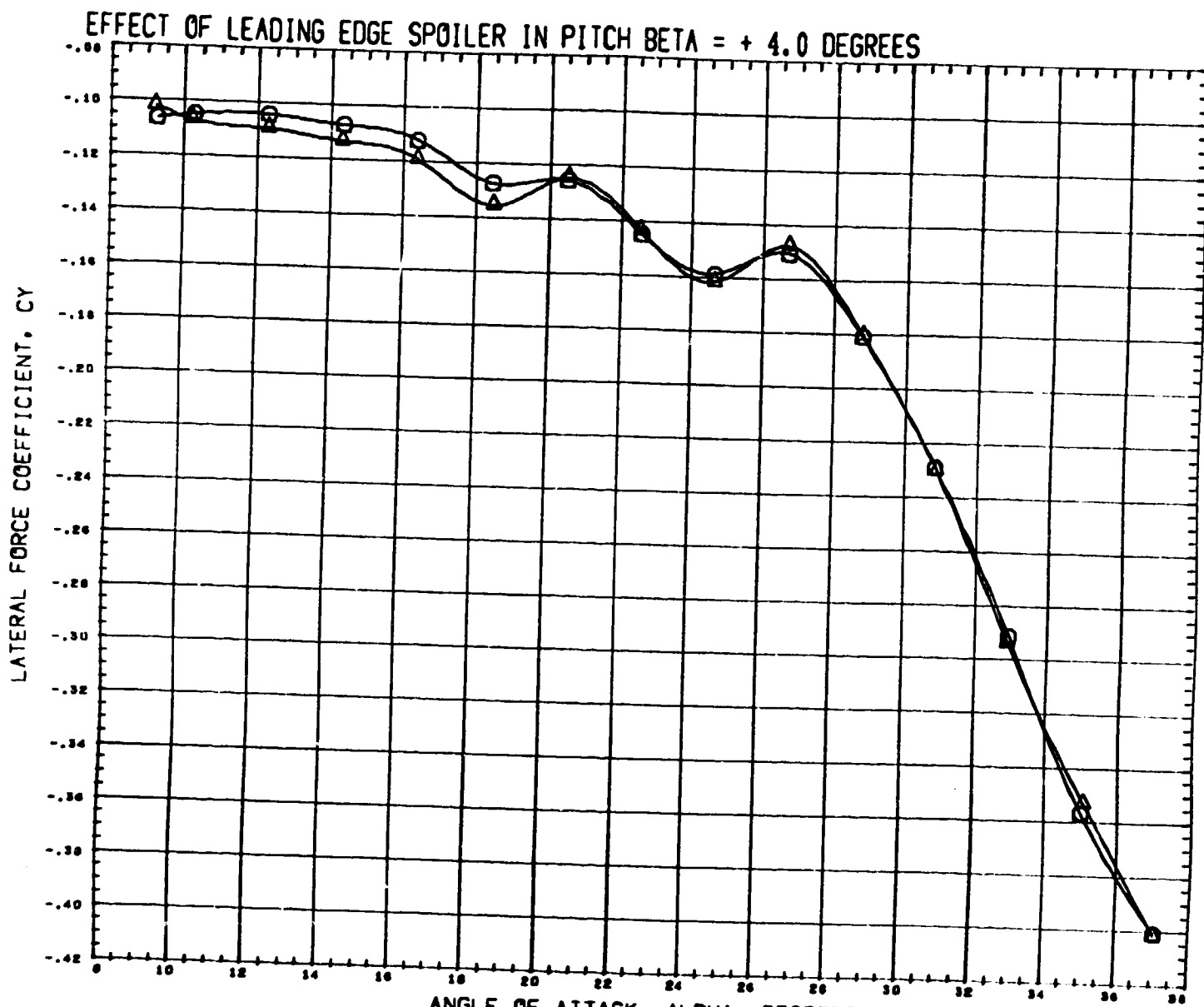
EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HTAIL	ELEVTR	SPOILER
(R2072)	BTWT-1265 BOEING N-32 BOOSTER	0.000	0.000	
(R2102)	BTWT-1265 BOEING N-32 BOOSTER	0.000	0.000	60.000

MACH 0.001

REFERENCE INFORMATION		
SREF	31.3600	88. IN
LREF	2.2400	IN.
BREF	14.0000	IN.
XMRP	11.9000	IN.
YMRP	0.0030	IN.
ZMRP	2.4330	IN.
SCALE	0.0007	



DATA SET SYMBOL CONFIGURATION DESCRIPTION

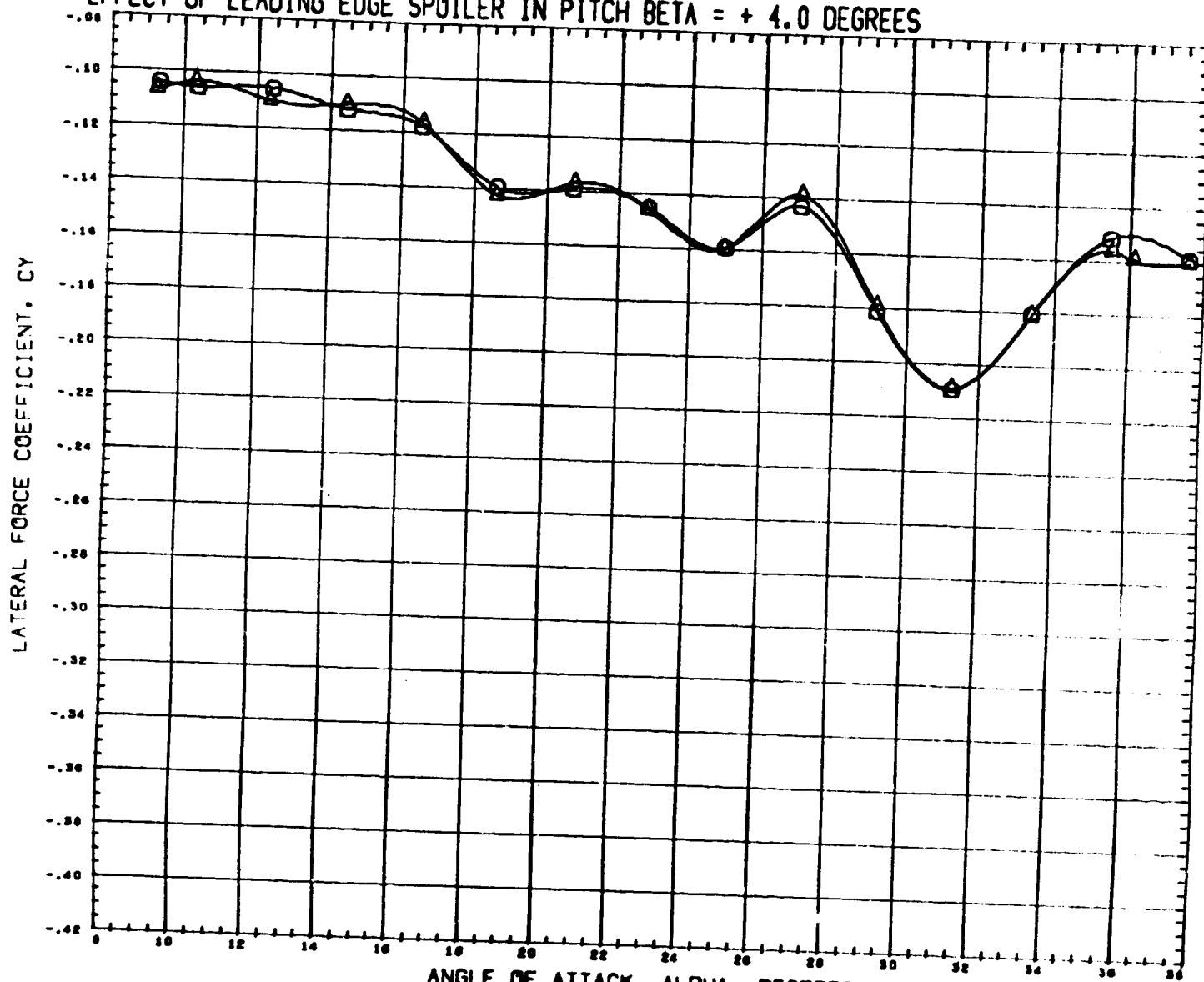
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILR
(RD2072)	BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3	0.000	0.000	
(RD2102)	BTWT-1265 BOEING N-32 BOOSTER 88W4H4V382	0.000	0.000	60.000

MACH 0.691

REFERENCE INFORMATION

SREF	31.3600	80. IN
LREF	2.2400	IN.
OREF	14.8000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0007	

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES



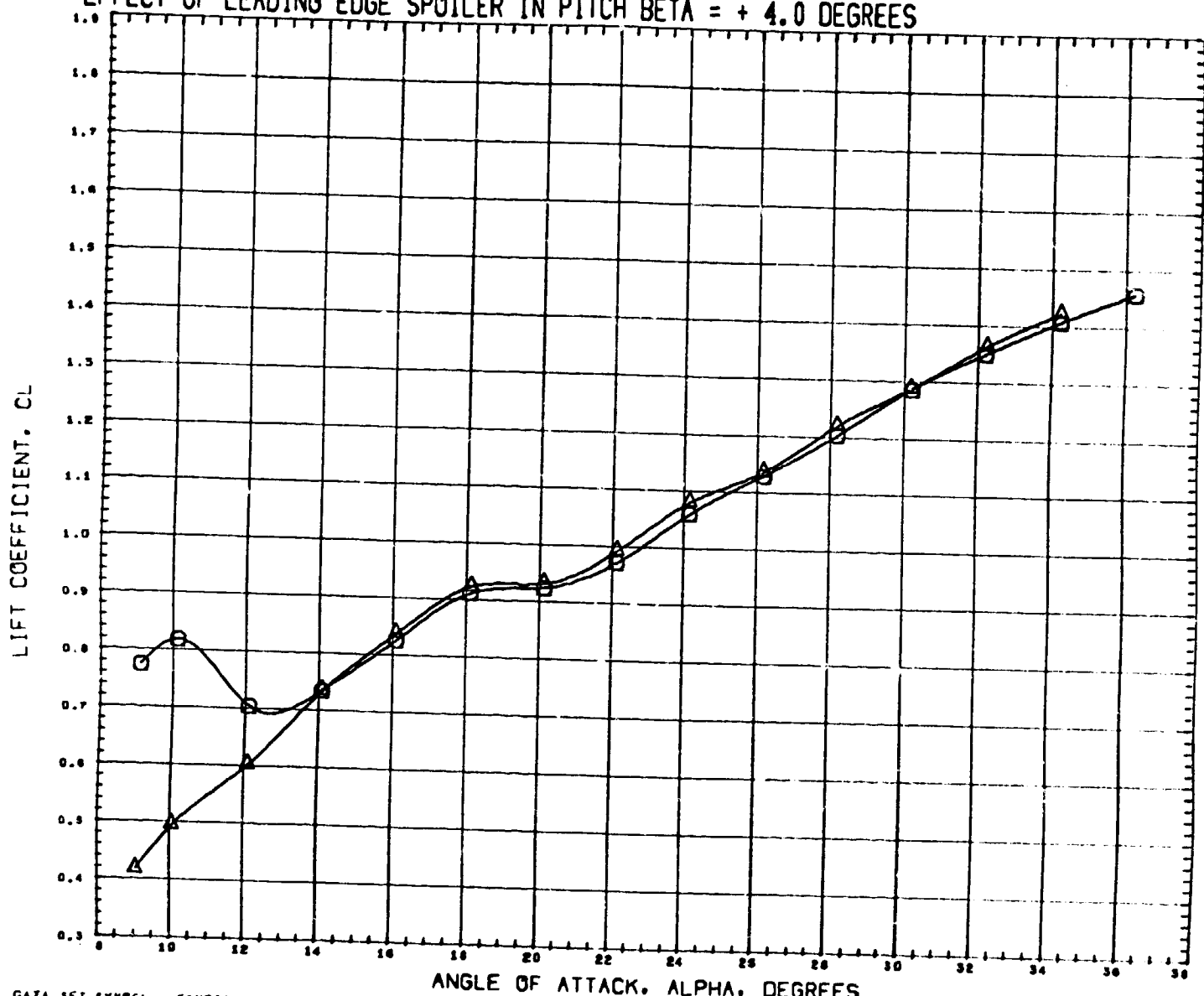
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02072) 8TMT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (R02102) 8TMT-1265 BOEING N-32 BOOSTER 88W4H4V3S2

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000 60.000

REFERENCE INFORMATION
 SREF 31.3600 88. IN
 LREF 2.2400 IN.
 SREF 14.8000 IN.
 XWRP 11.9400 IN.
 YWRP 0.0000 IN.
 ZWRP 2.4330 IN.
 SCALE 0.0067

MACH 0.800

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES

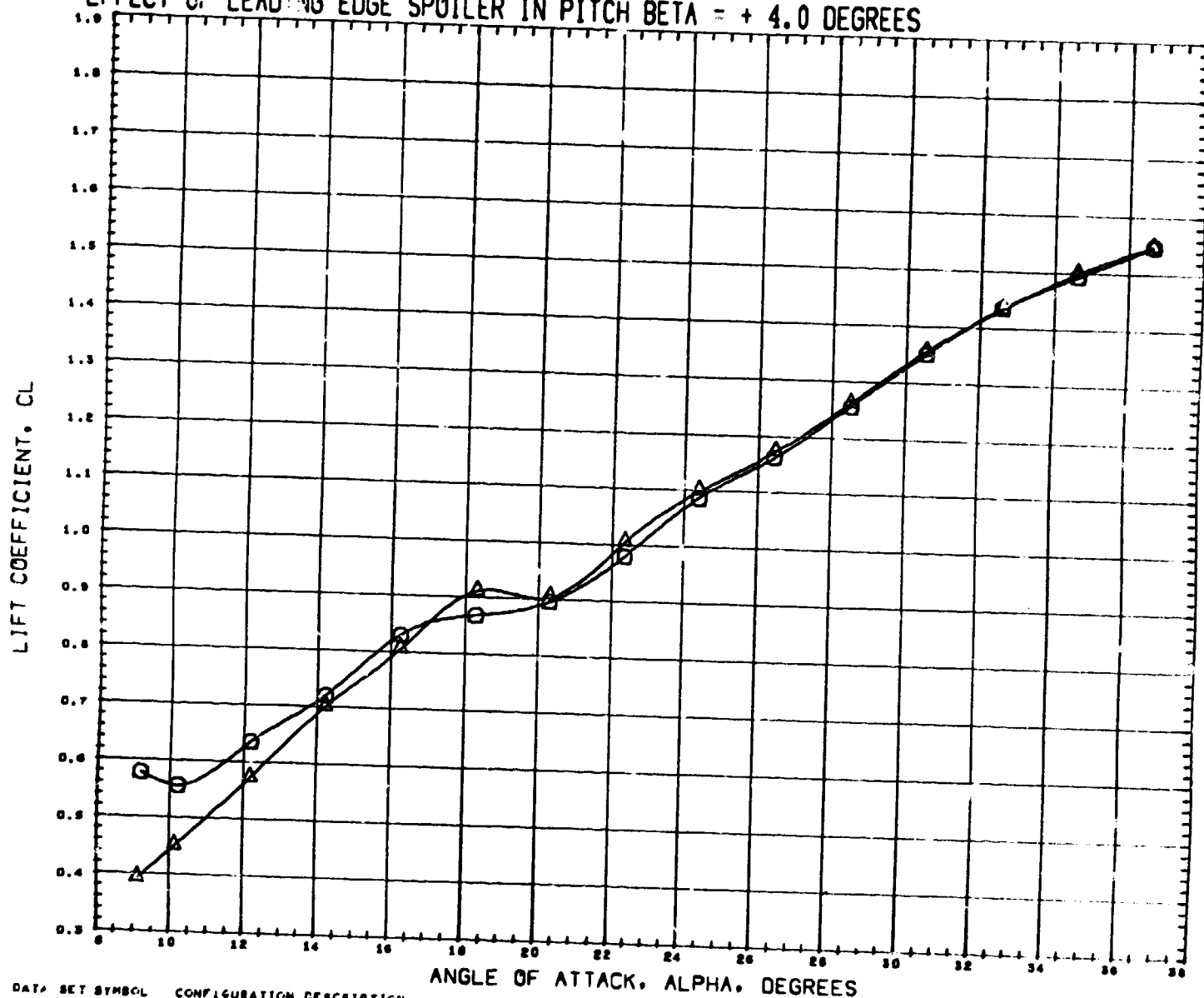


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILR
(R02072)	BTWT-1265 BOEING N-32 BOOSTER	0.000	0.000	
(R02152)	BTWT-1265 BOEING N-32 BOOSTER	0.000	0.000	60.000

REFERENCE INFORMATION		
SREF	31.3400	sq. in
LREF	2.2400	in.
BREF	14.0000	in.
XMRP	11.9000	in.
YMRP	0.0000	in.
ZMRP	2.4330	in.
SCALE	0.0067	

NACH 0.300

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES



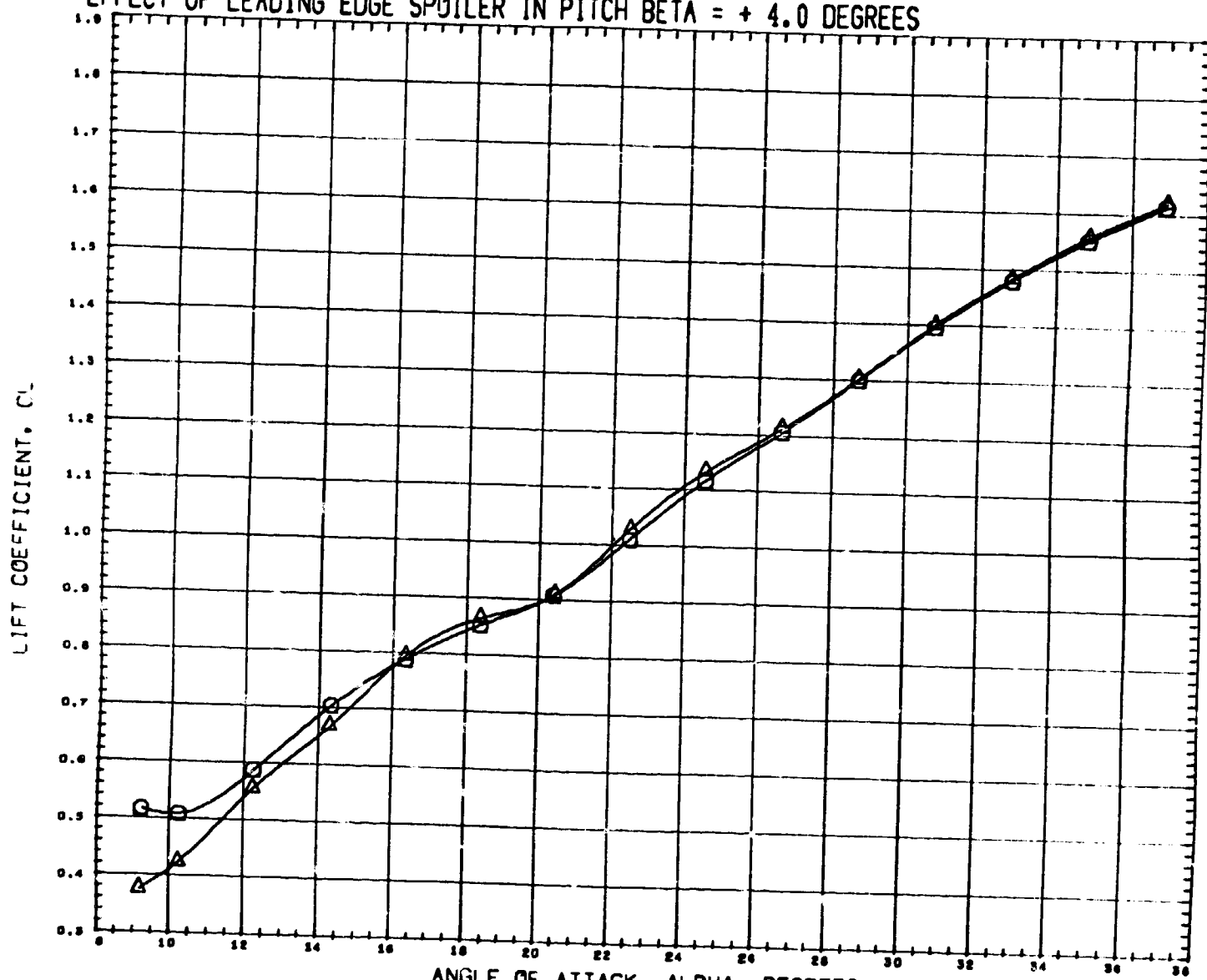
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC2072) BTMT-1245 BOEING H-32 BOOSTER 88W4H4V3
 (RC2102) BTMT-1245 BOEING H-32 BOOSTER 88W4H4V3S2

MTAIL ELEVTR SPOILR
 0.000 0.000 0.000
 0.000 0.000 60.000

REFERENCE INFORMATION
 SREF 31.3600 88. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XNRP 11.9600 IN.
 YNRP 0.0000 IN.
 ZNRP 2.4350 IN.
 SCALE 0.0067

MACH 0.300

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES



DATA SET SYMBOL CONFIGURATION DESCRIPTION

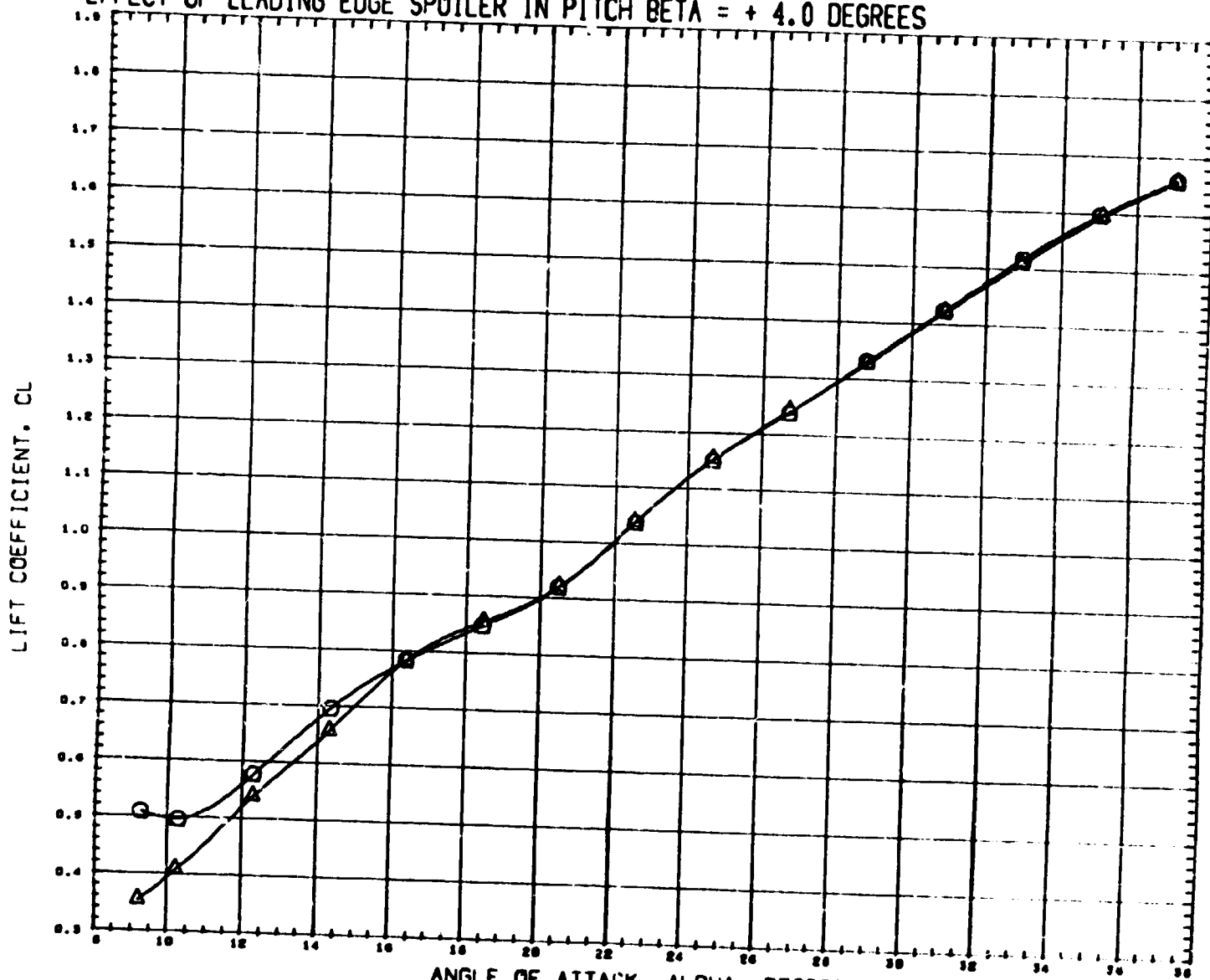
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILR
(RC2072)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	0.000	0.000	
(RD21G2)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3S2	0.000	0.000	60.000

MACH 0.601

REFERENCE INFORMATION

SREF	31.3600	50. IN
LREF	2.2400	IN.
BREF	14.6000	IN.
XMRP	11.9600	IN.
YMRP	0.0000	IN.
ZMRP	2.4350	IN.
SCALE	0.0067	

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES



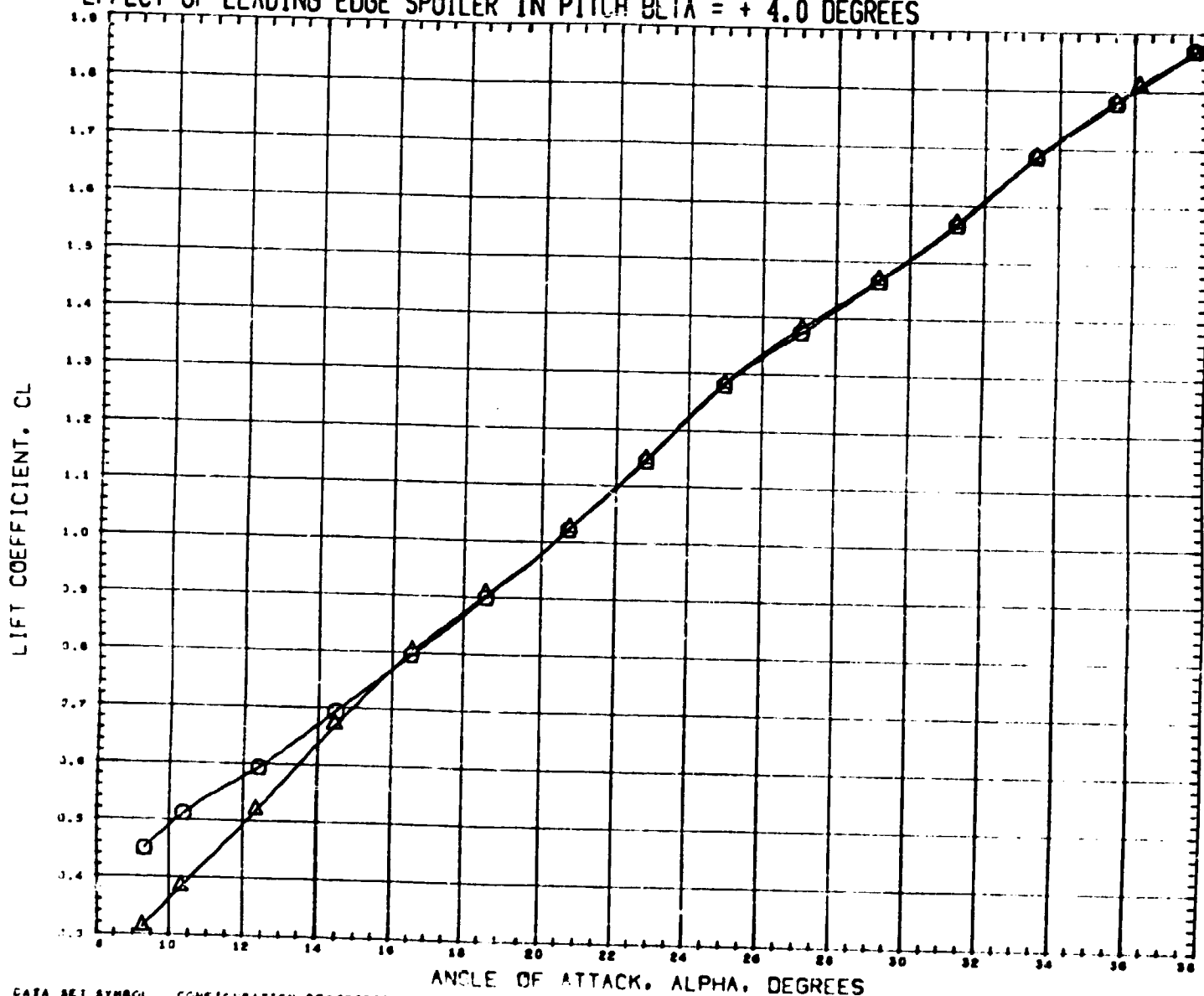
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02072)  B7MT-1261 BOEING N-32 BOOSTER B0W4H4V3
 (R02102)  B7MT-1261 BOEING N-32 BOOSTER B0W4H4V3S2

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000 60.000

REFERENCE INFORMATION
 SREF 31.3600 88. IN
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XMRP 11.0000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0007

MACH 0.031

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(R02072) BTMT-1265 BOEING N-32 BOOSTER 88W4M4V3
 (R02102) BTMT-1265 BOEING N-32 BOOSTER 83W4M4V382

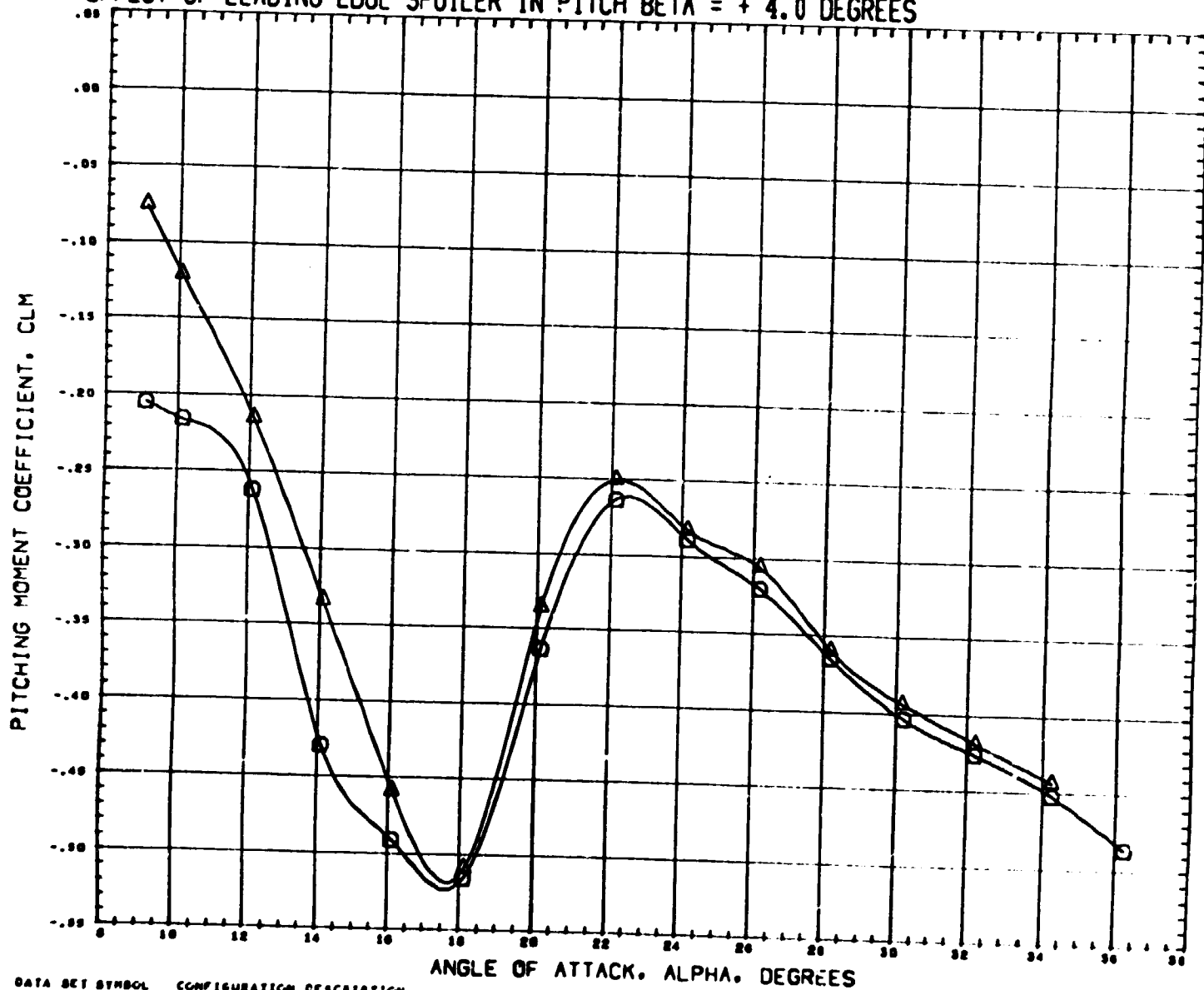
NTAIL ELEVTR SPOTLR
 0.000 0.000
 0.000 0.000 60.000

REFERENCE INFORMATION

SREF 31.3600 88. IN
 LREF 2.2400 IN.
 SREF 14.8000 IN.
 XMRP 11.9000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0047

MACH 0.000

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES



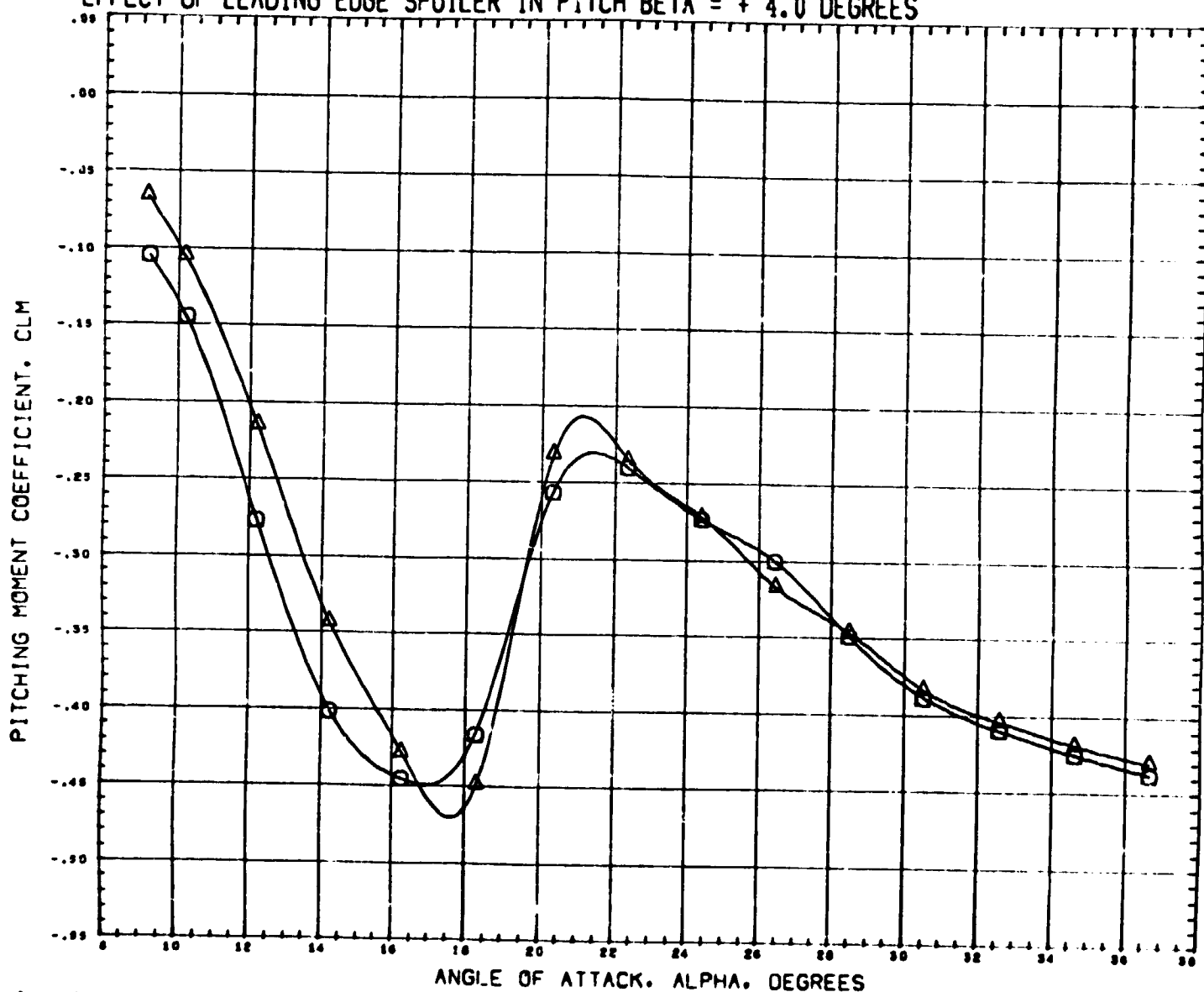
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (802072) 80M4H4V3
 (802102) 80M4H4V3S2

NTAIL ELEVTR SPOILR
 0.000 0.000 00.000
 0.000 0.000 00.000

REFERENCE INFORMATION
 SREF 31.3000 IN.
 LREF 2.2400 IN.
 OREF 14.0000 IN.
 XMRP 11.0000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0007

MACH 0.900

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES

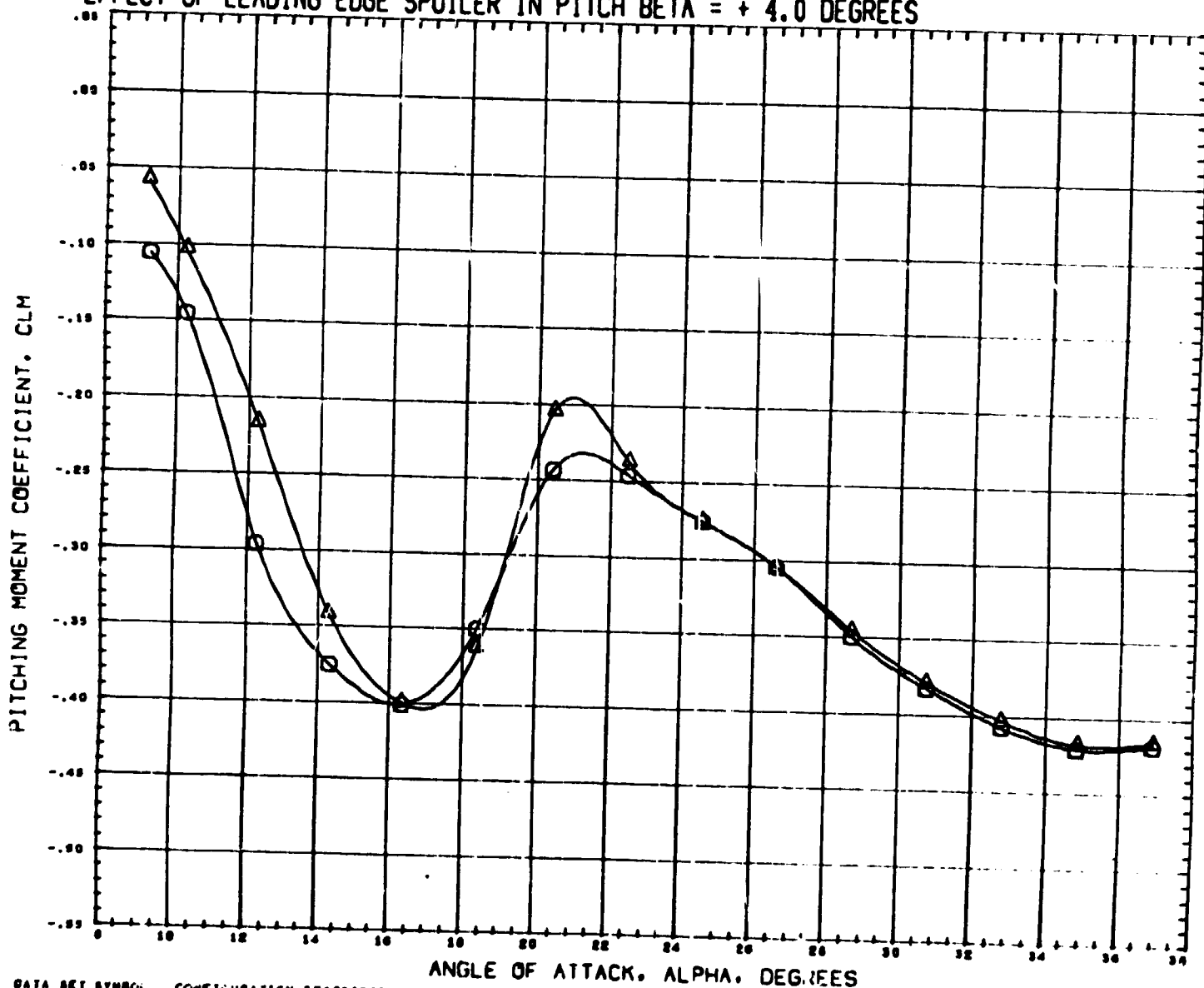


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	FLEVTR	SPOILR
(RC2072)	81WT-1265 BOEING N-32 BOOSTER 88W4H4V3	0.000	0.000	
(RC2102)	81WT-1265 BOEING N-32 BOOSTER 88W4H4V3S2	0.000	0.020	60.000

MACH 0.500

REFERENCE INFORMATION	
OREF	31.3600 IN.
LREF	2.2400 IN.
OREF	14.0000 IN.
XNRP	11.0000 IN.
YNRP	0.0000 IN.
ZNRP	2.4330 IN.
SCALE	0.0007

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02072) BNT-1265 BOEING H-32 BOOSTER
 (R02172) BNT-1265 BOEING H-32 BOOSTER

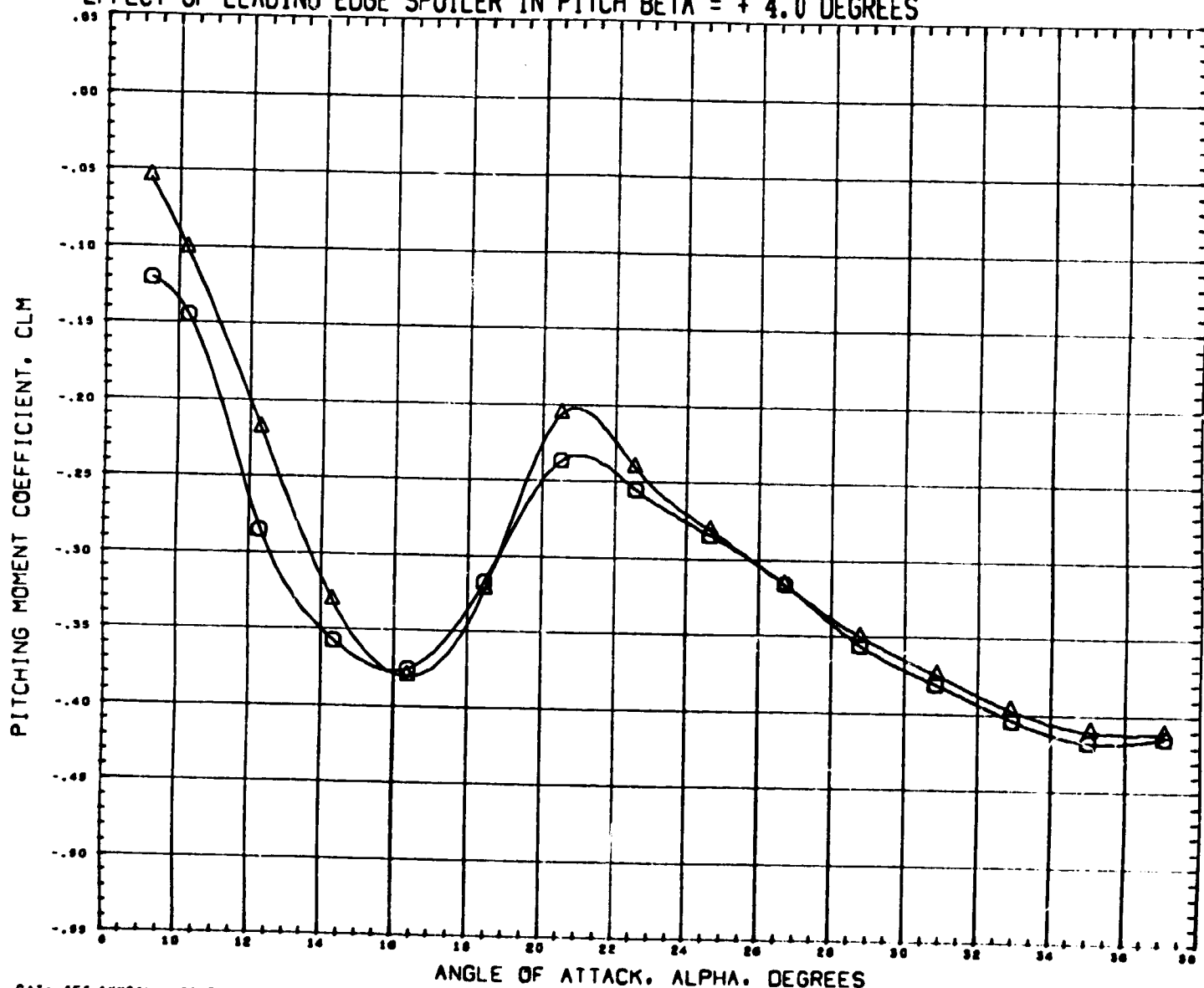
88W4N4V3
 88W4N4V3B2

MTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000 60.000

REFERENCE INFORMATION
 SREF 81.3600 IN.
 LREF 2.2400 IN.
 BREF 14.6800 IN.
 XMRP 11.9000 IN.
 YMRP 0.0050 IN.
 ZMRP 2.4510 IN.
 SCALE 0.0017

MACH 0.001

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES

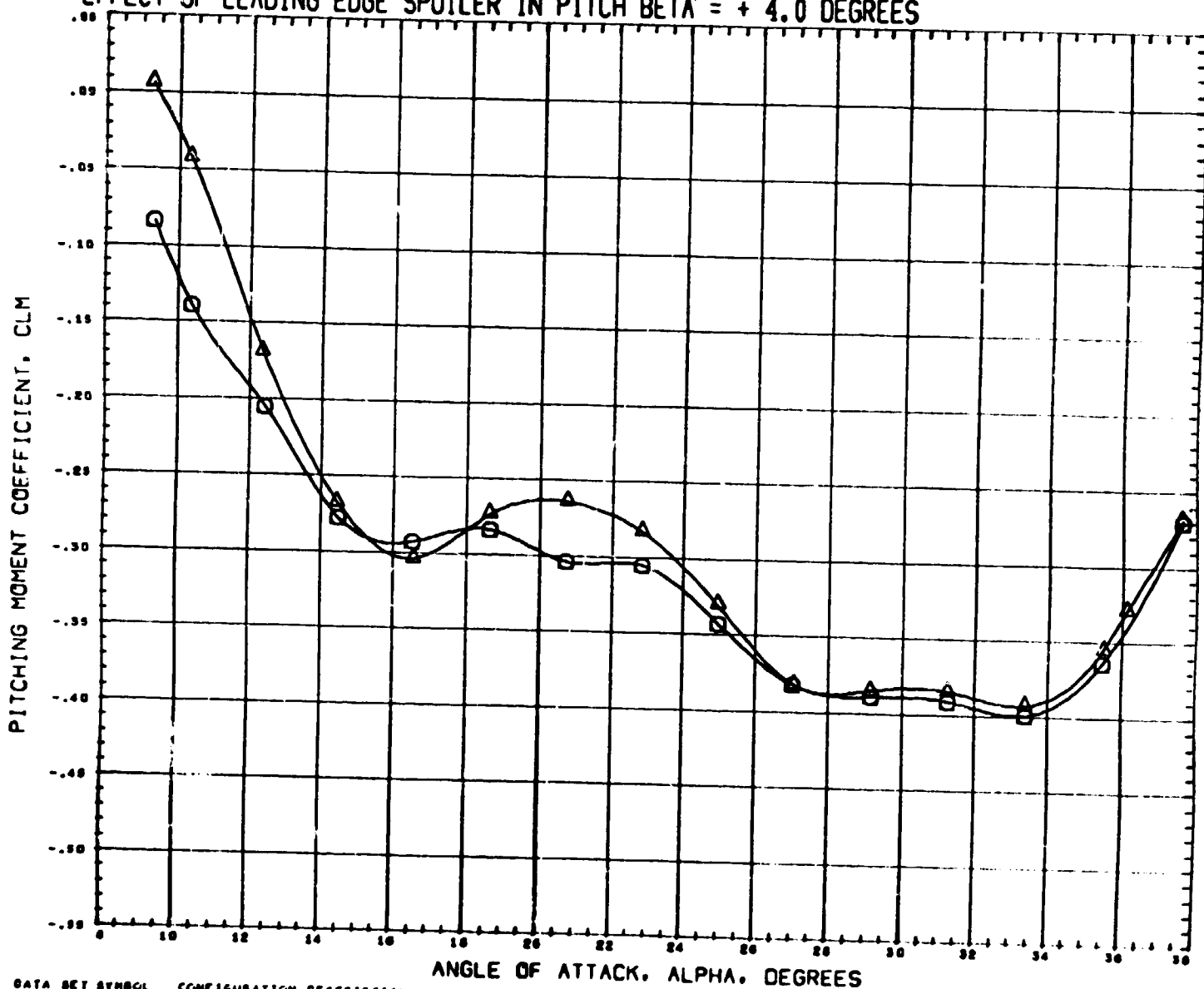


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MTAIL	ELEVTR	SPOILER
(R02072)	BTMT-1265 BOEING N-32 BOOSTER 88W4H4V3	0.000	0.000	
(R02102)	BTMT-1265 BOEING N-32 BOOSTER 88W4H4V382	0.000	0.000	60.000

MACH 0.651

REFERENCE INFORMATION		
SRFP	51.3800	80. IN
LRFP	2.2400	IN.
DRFP	14.6000	IN.
TRFP	11.9800	IN.
VRFP	0.0000	IN.
ZRFP	2.4330	IN.
SCALE	0.0067	

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES

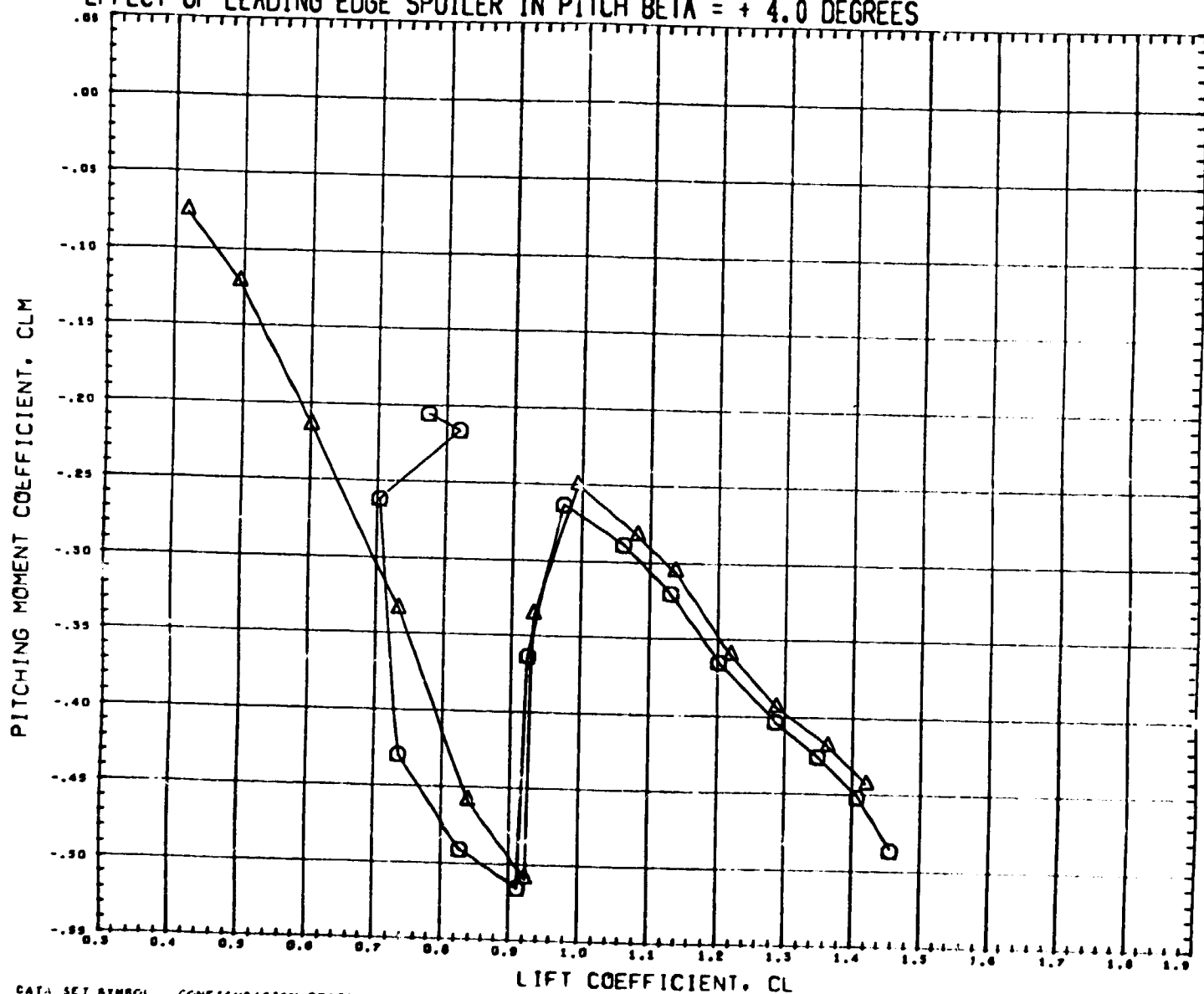


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HTAIL	ELEVTR	SPO/LR
(R02172)	BTMT-1265 BOEING N-32 BOOSTER 88W4H4V3	0.000	0.000	
(R02102)	BTMT-1265 BOEING N-32 BOOSTER 88W4H4V3S2	0.000	0.000	60.000

MACH 0.800

REFERENCE INFORMATION		
SREF	31.5600	80. IN
LREF	8.2400	IN.
BREF	14.0000	IN.
XRHP	11.9000	IN.
YRHP	0.0000	IN.
ZRHP	2.4330	IN.
SCALE	0.0007	

