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DMS-DR-1006

CR-103151

—SPACE SHUTTLE—

Variable Geometry

AEDC VON KARMAN TUNNEL "C" TEST VT0055 SAMSO-GD/CONVAIR T-18 HYPERSONIC STATIC STABILITY AND CONTROL EFFECTIVENESS INVESTIGATION

WIND TUNNEL TEST RESULTS DATA REPORT

JULY, 1970

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SPACE DIVISION CHRYSLER CORPORATION

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REPORT NUMBER: DMS-DR-1006

PUBLISHED: July, 1970

SPACE SHUTTLE
WIND TUNNEL TEST
DATA REPORT

TEST FACILITY: AEDC VON KARMAN TUNNEL "C"; TEST VT0055

CONFIGURATION: SAMSO-GD/CONVAIR T-18

MODEL SCALE: 0.0182

TEST PURPOSE: HYPERSONIC STATIC STABILITY AND CONTROL EFFECTIVENESS INVESTIGATION

MACH NUMBER: 10.0

TESTS CONDUCTED BY:

GENERAL DYNAMICS/CONVAIR DIVISION

TEST CONDUCTOR: W. H. GALLAHER

PROJECT ENGINEER: C. J. SPURLIN

TEST DATE: 2-9 JANUARY 1970

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

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ABSTRACT

This report presents results of an experimental wind tunnel investigation on the SAMSO-GD/Convair T-18 variable geometry configuration of the Space Transportation System (STS) study. Tests of this configuration were conducted in the AEDC von Karman Facility, Tunnel "C" hypersonic wind tunnel. The nominal free stream tunnel conditions during the test were a Mach number = 10.0, a Reynolds number = 10^6 per foot and a free stream dynamic pressure of 1.2 psia. Parameters investigated included: a) static longitudinal stability over a range of angles of attack from 8 degrees to 55 degrees; b) static directional stability over a range of sideslip angle from -8 degrees to 8 degrees; c) control effectiveness using elevon deflections ranging from -20 degrees to 20 degrees and ruddervator deflections ranging from -20 degrees to 40 degrees.

TEST CONDITIONS
TEST Test VT0055

MACH NUMBER	REYNOLDS NUMBER per unit length	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)
10	1×10^6	1.20	1440

BALANCE UTILIZED: #24

CAPACITY:		ACCURACY:	COEFFICIENT TOLERANCE:
NF	700 Lb		
SF	700 Lb		
AF	150 Lb		
PM	1400 in-lb		
YM	1400 in-lb		
RM	300 in-Lb.		

COMMENTS:

DATA REDUCTION

The force and moment coefficient data were corrected for the balance tares, base pressure, and balance cavity pressure, and reduced about the moment reference center (see Figure 2). The reference moment center is located 52.39 percent of the body length aft of the nose or 14.853 inches and 0.698 inch below the balance sting centerline. The reference dimensions utilized for this test are listed below:

1. Reference area = total platform area = 0.7706 ft^2 = 111 in^2
2. Reference length = total body length = 2.358 ft = 28.3 in.
3. Reference span = body width = 0.364 ft = 4.36 in.

Force and moment body axis data were initially calculated and stability axis data are based on total axial force coefficient values.

CONFIGURATIONS INVESTIGATED

Configuration

Nomenclature

B = Body

E = Split elevon

V = Vee-tail (roll-out angle = 45 degrees)

Refer to the immediately following pages for dimensional data on the above components.

Combinations Tested

BE

BEV

See Figure 2 for a general sketch of the configuration. The above configurations were tested with the split elevon deflected over a range from -20 to +20 degrees and the ruddervator deflected over a range from -20 to +40 degrees (longitudinal control) and from 0 to +20 degrees (directional control).

TECHNICAL REPORT STANDARD TITLE PAGE

1. REPORT NO. NASA CR-103151	2. GOVERNMENT ACCESSION NO.	3. RECIPIENT'S CATALOG NO.
4. TITLE AND SUBTITLE (Space Shuttle) AEDC von Karman Tunnel "C", Test VT0055, SAMSO-GD/Convair T18; Hypersonic Static Stability and Control Effectiveness Investigation		5. REPORT DATE July 1970
		6. PERFORMING ORGANIZATION CODE CCSD
7. AUTHOR(S) W. H. Gallaher, GD/C and C. J. Spurlin, GD/C		8. PERFORMING ORGANIZATION REPORT # DMS-DR-1006
9. PERFORMING ORGANIZATION NAME AND ADDRESS Chrysler Corporation Space Division Michoud Operations P.O. Box 29200 New Orleans, Louisiana 70129		10. WORK UNIT NO.
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		14. SPONSORING AGENCY CODE S&E-AERO-A

15. SUPPLEMENTARY NOTES
Contractor Monitor: C. Dale Andrews
Aero-Astrodynamics Laboratory

16. ABSTRACT

This report presents results of an experimental wind tunnel investigation on the SAMSO-GD/Convair T-18 variable geometry configuration of the Space Transportation System (STS) study. Tests of this configuration were conducted in the AEDC von Karman Facility, Tunnel "C" hypersonic wind tunnel. The nominal free stream tunnel conditions during the test were a Mach number = 10.0, a Reynolds number = 10^6 per foot and a free stream dynmaic pressure of 1.2 psia. Parameters investigated included: a) static longitudinal stability over a range of angles of attack from 8 degrees to 55 degrees; b) static directional stability over a range of sideslip angle from -8 degrees to 8 degrees; c) control effectiveness using elevon deflections ranging from -20 degrees to 20 degrees and ruddervator deflections ranging from -20 degrees to 40 degrees.

Contract No. NAS8-4016 with Chrysler Corporation is for data presentation of information generated by various Space Shuttle Phase B contractors, and NASA Centers.

17. KEY WORDS	18. DISTRIBUTION STATEMENT U. S. Government Agencies and contractors only		
19. SECURITY CLASSIF. (of this report) Unclassified	20. SECURITY CLASSIF. (of this page) Unclassified	21. NO. OF PAGES 22 Front 39 Data Plots 61 Total	22. PRICE

MSFC - Form 3292 (May 1969)

MODEL COMPONENT: BODY - (B)

GENERAL DESCRIPTION: .0182 Scale Model of the SAMSO - GD/Convair T-18 Variable Geometry Booster Configuration.

DRAWING NUMBER:

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length, Feet	129.6	2.358
Max. Width, inches	240	4.36
Max. Depth, inches	240	4.36
Fineness Ratio	.154	.154
Area, Feet^2		
Max. Cross-Sectional	332.75	.11
Planform	2331	.7706
Wetted		
Base	127.29	.0421

MODEL COMPONENT: Split Elevon - (E)

GENERAL DESCRIPTION: Elevons on Bottom Base of Body

DRAWING NUMBER: _____

DIMENSIONS:

	FULL-SCALE	MODEL SCALE
Area, Feet^2	134.948	.0045
Span (equivalent), inches	160.6	2.92
Inb'd equivalent chord, inches	121.00	2.200
Outb'd equivalent chord, inches	121.00	2.200
Ratio Elevator chord/horizontal tail chord		
At Inb'd equiv. chord		
At Outb'd equiv. chord		
Sweep Back Angles, degrees		
Leading Edge		
Tailing Edge		
Hingeline		
Area Moment (Normal to hinge line), ft^3		
Taper Ratio	1.0	1.0

MODEL COMPONENT: Vee-Tail - (V)

GENERAL DESCRIPTION: Vee-Tail at Roll out Angle - 45 Degrees

DRAWING NUMBER: _____

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Area, Feet^2	674.27	.2229
Sem. Span (Planform), Inches	231.00	4.20
Inb'd equivalent chord, inches	260.70	4.74
Outb'd equivalent chord, inches	159.50	2.9
Ratio Ruddervator Chord/Vee-Tail tail chord		
At Inb'd equiv. chord	.35	.35
At Outb'd equiv. chord	.35	.35
Sweep Back Angles, degrees		
Leading Edge	45	45
Tailing Edge	29.3	29.3
Hingeline	35.6	35.6
Area Moment (Normal to hinge line), ft^3		
Taper Ratio	.612	.612
Aspect Ratio	2.2	2.2

TEST AEDC VT0055 DATA SET COLLATION SHEET

Force - SAMSO - GD/Convair T-18 0.0182 Scale Model. Hypersonic Static Stability and Control Effectiveness.

☐ PRETEST
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	CONTROL DEFLECTION δe_R	δe_L	δr_R	δr_L	NO. of RUNS	MACH NUMBERS 10.0											
RT4011	BE	B	0	0	0	OFF	OFF	1	24											
RT4022	BE	↑	+5	0	0	OFF	OFF	1	25											
RT4031	BEV	↕	0	0	0	0	0	1	26											
RT4041	↑	↕	↑	+10	+10	0	0	1	27											
RT4051	↕	↕	↕	+20	+20	0	0	1	28											
RT4061	↕	↕	↕	+20	+20	+20	-20	1	29											
RT4071	↕	↕	↕	+20	+20	+10	-10	1	30											
RT4081	↕	↕	↕	+20	+20	+40	-40	1	31											
RT4091	↕	↕	↕	-10	-10	0	0	1	32											
RT4101	↓	↓	↕	0	0	-40	+40	1	33											
RT4111	BEV	B	↓	0	0	+20	-20	1	34											
RT4123	BE	A	0	0	0	OFF	OFF	1	54											
RT4134	BE	↑	+5	0	0	OFF	OFF	1	55											
RT4143	BEV	↕	0	0	0	0	0	1	56											
RT4154	↑	↕	+5	0	0	0	0	1	57											
RT4163	↕	↕	0	+10	+10	0	0	1	58											
RT4173	↕	↕	↑	-10	-10	0	0	1	59											
RT4183	↕	↕	↕	-20	-20	0	0	1	60											
RT4193	↓	↓	↓	0	0	+20	-20	1	61											
RT4203	BEV	A	0	0	0	-40	+40	1	62											

COEFFICIENTS:

1	7	13	19	25	31	37	43	49	55	61
CNM	CN	CYM	CY	CRL	CA TOTL	CA BASE	CL	CD		9

NDV

α or β SCHEDULES

$\alpha A = 30$ TO 55 ; $\Delta\alpha = 5$ $\beta D = -8$ TO 8 ; $\Delta\beta = 2$

$\alpha B = 8, 10$ TO 35 ; $\Delta\alpha = 5$

B = BODY
E = SPLIT ELEVON
V = VEE TAIL

CUFFT / OP

TEST AEDC VT0055 DATA SET COLLATION SHEET

Force - SAMSO - GD/Convair T-18 0.0182 Scale Model. Hypersonic Static Stability and Control Effectiveness.

☐ PRETEST
☒ POSTTEST

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	CONTROL DEFLECTION δ_{e_R}	δ_{e_L}	δ_{r_R}	δ_{r_L}	NO. of RUNS	MACH NUMBERS 10.0
RT4213	BEV	A	0	+20	+20	+20	-20	1	63
RT4223		A	0	+20	+20	+10	-10	1	64
RT4233		A	0	+20	+20	0	0	1	65
RT4245		23	D	+20	+20	0	0	1	98
RT4255				+20	+20	+5	+5	1	99
RT4265				+20	+20	+10	+10	1	100
RT4275				+20	+20	+10	0	1	101
RT4285				+20	+20	0	+10	1	102
RT4295				+20	+20	+20	+20	1	103
RT4305		23	D	+20	+20	0	+20	1	104
RT4311		B	0	+20	+20	0	+20	1	105
RT4321		B	0	+20	+20	+20	0	1	106
RT4335		23	D	+20	+20	+20	0	1	107
RT4345		23	D	+20	+20	+20	+40	1	108
RT4351	BEV	B	0	+20	+20	+20	+40	1	109

COEFFICIENTS: 1 CNM, 7 CN, 13 CYM, 19 CY, 25 CRL, 31 CATOTL, 37 CABASE, 43 CL, 49 CD, 55, 61 9 (NDV)

α or β SCHEDULES: $\alpha A = 30$ TO 55; $\Delta\alpha = 5$ $\beta D = -8$ TO 8; $\Delta\beta = 2$
$\alpha B = 8, 10$ TO 35; $\Delta\alpha = 5$

B = BODY
E = SPLIT ELEVON
V = VEE TAIL

SHEET 2 OF 2

TEST AEDC VT0055 DATA SET DESCRIPTOR SHEET

Force - SAMSO - GD/Convair T-18 0.0182 Scale Model. Hypersonic Static Stability and Control Effectiveness.

DATA SET IDENTIFIER	DATA SET DESCRIPTOR (1 … 11 … 21 … 31 … 41)		CURVE SLOPE RANGE 51 LOWER LIMIT	CURVE SLOPE RANGE 61 UPPER LIMIT
RT4011	AEDC VT0055 CONVAIR (T-18) BE (0.018.2 SCALE)	1.1	9.5	20.5
RT4022	AEDC VT0055 CONVAIR (T-18) BE (0.018.2 SCALE)	1.1	↑	↑
RT4031	AEDC VT0055 CONVAIR (T-18) BEV (0.018.2 SCALE)	1.1	↑	↑
RT4041		1.1	↑	↑
RT4051		1.1	↑	↑
RT4061		1.1	↑	↑
RT4071		1.1	↑	↑
RT4081		1.1	↑	↑
RT4091		1.1	↑	↑
RT4101		1.1	↓	↓
RT4111	AEDC VT0055 CONVAIR (T-18) BEV (0.018.2 SCALE)	1.1	9.5	20.5
RT4123	AEDC VT0055 CONVAIR (T-18) BE (0.018.2 SCALE)	1.1	3.4.5	4.5.5
RT4134	AEDC VT0055 CONVAIR (T-18) BE (0.018.2 SCALE)	1.1	↑	↑
RT4143	AEDC VT0055 CONVAIR (T-18) BEV (0.018.2 SCALE)	1.1	↑	↑
RT4154		1.1	↑	↑
RT4163		1.1	↑	↑
RT4173		1.1	↑	↑
RT4183		1.1	↑	↑
RT4193		1.1	↓	↓
RT4203	AEDC VT0055 CONVAIR (T-18) BEV (0.018.2 SCALE)	1.1	3.4.5	4.5.5

1	11	21	31	41	51	61
0.7706 FT²	2.358 FT	0.364 FT	1.238 FT	0.0 FT	0.1696 FT	CONVAIR TM69-AE-25
REFERENCE AREA S_R	LONGITUDINAL ℓ_R	LATERAL b_R	LONGITUDINAL XMRP	LATERAL YMRP	VERTICAL ZMRP	SOURCE DOCUMENT
	REFERENCE LENGTH		MOMENT REFERENCE POINT			

SHEET 1 OF 2

TEST AEDC VT0055 DATA SET DESCRIPTOR SHEET

Force - SAMSO - GD/Convair T-18 0.0182 Scale Model. Hypersonic Static Stability and Control Effectiveness.

DATA SET IDENTIFIER	DATA SET DESCRIPTOR (1, 11, 21, 31, 41)		CURVE SLOPE RANGE 51 LOWER LIMIT	CURVE SLOPE RANGE 61 UPPER LIMIT
RT4213	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	1.1	34.5	45.5
RT4223		1.1	34.5	45.5
RT4233		1.1	34.5	45.5
RT4245		2.1	-2.5	2.5
RT4255		2.1		
RT4265		2.1		
RT4275		2.1		
RT4285		2.1		
RT4295		2.1		
RT4305		2.1	-2.5	2.5
RT4311		1.1	9.5	20.5
RT4321		1.1	9.5	20.5
RT4335		2.1	-2.5	2.5
RT4345		2.1	-2.5	2.5
RT4351	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	1.1	9.5	20.5

1	11	21	31	41	51	61
0.7706 FT²	2.358 FT	0.364 FT	1.238 FT	0.0 FT	0.1696 FT	CONVAIR TN 69-AE-25
REFERENCE AREA S_R	LONGITUDINAL ℓ_R	LATERAL b_R	LONGITUDINAL XMRP	LATERAL YMRP	VERTICAL ZMRP	SOURCE DOCUMENT
	REFERENCE LENGTH		MOMENT REFERENCE POINT			

SHEET 2 OF 2

TEST FACILITY

The von Karman Facility, Tunnel "C" at AEDC is a closed circuit, continuous flow hypersonic wind tunnel having an axisymmetric contoured nozzle and a 50 inch diameter test section. The tunnel can be operated at Mach 10.0 or at Mach 12.0 by changing the throat section of the nozzle. The entire tunnel is cooled by an integral, external water jacket. The tunnel is equipped with a model support system which is retracted from the tunnel for model changes and for cooling, allowing all model work to be accomplished without disturbing tunnel operations.

The maximum operating stagnation temperature of the tunnel is 1890° F while the stagnation pressure ranges from 200 psia to 2000 psia. Minimum and maximum free stream dynamic pressure range is from 0.3 psia to 2.8 psia. Free stream Reynolds number per foot ranges from 0.3×10^6 to 2.2×10^6.

Six fused quartz windows are provided. Two on each side of the test section are used for shadowgraph or Schlieren systems while two windows on the top are used for photographic purposes.

A more detailed discussion of the tunnel is given in the AEDC Test Facilities Handbook (Eighth Edition) dated December 1969.

NOMENCLATURE

SYMBOL	SADSAC SYMBOL	DEFINITION
$\bar{V}$		velocity of vehicle relative to surrounding atmosphere; m/sec, ft/sec
α	ALPHA	angle of attack, angle between the projection of the wind X_w-axis on the body X, Z-plane and body X-axis; deg
β	BETA	sideslip angle, angle between the wind X_w-axis and the projection of this axis on the body X-Z-plane; deg
γ		ratio of specific heats
Γ	DIHDRL	wing dehedral angle; deg
δ_e	ELEVON	elevon deflection, degrees (positive for trailing edge down)
δ_r	RUDVTR or RUDDER	ruddernator deflection, degrees (positive for trailing edge down) or rudder deflection, degrees (positive for trailing edge right viewed from rear)
ρ		air density, Kg/m^3, $slugs/ft^3$
θ		pitch angle, angle of rotation about the body Y-axis, positive when the positive Z-axis is rotated toward the positive X-axis; deg
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; deg
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; deg

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.

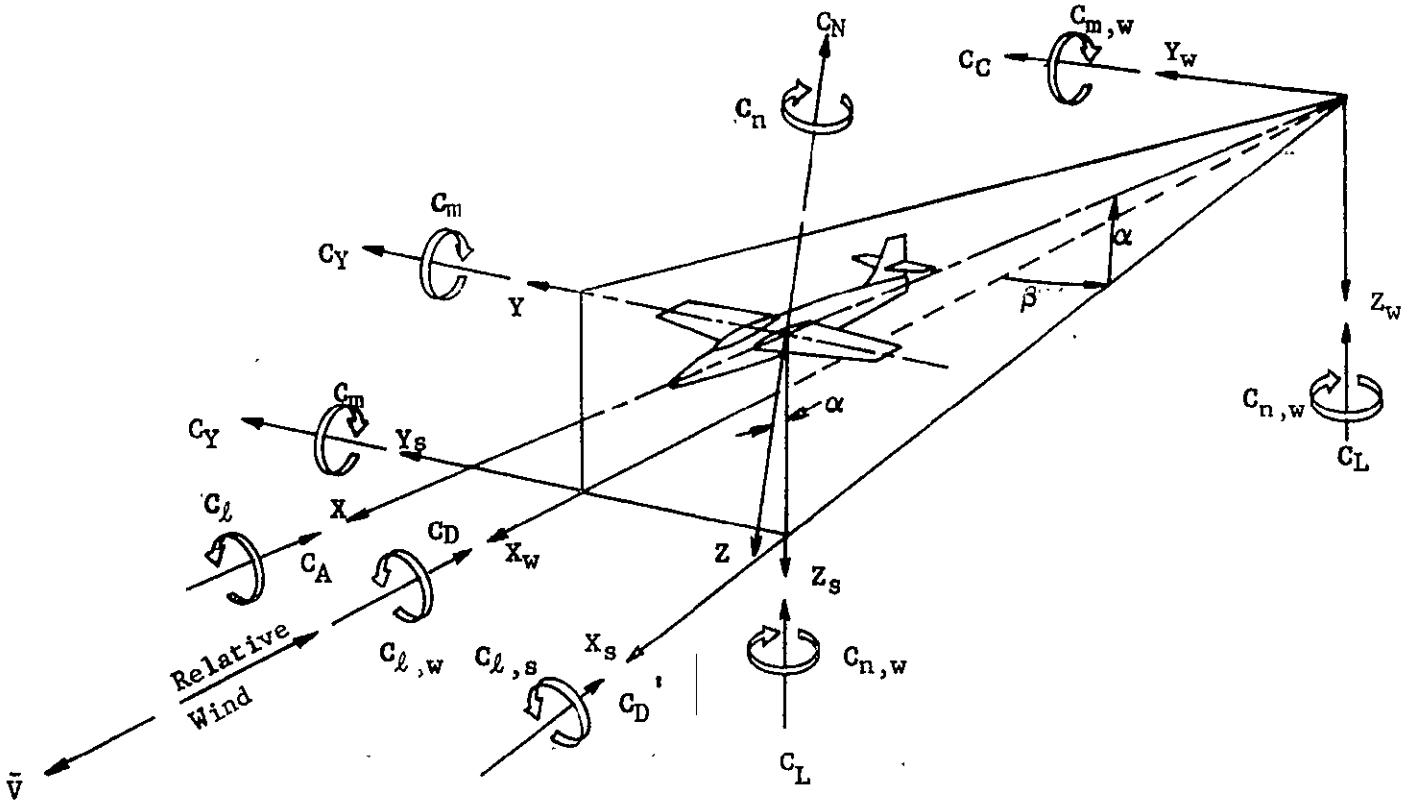


Figure 1. Axis systems, showing direction and sense of force and moment coefficients, angle of attack, and sideslip angle

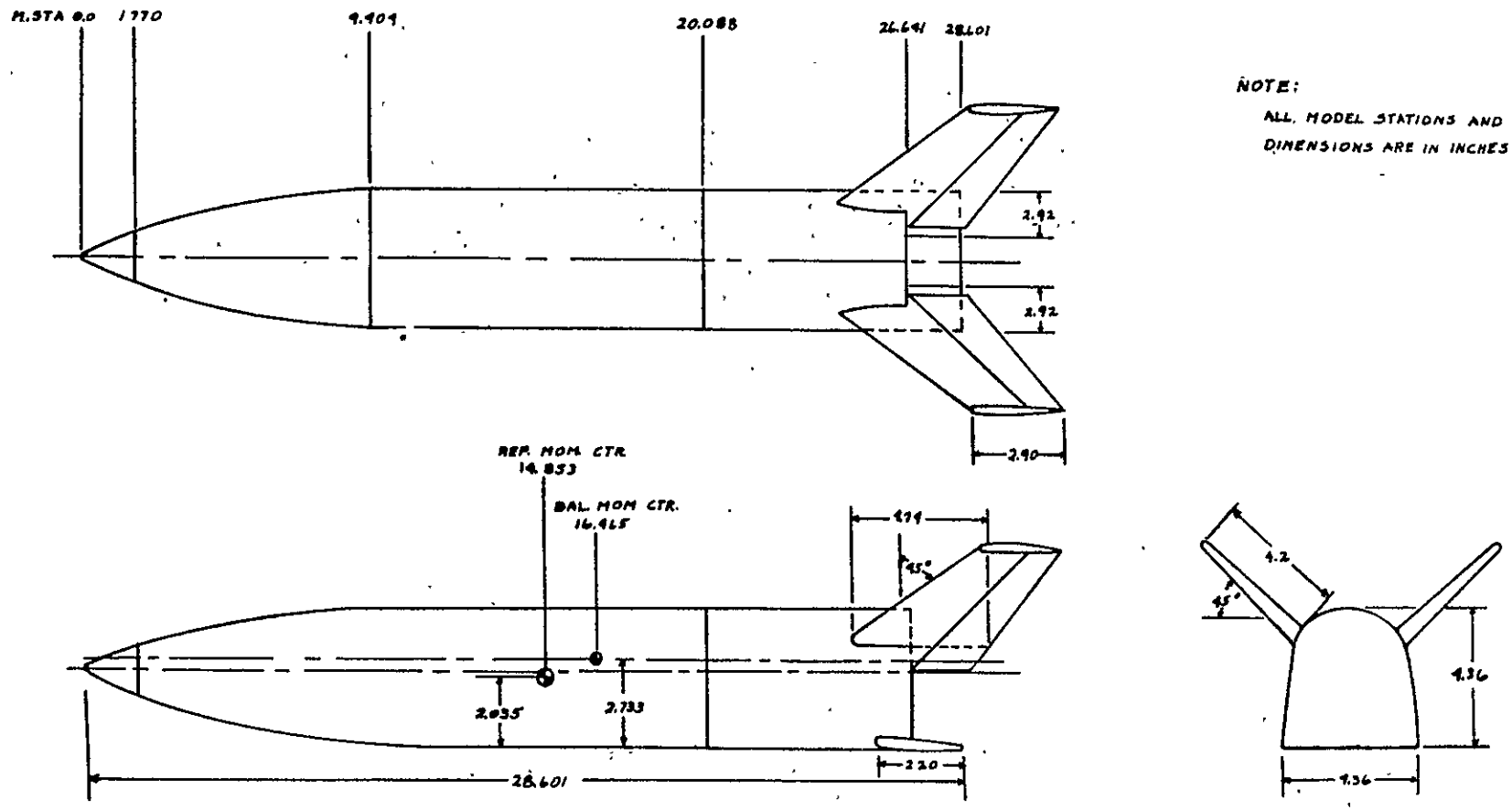


Figure 2. 3-View Sketch of a 0.0182 Scale Model of the GD/Convair (T-18) Booster.