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES

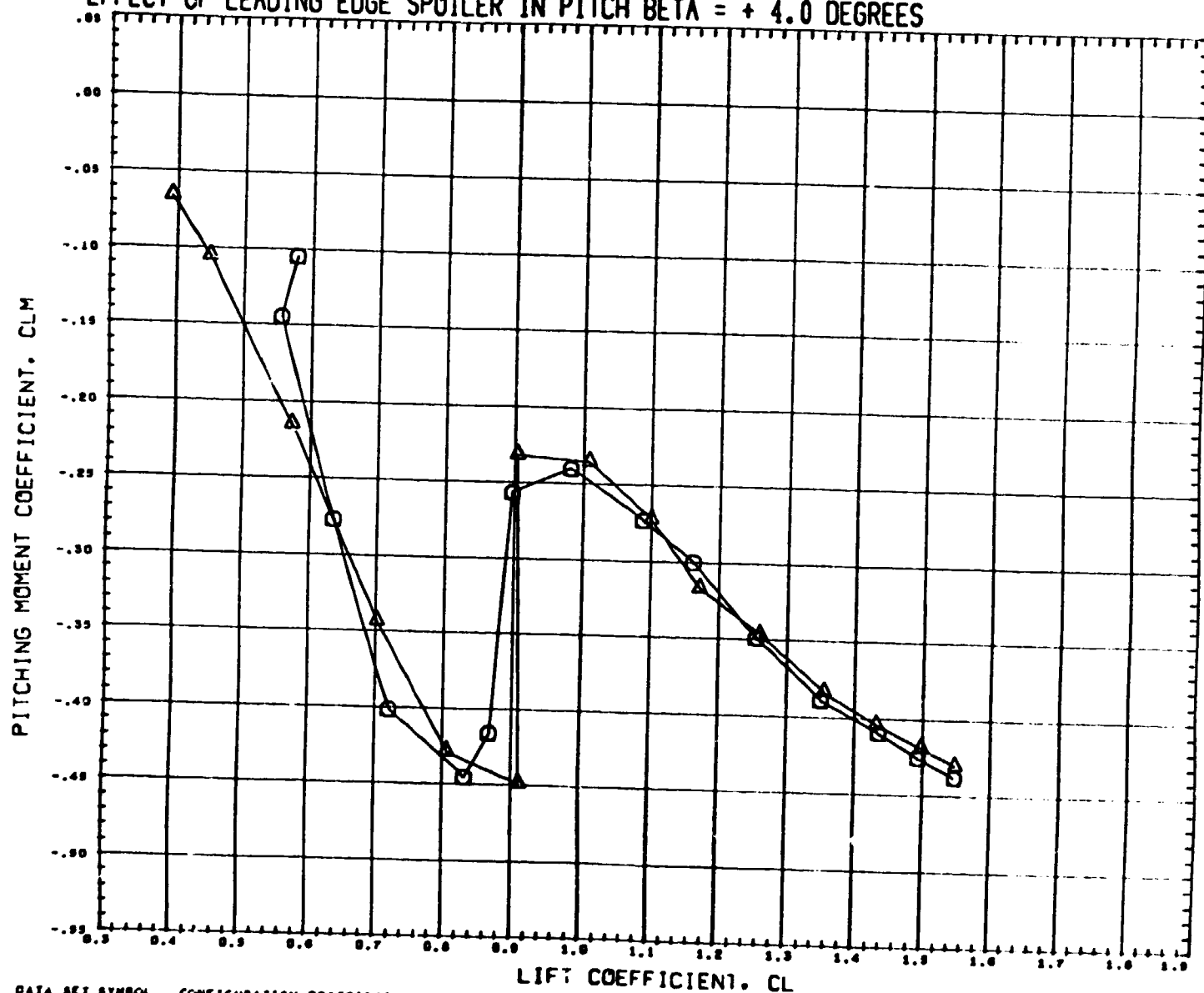


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MTAIL	ELEVTR	SPOILR
(RC072)	BTWT-1265 BOEING N-32 BOOSTER	0.000	0.000	
(RC2102)	BTWT-1265 BOEING N-32 BOOSTER	0.000	0.000	60.000

REFERENCE INFORMATION		
SREF	31.3603	sq. in
LREF	2.2403	in.
BREF	14.8003	in.
XMRP	11.8603	in.
YMRP	0.0003	in.
ZMRP	2.4333	in.
SCALE	0.0067	

MACH 0.300

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES

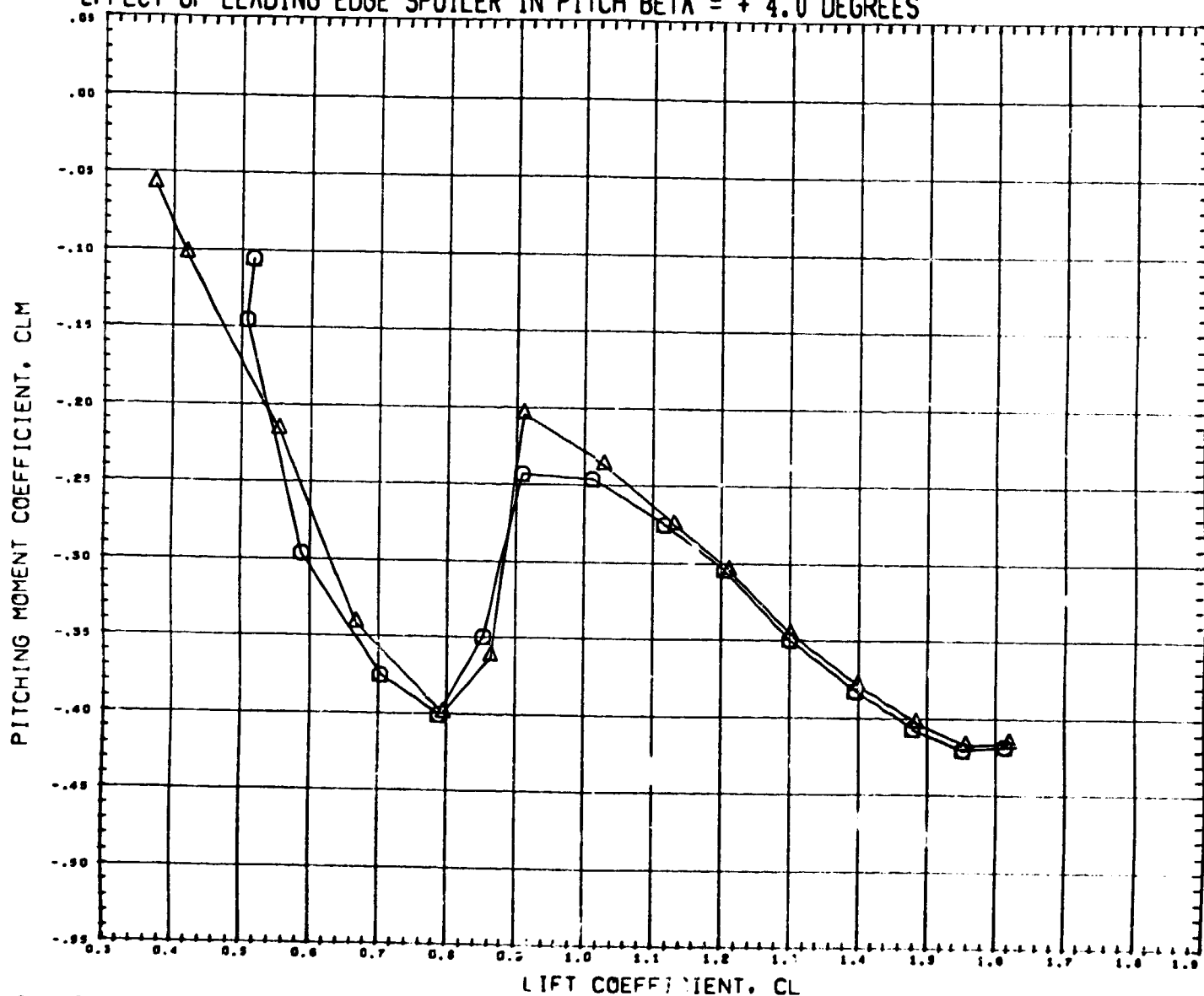


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILR
(RC207Z)	BTMT-1265 BOEING N-32 BOOSTER	0.000	0.000	
(RC210Z)	BTMT-1265 BOEING N-32 BOOSTER	0.000	0.000	60.000

REFERENCE INFORMATION		
SREF	31.3600	30. IN
LREF	2.2400	IN.
BREF	14.0000	IN.
XMRP	11.9600	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

MACH 0.900

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES

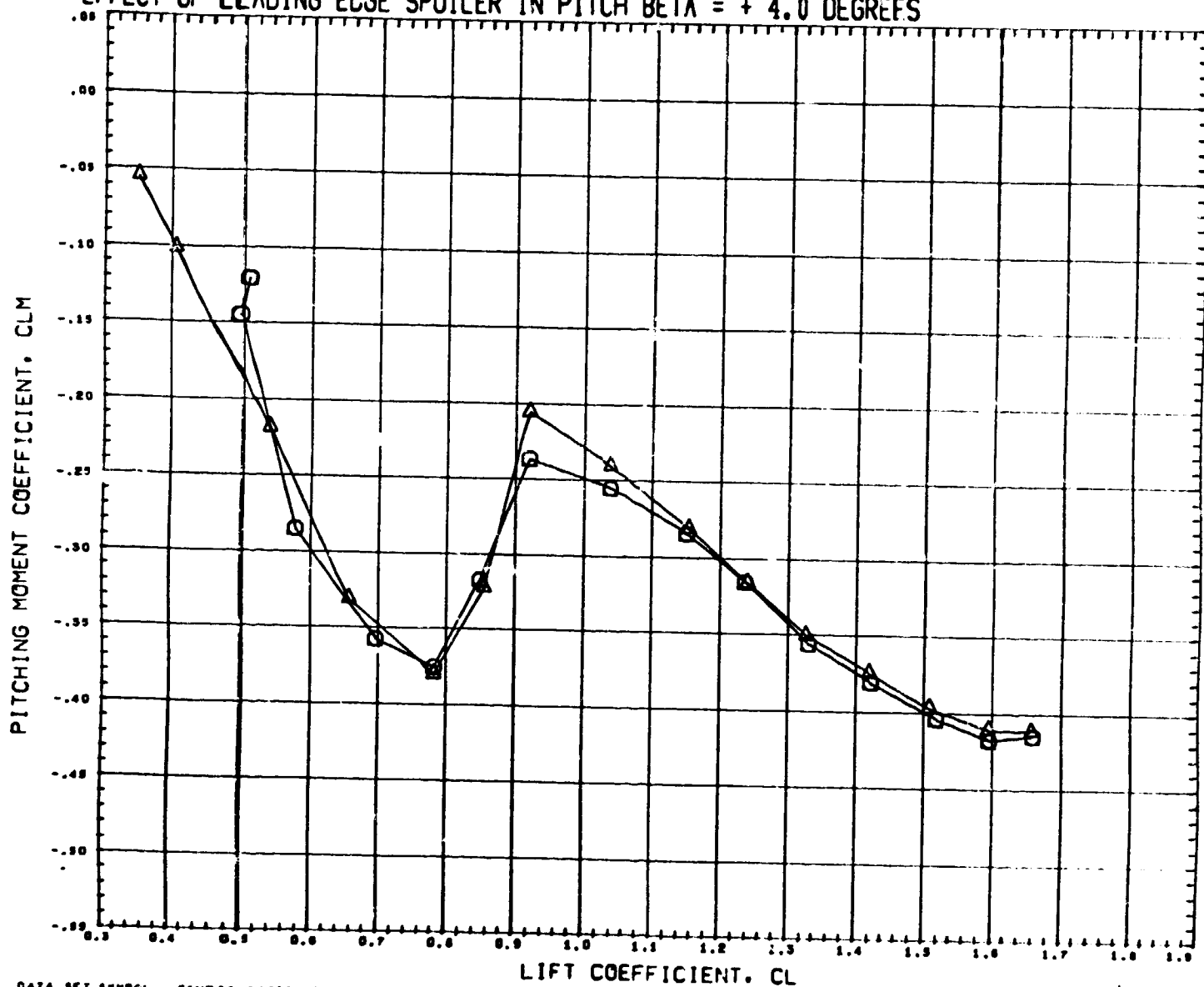


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILR
(R2072)	DTWT-1265 BOEING N-32 BOOSTER	0.000	0.000	
(R2102)	DTWT-1265 BOEING N-32 BOOSTER	0.000	0.000	60.000

REFERENCE INFORMATION		
SREF	31.3600	IN.
LREF	2.2400	IN.
BREF	14.0000	IN.
XMRP	11.9600	IN.
YMRP	0.0000	IN.
ZMRP	2.4300	IN.
SCALE	0.0007	

MACH 0.001

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES



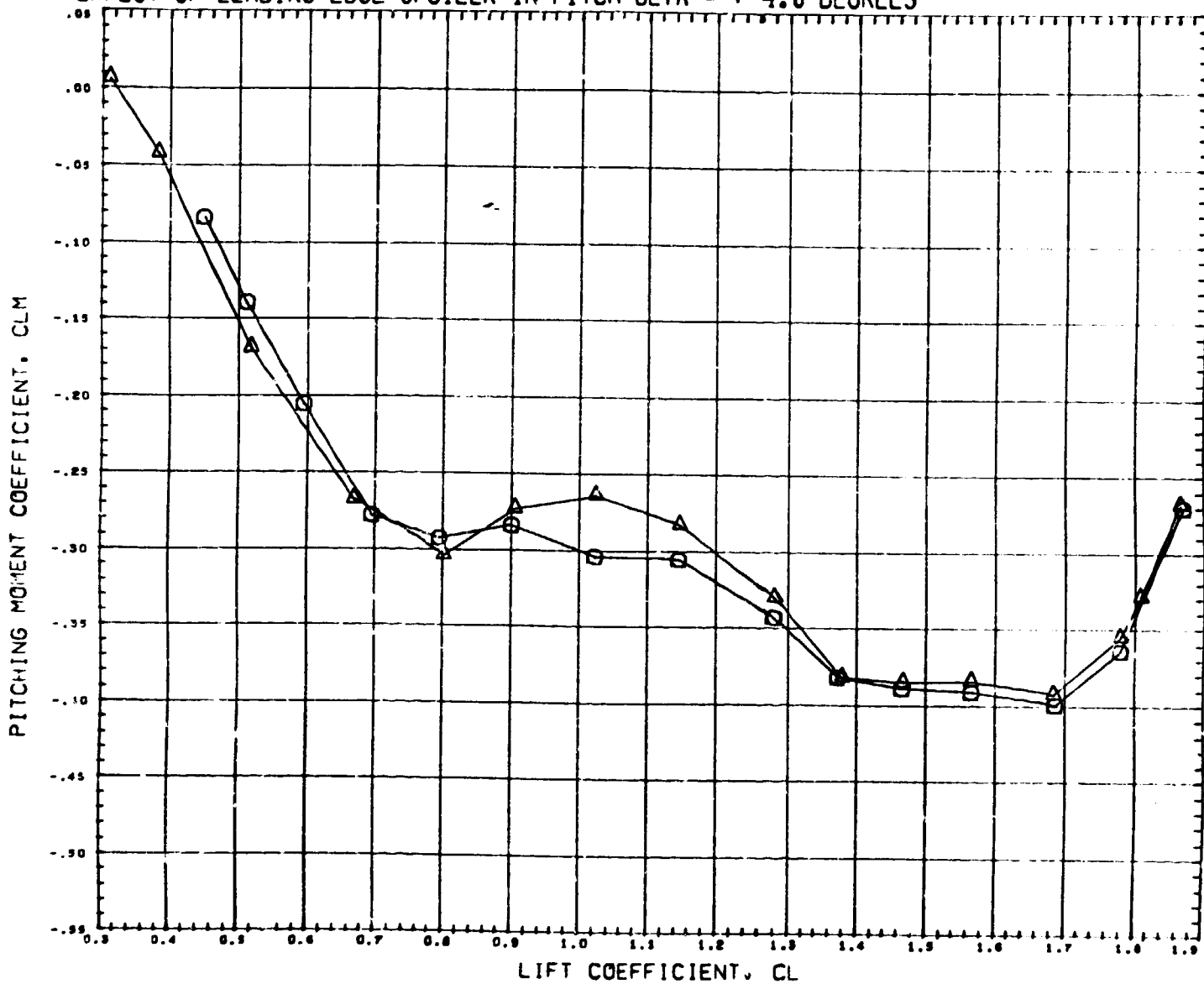
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(R02072)	STMT-1265 BOEING N-32 BOOSTER
(R02102)	STMT-1265 BOEING N-32 BOOSTER

NTAIL	ELEVTR	SPOILR
0.000	0.000	0.000
0.000	0.000	60.000

REFERENCE INFORMATION		
SREF	31.3600	50. IN
LREF	2.2400	IN.
BREF	14.8000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.3350	IN.
SCALE	0.0067	

NACH 0.051

EFFECT OF LEADING EDGE SPOILER IN PITCH BETA = + 4.0 DEGREES

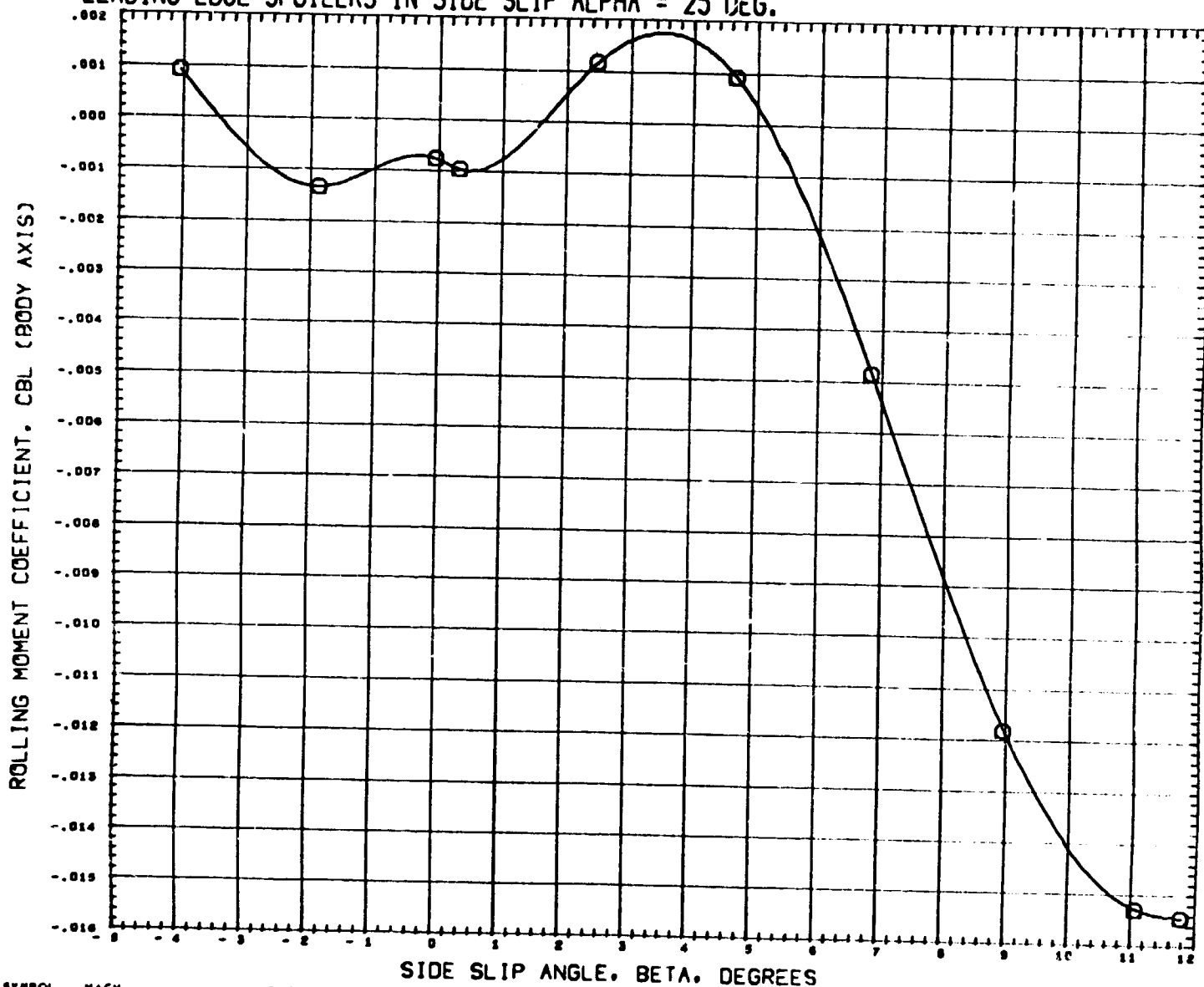


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HTAIL	ELEVATOR	SPOILER
(RC072)	BTWT-1265 BOEING N-32 BOOSTER	0.000	0.000	
(RC102)	BTWT-1265 BOEING N-32 BOOSTER	0.000	0.000	40.000

REFERENCE INFORMATION		
SREF	31.3600	80. IN
LREF	2.2400	IN.
BREF	14.8000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0007	

MACH 0.000

LEADING EDGE SPOILERS IN SIDE SLIP ALPHA = 25 DEG.



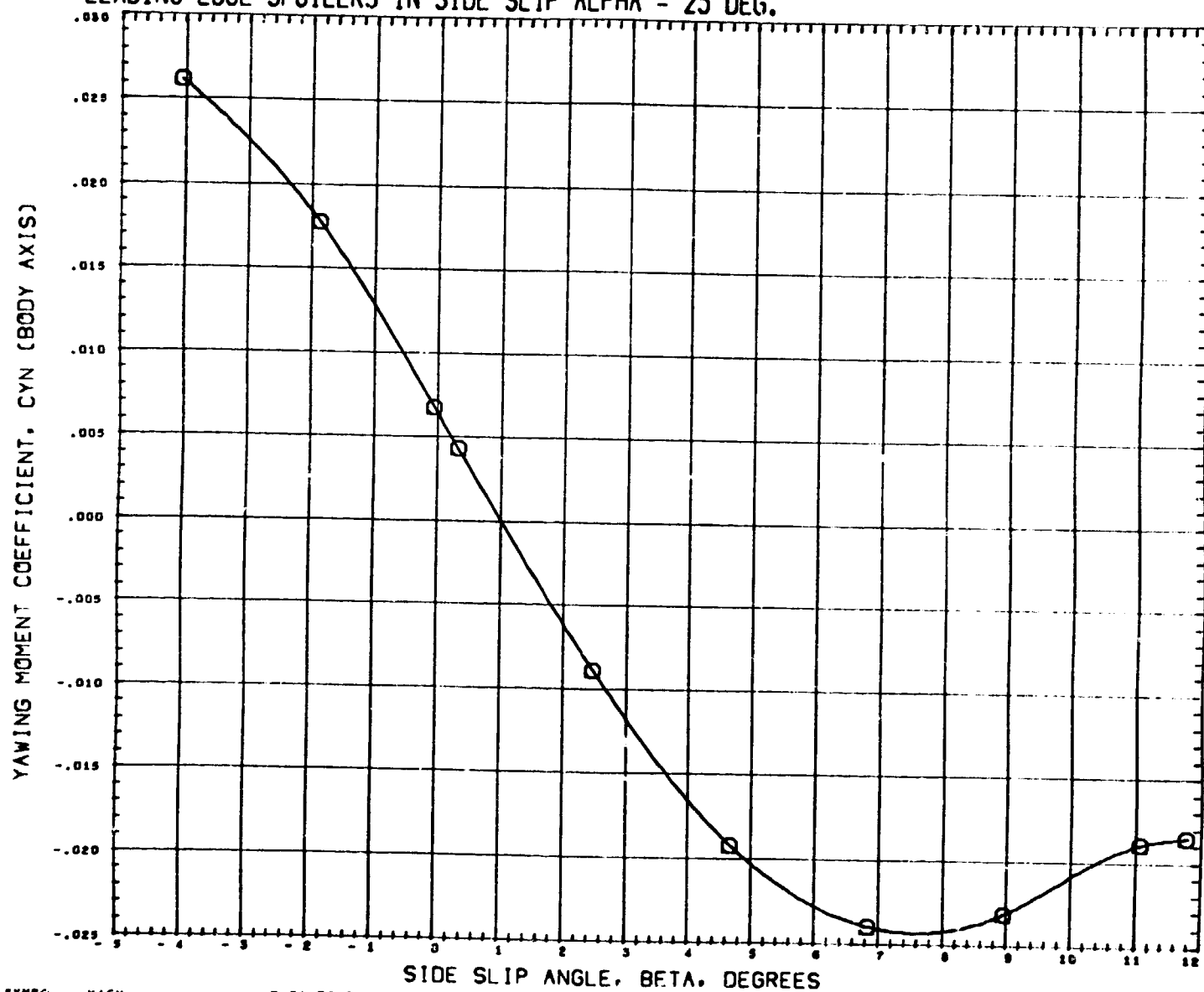
SYMBOL MACH ALPHA PARAMETRIC VALUES
 O 0.691 25.000 HTAIL 0.000
 ELEVTR 0.000 SPOILR 60.000

REFERENCE INFORMATION
 SREF 31.3600 SQ. IN
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0367

REFERENCE FILE

BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3S2 (R02108) 31 JAN 72 PAGE 196

LEADING EDGE SPOILERS IN SIDE SLIP ALPHA = 25 DEG.



SYMBOL: O
 MACH: 0.601
 ALPH: 25.000
 ELEV: 0.000
 PARAMETRIC VALUES:
 25.000 HTAIL 0.000
 0.000 SPOILR 60.000

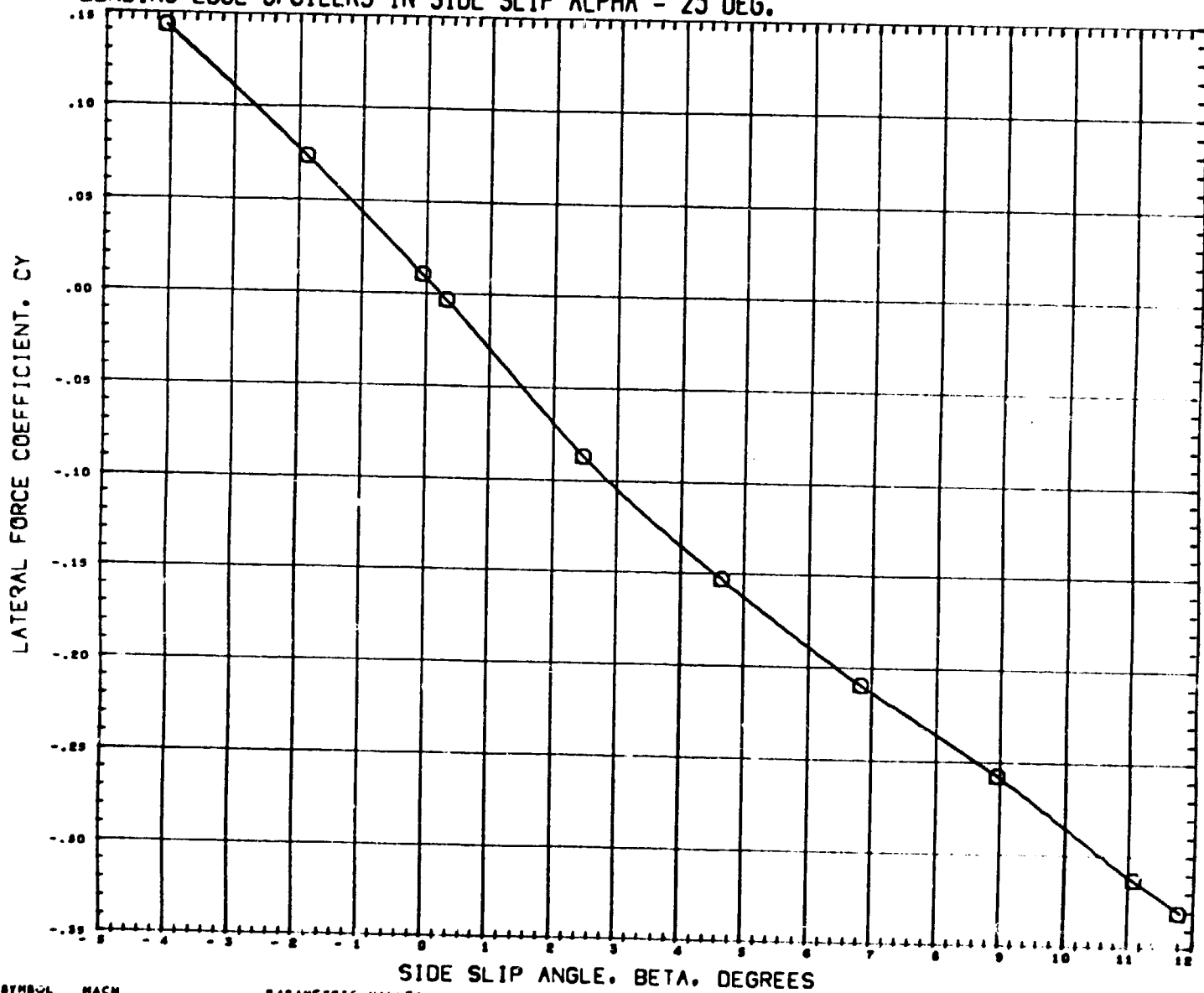
REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 OREF 14.8000 IN.
 XMRP 11.8600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

REFERENCE FILE

BTWT-1265 BOEING 4-32 BOOSTER B8W4H4V3S2

(RD2108) 31 JAN 72 PAGE 197

LEADING EDGE SPOILERS IN SIDE SLIP ALPHA = 25 DEG.



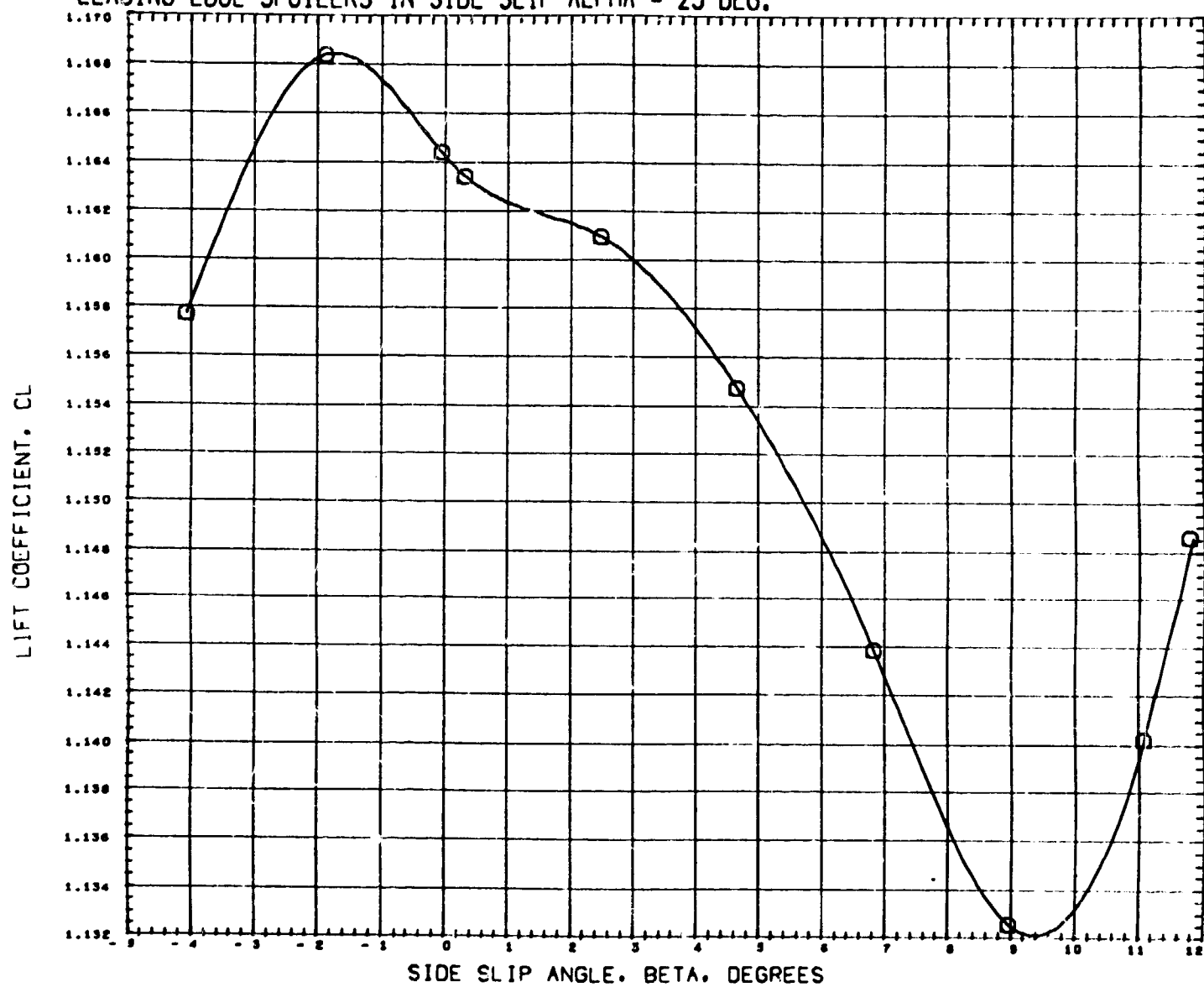
SYMBOL $\circ$ MACH 0.60: ALPHA 25.000 NTAIL 0.000
 ELEVTR 0.000 SPOILR 60.000

REFERENCE INFORMATION
 SREF 31.3600 30. IN
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XMAP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

REFERENCE FILE

BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3S2 (R02108) 31 JAN 72 PAGE 198

LEADING EDGE SPOILERS IN SIDE SLIP ALPHA = 25 DEG.

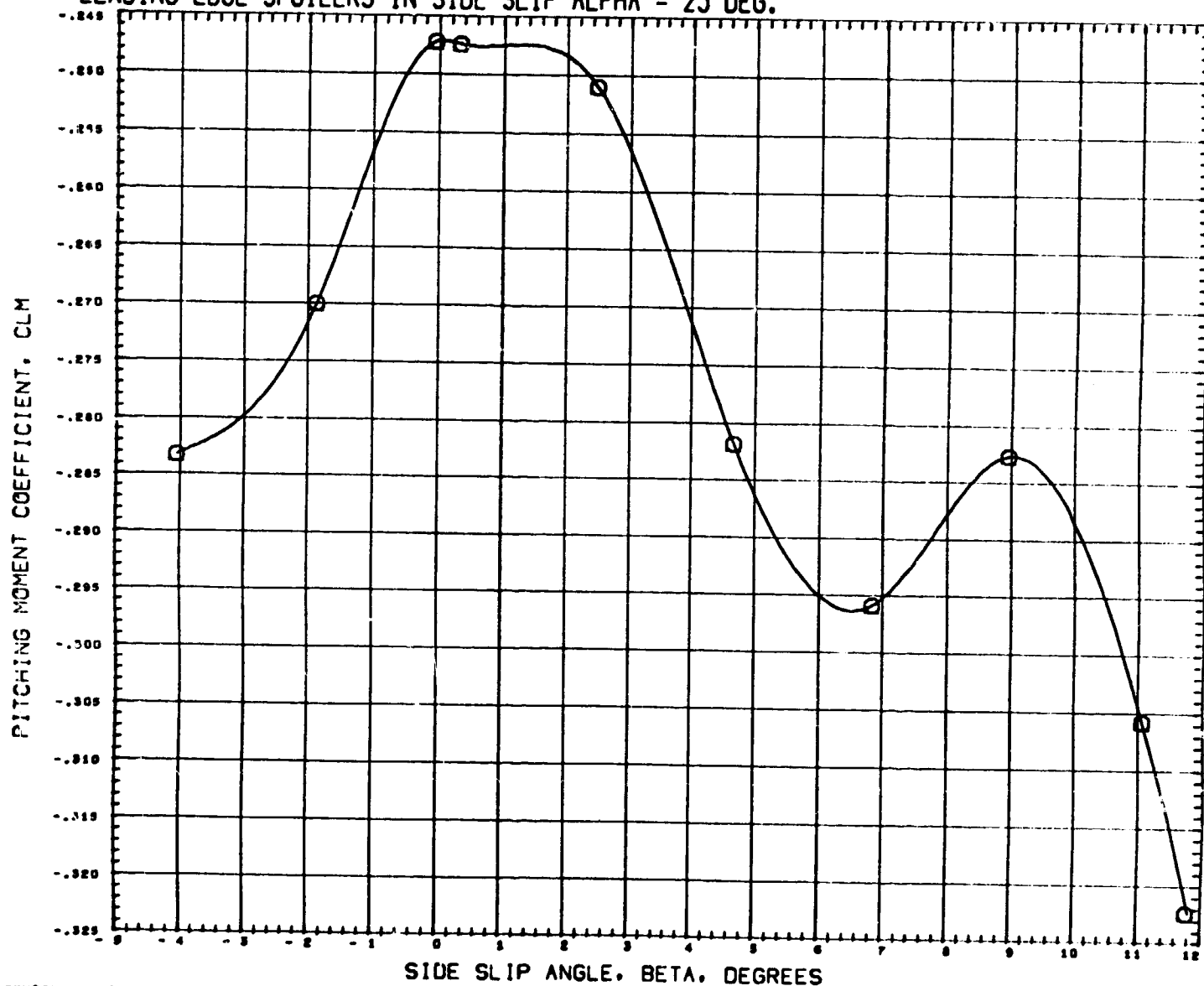


SYMBOL MACH ALPHA ELEVTR
 O 0.001 25.000 0.000
 PARAMETRIC VALUES
 HTAIL 0.000
 SPOILR 60.000

REFERENCE INFORMATION
 SREF 31.3600 82. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

REFERENCE FILE

LEADING EDGE SPOILERS IN SIDE SLIP ALPHA = 25 DEG.

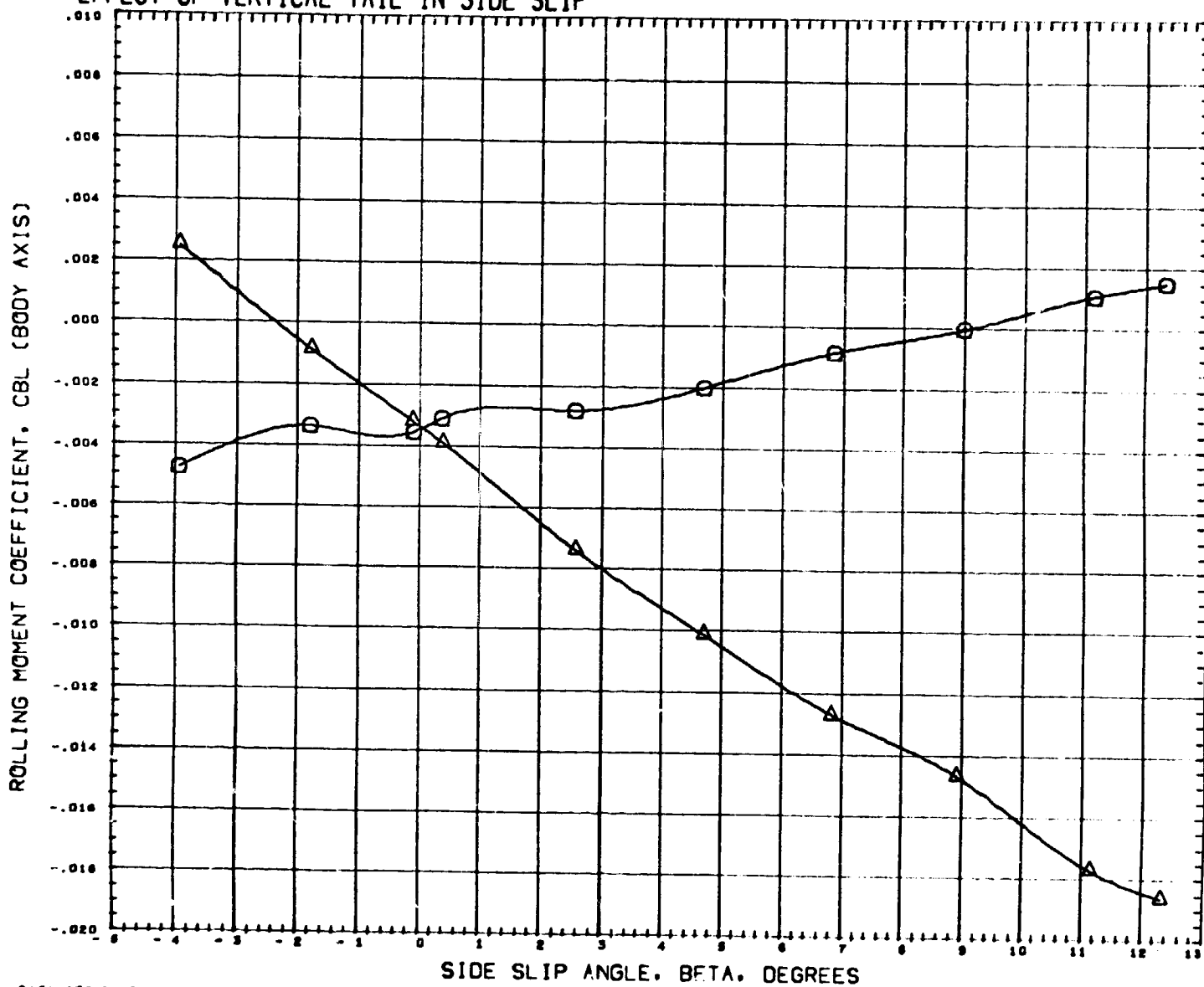


SYMBOL	MACH	PARAMETRIC VALUES
○	0.001	ALPHA 25.000 HTAIL 0.000
		ELEVTR 0.000 SPOILR 60.000

REFERENCE INFORMATION	
SREF	31.3600 80. IN
LRFP	2.2400 IN.
BRFP	14.8000 IN.
XRFP	11.9000 IN.
YMRP	0.0000 IN.
ZMRP	2.4330 IN.
SCALE	0.0007

REFERENCE FILE

EFFECT OF VERTICAL TAIL IN SIDE SLIP

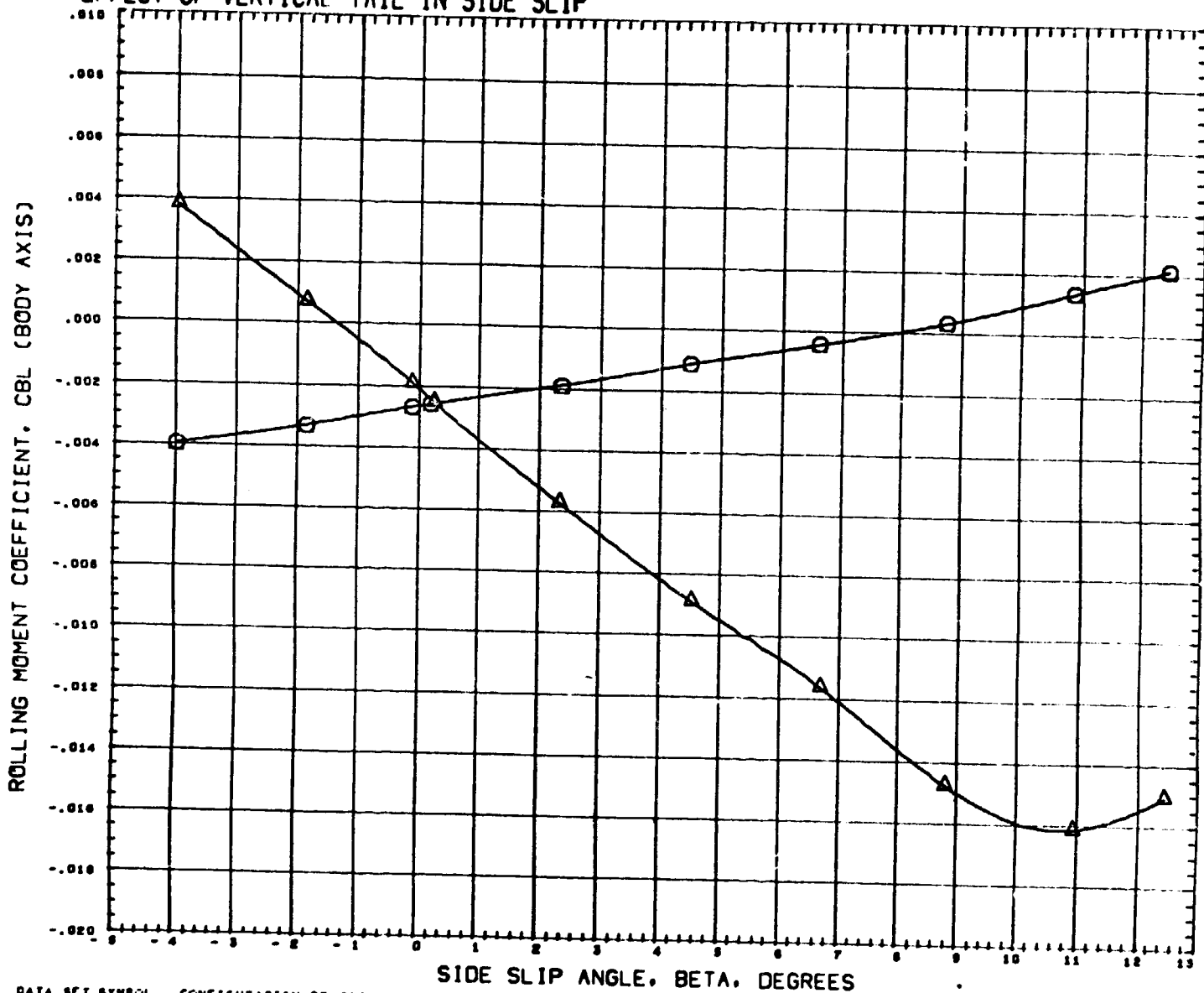


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILR
(RC2155)	BTWT-1265 BOEING H-32 BOOSTER B8W4H4	0.000	0.000	
(RC2075)	BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3	0.000	0.000	

MACH 0.259

REFERENCE INFORMATION		
SREF	31.3600	80. IN
LREF	2.2400	IN.
BREF	14.8000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

EFFECT OF VERTICAL TAIL IN SIDE SLIP

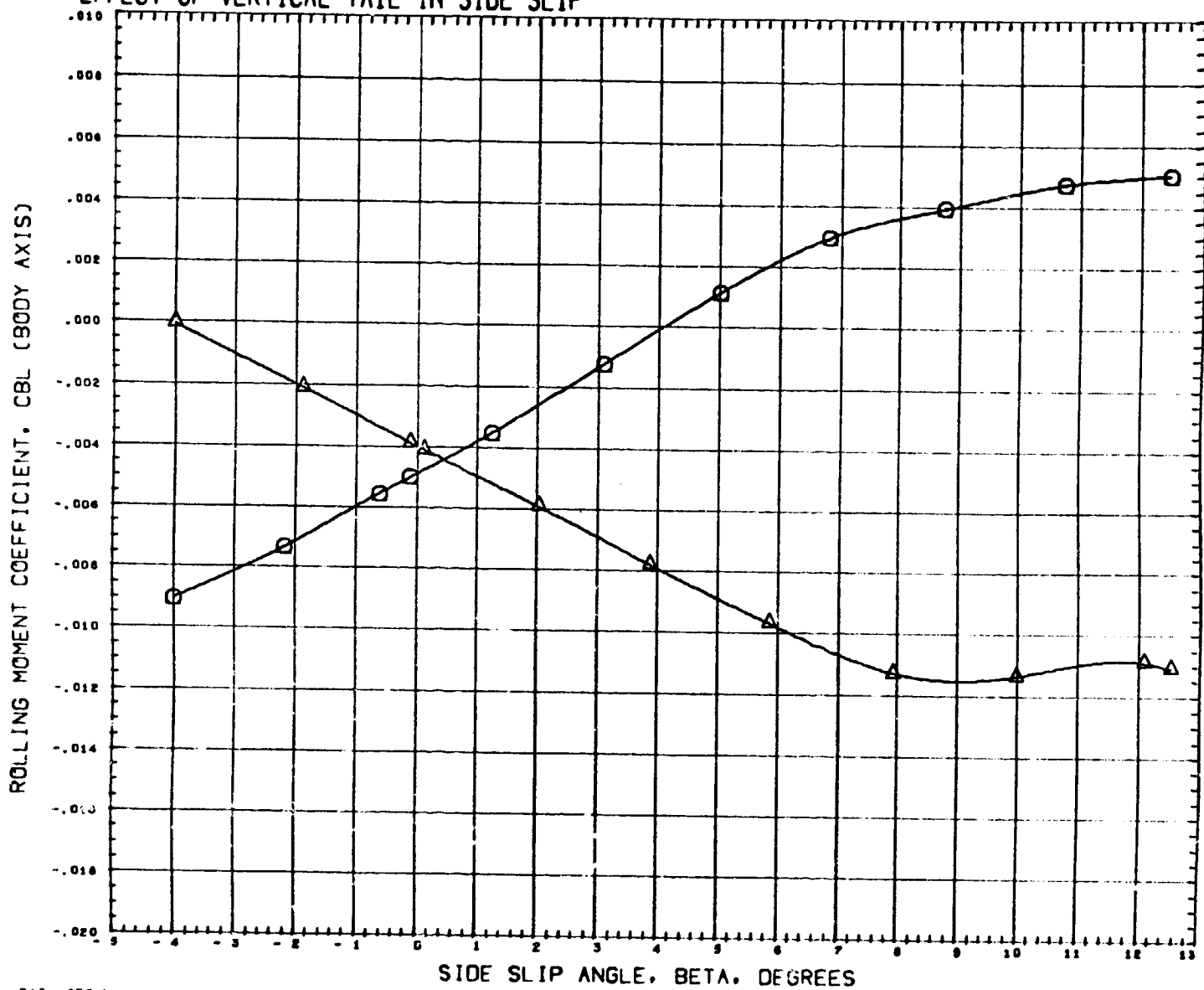


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MTAIL	ELEVTR	SPOILR
(RD2199) $\bigcirc$	BTMT-1265 BOEING N-32 BOOSTER 88W4H4	0.500	0.000	
(RD2079) $\triangle$	BTMT-1265 BOEING N-32 BOOSTER 88W4H4V3	0.000	0.000	

MACH 0.999

REFERENCE INFORMATION		
SREF	51.3600	IN.
LREF	2.2400	IN.
BREF	14.6000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

EFFECT OF VERTICAL TAIL IN SIDE SLIP



DATA SET SYMBOL CONFIGURATION DESCRIPTION NTAIL ELEVTR SPOILR

(RC155) BTWT-1265 BOEING H-32 BOOSTER 88W4H4
(RC2075) BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3

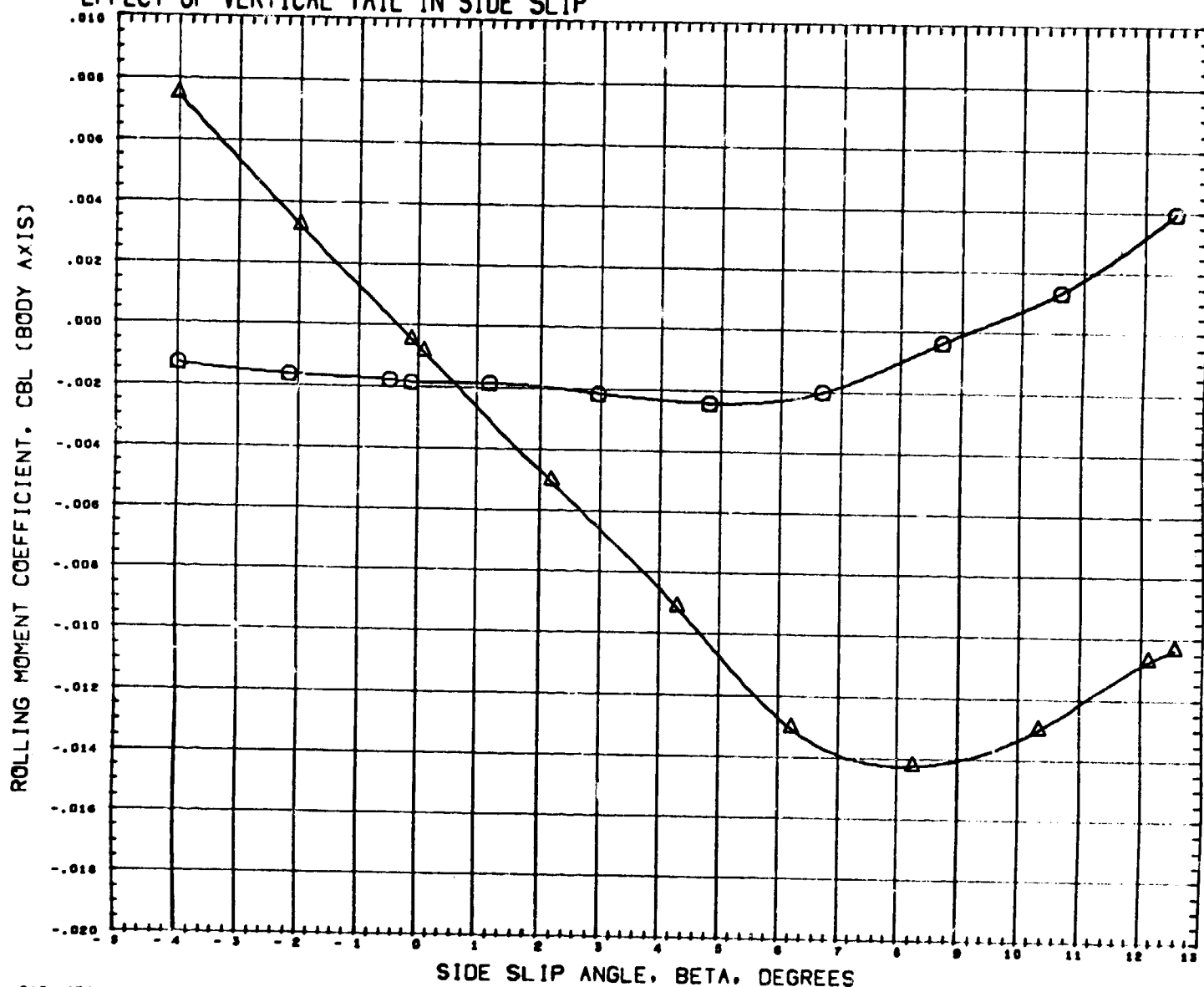
0.000 0.000
0.000 0.000

REFERENCE INFORMATION

SREF 31.3600 SQ. IN
LREF 2.2400 IN.
BREF 14.8000 IN.
XMRP 11.9800 IN.
YMRP 0.0000 IN.
ZMRP 2.4330 IN.
SCALE 0.0067

MACH 0.001

EFFECT OF VERTICAL TAIL IN SIDE SLIP

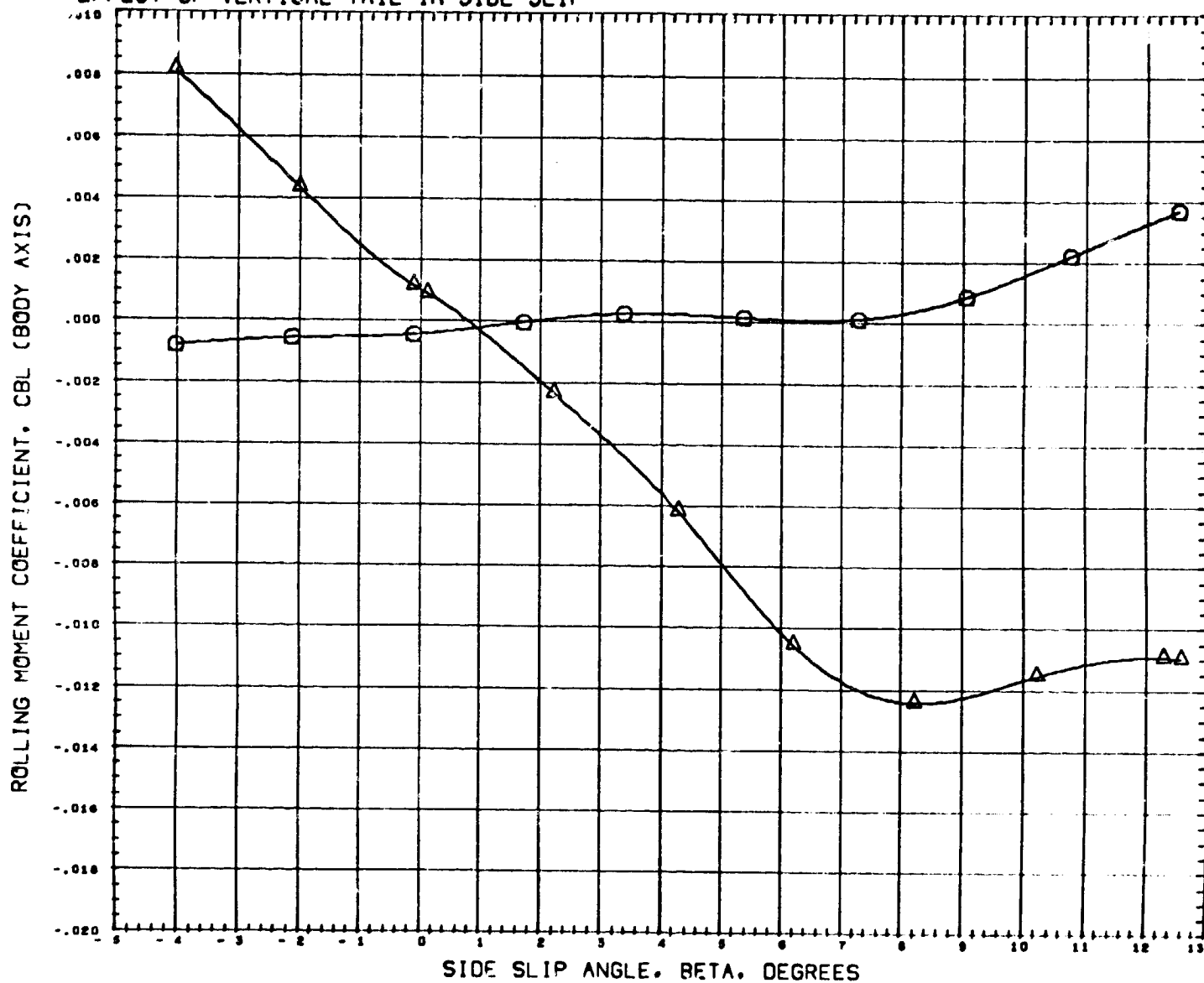


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILER
(RC2155)	BTWT-1265 BOEING N-32 BOOSTER B6W4M4	0.000	0.000	
(RC2675)	BTWT-1265 BOEING N-32 BOOSTER B6W4M4V3	0.000	0.000	