Body and Elevon - (BE)

Figure 3: A 0.0182 Scale Model of the GD/Convair Booster (T-18) Configuration
Body Elevon and Vee-Tail - (BEV)

NOT REPRODUCIBLE

DATA DISPLAY INDEX

I. Multiple, Dependent Variable vs. Angle of Attack

Data Set Identifier						Data Begins On Plot Page
(*) AT4183	AT4091	AT4031	AT4041	AT4051		1
(*) AT4011	AT4123	AT4031	AT4143			3
(*) AT4031	AT4143	AT4111	AT4193	AT4101	AT4203	5
(*) AT4051	AT4233	AT4071	AT4223	AT4061	AT4213	7
(*) AT4022	AT4134	AT4154				9
(*) AT4311	AT4321	AT4351				11
(#) AT4311	AT4321	AT4351				13
(#) AT4245	AT4255	AT4265	AT4295			16
(#) AT4285	AT4275	AT4305	AT4335	AT4345		19

(*) Data Set Dependent Variables - CL, L/D

(#) Data Set Dependent Variables - CY, CRL, CYM

II. Multiple, Dependent Variable Cross-Plots

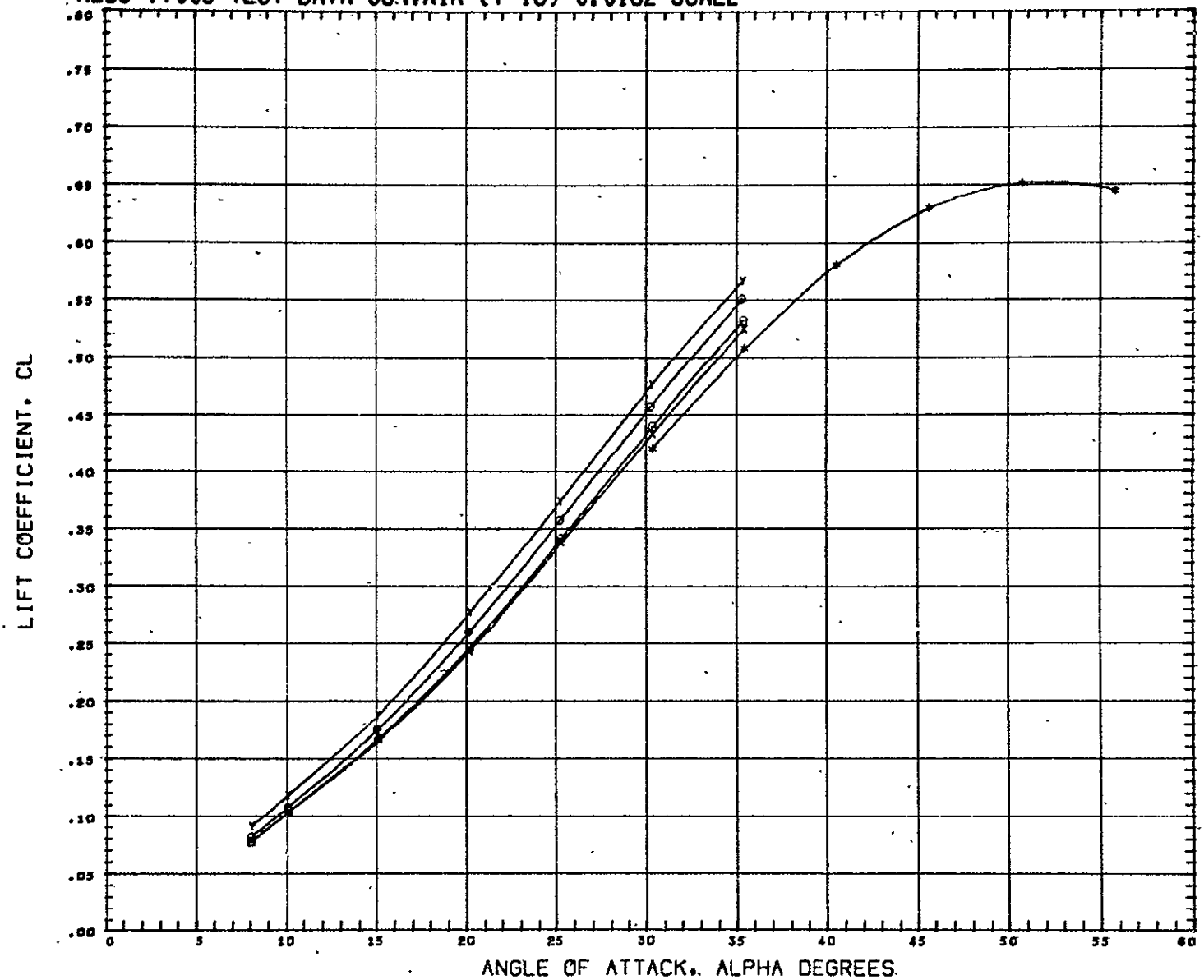
Data Set Identifier						Data Begins On Plot Page
AT4183	AT4091	AT4031	AT4041	AT4051		22
AT4011	AT4031	AT4123	AT4143			25
AT4031	AT4143	AT4111	AT4193	AT4101	AT4203	28
AT4051	AT4233	AT4071	AT4223	AT4061	AT4213	31
AT4022	AT4134	AT4154				34
AT4311	AT4321	AT4351				37

Dependent Variables - CD vs. CL, CNM vs. CL
CATOTL vs. CN

NASA-MSFC-MAF

DATA

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



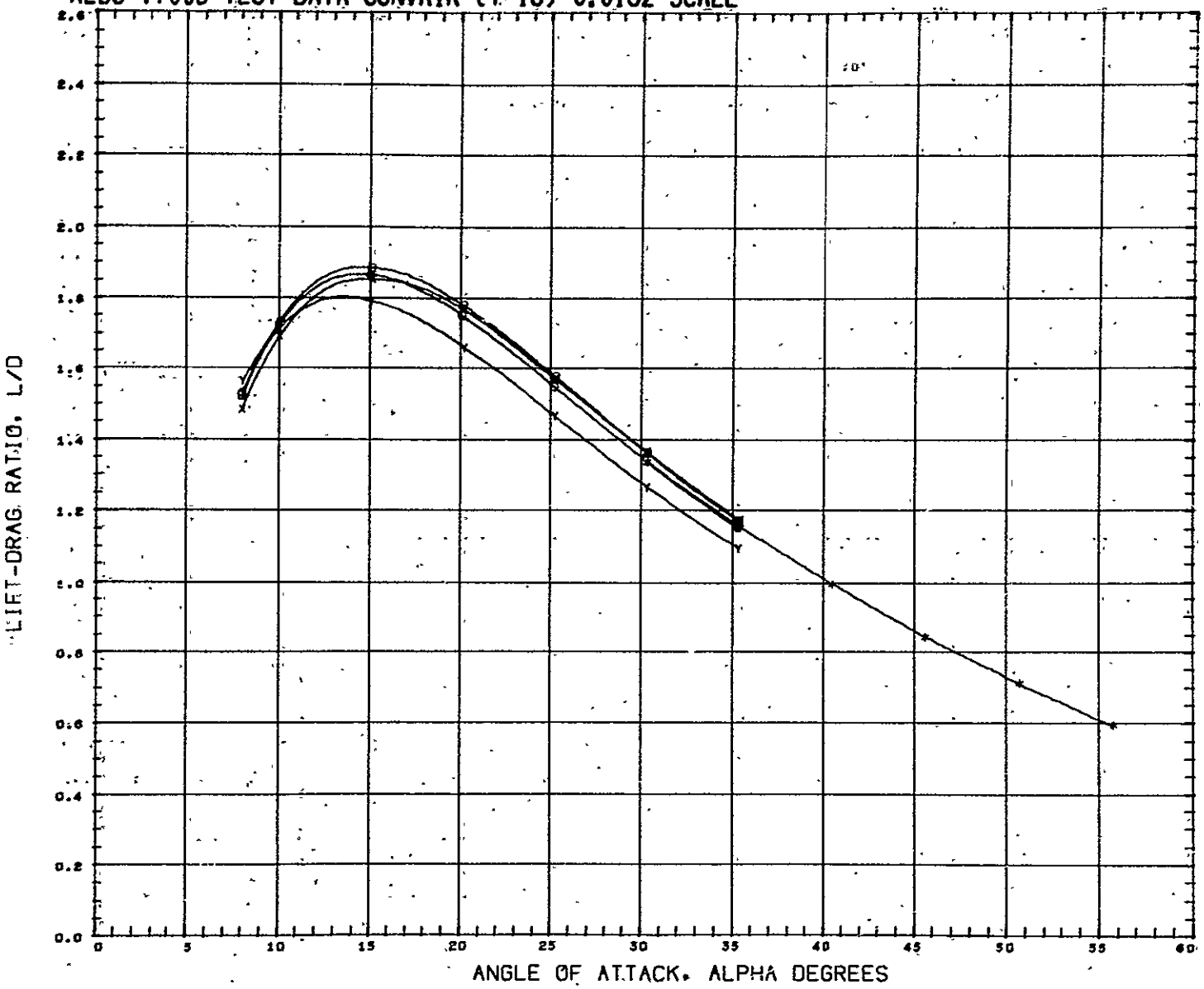
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4183)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4091)	20 JUL 70	
G	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4031)	20 JUL 70	
O	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4041)	20 JUL 70	
Y	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4051)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35600 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23600 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



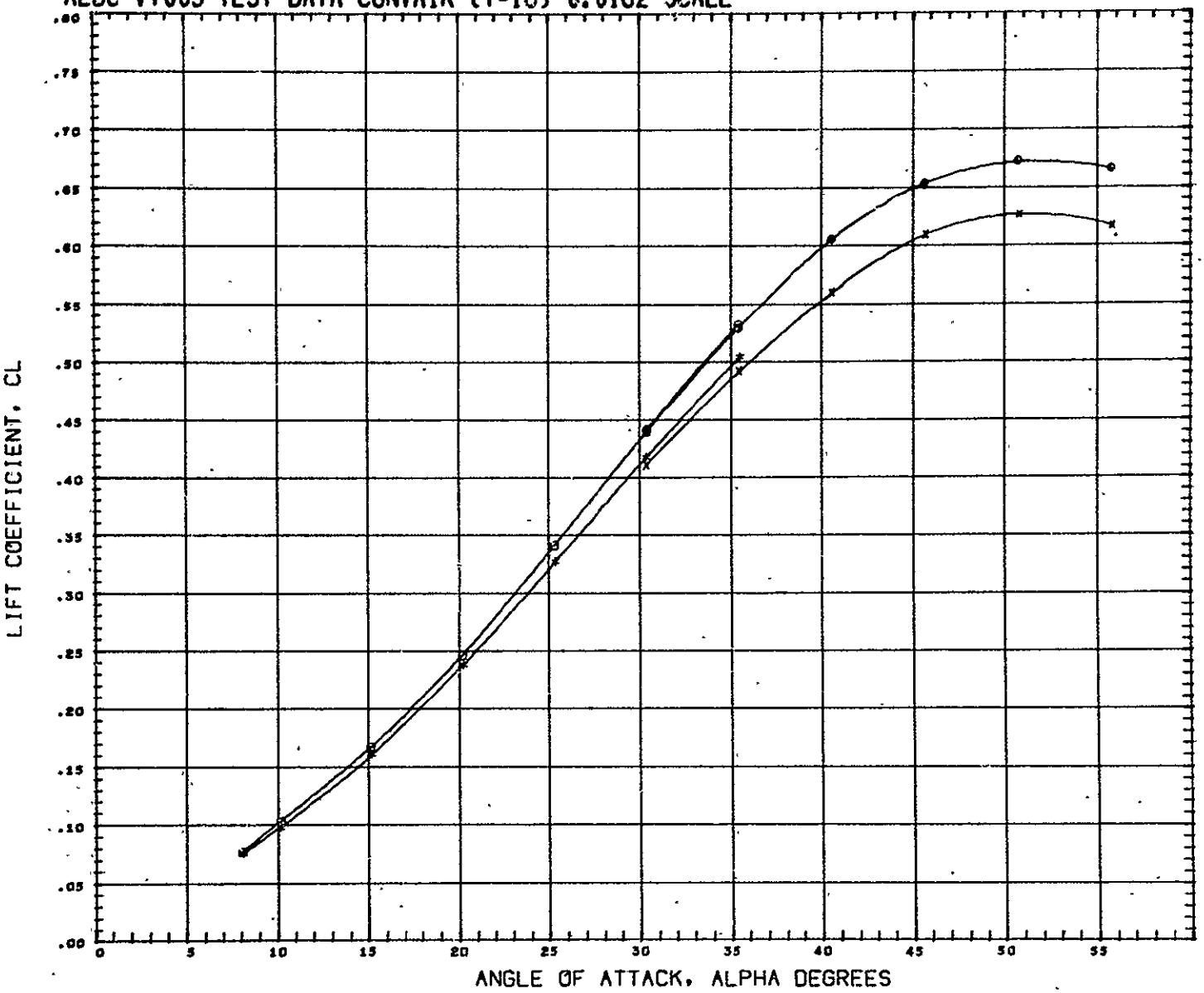
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4183)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4091)	20 JUL 70	
G	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4031)	20 JUL 70	
O	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4041)	20 JUL 70	
Y	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4051)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	0.00000×10^{-00}	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



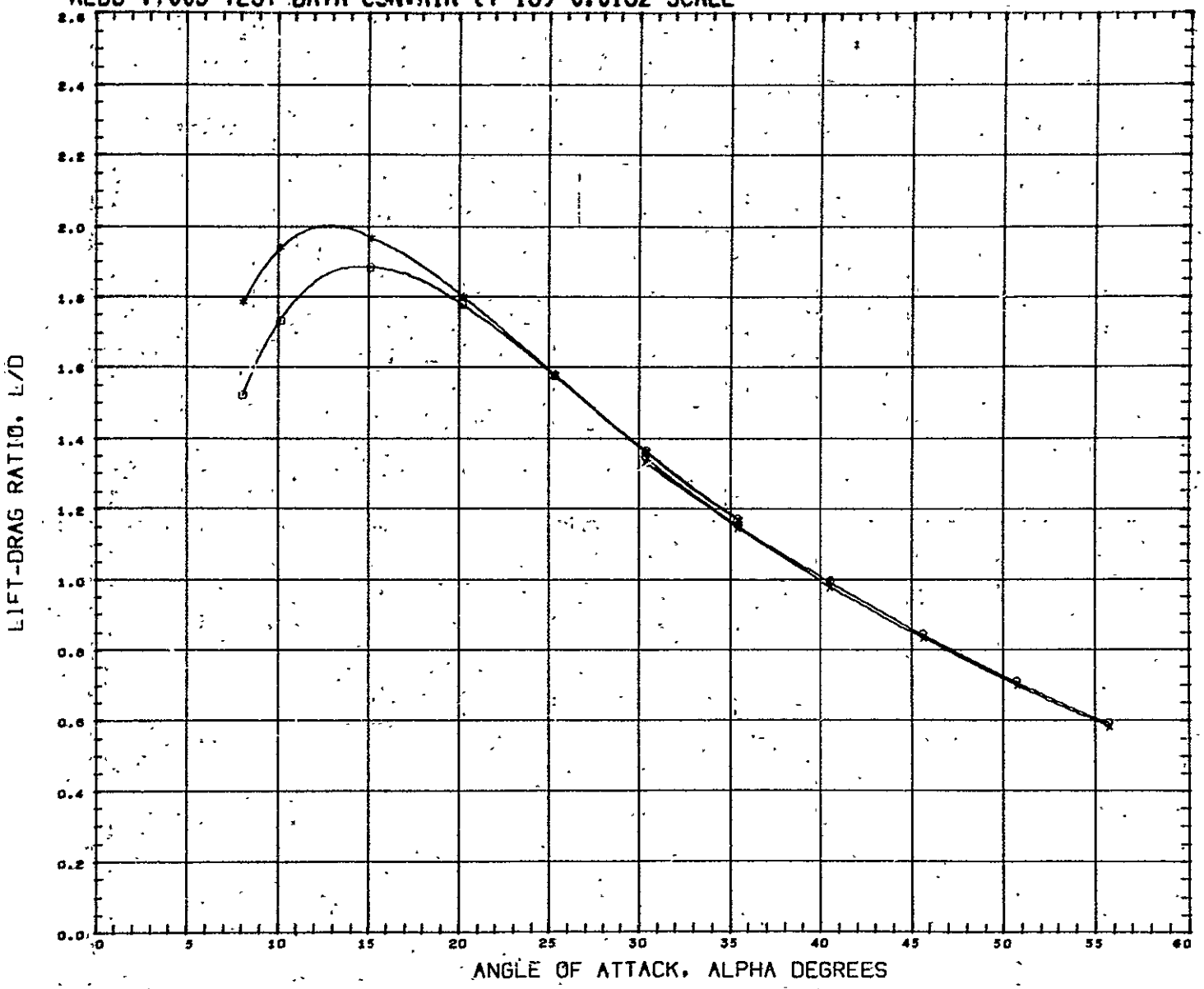
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BE (0.0182 SCALE)	(AT4011)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BE (0.0182 SCALE)	(AT4123)	20 JUL 70	
⊡	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4031)	20 JUL 70	
O	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4143)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35600 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



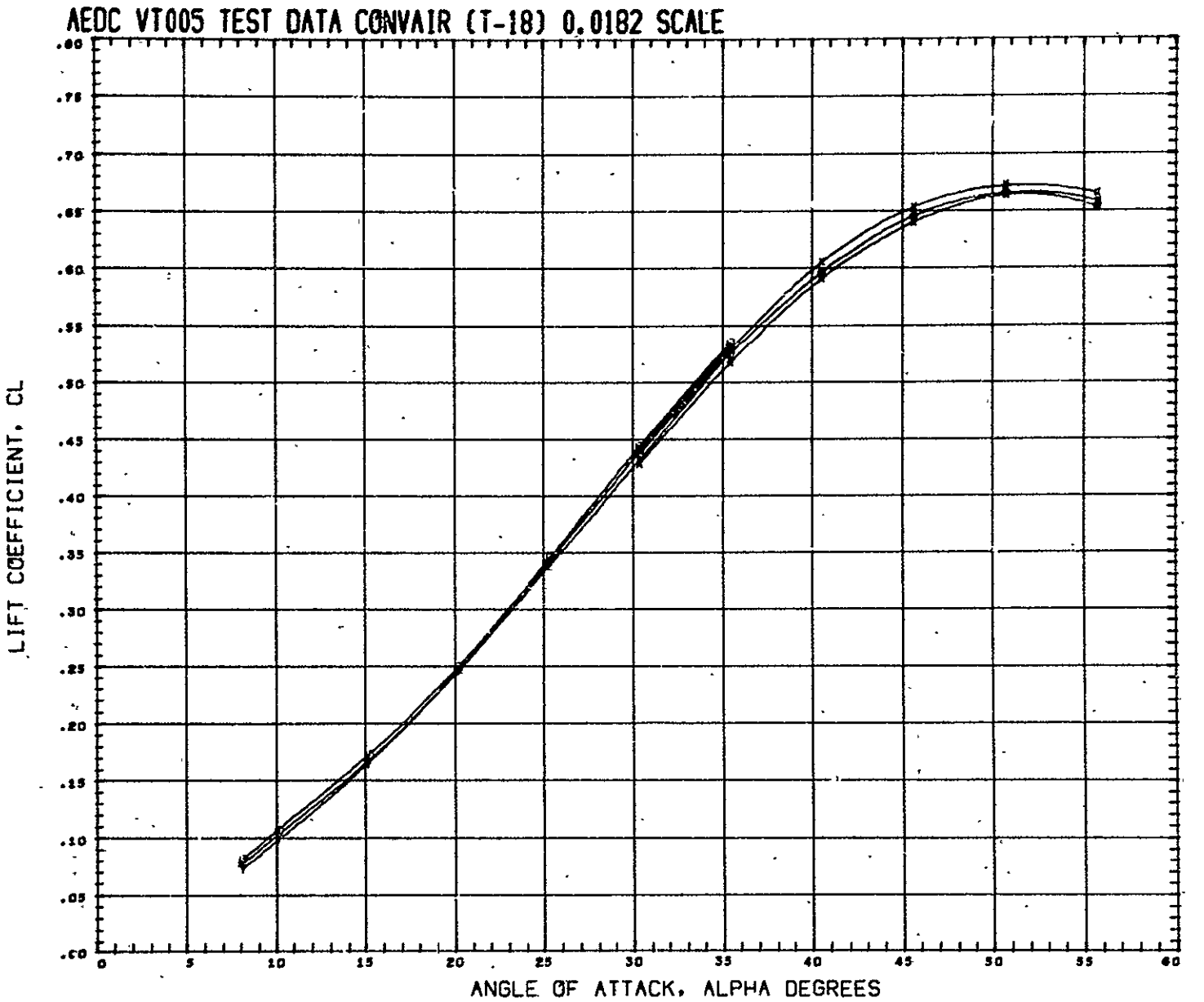
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BE (0.0182 SCALE)	(AT4011)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BE (0.0182 SCALE)	(AT4123)	20 JUL 70	
B	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4031)	20 JUL 70	
O	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4143)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23600 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