MACH 0.850

REFERENCE INFORMATION		
SREF	31.3600	sq. in
LREF	2.2400	in.
BREF	14.6000	in.
XMRP	11.9800	in.
YMRP	0.0000	in.
ZMRP	2.4330	in.
SCALE	0.0067	

EFFECT OF VERTICAL TAIL IN SIDE SLIP

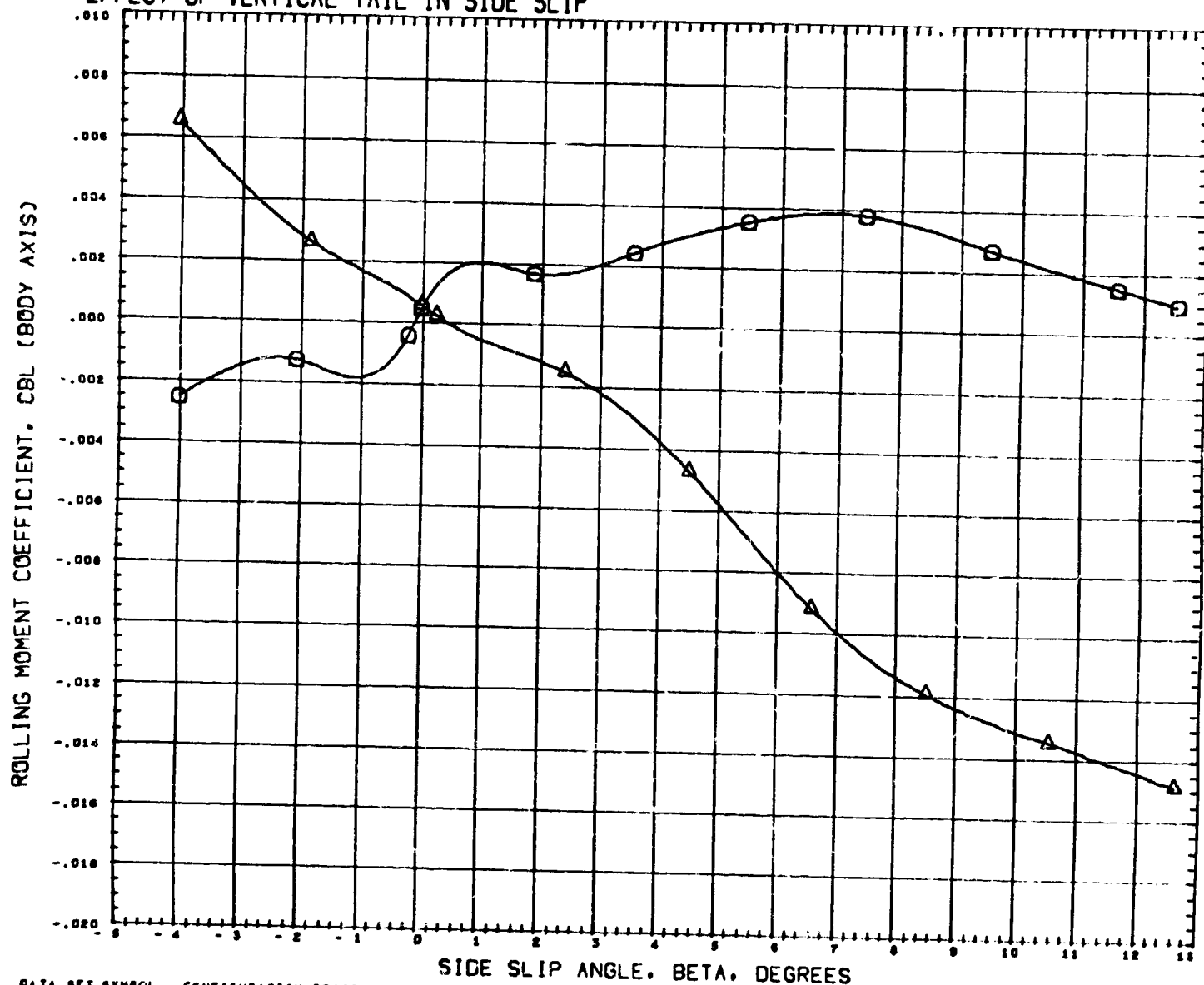


DAY	SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILR
(RD2155)	Q	BTWT-1265 BOEING H-32 BOOSTER BW4H4	0.000	0.000	
(RD2075)		BTWT-1265 BOEING H-32 BOOSTER BW4H4V3	0.000	0.000	

REFERENCE INFORMATION		
SREF	31.3400	sq. in
LREF	2.2400	in.
BREF	14.0000	in.
XMRP	11.9800	in.
YMRP	0.0000	in.
ZMRP	2.4333	in.
SCALE	0.0067	

NACH 0.099

EFFECT OF VERTICAL TAIL IN SIDE SLIP

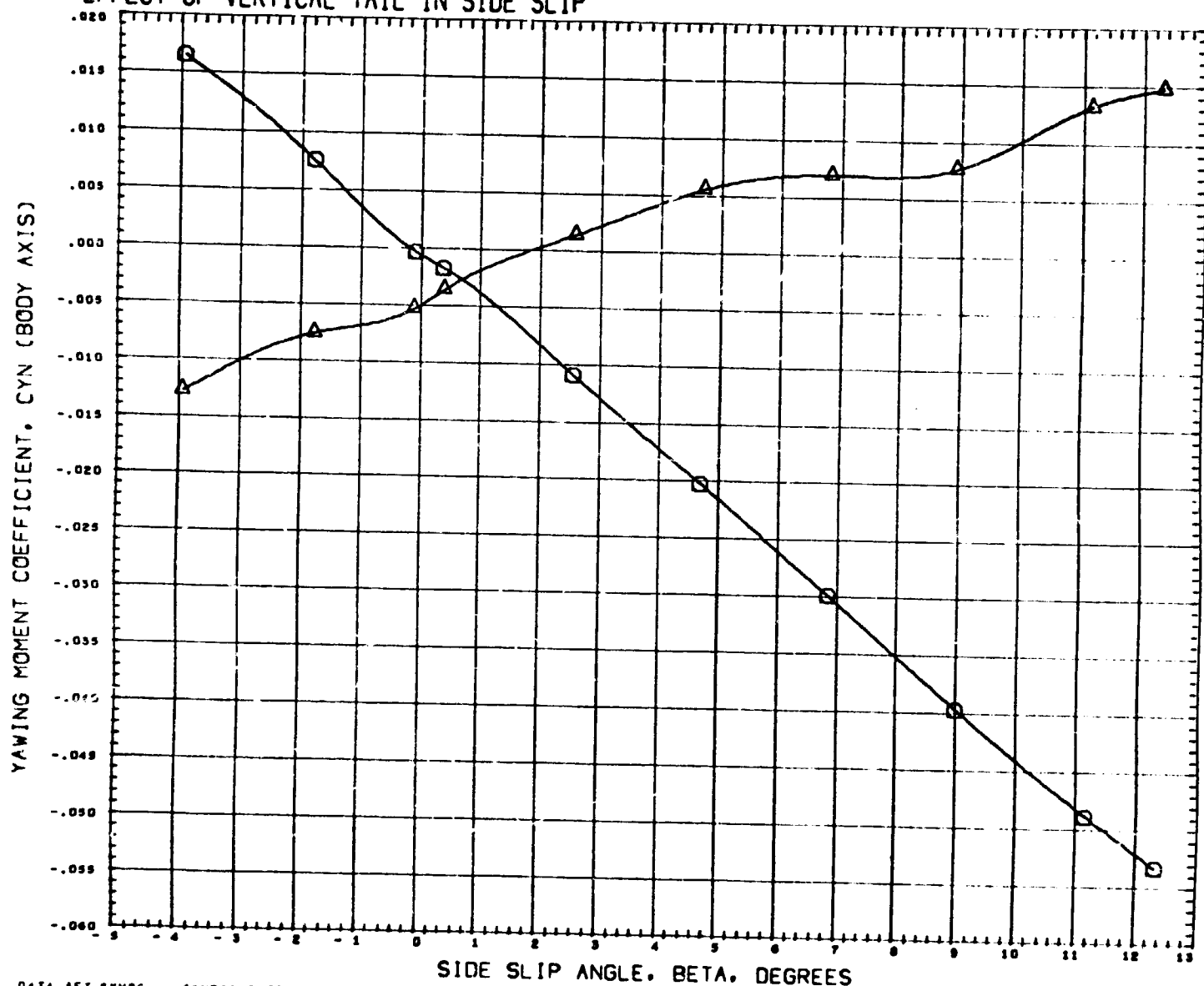


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILR
(R02155)	BTWT-1265 BOEING N-32 BOOSTER 88W4M4	0.000	0.000	
(R02075)	BTWT-1265 BOEING N-32 BOOSTER 88W4M4V5	0.000	0.000	

MACH 0.949

REFERENCE INFORMATION		
SREF	31.3600	80. IN
LREF	2.2400	IN.
BREF	14.6000	IN.
XHRP	11.9000	IN.
YHRP	0.0000	IN.
ZHRP	2.4350	IN.
SCALE	0.0067	

EFFECT OF VERTICAL TAIL IN SIDE SLIP

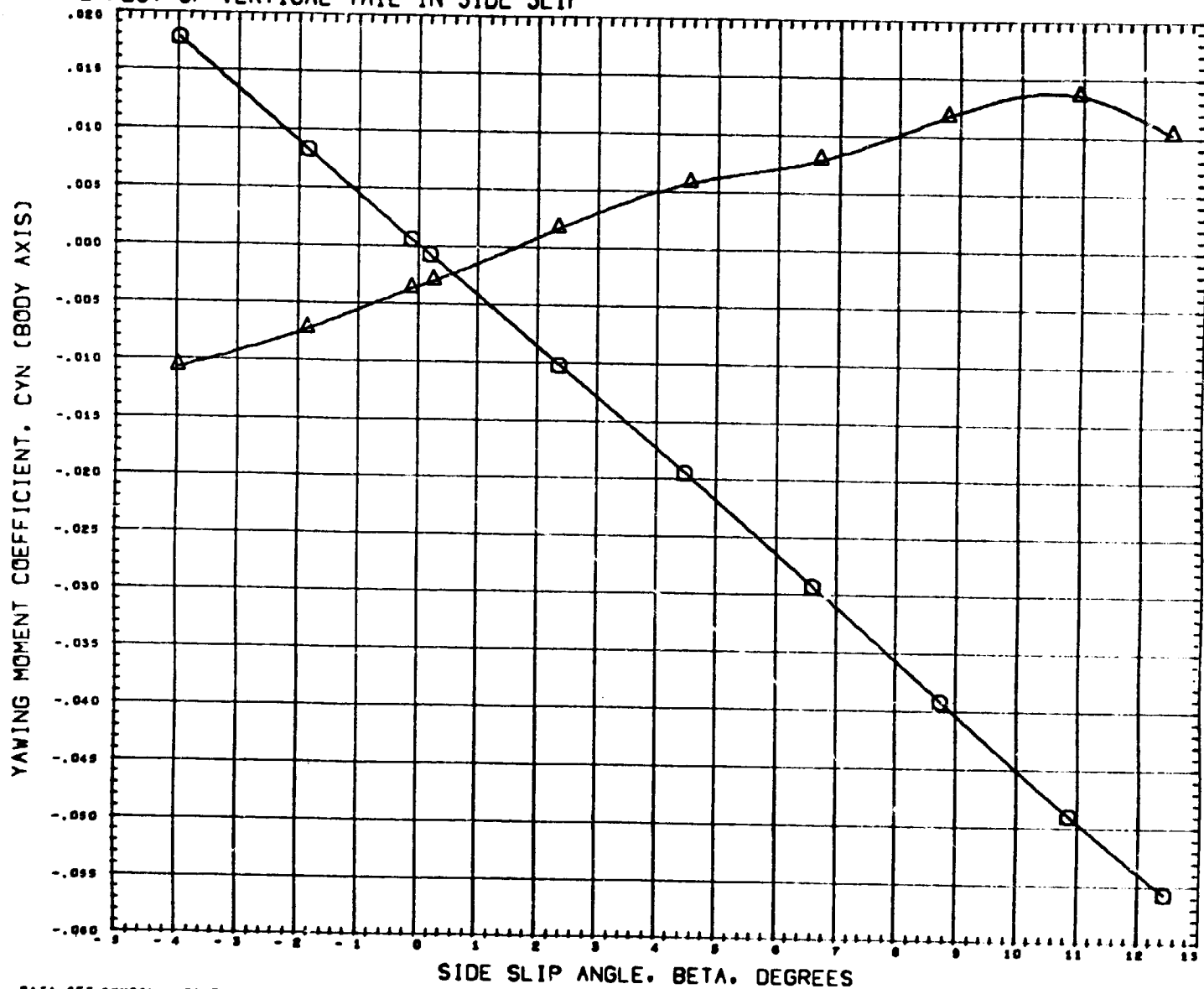


DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (AC2155) BTMT-1265 BOEING H-32 BOOSTER BBW4M4
 (AC2075) BTMT-1265 BOEING H-32 BOOSTER BBW4M4V3
 MTAIL 0.000 ELEVTR 0.000 SPOILR 0.000

MACH 0.299

REFERENCE INFORMATION
 SREF 31.3600 SQ. IN
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XMRP 11.0000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

EFFECT OF VERTICAL TAIL IN SIDE SLIP

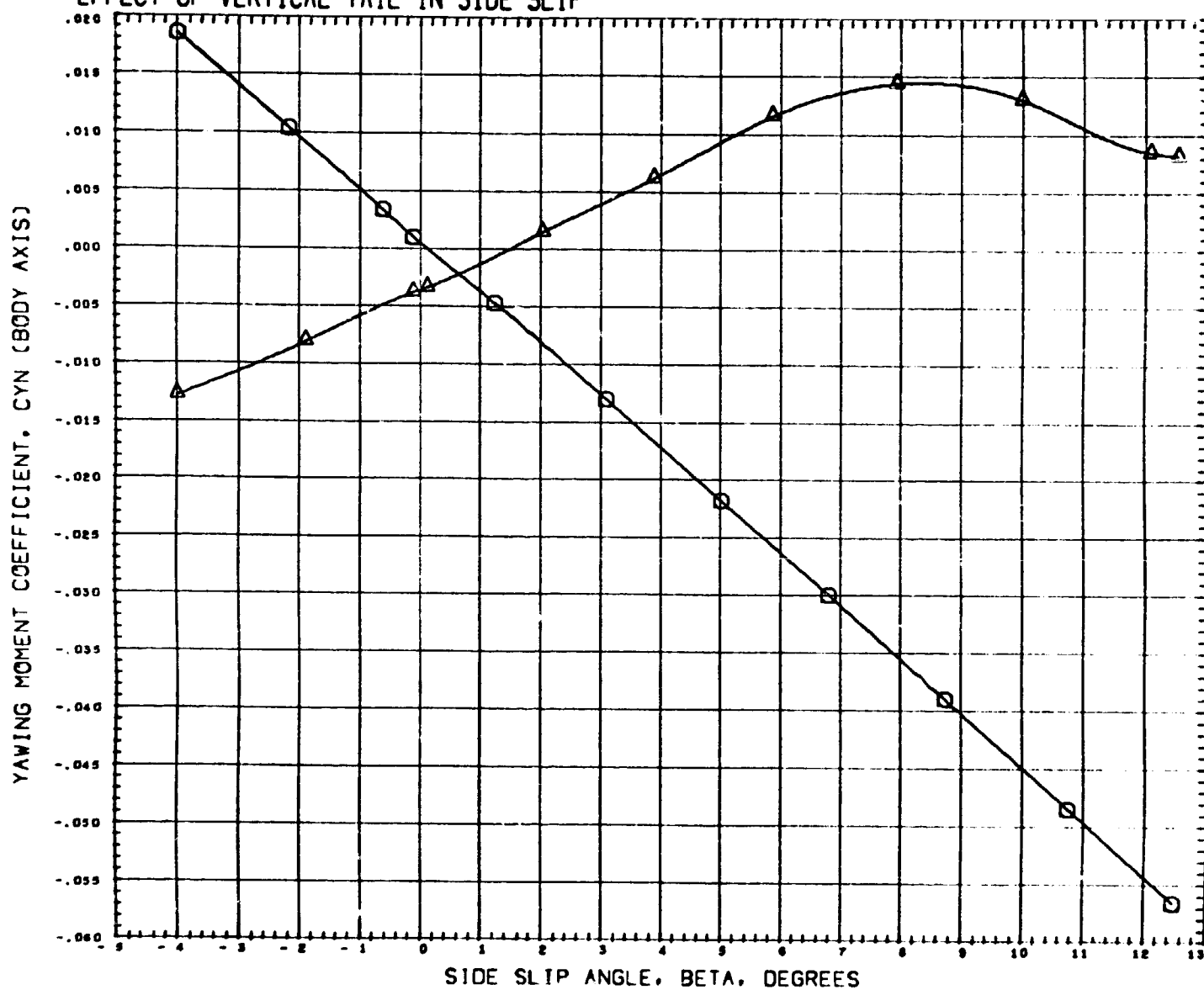


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILR
(R02155)	BTMT-1265 BOEING N-32 BOOSTER 88W4M4	0.000	0.000	
(R02075)	BTMT-1265 BOEING N-32 BOOSTER 88W4M4V3	0.000	0.000	

MACH 0.599

REFERENCE INFORMATION		
SREF	31.3600	80. IN
LRFF	2.2400	IN.
BREF	14.8000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

EFFECT OF VERTICAL TAIL IN SIDE SLIP

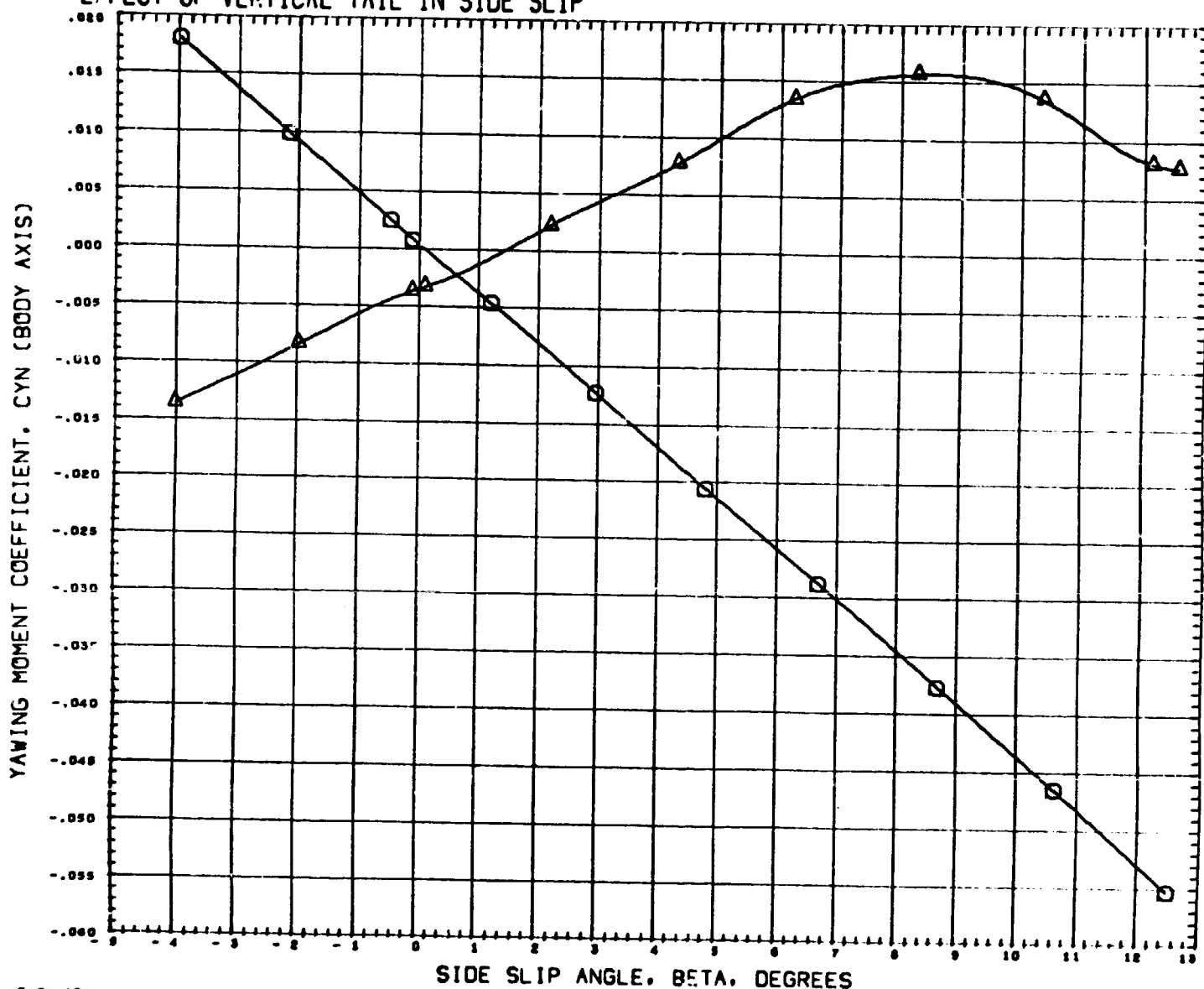


CAT.	SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILER
(RD.155)	○	BTWT-1265 BOEING H-32 BOOSTER B8W4H4	0.000	0.000	
(RD.2075)	△	BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3	0.000	0.000	

REFERENCE INFORMATION		
SREF	31.3600	sq. in
LREF	2.2400	in.
BREF	14.0000	in.
XMRP	11.9800	in.
YMRP	0.0000	in.
ZMRP	2.4330	in.
SCALE	0.0067	

MACH 0.891

EFFECT OF VERTICAL TAIL IN SIDE SLIP

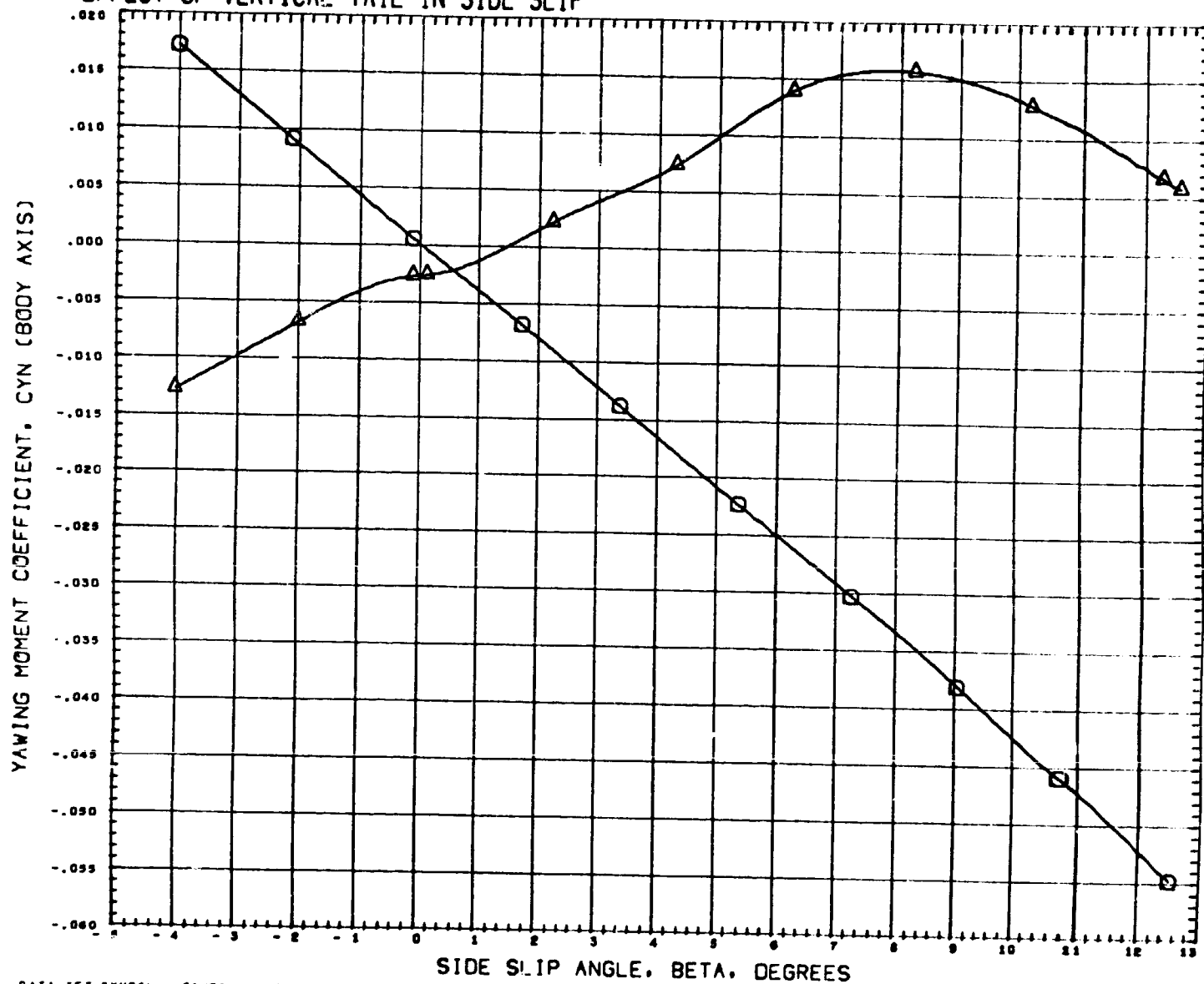


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HTAIL	ELEVTR	SPOILR
(R2155)	B1MT-1265 BOEING N-32 BOOSTER B8W4H4	0.000	0.000	
(R2079)	B1MT-1265 BOEING N-32 BOOSTER B8W4H4V3	0.000	0.000	

MACH 0.850

REFERENCE INFORMATION		
SREF	31.3600	50. IN
LREF	2.2400	IN.
BREF	14.0000	IN.
XMRP	11.9800	IN.
YMRP	0.0500	IN.
ZMRP	2.4330	IN.
SCALE	0.0007	

EFFECT OF VERTICAL TAIL IN SIDE SLIP

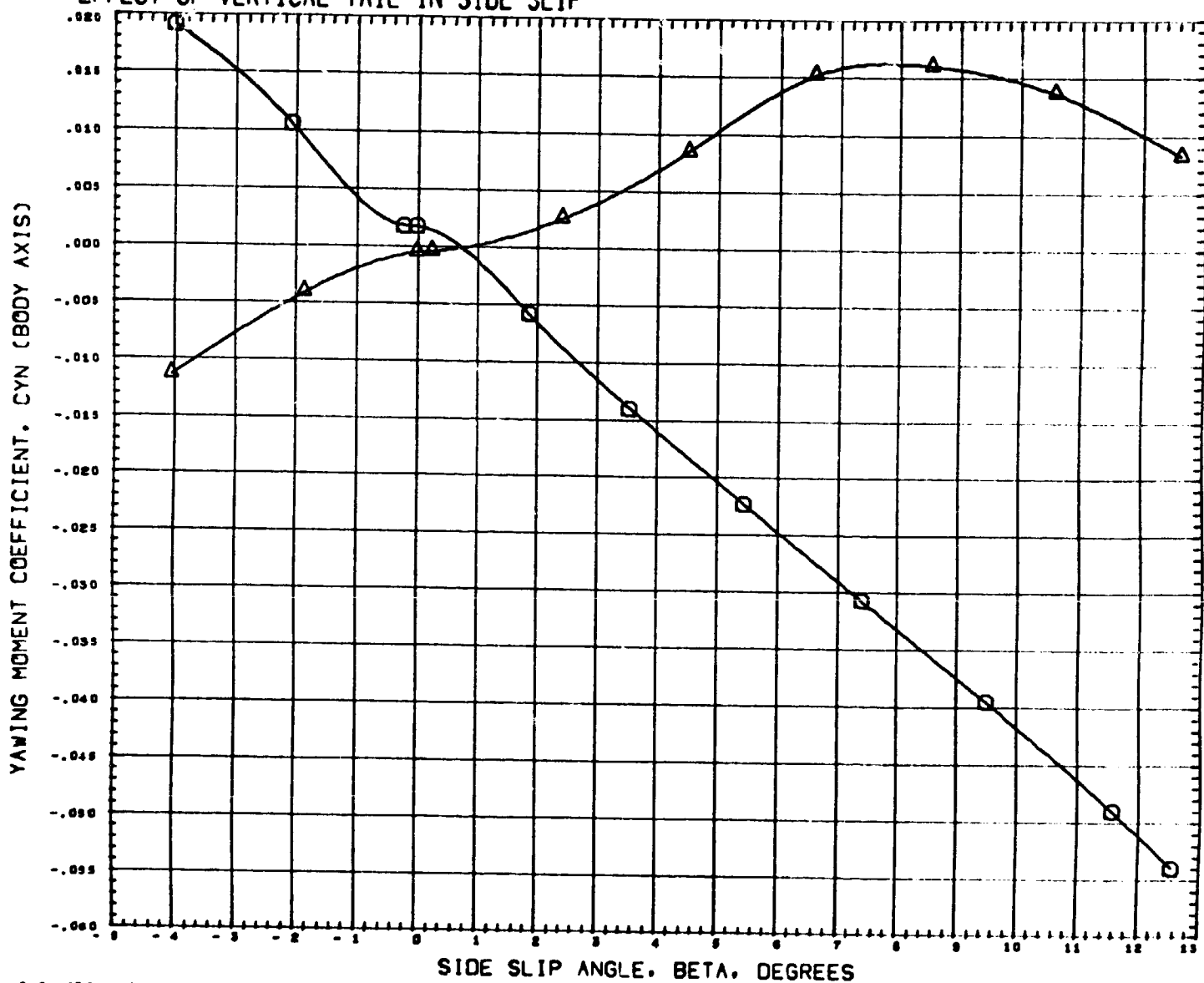


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MTAIL	ELEVTR	SPOILR
(RC2155)	BTWT-1265 BOEING N-32 BOOSTER 88W4H4	0.000	0.000	
(RC2075)	BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3	0.000	0.000	

MACH 0.899

REFERENCE INFORMATION		
SREF	31.3600	IN.
LREF	2.2400	IN.
BREF	14.6000	IN.
HNAP	11.9800	IN.
YNAP	0.0000	IN.
ZNAP	2.4330	IN.
SCALE	0.0067	

EFFECT OF VERTICAL TAIL IN SIDE SLIP

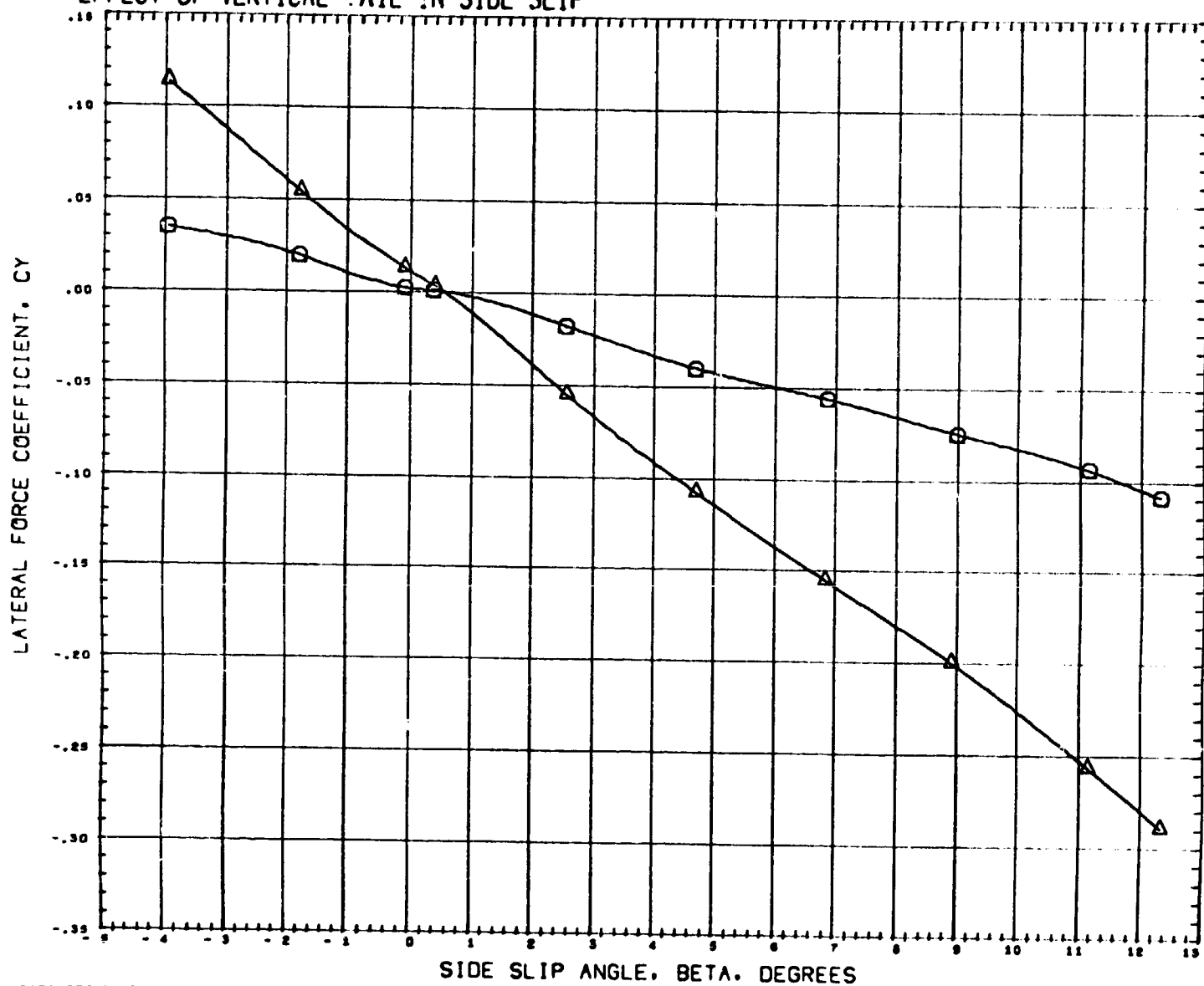


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MTAIL	ELEVTR	SPOILR
(R02155)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4	0.000	0.000	
(R02075)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	0.000	0.000	

MACH 0.949

REFERENCE INFORMATION		
SREF	31.3600	90. IN
LREF	2.2400	IN.
BREF	14.0000	IN.
XMRP	11.9000	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

EFFECT OF VERTICAL TAIL IN SIDE SLIP

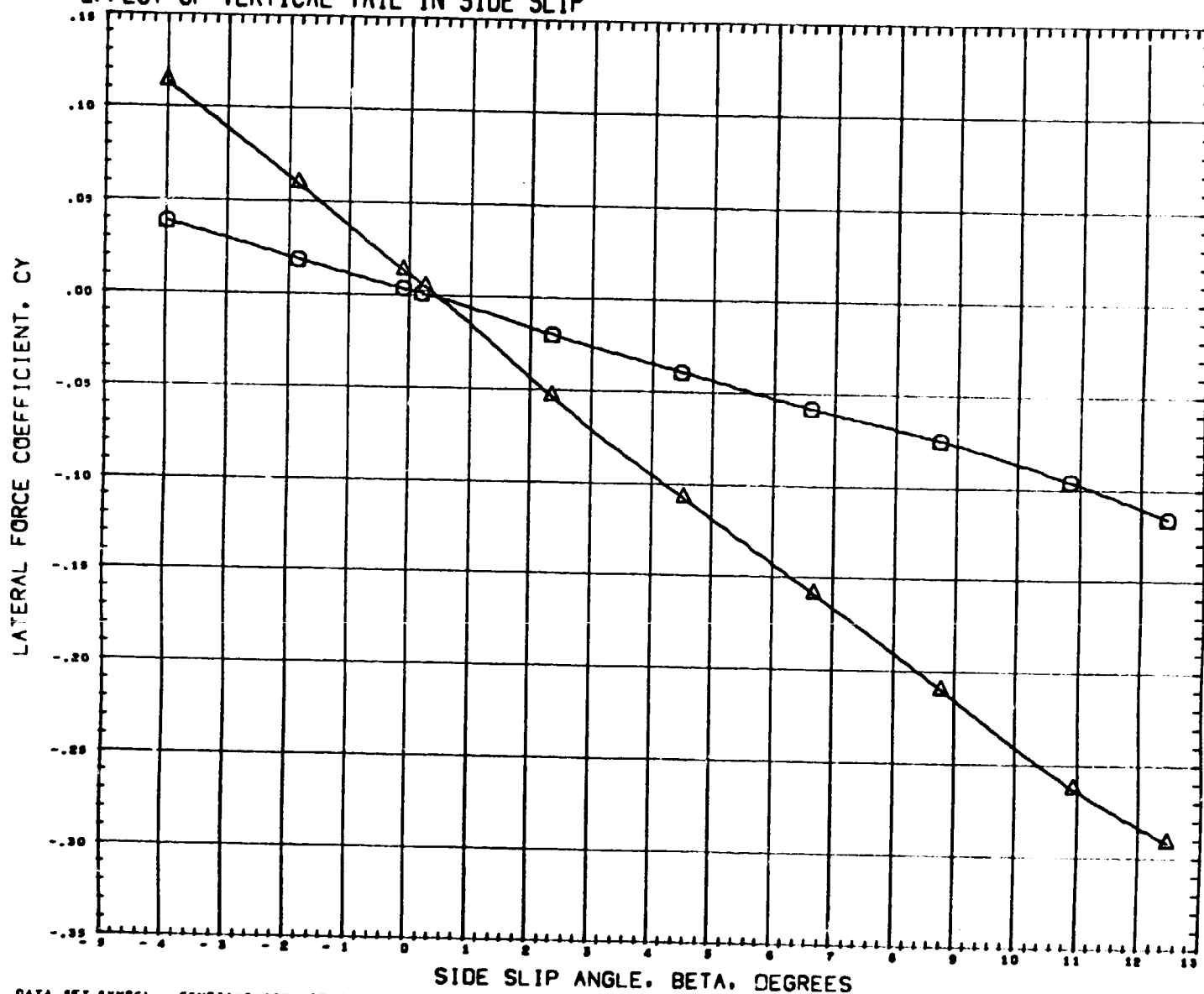


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HTAIL	ELEVTR	SPOILR
(RD2195)	B1WT-1265 BOEING H-32 BOOSTER B8W4H4	0.000	0.000	
(RD2075)	B1WT-1265 BOEING H-32 BOOSTER B8W4H4V3	0.000	0.000	

REFERENCE INFORMATION	
SREF	31.3400 SQ. IN
LREF	2.2400 IN.
BREF	14.8000 IN.
XMRP	11.9800 IN.
YMRP	0.0000 IN.
ZMRP	2.4330 IN.
SCALE	0.0067

MACH 0.299

EFFECT OF VERTICAL TAIL IN SIDE SLIP

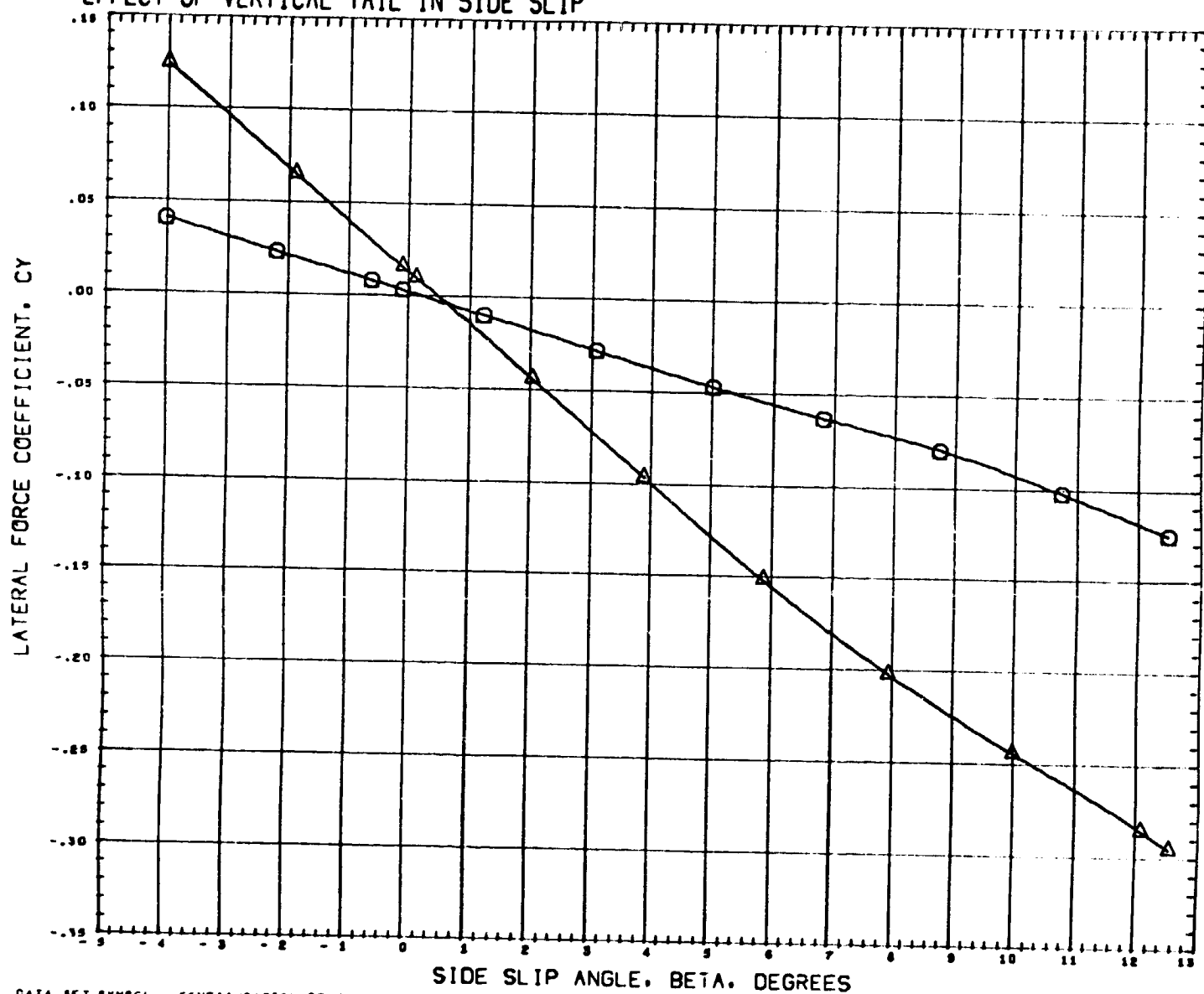


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MTAIL	ELEVTR	SPOILER
(R02135)	BTWT-1265 BOEING N-32 BOOSTER	0.000	0.000	
(R02075)	BTWT-1265 BOEING N-32 BOOSTER	0.000	0.000	

REFERENCE INFORMATION		
SREF	31.3600	sq. in
LREF	2.2400	in.
BREF	14.6000	in.
XMRP	11.9800	in.
YMRP	0.0000	in.
ZMRP	2.4330	in.
SCALE	0.0067	

MACH 0.599

EFFECT OF VERTICAL TAIL IN SIDE SLIP



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC2155) BTWT-1265 BOEING N-32 BOOSTER
 (RC2075) BTWT-1265 BOEING N-32 BOOSTER

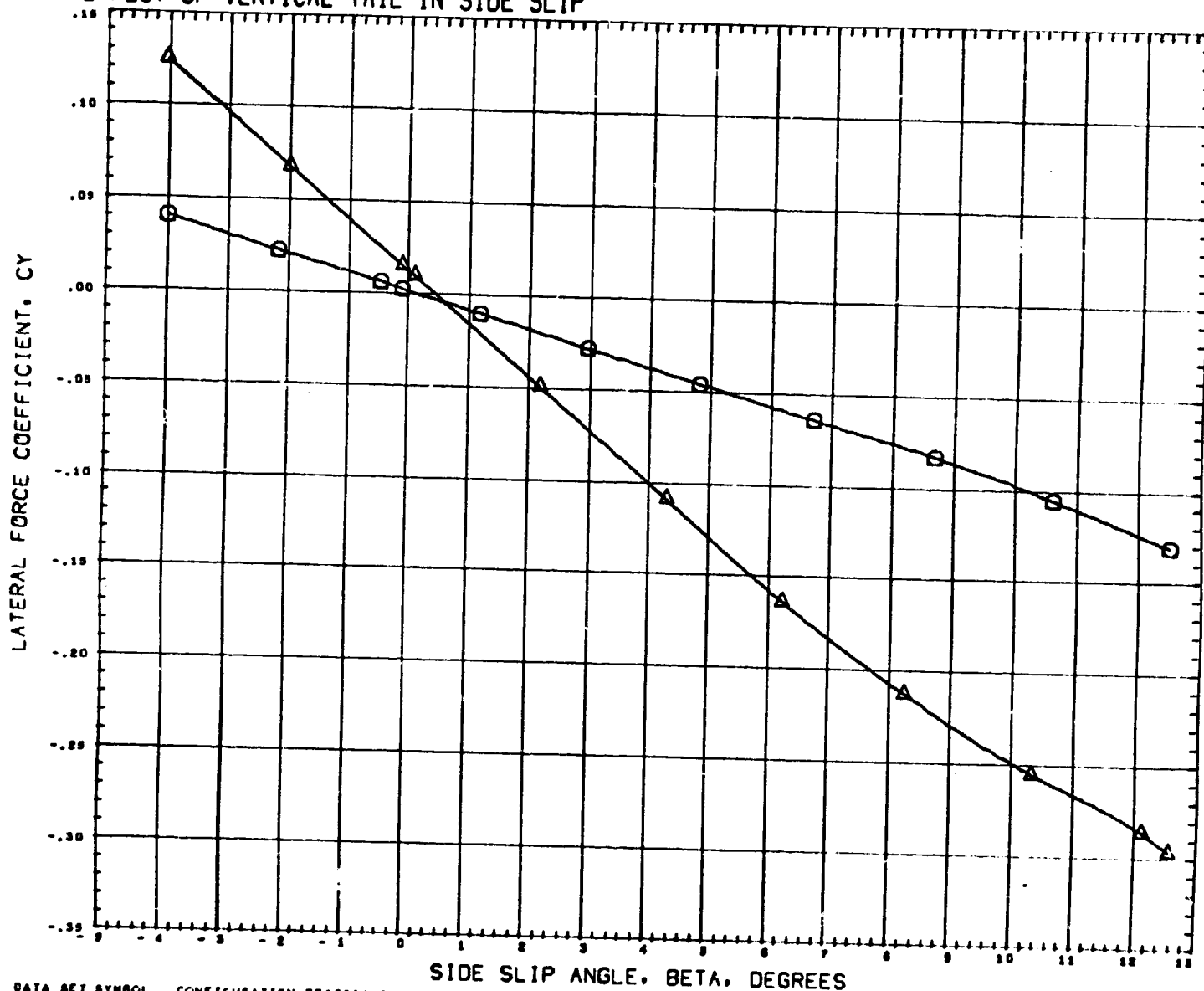
BTWT-1265
 BTWT-1265

HTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.601

EFFECT OF VERTICAL TAIL IN SIDE SLIP



DATA SET SYMBOL CONFIGURATION DESCRIPTION

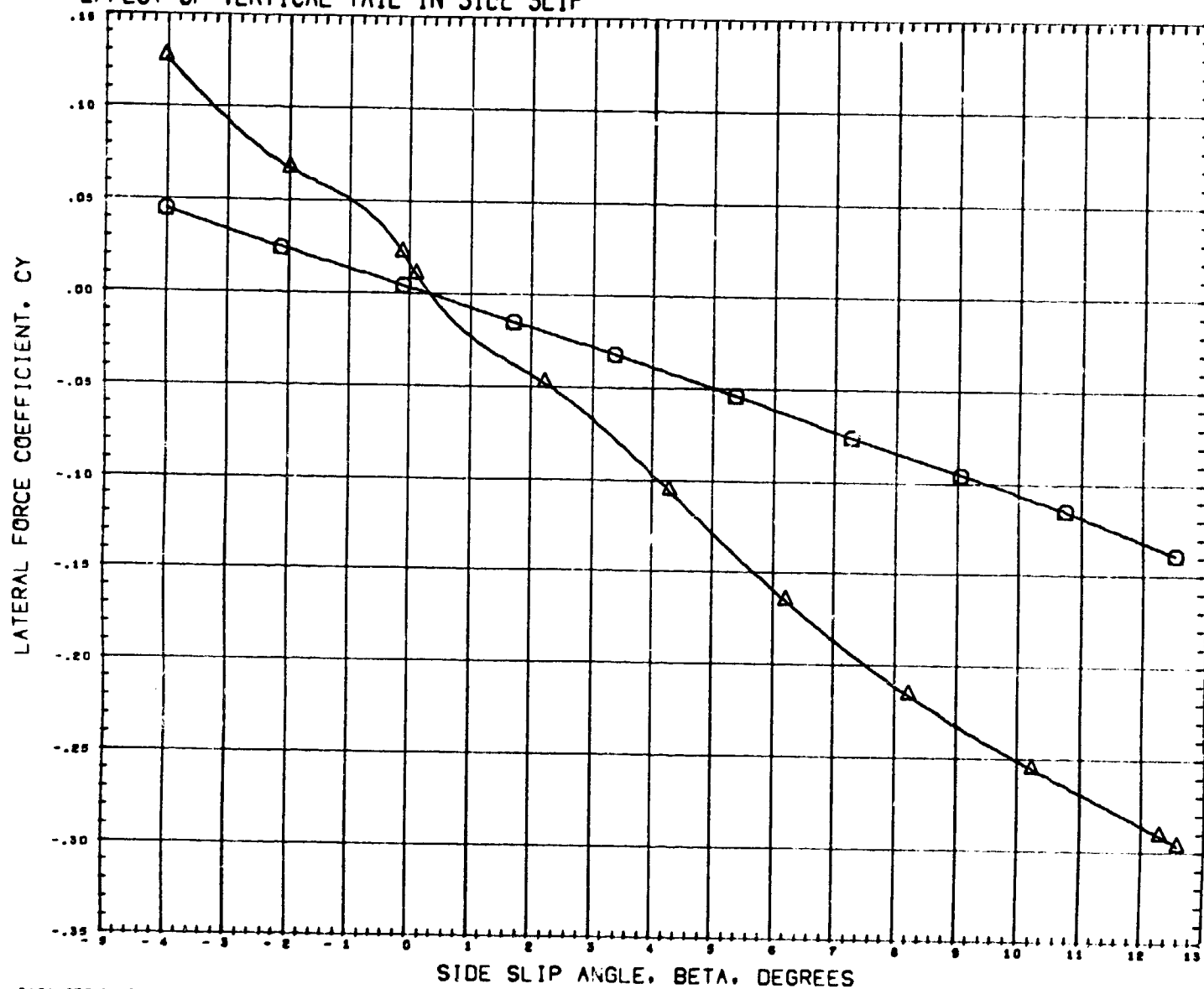
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MTAIL	ELEVTR	SPOILER
(002155)	BTWT-1245 BOEING N-32 BOOSTER	0.000	0.000	
(002673)	BTWT-1245 BOEING N-32 BOOSTER	0.000	0.000	

MACH 0.850

REFERENCE INFORMATION

SREF	31.3600	sq. in
LREF	2.2400	in.
BREF	14.0000	in.
KMRP	11.0000	in.
YMRP	0.0000	in.
ZMRP	2.4330	in.
SCALE	0.0007	

EFFECT OF VERTICAL TAIL IN SIDE SLIP



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC1155) BTWT-1265 BOEING H-32 BOOSTER
 (RC2075) BTWT-1265 BOEING H-32 BOOSTER