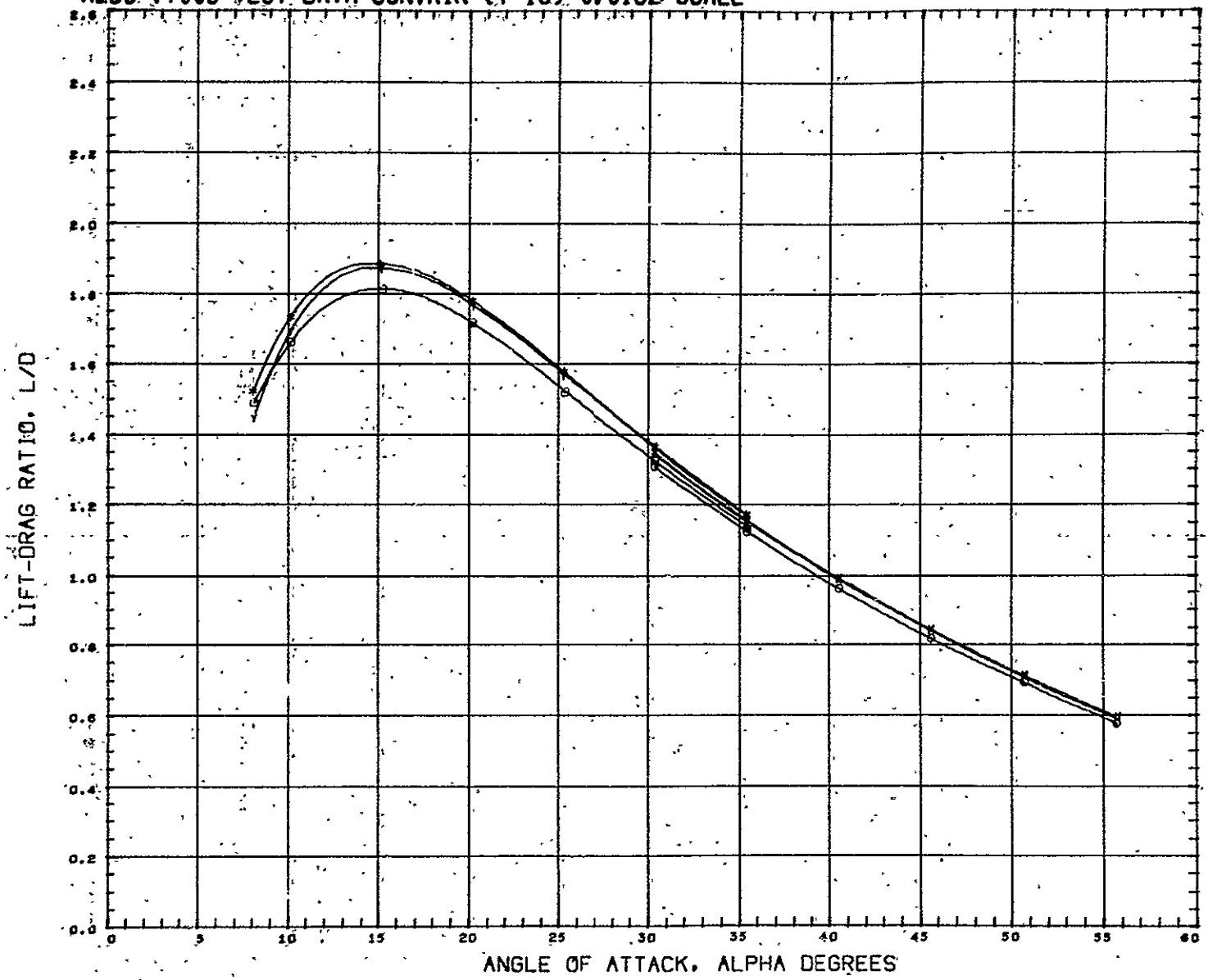
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4031)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4143)	20 JUL 70	
⊡	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4111)	20 JUL 70	
O	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4193)	20 JUL 70	
Y	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4101)	20 JUL 70	
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4203)	20 JUL 70	

REFERENCE FILE CONVAIR TN69-AE-25

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE

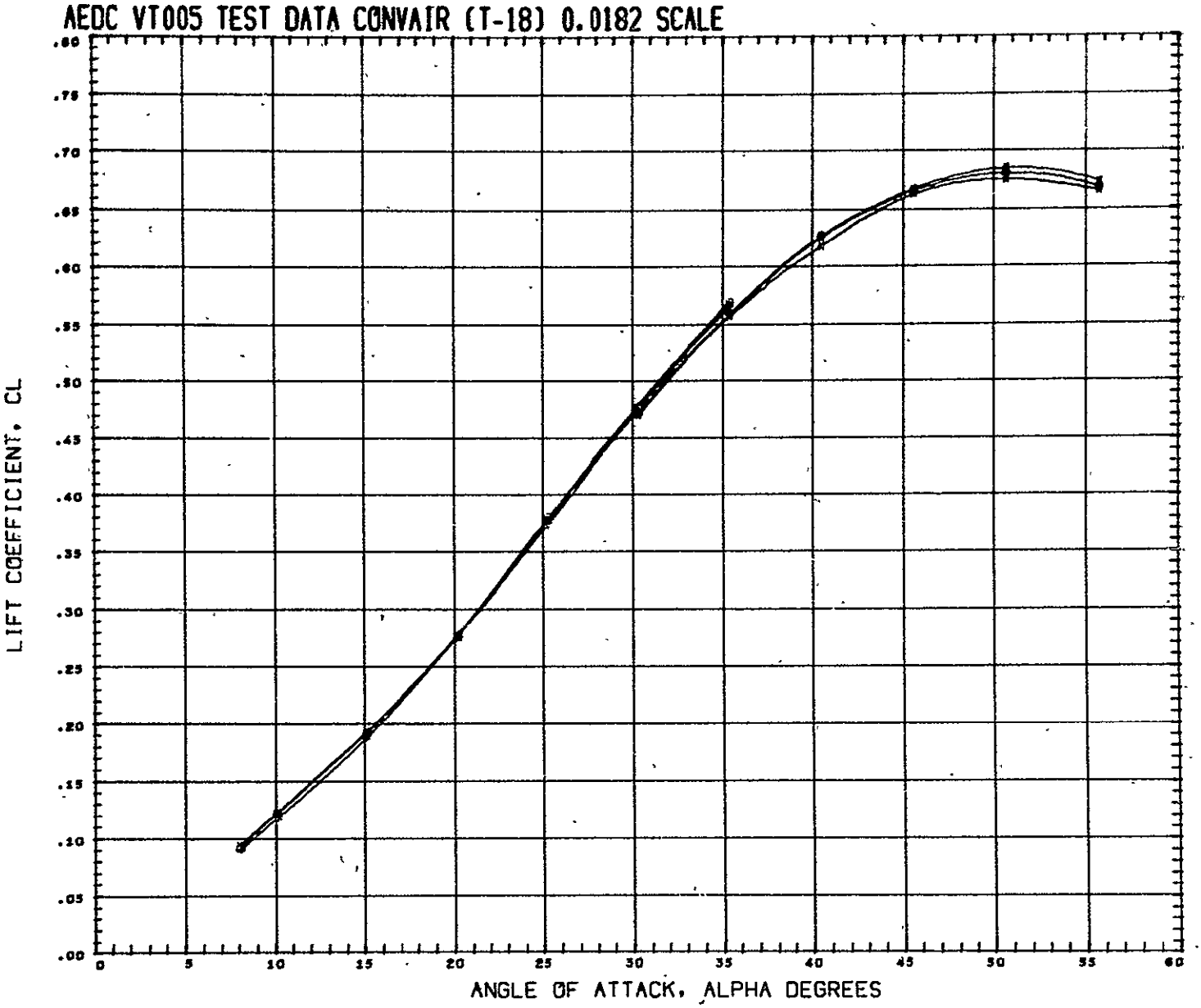


SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4031)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4143)	20 JUL 70	
⊖	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4111)	20 JUL 70	
⊙	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4193)	20 JUL 70	
Y	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4101)	20 JUL 70	
K	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4203)	20 JUL 70	

REFERENCE FILE CONVAIR TN69-AE-25

REFERENCE INFORMATION		
REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



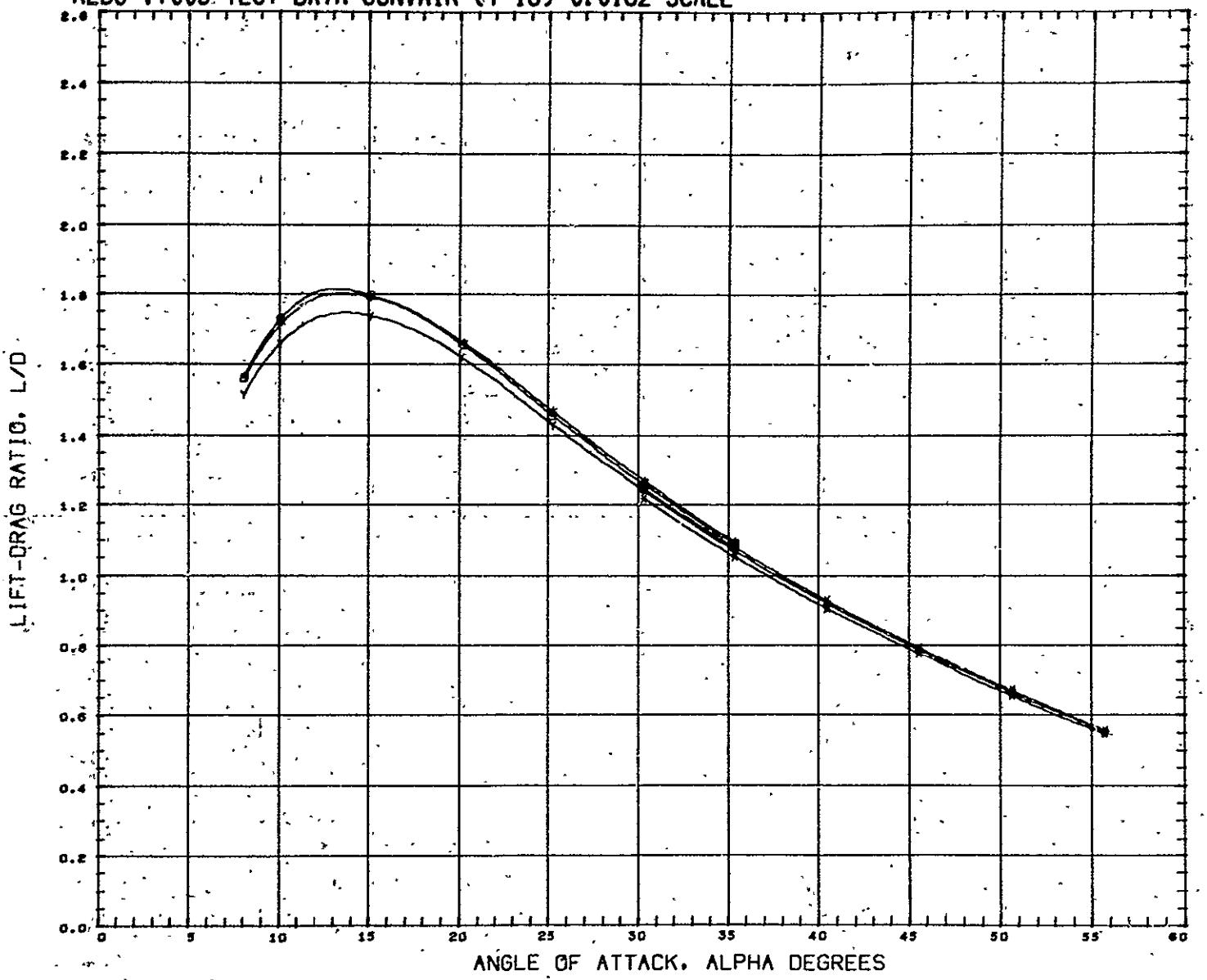
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4051)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4233)	20 JUL 70	
⊕	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4071)	20 JUL 70	
O	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4223)	20 JUL 70	
Y	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4061)	20 JUL 70	
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4213)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE

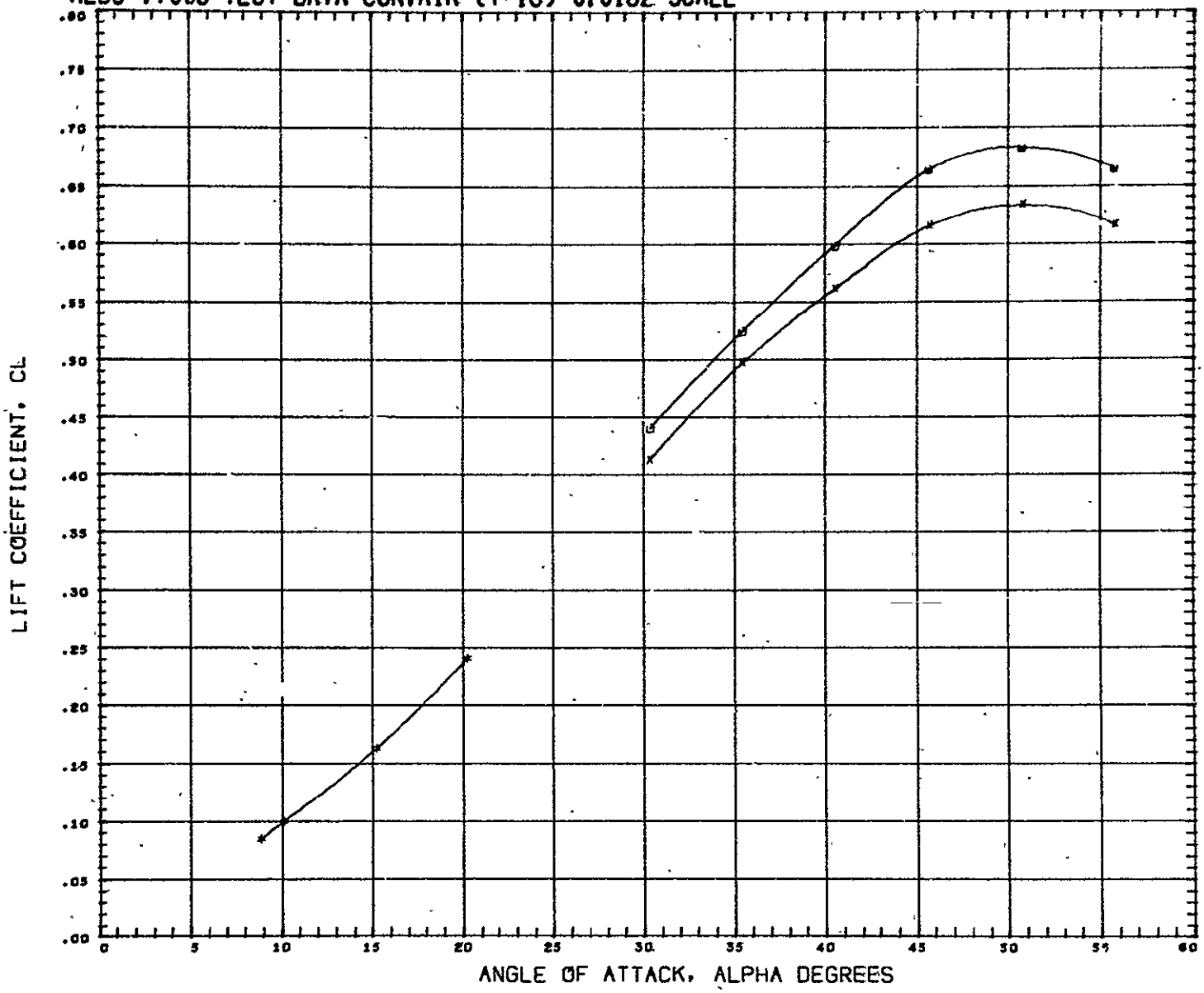


SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4051)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4233)	20 JUL 70	
@	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4071)	20 JUL 70	
O	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4223)	20 JUL 70	
Y	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4061)	20 JUL 70	
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4213)	20 JUL 70	

REFERENCE FILE CONVAIR TN69-AE-25

REFERENCE INFORMATION		
REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



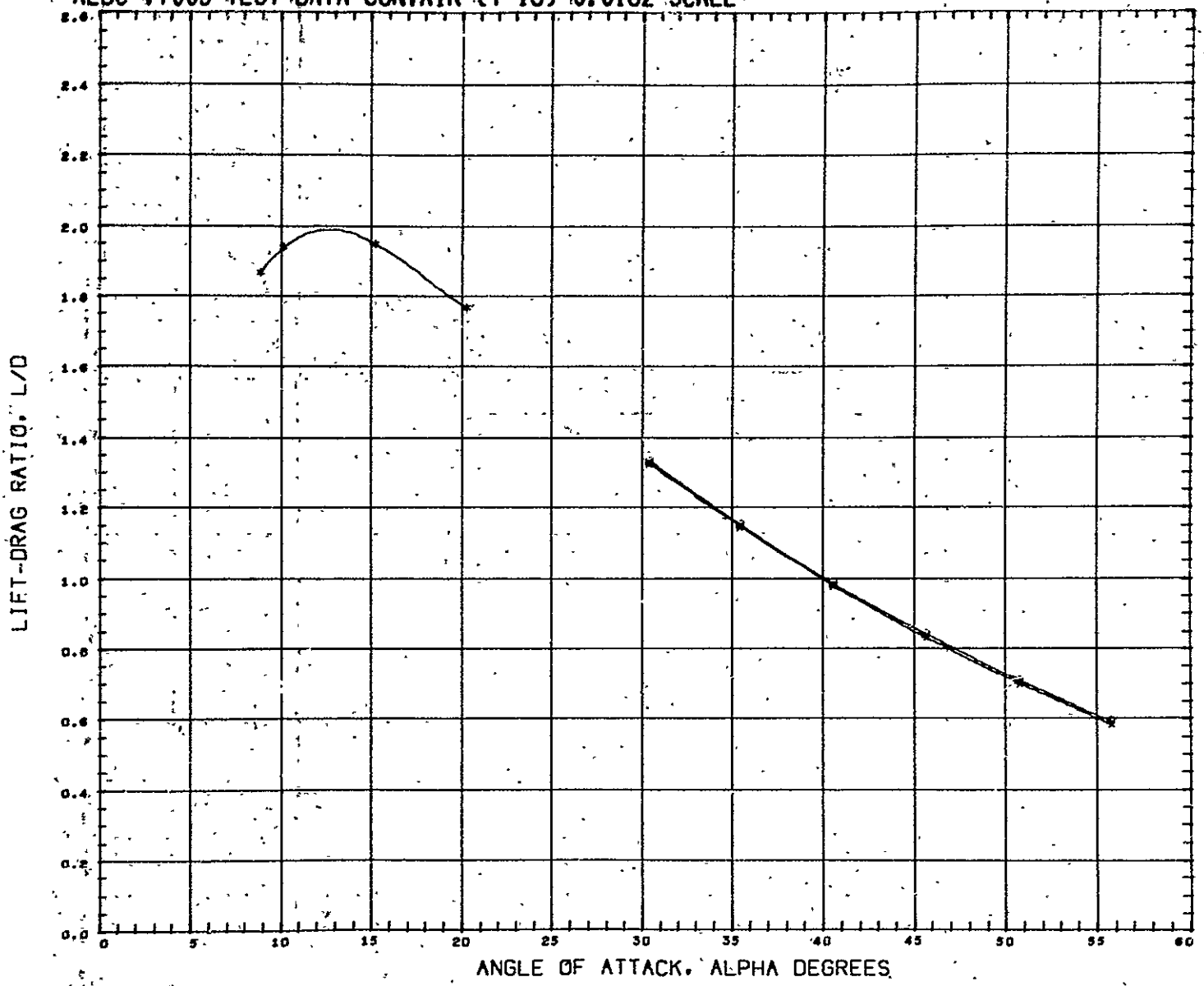
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BE (0.0182 SCALE)	(AT4022)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BE (0.0182 SCALE)	(AT4134)	20 JUL 70	
B	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4154)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	5.64000×10^{-01}	FT
XMRP	$1.23600 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