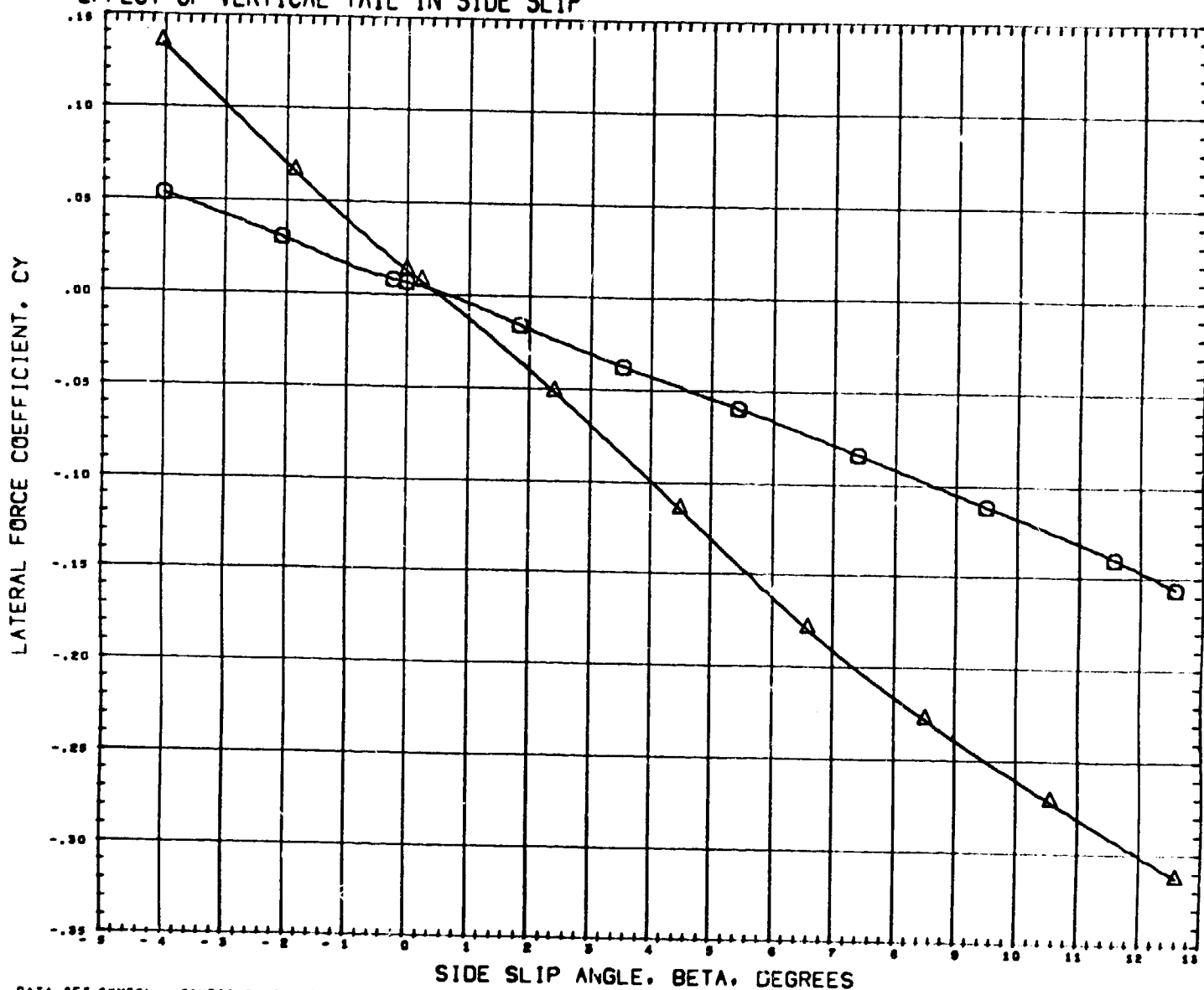
BOW4H4
 BOW4H4V3

HTAIL ELEVTR SPOILER
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 IN.
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.899

EFFECT OF VERTICAL TAIL IN SIDE SLIP

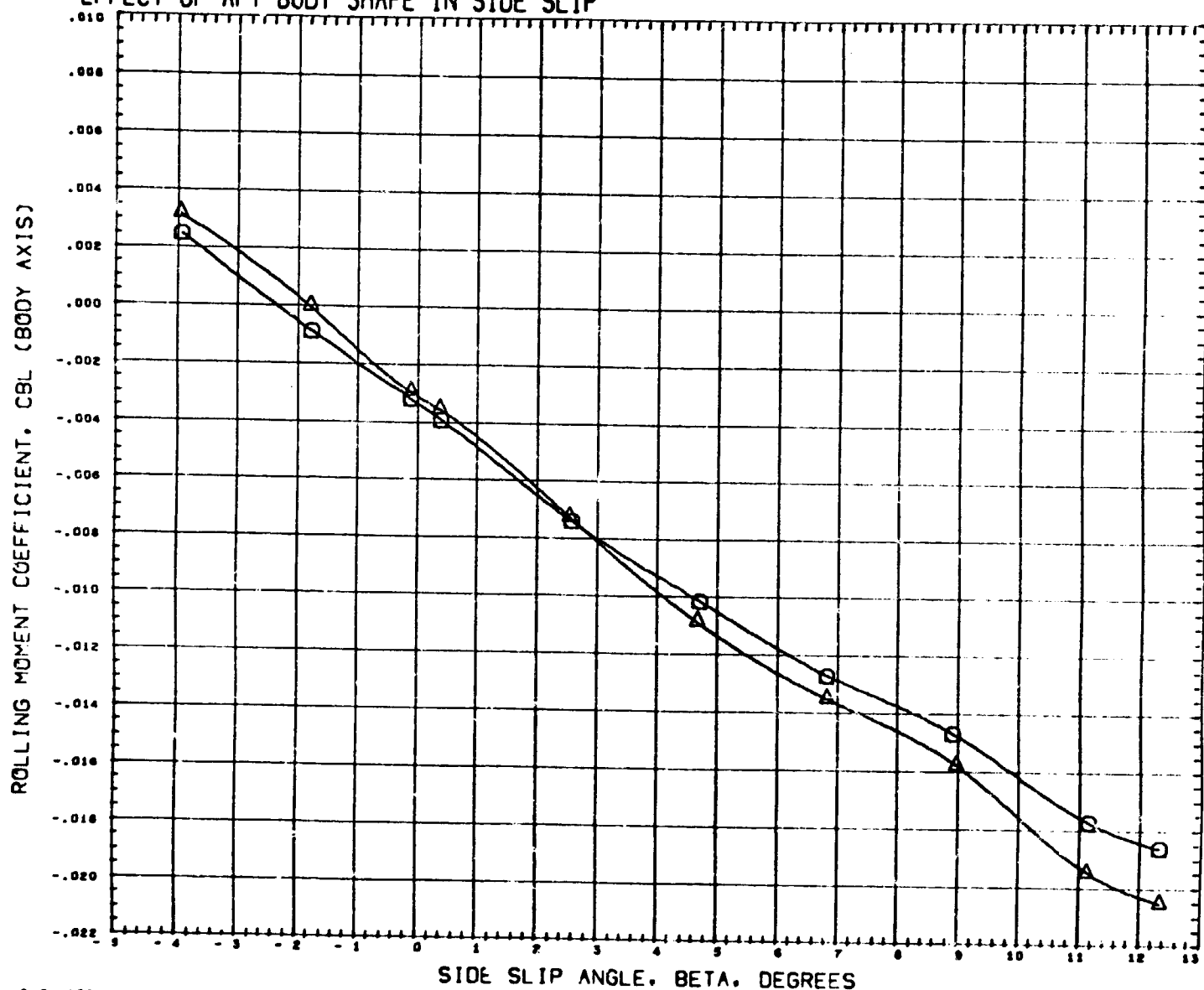


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MTAIL	ELEVTR	SPOILR
(RCR155)	BTMT-1265 BOEING N-32 BOOSTER	0.000	0.000	
(RDR075)	BTMT-1265 BOEING N-32 BOOSTER	0.000	0.000	

MACH 0.949

REFERENCE INFORMATION		
SRFP	31.3600	sq. in.
LRFP	2.2400	in.
RRFP	14.0000	in.
XRFP	11.0000	in.
YRFP	0.0000	in.
ZRFP	2.4330	in.
SCALE	0.0067	

EFFECT OF AFT BODY SHAPE IN SIDE SLIP

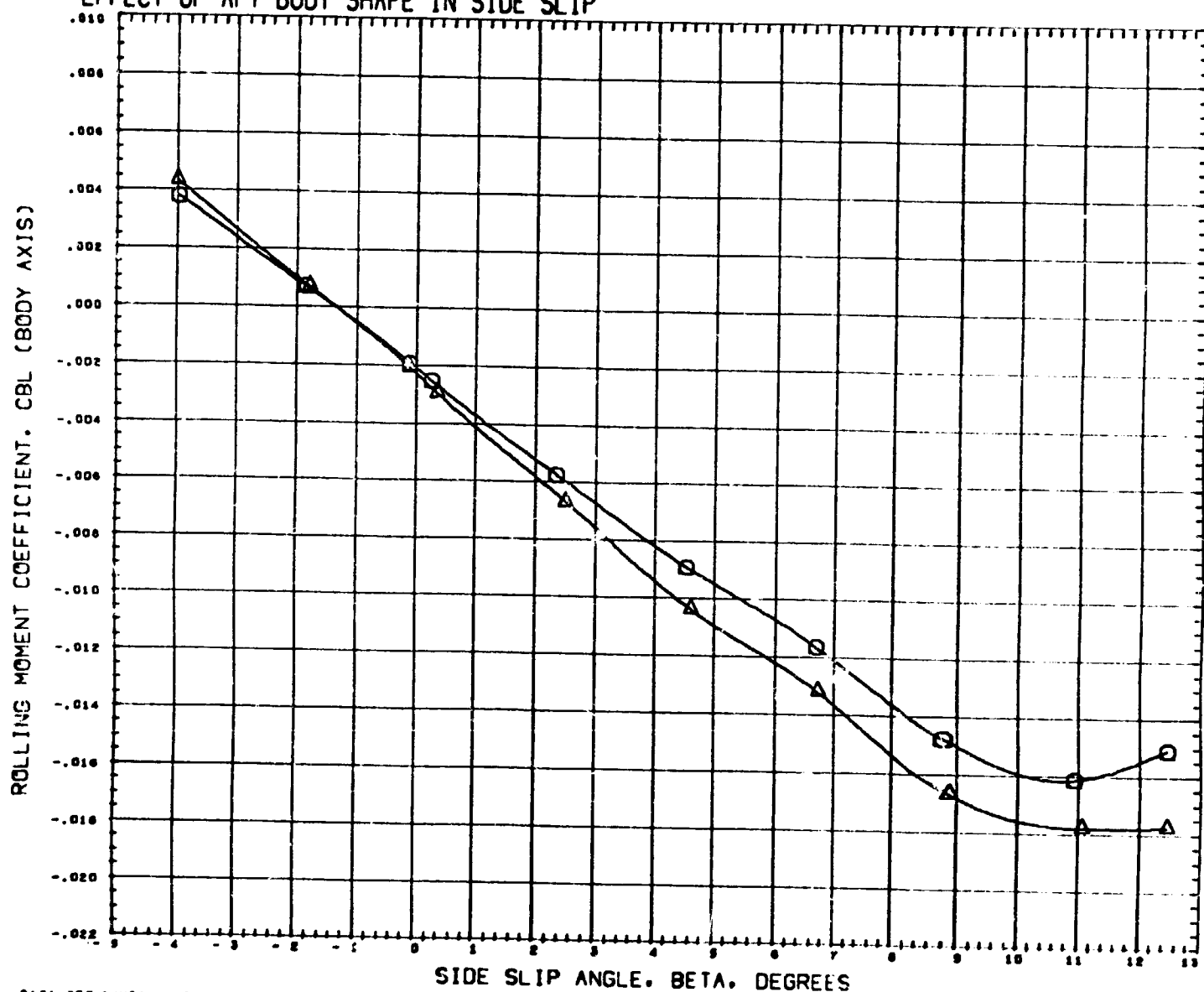


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MTAIL	ELEVTR	SPOILR
(R02075)	BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3	0.000	0.000	
(R02135)	BTWT-1265 BOEING N-32 BOOSTER 814W4H4V3	0.000	0.000	

MACH 0.300

REFERENCE INFORMATION		
SREF	31.3600	SQ. IN
LREF	2.2400	IN.
BREF	14.8000	IN.
XMRP	11.9000	IN.
YMRP	0.0000	IN.
ZMRP	2.7330	IN.
SCALE	0.0067	

EFFECT OF AFT BODY SHAPE IN SIDE SLIP

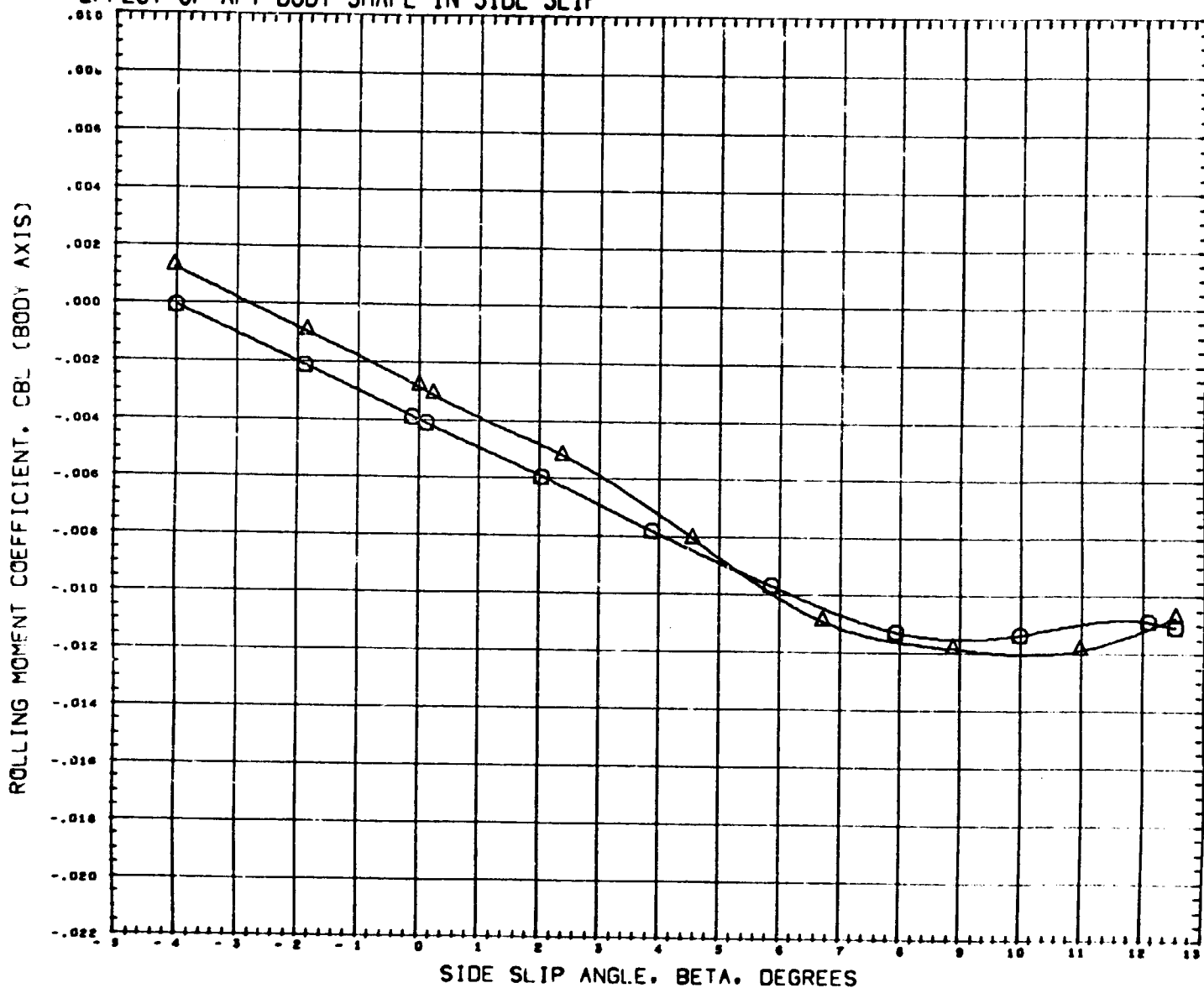


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MTAIL	ELEVTR	SPOILR
(R023P5)	BTWT-1265 BOEING M-32 BOOSTER B8W4N4V3	0.000	0.000	
(R02135)	BTWT-1265 BOEING M-32 BOOSTER B14W4N4V3	0.000	0.000	

MACH 0.599

REFERENCE INFORMATION		
SREF	31.3600	50. IN
LREF	2.2400	IN.
BREF	14.6000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

EFFECT OF AFT BODY SHAPE IN SIDE SLIP

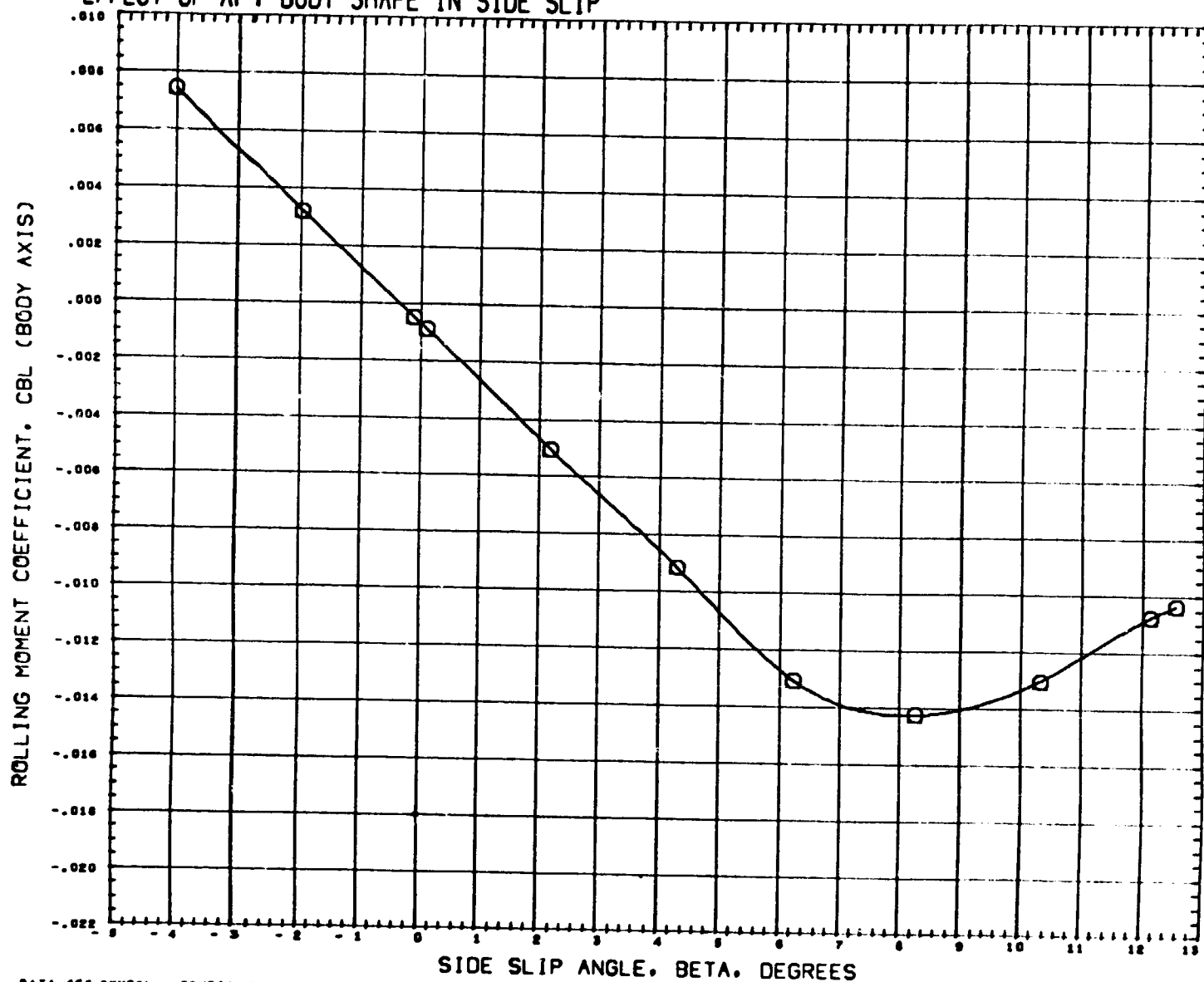


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MTAIL	CLEVTR	SPOILR
(RC2075)	BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3	0.000	0.000	
(RC2135)	BTWT-1265 BOEING H-32 BOOSTER B14W4H4V3	0.000	0.000	

MACH 0.000

REFERENCE INFORMATION		
SREF	31.3600	88. IN
LREF	2.2400	IN.
BREF	14.6000	IN.
XMRP	11.9000	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

EFFECT OF AFT BODY SHAPE IN SIDE SLIP



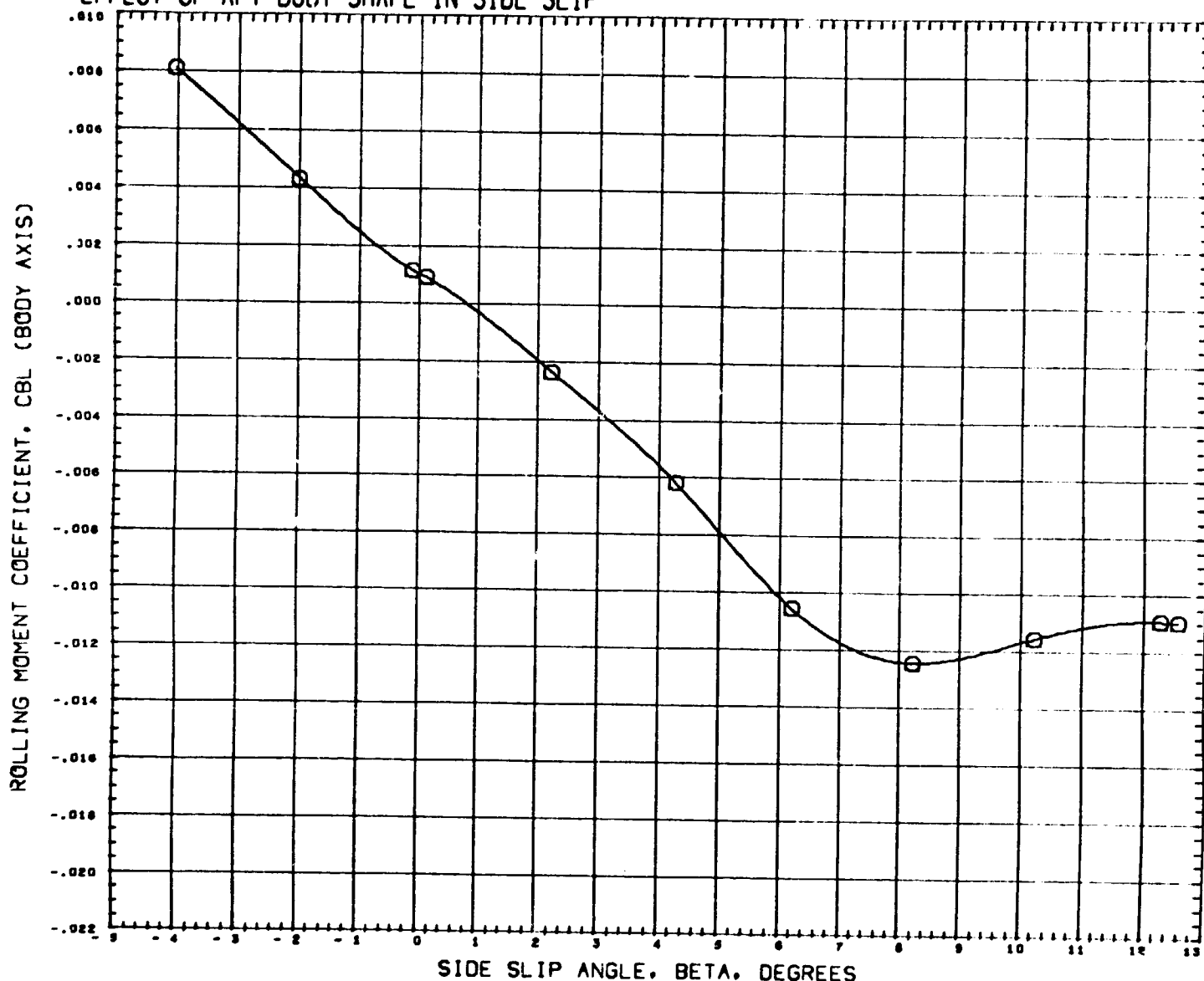
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02075) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (R02135) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 sq. in.
 LREF 2.2400 in.
 BREF 14.0000 in.
 XMRP 11.9600 in.
 YMRP 0.0000 in.
 ZMRP 2.4330 in.
 SCALE 0.0067

MACH 0.050

EFFECT OF AFT BODY SHAPE IN SIDE SLIP



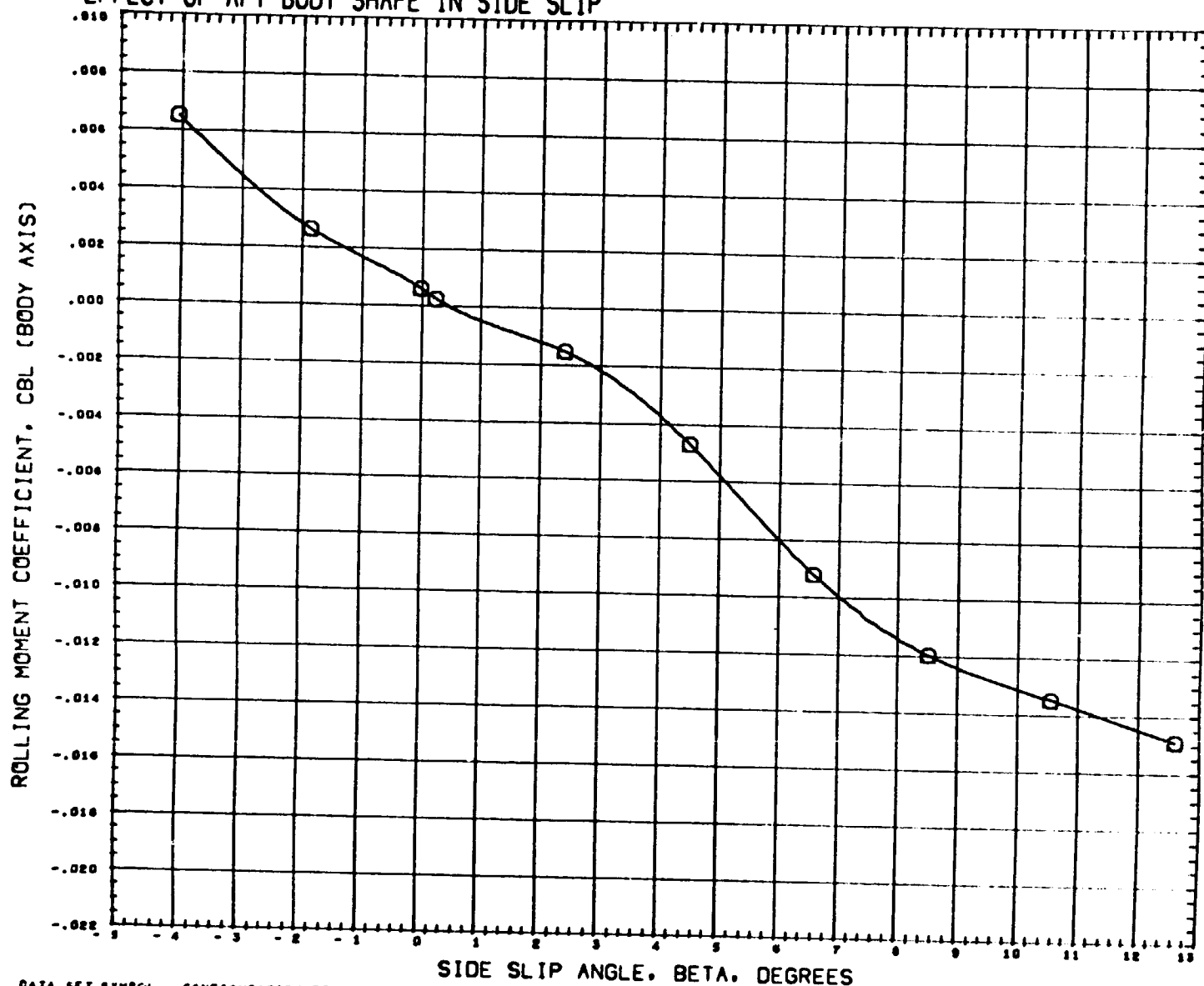
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC0275) Q BTWT-1263 BOEING M-32 BOOSTER 88W4H4V3
 (RC2133) DATA NOT AVAILABLE FOR ALL CONDITIONS

MTAIL ELEVT SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 SQ. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.900

EFFECT OF AFT BODY SHAPE IN SIDE SLIP



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(R02075) BTWT-1265 BOEING H-32 BOOSTER B8W4M4V3
 (R02135) DATA NOT AVAILABLE FOR ALL CONDITIONS

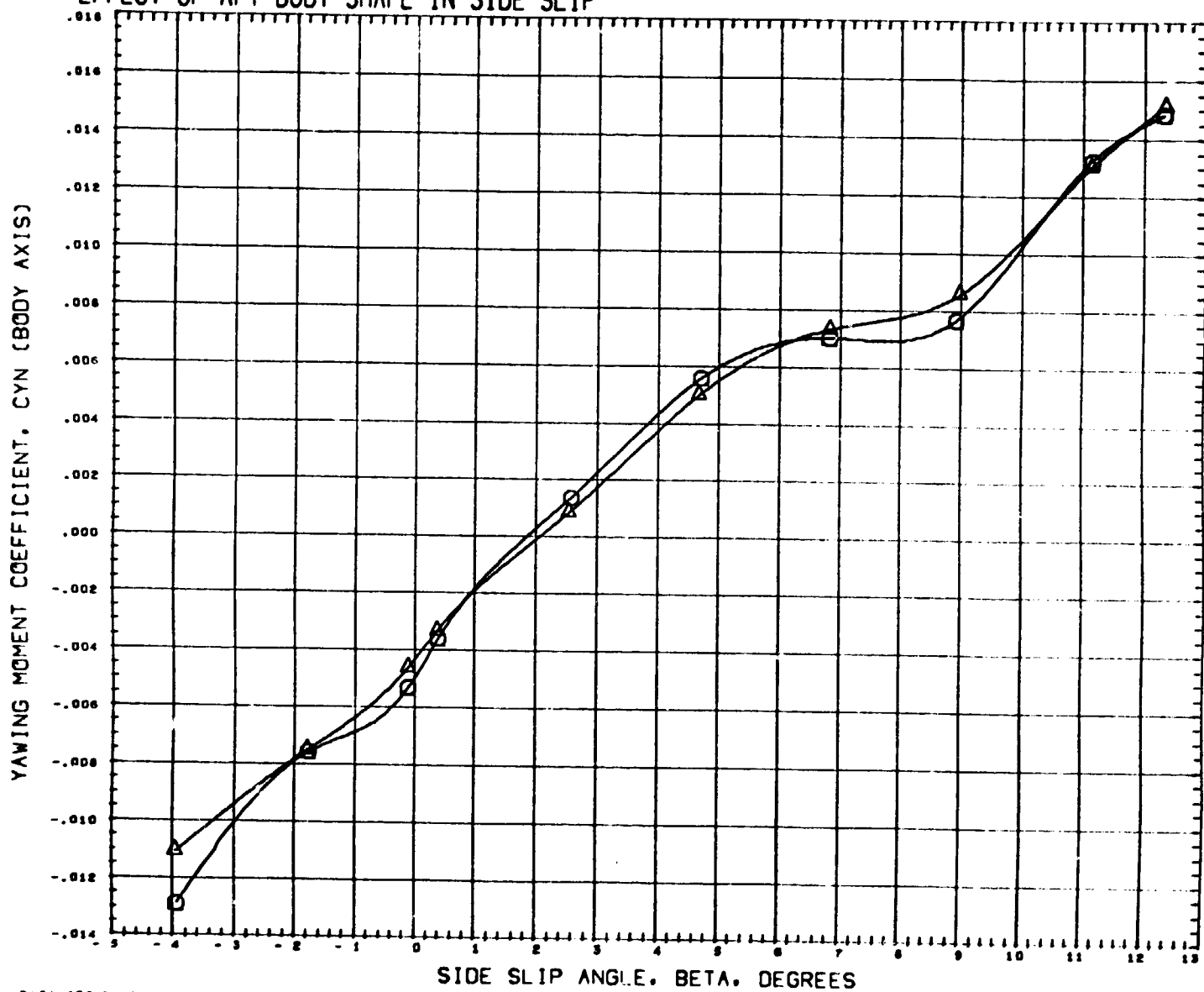
NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION

SREF 31.3600 IN.
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

NACH 0.951

EFFECT OF AFT BODY SHAPE IN SIDE SLIP

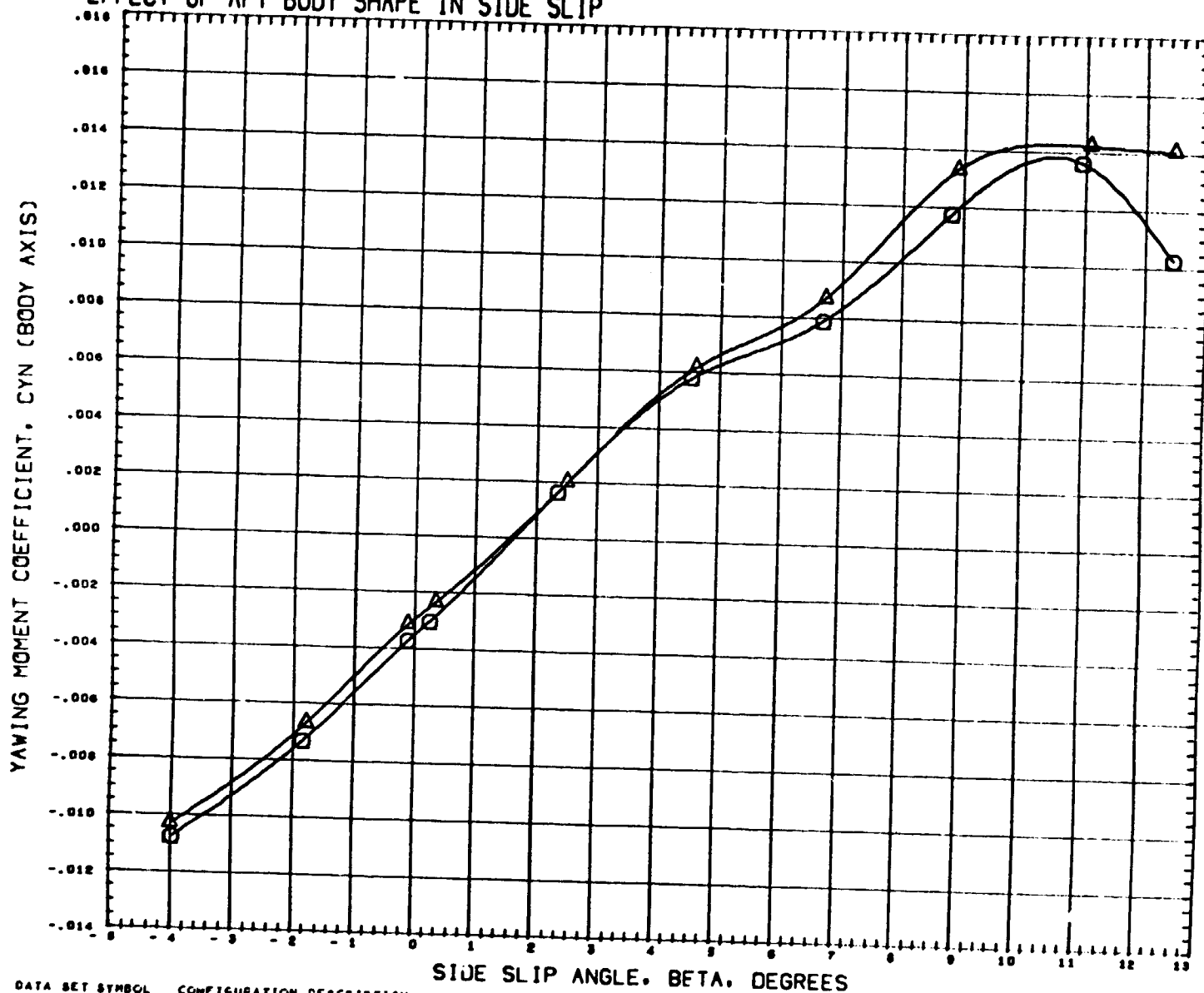


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILR
(RC2075) 	BTWT-1265 BOEING N-32 BOOSTER B8W4H4V3	0.000	0.000	
(RC2135) 	BTWT-1265 BOEING N-32 BOOSTER B14W4H4V3	0.000	0.000	

MACH 0.300

REFERENCE INFORMATION		
SREF	51.3600	sq. in
LREF	2.2400	in.
BREF	14.0000	in.
XHRP	11.9800	in.
YHRP	0.0000	in.
ZHRP	2.4330	in.
SCALE	0.0067	

EFFECT OF AFT BODY SHAPE IN SIDE SLIP

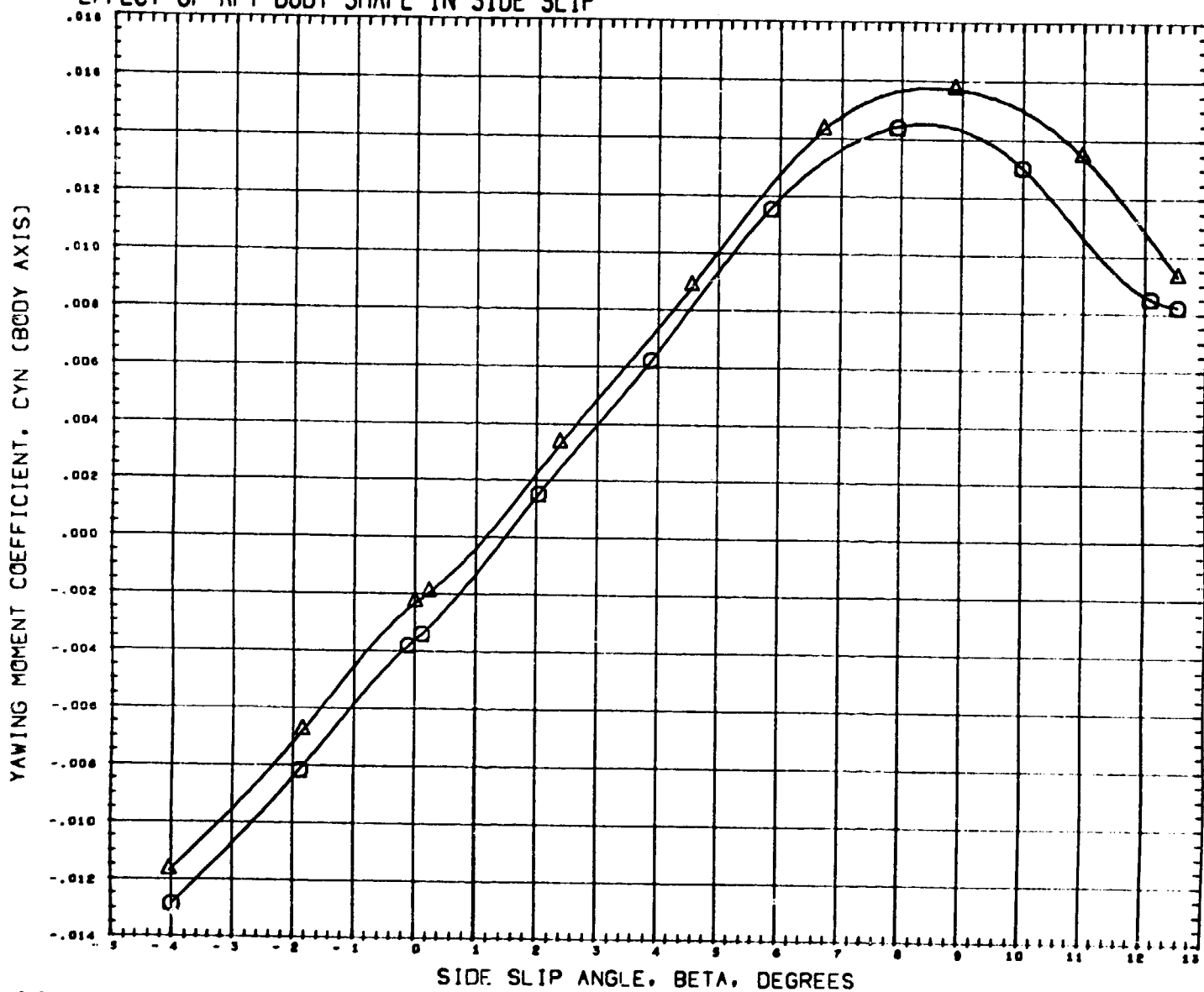


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILR
(R02075)	BTWT-1265 BOEING H-32 BOOSTER	0.000	0.000	
(R02135)	BTWT-1265 BOEING H-32 BOOSTER	0.000	0.000	
	B8W4H4V3			
	B14W4H4V3			

MACH 0.599

REFERENCE INFORMATION		
SREF	31.3600	90. IN
LREF	2.2400	IN.
BREF	14.6000	IN.
XMRP	11.9600	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

EFFECT OF AFT BODY SHAPE IN SIDE SLIP

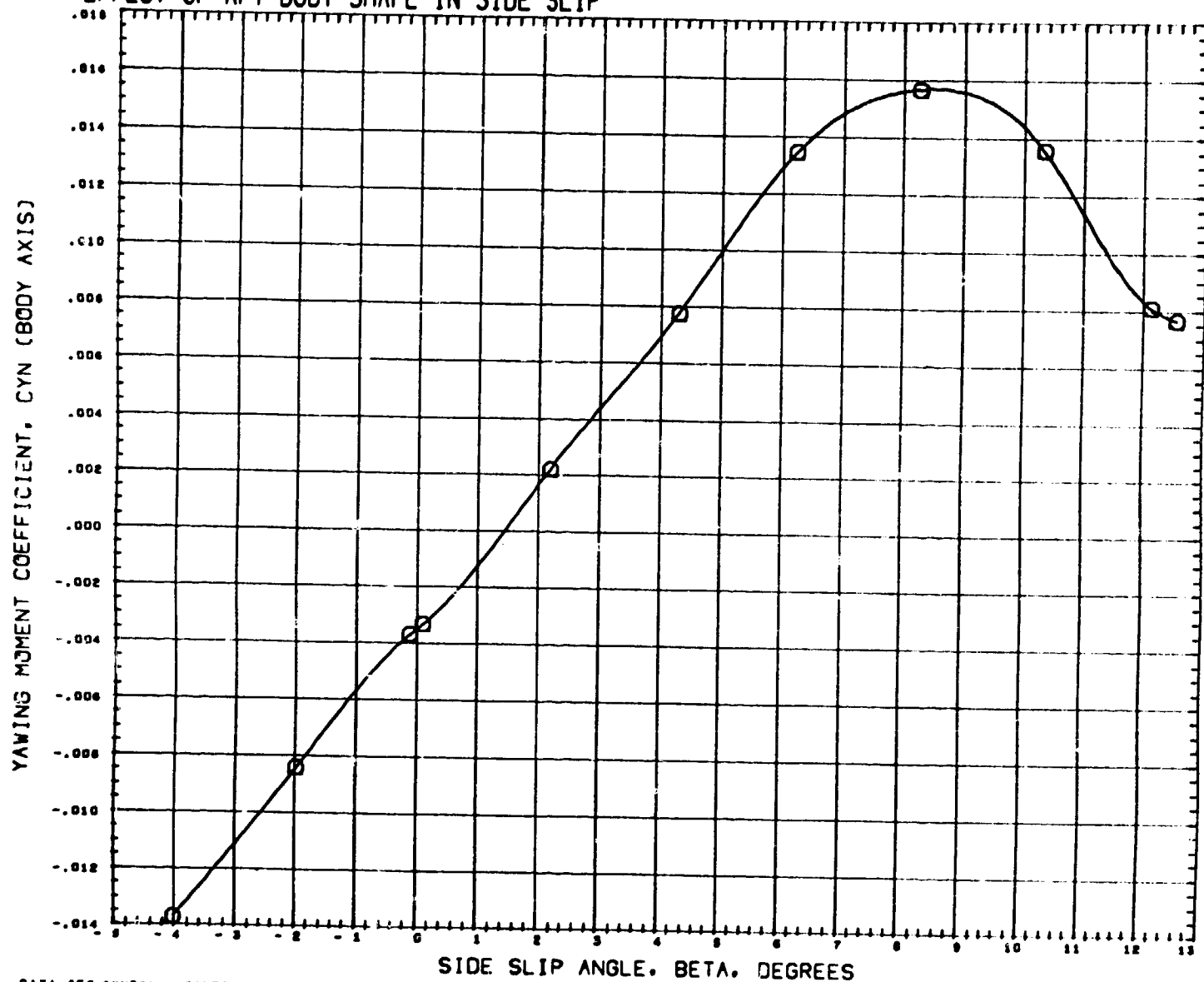


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MTAIL	ELEVTR	SPOILR
(AC2075)	B1W1-1265 BOEING H-32 BOOSTER B8W4H4V3	0.000	0.000	
(AC2135)	B1W1-1265 BOEING H-32 BOOSTER B14W4H4V3	0.000	0.000	

MACH 0.400

REFERENCE INFORMATION		
SREF	31.3600	80. IN
LREF	2.2400	IN.
BREF	14.0000	IN.
XMRP	11.9810	IN.
YMRP	0.6010	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

EFFECT OF AFT BODY SHAPE IN SIDE SLIP



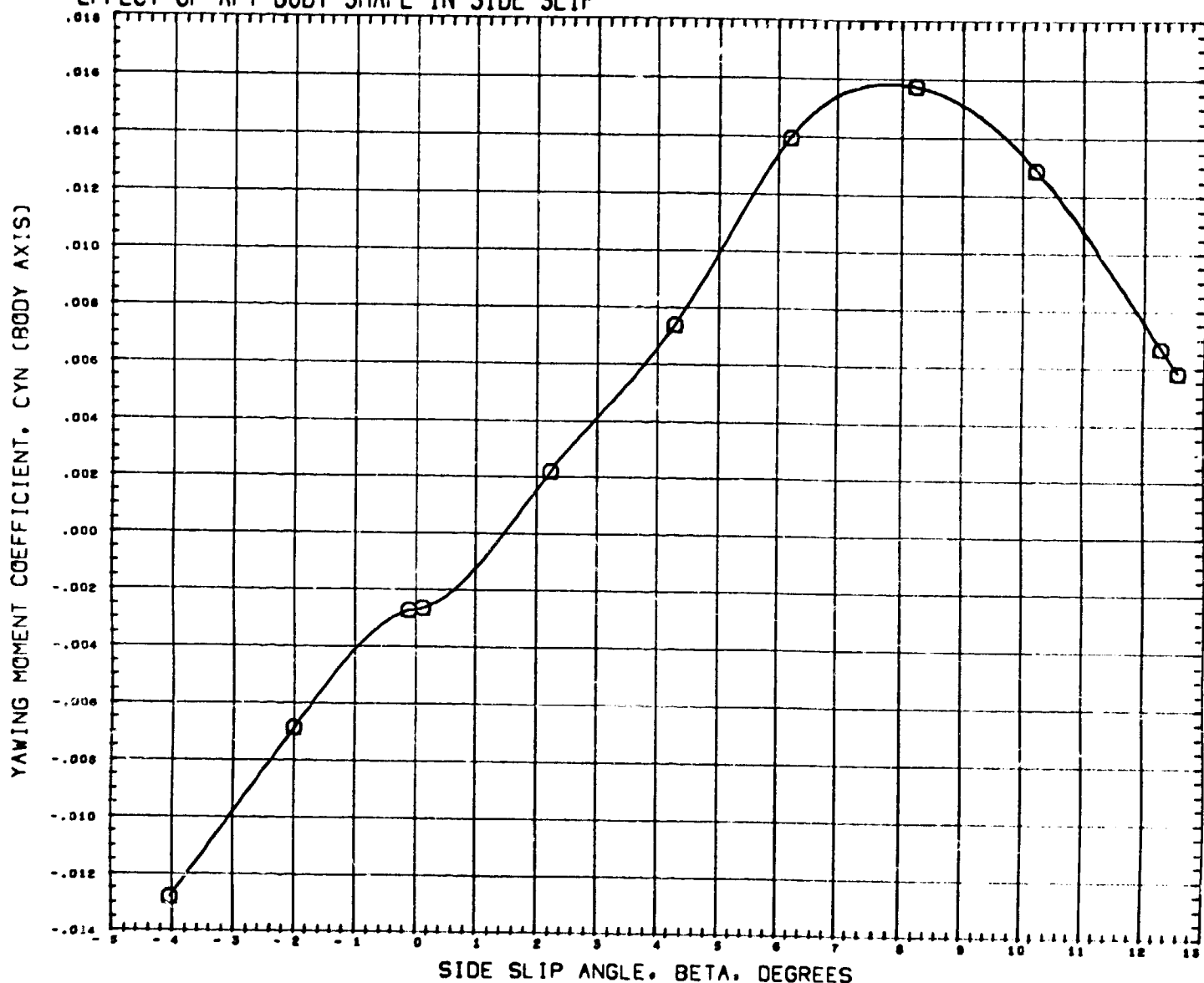
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC2075) 8TWT-1265 BOEING H-32 BOOSTER B8W4H4V3
 (RC2135) DATA NOT AVAILABLE FOR ALL CONDITIONS

MTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 SQ. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4930 IN.
 SCALE 0.0007

MACH 0.850

EFFECT OF AFT BODY SHAPE IN SIDE SLIP



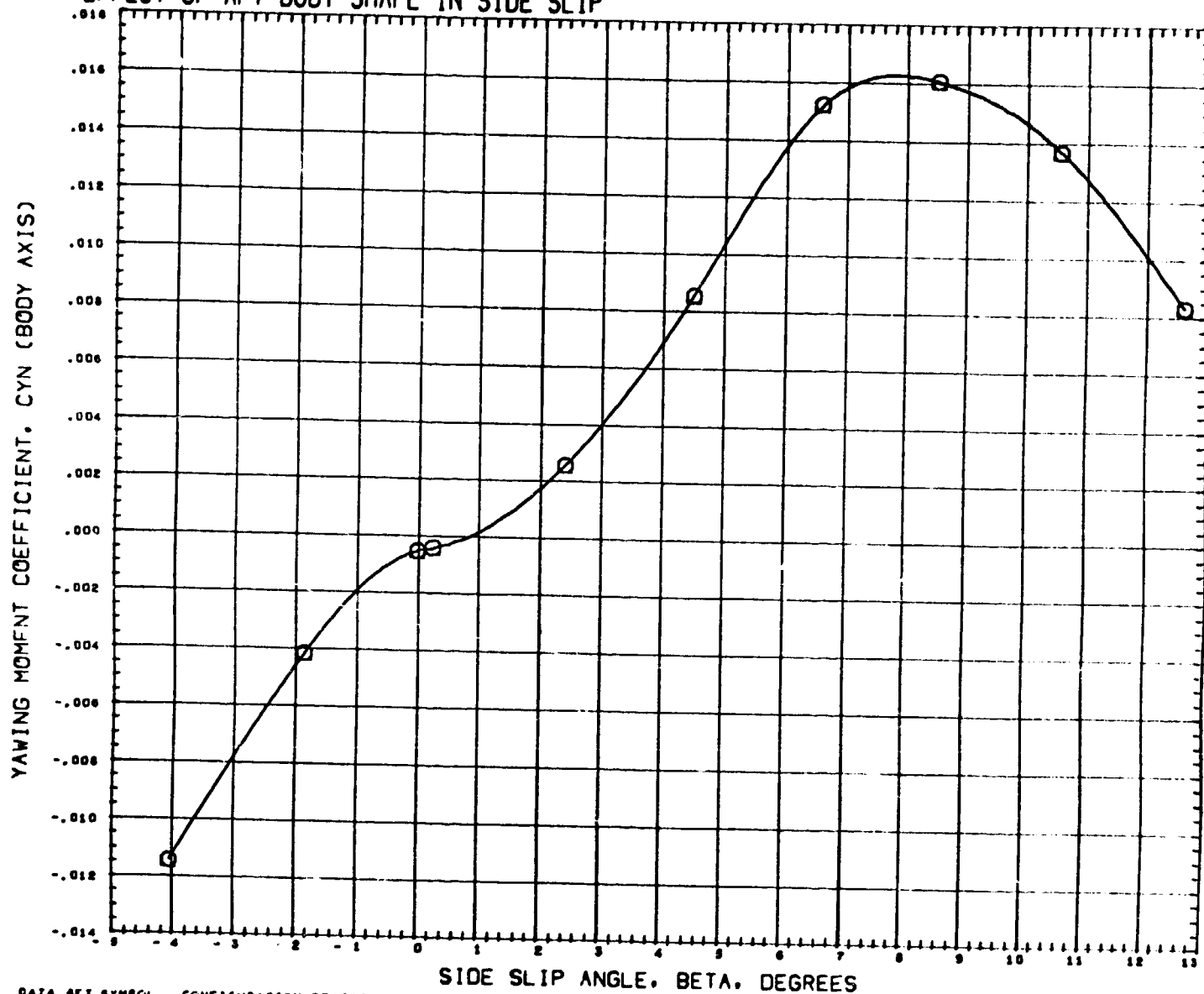
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02075) BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3
 (R02135) DATA NOT AVAILABLE FOR ALL CONDITIONS

MTAIL ELEVTR SPOILER
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 SQ. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.900

EFFECT OF AFT BODY SHAPE IN SIDE SLIP



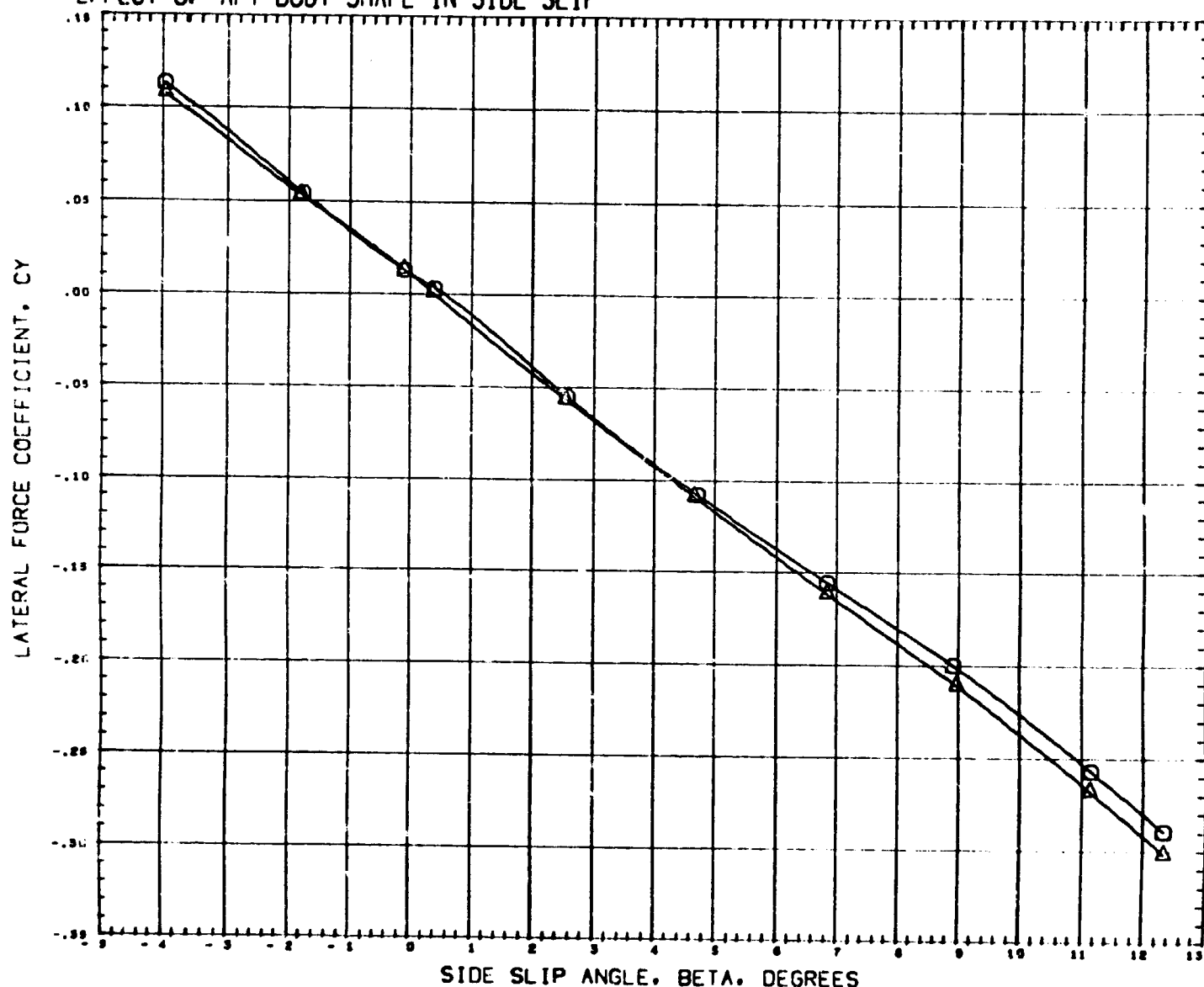
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02073) Q BTW7-1265 BOEING H-32 BOOSTER 88W4H4V3
 (R02135) DATA NOT AVAILABLE FOR ALL CONDITIONS

MTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 88. IN
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XMRP 11.9600 IN.
 YMRP 0.0000 IP.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.951

EFFECT OF AFT BODY SHAPE IN SIDE SLIP

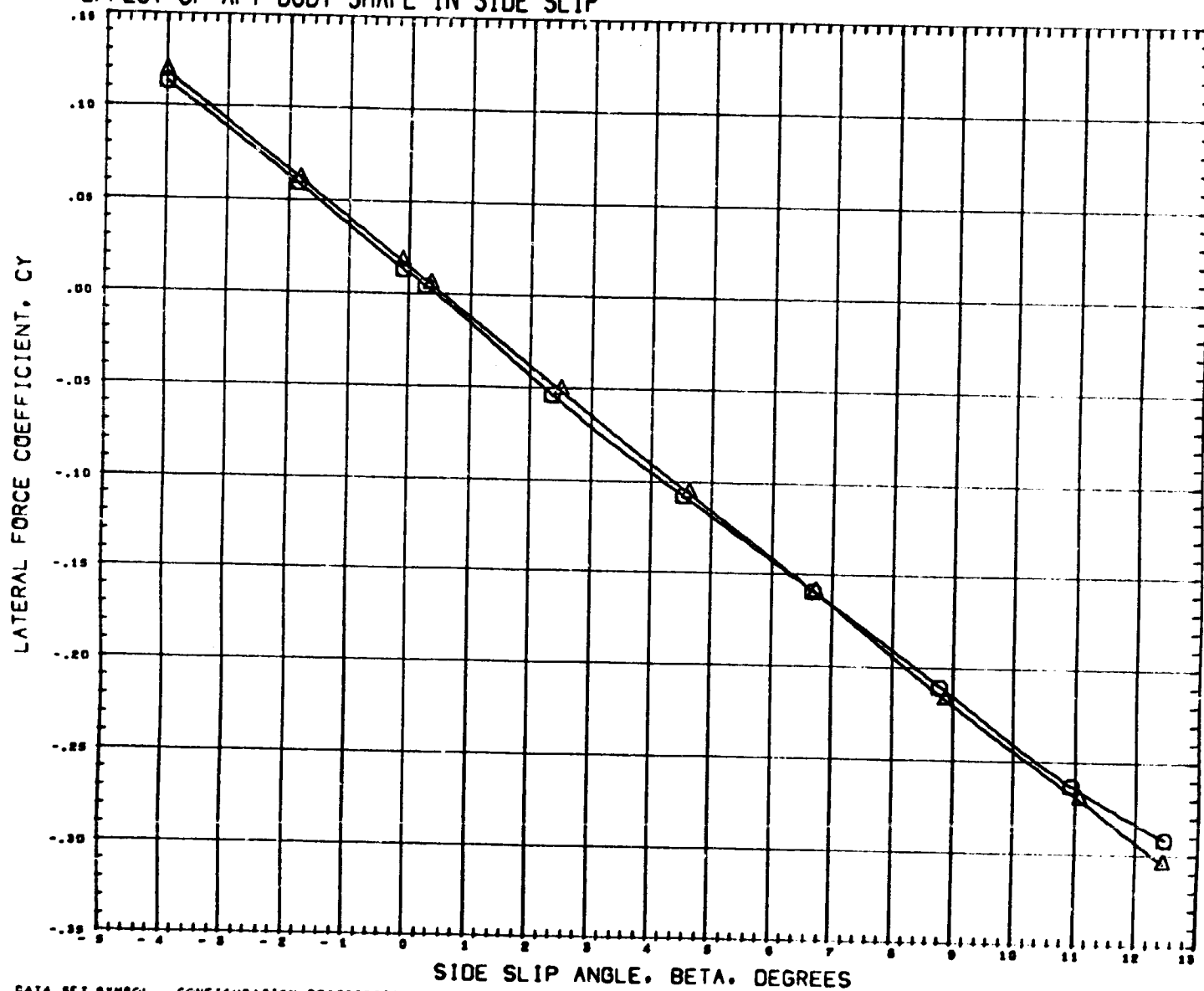


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HTAIL	ELEVTR	SPOILER
(RC2373)	BTWT-1265 BOEING M-32 BOOSTER 88W4H4V3	0.000	0.000	
(RC2133)	BTWT-1265 BOEING M-32 BOOSTER 814W4H4V3	0.000	0.000	

MACH 0.900

REFERENCE INFORMATION		
SPEF	31.3600	SG. IN
LREF	2.2400	IN.
BREF	14.0000	IN.
XMRP	11.9000	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

EFFECT OF AFT BODY SHAPE IN SIDE SLIP

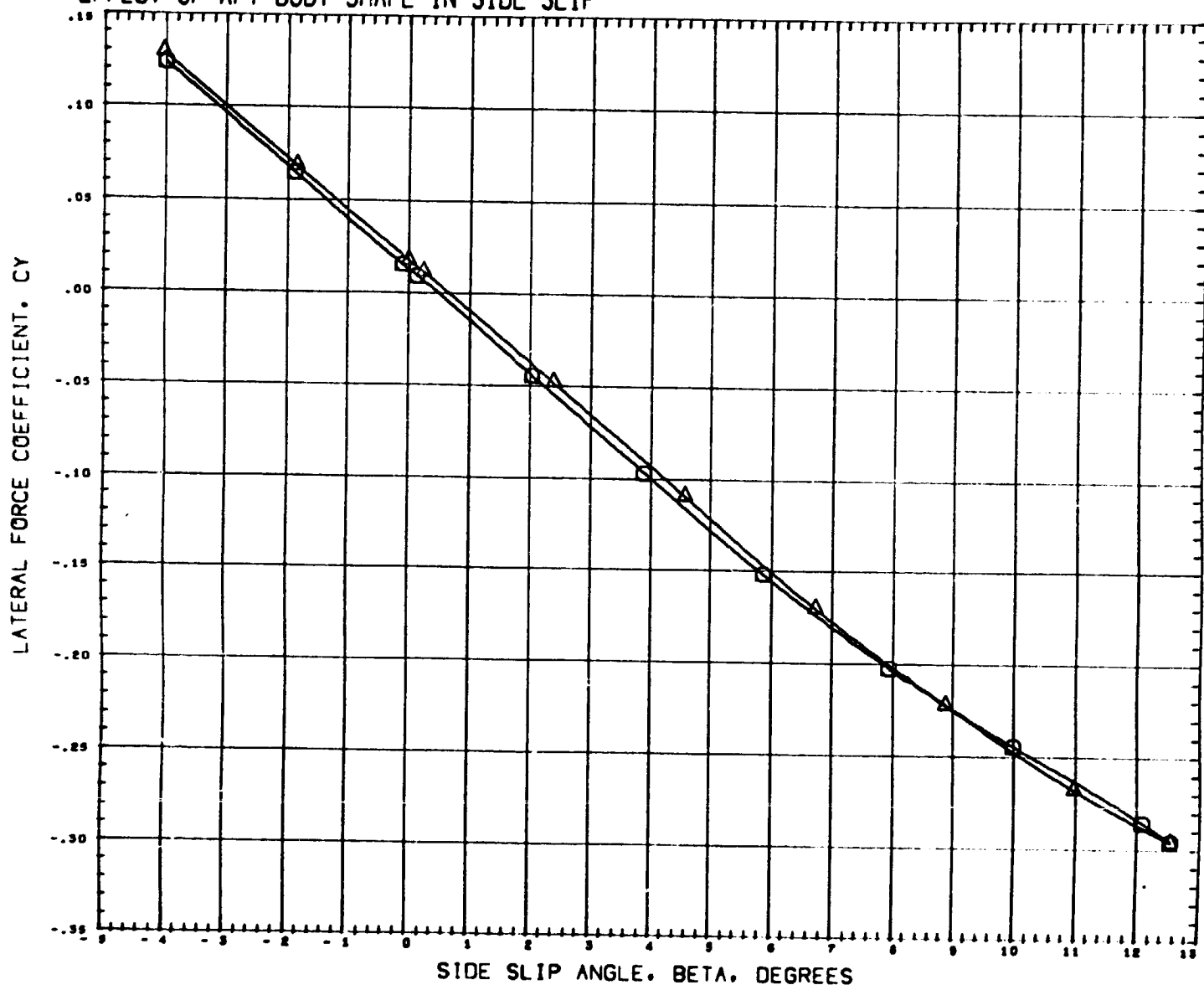


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HTAIL	ELEVTR	SPOILR
(R02077)	BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3	0.000	0.036	
(R02135)	BTWT-1265 BOEING H-32 BOOSTER B14W4H4V3	0.000	0.000	

MACH 0.989

REFERENCE INFORMATION		
SREF	31.3600	50. IN
LREF	2.2400	IN.
BREF	14.0000	IN.
XMRP	11.0000	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

EFFECT OF AFT BODY SHAPE IN SIDE SLIP

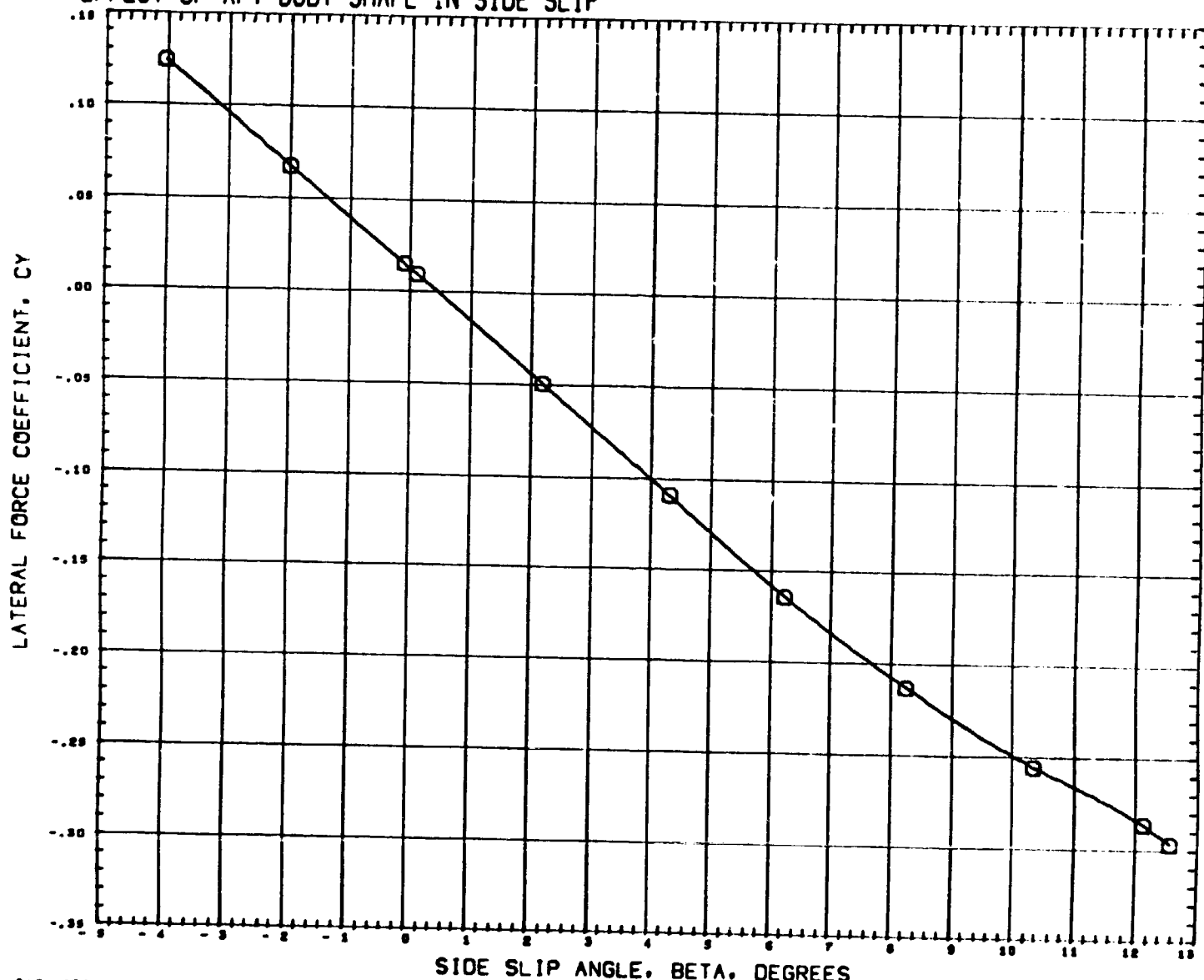


DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	MTAIL	ELEVTR	SPOILER
(RC2075)	8	BTWT-1265 BOEING N-32 BOOSTER	0.000	0.000	
(RC2135)		BTWT-1265 BOEING N-32 BOOSTER	0.000	0.000	

REFERENCE INFORMATION		
SREF	31.3600	80. IN
LREF	2.2400	IN.
BREF	14.6000	IN.
XHRP	11.9000	IN.
YHRP	0.0000	IN.
ZHRP	2.4330	IN.
SCALE	0.0067	

MACH 0.000

EFFECT OF AFT BODY SHAPE IN SIDE SLIP



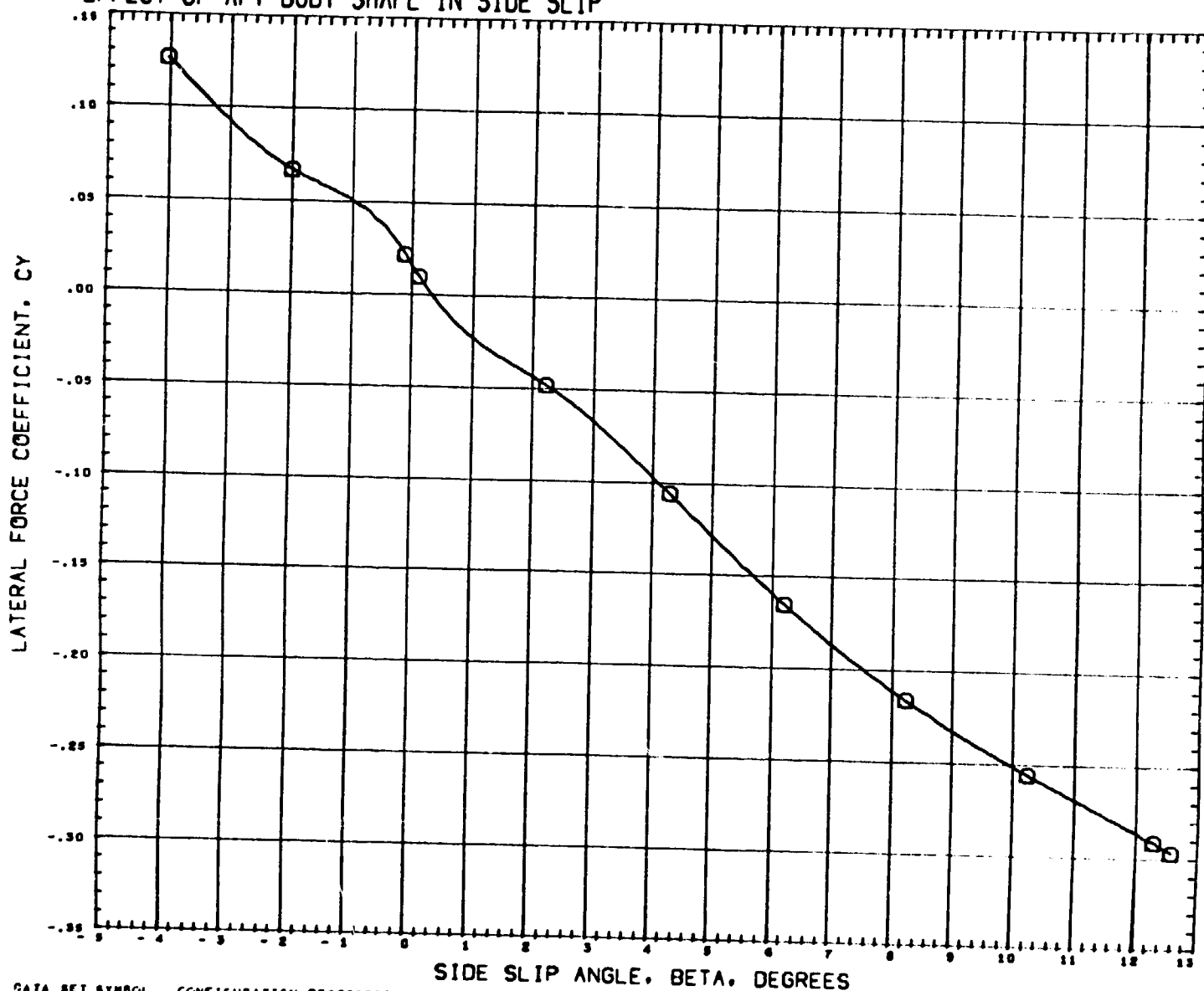
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RD2075)  BTMT-1285 BOEING N-32 BOOSTER 88W4H4V3
 (RD2135) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 SQ. IN
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XMRP 11.9000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.850

EFFECT OF AFT BODY SHAPE IN SIDE SLIP



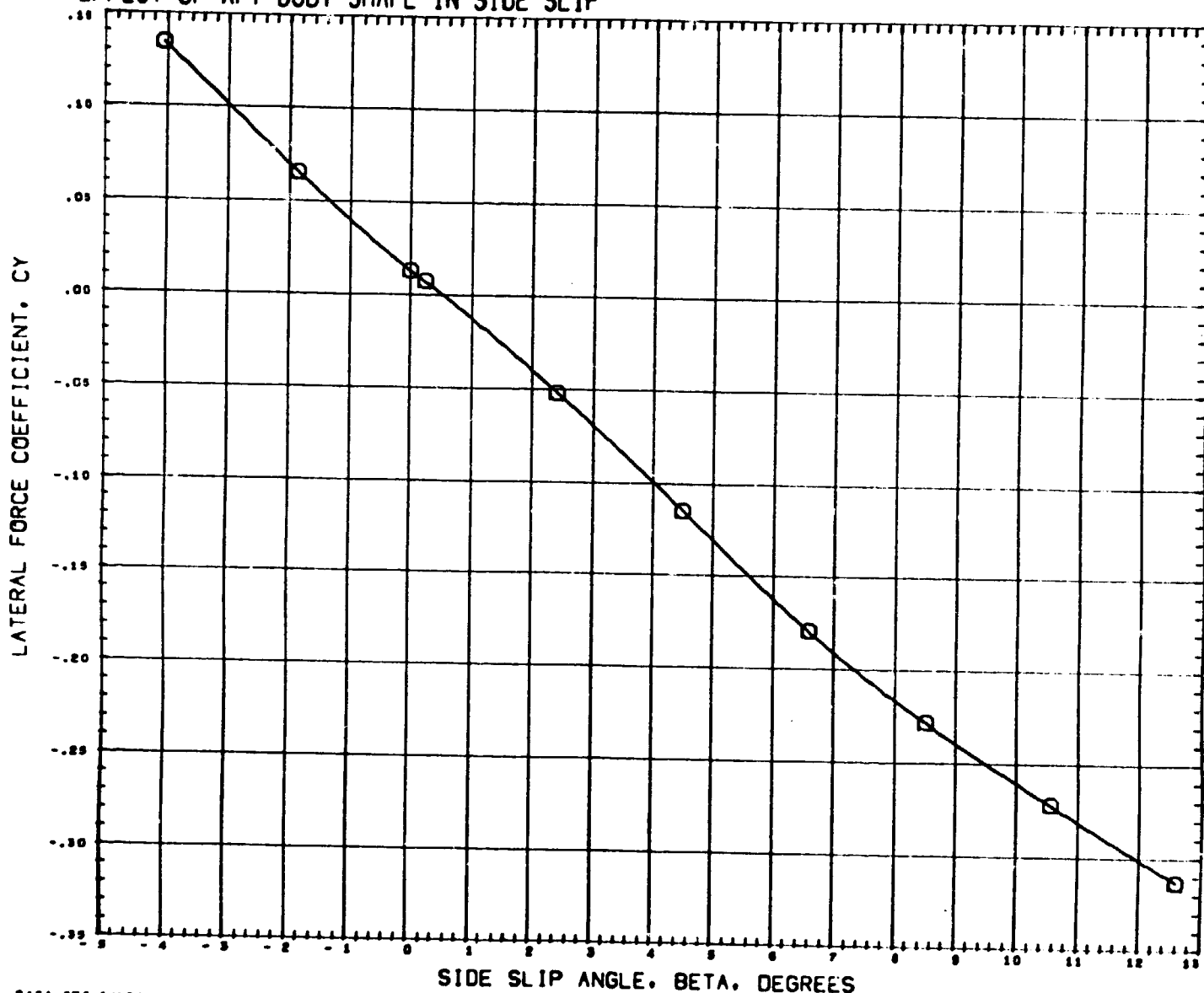
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC2075) $\odot$ BTWT-1265 BOEING M-32 BOOSTER B8W4H4V3
 (RC2155) $\odot$ DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTR SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 50. IN
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XHRP 11.9000 IN.
 YHRP 0.0000 IN.
 ZHRP 2.4330 IN.
 SCALE 0.0067

MACH 0.900

EFFECT OF AFT BODY SHAPE IN SIDE SLIP



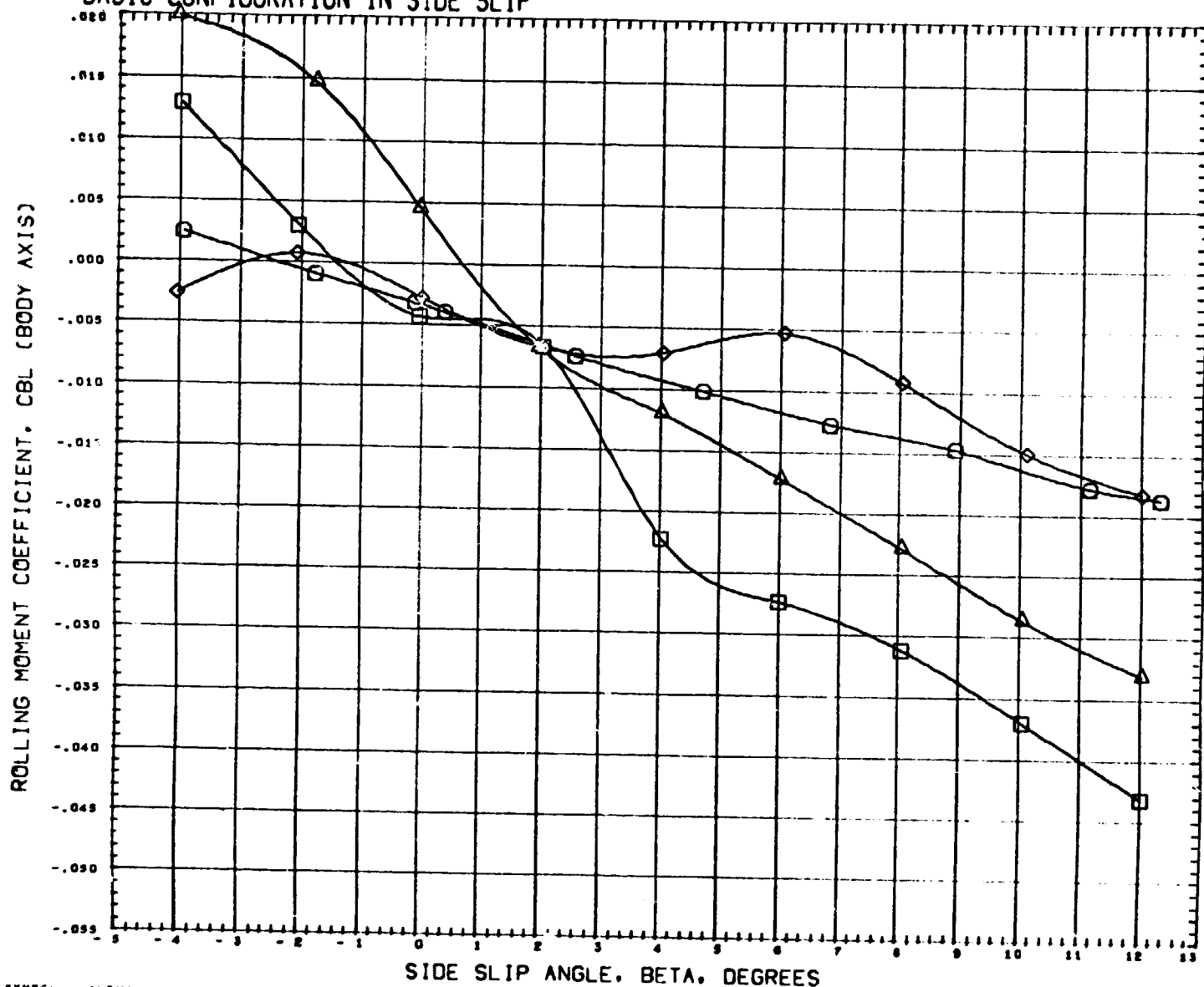
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02075) Q BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (R02135) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTN SPOILR
 0.000 0.000
 0.000 0.000

REFERENCE INFORMATION
 SREF 31.3600 80. IN
 LREF 2.2400 IN.
 BREF 14.0000 IN.
 XMRP 11.9000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0007

MACH 0.991

BASIC CONFIGURATION IN SIDE SLIP



SYMBOL	ALPHA		PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION			
	0.000	15.000	0.300	NTAIL	0.000	ED2075	ED2076	ED2059	BREF	31.3600
○	0.000	15.000	0.300	NTAIL	0.000	ED2075	ED2076	ED2059	LREF	2.2400
□	15.000	30.000	0.000			ED2075	ED2076	ED2059	BREF	14.8000
◇	30.000	74.000				ED2075	ED2076	ED2059	XMRP	11.9800
△	74.000					ED2075	ED2076	ED2059	YMRP	0.0000
									ZMRP	2.4330
									SCALE	0.0067

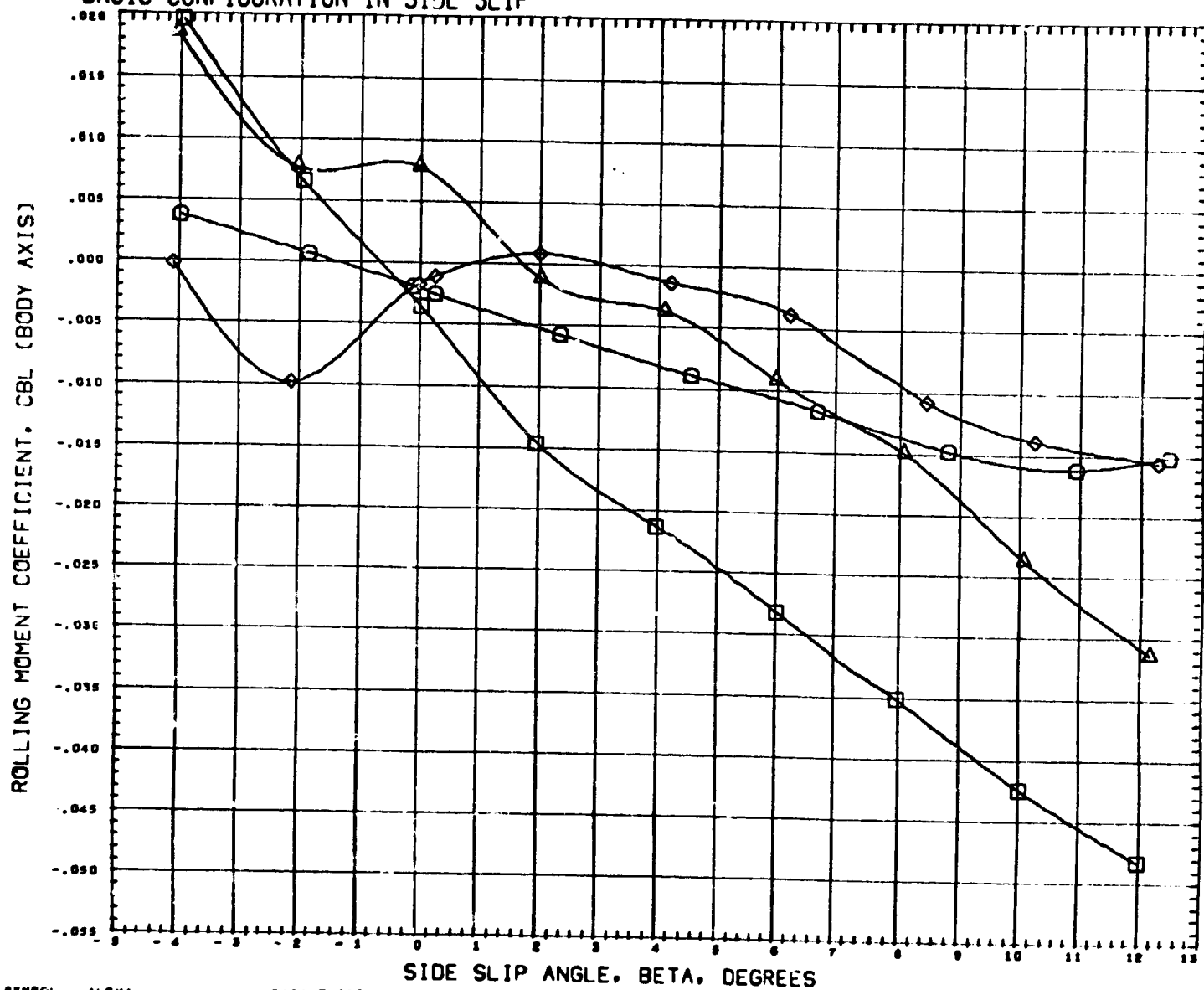
DATA HIST. CODE 9A

BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3

(ED2075) 11 FEB 72

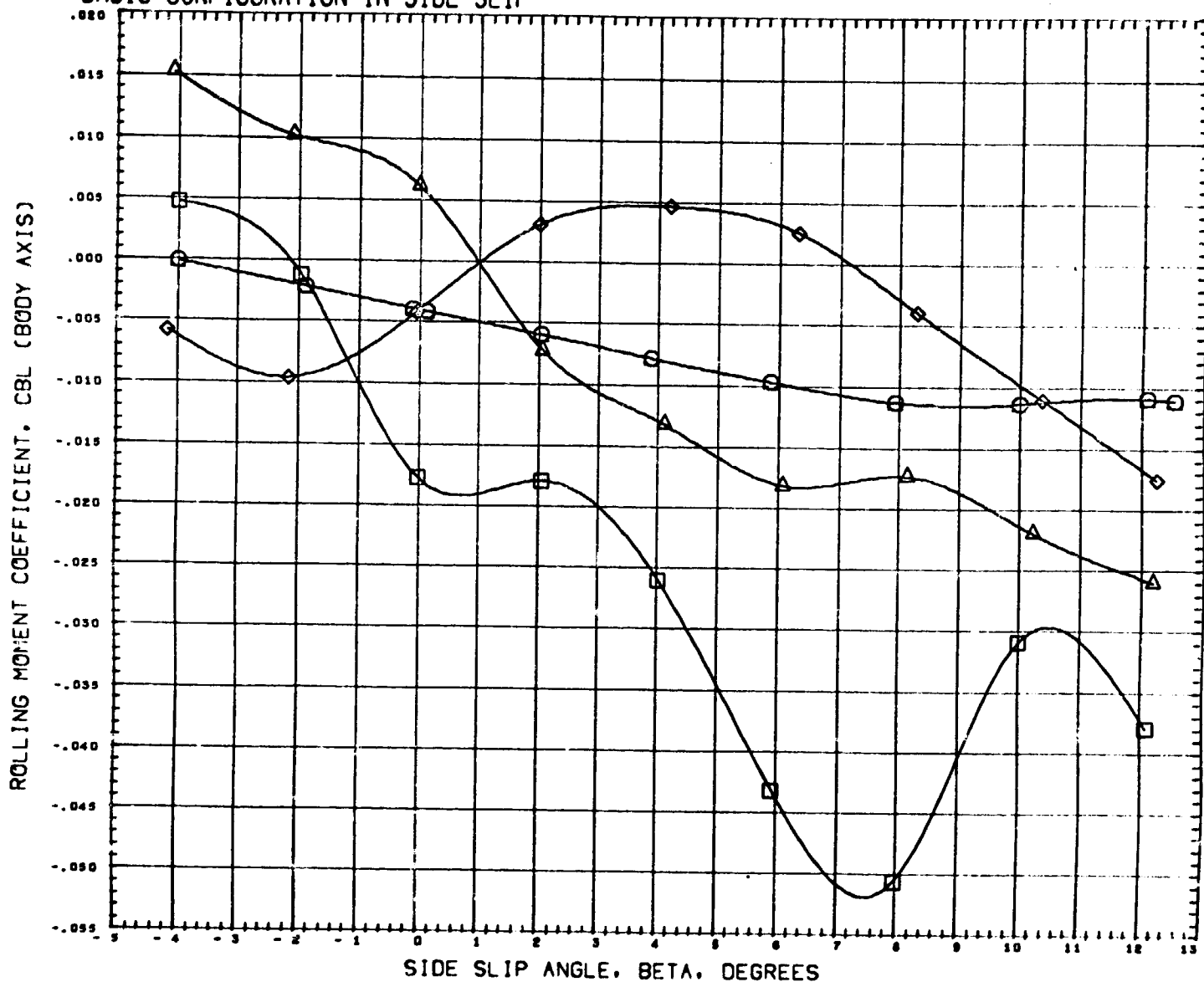
PAGE 237

BASIC CONFIGURATION IN SIDE SLIP



SYMBOL	ALPHA	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
○	0.000	MACH 0.000	0.000	SRCP 31.3600
◇	19.000	ELEVTR 0.000	ED2075	LRCF 2.2400
□	30.000		ED2057	BRCP 14.0000
	74.000			XMRP 11.0000
				YMRP 0.0000
				ZMRP 2.4330
				SCALE 0.0067

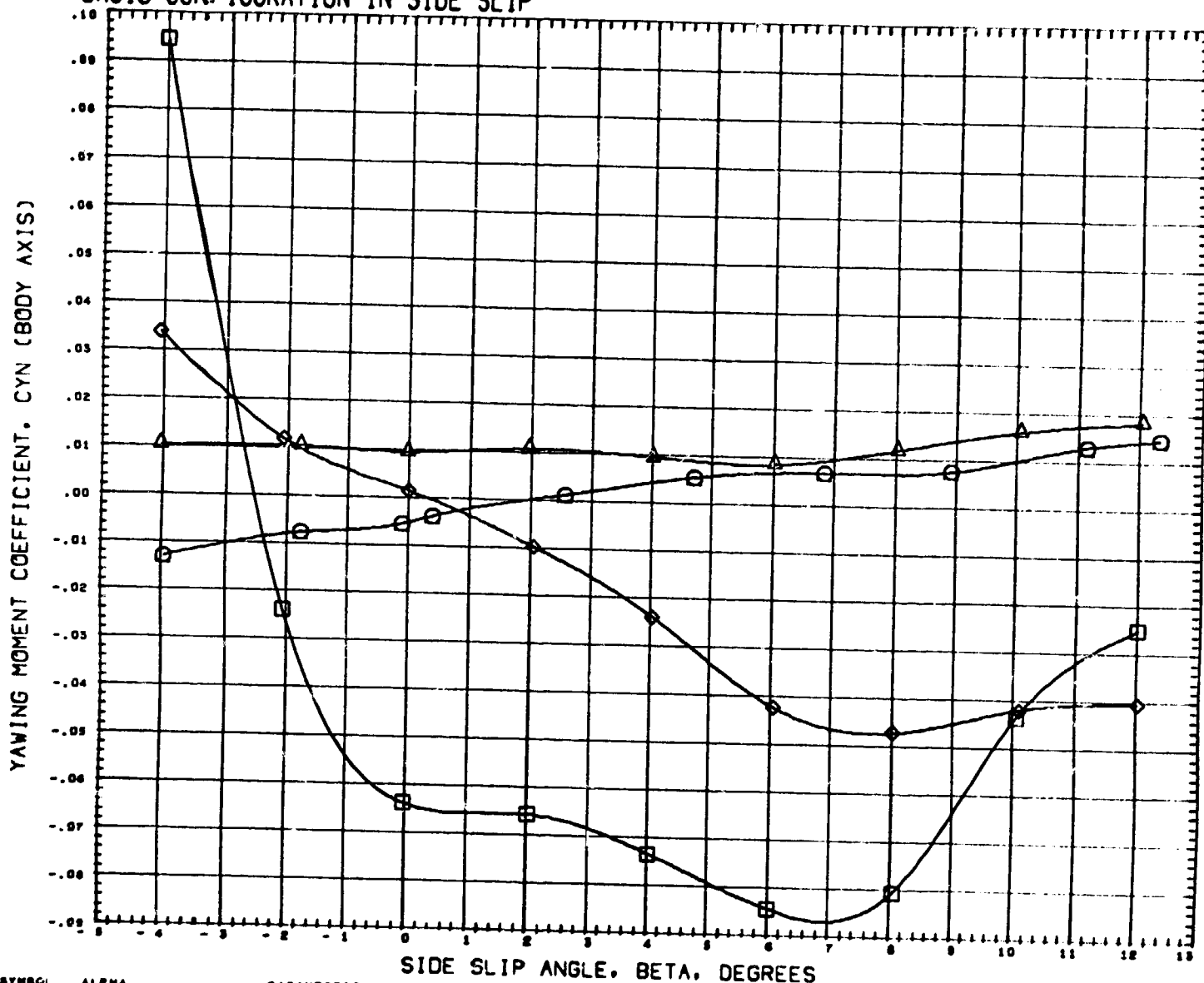
BASIC CONFIGURATION IN SIDE SLIP



SYMBOL	ALPHA		PARAMETRIC VALUES			DATA SOURCE			REFERENCE INFORMATION		
	0.000	15.000	0.000	NTAIL	0.000	ED2075	0.000	ED2076	SRF	31.3600	50. IN
□	15.000	30.000	0.000			ED2075	0.000	ED2076	LREF	2.2400	IN.
◇	30.000	74.000				ED2075	30.000	ED2076	BRF	14.8000	IN.
△									YMRP	11.9800	IN.
									YMRP	0.0000	IN.
									ZMRP	2.4330	IN.
									SCALE	0.0067	

DATA HIST. CODE 9A

BASIC CONFIGURATION IN SIDE SLIP



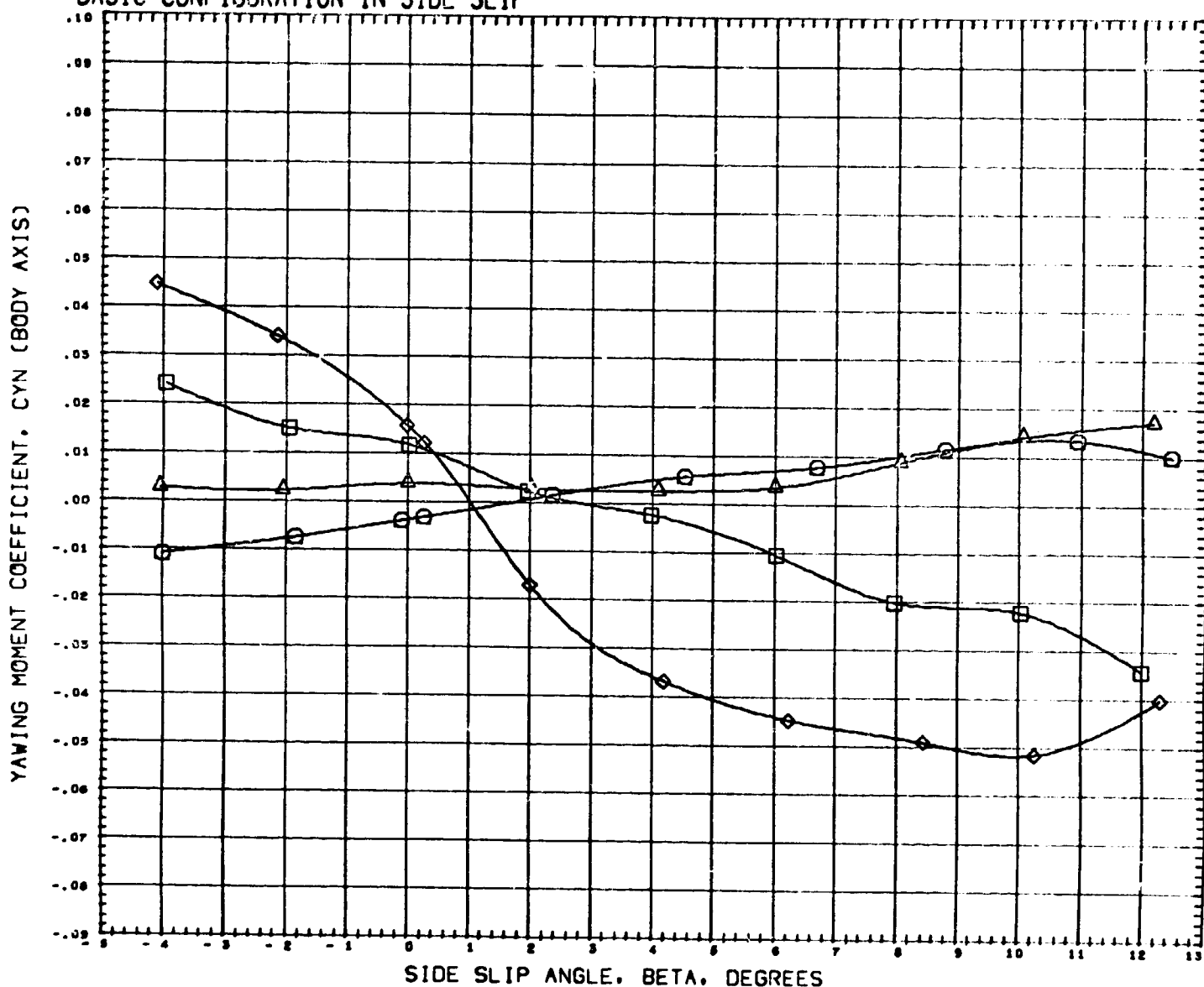
SYMBOL	ALPHA	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
◇	0.000	0.300 NTAIL	0.000	31.3600 88. IN
◇	15.000	0.000	ED2079	2.2400 IN.
◇	30.000		ED2076	14.0000 IN.
◇	74.000		ED2059	11.9800 IN.
				YMRP 0.0000 IN.
				ZMRP 2.4330 IN.
				SCALE 0.0067

DATA HIST. CODE 9A

BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3

(ED2075) 11 FEB 72 PAGE 240

BASIC CONFIGURATION IN SIDE SLIP



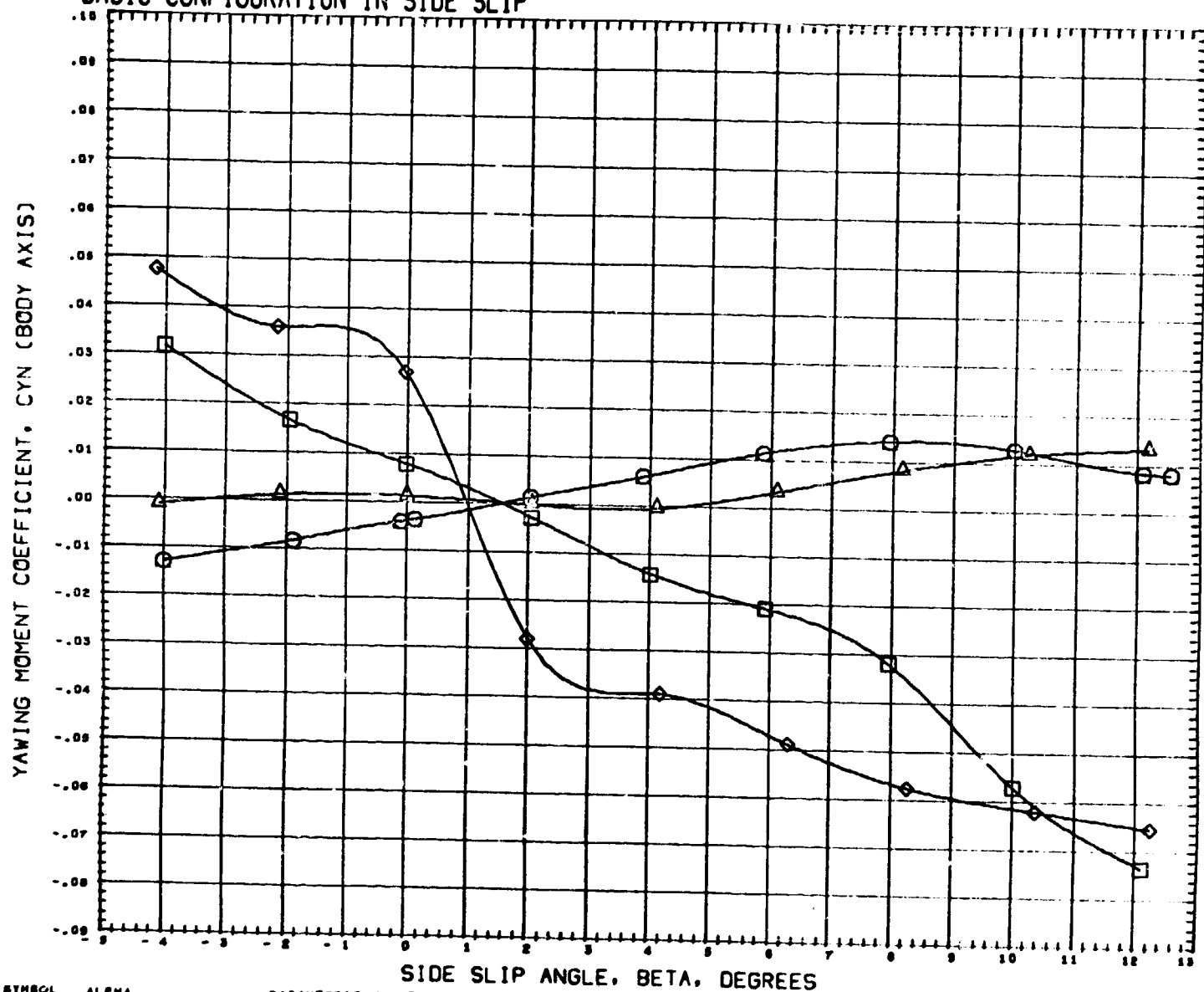
SYMBOL		ALPHA		PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
○		0.000	MACH	0.999	HTAIL	0.000	DATASET	ALPHA	SREF
△		15.000	ELEVTR	0.000			ED2075	0.000	LREF
◇		30.000					RD2057	30.000	BRF
□		74.000							XMRP
									YMRP
									ZMRP
									SCALE

DATA HIST. CODE 0A

BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3

(ED2075) 11 FEB 72 PAGE 241

BASIC CONFIGURATION IN SIDE SLIP



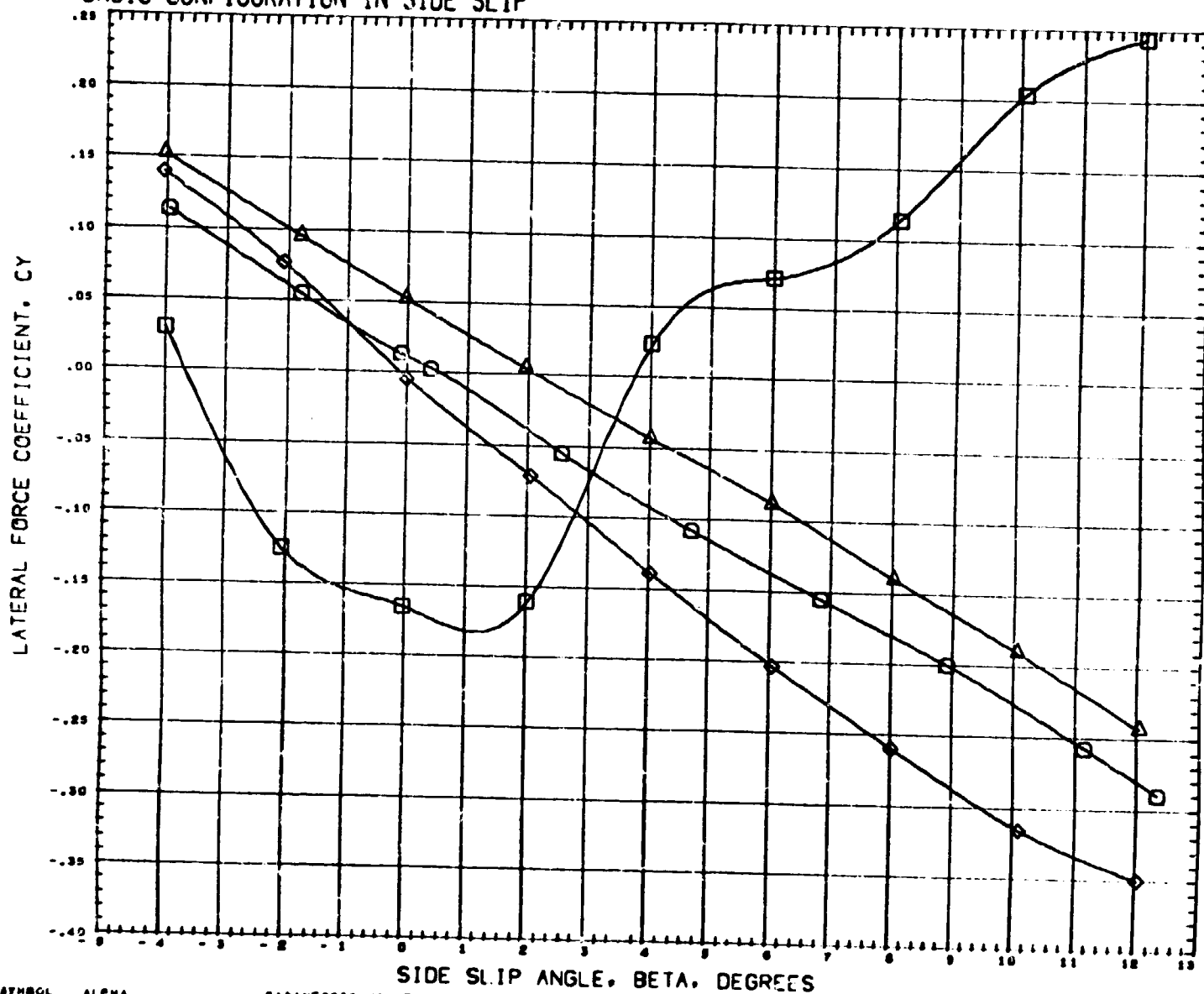
SYMBOL	PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION		
	ALPHA	NTAIL	ALPHA	ALPHA	BREF	IN.	IN.
◇	0.000	0.000	0.000	ED2075	31.3600	80.	IN.
□	15.000	0.000	30.000	ED2076	2.2400	IN.	IN.
△	30.000			ED2078	14.6000	IN.	IN.
○	74.000			ED2079	11.9800	IN.	IN.
					YMRP	0.0000	IN.
					ZMRP	2.4330	IN.
					SCALE	0.0067	

DATA HIST. CODE 8A

BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3

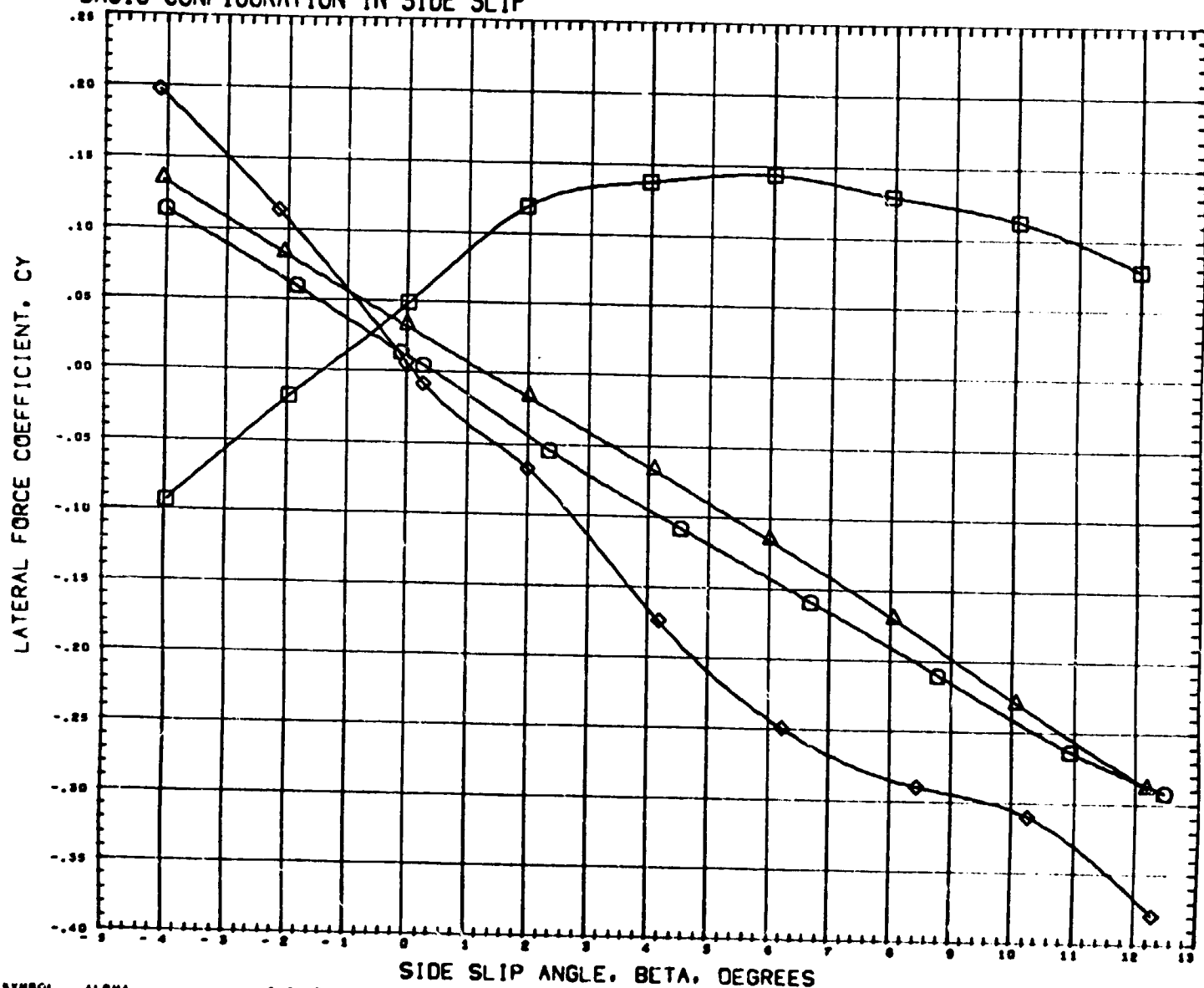
(ED2075) 11 FEB 72 PAGE 242

BASIC CONFIGURATION IN SIDE SLIP



SYMBOL		PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
△	ALPHA	0.000	0.300	0.000	0.000	31.3500	80. IN
◇	ALPHA	15.000	0.000	0.000	15.000	2.2400	IN.
□	ALPHA	30.000	0.000	0.000	30.000	14.0000	IN.
○	ALPHA	74.000	0.000	0.000	74.000	11.8600	IN.
						0.2000	IN.
						2.4330	IN.
						0.0067	IN.