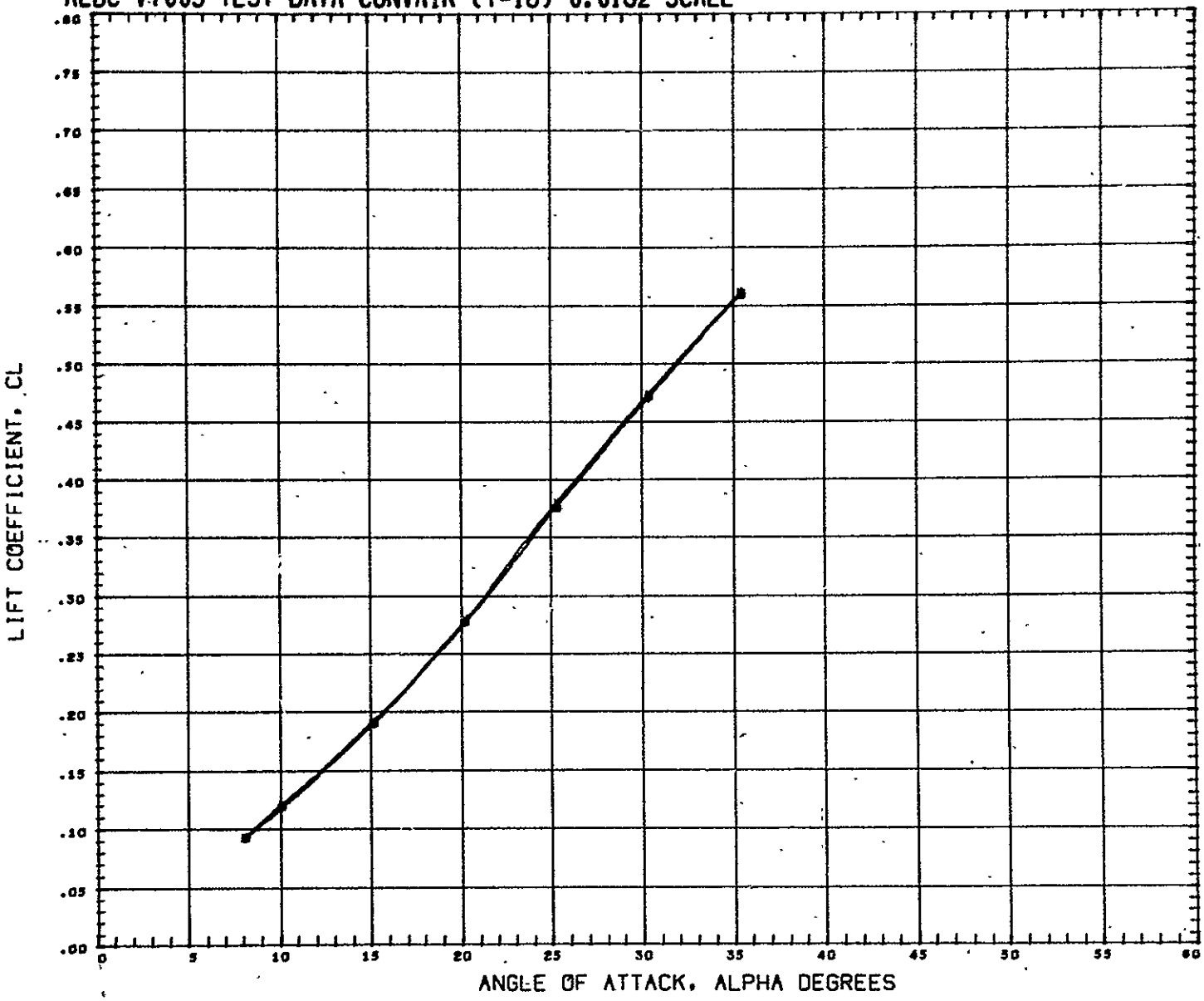
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BE (0.0182 SCALE)	(AT4022)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BE (0.0182 SCALE)	(AT4134)	20 JUL 70	
G	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4154)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	2.35800×10^{-01}	FT
REFB	$3.64000 \times 10^{+00}$	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	0.00000×10^{-01}	FT
ZMRP	1.69600×10^{-02}	FT
SCALE	1.75000×10	

REFERENCE FILE CONVAIR IN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



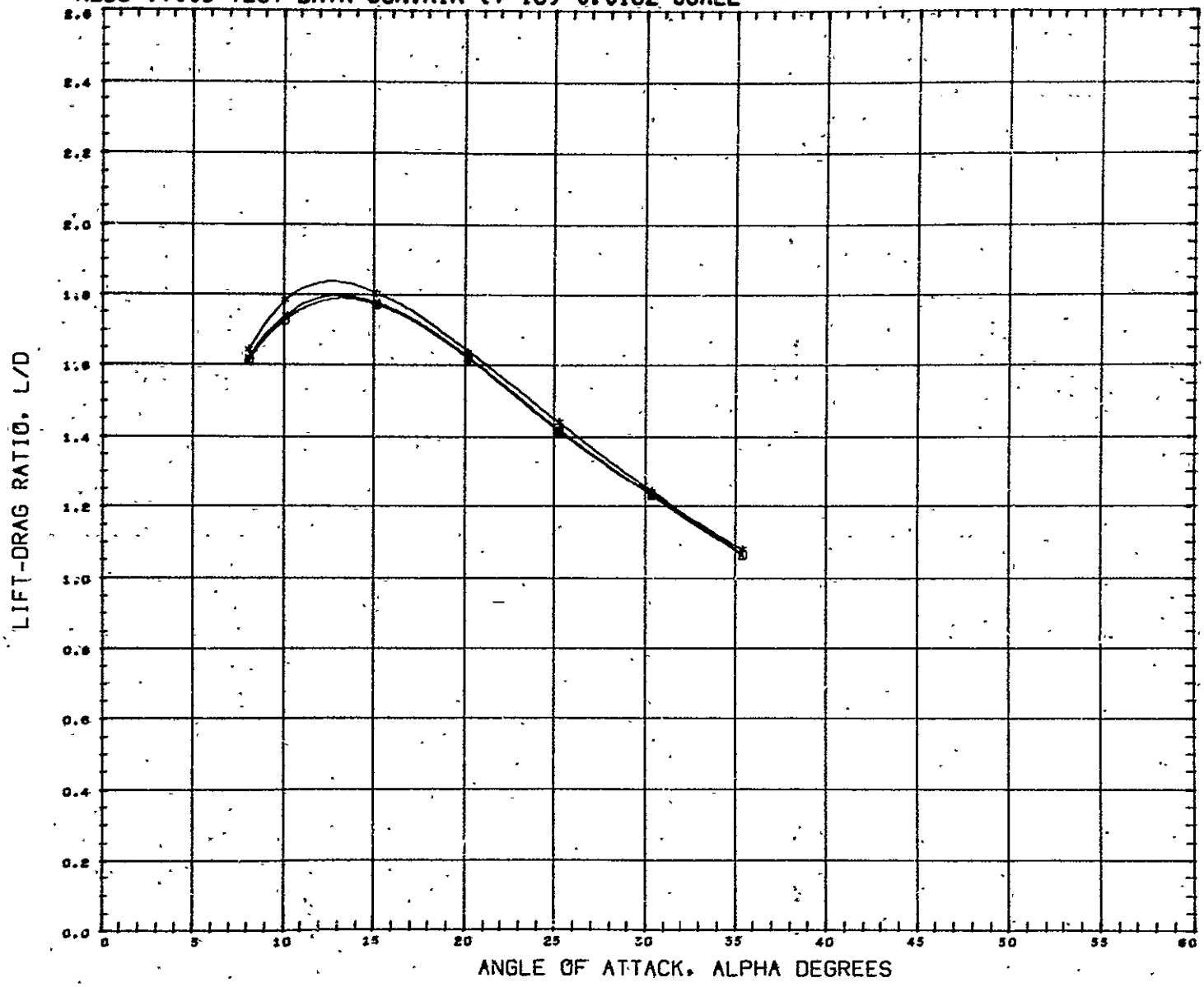
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4311)	20 JUL 70	10.000.
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4321)	20 JUL 70	
⊡	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4351)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE

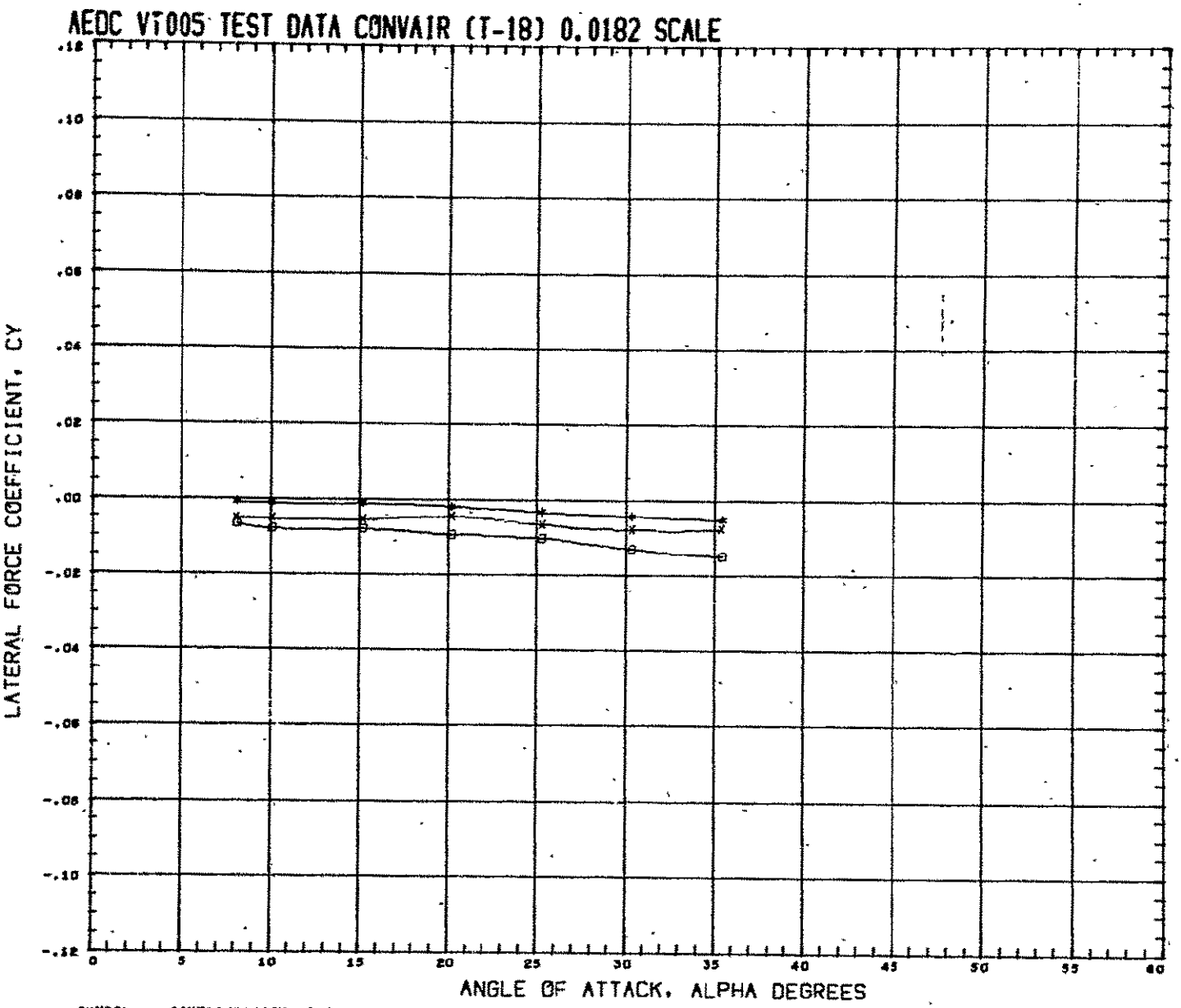


SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4311)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4321)	20 JUL 70	
G	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4351)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TN69-AE-25



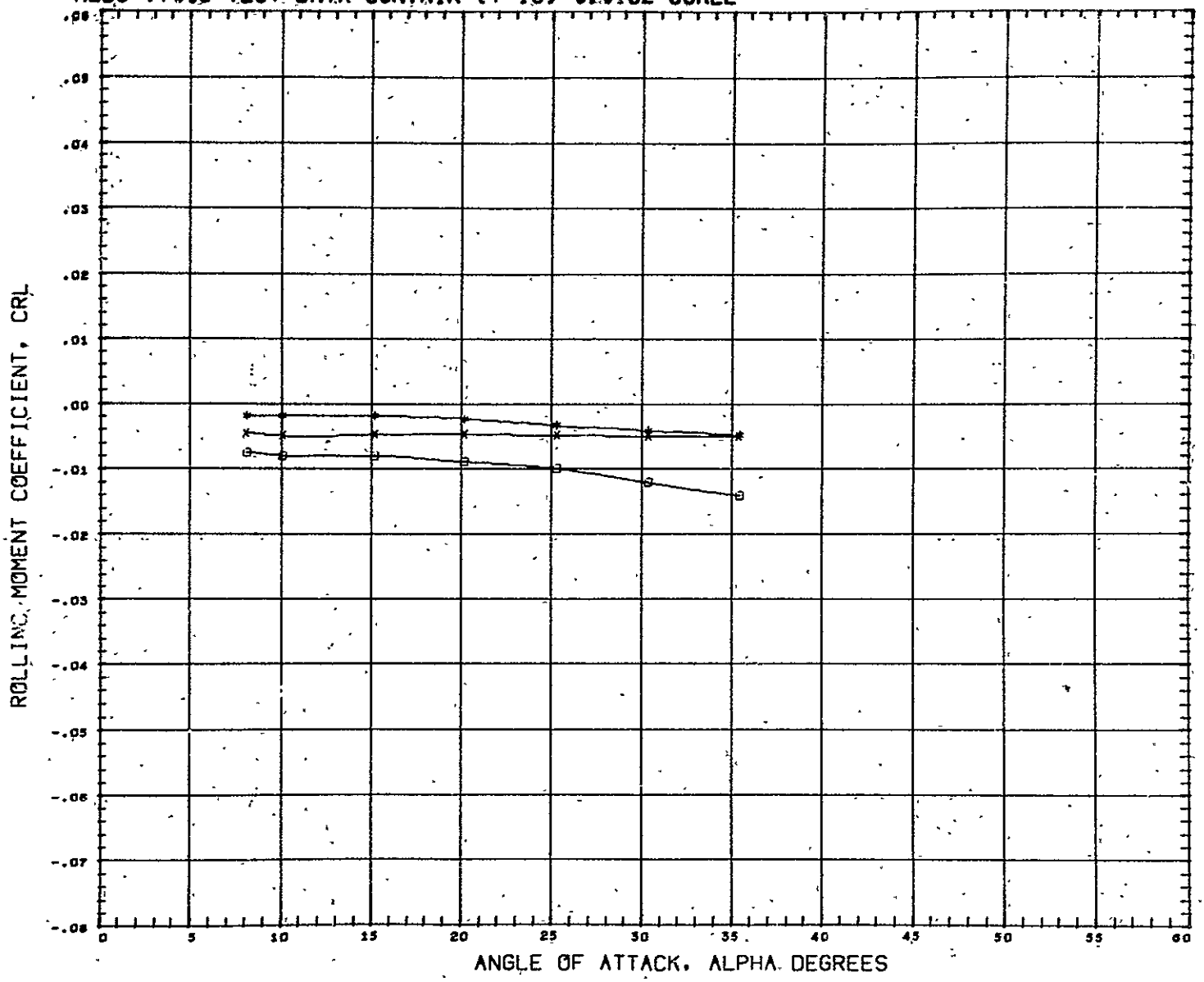
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4311)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4321)	20 JUL 70	
@	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4351)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23600 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



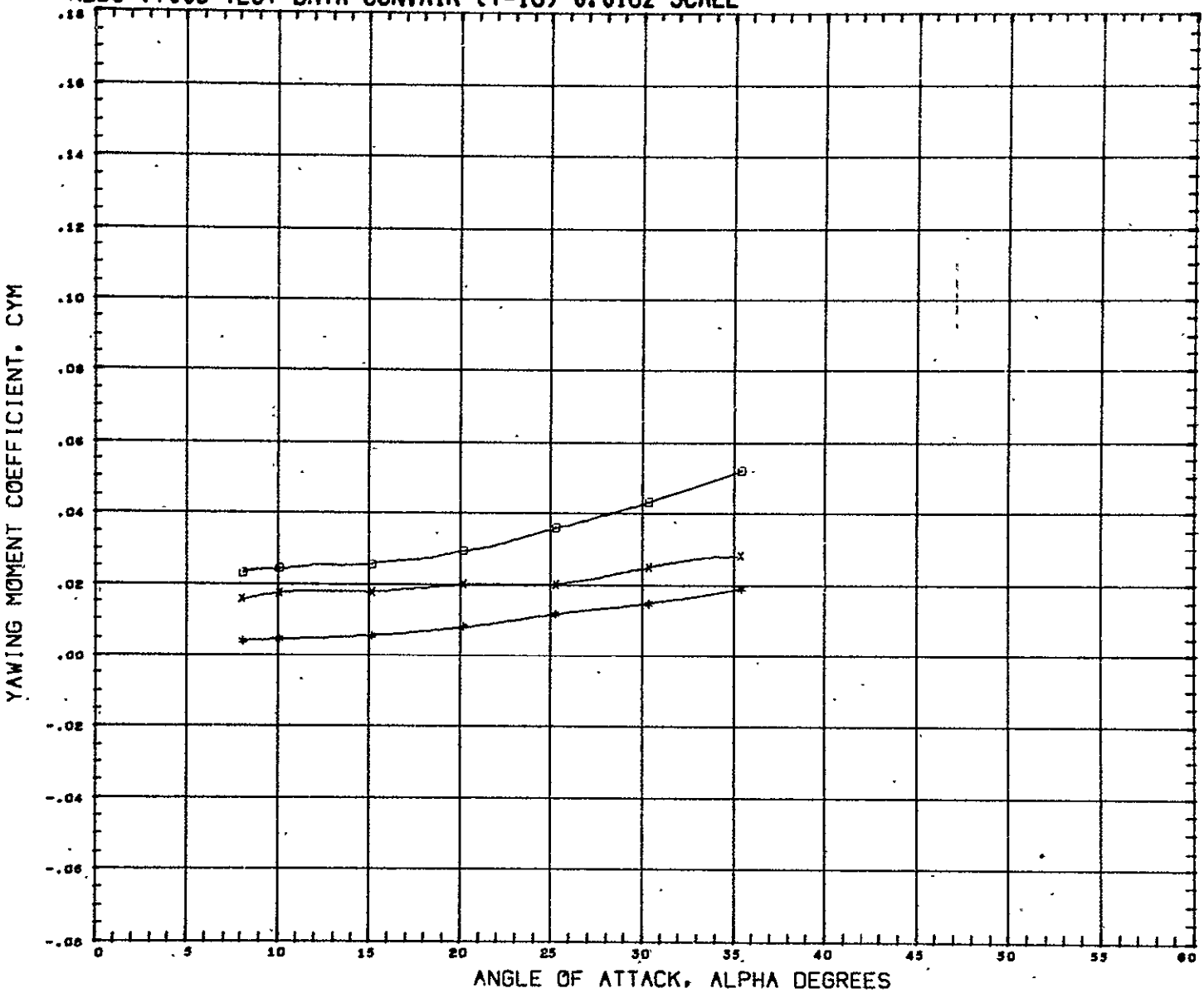
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4311)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4321)	20 JUL 70	
G	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4351)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



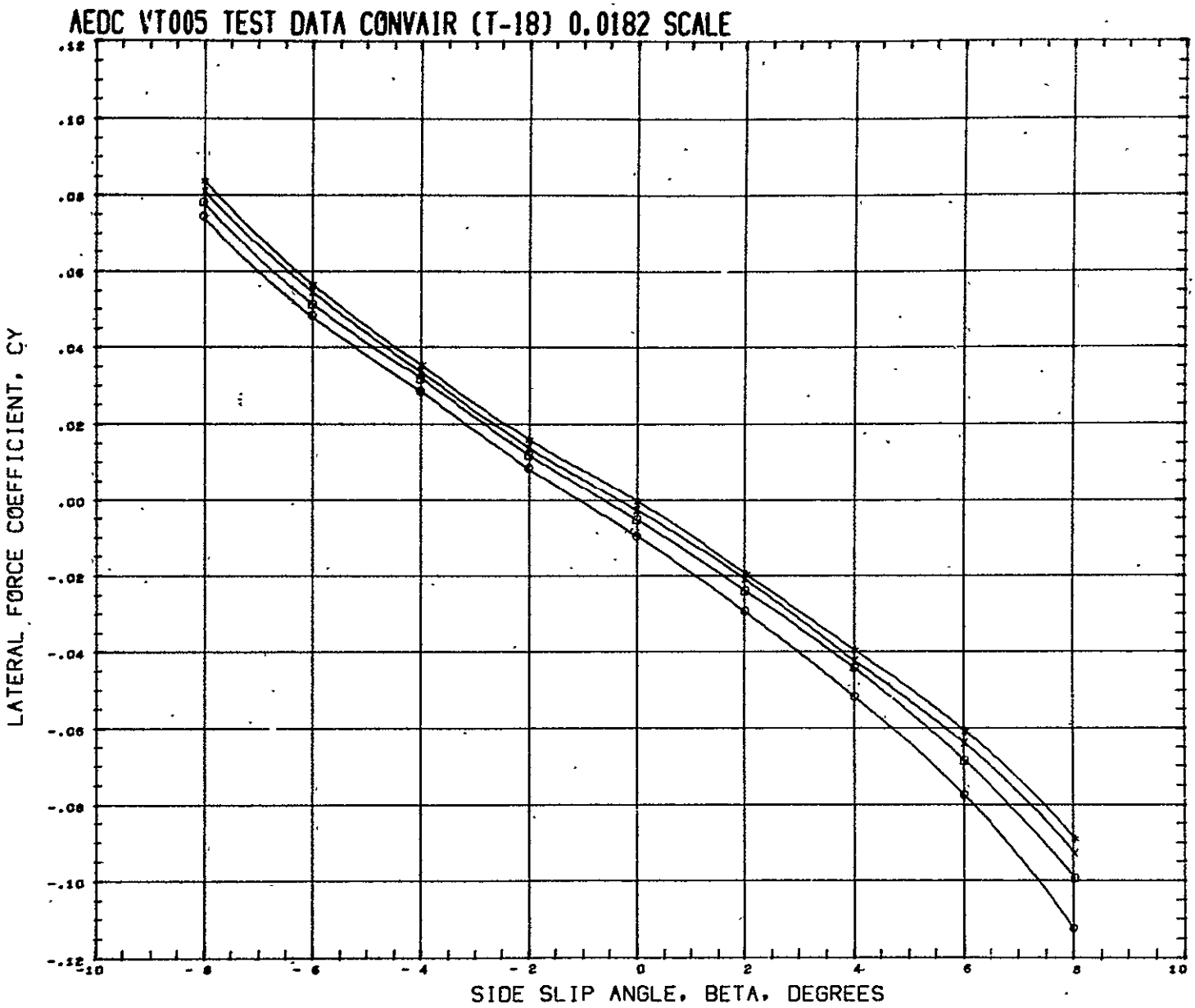
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4311)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4321)	20 JUL 70	
⊖	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4351)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35600 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23600 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE.FILE CONVAIR TN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



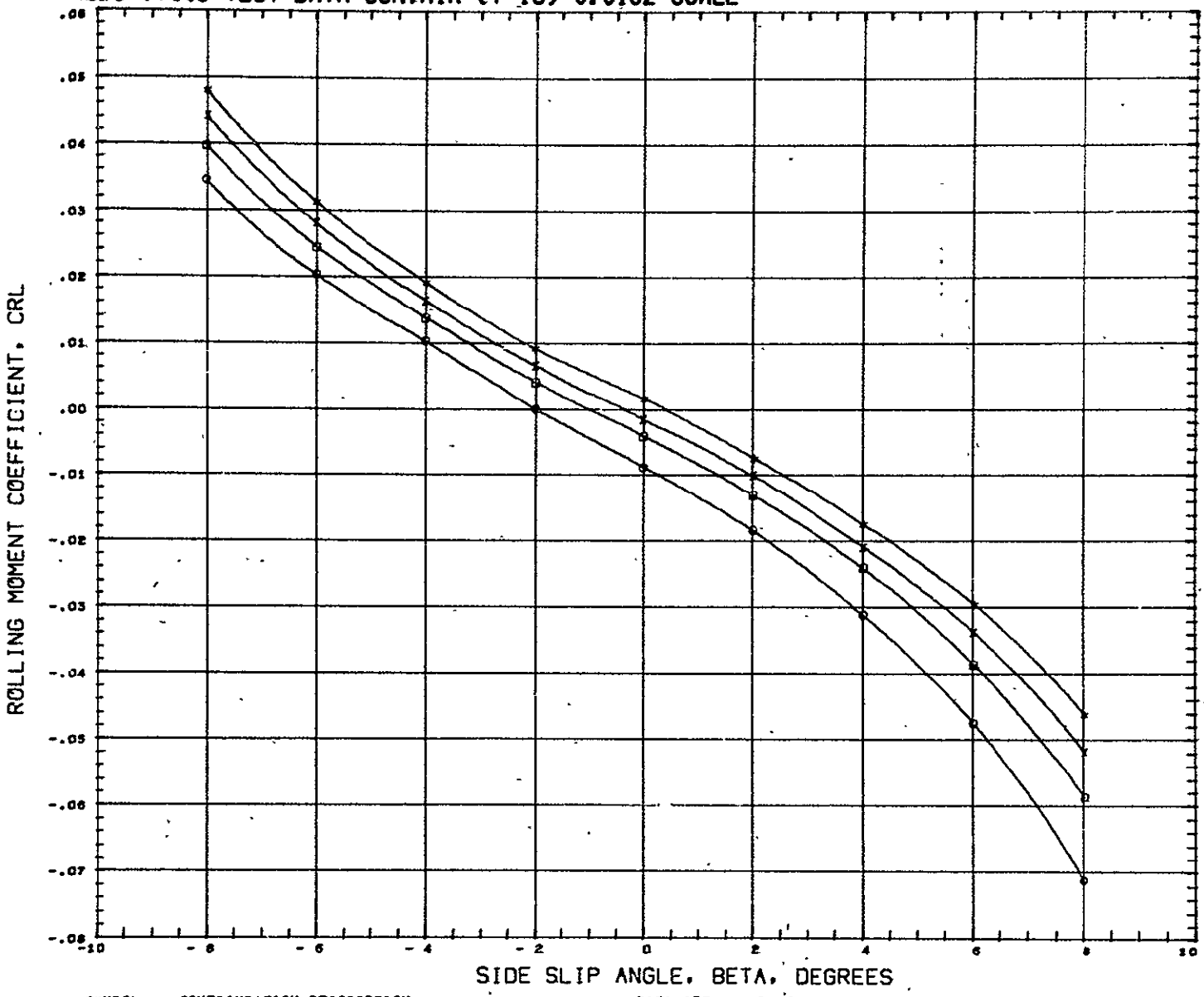
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4245)	20 JUL 70	10.000
x	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4255)	20 JUL 70	
⊖	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4265)	20 JUL 70	
⊙	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4295)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE

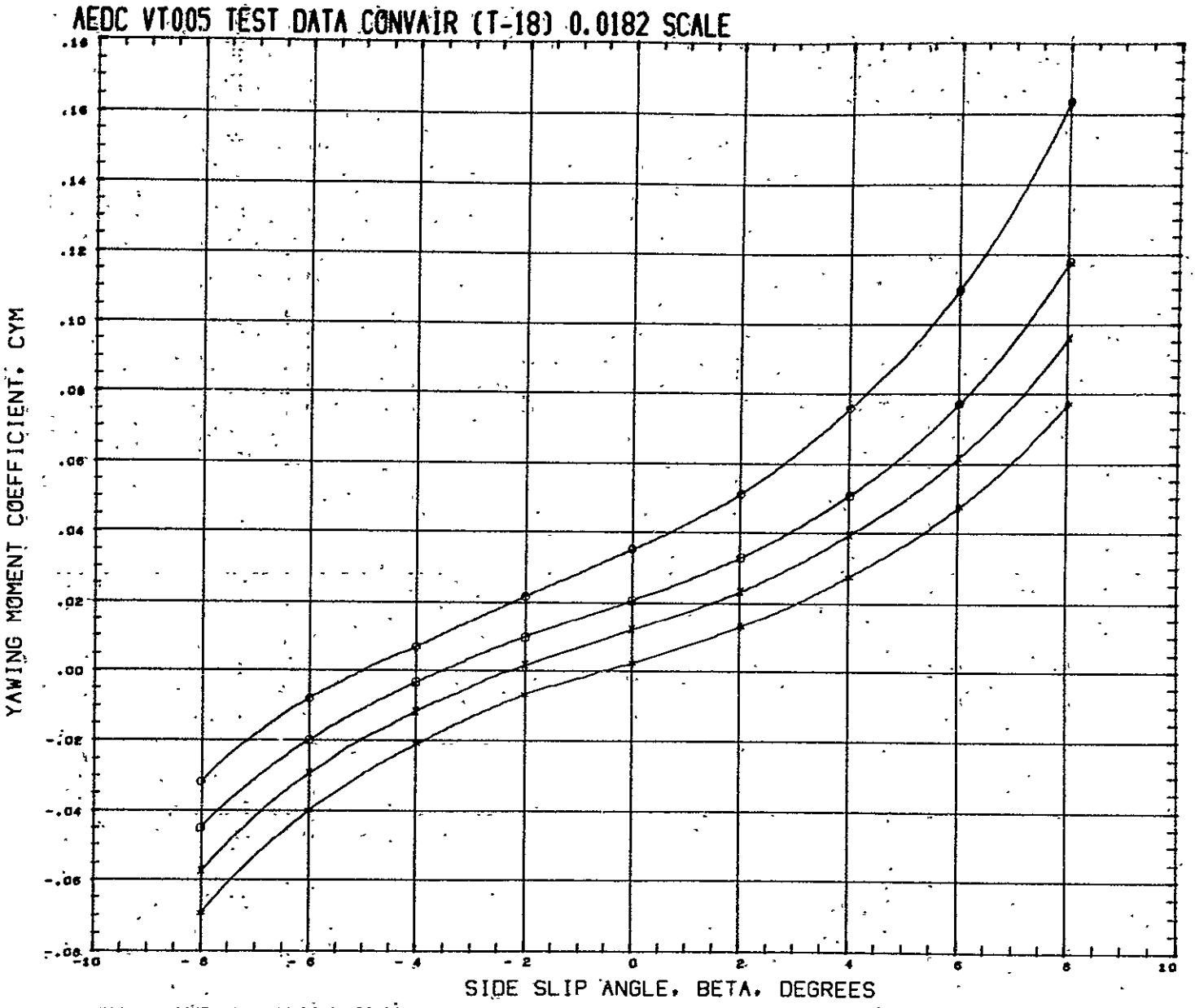


SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4245)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4255)	20 JUL 70	
G	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4265)	20 JUL 70	
G	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4295)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23600 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TN69-AE-25



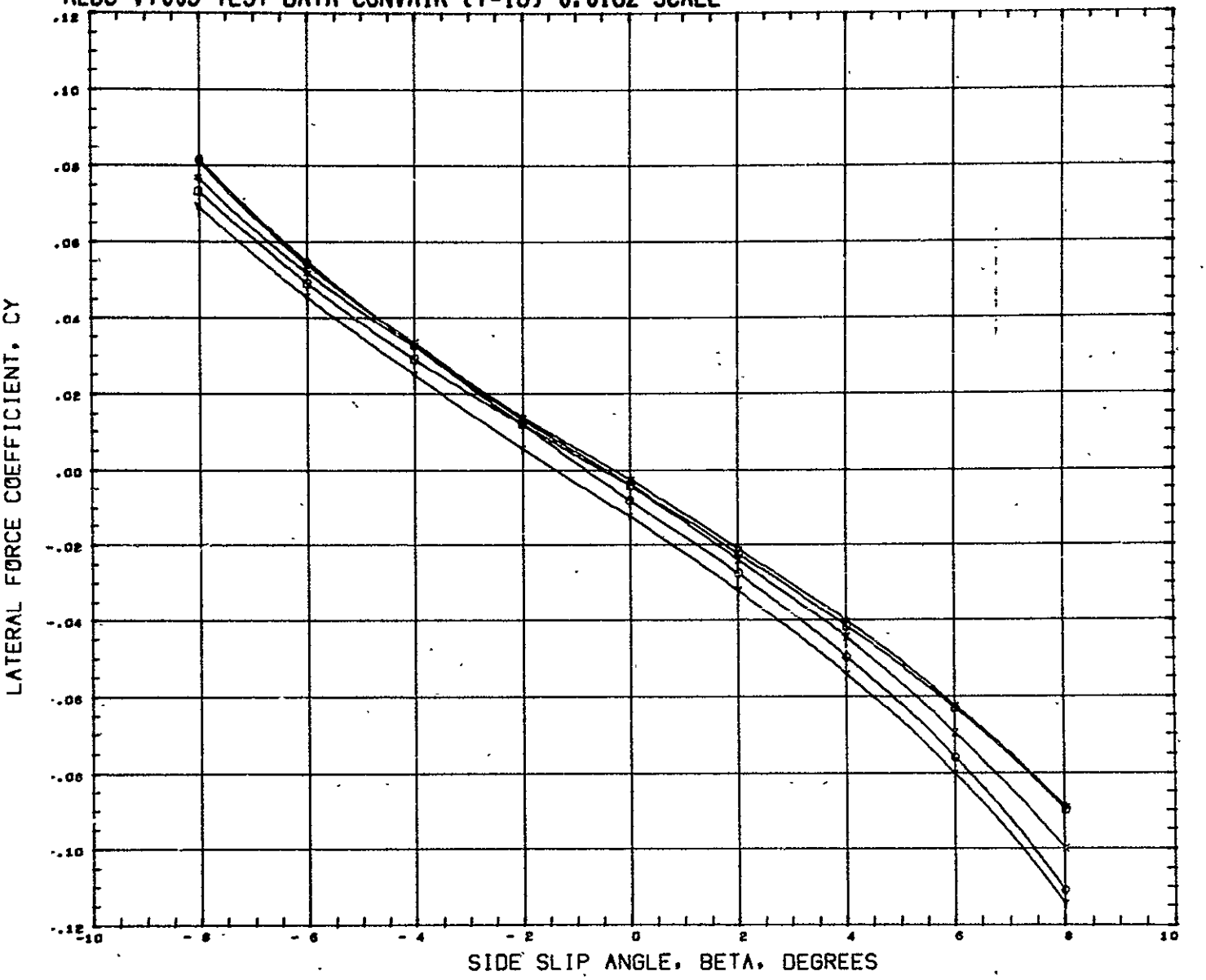
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4245)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4255)	20 JUL 70	
⊡	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4265)	20 JUL 70	
⊙	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4295)	20 JUL 70	

REFERENCE FILE CONVAIR TN69-AE-25

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRF	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



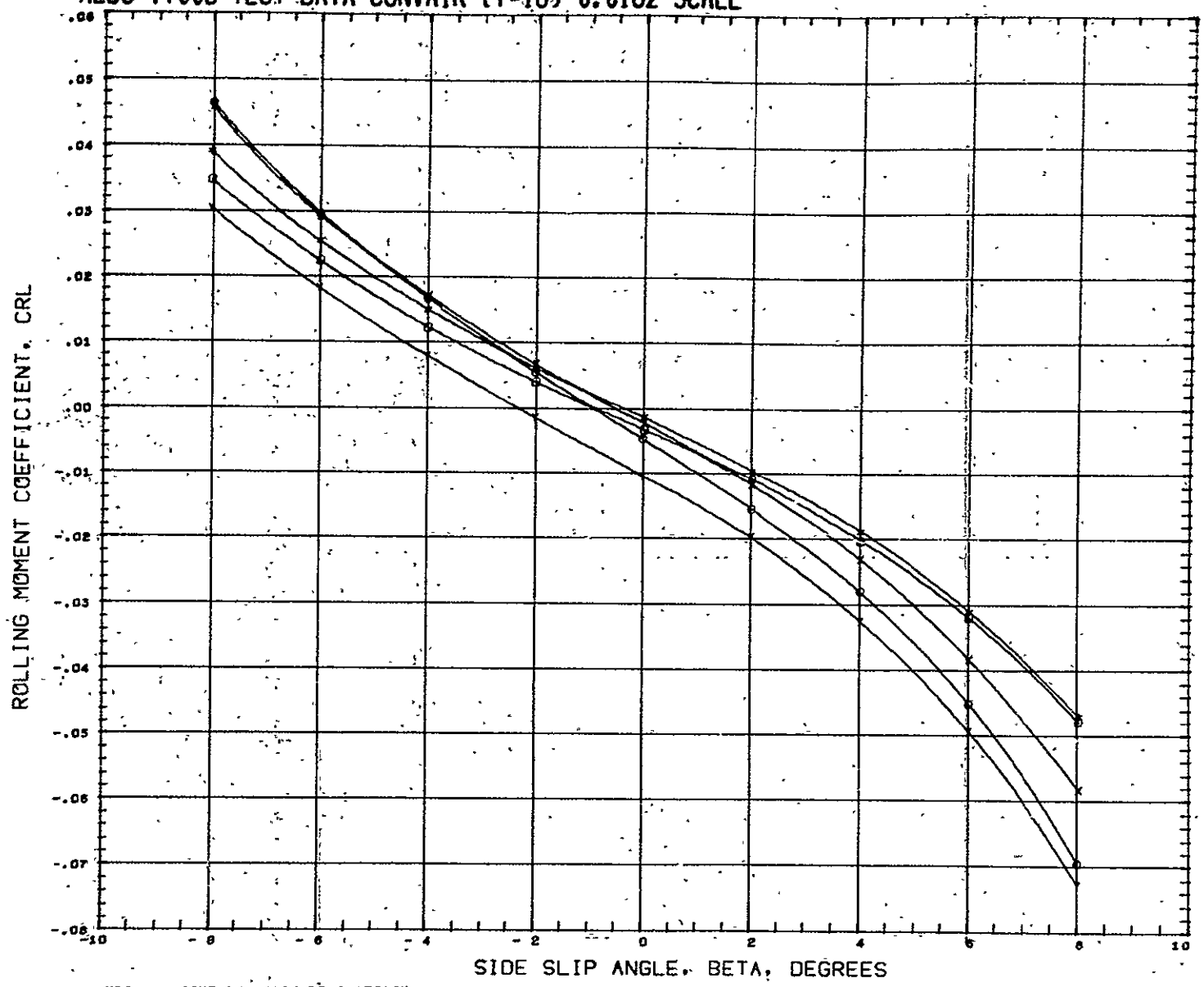
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4285)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4275)	20 JUL 70	
G	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4305)	20 JUL 70	
O	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4335)	20 JUL 70	
V	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4345)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	0.00000×10^{-01}	FT
ZMRP	1.69600×10^{-02}	FT
SCALE	1.75000×10	

REFERENCE FILE CONVAIR TN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



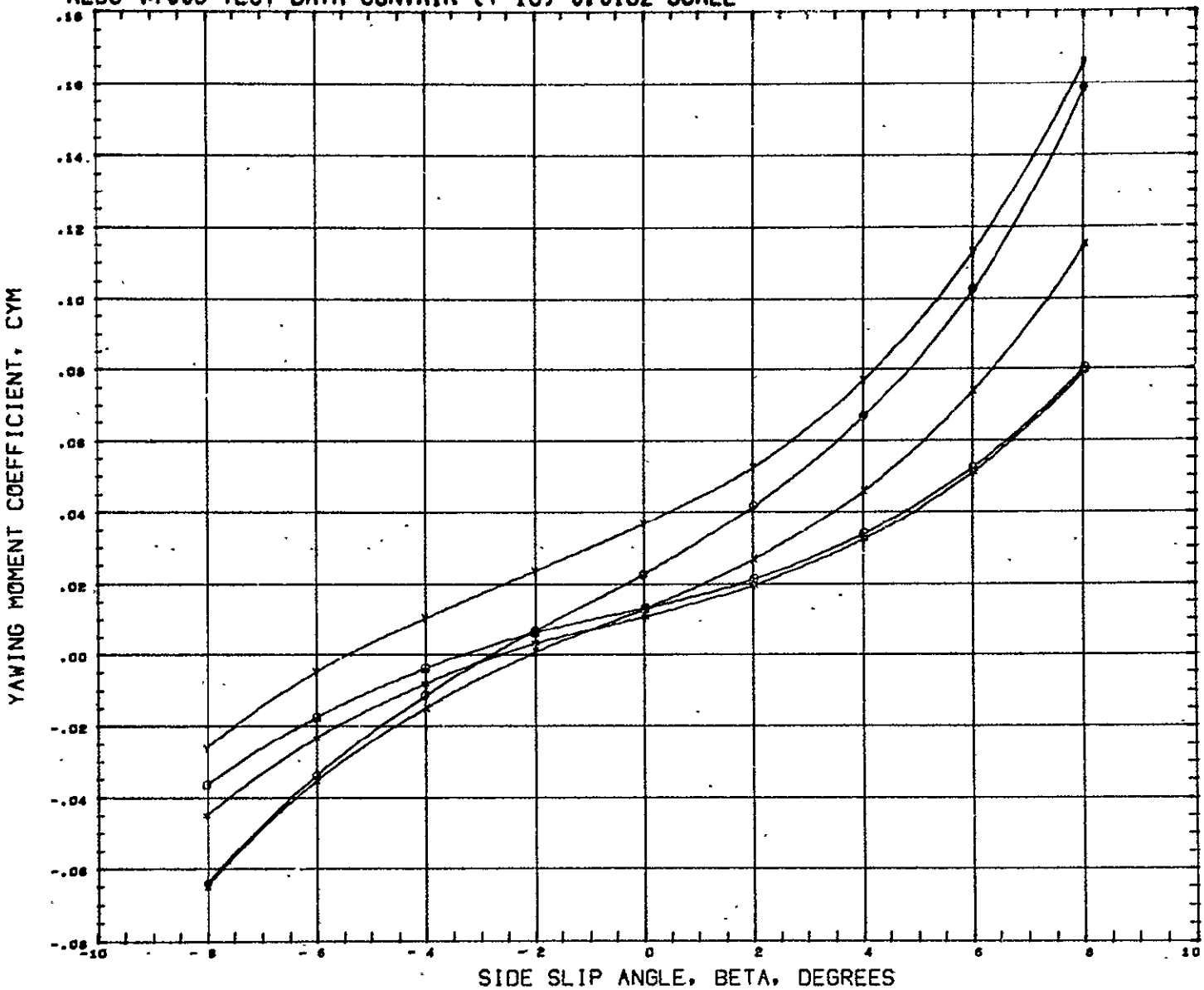
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4285)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4275)	20 JUL 70	
⊖	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4305)	20 JUL 70	
⊙	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4335)	20 JUL 70	
Y	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4345)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	0.00000×10^{-01}	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



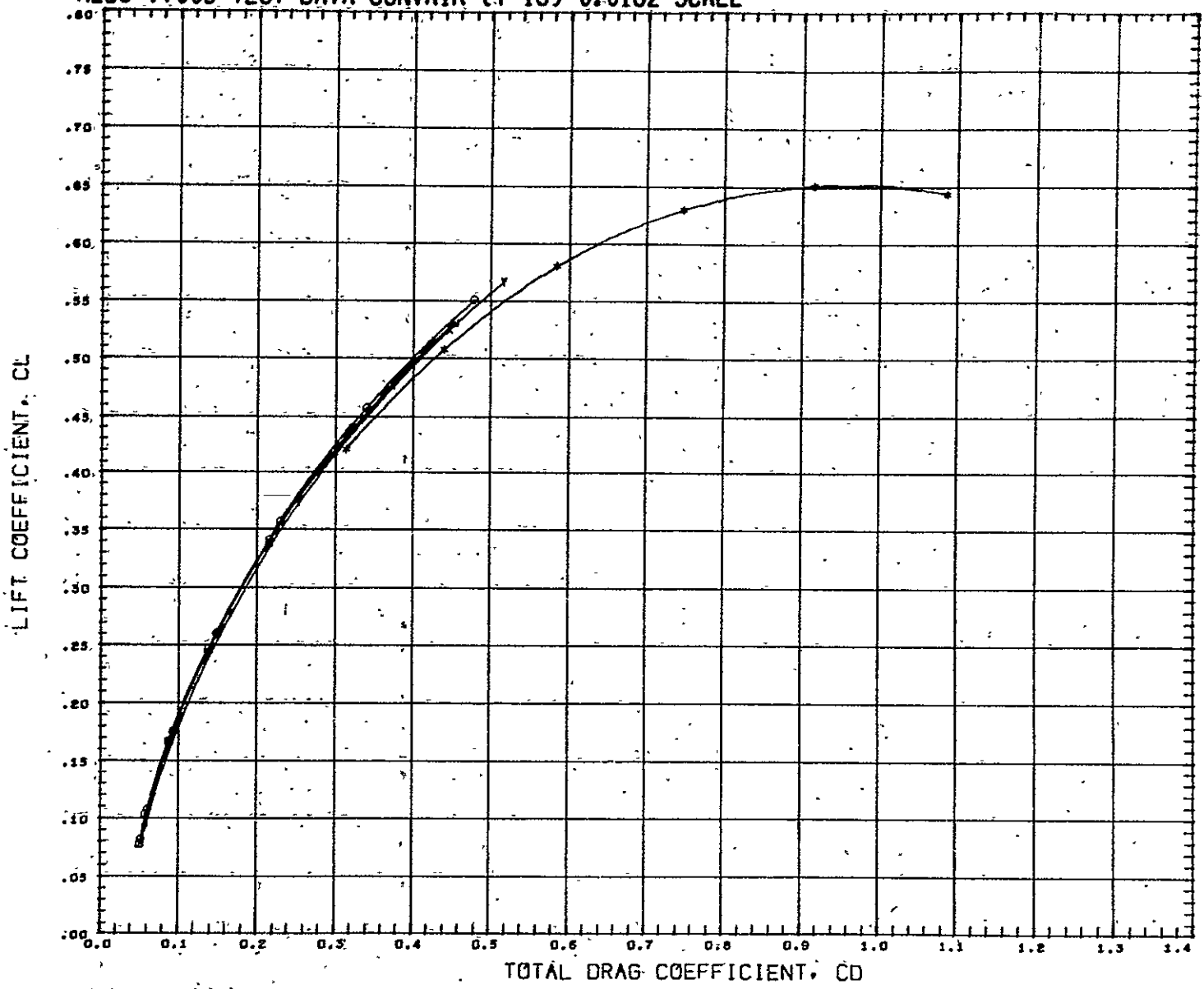
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4285)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4275)	20 JUL 70	
G	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4305)	20 JUL 70	
O	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4335)	20 JUL 70	
Y	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4345)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	0.00000×10^{-01}	FT
ZMRP	1.69600×10^{-02}	FT
SCALE	1.75000×10	