BASIC CONFIGURATION IN SIDE SLIP

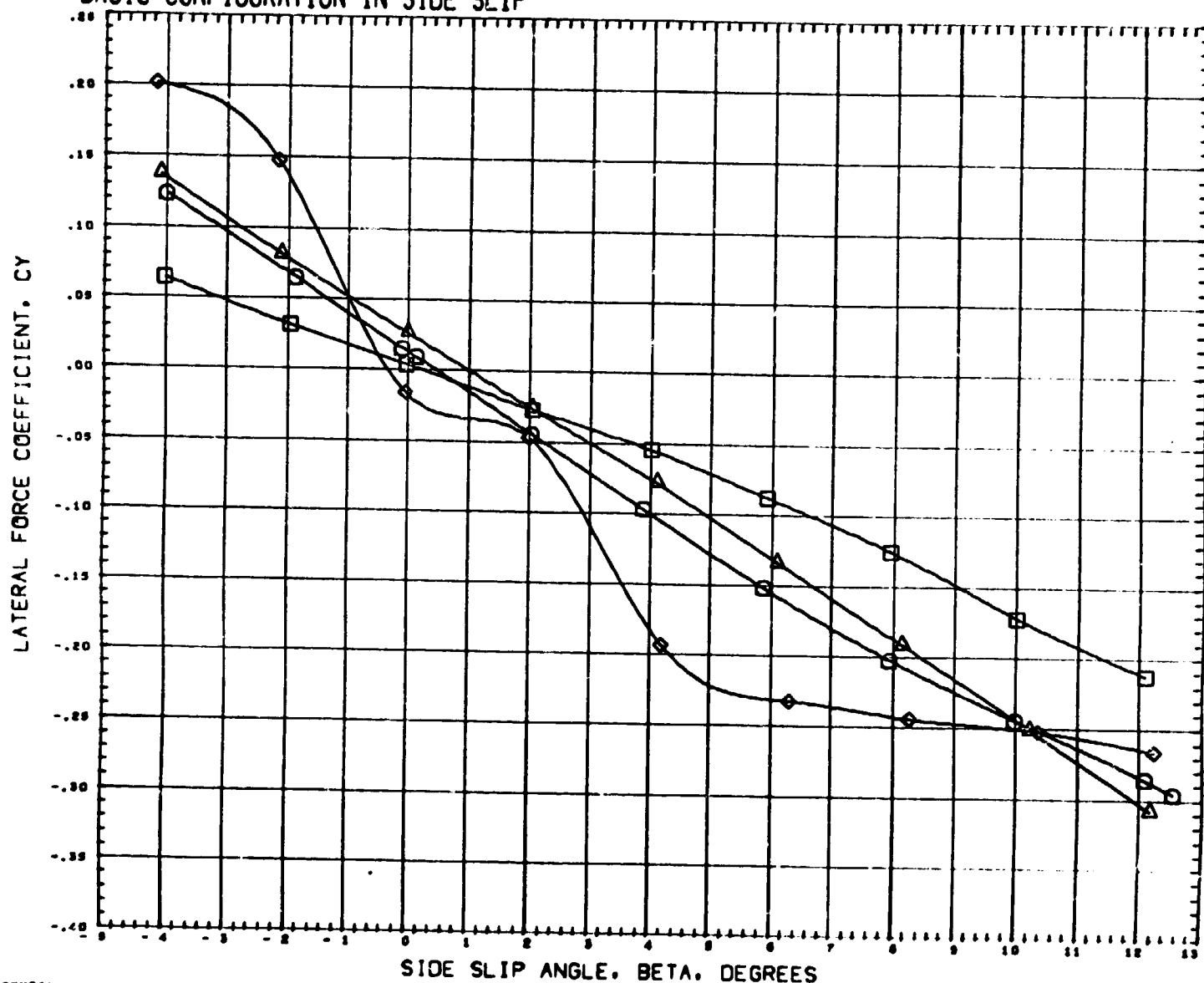


SYMBOL		ALPHA		PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
○	0.000	NASH	0.999	NTAIL	0.000	DATASET	ALPHA	SREF	31.3600
△	19.000	ELEVTR	0.000			EO2075	0.000	LREF	2.2400
◇	30.000					EO2076	19.000	SREF	14.0000
□	74.000					EO2077	30.000	XMRP	11.0000
								YMRP	0.0000
								ZMRP	2.4330
								SCALE	0.0007

BTWT-1265 BOEING H-32 BOOSTER BBW4H4V3

(EO2075) 11 FEB 72 PAGE 244

BASIC CONFIGURATION IN SIDE SLIP



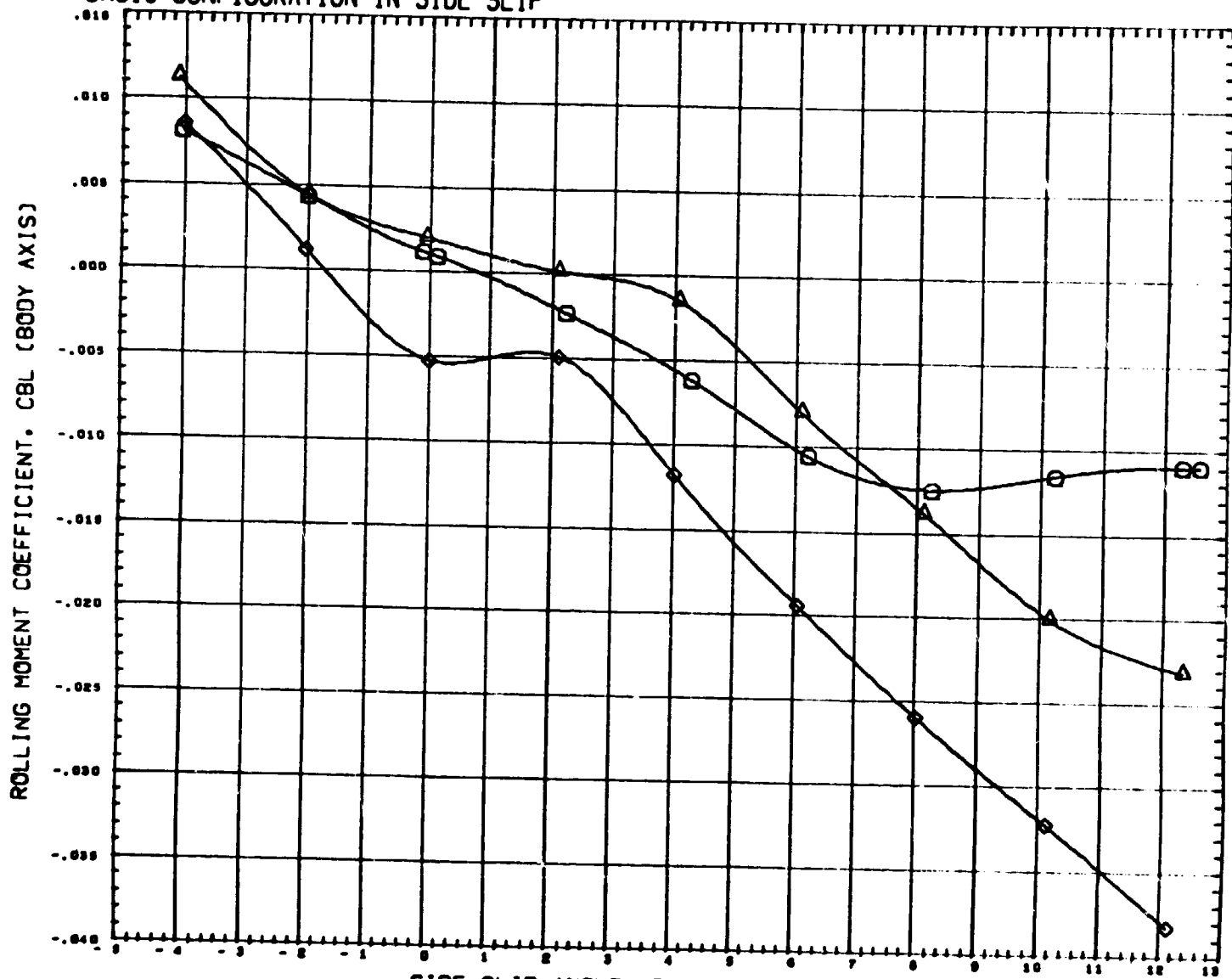
SYMBOL	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION			
	ALPHA	MACH	ELEV	NTAIL	ALPHA	ALPHA	ALPHA	ALPHA	SREF	LREF	BREF	XMRP
◇	0.000	19.000	0.000	0.000	0.000	0.000	19.000	74.000	31.3600	2.2400	14.0000	11.9000
△	0.000	30.000	0.000	0.000	0.000	0.000	19.000	74.000	2.2400	14.0000	11.9000	0.0000
○	0.000	74.000	0.000	0.000	0.000	0.000	19.000	74.000	2.4330	0.0067		
□	0.000		0.000	0.000	0.000	0.000	19.000	74.000				

DATA HIST. CODE 0A

BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3

(ED2075) 11 FEB 72 PAGE 245

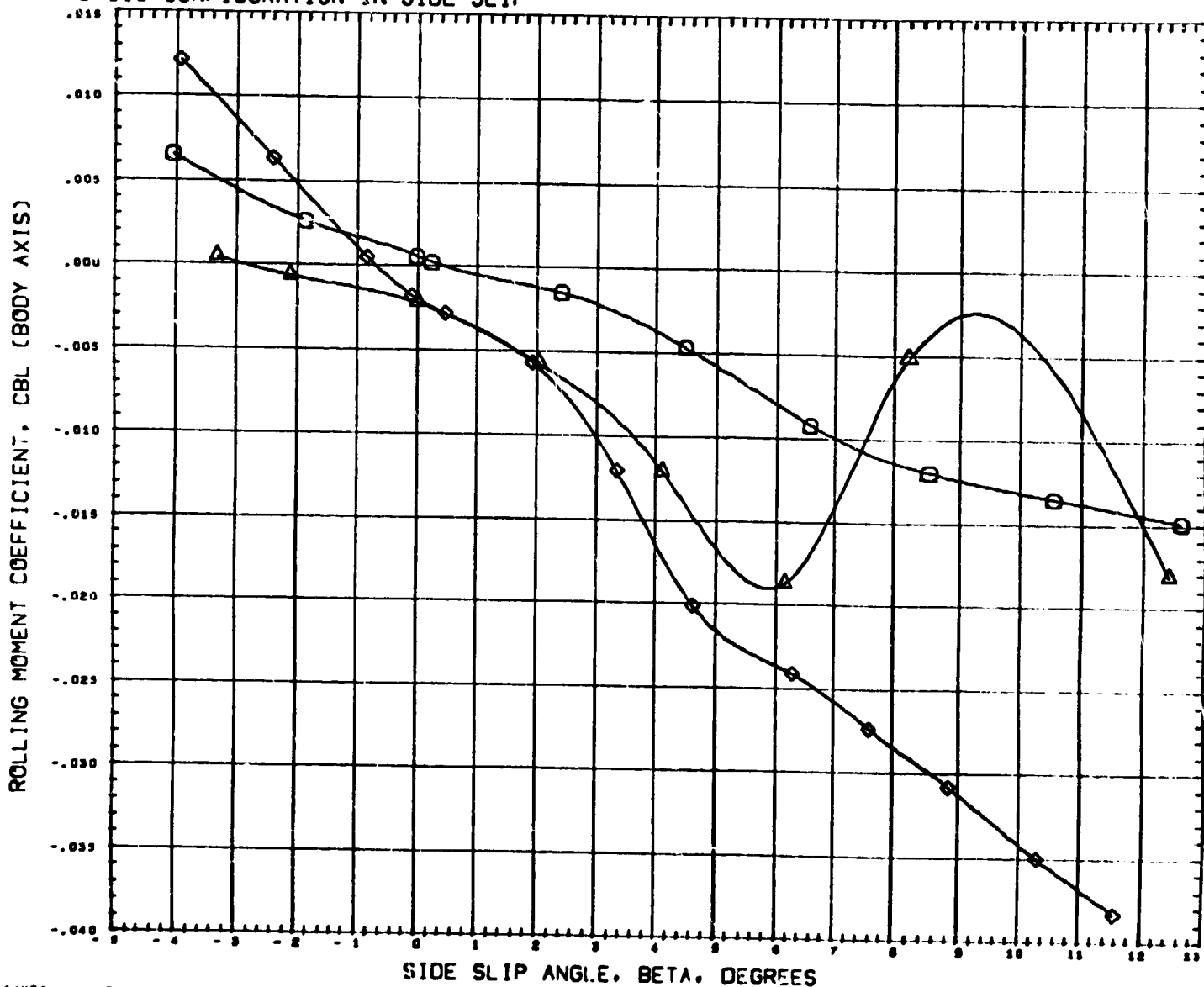
BASIC CONFIGURATION IN SIDE SLIP



SYMBOL	ALPHA	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
△	0.000	MACH 0.000 NTAIL 0.000	DATA SET ALPHA 0.000	SREF 31.3000 50. IN
□	19.000	ELEVTR 0.000	FD2075 ALPHA 0.000	LREF 2.2400 IN.
◇	74.000		FD2076 ALPHA 19.000	SREF 14.0000 IN.
				XMRP 11.0000 IN.
				YMRP 0.0000 IN.
				ZMRP 2.4330 IN.
				SCALE 0.0007

BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3

BASIC CONFIGURATION IN SIDE SLIP



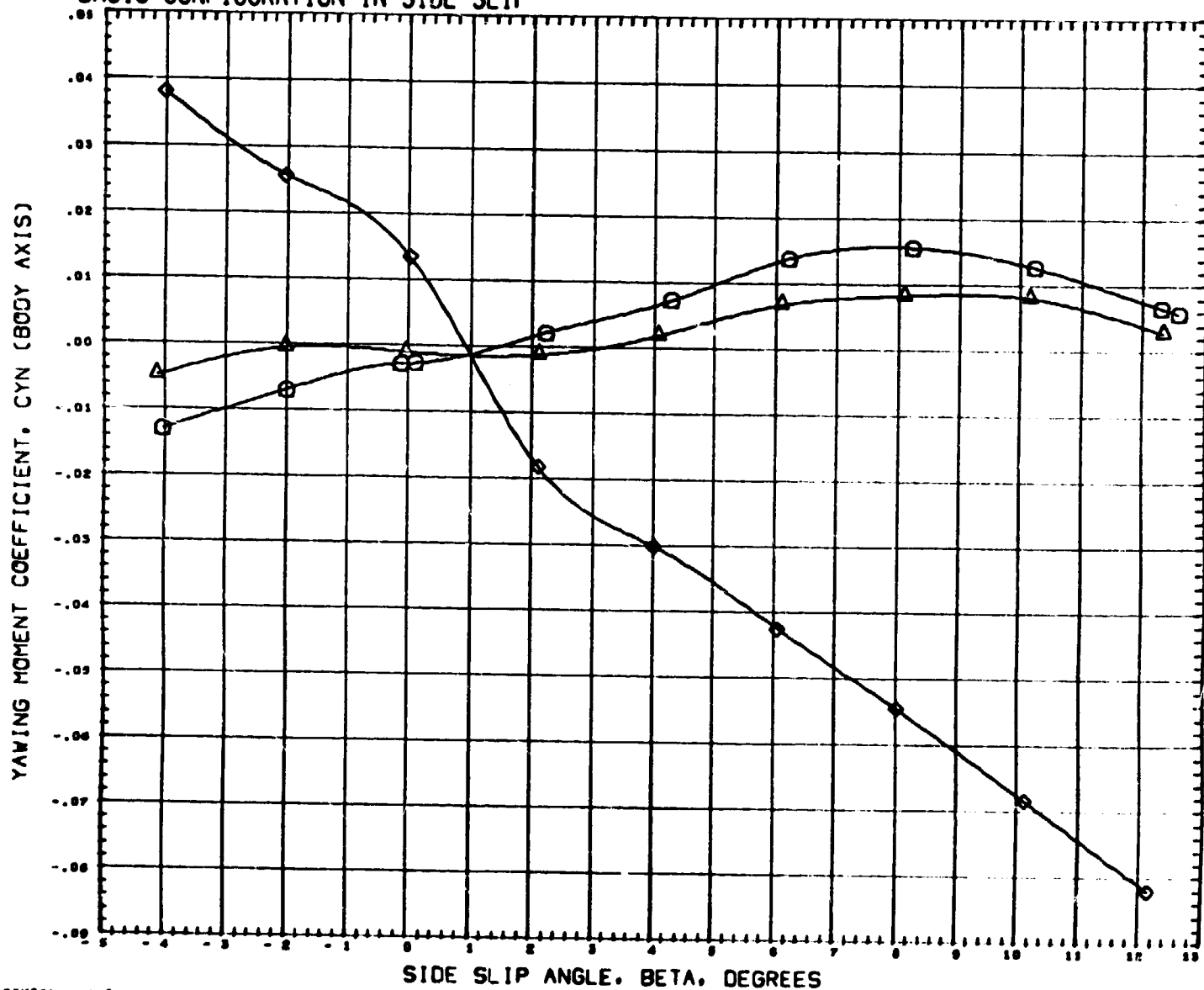
SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
○	0.000	19.000	0.991 NTAIL	0.000	SRF 31.3600 80. IN
◻	19.000	ELEVTR	0.000	FO2075 0.000	LRF 2.2400 IN.
◊	74.000			FO2076 74.000	BRF 14.0000 IN.
					AMRP 11.9800 IN.
					TMRP 0.0000 IN.
					ZMRP 2.4330 IN.
					SCALE 0.0007

DATA HIST. CODE 0A

BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3

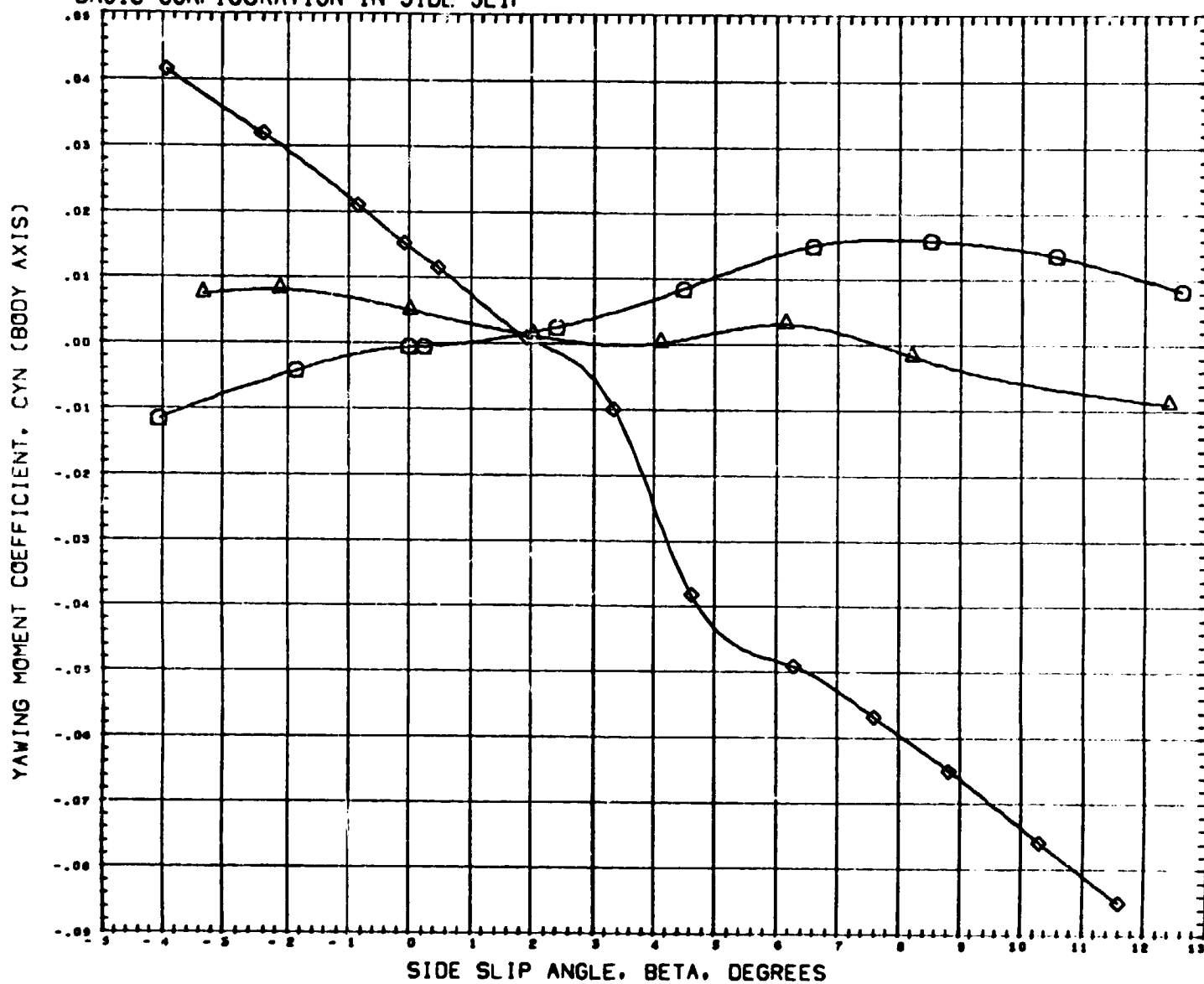
(FO2075) 11 FEB 72 PAGE 247

BASIC CONFIGURATION IN SIDE SLIP



SYMBOL		PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
○	ALPHA	0.000	HASH	0.000	HTAIL	0.000	0.000
△	19.000	0.000	ELEVTR	0.000	0.000	0.000	0.000
□	74.000	0.000	0.000	0.000	0.000	0.000	0.000

BASIC CONFIGURATION IN SIDE SLIP



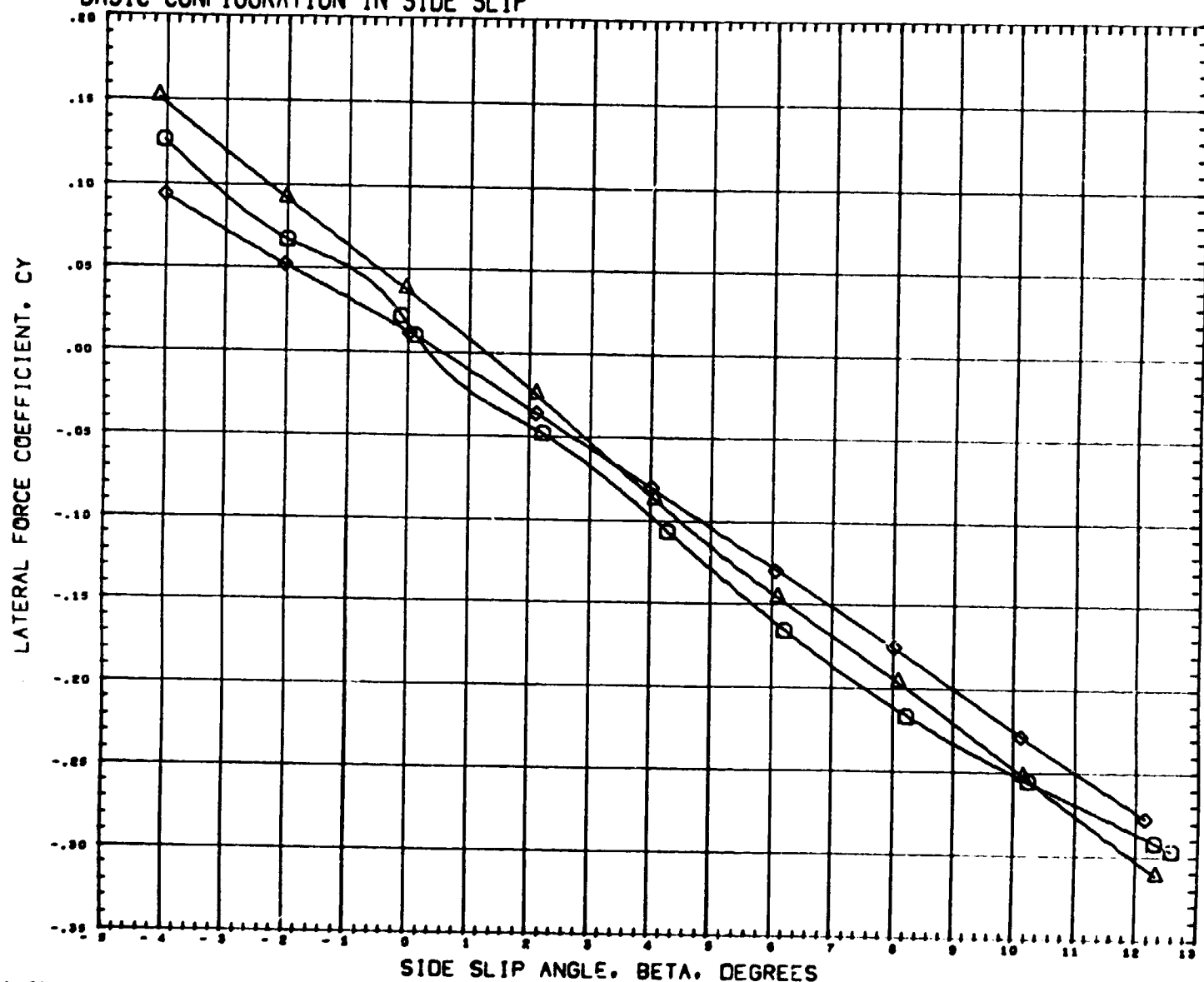
SYMBOL		ALPHA		PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION		
○	0.000	<u>HASH</u>	0.991	HTAIL	0.000	DATASET	ALPHA	SREF	31.3600	96. IN
△	15.000	ELEVTR	0.000			FD2075	0.000	LREF	2.2400	IN.
◻	74.000					FD2099	74.000	BREF	14.6000	IN.
								XMRP	11.9800	IN.
								YMRP	0.0000	IN.
								ZMRP	2.4330	IN.
								SCALE	0.0007	IN.

DATA MIST. CODE 0A

BTWT-1265 BOEING H-32 BOOSTER B6W4H4V3

(FD2075) 11 FEB 72 PAGE 249

BASIC CONFIGURATION IN SIDE SLIP



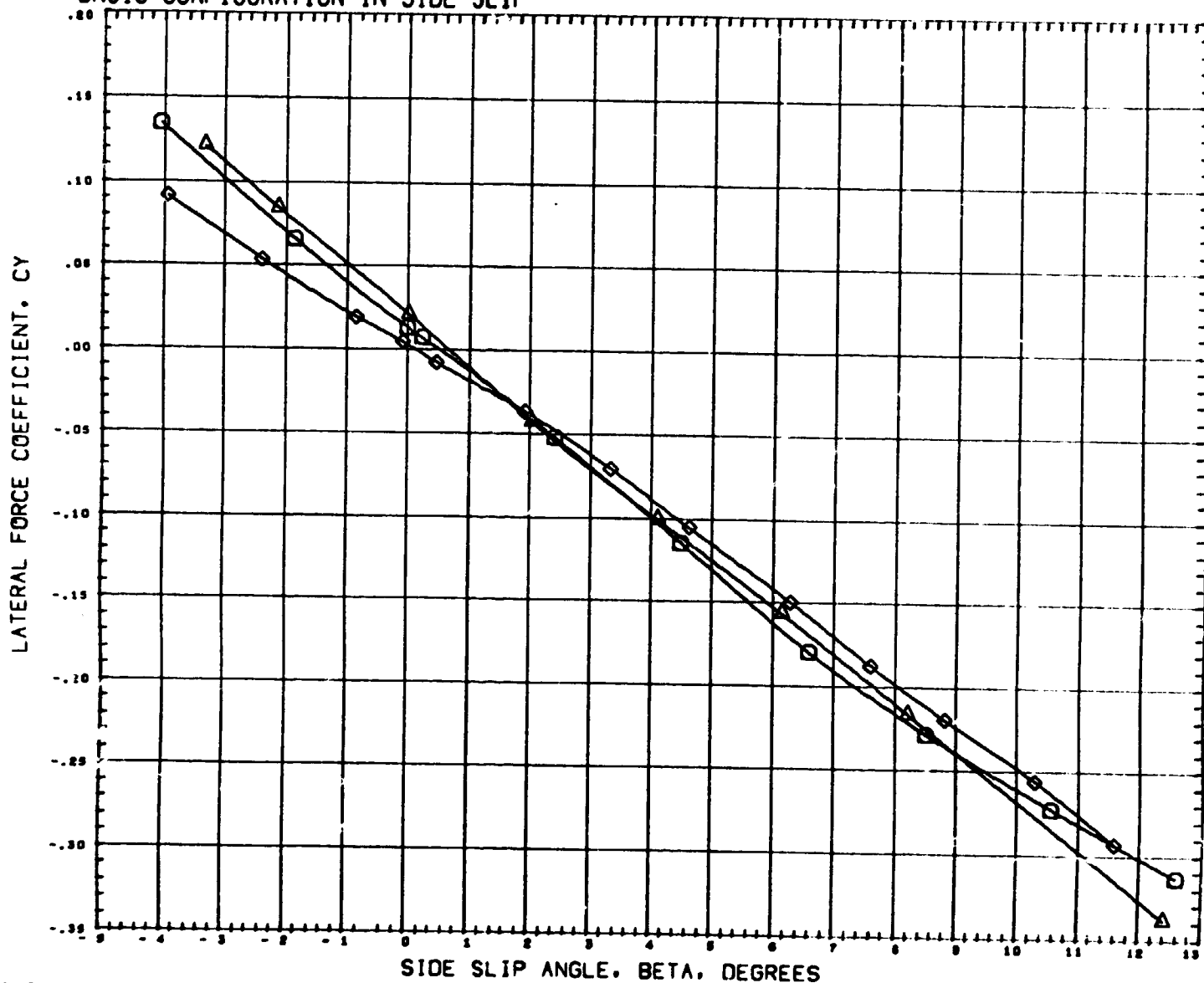
SYMBOL		ALPHA	PARAMETRIC VALUES			DATA SOURCE			REFERENCE INFORMATION			
○	0.000	<u>HASH</u>	0.000	MTAIL	0.000	DATASET	ALPHA	DATASET	ALPHA	BREF	31.3400	90. IN
△	19.000	ELEVTR	0.000			FD2075	0.000	FD2076	19.000	LREF	2.2400	IN.
◇	74.000					FD2076	74.000			BREF	14.6000	IN.
										XMRP	11.9600	IN.
										YMRP	0.0000	IN.
										ZMRP	2.4330	IN.
										SCALE	0.0007	
			DATA HIST. CODE		0A							

DATA HIST. CODE 0A

BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3

(FD2075) 11 FEB 72 PAGE 250

BASIC CONFIGURATION IN SIDE SLIP



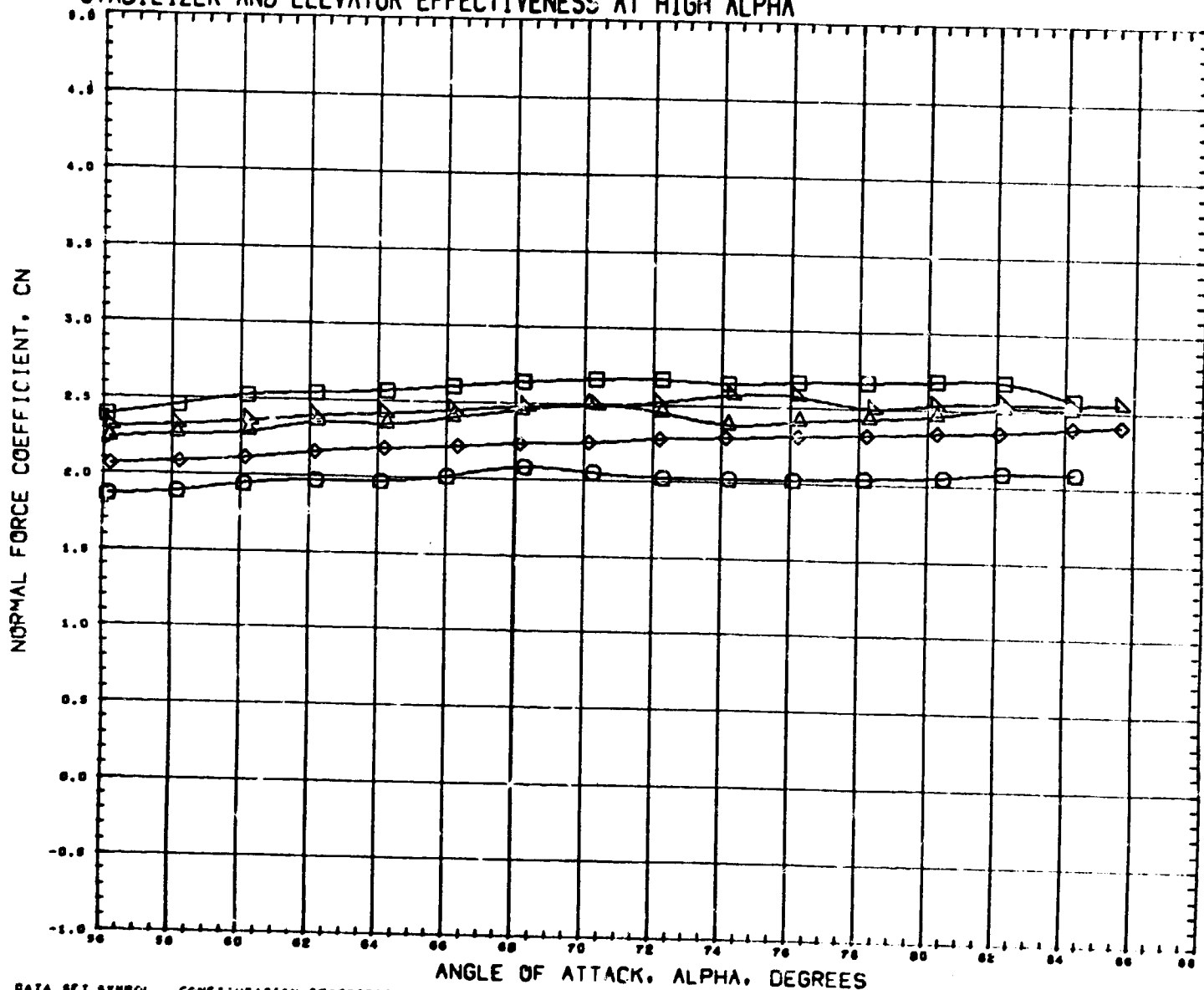
SYMBOL	ALPHA	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
○	0.000	0.951	DATA SET	SPF 31.3000 80. IN
△	15.000	0.000	ALPHA 0.000	LREF 2.2400 IN.
◇	74.000	0.000	DATA SET FD2076	BREF 14.6000 IN.
			ALPHA 15.000	KMRP 11.9000 IN.
				YMRP 0.0000 IN.
				ZMRP 2.4930 IN.
				SCALE 0.0007

DATA HIST. CODE 8A

BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3

(FD2075) 11 FEB 72 PAGE 251

STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(R02031)	BTWT-1265 BOEING N-32 BOOSTER B0W4V3
(R02051)	BTWT-1265 BOEING N-32 BOOSTER B0W44V3
(R02041)	BTWT-1265 BOEING N-32 BOOSTER B0W4H4V3
(R02071)	BTWT-1265 BOEING N-32 BOOSTER B0W3H4V3
(R02061)	BTWT-1265 BOEING N-32 BOOSTER B0W4H4V3

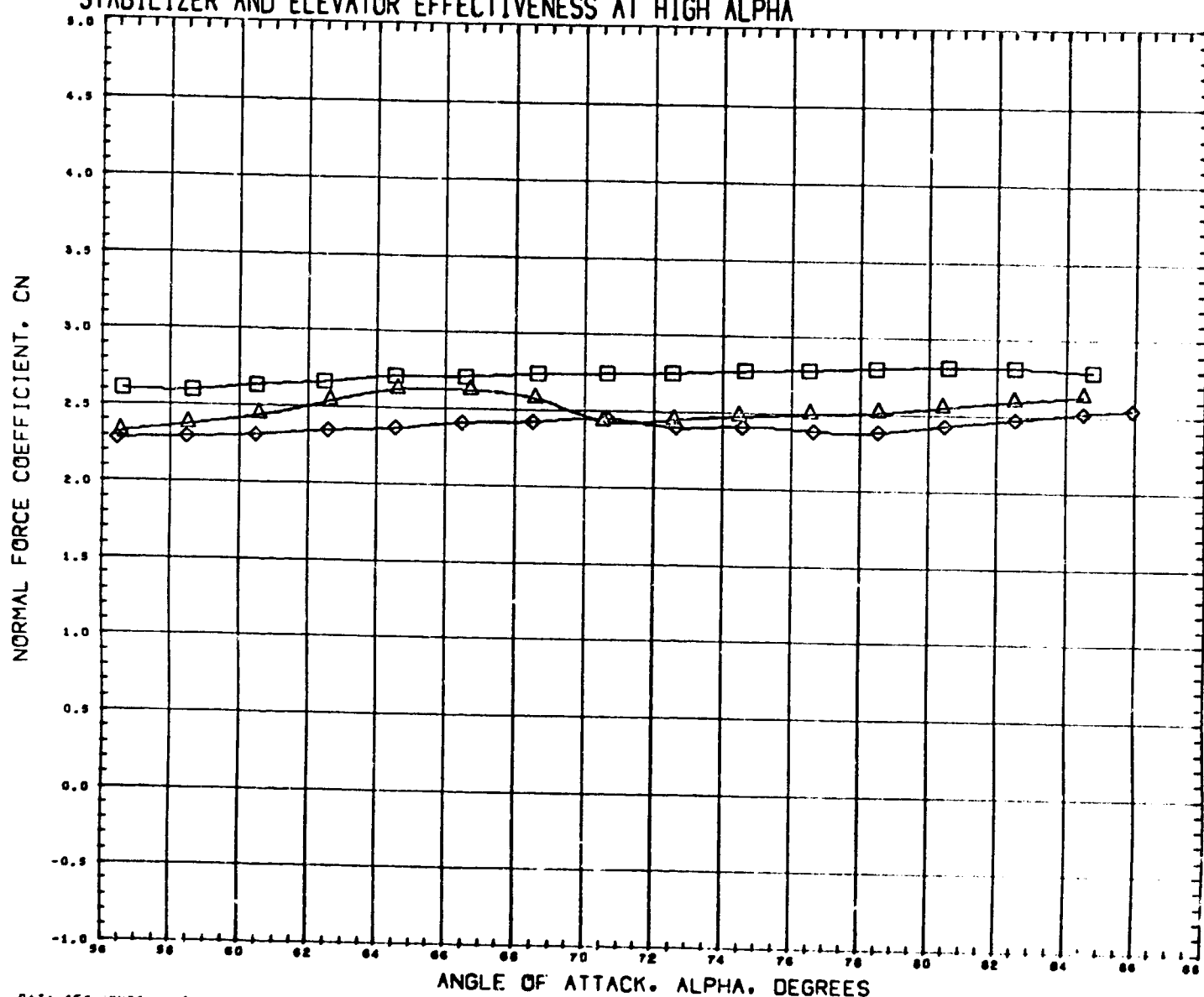
MACH 0.301

ANGLE OF ATTACK, ALPHA, DEGREES

NTAIL	ELEVTR	SPOILR
-20.000	0.000	
-20.000	-30.000	
0.000	0.000	
0.000	-30.000	

REFERENCE INFORMATION		
SREF	31.3600	88. IN
LREF	2.2400	IN.
BREF	14.1000	IN.
YNRP	11.9800	IN.
YNRP	0.0000	IN.
ZNRP	2.4330	IN.
SCALE	0.0067	

STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



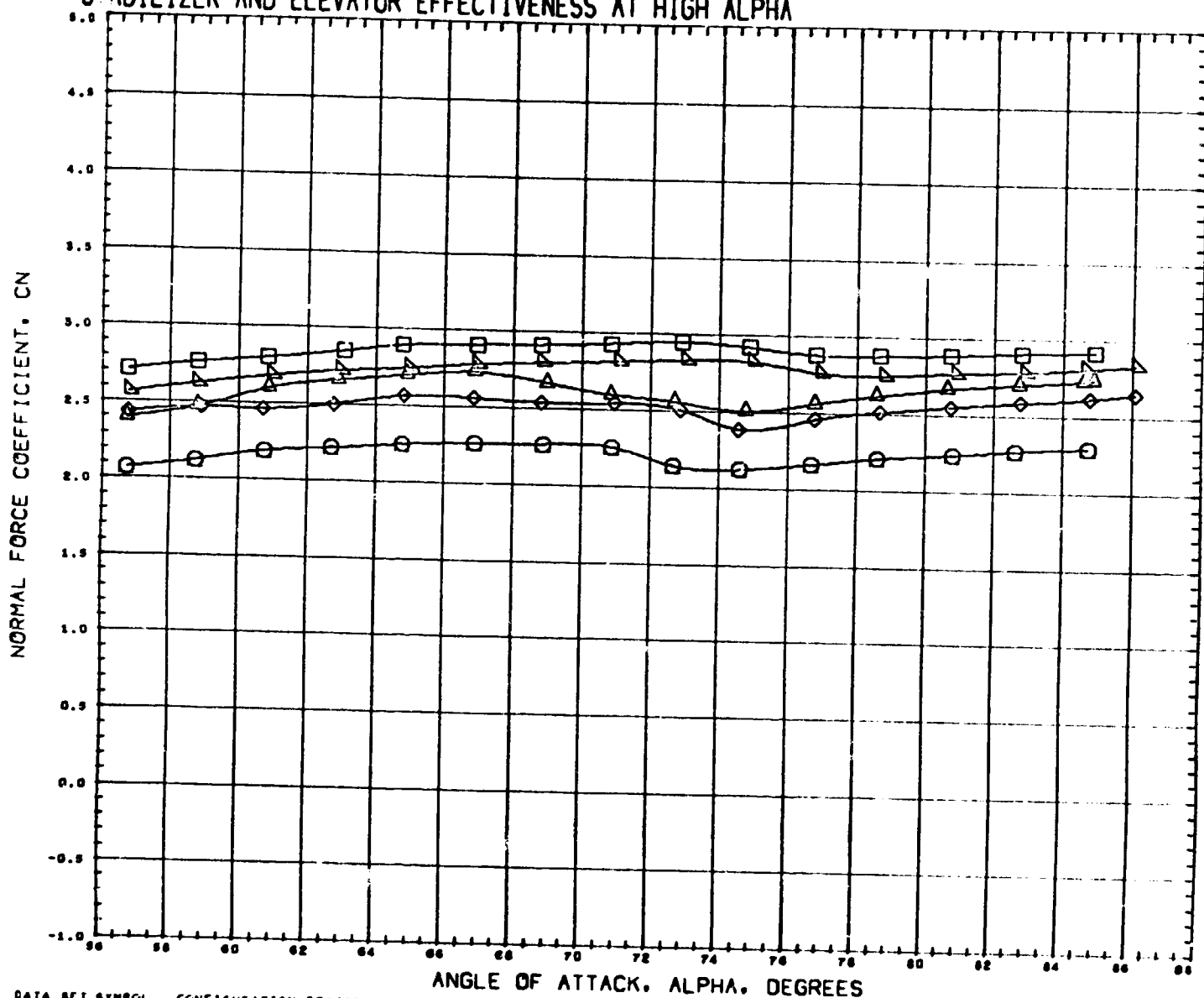
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC2031) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RC2031) BTMT-1285 BOEING N-32 BOOSTER 88W4H4V3
 (RC2041) BTMT-1285 BOEING N-32 BOOSTER 88W4H4V3
 (RC2071) BTMT-1285 BOEING N-32 BOOSTER 88W4H4V3
 (RC2081) DATA NOT AVAILABLE FOR ALL CONDITIONS

MTAIL ELEVTR SPOILR
 -20.000 0.000
 -20.000 -30.000
 0.000 0.000
 0.000 -30.000

REFERENCE INFORMATION
 SRFF 31.3600 88. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XHRP 11.9800 IN.
 YHRP 0.0000 IN.
 ZHRP 2.4330 IN.
 SCALE 0.0067

MACH 0.901

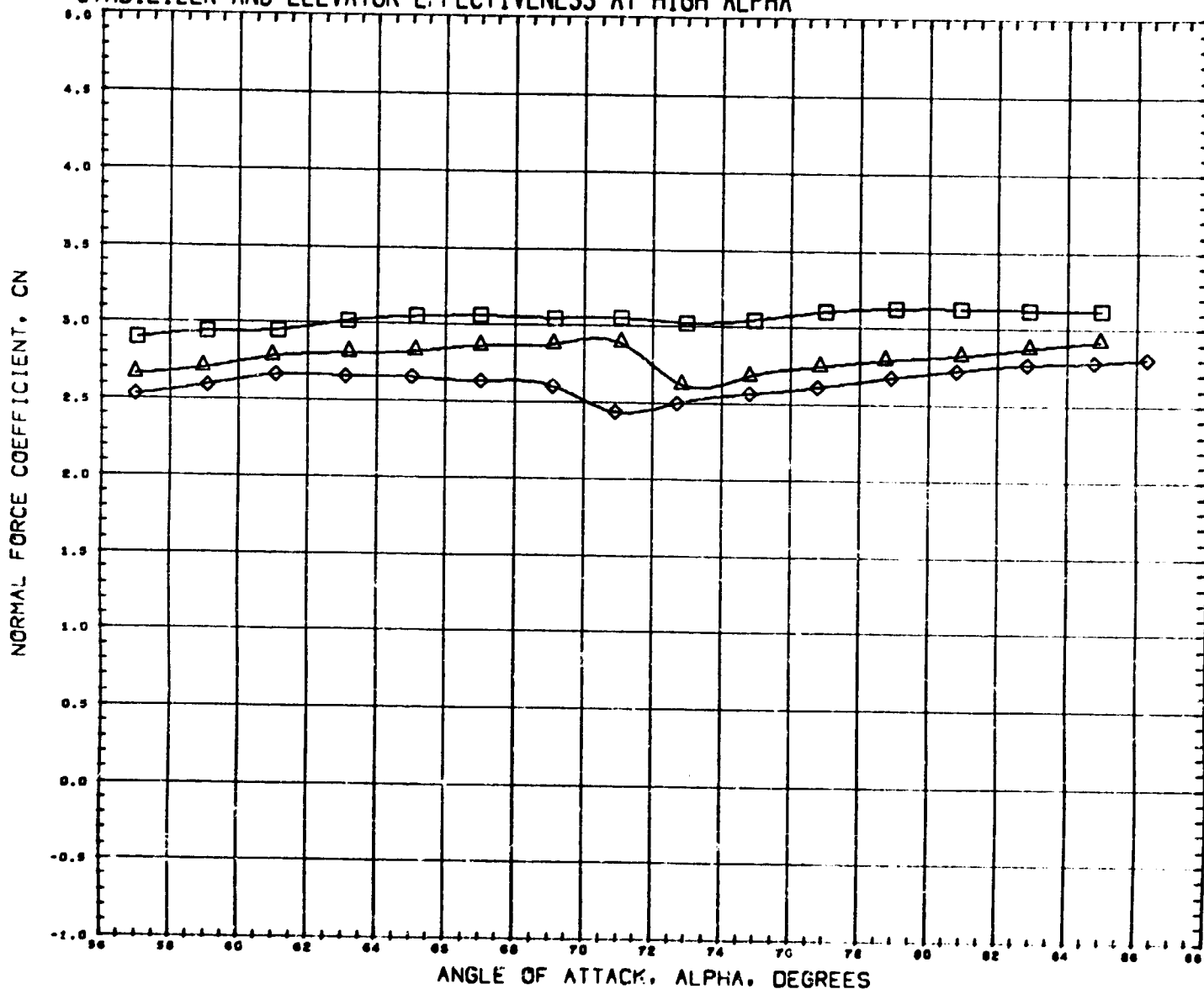
STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILER	REFERENCE INFORMATION
(RC2031)	BTMT-1265 BOEING N-32 BOOSTER	86W4V3			SREF 31.3600 80. IN
(RC2041)	BTMT-1265 BOEING N-32 BOOSTER	86W4H4V3			LREF 2.2400 IN.
(RC2041)	BTMT-1265 BOEING N-32 BOOSTER	86W4H4V3	-20.000	0.000	BREF 14.6000 IN.
(RC2071)	BTMT-1265 BOEING N-32 BOOSTER	86W4H4V3	-20.000	-30.000	XHRP 11.9800 IN.
(RC2061)	BTMT-1265 BOEING N-32 BOOSTER	86W4H4V3	0.000	0.000	YHRP 0.0000 IN.
			0.000	-30.000	ZHRP 2.4330 IN.
					SCALE 0.0067

MACH 5 500

STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RD2031) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RD2031) BTMT-1265 BOEING M-32 BOOSTER 86W4H4V3
 (RD2041) BTMT-1265 BOEING M-32 BOOSTER 86W4H4V3
 (RD2071) BTMT-1265 BOEING M-32 BOOSTER 86W4H4V3
 (RD2081) DATA NOT AVAILABLE FOR ALL CONDITIONS

HTAIL ELEVTR SPOILR

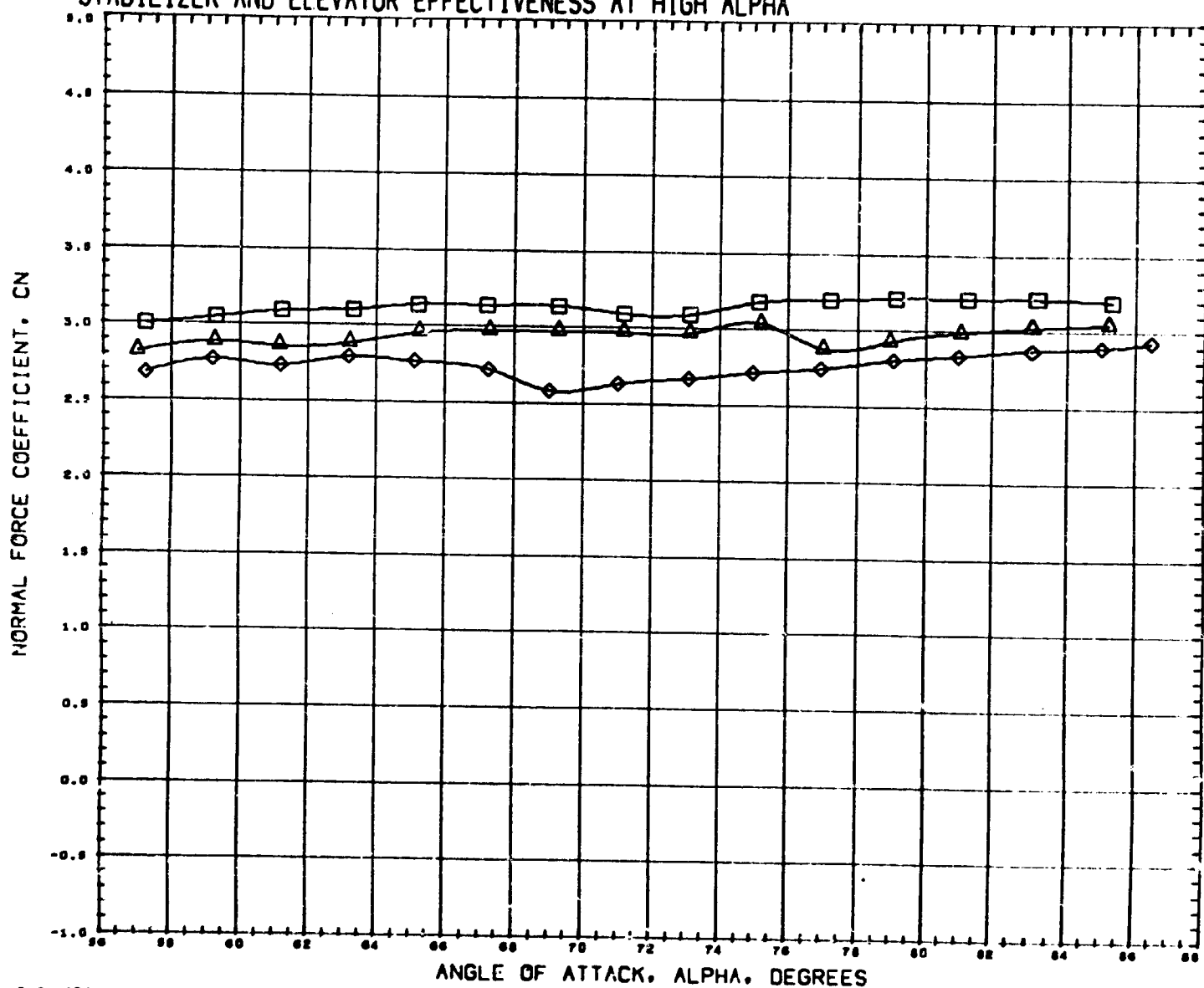
-23.000 0.000
 -20.000 -32.000
 0.000 0.000
 0.000 -30.000