REFERENCE FILE CONVAIR TN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



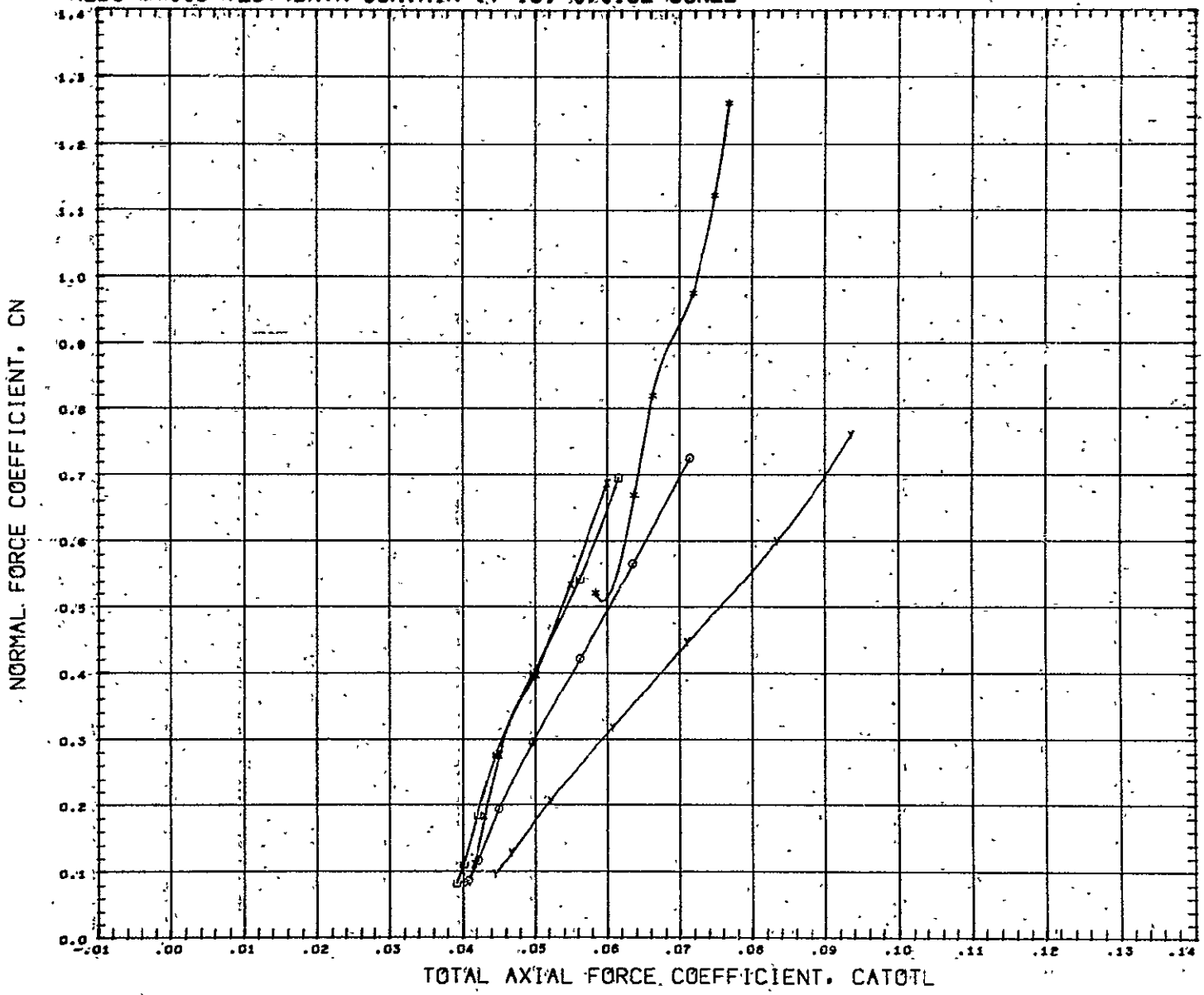
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4183)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4091)	20 JUL 70	
B	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4031)	20 JUL 70	
O	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4041)	20 JUL 70	
V	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT1051)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE

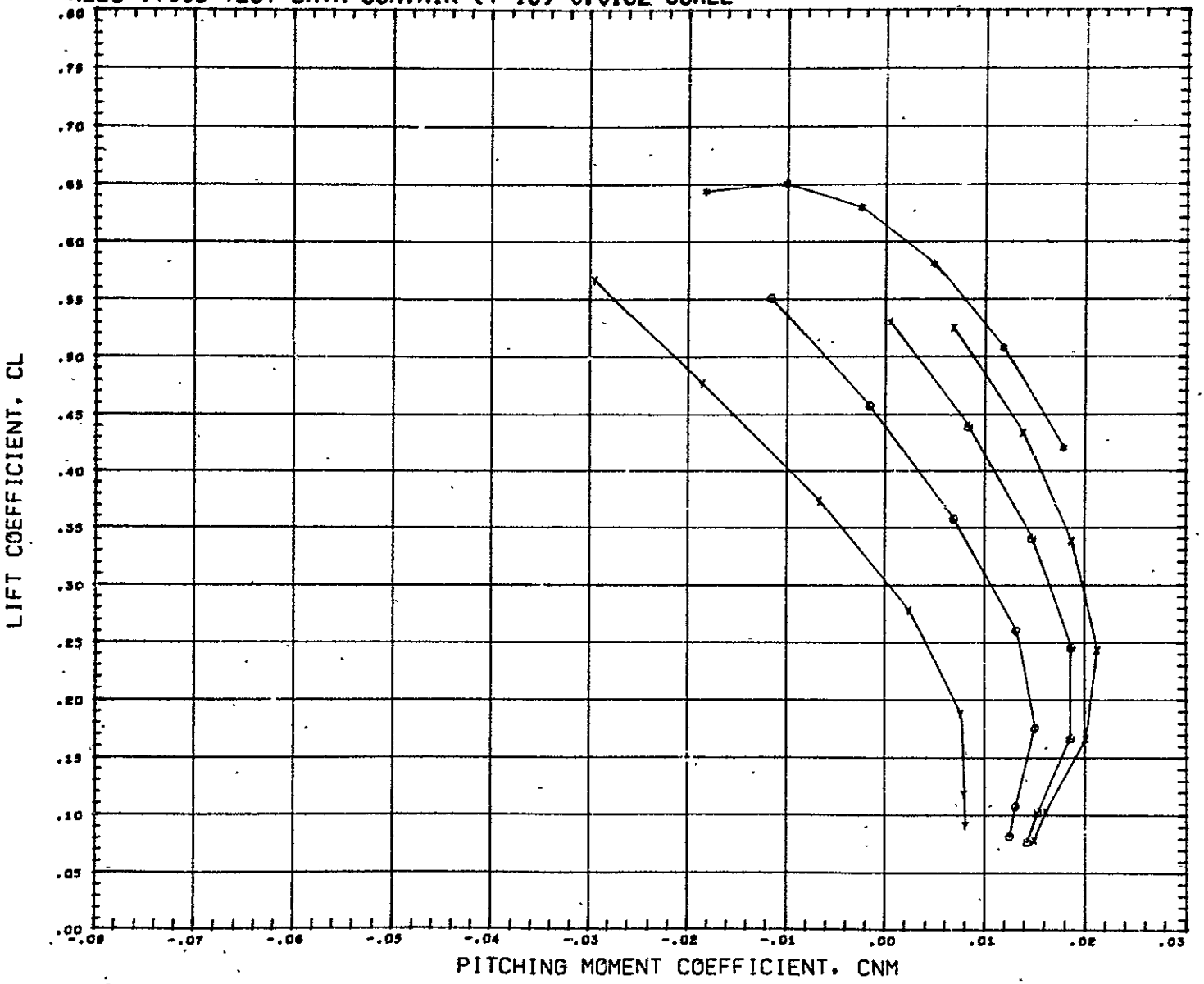


SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4183)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4091)	20 JUL 70	
G	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4031)	20 JUL 70	
O	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4041)	20 JUL 70	
Y	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4051)	20 JUL 70	

REFERENCE FILE CONVAIR TN69-AE-25

REFERENCE INFORMATION		
REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE

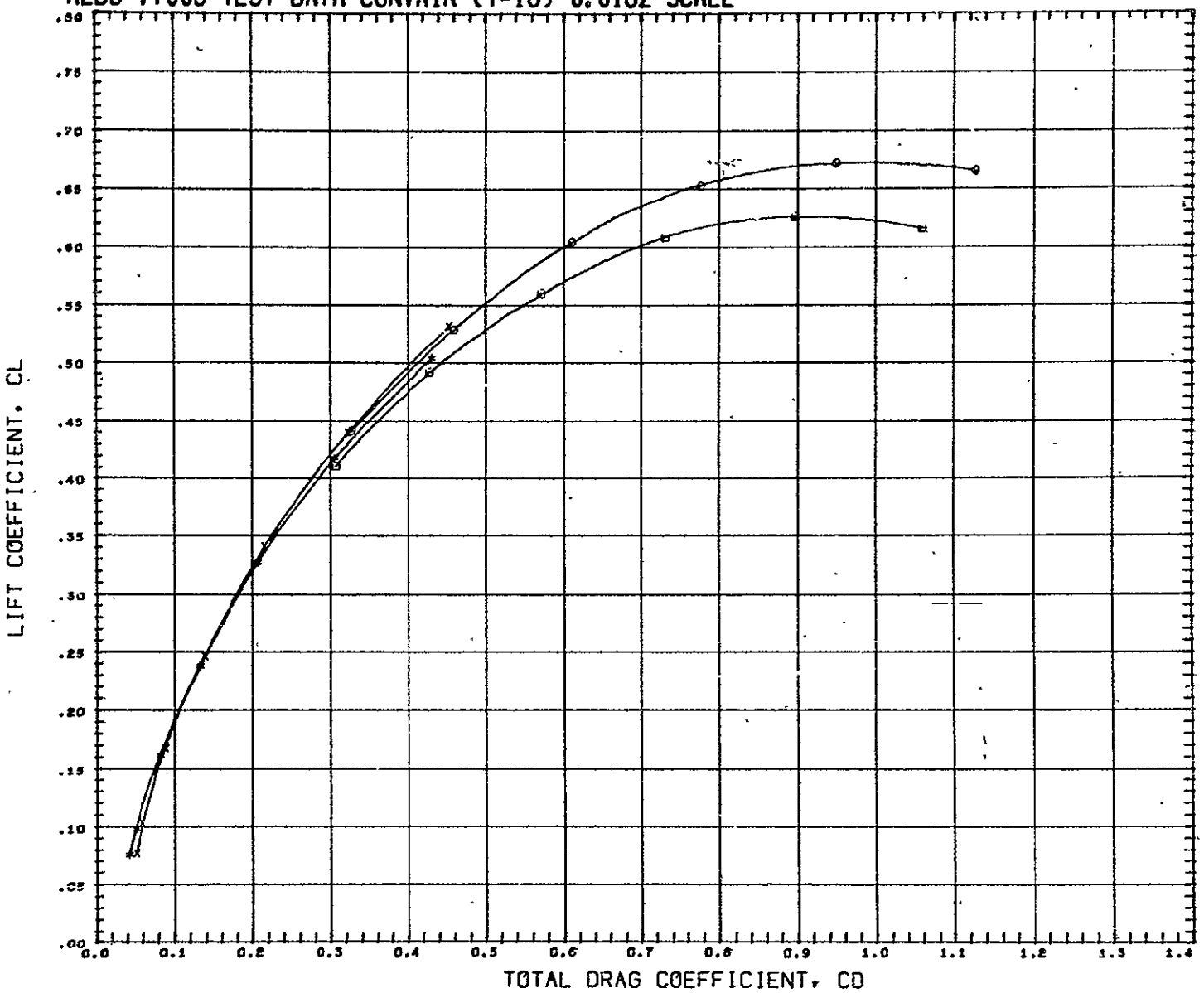


SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4183)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4091)	20 JUL 70	
G	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4031)	20 JUL 70	
O	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4041)	20 JUL 70	
Y	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4051)	20 JUL 70	

REFERENCE FILE CONVAIR TN69-AE-25

REFERENCE INFORMATION		
REFS	7.70600×10^{-01}	FT2
REFL	2.33800×10^{-01}	FT
REFB	$3.64000 \times 10^{+00}$	FT
XMRP	$1.23600 \times 10^{+00}$	FT
YMRP	0.00000×10^{-01}	FT
ZMRP	1.69600×10^{-02}	FT
SCALE	1.75000×10	

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



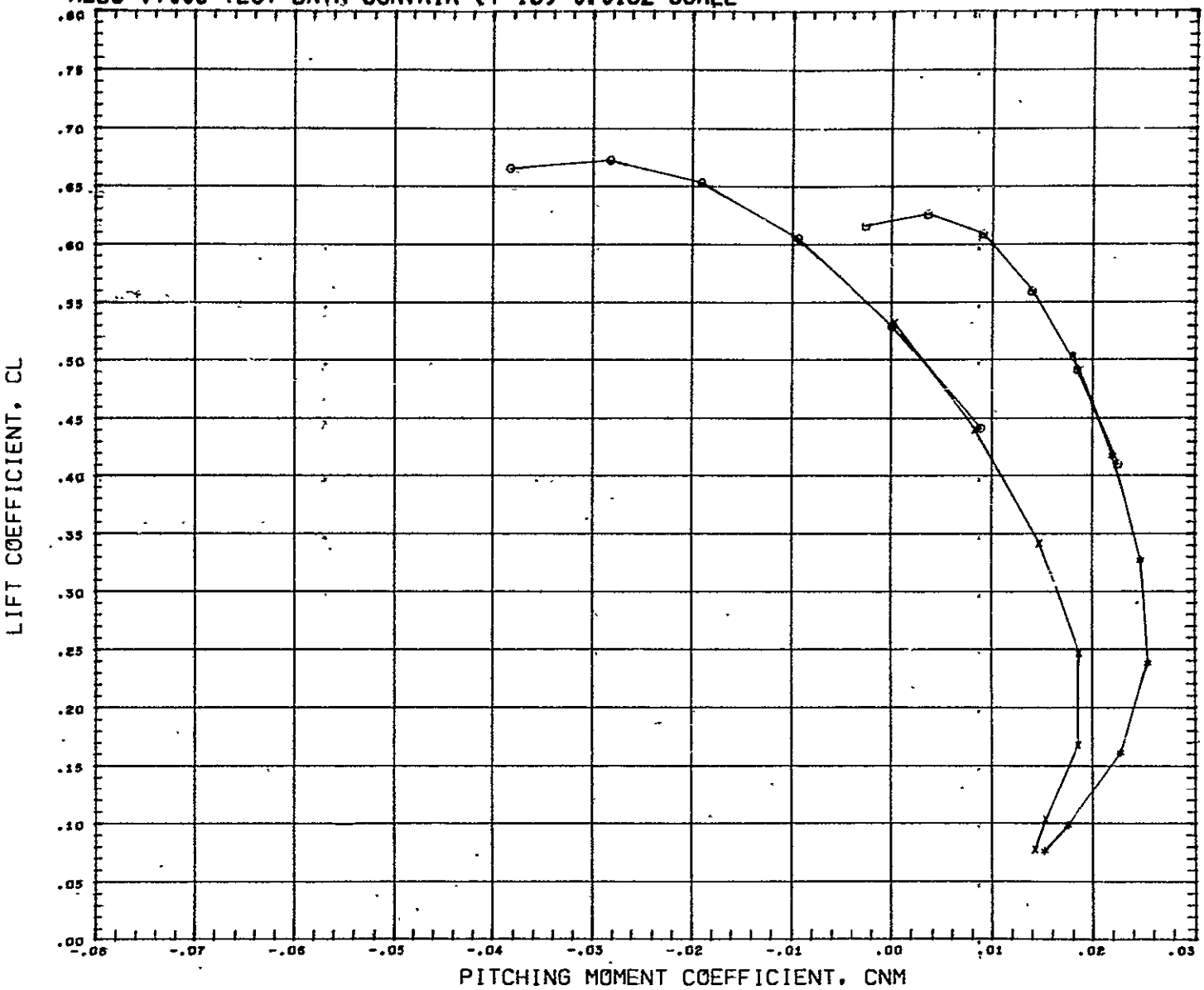
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BE (0.0182 SCALE)	(AT4011)	20 JUL 70	10.000
x	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4031)	20 JUL 70	
B	AEDC VT0055 CONVAIR (T-18) BE (0.0182 SCALE)	(AT4123)	20 JUL 70	
O	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4143)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



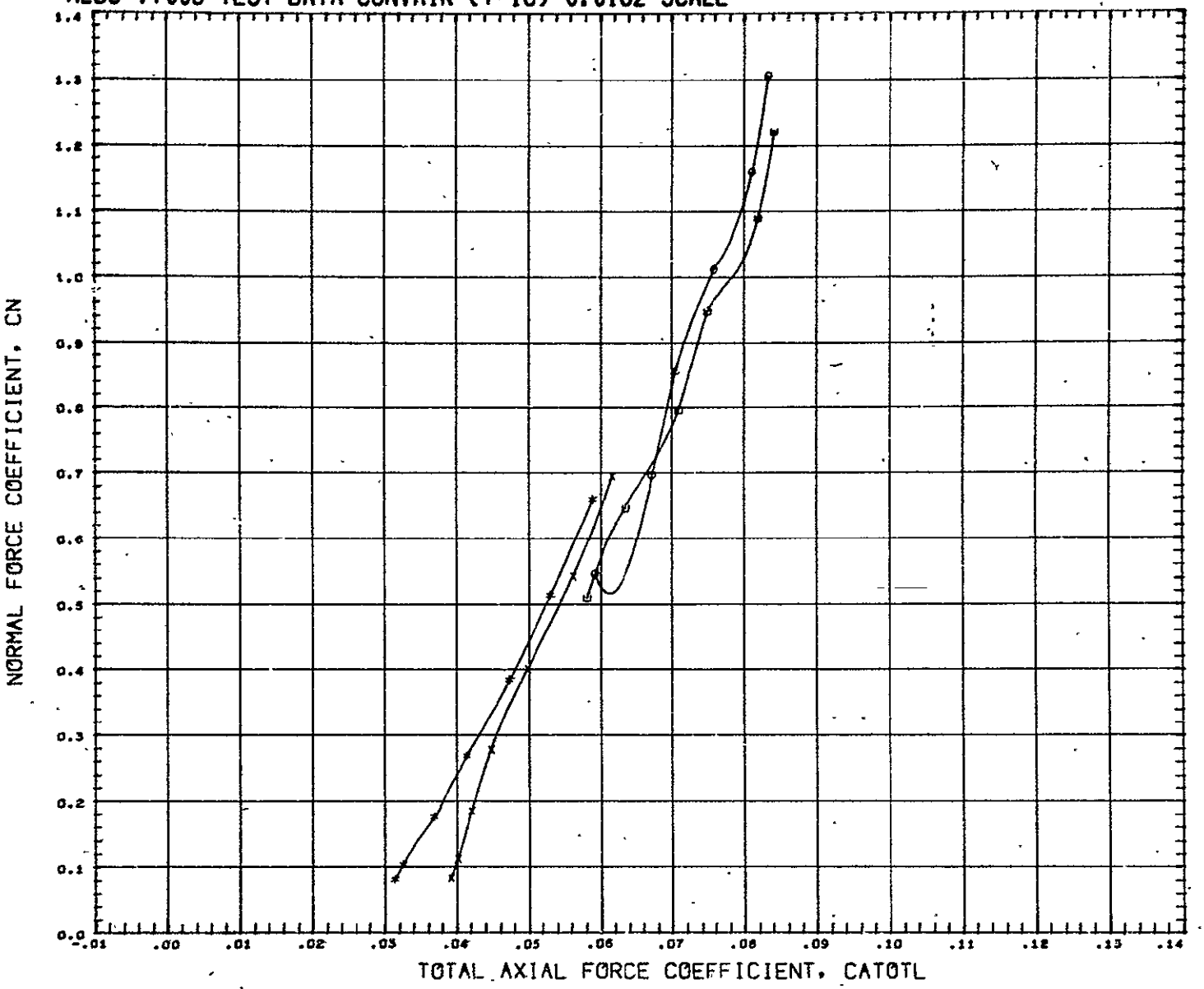
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BE (0.0182 SCALE)	(AT4011)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4031)	20 JUL 70	
G	AEDC VT0055 CONVAIR (T-18) BE (0.0182 SCALE)	(AT4123)	20 JUL 70	
O	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4143)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.33800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



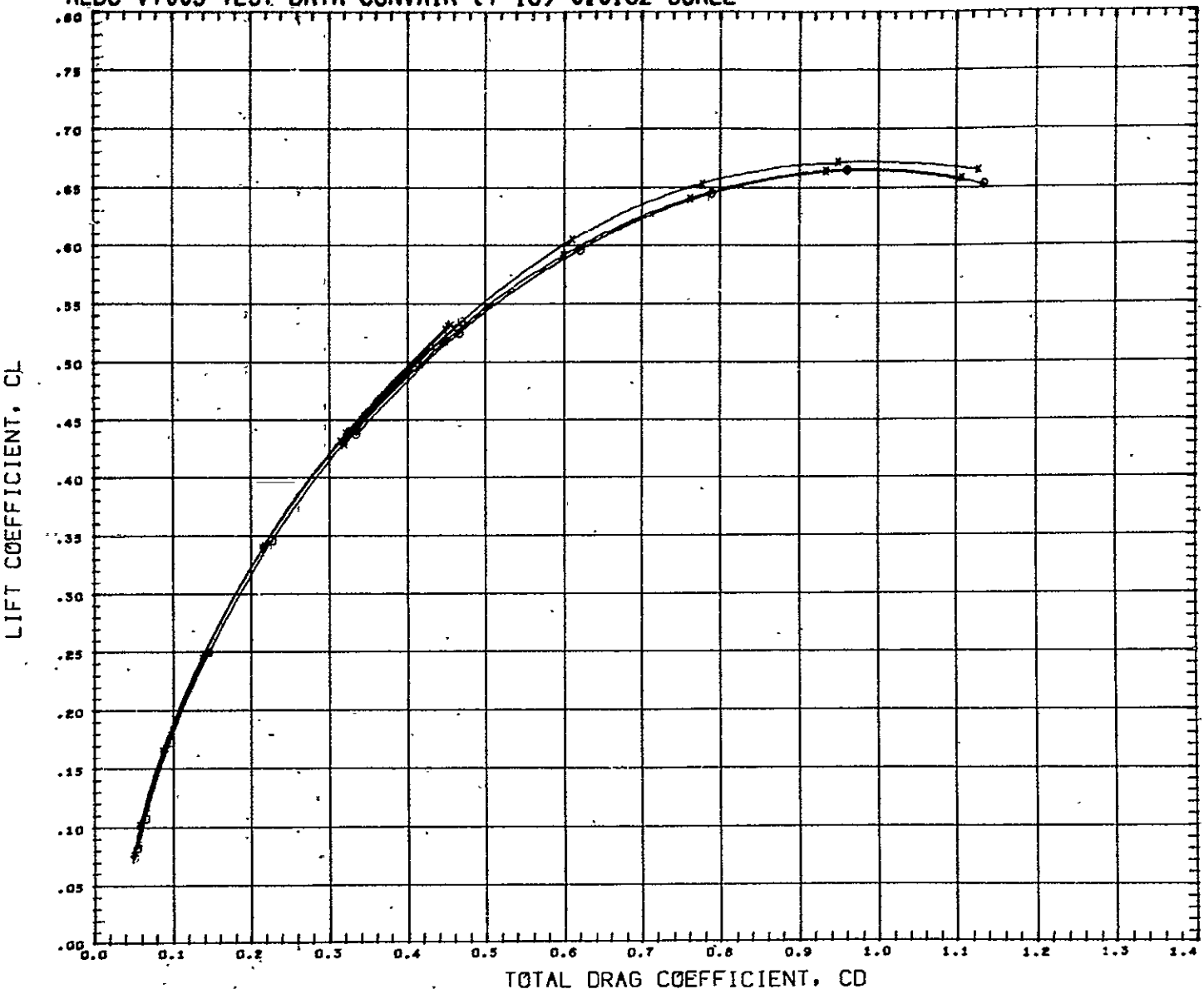
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BE (0.0182 SCALE)	(AT4011)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4031)	20 JUL 70	
B	AEDC VT0055 CONVAIR (T-18) BE (0.0182 SCALE)	(AT4123)	20 JUL 70	
O	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4143)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



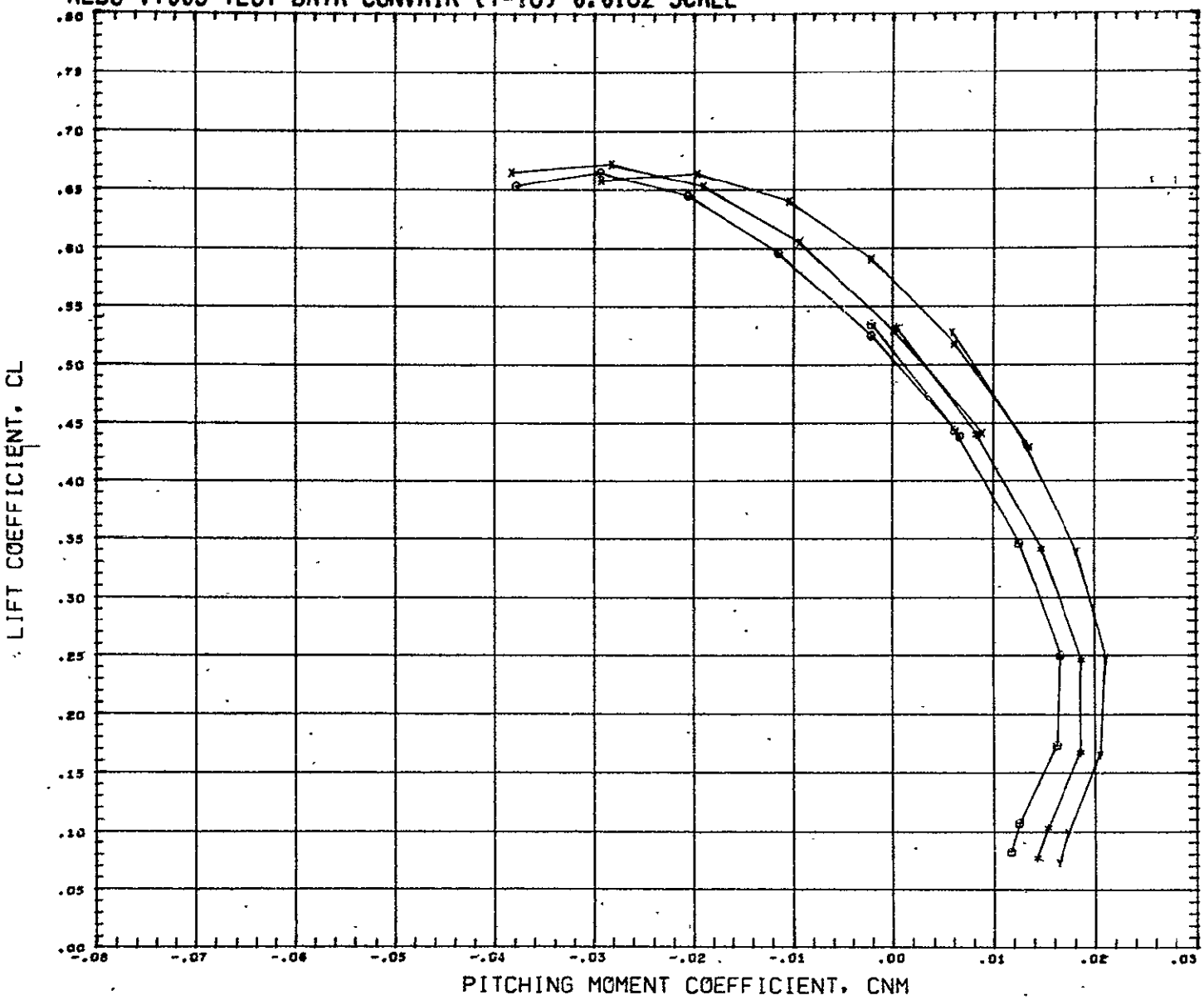
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4031)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4143)	20 JUL 70	
@	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4111)	20 JUL 70	
O	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4193)	20 JUL 70	
Y	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4101)	20 JUL 70	
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4203)	20 JUL 70	

REFERENCE FILE CONVAIR TN69-AE-25

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	0.00000×10^{-01}	FT
ZMRP	1.69600×10^{-02}	FT
SCALE	1.75000×10	

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



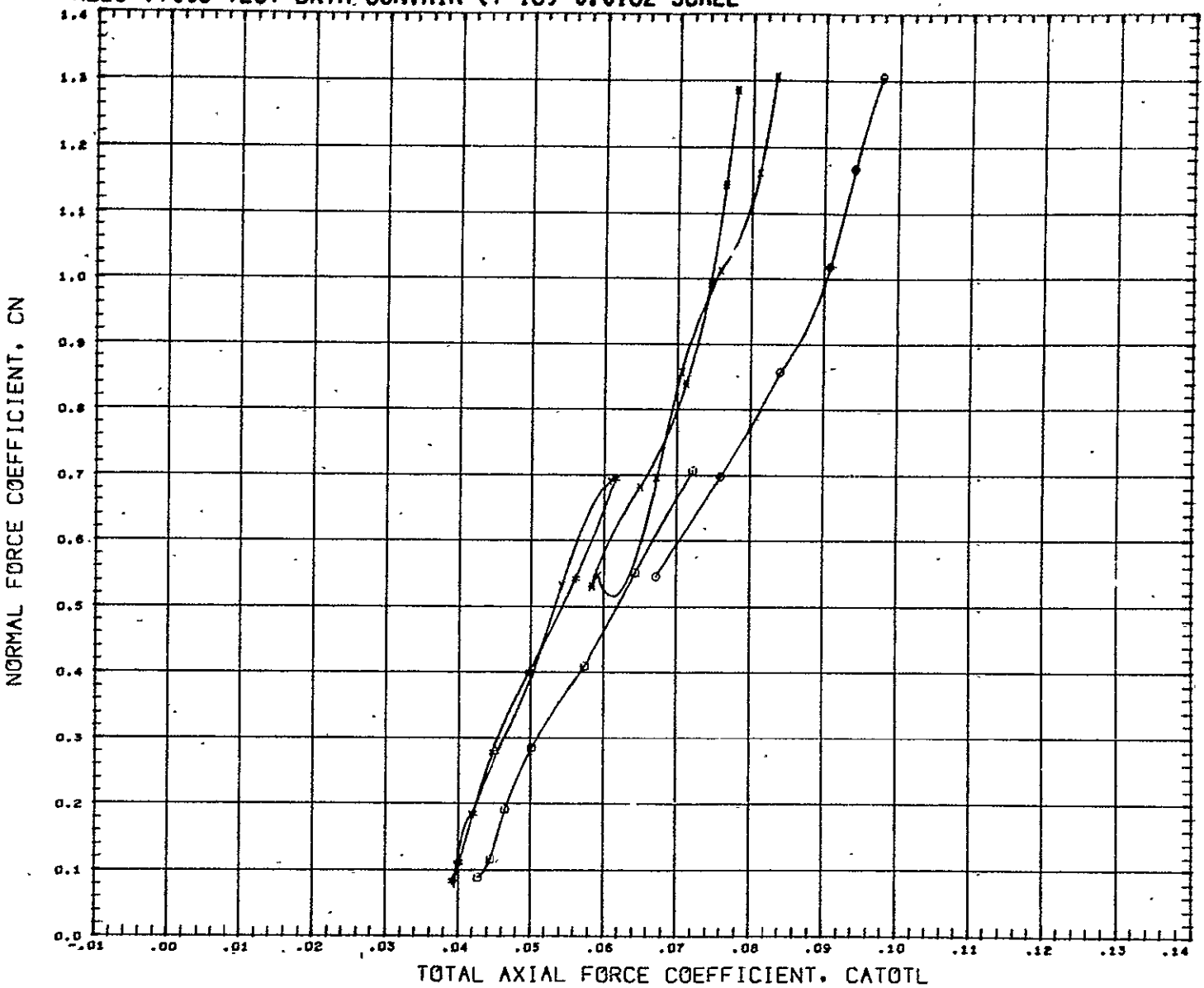
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4031)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4143)	20 JUL 70	
G	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4111)	20 JUL 70	
O	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4193)	20 JUL 70	
Y	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4101)	20 JUL 70	
K	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4203)	20 JUL 70	

REFERENCE FILE CONVAIR TN69-AE-25

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35600 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



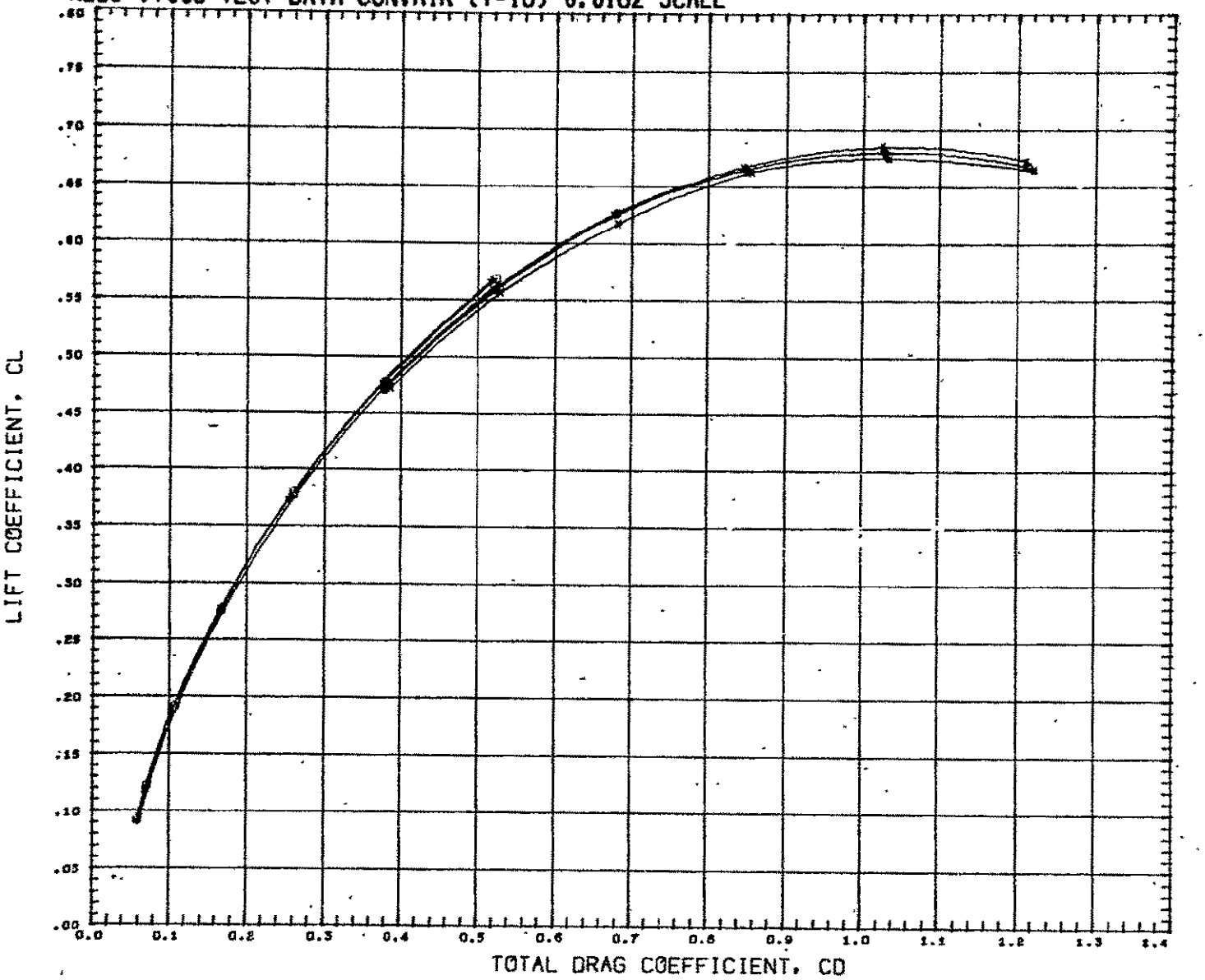
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4031)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4143)	20 JUL 70	
B	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4111)	20 JUL 70	
O	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4193)	20 JUL 70	
Y	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4101)	20 JUL 70	
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0162 SCALE)	(AT4203)	20 JUL 70	

REFERENCE FILE CONVAIR TN69-AE-25

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23600 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



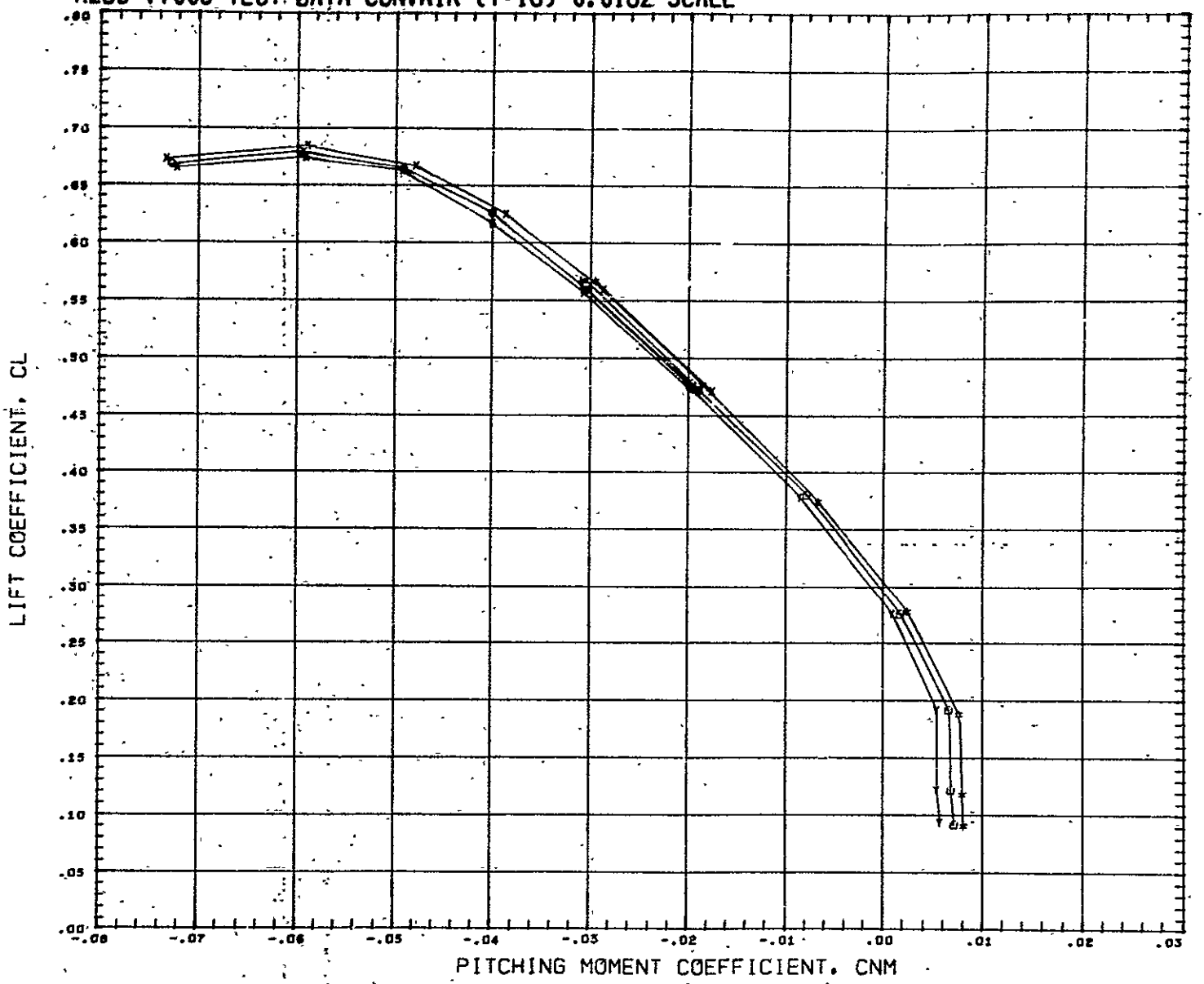
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4051)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4233)	20 JUL 70	
G	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4071)	20 JUL 70	
O	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4223)	20 JUL 70	
Y	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4061)	20 JUL 70	
K	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4213)	20 JUL 70	

REFERENCE FILE · CONVAIR TN69-AE-25

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE

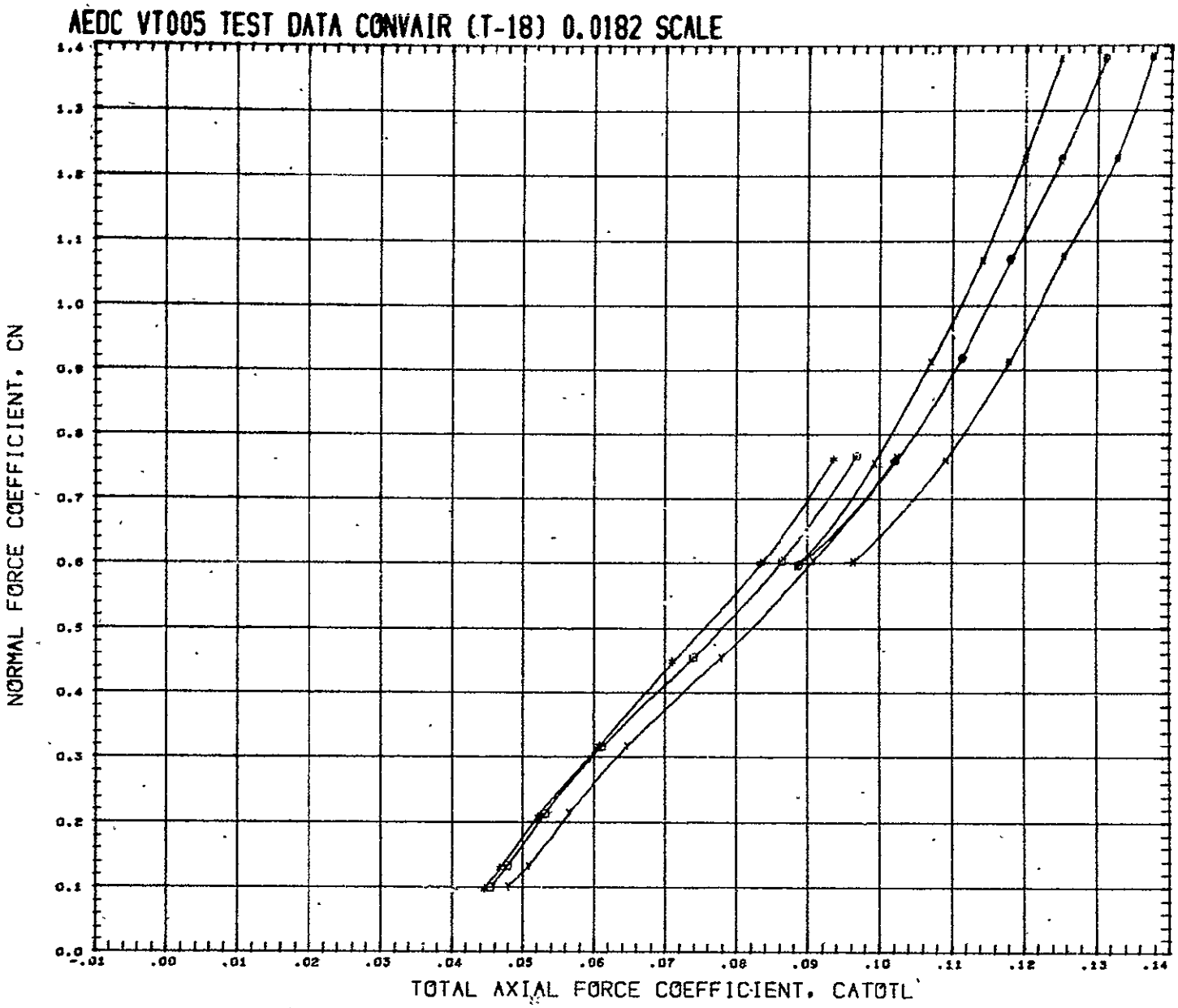


SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0162 SCALE)	(AT4051)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4233)	20 JUL 70	
G	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4071)	20 JUL 70	
G	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4223)	20 JUL 70	
Y	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4061)	20 JUL 70	
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4213)	20 JUL 70	