REFERENCE INFORMATION

SREF 31.3400 88. IN
 LREF 2.2400 IN.
 WREF 14.6000 IN.
 XHWP 11.9000 IN.
 YHWP 0.0000 IN.
 ZHWP 2.4330 IN.
 SCALE 0.0087

MACH 0.651

STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



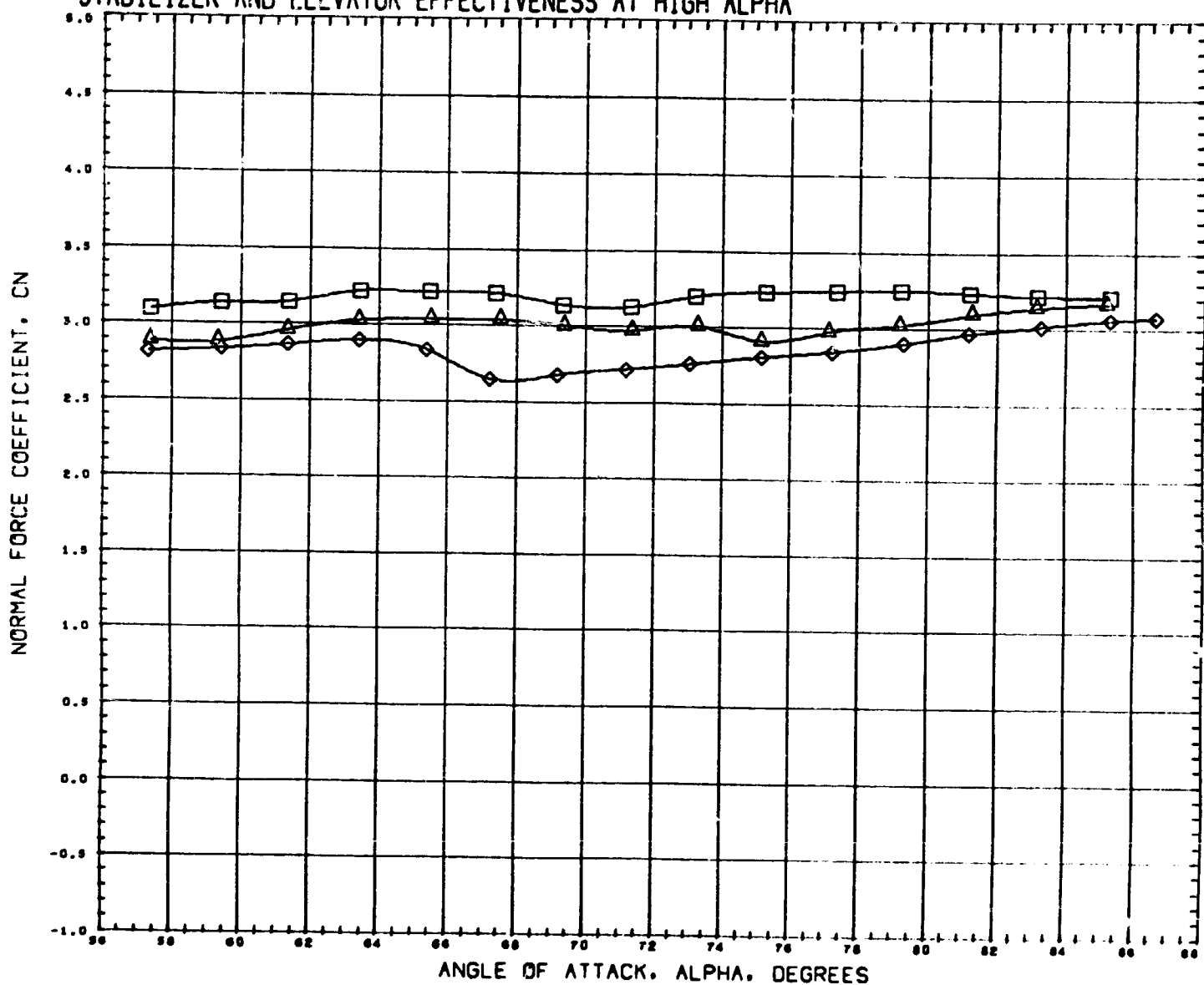
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC2031) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RC2031) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (RC2041) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (RC2071) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (RC2081) DATA NOT AVAILABLE FOR ALL CONDITIONS

HTAIL	ELEVTR	SPOILER
-20.000	0.000	
-20.000	-30.000	
0.000	0.000	
0.000	-30.000	

REFERENCE INFORMATION
 SREF 31.3600 SQ. IN
 LREF 2.2400 IN.
 SREF 14.6000 IN.
 XMRP 11.9800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.781

STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



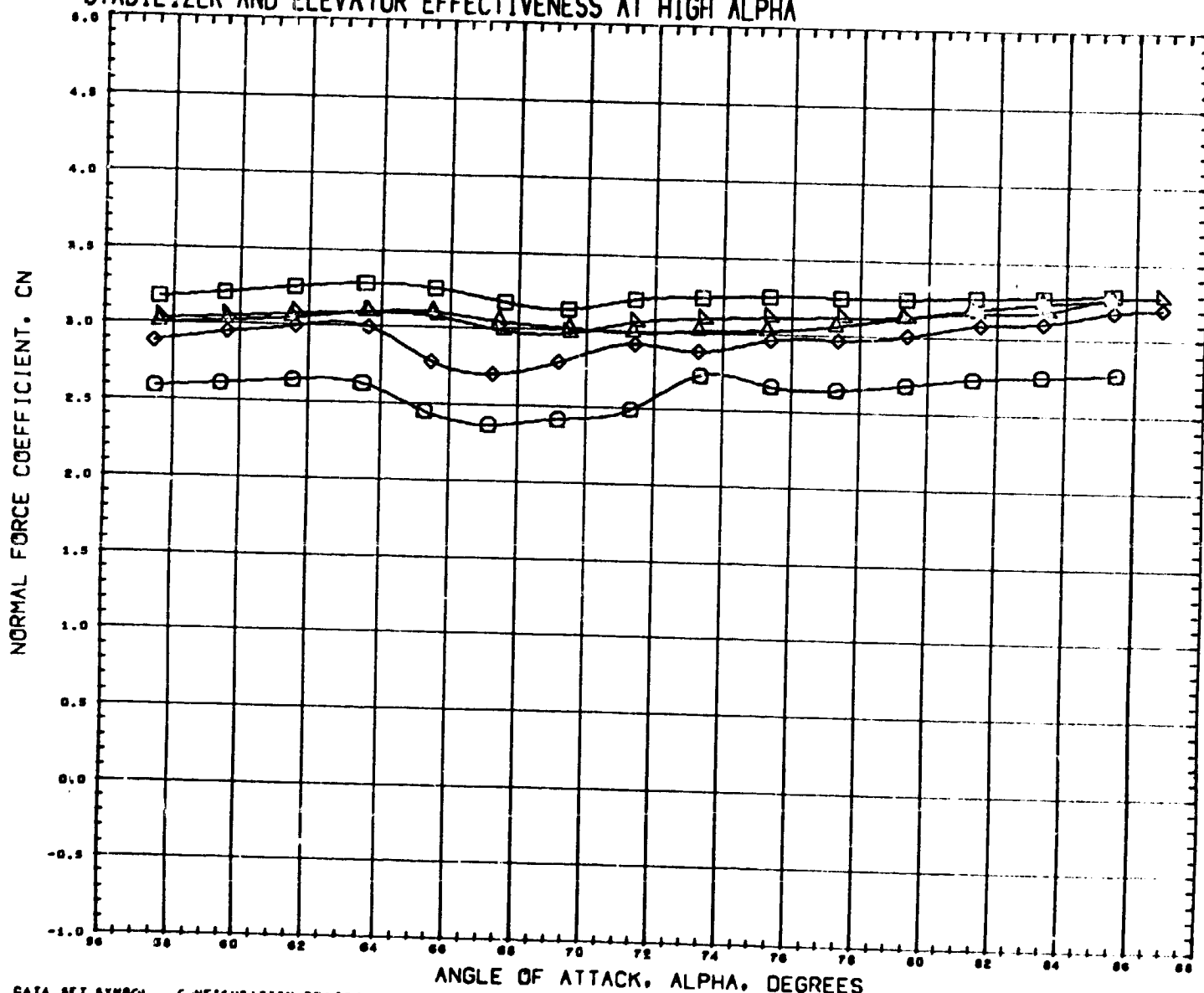
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC2)311 DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RC2)311 BTWT-1265 BOEING M-32 BOOSTER 88W4H4V3
 (RC2)411 BTWT-1265 BOEING M-32 BOOSTER 88W4H4V3
 (RC2)711 BTWT-1265 BOEING M-32 BOOSTER 88W4H4V3
 (RC2)811 DATA NOT AVAILABLE FOR ALL CONDITIONS

MTAIL ELEVTR SPOILR
 -20.000 0.000
 -20.000 -30.000
 0.000 0.000
 0.000 -30.000

REFERENCE INFORMATION
 SREF 31.3600 88. IN
 LREF 2.2400 IN.
 SREF 14.6000 IN.
 XHRP 11.9800 IN.
 YHRP 0.0000 IN.
 ZHRP 2.4330 IN.
 SCALE 0.0067

MACH 0.791

STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RC2031)	BTWT-1263	BOEING H-32 BOOSTER	88W4V3
(RC2032)	BTWT-1263	BOEING H-32 BOOSTER	88W4H4V3
(RC2041)	BTWT-1263	BOEING H-32 BOOSTER	88W4H4V3
(RC2071)	BTWT-1263	BOEING H-32 BOOSTER	88W4H4V3
(RC2081)	BTWT-1263	BOEING H-32 BOOSTER	88W4H4V3

MACH 0.600

ANGLE OF ATTACK, ALPHA, DEGREES

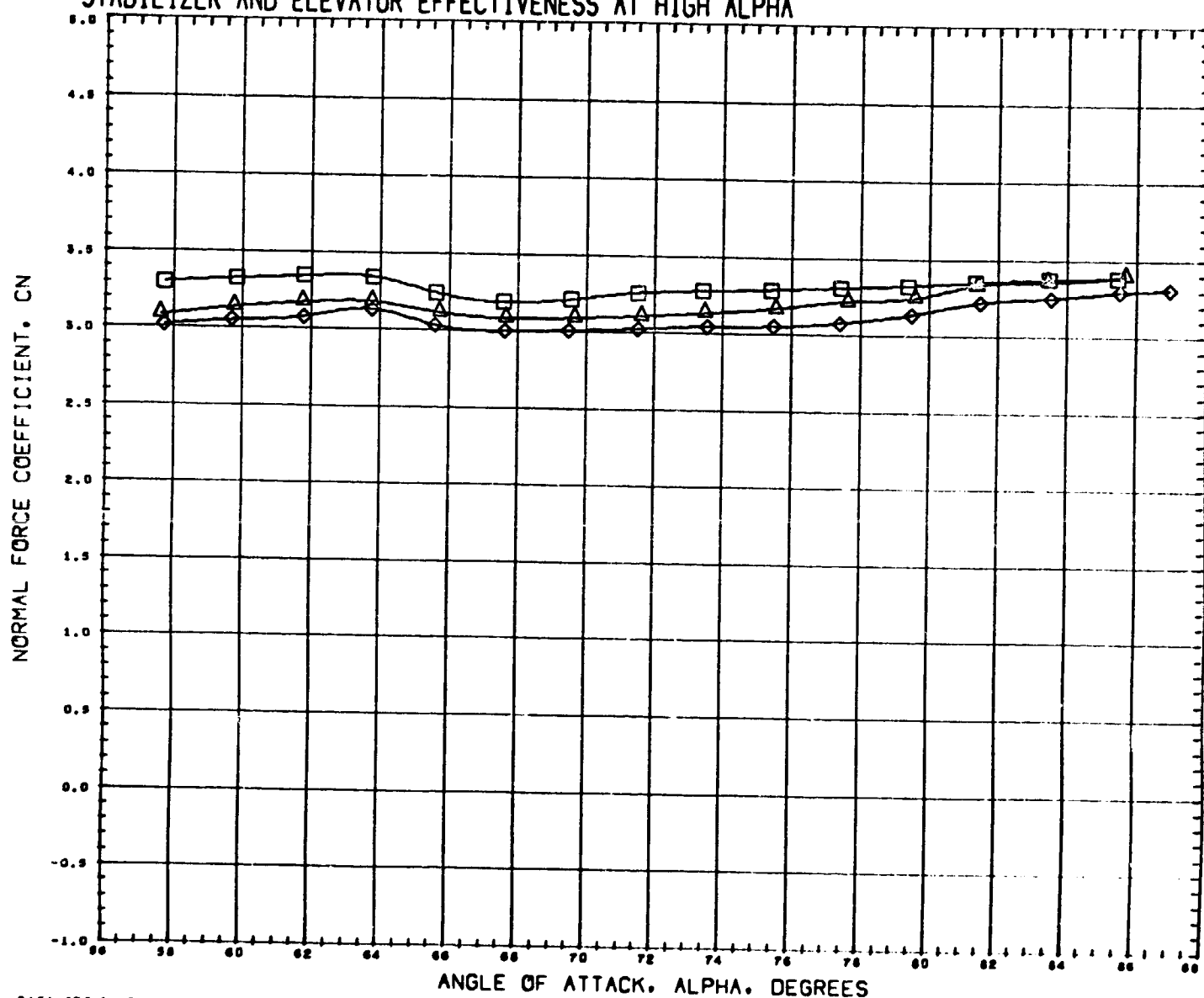
NTAIL ELEVTR SPOILR

-70.000	0.000
-20.000	-30.000
0.000	0.000
0.000	-30.000

REFERENCE INFORMATION

SRFP	31.3600	88. IN
LRFP	2.2400	IN.
SRFP	14.8000	IN.
XRFP	11.9800	IN.
YRFP	0.0080	IN.
ZRFP	2.4330	IN.
SCALE	0.0007	

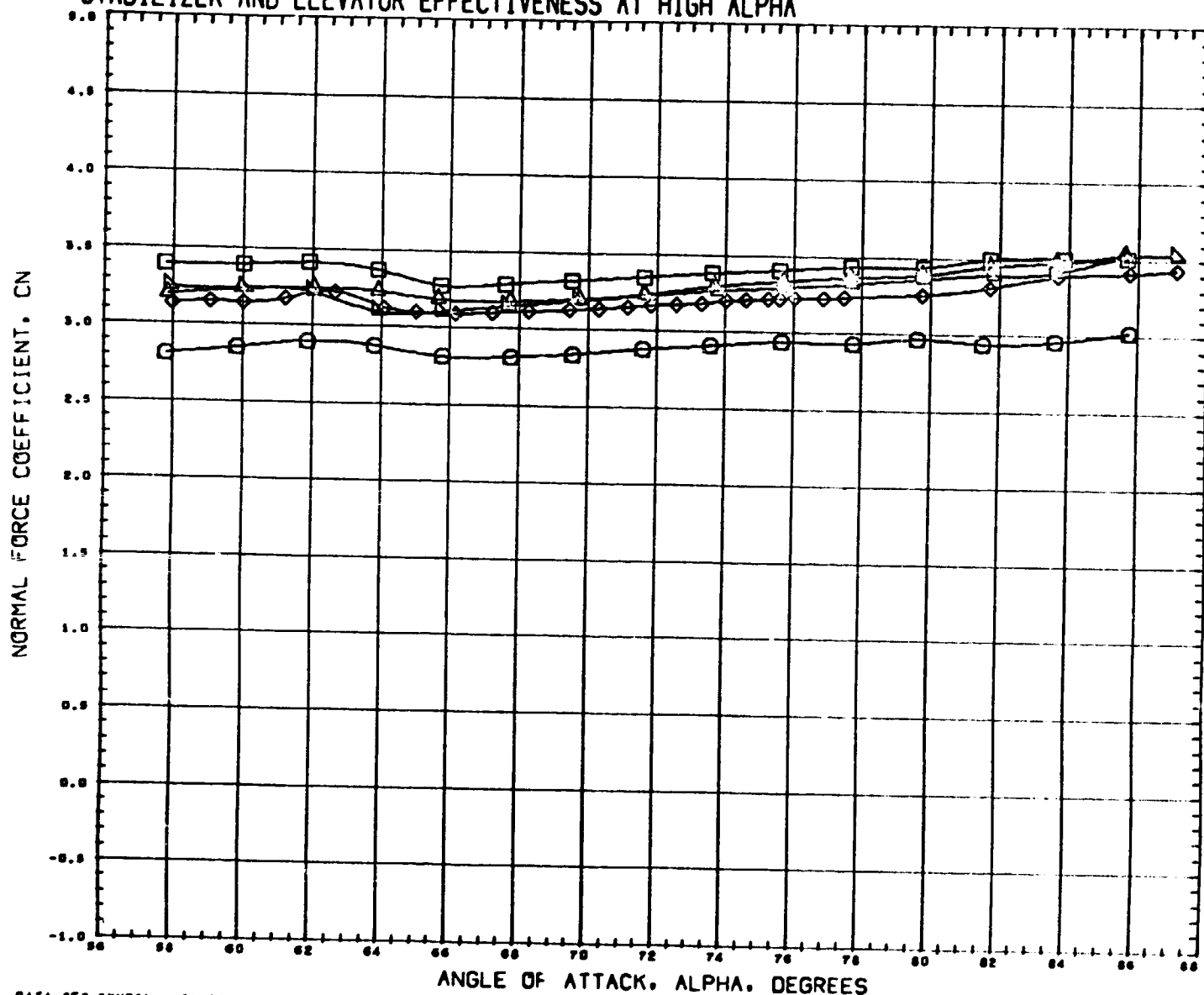
STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MTAIL	ELEVTR	SPOILR	REFERENCE INFORMATION
(R02031)	DATA NOT AVAILABLE FOR ALL CONDITIONS				SREF 31.3600 sq. in
(R02031)	BTWT-1265 BOEING N-32 BOOSTER BW4H4V3	-20.000	0.000		LRUF 2.2400 in.
(R02041)	BTWT-1265 BOEING N-32 BOOSTER BW4H4V3	-20.000	-30.000		BRUF 14.0000 in.
(R02071)	BTWT-1265 BOEING N-32 BOOSTER BW4H4V3	0.000	0.000		KNRP 11.9800 in.
(R02061)	DATA NOT AVAILABLE FOR ALL CONDITIONS	0.000	-30.000		YNRP 0.0000 in.
					ZNRP 2.4330 in.
					SCALE 0.0067

NACH 0.050

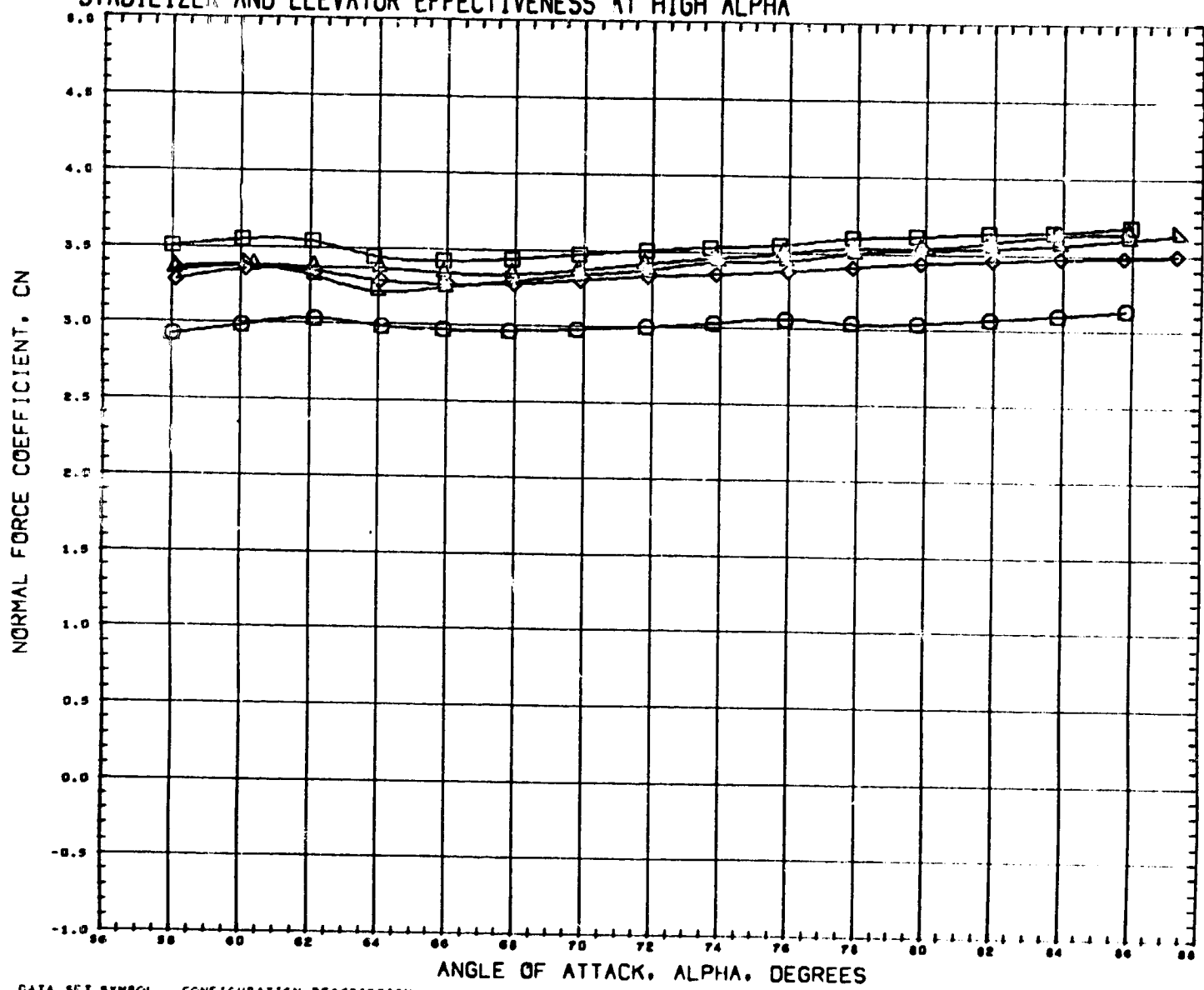
STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILER	REFERENCE INFORMATION
(RC2031)	BTWT-1265 BOEING H-32 BOOSTER 88W4V3	-20.000	0.000		SREF 31.3600 88. IN
(RC2051)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	-20.000	-30.000		LREF 2.2400 IN.
(RC2041)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	0.000	0.000		GREF 14.6000 IN.
(RC2071)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	0.000	-30.000		XMAP 11.9800 IN.
(RC2061)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3				YMAP 0.0000 IN.
					ZMAP 2.4330 IN.
					SCALE 0.0067

MACH 0.899

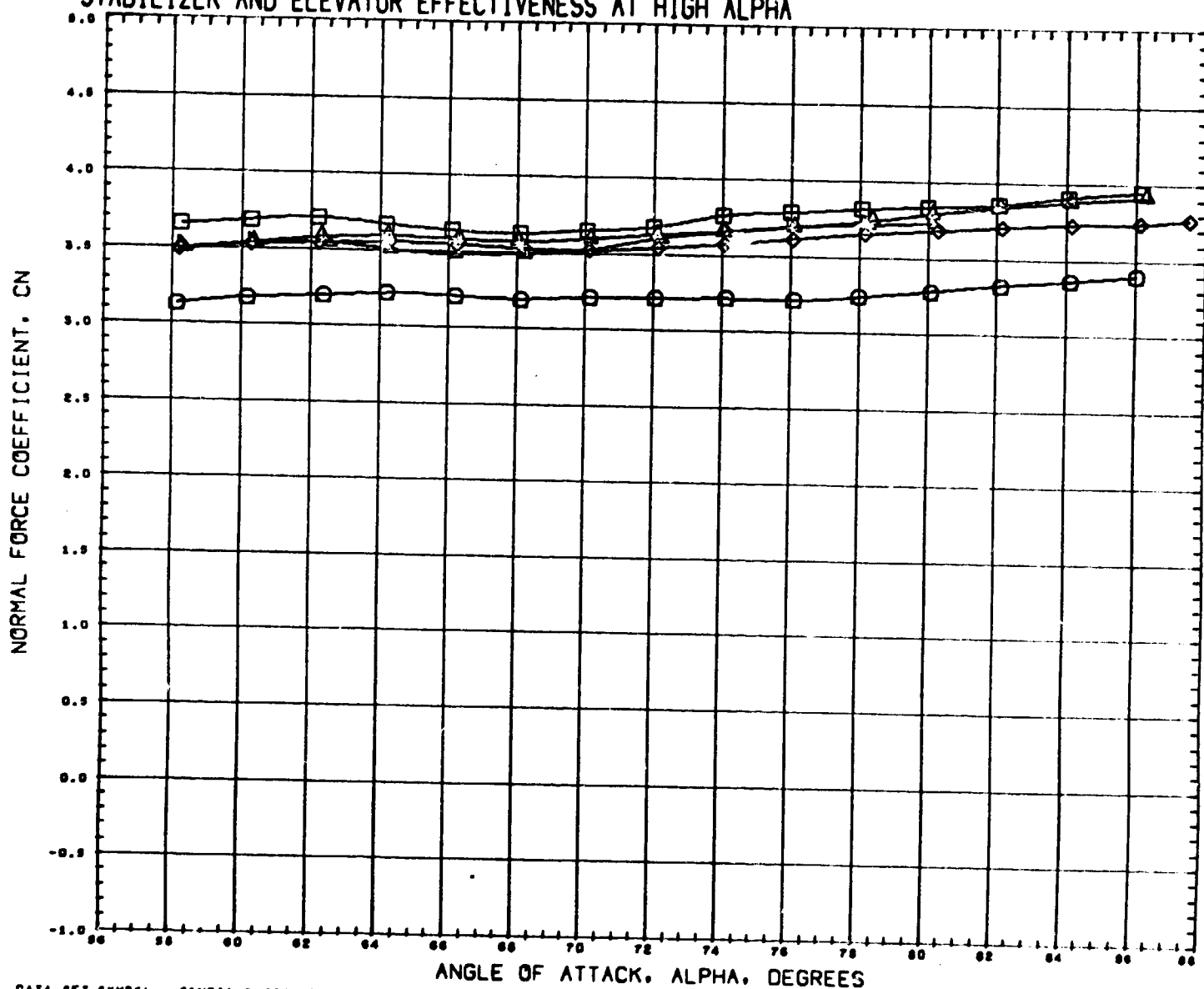
STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



DATA SET SYMBOL				CONFIGURATION DESCRIPTION			REFERENCE INFORMATION		
(AC2331)	CROSS	BTMT-1265	BOEING N-32 BOOSTER	86W4V3	NTAIL	ELEVTR	SPOILR	SREF	31.3600 SQ. IN
(AC2351)		BTMT-1265	BOEING N-32 BOOSTER	86W4H4V3	-20.000	0.000		LREF	2.2400 IN.
(AC2341)		BTMT-1265	BOEING N-32 BOOSTER	86W4H4V3	-20.000	-30.000		BREF	14.8000 IN.
(AC2371)		BTMT-1265	BOEING N-32 BOOSTER	86W4H4V3	0.000	0.000		KKRP	11.9800 IN.
(AC2061)	CROSS	BTMT-1265	BOEING N-32 BOOSTER	86W4H4V3	0.000	-30.000		YMRP	0.0000 IN.
		BTMT-1265	BOEING N-32 BOOSTER	86W4H4V3	0.000	-30.000		ZMRP	2.4330 IN.
								SCALE	0.0067

MACH 0.951

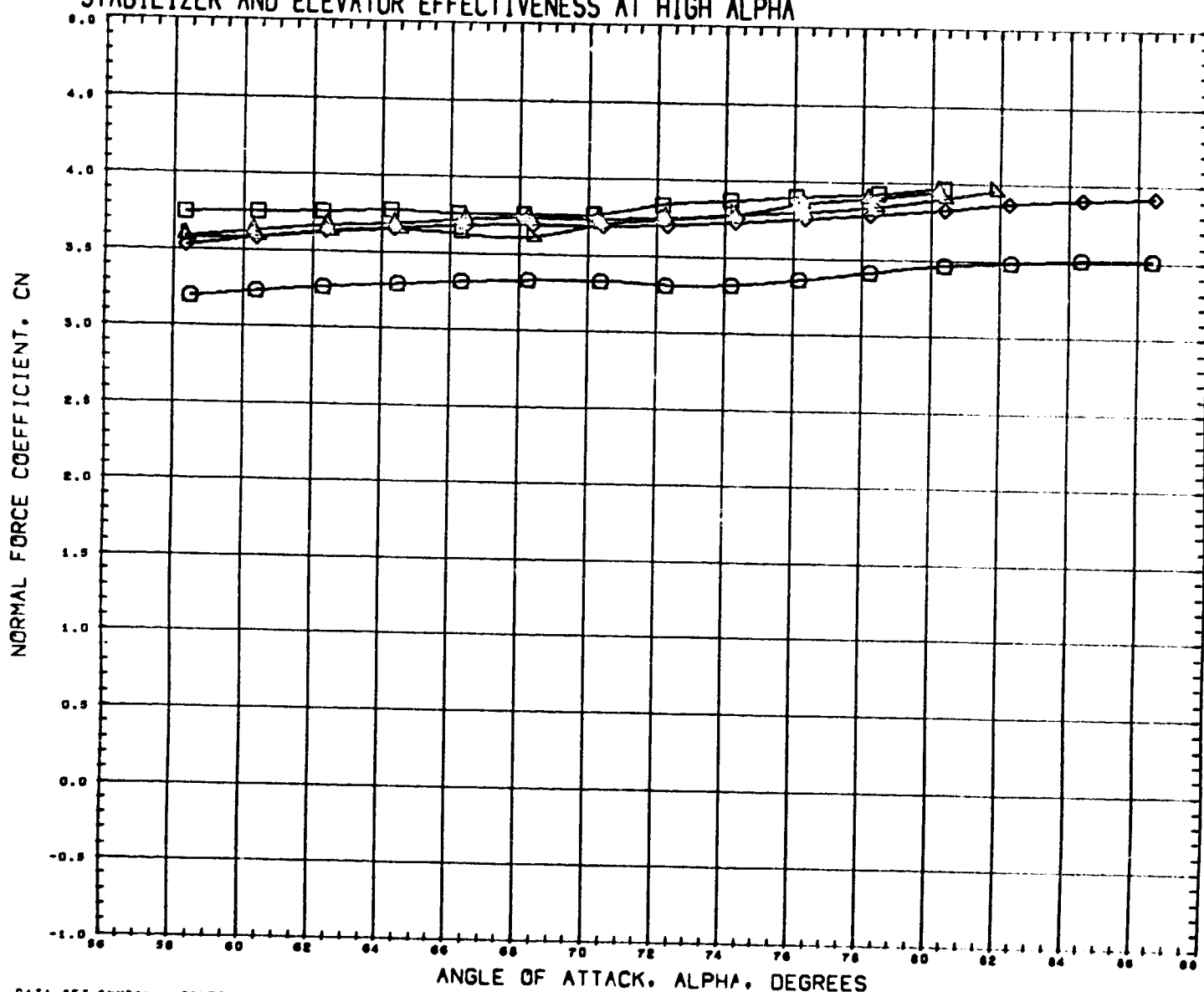
STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MTAIL	ELEVTR	SPOILER	REFERENCE INFORMATION
(R02031)	BTMT-1265 BOEING H-32 BOOSTER B8W4V3				SREF 31.3600 IN.
(R02031)	BTMT-1265 BOEING H-32 BOOSTER B8W4H4V3	-20.000	0.000		LREF 2.2400 IN.
(R02031)	BTMT-1265 BOEING H-32 BOOSTER B8W4H4V3	-20.000	-30.000		BREF 14.6000 IN.
(R02031)	BTMT-1265 BOEING H-32 BOOSTER B8W4H4V3	0.000	0.000		XMRP 11.9000 IN.
(R02031)	BTMT-1265 BOEING H-32 BOOSTER B8W4H4V3	0.000	-30.000		YMRP 0.0000 IN.
					ZMRP 2.4330 IN.
					SCALE 0.0067

MACH 0.988

STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA

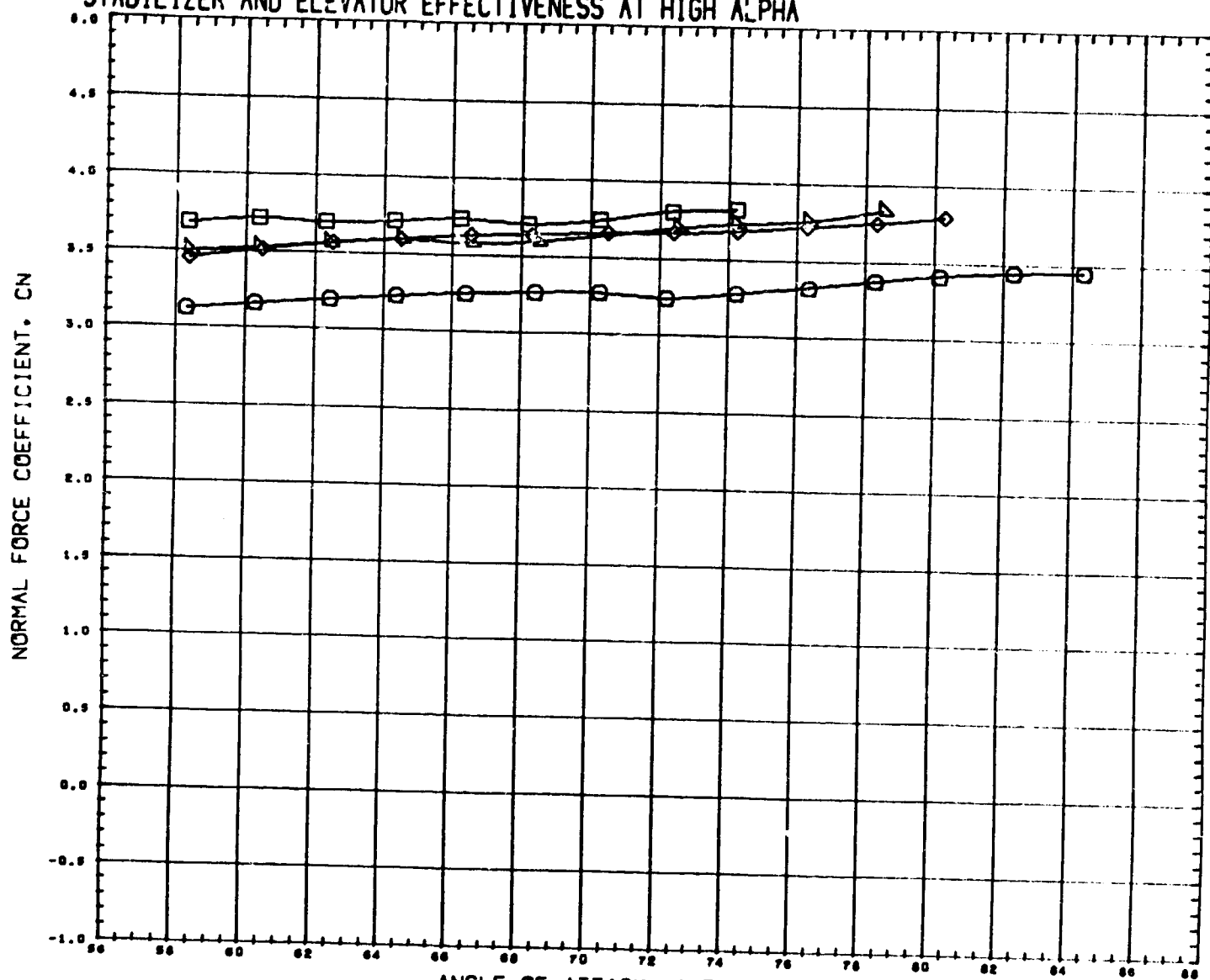


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILER
(R02031)	BTWT-1265 BOEING H-32 BOOSTER 88W4V3	-20.000	0.000	
(R02051)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	-20.000	-30.000	
(R02041)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	0.000	0.000	
(R02071)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	0.000	-30.000	
(R02061)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3			

MACH 1.050

REFERENCE INFORMATION		
SRF	31.3600	88. IN
LRP	2.2400	IN.
SRF	14.6000	IN.
XRFP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(R02031)	BTWT-1265 BOEING H-32 BOOSTER	88W4V3
(R02031)	DATA NOT AVAILABLE FOR ALL CONDITIONS	
(R02041)	BTWT-1265 BOEING H-32 BOOSTER	88W4H4V3
(R02071)	BTWT-1265 BOEING H-32 BOOSTER	88W4H4V3
(R02061)	BTWT-1265 BOEING H-32 BOOSTER	88W4H4V3

MTAIL ELEVTR SPOILR

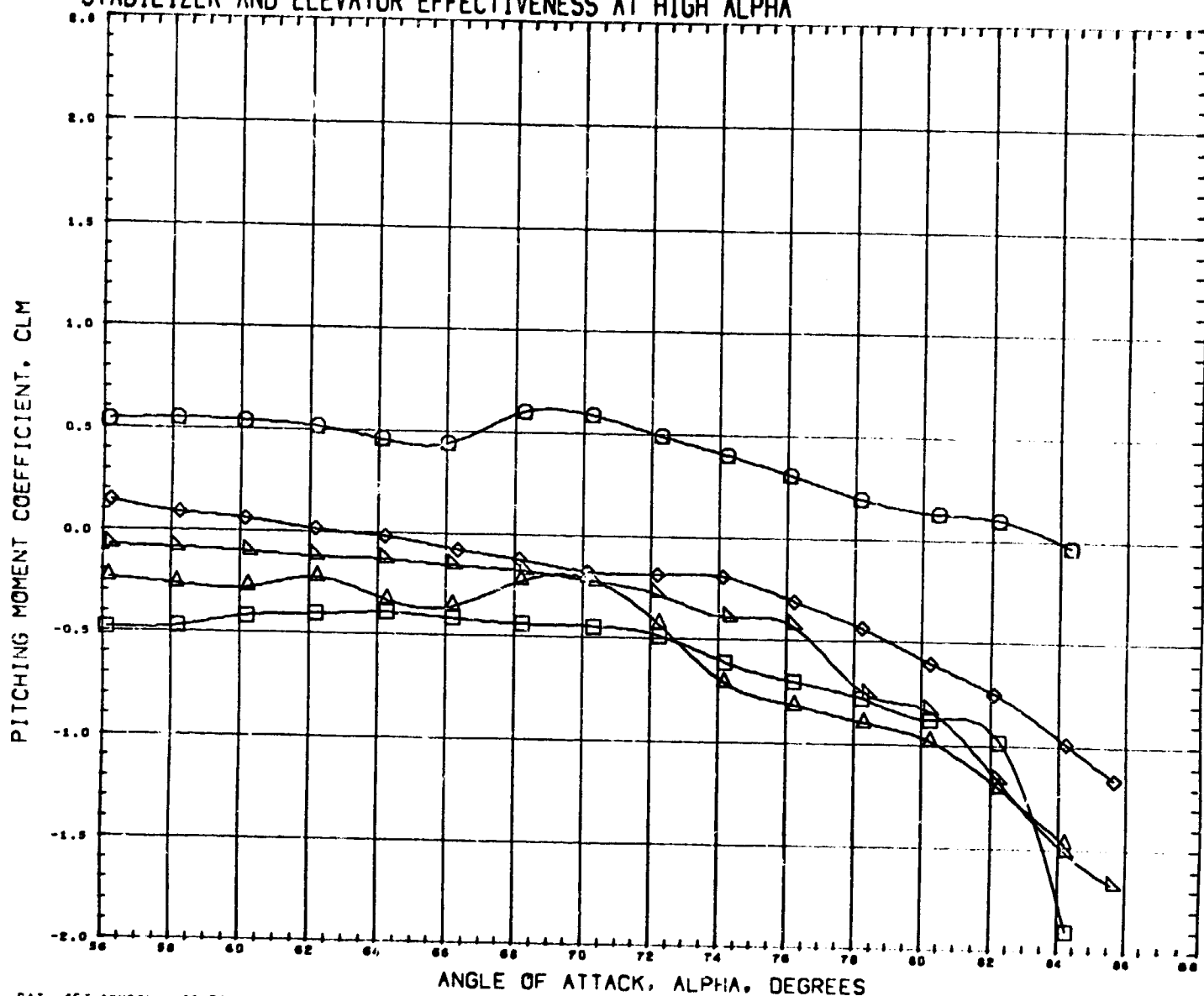
-20.000	0.000
-20.000	-30.000
0.000	0.000
0.000	-30.000

REFERENCE INFORMATION

SREF	31.3600	50. IN
LREF	2.2400	IN.
BREF	14.8000	IN.
XMRP	11.9000	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

MACH 1.099

STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RC0031)	BTWT-1265	BOEING H-32 BOGSTER	B3W4V3
(RC0051)	BTWT-1265	BOEING H-32 BOGSTER	B6W4H4V3
(RC0041)	BTWT-1265	BOEING H-32 BOGSTER	B6W4H4V3
(RC0071)	BTWT-1265	BOEING H-32 BOGSTER	B6W4H4V3
(RC0061)	BTWT-1265	BOEING H-32 BOGSTER	B6W4H4V3

MACH

0.901

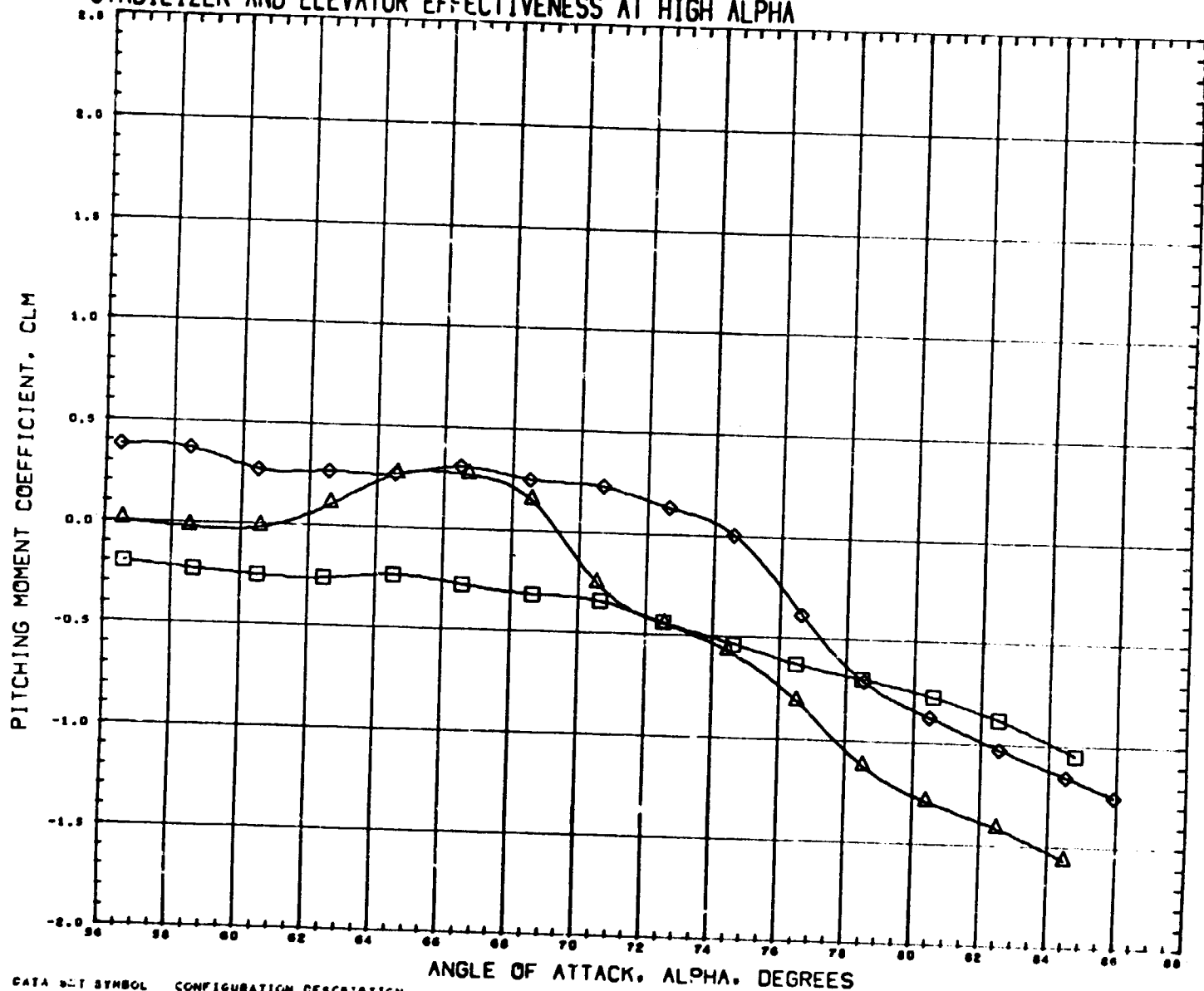
MTAIL ELEVTN SPOILER

-20.000	0.000
-20.000	-30.000
0.000	0.000
0.000	-30.000

REFERENCE INFORMATION

SREF	31.3600	sq. in
LREF	2.2400	in.
BREF	14.8000	in.
XMRP	11.9800	in.
YMRP	0.0000	in.
ZMRP	2.4330	in.
SCALE	0.0067	

STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



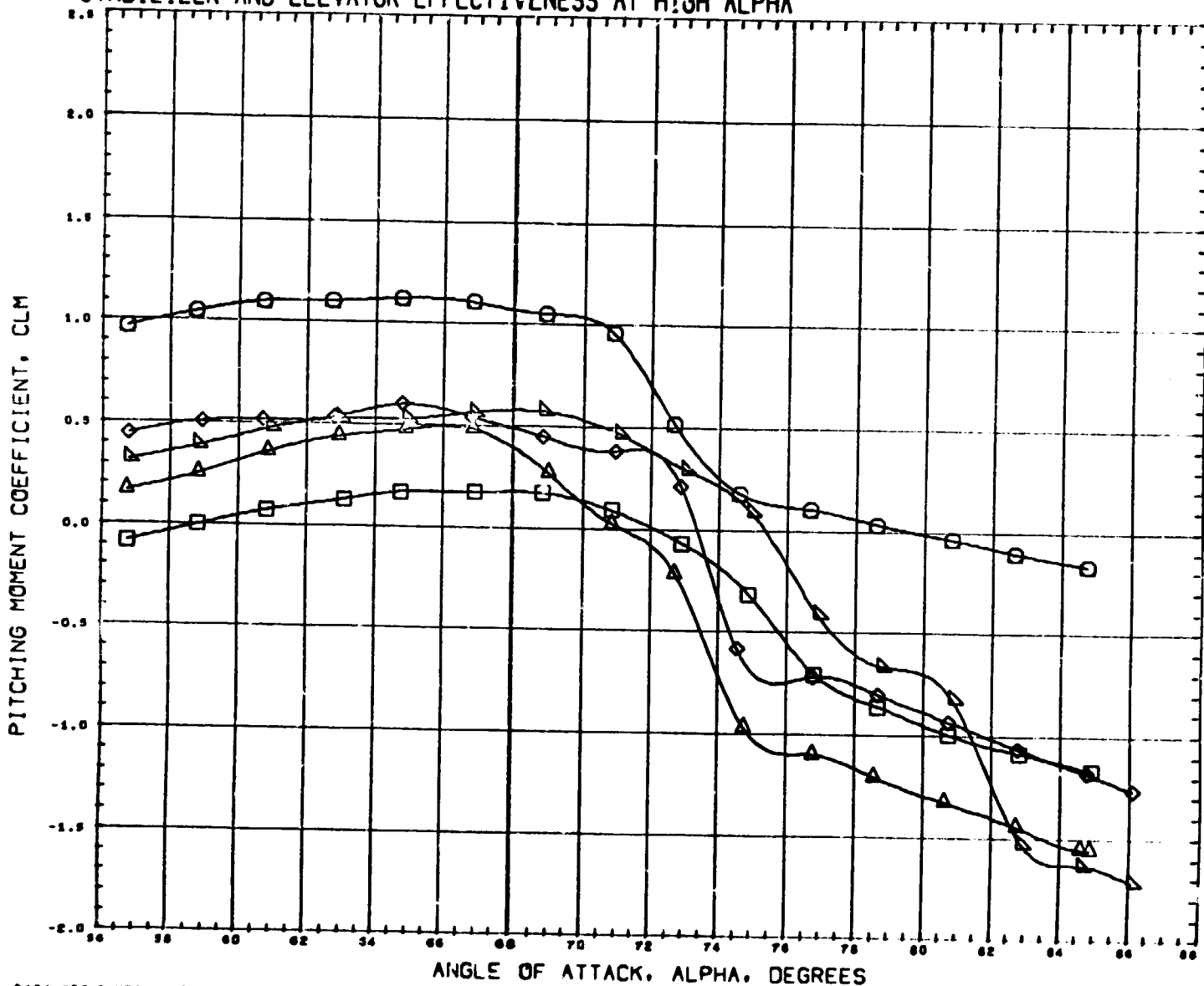
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RD2051) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RD2052) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (RD2053) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (RD2054) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (RD2055) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (RD2056) DATA NOT AVAILABLE FOR ALL CONDITIONS

HTAIL ELEVTR SPOILR
 -20.000 0.000
 -20.000 -30.000
 0.000 0.000
 0.000 -30.000

REFERENCE INFORMATION
 SREF 31.3600 IN.
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.901

STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RCE231)	ORCA	BTWT-1265	BOEING M-32 BOOSTER	88W4V3
(RCE251)	ORCA	BTWT-1265	BOEING M-32 BOOSTER	88W4H4V3
(RCE241)	ORCA	BTWT-1265	BOEING M-32 BOOSTER	88W4H4V2
(RCE271)	ORCA	BTWT-1265	BOEING M-32 BOOSTER	88W4H4V3
(RCE261)	ORCA	BTWT-1265	BOEING M-32 BOOSTER	88W4H4V3

MACH 0.600

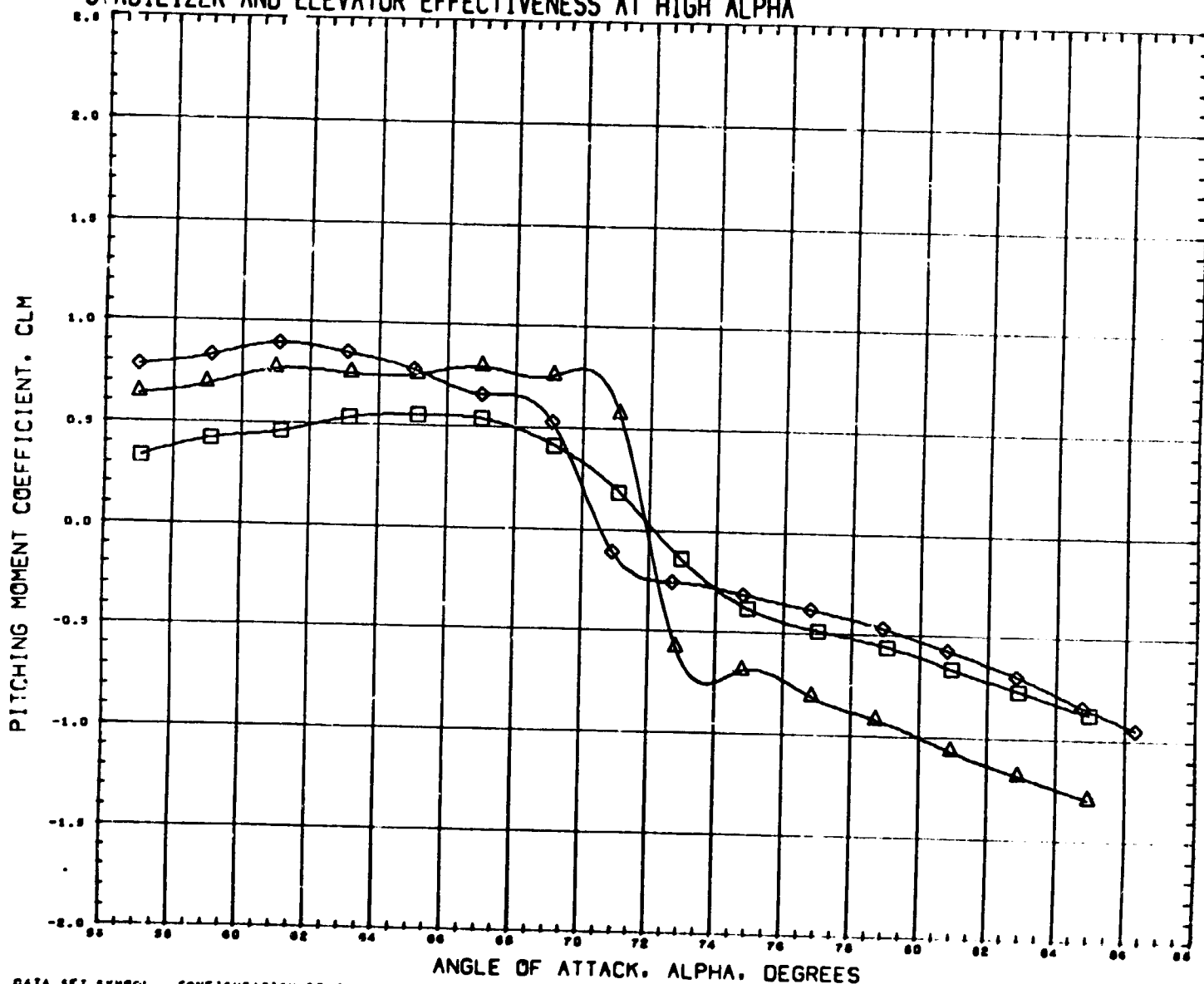
ANGLE OF ATTACK, ALPHA, DEGREES

NTAIL	ELEVTR	SPOILER
-20.000	0.000	
-20.000	-30.000	
0.000	0.000	
0.000	-30.000	

REFERENCE INFORMATION

SREF	31.3600	80. IN
LRREF	2.2400	IN.
SRREF	14.4000	IN.
XMRP	11.0000	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0047	

STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02031) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (R02031) BTWT-1263 BOEING H-32 BOOSTER 88W4M4V3
 (R02041) BTWT-1263 BOEING H-32 BOOSTER 88W4M4V3
 (R02071) BTWT-1263 BOEING H-32 BOOSTER 88W4M4V3
 (R02061) DATA NOT AVAILABLE FOR ALL CONDITIONS

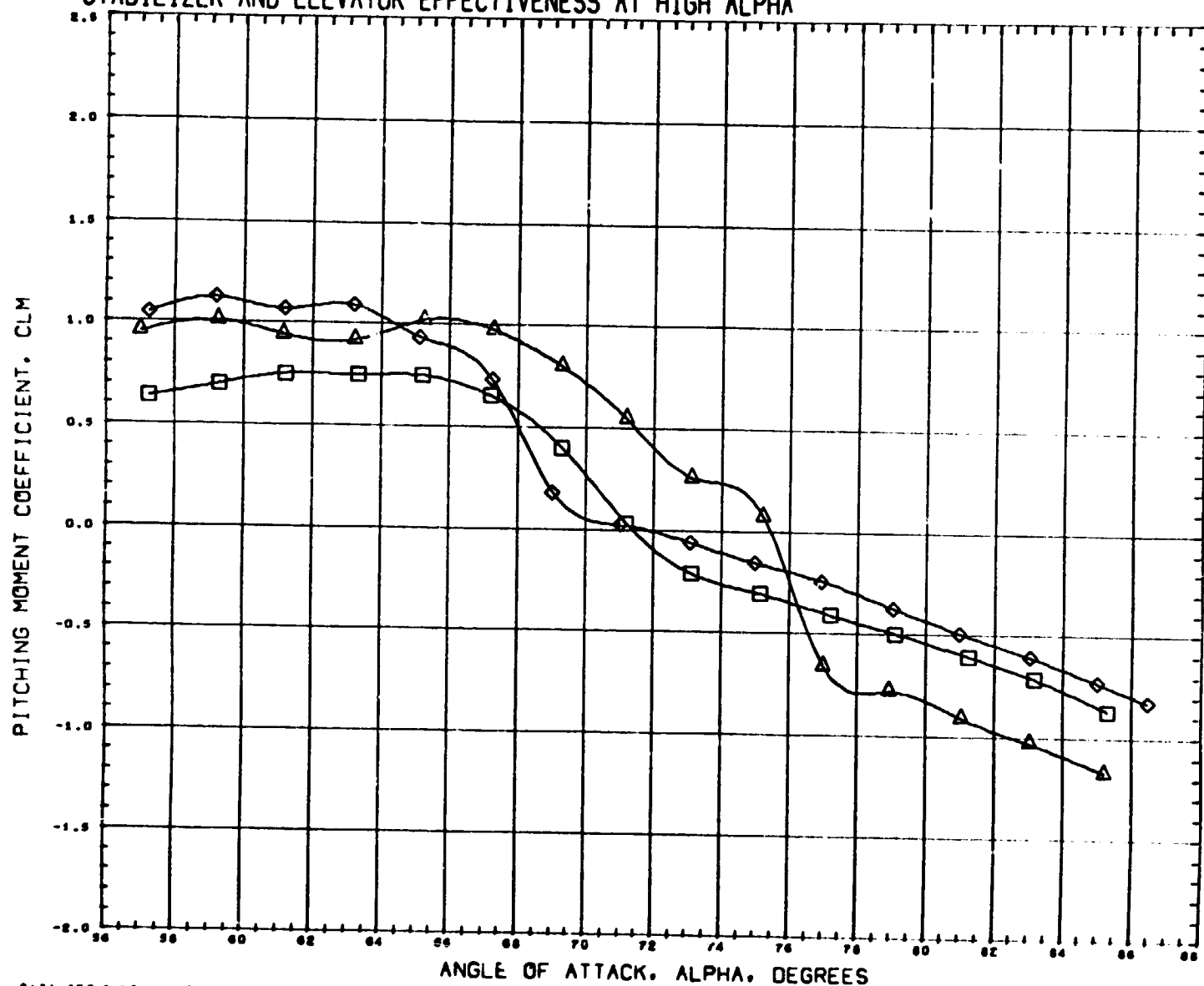
RACH 0.051

ANGLE OF ATTACK, ALPHA, DEGREES

HTAIL	ELEVTR	SPOILR
-20.000	0.000	
-20.000	-30.000	
0.000	0.000	
0.000	-30.000	

REFERENCE INFORMATION
 SREF 31.3600 SQ. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.9000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0007

STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



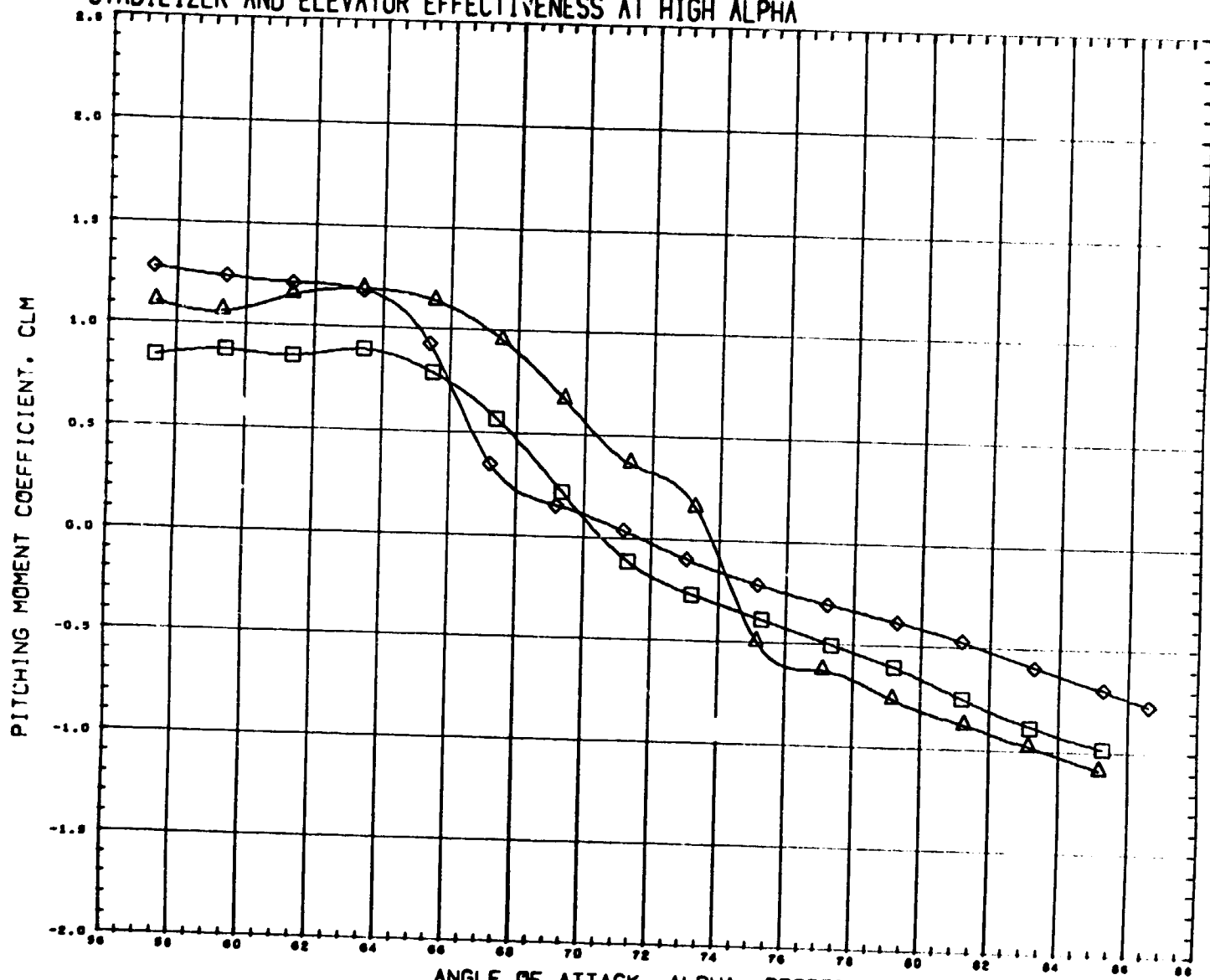
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (R02531) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (R02531) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (R02541) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (R02571) BTWT-1265 BOEING N-32 BOOSTER 88W4H4V3
 (R02581) DATA NOT AVAILABLE FOR ALL CONDITIONS

HTAIL ELEVTR SPOILR
 -20.000 0.000
 -20.000 -30.000
 0.000 0.000
 0.000 -30.000

REFERENCE INFORMATION
 SREF 31.3600 88. IN
 LREF 2.2400 IN.
 BREF 14.6000 IN.
 XMRP 11.9000 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

RACH 0.781

STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



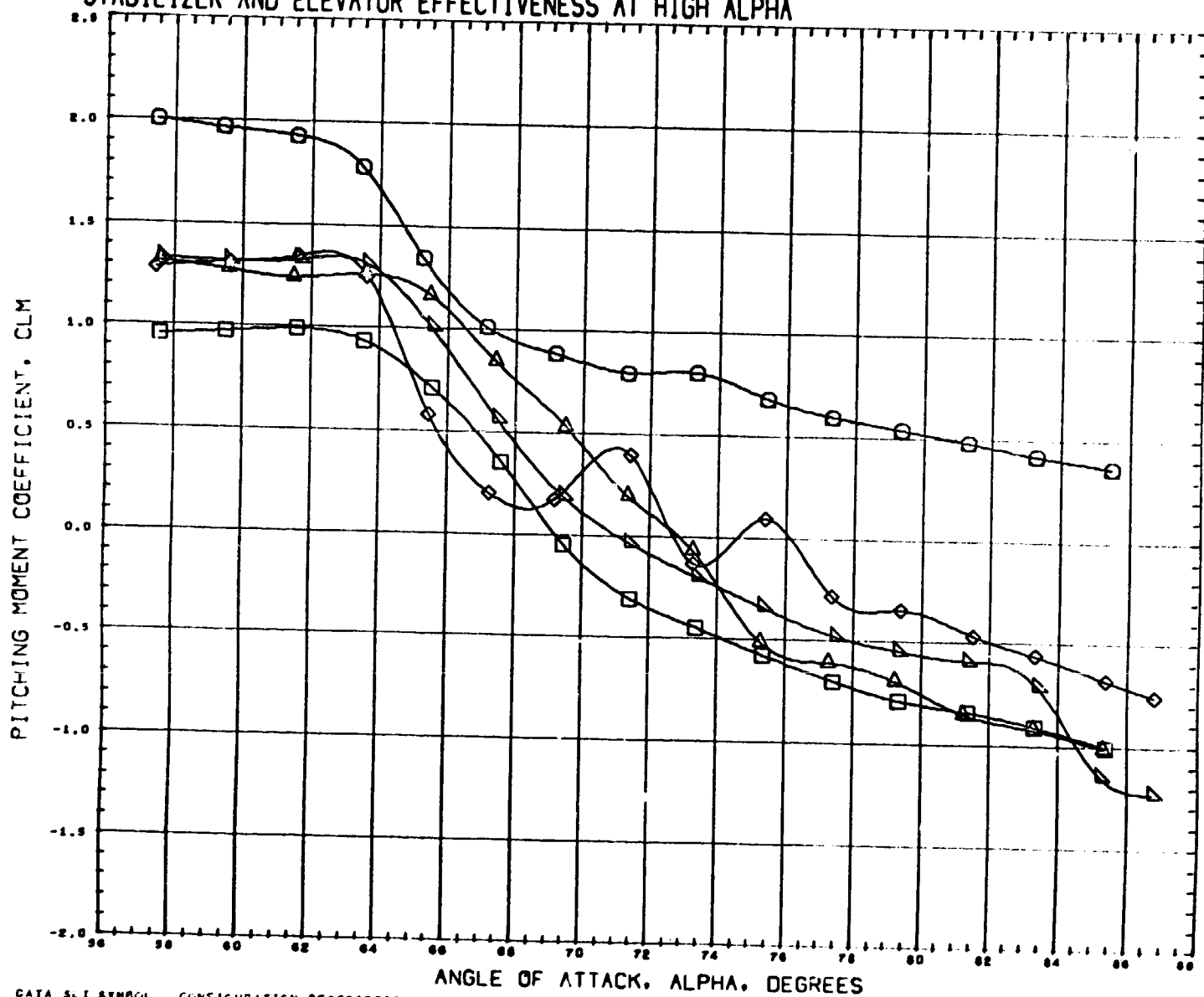
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RD2331) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RD2332) BTWT-1245 BOEING N-32 BOOSTER 88W4H4V3
 (RD2341) BTWT-1245 BOEING N-32 BOOSTER 88W4H4V3
 (RD2371) BTWT-1245 BOEING N-32 BOOSTER 88W4H4V3
 (RD2381) DATA NOT AVAILABLE FOR ALL CONDITIONS

HTAIL ELEVTR SPOILR
 -20.000 0.000
 -20.000 -30.000
 0.000 0.000
 0.000 -30.000

REFERENCE INFORMATION
 SREF 31.3600 sq. in.
 LREF 2.2400 in.
 BREF 14.6000 in.
 XMRP 11.9800 in.
 YMRP 0.0000 in.
 ZMRP 8.4330 in.
 SCALE 0.0067

MACH 0.751

STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA

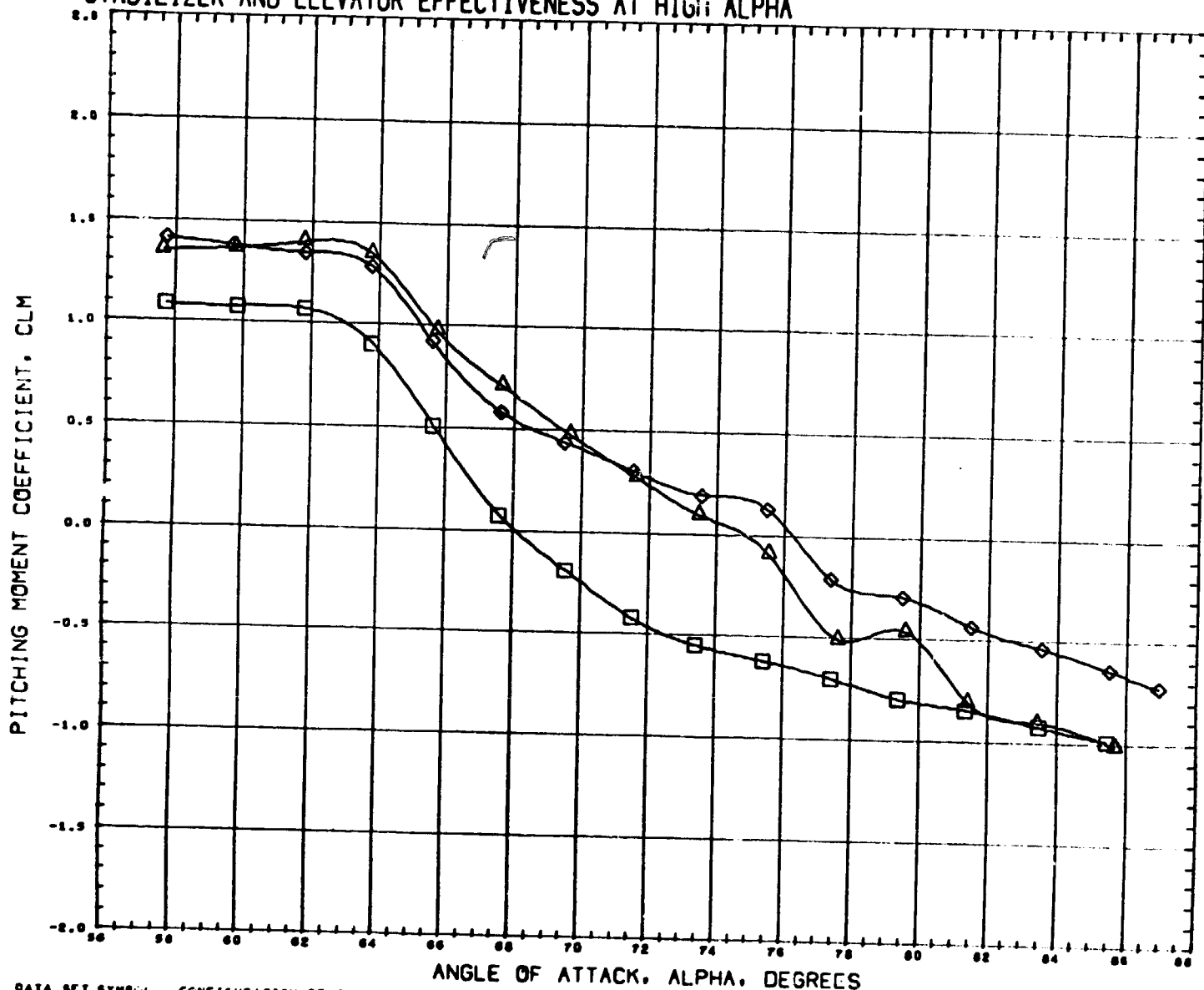


DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NTAIL	ELEVTR	SPOILER
(RC2031)	BTWT-1265 BOEING H-32 BOOSTER 88W4V3	-20.000	0.000	
(RC2031)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	-20.000	-30.000	
(RC2041)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	0.000	0.000	
(RC2071)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	0.000	-30.000	

MACH 0.000

REFERENCE INFORMATION		
SREF	31.3600	50. IN
LREF	2.2400	IN.
BREF	14.8000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	8.4330	IN.
SCALE	0.0067	

STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



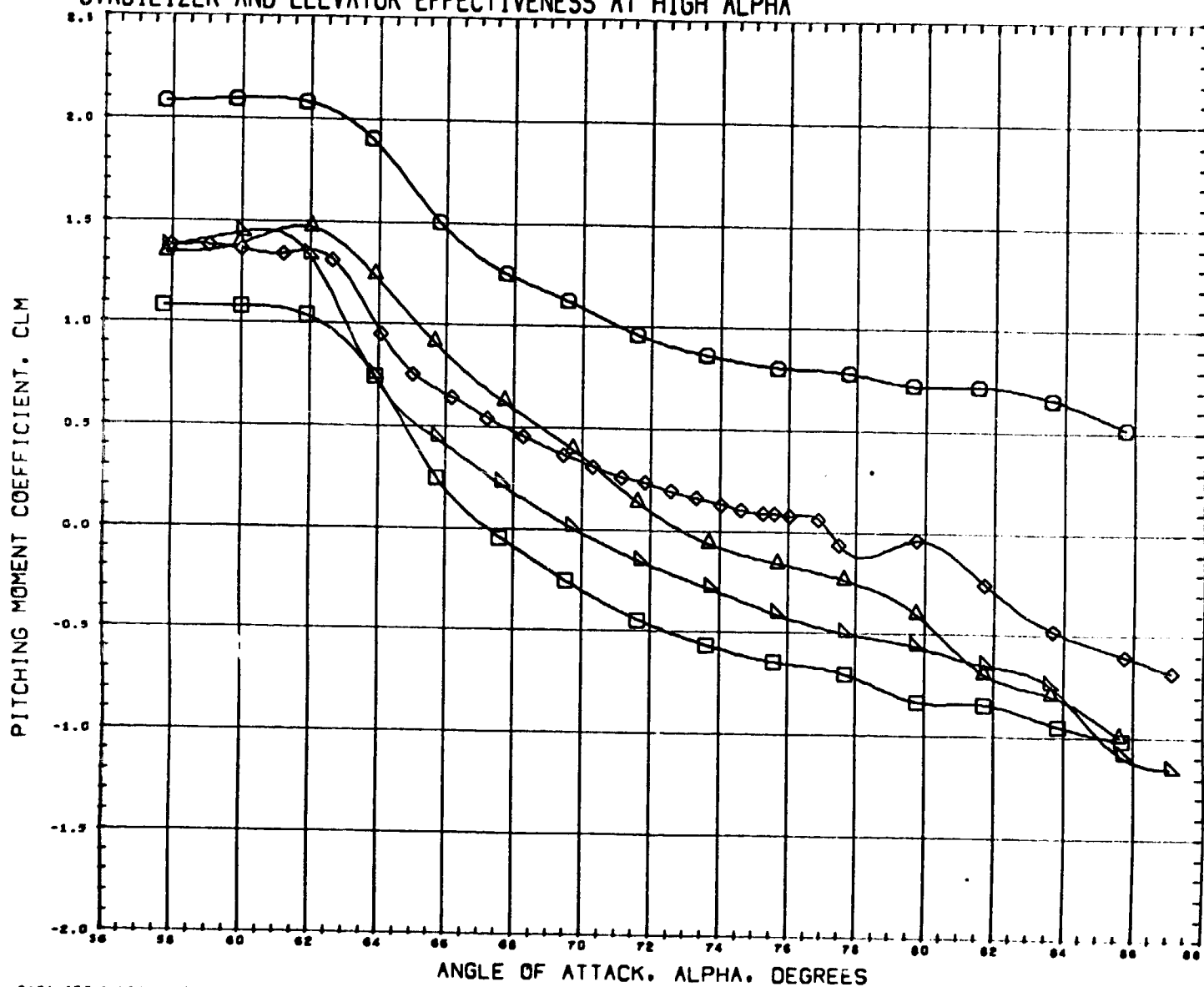
DATA SET SYMBOL CONFIGURATION DESCRIPTION
 (RC2031) DATA NOT AVAILABLE FOR ALL CONDITIONS
 (RC2051) BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3
 (RC2041) BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3
 (RC2071) BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3
 (RC2061) DATA NOT AVAILABLE FOR ALL CONDITIONS

NTAIL ELEVTR SPOILER
 -20.000 0.000
 -20.000 -30.000
 0.000 0.000
 0.000 -30.000

REFERENCE INFORMATION
 SREF 31.3600 SQ. IN
 LREF 2.2400 IN.
 BREF 14.8000 IN.
 XMRP 11.2800 IN.
 YMRP 0.0000 IN.
 ZMRP 2.4330 IN.
 SCALE 0.0067

MACH 0.650

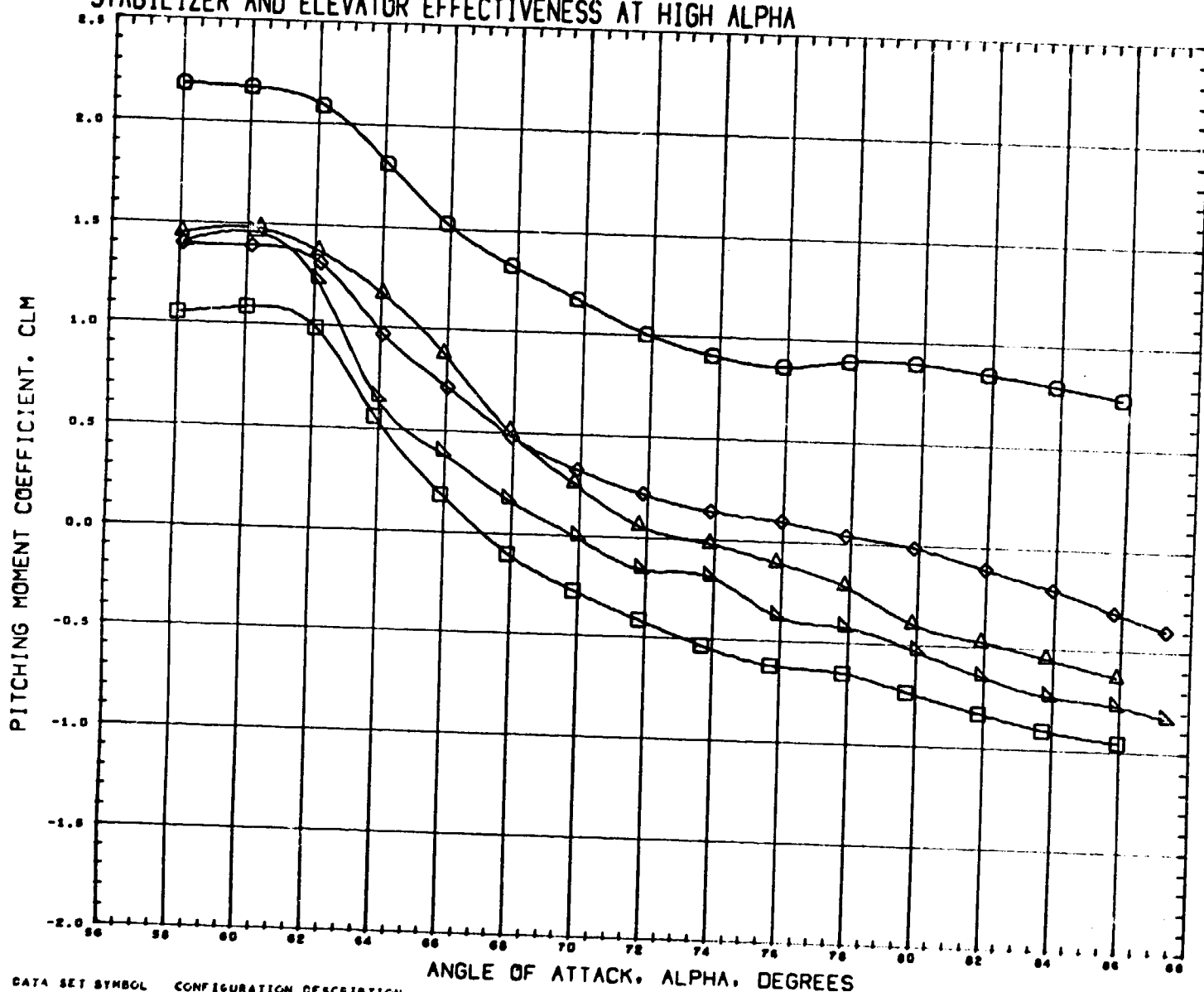
STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	HTAIL	ELEVTR	SPOILR	REFERENCE INFORMATION
(RC2:31)	BTWT-1265 BOEING H-32 BOOSTER 88W4V3				SREF 31.3600 50. IN
(RC2:51)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	-20.000	0.000		LREF 2.2400 IN.
(RC2:41)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	-20.000	-30.000		BREF 14.8000 IN.
(RC2:71)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	0.000	0.000		XMRP 11.9600 IN.
(RC2:61)	BTWT-1265 BOEING H-32 BOOSTER 88W4H4V3	0.000	-30.000		YMRP 0.0000 IN.
					ZMRP 2.4336 IN.
					SCALE 0.0067

MACH 0.899

STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



DATA SET SYMBOL CONFIGURATION DESCRIPTION

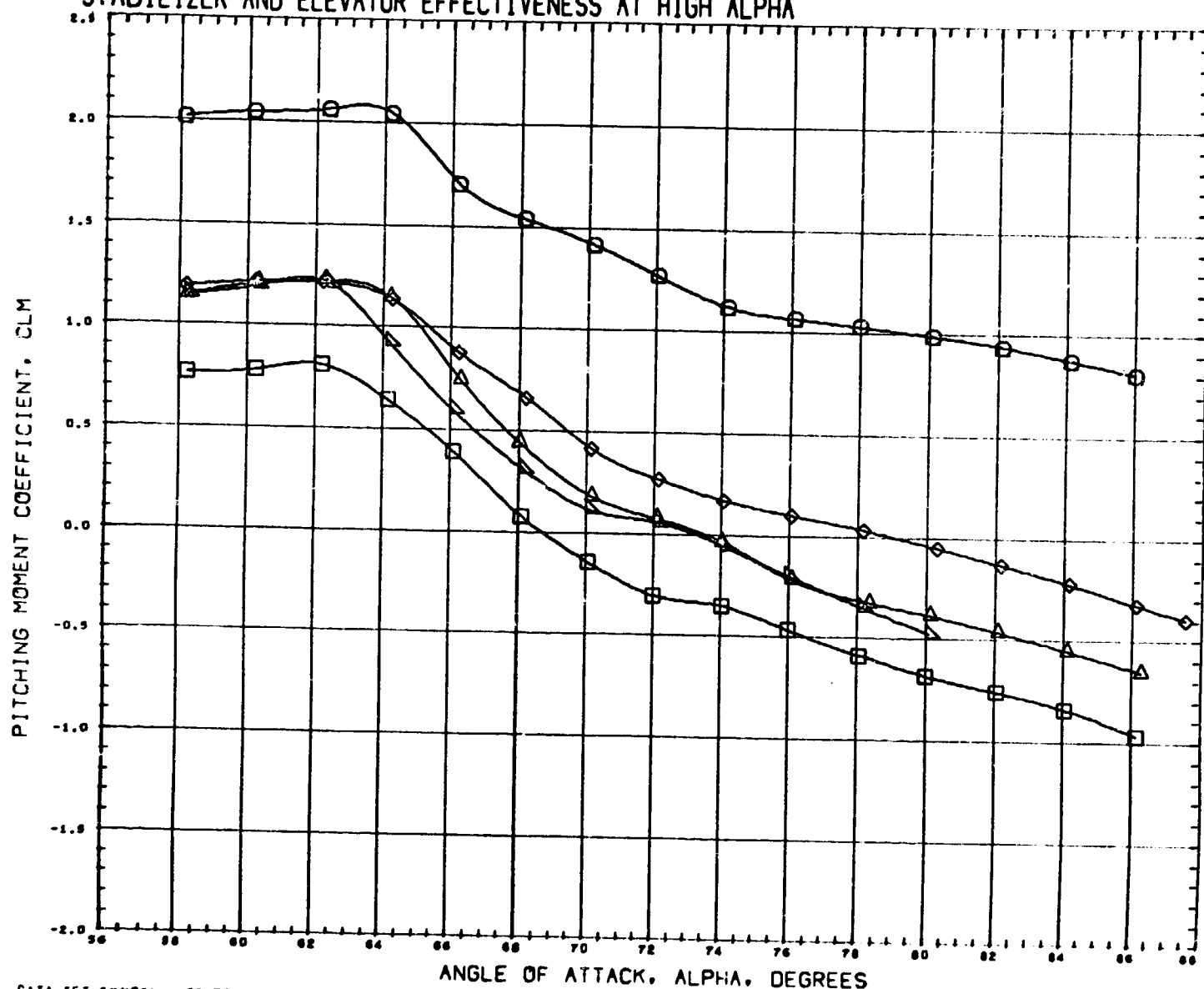
(RC2031)	STWT-1265	BOEING H-32 BOOSTER	88W4V3
(RC2031)	STWT-1265	BOEING H-32 BOOSTER	88W4H4V3
(RC2041)	STWT-1265	BOEING H-32 BOOSTER	88W4H4V3
(RC2041)	STWT-1265	BOEING H-32 BOOSTER	88W4H4V3
(RC2041)	STWT-1265	BOEING H-32 BOOSTER	88W4H4V3

NTAIL	ELEVTR	SPOILR
-20.000	0.000	
-20.000	-30.000	
0.000	0.000	
0.000	-30.000	

REFERENCE INFORMATION		
SREF	31.3600	SQ. IN
LRFP	2.2400	IN.
SRFP	14.6000	IN.
YMRP	11.9800	IN.
ZMRP	0.0000	IN.
SCALE	2.4330	IN.
	0.0067	

MACH 0.951

STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



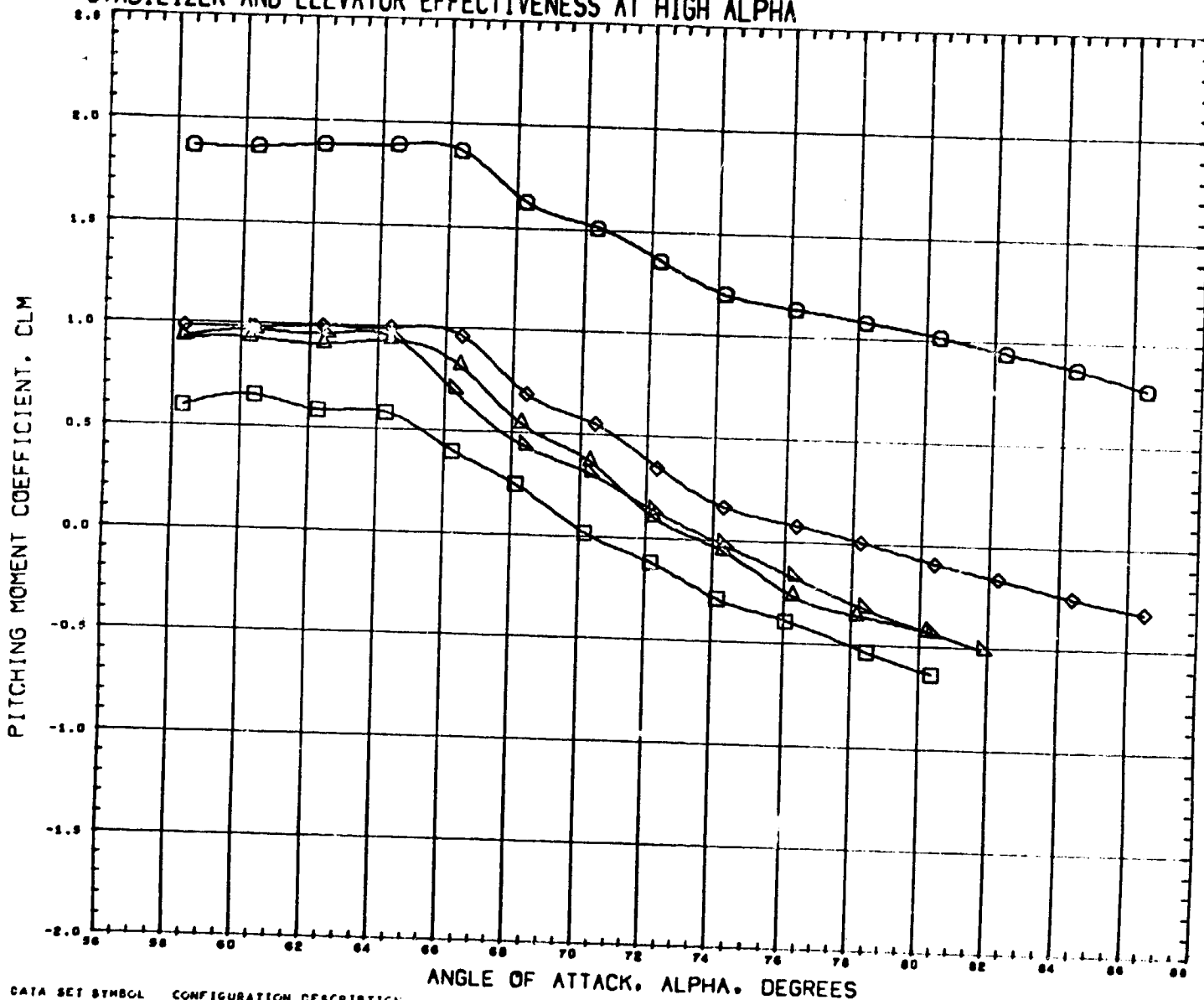
DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(R02(31))	BTWT-1265 BOEING H-32 BOOSTER 80W4V3
(R02(31))	BTWT-1265 BOEING H-32 BOOSTER 80W4M4V3
(R02(41))	BTWT-1265 BOEING H-32 BOOSTER 80W4M4V3
(R02(71))	BTWT-1265 BOEING H-32 BOOSTER 80W4M4V3
(R02(81))	BTWT-1265 BOEING H-32 BOOSTER 80W4M4V3

MACH 0.999

NTAIL	ELEVTR	SPOILR
-20.000	0.000	
-20.000	-30.000	
0.000	0.000	
0.000	-30.000	

REFERENCE INFORMATION		
SREF	31.3600	80. IN
LREF	2.2400	IN.
BREF	14.8000	IN.
XMRP	11.9800	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0067	

STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RC2031) BTMT-1265 BOEING N-32 BOOSTER 88W4V3

(RC2051) BTMT-1265 BOEING N-32 BOOSTER 88W4H4V3

(RC2041) BTMT-1265 BOEING N-32 BOOSTER 88W4H4V3

(RC2071) BTMT-1265 BOEING N-32 BOOSTER 88W4H4V3

(RC2081) BTMT-1265 BOEING N-32 BOOSTER 88W4H4V3

NTAIL ELEVTR SPOILR

-20.000 0.000

-20.000 -30.000

0.000 0.000

0.000 -30.000

REFERENCE INFORMATION

SREF 31.3600 SQ. IN

LREF 2.2400 IN.

QREF 14.8000 IN.

XMRP 11.9800 IN.

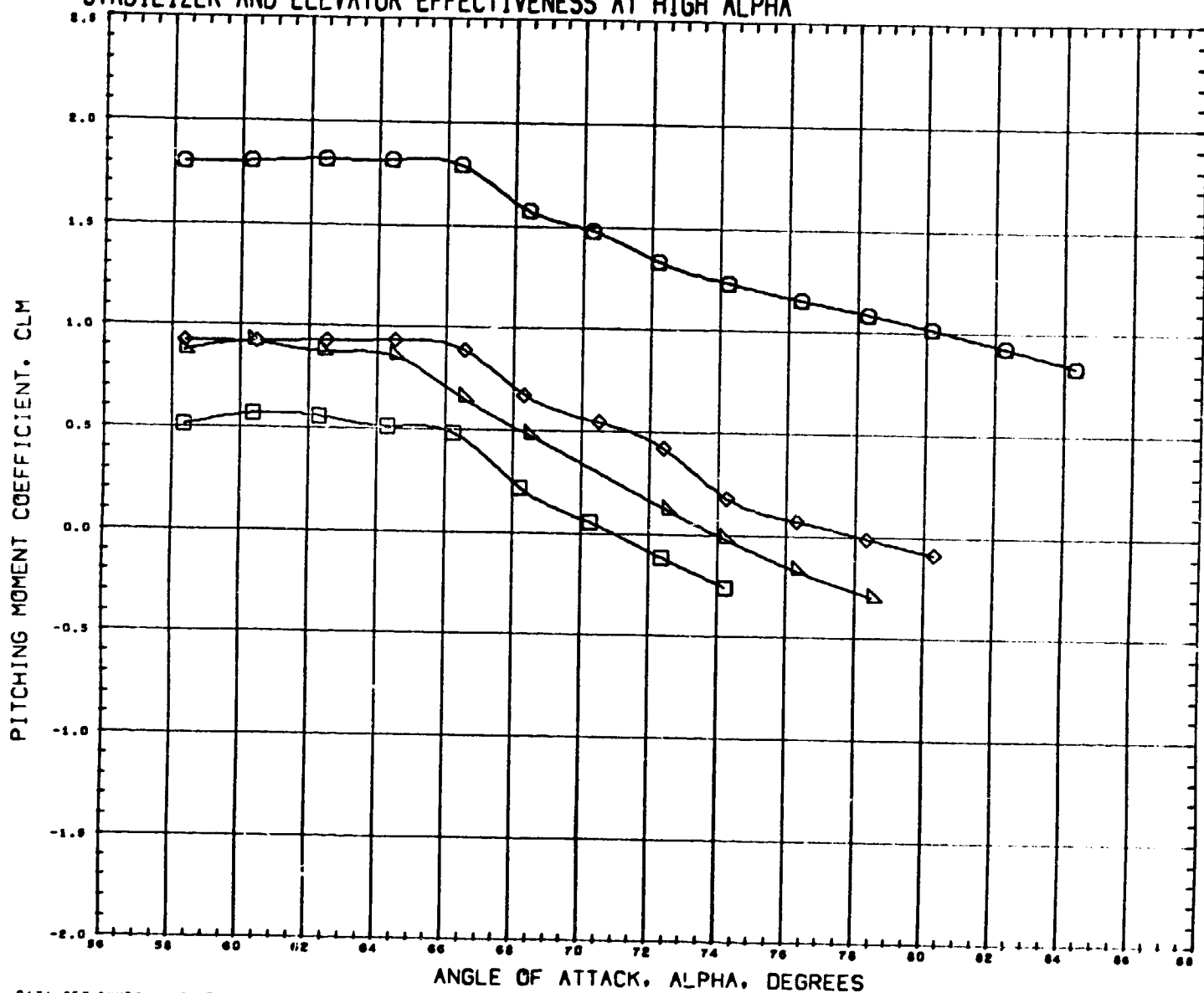
YMRP 0.0800 IN.

ZMRP 2.4330 IN.

SCALE 0.0067

MACH 1.050

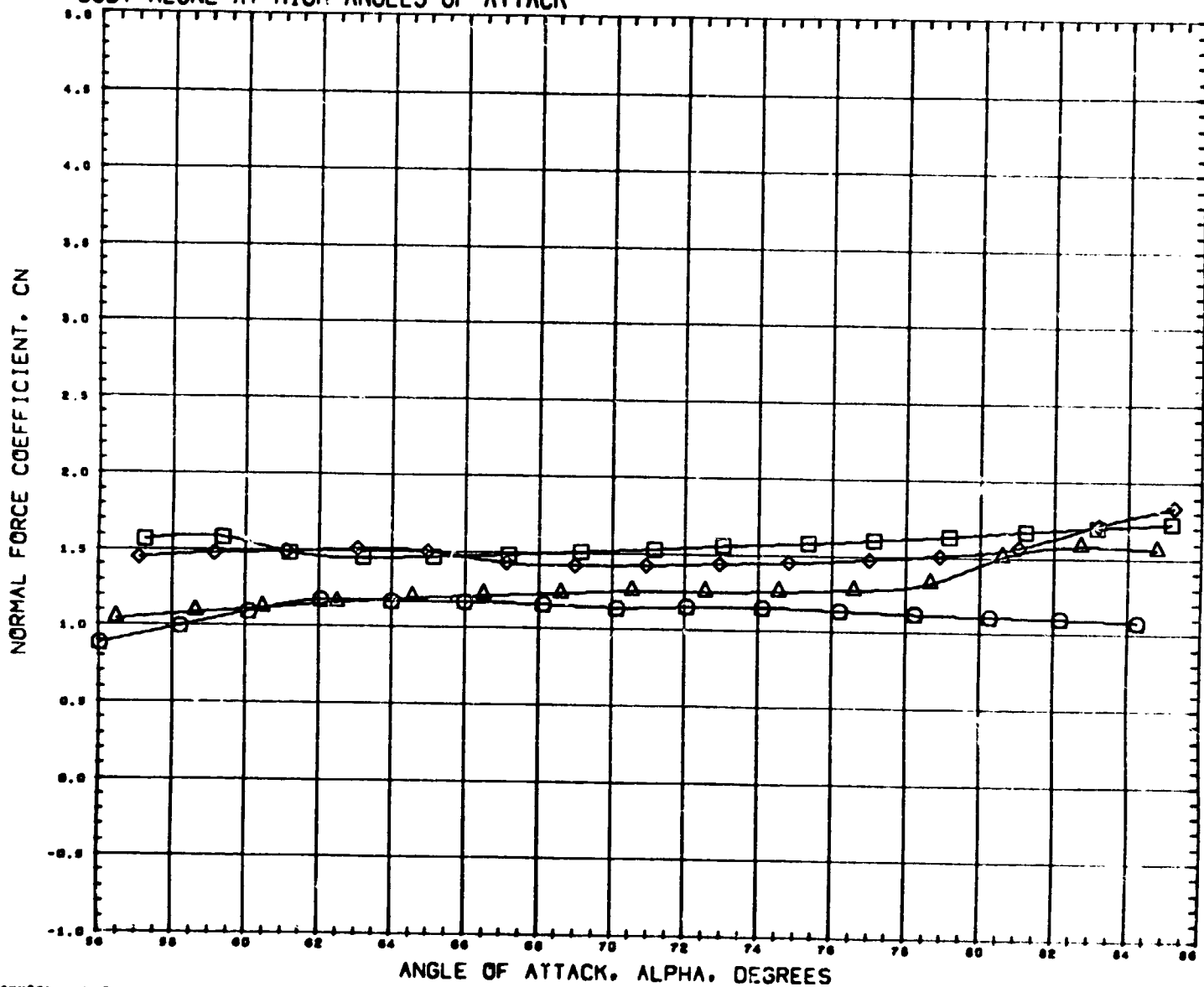
STABILIZER AND ELEVATOR EFFECTIVENESS AT HIGH ALPHA



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	MTAIL	ELEVTR	SPOILR	REFERENCE INFORMATION
(R02031)	BTWT-1265 BOEING H-32 BOOSTER B8W4V3	-20.000	0.000		SREF 31.3600 30. IN
(R02091)	DATA NOT AVAILABLE FOR ALL CONDITIONS	-20.000	-30.000		LRREF 2.2400 IN.
(R02041)	BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3	0.000	0.000		BRREF 14.6000 IN.
(R02071)	BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3	0.000	0.000		XMRP 11.9800 IN.
(R02061)	BTWT-1265 BOEING H-32 BOOSTER B8W4H4V3	0.000	-30.000		YMRP 0.0000 IN.
					ZMRP 2.4330 IN.
					SCALE 0.0067

MACH 1.099

BODY ALONE AT HIGH ANGLES OF ATTACK



SYMBOL	MACH	BETA	PARAMETRIC VALUES
○	0.299		0.000
△	0.909		
◇	0.799		
□	0.900		

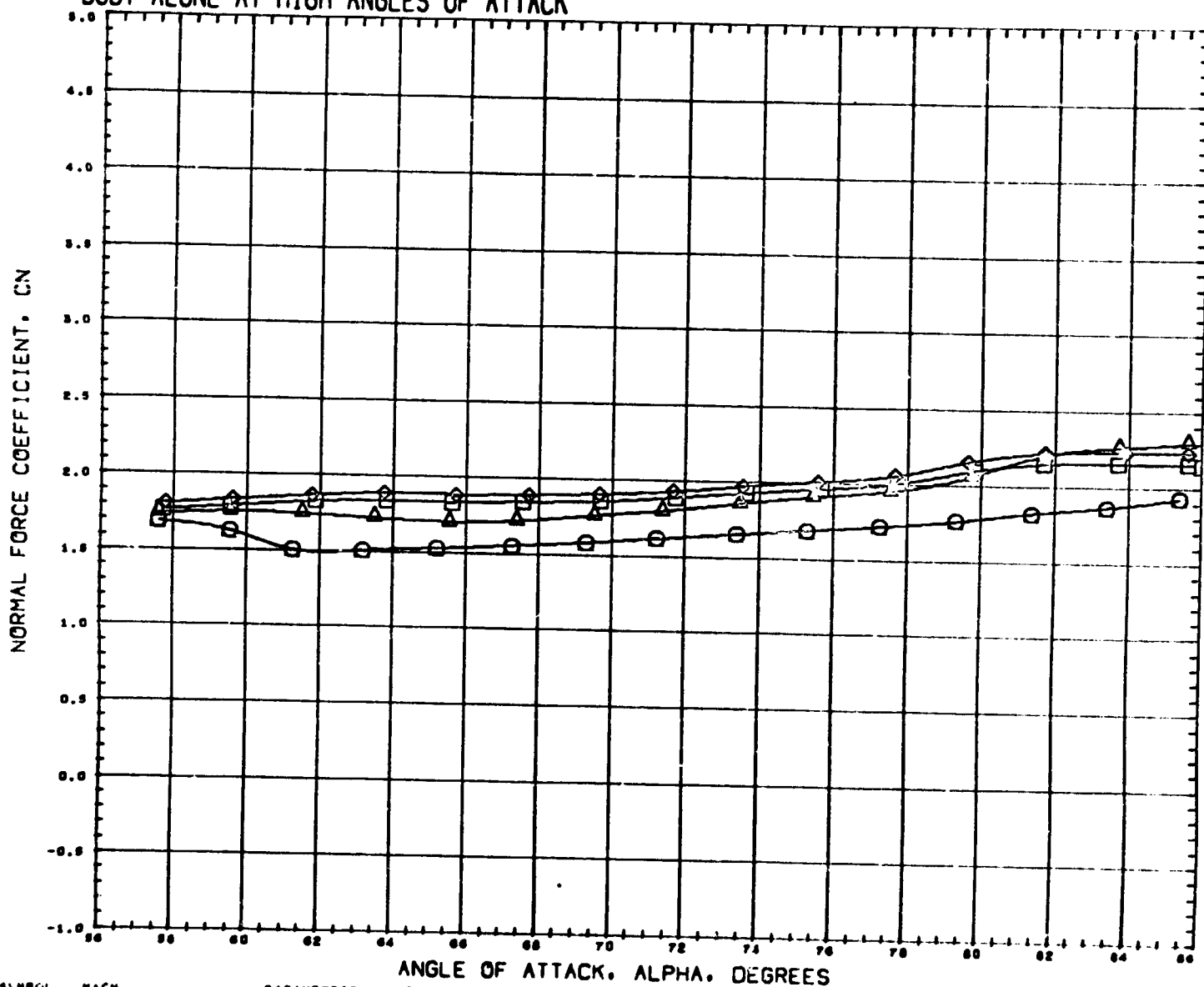
REFERENCE FILE

REFERENCE INFORMATION		
SREF	31.3000	80. IN
LREF	8.2400	IN.
BREF	14.6000	IN.
XMRP	11.9000	IN.
YMRP	0.0000	IN.
ZMRP	8.4330	IN.
SCALE	0.0067	

BTWT-1265 BOEING H-32 BOOSTER 88

(RD2011) 31 JAN 72 PAGE 278

BODY ALONE AT HIGH ANGLES OF ATTACK



SYMBOL	MACH	BETA	PARAMETRIC VALUES
△	0.951	0.000	
◇	1.001		
□	1.050		
○	1.100		

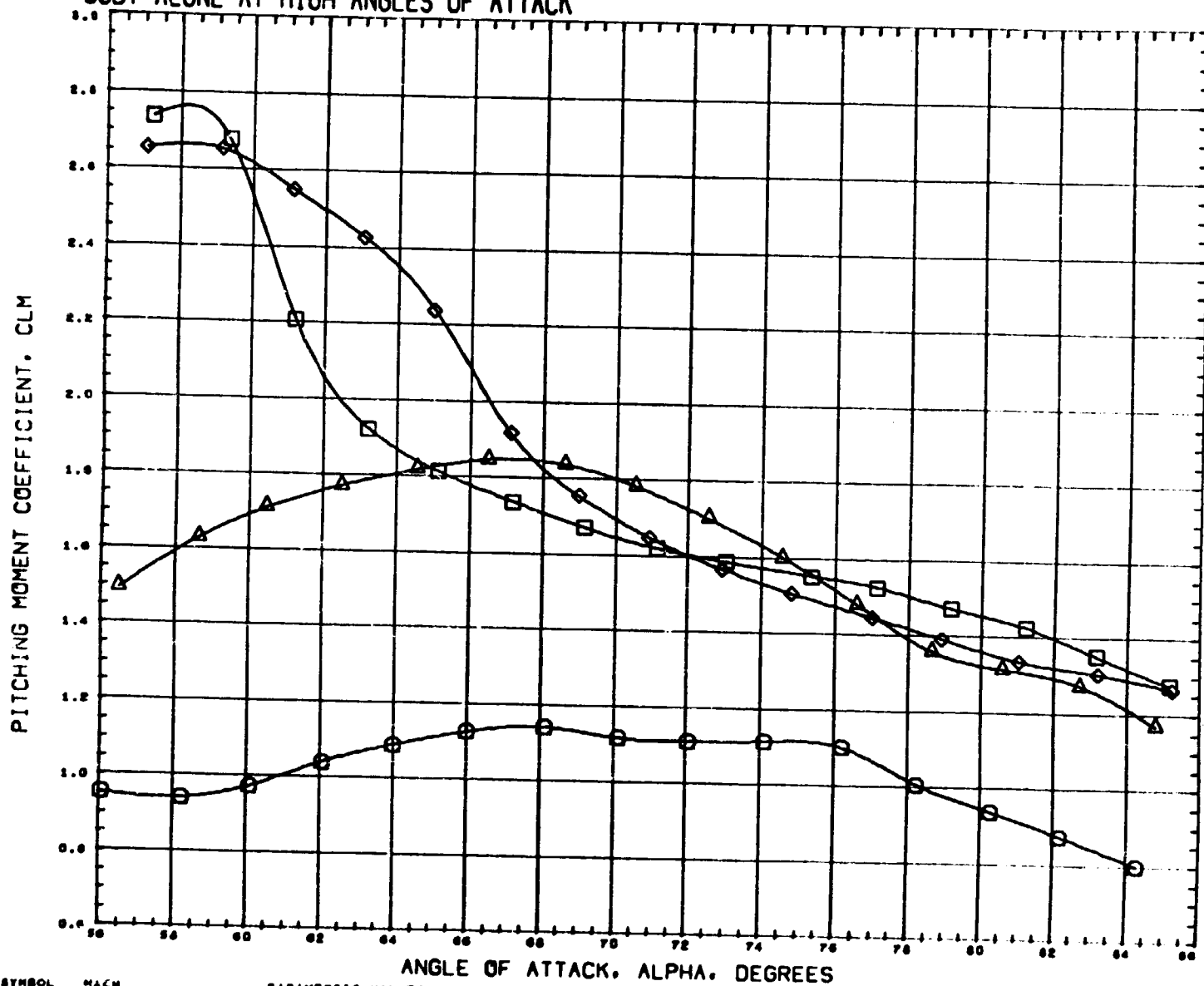
REFERENCE INFORMATION		
REF	31.3000	88. IN
LREF	2.2400	IN.
REF	14.0000	IN.
XREF	11.9000	IN.
YREF	0.000	IN.
ZREF	8.4350	IN.
SCALE	0.0067	

REFERENCE FILE

BTWT-1265 BOEING H-32 BOOSTER B8

(RD2011) 31 JAN 72 PAGE 279

BODY ALONE AT HIGH ANGLES OF ATTACK



SYMBOL	MACH	BETA	PARAMETRIC VALUES
□	0.299		0.000
◇	0.399		
△	0.799		
○	0.999		

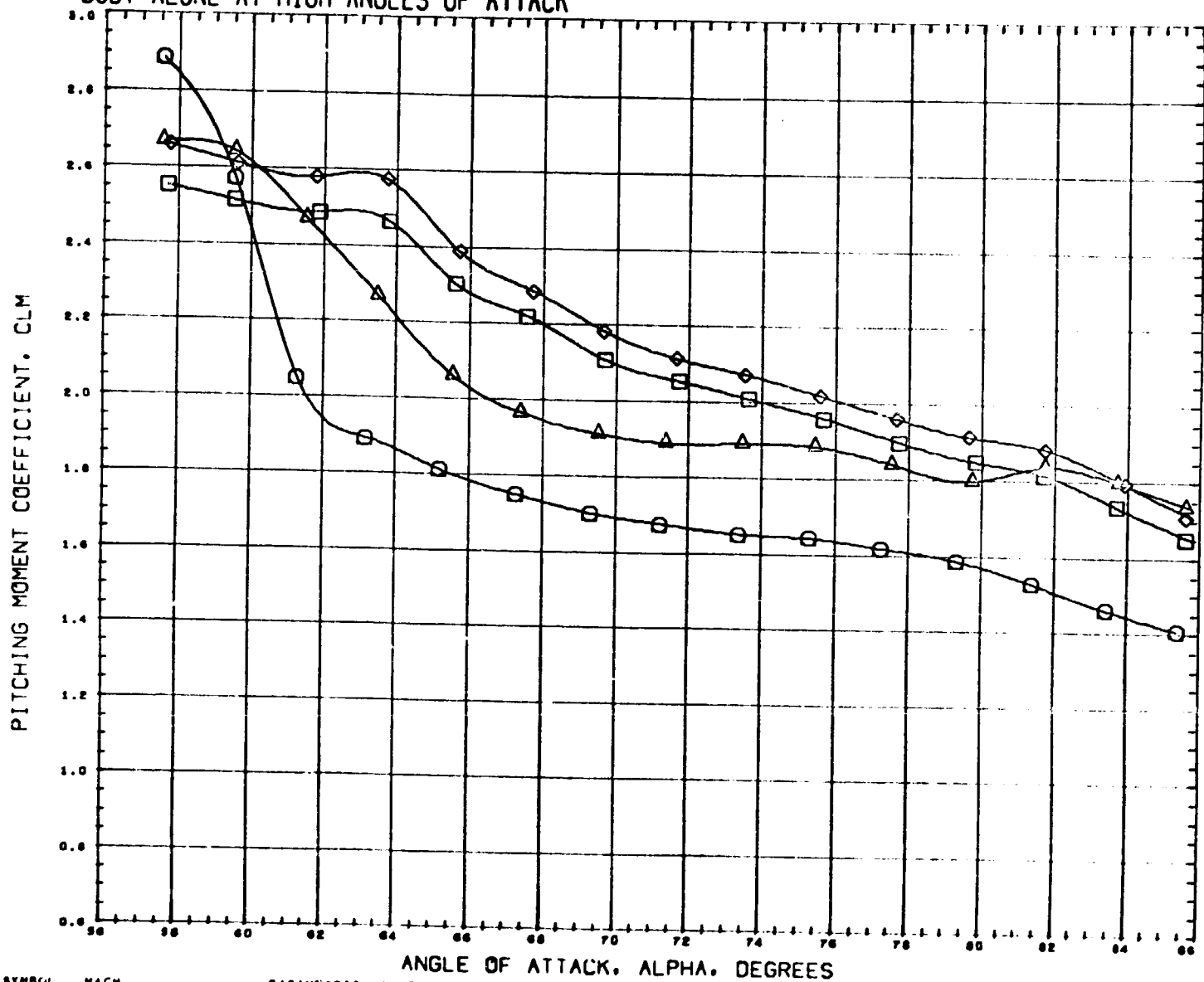
REFERENCE FILE

REFERENCE INFORMATION		
SRF	31.3400	88. IN
LRP	2.2400	IN.
SRF	14.8000	IN.
YMRP	11.8800	IN.
YMRP	0.0000	IN.
ZMRP	2.4330	IN.
SCALE	0.0007	

BTWT-1265 BOEING H-32 BOOSTER 88

(RD2011) 31 JAN 72 PAGE 280

BODY ALONE AT HIGH ANGLES OF ATTACK



SYMBOL MACH BETA PARAMETRIC VALUES
 ○ 0.951 0.000
 △ 1.001
 ◇ 1.050
 □ 1.100

REFERENCE FILE

REFERENCE INFORMATION
 SREF 31.3600 86. IN
 LREF 2.2400 IN.
 OREF 14.8000 IN.
 XHRP 11.9800 IN.
 YHRP 0.0000 IN.
 ZHRP 2.4330 IN.
 SCALE 0.0067

BTWT-1265 BOEING H-32 BOOSTER 88

(RD2011) 31 JAN 72 PAGE 281