REFERENCE FILE CONVAIR TN69-AE-25

REFERENCE INFORMATION		
REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



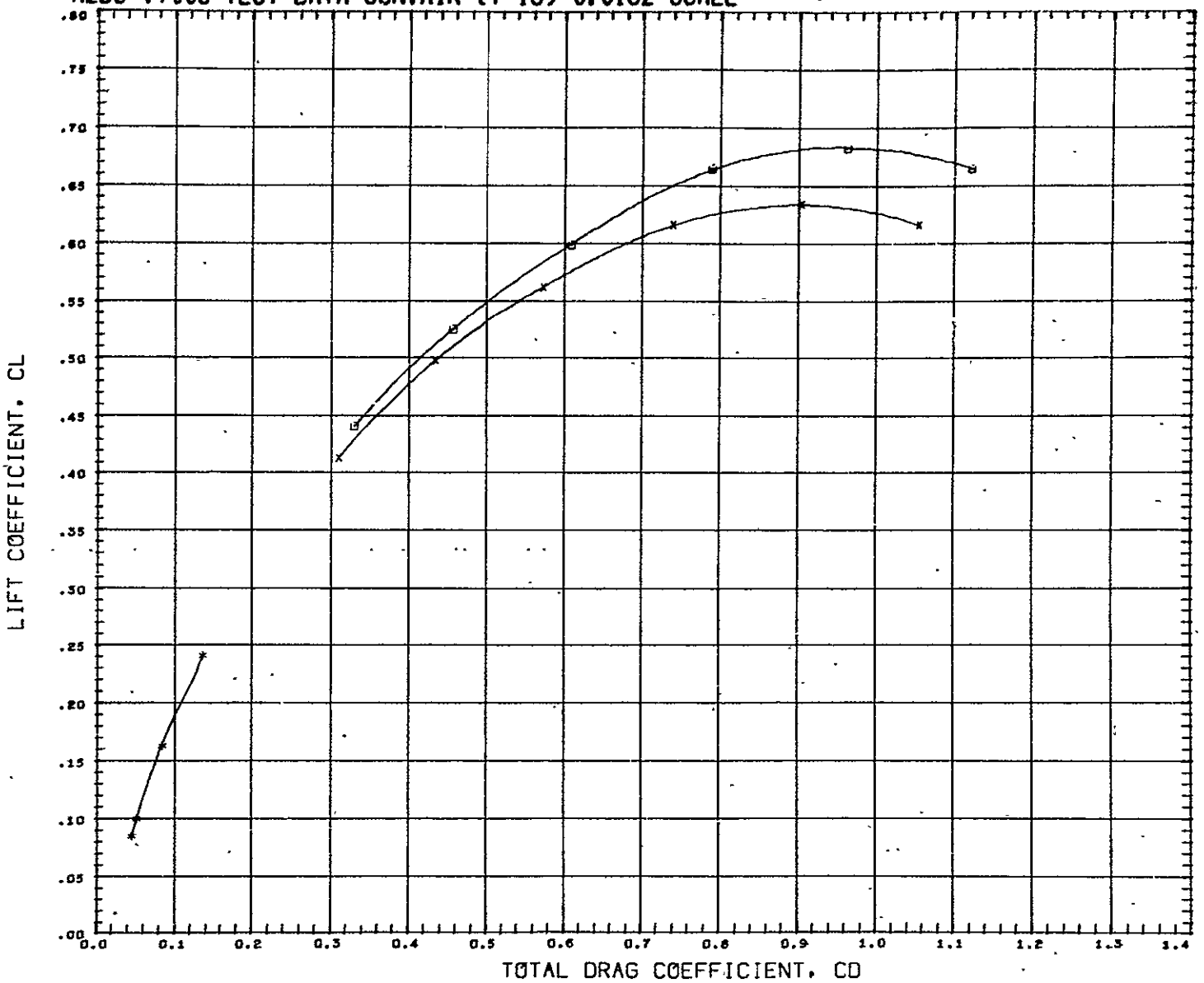
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4051)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4233)	20 JUL 70	
⊖	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4071)	20 JUL 70	
⊙	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4223)	20 JUL 70	
Y	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4061)	20 JUL 70	
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4213)	20 JUL 70	

REFERENCE FILE CONVAIR TN69-AE-25

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



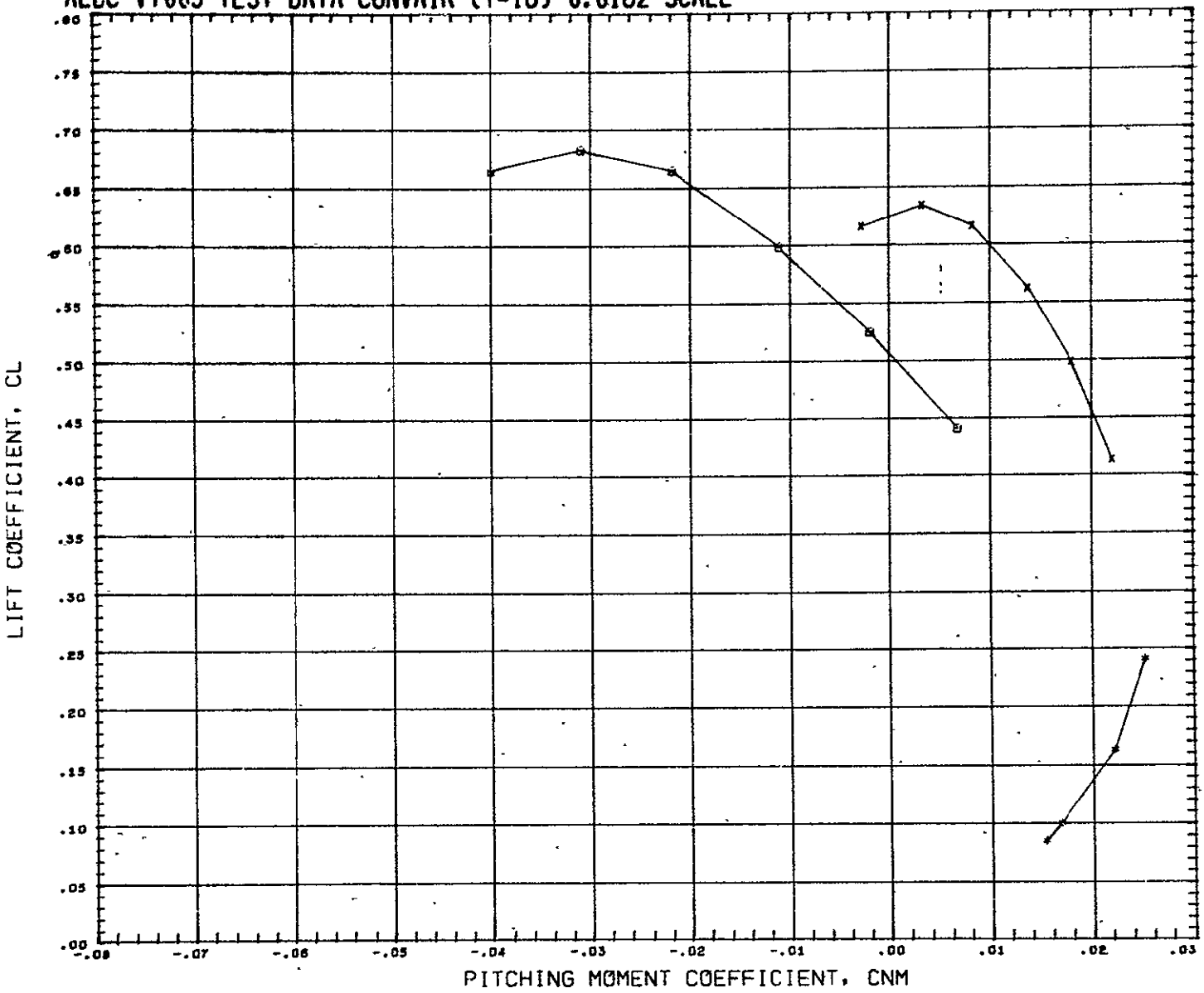
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BE (0.0182 SCALE)	(AT4022)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BE (0.0182 SCALE)	(AT4134)	20 JUL 70	
G	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4154)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23600 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



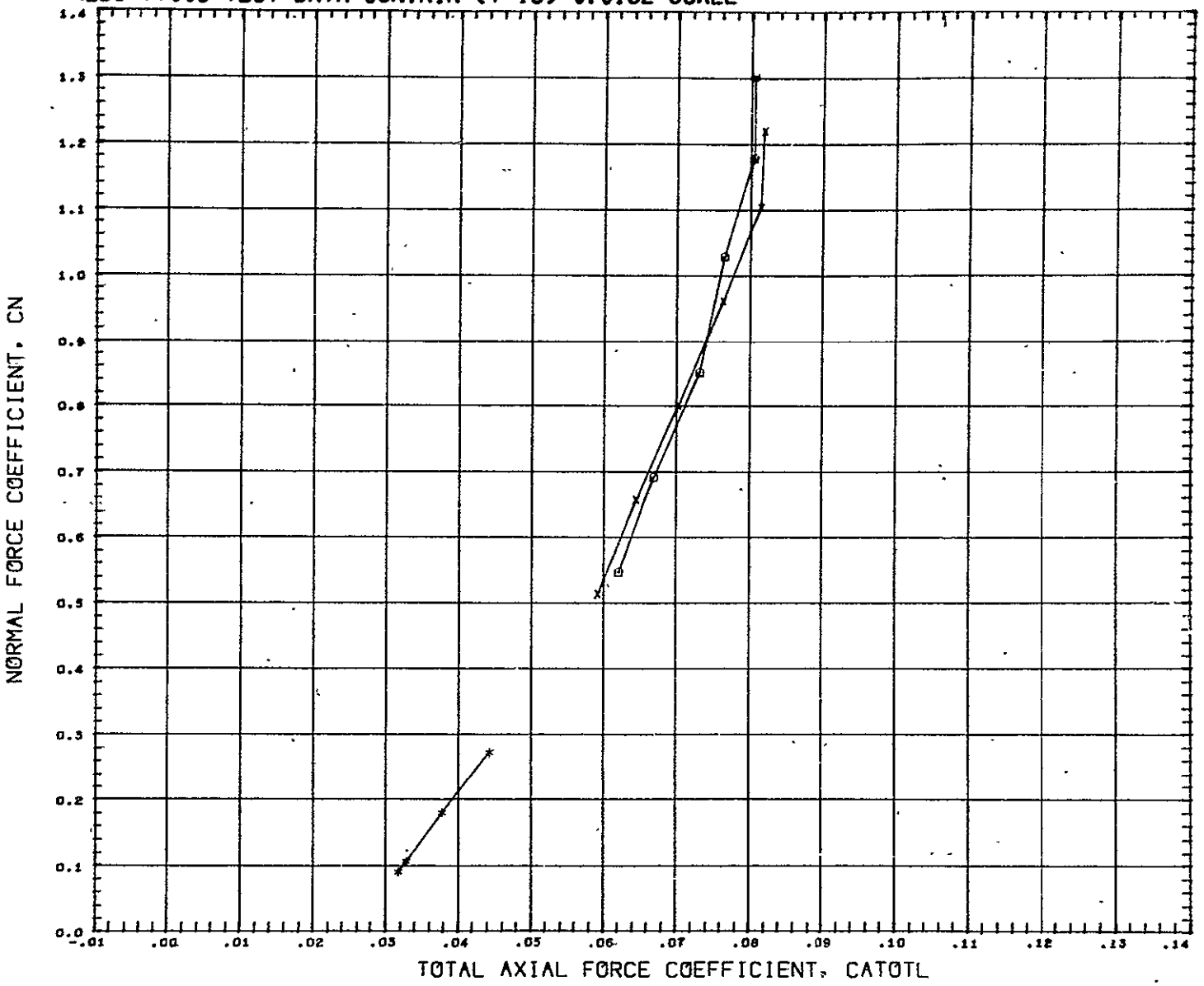
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BE (0.0182 SCALE)	(AT4022)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BE (0.0182 SCALE)	(AT4134)	20 JUL 70	
⊡	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4154)	20 JUL 70.	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TM69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



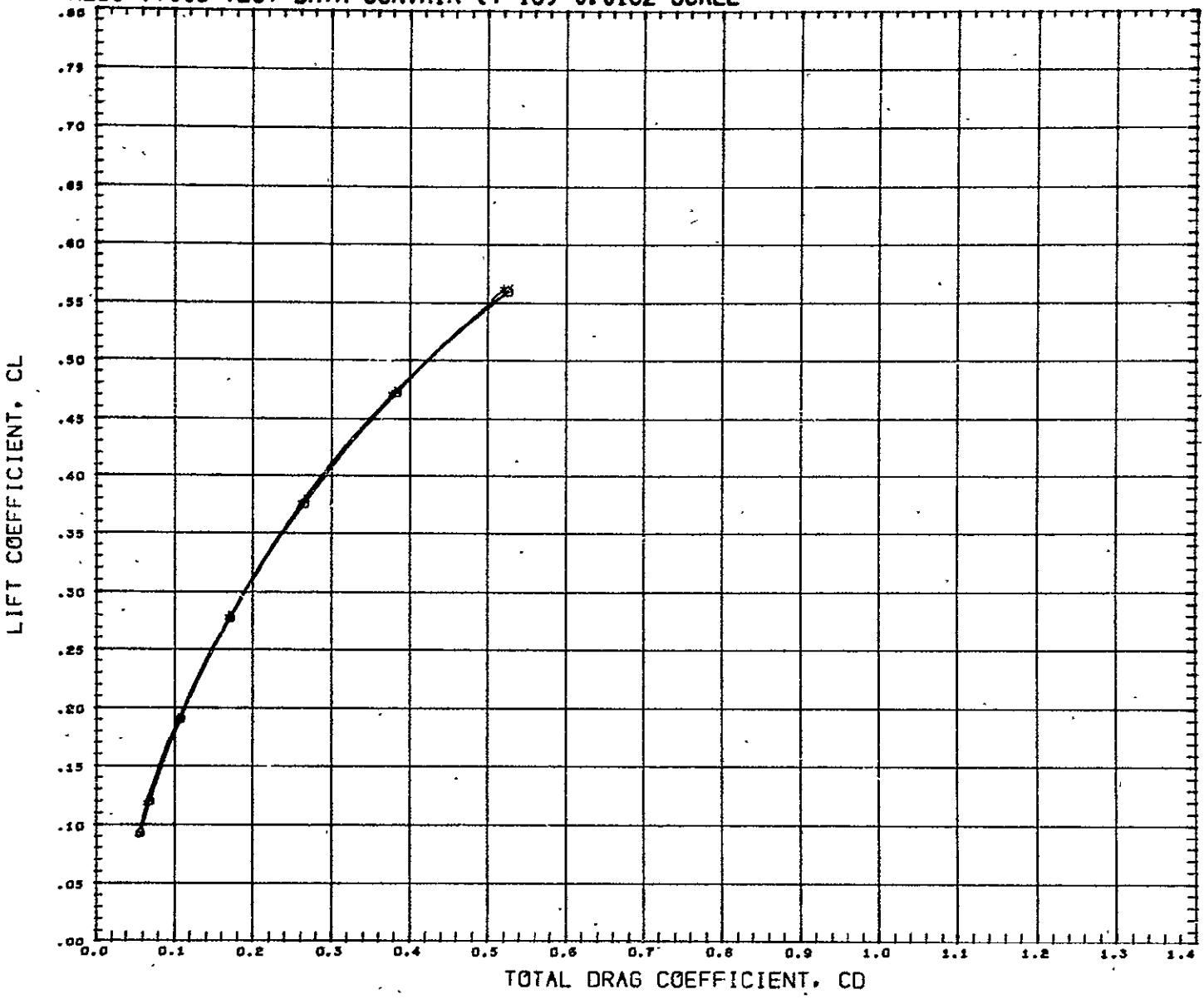
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BE (0.0182 SCALE)	(AT4022)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BE (0.0182 SCALE)	(AT4134)	20 JUL 70	
G	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4154)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



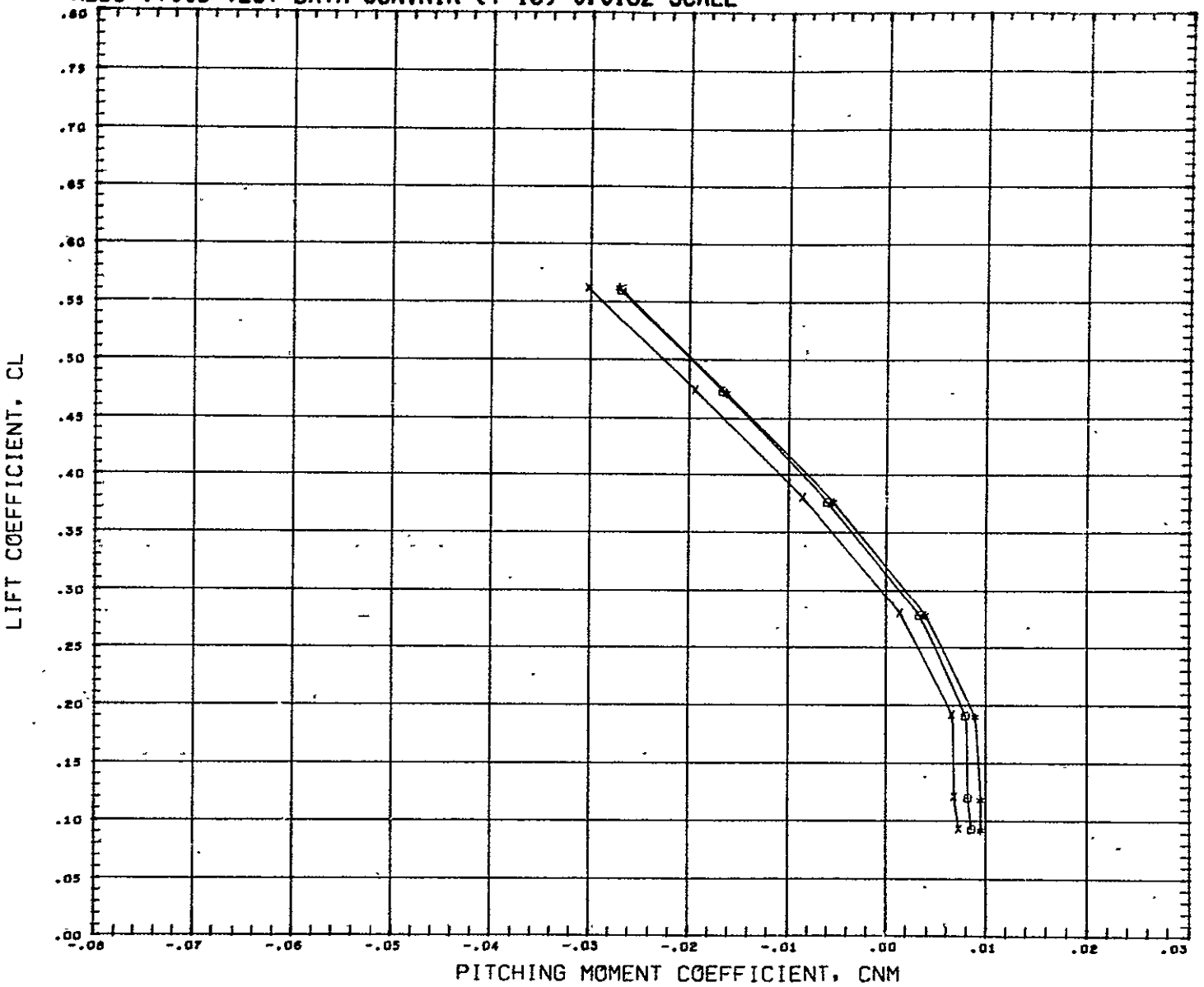
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4311)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4321)	20 JUL 70	
⊕	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4351)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	0.00000×10^{-01}	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



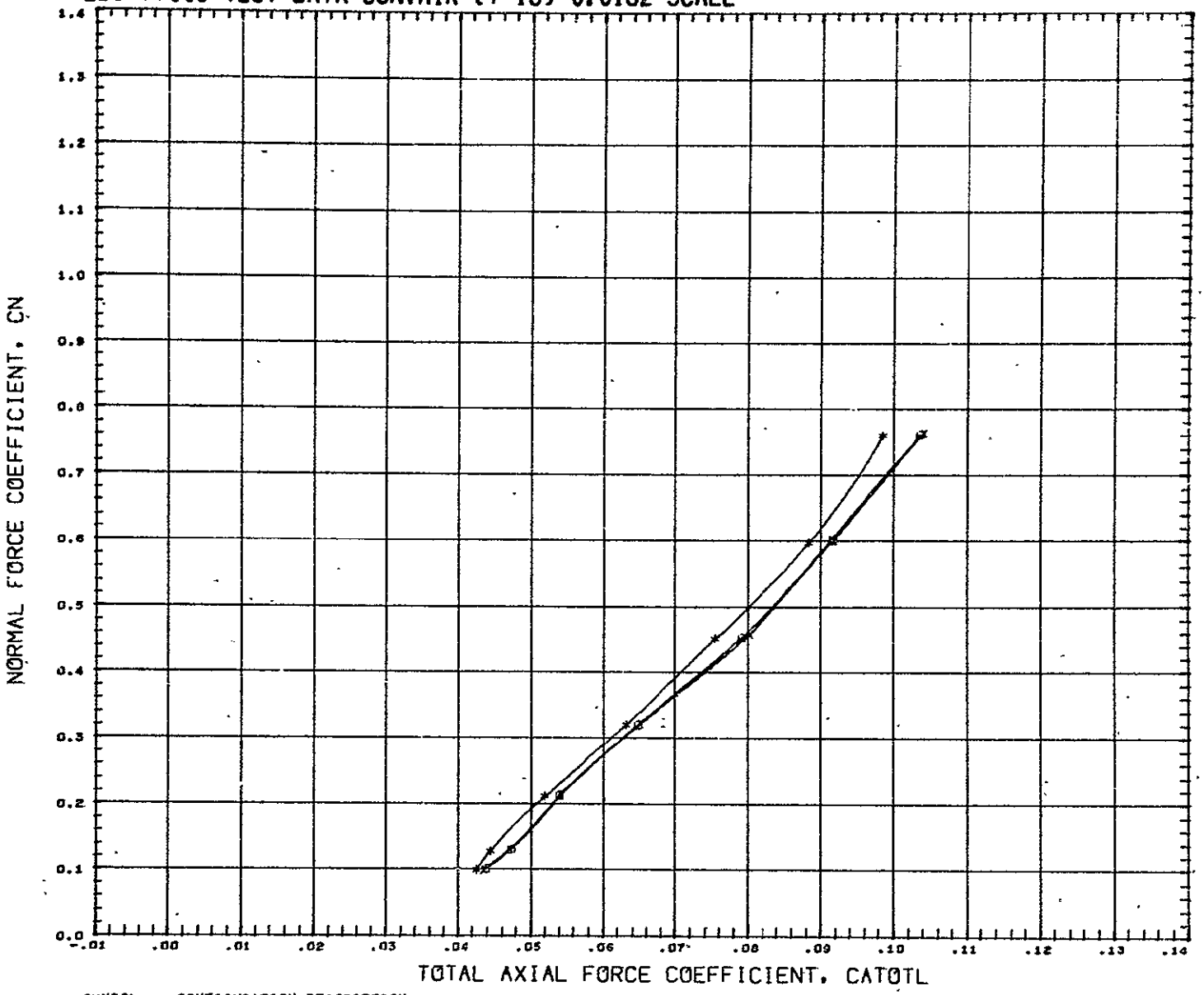
SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4311)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4321)	20 JUL 70	
⊕	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4351)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64600×10^{-01}	FT
XMRP	$1.23800 \times 10^{+00}$	FT
YMRP	$0.00000 \times 10^{+00}$	FT
ZMRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TN69-AE-25

AEDC VT005 TEST DATA CONVAIR (T-18) 0.0182 SCALE



SYMBOL	CONFIGURATION DESCRIPTION	DATA SET	DATE	MACH
*	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4311)	20 JUL 70	10.000
X	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4321)	20 JUL 70	
G	AEDC VT0055 CONVAIR (T-18) BEV (0.0182 SCALE)	(AT4351)	20 JUL 70	

REFERENCE INFORMATION

REFS	7.70600×10^{-01}	FT2
REFL	$2.35800 \times 10^{+00}$	FT
REFB	3.64000×10^{-01}	FT
XHRP	$1.23800 \times 10^{+00}$	FT
YHRP	$0.00000 \times 10^{+00}$	FT
ZHRP	1.69600×10^{-01}	FT
SCALE	1.75000×10^{-02}	

REFERENCE FILE CONVAIR TN69-AE-25

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